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2021 NAVIGATOR Owner's Manual

2021 NAVIGATOR



Owner's Manual



THE LINCOLN MOTOR COMPANY

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California Proposition 65



WARNING: Operating, servicing and maintaining a passenger vehicle or off-highway motor vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to www.P65Warnings.ca.gov/passenger-vehicle.



WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash your hands after handling.**

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Introduction

ABOUT THIS MANUAL

Thank you for choosing Lincoln. We recommend that you take some time to get to know your vehicle by reading this manual. The more that you know about it, the greater the safety and pleasure you will get from driving it.



WARNING: Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

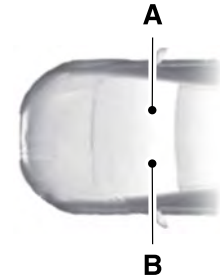
Note: *This manual describes product features and options available throughout the range of available models, sometimes even before they are generally available. It may describe options not fitted to the vehicle you have purchased.*

Note: *Some of the illustrations in this manual may show features as used in different models, so may appear different to you on your vehicle.*

Note: *Always use and operate your vehicle in line with all applicable laws and regulations.*

Note: *Pass on this manual when selling your vehicle. It is an integral part of your vehicle.*

This manual may qualify the location of a component as left-hand side or right-hand side. The side is determined when facing forward in the seat.



- A Right-hand side.
- B Left-hand side.

SYMBOLS GLOSSARY

These are some of the symbols you may see on your vehicle.



Air conditioning system



Air conditioning system lubricant type

Introduction



Anti-lock braking system



Avoid smoking, flames or sparks



Battery



Battery acid



Brake fluid - non petroleum based



Brake system



Brake system



Cabin air filter



Check fuel cap



Child safety door lock or unlock



Child seat lower anchor



Child seat tether anchor



Cruise control



Do not open when hot



Engine air filter



Engine coolant



Engine coolant temperature



Engine oil



Explosive gas



Fan warning



Fasten seatbelt



Flammable



Front airbag



Front fog lamps



Fuel pump reset



Fuse compartment



Hazard flashers



Heated rear window

Introduction



Windshield defrosting system



Interior luggage compartment release



Jack



Keep out of reach of children



Lighting control



Low tire pressure warning



Maintain correct fluid level



Note operating instructions



Horn control



Panic alarm



Parking aid



Parking brake



Power steering fluid



Power windows front/rear



Power window lockout



Requires registered technician



Safety alert



See Owner's Manual



See Service Manual



Service engine soon



Passenger airbag activated



Passenger airbag deactivated



Side airbag



Shield the eyes



Stability control



Hill descent control



Trail control



Windshield wiping system

Introduction



Windshield wash and wipe

DATA RECORDING



WARNING: Do not connect wireless plug-in devices to the data link connector. Unauthorized third parties could gain access to vehicle data and impair the performance of safety related systems. Only allow repair facilities that follow our service and repair instructions to connect their equipment to the data link connector.

We respect your privacy and are committed to protecting it. The information contained in this publication was correct at the time of going to print but as technology rapidly changes, we recommend that you visit the regional Lincoln website for the latest information.

Your vehicle has electronic control units that have data recording functionality and the ability to permanently or temporarily store data. This data could include information on the condition and status of your vehicle, vehicle maintenance requirements, events and malfunctions. The types of data that can be recorded are described in this section. Some of the data recorded is stored in event logs or error logs.

Note: *Error logs are reset following a service or repair.*

Note: *We may provide information in response to requests from law enforcement, other government authorities and third parties acting with lawful authority or through a legal process. Such information could be used by them in legal proceedings.*

Data recorded includes, for example:

- Operating states of system components, for example, fuel level, tire pressure and battery charge level.
- Vehicle and component status, for example, wheel speed, deceleration, lateral acceleration and seatbelt status.

- Events or errors in essential systems, for example, headlamps and brakes.
- System responses to driving situations, for example, airbag deployment and stability control.
- Environmental conditions, for example, temperature.

Some of this data, when used in combination with other information, for example, an accident report, damage to a vehicle or eyewitness statements, could be associated with a specific person.

Service Data

Service data recorders in your vehicle are capable of collecting and storing diagnostic information about your vehicle. This potentially includes information about the performance or status of various systems and modules in the vehicle, such as engine, throttle, steering or brake systems. In order to properly diagnose and service your vehicle, Lincoln Motor Company (Lincoln of Canada, in Canada), and service and repair facilities may access or share among them vehicle diagnostic information received

Introduction

through a direct connection to your vehicle when diagnosing or servicing your vehicle. Additionally, Ford Motor Company (Ford of Canada, in Canada) may, where permitted by law, use vehicle diagnostic information for vehicle improvement or with other information we may have about you, for example, your contact information, to offer you products or services that may interest you. Data may be provided to our service providers, such as part suppliers, that may help diagnose malfunctions, and who are similarly obligated to protect data. We retain this data only as long as necessary to perform these functions or to comply with law. We may provide information where required in response to official requests to law enforcement or other government authorities or third parties acting with lawful authority or court order, and such information may be used in legal proceedings. For U.S. only (if equipped), if you choose to use connected apps and services, you consent that certain diagnostic information may also be accessed electronically by Ford Motor Company and Lincoln authorized service facilities, and that the diagnostic information may be used to provide services to you,

personalizing your experience, troubleshoot, and to improve products and services and offer you products and services that may interest you, where permitted by law. For Canada only, for more information, please review the Lincoln of Canada privacy policy at www.LincolnCanada.com, including our U.S. data storage and use of service providers in other jurisdictions who may be subject to legal requirements in Canada, the United States and other countries applicable to them, for example, lawful requirements to disclose personal information to governmental authorities in those countries.

Event Data

This vehicle is equipped with an event data recorder. The main purpose of an event data recorder is to record, in certain crash or near crash-like situations, such as an airbag deployment or hitting a road obstacle; this data assists in understanding how a vehicle's systems performed. The event data recorder is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less.

The event data recorder in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger seatbelts were buckled or fastened;
- How far, if at all, the driver was depressing the accelerator or the brake pedal; and
- How fast the vehicle was traveling; and
- Where the driver was positioning the steering wheel.

This data can help provide a better understanding of the circumstances in which crashes and injuries occur.

Introduction

Note: *Event data recorder data is recorded by your vehicle only if a non-trivial crash situation occurs; no data is recorded by the event data recorder under normal driving conditions and no personal data or information (e.g., name, gender, age, and crash location) is recorded. However, other parties, such as law enforcement, could combine the event data recorder data with the type of personally identifying data routinely acquired during a crash investigation.*

To read data recorded by an event data recorder, special equipment is required, and access to the vehicle or the event data recorder is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have such special equipment, can read the information if they have access to the vehicle or the event data recorder.

Comfort, Convenience and Entertainment Data

Your vehicle has electronic control units that have the ability to store data based on your personalized settings. The data is stored locally in the vehicle or on devices that you connect to it, for example, a USB drive or digital music player. You can delete some of this data and also choose whether to share it through the services to which you subscribe. See **Settings** (page 515).

Comfort and Convenience Data

Data recorded includes, for example:

- Seat and steering wheel position.
- Climate control settings.
- Radio presets.

Entertainment Data

Data recorded includes, for example:

- Music, videos or album art.
- Contacts and corresponding address book entries.
- Navigation destinations.

Services That We Provide

If you use our services, we collect and use data, for example, account information, vehicle location and driving characteristics, that could identify you. We transmit this data through a dedicated, protected connection. We only collect and use data to enable your use of our services to which you have subscribed, with your consent or where permitted by law. For additional information, see the terms and conditions of the services to which you have subscribed.

Services That Third Parties Provide

We recommend that you review the terms and conditions and data privacy information for any services to which you subscribe. We take no responsibility for services that third parties provide.

Introduction

Vehicles With a Modem (If Equipped)



The modem has a SIM. The modem was enabled when your vehicle was built and periodically sends messages to stay connected to the cell phone network, receive automatic software updates and send vehicle-related information to us, for example, diagnostic information. These messages could include information that identifies your vehicle, the SIM and the electronic serial number of the modem. Cell phone network service providers could have access to additional information, for example, cell phone network tower identification. For additional information about our privacy policy, visit www.ConnectedLincoln.com or refer to your local Lincoln website.

Note: *The modem continues to send this information unless you disable the modem or stop the modem from sharing vehicle data by changing the modem settings. See **Connected Vehicle** (page 455).*

Note: *The service can be unavailable or interrupted for a number of reasons, for example, environmental or topographical conditions and data plan coverage.*

Note: *To find out if your vehicle has a modem, visit www.ConnectedLincoln.com.*

Vehicles With SYNC

Mobile Device Data

If you connect a mobile device to your vehicle, you can display data from your device on the touchscreen for example, music and album art. You can share your vehicle data with mobile apps on your device through the system. See **Apps** (page 512).

The mobile apps function operates by your connected device sending data to us in the United States. The data is encrypted and includes, for example, the vehicle identification number of your vehicle, the SYNC module serial number, odometer, enabled apps, usage statistics and

debugging information. We retain it only as long as necessary to provide the service, to troubleshoot, for continuous improvement and to offer you products and services that may be of interest to you according to your preferences and where allowed by law.

If you connect a cell phone to the system, the system creates a profile that links to that cell phone. The cell phone profile enables more mobile features and efficient operation. The profile contains, for example, data from your phonebook, read and unread text messages and call history, including history of calls when your cell phone was not connected to the system.

If you connect a media device, the system creates and retains a media device index of supported media content. The system also records a short diagnostic log of approximately 10 minutes of all recent system activity.

Introduction

The cell phone profile, media device index and diagnostic log remain in your vehicle unless you delete them and are generally accessible only in your vehicle when you connect your cell phone or media device. If you no longer plan to use the system or your vehicle, we recommend you use the master reset function to erase the stored information. See **Settings** (page 515).

System data cannot be accessed without special equipment and access to your vehicle's module.

For additional information about our privacy policy, refer to your local Lincoln website.

Note: *To find out if your vehicle has connectivity technology, visit www.ConnectedLincoln.com.*

Vehicles With an Emergency Call System

When the emergency call system is active, it may disclose to emergency services that your vehicle has been in a crash involving the deployment of an airbag or activation of the fuel pump shut-off. Certain versions or updates to the emergency call system may

also be capable of electronically or verbally disclosing to emergency services operators your vehicle location or other details about your vehicle or crash to assist emergency services operators to provide the most appropriate emergency services. If you do not want to disclose this information, do not activate the emergency call system.

Note: *You cannot deactivate emergency call systems that are required by law.*

PERCHLORATE

Certain components in your vehicle such as airbag modules, seatbelt pretensioners and remote control batteries may contain perchlorate material. Special handling may apply for service or vehicle end of life disposal.

For more information visit:

Web Address
www.dtscc.ca.gov/hazardouswaste/perchlorate

LINCOLN AUTOMOTIVE FINANCIAL SERVICES

Lincoln Automotive Financial Services offer a full range of financing and lease plans to help you acquire your vehicle. We are dedicated to providing answers, information and a truly extraordinary experience.

We offer a number of convenient ways to contact us and to manage your account.

Phone: 1-888-498-8801

Mail: Lincoln Automotive Financial Services

P.O. Box 542000

Omaha, NE 68154-8000

For more information, visit www.lincoln.com/finance.

Introduction

REPLACEMENT PARTS RECOMMENDATION

We have built your vehicle to the highest standards using quality parts. We recommend that you demand the use of genuine Ford and Motorcraft parts whenever your vehicle requires scheduled maintenance or repair. You can clearly identify genuine Ford and Motorcraft parts by looking for the Ford, FoMoCo or Motorcraft branding on the parts or their packaging.

Scheduled Maintenance and Mechanical Repairs

One of the best ways for you to make sure that your vehicle provides years of service is to have it maintained in line with our recommendations using parts that conform to the specifications detailed in this Owner's Manual. Genuine Ford and Motorcraft parts meet or exceed these specifications.

Collision Repairs

We hope that you never experience a collision, but accidents do happen. Genuine Ford replacement collision parts meet our stringent requirements for fit, finish, structural integrity, corrosion protection and dent resistance. During vehicle development we validate that these parts deliver the intended level of protection as a whole system. A great way to know for sure you are getting this level of protection is to use genuine Ford replacement collision parts.

Warranty on Replacement Parts

Genuine Ford and Motorcraft replacement parts are the only replacement parts that benefit from a Lincoln Warranty. Damage caused to your vehicle as a result of the failure of non-Ford parts may not be covered by the Lincoln Warranty. For additional information, refer to the terms and conditions of the Lincoln Warranty.

SPECIAL NOTICES

New Vehicle Limited Warranty

For a detailed description of what is covered by your New Vehicle Limited Warranty, see your warranty guide that is available online. For more information, refer to our website and download your copy of the warranty guide.

Special Instructions

For your added safety, your vehicle is fitted with sophisticated electronic controls.



WARNING: You risk death or serious injury to yourself and others if you do not follow the instruction highlighted by the warning symbol. Failure to follow the specific warnings and instructions could result in personal injury.

Introduction



WARNING: NEVER use a rearward facing child restraint on a seat protected by an ACTIVE AIRBAG in front of it, DEATH or SERIOUS INJURY to the CHILD can occur.

On Board Diagnostics Data Link Connector



WARNING: Do not connect wireless plug-in devices to the data link connector. Unauthorized third parties could gain access to vehicle data and impair the performance of safety related systems. Only allow repair facilities that follow our service and repair instructions to connect their equipment to the data link connector.

Your vehicle has an OBD Data Link Connector (DLC) that is used in conjunction with a diagnostic scan tool for vehicle diagnostics, repairs and reprogramming services. Installing an aftermarket device that uses the DLC during normal driving for purposes such as remote insurance company

monitoring, transmission of vehicle data to other devices or entities, or altering the performance of the vehicle, may cause interference with or even damage to vehicle systems. We do not recommend or endorse the use of unapproved aftermarket plug-in devices. The vehicle Warranty will not cover damage caused by an aftermarket plug-in device.

Notice to Owners of Pickup Trucks and Utility Type Vehicles



WARNING: Utility vehicles have a significantly higher rollover rate than other types of vehicles.

Before you drive your vehicle, please read this Owner's Guide carefully. Your vehicle is not a passenger car. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of vehicle control, vehicle rollover, personal injury or death.

Using Your Vehicle With a Snowplow

Do not use this vehicle for snowplowing.

Your vehicle does not have a snowplowing package.

Using Your Vehicle as an Ambulance

Do not use this vehicle as an ambulance.

Your vehicle does not have the Ambulance Preparation Package.

MOBILE COMMUNICATIONS EQUIPMENT



WARNING: Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

Introduction

Using mobile communications equipment is becoming increasingly important in the conduct of business and personal affairs. However, you must not compromise your own or others' safety when using such equipment. Mobile communications can enhance personal safety and security when appropriately used, particularly in emergency situations. Safety must be paramount when using mobile communications equipment to avoid negating these benefits. Mobile communication equipment includes, but is not limited to, cellular phones, pagers, portable email devices, text messaging devices and portable two-way radios.

EXPORT UNIQUE OPTIONS

For your particular global region, your vehicle may be equipped with features and options that are different from the features and options that are described in this Owner's Manual. A market unique supplement may be supplied that complements this book. By referring to the market unique supplement, if provided, you can properly identify those features, recommendations and

specifications that are unique to your vehicle. This Owner's Manual is written primarily for the U.S. and Canadian Markets. Features or equipment listed as standard may be different on units built for export. **Refer to this Owner's Manual for all other required information and warnings.**

Environment

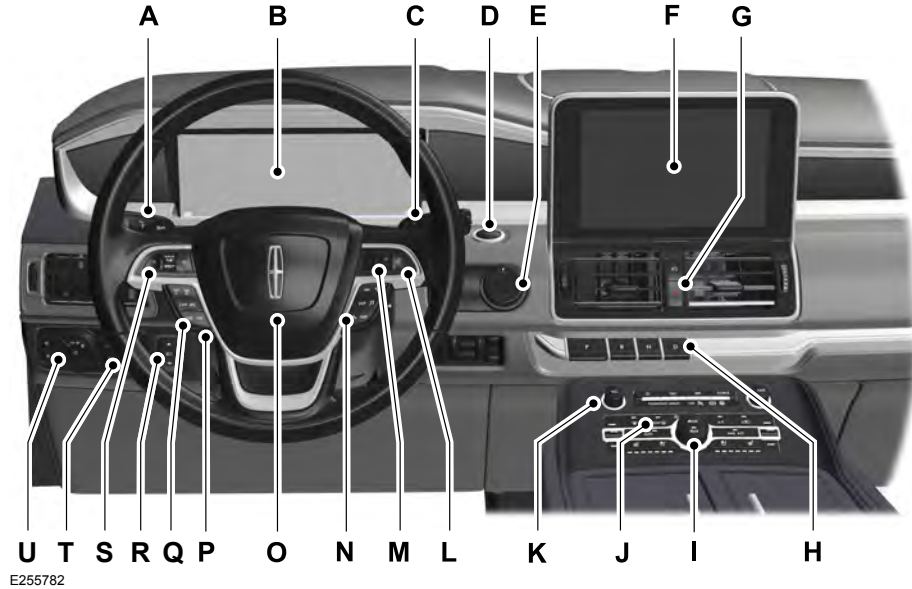
PROTECTING THE ENVIRONMENT

You should play your part in protecting the environment. Correct vehicle usage and the authorized disposal of waste, cleaning and lubrication materials are significant steps toward this aim.

For additional information about our sustainability progress and initiatives, visit www.sustainability.ford.com.

At a Glance

INSTRUMENT PANEL



At a Glance

- A Direction indicators. See **Direction Indicators** (page 114).
- B Instrument cluster. See **Instrument Cluster** (page 127).
- C Wiper lever. See **Wipers and Washers** (page 106).
- D Start button. See **Keyless Starting** (page 207).
- E Trailer backup assist. See **Trailer Reversing Aids** (page 316).
- F Information and entertainment display. See **General Information** (page 473).
- G Hazard flasher switch. See **Hazard Flashers** (page 345).
- H Automatic transmission. See **Automatic Transmission** (page 227).
- I Climate control. See **Climate Control** (page 166).
- J Rear defrost. See **Heated Rear Window** (page 171).
- K Audio. See **Audio System** (page 461).
- L Voice control. See **Voice Control** (page 102).
- M Information display controls. See **Information Displays** (page 134).
- N Information display control. See **Information Display Control** (page 103).
- O Horn. See **Horn** (page 104).
- P Steering wheel adjustment. See **Adjusting the Steering Wheel** (page 101).
- Q Cruise control. See **Cruise Control** (page 272).
- R Pedal adjustment. See **Adjusting the Pedals** (page 105).
- S Audio control. See **Audio Control** (page 102).

At a Glance

- T Liftgate control. See **Power Liftgate** (page 91).
- U Lighting control. See **Lighting Control** (page 110).

Child Safety

GENERAL INFORMATION

See the following sections for directions on how to properly use safety restraints for children.



WARNING: Always make sure your child is secured properly in a device that is appropriate for their height, age and weight. Child safety restraints must be bought separately from your vehicle. Failure to follow these instructions and guidelines may result in an increased risk of serious injury or death to your child.



WARNING: All children are shaped differently. The National Highway Traffic Safety Administration and other safety organizations, base their recommendations for child restraints on probable child height, age and weight thresholds, or on the minimum requirements of the law. We recommend that you check with a NHTSA Certified Child Passenger Safety Technician (CPST) to make sure that you properly install the child restraint in your vehicle and that you consult your pediatrician to make sure you have a child restraint appropriate for your child. To locate a child restraint fitting station and CPST, contact NHTSA toll free at

1-888-327-4236 or go to www.nhtsa.dot.gov. In Canada, contact Transport Canada toll free at 1-800-333-0371 or go to www.tc.gc.ca to find a Child Car Seat Clinic in your area. Failure to properly restrain children in child restraints made especially for their height, age and weight, may result in an increased risk of serious injury or death to your child.



WARNING: On hot days, the temperature inside the vehicle can rise very quickly. Exposure of people or animals to these high temperatures for even a short time can cause death or serious heat related injuries, including brain damage. Small children are particularly at risk.

Child Safety

Recommendations for Safety Restraints for Children

Child	Child Size, Height, Weight, or Age	Recommended Restraint Type
Infants or toddlers	Children weighing 40 lb (18 kg) or less (generally age four or younger).	Use a child restraint (sometimes called an infant carrier, convertible seat, or toddler seat).
Small children	Children who have outgrown or no longer properly fit in a child restraint (generally children who are less than 57 in (1.45 m) tall, are greater than age four and less than age 12, and between 40 lb (18 kg) and 80 lb (36 kg) and upward to 100 lb (45 kg) if recommended by your child restraint manufacturer).	Use a belt-positioning booster seat.
Larger children	Children who have outgrown or no longer properly fit in a belt-positioning booster seat (generally children who are at least 57 in (1.45 m) tall or greater than 80 lb (36 kg) or 100 lb (45 kg) if recommended by child restraint manufacturer).	Use a vehicle seatbelt having the lap belt snug and low across the hips, shoulder belt centered across the shoulder and chest, and seat backrest upright.

Child Safety

- You are required by law to properly use child restraints for infants and toddlers in the United States and Canada.
- Many states and provinces require that small children use approved booster seats until they reach age eight, a height of 57 in (1.45 m) tall, or 80 lb (36 kg). Check your local and state or provincial laws for specific requirements about the safety of children in your vehicle.
- When possible, always properly restrain children 12 years of age and under in a rear seating position of your vehicle. Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in a front seating position.
- When installing a rear facing child restraint, adjust the vehicle seats to avoid interference between the child restraint and the vehicle seat in front of the child restraint.

INSTALLING CHILD RESTRAINTS


Child Seats





E142594

Use a child safety seat (sometimes called an infant carrier, convertible seat, or toddler seat) for infants, toddlers, or children weighing 40 lb (18 kg) or less (generally age four or younger).

Using Lap and Shoulder Belts

 **WARNING:** Airbags can kill or injure a child in a child restraint. Never place a rear-facing child restraint in front of an active airbag. If you must use a forward-facing child restraint in the front seat, move the seat upon which the child restraint is installed all the way back.

 **WARNING:** Airbags can kill or injure a child in a child restraint. Properly restrain children 12 and under in the rear seat whenever possible.

 **WARNING:** Depending on where you secure a child restraint, and depending on the child restraint design, you may block access to certain seatbelt buckle assemblies and LATCH lower anchors, rendering those features potentially unusable. To avoid risk of injury, make sure occupants only use seating positions where they are able to be properly restrained.

Child Safety

When installing a child safety seat with combination lap and shoulder belts:

- Use the correct seatbelt buckle for that seating position.
- Insert the belt tongue into the proper buckle until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child restraint and the release button, to prevent accidental unbuckling.
- Place the vehicle seat upon which the child restraint will be installed in the upright position.
- For second-row seating positions, adjust the recliner slightly to improve child restraint fit. If needed, remove the head restraints.
- For third-row seating positions, stow the head restraints to improve child restraint fit. See **Head Restraints** (page 175).
- Put the seatbelt in the automatic locking mode. See Step 5. This vehicle does not require the use of a locking clip.

Perform the following steps when installing the child restraint with combination lap and shoulder belts:

Note: *Although the child restraint illustrated is a forward facing child restraint, the steps are the same for installing a rear facing child restraint.*

Note: *The lock-off device on some child restraints may not accommodate the shoulder portion of the inflatable seatbelt. Follow all instructions provided by the manufacturer of the child restraint regarding the necessary and proper use of the lock-off device. In some instances these devices have been provided only for use in vehicles with seatbelt systems that would otherwise require a locking clip.*

Standard seatbelts



1. Position the child safety seat in a seat with a combination lap and shoulder belt.

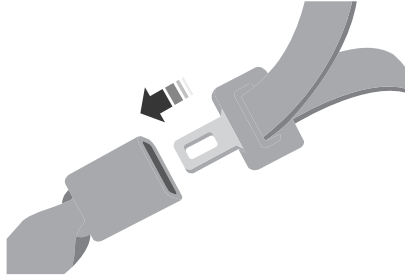


Child Safety

2. After positioning the child safety seat in the proper seating position, pull down on the shoulder belt and then grasp the shoulder belt and lap belt together behind the belt tongue.



3. While holding the shoulder and lap belt portions together, route the tongue through the child restraint according to the child restraint manufacturer's instructions. Be sure the belt webbing is not twisted.



4. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) for that seating position until you hear a snap and feel the latch engage. Make sure the tongue is latched securely by pulling on it.



5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until you pull all of the belt out.

Note: *The automatic locking mode is available on the front passenger and rear seats.*

6. Allow the belt to retract to remove slack. The belt will click as it retracts to indicate it is in the automatic locking mode.

Child Safety

7. Try to pull the belt out of the retractor to make sure the retractor is in the automatic locking mode (you should not be able to pull more belt out). If the retractor is not locked, unbuckle the belt and repeat Steps 5 and 6.



8. Remove remaining slack from the belt. Force the seat down with extra weight, for example, by pressing down or kneeling on the child restraint while pulling up on the shoulder belt in order to force slack from the belt. This is necessary to remove the remaining slack that exists once the extra weight of the

child is added to the child restraint. It also helps to achieve the proper snugness of the child restraint to your vehicle. Sometimes, a slight lean toward the buckle provides extra help to remove remaining slack from the belt.

9. Attach the tether strap (if the child restraint is equipped).



10. Before placing the child in the seat, forcibly move the seat forward and back to make sure the seat is securely held in place. To check this, grab the seat at the belt path and attempt to move it side to side and forward and back. There should be no more than 1 in (2.5 cm) of movement for proper installation.

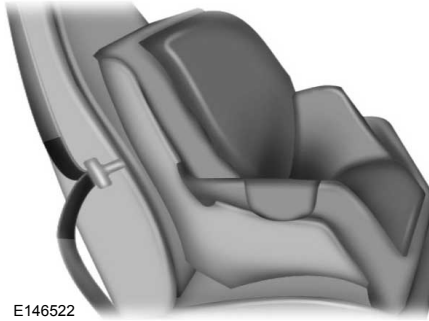
We recommend checking with a NHTSA Certified Child Passenger Safety Technician to make certain the child restraint is properly installed. In Canada, check with Transport Canada for referral to a Child Car Seat Clinic.

Child Safety

Inflatable seatbelts



1. Position the child safety seat in a seat with a combination lap and shoulder belt.

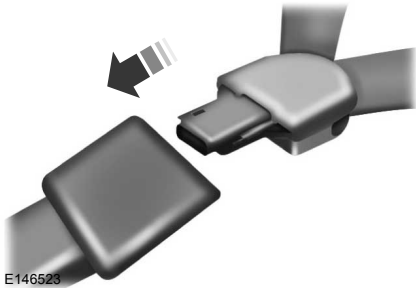


2. After positioning the child safety seat in the proper seating position, grasp the shoulder belt and lap belt together behind the belt tongue.

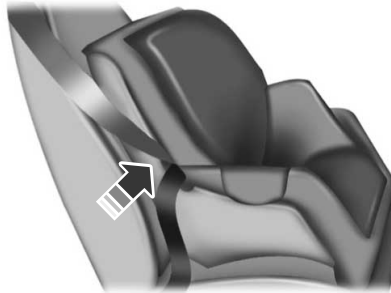


3. While holding the shoulder and lap belt portions together, route the tongue through the child restraint according to the child restraint manufacturer's instructions. Be sure the belt webbing is not twisted.

Child Safety



4. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) for that seating position until you hear a snap and feel the latch engage. Make sure the tongue is latched securely by pulling on it.



5. To put the retractor in the automatic locking mode, grasp the lap portion of the inflatable seatbelt and pull upward until you pull all of the belt out.

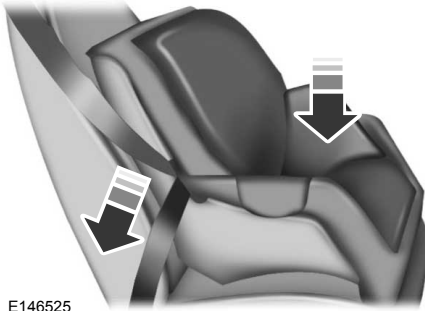
Note: *The automatic locking mode is available on the front passenger and rear seats.*

Note: *Unlike the standard seatbelt, the inflatable seatbelt's unique lap portion locks the child restraint for installation. The ability for the shoulder portion of the belt to move freely is normal, even after the lap belt has been put into the automatic locking mode.*

Note: *The lock-off device on some child restraints may not accommodate the shoulder portion of the inflatable seatbelt. Follow all instructions provided by the manufacturer of the child restraint regarding the necessary and proper use of the lock-off device. In some instances, these devices have been provided only for use in vehicles with seatbelt systems that would otherwise require a locking clip.*

6. Allow the belt to retract to remove slack. The belt clicks as it retracts to indicate it is in the automatic locking mode.
7. Try to pull the belt out of the retractor to make sure the retractor is in the automatic locking mode (you should not be able to pull more belt out). If the retractor is not locked, unbuckle the belt and repeat Steps 5 and 6.

Child Safety



E146525


9. Attach the tether strap (if the child restraint is equipped).



10. Before placing the child in the seat, forcibly move the seat forward and back to make sure the seat is securely held in place. To check this, grab the seat at the belt path and attempt to move it side to side and forward and back. There should be no more than 1 in (2.5 cm) of movement for proper installation.

We recommend checking with a NHTSA Certified Child Passenger Safety Technician to make certain the child restraint is properly installed. In Canada, check with Transport Canada for referral to a Child Car Seat Clinic.

Using Lower Anchors and Tethers for Children (LATCH)

 **WARNING:** Do not attach two child safety restraints to the same anchor. In a crash, one anchor may not be strong enough to hold two child safety restraint attachments and may break, causing serious injury or death.

The LATCH system is composed of three vehicle anchor points: two lower anchors where the vehicle seatback and seat cushion meet (called the seat bight) and one top tether anchor behind that seating position.

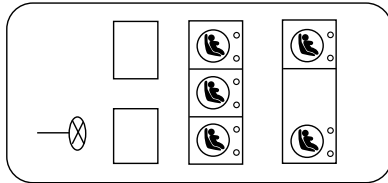
LATCH compatible child safety seats have two rigid or webbing mounted attachments that connect to the two lower anchors at the LATCH equipped seating positions in your vehicle. This type of attachment method eliminates the need to use seatbelts to attach

Child Safety

the child restraint. However, you can still use the seatbelt to attach the child restraint if the lower anchors are not used. For forward-facing child restraints, you must also attach the top tether strap to the proper top tether anchor if a top tether strap has been provided with your child restraint. We recommend the use of a child safety seat having a top tether strap. See Using Tether Straps in this chapter.

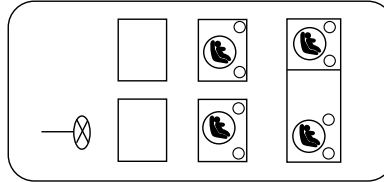
Your vehicle has LATCH lower anchors for child restraint installation at the seating positions marked with the child restraint symbol.

Second Row Bench Seat



E251314

Second Row Bucket Seats



E251315

The LATCH anchors are at the rear section of the rear seat between the cushion and seatback, below the locator symbols on the seatback. Follow the child restraint manufacturer's instructions to properly install a child restraint with LATCH attachments.



E144054

The locator symbols are on round plastic buttons for the center seat and on rectangular tags for the outboard seats.

Follow the instructions on attaching child safety seats with tether straps. See Using Tether Straps in this chapter.

Attach LATCH lower attachments of the child restraint only to the anchors shown.

Child Safety

Each time you use the safety seat, check that the seat is properly attached to the lower anchors and tether anchor, if applicable. Tug the child restraint from side to side and forward and back where it is secured to the vehicle. The seat should move less than one inch when you do this for a proper installation.

If the safety seat is not anchored properly, the risk of a child being injured in a crash greatly increases.

Combining Seatbelt and LATCH Lower Anchors for Attaching Child Safety Seats

When used in combination, either the seatbelt or the LATCH lower anchors may be attached first, provided a proper installation is achieved. Attach the tether strap afterward, if included with the child restraint.

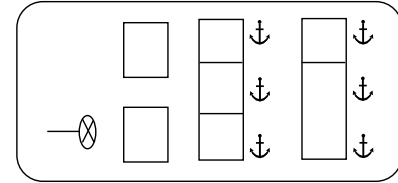
Using Tether Straps

Many forward-facing child safety seats include a tether strap which extends from the back of the child safety seat and hooks to an anchoring point called the top tether anchor. Tether straps are available as an accessory for many older safety seats. Contact the manufacturer of your child restraint for information about ordering a tether strap, or to obtain a longer tether strap if the tether strap on your safety seat does not reach the appropriate top tether anchor in the vehicle.

Some of the rear seats of your vehicle have built-in tether strap anchors behind the seats as described below.

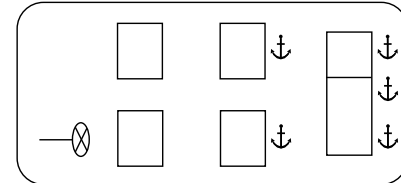
The tether strap anchors in your vehicle are in the following positions (shown from top view).

Second Row Bench Seat



E251316

Second Row Bucket Seats



E251319

Child Safety

Attach the tether strap only to the appropriate tether anchor as shown. The tether strap may not work properly if attached somewhere other than the correct tether anchor.

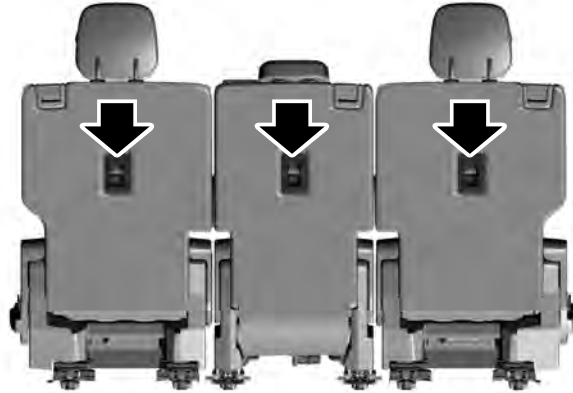
Once the child safety seat has been installed using either the seatbelt, the lower anchors of the LATCH system, or both, you can attach the top tether strap.

If you install a child restraint with rigid LATCH attachments, do not tighten the tether strap enough to lift the child restraint off the vehicle seat cushion when the child is seated in it. Keep the tether strap just snug without lifting the front of the child restraint. Keeping the child restraint just touching the vehicle seat gives the best protection in a severe crash.

Perform the following steps to install a child safety seat with tether anchors:

Child Safety

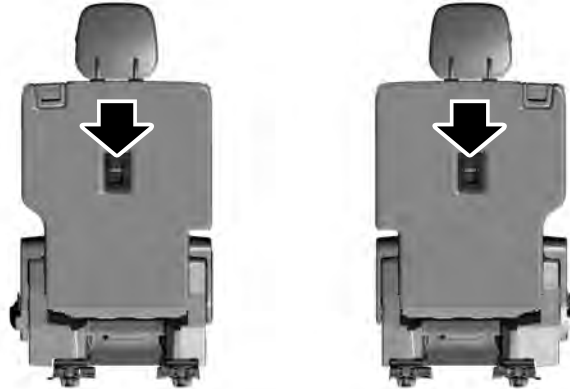
Second Row Seating Positions



E251593

Child Safety

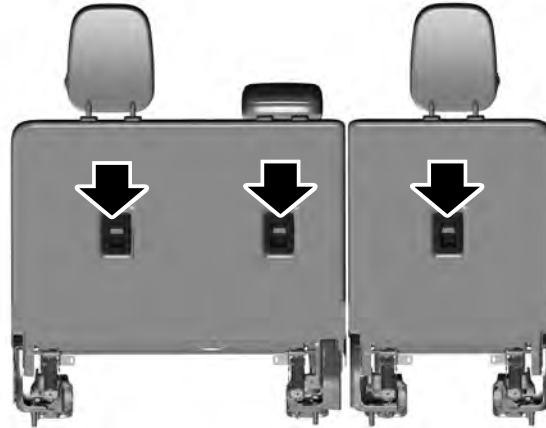
Second Row Bucket Seating Positions



E251594

Child Safety

Third Row Seating Positions



E251595

1. For center seating positions, route the child safety seat tether strap over the back of the seat. For outboard seating positions, route the tether strap under the head restraint and between the head restraint posts. If the top of the safety seat hits the head restraint, recline the seatback slightly to obtain proper fit.
2. Clip the tether strap to the anchor. If the tether strap is clipped incorrectly, the child safety seat may not be retained properly in the event of a crash.
3. Tighten the child safety seat tether strap according to the manufacturer's instructions. If the safety seat is not anchored properly, the risk of a child being injured in a crash greatly increases.

Child Safety

If your child restraint system has a tether strap and the child restraint manufacturer recommends its use, we also recommend its use.

BOOSTER SEATS



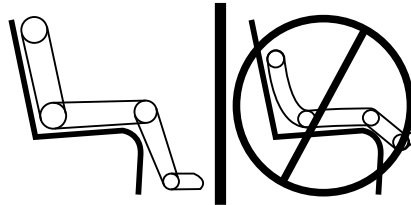
WARNING: Do not put the shoulder section of the seatbelt or allow the child to put the shoulder section of the seatbelt under their arm or behind their back. Failure to follow this instruction could reduce the effectiveness of the seatbelt and increase the risk of injury or death in a crash.

Note: Some booster seat seatbelt guides may not accommodate the shoulder portion of the inflatable seatbelt.

Use a belt-positioning booster seat for children who have outgrown or no longer properly fit in a child safety seat (generally children who are less than 57 in (1.45 m) tall, are greater than age four (4) and less than age twelve (12), and between 40 lb (18 kg)

and 80 lb (36 kg) and upward to 100 lb (45 kg) if recommended by your child restraint manufacturer). Many state and provincial laws require that children use approved booster seats until they reach age eight, a height of 57 in (1.45 m) tall, or 80 lb (36 kg).

Booster seats should be used until you can answer YES to ALL of these questions when seated without a booster seat:



- Can the child sit all the way back against their vehicle seat backrest with knees bent comfortably at the edge of the seat cushion?
- Can the child sit without slouching?

- Does the lap belt rest low across the hips?
- Is the shoulder belt centered on the shoulder and chest?
- Can the child stay seated like this for the whole trip?

Always use booster seats in conjunction with your vehicle lap and shoulder belt.

Types of Booster Seats



- Backless booster seats

Child Safety

If your backless booster seat has a removable shield, remove the shield. If a vehicle seating position has a low seat backrest or no head restraint, a backless booster seat may place your child's head (as measured at the tops of the ears) above the top of the seat. In this case, move the backless booster to another seating position with a higher seat backrest or head restraint and lap and shoulder belts, or consider using a high back booster seat.



- High back booster seats

If, with a backless booster seat, you cannot find a seating position that adequately supports your child's head, a high back booster seat would be a better choice.

Children and booster seats vary in size and shape. Choose a booster that keeps the lap belt low and snug across the hips, never up across the stomach, and lets you adjust the shoulder belt to cross the chest and rest snugly near the center of the shoulder. The following drawings compare the ideal fit (center) to a shoulder belt uncomfortably close to the neck and a shoulder belt that could slip off the shoulder. The drawings also show how the lap belt should be low and snug across the child's hips.


Child Safety





Child Safety

If the booster seat slides on the vehicle seat upon which it is being used, placing a rubberized mesh sold as shelf or carpet liner under the booster seat may improve this condition. Do not introduce any item thicker than this under the booster seat. Check with the booster seat manufacturer's instructions.


CHILD RESTRAINT POSITIONING


 **WARNING:** Do not place a rearward facing child restraint in front of an active airbag. Failure to follow this instruction could result in personal injury or death.


 **WARNING:** Properly secure children 12 years old and under in a rear seating position whenever possible. If you are unable to properly secure all children in a rear seating position, properly secure the largest child on the front seat. If you must use a forward facing child restraint on the front seat, move the seat as far back as possible. Failure to follow these instructions could result in personal injury or death.

 **WARNING:** Always carefully follow the instructions and warnings provided by the manufacturer of any child restraint to determine if the restraint device is appropriate for your child's size, height, weight, or age. Follow the child restraint manufacturer's instructions and warnings provided for installation and use in conjunction with the instructions and warnings provided by your vehicle

manufacturer. A safety seat that is improperly installed or utilized, is inappropriate for your child's height, age, or weight or does not properly fit the child may increase the risk of serious injury or death.

 **WARNING:** Do not allow a passenger to hold a child on their lap when your vehicle is moving. Failure to follow this instruction could result in personal injury or death in the event of a sudden stop or crash.

 **WARNING:** Do not use pillows, books or towels to boost your child's height. Failure to follow this instruction could result in personal injury or death.

 **WARNING:** Properly secure child restraints or booster seats when they are not in use. They could become projectiles in a sudden stop or crash. Failure to follow this instruction could result in personal injury or death.

Child Safety



WARNING: Do not put the shoulder section of the seatbelt or allow the child to put the shoulder section of the seatbelt under their arm or behind their back.

Failure to follow this instruction could reduce the effectiveness of the seatbelt and increase the risk of injury or death in a crash.



WARNING: Do not leave children or pets unattended in your vehicle. Failure to follow this instruction could result in personal injury or death.

Recommendations for Attaching Child Safety Restraints for Children

Restraint Type	Combined Weight of Child and Child Restraint	Use Any Attachment Method as Indicated Below by X				
		LATCH (Lower Anchors and Top Tether Anchor)	LATCH (Lower Anchors Only)	Seatbelt and Top Tether Anchor	Seatbelt and LATCH (Lower Anchors and Top Tether Anchor)	Seatbelt Only
Rear facing child restraint	Up to 65 lb (29.5 kg)		X			X
Rear facing child restraint	Over 65 lb (29.5 kg)					X
Forward facing child restraint	Up to 65 lb (29.5 kg)	X		X	X	
Forward facing child restraint	Over 65 lb (29.5 kg)			X	X	

Child Safety

Note: *The child restraint must rest tightly against the vehicle seat upon which it is installed. It may be necessary to lift or remove the head restraint. See **Seats** (page 175).*

CHILD SAFETY LOCKS

When these locks are set, the rear doors cannot be opened from the inside.



E249891

The locks are on the rear edge of each rear door and must be set separately for each door.

Left-Hand Side


Turn it clockwise to switch the child lock on and counterclockwise to switch it off.


Right-Hand Side


Turn it counterclockwise to switch the child lock on and clockwise to switch it off.


Seatbelts


PRINCIPLE OF OPERATION


 **WARNING:** Always drive and ride with your seatback upright and the lap belt snug and low across the hips.


 **WARNING:** Children must always be properly restrained.


 **WARNING:** Never let a passenger hold a child on his or her lap while the vehicle is moving. The passenger cannot protect the child from injury in a crash.


 **WARNING:** All occupants of your vehicle, including the driver, should always properly wear their seatbelts, even when an airbag supplemental restraint system is provided. Failure to properly wear your seatbelt could seriously increase the risk of injury or death.

 **WARNING:** It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a crash, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and seatbelts. Make sure everyone in your vehicle is in a seat and properly using a seatbelt. Failure to follow this warning could result in serious personal injury or death.

 **WARNING:** In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seatbelt.

 **WARNING:** Each seating position in your vehicle has a specific seatbelt assembly made up of one buckle and one tongue designed to be used as a pair. Use the shoulder belt on the outside shoulder only. Never wear the shoulder belt under the arm. Never use a single seatbelt for more than one person.

 **WARNING:** Even with advanced restraints systems, properly restrain children 12 and under in a rear seating position. Failure to follow this could seriously increase the risk of injury or death.

 **WARNING:** Seatbelts and seats may be hot in a vehicle that is in the sunshine. The hot seatbelts or seats may burn a small child. Check seat covers and buckles before you place a child anywhere near them.

All seating positions in your vehicle have lap and shoulder seatbelts. All occupants of the vehicle should always properly wear their seatbelts, even when an airbag supplemental restraint system is provided.

The seatbelt system consists of:

- Lap and shoulder seatbelts.
- Shoulder seatbelt with automatic locking mode, (except driver seatbelt and rear inflatable seatbelt).

Seatbelts

- Height adjuster at the front outboard seating positions.
- Seatbelt pretensioner at the front outboard seating positions.
- Belt tension sensor at the front outboard passenger seating position.



- Seatbelt warning light and chime.



- Crash sensors and monitoring system with readiness indicator.

The seatbelt pretensioners and rear inflatable seatbelts are designed to activate in frontal, near-frontal and side crashes, and in rollovers. The seatbelt pretensioners at the front seating positions are designed to tighten the seatbelts firmly against the

occupant's body when activated. This helps increase the effectiveness of the seatbelts. In frontal crashes, the seatbelt pretensioners can be activated alone or, if the crash is of sufficient severity, together with the front airbags.

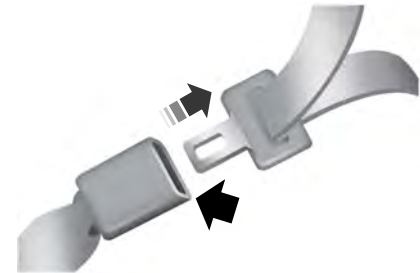
FASTENING THE SEATBELTS

Standard belts shown, inflatable belts similar

The front outboard and rear safety restraints in the vehicle are combination lap and shoulder belts.

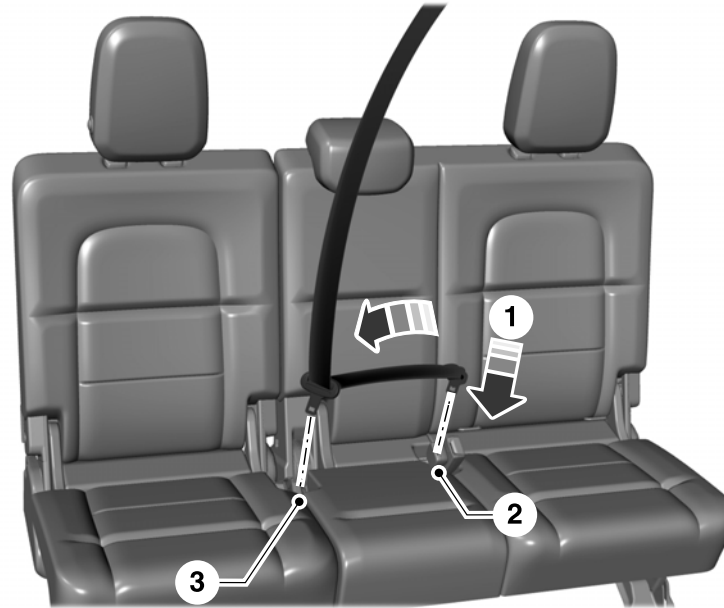


1. Insert the seatbelt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) until you hear a snap and feel it latch. Make sure you securely fasten the tongue in the buckle.



2. To unfasten, press the release button and remove the tongue from the buckle.

Seatbelts



E275033

The retractor for the third row center seatbelt is in the roof.

To fasten the seatbelt:

1. Pull the belt out steadily. It may lock if you pull it sharply or if the vehicle is on a slope.
2. Insert the smaller tongue into the smaller buckle to the left of the center seat.

Seatbelts

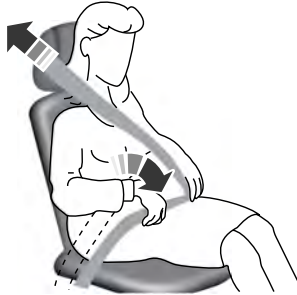
3. Pull the larger tongue across the lap and insert it into the buckle to the right of the center seat.

Note: *If in constant use, you can leave the belt buckled in the smaller buckle. When it is not in use, or when you fold or move the rear seats, you should release the belt from the smaller buckle. Using the tongue of the adjacent seatbelt, press the red button on the smaller buckle.*

Using Seatbelts During Pregnancy



WARNING: Always ride and drive with your seatback upright and properly fasten your seatbelt. Fit the lap portion of the seatbelt snugly and low across the hips. Position the shoulder portion of the seatbelt across your chest. Pregnant women must follow this practice. See the following figure.



Pregnant women should always wear their seatbelt. Position the lap belt portion of a combination lap and shoulder belt low across the hips below the belly and worn as tight as comfort allows. Position the shoulder belt to cross the middle of the shoulder and the center of the chest.

Seatbelt Locking Modes



WARNING: If your vehicle is involved in a crash, have the seatbelts and associated components inspected as soon as possible. Failure to follow this instruction could result in personal injury or death.

All safety restraints in the vehicle are combination lap and shoulder belts. The driver seatbelt has the vehicle sensitive locking mode. The front outboard passenger and rear seatbelts have both the vehicle sensitive locking mode and the automatic locking mode.

Vehicle Sensitive Mode

This is the normal retractor mode, which allows free shoulder belt length adjustment to your movements and locking in response to vehicle movement. For example, if the driver brakes suddenly or turns a corner sharply, or the vehicle receives an impact of about 5 mph (8 km/h) or more, the combination seatbelts lock to help reduce forward movement of the driver and passengers.

In addition, the retractor is designed to lock if you pull the webbing out too quickly. If the seatbelt retractor locks, slowly lower the height adjuster to allow the seatbelt to retract. If the retractor does not unlock, pull the seatbelt out slowly then feed a small

Seatbelts

length of webbing back toward the stowed position. For rear seatbelts, recline the rear seat backrest or push the seat backrest cushion away from the seatbelt. Feed a small length of webbing back toward the stowed position.

Automatic Locking Mode

In this mode, the shoulder belt automatically pre-locks. The belt still retracts to remove any slack in the shoulder belt. The automatic locking mode is not available on the driver seatbelt.

When to Use the Automatic Locking Mode

Use this mode when you install a child safety seat, except a booster, in the passenger front or rear seating positions. Properly restrain children 12 years old and under in a rear seating position whenever possible. See **Seatbelts** (page 45).

How to Use the Automatic Locking Mode

Non-Inflatable Seatbelts



1. Buckle the combination lap and shoulder belt.
2. Grasp the shoulder portion and pull downward until you pull the entire belt out. As the belt retracts, you will hear a clicking sound. This indicates the seatbelt is now in the automatic locking mode.

Rear Outermost Inflatable Seatbelts (Second Row Only–If Equipped)



E146363


1. Buckle the combination lap and shoulder belt.
2. Grasp the lap portion of the belt and pull upward until you pull the entire belt out.
3. Allow the belt to retract. As the belt retracts, you will hear a clicking sound. This indicates the seatbelt is now in the automatic locking mode.

Seatbelts

How to Disengage the Automatic Locking Mode

Unbuckle the combination lap and shoulder belt and allow it to retract completely to disengage the automatic locking mode and activate the vehicle sensitive (emergency) locking mode.

Rear Inflatable Seatbelt (If Equipped)

 **WARNING:** Do not attempt to service, repair, or modify the supplementary restraint system or associated components. Failure to follow this instruction could result in personal injury or death.


The rear inflatable seatbelts are in the shoulder portion of the seatbelts of the second-row outermost seating positions.

Note: *The rear inflatable seatbelts are compatible with most infant and child safety car seats and belt positioning booster seats when you properly install them. This is because they are designed to fill with a cooled gas at a lower pressure and at a slower rate than traditional airbags. After inflation, the shoulder portion of the seatbelt remains cool to the touch.*

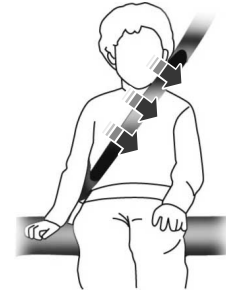
The rear inflatable seatbelt consists of the following:

- An inflatable bag in the shoulder seatbelt webbing.
- Lap seatbelt webbing with automatic locking mode.
- The same warning light, electronic control and diagnostic unit as used for the front seatbelts.
- Impact sensors in various parts of the vehicle.

How does the rear inflatable seatbelt system work?

 **WARNING:** If a supplementary restraint system component has deployed, it will not function again. Have the system and associated components inspected as soon as possible. Failure to follow this instruction could result in personal injury or death.

The rear inflatable seatbelts function like standard restraints in everyday usage.



E146364

Seatbelts

During a crash of sufficient force, the inflatable belt inflates from inside the webbing.



E146365

The fully inflated seatbelt's increased diameter more effectively holds the occupant in the appropriate seating position, and spreads crash forces over more area of the body than regular seatbelts. This helps reduce pressure on the chest and helps control head and neck motion for passengers.

The rear inflatable seatbelts are designed to inflate in frontal or near-frontal crashes, side impact crashes and rollovers. The fact that the rear inflatable seatbelt did not inflate in a crash does not mean that something is wrong with the system. Rather, it means the forces were not of the type sufficient to cause activation.

SEATBELT HEIGHT ADJUSTMENT



WARNING: Position the seatbelt height adjuster so that the belt rests across the middle of your shoulder. Failure to adjust the seatbelt properly could reduce the effectiveness of the seatbelt and increase the risk of injury in a crash.



E146191

To adjust the shoulder belt height, squeeze the button and slide the height adjuster up or down. Release the button and pull down on the height adjuster to make sure it is locked in place.

SEATBELT WARNING LAMP AND INDICATOR CHIME



This lamp illuminates and an indicator chime will sound if the driver seatbelt has not been fastened when the vehicle's ignition is turned on.

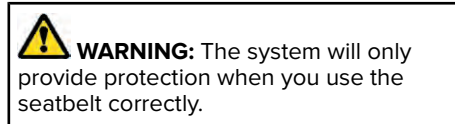
Seatbelts

Conditions of operation

If	Then
The driver seatbelt is not buckled before the ignition switch is turned to the on position...	The seatbelt warning lamp illuminates and the indicator chime sounds for a few seconds.
The driver seatbelt is buckled while the warning lamp is illuminated and the indicator chime is sounding...	The seatbelt warning lamp and indicator chime turn off.
The driver seatbelt is buckled before the ignition switch is turned to the on position...	The seatbelt warning lamp and indicator chime remain off.

SEATBELT REMINDER

Front Seats



This feature provides audio and visual reminders for the front seatbelts.



This lamp illuminates and a warning tone sounds if you do not fasten your seatbelt when you switch the ignition on. The lamp and tone switch off when you fasten your seatbelt or about one minute has elapsed.

When the initial warning expires for the driver, more warnings are provided for the driver and front outermost passenger. This lamp illuminates and a warning tone sounds if you or your front passenger do not fasten the seatbelt buckle and the vehicle speed exceeds 6 mph (9.7 km/h). To deactivate the warning, see Deactivating and Activating the Belt-Minder Feature.

Note: To avoid inadvertent warnings, do not place large objects on the front passenger seat.

Seatbelt Monitor (If Equipped)

This feature provides the driver with visual only feedback for the seatbelts.



This lamp illuminates when you switch the ignition on, identifying the number of seating positions with fastened buckles. It illuminates again when a seating position changes from unfastened to fastened.

Seatbelts



This warning displays and a tone sounds if an occupant unfastens the rear seatbelt buckle or it becomes unfastened.

Note: *If a rear seat is unoccupied, or an occupant never fastens the seatbelt buckle to begin with, the warning will not display.*

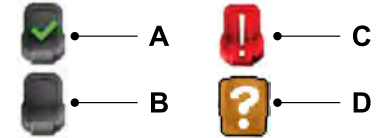
Note: *Front seating positions appear in this warning display. Warnings for unfastened front seatbelt buckles appear in the initial warning lamp.*

Seatbelt Status

To view the seatbelt status, use the information display controls on the steering wheel. See **General Information** (page 134).



E274570



E274703

- A Seatbelt fastened.
- B Seatbelt not fastened.
- C Seatbelt recently unfastened.
- D Fault

Deactivating and Activating the Belt-Minder Feature - Front outermost seats only



WARNING: While the system allows you to deactivate it, this system is designed to improve your chances of being safely belted and surviving an accident. We recommend you leave the system activated for yourself and others who may use the vehicle.

Seatbelts

Note: *The driver and front passenger warnings switch on and off independently. When you perform this procedure for one seating position, do not buckle the other position as this terminates the process.*

Read Steps 1 - 4 before starting the procedure.

Make sure that:

- You set the parking brake.
 - The transmission is in park (P).
 - The ignition is off.
 - You close all vehicle doors.
 - You unbuckle the driver and front passenger seatbelts.
1. Switch the ignition on. Do not start the engine.
 2. Wait until the seatbelt warning lamp turns off (about one minute). After Step 2, wait an additional five seconds before proceeding with Step 3. Once you start Step 3, you must complete the procedure within 60 seconds.

3. For the seating position you are switching off, buckle then unbuckle the seatbelt three times at a moderate speed, ending in the unbuckled state. After Step 3, the seatbelt warning lamp turns on.
4. When the seatbelt warning lamp is on, buckle then unbuckle the seatbelt. After Step 4, the seatbelt warning lamp flashes for confirmation.
 - This switches the feature off if it is currently on.
 - This switches the feature on if it is currently off.

CHILD RESTRAINT AND SEATBELT MAINTENANCE

Inspect the vehicle seatbelts and child safety seat systems periodically to make sure they work properly and are not damaged. Inspect the vehicle and child restraint seatbelts to make sure there are no nicks, tears or cuts. Replace if necessary. All vehicle seatbelt assemblies, including retractors, buckles, front seatbelt buckle assemblies, buckle support assemblies (slide bar-if equipped),

shoulder belt height adjusters (if equipped), shoulder belt guide on seat backrest (if equipped), child safety seat LATCH and tether anchors, and attaching hardware, should be inspected after a crash. Read the child restraint manufacturer's instructions for additional inspection and maintenance information specific to the child restraint.

We recommend that all seatbelt assemblies in use in vehicles involved in a crash be replaced. However, if the crash was minor and an authorized dealer finds that the belts do not show damage and continue to operate properly, they do not need to be replaced. Seatbelt assemblies not in use during a crash should also be inspected and replaced if either damage or improper operation is noted.

Properly care for seatbelts. See **Vehicle Care** (page 396).

Seatbelts

SEATBELT EXTENSIONS



WARNING: Persons who fit into the vehicle's seatbelt should not use an extension. Unnecessary use could result in serious personal injury in the event of a crash.



WARNING: Only use extensions provided free of charge by Lincoln Motor Company dealers. The dealer will provide an extension designed specifically for this vehicle, model year and seating position. The use of an extension intended for another vehicle, model year or seating position may not offer you the full protection of your vehicle's seatbelt restraint system.



WARNING: Never use seatbelt extensions to install child restraints.



WARNING: Do not use a seatbelt extension with an inflatable seatbelt.



WARNING: Do not use extensions to change the fit of the belt across the torso, over the lap or to make the seatbelt buckle easier to reach.

If, because of body size or driving position, it is not possible to properly fasten the seatbelt over your lap and shoulder, an extension that is compatible with the seatbelts is available free of charge from Lincoln Motor Company dealers. Only Lincoln seatbelt extensions made by the same company which made the original equipment seatbelts, should be used with Lincoln seatbelts. Ask your authorized dealer if your extension is compatible with your Lincoln vehicle restraint system.

Personal Safety System™

The Personal Safety System provides an improved overall level of frontal crash protection to front seat occupants and is designed to help further reduce the risk of airbag-related injuries. The system is able to analyze different occupant conditions and crash severity before activating the appropriate safety devices to help better protect a range of occupants in a variety of frontal crash situations.

The Vehicle Personal Safety System consists of:

- Driver and passenger dual-stage airbag supplemental restraints.
- Front seat outermost seatbelts with pretensioners, energy management retractors and seatbelt usage sensors.
- Driver seat position sensor.
- Passenger seat position sensor.
- Front passenger sensing system.
- Passenger airbag off and on indicators.
- Front crash severity sensors.
- Restraints control module with impact and safing sensors.


- Restraint system warning lamp and tone.
- The electrical wiring for the airbags, crash sensors, seatbelt pretensioners, front seatbelt usage sensors, driver seat position sensor, front passenger sensing system and indicators.


How Does the Personal Safety System Work?


The Personal Safety System can adapt the deployment strategy of the safety devices according to crash severity and occupant conditions. A collection of crash and occupant sensors provides information to the restraints control module. During a crash, the restraints control module may deploy the seatbelt pretensioners, one or both stages of the dual-stage airbags based on crash severity and occupant conditions.


Supplementary Restraints System


PRINCIPLE OF OPERATION


 **WARNING:** Airbags do not inflate slowly or gently, and the risk of injury from a deploying airbag is the greatest close to the trim covering the airbag module.


 **WARNING:** All occupants of your vehicle, including the driver, should always properly wear their seatbelts, even when an airbag supplemental restraint system is provided. Failure to properly wear your seatbelt could seriously increase the risk of injury or death.


 **WARNING:** Even with advanced restraints systems, properly restrain children 12 and under in a rear seating position. Failure to follow this could seriously increase the risk of injury or death.


 **WARNING:** Do not place your arms on the airbag cover or through the steering wheel. Failure to follow this instruction could result in personal injury.

 **WARNING:** Keep the areas in front of the airbags free from obstruction. Do not affix anything to or over the airbag covers. Objects could become projectiles during airbag deployment or in a sudden stop. Failure to follow this instruction could result in personal injury or death.

 **WARNING:** Airbags can kill or injure a child in a child restraint. Never place a rear-facing child restraint in front of an active airbag. If you must use a forward-facing child restraint in the front seat, move the seat upon which the child restraint is installed all the way back.

 **WARNING:** Do not attempt to service, repair, or modify the supplementary restraint system or associated components. Failure to follow this instruction could result in personal injury or death.

 **WARNING:** Several airbag system components get hot after inflation. To reduce the risk of injury, do not touch them after inflation.

 **WARNING:** If a supplementary restraint system component has deployed, it will not function again. Have the system and associated components inspected as soon as possible. Failure to follow this instruction could result in personal injury or death.

The airbags are a supplemental restraint system and are designed to work with the seatbelts to help protect the driver and right front passenger from certain upper body injuries. Airbags do not inflate slowly; there is a risk of injury from a deploying airbag.

Note: *You will hear a loud bang and see a cloud of harmless powdery residue if an airbag deploys. This is normal.*

Supplementary Restraints System

The airbags inflate and deflate rapidly upon activation. After airbag deployment, it is normal to notice a smoke-like, powdery residue or smell the burnt propellant. This may consist of cornstarch, talcum powder (to lubricate the bag) or sodium compounds (for example, baking soda) that result from the combustion process that inflates the airbag. Small amounts of sodium hydroxide may be present which may irritate the skin and eyes, but none of the residue is toxic.

While the system is designed to help reduce serious injuries, contact with a deploying airbag may also cause abrasions or swelling. Temporary hearing loss is also a possibility as a result of the noise associated with a deploying airbag. Because airbags must inflate rapidly and with considerable force, there is the risk of death or serious injuries such as fractures, facial and eye injuries or internal injuries, particularly to occupants who are not properly restrained or are otherwise out of position at the time of airbag deployment. Thus, it is extremely important that occupants be properly restrained as far away from the airbag module as possible while maintaining vehicle control.

Routine maintenance of the airbags is not required.

DRIVER AND PASSENGER AIRBAGS



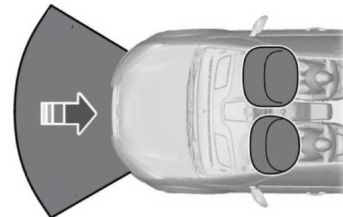
WARNING: Do not place your arms on the airbag cover or through the steering wheel. Failure to follow this instruction could result in personal injury.



WARNING: Keep the areas in front of the airbags free from obstruction. Do not affix anything to or over the airbag covers. Objects could become projectiles during airbag deployment or in a sudden stop. Failure to follow this instruction could result in personal injury or death.



WARNING: Airbags can kill or injure a child in a child restraint. Never place a rear-facing child restraint in front of an active airbag. If you must use a forward-facing child restraint in the front seat, move the seat upon which the child restraint is installed all the way back.



The driver and passenger front airbags will deploy during significant frontal and near frontal crashes.

Supplementary Restraints System

The driver and passenger front airbag system consists of:

- Driver and passenger airbag modules.
- Front passenger sensing system.



• Crash sensors and monitoring system with readiness indicator. See **Crash Sensors and Airbag Indicator** (page 65).

Proper Driver and Front Passenger Seating Adjustment



WARNING: National Highway Traffic Safety Administration (NHTSA) recommends a minimum distance of at least 10 in (25 cm) between an occupant's chest and the driver airbag module.

To properly position yourself away from the airbag:

- Move your seat to the rear as far as you can while still reaching the pedals comfortably.
- Recline the seat slightly (one or two degrees) from the upright position.

After all occupants have adjusted their seats and put on seatbelts, it is very important that they continue to sit properly. Properly seated occupants sit upright, lean against the seat back, and center themselves on the seat cushion, with their feet comfortably extended on the floor. Sitting improperly can increase the chance of injury in a crash event. For example, if an occupant slouches, lies down, turns sideways, sits forward, leans forward or sideways, or puts one or both feet up, the chance of injury during a crash greatly increases.

Children and Airbags



WARNING: Airbags can kill or injure a child in a child restraint. Never place a rear-facing child restraint in front of an active airbag. If you must use a forward-facing child restraint in the front seat, move the seat upon which the child restraint is installed all the way back.



Children must always be properly restrained. Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in the front seating position. Failure to follow these instructions may increase the risk of injury in a crash.

Supplementary Restraints System

FRONT PASSENGER SENSING SYSTEM



WARNING: Even with advanced restraints systems, properly restrain children 12 and under in a rear seating position. Failure to follow this could seriously increase the risk of injury or death.



WARNING: Sitting improperly, out of position or with the seatback reclined too far can take weight off the seat cushion and affect the decision of the passenger sensing system, resulting in serious injury or death in the event of a crash. Always sit upright against your seat back, with your feet on the floor.



WARNING: Any alteration or modification to the front passenger seat may affect the performance of the front passenger sensing system. This could seriously increase the risk of injury or death.



The front passenger sensing system uses a passenger airbag status indicator which illuminates indicating that the front passenger frontal airbag is either on (enabled) or off (disabled). The indicator lamp is in the center stack of the instrument panel.

Note: *When you first switch the ignition on, the passenger airbag status indicator off and on lamps illuminate for a short period to confirm it is functional.*

The front passenger sensing system is designed to disable (will not inflate) the front passenger frontal airbag under certain conditions:

- The front passenger seat is unoccupied.
- The system determines an infant is present in a child restraint.

- A passenger takes their weight off of the seat for a period of time.
- If there is a problem with the airbag system or the passenger sensing system.

Even with this technology, parents are **strongly** encouraged to always properly restrain children in the rear seat.

- When the front passenger sensing system disables (will not inflate) the front passenger frontal airbag, the passenger airbag status indicator illuminates the off lamp and stays lit to remind you that the front passenger frontal airbag is disabled.
- If you have installed the child restraint and the passenger airbag status indicator illuminates the on lamp, then switch your vehicle off, remove the child restraint from your vehicle and reinstall the restraint following the child restraint manufacturer's instructions.

Supplementary Restraints System

The front passenger sensing system works with sensors that are part of the front passenger seat and seatbelt. The sensors are designed to detect the presence of a properly seated occupant and determine if the front passenger frontal airbag should be enabled.

- When the front passenger sensing system enables the front passenger frontal airbag (may inflate), the passenger airbag status indicator illuminates the on lamp and remains illuminated.

If a person of adult size is sitting in the front passenger seat, but the passenger airbag status indicator off lamp is lit, it is possible that the person is not sitting properly in the seat. If this happens:

- Switch your vehicle off and ask the person to place the seat backrest in an upright position.
- Have the person sit upright in the seat, centered on the seat cushion, with the person's legs comfortably extended.

- Restart your vehicle and have the person remain in this position for about two minutes. This allows the system to detect that person and enable the passenger frontal airbag.
- If the indicator off lamp remains lit even after this, you should advise the person to ride in the rear seat.

After all occupants have adjusted their seats and put on seatbelts, it is very important that they continue to sit properly. A properly seated occupant sits upright, leaning against the seat backrest, and centered on the seat cushion, with their feet comfortably extended on the floor. Sitting improperly can increase the chance of injury in a crash event. For example, if an occupant slouches, lies down, turns sideways, sits forward, leans forward or sideways, or puts one or both feet up, the chance of injury during a crash greatly increases.

If you think that the state of the passenger airbag status indicator lamp is incorrect, check for the following:

- Objects lodged underneath the seat.
- Objects between the seat cushion and the center console.
- Objects hanging off the seat backrest.
- Objects stowed in the seat backrest map pocket.
- Objects placed on the occupant's lap.
- Cargo interference with the seat.
- Other passengers pushing or pulling on the seat.
- Rear passenger feet and knees resting or pushing on the seat.

The conditions listed above may cause the weight of a properly seated occupant to be incorrectly interpreted by the front passenger sensing system. The person in the front passenger seat may appear heavier or lighter due to the conditions described in the previous list.

Supplementary Restraints System



Make sure the front passenger sensing system is operating properly. See **Crash Sensors and Airbag Indicator** (page 65).

If the airbag readiness light is lit, do the following:

The driver and adult passengers should check for objects lodged underneath the front passenger seat or cargo interfering with the seat.

If objects are lodged or cargo is interfering with the seat, take the following steps to remove the obstruction:

- Pull your vehicle over.
- Switch your vehicle off.
- Driver or adult passengers should check for any objects lodged underneath the front passenger seat or cargo interfering with the seat.
- Remove the obstruction(s) (if found).
- Restart your vehicle.

- Wait at least two minutes and verify that the airbag readiness light in the instrument cluster is no longer illuminated.
- If the airbag readiness light in the instrument cluster remains illuminated, this may or may not be a problem due to the front passenger sensing system.

Do not attempt to repair or service the system. Take your vehicle immediately to an authorized dealer.

If it is necessary to modify an advanced front airbag system to accommodate a person with disabilities, contact your Customer Relationship Center.

SIDE AIRBAGS



WARNING: Do not place objects or mount equipment on or near the airbag cover, on the side of the front or rear seatbacks, or in areas that may come into contact with a deploying airbag. Failure to follow these instructions may increase the risk of personal injury in the event of a crash.



WARNING: Do not use accessory seat covers. The use of accessory seat covers may prevent the deployment of the side airbags and increase the risk of injury in an accident.



WARNING: Do not lean your head on the door. The side airbag could injure you as it deploys from the side of the seatback.

Supplementary Restraints System



WARNING: Do not attempt to service, repair, or modify the supplementary restraint system or associated components. Failure to follow this instruction could result in personal injury or death.



WARNING: If a supplementary restraint system component has deployed, it will not function again. Have the system and associated components inspected as soon as possible. Failure to follow this instruction could result in personal injury or death.

The side airbags are on the outermost side of the seat backrests of the front seats. The airbag was designed to inflate between the door panel and occupant to further enhance the protection provided occupants in side impact crashes.



The system consists of the following:

- A label or embossed side panel indicating that side airbags are found on your vehicle.
- Side airbags inside the seat backrest of the driver and front passenger seats.



• Crash sensors and monitoring system with readiness indicator. See **Crash Sensors and Airbag**

Indicator (page 65).

The design and development of the side airbag system included recommended testing procedures that were developed by a group of automotive safety experts known as the Side Airbag Technical Working Group. These recommended testing procedures help reduce the risk of injuries related to the deployment of side airbags.

SAFETY CANOPY™





WARNING: Do not place objects or mount equipment on or near the headliner at the siderail that may come into contact with a deploying curtain airbag. Failure to follow these instructions may increase the risk of personal injury in the event of a crash.





WARNING: Do not lean your head on the door. The curtain airbag could injure you as it deploys from the headliner.

Supplementary Restraints System

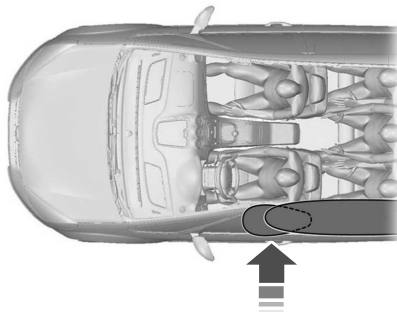
 **WARNING:** Do not attempt to service, repair, or modify the supplementary restraint system or associated components. Failure to follow this instruction could result in personal injury or death.

 **WARNING:** All occupants of your vehicle, including the driver, should always properly wear their seatbelts, even when an airbag supplemental restraint system is provided. Failure to properly wear your seatbelt could seriously increase the risk of injury or death.

 **WARNING:** To reduce risk of injury, do not obstruct or place objects in the deployment path of the airbag.

 **WARNING:** If a supplementary restraint system component has deployed, it will not function again. Have the system and associated components inspected as soon as possible. Failure to follow this instruction could result in personal injury or death.

The Safety Canopy deploys during significant side crashes or when a certain likelihood of a rollover event is detected by the rollover sensor. The Safety Canopy is mounted to the roof side rail sheet metal, behind the headliner, above each row of seats. In certain sideways crashes or rollover events, the Safety Canopy will be activated, regardless of which seats are occupied. The Safety Canopy is designed to inflate between the side window area and occupants to further enhance protection provided in side impact crashes and rollover events.



The system consists of the following:

- Safety Canopy curtain airbags above the trim panels over the front and rear side windows identified by a label or wording on the headliner or roof-pillar trim.
- A flexible headliner which opens above the side doors to allow air curtain deployment



• Crash sensors and monitoring system with a readiness indicator. See **Crash Sensors and Airbag Indicator** (page 65).

Properly restrain children 12 years old and under in the rear seats. The Safety Canopy will not interfere with children restrained using a properly installed child or booster seat because it is designed to inflate downward from the headliner above the doors along the side window opening.

Supplementary Restraints System

The design and development of the Safety Canopy included recommended testing procedures that were developed by a group of automotive safety experts known as the Side Airbag Technical Working Group. These recommended testing procedures help reduce the risk of injuries related to the deployment of side airbags (including the Safety Canopy).

CRASH SENSORS AND AIRBAG INDICATOR



WARNING: Modifying or adding equipment to the front end of your vehicle (including hood, bumper system, frame, front end body structure, tow hooks and hood pins) may affect the performance of the airbag system, increasing the risk of injury. Do not modify or add equipment to the front end of your vehicle.

Your vehicle has a collection of crash and occupant sensors which provide information to the restraints control module which deploys (activates) the front seatbelt pretensioners, the adaptive steering column, driver airbag, passenger airbag, rear inflatable belts, seat mounted side airbags, and the Safety Canopy. Based on the type of crash, the restraints control module will deploy the appropriate safety devices.

The restraints control module also monitors the readiness of the above safety devices plus the crash and occupant sensors. The readiness of the safety system is indicated by a warning indicator light in the instrument cluster or by a backup tone if the warning light is not working. See **Instrument Cluster** (page 127). Routine maintenance of the airbag is not required.

A difficulty with the system is indicated by one or more of the following:



The readiness light will not illuminate immediately after you switch the ignition on.

- The readiness light either flashes or stays lit.
- A series of five beeps will be heard. The tone pattern will repeat periodically until the problem, the light or both are repaired.

If any of these things happen, even intermittently, have the supplemental restraint system serviced at an authorized dealer immediately. Unless serviced, the system may not function properly in the event of a crash.

Supplementary Restraints System

The fact that the seatbelt pretensioners or front airbags did not activate for both front seat occupants in a crash does not mean that something is wrong with the system. Rather, it means the restraints control module determined the accident conditions (crash severity, belt usage) were not appropriate to activate these safety devices.

- The design of the front airbags is to activate only in frontal and near-frontal crashes (not rollovers, side impacts or rear impacts) unless the crash causes sufficient frontal deceleration.
- The design of the seatbelt pretensioners and rear inflatable belts is to activate in frontal, near-frontal and side crashes, and in rollovers.

- The design of the side airbags is to inflate in certain side impact crashes or rollover events. Side airbags may activate in other types of crashes if the vehicle experiences sufficient sideways motion or deformation.
- The design of the Safety Canopy is to inflate in certain side impact crashes or rollover events. The Safety Canopy may activate in other types of crashes if the vehicle experiences sufficient sideways motion or deformation, or a certain likelihood of rollover.

AIRBAG DISPOSAL

Contact your authorized dealer as soon as possible. Airbags must be disposed of by qualified personnel.

911 Assist

WHAT IS 911 ASSIST

911 Assist is a SYNC system feature that can call for help if you are in an accident. If a crash deploys an airbag, excluding knee airbags and rear inflatable seatbelts [if equipped], or activates the fuel pump shut-off, your SYNC-equipped vehicle may be able to contact emergency services by dialing 911 through a paired and connected Bluetooth enabled phone. You can learn more about the 911 Assist feature, by visiting:

Website
www.owner.lincoln.com
www.syncmyride.ca
www.syncmaroute.ca

Not all crashes will deploy an airbag or activate the fuel pump shut-off, the triggers for 911 Assist. If a connected cell phone sustains damage or loses its connection to SYNC during a crash, SYNC will search for and try to connect to a previously paired cell phone. SYNC will then attempt to call the emergency services.

Before making the call:

- SYNC provides a short window of time, about 10 seconds, to cancel the call. If you fail to cancel the call, SYNC attempts to dial 911.
- SYNC says the following, or a similar message: SYNC will attempt to call 911, to cancel the call, press Cancel on your screen or press and hold the phone button on your steering wheel.

If you do not cancel the call, and SYNC makes a successful call, a pre-recorded message plays for the 911 operator, and then the occupant(s) in your vehicle is able to talk with the operator. Be prepared to immediately provide your name, phone number and location, because not all 911 systems are capable of receiving this information electronically.

During an emergency call, the system transmits vehicle data to the emergency service. See **Data Recording** (page 12).

EMERGENCY CALL REQUIREMENTS



WARNING: Do not wait for 911 Assist to make an emergency call if you can do it yourself. Dial emergency services immediately to avoid delayed response time which could increase the risk of serious injury or death after a crash. If you do not hear 911 Assist within five seconds of the crash, the system or phone may be damaged or non-functional.



WARNING: Always place your phone in a secure location in your vehicle so it does not become a projectile or get damaged in a crash. Failure to do so may cause serious injury to someone or damage the phone which could prevent 911 Assist from working properly.



WARNING: Unless the 911 Assist setting is set on before a crash, the system will not dial for help which could delay response time, potentially increasing the risk of serious injury or death after a crash.

911 Assist

- SYNC must be powered and working properly at the time of the incident and throughout feature activation and use.
- The 911 Assist feature must be set on before the incident.
- You must pair and connect a Bluetooth enabled and compatible cell phone to SYNC.
- A connected Bluetooth enabled phone must have the ability to make and maintain an outgoing call at the time of the incident.
- A connected Bluetooth enabled phone must have adequate network coverage, battery power and signal strength.
- The vehicle must have battery power and be located in the U.S., Canada or in a territory in which 911 is the emergency number.

Note: *If any user sets 911 Assist to on or off, that setting applies for all paired phones. If 911 Assist is switched off and the phone is connected to SYNC, an icon displays on the status bar.*

Note: *Every phone operates differently. While SYNC 911 Assist works with most cellular phones, some may have trouble using this feature.*

EMERGENCY CALL LIMITATIONS

The SYNC 911 Assist feature only operates in the U.S., Canada or in a territory in which 911 is the emergency number.

- Your cellular phone or 911 Assist hardware sustains damage in a crash.
- The vehicle's battery or the SYNC system has no power.
- The phone(s) thrown from your vehicle are the ones paired and connected to the system.

Keys and Remote Controls

GENERAL INFORMATION ON RADIO FREQUENCIES

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.



WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

The typical operating range for your transmitter is approximately 33 ft (10 m). Vehicles with the remote start feature will have a greater range.

One of the following could cause a decrease in operating range:

- Weather conditions.
- Nearby radio towers.
- Structures around the vehicle.
- Other vehicles parked next to your vehicle.

The radio frequency used by your remote control can also be used by other radio transmitters, for example amateur radios, medical equipment, wireless headphones, wireless remote controls, cell phones, battery chargers and alarm systems. If the frequencies are jammed, you will not be able to use your remote control. You can lock and unlock the doors with the key.

Note: *Make sure to lock your vehicle before leaving it unattended.*

Note: *If you are in range, the remote control will operate if you press any button unintentionally.*

Note: *The remote control contains sensitive electrical components. Exposure to moisture or impact may cause permanent damage.*

Intelligent Access (If Equipped)

The system uses a radio frequency signal to communicate with your vehicle and authorize your vehicle to unlock when one of the following conditions are met:

- You activate the front exterior door handle switch.
- You press the luggage compartment button.
- You press a button on the transmitter.

If excessive radio frequency interference is present in the area or if the transmitter battery is low, you may need to mechanically unlock your door. You can use the mechanical key blade in your intelligent access key to open the driver door in this situation. See **Remote Control** (page 69).

REMOTE CONTROL

Intelligent Access Key

Note: *You may not be able to shift out of park (P) unless the intelligent access key is inside your vehicle.*

Keys and Remote Controls



The intelligent access keys operate the power locks and the remote start system. The key must be in your vehicle to use the push button start.



The intelligent access key also contains a removable key blade that you can use to unlock your vehicle. Slide the release on the back of the remote control to release the key blade, then pull the blade out.



Note: Your vehicle keys came with a security label that provides important key cut information. Keep the label in a safe place for future reference.

Using the Key Blade

The key cylinder is under the handle.
To access the cylinder:

Keys and Remote Controls



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1. Pull the handle and hold it.
2. While holding the handle outward, identify the cylinder and insert the key blade into the slot.
3. Actuate the cylinder to unlock or lock the door.

Replacing the Battery

WARNING: Keep batteries away from children to prevent ingestion. Failure to follow this instruction could result in personal injury or death. If ingested, immediately seek medical attention.

WARNING: If the battery compartment does not securely close, stop using the remote control and replace it as soon as possible. In the meantime, keep the remote control away from children. Failure to follow this instruction could result in personal injury or death.

Note: Refer to local regulations when disposing of transmitter batteries.

Note: Do not wipe off any grease on the battery terminals or on the back surface of the circuit board.

Note: Replacing the battery does not erase the programmed key from your vehicle. The transmitter should operate normally.

A message appears in the information display when the battery is low. See **General Information** (page 134).

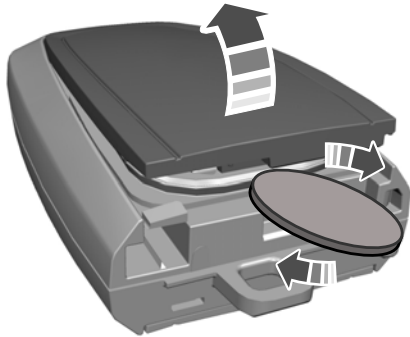
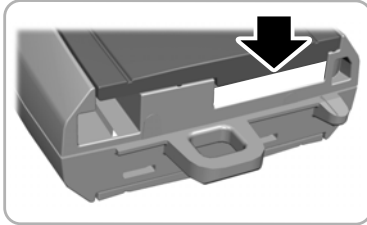
Intelligent Access Key

The remote control uses one coin-type three-volt lithium battery CR2450 or equivalent.

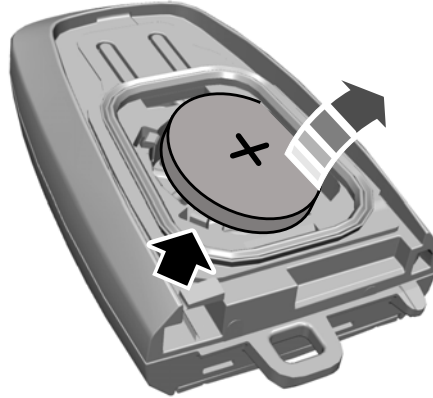


Keys and Remote Controls

1. Push the release button and pull the key blade out.



2. Twist a thin coin under the tab hidden behind the key blade head to remove the battery cover.



3. Insert a suitable tool, for example a screwdriver, in the position shown and carefully remove the battery.
4. Install new battery with the + facing upward.

5. Reinstall the battery cover and the key blade.

Car Finder



Press the button twice within three seconds.

The horn sounds and the direction indicators flash. We recommend you use this method to locate your vehicle, rather than using the panic alarm.

Note: *If any door or the liftgate is open, or if the hood is open on vehicles with an anti-theft alarm or remote start, the horn sounds twice and the direction indicators do not flash.*

Sounding the Panic Alarm



Press the button to sound the panic alarm. Press the button again or switch the ignition on to turn it off.

Note: *The panic alarm only operates when the ignition is off.*

Keys and Remote Controls

Remote Start



WARNING: Do not start the engine in a closed garage or in other enclosed areas. Exhaust fumes are toxic. Always open the garage door before you start the engine. Failure to follow this instruction could result in personal injury or death.

Note: Do not use remote start if your fuel level is low.



The remote start button is on the transmitter.

This feature allows you to start your vehicle from outside the vehicle. The transmitter has an extended operating range.

Vehicles with automatic climate control can be configured to operate when the vehicle is remote started. See **Automatic Climate Control** (page 166).

Many states and provinces have restrictions for the use of remote start. Check your local and state or provincial laws for specific requirements regarding remote start systems.

The system does not work if:

- The ignition is on.
- The anti-theft alarm triggers.
- You switch off the feature in the information display. See **General Information** (page 134).
- The hood is open.
- The transmission is not in park (P).
- The battery voltage is below the minimum operating voltage.

Remote Control Feedback

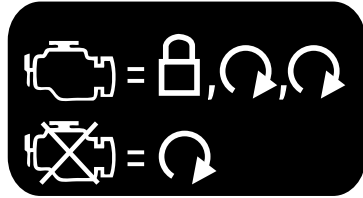
An LED on the remote control provides status feedback of remote start or stop commands.

LED	Status
Solid green	Remote start successful
Solid red	Remote stop successful
Blinking red	Request failed or status not received
Blinking green	Status incomplete

Remote Starting Your Vehicle

Note: You must press each button within three seconds of each other. If you do not follow this sequence, your vehicle does not start remotely, the direction indicators do not flash twice and the horn does not sound.

Keys and Remote Controls



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To remote start your vehicle:

1. Press the lock button to lock all the doors.
2. Press the remote start button twice. The exterior lamps flash twice.

The horn sounds if the system fails to start.

Note: Press the push button ignition switch on the instrument panel once to exit remote start.

The power windows do not work during remote start and the radio does not turn on automatically.

The parking lamps remain on and the vehicle runs for 5, 10 or 15 minutes, depending on the setting.

Extending the Engine Running Time

To extend the engine running time duration of your vehicle during remote start, repeat steps 1 and 2 while the engine is running. If the duration is set to 15 minutes, the duration extends by another 15 minutes. For example, if your vehicle had been running from the first remote start for 5 minutes, your vehicle continues to run now for a total of 30 minutes. You can extend the remote start up to a maximum of 35 minutes.

Wait at least five seconds before remote starting after the engine stops running.

Turning Your Vehicle Off After Remote Starting



Press the button once. The parking lamps turn off.

You may have to be closer to your vehicle to remotely switch off your vehicle after remote starting. This is due to the added noise of your running vehicle.

You can switch this feature on or off in the information display.

Memory Feature

You can program your intelligent access key to recall memory positions. See **Memory Function** (page 183).

If programmed to a pre-set position, the remote control recalls memory positions when you unlock your vehicle. If you have the easy entry and exit feature enabled and the ignition is off, the seat moves to the easy entry position.

The seat moves to the driver memory position when you switch the ignition on.

REPLACING A LOST KEY OR REMOTE CONTROL

Replacement keys or remote controls can be purchased from an authorized dealer. Authorized dealers can program remote controls for your vehicle.

Phone as a Key

WHAT IS PHONE AS A KEY

Phone as a Key allows you to use your phone in place of a passive key.

You can use your phone for the following functions:

- Remote locking and unlocking.
- Passive entry and exit.
- Passive start and drive the vehicle.
- Remote start.
- Memory function recall.

PHONE AS A KEY LIMITATIONS

Limitations can vary based on the make and model of your phone, phone location and physical obstructions.

The following items could impact Phone as a Key performance or prevent functionality in some cases:

- The typical operating range for Phone as a Key is 131 ft (40 m).

- Your Bluetooth connection is not enabled, is disrupted, or out of range.
- Your Phone as a Key is not active or enabled on at least one phone.
- Your vehicle battery has depleted.
- Your phone battery has depleted.
- Interference from other devices using radio frequencies or physical obstructions.
- Your phone is too close to metal objects or other electronic devices.

Note: *Do not leave a duplicate coded key in the vehicle. Always take your keys and phone and lock all doors when leaving the vehicle.*

PROGRAMMING YOUR PHONE

To program your smartphone as Phone as a Key:

1. Visit your device's app store to download the Lincoln Way app.

2. Create or sign-in to the Lincoln Way app and add the vehicle identification number to your account.
3. Once you add the vehicle identification number, follow the prompts in the Lincoln Way app to complete the Sync Connect Authorization process.
4. After the vehicle authorizes, you can setup Phone as a Key following the prompts in the Lincoln Way app.
5. After Phone as a Key is setup, you can setup the Backup Start Passcode by following the prompts on your touchscreen.

Note: *Keep your new Backup Start Passcode with you in case of an emergency.*

Resetting Phone as a Key

If the Phone as a Key belongs to your account, you can delete it from your phone. If not, reset Phone as a Key using the following steps:

1. Press **Settings** on the touchscreen.
2. Press **General**.
3. Press **Reset**.

Phone as a Key

4. Press **Lincoln Way Connect Reset**.
5. Press **Reset All**.
6. Confirm you would like to continue with erasing all Phone as a Key, Backup Start Passcodes.
7. Press **Continue**.
8. Confirm you are aware you are de-authorizing all authorized users and Lincoln Way Connect settings.
9. Press **Continue**.

Note: Please wait while the vehicle resets all the Phone as a Key, Backup Start Passcodes, Lincoln Way Connect Settings and de-authorize previously authorized users.

USING THE VALET MODE

1. Press Settings on the touchscreen.
2. Press Valet Mode.

Note: Have your Backup Start Passcode completely setup before using Valet Mode.

Note: Once the system detects a valid Phone as a Key, the temporary passcode displays in both the touchscreen and mobile app. If the system does not detect a valid Phone as a Key, it prompts you to enter your Backup Start Passcode. Once validated, the temporary passcode displays on the touchscreen.

3. Enter the first five digits of the passcode on the keyless entry keypad to unlock your vehicle.
4. Enter the eight-digit passcode on the touchscreen to start and drive your vehicle.

To disable Valet Mode, press Exit Valet Mode on the touchscreen. Once the system detects an authorized Phone as a Key, it disables. If the system does not detect a valid Phone as a Key, it prompts you to enter your Backup Start Passcode. Once validated, Valet Mode disables.

USING THE BACKUP START PASSCODE

If you are unable to start your vehicle with Phone as a Key, follow the steps below:

1. Press the brake pedal and the ignition button. If the system does not detect a valid Phone as a Key, a message appears and the system prompts you for your Backup Start Passcode.

Note: Make sure you have Phone as a Key active on at least one phone to use the previously created Backup Start Passcode.

Note: If the Backup Start Passcode screen does not appear, it is necessary to press the ignition button again.

2. Use the touchscreen to enter your Backup Start Passcode.
3. After entering your Backup Start Passcode, you must press Enter within 30 seconds.
4. Once the system validates the Backup Start Passcode, a message alerts you to start your vehicle.

Phone as a Key

5. Press the brake pedal and the ignition button within 20 seconds to start the vehicle.
6. If your vehicle does not start, repeat steps 1-5.

System Lockout

The system locks after five attempts of trying to enter a Backup Start Passcode, resetting a current passcode or entering an incorrect Valet Mode passcode.

Note: *The system remains locked for five minutes. After five minutes the system allows codes to be entered again.*

PHONE AS A KEY – TROUBLESHOOTING

Phone as a Key – Frequently Asked Questions

How can I tell if my vehicle has Phone as a Key?

The touchscreen shows the Phone as a Key reset option if your vehicle has Phone as a Key. If you have registered your vehicle through the Lincoln Way app, a control button appears on the home screen of the Lincoln Way app.

What happens if I cannot unlock the vehicle with Phone as a Key?

Attempt to move your phone closer to the vehicle. Check that the Lincoln Way app is still running and that the Phone as a Key control screen shows connected. If the phone is connected, attempt to press the remote unlock button in the Lincoln Way app. If the phone is not connected or the remote unlock button does not work in the Lincoln Way app, attempt to force close and restart the app.

Why do I get a No Key Detected message in the instrument cluster display when I am using Phone as a Key and my phone is in the car?

Your phone's Bluetooth connection has been disrupted or is not connected. Try reconnecting your phone's Bluetooth connection. Move the phone closer to the center of the vehicle near the cup holder or center console. Verify your Phone as a Key is still active, enabled and has not been revoked.

Phone as a Key

What do I do if my phone is lost, damaged, or the battery has depleted?

Use the Backup Start Passcode that you created to protect you in the event that you lose your phone, damage it, or the battery depletes. See **Using the Backup Start Passcode** (page 76).

How many phones can I use for Phone as a Key?

You can program and activate up to four phones with Phone as a Key to your vehicle.

How does a valet drive my car if I only use my Phone as a Key?

Have the valet use the temporary valet passcode that you created when using valet mode. See **Using the Valet Mode** (page 76).

I uninstalled my Lincoln Way app and reinstalled it. Why am I not able to get a new Phone as a Key?

Remove the Phone as a Key that was previously associated with your phone or reset Phone as a Key from your vehicle, and then request a new Phone as a Key. See **Programming Your Phone** (page 75).

Why can I not remotely start the vehicle with my Phone as a Key?

Using the Lincoln Way app, verify your Phone as a Key setup is complete and enabled via Bluetooth connection on at least one phone. If Bluetooth has connected but Phone as a Key setup is not complete, complete the setup of your Phone as a Key, as prompted from the Lincoln Way app. See **Programming Your Phone** (page 75).

PRINCIPLE OF OPERATION

MyKey allows you to program keys with restricted driving modes to promote good driving habits. You can program the restrictions to all keys except one. Any keys that you did not program are administrator keys or admin keys.

You can use admin keys to:

- Create a MyKey with certain vehicle restrictions.
- Program certain MyKey settings.
- Clear all MyKey restrictions.

After you program a MyKey, you can view the following information through the information display:

- The total number of admin keys and MyKeys for your vehicle.
- The total distance a MyKey driver traveled with your vehicle.

Note: *Every MyKey receives the same restrictions and settings. You cannot program them individually.*

Note: *For vehicles equipped with a push-button start switch: When both a MyKey and an admin key are present when you start your vehicle, the system recognizes the admin key only.*

Standard Settings

Not every vehicle includes the features listed below. If your vehicle has this equipment, then you cannot change the following settings when using a MyKey:

- Seatbelt reminder or Belt-Minder™. MyKey mutes the audio system until drivers, and in some instances, passengers, fasten their seatbelts. **Note:** If your vehicle includes an AM/FM radio or a very basic audio system, then the radio may not mute.
- Earlier low-fuel warning. The low-fuel warning activates earlier for MyKey drivers, giving them more time to refuel.

- Certain driver alerts, stability systems or parking aids turn on automatically when you use the MyKey system. For example, Blind Spot Information System (BLIS), cross traffic alert, lane departure warning or forward collision warning. **Note:** MyKey drivers may be able to turn the lane departure warning feature off, but this feature turns back on automatically with every new key cycle.
- Restricted touchscreen operation in some markets. For example, MyKey may prevent manual navigation destination input while the vehicle is in any gear other than park (P) or when the vehicle reaches a certain rate of speed.
- Satellite radio adult content restrictions, if this feature is available in your market.

Optional Settings

You can configure certain vehicle feature settings when you first create a MyKey. You can also change the settings afterward with an admin key.

Note: *Not every feature applies to every vehicle in every market. When they are available for your vehicle, then they appear in your information display, providing choices to switch them on or off, or to select a more specific setting.*

- Various vehicle speed limits so the MyKey driver cannot exceed certain speeds. The information display shows warnings followed by an audible tone when the MyKey driver reaches the set speed. You cannot override the set speed by fully depressing the accelerator pedal.



WARNING: Do not set MyKey maximum speed limit to a limit that will prevent the driver from maintaining a safe speed considering posted speed limits and prevailing road conditions. The driver is always responsible to drive in accordance with local laws and prevailing conditions. Failure to do so could result in accident or injury.

- Various vehicle speed reminders so MyKey drivers know when their vehicle speed approaches the limits. Warnings appear in your information display and a tone sounds when the MyKey drivers exceed the set vehicle speed.
- The audio system's maximum volume limits to 45% so MyKey drivers can concentrate on the road. A message appears in the information display when MyKey drivers attempt to exceed the limited volume. MyKey also disables the automatic volume control. **Note:** If your vehicle includes an AM/FM radio or a very basic audio system, then the radio may not limit.
- Always on setting. This setting forces certain features to remain on and active for MyKey drivers. For example, E911 or emergency assistance and the do not disturb features stay on even if a MyKey driver uses the feature's control to switch it off. When selected, you will not be able to turn off Advance Trac or traction control (if your vehicle has this feature).

