

# 2013

# \_\_RAM CV\_\_\_ Cargo Van

OWNER'S MANUAL

## **VEHICLES SOLD IN CANADA**

With respect to any Vehicles Sold in Canada, the name FCA US LLC shall be deemed to be deleted and the name FCA Canada Inc. used in substitution therefore.

## **DRIVING AND ALCOHOL**

Drunken driving is one of the most frequent causes of accidents.

Your driving ability can be seriously impaired with blood alcohol levels far below the legal minimum. If you are drinking, don't drive. Ride with a designated nondrinking driver, call a cab, a friend, or use public transportation.

## WARNING!

Driving after drinking can lead to an accident. Your perceptions are less sharp, your reflexes are slower, and your judgment is impaired when you have been drinking. Never drink and then drive. This manual illustrates and describes the operation of features and equipment that are either standard or optional on this vehicle. This manual may also include a description of features and equipment that are no longer available or were not ordered on this vehicle. Please disregard any features and equipment described in this manual that are not on this vehicle.

FCA US LLC reserves the right to make changes in design and specifications, and/or make additions to or improvements to its products without imposing any obligation upon itself to install them on products previously manufactured.

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## INTRODUCTION

Congratulations on selecting your new FCA US LLC vehicle. Be assured that it represents precision workmanship, distinctive styling, and high quality - all essentials that are traditional to our vehicles.

This Owner's Manual has been prepared with the assistance of service and engineering specialists to acquaint you with the operation and maintenance of your vehicle. It is supplemented by Warranty Information, and various customer-oriented documents. Please take the time to read these publications carefully. Following the instructions and recommendations in this manual will help assure safe and enjoyable operation of your vehicle.

NOTE: After reviewing the owner information, it should be stored in the vehicle for convenient referencing and remain with the vehicle when sold.

When it comes to service, remember that your authorized dealer knows your vehicle best, has factory-trained technicians and genuine parts, and cares about your satisfaction.

### HOW TO USE THIS MANUAL

Consult the Table of Contents to determine which section contains the information you desire.

Since the specification of your vehicle depends on the items of equipment ordered, certain descriptions and illustrations may differ from your vehicle's equipment.

The detailed index at the back of this Owner's Manual contains a complete listing of all subjects.

Consult the following table for a description of the symbols that may be used on your vehicle or throughout this Owner's Manual:

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: D); ESP 0 ≣( Æ 0 合心 BAS ELECTRONIC STABILITY ELECTRONIC PROGRAM / BRAKE SPEED CONTROL ASSIST SYSTEM WATER IN FUEL REAR WINDOW WINDSHIELD WIPER EXTERIOR BULB UPPER AIR ADJUSTABLE HIGH BEAM TURN SIGNALS HEATED SEAT DOOR LOCK LOW VP. BRAKE m .6 B (!) -Q-1 1 ₩ Ą 6 BRAKE SYSTEM REAR WINDOW FUEL. WINDSHIELD MASTER LIGHTING LOW BEAM KEY ACTIVATE UPPER AND LOWER HEATED SEAT WINDOW LIFT TIRE PRESSURE HEL DESCENT SWITCH UNDU. MONITOR CONTROL BRAKE 3 77 G (ABS) AWD! 4 П U FUEL FILL SIDE REAR WINDOW WINDSHIELD WASHER WASHER FLUID LEVEL DOME LIGHT FRONT FOG LIGHT HOOD RELEASE LOWER AR RECIRCULATION CONVERTIBLE ELECTRONIC ALL WHEEL FAILURE OF ANTI-LOCK STABILITY CONTROL 1 KA EDOE 27 111 E )± 4WD! BRAKE WINDSHIELD, ELECTRICALLY HEATED LIFTGATE RELEASE AND LIFTGATE OPEN ELECTRONIC THROTTLE CONTROL BRAKE SYSTEM WARNING PARKING REAR WINDOW PARK LIGHTS REAR FOG LAMP DEFROST AND VENTILATING FAN WINDOW LOCK FOUR WHEEL ENGINE OIL DRIVE BRAKE ନ୍ତି TOW/ 1 4 (15 - + HAUL .... 377 VOICE RECOGNITION BUTTON BATTERY TRUNK / DECK CHILD SEAT WARNING TOW/HAUL HEATED MIRROR WINDSHELD INSTRUMENT PANEL SEAT BELT SLIDING DOOR AIR CONDITIONING RELEASE **ELUMINATION** m i. × Ø  $\square$ 00 T (u) LOW 5 3 OWER ANCHOR EMERGENCY RELEASE HANDLE GLOW PLUG FOWER STEERING FLUID WINDSHIELD WIPER SIDE AIRBAG AIRBAG SLIDING DOOR LIGHTER AND TETHER FOR CHILDREN (LATCH) UCONNECT\* HAZARD FOUR WHEEL SRS DEF. ×. L. Æ A/C  $\odot$ 0 AIDBAG PUSH CONVERTIBLE CONVERTIBLE MALFUNCTION INDICATOR LIGHT TRANS ENGINE COOLANT SUPPLEMENTAL TEMPERATURE RESTRAINT SYSTEM PASSENGER DOOR ALAR HORN SEE OWNER'S MANUAL ISO AIR ELECTRONIC OIL TEMP AIRBAG OFF TOP DOWN TOP UP CONDITIONER STABILITY 010533317 CONTROL OFF

### WARNINGS AND CAUTIONS

This Owners Manual contains **WARNINGS** against operating procedures that could result in a collision or bodily injury. It also contains **CAUTIONS** against procedures that could result in damage to your vehicle. If you do not read this entire Owners Manual, you may miss important information. Observe all Warnings and Cautions.

### VAN CONVERSIONS/CAMPERS

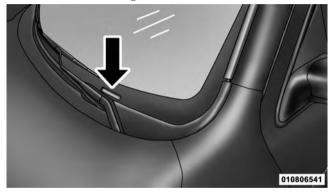
The New Vehicle Limited Warranty does not apply to body modifications or special equipment installed by van conversion/camper manufacturers/body builders. Refer to the Warranty Information book, Section 2.1.C. Such equipment includes video monitors, VCRs, heaters, stoves, refrigerators, etc. For warranty coverage and service on these items, contact the applicable manufacturer. Operating instructions for the special equipment installed by the conversion/camper manufacturer should also be supplied with your vehicle. If these instructions are missing, please contact your authorized dealer for assistance in obtaining replacement documents from the applicable manufacturer.

For information on the Body Builders Guide refer to: www.dodgebodybuilder.com. This website contains dimensional and technical specifications for your vehicle. It is intended for Second Stage Manufacturer's technical support. For service issues, contact your authorized dealer.

### VEHICLE IDENTIFICATION NUMBER

The Vehicle Identification Number (VIN) is found on the left front corner of the instrument panel, visible through the windshield. This number also appears on the vehicle

frame and underbody as well as the Automobile Information Disclosure Label affixed to a window on your vehicle, the vehicle registration and title.



**Vehicle Identification Number NOTE:** It is illegal to remove or alter the VIN.

### WARNING!

Any modifications or alterations to this vehicle could seriously affect its roadworthiness and safety and may lead to a collision resulting in serious injury or death.

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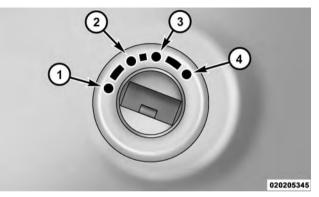
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## A WORD ABOUT YOUR KEYS

Your vehicle uses a keyless ignition system. This system consists of a Key Fob with Remote Keyless Entry (RKE) transmitter and a Wireless Ignition Node (WIN) with integral ignition switch. You can insert the Key Fob into the ignition switch with either side up.

## Wireless Ignition Node (WIN)

The Wireless Ignition Node (WIN) operates similarly to an ignition switch. It has four operating positions, three with detents and one that is spring-loaded. The detent positions are OFF, ACC, and ON/RUN. The START position is a spring-loaded momentary contact position. When released from the START position, the switch automatically returns to the ON/RUN position.



Wireless Ignition Node (WIN)

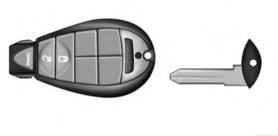


### Key Fob

The Key Fob operates the ignition switch. Insert the square end of the key fob into the ignition switch located on the instrument panel and rotate to the desired position. It also contains the Remote Keyless Entry (RKE) transmitter and an emergency key, which stores in the rear of the Key Fob.

The emergency key allows for entry into the vehicle should the battery in the vehicle or the RKE transmitter go dead. The emergency key is also for locking the lower glove compartment. You can keep the emergency key with you when valet parking.

To remove the emergency key, slide the mechanical latch at the top of the Key Fob sideways with your thumb and then pull the key out with your other hand.



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### Emergency Key Removal

**NOTE:** You can insert the double-sided emergency key into the lock cylinder with either side up.

## **Removing Key Fob From Ignition**

Place the shift lever in PARK. Turn the Key Fob to the OFF position and then remove the Key Fob.

**NOTE:** Power window switches will also remain active for up to 10 minutes after the ignition switch has been turned to OFF, depending upon the accessory delay setting. Opening the front door will cancel this feature.

## WARNING!

Before exiting a vehicle, always apply the parking brake, shift the transmission into PARK, and push ignition button to place ignition in OFF position. When leaving the vehicle, always lock your vehicle.
Never leave children alone in a vehicle, or with access to an unlocked vehicle.

## WARNING! (Continued)

- Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the shift lever.
- Do not leave the Key Fob in or near the vehicle, or in a location accessible to children. A child could operate power windows, other controls, or move the vehicle.
- Do not leave children or animals inside parked vehicles in hot weather. Interior heat build-up may cause serious injury or death.

(Continued)

### **CAUTION!**

An unlocked car is an invitation to thieves. Always remove the Key Fob from the ignition and lock all doors when leaving the vehicle unattended.

### **Key-In-Ignition Reminder**

Opening the driver's door when the Key Fob is in the ignition and the ignition switch position is OFF or ACC, a chime will sound to remind you to remove the key.

**NOTE:** The Key-In-Ignition reminder only sounds when the Key Fob is placed in the OFF or ACC ignition position.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 15

### **SENTRY KEY®**

The Sentry Key® Immobilizer system prevents unauthorized vehicle operation by disabling the engine. The 2 system does not need to be armed or activated. Operation is automatic, regardless of whether the vehicle is locked or unlocked.

The system uses Key Fob with factory-mated Remote Keyless Entry (RKE) transmitter and Wireless Ignition Node (WIN) to prevent unauthorized vehicle operation. Therefore, only Key Fobs that are programmed to the vehicle can be used to start and operate the vehicle. The system will shut the engine off in two seconds if an invalid Key Fob is used to start the engine.

After turning the ignition switch to the ON/RUN position, the Vehicle Security Light will turn on for three seconds for a bulb check. If the light remains on after the bulb check, it indicates that there is a problem with the electronics. In addition, if the light begins to flash after

the bulb check, it indicates that someone used an invalid Key Fob to start the engine. Either of these conditions will result in the engine being shut off after two seconds.

If the Vehicle Security Light turns on during normal vehicle operation (vehicle running for longer than 10 seconds), it indicates that there is a fault in the electronics. Should this occur, have the vehicle serviced as soon as possible by an authorized dealer.

## **CAUTION!**

The Sentry Key® Immobilizer system is not compatible with some after-market remote starting systems. Use of these systems may result in vehicle starting problems and loss of security protection.

All of the Key Fobs provided with your new vehicle have been programmed to the vehicle electronics.

### **Replacement Keys**

**NOTE:** Only Key Fobs that are programmed to the vehicle electronics can be used to start and operate the vehicle. Once a Key Fob is programmed to a vehicle, it cannot be reprogrammed to any other vehicle.

## **CAUTION!**

Always remove the Key Fobs from the vehicle and lock all doors when leaving the vehicle unattended.

At the time of purchase, the original owner is provided with a four-digit Personal Identification Number (PIN). Keep the PIN in a secure location. This number is required for authorized dealer replacement of Key Fobs. Duplication of Key Fobs may be performed at an authorized dealer, this procedure consists of programming a blank Key Fob to the vehicle electronics. A blank Key Fob is one that has never been programmed.

NOTE: When having the Sentry Key® Immobilizer system serviced, bring all vehicle Key Fobs with you to the authorized dealer.

### **Customer Key Programming**

Programming Key Fobs or RKE transmitters may be performed at an authorized dealer.

### **General Information**

The Sentry Key® system complies with FCC rules Part 15 and with RSS-210 of Industry Canada. Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference that may be received, including interference that may cause undesired operation.

### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 17

### VEHICLE SECURITY ALARM — IF EQUIPPED

The Vehicle Security Alarm monitors the vehicle doors for unauthorized entry and the ignition switch for unauthorized operation. When the alarm is activated, the interior switches for door locks, power sliding doors and power liftgate are disabled. The Vehicle Security Alarm provides both audible and visible signals, for the first three minutes, the headlights will turn on, the park lamps and/or turn signals will flash and Vehicle Security Light will flash repeatedly and the horn will sound. For an additional 15 minutes, only the headlights, park lamps and/or turn signals and Vehicle Security Light will flash.

### **Rearming Of The System**

The Vehicle Security Alarm will rearm itself after the 15 additional minutes of headlights and Vehicle Security Light flashing, if the Vehicle Security Alarm has not been disabled. If the condition which initiated the alarm is still

present, the Vehicle Security Alarm will ignore that condition and monitor the remaining doors and ignition.

### To Arm The System

Follow these steps to arm the Vehicle Security Alarm:

- 1. Remove the key from the ignition system (refer to "Starting Procedures" in "Starting And Operating" for further information).
- Make sure the vehicle ignition system is "OFF" and the key is physically removed from the ignition.
- 2. Perform one of the following methods to lock the vehicle:
- Press LOCK on the interior power door lock switch with the driver and/or passenger door open.
- Press the LOCK button on the Remote Keyless Entry (RKE) transmitter.
- 3. If any doors are open, close them.

## To Disarm The System

The Vehicle Security Alarm can be disarmed using any of the following methods:

- Press the UNLOCK button on the Remote Keyless Entry (RKE) transmitter.
- Cycle the vehicle ignition system out of the OFF position. Insert a valid key into the ignition switch and turn the key to the ON position.

### NOTE:

- The driver's door key cylinder and the liftgate button on the RKE transmitter cannot arm or disarm the Vehicle Security Alarm.
- The Vehicle Security Alarm remains armed during power liftgate entry. Pressing the liftgate button will not disarm the Vehicle Security Alarm. If someone enters the vehicle through the liftgate and opens any door the alarm will sound.

• When the Vehicle Security Alarm is armed, the interior power door lock switches will not unlock the doors.

The Vehicle Security Alarm is designed to protect your vehicle; however, you can create conditions where the system will give you a false alarm. If one of the previously described arming sequences has occurred, the Vehicle Security Alarm will arm regardless of whether you are in the vehicle or not. If you remain in the vehicle and open a door, the alarm will sound. If this occurs, disarm the Vehicle Security Alarm.

If the Vehicle Security Alarm is armed and the battery becomes disconnected, the Vehicle Security Alarm will remain armed when the battery is reconnected; the exterior lights will flash, the horn will sound. If this occurs, disarm the Vehicle Security Alarm.

### Tamper Alert

If something has triggered the Vehicle Security Alarm in your absence, the horn will sound three times and the **2** exterior lights blink three times when you unlock the doors. Check the vehicle for tampering.

### Security System Manual Override

The Vehicle Security Alarm will not arm if you lock the doors using the manual door lock plunger.

### ILLUMINATED ENTRY — IF EQUIPPED

The courtesy lights will turn on when you use the Remote Keyless Entry (RKE) transmitter to unlock the doors or open any door.

This feature also turns on the approach lighting in the outside mirrors (if equipped). Refer to "Mirrors" in "Understanding The Features Of Your Vehicle" for further information.

The lights will fade to off after approximately 30 seconds, or they will immediately fade to off once the ignition switch is turned to ON/RUN from the OFF position.

### NOTE:

- The front courtesy overhead console and door courtesy lights will not turn off if the dimmer control is in the "Dome ON" position (rotate horizontal thumb wheel on the bottom of the switch to the far right detent position).
- The illuminated entry system will not operate if the dimmer control is in the "Dome OFF" position (rotate horizontal thumb wheel on the bottom of the switch to the far left detent position).

# REMOTE KEYLESS ENTRY (RKE) — IF EQUIPPED

This system allows you to lock or unlock the doors and liftgate, and activate the Panic Alarm, optional power liftgate, left power sliding door, and right power sliding door from distances up to approximately 66 ft (20 m) using a hand-held Key Fob with RKE transmitter. The RKE transmitter does not need to be pointed at the vehicle to activate the system.

**NOTE:** Inserting the Key Fob with RKE transmitter into the ignition switch disables the system from responding to any button presses from that RKE transmitter. Driving at speeds 5 mph (8 km/h) and above disables the system from responding to all RKE transmitter buttons for all RKE transmitters.

Two RKE transmitters may be supplied with the vehicle. Vehicles built without the powered options will be equipped from the factory with three-button RKE transmitters, and those built with power options will be equipped with up to seven-button RKE transmitters.

### Using The RKE Transmitter

Three-button RKE transmitters will provide basic UN-LOCK, LOCK and PANIC functions.



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### Key Fob With Three-Button RKE Transmitter

Seven-button RKE transmitters will provide functions that allow the same basic operation as the three-button, but may also be used to operate the power liftgate (optional), power sliding doors, Remote Start feature

(optional). Some features can be programmed to the customers preferences. For example, flash headlights or sound horn on LOCK.



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Key Fob With Seven-Button RKE Transmitter

### Remote Unlock Doors And Liftgate

Press and release the UNLOCK button on the RKE transmitter once to unlock the driver's side or twice to unlock all doors and liftgate. This will also turn on the Illuminated Entry system.

### Remote Key Unlock On First Press

This feature lets you program the system to unlock either the driver's side, or all doors, on the first press of the UNLOCK button on the RKE transmitter:

### NOTE:

• For vehicles equipped with an Electronic Vehicle Information Center (EVIC), refer to "Electronic Vehicle Information Center (EVIC)/Personal Settings (Customer-Programmable Features)" in "Understanding Your Instrument Panel" for further information.

- For vehicles not equipped with the EVIC, the Remote Unlock feature can be enabled or disabled by performing the following steps:
- 1. Perform this operation while standing outside the vehicle.
- 2. Press and hold the LOCK button on a programmed RKE transmitter for at least 4 seconds, but no longer than 10 seconds. Then, press and hold the UNLOCK button while still holding the LOCK button.
- 3. Release both buttons at the same time.
- 4. Test the feature while outside of the vehicle by pressing the LOCK/UNLOCK buttons on the RKE transmitter with the ignition switch in the OFF position and the Key Fob removed.
- 5. Repeat these steps if you want to return this feature to its previous setting.

NOTE: Pressing the LOCK button on the RKE transmitter while you are inside the vehicle will activate the Vehicle Security Alarm. Opening a door with the Vehicle 2 Security Alarm activated will cause the alarm to sound. Press the UNLOCK button to deactivate the Vehicle Security Alarm.

### **Remote Lock Doors And Liftgate**

Press and release the LOCK button on the RKE transmitter to lock all doors and liftgate. The turn signal lights will flash and the horn will chirp to acknowledge the signal.

### Sound Horn With Remote Lock

This feature will cause the horn to chirp when the doors are locked with the RKE transmitter. This feature can be turned on or turned off. To change the current setting, proceed as follows:

- For vehicles equipped with the EVIC, refer to "Electronic Vehicle Information Center (EVIC)/Personal Settings (Customer-Programmable Features)" in "Understanding Your Instrument Panel" for further information.
- For vehicles not equipped with the EVIC, perform the following steps:
- 1. Perform this operation while standing outside the vehicle.
- 2. Press the LOCK button on a programmed RKE transmitter for at least 4 seconds, but no longer than 10 seconds. Then, press the PANIC button while still holding the LOCK button.
- 3. Release both buttons at the same time.

- 4. Test the feature while outside of the vehicle by pressing the LOCK button on the RKE transmitter with the ignition switch in the OFF position and the Key Fob removed.
- 5. Repeat these steps if you want to return this feature to its previous setting.

**NOTE:** Pressing the LOCK button on the RKE transmitter while you are in the vehicle will activate the Vehicle Security Alarm. Opening a door with the Vehicle Security Alarm activated will cause the alarm to sound. Press the UNLOCK button to deactivate the Vehicle Security Alarm.

### Using The Panic Alarm

To turn the Panic Alarm feature on or off, press and hold the PANIC button on the RKE transmitter for at least one second and release. When the Panic Alarm is on, the

headlights and park lights will flash, the horn will pulse on and off, and the interior lights will turn on.

The Panic Alarm will stay on for three minutes unless you turn it off by pressing the PANIC button a second time or if the vehicle is driven above 5 mph (8 km/h).

### NOTE:

- When you turn off the Panic Alarm by pressing the PANIC button a second time, you may have to move closer to the vehicle due to the Radio Frequency (RF) noises of the system.
- The Panic Alarm cannot be activated if the engine is running.

### Power Open/Close Power Liftgate — If Equipped

Press the LIFTGATE button twice on the RKE transmitter within five seconds to Open/Close the Power Liftgate. If

the button is pushed while the liftgate is being power closed, the liftgate will reverse to the full open position.

The power liftgate may also be opened and closed by **2** pressing the LIFTGATE button located on the overhead console.

If equipped with a rear interior switch on the left rear pillar, pushing this switch once will close the liftgate only. The liftgate cannot be opened from this switch.

If the vehicle is locked and Vehicle Security Alarm is armed, using RKE transmitter to open the power liftgate does not unlock the vehicle or disarm the Vehicle Security Alarm.

## Power Open/Close Left Power Sliding Door — If Equipped

Press the LEFT Power Sliding Door button twice on the RKE transmitter within five seconds to Power Open/ Close the Left Power Sliding Door. If the button on the

RKE transmitter is pushed while the door is being power-closed, the door will reverse to the full open position.

If the vehicle is locked and the Vehicle Security Alarm is armed, pressing the LEFT Power Sliding Door button twice unlocks the power sliding door and disarms Vehicle Security Alarm.

# Power Open/Close Right Power Sliding Door — If Equipped

Press the RIGHT Power Sliding Door button twice on the RKE transmitter within five seconds to Power Open/ Close the Right Power Sliding Door. If the button on the RKE transmitter is pushed while the door is being power-closed, the door will reverse to the full open position.

If the vehicle is locked and the Vehicle Security Alarm is armed, pressing the RIGHT Power Sliding Door button twice unlocks the power sliding door and disarms Vehicle Security Alarm.

# Turn Off Flash Lights With RKE Lock — If Equipped

This feature will cause the turn signal lights to flash when the doors are locked or unlocked with the RKE transmitter. This feature can be turned on or turned off. To change the current setting, proceed as follows:

• For vehicles equipped with the EVIC, refer to "Electronic Vehicle Information Center (EVIC)/Personal Settings (Customer-Programmable Features)" in "Understanding Your Instrument Panel" for further information.

- For vehicles not equipped with the EVIC, perform the following steps:
- 1. Perform this operation while standing outside the vehicle.
- 2. Press and hold the UNLOCK button on a programmed RKE transmitter for at least 4 seconds, but no longer than 10 seconds. Then, press and hold the LOCK button while still holding the UNLOCK button.
- 3. Release both buttons at the same time.
- 4. Test the feature while outside of the vehicle by pressing the LOCK/UNLOCK buttons on the RKE transmitter with the ignition switch in the OFF position and the Key Fob removed.
- 5. Repeat these steps if you want to return this feature to its previous setting.

NOTE: Pressing the LOCK button on the RKE transmitter while you are in the vehicle will activate the Vehicle Security Alarm. Opening a door with the Vehicle Security Alarm activated will cause the alarm to sound. Press the UNLOCK button to deactivate the Vehicle Security Alarm.

## **Programming Additional Transmitters**

If you do not have a programmed RKE transmitter, contact your authorized dealer for details.

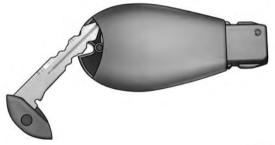
### **Transmitter Battery Replacement**

The recommended replacement battery is one CR2032 battery.

## NOTE:

• Perchlorate Material — special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate

- Do not touch the battery terminals that are on the back housing or the printed circuit board.
- 1. Remove the emergency key by sliding the mechanical latch at the top of the RKE transmitter sideways with your thumb and then pull the key out with your other hand.
- 2. Insert the tip of the emergency key or a #2 flat blade screwdriver into the slot and gently pry the two halves of the RKE transmitter apart. Make sure not to damage the seal during removal.



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**Inserting Emergency Key Into Slot** 

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**Emergency Key Removal** 



### Separating RKE Transmitter

3. Remove and replace the battery. When replacing the battery, match the + sign on the battery to the + sign on the inside of the battery clip, located on the back cover. Avoid touching the new battery with your fingers. Skin oils may cause battery deterioration. If you touch a battery, clean it with rubbing alcohol.

### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 29

4. To assemble the RKE transmitter case, snap the two halves together.

### **General Information**

This device complies with Part 15 of the FCC rules and RSS 210 of Industry Canada. Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

If your RKE transmitter fails to operate from a normal distance, check for these two conditions.

1. A weak battery in the RKE transmitter. The expected life of the battery is approximately three years.

2. Closeness to a radio transmitter such as a radio station tower, airport transmitter, and some mobile or CB radios.

### **REMOTE STARTING SYSTEM — IF EQUIPPED**



This system uses the Remote Keyless Entry (RKE) transmitter to start the engine conveniently from outside the vehicle while still maintaining security. The system has a range of approximately 300 ft (91 m).

## NOTE:

- The vehicle must be equipped with an automatic transmission to be equipped with Remote Start.
- Obstructions between the vehicle and the Key Fob may reduce this range.

### How To Use Remote Start

All of the following conditions must be met before the engine will Remote Start:

- Shift lever in PARK
- Doors closed
- Hood closed
- Liftgate closed
- Hazard switch off
- Brake switch inactive (brake pedal not pressed)
- Ignition key removed from ignition switch
- Battery at an acceptable charge level
- RKE PANIC button not pressed

- System not disabled from previous remote start event
- Vehicle theft alarm not active
- Ignition in Off position

## WARNING!

- Do not start or run an engine in a closed garage or confined area. Exhaust gas contains Carbon Monoxide (CO) which is odorless and colorless. Carbon Monoxide is poisonous and can cause serious injury or death when inhaled.
- Keep Remote Keyless Entry (RKE) transmitters away from children. Operation of the Remote Start System, windows, door locks or other controls could cause serious injury or death.

**Remote Start Abort Message On Electronic Vehicle** Information Center (EVIC) — If Equipped

The following messages will display in the EVIC if the **2** vehicle fails to remote start or exits remote start prematurely:

- Remote Start Aborted Door Ajar
- Remote Start Aborted Hood Ajar
- Remote Start Aborted Fuel Low
- Remote Start Aborted L/Gate Ajar
- Remote Start Disabled Start Vehicle To Reset

The EVIC message stays active until the ignition is turned to the ON/RUN position.

### To Enter Remote Start Mode



Press and release the REMOTE START button on the RKE transmitter twice within five seconds. The vehicle doors will lock, the parking lights will flash and horn will chirp twice (if programmed). Then, the engine will start and the vehicle will remain in the Remote Start mode for a 15-minute cycle.

## NOTE:

- If your power door locks were unlocked, Remote Start will automatically lock the doors.
- The park lights will turn on and remain on during Remote Start mode.
- For security, power window and power sunroof operation (if equipped) are disabled when the vehicle is in the Remote Start mode.

• The engine can be started two consecutive 15-minute cycles with the RKE transmitter. However, the ignition switch must be turned to the ON/RUN position.

### To Enter the Vehicle After Remote Start

To enter the vehicle while the engine is running during a Remote Start, you must first unlock the vehicle using the UNLOCK button on the transmitter. After the vehicle is unlocked, you can enter the vehicle, insert the Key Fob into the ignition switch and turn it to the ON/RUN position, otherwise the engine will shut off at the end of 15-minute cycle.

### To Exit Remote Start Mode And Drive The Vehicle

Before the end of the 15-minute cycle, press and release the UNLOCK button on the RKE transmitter to unlock the doors and disarm the Vehicle Security Alarm (if equipped). Then, prior to the end of the 15-minute cycle, insert the Key Fob into the ignition switch and turn the switch to the ON/RUN position.

- The ignition switch must be in the ON/RUN position in order to drive the vehicle.
- The message "Remote Start Active Key To Run" will display in the EVIC until you insert and turn the key to ON/RUN position. Refer to "Electronic Vehicle Information Center (EVIC)" for further information.

### **Cancel Remote Start**

Remote Starting will also cancel if any of the following occur:

- The engine stalls or engine speed exceeds 2500 rpm
- Any engine warning lights come on
- Low Fuel Light turns on
- The hood is opened
- The hazard switch is pressed

### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 33

- The shift lever is moved out of PARK
- The engine is allowed to run for the entire 15-minute cycle
- The brake pedal is pressed

### To Turn Off The Engine While In Remote Start Mode

Press and release the REMOTE START button 1 time or allow the engine to run for the entire 15 minute cycle.

**NOTE:** To avoid unintentional shutdowns while in the Remote Start Mode, the system will not allow the Remote Start button to shut down the engine for 2 seconds after receiving a valid Remote Start request.

### When To Reset Remote Start

The vehicle can be started remotely up to a maximum of two times. The vehicle is also allowed a maximum of one failed start, where the Remote Starting sequence was

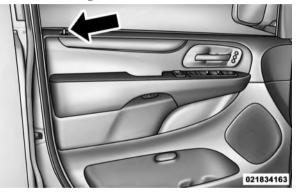
initiated but the engine stopped cranking without starting. After either of these conditions, or if the Vehicle Security Alarm system is alarming, or if the PANIC button was pressed, the vehicle must be reset insert the Key Fob into the ignition switch and turn the switch to the ON/RUN position.

### DOOR LOCKS

### Manual Door Locks

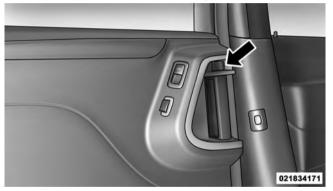
Lock the front doors by pushing down on the lock knobs on each door trim panel.

If the lock knob is down when you shut either front door, the door will lock. Make sure the keys are not inside the vehicle before closing the door.



Manual Door Lock

If the lock knob is rearward when you shut either side sliding door, the door will lock. Make sure the keys are not inside the vehicle before closing the door.



Sliding Door Lock

### WARNING!

- For personal security and safety in the event of an collision, lock the vehicle doors as you drive as well as when you park and leave the vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the shift lever.
- Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the shift lever.

(Continued)

### WARNING! (Continued)

 Do not leave the key fob in or near the vehicle, or in a location accessible to children, and do not leave a vehicle equipped with Keyless Enter-N-Go<sup>™</sup> in the ACC or ON/RUN position. A child could operate power windows, other controls, or move the vehicle.

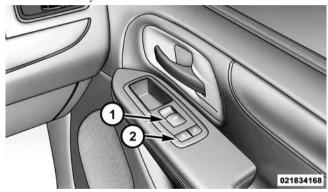
### Power Door Locks — If Equipped

A power door lock switch is on each front door trim panel. Use this switch to lock or unlock the doors.



**Driver Power Door Lock Switches** 

If you press the power door lock switch while the Key Fob is in the ignition, and any front door is open, the power locks will not operate. This prevents you from accidentally locking your keys in the vehicle. Removing the Key Fob or closing the door will allow the locks to ignition switch and a door is open, as a reminder to remove the Key Fob.



Front Passenger Power Door Switches

- 1 Window Open/Close
- 2 Power Door Locks

operate. A chime will sound if the Key Fob is in the If you press the power door lock switch while the sliding door is open, the sliding door will lock.

### Automatic Door Locks — If Equipped

When enabled, the door locks will lock automatically when the vehicle's speed exceeds 15 mph (24 km/h). The auto door lock feature can be enabled or disabled by your authorized dealer per written request of the customer. Please see your authorized dealer for service.

### Unlock Doors Automatically On Exit — If Equipped

The Unlock Doors Automatically On Exit feature unlocks all of the vehicle doors when any door is opened. This will occur only after the shift lever has been shifted into the PARK position, after the vehicle has been driven (the shift lever has been shifted out of PARK and all doors closed).

The Unlock Doors Automatically On Exit feature will not operate if there is any manual operation of the power door locks (lock or unlock).

On vehicles equipped with the optional Electronic Vehicle Information Center (EVIC), refer to "Electronic Vehicle Information Center (EVIC)/Personal Settings (Customer-Programmable Features)" in "Understanding Your Instrument Panel" for further information.

**NOTE:** Use the Lock Doors Automatically at 15 mph (24 km/h) and Unlock Doors Automatically On Exit features in accordance with local laws.

### WINDOWS

### Power Vent Windows — If Equipped

The Power Vent Window Switch located on the driver's door trim panel allows the driver to operate the two vent windows from the driver's seat.



Power Vent Window Switch Open/Close

#### Power Windows

You can control either the front or rear windows using switches located on the driver's door trim panel. The switches will operate only when the ignition switch is in the ON/RUN or ACC position and during power accessory delay.



**Driver's Power Window Switches** 

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 39

**NOTE:** Power Window switches will also remain active for up to 10 minutes after the ignition switch has been turned to OFF, depending upon the accessory delay 2 setting. Opening a front door will cancel this feature.

### Power Window Lockout Switch — If Equipped

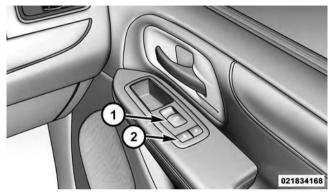
The driver may lock out the rear power windows by depressing the bar switch just below the power window switches.



### Front Passenger Power Window Switch

There is a single switch on the front passenger's door trim panel which operates the passenger door window and a set of switches that lock and unlock all doors. The switches will operate only when the ignition switch is in the ON/RUN or ACC position and during power accessory delay.

Power Window Lockout Switch



Front Passenger Power Door Switches

- 1 Window Open/Close
- 2 Power Door Locks

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 41

### Auto-Down Feature — If Equipped

The front window switches may be equipped with an Auto-Down feature. Press the window switch past the **2** detent, release, and the window will go down automatically.

To open the window part way, press the window switch part way and release it when you want the window to stop.

The power window switches remain active for up to 10 minutes (depending on the accessory delay setting) after the ignition switch has been turned to OFF. Opening a vehicle front door will cancel this feature.

# Auto Up Feature With Anti-Pinch Protection — If Equipped

The front driver and front passenger switches may be equipped with an Auto Up feature. Lift the window switch fully upward to the second detent, release, and the window will go up automatically.

To stop the window from going all the way up during the Auto Up operation, push down on the switch briefly.

To close the window part way, lift the window switch to the first detent and release when you want the window to stop.

### NOTE:

• If the window runs into any obstacle during autoclosure, it will reverse direction and then go back down. Remove the obstacle and use the window switch again to close the window. • Any impact due to rough road conditions may trigger the auto reverse function unexpectedly during autoclosure. If this happens, pull the switch lightly to the first detent and hold to close window manually.

### WARNING!

There is no anti-pinch protection when the window is almost closed. To avoid personal injury be sure to clear your arms, hands, fingers and all objects from the window path before closing.

### Auto Up Reset — If Equipped

To reactivate the Auto Up feature, perform the following steps after vehicle power is restored:

1. Pull the window switch up to close the window completely and continue to hold the switch up for an additional two seconds after the window is closed.

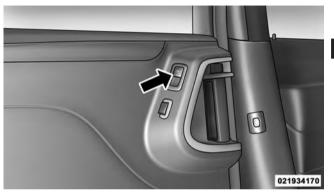
2. Push the window switch down firmly to the second detent to open the window completely and continue to hold the switch down for an additional two seconds after the window is fully open.

## Sliding Side Door Power Window Switch — If Equipped

Second row passengers may open and close the sliding door window by a single switch on the door handle assembly.

The switches will operate only when the ignition switch is in the ON/RUN or ACC position and during power accessory delay.

**NOTE:** The switches will not operate if the driver has activated the Power Window Lockout.



Sliding Door Power Window Switch

**NOTE:** The sliding door windows do not fully open, stopping several inches above the window sill.

#### Wind Buffeting

Wind buffeting can be described as the perception of pressure on the ears or a helicopter-type sound in the

ears. Your vehicle may exhibit wind buffeting with the windows down, or the sunroof (if equipped) in certain open or partially open positions. This is a normal occurrence and can be minimized. If the rear windows are open and buffeting occurs, open the front and rear windows together to minimize the buffeting. If the buffeting occurs with the sunroof open, adjust the sunroof opening to minimize the buffeting.

### SLIDING SIDE DOOR

The sliding door may be opened from the inside or the outside. Pull outward on the exterior handle to open the sliding door. The sliding door inside handle functions by rocking forward and back. Rocking the handle backwards opens the door and rocking forward releases the hold open latch in order to close the door.

To keep your door operating properly, observe the following guidelines: • Always open the door smoothly.

- Avoid high impacts against the door stop when opening the door. This is very important when your vehicle is parked on an incline as the door will slide faster in the downhill direction.
- There is a hold-open latch that is activated when the sliding door is fully opened. This latch will keep your sliding door open on any incline. To close the sliding door after the hold-open latch is activated, you must rock the inside handle forward or pull outward on the exterior handle.

Always make sure that the sliding door is fully latched anytime the vehicle is in motion.

**NOTE:** The left side sliding door cannot be opened while the fuel door is open. This feature operates only when the sliding door is fully closed prior to opening the fuel door.

#### Power Sliding Side Door — If Equipped

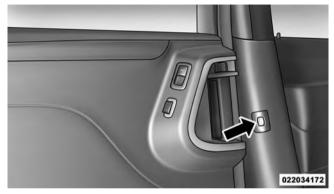
The power sliding door may be opened or closed manually or by using the buttons on the RKE transmitter, overhead console switch, or rear door switch. Pulling the inside or outside power sliding door handle will also power open or close the power sliding door.

**NOTE:** Pulling the outside power sliding door handle a second time while the sliding door is power opening or power closing will allow the sliding door to be opened or closed manually.

Press the button on the RKE transmitter twice within 5 seconds to open a power sliding door. When the door is fully open, pressing the button twice within 5 seconds a second time will close the door.

There are power sliding side door switches located on the b-pillar trim panel, just in front of the power sliding door for the rear seat passengers and in the overhead console for the driver and passengers. Pressing the switch once will open the power sliding door. If the switch is pressed while the door is under a power cycle, the door will reverse direction.

**NOTE:** The power sliding side door must be unlocked before the power sliding door switches will operate.



#### Power Sliding Door Switch

If the inside or outside door handles are used while the power sliding side door is activated, the power sliding door feature will be canceled and will go into manual mode.

To avoid unintentional operation of the power sliding doors from the rear seats, press the power sliding door

master lock button, located in the overhead console, to disable the switches and handles for the rear seat passengers.

### NOTE:

- The power sliding side door switches will not open the power sliding door if the shift lever is in gear or the vehicle speed is above 0 mph (0 km/h). To close the power sliding door with the shift lever in gear and vehicle speed at 0 mph (0 km/h), the brake must be pressed.
- If anything obstructs the power sliding side door while it is closing or opening, the door will automatically reverse to the closed or open position, provided it meets sufficient resistance.
- If the power sliding side door is not in the full open or close position, it will fully open when a power sliding

door switch is pressed. To close the door, wait until it Power Sliding Side Door Open Flash is fully open and then press the switch again.

• If the power sliding door encounters multiple obstructions within the same cycle, the system will automatically stop, the power sliding door motor will make a clicking sound until the door has no further movement. This clicking sound can be stopped by pulling the inside or outside handle. If this condition occurs, no damage is done to the power sliding door motor. The power sliding door must be opened or closed manually.

#### WARNING!

You, or others, could be injured if caught in the path of the sliding door. Make sure the door path is clear before closing the door.

The left and right exterior hazard lights will flash for 12 seconds when either sliding door is opened. This will 2 alert other drivers in the area that passenger(s) could be entering or exiting the vehicle.

The Sliding Side Door Open Flash can be enabled or disabled by performing the following procedure:

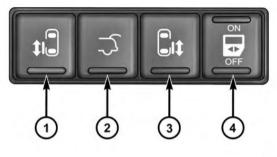
- 1. Place the Key Fob in the ignition switch.
- 2. Cycle the ignition switch from ON/RUN to OFF five times ending in the ON/RUN position (do not start the engine).
- 3. Within 10 seconds of the final cycle, press the HAZ-ARD switch ON.
- 4. A single chime will sound to signify that you have successfully completed the programming.

You can turn the feature back on by repeating the previous procedure.

#### Power Sliding Side Door Master Lock Switch

To provide a safer environment for small children riding in the rear seats, the second row sliding door switches and handles may be overridden by pressing the OFF side of the Master Lock Out Switch located in the front overhead console.

When the power sliding door master lock switch is in the OFF position, the power sliding side door may not be opened or closed by pressing the switch located on the b-pillar trim panel, just in front of the sliding door or activating the inside power sliding door handle.



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#### Overhead Console Power Sliding Door Master Switch

| 1 — Left Sliding Door | 3 — Right Sliding Door |
|-----------------------|------------------------|
| 2 — Liftgate          | 4 — Master Lock        |

### Sliding Side Door Child Protection Lock

To provide a safer environment for small children riding in the rear seats, the sliding doors are equipped with a Child Protection Door Lock system.

**NOTE:** When the Child Protection Door Lock system is engaged, the door can be opened only by using the outside door handle even though the inside door lock is in the unlocked position.

### To Engage the Child Protection Door Lock

- 1. Open the sliding side door.
- 2. Slide the Child Protection Door Lock control inward (toward the vehicle) to engage the Child Protection Door Lock.



Child Protection Door Lock

- 3. Repeat Steps 1 and 2 on the opposite sliding door. **NOTE:**
- After engaging the Child Protection Door Lock, always test the door from the inside to make certain it is in the desired position.

- When the Child Protection Door Lock system is engaged, (even if the inside door lock is in the unlocked position) the door can be opened only by using the outside door handle, the RKE transmitter, the switches on the overhead console or the switches located on the trim panel just in front of the power sliding door.
- The power sliding side door will operate from the switches located on the b-pillar trim panel, just in front of the power sliding door, regardless of the Child Protection Door Lock lever position. To avoid unintentional operation of the power sliding door from the rear seats, press the "OFF" Master Lock Out Switch located in the front overhead console, next to the driver.

### WARNING!

Avoid trapping anyone in the vehicle in a collision. Remember that the sliding doors can only be opened from the outside door handle or the switches located on the trim panel just in front of the power sliding door when the Child Protection Door Locks are engaged.

### To Disengage the Child Protection Door Lock

- 1. Open the sliding side door.
- 2. Slide the Child Protection Door Lock control outward (away from the vehicle) to disengage the Child Protection Door Lock.
- 3. Repeat Steps 1 and 2 on the opposite sliding door (if equipped).

#### NOTE:

- After setting the Child Protection Door Lock system, always test the door from the inside to make certain it is in the desired position.
- The power sliding side door switches will not open the power sliding doors if the vehicle is in gear or the vehicle speed is above 0 mph (0 km/h).

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 51

• The power sliding door will operate from the outside door handle, the RKE transmitter, the switches on the overhead console, or the switches located on the b-pillar trim panel, just in front of the power sliding door when the shift lever is in PARK, regardless of the child lock lever position.

### LIFTGATE

On vehicles equipped with power locks, the liftgate can be unlocked using the Remote Keyless Entry (RKE) transmitter button, or by activating the power door lock switches located on the front doors.

To open the liftgate, press the liftgate release handle located on the underside of the license plate bar and pull the liftgate open with one fluid motion.

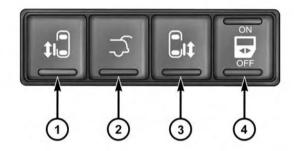


Liftgate Handle Location

### Power Liftgate — If Equipped

The power liftgate may be opened manually or by using the button on the Remote Keyless Entry (RKE) transmitter. Press the button on the transmitter twice within five seconds, to open the power liftgate. When the liftgate is fully open, pressing the button twice within five seconds, a second time, will close the liftgate.

The power liftgate may also be opened and closed by pressing the button located on the overhead console.



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#### **Overhead Console Master Power Switch**

1 — Left Sliding Door 2 — Liftgate

3 — Right Sliding Door 4 — Master Lock

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 53

The power liftgate may be closed by pressing the button, located in the upper left trim in the liftgate opening. Pushing once will only close the liftgate. This button cannot be used to open the liftgate.



**Rear Power Liftgate Switch** 

When the RKE transmitter button is pressed and the Flash Lights feature is enabled, the tail lights will flash

and several audible beeps will occur to signal that the liftgate is opening or closing.

### WARNING!

During power operation, personal injury or cargo damage may occur. Ensure the liftgate travel path is clear. Make sure the liftgate is closed and latched before driving away.

### NOTE:

- If anything obstructs the power liftgate while it is closing or opening, the liftgate will automatically reverse to the closed or open position, provided it meets sufficient resistance.
- There are also pinch sensors attached to the side of the liftgate opening. Light pressure anywhere along these strips will cause the liftgate to return to the open position.

- During power operation, whether liftgate is fully open or fully closed, the liftgate chime will beep several times indicating power operation is in progress.
- The power liftgate must be in the full open or close positions for any of the buttons to operate. If the liftgate is not in the full open or close positions, it must be opened or closed manually.
- If the liftgate release button is activated while the power liftgate is closing, the liftgate will reverse to the full open position.
- The power liftgate buttons will not operate if the shift lever is in gear or the vehicle speed is above 0 mph (0 km/h).
- The power liftgate will not operate in temperatures below -12°F (-24°C) or temperatures above 143°F

(62°C). Be sure to remove any buildup of snow or ice from the liftgate before pressing any of the power liftgate buttons.

• If the power liftgate encounters multiple obstructions within the same cycle, the system will automatically stop and must be opened or closed manually.

### WARNING!

- Driving with the liftgate open can allow poisonous exhaust gases into your vehicle. You and your passengers could be injured by these fumes. Keep the liftgate closed when you are operating the vehicle.
- If you are required to drive with the liftgate open, make sure that all windows are closed, and the climate control blower switch is set at high speed. Do not use the recirculation mode.

### Gas props support the liftgate in the open position. However, because the gas pressure drops with temperature, it may be necessary to assist the props when opening the liftgate in cold weather.

THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 55

### OCCUPANT RESTRAINTS

Some of the most important safety features in your vehicle are the restraint systems:

- Three-point lap and shoulder belts for all seating positions
- Advanced Front Air Bags for driver and front passenger
- Supplemental Active Head Restraints (AHR) located on top of the front seats (integrated into the head restraint) — if equipped
- Supplemental Driver Side Knee Air Bag

- Supplemental Side Air Bag Inflatable Curtains (SABIC) that span the front, second, and third row seating for the driver and passengers seated next to a window
- Supplemental Seat-Mounted Side Air Bags (SAB)
- An energy-absorbing steering column and steering wheel
- Knee bolster for front passenger seat occupant
- Front seat belts incorporate pretensioners that may enhance occupant protection by managing occupant energy during an impact event
- All seat belt systems (except the driver's and third row center) include Automatic Locking Retractors (ALRs), which lock the seat belt webbing into position by extending the belt all the way out and then adjusting the belt to the desired length to restrain a child seat or secure a large item in a seat

Please pay close attention to the information in this section. It tells you how to use your restraint system properly, to keep you and your passengers as safe as possible.

If you will be carrying children too small for adult-sized seat belts, the seat belts or the Lower Anchors and Tether for CHildren (LATCH) feature also can be used to hold infant and child restraint systems. For more information on LATCH, refer to Lower Anchors and Tether for CHildren (LATCH).

**NOTE:** The Advanced Front Air Bags have a multistage inflator design. This allows the air bag to have different rates of inflation based on several factors, including the severity and type of collision.

Here are some simple steps you can take to minimize the risk of harm from a deploying air bag:

1. Children 12 years old and under should always ride buckled up in a rear seat.

### WARNING!

Infants in rear facing child restraints should never ride in the front seat of a vehicle with a passenger Advanced Front Air Bag. An air bag deployment can cause severe injury or death to infants in that position.

Children that are not big enough to wear the vehicle seat belt properly (see section on Child Restraints) should be secured in the rear seat in child restraints or beltpositioning booster seats. Older children who do not use child restraints or belt-positioning booster seats should ride properly buckled up in the rear seat. Never allow children to slide the shoulder belt behind them or under their arm.

If a child from 1 to 12 years old (not in a rear facing child seat) must ride in the front passenger seat, move the seat as far back as possible and use the proper child restraint. (Refer to "Child Restraints")

THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 57

You should read the instructions provided with your child restraint to make sure that you are using it properly.

- 2. All occupants should always wear their lap and shoulder belts properly.
- 3. The driver and front passenger seats should be moved back as far as practical to allow the Advanced Front Air Bags room to inflate.
- 4. Do not lean against the door or window. If your vehicle has side air bags, and deployment occurs, the side air bags will inflate forcefully into the space between you and the door.

5. If the air bag system in this vehicle needs to be modified to accommodate a disabled person, contact the Customer Center. Phone numbers are provided under "If You Need Assistance".

### WARNING!

- Relying on the air bags alone could lead to more severe injuries in a collision. The air bags work with your seat belt to restrain you properly. In some collisions, the air bags won't deploy at all. Always wear your seat belts even though you have air bags.
- Being too close to the steering wheel or instrument panel during Advanced Front Air Bag deployment could cause serious injury, including death. Air Bags need room to inflate. Sit back, comfortably

(Continued)

## WARNING! (Continued)

extending your arms to reach the steering wheel or instrument panel.

- Supplemental Side Air Bag Inflatable Curtain (SABIC) and Seat-Mounted Side Air Bags (SAB) also need room to inflate. Do not lean against the door or window. Sit upright in the center of the seat.
- In a collision, you and your passengers can suffer much greater injuries if you are not properly buckled up. You can strike the interior of your vehicle or other passengers, or you can be thrown out of the vehicle. Always be sure you and others in your vehicle are buckled up properly.
- Being too close to the Supplemental Side Air Bag Inflatable Curtain (SABIC) and/or Seat-Mounted Side Air Bag (SAB) during deployment could cause you to be severely injured or killed.

Buckle up even though you are an excellent driver, even on short trips. Someone on the road may be a poor driver and cause a collision that includes you. This can happen far away from home or on your own street.

Research has shown that seat belts save lives, and they can reduce the seriousness of injuries in a collision. Some of the worst injuries happen when people are thrown from the vehicle. Seat belts reduce the possibility of ejection and the risk of injury caused by striking the inside of the vehicle. Everyone in a motor vehicle should be belted at all times.

#### Lap/Shoulder Belts

All seats in your vehicle are equipped with lap/shoulder belts.