CREATING A MYKEY

Use the information display to create a MyKey:

1. Insert the key you want to program into the ignition. If your vehicle has a push-button start, place the remote control into the backup slot. See **Starting a Gasoline Engine** (page 208).
2. Switch the ignition on.
3. Access the main menu in the information display and then scroll through the menus to change the settings of your MyKey. From the MyKey menu select the option Create MyKey. See **Information Displays** (page 134).
4. Select **Yes** if you want to create the key as MyKey. A confirmation message appears on the screen.
5. Switch the ignition off.

You successfully created a MyKey. Make sure you label it so you can distinguish it from the admin keys.

You can also program configurable settings for the key(s). See **Programming and Changing Configurable Settings**.

Programming and Changing Configurable Settings

Use the information display to access your configurable MyKey settings.

1. Switch the ignition on using an admin key or transmitter you want to program.
2. Access the main menu in the information display and then scroll through the menus to change the settings of your MyKey. See **Information Displays** (page 134).
3. Follow the instructions in the display. The programmed restrictions apply when you switch the vehicle off, open and close the driver door and restart your vehicle with the programmed key or transmitter.

Note: *You can clear or change your MyKey settings at any time during the same key cycle as you created the MyKey. Once you have switched the vehicle off, however, you need an admin key to change or clear your MyKey settings. When you make any changes to your MyKey settings, you change the settings for every MyKey. You cannot make individual changes to apply to certain MyKeys.*

CLEARING ALL MYKEYS

When you clear your MyKeys, you remove all restrictions and return all MyKeys to their original admin key status at once. To clear all MyKeys of all MyKey settings, use the information display.

1. Switch the ignition on using an admin key.
2. Access the main menu in the information display and then scroll through the menus to begin clearing your MyKey programming. See **Information Displays** (page 134).
3. Follow the instructions in the display.

4. A confirmation message appears in the display after you finish clearing your MyKeys.

Note: *When you clear your MyKeys, you remove all restrictions and return all MyKeys to their original admin key status. You cannot remove the MyKey restrictions individually.*

CHECKING MYKEY SYSTEM STATUS

You can find information about your programmed MyKeys by using the information display. See **Information Displays** (page 134).

MyKey Distance

Tracks the distance when drivers use a MyKey. The only way to delete the accumulated distance is by using an admin key to clear all MyKeys. If the distance does not accumulate as expected, then the intended user is not using the MyKey, or an admin key user recently cleared and then recreated a MyKey.

Number of MyKeys

Indicates the number of MyKeys programmed to your vehicle. Use this feature to detect how many MyKeys you have for your vehicle and determine when all MyKeys have been deleted.

Number of Admin Keys

Indicates how many admin keys are programmed to your vehicle. Use this feature to determine how many admin keys you have for your vehicle, and detect if an additional MyKey has been programmed.

USING MYKEY WITH REMOTE START SYSTEMS

MyKey is not compatible with non Ford-approved, aftermarket remote start systems. If you choose to install a remote start system, see an authorized dealer for a Ford-approved remote start system.

MYKEY – TROUBLESHOOTING

Condition	Potential causes
I cannot create a MyKey.	<ul style="list-style-type: none"> · The key or transmitter used to start the vehicle does not have admin privileges. · Vehicles with keyless start: Make sure you place the transmitter into the backup slot. See Passive Anti-Theft System (page 95). · The key or transmitter used to start the vehicle is the only admin key. There always has to be at least one admin key. · SecuriLock passive anti-theft system is disabled or in unlimited mode.
I cannot program the configurable settings.	<ul style="list-style-type: none"> · The key or transmitter used to start the vehicle does not have admin privileges.

MyKey™

Condition	Potential causes
	· There are no MyKeys programmed to the vehicle. See Creating a MyKey (page 80).
I cannot clear the MyKeys.	· The key or transmitter used to start the vehicle does not have admin privileges. · No MyKeys are created. See Creating a MyKey (page 80).
I lost the only admin key.	· Purchase a new key or transmitter from your authorized dealer.
I lost a key.	· Program a spare key or transmitter. You may need to see your authorized dealer. See Passive Anti-Theft System (page 95).
MyKey distances do not accumulate.	· The MyKey user is not using the MyKey. · An admin key holder cleared the MyKeys and created new MyKeys. · The key system has been reset.

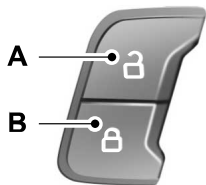
Doors and Locks

LOCKING AND UNLOCKING

You can use the power door lock control or the remote control to lock and unlock your vehicle.

Power Door Locks

The power door lock control is on the driver and front passenger door panels.



- A Unlock.
- B Lock.

Door Lock Indicator

An LED on each door window trim illuminates when you lock the door. It remains on for up to 10 minutes after you switch the ignition off.

Door Lock Switch Inhibitor

When you electronically lock your vehicle, the power door lock switch and interior trunk release switch do not operate after 20 seconds. You must unlock your vehicle with the remote control or keyless keypad, or switch the ignition on, to restore function to these switches. You can switch this feature on or off in the information display. See **General Information** (page 134).

Note: Switch the ignition on and off after changing the setting in the information display.

Rear Door Unlocking and Opening

Pull the interior door handle twice to unlock and open a rear door. The first pull unlocks the door and the second pull opens the door.

Remote Control

You can use the remote control at any time. The liftgate release button only operates when your vehicle's speed is less than 3 mph (5 km/h).

Unlocking the Doors (Two-Stage Unlock)



Press the button to unlock the driver door.

Press the button again within three seconds to unlock all doors. The direction indicators will flash.

Note: If the system does not function, use the key blade to lock and unlock your vehicle.

Press and hold both the lock and unlock buttons on the remote control for three seconds to change between driver door or all doors unlock mode. The direction indicators flash twice to confirm the change. Driver door mode only unlocks the driver door when you press the unlock button once. All door mode unlocks all doors when

Doors and Locks

you press the unlock button once. The unlocking mode applies to the remote control, keyless entry keypad and intelligent access. You can also change between the unlocking modes using the information display. See **General Information** (page 134).

Reprogramming the Unlocking Function

Note: When you press the unlock button, either all the doors are unlocked or only the driver door is unlocked. Pressing the unlock button again unlocks all the doors.

Press and hold the unlock and lock buttons on the remote control simultaneously for at least four seconds with the ignition off. The direction indicators flash twice to confirm the change.

To return to the original unlocking function, repeat the process.

Locking the Doors



Press the button to lock all doors. The direction indicators will flash.

Press the button again within three seconds to confirm that all the doors are closed. The door lock again, the horn sounds and the direction indicators flash if all the doors and the liftgate are closed.

Note: If the system does not function, use the key blade to lock and unlock your vehicle.

Mislock

If any door or the liftgate is open, or if the hood is open on vehicles with an anti-theft alarm or remote start, the horn sounds twice and the direction indicators do not flash. You can switch this feature on or off in the information display. See **General Information** (page 134).

Opening the Liftgate



Press twice within three seconds to open the liftgate.

Activating Intelligent Access

General Information

You can unlock and lock the vehicle without taking the keys out of your pocket or purse when your intelligent access key is within 3 ft (1 m) of your vehicle. Intelligent access uses a sensor on the back of the door handle for unlocking and a separate sensor on the face of each door handle for locking.

The system does not function if:

- Your vehicle battery has no charge.
- The key battery has no charge.
- The key frequencies are jammed.

Note: The system may not function if the key is close to metal objects or electronic devices, for example keys or a cell phone.

Note: If the system does not function, use the key blade to lock and unlock your vehicle. See **Remote Control** (page 69).

Doors and Locks

Unlocking Using Intelligent Access



With your intelligent access key within 3 ft (1 m) of your vehicle, touch the unlock sensor on the back of the door handle for a brief period and then pull on the door handle to unlock, being careful to not touch the lock sensor at the same time or pulling the door handle too quickly. The intelligent access system requires a brief delay to authenticate your intelligent access key fob.

Locking Using Intelligent Access



With your intelligent access key within 3 ft (1 m) of your vehicle, touch the outer door handle lock sensor for approximately one second to lock, being careful to not touch the unlock sensor on the back of the door handle at the same time. After locking, you can immediately pull on the door handle to confirm locking occurred without inadvertently unlocking.

At the Luggage Compartment



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With your intelligent access key within 3 ft (1 m) of your vehicle, press the exterior release button.

Doors and Locks

Locking and Unlocking the Doors with the Key Blade

A key cylinder is located under the driver side door handle. You can use your key blade to manually lock and unlock the driver side door. See **Remote Control** (page 69).

Smart Unlocks for Intelligent Access Keys

This helps to prevent you from locking your key inside the passenger compartment or rear cargo area.

When you electronically lock your vehicle with any door open, the transmission is in park (P) and the ignition is off, the system searches for an intelligent access key inside your vehicle after you close the last door. If the system finds a key, all the doors immediately unlock and the horn sounds twice, indicating that a key is inside.

You can override the smart unlock feature and intentionally lock the intelligent access key inside your vehicle.

To do this, lock your vehicle after you have closed all the doors by:

- Using the keyless entry keypad.
- Pressing the lock button on another intelligent access key.

When you open one of the front doors and lock your vehicle using the power door lock control, all doors will lock then unlock if:

- The ignition is on.
- The ignition is off and the transmission is not in park (P).

Autolock (If Equipped)

Autolock locks all the doors when:

- All doors are closed.
- The ignition is on.
- You shift into any gear putting your vehicle in motion.
- Your vehicle reaches a speed greater than 12.4 mph (20 km/h).

Autolock repeats when:

- You open then close any door while the ignition is on and your vehicle speed is 9 mph (15 km/h) or lower.
- Your vehicle reaches a speed greater than 12 mph (20 km/h).

Autounlock

Autounlock unlocks all the doors when:

- The ignition is on, all the doors are closed, and your vehicle has been moving at a speed greater than 12.4 mph (20 km/h).
- Your vehicle comes to a stop and you switch the ignition off, or to the accessory position.
- You open the driver door within 10 minutes of switching the ignition off or to accessory.

Note: *The doors do not autounlock if you electronically lock your vehicle after you switch the ignition off and before you open the driver door.*

Doors and Locks

Enabling or Disabling Autounlock

You can enable or disable the autounlock feature in the information display or an authorized dealer can do it for you. See **General Information** (page 134).

Illuminated Entry

The interior lamps and some exterior lamps illuminate when you unlock the doors with the remote control.

The lamps turn off if:

- The ignition is on.
- You press the remote control lock button.
- 25 seconds have elapsed.

The lamps do not turn off if:

- You turn them on with the lamp control.
- Any door is open.

Illuminated Exit

The interior lamps and some exterior lamps illuminate when all doors are closed and you switch the ignition off.

The lamps turn off if all the doors remain closed and:

- 25 seconds have elapsed.
- You press the push button ignition switch.

Approach Detection Illumination

When you approach your vehicle and a valid key is detected, the exterior door handles and some exterior lamps illuminate.

Battery Saver

If you leave the courtesy lamps, interior lamps or headlamps on, the battery saver shuts them off 10 minutes after you switch the ignition off.

Battery Saver for Intelligent Access Keys

If you leave the ignition switched on, it shuts off when it detects a certain amount of battery drain, or after 30 minutes.

KEYLESS ENTRY

SECURICODE™ KEYLESS ENTRY KEYPAD

The keypad is near the driver window. It illuminates when touched.

Note: *If you enter your entry code too fast on the keypad, the unlock function may not work. Enter your entry code again more slowly.*

1-2
3-4
5-6
7-8
9-0

E138637

Doors and Locks

You can use the keypad to:

- Lock or unlock the doors.
- Unlock the liftgate glass.
- Program and erase user codes.
- Arm and disarm the anti-theft alarm.

You can operate the keypad with the factory-set five-digit entry code. The code is on the owner's wallet card in the glove box and is available from an authorized dealer. You can also program up to five of your own five-digit personal entry codes.

Programming a Personal Entry Code

To create your own personal entry code:

1. Enter the factory-set five-digit code.
2. Press **1-2** on the keypad within five seconds.
3. Enter your personal five-digit code. You must press each number within five seconds of each other.
4. Press **1-2** on the keypad to save personal code 1.

The doors lock then unlock to confirm that programming was successful.

To program additional personal entry codes, repeat Steps 1-3, then for Step 4:

- Press **3-4** to save personal code 2
- Press **5-6** to save personal code 3
- Press **7-8** to save personal code 4
- Press **9-0** to save personal code 5.

You may also program a personal entry code through the information display.

Tips:

- Do not set a code that uses five of the same number.
- Do not use five numbers in sequential order.
- The factory-set code works even if you have set your own personal code.

Erasing a Personal Code

1. Enter the factory-set 5-digit code.
2. Press and release **1-2** on the keypad within five seconds.
3. Press and hold **1-2** for two seconds. You must do this within five seconds of completing Step 2.

All personal codes erase and only the factory-set 5-digit code works.

Anti-Scan Feature

The keypad goes into an anti-scan mode if you enter the wrong code seven times. This mode turns off the keypad for one minute and the keypad lamp flashes.

The anti-scan feature turns off after:

- One minute of keypad inactivity.
- Pressing the unlock button on the remote control.
- Switching the ignition on.

Locking and Unlocking

To Unlock All Doors

Enter the factory-set 5-digit code or your personal code to unlock all doors.

To Lock All Doors

Press and hold **7-8** and **9-0** at the same time with the driver door closed to lock all doors. You do not need to enter the keypad code first.

Doors and Locks

To Unlock the Liftgate Glass

Enter the factory-set 5-digit code or your personal code, then press **5-6** to unlock the liftgate glass.

The factory-set code appears in the information display for a few seconds.

Note: *The code may not display until after any other warning messages first display.*

Displaying the Factory-Set Code

Note: *Two programmed intelligent access keys are required for this procedure.*

1. Open the floor console storage compartment lid.
2. With the buttons facing the rear of your vehicle and the key ring facing upward, place the first intelligent access key into the backup slot inside the center console.
3. Press the push button ignition switch once and wait for a few seconds.
4. Press the push button ignition switch again and remove the intelligent access key from the center console.
5. Insert the second programmed key into the backup slot in the center console, then press the push button ignition switch.

Liftgate

POWER LIFTGATE



WARNING: It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a crash, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and seatbelts. Make sure everyone in your vehicle is in a seat and properly using a seatbelt. Failure to follow this warning could result in serious personal injury or death.



WARNING: Make sure that you fully close the liftgate to prevent exhaust fumes from entering your vehicle. If you are unable to fully close the liftgate, open the air vents or the windows to allow fresh air to enter your vehicle. Failure to follow this instruction could result in personal injury or death.



WARNING: Keep keys out of reach of children. Do not allow children to operate or play near an open or moving power liftgate. You should supervise the operation of the power liftgate at all times.

Note: *Make sure that you close the liftgate before operating or moving your vehicle, especially in an enclosure, like a garage or a parking structure. This could damage the liftgate and its components.*

Note: *Do not hang anything, for example a bike rack, from the glass or liftgate. This could damage the liftgate and its components.*

Note: *Make sure that you fully close the liftgate to prevent cargo from falling out.*

The liftgate only operates with the transmission in park (P).

Three warning tones sound as the liftgate begins to power close. If there is a problem with the open or close request, one of the following may occur:

- One tone sounds if the ignition is on and the transmission is not in park (P).
- Three tones sound if the battery voltage is below the minimum operating voltage.
- One tone sounds if the vehicle speed is at or above 3 mph (5 km/h)

If the liftgate starts to close after it has fully opened, this indicates there may be excessive weight on the liftgate or a possible strut failure. A repetitive tone sounds and the liftgate closes under control. Remove any excessive weight from the liftgate. If the liftgate continues to close after opening, have the system checked as soon as possible.

Opening and Closing the Liftgate



WARNING: Make sure all persons are clear of the power liftgate area before using the power liftgate control.

Liftgate

Note: Make sure the area behind your vehicle is free from obstruction and that there is enough room for you to operate the liftgate. Objects too close to your vehicle, for example a wall, garage door or another vehicle may come into contact with the moving liftgate. This could damage the liftgate and its components.

Note: Be careful when opening or closing the liftgate in a garage or other enclosed area to avoid damaging the liftgate.

Note: Do not leave the liftgate open when driving. This could damage the liftgate and its components.

From the Instrument Panel



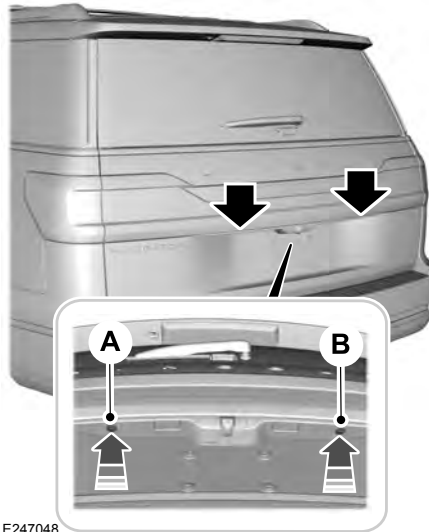
With the transmission in park (P), press the button on the instrument panel.

Remote Control



Press the button twice within a few seconds.

Outside Control



E247048

- A Liftgate window. See **Liftgate Window** (page 125).
- B Liftgate.

Opening the Liftgate

1. Unlock the liftgate with the remote control or power door unlock control. If an intelligent access key is within 3 ft (1 m) of the liftgate, the liftgate unlocks when you press the liftgate release button.
2. Press button B.

Note: Allow the power system to open the liftgate. Manually pushing or pulling the liftgate may activate the system's obstacle detection and stop the power operation or reverse its direction, replicate a strut failure or damage mechanical components.

Stopping the Liftgate Movement

Note: Do not apply sudden excessive force to the liftgate when it is in motion. This could damage the power liftgate and its components.

Liftgate

You can stop the liftgate movement by doing any of the following:

- Pressing the liftgate control button.
- Pressing the liftgate button on the remote control twice.
- Pressing the liftgate button on the instrument panel.

Setting the Liftgate Open Height

1. Open the liftgate.
2. Stop the liftgate movement by pressing the control button on the liftgate when it reaches the desired height.

Note: *Once the liftgate has stopped moving, you can also manually move it to the desired height.*

3. Press and hold the liftgate control button on the liftgate until a tone sounds, indicating programming is complete.

Note: *You can only use the liftgate control button to program the height.*

Note: *You cannot program the height if the liftgate position is too low.*

The new open liftgate height is recalled when the power liftgate is opened. To change the programmed height, repeat the above procedure. Once you open the power liftgate, you can manually move it to a different height.

Note: *The system recalls the new programmed height, even if you disconnect the battery.*

When operating the power liftgate after you have programmed a lower height than fully open, you can fully open the liftgate by manually pushing it upward to the maximum open position.

Obstacle Detection

Note: *Entering your vehicle while the liftgate is closing can cause your vehicle to bounce and activate obstacle detection. To prevent this, let the power liftgate close completely before you enter your vehicle. Before driving off, check the instrument cluster for a liftgate or door ajar message or warning indicator. Failure to do this could result in unintentionally leaving the liftgate open when driving.*

When Closing

The system stops when it detects an obstacle. Three tones sound and the system reverses to open. When you remove the obstacle, you can power close the liftgate.

When Opening

The system stops when it detects an obstacle and two short tones sound. Remove the obstacle to operate the liftgate.

Switching the Power Liftgate On or Off

You can switch the power liftgate on or off through the vehicle settings menu. See **General Information** (page 134).

When switched off, the liftgate only unlatches and will not power open or close.

Using the Hands-Free Liftgate (If Equipped)

Make sure you have an intelligent access key within 3 ft (1 m) of the liftgate.

1. Stand behind your vehicle, and face the liftgate.

Liftgate

2. Move your foot, in a single-kick motion, without pausing, under and away from the rear bumper detection area.
3. The liftgate power opens or closes.

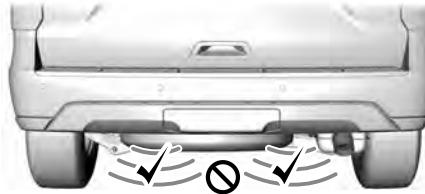
Vehicles Without a Trailer Hitch



E253664

The detection area is in the center of the rear bumper.

Vehicles With a Trailer Hitch



E253799

The detection area is on the left-hand side and right-hand side of the hitch, between the exhaust and the hitch.

Avoid the following actions when using hands-free opening:

- Making physical contact with the bumper.
- Holding your foot under the bumper.
- Sweeping your foot from side to side, or kicking at an odd angle.

Note: Allow the power system to open the liftgate. Manually pushing or pulling the liftgate may activate the system's obstacle detection and stop the power operation or reverse its direction, replicate a strut failure, or damage mechanical components.

Note: Any physical actions that mimic a kicking motion such as splashing water, trailer chains or vacuum hoses may cause the hands-free liftgate to activate. Switch the power liftgate off through your vehicle settings or keep the intelligent access key away from the rear bumper detection area.

Security

PASSIVE ANTI-THEFT SYSTEM

Note: *The system is not compatible with aftermarket remote start systems. Use of these systems may result in vehicle starting problems and a loss of security protection.*

Note: *Metallic objects, electronic devices or a second coded key on the same key chain may cause vehicle starting problems if they are too close to the key when starting the engine. Prevent these objects from touching the coded key while starting the engine. Switch the ignition off, move all objects on the key chain away from the coded key and restart the engine if a problem occurs.*

Note: *Do not leave a duplicate coded key in the vehicle. Always take your keys and lock all doors when leaving the vehicle.*

SecuriLock™

The system is an engine immobilization system. The intended design is to help prevent the engine from starting unless a coded key programmed to your vehicle is used. Using the wrong key may prevent the engine from starting. A message may appear in the information display.

If you are unable to start the engine with a correctly coded key, a malfunction has happened and a message may appear in the information display.

Automatic Arming

The vehicle arms immediately after you switch the ignition off.

Automatic Disarming

If you switch the ignition on with a coded key you disarm the vehicle. If you unlock the doors with the touch handle you disarm the alarm.

Replacement Keys

Note: *Your vehicle comes equipped with two intelligent access keys.*

The intelligent access key functions as a programmed key that operates the driver door lock and activates the intelligent access with push button start system, as well as a remote control.

If your programmed transmitters are lost or stolen and you do not have an extra coded key, you will need to have your vehicle towed to an authorized dealer. You need to erase the key codes from your vehicle and program new coded keys.

Store an extra programmed key away from the vehicle in a safe place to help prevent any inconveniences. See your authorized dealer to purchase additional spare or replacement keys.

Programming a Spare Intelligent Access Key

Note: *Do not place the device on the wireless accessory charging area when programming intelligent access keys.*

Security

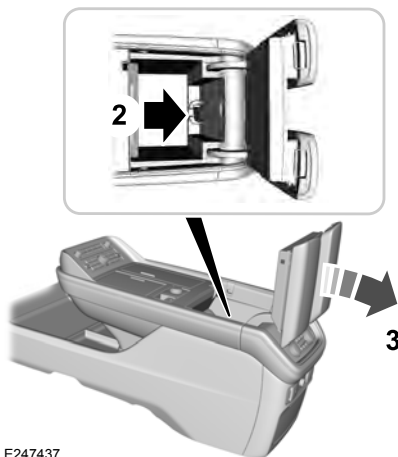
Note: You can program a maximum of four keys to your vehicle.

You must have two previously programmed intelligent access keys inside your vehicle and the new unprogrammed intelligent access key readily accessible. You can purchase replacement keys or remote controls from an authorized dealer.

Make sure that the ignition is switched off before beginning this procedure. Make sure that you close all the doors before beginning and that they remain closed throughout the procedure. Carry out all steps within 30 seconds of starting the sequence. Stop and wait for at least one minute before starting again if you carry out any steps out of sequence.

Read and understand the entire procedure before you begin.

1. Remove the key blade from the transmitter.



E247437

2. Open the center console storage compartment lid.
3. Insert the first programmed key in the backup slot.
4. Press the push button ignition switch.
5. Wait five seconds and then press the push button ignition switch again.
6. Remove the intelligent access key.

7. Within 10 seconds, place a second programmed intelligent access key in the backup slot and press the push button ignition switch.
8. Wait five seconds and then press the push button ignition switch again.
9. Remove the intelligent access key.
10. Wait five seconds, then place the unprogrammed intelligent access key in the backup slot and press the push button ignition switch.
11. Once complete, the information cluster displays a message confirming the key has been programmed. The direction indicators flash and the horn sounds.

Programming is now complete. Check that the remote control functions operate and your vehicle starts with the new intelligent access key.

If programming was unsuccessful, wait 10 seconds and repeat steps 1 through 7. If it still does not work, take your vehicle to an authorized dealer.

Security

ANTI-THEFT ALARM

The active anti-theft system is designed to warn you in the event of unauthorized vehicle entry and is also designed to help prevent unwanted towing of your vehicle. You can choose what is monitored by arming the system in different ways. See **Information Displays** (page 134).

The direction indicators flash and the horn sounds if the system triggers while the alarm is armed.

Take all remote controls to an authorized dealer if there is any potential alarm problem with your vehicle.

Using the System

You can select two levels of alarm security. You can change the level of security when the ignition is switched off through the information display with the two options below:

Perimeter Only (If Equipped)

Perimeter only monitors the following:

- Doors.
- Hood.
- Liftgate.

All Sensors (If Equipped)

All sensors monitors the following:

- Doors.
- Hood.
- Liftgate.
- Movement inside your vehicle.
- Change in vehicle inclination, for example, unwanted towing.

Note: *Do not choose all sensors monitor mode when the vehicle is in transport or if movement within the vehicle is likely to occur.*

Note: *For correct operation of the interior motion detection system, make sure you close all the windows prior to arming the system. This helps prevent accidental alarm activation due to external influences. Additionally, the interior motion sensing system does not arm if any door is ajar.*

Arming the Alarm

The alarm is ready to arm when there is not a key in the ignition. Lock your vehicle using the remote control or keyless entry keypad. You can also lock your vehicle using the lock sensor on the exterior door handle if your vehicle is equipped with intelligent access. See **Locking and Unlocking** (page 84).

The direction indicators flash once after you lock your vehicle. This indicates the alarm is in the pre-armed mode. It fully arms after 20 seconds.

Disarming the Alarm

Disarm the alarm by any of the following actions:

- Press the power door unlock button within the 20-second pre-armed mode.
- Unlock the doors with the remote control or keyless entry keypad. If equipped with intelligent access, you can use the unlock sensor on the exterior door handle. See **Locking and Unlocking** (page 84).
- Switch the ignition on or start your vehicle.
- Use a key in the driver door lock cylinder to unlock your vehicle, then switch the ignition on within 12 seconds.

Power Running Boards

USING POWER RUNNING BOARDS



WARNING: In extreme climates, excessive ice buildup may occur, causing the running boards not to deploy. Make sure that the running boards have deployed, and have finished moving before attempting to step on them. The running boards will resume normal function once the blockage is cleared.



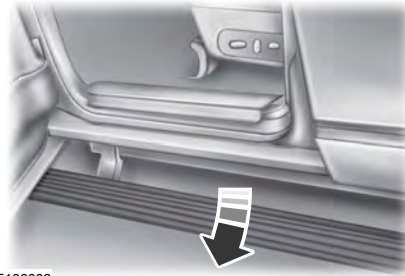
WARNING: Switch off the running boards before jacking or placing any object under your vehicle. Never place your hand between the extended running board and your vehicle. A moving running board may cause injury.

Note: Do not use the running boards, front and rear hinge assemblies, running board motors, or the running board underbody mounts to lift your vehicle when jacking. Always use proper jacking points.

Note: The running boards may operate more slowly in cool temperatures.

Note: The running board mechanism may trap debris such as mud, dirt, snow, ice and salt. This may cause unwanted noise. If this happens, manually set the running boards to the deployed position. Then, wash the system, in particular the front and rear hinge arms, with a high-pressure car wash wand.

Automatic Power Deploy



E166682

The running boards automatically extend down and out when you open the door. This can help you enter and exit your vehicle.

For vehicles with intelligent access, the remote control determines your proximity to the vehicle. As the remote control enters approximately 8.9 ft (2.7 m) of the vehicle, some exterior lights illuminate and the power running boards deploy automatically. In addition to deploying on both sides of the vehicle, there is illumination around the power running boards. The deployment is configurable in the advanced settings of the information display. If the configuration is turned off, the power running boards do not automatically deploy.

Note: Automatic power deploy approach detection does not unlock or lock the vehicle. It also does not interfere with the alarm system.

Automatic Power Stow

When you close the doors, the running boards return to the stowed position after a two-second delay.

Power Running Boards

Manual Power Deploy

You can manually operate the running boards in the advanced settings of the information display. See **General Information** (page 134).

Set the running boards in the deployed position to access the roof.

The running boards return to the stowed position and enter automatic mode when the vehicle speed exceeds 5 mph (8 km/h).

Enabling and Disabling

You can enable and disable the power running board feature in the advanced settings of the information display. See **General Information** (page 134).

- When disabled (**OFF**), the running boards move to the stowed position regardless of the door position.
- When enabled (**AUTO**), the running boards move back to the correct positions based on the door position.

Bounce-back

The running board will reverse direction and move to the end of travel if it encounters an object while moving.

Steering Wheel

ADJUSTING THE STEERING WHEEL



WARNING: Do not adjust the steering wheel when your vehicle is moving.

Note: Make sure that you are sitting in the correct position. See **Sitting in the Correct Position** (page 174).



Use the control on the side of the steering column to adjust the position.

To adjust:

- Tilt: Press the top or bottom of the control.
- Telescope: Press the front or rear of the control.

End of Travel Position

The steering column sets a stopping position just short of the end of the column position to prevent damage to the steering column. A new stopping position sets if the steering column encounters an object when tilting or telescoping.

To reset the steering column to its normal stopping position:

1. Confirm there is nothing obstructing the motion of the steering column.
2. Press and hold the steering column control until the steering column stops moving.
3. Press the steering column control again.

Note: The steering column may begin to move again.

4. When the steering column stops, continue holding the control for a few seconds.
5. Repeat for each direction as necessary.

A new stopping position sets. The next time you tilt or telescope the steering column, it stops just short of the end of the column position.

Memory Feature (If Equipped)

You can save and recall the steering column position with the memory function. See **Memory Function** (page 183).

Pressing the adjustment control during a memory recall cancels the operation.

Easy Entry and Exit Feature

The column moves up when you switch the ignition off. Switch the ignition on to return the system to its previous settings. You can switch this feature on or off in the information display. See **Information Displays** (page 134).

Steering Wheel

Note: If you press any adjustment or memory button when in easy exit mode, the system cancels the operation.

Note: Depending on your vehicle, the column may move up and in.

AUDIO CONTROL










E289590



E251877


You can operate the following functions with the control:

-  Press - to decrease volume level.
Press + to increase volume level.
-  Press to silence the current media

-  Press to access the previous media selection.
-  Press to access the next media selection.
-  Press to access phone mode or to answer a phone call.
-  Press to end a phone call.
-  Press to access the audio quick access menu (QAM).

VOICE CONTROL

The controls are on the steering wheel.

-  Press and release to activate voice recognition.

Steering Wheel

CRUISE CONTROL - VEHICLES WITH: CRUISE CONTROL



E221071

See **What Is Cruise Control** (page 272).

CRUISE CONTROL - VEHICLES WITH: ADAPTIVE CRUISE CONTROL



E223599

See **Using Adaptive Cruise Control** (page 273).

INFORMATION DISPLAY CONTROL



E221074

Steering Wheel



E221072

See **Information Displays** (page 134).

Note: The **HUD** button replaces the **DISP** button on vehicles that have a head up display (HUD).

Note: The **NAV** button is replaced with a compass button on vehicles without navigation.

HEATED STEERING WHEEL

Switch the heated steering wheel on and off using the touchscreen.



Touch the button to switch the heated steering wheel on and off.

Note: You can use the heated steering wheel only when the engine is running.

Note: The system uses a sensor and is designed to control the temperature of the steering wheel and to prevent it from overheating.

Note: In warm temperatures, the steering wheel quickly reaches its maximum temperature and the system reduces the current to the heating element. This could cause you to think that the system has stopped working but it has not. This is normal.

HORN



Press on the center of the steering wheel near the horn icon to activate the horn.

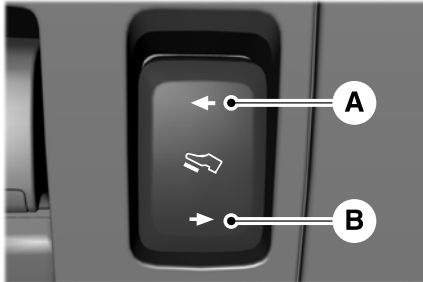
Adjustable Pedals

ADJUSTING THE PEDALS



WARNING: Never use the pedal adjustment controls when your feet are on the accelerator or brake pedal when the vehicle is moving.

You can find the control on the left side of the steering column. Press and hold the appropriate side of the control to move the pedals.



- A Farther.
- B Closer.

You can save and recall the pedal positions with the memory feature. See **Memory Function** (page 183).

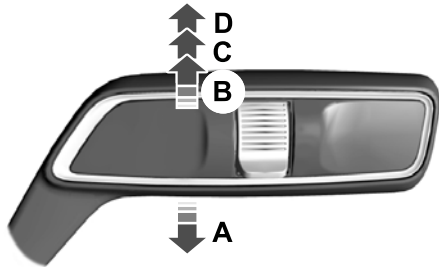
Note: *Adjust the pedals only when your vehicle is in park (P).*

Wipers and Washers

WINDSHIELD WIPERS



Push the lever up or down to operate the windshield wiper.



E269410

- A Single wipe.
- B Intermittent wipe.
- C Normal wipe.
- D High-speed wipe.

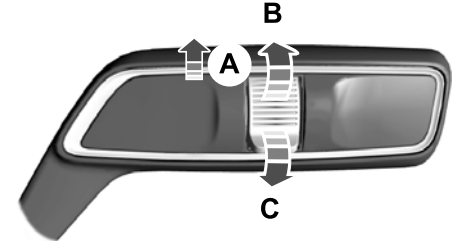
Note: Fully defrost the windshield before you switch the windshield wipers on.

Note: Make sure that you switch the windshield wipers off before entering a car wash.

Note: If streaks or smears appear on the windshield, clean the windshield and the wiper blades. If that does not resolve the issue, install new wiper blades.

Note: Do not operate the wipers on a dry windshield. This may scratch the glass, damage the wiper blades or cause the wiper motor to burn out. Always use the windshield washers before wiping a dry windshield.

Intermittent Wipe



E269411

- A Intermittent wipe
- B Shortest wipe interval.
- C Longest wipe interval.

Use the rotary control to adjust the intermittent wipe interval.

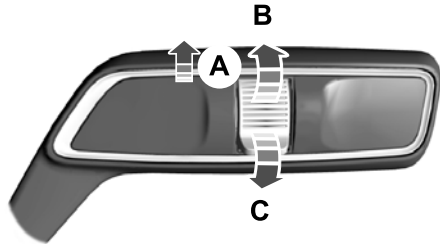
Speed Dependent Wipers

When your vehicle speed increases, the interval between wipes decreases.

Wipers and Washers

AUTOWIPERS

Wet or winter driving conditions with ice, snow or salty road mist can cause inconsistent and unexpected wiping or smearing.



E269411

- A Autowipers On.
- B High sensitivity.
- C Low sensitivity.

Use the rotary control to adjust the sensitivity of the autowipers. When you select low sensitivity, the wipers operate when the sensor detects a large amount of water on the windshield. When you select high sensitivity, the wipers operate when the sensor detects a small amount of water on the windshield.

Keep the outside of the windshield clean. The rain sensor is very sensitive and the wipers may operate if dirt, mist or insects hit the windshield.

In these conditions, you can do the following:

- Lower the sensitivity of the autowipers to reduce the amount of smearing on the windshield.
- Switch to normal or high-speed wipe.
- Switch autowipers off.

Note: Fully defrost the windshield before you switch the windshield wipers on.

Note: Make sure that you switch the windshield wipers off before entering a car wash.

Note: If streaks or smears appear on the windshield, clean the windshield and the wiper blades. If that does not resolve the issue, install new wiper blades.

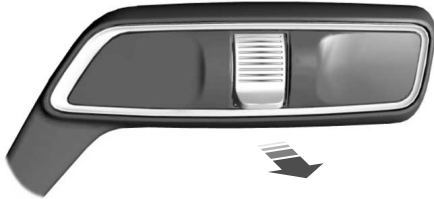
Note: If you switch autolamps and autowipers on, the headlamps turn on when the windshield wipers continuously operate.

Autowipers Settings

Autowipers defaults to on and remains on until you switch it off in the information display. When you switch off autowipers, the wipers operate in intermittent mode.

Wipers and Washers

WINDSHIELD WASHERS



E269412



Pull the lever toward you to operate the windshield washers.

When you release the lever, the wipers operate for a short time. When activated, a courtesy wipe occurs a short time after the wipers stop to clear any remaining washer fluid.

Note: You can switch courtesy wipe on or off in the information display. See **Information Messages** (page 139).

Note: Do not operate the washers when the washer reservoir is empty. This could cause the washer pump to overheat.

Front Camera Washer (If Equipped)

Operating the windshield washer also turns on the front camera washer.

REAR WINDOW WIPER AND WASHERS

Rear Window Wiper



E242324

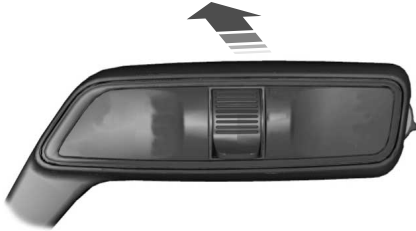
- A Intermittent wipe.
- B Continuous wipe.
- C Rear window wiper off.

Depending on your vehicle, when you switch on the front wipers and move the gearshift lever to reverse (R), the rear intermittent wipe may turn on.

Wipers and Washers

Note: Make sure you switch the rear window wiper off before entering a car wash.

Rear Window Washer



E269727

Push the lever away from you to operate the rear window washer. When you release the lever, the wipers operate for a short time.

Do not operate the washers when the washer reservoir is empty. This could cause the washer pump to overheat.

Lighting

GENERAL INFORMATION

Condensation in the Exterior Front Lamps and Rear Lamps

Exterior front lamps and rear lamps have vents to accommodate normal changes in air pressure.

Condensation can be a natural by-product of this design. When moist air enters the lamp assembly through the vents, there is a possibility that condensation can occur when the temperature is cold. When normal condensation occurs, a fine mist can form on the interior of the lens. The fine mist eventually clears and exits through the vents during normal operation.

Clearing time may take as long as 48 hours under dry weather conditions.

Examples of acceptable condensation are:

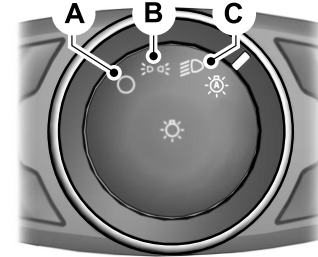
- The presence of a fine mist (no streaks, drip marks or large droplets).
- A fine mist covers less than 50% of the lens.

Examples of unacceptable condensation are:

- A water puddle inside the lamp.
- Streaks, drip marks or large droplets present on the interior of the lens.

If you see any unacceptable condensation, have your vehicle checked by an authorized dealer.

LIGHTING CONTROL



- A Lamps off.
- B Parking lamps, instrument panel lamps, license plate lamps and tail lamps.
- C Headlamp low beam.

Lighting

Headlamp High Beam



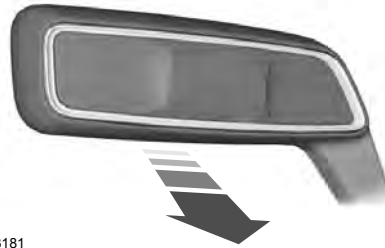
E273182



Push the lever away from you to switch the high beam on.

Push the lever away from you again or pull the lever toward you to switch the high beam off.

Flashing the Headlamp High Beam



E273181

Slightly pull the lever toward you and release it to flash the headlamps.

AUTOLAMPS



WARNING: The system does not relieve you of your responsibility to drive with due care and attention. You may need to override the system if it does not turn the headlamps on in low visibility conditions, for example daytime fog.

Autolamps turn the headlamps on in low light situations or when the wipers operate.



Switch the lighting control to the autolamps position.

The headlamps remain on for a period of time after you switch the ignition off. Use the information display controls to adjust the period of time that the headlamps remain on.

Note: *If you switch the autolamps on, you cannot switch the high beams on until the system turns the low beams on.*

Windshield Wiper Activated Headlamps

When you switch the autolamps on, the headlamps turn on within 10 seconds of switching the wipers on. They turn off approximately 60 seconds after you switch the windshield wipers off.

The headlamps do not turn on with the wipers:

- During a single wipe.
- When using the windshield washers.
- If the wipers are in intermittent mode.

Lighting

Note: If you switch the autolamps and the autowipers on, the headlamps turn on when the windshield wipers continuously operate.

INSTRUMENT LIGHTING DIMMER

The instrument lighting dimmer buttons are on the lighting control.



Repeatedly press one of the buttons to adjust the brightness.



HEADLAMP EXIT DELAY

After you switch the ignition off, you can switch the headlamps on by pulling the direction indicator lever toward you. You will hear a short tone. The headlamps will switch off automatically after three minutes with any door open or 30 seconds after the last door has been closed. You can cancel this feature by pulling the direction indicator lever toward you again or switching the ignition on.

DAYTIME RUNNING LAMPS - VEHICLES WITH: CONFIGURABLE DAYTIME RUNNING LAMPS



WARNING: The daytime running lamps system does not activate the rear lamps and may not provide adequate lighting during low visibility driving conditions. Make sure you switch the headlamps on, as appropriate, during all low visibility conditions. Failure to do so may result in a crash.

Switch the daytime running lamps on or off using the information display. See **General Information** (page 134).

The daytime running lamps turn on when:

1. The lamps are on in the information display.
2. You switch the ignition on.
3. The transmission is not in park (P) for vehicles with automatic transmissions or you release the parking brake for vehicles with manual transmissions.

4. The lighting control is in the autolamps position.
5. The headlamps are off.

The other lighting control switch positions do not turn on the daytime running lamps.

If the daytime running lamps are off in the information display, the lamps stay off in all switch positions.

DAYTIME RUNNING LAMPS - VEHICLES WITH: DAYTIME RUNNING LAMPS (DRL)



WARNING: The daytime running lamps system does not activate the rear lamps and may not provide adequate lighting during low visibility driving conditions. Make sure you switch the headlamps on, as appropriate, during all low visibility conditions. Failure to do so may result in a crash.

The system turns the lamps on in daylight conditions.

Lighting

To switch the system on, switch the lighting control to any position except headlamps.

FRONT FOG LAMPS

Switching the Front Fog Lamps On or Off

Only switch the front fog lamps on during reduced visibility.

You can switch the front fog lamps on if any of the following occur:

- You set the lighting control to the parking lamps position.
- You set the lighting control to the headlamps position.
- You set the lighting control to the autolamps position and the headlamps are on.

The front fog lamp button is on the lighting control.



Press the button to switch the front fog lamps on or off.

Note: *The brightness of the daytime running lamps may decrease when the front fog lamps are switched on.*

Front Fog Lamp Indicator



It illuminates when you switch the front fog lamps on.

HEADLAMP LEVELING

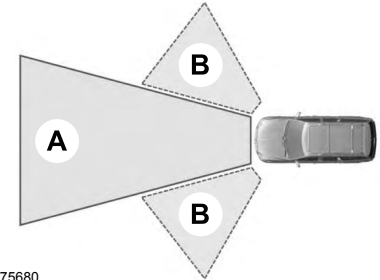
This vehicle is equipped with a dynamic automatic leveling system. The headlamps do not require additional aim adjustment.

ADAPTIVE HEADLAMPS

Speed Dependent Lamps

There are add on light sources within the headlamp that provide additional light on the road depending on your vehicle speed and steering wheel input.

- A. Standard low beam.
- B. Additional lighting.



E275680

The system only works with the lighting control in the autolamp position. You can switch this feature on or off in the information display.

Lighting

DIRECTION INDICATORS



E247171

- To operate the left-hand direction indicator, push the lever down until it stops.
- To operate the right-hand direction indicator, push the lever up until it stops.
- To manually cancel direction indicator operation, push the lever again in either direction.

Lane Change

To indicate a lane change:

- Push the lever up or down to the first stop position and release. The direction indicator flashes three times and stops.
- Push the lever up or down to the first stop position and hold. The direction indicator flashes for as long as you hold the lever in this position.

WELCOME LIGHTING

The Lincoln welcome mat projection lights are on the bottom of the exterior mirror housings. They project an image onto the ground a short distance from your vehicle when welcome lighting or lighted entry turns on.

For auto-fold mirrors, the Lincoln welcome mat turns on when welcome lighting or lighted entry turns on and the mirrors fold in upon locking or using the switch on the door.

You can switch this feature on or off in the information display.

Note: *Moisture, frost and ice build-up or other types of contamination on the surface of the light lens can cause non-permanent distortion or reduced brightness of the image. Do not use abrasive materials to clean the lens.*

Note: *If you enable auto-fold and then you fold the mirrors in to the door window glass, the welcome mats do not turn on.*

INTERIOR LAMPS

The lamps turn on under the following conditions:

- You open any door.
- You press a remote control button.
- You press the all lamps on button on the overhead console.

Lighting

Front Interior Lamp



E262162

The front interior lamp switches are on the overhead console.

Note: *The position of each button on the overhead console depends on your vehicle.*

All Lamps On



Press to switch all interior lamps on.

All Lamps Off



Press to switch all interior lamps off.

Individual Dome Lamps



Press to switch the left-hand individual dome lamp on and off.



Press to switch the right-hand individual dome lamp on and off.

Interior Lamp Function



Press to switch the interior lamp function on and off.

When the interior lamp function is off and you open a door, the courtesy and door lamps stay off.

When the interior lamp function is on and you open a door, the courtesy and door lamps turn on.

Note: *The indicator lamp lights amber when the door function is off.*

Individual Map Lamps

Press a map lens to switch individual map lamps on and off independently.

Rear Interior Lamps

The rear interior lamps may be above the rear seat or above the rear windows.



Press to switch the lamps on or off.



Press to switch the left-hand individual dome lamp on and off.



Press to switch the right-hand individual dome lamp on and off.

AMBIENT LIGHTING

Use the touchscreen to select the following:

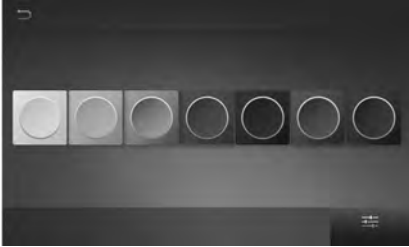


Select the settings option on the feature bar.



Select ambient lighting.

Lighting



E281470

Switching Ambient Lighting On

Touch a color once.

Changing the Color

Touch any color once.

Adjusting the Brightness

Drag the selected color up or down.

Switching Ambient Lighting Off

Touch the selected color once or drag the selected color down to zero brightness.

Automatic High Beam Control

WHAT IS AUTOMATIC HIGH BEAM CONTROL

The system turns on high beams if it is dark enough and no other traffic is present. If it detects an approaching vehicle's headlamps or tail lamps, or street lighting ahead, the system turns the high beams off. Low beams remain on.

A camera sensor, centrally mounted behind the windshield of your vehicle, continuously monitors conditions to turn the high beams on and off.

SWITCHING AUTOMATIC HIGH BEAM CONTROL ON AND OFF

Switch the system on or off using the information display. See **General Information** (page 134).

Activating the Automatic High Beam Control



Switch the lighting control to the autolamps position to activate. See **Autolamps** (page 111).

Note: Automatic high beams are not available when autolamps are not turned on.

When active, the high beams turn on if:

- The ambient light level is low enough.
- There is no traffic in front of your vehicle.
- The vehicle speed is greater than approximately 32 mph (52 km/h).

When active, the high beams turn off if:

- The ambient light level is high enough that high beams are not required.
- The system detects an approaching vehicle's headlamps or tail lamps.
- The system detects severe rain, snow or fog.
- The camera is blocked.
- The vehicle speed falls below approximately 27 mph (44 km/h).

Note: The deactivation speed is lower on curves.

Note: High beam reactivation may be delayed in certain curvy road situations.

Note: The system may not operate properly if the sensor is blocked. Keep the windshield free from obstruction or damage.

Note: The system may not operate properly in cold or inclement conditions. You can switch on the high beams by overriding the system.

Note: If the system detects a blockage, for example bird droppings, bug splatter, snow or ice, the system goes into low beam mode until you clear the blockage. A message may appear in the information display if the camera is blocked.

Note: Using much larger tires or equipping vehicle accessories such as snowplows can modify your vehicle's ride height and degrade automatic high beam control performance.

Automatic High Beam Control

AUTOMATIC HIGH BEAM CONTROL INDICATORS



The indicator illuminates to confirm when the system is ready to assist.

OVERRIDING AUTOMATIC HIGH BEAM CONTROL



WARNING: The system does not relieve you of your responsibility to drive with due care and attention. You may need to override the system if it does not turn the high beams on or off.



WARNING: You may need to override the system when approaching other road users.



WARNING: You may need to override the system during inclement weather.



E273182

Push the lever away from you to switch between high beam and low beam.

Windows and Mirrors

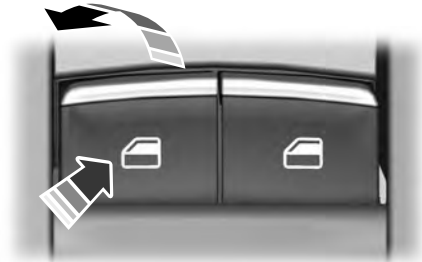
POWER WINDOWS



WARNING: Do not leave children unattended in your vehicle and do not let them play with the power windows. Failure to follow this instruction could result in personal injury.



WARNING: When closing the power windows, verify they are free of obstruction and make sure that children and pets are not in the proximity of the window openings.



Note: You may hear a pulsing noise when just one of the windows is open. Lower the opposite window slightly to reduce this noise.

Press the switch to open the window.

Lift the switch to close the window.

One-Touch Down

Press the switch fully and release it. Press again or lift it to stop the window.

One-Touch Up

Lift the switch fully and release it. Press or lift it again to stop the window.

Resetting One-Touch Up

Start the engine.

1. Lift and hold the window switch until you fully close the door window. Continue to hold the switch for a few seconds after you close the window.
2. Release the window switch.
3. Press and hold the window switch until you fully open the door window.

4. Release the window switch.
5. Lift and hold the window switch until you fully close the window.
6. Test for correct window operation by carrying out the one-touch down and one-touch up features.

Bounce-Back

The window will stop automatically while closing. It reverses some distance if there is an obstacle in the way.

Overriding the Bounce-Back Feature



WARNING: If you override bounce-back, the window does not reverse if it detects an obstacle. Take care when closing the windows to avoid personal injury or damage to your vehicle.

Pull up the window switch and hold within a few seconds of the window reaching the bounce-back position. The window travels up with no bounce-back protection. The window stops if you release the switch before the window fully closes.

Windows and Mirrors

Window Lock



E300439

Press the control to lock or unlock the rear window controls. It illuminates when you lock the rear window controls.

Accessory Delay

You can use the window switches for several minutes after you switch the ignition off or until you open either front door.

GLOBAL OPENING AND CLOSING

You can use the remote control to open the windows with the ignition off.


Note: You can enable or disable this feature in the information display or see an authorized dealer. See **General Information** (page 134).

Note: To operate this feature, accessory delay must not be active.

Opening the Windows

You can only open the windows for a short time after you unlock your vehicle with the remote control. After you unlock your vehicle, press and hold the remote control unlock button to open the windows. Release the button once movement starts. Press the lock or unlock button to stop movement.


Closing the Windows

 **WARNING:** When closing the power windows, verify they are free of obstruction and make sure that children and pets are not in the proximity of the window openings.

To close the windows, press and hold the remote control lock button. Release the button once movement starts. Press the lock or unlock button to stop movement.

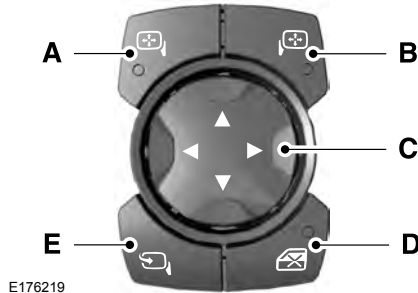
EXTERIOR MIRRORS

Power Exterior Mirrors

 **WARNING:** Do not adjust the mirrors when your vehicle is moving. This could result in the loss of control of your vehicle, serious personal injury or death.

Note: Do not use an ice scraper on the mirror glass or housing.

Windows and Mirrors



E176219

- A Left-hand mirror.
- B Right-hand mirror.
- C Adjustment control.
- D Window lockout.
- E Power-folding mirror control.

To adjust a mirror:

1. Select the mirror you want to adjust. The control will light.
2. Adjust the position of the mirror.
3. Press the mirror control again.

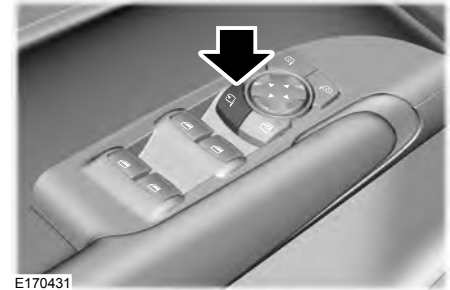
Fold-Away Exterior Mirrors

Push the mirror toward the door window glass. Make sure that you fully engage the mirror in its support when returning it to its original position.

Auto-Folding Mirrors

The exterior mirrors automatically fold in toward the glass after you place the transmission into park (P), turn off the vehicle, open and close the driver's side door and lock the vehicle. The exterior mirrors automatically unfold and return to their driving position after you unlock the vehicle and open and close the driver's side door.

You can switch this feature on and off through the information display. See **General Information** (page 134).



E170431

You can fold the mirrors on demand by pressing the power-folding mirror control located on the door. The control lights and the mirrors fold in toward the glass. Press the control again to unfold the mirrors. The control light turns off.

Note: If you use the power-folding control to fold the mirrors on demand and the auto fold feature is switched on, you must use the control again to unfold them.

Windows and Mirrors

Loose Mirror

If your power-folding mirrors are manually folded, they may not work properly even after you re-position them. You need to reset them if:

- The mirrors vibrate when you drive.
- The mirrors feel loose.
- The mirrors do not stay in the folded or unfolded position.
- One of the mirrors is not in its normal driving position.

To reset the power-fold feature, use the power-folding mirror control to fold and unfold the mirrors. You may hear a loud noise as you reset the power-folding mirrors. This sound is normal. Repeat this process as needed each time the mirrors are manually folded.

Heated Exterior Mirrors

See **Heated Exterior Mirrors** (page 171).

Memory Mirrors

You can save and recall the mirror positions through the memory function. See **Memory Function** (page 183).

Auto-Dimming Feature

The driver's exterior mirror automatically dims when the interior auto-dimming mirror turns on.

Signal Indicator Mirrors

The outer portion of the appropriate mirror housing blinks when you switch on the direction indicator.

Lincoln Welcome Mat

Projection lights, on the bottom of the mirror housings, project an image onto the ground a short distance from the vehicle.

360-Degree Camera (If Equipped)

See **360 Degree Camera** (page 269).

Blind Spot Monitor

See **Blind Spot Information System** (page 288).

INTERIOR MIRROR



WARNING: Do not adjust the mirrors when your vehicle is moving. This could result in the loss of control of your vehicle, serious personal injury or death.

Note: *Do not clean the housing or glass of any mirror with harsh abrasives, fuel or other petroleum or ammonia-based cleaning products.*

You can adjust the interior mirror to your preference. Some mirrors also have a second pivot point. This lets you move the mirror head up or down and from side to side.

Windows and Mirrors

Auto-Dimming Mirror

Note: Do not block the sensors on the front and back of the mirror. A rear center passenger or raised rear center head restraint may also block light from reaching the sensor.

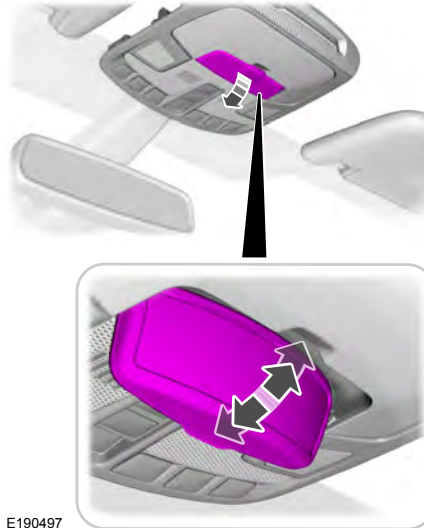
The mirror dims to reduce the effect of bright light from behind. It returns to normal when the bright light from behind is no longer present or if you shift into reverse (R).

CHILDMINDER MIRROR

On overhead consoles, the childminder mirror allows the driver to view the rear seating area.



WARNING: Do not use the childminder mirror to view rearward traffic, do not allow rear passengers to distract you from the driving task, and make sure the rear view mirror has a clear view of rearward traffic. Failure to do so could increase the risk of a crash from an unseen vehicle, which may result in serious injury.



E190497

Pull down the rear edge of the childminder mirror to open. You can adjust the childminder mirror to any position up to full open to aid in visibility.

TOLL READER

Installing the Toll Reader

Install the toll reader or radio-controlled equipment on the driver side of the windshield behind the interior mirror.

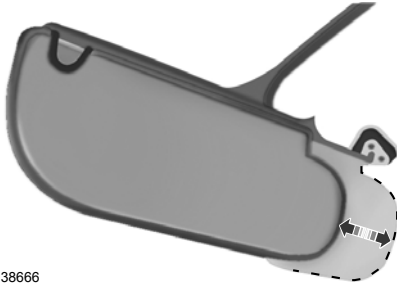
Note: Follow the manufacturer's installation instructions.



E274072

Windows and Mirrors

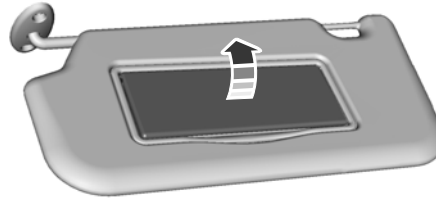
SUN VISORS



E138666

Rotate the sun visor toward the side window and extend it rearward for extra shade.

Illuminated Vanity Mirror



E162197

Lift the cover to switch the lamp on.

MOONROOF (IF EQUIPPED)



WARNING: Do not leave children unattended in your vehicle and do not let them play with the moonroof. Failure to follow this instruction could result in personal injury.

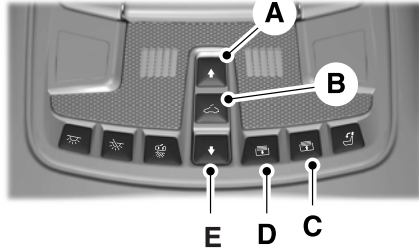


WARNING: When closing the moonroof, verify that it is free of obstruction and make sure that children and pets are not in the proximity of the roof opening.

The moonroof controls are located on the overhead console and have a one-touch open and close feature. To stop its movement during one-touch operation, press the control a second time.

Windows and Mirrors

Opening and Closing the Moonroof



E258458

- A **Moonroof open.**
- B **Moonroof vent.**
- C **Sunshade open.**
- D **Sunshade close.**
- E **Moonroof close.**

Note: If you press and hold the moonroof open or sunshade open buttons, the moonroof or sunshade moves proportionally to how long you hold the button. The same also applies to the moonroof close and sunshade close buttons.

Moonroof Open

Press and immediately release to fully open the moonroof. If there is a comfort stop position, the moonroof first opens to the comfort stop position. Press and immediately release the control again to open the moonroof fully.

Moonroof Vent

Press and release to vent the moonroof.

Sunshade Open

Press and release to open the sunshade. The sunshade opens automatically with the moonroof. You can also open the sunshade with the moonroof closed.

Note: The sunshade stops short of its fully opened position for the comfort of rear passengers. To open the sunshade fully, press the control again.

Sunshade Close

Press and release to close the sunshade.

Note: The sunshade does not fully close unless the moonroof glass is fully closed.

Moonroof Close

Press and release to close the moonroof from either the open or vent positions.

Bounce-Back

The moonroof automatically reverses some distance if an obstacle is detected while closing.

To override this feature, press and hold the **moonroof close** control within two seconds after the roof comes to a stop following a bounce-back reversal.

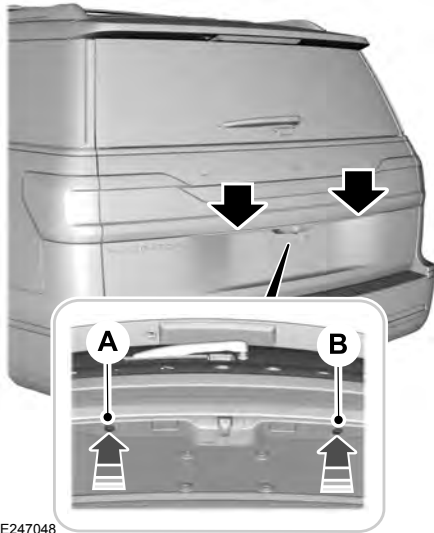
LIFTGATE WINDOW

Opening the Liftgate Window

Note: To avoid vehicle damage, use care when operating the liftgate when the liftgate window is open.

Windows and Mirrors

With the Outside Control Buttons



2. Pull the liftgate window upward.

With the Keypad

The liftgate window also opens with the keypad. See **Keyless Entry** (page 88).

E247048

A Liftgate window.

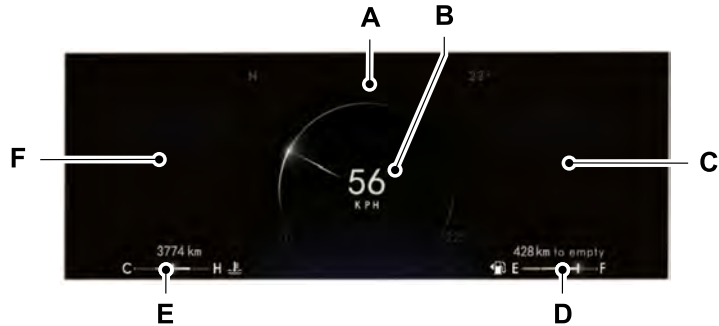
B Liftgate.

1. Press button A.

Instrument Cluster

GAUGES

Note: Clusters shown in single gauge view.



E271984

Instrument Cluster

- A Status Bar.
- B Speedometer.
- C Right Information Group.
- D Fuel Gauge.
- E Coolant Gauge.
- F Left Information Group.

Status Bar

Displays information related to the current audio source, compass direction and outside air temperature.

Left and Right Information Group

Information that appears depends on current gauge view and on-demand settings. See **General Information** (page 134).

Fuel Gauge

The fuel gauge indicates about how much fuel is in the fuel tank.

The arrow adjacent to the fuel pump symbol indicates on which side of your vehicle the fuel filler door is located.

Note: *The fuel gauge may vary slightly when your vehicle is moving or on a slope.*

Low Fuel Reminder

A low fuel level reminder displays and sounds when the distance to empty reaches 75 mi (120 km) to empty for MyKey, and at 50 mi (80 km), 25 mi (40 km), 10 mi (20 km) and 0 mi (0 km) for all vehicle keys.

Note: *The low fuel reminder can appear at different fuel gauge positions depending on fuel economy conditions. This variation is normal.*

Engine Coolant Temperature Gauge



WARNING: Do not remove the coolant reservoir cap when the engine is on or the cooling system is hot. Wait 10 minutes for the cooling system to cool down. Cover the coolant reservoir cap with a thick cloth to prevent the possibility of scalding and slowly remove the cap. Failure to follow this instruction could result in personal injury.

Instrument Cluster

Indicates engine coolant temperature. At normal operating temperature, the level indicator will be in the normal range. If the engine coolant temperature exceeds the normal range, stop your vehicle as soon as safely possible, switch off the engine and let the engine cool.

WARNING LAMPS AND INDICATORS

The following warning lamps and indicators alert you to a vehicle condition that may become serious. Some lamps illuminate when you start your vehicle to make sure they work. If any lamps remain on after starting your vehicle, refer to the respective system warning lamp for further information.

Note: *Some warning indicators appear in the information display and operate the same as a warning lamp but do not illuminate when you start your vehicle.*

Adaptive Cruise Control Indicator



It illuminates when you switch the system on.

It illuminates white when the system is in standby mode. It illuminates green when you set the adaptive cruise speed.

See **Using Adaptive Cruise Control** (page 273).

Anti-Lock Brake System Warning Lamp



If it illuminates when you are driving, this indicates a malfunction. Your vehicle continues to have normal braking without the anti-lock brake system function. Have your vehicle checked as soon as possible.

Auto Hold Active



Illuminates when the system holds your vehicle stationary.

Auto Hold Unavailable



Illuminates when the system is on, but unavailable to hold your vehicle stationary.

Auto-Start-Stop Indicator



It illuminates when the engine has automatically stopped. It flashes to inform you when the engine needs to restart. The indicator is shown with a strikethrough if the system is not available.

See **Auto-Start-Stop** (page 212).

Automatic Headlamp High Beam Indicator



It illuminates when the system turns the headlamp high beam on.

See **What Is Automatic High Beam Control** (page 117).

Battery



It illuminates when you switch the ignition on.

If it illuminates when the engine is running this indicates a malfunction. Have your vehicle checked as soon as possible.

Instrument Cluster

Blind Spot Monitor



It illuminates when you switch the system off.

See **Blind Spot Information System** (page 288).

Brake System Warning Lamp



WARNING: Driving your vehicle with the warning lamp on is dangerous. A significant decrease in braking performance may occur. It may take you longer to stop your vehicle. Have your vehicle checked as soon as possible. Driving extended distances with the parking brake engaged can cause brake failure and the risk of personal injury.

Note: *Indicators vary depending on region.*

This lamp is a dual function lamp and will illuminate when:

- You apply the parking brake with the ignition on.
- Your vehicle has a brake fault or low brake fluid level, regardless of parking brake position.



If the lamp illuminates when you are moving, you may have the parking brake applied. Make sure the parking brake is off. Have your vehicle checked as soon as possible if the lamp continues to illuminate.

Cruise Control Indicator



It illuminates when you switch the system on.

See **Using Adaptive Cruise Control** (page 273).

Direction Indicator



It illuminates when the left or right turn signal or the hazard warning flasher is turned on. Flashes during operation. An increase in the rate of flashing warns of a failed indicator bulb.

Door Ajar



It illuminates when you switch the ignition on and remains on if any door or the hood is open.

Electric Park Brake



It illuminates or flashes when the electric parking brake has a malfunction. See **Electric Parking Brake** (page 242).

Engine Coolant Temperature Warning Lamp



If it illuminates when your vehicle is moving, this indicates that the engine is overheating. Stop your vehicle as soon as it is safe to do so and switch the engine off. Have your vehicle checked as soon as possible.

See **Engine Coolant Check** (page 383).

Instrument Cluster

Engine Oil



If it illuminates with the engine running or when you are driving, this indicates a malfunction. Stop your vehicle as soon as it is safe to do so and switch the engine off. Check the engine oil level.

See **Engine Oil Check** (page 380).

Note: Do not resume your journey if it illuminates despite the level being correct. Have the system checked by your authorized dealer immediately.

Fasten Rear Seatbelt (If Equipped)



It illuminates and a chime sounds to signal the rear seatbelts are not buckled.

Fasten Seatbelt Warning Lamp



It illuminates and a chime sounds until you fasten the seatbelts.

Four-Wheel Drive Indicators (If Equipped)



It illuminates momentarily when you select two-wheel drive high.



It illuminates when the automatic four-wheel drive system is engaged.



It illuminates when four-wheel drive low is engaged.



It illuminates when four-wheel drive high is engaged.

Front Airbag



If it fails to illuminate when you start your vehicle, continues to flash or remains on, it indicates a malfunction. Have the system checked.

Headlamp High Beam Indicator



It illuminates when you switch the headlamp high beam on. It flashes when you use the headlamp flasher.

Hill Descent (If Equipped)



It illuminates when you switch hill descent on.

Hood Ajar



Displays when the ignition is on and the hood is not completely closed.

Liftgate Ajar



Displays when the ignition is on and the liftgate is not completely closed.

Low Fuel Level Warning Lamp



If it illuminates when you are driving, refuel as soon as possible.

Instrument Cluster

Low Tire Pressure Warning Lamp



It illuminates when your tire pressure is low. If the lamp remains on with the engine running or when driving, check your tire pressure as soon as possible.

It also illuminates momentarily when you switch the ignition on to confirm the lamp is functional. If it does not illuminate when you switch the ignition on, or begins to flash at any time, have the system checked by your authorized dealer.

Low Beam Malfunction Warning Lamp



It illuminates when there is a malfunction with the low beam headlamp bulb.

Low Washer Fluid Level Warning Lamp



It illuminates when the washer fluid is low.

Parking Lamps



Illuminates when you switch the parking lamps on.

Powertrain Fault



Illuminates when a powertrain or an 4WD fault has been detected. Contact an authorized dealer.

Service Engine Soon



If it illuminates when the engine is running this indicates a malfunction. The On Board Diagnostics system has detected a malfunction of the vehicle emission control system.

If it flashes, engine misfire may be occurring. Increased exhaust gas temperatures could damage the catalytic converter or other vehicle components. Drive in a moderate fashion (avoid heavy acceleration and deceleration) and have your vehicle immediately serviced.

It illuminates when you switch the ignition on prior to engine start to check the bulb and to indicate whether your vehicle is ready for Inspection and Maintenance (I/M) testing.

Normally, it illuminates until the engine is cranked and automatically turns off if no malfunctions are present. However, if after 15 seconds it flashes eight times, this indicates that your vehicle is not ready for Inspection and Maintenance (I/M) testing.

See **Catalytic Converter** (page 224).

Stability Control and Traction Control Indicator



Flashes during operation.

If it does not illuminate when you switch the ignition on, or remains on when the engine is running, this indicates a malfunction. Have your vehicle checked as soon as possible.

See **Using Stability Control** (page 249).

Instrument Cluster

Stability Control and Traction Control Off Warning Lamp



It illuminates when you switch the system off.

Tow Haul Indicator* (If Equipped)



It illuminates when your vehicle detects a heavy trailer.

AUDIBLE WARNINGS AND INDICATORS

Keyless Warning Alert

The horn will sound twice when you exit your vehicle with the intelligent access key and your vehicle is in RUN, indicating your vehicle is still on.

Headlamps On Warning Chime

Sounds when you have left the headlamps or parking lamps on and open the driver door with the vehicle off.

Parking Brake On Warning Chime

Sounds when you have left the parking brake on and drive your vehicle. If the warning chime remains on after you have released the parking brake, have the system checked by your authorized dealer immediately.

Information Displays

GENERAL INFORMATION



WARNING: Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

You can control various systems on your vehicle using the quick action menu (QAM) buttons on the right-hand side of the steering wheel. The information display provides the corresponding information.

Note: *Some options may appear slightly different or not at all if the items are optional.*

Note: *Trailer options are not available if your vehicle speed is greater than 3 mph (5 km/h).*

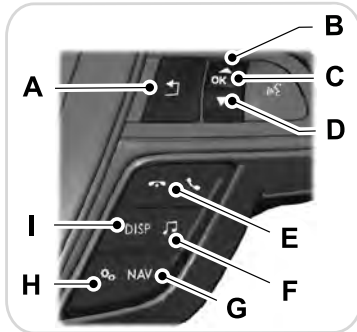
Note: *Some MyKey menu options only appear if MyKey is enabled and at least one MyKey is programmed.*



This icon gives you the ability to switch a feature on or off. A check in the box indicates the feature is on, and unchecked indicates the feature is off.

Information Displays

Information Display Controls



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- A Back Button.
- B Toggle Up.
- C OK Button.
- D Toggle Down.
- E Phone QAM Buttons.
- F Audio QAM Button.
- G Navigation QAM Button.
- H Settings QAM Button.
- I Display QAM Button.

Note: The **DISP** button is replaced with a **HUD** button on vehicles equipped with a head up display (HUD). See **Head Up Display** (page 162).

Note: The **NAV** button is replaced with a compass button on vehicles without navigation.

- Press one of the QAM buttons to enter a menu.
- Toggle **(B)** and **(D)** to scroll through and highlight the options within a menu.
- Press **(C)** to enter a sub-menu.
- Press **(A)** to exit a menu.
- Press the open menu's QAM button at any time to close the menu (escape button).
- Press **(C)** to choose and confirm settings or messages.

Information Displays

Settings

SETTINGS		
DISPLAY SETUP	SPEEDOMETER km/h	
	SPEEDOMETER MPH	
	ADD TACHOMETER TO VIEW	
	MEASUREMENT UNITS	Enter the submenu and select your setting
	TEMPERATURE	
	TIRE PRESSURE	
	LANGUAGE	
TRACTION CONTROL		
HILL DESCENT		
TRAILER SWAY CONTROL		
TOW HAUL	Enter the submenu and select your setting	
DRIVER ASSIST- ANCE	BLIND SPOT	
	TRAILER BLINDSPOT	
	CROSS TRAFFIC ALERT	
	CRUISE CONTROL	Enter the submenu and select your setting

Information Displays

SETTINGS		
	DRIVER ALERT	
	LANE KEEPING SYSTEM	Enter the submenu and select your setting
	PRE-COLLISION	
TOWING	TRAILER STATUS	Enter the submenu and select your setting
	TRAILER OPTIONS	
	CONNECTION CHECKLIST	
ADVANCED SETTINGS	VEHICLE	ALARM
		AUTO ENGINE OFF
		EASY ENTRY/EXIT
		LIGHTING
		LOCKS
		MIRRORS
		NEUTRAL TOW
		OIL LIFE RESET
		POWER LIFTGATE
		REMOTE START

Information Displays

SETTINGS		
		POWER RUNNING BOARD
		TIRE MONITOR
		WINDOWS
		WIPERS
	MyKey	Enter the submenu and select your setting

Note: Once you select a trailer, it remains active until you set it as no longer active. An active trailer still accumulates miles even after you physically disconnect it from your vehicle.

Note: If your vehicle is not equipped with a head up display, use the **DISP** button to access your **DISPLAY SETUP** options.

Information Screens

INFO/TRIP/FUEL On Demand information appears on the right-hand side of your instrument cluster in single gauge view and in the center of your instrument cluster when **ADD TACHOMETER TO VIEW** is switched on.

INFO/TRIP/FUEL
NO CONTENT
TRIP 1
TRIP 2
FUEL ECONOMY
SEATBELTS

INFO/TRIP/FUEL

Information Displays

INFO/TRIP/FUEL
TIRE PRESSURE
TRAILER INFORMATION

- **NO CONTENT** - Displays a blank area.
- **TRIP 1** - Displays distance traveled, average fuel economy, and time spent for trip. Press and hold **OK** to reset.
 - **TRIP 2** information is the same as **TRIP 1**.
- **FUEL ECONOMY** - Displays your vehicle's average fuel economy. Press and hold **OK** to reset.
- **SEATBELTS** - Displays a graphic of the connection status of the rear seatbelts.
- **TIRE PRESSURE** - Displays a graphic of current vehicle tire pressures.
- **TRAILER INFORMATION** - Displays the transmission temperature and trailer gain.

Head Up Display (If Equipped)

See **Head Up Display** (page 162).

Phone

See **General Information** (page 473).

Audio

See **General Information** (page 473).

Navigation (If Equipped)

See **General Information** (page 473).

INFORMATION MESSAGES

Note: *Depending on your vehicle options and instrument cluster type, not all of the messages will display or be available. Certain messages may be abbreviated or shortened depending upon which cluster type you have.*



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Press the **OK** button to acknowledge and remove some messages from the information display. Other messages will be removed automatically after a short time.

Certain messages need to be confirmed before you can access the menus.

Information Displays

Active Park

Message	Action
Active Park Fault	The system requires service. Have the system checked as soon as possible.

Adaptive Cruise Control

Message	Action
Adaptive Cruise Malfunction	A radar malfunction is preventing the adaptive cruise from engaging. See Using Adaptive Cruise Control (page 273).
Front Sensor Not Aligned	
Adaptive Cruise Not Available	Conditions exist such that the adaptive cruise cannot function properly. See Using Adaptive Cruise Control (page 273).
Adaptive Cruise Not Available Sensor Blocked See Manual	The radar is blocked because of poor radar visibility due to inclement weather including ice, mud or water in front of radar. You can typically clean the sensor to resolve. See Using Adaptive Cruise Control (page 273).
Normal Cruise Active Automatic Braking Turned Off	Displays when the automatic braking has been disabled.
Adaptive Cruise - Driver Resume Control	Displays when the adaptive cruise has reinstated controls to you.
Adaptive Cruise Speed Too Low to Activate	Displays when the vehicle speed is too slow to activate the adaptive cruise.

Information Displays

Adaptive Headlamps

Message	Action
Check Headlamp System See Manual	Displays when the system requires service. Have the system checked as soon as possible.

Alarm

Message	Action
Vehicle Alarm To Stop Alarm, Start Vehicle.	The alarm has been triggered due to unauthorized entry.

Automatic Engine Shutdown

Message	Action
Vehicle Shuts Off In {seconds:#0} Seconds	The engine is getting ready to shut off.
Vehicle Shut Off to Save Energy	The engine has shut off to help increase fuel economy.
Vehicle Shuts Off in {seconds:#0} Seconds Press Ok to Override	The engine is getting ready to shut off. You can press OK on the left steering wheel button to override the shut down.

Information Displays

Battery and Charging System

Message	Action
Check Charging System	The charging system needs servicing. If the warning stays on or continues to come on, contact an authorized dealer as soon as possible.
Charging System Service Soon	The charging system needs servicing. If the warning stays on or continues to come on, contact an authorized dealer as soon as possible.
Charging System Service Now	The charging system needs servicing. Contact an authorized dealer as soon as possible.
Battery State of Charge Low	The battery management system determines that the battery is at a low state of charge. Turn your ignition off as soon as possible to protect the battery. This message clears once you restart your vehicle and the battery state of charge has recovered.
Turn Power Off To Save Battery	The battery management system determines that the battery is at a low state of charge. Turn the ignition off as soon as possible to protect the battery. This message will clear once the vehicle has been started and the battery state of charge has recovered. Turning off unnecessary electrical loads will allow faster battery state-of-charge recovery.
Low Battery Features Temporarily Turned Off	Displayed when the battery management system detects an extended low-voltage condition. Various vehicle features will be disabled to help preserve the battery. Turn off as many of the electrical loads as soon as possible to improve system voltage. If the system voltage has recovered, the disabled features will operate again as normal.

Information Displays

Blind Spot Information and Cross Traffic Alert System

Message	Action
Blindspot System Fault	Displays when the system requires service. Have the system checked as soon as possible.
Blindspot Not Available Sensor Blocked See Manual	The system sensors are blocked. Have the system checked as soon as possible. See Blind Spot Information System (page 288).
Vehicle Coming From X	The system detects a vehicle. See Blind Spot Information System (page 288).
Cross Traffic Not Available Sensor Blocked See Manual	The blind spot information system and cross traffic alert system sensors are blocked. See Blind Spot Information System (page 288).
Cross Traffic System Fault	Displays when the system requires service. Have the system checked as soon as possible.
Cross Traffic Alert Deactivated Trailer Attached	The system automatically turns off and displays this message when you connect a trailer to the vehicle that does not have a trailer blind spot system or when you switch the trailer blind spot system off through the information display. See Blind Spot Information System (page 288).
Blind Spot Alert Deactivated Trailer Attached	The system automatically turns off and displays this message when you connect a trailer to the vehicle that does not have a trailer blind spot system or when you switch the trailer blind spot system off through the information display. See Blind Spot Information System (page 288).
Trailer Blind Spot Not available Due to Invalid Trailer	Displays when the trailer connected is a fifth wheel or gooseneck, or when the trailer width is wider than 10 ft (2.7 m) or longer than 33 ft (10 m).

Information Displays

Doors and Locks

Message	Action
X Door Ajar	The door listed is not completely closed.
Trunk Ajar	The luggage compartment is not completely closed.
Engine ON	The driver door is opened, your vehicle is in park and the engine is on.
Hood Ajar	Displays when the hood is not completely closed.
Switches Inhibited Security Mode	Displays when the door switches have been disabled.
Child Lock Malfunction Service Required	Displays when the system requires service. Have the system checked as soon as possible.
Factory Keypad Code {X X X X X}	Displays the factory keypad code after the keypad has been reset. See Keyless Entry (page 88).

Driver Alert

Message	Action
Driver Alert Warning Rest Now	Stop and rest as soon as it is safe to do so.
Driver Alert Warning Rest Suggested	Take a rest soon.

Information Displays

Drivetrain

Message	Action
Check Electronic Limited Slip Differential	Displays when the system requires service. Have your vehicle checked as soon as possible.
Electronic Limited Slip Differential Off See Owner's Manual	Displays when the system requires service. Have your vehicle checked as soon as possible.
Electronic Limited Slip Differential Restored to Normal	Displays when the electronic limited slip differential system resumes normal function.
Electronic Limited Slip Differential Temporarily Disabled	Displays if the electronic limited slip differential system temporarily turns off due to overheating or an undersized spare tire. If an undersized spare tire is installed, replace the spare tire with a full-sized tire as soon as possible. If not, stop the vehicle in a safe location and allow the system to cool.
Electronic Limited Slip Differential Reduced Torque	Displays if the electronic limited slip differential has limited functionality. This could be due to an undersized spare tire or caused by the system overheating. If an undersized spare tire is installed, replace the spare tire with a full-sized tire as soon as possible. If an undersized spare tire is not installed, the vehicle has reduced functionality. Have your vehicle checked as soon as possible.

Information Displays

Message	Action
Electronic Limited Slip Differential Locking Feature Not Available	Displays when you select a drive mode that does not allow the electronic limited slip differential to turn on. This may also display when the electronic limited slip differential has a fault and the vehicle requests the locking feature.
Neutral Tow Enabled Leave Transmission in Neutral	The transfer case is in the neutral position. This message indicates that your vehicle is safe to be towed with all four wheels on the ground.
Neutral Tow Disabled	The transfer case is NOT in the neutral position. This message indicates that your vehicle is NOT safe to be towed with all four wheels on the ground.

Four-Wheel Drive

Message	Action
Check 4x4	Displays when the system requires service. Have the system checked as soon as possible.
4x4 Shift in Progress	The 4X4 system is making a shift.
For 4x4 LOW Shift to N	Displays when you attempt to switch to 4X4 LOW and you do not shift the transmission to neutral (N).
For 4x4 LOW Slow to 3 MPH	Displays when you attempt to switch to 4X4 LOW and your vehicle's speed is greater than 3 mph (5 km/h).
To Exit 4x4 LOW Shift to N	Displays when you attempt to switch from 4X4 LOW and you do not shift the transmission to neutral (N).

Information Displays

Message	Action
To Exit 4x4 LOW Slow to 3 MPH	Displays when you attempt to switch from 4X4 LOW and your vehicle's speed is greater than 3 mph (5 km/h).
Shift Delayed Pull Forward	May display when there is a transfer case gear tooth blockage while shifting to or from 4L or to the neutral state.
4x4 Temporarily Disabled	Displays when the system turns off the clutch due to excessive stress. The system automatically turns on the clutch after it cools.
4x4 Restored	Displays when the 4X4 system has been restored to its original setting.
4x4 Temporarily Locked	Displays when the 4X4 system temporarily turns on 4H from 4A after detecting driving conditions that require greater 4X4 performance. The system automatically returns to 4A after the system no longer detects these driving conditions.

Fuel

Message	Action
Fuel Level Low	An early reminder of a low fuel condition.
Check Fuel Fill Inlet	The fuel fill inlet may not be properly closed.

Information Displays

Hill Start Assist

Message	Action
Hill Start Assist Not Available	Displays when hill start assist is not available. Contact your authorized dealer. See Hill Start Assist (page 244).

Keys and Intelligent Access

Message	Action
To START Press Brake	A reminder to press the brake while starting your vehicle.
No Key Detected	The key is not detected by the system.
Restart Now or Key is Needed	The Start Stop button is pressed to shut off the engine and an Intelligent Access key is not detected inside your vehicle.
Full Accessory Power Active	Your vehicle is in the accessory ignition state.
Starting System Fault	There is a concern with your vehicle's starting system. Have the system checked as soon as possible.
Key Program Successful	During spare key programming, an intelligent access key is programmed to the system.
Max Number of Keys Learned	During spare key programming, the maximum number of keys have been programmed.
Key Program Failure	Displayed during spare key programming, when an intelligent access key has failed to be programmed.

Information Displays

Message	Action
Not Enough Keys Learned	Displayed during spare key programming when not enough keys have been programmed.
Key Battery Low Replace Soon	Displays when the key battery is low. Change the battery as soon as possible.
Vehicle Switched Off	Displays when the vehicle is switched off.

Lane Keeping System

Message	Action
Lane Keeping Sys. Malfunction Service Required	Displays when the system requires service. Have the system checked as soon as possible.
Front Camera Temporarily Not Available	The system has detected a condition that has caused the system to be temporarily unavailable.
Front Camera Low Visibility Clean Screen	The system has detected a condition that requires the windshield to be cleaned to operate properly.
Front Camera Malfunction Service Required	Displays when the system requires service. Have the system checked as soon as possible.
Keep Hands on Steering Wheel	The system requests that you keep your hands on the steering wheel.

Information Displays

Maintenance

Message	Action
Low Engine Oil Pressure	Stop your vehicle as soon as safely possible, turn off the engine. Check the oil level. If the message stays on or continues to come on with your engine running, have the system checked as soon as possible.
Change Engine Oil Soon	The engine oil life is low and needs to be changed soon. See General Maintenance Information (page 539).
Oil Change Required	The engine oil life is low and needs to be changed immediately. See General Maintenance Information (page 539).
Brake Fluid Level Low	The brake fluid level is low and the brake system should be inspected immediately. See Brake Fluid Check (page 389).
Check Brake System	The brake system needs servicing. Stop the vehicle in a safe place. Have the system checked as soon as possible.
Engine Coolant Over Temperature	The engine coolant temperature is excessively high.
Washer Fluid Level Low	The washer fluid is low and needs to be refilled.
Transport Mode Contact Dealer	Indicates that your vehicle is still in Transport mode. This may not allow some features to operate properly. Have the system checked as soon as possible.
Factory Mode Contact Dealer	Indicates that your vehicle is still in Factory mode. This may not allow some features to operate properly. Have the system checked as soon as possible.

Information Displays

Message	Action
See Manual	Informs the driver that the powertrain needs service due to a powertrain malfunction.
Power Reduced to Lower Engine Temp	The engine has reduced power to help reduce high engine temperature.
Brake Applied Power Reduced	The brake system has reduced stopping power.

MyKey

Message	Action
MyKey not Created	Displays when a MyKey cannot be programmed during key programming. Restart programming.
Speed Limited to XX MPH/km/h	When starting your vehicle, a MyKey is in use and the MyKey speed limit is on.
Near Vehicle Top Speed	When a MyKey is in use, the MyKey speed limit is on and your vehicle speed is approaching 80 mph (130 km/h).
MyKey Active Drive Safely	Displays when MyKey is active.
Check Speed Drive Safely	Displays when MyKey is active.
Vehicle at Top Speed of MyKey Setting	Displays when a MyKey is in use and the MyKey speed limit is reached.
Buckle Up to Unmute Audio	Displays when a MyKey is in use and Belt-Minder is activated.

Information Displays

Message	Action
AdvanceTrac On - MyKey Setting	Displays when a MyKey is in use and AdvanceTrac is activated.
MyKey Park Aid Cannot be Deactivated	Displays when a MyKey is in use and park aid is activated.
Lane Keeping Alert On MyKey Setting	Displays when the lane keeping aid is on per MyKey settings.

Off Road

Message	Action
Hill Descent Control Active	Hill descent control mode is active.
Hill Descent Control OFF	Hill descent control mode is inactive.
For Hill Descent Reduce Speed XX MPH/km/h or Less	Your vehicle speed requirement for off-road mode entry has not been met.
For Hill Descent Select Gear	You need to select a transmission gear for hill descent mode.
Hill Descent Driver Resume Control	Hill descent control mode is deactivated and you must resume control.
Hill Descent Control Fault	Displays when the system requires service. Have the system checked as soon as possible.
Hill Descent Control Off System Cooling	The hill descent system is cooling due to overuse.
Hill Descent Control Ready	The hill descent control system is ready.

Information Displays

Park Aid

Message	Action
Check Front Park Aid	Displays when the system requires service. Have the system checked as soon as possible.
Check Rear Park Aid	Displays when the system requires service. Have the system checked as soon as possible. See Rear Parking Aid (page 252).

Park Brake

Message	Action
Park Brake Engaged	The parking brake is set, the engine is running and you drive your vehicle more than 3 mph (5 km/h). If the warning stays on after the parking brake is released, have the system checked as soon as possible.
To Release: Press Brake and Switch	The electric parking brake is set and a manual release is attempted without the brake pedal being pressed.
Park Brake Use Switch to Release	The electric parking brake is set and an automatic release is attempted but cannot be performed. Perform a manual release.
Release Park Brake	The electric parking brake is set and your vehicle speed exceeds 3 mph (5 km/h). Release park brake before continued driving.
Park Brake Not Applied	The electric parking brake is not fully applied.
Park Brake Not Released	The electric parking brake is not fully released.

Information Displays

Message	Action
Park Brake Maintenance Mode	The electric parking brake system has been put into a special mode that is used to allow service of the rear brakes. Have the system checked as soon as possible.
Park Brake Limited Function Service Required	Displays when the system requires service. Some functionality may still be available. Have the system checked as soon as possible.
Park Brake Malfunction Service Now	Displays when the system requires service. Have the system checked as soon as possible.
Park Brake System Overheated	Numerous park brake applies have overheated the system. Wait 2 minutes before attempting to apply again.

Power Steering

Message	Action
Steering Fault Service Now	Displays when the system requires service. Have the system checked as soon as possible.
Steering Assist Fault Service Required	Displays when the system requires service. Have the system checked as soon as possible.
Steering Loss Stop Safely	The power steering system is not working. Stop the vehicle in a safe place. Have the system checked as soon as possible.

Information Displays

Pre-Collision Assist

Message	Action
Pre-Collision Assist Not Available Sensor Blocked	You have a blocked sensor due to inclement weather, ice, mud or water in front of the radar sensor. You can typically clean the sensor to resolve.
Pre-Collision Assist Not Available	Displays when the system requires service. Have the system checked as soon as possible.

Pro Trailer Backup Assist™

Message	Action
Pro Trailer Backup Assist™ Not Active Stop Vehicle to Activate	Pro Trailer Backup Assist™ can only be activated when the vehicle is stopped.
Pro Trailer Backup Assist™ Locating Sticker Please wait... Press Knob to Exit	Camera System is locating the sticker. Wait until the sticker is found before attempting to use Pro Trailer Backup Assist.
Pro Trailer Backup Assist™ Stop now Maximum trailer angle Press Knob to Exit	Stop Now. Pro Trailer Backup Assist™ has reached max trailer angle.
Pro Trailer Backup Assist™ Stop Now Take Control of Steering Wheel	Stop Now. Pro Trailer Backup Assist™ is no longer controlling steering.
Pro Trailer Backup Assist™ Reduce Speed Turn Knob to Steer Press Knob to Exit	Slow vehicle speed. Vehicle is approaching the exit speed for the Pro Trailer Backup Assist™ feature.
Pro Trailer Backup Assist™ System is Not Available	Conditions for Pro Trailer Backup Assist operation are not met. See Trailer Reversing Aids (page 316).

Information Displays

Message	Action
Pro Trailer Backup Assist™ Remove Hands from Steering Wheel to Activate Press Knob to Exit	Pro Trailer Backup Assist™ cannot operate with hands on wheel. Remove hands to activate.
Pro Trailer Backup Assist™ Cancelled by Driver Take Control of Steering Wheel	Pro Trailer Backup Assist™ knob has been pushed to deactivate the system.
Pro Trailer Backup Assist™ Shift to Reverse to Activate. Press Knob to Exit	Pro Trailer Backup Assist™ operation is only available in reverse gear. Shift the gear selector into reverse to activate.
Pro Trailer Backup Assist™ Sticker Not Found Shift to Park Press Knob to Exit	The camera system cannot locate the sticker. Shift to park.
Pro Trailer Backup Assist™ Sticker Not Found Refer to Owner's Manual. Press Knob to Exit	The camera system cannot locate the sticker. See Trailer Reversing Aids (page 316).
Pro Trailer Backup Assist™ Drive Straight Forward to Calibrate. Press Knob to Exit	Drive between 4–24 mph (6–39 km/h) straight forward to calibrate the Pro Trailer Backup Assist™.
Pro Trailer Backup Assist™ Calibration Complete Stop Vehicle	The system has completed calibration. Stop the vehicle to use the Pro Trailer Backup Assist™ feature.

Remote Start

Message	Action
To Drive: Press Brake and Gear Shift Button	Displays as a reminder to apply the brake and push the gear shift button to drive the vehicle after a remote start.

Information Displays

Seats

Message	Action
Memory Recall Not Permitted While Driving	Displays as a reminder that memory seats are not available while driving.
Memory {0} Saved	Displays to show where your memory setting has been saved.

Stability Control

Message	Action
Service AdvanceTrac	Displays when the system has detected a condition that requires service. Have the system checked as soon as possible.
AdvanceTrac Off On	The traction control has been disabled or enabled by the driver.

Information Displays

Starting System

Message	Action
To START Press Brake	Displays when starting the vehicle as a reminder to apply the brake.
Cranking Time Exceeded	Displays when the starter has exceeded its cranking time in attempting to start the vehicle.
Engine Start Pending Please Wait	Displays when the starter is attempting to start the vehicle.
Pending Start Cancelled	Displays when the pending start has been cancelled.

Tire Pressure Monitoring System

Message	Action
Tire Pressure Low	One or more tires on your vehicle have low tire pressure. See Tire Pressure Monitoring System (page 424).
Tire Pressure Monitor Fault	The system may require service. If the warning stays on or continues to come on, have the system checked as soon as possible. See Tire Pressure Monitoring System (page 424).
Tire Pressure Sensor Fault	The system may require service, or your spare tire is in use. For more information on how the system operates under these conditions, See Tire Pressure Monitoring System (page 424). If the warning stays on or continues to come on, have the system checked as soon as possible.

Information Displays

Trailer

Message	Action
Trailer Brake Gain: {trailer gain value:#0.0}	The current gain setting for the trailer brake.
Trailer Brake Gain: {trailer gain value:#0.0} No Trailer	The current gain setting for the trailer brake when a trailer is not connected.
Trailer Brake Module Fault	Faults sensed in the integrated trailer brake control module followed by a single tone. See Towing a Trailer (page 315).
Trailer Connected	A correct trailer connection is sensed during a given ignition cycle.
Trailer Disconnected	A trailer connection becomes disconnected, either intentionally or unintentionally, and has been sensed during a given ignition cycle.
Trailer Sway Reduce Speed	The trailer sway control has detected trailer sway.
Trailer Wiring Fault	There are certain faults in your vehicle wiring and trailer wiring/brake system. See Towing a Trailer (page 315).
Trailer Left Turn Lamps Fault Check Lamps	There is a fault with your trailer turn lamp. Check your lamp.
Trailer Right Turn Lamps Fault Check Lamps	There is a fault with your trailer turn lamp. Check your lamp.
Trailer Battery Not Charging See Manual	There is a fault with your trailer battery. See Towing a Trailer (page 315).
Trailer Lighting Module Fault See Manual	There is a fault with your vehicle trailer lighting module. See Towing a Trailer (page 315).

Information Displays

Message	Action
Trailer Tire Low Specified:	One or more tires on your trailer is below the specified tire pressure.
Trailer Tire Pressure Sensor Fault	A trailer tire pressure sensor is malfunctioning. If the warning stays on or continues to come on, have the system checked as soon as possible.
Trailer Tire Pressure Monitor Fault	The trailer tire pressure monitoring system is malfunctioning. If the warning stays on or continues to come on, have the system checked as soon as possible.
Trailer Tire Pressure Monitor Capability Not Detected	The system cannot detect the trailer tire pressure monitoring system.
Trailer Tire Pressure Indication Not Setup See Manual	The trailer tire pressure monitoring system is not setup. See General Information (page 134).

Transmission

Message	Action
Shift to Park	You switched the engine off with the shift select lever in any position other than park (P).
Transmission Warming Up Please Wait	Transmission is too cold. Wait for it to warm up before you drive.
Press Brake Pedal	Displays when the brake pedal needs to be pressed.
Transmission Over Temperature Stop Safely	The transmission is overheating and needs to cool. Stop in a safe place as soon as possible.
Transmission Service Required	Have the system checked.

Information Displays

Message	Action
Transmission Too Hot Press Brake	The transmission is overheating and needs to cool. Stop in a safe place as soon as possible.
Transmission Limited Function See Manual	The transmission has limited functionality. Have the system checked.
Transmission Not in Park	A reminder to shift into park. In addition, this message is typical after reconnecting or recharging the battery until you cycle the ignition to the on mode. See Changing the 12V Battery (page 390).
SHIFT SYS FAULT Confirm Park Brake Apply Before Exiting the Vehicle	Displays when there is a system fault and the park brake needs to be depressed before exiting the vehicle. Have the system checked.
SHIFT SYS FAULT Service Required	Have the system checked.
SHIFT SYS FAULT Vehicle is Shifting to Park	Displays when there is a system fault while the vehicle is shifting to park. Have the system checked.
SHIFT SYS FAULT Reverse Unavailable Service Required	Displays when there is a system fault while the vehicle is shifting to reverse. Have the system checked.
SHIFT SYS FAULT Drive Unavailable Select S for Drive Service Required	Have the system checked.
SHIFT SYS FAULT Neutral Unavailable Service Required	Have the system checked..
Invalid Gear Selection	Displays when an invalid gear has been selected.

Information Displays

Message	Action
Depress Brake to Shift from Park	Displays when the brake pedal needs to be pressed to enable the transmission to shift from park.
Stay in Neutral Mode Engaged	Displays when Stay in Neutral Mode is active. See Automatic Transmission (page 227).
To Stay in Neutral When Exiting Vehicle Select N Again	Displays when the neutral button N needs to be pressed again to enter Stay in Neutral Mode. See Automatic Transmission (page 227).

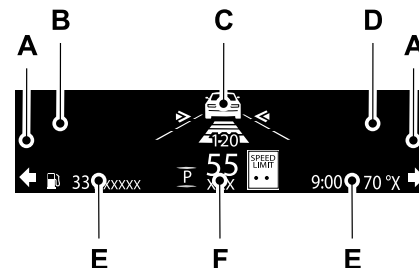
HEAD UP DISPLAY (IF EQUIPPED)

Head Up Display (HUD)

This is a visual system that shows information in your field of view as you drive. The information comes from various vehicle systems and includes vehicle speed, speed limit, navigation, and advanced driver assistance systems (ADAS), such as adaptive cruise control (ACC) and the lane keeping system. This system projects the information off the windshield, and focuses the image

near the end of the hood approximately 7 ft (2 m) in front of the driver. Viewing this information does not require you to significantly move your head, allowing you to keep your eyes on the road while having quick and easy access to information.

Head Up Display Information



E228521

- A Signaling and Traffic Indication.
- B Left Information Group.
- C ADAS Display Area.

Information Displays

- D Navigation Display Area.
- E Status Bar.
- F Speedometer Display Area.

Signaling and Traffic Indication

Displays direction indicators, blind spot information (if direction indicators are active) and cross traffic alert.

Left Information Group

Displays incoming call information.

ADAS Display Area

Displays ACC and lane keeping system status and warnings.

Navigation Display Area

Displays navigation next turn instructions.

Status Bar

Displays distance to empty (DTE), time and outside air temperature. Next to DTE, the fuel gauge fill color changes to yellow in low fuel conditions. You can switch off the status bar in the HUD settings menu.

Speedometer Display Area

Displays current vehicle speed, speed limit (if available in the map database) and your transmission gear selection.

Configuring The Head Up Display

You can control the system's options through the information display by using the **HUD**, **OK** and arrow buttons on the right-hand side of your steering wheel. See **General Information** (page 134). You can adjust the display according to your height to make viewing the content easier. You can also adjust what content displays and the brightness of the content. The system's options appear in the instrument cluster while the updates happen in the HUD.

Note: If **HUD On** is unchecked, other options of the system are hidden.

Note: The HUD menu automatically closes after a certain period of inactivity.

Note: The HUD image brightness automatically adjusts to the brightness of the ambient environment. You have the ability to adjust the brightness further according to your preference.

Note: In some instances, sunlight can cause some reflections in and around the HUD image.

Information Displays

Head-Up Display (HUD)		
HUD On	Turns the HUD on and off.	
Brightness	Follow onscreen directions to confirm or modify your settings.	
HUD Adjustments	Vertical Position	Follow onscreen directions to confirm or modify your settings.
	Image Rotation	
HUD Content	Turns the distance to empty, time and temperature on and off.	
	Cruise and Lane Control	Select Your Setting

Note: When you save a memory preset position, your current HUD settings are also saved to that memory preset position. See **Memory Function** (page 183).

Maintaining Your Head Up Display

- Do not place objects onto the transparent cover, as they may block you from seeing portions of the image. These objects could also damage the cover and affect the quality of the projected image.
- The system uses a special windshield designed to provide the optimum image quality. You must replace the windshield in a vehicle with this system with a certified original equipment manufactured (OEM) head up display windshield. Replacing this system's windshield with a non-head up display windshield causes a double image or distorted image. Have an authorized dealer or authorized repair facility replace the windshield.
- Light conditions such as oncoming headlamps, sunrise, sunset or reflections off of wet road surfaces can affect the driver's ability to see the HUD image.
- Clean the windshield often for optimal HUD performance. See **Cleaning the Windows and Wiper Blades** (page 399).

Climate Control

AUTOMATIC CLIMATE CONTROL



E293088

Note: Depending on your vehicle option package, the controls may look different from what you see here.

Note: You can switch temperature units between Fahrenheit and Celsius.

Note: You can control some of the climate features through the touchscreen.

Accessing the Climate Control Menu

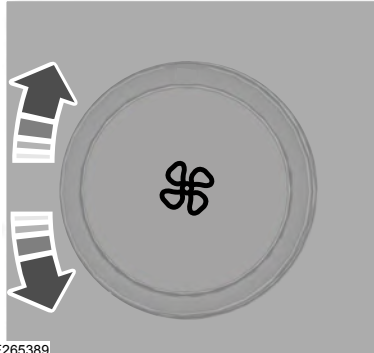
MENU Press and release the button to access additional controls for the front climate system.

Accessing Rear Climate Controls

REAR

Press and release the button to access additional controls for the rear climate system.

Setting the Blower Motor Speed



E265389

Turn the control to adjust the volume of air circulated in the vehicle.

Setting the Temperature

Press the toggle button on the left-hand side of the climate control upward or downward to set the left-hand temperature.

Note: This control also adjusts the right-hand side temperature when you switch off dual zone mode.

Press the toggle button on the right-hand side of the climate control upward or downward to set the right-hand temperature.

Switching Auto Mode On and Off

AUTO

Press and release the button to switch on automatic operation. Repeatedly press the button to adjust auto mode.

The system adjusts the blower motor speed, air distribution, air conditioning operation, and outside or recirculated air to reach and maintain the temperature you have set.

Under high humidity conditions, the system adjusts the blower motor speed, air distribution and air conditioning operation to reduce window fogging.

Climate Control

Note: The system starts at the previous setting when you switch on **AUTO** mode.

Note: You can also switch off dual zone mode by pressing and holding the button for more than two seconds.

Auto Mode Indicator Status

Auto Mode Indicator Status	Description
One indicator illuminated.	<ul style="list-style-type: none">• The blower motor speed is reduced.<ul style="list-style-type: none">• Use this setting to minimize the amount of noise from the blower motor.• This setting increases the time taken to cool the interior.
Two indicators illuminated.	<ul style="list-style-type: none">• The blower motor speed is moderate.
Three indicators illuminated.	<ul style="list-style-type: none">• The blower motor speed is increased.<ul style="list-style-type: none">• Use this setting to reduce the time taken to cool the interior.• This setting increases the amount of noise from the blower motor.

Switching Defrost On and Off



Press and release the button to distribute air through the windshield air vents and de-mister.

Air directed to the instrument panel and footwell air vents turns off. You can also use this setting to defog and clear the windshield of a thin covering of ice.

Switching the Air Conditioning On and Off



Press and release the button.

Use air conditioning with recirculated air to improve cooling performance and efficiency.

Climate Control

Note: In certain conditions, such as maximum defrost, the air conditioning compressor may continue to operate even though you switch off the air conditioning.

Switching Maximum Air Conditioning On and Off



Press and release the button for maximum cooling.

The left-hand and right-hand settings set to LO, recirculated air flows through the instrument panel air vents, air conditioning turns on and the blower motor adjusts to the highest speed.

Switching Recirculated Air On and Off



Press and release the button to switch between outside air and recirculated air.

The air currently in the passenger compartment recirculates. This may reduce the time needed to cool the interior, when used with **A/C**, and reduce unwanted odors from entering your vehicle.

Note: Recirculated air may turn off, or prevent you from switching on, in all air flow modes except **MAX A/C** to reduce the risk of fogging. Recirculation may also turn on and off in various air distribution control combinations during hot weather to improve cooling efficiency.

Switching the Heated Seats On and Off



Switching the Ventilated Seats On and Off



See **Climate Controlled Seats** (page 193).

HINTS ON CONTROLLING THE INTERIOR CLIMATE

General Hints

Note: Prolonged use of recirculated air may cause the windows to fog up.

Note: You may feel a small amount of air from the footwell air vents regardless of the air distribution setting.

Note: To reduce humidity build-up inside your vehicle, do not drive with the system switched off or with recirculated air always switched on.

Note: Do not place objects under the front seats as this may interfere with the airflow to the rear seats.

Note: Remove any snow, ice or leaves from the air intake area at the base of the windshield.

Note: To improve the time to reach a comfortable temperature in hot weather, drive with the windows open until you feel cold air through the air vents.

Automatic Climate Control

Note: Adjusting the settings when your vehicle interior is extremely hot or cold is not necessary. Automatic mode is best recommended to maintain set temperature.

Climate Control

Note: The system adjusts to heat or cool the interior to the temperature you select as quickly as possible.

Note: For the system to function efficiently, the instrument panel and side air vents should be fully open.

Note: If you select **AUTO** during cold outside temperatures, the system directs air flow to the windshield and side window air vents. In addition, the blower motor may run at a slower speed until the engine warms up.

Note: If you select **AUTO** during hot temperatures and the inside of the vehicle is hot, the system uses recirculated air to maximize interior cooling. Blower motor speed may also reduce until the air cools.

Quickly Heating the Interior

1. Press and release **AUTO**.
2. Adjust the temperature function to the setting you prefer.

Recommended Settings for Heating

1. Press and release **AUTO**.

2. Adjust the temperature function to the setting you prefer. Use 72°F (22°C) as a starting point, then adjust the setting as necessary.

Quickly Cooling the Interior

1. Press and release **MAX A/C**.

Recommended Settings for Cooling

1. Press and release **AUTO**.
2. Adjust the temperature function to the setting you prefer. Use 72°F (22°C) as a starting point, then adjust the setting as necessary.

Defogging the Side Windows in Cold Weather

1. Press and release defrost or maximum defrost.
2. Adjust the temperature control to the setting you prefer. Use 72°F (22°C) as a starting point, then adjust the setting as necessary.

REAR PASSENGER CLIMATE CONTROLS



E290004

Note: Depending on your vehicle option package, the controls may look different from what you see here.

Directing Air to the Rear Console Air Vents



Press and release the button to direct airflow to the rear console air vents.

Climate Control

Directing Air to the Rear Footwell Air Vents



Press and release the button to direct airflow to rear footwell air vents.

Note: Air can be directed through any combination of air vents.

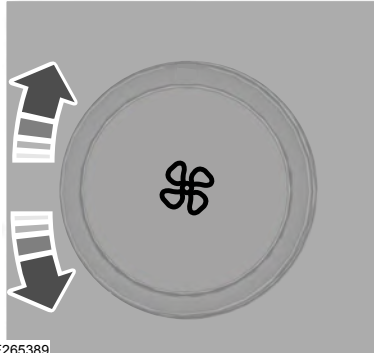
Rear Climate Control Lock Indicator



Illuminates when the rear climate controls are locked through the front climate controls.

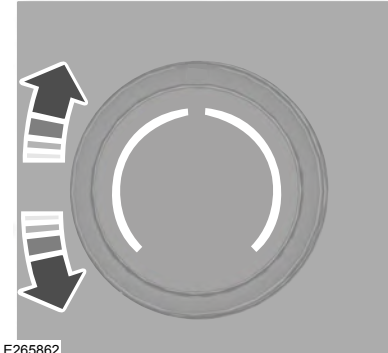
Note: If the rear climate controls are locked and the rear climate system is turned off, the indicator illuminates for a few seconds when you try to use any of the rear climate controls.

Setting the Rear Blower Motor Speed



Turn the control to adjust the volume of air circulated in the rear passenger compartment.

Setting the Rear Temperature



Turn the control to set the temperature in the rear passenger compartment.

Switching Rear Auto Mode On



Press and release the button to switch rear automatic operation on, then set the temperature.

Climate Control

The system adjusts the blower motor speed, air distribution, air conditioning operation to reach and maintain the temperature you have set.

Switching the Rear Climate Control On and Off



Press and release the button to switch the rear climate control on or off.

Note: *If the system is on and Max Defrost is switched on through the front climate controls, the system turns off. It turns back on when Max Defrost is switched off.*

Note: *If Max Defrost is switched on, the system can be turned on at the same time.*

Switching the Rear Heated Seats On and Off (If Equipped)



Switching the Rear Ventilated Seats On and Off (If Equipped)



See **Climate Controlled Seats** (page 193).

HEATED REAR WINDOW



Press the button to clear the rear window of thin ice and fog. The heated rear window turns off after a short period of time.

Note: *Make sure the engine is on before operating the heated windows.*

Note: *Do not use harsh chemicals, razor blades or other sharp objects to clean or remove decals from the inside of the heated rear window. The vehicle warranty may not cover damage to the heated rear window grid lines.*

HEATED EXTERIOR MIRRORS

When you switch the heated rear window on, the heated exterior mirrors turn on.

Note: *Do not remove ice from the mirrors with a scraper or adjust the mirror glass when it is frozen in place.*

Note: *Do not clean the mirror housing or glass with harsh abrasives, fuel or other petroleum-based cleaning products. The vehicle warranty may not cover damage caused to the mirror housing or glass.*

REMOTE START

You can switch this feature on or off and adjust the settings using the information display controls. See **Information Displays** (page 134).

The climate control system adjusts the interior temperature during remote start.

You cannot adjust the climate control setting during remote start operation. Switch the ignition on to make adjustments.

Climate Control

Based on your remote start settings, the following vehicle-dependent features may or may not remain on after remote starting your vehicle:

- Climate controlled seats.
- Heated steering wheel.
- Heated mirrors.
- Heated rear window.
- Windshield wiper de-icer.

Note: *For dual zone climate controlled seats, the passenger seat setting defaults to match the driver seat during remote start.*

Automatic Settings

If **Auto** is on, the system sets the interior temperature to 72°F (22°C) and heats or cools the vehicle interior as required to achieve comfort.

Note: *In cold weather, the heated rear window and heated mirrors turn on.*

Last Settings

If **Last Settings** is on, the system uses the settings last selected before you turned off the vehicle.

Heated and Cooled Features

In **Auto** mode, certain heated features may switch on during cold weather, and cooled features during hot weather.

WHAT IS THE CABIN AIR FILTER

The cabin air filter improves the quality of air in your vehicle by trapping dust, pollen and other particles.

LOCATING THE CABIN AIR FILTER

You can locate the cabin air filter behind the glove box.

REPLACING THE CABIN AIR FILTER


Replace the filter at regular intervals. See **Scheduled Maintenance** (page 539).


Note: *Make sure you have a cabin air filter installed at all times. This prevents foreign objects from entering the system. Running the system without a filter in place could result in degradation or damage to the system.*


Note: *Using an aftermarket cabin air filter could reduce cabin air filtration and climate control performance.*

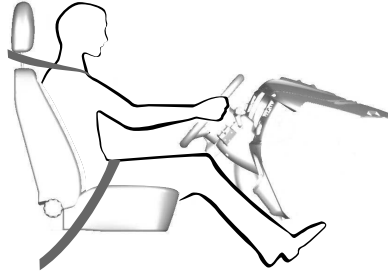
Seats

SITTING IN THE CORRECT POSITION

 **WARNING:** Sitting improperly, out of position or with the seatback reclined too far can take weight off the seat cushion and affect the decision of the passenger sensing system, resulting in serious injury or death in the event of a crash. Always sit upright against your seat back, with your feet on the floor.

 **WARNING:** Do not recline the seat backrest too far as this can cause the occupant to slide under the seatbelt, resulting in personal injury in the event of a crash.

 **WARNING:** Do not place objects higher than the top of the seat backrest. Failure to follow this instruction could result in personal injury or death in the event of a sudden stop or crash.



When you use them properly, the seat, head restraint, seatbelt and airbags will provide optimum protection in the event of a crash.

We recommend that you follow these guidelines:

- Sit in an upright position with the base of your spine as far back as possible.
- Do not recline the seat backrest so that your torso is more than 30 degrees from the upright position.

- Adjust the head restraint so that the top of it is level with the top of your head and as far forward as possible. Make sure that you remain comfortable.
- Keep sufficient distance between yourself and the steering wheel. We recommend a minimum of 10 in (25 cm) between your breastbone and the airbag cover.
- Hold the steering wheel with your arms slightly bent.
- Bend your legs slightly so that you can press the pedals fully.
- Position the shoulder strap of the seatbelt over the center of your shoulder and position the lap strap tightly across your hips.

Make sure that your driving position is comfortable and that you can maintain full control of your vehicle.

Seats

HEAD RESTRAINTS



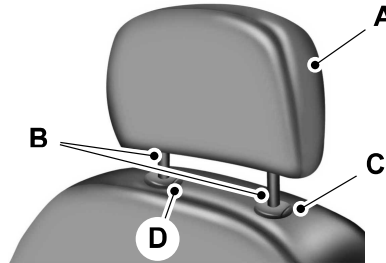
WARNING: Fully adjust the head restraint before you sit in or operate your vehicle. This will help minimize the risk of neck injury in the event of a crash. Do not adjust the head restraint when your vehicle is moving.



WARNING: The head restraint is a safety device. Whenever possible it should be installed and properly adjusted when the seat is occupied. Failure to adjust the head restraint properly could reduce its effectiveness during certain impacts.

Note: *Adjust the seat backrest to an upright driving position before adjusting the head restraint. Adjust the head restraint so that the top of it is level with the top of your head and as far forward as possible. Make sure that you remain comfortable. If you are extremely tall, adjust the head restraint to its highest position.*

Front Seat Manual Head Restraints



The head restraints consist of:

- A An energy absorbing foam and structure.
- B Two steel posts.
- C Guide sleeve with adjust and release button.
- D Guide sleeve without button.

Adjusting the Head Restraint

Raising the Head Restraint

Pull the head restraint up.

Lowering the Head Restraint

1. Press and hold button C.
2. Push the head restraint down.

Removing the Head Restraint

1. Pull the head restraint up until it reaches its highest position.
2. Press and hold button C.
3. Pull the head restraint up.

Note: *You cannot remove front seat head restraints that have entertainment system video screens.*

Installing the Head Restraint

Align the steel posts into the guide sleeves and push the head restraint down until it locks.

Seats

Tilting Manual Head Restraints (If Equipped)

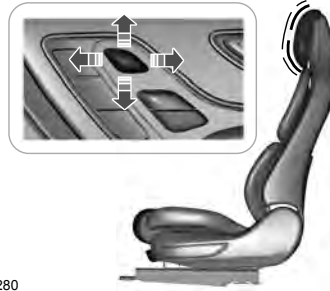
The front seat head restraints tilt for extra comfort. To tilt the head restraint, do the following:



1. Adjust the seat backrest to an upright driving or riding position.
2. Pivot the head restraint forward toward your head to the desired position.

After the head restraint reaches the forward-most tilt position, pivot it forward again to release it to the rearward, un-tilted position.

Power Front Head Restraints (If Equipped)



E222280

To raise the head restraint, lift the switch up until you reach a comfortable height.

To lower the head restraint, press the switch down.

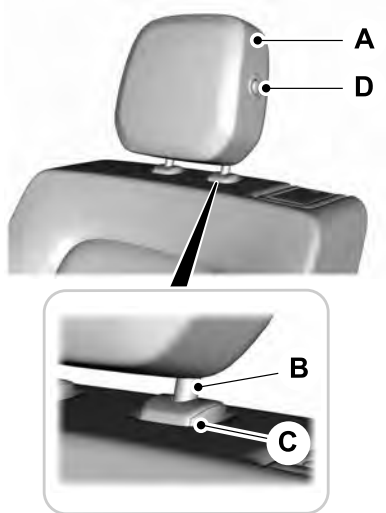
To move the head restraint forward, push the switch forward until you reach the desired position.

To move the head restraint rearward, push the switch rearward.

Second Row Outermost Head Restraints

The outermost head restraints are non-adjustable, but you may be able to fold them rearward.

Seats



E257663

The head restraints consist of:

- A An energy absorbing foam and structure.
- B Two steel posts.

- C Guide sleeve with unlock and remove button.
- D A fold button (if equipped).

Removing the Head Restraint

1. Press and hold both C buttons.
2. Pull the head restraint up.

Installing the Head Restraint

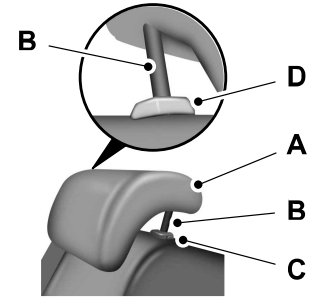
Align the steel posts into the guide sleeves and push the head restraint down until it locks.

Note: Make sure the head restraint fold button is facing the outboard side of the seat.

Folding the Head Restraint

1. Press button D to fold the head restraint.
2. Pull the head restraint up to place it back to the upright position.

Second Row Center Seat Head Restraint



E138645

The head restraints consist of:

- A An energy absorbing foam and structure.
- B Two steel posts.
- C Guide sleeve with adjust and release button.
- D Guide sleeve with unlock and remove button.

Raising the Head Restraint

Pull the head restraint up.

Seats

Lowering the Head Restraint

1. Press and hold button C.
2. Push the head restraint down.

Removing the Head Restraint

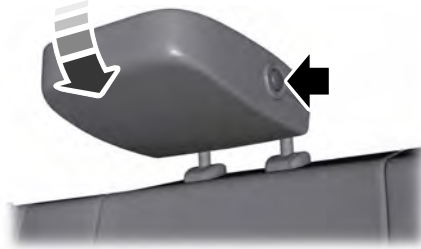
1. Pull the head restraint up until it reaches its highest position.
2. Press and hold buttons C and D.
3. Pull the head restraint up.

Installing the Head Restraint

Align the steel posts into the guide sleeves and push the head restraint down until it locks.

Third Row Head Restraints

The third row head restraints are non-adjustable, but you may be able to fold them.



E193964

The head restraints consist of:

- An energy absorbing foam and structure.
 - A fold button (If equipped).
1. Press the button to fold the head restraint.
 2. Pull the head restraint up to place it back in the upright position.

Power Rear Head Restraints

The third row outermost head restraints are fixed and cannot be removed.



E255798

Press the button on the overhead console to fold the third row outermost head restraints.

Pull the head restraint up to place it in the upright position.

Note: *These head restraints fold when you press the fold flat button.*

Seats

POWER SEATS

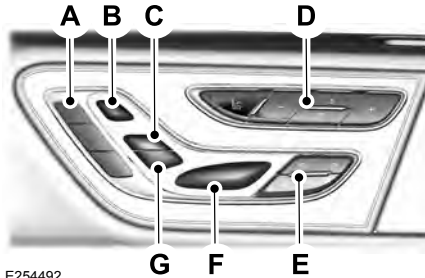


WARNING: Do not adjust the driver seat or seat backrest when your vehicle is moving. This may result in sudden seat movement, causing the loss of control of your vehicle.



WARNING: Do not place cargo or any objects behind the seatback before returning it to the original position.

The power seat controls are on the door.

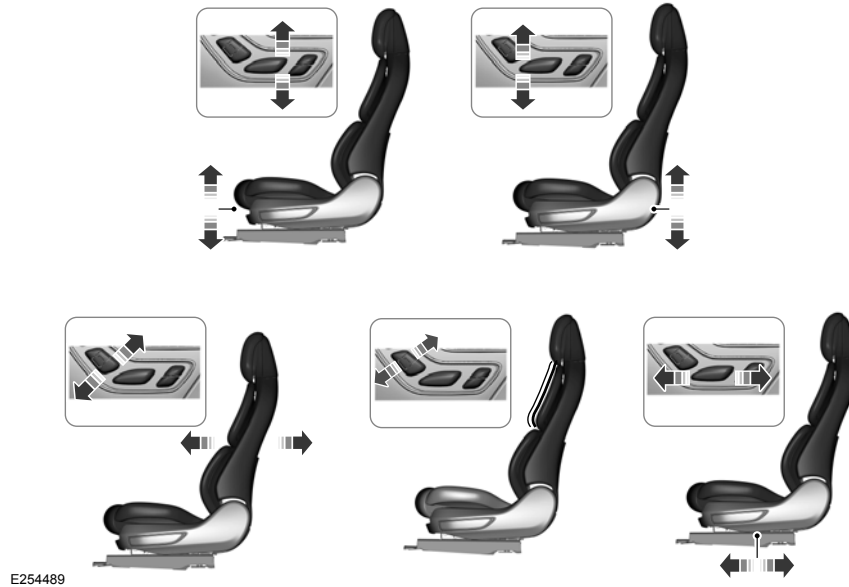


E254492

- A Memory Function.
- B Head Restraints.

- C Upper Seat Backrest.
- D Multi-Contour.
- E Seat Cushion Adjustment.
- F Power Seats.
- G Recline.

Seats



Seats

Adjusting the Lumbar Support



E222308

Adjusting the Length of the Seat Cushion



E221053

Press the top of the control to adjust the left side of the cushion.

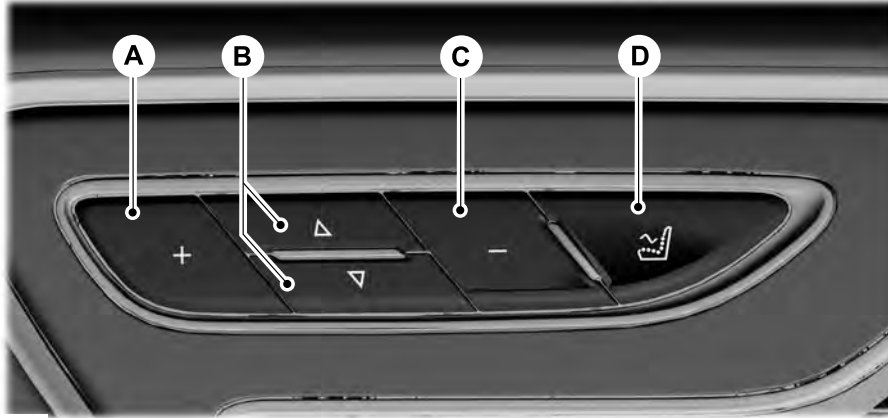
Press the bottom of the control to adjust the right side of the cushion.

Adjusting the Multi-Contour Front Seats With Active Motion (If Equipped)

Note: *The engine must be running or the vehicle must be in accessory mode to activate the seats.*

Note: *Allow a few seconds for any selection to activate. The seat backrest and cushion massage cannot function at the same time.*

Seats



E222219

	Message Mode
A	Message intensity increase
B	Message feature selection
C	Message intensity decrease
D	On and off

Seats

You can also adjust this feature through the touchscreen.



Press the Menu Settings icon, then Vehicle. Choose Multi-Contour Seats.

When switched on, the system displays directions for you to adjust the lumbar settings in your seat or to set the massage function.

To access and make adjustments to the lumbar setting:

1. Choose the seat you would like to adjust.
2. Press the + or - to adjust the lumbar intensity.

To access and make adjustments to the massage setting:

1. Press the Menu Settings icon, then Vehicle. Choose Multi-Contour Seats.
2. Choose the seat you would like to adjust.
3. Press OFF, Low or High.

MEMORY FUNCTION



WARNING: Before activating the memory seat, make sure that the area immediately surrounding the seat is clear of obstructions and that all occupants are clear of moving parts.



WARNING: Do not use the memory function when your vehicle is moving.

Driver Seat Memory

This feature automatically recalls the position of the following:

- Driver seat.
- Power mirrors.
- Power adjustable foot pedals.
- Power steering column.

The memory control is on the driver door.



E222235

Saving a PreSet Position

1. Switch the ignition on.
2. Adjust the memory features to your preferred position.
3. Press and hold the preferred preset button until you hear a single tone.

Seats

You can save up to three preset memory positions. You can save a memory preset at any time.

Recalling a PreSet Position

Press and release the preset button associated with your preferred driving position. The memory features move to the position stored for that preset.

Note: *You can only recall a driver seat preset memory position when the ignition is off, or when the transmission is in park (P) or neutral (N) (and your vehicle is not moving) if the ignition is on.*

You can also recall a preset memory position by:

- Pressing the unlock button on your intelligent access key fob if it is linked to a preset position.
- Unlocking the intelligent driver door handle if a linked key fob is present.
- Recalling a personal profile in your SYNC 3 menu.

Note: *Using a linked remote control to recall your memory position when the ignition is off moves the seat to the Easy Entry position.*

Note: *Pressing any active memory feature adjustment control (or any memory button) during a memory recall cancels the operation.*

Easy Entry and Exit Feature

If you enable the easy entry and exit feature, it automatically moves the driver seat position rearward up to 2 in (5 cm) when you switch the ignition off.

The driver seat returns to its previous position when you switch the ignition on.

You can switch this feature on or off in the information display. See **Information Displays** (page 134).

Passenger Seat Memory

This feature recalls the position of the passenger seat. The memory control is on the passenger door.

Saving a PreSet Position

1. Adjust the passenger seat to your preferred position.
2. Press and hold the preferred preset button until you hear a single tone.

You can save up to three preset memory positions. You can save a memory preset at any time.

Recalling a PreSet Position

Press and release the preset button associated with your preferred position. The passenger seat features move to the position stored for that preset. You can recall a passenger seat preset memory at any time.

Seats

Personal Profiles

This feature allows you to create multiple personal profiles enabling users to personalize vehicle's settings. You can create one profile for each preset memory seat button along with a guest profile. You can recall a profile using SYNC 3 or the preset button you selected when you created your profile. You can also link a remote control or mobile device to your profile, which is used to recall it.

Creating a Personal Profile

Use the SYNC display to create a personal profile.

1. Switch the ignition on and leave the vehicle in park (P).
2. Select the Personal Profiles button under Settings.
3. Follow the instructions on the display.

Linking a Personal Profile to your Remote Control or Mobile Device

You can save preset memory positions for up to three remote controls by assigning a remote control to a personal profile in your SYNC 3. You can assign three additional remote controls set up as Phone as a Key. See **Keys and Remote Controls** (page 69).

Use the SYNC display to link a remote control, mobile device or both to a personal profile.

1. Switch the ignition on and leave the vehicle in park (P).
2. Select the Personal Profiles button under Settings.
3. Touch the arrow for the profile you wish to link to a remote control or mobile device.
4. Select the correct button to link a remote control, mobile device or both.
5. Follow the instructions on the display.

Note: To successfully link a mobile device, the mobile device must be present in your vehicle, and must have previously been setup as a remote control for your vehicle.

Note: If more than one linked remote control or intelligent access key is in range, the memory function moves to the settings of the first key to initiate a memory recall.

Note: The guest profile consists of existing settings when there is no driver profile created. After you create a driver profile, the guest profile serves as an additional driver profile.

Note: You cannot link a personalized name, a memory seat button or a keyfob to a guest profile.

Personal Settings

Personal profiles allow you to personalize positional settings such as seats and mirrors, as well as non-positional settings such as radio, navigation, driver assist and system settings. See **SYNC™ 3** (page 473). You cannot change the menu locations and settings of those personalized features with personal profiles.

Seats

Note: *Non-positional settings are saved to the active driver profile whenever you change a setting.*

Note: *You can save positional settings if you press and hold a memory seat button. See **Settings** (page 515).*

Recalling and Changing a Profile

You can recall a profile by:

- Using a remote control or mobile device that has been linked to a driver profile to access the remote start feature, press an unlock button or open the door with the exterior door handle.
- Pressing a memory seat button that has been linked to a driver profile.
- Using the Personal Profiles menu on the SYNC touchscreen.

Note: *The recalled profile replaces the previously active profile. If the active profile is not your preferred profile, you can change it using any of the three methods listed.*

When you switch on the personal profiles feature:

- Unlocking a door with a remote control or mobile device that is not linked to a driver profile recalls non-positional settings from the guest profile. It will not change the positional settings.
- Pressing a memory seat button that is not linked to a driver profile or has not been saved to a preset setting recalls non-positional settings from the guest profile. It will not change the positional settings.
- Pressing a memory seat button that is not linked to a driver profile but has been saved to a preset setting recalls non-positional settings from the guest profile. It recalls the positional settings that you saved to that memory seat button.

See **SYNC™ 3 Troubleshooting** (page 517).

When you switch off the personal profiles feature:

- Unlocking a door with a remote control or mobile device recalls non-positional settings from the guest profile and still recalls positional settings from the driver profile which the keyfob had been linked to.
- Pressing a memory seat button that has not been linked to a driver profile or has not been saved to a preset setting recalls non-positional settings from the guest profile. It will not change the positional settings.
- Pressing a memory seat button that has been linked to a driver profile or has saved to a preset setting recalls non-positional settings from the guest profile. It recalls the positional settings that you saved to that memory seat button.

Seats

REAR SEATS

Folding the Second Row Outermost Seats

WARNING: Do not place cargo or any objects behind the seat backrest before returning it to the original position. Pull on the seat backrest to make sure that it has fully latched after returning the seat backrest to its original position. An unlatched seat may become dangerous if you stop suddenly or have a crash.



E246710

1. Locate the handle on the side of the seat cushion by the door.
2. Pull up on the handle to fold the seat backrest.

Note: Use caution when folding the seat backrest to the flat position as the seat moves forward when you lift the release handle.

To return the seat to the upright position:



E246709

1. Lift the seat backrest toward the rear of the vehicle.
2. Rotate the seat backrest until you hear a click, locking it in the upright position.

Adjusting the Manual Second Row Outermost Seats for Easy Entry

WARNING: Do not drive your vehicle with a seat that is unlatched or in the folded position. Failure to follow this instruction could result in personal injury or death in the event of a sudden stop or crash.

WARNING: Check under the seat cushion to make sure no cargo or objects are under the seat cushion before returning the seat cushion to its original position, and that the seat cushion locks into place. Failure to do so may prevent the seat from operating properly in the event of a crash, which could increase the risk of serious injury.

Seats

WARNING: Do not place cargo or any objects behind the seat backrest before returning it to the original position. Pull on the seat backrest to make sure that it has fully latched after returning the seat backrest to its original position. An unlatched seat may become dangerous if you stop suddenly or have a crash.

Note: You can move the outermost seats forward to allow access to the third row seats.

This feature allows for easier entry and exit to and from the third row seat.



E257686

1. Pull the lever up.
2. Tilt the entire seat forward.
3. Slide the seat forward until it stops.

4. To return the seat to the seating position, slide the seat rearward while pulling down on the seat backrest until the latch fully engages.
5. To move the seat further back, pull the lever under the front of the seat and slide it backward.

Note: You must move the seat to the full forward position before you move it rearward. Otherwise, the seat may not slide properly rearward.

Note: You can slide the outermost seats forward when using a child restraint.

Adjusting the Power Second Row Outermost Seats for Easy Entry (If Equipped)

WARNING: Do not drive your vehicle with a seat that is unlatched or in the folded position. Failure to follow this instruction could result in personal injury or death in the event of a sudden stop or crash.

Seats



WARNING: Check under the seat cushion to make sure no cargo or objects are under the seat cushion before returning the seat cushion to its original position, and that the seat cushion locks into place. Failure to do so may prevent the seat from operating properly in the event of a crash, which could increase the risk of serious injury.



WARNING: Do not place cargo or any objects behind the seat backrest before returning it to the original position. Pull on the seat backrest to make sure that it has fully latched after returning the seat backrest to its original position. An unlatched seat may become dangerous if you stop suddenly or have a crash.

The easy entry seat allows for easier entry and exit to and from the third row seat.



E247495

1. Press the button on the rear quarter trim panel to unlock the rear of the seat.
2. Push the seat forward to gain access to the third row seat.

Adjusting the Second Row Outermost Seats for Easy Exit



E240708

When exiting your vehicle from the third row seats, pull the lever up on the upper corner of the outermost seats. Then, push the seat forward until it stops.

Reclining the Second Row Outermost Seat Backrest



WARNING: Reclining the seatback can cause an occupant to slide under the seat's seatbelt, resulting in severe personal injuries in the event of a crash.



E247681

Seats

The release handle is on the outermost side of the seat cushion. Lift it to adjust the seat backrest to your desired position.

Folding the Second Row Center Seat

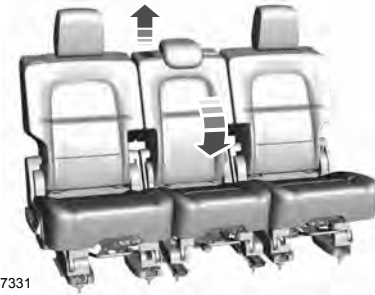
(If Equipped)



WARNING: To prevent possible damage to the seat or seatbelts, make sure that the seatbelts are not fastened before folding the seatback.



WARNING: Do not place cargo or any objects behind the seat backrest before returning it to the original position. Pull on the seat backrest to make sure that it has fully latched after returning the seat backrest to its original position. An unlatched seat may become dangerous if you stop suddenly or have a crash.



E247331

The release handle is on the upper right seat backrest. Pull the handle to release the folding seat latch.

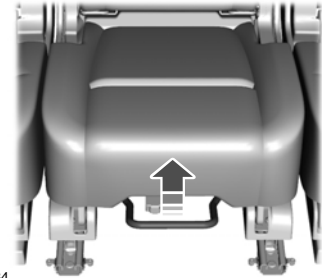
To return the seat to the upright position, rotate the seat backrest until you hear a click, locking it in the upright position.

Note: Use the same release handle to recline the seat backrest.

Adjusting the Second Row Center Seat

(If Equipped)

Note: Move this seat forward to keep a child in a child restraint close to the front seat occupants. Move the seat to the full rearward position when it is occupied by older children or adults, including children in booster seats.



E247034

Lift the handle to move the seat forward or rearward.

Seats

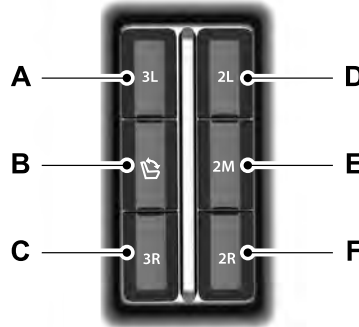
Folding the Power Rear Seats

Note: Similar to the battery saver feature, the power rear seat functions disable 10 minutes after you switch the ignition off. The transmission must be in park (P) and the liftgate, or liftgate glass must be open in order to operate the seats.

Note: Be sure the third-row center head restraint is in the lowered position before you power the rear seats down. The third-row outermost head restraints fold when you press the fold button.

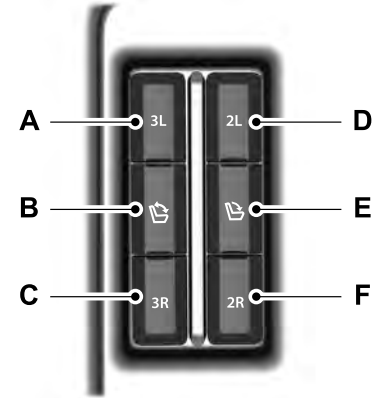
The control buttons are on the left-hand rear quarter trim panel (accessible from the liftgate area).

With Second Row Bench Seats



E257920

With Second Row Captain Chairs



E246705

- A Folds the left-hand third-row seat.
- B Folds both third-row seats.
- C Folds the right-hand third-row seat.
- D Folds the left-hand second-row seat.

Seats

- E Folds the second-row bench center seat or both second-row captain chair seats.
- F Folds the right-hand second-row seat.

To return the second-row seat backrest to the original position, rotate the seat backrest up until it latches in the upright position. The seat backrest clicks when it is locked into position.

To return the third-row seat backrest to the original position, press the corresponding control again.

If the power rear seat is disabled after 10 minutes, you can enable the seat by:

- Opening any door.
- Pressing the unlock button on the key fob.
- Pressing any keyless entry keypad button.
- Switching the ignition on.

Folding Down the Rear Seats to the Load Floor



WARNING: To prevent possible damage to the seat or seatbelts, make sure that the seatbelts are not fastened before folding the seatback.



WARNING: Do not place cargo or any objects behind the seatback before returning it to the original position.

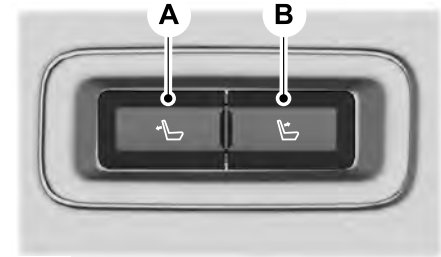
The third-row seats have obstacle detection that prevents the seats from folding or returning if they are obstructed.

Reclining the Third Row Power Seats



WARNING: Do not recline a rear seat on which a child restraint is installed. Failure to follow this instruction could reduce the effectiveness of the child restraint.

The third-row power recline buttons are on the quarter trim panel on each side of the vehicle.



E246706

- A Moves the seat backrest rearward.
- B Moves the seat backrest forward.

Seats

CLIMATE CONTROLLED SEATS

Heated Seats



WARNING: Use caution when using the heated seat if you are unable to feel pain to your skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion or other physical conditions. The heated seat could cause burns even at low temperatures, especially if used for long periods of time. Failure to follow this instruction could result in personal injury.



WARNING: Do not poke sharp objects into the seat cushion or seat backrest. This could damage the heated seat element and cause it to overheat. Failure to follow this instruction could result in personal injury.



WARNING: Do not place anything on the seat that blocks the heat, for example a seat cover or a cushion. This could cause the seat to overheat. Failure to follow this instruction could result in personal injury.

Note: *The heated seats switch on during a remote start if they are enabled. See **Remote Start** (page 171).*

Note: *The heated seats may also switch on when you start your vehicle if they were on when you previously switched your vehicle off.*

Note: *Do not do the following:*

- Place heavy objects on the seat.
- Operate the seat heater if water or any other liquid spills on the seat. Allow the seat to dry thoroughly.



Press this symbol to cycle through the various heat settings and off. More indicator lights indicate warmer settings.

Rear Heated Seats (If Equipped)

The rear heated seat controls are on the rear of the center console.

Automatic Climate Controlled Seats (If Equipped)

When you switch the auto setting on, the climate controlled seats switch between the heated seats and ventilated seats to match your climate control setting.

Seats

Ventilated Seats

Note: *The ventilated seats switch on during a remote start if they are enabled. See **Remote Start** (page 171).*

Note: *The ventilated seats may also switch on when you start your vehicle if they were on when you previously switched your vehicle off.*

Note: *Do not do the following:*

- Spill liquid on the front seats. This may cause the air vent holes to become blocked and not work properly.
- Place cargo or objects under the seats. They may block the air intake causing the air vents to not work properly.

The ventilated seats only function when the engine is running.



Press this symbol to cycle through the various ventilation settings and off. More indicator lights indicate higher fan speeds.

If the engine falls below 350 RPM while the ventilated seats are on, the feature turns itself off. You need to reactivate it.

Automatic Climate Controlled Seats (if Equipped)

When you switch the auto setting on, the climate controlled seats switch between the heated seats and ventilated seats to match your climate control setting.

Rear Occupant Alert System (If Equipped)

WHAT IS THE REAR OCCUPANT ALERT SYSTEM

The rear occupant alert system monitors vehicle conditions and notifies you to check for rear seat occupants when you switch the ignition off.

HOW DOES THE REAR OCCUPANT ALERT SYSTEM WORK

The system monitors when rear doors have been opened and closed to indicate the potential presence of an occupant in the rear seat.

A message displays in the information and entertainment display screen and an audible warning sounds when you switch the ignition off after any of the following conditions have been met:

- A rear door is opened or closed while the ignition is on.
- You switch the ignition on within 15 minutes of a rear door opening and closing.
- You switch the ignition on within 15 minutes of the alert having displayed or sounded.

REAR OCCUPANT ALERT SYSTEM PRECAUTIONS



WARNING: On hot days, the temperature inside the vehicle can rise very quickly. Exposure of people or animals to these high temperatures for even a short time can cause death or serious heat related injuries, including brain damage. Small children are particularly at risk.



WARNING: Do not leave children or pets unattended in your vehicle. Failure to follow this instruction could result in personal injury or death.

REAR OCCUPANT ALERT SYSTEM LIMITATIONS

The system does not detect the presence of objects or passengers in the rear seat. It monitors when rear doors are opened and closed.

Note: *It is possible to receive an alert when there is no rear seat occupant, but alert conditions are met.*

Note: *It is possible to receive no alert when there is an occupant in the rear seat, if alert conditions are not met. For example, if a rear seat occupant does not enter the vehicle through a rear door.*

Note: *The audible warning does not sound when the front door is opened before you switch the ignition off.*

Rear Occupant Alert System (If Equipped)

SWITCHING REAR OCCUPANT ALERT SYSTEM ON AND OFF

1. Press **Settings** on the touchscreen.
2. Press **Vehicle**.
3. Switch **Rear Occupant Alert** on or off.

Note: The default setting is on.

Note: Performing a master reset causes the system to switch on again.

Semiannual Reminder (If Equipped)

When you switch the system off, a message appears every six months as a reminder that the system is off. You can switch the system back on or leave it off.

REAR OCCUPANT ALERT SYSTEM INDICATORS



Message
Check rear seats for occupants.

Displays when you switch your vehicle off after the alert conditions are met.

The message displays for a short period of time. Press **Close** to acknowledge and remove the message.

REAR OCCUPANT ALERT SYSTEM AUDIBLE WARNINGS

Sounds when you switch your vehicle off after the alert conditions are met.

The warning sounds for a short period of time.

Garage Door Opener

UNIVERSAL GARAGE DOOR OPENER

HomeLink Wireless Control System



WARNING: Do not use the system with any garage door opener that does not have the safety stop and reverse feature as required by U.S. Federal Safety Standards (this includes any garage door opener manufactured before April 1, 1982). A garage door opener which cannot detect an object, signaling the door to stop and reverse, does not meet current federal safety standards. Using a garage door opener without these features increases the risk of serious injury or death.

Note: Make sure that the garage door and security device are free from obstruction when you are programming. Do not program the system with the vehicle in the garage.

Note: Make sure you keep the original remote control transmitter for use in other vehicles as well as for future system programming.

Note: We recommend that upon the sale or lease termination of your vehicle, you erase the programmed function buttons for security reasons. See **Erasing the Function Button Codes** later in this section.

Note: You can program a maximum of three devices. To change or replace any of the three devices after it has been initially programmed, you must first erase the current settings. See **Erasing the Function Button Codes**.



The universal garage door opener replaces the common hand-held garage door opener with a three-button transmitter integrated into the driver's sun visor.

The system includes two primary features, a garage door opener and a platform for remote activation of devices within the home. You can program garage doors as well as entry gate operators, security systems, entry door locks and home or office lighting.

Additional system information can be found online at www.homelink.com, www.youtube.com/user/HomeLinkGentex or by calling the toll-free help line at 1-800-355-3515.

In-Vehicle Programming

This process is to program your in-vehicle HomeLink function button with your hand-held transmitter.

Note: The programming steps below assume you will be programming HomeLink that was not previously programmed. If your HomeLink was previously programmed, you may need to erase your HomeLink buttons. See **Erasing the Function Button Codes**.

Note: Put a new battery in the hand-held transmitter. This allows for quicker training and accurate transmission of the radio-frequency signal.

Garage Door Opener



Note: You may need to use a different method if you live in Canada or have difficulties programming your gate operator or garage door opener. See **Gate Operator / Canadian Programming**.

5. Press and hold the HomeLink button you programmed for two seconds, then release. You may need to do this twice to activate the door. If your garage door does not operate, watch the HomeLink indicator light.

If the indicator light stays on, the programming is complete. Your device should activate when the HomeLink button is pressed and released.

If the indicator light flashes rapidly, press and hold for two seconds and release the programmed HomeLink button. Repeat the "press/hold/release" sequence up to three times to complete the programming process. If your device still does not operate, you must program your garage door. See **Programming Your Garage Door Opener Motor**.

To program additional buttons, repeat Steps 1 – 4.

For questions or comments, please contact HomeLink at www.homelink.com, www.youtube.com/user/HomeLinkGentex or by calling the toll-free help line at 1-800-355-3515.

Programming Your Garage Door Opener Motor

Note: You may need a ladder to reach the unit and you may need to remove the cover or lamp lens on your garage door opener.



1. Press the learn button on the garage door opener motor and then you have 30 seconds to complete the next two steps.
2. Return to your vehicle.

Garage Door Opener



3. Press and hold the function button you want to program for 2 seconds, then release. Repeat this step. Depending on your brand of garage door opener, you may need to repeat this sequence a third time.

Gate Operator / Canadian Programming

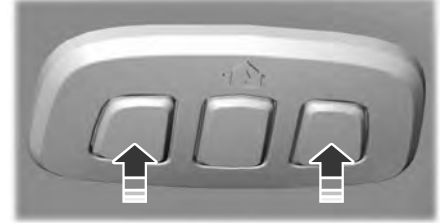
Canadian radio-frequency laws require transmitter signals to “time-out” (or quit) after several seconds of transmission – which may not be long enough for HomeLink to pick up the signal during programming. Similar to this Canadian law, some U.S. gate operators are designed to “time-out” in the same manner.

Note: *If programming a garage door opener or gate operator, it is advised to unplug the device during the “cycling” process to prevent possible overheating.*

1. Press and release, **every two seconds**, your hand-held transmitter until the HomeLink indicator light changes to a rapidly blinking or continuously on light.
2. Release the hand-held transmitter button.
3. Continue programming HomeLink. See **In-Vehicle Programming, Step 4.**

Erasing the Function Button Codes

Note: *You cannot erase individual buttons.*



1. Press and hold the outer two function buttons simultaneously for approximately 10 seconds until the indicator light above the buttons flashes rapidly.
2. When the indicator light flashes, release the buttons. You erased the codes for all buttons.

Reprogramming a Single Button

To program a device to a previously trained button, follow these steps:

1. Press and hold the desired button. Do NOT release the button.

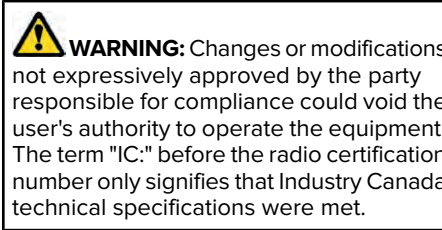
Garage Door Opener

2. The indicator light begins to flash after 20 seconds. Without releasing the button, follow Step 1 in the Programming section.

For questions or comments, contact HomeLink at www.homelink.com, www.youtube.com/user/HomeLinkGentex or by calling the toll-free help line at 1-800-355-3515.

FCC and RSS-210 Industry Canada Compliance

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End Users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 8 in (20 cm) from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

The term "IC:" before the certification/registration number only signifies that Industry Canada technical specifications were met.

Power Outlet - Vehicles With: 12V Power Outlet

WHAT IS THE POWER OUTLET

The power outlet can power devices using a 12 V outlet adapter.

POWER OUTLET PRECAUTIONS

When you switch the vehicle on, you can use the socket to power 12 V appliances with a maximum current rating of 20 A. Do not use the power point over the vehicle capacity of 12 V DC 240 W or a fuse could blow. Do not plug in any device that supplies power to the vehicle through the power points. This could result in damage to vehicle systems. Do not hang any accessory from the accessory plug. Always keep the power point caps closed when not in use. Do not insert objects other than an accessory plug into the power point.

To prevent the battery from running out of charge:

- Do not use the power point longer than necessary when the vehicle is off.
- Do not leave devices plugged in overnight or when you park your vehicle for extended periods.

LOCATING THE POWER OUTLET

Power outlets may be in the following locations:

- On the lower instrument panel.
- Inside the center console.
- On the front of the center console.
- On the rear of the center console.
- In the cargo area.
- On the passenger side floor panel.
- 3rd row on the quarter trim panels.

Power Outlet - Vehicles With: 110V Power Outlet

WHAT IS THE POWER OUTLET

The power outlet can power devices that use a household plug.

POWER OUTLET PRECAUTIONS



WARNING: Do not keep electrical devices plugged in the power point whenever the device is not in use. Do not use any extension cord with the 110 volt AC power point, since it will defeat the safety protection design. Doing so may cause the power point to overload due to powering multiple devices that can reach beyond the 400 watt load limit and could result in fire or serious injury.

Note: The vehicle provides up to 400 watts when in park and up to 300 watts when in drive mode. This wattage is divided between multiple outlets when in use at the same time.

LOCATING THE POWER OUTLET

The power outlet is on the instrument panel or the rear of the center console.

POWER OUTLET INDICATORS

The power outlet indicator illuminates to let you know the status of the system.

Indicator Status	Description
On	The power point is working, the ignition is on, or the vehicle is in accessory mode.
Off	The power point is off, the ignition is off, or the vehicle is not in accessory mode.
Flashing	The power point is in fault mode.

Note: Due to different technologies used on its construction, some devices may exceed the capacity shown on its label when they are initially plugged in.

Note: The power outlet temporarily turns off power when in fault mode if the device exceeds the Watt limit. Unplug your device and switch the ignition off. Switch the ignition back on, but do not plug your device back in. Let the system cool off and switch the ignition off to reset the fault mode. Switch the ignition back on and make sure the indicator light remains on.

Wireless Accessory Charger

WHAT IS THE WIRELESS ACCESSORY CHARGER

The wireless accessory charger allows you to charge one compatible Qi wireless charging device on the charging area.

WIRELESS ACCESSORY CHARGER PRECAUTIONS



WARNING: Wireless charging devices can affect the operation of implanted medical devices, including cardiac pacemakers. If you have any implanted medical devices, we recommend that you consult with your physician.

Tests on this equipment show that it complies with part 18 of the FCC Rules.

- This equipment generates, uses and can radiate radio frequency energy and may cause harmful interference to radio communications. There is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, please consult the dealer.
- This product is not end-user serviceable.



WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to:

- This device may not cause interference.
- This device must accept any interference, including interference that may cause undesired operation of the device.

Keep the charging area clean and remove foreign objects prior to charging a device.

Do not place items with a magnetic strip, for example passports, parking tickets or credit cards, near the charging area when charging a device. Damage may occur to the magnetic strip.

Do not place metal objects, for example remote controls, coins and candy wrappers, on or near the charging area when charging a device. Metal objects may heat up and degrade the charging performance, in addition to causing error messages and interruptions in charging.

Note: *During charging, the device and the charger could heat up, this is normal. If the battery gets hotter than usual, the device may stop charging.*

Wireless Accessory Charger

LOCATING THE WIRELESS ACCESSORY CHARGER



The charging area is on the center console or in the media bin below the instrument panel.

CHARGING A WIRELESS DEVICE

Place the device on the center of the charging surface with the charging side down. The charging stops after your device reaches a full charge.

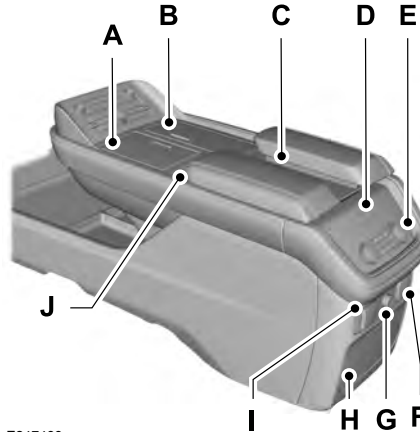
You can use the charger when the vehicle is in accessory mode, when the vehicle is running, or when SYNC is on.

Storage Compartments

CENTER CONSOLE

Stow items in the cup holder carefully as items may become loose during hard braking, acceleration or crashes, including hot drinks which may spill.

Available console features include:



E247439

- A Front storage compartment with USB ports, auxiliary power point and wireless charger.
- B Cup holders with auxiliary storage bin.
- C Storage compartment with auxiliary power point.

- D Rear audio controls/Rear window shade controls.
- E Rear climate controls.
- F AC power point.
- G Auxiliary power point or cigar lighter.
- H Rear cup holders.
- I Dual USB port.
- J Terrain management switch and electric parking brake.

OVERHEAD CONSOLE





Storage Compartments


Press near the rear edge of the door to open it.


Starting and Stopping the Engine

GENERAL INFORMATION

 **WARNING:** Extended idling at high engine speeds can produce very high temperatures in the engine and exhaust system, creating the risk of fire or other damage.

 **WARNING:** Do not park, idle or drive your vehicle on dry grass or other dry ground cover. The emission system heats up the engine compartment and exhaust system, creating the risk of fire.

 **WARNING:** Do not start the engine in a closed garage or in other enclosed areas. Exhaust fumes can be toxic. Always open the garage door before you start the engine.

 **WARNING:** Exhaust leaks may result in entry of harmful and potentially lethal fumes into the passenger compartment. If you smell exhaust fumes inside your vehicle, have your vehicle inspected immediately. Do not drive if you smell exhaust fumes.

If you disconnect the battery, your vehicle may exhibit some unusual driving characteristics for approximately 5 mi (8 km) after you reconnect it. This is because the engine management system must realign itself with the engine. You can disregard any unusual driving characteristics during this period.

The powertrain control system meets all Canadian interference-causing equipment standard requirements regulating the impulse electrical field or radio noise.

When you start the engine, avoid pressing the accelerator pedal before and during operation. Only use the accelerator pedal when you have difficulty starting the engine.

KEYLESS STARTING

Note: *The system may not function if the passive key is close to metal objects or electronic devices, for example keys or a cell phone.*

Note: *A valid passive key must be located inside your vehicle to switch the power on and start your vehicle.*

Note: *A light on the button illuminates when the ignition is on and when your vehicle starts.*

Switching the Ignition On



E144447

Starting and Stopping the Engine

Press the push button ignition switch once without your foot on the brake pedal. It is on the instrument panel near the steering wheel. All electrical circuits and accessories are operational and the warning lamps and indicators illuminate.

Press the push button ignition switch again without your foot on the brake pedal to switch the ignition off.

STARTING A GASOLINE ENGINE

When you start the engine, the idle speed increases.

This helps to warm up the engine. If the engine idle speed does not slow down automatically, have your vehicle checked by an authorized dealer.

Note: *You can crank the engine for a total of 60 seconds without the engine starting before the starting system temporarily disables. The 60 seconds does not have to be all at once. For example, if you crank the engine three times for 20 seconds each time, without the engine starting, you reached the 60-second time limit. You cannot attempt to start the engine for at least 15 minutes. After 15 minutes, you are limited to a 15-second engine cranking time. You need to wait 60 minutes before you can crank the engine for 60 seconds again.*

Before starting your vehicle, check the following:

- Make sure all occupants have fastened their seatbelts.
- Make sure the headlamps and electrical accessories are off.
- Make sure the parking brake is on.
- Make sure the transmission is in park (P).

Note: *Do not touch the accelerator pedal.*

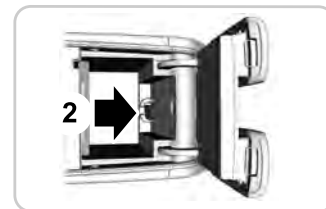
Note: *You must have your intelligent access key in your vehicle to shift the transmission out of park (P).*

1. Fully depress the brake pedal.
2. Press the push button ignition switch.

The system does not function if:

- The passive key frequencies are jammed.
- The key battery has no charge.

If you are unable to start your vehicle, do the following:



E247437

Starting and Stopping the Engine

1. Open the floor console storage compartment lid.
2. Insert the passive key into the backup slot.
3. With the passive key in this position, you can use the push button ignition switch to switch the ignition on and start your vehicle.

Fast Restart

The fast restart feature allows you to restart your vehicle within 20 seconds of switching it off, even if it does not detect a valid passive key.

Within 20 seconds of switching the engine off, press the brake pedal and press the push button ignition switch. After 20 seconds, you can no longer start your vehicle if it does not detect a valid passive key.

Once your vehicle starts, it remains running until you press the push button ignition switch, even if your vehicle does not detect a valid passive key. If you open and close a door while your vehicle is running, the system searches for a valid passive key. You cannot start your vehicle if the system does not detect a valid passive key within 20 seconds.

Failure to Start

If you cannot start the engine after three attempts, wait 10 seconds and follow this procedure:

1. Fully depress the brake pedal.
2. Shift into park (P).
3. Fully press the accelerator pedal and hold it there.
4. Start the engine.

Automatic Engine Shutdown

For vehicles with a keyless ignition, this automatically shuts down your vehicle if it has been idling for an extended period. The ignition also turns off to save battery power. Before your vehicle shuts down, a message appears in the information display showing a timer counting down. If you do not intervene within 30 seconds, your vehicle shuts down. Another message appears in the information display to inform you that your vehicle has shut down to save fuel. Start your vehicle as normal.

Automatic Engine Shutdown Override

Note: *You cannot permanently switch off the automatic shutdown. When you switch it off temporarily, it turns on at the next ignition cycle.*

Starting and Stopping the Engine

You can stop the shutdown, or reset the timer, at any point before the 30-second countdown has expired by doing any of the following:

- Interacting with your vehicle, for example pressing the brake or accelerator pedal.
- You can temporarily switch off the shutdown feature any time the ignition is on using the information display. See **Information Displays** (page 134). The feature only remains off for the current ignition cycle.
- During the 30-second countdown, the system prompts you to press OK or RESET to temporarily switch the feature off for the current ignition cycle only.

Stopping the Engine When Your Vehicle is Stationary

1. Shift into park (P).
2. Press the push button ignition switch.
3. Apply the parking brake.

Note: *The ignition, all electrical circuits and all warning lamps and indicators will be turned off.*

Note: *If the engine is idling for 30 minutes, the ignition and engine automatically shuts down.*

Stopping the Engine When Your Vehicle is Moving



WARNING: Switching off the engine when the vehicle is still moving will result in a loss of brake and steering assistance. The steering will not lock, but higher effort will be required. When the ignition is switched off, some electrical circuits, including air bags, warning lamps and indicators may also be off. If the ignition was turned off accidentally, you can shift into neutral (N) and re-start the engine.

1. Shift into neutral and use the brakes to bring your vehicle to a safe stop.
2. When your vehicle has stopped, shift into park (P).
3. Press and hold the push button ignition switch, or press it three times within two seconds.
4. Apply the parking brake.

Guarding Against Exhaust Fumes



WARNING: Exhaust leaks may result in entry of harmful and potentially lethal fumes into the passenger compartment. If you smell exhaust fumes inside your vehicle, have your vehicle inspected immediately. Do not drive if you smell exhaust fumes.

Important Ventilating Information

If you stop your vehicle and then leave the engine idling for long periods, we recommend that you do one of the following:

- Open the windows at least 1 in (3 cm).
- Set your climate control to outside air.

ENGINE BLOCK HEATER (IF EQUIPPED)



WARNING: Failure to follow engine block heater instructions could result in property damage or serious personal injury.

Starting and Stopping the Engine



WARNING: Do not use your heater with ungrounded electrical systems or two-pronged adapters. There is a risk of electrical shock.



WARNING: Do not fully close the hood, or allow it to drop under its own weight when using the engine block heater. This could damage the power cable and may cause an electrical short resulting in fire, injury and property damage.

Note: *The heater is most effective when outdoor temperatures are below 0°F (-18°C).*

The heater acts as a starting aid by warming the engine coolant. This allows the climate control system to respond quickly. The equipment includes a heater element, installed in the engine block and a wire harness. You can connect the system to a grounded 120-volt AC electrical source.

We recommend that you do the following for a safe and correct operation:

- Use a 16-gauge outdoor extension cord that is product certified by Underwriter's Laboratory (UL) or Canadian Standards Association (CSA). This extension cord must be suitable for use outdoors, in cold temperatures, and be clearly marked Suitable for Use with Outdoor Appliances. Do not use an indoor extension cord outdoors. This could result in an electric shock or become a fire hazard.
- Use as short an extension cord as possible.
- Do not use multiple extension cords.
- Make sure that when in operation, the extension cord plug and heater cord plug connections are free and clear of water. This could cause an electric shock or fire.
- If the block heater cord is under the hood, Do Not remove the wiring from its original location. Do Not close the hood on the extension wiring.
- Make sure your vehicle is parked in a clean area, clear of combustibles.

- Make sure the heater, heater cord and extension cord are firmly connected.
- Check for heat anywhere in the electrical hookup once the system has been operating for approximately 30 minutes.
- Make sure the system is unplugged and properly stowed before starting and driving your vehicle. Make sure the protective cover seals the prongs of the block heater cord plug when not in use.
- Make sure the heater system is checked for proper operation before winter.

Using the Engine Block Heater

Make sure the receptacle terminals are clean and dry prior to use. Clean them with a dry cloth if necessary.

The heater uses 0.4 to 1.0 kilowatt-hours of energy per hour of use. The system does not have a thermostat. It achieves maximum temperature after approximately three hours of operation. Using the heater longer than three hours does not improve system performance and unnecessarily uses electricity.

Unique Driving Characteristics

AUTO-START-STOP

The system helps reduce fuel consumption by automatically stopping and restarting the engine when your vehicle has stopped. The engine restarts automatically when you release the brake pedal.

In some situations, your vehicle may restart automatically, for example:

- To maintain interior comfort.
- To recharge the battery.

Note: *Power assist steering turns off when the engine is off.*

Note: *If your vehicle is flex fuel capable, Auto-Start-Stop is inhibited for a short time after a refuel event when the system is verifying the fuel type being used.*



WARNING: Always fully apply the parking brake. Make sure you shift into park (P) for vehicles with an automatic transmission. Switch the ignition off and remove the key whenever you leave your vehicle.



WARNING: Before opening the hood or performing any maintenance, fully apply the parking brake, shift into park (P) or neutral (N) and switch the ignition off.



WARNING: Always switch the ignition off before leaving the vehicle. If the ignition is switched on an automatic restart may occur at any time.



WARNING: The system may require the engine to automatically restart when the auto-start-stop indicator illuminates green or flashes amber. Failure to follow this instruction could result in personal injury.

The Auto-Start-Stop system status is available at a glance within the information display. See **Information Displays** (page 134).

Enabling Auto-Start-Stop

The system automatically enables every time you start your vehicle if:

- You do not press the Auto-Start-Stop button (not illuminated).
- Your vehicle exceeds an initial speed of 3 mph (5 km/h) after you have initially started your vehicle.
- You have stopped your vehicle.
- Your foot is on the brake pedal.
- The transmission is in drive.
- Not in Excite mode (enable by pressing the Auto-Start-Stop button).
- The driver door is closed.
- There is adequate brake vacuum.
- The interior compartment has cooled or warmed to an acceptable level.
- The front windshield defroster is off.
- You have not turned the steering wheel rapidly or you do not have it at a sharp angle.
- The vehicle is not on a steep road grade.
- The battery is within optimal operating conditions, (with the battery state of charge and temperature in range).
- The engine coolant is at operating temperature.

Unique Driving Characteristics

- Elevation is below about 11,000 ft (3,350 m).
- Ambient temperature is moderate.
- If equipped with selectable drive modes and when you select Normal, Conserve, Slippery.
- The trailer is not connected.
- Tow haul mode not engaged.
- You have not selected Manual mode.



The green Auto-Start-Stop indicator light on the instrument cluster will illuminate to indicate when the automatic engine stop occurs.



If the instrument cluster is equipped with a grey Auto-Start-Stop indicator light, it illuminates when automatic engine stop is not available due to one of the above noted conditions not being met.

Automatic Engine Restart

Any of the following conditions results in an automatic restart of the engine:

- You have removed your foot from the brake pedal.
- You press the accelerator pedal.
- You press the accelerator and the brake pedal at the same time.
- The driver seatbelt becomes unfastened or the driver door is ajar.
- Your vehicle is moving.
- The interior compartment does not meet customer comfort when air conditioning or heat is on.
- Fogging of the windows could occur and the air conditioning is on.
- The battery is not within optimal operating conditions.
- You have exceeded the maximum engine off time.
- When you press the Auto-Start-Stop button with the engine automatically stopped.

- The front defroster is turned to the Max setting.
- When you shift into park (P) the engine will restart.

Any of the following conditions may result in an automatic restart of the engine:

- You have increased the blower fan speed or changed the climate control temperature.
- You have an electrical accessory turned on or plugged in.

Note: *You may notice that the climate seat fan fluctuates during an automatic restart.*

Unique Driving Characteristics

Disabling Auto-Start-Stop



If your vehicle is in an engine off Auto-Start-Stop state and you change the transmission to reverse [®]) when the brake pedal is not pressed, the message Auto-Start-Stop Press Brake to Start Engine appears. You must press the brake pedal within 60 seconds or a shift to park (P) and a manual restart is required.

Press the Auto-Start-Stop button located on the center console to switch the system off. The button illuminates. This only deactivates the system for the current ignition cycle. Press the button again to restore Auto-Start-Stop function.

Note: *If the Shift to P, Restart Engine message appears and the amber Auto-Start-Stop indicator light is flashing, automatic restart is not available. You must restart the vehicle manually. See **Information Displays** (page 134).*

Fuel and Refueling

SAFETY PRECAUTIONS



WARNING: Do not overfill the fuel tank. The pressure in an overfilled tank may cause leakage and lead to fuel spray and fire.



WARNING: The fuel system may be under pressure. If you hear a hissing sound near the fuel filler inlet, do not refuel until the sound stops. Otherwise, fuel may spray out, which could cause serious personal injury.



WARNING: Fuels can cause serious injury or death if misused or mishandled.



WARNING: Fuel may contain benzene, which is a cancer-causing agent.



WARNING: When refueling always shut the engine off and never allow sparks or open flames near the fuel tank filler valve. Never smoke or use a cell phone while refueling. Fuel vapor is extremely hazardous under certain conditions. Avoid inhaling excess fumes.

Follow these guidelines when refueling:

- Extinguish all smoking materials and any open flames before refueling your vehicle.
- Always switch the engine off before refueling.
- Automotive fuels can be harmful or fatal if swallowed. Fuel is highly toxic and if swallowed can cause death or permanent injury. If fuel is swallowed immediately call a physician, even if no symptoms are immediately apparent. The toxic effects of fuel may not be apparent for hours.

- Avoid inhaling fuel vapors. Inhaling fuel vapor can lead to eye and respiratory tract irritation. In severe cases, excessive or prolonged breathing of fuel vapor can cause serious illness and permanent injury.
- Avoid getting fuel in your eyes. If you splash fuel in your eyes, immediately remove contact lenses (if worn), flush with water for 15 minutes and seek medical attention. Failure to seek proper medical attention could lead to permanent injury.
- Fuels can be harmful if absorbed through the skin. If you splash fuel on your skin, clothing or both, promptly remove contaminated clothing and thoroughly wash your skin with soap and water. Repeated or prolonged skin contact causes skin irritation.
- Be particularly careful if you are taking Antabuse or other forms of Disulfiram for the treatment of alcoholism. Breathing fuel vapors could cause an adverse reaction, serious personal injury or sickness. Immediately call a physician if you experience any adverse reactions.

Fuel and Refueling

FUEL QUALITY

Choosing the Right Fuel



Your vehicle is designed to operate on regular unleaded gasoline with a minimum pump (R+M)/2 octane rating of 87.

Some fuel stations, particularly those in high altitude areas, offer fuels posted as regular unleaded gasoline with an octane rating below 87. The use of these fuels could result in engine damage that will not be covered by the vehicle warranty.

For best overall vehicle and engine performance, premium fuel with an octane rating of 91 or higher is recommended. The performance gained by using premium fuel is most noticeable in hot weather as well as other conditions, for example when towing a trailer. See **Towing** (page 315).

Do not be concerned if the engine sometimes knocks lightly. However, if the engine knocks heavily while using fuel with the recommended octane rating, contact an authorized dealer to prevent any engine damage.

We recommend Top Tier detergent gasolines, where available to help minimize engine deposits and maintain optimal vehicle and engine performance. For additional information, refer to www.toptiergas.com.

Note: *Use of any fuel for which the vehicle was not designed can impair the emission control system, cause loss of vehicle performance, and cause damage to the engine which may not be covered by the vehicle Warranty.*

Do not use:

- Diesel fuel.
- Fuels containing kerosene or paraffin.
- Fuel containing more than 15% ethanol or E85 fuel.
- Fuels containing methanol.
- Fuels containing metallic-based additives, including manganese-based compounds.
- Fuels containing the octane booster additive, methylcyclopentadienyl manganese tricarbonyl (MMT).
- Leaded fuel, using leaded fuel is prohibited by law.

The use of fuels with metallic compounds such as methylcyclopentadienyl manganese tricarbonyl (commonly known as MMT), which is a manganese-based fuel additive, will impair engine performance and affect the emission control system.

FUEL FILLER FUNNEL LOCATION

The fuel filler funnel is in the spare wheel storage tray.

Fuel and Refueling

RUNNING OUT OF FUEL

Running out of fuel can cause damage not covered by the vehicle Warranty.

If your vehicle runs out of fuel:

- Add a minimum of 1.3 gal (5 L) of fuel to restart the engine.
- You may need to switch the ignition from off to on several times after refueling to allow the fuel system to pump the fuel from the tank to the engine. When restarting, cranking time takes a few seconds longer than normal.

Note: *If your vehicle is on a steep slope, more fuel may be required.*

Filling a Portable Fuel Container



WARNING: Flow of fuel through a fuel pump nozzle can produce static electricity. This can cause a fire if you are filling an ungrounded fuel container.

Use the following guidelines to avoid electrostatic charge build-up, which can produce a spark, when filling an ungrounded fuel container:

- Only use an approved fuel container to transfer fuel to your vehicle. Place the container on the ground when filling it.
- Do not fill a fuel container when it is inside your vehicle (including the cargo area).
- Keep the fuel pump nozzle in contact with the fuel container when filling it.
- Do not use a device that holds the fuel pump nozzle lever in the fill position.

Adding Fuel From a Portable Fuel Container



WARNING: Do not insert the nozzle of a fuel container or an aftermarket funnel into the fuel filler neck. This may damage the fuel system filler neck or its seal and cause fuel to run onto the ground.



WARNING: Do not try to pry open or push open the capless fuel system with foreign objects. This could damage the fuel system and its seal and cause injury to you or others.



WARNING: Do not dispose of fuel in the household refuse or the public sewage system. Use an authorized waste disposal facility.

When refueling the vehicle fuel tank from a fuel container, use the fuel filler funnel included with your vehicle. See **Fuel Filler Funnel Location** (page 216).

Note: *Do not use aftermarket funnels as they may not work with the capless fuel system and can damage it.*

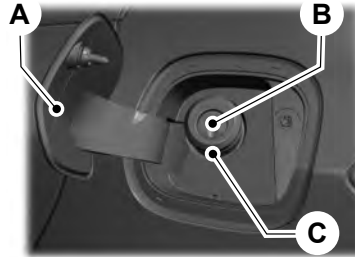
When refueling the vehicle fuel tank from a fuel container, do the following:

1. Fully open the fuel filler door.
2. Fully insert the fuel filler funnel into the fuel filler inlet.

Fuel and Refueling

REFUELING

Refueling System Overview



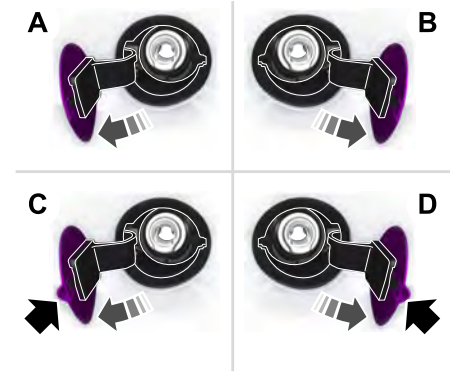
- A Fuel filler door.
- B Fuel tank filler valve.
- C Fuel tank filler pipe.

Your vehicle does not have a fuel tank filler cap.



3. Add fuel to your vehicle from the fuel container.
4. Remove the fuel filler funnel.
5. Fully close the fuel filler door.
6. Clean the fuel filler funnel and place it back in your vehicle or correctly dispose of it.

Note: *Extra funnels can be purchased from an authorized dealer if you choose to dispose of the funnel.*



- A Left-hand side. To open the fuel filler door, press the center rear edge of the fuel filler door and then release.
- B Right-hand side. To open the fuel filler door, press the center rear edge of the fuel filler door and then release.

Fuel and Refueling

- C Left-hand side. Pull the rear of the fuel filler door to open it.
- D Right-hand side. Pull the rear of the fuel filler door to open it.

Refueling Your Vehicle

WARNING: When refueling always shut the engine off and never allow sparks or open flames near the fuel tank filler valve. Never smoke or use a cell phone while refueling. Fuel vapor is extremely hazardous under certain conditions. Avoid inhaling excess fumes.

WARNING: The fuel system may be under pressure. If you hear a hissing sound near the fuel filler inlet, do not refuel until the sound stops. Otherwise, fuel may spray out, which could cause serious personal injury.

WARNING: Do not pry open the fuel tank filler valve. This could damage the fuel system. Failure to follow this instruction could result in fire, personal injury or death.

WARNING: Do not remove the fuel pump nozzle from its fully inserted position when refueling.

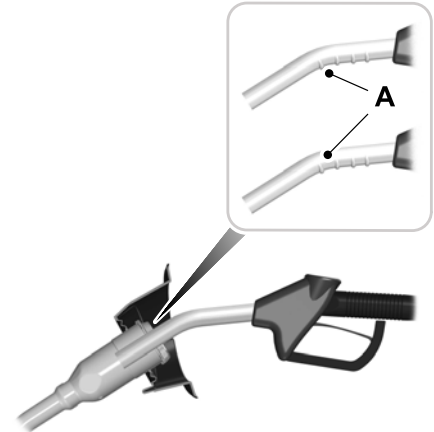
WARNING: Stop refueling when the fuel pump nozzle automatically shuts off for the first time. Failure to follow this will fill the expansion space in the fuel tank and could lead to fuel overflowing.

WARNING: Do not overfill the fuel tank. The pressure in an overfilled tank may cause leakage and lead to fuel spray and fire.

WARNING: Wait at least five seconds before removing the fuel pump nozzle to allow any residual fuel to drain into the fuel tank.

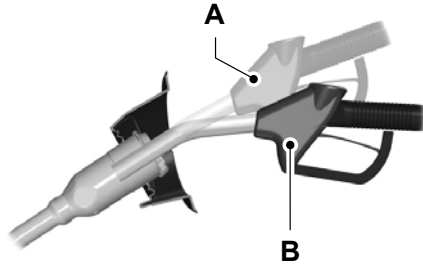
1. Fully open the fuel filler door.

2. Select the correct fuel pump nozzle for your vehicle.



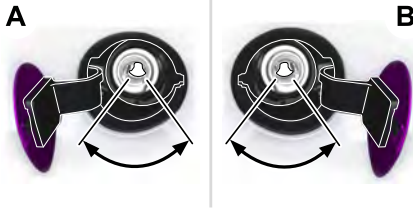
3. Insert the fuel pump nozzle up to the first notch on the nozzle A. Keep the fuel pump nozzle resting on the fuel tank filler pipe.

Fuel and Refueling

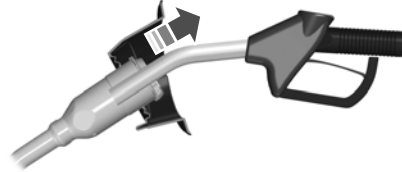


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4. Hold the fuel pump nozzle in position B when refueling. Holding the fuel pump nozzle in position A can affect the flow of fuel and shut off the fuel pump nozzle before the fuel tank is full.



5. Operate the fuel pump nozzle within the area shown.



6. When you finish refueling slightly raise the fuel pump nozzle and slowly remove it.
7. Fully close the fuel filler door.

Do not attempt to start the engine if you have filled the fuel tank with incorrect fuel. Incorrect fuel use could cause damage not covered by the vehicle Warranty. Have your vehicle immediately checked.

Refueling System Warning (If Equipped)

If the fuel tank filler valve does not fully close, a message could appear in the information display.

Message
Check Fuel Fill Inlet

If the message appears, do the following:

1. Stop your vehicle as soon as it is safe to do so and switch the engine off.
2. Shift into park (P) or neutral (N).
3. Apply the parking brake.
4. Fully open the fuel filler door.
5. Check the fuel tank filler valve for any debris that may be restricting its movement.
6. Remove any debris from the fuel tank filler valve.
7. Fully insert a fuel pump nozzle or the fuel filler funnel provided with your vehicle into the fuel filler pipe. See **Fuel Filler Funnel Location** (page 216). This action should dislodge any debris that may be preventing the fuel tank filler valve from fully closing.
8. Remove the fuel pump nozzle or fuel filler funnel from the fuel filler pipe.

Fuel and Refueling

9. Fully close the fuel filler door.

Note: *The message may not immediately reset. If the message continues to appear and a warning lamp illuminates, have your vehicle checked as soon as possible.*

FUEL CONSUMPTION

Advertised Capacity

The advertised capacity is the maximum amount of fuel that you can add to the fuel tank when the fuel gauge indicates empty. See **Capacities and Specifications** (page 440).

In addition, the fuel tank contains an empty reserve. The empty reserve is an unspecified amount of fuel that remains in the fuel tank when the fuel gauge indicates empty.

Note: *When refueling your vehicle after the fuel gauge indicates empty, you might not be able to refuel the full amount of the advertised capacity due to the empty reserve still present in the fuel tank.*

Filling the Fuel Tank

For consistent results when refueling:

- Turn the ignition off before fueling; an inaccurate reading results if the engine is left running.
- Use the same fill rate (low-medium-high) each time the tank is filled.
- Allow no more than one automatic shut-off when refueling.

Results are most accurate when the filling method is consistent.

Calculating Fuel Economy

Your vehicle calculates fuel economy figures through the trip computer average fuel function. See **Information Displays** (page 134).

The first 1,000 mi (1,500 km) of driving is the break-in period of the engine. A more accurate measurement is obtained after 2,000 mi (3,000 km).

1. Completely fill the fuel tank and record the initial odometer reading.

2. Each time you fill the fuel tank, record the amount of fuel added.
3. After at least three fill ups, fill the fuel tank and record the current odometer reading.
4. Subtract your initial odometer reading from the current odometer reading.

To calculate L/100 km (liters per 100 kilometers) fuel consumption, multiply the liters used by 100, then divide by kilometers traveled. To calculate MPG (miles per gallon) fuel consumption, divide miles traveled by gallons used.

Keep a record for at least one month and record the type of driving, for example city or highway. This provides an accurate estimate of your vehicle's fuel economy under current driving conditions. Keeping records during summer and winter shows how temperature impacts fuel economy.

Fuel and Refueling

Conditions

- Heavily loading your vehicle reduces fuel economy.
- Carrying unnecessary weight in your vehicle may reduce fuel economy.
- Avoid adding accessories that increase aerodynamic drag to your vehicle such as bug deflectors, car top carriers and ski or bike racks.
- Using fuel blended with alcohol may lower fuel economy.
- Fuel economy may decrease with lower temperatures.
- Fuel economy may decrease when driving short distances.
- You will get better fuel economy when driving on flat terrain than when driving on hilly terrain.

Engine Emission Control

EMISSION LAW



WARNING: Do not remove or alter the original equipment floor covering or insulation between it and the metal floor of the vehicle. The floor covering and insulation protect occupants of the vehicle from the engine and exhaust system heat and noise. On vehicles with no original equipment floor covering insulation, do not carry passengers in a manner that permits prolonged skin contact with the metal floor. Failure to follow these instructions may result in fire or personal injury.

U.S. federal laws and certain state laws prohibit removing or rendering inoperative emission control system components. Similar federal or provincial laws may apply in Canada. We do not approve of any vehicle modification without first determining applicable laws.



Tampering with emissions control systems including related sensors or the Diesel Exhaust Fluid system can result in reduced engine power and the illumination of the service engine soon light.

Tampering With a Noise Control System

Federal laws prohibit the following acts:

- Removal or rendering inoperative by any person other than for purposes of maintenance.
- Repair or replacement of any device or element of the design incorporated into a new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use.
- The use of the vehicle after any person removes or renders inoperative any device or element of the design.

The U.S. Environmental Protection Agency may presume to constitute tampering as follows:

- Removal of hood blanket, fender apron absorbers, fender apron barriers, underbody noise shields or acoustically absorptive material.
- Tampering or rendering inoperative the engine speed governor, to allow engine speed to exceed manufacturer specifications.

If the engine does not start, runs rough, experiences a decrease in engine performance, experiences excess fuel consumption or produces excessive exhaust smoke, check for the following:

- A plugged or disconnected air inlet system hose.
- A plugged engine air filter element.
- Water in the fuel filter and water separator.
- A clogged fuel filter.
- Contaminated fuel.
- Air in the fuel system, due to loose connections.

Engine Emission Control

- An open or pinched sensor hose.
- Incorrect engine oil level.
- Incorrect fuel for climatic conditions.
- Incorrect engine oil viscosity for climatic conditions.

Note: *Some vehicles have a lifetime fuel filter that is integrated with the fuel tank. Regular maintenance or replacement is not needed.*

Note: *If these checks do not help you correct the concern, have your vehicle checked as soon as possible.*

Noise Emissions Warranty, Prohibited Tampering Acts and Maintenance

On January 1, 1978, Federal regulation became effective governing the noise emission on trucks over 10,000 lb (4,536 kg) Gross Vehicle Weight Rating (GVWR). The preceding statements concerning prohibited tampering acts and maintenance, and the noise warranty found in the Warranty Guide, are applicable to complete chassis cabs over 10,000 lb (4,536 kg) GVWR.

CATALYTIC CONVERTER



WARNING: Do not park, idle or drive your vehicle on dry grass or other dry ground cover. The emission system heats up the engine compartment and exhaust system, creating the risk of fire.



WARNING: The normal operating temperature of the exhaust system is very high. Never work around or attempt to repair any part of the exhaust system until it has cooled. Use special care when working around the catalytic converter. The catalytic converter heats up to a very high temperature after only a short period of engine operation and stays hot after the engine is switched off.



WARNING: Exhaust leaks may result in entry of harmful and potentially lethal fumes into the passenger compartment. If you smell exhaust fumes inside your vehicle, have your vehicle inspected immediately. Do not drive if you smell exhaust fumes.

Your vehicle has various emission control components and a catalytic converter that enables it to comply with applicable exhaust emission standards.

To make sure that the catalytic converter and other emission control components continue to work properly:

- Do not crank the engine for more than 10 seconds at a time.
- Do not run the engine with a spark plug lead disconnected.
- Do not push-start or tow-start your vehicle. Use booster cables. See **Jump Starting the Vehicle** (page 346).
- Use only the specified fuel listed.
- Do not switch the ignition off when your vehicle is moving.
- Avoid running out of fuel.
- Have the items listed in scheduled maintenance information performed according to the specified schedule.

Note: *Resulting component damage may not be covered by the vehicle Warranty.*

Engine Emission Control

The scheduled maintenance items listed in scheduled maintenance information are essential to the life and performance of your vehicle and to its emissions system.

If you use anything other than Lincoln, Motorcraft or Lincoln-authorized parts for maintenance replacements or for service of components affecting emission control, such non-Lincoln parts should be equivalent to genuine Lincoln Motor Company parts in performance and durability.

Illumination of the service engine soon indicator, charging system warning light or the temperature warning light, fluid leaks, strange odors, smoke or loss of engine power could indicate that the emission control system is not working properly.

An improperly operating or damaged exhaust system may allow exhaust to enter the vehicle. Have a damaged or improperly operating exhaust system inspected and repaired immediately.

Do not make any unauthorized changes to your vehicle or engine. By law, vehicle owners and anyone who manufactures, repairs, services, sells, leases, trades vehicles, or supervises a fleet of vehicles are not permitted to intentionally remove an emission control device or prevent it from working. Information about your vehicle's emission system is on the Vehicle Emission Control Information Decal located on or near the engine. This decal also lists engine displacement.

Please consult your warranty information for complete details.

On-Board Diagnostics (OBD-II)

Your vehicle has a computer known as the on-board diagnostics system (OBD-II) that monitors the engine's emission control system. The system protects the environment by making sure that your vehicle continues to meet government emission standards. The OBD-II system also assists a service technician in properly servicing your vehicle.



When the service engine soon indicator illuminates, the OBD-II system has detected a malfunction.

Temporary malfunctions may cause the service engine soon indicator to illuminate. Examples are:

1. Your vehicle has run out of fuel—the engine may misfire or run poorly.
2. Poor fuel quality or water in the fuel—the engine may misfire or run poorly.
3. The fuel fill inlet may not have closed properly. See **Refueling** (page 218).
4. Driving through deep water—the electrical system may be wet.

You can correct these temporary malfunctions by filling the fuel tank with good quality fuel, properly closing the fuel fill inlet or letting the electrical system dry out. After three driving cycles without these or any other temporary malfunctions present, the service engine soon indicator should stay off the next time you start the engine. A driving cycle consists of a cold engine startup followed by mixed city and highway driving. No additional vehicle service is required.

Engine Emission Control

If the service engine soon indicator remains on, have your vehicle serviced at the first available opportunity. Although some malfunctions detected by the OBD-II may not have symptoms that are apparent, continued driving with the service engine soon indicator on can result in increased emissions, lower fuel economy, reduced engine and transmission smoothness and lead to more costly repairs.

Readiness for Inspection and Maintenance (I/M) Testing

Some state and provincial and local governments may have Inspection/Maintenance (I/M) programs to inspect the emission control equipment on your vehicle. Failure to pass this inspection could prevent you from getting a vehicle registration.



If the service engine soon indicator is on or the bulb does not work, your vehicle may need service. See On-Board Diagnostics.

Your vehicle may not pass the I/M test if the service engine soon indicator is on or not working properly (bulb is burned out), or if the OBD-II system has determined that some of the emission control systems have not been properly checked. In this case, the vehicle is not ready for I/M testing.

If the vehicle's engine or transmission has just been serviced, or the battery has recently run down or been replaced, the OBD-II system may indicate that the vehicle is not ready for I/M testing. To determine if the vehicle is ready for I/M testing, turn the ignition key to the on position for 15 seconds without cranking the engine. If the service engine soon indicator blinks eight times, it means that the vehicle is not ready for I/M testing; if the service engine soon indicator stays on solid, it means that your vehicle is ready for I/M testing.

The OBD-II system checks the emission control system during normal driving. A complete check may take several days.


If the vehicle is not ready for I/M testing, you can perform the following driving cycle consisting of mixed city and highway driving:


1. 15 minutes of steady driving on an expressway or highway followed by 20 minutes of stop-and-go driving with at least four 30-second idle periods.
2. Allow your vehicle to sit for at least eight hours with the ignition off. Then, start the vehicle and complete the above driving cycle. The vehicle must warm up to its normal operating temperature. Once started, do not turn off the vehicle until the above driving cycle is complete.


If the vehicle is still not ready for I/M testing, you need to repeat the above driving cycle.

Transmission

AUTOMATIC TRANSMISSION

 **WARNING:** Always fully apply the parking brake and make sure you shift into park (P). Failure to follow this instruction could result in personal injury or death.

 **WARNING:** Do not use tow/haul when the road surface is slippery. Failure to follow this instruction could result in the loss of control of your vehicle.

 **WARNING:** When your vehicle is stationary, keep the brake pedal fully pressed when shifting gears. Failure to follow this instruction could result in personal injury, death or property damage.

Note: You may not be able to shift out of park (P) unless the intelligent access key is inside your vehicle.

Understanding the Shift Positions of your Automatic Transmission



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Putting your vehicle in or out of gear:

1. Fully press down on the brake pedal.
2. Press the desired gear on the transmission selector.
3. When you finish driving, come to a complete stop.
4. Press the park (P) button on the transmission selector.

The instrument cluster displays the current gear.

Park (P)

With the transmission in park (P), your vehicle locks the transmission and prevents the wheels from turning. Always come to a complete stop before putting your vehicle into and out of park (P). An audible tone sounds once you select park (P).

When the ignition is off, your vehicle automatically shifts into park (P). If the ignition is off when the vehicle is moving, it first shifts into neutral (N) until the vehicle stops, and then shift into park (P) automatically.

The electric parking brake may apply when you shift to park (P) without the brake pedal fully pressed. The electric parking brake applies when you shift to park (P) on large slopes. The electric parking brake releases with the drive away release function or manually as described in the Releasing the Electric Parking Brake section. See **Electric Parking Brake** (page 242).

Automatic Return to Park

Note: This feature does not operate when your vehicle is in Stay in Neutral mode or neutral tow.

Transmission

Your vehicle has a feature that automatically shifts your vehicle into park (P) when any of the following conditions occur:

- You turn the vehicle off.
- You open the driver's door with your seatbelt unlatched with the vehicle stopped.
- You unlatch your seatbelt when the driver's door is open with the vehicle stopped.

If you turn your vehicle off when moving, your vehicle first shifts into neutral (N) until it stops and then shift into park (P) automatically.

Note: *If you have waited an extended period of time, 2-15 minutes before starting your vehicle, unlatching your seatbelt can cause this feature to activate, even with the driver door closed.*

Note: *This feature may not work properly if the door ajar switch is malfunctioning. If your door ajar indicator does not illuminate when you open the driver's door or the indicator illuminates with the driver's door closed, see your authorized dealer.*

Reverse (R)

With the selector in reverse (R), your vehicle moves backward. Always come to a complete stop before shifting into and out of reverse (R).

Neutral (N)

With the selector in neutral (N), you can start your vehicle and is free to roll. Hold the brake pedal down when in this position.

Stay in Neutral Mode

Stay in Neutral mode allows your vehicle to stay in neutral when you exit your vehicle. Your vehicle must be stationary to enter this mode.

Note: *Stay in neutral mode is a temporary vehicle state with the ignition off. Once in this mode, sufficient battery voltage must be maintained or your vehicle returns to park. Extended usage of Stay in Neutral mode may result in a battery voltage reduction to a level where the vehicle may no longer start. Do not tow your vehicle in this mode.*

Note: *Always put your vehicle in Stay in Neutral mode when entering an automatic car wash. Failure to do this could result in vehicle damage not covered by warranty.*

To enter Stay in Neutral mode:

- Press the neutral (N) button on the transmission selector.
- Press the neutral (N) button again to enter Stay in Neutral mode.

A message appears in your information display screen when your vehicle has entered Stay in Neutral mode.

To exit Stay in Neutral mode, apply the brake and select a different gear.

Stay in Neutral Mode - No Start

Use this to move your transmission from the park position in the event of a no start situation. If your vehicle has a dead battery, you require an external power source. Do not tow your vehicle in this mode.

Transmission

Note: This only functions if your 12 volt battery has power and the starter can spin the engine. If vehicle battery voltage is not sufficient, you may require an external 12 volt power source such as jumper cables, battery charger or jump pack for this feature to function.

Note: Once in this mode, maintain sufficient battery voltage or your vehicle returns to park.



WARNING: When doing this procedure, you need to take the transmission out of park (P) which means your vehicle can roll freely. To avoid unwanted vehicle movement, always fully apply the parking brake prior to doing this procedure. Use wheels chocks if appropriate.

1. Do not press the brake pedal. Press the Start/Stop button.
2. Fully press down on the brake pedal. Keep the brakes applied through step 7.
3. Press the accelerator pedal to the floor and hold through step 7.

4. Press the neutral (N) button on the transmission selector.
5. Press the neutral (N) button again to enter Stay in Neutral mode.
6. Press and release the push to start button, the transmission needs a minimum of 2 seconds to exit park.
7. When neutral (N) displays, you can release the brake and accelerator pedals.

To exit Stay in Neutral mode, select a different gear.

A message appears in your information display screen when your vehicle has entered Stay in Neutral mode.

Drive (D)

Drive (D) is the normal driving position for the best fuel economy. The overdrive function allows automatic upshifts and downshifts through gears one through ten.

Adaptive Tow/Haul Mode



WARNING: Do not use tow/haul when the road surface is slippery. Failure to follow this instruction could result in the loss of control of your vehicle.

Adaptive tow/haul has two modes, automatic that is enabled by default and off.

To turn adaptive tow/haul off or on, use the information display controls. See **General Information** (page 134). The indicator light illuminates in the instrument cluster.

Key adaptive tow/haul features:

- The system remains in the same mode, even after a key cycle.
- Is only available in normal drive modes (Normal 2H and Normal 4A).