The belt webbing in the retractor is designed to lock during very sudden stops or collisions. This feature allows the shoulder part of the belt to move freely with you under normal conditions. However, in a collision the

belt will lock and reduce the risk of you striking the inside of the vehicle or being thrown out.

### WARNING!

- It is dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, 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 seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.
- Wearing a seat belt incorrectly is dangerous. Seat belts are designed to go around the large bones of your body. These are the strongest parts of your body and can take the forces of a collision the best.

#### (Continued)

### WARNING! (Continued)

- Wearing your belt in the wrong place could make your injuries in a collision much worse. You might suffer internal injuries, or you could even slide out of part of the belt. Follow these instructions to wear your seat belt safely and to keep your passengers safe, too.
- Two people should never be belted into a single seat belt. People belted together can crash into one another in a collision, hurting one another badly. Never use a lap/shoulder belt or lap belt for more than one person, no matter what their size.

### Lap/Shoulder Belt Operating Instructions

- 1. Enter the vehicle and close the door. Sit back and adjust the seat.
- 2. The seat belt latch plate is near the seatback of the front seats and next to your arm in the rear seats.

Grasp the latch plate and pull out the belt. Slide the latch plate up the webbing as far as necessary to allow the belt to go around your lap.



Pulling Out Belt and Latch Plate

### WARNING!

- A belt that is worn under your arm is dangerous. Your body could strike the inside surfaces of the vehicle in a collision, increasing head and neck injury. A belt worn under the arm can cause internal injuries. Ribs aren't as strong as shoulder bones. Wear the belt over your shoulder so that your strongest bones will take the force in a collision.
- A shoulder belt placed behind you will not protect you from injury during a collision. You are more likely to hit your head in a collision if you do not wear your shoulder belt. The lap and shoulder belt are meant to be used together.

3. When the belt is long enough to fit, insert the latch plate into the buckle until you hear a "click".



Inserting Latch Plate Into Buckle

### WARNING!

- A belt that is buckled into the wrong buckle will not protect you properly. The lap portion could ride too high on your body, possibly causing internal injuries. Always buckle your belt into the buckle nearest you.
- A belt that is too loose will not protect you properly. In a sudden stop you could move too far forward, increasing the possibility of injury. Wear your seat belt snugly.
- 4. Position the lap belt across your thighs, below your abdomen. To remove slack in the lap belt portion, pull up on the shoulder belt. To loosen the lap belt if it is

too tight, tilt the latch plate and pull on the lap belt. A snug belt reduces the risk of sliding under the belt in a collision.



**Removing Slack From Belt** 

### WARNING!

- A lap belt worn too high can increase the risk of internal injury in a collision. The belt forces won't be at the strong hip and pelvic bones, but across your abdomen. Always wear the lap belt as low as possible and keep it snug.
- A twisted belt may not protect you properly. In a collision, it could even cut into you. Be sure the belt is straight. If you can't straighten a belt in your vehicle, take it to your authorized dealer immediately and have it fixed.
- 5. Position the shoulder belt on your chest so that it is comfortable and not resting on your neck. The retractor will withdraw any slack in the belt.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 63

6. To release the belt, push the red button on the buckle. The belt will automatically retract to its stowed position. If necessary, slide the latch plate down the webbing to allow the belt to retract fully.

#### WARNING!

A frayed or torn belt could rip apart in a collision and leave you with no protection. Inspect the belt system periodically, checking for cuts, frays, or loose parts. Damaged parts must be replaced immediately. Do not disassemble or modify the system. Seat belt assemblies must be replaced after a collision if they have been damaged (bent retractor, torn webbing, etc.).

#### Third Row Center Shoulder Belt Instructions

The shoulder belt for the third row center seat is located in the headliner slightly behind the third row seat.

Pull the strap down and secure the small latch plate of the lap belt into the small buckle until you hear a "click".

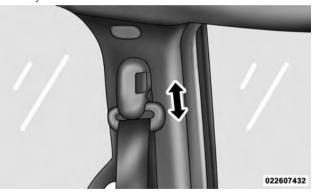
Position the shoulder belt on your chest so that it is comfortable and not resting on your neck. When the belt is long enough to fit, insert the large latch plate into the buckle until you hear a "click." The retractor should withdraw any slack in the belt.

To release the small latch plate, position the end of the large latch plate against the red button on the small latch plate and push upward. Reinstall the latch plates into the headliner.

### Adjustable Upper Shoulder Belt Anchorage

In the front seats and the second row outboard seats, the shoulder belt anchorage can be adjusted upward or

downward to help position the belt away from your neck. The upper anchorage can be adjusted upward by pushing anywhere on the anchorage. To move the anchorage downward, squeeze the actuation buttons while simultaneously pushing down on the anchorage assembly.



Adjustable Anchorage

As a guide, if you are shorter than average you will prefer a lower position, and if you are taller than average you will prefer a higher position. When you release the anchorage, try to move it up or down to make sure that it is locked in position.

#### Seat Belts In Passenger Seating Positions

The seat belts in the passenger seating positions are equipped with an Automatic Locking Retractor (ALR) or a cinching latch plate which are used to secure a child restraint system. For additional information refer to "Installing Child Restraints Using the Vehicle Seat Belt" under the "Child Restraint" section. The chart below defines the type of feature for each seating position.

|            | Driver | Center | Passenger |
|------------|--------|--------|-----------|
| First Row  | N/A    | N/A    | ALR       |
| Second Row | ALR    | N/A    | ALR       |
| Third Row  | ALR    | Cinch  | ALR       |

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 65

- N/A Not Applicable
- ALR Automatic Locking Retractor

If the passenger seating position is equipped with an ALR and is being used for normal usage:

Only pull the belt webbing out far enough to comfortably wrap around the occupant's mid-section so as to not activate the ALR. If the ALR is activated, you will hear a ratcheting sound as the belt retracts. Allow the webbing to retract completely in this case and then carefully pull out only the amount of webbing necessary to comfortably wrap around the occupant's mid-section. Slide the latch plate into the buckle until you hear a "click."

## Automatic Locking Retractor Mode (ALR) — If Equipped

In this mode, the shoulder belt is automatically prelocked. The belt will still retract to remove any slack in the shoulder belt. The Automatic Locking Mode is available on all passenger-seating positions with a combination lap/shoulder belt. Use the Automatic Locking Mode anytime a child safety seat is installed in a seating position that has a belt with this feature. Children 12 years old and under should always be properly restrained in the rear seat.

### How To Engage The Automatic Locking Mode

- 1. Buckle the combination lap and shoulder belt.
- 2. Grasp the shoulder portion and pull downward until the entire belt is extracted.

3. Allow the belt to retract. As the belt retracts, you will hear a clicking sound. This indicates the safety belt is now in the Automatic Locking Mode.

### How To Disengage The Automatic Locking Mode

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

### WARNING!

- The belt and retractor assembly must be replaced if the seat belt assembly Automatic Locking Retractor (ALR) feature or any other seat belt function is not working properly when checked according to the procedures in the Service Manual.
- Failure to replace the belt and retractor assembly could increase the risk of injury in collisions.

### **Energy Management Feature**

This vehicle has a safety belt system with an Energy Management feature in the front seating positions to help further reduce the risk of injury in the event of a head-on collision.

This safety belt system has a retractor assembly that is designed to release webbing in a controlled manner. This feature is designed to help reduce the belt force acting on the occupant's chest.

#### Seat Belt Pretensioners

The seat belts for both front seating positions are equipped with pretensioning devices that are designed to remove slack from the seat belt in the event of a collision. These devices may improve the performance of the seat belt by assuring that the belt is tight about the occupant early in a collision. Pretensioners work for all size occupants, including those in child restraints. **NOTE:** These devices are not a substitute for proper seat belt placement by the occupant. The seat belt still must be worn snugly and positioned properly.

The pretensioners are triggered by the Occupant Restraint Controller (ORC). Like the air bags, the pretensioners are single use items. A deployed pretensioner or a deployed air bag must be replaced immediately.

### Supplemental Active Head Restraints (AHR)

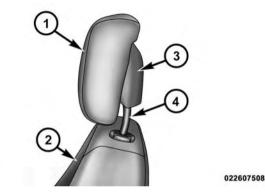
These head restraints are passive, deployable components, and vehicles with this equipment cannot be readily identified by any markings, only through visual inspection of the head restraint. The head restraint will be split in two halves, with the front half being soft foam and trim, the back half being decorative plastic.

#### How The Active Head Restraints (AHR) Work

The Occupant Restraint Controller (ORC) determines whether the severity, or type of rear impact will require the Active Head Restraints (AHR) to deploy. If a rear impact requires deployment, both the driver and front passenger seat AHRs will be deployed.

When AHRs deploy during a rear impact, the front half of the head restraint extends forward to minimize the gap between the back of the occupant's head and the AHR. This system is designed to help prevent or reduce the extent of injuries to the driver and front passenger in certain types of rear impacts.

**NOTE:** The Active Head Restraints (AHR) may or may not deploy in the event of a front or side impact. However if during a front impact, a secondary rear impact occurs, the AHR may deploy based on the severity and type of the impact.



#### Active Head Restraint (AHR) Components

| 1 — Head Restraint Front Half | 3 — Head Restraint Back Half    |
|-------------------------------|---------------------------------|
| (Soft Foam and Trim)          | (Decorative Plastic Rear Cover) |
| 2 — Seatback                  | 4 — Head Restraint Guide        |
|                               | Tubes                           |
|                               |                                 |

### **CAUTION!**

All occupants, including the driver, should not operate a vehicle or sit in a vehicle's seat until the head restraints are placed in their proper positions in order to minimize the risk of neck injury in the event of a collision.

**NOTE:** For more information on properly adjusting and positioning the head restraint, refer to "Adjusting Active Head Restraints" in "Understanding The Features Of Your Vehicle".

#### **Resetting Active Head Restraints (AHR)**

If the Active Head Restraints are triggered in a collision, you must reset the head restraint on the driver's and front passenger seat. You can recognize when the Active Head Restraint has been triggered by the fact that they

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 69

have moved forward (as shown in step three of the resetting procedure).

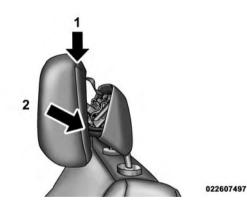
1. Grasp the deployed AHR from the rear seat.



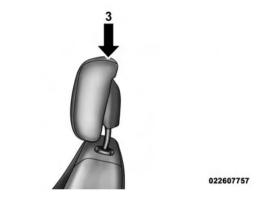
Hand Positioning Points On AHR

2. Position the hands on the top of the deployed AHR at a comfortable position.

3. Pull **down** then **rearward** towards the rear of the vehicle then **down** to engage the locking mechanism.



- 1 Downward Movement
- 2 Rearward Movement



- 3 Final Downward Movement To Engage Locking Mechanism
- 4. The AHR front soft foam and trim half should lock into the back decorative plastic half.



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AHR In Reset Position

# NOTE:

• If you have difficulties or problems resetting the Active Head Restraints, see an authorized dealer.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 71

• For safety reasons, have the Active Head Restraints checked by a qualified specialist at an authorized dealer.

# Enhanced Seat Belt Use Reminder System (BeltAlert®)

BeltAlert® is a feature intended to remind the driver and front passenger (if equipped with front passenger BeltAlert®) to fasten their seat belts. The feature is active whenever the ignition is on. If the driver or front seat passenger is unbelted, the Seat Belt Reminder Light will turn on and remain on until both front seat belts are fastened.

The BeltAlert® warning sequence begins after the vehicle speed is over 5 mph (8 km/h), by blinking the Seat Belt Reminder Light and sounding an intermittent chime. Once the sequence starts, it will continue for the entire duration or until the respective seatbelts are fastened. After the sequence completes, the Seat Belt Reminder

Light remains illuminated until the respective seat belts are fastened. The driver should instruct all other occupants to fasten their seat belts. If a front seat belt is unbuckled while traveling at speeds greater than 5 mph (8 km/h), BeltAlert® will provide both audio and visual notification.

The front passenger seat BeltAlert® is not active when the front passenger seat is unoccupied. BeltAlert® may be triggered when an animal or heavy object is on the front passenger seat or when the seat is folded flat (if equipped). It is recommended that pets be restrained in the rear seat in pet harnesses or pet carriers that are secured by seat belts, and cargo is properly stowed.

BeltAlert® can be enabled or disabled by your authorized dealer. FCA US LLC does not recommend deactivating BeltAlert®.

**NOTE:** Although BeltAlert® has been deactivated, the Seat Belt Reminder Light will continue to illuminate while the driver's or front passenger (if equipped with BeltAlert®) seat belt remains unfastened.

# Seat Belts And Pregnant Women

We recommend that pregnant women use the seat belts throughout their pregnancies. Keeping the mother safe is the best way to keep the baby safe.

Pregnant women should wear the lap part of the belt across the thighs and as snug across the hips as possible. Keep the belt low so that it does not come across the abdomen. That way the strong bones of the hips will take the force if there is a collision.

# Seat Belt Extender

If a seat belt is too short, even when fully extended and when the adjustable upper shoulder belt anchorage (if equipped) is in its lowest position, your authorized dealer can provide you with a seat belt extender. This extender should be used only if the existing belt is not long enough. When it is not required, remove the extender and store it.

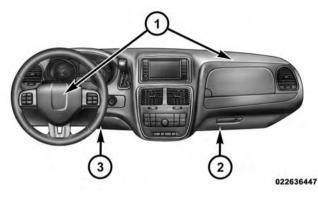
# WARNING!

Using a seat belt extender when not needed can increase the risk of injury in a collision. Only use when the lap belt is not long enough when it is worn low and snug, and in the recommended seating positions. Remove and store the extender when not needed.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 73

# Supplemental Restraint System (SRS) — Air Bags

This vehicle has Advanced Front Air Bags for both the driver and front passenger as a supplement to the seat **2** belt restraint systems. The driver's Advanced Front Air Bag is mounted in the center of the steering wheel. The passenger's Advanced Front Air Bag is mounted in the instrument panel, above the glove compartment. The words SRS AIRBAG are embossed on the air bag covers. In addition, the vehicle is equipped with a Supplemental Driver Side Knee Air Bag mounted in the instrument panel below the steering column.



Advanced Front Air Bag And Knee Bolster Locations

Driver And Passenger
 Advanced Front Air Bags
 Supplemental Driver Side
 Knee Air Bag

**NOTE:** The Driver and Front Passenger Advanced Front Air Bags are certified to the new Federal regulations for Advanced Air Bags.

The Advanced Front Air Bags have a multistage inflator design. This allows the air bag to have different rates of inflation based on several factors, including the severity and type of collision.

This vehicle may be equipped with driver and/or front passenger seat track position sensors that may adjust the inflation rate of the Advanced Front Air Bags based upon seat position.

This vehicle may be equipped with a driver and/or front passenger seat belt buckle switch that detects whether the driver or front passenger seat belt is fastened. The seat belt buckle switch may adjust the inflation rate of the Advanced Front Air Bags.

This vehicle may be equipped with Supplemental Side Air Bag Inflatable Curtains (SABIC) to protect the driver,

front, and rear passengers sitting next to a window. The SABIC air bags are located above the side windows and their covers are also labeled: SRS AIRBAG.

This vehicle is equipped with Supplemental Seat-Mounted Side Air Bags (SAB) to provide enhanced protection for an occupant during a side impact. The SABs are located in the outboard side of the front seats.

# NOTE:

- Air Bag covers may not be obvious in the interior trim, but they will open during air bag deployment.
- After any collision, the vehicle should be taken to an authorized dealer immediately.

# Air Bag System Components

Your vehicle may be equipped with the following air bag system components:

• Occupant Restraint Controller (ORC)

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 75

- Air Bag Warning Light
- Steering Wheel and Column
- Instrument Panel
- Supplemental Driver Side Knee Air Bag
- Knee Impact Bolster
- Driver Advanced Front Air Bag
- Passenger Advanced Front Air Bag
- Supplemental Seat-Mounted Side Air Bags (SAB)
- Supplemental Side Air Bag Inflatable Curtains (SABIC)
- Front and Side Impact Sensors
- Front Seat Belt Pretensioners, Seat Belt Buckle Switch, and Seat Track Position Sensors

# **Advanced Front Air Bag Features**

The Advanced Front Air Bag system has multistage driver and front passenger air bags. This system provides output appropriate to the severity and type of collision as determined by the Occupant Restraint Controller (ORC), which may receive information from the front impact sensors.

The first stage inflator is triggered immediately during an impact that requires air bag deployment. This low output is used in less severe collisions. A higher energy output is used for more severe collisions.

# WARNING!

• No objects should be placed over or near the air bag on the instrument panel, because any such objects could cause harm if the vehicle is in a

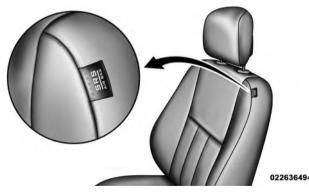
# WARNING! (Continued)

collision severe enough to cause the air bag to inflate.

- Do not put anything on or around the air bag covers or attempt to open them manually. You may damage the air bags and you could be injured because the air bags may no longer be functional. The protective covers for the air bag cushions are designed to open only when the air bags are inflating.
- Do not drill, cut or tamper with the knee bolster in any way.
- Do not mount any accessories to the knee bolster such as alarm lights, stereos, citizen band radios, etc.

# Supplemental Seat-Mounted Side Air Bags (SAB)

Supplemental Seat-Mounted Side Air Bags (SAB) may provide enhanced protection to help protect an occupant during a side impact. The SAB is marked with an air bag label sewn into the outboard side of the front seats "ONLY".



Supplemental Seat-Mounted Side Air Bag Label

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 77

When the air bag deploys, it opens the seam between the front and side of the seat's trim cover. Each air bag deploys independently; a left side impact deploys the left air bag only and a right-side impact deploys the right air bag only.

# Supplemental Side Air Bag Inflatable Curtain (SABIC) — If Equipped

SABIC air bags may offer side-impact and vehicle rollover protection to front and rear seat outboard occupants in addition to that provided by the body structure. Each air bag features inflated chambers placed adjacent to the head of each outboard occupant that reduce the potential for side-impact head injuries. The SABIC deploy downward, covering both windows on the impact side.

# NOTE:

- Should a vehicle rollover occur, the pretensioners and/or SAB and SABIC air bags on both sides of the vehicle may deploy.
- Air Bag covers may not be obvious in the interior trim, but they will open during air bag deployment.
- Being too close to the SAB and SABIC air bags during deployment could cause you to be severely injured or killed.

The system includes side impact sensors that are calibrated to deploy the side air bags during impacts that require air bag occupant protection.

# WARNING!

- Your vehicle is equipped with left and right Supplemental Side Air Bag Inflatable Curtain (SABIC), do not stack luggage or other cargo up high enough to block the location of the SABIC. The area where the SABIC is located should remain free from any obstructions.
- Do not use accessory seat covers or place objects between you and the side air bags; the performance could be adversely affected and/or objects could be pushed into you, causing serious injury.
- Your vehicle is equipped with SABIC air bags, do not have any accessory items installed which will alter the roof, including adding a sunroof to your vehicle. Do not add roof racks that require permanent attachments (bolts or screws) for installation

(Continued)

# WARNING! (Continued)

- on the vehicle roof. Do not drill into the roof of the vehicle for any reason.
- Do not allow occupants to extend any part of their body outside of the window.

SAB and SABIC air bags are a supplement to the seat belt restraint system. Occupants, including children who are up against or very close to SAB or SABIC air bags can be seriously injured or killed. Occupants, especially children, should not lean on or sleep against the door, side windows, or area where the SAB or SABIC air bags inflate, even if they are in an infant or child restraint.

Always sit upright as possible with your back against the seat back, use the seat belts properly, and use the appropriate sized child restraint, infant restraint or booster seat recommended for the size and weight of the child.

# Supplemental Driver Side Knee Air Bag

The Supplemental Driver Side Knee Air Bag provides enhanced protection and works together with the Driver **2** Advanced Front Air Bag during a frontal impact.

# **Knee Impact Bolster**

The Knee Impact Bolster helps protect the knees of the front passenger, and position the front occupant for the best interaction with the Advanced Front Air Bag.

Along with seat belts and pretensioners, Advanced Front Air Bags work with the Supplemental Driver Side Knee Air Bag and the passenger side knee bolster to provide improved protection for the driver and front passenger. Side air bags also work with seat belts to improve occupant protection.

# Air Bag Deployment Sensors And Controls

# **Occupant Restraint Controller (ORC)**

The ORC is part of a Federally regulated safety system required for this vehicle.

The ORC determines if deployment of the front and/or side air bags in a frontal or side collision is required. Based on the impact sensor's signals, a central electronic ORC deploys the Advanced Front Air Bags, SABIC air bags, SABs, Supplemental Driver Side Knee Air Bag, and front seat belt pretensioners, as required, depending on several factors, including the severity and type of impact.

Advanced Front Air Bags and Supplemental Driver Side Knee Air Bag are designed to provide additional protection by supplementing the seat belts in certain frontal collisions depending on several factors, including the severity and type of collision. Advanced Front Air Bags are not expected to reduce the risk of injury in rear, side, or rollover collisions.

The Advanced Front Air Bags and Supplemental Driver Side Knee Air Bag will not deploy in all frontal collisions, including some that may produce substantial vehicle damage — for example, some pole collisions, truck underrides, and angle offset collisions. On the other hand, depending on the type and location of impact, Advanced Front Air Bags may deploy in crashes with little vehicle front-end damage but that produce a severe initial deceleration.

The side air bags will not deploy in all side collisions. Side air bag deployment will depend on the severity and type of collision.

Because air bag sensors measure vehicle deceleration over time, vehicle speed and damage by themselves are not good indicators of whether or not an air bag should have deployed.

Seat belts are necessary for your protection in all collisions, and also are needed to help keep you in position, away from an inflating air bag.

The ORC monitors the readiness of the electronic parts of the air bag system whenever the ignition switch is in the START or ON/RUN position. If the key is in the OFF position, in the ACC position, or not in the ignition, the air bag system is not on and the air bags will not inflate.

The ORC contains a backup power supply system that may deploy the air bags even if the battery loses power or it becomes disconnected prior to deployment.



Also, the ORC turns on the Air Bag Warning Light in the instrument panel for approximately four to eight seconds for a self-check 2 when the ignition is first turned on. After the self-check, the Air Bag Warning Light will turn off. If the ORC detects a malfunction in any part of the system, it turns on the Air Bag Warning Light, either momentarily or continuously. A single chime will sound if the light comes on again after initial startup.

It also includes diagnostics that will illuminate the instrument cluster Air Bag Warning Light if a malfunction is noted that could affect the air bag system. The diagnostics also record the nature of the malfunction.

# WARNING!

Ignoring the Air Bag Warning Light in your instrument panel could mean you won't have the air bags to protect you in a collision. If the light does not come on as a bulb check when the ignition is first turned on, stays on after you start the vehicle, or if it comes on as you drive, have an authorized dealer service the air bag system immediately.

# Driver And Passenger Advanced Front Air Bag Inflator Units

The Driver and Passenger Advanced Front Air Bag Inflator Units are located in the center of the steering wheel and on the right side of the instrument panel. When the ORC detects a collision requiring the Advanced Front Air Bags, it signals the inflator units. A large quantity of non-toxic gas is generated to inflate the Advanced Front Air Bags. Different air bag inflation rates

are possible, based on several factors, including the collision type and severity. The steering wheel hub trim cover and the upper right side of the instrument panel separate and fold out of the way as the air bags inflate to their full size. The air bags fully inflate in about 50 to 70 milliseconds. This is about half of the time it takes to blink your eyes. The air bags then quickly deflate while helping to restrain the driver and front passenger.

The Advanced Front Air Bag gas is vented through the vent holes in the sides of the air bag. In this way, the air bags do not interfere with your control of the vehicle.

# Supplemental Driver Side Knee Air Bag Inflator Unit

The Supplemental Driver Side Knee Air Bag unit is located in the instrument panel trim beneath the steering column. When the ORC detects a collision requiring the Advanced Front Air Bags, it signals the inflator units. A large quantity of non-toxic gas is generated to inflate the Supplemental Driver Side Knee Air Bag. The trim cover separates and folds out of the way allowing the air bag to inflate to the full size. The air bag fully inflates in about 15 to 20 milliseconds. The Supplemental Driver Side Knee Air Bag gas is vented through small vent holes in the side of the air bag.

# Supplemental Seat-Mounted Side Air Bag (SAB) Inflator Units

The Supplemental Seat-Mounted Side Air Bags (SAB) are designed to activate only in certain side collisions.

The ORC determines if a side collision requires the side air bags to inflate, based on the severity and type of collision.

Based on the severity and type of collision, the side air bag inflator on the crash side of the vehicle may be triggered, releasing a quantity of non-toxic gas. The inflating SAB exits through the seat seam into the space

between the occupant and the door. The SAB fully inflate in about 10 milliseconds. The side air bag moves at a very high speed and with such a high force that it could injure you if you are not seated properly, or if items are positioned in the area where the side air bag inflates. This especially applies to children.

# Supplemental Side Air Bag Inflatable Curtain (SABIC) Inflator Units

During collisions where the impact is confined to a particular area of the side of the vehicle, the ORC may deploy the SABIC air bags, depending on the severity and type of collision. In these events, the ORC will deploy the SABIC only on the impact side of the vehicle.

A quantity of non-toxic gas is generated to inflate the side curtain air bag. The inflating side curtain air bag pushes the outside edge of the headliner out of the way and covers the window. The air bag inflates in about 30 milliseconds (about one-quarter of the time that it takes

to blink your eyes) with enough force to injure you if you are not belted and seated properly, or if items are positioned in the area where the side curtain air bag inflates. This especially applies to children. The side curtain air bag is only about 3-1/2 in (9 cm) thick when it is inflated.

Because air bag sensors estimate deceleration over time, vehicle speed and damage are not good indicators of whether or not an air bag should have deployed.

**NOTE:** In a rollover the pretensioners and/or SAB and SABIC air bags may deploy on both sides of the vehicle.

# Front And Side Impact Sensors

In front and side impacts, impact sensors can aid the ORC in determining appropriate response to impact events.

# Enhanced Accident Response System

In the event of an impact causing air bag deployment, if the communication network remains intact, and the power remains intact, depending on the nature of the event the ORC will determine whether to have the Enhanced Accident Response System perform the following functions:

- Cut off fuel to the engine.
- Flash hazard lights as long as the battery has power or until the ignition key is turned off.
- Turn on the interior lights, which remain on as long as the battery has power or until the ignition key is removed.
- Unlock the doors automatically.

In order to reset the Enhanced Accident Response System functions after an event, the ignition switch must be changed from IGN ON to IGN OFF.

# If A Deployment Occurs

The Advanced Front Air Bags are designed to deflate immediately after deployment.

**NOTE:** Front and/or side air bags will not deploy in all collisions. This does not mean something is wrong with the air bag system.

If you do have a collision which deploys the air bags, any or all of the following may occur:

• The nylon air bag material may sometimes cause abrasions and/or skin reddening to the driver and front passenger as the air bags deploy and unfold. The abrasions are similar to friction rope burns or those you might get sliding along a carpet or gymnasium floor. They are not caused by contact with chemicals.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 85

They are not permanent and normally heal quickly. However, if you haven't healed significantly within a few days, or if you have any blistering, see your doctor immediately.

• As the air bags deflate, you may see some smoke-like particles. The particles are a normal by-product of the process that generates the non-toxic gas used for air bag inflation. These airborne particles may irritate the skin, eyes, nose, or throat. If you have skin or eye irritation, rinse the area with cool water. For nose or throat irritation, move to fresh air. If the irritation continues, see your doctor. If these particles settle on your clothing, follow the garment manufacturer's instructions for cleaning.

Do not drive your vehicle after the air bags have deployed. If you are involved in another collision, the air bags will not be in place to protect you.

# WARNING!

Deployed air bags and seat belt pretensioners can not protect you in another collision. Have the air bags, seat belt pretensioners, and the front seat belt retractor assemblies replaced by an authorized dealer immediately. Also, have the Occupant Restraint Controller (ORC) system serviced as well.

Maintaining Your Air Bag System

# WARNING!

• Modifications to any part of the air bag system could cause it to fail when you need it. You could be injured if the air bag system is not there to protect you. Do not modify the components or wiring, including adding any kind of badges or

# WARNING! (Continued)

- stickers to the steering wheel hub trim cover or the upper right side of the instrument panel. Do not modify the front bumper, vehicle body structure, or add aftermarket side steps or running boards.
- It is dangerous to try to repair any part of the air bag system yourself. Be sure to tell anyone who works on your vehicle that it has an air bag system.
- Do not attempt to modify any part of your air bag system. The air bag may inflate accidentally or may not function properly if modifications are made. Take your vehicle to an authorized dealer for any air bag system service. If your seat, including your trim cover and cushion, needs to be serviced in any way (including removal or loosening/tightening of seat attachment bolts), take the vehicle to your authorized dealer. Only manufacturer approved

(Continued)

(Continued)

# WARNING! (Continued)

seat accessories may be used. If it is necessary to modify the air bag system for persons with disabilities, contact your authorized dealer.

# Air Bag Warning Light



You will want to have the air bags ready to inflate for your protection in a collision. The Air Bag Warning Light monitors the internal circuits and interconnecting wiring associated

with air bag system electrical components. While the air bag system is designed to be maintenance free, if any of the following occurs, have an authorized dealer service the air bag system immediately.

• The Air Bag Warning Light does not come on for approximately four to eight seconds when the ignition switch is first turned to ON/RUN.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 87

- The Air Bag Warning Light remains on after the approximate four to eight-second interval.
- The Air Bag Warning Light comes on intermittently or **2** remains on while driving.

NOTE: If the speedometer, tachometer, or any engine related gauges are not working, the Occupant Restraint Controller (ORC) may also be disabled. The air bags may not be ready to inflate for your protection. Promptly check the fuse block for blown fuses. Refer to the label located on the inside of the fuse block cover for the proper air bag fuses. See your authorized dealer if the fuse is good.

# **Event Data Recorder (EDR)**

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will

assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR 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 safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.

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

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

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

### **Child Restraints**

Everyone in your vehicle needs to be buckled up at all times, including babies and children. Every state in the United States, and every Canadian province, requires that small children ride in proper restraint systems. This is the law, and you can be prosecuted for ignoring it.

Children 12 years or younger should ride properly buckled up in a rear seat, if available. According to crash statistics, children are safer when properly restrained in the rear seats rather than in the front.

There are different sizes and types of restraints for children from newborn size to the child almost large enough for an adult safety belt. Always check the child seat Owner's Manual to make sure you have the correct seat for your child.

Before buying any restraint system, make sure that it has a label certifying that it meets all applicable Safety Standards. You should also make sure that you can install it in the vehicle where you will use it.

NOTE: For additional information. refer to www.seatcheck.org or call 1-866-SEATCHECK. Canadian residents should refer to Transport Canada's website for additional information: http://www.tc.gc.ca/ eng/roadsafety/safedrivers-childsafety-index-53.htm

## WARNING!

In a collision, an unrestrained child can become a projectile inside the vehicle. The force required to hold even an infant on your lap could become so great that you could not hold the child, no matter how strong you are. The child and others could be badly injured. Any child riding in your vehicle should be in a proper restraint for the child's size.

# Summary Of Recommendations For Restraining Children In Vehicles

|  | Child Size, Height, Weight or Age  | Recommended Type of Child Restraint  |
|--|--|--|
| Infants and Toddlers                       | Children who are two years old or<br>younger and who have not reached the<br>height or weight limits of their<br>child restraint       | Either an Infant Carrier or a Convertible<br>Child Restraint, facing rearward in the<br>rear seat of the vehicle |
| Small Children                             | Children who are at least two years old<br>or who have out-grown the height or<br>weight limit of their rear-facing<br>child restraint | Forward-Facing Child Restraint with a five-point Harness, facing forward in the rear seat of the vehicle         |
| Larger Children                            | Children who have out-grown their<br>forward-facing child restraint, but are<br>too small to properly fit the vehicle's<br>seat belt   | Belt Positioning Booster Seat and the<br>vehicle seat belt, seated in the rear seat<br>of the vehicle            |
| Children Too Large for<br>Child Restraints | Children 12 years old or younger, who<br>have out-grown the height or weight<br>limit of their booster seat                            | Vehicle Seat Belt, seated in the rear seat<br>of the vehicle   |

# Infants And Child Restraints

Safety experts recommend that children ride rearwardfacing in the vehicle until they are two years old or until they reach either the height or weight limit of their rear facing child safety seat. Two types of child restraints can be used rearward-facing: infant carriers and convertible child seats.

The infant carrier is only used rearward-facing in the vehicle. It is recommended for children from birth until they reach the weight or height limit of the infant carrier. Convertible child seats can be used either rearward-facing or forward-facing in the vehicle. Convertible child seats often have a higher weight limit in the rearward-facing direction than infant carriers do, so they can be used rearward-facing by children who have outgrown their infant carrier but are still less than at least two years old. Children should remain rearward-facing until they

reach the highest weight or height allowed by their convertible child seat.

# WARNING!

- Never place a rear facing infant seat in front of an air bag. A deploying passenger Advanced Front Air Bag can cause death or serious injury to a child 12 years or younger, including a child in a rearward facing infant seat.
- Only use a rearward-facing child restraint in a rear seat.

# Older Children And Child Restraints

Children who are two years old or who have outgrown their rear-facing convertible child seat can ride forwardfacing in the vehicle. Forward-facing child seats and convertible child seats used in the forward-facing direction are for children who are over two years old or who

have outgrown the rear-facing weight or height limit of their rear-facing convertible child seat. Children should remain in a forward-facing child seat with a harness for as long as possible, up to the highest weight or height allowed by the child seat.

All children whose weight or height is above the forward-facing limit for the child seat should use a belt-positioning booster seat until the vehicle's seat belts fit properly. If the child cannot sit with knees bent over the vehicle's seat cushion while the child's back is against the seatback, they should use a belt-positioning booster seat. The child and belt-positioning booster seat are held in the vehicle by the seat belt.

# WARNING!

- Improper installation can lead to failure of an infant or child restraint. It could come loose in a collision. The child could be badly injured or killed. Follow the child restraint manufacturer's directions exactly when installing an infant or child restraint.
- When your child restraint is not in use, secure it in the vehicle with the seat belt or LATCH anchorages, or remove it from the vehicle. Do not leave it loose in the vehicle. In a sudden stop or accident, it could strike the occupants or seatbacks and cause serious personal injury.

# **Children Too Large For Booster Seats**

Children who are large enough to wear the shoulder belt comfortably, and whose legs are long enough to bend over the front of the seat when their back is against the seatback, should use the seat belt in a rear seat. Use this simple 5-step test to decide whether the child can use the vehicle's seat belt alone:

- 1. Can the child sit all the way back against the back of the vehicle seat?
- 2. Do the child's knees bend comfortably over the front of the vehicle seat – while they are still sitting all the way back?
- 3. Does the shoulder belt cross the child's shoulder between their neck and arm?

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 93

4. Is the lap part of the belt as low as possible, touching the child's thighs and not their stomach?

5. Can the child stay seated like this for the whole trip? 2

If the answer to any of these questions was "no," then the child still needs to use a booster seat in this vehicle. If the child is using the lap/shoulder belt, check belt fit periodically. A child's squirming or slouching can move the belt out of position. If the shoulder belt contacts the face or neck, move the child closer to the center of the vehicle. Never allow a child to put the shoulder belt under an arm or behind their back.

# **Recommendations For Attaching Child Restraints**

| Restraint Type                    | Combined                                    | Use any attachment method shown with an "X" Below |                |  |                                  |
|-----------------------------------|---|---|----------------|--|----------------------------------|
|                                   | Weight of the<br>Child + Child<br>Restraint | LATCH –<br>Lower Anchors<br>Only                  | Seat Belt Only | LATCH –<br>Lower Anchors<br>+ Top Tether<br>Anchor | Seat Belt + Top<br>Tether Anchor |
| Rear-Facing<br>Child Restraint    | Up to 65 lbs<br>(29.5 kg)                   | Х   | Х              |  |                                  |
| Rear-Facing<br>Child Restraint    | More than<br>65 lbs (29.5 kg)               |   | Х              |  |                                  |
| Forward-Facing<br>Child Restraint | Up to 65 lbs<br>(29.5 kg)                   |   |                | Х  | Х                                |
| Forward-Facing<br>Child Restraint | More than<br>65 lbs (29.5 kg)               |   |                |  | Х                                |

# Lower Anchors and Tethers for Children (LATCH) **Restraint System**

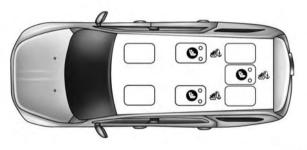


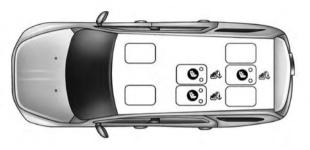
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#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 95

Your vehicle is equipped with the child restraint anchorage system called LATCH, which stands for Lower Anchors and Tethers for CHildren. The LATCH system has three vehicle anchor points for installing LATCHequipped child seats. There are two lower anchorages located at the back of the seat cushion where it meets the seatback and one top tether anchorage located behind the seating position. These anchorages are used to install LATCH-equipped child seats without using the vehicle's seat belts. Some seating positions may have a top tether anchorage but no lower anchorages. In these seating positions, the seat belt must be used with the top tether anchorage to install the child restraint. Please see the following table for more information.

# LATCH Positions For Installing Child Restraints In This Vehicle





022668731

### Second Row Bench

022668730

# Second Row Captains Chairs

Lower Anchorage Symbol 2 anchorages per seating position

A Top Tether Anchorage Symbol

Lower Anchorage Symbol 2 anchorages per seating position

are Top Tether Anchorage Symbol

## **Child Restraint LATCH Positions**

| What is the weight limit (child's weight + weight of the child re-<br>straint) for using the LATCH an-<br>chorage system to attach the child<br>restraint? | 65 lbs (29.5 kg) | Use the LATCH anchorage system<br>until the combined weight of the<br>child and the child restraint is<br>65 lbs (29.5 kg). Use the seat belt<br>and tether anchor instead of the<br>LATCH system once the combined<br>weight is more than 65 lbs<br>(29.5 kg). |
|--|------------------|---|
| Can the LATCH anchorages and<br>the seat belt be used together to<br>attach a rear-facing or forward-<br>facing child restraint?                           | No               | Do not use the seat belt when you<br>use the LATCH anchorage system<br>to attach a rear-facing or forward-<br>facing child restraint.   |
| Can a child seat be installed in the center position using the inner LATCH lower anchorages?   | N/A              |   |

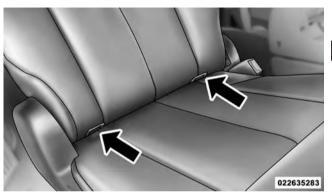
2

| Can two child restraints be<br>attached using a common lower<br>LATCH anchorage?      | No  | Never "share" a LATCH anchorage<br>with two or more child restraints.<br>If the center position does not have<br>dedicated LATCH lower anchor-<br>ages, use the seat belt to install a<br>child seat in the center position<br>next to a child seat using the<br>LATCH anchorages in an<br>outboard position. |
|---|---|---|
| Can the rear-facing child restraint<br>touch the back of the<br>front passenger seat? | Yes   | The child seat may touch the back<br>of the front passenger seat if the<br>child restraint manufacturer also<br>allows contact. See your child<br>restraint owner's manual for more<br>information.   |
| Can the head restraints be removed?   | Yes; second row outboard positions only, third row all positions. |   |

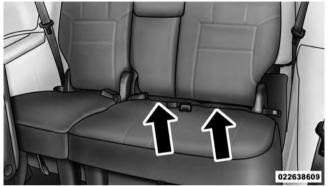
# Locating The LATCH Anchorages



The lower anchorages are round bars that are found at the rear of the seat cushion where it meets the seatback. They are just visible when you lean into the rear seat to install the child restraint. You will easily feel them if you run your finger along the gap between the seatback and seat cushion.



LATCH Anchorages (Second Row Anchorages Shown)

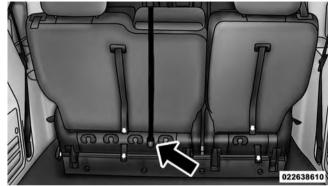


LATCH Anchorages (Third Row 60/40 Anchorages Shown)

# Locating The LATCH Anchorages



In addition, there are tether strap anchors located behind each rear seatback, near to the floor.



LATCH Anchorages (Third Row 60/40 Anchorage Shown)

LATCH-compatible child restraint systems will be equipped with a rigid bar or a flexible strap on each side. Each will have a hook or connector to attach to the lower anchorage and a way to tighten the connection to the anchorage. Forward-facing child restraints and some rear-facing infant restraints will also be equipped with a tether strap. The tether strap will have a hook at the end to attach to the top tether anchorage and a way to tighten the strap after it is attached to the anchorage.

Center Seat LATCH – Commercial Cargo Vehicles (No Factory Installed Rear Seats) — If Equipped

# WARNING!

This vehicle does not have a center seating position. Do not use the center lower LATCH anchorages to install a child seat in the center of the back seat.

Always follow the directions of the child restraint manufacturer when installing your child restraint. Not all child restraint systems will be installed as described here.

# **Center Seat LATCH**

If a child restraint installed in the center position blocks the seat belt webbing or buckle for the outboard position,

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 101

do not use that outboard position. If a child seat in the center position blocks the outboard LATCH anchors or seat belt, do not install a child seat in that outboard position.

# WARNING!

Never use the same lower anchorage to attach more than one child restraint. Please refer to "Installing The LATCH-Compatible Child Restraint System" for typical installation instructions.

Always follow the directions of the child restraint manufacturer when installing your child restraint. Not all child restraint systems will be installed as described here.

# To Install A LATCH-compatible Child Restraint

1. If the selected seating position has a Switchable Automatic Locking Retractor (ALR) seat belt, stow the seat belt, following the instructions below. See the section

- "Installing Child Restraints Using the Vehicle Seat Belt" to check what type of seat belt each seating position has.
- 2. Loosen the adjusters on the lower straps and on the tether strap of the child seat so that you can more easily attach the hooks or connectors to the vehicle anchorages.
- 3. Place the child seat between the lower anchorages for that seating position. For some second row seats, you may need to recline the seat and / or raise the head restraint to get a better fit.
- 4. Attach the lower hooks or connectors of the child restraint to the lower anchorages in the selected seating position.

- 5. If the child restraint has a tether strap, connect it to the top tether anchorage. See the section "Installing Child Restraints Using the Top Tether Anchorage" for directions to attach a tether anchor.
- 6. Tighten all of the straps as you push the child restraint rearward and downward into the seat. Remove slack in the straps according to the child restraint manufacturer's instructions.
- 7. Test that the child restraint is installed tightly by pulling back and forth on the child seat at the belt path. It should not move more than 1 inch (25.4 mm) in any direction.

## How To Stow An Unused ALR Seatbelt

When using the LATCH attaching system to install a child restraint, stow all ALR seat belts that are not being used by other occupants or being used to secure child restraints. An unused belt could injure a child if they play with it and accidentally lock the seatbelt retractor. Before installing a child restraint using the LATCH system, buckle the seat belt behind the child restraint and out of the child's reach. If the buckled seat belt interferes with the child restraint installation, instead of buckling it behind the child restraint, route the seat belt through the child restraint belt path and then buckle it. Do not lock the seatbelt. Remind all children in the vehicle that the seat belts are not toys and that they should not play with them.

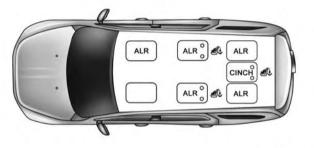
# WARNING!

Improper installation of a child restraint to the LATCH anchorages can lead to failure of the restraint. The child could be badly injured or killed. Follow the child restraint manufacturer's directions exactly when installing an infant or child restraint.

# Installing Child Restraints Using The Vehicle Seat Belt

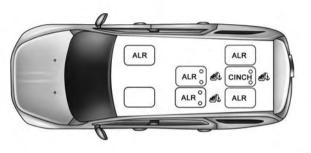
The seat belts in the passenger seating positions are equipped with either a Switchable Automatic Locking Retractor (ALR) or a cinching latch plate or both. Both types of seat belts are designed to keep the lap portion of the seat belt tight around the child restraint so that it is not necessary to use a locking clip. The ALR retractor can be "switched" into a locked mode by pulling all of the webbing out of the retractor and then letting the webbing retract back into the retractor. If it is locked, the ALR will

make a clicking noise while the webbing is pulled back Lap/Shoulder Belt Systems for Installing Child into the retractor. For additional information on ALR. Restraints in this Vehicle refer to the "Automatic Locking Mode" description under "Occupant Restraints." The cinching latch plate is designed to hold the lap portion of the seatbelt tight when webbing is pulled tight and straight through a child restraint's belt path. Please see the table below and the following sections for more information about both types of seat belts.



0226002258

Second Row Captains Chair



#### 0226002260

### Second Row Bench

# Lap/Shoulder Belt Systems

| What is the weight limit (child's weight +   | Weight limit of the | Always use the tether anchor when using   |
|--|---------------------|---|
| weight of the child restraint) for using the | Child Restraint     | the seat belt to install a forward facing |
| Tether Anchor with the seat belt to attach a |                     | child restraint, up to the recommended    |
| forward facing child restraint?              |                     | weight limit of the child restraint.      |

| Can the rear-facing child restraint touch the back of the front passenger seat?                              | Yes  | Contact between the front passenger seat<br>and the child restraint is allowed, if the<br>child restraint manufacturer also<br>allows contact.  |
|--|--|---|
| Can the head restraints be removed?  | Yes; second row<br>outboard positions<br>only, third row all<br>positions. |   |
| Can the buckle stalk be twisted to tighten<br>the seat belt against the belt path of the<br>child restraint? | Yes  | In positions with cinching latch plates<br>(CINCH), the buckle stalk may be twisted<br>up to 3 full turns. Do not twist the buckle<br>stalk in a seating position with an<br>ALR retractor. |

# Installing A Child Restraint with a Switchable Automatic Locking Retractor (ALR)

- 1. Place the child seat in the center of the seating position. For some second row seats, you may need to recline the seat and/or raise the head restraint to get a better fit.
- 2. Pull enough of the seat belt webbing from the retractor to pass it through the belt path of the child restraint. Do not twist the belt webbing in the belt path.
- 3. Slide the latch plate into the buckle until you hear a "click."
- 4. Pull on the webbing to make the lap portion tight against the child seat.
- 5. To lock the seat belt, pull down on the shoulder part of the belt until you have pulled all the seat belt webbing out of the retractor. Then, allow the webbing to retract

back into the retractor. As the webbing retracts, you will hear a clicking sound. This means the seat belt is now in the Automatic Locking mode.

- 6. Try to pull the webbing out of the retractor. If it is locked, you should not be able to pull out any webbing. If the retractor is not locked, repeat step 5.
- 7. Finally, pull up on any excess webbing to tighten the lap portion around the child restraint while you push the child restraint rearward and downward into the vehicle seat.
- 8. If the child restraint has a top tether strap and the seating position has a top tether anchorage, connect the tether strap to the anchorage and tighten the tether strap. Refer to "Lower Anchors and Tethers for Children (LATCH) Restraint System" for directions to attach a tether anchor.

9. Test that the child restraint is installed tightly by pulling back and forth on the child seat at the belt path. It should not move more than 1 inch (25.4 mm) in any direction.

Any seat belt system will loosen with time, so check the belt occasionally, and pull it tight if necessary.

### Installing A Child Restraint With A Cinching Latch Plate (CINCH) — If Equipped

- 1. Place the child seat in the center of the seating position. For some second row seats, you may need to recline the seat and / or raise the head restraint to get a better fit.
- 2. Next, pull enough of the seat belt webbing from the retractor to pass it through the belt path of the child restraint. Do not twist the belt webbing in the belt path.

- 3. Slide the latch plate into the buckle until you hear a "click."
- 4. Finally, pull up on any excess webbing to tighten the lap portion around the child restraint while you push the child restraint rearward and downward into the vehicle seat.
- 5. If the child restraint has a top tether strap and the seating position has a top tether anchorage, connect the tether strap to the anchorage and tighten the tether strap. Refer to "Lower Anchors and Tethers for Children (LATCH) Restraint System" for directions to attach a tether anchor.
- 6. Test that the child restraint is installed tightly by pulling back and forth on the child seat at the belt path. It should not move more than 1 inch (25.4 mm) in any direction.

Any seat belt system will loosen with time, so check the belt occasionally, and pull it tight if necessary.

If the buckle or the cinching latch plate is too close to the belt path opening of the child restraint, you may have trouble tightening the seat belt. If this happens, disconnect the latch plate from the buckle and twist the short buckle-end belt up to three full turns to shorten it. Insert the latch plate into the buckle with the release button facing out, away from the child restraint. Repeat steps 4 to 6, above, to complete the installation of the child restraint.

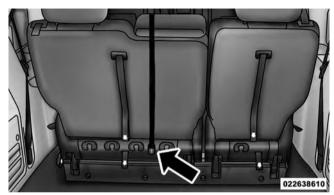
If the belt still cannot be tightened after you shorten the buckle, disconnect the latch plate from the buckle, turn the buckle around one half turn, and insert the latch plate into the buckle again. If you still cannot make the child restraint installation tight, try a different seating position.

Installing Child Restraints Using The Top Tether Anchorage

- 1. Look behind the seating position where you plan to **2** install the child restraint to find the tether anchorage. You may need to move the seat forward to provide better access to the tether anchorage. If there is no top tether anchorage for that seating position (see the charts above), move the child restraint to another position in the vehicle if one is available.
- 2. Route the tether strap to provide the most direct path for the strap between the anchor and the child seat. If your vehicle is equipped with adjustable rear head restraints, raise the head restraint, and where possible, route the tether strap under the head restraint and between the two posts. If not possible, lower the head restraint and pass the tether strap around the outboard side of the head restraint.

3. Attach the tether strap hook of the child restraint to the top tether anchorage as shown in the diagram.





Rear Seat Tether Strap Mounting (Second Row Anchorage Shown)

022635284

LATCH Anchorages (Third Row 60/40 Anchorage Shown)

4. Remove slack in the tether strap according to the child restraint manufacturer's instructions.

## WARNING!

- An incorrectly anchored tether strap could lead to increased head motion and possible injury to the child. Use only the anchorage position directly behind the child seat to secure a child restraint top tether strap.
- If your vehicle is equipped with a split rear seat, make sure the tether strap does not slip into the opening between the seatbacks as you remove slack in the strap.

#### **Transporting Pets**

Air Bags deploying in the front seat could harm your pet. An unrestrained pet could be thrown about and possibly injured, or injure a passenger during panic braking or in a collision.

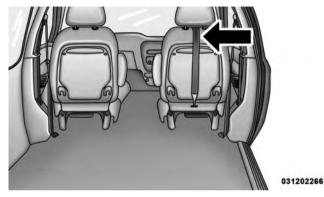
Pets should be restrained in the rear seat in pet harnesses or pet carriers that are secured by seat belts.