The adaptive tow/haul feature improves transmission operation when towing a trailer or a heavy load. All transmission gear ranges are available when using adaptive tow/haul.

For information on towing. See **Towing** (page 315).

Transmission

SelectShift™ Automatic Transmission

Your vehicle has a SelectShift Automatic transmission. The SelectShift Automatic transmission gives you the ability to change gears up or down, without a clutch, as desired.

In order to prevent the engine from running at too low of an RPM, which may cause it to stall, SelectShift still automatically makes some downshifts if it has determined that you have not downshifted in time. Although SelectShift makes some downshifts for you, it still allows you to downshift at any time as long as the SelectShift determines that damage to the engine does not occur from over-revving.

Note: *Engine damage may occur if you maintain excessive engine revving without shifting.*

SelectShift does not automatically upshift, even if the engine is approaching the RPM limit. Shift manually by pressing the + paddle.

Pull the + paddle on the steering wheel to activate SelectShift.

- Pull the right paddle (+) to upshift.
- Pull the left paddle (–) to downshift.



SelectShift in drive (D):

Provides a temporary manual mode for performing more demanding maneuvers where you require extra control of gear selection, for example, when towing, downhill driving or overtaking. This mode holds a selected gear for a temporary period of time dependent on driver inputs (for example, steering or accelerator pedal input).

In SelectShift mode, the instrument cluster displays your currently selected gear. If you request a gear, but it is not available due to vehicle conditions, low speed, too high engine speed for requested gear selection, the current gear briefly flashes.

Note: *At full accelerator pedal travel, the transmission downshifts for maximum performance.*

Note: *In low traction conditions, you can pull away in second gear using SelectShift. To perform this operation, select drive (D) and press the + paddle until 2 displays on the cluster. Your vehicle is now ready to move in 2nd gear.*

Transmission

Brake-Shift Interlock Override



WARNING: When doing this procedure, you need to take the transmission out of park (P) which means your vehicle can roll freely. To avoid unwanted vehicle movement, always fully apply the parking brake prior to doing this procedure. Use wheels chocks if appropriate.



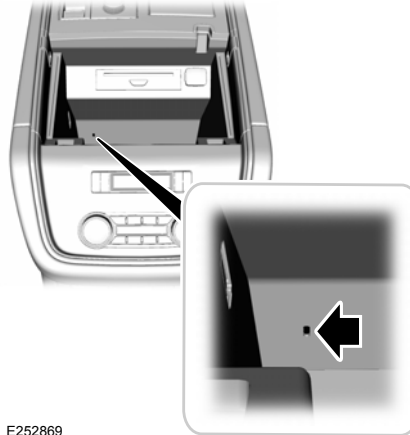
WARNING: Do not drive your vehicle until you verify that the stoplamps are working.



WARNING: If the parking brake is fully released, but the brake warning lamp remains illuminated, the brakes may not be working properly. Have your vehicle checked as soon as possible.

Use the brake-shift interlock override to move your transmission from the park position in the event of an electrical malfunction.

1. Apply the parking brake and start the engine before performing this procedure.



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2. Locate your brake-shift interlock access slot. The slot is located below the CD player, in your center console storage bin. The access slot does not have a label.

Note: Make sure that you correctly identify the access hole as not to damage the CD player.

3. Insert a small tool, or screwdriver into the slot, press in and hold the brake shift interlock switch, inside the slot on the console. The shift buttons on the instrument panel flash when your vehicle is in override mode.
4. With the override switch still held, press the neutral (N) button to shift from park.
5. Release the override button.
6. You can shift your vehicle to the gear you prefer and drive.
7. Release the parking brake.

Note: See your authorized dealer as soon as possible if you use this procedure.

Note: For some markets, this feature is disabled.

Note: This feature only functions if your 12 volt battery has power.

Transmission

Automatic Transmission Adaptive Learning

This feature may increase durability and provide consistent shift feel over the life of your vehicle. A new vehicle or transmission may have firm shifts, soft shifts or both. This operation is normal and does not affect function or durability of the transmission. Over time, the adaptive learning process fully updates transmission operation.

If Your Vehicle Gets Stuck in Mud or Snow

If your vehicle gets stuck in mud or snow, you may rock it out by shifting between forward and reverse gears, stopping between shifts in a steady pattern. Press lightly on the accelerator in each gear.

Note: *Do not rock your vehicle if the engine is not at normal operating temperature or damage to the transmission may occur.*

Note: *Do not rock your vehicle for more than a minute or damage to the transmission and tires may occur, or the engine may overheat.*

Four-Wheel Drive (If Equipped)

USING FOUR-WHEEL DRIVE

Note: Please review important information regarding the safe operation of this type of vehicle. See **General Information** (page 407).

Note: Do not use slippery, deep conditions or slow climb on dry, hard surfaced roads. Doing so produces excessive noise, increases tire wear and could damage drive components. The four-wheel drive system in these modes is only intended for consistently slippery or loose surfaces.

Note: If you select a drive mode that uses 4L when your vehicle is moving above 3 mph (5 km/h), the four-wheel drive system does not perform a shift. This is normal and should be no reason for concern.

4X4 Indicator Lights

4X2

2H Momentarily illuminates when you start the vehicle or when a drive mode that uses 2H is selected.

4X4 AUTO

4A Continuously illuminates when a drive mode that uses 4A is selected.


4X4 HIGH

4H Continuously illuminates when a drive mode that uses 4H is selected.

4X4 LOW (If Equipped)

4L Continuously illuminates when a drive mode that uses 4L is selected.

CHECK 4X4

 Displays when a 4X4 fault is present.

Note: When a 4X4 system fault is present, the system typically remains in whichever 4X4 mode was selected prior to the fault condition occurring. It does not necessarily default to 4X2. When this warning is displayed, have your vehicle serviced as soon as possible.

4X4 Modes



WARNING: Vehicles with a higher center of gravity (utility and four-wheel drive vehicles) handle differently than vehicles with a lower center of gravity (passenger cars). Avoid sharp turns, excessive speed and abrupt steering in these vehicles. Failure to drive cautiously increases the risk of losing control of your vehicle, vehicle rollover, personal injury and death.

Your vehicle engages 4X4 modes based on the currently selected drive mode. See **Drive Mode Control** (page 303).

Note: The information display could show messages during four-wheel drive operation. See **Information Messages** (page 139).

Four-Wheel Drive (If Equipped)

Note: *The AdvanceTrac® with RSC® stability enhancement system can be switched off by deselecting the feature on the instrument panel. See **Using Traction Control** (page 247). This disables the engine management feature, allowing the vehicle to maintain full power and enhanced momentum through the obstacle.*

Note: *The AdvanceTrac system can take control of the transfer case clutch and disable it during driving maneuvers when necessary.*

2H - 4X2

This turns on when you select normal or conserve. Power is delivered to the rear wheels only. This mode is appropriate for normal on-road driving on dry pavement and provides the best fuel economy.

4A - 4X4 Auto

This turns on when you select excite, normal, 4x4 auto or slippery. It provides electronically controlled four-wheel drive with power delivered to all four wheels, as required, for increased traction. 4A is calibrated in conjunction with drive mode. Using 4A in excite is less aggressively tuned and is appropriate for dry road surfaces. Using 4A in normal and 4x4 auto is appropriate for all on-road driving conditions, such as dry road surfaces, wet pavement, light snow or gravel. Using 4A in slippery is more aggressively tuned and is appropriate for slippery surfaces, such as light snow or gravel.

4H - 4X4 High

This turns on when you select deep conditions. It provides electronically locked four-wheel drive power to both the front and rear wheels for use in off-road or winter conditions such as deep snow, sand or mud. This mode is not for use on dry pavement.

4L - 4X4 Low (If Equipped)

This turns on when you select slow climb. It provides electronically locked four-wheel drive power to both the front and rear wheels for use on low traction surfaces, but does so with additional gearing for increased torque multiplication. Intended only for off-road applications such as deep sand, steep slopes or pulling heavy objects. Using 4L does not engage when your vehicle is moving above 3 mph (5 km/h). This is normal and is no reason for concern.

Shifting Between Four-Wheel Drive System Modes

Note: *Momentarily releasing the accelerator pedal when a shift in progress message displays improves engagement and disengagement performance.*

Note: *Do not perform this operation if the rear wheels are slipping.*

Note: *You may hear some noise as the system shifts or engages. This is normal.*

Four-Wheel Drive (If Equipped)

Shifting to or from 4L - 4X4 LOW

1. Bring the vehicle to a rolling speed of 3 mph (5 km/h) or less.
2. Place the gearshift in neutral (N).
3. Rotate the drive mode knob to the desired mode.

The information display shows a message indicating a 4X4 shift is in progress. The information display shows the system mode selected. If any of the previous shift conditions are not present, the shift does not occur and the information display shows the information guiding the driver through the proper shifting procedures. If the previous conditions are not satisfied within 30 seconds, the system reverts to the previous drive mode.

If shift delayed pull forward displays in the information display, a transfer case gear tooth blockage is present. To alleviate this condition, place the transmission in a forward gear, move the vehicle forward approximately 5 ft (2 m), and shift the transmission back to neutral (N) to allow the transfer case to complete the range shift.

Note: *Using 4L mode is not intended to be used on dry pavement.*

Operating Four-Wheel Drive Vehicles with Spare or Mismatched Tires

On four-wheel drive vehicles, the size of the spare tire can affect the four-wheel drive system. If there is a significant difference between the size of the spare tire and the remaining tires, you may have limited four-wheel drive functionality.

When driving with the full-size dissimilar spare wheel and tire assembly, it is recommended that you do not:

- Exceed 50 mph (80 km/h) with a four-wheel drive mode turned on.
- Turn on a four-wheel drive mode unless the vehicle is stationary.
- Use a four-wheel drive mode on dry pavement.

Use of a dissimilar spare wheel and tire assembly may lead to impairment of the following:

- Comfort and noise.
- Winter weather driving capability.

- Wet driving capability.
- Four-wheel drive capability.

How Your Vehicle Differs from Other Vehicles



WARNING: Vehicles with a higher center of gravity (utility and four-wheel drive vehicles) handle differently than vehicles with a lower center of gravity (passenger cars). Avoid sharp turns, excessive speed and abrupt steering in these vehicles. Failure to drive cautiously increases the risk of losing control of your vehicle, vehicle rollover, personal injury and death.

Truck and utility vehicles can differ from some other vehicles. Your vehicle may be higher to allow it to travel over rough terrain without getting hung up or damaging underbody components.

The differences that make your vehicle so versatile also make it handle differently than an ordinary passenger car.

Four-Wheel Drive (If Equipped)

Always maintain steering wheel control, especially in rough terrain. Since sudden changes in terrain can result in abrupt steering wheel motion, make sure you grip the steering wheel from the outside. Do not grip the spokes.

Drive cautiously to avoid vehicle damage from concealed objects such as rocks and stumps.

You should either know the terrain or examine maps of the area before driving. Map out your route before driving in the area. To maintain steering and braking control of your vehicle, you must have all four wheels on the ground and they must be rolling, not sliding or spinning.

Driving Off-Road with Truck and Utility Vehicles

Four-wheel drive vehicles are specially equipped for driving on sand, snow, mud and rough terrain and have operating characteristics that are different from conventional vehicles, both on and off the road.

Power is supplied to all four wheels through a transfer case. On four-wheel drive vehicles, the transfer case allows you to utilize different four-wheel drive modes when necessary.

Four-wheel drive, when you select a 4X4-capable drive mode uses all four wheels to power the vehicle. This increases traction, enabling you to drive over terrain and road conditions that a conventional two-wheel drive vehicle cannot.

Note: *On some models, the initial shift from two-wheel drive to four-wheel drive when the vehicle is moving can cause some momentary clunk and ratcheting sounds. This is the front drivetrain coming up to speed and is not a cause for concern.*

Note: *Your vehicle may have a front air dam. Due to low ground clearance, you can damage it when taking your vehicle off-road. You can take the air dam off by removing the bolts that secure it.*

Basic Operating Principles

- Do not use slippery, deep conditions, or slow climb, on dry, hard surfaced roads. Doing so produces excessive noise, increases tire wear and may damage drive components. The four-wheel drive system in these modes is only intended for consistently slippery or loose surfaces.
- Drive slower in strong crosswinds which can affect the normal steering characteristics of your vehicle.
- When driving your vehicle on surfaces made slippery by loose sand, water, gravel, snow or ice, proceed with care.

If Your Vehicle Leaves the Road

If your vehicle leaves the road, reduce your vehicle speed and avoid severe braking. When your vehicle speed has been reduced ease your vehicle back onto the road. Do not turn the steering wheel sharply when returning your vehicle to the road.

Four-Wheel Drive (If Equipped)

It may be safer to stay on the shoulder of the road and slow down gradually before returning to the road. You may lose control if you do not slow down or if you turn the steering wheel too sharply or abruptly.

It may be less risky to strike small objects, such as freeway reflectors, with minor damage to your vehicle rather than attempt a sudden return to the road which could cause your vehicle to slide sideways out of control or roll over. Remember, your safety and the safety of others should be your primary concern.

If Your Vehicle Gets Stuck



WARNING: Do not spin the wheels at over 34 mph (55 km/h). The tires may fail and injure a passenger or bystander.

If your vehicle gets stuck in mud or snow it may be rocked out by shifting between forward and reverse gears, stopping between shifts, in a steady pattern. Press lightly on the accelerator in each gear.

Note: Do not rock your vehicle if the engine is not at normal operating temperature or damage to the transmission could occur.

Note: Do not rock your vehicle for more than a minute or damage to the transmission and tires may occur or the engine could overheat.

Emergency Maneuvers

In an unavoidable emergency where a sudden sharp turn must be made, remember to avoid over-driving your vehicle, for example, turn the steering wheel only as rapidly and as far as required to avoid the emergency. Excessive steering can result in loss of vehicle control. Apply smooth pressure to the accelerator pedal or brake pedal when changes in vehicle speed are required. Avoid abrupt steering, acceleration and braking. This could result in an increased risk of vehicle roll over, loss of vehicle control and personal injury. Use all of the available road surface to bring your vehicle to a safe direction of travel.

In the event of an emergency stop, avoid skidding the tires and do not attempt any sharp steering wheel movements.

If your vehicle goes from one type of surface to another such as from concrete to gravel, there may be a change in the way your vehicle responds to a maneuver, for example, steering, acceleration or braking.

Sand

When driving over sand, try to keep all four wheels on the most solid area of the trail. Avoid reducing the tire pressures but shift to a lower gear and drive steadily through the terrain. Apply the accelerator slowly and avoid excessive wheel slip.

Avoid driving at excessive speeds, this causes vehicle momentum to work against you and your vehicle could become stuck to the point that assistance may be required from another vehicle. Remember, you may be able to back out the way you came if you proceed with caution.

Four-Wheel Drive (If Equipped)

Mud and Water

If you must drive through high water, drive slowly. Traction or brake capability could be limited.

When driving through water, determine the depth and avoid water higher than the bottom of the hubs. If the ignition system gets wet, your vehicle may stall.

Once through water, always try the brakes. Wet brakes do not stop your vehicle as effectively as dry brakes. Drying can be improved by applying light pressure to the brake pedal when slowly moving.

Be cautious of sudden changes in vehicle speed or direction when you are driving in mud. Even four-wheel drive vehicles can lose traction in slick mud. As when you are driving over sand, apply the accelerator slowly and avoid spinning your wheels. If the vehicle does slide, steer in the direction of the slide until you regain control of the vehicle.

If the transmission, transfer case or front axle are submerged in water, their fluids should be checked and changed, if necessary.

If the front or rear axle is submerged in water, the axle lubricant should be replaced.

After driving through mud, clean off residue stuck to rotating driveshafts and tires. Excess mud stuck on tires and rotating driveshafts causes an imbalance that could damage drive components.

Note: *Driving through deep water could damage the vehicle.*

Driving on Hilly or Sloping Terrain

Although natural obstacles may make it necessary to travel diagonally up or down a hill or steep incline, you should always try to drive straight up or straight down.

When climbing a steep slope or hill, start in a lower gear rather than downshifting to a lower gear from a higher gear once the ascent has started. This reduces strain on the engine and the possibility of stalling.

If your vehicle stalls, do not try to turn around because this could cause vehicle roll over. It is better to reverse back to a safe location.

Apply just enough power to the wheels to climb the hill. Too much power causes the tires to slip, spin or lose traction, resulting in loss of vehicle control.



Descend a hill in the same gear you would use to climb up the hill to avoid excessive brake application and brake overheating. Do not descend in neutral. Disengage overdrive or move the transmission selector lever to a lower gear. When descending a steep hill, avoid sudden hard braking as you could lose control. The front wheels have to be turning in order to steer your vehicle.

If your vehicle has anti-lock brakes, apply the brakes steadily. Do not pump the brakes.

Four-Wheel Drive (If Equipped)

Note: Avoid driving crosswise or turning on steep slopes or hills.

Note: Avoid turning on steep slopes or hills. A danger lies in losing traction, slipping sideways and possible vehicle roll over. Whenever driving on a hill, determine beforehand the route you will use. Do not drive over the crest of a hill without seeing what conditions are on the other side. Do not drive in reverse over a hill without the aid of an observer.

Driving on Snow and Ice



WARNING: If you are driving in slippery conditions that require tire chains or cables, then it is critical that you drive cautiously. Keep speeds down, allow for longer stopping distances and avoid aggressive steering to reduce the chances of a loss of vehicle control which can lead to serious injury or death. If the rear end of your vehicle slides while cornering, steer in the direction of the slide until you regain control of your vehicle.

Four-wheel drive vehicles have advantages over two-wheel drive vehicles in snow and ice but can skid like any other vehicle. Should you start to slide when driving on snowy or icy roads, turn the steering wheel in the direction of the slide until you regain control.

Avoid sudden applications of power and quick changes of direction on snow and ice. Apply the accelerator slowly and steadily when starting from a full stop.

Avoid sudden braking. Although a four-wheel drive vehicle may accelerate better than a two-wheel drive vehicle in snow and ice, it does not stop any faster as braking occurs at all four wheels. Do not become overconfident in any road condition.

Make sure you allow sufficient distance between you and other vehicles for stopping. Drive slower than usual and consider using one of the lower gears. In emergency stopping situations, apply the brake steadily. Do not pump the brake pedal. See **Hints on Driving With Anti-Lock Brakes** (page 242).

Note: Excessive tire slippage can cause transmission damage.

Maintenance and Modifications

The suspension and steering systems on your vehicle have been designed and tested to provide predictable performance whether loaded or empty. For this reason, we strongly recommend that you do not make modifications such as adding or removing parts, for example, lift kits or stabilizer bars, or by using replacement parts not equivalent to the original factory equipment.

We recommend that you use caution when your vehicle has either a high load or device such as a ladder or luggage racks. Any modifications to your vehicle that raise the center of gravity could cause your vehicle to roll over when there is a loss of vehicle control.

Failure to maintain your vehicle correctly could void the warranty, increase your repair cost, reduce vehicle performance and operational capabilities and adversely affect you and your passenger's safety. We recommend you frequently inspect your vehicle's chassis components when your vehicle is subject to off-road usage.

Rear Axle

LIMITED SLIP DIFFERENTIAL (IF EQUIPPED)

The Electronic Limited Slip Differential (eLSD) system directs torque, enabling the vehicle to drive over terrain and road conditions that a conventional axle cannot. The system is active at all times and requires no input from the driver.

Note: *If your vehicle is not at optimal operating conditions or a system fault is present, a warning may be displayed in the instrument cluster. Depending on the warning, your vehicle may need to be serviced. You can find more information regarding the system information messages in the Information Displays chapter. See **Information Messages** (page 139).*

Spare Tire

If your vehicle has an Electronic Limited Slip Differential, do not use a spare tire of a different size than the tire provided. If a spare tire is installed, a message may appear, indicating the system has disabled automatically or reduced function to prevent

system overheat and damage. It is recommended to reinstall the repaired or replaced road tire as soon as possible. When the road tire is replaced, the system will resume normal operation on the next key cycle.

Trailer Towing

The Electronic Limited Slip Differential enhances vehicle stability during trailer tow operation. During high demand trailering events, such as steep slopes, high speeds or with a spare tire, the system may provide a warning in the instrument cluster and reduce function or enter a temporarily disabled state. To resume normal function, stop the vehicle in a safe location and allow the unit to adequately cool. Once the system has reached normal operating temperatures, system function will be restored and the Electronic Limited Slip Differential Restored message will be displayed.

Brakes

GENERAL INFORMATION

Note: *Occasional brake noise is normal. If a metal-to-metal, continuous grinding or continuous squeal sound is present, the brake linings could be worn-out, you should have them checked. If the vehicle has continuous vibration or shudder in the steering wheel while braking, you should have the system checked.*

Note: *Brake dust may accumulate on the wheels, even under normal driving conditions. Some dust is inevitable as the brakes wear and does not contribute to brake noise. See **Cleaning the Wheels** (page 403).*



See **Warning Lamps and Indicators** (page 129).

Wet brakes result in reduced braking efficiency. Gently press the brake pedal a few times when driving from a car wash or standing water to dry the brakes.

Brake Over Accelerator

In the event the accelerator pedal becomes stuck or entrapped, apply steady and firm pressure to the brake pedal to slow the vehicle and reduce engine power. If you experience this condition, apply the brakes and bring your vehicle to a safe stop. Switch the engine off, move the transmission to park (P) and apply the parking brake. Inspect the accelerator pedal and the area around it for any items or debris that may be obstructing its movement. If none are found and the condition persists, do not drive your vehicle. Have your vehicle towed to the location you are having it checked.

Emergency Brake Assist

Emergency brake assist detects when you brake heavily by measuring the rate at which you press the brake pedal. It provides maximum braking efficiency as long as you press the pedal. Emergency brake assist can reduce stopping distances in critical situations.

Anti-lock Brake System

This system helps you maintain steering control during emergency stops by keeping the brakes from locking.



This lamp momentarily illuminates when you switch the ignition on. If the light does not illuminate during start up, remains on or flashes, the anti-lock braking system may be disabled. Have the system checked. If the anti-lock brake system is disabled, normal braking is still effective.



If the brake warning lamp illuminates with the parking brake released, have your brake system serviced immediately.

It also illuminates momentarily when you switch the ignition on to confirm the lamp is functional. If it does not illuminate when you switch the ignition on, or begins to flash at any time, have the system checked.

Brakes

HINTS ON DRIVING WITH ANTI-LOCK BRAKES

The anti-lock braking system does not eliminate the risks when:

- You drive too closely to the vehicle in front of you.
- Your vehicle is hydroplaning.
- You take corners too fast.
- The road surface is poor.

Note: *If the system activates, the brake pedal may pulse and may travel further. Maintain pressure on the brake pedal. You may also hear a noise from the system. This is normal.*

ELECTRIC PARKING BRAKE



WARNING: Always fully apply the parking brake and make sure you shift into park (P). Failure to follow this instruction could result in personal injury or death.



WARNING: If you drive extended distances with the parking brake applied, you could cause damage to the brake system.



WARNING: The electric parking brake does not operate if the vehicle battery is running out of charge.

Your vehicle has an electric parking brake. You operate it with a switch instead of a lever. The switch is on the center console or to the left-hand side of the steering wheel, on the lower part of the instrument panel.

Note: *The electric parking brake makes noises during operation. This is normal.*

Applying the Electric Parking Brake



Pull the switch upward.



The red warning lamp flashes during operation and illuminates when the parking brake is applied.



Note: *It remains illuminated for a short period of time after you switch the ignition off.*

If it continues to flash or does not illuminate, the system has malfunctioned. Have your vehicle checked as soon as possible.

Note: *You can apply the electric parking brake when the ignition is off.*

Note: *The electric parking brake could automatically apply when you shift into park (P). See **Transmission** (page 227).*

Applying the Electric Parking Brake in an Emergency

Note: *Do not apply the electric parking brake when your vehicle is moving, except in an emergency. If you repeatedly use the electric parking brake to slow or stop your vehicle, you could cause damage to the brake system.*

You can use the electric parking brake to slow or stop your vehicle in an emergency.

Brakes



Pull the switch upward and hold it.



The red warning lamp illuminates, a tone sounds and the stoplamps turn on.



The electric parking brake continues to slow your vehicle down unless you release the switch.

Manually Releasing the Electric Parking Brake

Switch the ignition on.

Press and hold the brake pedal.



Push the switch downward.



The red warning lamp turns off.



If it remains illuminated or flashes, the system has malfunctioned. Have your vehicle checked as soon as possible.

Pulling Away on a Hill When Towing a Trailer

Press and hold the brake pedal.



Pull the switch upward and hold it.

Shift into gear.

Press the accelerator pedal until engine has developed sufficient torque to prevent your vehicle from rolling down the hill.



Release the switch and pull away in a normal manner.

Automatically Releasing the Electric Parking Brake

Close the driver door.

Shift into gear.

Press the accelerator pedal and pull away in a normal manner.



The red warning lamp turns off.



If it remains illuminated or flashes, the electric parking brake has not released. Manually release the parking brake.

Releasing the Electric Parking Brake if the Vehicle Battery is Running Out of Charge

Connect a booster battery to the vehicle battery to release the electric parking brake if the vehicle battery is running out of charge. See **Jump Starting the Vehicle** (page 346).

Brakes

HILL START ASSIST



WARNING: The system does not replace the parking brake. When you leave your vehicle, always apply the parking brake and shift the transmission into park (P) for automatic transmission or first gear for manual transmission.



WARNING: You must remain in your vehicle when the system turns on. At all times, you are responsible for controlling your vehicle, supervising the system and intervening, if required. Failure to take care may result in the loss of control of your vehicle, serious personal injury or death.

Note: *If the engine is revved excessively, or if a malfunction is detected, the system will be deactivated.*

The system makes it easier to pull away when your vehicle is on a slope without the need to use the parking brake.

When the system is active, your vehicle will remain stationary on the slope for two to three seconds after you release the brake pedal. This allows you time to move your foot from the brake to the accelerator pedal. The brakes release automatically when the engine has sufficient torque to prevent your vehicle from rolling down the grade. This is an advantage when pulling away on a slope, for example from a car park ramp, traffic lights or when reversing uphill into a parking space.

The system will activate automatically on any slope that will cause significant vehicle rollback. For vehicles with a manual transmission, you can switch this feature off using the information display. See **Information Displays** (page 134). The system will remain on or off depending on how it was last set.

Note: *There is no warning lamp to indicate the system is either on or off.*

Note: *If your vehicle is equipped with Auto Hold, Hill Start Assist will not be available while Auto Hold is active.*

Using Hill Start Assist

1. Bring your vehicle to a complete standstill. Keep the brake pedal pressed and select an uphill gear (for example, drive (D) or first (1) when facing uphill or reverse (R) when facing downhill).
2. If the sensors detect that your vehicle is on a slope, the system will activate automatically.
3. When you remove your foot from the brake pedal, your vehicle will remain on the slope without rolling away for about two or three seconds. This hold time will automatically be extended if you are in the process of driving off.
4. Drive off in the normal manner. The brakes will release automatically.

Switching the System On and Off

You can switch this feature on or off if your vehicle is equipped with a manual transmission and an information display. See **General Information** (page 134). The system remembers the last setting when you start your vehicle.

Brakes

If your vehicle is not equipped with a manual transmission and an information display, you cannot turn the system on or off. When you switch the ignition on, the system automatically turns on.

AUTO HOLD



WARNING: The system does not replace the parking brake. When you leave your vehicle, always apply the parking brake.



WARNING: You must remain in your vehicle when the system turns on. At all times, you are responsible for controlling your vehicle, supervising the system and intervening, if required. Failure to take care may result in the loss of control of your vehicle, serious personal injury or death.



WARNING: The system will turn off if a malfunction is apparent. Failure to take care may result in the loss of control of your vehicle, serious personal injury or death.

The system uses your vehicle's brakes to hold your vehicle at a standstill after you stop your vehicle and release the brake pedal. For example, Auto Hold can assist you while stopping at traffic lights or while in traffic jams by holding the brake pressure for you once you bring your vehicle to a stop.

Make sure you switch the system off before towing with your vehicle.

Note: In case of a malfunction in the system while Auto Hold actively holds the vehicle (for example, low power supply), a message appears in the information display asking you to press the brake pedal. If you see this message, press the brake pedal immediately.

Note: The system only activates if it recognizes it is applying enough brake pressure. On a steep hill or slope, make sure you press the brake pedal sufficiently to activate the system.

Note: In some cases, Auto Hold might hand over to the parking brake. When the parking brake applies, the red brake lamp appears. This is normal. When you press the accelerator pedal, the drive away release feature releases the parking brake.

Note: Auto Hold works on all road grades.



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Press the button to switch the system on and off. The indicator light illuminates when you switch the system on.

Note: You can only switch the system on if you close the door and fasten your seatbelt.

Note: The system turns off every time you power down your vehicle.


Brakes


Note: *The system remembers the last setting when you start your vehicle.*

Note: *When in reverse (R), Auto Hold does not function.*

When the system is off, your vehicle behaves the same as a vehicle without Auto Hold.

There is an indicator lamp in the instrument cluster that has two modes, active and unavailable:

 The auto hold active indicator illuminates in the information display when the system holds your vehicle stationary. When in active mode, press the brake pedal and the Auto Hold button to switch the system off.

 The auto hold unavailable indicator illuminates in the information display when the system is on but unavailable to hold your vehicle (for example, during Active Park Assist, Stay in Neutral Mode, or when you do not fasten your seatbelt or close the door).

Note: *Make sure you switch off Auto Hold or use the Stay in Neutral mode before you enter a car wash. See **Automatic Transmission** (page 227).*

Using Auto Hold

1. Use the brakes to bring your vehicle to a complete stop. The auto hold active indicator illuminates in the information display.
2. Release the brake pedal. The system holds your vehicle at a standstill. The auto hold active indicator remains illuminated in the information display.
3. When you press the accelerator pedal, the system releases the brakes and you will be able to drive off. Once you drive off, the auto hold active indicator no longer illuminates in the information display.

Note: *The auto-start-stop system (if equipped) may stop the engine when you press the brake pedal. If this occurs, it restarts once you press the accelerator pedal. Auto Hold still holds your vehicle at a standstill with the engine off.*

Traction Control

PRINCIPLE OF OPERATION

The traction control system helps avoid drive wheel spin and loss of traction.

If your vehicle begins to slide, the system applies the brakes to individual wheels and, when needed, reduces engine power at the same time. If the wheels spin when accelerating on slippery or loose surfaces, the system reduces engine power in order to increase traction.

USING TRACTION CONTROL



WARNING: The stability and traction control light illuminates steadily if the system detects a failure. Make sure you did not manually disable the traction control system using the information display controls or the switch. If the stability control and traction control light is still

illuminating steadily, have the system serviced by an authorized dealer immediately. Operating your vehicle with the traction control disabled could lead to an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.

The system automatically turns on each time you switch the ignition on.

If your vehicle is stuck in mud or snow, switching traction control off may be beneficial as this allows the wheels to spin.

Note: When you switch traction control off, stability control remains fully active.

Switching the System On and Off

You can switch traction control on and off through the information display controls. See **General Information** (page 134).

When you switch the system off, a message and an illuminated icon appear on the instrument cluster.

Switch traction control on again to return the system to normal operations.

Note: Your vehicle may have MyKey restrictions regarding this feature. See **Principle of Operation** (page 79).

System Indicator Lights and Messages



The stability and traction control light temporarily illuminates on engine start-up and flashes:

- When a driving condition activates either of the systems.
- If a problem occurs in either of the systems.



The stability and traction control off light temporarily illuminates on engine start-up and stays on when you switch the traction control system off.

Stability Control

PRINCIPLE OF OPERATION



WARNING: Vehicle modifications involving braking system, aftermarket roof racks, suspension, steering system, tire construction and wheel and tire size may change the handling characteristics of your vehicle and may adversely affect the performance of the electronic stability control system. In addition, installing any stereo loudspeakers may interfere with and adversely affect the electronic stability control system. Install any aftermarket stereo loudspeaker as far as possible from the front center console, the tunnel, and the front seats in order to minimize the risk of interfering with the electronic stability control sensors. Reducing the effectiveness of the electronic stability control system could lead to an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.



WARNING: Remember that even advanced technology cannot defy the laws of physics. It's always possible to lose control of a vehicle due to inappropriate driver input for the conditions. Aggressive driving on any road condition can cause you to lose control of your vehicle increasing the risk of personal injury or property damage. Activation of the electronic stability control system is an indication that at least some of the tires have exceeded their ability to grip the road; this could reduce the operator's ability to control the vehicle potentially resulting in a loss of vehicle control, vehicle rollover, personal injury and death. If your electronic stability control system activates, **SLOW DOWN**.

The system automatically turns on each time you switch the ignition on.

If a fault occurs in either the stability control or the traction control system, you may experience the following conditions:

- The stability and traction control light illuminates steadily.
- The stability control and traction control systems do not enhance your vehicle's ability to maintain traction of the wheels.

If a driving condition activates either the stability control or the traction control system you may experience the following conditions:

- The stability and traction control light flashes.
- Your vehicle slows down.
- Reduced engine power.
- A vibration in the brake pedal.
- The brake pedal is stiffer than usual.
- If the driving condition is severe and your foot is not on the brake, the brake pedal may move as the system applies higher brake force.

The stability control system has several features built into it to help you maintain control of your vehicle:

Stability Control

Electronic Stability Control

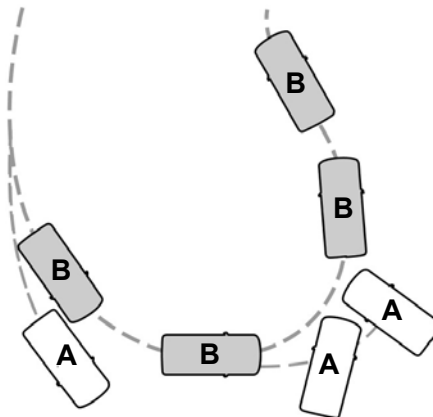
The system enhances your vehicle's ability to prevent skids or lateral slides by applying brakes to one or more of the wheels individually and, if necessary, reducing engine power.

Roll Stability Control

The system enhances your vehicle's ability to prevent rollovers by detecting your vehicle's roll motion and the rate at which it changes by applying the brakes to one or more wheels individually.

Traction Control

The system enhances your vehicle's ability to maintain traction of the wheels by detecting and controlling wheel spin. See **Using Traction Control** (page 247).



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- A Vehicle without stability control skidding off its intended route.
- B Vehicle with stability control maintaining control on a slippery surface.

USING STABILITY CONTROL

Stability Control and Traction Control with Roll Stability Control™ (RSC™)

The system automatically activates when you start the engine. It disables when the transmission is in reverse (R). You can switch off the traction control portion of the system independently. See **Using Traction Control** (page 247).

Hill Descent Control (If Equipped)

PRINCIPLE OF OPERATION



WARNING: Hill descent control cannot control descent in all surface conditions and circumstances, such as ice or extremely steep grades. Hill descent control is a driver assist system and cannot substitute for good judgment by the driver. Failure to do so may result in loss of vehicle control, crash or serious injury.

Hill descent control allows you to set and maintain vehicle speed when descending steep grades in various surface conditions.

Hill descent control can maintain vehicle speeds on downhill grades between 0 mph (3 km/h) and 20 mph (32 km/h). Above 20 mph (32 km/h), the system remains armed, but you cannot use the system to set or maintain the descent speed.

Hill descent control requires a cooling down interval after a period of sustained use. The amount of time that the feature can remain active before cooling varies with conditions. The system provides a warning in the message center and a tone sounds when the system is about to disengage for cooling. At this time, manually apply the brakes as needed to maintain descent speed.

USING HILL DESCENT CONTROL



You can switch the hill descent control on and off through the information display.

To increase descent speed, press the accelerator pedal until you reach the desired speed. To decrease descent speed, press the brake pedal until you reach the desired speed.

Whether accelerating or decelerating, once you reach the desired descent speed, remove your feet from the pedals and hill descent control maintains the chosen vehicle speed.

Note: You may observe noise from the ABS pump motor during hill descent control operation. This is a normal characteristic of the ABS and should be no reason for concern.

Hill Descent Modes

- At speeds between 2 mph (3 km/h) and 20 mph (32 km/h): Your vehicle maintains the speed you desire while in this mode.
- At speeds between 20 mph (32 km/h) and 40 mph (64 km/h): Your vehicle does not maintain the speed you desire and you cannot set your descent speed.
- At speeds above 40 mph (64 km/h): You need to switch this feature back on to use.

Refer to the Information Display for additional hill descent control messages. See **Information Messages** (page 139).

Parking Aids

PRINCIPLE OF OPERATION



WARNING: To help avoid personal injury, always use caution when in reverse (R) and when using the sensing system.



WARNING: The system may not detect objects with surfaces that absorb reflection. Always drive with due care and attention. Failure to take care may result in a crash.



WARNING: Traffic control systems, inclement weather, air brakes, external motors and fans may affect the correct operation of the sensing system. This may cause reduced performance or false alerts.



WARNING: The system may not detect small or moving objects, particularly those close to the ground.

Note: Certain add-on devices installed around the bumper or fascia may create false beeps. For example, large trailer hitches, bike or surfboard racks, license plate brackets, bumper covers or any other device that may block the normal detection zone of the system.

Note: Keep the sensors, located on the bumper or fascia, free from snow, ice and large accumulations of dirt. If the sensors are covered, the system's accuracy can be affected. Do not clean the sensors with sharp objects.

Note: If your vehicle sustains damage to the bumper or fascia, leaving it misaligned or bent, the sensing zone may be altered causing inaccurate measurement of obstacles or false alarms. See your authorized technician.

Note: When a trailer is connected to your vehicle, the rear parking aid may detect the trailer and therefore provide warnings. Disable the rear parking aid when a trailer is connected to prevent these warnings.

Note: The sensing system cannot be turned off when a MyKey is present. See **Principle of Operation** (page 79).

We recommend that you take some time to get to know the system and its limitations by reading this section.

The sensing system warns the driver of obstacles within a certain range of your vehicle. The system automatically turns on each time you switch the ignition on.

When receiving a detection warning, the radio volume reduces to a predetermined level. After the warning goes away, the radio volume returns to the previous level.



You can turn the system on or off by pressing the parking aid button. If your vehicle does not have a parking aid button, the system can be switched off through the information display menu or from the pop-up message that appears once you shift the transmission into reverse (R). See **General Information** (page 134).

Parking Aids

If a fault is present in the system, a warning message appears in the information display and does not allow you to switch the system on. See **Information Messages** (page 139).

If a sensor is blocked and cannot function, the system becomes disabled and a warning message appears in the information display. The system returns to a normal state once the blockage is cleared.

REAR PARKING AID



WARNING: The system may not detect objects with surfaces that absorb reflection. Always drive with due care and attention. Failure to take care may result in a crash.



WARNING: The system may not detect small or moving objects, particularly those close to the ground.



WARNING: To help avoid personal injury, always use caution when in reverse (R) and when using the sensing system.



WARNING: The parking aid system can only assist you to detect objects when your vehicle is moving at parking speeds. To help avoid personal injury you must take care when using the parking aid system.

Note: *Keep the sensors free from snow, ice and large accumulations of dirt.*

Note: *Do not cover up the sensors.*

Note: *Do not clean the sensors with sharp objects.*

Note: *If your vehicle sustains damage leaving the sensors misaligned, this may cause inaccurate measurements or false alerts.*

Note: *Some accessories, for example large trailer hitches or bike or surfboard racks can cause reduced performance or false alerts.*

The sensors are on the rear bumper.

The sensors are active when the transmission is in reverse (R) and the vehicle speed is less than 3 mph (5 km/h). When the parking aid system sounds a tone, the audio system may reduce the set volume.

A warning tone sounds when your vehicle approaches an object. As your vehicle moves closer to an object, the rate of the tone increases. The warning tone continuously sounds when an object is 12 in (30 cm) or less from the center of the rear bumper.

Note: *There is a decreased coverage area at the outer corners.*

Parking Aids



The sensor coverage area is up to 70 in (180 cm) from the rear bumper.

If the system detects a fault, a warning message appears in the information display.

The system detects large objects when you shift into reverse (R) and any of the following occur:

- Your vehicle is moving backward at low speed.
- Your vehicle is stationary but an object is approaching the rear of your vehicle at low speed.
- Your vehicle is moving backward at low speed and an object is moving toward your vehicle, for example another vehicle at low speed.

If your vehicle remains stationary for two seconds the audible warning turns off. If your vehicle moves backward the tone sounds again.

Note: *If the detected object is 12 in (30 cm) or less from the rear bumper, the audible warning does not turn off.*

Object Distance Indicator (If Equipped)




The system provides object distance indication through the information display.


- As the distance to the object decreases, the indicator blocks illuminate and move toward the vehicle icon.
- If the system does not detect an object, the distance indicator blocks are gray.


Parking Aids

When you shift into reverse (R), the system provides audible warnings and visual indication when your vehicle is moving and the detected object is moving toward your vehicle. When you stop your vehicle, the audible warnings stop after two seconds. Visual indication remains on when the transmission is in reverse (R).

FRONT PARKING AID

 **WARNING:** The system may not detect objects with surfaces that absorb reflection. Always drive with due care and attention. Failure to take care may result in a crash.

 **WARNING:** The system may not detect small or moving objects, particularly those close to the ground.

 **WARNING:** To help avoid personal injury, always use caution when in reverse (R) and when using the sensing system.



WARNING: The parking aid system can only assist you to detect objects when your vehicle is moving at parking speeds. To help avoid personal injury you must take care when using the parking aid system.

Note: *Keep the sensors free from snow, ice and large accumulations of dirt.*

Note: *Do not cover up the sensors.*

Note: *Do not clean the sensors with sharp objects.*

Note: *If your vehicle sustains damage leaving the sensors misaligned, this may cause inaccurate measurements or false alerts.*

Note: *Some accessories, for example large trailer hitches or bike or surfboard racks can cause reduced performance or false alerts.*

The sensors are on the front bumper.

The sensors are active when the transmission is in any position other than park (P). When the parking aid system sounds a tone, the audio system may reduce the set volume.

A warning tone sounds when your vehicle approaches an object. As your vehicle moves closer to an object, the rate of the tone increases. The warning tone continuously sounds when an object is 12 in (30 cm) or less from the front bumper.

Note: *There is a decreased coverage area at the outer corners.*

The system turns off when the vehicle speed reaches 5 mph (8 km/h).



Parking Aids

The sensor coverage area is up to 28 in (70 cm) from the center of the bumper.

If the transmission is in reverse (R), the system detects objects when your vehicle is moving at low speed or an object is moving toward your vehicle, for example another vehicle at low speed. When you stop your vehicle, the audible warning turns off after two seconds.

If the transmission is in any forward gear, the system provides audible warnings when your vehicle is moving and an object is within the detection area. When you stop your vehicle, the audible warning turns off after two seconds and the visual warning turns off after four seconds.

If the system detects a fault, a warning message appears in the information display.

Object Distance Indicator (If Equipped)



The system provides object distance indication through the information display.

- As the distance to the object decreases, the indicator blocks illuminate and move toward the vehicle icon.
- If there is no object detected, the distance indicator blocks are gray.


When you shift into any forward gear, the system provides audible warnings and visual indication when your vehicle is moving at a speed of approximately 5 mph (8 km/h) or below and the system detects an object within the detection zone. When you stop your vehicle, the audible warnings stop after two seconds and visual indication stops after four seconds.


Note: *If the detected object is 12 in (30 cm) or less from your vehicle, visual indication remains on.*


When you shift into neutral (N), the system only provides visual indication if your vehicle is moving at a speed of approximately 5 mph (8 km/h) or below, for example, your vehicle is moving on a slope, and the system detects an object moving toward your vehicle. When you stop your vehicle, visual indication stops after four seconds.


Parking Aids

SIDE SENSING SYSTEM

 **WARNING:** The system may not detect objects with surfaces that absorb reflection. Always drive with due care and attention. Failure to take care may result in a crash.

 **WARNING:** The system may not detect small or moving objects, particularly those close to the ground.

 **WARNING:** To help avoid personal injury, always use caution when in reverse (R) and when using the sensing system.

 **WARNING:** The parking aid system can only assist you to detect objects when your vehicle is moving at parking speeds. To help avoid personal injury you must take care when using the parking aid system.

The system uses the front and rear outermost parking aid sensors to detect objects that are near to the sides of your vehicle. The system displays them on a virtual map in the information display as your vehicle moves past them.

The sensors are on the front and rear bumpers.

Note: *Keep the sensors free from snow, ice and large accumulations of dirt.*

Note: *Do not cover up the sensors.*

Note: *Do not clean the sensors with sharp objects.*

Note: *If your vehicle sustains damage leaving the sensors misaligned, this may cause inaccurate measurements or false alerts.*

The system may not function if:

- You switch the ignition on, off and back on within a few seconds.
- Your vehicle remains stationary for over two minutes.
- The anti-lock brake system activates.
- The traction control system activates.

Note: *If you switch traction control off, the side sensing system also turns off.*

Note: *Some accessories, for example large trailer hitches or bike or surfboard racks can cause reduced performance or false alerts.*

To reinitialize the system, you may have to drive your vehicle approximately 10 ft (3 m).



The sensor coverage area is up to 24 in (60 cm) from the side of your vehicle.

Parking Aids

When the system detects an object within the coverage area and the driving path of your vehicle, an audible warning sounds. As your vehicle moves closer to the object, the rate of the tone increases.

Note: *The system does not detect an object that is moving toward the side of your vehicle, for example another vehicle moving at low speed, if it does not pass a front or rear sensor.*

Object Distance Indicator (If Equipped)



The system provides object distance indication through the information display.

- As the distance to the object decreases, the indicator blocks illuminate and move toward the vehicle icon.
- If there is no object detected, the distance indicator blocks are gray.

When you shift into reverse (R), the system provides audible warnings and a visual indication when detected objects are within 24 in (60 cm) and are inside the driving path of your vehicle. When you stop your vehicle, the audible warnings turn off after two seconds.


When you shift into any forward gear, the system provides audible warnings and a visual indication when your vehicle is moving at a speed of approximately 5 mph (8 km/h) or below and the system detects an object within the detection zone. When you stop your vehicle, the audible warnings turn off after two seconds and the visual indication turns off after four seconds.


When you shift into neutral (N), the system only provides a visual indication if your vehicle is moving at a speed of approximately 5 mph (8 km/h) or below. For example, your vehicle is moving on a slope, and the system detects an object moving toward your vehicle. When you stop your vehicle, the visual indication turns off after four seconds.


Parking Aids

If the system is not available, the side distance indicator blocks do not display.

ACTIVE PARK ASSIST

 **WARNING:** You must remain in your vehicle when the system turns on. At all times, you are responsible for controlling your vehicle, supervising the system and intervening, if required. Failure to take care may result in the loss of control of your vehicle, serious personal injury or death.

 **WARNING:** The sensors may not detect objects in heavy rain or other conditions that cause interference.

 **WARNING:** Active park assist does not apply the brakes under any circumstances.



WARNING: You are responsible for controlling your vehicle at all times. The system is designed to be an aid and does not relieve you of your responsibility to drive with due care and attention. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death.

Active park assist is a multi-step process and may require you to shift the transmission multiple times. Follow the onscreen instructions until the parking maneuver is complete.

If you are uncomfortable with the proximity to any vehicle or object, you may choose to override the system by grabbing the steering wheel, or by taking full control of your vehicle after pressing the active park assist button.

Keep your hands, hair, clothing and any loose items clear of the steering wheel when using active park assist.

The sensors are on the front and rear bumpers.

Note: Keep the sensors free from snow, ice and large accumulations of dirt.

Note: Do not cover up the sensors.

Note: Do not clean the sensors with sharp objects.

Note: The sensors may not detect objects with surfaces that absorb ultrasonic waves. The sensors may falsely detect objects due to ultrasonic interference caused by motorcycle exhausts, truck air brakes or horns, for example.

Note: If you change any tires, the system must recalibrate and may not correctly operate for a short time.

The system may not correctly operate in any of the following conditions:

- You use a spare tire or a tire that is significantly worn more than the other tires.
- One or more tires are incorrectly inflated.
- You try to park on a tight curve.
- Something passes between the front bumper and the parking space. For example, a pedestrian or cyclist.

Parking Aids

- The edge of the neighboring parked vehicle is high off the ground. For example, a bus, tow truck or flatbed truck.
- The weather conditions are poor. For example, during heavy rain, snow, fog, high humidity and high temperatures.

Do not use the system if:

- You have attached an add-on accessory close to the sensors on the front or rear of your vehicle. For example, a bike rack or trailer.
- You have attached an overhanging object to the roof. For example, a surfboard.
- The front bumper, rear bumper or the side sensors are damaged.
- The correct tire size is not in use on your vehicle. For example, a mini-spare tire.

Using Active Park Assist

Selecting an Active Park Assist Mode



Press the button once to activate parallel parking. Press the button a second time to activate perpendicular parking. If you press the button again the system switches off.

If your vehicle is parked and after you switch the ignition on, you can use the information display to toggle through the modes. Press the button to switch the system on and open the system menu in the information display.

Note: *If your vehicle is parked, the default mode is parallel park out assist. However, if you did not use active park assist to parallel park your vehicle, use the information display to select park out assist.*

Note: *You can repeatedly press the active park assist button to toggle through the modes only after moving your vehicle approximately 33 ft (10 m).*

To toggle through the modes, use the buttons on the information display to select the following:

- Parallel parking.
- Perpendicular parking.
- Parallel park out assist.
- Switch the system off.

Note: *There is no time limit for toggling through the modes.*

Parallel Parking

The system detects available parallel parking spaces and steers your vehicle into the space. You control the accelerator, gearshift and brakes. The system visually and audibly guides you into a parallel parking space.



Press the button once to search for a parking space.

Note: *You can also switch the system on after you have already driven partially or completely past a parking space. Press the active park assist button and the system informs you if you have recently passed a suitable parking space.*

Parking Aids

When the vehicle speed is less than 22 mph (35 km/h), the system scans both sides of your vehicle for an available parking space. A message and a graphic appear in the information display to indicate the system is searching for a parking space. Use the direction indicator lever to search for a parking space on the driver or passenger side of your vehicle.

Note: The system scans both sides of your vehicle and offers parking spaces one side at a time if you do not use the direction indicator.

Note: The system defaults to the passenger side if you do not use the direction indicator.



Drive your vehicle approximately 3 ft (1 m) and parallel to the other parked vehicles when searching for a parking space.

Note: If you drive your vehicle less than 2 ft (0.5 m) or greater than 5 ft (1.5 m) away from other parked vehicles, the system may not be able to detect an available parking space.

When the system detects a suitable space, a message displays and a tone sounds. Stop your vehicle and follow the onscreen instructions. If your vehicle is moving very slowly, you may have to move forward a short distance before the system is ready to park.

Note: You must observe that the space the system selects remains clear of obstructions at all times during the maneuver.

Note: The system always offers the last parking space it detects. For example, if your vehicle detects multiple spaces when you are driving, it offers the last one.

Note: If the vehicle speed is greater than approximately 22 mph (35 km/h), the system shows a message to instruct you to reduce the vehicle speed.

Automatically Steering into a Parallel Parking Space

When you shift into reverse (R), with your hands off the steering wheel and nothing obstructing its movement, your vehicle steers itself into the space. The system displays instructions to move your vehicle backward and forward in the space.

Note: If the vehicle speed exceeds approximately 6 mph (9 km/h), you interrupt the maneuver, or the system switches off, you must take full control of your vehicle.

Note: If the system detects an object is very close to your vehicle and it may be unsafe to continue the maneuver, it may instruct you to stop your vehicle. The system may not provide any further instruction. Steering assistance continues to operate but you must decide if it is safe to continue the maneuver.



Parking Aids

When you believe your vehicle is correctly parked, or a solid tone sounds and an information message appears, bring your vehicle to a complete stop.

When the Active Park Assist maneuver is complete, a tone sounds and an information message appears.

Note: *You are responsible for checking how your vehicle is parked and making any necessary corrections before leaving your vehicle.*

Deactivating Active Park Assist

You can manually deactivate the system by:

- Pressing the Active Park Assist button during an active maneuver.
- Grabbing the steering wheel during an active maneuver.
- Driving above 22 mph (35 km/h) for 30 seconds when searching for a parking space.
- Driving above 31 mph (50 km/h).
- Driving above 6 mph (9 km/h) during an active maneuver.
- Switching the traction control system off.

Certain vehicle conditions may also deactivate the system, for example:

- The traction control system activates or fails.
- The anti-lock brake system activates or fails.

If the system malfunctions, a message appears and a tone sounds. Have your vehicle checked as soon as possible.

Perpendicular Parking

The system detects available perpendicular parking spaces and steers your vehicle into the space. You control the accelerator, gearshift and brakes. The system visually and audibly guides you into a perpendicular parking space.



Press the button twice to search for a parking space.

When the vehicle speed is less than 19 mph (30 km/h), the system scans both sides of your vehicle for an available parking space. A message and a graphic appear in the information display to indicate the system is searching for a parking space. Use the direction indicator lever to search for a parking space on the driver or passenger side of your vehicle.

Note: *The system scans both sides of your vehicle and offers parking spaces one side at a time if you do not use the direction indicator.*

Note: *The system defaults to the passenger side if you do not use the direction indicator.*



Drive your vehicle approximately 3 ft (1 m) and perpendicular to the other parked vehicles when searching for a parking space.

Parking Aids

Note: If you drive your vehicle less than 2 ft (0.5 m) or greater than 5 ft (1.5 m) away from other parked vehicles, the system may not be able to detect an available parking space.

When the system detects a suitable space, a message displays and a tone sounds. Stop your vehicle and follow the onscreen instructions. If your vehicle is moving very slowly, you may have to move forward a short distance before the system is ready to park.

Note: You must observe that the space the system selects remains clear of obstructions at all times during the maneuver.

Note: The system always offers the last detected parking space. For example, if your vehicle detects multiple spaces when you are driving, it offers the last one.

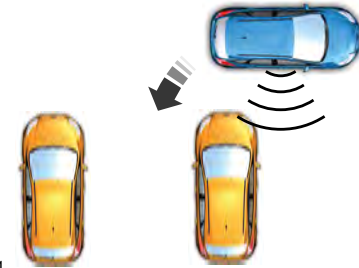
Note: If the vehicle speed is greater than approximately 19 mph (30 km/h), the system shows a message to instruct you to reduce the vehicle speed.

Automatically Steering into a Perpendicular Parking Space

When you shift into reverse (R), with your hands off the steering wheel and nothing obstructing its movement, your vehicle steers itself into the space. The system displays instructions to move your vehicle backward and forward in the space.

Note: If the vehicle speed exceeds approximately 6 mph (9 km/h), you interrupt the maneuver, or the system switches off, you must take full control of your vehicle.

Note: If the system detects an object is very close to your vehicle and it may be unsafe to continue the maneuver, it may instruct you to stop your vehicle. The system may not provide any further instruction. Steering assistance continues to operate but you must decide if it is safe to continue the maneuver.



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When you believe your vehicle is correctly parked, or a solid tone sounds and an information message appears, bring your vehicle to a complete stop.

When the active park assist maneuver is complete, a tone sounds and a message appears.

Note: You are responsible for checking how your vehicle is parked and making any necessary corrections before leaving your vehicle.

Parking Aids

Deactivating Active Park Assist

You can manually deactivate the system by:

- Pressing the Active Park Assist button during an active maneuver.
- Grabbing the steering wheel during an active maneuver.
- Driving above 19 mph (30 km/h) for 30 seconds when searching for a parking space.
- Driving above 31 mph (50 km/h).
- Driving above 6 mph (9 km/h) during an active maneuver.
- Switching the traction control system off.

Certain vehicle conditions may also deactivate the system, for example:

- The traction control system activates or fails.
- The anti-lock brake system activates or fails.

If the system malfunctions, a message appears and a tone sounds. Have your vehicle checked as soon as possible.

Parallel Park Out Assist

The system steers your vehicle out of a parallel parking space. You control the accelerator, gearshift and brakes. The system visually and audibly guides you out of a parallel parking space.

Note: This system is not intended to assist when exiting a perpendicular parking space.

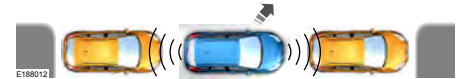


Press the button once when your vehicle is stationary in a parallel parking space.

Note: If you did not use active park assist to parallel park your vehicle, pressing the button once selects parallel park. You must use the information display to select park out assist.

The system displays a message instructing you to switch a direction indicator on. Use the direction indicator to select which side of your vehicle you want to exit the parking space. The system displays instructions to move your vehicle backward and forward in the space.

Note: If the system detects an object is very close to your vehicle and it may be unsafe to continue the maneuver, it may instruct you to stop your vehicle. The system may not provide any further instruction. Steering assistance continues to operate but you must decide if it is safe to continue the maneuver.



After the system directs your vehicle to a position where you can exit the parking space in a forward movement, a message appears instructing you to take full control of your vehicle. Generally, hand-over is when your vehicle is still inside the parking space.

Note: Parallel Park Out Assist may not be available when the clearance to the front or the rear of your vehicle is too small.

Note: If the vehicle speed exceeds approximately 6 mph (9 km/h), you interrupt the maneuver, or the system switches off, you must take full control of your vehicle.

Parking Aids

Note: *You are responsible for controlling your vehicle and making sure the path is clear prior to pulling into traffic.*

Troubleshooting


Symptom	Possible Cause
The system does not search for a parking space.	You may have switched the traction control off.
	The transmission is in reverse (R). Your vehicle must be moving forward to be able to detect a parking space.
The system does not offer a parking space.	The sensors may be blocked. For example, snow, ice or dirt buildup. Blocked sensors can affect how the system functions.
	There is not enough room in the parking space for your vehicle to safely park.
	There is not enough space for the parking maneuver on the opposite side of the parking space.
	The parking space is more than 5 ft (1.5 m) or less than 2 ft (0.5 m) away.
	The vehicle speed is greater than 22 mph (35 km/h) for parallel parking or greater than 19 mph (30 km/h) for perpendicular parking.
	You recently disconnected or replaced the battery. After you reconnect the battery you must drive your vehicle on a straight road for a short period of time.
The system does not correctly position your vehicle in a parking space.	Your vehicle is rolling in the opposite direction of the current transmission position. For example, rolling forward when in reverse (R).


Parking Aids


Symptom	Possible Cause
	An irregular curb along the parking space prevents the system from correctly aligning your vehicle.
	Vehicles or objects bordering the space may not be correctly parked.
	Your vehicle stopped too far past the parking space.
	The tires may not be correctly installed or maintained. For example, not inflated correctly, improper size, or of different sizes.
	A repair or alteration changes the detection capabilities.
	A parked vehicle has a high attachment. For example, a salt sprayer, snowplow or moving truck bed.
	The parking space length or position of parked objects changes after your vehicle passes the space.
	The temperature around your vehicle quickly changes. For example, driving from a heated garage into the cold, or after leaving a car wash.


Parking Aids


REAR VIEW CAMERA

 **WARNING:** The rear view camera system is a reverse aid supplement device that still requires the driver to use it in conjunction with the interior and exterior mirrors for maximum coverage.

 **WARNING:** Objects that are close to either corner of the bumper or under the bumper, might not be seen on the screen due to the limited coverage of the camera system.

 **WARNING:** Reverse your vehicle slowly. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death.

 **WARNING:** Use caution when the rear cargo door is ajar. If the rear cargo door is ajar, the camera will be out of position and the video image may be incorrect. All guidelines disappear when the rear cargo door is ajar. Failure to follow this instruction could result in personal injury.

 **WARNING:** Use caution when turning camera features on or off when the transmission is not in park (P). Make sure your vehicle is not moving.

The rear view camera system provides a video image of the area behind your vehicle. During operation, lines appear in the display which represent your vehicle's path and proximity to objects behind your vehicle.



The camera is located on the luggage compartment door, above the license plate.

Using the Rear View Camera System

The rear view camera system displays what is behind your vehicle when you place the transmission in reverse (R).

Note: *The reverse sensing system is not effective at speeds above 3 mph (5 km/h) and may not detect certain angular or moving objects.*

Parking Aids

The system uses three types of guides to help you see what is behind your vehicle:

- Active guidelines (if equipped): Show the intended path of your vehicle when reversing.
- Fixed guidelines: Show the actual path your vehicle is moving in while reversing in a straight line. This can be helpful when backing into a parking space or aligning your vehicle with another object behind you.
- Centerline: Helps align the center of your vehicle with an object. For example, a trailer.

Note: If the transmission is in reverse (R) and the luggage compartment door or liftgate is open, no rear view camera features display.

Note: When towing, the camera only sees what you are towing. This might not provide adequate coverage as it usually provides in normal operation and some objects might not be seen. In some vehicles, the guidelines may disappear when you connect the trailer tow connector.

The camera may not operate correctly under the following conditions:

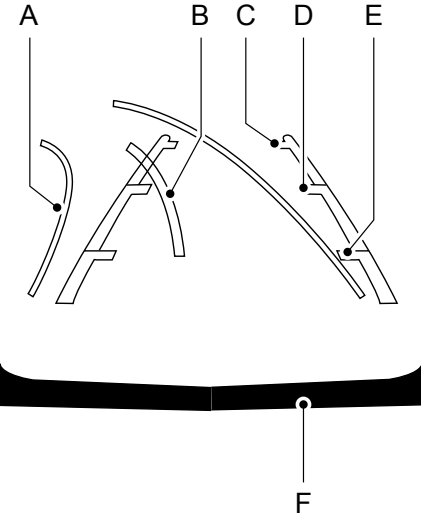
- Nighttime or dark areas if one or both reverse lamps are not operating.
- Mud, water or debris obstructs the camera's view. Clean the lens with a soft, lint-free cloth and non-abrasive cleaner. The rear view camera has a washer that activates when you use the rear window washer. See **Rear Window Wiper and Washers** (page 108).
- The rear of your vehicle is hit or damaged, causing the camera to become misaligned.

Camera System Settings

The rear view camera system settings can be accessed through the display screen. See **General Information** (page 134).

Camera Guidelines

Note: Active guidelines are only available when the transmission is in reverse (R).



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- A Active guidelines (If equipped)
- B Centerline
- C Fixed guideline: Green zone

Parking Aids

- D Fixed guideline: Yellow zone
- E Fixed guideline: Red zone
- F Rear bumper

Active guidelines are only shown with fixed guidelines. To use active guidelines, turn the steering wheel to point the guidelines toward an intended path. If you change the steering wheel position while reversing, your vehicle might deviate from the original intended path.

The fixed and active guidelines fade in and out depending on the steering wheel position. The active guidelines do not display when the steering wheel position is straight.

Always use caution while reversing. Objects in the red zone are closest to your vehicle and objects in the green zone are farther away. Objects are getting closer to your vehicle as they move from the green zone to the yellow or red zones. Use the side view mirrors and rear view mirror to get better coverage on both sides and rear of the vehicle.

Obstacle Distance Indicator (If Equipped)



The system will provide an image of your vehicle and the sensor zones. The zones will highlight green, yellow and red when the parking aid sensors detect an object in the coverage area.

Manual Zoom



WARNING: When manual zoom is on, the full area behind your vehicle may not show. Be aware of your surroundings when using the manual zoom feature.

Note: *Manual zoom is only available when the transmission is in reverse (R).*

Note: *When you enable manual zoom, only the centerline is shown.*

Selectable settings for this feature are Zoom in (+) and Zoom out (-). Press the symbol in the camera screen to change the view. The default setting is Zoom OFF.

This allows you to get a closer view of an object behind your vehicle. The zoomed image keeps the bumper in the image to provide a reference. The zoom is only active while the transmission is in reverse (R).

Rear Camera Delay

Selectable settings for this feature are ON and OFF.

Parking Aids

The default setting for the rear camera delay is OFF.

When shifting the transmission out of reverse (R) and into any gear other than park (P), the camera image remains in the display until:

- Your vehicle speed reaches approximately 6 mph (10 km/h).
- You shift your vehicle into park (P).

360 DEGREE CAMERA (IF EQUIPPED)



WARNING: The 360 degree camera system still requires the driver to use it in conjunction with looking out of the windows, and checking the interior and exterior mirrors for maximum coverage.



WARNING: Objects that are close to either corner of the bumper or under the bumper, might not be seen on the screen due to the limited coverage of the camera system.



WARNING: Use caution when turning camera features on or off when the transmission is not in park (P). Make sure your vehicle is not moving.

Note: *The 360 degree camera system turns off when your vehicle is in motion at low speed, except when in reverse (R).*

The 360 degree camera system consists of front, side and rear cameras. The system:

- Allows you to see what is directly in front or behind your vehicle.
- Provides cross traffic view in front and behind your vehicle.
- Allows you to see a top-down view of the area outside your vehicle, including the blind spots.
- Provides visibility around your vehicle in parking maneuvers such as:
 - Centering in a parking space.
 - Obstacles near vehicle.
 - Parallel parking.

Camera Views



The front camera enable button is near the display screen and turns on the front camera when your vehicle is not in reverse (R).

When in park (P), neutral (N) or drive (D), only images from the front cameras are displayed. Press the camera button to display the front camera image on the display screen.

When in reverse (R), only images from the rear cameras are displayed. When you shift into reverse (R), the rear view camera image automatically shows on the display screen.

Automatic 360 Degree Camera Activation

The system activates the 360 degree camera view when the front parking aid detects an object. The system displays the corresponding view when the object distance indicator detects an object. See **Front Parking Aid** (page 254).

Parking Aids

When the front parking aid system emits an audible tone, the 360 degree camera views are active and deactivates a few seconds after the tone stops. The camera view stays active for objects detected in the red parking aid zone regardless of tone. You can turn the view off by pressing the physical camera button.

Switching Automatic 360 Degree Camera Activation On and Off

You can turn the automatic 360 degree camera activation on and off through the parking aid button.

The automatic 360 degree camera activation is only available when you shift into drive (D) or neutral (N) and if your vehicle speed is below 6 mph (10 km/h).

The automatic 360 degree camera activation is not available when you shift into park (P) or reach speeds over 6 mph (10 km/h).

Note: *The rear camera and 360 degree camera operate normally regardless of object detection.*

Advanced Camera Views (If Equipped)



Additional camera views may be available for vehicles with specific features. Press the small camera icon shown on the top left corner of the display screen to open the camera view menu.

The following camera views can be accessed in park (P), neutral (N) or drive (D) when you press the camera button:

- **Front 360 + Normal:** Contains the normal front camera view next to a 360 degree camera view.
- **Front Normal View:** Provides an image of what is directly in front of your vehicle.
- **Front Split View:** Provides an extended view of what is in front of your vehicle.

The following camera views can be accessed when you shift into reverse (R):

- **Rear 360 + Normal:** Contains the normal rear camera view next to a 360 degree camera view. Press the zoom (+) button to quickly access Rear Normal View from this screen.
- **Rear Normal View:** Provides an image of what is directly behind your vehicle.
- **Rear Split View:** Provides an extended view of what is behind your vehicle.

Keep Out Zone

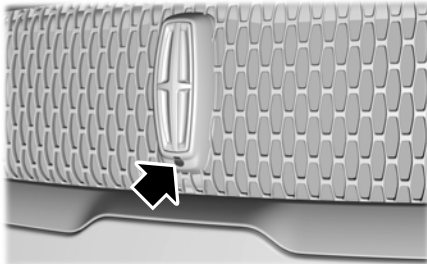
The Keep Out Zone is represented by the yellow dotted lines running parallel to your vehicle. It is designed to give you the indication on the ground of the fully extended outside mirror position.

Front Camera



WARNING: The front camera system still requires the driver to use it in conjunction with looking out of your vehicle.

Parking Aids

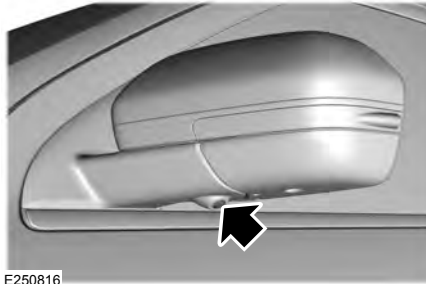


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The front video camera, in the grille, provides a video image of the area in front of your vehicle. It adds assistance to the driver while driving forward at low speeds. To use the front video camera system, place the transmission in any gear except reverse (R). An image will display once the camera enable button is pressed. The area displayed on the screen may vary according to your vehicle's orientation and/or road condition.

The front camera has a washer that activates when you use the windshield washer. See **Windshield Washers** (page 108).

Side Camera



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The side view camera, in the outside mirror, provides a video image of the area on the sides of your vehicle as part of the front 360 + normal view and rear 360 + normal view. It aids you while parking your vehicle either forward or backward.

Note: Use caution when using the 360 view while any of the doors are ajar. If a door is ajar, the camera will be out of position and the video image may be incorrect.

Cruise Control


WHAT IS CRUISE CONTROL

Cruise control lets you maintain a set speed without keeping your foot on the accelerator pedal.

Requirements


Use cruise control when the vehicle speed is greater than 20 mph (30 km/h).

SWITCHING CRUISE CONTROL ON AND OFF


 **WARNING:** Do not use cruise control on winding roads, in heavy traffic or when the road surface is slippery. This could result in loss of vehicle control, serious injury or death.

The cruise controls are on the steering wheel. See **Cruise Control** (page 103).

Switching Cruise Control On

 Press the button.


Switching Cruise Control Off

 Press the button when the system is in standby mode.


The system also turns off when you switch the ignition off.

Note: *The set speed erases when you switch the system off.*

SETTING THE CRUISE CONTROL SPEED

 **WARNING:** When you are going downhill, your vehicle speed could increase above the set speed. The system does not apply the brakes.

Drive to the speed you prefer.


 Press either button to set the current speed.




Take your foot off the accelerator pedal.

Note: *The indicator changes color in the information display.*

Changing the Set Speed

 Press and release the button to increase the set speed in small increments.

Press and hold the button to accelerate. Release the button when you reach your preferred speed.

 Press and release the button to decrease the set speed in small increments.

Press and hold the button to decelerate. Release the button when you reach your preferred speed.

Cruise Control

Note: If you accelerate by pressing the accelerator pedal, the set speed does not change. When you release the accelerator pedal, your vehicle returns to the speed that you previously set.

CANCELING THE SET SPEED

CAN Press the button, or tap the brake pedal to cancel the set speed.


Note: The system remembers the set speed.

Note: The system cancels if the vehicle speed drops below 10 mph (16 km/h) under the set speed when driving uphill.


RESUMING THE SET SPEED


RES Press the button.


CRUISE CONTROL INDICATORS


 Illuminates when you switch the system on.


USING ADAPTIVE CRUISE CONTROL (IF EQUIPPED)


 **WARNING:** Always pay close attention to changing road conditions when using adaptive cruise control. The system does not replace attentive driving. Failing to pay attention to the road may result in a crash, serious injury or death.

 **WARNING:** Do not use the adaptive cruise control when entering or leaving a highway, on roads with intersections or roundabouts or non-vehicular traffic or roads that are winding, slippery, unpaved, or steep slopes.


 **WARNING:** Do not use the system in poor visibility, for example fog, heavy rain, spray or snow.

 **WARNING:** Do not use the system when towing a trailer that has aftermarket electronic trailer brake controls. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death.


 **WARNING:** Do not use tire sizes other than those recommended because this can affect the normal operation of the system. Failure to do so may result in a loss of vehicle control, which could result in serious injury.

 **WARNING:** Adaptive cruise control may not detect stationary or slow moving vehicles below 6 mph (10 km/h).

 **WARNING:** Adaptive cruise control does not detect pedestrians or objects in the road.

 **WARNING:** Adaptive cruise control does not detect oncoming vehicles in the same lane.

Cruise Control

 **WARNING:** Adaptive cruise control is not a crash warning or avoidance system.

The system adjusts your vehicle speed to maintain the set gap between you and the vehicle in front of you in the same lane. You can select four gap settings.

The system uses a radar sensor which projects a beam directly in front of your vehicle.

Note: It is your responsibility to stay alert, drive safely and be in control of the vehicle at all times.



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The cruise controls are on the steering wheel. See **Cruise Control** (page 103).

Switching Adaptive Cruise Control On

ON

Press and release the button.



The indicator, current gap setting and set speed appear in the information display.



Setting the Adaptive Cruise Speed

Drive to your preferred speed.

SET-

Press and release the button.

Take your foot off the accelerator pedal.

The indicator, current gap setting and set speed appear in the information display.



Note: When adaptive cruise control is active, the speedometer may vary slightly from the set speed displayed in the information display.

Setting the Adaptive Cruise Speed When Your Vehicle is Stationary

Follow a vehicle to a complete stop.

RES+

Press while keeping the brake pedal fully pressed.

The set speed adjusts to 20 mph (30 km/h).

The indicator, current gap setting and set speed appear in the information display.

Cruise Control

Following a Vehicle



WARNING: When following a vehicle, your vehicle does not always decelerate quickly enough to avoid a crash without driver intervention. Always apply the brakes when necessary. Failing to do so may result in a crash, serious injury or death.



WARNING: Adaptive cruise control only warns of vehicles detected by the radar sensor. In some cases there may be no warning or a delayed warning. You should always apply the brakes when necessary. Failure to do so may result in a crash, serious injury or death.

When a vehicle ahead of you enters the same lane or a slower vehicle is ahead in the same lane, the vehicle speed adjusts to maintain a preset gap distance. A vehicle graphic illuminates in the instrument cluster.

Note: *The brakes may emit noise when applied by the system.*

Note: *When you are following a vehicle and you switch on a direction indicator, adaptive cruise control may provide a small temporary acceleration to help you pass.*

Your vehicle maintains a consistent gap from the vehicle ahead until:

- The vehicle in front of you accelerates to a speed above the set speed.
- The vehicle in front of you moves out of the lane you are in.
- You set a new gap distance.

The system applies the brakes to slow your vehicle to maintain a safe gap distance from the vehicle in front. The system only applies limited braking. You can override the system by applying the brakes.

If the system determines that its maximum braking level is not sufficient, an audible warning sounds, a message appears in the information display and an indicator flashes when the system continues to brake. Take immediate action.

Following a Vehicle to a Complete Stop

If your vehicle follows a vehicle to a complete stop and remains stationary for less than three seconds, your vehicle accelerates from a stationary position to follow the vehicle ahead.



If your vehicle follows a vehicle to a complete stop and remains stationary for more than three seconds, press to follow the vehicle ahead. Or press the accelerator pedal.

Setting the Gap Distance

You can decrease or increase the distance between your vehicle and the vehicle in front by pressing the gap control.



Press and release to decrease the gap distance.



Press and release to increase the gap distance.

Cruise Control



The selected gap appears in the information display as shown by the bars in the image.

Note: The gap setting is time dependent and therefore the distance adjusts with your vehicle speed.

Note: It is your responsibility to select a gap appropriate to the driving conditions.

Adaptive Cruise Control Gap Settings

Graphic display, bars indicated between vehicles	Distance Gap	Dynamic behavior
1	Closest.	Sport.
2	Close.	Normal.
3	Medium.	Normal.
4	Far.	Comfort.

Each time you switch the system on, it selects the last chosen gap setting.

Overriding the Set Speed



WARNING: If you override the system by pressing the accelerator pedal, it does not automatically apply the brakes to maintain a gap from any vehicle ahead.

When you press the accelerator pedal, you override the set speed and gap distance.



Use the accelerator pedal normally to intentionally exceed the set speed limit.

When you override the system, the green indicator light illuminates and the vehicle image does not appear in the information display.

The system resumes operation when you release the accelerator pedal. The vehicle speed decreases to the set speed, or a lower speed if following a slower vehicle.

Changing the Set Speed



Press and release to increase the set speed in small increments.



Press and release to decrease the set speed in small increments.

Press and hold either button to change the set speed in large increments. Release the button when you reach your preferred speed.

Cruise Control

The system may apply the brakes to slow the vehicle to the new set speed. The set speed displays continuously in the information display when the system is active.

Canceling the Set Speed

CAN Press and release the button or tap the brake pedal.

The set speed does not erase.

Resuming the Set Speed

RES+ Press and release the button.

Your vehicle speed returns to the previously set speed and gap setting. The set speed displays continuously in the information display when the system is active.

Note: Only use resume if you are aware of the set speed and intend to return to it.

Automatic Cancellation

Automatic cancellation can also occur when:

- The tires lose traction.
- You apply the parking brake.

Park Brake Application

Automatic parking brake application and cancellation occurs if:

- You unbuckle the seatbelt and open the door after you stop the vehicle.
- You hold the vehicle at a stop continuously for more than three minutes.

Hilly Condition Usage

You should select a lower gear when the system is active in situations such as prolonged downhill driving on steep grades, for example in mountainous areas. The system needs additional engine braking in these situations to reduce the load on the vehicle's regular brake system to prevent it from overheating.


Note: An audible alarm sounds and the system shuts down if it applies brakes for an extended period of time. This allows the brakes to cool. The system functions normally again after the brakes cool.


Switching Adaptive Cruise Control Off

OFF Press and release the button when the system is in standby mode, or switch the ignition off.

Note: You erase the set speed and gap setting when you switch the system off.

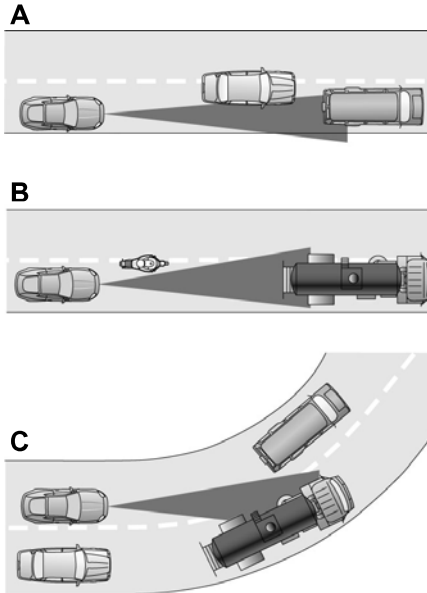
Detection Issues

 **WARNING:** On rare occasions, detection issues can occur due to the road infrastructures, for example bridges, tunnels and safety barriers. In these cases, the system may brake late or unexpectedly. At all times, you are responsible for controlling your vehicle, supervising the system and intervening, if required.

 **WARNING:** If the system malfunctions, have your vehicle checked as soon as possible.

Cruise Control

The radar sensor has a limited field of view. It may not detect vehicles at all or detect a vehicle later than expected in some situations. The lead vehicle graphic does not illuminate if the system does not detect a vehicle in front of you.



Detection issues can occur:

- A When driving on a different line than the vehicle in front.
- B With vehicles that edge into your lane. The system can only detect these vehicles once they move fully into your lane.
- C There may be issues with the detection of vehicles in front when driving into and coming out of a bend or curve in the road.

In these cases, the system may brake late or unexpectedly. You should stay alert and take action when necessary.

If something hits the front end of your vehicle or damage occurs, the radar-sensing zone may change. This could cause missed or false vehicle detection.

Optimal system performance requires a clear view of the road by the windshield-mounted camera.

Optimal performance may not occur if:

Cruise Control

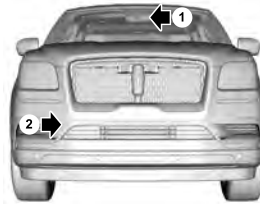
- The camera is blocked.
- There is poor visibility or lighting conditions.
- There are bad weather conditions.

System Not Available

Conditions that can cause the system to deactivate or prevent the system from activating when requested include:

- A blocked sensor.
- High brake temperature.
- A failure in the system or a related system.

Blocked Sensor



A message displays if something obstructs the radar signals from the sensor. The sensor is in the lower grille. The system cannot detect a vehicle ahead and does not function when something blocks the sensor.

Note: *You cannot see the sensor. It is behind a fascia panel.*

Keep the front of your vehicle free of dirt, metal badges or objects. Vehicle front protectors and aftermarket lights may also block the sensor.

Possible Causes and Actions for This Message Displaying:


Cause	Action
The surface of the radar is dirty or obstructed.	Clean the grille surface in front of the radar or remove the object causing the obstruction.
The surface of the radar is clean but the message remains in the display.	Wait a short time. It may take several minutes for the radar to detect that it is free from obstruction.
Heavy rain or snow is interfering with the radar signals.	Do not use the system in these conditions because it may not detect any vehicles ahead.

Cruise Control


Cause	Action
Water, snow or ice on the surface of the road may interfere with the radar signals.	Do not use the system in these conditions because it may not detect any vehicles ahead.
You are in a desert or remote area with no other vehicles and no roadside objects.	Wait a short time or switch to normal cruise control.

Due to the nature of radar technology, it is possible to get a blockage warning with no actual block. A false blocked condition either self clears, or clears after you restart your vehicle.

Switching to Normal Cruise Control




WARNING: Normal cruise control will not brake when your vehicle is approaching slower vehicles. Always be aware of which mode you have selected and apply the brakes when necessary.


 The cruise control indicator light replaces the adaptive cruise control indicator light if you select normal cruise control. The gap setting does not display, and the system does not respond to lead vehicles. Automatic braking remains active to maintain set speed.


You can change from adaptive cruise control to normal cruise control through the information display. See **General Information** (page 134).


Driving Aids


DRIVER ALERT


 **WARNING:** The system is designed to aid the driver. It is not intended to replace your attention and judgment. You are still responsible to drive with due care and attention.


 **WARNING:** At all times, you are responsible for controlling your vehicle, supervising the system and intervening, if required. Failure to take care may result in the loss of control of your vehicle, serious personal injury or death.


 **WARNING:** The system may not function if the sensor is blocked.


 **WARNING:** Take regular rest breaks if you feel tired. Do not wait for the system to warn you.

 **WARNING:** Certain driving styles may result in the system warning you even if you are not feeling tired.

 **WARNING:** In cold and severe weather conditions the system may not function. Rain, snow and spray can all limit sensor performance.

 **WARNING:** The system will not operate if the sensor cannot track the road lane markings.

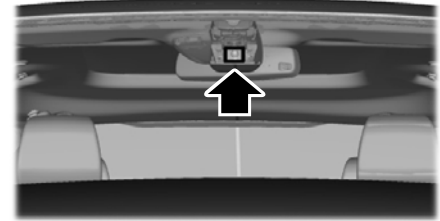
 **WARNING:** If damage occurs in the immediate area surrounding the sensor, have your vehicle checked as soon as possible.

 **WARNING:** The system may not correctly operate if your vehicle is fitted with a suspension kit not approved by us.

Note: *Keep the windshield free from obstructions. For example, bird droppings, insects and snow or ice.*

Note: *If the camera is blocked or if the windshield is damaged, the system may not function.*

Note: *If enabled in the menu, the system activates at speeds above 40 mph (64 km/h).*



E249505

The system automatically monitors your driving behavior using various inputs including the front camera sensor.

If the system detects that your driving alertness is reduced below a certain threshold, the system will alert you using a chime and a message in the information display.

Driving Aids

Using Driver Alert

Switching the system on and off

You may switch the system on or off through the information display. See **General Information** (page 134). When activated, the system monitors your alertness level based upon your driving behavior in relation to the lane markings, and other factors.

System Warnings

Note: *The system does not issue warnings below approximately 40 mph (64 km/h).*

The warning system is in two stages. At first the system issues a temporary warning that you need to take a rest. This message will only appear for a short time. If the system detects further reduction in driving alertness, another warning may be issued which will remain in the information display for a longer time. Press OK on the steering wheel control to clear the warning. When active the system will run automatically in the background and only issue a warning if required.

Resetting the System

You can reset the system by either:

- Switching the ignition off and on.
- Stopping your vehicle and then opening and closing the driver's door.

LANE KEEPING SYSTEM



WARNING: You are responsible for controlling your vehicle at all times. The system is designed to be an aid and does not relieve you of your responsibility to drive with due care and attention. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death.



WARNING: Always drive with due care and attention when using and operating the controls and features on your vehicle.



WARNING: In cold and severe weather conditions the system may not function. Rain, snow and spray can all limit sensor performance.



WARNING: The system will not operate if the sensor cannot track the road lane markings.



WARNING: The sensor may incorrectly track lane markings as other structures or objects. This can result in a false or missed warning.



WARNING: Large contrasts in outside lighting can limit sensor performance.



WARNING: The system may not operate properly if the sensor is blocked. Keep the windshield free from obstruction.



WARNING: If damage occurs in the immediate area surrounding the sensor, have your vehicle checked as soon as possible.

Driving Aids



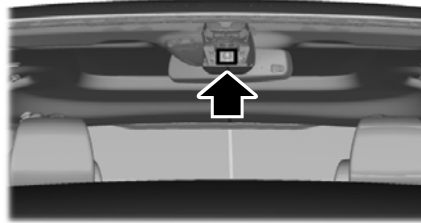
WARNING: The system may not correctly operate if your vehicle is fitted with a suspension kit not approved by us.

Note: The system works above 40 mph (64 km/h).

Note: The system works as long as the camera can detect one lane marking.

Note: When you select aid or alert and aid mode and the system detects no steering activity for a short period, the system alerts you to put your hands on the steering wheel. **The system may detect a light grip or touch on the steering wheel as hands off driving.**

Note: The system may not function if the camera is blocked, or if the windshield is damaged or dirty.



E249505

When you switch the system on and it detects an unintentional drift out of your lane is likely to occur, the system notifies or assists you to stay in your lane through the steering system and information display. In Alert mode, the system provides a warning by vibrating the steering wheel. In Aid mode, the system provides steering assistance by gently counter steering your vehicle back into the lane.

When the system is functioning in the combined Alert and Aid mode, the system first provides steering assistance by gently counter steering your vehicle back into the lane, followed by a warning that vibrates the steering wheel if the vehicle is still out of the lane markings.

Switching the System On and Off

Note: The system on or off setting is stored until it is manually changed, unless a MyKey™ is detected. If the system detects a MyKey™, it defaults to on and the mode is set to alert.



E132099

Press the button on the direction indicator stalk to switch the system on or off.

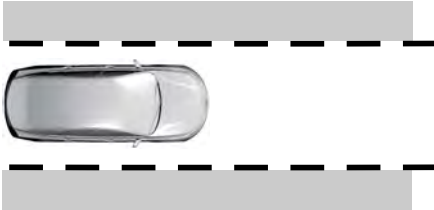
Driving Aids

System Settings

The system has optional menu settings available. See **General Information** (page 134). The system stores the last known selection for each of these settings. You do not need to readjust your settings each time you switch the system on.

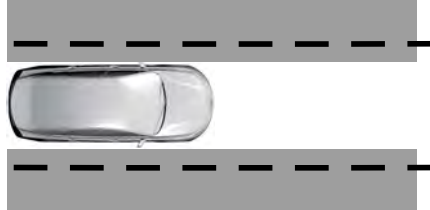
Adjust the settings to enable one of the three modes:

Alert Only



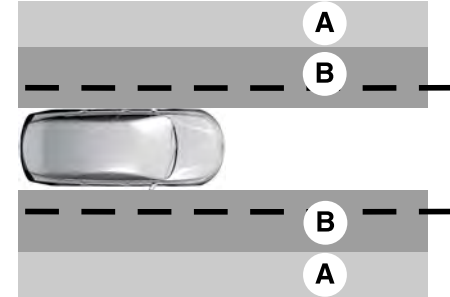
Alert Only — Provides a steering wheel vibration when the system detects an unintended lane departure.

Aid Only



Aid Only — Provides steering assistance toward the lane center.

Alert and Aid Mode



- A Alert
- B Aid

Alert + Aid — Provides steering assistance toward the lane center.

If your vehicle continues drifting out of the lane, the system provides a steering wheel vibration.

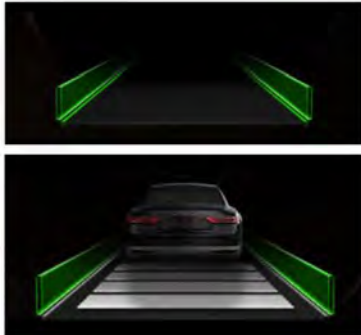
Note: *The alert and aid diagrams illustrate general zone coverage. They do not provide exact zone parameters.*

Driving Aids

Intensity: This setting affects the intensity of the steering wheel vibration used for the alert and alert and aid modes. **This setting does not affect the aid mode.**

- Low.
- Medium.
- High.

System Display



E272890

If you switch the system on in alert mode, a graphic with lane markings appears in the information display.

If you switch the system on in aid or alert and aid mode, walls appear instead of lane markings.

When you switch off the system, the lane marking graphics do not display.

Note: *The overhead vehicle graphic may still appear if you enable adaptive cruise control.*

When the system is on, the color of the lane markings change to indicate the system status.

Gray: Indicates that the system is temporarily unable to provide a warning or intervention on the indicated side. This may be because:

- Your vehicle is under the activation speed.
- The direction indicator is active.
- Your vehicle is in a dynamic maneuver.
- Quick braking.

- Fast acceleration.
- Driving too close to the lane markings.
- The road has no or poor lane markings in the camera field-of-view.
- The camera is obscured or unable to detect the lane markings due to environmental, traffic or vehicle conditions. For example, significant sun angles, shadows, snow, heavy rain or fog, following a large vehicle that is blocking or shadowing the lane or poor headlamp illumination.

See **Troubleshooting** for additional information.

Green: Indicates that the system is available or ready to provide a warning or intervention on the indicated side.

Red: Indicates that the system is providing or has just provided a lane keeping alert warning.

Driving Aids

Troubleshooting

Why is the feature not available (line markings are gray) when I can see the lane markings on the road?
Your vehicle speed is outside the operational range of the feature.
The sun is shining directly into the camera lens.
A quick intentional lane change has occurred.
Your vehicle stays too close to the lane markings.
Driving at high speeds in curves.
The last alert warning or aid intervention occurred a short time ago.
Ambiguous lane markings, for example in construction zones.
Rapid transition from light to dark, or from dark to light.
Sudden offset in lane markings.
ABS or AdvanceTrac™ is active.
There is a camera blockage due to dirt, grime, fog, frost or water on the windshield.
You are driving too close to the vehicle in front of you.
Transitioning between no lane markings to lane markings or vice versa.
There is standing water on the road.
Faint lane markings, for example partial yellow lane markings on concrete roads.


Driving Aids


Why is the feature not available (line markings are gray) when I can see the lane markings on the road?
Lane width is too narrow or too wide.
The camera has not been calibrated after a windshield replacement.
Driving on tight roads or on uneven roads.

Why does the vehicle not come back toward the middle of the lane, as expected, in the Aid or Aid + Alert mode?
High cross winds are present.
There is a large road crown.
Rough roads, grooves or shoulder drop-offs.
Heavy uneven loading of the vehicle or improper tire inflation pressure.
The tires have been changed, or the suspension has been modified.

Driving Aids

BLIND SPOT INFORMATION SYSTEM

 **WARNING:** Do not use the blind spot information system as a replacement for using the interior and exterior mirrors or looking over your shoulder before changing lanes. The blind spot information system is not a replacement for careful driving.

 **WARNING:** The system may not operate properly during severe weather conditions, for example snow, ice, heavy rain and spray. Always drive with due care and attention. Failure to take care may result in a crash.



E255695

The system is designed to detect vehicles that may have entered the blind spot zone. The detection area is on both sides of your vehicle, extending rearward from the exterior mirrors to approximately 13 ft (4 m) beyond the rear bumper. The detection area extends to approximately 59 ft (18 m) beyond the rear bumper when the vehicle speed is greater than 30 mph (48 km/h) to alert you of faster approaching vehicles.

Note: *The system does not prevent contact with other vehicles. It is not designed to detect parked vehicles, pedestrians, animals or other infrastructures.*

Using the Blind Spot Information System

The system turns on when all of the following occur:

- You start your vehicle.
- You shift into drive (D).
- The vehicle speed is greater than 6 mph (10 km/h).

Note: *The system does not operate in park (P) or reverse (R).*

Driving Aids

System Lights and Messages



E142442

When the system detects a vehicle, an alert indicator illuminates in the exterior mirror on the side the approaching vehicle is coming from. If you turn the direction indicator on for that side of your vehicle, the alert indicator flashes.

Note: The system may not alert you if a vehicle quickly passes through the detection zone.

Blocked Sensors



E205199

The sensors are behind the rear bumper on both sides of your vehicle.

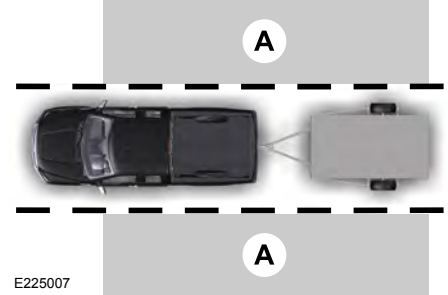
Note: Keep the sensors free from snow, ice and large accumulations of dirt.

Note: Do not cover the sensors with bumper stickers, repair compound or other objects.

Note: Blocked sensors could affect system performance.

If the sensors become blocked, a message may appear in the information display. See **Information Messages** (page 139). The alert indicators remain illuminated but the system does not alert you.

Blind Spot Information System with Trailer Tow



E225007

The system is designed to detect vehicles that may have entered the blind spot zone (A). The detection area is on both sides of your vehicle and trailer, extending rearward from the exterior mirrors to the end of your trailer.

The system turns on when all of the following occur:

- You attach a trailer to your vehicle.
- You have set up the trailer to work with the system through the information display.

Driving Aids

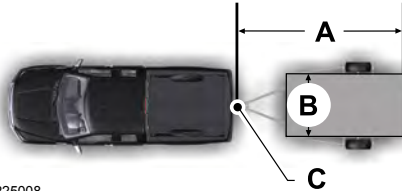
- You start your vehicle.
- You shift into drive (D).
- The vehicle speed is greater than 6 mph (10 km/h).

Note: If you switch the Blind Spot Information System off, the Blind Spot Information System with Trailer Tow automatically turns off.

Note: If you connect a trailer to your vehicle and do not set up the trailer through the information display, the system turns off and a warning message appears. See **Information Messages** (page 139).

Note: When towing a trailer, the extended blind spot zone range decreases to a short fixed or non-variable distance behind the trailer. The extended blind spot zone range returns to 59 ft (18 m) when the trailer is disconnected.

Setting up a Trailer



E225008

- A Trailer length.
- B Trailer width.
- C Trailer hitch ball.

You can set-up a trailer to work with the system through the information display. See **General Information** (page 134). When setting up a trailer, a sequence of screens appear asking for trailer information.

- Select type of trailer screen -
Conventional, fifth wheel or gooseneck.

The system only supports conventional trailers. If you select fifth wheel or gooseneck, the system automatically turns off.

- Do you want to set up BLIS with trailer screen?

If no, the system turns off.

If yes, the menu goes to the next screen.

- Is the width less than 9 ft (2.7 m) and length less than 33 ft (10.1 m)?

If no, the system turns off.

If yes, the menu goes to the next screen.

- Trailer width measurement:

The width of the trailer is measured at the front of the trailer. It is not measured at the widest point of the trailer. The maximum width at the front of the trailer that the system can support is 8.5 ft (2.6 m).

Note: You do not need to enter an exact trailer width measurement. You only need to confirm that the width of the trailer is 8.5 ft (2.6 m) or less.

- Trailer length measurement:

The trailer length is the distance between the trailer hitch ball and the rear of the trailer. The maximum length that the system can support is 33 ft (10.1 m).

Driving Aids

- Enter length of trailer:

The default setting is 18 ft (5.5 m). Toggling up or down using the menu buttons increases or decreases the measurement by 3 ft (1 m). Select a length that is equal to or within 3 ft (1 m) of the actual measured length. For example, if the actual measured length is 25 ft (7.6 m), toggle the length in the menu to 27 ft (8.2 m). When you enter the length of the trailer, the system setup is saved.

Note: *If the trailer is a bike rack or cargo rack with electrical lighting, enter a length of 3 ft (1 m). Cross Traffic Alert remains on for trailers with a length of 3 ft (1 m) or less.*

Note: *Proper measurement and measurement entry is required for the system to function as designed.*

System Operation

When you connect a trailer to your vehicle, the trailer set up menu appears in the information display. This menu allows you to set up a new trailer or choose from a previously set up trailer. A warning message appears and the system turns off if you do not choose or add a new trailer.

Note: *The warning message may not appear until your vehicle speed reaches 22 mph (35 km/h).*

If you select a trailer in the information display before connecting a trailer to your vehicle, the system loads the configuration for the selected trailer. When a trailer is connected, a warning message appears.

Note: *A second warning message may appear stating that the Cross Traffic Alert system has turned off. The Blind Spot Information System with Trailer Tow continues to function normally in this situation.*

Note: *The system remembers the last selected trailer set up when you start your vehicle.*

Trailer Considerations

The system is designed to work with a trailer with a front width of 8.5 ft (2.6 m) or less, and a total length from the trailer hitch ball to the rear of the trailer of 33 ft (10.1 m) or less.