## **COMMERCIAL CARGO VEHICLES (NO FACTORY INSTALLED REAR SEATS)** — IF EQUIPPED

Commercial cargo vehicles are not designed for use as a **2** family vehicle and are not intended for carrying children in the front passenger seat. However, if you must carry a child in a vehicle without a rear seat, the passenger seat should be moved to the full rearward position and the child must be in a proper restraint system based on its age, size and weight.

## WARNING!

Rearward-facing infant restraints must never be secured in the passenger seat of a vehicle with a passenger Air Bag. In a collision, a passenger Air Bag may deploy causing severe injury or death to infants riding in rearward-facing infant restraints.



Commercial Child Restraint Tether Anchor

This vehicle is equipped with a child restraint tether anchor located on the lower rear of the front passenger seat. Use this tether anchor to secure only forwardfacing child restraints equipped with an upper tether strap.

# Restraining Infants And Small Children In Commercial Cargo Vehicles

There are different sizes and types of restraints for children from newborn size to the child almost large enough for an adult safety belt. Use the restraint that is correct for your child. Refer to "Child Restraints" in the "Occupant Restraints" section.

#### Tether Installation For Commercial Cargo Vehicles

To secure the child restraint upper tether strap to the vehicle, follow these steps:

- 1. Locate the child restraint tether anchor on the lower rear of the front passenger seat.
- 2. Route the tether strap under the head rest.

**NOTE:** Ensure that the child restraint tether strap is centered between the headrest supports underneath the head rest.

- 3. Using the hook attached to the child restraint tether strap, attach the child restraint tether strap to the metal anchor on the lower rear of the front passenger seat.
- 4. Following the child seat manufacturer's instructions, tighten the child restraint tether strap.

### WARNING!

The vehicle tether anchor is designed to be used with a child restraint only. It should not be used for any other purpose. Before use, inspect the tether anchor strap for nicks, abrasions, discoloration, and loose threads. If these or any other condition that might affect the performance of the strap is observed, DO NOT USE that strap. Personal injury may result. Contact your authorized dealer for a replacement part.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 113

#### **ENGINE BREAK-IN RECOMMENDATIONS**

A long break-in period is not required for the engine and drivetrain (transmission and axle) in your vehicle.

Drive moderately during the first 300 miles (500 km). After the initial 60 miles (100 km), speeds up to 50 or 55 mph (80 or 90 km/h) are desirable.

While cruising, brief full-throttle acceleration within the limits of local traffic laws contributes to a good break-in. Wide-open throttle acceleration in low gear can be detrimental and should be avoided.

The engine oil installed in the engine at the factory is a high-quality energy conserving type lubricant. Oil changes should be consistent with anticipated climate conditions under which vehicle operations will occur. For the recommended viscosity and quality grades, refer to "Maintenance Procedures" in "Maintaining Your Vehicle".

## CAUTION!

Never use Non-Detergent Oil or Straight Mineral Oil in the engine or damage may result.

**NOTE:** A new engine may consume some oil during its first few thousand miles (kilometers) of operation. This should be considered a normal part of the break-in and not interpreted as an indication of difficulty.

## SAFETY TIPS

## **Transporting Passengers**

NEVER TRANSPORT PASSENGERS IN THE CARGO AREA.

## WARNING!

- Do not leave children or animals inside parked vehicles in hot weather. Interior heat build-up may cause serious injury or death.
- It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, 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 seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

#### **Exhaust Gas**

## WARNING!

Exhaust gases can injure or kill. They contain carbon monoxide (CO), which is colorless and odorless. Breathing it can make you unconscious and can eventually poison you. To avoid breathing (CO), follow these safety tips:

- Do not run the engine in a closed garage or in confined areas any longer than needed to move your vehicle in or out of the area.
- If you are required to drive with the trunk/liftgate open, make sure that all windows are closed and the climate control BLOWER switch is set at high speed. DO NOT use the recirculation mode.
- If it is necessary to sit in a parked vehicle with the engine running, adjust your heating or cooling

## WARNING! (Continued)

controls to force outside air into the vehicle. Set the blower at high speed.

The best protection against carbon monoxide entry into the vehicle body is a properly maintained engine exhaust system.

Whenever a change is noticed in the sound of the exhaust system, when exhaust fumes can be detected inside the vehicle, or when the underside or rear of the vehicle is damaged, have a competent mechanic inspect the complete exhaust system and adjacent body areas for broken, damaged, deteriorated, or mispositioned parts. Open seams or loose connections could permit exhaust fumes to seep into the passenger compartment. In addition, inspect the exhaust system each time the vehicle is raised for lubrication or oil change. Replace as required.

(Continued)

# Safety Checks You Should Make Inside The Vehicle

### Seat Belts

Inspect the belt system periodically, checking for cuts, frays, and loose parts. Damaged parts must be replaced immediately. Do not disassemble or modify the system.

Front seat belt assemblies must be replaced after a collision. Rear seat belt assemblies must be replaced after a collision if they have been damaged (i.e., bent retractor, torn webbing, etc.). If there is any question regarding belt or retractor condition, replace the belt.

## Air Bag Warning Light



The light should come on and remain on for four to eight seconds as a bulb check when the ignition switch is first turned ON. If the light is not lit during starting, see your authorized

dealer. If the light stays on, flickers, or comes on while driving, have the system checked by an authorized dealer.

#### Defroster

Check operation by selecting the defrost mode and place the blower control on high speed. You should be able to feel the air directed against the windshield. See your authorized dealer for service if your defroster is inoperable.

### Floor Mat Safety Information

Always use floor mats designed to fit the footwell of your vehicle. Use only floor mats that leave the pedal area unobstructed and that are firmly secured so that they cannot slip out of position and interfere with the pedals or impair safe operation of your vehicle in other ways.

## WARNING!

Pedals that cannot move freely can cause loss of vehicle control and increase the risk of serious personal injury.

- Always make sure that floor mats are properly attached to the floor mat fasteners.
- Never place or install floor mats or other floor coverings in the vehicle that cannot be properly secured to prevent them from moving and interfering with the pedals or the ability to control the vehicle.
- Never put floor mats or other floor coverings on top of already installed floor mats. Additional floor mats and other coverings will reduce the size of the pedal area and interfere with the pedals.

## WARNING! (Continued)

- Check mounting of mats on a regular basis. Always properly reinstall and secure floor mats that have been removed for cleaning.
- Always make sure that objects cannot fall into the driver footwell while the vehicle is moving. Objects can become trapped under the brake pedal and accelerator pedal causing a loss of vehicle control.
- If required, mounting posts must be properly installed, if not equipped from the factory.

Failure to properly follow floor mat installation or mounting can cause interference with the brake pedal and accelerator pedal operation causing loss of control of the vehicle.

(Continued)

### Periodic Safety Checks You Should Make Outside Do The Vehicle

### Tires

Examine tires for excessive tread wear and uneven wear patterns. Check for stones, nails, glass, or other objects lodged in the tread or sidewall. Inspect the tread for cuts and cracks. Inspect sidewalls for cuts, cracks and bulges. Check the wheel nuts for tightness. Check the tires (including spare) for proper cold inflation pressure.

## Lights

Have someone observe the operation of brake lights and exterior lights while you work the controls. Check turn signal and high beam indicator lights on the instrument panel.

#### **Door Latches**

Check for positive closing, latching, and locking.

## Fluid Leaks

Check area under vehicle after overnight parking for fuel, engine coolant, oil, or other fluid leaks. Also, if gasoline fumes are detected or if fuel, power steering fluid (if equipped), or brake fluid leaks are suspected, the cause should be located and corrected immediately.

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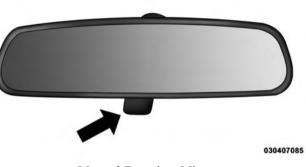
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### Inside Day/Night Mirror — If Equipped

A two-point pivot system allows for horizontal and vertical adjustment of the mirror. Adjust the mirror to center on the view through the rear window.

Headlight glare can be reduced by moving the small control under the mirror to the night position (toward the rear of the vehicle). The mirror should be adjusted while set in the day position (toward the windshield).



Manual Rearview Mirror

#### Automatic Dimming Mirror — If Equipped

This mirror automatically adjusts for headlight glare from vehicles behind you. You can turn the feature on or off by pressing the button at the base of the mirror. A light to the left of the button will illuminate to indicate when the dimming feature is activated. The sensor to the right of the button does not illuminate.

**NOTE:** This feature is disabled when the vehicle is moving in reverse.



Automatic Dimming Mirror

#### CAUTION!

To avoid damage to the mirror during cleaning, never spray any cleaning solution directly onto the mirror. Apply the solution onto a clean cloth and wipe the mirror clean.

### **Outside Mirrors**

To receive maximum benefit, adjust the outside mirror(s) to center on the adjacent lane of traffic with a slight overlap of the view obtained on the inside mirror.

## WARNING!

Vehicles and other objects seen in an outside convex mirror will look smaller and farther away than they really are. Relying too much on side convex mirrors could cause you to collide with another vehicle or other object. Use your inside mirror when judging the size or distance of a vehicle seen in a side convex mirror.

# Driver's Outside Automatic Dimming Mirror — If Equipped

The driver's outside mirror will automatically adjust for glare from vehicles behind you. This feature is controlled by the inside automatic dimming mirror and will automatically adjust for headlight glare when the inside mirror adjusts.

## **Outside Mirrors Folding Feature**

All outside mirrors are hinged and may be moved either forward or rearward to resist damage. The hinges have three detent positions:

- full forward
- full rearward and
- normal.

#### Power Mirrors — If Equipped

The power mirror controls are located on the driver-side door trim panel.



**Power Mirror Controls** 

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 129

The power mirror controls consist of mirror select buttons and a four-way mirror control switch. To adjust a mirror, press either the L (left) or R (right) to select the mirror that you want to adjust.

**NOTE:** A light in the selected button will illuminate indicating the mirror is activated and can be adjusted.

Using the mirror control switch, press on any of the four arrows for the direction that you want the mirror to move.

Left and Right side power mirror preselected positions can be controlled by the optional Driver Memory Seat Feature. Refer to "Driver Memory Seat" in "Understanding The Features Of Your Vehicle" for further information.

### Heated Mirrors — If Equipped

These mirrors are heated to melt frost or ice. This feature can be activated whenever you turn on the rear window defroster (if equipped). Some vehicles may not be equipped with rear window defroster, in this case the heated mirrors will still function as intended. Refer to "Rear Window Features" in "Understanding The Features Of Your Vehicle" for further information.

# Tilt Mirrors In Reverse (Available With Memory Seat Only) — If Equipped

Tilt Mirrors in Reverse provides automatic outside mirror positioning which will aid the drivers view of the ground rearward of the front doors. The driver's outside mirror will move slightly downward from the present position when the vehicle is shifted into REVERSE. The driver's outside mirror will then return to the original position when the vehicle is shifted out of REVERSE position. Each stored memory setting will have an associated Tilt Mirrors in Reverse position.

**NOTE:** The Tilt Mirrors in Reverse feature is not enabled when delivered from the factory. The Tilt Mirrors in Reverse feature can be enabled or disabled in the Electronic Vehicle Information Center (EVIC). Refer to "Electronic Vehicle Information Center (EVIC)/Customer-Programmable Features" in "Understanding Your Instrument Panel" for further information.

#### Power Folding Mirrors — If Equipped

The switch for the power folding mirrors is located between the power mirror switches L (left) and R (right). Press the switch once and the mirrors will fold in, pressing the switch a second time will return the mirrors to the normal driving position.

#### **NOTE:** If the vehicle speed is greater than 10 mph (16 km/h) the folding feature will be disabled.

If the mirrors are in the folded position, and vehicle speed is equal or greater than 10 mph (16 km/h), they will automatically unfold.

#### **Resetting the Power Folding Outside Mirrors**

You may need to reset the power folding mirrors if the following occurs:

- The mirrors are accidentally blocked while folding.
- The mirrors are accidentally manually folded/ unfolded.

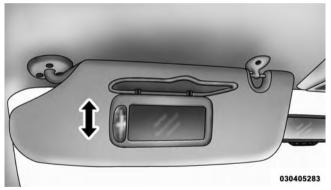
#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 131

- The mirrors come out of the unfolded position.
- The mirrors shake and vibrate at normal driving speeds.

To reset the power folding mirrors : Fold and unfold 3 them by pressing the button. (This may require multiple button pushes). This resets them to their normal position.

## Illuminated Vanity Mirrors — If Equipped

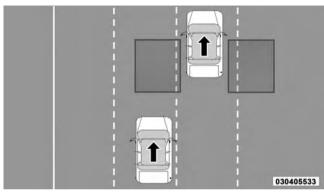
An illuminated vanity mirror is located on the sun visor. To use the mirror, rotate the sun visor down and swing the mirror cover upward. The lights turn on automatically. Closing the mirror cover turns off the lights.



## BLIND SPOT MONITORING (BSM) — IF EQUIPPED

The Blind Spot Monitoring (BSM) system uses two radarbased sensors, located inside the rear bumper fascia, to detect highway licensable vehicles (automobiles, trucks, motorcycles, etc.) that enter the blind spot zones from the rear/front/side of the vehicle.

**Illuminated Mirror** 



#### **Rear Detection Zones**

When the vehicle is started, the BSM warning light will momentarily illuminate in both outside rear view mirrors to let the driver know that the system is operational.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 133

Automatic Transmission vehicles

The BSM system sensors operate when the vehicle is in any forward gear or REVERSE and enters stand-by mode when the vehicle is in PARK.

#### Manual Transmission vehicles

The BSM system sensors operate when the vehicle is in any gear and enters stand-by mode when the Park Brake is engaged, the vehicle is not in REVERSE, and the vehicle is stationary.

The BSM detection zone covers approximately one lane on both sides of the vehicle (12 ft or 3.8 m). The zone starts at the outside rear view mirror and extends approximately 23 ft (7 m) to the rear of the vehicle. The BSM system monitors the detection zones on both sides of the vehicle when the vehicle speed reaches approximately 6 mph (10 km/h) or higher and will alert the driver of vehicles in these areas.

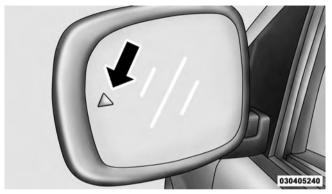
- The BSM system does NOT alert the driver about rapidly approaching vehicles that are outside the detection zones.
- The BSM system detection zone DOES NOT change if your vehicle is towing a trailer. Therefore, visually verify the adjacent lane is clear for both your vehicle and trailer before making a lane change. If the trailer or other object (i.e., bicycle, sports equipment) extends beyond the side of your vehicle, this may result in the BSM warning light remaining illuminated the entire time the vehicle is in a forward gear.

The area on the rear fascia where the radar sensors are located must remain free of snow, ice, and dirt/road contamination so that the BSM system can function properly. Do not block the area of the rear fascia where the radar sensors are located with foreign objects (bumper stickers, bicycle racks, etc.).



#### **Sensor Locations**

The BSM system notifies the driver of objects in the detection zones by illuminating the BSM warning light located in the outside mirrors in addition to sounding an audible (chime) alert and reducing the radio volume. Refer to "Modes Of Operation" for further information.



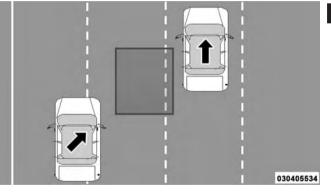
#### **BSM Warning Light**

The BSM system monitors the detection zone from three different entry points (side, rear, front) while driving to see if an alert is necessary. The BSM system will issue an alert during these types of zone entries.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 135

#### **Entering From The Side**

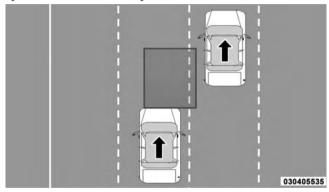
Vehicles that move into your adjacent lanes from either side of the vehicle.



Side Monitoring

**Entering From The Rear** 

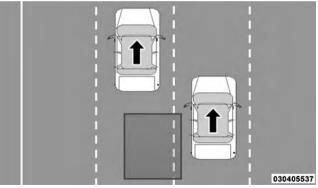
Vehicles that come up from behind your vehicle on either side and enter the rear detection zone with a relative speed of less than 30 mph (48 km/h).



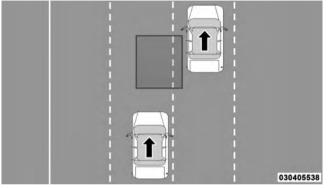
**Rear Monitoring** 

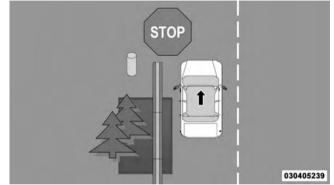
#### **Overtaking Traffic**

If you pass another vehicle slowly (with a relative speed of less than 15 mph (24 km/h) and the vehicle remains in the blind spot for approximately 1.5 seconds, the warning light will be illuminated. If the difference in speed between the two vehicles is greater than 10 mph (16 km/h), the warning light will not illuminate.



**Overtaking/Approaching** 



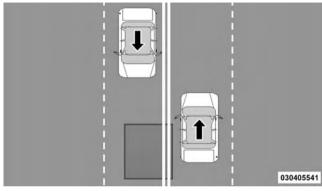


#### **Overtaking/Passing**

The BSM system is designed not to issue an alert on The BSM system will not alert you of objects that are stationary objects such as guardrails, posts, walls, foliage, berms, etc. However, occasionally the system may alert on such objects. This is normal operation and your vehicle does not require service.

#### **Stationary Objects**

traveling in the opposite direction of the vehicle in adjacent lanes.



**Opposing Traffic** 

## WARNING!

The Blind Spot Monitoring system is only an aid to help detect objects in the blind spot zones. The BSM

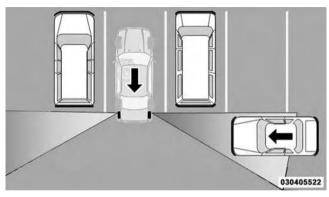
## WARNING! (Continued)

system is not designed to detect pedestrians, bicyclists, or animals. Even if your vehicle is equipped with the BSM system, always check your vehicle's mirrors, glance over your shoulder, and use your turn signal before changing lanes. Failure to do so can result in serious injury or death.

#### **Rear Cross Path**

The Rear Cross Path (RCP) feature is intended to aid the driver when backing out of parking spaces where their vision of oncoming vehicles may be blocked. Proceed slowly and cautiously out of the parking space until the rear end of the vehicle is exposed. The RCP system will then have a clear view of the cross traffic and if an oncoming vehicle is detected, alert the driver.

(Continued)



#### **RCP** Detection Zones

RCP monitors the rear detection zones on both sides of the vehicle, for objects that are moving toward the side of the vehicle with a minimum speed of approximately 3 mph (5 km/h), to objects moving a maximum of approximately 20 mph (32 km/h), such as in parking lot situations.

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**NOTE:** In a parking lot situation, oncoming vehicles can be obscured by vehicles parked on either side. If the sensors are blocked by other structures or vehicles, the system will not be able to alert the driver.

When RCP is on and the vehicle is in REVERSE, the driver is alerted using both the visual and audible alarms, including reducing the radio volume.

#### WARNING!

RCP is not a Back Up Aid system. It is intended to be used to help a driver detect an oncoming vehicle in a parking lot situation. Drivers must be careful when backing up, even when using RCP. Always check carefully behind your vehicle, look behind you, and be sure to check for pedestrians, animals, other vehicles, obstructions, and blind spots before backing up. Failure to do so can result in serious injury or death.

### **Modes Of Operation**

## Modes Of Operation With EVIC

Three selectable modes of operation are available in the Electronic Vehicle Information Center (EVIC). Refer to "Electronic Vehicle Information Center (EVIC)/Personal Settings (Customer-Programmable Features)" in "Understanding Your Instrument Panel" for further information.

# Modes Of Operation With Uconnect® System — If Equipped

Three selectable modes of operation are available in the Uconnect® system screen. Refer to "Customer- Programmable Features — Uconnect® Access settings " in "Understanding Your Instrument Panel" for further information.

#### Blind Spot Alert Lights Only

When operating in Blind Spot Alert mode, the BSM system will provide a visual alert in the appropriate side view mirror based on a detected object. However, when

the system is operating in RCP, the system will respond with both visual and audible alerts when a detected object is present. Whenever an audible alert is requested, the radio is muted.

### Blind Spot Alert Lights/Chime

When operating in Blind Spot Alert Lights/Chime mode, the BSM system will provide a visual alert in the appropriate side view mirror based on a detected object. If the turn signal is then activated, and it corresponds to an alert present on that side of the vehicle, an audible chime will also be sounded. Whenever a turn signal and detected object are present on the same side at the same time, both the visual and audio alerts will be issued. In addition to the audible alert the radio (if on) will also be muted.

#### NOTE:

- Whenever an audible alert is requested by the BSM system, the radio is also muted.
- If the hazard flashers are on, the system will request the appropriate visual alert only.

When the system is in RCP, the system shall respond with both visual and audible alerts when a detected object is present. Whenever an audible alert is requested, the radio is also muted. Turn/hazard signal status is ignored; the RCP state always requests the chime.

#### Blind Spot Alert Off

When the BSM system is turned off there will be no visual or audible alerts from either the BSM or RCP systems.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 141

**NOTE:** The BSM system will store the current operating mode when the vehicle is shut off. Each time the vehicle is started the previously stored mode will be recalled and used

#### Uconnect<sup>®</sup> Phone — IF EQUIPPED

Uconnect® Phone is a voice-activated, hands-free, invehicle communications system. Uconnect® Phone allows you to dial a phone number with your mobile phone using simple voice commands (e.g., "Call" ... "Mike" ... "Work" or "Dial" ... "248-555-1212"). Your mobile phone's audio is transmitted through your vehicle's audio system; the system will automatically mute your radio when using the Uconnect® Phone.

**NOTE:** The Uconnect<sup>®</sup> Phone requires a mobile phone equipped with the Bluetooth<sup>®</sup> "Hands-Free Profile", Version 0.96 or higher. See the Uconnect<sup>®</sup> website for supported phones.

For Uconnect® customer support:

- U.S. residents visit www.UconnectPhone.com or call 1–877–855–8400.
- Canadian Residents visit www.UconnectPhone.com or call, 1-800-465–2001 (English) or 1-800-387-9983 (French).

Uconnect<sup>®</sup> Phone allows you to transfer calls between the system and your mobile phone as you enter or exit your vehicle and enables you to mute the system's microphone for private conversation.

The Uconnect® Phone is driven through your Bluetooth® "Hands-Free Profile" mobile phone. Uconnect® features Bluetooth® technology - the global standard that enables different electronic devices to connect to each other without wires or a docking station, so Uconnect® Phone works no matter where you stow your mobile phone (be it your purse, pocket, or briefcase), as

long as your phone is turned on and has been paired to the vehicle's Uconnect® Phone. The Uconnect® Phone allows up to seven mobile phones to be linked to the system. Only one linked (or paired) mobile phone can be used with the system at a time. The system is available in English, Spanish, or French languages.

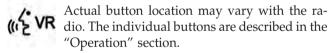
## WARNING!

Any voice commanded system should be used only in safe driving conditions following all applicable laws, including laws regarding phone use. Your attention should be focused on safely operating the vehicle. Failure to do so may result in a collision causing serious injury or death.

#### Uconnect<sup>®</sup> Phone Button

The radio or steering wheel controls (if equipped) will contain the two control buttons (Uconnect® Phone button and Voice Command @m button) that will enable you to access the system. When you press the button you will hear the word Uconnect® followed by a BEEP. The beep is your signal to give a command.

### **Voice Command Button**



The Uconnect® Phone can be used with any Hands-Free Profile certified Bluetooth® mobile phone. See the Uconnect® website for supported phones. Refer to your mobile service provider or the phone manufacturer for details.

The Uconnect<sup>®</sup> Phone is fully integrated with the vehicle's audio system. The volume of the Uconnect<sup>®</sup> Phone can be adjusted either from the radio volume control knob or from the steering wheel radio control (right switch), if so equipped.

The radio display will be used for visual prompts from the Uconnect<sup>®</sup> Phone such as "CELL" or caller ID on certain radios.

#### Operation

Voice commands can be used to operate the Uconnect® Phone and to navigate through the Uconnect® Phone menu structure. Voice commands are required after most Uconnect® Phone prompts. You will be prompted for a specific command and then guided through the available options.

- Prior to giving a voice command, one must wait for the beep, which follows the "Ready" prompt or another prompt.
- For certain operations, compound commands can be used. For example, instead of saying "Setup" and then "Pair a Device", the following compound command can be said: "Pair a Bluetooth® Device".
- For each feature explanation in this section, only the compound form of the voice command is given. You can also break the commands into parts and say each part of the command when you are asked for it. For example, you can use the compound form voice command "Phonebook New Entry", or you can break the compound form command into two voice commands: "Phonebook" and "New Entry". Please remember, the Uconnect® Phone works best when you talk in a normal conversational tone, as if speaking to someone sitting a few feet/meters away from you.

## Voice Command Tree

Refer to "Voice Tree" in this section.

# Help Command

If you need assistance at any prompt, or if you want to know your options at any prompt, say "Help" following the beep. The Uconnect® Phone will play some of the options at any prompt if you ask for help.

To activate the Uconnect<sup>®</sup> Phone, simply press the **b**utton and follow the audible prompts for directions. Uconnect<sup>®</sup> Phone sessions begin with a press of the **b**utton on the radio control head.

# **Cancel Command**

At any prompt, after the beep, you can say "Cancel" and you will be returned to the main menu. However, in a few instances the system will take you back to the previous menu.

## Pair (Link) Uconnect® Phone To A Mobile Phone

To begin using your Uconnect<sup>®</sup> Phone, you must pair your compatible Bluetooth<sup>®</sup> enabled mobile phone.

To complete the pairing process, you will need to reference your mobile phone Owner's Manual. The Uconnect® website may also provide detailed instructions for pairing.

The following are general phone to Uconnect<sup>®</sup> Phone pairing instructions:

- Press the Subtron to begin.
- After the "Ready" prompt and the following beep, say "Device Pairing".
- When prompted, after the beep, say "Pair a Device" and follow the audible prompts.
- You will be asked to say a four-digit Personal Identification Number (PIN), which you will later need to

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enter into your mobile phone. You can enter any four-digit PIN. You will not need to remember this PIN after the initial pairing process.

- For identification purposes, you will be prompted to give the Uconnect<sup>®</sup> Phone a name for your mobile phone. Each mobile phone that is paired should be given a unique phone name.
- You will then be asked to give your mobile phone a priority level between one and seven, with one being the highest priority. You can pair up to seven mobile phones to your Uconnect® Phone. However, at any given time, only one mobile phone can be in use, connected to your Uconnect® System. The priority allows the Uconnect® Phone to know which mobile phone to use if multiple mobile phones are in the vehicle at the same time. For example, if priority three and priority five phones are present in the vehicle, the Uconnect® Phone will use the priority three mobile

phone when you make a call. You can select to use a lower priority mobile phone at any time (refer to "Advanced Phone Connectivity" in this section).

# Dial By Saying A Number

- Press the Subtron to begin.
- After the "Ready" prompt and the following beep, say "Dial".
- The system will prompt you to say the number you want to call.
- For example, you can say "151-1234 -5555".
- The Uconnect® Phone will confirm the phone number and then dial. The number will appear in the display of certain radios.

# Call By Saying A Name

- Press the 🍆 button to begin.
- After the "Ready" prompt and the following beep, say "Call".
- The system will prompt you to say the name of the person you want to call.
- After the "Ready" prompt and the following beep, say the name of the person you want to call. For example, you can say "John Doe", where John Doe is a previously stored name entry in the Uconnect® phonebook or downloaded phonebook. To learn how to store a name in the phonebook, refer to "Add Names to Your Uconnect® Phonebook".
- The Uconnect® system will confirm the name and then dial the corresponding phone number, which may appear in the display of certain radios.

## Add Names To Your Uconnect® Phonebook

**NOTE:** Adding names to the Uconnect® Phonebook is recommended when the vehicle is not in motion.

- Press the 🍆 button to begin.
- After the "Ready" prompt and the following beep, say "Phonebook New Entry".
- When prompted, say the name of the new entry. Use of long names helps the Voice Command and it is recommended. For example, say "Robert Smith" or "Robert" instead of "Bob".
- When prompted, enter the number designation (e.g., "Home", "Work", "Mobile", or "Other"). This will allow you to store multiple numbers for each phonebook entry, if desired.
- When prompted, recite the phone number for the phonebook entry that you are adding.

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After you are finished adding an entry into the phonebook, you will be given the opportunity to add more phone numbers to the current entry or to return to the main menu.

The Uconnect<sup>®</sup> Phone will allow you to enter up to 32 names in the phonebook with each name having up to four associated phone numbers and designations. Each language has a separate 32-name phonebook accessible only in that language. In addition, if equipped and supported by your phone, Uconnect<sup>®</sup> Phone automatically downloads your mobile phone's phonebook.

## Phonebook Download – Automatic Phonebook Transfer From Mobile Phone

If equipped and specifically supported by your phone, Uconnect<sup>®</sup> Phone automatically downloads names (text names) and number entries from your mobile phone's phonebook. Specific Bluetooth<sup>®</sup> Phones with Phone

Book Access Profile may support this feature. See Uconnect® website for supported phones.

- To call a name from the Uconnect® Phonebook or downloaded Phonebook, follow the procedure in "Call by Saying a Name" section.
- Automatic download and update, if supported, begins as soon as the Bluetooth® wireless phone connection is made to the Uconnect® Phone, for example, after you start the vehicle.
- A maximum of 1000 entries per phone will be downloaded and updated every time a phone is connected to the Uconnect® Phone.
- Depending on the maximum number of entries downloaded, there may be a short delay before the latest downloaded names can be used. Until then, if available, the previously downloaded phonebook is available for use.

- Only the phonebook of the currently connected mobile phone is accessible.
- Either the mobile phone's phonebook or the mobile phone's SIM card phonebook is downloaded.
- This downloaded phonebook cannot be edited or deleted on the Uconnect® Phone. These can only be edited on the mobile phone. The changes are transferred and updated to Uconnect® Phone on the next phone connection.

## Edit Uconnect® Phonebook Entries

**NOTE:** Editing phonebook entries is recommended when the vehicle is not in motion. Automatic downloaded phonebook entries cannot be deleted or edited.

- Press the **b**utton to begin.
- After the "Ready" prompt and the following beep, say "Phonebook Edit".

- You will then be asked for the name of the phonebook **Delete Uconnect**® **Phonebook Entry** entry that you wish to edit.
- Next, choose the number designation (home, work, mobile, or other) that you wish to edit.
- When prompted, recite the new phone number for the phonebook entry that you are editing.

After you are finished editing an entry in the phonebook, you will be given the opportunity to edit another entry in the phonebook, call the number you just edited, or return to the main menu.

"Phonebook Edit" can be used to add another phone number to a name entry that already exists in the phonebook. For example, the entry John Doe may have a mobile and a home number, but you can add "John Doe's" work number later using the "Phonebook Edit" feature.

NOTE: Editing phonebook entries is recommended when the vehicle is not in motion.

• Press the Subtraction to begin.

"Phonebook Delete".

- After the "Ready" prompt and the following beep, say
- After you enter the Phonebook Delete menu, you will then be asked for the name of the entry that you wish to delete. You can either say the name of a phonebook entry that you wish to delete or you can say "List Names" to hear a list of the entries in the phonebook from which you choose. To select one of the entries from the list, press the www.button while the Uconnect<sup>®</sup> Phone is playing the desired entry and say "Delete".

- After you enter the name, the Uconnect® Phone will ask you which designation you wish to delete: home, work, mobile, other, or all. Say the designation you wish to delete.
- Note that only the phonebook entry in the current language is deleted.
- Automatic downloaded phonebook entries cannot be deleted or edited.

# Delete/Erase "All" Uconnect® Phonebook Entries

- Press the 🍆 button to begin.
- After the "Ready" prompt and the following beep, say "Phonebook Erase All".
- The Uconnect® Phone will ask you to verify that you wish to delete all the entries from the phonebook.
- After confirmation, the phonebook entries will be deleted.

- Note that only the phonebook in the current language is deleted.
- Automatic downloaded phonebook entries cannot be deleted or edited.

# List All Names In The Uconnect® Phonebook

- Press the Subtron to begin.
- After the "Ready" prompt and the following beep, say "Phonebook List Names".
- The Uconnect® Phone will play the names of all the phonebook entries, including the downloaded phonebook entries, if available.
- To call one of the names in the list, press the in button during the playing of the desired name, and say "Call".

**NOTE:** The user can also exercise "Edit" or "Delete" operations at this point.

- The Uconnect® Phone will then prompt you as to the number designation you wish to call.
- The selected number will be dialed.

# **Phone Call Features**

The following features can be accessed through the Uconnect<sup>®</sup> Phone if the feature(s) are available on your mobile service plan. For example, if your mobile service plan provides three-way calling, this feature can be accessed through the Uconnect<sup>®</sup> Phone. Check with your mobile service provider for the features that you have.

# Answer Or Reject An Incoming Call — No Call Currently In Progress

When you receive a call on your mobile phone, the Uconnect<sup>®</sup> Phone will interrupt the vehicle audio system, if on, and will ask if you would like to answer the call. Press the **b**utton to accept the call. To reject the

# call, press and hold the Subutton until you hear a single beep, indicating that the incoming call was

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Answer Or Reject An Incoming Call — Call Currently In Progress

rejected.

If a call is currently in progress and you have another incoming call, you will hear the same network tones for call waiting that you normally hear when using your mobile phone. Press the button to place the current call on hold and answer the incoming call.

**NOTE:** The Uconnect<sup>®</sup> Phone compatible phones in the market today do not support rejecting an incoming call when another call is in progress. Therefore, the user can only answer an incoming call or ignore it.

# Making A Second Call While Current Call Is In Progress

To make a second call while you are currently on a call, press the for button and say "Dial" or "Call" followed by the phone number or phonebook entry you wish to call. The first call will be on hold while the second call is in progress. To go back to the first call, refer to "Toggling Between Calls" in this section. To combine two calls, refer to "Conference Call" in this section.

## Place/Retrieve A Call From Hold

To put a call on hold, press the **b** button until you hear a single beep. This indicates that the call is on hold. To bring the call back from hold, press and hold the **b** button until you hear a single beep.

# **Toggling Between Calls**

If two calls are in progress (one active and one on hold), press the **S** button until you hear a single beep,

indicating that the active and hold status of the two calls have switched. Only one call can be placed on hold at a time.

# **Conference Call**

When two calls are in progress (one active and one on hold), press and hold the **S** button until you hear a double beep indicating that the two calls have been joined into one conference call.

# Three-Way Calling

To initiate three-way calling, press the in button while a call is in progress, and make a second phone call, as described under "Making a Second Call While Current Call is in Progress". After the second call has established, press and hold the button until you hear a double beep, indicating that the two calls have been joined into one conference call.

To end a call in progress, momentarily press the **b**utton. Only the active call(s) will be terminated and if there is a call on hold, it will become the new active call. If the active call is terminated by the phone far end, a call on hold may not become active automatically. This is cell phone-dependent. To bring the call back from hold, press and hold the **b**utton until you hear a single beep.

# Redial

- Press the 🍆 button to begin.
- After the "Ready" prompt and the following beep, say "Redial".
- The Uconnect® Phone will call the last number that was dialed from your mobile phone.

**NOTE:** This may not be the last number dialed from the Uconnect® Phone.

# **Call Continuation**

Call continuation is the progression of a phone call on the Uconnect<sup>®</sup> Phone after the vehicle ignition has been switched to OFF. Call continuation functionality available on the vehicle can be any one of three types:

- After the ignition is switched to OFF, a call can continue on the Uconnect® Phone either until the call ends, or until the vehicle battery condition dictates cessation of the call on the Uconnect® Phone and transfer of the call to the mobile phone.
- After the ignition is cycled to OFF, a call can continue on the Uconnect® Phone for a certain duration, after which the call is automatically transferred from the Uconnect® Phone to the mobile phone.

• An active call is automatically transferred to the mobile phone after the ignition is cycled to OFF.

# **Uconnect® Phone Features**

# Language Selection

To change the language that the Uconnect® Phone is using:

- Press the Subtron to begin.
- After the "Ready" prompt and the following beep, say the name of the language you wish to switch to English, Espanol, or Francais.
- Continue to follow the system prompts to complete the language selection.

After selecting one of the languages, all prompts and voice commands will be in that language.

**NOTE:** After every Uconnect<sup>®</sup> Phone language change operation, only the language-specific 32-name phonebook is usable. The paired phone name is not language-specific and is usable across all languages.

# **Emergency Assistance**

If you are in an emergency and the mobile phone is reachable:

• Pick up the phone and manually dial the emergency number for your area.

If the phone is not reachable and the Uconnect<sup>®</sup> Phone is operational, you may reach the emergency number as follows:

- Press the Subtron to begin.
- After the "Ready" prompt and the following beep, say "Emergency" and the Uconnect<sup>®</sup> Phone will instruct

the paired mobile phone to call the emergency number. This feature is supported in the U.S., Canada, and Mexico.

# NOTE:

- The emergency number dialed is based on the country where the vehicle is purchased (911 for the U.S. and Canada and 060 for Mexico). The number dialed may not be applicable with the available mobile service and area.
- If supported, this number may be programmable on some systems. To do this, press the button and say "Setup", followed by "Emergency".
- The Uconnect<sup>®</sup> Phone does slightly lower your chances of successfully making a phone call as to that for the mobile phone directly.

# WARNING!

To use you Uconnect<sup>®</sup> Phone System in an emergency, your mobile phone must be:

- turned on,
- paired to the Uconnect® System,
- and have network coverage.

## **Roadside Assistance / Towing Assistance**

If you need roadside assistance:

- Press the 🍆 button to begin.
- After the "Ready" prompt and the following beep, say "Towing Assistance".

**NOTE:** You should program the desired Towing Assistance phone number using the Voice Command system. To do this, press the button and say "Setup", followed by "Towing Assistance". When prompted say 1-800-528-2069 for the U.S., say 1-800-363-4869 for Canada, say 55-14-3454 for Mexico City and 1-800-712-3040 for outside Mexico City in Mexico.

# Paging

To learn how to page, refer to "Working with Automated Systems". Paging works properly except for pagers of certain companies, which time out a little too soon to work properly with the Uconnect® Phone.

# Voice Mail Calling

To learn how to access your voice mail, refer to "Working with Automated Systems".

# Working With Automated Systems

This method is used in instances where one generally has to press numbers on the mobile phone keypad while navigating through an automated telephone system.

You can use your Uconnect<sup>®</sup> Phone to access a voice mail system or an automated service, such as a paging service or automated customer service line. Some services require immediate response selection. In some instances, that may be too quick for use of the Uconnect<sup>®</sup> Phone.

When calling a number with your Uconnect® Phone that normally requires you to enter in a touch-tone sequence on your mobile phone keypad, you can press the <sup>6</sup>/<sub>2</sub><sup>m</sup> button and say the sequence you wish to enter, followed by the word "Send". For example, if required to enter your PIN followed with a pound, (3 7 4 6 #), you can press the <sup>6</sup>/<sub>2</sub><sup>m</sup> button and say, "3 7 4 6 # Send". Saying a number, or sequence of numbers, followed by "Send", is also to be used for navigating through an automated customer service center menu structure, and to leave a number on a pager.

You can also send stored Uconnect® phonebook entries as tones for fast and easy access to voice mail and pager entries. To use this feature, dial the number you wish to call and then press the *w* button and say, "Send." The system will prompt you to enter the name or number and say the name of the phonebook entry you wish to send. The Uconnect® Phone will then send the corresponding phone number associated with the phonebook entry, as tones over the phone.

## NOTE:

• You may not hear all of the tones due to mobile phone network configurations. This is normal.

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• Some paging and voice mail systems have system time out settings that are too short and may not allow the use of this feature.

# Barge In — Overriding Prompts

The "Voice Command" button can be used when you wish to skip part of a prompt and issue your voice command immediately. For example, if a prompt is asking "Would you like to pair a phone, clear a...," you could press the www button and say, "Pair a Phone" to select that option without having to listen to the rest of the voice prompt.

# **Turning Confirmation Prompts ON/OFF**

Turning confirmation prompts off will stop the system from confirming your choices (e.g., the Uconnect® Phone will not repeat a phone number before you dial it).

• Press the Subtron to begin.

- After the "Ready" prompt and the following beep, say one of the following:
  - "Setup Confirmation Prompts On"
  - "Setup Confirmation Prompts Off"

## Phone And Network Status Indicators

If available on the radio and/or on a premium display such as the instrument panel cluster, and supported by your mobile phone, the Uconnect® Phone will provide notification to inform you of your phone and network status when you are attempting to make a phone call using Uconnect® Phone. The status is given for network signal strength, phone battery strength, etc.

# Dialing Using The Mobile Phone Keypad

You can dial a phone number with your mobile phone keypad and still use the Uconnect<sup>®</sup> Phone (while dialing via the mobile phone keypad, the user must exercise caution and take precautionary safety measures). By

dialing a number with your paired Bluetooth® mobile phone, the audio will be played through your vehicle's audio system. The Uconnect® Phone will work the same as if you dial the number using Voice Command.

**NOTE:** Certain brands of mobile phones do not send the dial ring to the Uconnect® Phone to play it on the vehicle audio system, so you will not hear it. Under this situation, after successfully dialing a number the user may feel that the call did not go through even though the call is in progress. Once your call is answered, you will hear the audio.

## Mute/Un-Mute (Mute ON/OFF)

When you mute the Uconnect<sup>®</sup> Phone, you will still be able to hear the conversation coming from the other party, but the other party will not be able to hear you. In order to mute the Uconnect<sup>®</sup> Phone:

Press the Wm button.

• Following the beep, say "Mute".

In order to un-mute the Uconnect® Phone:

- Press the Www button.
- Following the beep, say "Mute off".

### **Advanced Phone Connectivity**

### Transfer Call To And From Mobile Phone

The Uconnect® Phone allows ongoing calls to be transferred from your mobile phone to the Uconnect® Phone without terminating the call. To transfer an ongoing call from your Uconnect® Phone paired mobile phone to the Uconnect® Phone or vice versa, press the <sup>Mare</sup> button and say "Transfer Call".

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# Connect Or Disconnect Link Between The Uconnect<sup>®</sup> Phone And Mobile Phone

Your mobile phone can be paired with many different electronic devices, but can only be actively "connected" with one electronic device at a time.

If you would like to connect or disconnect the Bluetooth® connection between your mobile phone and the Uconnect® Phone System, follow the instructions described in your mobile phone User's Manual.

## List Paired Mobile Phone Names

- Press the Subtron to begin.
- After the "Ready" prompt and the following beep, say "Setup Phone Pairing".
- When prompted, say "List Phones".
- The Uconnect® Phone will play the phone names of all paired mobile phones in order from the highest to the

lowest priority. To "Select" or "Delete" a paired phone being announced, press the "Select" or "Delete". Also, see the next two sections for an alternate way to "Select" or "Delete" a paired phone.

## Select Another Mobile Phone

This feature allows you to select and start using another phone paired with the Uconnect® Phone.

- Press the Subtron to begin.
- After the "Ready" prompt and the following beep, say "Setup Select Phone" and follow the prompts.
- You can also press the button at any time while the list is being played, and then choose the phone that you wish to select.
- The selected phone will be used for the next phone call. If the selected phone is not available, the

Uconnect<sup>®</sup> Phone will return to using the highest priority phone present in or near (approximately within 30 ft. (9 m)) the vehicle.

# Delete Uconnect<sup>®</sup> Phone Paired Mobile Phones

- Press the 🍆 button to begin.
- After the "Ready" prompt and the following beep, say "Setup Phone Pairing".
- At the next prompt, say "Delete" and follow the prompts.
- You can also press the button at any time while the list is being played, and then choose the phone you wish to delete.

# Things You Should Know About Your Uconnect® Phone

# **Uconnect® Phone Tutorial**

To hear a brief tutorial of the system features, press the button and say "Uconnect® Tutorial."

# Voice Training

For users experiencing difficulty with the system recognizing their voice commands or numbers, the Uconnect® Phone Voice Training feature may be used. To enter this training mode, follow one of the two following procedures:

From outside the Uconnect® Phone mode (e.g., from radio mode):

• Press and hold the who button for five seconds until the session begins, or,

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• Press the Werbutton and say the "Voice Training", "System Training", or "Start Voice Training" command.

You can either press the Uconnect<sup>®</sup> Phone button to restore the factory setting or repeat the words and phrases when prompted by the Uconnect<sup>®</sup> Phone. For best results, the Voice Training session should be completed when the vehicle is parked with the engine running, all windows closed, and the blower fan switched off.

This procedure may be repeated with a new user. The system will adapt to the last trained voice only.

Reset

- Press the 🍆 button.
- After the "Ready" prompt, and the following beep, say "Setup", then "Reset".

This will delete all phone pairing, phone book entries, and other settings in all language modes. The System will prompt you before resetting to factory settings.

# Voice Command

- For best performance, adjust the rearview mirror to provide at least ½ in (1 cm) gap between the overhead console (if equipped) and the mirror.
- Always wait for the beep before speaking.
- Speak normally without pausing, just as you would speak to a person sitting a few feet/meters away from you.
- Make sure that no one other than you is speaking during a Voice Command period.
- Performance is maximized under:
  - low-to-medium blower setting,
  - low-to-medium vehicle speed,

- low road noise,
- smooth road surface,
- fully closed windows,
- dry weather condition.
- Even though the system is designed for users speaking in North American English, French, and Spanish accents, the system may not always work for some.
- When navigating through an automated system such as voice mail, or when sending a page, at the end of speaking the digit string, make sure to say "Send".
- Storing names in the phonebook when the vehicle is not in motion is recommended.
- It is not recommended to store similar sounding names in the Uconnect® Phonebook.

- Phonebook (Downloaded and Uconnect® Phone Local) name recognition rate is optimized when the entries are not similar.
- Numbers must be spoken in single digits. "800" must be spoken "eight-zero-zero" not "eight hundred".
- You can say "O" (letter "O") for "0" (zero).
- Even though international dialing for most number combinations is supported, some shortcut dialing number combinations may not be supported.
- In a convertible vehicle, system performance may be compromised with the convertible top down.

# Far End Audio Performance

- Audio quality is maximized under:
  - low-to-medium blower setting,
  - low-to-medium vehicle speed,
  - low road noise,

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- smooth road surface,
- fully closed windows,
- dry weather conditions, and
- operation from the driver's seat.
- Performance, such as audio clarity, echo, and loudness to a large degree rely on the phone and network, and not the Uconnect® Phone.
- Echo at the phone far end can sometimes be reduced by lowering the in-vehicle audio volume.
- In a convertible vehicle, system performance may be compromised with the convertible top down.

## **Recent Calls**

If your phone supports "Automatic Phonebook Download", Uconnect® Phone can list your Outgoing, Incoming and Missed Calls.

# Voice Text Reply

Uconnect® Phone can read or send new messages on your phone.

# **Read Messages:**

If you receive a new text message while your phone is connected to Uconnect® Phone, an announcement will be made to notify you that you have a new text message. If you wish to hear the new message:

- Press the 🌭 button.
- After the "Ready" prompt and the following beep, say "SMS Read" or "Read Messages."
- Uconnect<sup>®</sup> Phone will play the new text message for you.

After reading a message, you can "Reply" or "Forward" the message using Uconnect® Phone.

# Send Messages:

You can send messages using Uconnect® Phone. To send a new message:

- Press the 🌭 button.
- After the "Ready" prompt and the following beep, say "SMS Send" or "Send Message."
- You can either say the message you wish to send or say "List Messages." There are 20 preset messages.

To send a message, press the important button while the system is listing the message and say "Send."

Uconnect<sup>®</sup> Phone will prompt you to say the name or number of the person you wish to send the message to.

List of Preset Messages:

1. Yes

2. No

- 4. I need more direction.
- 5. L O L
- 6. Why
- 7. I love you
- 8. Call me
- 9. Call me later
- 10. Thanks
- 11. See You in 15 minutes
- 12. I am on my way
- 13. I'll be late
- 14. Are you there yet?
- 15. Where are we meeting?

- 16. Can this wait?
- 17. Bye for now
- 18. When can we meet?
- 19. Send number to call
- 20. Start without me

# Turn Voice Text Reply Incoming Announcement ON/ OFF

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Turning the Voice Text Reply Incoming Announcement OFF will stop the system from announcing the new incoming messages.

- Press the 🍆 button.
- After the "Ready" prompt and the following beep, say "Setup, Incoming Message Announcement", you will then be given a choice to change it.

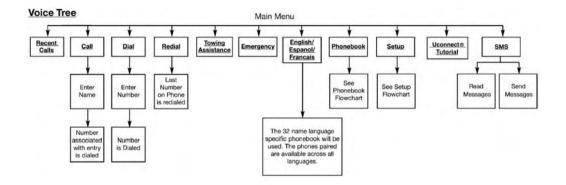
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# Bluetooth® Communication Link

Mobile phones have been found to lose connection to the Uconnect® Phone. When this happens, the connection can generally be reestablished by switching the phone off/on. Your mobile phone is recommended to remain in Bluetooth® ON mode.

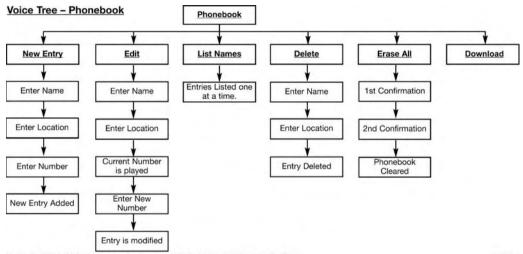
# Power-Up

After switching the ignition key from OFF to either the ON or ACC position, or after a language change, you must wait at least fifteen seconds prior to using the system.



Note: Available Voice commands are shown in bold face and are underlined.

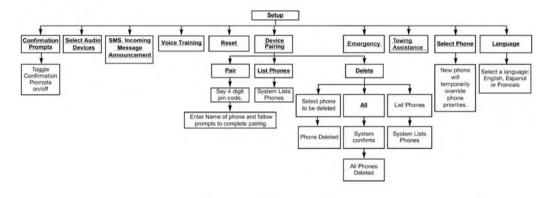
030772523



Note: Available Voice commands are shown in bold face and are underlined.

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#### Voice Tree - Setup



Note: Available Voice commands are shown in bold face and are underlined. 030605540

| Voice Commands |               |
|----------------|---------------|
| Primary        | Alternate (s) |
| zero           |               |
| one            |               |
| two            |               |
| three          |               |
| four           |               |
| five           |               |
| six            |               |
| seven          |               |
| eight          |               |
| nine           |               |
| star (*)       |               |
| plus (+)       |               |
| pound (#)      |               |
| add location   |               |

| Voice Commands       |               |  |
|----------------------|---------------|--|
| Primary              | Alternate (s) |  |
| all                  |               |  |
| call                 |               |  |
| cancel               |               |  |
| confirmation prompts |               |  |
| continue             |               |  |
| delete               |               |  |
| dial                 |               |  |
| download             |               |  |
| edit                 |               |  |
| emergency            |               |  |
| English              |               |  |
| erase all            |               |  |
| Espanol              |               |  |
| Francais             |               |  |
|                      |               |  |

| Voice Commands |               |
|----------------|---------------|
| Primary        | Alternate (s) |
| help           |               |
| home           |               |
| language       |               |
| list names     |               |
| list phones    |               |
| mobile         |               |
| mute           |               |
| mute off       |               |
| new entry      |               |
| no             |               |
| other          |               |
| pair a phone   |               |
| phone pairing  | pairing       |
| phonebook      | phone book    |

| Voice Commands                 |                                   |  |
|--------------------------------|-----------------------------------|--|
| Primary                        | Alternate (s)                     |  |
| previous                       |                                   |  |
| record again                   |                                   |  |
| redial                         |                                   |  |
| return to main menu            | return or main menu               |  |
| select phone                   | select                            |  |
| send                           |                                   |  |
| set up                         | phone settings or phone<br>set up |  |
| towing assistance              |                                   |  |
| transfer call                  |                                   |  |
| Uconnect <sup>®</sup> Tutorial |                                   |  |
| voice training                 |                                   |  |
| work                           |                                   |  |
| yes                            |                                   |  |
|                                |                                   |  |

## General Information

This device complies with Part 15 of the FCC rules and RSS 210 of Industry Canada. Operation is subject to the following conditions:

- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

# VOICE COMMAND — IF EQUIPPED

## **Voice Command System Operation**



The Uconnect® Voice Command system allows you to control your AM, FM radio, disk player, USB mass storage class device, iPod® family of devices, Bluetooth Streaming Audio Device, satellite radio, disc player, and a memo recorder.

NOTE: Take care to speak into the Voice Interface System as calmly and normally as possible. The ability of the Voice Interface System to recognize user voice commands may be negatively affected by rapid speaking or a raised voice level.

# WARNING!

Any voice commanded system should be used only in safe driving conditions following all applicable laws. Your attention should be focused on safely operating the vehicle. Failure to do so may result in a collision causing serious injury or death.

When you press the Voice Command for button, you will hear a beep. The beep is your signal to give a command.

**NOTE:** If you do not say a command within a few seconds, the system will present you with a list of options.

If you ever wish to interrupt the system while it lists options, press the Voice Command for button, listen for the beep, and say your command.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 173

Pressing the Voice Command **%** button while the system is speaking is known as "barging in." The system will be interrupted, and after the beep, you can add or change commands. This will become helpful once you start to learn the options.

**NOTE:** At any time, you can say the words "Cancel", "Help" or "Main Menu".

These commands are universal and can be used from any menu. All other commands can be used depending upon the active application.

When using this system, you should speak clearly and at a normal speaking volume.

The system will best recognize your speech if the windows are closed, and the heater/air conditioning fan is set to low.

At any point, if the system does not recognize one of your commands, you will be prompted to repeat it.

To hear the first available Menu, press the Voice Command I mand say "Help" or "Main Menu".

# Commands

The Voice Command system understands two types of commands. Universal commands are available at all times. Local commands are available if the supported radio mode is active.

# Changing the Volume

- 1. Start a dialogue by pressing the Voice Command www.button.
- 2. Say a command (e.g., "Help").
- 3. Use the ON/OFF VOLUME rotary knob to adjust the volume to a comfortable level while the Voice Command system is speaking. Please note the volume setting for Voice Command is different than the audio system.

## Main Menu

Start a dialogue by pressing the Voice Command a button. You may say "Main Menu" to switch to the main menu.

In this mode, you can say the following commands:

- "Radio AM" (to switch to the radio AM mode)
- "Radio FM" (to switch to radio FM mode)
- "Sat" (to switch to Satellite radio mode)
- "Disc" (to switch to the disc mode)
- "USB" (to switch to USB mode)
- "Bluetooth Streaming" (to switch to Bluetooth® Streaming mode)
- "Memo" (to switch to the memo recorder)
- "System Setup" (to switch to system setup)

#### Radio AM

To switch to the AM band, say "AM" or "Radio AM". In this mode, you may say the following commands:

- "Frequency #" (to change the frequency)
- "Next Station" (to select the next station)
- "Previous Station" (to select the previous station)
- "Radio Menu" (to switch to the radio menu)
- "Main Menu" (to switch to the main menu)

## Radio FM

To switch to the FM band, say "FM" or "Radio FM". In this mode, you may say the following commands:

- "Frequency #" (to change the frequency)
- "Next Station" (to select the next station)
- "Previous Station" (to select the previous station)

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 175

- "Menu Radio" (to switch to the radio menu)
- "Main Menu" (to switch to the main menu)

# Satellite Radio

To switch to satellite radio mode, say "Sat" or "Satellite Radio". In this mode, you may say the following commands:

- "Channel Number" (to change the channel by its spoken number)
- "Next Channel" (to select the next channel)
- "Previous Channel" (to select the previous channel)
- "List Channel" (to hear a list of available channels)
- "Select Name" (to say the name of a channel)
- "Menu Radio" (to switch to the radio menu)
- "Main Menu" (to switch to the main menu)

## Disc Mode

To switch to the disc mode, say "Disc". In this mode, you may say the following commands:

- "Track" (#) (to change the track)
- "Next Track" (to play the next track)
- "Previous Track" (to play the previous track)
- "Main Menu" (to switch to the main menu)

# USB Mode

To switch to USB mode, say "USB". In this mode, you may say the following commands:

- "Next Track" (to play the next track)
- "Previous Track" (to play the previous track)
- "Play" (to play a Artist Name, Playlist Name, Album Name, Track Name, etc.)

# Bluetooth<sup>®</sup> Streaming (BT) Mode

To switch to Bluetooth® Streaming (BT) mode, say "Bluetooth Streaming". In this mode, you may say the following commands:

- "Next Track" (to play the next track)
- "Previous Track" (to play the previous track)
- "List" (to list an Artist, Playlist, Album, Track, etc.)

# Memo Mode

To switch to the voice recorder mode, say "Memo". In this mode, you may say the following commands:

- "New Memo" (to record a new memo) During the recording, you may press the Voice Command and button to stop recording. You proceed by saying one of the following commands:
  - "Save" (to save the memo)
  - "Continue" (to continue recording)

• "Switch to setup"

• "Main menu setup" or

In this mode, you may say the following commands:

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- "Language English"
- "Language French"
- "Language Spanish"
- "Tutorial"
- "Voice Training"

**NOTE:** Keep in mind that you have to press the Voice Command for button first and wait for the beep before speaking the "Barge In" commands.

- "Play Memos" (to play previously recorded memos) During the playback you may press the Voice Command for button to stop playing memos. You proceed by saying one of the following commands:
  - "Repeat" (to repeat a memo)
  - "Next" (to play the next memo)
  - "Previous" (to play the previous memo)
  - "Delete" (to delete a memo)
- "Delete All" (to delete all memos)

### Setup

To switch to system setup, you may say one of the following:

- "Change to setup"
- "Switch to system setup"

# **Voice Training**

For users experiencing difficulty with the system recognizing their voice commands or numbers the Uconnect® Voice "Voice Training" feature may be used.

- 1. Press the Voice Command More button, say "System Setup" and once you are in that menu then say "Voice Training." This will train your own voice to the system and will improve recognition.
- 2. Repeat the words and phrases when prompted by Uconnect® Voice. For best results, the "Voice Training" session should be completed when the vehicle is parked, engine running, all windows closed, and the blower fan switched off. This procedure may be repeated with a new user. The system will adapt to the last trained voice only.

# SEATS

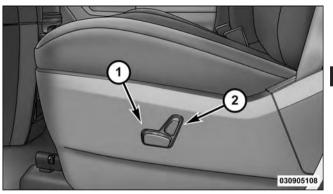
Seats are a part of the Occupant Restraint System of the vehicle.

# WARNING!

- It is dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, 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 seat belts. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

### Power Seats — If Equipped

Some models may be equipped with eight-way power seats for the driver and front passenger. The power seat switches are located on the outboard side of the seat. The switches control the movement of the seat cushion and the seatback.



**Driver Power Seat Switch** 

| — Seat Switch | 2 — | Seatback | Switch |
|---------------|-----|----------|--------|
|---------------|-----|----------|--------|

## WARNING!

- Adjusting a seat while driving may be dangerous. Moving a seat while driving could result in loss of control which could cause a collision and serious injury or death.
- Seats should be adjusted before fastening the seat belts and while the vehicle is parked. Serious injury or death could result from a poorly adjusted seat belt.
- Do not ride with the seatback reclined so that the shoulder belt is no longer resting against your chest. In a collision you could slide under the seat belt, which could result in serious injury or death.

# **CAUTION!**

Do not place any article under a power seat or impede its ability to move as it may cause damage to the seat controls. Seat travel may become limited if movement is stopped by an obstruction in the seat's path.

### Adjusting The Seat Forward Or Rearward

The seat can be adjusted both forward and rearward. Push the seat switch forward or rearward, the seat will move in the direction of the switch. Release the switch when the desired position has been reached.

### Adjusting The Seat Up Or Down

The height of the seats can be adjusted up or down. Pull upward or push downward on the seat switch, the seat will move in the direction of the switch. Release the switch when the desired position has been reached.

### Tilting The Seat Up Or Down

The angle of the seat cushion can be adjusted in four directions. Pull upward or push downward on the front or rear of the seat switch, the front or rear of the seat cushion will move in the direction of the switch. Release the switch when the desired position has been reached.

### **Reclining The Seatback**

The angle of the seatback can be adjusted forward or rearward. Push the seatback switch forward or rearward, the seat will move in the direction of the switch. Release the switch when the desired position is reached.

### WARNING!

• Adjusting a seat while driving may be dangerous. Moving a seat while driving could result in loss of

(Continued)

### WARNING! (Continued)

control which could cause a collision and serious injury or death.

- Seats should be adjusted before fastening the seat belts and while the vehicle is parked. Serious injury or death could result from a poorly adjusted seat belt.
- Do not ride with the seatback reclined so that the shoulder belt is no longer resting against your chest. In a collision you could slide under the seat belt, which could result in serious injury or death.

### **CAUTION!**

Do not place any article under a power seat or impede its ability to move as it may cause damage to the seat controls. Seat travel may become limited if

### 3

#### (Continued)

### CAUTION! (Continued)

movement is stopped by an obstruction in the seat's path.

### Power Lumbar — If Equipped

Vehicles equipped with power driver or passenger seats may also be equipped with power lumbar. The power lumbar switch is located on the outboard side of the power seat. Push the switch forward to increase the lumbar support. Push the switch rearward to decrease the lumbar support.



### Power Lumbar Switch Heated Seats — If Equipped

On some models, the front and rear seats may be equipped with heaters located in the seat cushions.

### WARNING!

- Persons who are unable to feel pain to the skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion or other physical condition must exercise care when using the seat heater. It may cause burns even at low temperatures, especially if used for long periods of time.
- Do not place anything on the seat or seatback that insulates against heat, such as a blanket or cushion. This may cause the seat heater to overheat. Sitting in a seat that has been overheated could cause serious burns due to the increased surface temperature of the seat.

### Vehicles Equipped With Remote Start

On models that are equipped with remote start, the driver's heated seat can be programmed to come on

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during a remote start. Refer to "Remote Starting System — If Equipped" in "Things To Know Before Starting Your Vehicle" for further information.

### **Front Heated Seats**

There are two heated seat switches that allow the driver and passenger to operate the seats independently. The controls for each heater are located on the switch bank below the climate controls.

You can choose from HIGH, LOW or OFF heat settings. Amber indicator lights in each switch indicate the level of heat in use. Two indicator lights will illuminate for HIGH, one for LOW and none for OFF.

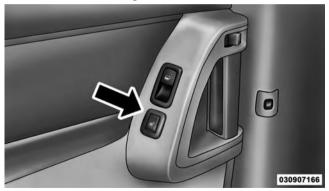


Press the switch once to select HIGH-level heating. Press the switch a second time to select LOW-level heating. Press the switch a third time to shut the heating elements OFF.

NOTE: Once a heat setting is selected, heat will be felt Rear Heated Seats within two to five minutes.

When the HIGH-level setting is selected, the heater will provide a boosted heat level during the initial stages of operation. Then, the heat output will drop to the normal HIGH-level. If the HIGH-level setting is selected, the system will automatically switch to LOW-level after approximately 60 minutes of continuous operation. At that time, the display will change from HIGH to LOW, indicating the change. The LOW-level setting will turn OFF automatically after approximately 45 minutes.

On some models, the second row seats are equipped with heaters. There are two heated seat switches that allow the second row passengers to operate the seats independently. The heated seat switches are located on the sliding side door handle trim panels.



Second Row Heated Seat Switch

You can choose from HIGH, LOW or OFF heat settings. Amber indicator lights in each switch indicate the level of heat in use. Two indicator lights will illuminate for HIGH, one for LOW and none for OFF.



Press the switch once to select HIGH-level heating. Press the switch a second time to select LOW-level heating. Press the switch a third time to shut the heating elements OFF.

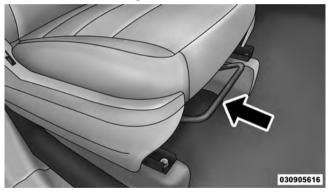
NOTE: Once a heat setting is selected, heat will be felt within two to five minutes.

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When the HIGH-level setting is selected, the heater will provide a boosted heat level during the initial stages of operation. Then, the heat output will drop to the normal HIGH-level. If the HIGH-level setting is selected, the system will automatically switch to LOW-level after 3 approximately 60 minutes of continuous operation. At that time, the display will change from HIGH to LOW, indicating the change. The LOW-level setting will turn OFF automatically after approximately 45 minutes.

### Manual Front/Second Row Seat Adjuster

Both front seats are adjustable forward or rearward. The manual seat adjustment handle is located under the seat cushion at the front edge of each seat.



Manual Seat Adjuster

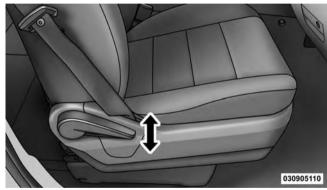
While sitting in the seat, pull up on the handle and slide the seat forward or rearward. Release the bar once you have reached the desired position. Then, using body pressure, move forward and rearward on the seat to be sure that the seat adjusters have latched.

### WARNING!

- Adjusting a seat while driving may be dangerous. Moving a seat while driving could result in loss of control which could cause a collision and serious injury or death.
- Seats should be adjusted before fastening the seat belts and while the vehicle is parked. Serious injury or death could result from a poorly adjusted seat belt.

### Manual Reclining Seats — If Equipped

For models equipped with manual reclining seats, the recline lever is located on the outboard side of the seat.



Manual Recline Lever

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 187

To recline, lean forward slightly, lift the lever, then push back to the desired position and release the lever. Lean forward and lift the lever to return the seatback to its normal position. Using body pressure, lean forward and rearward on the seat to be sure the seatback has latched. **3** 

### WARNING!

Do not ride with the seatback reclined so that the shoulder belt is no longer resting against your chest. In a collision you could slide under the seat belt, which could result in serious injury or death.

### **Head Restraints**

Head restraints are designed to reduce the risk of injury by restricting head movement in the event of a rear impact. Head restraints should be adjusted so that the top of the head restraint is located above the top of your ear.

### WARNING!

The head restraints for all occupants must be properly adjusted prior to operating the vehicle or occupying a seat. Head restraints should never be adjusted while the vehicle is in motion. Driving a vehicle with the head restraints improperly adjusted or removed could cause serious injury or death in the event of a collision.

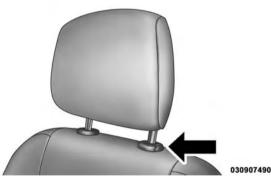
### Active Head Restraints — Front Seats

Active Head Restraints are passive, deployable components, and vehicles with this equipment cannot be readily identified by any markings, only through visual inspection of the head restraint. The head restraint will be split in two halves, with the front half being soft foam and trim, the back half being decorative plastic.

When AHRs deploy during a rear impact, the front half of the head restraint extends forward to minimize the gap between the back of the occupant's head and the AHR. This system is designed to help prevent or reduce the extent of injuries to the driver and front passenger in certain types of rear impacts. Refer to "Occupant Restraints" in "Things To Know Before Starting Your Vehicle" for further information

To raise the head restraint, pull upward on the head restraint. To lower the head restraint, press the push button, located at the base of the head restraint, and push downward on the head restraint.

the back of your head, pull forward on the bottom of the head restraint. Push rearward on the bottom of the head restraint to move the head restraint away from your head.



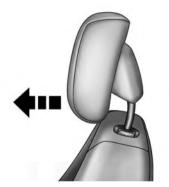
**Push Button** 

For comfort the Active Head Restraints can be tilted forward and rearward. To tilt the head restraint closer to



022607494

Active Head Restraint (Normal Position)



030907533

Active Head Restraint (Tilted)

### NOTE:

• The head restraints should only be removed by qualified technicians, for service purposes only. If either of the head restraints require removal, see your authorized dealer. • In the event of deployment of an Active Head Restraint, refer to "Occupant Restraints/Resetting Active Head Restraints (AHR)" in "Things To Know Before Starting Your Vehicle" for further information.

### WARNING!

- Do not place items over the top of the Active Head Restraint, such as coats, seat covers or portable DVD players. These items may interfere with the operation of the Active Head Restraint in the event of a collision and could result in serious injury or death.
- Active Head Restraints may be deployed if they are struck by an object such as a hand, foot or loose cargo. To avoid accidental deployment of the Active Head Restraint ensure that all cargo is secured,

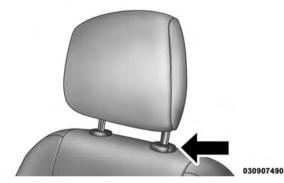
(Continued)

### WARNING! (Continued)

as loose cargo could contact the Active Head Restraint during sudden stops. Failure to follow this warning could cause personal injury if the Active Head Restraint is deployed.

### Head Restraints - Second Row Quad Seats

To raise the head restraint, pull upward on the head restraint. To lower the head restraint, press the push button, located at the base of the head restraint, and push downward on the head restraint.



### Push Button Head Restraints — Second Row Bench

To raise the head restraint, pull upward on the head restraint. To lower the head restraint, press the push button, located at the base of the head restraint, and push downward on the head restraint.

### Head Restraints — Third Row

The head restraint in the center position can be raised and lowered for tether routing. Refer to "Occupant Restraints" in "Things To Know Before Starting Your Vehicle" for further information.

### Stow 'n Go® Seating — If Equipped

On vehicles equipped with Stow 'n Go® seating, the second and third row seats can be folded into the floor for convenient storage.

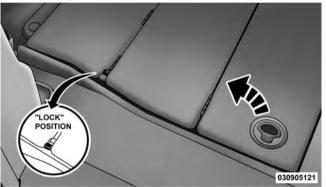
### Second Row Stow 'n Go®

On vehicles equipped with Stow 'n Go® seats, the seats will fold and tumble in one motion.

- 1. Move the front seat fully forward.
- 2. Recline the front seatback fully forward.
- 3. Raise the armrests on the second row seat.

**NOTE:** Seat will not stow in the storage bin unless the armrests are raised.

4. Slide the storage bin locking mechanism to the "LOCK" position and then pull up on the storage bin latch to open the cover.



Storage Bin Cover Lock Release

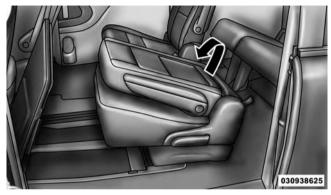
5. Pull upward on the seatback recliner lever located on the outboard side of the seat.



Seatback Recliner Lever, Seat Tumble, And Head Restraint Fold Lever The non-adjustable head restraint and seatback will fold automatically during the seat tumble. No additional actuation is necessary.

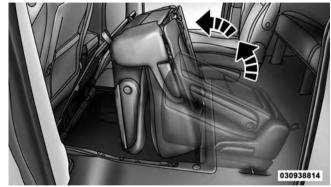


Non-Adjustable Head Restraint



Automatic Folding Seatback

The seat will automatically tumble into position for easy storage.



Tumbled Second Row Seat



Seat In Storage Bin

7. Close the storage bin cover.

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### **CAUTION!**

The storage bin cover must be locked and flat to avoid damage from contact with the front seat tracks, which have minimal clearance to the cover.

### WARNING!

In a collision, serious injury could result if the seat storage bin covers are not properly latched.

- Do not drive the vehicle with the storage bin covers open.
- Keep the storage bin covers closed and latched while the vehicle is in motion.
- Do not use a storage bin latch as a tie down.

### To Unstow Second Row Seats

- 1. Pull up on the storage bin latch to open the cover.
- 2. Pull up on the strap to lift the seat out of the storage bin and push the seat rearward to latch the seat anchors.
- 3. Lift the seatback to the full upright position.
- 4. Return the head restraint to its upright position, close the storage bin cover and slide the storage bin locking mechanism to the "Unlocked" position.

### Stow 'n Go® Seat - Folded And Latched Position

To tumble or stow the seat from the folded and latched position: return the seatback and head restraint to the upright position. Then pull up on the seatback recliner

lever on the outboard side of the seat to fold head rest and seatback and tumble seat forward.

1. Return the seatback to the upright position.



**Raising The Seatback** 

2. Return the head restraint to the upright position.



**Raising The Head Restraint** 

3. Pull up on the seatback recliner lever on the outboard side of the seat to fold head rest and seatback and tumble seat forward.

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### Easy Entry Second Row

The second row Stow 'n Go® seats allow easy entry to the third row seat or rear cargo area.

Pull up on the seatback recliner lever on the outboard 3 side of the seat.



Seatback Recliner Lever, Seat Tumble, And Head **Restraint Fold Lever** 

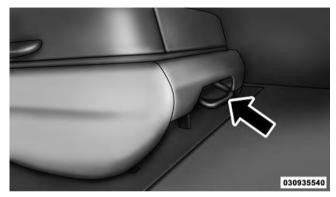
The seat will automatically fold into position for easy entry into the third row.

### WARNING!

In the event of a collision you could be injured if the seat is not fully latched.

### Quad Seats — If Equipped

Both Quad seats are adjustable forward or rearward. The manual seat adjustment handle is located under the seat cushion at the front edge of each seat.



#### Manual Seat Adjuster

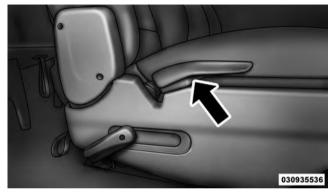
While sitting in the seat, pull up on the handle and slide the seat forward or rearward. Release the bar once you have reached the desired position. Then, using body pressure, move forward and rearward on the seat to be sure that the seat adjusters have latched.

### WARNING!

- Adjusting a seat while driving may be dangerous. Moving a seat while driving could result in loss of control which could cause a collision and serious injury or death.
- Seats should be adjusted before fastening the seat belts and while the vehicle is parked. Serious injury or death could result from a poorly adjusted seat belt.

#### Manual Recline

To recline, lean forward slightly, lift the lever, then push back to the desired position and release the lever. Lean forward and lift the lever to return the seatback to its normal position. Using body pressure, lean forward and rearward on the seat to be sure the seatback has latched.



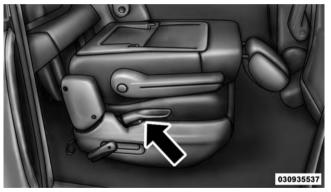
#### **Recline Lever**

### WARNING!

Do not ride with the seatback reclined so that the shoulder belt is no longer resting against your chest. In a collision you could slide under the seat belt, which could result in serious injury or death.

### Fold-Flat

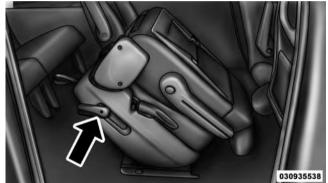
To fold the seat, lift the recliner lever to the full upward position and push the seatback forward until it rests on the seat cushion.

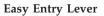


Fold-Flat Quad Seat

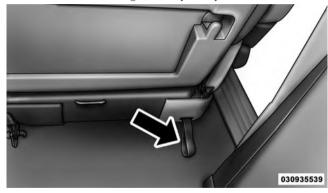
### Easy Entry

The Quad seats can be tilted forward for easy entry into the third row. With the Quad seat in the fold-flat position, lift up on the easy entry lever located near the bottom of the seat and lift the seat forward.





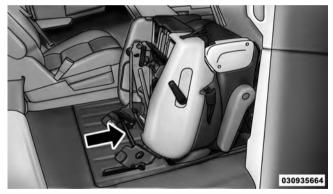
For passengers seated in the third row, there is a pull strap located on the outboard side of the seat near the bottom of the seat back. Third row passengers can pull on the strap and push the Quad seat forward for folding the seatback and accessing the easy entry lever.



Pull Strap for Third Row Passengers

#### Removal

The Quad seats can be removed if additional storage is needed. With the seat in the easy entry position, lift the cross beam forward and up to release the front anchor latches.



**Cross Beam For Seat Removal** 

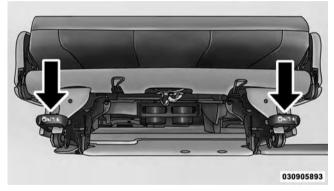
### Second Row Bench Seat — If Equipped

While the bench seat does not stow in the floor, it is removable for added cargo space.



Second Row Bench Seat

Release levers are located on the rear leg assemblies, near the floor. To remove the seat, squeeze each release handle and rotate downwards to deploy the wheels. A lock indicator button pops up when the seat is unlocked. The seat assembly can now be removed from the vehicle and moved on its Easy Out® Rollers.



#### **Release Handles**

To reinstall the seat, align the seat into the detent positions on the floor. Squeeze the release handle and rotate upward until the lock indicator button returns into the handle.

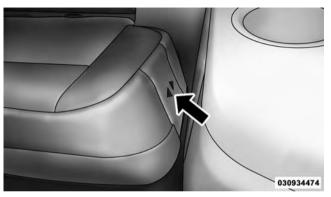
### WARNING!

If not properly latched, the bench seats could become loose. Personal injuries could result. After reinstalling these seats, be sure the red indicator button on the release handles return into the handles.

### Third Row Power Recline — If Equipped

The power recline feature, located on the side of the seat cushion, adjusts the seatback angle forward/rearward for occupant comfort.

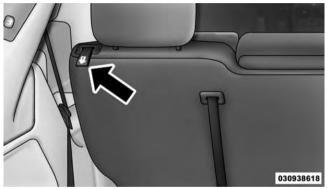
#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 203



### Third Row Power Seat Switch Third Row Power Folding Seat — If Equipped

A one-touch power folding seat switch is located in the left rear trim panel as part of a switch bank.

**NOTE:** Lower the head restraint by pulling on the release strap marked "1" located on the outboard side of the head restraint.



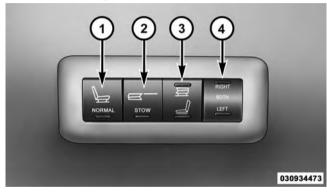
Head Restraint Release Strap "1" The switch is only functional when the liftgate is open and the vehicle is in PARK.



One Touch Folding Seat Third Row

The rear switch bank allows multiple power folding and unfolding positions for the third row seats.

Left and right third row seats can be folded individually or together. The third row power folding seat adjusts to the following positions using the switch bank located on **N** the left rear trim panel:



#### **Rear Panel Power Switch Bank**

| 1 — Open to Normal     | 2 – |
|------------------------|-----|
| 3 — Tailgate/Fold Flat | 4 – |
| 0                      | Sea |

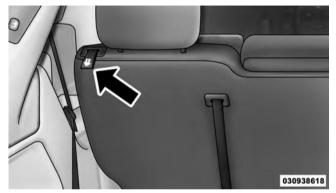
2 — Stow 4 — Right/Left Seats/Both Seats UNDERSTANDING THE FEATURES OF YOUR VEHICLE 205

NOTE:

- Disconnect the center shoulder belt from the small buckle and lower the head restraints before attempting to fold/stow the power third row seats.
- To abort seat operation while seat is in motion, press a different seat position selector switch to stop the seat. Once the seat stops moving, then the desired position can be selected.
- The third row power seat system includes obstacle detection for safe operation. When the system detects an obstacle, the motors will stop and reverse the motion a short distance to move the seat away from the obstacle. Should this occur, remove the obstacle and press the button again, for the desired position.

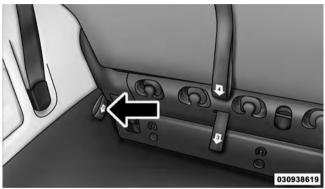
### Manually Folding Third Row Seats — If Equipped

- 1. Lower the center head restraint down to the seatback by pushing the button on the guide and pushing the head restraint down.
- 2. Lower the outboard head restraints by pulling on the release strap marked "1" located on the outboard side of the head restraint.

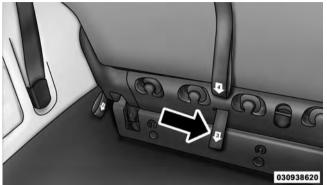


Head Restraint Release Strap "1"

3. Pull release strap marked "2" located on the rear of the 4. Pull release strap marked "3" to release the anchors. seat to lower the seatback.

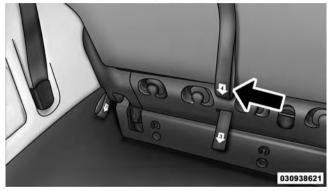


Release Strap "2"



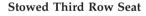
Release Strap "3"

5. Pull release strap marked "4" and tumble the seat rearward into the storage bin.



Release Strap "4"





### To Unfold Third Row Seats

- 1. Pull up on the assist strap to lift the seat out of the storage bin and push the seat forward until the anchors latch.
- 2. Pull release strap marked "2" to unlock the recliner.

- 3. Pulling strap "4" releases the seatback to return to its full upright position.
- 4. Raise the head restraint to its upright position.

### WARNING!

In a collision, you or others in your vehicle could be injured if seats are not properly latched to their floor attachments. Always be sure the seats are fully latched.

### Tailgate Mode

- 1. Pull release strap "3", then pull release strap "4" to rotate the entire seat rearward.
- 2. To restore the seat to its upright position, lift up on the seatback and push forward until the anchors latch.

### WARNING!

To avoid serious injury or death, never operate the vehicle with occupants in the third row seat while in the tailgate mode.

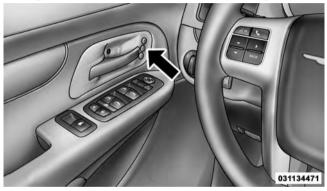
### Plastic Grocery Bag Retainer Hooks

Retainer hooks which will hold plastic grocery bag handles are built into the seatbacks of all rear seats and some front seats. The floor supports the partial weight of the bagged goods.

### DRIVER MEMORY SEAT — IF EQUIPPED

The Memory Buttons 1 and 2 on the driver's door panel can be programmed to recall the driver's seat, outside mirrors, adjustable brake and accelerator pedals, and radio station preset settings. Your Remote Keyless Entry

(RKE) transmitters can also be programmed to recall the same positions when the UNLOCK button is pressed.



### **Driver Memory Switch**

Your vehicle may have been delivered with two RKE transmitters. Only one RKE transmitter can be linked to each of the memory positions.

### Setting Memory Positions And Linking RKE Transmitter To Memory

**NOTE:** Each time the SET (S) button and a numbered button (1 or 2) is pressed, you erase the memory settings for that button and store a new one.

- 1. Insert the ignition key and turn the ignition switch to the ON position.
- 2. Press the driver door MEMORY button number 1 if you are setting the memory for driver 1, or button number 2 if you are setting the memory for driver 2. The system will recall any stored settings. Wait for the system to complete the memory recall before continuing to Step 3.
- 3. Adjust the driver's seat, recliner, and driver's sideview mirror to the desired positions.
- 4. Adjust the brake and accelerator pedals to the desired positions.

- 5. Turn on the radio and set the radio station presets (up to 10 AM and 10 FM stations can be set).
- 6. Turn the ignition switch to the OFF position and remove the key.
- 7. Press and release the SET (S) button located on the driver's door.
- 8. Within five seconds, press and release MEMORY button 1 or 2 on the driver's door. The next step must be performed within 5 seconds if you desire to also use a RKE transmitter to recall memory positions.
- 9. Press and release the LOCK button on one of the RKE transmitters.
- 10. Insert the ignition key and turn the ignition switch to the ON position.

- 11. Select "Remote Linked to Memory" in the Electronic Vehicle Information Center (EVIC) and enter "Yes". Refer to "Electronic Vehicle Information Center (EVIC)/Customer-Programmable Features" in "Understanding Your Instrument Panel" for further in- 3 formation.
- 12. Repeat the above steps to set the next Memory position using the other numbered Memory button or to link another RKE transmitter to memory.

### **Memory Position Recall**

**NOTE:** The vehicle must be in PARK to recall memory positions. If a recall is attempted when the vehicle is not in PARK, a message will be displayed in the EVIC.

To recall the memory settings for driver one, press MEMORY button 1 on the driver's door or the UNLOCK button on the RKE transmitter linked to memory position 1.

To recall the memory setting for driver two, press MEMORY button 2 on the driver's door or the UNLOCK button on the RKE transmitter linked to Memory Position 2.

A recall can be cancelled by pressing any of the MEMORY buttons on the driver's door during a recall (S, 1, or 2). When a recall is cancelled, the driver's seat, outside mirrors, and the pedals stop moving. A delay of one second will occur before another recall can be selected.

### To Disable RKE Transmitter Linked To Memory

- 1. Turn the ignition switch to the OFF position and remove the key.
- 2. Press and release MEMORY button 1. The system will recall any memory settings stored in position 1. Wait for the system to complete the memory recall before continuing to Step 3.

- 3. Press and release the memory SET (S) button located on the driver's door. A chime will sound signaling that you are in the memory set mode.
- 4. Within five seconds, press and release MEMORY button 1 on the driver's door. A chime will sound signaling to you that the driver memory has been set.
- 5. Within five seconds, press and release the UNLOCK button on the RKE transmitter. A chime will sound signaling to you that the RKE transmitter link has been successfully disabled.

To disable another RKE transmitter linked to either Memory Position, repeat Steps 1 to 5 for each RKE transmitter.

**NOTE:** Once programmed, all RKE transmitters linked to memory can be easily enabled or disabled at one time. Refer to "Electronic Vehicle Information Center (EVIC)/ Customer-Programmable Features" in "Understanding Your Instrument Panel" for further information.

# Easy Entry/Exit Seat (Available With Memory Seat ONLY)

This feature provides automatic driver seat positioning to enhance driver mobility when entering and exiting the vehicle.

The distance the driver seat moves depends on where you have the driver seat positioned when you remove the key from the ignition switch.

- When you remove the key from the ignition switch, the driver seat will move about 2.4 in (60 mm) rearward if the driver seat position is greater than or equal to 2.7 in (67.7 mm) forward of the rear stop. The seat will return to its previously set position when you insert the key into the ignition switch and turn it out of the LOCK position.
- When you remove the key from the ignition switch the driver seat will move to a position 0.3 in (7.7 mm) forward of the rear stop if the driver seat position is between 0.9 2.7 in (22.7 67.7 mm) forward of the

rear stop. The seat will return to its previously set position when you insert the key into the ignition switch and turn it out of the LOCK position.

• The Easy Entry/Easy Exit feature is disabled when the driver seat position is less than 0.9 in (22.7 mm) forward of the rear stop. At this position, there is no benefit to the driver by moving the seat for Easy Exit or Easy Entry.

Each stored memory setting will have an associated Easy Entry and Easy Exit Position.

**NOTE:** The Easy Entry/Easy Exit feature can be enabled or disabled through the programmable features in the Electronic Vehicle Information Center (EVIC). If your vehicle is not equipped with an EVIC, your dealership can activate/deactivate this feature for you. For details, refer to "Electronic Vehicle Information Center (EVIC)/ Customer-Programmable Features" in "Understanding Your Instrument Panel" for further information.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 213

# 214 UNDERSTANDING THE FEATURES OF YOUR VEHICLE TO OPEN AND CLOSE THE HOOD

To open the hood, two latches must be released.

1. Pull the hood release lever located on the instrument panel, below the steering column.



Hood Release Lever

2. Move to the front of the vehicle and look inside the center of the hood opening. Locate, then push the safety catch downward while raising the hood at the same time.



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Safety Lever Location

Use the hood prop rod to secure the hood in the open position.



Hood Prop Rod

# **CAUTION!**

To prevent possible damage, do not slam the hood to close it. Lower the hood until it is open approximately 12 in (30 cm) and then drop it. This should secure both latches. Never drive your vehicle unless the hood is fully closed, with both latches engaged.

# WARNING!

Be sure the hood is fully latched before driving your vehicle. If the hood is not fully latched, it could open when the vehicle is in motion and block your vision. Failure to follow this warning could result in serious injury or death.

# **Headlight Switch**

The headlight switch is located on the left side of the instrument panel. The switch controls the operation of the headlights, parking lights, instrument panel lights, interior lights and the fog lights.



#### Headlight Switch With Halo Control

Rotate the headlight switch clockwise to the first detent for parking light and instrument panel light operation. Rotate the headlight switch to the second detent for headlight, parking light and instrument panel operation.

### Automatic Headlights — If Equipped

This system automatically turns your headlights on or off based on ambient light levels. To turn the system on, turn the headlight switch to the extreme counterclockwise position aligning the indicator with the AUTO on the headlight switch. When the system is on, the Headlight Time Delay feature is also on. This means your headlights will stay on for up to 90 seconds after you turn the ignition switch OFF. To turn the Automatic System off, turn the headlight switch clockwise to the O (OFF) position.

**NOTE:** The engine must be running before the head-lights will come on in the Automatic mode.

# Headlights On With Wipers — If Equipped

When your headlights are in the AUTO mode and the engine is running, the headlights will automatically turn on when the wiper system is also turned on. Headlights on when windshield wipers are on may be found on vehicles equipped with an automatic headlight system. Refer to "Electronic Vehicle Information Center (EVIC)/ Customer-Programmable Features" in "Understanding Your Instrument Panel" for further information.

UNDERSTANDING THE FEATURES OF YOUR VEHICLE 217

#### Headlight Delay — If Equipped

This feature provides the safety of headlight illumination for up to 90 seconds after exiting your vehicle.

To activate the delay feature, turn OFF the ignition switch while the headlights are still on. Then turn off the headlights within 45 seconds. The 90 second delay interval begins when headlight switch is turned off. If the headlights or parking lights are turned back on or the ignition switch is turned ON, the delay will be cancelled.

When exiting the vehicle the driver can choose to have the headlights remain on for 30, 60 or 90 seconds or not remain on. To change the timer setting, see your authorized dealer.

The headlight delay time is programmable on vehicles equipped with an EVIC. Refer to "Electronic Vehicle Information Center (EVIC)/Customer-Programmable Features" in "Understanding Your Instrument Panel" for further information.

If the headlights are turned off before the ignition, they will turn off in the normal manner.

NOTE: The headlights must be turned off within 45 seconds of turning the ignition OFF to activate this feature.

# Lights-On Reminder

If the headlights or the parking lights are left on, or if the dimmer control is in the extreme top position after the ignition switch is turned OFF, a chime will sound when the driver's door is opened.

# Daytime Running Lights — If Equipped

The headlights on your vehicle will illuminate when the engine is started and the transmission is in any gear except PARK. This provides a constant lights on condition until the ignition is turned OFF. The lights illuminate at less than 50% of normal intensity. If the parking brake is applied, the Daytime Running Lights (DRL) will turn off. Also, if a turn signal is activated, the DRL lamp on the same side of the vehicle will turn off for the duration of the turn signal activation. Once the turn signal is no longer active, the DRL lamp will illuminate.

# Front Fog Lights — If Equipped



To activate the front fog lights, turn on the parking lights or the low beam headlights and push in the headlight switch control knob. Pressing the headlight switch control knob in a second time will turn the front fog lights off.

### **Dimmer Controls**

The dimmer switch is located next to the headlight switch.



#### **Dimmer Control**

With the parking lights or headlights on, rotating the dimmer control upward will increase the brightness of the instrument panel lights.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 219

# **Interior Lighting On**

Rotate the left dimmer control completely upward to the second detent (extreme top position) to turn on the interior lights. The interior lights will remain on when the dimmer control is in this position.

Interior lights are also turned on when a door or liftgate is opened, the Remote Keyless Entry (RKE) transmitter is activated, or when the dimmer control is moved to the extreme top.

The interior lights will automatically turn off in approximately 10 minutes for the first activation and 90 seconds every activation thereafter until the engine is started, if one of the following occur:

- A door, sliding door or the liftgate is left open
- Any overhead reading light is left on

**NOTE:** The key must be out of the ignition switch or the ignition switch must be in the OFF position for this feature to operate.

# **Interior Lighting Off**

Rotate the left dimmer control to the off position (extreme bottom). The interior lights will remain off when the doors or liftgate are open.

## Parade Mode (Daytime Brightness Feature)

Rotate the left dimmer control to the first detent. This feature brightens the odometer, radio and overhead displays when the parking lights or headlights are on.

# Halo Lights — If Equipped

Halo lights are strategically placed soft lighting that help to illuminate specific areas to aid the occupants in locating specific features while driving at night.

The Halo control switch is located to the right of the dimmer switch.



#### Halo Control

To activate the Halo lights, rotate the Halo switch control upward or downward to increase or decrease the lighting.

## **Multifunction Lever**

The multifunction lever is located on the left side of the steering column.



Multifunction Lever The multifunction lever controls the:

• Turn Signals

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 221

- Headlight Beams Low/High
- Flash-To-Pass (Optical Horn)
- Front and Rear Wipers Washer Functions

## **Turn Signals**

Move the multifunction lever up or down and the arrows on each side of the instrument cluster flash to show proper operation of the front and rear turn signal lights.

**NOTE:** If either light remains on and does not flash, or there is a very fast flash rate, check for a defective outside light bulb. If an indicator fails to light when the lever is moved, it would suggest that the indicator bulb is defective.

#### **Turn Signal Warning**

If the vehicle electronics sense that the vehicle has traveled at over 18 mph (29 km/h) for about 1 mile (1.6 km) with the turn signals on, a chime will sound to alert the driver.

## Lane Change Assist

Tap the lever up or down once, without moving beyond the detent, and the turn signal (right or left) will flash three times then automatically turn off.

## High/Low Beam Switch

When the headlights are turned on, pushing the multifunction lever toward the instrument panel will switch from low beams to high beams. Pulling back to the neutral position returns the headlights to the low beam operation.

# Flash-To-Pass

You can signal another vehicle with your headlights by lightly pulling the multifunction lever toward you. This will cause the headlights to turn on at high beam and remain on until the lever is released.

## **Battery Protection**

This feature provides battery protection to avoid wearing down the battery if the headlights, parking lights, or front fog lights are left on for extended periods of time when the ignition switch is in the LOCK position. After eight minutes of the ignition switch being in the LOCK position and the headlight switch in any position other than OFF or AUTO, the lights will turn off automatically until the next cycle of the ignition switch or headlight switch.

The battery protection feature will be disabled if the ignition switch is turned to any other position other than LOCK during the eight minute delay.

### WINDSHIELD WIPER AND WASHERS

The wipers and washers are operated by a switch within the multifunction lever. Rotate the end of the multifunction lever to select the desired wiper speed.



Washer And Wiper Controls

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 223

**NOTE:** Always remove any buildup of snow that prevents the windshield wiper blades from returning to the off position. If the windshield wiper switch is turned off and the blades cannot return to the off position, damage to the wiper motor may occur.

#### WARNING!

Sudden loss of visibility through the windshield could lead to a collision. You might not see other vehicles or other obstacles. To avoid sudden icing of the windshield during freezing weather, warm the windshield with the defroster before and during windshield washer use.

#### **Intermittent Wiper System**

Use the intermittent wiper when weather conditions make a single wiping cycle with a variable pause between cycles desirable. Rotate the end of the multifunction lever to the first detent position, and then turn the end of the lever to select the desired delay interval. There are four delay settings, which allow you to regulate the wipe interval from a minimum of one cycle every second to a maximum of approximately 36 seconds between cycles. The delay intervals will double in duration when the vehicle speed is 10 mph (16 km/h) or less.

#### Windshield Wiper Operation

Rotate the end of the lever upward, to the first detent past the intermittent settings for low-speed wiper operation. Rotate the end of the lever upward to the second detent past the intermittent settings for high-speed wiper operation.

#### Windshield Washers

To use the Washer, push on the end of the lever to the second detent and hold while spray is desired. If the lever is pushed while on the intermittent setting, the wipers will turn on and operate for several wipe cycles after the lever is released, and then resume the intermittent interval previously selected. If the lever is pushed while the wipers are in the off position, the wipers will operate several wipe cycles, then turn off.

## **Mist Feature**

Press the end of the multifunction lever inward (toward the steering column) to the first detent and release for a single wiping cycle.

**NOTE:** The mist feature does not activate the washer pump; therefore, no washer fluid will be sprayed on the windshield. The wash function must be used in order to spray the windshield with washer fluid.

#### **Rear Wiper And Washer**

Rotating the rotary ring to the first detent activates the rear intermittent wipers. To activate the washers, rotate the rotary ring fully forward and the washers will spray until the ring is released, and then resume the intermittent interval.

**NOTE:** Rear window wipers function in the intermittent wiper speed only.

#### Rain Sensing Wipers — If Equipped

This feature senses moisture on the windshield and automatically activates the wipers for the driver. This feature is especially useful for road splash or overspray from the windshield washers of the vehicle ahead. Rotate the end of the multifunction lever to one of the five intermittent wiper sensitivity settings to activate this feature.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 225

The sensitivity of the system is adjustable from the multifunction lever. Wiper sensitivity position 3 has been calibrated for best overall wiping sensitivity. If the operator desires more wiping sensitivity, they may select sensitivity positions 4 or 5. If the operator desires less 3 wiping sensitivity, they may select sensitivity positions 2 or 1. Place the multifunction lever in the OFF position when not using the system.

#### NOTE:

- The Rain Sensing feature will not operate when the wiper speed is in the low or high position.
- The Rain Sensing feature may not function properly when ice or dried saltwater is present on the windshield.
- Use of Rain-X® or products containing wax or silicone may reduce rain sensor performance.

• The Rain Sensing feature can be turned on and off through the EVIC (if equipped). Refer to "Electronic Vehicle Information Center (EVIC)/Personal Settings (Customer-Programmable Features)" in "Understanding Your Instrument Panel" for further information.

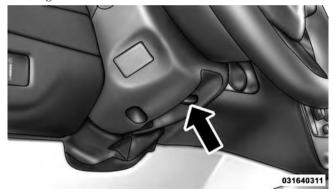
The Rain Sensing system has protective features for the wiper blades and arms. It will not operate under the following conditions:

• Low Temperature Wipe Inhibit — The Rain Sensing feature will not operate when the ignition is first switched ON, and the vehicle is stationary, and the outside temperature is below 32°F (0°C), unless the wiper control on the multifunction lever is moved, or the vehicle speed becomes greater than 0 mph (0 km/h), or the outside temperature rises above freezing.

- Neutral Wipe Inhibit The Rain Sensing feature will not operate when the ignition is ON, and the transmission shift lever is in the NEUTRAL position, and the vehicle speed is less than 5 mph (8 km/h), unless the wiper control on the multifunction lever is moved or the shift lever is moved out of the NEUTRAL position.
- Remote Start Mode Inhibit On vehicles equipped with Remote Starting system, Rain Sensing wipers are not operational when the vehicle is in the remote start mode. Once the operator is in the vehicle and has placed the ignition switch in the RUN position, rain sensing wiper operation can resume, if it has been selected, and no other inhibit conditions (mentioned previously) exist.

#### TILT/TELESCOPING STEERING COLUMN

This feature allows you to tilt the steering column upward or downward. It also allows you to lengthen or shorten the steering column. The tilt/telescoping lever is located below the steering wheel at the end of the steering column.



Tilt/Telescoping Lever

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 227

To unlock the steering column, push the lever downward (toward the floor). To tilt the steering column, move the steering wheel upward or downward as desired. To lengthen or shorten the steering column, pull the steering wheel outward or push it inward as desired. To lock the **3** steering column in position, push the lever upward until fully engaged.

#### WARNING!

Do not adjust the steering column while driving. Adjusting the steering column while driving or driving with the steering column unlocked, could cause the driver to lose control of the vehicle. Failure to follow this warning may result in serious injury or death.

# HEATED STEERING WHEEL — IF EQUIPPED

The steering wheel contains a heating element that helps warm your hands in cold weather. The heated steering wheel has only one temperature setting. Once the heated steering wheel has been turned on it will operate for approximately 30 to 80 minutes before automatically shutting off. The heated steering wheel can shut off early or may not turn on when the steering wheel is already warm.

The heated steering wheel switch is located on the switch bank below the climate controls. There are also soft-keys in the radio screen that will activate the heated steering wheel.



Press the switch to turn on the heated steering wheel. The light on the switch will illuminate to indicate the steering wheel heater is on. Pressing the switch a second time will turn off the heated steering wheel and light indicator.

**NOTE:** The engine must be running for the heated steering wheel to operate.

# Vehicles Equipped With Remote Start

On models that are equipped with remote start, the heated steering wheel can be programmed to come on during a remote start. Refer to "Remote Starting System — If Equipped" in "Things to Know Before Starting Your Vehicle" for further information.

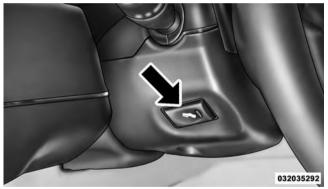
# WARNING!

- Persons who are unable to feel pain to the skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion, or other physical conditions must exercise care when using the steering wheel heater. It may cause burns even at low temperatures, especially if used for long periods.
- Do not place anything on the steering wheel that insulates against heat, such as a blanket or steering wheel covers of any type and material. This may cause the steering wheel heater to overheat.

#### ADJUSTABLE PEDALS — IF EQUIPPED

The adjustable pedals system is designed to allow a greater range of driver comfort for steering wheel tilt and seat position. This feature allows the brake, accelerator, and clutch pedals (if equipped) to move toward or away from the driver to provide improved position with the steering wheel.

The switch is located on the left side of the steering 3 column.



**Adjustable Pedal Switch** 

Press the switch forward to move the pedals forward (toward the front of the vehicle).

Press the switch rearward to move the pedals rearward (toward the driver).

- The pedals can be adjusted with the ignition OFF.
- The pedals **cannot** be adjusted when the vehicle is in REVERSE or when the Electronic Speed Control System is on. The following messages will be displayed on vehicles equipped with the Electronic Vehicle Information System (EVIC) if the pedals are attempted to be adjusted when the system is locked out ("Adjustable Pedal Disabled Cruise Control Engaged" or "Adjustable Pedal Disabled Vehicle In Reverse".

# NOTE:

• Always adjust the pedals to a position that allows full pedal travel.

• Further small adjustments may be necessary to find the best possible seat/pedal position.