Some trailers may cause a slight change in system performance:

- Large box trailers may cause false alerts to occur when driving next to infrastructures or near parked cars. A false alert may also occur while making a 90 degree turn.
- Trailers that have a width greater than 8.5 ft (2.6 m) at the front and have a total length greater than 20 ft (6 m) may cause delayed alerts when a vehicle is passing at high speeds.
- Box trailers that have a width greater than 8.5 ft (2.6 m) at the front may cause early alerts when you pass a vehicle.
- Clam shell or V-Nose box trailers with a width greater than 8.5 ft (2.6 m) at the front may cause delayed alerts when a vehicle traveling the same speed as your vehicle merges lanes.

Driving Aids

System Errors

If the system detects a fault, a warning lamp illuminates and a message displays. See **Information Messages** (page 139).

Switching the System On and Off

You can switch the system off using the information display. See **General Information** (page 134). When you switch the system off, a warning lamp illuminates and a message displays. When you switch the system on or off, the alert indicators flash twice.

Note: *The system remembers the last setting when you start your vehicle.*

Note: *The system may not correctly operate when towing a trailer. For vehicles with a trailer tow module and tow bar approved by us, the system turns off when you attach a trailer. For vehicles with an aftermarket trailer tow module or tow bar, we recommend that you switch the system off when you attach a trailer.*

To permanently switch the system off, contact an authorized dealer.

CROSS TRAFFIC ALERT



WARNING: Do not use the cross traffic alert system as a replacement for using the interior and exterior mirrors or looking over your shoulder before reversing out of a parking space. The cross traffic alert system is not a replacement for careful driving.



WARNING: The system may not operate properly during severe weather conditions, for example snow, ice, heavy rain and spray. Always drive with due care and attention. Failure to take care may result in a crash.

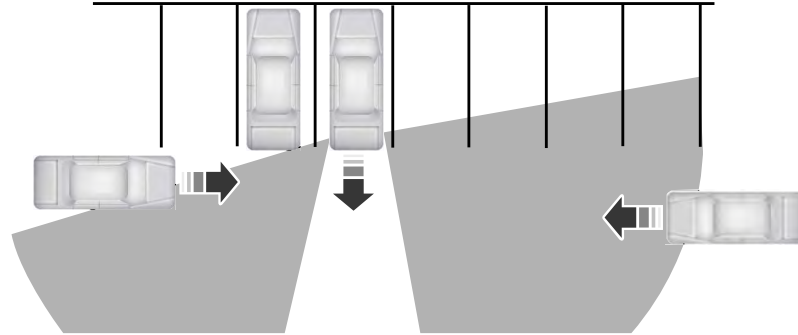
The system alerts you of vehicles approaching from the sides behind your vehicle when you shift into reverse (R).

Using Cross Traffic Alert

The system detects vehicles that approach at a speed between 4 mph (6 km/h) and 37 mph (60 km/h). Coverage decreases when the sensors are partially, mostly or fully obstructed. Slowly reversing helps increase the coverage area and effectiveness.

The system turns on when you start the engine and you shift into reverse (R). The system turns off when you shift out of reverse (R).

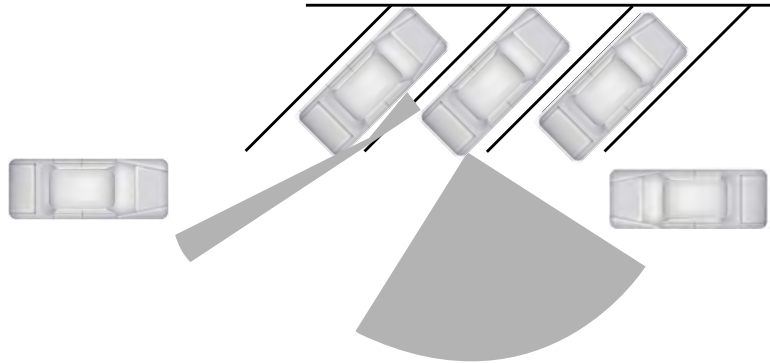
Driving Aids



E142440

The sensor on the left-hand side is only partially obstructed and zone coverage on the right-hand side is maximized.

Driving Aids



E142441

Zone coverage also decreases when parking at narrow angles. The sensor on the left-hand side is mostly obstructed and zone coverage on that side is severely reduced.

Driving Aids

Cross Traffic Alert System Sensors



E205199

The sensors are behind the rear bumper on both sides of your vehicle.

Note: *Keep the sensors free from snow, ice and large accumulations of dirt.*

Note: *Do not cover the sensors with bumper stickers, repair compound or other objects.*

Note: *Blocked sensors could affect system performance.*

If the sensors are blocked, a message may appear in the information display when you shift into reverse (R).

Cross Traffic Alert System Limitations

The system may not correctly operate when any of the following occur:

- The sensors are blocked.
- Adjacently parked vehicles or objects are obstructing the sensors.
- Vehicles approach at speeds less than 4 mph (6 km/h) or greater than 37 mph (60 km/h).
- The vehicle speed is greater than 7 mph (12 km/h).
- You reverse out of an angled parking space.

Cross Traffic Alert Behavior When Trailer is Attached

Note: *The system may not correctly operate when towing a trailer. For vehicles with an approved trailer tow module and tow bar, the system turns off when you attach a trailer. For vehicles with an aftermarket trailer tow module or tow bar, we recommend that you switch the system off when you attach a trailer.*

Cross traffic alert remains on when you attach a trailer in vehicles that come with blind spot information system with trailer tow under the following conditions:

- You connect a trailer.
- The trailer is a bike rack or cargo rack with a maximum length of 3 ft (1 m).
- You set the trailer length to 3 ft (1 m) in the information display.

See **Blind Spot Information System** (page 288).

Switching the System On and Off

To switch the system on or off, adjust the setting. Depending on your vehicle options, the setting could be in the following:

- Information display. See **General Information** (page 134).
- Touchscreen. See **Settings** (page 515).

Note: *The system turns on every time you switch the ignition on. To permanently switch the system off, contact an authorized dealer.*

Driving Aids

Cross Traffic Alert Indicator



When the system detects an approaching vehicle, a tone sounds, a warning lamp illuminates in the relevant exterior mirror and arrows appear in the information display to show which side the approaching vehicle is coming from.

Note: *If arrows do not display, a message appears in the information display.*

If the system malfunctions, a warning lamp illuminates in the instrument cluster and a message appears in the information display. Have your vehicle checked as soon as possible.

Note: *In exceptional conditions, the system could alert you, even when there is nothing in the detection zone, for example a vehicle passing further away from your vehicle.*

Cross Traffic Alert Information Messages

Message	Action
Cross Traffic Alert	Displays instead of indication arrows when the system detects a vehicle. Check for approaching traffic.
Cross Traffic Not Available Sensor Blocked See Manual	Indicates blocked cross traffic alert system sensors. Clean the sensors. If the message continues to appear, have your vehicle checked as soon as possible.
Cross Traffic System Fault	The system has malfunctioned. Have your vehicle checked as soon as possible.
Cross Traffic Alert Deactivated Trailer Attached	Displays if you attach a trailer to your vehicle.

Driving Aids

STEERING

Electric Power Steering



WARNING: The electric power steering system has diagnostic checks that continuously monitor the system. If a fault is detected, a message displays in the information display. Stop your vehicle as soon as it is safe to do so. Switch the ignition off. After at least 10 seconds, switch the ignition on and watch the information display for a steering system warning message. If a steering system warning message returns, have the system checked as soon as possible.



WARNING: If the system detects an error, you may not feel a difference in the steering, however a serious condition may exist. Have your vehicle checked as soon as possible. Failure to do so may result in loss of steering control.

Your vehicle has an electric power steering system, there is no fluid reservoir, no maintenance is required.

If your vehicle loses electrical power while you are driving, electric power steering assistance is lost. The steering system still operates and you can steer your vehicle manually. Manually steering your vehicle requires more effort.

Extreme continuous steering may increase the effort required for you to steer your vehicle, this increased effort prevents overheating and permanent damage to the steering system. You do not lose the ability to steer your vehicle manually. Typical steering and driving maneuvers allow the system to cool and return to normal operation.

Steering Tips

If the steering wanders or pulls, check for:

- Correct tire pressures.
- Uneven tire wear.
- Loose or worn suspension components.
- Loose or worn steering components.
- Improper vehicle alignment.


Note: *A high crown in the road or high crosswinds may also make the steering seem to wander or pull.*


Adaptive Learning (If Equipped)


The electronic power steering system adaptive learning helps correct road irregularities and improves overall handling and steering feel. It communicates with the brake system to help operate advanced stability control and accident avoidance systems. Additionally, whenever the battery is disconnected or a new battery installed, you must drive your vehicle a short distance before the system relearns the strategy and reactivates all systems.


Driving Aids


PRE-COLLISION ASSIST


 **WARNING:** You are responsible for controlling your vehicle at all times. The system is designed to be an aid and does not relieve you of your responsibility to drive with due care and attention. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death.

 **WARNING:** The system does not detect vehicles that are driving in a different direction, cyclists or animals. Apply the brakes when necessary. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death.

 **WARNING:** The system does not operate during hard acceleration or steering. Failure to take care may lead to a crash or personal injury.

 **WARNING:** The system may fail or operate with reduced function during cold and severe weather conditions. Snow, ice, rain, spray and fog can adversely affect the system. Keep the front camera and radar free of snow and ice. Failure to take care may result in the loss of control of your vehicle, serious personal injury or death.

 **WARNING:** Some situations and objects prevent hazard detection. For example low or direct sunlight, inclement weather, unconventional vehicle types, and pedestrians. Apply the brakes when necessary. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death.

 **WARNING:** The system cannot help prevent all crashes. Do not rely on this system to replace driver judgment and the need to maintain a safe distance and speed.

Using the Pre-Collision Assist System

The Pre-Collision Assist system is active at speeds above approximately 3 mph (5 km/h) and pedestrian detection is active at speeds up to 50 mph (80 km/h).



E156130

If your vehicle is rapidly approaching another stationary vehicle, a vehicle traveling in the same direction as yours, or a pedestrian within your driving path, the system provides three levels of functionality:

1. Alert
2. Brake Support
3. Active Braking

Alert: When active, a flashing visual warning appears and an audible warning tone sounds.

Driving Aids

Brake Support: The system helps reduce the impact speed by preparing the brakes for rapid braking. Brake support does not apply the brakes. If you press the brake pedal, the system could apply additional braking up to maximum braking force, even if you lightly press the brake pedal.

Active Braking: Active braking may activate if the system determines that a collision is imminent. The system may help the driver reduce impact damage or avoid the crash completely.

Note: *Brake Support and Active Braking are active at speeds up to 74.6 mph (120 km/h). If the vehicle has a radar sensor or Adaptive Cruise Control, then Brake Support and Active Braking are active up to the maximum speed of the vehicle.*

Note: *The system disables when you select the Slow Climb or Deep Conditions drive modes.*

Note: *If you perceive Pre-Collision Assist alerts as being too frequent or disturbing, then you can reduce the alert sensitivity, though the manufacturer recommends using the highest sensitivity setting where possible. Setting lower sensitivity would lead to fewer and later system warnings.*

Distance Indication and Alert (If Equipped)

Distance Indication and Alert is a function that provides you with a graphical indication of the time gap to other preceding vehicles traveling in the same direction. The Distance Indication and Alert screen in the information display shows one of the following graphics.



E254797

If the time gap to a preceding vehicle is small, a red visual indication appears.

Note: *Distance Indication and Alert deactivates, and the graphics do not display when adaptive cruise control is active.*

Driving Aids

Speed	Sensitivity	Graphics	Distance Gap	Time Gap
62 mph (100 km/h)	Normal	Grey	>82 ft (25 m)	>0.9sec
62 mph (100 km/h)	Normal	Yellow	56–82 ft (17–25 m)	0.6sec — 0.9sec
62 mph (100 km/h)	Normal	Red	<56 ft (17 m)	<0.6sec

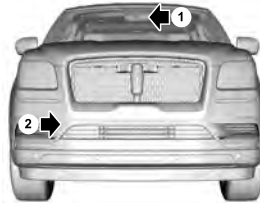
Adjusting the Pre-Collision Assist Settings

You can adjust the following settings by using the information display controls. See **General Information** (page 134).

- You can adjust the Alert and Distance Alert sensitivity to one of three settings.
- You can switch the Distance Indication and Alert function on or off.
- If required, you can switch Active Braking on or off.

Note: *Active braking automatically turns on every time you switch the ignition on.*

Blocked Sensors



- 1 Camera.
- 2 Radar sensor (if equipped).

If a message regarding a blocked sensor or camera appears in the information display, the radar signals or camera images have become obstructed. If your vehicle has a radar sensor, it is located behind a fascia cover near the passenger side of the lower grille. With an obstructed radar, the Pre-Collision Assist system does not function and cannot detect a vehicle ahead. With a blocked sensor or camera, the Pre-Collision Assist system may not function, or performance may reduce. The following table lists possible causes and actions for when this message displays.

Driving Aids

Camera Troubleshooting

Cause	Action
The windshield in front of the camera is dirty or obstructed in some way.	Clean the outside of the windshield in front of the camera.
The windshield in front of the camera is clean but the message remains in the display.	Wait a short time. It may take several minutes for the camera to detect that there is no obstruction.

Driving Aids

Radar Troubleshooting (If Equipped)

Cause	Action
The surface of the radar in the grille is dirty or obstructed in some way.	The surface of the radar in the grille is clean but the message remains in the display.
The surface of the radar in the grille is clean but the message remains in the display.	Wait a short time. It may take several minutes for the radar to detect that there is no obstruction.
Heavy rain, spray, snow, or fog is interfering with the radar signals.	The Pre-Collision Assist system is disabled. Pre-Collision Assist should automatically reactivate a short time after the weather conditions improve.
Swirling water, or snow or ice on the surface of the road may interfere with the radar signals.	The Pre-Collision Assist system is disabled. Pre-Collision Assist should automatically reactivate a short time after the weather conditions improve.
Radar is out of alignment due to a front-end impact.	Contact an authorized dealer to have the radar checked for proper coverage and operation.

Note: Proper system operation requires a clear view of the road by the camera. Have any windshield damage in the camera's field of view repaired.

Note: If something hits the front end of your vehicle or damage occurs, the radar sensing zone may change. This could cause missed or false vehicle detections. Contact an authorized dealer to have the radar checked for proper coverage and operation.

Driving Aids

Note: *If your vehicle detects excessive heat at the camera or a potential misalignment condition, a message may display in the information display indicating temporary sensor unavailability. When operational conditions are correct, the message deactivates. For example, when the ambient temperature around the sensor decreases or the sensor automatically recalibrates successfully.*

DRIVE MODE CONTROL

Lincoln Drive Modes

Lincoln Drive Modes deliver a driving experience through a suite of sophisticated electronic vehicle systems. These systems optimize steering, handling and powertrain response. You can control performance settings for multiple systems from this single location.

Changing the drive mode automatically changes the functionality of the following systems:

- Electronically power-assisted steering system adjusts steering effort and feel based on the mode you select. See **Steering** (page 297).
- Electronic stability control and traction control maintain your vehicle control in adverse conditions or high performance driving. See **Stability Control** (page 248).
- Electronic throttle control enhances the powertrain response to your inputs.
- Transmission controls optimize with shift schedules tuned to each mode.
- Driveline settings optimize for each mode.

Using the System

The system automatically tailors your vehicle configuration for each mode you select.



E246604

To change the drive mode setting, use the drive mode selector on the center console.

Note: *Mode changes are not available when the vehicle ignition is off or when the engine is not running.*

Note: *Not all settings may be available.*

Driving Aids

- **NORMAL** – For everyday driving. This mode is a perfect balance of excitement, comfort and convenience.
- **EXCITE** – For aggressive on-road driving. This mode increases throttle response, provides a sportier steering feel, along with quicker shifting. The suspension stiffens, with an emphasis on handling and control. The transmission also holds gears longer, helping your vehicle accelerate faster when shifting gears.
- **CONSERVE** – Enables efficient and responsible driving. It helps deliver maximum fuel efficiency and increases driving range.
- **NORMAL 4A** – For general on-road driving. Use this mode on normal firm surfaces such as dry or wet pavement and hard packed dirt or gravel roads. Delivers power to all four wheels, as required.
- **SLIPPERY** – For less than ideal road conditions, such as snow or ice covered roads. Slippery mode inspires confidence without taking away from driving pleasure. Slippery mode lowers throttle response and optimizes shifting for slippery surfaces.
- **DEEP CONDITIONS** – Used for crossing terrain that has deformable deep, rutted surfaces such as mud, deep snow or deep sand. Do not use on dry, hard surfaced roads.
- **SLOW CLIMB** – Used when you need extra power, such as when climbing steep grades, going through deep sand or pulling a boat out of a launch ramp. Do not use on dry, hard surfaced roads. Slow Climb mode puts you in 4x4 Low drive line settings.

Note: *Slow Climb is only available on vehicles with 4x4 and a two-speed transfer case.*

Note: *The system has diagnostic checks that continuously monitor the system for proper operation. Certain drive modes are not available based on gear shifter position. If a mode is unavailable due to a system fault or change in gear shifter position, the mode defaults to **NORMAL**.*

Load Carrying

REAR UNDER FLOOR STORAGE

Cargo Management System

A storage area is located in the floor of the rear cargo area. There are two types of storage systems depending on your vehicle.

Short Wheel Base System



E250821

Lift up on the handle to open the cover.

Note: The board operates with friction hinges, which allows it to be put in any position between a 0° and a 90° angle.



E250823

To close, lower the cover.

Long Wheel Base System

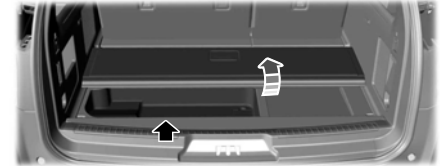
The long wheel base system has two separate storage compartments. To access these compartments, there is a bifolding cover.



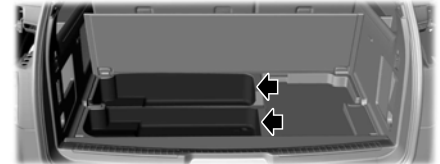
E250822

Lift up on the handle and fold back to open the cover.

Note: The board operates with friction hinges, which allows it to be put in any position between a 0° and a 90° angle.



E250824



E250825

To access the second storage compartment, fold the cover back a second time.

To close, lower the cover.

Load Carrying

Advanced System: Forward Divider, Cargo Shelf and Rear Barrier (Bulkhead Position) (If Equipped)



WARNING: Do not load any objects on the shelf that may obstruct your vision or strike occupants of the vehicle in the case of a sudden stop or collision.



WARNING: Do not place people or pets on or under the parcel shelf.

The board moves to the same positions for both the short wheel base and long wheel base advanced systems.

Advanced Short Wheel Base System



E250026

A storage compartment is located in the floor of the rear cargo area. The cover operates on friction hinges. Lift up on the handle to open the cover. To close, lower the cover.

Advanced Long Wheel Base System



E250027

With the advanced long wheel base system, there is an additional cover with an extra storage compartment underneath. This cover also operates on friction hinges. Lift up on the handle to open the cover. To close, lower the cover.

Forward Divider



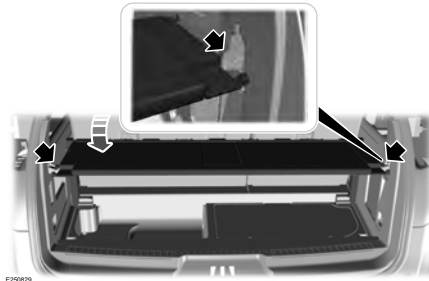
E250028

To move the board into the divider position, lift up on the handle and position the board vertically at a 90° angle.

Note: The board operates on friction hinges, which allows it to be put in any position between a 0° and a 90° angle.

Load Carrying

Cargo Shelf



To move the board into the shelf position, lift the board and move it to the horizontal position. Once the board is horizontal, insert the forward facing nubs into the hooks on either side.

For the short wheel base system, it is necessary for the second panel located toward the front of the vehicle to be raised up when the seats are folded down.

For the long wheel base system, it is necessary for the second panel located toward the front of the vehicle to be raised up.

Note: Before moving the board into the shelf position, you may need to flip down the hooks.

Note: Do not put more than 50 lb (22 kg) on shelf.

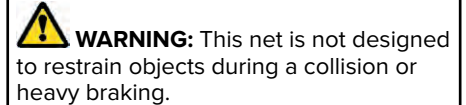
Rear Barrier (Bulkhead Position)



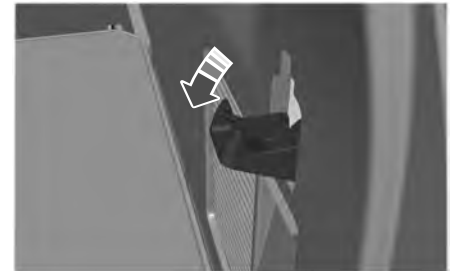
To move the board into the rear barrier or bulkhead position, lift the board and move it to the vertical position. Once the board is vertical, insert the rearward facing nubs into the hooks on either side.

Note: Before moving the board into the rear barrier or bulkhead position, you may need to flip down the hooks.

CARGO NETS

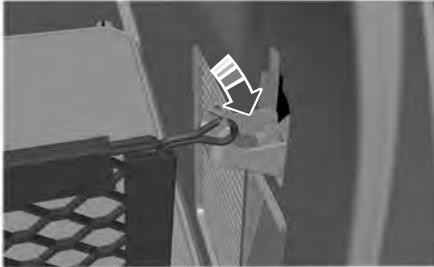


The cargo net secures lightweight objects in the cargo area.



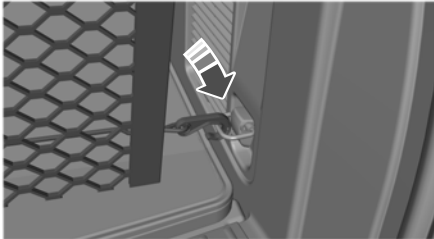
1. Fold down the hooks on the top of the rear quarter trim panel.

Load Carrying



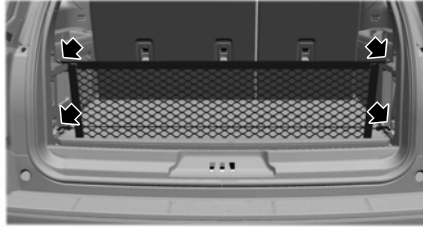
E275126

2. Attach the loop end of the net to the upper hook. Use one prong on the hook for the net attachment.



E275125

3. Attach the bottom of the net to the lower anchor point.



E275124

4. Repeat this procedure on the other side of your vehicle.

ROOF RACKS AND LOAD CARRIERS



WARNING: When loading the roof racks, we recommend you evenly distribute the load, as well as maintain a low center of gravity. Loaded vehicles, with higher centers of gravity, may handle differently than unloaded vehicles. Take extra precautions, such as slower speeds and increased stopping distance, when driving a heavily loaded vehicle.

For correct roof rack system function, you must place loads directly on crossbars affixed to the roof rack side rails. When using the roof rack system, we recommend using our genuine accessory crossbars designed specifically for your vehicle.

Make sure that you securely fasten the load. Check the tightness of the load before driving and at each fuel stop.

Note: *Never place loads directly on the roof panel. The roof panel is not designed to directly carry a load.*

Load Carrying

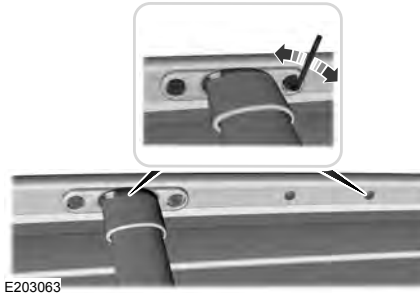
Maximum Recommended Load Amounts

Description	Maximum Recommended Load
Vehicles with moonroof.	100 lb (45 kg)
Vehicles without moonroof.	175 lb (79 kg)

Note: The maximum recommended load is based on the load being evenly distributed on the crossbars.

Adjusting the Crossbar (If Equipped)

Note: For less wind noise and better aerodynamics, only install the crossbars when you need them for carrying cargo. The front crossbar is fixed. There are two optional positions for the rear crossbar. Follow the steps to reposition or remove the rear crossbar.



E203063

1. Remove the crossbar bolts at both sides of the rear crossbar by using the supplied torx tool or a similar tool.
2. Move the crossbar to the new position.
3. Replace and tighten the bolts at both sides of the crossbar by using the supplied torx tool or a similar tool.

Note: There may be snap caps in the new side rail position, which must be removed before installing the crossbar. These caps can be removed by using the supplied torx tool or a similar tool.

LOAD LIMIT

Vehicle Loading - with and without a Trailer


This section guides you in the proper loading of your vehicle, trailer, or both. Keep your loaded vehicle weight within its design rating capability, with or without a trailer. Properly loading your vehicle provides maximum return of vehicle design performance. Before you

Load Carrying

load your vehicle, become familiar with the following terms for determining your vehicle's weight rating, with or without a trailer, from the vehicle's Tire and Loading Information label or Safety Compliance Certification label.

Tire and Loading Label Information

Example:




TIRE AND LOADING INFORMATION

SEATING CAPACITY TOTAL: 5 FRONT: 2 REAR: 3

The combined weight of occupants, and cargo should never exceed **385 kg or 850 lbs.**

TIRE	SIZE	COLD TIRE PRESSURE
FRONT	235/45R18 94V	235 KPA, 34 PSI
REAR	235/45R18 94V	235 KPA, 34 PSI
SPARE	NONE	NONE

SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION



TIRE AND LOADING INFORMATION
RENSEIGNEMENTS SUR LES PNEUS ET LE CHARGEMENT

SEATING CAPACITY / NOMBRE DE PLACES TOTAL: 5 FRONT / AVANT: 2 REAR / ARRIERE: 3

The combined weight of occupants and cargo should never exceed **396 kg or 875 lbs.**
Le poids total des occupants et du chargement ne doit jamais dépasser **396 kg ou 875 lb.**

TIRE / PNEU	SIZE / DIMENSIONS	COLD TIRE PRESSURE / PRESSION DES PNEUS A FROID
FRONT / AVANT	235/40R19 96V	255 KPA, 37 PSI
REAR / ARRIERE	235/40R19 96V	255 KPA, 37 PSI
SPARE / DE SECOURS	T125/80R16 97M	415 KPA, 60 PSI

SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION
VOIR LE MANUEL DE L'USAGER POUR PLUS DE RENSEIGNEMENTS

E198719

Payload

Payload is the combined weight of cargo and passengers that your vehicle is carrying. The maximum payload for your vehicle appears on the Tire and Loading label. The label is either on the B-pillar or the edge of the driver door. Vehicles exported outside the US and Canada may not have a tire and loading label. Look for "The combined weight of occupants and cargo should never exceed XXX kg OR XXX lb" for maximum payload. The payload listed on the Tire and Loading Information label is the maximum payload for your vehicle as built by the assembly plant. If you install any additional equipment on your vehicle, you must determine the new payload. Subtract the weight of the equipment from the payload listed on the Tire and Loading label. When towing, trailer tongue weight or king pin weight is also part of payload.

Load Carrying



WARNING: The appropriate loading capacity of your vehicle can be limited either by volume capacity (how much space is available) or by payload capacity (how much weight the vehicle should carry). Once you have reached the maximum payload of your vehicle, do not add more cargo, even if there is space available. Overloading or improperly loading your vehicle can contribute to loss of vehicle control and vehicle rollover.

GAWR (Gross Axle Weight Rating)

GAWR is the maximum allowable weight that a single axle (front or rear) can carry. These numbers are on the Safety Compliance Certification label. The label is located on the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver seating position.

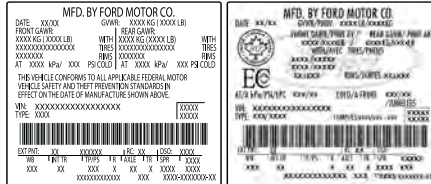
The total load on each axle must never exceed its Gross Axle Weight Rating.

GVWR (Gross Vehicle Weight Rating)

GVWR is the maximum allowable weight of the fully loaded vehicle. This includes all options, equipment, passengers and cargo. It appears on the Safety Compliance Certification label. The label is located on the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver seating position.

The gross vehicle weight must never exceed the Gross Vehicle Weight Rating.

Safety Compliance Certification Label Example:



E188828



WARNING: Exceeding the Safety Compliance Certification label vehicle weight limits can adversely affect the performance and handling of your vehicle, cause vehicle damage and can result in the loss of control of your vehicle, serious personal injury or death.

Maximum Loaded Trailer Weight

Maximum loaded trailer weight is the highest possible weight of a fully loaded trailer the vehicle can tow. Consult an authorized dealer (or the RV and Trailer Towing Guide available at an authorized dealer) for more detailed information.

GCWR (Gross Combined Weight Rating)

GCWR is the maximum allowable weight of the vehicle and the loaded trailer, including all cargo and passengers, that the vehicle can handle without risking damage. (Important: The towing vehicle's braking system is rated for

Load Carrying

operation at Gross Vehicle Weight Rating, not at Gross Combined Weight Rating.) Separate functional brakes should be used for safe control of towed vehicles and for trailers where the Gross Combined Weight of the towing vehicle plus the trailer exceed the Gross Vehicle Weight Rating of the towing vehicle.

The gross combined weight must never exceed the Gross Combined Weight Rating.

Note: For trailer towing information refer to the *RV and Trailer Towing Guide* available at an authorized dealer.



WARNING: Do not exceed the GVWR or the GAWR specified on the certification label.



WARNING: Do not use replacement tires with lower load carrying capacities than the original tires because they may lower your vehicle's GVWR and GAWR limitations. Replacement tires with a higher limit than the original tires do not increase the GVWR and GAWR limitations.



WARNING: Exceeding any vehicle weight rating can adversely affect the performance and handling of your vehicle, cause vehicle damage and can result in the loss of control of your vehicle, serious personal injury or death.

Steps for determining the correct load limit:

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lb." on your vehicle's placard.

2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lb.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1,400 lb. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lb. (1400-750 (5 x 150) = 650 lb.)
5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

Load Carrying

6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

Helpful examples for calculating the available amount of cargo and luggage load capacity

Suppose your vehicle has a 1400-pound (635-kilogram) cargo and luggage capacity. You decide to go golfing. Is there enough load capacity to carry you, four of your friends and all the golf bags? You and four friends average 220 pounds (99 kilograms) each and the golf bags weigh approximately 30 pounds (13.5 kilograms) each. The calculation would be: $1400 - (5 \times 220) - (5 \times 30) = 1400 - 1100 - 150 = 150$ pounds. Yes, you

have enough load capacity in your vehicle to transport four friends and your golf bags. In metric units, the calculation would be: $635 \text{ kilograms} - (5 \times 99 \text{ kilograms}) - (5 \times 13.5 \text{ kilograms}) = 635 - 495 - 67.5 = 72.5$ kilograms.

Suppose your vehicle has a 1400-pound (635-kilogram) cargo and luggage capacity. You and one of your friends decide to pick up cement from the local home improvement store to finish that patio you have been planning for the past two years. Measuring the inside of the vehicle with the rear seat folded down, you have room for twelve 100-pound (45-kilogram) bags of cement. Do you have enough load capacity to transport the cement to your home? If you and your friend each weigh 220 pounds (99 kilograms), the calculation would be: $1400 - (2 \times 220) - (12 \times 100) = 1400 - 440 - 1200 = -240$ pounds. No, you do not have enough cargo capacity to carry that much weight. In metric units, the calculation would be: $635 \text{ kilograms} - (2 \times 99 \text{ kilograms}) - (12 \times 45 \text{ kilograms}) = 635 -$

$198 - 540 = -103$ kilograms. You will need to reduce the load weight by at least 240 pounds (104 kilograms). If you remove three 100-pound (45-kilogram) cement bags, then the load calculation would be: $1400 - (2 \times 220) - (9 \times 100) = 1400 - 440 - 900 = 60$ pounds. Now you have the load capacity to transport the cement and your friend home. In metric units, the calculation would be: $635 \text{ kilograms} - (2 \times 99 \text{ kilograms}) - (9 \times 45 \text{ kilograms}) = 635 - 198 - 405 = 32$ kilograms.

The above calculations also assume that the loads are positioned in your vehicle in a manner that does not overload the front or the rear gross axle weight rating specified for your vehicle on the Safety Compliance Certification label.

Load Carrying

Special Loading Instructions for Owners of Pick-up Trucks and Utility-type Vehicles



WARNING: When loading the roof racks, we recommend you evenly distribute the load, as well as maintain a low center of gravity. Loaded vehicles, with higher centers of gravity, may handle differently than unloaded vehicles. Take extra precautions, such as slower speeds and increased stopping distance, when driving a heavily loaded vehicle.

Towing

TOWING A TRAILER



WARNING: Towing trailers beyond the maximum recommended gross trailer weight exceeds the limit of your vehicle and could result in engine damage, transmission damage, structural damage, loss of vehicle control, vehicle rollover and personal injury.



WARNING: Do not exceed the GVWR or the GAWR specified on the certification label.

Note: See **Recommended Towing Weights** (page 327).

Your vehicle may have electrical items, such as fuses or relays, related to towing. See **Fuses** (page 360).

Your vehicle's load capacity designation is by weight, not by volume, so you cannot necessarily use all available space when loading a vehicle or trailer.

Towing a trailer places an extra load on your vehicle's engine, transmission, axle, brakes, tires and suspension. Inspect these components periodically during, and after, any towing operation.

Load Placement

To help minimize how trailer movement affects your vehicle when driving:

- Load the heaviest items closest to the trailer floor.
- Load the heaviest items centered between the left and right side trailer tires.

- Load the heaviest items above the trailer axles or just slightly forward toward the trailer tongue. Do not allow the final trailer tongue weight to go above or below 10-15% of the loaded trailer weight.
- Select a ball mount with the correct rise or drop and load capacity. When both the loaded vehicle and trailer are connected, the trailer frame should be level, or slightly angled down toward your vehicle, when viewed from the side.

When driving with a trailer or payload, a slight takeoff vibration or shudder may be present due to the increased payload weight. Additional information regarding proper trailer loading and setting your vehicle up for towing is located in another chapter of this manual. See **Load Limit** (page 309).

You can also find information in the **RV & Trailer Towing Guide** available at your authorized dealer, or online.

Towing

RV & Trailer Towing Guide Online

Website

<http://www.fleet.ford.com/towing-guides/>

TRAILER REVERSING AIDS (IF

EQUIPPED)

Pro Trailer Backup Assist™



WARNING: Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.



WARNING: This system is an extra driving aid. It does not replace your attention and judgment, or the need to apply the brakes. This system does NOT automatically brake your vehicle. If you fail to press the brake pedal when necessary, you may collide with another vehicle.

Note: The system is not a substitute for safe driving practices.

Note: You must always be aware of the vehicle and trailer combination and the surrounding environment.

Note: The system does not detect or prevent the vehicle or trailer from making contact with obstacles in the surrounding environment.

Note: Keep in mind that the front end of the vehicle swings out when changing the direction of the trailer.

Note: The system relies on user measurements to determine sticker placement and system limits. It is critical to take the key measurements correctly. Incorrect measurements can result in the improper function of the system up to and including contact between the vehicle and trailer.

Note: The system limits vehicle speed when backing up. The system is not a replacement for proper use of the throttle and brake pedals.

Principle of Operation

This feature helps you to steer your vehicle when reversing with a trailer attached. Turn and hold the control knob in the direction you want the trailer to go and the system takes over the steering. This allows you to focus on checking the mirrors and operating the brake and accelerator.

Towing

You have to set up each trailer you use with your vehicle. You must accurately follow the setup process to make sure you correctly place the sticker.

Contact your dealership if you need assistance in setting up your trailer.

Setting Up Pro Trailer Backup Assist

Note: Once you enter a trailer's information, the system stores it for easy recall. You can add a maximum of 10 trailers to the system.

Step 1: Position your Vehicle and Trailer

Hitch the conventional trailer to your vehicle. See **Essential Towing Checks** (page 330).

Park your vehicle and trailer on a level surface.



E247482

For best results, make sure that your trailer rides level with the ground when you hitch your vehicle. More information on selecting your tow bar is available in the Towing section. See **Towing** (page 315).

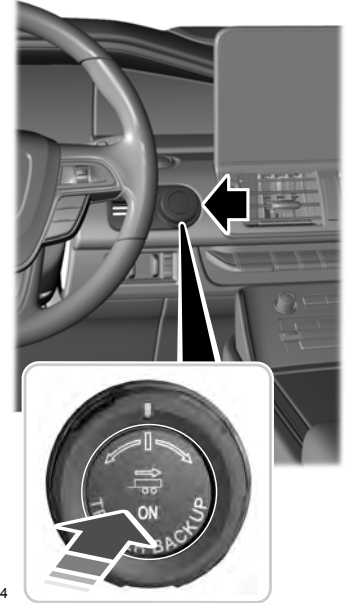


E247481

Make sure your vehicle and the trailer are in line with each other. You can do this by driving straight forward.

Step 2: Follow the Information Display Prompts

Press the button to turn the system on.



E246984

1. Select the option to add a trailer in the information display using the steering wheel control. See **General Information** (page 134).

Towing

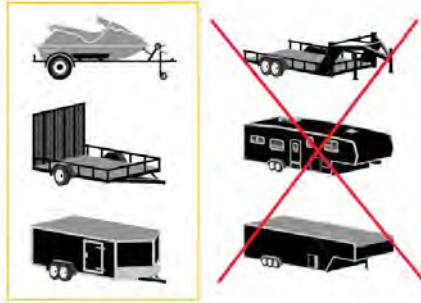
2. Add a personalized name for the trailer using the screen prompts. Use the down arrow to scroll to the desired letter and then press the toggle switch to advance to the next letter. Press OK to continue.
3. Select the type of trailer brake system for the trailer you are adding.
4. Select the brake effort level for the trailer.

Note: The default option is low. We recommend this for most trailers. If the trailer's brakes require more initial voltage, or if you prefer more aggressive braking, then select the other options as required.

Some examples of conventional type trailers are below.

Note: You cannot use the system with the types of trailers marked with the cross.

The system only works with conventional trailers. It does not work with other types including goose neck and fifth wheel.



E209766

Follow the information display prompts.

Step 3: Place the Sticker on the Trailer Frame

You must place the supplied sticker in an area visible by the rear view camera.

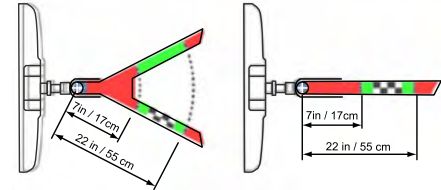
Note: An assistant can help to carry out the following procedure.

Note: Make sure nothing can obstruct the rear view camera's view of the sticker. For example, items such as a jack handle or wiring.

Note: Position the sticker on a flat, dry and clean horizontal surface. For best results apply the sticker when temperatures are above 32°F (0°C).

Note: Do not move stickers after you position them. Do not re-use any stickers if removed.

Note: You can purchase additional stickers through your authorized dealer.



E209805

Towing

Use the supplied measurement card, a tape measure and pen to carefully mark the area where to attach the sticker (supplied in the back cover pocket of your quick start guide). Make sure the whole sticker is within the zone between the two arcs or distance markers on the diagram, and is also visible in the rear view camera display.

Step 4: Take Measurements

After you correctly place the sticker on the trailer, you must take some key measurements.

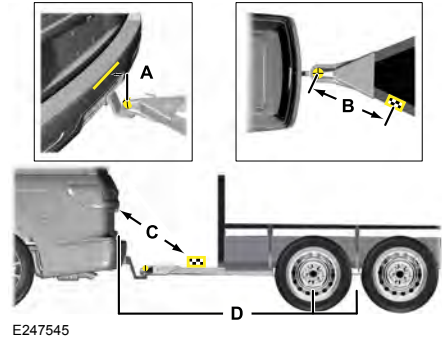
Note: You must take accurate measurements for the system to operate properly.

Note: When rounding in inches, round upward if the measured length is a quarter inch or greater. Round downward if the measured length is less than a quarter inch. For example 12.25 in (31.11 cm) would be rounded up to 12.50 in (31.75 cm). 12.13 in (30.8 cm) would be rounded down to 12.00 in (30.48 cm).

Note: When rounding in centimeters, round to the nearest whole centimeter. If the measurement is less than 0.2 in (0.5 cm) round downward. If the measurement is more than or equal to 0.2 in (0.5 cm) round upward. For example, 11.9 in (30.3 cm) would be rounded down to 11.8 in (30 cm). 12.0 in (30.5 cm) would be rounded up to 12.2 in (31 cm).

Note: Use consistent metric or imperial units as required by your country or vehicle.

Record the four key distances (A, B, C, D) as required by the measurement card. Record the trailer name for these measurements.



Distance A

The horizontal distance from the bumper to the center of the ball hitch on the trailer.

Distance B

The horizontal distance from the center of the ball hitch to the center of the sticker.

Distance C

The distance from the rear view camera to the center of the sticker.

Towing

Distance D

The horizontal distance from the bumper to the center of the trailer axle (single axle trailers), or the center of the axles (trailers with dual axles or more).

Note: *If the distance ends in anything less than one half of an inch, round down to the current whole inch. If a distance ends in one half or greater of an inch, round up to the next whole inch. For example, 12.3 in (31.12 cm) would be rounded down to 12 in (30.48 cm). 12.5 in (31.75 cm) would be rounded up to 13 in (33 cm).*

Step 5: Enter Measurements Using the Information Display

Using the recorded measurements, enter the required data into the system. Follow the on screen prompts to enter each of the measurements taken in step 4. When all four distances have been entered, a confirmation display will appear. Check the values are correct before proceeding, or go back to change any if required.

Step 6: Confirming the Sticker Location

Check the rear view camera display to see if the sticker is identified by the system and marked with a red circle.

Confirm that the red circle is correctly located over the sticker image in the display. The on screen prompt will ask you to confirm this.

Note: *If the system cannot locate the sticker try cleaning the camera lens, and also make sure the sticker is within the green zone as indicated in step 3.*

Calibrating the System

To complete setup, drive your vehicle straight forward between 4 mph (6 km/h) and 24 mph (39 km/h) following the on screen prompt.

Note: *Check your measurements to make sure you measured from the correct points.*

Note: *If you move the steering wheel during this procedure, the calibration pauses.*

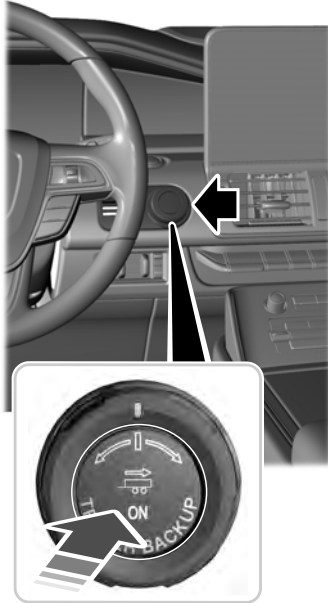
Note: *We recommend that you do not do this at night.*

A message will be displayed during calibration and after calibration is complete.

Using Pro Trailer Backup Assist

To use the system press the button and select the required trailer from the display.

Towing



E246984

When the sticker is located, the display prompts you to shift into reverse (R). The system turns on.

Note: The system does not function if your hands are on the steering wheel. Remove your hands to resume operation.

Follow the screen prompts to steer your vehicle and trailer.

Note: You may have to drive forward to straighten the trailer.

Take your hands off the steering wheel and turn the Pro Trailer Backup Assist control knob instead. The knob acts as the steering control for the trailer.

Note: The more you turn the knob, the sharper the trailer turns.



E246992

Turn and hold counterclockwise to make the trailer go left.



E246991

Turn and hold clockwise to make the trailer go right.

Note: Practice maneuvering with the system in a safe open area first.

Note: Try backing up in a straight line and then turning the knob slowly in the direction you want to go.

Note: Quickly turning and releasing the knob results in a jerky movement of the vehicle.



E246993

Towing

Release the knob when the trailer is moving in the direction you want. Control the accelerator and brakes while the system steers your vehicle automatically to keep the trailer moving straight back.

Note: *You may have to use the knob to correct the trailer direction when attempting to move the trailer straight back under some conditions.*

Note: *Your vehicle speed is automatically limited.*

Note: *When you release the knob or turn it to the center position, your vehicle follows the trailer's path.*

Troubleshooting

Note: *The system requires a clear view of the sticker placed on the trailer. You must keep the camera lens and sticker clean for the system to operate correctly.*

Setup

The system is designed to be used with a wide variety of trailers. However there are some trailers that do not have a proper surface and location to mount the sticker. These trailers are not supported. Attempts to place the sticker on a surface that does not meet the sticker placement requirement listed in Step 3 of the setup instruction or entering inaccurate measurements to proceed through setup can result in improper system function.

Accurate measurements are critical to correct system function. If you need to check measurements entered or change them you can access them through the trailer menus in the instrument cluster. Choose the option to change the sticker from the change trailer settings menu. It is not necessary to remove the sticker if you are just reviewing or changing measurements.

The following menu warnings or difficulties may occur during setup. Tips to resolve them are listed below.

Note: *If you still experience issues with the system's ability to detect the sticker, see the information in the next section regarding sticker lost during system operation.*

Measurement A has reached maximum or minimum value:

- The system is designed to work with drawbars that have a bumper to hitch ball center measurement of 4 in (10 cm) to 11 in (28 cm) when installed. Do not attempt to use drawbars that have a length outside this range as the system performance will be degraded and could cause improper system function.
- Make sure that the measurement being made is the horizontal distance only from bumper and the hitch ball center. A straight line distance that includes any vertical rise or drop will increase the measurement and make it inaccurate. Inaccurate measurements will degrade system performance and could cause improper system function. See step 4 of the setup instruction to review measurement instructions.

Towing

Measurement B has reached maximum or minimum value:

- Make sure that the sticker placement instruction in step 3 of the setup has been followed. Stickers placed outside the allowed zone will adversely affect the system performance and could cause improper feature function.
- Make sure that the measurement being made is the horizontal distance only from center of sticker to the hitch ball center. A straight line distance that includes any vertical rise or drop will increase the measurement and cause an inaccurate value to be entered into the system. See step 4 of the setup for additional measurement instructions.

Measurement C has reached maximum or minimum value:

- Make sure that the sticker placement instructions in step 3 of the setup have been followed. Stickers placed outside the allowed zone will adversely affect the system performance and could cause improper feature function. If you have met all the criteria for sticker placement and you see this message this sticker is

either too far below or too close to the camera to properly recognize the sticker.

In order for the system to operate correctly the sticker height must be lowered if you receive the minimum warning or the sticker height must be raised if you receive the maximum warning.

- Only one sticker can be placed on the trailer for correct system function. The previous sticker must be removed or covered so only one sticker is visible to the camera.
- Measurement B and C must be measured again if a new sticker is placed on the trailer.

Measurement D has reached maximum or minimum value:

- Make sure that the measurement being made is the horizontal distance only from the bumper to the center of the single axle or the center of all the axles on the trailer. See step 4 of the setup for additional measurement instructions. The TBA system does not support trailer lengths outside the range allowed by the information display.

System is circling something beside the sticker or system cannot find the sticker:

- Make sure the rear camera is clean and the sticker is clearly visible in the camera image. Clean the camera and sticker if necessary.
- The camera system uses the entered measurements to help locate the sticker. Inaccurate sticker measurements will degrade the system's ability to locate the sticker. Verify the measurements entered into the system are accurate.
- Remove the incorrectly circled label or decal if possible.
- If you cannot resolve the issue a new sticker location should be tried. The sticker location must still meet the requirements noted in step 3 of the setup instructions. Only one sticker can be placed on the trailer for correct system function. The previous sticker must be removed or covered so only one sticker is visible to the camera.

Towing

Calibration

The system monitors various vehicle parameters to ensure your vehicle is being driven straight and the trailer straight behind your vehicle. Any steering input or trailer movement will pause the calibration.

For best results:

- Use a long, straight, smooth and level road when attempting to calibrate.
- Drive straight forward.
- Drive between 4 mph (6 km/h) and 24 mph (39 km/h).

System Operation

The following warnings or difficulties may occur during feature operation. Tips to resolve them are listed below.

The system is not available:

- The system relies on many sub-systems in your vehicle to operate correctly. If those sub-systems are not operating correctly the system may not be available.
- Low battery voltage is a condition which will prevent the system from operating. Please make sure the battery is correctly charged if the system is not available.
- You may need to drive your vehicle straight forward above 25 mph (40 km/h) before the system is available again.
- If the message still displays take your vehicle to an authorized dealer for service.

Sticker lost:

- If the system cannot initially find the sticker, it may be necessary for you to change the lighting conditions by moving the vehicle and trailer or waiting until conditions change.
- Check for the following if you receive the lost sticker message while using the system.

- Stop your vehicle as soon as the message displays.
- Make sure the sticker is visible and the pattern is discernable in the rear view camera image.
- Clean the sticker and camera to make sure they are unobstructed.
- Clean the lens with a soft, lint-free cloth and water.
- Clean the sticker with isopropyl rubbing alcohol sprayed directly onto the sticker, and then wipe clean with a soft cloth.
- Remove any items that may be blocking the view of the sticker. Depending on your trailer configuration and any equipment mounted to your trailer it is possible for the sticker to be blocked from view of the camera as it rotates on the hitch ball but not be blocked during setup. Remove the obstruction if possible. It will be necessary to remove the sticker from its current location if the obstruction cannot be cleared and place a new sticker that will be visible to the camera in all positions of the trailer behind your vehicle.

Towing

- Placing the sticker on a surface angled away from the vehicle reduces performance. Use a drawbar that positions the trailer level to the ground when attached to vehicle. This typically provides a level surface to mount the sticker. Place the sticker on a bracket or other object when no level surface is available.
- Make sure the entire sticker is on a flat surface that is completely visible to the camera. Do not fold the sticker over an edge on the trailer frame. This can degrade performance.
- Shadows on the sticker may effect tracking performance under some lighting conditions. Moving the sticker to another location within the allowed placement area may improve performance. Use the change sticker option in your Towing menu if you move the sticker.
- You can change your sticker location by going into the Towing menu, selecting trailer options, selecting change trailer settings and then selecting the change sticker option. The previous sticker must be removed. **ONLY ONE STICKER SHOULD BE PLACED ON THE TRAILER FOR CORRECT SYSTEM FUNCTION.**
- The camera system uses the entered measurements to help locate the sticker. Inaccurate measurements will reduce the system's ability to locate the sticker. Check the measurements entered into the system are correct. Refer to the step 4 of Pro trailer backup Assist setup for instructions on measurements.
- You can change your measurement by going into the Towing menu, selecting trailer options, selecting change trailer setting and then selecting the change sticker option. Disregard the prompt to remove this sticker and continue to the next step if you only plan to update the measurements for the current sticker location.

System will not backup straight:

- Factors such as the drawbar connection to the hitch receiver, road camber, road grade and compliance in the trailer suspension can influence how straight the system is able to back your trailer when the knob is not turned. You can compensate for the trailer drifting to the right or left by slowly turning the Pro Trailer Backup Assist knob until the trailer is following your desired path and then holding the knob in that position. If you would like to recalibrate the system for straight backing, you can do so with the following procedure.
- Go into the Towing menu, select trailer options, select change trailer setting and then select the change sticker option. Your saved measurements will be displayed. Do not change them but continue to confirm measurements. Once you confirm the measurements, the system will then prompt you to perform the calibration procedure.

Towing

System consistently shows Stop Now Max trailer angle reached warning:

- The system uses your measurements to determine sticker position and establish system limits. Accurate sticker placement and trailer measurements will provide the best system performance. If you are consistently receiving this warning it is likely there is an issue with sticker placement or the entered measurements. Make sure that the sticker is placed correctly based on steps 3 and the measurements were made correctly according to Step 4. The troubleshooting guide for trailer measurements can also be reviewed for help in making measurements.
- To change sticker location or change trailer measurements, go into the Towing menu, select trailer options, select change trailer setting and then select the change sticker option.

- If the sticker location needs to be changed, the previous sticker must be removed and a new sticker needs to be placed on the trailer. **ONLY ONE STICKER SHOULD BE PLACED ON THE TRAILER FOR PROPER SYSTEM FUNCTION.**
- Disregard the prompt to remove this sticker and continue to the next step if you only plan to update the measurements for the current sticker location.

System consistently shows Stop now take control of steering warning:

- The system displays this warning when it can no longer steer the vehicle and you must take over steering. There are four reasons why this warning displays and additional information regarding the reason for the warning is available on the center display.
- The steering wheel is touched while the system is controlling it. Avoid touching the wheel during system operation.

- The maximum speed for feature operation is exceeded. System performance is optimized at slower speeds. Backup slowly.
- The sticker was lost by the camera system. Once your vehicle is stopped additional warnings will indicate the sticker was lost. Refer to sticker lost trouble shooting tips.
- An internal condition for system operation was not met which requires your vehicle return to manual control of the steering.

Note: *The system is designed to be used with the same trailer connection every time the trailer is chosen from the selection menu. Using a different drawbar or a different pin hole (on drawbars with more than one) when connecting the drawbar to your vehicle affects the trailer measurements. Take the measurements again and update if required.*

Towing

TRAILER SWAY CONTROL (IF EQUIPPED)



WARNING: Turning off trailer sway control increases the risk of loss of vehicle control, serious injury or death. Ford does not recommend disabling this feature except in situations where speed reduction may be detrimental (such as hill climbing), the driver has significant trailer towing experience, and can control trailer sway and maintain safe operation.

Note: This feature does not prevent trailer sway, but reduces it once it begins.

Note: This feature cannot stop all trailers from swaying.

Note: In some cases, if vehicle speed is too high, the system may activate multiple times, gradually reducing vehicle speed.

This feature applies your vehicle brakes at individual wheels and, if necessary, reduces engine power. If the trailer begins to sway, the stability control light flashes and the message **TRAILER SWAY REDUCE SPEED** appears in the information display. The first thing to do is slow your vehicle down, then pull safely to the side of the road and check for proper tongue load and trailer load distribution. See **Load Carrying** (page 309).

RECOMMENDED TOWING WEIGHTS

Note: Do not exceed the trailer weight for your vehicle configuration listed in the chart below.

Note: Make sure to take into consideration trailer frontal area. Do not exceed 55 ft² (5.11 m²) if your vehicle has the standard towing package, or 60 ft² (5.57 m²) if your vehicle has the heavy duty package.

Note: Exceeding this limitation may significantly reduce the performance of your towing vehicle. Selecting a trailer with a low aerodynamic drag and rounded front design helps optimize performance and fuel economy.

Note: Your vehicle could have reduced performance when operating at high altitudes, and when heavily loaded or towing a trailer. When driving at elevation, in order to match driving performance as perceived at sea level, reduce gross vehicle weight and gross combination weight by 2% per 1,000 ft (300 m) of elevation.

Note: Certain states require electric trailer brakes for trailers over a specified weight. Be sure to check state regulations for this specified weight. The maximum trailer weights listed may be limited to this specified weight, as the vehicle's electrical system may not include the wiring connector needed to activate electric trailer brakes.

Towing

Your vehicle may tow a trailer provided the maximum trailer weight is less than or equal to the maximum trailer weight listed for your vehicle configuration on the following chart.

To calculate the maximum loaded trailer weight for your vehicle:

1. Start with the gross combined weight rating for your vehicle model and axle ratio. See the following chart.
2. Subtract all of the following that apply to your vehicle:
 - Vehicle curb weight.
 - Hitch hardware weight, such as a draw bar, ball, locks or weight distributing.
 - Driver weight.
 - Passenger weight.
 - Payload, cargo and luggage weight.
 - Aftermarket equipment weight.
3. This equals the maximum loaded trailer weight for this combination.

Note: *The trailer tongue load figures into the payload for your vehicle. Reduce the total payload by the final trailer tongue weight.*

Consult an authorized dealer to determine the maximum trailer weight allowed for your vehicle if you are not sure.

Towing

Vehicle Type	Towing Package	Maximum GCWR	Maximum Trailer Weight
Short Wheel Base 4x2	Standard	12,500 lb (5,670 kg)	6,200 lb (2,812 kg)
Short Wheel Base 4x4		12,700 lb (5,761 kg)	6,200 lb (2,812 kg)
Long Wheel Base 4x2		13,100 lb (5,942 kg)	6,600 lb (2,994 kg)
Long Wheel Base 4x4		13,300 lb (6,033 kg)	6,600 lb (2,994 kg)
Short Wheel Base 4x2	Optional Heavy Duty with 50% Load Distributing - Front Axle Load Restora- tion	15,300 lb (6,940 kg)	8,700 lb (3,946 kg)
Short Wheel Base 4x4		15,300 lb (6,940 kg)	8,300 lb (3,765 kg)
Long Wheel Base 4x2		15,500 lb (7,031 kg)	8,400 lb (3,810 kg)
Long Wheel Base 4x4		15,500 lb (7,031 kg)	8,100 lb (3,674 kg)

Towing

ESSENTIAL TOWING CHECKS

Follow these guidelines for safe towing:

- Do not tow a trailer until you drive your vehicle at least 1,000 mi (1,600 km).
- Consult your local motor vehicle laws for towing a trailer.
- See any instructions that come with towing accessories for the proper installation and adjustment specifications.
- Service your vehicle more frequently if you tow a trailer. See **Scheduled Maintenance** (page 539).
- If you use a rental trailer, follow the instructions the rental agency gives you.

You can find information on load specification terms found on the tire label and Safety Compliance label as well as instructions on calculating your vehicle's load in the Load Carrying chapter. See **Load Limit** (page 309).

Remember to account for the trailer tongue weight as part of your vehicle load when calculating the total vehicle weight.

Trailer Towing Connector (Vehicles with a Trailer Towing Package and 7-Pin Connector)



E163167

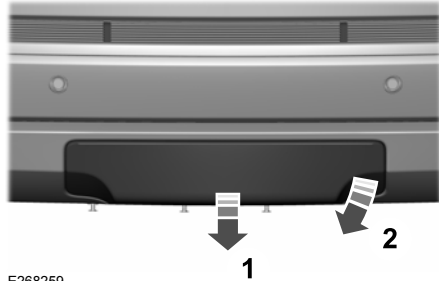
When attaching the trailer wiring connector to your vehicle, only use a proper fitting connector that works with the vehicle and trailer functions. Some seven-position connectors may have the SAE J2863 logo, which confirms that it is the proper wiring connector and works correctly with your vehicle.

Color	Function
Yellow	Left turn signal and stop lamp.
White	Ground (-).
Blue	Electric brakes.
Green	Right turn signal and stop lamp.
Orange	Battery (+).
Brown	Running lights.
Grey	Reverse lights.

Trailer Hitch Cover

Your vehicle has a removable trailer hitch cover. To remove the trailer hitch cover:

Towing



E268259

1. Grab the trailer hitch cover at the bottom and pull towards the rear of the vehicle until the bottom of the trailer hitch cover unsnaps from the bumper.
2. Grab the trailer hitch cover at the edge and rotate until the top of the trailer hitch cover unsnaps from the bumper, then remove the trailer hitch cover.


To install the trailer hitch cover:



E268260

1. Line up the snaps on the trailer hitch cover to the holes on the bumper and push forward until it snaps into place.


Hitches

 **WARNING:** Do not cut, drill, weld or modify the trailer hitch. Modifying the trailer hitch could reduce the hitch rating.

Do not use a hitch that either clamps onto the bumper or attaches to the axle.

Distribute the trailer load so 10-15% of the total trailer weight is on the tongue.

Integrated Hitch Rating

 **WARNING:** Towing trailers beyond the maximum recommended gross trailer weight exceeds the limit of your vehicle and could result in engine damage, transmission damage, structural damage, loss of vehicle control, vehicle rollover and personal injury.

The standard integrated hitch has two ratings depending on mode of operation:

- Weight-carrying mode requires a draw bar and hitch ball. The draw bar supports all the vertical tongue load of the trailer.
- Weight-distributing mode requires an aftermarket weight-distributing system, which includes draw bar, hitch ball, spring bars and snap-up brackets. This system distributes the vertical tongue load of the trailer between the truck and the trailer.

You must use a weight-distributing hitch for weights above 6,000 lb (2,721 kg), up to your vehicle's maximum towing capacity.

Towing

Note: These are hitch ratings only. Actual vehicle ratings are dependent on engine, transmission and axle combinations.

Weight-distributing Hitch



WARNING: Do not adjust the spring bars so that your vehicle's rear bumper is higher than before attaching the trailer. Doing so will defeat the function of the weight-distributing hitch, which may cause unpredictable handling, and could result in serious personal injury.

When hooking-up a trailer using a weight-distributing hitch, always use the following procedure:

1. Park the loaded vehicle, without the trailer, on a level surface.
2. Measure the height to the top of your vehicle's front wheel opening on the fender. This is H1.
3. Attach the loaded trailer to your vehicle without the weight-distributing bars connected.

4. Measure the height to the top of your vehicle's front wheel opening on the fender a second time. This is H2.
5. Install and adjust the tension in the weight-distributing bars so that the height of your vehicle's front wheel opening on the fender is approximately half the way down from H2, toward H1.
6. Check that the trailer is level or slightly nose down toward your vehicle. If not, adjust the ball height accordingly and repeat Steps 2-6.

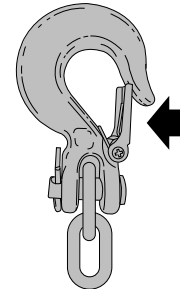
When the trailer is level or slightly nose down toward the vehicle:

- Lock the bar tension adjuster in place.
- Check that the trailer tongue securely attaches and locks onto the hitch.
- Install safety chains, lighting and trailer brake controls as required by law or the trailer manufacturer.

Safety Chains

Note: Do not attach safety chains to the bumper. Always connect the safety chains to the frame or hook retainers of your trailer hitch.

Install trailer safety chains to the trailer hitch as recommended by the manufacturer. Cross the chains under the trailer tongue and allow enough slack for turning tight corners. Do not allow the chains to drag on the ground.



If the trailer safety chain hook has a latch, make sure the latch fully closes.

Towing

Trailer Brakes (If Equipped)

WARNING: Do not connect a trailer's hydraulic brake system directly to your vehicle's brake system. Your vehicle may not have enough braking power and your chances of having a collision greatly increase.

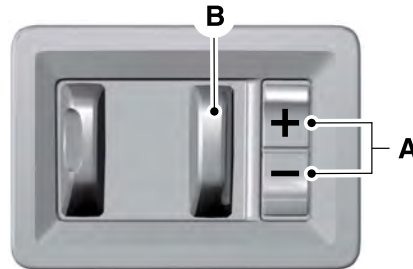
Electric brakes and manual, automatic or surge-type trailer brakes are safe if you install them properly and adjust them to the manufacturer's specifications. The trailer brakes must meet local and federal regulations.

The rating for the tow vehicle's braking system operation is at the gross vehicle weight rating, not the gross combined weight rating.

Separate functioning brake systems are required for safe control of towed vehicles and trailers weighing more than 1500 lb (680 kg) when loaded.

Integrated Trailer Brake Controller (If Equipped)

WARNING: Use the integrated trailer brake controller to properly adjust the trailer brakes and check all connections before towing a trailer. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death.



E183395

When used properly, the trailer brake controller assists in smooth and effective trailer braking by powering the trailer's electric or electric-over-hydraulic brakes with a proportional output based on the towing vehicle's brake pressure.

The controller user interface consists of the following:

A: + and - (Gain adjustment buttons): Pressing these buttons adjusts the controller's power output to the trailer brakes in 0.5 increments. You can increase the gain setting to 10.0 (maximum trailer braking) or decrease it to 0 (no trailer braking). The gain setting displays in the message center.

Towing

The controller shows gain setting, output bar graph, and trailer connectivity status in the information display. They appear in the information display as follows:

- **Trailer Brake Controller Gain (without trailer connected):** Shows the current gain setting during a given ignition cycle and when adjusting the gain. This also displays if you use the manual control lever or make gain adjustments with no trailer connected.
- **Trailer Brake Controller Gain Output:** Displays when you push your vehicle's brake pedal, or upon use of the manual control. Bar indicators illuminate in the information display to indicate the amount of power going to the trailer brakes relative to the brake pedal or manual control input. One bar indicates the least amount of output; six bars indicate maximum output.

- **Trailer Connected:** Displays when the system senses a correct trailer wiring connection (a trailer with electric trailer brakes) during a given ignition cycle.
- **Trailer Disconnected:** Displays, accompanied by a single audible time, when the system senses a trailer connection and then a disconnection, either intentional or unintentional, during a given ignition cycle. It also displays if a truck or trailer-wiring fault occurs causing the trailer to appear disconnected. This message can also display if you use the manual control lever without a trailer connected. After disconnecting the trailer connector, press the brake pedal for approximately five seconds to allow the system to detect and update the trailer status.

B: Manual control lever: Slide the control lever to the left to turn on the trailer's electric brakes independent of the tow vehicle's. See the following **Procedure for adjusting gain** section for instructions on proper use of this feature. If you use the manual control while the brake is also applied, the greater of the two inputs determines the power sent to the trailer brakes.

- **Stop lamps:** Using the manual control lever illuminates both the trailer brake lamps and your vehicle brake lamps except the center high-mount stop lamp, if you make the proper electrical connection to the trailer. Pressing your vehicle brake pedal also illuminates both trailer and vehicle brake lamps.

Procedure for Adjusting Gain

Note: Only perform this procedure in a traffic-free environment at speeds of approximately 20–25 mph (32–40 km/h).

Towing

The gain setting sets the trailer brake controller for the specific towing condition. You should change the setting as towing conditions change. Changes to towing conditions include trailer load, vehicle load, road conditions and weather.

The gain should be set to provide the maximum trailer braking assistance while making sure the trailer wheels do not lock when using the brakes. Locked trailer wheels may lead to trailer instability.

1. Make sure the trailer brakes are in good working condition, functioning normally and properly adjusted. See your trailer dealer if necessary.
2. Hook up the trailer and make the electrical connections according to the trailer manufacturer's instructions.
3. When you plug in a trailer with electric or electric-over-hydraulic brakes, a message confirming connection appears in the information display.

4. Use the gain adjustment (+ and -) buttons to increase or decrease the gain setting to the desired starting point. A gain setting of 6.0 is a good starting point for heavier loads.
5. In a traffic-free environment, tow the trailer on a dry, level surface at a speed of 20–25 mph (32–40 km/h) and squeeze the manual control lever completely.
6. If the trailer wheels lock up, indicated by squealing tires, reduce the gain setting. If the trailer wheels turn freely, increase the gain setting. Repeat Steps 5 and 6 until the gain setting is at a point just below trailer wheel lock-up. If towing a heavier trailer, trailer wheel lock-up may not be attainable even with the maximum gain setting of 10.

Explanation of Information Display Warning Messages

Note: *An authorized dealer can diagnose the trailer brake controller to determine exactly which trailer fault has occurred. However, your warranty does not cover this diagnosis if the fault is with the trailer.*

A message indicating a trailer brake module fault may display in response to faults sensed by the trailer brake controller, accompanied by a single tone. If this message appears, contact an authorized dealer as soon as possible for diagnosis and repair. The controller may still function, but performance may be degraded.

A message indicating a trailer wiring fault may display when there is a short circuit on the electric brake output wire. If this message displays, accompanied by a single tone, with no trailer connected, the problem is with your vehicle wiring between the trailer brake controller and the 7-pin connector at the bumper. If the message only displays with a trailer connected, the problem is with the trailer wiring. Consult your trailer dealer for assistance. This can be a short to ground (such as a chaffed wire), short to voltage (such as a pulled pin on trailer emergency breakaway battery) or the trailer brakes may be drawing too much current.

Towing

Points to Remember

Note: Do not attempt removal of the trailer brake controller without consulting the Workshop Manual. Damage to the unit may result.

- Adjust gain setting before using the trailer brake controller for the first time.
- Adjust gain setting, using the procedure above, whenever road, weather and trailer or vehicle loading conditions change from when the gain was initially set.
- Only use the manual control lever for proper adjustment of the gain during trailer setup. Misuse, such as application during trailer sway, could cause instability of trailer or tow vehicle.
- Avoid towing in adverse weather conditions. The trailer brake controller does not provide anti-lock control of the trailer wheels. Trailer wheels can lock up on slippery surfaces, resulting in reduced stability of trailer and tow vehicle.
- The trailer brake controller is equipped with a feature that reduces output at vehicle speeds below 11 mph (18 km/h) so trailer and vehicle braking is not jerky or harsh. This feature is only available when applying the brakes using your vehicle's brake pedal, not the controller.
- The controller interacts with the brake control system and powertrain control system of your vehicle to provide the best performance on different road conditions.
- Your vehicle's brake system and the trailer brake system work independently of each other. Changing the gain setting on the controller does not affect the operation of your vehicle's brakes whether you attach a trailer or not.
- When you switch the engine off, the controller output is disabled and the display and module shut down. The controller module and display turn on when you switch the ignition on.
- The trailer brake controller is only a factory-installed or dealer-installed item. Lincoln is not responsible for warranty or performance of the controller due to misuse or customer installation.

Trailer Lamps



WARNING: Never connect any trailer lamp wiring to the vehicle's tail lamp wiring; this may damage the electrical system resulting in fire. Contact your authorized dealer as soon as possible for assistance in proper trailer tow wiring installation. Additional electrical equipment may be required.

Trailer lamps are required on most towed vehicles. Make sure all running lights, brake lights, turn signals and hazard lights are working.

Towing

Before Towing a Trailer

Practice turning, stopping and backing up to get the feel of your vehicle-trailer combination before starting on a trip. When turning, make wider turns so the trailer wheels clear curbs and other obstacles.

When Towing a Trailer

- Do not drive faster than 70 mph (113 km/h) during the first 500 mi (800 km).
 - Do not make full-throttle starts.
 - Check your hitch, electrical connections and trailer wheel lug nuts thoroughly after you have traveled 50 mi (80 km).
 - When stopped in congested or heavy traffic during hot weather, place the transmission in park (P) to aid engine and transmission cooling and to help A/C performance.
 - Turn off the speed control when carrying heavy loads or in hilly terrain. The speed control may turn off automatically when you are towing on long, steep grades.
- Shift to a lower gear when driving down a long or steep hill. Do not apply the brakes continuously, as they may overheat and become less effective.
 - If your transmission has a Grade Assist or Tow/Haul feature, use this feature when towing. This provides engine braking and helps eliminate excessive transmission shifting for optimum fuel economy and transmission cooling.
 - If your vehicle has AdvanceTrac with RSC, this system may turn on during typical cornering maneuvers with a heavily loaded trailer. This is normal. Turning the corner at a slower speed while towing may reduce this tendency.
 - If your vehicle has Adaptive suspension, you can select NORMAL or SPORT drive control modes for better experience when towing a trailer. See **Information Displays** (page 134).
 - If you are towing a trailer frequently in hot weather, hilly conditions, at the gross combined weight rating (or any combination of these factors), consider refilling your rear axle with synthetic gear lubricant (if the axle is not already filled with it). See **Capacities and Specifications** (page 438).
 - Allow more distance for stopping with a trailer attached. Anticipate stops and brake gradually.
 - Avoid parking on a grade. However, if you must park on a grade:
 1. Turn the steering wheel to point your vehicle tires away from traffic flow.
 2. Set your vehicle parking brake.
 3. Place the transmission in park (P).
 4. Place wheel chocks in the front and back of the trailer wheels.

Note: *Chocks are not included with your vehicle.*

Towing

Your vehicle may be equipped with a temporary or conventional spare tire. A temporary spare tire is different in size (diameter or width), tread-type (All-Season or All-Terrain) or is from a different manufacturer than the road tires on your vehicle. Consult information on the tire label or Safety Compliance label for limitations when using.

Launching or Retrieving a Boat or Personal Watercraft (PWC)

Note: Disconnect the wiring to the trailer **before** backing the trailer into the water.

Note: Reconnect the wiring to the trailer **after** removing the trailer from the water.

When backing down a ramp during boat launching or retrieval:

- Do not allow the static water level to rise above the bottom edge of the rear bumper.
- Do not allow waves to break higher than 6 in (15 cm) above the bottom edge of the rear bumper.

Exceeding these limits may allow water to enter vehicle components:

- Causing internal damage to the components.
- Affecting driveability, emissions, and reliability.

Replace the rear axle lubricant anytime the rear axle has been submerged in water. Water may have contaminated the rear axle lubricant, which is not normally checked or changed unless a leak is suspected or other axle repair is required.

TOWING THE VEHICLE ON FOUR WHEELS



WARNING: If your vehicle has a steering wheel lock make sure the ignition is in the accessory or on position when being towed.

Recreational Towing

Note: Put your climate control system in recirculated air mode to prevent exhaust fumes from entering your vehicle. See **Climate Control** (page 166).

Follow these guidelines if you have a need for recreational towing, such as towing your vehicle behind a motorhome. These guidelines are designed to prevent damage to your transmission.

Two-wheel Drive Vehicles

You cannot tow a two-wheel drive vehicle with any wheels on the ground as vehicle or transmission damage may occur. You must tow your vehicle with all four wheels off the ground, for example when using a car-hauling trailer.

Four-wheel Drive Vehicles Without **SLOW CLIMB** Mode

You cannot tow your vehicle with any wheels on the ground or vehicle damage may occur. You must tow your vehicle with all four wheels off the ground, for example when using a car-hauling trailer.

Towing

Four-wheel Drive Vehicles With **SLOW CLIMB** Mode

You can only tow your vehicle with all wheels on the ground by placing the transfer case in its neutral position and engaging the four wheel down towing feature. Perform the steps outlined in the following section after positioning your vehicle behind the tow vehicle and properly securing them together.

Four-wheel-down Towing

Note: *If completed successfully, the information display shows **Neutral Tow Enabled Leave Transmission in Neutral**. This indicates that your vehicle is safe to tow with all wheels on the ground.*

Note: *If you do not see the message in the information display, you must perform the procedure again from the beginning.*

Note: *Make sure you properly secure your vehicle to the tow vehicle.*

1. Start your vehicle.
2. Confirm that your vehicle is in **NORMAL** mode. See **Drive Mode Control** (page 303).

3. Place your vehicle in stay in neutral mode. See **Automatic Transmission** (page 227).
4. Switch your vehicle off by pressing the engine **START/STOP** button once. A **Transmission Not in Park** message appears in the information display.
5. Place your vehicle in accessory mode by pressing the start button once without pressing the brake pedal.
6. Press and hold the brake pedal.
7. Enable neutral tow through the information display by selecting **Settings** from the menu. See **General Information** (page 134).
8. Then select **Advanced Settings**.
9. Then select **Vehicle**.
10. Then select **Neutral Tow**.
11. Press and hold the **OK** button until the information display states **Neutral Tow Enabled Leave Transmission in Neutral**.

Note: *If completed successfully, the information display shows **Neutral Tow Enabled Leave Transmission in Neutral**. This indicates that your vehicle is safe to tow with all wheels on the ground.*

Note: *If you do not see the message in the information display, you must perform the procedure again from the beginning.*

Note: *You may hear an audible noise as the transfer case shifts into neutral, this is normal.*

12. Leave the transmission in neutral (N) and switch the ignition off by pressing the engine **START/STOP** button once without pressing the brake pedal. You do not need to leave your keys in the vehicle. You can lock and unlock your vehicle as you normally do.



WARNING: Do not disconnect the battery during recreational towing. It prevents the transfer case from shifting properly and may cause the vehicle to roll, even if the transmission is in park (P).

Towing



WARNING: Shifting the transfer case to its neutral position for recreational towing may cause the vehicle to roll, even if the transmission is in park (P). It may injure the driver and others. Make sure you press the foot brake and the vehicle is in a secure, safe position when you shift to neutral (N).

Note: Failing to put the transfer case in its neutral position can damage vehicle components.

Note: You can check four-wheel-down towing status at any time by opening the driver's door or turning the ignition to the accessory or on position. A message appears in the information display confirming your vehicle is in neutral tow.

To exit four-wheel-down towing and return the transfer case to its **2H** position:

1. With your vehicle still properly secured to the tow vehicle, press the brake pedal and start the engine.
2. Switch your vehicle off by pressing the engine **START/STOP** button once.

3. Place your vehicle in accessory mode by pressing the start button once without pressing the brake pedal.
4. Press the brake pedal.
5. Place the transmission back into park (P).
6. Release the brake pedal.

Note: If completed successfully, the information display shows **2H** and **Neutral Tow Disabled**.

Note: If the indicator light and message do not display, you must perform the procedure again from the beginning.

Note: You may hear an audible noise as the transfer case shifts out of its neutral position, this is normal.

Note: If **Shift Delayed Pull Forward** displays in the instrument cluster, transfer case gear tooth blockage is present. See the instructions following this section.

7. Apply the parking brake, then disconnect your vehicle from the tow vehicle.

8. Release the parking brake, start the engine, and shift the transmission into drive (D) to make sure the transfer case is out of the neutral tow position.
9. If the transfer case does not successfully shift out of neutral (N), set the parking brake until you can have your vehicle serviced.

Resolving the Shift Delayed Pull Forward or To Exit 4x4 LOW Shift to N Message

If the instrument cluster displays these messages, perform the following:

1. Press and hold the brake pedal.
2. Put the transmission into neutral (N), then start the engine.
3. With the engine running, shift the transmission into drive (D) and let the vehicle roll forward, up to 3 ft (1 m). You may hear an audible noise as the transfer case shifts out of its neutral position. This is normal.
4. Make sure the instrument cluster displays **Neutral Tow Disabled**.

Driving Hints

REDUCED ENGINE PERFORMANCE



WARNING: If you continue to drive your vehicle when the engine is overheating, the engine could stop without warning. Failure to follow this instruction could result in the loss of control of your vehicle.

If the engine coolant temperature gauge needle moves to the upper limit position, the engine is overheating. See **Gauges** (page 127).

You must only drive your vehicle for a short distance if the engine overheats. The distance you can travel depends on ambient temperature, vehicle load and terrain. The engine continues to operate with limited power for a short period of time.

If the engine temperature continues to rise, the fuel supply to the engine reduces. The air conditioning switches off and the engine cooling fan operates continually.

1. Gradually reduce your speed and stop your vehicle as soon as it is safe to do so.
2. Immediately switch the engine off to prevent severe engine damage.
3. Wait for the engine to cool down.
4. Check the coolant level. See **Engine Coolant Check** (page 383).
5. Have your vehicle checked as soon as possible.

ECONOMICAL DRIVING

Fuel economy is affected by several things such as how you drive, the conditions you drive under and how you maintain your vehicle.

There are some things to keep in mind that may improve your fuel economy:

- Accelerate and slow down in a smooth, moderate fashion.
- Drive at steady speeds.
- Anticipate stops; slowing down may eliminate the need to stop.

- Combine errands and minimize stop-and-go driving (When running errands, go to the furthest destination first and then work your way back home).
- Close the windows for high-speed driving.
- Drive at reasonable speeds.
- Keep the tires properly inflated and use only the recommended size.
- Use the recommended engine oil.
- Perform all regularly scheduled maintenance.

There are also some things you may want to avoid doing because they reduce your fuel economy:

- Avoid sudden or hard accelerations.
- Avoid revving the engine before turning off the car.
- Avoid long idle periods.
- Do not warm up your vehicle on cold mornings.
- Reduce the use of air conditioning and heat.
- Avoid using speed control in hilly terrain.

Driving Hints

- Do not rest your foot on the brake pedal while driving.
- Avoid carrying unnecessary weight.
- Avoid adding particular accessories to your vehicle (e.g. bug deflectors, rollbars/light bars, running boards, ski racks).
- Avoid driving with the wheels out of alignment.

BREAKING-IN

You need to break in new tires for approximately 300 mi (480 km). During this time, your vehicle may exhibit some unusual driving characteristics.

DRIVING THROUGH WATER

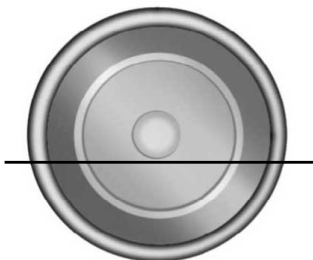


WARNING: Do not drive through flowing or deep water as you may lose control of your vehicle.

Note: *Driving through standing water can cause vehicle damage.*

Note: *Engine damage can occur if water enters the air filter.*

Before driving through standing water, check the depth. Never drive through water that is higher than the bottom of the wheel hubs.



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When driving through standing water, drive very slowly and do not stop your vehicle. Your brake performance and traction may be limited. After driving through water and as soon as it is safe to do so:

- Lightly press the brake pedal to dry the brakes and to check that they work.
- Check that the horn works.
- Check that the exterior lights work.
- Turn the steering wheel to check that the steering power assist works.

FLOOR MATS



WARNING: Use a floor mat designed to fit the footwell of your vehicle that does not obstruct the pedal area. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death.



WARNING: Pedals that cannot move freely can cause loss of vehicle control and increase the risk of serious personal injury.

Driving Hints



WARNING: Secure the floor mat to both retention devices so that it cannot slip out of position and interfere with the pedals. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death.



WARNING: Do not place additional floor mats or any other covering on top of the original floor mats. This could result in the floor mat interfering with the operation of the pedals. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death.



WARNING: Always make sure that objects cannot fall into the driver foot well while your vehicle is moving. Objects that are loose can become trapped under the pedals causing a loss of vehicle control.



To install the floor mats, position the floor mat eyelet over the retention post and press down to lock in position.

To remove the floor mat, reverse the installation procedure.

Note: *Regularly check the floor mats to make sure they are secure.*

Roadside Emergencies

ROADSIDE ASSISTANCE

Vehicles sold in the United States: Getting Roadside Assistance

To fully assist you should you have a vehicle concern, Lincoln Motor Company offers a complimentary roadside assistance program. This program is separate from the New Vehicle Limited Warranty.

The service is available:

- Throughout the life of the vehicle for original owners.
- For six years or 70,000 mi (110,000 km) (whichever comes first) for subsequent owners.

Roadside Assistance covers:

- A flat tire change with a good spare (except vehicles supplied with a tire inflation kit).
- Battery jump start.
- Lock-out assistance (key replacement cost is the client's responsibility).

- Fuel delivery — independent service contractors, if not prohibited by state, local or municipal law shall deliver up to 2 gal (8 L) of gasoline fuel to a disabled vehicle. Roadside Assistance limits fuel delivery service to two no-charge occurrences within a 12-month period.
- Winch out — available within 100 ft (30 m) of a paved or county maintained road, no recoveries.
- Towing — independent service contractors, if not prohibited by state, local or municipal law shall tow Lincoln eligible vehicles to the client's selling or preferred dealer within 100 mi (160 km) of the disablement location or to the nearest Lincoln dealer. If a client requests a tow to a selling or preferred dealer that is more than 100 mi (160 km) from the disablement location, the client is responsible for any mileage costs in excess of 100 mi (160 km).
- Roadside Assistance includes up to \$200 for a towed trailer if the disabled eligible vehicle requires service at the nearest authorized dealer. If the towing vehicle is operational but the trailer is not, then the trailer does not qualify for any roadside services.

Vehicles Sold in the United States: Using Roadside Assistance

United States clients who require roadside assistance, call 1-800-521-4140 or contact Roadside Assistance using the Lincoln Way mobile app.

Roadside Emergencies

If you need to arrange roadside assistance for yourself, Lincoln Motor Company reimburses a reasonable amount for towing to the nearest Lincoln dealership within 100 mi (160 km). To obtain reimbursement information, United States clients, call 1-800-521-4140. Clients need to submit their original receipts.

Vehicles Sold in Canada: Getting Roadside Assistance

To fully assist you should you have a vehicle concern, Lincoln Motor Company offers a complimentary roadside assistance program. This program is eligible within Canada or the continental United States.

The service is available 24 hours a day, seven days a week.

This program is separate from the New Vehicle Limited Warranty, beginning from the original warranty start date and lasts the life of the vehicle for the original owner. Subsequent owners receive coverage that is concurrent with the 6 years or 70,000 mi (110,000 km) (whichever occurs first) powertrain warranty coverage period.

Note: *Canadian roadside coverage and benefits may differ from the U.S. coverage.*

For complete program coverage details, review your warranty guide, contact your dealer, call us in Canada at 1-800-387-9333, or visit our website at www.lincolncanada.com.

If you purchased your vehicle in Canada and require roadside assistance, please call 1-800-387-9333 or contact Roadside Assistance using the Lincoln Way mobile app.

Note: *For quick reference, complete the roadside assistance identification card found in the glove compartment of your vehicle and place it in your wallet.*

HAZARD FLASHERS

Note: *The hazard flashers operate when the ignition is in any position, or if the key is not in the ignition. If used when the vehicle is not running, the battery loses charge. As a result, there may be insufficient power to restart your vehicle.*



The flasher control is on the instrument panel. Use your hazard flashers when your vehicle is creating a safety hazard for other motorists.

- Press the flasher control and all front and rear direction indicators flash.
- Press the button again to switch them off.

FUEL SHUTOFF



WARNING: If your vehicle has been involved in a crash, have the fuel system checked. Failure to follow this instruction could result in fire, personal injury or death.

Note: *When you try to restart your vehicle after a fuel shutoff, the vehicle makes sure that various systems are safe to restart. Once the vehicle determines the systems are safe, then the vehicle allows you to restart.*

Note: *In the event that your vehicle does not restart after your third attempt, contact a qualified technician.*

Roadside Emergencies

The fuel pump shutoff stops the flow of fuel to the engine in the event of a moderate to severe crash. Not every impact causes a shutoff.

Should your vehicle shut off after a crash, you may restart your vehicle.

1. Press **START/STOP** to switch off your vehicle.
2. Press the brake pedal and **START/STOP** to switch on your vehicle.
3. Remove your foot from the brake pedal and press **START/STOP** to switch off your vehicle.
4. You can attempt to start the vehicle by pressing the brake pedal and **START/STOP**, or press **START/STOP** without pressing the brake pedal.
5. If the vehicle does not start, repeat steps 1 through 4.

JUMP STARTING THE VEHICLE



WARNING: Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lighted substances to come near the battery. When working near the battery, always shield your face and protect your eyes. Always provide correct ventilation.



WARNING: Keep batteries out of reach of children. Batteries contain sulfuric acid. Avoid contact with skin, eyes or clothing. Shield your eyes when working near the battery to protect against possible splashing of acid solution. In case of acid contact with skin or eyes, flush immediately with water for a minimum of 15 minutes and get prompt medical attention. If acid is swallowed, call a physician immediately.



WARNING: Use only adequately sized cables with insulated clamps.

Note: To avoid reverse polarity connections, make sure that you correctly identify the positive (+) and negative (-) terminals on both the disabled and booster vehicles before connecting the cables. Stay clear of moving parts.

Preparing Your Vehicle

Do not attempt to push-start your automatic transmission vehicle.

Note: Attempting to push-start a vehicle with an automatic transmission may cause transmission damage.

Note: Use only a 12-volt supply to start your vehicle.

Note: Do not disconnect the battery of the disabled vehicle as this could damage the vehicle electrical system.

Park the booster vehicle close to the hood of the disabled vehicle, making sure the two vehicles do not touch.

Roadside Emergencies

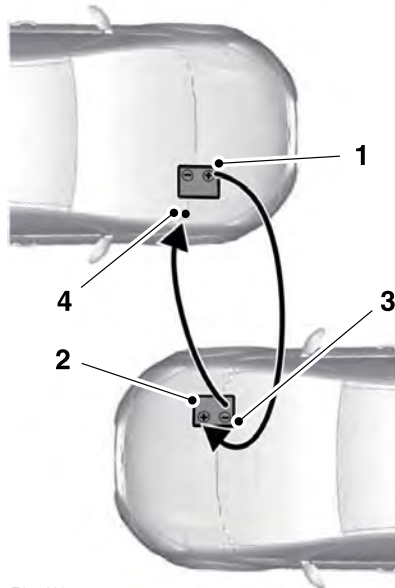
Connecting the Jumper Cables



WARNING: Do not connect the negative jumper cable to any other part of your vehicle. Use the ground point.

Note: Do not attach the end of the positive cable to the studs or L-shaped eyelet located above the positive (+) terminal of your vehicle's battery. High current may flow through and cause damage to the fuses.

Note: In the illustration, the bottom vehicle represents the booster vehicle.



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1. Connect the positive (+) jumper cable to the positive (+) terminal of the discharged battery.

2. Connect the other end of the positive (+) cable to the positive (+) terminal of the booster vehicle battery.
3. Connect the negative (-) cable to the negative (-) terminal of the booster vehicle battery.
4. Make the final connection of the negative (-) cable to an exposed metal part of the stalled vehicle's engine, away from the battery and the fuel injection system, or connect the negative (-) cable to a ground connection point if available.

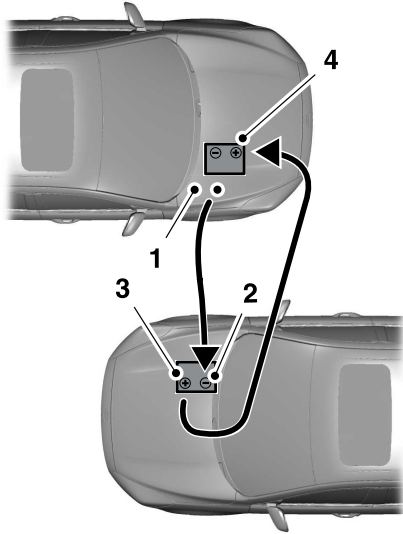
Jump Starting

1. Start the engine of the booster vehicle and rev the engine moderately, or press the accelerator gently to keep your engine speed between 2000 and 3000 RPM, as shown in your tachometer.
2. Start the engine of the disabled vehicle.
3. Once the disabled vehicle has been started, run both vehicle engines for an additional three minutes before disconnecting the jumper cables.

Roadside Emergencies

Removing the Jumper Cables

Remove the jumper cables in the reverse order that they were connected.



1. Remove the negative (-) jumper cable from the disabled vehicle.

2. Remove the jumper cable on the negative (-) terminal of the booster vehicle battery.
3. Remove the jumper cable from the positive (+) terminal of the booster vehicle battery.
4. Remove the jumper cable from the positive (+) terminal of the disabled vehicle battery.
5. Allow the engine to idle for at least one minute.

- Your vehicle runs out of power.
- Sounding of the horn is only enabled in specific markets.

POST-CRASH ALERT SYSTEM

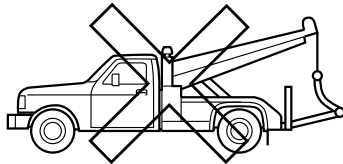
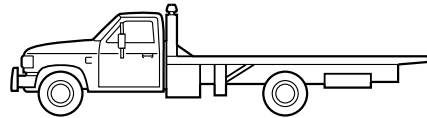
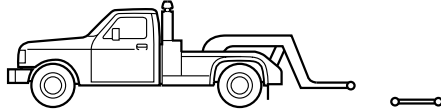
The system flashes the direction indicators and sounds the horn (intermittently) in the event of a serious impact that deploys an airbag (front, side, side curtain or Safety Canopy) or the seatbelt pretensioners.

The horn and indicators turn off when:

- You press the hazard control button.
- You press the panic button on the remote entry transmitter (if equipped).

Roadside Emergencies

TRANSPORTING THE VEHICLE



If you need to tow your vehicle, contact a professional towing service or, if you are a member of a roadside assistance program, your roadside assistance service provider.

We recommend the use of a wheel lift and dollies or flatbed equipment to tow your vehicle. Do not tow with a slingbelt. We do not approve a slingbelt towing procedure. If you tow your vehicle incorrectly, or by any other means, vehicle damage may occur.

We produce a towing manual for all authorized tow truck operators. Have your tow truck operator refer to this manual for proper hook-up and towing procedures for your vehicle.

We recommend towing a four-wheel drive vehicle with all wheels off the ground, such as using a wheel lift and dollies or flatbed equipment.

We recommend towing a rear-wheel drive vehicle with the rear wheels on a tow dolly when towing your vehicle from the front using wheel lift equipment. This prevents damage to the transmission.

We recommend towing a rear-wheel drive vehicle with the front wheels on a tow dolly when towing your vehicle from the rear using wheel lift equipment. This prevents damage to the front fascia.

TOWING POINTS (IF EQUIPPED)



WARNING: Switch the ignition off before removing the recovery hook. Failure to do so could result in personal injury.



WARNING: The recovery hook can become hot. Let the recovery hook cool down before removing it. Failure to do so could result in personal injury.

Your vehicle comes with frame-mounted front recovery hooks. These hooks should never have a load applied to them greater than the gross vehicle weight rating of your vehicle.

Roadside Emergencies



E276543

Remove the covers to access the front recovery hooks.

Before using recovery hooks:

- Make sure all attaching points are secure and capable of withstanding the applied load.
- Do not use chains, cables or tow straps with metal hook ends.
- Only use recovery straps that have a minimum breaking strength two to three times the gross vehicle weight of the stuck vehicle.
- Make sure the recovery strap is in good condition and free of visible cuts, tears or damage.
- Use a damper device such as a tarp, heavy blanket or piece of carpet draped over the recovery strap to help absorb the energy in the event the strap breaks.

- Make sure the stuck vehicle does not have a load heavier than its gross vehicle weight rating specified on the certification label.
- Always align the tow vehicle and stuck vehicle in a straight line, within 10 degrees.
- Keep bystanders to the sides of the vehicle, at a distance of at least twice the length of the recovery strap. This helps avoid injury from the hazard of a recovery hook or strap breaking, or a vehicle lurching into their path.

Customer Assistance

GETTING THE SERVICES YOU NEED

Warranty repairs to your vehicle must be performed by an authorized dealer. While any authorized dealer handling your vehicle line provides warranty service, we recommend you return to your selling authorized dealer who wants to ensure your continued satisfaction.

Please note that certain warranty repairs require special training and equipment, so not all authorized dealers are authorized to perform all warranty repairs. This means that, depending on the warranty repair needed, you may have to take your vehicle to another authorized dealer.

A reasonable time must be allowed to perform a repair after taking your vehicle to the authorized dealer. Repairs are made using Lincoln or Motorcraft parts, or remanufactured or other parts that are authorized by Lincoln.

Away From Home

If you are away from home when your vehicle needs service, contact the Lincoln Client Relationship Center or use the online resources listed below to find the nearest authorized dealer.

In the United States:

Mailing address

Lincoln Motor Company
Client Relationship Center
P.O. Box 6248
Dearborn, MI 48126

Telephone

1-800-521-4140
TDD for the hearing impaired:
1-800-232-5952

Web Address
www.LincolnOwner.com

These are some of the items that can be found online:

- United States dealer locator by Dealer Name, City, State or ZIP Code.
- Owner Manuals.
- Maintenance Schedules.
- Recalls.
- Lincoln Extended Service Plans.
- Lincoln Original Accessories.
- Service specials and promotions.

In Canada:

Mailing address

Lincoln Client Relationship Centre
Lincoln Motor Company of Canada, Limited
P.O. Box 2000
Oakville, Ontario L6K 1C8

Telephone

Customer Assistance

1-800-387-9333
TDD for the hearing impaired:
1-888-658-6805

Web Address
www.LincolnCanada.com

Online Resources

Twitter

@LincolnClientCA

Instagram

@LincolnMotorCA

Facebook

/LincolnClientCA

Additional Assistance

If you have questions or concerns, or are unsatisfied with the service you are receiving, follow these steps:

1. Contact your Sales Representative or Service Advisor at your selling or servicing authorized dealer.

2. If your inquiry or concern remains unresolved, contact the Sales Manager, Service Manager or Customer Relations Manager.
3. If you require assistance or clarification on Lincoln Motor Company policies, please contact the Lincoln Client Relationship Center.

In order to help us serve you better, please have the following information available when contacting a Client Relationship Center:

- Vehicle Identification Number.
- Your telephone number (home and business).
- The name of the authorized dealer and city where located.
- The vehicle's current odometer reading.

In some states, you must directly notify Lincoln in writing before pursuing remedies under your state's warranty laws. Lincoln is also allowed a final repair attempt in some states.

In the United States, a warranty dispute must be submitted to the BBB AUTO LINE before taking action under the Magnuson-Moss Warranty Act, or to the extent allowed by state law, before pursuing replacement or repurchase remedies provided by certain state laws. This dispute handling procedure is not required prior to enforcing state created rights or other rights which are independent of the Magnuson-Moss Warranty Act or state replacement or repurchase laws.

IN CALIFORNIA (U.S. ONLY)

California Civil Code Section 1793.2(d) requires that, if a manufacturer or its representative is unable to repair a motor vehicle to conform to the vehicle's applicable express warranty after a reasonable number of attempts, the manufacturer shall be required to either replace the vehicle with one substantially identical or repurchase the

Customer Assistance

vehicle and reimburse the buyer in an amount equal to the actual price paid or payable by the consumer (less a reasonable allowance for consumer use). The consumer has the right to choose whether to receive a refund or replacement vehicle.