# **CAUTION!**

Do not place any article under the adjustable pedals or impede its ability to move, as it may cause damage to the pedal controls. Pedal travel may become limited if movement is stopped by an obstruction in the adjustable pedal's path.

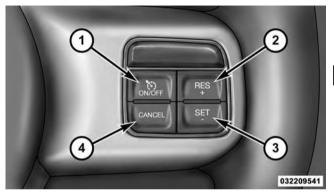
# WARNING!

Do not adjust the pedals while the vehicle is moving. You could lose control and have an accident. Always adjust the pedals while the vehicle is parked.

### ELECTRONIC SPEED CONTROL — IF EQUIPPED

When engaged, the Electronic Speed Control takes over accelerator operations at speeds greater than 25 mph (40 km/h).

The Electronic Speed Control buttons are located on the right side of the steering wheel.



**Electronic Speed Control Buttons** 

| 1 - ON/OFF | 2 — RES + |
|------------|-----------|
| 4 — CANCEL | 3 — SET - |

**NOTE:** In order to ensure proper operation, the Electronic Speed Control System has been designed to shut down if multiple Speed Control functions are operated at the same time. If this occurs, the Electronic Speed Control System can be reactivated by pushing the Electronic Speed Control ON/OFF button and resetting the desired vehicle set speed.

# To Activate

Push the ON/OFF button. The Cruise Indicator Light in the instrument cluster will illuminate. To turn the system off, push the ON/OFF button a second time. The Cruise Indicator Light will turn off. The system should be turned off when not in use.

# WARNING!

Leaving the Electronic Speed Control system on when not in use is dangerous. You could accidentally set the system or cause it to go faster than you want. You could lose control and have an accident. Always leave the system OFF when you are not using it.

# To Set A Desired Speed

Turn the Electronic Speed Control ON. When the vehicle has reached the desired speed, press the SET (-) button and release. Release the accelerator and the vehicle will operate at the selected speed.

**NOTE:** The vehicle should be traveling at a steady speed and on level ground before pressing the SET (-) button.

#### To Deactivate

A soft tap on the brake pedal, pushing the CANCEL button, or normal brake pressure while slowing the vehicle will deactivate Electronic Speed Control without erasing the set speed memory. Pressing the ON/OFF button or turning the ignition switch OFF erases the set speed memory.

#### To Resume Speed

To resume a previously set speed, push the RES (+) button and release. Resume can be used at any speed above 20 mph (32 km/h).

#### To Vary The Speed Setting

When the Electronic Speed Control is set, you can increase speed by pushing the RES (+) button. If the button is continually pressed, the set speed will continue to increase until the button is released, then the new set speed will be established.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 233

Pressing the RES (+) button once will result in a 1 mph (1.6 km/h) increase in set speed. Each subsequent tap of the button results in an increase of 1 mph (1.6 km/h).

To decrease speed while the Electronic Speed Control is set, push the SET (-) button. If the button is continually held in the SET (-) position, the set speed will continue to decrease until the button is released. Release the button when the desired speed is reached, and the new set speed will be established.

Pressing the SET (-) button once will result in a 1 mph (1.6 km/h) decrease in set speed. Each subsequent tap of the button results in a decrease of 1 mph (1.6 km/h).

#### To Accelerate For Passing

Press the accelerator as you would normally. When the pedal is released, the vehicle will return to the set speed.

# Using Electronic Speed Control On Hills

The transmission may downshift on hills to maintain the vehicle set speed.

**NOTE:** The Electronic Speed Control system maintains speed up and down hills. A slight speed change on moderate hills is normal.

On steep hills, a greater speed loss or gain may occur so it may be preferable to drive without Electronic Speed Control.

# WARNING!

Electronic Speed Control can be dangerous where the system cannot maintain a constant speed. Your vehicle could go too fast for the conditions, and you could lose control and have an accident. Do not use Electronic Speed Control in heavy traffic or on roads that are winding, icy, snow-covered or slippery.

# PARKSENSE® REAR PARK ASSIST — IF EQUIPPED

The ParkSense® Rear Park Assist system provides visual and audible indications of the distance between the rear fascia and a detected obstacle when backing up, e.g. during a parking maneuver. Refer to ParkSense® System Usage Precautions for limitations of this system and recommendations.

ParkSense<sup>®</sup> will retain the last system state (enabled or disabled) from the last ignition cycle when the ignition is changed to the ON/RUN position.

ParkSense® can be active only when the shift lever is in REVERSE. If ParkSense® is enabled at this shift lever position, the system will remain active until the vehicle speed is increased to approximately 7 mph (11 km/h) or above. The system will become active again if the vehicle speed is decreased to speeds less than approximately 6 mph (9 km/h).

#### ParkSense® Sensors

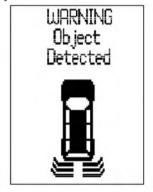
The four ParkSense® sensors, located in the rear fascia/ bumper, monitor the area behind the vehicle that is within the sensors' field of view. The sensors can detect obstacles from approximately 12 in (30 cm) up to 79 in (200 cm) from the rear fascia/bumper in the horizontal direction, depending on the location, type and orientation of the obstacle.

### ParkSense® Warning Display

The ParkSense® Warning screen will only be displayed if Sound and Display is selected from the Customer- Programmable Features section of the Electronic Vehicle Information Center (EVIC). Refer to "Electronic Vehicle Information Center (EVIC)/Personal Settings (Customer-Programmable Features)" in "Understanding Your Instrument Panel" for further information.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 235

The ParkSense® Warning Display is located in the Instrument cluster's EVIC display. It provides both visual and audible warnings to indicate the distance between the rear fascia/bumper and the detected obstacle.

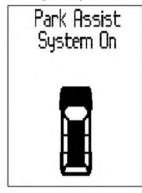


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ParkSense® Warning Display

### ParkSense® Display

When the vehicle is in REVERSE, the warning display will turn ON indicating the system status.



Park Assist System ON

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Park Assist Sustem

#### 032737807

#### Park Assist System OFF

The system will indicate a detected obstacle by showing three solid arcs and will produce a one-half second tone. As the vehicle moves closer to the object the EVIC display will show fewer arcs and the sound tone will change from slow, to fast, to continuous.



Slow Tone

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032839249

Fast Tone



The vehicle is close to the obstacle when the EVIC display shows one flashing arc and sounds a continuous tone. The following chart shows the warning alert operation when the system is detecting an obstacle:

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**Continuous Tone** 

| WARNING ALERTS           |                                |                           |                         |                        |                            |
|--------------------------|--------------------------------|---------------------------|-------------------------|------------------------|----------------------------|
| Rear Distance<br>(in/cm) | Greater than<br>79 in (200 cm) | 79-39 in<br>(200-100 cm)  | 39-25 in<br>(100-65 cm) | 25-12 in<br>(65-30 cm) | Less than<br>12 in (30 cm) |
| Audible Alert<br>Chime   | None                           | Single 1/2<br>Second Tone | Slow                    | Fast                   | Continuous                 |
| Arcs                     | None                           | 3 Solid<br>(Continuous)   | 3 Slow<br>Flashing      | 2 Slow<br>Flashing     | 1 Slow<br>Flashing         |
| Radio Mute               | No                             | Yes                       | Yes                     | Yes                    | Yes                        |

**NOTE:** ParkSense® will MUTE the radio, if on, when the system is sounding an audio tone.

## Enabling/Disabling ParkSense®

ParkSense® can be enabled and disabled through the Customer-Programmable Features section of the EVIC. The available choices are: OFF, Sound Only, or Sound and Display. Refer to "Electronic Vehicle Information Center

(EVIC)/Personal Settings (Customer-Programmable Features)" in "Understanding Your Instrument Panel" for further information.

When ParkSense® is disabled, the instrument cluster will display the "PARK ASSIST SYSTEM OFF" message for approximately five seconds. Refer to "Electronic Vehicle Information Center (EVIC)" in "Understanding Your Instrument Panel" for further information. When the shift lever is moved to REVERSE and the system is

disabled, the EVIC will display the "PARK ASSIST SYS-TEM OFF" message for as long as the vehicle is in REVERSE.

# Service The ParkSense® Rear Park Assist System

During vehicle start up, when the ParkSense® Rear Park Assist System has detected a faulted condition, the instrument cluster will actuate a single chime, once per ignition cycle, and it will display the "PARKSENSE UNAVAILABLE WIPE REAR SENSORS" or the "PARKSENSE UNAVAILABLE SERVICE REQUIRED" message. Refer to "Electronic Vehicle Information Center (EVIC)" in "Understanding Your Instrument Panel" for further information. When the shift lever is moved to

REVERSE and the system has detected a faulted condition, the EVIC will display the "PARKSENSE UNAVAIL-ABLE WIPE REAR SENSORS" or "PARKSENSE UN-AVAILABLE SERVICE REQUIRED" message for as long as the vehicle is in REVERSE. Under this condition, ParkSense will not operate.

If "PARKSENSE UNAVAILABLE WIPE REAR SEN-SORS" appears in the Electronic Vehicle Information Center (EVIC) make sure the outer surface and the underside of the rear fascia/bumper is clean and clear of snow, ice, mud, dirt or other obstruction and then cycle the ignition. If the message continues to appear, see an authorized dealer.

If "PARKSENSE UNAVAILABLE SERVICE REQUIRED" appears in the EVIC, see an authorized dealer.

## Cleaning The ParkSense® System

Clean the ParkSense® sensors with water, car wash soap and a soft cloth. Do not use rough or hard cloths. Do not scratch or poke the sensors. Otherwise, you could damage the sensors.

# ParkSense® System Usage Precautions

# NOTE:

- Ensure that the rear bumper is free of snow, ice, mud, dirt and debris to keep the ParkSense® system operating properly.
- Jackhammers, large trucks, and other vibrations could affect the performance of ParkSense®.
- When you turn ParkSense® OFF, the instrument cluster will display "PARK ASSIST SYSTEM OFF." Furthermore, once you turn ParkSense® off, it remains off until you turn it on again, even if you cycle the ignition key.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 241

- When you move the shift lever to the REVERSE position and ParkSense® is turned OFF, the EVIC will display "PARK ASSIST SYSTEM OFF" message for as long as the vehicle is in REVERSE.
- ParkSense<sup>®</sup>, when on, will MUTE the radio when it is sounding a tone.
- Clean the ParkSense® sensors regularly, taking care not to scratch or damage them. The sensors must not be covered with ice, snow, slush, mud, dirt or debris. Failure to do so can result in the system not working properly. The ParkSense® system might not detect an obstacle behind the fascia/bumper, or it could provide a false indication that an obstacle is behind the fascia/ bumper.
- Use the ParkSense® switch to turn the ParkSense® system OFF if objects such as bicycle carriers, trailer hitches, etc. are placed within 12 in (30 cm) from the rear fascia/bumper. Failure to do so can result in the

system misinterpreting a close object as a sensor problem, causing the "SERVICE PARK ASSIST SYS-TEM" message to be displayed in the EVIC .

• On vehicles equipped with a tailgate, ParkSense® should be disabled when the tailgate is in the lowered or open position and the vehicle is in REVERSE. A lowered tailgate could provide a false indication that an obstacle is behind the vehicle.

# **CAUTION!**

• ParkSense® is only a parking aid and it is unable to recognize every obstacle, including small obstacles. Parking curbs might be temporarily detected or not detected at all. Obstacles located above or below the sensors will not be detected when they are in close proximity.

#### (Continued)

# CAUTION! (Continued)

• The vehicle must be driven slowly when using ParkSense® in order to be able to stop in time when an obstacle is detected. It is recommended that the driver looks over his/her shoulder when using ParkSense®.

# WARNING!

• Drivers must be careful when backing up even when using ParkSense®. Always check carefully behind your vehicle, look behind you, and be sure to check for pedestrians, animals, other vehicles, obstructions, and blind spots before backing up. You are responsible for safety and must continue to pay attention to your surroundings. Failure to do so can result in serious injury or death.

(Continued)

# WARNING! (Continued)

• Before using ParkSense®, it is strongly recommended that the ball mount and hitch ball assembly is disconnected from the vehicle when the vehicle is not used for towing. Failure to do so can result in injury or damage to vehicles or obstacles because the hitch ball will be much closer to the obstacle than the rear fascia when the loudspeaker sounds the continuous tone. Also, the sensors could detect the ball mount and hitch ball assembly, depending on its size and shape, giving a false indication that an obstacle is behind the vehicle.

#### PARKVIEW® REAR BACK UP CAMERA — IF EQUIPPED

Your vehicle may be equipped with the ParkView® Rear Back Up Camera that allows you to see an on-screen image of the rear surroundings of your vehicle whenever

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 243

the shift lever is put into REVERSE. The image will be displayed on the Navigation/Multimedia radio display screen along with a caution note to "check entire surroundings" across the top of the screen. After five seconds this note will disappear. The ParkView® camera is 3 located on the rear of the vehicle above the rear License plate.

When the vehicle is shifted out of REVERSE, the rear camera mode is exited and the navigation or audio screen appears again.

When displayed, static grid lines will illustrate the width of the vehicle while a dashed center-line will indicate the center of the vehicle to assist with aligning to a hitch/ receiver. The static grid lines will show separate zones that will help indicate the distance to the rear of the

vehicle. The following table shows the approximate distances for each zone:

| Zone   | Distance to the rear of the vehicle |  |
|--------|-------------------------------------|--|
| Red    | 0 - 1 ft (0 - 30 cm)                |  |
| Yellow | 1 ft - 3 ft (30 cm - 1 m)           |  |
| Green  | 3 ft or greater (1 m or greater)    |  |

# WARNING!

Drivers must be careful when backing up even when using the ParkView® Rear Back Up Camera. Always check carefully behind your vehicle, and be sure to

(Continued)

# WARNING! (Continued)

check for pedestrians, animals, other vehicles, obstructions, or blind spots before backing up. You are responsible for the safety of your surroundings and must continue to pay attention while backing up. Failure to do so can result in serious injury or death.

# CAUTION!

- To avoid vehicle damage, ParkView® should only be used as a parking aid. The ParkView® camera is unable to view every obstacle or object in your drive path.
- To avoid vehicle damage, the vehicle must be driven slowly when using ParkView® to be able to stop in time when an obstacle is seen. It is recommended that the driver look frequently over his/her shoulder when using ParkView®.

**NOTE:** If snow, ice, mud, or any foreign substance builds up on the camera lens, clean the lens, rinse with water, and dry with a soft cloth. Do not cover the lens.

# Turning ParkView® On Or Off — With Navigation/Multimedia Radio

- 1. Press the "menu" hard-key.
- 2. Select "system setup" soft-key.
- 3. Press the "camera setup" soft-key.
- 4. Enable or disable the rear camera feature by selecting the "enable rear camera in reverse" soft-key.
- 5. Press the "save" soft-key.

# Turning ParkView® On Or Off — Without Navigation/Multimedia Radio

- 1. Press the "menu" hard-key.
- 2. Select "system setup" soft-key.
- 3. Enable or disable the rear camera feature by selecting "enable rear camera in reverse" soft-key.

# 246 UNDERSTANDING THE FEATURES OF YOUR VEHICLE OVERHEAD CONSOLES

## **Front Overhead Console**

Two versions of the overhead console are available. The base front overhead console model featured fixed incandescent courtesy/reading lights, flip-down sunglass storage and conversation mirror. The premium front overhead console model features a LED focused light that illuminates the instrument panel cupholders, two swiveling LED lights, flip-down sunglass storage, conversation mirror, optional power sliding door switches and an optional power liftgate switch.

**NOTE:** Premium sunroof console models include all of above except sunglass storage.



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# Overhead Console Courtesy/Interior Lighting

At the forward end of the console are two courtesy lights (standard dome light has two buttons). The lights turn on when a front door, a sliding door or the liftgate is opened.

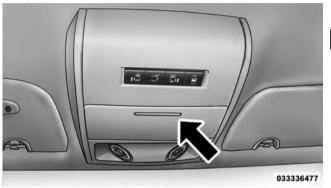
If your vehicle is equipped with Remote Keyless Entry (RKE) the lights will also turn on when the UNLOCK button on the RKE transmitter is pressed.

The courtesy lights also function as reading lights. Press in on each lens to turn these lights on while inside the vehicle. Press a second time to turn each light off. You may adjust the direction of these lights by pressing the outside ring, which is identified with four directional arrows (LED lamps only).

The area around the instrument panel cupholders is also illuminated from a light in the overhead console (premium console only). This light is turned on when the headlight switch is on, and will adjust in brightness when the dimmer control is rotated up or down.

#### Sunglass Storage (Non-Sunroof Only)

At the front of the overhead console, a compartment is provided for the storage of two pairs of sunglasses. From the closed position, press the door latch to open the compartment.



#### **Over Door Latch**

The door will slowly rotate to the full open position.



#### **Full Open Position**

From this position, the door can be fully closed or, by rotating upward about 3/4 of the way and releasing, positioned for conversation mirror use.

# 

#### **Conversation Mirror Position**

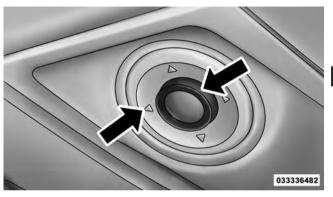
**NOTE:** From the "conversation mirror" position, the door can only be closed.

To return to the full open position, the door must first be closed and then opened by pressing the latch again to release.

#### Rear Courtesy/Reading Lights — If Equipped

The overhead console has two sets of courtesy lights. The lights turn on when a front door, a sliding door or the liftgate is opened. If your vehicle is equipped with Remote Keyless Entry (RKE) the lights will also turn on when the UNLOCK button on the RKE transmitter is pressed.

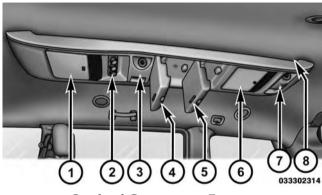
The courtesy lights also function as reading lights. Press in on each lens to turn these lights on while inside the vehicle. Press the lens a second time to turn each light off. You may adjust the direction of these lights by pressing the outside ring, which is identified with four directional arrows.



## Reading Lights Rear Overhead Consoles — If Equipped

The rear overhead storage system is available in two versions: with or without sunroof.

An additional LED at the front of the rear console shines down on the front foot-well area while in courtesy mode, for added convenience.



**Overhead Compartment Features** 

5 — Storage

8 — Halo Lighting

6 — DVD\* 7 — Interior Lights

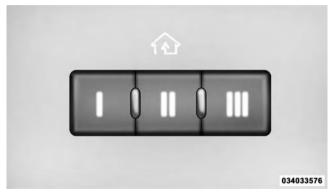
- 1 DVD\*
- 2 Rear HVAC
- 3 Interior Lights
- 4 Storage
- \* If equipped, otherwise storage.

#### **Rear Console Halo Lighting**

The rear overhead console has recessed halo lighting around the perimeter of the console base. This feature provides additional lighting options while traveling and is controlled by the headlight switch. Refer to "Lights/ Halo Lights — If Equipped" in "Understanding the Features Of Your Vehicle" for further information.

# GARAGE DOOR OPENER — IF EQUIPPED

HomeLink<sup>®</sup> replaces up to three hand-held transmitters that operate devices such as garage door openers, motorized gates, lighting or home security systems. The HomeLink<sup>®</sup> unit is powered by your vehicles 12 Volt battery. The HomeLink® buttons, located on either the overhead console, headliner or sunvisor, designate the three different HomeLink® channels. The HomeLink® indicator is located above the center button.



HomeLink® Buttons/Overhead Consoles



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HomeLink® Buttons/Sunvisor/Headliner NOTE: HomeLink® is disabled when the Vehicle Security Alarm is active.

## Before You Begin Programming HomeLink®

Be sure that your vehicle is parked outside of the garage before you begin programming.

For more efficient programming and accurate transmission of the radio-frequency signal it is recommended that a new battery be placed in the hand-held transmitter of the device that is being programmed to the HomeLink® system.

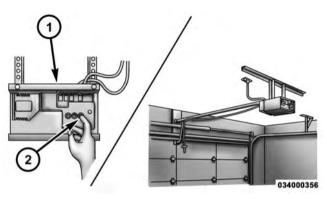
Erase all channels before you begin programming. To erase the channels place the ignition in the ON/RUN position and press and hold the two outside HomeLink® buttons (I and III) for up 20 seconds or until the red indicator flashes.

## NOTE:

- Erasing all channels should only be performed when programming HomeLink® for the first time. Do not erase channels when programming additional buttons.
- If you have any problems, or require assistance, please call toll-free 1–800–355–3515 or, on the Internet at www.HomeLink.com for information or assistance.

# Programming A Rolling Code

For programming garage door openers that were manufactured after 1995. These garage door openers can be identified by the "LEARN" or "TRAIN" button located where the hanging antenna is attached to the garage door opener. It is NOT the button that is normally used to open and close the door. The name and color of the button may vary by manufacturer.



Training The Garage Door Opener

- 1 Door Opener
- 2 Training Button
- 1. Cycle the ignition to the ON/RUN position.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 253

- 2. Place the hand-held transmitter 1 to 3 in (3 to 8 cm) away from the HomeLink® button you wish to program while keeping the HomeLink® indicator light in view.
- 3. Simultaneously press and hold both the HomeLink® button you want to program and the hand-held transmitter button.
- 4. Continue to hold both buttons and observe the indicator light. The HomeLink® indicator will flash slowly and then rapidly after HomeLink® has received the frequency signal from the hand-held transmitter. Release both buttons after the indicator light changes from slow to rapid.
- 5. At the garage door opener motor (in the garage), locate the "LEARN" or "TRAINING" button. This can usually be found where the hanging antenna wire is attached to the garage door opener/device motor.

Firmly press and release the "LEARN" or "TRAIN-ING" button. On some garage door openers/devices there may be a light that blinks when the garage door opener/device is in the LEARN/TRAIN mode.

**NOTE:** You have 30 seconds in which to initiate the next step after the LEARN button has been pressed.

6. Return to the vehicle and press the programmed HomeLink® button twice (holding the button for two seconds each time). If the garage door opener/device activates, programming is complete.

**NOTE:** If the garage door opener/device does not activate, press the button a third time (for two seconds) to complete the training.

To program the remaining two HomeLink® buttons, repeat each step for each remaining button. DO NOT erase the channels.

## Programming A Non-Rolling Code

For programming Garage Door Openers manufactured before 1995.

- 1. Turn the ignition switch to the ON/RUN position.
- 2. Place the hand-held transmitter 1 to 3 in (3 to 8 cm) away from the HomeLink® button you wish to program while keeping the HomeLink® indicator light in view.
- 3. Simultaneously press and hold both the Homelink® button you want to program and the hand-held transmitter button.
- 4. Continue to hold both buttons and observe the indicator light. The Homelink® indicator will flash slowly and then rapidly after HomeLink® has received the frequency signal from the hand-held transmitter. Release both buttons after the indicator light changes from slow to rapid.

- 5. Press and hold the programmed HomeLink® button and observe the indicator light.
  - If the indicator light stays on constantly, programming is complete and the garage door/device should activate when the HomeLink® button is pressed.
  - To program the two remaining HomeLink® buttons, repeat each step for each remaining button. DO NOT erase the channels.

## Reprogramming A Single HomeLink® Button

To reprogram a channel that has been previously trained, follow these steps:

- 1. Turn the ignition switch to the ON/RUN position.
- 2. Press and hold the desired HomeLink® button until the indicator light begins to flash after 20 seconds. **Do not release the button.**

3. Without releasing the button proceed with "Programming A Rolling Code" Step 2 and follow all remaining steps.

## Canadian/Gate Operator Programming

For programming transmitters in Canada/United States that require the transmitter signals to "time-out" after several seconds of transmission.

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.

It may be helpful to unplug the device during the cycling process to prevent possible overheating of the garage door or gate motor.

1. Cycle the ignition to the ON/RUN position.

- 2. Place the hand-held transmitter 1 to 3 in (3 to 8 cm) away from the HomeLink® button you wish to program while keeping the HomeLink® indicator light in view.
- 3. Continue to press and hold the HomeLink® button, while you press and release ("cycle"), your hand-held transmitter every two seconds until HomeLink® has successfully accepted the frequency signal. The indicator light will flash slowly and then rapidly when fully trained.
- 4. Watch for the HomeLink® indicator to change flash rates. When it changes, it is programmed. It may take up to 30 seconds or longer in rare cases. The garage door may open and close while you are programming.
- 5. Press and hold the programmed HomeLink® button and observe the indicator light.

- If the indicator light stays on constantly, programming is complete and the garage door/device should activate when the HomeLink® button is pressed.
- To program the two remaining HomeLink® buttons, repeat each step for each remaining button. DO NOT erase the channels.

If you unplugged the garage door opener/device for programming, plug it back in at this time.

## Reprogramming A Single HomeLink® Button

To reprogram a channel that has been previously trained, follow these steps:

- 1. Cycle the ignition to the ON/RUN position.
- 2. Press and hold the desired HomeLink® button until the indicator light begins to flash after 20 seconds. **Do not release the button.**

follow all remaining steps.

## Using HomeLink®

To operate, press and release the programmed HomeLink® button. Activation will now occur for the programmed device (i.e., garage door opener, gate operator, security system, entry door lock, home/office lighting, etc.,). The hand-held transmitter of the device may also be used at any time.

### Security

It is advised to erase all channels before you sell or turn in your vehicle.

To do this, press and hold the two outside buttons for 20 seconds until the red indicator flashes. Note that all channels will be erased. Individual channels cannot be erased.

the Vehicle Security Alarm is active.

UNDERSTANDING THE FEATURES OF YOUR VEHICLE 257

## **Troubleshooting Tips**

If you are having trouble programming HomeLink<sup>®</sup>, 3 here are some of the most common solutions:

- Replace the battery in the original hand-held transmitter.
- Press the LEARN button on the Garage Door Opener to complete the training for a Rolling Code.
- Did you unplug the device for programming and remember to plug it back in?

If you have any problems, or require assistance, please call toll-free 1-800-355-3515 or, on the Internet at www.HomeLink.com for information or assistance.

# WARNING!

- Your motorized door or gate will open and close while you are programming the universal transceiver. Do not program the transceiver if people, pets or other objects are in the path of the door or gate. Only use this transceiver with a garage door opener that has a "stop and reverse" feature as required by Federal safety standards. This includes most garage door opener models manufactured after 1982. Do not use a garage door opener without these safety features. Call toll-free 1-800-355-3515 or, on the Internet at www.HomeLink.com for safety information or assistance.
- Vehicle exhaust contains carbon monoxide, a dangerous gas. Do not run your vehicle in the garage while programming the transceiver. Exhaust gas can cause serious injury or death.

#### **General Information**

This device complies with FCC rules Part 15 and Industry Canada RSS-210. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference that may be received including interference that may cause undesired operation.

#### NOTE:

- The transmitter has been tested and it complies with FCC and IC rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.
- The term IC before the certification/registration number only signifies that Industry Canada technical specifications were met.

# UNDERSTANDING THE FEATURES OF YOUR VEHICLE 259 POWER SUNROOF — IF EQUIPPED

The power sunroof switch is located between the sun visors on the overhead console.



**Power Sunroof Switch** 

# WARNING!

- Never leave children unattended in a vehicle, and do not leave the key in the ignition switch. Occupants, particularly unattended children, can become entrapped by the power sunroof while operating the power sunroof switch. Such entrapment may result in serious injury or death.
- In a collision, there is a greater risk of being thrown from a vehicle with an open sunroof. You could also be seriously injured or killed. Always fasten your seat belt properly and make sure all passengers are also properly secured.
- Do not allow small children to operate the sunroof. Never allow your fingers, other body parts, or any object, to project through the sunroof opening. Injury may result.

## **Opening Sunroof — Express**

Press the switch rearward and release it within one-half second. The sunroof and sunshade will open automatically from any position. The sunroof and sunshade will open fully and stop automatically. This is called "Express Open". During Express Open operation, any movement of the sunroof switch will stop the sunroof.

## **Opening Sunroof — Manual Mode**

To open the sunroof, press and hold the switch rearward to full open. Any release of the switch will stop the movement. The sunroof and sunshade will remain in a partially opened condition until the switch is pushed and held rearward again.

# Closing Sunroof — Express

Press the switch forward and release it within one-half second and the sunroof will close automatically from any

position. The sunroof will close fully and stop automatically. This is called "Express Close". During Express Close operation, any movement of the switch will stop the sunroof.

#### Closing Sunroof — Manual Mode

To close the sunroof, press and hold the switch in the forward position. Any release of the switch will stop the movement and the sunroof will remain in a partially closed condition until the switch is pushed and held forward again.

### **Pinch Protect Feature**

This feature will detect an obstruction in the opening of the sunroof during Express Close operation. If an obstruction in the path of the sunroof is detected, the sunroof will automatically retract. Remove the obstruction if this occurs. Next, press the switch forward and release to Express Close.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 261

## Venting Sunroof — Express

Press and release the Vent button within one half second and the sunroof will open to the vent position. This is called "Express Vent", and it will occur regardless of sunroof position. During Express Vent operation, any movement of the switch will stop the sunroof.

## **Sunshade Operation**

The sunshade can be opened manually. However, the sunshade will open automatically as the sunroof opens.

**NOTE:** The sunshade cannot be closed if the sunroof is open.

# Wind Buffeting

Wind buffeting can be described as the perception of pressure on the ears or a helicopter-type sound in the ears. Your vehicle may exhibit wind buffeting with the windows down, or the sunroof (if equipped) in certain

open or partially open positions. This is a normal occurrence and can be minimized. If the buffeting occurs with the rear windows open, open the front and rear windows together to minimize the buffeting. If the buffeting occurs with the sunroof open, adjust the sunroof opening to minimize the buffeting or open any window.

### **Sunroof Maintenance**

Use only a non-abrasive cleaner and a soft cloth to clean the glass panel.

#### **Ignition Off Operation**

# For Vehicles Not Equipped With The Electronic Vehicle Information Center (EVIC)

The power sunroof switch will remain active for 45 seconds after the ignition switch is turned to the LOCK position. Opening either front door will cancel this feature.

## For Vehicles Equipped With The EVIC

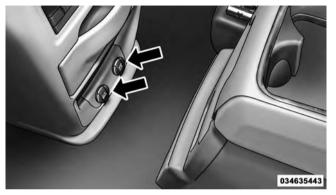
The power sunroof switch will remain active for up to approximately ten minutes after the ignition switch is turned to the LOCK position. Opening either front door will cancel this feature.

#### **Sunroof Fully Closed**

Press the switch forward and release to ensure that the sunroof is fully closed.

## ELECTRICAL POWER OUTLETS — IF EQUIPPED

Two 12 Volt (13 Amp) power outlets are located on the lower instrument panel, below the open storage bin. The driver-side power outlet is controlled by the ignition switch and the passenger-side power outlet is connected directly to the battery. The driver-side power outlet will also operate a conventional cigar lighter unit (if equipped with an optional Smoker's Package).



#### **Instrument Panel Outlets**

**NOTE:** To ensure proper operation a MOPAR® cigar knob and element must be used.

## **CAUTION!**

- Do not exceed the maximum power of 160 Watts (13 Amps) at 12 Volts. If the 160 Watt (13 Amp) power rating is exceeded the fuse protecting the system will need to be replaced.
- Power outlets are designed for accessory plugs only. Do not insert any other object in the power outlets as this will damage the outlet and blow the fuse. Improper use of the power outlet can cause damage not covered by your New Vehicle Limited Warranty.

One outlet in the removable floor console (if equipped) shares a fuse with the lower outlet in the instrument panel and is also connected to the battery. Do not exceed a maximum power of 160 Watts (13 Amps) shared

between the lower panel outlet and the removable floor console outlet.



Removable Console Outlet

On vehicles equipped with the Super Console the power outlets are located under the retractable cover. To access the power outlets push down on the cover and slide it toward the instrument panel.



Super Console Outlets

The outlet in the rear quarter panel near the liftgate and the upper outlet in the instrument panel are both controlled by the ignition switch. Each of these outlets can support 160 Watts (13 Amps). Do not exceed 160 Watts (13 Amps) for each of these outlets.

**Power Outlet Fuses** 

 $1-\mathrm{M7}$  Fuse 20 A Yellow Power Outlet Center Seat (Opt) or with Console Rear

 $2-{\rm M6}$  Fuse 20 A Yellow Cigar Lighter Instrument Panel or with Console Front

3-M36 Fuse 20 A Yellow Power Outlet Instrument Panel or with Console Center

The power outlets include tethered caps, labeled with a key or battery symbol indicating the power source. The power outlet, located on the lower instrument panel, is powered directly from the battery. Items plugged into this power outlet may discharge the battery and/or prevent the engine from starting.

# WARNING!

To avoid serious injury or death:

- Only devices designed for use in this type of outlet should be inserted into any 12 Volt outlet.
- Do not touch with wet hands.
- Close the lid when not in use and while driving the vehicle.
- If this outlet is mishandled, it may cause an electric shock and failure.

# **CAUTION!**

• Many accessories that can be plugged in draw power from the vehicle's battery, even when not in use (i.e., cellular phones, etc.). Eventually, if plugged in long enough, the vehicle's battery will

# CAUTION! (Continued)

discharge sufficiently to degrade battery life and/or prevent the engine from starting.

- Accessories that draw higher power (i.e., coolers, vacuum cleaners, lights, etc.), will degrade the battery even more quickly. Only use these intermittently and with greater caution.
- After the use of high power draw accessories, or long periods of the vehicle not being started (with accessories still plugged in), the vehicle must be driven a sufficient length of time to allow the alternator to recharge the vehicle's battery.
- Power outlets are designed for accessory plugs only. Do not hang any type of accessory or accessory bracket from the plug. Improper use of the power outlet can cause damage.

(Continued)

(Continued)

#### POWER INVERTER — IF EQUIPPED

A 110 Volt, 150 Watt inverter outlet (if equipped) converts DC current to AC current, and is located on the left rear trim panel immediately behind the second row left passenger seat.



**Power Inverter Outlet** 

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 267

The power inverter switch is located on the instrument panel below the climate controls.

To turn on the power outlet, press the switch once. Press the switch a second time to turn the power outlet off.

This outlet can power cellular phones, electronics and other low power devices requiring power up to 150 Watts. Certain high-end video games, such as Playstation3 and XBox360 will exceed this power limit, as will most power tools.

The power inverter is designed with built-in overload protection. If the power rating of 150 Watts is exceeded, the power inverter will automatically shut down. Once the electrical device has been removed from the outlet the inverter should automatically reset. If the power rating exceeds approximately 170 Watts, the power inverter may have to be reset manually. To reset the inverter manually press the power inverter button OFF and ON.

To avoid overloading the circuit, check the power ratings on electrical devices prior to using the inverter.

## WARNING!

To avoid serious injury or death:

- Do not insert any objects into the receptacles.
- Do not touch with wet hands.
- Close the lid when not in use.
- If this outlet is mishandled, it may cause an electric shock and failure.

## CUPHOLDERS

There are cupholders located throughout the interior. All liners are removable for cleaning. Pull the flexible liner from the cupholder drawer or tray starting at one edge for easy removal. Refer to "Cleaning The Instrument Panel Cupholders" in "Maintaining Your Vehicle" for further information.

## **Instrument Panel Cupholders**

The instrument panel cupholders are located in a pull-out drawer just above the lower storage bin.



#### **Front Cupholders**

Pull the drawer out firmly until it stops, and place the container to be held in either one of the cupholder wells. The cupholders are designed to accommodate a wide

variety of container types and sizes. Press down on the container to engage the cupholder retention features.

## Super Console — If Equipped

On models equipped with the Super Console, there are two cupholders located in the center of the console.



Super Console Cupholders

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 269

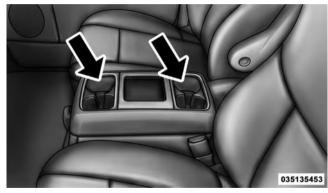
For rear passengers two cupholders are located in the pull-out drawer, located in the back of the Super Console. Pull the drawer out to the first position to use the cupholders.



**Rear Cupholders** 

## Premium Console Cupholders — If Equipped

On models equipped with premium center consoles, there are four cupholders located on the top of the console.



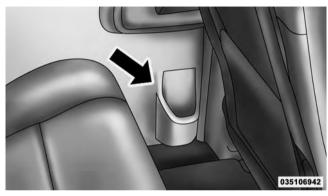
Premium Console Cupholders

#### **Interior Bottle Holders**

There are four bottle holders located in the interior. One bottle holder is molded into each front interior door trim panels, and one bottle holder is molded into each side sliding interior door trim panel. Each holder accommodates up to a 20 oz (.6 L) plastic bottle.

# WARNING!

If containers of hot liquid are placed in the bottle holder, they can spill when the door is closed, burning the occupants. Be careful when closing the doors to avoid injury.



#### **Interior Bottle Holder**

Two outboard mesh pockets are on intermediate seating. The mesh pockets are flexible enough to hold juice boxes, toys, games or MP3 players, etc.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 271

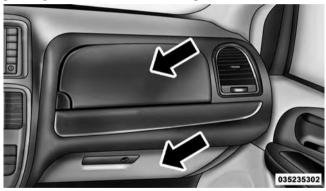
## Smoker's Package Kit — If Equipped

With the optional authorized dealer-installed Smoker's Package Kit, a removable ash receiver is inserted into one of the two cupholders in the center front instrument panel. To install the ash receiver, align the receiver so the thumb grip on the lid is facing rearward. Press the ash receiver into either of the cup wells to secure. Pull upward on the ash receiver to remove for cleaning and/or storage.

The left rear trim panel cupholder is designed to accommodate a second ash receiver, if desired.

## **Glove Compartments**

Upper and lower glove compartments are located on the passenger side of the instrument panel.



Upper and Lower Glove Compartments

## **Upper Glove Compartment**

To open the upper compartment, press in on the button, located on the left side of the upper door. The door will automatically open.



Upper Compartment

To close the compartment door, push downward on the door's surface to latch the door closed.

## Lower Glove Compartment

To open the lower compartment pull out on the release handle.



Lower Compartment

**NOTE:** The lower compartment is equipped with a lock that is part of the compartment handle.

UNDERSTANDING THE FEATURES OF YOUR VEHICLE 273

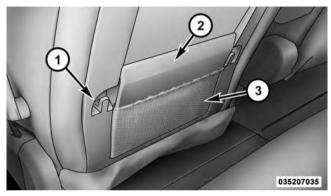
**Door Trim Panel Storage** 

#### Front Door Storage

Both interior front door panels have multiple pockets for storage.

### Driver Seatback Storage — If Equipped

The driver's seatback has a primary storage pocket on all models and an optional secondary mesh pocket.

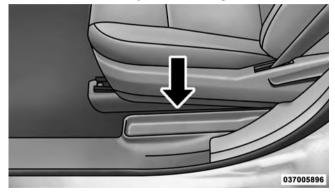


Driver's Seatback Storage

- 1 Bag Holder
- 2 Standard Pocket
- 3 Mesh Pocket

#### Umbrella Holder

An umbrella holder has been conveniently molded into the left front door entry scuff molding.

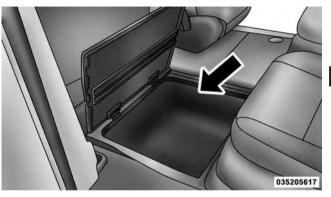


Umbrella Holder

#### Second Row Seat Storage Bins — If Equipped

The seat storage bins are located on the floor in front of the second row seats. The area below the covers can be used for storage when the second row seat is in the upright position.

Pull up on the storage bin latch to open the cover. Slide the storage bin locking mechanism to the "Lock" position to allow greater access to the storage bin.



Storage Bin

## **CAUTION!**

NOTE: The storage bin cover must be locked and flat to avoid damage from contact with the front seat tracks, which have minimal clearance to the cover.

# WARNING!

In a collision, serious injury could result if the seat storage bin covers are not properly latched.

- Do not drive the vehicle with the storage bin covers open.
- Keep the storage bin covers closed and latched while the vehicle is in motion.
- Do not use a storage bin latch as a tie down.

# Storage Bin Safety Warning

Carefully follow these warnings to help prevent personal injury or damage to your vehicle:

# WARNING!

• Always close the storage bin covers when your vehicle is unattended.

# WARNING! (Continued)

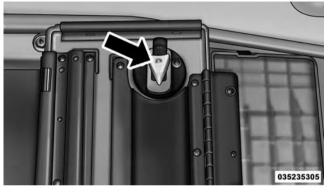
- Do not allow children to have access to the second row seat storage bins. Once in the storage bin, young children may not be able to escape. If trapped in the storage bin, children can die from suffocation or heat stroke.
- In a collision, serious injury could result if the seat storage bin covers are not properly latched.
- Do not drive the vehicle with the storage bin covers open. Keep the storage bin covers closed and latched while the vehicle is in motion.
- Do not operate the storage bin covers while the vehicle is in motion.
- Do not use a storage bin latch as a tie down.

## CAUTION!

The storage bin cover must be flat and locked to avoid damage from contact with the front seat tracks, which have minimal clearance to the cover.

#### Seat Storage Bin Cover Emergency Release Lever

As a security measure, the Seat Storage Bin Cover has an Emergency Release Lever built into the latching mechanism.



#### Storage Bin Cover Emergency Release Lever

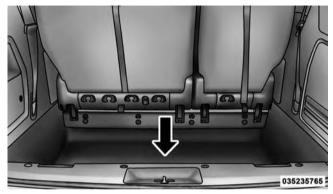
**NOTE:** In the event of an individual being locked inside the storage bin, the storage bin cover can be opened from inside of the bin by pushing on the glow-in-the-dark lever attached to the storage bin cover latching mechanism.

## **Coat Hooks**

Coat hooks are located along the headliner for the second and third row seating positions. The coat hook load limit is 10 lbs (4.5 kg). Exceeding the recommended load limit can cause the coat hooks to break or disengage from the vehicle.

## Cargo Area Storage

The liftgate sill plate has a raised line with the statement "Load To This Line". This line indicates how far rearward cargo can be placed without interfering with liftgate closing.



Rear Cargo Area Loading Limit

**NOTE:** With all rear seats stowed or removed, 4 x 8 foot sheets of building material will fit on the vehicle floor with the liftgate closed. The front seats must be moved slightly forward of the rearmost position.

## **CONSOLE FEATURES**

There are three consoles available: Basic, Premium and Super.

### WARNING!

Do not operate this vehicle with a console compartment lid in the open position. Cellular phones, music players, and other handheld electronic devices should be stowed while driving. Use of these devices while driving can cause an accident due to distraction, resulting in death or injury.

#### **Basic Console**

Basic Console features consist of the following:

• The basic console profile allows vehicle occupants to easily pass through the first row to the second.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 279

- Four cupholders accept up to extra large size beverage cups or 20 oz (.6 L) plastic bottles. Cupholders are dishwasher safe for cleaning.
- The cupholders are removable to access a large storage bin.
- The basic console is removable from the vehicle for additional floor space by removing the cap and clip at the console base.

## To Remove The Basic Floor Console

- 1. Remove the front anchor cup plug and clip.
- 2. Slide the console base forward while lifting slightly to clear the rear load floor hook.
- 3. Remove the console.

# To Reinstall The Basic Floor Console

- 1. Position the console at a slight angle (front slightly higher than the rear).
- 2. Slide the console rearward into the floor bracket/ hook.
- 3. Align the console until the front anchor cup plug hole is centered on the winch hole.
- 4. Reinstall the clip first and then while pushing downward on the console with slight pressure, reinstall the cover plug.
- 5. Pull up on the console to be sure it is firmly latched.

# WARNING!

In an accident, serious injury could result if the removable floor console is not properly installed.

# WARNING! (Continued)

Always be sure the removable floor console is fully latched.

# Premium Console — If Equipped

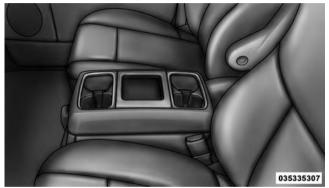
The three-compartment console with sliding storage bin, sliding upper tray with storage and large console storage bin offers multiple configurations.

- Four cupholders with dishwasher safe liners for cleaning. The cupholders can accept plastic bottles, large cups or mugs with handles.
- Top tray storage
- Upper storage bin can hold nine regular or 18 thin CDs or other items

- Large console center storage will store headphones for the available rear DVD entertainment system or other items
- 12 Volt DC power outlet provides continuous power inside the console for cell phones or other electronics.
- Rear occupant accessible
- Multiple adjustments
- Removable from vehicle for additional floor space.

The top and center console sections slide forward and rearward to provide added user comfort. A one-piece cup holder insert for both cavities can easily be removed for cleaning. The cupholders will also accommodate large size cups and 20 oz (.6 L) bottles.

Position 1 shows the console closed with four cupholders and a convenient storage tray.



**Console Position 1** 

Position 2 shows the raised storage tray revealing a large storage area below.



**Console Position 2** 

#### **Dual Storage Bins**

Position 3 shows the top portion of the console in a rearward position. This is accomplished by lifting the upper most latch at the front of the console. This provides easy access to the storage area below and provides two of the four cupholders for the second row passengers.



**Console Position 3** 

Position 4 shows the complete console in its rearmost position. Again, lifting second latch handle at the front of the console, allows complete access to a lower storage bin and provides additional cupholders for rear passengers.



**Console Position 4** 

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 283

#### To Remove The Premium Floor Console

- 1. Pull up on the bottom release handle in the front of the console.
- 2. Lift the rear of the console up several inches/ 3 centimeters
- 3. Pull rearward to disengage from floor and remove console.

## To Reinstall The Premium Floor Console:

- 1. Position the console at a slight angle (rear slightly higher than the front).
- 2. Slide the console forward into the floor bracket.
- 3. Rotate the rear of the console down until it is resting on the floor bracket.
- 4. Push down on the rear of the console until it is seated in the rear floor bracket

5. Pull up on the console to be sure it is firmly latched.

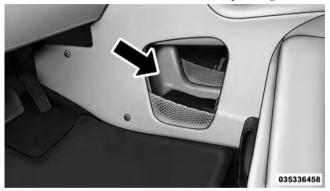
## WARNING!

In an accident, serious injury could result if the removable floor console is not properly installed. Always be sure the removable floor console is fully latched.

## Super Console — If Equipped

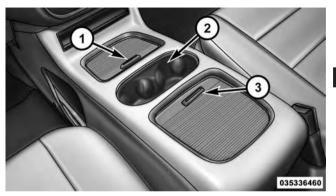
The Super Console contains multiple storage areas, front lower pass through, top forward bin, top rearward bin and rear pull out drawer.

The super console contains a pass through storage area accessible for both the driver and front passenger.



Front Lower Pass Through

The super console tambour doors are opened by pushing down on the finger tabs and sliding the door. The front tambour door slides forward, the rear tambour door slides rearward.

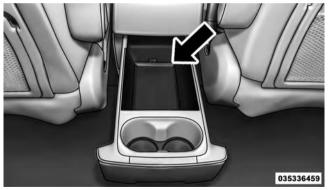


Super Console

- 1 Front Sliding Tambour Door
- 2 Cupholder Light Ring
- 3 Rear Sliding Tambour Door

**NOTE:** The front cupholder light ring and pass through lighting is controlled by a dimming switch located on the instrument panel, refer to "Lights" in "Understanding The Features Of Your Vehicle" for further information.

Located in the back of the super console is a storage drawer and cupholders for the rear passengers.



**Rear Drawer Storage** 

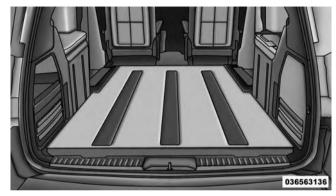
## **RAM CARGO VAN FEATURES**

#### Ram Cargo Van Load Floor

The Ram Cargo Van receives a structural aluminum rear load floor. Two load floor options are available, the standard floor with a flat aluminum surface and non skid strips or an optional deluxe floor with a flat aluminum surface and non skid strips, through-the-floor access to three storage bins and four load floor tie downs.

## WARNING!

Do not operate the vehicle with loose items stored on the load floor. While driving or in an accident you may experience abrupt stopping, rapid acceleration, or sharp turns. Loose objects stored on the load floor may move around with force and strike occupants, resulting in serious or fatal injury.



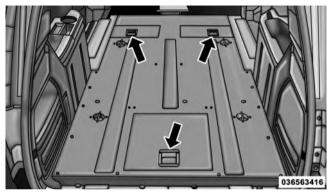
Standard Load Floor (Rear View)

### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 287

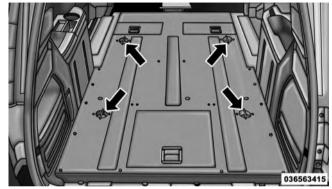


Standard Load Floor

### 288 UNDERSTANDING THE FEATURES OF YOUR VEHICLE



Deluxe Load Floor Storage Bin Locations (Rear View)



Deluxe Load Floor Tie Down Locations (Rear View)

### **REAR WINDOW FEATURES**

### **Rear Window Defroster**

The rear window defroster button is located on the climate control (Mode) knob. Press this button to turn on the rear window defroster and the heated outside mirrors (if equipped). An indicator in the button will illuminate when the rear window defroster is on. The rear window defroster automatically turns off after approximately 10 minutes. For an additional five minutes of operation, press the button a second time.

## NOTE:

• You can turn off the heated mirror feature at anytime by pressing the rear window defroster switch a second time.

### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 289

• To prevent excessive battery drain, use the rear window defroster only when the engine is operating.

## **CAUTION!**

Failure to follow these cautions can cause damage to the heating elements:

- Use care when washing the inside of the rear window. Do not use abrasive window cleaners on the interior surface of the window. Use a soft cloth and a mild washing solution, wiping parallel to the heating elements. Labels can be peeled off after soaking with warm water.
- Do not use scrapers, sharp instruments, or abrasive window cleaners on the interior surface of the window.
- Keep all objects a safe distance from the window.

### 290 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

### LOAD LEVELING SYSTEM — IF EQUIPPED

The automatic load leveling system will provide a levelriding vehicle under most passenger and cargo loading conditions.

A hydraulic pump contained within the shock absorbers raises the rear of the vehicle to the correct height. It takes approximately 1 mile (1.6 km) of driving for the leveling to complete depending on road surface conditions.

If the leveled vehicle is not moved for approximately 15 hours, the leveling system will bleed itself down. The vehicle must be driven to reset the system.

### **ROOF LUGGAGE RACK — IF EQUIPPED**

The crossbars on your vehicle are delivered stowed within the roof rack side rails. If adding cargo, deploy the crossbars. Distribute cargo weight evenly on the roof rack crossbars, to maximum of 150 lbs (68 kg). The roof rack does not increase the total load carrying capacity of the

vehicle. Be sure the total load of cargo inside the vehicle plus that on the external rack does not exceed the maximum vehicle load capacity.



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### Crossbar Stowed In Side Rail

The crossbars and side rails are designed to carry weight on vehicles equipped with a luggage rack. The load must not exceed 150 lbs (68 kg), and should be uniformly distributed over the luggage rack crossbars.

## NOTE:

- Crossbars are error-proofed and cannot be deployed or stowed in the incorrect positions.
- To help control wind noise, stow the crossbars in the side rails when they are not in use.

### **Deploying the Crossbars**

To deploy the crossbars, completely loosen the thumb screws at both ends of the crossbar and lift the crossbar from its stowed position in the side rail. Repeat with crossbar on the opposite side.



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Loosening Crossbars

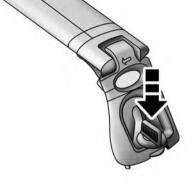
## **CAUTION!**

Use care when removing and handling the crossbars to prevent damage to the vehicle.

### 292 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

Bend the crossbar supports at each end, taking care to keep hand clear of pivoting joint. Slide the thumb screw down.





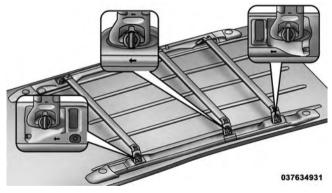
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**Deployed Position** 

**Stowed Position** 

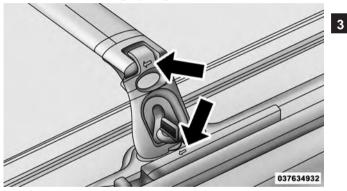
Then, position the crossbars across the roof.

**NOTE:** The crossbars are identical and can be placed in any two of the three deploy positions.



### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 293

Make sure the directional arrows on the crossbars align with the directional arrows on the side rails. Set the crossbars into the deployed positions.

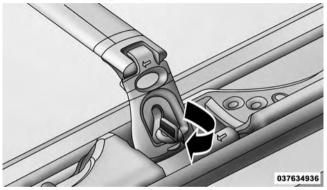


Crossbar To Side Rail Installation

**Deploy Positions - Choose Two Of Three** 

### 294 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

Once the crossbars are set into position, tighten the thumb screws completely.

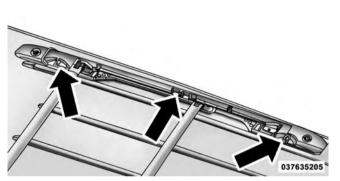


**Tightening Crossbar** 

### Stowing the Crossbars

Reverse the procedure to stow the crossbars, again, taking care to keep hand clear of pivoting joint. Crossbars are identical and can be stowed in either rail nest. Once the crossbars are stowed, tighten the thumb screws completely.

**NOTE:** Load should always be secured to crossbars first, with rail tie down loops used as additional securing points if needed. Tie loops are intended as supplementary tie down points only. Do not use ratcheting mechanisms with the tie loops.



Rail Tie Loops

# CAUTION!

• Check deployed crossbars frequently and retighten thumb screws as necessary.

(Continued)

# CAUTION! (Continued)

- To avoid damage to the roof rack and vehicle, do not exceed the maximum roof rack load capacity of 150 lb (68 kg). Always distribute heavy loads as evenly as possible and secure the load appropriately.
- To prevent damage to the roof of your vehicle, DO NOT carry any loads on the roof rack without the crossbars deployed.
- The load should be secured and placed on top of the crossbars, not directly on the roof. If it is necessary to place the load on the roof, place a blanket or other protective layer between the load and the roof surface.
- Long loads which extend over the windshield, such as wood panels or surfboards, or loads with large frontal area should be secured to both the front and rear of the vehicle.

(Continued)

### 296 UNDERSTANDING THE FEATURES OF YOUR VEHICLE

## CAUTION! (Continued)

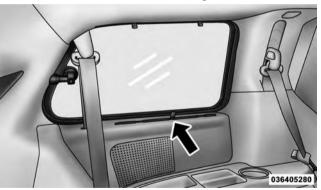
• Travel at reduced speeds and turn corners carefully when carrying large or heavy loads on the roof rack. Wind forces, due to natural causes or nearby truck traffic, can add sudden upward lift to a load. This is especially true on large flat loads and may result in damage to the cargo or your vehicle.

## WARNING!

Cargo must be securely tied before driving your vehicle. Improperly secured loads can fly off the vehicle, particularly at high speeds, resulting in personal injury or property damage. Follow the roof rack cautions when carrying cargo on your roof rack.

## SUN SCREENS — IF EQUIPPED

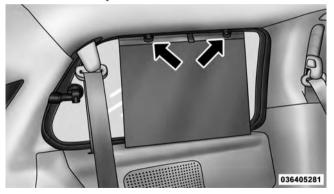
Sun screens are available for second and third row seating windows. The screens store in the sill trim panels, and the tops of the windows are equipped with hooks that the sun screens attach to when pulled out.



Sun Screen Retracted

Gently pull up on the tab to raise the sun screen. Continue pulling the sun screen until the tab is near the top of the window.

Once the screen is completely to the top of the window, extend the top bar of the sun screen over the two hooks attached to the top of the window.



## n. To lower the sun screen, gently lift the tab upward to

disengage the hooks, and feed the screen back into the base sill.

UNDERSTANDING THE FEATURES OF YOUR VEHICLE 297

Sun Screen Extended

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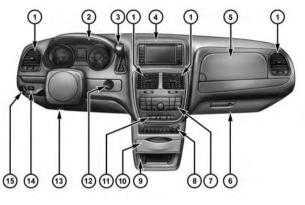
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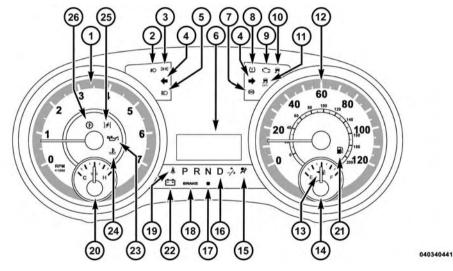
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### **INSTRUMENT PANEL FEATURES**

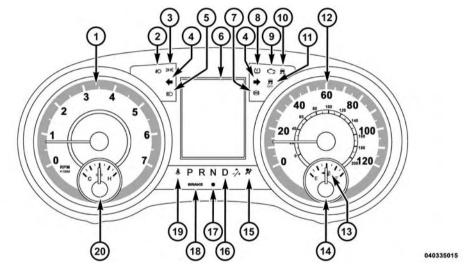


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### **INSTRUMENT CLUSTER — BASE**



### **INSTRUMENT CLUSTER — PREMIUM**



## INSTRUMENT CLUSTER DESCRIPTIONS

## 1. Tachometer

This gauge measures engine revolutions per minute (RPM x 1000). Before the pointer reaches the red area, ease up on the accelerator to prevent engine damage.

## 2. Front Fog Light Indicator — If Equipped



This indicator will illuminate when the front fog lights are on.

## 3. Park/Headlight ON Indicator — If Equipped



This indicator will illuminate when the park lights or headlights are turned on.

4. Turn Signal Indicators



The arrow will flash with the exterior turn signal when the turn signal lever is operated.

If the vehicle is driven more than 1 mile (1.6 km) with either turn signal on, a continuous chime will sound to alert you to turn the signal off. If 4 either indicator flashes at a rapid rate, check for a

## 5. High Beam Indicator

defective outside light bulb.

This indicator shows that the high beam headlights are on. Push the multifunction lever forward to switch the headlights to high beam, and pull toward yourself (normal position) to return to low beam.

6. Odometer Display / Electronic Vehicle Information Center (EVIC) Display — If Equipped

**Odometer Display / Trip Odometer Display** The odometer display shows the total distance the vehicle has been driven.

U.S. Federal regulations require that upon transfer of vehicle ownership, the seller certify to the purchaser the correct mileage that the vehicle has been driven. If your odometer needs to be repaired or serviced, the repair technician should leave the odometer reading the same as it was before the repair or service. If s/he cannot do so, then the odometer must be set at zero, and a sticker must be placed in the door jamb stating what the mileage was before the repair or service. It is a good idea for you to make a record of the odometer reading before the repair/ service, so that you can be sure that it is properly reset, or that the door jamb sticker is accurate if the odometer must be reset at zero.

This also displays Trip A and Trip B, DTE, MPG or L/100km, OAT (Outside Air Temperature) information to Base Cluster, use STEP and RESET button (on steering wheel) to access or reset the display.

### Message Display Area

When the appropriate conditions exist, the following odometer messages will display:

| door                       |
|----------------------------|
| gATE Liftgate Ajar         |
| LoW tirE Low Tire Pressure |
| gASCAP Fuel Cap Fault      |
| noFUSE Fuse Fault          |

CHAngE OIL .....Oil Change Required

LoCOOL ..... Low Coolant

NOTE: Some of the above warnings will be displayed in the Electronic Vehicle Information Center Display Area located in the instrument cluster.

Refer to "Electronic Vehicle Information Center (EVIC) Display — If Equipped" for further information.

### LoW tirE

When the appropriate condition exists, the odometer display will toggle between LoW and tirE for three cycles.

## gASCAP

If the vehicle diagnostic system determines that the fuel filler cap is loose, improperly installed, or damaged, a "gASCAP" message will display in the odometer display area. Tighten the fuel filler cap properly and press the STEP button on the steering wheel to turn off the message. If the problem continues, the message will appear the next time the vehicle is started.

### noFUSE

If the vehicle diagnostic system determines that the 4 Ignition Off Draw (IOD) fuse is improperly installed, or damaged, a "noFUSE" message will display in the odometer display area. For further information on fuses and fuse locations refer to "Fuses" in "Maintaining Your Vehicle".

### CHAngE OIL

Your vehicle is equipped with an engine oil change indicator system. The CHAngE OIL message will flash in the instrument cluster odometer for approximately 12 seconds, after a single chime has sounded, to indicate the next scheduled oil change interval. The engine oil change

indicator system is duty cycle-based, which means the engine oil change interval may fluctuate dependent upon your personal driving style.

Unless reset, this message will continue to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the STEP button on the steering wheel. To reset the oil change indicator system (after performing the scheduled maintenance), perform the following steps.

1. Turn the ignition switch to the ON/RUN position (do not start the engine).

2. Fully depress the accelerator pedal, slowly, three times within 10 seconds.

3. Turn the ignition switch to the OFF/LOCK position.

**NOTE:** If the indicator message illuminates when you start the engine, the oil change indicator system did not reset. If necessary, repeat these steps.

# Electronic Vehicle Information Center (EVIC) Display — If Equipped

The Electronic Vehicle Information Center (EVIC) features a driver-interactive display that is located in the instrument cluster. For further information, refer to "Electronic Vehicle Information Center (EVIC)".

## 7. Anti-Lock Brake (ABS) Light



This light monitors the Anti-Lock Brake System (ABS). The light will turn on when the ignition switch is turned to the ON/RUN position and may stay on for as long as four seconds.

If the ABS light remains on or turns on while driving, it indicates that the Anti-Lock portion of the brake system is not functioning and that service is required. However, the conventional brake system will continue to operate normally if the BRAKE warning light is not on. If the ABS light is on, the brake system should be serviced as soon as possible to restore the benefits of Anti-Lock brakes. If the ABS light does not turn on when the ignition switch is turned to the ON/RUN position, have the light inspected by an authorized dealer.

### 8. Tire Pressure Monitoring Telltale Light — If Equipped

(!)

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 may 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 may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may 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.

## **CAUTION!**

The TPMS has been optimized for the original equipment tires and wheels. TPMS pressures and

### (Continued)

# **CAUTION!** (Continued)

warning have been established for the tire size equipped on your vehicle. Undesirable system operation or sensor damage may result when using replacement equipment that is not of the same size, type, and/or style. Aftermarket wheels can cause sensor damage. Do not use tire sealant from a can or balance beads if your vehicle is equipped with a TPMS, as damage to the sensors may result.

## 9. Malfunction Indicator Light (MIL)



The Malfunction Indicator Light (MIL) is part of an onboard diagnostic system, called OBD, that monitors engine and automatic transmission control systems. The light will illuminate when the key is in the ON/RUN position, before engine start. If the bulb does not come on when turning the key from OFF to ON/RUN, have the condition checked promptly.

Certain conditions, such as a loose or missing gas cap, poor fuel quality, etc., may illuminate the MIL after engine start. The vehicle should be serviced if the light stays on through several of your typical driving cycles. In most situations, the vehicle will drive normally and will not require towing.

### **CAUTION!**

Prolonged driving with the Malfunction Indicator Light (MIL) on could cause damage to the engine control system. It also could affect fuel economy and drivability. If the MIL is flashing, severe catalytic converter damage and power loss will soon occur. Immediate service is required.

## WARNING!

A malfunctioning catalytic converter, as referenced above, can reach higher temperatures than in normal operating conditions. This can cause a fire if you drive slowly or park over flammable substances such as dry plants, wood, cardboard, etc. This could result in death or serious injury to the driver, occupants or others.

10. Electronic Stability Control (ESC) Activation/ Malfunction Indicator Light — If Equipped



The "ESC Activation/Malfunction Indicator Light" in the instrument cluster will come on when the ignition switch is turned to the

ON/RUN position. It should go out with the engine running. If the "ESC Activation/Malfunction Indicator Light" comes on continuously with the engine running, a malfunction has been detected in the ESC

system. If this light remains on after several ignition cycles, and the vehicle has been driven several miles (kilometers) at speeds greater than 30 mph (48 km/h), see your authorized dealer as soon as possible to have the problem diagnosed and corrected.

## NOTE:

- The "ESC Off Indicator Light" and the "ESC Activation/Malfunction Indicator Light" come on momentarily each time the ignition switch is turned to ON/RUN.
- Each time the ignition is turned to ON/RUN, the ESC system will be ON, even if it was turned off previously.
- The ESC system will make buzzing or clicking sounds when it is active. This is normal; the sounds will stop when ESC becomes inactive following the maneuver that caused the ESC activation.

11. Electronic Stability Control (ESC) OFF Indicator Light — If Equipped



This light indicates the Electronic Stability Control (ESC) is off.

## 12. Speedometer

Indicates vehicle speed.

## 13. Fuel Door Reminder



The arrow in this symbol is a reminder that the Fuel Filler Door is located on the left side of the vehicle.

## 14. Fuel Gauge

The pointer shows the level of fuel in the fuel tank when the ignition switch is in the ON/RUN position.

## 15. Air Bag Warning Light



This light will turn on for four to eight seconds as a bulb check when the ignition switch is first turned to ON/RUN. If the light is either not on during starting, stays on, or turns on while driving, have the system inspected at an authorized dealer as soon as possible. Refer to "Occupant Restraints" in "Things To Know Before Starting Your Vehicle" for further information.

### 16. Shift Lever Indicator

The Shift Lever Indicator is self-contained within the instrument cluster. It displays the gear position of the automatic transmission.

### NOTE:

- You must apply the brakes before shifting from PARK.
- The highest available transmission gear is displayed in the lower right corner of the Electronic Vehicle Information Center (EVIC) whenever the Electronic 4 Range Select (ERS) feature is active. Use the +/selector on the shift lever to activate ERS. Refer to "Automatic Transmission" in "Starting And Operating" for further information.
- 17. Vehicle Security Light If Equipped



This light will flash at a fast rate for approximately 15 seconds, when the vehicle security alarm is arming, and then will flash slowly until the vehicle is disarmed.

### 18. Brake Warning Light

**BRAKE** This light monitors various brake functions, including brake fluid level and parking brake application. If the brake light turns on it may indicate that the parking brake is applied, that the brake fluid level is low, or that there is a problem with the anti-lock brake system reservoir.

If the light remains on when the parking brake has been disengaged, and the fluid level is at the full mark on the master cylinder reservoir, it indicates a possible brake hydraulic system malfunction or that a problem with the Brake Booster has been detected by the Anti-Lock Brake System (ABS) / Electronic Stability Control (ESC) system. In this case, the light will remain on until the condition has been corrected. If the problem is related to the brake booster, the ABS pump will run when applying the brake and a brake pedal pulsation may be felt during each stop.

The dual brake system provides a reserve braking capacity in the event of a failure to a portion of the hydraulic system. A leak in either half of the dual brake system is indicated by the Brake Warning Light, which will turn on when the brake fluid level in the master cylinder has dropped below a specified level.

The light will remain on until the cause is corrected.

**NOTE:** The light may flash momentarily during sharp cornering maneuvers, which change fluid level conditions. The vehicle should have service performed, and the brake fluid level checked.

If brake failure is indicated, immediate repair is necessary.

### WARNING!

Driving a vehicle with the red brake light on is dangerous. Part of the brake system may have failed. It will take longer to stop the vehicle. You could have a collision. Have the vehicle checked immediately.

Vehicles equipped with the Anti-Lock Brake System (ABS), are also equipped with Electronic Brake Force Distribution (EBD). In the event of an EBD failure, the Brake Warning Light will turn on along with the ABS Light. Immediate repair to the ABS system is required.

Operation of the Brake Warning Light can be checked by turning the ignition switch from the OFF position to the ON/RUN position. The light should illuminate for approximately two seconds. The light should then turn off unless the parking brake is applied or a brake fault is detected. If the light does not illuminate, have the light inspected by an authorized dealer. The light also will turn on when the parking brake is applied with the ignition switch in the ON/RUN position.

**NOTE:** This light shows only that the parking brake is applied. It does not show the degree of brake application.

19. Seat Belt Reminder Light



When the ignition switch is first turned to ON/ RUN, this light will turn on for four to eight seconds as a bulb check. During the bulb check, if

the driver or front passenger's seat belt is unbuckled, a chime will sound. After the bulb check or when driving, if the driver's seat belt remains unbuckled, the Seat Belt Reminder Light will illuminate and the chime will sound. Refer to "Occupant Restraints" in "Things To Know Before Starting Your Vehicle" for further information.

## 20. Temperature Gauge

The temperature gauge shows engine coolant temperature. Any reading within the normal range indicates that the engine cooling system is operating satisfactorily.

The gauge pointer will likely indicate a higher temperature when driving in hot weather, up mountain grades, or when towing a trailer. It should not be allowed to exceed the upper limits of the normal operating range.

## **CAUTION!**

Driving with a hot engine cooling system could damage your vehicle. If the temperature gauge reads "H" pull over and stop the vehicle. Idle the vehicle with the air conditioner turned off until the pointer drops back into the normal range. If the pointer remains on the "H" and you hear continuous chimes,

(Continued)

# **CAUTION!** (Continued)

turn the engine off immediately and call an authorized dealer for service.

## WARNING!

A hot engine cooling system is dangerous. You or others could be badly burned by steam or boiling coolant. You may want to call an authorized dealer for service if your vehicle overheats. If you decide to look under the hood yourself, see "Maintaining Your Vehicle". Follow the warnings under the Cooling System Pressure Cap paragraph.

## 21. Low Fuel Light



When the fuel level reaches approximately 2.0 gal (7.8 L) this light will turn on, and remain on until fuel is added.

### 22. Charging System Light

This light shows the status of the electrical charging system. The light should come on when the ignition switch is first turned to ON/RUN and remain on briefly as a bulb check. If the light stays on or comes on while driving, turn off some of the vehicle's non-essential electrical devices or increase engine speed (if at idle). If the charging system light remains on, it means that the vehicle is experiencing a problem with the charging system. Obtain SERVICE IMMEDIATELY. See an authorized dealer.

If jump starting is required, refer to "Jump Starting Procedures" in "What To Do In Emergencies".

### 23. Oil Pressure Warning Light

This light indicates low engine oil pressure. The light should turn on momentarily when the engine is started. If the light turns on while driving, stop the

vehicle and shut off the engine as soon as possible. A chime will sound when this light turns on.

Do not operate the vehicle until the cause is corrected. This light does not indicate how much oil is in the engine. The engine oil level must be checked under the hood.

### 24. Engine Temperature Warning Light

This light warns of an overheated engine condition. As engine coolant temperatures rise and the gauge approaches H, this indicator will illuminate and a single chime will sound after reaching a set threshold. Further overheating will cause the temperature gauge to pass H, a continuous chime will occur until the engine is allowed to cool.

If the light turns on while driving, safely pull over and stop the vehicle. If the A/C system is on, turn it off. Also, shift the transmission into NEUTRAL and idle the vehicle. If the temperature reading does not return to normal, turn the engine off immediately and call for

service. Refer to "If Your Engine Overheats" in "What To Do In Emergencies" for further information.

### 25. Electronic Throttle Control (ETC) Light



This light informs you of a problem with the Electronic Throttle Control (ETC) system. The light will come on when the ignition is first turned to ON/RUN and remain on briefly as a bulb check. If the light does not come on during starting, have the system checked by an authorized dealer.

If a problem is detected, the light will come on while the engine is running. Cycle the ignition key when the vehicle has completely stopped and the shift lever is placed in the PARK position, the light should turn off.

If the light remains lit with the engine running, your vehicle will usually be drivable; however, see an authorized dealer for service as soon as possible. If the light is flashing when the engine is running, immediate service is required and you may experience reduced performance, an elevated/rough idle or engine stall and your vehicle may require towing.

### 26. Transmission Temperature Warning Light



During sustained high speed driving or trailer towing up long grades on hot days, the automatic transmission oil may become too hot. When the transmission overheat warning light

turns on, you will experience reduced vehicle performance until the automatic transmission cools down. Once the transmission has cooled down and the light turns off, you may continue to drive normally. If the high speed is maintained, the overheating will continue to occur.

If the overheating continues, it may become necessary to stop the vehicle and run the engine at idle with the transmission in NEUTRAL until the light turns off.

## CAUTION!

Continuous driving with the Transmission Temperature Warning Light illuminated will eventually cause severe transmission damage or transmission failure.

### WARNING!

If you continue operating the vehicle when the Transmission Temperature Warning Light is illuminated you could cause the fluid to boil over, come in contact with hot engine or exhaust components and cause a fire.

# ELECTRONIC VEHICLE INFORMATION CENTER (EVIC) — IF EQUIPPED

The Electronic Vehicle Information Center (EVIC) features a driver-interactive display that is located in the instrument cluster.



**Electronic Vehicle Information Center (EVIC)** 

This system conveniently allows the driver to select a The system allows the driver to select information by variety of useful information by pressing the switches pressing the following buttons mounted on the steering mounted on the steering wheel. The EVIC consists of the wheel: following:

- Radio Information
- Fuel Economy
- Vehicle Speed
- Trip Info
- Tire PSI
- Vehicle Info
- Messages
- Units
- System Setup (Personal Settings)
- Turn Menu Off



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**EVIC Steering Wheel Buttons** 

#### **UP** Button

Press and release the UP button to scroll upward through the main menus (Fuel Economy, Vehicle Info, Tire PSI, Cruise, Messages, Units, System Setup) and sub-menus.

## **DOWN Button**



Press and release the DOWN button to scroll downward through the main menus and sub-menus.

#### SELECT Button



The SELECT button allows access to information in EVIC submenus, selects some feature settings, and resets some EVIC features. The EVIC prompts the driver when the SELECT button can be used by displaying the right arrow graphic.

## **BACK Button**

BACK

Press the BACK button to scroll back to a previous menu or sub-menu.

## Electronic Vehicle Information Center (EVIC) Displays

The EVIC display consists of three sections:

- 1. The top line where compass direction, odometer line and outside temperature are displayed.
- 2. The main display area where the menus and pop up messages are displayed.
- 3. The reconfigurable telltales section below the odometer line.

The Reconfigurable Telltales section is divided into the white telltales area on the right, amber telltales in the middle, and red telltales on the left.

The main display area will normally display the main menu or the screens of a selected feature of the main menu. The main display area also displays "pop up" messages that consist of approximately 60 possible warning or information messages. These pop up messages fall into several categories:

#### • Five Second Stored Messages

When the appropriate conditions occur, this type of message takes control of the main display area for five seconds and then returns to the previous screen. Most of the messages of this type are then stored (as long as the condition that activated it remains active) and can be reviewed from the "Messages" main menu item. As long as there is a stored message, an "i" will be displayed in the EVIC's compass/outside temp line. Examples of this message type are "Right Front Turn Signal Lamp Out" and "Low Tire Pressure".

#### • Unstored Messages

This message type is displayed indefinitely or until the condition that activated the message is cleared. Examples of this message type are "Turn Signal On" (if a turn signal is left on) and "Lights On" (if driver leaves the vehicle).

## • Unstored Messages Until RUN

These messages deal primarily with the Remote Start feature. This message type is displayed until the ignition is in the RUN state. Examples of this message type are "Remote Start Aborted - Door Ajar" and "Press Brake Pedal and Push Button to Start".

## • Five Second Unstored Messages

When the appropriate conditions occur, this type of message takes control of the main display area for five seconds and then returns to the previous screen. Examples of this message type are "Memory System Unavailable - Not in Park" and "Automatic High Beams On".

When the appropriate conditions exist, the EVIC displays the following messages:

- Key in ignition
- Ignition or Accessory On
- Remote start aborted Door ajar
- Remote start aborted Hood ajar
- Remote start aborted L/Gate ajar
- Remote start aborted Fuel low
- Remote start disabled Start Vehicle to Reset
- Remote start active Key to Run
- Wrong Key
- Damaged Key
- Key not programmed

- Vehicle Not in Park
- Press Brake Pedal and Push Button to Start
- Door(s) Ajar (with a single chime, if vehicle is in motion)
- Liftgate Ajar (chime will sound when vehicle starts moving)
- Low Tire Pressure
- Service TPM System (refer to "Tire Pressure Monitoring System" in "Starting And Operating")
- Tire Pressure Screen With Low Tire(s) "Inflate Tire to XX"
- Turn Signal On
- RKE Battery Low
- LOW WASHER FLUID

- Oil Change Required
- Left Front Turn Signal Light Out
- Left Rear Turn Signal Light Out
- Right Front Turn Signal Light Out
- Right Rear Turn Signal Light Out
- Park Assist Disabled
- Service Park Assist System
- Personal Settings Not Available Vehicle Not In Park
- Blind Spot System Off This message is displayed when the ignition is turned to ON to indicate the Blind Spot System has been turned off.

- Blind Spot System Not Available This message is displayed to indicate the Blind Spot Monitor (BSM) system is temporarily unavailable due to sensor blockage, electronic interference, or other "temporary" conditions. When this message is displayed both outside rear view icons will be illuminated. If electronic interference is present, the BSM system will illuminate the icon only on the side of interference as long as interference is present.
- Service Blind Spot System This message is displayed to indicate the Blind Spot Monitor (BSM) system is permanently unavailable. The driver will receive an EVIC message and the BSM display warning in both mirrors will be permanently illuminated. If this message is present see an authorized dealer.

## **EVIC White Telltale Lights**

This area will show reconfigurable white caution telltales. These telltales include:

• Electronic Range Select (ERS) Status

The shift lever status "5,4,3,2,1" are displayed indicating the shift lever position. Telltales "5,4,3,2,1" indicate the Electronic Range Select (ERS) feature has been engaged and the gear selected is displayed. For further information on ERS, refer to "Starting And Operating"

• Electronic Speed Control Ready



This light will turn on when the electronic speed control is ready. For further information, refer to "Electronic Speed Control" in "Understanding The Features Of Your Vehicle."

## • Electronic Speed Control SET



This light will turn on when the electronic speed control is SET. For further information, refer to "Electronic Speed Control" in "Understanding The Features Of Your Vehicle."

## **EVIC Amber Telltale Lights**

This area will show reconfigurable amber caution telltales. These telltales include:

## • Low Fuel Light



When the fuel level reaches approximately 3.0 gal (11.0 L) this light will turn on, and remain on until fuel is added.

#### • Loose Gascap Indicator



If the vehicle diagnostic system determines that the fuel filler cap is loose, improperly installed, or damaged, a loose gascap indicator will display in the telltale display area. Tighten the fuel filler cap properly and press the SELECT button to turn off the message. If the problem continues, the message will appear the next time the vehicle is started.

A loose, improperly installed, or damaged fuel filler cap may also turn on the Malfunction Indicator Light (MIL).

• Windshield Washer Fluid Low Indicator



This light will turn on to indicate the windshield washer fluid is low.

## **EVIC Red Telltale Lights**

This area will show reconfigurable red telltales. These telltales include:

• Door Ajar



This light will turn on to indicate that one or more doors may be ajar.

## • Oil Pressure Warning Light

This light indicates low engine oil pressure. The light should turn on momentarily when the engine is started. If the light turns on while driving, stop the vehicle and shut off the engine as soon as possible. A chime will sound for four minutes when this light turns on.

Do not operate the vehicle until the cause is corrected. This light does not show how much oil is in the engine. The engine oil level must be checked under the hood.

• Charging System Light

This light shows the status of the electrical charging system. The light should come on when the ignition switch is first turned ON and remain on briefly as a bulb check. If the light stays on or comes on while driving, turn off some of the vehicle's non-essential electrical devices or increase engine speed (if at idle). If the charging system light remains on, it means that the vehicle is experiencing a problem with the charging system. Obtain SERVICE IMMEDIATELY. See an authorized dealer.

If jump starting is required, refer to "Jump Starting Procedures" in "What To Do In Emergencies".

• Electronic Throttle Control (ETC) Light

This light informs you of a problem with the Electronic Throttle Control (ETC) system. The light will come on when the ignition is first turned ON and remain on briefly as a bulb check. If the light does not come on during starting, have the system checked by an authorized dealer.

If a problem is detected, the light will come on while the engine is running. Cycle the ignition key when the vehicle has completely stopped and the shift lever is placed in the PARK position. The light should turn off.

If the light remains lit with the engine running, your vehicle will usually be drivable. However, see an authorized dealer for service as soon as possible. If the light is flashing when the engine is running, immediate service is required. You may experience reduced performance, an elevated/rough idle or engine stall and your vehicle may require towing.

## • Engine Temperature Warning Light

This light warns of an overheated engine condition. As temperatures rise and the gauge approaches H, this indicator will illuminate and a single chime will sound after reaching a set threshold. Further overheating will cause the temperature gauge to pass H, the indicator will continuously flash and a continuous chime will occur until the engine is allowed to cool.

If the light turns on while driving, safely pull over and stop the vehicle. If the A/C system is on, turn it off. Also, shift the transmission into NEUTRAL and idle the vehicle. If the temperature reading does not return to normal, turn the engine off immediately and call for service. Refer to "If Your Engine Overheats" in "What To Do In Emergencies" for more information.

## • Transmission Temperature Warning Light



This light indicates that the transmission fluid temperature is running hot. This may occur with severe usage, such as trailer towing. If this light turns on, safely pull over and stop the vehicle. Then, shift the transmission into NEUTRAL and run the engine at idle or faster until the light turns off.

## **CAUTION!**

Continuous driving with the Transmission Temperature Warning Light illuminated will eventually cause severe transmission damage or transmission failure.

#### WARNING!

If you continue operating the vehicle when the Transmission Temperature Warning Light is illuminated you could cause the fluid to boil over, come in contact with hot engine or exhaust components and cause a fire.

#### **Oil Change Required**

Your vehicle is equipped with an engine oil change indicator system. The Oil Change Required message will flash in the EVIC display for approximately 10 seconds, after a single chime has sounded, to indicate the next scheduled oil change interval. The engine oil change indicator system is duty-cycle based, which means the engine oil change interval may fluctuate dependent upon your personal driving style. Unless reset, this message will continue to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance), perform the following steps.

- 1. Turn the ignition switch to the ON position (do not start the engine.)
- 2. Fully depress the accelerator pedal, slowly, three times within 10 seconds.
- 3. Turn the ignition switch to the OFF/LOCK position.

**NOTE:** If the indicator message illuminates when you start the engine, the oil change indicator system did not reset. If necessary, repeat these steps.

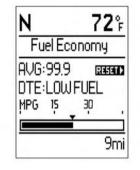
#### **Fuel Economy**

Press and release the UP or DOWN button until "Fuel Economy" displays highlighted in the EVIC and press the SELECT button. The following Fuel Economy functions display in the EVIC:

- Average Fuel Economy (AVG)
- Distance To Empty (DTE)
- Miles Per Gallon (MPG)

## Average Fuel Economy

This display shows the average fuel economy since the last reset. The Average Fuel Economy can be reset by following the prompt in the EVIC to use the SELECT button. When the fuel economy is reset, the display will read "zero" for two seconds. Then, the history information will be erased, and the averaging will continue from the last fuel average reading before the reset.



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#### Average Fuel Economy Display

## Distance To Empty (DTE)

This display shows the estimated distance that can be traveled with the fuel remaining in the tank. This estimated distance is determined by a weighted average of the instantaneous and average fuel economy, according to the current fuel tank level. DTE cannot be reset through the SELECT button.

**NOTE:** Significant changes in driving style or vehicle loading will greatly affect the actual drivable distance of the vehicle, regardless of the DTE displayed value.

When the DTE value is less than 30 miles (48 km) estimated driving distance, the DTE display will change to a "LOW FUEL" message. This display will continue until the vehicle runs out of fuel. Adding a significant amount of fuel to the vehicle will turn off the "LOW FUEL" message and a new DTE value will display.

#### Miles Per Gallon (MPG)

This display shows the instantaneous MPG in bar graph form while driving. This will monitor the gas mileage in real-time as you drive and can be used to modify driving habits in order to increase fuel economy.

## Vehicle Speed

Press and release the UP or DOWN button until "Vehicle Speed" displays highlighted in the EVIC and press the SELECT button. Press the SELECT button to display the current speed in mph or km/h. Pressing the SELECT button a second time will toggle the unit of measure between mph or km/h.

**NOTE:** Changing the unit of measure in the Vehicle Speed menu will not change the unit of measure in the EVIC.

## Trip Info

Press and release the UP or DOWN button until "Trip Info" is highlighted in the EVIC and press the SELECT button. Press and release the UP/DOWN buttons to

highlight one of the following functions if you want to reset it:

## Trip A

Shows the total distance traveled for Trip A since the last reset.

## Trip B

Shows the total distance traveled for Trip B since the last reset.

## Elapsed Time

Shows the total elapsed time of travel since the last reset when the ignition switch is in the ACC position. Elapsed time will increment when the ignition switch is in the ON or START position.

## To Reset A Trip Function

Reset will only occur while a resettable function is selected (highlighted). Press and hold the SELECT button to clear the resettable function being displayed.

## Tire PSI

Press and release the UP or DOWN button until "Tire PSI:" displays highlighted in the EVIC. Press the SELECT button to view a graphic of the vehicle with a tire pressure value at each corner of the graphic.

## Units

Press and release the UP or DOWN button until "Units" displays highlighted in the EVIC and press the SELECT button. The EVIC, odometer, and navigation system (if equipped) can be changed between English and Metric units of measure. To make your selection, scroll up or down until the preferred setting is highlighted, then

press and release the SELECT button until a check-mark appears next to the setting, showing that the setting has been selected.

## Vehicle Info (Customer Information Features)

Press and release the UP or DOWN button until "Vehicle Info" displays in the EVIC and press the SELECT button. Press the UP and DOWN button to scroll through the selections below:

• Coolant Temp

Displays the actual coolant temperature.

• Oil Temperature

Displays the actual oil temperature.

• Oil Pressure

Displays the actual oil pressure.

• Engine Hours

Displays the number of hours of engine operation.

## Messages #

Select from Main Menu using the UP or DOWN buttons. This feature shows the number of stored warning messages (in the # place holder). Pressing the SELECT button will allow you to see what the stored messages are. Press and release the UP and DOWN buttons if there is more than one message to step through the remaining stored messages. Pressing the BACK button takes you back to the Main Menu.

## **Compass / Temperature Display**

The compass readings indicate the direction the vehicle is facing. The EVIC will display one of eight compass readings and the outside temperature.

**NOTE:** The system will display the last known outside temperature when starting the vehicle and may need to be driven several minutes before the updated temperature is displayed. Engine temperature can also affect the displayed temperature; therefore, temperature readings are not updated when the vehicle is not moving.

## **Automatic Compass Calibration**

This compass is self-calibrating, which eliminates the need to manually reset the compass. When the vehicle is new, the compass may appear erratic and the EVIC will display CAL until the compass is calibrated. You may also calibrate the compass by completing one or more 360–degree turns (in an area free from large metal or

metallic objects) until the CAL indicator displayed in the EVIC turns off. The compass will now function normally.

**NOTE:** A good calibration requires a level surface and an environment free from large metallic objects such as buildings, bridges, underground cables, railroad tracks, etc.

## Manual Compass Calibration

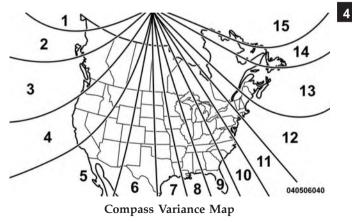
If the compass appears erratic and the CAL indicator does not appear in the EVIC display, you must put the compass into the Calibration Mode manually, as follows:

- 1. Turn ON the ignition switch.
- 2. Press the UP or DOWN button until the Setup (Customer-Programmable Features) menu is reached, then press the SELECT button.
- 3. Press the DOWN button until "Calibrate Compass" is displayed in the EVIC.

- 4. Press and release the SELECT button to start the calibration. The "CAL" indicator will be displayed in the EVIC.
- 5. Complete one or more 360–degree turns (in an area free from large metal or metallic objects) until the "CAL" indicator turns off. The compass will now function normally.

#### **Compass Variance**

Compass Variance is the difference between Magnetic North and Geographic North. To compensate for the differences the variance should be set for the zone where the vehicle is driven, per the zone map. Once properly set, the compass will automatically compensate for the differences, and provide the most accurate compass heading. For the most accurate compass performance, the compass must be set using the following steps. **NOTE:** Keep magnetic materials away from the top of the instrument panel, such as iPod's, Mobile Phones, Laptops and Radar Detectors. This is where the compass module is located, and it can cause interference with the compass sensor, and it may give false readings.



1. Turn the ignition switch ON.

- 2. Press the UP or DOWN button until the Setup (Customer-Programmable Features) menu is reached, then press the SELECT button.
- 3. Press the DOWN button until the "Compass Variance" message is displayed in the EVIC, then press the SELECT button. The last variance zone number displays in the EVIC.
- 4. Press and release the SELECT button until the proper variance zone is selected, according to the map.
- 5. Press and release the RETURN button to exit.

# Customer-Programmable Features (System Setup)

Personal Settings allows you to set and recall features when the transmission is in PARK. If the transmission is out of PARK or the vehicle begins moving, a warning

message **SYSTEM SETUP NOT AVAILABLE VEHICLE NOT IN PARK** displays when you try to select "System Setup" from the main menu.

Press and release the UP or DOWN button until "System Setup" is highlighted in the main menu of the EVIC. Then press the SELECT button to enter the System Setup sub-menu. Press and release the UP or DOWN button to select a feature form the following choices:

#### Select Language

When in this display you may select one of five languages for all display nomenclature, including the trip functions and the navigation system (if equipped). Press the UP or DOWN button while in this display and scroll through the language choices. Press the SELECT button to select English, Spanish (Español), French (Français). Then, as you continue, the information will display in the selected language.

#### Nav-Turn By Turn-If Equipped

When this feature is selected, the navigation system utilizes voice commands, guiding through the drive route, mile by mile, turn-by-turn until the final destination is reached. To make your selection, press and release the SELECT button until a check-mark appears next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated.

## Enable/Disable the Rear Park Assist System – If Equipped

The Rear Park Assist system will scan for objects behind the vehicle when the transmission is in the REVERSE position and the vehicle speed is less than 11 mph (18 km/h). The system can be enabled with Sound Only, Sound and Display, or turned OFF through the EVIC. To make your selection, press and release the SELECT button until a check-mark appears next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated. Refer to "Rear Park Assist System" in "Understanding The Features Of Your Vehicle" for system function and operating information.

#### Auto Unlock Doors – If Equipped

When ON is selected, all doors will unlock when the vehicle is stopped and the transmission is in the PARK or NEUTRAL position and the driver's door is opened. To make your selection, press and release the SELECT button until a check-mark appears next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated.

#### **Remote Unlock Sequence**

When **Driver Door 1st Press** is selected, only the driver's door will unlock on the first press of the Remote Keyless Entry (RKE) transmitter UNLOCK button. When Driver Door 1st Press is selected, you must press the RKE

transmitter UNLOCK button twice, to unlock the passenger's doors. When **All Doors 1st Press** is selected, all of the doors will unlock on the first press of the RKE transmitter UNLOCK button. To make your selection, press and release the SELECT button until a check-mark appears next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated.

## **RKE Linked To Memory – If Equipped**

When this feature is selected the memory seat, mirror, and radio settings will return to the memory set position when the RKE transmitter UNLOCK button is pressed. If this feature is not selected then the memory seat, mirror, and radio settings can only return to the memory set position using the door mounted switch. To make your selection, press and release the SELECT button until a check-mark appears next to the feature showing the

system has been activated or the check-mark is removed showing the system has been deactivated.

## Remote Start Comfort Sys. – If Equipped

When this feature is selected and the remote start is activated, the heated steering wheel and driver heated seat features will automatically turn on in cold weather. In warm weather, the driver vented seat feature will automatically turn on when the remote start is activated. These features will stay on through the duration of remote start or until the key is turned to RUN. To make your selection, press and release the SELECT button until a check-mark appears next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated.

## Horn with Remote Lock - If Equipped

When this feature is selected, a short horn sound will occur when the RKE transmitter LOCK button is pressed. This feature may be selected with or without the Flash

Lamps with Lock feature. To make your selection, press and release the SELECT button until a check-mark appears next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated.

#### Horn with Remote Start

When this feature is selected, a short horn sound will occur when the RKE transmitter REMOTE START button is pressed. To make your selection, press and release the SELECT button until a check-mark appears next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated.

#### Flash Lamps with Lock

When ON is selected, the front and rear turn signals will flash when the doors are locked or unlocked with the RKE transmitter. This feature may be selected with or without the sound horn on lock feature selected. To make

your selection, press and release the SELECT button until a check-mark appears next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated.

#### Headlamp Off Delay

When this feature is selected, the driver can choose to 4 have the headlights remain on for 0, 30, 60, or 90 seconds when exiting the vehicle. To make your selection, scroll up or down until the preferred setting is highlighted, then press and release the SELECT button until a checkmark appears next to the setting, showing that the setting has been selected.

#### **Daytime Running Lights**

When selected, the headlights on your vehicle will illuminate when the engine is started and the transmission is in any gear except PARK. This provides a constant lights on condition until the ignition is turned OFF. To make

your selection, press and release the SELECT button until a check-mark appears next to the setting, showing that the setting has been selected.

# Headlamps with Wipers (Available with Auto Headlights Only)

When ON is selected, and the headlight switch is in the AUTO position, the headlights will turn on approximately 10 seconds after the wipers are turned on. The headlights will also turn off when the wipers are turned off if they were turned on by this feature. To make your selection, press and release the SELECT button until a check-mark appears next to the setting, showing that the setting has been selected.

**NOTE:** Turning the headlights on during the daytime causes the instrument panel lights to dim. To increase the brightness, refer to "Lights" in "Understanding The Features Of Your Vehicle."

## Intermittent Wiper Options — If Equipped

When ON is selected, the system will automatically activate the windshield wipers if it senses moisture on the windshield. To make your selection, press and release the SELECT button until a check-mark appears next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated. When the system is deactivated, the system reverts to the standard intermittent wiper operation.

## **Key-Off Power Delay**

When this feature is selected, the power window switches, radio, Uconnect® phone (if equipped), DVD video system (if equipped), power sunroof (if equipped), and power outlets will remain active for up to 10 minutes after the ignition switch is turned OFF. Opening either front vehicle door will cancel this feature. To make your selection, scroll up or down until the preferred setting is

highlighted, then press and release the SELECT button until a check-mark appears next to the setting, showing that the setting has been selected.

#### **Illuminated Approach**

When this feature is selected, the headlights will activate and remain on for up to 90 seconds when the doors are unlocked with the RKE transmitter. To make your selection, scroll up or down until the preferred setting is highlighted, then press and release the SELECT button until a check-mark appears next to the setting, showing that the setting has been selected.

#### Flashers with Sliding Door

When this feature is selected the signal lamps activate when power or manual sliding doors are in operation, signaling other drivers that someone may be exiting or entering the vehicle. To make your selection, press and release the SELECT button until a check-mark appears

next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated

#### Easy Entry/Exit Seat – If Equipped

This feature provides automatic driver seat positioning to enhance driver mobility when entering and exiting the 4 vehicle. To make your selection, press and release the SELECT button until a check-mark appears next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated.

**NOTE:** The seat will return to the memorized seat location (if Recall Memory with Remote Key Unlock is set to ON) when the RKE transmitter is used to unlock the door. Refer to "Driver Memory Seat" in "Understanding The Features Of Your Vehicle" for further information.

## Tilt Mirror In Reverse – If Equipped

When this feature is selected and the vehicle is placed in a reverse gear, the driver's side mirror will tilt downward to allow the driver to see into the previous blind spot and avoid objects in close proximity to the rear of the vehicle. To make your selection, press and release the SELECT button until a check-mark appears next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated.

## Blind Spot Alert - If Equipped

There are three selections when operating Blind Spot Alert ("Blind Spot Alert Lights", "Blind Spot Alert Lights/CHM", "Blind Spot Alert Off"). The Blind Spot Alert feature can be activated in "Blind Spot Alert Lights" mode, when this mode is selected the Blind Spot Monitor (BSM) system is activated and will only show a visual alert in the outside mirrors. The Blind Spot Alert feature can be activated in "Blind Spot Alert Lights/CHM" mode, in this mode the Blind Spot Monitor (BSM) will show a visual alert in the outside mirrors as well as an audible alert when the turn signal is on. When "Blind Spot Alert Off" is selected the Blind Spot Monitor (BSM) system is deactivated.

To make your selection, press and release the SELECT button until a check-mark appears next to the feature showing the system has been activated or the check-mark is removed showing the system has been deactivated.

**NOTE:** If your vehicle has experienced any damage in the area where the sensor is located, even if the fascia is not damaged, the sensor may have become misaligned. Take your vehicle to an authorized dealer to verify sensor alignment. Having a sensor that is misaligned will result in the BSM not operating to specification.

## **Calibrate Compass**

Refer to "Compass Display" for more information.

## **Compass Variance**

Refer to "Compass Display" for more information.

## Turn Menu Off

Press and release SELECT to turn the menu off.

## Uconnect® 730N/430/430N CD/DVD/HDD/NAV — IF EQUIPPED

Refer to your Uconnect® Supplement Manual for detailed operating instructions.

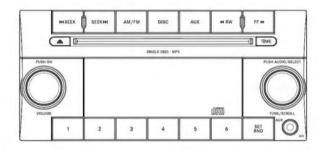
## Operating Instructions (Voice Command System) — If Equipped

Refer to "Voice Command" for further details.

## 

Refer to "Uconnect® Phone" for further details.

## Uconnect® 130



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#### Uconnect® 130

#### **Operating Instructions — Radio Mode**

**NOTE:** The ignition switch must be in the ON or ACC position to operate the radio.

## Power Switch/Volume Control (Rotary)

Push the ON/VOLUME control knob to turn on the radio. Push the ON/VOLUME control knob a second time to turn off the radio.

## **Electronic Volume Control**

The electronic volume control turns continuously (360 degrees) in either direction, without stopping. Turning the ON/VOLUME control knob to the right increases the volume, and to the left decreases it.

When the audio system is turned on, the sound will be set at the same volume level as last played.

## **SEEK Buttons**

Press and release the SEEK buttons to search for the next listenable station in AM/FM mode. Press the right switch to seek up and the left switch to seek down. The radio will remain tuned to the new station until you make

another selection. Holding either button will bypass stations without stopping, until you release it.

## **TIME Button**

Press the TIME button to alternate display of the time and radio frequency.

## **Clock Setting Procedure**

- 1. Press and hold the TIME button until the hours blink.
- 2. Adjust the hours by turning the right side TUNE/ SCROLL control knob.
- 3. After adjusting the hours, press the right side TUNE/ SCROLL control knob to set the minutes. The minutes will begin to blink.
- 4. Adjust the minutes using the right side TUNE/ SCROLL control knob. Press the TUNE/SCROLL control knob to save time change.

5. To exit, press any button/knob, or wait five seconds. **RW/FF** 

Pressing the RW (Rewind) or FF (Fast Forward) buttons causes the tuner to search for the next frequency in the direction of the arrows. This feature operates in either AM or FM frequencies.

#### **TUNE Control**

Turn the rotary TUNE/SCROLL control knob clockwise to increase or counterclockwise to decrease the frequency.

#### Setting the Tone, Balance, and Fade

Push the rotary TUNE/SCROLL control knob and BASS will display. Turn the TUNE/SCROLL control knob to the right or left to increase or decrease the bass tones.

Push the rotary TUNE/SCROLL control knob a second time and MID will display. Turn the TUNE/SCROLL control knob to the right or left to increase or decrease the mid-range tones.

Push the rotary TUNE/SCROLL control knob a third time and TREBLE will display. Turn the TUNE/SCROLL control knob to the right or left to increase or decrease the treble tones.

Push the rotary TUNE/SCROLL control knob a fourth time and BALANCE will display. Turn the TUNE/ SCROLL control knob to the right or left to adjust the sound level from the right or left side speakers.

Push the rotary TUNE/SCROLL control knob a fifth time and FADE will display. Turn the TUNE/SCROLL control knob to the left or right to adjust the sound level between the front and rear speakers.

Push the rotary TUNE/SCROLL control knob again to exit setting tone, balance, and fade.

### **AM/FM Button**

Press the buttons to select either AM or FM mode.

## SET/RND Button — To Set the Pushbutton Memory

When you are receiving a station that you wish to commit to pushbutton memory, press the SET/RND button. The symbol SET 1 will now show in the display window. Select the button (1 to 6) you wish to lock onto this station and press and release that button. If a button is not selected within five seconds after pressing the SET/RND button, the station will continue to play but will not be stored into pushbutton memory.

You may add a second station to each pushbutton by repeating the above procedure with this exception: Press the SET/RND button twice and SET 2 will show in the

display window. Each button can be set for SET 1 and SET 2 in both AM and FM. This allows a total of 12 AM and 12 FM stations to be stored into pushbutton memory. The stations stored in SET 2 memory can be selected by pressing the pushbutton twice.

Every time a preset button is used, a corresponding button number will display.

## Buttons 1 - 6

These buttons tune the radio to the stations that you commit to pushbutton memory (12 AM and 12 FM stations).

## **DISC Button**

Pressing the DISC button will allow you to switch from AM/FM modes to Disc modes.

## Operation Instructions — CD MODE For CD And MP3 Audio Play

#### NOTE:

- The ignition switch must be in the ON or ACC position to operate the radio.
- This radio is capable of playing compact discs (CD), recordable compact discs (CD-R), rewritable compact discs (CD-RW), compact discs with MP3 tracks and multisession compact discs with CD and MP3 tracks.

#### Inserting Compact Disc(s)

Gently insert one CD into the CD player with the CD label facing up. The CD will automatically be pulled into the CD player and the CD icon will illuminate on the radio display. If a CD does not go into the slot more than 1.0 in (2.5 cm), a disc may already be loaded and must be ejected before a new disc can be loaded.

If you insert a disc with the ignition ON and the radio ON, the unit will switch from radio to CD mode and begin to play when you insert the disc. The display will show the track number, and index time in minutes and seconds. Play will begin at the start of track 1.