California Civil Code Section 1793.22(b) presumes that the manufacturer has had a reasonable number of attempts to conform the vehicle to its applicable express warranties if, within the first 18 months of ownership of a new vehicle or the first 18,000 mi (29,000 km), whichever occurs first:

1. Two or more repair attempts are made on the same non-conformity likely to cause death or serious bodily injury OR
2. Four or more repair attempts are made on the same nonconformity (a defect or condition that substantially impairs the use, value or safety of the vehicle) OR
3. The vehicle is out of service for repair of nonconformities for a total of more than 30 calendar days (not necessarily all at one time).

In the case of 1 or 2 above, the consumer must also notify the manufacturer of the need for the repair of the nonconformity at the following address:

Ford Motor Company
16800 Executive Plaza Drive
Mail Drop 3NE-B
Dearborn, MI 48126

You are required to submit your warranty dispute to BBB AUTO LINE before asserting in court any rights or remedies conferred by California Civil Code Section 1793.22(b). You are also required to use BBB AUTO LINE before exercising rights or seeking remedies created by the Federal Magnuson-Moss Warranty Act, 15 U.S.C. sec. 2301 et seq. If you choose to seek redress by pursuing rights and remedies not created by California Civil Code Section 1793.22(b) or the Magnuson-Moss Warranty Act, resort to BBB AUTO LINE is not required by those statutes.

THE BETTER BUSINESS BUREAU (BBB) AUTO LINE PROGRAM (U.S. ONLY)

Your satisfaction is important to Ford Motor Company and to your dealer. If a warranty concern has not been resolved using the three-step procedure outlined earlier in this chapter in the Getting the Services you need section, you may be eligible to participate in the BBB AUTO LINE program.

The BBB AUTO LINE program consists of two parts – mediation and arbitration. During mediation, a representative of the BBB will contact both you and Ford Motor Company to explore options for settlement of the claim. If an agreement is not reached during mediation or you do not want to participate in mediation, and if your claim is eligible, you may participate in the arbitration process. An arbitration hearing will be scheduled so that you can present your case in an informal setting before an impartial person. The arbitrator will consider the testimony provided and make a decision after the hearing.

Customer Assistance

Disputes submitted to the BBB AUTO LINE program are usually decided within forty days after you file your claim with the BBB. You are not bound by the decision, and may reject the decision and proceed to court where all findings of the BBB Auto Line dispute, and decision, are admissible in the court action. Should you choose to accept the BBB AUTO LINE decision, Ford is then bound by the decision, and must comply with the decision within 30 days of receipt of your acceptance letter.

BBB AUTO LINE Application: Using the information provided below, please call or write to request a program application. You will be asked for your name and address, general information about your new vehicle, information about your warranty concerns, and any steps you have already taken to try to resolve them. A Customer Claim Form will be mailed that will need to be completed, signed and returned to the BBB along with proof of ownership. Upon receipt, the BBB will review the claim for eligibility under the Program Summary Guidelines.

You can get more information by calling BBB AUTO LINE at 1-800-955-5100, or writing to:

**BBB AUTO LINE
3033 Wilson Boulevard, Suite 600
Arlington, Virginia 22201**

BBB AUTO LINE applications can also be requested by calling the Ford Motor Company Customer Relationship Center at 1-800-392-3673.

For additional information refer to the Better Business Bureau website.

Note: *Ford Motor Company reserves the right to change eligibility limitations, modify procedures, or to discontinue this process at any time without notice and without obligation.*

UTILIZING THE MEDIATION/ARBITRATION PROGRAM (CANADA ONLY)

For vehicles delivered to authorized Canadian dealers. In those cases where you continue to feel that the efforts by Ford of Canada and the authorized dealer to resolve a factory-related vehicle service concern have been unsatisfactory, Ford of Canada participates in an impartial third party mediation/arbitration program administered by the Canadian Motor Vehicle Arbitration Plan (CAMVAP).

The CAMVAP program is a straight forward and relatively speedy alternative to resolve a disagreement when all other efforts to produce a settlement have failed. This procedure is without cost to you and is designed to eliminate the need for lengthy and expensive legal proceedings.

Customer Assistance

In the CAMVAP program, impartial third-party arbitrators conduct hearings at mutually convenient times and places in an informal environment. These impartial arbitrators review the positions of the parties, make decisions and, when appropriate, render awards to resolve disputes. CAMVAP decisions are fast, fair, and final as the arbitrator's award is binding on both you and Ford of Canada.

CAMVAP services are available in all Canadian territories and provinces. For more information, without charge or obligation, call your CAMVAP Provincial Administrator directly at 1-800-207-0685 or visit www.camvap.ca.

GETTING ASSISTANCE OUTSIDE THE U.S. AND CANADA

Before exporting your vehicle to a foreign country, contact the appropriate foreign embassy or consulate. These officials can inform you of local vehicle registration regulations and where to find unleaded fuel or petrol/gas engines or the proper sulfur fuel for diesel engines.

If you cannot find the proper fuel recommended for your vehicle, contact our Customer Relationship Center.

The use of improper fuels in your vehicle without proper conversion may damage the effectiveness of your emission control system and may cause engine knocking or serious engine damage. Ford Motor Company or Ford of Canada is not responsible for any damage caused by use of improper fuel. Using improper fuels may also result in difficulty importing your vehicle back into the United States.

If your vehicle must be serviced while you are traveling or living in Asia-Pacific Region, Sub-Saharan Africa, U.S. Virgin Islands and/or Puerto Rico, Central America, the Caribbean, and Israel and the Middle East, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact the corresponding Ford Customer Assistance Center:

FORD MOTOR COMPANY

Customer Relationship Centers in:

Customer Assistance

Customer Relationship Center	Phone	Fax	E-mail
Asia Pacific	N/A	N/A	apemcrc@ford.com
Caribbean and Central America	+1-800-841-3673	N/A	atnclien@ford.com
Middle East	Ford 80004443673	971 4 3327 266	menacac@ford.com
	Lincoln 80004441067		
	UAE 80004441066		
	Saudi Arabia 8008443673		
	Mobily and Zain cell phone users in Saudi 800850078		
	Kuwait 22280384		
North Africa	N/A	N/A	nafcrc@ford.com

Customer Assistance

Customer Relationship Center	Phone	Fax	E-mail
Puerto Rico and U.S. Virgin Islands	+1-800-841-3673	N/A	atnclien@ford.com
Sub-Saharan Africa	N/A	N/A	ssacrc@ford.com
South Korea	+82-02-1600-6003	N/A	infokr1@ford.com or infokr@lincoln.com

If you buy your vehicle in North America and then relocate to any of the above locations, register your vehicle identification number (VIN) and new address with Ford Global Trade Services by emailing, expcso@ford.com.

If you are in another foreign country, contact the nearest authorized dealer. In the event your inquiry is unresolved, communicate your concern with the dealership's Sales Manager, Service Manager or Customer Relations Manager. If you require additional assistance or clarification, please contact the respective Customer Relationship Center as previously listed.

Customers in the U.S. should call 1-800-392-3673.

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Obtaining a French Owner's Manual

French Owner's Manual can be obtained from your authorized dealer or by contacting Helm, Incorporated using the contact information listed previously in this section.

Customer Assistance

REPORTING SAFETY DEFECTS (U.S. ONLY)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Ford Motor Company.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Ford Motor Company.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to www.safercar.gov; or write to:

Administrator

1200 New Jersey Avenue, Southeast

Washington, D.C. 20590

You can also obtain other information about motor vehicle safety from www.safercar.gov.

REPORTING SAFETY DEFECTS (CANADA ONLY)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada and Ford of Canada.

Transport Canada Contact Information	
Website	http://www.tc.gc.ca/eng/motorvehiclesafety/reporting-defects-motor-vehicles.html (English)
Website	http://www.tc.gc.ca/fra/securiteautomobile/signaler-defauts-vehicules-automobiles.html (French)
Phone	1-800-333-0510

Customer Assistance

Ford of Canada Contact Information	
Website	www.ford.ca
Phone	1-800-565-3673

Fuses

FUSE SPECIFICATION CHART

Engine Compartment Fuse Box



WARNING: Always disconnect the battery before servicing high current fuses.



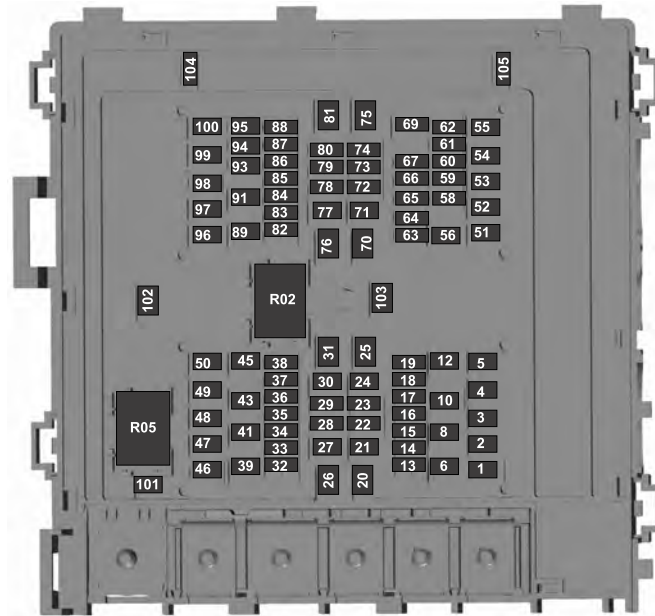
WARNING: To reduce risk of electrical shock, always replace the cover to the power distribution box before reconnecting the battery or refilling fluid reservoirs.

The engine compartment fuse box is in the engine compartment. It has high-current fuses that protect your vehicle's main electrical systems from overloads.

You need to reset some features when you, or someone else, disconnects and reconnects the battery. See **Changing the 12V Battery** (page 390).

Replace fuses with the same type and rating. See **Changing a Fuse** (page 374).

Fuses



E251921

Fuses

Fuse Number	Fuse Rating	Protected Component
1	25 A	Horn.
2	50 A	Electric fan 1.
3	30 A	Front wiper motor.
4	50 A	Inverter.
5	30 A	Starter relay.
6	20 A	Power point #1.
8	20 A	Power point #2.
10	5 A	Rain sensor.
12	20 A	Trailer tow light module.
13	10 A	4X4 module. Heated backlight relay coil. Heated mirror relay coil. Heated wiper park relay coil. Transmission isolation relay coil.
14	15 A	Transmission coil module.
15	15 A	Right-hand lighting driver module. Left-hand lighting driver module. Voltage quality module.

Fuses

Fuse Number	Fuse Rating	Protected Component
		Blindspot information system. Cruise control module. Tailgate applique. Air quality sensor. Image processing module B.
16	10 A	Powertrain control module run/start feed.
17	10 A	Anti-lock brake system run/start feed.
18	10 A	Electronic power assist steering run/start feed.
19	—	Not used.
20	40 A	Front blower.
21	40 A	Passenger seat motors.
22	—	Not used.
23	10 A	Alternator A-line.
24	30 A	Trailer brake control module.
25	50 A	Body control module power 1.
26	50 A	Electric fan 3.
27	40 A	Driver seat motors.

Fuses

Fuse Number	Fuse Rating	Protected Component
28	15 A	Rear heated seats. Rear seat climate control module.
29	—	Not used.
30	25 A	Trailer tow class II-IV battery charge.
31	50 A	Power folding seat module.
32	10 A	A/C clutch.
33	—	Not used.
34	—	Not used.
35	20 A	Vehicle power 4.
36	10 A	Vehicle power 3.
37	25 A	Vehicle power 2.
38	25 A	Vehicle power 1.
39	—	Not used.
41	—	Not used.
43	—	Not used.
45	20 A	Front and rear washer pump.

Fuses

Fuse Number	Fuse Rating	Protected Component
46	7.5 A	Family entertainment system.
47	—	Not used.
48	—	Not used.
49	—	Not used.
50	30 A	Fuel pump.
51	20 A	Power point #3.
52	50 A	Body control module voltage quality monitor.
53	25 A	Trailer tow park lamps relay. Trailer tow control module.
54	40 A	Electronic limited slip differential relay.
55	40 A	Auxiliary blower.
56	20 A	Power point #4.
58	5 A	Front driver and passenger seats - belt tension reducer.
59	—	Not used.
60	5 A	Lincoln start lamp.
61	25 A	Right-hand enhanced exterior lighting module.

Fuses

Fuse Number	Fuse Rating	Protected Component
62	25 A	Left-hand enhanced exterior lighting module.
63	25 A	4X4 module.
64	—	Not used.
65	—	Not used.
66	—	Not used.
67	—	Not used.
69	30 A	Power liftgate module.
70	40 A	Anti-lock brake system and park brake module.
71	25 A	4X4 module
72	—	Not used.
73	—	Not used.
74	10 A	Trailer tow backup lamps.
75	—	Not used.
76	50 A	Body control module run power 2.
77	30 A	Climate control seat module.
78	—	Not used.

Fuses

Fuse Number	Fuse Rating	Protected Component
79	—	Not used.
80	10 A	Heated wiper park.
81	—	Not used.
82	—	Not used.
83	15 A	Transmission control module power.
84	—	Not used.
85	—	Not used.
86	5 A	USB smart charger #5.
87	5 A	USB smart charger #3.
88	10 A	Multi-contour seats relay.
89	40 A	Power running boards.
91	—	Not used.
93	15 A	Heated mirrors.
94	5 A	USB smart charger #1.
95	10 A	USB smart charger #2.
96	30 A	Rear wiper motor relay.

Fuses

Fuse Number	Fuse Rating	Protected Component
97	40 A	Intercooler puller fan relay.
98	15 A	Transmission oil pump.
99	40 A	Heated backlight.
100	20 A	Power point #5.
101	25 A	Electric fan 2.
102	—	Not used.
103	—	Not used.
104	—	Not used.
105	—	Not used.

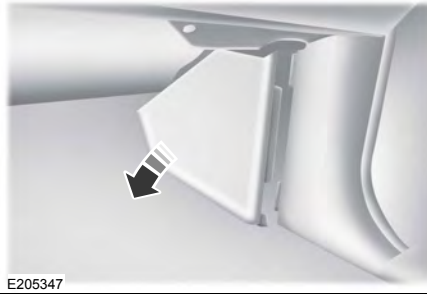
Note: *Spare fuse amperage may vary.*

Relay Number	Protected Component
R02	Powertrain control module.
R05	Electric fan 2.

Fuses

Passenger Compartment Fuse Box

The fuse box is under the right-hand side of the instrument panel.



To remove the trim panel for access to the fuse box, pull the panel toward you and swing it out and away from the side and remove it. To reinstall it, line up the tabs with the grooves on the panel, then push it shut.

Fuses



Fuse Number	Fuse Rating	Protected Component
1	—	Not used.
2	10 A	Driver seat switch.
3	7.5 A	Driver door unlock.
4	20 A	Speaker amplifier.

Fuses

Fuse Number	Fuse Rating	Protected Component
5	—	Not used.
6	10 A	Smart datalink connector logic.
7	10 A	Rear audio control module. Head up display.
8	5 A	Wireless accessory charger. Hands-free liftgate module.
9	5 A	Keypad. Combined sensor module.
10	—	Not used.
11	—	Not used.
12	7.5 A	Instrument cluster.
13	7.5 A	Steering column control module. Smart datalink connector logic. Climate control module. Gear shift module.
14	15 A	Brake switch.
15	15 A	SYNC.
16	—	Not used.

Fuses

Fuse Number	Fuse Rating	Protected Component
17	7.5 A	Headlamp control module.
18	7.5 A	Not used (spare).
19	5 A	Telematics control unit module. Bluetooth low energy module.
20	5 A	Not used (spare).
21	5 A	In-vehicle temperature and humidity sensor.
22	5 A	Electrochromic mirror. Second row heated seat module.
23	30 A	Left-hand front door zone module. Power window switch. Power mirror switch. DVD player.
24	30 A	Moonroof logic.
25	20 A	Speaker amplifier 2.
26	30 A	Right-hand front door zone module.
27	30 A	Left-hand rear door zone module.
28	30 A	Right-hand rear door zone module.
29	15 A	Adjustable column and pedal memory module.

Fuses

Fuse Number	Fuse Rating	Protected Component
30	5 A	Trailer tow control module.
31	10 A	Rear climate control module. Drive mode switch module. Terrain management system switch. Radio frequency transceiver module.
32	20 A	Audio control module. Rear seat entertainment module. Rear audio control module.
33	—	Not used.
34	30 A	Run/start relay.
35	5 A	Not used (spare).
36	15 A	Image processing module A. Automated park assist module. Continuous control damping module. Air particulate matter sensor.
37	20 A	Heated steering wheel.
38	30A Circuit Breaker	Left-hand rear power window. Right-hand rear power window.

Note: Spare fuse amperage may vary.

Fuses

CHANGING A FUSE

Fuses



WARNING: Always replace a fuse with one that has the specified amperage rating. Using a fuse with a higher amperage rating can cause severe wire damage and could start a fire.

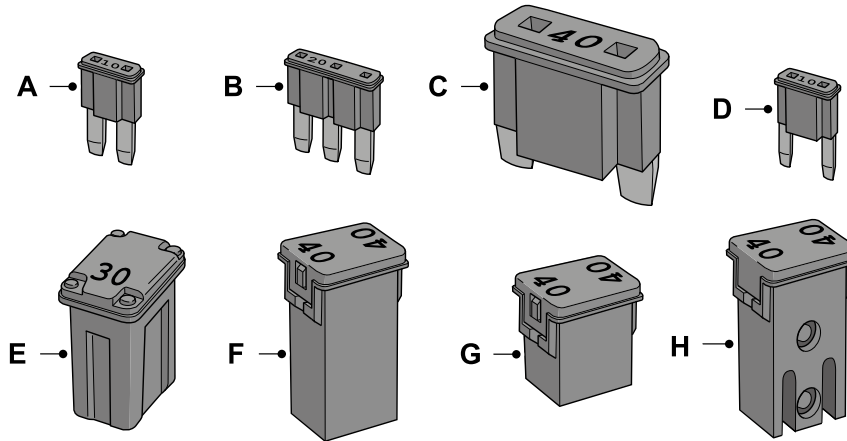


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If electrical components in the vehicle are not working, a fuse may have blown. Blown fuses are identified by a broken wire within the fuse. Check the appropriate fuses before replacing any electrical components.

Fuses

Fuse Types



- A Micro 2.
- B Micro 3.
- C Maxi.
- D Mini.
- E M Case.

Fuses

- F J Case.
- G J Case Low Profile.
- H Slotted M Case.

Maintenance

GENERAL INFORMATION

Have your vehicle serviced regularly to help maintain its roadworthiness and resale value. There is a large network of authorized dealers that are there to help you with their professional servicing expertise. We believe that their specially trained technicians are best qualified to service your vehicle properly and expertly. They are supported by a wide range of highly specialized tools developed specifically for servicing your vehicle.

If your vehicle requires professional service, an authorized dealer can provide the necessary parts and service. Check your warranty information to find out which parts and services are covered.

Use only recommended fuels, lubricants, fluids and service parts conforming to specifications. Motorcraft® parts are designed and built to provide the best performance in your vehicle.

Precautions

- Do not work on a hot engine.
- Make sure that nothing gets caught in moving parts.
- Do not work on a vehicle with the engine running in an enclosed space, unless you are sure you have enough ventilation.
- Keep all open flames and other burning material (such as cigarettes) away from the battery and all fuel related parts.

Working with the Engine Off

1. Set the parking brake and shift the transmission to park (P).
2. Switch off the engine.
3. Block the wheels.

Working with the Engine On

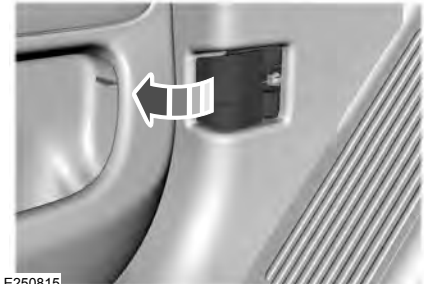


WARNING: To reduce the risk of vehicle damage and personal burn injuries, do not start your engine with the air cleaner removed and do not remove it while the engine is running.

1. Set the parking brake and shift the transmission to park (P).
2. Block the wheels.

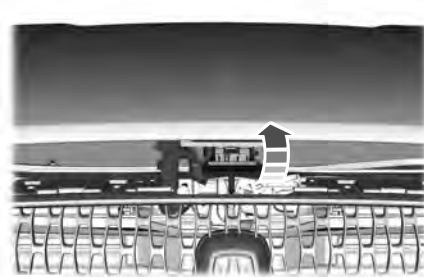
OPENING AND CLOSING THE HOOD

1. Inside the vehicle, pull the hood release handle located under the left-hand side of the instrument panel.



Maintenance

2. Go to the front of your vehicle and locate the secondary release lever under the front of the hood in the center. Release the hood latch by pulling the secondary release upward.

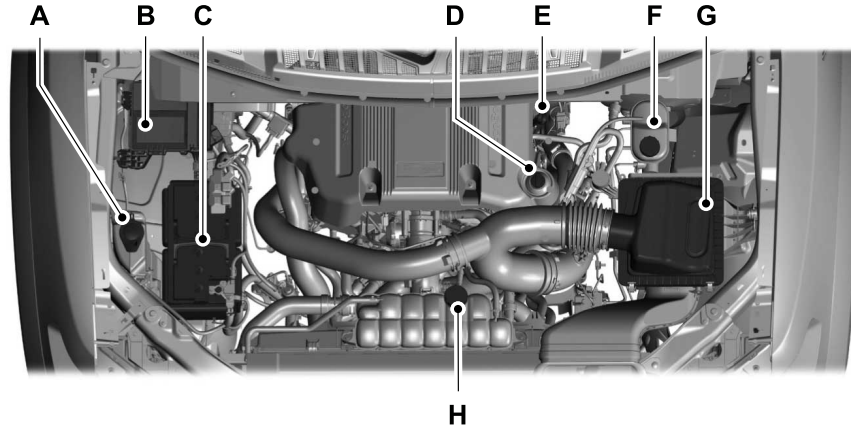


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3. Lift the hood until the lift cylinders hold it open.
4. To close, lower the hood and make sure that it is closed properly and fully latched.

Maintenance

UNDER HOOD OVERVIEW

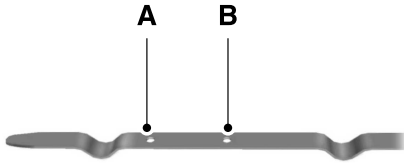


- A. Windshield washer fluid reservoir. See **Washer Fluid Check** (page 394).
- B. Power distribution box. See **Changing a Fuse** (page 374).
- C. Battery. See **Changing the 12V Battery** (page 390).
- D. Engine oil filler cap. See **Engine Oil Check** (page 380).
- E. Engine oil dipstick. See **Engine Oil Dipstick** (page 380).

Maintenance

- F. Brake fluid reservoir. See **Brake Fluid Check** (page 389).
- G. Air filter. See **Changing the Engine Air Filter** (page 382).
- H. Engine coolant reservoir. See **Engine Coolant Check** (page 383).

ENGINE OIL DIPSTICK



E146429

- A MIN
- B MAX

ENGINE OIL CHECK

To check the engine oil level consistently and accurately, do the following:

1. Make sure the parking brake is on. Make sure the transmission is in park (P) or neutral (N).
2. Run the engine until it reaches normal operating temperature.
3. Make sure that your vehicle is on level ground.
4. Switch the engine off and wait 15 minutes for the oil to drain into the oil pan. Checking the engine oil level too soon after you switch the engine off may result in an inaccurate reading.
5. Open the hood. See **Opening and Closing the Hood** (page 377).

6. Remove the dipstick and wipe it with a clean, lint-free cloth. See **Under Hood Overview** (page 379).
7. Reinstall the dipstick and remove it again to check the oil level. See **Engine Oil Dipstick** (page 380).
8. Make sure that the oil level is between the maximum and minimum marks. If the oil level is at the minimum mark, add oil immediately. See **Capacities and Specifications** (page 440).
9. If the oil level is correct, replace the dipstick and make sure it is fully seated.

Note: Do not remove the dipstick when the engine is running.

Note: If the oil level is between the maximum and minimum marks, the oil level is acceptable. Do not add oil.

Maintenance

Note: The oil consumption of new engines reaches its normal level after approximately 3,000 mi (5,000 km).

Adding Engine Oil



WARNING: Do not remove the filler cap when the engine is running.

Do not use supplemental engine oil additives because they are unnecessary and could lead to engine damage that may not be covered by the vehicle Warranty.



E142732

Only use oils certified for gasoline engines by the American Petroleum Institute (API). An oil with this trademark symbol conforms to the current engine and emission system protection standards and fuel economy requirements of the International Lubricants Specification Advisory Committee (ILSAC).

To top up the engine oil level do the following:

1. Clean the area surrounding the engine oil filler cap before you remove it.
2. Remove the engine oil filler cap. See **Under Hood Overview** (page 379). Turn it counterclockwise and remove it.
3. Add engine oil that meets our specifications. See **Capacities and Specifications** (page 440). You may have to use a funnel to pour the engine oil into the opening.
4. Recheck the oil level.
5. If the oil level is correct, replace the dipstick and make sure it is fully seated.
6. Replace the engine oil filler cap. Turn it clockwise until you feel a strong resistance.

Note: Do not add oil further than the maximum mark. Oil levels above the maximum mark may cause engine damage.

Note: Make sure you install the oil filler cap correctly.

Note: Soak up any spillage with an absorbent cloth immediately.

OIL CHANGE INDICATOR RESET

Use the information display controls on the steering wheel to reset the oil change indicator.

Maintenance

From the main menu scroll to:

Message	Action and description
Settings	Press the right arrow button, then from this menu scroll to the following message.
Vehicle	Press the right arrow button, then from this menu scroll to the following message.
Oil Life	Press the right arrow button, then from this menu scroll to the following message.
Hold OK to Reset	Press and hold the OK button until the instrument cluster displays the following message. Reset Successful
	When the oil change indicator resets the instrument cluster displays 100%. Remaining Life {00}%

Message	Action and description
	If the instrument cluster displays one of the following messages, repeat the process. Not Reset Reset Cancelled

CHANGING THE ENGINE AIR FILTER

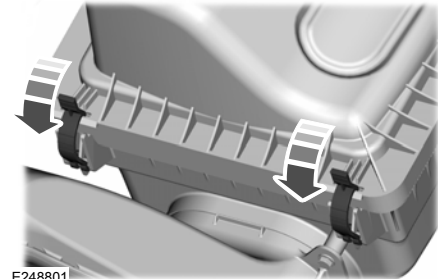


WARNING: To reduce the risk of vehicle damage and personal burn injuries, do not start your engine with the air cleaner removed and do not remove it while the engine is running.

Note: *Failure to use the correct air filter element may result in severe engine damage. Resulting component damage may not be covered by the vehicle Warranty.*

When changing the air filter element, use only the air filter element listed. See **Motorcraft Parts** (page 439).

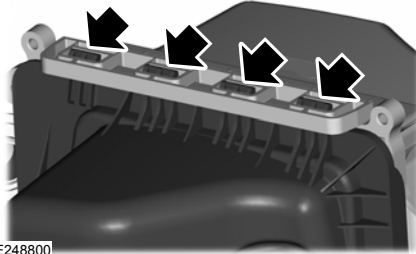
Change the air filter element at the correct interval. See **Scheduled Maintenance** (page 543).



E248801

1. Release the two clamps that secure the cover to the air filter housing. Push the air filter cover toward the front of the vehicle and up slightly to release it.
2. Remove the air filter element from the air filter housing.
3. Install the new air filter element.


Maintenance





E248800

4. Replace the air filter housing cover and secure all the clamps. Be careful not to crimp the filter element edges between the air filter housing and cover and ensure that you properly align the tabs on the edge into the slots.

ENGINE COOLANT CHECK

 **WARNING:** Do not remove the coolant reservoir cap when the engine is on or the cooling system is hot. Wait 10 minutes for the cooling system to cool down. Cover the coolant reservoir cap with a thick cloth to prevent the possibility of scalding and slowly remove the cap. Failure to follow this instruction could result in personal injury.

 **WARNING:** Do not put coolant in the windshield washer reservoir. If sprayed on the windshield, coolant could make it difficult to see through the windshield.

 **WARNING:** To reduce the risk of personal injury, make sure the engine is cool before unscrewing the coolant pressure relief cap. The cooling system is under pressure. Steam and hot liquid can come out forcefully when you loosen the cap slightly.

 **WARNING:** Do not add coolant further than the **MAX** mark.

When the engine is cold, check the concentration and level of the coolant at the intervals listed in the scheduled maintenance information. See **Scheduled Maintenance** (page 539).

Note: Make sure that the coolant level is between the **MIN** and **MAX** marks on the coolant reservoir.

Note: Coolant expands when it is hot. The level may extend beyond the **MAX** mark.

Maintain coolant concentration within 48% to 50%, which equates to a freeze point between -29°F (-34°C) and -35°F (-37°C). Coolant concentration should be checked using a refractometer. We do not recommend the use of hydrometers or coolant test strips for measuring coolant concentration.

Maintenance

Adding Coolant



WARNING: Do not remove the coolant reservoir cap when the engine is on or the cooling system is hot. Wait 10 minutes for the cooling system to cool down. Cover the coolant reservoir cap with a thick cloth to prevent the possibility of scalding and slowly remove the cap. Failure to follow this instruction could result in personal injury.



WARNING: Do not add engine coolant when the engine is on or the cooling system is hot. Failure to follow this instruction could result in personal injury.

Note: Automotive fluids are not interchangeable. Take care not to put engine coolant in the windshield washer fluid reservoir or windshield washer fluid in the engine coolant reservoir.

Note: Do not use stop leak pellets, cooling system sealants, or non-specified additives as they can cause damage to the engine cooling or heating systems. Resulting component damage may not be covered by the vehicle Warranty.

It is very important to use prediluted coolant approved to the correct specification in order to avoid plugging the small passageways in the engine cooling system. See **Capacities and Specifications** (page 440). Do not mix different colors or types of coolant in your vehicle. Mixing of engine coolants or using an incorrect coolant may harm the engine or cooling system components and may not be covered by the vehicle Warranty.

Note: If prediluted coolant is not available, use the approved concentrated coolant diluting it to 50/50 with distilled water. See **Capacities and Specifications** (page 440). Using water that has not been deionised may contribute to deposit formation, corrosion and plugging of the small cooling system passageways.

Note: Coolants marketed for all makes and models may not be approved to our specifications and may cause damage to the cooling system. Resulting component damage may not be covered by the vehicle Warranty.

If the coolant level is at or below the minimum mark, add prediluted coolant immediately.

To top up the coolant level do the following:

1. Unscrew the cap slowly. Any pressure escapes as you unscrew the cap.
2. Add prediluted coolant approved to the correct specification. See **Capacities and Specifications** (page 440).
3. Add enough prediluted coolant to reach the correct level.
4. Replace the coolant reservoir cap. Turn the cap clockwise until it contacts the hard stop.
5. Check the coolant level in the coolant reservoir the next few times you drive your vehicle. If necessary, add enough prediluted engine coolant to bring the coolant level to the correct level.

Maintenance

If you have to add more than 1.1 qt (1 L) of engine coolant per month, have your vehicle checked as soon as possible. Operating an engine with a low level of coolant can result in engine overheating and possible engine damage.

In case of emergency, you can add a large amount of water without engine coolant in order to reach a vehicle service location. In this instance, qualified personnel:

1. Must drain the cooling system.
2. Chemically clean the coolant system.
3. Refill with engine coolant as soon as possible.

Water alone, without engine coolant, can cause engine damage from corrosion, overheating or freezing.

Do not use the following as a coolant substitute:

- Alcohol.
- Methanol.
- Brine.
- Any coolant mixed with alcohol or methanol antifreeze.

Alcohol and other liquids can cause engine damage from overheating or freezing.

Do not add extra inhibitors or additives to the coolant. These can be harmful and compromise the corrosion protection of the coolant.

Recycled Coolant

We do not recommend the use of recycled coolant as an approved recycling process is not yet available.

Dispose of used engine coolant in an appropriate manner. Follow your community's regulations and standards for recycling and disposing of automotive fluids.

Severe Climates

If you drive in extremely cold climates:

- It may be necessary to increase the coolant concentration above 50%.
- A coolant concentration of 60% provides improved freeze point protection. Coolant concentrations above 60% decrease the overheat protection characteristics of the coolant and may cause engine damage.

If you drive in extremely hot climates:

- You can decrease the coolant concentration to 40%.
- Coolant concentrations below 40% decrease the freeze and corrosion protection characteristics of the coolant and may cause engine damage.

Vehicles driven year-round in non-extreme climates should use prediluted coolant for optimum cooling system and engine protection.

Maintenance

Coolant Change

At specific mileage intervals, as listed in the scheduled maintenance information, the coolant should be changed. Add prediluted coolant approved to the correct specification. See **Capacities and Specifications** (page 440).

Fail-Safe Cooling

Fail-safe cooling allows you to temporarily drive your vehicle before any incremental component damage occurs. The fail-safe distance depends on ambient temperature, vehicle load and terrain.

How Fail-Safe Cooling Works



If the engine begins to overheat, the coolant temperature gauge moves toward the red zone:



A warning lamp illuminates and a message may appear in the information display.

If the engine reaches a preset over-temperature condition, the engine automatically switches to alternating cylinder operation. Each disabled cylinder acts as an air pump and cools the engine.

When this occurs, your vehicle still operates, however:

- Engine power is limited.
- The air conditioning system turns off.

Continued operation increases the engine temperature, causing the engine to completely shut down. Your steering and braking effort increases in this situation.

When the engine temperature cools, you can re-start the engine. Have your vehicle checked as soon as possible to minimize engine damage.

When Fail-Safe Mode Is Activated



WARNING: Fail-safe mode is for use during emergencies only. Operate your vehicle in fail-safe mode only as long as necessary to bring your vehicle to rest in a safe location and seek immediate repairs. When in fail-safe mode, your vehicle will have limited power, will not be able to maintain high-speed operation, and may completely shut down without warning, potentially losing engine power, power steering assist, and power brake assist, which may increase the possibility of a crash resulting in serious injury.



WARNING: Do not remove the coolant reservoir cap when the engine is on or the cooling system is hot. Wait 10 minutes for the cooling system to cool down. Cover the coolant reservoir cap with a thick cloth to prevent the possibility of scalding and slowly remove the cap. Failure to follow this instruction could result in personal injury.

Maintenance

Your vehicle has limited engine power when in the fail-safe mode, drive your vehicle with caution. Your vehicle does not maintain high-speed operation and the engine may operate poorly.

Remember that the engine is capable of automatically shutting down to prevent engine damage. In this situation:

1. Pull off the road as soon as safely possible and switch the engine off.
2. If you are a member of a roadside assistance program, we recommend that you contact your roadside assistance service provider.
3. If this is not possible, wait a short period for the engine to cool.
4. Check the coolant level. If the coolant level is at or below the minimum mark, add prediluted coolant immediately.
5. When the engine temperature cools, you can re-start the engine. Have your vehicle checked as soon as possible to minimize engine damage.

Note: *Driving your vehicle without repair increases the chance of engine damage.*

Engine Coolant Temperature Management (If Equipped)



WARNING: To reduce the risk of crash and injury, be prepared that the vehicle speed may reduce and the vehicle may not be able to accelerate with full power until the coolant temperature reduces.

If you tow a trailer with your vehicle, the engine may temporarily reach a higher temperature during severe operating conditions, for example ascending a long or steep grade in high ambient temperatures.

At this time, you may notice the coolant temperature gauge moves toward the red zone and a message may appear in the information display.

You may notice a reduction in vehicle speed caused by reduced engine power in order to manage the engine coolant temperature. Your vehicle may enter this mode if certain high-temperature and high-load conditions take place. The amount of speed reduction depends on vehicle loading, grade and ambient temperature. If this occurs, there is no need to stop your vehicle. You can continue to drive.

The air conditioning may automatically turn on and off during severe operating conditions to protect the engine from overheating. When the coolant temperature decreases to the normal operating temperature, the air conditioning turns on.

If the coolant temperature gauge moves fully into the red zone, or if the coolant temperature warning or service engine soon messages appear in your information display, do the following:

1. Stop your vehicle as soon as it is safe to do so. Fully apply the parking brake, shift into park (P) or neutral (N).

Maintenance

2. Leave the engine running until the coolant temperature gauge needle returns to the normal position. If the temperature does not drop after several minutes, follow the remaining steps.
3. Switch the engine off and wait for it to cool. Check the coolant level.
4. If the coolant level is at or below the minimum mark, add prediluted coolant immediately.
5. If the coolant level is normal, restart the engine and continue.

AUTOMATIC TRANSMISSION FLUID CHECK

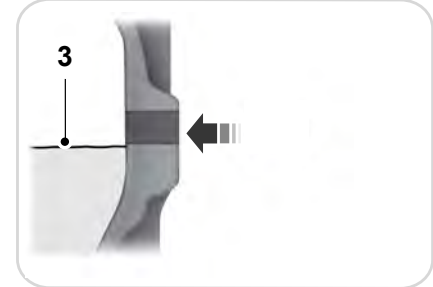
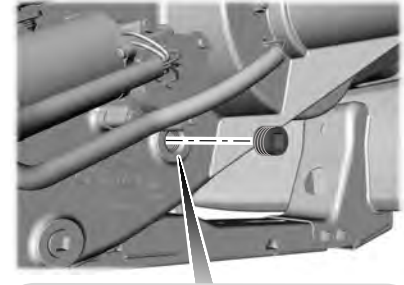
If required, have an authorized dealer check and change the transmission fluid at the correct service interval. See **Scheduled Maintenance** (page 539).

The automatic transmission does not have a transmission fluid dipstick.

Refer to your scheduled maintenance information for scheduled intervals for fluid checks and changes. Your transmission does not consume fluid. However, if the transmission slips, shifts slowly or if you notice a sign of leaking fluid, contact an authorized dealer.

Do not use supplemental transmission fluid additives, treatments or cleaning agents. The use of these materials may affect transmission operation and result in damage to internal transmission components.

TRANSFER CASE FLUID CHECK (IF EQUIPPED)




E170444


Maintenance


1. Clean the area around the filler plug.
2. Remove the filler plug.
3. Inspect the fluid level. The fluid level should be within 0.20 in (5 mm) from the bottom of the hole.
4. Add fluid through the filler opening. Fill to the bottom of the opening.


Use only fluid that meets our specifications. See **Capacities and Specifications** (page 440).

BRAKE FLUID CHECK

 **WARNING:** Do not use any fluid other than the recommended brake fluid as this will reduce brake efficiency. Use of incorrect fluid could result in the loss of vehicle control, serious personal injury or death.

 **WARNING:** Only use brake fluid from a sealed container. Contamination with dirt, water, petroleum products or other materials may result in brake system damage or failure. Failure to adhere to this warning could result in the loss of vehicle control, serious personal injury or death.

 **WARNING:** Do not allow the fluid to touch your skin or eyes. If this happens, rinse the affected areas immediately with plenty of water and contact your physician.

 **WARNING:** The brake system could be affected if the brake fluid level is below the **MIN** mark or above the **MAX** mark on the brake fluid reservoir.



1. Park your vehicle on a level surface.
2. Look at the brake fluid reservoir to see where the brake fluid level is relative to the **MIN** and the **MAX** marks on the reservoir.

Note: If the brake fluid level is between the **MIN** and the **MAX** marks on the reservoir, it is acceptable.

Maintenance

Note: If the brake fluid level is below the **MIN** mark or above the **MAX** mark, have your vehicle checked as soon as possible.

Note: To avoid fluid contamination, the reservoir cap must remain in place and fully tight, unless you are adding fluid.

Only use fluid that meets our specifications. See **Capacities and Specifications** (page 440).

Brake Fluid Service Interval

Brake fluid absorbs water over time which degrades the effectiveness of the brake fluid. Change the brake fluid at the specified intervals to prevent degraded braking performance.

For detailed interval information, see Scheduled Maintenance in your Owner's Manual or your local maintenance guide.

POWER STEERING FLUID CHECK

Your vehicle is equipped with an electric power steering (EPS) system. There is no fluid reservoir to check or fill.

CHANGING THE 12V BATTERY



WARNING: Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lighted substances to come near the battery. When working near the battery, always shield your face and protect your eyes. Always provide correct ventilation.



WARNING: When lifting a plastic-cased battery, excessive pressure on the end walls could cause acid to flow through the vent caps, resulting in personal injury and damage to the vehicle or battery. Lift the battery with a battery carrier or with your hands on opposite corners.



WARNING: Keep batteries out of reach of children. Batteries contain sulfuric acid. Avoid contact with skin, eyes or clothing. Shield your eyes when working near the battery to protect against possible splashing of acid solution. In case of acid contact with skin or eyes, flush immediately with water for a minimum of 15 minutes and get prompt medical attention. If acid is swallowed, call a physician immediately.



WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash your hands after handling.**

Maintenance



WARNING: This vehicle may have more than one battery. Removing the battery cables from only one battery does not disconnect your vehicle electrical system. Make sure you disconnect the battery cables from all batteries when disconnecting power. Failure to do so may cause serious personal injury or property damage.

Your vehicle is fitted with a Motorcraft maintenance-free battery which normally does not require additional water.

When a battery replacement is required, you must use a recommended replacement battery that matches the electrical requirements of the vehicle.

Note: After cleaning or replacing the battery, make sure you reinstall the battery vent tube, battery cover or shield.

For longer, trouble-free operation, keep the top of the battery clean and dry.

If you see any corrosion on the battery or terminals, remove the cables from the terminals and clean with a wire brush. You can neutralize the acid with a solution of baking soda and water.

Because your vehicle's engine is electronically controlled by a computer, some control conditions are maintained by power from the battery. When the battery is disconnected or a new battery is installed, the engine must relearn its idle and fuel trim strategy for optimum driveability and performance. Flexible fuel vehicles (FFV) must also relearn the ethanol content of the fuel for optimum driveability and performance.

To restore the settings, do the following:

1. Apply the parking brake.
2. Shift into park (P) or neutral (N).
3. Switch off all accessories.
4. Press the brake pedal and start your vehicle.

5. Run the engine until it reaches normal operating temperature. While the engine is warming up, complete the following: Reset the clock. Reset the power windows bounce-back feature. See **Windows and Mirrors** (page 119). Reset the radio station presets. See **Audio System** (page 461).
6. Allow the engine to idle for at least one minute.
7. Drive the vehicle at least 10 mi (16 km) to completely relearn the idle trim and fuel trim strategy.

Note: If you do not allow the engine to relearn the idle and fuel trim strategy, the idle quality of your vehicle may be adversely affected until the engine computer eventually relearns the idle trim and fuel trim strategy.

Note: For flexible fuel vehicles, if you are operating on E85, you may experience poor starts or an inability to start the engine and driveability problems until the fuel trim and ethanol content have been relearned.

Maintenance

Make sure that you dispose of old batteries in an environmentally friendly way. Seek advice from your local authority about recycling old batteries.

If storing your vehicle for more than 30 days without recharging the battery, we recommend that you disconnect the negative battery cable to maintain battery charge for quick starting.

Battery Management System (If Equipped)

The battery management system monitors battery conditions and takes actions to extend battery life. If excessive battery drain is detected, the system temporarily disables some electrical systems to protect the battery.

Systems included are:

- Heated rear window.
- Heated seats.
- Climate control.
- Heated steering wheel.
- Audio unit.
- Navigation system.

A message may appear in the information displays to alert you that battery protection actions are active. These messages are only for notification that an action is taking place, and not intended to indicate an electrical problem or that the battery requires replacement.

After battery replacement, or in some cases after charging the battery with an external charger, the battery management system requires eight hours of vehicle sleep time to relearn the battery state of charge. During this time your vehicle must remain fully locked with the ignition switched off.

Note: *Prior to relearning the battery state of charge, the battery management system may temporarily disable some electrical systems.*

Electrical Accessory Installation

To make sure the battery management system works correctly, do not connect an electrical device ground connection directly to the battery negative post. This can cause inaccurate measurements of the battery condition and potential incorrect system operation.

Note: *If you add electrical accessories or components to the vehicle, it may adversely affect battery performance and durability. This may also affect the performance of other electrical systems in the vehicle.*

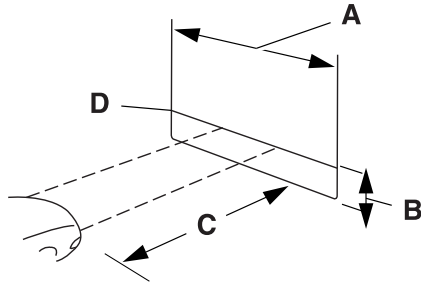
ADJUSTING THE HEADLAMPS

Vertical Aim Adjustment

The headlamps on your vehicle are properly aimed at the assembly plant. If your vehicle has been in an accident, contact an authorized dealer to check and realign your headlamps.

Maintenance

Headlamp Aiming Target



- A 8 feet (2.4 meters).
- B Center height of lamp to ground.
- C 25 feet (7.6 meters).
- D Horizontal reference line.

Vertical Aim Adjustment

1. Park your vehicle directly in front of a wall or screen on a level surface, approximately 25 ft (7.6 m) away.



2. Measure the height from the center of your headlamp (indicated by a dimple at the center of the outboard projector lens) to the ground and mark an 8 ft (2.4 m) horizontal reference line on the vertical wall or screen at this height (a piece of masking tape works well).

Note: To see a clearer light pattern for adjusting, you may want to block the light from one headlamp while adjusting the other.

3. Switch on the low beam headlamps to illuminate the wall or screen and open the hood. Cover one of the headlamps so no light hits the wall.

4. **For halogen or LED headlamps:** On the wall or screen you will observe a light pattern with a distinct horizontal edge toward the right. If this edge is not at the horizontal reference line, you will need to adjust the beam so the edge is at the same height as the horizontal reference line.



5. Locate the vertical adjuster on each headlamp. Use a #2 Phillips screwdriver to turn the adjuster either counterclockwise or clockwise in order to adjust the vertical aim of the headlamp.

Maintenance

- Repeat Steps 3 through 7 to adjust the other headlamp.
- Close the hood and turn off the lamps.

Horizontal Aim Adjustment

Horizontal aim is not required for this vehicle and is not adjustable.

WASHER FLUID CHECK



WARNING: If you operate your vehicle in temperatures below 41.0°F (5°C), use washer fluid with antifreeze protection. Failure to use washer fluid with antifreeze protection in cold weather could result in impaired windshield vision and increase the risk of injury or accident.

Note: *The front and rear washer systems are supplied from the same reservoir.*

Add fluid to fill the reservoir if the level is low. Only use a washer fluid that meets our specifications. See **Capacities and Specifications** (page 440).

State or local regulations on volatile organic compounds may restrict the use of methanol, a common windshield washer antifreeze additive. Washer fluids containing non-methanol antifreeze agents should be used only if they provide cold weather protection without damaging the vehicle's paint finish, wiper blades or washer system.

FUEL FILTER

Your vehicle is equipped with a lifetime fuel filter that is integrated with the fuel tank. Regular maintenance or replacement is not needed.

CHECKING THE WIPER BLADES



E142463

Run the tip of your fingers over the edge of the blade to check for roughness.

Clean the wiper blades with washer fluid or water applied with a soft sponge or cloth.

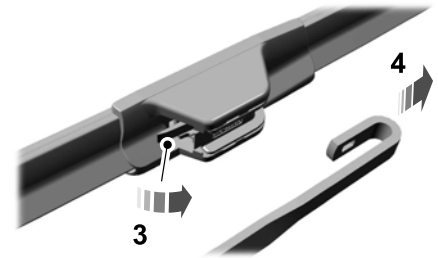
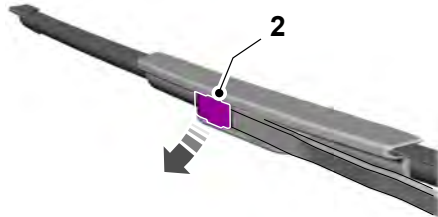
CHANGING THE WIPER BLADES

Note: *Do not hold the wiper blade when lifting the wiper arm.*



- Pull the wiper blade and arm away from the glass.

Maintenance



2. Lift the wiper blade primary locking clip.
3. Press the wiper blade secondary locking clip.
4. Remove the wiper blade.

Note: Make sure that the wiper arm does not spring back against the glass when the wiper blade is not attached.

5. Install in the reverse order.

Note: Make sure that the wiper blade locks into place.

CHANGING A BULB



WARNING: Bulbs can become hot. Let the bulb cool down before removing it. Failure to do so could result in personal injury.

Note: Vehicles with LED headlamps do not contain serviceable bulbs. See an authorized dealer if they fail.

LED Lamps

These lamps operate at a high voltage. Contact an authorized dealer.

The following lamps are LED:

- Headlamp Low/high.
- Front parking lamps.

- Front side marker lamps.
- Daytime running lamps.
- Front direction indicators.
- Rear direction indicators.
- Brake and rear lamps.
- Reversing lamps.
- License plate lamps.

Vehicle Care

GENERAL INFORMATION

Your dealer has many quality products available to clean your vehicle and protect its finishes.

CLEANING PRODUCTS

Materials

For best results, use the following products or products of equivalent quality:

For additional information and assistance, we recommend that you contact an authorized dealer.

Name	Specification
Motorcraft® Bug and Tar Remover, ZC-42 (U.S. & Canada)	
Motorcraft® Custom Bright Metal Cleaner, ZC-15 (U.S. & Canada)	ESR-M5B194-B
Motorcraft® Detail Wash, ZC-3-A (U.S. & Canada)	ESR-M14P4-A
Motorcraft® Engine Shampoo and Degreaser, ZC-20 (U.S.)	ESR-M14P3-A
Motorcraft® Engine Shampoo, CXC-66-A (Canada)	
Motorcraft® Premium Leather and Vinyl Cleaner, ZC-56 (U.S. & Canada)	
Motorcraft® Multi-Purpose Cleaner, CXC-101 (Canada)	
Motorcraft® Premium Windshield Wash Concentrate with Bitterant, ZC-32-B2 (U.S.)	WSS-M14P19-A
Motorcraft® Premium Quality Windshield Washer Fluid, CXC-37-A/B/D/F (Canada)	WSS-M14P19-A
Motorcraft® Professional Strength Carpet & Upholstery Cleaner, ZC-54 (U.S. & Canada)	
Motorcraft® Premium Glass Cleaner, CXC-100 (Canada)	ESR-M14P5-A

Vehicle Care

Name	Specification
Motorcraft® Spot and Stain Remover, ZC-14 (U.S.)	
Motorcraft® Ultra-Clear Spray Glass Cleaner, ZC-23 (U.S.)	ESR-M14P5-A
Motorcraft® Wheel and Tire Cleaner, ZC-37-A (U.S. & Canada)	

CLEANING THE EXTERIOR

Wash your vehicle regularly with cool or lukewarm water and a neutral pH shampoo, we recommend Motorcraft Detail Wash.

- Never use strong household detergents or soap, for example dish washing or laundry liquid. These products can discolor and spot painted surfaces.
- Never wash your vehicle when it is hot to the touch, or during strong or direct sunlight.
- Dry your vehicle with a chamois or soft terry cloth towel to eliminate water spotting.

- Immediately remove fuel spillages, bird droppings, insect deposits and road tar. These may cause damage to your vehicle's paintwork or trim over time. We recommend Motorcraft Bug and Tar Remover.
- Remove any exterior accessories, for example antennas, before entering a car wash.
- When filling with AdBlue®, remove any residue on painted surfaces immediately.

Note: *Suntan lotions and insect repellents can damage painted surfaces. If these substances come in contact with your vehicle, wash the affected area as soon as possible.*

Cleaning the Exterior Precautions

Immediately remove fuel spillages, AdBlue residuals, bird droppings, insect deposits and road tar. These may cause damage to your vehicle's paintwork or trim over time.

Remove any exterior accessories, for example antennas, before entering a car wash.

Cleaning the Exterior Lamps

Note: *Do not scrape the exterior lamps lenses or use abrasives, alcoholic solvents or chemical solvents to clean them.*

Note: *Do not wipe the exterior lamps when they are dry.*

Vehicle Care

Exterior Chrome Parts

- Apply a high quality-cleaning product to bumpers and other chrome parts. Follow the manufacturer's instructions. We recommend Motorcraft Custom Bright Metal Cleaner.
- Do not apply the cleaning product to hot surfaces. Do not leave the cleaning product on chrome surfaces longer than the time recommended.
- Using non-recommended cleaners can result in severe and permanent cosmetic damage.

Note: *Never use abrasive materials, for example steel wool or plastic pads as they can scratch the chrome surface.*

Note: *Do not use chrome cleaner, metal cleaner or polish on wheels or wheel covers.*

Exterior Plastic Parts

For routine cleaning we recommend Motorcraft Detail Wash. If tar or grease spots are present, we recommend Motorcraft Bug and Tar Remover.

Stripes or Graphics (If Equipped)

Hand washing your vehicle is preferred however, pressure washing may be used under the following conditions:

- Do not use water pressure higher than 2,000 psi (14,000 kPa).
- Do not use water hotter than 179°F (82°C).
- Use a spray with a 40° wide spray angle pattern.
- Keep the nozzle at a 12 in (305 mm) distance and 90° angle to your vehicle's surface.

Note: *Holding the pressure washer nozzle at an angle to the vehicle's surface may damage graphics and cause the edges to peel away from the vehicle's surface.*

Underbody

Regularly clean the underside of your vehicle using water. Keep body and door drain holes free of debris or foreign material.

Under Hood

For removing black rubber marks from under the hood we recommend Motorcraft Wheel and Tire Cleaner or Motorcraft Bug and Tar Remover.

WAXING

Regular waxing is necessary to protect your car's paint from the elements. We recommend that you wash and wax the painted surface once or twice a year.

When washing and waxing, park your vehicle in a shaded area out of direct sunlight. Always wash your vehicle before applying wax.

- Use a quality wax that does not contain abrasives.
- Follow the manufacturer's instructions to apply and remove the wax.
- Apply a small amount of wax in a back-and-forth motion, not in circles.

Vehicle Care

- Do not allow wax to come in contact with any non-body (low-gloss black) colored trim. The wax will discolor or stain the parts over time.
 - Roof racks.
 - Bumpers.
 - Grained door handles.
 - Side moldings.
 - Mirror housings.
 - Windshield cowl area.
- Do not apply wax to glass areas.
- After waxing, your car's paint should feel smooth, and be free of streaks and smudges.

CLEANING THE ENGINE

Engines are more efficient when they are clean because grease and dirt buildup keep the engine warmer than normal.

When washing:

- Take care when using a power washer to clean the engine. The high-pressure fluid could penetrate the sealed parts and cause damage.
- Do not spray a hot engine with cold water to avoid cracking the engine block or other engine components.
- Spray Motorcraft Engine Shampoo and Degreaser on all parts that require cleaning and pressure rinse clean. In Canada, use Motorcraft Engine Shampoo.

Note: *If your vehicle has an engine cover remove the cover before application of Motorcraft Engine Shampoo and Degreaser. Immediately rinse away any over spray.*

- Never wash or rinse the engine while it is hot or running; water in the running engine may cause internal damage.
- Never wash or rinse any ignition coil, spark plug wire or spark plug well, or the area in and around these locations.
- Cover the battery, power distribution box, and air filter assembly to prevent water damage when cleaning the engine.

CLEANING THE WINDOWS AND WIPER BLADES

Car wash chemicals and environmental fallout can result in windshield and wiper blade contamination. Dirty windshield and wipers will result in poor windshield wiper operation. Keep the windshield and wiper blades clean to maintain windshield wiper performance.

To clean the windshield and wiper blades:

- Clean the windshield with a non-abrasive glass cleaner. When cleaning the interior of the windshield, avoid getting any glass cleaner on the instrument panel or door panels. Wipe any glass cleaner off these surfaces immediately.
- For windshields contaminated with tree sap, chemicals, wax or bugs, clean the entire windshield using steel wool (no greater than 0000 grade) in a circular motion and rinse with water.
- Clean the wiper blades with isopropyl rubbing alcohol or windshield washer concentrate.

Vehicle Care

Note: Do not use razor blades or other sharp objects to clean or remove decals from the inside of the heated rear window. The vehicle warranty does not cover damage caused to the heated rear window grid lines.

CLEANING THE INTERIOR



WARNING: Do not use cleaning solvents, bleach or dye on the vehicle's seatbelts, as these actions may weaken the belt webbing.



WARNING: On vehicles equipped with seat-mounted airbags, do not use chemical solvents or strong detergents. Such products could contaminate the side airbag system and affect performance of the side airbag in a crash.

Note: Follow the same procedure for cleaning leather seats when cleaning leather interior. See **Cleaning Leather Seats** (page 403).

Note: Do not use household cleaning products or glass cleaners, which can stain and discolor the fabric and affect the flame retardant abilities of the seat materials.

For fabric, carpets, cloth seats, safety belts and seats equipped with side airbags:

- Remove dust and loose dirt with a vacuum cleaner.
- Remove light stains and soil with Motorcraft® Professional Strength Carpet & Upholstery Cleaner.

For grease or tar stains:

- Spot clean the area with Motorcraft® Spot and Stain Remover. In Canada, use Motorcraft® Multi-Purpose Cleaner.
- If a ring forms on the fabric after spot cleaning, clean the entire area immediately, but do not oversaturate or the ring will set.

Cleaning Black Label or Presidential Interior (If Equipped)

Note: Alcantara microfiber cloth fabric is made of polyester microfiber with micro-porous polyurethane. Using commercially available fabric cleaners can cause permanent damage.

Note: Do not use commercially available leather and vinyl cleaning products on Alcantara microfiber cloth fabric.

Note: Lincoln Black Label or Presidential vehicles may have Alcantara microfiber cloth fabric on the seats, headliner, floor mats and door panels.

Depending on the type of stain, use water, lemon juice or pure ethyl alcohol when cleaning. For cleaning Alcantara microfiber cloth, refer to the following chart:

Vehicle Care

Type of Stain	Cleaning Procedure
Fruit juice, jam, jelly, syrup or ketchup.	Use lukewarm water and rinse by dabbing with clean water.
Blood, egg, excrement or urine.	Use cold water and rinse by dabbing with clean water. Avoid warm water because it makes these substances coagulate.
Liquor, alcoholic beverages, wine, beer, cola and tea.	Use lukewarm water. If the color remains, treat with lemon juice and then rinse.
Indelible pencil, cocoa, chocolate, pastry with cream or chocolate, ice cream or mustard.	Use lukewarm water and rinse by dabbing with clean water.
Vinegar, hair gel, tomato sauce or coffee with sugar.	Use lemon juice, wipe with lukewarm water and rinse by dabbing with clean water.
Dye transfer and all other stains.	Use ethyl alcohol, then dab with water.

Vehicle Care

CLEANING THE INSTRUMENT PANEL AND INSTRUMENT CLUSTER LENS



WARNING: Do not use chemical solvents or strong detergents when cleaning the steering wheel or instrument panel to avoid contamination of the airbag system.

Note: Follow the same procedure as cleaning leather seats for cleaning leather instrument panels and leather interior trim surfaces. See **Cleaning Leather Seats** (page 403).

Clean the instrument panel and cluster lens with a clean, damp and soft cloth, then use a clean, dry and soft cloth to dry these areas.

- Avoid cleaners or polishes that increase the gloss of the upper portion of the instrument panel. The dull finish in this area helps protect you from undesirable windshield reflection.
 - Do not use any household cleaning products or glass cleaners as these may damage the finish of the instrument panel, interior trim and cluster lens.
 - Wash or wipe your hands clean if you have been in contact with certain products such as insect repellent and suntan lotion to avoid possible damage to the interior painted surfaces.
 - Do not allow air fresheners and hand sanitizers to spill onto interior surfaces. If a spill occurs, wipe off immediately. Your warranty may not cover these damages.
2. Use Motorcraft Premium Leather and Vinyl Cleaner or a commercially available leather cleaning product for automotive interiors. Test any cleaner or stain remover on an inconspicuous area.
 3. Alternatively, wipe the surface with a clean, soft cloth and a mild soap and water solution. Dry the area with a clean, soft cloth.
 4. If necessary, apply more soap and water solution or cleaning product to a clean, soft cloth and press it onto the soiled area. Allow this to set at room temperature for 30 minutes.
 5. Remove the soaked cloth, then with a clean, damp cloth, use a rubbing motion for 60 seconds on the soiled area.
 6. Dry the area with a clean, soft cloth.

If a staining liquid like coffee or juice has been spilled on the instrument panel or on interior trim surfaces:

1. Wipe up spilled liquid using a clean, soft cloth as quickly as possible.

Vehicle Care

CLEANING LEATHER SEATS (IF EQUIPPED)

Note: Follow the same procedure as cleaning leather seats for cleaning leather instrument panels and leather interior trim surfaces.

For routine cleaning, wipe the surface with a soft, damp cloth and a mild soap and water solution. Dry the area with a clean, soft cloth.

For cleaning and removing stains such as dye transfer, use Motorcraft Premium Leather and Vinyl Cleaner or a commercially available leather cleaning product for automotive interiors.

Note: Test any cleaner or stain remover on an inconspicuous area.

You should:

- Remove dust and loose dirt with a vacuum cleaner.
- Clean and treat spills and stains as soon as possible.

Do not use the following products as these may damage the leather:

- Oil and petroleum or silicone-based leather conditioners.
- Household cleaners.
- Alcohol solutions.
- Solvents or cleaners intended specifically for rubber, vinyl and plastics.

REPAIRING MINOR PAINT DAMAGE

Authorized dealers have touch-up paint to match your vehicle's color. Your vehicle color code is printed on a sticker on the front, left-hand side door jamb. Take your color code to your authorized dealer to make sure you get the correct color.

Before repairing minor paint damage, use a cleaner to remove particles such as bird droppings, tree sap, insect deposits, tar spots, road salt and industrial fallout.

Read the instructions before using cleaning products.

CLEANING THE WHEELS

Note: Do not apply a cleaning chemical to warm or hot wheel rims and covers.

Note: Industrial-strength (heavy-duty) cleaners, or cleaning chemicals, in combination with brush agitation to remove brake dust and dirt, could wear away the clear coat finish over a period of time.

Note: Do not use hydrofluoric acid-based or high caustic-based wheel cleaners, steel wool, fuels or strong household detergent.

Note: If you intend to park your vehicle for an extended period after cleaning the wheels with a wheel cleaner, drive your vehicle for a few minutes before doing so. This reduces the risk of increased corrosion of the brake discs, brake pads and linings.

Note: Some automatic car washes could cause damage to the finish on your wheel rims and covers.

Vehicle Care

Alloy wheels and wheel covers are coated with a clear coat paint finish. To maintain their condition we recommend that you:

- Clean them weekly with the recommended wheel and tire cleaner.
- Use a sponge to remove heavy deposits of dirt and brake dust accumulation.
- Rinse them thoroughly with a pressurized stream of water when you complete the cleaning process.

We recommend that you use our surface wheel cleaner. Make sure that you read and follow the manufacturer's instructions.

Using other non-recommended cleaning products can result in severe and permanent damage.

VEHICLE STORAGE

If you plan on storing your vehicle for 30 days or more, read the following maintenance recommendations to make sure your vehicle stays in good operating condition.

We engineer and test all motor vehicles and their components for reliable, regular driving. Under various conditions, long-term storage may lead to degraded engine performance or failure unless you use specific precautions to preserve engine components.

General

- Store all vehicles in a dry, ventilated place.
- Protect from sunlight, if possible.
- If vehicles are stored outside, they require regular maintenance to protect against rust and damage.

Body

- Wash your vehicle thoroughly to remove dirt, grease, oil, tar or mud from exterior surfaces, rear-wheel housing and the underside of front fenders.
- Periodically wash your vehicle if it is stored in exposed locations.
- Touch-up exposed or primed metal to prevent rust.

- Cover chrome and stainless steel parts with a thick coat of auto wax to prevent discoloration. Re-wax as necessary when you wash your vehicle.
- Lubricate all hood, door and luggage compartment hinges and latches with a light grade oil.
- Cover interior trim to prevent fading.
- Keep all rubber parts free from oil and solvents.

Engine

- Change the engine oil and filter prior to storage because used engine oil contains contaminants which may cause engine damage.
- Start the engine every 15 days for a minimum of 15 minutes. Run at fast idle with the climate controls set to defrost until the engine reaches normal operating temperature.
- With your foot on the brake, shift through all the gears while the engine is running.
- We recommend that you change the engine oil before you use your vehicle again.

Vehicle Care

Fuel system

- Fill the fuel tank with high-quality fuel until the first automatic shutoff of the fuel pump nozzle.

Cooling system

- Protect against freezing temperatures.
- When removing your vehicle from storage, check coolant fluid level. Confirm that there are no cooling system leaks and that fluid is at the recommended level.

Disconnecting Your 12 Volt Battery

- Check and recharge as necessary. Keep connections clean.
- If storing your vehicle for more than 30 days without recharging the battery, we recommend that you disconnect the battery cables to maintain battery charge for quick starting.

Note: *It is necessary to reset memory features if you disconnect the battery cables.*

Brakes

- Make sure the brakes and parking brake release fully.

Tires

- Maintain recommended air pressure.

Miscellaneous

- Make sure all linkages, cables, levers and pins under your vehicle are covered with grease to prevent rust.
- Move vehicles at least 25 ft (7.5 m) every 15 days to lubricate working parts and prevent corrosion.

Removing Vehicle From Storage

When your vehicle is ready to come out of storage, do the following:

- Wash your vehicle to remove any dirt or grease film build-up on window surfaces.
- Check windshield wipers for any deterioration.

- Check under the hood for any foreign material that may have collected during storage such as mice or squirrel nests.
- Check the exhaust for any foreign material that may have collected during storage.
- Check tire pressures and set tire inflation per the Tire Label.
- Check brake pedal operation. Drive your vehicle 15 ft (4.5 m) back and forth to remove rust build-up.
- Check fluid levels (including coolant, oil and gas) to make sure there are no leaks, and fluids are at recommended levels.
- If you remove the battery, clean the battery cable ends and check for damage.

Contact an authorized dealer if you have any concerns or issues.

Vehicle Care

BODY STYLING KITS

The distance between the underside of your vehicle and the ground is less than that of other models. Drive with extreme care to avoid damage to your vehicle.

Wheels and Tires

GENERAL INFORMATION

Use only approved wheel and tire sizes, using other sizes could damage your vehicle. If you change the diameter of the tires from that fitted at the factory, the speedometer may not display the correct speed. If you intend to change the size of the wheels from that fitted by the manufacturer, you can check the suitability with an authorized dealer.

Additional information related to the functionality and maintenance of your tires can be found later in this chapter. See **Tire Care** (page 409).

You can find the recommended tire inflation pressures can on the Tire Label, which is on the B-pillar or the edge of the driver door. You can also find this information on the Safety Compliance Certification Label, affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door latch post; next to the driver seating position.

We strongly recommend maintaining these tire pressures at all times. Failure to follow the tire pressure recommendations can cause uneven treadwear patterns, reduced fuel economy, and adversely affect the way your vehicle handles.

Note: *Check and set the tire pressure at the ambient temperature in which you are intending to drive your vehicle and when the tires are cold.*

Note: *Check your tire pressures at least once per month.*

If your vehicle has a spare tire, set the pressure to the highest value given for your vehicle and tire size combination.

Notice to utility vehicle and truck owners



WARNING: Utility vehicles have a significantly higher rollover rate than other types of vehicles.



WARNING: Vehicles with a higher center of gravity (utility and four-wheel drive vehicles) handle differently than vehicles with a lower center of gravity (passenger cars). Avoid sharp turns, excessive speed and abrupt steering in these vehicles. Failure to drive cautiously increases the risk of losing control of your vehicle, vehicle rollover, personal injury and death.



WARNING: In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seatbelt.



WARNING: Do not become overconfident in the ability of four-wheel drive vehicles. Although a four-wheel drive vehicle may accelerate better than a two-wheel drive vehicle in low traction situations, it won't stop any faster than two-wheel drive vehicles. Always drive at a safe speed.

Wheels and Tires

Utility vehicles and trucks handle differently than passenger cars in the various driving conditions that are encountered on streets, highways and off-road. Utility vehicles and trucks are not designed for cornering at speeds as high as passenger cars any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions.

Study your owner's manual and any supplements for specific information about equipment features, instructions for safe driving and additional precautions to reduce the risk of an accident or serious injury.

Four-wheel drive system (If Equipped)



WARNING: Do not become overconfident in the ability of four-wheel drive vehicles. Although a four-wheel drive vehicle may accelerate better than a two-wheel drive vehicle in low traction situations, it won't stop any faster than two-wheel drive vehicles. Always drive at a safe speed.

A vehicle equipped with four-wheel drive, when selected, has the ability to use all four wheels to power itself. This increases traction which may enable you to safely drive over terrain and road conditions that a conventional two-wheel drive vehicle cannot.

Power is supplied to all four wheels through a transfer case or power transfer unit. Four-wheel drive vehicles allow you to select different modes as necessary. For information on transfer case operation and shifting procedures, See **Four-Wheel Drive** (page 233). For information on transfer case maintenance, See **Maintenance** (page 377). You should become thoroughly familiar with this information before you operate your vehicle.

On some four-wheel drive vehicles, the initial shift from two-wheel to four-wheel drive when the vehicle is moving can cause a momentary clunk and ratcheting sound. These sounds are normal and are not cause for concern.

In four-wheel drive vehicles, the size of the spare tire relative to the remaining tires can have an effect on the 4x4 system. If there is a significant difference between the size of a spare and the remaining tires, four-wheel drive functionality may be limited. See **Using Four-Wheel Drive** (page 233).

How your vehicle differs from other vehicles

Sport utility vehicles and trucks can differ from some other vehicles in a few noticeable ways. Your vehicle may be:

Wheels and Tires

- Higher - to allow higher load carrying capacity and to allow it to travel over rough terrain without getting hung up or damaging underbody components.
- Shorter - to give it the capability to approach inclines and drive over the crest of a hill without getting hung up or damaging underbody components. All other things held equal, a shorter wheelbase may make your vehicle quicker to respond to steering inputs than a vehicle with a longer wheelbase.
- Narrower - to provide greater maneuverability in tight spaces, particularly in off-road use.

As a result of the above dimensional differences, Sport utility vehicles and trucks often have a higher center of gravity and a greater difference in center of gravity between the loaded and unloaded condition. These differences that make your vehicle so versatile also make it handle differently than an ordinary passenger car.

TIRE CARE

Information About Uniform Tire Quality Grading



E142542

Tire Quality Grades apply to new pneumatic passenger car tires. The Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example: **Treadwear 200 Traction AA Temperature A.**

These Tire Quality Grades are determined by standards that the United States Department of Transportation has set.

Tire Quality Grades apply to new pneumatic passenger car tires. They do not apply to deep tread, winter-type snow tires, space-saver or temporary use spare tires, light truck or LT type tires, tires with nominal rim diameters of 10 to 12 inches or limited production tires as defined in Title 49 Code of Federal Regulations Part 575.104 (c)(2).

U.S. Department of Transportation Tire quality grades: The U.S. Department of Transportation requires us to give you the following information about tire grades exactly as the government has written it.

Wheels and Tires

Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one-half (1½) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices, and differences in road characteristics and climate.

Traction AA A B C



WARNING: The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning or peak traction characteristics.

The traction grades, from highest to lowest are AA, A, B, and C. The grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

Temperature A B C



WARNING: The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

The temperature grades are A (the highest), B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause

the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 139. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Glossary of Tire Terminology

***Tire label:** A label showing the original equipment tire sizes, recommended inflation pressure and the maximum weight the vehicle can carry.

***Tire Identification Number (TIN):** A number on the sidewall of each tire providing information about the tire brand and manufacturing plant, tire size and date of manufacture. Also referred to as DOT code.

***Inflation pressure:** A measure of the amount of air in a tire.

Wheels and Tires

***Standard load:** A class of P-metric or Metric tires designed to carry a maximum load at set pressure. For example: For P-Metric tires 35 psi (2.4 bar) and for Metric 36 psi (2.5 bar). Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.

***Extra load:** A class of P-metric or Metric tires designed to carry a heavier maximum load at 42 psi (2.9 bar). Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.

***kPa:** Kilopascal, a metric unit of air pressure.

***PSI:** Pounds per square inch, a standard unit of air pressure.

***Cold tire pressure:** The tire pressure when the vehicle has been stationary and out of direct sunlight for an hour or more and prior to the vehicle being driven for 1 mile (1.6 kilometers).

***Recommended inflation pressure:** The cold inflation pressure found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door.

B-pillar: The structural member at the side of the vehicle behind the front door.

***Bead area of the tire:** Area of the tire next to the rim.

***Sidewall of the tire:** Area between the bead area and the tread.

***Tread area of the tire:** Area of the perimeter of the tire that contacts the road when mounted on the vehicle.

***Rim:** The metal support (wheel) for a tire or a tire and tube assembly upon which the tire beads are seated.

Information Contained on the Tire Sidewall

Both United States and Canada Federal regulations require tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a U.S. DOT Tire Identification Number for safety standard certification and in case of a recall.

Wheels and Tires

Letter rating	mph (km/h)
M	81 (130)
N	87 (140)
Q	99 (159)
R	106 (171)
S	112 (180)
T	118 (190)
U	124 (200)
H	130 (210)
V	149 (240)

Letter rating	mph (km/h)
W	168 (270)
Y	186 (299)

Note: For tires with a maximum speed capability over 149 mph (240 km/h), tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph (299 km/h), tire manufacturers always use the letters ZR.

H. U.S. DOT Tire Identification Number: This begins with the letters DOT and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code designating where it was manufactured, the next two are the tire size code and the last four numbers represent the week and year the tire was built. For example, the numbers 317 mean the 31st week of 1997. After 2000 the numbers go to four

digits. For example, 2501 means the 25th week of 2001. The numbers in between are identification codes used for traceability. This information is used to contact customers if a tire defect requires a recall.

I. M+S or M/S: Mud and Snow, or

AT: All Terrain, or

AS: All Season.

J. Tire Ply Composition and Material Used: Indicates the number of plies or the number of layers of rubber-coated fabric in the tire tread and sidewall. Tire manufacturers also must indicate the ply materials in the tire and the sidewall, which include steel, nylon, polyester, and others.

Wheels and Tires

K. Maximum Load: Indicates the maximum load in kilograms and pounds that can be carried by the tire (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door.

L. Treadwear, Traction and Temperature Grades:

***Treadwear:** The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear 1½ times as well on the government course as a tire graded 100.

***Traction:** The traction grades, from highest to lowest are AA, A, B, and C. The grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

***Temperature:** The temperature grades are A (the highest), B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

M. Maximum Inflation Pressure: Indicates the tire manufacturers' maximum permissible pressure or the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the vehicle manufacturer's recommended cold inflation pressure which can be found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to

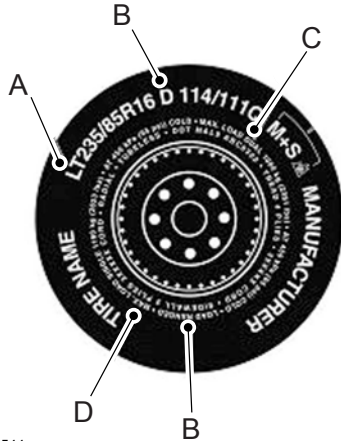
the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door. The cold inflation pressure should never be set lower than the recommended pressure on the vehicle label.

The tire suppliers may have additional markings, notes or warnings such as standard load or radial tubeless.

Additional Information Contained on the Tire Sidewall for LT Type Tires

Note: *Tire Quality Grades do not apply to this type of tire.*

Wheels and Tires



E142544

LT type tires have some additional information beyond those of P type tires. These differences are described below.

A. LT: Indicates a tire, designated by the Tire and Rim Association, that is intended for service on light trucks.

B. Load Range and Load Inflation

Limits: Indicates the tire's load-carrying capabilities and its inflation limits.

C. Maximum Load Dual lb (kg) at psi (kPa) cold: Indicates the maximum load and tire pressure when the tire is used as a dual; defined as four tires on the rear axle (a total of six or more tires on the vehicle).

D. Maximum Load Single lb (kg) at psi (kPa) cold: Indicates the maximum load and tire pressure when the tire is used as a single; defined as two tires (total) on the rear axle.

Information on T Type Tires

T145/80D16 is an example of a tire size.

Note: *The temporary tire size for your vehicle may be different from this example. Tire Quality Grades do not apply to this type of tire.*



E142545

T type tires have some additional information beyond those of P type tires. These differences are described below:

Wheels and Tires

A. T: Indicates a type of tire, designated by the Tire and Rim Association, that is intended for temporary service on cars, sport utility vehicles, minivans and light trucks.

B. 145: Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

C. 80: Indicates the aspect ratio which gives the tire's ratio of height to width. Numbers of 70 or lower indicate a short sidewall.

D. D: Indicates a diagonal type tire.

R: Indicates a radial type tire.

E. 16: Indicates the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

Location of the Tire Label

You will find a Tire Label containing tire inflation pressure by tire size and other important information located on the B-Pillar or the edge of the driver's door. See **Load Carrying** (page 309).

Inflating Your Tires

Safe operation of your vehicle requires that your tires are properly inflated. Remember that a tire can lose up to half of its air pressure without appearing flat.

Every day before you drive, check your tires. If one looks lower than the others, use a tire gauge to check pressure of all tires and adjust if required.

At least once a month and before long trips, inspect each tire and check the tire pressure with a tire gauge (including spare, if equipped). Inflate all tires to the inflation pressure recommended by us.

You are strongly urged to buy a reliable tire pressure gauge, as automatic service station gauges may be inaccurate. We recommend the use of a digital or dial-type tire pressure gauge rather than a stick-type tire pressure gauge.

Use the recommended cold inflation pressure for optimum tire performance and wear. Under-inflation or over-inflation may cause uneven treadwear patterns.



WARNING: Under-inflation is the most common cause of tire failures and may result in severe tire cracking, tread separation or blowout, with unexpected loss of vehicle control and increased risk of injury. Under-inflation increases sidewall flexing and rolling resistance, resulting in heat buildup

Wheels and Tires

and internal damage to the tire. It also may result in unnecessary tire stress, irregular wear, loss of vehicle control and accidents. A tire can lose up to half of its air pressure and not appear to be flat!

Always inflate your tires to the our recommended inflation pressure even if it is less than the maximum inflation pressure information found on the tire. Our recommended tire inflation pressure is found on the Safety Compliance Certification Label or Tire Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door. Failure to follow the tire pressure recommendations can cause uneven treadwear patterns and adversely affect the way your vehicle handles.

Note: *Do not reduce tire pressure to change the ride characteristics of the vehicle. If you do not maintain the inflation pressure at the levels specified by us, your vehicle may experience a condition known as shimmy. Shimmy is a severe vibration and oscillation in the steering wheel after the vehicle travels over a bump or dip in the road that does not dampen out by itself. Shimmy may result from significant under-inflation of the tires, improper tires (load range, size, or type), or vehicle modifications such as lift-kits. In the event that your vehicle experiences shimmy, you should slowly reduce speed by either lifting off the accelerator pedal or lightly applying the brakes. The shimmy will cease as the vehicle speed decreases.*

Maximum Inflation Pressure is the tire manufacturer's maximum permissible pressure and the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the manufacturer's recommended cold inflation pressure which can be found on the Safety Compliance Certification

Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door. The cold inflation pressure should never be set lower than the recommended pressure on the Safety Compliance Certification Label or Tire Label.

When weather temperature changes occur, tire inflation pressures also change. A 10°F (6°C) temperature drop can cause a corresponding drop of 1 psi (7 kPa) in inflation pressure. Check your tire pressures frequently and adjust them to the proper pressure which can be found on the Safety Compliance Certification Label or Tire Label.

To check the pressure in your tire(s):

1. Make sure the tires are cool, meaning they are not hot from driving even a mile.

Wheels and Tires

Note: *If you are checking tire pressure when the tire is hot, (for example, driven more than 1 mile [1.6 kilometers]), never bleed or reduce air pressure. The tires are hot from driving and it is normal for pressures to increase above recommended cold pressures. A hot tire at or below recommended cold inflation pressure could be significantly under-inflated.*

Note: *If you have to drive a distance to get air for your tire(s), check and record the tire pressure first and add the appropriate air pressure when you get to the pump. It is normal for tires to heat up and the air pressure inside to go up as you drive.*

2. Remove the cap from the valve on one tire, then firmly press the tire gauge onto the valve and measure the pressure.
3. Add enough air to reach the recommended air pressure.

Note: *If you overfill the tire, release air by pressing on the metal stem in the center of the valve. Then recheck the pressure with your tire gauge.*

4. Replace the valve cap.
5. Repeat this procedure for each tire, including the spare.

Note: *Some spare tires operate at a higher inflation pressure than the other tires. For T type mini-spare tires, see the Dissimilar spare wheel and tire assembly information for a description. Store and maintain at 60 psi (4.15 bar). For full-size and dissimilar spare tires, see the Dissimilar spare wheel and tire assembly information for a description. Store and maintain at the higher of the front and rear inflation pressure as shown on the Safety Compliance Certification Label or Tire Label.*

6. Visually inspect the tires to make sure there are no nails or other objects embedded that could poke a hole in the tire and cause an air leak.

7. Check the sidewalls to make sure there are no gouges, cuts or bulges.

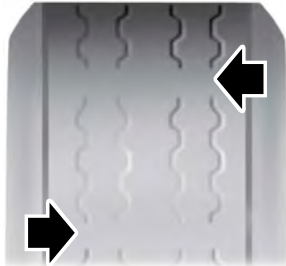
Inspecting Your Tires and Wheel Valve Stems

Periodically inspect the tire treads for uneven or excessive wear and remove objects such as stones, nails or glass that may be wedged in the tread grooves. Check the tire and valve stems for holes, cracks, or cuts that may permit air leakage and repair or replace the tire and replace the valve stem. Inspect the tire sidewalls for cracking, cuts, bruises and other signs of damage or excessive wear. If internal damage to the tire is suspected, have the tire demounted and inspected in case it needs to be repaired or replaced. For your safety, tires that are damaged or show signs of excessive wear should not be used because they are more likely to blow out or fail.

Wheels and Tires

Improper or inadequate vehicle maintenance can cause tires to wear abnormally. Inspect all your tires, including the spare, frequently, and replace them if one or more of the following conditions exist:

Tire Wear



E142546


When the tread is worn down to one sixteenth of an inch (2 millimeters), tires must be replaced to help prevent your vehicle from skidding and hydroplaning. Built-in treadwear indicators, or wear bars, which look like narrow strips of smooth rubber across the tread will appear on the tire when the tread is worn down to one sixteenth of an inch (2 millimeters).


When the tire tread wears down to the same height as these wear bars, the tire is worn out and must be replaced.


Damage

Periodically inspect the tire treads and sidewalls for damage (such as bulges in the tread or sidewalls, cracks in the tread groove and separation in the tread or sidewall). If damage is observed or suspected have the tire inspected by a tire professional. Tires can be damaged during off-road use, so inspection after off-road use is also recommended.

Age

 **WARNING:** Tires degrade over time depending on many factors such as weather, storage conditions, and conditions of use (load, speed, inflation pressure) the tires experience throughout their lives.

 **WARNING:** In general, tires should be replaced after six years regardless of tread wear. However, heat caused by hot climates or frequent high loading conditions can accelerate the aging process and may require tires to be replaced more frequently.

 **WARNING:** You should replace your spare tire when you replace the road tires or after six years due to aging even if it has not been used.

Wheels and Tires

U.S. DOT Tire Identification Number

Both United States and Canada Federal regulations require tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a U.S. DOT Tire Identification Number for safety standard certification and in case of a recall.

This begins with the letters DOT and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code designating where it was manufactured, the next two are the tire size code and the last four numbers represent the week and year the tire was built. For example, the numbers 317 mean the 31st week of 1997. After 2000 the numbers go to four digits. For example, 2501 means the 25th week of 2001. The numbers in between are identification codes used for traceability. This information is used to contact customers if a tire defect requires a recall.

Tire Replacement Requirements

Your vehicle is equipped with tires designed to provide a safe ride and handling capability.



WARNING: Only use replacement tires and wheels that are the same size, load index, speed rating and type (such as P-metric versus LT-metric or all-season versus all-terrain) as those originally provided by Ford. The recommended tire and wheel size may be found on either the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or the Tire Label which is located on the B-Pillar or edge of the driver's door. If this information is not found on these labels, then you should contact your authorized dealer as soon as possible. Use of any tire or wheel not

recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.



WARNING: To reduce the risk of serious injury, when mounting replacement tires and wheels, you should not exceed the maximum pressure indicated on the sidewall of the tire to set the beads without additional precautions listed below. If the beads do not seat at the maximum pressure indicated, re-lubricate and try again.



WARNING: When inflating the tire for mounting pressures up to 20 psi (1.38 bar) greater than the maximum pressure on the tire sidewall, the following precautions must be taken to protect the person mounting the tire:

Wheels and Tires

- Make sure that you have the correct tire and wheel size.
- Lubricate the tire bead and wheel bead seat area again.
- Stand at a minimum of 12 ft (3.66 m) away from the wheel and tire assembly.
- Use both eye and ear protection.



WARNING: For a mounting pressure more than 20 psi (1.38 bar) greater than the maximum pressure, a Ford dealer or other tire service professional should do the mounting.



WARNING: Always inflate steel carcass tires with a remote air fill with the person inflating standing at a minimum of 12 ft (3.66 m) away from the wheel and tire assembly.

Important: Remember to replace the wheel valve stems when the road tires are replaced on your vehicle.

The two front tires or two rear tires should generally be replaced as a pair, except if the vehicle is equipped with four wheel drive. Vehicles equipped with four wheel drive should have all four tires replaced simultaneously. Unevenly worn tires, mismatched makes, models or brands can be different in size, resulting in potential damage to the four wheel drive system.

The tire pressure sensors mounted in the wheels are not designed to be used in aftermarket wheels.

The use of wheels or tires not recommended by us may affect the operation of your tire pressure monitoring system.

If the tire pressure monitoring system indicator is flashing, the system is malfunctioning. Your replacement tire might be incompatible with your tire pressure monitoring system, or some component of the system may be damaged.

Safety Practices



WARNING: If your vehicle is stuck in snow, mud or sand, do not rapidly spin the tires; spinning the tires can tear the tire and cause an explosion. A tire can explode in as little as three to five seconds.



WARNING: Do not spin the wheels at over 34 mph (55 km/h). The tires may fail and injure a passenger or bystander.

Driving habits have a great deal to do with your tire mileage and safety.

- *Observe posted speed limits
- *Avoid fast starts, stops and turns
- *Avoid potholes and objects on the road
- *Do not run over curbs or hit the tire against a curb when parking

Wheels and Tires

Highway Hazards

No matter how carefully you drive there's always the possibility that you may eventually have a flat tire on the highway. Drive slowly to the closest safe area out of traffic. This may further damage the flat tire, but your safety is more important.

If you feel a sudden vibration or ride disturbance while driving, or you suspect your tire or vehicle has been damaged, immediately reduce your speed. Drive with caution until you can safely pull off the road. Stop and inspect the tires for damage. If a tire is under-inflated or damaged, deflate it, remove wheel and replace it with your spare tire and wheel. If you cannot detect a cause, have the vehicle towed to the nearest repair facility or tire dealer to have the vehicle inspected.

Tire and Wheel Alignment

A bad jolt from hitting a curb or pothole can cause the front end of your vehicle to become misaligned or cause damage to your tires. If your vehicle seems to pull to one side when you're driving, the wheels may be out of alignment. Have an authorized dealer check the wheel alignment periodically.

Wheel misalignment in the front or the rear can cause uneven and rapid treadwear of your tires and should be corrected by an authorized dealer. Front-wheel drive vehicles and those with an independent rear suspension may require alignment of all four wheels.

The tires should also be balanced periodically. An unbalanced tire and wheel assembly may result in irregular tire wear.

Tire Rotation



WARNING: If the tire label shows different tire pressures for the front and rear tires and the vehicle has a tire pressure monitoring system, then you need to update the settings for the system sensors. Always perform the system reset procedure after tire rotation. If you do not reset the system, it may not provide a low tire pressure warning when necessary.

Note: *If your tires show uneven wear ask an authorized dealer to check for and correct any wheel misalignment, tire imbalance or mechanical problem involved before tire rotation.*

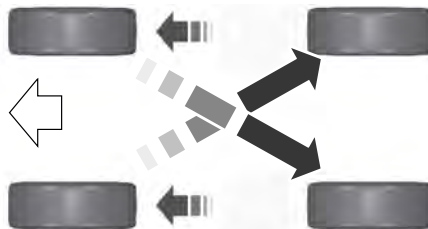
Wheels and Tires

Note: Your vehicle may be equipped with a dissimilar spare wheel and tire assembly. A dissimilar spare wheel and tire assembly is defined as a spare wheel and tire assembly that is different in brand, size or appearance from the road tires and wheels. If you have a dissimilar spare wheel and tire assembly it is intended for temporary use only and should not be used in a tire rotation.

Note: After having your tires rotated, inflation pressure must be checked and adjusted to the vehicle requirements.

Rotating your tires at the recommended interval (as indicated in the Scheduled Maintenance chapter) will help your tires wear more evenly, providing better tire performance and longer tire life.

Rear-wheel drive vehicles and four-wheel drive vehicles (front tires at left of diagram)



E142548

Sometimes irregular tire wear can be corrected by rotating the tires.

USING SNOW CHAINS



WARNING: Snow tires must be the same size, load index and speed rating as those originally provided by Ford. Use of any tire or wheel not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of control, vehicle rollover, personal injury and death. Additionally, the use of non-recommended

tires and wheels can cause steering, suspension, axle, transfer case or power transfer unit failure. Follow the Ford recommended tire inflation pressure found on the Safety Compliance Certification Label (on the door hinge pillar, door latch post or the door edge that meets the door latch post, next to the driver seat), or Tire Label on the B-Pillar or the edge of the driver door. Failure to follow the tire pressure recommendations can cause uneven treadwear patterns and adversely affect the way your vehicle handles.

Note: The suspension insulation and bumpers will help prevent vehicle damage. Do not remove these components from your vehicle when using snow tires and chains.

The tires on your vehicle have all-weather treads to provide traction in rain and snow. However, in some climates, you may need to use snow tires and cables. If you need to use cables, it is recommended that steel wheels (of the same size and specifications) be used, as cables may chip aluminum wheels.

Wheels and Tires

Follow these guidelines when using snow tires and chains:

- If possible, avoid fully loading your vehicle.
- Use only cable type chains or chains offered by Ford/Lincoln as an accessory or equivalent. Other conventional link type chains may contact and cause damage to the vehicle's wheel house and/or body.
- Do not install chains on the front tires as this may interfere with suspension components.
- Only certain snow cables or chains have been approved by Ford/Lincoln as safe for use on your vehicle with the following tires: 265/70R17 and 275/65R18.
- You should install snow cables or chains that have been rated as SAE Class S.
- Install chains securely, verifying that the chains do not touch any wiring, brake lines, or fuel lines.
- Do not exceed 31 mph (50 km/h) or less if recommended by the chain manufacturer while using snow chains.

- Drive cautiously. If you hear the chains rub or bang against your vehicle, stop and retighten the chains. If this does not work, remove the chains to prevent damage to your vehicle.
- Remove the tire chains when they are no longer needed. Do not use tire chains on dry roads.
- Purchase chains or cables from a manufacturer that clearly labels body to tire dimension restrictions. The snow chains or cables must be mounted in pairs on the rear tires only.

If you have any questions regarding snow chains or cables, please contact your authorized dealer.

TIRE PRESSURE MONITORING SYSTEM



WARNING: The tire pressure monitoring system is not a substitute for manually checking tire pressures. You should periodically check tire pressures using a pressure gauge. Failure to correctly maintain tire pressures could increase the risk of tire failure, loss of control, vehicle rollover and personal injury.

Note: *You should only use tire sealants in roadside emergencies as they could cause damage to the tire pressure monitoring system sensor.*

Note: *If the tire pressure monitoring system sensor becomes damaged, it will not function.*

Wheels and Tires



Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires).

As an added safety feature, your vehicle has been equipped with a Tire Pressure Monitoring System (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and could affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists.

When the malfunction indicator is illuminated, the system will not be able to detect or signal low tire pressure as intended. TPMS malfunctions could occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from

functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

This device complies with Part 15 of the FCC Rules and with License exempt RSS Standards of Industry Canada. Operation is subject to the following two conditions:

1. This device will not cause harmful interference, and
2. This device must accept any interference received, including interference that could cause undesired operation.



WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

Wheels and Tires

Changing Tires With a Tire Pressure Monitoring System



E142549

Note: Each road tire is equipped with a tire pressure sensor located inside the wheel and tire assembly cavity. The pressure sensor is attached to the valve stem. The pressure sensor is covered by the tire and is not visible unless the tire is removed. Take care when changing the tire to avoid damaging the sensor.

You should always have your tires serviced by an authorized dealer.

Check the tire pressure periodically (at least monthly) using an accurate tire gauge. See **When Inflating Your Tires** in this chapter.

Understanding Your Tire Pressure Monitoring System



E250820

The tire pressure monitoring system measures pressure in your road tires and sends the tire pressure readings to your vehicle. You can view the tire pressure readings through the information display. See **General Information** (page 134). The low tire pressure warning light will turn on if the tire pressure is significantly low. Once the

light is illuminated, your tires are under-inflated and need to be inflated to the manufacturer's recommended tire pressure. Even if the light turns on and a short time later turns off, your tire pressure still needs to be checked.

When Your Temporary Spare Tire is Installed

When one of your road tires needs to be replaced with the temporary spare, the system will continue to identify an issue to remind you that the damaged road wheel and tire assembly needs to be repaired and put back on your vehicle.

To restore the full function of the tire pressure monitoring system, have the damaged road wheel and tire assembly repaired and remounted on your vehicle.

Wheels and Tires

When You Believe Your System is Not Operating Properly

The main function of the tire pressure monitoring system is to warn you when your

tires need air. It can also warn you in the event the system is no longer capable of functioning as intended. See the following chart for information concerning your tire pressure monitoring system:

Wheels and Tires

Low tire pressure warning light	Possible cause	Customer action required
Solid warning light	Tire(s) under-inflated	Make sure tires are at the proper pressure. See Inflating your tires in this chapter. After inflating your tires to the manufacturer's recommended pressure as shown on the Tire Label (located on the edge of driver's door or the B-Pillar), the vehicle must be driven for at least two minutes over 20 mph (32 km/h) before the light turns off.
	Spare tire in use	Repair the damaged road wheel and tire assembly and reinstall it on the vehicle to restore system function. For a description on how the system functions, see When Your Temporary Spare Tire is Installed in this section.
	TPMS malfunction	If the tires are properly inflated and the spare tire is not in use but the light remains on, contact your authorized dealer as soon as possible.
Flashing warning light	Spare tire in use	Repair the damaged road wheel and tire assembly and reinstall it on the vehicle to restore system function. For a description on how the system functions, see When Your Temporary Spare Tire is Installed in this section.
	TPMS malfunction	If the tires are properly inflated and the spare tire is not in use but the light remains on, contact your authorized dealer as soon as possible.

Wheels and Tires

When Inflating Your Tires



WARNING: Do not use the tire pressure displayed in the information display as a tire pressure gauge. Failure to follow this instruction could result in personal injury or death.

When putting air into your tires (such as at a gas station or in your garage), the tire pressure monitoring system will not respond immediately to the air added to your tires.

It could take up to two minutes of driving over 20 mph (32 km/h) for the light to turn off after you have filled your tires to the recommended inflation pressure.

How Temperature Affects Your Tire Pressure

The tire pressure monitoring system monitors tire pressure in each pneumatic tire. While driving in a normal manner, a typical passenger tire inflation pressure could increase about 2–4 psi (14–28 kPa) from a cold start situation. If the vehicle is stationary overnight with the outside temperature

significantly lower than the daytime temperature, the tire pressure could decrease about 3 psi (21 kPa) for a drop of 30°F (17°C) in ambient temperature. This lower pressure value could be detected by the tire pressure monitoring system as being significantly lower than the recommended inflation pressure and activate the system warning light for low tire pressure. If the low tire pressure warning light is on, visually check each tire to verify that no tire is flat. If one or more tires are flat, repair as necessary. Check the air pressure in the road tires. If any tire is under-inflated, carefully drive the vehicle to the nearest location where air can be added to the tires. Inflate all the tires to the recommended inflation pressure.