## **CAUTION!**

- This CD player will accept 4–3/4 in (12 cm) discs only. The use of other sized discs may damage the CD player mechanism.
- Do not use adhesive labels. These labels can peel away and jam the player mechanism.
- The Uconnect<sup>®</sup> 130 is a single CD player. Do not attempt to insert a second CD if one is already loaded.

(Continued)

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## CAUTION! (Continued)

• Dual-media disc types (one side is a DVD, the other side is a CD) should not be used, and they can cause damage to the player.

EJECT Button - Ejecting a CD



Press the EJECT button to eject the CD.

If you have ejected a disc and have not removed it within 10 seconds, it will be reloaded. If the CD is not removed, the radio will reinsert the CD but will not play it.

A disc can be ejected with the radio and ignition OFF.

**NOTE:** Ejecting with the ignition OFF is not allowed on convertible or soft-top models (if equipped).

## **SEEK Button**

Press the right SEEK button for the next selection on the CD. Press the left SEEK button to return to the beginning of the current selection, or return to the beginning of the previous selection if the CD is within the first second of the current selection. Pressing and holding the SEEK button will allow faster scrolling through the tracks in CD and MP3 modes.

## **TIME Button**

Press this button to change the display from a large CD playing time display to a small CD playing time display.

## RW/FF

Press and hold the FF (Fast Forward) button and the CD player will begin to fast forward until FF is released, or RW or another CD button is pressed. The RW (Reverse) button works in a similar manner.

4

#### **AM/FM Button**

Press the button to select either AM or FM mode.

#### SET/RND Button (Random Play Button)

Press this button while the CD is playing to activate Random Play. This feature plays the selections on the compact disc in random order to provide an interesting change of pace.

Press the right SEEK button to move to the next randomly selected track.

Press the RND button a second time to stop Random Play.

#### Notes on Playing MP3 Files

The radio can play MP3 files; however, acceptable MP3 file recording media and formats are limited. When writing MP3 files, pay attention to the following restrictions.

## Supported Media (Disc Types)

The MP3 file recording media supported by the radio are CDDA, CD-R, CD-RW, MP3, and CDDA+MP3.

## Supported Medium Formats (File Systems)

The medium formats supported by the radio are ISO 9660 Level 1 and Level 2 and includes the Joliet extension. When reading discs recorded using formats other than ISO 9660 Level 1 and Level 2, the radio may fail to read files properly and may be unable to play the file normally. UDF and Apple HFS formats are not supported.

The radio uses the following limits for file systems:

- Maximum number of folder levels: 8
- Maximum number of files: 255
- Maximum number of folders. (The radio display of file names and folder names is limited. For large numbers of files and/or folders, the radio may be unable to

display the file name and folder name, and will assign a number instead. With a maximum number of files, exceeding 20 folders will result in this display. With 200 files, exceeding 50 folders will result in this display.)

- Maximum number of characters in file/folder names:
  - Level 1: 12 (including a separator "." and a three-character extension)
  - Level 2: 31 (including a separator "." and a three-character extension)

Multisession disc formats are supported by the radio. Multisession discs may contain combinations of normal CD audio tracks and computer files (including MP3 files). Discs created with an option such as "keep disc open after writing" are most likely multisession discs. The use of multisession for CD audio or MP3 playback may result in longer disc loading times.

#### Supported MP3 File Formats

The radio will recognize only files with the \*.MP3 extension as MP3 files. Non-MP3 files named with the \*.MP3 extension may cause playback problems. The radio is designed to recognize the file as an invalid MP3 and will not play the file.

When using the MP3 encoder to compress audio data to an MP3 file, the bit rate and sampling frequencies in the following table are supported. In addition, variable bit rates (VBR) are also supported. The majority of MP3 files use a 44.1 kHz sampling rate and a 192, 160, 128, 96 or VBR bit rate.

| MPEG<br>Specification   | Sampling<br>Frequency<br>(kHz) | Bit Rate (kbps)  |
|-------------------------|--------------------------------|--|
| MPEG-1 Audio<br>Layer 3 | 48, 44.1, 32                   | 320, 256, 224,<br>192, 160, 128,<br>112, 96, 80, 64,<br>56, 48, 40, 32 |
| MPEG-2 Audio<br>Layer 3 | 24, 22.05, 16                  | 160, 128, 144,<br>112, 96, 80, 64,<br>56, 48, 40, 32,<br>24, 16, 8     |

ID3 Tag information for artist, song title, and album title are supported for version 1 ID3 tags. ID3 version 2 is not supported by the radios.

Playlist files are not supported. MP3 Pro files are not supported.

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## Playback of MP3 Files

When a medium containing MP3 data is loaded, the radio checks all files on the medium. If the medium contains a lot of folders or files, the radio will take more time to start playing the MP3 files.

Loading times for playback of MP3 files may be affected **4** by the following:

- Media CD-RW media may take longer to load than CD-R media
- Medium formats Multisession discs may take longer to load than non-multisession discs
- Number of files and folders Loading times will increase with more files and folders

To increase the speed of disc loading, it is recommended to use CD-R media and single-session discs. To create a single-session disc, enable the "Disc at Once" option before writing to the disc.

#### **Operation Instructions - Auxiliary Mode**

The auxiliary (AUX) jack is an audio input jack, which allows the user to plug in a portable device, such as an MP3 player, or iPod®, and utilize the vehicle's audio system to amplify the source and play through the vehicle speakers.

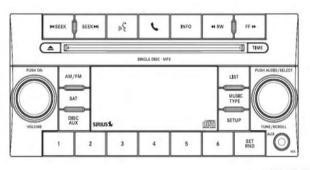
Pressing the DISC/AUX button will change the mode to auxiliary device if the AUX jack is connected.

**NOTE:** The AUX device must be turned on and the device's volume set to proper level. If the AUX audio is not loud enough, turn the device's volume up. If the AUX audio sounds distorted, turn the device's volume down.

## TIME Button (Auxiliary Mode)

Press this button to change the display to time of day. The time of day will display for five seconds (when ignition is OFF).

#### Uconnect® 130 WITH SATELLITE RADIO



042340030

## Uconnect® 130 Operating Instructions — Radio Mode

**NOTE:** The ignition switch must be in the ON/RUN or ACC position to operate the radio.

#### Power Switch/Volume Control (Rotary)

Push the ON/VOLUME control knob to turn on the radio. Push the ON/VOLUME control knob a second time to turn off the radio.

#### **Electronic Volume Control**

The electronic volume control turns continuously (360 degrees) in either direction, without stopping. Turning the ON/VOLUME control knob to the right increases the volume, and to the left decreases it.

When the audio system is turned on, the sound will be set at the same volume level as last played.

#### **SEEK Buttons**

Press and release the SEEK buttons to search for the next listenable station in AM/FM mode. Press the right switch to seek up and the left switch to seek down. The radio will remain tuned to the new station until you make

another selection. Holding either button will bypass stations without stopping, until you release it.

## Voice Command System (Radio) — If Equipped

Refer to "Voice Command" for further details.

# Voice Command Button Uconnect® Phone — If Equipped

Press this button to operate the Uconnect® Phone feature (if equipped). Refer to "Voice Command" for further details.

If your vehicle is not equipped with or this feature is not available on your vehicle, a "Not Equipped With Uconnect Phone" message will display on the radio screen.

## Phone Button Uconnect<sup>®</sup> Phone — If Equipped

Press this button to operate the Uconnect® Phone feature (if equipped). Refer to "Uconnect® Phone" for further details.

If your vehicle is not equipped with or this feature is not available on your vehicle, a "Not Equipped With Uconnect Phone" message will display on the radio screen.

## TIME Button

Press the TIME button to alternate display of the time and radio frequency.

## **Clock Setting Procedure**

- 1. Press and hold the TIME button until the hours blink.
- 2. Adjust the hours by turning the right side TUNE/ SCROLL control knob.

- 3. After adjusting the hours, press the right side TUNE/ SCROLL control knob to set the minutes. The minutes will begin to blink.
- 4. Adjust the minutes using the right side TUNE/ SCROLL control knob. Press the TUNE/SCROLL control knob to save time change.
- 5. To exit, press any button/knob or wait five seconds.

The clock can also be set by pressing the SETUP button. For vehicles equipped with satellite radio, press the SETUP button, use the TUNE/SCROLL control to select SET CLOCK, and then follow the above procedure, starting at Step 2. For vehicles not equipped with satellite radio, press the SETUP button and then follow the above procedure, starting at Step 2.

#### **INFO Button**

Press the INFO button for an RDS station (one with call letters displayed). The radio will return a Radio Text message broadcast from an FM station (FM mode only).

#### RW/FF

Pressing the RW (Rewind) or FF (Fast Forward) buttons causes the tuner to search for the next frequency in the direction of the arrows. This feature operates in either AM or FM frequencies.

#### **TUNE Control**

Turn the rotary TUNE/SCROLL control knob clockwise to increase or counterclockwise to decrease the frequency.

#### Setting the Tone, Balance, and Fade

Push the rotary TUNE/SCROLL control knob and BASS will display. Turn the TUNE/SCROLL control knob to the right or left to increase or decrease the bass tones.

Push the rotary TUNE/SCROLL control knob a second time and MID will display. Turn the TUNE/SCROLL control knob to the right or left to increase or decrease the mid-range tones.

Push the rotary TUNE/SCROLL control knob a third time and TREBLE will display. Turn the TUNE/SCROLL control knob to the right or left to increase or decrease the treble tones.

Push the rotary TUNE/SCROLL control knob a fourth time and BALANCE will display. Turn the TUNE/ SCROLL control knob to the right or left to adjust the sound level from the right or left side speakers.

Push the rotary TUNE/SCROLL control knob a fifth time and FADE will display. Turn the TUNE/SCROLL control knob to the left or right to adjust the sound level between the front and rear speakers.

Push the rotary TUNE/SCROLL control knob again to exit setting tone, balance, and fade.

#### **MUSIC TYPE Button**

Pressing this button once will turn on the Music Type mode for five seconds. Pressing the MUSIC TYPE button or turning the TUNE/SCROLL control knob within five seconds will allow the program format type to be selected. Many radio stations do not currently broadcast Music Type information.

Toggle the MUSIC TYPE button to select the following format types:

| Program Type                    | 16-Digit Character<br>Display |
|---------------------------------|-------------------------------|
| No program type or<br>undefined | None                          |
| Adult Hits                      | Adlt Hit                      |

| Program Type     | 16-Digit Character<br>Display |  |
|------------------|-------------------------------|--|
| Classical        | Classicl                      |  |
| Classic Rock     | Cls Rock                      |  |
| College          | College                       |  |
| Country          | Country                       |  |
| Foreign Language | Language                      |  |
| Information      | Inform                        |  |
| Jazz             | Jazz                          |  |
| News             | News                          |  |
| Nostalgia        | Nostalga                      |  |
| Oldies           | Oldies                        |  |
| Personality      | Persnlty                      |  |
| Public           | Public                        |  |
| Rhythm and Blues | R & B                         |  |
| Religious Music  | Rel Musc                      |  |

| Program Type          | 16-Digit Character<br>Display |  |  |
|-----------------------|-------------------------------|--|--|
| Religious Talk        | Rel Talk                      |  |  |
| Rock                  | Rock                          |  |  |
| Soft                  | Soft                          |  |  |
| Soft Rock             | Soft Rck                      |  |  |
| Soft Rhythm and Blues | Soft R&B                      |  |  |
| Sports                | Sports                        |  |  |
| Talk                  | Talk                          |  |  |
| Top 40                | Top 40                        |  |  |
| Weather               | Weather                       |  |  |

By pressing the SEEK button when the Music Type icon is displayed, the radio will be tuned to the next frequency station with the same selected Music Type name. The Music Type function only operates when in the FM mode.

If a preset button is activated while in the Music Type (Program Type) mode, the Music Type mode will be exited and the radio will tune to the preset station.

## **SETUP Button**

Pressing the SETUP button allows you to select between the following items:

• Set Clock — Pressing the SELECT button will allow you to set the clock. Adjust the hours by turning the TUNE/SCROLL control knob. After adjusting the hours, press the TUNE/SCROLL control knob to set the minutes. The minutes will begin to blink. Adjust the minutes using the right side TUNE/SCROLL control knob. Press the TUNE/SCROLL control knob to save time change.

# **AM/FM Button**

Press the button to select either AM or FM mode.

# SET/RND Button — To Set the Pushbutton Memory

When you are receiving a station that you wish to commit to pushbutton memory, press the SET/RND button. The symbol SET 1 will now show in the display window. Select the button (1–6) you wish to lock onto this station and press and release that button. If a button is not selected within five seconds after pressing the SET/ RND button, the station will continue to play but will not be stored into pushbutton memory.

You may add a second station to each pushbutton by repeating the above procedure with this exception: Press the SET/RND button twice and SET 2 will show in the display window. Each button can be set for SET 1 and SET 2 in both AM and FM. This allows a total of 12 AM and 12 FM stations to be stored into pushbutton memory. The stations stored in SET 2 memory can be selected by pressing the pushbutton twice.

Every time a preset button is used, a corresponding button number will display.

### Buttons 1 - 6

These buttons tune the radio to the stations that you commit to pushbutton memory (12 AM and 12 FM stations).

## **DISC/AUX Button**

Pressing the DISC/AUX button will allow you to switch from AM/FM modes to DISC/AUX mode.

# Operation Instructions — CD MODE for CD and **MP3 Audio Play**

NOTE:

- The ignition switch must be in the ON/RUN or ACC position to operate the radio.
- This radio is capable of playing compact discs (CD), recordable compact discs (CD-R), rewritable compact

discs (CD-RW), compact discs with MP3 tracks and multisession compact discs with CD and MP3 tracks.

## Inserting Compact Disc(s)

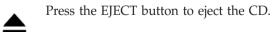
Gently insert one CD into the CD player with the CD label facing up. The CD will automatically be pulled into the CD player and the CD icon will illuminate on the 4 radio display. If a CD does not go into the slot more than 1.0 in (2.5 cm), a disc may already be loaded and must be ejected before a new disc can be loaded.

If you insert a disc with the ignition ON/RUN and the radio ON, the unit will switch from radio to CD mode and begin to play when you insert the disc. The display will show the track number, and index time in minutes and seconds. Play will begin at the start of track 1.

# CAUTION!

- This CD player will accept 4–3/4 in (12 cm) discs only. The use of other sized discs may damage the CD player mechanism.
- Do not use adhesive labels. These labels can peel away and jam the player mechanism.
- The Uconnect<sup>®</sup> 130 is a single CD player. Do not attempt to insert a second CD if one is already loaded.
- Dual-media disc types (one side is a DVD, the other side is a CD) should not be used, and they can cause damage to the player.

EJECT Button - Ejecting a CD



If you have ejected a disc and have not removed it within 10 seconds, it will be reloaded. If the CD is not removed, the radio will reinsert the CD but will not play it.

A disc can be ejected with the radio and ignition OFF.

**NOTE:** Ejecting with the ignition OFF is not allowed on convertible or soft-top models (if equipped).

# **SEEK Button**

Press the right SEEK button for the next selection on the CD. Press the left SEEK button to return to the beginning of the current selection, or return to the beginning of the previous selection if the CD is within the first second of the current selection. Pressing and holding the SEEK button will allow faster scrolling through the tracks in CD and MP3 modes.

# **TIME Button**

Press this button to change the display from a large CD playing time display to a small CD playing time display.

#### RW/FF

Press and hold FF (Fast Forward) and the CD player will begin to fast forward until FF is released or RW or another CD button is pressed. The RW (Reverse) button works in a similar manner.

#### **AM/FM Button**

Press the button to select either AM or FM mode.

## SET/RND Button (Random Play Button)

Press this button while the CD is playing to activate Random Play. This feature plays the selections on the compact disc in random order to provide an interesting change of pace.

Press the right SEEK button to move to the next randomly selected track.

Press the SET/RND button a second time to stop Random Play.

# **Notes On Playing MP3 Files**

The radio can play MP3 files; however, acceptable MP3 file recording media and formats are limited. When writing MP3 files, pay attention to the following restrictions.

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## Supported Media (Disc Types)

The MP3 file recording media supported by the radio are CDDA, CD-R, CD-RW, MP3, and CDDA+MP3.

## Supported Medium Formats (File Systems)

The medium formats supported by the radio are ISO 9660 Level 1 and Level 2 and includes the Joliet extension. When reading discs recorded using formats other than ISO 9660 Level 1 and Level 2, the radio may fail to read files properly and may be unable to play the file normally. UDF and Apple HFS formats are not supported.

The radio uses the following limits for file systems:

- Maximum number of folder levels: 8
- Maximum number of files: 255
- Maximum number of folders. (The radio display of file names and folder names is limited. For large numbers of files and/or folders, the radio may be unable to display the file name and folder name, and will assign a number instead. With a maximum number of files, exceeding 20 folders will result in this display. With 200 files, exceeding 50 folders will result in this display.)
- Maximum number of characters in file/folder names:
  - Level 1: 12 (including a separator "." and a three-character extension)
  - Level 2: 31 (including a separator "." and a three-character extension)

Multisession disc formats are supported by the radio. Multisession discs may contain combinations of normal CD audio tracks and computer files (including MP3 files). Discs created with an option such as "keep disc open after writing" are most likely multisession discs. The use of multisession for CD audio or MP3 playback may result in longer disc loading times.

# Supported MP3 File Formats

The radio will recognize only files with the \*.MP3 extension as MP3 files. Non-MP3 files named with the \*.MP3 extension may cause playback problems. The radio is designed to recognize the file as an invalid MP3 and will not play the file.

When using the MP3 encoder to compress audio data to an MP3 file, the bit rate and sampling frequencies in the following table are supported. In addition, variable bit rates (VBR) are also supported. The majority of MP3 files use a 44.1 kHz sampling rate and a 192, 160, 128, 96 or VBR bit rates.

| MPEG Specifi-<br>cation | Sampling<br>Frequency<br>(kHz) | Bit Rate (kbps)  |
|-------------------------|--------------------------------|--|
| MPEG-1 Audio<br>Layer 3 | 48, 44.1, 32                   | 320, 256, 224,<br>192, 160, 128,<br>112, 96, 80, 64,<br>56, 48, 40, 32 |
| MPEG-2 Audio<br>Layer 3 | 24, 22.05, 16                  | 160, 128, 144,<br>112, 96, 80, 64,<br>56, 48, 40, 32,<br>24, 16, 8     |

ID3 Tag information for artist, song title, and album title are supported for version 1 ID3 tags. ID3 version 2 is not supported by the radios.

Playlist files are not supported. MP3 Pro files are not supported.

# Playback of MP3 Files

When a medium containing MP3 data is loaded, the radio checks all files on the medium. If the medium contains a lot of folders or files, the radio will take more **4** time to start playing the MP3 files.

Loading times for playback of MP3 files may be affected by the following:

- Media CD-RW media may take longer to load than CD-R media
- Medium formats Multisession discs may take longer to load than non-multisession discs
- Number of files and folders Loading times will increase with more files and folders

To increase the speed of disc loading, it is recommended to use CD-R media and single-session discs. To create a single-session disc, enable the "Disc at Once" option before writing to the disc.

# LIST Button (CD Mode for MP3 Play)

Pressing the LIST button will bring up a list of all folders on the disc. Scrolling up or down the list is done by turning the TUNE/SCROLL control knob. Selecting a folder by pressing the TUNE/SCROLL control knob will begin playing the files contained in that folder (or the next folder in sequence if the selection does not contain playable files).

The folder list will time out after five seconds.

# INFO Button (CD Mode for MP3 Play)

Pressing the INFO button repeatedly will scroll through the following TAG information: Song Title, Artist, File Name, and Folder Name (if available).

Press the INFO button once more to return to "elapsed time" priority mode.

Press and hold the INFO button for three seconds or more and the radio will display song titles for each file.

Press and hold the INFO button again for three seconds to return to "elapsed time" display.

# **Operation Instructions - Auxiliary Mode**

The auxiliary (AUX) jack is an audio input jack which allows the user to plug in a portable device such as an MP3 player or iPod® and utilize the vehicle's audio system to amplify the source and play through the vehicle speakers.

Pressing the AUX button will change the mode to auxiliary device if the AUX jack is connected.

**NOTE:** The AUX device must be turned on and the device's volume set to the proper level. If the AUX audio is not loud enough, turn the device's volume up. If the AUX audio sounds distorted, turn the device's volume down.

### TIME Button (Auxiliary Mode)

Press this button to change the display to time of day. The time of day will display for five seconds (when the ignition is OFF).

## Uconnect<sup>®</sup> (Satellite Radio) — If Equipped

Satellite radio uses direct satellite-to-receiver broadcasting technology to provide clear digital sound, coast to coast. The subscription service provider is Sirius Satellite Radio. This service offers over 130 channels of music, sports, news, entertainment, and programming for children, directly from its satellites and broadcasting studios.

**NOTE:** Sirius service is not available in Hawaii and has limited coverage in Alaska.

## **System Activation**

Sirius Satellite Radio service is pre-activated, and you may begin listening immediately to the one year of audio service that is included with the factory-installed satellite 4 radio system in your vehicle. Sirius will supply a welcome kit that contains general information, including how to setup your on-line listening account. For further information, call the toll-free number 888-539-7474, or visit the Sirius web site at www.sirius.com, or at www.siriuscanada.ca for Canadian residents.

# Electronic Serial Number/Sirius Identification Number (ESN/SID)

Please have the following information available when calling:

- 1. The Electronic Serial Number/Sirius Identification Number (ESN/SID).
- 2. Your Vehicle Identification Number.

To access the ESN/SID, refer to the following steps:

# ESN/SID Access

With the ignition switch in the ON/RUN or ACC position and the radio on, press the SETUP button and scroll using the TUNE/SCROLL control knob until Sirius ID is selected. Press the TUNE/SCROLL control knob and the Sirius ID number will display. The Sirius ID number display will time out in two minutes. Press any button on the radio to exit this screen.

# Selecting Uconnect® (Satellite) Mode

Press the SAT button until "SAT" appears in the display. A CD may remain in the radio while in the Satellite radio mode.

## Satellite Antenna

To ensure optimum reception, do not place items on the roof around the rooftop antenna location. Metal objects placed within the line of sight of the antenna will cause decreased performance. Larger luggage items such as bikes should be placed as far rearward as possible, within the loading design of the rack. Do not place items directly on or above the antenna.

# **Reception Quality**

Satellite reception may be interrupted due to one of the following reasons:

• The vehicle is parked in an underground parking structure or under a physical obstacle.

- Dense tree coverage may interrupt reception in the form of short audio mutes.
- Driving under wide bridges or along tall buildings can cause intermittent reception.
- Placing objects over or too close to the antenna can cause signal blockage.

# **Operating Instructions - Uconnect® (Satellite)** Mode

NOTE: The ignition switch must be in the ON/RUN or ACC position to operate the radio.

# **SEEK Buttons**

Press and release the SEEK buttons to search for the next channel in Satellite mode. Press the right switch to seek up and the left switch to seek down. The radio will remain tuned to the new channel until you make another selection. Holding either button will bypass channels without stopping until you release it.

## SCAN Button

Pressing the SCAN button causes the tuner to search for the next channel, pausing for eight seconds before continuing to the next. To stop the search, press the SCAN button a second time.

## **INFO Button**

Pressing the INFO button will cycle the display information between Artist, Song Title, and Composer (if available). Also, pressing and holding the INFO button for an additional three seconds will make the radio display the Song Title all of the time (press and hold again to return to normal display).

## RW/FF

Pressing the RW (Rewind) or FF (Fast Forward) buttons causes the tuner to search for the next channel in the direction of the arrows.

# **TUNE Control (Rotary)**

Turn the rotary TUNE/SCROLL control knob clockwise to increase or counterclockwise to decrease the channel.

## MUSIC TYPE Button

Pressing this button once will turn on the Music Type mode for five seconds. Pressing the MUSIC TYPE button or turning the TUNE/SCROLL control knob within five seconds will allow the program format type to be selected.

Toggle the MUSIC TYPE button again to select the music type.

By pressing the SEEK button when the Music Type function is active, the radio will be tuned to the next channel with the same selected Music Type name.

If a preset button is activated while in the Music Type (Program Type) mode, the Music Type mode will be exited and the radio will tune to the preset channel.

## **SETUP Button**

Pressing the SETUP button allows you to select the following items:

• Display Sirius ID number — Press the AUDIO/ SELECT button to display the Sirius ID number. This number is used to activate, deactivate, or change the Sirius subscription.

## SET Button – To Set the Pushbutton Memory

When you are receiving a channel that you wish to commit to pushbutton memory, press the SET button. The symbol SET 1 will now show in the display window.

Select the button (1-6) you wish to lock onto this channel and press and release that button. If a button is not selected within five seconds after pressing the SET button, the channel will continue to play but will not be stored into pushbutton memory.

You may add a second channel to each pushbutton by repeating the above procedure with this exception: Press the SET button twice and SET 2 will show in the display window. Each button can be set for SET 1 and SET 2. This allows a total of 12 Satellite channels to be stored into pushbutton memory. The channels stored in SET 2 memory can be selected by pressing the pushbutton twice.

Every time a preset button is used, a corresponding button number will display.

## Buttons 1 - 6

These buttons tune the radio to the channels that you commit to pushbutton memory (12 Satellite stations).

# Operating Instructions (Uconnect® Phone) — If Equipped

Refer to "Uconnect® Phone" for further details.

# iPod®/USB/MP3 CONTROL — IF EQUIPPED

**NOTE:** This section is for sales code RES and REQ/ REL/RET radios only with Uconnect®. For sales code RBZ/RHB, RHR, RHP, RHW or RB2 touch-screen radio iPod®/USB/MP3 control feature, refer to the separate RBZ/RHB, RHR, RHP, RHW or RB2 User's Manual. iPod®/USB/MP3 control is available only if equipped as an option with these radios.

This feature allows an iPod® or external USB device to be plugged into the USB port, located in the glove compartment.

iPod® control supports Mini, 4G, Photo, Nano, 5G iPod® and iPhone® devices. Some iPod® software versions may not fully support the iPod® control features. Please visit Apple's website for software updates.

# NOTE:

- If the radio has a USB port, refer to the appropriate Uconnect® Multimedia radio User's Manual for iPod® or external USB device support capability.
- Connecting an iPod® or consumer electronic audio device to the AUX port located in the radio faceplate, plays media, but does not use the iPod® /MP3 control feature to control the connected device.

# Connecting The iPod® Or External USB Device

Use the connection cable to connect an iPod® or external USB device to the vehicle's USB connector port which is located in the glove compartment.



**USB** Connector Port

**NOTE:** The glove compartment will have a position where the iPod® or consumer electronic audio device cable can be routed through without damaging the cable when closing the lid. This allows routing of the cable without damaging it while closing the lid. If a cut out is not available in the glove compartment, route the cable away from the lid latch and in a place that will allow the lid to close without damaging the cable.

Once the audio device is connected and synchronized to the vehicle's iPod®/USB/MP3 control system (iPod® or external USB device may take a few minutes to connect), the audio device starts charging and is ready for use by pressing radio switches, as described below.

**NOTE:** If the audio device battery is completely discharged, it may not communicate with the iPod®/USB/ MP3 control system until a minimum charge is attained. Leaving the audio device connected to the iPod®/USB/ MP3 control system may charge it to the required level.

## **Using This Feature**

By using an iPod<sup>®</sup> cable, or an external USB device to connect to the USB port:

- The audio device can be played on the vehicle's sound system, providing metadata (artist, track title, album, etc.) information on the radio display.
- The audio device can be controlled using the radio buttons to Play, Browse, and List the iPod® contents.
- The audio device battery charges when plugged into the USB/AUX connector (if supported by the specific audio device).

# Controlling The iPod® Or External USB Device Using Radio Buttons

To get into the iPod®/USB/MP3 control mode and access a connected audio device, either press the "AUX" button on the radio faceplate or press the VR button and say "USB" or "Switch to USB". Once in the iPod®/USB/

MP3 control mode, audio tracks (if available from audio device) start playing over the vehicle's audio system.

# **Play Mode**

When switched to iPod®/USB/MP3 control mode, the iPod® or external USB device automatically starts Play mode. In Play mode, the following buttons on the radio faceplate may be used to control the iPod® or external USB device and display data:

- Use the TUNE control knob to select the next or previous track.
  - Turning it clockwise (forward) by one click, while playing a track, skips to the next track or press the VR button and say "Next Track".
  - Turning it counterclockwise (backward) by one click, will jump to the previous track in the list or press the VR button and say "Previous Track"

- Jump backward in the current track by pressing and holding the << **RW** button. Holding the << **RW** button long enough will jump to the beginning of the current track.
- Jump forward in the current track by pressing and holding the FF>> button.
- A single press backward << **RW** or forward **FF**>> will jump backward or forward respectively, for five seconds.
- Use the << SEEK and SEEK>> buttons to jump to the previous or next track. Pressing the SEEK>> button during play mode will jump to the next track in the list, or press the VR button and say "Next or Previous Track".
- While a track is playing, press the **INFO** button to see the associated metadata (artist, track title, album, etc.) for that track. Pressing the **INFO** button again jumps

to the next screen of data for that track. Once all screens have been viewed, the last INFO button press will go back to the play mode screen on the radio.

- Pressing the **REPEAT** button will change the audio device mode to repeat the current playing track or press the VR button and say "Repeat ON" or "Repeat Off".
- Press the SCAN button to use iPod®/USB/MP3 device scan mode, which will play the first 10 seconds of each track in the current list and then forward to the next song. To stop SCAN mode and start playing the desired track, when it is playing the track, press the SCAN button again. During Scan mode, pressing the << SEEK and SEEK>> buttons will select the previous and next tracks.
- **RND** button (available on sales code RES radio only): Pressing this button toggles between Shuffle ON and Shuffle OFF modes for the iPod® or external USB

device, or press the VR button and say "Shuffle ON" or "Shuffle Off". If the RND icon is showing on the radio display, then the shuffle mode is ON.

## List Or Browse Mode

During Play mode, pressing any of the buttons described below, will bring up List mode. List mode enables scrolling through the list of menus and tracks on the audio device.

- TUNE control knob: The TUNE control knob functions in a similar manner as the scroll wheel on the audio device or external USB device.
  - Turning it clockwise (forward) and counterclockwise (backward) scrolls through the lists, displaying the track detail on the radio display. Once the track to be played is highlighted on the radio display, press the TUNE control knob to select and start playing the track. Turning the TUNE control knob fast will scroll

through the list faster. During fast scroll, a slight delay in updating the information on the radio display may be noticeable.

- During all List modes, the iPod® displays all lists in "wrap-around" mode. So if the track is at the bottom of the list, just turn the wheel backward (counter-clockwise) to get to the track faster.
- In List mode, the radio **PRESET** buttons are used as shortcuts to the following lists on the iPod® or external USB device.
- Preset 1 Playlists
- Preset 2 Artists
- Preset 3 Albums
- Preset 4 Genres
- Preset 5 Audiobooks
- Preset 6 Podcasts

- Pressing a PRESET button will display the current list on the top line and the first item in that list on the second line.
- To exit List mode without selecting a track, press the same **PRESET** button again to go back to **Play mode**.
- LIST button: The LIST button will display the top level menu of the iPod® or external USB device. Turn the TUNE control knob to list the top-menu item to be selected and press the TUNE control knob. This will display the next sub-menu list item on the audio device, then follow the same steps to go to the desired track in that list. Not all iPod® or external USB device sub-menu levels are available on this system.
- **MUSIC TYPE** button: The **MUSIC TYPE** button is another shortcut button to the genre listing on your audio device.

# CAUTION!

- Leaving the iPod® or external USB device (or any supported device) anywhere in the vehicle in extreme heat or cold can alter the operation or damage the device. Follow the device manufacturer's guidelines.
- Placing items on the iPod® or external USB device, or connections to the iPod® or external USB device in the vehicle, can cause damage to the device and/or to the connectors.

## WARNING!

Do not plug in or remove the iPod® or external USB device while driving. Failure to follow this warning could result in an accident.

# **Bluetooth Streaming Audio (BTSA)**

Music can be streamed from your cellular phone to the Uconnect<sup>®</sup> phone system.

# Controlling BTSA Using Radio Buttons

To enter BTSA mode, press either "AUX" button on the radio or press the VR button and say "Bluetooth Streaming Audio".

## Play Mode

When switched to BTSA mode, some audio devices can start playing music over the vehicle's audio system, but some devices require the music to be initiated on the device first, then it will get streamed to the Uconnect® phone system. Seven devices can be paired to the Uconnect® phone system, but just one can be selected and played.

# Selecting A Different Audio Device

- 1. Press the PHONE button to begin.
- 2. After the "Ready" prompt and following the beep, say "Setup", then say "Select Audio Devices".
- 3. Say the name of the audio device or ask the Uconnect® phone system to list the audio devices.

# Next Track

Use the SEEK UP button, or press the VR button on the radio and say "Next Track", to jump to the next music track on your cellular phone.

# **Previous Track**

Use the SEEK DOWN button, or press the VR button on the radio and say "Previous Track", to jump to the previous music track on your cellular phone.

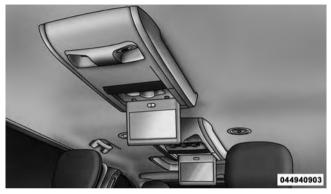
### Browse

Browsing is not available on a Bluetooth Streaming Audio (BTSA) device. Only the current song that is playing will display info.

# UCONNECT® MULTIMEDIA — VIDEO ENTERTAINMENT SYSTEM (VES™) — If Equipped

# **Getting Started**

• Screen(s) located in the overhead console: Unfold the overhead LCD screen(s) by pushing the button on the overhead console behind the screen(s).



Video Entertainment System (VESTM)

- Cycle the ignition to the ON or ACC position.
- Your vehicle may be equipped with either a standard DVD player or a Blu-ray Disc Player. If equipped with a Blu-ray Disc Player, the icon will be present on the Player.

#### UNDERSTANDING YOUR INSTRUMENT PANEL 379

- Turn on the Player (if equipped on Dual Screen System) by pushing the Power button, located on the far left, or by pressing the button on the Remote Control.
- When the Video Screen(s) are open and a DVD/Bluray Disc is inserted into the VES<sup>™</sup> player, the screen(s) turn(s) on automatically, the headphone transmitters turn on and playback begins.
- For Dual Video Screen System, Channel 1 on the Remote Control and Headphones refers to Screen 1 (second row) and Channel 2 on the Remote Control and Headphones refers to Screen 2 (third row). Refer to the Dual Video Screen section for more information.
- The system can be controlled by the front seat occupants using either the touch-screen- radio, the DVD or Blu-ray Disc Player, or by the rear seat occupants using the remote control.

# **Blu-ray Player**

# Play A Blu-ray Disc

To view a Blu-ray insert the disc into the Blu-ray VES<sup>TM</sup> disc Player. Playback will begin automatically after the Blu-ray is recognized by the disc drive. If playback does not begin automatically after the disc is inserted into the Blu-ray player press the play button. If playback does not begin automatically after the disc is inserted into Blu-ray VES<sup>TM</sup> disc Player follow these steps:

# Using the Touch-Screen Radio

- Press the MENU hard-key, then touch the Rear VES<sup>TM</sup> soft key. If a chapter list appears on the right side of the screen, touch the hide list soft key to display the Rear VES<sup>TM</sup> control screen.
- Touch the 1 soft-key to select an audio channel, then touch the VES<sup>TM</sup> Disc soft-key in the media column.

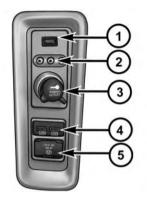
## Using the Remote Control

- Select an audio channel (Channel 1 for 2nd row screen and Channel 2 for 3rd row screen), then press the source key and select VES<sup>™</sup> Disc from the menu.
- Press popup/menu key to navigate disc menu and options.

**NOTE:** Due to the size of the content on a Blu-ray disc, the disc may not start playing immediately.

# **Play Video Games**

Connect the video game console to the Auxiliary RCA input jacks or HDMI port, located on the left side behind the second row seat.



When connecting an external source to the AUX input, be sure to follow the standard color coding for the VES<sup>TM</sup> jacks:

NOTE: Certain high-end video games, such as Playstation3 and XBox360 will exceed the power limit of the vehicle's Power Inverter. Refer to the Power Inverter section in your vehicle's Owner's Manual for more information.

# Using The Remote Control

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1. HDMI port

2. Audio/Video In

3. Power Outlet

4. USB Ports (Charge Only)

5. Power Inverter

1. Press the MODE button on the Remote Control.

2. While looking at the video screen, highlight VES AUX 1, by either pressing Up/Down/Left/Right buttons or

by repeatedly pressing the MODE button, then press ENTER on the Remote Control.



Select VES AUX1 Mode On The VES Screen Using The Touch-Screen Radio Controls

1. Press the MENU hard-key on the radio faceplate.

2. Touch the Rear VES soft-key to display the Rear VES Controls. If a channel list is displayed, press the HIDE LIST soft-key to display the Rear VES Controls screen.





3. Touch the 1 soft-key and then touch either AUX 1 or AUX 2 in the VES column (depending which AUX input is used). To exit press the back arrow soft-key at the top of the screen.

| Rear VES Controls |        |       |       |           |  |
|-------------------|--------|-------|-------|-----------|--|
|                   |        | RADIO | MEDIA | Ves       |  |
|                   | ل<br>ل | AM    | HDD   | DISC      |  |
| 11.02.054         | 1      | FM    | DISC  | AUX1      |  |
|                   |        | SAT   | AUX   | AUX2      |  |
|                   | 2      |       |       |           |  |
| 12:00 🔂 LOCK      | LIST   |       |       |           |  |
|                   |        |       |       | 010107710 |  |

Select Channel/Screen 1 And AUX 1 In The VES Column

# Listen To An Audio Source On Channel 2 While A Video Is Playing On Channel 1

Ensure the Remote Control and Headphone switch is on Channel 2.

# Using The Remote Control

- 1. Press the SOURCE button on the Remote Control and the Mode Select Screen will display, unless a video is playing then only a small banner will appear on the bottom of the screen.
- 2. While looking at the video screen, either press Up/ Down/Left/Right on the Remote Control to highlight the desired audio source or repeatedly press the

SOURCE button on the remote until the desired audio source appears on the screen.



Select FM Mode On The VES Screen Using The Touch-Screen Radio Controls

1. Press the MENU hard-key on the radio faceplate.

2. Touch the Rear VES soft-key to display the Rear VES Controls. If a channel list is displayed, press the HIDE LIST soft-key to display the Rear VES Controls screen.



**Rear VES Soft-Key** 

3. To listen to an audio source on Channel 2 while a video is playing on Channel 1, touch the 2 soft-key and choose an audio source. To exit touch the back arrow soft-key at the top left of the left screen.



Select Channel/Screen 2 And HDD In The Media Column

### **Dual Video Screen**

**NOTE:** Typically there are two different ways to operate the features of the Video Entertainment System (VES<sup>TM</sup>).

- The Remote Control
- The Touch-Screen Radio (If Equipped)

## Play A DVD Using The Touch-Screen Radio

**NOTE:** Headunit DVD player does not play Blu-Ray discs.

- 1. Press the OPEN/CLOSE or LOAD hard-key on the radio faceplate (Touch-Screen).
- 2. Insert the DVD with the label facing up. The radio automatically selects the appropriate mode after the disc is recognized and displays the menu screen or starts playing the first track.

- 3. To watch a DVD on Screen 1 for second row passengers, ensure the Remote Control and Headphone switch is on Channel 1.
- 4. To watch a DVD on Screen 2 for third row passengers, ensure the Remote Control and Headphone switch is on Channel 2.

# Using The Remote Control

- 1. Press the SOURCE button on the Remote Control.
- 2. While looking at Screen 1 or 2, highlight DISC by either pressing Up/Down/Left/Right buttons or by repeatedly pressing the SOURCE button, then press ENTER/OK.



Select DISC Mode On The VES<sup>™</sup> Screen NOTE:

• Channel/Screen 1 select mode information is shown on the left side of the screen.

- Channel/Screen 2 select mode information is shown on the right side of the screen.
- The VES<sup>TM</sup> will retain the last setting when turned off.

### Using The Touch-Screen Radio Controls

- 1. Press the MENU hard-key on the radio faceplate.
- 2. Touch the Rear VES soft-key to display the Rear VES Controls. If a channel list is displayed, press the HIDE LIST soft-key to display the Rear VES Controls screen.



## **Rear VES Soft-key**

3. Touch the 1 or 2 soft-key and then the DISC soft-key in the MEDIA column. To exit touch the back arrow at the top left of the screen.

## NOTE:

- To view a DVD on the radio press the RADIO/MEDIA hard-key, on the radio faceplate, then touch the DISC tab soft-key and then the VIEW VIDEO soft-key.
- Viewing a DVD on the Touch-Screen radio screen is not available in all states/provinces. If available, the vehicle must be stopped and the shift lever must be in the PARK position for vehicles with an automatic transmission. In vehicles with a manual transmission the parking brake must be engaged.
- Touching the screen on a Touch-Screen radio while a DVD is playing brings up basic remote control functions for DVD play such as scene selection, Play, Pause, FF, RW, and Stop. Pressing the X in the upper corner will turn off the remote control screen functions.

## Play A DVD Using The VES<sup>™</sup> Player (If Equipped)

1. Insert the DVD with the label facing up. The VES<sup>™</sup> player automatically selects the appropriate mode after the disc is recognized and starts playing the DVD.

**NOTE:** The VES<sup>™</sup> player has basic DVD control function such as Menu, Play, Pause, FF, RW and Stop

- 2. To watch a DVD on Screen 1 for second row passengers, ensure the Remote Control and Headphone switch is on Channel 1.
- 3. To watch a DVD on Screen 2 for third row passengers, ensure the Remote Control and Headphone switch is on Channel 2.

# Using The Remote Control

- 1. Press the SOURCE button on the Remote Control.
- 2. While looking at Screen 1 or 2, highlight VES DISC by either pressing Up/Down/Left/Right buttons or by repeatedly pressing the SOURCE button, then press ENTER/OK on the Remote Control.



Select VES DISC Mode On The VES Screen NOTE:

• Channel/Screen 1 select mode information is shown on the left side of the screen.

- Channel/Screen 2 select mode information is shown on the right side of the screen.
- The VES<sup>TM</sup> will retain the last setting when turned off.

# Using The Touch-Screen Radio Controls

- 1. Press the MENU hard-key on the radio faceplate.
- 2. Touch the Rear VES soft-key to display the Rear VES Controls. If a channel list is displayed, touch the HIDE LIST soft-key to display the Rear VES Controls screen.



**Rear VES Soft-key** 

3. Touch the 1 or 2 soft-key and then the DISC soft-key in the VES column. To exit touch the back arrow soft-key at the top left of the screen.



Select Channel/Screen 1 And DISC In The VES Column

NOTE:

- To view a DVD on the radio press the RADIO/MEDIA hard-key, on the radio faceplate, then touch the DISC tab soft-key and then the VIEW VIDEO soft-key.
- Viewing a DVD on the Touch-Screen radio screen is not available in all states/provinces. If available, the vehicle must be stopped and the shift lever must be in the PARK position for vehicles with an automatic transmission. In vehicles with a manual transmission the parking brake must be engaged.

# Play A Blu-ray Disc Using The Blu-ray Player (If Equipped)

1. Insert the Blu-ray disc with the label facing up. The Blu-ray player automatically selects the appropriate mode after the disc is recognized and starts playing the Blu-ray disc.

**NOTE:** The Blu-ray player has basic control functions **NOTE:** such as Menu, Play, Pause, FF, RW and Stop.

- 2. To watch a Blu-ray disc on Screen 1 for second row passengers, ensure the Remote Control and Head-phone switch is on Channel 1.
- 3. To watch a Blu-ray disc on Screen 2 for third row passengers, ensure the Remote Control and Head-phone switch is on Channel 2.

# Using The Remote Control

- 1. Press the SOURCE button on the Blu-ray player Remote Control.
- 2. While looking at Screen 1 or 2, highlight Blu-ray by either pressing Up/Down/Left/Right buttons or by repeatedly pressing the SOURCE button, then press OK on the Remote Control.

- Channel/Screen 1 select mode information is shown on the left side of the screen.
- Channel/Screen 2 select mode information is shown on the right side of the screen.
- The VES<sup>TM</sup> will retain the last setting when turned off.

# Using The Touch-Screen Radio Controls

1. Press the MENU hard-key on the radio faceplate.

2. Touch the Rear VES<sup>TM</sup> soft-key to display the Rear VES<sup>TM</sup> Controls. If a channel list is displayed, touch the HIDE LIST soft-key to display the Rear VES<sup>TM</sup> Controls screen.

3. Touch the 1 or 2 soft-key and then the VES<sup>TM</sup> Disc soft-key in the VES<sup>TM</sup> column. To exit touch the back arrow soft-key at the top left of the screen.

# NOTE:

- To view a Blu-ray Disc on the radio press the RADIO/ MEDIA hard-key, on the radio faceplate, then touch the VES<sup>™</sup> Disc tab soft-key and then the VIEW VIDEO soft-key.
- Viewing a Blu-ray Disc on the Touch-Screen radio screen is not available in all states/provinces. If available, the vehicle must be stopped and the shift lever must be in the PARK position for vehicles with an automatic transmission. In vehicles with a manual transmission the parking brake must be engaged.

# Listen To An Audio Source While A Video Is Playing

Ensure the Remote Control and Headphone switch are on the same channel. If watching a video on Screen 1 (second row), then Channel 2 could be used for audio. If watching a video on Screen 2 (third row), then Channel 1 could be used for audio.

# Using The Remote Control

- 1. Press the SOURCE button on the Remote Control and the Mode Select Screen will display, unless a video is playing then only a small banner will appear on the bottom of the screen.
- 2. While looking at the video screen, either press Up/ Down/Left/Right on the Remote Control to highlight the desired audio source or repeatedly press the

SOURCE button on the remote until the desired audio source appears on the screen.



Select FM Mode On The VES Screen Using The Touch-Screen Radio Controls

1. Press the MENU hard-key on the radio faceplate.

2. Touch the Rear VES soft-key to display the Rear VES Controls. If a channel list is displayed, press the HIDE LIST soft-key to display the Rear VES Controls screen.



**Rear VES Soft-Key** 

3. To listen to an audio source on Channel 2 while a video is playing on Channel 1, touch the 2 soft-key and choose an audio source. To exit touch the back arrow soft-key at the top left of the left screen.

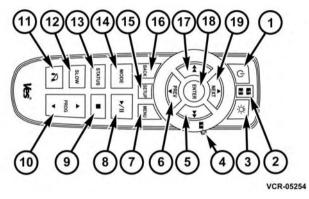


Select Channel/Screen 2 And HDD In The Media Column

## Important Notes For Dual Video Screen System

- VES is able to transmit two channels of stereo audio and video simultaneously.
- The Blu-ray Disc Player can play CDs, DVDs and Blu-ray Discs.
- The DVD Player can play CDs and DVDs.
- In split screen mode the left side equates to Channel 1 and the right side equates to Channel 2.
- Selecting a video source on Channel 1, the video source will display on the second row screen or Screen 1 and can be heard on Channel 1.

- Selecting a video source on Channel 2, the video VES<sup>™</sup> Remote Control If Equipped source will display on the third row screen or Screen 2 and can be heard on Channel 2.
- The 2nd row screen and 3rd row screen of the Video Entertainment System can play two separate discs by utilizing the touch-screen radio DVD player and Bluray Disc Player.
- Audio can be heard through the headphones even when the screen(s) are closed.



**Remote Control** 

# **Controls And Indicators**

1. Power – Turns the screen and wireless headphone transmitter for the selected Channel on or off. To hear

audio while the screen is closed, press the Power button to turn the headphone transmitter on.

- 2. Channel Selector Indicators When a button is pressed, the currently affected channel or channel button is illuminated momentarily.
- 3. Light Turns the remote control backlighting on or off. The remote backlighting turns off automatically after five seconds.
- 4. Channel/Screen Selector Switch Indicates which channel is being controlled by the remote control. When the selector switch is in the Channel 1 position, the remote controls the functionality of headphone Channel 1 (right side of the screen). When the selector switch is in the Channel 2, position the remote controls the functionality of headphone Channel 2 (left side of the screen).

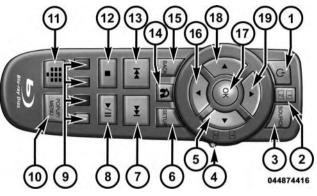
- 5. ►► In radio modes, press to seek the next tunable station. In disc modes, press and hold to fast forward through the current audio track or video chapter. In menu modes use to navigate in the menu.
- 6. ▼ / Prev In radio modes, press to select to the previous station. In disc modes, press to advance to the start of the current or previous audio track or video chapter. In menu modes, use to navigate in the menu.
- 7. POP UP/MENU Press to return to the main menu of a DVD disc, to select a satellite audio channel from the Station list, or select playback modes (SCAN/ RANDOM for a CD).
- 8.  $\blacktriangleright$  / || (Play/Pause) Begin/resume or pause disc play.
- 9. (Stop) Stops disc play

- 10. PROG Up/Down / Rewind/skip back and fast fwd/ skip forward – When listening to a radio mode, pressing PROG Up selects the next preset and pressing PROG Down selects the previous preset stored in the radio. When listening to compressed audio on a data disc, PROG Up selects the next directory and PROG Down selects the previous directory. When listening to a disc in a radio with a multiple-disc changer, PROG Up selects the next disc and PROG Down selects the previous disc.
- 11. MUTE Press to mute the headphone audio output for the selected channel.
- 12. SLOW If Equipped Press to slow playback of a DVD disc. Press play (▶) to resume normal play.

- 13. STATUS If Equipped Press to display the current status.
- 14. MODE/SOURCE Press to change the mode of the selected channel. See the Mode Selection section of this manual for details on changing modes.
- 15. SETUP When in a video mode, press the SETUP button to access the display settings (see the display settings section) to access the DVD setup menu, select the menu button on the radio. When a disc is loaded in the DVD player (if equipped) and the VES<sup>TM</sup> mode is selected and the disc is stopped, press the SETUP button to access the DVD Setup menu. (see the DVD Setup Menu of this manual.)

- 16. BACK When navigating in menu mode, press to return to the previous screen. When navigating a DVDs disc menu, the operation depends on the disc's contents.
- 17. ◀◀ In radio modes, press to seek to the previous tunable station. In disc modes, press and hold to fast rewind through the current audio track or video chapter. In menu modes use to navigate in the menu.
- 18. ENTER/OK Press to select the highlighted option in a menu.
- 19. ▲ / NEXT In radio modes, press to select to the next station. In disc modes, press to advance to the next audio track or video chapter. In menu modes, use to navigate in the menu.

Blu-ray Player Remote Control – If Equipped



Blu-ray Player Remote Control Controls And Indicators

1. Power – Turns the screen and wireless headphone transmitter for the selected Channel on or off. To hear

audio while the screen is closed, press the Power button to turn the headphone transmitter on.