CHANGING A ROAD WHEEL



WARNING: If the tire pressure monitor sensor becomes damaged it may not function.

Note: You should only use tire sealants in roadside emergencies as they may cause damage to the tire pressure monitoring system sensor.

Note: The tire pressure monitoring system indicator light illuminates when the spare tire is in use. To restore the full function of the monitoring system, all road wheels equipped with tire pressure monitoring sensors must be mounted on this vehicle.

If you get a flat tire when driving, do not apply the brake heavily. Instead, gradually decrease your speed. Hold the steering wheel firmly and slowly move to a safe place on the side of the road.

Have a flat serviced by an authorized dealer in order to prevent damage to the system sensors. See **Tire Pressure Monitoring System** (page 424). Replace the spare tire with a road tire as soon as possible. During repairing or replacing of the flat tire, have the authorized dealer inspect the system sensor for damage.

Wheels and Tires

Dissimilar Spare Wheel and Tire Assembly Information



WARNING: Failure to follow these guidelines could result in an increased risk of loss of vehicle control, injury or death.

If you have a dissimilar spare wheel and tire, then it is intended for temporary use only. This means that if you need to use it, you should replace it as soon as possible with a road wheel and tire assembly that is the same size and type as the road tires and wheels that were originally provided. If the dissimilar spare tire or wheel is damaged, it should be replaced rather than repaired.

A dissimilar spare wheel and tire assembly is defined as a spare wheel and tire assembly that is different in brand, size or appearance from the road tires and wheels.

Full-size dissimilar spare

When driving with the full-size dissimilar spare wheel and tire assembly, do not:

- Exceed 70 mph (113 km/h).
- Use more than one dissimilar spare wheel and tire assembly at a time.
- Use snow chains on the end of the vehicle with the dissimilar spare wheel and tire assembly.

When driving with the full-size dissimilar spare wheel and tire assembly, it is recommended that you do not:

- Exceed 50 mph (80 km/h) in 4WD.
- Engage 4WD unless the vehicle is stationary.
- Use 4WD on dry pavement.

The usage of a full-size dissimilar spare wheel and tire assembly can lead to impairment of the following:

- Handling, stability and braking performance.
- Comfort and noise.

- Ground clearance and parking at curbs.
- Winter weather driving capability.
- Wet weather driving capability.
- Four-wheel driving capability.

When driving with the full-size dissimilar spare wheel and tire assembly additional caution should be given to:

- Towing a trailer.
- Driving vehicles equipped with a camper body.
- Driving vehicles with a load on the cargo rack.

Drive cautiously when using a full-size dissimilar spare wheel and tire assembly and seek service as soon as possible.

Location of the Spare Tire and Tools

The spare tire is located under the vehicle, just forward of the rear bumper. The jack, swivel wrench and lug wrench are in the following locations:

Wheels and Tires

Item	Location
Spare tire	Under the vehicle, just forward of the rear bumper
Jack and tool kit bag	Under the access panel located in the floor compartment behind the rear seat

Tire Change Procedure



WARNING: Only use replacement tires and wheels that are the same size, load index, speed rating and type (such as P-metric versus LT-metric or all-season versus all-terrain) as those originally provided by Ford. The recommended tire and wheel size may be found on either the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or the Tire Label which is located on the B-Pillar or edge of the driver's door. If this information is not found on these labels, then you should contact your authorized dealer as soon as

possible. Use of any tire or wheel not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.



WARNING: To help prevent your vehicle from moving when changing a wheel, shift the transmission into park (P), set the parking brake and use an appropriate block or wheel chock to secure the wheel diagonally opposite to the wheel being changed. For example, when changing the front left wheel, place an appropriate block or wheel chock on the right rear wheel.





WARNING: Do not attempt to change a tire on the side of the vehicle close to moving traffic. Pull far enough off the road to avoid the danger of being hit when operating the jack or changing the wheel.

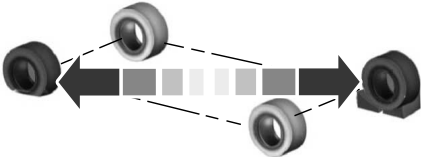


WARNING: Always use the jack provided as original equipment with your vehicle. If using a jack other than the one provided, make sure the jack capacity is adequate for the vehicle weight, including any vehicle cargo or modifications. If you are unsure if the jack capacity is adequate, contact the authorized dealer.

Wheels and Tires

 **WARNING:** Switch off the running boards before jacking or placing any object under your vehicle. Never place your hand between the extended running board and your vehicle. A moving running board may cause injury.

 **WARNING:** Only use the spare wheel carrier to stow the wheel provided with your vehicle. Other wheel sizes could cause the spare wheel carrier to fail if it does not fit securely or is too heavy.



2. Apply the parking brake, place the transmission in park (P) and switch the ignition off.
3. Block the wheels diagonally opposite the flat tire, for example, if the left front tire is flat, block the right rear wheel.

Removing the Jack and Tools

Note: Pay close attention to the orientation of the jack and tool kit bag, because it needs to be reinstalled after changing the tire.

1. Open the liftgate and lift the load floor behind the third row seat. If your vehicle has an access panel, you need to then unlatch and remove this panel.
2. Remove the wing nut by turning it counterclockwise.
3. Remove the jack and tool kit bag from the bracket, loosen the straps and remove the tool bag from the jack.



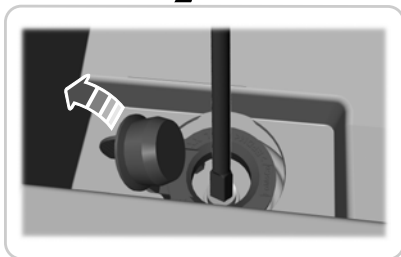
E252435

Removing the Spare Tire

1. Remove the swivel wrench from the tool kit bag, open the spare tire winch access plug at the bottom of the compartment for the jack and tools tray.
2. Insert the swivel wrench through the access hole in the floor to engage the winch. Turn the handle counterclockwise until the tire lowers to the ground and the cable is slightly slack.

1. Park the vehicle on firm, level ground and activate the hazard flashers.

Wheels and Tires




E273399


- Slide the retainer through the center of the spare tire wheel and remove the spare tire.

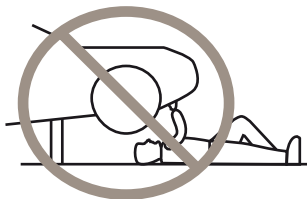
Note: If your wheel nuts are hidden, the wheel cover or ornament must be removed using the provided tool to access the wheel nuts.


- Use the lug wrench tip to remove any wheel trim.
- Loosen each wheel lug one-half turn counterclockwise, but do not remove them until the wheel is off the ground.


Jacking the Vehicle


 **WARNING:** No person should place any portion of their body under a vehicle that is supported by a jack.


 **WARNING:** Do not get under a vehicle that is only supported by a vehicle jack.





 **WARNING:** Check that the vehicle jack is not damaged or deformed and the thread is lubricated and clean.

 **WARNING:** The jack supplied with this vehicle is only intended for changing wheels. Do not use the vehicle jack other than when you are changing a wheel in an emergency.


 **WARNING:** The jack should be used on level firm ground wherever possible.


 **WARNING:** Never place anything between the vehicle jack and the ground.

 **WARNING:** Never place anything between the vehicle jack and your vehicle.

 **WARNING:** Do not work on your vehicle when the jack is the only support as your vehicle could slip off the jack. Failure to follow this instruction could result in personal injury or death.

Wheels and Tires

 **WARNING:** It is recommended that the wheels of the vehicle be chocked, and that no person should remain in a vehicle that is being jacked.

 **WARNING:** Failure to follow these guidelines could result in an increased risk of loss of vehicle control, injury or death.

Note: *The jack does not require maintenance or additional lubrication over the service life of your vehicle.*

Note: *Both the front and rear jacking points are on the frame rails. The correct locations on the frame rails are marked with an arrow punched into the frame rail. Jack at the specified locations to avoid damaging your vehicle.*

1. Position the jack at the jacking point indicator arrow closest to the flat tire location. Assemble the jack drive extension to the lug wrench as shown and use it to turn the jack drive clockwise to raise the vehicle until the flat tire is completely off the ground.



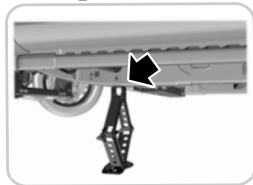
2. Remove the lug nuts with the lug wrench. Replace the flat tire with the spare tire, making sure the valve stem is facing outward.
3. Reinstall the lug nuts until the wheel is snug against the hub. Do not fully tighten the lug nuts until the wheel has been lowered.
4. Completely lower the vehicle by turning the jack drive counterclockwise.
5. Remove the jack and fully tighten the lug nuts in the order shown. See **Technical Specifications** (page 436).



E166719

Front jacking point

Wheels and Tires



Rear jacking point



Stowing the Flat or Spare Tire

1. Lay the tire on the ground, near the rear of the vehicle, with the valve stem side facing up.
2. Slide the wheel partially under the vehicle and install the retainer through the wheel center. You may have to remove the wheel center cap prior to pushing the retainer through the center of the wheel. To remove the center cap, press it off with the jack tool from the inner side of the wheel. Pull on the cable to align the components at the end of the cable.
3. Using the swivel wrench, insert it through the access hole behind the third row seat and engage the winch.
4. Turn the swivel wrench clockwise until the tire is raised to its stowed position underneath the vehicle. The wrench becomes harder to turn and the spare tire winch ratchets or slips when the tire is raised to maximum tightness. A clicking sound can be heard from the winch indicating that the tire is properly stowed.
5. Carefully place all tools back into the tool kit bag.
6. Reinstall the tool kit bag on the jack and tighten the straps.

Wheels and Tires

7. Reinstall the jack properly on the bracket and secure with the wing nut.
8. Close the access hole with the rubber plug.
9. If the vehicle has an access panel, reinstall.
10. Unblock the wheel.

TECHNICAL SPECIFICATIONS

Wheel Lug Nut Torque Specifications



WARNING: When you install a wheel, always remove any corrosion, dirt or foreign materials present on the mounting surfaces of the wheel or the surface of the wheel hub, brake drum or brake disc that contacts the wheel. Make sure to secure any fasteners that attach the rotor to the hub so they do not interfere with the mounting surfaces of the wheel. Installing wheels without correct metal-to-metal contact at the wheel mounting surfaces can cause the wheel nuts to loosen and the wheel to come off while your vehicle is in motion, resulting in loss of vehicle control, personal injury or death.

Bolt Size	lb.ft (Nm) ¹
M14 x 1.5	150 lb.ft (204 Nm)

¹Torque specifications are for nut and bolt threads free of dirt and rust. Use only our recommended replacement fasteners.

Retighten the lug nuts to the specified torque within 100 mi (160 km) after any wheel disturbance, such as tire rotation, changing a flat tire or wheel removal.

Wheels and Tires



E145950

A Wheel pilot bore.

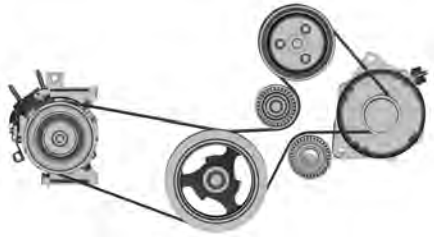
Inspect the wheel pilot hole and mounting surface prior to installation. Remove any visible corrosion or loose particles.

Capacities and Specifications

ENGINE SPECIFICATIONS

Measurement	Specification
Engine displacement.	213 in ³ (3,497 cm ³)
Firing order.	1-4-2-5-3-6
Ignition system.	Coil on plug
Compression ratio.	10.0:1
Spark plug gap.	0.028 in (0.7 mm) - 0.031 in (0.8 mm)

Drivebelt Routing



E250666

Capacities and Specifications

MOTORCRAFT PARTS

Component	Part Number
Air filter element.	FA-1883
Cabin air filter.	FP-79
Oil filter.	FL-500-S ¹
Battery.	BAGM-49H8
Spark plugs.	SP-578 ²
Transmission filter.	FT-215
Windshield wiper blade.	WW-2248
Rear window wiper blade.	WW-1107

¹If a Motorcraft oil filter is not available, use an oil filter that meets industry performance specification SAE/USCAR-36.

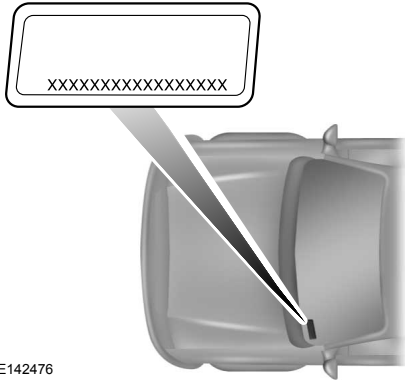
² For spark plug replacement, contact an authorized dealer. Replace the spark plugs at the appropriate intervals. See **Scheduled Maintenance** (page 539).

We recommend Motorcraft replacement parts available at your authorized dealer or at fordparts.com for scheduled maintenance. We engineer the parts for your vehicle to meet and exceed our specifications. Use of other parts may impact vehicle performance, emissions and durability. Your warranty could be void for any damage related to use of other parts.

Capacities and Specifications

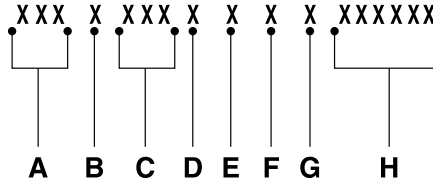
VEHICLE IDENTIFICATION NUMBER

The vehicle identification number is located on the left-hand side of the instrument panel.



Please note that in the graphic, XXXX is representative of your vehicle identification number.

The Vehicle Identification Number contains the following information:



- A World manufacturer identifier
- B Brake system, Gross Vehicle Weight Rating, Restraint Devices and their locations
- C Make, vehicle line, series, body type
- D Engine type
- E Check digit
- F Model year
- G Assembly plant
- H Production sequence number


CAPACITIES AND SPECIFICATIONS

Use oil and fluid that meets the defined specification and viscosity grade.

If you do not use oil and fluid that meets the defined specification and viscosity grade, it could result in:

- Component damage that your vehicle warranty does not cover.
- Longer engine cranking periods.
- Increased emission levels.
- Reduced engine performance.
- Reduced fuel economy.
- Reduced brake performance.

Air Conditioning System



WARNING: The air conditioning refrigerant system contains refrigerant under high pressure. Only qualified personnel should service the air conditioning refrigerant system. Opening the air conditioning refrigerant system can cause personal injury.

Capacities and Specifications

Capacities

Variant	Refrigerant	Refrigerant Oil
All.	37 oz (1.05 kg)	6.1 fl oz (180 ml)

Materials

Name	Specification
R-1234yf Refrigerant(U.S.) R-1234yf Refrigerant / Frigorigène R-1234yf(Canada) YN-33-A(U.S.) HS7Z-19B519-BA(Canada)	WSS-M17B21-A
Motorcraft® R-1234yf Refrigerant PAG Oil(U.S.) Motorcraft® R-1234yf Refrigerant PAG Oil / Huile PAG pour frigorigène R-1234yf Motorcraft®(Canada) YN-35(U.S. & Canada)	WSS-M2C300-A2

Automatic Transmission

Note: Only use MERCON® ULV transmission fluid for automatic transmissions that require MERCON® ULV transmission fluid. The use of any other fluid could cause transmission damage.

Capacities and Specifications

Capacities

Variant	Quantity
All.	13.1 qt (12.4 L) ¹

¹Approximate dry fill capacity. Actual amount could vary during fluid changes.

Materials

Name	Specification
Motorcraft® MERCON® ULV Automatic Transmission Fluid(U.S.) Motorcraft® MERCON® ULV Automatic Transmission Fluid / MERCON® ULV huile pour boîtes automatique Motorcraft®(Canada) XT-12-QULV(U.S. & Canada)	WSS-M2C949-A, MERCON® ULV

Engine Coolant

Capacities

Variant	Quantity
With base radiator.	16.9 qt (16 L)
With heavy-duty trailer towing.	16.4 qt (15.5 L)

Capacities and Specifications

Materials

Name	Specification
Motorcraft® Yellow Prediluted Antifreeze/Coolant(U.S.) Motorcraft® Yellow Prediluted Antifreeze/Coolant / Antigél/liquide de refroidissement prédilué jaune Motorcraft®(Canada) VC-13DL-G(U.S.) CVC-13DL-G(Canada)	WSS-M97B57-A2

Engine Oil



E142732

An oil that displays this symbol conforms to current engine, emission system and fuel economy performance standards of ILSAC.

We recommend Motorcraft® motor oil for your vehicle. If Motorcraft® oil is not available, use motor oils of the recommended viscosity grade that meet API SP requirements and display the API Certification Mark for gasoline engines.

Do not use supplemental engine oil additives because they are unnecessary and could lead to engine damage that your vehicle warranty does not cover.

Capacities and Specifications

Capacities

Variant	Including the Oil Filter
All.	6.0 qt (5.7 L)

Materials

Name	Specification
Motorcraft® SAE 5W-30 Synthetic Blend Motor Oil(U.S.) Motorcraft® SAE 5W-30 Super Premium Motor Oil / Huile moteur de très haute qualité SAE 5W-30 Motorcraft®(Canada) XO-5W30-Q1SP(U.S.) CXO-5W30-LSP6(Canada)	WSS-M2C961-A1

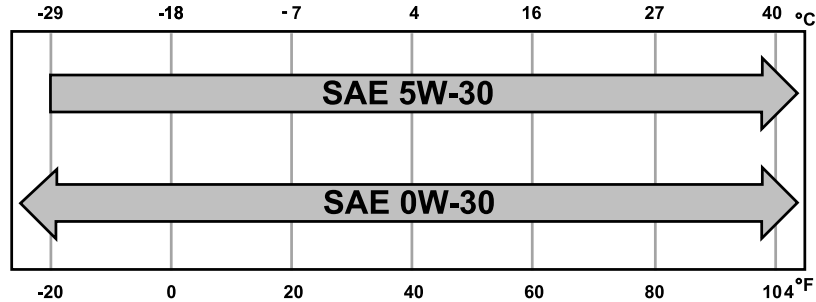
Alternative Engine Oil for Extremely Cold Climates

To improve engine cold start performance, we recommend that you use the following alternative engine oil in extremely cold climates, where the ambient temperature reaches -22.0°F (-30°C) or below.

Capacities and Specifications

Materials

Name	Specification
Engine Oil - SAE 0W-30 - Synthetic Blend	WSS-M2C963-A1



Capacities and Specifications

Fuel Tank

Capacities

Variant	Quantity
Base.	23.6 gal (89.3 L)
Navigator L.	27.8 gal (105.2 L)

Grease

Materials

Name	Specification
Motorcraft® Multi-Purpose Grease Spray(U.S.) Motorcraft® Multi-Purpose Grease Spray / Graisse tout usage en aérosol Motorcraft®(Canada) XL-5-A(U.S. & Canada)	ESB-M1C93-B

Capacities and Specifications

Hydraulic Brake System

Note: *We recommend using DOT 4 Low Viscosity (LV) High Performance Brake Fluid or equivalent meeting WSS-M6C65-A2. Use of any fluid other than the recommended fluid could cause reduced brake performance and not meet our performance standards. Keep brake fluid clean and dry. Contamination with dirt, water, petroleum products or other materials could result in brake system damage and possible failure.*

Materials

Name	Specification
Motorcraft® DOT 4 LV High Performance Motor Vehicle Brake Fluid(U.S.) Motorcraft® DOT 4 LV High Performance Motor Vehicle Brake Fluid / Liquide de frein automobile haute performance DOT 4 LV Motorcraft®(Canada) PM-20(U.S. & Canada)	WSS-M6C65-A2

Locks

Capacities and Specifications

Materials

Name	Specification
Motorcraft® Penetrating and Lock Lubricant(U.S.) Motorcraft® Penetrating Fluid / Liquide dégrissant Motorcraft®(Canada) XL-1(U.S.) CXC-51-A(Canada)	-

Transfer Case

Capacities

Variant	Quantity
All.	1.4–1.6 qt (1.3–1.5 L)

Materials

Name	Specification
Motorcraft® MERCON® LV Automatic Transmission Fluid(U.S.) Motorcraft® MERCON® LV Automatic Transmission Fluid / Huile pour boîte automatique MERCON® LV Motorcraft®(Canada) XT-10-QLVC(U.S.) CXT-10-LV6(Canada)	WSS-M2C938-AMERCON® LV,

Capacities and Specifications

Front Axle

Capacities

Variant	Quantity
All.	1.8 qt (1.7 L)

Materials

Name	Specification
Motorcraft® SAE 75W-85 Premium Synthetic Hypoid Gear Lubricant(U.S.) Motorcraft® SAE 75W-85 Premium Synthetic Hypoid Gear Lubricant / Huile synthétique de haute qualité pour engrenages hypoides SAE 75W-85 Motorcraft®(Canada) XY-75W85-QL(U.S. & Canada)	WSS-M2C942-A

Rear Axle

Capacities

Variant	Quantity
All.	2.5 qt (2.4 L) ¹

¹The rear axle is filled with synthetic rear axle lubricant, and it is considered lubricated for life. Do not check or change the lubricant unless you suspect a leak or submerge the axle in water. Contact an authorized dealer.

Capacities and Specifications

Materials

Name	Specification
Motorcraft® SAE 75W-85 Premium Synthetic Hypoid Gear Lubricant(U.S.) Motorcraft® SAE 75W-85 Premium Synthetic Hypoid Gear Lubricant / Huile synthétique de haute qualité pour engrenages hypoides SAE 75W-85 Motorcraft®(Canada) XY-75W85-QL(U.S. & Canada)	WSS-M2C942-A

Washer Reservoir

Capacities

Variant	Quantity
All.	Fill as required.

Capacities and Specifications

Materials

Name	Specification
Motorcraft® Premium Windshield Wash Concentrate with Bitterant(U.S.) Motorcraft® Premium Quality Windshield Washer Fluid / Liquide lave-glace de haute qualité Motorcraft®(Canada) ZC-32-B2(U.S.) CXC-37-A/B/D/F(Canada)	WSS-M14P19-A

BULB SPECIFICATION CHART

Replacement bulbs are specified in the chart below. Headlamp bulbs must be marked with an authorized D.O.T. for North America and an E for Europe to ensure lamp performance, light brightness and pattern and safe visibility. The correct bulbs will not damage the lamp assembly or void the lamp assembly warranty and will provide quality bulb illumination time.

Capacities and Specifications

Exterior Lamps

Lamp	Specification	Power (Watt)
Front direction indicator.	LED	LED
Daytime running lamps.	LED	LED
Headlamp low beam.	LED	LED
Headlamp high beam.	LED	LED
Front side marker lamps.	LED	LED
Side direction indicator.	LED	LED
Welcome lighting lamps.	LED	LED
Rear lamp, brake lamp and rear direction indicator.	LED	LED
Central high mounted brake lamp.	LED	LED
Reversing lamps.	LED	LED
License plate lamp.	LED	LED

LED lamps are not serviceable. Contact an authorized dealer if they fail.

Capacities and Specifications

Interior Lamps

Lamp	Specification	Power (Watt)
Glove compartment lamp if equipped.	LED	LED
Vanity mirror lamp.	LED	LED
Map lamp.	LED	LED
Second row lamp.	LED	LED
Rear dome lamp.	LED	LED

LED lamps are not serviceable. Contact an authorized dealer if they fail.

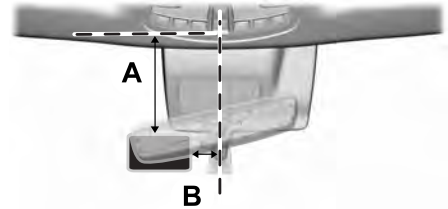
Vehicle Identification

INSTALLING THE VEHICLE IDENTIFICATION CARD

Install the vehicle identification card to the specified area on the windshield.

Note: Follow the manufacturer's installation instructions.

Note: When installing the radio frequency identification device, do not block objects such as the rain sensor and the auto-dimming sensor.



E292699

Item	Dimension Description	Dimension
A	The top edge of the windshield to the top edge of the identification card.	5.9 in (150 mm)
B	The center of the windshield to the right edge of the identification card.	0.59 in (15 mm)

Connected Vehicle

CONNECTED VEHICLE REQUIREMENTS

Connected service and related feature functionality requires a compatible vehicle network.

Some remote features require a subscription. For additional information, see the Lincoln Way app. Some restrictions, third party terms and message or data rates may apply.

CONNECTED VEHICLE LIMITATIONS

Evolving technology, cellular networks, or regulations could affect functionality and availability, or continued provision of some features. These changes could even stop some features from functioning.

CONNECTING THE VEHICLE TO A MOBILE NETWORK

What Is the Modem



The modem allows access to a range of features built into your vehicle.

Enabling and Disabling the Modem

1. Press **Settings**.
2. Press **Lincoln Connect**.
3. Press **Connectivity Settings**.
4. Switch connectivity features on or off.

Connecting Lincoln Way to the Modem

1. Make sure that the modem is enabled using the vehicle settings menu.
2. Open the Lincoln way app on your device and log in.

3. Add your vehicle or select your vehicle if already added.
4. Select the option for vehicle details.
5. Select the option to activate your vehicle.
6. Make sure that the name on the screen matches the name shown in your Lincoln Way account.
7. Confirm that your Lincoln Way account is connected to the modem.

CONNECTING THE VEHICLE TO A WI-FI NETWORK

1. Press **Settings**.
2. Press **Wi-Fi**.
3. Switch **System Wi-Fi** on.
4. Press **View Available Networks**.
5. Select an available Wi-Fi network.

Note: Enter the network password to connect to a secure network.

Connected Vehicle

CONNECTED VEHICLE – TROUBLESHOOTING

Wi-Fi Network

Symptom	Possible Cause and Resolution
I cannot connect to a Wi-Fi network.	<ul style="list-style-type: none">– Password error.<ul style="list-style-type: none">• Enter the correct network password.– Weak network signal.<ul style="list-style-type: none">• Move your vehicle closer to the Wi-Fi hotspot or to a place where the network signal is not obstructed.– Multiple access points in range with the same SSID.<ul style="list-style-type: none">• Use a unique name for your SSID. Do not use the default name unless it contains a unique identifier, for example as part of the MAC address.
The Wi-Fi connection disconnects after successful connection.	<ul style="list-style-type: none">– Weak network signal.<ul style="list-style-type: none">• Move your vehicle closer to the Wi-Fi hotspot or to a place where the network signal is not obstructed.
I am close to a Wi-Fi hotspot but the network signal strength is weak.	<ul style="list-style-type: none">– Obstructed network signal.<ul style="list-style-type: none">• If your vehicle has a heated windshield, position your vehicle so that the windshield is not facing the Wi-Fi hotspot.• If your vehicle has metallic tinting on the windows but not on the windshield, position your vehicle so that the windshield is facing the Wi-Fi hotspot or open the windows that are facing the hotspot.

Connected Vehicle

Symptom	Possible Cause and Resolution
	<ul style="list-style-type: none"> • If your vehicle has metallic tinting on the windows and the windshield, open the windows that are facing the hotspot. • If your vehicle is in a garage and you have the garage door closed, open the garage door.
I cannot see a network in the list of available networks that I expect to see.	<ul style="list-style-type: none"> – Hidden network. <ul style="list-style-type: none"> • Make the network visible and try again.
I cannot see the Wi-Fi hotspot name when I search for Wi-Fi networks on my cell phone or other device.	<ul style="list-style-type: none"> – System limitation. <ul style="list-style-type: none"> • Make sure Wi-Fi hotspot visibility is on. • The system does not provide a Wi-Fi hotspot at this time.
Software downloads take too long.	<ul style="list-style-type: none"> – Weak network signal. <ul style="list-style-type: none"> • Move your vehicle closer to the Wi-Fi hotspot or to a place where the network signal is not obstructed. – Wi-Fi hotspot in high demand or has a slow Internet connection. <ul style="list-style-type: none"> • Use a more reliable Wi-Fi hotspot.
The system seems to connect to a Wi-Fi network and the signal strength is excellent but the software does not update.	<ul style="list-style-type: none"> – No software update available. – Wi-Fi network requires a subscription or acceptance of terms and conditions. <ul style="list-style-type: none"> • Test the connection using another device. If the network requires a subscription or acceptance of terms and conditions, contact the network service provider.

Connected Vehicle

Mobile Network

Symptom	Possible Cause and Resolution
I cannot confirm the connection of Lincoln Way account to the modem.	<ul style="list-style-type: none">- Modem is not enabled.<ul style="list-style-type: none">• Switch connectivity features on.- Weak network signal.<ul style="list-style-type: none">• Move your vehicle closer to a place where the network signal is not obstructed.

Vehicle Wi-Fi Hotspot

CREATING A VEHICLE WI-FI HOTSPOT

You can create a Wi-Fi hotspot in your vehicle and allow devices to connect to it for access to the Internet.



Select the settings option on the feature bar.

1. Press **Lincoln Connect**.
2. Press **Vehicle Hotspot**.

Note: The vehicle hotspot default setting is on.

3. Press **Settings**.
4. Press **Wi-Fi visibility**.

Note: The Wi-Fi Visibility default setting is on.

Finding the Wi-Fi Hotspot Name and Password



Select the settings option on the feature bar.

1. Press **Lincoln Connect**.

2. Press **Vehicle Hotspot**.
3. Press **Settings**.

Note: The SSID is the hotspot name.

4. Press **View Password**.

Connecting a Device to the Wi-Fi Hotspot

1. On your device, switch Wi-Fi on and select the hotspot from the list of available Wi-Fi networks.
2. When prompted, enter the password.

Purchasing a Data Plan

1. Connect a device to the hotspot.

Note: The vehicle network carrier's portal opens on your device.

2. If the portal does not open on your device, open a website and it redirects to the vehicle network carrier's portal.

Note: Secure websites do not redirect.

3. Follow the instructions on the carrier portal to purchase a plan.

Note: If you have an active plan, the system does not redirect to the vehicle network carrier's portal when you connect a device. Visit the vehicle network carrier's website to purchase more data.

Note: If data usage information is available in the vehicle hotspot menu, it is approximate.

Note: If you carry out a master reset, the system does not remove your vehicle from your vehicle network carrier's account. To remove your vehicle from the account, contact your vehicle network carrier.

Note: The vehicle network carrier provides Vehicle Hotspot services, subject to your vehicle network carrier agreement, coverage and availability.

CHANGING THE VEHICLE WI-FI HOTSPOT NAME OR PASSWORD



Select the settings option on the feature bar.

1. Press **Lincoln Connect**.

Vehicle Wi-Fi Hotspot

2. Press **Vehicle Hotspot**.
3. Press **Settings**.
4. Press **Edit**.
5. Press **Change SSID Name**.
6. Enter your required SSID.
7. Press **Done**.
8. Press **Change Password**.
9. Enter your required password.
10. Press **Done**.

Audio System

GENERAL INFORMATION



WARNING: Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the

road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.


Radio Frequencies and Reception Factors

Note: *Listening to loud audio for long periods of time could damage your hearing.*

Radio Reception Factors	
Distance and strength	The further you travel from an AM or FM station, the weaker the signal and the weaker the reception.
Terrain	Hills, mountains, tall buildings, bridges, tunnels, freeway overpasses, parking garages, dense tree foliage and thunderstorms can interfere with the reception.
Station overload	When you pass a ground-based broadcast repeating tower, a stronger signal may overtake a weaker one and result in the audio system muting.

Audio System

AUDIO UNIT

 **WARNING:** Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.



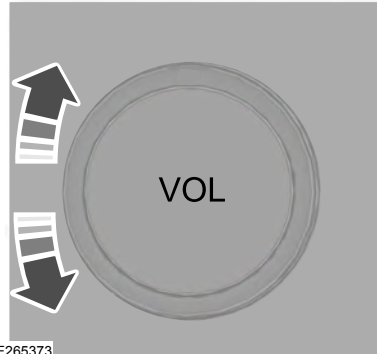
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Note: Depending on your vehicle option package, the controls may look different from what you see here.

Note: Some features, such as satellite radio, may not be available in your location. Check with an authorized dealer.

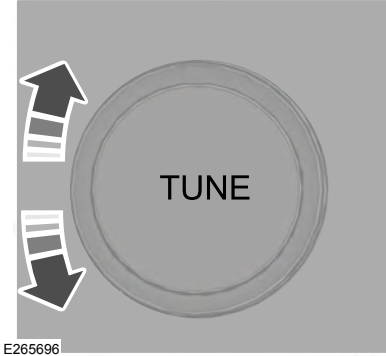
Note: The touchscreen system controls most of the audio features.

Adjusting the Volume



Turn to adjust the volume.

Changing Radio Stations



In radio mode, turn to search through the radio frequency band.

In satellite radio mode, turn to find the previous or next available satellite radio station.

Audio System

Locking the Rear Audio Controls (If

Equipped)



Press and release the button to lock the rear passenger audio controls.

Selecting the Audio Modes (If Equipped)



Press and release the button to access different audio modes, for example AM, FM and CD.

Switching the Audio Unit On and Off



Press and release the button.

Using Seek, Fast Forward and Reverse



In radio mode, select a frequency band and press and release either button. The system stops at the first station it finds in that direction.

In satellite radio mode, press and release to select the next or previous satellite radio station. If you select a specific category, such as jazz, rock or news, press to find the next or previous station in that category.

Rear Seat Audio Controls - Vehicles without: Second Row Center Console

(If Equipped)



E287853

Accessing the Audio System Modes



Press and release the button to scroll through available audio system modes.

Adjusting the Volume



Press and release the button to adjust the volume.

Displaying the Clock



Press and release the button to display the clock.

Audio System

Using Seek

SEEK

Press and release the button to select the next or previous stored radio frequency station.

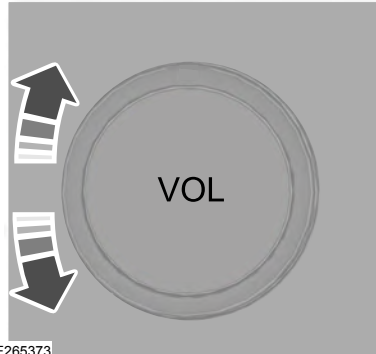
Rear Passenger Audio Controls - Vehicles with: Second Row Center Console (If Equipped)



E289983

Note: Depending on your vehicle option package, the controls may look different from what you see here.

Adjusting the Volume



E265373

Turn to adjust the volume.

Using Seek, Fast Forward and Reverse



In radio mode, press either button to scroll through the presets from the front radio. To select a radio station, press and hold to move quickly forward or backward through the radio stations.

In USB mode, press to select the next or previous track. Press and hold to move quickly forward or backward through the selected media source.

Selecting the Audio Modes

SOURCE

Press and release the button to access different media modes, for example AM, FM, CD, and USB.

Switching the Display On and Off

DISPLAY

Press and release the button.

Audio System

DIGITAL RADIO

Note: *HD Radio broadcasts are not available in all markets.*

HD Radio technology is the digital evolution of analog AM/FM radio. Your system has a special receiver that allows it to receive digital broadcasts, where available, in addition to the analog broadcasts, it already receives. Digital broadcasts provide a better sound quality than analog broadcasts with free, crystal-clear audio and no static or distortion. For more information, and a guide to available stations and programming, please visit www.hdradio.com.

When HD Radio is on and you tune to a station broadcasting HD Radio technology, you may notice the HD Radio logo on your screen. When this logo is available, you may also see Title and Artist fields on-screen.

The multicast indicator appears in FM mode, only, if the current station is broadcasting multiple digital broadcasts. The highlighted numbers signify available digital channels where new or different content is available. HD1 signifies the main programming status and is available in analog and digital broadcasts. Other multicast stations, HD2 through HD7, are only available digitally.

When HD Radio broadcasts are active, you can access the following functions:

- **Memory presets** allow you to save an active channel as a memory preset. Touch and hold a memory preset slot until the sound returns. There is a brief mute while the radio saves the station. Sound returns when finished. When switching to an HD2 or HD3 memory preset, the sound mutes before the digital audio plays, because the system has to reacquire the digital signal.

Note: *As with any saved radio station, you cannot access the saved station if your vehicle is outside the station's reception area.*

Audio System

HD Radio Reception and Station Troubleshooting

Potential reception issues	
Reception area	If you are listening to a multicast station and you are on the fringe of the reception area, the station may mute due to weak signal strength.
	If you are listening to HD1, the system switches back to the analog broadcast until the digital broadcast is available again. However, if you are listening to any of the possible HD2-HD7 multicast channels, the station mutes and stays muted unless it is able to connect to the digital signal again.
Station blending	When the system first receives a station, aside from HD2-HD7 multicast stations, it first plays the station in the analog version. Once the receiver verifies the station is an HD Radio station, it shifts to the digital version. Depending on the station quality, you may hear a slight sound change when the station changes from analog to digital. Blending is the shift from analog to digital sound or digital back to analog sound.

In order to provide the best possible experience, use the contact form to report any station issues found while listening to a station broadcasting with HD Radio technology. Independent entities own and operate each station. These stations are responsible for the accuracy of all audio streams and data fields.

Audio System

Potential station issues		
Issues	Cause	Action
Echo, stutter, skip or repeat in audio. Increase or decrease in audio volume.	This is poor time alignment by the radio broadcaster.	No action required. This is a broadcast issue.
Sound fading or blending in and out.	The radio is shifting between analog and digital audio.	No action required. The reception issue may clear up as you continue to drive.
There is an audio mute delay when selecting HD2 or HD3, multicast preset or Direct Tune .	The digital multicast is not available until the HD Radio broadcast is decoded. Once decoded, the audio is available.	No action required. This is normal behavior. Wait until the audio is available.
Cannot access HD2 or HD3 multicast channel when recalling a preset or from a direct tune.	The previously stored multicast preset or direct tune is not available in your current reception area.	No action required. The station is not available in your current location.
Text information does not match currently playing audio.	Data service issue by the radio broadcaster.	Fill out the station issue form at website listed below. ¹
There is no text information shown for currently selected frequency.	Data service issue by the radio broadcaster.	Fill out the station issue form at website listed below. ¹

¹ <http://hdradio.com/stations/feedback>

Audio System

HD Radio Technology manufactured under license from iBiquity Digital Corporation and foreign patents. HD Radio and the HD and HD Radio logos are proprietary trademarks of DTS Ford Motor Company and DTS are not responsible for the content sent using HD Radio technology. Content may be changed, added or deleted at any time at the station owner's discretion.

SATELLITE RADIO

SiriusXM® Satellite Radio broadcasts a variety of music, news, sports, weather, traffic and entertainment satellite radio channels. For more information and a complete list of SiriusXM satellite radio channels, visit www.siriusxm.com in the United States, www.siriusxm.ca in Canada, or call SiriusXM at 1-888-539-7474.

Note: *This receiver includes the eCos real-time operating system. eCos is published under the eCos License.*

Satellite Radio Reception Factors

Potential satellite radio reception issues	
Antenna obstructions	For optimal reception performance, keep the antenna clear of snow and ice build-up and keep luggage and other material as far away from the antenna as possible.
Terrain	Hills, mountains, tall buildings, bridges, tunnels, freeway overpasses, parking garages, dense tree foliage and thunderstorms can interfere with your reception.
Station overload	When you pass a ground-based broadcast-repeating tower, a stronger signal may overtake a weaker one and the audio system may mute.
Satellite radio signal interference	Your display may show ACQUIRING . . . to indicate the interference and the audio system may mute.

Audio System

SiriusXM Satellite Radio Service

Note: *SiriusXM reserves the unrestricted right to change, rearrange, add or delete programming including canceling, moving or adding particular channels, and its prices, at any time, with or without notice to you. Ford Motor Company shall not be responsible for any such programming changes.*



E208625

SiriusXM satellite radio is a subscription-based satellite radio service that broadcasts a variety of music, sports, news, weather, traffic and entertainment programming. Your factory-installed SiriusXM satellite radio system includes hardware and a limited subscription term, which begins on the date of sale or lease of your vehicle. See an authorized dealer for availability.

For more information on extended subscription terms (a service fee is required), the online media player and a complete list of SiriusXM satellite radio channels, and other features, please visit www.siriusxm.com in the United States, www.siriusxm.ca in Canada, or call SiriusXM at 1-888-539-7474.

Satellite Radio Electronic Serial Number (ESN)

You need your ESN to activate, modify or track your satellite radio account.

Locating Your ESN

With satellite radio as the source, use the touchscreen to select the following:

1. Select **Settings**. See **Settings** (page 515).
2. Select **SiriusXM**.
3. Select **SiriusXM information**.

Audio System

Troubleshooting

Message	Condition	Action
Acquiring...	Radio requires more than two seconds to produce audio for the selected channel.	No action required. This message should disappear shortly.
Satellite antenna fault SIRIUS system failure	There is an internal module or system failure present.	If this message does not clear shortly, or with an ignition key cycle, your receiver may have a fault. See an authorized dealer for service.
Invalid Channel	The channel is no longer available.	Tune to another channel or choose another preset.
Unsubscribed Channel	Your subscription does not include this channel.	Contact SiriusXM at 1-888-539-7474 to subscribe to the channel, or tune to another channel.
No Signal	The signal is lost from the SiriusXM satellite or SiriusXM tower to your vehicle antenna.	The signal is blocked. When you move into an open area, the signal should return.
Updating...	Update of channel programming in progress.	No action required. The process may take up to three minutes.
Questions? Call 1-888-539-7474	Your satellite service is no longer available.	Contact SiriusXM at 1-888-539-7474 to resolve subscription issues.

Audio System

Message	Condition	Action
None found Check Channel Guide	All the channels in the selected category are either skipped or locked.	Use the channel guide to turn off the Lock or Skip function on that station.
Subscription Updated	SiriusXM has updated the channels available for your vehicle.	No action required.

USB PORT



WARNING: Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

USB A



USB C



The USB port allows you to plug in media playing devices, memory sticks and charge devices.

Note: We recommend using only USB-IF certified cables and adapters. Non-certified cables and adapters may not work.

Audio System

Locating the USB Ports

The USB ports may be in the following locations:

- Inside the media bin.
- Inside the center console.
- On the lower instrument panel.

Note: *The number and type of USB ports may vary depending on your vehicle.*

Note: *Not all USB ports in your vehicle have data transfer capabilities. See **What Is the Power Outlet** (page 201).*

GENERAL INFORMATION



WARNING: Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

About SYNC

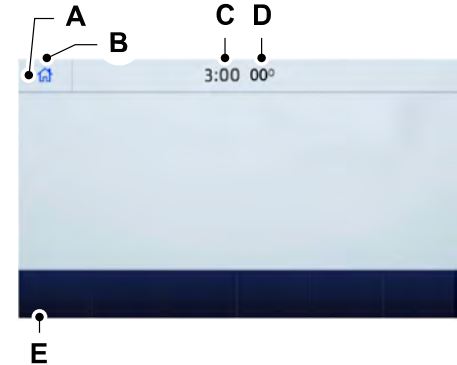
The system allows you to interact with the entertainment, information and communication systems on your vehicle using voice commands and a touchscreen. The system provides easy interaction with audio, phone, navigation, mobile apps and settings.

Note: You can switch the system on and use it for up to an hour without switching the ignition on.

Note: You can use the system after you switch the ignition off for up to 10 minutes or until you open a door.

Note: For your safety, some features are speed-dependent. Their use is limited to when your vehicle speed is less than 3 mph (5 km/h).

Using the Touchscreen



- A Status bar.
- B Home screen.
- C Clock. See **Settings** (page 515).
- D Outside air temperature.
- E Feature bar.

Status Bar



Cell phone microphone muted.



Audio system muted.



Software update installed.



Wi-Fi connected.



Cell phone roaming.



Text message received.



Automatic crash notification system off.



Cell phone network signal strength.



Vehicle data sharing on.



Vehicle location sharing on.



Vehicle data and vehicle location sharing on.



Wireless charger active.

Feature Bar



Select to use the radio, a USB, a media player or a Bluetooth device. See **Entertainment** (page 487).



Select to adjust climate settings. See **Climate** (page 499).



Select to make calls and access the phonebook on your cell phone. See **Phone** (page 502).



Select to use the navigation system. See **Navigation** (page 504).



Select to search for and use compatible apps on your iOS or Android device. See **Apps** (page 512).



Select to adjust system settings. See **Settings** (page 515).

Cleaning the Touchscreen

See **Cleaning the Interior** (page 400).

Updating the System

Updating the System Using a USB Drive

Downloading an Update

1. Go to the SYNC update page on the local Ford website.
2. Download the update.

Note: The website notifies you if an update is available.

3. Insert a USB drive into your computer.

Note: The USB drive needs to be empty and meet the minimum requirements detailed on the website.

4. Follow the instructions provided to download the update to the USB drive.

Installing an Update

Note: You can use the system when an installation is in progress.

1. Disconnect all other USB devices from the USB ports.
2. Connect the USB drive with the update to a USB port.

Note: Installation starts automatically within 10 minutes.

Updating the System Using a Wi-Fi Network Connection

Connecting to a Wi-Fi Network



Select the settings option on the feature bar.

1. Select **Automatic Updates**.
2. Select **System Wi-Fi**.
3. Switch **System Wi-Fi** on.
4. Select **Available Wi-Fi Networks**.
5. Select an available Wi-Fi network.

Note: Enter the network password to connect to a secure network.

Switching Automatic System Updates On



Select the settings option on the feature bar.

1. Select **Automatic Updates**.
2. Switch **Automatic System Updates** on.

The system is now set to check for and receive system updates when it is connected to a Wi-Fi network.

Note: You can use the system when a download is in progress.

Note: If the system is disconnected from the Wi-Fi network when a download is in progress, the download continues the next time the system is connected to a Wi-Fi network.

Additional Information and Assistance

For additional information and assistance, we recommend that you contact an authorized dealer or refer to the local Ford website.

USING VOICE RECOGNITION

The SYNC 3 system allows you to use voice commands, to control features like audio and climate controls. By using voice commands, you can keep your hands on the wheel and your eyes on the road.

You can access each feature controlled by SYNC 3 through a variety of commands.



To activate the SYNC 3 voice commands push the voice button on the steering wheel and wait for the prompt.

___ is a dynamic listing, meaning that it can be the name of anything, such as artist, the name of contact or number. The context and the description of the command tell you what to say for this dynamic option.

There are some commands that work for every feature, these commands are:

Voice Command	Action and Description
Main Menu	Brings you to the main menu.
Go back	Returns you to the previous screen.
Cancel	Ends the voice session.
List of Commands	Gives you a list of possible voice commands.
___ List of Commands	You can name any feature and the system gives a list of commands available for the feature. For example, you could say:
	Phone List of Commands
	Navigation List of Commands
Next Page	You can use this command to view the next page of options on any screen where multiple pages of choices are given.
Previous Page	You can use this command to view the previous page of options on any screen where multiple pages of choices are given.
Help	Gives you available commands you can use on the current screen.

Included here are some of the most popular commands for each SYNC 3 feature.

Audio Voice Commands

___ is a dynamic listing, meaning that for audio voice commands it can be the name

of a Sirius channel or a channel number, a radio frequency number, or the name of an artist, album, song or a genre.

To control the media features, press the voice button and when prompted, say:

Voice command	Description
Sirius Channel ___ ¹	You can say the Sirius channel name or number such as "Sirius channel 16".
You can also turn to a Sirius channel by saying the channel's name, such as "The Pulse".	
AM ___ FM ___	Allows you to tune to a specific FM or AM frequency such as "FM 88.7" or "AM 1580".
FM ___ HD ___ ¹	Allows you to tune to a specific HD frequency such as "FM 88.7 HD 1".
Bluetooth Audio	Allows you to listen to music on your Bluetooth connected device.
USB	Allows you to listen to music on your USB connected device.
Play Genre ___ Play Playlist ___ Play Artist ___ Play Album ___ Play Podcast ___	For USB audio only, you can say the name of an artist, album, song or a genre to listen to that selection. Your system must finish indexing before this option is available. For example, you could say "Play artist The Beatles" or "Play song Penny Lane".

Voice command	Description
Play Song ____ Play Audiobook ____	
Browse ____ Browse Artist ____ Browse Album ____ Browse Genre ____ Browse Playlist ____ Browse Audiobook ____ Browse Podcast ____	For USB audio only, you can say the name of an artist, album, or a genre to browse by that selection. Your system must finish indexing before this option is available. For example you can say "Browse artist The Beatles" or "Browse genre folk".

¹ This option may not be available in all markets or may require a subscription.

Climate Voice Commands (If Equipped)

You can control the temperature of the vehicle using voice commands.

____ is a dynamic listing, meaning that for climate voice commands it can be the desired degrees for the temperature setting.

To adjust the temperature, say:

Voice command	Description
Set the Temperature to ____	Adjust the temperature between 60–85°F (15.5–29.5°C).

Phone Voice Commands

Pairing a Phone

You can use voice commands to connect your Bluetooth enabled phone to the system.

To pair your phone, press the voice button and when prompted, say:

Voice command	Description
Pair Phone	Follow the on-screen instructions to complete the pairing process. See Settings (page 515).

Making Calls

____ is a dynamic listing, meaning that for phone voice commands it can be the name of the contact you wish to call or the digits you want to dial.

Press the voice button and say a command similar to the following:

Voice command	Description
Call ____	Allows you to call a specific contact from your phonebook such as "Call Jenny".
Call ____ at ____	Allows you to call a specific contact from your phonebook at a specific location such as "Call Jenny at Home".
Dial ____	Allows you to dial a specific number such as "Dial 867-5309".

Please make sure that you are saying the contact name exactly as it appears in your contact list.

Once you have provided the digits of the phone number, you can say the following commands:

Voice Command	Description
<0-9>	If you did not enter the full number with the first command, you can continue saying the number.
Dial	Tells SYNC 3 to make the phone call.
Delete	Tells SYNC 3 to erase the last block of digits you state.
Clear	Tells SYNC 3 to erase the entire number.

Text Message Voice Commands

To access text message options, press the voice button and say:

Voice command	Description
Listen to Message	
Listen to text message ____	You can say the number of the message you would like to hear.
Reply to Message	
Reply to Message ____	You can say the number of the message you would like to respond to.
Reply to ____	You can say the contact of the most recent message to respond.

Navigation Voice Commands (If Equipped)

Setting a Destination

You can use any of the following commands to set a destination or find a point of interest.

____ is a dynamic listing, meaning that for navigation voice commands it can be a POI category or a major brand name, where major brand name is a chain with more than 20 locations

You can find an address, a point of interest (POI), or search for points of interest by category:

Voice command	Description
Find an Address	Allows you to enter the address search functionality. You can also search for an address in a specific state or province.
Find a ____	State the name of the POI category or major brand name you would like to search for such as "Find restaurants".
Find a POI	Allows you to enter the POI search functionality.
Find an Intersection	Allows you to enter the intersection search functionality.
Find the Nearest <POI Category>	State the name of a POI category or major brand name you would like to search for.
Show Previous Destinations	Allows you to see a list of your previous destinations.
Show Favorites	Allows you to see a list of your favorite destinations.
Drive Home	Allows you to route to your home address.
Drive to Work	Allows you to route to your work address.

In addition, you can say these commands when a route is active:

Voice command	Description
Cancel Route	Cancels the current route.
Detour	Allows you to select an alternate route.
Repeat Instruction	Repeats the last guidance prompt.
Show Route	Displays the active route.
Route Summary	Displays the list of upcoming maneuvers.
Where Am I	Provides current location.
Zoom in	Allows you to zoom in on the map.
Zoom out	Allows you to zoom out from the map.

Mobile App Voice Commands (If Equipped)

The following voice commands are always available:

Voice command	Description
Mobile Apps	SYNC 3 will prompt you to say the name of an app to start it on SYNC 3.
List Mobile Apps	SYNC 3 will list all of the currently available Mobile Apps.
Find Mobile Apps	SYNC 3 will search and connect to compatible app(s) running on your mobile device.

There are also voice commands that you can use when app(s) are connected to SYNC 3:

Voice command	Description
Say the name of an app	At any time, you can say the name of a mobile app to start the mobile app on SYNC 3.
Say the name of an app, followed by help	SYNC 3 will list the available voice commands for the specified app if the app is running on SYNC 3.

SiriusXM Traffic and Travel Link Voice Commands (If Equipped)

SiriusXM Traffic and Travel Link may not be available in all markets. Activation and a subscription are required.

You can say the following commands to access SiriusXM Traffic and Travel Link:

Voice command	Description
Show Traffic	Displays a list of traffic incidents.
Show Weather Map	Displays the current weather map.
Show Fuel Prices	Displays a list of fuel prices.
Show 5 Day Forecast	Displays the 5 day weather forecast.
Help	

Voice Settings Commands

You can say the following commands to access the voice settings:

Voice command	Description
Voice Settings	Allows you to enter the voice settings functionality.
Interaction Mode Standard	Sets standard prompting with longer prompts.
Interaction Mode Advanced	Sets advanced prompting with shorter prompts.
Phone Confirmation On	Allows the system to confirm before making a phone call.

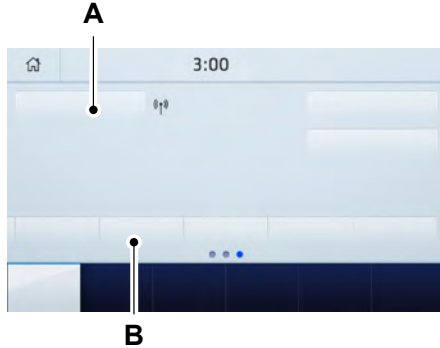
Voice command	Description
Phone Confirmation Off	The system does not confirm before placing a call.
Voice Command Lists On	The system displays a short list of available commands.
Voice Command Lists Off	The system does not display the list of commands.

You can use the volume control to adjust the volume of the system voice prompts. While prompt is active, adjust the volume control up or down to your desired setting.

Note: Depending on the current climate control settings, the fan speed may automatically go down while issuing voice commands or while making and receiving phone calls via SYNC to reduce the amount of background noise in the vehicle. The fan speed will automatically return to normal operation once the voice session ends. You can adjust the fan speed during a voice session, simply press the fan buttons (or turn the fan knob) to increase or decrease the fan speed to the setting you prefer.

To disable this automatic fan speed reduction feature during voice sessions, press and hold the climate control AC and Recirculated air buttons simultaneously, release and then increase fan speed within 2 seconds. To re-enable this feature, repeat the above sequence.

ENTERTAINMENT



- A Audio source. Select to choose a different audio source.
- B Presets. Swipe left to view more presets.

You can access these options using the touchscreen or voice commands.

Sources

Press this button to select the source of media you want to listen to.

Menu Item	
AM	
FM	
SIRIUS	1
CD	
USB	The name of the USB that is plugged in displays here.

Menu Item	
Bluetooth Stereo	
Apps	If you have SYNC 3 compatible apps on your connected smart phone, they display here as individual source selections.

¹ This feature may not be available in all markets and requires an active subscription.

AM/FM Radio

Tuning a Station

You can use the tune or seek controls on the radio bezel to select a station.

To tune a station using the touchscreen, select:

Menu Item
Direct Tune

A pop up appears, allowing you to type in the frequency of a station. You can only enter a valid station for the source you are currently listening to.

You can press the backspace button to delete the previously entered number.

Once you have entered the station's call numbers, you can select:

Menu Item	Action and Description
Enter	Press to begin playing the station you have entered.
Cancel	Press to exit without changing the station.

Presets

To set a new preset, tune to the station and then press and hold one of the memory preset buttons. The audio mutes briefly while the system saves the station and then returns.

You may be able to add additional preset pages using the settings option on the feature bar.

SiriusXM® Satellite Radio (If Activated)

Note: *This feature may not be available in all markets and requires an active subscription.*



E234451

SiriusXM satellite radio is a subscription-based satellite radio service that broadcasts a variety of music, sports, news, weather, traffic and entertainment programming. Your factory-installed SiriusXM satellite radio system includes hardware and a limited subscription term that begins on the date of sale or lease of your vehicle. See an authorized dealer for availability.

For more information on extended subscription terms (a service fee is required), the online media player and a list of SiriusXM satellite radio channels, and other features, please visit www.siriusxm.com in the United States, www.siriusxm.ca in Canada, or call SiriusXM at 1-888-539-7474.

Note: *SiriusXM reserves the unrestricted right to change, rearrange, add or delete programming. This includes canceling, moving or adding particular channels, and its prices, at any time, with or without notice to you. We are not responsible for any such programming changes.*

Note: *This receiver includes the eCos real-time operating system. eCos is published under the eCos License.*

The following buttons are available for SiriusXM:

Menu Item	Action and Description	
Browse	Touch this button to see a list of available stations.	
Direct Tune	A pop-up appears, allowing you to type in the call numbers of a station. Once you enter the stations call numbers, you can select:	
	Enter	The system tunes to the station you select.
	Cancel	You exit the pop-up and the current station continues to play.
	You can press the backspace button to delete the previous number.	

Menu Item	Action and Description	
Replay	Replay audio on the current channel. You can replay approximately 45 minutes of audio as long as you remain tuned to the current station. Changing stations erases the previous audio.	
	Live	When you are in replay mode, you are not able to select a different preset until you return to live audio. Pressing this button returns you to the live broadcast.
ALERT	Save the current song, artist, or team as a favorite. The system alerts you when it plays again on any channel. Selecting this button allows you to enable and edit alerts.	

Memory Presets

To set a preset, tune to the station then press and hold one of the memory preset buttons. The audio mutes briefly while the system saves the station and returns once the station is stored.

You may be able to add additional preset pages using the settings option on the feature bar.

SiriusXM Satellite Radio Reception Factors and Troubleshooting

Potential Reception Issues	
Antenna obstructions	For optimal reception performance, keep the antenna clear of snow and ice build-up and keep luggage and other materials as far away from the antenna as possible.
Terrain	Hills, mountains, tall buildings, bridges, tunnels, freeway overpasses, parking garages, dense tree foliage and thunderstorms can interfere with your reception.
Station overload	When you pass a ground-based broadcast-repeating tower, a stronger signal may overtake a weaker one and the audio system may mute.
Satellite radio signal interference	Your display may show ACQUIRING... to indicate the interference and the audio system may mute.

Troubleshooting Tips		
Message	Cause	Action
Acquiring Signal	Radio requires more than two seconds to produce audio for the selected channel.	No action required. This message should disappear shortly.
Satellite antenna fault SIRIUS system failure	There is an internal module or system failure present.	If this message does not clear shortly, or with an ignition key cycle, your receiver may have a fault. See an authorized dealer for service.
Invalid Channel	The channel is no longer available.	Tune to another channel or choose another preset.

Troubleshooting Tips		
Message	Cause	Action
Unsubscribed Channel	Your subscription does not include this channel.	Contact SiriusXM at 1-888-539-7474 to subscribe to the channel, or tune to another channel.
Satellite acquiring signal...	The signal is lost from the SiriusXM satellite or SiriusXM tower to your vehicle antenna.	The signal is blocked. When you move into an open area, the signal should return.
Updating...	Update of channel programming in progress.	No action required. The process may take up to three minutes.
Questions? Call 1-888-539-7474	Your satellite service is no longer available.	Contact SiriusXM at 1-888-539-7474 to resolve subscription issues.
None found. Check channel guide.	All the channels in the selected category are either skipped or locked.	Use the channel guide or the Sirius XM Settings tile to turn off the Lock or Skip function on that station.
SIRIUS Subscription updated	SiriusXM has updated the channels available for your vehicle.	No action required.

HD Radio™ Information (If Available)

To activate HD radio, please see the Radio Settings in the Settings Chapter. See **Settings** (page 515).

Note: *HD Radio broadcasts are not available in all markets.*

HD Radio technology is the digital evolution of analog AM/FM radio. Your system has a special receiver that allows it to receive digital broadcasts (where available) in addition to the analog broadcasts, it already receives. Digital broadcasts provide a better sound quality than analog broadcasts with free, crystal-clear audio and no static or distortion. For more information, and a guide to available stations and programming, please visit:

Website
www.hdradio.com

When HD Radio is on and you tune to a station broadcasting HD Radio technology, you may notice the following indicators on your screen:



The HD logo is grey when acquiring a digital station, and then changes to orange when digital audio is playing. When this logo is available, you may also see Title and Artist fields on-screen.

The multicast indicator appears in FM mode (only) if the current station is broadcasting multiple digital broadcasts. The highlighted numbers signify available digital channels where new or different content is available. HD1 signifies the main programming status and is available in analog and digital broadcasts. Other multicast stations (HD2 through HD7) are only available digitally.

Note: *There is also an additional feature for stations that have more than 1 HD multicast (For example, HD1 or HD2). The HD logo and Radio text appears as a button. Pressing this button allows you to cycle through all of the HD stations on that specific frequency. For example, if you are on 101.1 and it has HD1, HD2, HD3, pressing the button repeatedly causes the radio to cycle through the HD stations in a cyclic increasing order.*

When HD Radio broadcasts are active, you can access the following functions:

Message	Action and Description
Presets	Allows you to save an active channel as a memory preset. Touch and hold a memory preset slot until the sound returns. There is a brief mute while the radio saves the station. Sound returns when the channel saves. When switching to an HD2 or HD3 memory preset, the sound mutes before the digital audio plays, because the system has to reacquire the digital signal.

Note: *As with any station you save, you cannot access the saved station if your vehicle is outside the station's reception area.*

HD Radio Reception and Station Troubleshooting

Potential Reception Issues	
Reception area	If you are listening to a multicast station and you are on the fringe of the reception area, the station may mute due to weak signal strength.
	If you are listening to HD1, the system changes back to the analog broadcast until the digital broadcast is available again. However, if you are listening to any of the possible HD2-HD7 multicast channels, the station mutes and stays muted unless it is able to connect to the digital signal again.
Station blending	When the system first receives a station (aside from HD2-HD7 multicast stations), it first plays the station in the analog version. Once the receiver verifies the station is an HD Radio station, it shifts to the digital version. Depending on the station quality, you may hear a slight sound change when the station changes from analog to digital. Blending is the shift from analog to digital sound or digital back to analog sound.

In order to provide the best possible experience, use the contact form to report any station issues found while listening to a station broadcasting with HD Radio

technology. Independent entities own and operate each station. These stations are responsible for ensuring all audio streams and data fields are accurate.

Potential Station Issues		
Issues	Cause	Action
Echo, stutter, skip or repeat in audio. Increase or decrease in audio volume.	This is poor time alignment by the radio broadcaster.	No action required. This is a broadcast issue.
Sound fading or blending in and out.	The radio is shifting between analog and digital audio.	No action required. The reception issue may clear up as you continue to drive.
There is an audio mute delay when selecting HD2 or HD3, multicast preset or Direct Tune.	The digital multicast is not available until the HD Radio broadcast is decoded. Once decoded, the audio is available.	No action required. This is normal behavior. Wait until the audio is available.
Cannot access HD2 or HD3 multicast channel when recalling a preset or from a direct tune.	The previously stored multicast preset or direct tune is not available in your current reception area.	No action required. The station is not available in your current location.
Text information does not match currently playing audio.	Data service issue by the radio broadcaster.	Fill out the station issue form. ¹
There is no text information shown for currently selected frequency.	Data service issue by the radio broadcaster.	Fill out the station issue form. ¹

¹ You can find the form here:

Website
http://hdradio.com/stations/feedback

HD Radio Technology manufactured under license from iBiquity Digital Corporation and foreign patents. HD Radio and the HD and HD Radio logos are proprietary trademarks of DTS. The vehicle manufacturer and DTS are not responsible for the content sent using HD Radio technology. Content may be changed, added or deleted at any time at the station owner's discretion.

CD (If Equipped)

Once you select this option, the system returns you to the main audio screen.

The current audio information appears on the screen.

The following buttons are also available:

Button	Function
Browse	You can use the browse button to select a track.
Repeat	Select this button and a small number one displays to indicate the track is set to repeat. For MP3 CDs, this button allows you to toggle through repeat off, repeat one track (a small number one displays), and repeat current folder (a small folder displays).
Shuffle	Select the shuffle symbol to have the audio on the disk play in random order.

You can use the forward, reverse, pause or play buttons to control the audio playback.

Bluetooth Stereo or USB

Bluetooth Stereo and USB allow you to access media that you store on your Bluetooth device or USB device such as music, audio books or podcasts.

The following buttons are available for Bluetooth and USB:

Button	Function
Repeat	Pressing the repeat button toggles the repeat setting through three modes: repeat off (button not highlighted), repeat all (button highlighted) and repeat track (button highlighted with a small number one).
Shuffle	Play the tracks in random order.

You can use the forward, reverse, pause or play buttons to control the audio playback.

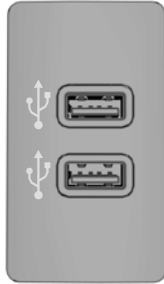
To get more information about the currently playing track, press the cover art or Info button.

For some devices, SYNC 3 is able to provide 30-second skip buttons when you listen to audio books or podcasts. These buttons allow you to skip forward or backward within a track.

While playing audio from a USB device you can look for certain music by selecting the following:

Button	Function
Browse	If available, displays the list of tracks in the Now Playing playlist.
New Search	<p>This option, which is available under browse, allows you to play all tracks or to filter the available media into one of the below categories.</p> <p>Play All</p> <p>Playlists</p> <p>Artist</p> <p>Albums</p> <p>Songs</p> <p>Genres</p> <p>Podcasts</p> <p>Audio books</p> <p>Composers</p>
A-Z Jump	This button allows you to choose a specific letter to view within the category you are browsing.
Explore Device	If available, this allows you to browse the folders and files on your USB device.

USB Ports



E211463

The USB ports are in the center console or behind a small access door in the instrument panel.

This feature allows you to plug in USB media devices, memory sticks, flash drives or thumb drives, and charge devices if they support this feature.

Select this option to play audio from your USB device.

Apps

The system supports the use of certain audio apps such as iHeartRadio through a USB or Bluetooth enabled device.

Each app gives you different on-screen options depending on the app's content. See **Apps** (page 512).

Supported Media Players, Formats and Metadata Information

The system is capable of hosting nearly any digital media player, including iPod, iPhone, and most USB drives.

Supported audio formats include MP3, WMA, WAV, AAC, and FLAC.

Supported audio file extensions include MP3, WMA, WAV, M4A, M4B, AAC, and FLAC.

Supported USB file systems include: FAT, exFAT, and NTFS.

SYNC 3 is also able to organize the media from your USB device by metadata tags. Metadata tags, which are descriptive software identifiers embedded in the media files, provide information about the file.

If your indexed media files contain no information embedded in these metadata tags, SYNC 3 may classify the empty metadata tags as unknown.

SYNC 3 is capable of indexing up to 50,000 songs per USB device, for up to 10 devices.

CLIMATE

Touch the climate button on the touchscreen to access your climate control features.

Note: You can switch temperature units between Fahrenheit and Celsius. See **Settings** (page 515).

Accessing the Climate Control Menu



Touch the button to access additional controls for the front climate system.

Directing the Airflow



Touch the button to direct airflow to the windshield air vents and de-mister.



Touch the button to direct airflow to the instrument panel air vents.



Touch the button to direct airflow to the footwell air vents.

You can direct air through any combination of these air vents.

Setting the Blower Motor Speed



Touch up or down to increase or decrease the volume of air that circulates in your vehicle.

Setting the Temperature

Touch up or down on the left-hand temperature control to set the left-hand temperature.

Note: *This control also adjusts the right-hand side temperature when you switch off dual zone mode.*

Touch up or down on the right-hand temperature control to set the right-hand temperature.

Switching Auto Mode On and Off



Touch the button to switch on automatic operation, then set the temperature.

The system adjusts the blower motor speed, air distribution, air conditioning operation, and outside or recirculated air to reach and maintain the temperature you have set.

Switching the Air Conditioning On and Off



A pop-up appears on the screen to display the air conditioning options.

MAX A/C: Touch the button to activate and maximize cooling. The driver and passenger temperatures are set to LO, recirculated air flows through the instrument panel vents, air conditioning automatically turns on and the fan automatically adjusts to the highest speed.

A/C: Touch to switch the air conditioning on or off. Use A/C with recirculated air to improve cooling performance and efficiency.

Note: *In certain conditions, such as maximum defrost, the air conditioning compressor may continue to operate even though you switch off the air conditioning.*

Switching the Climate Control On and Off



Touch the button.

Switching the Climate Controlled Seats On and Off



Touch the button to cycle through the various climate controlled seat settings.

Switching Dual Zone Mode On and Off



Touch the button to switch on temperature control for the right-hand side of the vehicle.

Switching the Heated Exterior Mirrors On and Off



Touch the button.

Switching the Heated Windshield On and Off



Touch the button to clear the windshield of thin ice and fog. The heated windshield turns off after a short period of time.

Switching the Heated Rear Window On and Off



Touch the button to clear the rear window of thin ice and fog.

Switching the Heated Seats On and Off



Touch the button to cycle through the various heat settings.

Switching the Heated Steering Wheel On and Off



Touch the button.

Switching Maximum Air Conditioning On and Off



Touch the button for maximum cooling.

Recirculated air flows through the instrument panel air vents, air conditioning turns on and the blower motor adjusts to the highest speed.

Switching Maximum Defrost On and Off



Touch the button for maximum defrosting.

Air flows through the windshield air vents, and the blower motor adjusts to the highest speed.

You can also use this setting to defog and clear the windshield of a thin covering of ice.

Note: To prevent window fogging, you cannot select recirculated air when maximum defrost is on.

Note: The heated rear window also turns on when you select maximum defrost.

Switching Recirculated Air On and Off



Touch the button to switch between outside air and recirculated air.

The air currently in the passenger compartment recirculates. This may reduce the time needed to cool the interior, when used with **A/C**, and reduce unwanted odors from entering your vehicle.

Note: Recirculated air may turn off, or prevent you from switching on, in all air flow modes except **MAX A/C** to reduce the risk of fogging. Recirculation may also turn on and off in various air distribution control combinations during hot weather to improve cooling efficiency.

Switching the Ventilated Seats On and Off



Touch the button to cycle through the various ventilated seat settings.

Accessing Rear Climate Controls



Touch the button to access additional controls for the rear climate system.

Rear Climate Control Lock Indicator



Touch the button.

When on, you can only operate the rear passenger settings through the front controls.

Switching Rear Auto Mode On and Off



Touch the button to switch on rear automatic operation, then set the temperature.

Switching the Rear Climate Controlled Seats On and Off



Touch the button to cycle through the various climate controlled seat settings.

Switching the Rear Heated Seats On and Off



Touch the button to cycle through the various heat settings.

Switching the Rear Ventilated Seats On and Off



Touch the button to cycle through the various ventilated seat settings.

PHONE



WARNING: Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

Check the compatibility of your device on the regional website.

Pairing Your Cell Phone for the First Time

Go to the settings menu on your cell phone and switch Bluetooth on.



Select the phone option on the feature bar.

1. Select **Add Phone**.

Note: A prompt alerts you to search for your vehicle on your cell phone.

2. Select your vehicle on your cell phone.

Note: A number appears on your cell phone and on the touchscreen.

3. Confirm that the number on your cell phone matches the number on the touchscreen.

Note: The touchscreen indicates that you have successfully paired your cell phone.

4. Download the phonebook from your cell phone when you are prompted.

Note: If you pair more than one cell phone, use the phone settings to specify the primary phone. You can change this setting at any time.

Using Your Cell Phone

Recent Call List

Display and select an entry from a list of previous calls.

Contacts

Display a smart search form to look up your contacts. Use the List button to alphabetically sort your contacts.

Change Phone

Display the list of paired or connected devices that you can select.

Phone Settings

Change ring tones, alerts or pair another phone.

Do Not Disturb

Reject incoming calls and switch ring tones and alerts off.

Phone Keypad

Directly dial a number.

Mute

Mute the microphone when in a call or voice recognition session.

Text Messaging

Setting Text Message Notification

iOS

1. Go to the settings menu on your cell phone.
2. Select Bluetooth.
3. Select the information icon to the right of your vehicle.
4. Switch text message notification on.

Android

1. Go to the settings menu on your cell phone.
2. Select Bluetooth.
3. Select the profiles option.
4. Select the phone profile.
5. Switch text message notification on.

Using Text Messaging

Menu Item	Description
Hear It	Hear the text message.
View	View the text message.
Call	Call the sender.
Reply	Reply to the text message with a standard text message.

Apple CarPlay (If Equipped)

1. Connect your device to a USB port.
2. Follow the instructions on the touchscreen.

Note: Certain features of the system are not available when you are using Apple CarPlay.

Switching Apple CarPlay Off



Select the settings option on the feature bar.

1. Select **Apple CarPlay Preferences**.
2. Switch **Apple CarPlay** off.

Android Auto (If Equipped)

1. Connect your device to a USB port.
2. Follow the instructions on the touchscreen.

Note: You might need to enable Android Auto from the settings menu.

Note: Certain features of the system are not available when you are using Android Auto.

Switching Android Auto Off



Select the settings option on the feature bar.

1. Select **Android Auto**.

2. Switch **Android Auto** off.

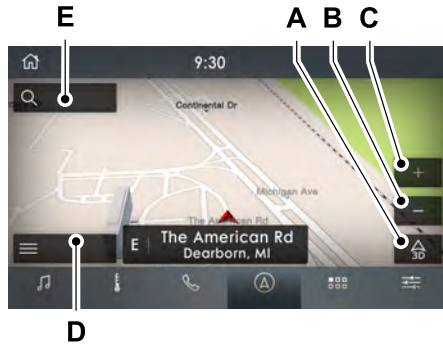
NAVIGATION

Note: For more information, refer to our website.



Select the navigation option on the feature bar.

SYNC™ 3



- A Map view menu.
- B Zoom out.
- C Zoom in.
- D Route guidance menu.
- E Destination entry menu.

Setting a Destination

Destination Entry Menu

Item	Description
Search	Enter a destination address.
Previous Destinations	Display and select from a list of previous destinations.
Home	Set your saved home address as your destination
Work	Set your saved place of work as your destination.
Favorites	Display and select from a list of favorite destinations.

Setting a Destination Using the Text Entry Screen



- A Text entry field.
- B Automatic suggestions based on the text you enter.
- C Information icon.

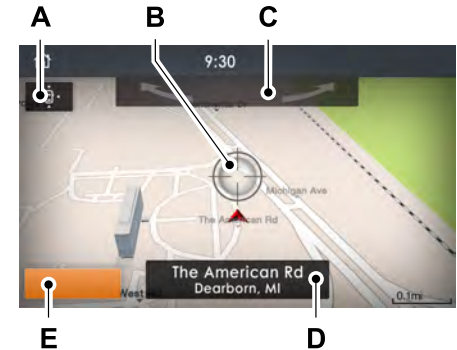
- D Search.
- E Keyboard settings.

Note: Select one of the suggestions to copy the detail to the text entry field.

You can search by entering all or part of the destination, such as the Address, POI Category or Name, Intersection, City, Latitude/Longitude, etc. Tips: If you do not specify a location, the system will use the current vehicle location. You can specify a location by address, city, state or zip code. For additional search support, please visit: owner.lincoln.com.

Note: Press the button in the top right-hand corner of the main map to display estimated time of arrival, remaining travel time or distance to destination.

Setting a Destination Using the Map Screen



- A Re-center the map.
- B Selected location.
- C 3D map rotation. Swipe left or right.
- D Destination name.
- E Start route guidance.

Select the location on the map.

Select **Start** to begin route guidance.

Changing the Format of the Map

Display the map in one of the following formats:

- A two-dimensional map with the direction you are traveling toward the top of the screen.
- A two-dimensional map with north toward the top of the screen.
- A three-dimensional map with the direction you are traveling toward the front.

Zoom

Display more or less detail on the map.

Note: You can use pinch gestures to zoom in and out. Place two fingers on the screen and move them apart to zoom in. Place two fingers on the screen and bring them together to zoom out.

Route Guidance



- A Turn indicator. Select to hear the last voice prompt.
- B Point of interest.

- C Estimated time of arrival, distance to destination or time to destination.
- D Current road.
- E Mute guidance prompts.

Note: To change guidance prompt volume, turn the volume control when a guidance prompt plays.

Route Guidance Menu

Menu Item	Description
Screen View	Adjust your map preferences for when route guidance is active.
Full Map	View a full screen map when route guidance is active.
Highway Exit Info	View highway exit information for your current route.
Turn List	View the turn list for your current route. Select a road to avoid it.
Traffic List	You can find the SiriusXM Traffic and Travel Link information by pressing this button. This information requires an active subscription to SiriusXM Traffic and Travel Link. When a route is not active, a list of nearby traffic incidents displays. When a route is active, you can choose to display a list of traffic nearby or on the route.
Navigation Settings	Adjust navigation settings. See Settings (page 515).
Where Am I?	View information about your current location.
Cancel Route	Cancel route guidance.
View Route	View the entire current route on the map.
Detour	View an alternative route compared to your current one.
Edit Waypoints	Change the order or remove waypoints.
Optimize Order	The system determines the order of waypoints for you.
Go	Go to the next screen and start the new route.

Adjusting the Guidance Prompt Volume

Turn the volume control when a guidance prompt plays to adjust the volume.

Note: *If you have inadvertently adjusted the volume to zero, press the turn indicator button to play the last voice prompt and then adjust the volume to the desired level.*

Muting Guidance Prompts



Select the mute option on the screen to mute guidance prompts.

Note: *The system mutes the next and all future guidance prompts.*

Adding Waypoints

You can add a waypoint to a navigation route as a destination along your route. You can add up to five waypoints.

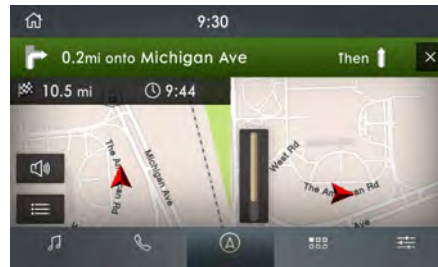
1. Select the search option on the map.
2. Set a destination.
3. Select **Add Waypoint**.
4. Select **Go**.

Canceling Route Guidance



Select the route guidance menu option on the active guidance screen.

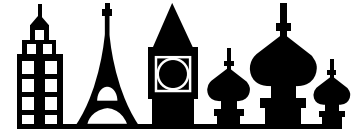
Select **Cancel Route**.



Note: *The route guidance menu option is always in the bottom right-hand corner of the main map.*

cityseeker (If Equipped)

Note: *cityseeker point of interest (POI) information is limited to approximately 1,110 cities (1,049 in the United States, 36 in Canada and 15 in Mexico).*



cityseeker

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cityseeker, when available, is a service that provides more information about certain points of interest such as restaurants, hotels and attractions.

When you have selected a point of interest, the location and information appear, such as address, phone number and a star rating.

Press **More Information** to see a photo, a review, a list of services and facilities, the average room or meal price and the web address. This screen displays the point of interest icons.

For restaurants, cityseeker can provide information such as star rating, average cost, review, handicap access, hours of operation, and website address.

For hotels, cityseeker can provide information such as star rating, price category, review, check-in and checkout times, hotel service icons and website address. Hotel service icons include:

- Restaurant
- Business center
- Handicap facilities
- Laundry
- Refrigerator
- 24 hour room service
- Fitness center
- Internet access
- Pool
- Wi-Fi

Attractions include nearby landmarks, amusement parks, historic buildings and more. cityseeker can provide information such as star rating, reviews, hour of operation and admission price.

SiriusXM Traffic and Travel Link (If Equipped)

SiriusXM Traffic and Travel Link is available on vehicles equipped with navigation and only in select markets. You must activate and subscribe to receive SiriusXM Traffic and Travel Link information. It helps you locate the best gas prices, find movie listings, get current traffic alerts, view the weather map, get accurate ski conditions and see current sports scores.

The system calculates a reasonable efficient route based on available speed limits, traffic, and road conditions. You may know a local short cut that is more efficient at a given time than the route provided by SYNC 3, but you should expect a slight difference in minutes or miles with the SYNC 3 route.

Michelin Travel Guide (If Equipped)

The Michelin travel guide is a service which provides additional information about certain places of interest, for example restaurants, hotels and tourist sites. Points of interest that have Michelin travel guide information display a button to show you more information. Push the button to see the additional information. If you have paired your phone with the system, you can press the phone button to directly establish a call with the selected point of interest.

Navigation Map Accuracy and Updates

HERE is the digital map provider for the navigation application. If you find map data errors, you may report them directly to HERE by going to www.here.com. HERE evaluates all reported map errors and responds with the result of their investigation by e-mail.

The navigation system map data may contain inaccurate or incomplete information due to the passage of time, changing circumstances, sources used and the nature of collecting comprehensive geographic data, any of which may lead to incorrect results. Inaccurate speed limit information, turn restrictions and other road attributes may affect the determined route and associated guidance

Annual navigation map updates are available for purchase through your dealership. Depending on your purchase agreement, you might be eligible for free Map update. You can choose to download the Map data update onto a USB, order a USB, or use Wi-Fi to deliver automatic updates. To update your Map data over Wi-Fi, your vehicle must be connected to a Wi-Fi access point. Map Data files are large, so it is highly recommended to perform the update when free Wi-Fi is available otherwise high data rates may apply. For USB updates, free map update eligibility, and other details, contact dealers at 1-866-462-8837 in the United States and Canada or 01-800-557-5539 in Mexico or visit our local website for more information.

APPS

The system allows you interact with select mobile apps while keeping your eyes on the road. Voice commands, your steering wheel buttons, or a quick tap on your touchscreen give you advanced control of compatible mobile apps. You can also stream your favorite music or podcasts, share your time of arrival with friends, and keep connected safely.

When you start an app through the system for the first time, you could be asked to grant certain permissions. You can review and change the permissions that you have granted at any time when your vehicle is not moving. We recommend that you check your data plan before using your apps through the system. Using them could result in additional charges. We also recommend that you check the app provider's terms and conditions and privacy policy before using

their app. Make sure that you have an active account for apps that you want to use through the system. Some apps will work with no setup. Others require you to configure some personal settings before you can use them.

Note: For more information about available apps, visit catalog.ford.com.

Using Apps on an iOS Device



Select the apps option on the feature bar.

1. If your device is connected via USB, switch Apple CarPlay off. See **Phone** (page 502).
2. Connect your device to a USB port or pair and connect using Bluetooth.
3. If prompted to enable CarPlay, select **Disable**.
4. Start the apps on your device that you want to use through SYNC.

Note: If you close the apps on your device, you will not be able to use them through the system.

5. Select the app that you want to use on the touchscreen.

Note: Connect your device to a USB port if you want to use a navigation app. When using a navigation app, keep your device unlocked and the app open.

Using Apps on an Android Device



Select the apps option on the feature bar.

1. If your device is connected via USB, switch Android Auto off. See **Phone** (page 502).
2. Pair your device. See **Phone** (page 502).
3. Start the apps on your device that you want to use through SYNC.

Note: If you close the apps on your device, you will not be able to use them through the system.

4. Select **Find Mobile Apps**.

Note: The system searches and connects to compatible apps that are running on your device.

5. Select the app that you want to use on the touchscreen.

Note: Mobile Apps on your device use the USB port to establish a connection with SYNC. Some devices may lose the ability to play music over USB when Mobile Apps are enabled.

Using Mobile Navigation on an Android Device

1. Connect your device to a USB port.
2. Switch Android Auto off. See **Phone** (page 502).
3. Switch on **Enable Mobile Apps via USB** in the Mobile Apps Settings tile.
4. Select the apps option on the feature bar.
5. Select the navigation app that you want to use on the touchscreen.

Note: When using a navigation app, keep your device unlocked and the app open.

SiriusXM Traffic and Travel Link (if

Equipped)



WARNING: Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

Note: SiriusXM Traffic and Travel Link may not be available in all markets.

Note: In order to use SiriusXM Traffic and Travel Link, your vehicle must have navigation.

Note: A paid subscription is required to access and use these features. Go to www.siriusxm.com/travelink for more information.

Note: Visit www.siriusxm.com/traffic and click on Coverage map and details for a complete listing of all traffic areas covered by SiriusXM Traffic and Travel Link.

Note: Neither Sirius nor Ford is responsible for any errors or inaccuracies in the SiriusXM Traffic and Travel Link services or its use in vehicles.

When you subscribe to SiriusXM Traffic and Travel Link, it can help you locate the best gas prices, find movie listings, get current traffic alerts, view the current weather map, get accurate ski conditions and see scores to current sports games.

Menu Item	Action and Description	
Traffic on Route	Touch these buttons to identify traffic incidents on your route, near your vehicle's current location or near any of your favorite places, if programmed.	
Traffic Nearby		
Fuel Prices	Touch this button to view fuel prices at stations close to your vehicle's location or on an active navigation route.	
Movie Listings	Touch this button to view nearby movie theaters and their show times, if available.	
Weather	Touch this button to view the nearby weather, current weather, or the five-day forecast for the chosen area.	
	Map	Select to see the weather map, which can show storms, radar information, charts and winds.
	Area	Select to choose from a listing of weather locations.
Sports Info	Touch this button to view scores and schedules from a variety of sports. You can also save up to 10 favorite teams for easier access. The score automatically refreshes when a game is in progress.	
Ski Conditions	Touch this button to view ski conditions for a specific area.	

SETTINGS



Press the button to enter the settings menu.



Once you select a tile, press the button next to a menu item to view an explanation of the feature or setting.

Sound

Select this tile to adjust the sound settings.

Clock

Select this tile to adjust the clock settings.

Bluetooth

Select this tile to switch Bluetooth on and off and adjust settings.

Phone

Select this tile to connect, disconnect, and manage the connected device settings.

Audio

Select this tile to adjust the audio settings.

Driver Assist (If Equipped)

Select this tile to adjust Driver Assist features like Parking Aids, Lane Keeping system, Pedestrian Detection, and Auto-Start-Stop.

Vehicle

Select this tile to adjust vehicle settings like windows, alarm, lighting, backup starting passcode, and MyKey settings.

Lincoln Way

Select this tile to adjust the Lincoln Way settings.

General

Select this tile to adjust settings like language, measurement units, or to reset the system.

911 Assist (If Equipped)

Select this tile to switch 911 Assist on and off.

Automatic Updates

Select this tile to adjust automatic update settings.

Mobile Apps

Select this tile to adjust permissions, enable, disable, and update mobile apps.

Display

Select this tile to adjust display settings like brightness and auto dim.

Charge Settings (If Equipped)

Select this tile to adjust the electric vehicle charge setting.

Voice Control

Select this tile to adjust voice control settings like command confirmations and displayed lists.

Navigation (If Equipped)

Select this tile to adjust navigation settings like map preferences and route guidance.

Multi Contour Seats (If Equipped)

Select this tile to adjust the position and massage function of your multi contour seats.

Seats (If Equipped)

Select this tile to adjust the lumbar function of your seat.

Message Center (If Equipped)

Select this tile to view vehicle messages.

Personal Profiles (If Equipped)

Select this tile to adjust recalled memory features when using personal profiles.

Valet Mode (If Equipped)

Select this tile to enable and disable valet mode.

Ambient Lighting (If Equipped)

Select this tile to change the color or intensity of the interior lighting.

SYNC™ 3 TROUBLESHOOTING

Voice Recognition

Symptom	Possible Cause and Resolution
<p>The system does not understand what I am saying.</p>	<ul style="list-style-type: none"> – You are using the wrong voice commands. <ul style="list-style-type: none"> • See Using Voice Recognition (page 475). • For a complete list of voice commands, refer to our website. – You are speaking too soon. <ul style="list-style-type: none"> • Wait for the voice prompt before you speak.

Symptom	Possible Cause and Resolution
<p>The system does not understand the name of a track or artist.</p>	<ul style="list-style-type: none"> – Device limitation. Bluetooth does not support voice commands. <ul style="list-style-type: none"> • Connect your device to a USB port. • If you have an iOS device, press and hold the voice control button on the steering wheel to use Siri to play specific tracks. – You are using the wrong voice commands. <ul style="list-style-type: none"> • See Using Voice Recognition (page 475). • For a complete list of voice commands, refer to our website. – You are not saying the name exactly as it appears on your device. <ul style="list-style-type: none"> • Say the name of the track or artist exactly as it appears on your device. Spell out any abbreviations in the name. <p>The song or artist name may have some special characters that are not being recognized by the system.</p> – The name contains special characters, for example *, - or +. <ul style="list-style-type: none"> • Rename the files on your device or use the touchscreen to select and play the track.
<p>The system does not understand the name of a contact in the phonebook on my device and calls the wrong contact.</p>	<ul style="list-style-type: none"> – You are not saying the name exactly as it appears on your device. <ul style="list-style-type: none"> • Say the first and last name of the contact exactly as it appears on your device. Spell out any abbreviations in the name. – The name contains special characters, for example *, - or +. <ul style="list-style-type: none"> • Rename the contact on your device or use the touchscreen to select and call the contact.

Symptom	Possible Cause and Resolution
The system does not understand foreign names of contacts in the phonebook on my device.	<ul style="list-style-type: none"> – You are not saying the name exactly as it appears on your device. <ul style="list-style-type: none"> • Say the first and last name of the contact exactly as it appears on your device. The system applies phonetic pronunciation rules of the selected language to the names of contacts in the phonebook on your device. Select the name of the contact on the touchscreen and use the Hear it option to get an idea of how the system expects you to pronounce it.
The system voice prompts and the pronunciation of some words does not seem to be very accurate.	<ul style="list-style-type: none"> – Device limitation. <ul style="list-style-type: none"> • The system uses text-to-speech technology and uses a synthetically generated voice rather than pre-recorded human voice.

USB and Bluetooth Audio

Symptom	Possible Cause and Resolution
I cannot connect my device.	<ul style="list-style-type: none"> – Device malfunction. <ul style="list-style-type: none"> • Disconnect your device. Switch your device off, reset it and try again. – Cable connection issue. <ul style="list-style-type: none"> • Correctly connect the cable to your device and the vehicle USB port. – Incompatible cable. <ul style="list-style-type: none"> • Use the cable recommended by the manufacturer of your device.

SYNC™ 3

Symptom	Possible Cause and Resolution
	<ul style="list-style-type: none"> – Incorrect device settings. <ul style="list-style-type: none"> • Make sure that your device does not have an auto-install program or active security settings. • Check that your device is not set only to charge. – Device lock screen enabled. <ul style="list-style-type: none"> • Unlock your device before connecting it.
The system does not recognize my device.	<ul style="list-style-type: none"> – Device limitation. <ul style="list-style-type: none"> • Do not leave your device in your vehicle during very hot or very cold weather conditions. – Cable connection issue. <ul style="list-style-type: none"> • Correctly connect the cable to your device and the vehicle USB port. – Incompatible cable. <ul style="list-style-type: none"> • Use the cable recommended by the manufacturer of your device.
The system does not understand the name of a track or artist.	<ul style="list-style-type: none"> – Device limitation. Bluetooth does not support voice commands. <ul style="list-style-type: none"> • Connect your device to a USB port. • If you have an iOS device, press and hold the voice control button on the steering wheel to use Siri to play specific tracks.

Symptom	Possible Cause and Resolution
I cannot stream audio from my Bluetooth device.	<ul style="list-style-type: none"> – Incompatible device. <ul style="list-style-type: none"> • Check the compatibility of your device on our website. – Device not connected. <ul style="list-style-type: none"> • Pair your device. See Phone (page 502). – Media player not running. <ul style="list-style-type: none"> • Start the media player on your device.
The system does not recognize the music on my device.	<ul style="list-style-type: none"> – Missing or incorrect audio file metadata, for example artist, song title, album or genre. <ul style="list-style-type: none"> • Repair the files on your device. – Corrupt files. <ul style="list-style-type: none"> • Repair the files on your device. – Copyright protected files. <ul style="list-style-type: none"> • Use a device that contains files that are not copyright protected. – Unsupported file format. <ul style="list-style-type: none"> • Repair or convert the files to a supported format. See Entertainment (page 487). – Device indexing required. <ul style="list-style-type: none"> • Re-index your device. See Settings (page 515). – Device lock screen enabled. <ul style="list-style-type: none"> • Unlock your device before connecting it.

SYNC™ 3

Symptom	Possible Cause and Resolution
Sometimes I cannot hear a track playing on my device.	<ul style="list-style-type: none"> – Device malfunction. <ul style="list-style-type: none"> • Disconnect your device. Switch your device off, reset it and try again.
When I disconnect my iOS device the audio volume is set to maximum.	<ul style="list-style-type: none"> – Device limitation. <ul style="list-style-type: none"> • Turn the volume down on your device
The system does not play the tracks on my USB drive in the correct order.	<p>If the system does not play the tracks on your USB device in the correct order, the following information could help:</p> <ul style="list-style-type: none"> – If you are selecting USB as the audio source when the system is still indexing, SYNC plays tracks sorted alphabetically by file name in the root directory. – If you are selecting USB as the audio source after the system has finished indexing, SYNC plays all tracks sorted alphabetically by the title in the ID3 tag regardless of where they are located. SYNC uses the file name if the title in the ID3 Tag does not exist. – If you are selecting the option to play all tracks from the browsing menu, SYNC plays all tracks sorted alphabetically by the title in the ID3 tag regardless of where they are located. SYNC uses the file name if the title in the ID3 Tag does not exist. – If you are selecting a track when using the explore device option, SYNC plays tracks sorted alphabetically by file name in the folder you have selected. SYNC then plays all tracks in any subfolders in the folder you have selected.

Phone

Symptom	Possible Cause and Resolution
During a call, I can hear excessive background noise.	<ul style="list-style-type: none"> – Incorrect cell phone settings. <ul style="list-style-type: none"> • Check and adjust the audio settings on your cell phone. Refer to your cell phone's user manual.
During a call, I can hear the other person but they cannot hear me.	<ul style="list-style-type: none"> – Cell phone malfunction. <ul style="list-style-type: none"> • Switch your cell phone and Bluetooth on and off and try again. – Cell phone microphone muted. <ul style="list-style-type: none"> • Unmute your cell phone microphone.
During a call, I cannot hear the other person and they cannot hear me.	<ul style="list-style-type: none"> – System restart required. <ul style="list-style-type: none"> • Restart the system. Switch the ignition off and open the door. Close the door and lock the vehicle. Wait until the touchscreen is off and any illuminated USB ports are not illuminated. Unlock the vehicle, switch the ignition on and try again.
I cannot download phonebook.	<ul style="list-style-type: none"> – Incompatible cell phone. <ul style="list-style-type: none"> • Check the compatibility of your cell phone on our website. – Incorrect cell phone settings. <ul style="list-style-type: none"> • Allow the system to retrieve contacts from your cell phone. Refer to your cell phone's user manual.

Symptom	Possible Cause and Resolution
	<ul style="list-style-type: none"> – Incorrect system settings. <ul style="list-style-type: none"> • Switch automatic phonebook download on. See Settings (page 515). – Cell phone malfunction. <ul style="list-style-type: none"> • Switch your cell phone off, reset it and try again.
A message displays suggesting that my phonebook has downloaded but it is empty or it has missing contacts.	<ul style="list-style-type: none"> – Incorrect cell phone settings. <ul style="list-style-type: none"> • Allow the system to retrieve contacts from your cell phone. Refer to your cell phone's user manual. • Check the location of the missing contacts on your cell phone. If they are stored on the SIM card, move them to the cell phone memory. – Incorrect system settings. <ul style="list-style-type: none"> • Switch automatic phonebook download on. See Settings (page 515).

SYNC™ 3

Symptom	Possible Cause and Resolution
I cannot connect my cell phone.	<ul style="list-style-type: none"> – Incompatible cell phone. <ul style="list-style-type: none"> • Check the compatibility of your cell phone on our website. – Cell phone malfunction. <ul style="list-style-type: none"> • Switch your cell phone off, reset it and try again. • Install the latest cell phone firmware. • Delete your device from system and delete SYNC from your device and try again. • Switch automatic phonebook download off. See Settings (page 515).
Text messaging does not work.	<ul style="list-style-type: none"> – You did not switch on text message notifications. <ul style="list-style-type: none"> • Switch text message notifications on. See Phone (page 502). – Incompatible cell phone. <ul style="list-style-type: none"> • Check the compatibility of your cell phone on our website. – Cell phone malfunction. <ul style="list-style-type: none"> • Switch your cell phone off, reset it and try again.
I cannot hear text messages.	<ul style="list-style-type: none"> – Device message sharing is not enabled. <ul style="list-style-type: none"> • Check the permissions on your device to ensure text message sharing is enabled. – Incompatible cell phone. <ul style="list-style-type: none"> • Check the compatibility of your cell phone on our website.

Navigation (If Equipped)

Symptom	Possible Cause and Resolution
I cannot enter a street name when I am abroad.	<ul style="list-style-type: none"> – Incorrect entry method. <ul style="list-style-type: none"> • Enter the street name with the country.
The system does not recognize coordinates.	<ul style="list-style-type: none"> – You are using the wrong coordinates format. <ul style="list-style-type: none"> • Use the format ##. #####, ##. ##### (for N/S , E/W). Add a minus before coordinates if the direction is West and keep a positive value if the direction is East, for example 12.5412 means East and -12.5412 means West.

Apps

Symptom	Possible Cause and Resolution
The system cannot find any apps.	<ul style="list-style-type: none"> – Incompatible device. <ul style="list-style-type: none"> • You will need an Android device with OS 4.3 or higher or an iOS device with iOS 8.0 or higher. Pair and connect your Android device to find AppLink compatible apps. Connect your iOS device to a USB port or pair and connect using Bluetooth.
I have a compatible device and it is correctly connected but the system still cannot find any apps.	<ul style="list-style-type: none"> – AppLink compatible apps not installed on your device. <ul style="list-style-type: none"> • Download and install the latest version of the app. – AppLink compatible apps not running on your device. <ul style="list-style-type: none"> • Start the apps to allow the system to find them and make sure you sign in to any apps if required. – Incorrect app settings. <ul style="list-style-type: none"> • Check and adjust the app settings on your device and allow SYNC to access the app if required.
I have a compatible device, it is correctly connected and my apps are running but the system still cannot find any apps.	<ul style="list-style-type: none"> – Apps failed to fully close. <ul style="list-style-type: none"> • Restart the apps and try again. • If you have an Android device with apps that have an exit or quit option, use this and then restart the apps. Alternatively, use the force stop option in the settings menu on your device. • If you have an iOS device with iOS 7.0 or higher, tap the home button on your device twice and then swipe the app upward to close it.

Symptom	Possible Cause and Resolution
I have an Android device that is correctly connected, I have restarted my apps and they are running but the system still cannot find them.	<ul style="list-style-type: none"> – An issue on some older versions of the Android operating system could result in apps not being found. <ul style="list-style-type: none"> • Switch Bluetooth off and on again to force the system to reconnect to your device.
I have an iOS device that is correctly connected, I have restarted my apps and they are running but the system still cannot find them.	<ul style="list-style-type: none"> – Cable connection issue. <ul style="list-style-type: none"> • Disconnect the cable from your device, wait for a moment and then connect it again to force the system to reconnect to your device.
I have an Android device running a media app which the system has found but I cannot hear the sound or the sound is very quiet.	<ul style="list-style-type: none"> – Device volume is low. <ul style="list-style-type: none"> • Turn the volume up on your device.
I have an Android device running a number of compatible apps but the system cannot find all of them.	<ul style="list-style-type: none"> – Device limitation. Some Android devices have a limited number of Bluetooth ports that apps can use to connect. If you have more apps running on your device than the number of available Bluetooth ports, the system cannot find all of them. <ul style="list-style-type: none"> • Close some of the apps to allow the system to find those that you want to use.

Wi-Fi Connectivity

Symptom	Possible Cause and Resolution
I cannot connect to a Wi-Fi network.	<ul style="list-style-type: none"> – Password error. <ul style="list-style-type: none"> • Enter the correct network password. – Weak network signal. <ul style="list-style-type: none"> • Move your vehicle closer to the Wi-Fi hotspot or to a place where the network signal is not obstructed. – Multiple access points in range with the same SSID. <ul style="list-style-type: none"> • Use a unique name for your SSID. Do not use the default name unless it contains a unique identifier, for example as part of the MAC address.
The Wi-Fi connection disconnects after successful connection.	<ul style="list-style-type: none"> – Weak network signal. <ul style="list-style-type: none"> • Move your vehicle closer to the Wi-Fi hotspot or to a place where the network signal is not obstructed.
I am close to a Wi-Fi hotspot but the network signal strength is weak.	<ul style="list-style-type: none"> – Obstructed network signal. <ul style="list-style-type: none"> • If your vehicle has a heated windshield, position your vehicle so that the windshield is not facing the Wi-Fi hotspot. • If your vehicle has metallic tinting on the windows but not on the windshield, position your vehicle so that the windshield is facing the Wi-Fi hotspot or open the windows that are facing the hotspot. • If your vehicle has metallic tinting on the windows and the windshield, open the windows that are facing the hotspot.

SYNC™ 3

Symptom	Possible Cause and Resolution
	<ul style="list-style-type: none"> • If your vehicle is in a garage and you have the garage door closed, open the garage door.
I cannot see a network in the list of available networks that I expect to see.	<ul style="list-style-type: none"> – Hidden network. <ul style="list-style-type: none"> • Make the network visible and try again.
I cannot see SYNC when I search for Wi-Fi networks on my cell phone or other device.	<ul style="list-style-type: none"> – System limitation. <ul style="list-style-type: none"> • SYNC does not provide a Wi-Fi hotspot at this time.
Software downloads take too long.	<ul style="list-style-type: none"> – Weak network signal <ul style="list-style-type: none"> • Move your vehicle closer to the Wi-Fi hotspot or to a place where the network signal is not obstructed. – Wi-Fi hotspot in high demand or has a slow Internet connection. <ul style="list-style-type: none"> • Use a more reliable Wi-Fi hotspot.
The system seems to connect to a Wi-Fi network and the signal strength is excellent but the software does not update.	<ul style="list-style-type: none"> – No software update available. – Wi-Fi network requires a subscription or acceptance of terms and conditions. <ul style="list-style-type: none"> • Test the connection using another device. If the network requires a subscription or acceptance of terms and conditions, contact the network service provider.

Personal Profiles (If Equipped)

Symptom	Possible Cause and Solution
I cannot create a profile.	You have not set up Personal Profiles.
	You entered an invalid profile.
	You did not select a memory button when prompted.
	You did not have the ignition on or in park (P), or you shifted out park (P) when creating a profile.
	Personal Profiles has been switched off.
I cannot link a remote control.	You did not select the lock button on the remote control.
	The remote control selected was already associated with another profile and the system declined to overwrite.
	The system performed a profile recall when linking a remote control.
	You did not have the ignition on or in park (P), or you shifted out park (P) when creating a profile.
	You are using the old linking method.
My personalized settings do not save.	Personal Profiles does not support your unsaved settings.
	A different personal profile is active.
	Another user changed the settings for the wrong personal profile.

SYNC™ 3

Symptom	Possible Cause and Solution
My profile will not recall.	You did not create a personal profile.
	Personal Profiles is turned off.
	The profile you requested is already active.
	You did not link the memory button you are using to a profile.
	You did not link the remote control you are using to a profile.
	You are using the wrong remote control.
	You are pressing a button other than the unlock or remote start on a linked remote control.
My preset positions recall, but my profile does not.	You switched the personal profiles off.
My profile recalls but my preset positions do not.	The vehicle is in motion.
	The preset positions are the same as the guest or previously active profile.
I lost a remote control.	Unlink and relink your remote control in the Personal Profiles menu. You may need to see your authorized dealer.
I lost all profiles.	You erased and reprogrammed the remote controls. This could happen if you let a dealership add a new remote control to replace a lost one.
	Someone performed a master reset without your knowledge.

Resetting the System

1. Simultaneously press and hold the seek up and the audio unit power buttons until the screen goes black.
2. Wait three minutes to allow the system to complete the reset.
3. Press the audio unit power button to switch the system on.

Note: *You can reset the system to restore functionality that has stopped working. The system reset is designed to restore functionality and not delete any data that you have stored.*

Additional Information and Assistance

For additional information and assistance, we recommend that you contact an authorized dealer or refer to our website.

Accessories

For a complete listing of the accessories that are available for your vehicle, please contact your authorized dealer or visit the online store website:

Web Address (United States)
www.Accessories.Lincoln.com

Web Address (Canada)
www.LincolnCanada.com

We will repair or replace any properly authorized dealer-installed Lincoln Original Accessory found to be defective in factory-supplied materials or workmanship during the warranty period, as well as any component damaged by the defective accessories.

We will warrant your Lincoln Original Accessory through the warranty that provides the greatest benefit:

- 24 months, unlimited mileage.
- The remainder of your new vehicle limited warranty.

*Lincoln Licensed Accessory. The accessory manufacturer designs, develops and therefore warrants Lincoln Licensed Accessories, and does not design or test these accessories to Lincoln Motor Company engineering requirements. Contact an authorized Lincoln dealer for the accessory manufacturer's limited warranty details and request a copy of the Lincoln Licensed Accessories product limited warranty from the accessory manufacturer.

For maximum vehicle performance, keep the following information in mind when adding accessories or equipment to your vehicle:

- When adding accessories, equipment, passengers and luggage to your vehicle, do not exceed the total weight capacity of the vehicle or of the front or rear axle (GVWR or GAWR as indicated on the Safety Compliance Certification label). Ask an authorized dealer for specific weight information.
- The Federal Communications Commission (FCC) and Canadian Radio Telecommunications Commission (CRTC) regulate the use of mobile communications systems that have radio transmitters, for example two-way radios, telephones and theft alarms. Any such equipment installed in your vehicle should comply with Federal Communications Commission (FCC) and Canadian Radio Telecommunications Commission (CRTC) regulations and should only be installed by an authorized dealer.

Accessories

- Mobile communications systems may harm the operation of your vehicle, particularly if their manufacturer did not design them specifically for automotive use.
- If you or an authorized Lincoln dealer add any non-Lincoln electrical or electronic accessories or components to your vehicle, you may adversely affect battery performance and durability. In addition, you may also adversely affect the performance of other electrical systems in the vehicle.

Lincoln Protect

PROTECT YOURSELF FROM THE RISING COST OF VEHICLE REPAIRS WITH LINCOLN PROTECT EXTENDED SERVICE PLAN.

Lincoln Protect Extended Service Plans (U.S. Only)

Lincoln Protect means peace of mind. It's the extended service plan backed by the Lincoln Motor Company, and provides more protection beyond the New Vehicle Limited Warranty coverage. When you visit your Lincoln Dealer, insist on genuine Lincoln Protect extended service plans!

Lincoln Protect Extended Service Plan Can Quickly Pay for Itself

One trip to the Service Center could easily exceed the price of your Lincoln Protect extended service plan. With Lincoln Protect you minimize your risk for unexpected repair bills and rising repair costs.

Up to 1000+ Covered Vehicle Components

There are four mechanical Lincoln Protect extended service plans with different levels of coverage. Ask your authorized dealer for details.

1. PremiumCARE - Our most comprehensive coverage. With over 1,000 covered components, this plan is so complete it's probably easier to list what's not covered.
2. ExtraCARE - Covers 113 components, and includes many high-tech items.
3. BaseCARE - Covers 84 components.
4. PowertrainCARE - Covers 29 critical components.

Lincoln Protect extended service plans are honored by all authorized Lincoln dealers in the U.S., Canada and Mexico.

That means you get:

- Reliable, quality service at any Lincoln or Ford dealership.
- Repairs performed by factory trained technicians, using genuine parts.

Rental Car Reimbursement

1st day Rental Benefit

If you bring your car into your dealer for service, we'll give you a loaner to use for the day.

Extended Rental Benefits

If your vehicle is kept overnight for covered repairs, you are eligible for rental car coverage, including bumper to bumper warranty repairs, and Field Service Actions.

Roadside Assistance

Exclusive 24/7 roadside assistance, including:

- Towing, flat-tire change and battery jump starts.
- Out of fuel and lock-out assistance.
- Travel expense reimbursement for lodging, meals and rental car.
- Assistance for taxi, shuttle, rental car coverage and other transportation.

Lincoln Protect

Transferable Coverage

If you sell your vehicle before your Lincoln Protect extended service plan coverage expires, you can transfer any remaining coverage to the new owner. Which should give you and your potential buyer a little more peace of mind.

Less Cost to Properly Maintain Your Vehicle

Lincoln Protect extended service plan also offers a Premium Maintenance Plan that covers all scheduled maintenance, and selected wear items. The coverage is prepaid, so you never have to worry about the cost of your vehicle's maintenance.

Covered maintenance includes:

- Windshield wiper blades.
- Spark plugs.
- The clutch disc (if equipped).
- Brake pads and linings.
- Shock absorbers and struts.
- Engine cooling hoses, clamps and o-rings.

- Engine belts.
- Diesel exhaust fluid replenishment (if equipped).

Interest Free Finance Options

Just a 10% down payment will provide you with an affordable, no interest, no fee payment program allowing you all the security and benefits Lincoln Protect extended service plan has to offer while paying over time. You are pre-approved with no credit check or hassles. To learn more, call our Lincoln Protect extended service plan specialists at 800-367-3377.

Complete the information below and mail to:

Lincoln Protect Extended Service Plan
P.O. Box 321067
Detroit, MI 48232

Lincoln Protect (CANADA ONLY)

You can get more protection for your vehicle by purchasing a Lincoln Protect extended service plan. Lincoln Protect extended service plan is the only service contract backed by Lincoln Motor Company of Canada, Limited. Depending on the plan you purchase, Lincoln Protect extended service plan provides benefits such as:

- Rental reimbursement.
- Coverage for certain maintenance and wear items.
- Protection against repair costs after your New Vehicle Limited Warranty Coverage expires.
- Roadside Assistance benefits.

Lincoln Protect

There are several Lincoln Protect extended service plans available in various time, distance and deductible combinations. Each plan is tailored to fit your own driving needs, including reimbursement for towing and rental. When you purchase Lincoln Protect extended service plan, you receive added peace-of-mind protection throughout Canada, the United States and Mexico, provided by a network of participating authorized Lincoln Motor Company dealers.

Note: *Repairs performed outside of Canada, the United States and Mexico are not eligible for Lincoln Protect extended service plan coverage.*

This information is subject to change. For more information, visit your local Lincoln of Canada dealer or www.LincolnCanada.com to find the Lincoln Protect extended service plan that is right for you.

Scheduled Maintenance

GENERAL MAINTENANCE INFORMATION

Why Maintain Your Vehicle?

Carefully following the maintenance schedule helps protect against major repair expenses resulting from neglect or inadequate maintenance and may help to increase the value of your vehicle when you sell or trade it. Keep all receipts for completed maintenance with your vehicle.

We have established regular maintenance intervals for your vehicle based upon rigorous testing. It is important that you have your vehicle serviced at the proper times. These intervals serve two purposes; one is to maintain the reliability of your vehicle and the second is to keep your cost of owning your vehicle down.

It is your responsibility to have all scheduled maintenance performed and to make sure that the materials used meet the specifications identified in this owner's manual. See **Capacities and Specifications** (page 438).

Failure to perform scheduled maintenance invalidates warranty coverage on parts affected by the lack of maintenance.

Why Maintain Your Vehicle at Your Dealership?

Factory-Trained Technicians

Service technicians participate in extensive factory-sponsored certification training to help them become experts on the operation of your vehicle. Ask your dealership about the training and certification their technicians have received.

Genuine Lincoln and Motorcraft® Replacement Parts

Dealerships stock Lincoln, Motorcraft and Lincoln authorized branded re-manufactured replacement parts. These parts meet or exceed our specifications. Parts installed at your dealership carry a nationwide 24-month or unlimited mile (kilometer) parts and labor limited warranty.

If you do not use Lincoln authorized parts they may not meet our specifications and depending on the part, it could affect emissions compliance.

Convenience

Many dealerships have extended evening and Saturday hours to make your service visit more convenient and they offer one stop shopping. They can perform any services that are required on your vehicle, from general maintenance to collision repairs.

Note: *Not all dealers have extended hours or body shops. Please contact your dealer for details.*

Protecting Your Investment

Maintenance is an investment that pays dividends in the form of improved reliability, durability and resale value. To maintain the proper performance of your vehicle and its emission control systems, make sure you have scheduled maintenance performed at the designated intervals.

Scheduled Maintenance

Your vehicle is equipped with the Intelligent Oil-Life Monitor system, which displays a message in the information display at the proper oil change interval. This interval may be up to one year or 10,000 mi (16,000 km).

When the oil change message appears in the information display, it is time for an oil change. Make sure you perform the oil change within two weeks or 500 mi (800 km) of the message appearing. Make sure you reset the Intelligent Oil-Life Monitor after each oil change. See **Oil Change Indicator Reset** (page 381).

If your information display resets prematurely or becomes inoperative, you should perform the oil change interval at six months or 5,000 mi (8,000 km) from your last oil change. Never exceed one year or 10,000 mi (16,000 km) between oil change intervals.

Your vehicle is very sophisticated and built with multiple, complex, performance systems. Every manufacturer develops these systems using different specifications and performance features. That is why it is important to rely upon your dealership to properly diagnose and repair your vehicle.

The Lincoln Motor Company has recommended maintenance intervals for various parts and component systems based upon engineering testing. The Lincoln Motor Company relies upon this testing to determine the most appropriate mileage for replacement of oils and fluids to protect your vehicle at the lowest overall cost to you and recommends against maintenance schedules that deviate from the scheduled maintenance information.

We strongly recommend the use of only genuine Lincoln, Motorcraft or Lincoln authorized re-manufactured replacement parts engineered for your vehicle.

Additives and Chemicals

This owner's manual and the Lincoln Workshop Manual list the recommended additives and chemicals for your vehicle. We do not recommend using chemicals or additives not approved by us as part of your vehicle's normal maintenance. Please consult your warranty information.

Oils, Fluids and Flushing

In many cases, fluid discoloration is a normal operating characteristic and, by itself, does not necessarily indicate a concern or that the fluid needs to be changed. However, a qualified expert, such as the factory-trained technicians at your dealership, should inspect discolored fluids that also show signs of overheating or foreign material contamination immediately.

Make sure to change your vehicle's oils and fluids at the specified intervals or in conjunction with a repair. Flushing is a viable way to change fluid for many vehicle sub-systems during scheduled maintenance. It is critical that systems are flushed only with new fluid that is the same as that required to fill and operate the system or using a Lincoln approved flushing chemical.

Owner Checks and Services

Make sure you perform the following basic maintenance checks and inspections every month or at six-month intervals.

Scheduled Maintenance

Check Every Month
Engine oil level.
Function of all interior and exterior lights.
Tires (including spare) for wear and proper pressure.
Windshield washer fluid level.
Fuel and water separator. Drain if necessary (or if indicated by the information display).
Holes and slots in the tail pipe to make sure they are functional and clear of debris.

Check Every Six Months
Battery connections. Clean if necessary.
Body and door drain holes for obstructions. Clean if necessary.
Cooling system fluid level and coolant strength.
Door weatherstrips for wear. Lubricate if necessary.
Hinges, latches and outside locks for proper operation. Lubricate if necessary.
Parking brake for proper operation.

Scheduled Maintenance

Check Every Six Months
Safety belts and seat latches for wear and function.
Safety warning lamps (brake, ABS, airbag and safety belt) for operation.
Washer spray and wiper operation. Clean or replace blades as necessary.

Multi-Point Inspection

In order to keep your vehicle running right, it is important to have the systems on your vehicle checked regularly. This can help identify potential issues and prevent major problems. We recommend having the following multi-point inspection performed at every scheduled maintenance interval to help make sure your vehicle keeps running great.

Multi-Point Inspection	
Accessory drive belt(s)	Hazard warning system operation
Battery performance	Horn operation
Engine air filter	Radiator, cooler, heater and air conditioning hoses
Exhaust system	Suspension components for leaks or damage

Scheduled Maintenance

Multi-Point Inspection	
Exterior lamps operation	Steering and linkage
Fluid levels ¹ ; fill if necessary	Tires (including spare) for wear and proper pressure ²
For oil and fluid leaks	Windshield for cracks, chips or pits
Half-shaft dust boots	Washer spray and wiper operation

¹ Brake, coolant recovery reservoir, automatic transmission and window washer

² If your vehicle is equipped with a temporary mobility kit, check the tire sealant expiration Use By date on the canister. Replace as needed.

Be sure to ask your dealership service advisor or technician about the multi-point vehicle inspection. It is a comprehensive way to perform a thorough inspection of your vehicle. Your checklist gives you immediate feedback on the overall condition of your vehicle.

NORMAL SCHEDULED MAINTENANCE

Intelligent Oil-Life Monitor

Your vehicle has an Intelligent Oil-Life Monitor that determines when you should change the engine oil based on how your vehicle is used. By using several important factors in its calculations, the monitor helps reduce the cost of owning your vehicle and reduces environmental waste at the same time.

This means you do not have to remember to change the oil on a mileage-based schedule. Your vehicle lets you know when an oil change is due by displaying a message in the information display.

The following table provides examples of vehicle use and its impact on oil change intervals. It is a guideline only. Actual oil change intervals depend on several factors and generally decrease with severity of use.

Scheduled Maintenance

When to expect the OIL CHANGE REQUIRED Message

Interval	Vehicle Use and Example
7,500–10,000 mi (12,000–16,000 km)	Normal
	Normal commuting with highway driving No, or moderate, load or towing Flat to moderately hilly roads No extended idling
5,000–7,500 mi (8,000–12,000 km)	Severe
	Moderate to heavy load or towing Mountainous or off-road conditions Extended idling Extended hot or cold operation
3,000–5,000 mi (5,000–8,000 km)	Extreme
	Maximum load or towing Extreme hot or cold operation

Scheduled Maintenance

Normal Maintenance Intervals

At Every Oil Change Interval as Indicated by the Information Display ¹
Change the engine oil and filter. ²
Rotate the tires, inspect tire wear and measure tread depth.
Perform a multi-point inspection - recommended.
Inspect the automatic transmission fluid level - vehicles with dipstick. Consult your dealer for requirements.
Inspect the brake pads, rotors, hoses and parking brake.
Inspect the engine cooling system strength and hoses.
Inspect the exhaust system and heat shields.
Inspect the front axle and U-joints.
Inspect the half-shaft boots.
Inspect the steering linkage, ball joints, suspension, tire-rod ends, driveshaft and U-joints.
Inspect the wheels and related components for abnormal noise, wear, looseness or drag.

¹ Do not exceed one year or 10,000 mi (16,000 km) between service intervals.

² Reset the Intelligent Oil-Life Monitor after engine oil and filter changes.

Scheduled Maintenance

Brake Fluid Maintenance¹	
Every 3 Years	Change the brake fluid. ²

¹ Perform this maintenance item every 3 years. Do not exceed the designated time for the interval.

² Brake fluid servicing requires special equipment available at your authorized dealer.

Other Maintenance Items¹	
Every 20,000 mi (32,000 km)	Replace the cabin air filter.
Every 30,000 mi (48,000 km)	Replace the engine air filter.
Every 100,000 mi (160,000 km)	Replace the spark plugs.
	Inspect the accessory drive belt(s). ²
Every 150,000 mi (240,000 km)	Change the automatic transmission fluid.
	Change the front axle fluid - Four-wheel drive vehicles.
	Change the rear axle fluid.
	Change the transfer case fluid - Four-wheel drive vehicles.

Scheduled Maintenance

Other Maintenance Items ¹	
	Replace the accessory drive belt(s).
Every 200,000 mi (320,000 km)	Change the engine coolant. ³

¹Perform these maintenance items within 3,000 mi (4,800 km) of the last engine oil and filter change. Do not exceed the designated distance for the interval.

²After initial inspection, inspect every other oil change until replaced.

³Initial replacement at ten years or 200,000 mi (320,000 km), then every five years or 100,000 mi (160,000 km).

SPECIAL OPERATING CONDITIONS SCHEDULED MAINTENANCE

If you operate your vehicle **primarily** in any of the following conditions, you need to perform extra maintenance, as indicated. If you operate your vehicle **occasionally** under any of these conditions, it is not necessary to perform the extra maintenance. For specific recommendations, see your dealership service advisor or technician.

Perform the services shown in the following tables when specified or within 3,000 mi (4,800 km) of the message appearing in the information display prompting you to change your oil.

- **Example 1:** The message comes on at 28,751 mi (46,270 km). Perform the 30,000 mi (48,000 km) automatic transmission fluid replacement.
- **Example 2:** The message has **not** come on, but the odometer reads 30,000 mi (48,000 km) (for example, the Intelligent Oil-Life Monitor was reset at 25,000 mi (40,000 km)). Perform the engine air filter replacement.

Scheduled Maintenance

Towing a Trailer or Using a Car-top Carrier	
As required	Change engine oil and filter as indicated by the information display and perform services listed in the Normal Scheduled Maintenance chart.
Inspect frequently, service as required	Inspect and lubricate U-joints (if equipped with grease fittings).
	See axle maintenance items under Exceptions .
Every 60,000 mi (96,000 km)	Change transfer case fluid (Four-wheel drive vehicles).
	Replace spark plugs.

Extensive Idling or Low-speed Driving for Long Distances, as in Heavy Commercial Use	
As required	Change engine oil and filter as indicated by the information display and perform services listed in the Normal Scheduled Maintenance chart.
Inspect frequently, service as required	Replace engine air filter.
	Replace cabin air filter.
Every 60,000 mi (96,000 km)	Change transfer case fluid (Four-wheel drive vehicles).
	Replace spark plugs.

Scheduled Maintenance

Operating in Dusty or Sandy Conditions (Such as Unpaved or Dusty Roads)	
Inspect frequently, service as required	Replace engine air filter.
	Replace cabin air filter.
Every 5,000 mi (8,000 km)	Inspect the wheels and related components for abnormal noise, wear, looseness or drag.
	Rotate tires, inspect tires for wear and measure tread depth.
Every 5,000 mi (8,000 km) or six months	Change engine oil and filter. ¹
Every 60,000 mi (96,000 km)	Change transfer case fluid (Four-wheel drive vehicles).

¹ Reset your Intelligent Oil-Life Monitor after each engine oil and filter change.

Off-road Operation	
Inspect frequently, service as required	Inspect steering linkage, ball joints and U-joints. Lubricate if equipped with grease fittings.
	Replace engine air filter.
	Replace cabin air filter.
Every 5,000 mi (8,000 km) or six months	Change engine oil and filter. ¹
	Inspect the wheels and related components for abnormal noise, wear, looseness or drag.

Scheduled Maintenance

Off-road Operation	
	Rotate tires, inspect tires for wear and measure tread depth.
Every 60,000 mi (96,000 km)	Change transfer case fluid (Four-wheel drive vehicles).

Reset your Intelligent Oil-Life Monitor after each engine oil and filter change.

Exceptions

There are several exceptions to the Normal Schedule.

Axle and Transfer Case Maintenance

Axle(s) and transfer case (Four-wheel drive vehicles) fluid changes or level checks are not required unless a leak is suspected or the assembly has been submerged in water. Contact an authorized dealer for service.

California Fuel Filter Replacement

If you register your vehicle in California, the California Air Resources Board has determined that the failure to perform this maintenance item does not nullify the emission warranty or limit recall liability before the completion of your vehicle's useful life. The Lincoln Motor Company, however, urges you to have all recommended maintenance services performed at the specified intervals and to record all vehicle service.

Hot Climate Oil Change Intervals

Vehicles operating in the Middle East, North Africa, Sub-Saharan Africa or locations with similar climates using an American Petroleum Institute (API) Certified for Gasoline Engines (Certification mark) oil of SM or SN quality, the normal oil change interval is 3,000 mi (4,800 km).

If the available API SM or SN oils are not available, then the oil change interval is 1,800 mi (2,900 km).

Engine Air Filter Replacement

The life of the engine air filter is dependent on exposure to dusty and dirty conditions. Vehicles operated in these conditions require frequent inspection and replacement of the engine air filter.

Customer Information

RADIO FREQUENCY CERTIFICATION LABELS

Blind Spot Information System Sensors

Argentina



Brazil



China

CMIIT ID: 2015DJ1610

Djibouti



European Union EU



Customer Information

Ghana

NCA PRODUCT IDENTIFIER: 3R8-8M-7DF-231

Malaysia



RALM/24A/0715/S(15-2272)

Mauritania

AGREE PAR L'ANE MAURITANIE
Numéro d'agrément: 0257/ARE/2015
Date d'agrément: 02/03/2015

Jamaica

This product has been Type Approved
by Jamaica: SMA - SRR3-B.

Moldova



Customer Information

Pakistan



Serbia



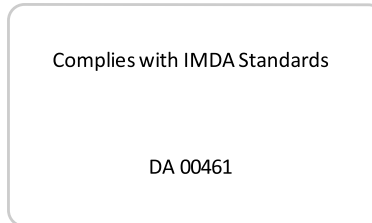
South Africa



Paraguay



Singapore



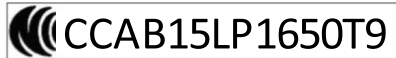
South Korea



Customer Information

MSIP-CRM-8DC-SRR3B

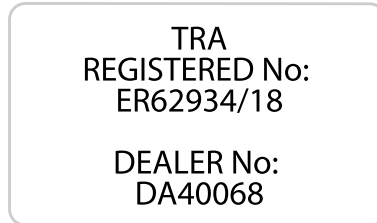
Taiwan



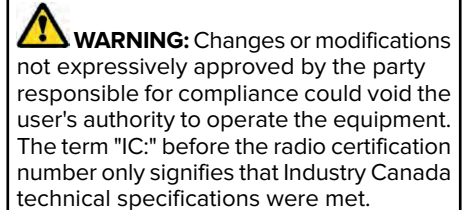
Ukraine



United Arab Emirates (U.A.E.)



United States and Canada



FCC ID: OAYSRR3B

IC: 4135A-SRR3B

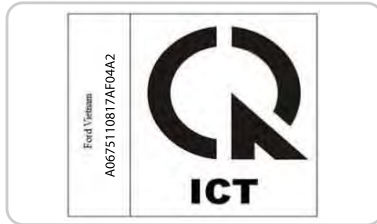
IC: RSS-310 compliant, Per FCC Test report no.: 1-8707-14-01-03

This device complies with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Customer Information

Vietnam



Body Control Module

Argentina



Djibouti



Zambia



Ghana

NCA APPROVED: NCA/TA/16/23

Customer Information

Jamaica

This product has been Type Approved by
Jamaica: SMA - M3NA2C738448.

Mauritania

AGREE PAR L'ANE MAURITANIE
Numéro d'agrément : 0262/ARE/2015
Date d'agrément : 18/03/2015

Morocco

AGREE PAR L'ANRT MAROC
Numéro d'agrément: MR 8925 ANRT 2014
Date d'agrément: 04/02/2014

Paraguay



2018-08-I-000410

2013-08-I-0158

Pakistan



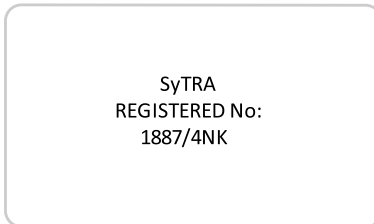
Customer Information

South Africa



2013-07-03

Syria



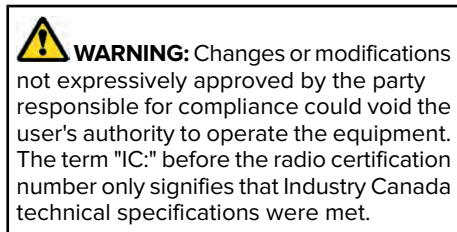
Ukraine



South Korea



United Stand and Canada



FCC ID: M3NA2C738448

IC: 7812A-A2C738448

Customer Information

This device complies with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Vietnam



Zambia



Cruise Control Module

Argentina



Customer Information

Brazil



06571-19-12270

Este equipamento não tem direito à proteção
contra interferência prejudicial e não pode causar
interferência em sistemas devidamente autorizados.

Djibouti

AGREE PAR LE MCPT (REPUBLIQUE DE DJIBOUTI)

Numéro d'agrément : 594/dpt/2017

Date d'agrément : 09/04/2017

Ghana

NCA PRODUCT IDENTIFIER: OR2-9H-7E1-x4D

Indonesia

SERTIFIKAT NOMOR : 53104/SDPPI/2017
PLG ID: 4927



Jamaica

This product has been Type Approved
by Jamaica: SMA - L2C0065TR.

Malaysia



RALM/61A/0318/S(18-0852)

Customer Information

Mauritania

AGREE PAR L'ANE MAURITANIE

Numéro d'agrément: 0409/ARE/2017

Date d'agrément: 12/04/2017

Morocco

AGREE PAR L'ANRT MAROC

Numéro d'agrément: MR 13639 ARNT 2017

Date d'agrément: 28/03/2017

Paraguay



Moldova



Pakistan



Serbia



Customer Information

Singapore

Complies with IMDA Standards
DA105753

South Korea

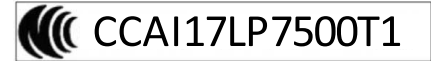


R-CMM-DLH-L2C0065TR

Syria

SyTRA
REGISTERED No:
FR00085-17

Taiwan



South Africa



TA2017-1923

Ukraine



Customer Information

United Arab Emirates



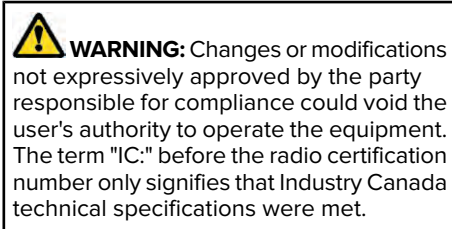
This device complies with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Zambia



United States and Canada

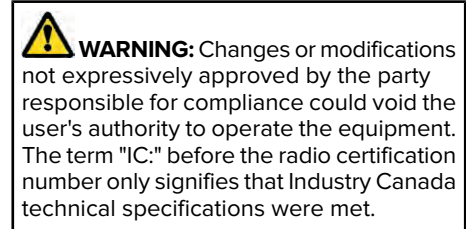


FCC ID: L2C0065TR

IC: 3432A-0065TR

Garage Door Opener

United States and Canada



FCC ID: NZLSAHL5D

IC: 4112A-SAHL5D

This device complies with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Customer Information

Keys and Remote Controls

Argentina

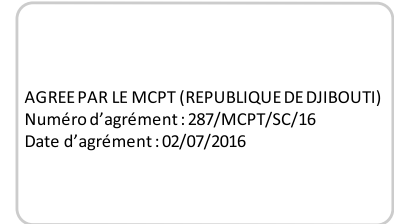


Brazil



Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

Djibouti



Ghana

NCA APPROVED: 2R9-8M-7E0-x94

Customer Information

Jamaica

This product has been Type Approved
by Jamaica: SMA – A2C97102000

Moldova



Paraguay



Morocco

AGREE PAR L'ANRT MAROC
Numéro d'agrément : MR 12432 ANRT 2016
Date d'agrément : 31/08/2016

NR: 2016-9-I-000222

Customer Information

Serbia



South Africa

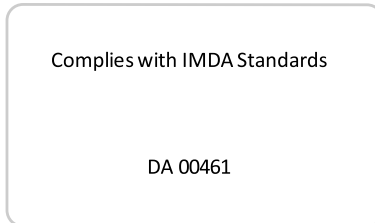


MSIP-CRM-TAL-A2C97102000

Ukraine



Singapore



South Korea



Customer Information

United Arab Emirates (U.A.E.)

TRA
REGISTERED No: ER47690/16
DEALER No: DA37380/15

This device complies with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

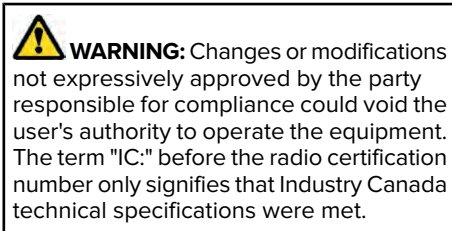
1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Zambia



Vietnam

United States and Canada



FCC ID: M3N-A2C931426

IC: 7812A-A2C931426

Customer Information

Radio Transceiver Module

Argentina



Brazil



10693-20-12270

Este equipamento não tem direito à proteção
contra interferência prejudicial e não pode causar
interferência em sistemas devidamente autorizados.

Djibouti

AGREE PAR LE MCPT (REPUBLIQUE DE DJIBOUTI)
Numéros d'agrément : 033/DDTIC/2020
Date d'agrément : 07/06/2020

AGREE PAR LE MCPT (REPUBLIQUE DE DJIBOUTI)
Numéros d'agrément : 034/DDTIC/2020
Date d'agrément : 07/06/2020

Ghana

NCA APPROVED: SRO-1M-7E4-108

NCA APPROVED: SRO-1M-7E4-114

Mauritania

AGREE PAR L'ANE MAURITANIE
Numéro d'agrément: 0803/ARE/2020
Date d'agrément: 03/06/2020

Customer Information

AGREE PAR L'ANE MAURITANIE
Numéro d'agrément : 0802/ARE/2020
Date d'agrément : 03/06/2020

Morocco

AGREE PAR L'ANE MAROC
Numéro d'agrément : MR 24102 ANRT 2020
Date d'agrément : 18/05/2020

Serbia



NO11 20

Moldova



Pakistan



South Africa

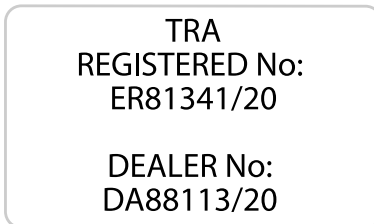


Customer Information

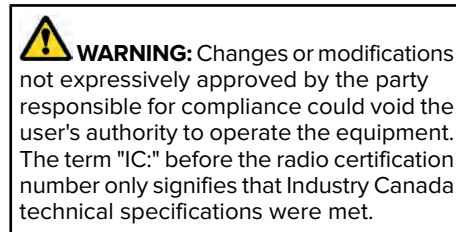
Taiwan



United Arab Emirates (U.A.E.)



United States and Canada



FCC ID: L2C0082R

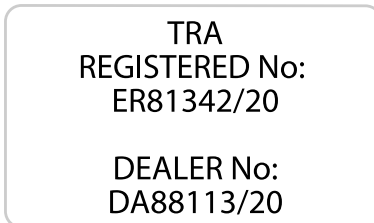
FCC ID: L2C0083TR

IC: 342A-0083TR

This device complies with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Ukraine



Customer Information

Zambia



SYNC

Argentina



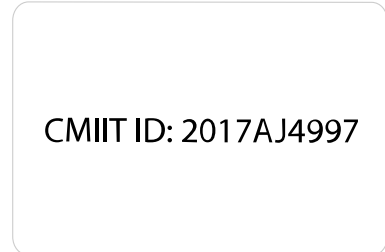
Brazil



06355-17-09014

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

China



Customer Information

Djibouti

AGREE PAR LE MCPT (REPUBLIQUE DE DJIBOUTI)
Numéro d'agrément: 634/MCPT/DPT/17
Date d'agrément: 04/12/2017

Ghana

NCA PRODUCT IDENTIFIER: BR3-1M-GE2-04F

Malaysia



RBAB/57H/0318/S(18-0624)

European Union EU



Jamaica

This product has been Type Approved
by Jamaica: SMA - FG-185-SG32-MH.

Customer Information

Mauritania

AGREE PAR L'ANE MAURITANIE
Numéro d'agrément: 0442/ARE/2017
Date d'agrément: 21/11/2017

Morocco

AGREE PAR L'ANRT MAROC
Numéro d'agrément: MR 15193 ANRT 2017
Date d'agrément: 22/11/2017

Paraguay



Moldova



Pakistan



NR: 2017-12-I-0000413

Customer Information

Serbia

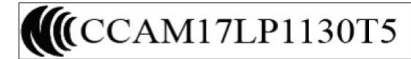


South Africa

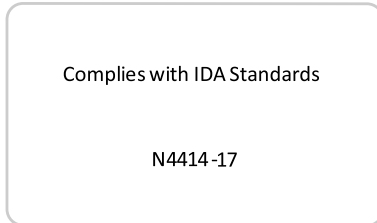


MSIP-CMM-pAs-FA-170-BCAR-HS

Taiwan



Singapore



South Korea

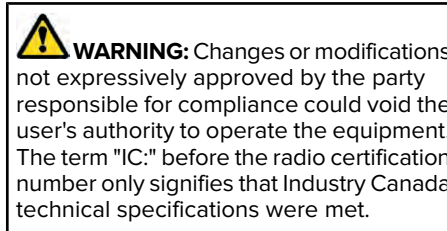


Customer Information

Ukraine



United States and Canada



FCC ID: ACJ-FG-185-SG32MH

IC: 216B-FG185SG32MH

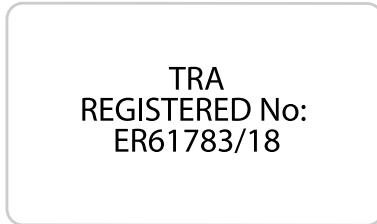
This device complies with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Vietnam



United Arab Emirates (U.A.E.)



Zambia



Customer Information

Tire Pressure Monitoring System Sensors - Vehicles With: 315 MHz Sensors

Argentina



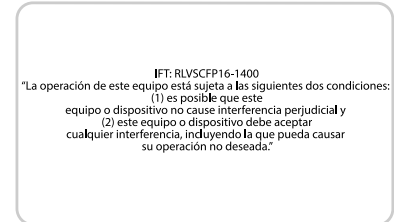
Brazil



Jamaica

This product has been Type Approved by Jamaica: SMA – FP3

Mexico



Paraguay



Customer Information

United States and Canada



WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

FCC ID: MRXFP3

IC: 2546A-FP3

This device complies with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Tire Pressure Monitoring System Sensors - Vehicles With: 433 MHz Sensors

Argentina



China

CMIIT ID: 2016DJ6033

Djibouti

AGREE PAR LE MCPT
(REPUBLIQUE DE DJIBOUTI)
Numéro d'agrément : 547/MCPT/DPT/16
Date d'agrément : 27/09/16

Customer Information

Ghana

NCA APPROVED: 2R9-8M-7E0-0BE

Jordan

Model: FP4
Manufacturer: Schrader Electronics Ltd
Type Approval No: TRC/LPD/2017/360
Equipment Type: Low Power Device (LPD)

Mauritania

AGREE PAR L'ANE MAURITANIE
Numéro d'agrément : 0358/ARE/2016
Date d'agrément : 04/10/2016

Moldova



Nigeria

Connection and use of this
communications
equipment is permitted by the Nigerian
Communications Commission

Oman

OMAN TRA
TA-R/3591/16
D080134

Customer Information

Pakistan

Pakistan Telecommunication Authority



Approved by PTA 2016

Serbia



И005 18

South Korea



MSIP-CRM-SRD-FP4

Ukraine



UA.TR.109

Paraguay



NR: 2018-07-I-000318

Singapore

Complies with
IMDA Standards
DA 107968

Customer Information

United Arab Emirates

TRA
REGISTERED No:
ER48598/16

DEALER No.
DA0047074

Wireless Accessory Charging Module

Argentina

CNC COMISIÓN NACIONAL
DE COMUNICACIONES

CNC ID: H-21576

Brazil



04021-18-06661

Este equipamento não tem direito à proteção
contra interferência prejudicial e não pode causar
interferência em sistemas devidamente autorizados.

Djibouti

AGREE PAR LE MCPT (REPUBLIQUE DE DJIBOUTI)
Numéro d'agrément : 004/DDTIC/2019
Date d'agrément : 10/01/2019

Customer Information

European Union EU



Jamaica

This product has been Type Approved by Jamaica: SMA - WACM.

Jordan

Type Approval No: TRC/LPD/2017/418
Equipment Type: Low Power Device (LPD)

SQASI/TA/19/4129

Mauritania

AGREE PAR L'ANE MAURITANIE
Numéro d'agrément : 0474/ARE/2018
Date d'agrément : 05/03/2018

Ghana

NCA APPROVED: 1R3-1M-7E1-174

Malaysia



Moldova



Customer Information

Morocco

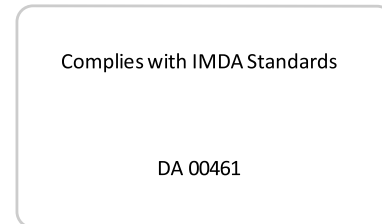


2017-10-I-0000333

Serbia



Singapore



Paraguay



South Africa



Customer Information

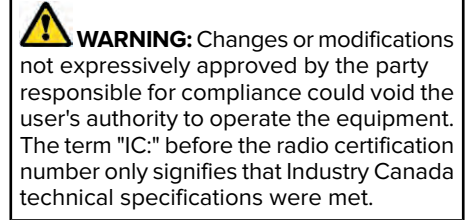
South Korea



Ukraine



United States

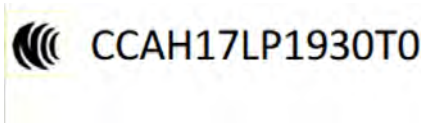


FCC ID: L2C0066T

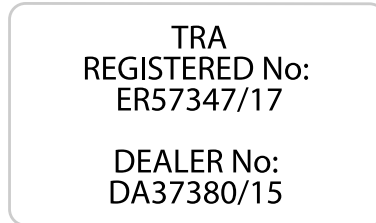
This device complies with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Taiwan



United Arab Emirates (U.A.E.)



Customer Information

Vietnam



Zambia



Appendices

ELECTROMAGNETIC COMPATIBILITY



WARNING: Do not place objects or mount equipment on or near the airbag cover, on the side of the front or rear seatbacks, or in areas that may come into contact with a deploying airbag. Failure to follow these instructions may increase the risk of personal injury in the event of a crash.



WARNING: Do not fasten antenna cables to vehicle wiring, fuel pipes and brake pipes.



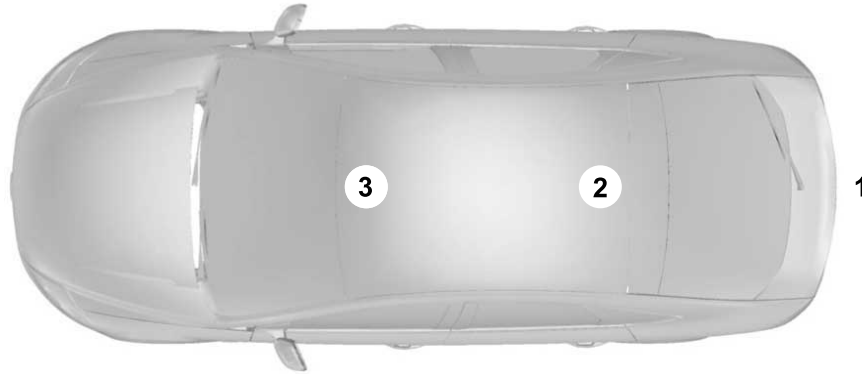
WARNING: Keep antenna and power cables at least 4 in (10 cm) from any electronic modules and airbags.

Note: We test and certify your vehicle to meet electromagnetic compatibility legislation. It is your responsibility to make sure that any equipment an authorized dealer installs on your vehicle complies with applicable local legislation and other requirements. Installation of some aftermarket electronic devices could degrade the performance of vehicle functions, which use radio frequency signals such as broadcast radio receiver, tire pressure monitoring system, push button start, Bluetooth connectivity or satellite navigation.

Note: Any radio frequency transmitter equipment in your vehicle (such as cellular telephones and amateur radio transmitters) must keep to the parameters in the following illustrations and table. We do not provide any other special provisions or conditions for installations or use.

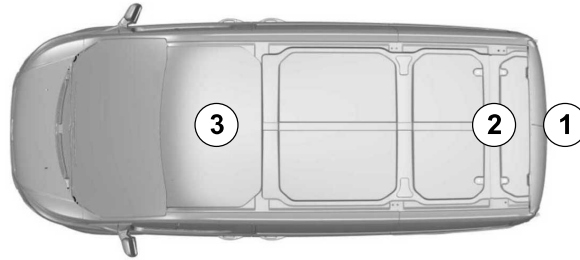
Appendices

Car/SUV



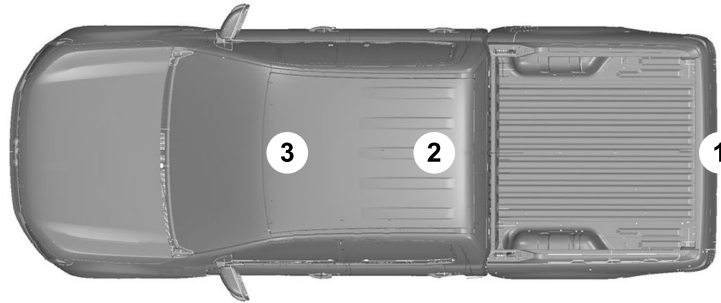
Appendices

Van



Appendices

Truck



Frequency Band MHz	Maximum output power Watt (Peak RMS)	Antenna Positions
1-30	50	1
50-54	50	2, 3
68-88	50	2, 3

Appendices

Frequency Band MHz	Maximum output power Watt (Peak RMS)	Antenna Positions
142-176	50	2, 3
380-512	50	2, 3
806-870	10	2, 3

Appendices

END USER LICENSE AGREEMENT

VEHICLE SOFTWARE END USER LICENSE AGREEMENT (EULA)

- You ("You" or "Your" as applicable) have acquired a vehicle having several devices, including SYNC[®] and various control modules, ("DEVICES") that include software licensed or owned by Ford Motor Company and its affiliates ("FORD MOTOR COMPANY"). Those software products of FORD MOTOR COMPANY origin, as well as associated media, printed materials, and "online" or electronic documentation ("SOFTWARE") are protected by international intellectual property laws and treaties. The SOFTWARE is licensed, not sold. All rights reserved.
- The SOFTWARE may interface with and/or communicate with, or may be later upgraded to interface with and/or communicate with additional software and/or systems provided by FORD MOTOR COMPANY.

IF YOU DO NOT AGREE TO THIS END USER LICENSE AGREEMENT ("EULA") DO NOT USE THE DEVICES OR COPY THE SOFTWARE. ANY USE OF THE SOFTWARE, INCLUDING BUT NOT LIMITED TO USE ON THE DEVICES, WILL CONSTITUTE YOUR AGREEMENT TO THIS EULA (OR RATIFICATION OF ANY PREVIOUS CONSENT).

GRANT OF SOFTWARE LICENSE: This EULA grants you the following license:

- You may use the SOFTWARE as installed on the DEVICES and as otherwise interfacing with systems and/or services provide by or through FORD MOTOR COMPANY or its third party software and service providers.

Description of Other Rights and Limitations

- **Speech Recognition:** If the SOFTWARE includes speech recognition component(s), you should understand that speech recognition is an inherently statistical process and that recognition errors are inherent in the process. Neither FORD MOTOR COMPANY nor

its suppliers shall be liable for any damages arising out of errors in the speech recognition process. It is your responsibility to monitor any speech recognition functions included in the system.

- **Limitations on Reverse Engineering, Decompilation and Disassembly:** You may not reverse engineer, decompile, translate, disassemble or attempt to discover any source code or underlying ideas or algorithms of the SOFTWARE nor permit others to reverse engineer, decompile or disassemble the SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation or to the extent as may be permitted by the licensing terms governing use of any open source components included with the SOFTWARE.

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- **Limitations on Distributing, Copying, Modifying and Creating Derivative Works:** You may not distribute, copy, make modifications to or create derivative works based on the SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation or to the extent as may be permitted by the licensing terms governing use of any open source components included with the SOFTWARE.
- **Single EULA:** The end user documentation for the DEVICES and related systems and services may contain multiple EULAs, such as multiple translations and/or multiple media versions (e.g., in the user documentation and in the software). Even if you receive multiple EULAs, you are licensed to use only one (1) copy of the SOFTWARE.
- **SOFTWARE Transfer:** You may permanently transfer your rights under this EULA only as part of a sale or transfer of the DEVICES, provided you retain no copies, you transfer all of the SOFTWARE (including all component parts, the media and printed materials, any upgrades, and, if applicable, the Certificate(s) of Authenticity), and the recipient agrees to the terms of this EULA. If the SOFTWARE is an upgrade, any transfer must include all prior versions of the SOFTWARE.
- **Termination:** Without prejudice to any other rights, FORD MOTOR COMPANY may terminate this EULA if you fail to comply with the terms and conditions of this EULA.
- **Internet-Based Services Components:** The SOFTWARE may contain components that enable and facilitate the use of certain Internet-based services. You acknowledge and agree that FORD MOTOR COMPANY, third party software and service suppliers, its affiliates and/or its designated agent may automatically check the version of the SOFTWARE and/or its components that you are utilizing and may provide upgrades or supplements to the SOFTWARE that may be automatically downloaded to your DEVICES.
- **Additional Software/Services:** The SOFTWARE may permit FORD MOTOR COMPANY, third party software and service suppliers, its affiliates and/or its designated agent to provide or make available to you SOFTWARE updates, supplements, add-on components, or Internet-based services components of the SOFTWARE after the date you obtain your initial copy of the SOFTWARE ("Supplemental Components"). SOFTWARE updates may cause you to incur additional charges from your wireless service provider. If FORD MOTOR COMPANY or third party software and services suppliers provide or make available to you Supplemental Components and no other EULA terms are provided along with the Supplemental Components, then the terms of this EULA shall apply. FORD

Appendices

MOTOR COMPANY, its affiliates and/or its designated agent reserve the right to discontinue without liability any Internet-based services provided to you or made available to you through the use of the SOFTWARE.

Appendices

- **Links to Third Party Sites:** The SOFTWARE may provide you with the ability to link to third party sites. The third party sites are not under the control of FORD MOTOR COMPANY, its affiliates and/or its designated agent. Neither FORD MOTOR COMPANY nor its affiliates nor its designated agent are responsible for (i) the contents of any third party sites, any links contained in third party sites, or any changes or updates to third party sites, or (ii) webcasting or any other form of transmission received from any third party sites. If the SOFTWARE provides links to third party sites, those links are provided to you only as a convenience, and the inclusion of any link does not imply an endorsement of the third party site by FORD MOTOR COMPANY, its affiliates and/or its designated agent.
- **Obligation to Drive Responsibly:** You recognize your obligation to drive responsibly and keep attention on the road. You will read and abide with the DEVICES operating instructions particularly as they pertain to safety and you agree to assume any risk associated

with the use of the DEVICES.

UPGRADES AND RECOVERY MEDIA: If the SOFTWARE is provided by FORD MOTOR COMPANY separate from the DEVICES on media such as a ROM chip, CD ROM disk(s) or via web download or other means, and is labeled "For Upgrade Purposes Only" or "For Recovery Purposes Only" you may install one (1) copy of such SOFTWARE onto the DEVICES as a replacement copy for the existing SOFTWARE, and use it in accordance with this EULA, including any additional EULA terms accompanying the upgrade SOFTWARE.

INTELLECTUAL PROPERTY RIGHTS: All title and intellectual property rights in and to the SOFTWARE (including but not limited to any images, photographs, animations, video, audio, music, text and "applets" incorporated into the SOFTWARE), the accompanying printed materials, and any copies of the SOFTWARE, are owned by FORD MOTOR COMPANY, or its affiliates or suppliers. The SOFTWARE is licensed, not sold. You may not copy the printed materials accompanying the SOFTWARE. All title and intellectual property rights in and to the content which

may be accessed through use of the SOFTWARE is the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This EULA grants you no rights to use such content outside its intended use. All rights not specifically granted under this EULA are reserved by FORD MOTOR COMPANY, its affiliates, and third party software and service providers and suppliers. Use of any on-line services which may be accessed through the SOFTWARE may be governed by the respective terms of use relating to such services. If this SOFTWARE contains documentation that is provided only in electronic form, you may print one copy of such electronic documentation.

Appendices

EXPORT RESTRICTIONS: You acknowledge that the SOFTWARE is subject to U.S. and European Union export jurisdiction. You agree to comply with all applicable international and national laws that apply to the SOFTWARE, including the U.S. Export Administration Regulations, as well as end-user, end-use and destination restrictions issued by U.S. and other governments.

TRADEMARKS: This EULA does not grant you any rights in connection with any trademarks or service marks of FORD MOTOR COMPANY, its affiliates, and third party software and service providers.

PRODUCT SUPPORT: Please refer to FORD MOTOR COMPANY instructions provided in the documentation for the DEVICES product support, such as the vehicle owner guide.

Should you have any questions concerning this EULA, or if you desire to contact FORD MOTOR COMPANY for any other reason, please refer to the address provided in the documentation for the DEVICES.

No Liability for Certain Damages: EXCEPT AS PROHIBITED BY LAW, FORD MOTOR COMPANY, ANY THIRD PARTY SOFTWARE OR SERVICES SUPPLIERS, AND THEIR AFFILIATES SHALL HAVE NO LIABILITY FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE SOFTWARE. THIS LIMITATION SHALL APPLY EVEN IF ANY REMEDY FAILS OF ITS ESSENTIAL PURPOSE. THERE ARE NO WARRANTIES OTHER THAN THOSE THAT MAY BE EXPRESSLY PROVIDED FOR YOUR NEW VEHICLE.

SYNC® Automotive Important Safety Information Read and follow instructions:

- Before using your SYNC® system, read and follow all instructions and safety information provided in this end user manual ("Owner Guide".) Not following precautions found in the Owner Guide can lead to an accident or other serious injuries.

General Operation

- **Voice Command Control:** Certain functions within the SYNC® system may be accomplished using voice commands. Using voice commands while driving helps you to operate the system without removing your hands from the wheel or eyes from the road.
- **Prolonged Views of Screen:** Do not access any function requiring a prolonged view of the screen while you are driving. Pull over in a safe and legal manner before attempting to access a function of the system requiring prolonged attention.
- **Volume Setting:** Do not raise the volume excessively. Keep the volume at a level where you can still hear outside traffic and emergency signals while driving. Driving while unable to hear these sounds could cause an accident.

Appendices

- **Navigation Features:** Any navigation features included in the system are intended to provide turn by turn instructions to get you to a desired destination. Please make certain all persons using this system carefully read and follow instructions and safety information fully.
- **Distraction Hazard:** Any navigation features may require manual (non-verbal) setup. Attempting to perform such set-up or insert data while driving can distract your attention and could cause an accident or other serious injury. Stop the vehicle in a safe and legal manner before attempting these operations.
- **Let Your Judgment Prevail:** Any navigation features are provided only as an aid. Make your driving decisions based on your observations of local conditions and existing traffic regulations. Any such feature is not a substitute for your personal judgment. Any route suggestions made by this system should never replace any local traffic regulations or your personal judgment or knowledge of safe driving practices.
- **Route Safety:** Do not follow the route suggestions if doing so would result in an unsafe or illegal maneuver, if you would be placed in an unsafe situation, or if you would be directed into an area that you consider unsafe. The driver is ultimately responsible for the safe operation of the vehicle and therefore, must evaluate whether it is safe to follow the suggested directions.
- **Potential Map Inaccuracy:** Maps used by this system may be inaccurate because of changes in roads, traffic controls or driving conditions. Always use good judgment and common sense when following the suggested routes.
- **Emergency Services:** Do not rely on any navigation features included in the system to route you to emergency services. Ask local authorities or an emergency services operator for these locations. Not all emergency services such as police, fire stations, hospitals and clinics are likely to be contained in the map database for such navigation features.

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Your Responsibilities and Assumptions of
Risk

Appendices

- You agree to each of the following:(a) Any use of the SOFTWARE while driving an automobile or other vehicle in violation of applicable law or otherwise driving in an unsafe manner presents a significant risk of distracted driving and should not be attempted under any circumstances;(b) Use of the SOFTWARE at excessive volume poses a significant risk of hearing damage and should not be attempted under any circumstances;(c) The SOFTWARE may not be compatible with new or different versions of an operating system, third party software, or third party services, and the SOFTWARE may potentially cause a critical failure of an operating system, third party software, or third party service.(d) Any third party service accessed by or third party software used with the SOFTWARE (i) may charge an additional fee for access, (ii) may not work correctly, on an uninterrupted basis, or error free, (iii) may change streaming formats or discontinue operation, (iv) may contain adult, profane or offensive content; and (v) may contain inaccurate, false or misleading traffic, weather,

financial or safety information or other content; and (e) Use of the SOFTWARE may cause you to incur additional charges from your wireless service provider (WSP) and any data or minute calculators that may be included in the software program are for reference only, are not warranted in any way and should not be relied upon in anyway.

- When using the SOFTWARE, you agree to be responsible for and assume the entire risk to the items set forth in Section (a) – (e) above.

Disclaimer of Warranty

YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT USE OF THE DEVICES AND SOFTWARE IS AT YOUR SOLE RISK AND THAT THE ENTIRE RISK AS TO SATISFACTORY QUALITY, PERFORMANCE, COMPATIBILITY, ACCURACY AND EFFORT IS WITH YOU. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE SOFTWARE AND ANY THIRD PARTY SOFTWARE OR THIRD-PARTY SERVICES ARE PROVIDED "AS IS" AND "AS AVAILABLE", WITH ALL FAULTS AND

WITHOUT WARRANTY OF ANY KIND, AND FORD MOTOR COMPANY HEREBY DISCLAIMS ALL WARRANTIES AND CONDITIONS WITH RESPECT TO THE SOFTWARE, THIRD PARTY SOFTWARE, AND THIRD-PARTY SERVICES, EITHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES AND/OR CONDITIONS OF MERCHANTABILITY, OF SATISFACTORY QUALITY, OF FITNESS FOR AN ARTICULAR PURPOSE, OF ACCURACY, OF QUIET ENJOYMENT, AND NON-INFRINGEMENT OF THIRD-PARTY RIGHTS. FORD MOTOR COMPANY DOES NOT WARRANT (a) AGAINST INTERFERENCE WITH YOUR ENJOYMENT OF THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES, (b) THAT THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES WILL MEET YOUR REQUIREMENTS, (c) THAT THE OPERATION OF THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES WILL BE UNINTERRUPTED OR ERROR-FREE, (d) OR THAT DEFECTS IN THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES WILL BE CORRECTED. NO ORAL

Appendices

OR WRITTEN INFORMATION OR ADVICE GIVEN BY FORD MOTOR COMPANY OR ITS AUTHORIZED REPRESENTATIVE SHALL CREATE A WARRANTY. SHOULD THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES PROVE DEFECTIVE, YOU ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION. SOME JURISDICTIONS DO NOT ALLOW THE DISCLAIMER OF IMPLIED WARRANTIES OR LIMITATIONS ON APPLICABLE STATUTORY RIGHTS OF A CONSUMER, SO THE ABOVE DISCLAIMER MAY NOT FULLY APPLY TO YOU. THE SOLE WARRANTY PROVIDED BY FORD MOTOR COMPANY SHALL BE FOUND IN THE WARRANTY INFORMATION INCLUDING WITH YOUR OWNER GUIDE. TO THE EXTENT THAT THERE IS ANY CONFLICT BETWEEN THE TERMS OF THIS SECTION AND THE WARRANTY BOOKLET, THE WARRANTY BOOKLET SHALL CONTROL.

Applicable Law, Venue, Jurisdiction

- The laws of the State of Michigan govern this EULA and Your use of the SOFTWARE. Your use of the SOFTWARE may also be subject to other local, state, national, or international laws. Any litigation arising out of or related to this EULA shall be brought and maintained exclusively in a court of the State of Michigan located in Wayne County or in the United States District Court for the Eastern District of Michigan. You hereby consent to submit to the personal jurisdiction of a court in the State of Michigan located in Wayne County and the United States District Court for the Eastern District of Michigan for any dispute arising out of or relating to this EULA.

Binding Arbitration and Class Action Waiver

(a) Application. This Section applies to any dispute EXCEPT IT DOES NOT INCLUDE A DISPUTE RELATING TO COPYRIGHT INFRINGEMENT, OR TO THE ENFORCEMENT OR VALIDITY OF YOUR, FORD MOTOR COMPANY, OR ANY OF

FORD MOTOR COMPANY'S LICENSORS' INTELLECTUAL PROPERTY RIGHTS. Dispute means any dispute, action, or other controversy between You and FORD MOTOR COMPANY, other than the exceptions listed above, concerning the SOFTWARE (including its price) or this EULA, whether in contract, warranty, tort, statute, regulation, ordinance, or any other legal or equitable basis.

(b) Notice of Dispute. In the event of a Dispute, You or FORD MOTOR COMPANY must give the other a "Notice of Dispute", which is a written statement of the name, address, and contact information of the party giving it, the facts giving rise to the dispute, and the relief requested. You and FORD MOTOR COMPANY will attempt to resolve any dispute through informal negotiation within 60 days from the date the Notice of Dispute is sent. After 60 days, You or FORD MOTOR COMPANY may commence arbitration.

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(c) Small claims court. You may also litigate any dispute in small claims court in your county of residence or FORD MOTOR COMPANY'S principal place of business, if the dispute meets all requirements to be heard in the small claims court. You may litigate in small claims court whether or not You negotiated informally first.

(d) Binding arbitration. If You and FORD MOTOR COMPANY, do not resolve any dispute by informal negotiation or in small claims court, any other effort to resolve the dispute will be conducted exclusively by binding arbitration. You are giving up the right to litigate (or participate in as a party or class member) all disputes in court before a judge or jury. Instead, all disputes will be resolved before a neutral arbitrator, whose decision will be final except for a limited right of appeal under the Federal Arbitration Act. Any court with jurisdiction over the parties may enforce the arbitrator's award.

(e) Class action waiver. Any proceedings to resolve or litigate any dispute in any forum will be conducted solely on an individual basis. Neither you nor FORD MOTOR COMPANY, will seek to have any dispute heard as a class action, as a private attorney general action, or in any other proceeding in which any party acts or proposes to act in a representative capacity. No arbitration or proceeding will be combined with another without the prior written consent of all parties to all affected arbitrations or proceedings.

(f) Arbitration procedure. Any arbitration will be conducted by the American Arbitration Association (the "AAA"), under its Commercial Arbitration Rules. If You are an individual and use the SOFTWARE for personal or vehicle use, or if the value of the dispute is \$75,000 or less whether or not You are an individual or how You use the SOFTWARE, the AAA Supplementary Procedures for Consumer-Related Disputes will also apply. To commence arbitration, submit a Commercial Arbitration Rules Demand for Arbitration form to the AAA. You may request a telephonic or in-person hearing by following the AAA rules. In a

dispute involving \$10,000 or less, any hearing will be telephonic unless the arbitrator finds good cause to hold an in-person hearing instead. For more information, see adr.org or call 1-800-778-7879. You agree to commence arbitration only in your county of residence or FORD MOTOR COMPANY'S principal place of business. The arbitrator may award the same damages to You individually as a court could. The arbitrator may award declaratory or injunctive relief only to You individually, and only to the extent required to satisfy Your individual claim.

(g) Arbitration fees and incentives.

- I. Disputes involving \$75,000 or less. FORD MOTOR COMPANY will promptly reimburse your filing fees and pay the AAA's and arbitrator's fees and expenses. If you reject FORD MOTOR COMPANY'S last written settlement offer made before the arbitrator was appointed ("last written offer"), your dispute goes all the way to an arbitrator's decision (called an "award"), and the arbitrator awards you more than the last written offer, FORD MOTOR COMPANY will give

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you three incentives: (1) pay the greater of the award or \$1,000; (2) pay twice your reasonable attorney's fees, if any; and (3) reimburse any expenses (including expert witness fees and costs) that your attorney reasonably accrues for investigating, preparing, and pursuing your claim in arbitration. The arbitrator will determine the amounts.

- ii. Disputes involving more than \$75,000. The AAA rules will govern payment of filing fees and the AAA's and arbitrator's fees and expenses.
- iii. Disputes involving any amount. In any arbitration you commence, FORD MOTOR COMPANY will seek its AAA or arbitrator's fees and expenses, or Your filing fees it reimbursed, only if the arbitrator finds the arbitration frivolous or brought for an improper purpose. In any arbitration FORD MOTOR COMPANY commences, it will pay all filing, AAA, and arbitrator's fees and expenses. It will not seek its attorney's fees or expenses from you in any arbitration. Fees and expenses are not counted in determining how much a dispute involves.

(h) Claims or disputes must be filed within one year. To the extent permitted by law, any claim or dispute under this EULA to which this Section applies must be filed within one year in small claims court (Section c) or in arbitration (Section d). The one-year period begins when the claim or dispute first could be filed. If such a claim or dispute is not filed within one year, it is permanently barred.

(I) Severability. If the class action waiver (Section e) is found to be illegal or unenforceable as to all or some parts of a dispute, then that portion of Section e will not apply to those parts. Instead, those parts will be severed and proceed in a court of law, with the remaining parts proceeding in arbitration. If any other provision of that portion Section e is found to be illegal or unenforceable, that provision will be severed with the remainder of Section e remaining in full force and effect.

Telenav Software End User License Agreement

Please read these terms and conditions carefully before you use the TeleNav Software. Your use of the TeleNav Software indicates that you accept these terms and conditions. If you do not accept these terms and conditions, do not break the seal of the package, launch, or otherwise use the TeleNav Software. TeleNav may revise this Agreement and the privacy policy at any time, with or without notice to you. You agree to visit <http://www.telenav.com> from time to time to review the then current version of this Agreement and of the privacy policy.

1. Safe and Lawful Use

You acknowledge that devoting attention to the TeleNav Software may pose a risk of injury or death to you and others in situations that otherwise require your undivided attention, and you therefore agree to comply with the following when using the TeleNav Software:

- (a) observe all traffic laws and otherwise drive safely;

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(b) use your own personal judgment while driving. If you feel that a route suggested by the TeleNav Software instructs you to perform an unsafe or illegal maneuver, places you in an unsafe situation, or directs you into an area that you consider to be unsafe, do not follow such instructions;

(c) do not input destinations, or otherwise manipulate the TeleNav Software, unless your vehicle is stationary and parked;

(d) do not use the TeleNav Software for any illegal, unauthorized, unintended, unsafe, hazardous, or unlawful purposes, or in any manner inconsistent with this Agreement;

(e) arrange all GPS and wireless devices and cables necessary for use of the TeleNav Software in a secure manner in your vehicle so that they will not interfere with your driving and will not prevent the operation of any safety device (such as an airbag).

You agree to indemnify and hold TeleNav harmless against all claims resulting from any dangerous or otherwise inappropriate use of the TeleNav Software in any moving vehicle, including as a result of your failure to comply with the directions above.

2. Account Information

You agree: (a) when registering the TeleNav Software, to provide TeleNav with true, accurate, current, and complete information about yourself, and (b) to inform TeleNav promptly of any changes to such information, and to keep it true, accurate, current and complete.

3. Software License

- Subject to your compliance with the terms of this Agreement, TeleNav hereby grants to you a personal, non-exclusive, non-transferable license (except as expressly permitted below in connection with your permanent transfer of the TeleNav Software license), without the right to sublicense, to use the TeleNav Software (in object code form only) in order to access and use the TeleNav Software. This license shall terminate upon any termination or expiration of this Agreement. You agree that you will use the TeleNav Software only for your personal business or leisure purposes, and not to provide commercial navigation services to other parties.

3.1 License Limitations

- **(a)** reverse engineer, decompile, disassemble, translate, modify, alter or otherwise change the TeleNav Software or any part thereof; **(b)** attempt to derive the source code, audio library or structure of the TeleNav Software without the prior express written consent of TeleNav; **(c)** remove from the TeleNav Software, or alter, any of TeleNav's or its suppliers' trademarks, trade names, logos, patent or copyright notices, or other notices or markings; **(d)** distribute, sublicense or otherwise transfer the TeleNav Software to others, except as part of your permanent transfer of the TeleNav Software; or **(e)** use the TeleNav Software in any manner that
 - i. infringes the intellectual property or proprietary rights, rights of publicity or privacy or other rights of any party,
 - ii. violates any law, statute, ordinance or regulation, including but not limited to laws and regulations related to spamming, privacy, consumer and child protection, obscenity or defamation, or

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iii. is harmful, threatening, abusive, harassing, tortuous, defamatory, vulgar, obscene, libelous, or otherwise objectionable; and (f) lease, rent out, or otherwise permit unauthorized access by third parties to the TeleNav Software without advanced written permission of TeleNav.

4. Disclaimers

- To the fullest extent permissible pursuant to applicable law, in no event will TeleNav, its licensors and suppliers, or agents or employees of any of the foregoing, be liable for any decision made or action taken by you or anyone else in reliance on the information provided by the TeleNav Software. TeleNav also does not warrant the accuracy of the map or other data used for the TeleNav Software. Such data may not always reflect reality due to, among other things, road closures, construction, weather, new roads and other changing conditions. You are responsible for the entire risk arising out of your use of the TeleNav Software. For example but without limitation, you agree not to rely

on the TeleNav Software for critical navigation in areas where the well-being or survival of you or others is dependent on the accuracy of navigation, as the maps or functionality of the TeleNav Software are not intended to support such high risk applications, especially in more remote geographical areas.

- TELENAV EXPRESSLY DISCLAIMS AND EXCLUDES ALL WARRANTIES IN CONNECTION WITH THE TELENAV SOFTWARE, WHETHER STATUTORY, EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES WHICH MAY ARISE FROM COURSE OF DEALING, CUSTOM OR TRADE AND INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS WITH RESPECT TO THE TELENAV SOFTWARE.
- Certain jurisdictions do not permit the disclaimer of certain warranties, so this limitation may not apply to you.

5. Limitation of Liability

- TO THE EXTENT PERMITTED UNDER APPLICABLE LAW, UNDER NO CIRCUMSTANCES SHALL TELENAV OR ITS LICENSORS AND SUPPLIERS BE LIABLE TO YOU OR TO ANY THIRD PARTY FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR EXEMPLARY DAMAGES (INCLUDING IN EACH CASE, BUT NOT LIMITED TO, DAMAGES FOR THE INABILITY TO USE THE EQUIPMENT OR ACCESS DATA, LOSS OF DATA, LOSS OF BUSINESS, LOSS OF PROFITS, BUSINESS INTERRUPTION OR THE LIKE) ARISING OUT OF THE USE OF OR INABILITY TO USE THE TELENAV SOFTWARE, EVEN IF TELENAV HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING ANY DAMAGES THAT YOU MIGHT INCUR FOR ANY REASON WHATSOEVER (INCLUDING, WITHOUT LIMITATION, ALL DAMAGES REFERENCED HEREIN AND ALL DIRECT OR GENERAL DAMAGES IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR

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OTHERWISE), THE ENTIRE LIABILITY OF TELENAV AND OF ALL OF TELENAV'S SUPPLIERS SHALL BE LIMITED TO THE AMOUNT ACTUALLY PAID BY YOU FOR THE TELENAV SOFTWARE. SOME STATES AND/OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

6. Arbitration and Governing Law

- You agree that any dispute, claim or controversy arising out of or relating to this Agreement or the TeleNav Software shall be settled by independent arbitration involving a neutral arbitrator and administered by the American Arbitration Association in the County of Santa Clara, California. The arbitrator shall apply the Commercial Arbitration Rules of the American Arbitration Association, and the judgment upon the award rendered by the arbitrator may be entered by any court having jurisdiction. Note that there is no judge or jury in an

arbitration proceeding and the decision of the arbitrator shall be binding upon both parties. You expressly agree to waive your right to a jury trial. This Agreement and performance hereunder will be governed by and construed in accordance with the laws of the State of California, without giving effect to its conflict of law provisions. To the extent judicial action is necessary in connection with the binding arbitration, both TeleNav and you agree to submit to the exclusive jurisdiction of the courts of the County of Santa Clara, California. The United Nations Convention on Contracts for the International Sale of Goods shall not apply.

7. Assignment

- You may not resell, assign, or transfer this Agreement or any of your rights or obligations, except in totality, in connection with your permanent transfer of the TeleNav Software, and expressly conditioned upon the new user of the TeleNav Software agreeing to be bound by the terms and conditions of this

Agreement. Any such sale, assignment or transfer that is not expressly permitted under this paragraph will result in immediate termination of this Agreement, without liability to TeleNav, in which case you and all other parties shall immediately cease all use of the TeleNav Software. Notwithstanding the foregoing, TeleNav may assign this Agreement to any other party at any time without notice, provided the assignee remains bound by this Agreement.

8. Miscellaneous

8.1

This Agreement constitutes the entire agreement between TeleNav and you with respect to the subject matter hereof.

8.2

Except for the limited licenses expressly granted in this Agreement, TeleNav retains all right, title and interest in and to the TeleNav Software, including without limitation all related intellectual property rights. No licenses or other rights which are

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not expressly granted in this Agreement are intended to, or shall be, granted or conferred by implication, statute, inducement, estoppel or otherwise, and TeleNav and its suppliers and licensors hereby reserve all of their respective rights other than the licenses explicitly granted in this Agreement.

8.3

By using the TeleNav Software, you consent to receive from TeleNav all communications, including notices, agreements, legally required disclosures or other information in connection with the TeleNav Software (collectively, "Notices") electronically. TeleNav may provide such Notices by posting them on TeleNav's Website or by downloading such Notices to your wireless device. If you desire to withdraw your consent to receive Notices electronically, you must discontinue your use of the TeleNav Software.

8.4

TeleNav's or your failure to require performance of any provision shall not affect that party's right to require performance at any time thereafter, nor shall a waiver of any breach or default of this Agreement constitute a waiver of any subsequent breach or default or a waiver of the provision itself.

8.5

If any provision herein is held unenforceable, then such provision will be modified to reflect the intention of the parties, and the remaining provisions of this Agreement will remain in full force and effect.

8.6

The headings in this Agreement are for convenience of reference only, will not be deemed to be a part of this Agreement, and will not be referred to in connection with the construction or interpretation of this Agreement. As used in this Agreement, the words "include" and "including" and variations thereof, will not be deemed to be terms of limitation, but rather will be deemed to be followed by the words "without limitation".

9. Other Vendors Terms and Conditions

- The Telenav Software utilizes map and other data licensed to Telenav by third party vendors for the benefit of you and other end users. This Agreement includes end-user terms applicable to these companies (included at the end of this Agreement), and thus your use of the Telenav Software is also subject to such terms. You agree to comply with the following additional terms and conditions, which are applicable to Telenav's third party vendor licensors:

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9.1 End User Terms Required by HERE North America, LLC

The data (“Data”) is provided for your personal, internal use only and not for resale. It is protected by copyright, and is subject to the following terms and conditions which are agreed to by you, on the one hand, and Telenav (“Telenav”) and its licensors (including their licensors and suppliers) on the other hand.

© 2013 HERE. All rights reserved.

The Data for areas of Canada includes information taken with permission from Canadian authorities, including: © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontario, © Canada Post Corporation, GeoBase®, © Department of Natural Resources Canada.

HERE holds a non-exclusive license from the United States Postal Service® to publish and sell ZIP+4® information.

©United States Postal Service® 2014. Prices are not established, controlled or approved by the United States Postal Service®. The following trademarks and registrations are owned by the USPS: United States Postal Service, USPS, and ZIP+4

The Data for Mexico includes certain data from Instituto Nacional de Estadística y Geografía.

9.2 End User Terms Required by NAV2 (Shanghai) Co., Ltd

The data (“Data”) is provided for your personal, internal use only and not for resale. It is protected by copyright, and is subject to the following terms and conditions which are agreed to by you, on the one hand, and NAV2 (Shanghai) Co., Ltd (“NAV2”) and its licensors (including their licensors and suppliers) on the other hand. 20xx. All rights reserved

Terms and Conditions

Permitted Use. You agree to use this Data together with the Telenav Software solely for the internal business and personal purposes for which you were licensed, and not for service bureau, time-sharing or other similar purposes. Accordingly, but subject to the restrictions set forth in the following paragraphs, you agree not to otherwise reproduce, copy, modify, decompile, disassemble, create any derivative works of, or reverse engineer any portion of this Data, and may not transfer or distribute it in any form, for any purpose, except to the extent permitted by mandatory laws.

Restrictions. Except where you have been specifically licensed to do so by Telenav, and without limiting the preceding paragraph, you may not use this Data (a) with any products, systems, or applications installed or otherwise connected to or in communication with vehicles, capable of vehicle navigation, positioning, dispatch, real time route guidance, fleet management or similar applications; or (b) with or in

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communication with any positioning devices or any mobile or wireless-connected electronic or computer devices, including without limitation cellular phones, palmtop and handheld computers, pagers, and personal digital assistants or PDAs.

Warning. The Data may contain inaccurate or incomplete information due to the passage of time, changing circumstances, sources used and the nature of collecting comprehensive geographic data, any of which may lead to incorrect results.

No Warranty. This Data is provided to you “as is,” and you agree to use it at your own risk. Telenav and its licensors (and their licensors and suppliers) make no guarantees, representations or warranties of any kind, express or implied, arising by law or otherwise, including but not limited to, content, quality, accuracy, completeness, effectiveness, reliability, fitness for a particular purpose, usefulness, use or results to be obtained from this Data, or that the Data or server will be uninterrupted or error-free.

Disclaimer of Warranty: TELENAV AND ITS LICENSORS (INCLUDING THEIR LICENSORS AND SUPPLIERS) DISCLAIM ANY WARRANTIES, EXPRESS OR IMPLIED, OF QUALITY, PERFORMANCE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. Some States, Territories and Countries do not allow certain warranty exclusions, so to that extent the above exclusion may not apply to you.

Disclaimer of Liability: TELENAV AND ITS LICENSORS (INCLUDING THEIR LICENSORS AND SUPPLIERS) SHALL NOT BE LIABLE TO YOU: IN RESPECT OF ANY CLAIM, DEMAND OR ACTION, IRRESPECTIVE OF THE NATURE OF THE CAUSE OF THE CLAIM, DEMAND OR ACTION ALLEGING ANY LOSS, INJURY OR DAMAGES, DIRECT OR INDIRECT, WHICH MAY RESULT FROM THE USE OR POSSESSION OF THE INFORMATION; OR FOR ANY LOSS OF PROFIT, REVENUE, CONTRACTS OR SAVINGS, OR ANY OTHER DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF YOUR USE OF OR INABILITY TO USE

THIS INFORMATION, ANY DEFECT IN THE INFORMATION, OR THE BREACH OF THESE TERMS OR CONDITIONS, WHETHER IN AN ACTION IN CONTRACT OR TORT OR BASED ON A WARRANTY, EVEN IF TELENAV OR ITS LICENSORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Some States, Territories and Countries do not allow certain liability exclusions or damages limitations, so to that extent the above may not apply to you.

Export Control. You shall not export from anywhere any part of the Data or any direct product thereof except in compliance with, and with all licenses and approvals required under, applicable export laws, rules and regulations, including but not limited to the laws, rules and regulations administered by the Office of Foreign Assets Control of the U.S. Department of Commerce and the Bureau of Industry and Security of the U.S. Department of Commerce. To the extent that any such export laws, rules or regulations prohibit HERE from complying with any of its obligations hereunder to deliver or distribute Data, such failure shall be excused and shall not constitute a breach of this Agreement.

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Entire Agreement. These terms and conditions constitute the entire agreement between Telenav (and its licensors, including their licensors and suppliers) and you pertaining to the subject matter hereof, and supersedes in their entirety any and all written or oral agreements previously existing between us with respect to such subject matter.

Governing Law. The above terms and conditions shall be governed by the laws of the State of Illinois [insert “Netherlands” where European HERE Data is used], without giving effect to (i) its conflict of laws provisions, or (ii) the United Nations Convention for Contracts for the International Sale of Goods, which is explicitly excluded. You agree to submit to the jurisdiction of the State of Illinois [insert “The Netherlands” where European HERE Data is used] for any and all disputes, claims and actions arising from or in connection with the Data provided to you hereunder.

Government End Users. If the Data is being acquired by or on behalf of the United States government or any other entity seeking or applying rights similar to those customarily claimed by the United States government, this Data is a “commercial item” as that term is defined at 48 C.F.R. (“FAR”) 2.101, is licensed in accordance with these End-User Terms, and each copy of Data delivered or otherwise furnished shall be marked and embedded as appropriate with the following “Notice of Use,” and shall be treated in accordance with such Notice:

NOTICE OF USE
CONTRACTOR (MANUFACTURER/ SUPPLIER) NAME: HERE
CONTRACTOR (MANUFACTURER/ SUPPLIER) ADDRESS: c/o Nokia, 425 West Randolph Street, Chicago, Illinois 60606
This Data is a commercial item as defined in FAR 2.101 and is subject to these End- User Terms under which this Data was provided.
© 1987 – 2014 HERE – All rights reserved.

If the Contracting Officer, federal government agency, or any federal official refuses to use the legend provided herein, the Contracting Officer, federal government agency, or any federal official must notify HERE prior to seeking additional or alternative rights in the Data.

I. US/Canada Territory

A. United States Data. The End-User Terms for any Application containing Data for the United States shall contain the following notices:

“HERE holds a non-exclusive license from the United States Postal Service® to publish and sell ZIP+4® information.”

“©United States Postal Service® 20XX. Prices are not established, controlled or approved by the United States Postal Service®. The following trademarks and registrations are owned by the USPS: United States Postal Service, USPS, and ZIP+4.”

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B. Canada Data. The following provisions apply to the Data for Canada, which may include or reflect data from third party licensors (“Third Party Data”), including Her Majesty the Queen in Right of Canada (“Her Majesty”), Canada Post Corporation (“Canada Post”) and the Department of Natural Resources of Canada (“NRCan”):

1. Disclaimer and Limitation: Client agrees that its use of the Third Party Data is subject to the following provisions:

a. Disclaimer: The Third Party Data is licensed on an “as is” basis. The licensors of such data, including Her Majesty, Canada Post and NRCan, make no guarantees, representations or warranties respecting such data, either express or implied, arising by law or otherwise, including but not limited to, effectiveness, completeness, accuracy or fitness for a particular purpose.

b. Limitation on Liability: The Third Party Data licensors, including Her Majesty, Canada Post and NRCan, shall not be liable: (i) in respect of any claim, demand or action, irrespective of the nature of the cause of the claim, demand or action alleging any loss, injury or damages, direct or indirect, which may result from the use or possession of such Data; or (ii) in any way for loss of revenues or contracts, or any other consequential loss of any kind resulting from any defect in the Data.

2. Copyright Notice: In connection with each copy of all or any portion of the Data for the Territory of Canada, Client shall affix in a conspicuous manner the following copyright notice on at least one of: (i) the label for the storage media of the copy; (ii) the packaging for the copy; or (iii) other materials packaged with the copy, such as user manuals or end user license agreements: “This data includes information taken with permis-

sion from Canadian authorities, including © Her Majesty the Queen in Right of Canada, © Queen’s Printer for Ontario, © Canada Post Corporation, GeoBase®, © The Department of Natural Resources Canada. All rights reserved.”

3. End-User Terms: Except as otherwise agreed by the parties, in connection with the provision of any portion of the Data for the Territory of Canada to End-Users as may be authorized under the Agreement, Client shall provide such End-Users, in a reasonably conspicuous manner, with terms (set forth with other end user terms required to be provided

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under the Agreement, or as otherwise may be provided, by Client) which shall include the following provisions on behalf of the Third Party Data licensors, including Her Majesty, Canada Post and NRCan:

The Data may include or reflect data of licensors, including Her Majesty the Queen in the Right of Canada (“Her Majesty”), Canada Post Corporation (“Canada Post”) and the Department of Natural Resources Canada (“NRCan”). Such data is licensed on an “as is” basis. The licensors, including Her Majesty, Canada Post and NRCan, make no guarantees, representations or warranties respecting such data, either express or implied, arising by law or otherwise, including but not limited to, effectiveness, completeness, accuracy or fitness for a particular purpose. The licensors, including Her Majesty, Canada Post and NRCan, shall not be liable in respect of any claim, demand or action, irrespective of the nature of the cause of the claim, demand or

action alleging any loss, injury or damages, direct or indirect, which may result from the use or possession of the data or the Data. The licensors, including Her Majesty, Canada Post and NRCan, shall not be liable in any way for loss of revenues or contracts, or any other consequential loss of any kind resulting from any defect in the data or the Data. End User shall indemnify and save harmless the licensors, including Her Majesty, Canada Post and NRCan, and their officers, employees and agents from and against any claim, demand or action, irrespective of the nature of

the cause of the claim, demand or action, alleging loss, costs, expenses, damages or injuries (including injuries resulting in death) arising out of the use or possession of the data or the Data.

4. Additional Provisions: The terms contained in this Section are in addition to all of the rights and obligations of the parties under the Agreement. To the extent that any of the provisions of this Section are inconsistent with, or conflict with, any other provisions of the Agreement, the provisions of this Section shall prevail.

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II. Mexico. The following provision applies to the Data for Mexico, which includes certain data from the Instituto Nacional de Estadística y Geografía (“INEGI”):

A. Any and all copies of the Data and/or packaging containing Data for Mexico shall contain the following notice: “Fuente: INEGI (Instituto Nacional de Estadística y Geografía)”

III. Latin America Territory

A. Third Party Notices. Any and all copies of the Data and/or packaging relating thereto shall include the respective Third Party Notices set forth below and used as described below corresponding to the Territory (or portion thereof) included in such copy:

Territory	Notice
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Argentina	IGN “INSTITUTO GEOGRAFICO NACIONAL ARGENTINO”
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Ecuador	“INSTITUTO GEOGRAFICO MILITAR DEL ECUADOR AUTORIZACION N° IGM-2011-01- PCO-01 DEL 25 DE ENERO DE 2011” “source: © IGN 2009 - BD TOPO ®”
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Guadeloupe, French Guiana and Martinique Mexico	“Fuente: INEGI (Instituto Nacional de Estadística y Geografía)”
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IV. Middle East Territory

A. Third Party Notices. Any and all copies of the Data and/or packaging relating thereto shall include the respective Third Party Notices set forth below and used as described below corresponding to the Territory (or portion thereof) included in such copy:

Country	Notice
Jordan	“© Royal Jordanian Geographic Centre”. The foregoing notice requirement for Jordan Data is a material term of the Agreement. If Client or any of its permitted sublicensees (if any) fail to meet such requirement, HERE shall have the right to terminate Client’s license with respect to the Jordan Data.

B. Jordan Data. Client and its permitted sublicensees (if any) are restricted from licensing and/or otherwise distributing HERE’s database for the country of Jordan (“Jordan Data”) for use in Enterprise Applications to (i) non-Jordanian entities for use of the Jordan Data solely in Jordan or (ii) Jordan-based customers. In addition, Client, its permitted sublicensees (if any) and End-Users are restricted from using the Jordan Data in Enterprise Applications if such party is (i) a non-Jordanian entity using the Jordan Data solely in Jordan or (ii) a Jordan-based customer. For purposes

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of the foregoing, “Enterprise Applications” shall mean Geomarketing applications, GIS applications, mobile business asset management applications, call center applications, telematics applications, public organization Internet applications or for providing geocoding services.

V. Europe Territory

A. Use of Certain Traffic Codes in Europe

1. General Restrictions Applicable to Traffic Codes. Client acknowledges and agrees that in certain countries of the Europe Territory, Client will need to obtain rights directly from third party RDS-TMC code providers to receive and use the Traffic Codes in the Data and to deliver to End-Users Transactions in any way derived from or based on such Traffic Codes. For such countries, HERE shall deliver the Data incorporating Traffic Codes to Client only after receiving certification from Client of its having obtained such rights.

2. Display of Third Party Rights Legends for Belgium. Client shall, for each Transaction that uses Traffic Codes for Belgium, provide the following notice to the End-User: “Traffic Codes for Belgium are provided by the Ministerie van de Vlaamse Gemeenschap and the Ministère de l’Équipement et des Transports.”

B. Paper Maps. With respect to any license granted to Client relating to making, selling or distributing paper maps (i.e., a map fixed on a paper or paper-like medium): (a) such license with respect to Data for the Territory of Great Britain is conditioned on Client’s entering into and complying with a separate written agreement with the Ordnance Survey (“OS”) to create and sell paper maps, Client’s paying to the OS any and all applicable paper map royalties, and Client’s complying with the OS copyright notice requirements; (b) such license for selling or otherwise distributing for charge with respect to Data for the Territory of Czech Republic is conditioned on Client’s obtaining prior written consent from

Kartografie a.s.; (c) such license for selling or distributing with respect to Data for the Territory of Switzerland is conditioned on Client’s obtaining a permit from Bundesamt für Landestopografie of Switzerland; (d) Client is restricted from using Data for the Territory of France to create paper maps with a scale between 1:5,000 and 1:250,000; and (e) Client is restricted from using any Data to create, sell or distribute paper maps that are the same or substantially similar, in terms of data content and specific use of color, symbols and scale, to paper maps published by the European national mapping agencies, including without limitation, Landervermessungämter of Germany, Topografische Dienst of the Netherlands, Nationaal Geografisch Instituut of Belgium, Bundesamt für Landestopografie of Switzerland, Bundesamt für Eich-und Vermessungswesen of Austria, and the National Land Survey of Sweden.

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C. OS Enforcement. Without limiting Section IV(B) above, with respect to Data for the Territory of Great Britain, Client acknowledges and agrees that the Ordnance Survey (“OS”) may bring a direct action against Client to enforce compliance with the OS copyright notice (see Section IV(D) below) and paper map requirements (see Section IV(B) above) contained in this Agreement.

D. Third Party Notices. Any and all copies of the Data and/or packaging relating thereto shall include the respective Third Party Notices set forth below and used as described below corresponding to the Territory (or portion thereof) included in such copy:

Country(ies)	Notice
Austria	“© Bundesamt für Eich- und Vermessungswesen”
Croatia Cyprus, Estonia, Latvia, Lithuania,	“© EuroGeographics”

Moldova,
Poland,
Slovenia
and/or
Ukraine

France “source: © IGN 2009 – BD TOPO ®”

Germany “Die Grundlagendaten wurden mit Genehmigung der zuständigen Behörden entnommen”

Great Britain “Contains Ordnance Survey data © Crown copyright and database right 2010 Contains Royal Mail data © Royal Mail copyright and database right 2010”

Greece “Copyright Geomatics Ltd.”

Hungary “Copyright © 2003; Top-Map Ltd.”

Italy “La Banca Dati Italiana è stata prodotta usando quale riferimento anche cartografia numerica ed al tratto prodotta e fornita dalla Regione Toscana.”

Norway “Copyright © 2000; Norwegian Mapping Authority”

Portugal “Source: IgeoE – Portugal”

Spain “Información geográfica propiedad del CNIG”

Sweden “Based upon electronic data © National Land Survey Sweden.”

Switzerland “Topografische Grundlage: © Bundesamt für Landestopographie.

E. Respective Country Distribution. Client acknowledges that HERE has not received approvals to distribute map data for the following countries in such respective countries: Albania, Belarus, Kyrgyzstan, Moldova and Uzbekistan. HERE may

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update such list from time to time. The license rights granted to Client under this TL with respect to the Data for such countries are contingent upon Client's compliance with all applicable laws and regulations, including, without limitation, any required licenses or approvals to distribute the Application incorporating such Data in such respective countries.

VI. Australia Territory

A. Third Party Notices. Any and all copies of the Data and/or packaging relating thereto shall include the respective Third Party Notices set forth below and used as described below corresponding to the Territory (or portion thereof) included in such copy:

Copyright. Based on data provided under license from PSMA Australia Limited (www.pasma.com.au).

Product incorporates data which is © 20XX Telstra Corporation Limited, GM Holden Limited, Intelematics Australia Pty Ltd and Continental Pty Ltd.

B. Third Party Notices for Australia. In addition to the foregoing, the End-User Terms for any Application containing RDS-TMC Traffic Codes for Australia shall contain the following notice: "Product incorporates traffic location codes which is © 20XX Telstra Corporation Limited and its licensors."

AT&T Vehicle Network Carrier Telematics Disclosure

END USER FOR PURPOSES OF THIS SECTION MEANS YOU AND YOUR HEIRS, EXECUTORS, LEGAL PERSONAL REPRESENTATIVES AND PERMITTED ASSIGNS. FOR PURPOSES OF THIS SECTION "UNDERLYING WIRELESS SERVICE CARRIER" INCLUDES ITS AFFILIATES AND CONTRACTORS AND THEIR RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES, SUCCESSORS AND ASSIGNS. END USER HAS NO CONTRACTUAL RELATIONSHIP

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FCC ID: ACJ-SYNCG3-L

IC: 216B-SYNCG3-L

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

- (1)** This device may not cause harmful interference, and
- (2)** this device must accept any interference received, including interference that may cause undesired operation.



WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

The antenna used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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Taiwan Territory

Note: In accordance with the management approach of low-power radio wave radiation motors:

Article 12: For approved and certified low-power radiation motor models, companies, firms or users must not alter the frequency, increase the power or change the characteristics and functions of the original design without authorization.

Article 14: The usage of low-power radio-frequency motors must not affect aviation safety and interfere with legal telecommunications. Should interference be detected, immediately stop using the device and only resume usage after ensuring that there is no longer any interference. For the legal telecommunication and wireless telecommunication of the telco, the low-power radio frequency motor must be able to tolerate legal limits of interference from telecommunication, industrial, scientific and radio wave equipment.

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7. Please Note

Great care has been taken in preparing this manual. Constant product development may mean that some information is not entirely up-to-date. The information in this document is subject to change without notice.

Appendices

DECLARATION OF CONFORMITY - VEHICLES WITH: SYNC 3

Radio Frequency Statement

SYNC Version	FCC Identification Number	IC Identification Number
3.0	ACJ-SYNCG3-L	216B-SYNCG3-L
3.1	ACJ-FA-170-BCARHS	216B-FA170BCARHS
3.2	ACJ-FG-185-SG32MH	216B-FG185SG32MH



WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

These devices comply with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

1. The device does not cause harmful interference.
2. The device accepts any interference received, including interference that could cause undesired operation.

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