- 2. Channel Selector Indicators When a button is pressed, the currently affected channel or channel button is illuminated momentarily.
- 3. SOURCE Press to enter Source Selection screen.
- 4. Channel/Screen Selector Switch Indicates which channel is being controlled by the remote control. When the selector switch is in the Rear 1 position, the remote controls the functionality of headphone Channel 1 (second row). When the selector switch is in the Rear 2, position the remote controls the functionality of headphone Channel 2 (third row).
- 5.  $\blacktriangleright$  Press to navigate menus.
- 6. SETUP Press to access the Blu-ray Setup menu screen. When a disc is loaded in the Blu-ray player (if

equipped) and the VES<sup>TM</sup> mode is selected and the disc is stopped, press the SETUP button to access the Blu-ray Setup menu.

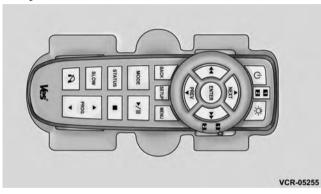
- 7. ►►I Press and release to jump to the next available audio track or video chapter. Press and hold to fast forward through the current audio track or video chapter.
- 8. ► / || (Play/Pause) Begin/resume or pause disc play.
- 9. Four Colored Buttons Press to access Blu-ray disc features.
- 10. POPUP/MENU Press to access the Blu-ray main menu when in Blu-ray or DVD mode. Press to start Scan or start Random track functions in CD or HDD modes.
- 11. KEYPAD Press to navigate chapters or titles.
- 12. (Stop) Stops disc play.

- 13. I◀◀ Press and release to jump to the previous audio track or video chapter. Press and hold to fast rewind through the current audio track or video chapter.
- 14. MUTE Mutes headphone audio.
- 15. BACK Press to exit out of menus or return to source selection screen.
- 16. **▼** Press to navigate menus.
- 17. OK Press to select the highlighted option in a menu.
- 18. ◀ Press to navigate menus.
- 19.  $\blacktriangle$  Press to navigate menus.

### **Remote Control Storage**

The video screen(s) come with a built in storage compartment for the remote control which is accessible when the screen is opened. To remove the remote, use your index finger to pull and rotate the remote towards you. Do not try to pull the remote straight down as it will be very difficult to remove. To return the remote back into its storage area, insert one long edge of the remote into the two retaining clips first, and then rotate the remote back

up into the other two retaining clips until it snaps back into position.



The Remote Control Storage

# Locking The Remote Control

All remote control functionality can be disabled as a parental control feature.

- To disable the Remote Control from making any changes, press the Video Lock button on the DVD player (if equipped). If the vehicle is not equipped with a DVD player, follow the radio's instructions to turn Video Lock on. The radio and the video screen(s) indicate when Video Lock is active.
- Pressing the Video Lock again or turning the ignition OFF turns Video Lock OFF and allows remote control operation of the VES<sup>TM</sup>.

# **Replacing The Remote Control Batteries**

The remote control requires two AAA batteries for operation. To replace the batteries:

- Locate the battery compartment on the back of the remote, then slide the battery cover downward.
- Replace the batteries, making sure to orient them according to the polarity diagram shown.
- Replace the battery compartment cover.

# **Headphones Operation**

The headphones receive two separate channels of audio using an infrared transmitter from the video screen.

Front seat occupants receive some headphone audio coverage to allow them to adjust the headphone volume for the young rear seat occupants that may not be able to 4 do so for themselves.

If no audio is heard after increasing the volume control, verify that the screen is turned on and in the down position and that the channel is not muted and the headphone channel selector switch is on the desired

channel. If audio is still not heard, check that fully charged batteries are installed in the headphones.



Volume Control
 Power Button
 Channel Selection Switch
 Power Indicator

# **Blu-ray Headphones Operation**

The headphones receive two separate channels of audio using an infrared transmitter from the video screen.

Front seat occupants receive some headphone audio coverage to allow them to adjust the headphone volume for the young rear seat occupants that may not be able to do so for themselves.

If no audio is heard after increasing the volume control, verify that the screen is turned on and in the down position and that the channel is not muted and the headphone channel selector switch is on the desired channel. If audio is still not heard, check that fully charged batteries are installed in the headphones.

Power Button
 Volume Control
 Channel Selection Switch

# Controls

The headphone power indicator and controls are located on the right ear cup.

#### UNDERSTANDING YOUR INSTRUMENT PANEL 405

**NOTE:** The rear video system must be turned on before sound can be heard from the headphones. To conserve battery life, the headphones will automatically turn off approximately three minutes after the rear video system is turned off.

# Changing the Audio Mode for Headphones

1. Ensure the Remote Control channel/screen selector switch is in the same position as the headphone selector switch.

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# **NOTE:**

- When both switches are on Channel 1, the Remote is controlling Channel 1 and the headphones are tuned to the audio of the VES<sup>TM</sup> Channel 1.
- When both switches are on Channel 2, the Remote is controlling Channel 2 and the headphones are tuned to the audio of the VES<sup>TM</sup> Channel 2.
- 2. Press the SOURCE button on the remote control.

- 3. If the video screen is displaying a video source (such as a DVD Video), pressing DISPLAY shows the status on a popup banner at the bottom of the screen. Pressing the SOURCE button will advance to the next mode. When the mode is in an audio only source (such as FM), the Mode Selection menu appears on screen.
- 4. When the Mode Selection menu appears on screen, use the cursor buttons on the remote control to navigate to the available modes and press the OK button to select the new mode.
- 5. To cancel out of the Mode Selection menu, press the BACK button on the remote control.

# **Replacing The Headphone Batteries**

Each set of headphones requires two AAA batteries for operation. To replace the batteries:

- Locate the battery compartment on the left ear cup of the headphones, and then slide the battery cover downward.
- Replace the batteries, making sure to orient them according to the polarity diagram shown.
- Replace the battery compartment cover.

# Unwired® Stereo Headphone Lifetime Limited Warranty

Who Does This Warranty Cover? This warranty covers the initial user or purchaser ("you" or "your") of this particular Unwired Technology LLC ("Unwired") wireless headphone ("Product"). The warranty is not transferable.

**How Long Does the Coverage Last?** This warranty lasts as long as you own the Product.

What Does This Warranty Cover? Except as specified below, this warranty covers any Product that in normal use is defective in workmanship or materials.

What Does This Warranty Not Cover? This warranty does not cover any damage or defect that results from misuse, abuse or modification of the Product other than by Unwired. Foam earpieces, which will wear over time through normal use, are specifically not covered (replacement foam is available for a nominal charge). UNWIRED TECHNOLOGY IS NOT LIABLE FOR ANY INIURIES OR DAMAGES TO PERSONS OR PROPERTY RESULT-ING FROM THE USE OF, OR ANY FAILURE OR DE-FECT IN, THE PRODUCT, NOR IS UNWIRED LIABLE FOR ANY GENERAL, SPECIAL, DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, PU-NITIVE OR OTHER DAMAGES OF ANY KIND OR NATURE WHATSOEVER. Some states and jurisdictions may not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not

apply to you. This warranty gives you specific legal rights. You may also have other rights, which vary from jurisdiction to jurisdiction.

What Will Unwired® Do? Unwired®, at its option, will repair or replace any defective Product. Unwired® reserves the right to replace any discontinued Product with a comparable model. THIS WARRANTY IS THE SOLE WARRANTY FOR THIS PRODUCT, SETS FORTH YOUR EXCLUSIVE REMEDY REGARDING DEFECTIVE PRODUCTS, AND IS IN LIEU OF ALL OTHER WAR-RANTIES (EXPRESS OR IMPLIED), INCLUDING ANY WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

If you have any questions or comments regarding your Unwired® wireless headphones, please phone 1-888-293-3332 or email customersupport@unwiredtechnology.com.

You may register your Unwired® wireless headphones online at www.unwiredtechnology.com or by phone at 1-888-293-3332.

# **System Information**

# Shared Modes

This allows the VES<sup>TM</sup> to output radio sources to the headphones and the radio to output VES<sup>TM</sup> sources to the vehicle speakers. When the radio and VES<sup>TM</sup> channel 1 or 2 are in the same (shared) mode, a VES<sup>TM</sup> icon will be visible on the radio's display for that channel, and the shared icon will be visible on the VES<sup>TM</sup> screen. When in shared mode, the same audio source is heard in the shared headphone channel 1 or channel 2.

If the radio functions (FM, AM, or SAT) are in the shared mode with the VES<sup>TM</sup>, only the radio is able to control the radio functions. In this case, VES<sup>TM</sup> can share the radio mode, but not change stations until the radio mode is changed to a mode that is different from the VES<sup>TM</sup>

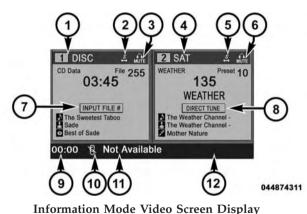
selected radio mode. When shared, the radio has priority over the VES<sup>TM</sup> or all radio modes (FM, AM, and SAT). The VES<sup>TM</sup> has the ability to switch tuner (AM/FM), SEEK, SCAN, TUNE, and recall presets in radio modes as long as it is not in shared mode.

When in shared disc mode both the radio and the VES<sup>TM</sup> have control of the video functions. The VES<sup>TM</sup> has the ability to control the following video modes:

- 1. CD: Ability to Fast Forward, Rewind, Scan, and Track Up/Down.
- 2. CD Changer (in radio): Ability to Disk Up/Down and program all listed CD controls (Fast Forward, Rewind, Scan, and Track Up/Down).

The VES<sup>TM</sup> can even control radio modes or video modes while the radio is turned off. The VES<sup>TM</sup> can access the radio modes or disc modes by navigating to those modes on the VES<sup>TM</sup> and activating a radio mode or disc mode.

# Information Mode Display



4. Channel 2 Mode

- 5. Channel 2 Shared Status
- 6. Channel 2 Audio Only/Mute
- 7. Channel 1 ENTER/OK Button Action
- 8. Channel 2 ENTER/OK Button Action
- 9. Clock
- 10. Video Lock
- 11. Not Available / Error

- 1. Channel 1 Mode
- 2. Channel 1 Shared Status
- 3. Channel 1 Audio Only/Mute

# Numeric Keypad Menu



# Numeric Keypad Menu

When the display for either Channel 1 or Channel 2 shows DIRECT TUNE, pressing the remote control's OK button activates a numeric keypad menu. This screen

makes it easy to enter a specific tuner frequency, satellite channel, or track number. To enter the desired digit:

- Press the remote control's navigation buttons (▲, ▼,
   ▶, ◄) to navigate to the desired digit.
- 2. When the digit is highlighted, press the remote control's ENTER/OK button to select the digit. Repeat these steps until all digits are entered.
- 3. To delete the last digit, navigate to the Del button and press the remote control's ENTER/OK button.
- 4. After all of the digits are entered, navigate to the Go button and press the remote control's ENTER/OK button.

### Station List Menu

When listening to Satellite audio, pressing the remote control's POP UP/MENU button displays a list of all available channels. Navigate this list using the remote control's navigation buttons ( $\blacktriangle$ ,  $\blacktriangledown$ ) to find the desired station, press the remote control's ENTER/OK button to tune to that station. To jump through the list more quickly, navigate to the Page Up and Page Down icons on the screen.

# Disc Menu



### Disc Menu For CDs

When listening to a CD Audio or CD Data disc, pressing the remote control's POP UP/MENU button displays a

list of all commands which control playback of the disc. Using the options you can activate or cancel Scan play and Random play.

# **Display Settings**

When watching a video source (DVD Video with the disc in Play mode, Aux Video, etc.), pressing the remote control's SETUP button activates the Display Settings menu. These settings control the appearance of the video on the screen. The factory default settings are already set for optimum viewing, so there is no need to change these settings under normal circumstances.

To change the settings, press the remote control's navigation buttons  $(\blacktriangle, \triangledown)$  to select an item, then press the remote control's navigation buttons  $(\triangleright, \blacktriangleleft)$  to change the value for the currently selected item. To reset all values back to the original settings, select the Default Settings menu option and press the remote control's ENTER/OK button.

Disc Features control the remote DVD player's (if equipped) settings of DVD being watched in the remote player.

# Listening To Audio With The Screen Closed

To listen to only audio portion of the channel with the screen closed:

- Set the audio to the desired source and channel.
- Close the video screen.
- To change the current audio mode, press the remote control's SOURCE button. This will automatically select the next available audio mode without using the MODE/SOURCE Select menu.

If the screen is closed and there is no audio heard, verify that the headphones are turned on (the ON indicator is illuminated) and the headphone selector switch is on the desired channel. If the headphones are turned on, press

the remote control's power button to turn audio on. If audio is still not heard, check that fully charged batteries are installed in the headphones.

# **Disc Formats**

The VES<sup>TM</sup> DVD player is capable of playing the following types of discs (12 cm or 8 cm diameter):

- DVD-Video discs (MPEG-2 video compression) (see notes about DVD Region Codes)
- DVD-Audio discs (2 channel audio output only)
- Audio Compact Discs (CDs)
- CD Data discs with MP3 and WMA compressed audio format files
- Video CDs (MPEG-1 video compression)

The Blu-Ray player is capable of the playing the following types of discs (12 cm diameter):

- BD: BDMV (Profile 1.1), BDAV (Profile 1.1),
- DVD: DVD-Video, DVD-Audio, AVCREC, AVCHD, DVD-VR
- CD: CD-DA, VCD, CD-TEXT
- DVD/CD: MP3, WMA, AAC, DivX (versions 3 6) 4 profile 3.0

# **DVD/BD** Region Codes

The VES<sup>™</sup> DVD player and many DVD discs are coded by geographic region. These region codes must match in order for the disc to play. If the region code for the DVD disc does not match the region code for the player, the disc will stop playing and a warning will be displayed.

# **DVD Audio Support**

When a DVD-Audio disc is inserted in the VES<sup>TM</sup> DVD player, the DVD-Audio title on the disc is played by default (most DVD-Audio discs also have a Video title,

but the Video title is ignored). All multi-channel program material is automatically mixed down to two channels, which may result in a lowered apparent volume level. If you increase the volume level to account for this change in level, remember to lower the volume before changing the disc or to another mode.

# **Recorded Discs**

The VES<sup>™</sup> DVD player will play CD-R and CD-RW discs recorded in CD-Audio or Video-CD format, or as a CD-ROM containing MP3 or WMA files. The player will also play DVD-Video content recorded to a DVD-R or DVD-RW disc. DVD-ROM discs (either pressed or recorded) are not supported.

If you record a disc using a personal computer, there may be cases where the VES<sup>TM</sup> DVD player may not be able to play some or the entire disc, even if it is recorded in a

compatible format and is playable on other players. To help avoid playback problems, use the following guidelines when recording discs.

- Open sessions are ignored. Only sessions that are closed are playable.
- For multi-session CDs that contain only multiple CD-Audio sessions, the player will renumber the tracks so each track number is unique.
- For CD Data (or CD-ROM) discs, always use the ISO-9660 (Level 1 or Level 2), Joliet, or Romeo format. Other formats (such as UDF, HFS, or others) are not supported.
- The player recognizes a maximum of 512 files and 99 folders per CD-R and CD-RW disc.
- Mixed media recordable DVD formats will only play the Video\_TS portion of the disc.

If you are still having trouble writing a disc that is playable in the VES<sup>TM</sup> DVD player, check with the disc recording software publisher for more information about burning playable discs.

The recommended method for labeling recordable discs (CD-R, CD-RW, and DVD-R) is with a permanent marker. Do not use adhesive labels as they may separate from the disc, become stuck, and cause permanent damage to the DVD player.

## Compressed Audio Files (MP3 and WMA)

The DVD player is capable of playing MP3 (MPEG-1 Audio Layer 3) and WMA (Windows Media Audio) files from a CD Data disc (usually a CD-R or CD-RW).

• The DVD player always uses the file extension to determine the audio format, so MP3 files must always end with the extension ".mp3" or ".MP3" and WMA files must always end with the extension ".wma" or

".WMA". To prevent incorrect playback, do not use these extensions for any other types of files.

- For MP3 files, only version 1 ID3 tag data (such as artist name, track title, album, etc.) are supported.
- Any file that is copy protected (such as those downloaded from many online music stores) will not play. 4 The DVD player will automatically skip the file and begin playing the next available file.
- Other compression formats such as AAC, MP3 Pro, Ogg Vorbis, and ATRAC3 will not play. The DVD player will automatically skip the file and begin playing the next available file.
- If you are creating your own files, the recommended fixed bit rate for MP3 files is between 96 and 192Kbps and the recommended fixed bit rate for WMA files is between 64 and 192Kbps. Variable bit rates are also supported. For both formats, the recommended sample rate is either 44.1kHz or 48kHz.

- To change the current file, use the remote control's or DVD player's ▲ button to advance to the next file, or the ▼ button to return to the start of the current or previous file.
- To change the current directory, use the remote control's PROG UP and Down buttons or Rewind/skip back and fast fwd/skip forward.

# **Disc Errors**

If the DVD player is unable to read the disc, a "Disc Error" message is displayed on the VES<sup>TM</sup> and Radio displays and the disc is automatically ejected. A dirty, damaged, or incompatible disc format are all potential causes for a "Disc Error" message.

If a disc has a damaged track which results in audible or visible errors that persists for 2.0 seconds, the DVD player will attempt to continue playing the disc by skipping forward 1.0 to 3.0 seconds at a time. If the end

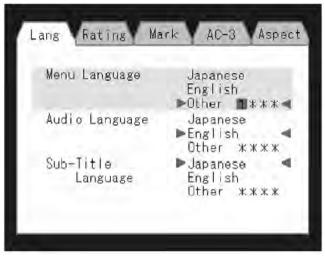
of the disc is reached, the DVD player will return to the beginning of the disc and attempt to play the start of the first track.

The DVD player may shut down during extremely hot conditions, such as when the vehicle's interior temperature is above 120°F. When this occurs, the DVD player will display "VES High Temp" and will shut off the VES<sup>TM</sup> displays until a safe temperature is reached. This shutdown is necessary to protect the optics of the DVD player.

The Blu-ray player may require additional reading time during extremely cold weather conditions. When this occurs, allow the vehicles interior temperature to warm, then insert disc into player.

# Display

# Other Language Setup



DVD Player Language Menu

All of the Language settings have a special "Other" setting to accommodate languages other than Japanese or English. These languages are selected using a special fourdigit code.

To enter a new language code, activate the DVD Setup Menu. To enter DVD Setup Menu stop the DVD, enter radio disc mode, then DVD setup and follow these additional instructions:

- Using the remote control Up and Down cursor buttons, highlight the Language item you want to edit, and then press the remote control ENTER/OK button.
- Using the remote control Down cursor button, select the "Other" setting, then press the remote control's Right cursor button to begin editing the setting.
- Using the remote control Up and Down cursor buttons, select a digit for the current position. After

selecting the digit, press the remote control's Right cursor button to select the next digit. Repeat this digit selection sequence for all four digits.

When the entire four-digit code is entered, press the remote control's ENTER/OK button. If the language code is not valid, the numbers all change back to "☆". If the digits are visible after this step, then the language code is valid.

Here is an abbreviated list of language codes. For more language codes, please contact the dealer where the vehicle was purchased.

| Language   | Code | Language | Code |
|------------|------|----------|------|
| Dutch      | 2311 | French   | 1517 |
| German     | 1304 | Italian  | 1819 |
| Portuguese | 2519 | Spanish  | 1418 |

# **Rating and Password Setup**

The Rating and Password settings work together to control the types of DVDs that your family watches. Most DVD-Video discs have a rating (from 1 to 8) assigned to them where lower numbers are designated for all audiences and higher numbers are designated for more adult audiences.

When a DVD-Video disc is loaded, its rating is compared to the setting in the DVD player. If the rating of the disc is higher than the setting in the player, a Password screen is displayed. In order to watch the disc, the rear passenger must enter the correct password using the password entry method described below.

To play all discs without requiring a password, set the DVD player's rating to Level 8. Setting the rating to Level 1 always requires the password to play any DVD disc.

Not all DVD discs encode a Rating, so it is still possible that discs designed for adult audiences can still play without requiring a password.

The default rating is Level 8 (play all discs without a password) and the default password is 0000.

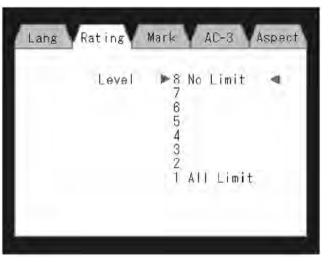


**DVD** Password Entry

To set the password, activate the DVD Setup Menu and follow these additional instructions:

- Using the remote control Left and Right cursor buttons, select the Rating tab.
- Highlight "Change Password", and then press the remote control's ENTER/OK button.
- Enter the current password. Select a digit, use the remote control Up and Down cursor buttons to set the value for the current digit, and then press the remote control's Right cursor button to select the next digit. Repeat this digit selection sequence for all four digits.

- After the four-digit password is entered, press the remote control's ENTER/OK button. If the password is correct, the set password screen is displayed.
- Using the remote control's Up and Down cursor buttons to set the value for the current digit and the remote control's Right cursor button to select digits, enter the new password.
- After the four-digit password is entered, press the remote control's ENTER/OK button to accept the change.



**DVD Player Level Menu** 

To set the rating, activate the DVD Setup Menu and follow these additional instructions:

- Using the remote control's Left and Right cursor buttons, select the Rating tab.
- Highlight "Change Rating", and then press the remote control's ENTER/OK button.
- Enter the current password. Select a digit, use the remote control's Up and Down cursor buttons to set the value for the current digit, and then press the remote control's Right cursor button to select the next digit. Repeat this digit selection sequence for all four digits.
- After the four-digit password is entered, press the remote control's ENTER/OK button. If the password is correct, the Rating Level menu is displayed.

#### UNDERSTANDING YOUR INSTRUMENT PANEL 421

• Using the remote control's Up and Down cursor buttons, select the new rating level, and then press the remote control's ENTER/OK button to accept the change.

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URL: http://www.embedded-carmultimedia.jp/linux/ oss/download/MP\_632\_34W821

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# **CAUTION!**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

# STEERING WHEEL AUDIO CONTROLS — IF EQUIPPED



045035190

Remote Sound System Controls (Back View Of Steering Wheel)

The remote sound system controls are located on the rear surface of the steering wheel, at the three and nine o'clock positions.

The right-hand rocker switch has a pushbutton in the center, and controls the volume and mode of the sound system. Pressing the top of the rocker switch will increase the volume. Pressing the bottom of the rocker switch will decrease the volume. Pressing the center button changes the operation of the radio from AM to FM, or to CD mode, depending on which radio is in the vehicle.

The left-hand rocker switch has a pushbutton in the center. The function of the left-hand switch is different, depending on which mode you are in.

The following describes the left-hand rocker switch operation in each mode.

# **Radio Operation**

Pressing the top of the switch will SEEK up for the next listenable station, and pressing the bottom of the switch will SEEK down for the next listenable station.

The button located in the center of the left-hand switch will tune to the next preset station that you have programmed in the radio preset pushbutton.

# **CD** Player

Pressing the top of the switch once will go to the next track on the CD. Pressing the bottom of the switch once will go to the beginning of the current track, or to the beginning of the previous track if it is within one second after the current track begins to play.

If you press the switch up or down twice it plays the second track; three times, it will play the third, etc.

The button in the center of the left-hand switch has no function in this mode.

# CD/DVD/BLU-RAY DISC MAINTENANCE

To keep a CD/DVD/Blu-ray disc in good condition, take the following precautions:

- 1. Handle the disc by its edge; avoid touching the surface.
- 2. If the disc is stained, clean the surface with a soft cloth, wiping from center to edge.
- 3. Do not apply paper or tape to the disc; avoid scratching the disc.
- 4. Do not use solvents such as benzene, thinner, cleaners, or anti-static sprays.
- 5. Store the disc in its case after playing.
- 6. Do not expose the disc to direct sunlight.
- 7. Do not store the disc where temperatures may become too high.

**NOTE:** If you experience difficulty in playing a particular disc, it may be damaged (i.e., scratched, reflective coating removed, a hair, moisture or dew on the disc) oversized, or have protection encoding. Try a known good disc before considering disc player service.

# **RADIO OPERATION AND MOBILE PHONES**

Under certain conditions, the mobile phone being on in your vehicle can cause erratic or noisy performance from your radio. This condition may be lessened or eliminated by relocating the mobile phone antenna. This condition is not harmful to the radio. If your radio performance does not satisfactorily "clear" by the repositioning of the antenna, it is recommended that the radio volume be turned down or off during mobile phone operation when not using Uconnect® (if equipped).

# **CLIMATE CONTROLS**

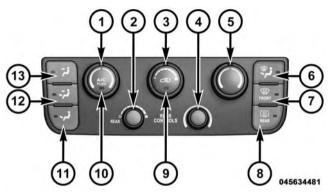
The Climate Control system allows you to regulate the temperature, amount, and direction of air circulating throughout the vehicle. The controls are located on the instrument panel, below the radio.

# Manual Heating And Air Conditioning System — If Equipped

The controls for the manual system in this vehicle contain a series of outer rotary dials and inner push knobs. These comfort controls can be set to obtain desired interior conditions.

With the Three-Zone Temperature Control system, each front seat occupant can independently control the Heating, Ventilation, and Air Conditioning operations coming from the outlets on their side of the vehicle. The primary control for the rear blower is on the front climate control unit located on the instrument panel. When the front control is in any position other than rear, the front control operates all the rear functions.

The rear airflow modes will mirror the front unit operation. Rear Panel mode is automatically selected when the front control is in the Panel mode. When the front unit is in Bi-Level mode, airflow will be emitted from both the upper and lower rear outlets. When the front control is in Floor, Defrost, or Mix modes, airflow will be directed out of the rear floor outlets.



**Manual Temperature Control** 

- 1. Left Front Temperature Control
- Provides left front seat occupant with independent temperature control. Turn left for cooler or right for warmer temperature settings.

### UNDERSTANDING YOUR INSTRUMENT PANEL 429

- 2. Rear Blower Control If Equipped
- Use this control to regulate the amount of air forced through the rear system in any mode you select. The rear blower speed increases as you move the control to the right from the "O" (Off) position. There are seven blower speeds. To allow the rear overhead control, turn blower knob fully to the left, past The "O" off position into the "REAR" control position.

# 3. Front Blower Control

• Use this control to regulate the amount of air forced through the system in any mode you select. The blower speed increases as you move the control to the right from the "O" (Off) position. There are seven blower speeds.

**NOTE:** For vehicles equipped with Remote Start, the climate controls will not function during Remote Start operation if the blower control is left in the "O" (Off) position. Blower control should be left in the "ON" position to allow the climate control to either warm or cool the vehicle.

# 4. Rear Temperature Control — If Equipped

• Provides temperature control for the rear cabin. Turn left for cooler or right for warmer temperature settings in the rear cabin.

# 5. Right Front Temperature Control

• Provides right front seat occupant with independent temperature control. Turn left for cooler or right for warmer temperature settings.

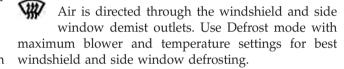
6. Mix Mode



Air is directed through the floor, defrost and side window demist outlets. This setting works best in

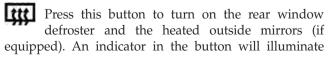
cold or snowy conditions that require extra heat at the windshield. This setting is good for maintaining comfort, while reducing moisture on the windshield.

# 7. Front Defrost Mode



**NOTE:** The air conditioning compressor may operate in Mix and Defrost, even if the A/C button is not pressed. This dehumidifies the air to help dry the windshield. To improve fuel economy, use these modes only when necessary.

# 8. Electronic Rear Window Defrost



when the rear window defroster is on. The rear window defroster automatically turns off after approximately 10 minutes

# NOTE:

- You can turn off the heated mirror feature at anytime by pressing the rear window defroster switch a second time.
- To prevent excessive battery drain, use the rear window defroster only when the engine is operating.

# **CAUTION!**

Failure to follow these cautions can cause damage to the heating elements:

• Use care when washing the inside of the rear window. Do not use abrasive window cleaners on the interior surface of the window. Use a soft cloth

# **CAUTION!** (Continued)

- and a mild washing solution, wiping parallel to the heating elements. Labels can be peeled off after soaking with warm water.
- Do not use scrapers, sharp instruments, or abrasive window cleaners on the interior surface of the window.
- Keep all objects a safe distance from the window.

# 9. Recirculation Control Button



(Continued)

Press this button to choose between outside air intake or recirculation of the air inside the vehicle. An indicator light will illuminate when you are in Recirculation mode. Only use the Recirculation mode to temporarily block out any outside odors, smoke, or dust, and to cool the interior rapidly upon initial start-up in very hot or humid weather.

# NOTE:

- If the Recirculation button is pressed when the system is in Defrost mode the Recirculation LED indicator will flash 3 times to indicate Recirculation mode is not allowed.
- Continuous use of the Recirculation mode may make the inside air stuffy and window fogging may occur. Extended use of this mode is not recommended.
- In cold or damp weather, the use of the Recirculation mode will cause windows to fog on the inside because of moisture buildup inside the vehicle. For maximum defogging, select the outside air position.
- In order to prevent fogging, when the Recirculation button is pressed and the mode control is set to Panel, the A/C will engage automatically.
- The A/C can be deselected manually without disturbing the mode control selection.

# 10. Air Conditioning (A/C) Button



Press and release to change the current setting. The indicator illuminates when ON.

**NOTE:** If your air conditioning performance seems lower than expected, check the front of the A/C condenser (located in front of the radiator), for an accumulation of dirt or insects. Clean with a gentle water spray from behind the radiator and through the condenser. Fabric front fascia protectors may reduce airflow to the condenser, reducing air conditioning performance.

#### 11. Floor Mode Button

Air is directed through the floor outlets with a small amount through the defrost and side window demist outlets.

#### 12. Bi-Level Mode Button



Air is directed through the panel and floor outlets.

**NOTE:** There is a difference in temperature (in any conditions other than full cold or full hot), between the upper and lower outlets for added comfort. The warmer air goes to the floor outlets. This feature gives improved comfort during sunny but cool conditions.

#### 13. Panel Mode Button

Air is directed through the outlets in the instrument panel. These outlets can be adjusted for direction, and turned on or off to control airflow.

**NOTE:** For maximum airflow to the rear, the center instrument panel outlets can be directed toward the rear seat passengers.

#### Economy Mode

If ECONOMY mode is desired, press the A/C button to turn off the indicator light and the A/C compressor. Rotate the temperature control knob to the desired temperature. Also, make sure to select only Panel, Bi-Level or Floor modes.

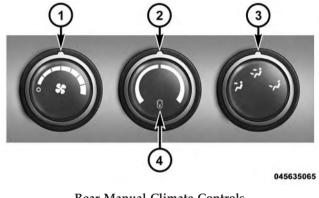
## Max A/C

For maximum cooling use the A/C and Recirculation mode buttons at the same time.

#### **Rear Manual Climate Control — If Equipped**

The Rear Manual Climate Control system has floor air outlets at the rear of the right side sliding door, and overhead outlets at each outboard rear seating position. The unit provides warm or cool air through the floor and upper outlets.

The rear blower and temperature controls for the rear seat passengers are located in the headliner, near the center of the vehicle.



#### **Rear Manual Climate Controls**

1 – Rear Blower
 2 – Rear Temperature

3 – Rear Mode

4 – Rear Climate Control Lock

#### **Rear Blower Control**

The primary control for the rear blower is on the front climate control unit, located on the instrument panel.

Only when the front control for the rear blower is in the **REAR** position do the second row seat occupants have control of the rear blower speed.

The rear blower control, located in the rear overhead console, has an off position and a range of blower speeds. This allows the second row seat occupants to control the volume of air circulated in the rear of the vehicle.

# CAUTION!

Interior air enters the Rear Manual Climate Control system through an intake grille, located in the right side trim panel behind the third row seats. The heater outlets are located in the right side trim panel,

(Continued)

# CAUTION! (Continued)

just behind the sliding door. Do not block or place objects directly in front of the inlet grille or heater outlets. The electrical system could overload, causing damage to the blower motor.

# **Rear Temperature Control**

The rear mode selection **REAR**, allows the settings to be controlled by the rear mode control knob.

To change the temperature in the rear of the vehicle, rotate the temperature control knob counterclockwise for cold air, and clockwise for heated air.

When rear controls are locked by the front system, the lock symbol on the temperature knob is illuminated, and the rear overhead adjustments are inoperable.

# **Rear Mode Control**

Headliner Mode

Air comes from the outlets in the headliner. Each of these outlets can be individually adjusted to direct the flow of air. Moving the air vanes of the outlets to one side will shut off the airflow.

#### **Bi-Level** Mode



Air comes from both the headliner outlets and the floor outlets.

**NOTE:** In many temperature positions, the Bi-Level mode is designed to provide cooler air out of the head-liner outlets and warmer air from the floor outlets.

Floor Mode

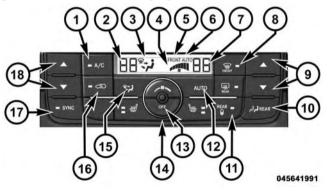


Air comes from the floor outlets.

# Automatic Temperature Control (ATC) — If Equipped

- Front Three-Zone ATC allows both driver and front passenger seat occupant, and rear seat occupants to select individual comfort settings.
- When occupants in the vehicle select the AUTO mode operation, a comfort temperature can be set by using the temperature up and down buttons, and the auto blower operation will be set automatically.
- The system can be controlled manually, if desired.
- SYNC feature links the controls for all three zones, allowing one comfort setting (driver setting) for the cabin, if desired.

The Three-Zone ATC system automatically maintains the interior comfort level desired by the driver and all passengers. The system automatically adjusts the air temperature, the airflow volume, amount of outside air recirculation and the airflow direction. This maintains a comfortable temperature, even under changing conditions.



Front ATC Panel

# 1. Air Conditioning (A/C) Button

Press and release to change the current Air Conditioning (A/C) setting, the indicator illuminates when A/C is ON. Performing this function will cause the ATC to switch into manual mode.

# 2. Left Front Seat Occupant Temperature Display

This display shows the temperature setting for the left front seat occupant.

# 3. Mode Display

This display shows the current Mode selection (Panel, Bi-Level, Floor, Mix).

# 4. Blower Control Display

This display shows the current Blower speed selection.

# 5. Front Auto Indicator

This indicates when the system is in Front Auto mode.

# 6. Auto Indicator

This indicates when the system is in Auto mode.

# 7. Right Front Seat Occupant Temperature Display

This display shows the temperature setting for the right front seat occupant.

#### 8. Front Defrost Button

Press and release to change the current setting, the indicator illuminates when ON. Performing this function will cause the ATC to switch into manual mode. The blower will engage immediately if the Defrost mode is selected.

#### 9. Passenger Temperature Control Up/Down Button

Provides the passenger with independent temperature control. Push the top button for warmer temperatures or the lower button for cooler temperature settings.

#### 10. Rear Control Button

Provides toggle operation between front control screen and rear control screen. Push the button to activate the rear climate control screen and allow the front seat occupants control over the rear climate settings.

#### 11. Rear Lock

Press and release the Rear Lock button on the front ATC panel to lock and unlock the rear climate controls.

#### 12. Auto Temperature Control Button

Controls airflow temperature, distribution, volume, and the amount of air recirculation automatically. Press and release to select. Refer to "Automatic Operation" for more information. Performing this function will cause the ATC to switch between manual mode and automatic modes.

#### 13. Climate Control OFF Button

Press and release to turn the Climate Control OFF. If the control is OFF, press any button to turn the control ON.

## 14. Blower Control

There are seven blower speeds, the blower speed increases as you move the control to the right from the lowest blower setting. Performing this function will cause the ATC to switch into manual mode.

#### 15. Mode Control Button

Press and release to select between Modes (Panel, Bi-Level, Floor, Mix). Performing this function will cause the ATC to switch into manual mode.

#### 16. Recirculation Control Button

Press and release to change the current setting, the indicator illuminates when ON.

#### 17. SYNC Button

Press and release to control the temperature setting for all three zones from the driver temperature control.

#### 18. Driver Temperature Control Up/Down Button

Provides the driver with independent temperature control. Push the top button for warmer temperatures or the lower button for cooler temperature settings.

#### **Automatic Operation**

- 1. Press the AUTO button on the front ATC Panel and the words Front Auto will illuminate in the front ATC display, along with two temperatures for the driver and front passenger. The system will then automatically regulate the amount of airflow.
- 2. Next, adjust the temperature you would like the system to maintain, by adjusting the driver, front passenger, and rear seat rotary temperature knobs.

Once the desired temperature is displayed, the system will achieve and automatically maintain that comfort level.

3. When the system is set up for your comfort level, it is not necessary to change the settings. You will experience the greatest efficiency by simply allowing the [4] system to function automatically.

#### NOTE:

- It is not necessary to move the temperature settings for cold or hot vehicles. The system automatically adjusts the temperature, mode and fan speed to provide comfort as quickly as possible.
- The temperature can be displayed in English or Metric units by selecting the "Display Units of Measure in" customer-programmable feature. Refer to the "Electronic Vehicle Information Center (EVIC) - Customer-Programmable Features" in this Section.

To provide you with maximum comfort in the automatic mode, during cold start-ups, the blower fan will remain on low until the engine warms up. The fan will engage immediately if the Defrost mode is selected, or by changing the front blower knob setting

# Manual Operation

This system offers a full complement of manual override features. The AUTO symbol in the front ATC display will be turned off when the system is being used in the manual mode.

**NOTE:** If not operating in AUTO mode, the system will not automatically sense the presence of fog, mist or ice on the windshield. DEFROST mode must be manually selected to clear the windshield and side glass.

• Air Conditioning (A/C)

The Air Conditioning (A/C) button allows the operator to manually activate or deactivate the air conditioning

system. When in A/C mode and the ATC is set to a cool temperature, dehumidified air flows through the air outlets. If Economy mode is desired, press the A/C button to turn off the A/C mode in the ATC display and deactivate the A/C system.

# NOTE:

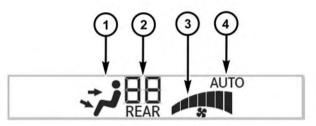
- If the system is in Mix, Floor or Defrost Mode, the A/C can be turned off, but the A/C system shall remain active to prevent fogging of the windows.
- If fog or mist appears on the windshield or side glass, select Defrost mode and increase blower speed.

# Controlling The Rear Climate Controls From The Front ATC Panel

The Three-Zone ATC system allows for adjustment of the rear climate controls from the front ATC panel.

#### To change the rear system settings:

- Press "REAR" button to change control to rear control mode, Rear display (below) will appear. Control functions now operate rear system.
- To return to Front screen, press "REAR" button again, or it will revert to the Front screen after six seconds.



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Front ATC Panel Rear Control Display

1. Mode Display

This display shows the current Mode selection.

2. Rear Temperature Display

This display shows the temperature setting for the rear seat occupants.

# 3. Blower Control Display

This display shows the current Blower speed selection.

# 4. Rear Auto Indicator

This indicates when the system is in Rear Auto mode.

# Rear Mode Control

# Headliner Mode

Air comes from the outlets in the headliner. Each of these outlets can be individually adjusted to direct the flow of air. Moving the air vanes of the outlets to one side will shut off the airflow.

# Bi-Level Mode

Air comes from both the headliner outlets and the floor outlets.

**NOTE:** In many temperature positions, the Bi-Level mode is designed to provide cooler air out of the head-liner outlets and warmer air from the floor outlets.

# Floor Mode



Air comes from the floor outlets.

# Rear Automatic Temperature Control (ATC) — If Equipped

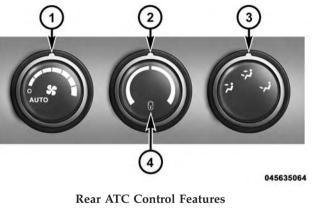
The rear ATC system has floor air outlets at the rear of the right side sliding door, and overhead outlets at each outboard rear seating position. The system provides heated air through the floor outlets or cool, dehumidified air through the headliner outlets.

The rear system temperature control is on the front ATC panel located on the instrument panel.

Pressing the Rear Temperature Lock button on the front ATC panel, illuminates a lock symbol in the rear display. The rear temperature and air source are controlled from the front ATC panel.

Rear second row occupants can only adjust the rear ATC control when the Rear Temperature Lock button is turned off.

The rear ATC system is located in the headliner, near the center of the vehicle.



| 1 - Blower Speed     | 3 - Rear Mode             |
|----------------------|---------------------------|
| 2 - Rear Temperature | 4 - Rear Temperature Lock |

1. Press the Rear Temperature Lock button on the front ATC panel. This turns off the Rear Temperature Lock icon in the rear temperature knob.

- 2. Rotate the Rear Blower, Rear Temperature and the Rear Mode Control knobs to suit your comfort needs.
- 3. ATC is selected by adjusting the rear blower knob counterclockwise to AUTO.

Once the desired temperature is displayed, the ATC System will automatically achieve and maintain that comfort level. When the system is set up for your comfort level, it is not necessary to change the settings. You will experience the greatest efficiency by simply allowing the system to function automatically.

# NOTE:

- It is not necessary to move the temperature settings for cold or hot vehicles. The system automatically adjusts the temperature, mode and fan speed to provide comfort as quickly as possible.
- The temperature can be displayed in English or Metric units by selecting the "Display Units of Measure in"

customer-programmable feature. Refer to the "Electronic Vehicle Information Center (EVIC) — Customer-Programmable Features" in this Section.

#### **Rear Blower Control**

The rear blower control knob can be manually set to off, or any fixed blower speed, by rotating the knob from low to high. This allows the rear seat occupants to control the volume of air circulated in the rear of the vehicle.

# **CAUTION!**

Interior air enters the Rear Automatic Temperature Control System through an intake grille, located in the right side trim panel behind the third row seats. The heater outlets are located in the right side trim panel, just behind the sliding door. Do not block or place objects directly in front of the inlet grille or

(Continued)

# CAUTION! (Continued)

heater outlets. The electrical system could overload causing damage to the blower motor.

#### **Rear Temperature Control**

To change the temperature in the rear of the vehicle, rotate the temperature knob counterclockwise to lower the temperature, and clockwise to increase the temperature. The rear temperature settings are displayed in the front ATC panel.

When rear controls are locked by the front system, the Rear Temperature Lock symbol on the temperature knob is illuminated and any rear overhead adjustments are ignored.

# **Rear Mode Control**

• Auto Mode

The rear system automatically maintains the correct mode and comfort level desired by the rear seat occupants.

• Headliner Mode

Air comes from the outlets in the headliner. Each of these outlets can be individually adjusted to direct the flow of air. Moving the air vanes of the outlets to one side will shut off the airflow.

• Bi-Level Mode



Air comes from both the headliner outlets and the floor outlets.

**NOTE:** In many temperature positions, the Bi-Level mode is designed to provide cooler air out of the head-liner outlets and warmer air from the floor outlets.

• Floor Mode

Air comes from the floor outlets.

#### **Recirculation Control**

When outside air contains smoke, odors, or high humid-



ity, or if rapid cooling is desired, you may wish to recirculate interior air by pressing the Recirculation control button. Recirculation mode should only be used temporarily. The recircu-

lation LED will illuminate when this button is selected. Push the button a second time to turn off the Recirculation mode LED and allow outside air into the vehicle.

**NOTE:** In cold weather, use of the Recirculation mode may lead to excessive window fogging. The Recirculation mode is not allowed in Defrost mode to improve window clearing operation. Recirculation will be disabled automatically if this mode is selected.

#### **Summer Operation**

The engine cooling system must be protected with a high-quality antifreeze coolant to provide proper corrosion protection and to protect against engine overheating. A solution of 50% ethylene glycol antifreeze coolant and 50% water is recommended. Refer to "Maintenance Procedures" in "Maintaining Your Vehicle" for proper coolant selection.

#### Winter Operation

To ensure the best possible heater and defroster performance, make sure the engine cooling system is functioning properly and the proper amount, type, and concentration of coolant is used. Refer to "Maintenance Procedures" in "Maintaining Your Vehicle" for proper coolant selection. Use of the air Recirculation mode during Winter months is not recommended, because it may cause window fogging. Before you store your vehicle, or keep it out of service (i.e., vacation) for two weeks or more, run the air conditioning system at idle for about five minutes, in fresh air with the blower setting on high. This will ensure adequate system lubrication to minimize the possibility of compressor damage when the system is started again.

# Window Fogging

Vehicle windows tend to fog on the inside in mild, rainy and/or humid weather. To clear the windows, select Defrost or Mix mode and increase the front blower speed. Do not use the Recirculation mode without A/C for long periods, as fogging may occur.

#### **Outside Air Intake**

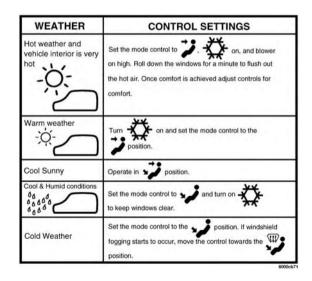
Make sure the air intake, located directly in front of the windshield, is free of obstructions such as leaves. Leaves collected in the air intake may reduce airflow, and if they enter the plenum, they could plug the water drains. In Winter months, make sure the air intake is clear of ice, slush, and snow.

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# A/C Air Filter

On vehicles equipped with Automatic Temperature Control (ATC), the climate control system filters out dust and pollen from the air. Refer to "Air Conditioning" in "Maintaining Your Vehicle" for filter replacement instructions.

#### **Operating Tips Chart**



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#### STARTING PROCEDURES

Before starting your vehicle, adjust your seat, adjust the inside and outside mirrors, fasten your seat belt, and if present, instruct all other occupants to buckle their seat belts.

#### WARNING!

- When leaving the vehicle, always remove the key fob from the ignition and lock your vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle.
- Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the shift lever.

(Continued)

# WARNING! (Continued)

• Do not leave the key fob in or near the vehicle, or in a location accessible to children. A child could operate power windows, other controls, or move the vehicle.

#### **Automatic Transmission**

The shift lever must be in the NEUTRAL or PARK position before you can start the engine. Press the brake pedal before shifting into any driving gear.

#### **Normal Starting**

- 1. Do not press the accelerator.
- 2. Use the Fob with Integrated Key to briefly turn the ignition switch to the START position and release it as soon as the starter engages. The starter motor will continue to run, and it will disengage automatically when the engine is running.

3. If the engine fails to start, the starter will disengage automatically in 10 seconds. If this occurs, turn the ignition switch to the OFF position, wait 10 to 15 seconds, then repeat the "Normal Starting" procedure (Steps 1–3 above).

NOTE: This vehicle is equipped with a transmission shift interlocking system. The brake pedal must be pressed to shift out of PARK.

# Extreme Cold Weather (Below -20°F Or -29°C)

To ensure reliable starting at these temperatures, use of an externally powered electric engine block heater (available from your authorized dealer) is recommended.

If The Engine Fails To Start

# WARNING!

- Never pour fuel or other flammable liquids into the throttle body air inlet opening in an attempt to start the vehicle. This could result in a flash fire causing serious personal injury.
- Do not attempt to push or tow your vehicle to get it started. Vehicles equipped with an automatic transmission cannot be started this way. Unburned fuel could enter the catalytic converter and once the engine has started, ignite and damage the converter and vehicle.
- If the vehicle has a discharged battery, booster cables may be used to obtain a start from a booster battery or the battery in another vehicle. This type of start can be dangerous if done improperly. Refer

#### (Continued)

## WARNING! (Continued)

to "Jump Starting" in "What To Do In Emergencies" for further information.

If the engine fails to start after you have followed the "Normal Starting" procedure, it may be flooded. Push the accelerator pedal all the way to the floor and hold it there while cranking the engine. This should clear any excess fuel in case the engine is flooded.

# **CAUTION!**

To prevent damage to the starter, DO NOT crank the engine for more than 15–second intervals at one time. Wait 10 to 15 seconds before trying again.

If the engine has been flooded, it may start to run, but not have enough power to continue running when the key fob is released. If this occurs, continue cranking with the accelerator pedal pushed all the way to the floor. Release the accelerator pedal and the key fob once the engine is running smoothly.

If the engine shows no sign of starting after two 15– second intervals of cranking with the accelerator pedal held to the floor, the "Normal Starting" procedure should be repeated.

#### After Starting

The idle speed is controlled automatically and it will decrease as the engine warms up.

#### ENGINE BLOCK HEATER — IF EQUIPPED

The engine block heater warms the engine, and permits quicker starts in cold weather. Connect the cord to a standard 110-115 Volt AC electrical outlet with a grounded, three-wire extension cord.

The engine block heater must be plugged in at least one hour to have an adequate warming effect on the engine.

The engine block heater cord is routed under the hood on the driver's side of the vehicle. It has a removable cap that is located on the driver side of the Integrated Power Module.

# WARNING!

Remember to disconnect the engine block heater cord before driving. Damage to the 110-115 Volt electrical cord could cause electrocution.

# AUTOMATIC TRANSMISSION

# **CAUTION!**

Damage to the transmission may occur if the following precautions are not observed:

- Shift into PARK only after the vehicle has come to a complete stop.
- Shift into or out of REVERSE only after the vehicle has come to a complete stop and the engine is at idle speed.
- Do not shift between PARK, REVERSE, NEU-TRAL, or DRIVE when the engine is above idle speed.
- Before shifting into any gear, make sure your foot is firmly pressing the brake pedal.

**NOTE:** You must press and hold the brake pedal while shifting out of PARK.

# WARNING!

- It is dangerous to shift out of PARK or NEUTRAL if the engine speed is higher than idle speed. If your foot is not firmly pressing the brake pedal, the vehicle could accelerate quickly forward or in reverse. You could lose control of the vehicle and hit someone or something. Only shift into gear when the engine is idling normally and your foot is firmly pressing the brake pedal.
- Unintended movement of a vehicle could injure those in or near the vehicle. As with all vehicles, you should never exit a vehicle while the engine is running. Before exiting a vehicle, always apply the parking brake, shift the transmission into PARK, turn the engine OFF, and remove the key fob. When

(Continued)

# WARNING! (Continued)

- the ignition is in the full OFF (key removal) position, the transmission is locked in PARK, securing the vehicle against unwanted movement.
- When leaving the vehicle, always remove the key fob and lock your vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle. Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the shift lever.
- Do not leave the key fob in or near the vehicle (or in a location accessible to children), and do not leave the ignition (of a vehicle equipped with Keyless Enter-N-Go<sup>TM</sup>) in the ACC or ON/RUN mode. A child could operate power windows, other controls, or move the vehicle.

# Key Ignition Park Interlock

This vehicle is equipped with a Key Ignition Park Interlock which requires the transmission to be in PARK before the ignition switch can be turned to the full OFF (key removal) position. The key fob can only be removed from the ignition when the ignition is in the full OFF position, and the transmission is locked in PARK whenever the ignition switch is in the full OFF position.

**NOTE:** If a malfunction occurs, the system will trap the key fob in the ignition switch to warn you that this safety feature is inoperable. The engine can be started and stopped but the key fob cannot be removed until you obtain service.

# Brake/Transmission Shift Interlock System

This vehicle is equipped with a Brake Transmission Shift Interlock System (BTSI) that holds the transmission shifter in PARK unless the brakes are applied. To shift the transmission out of PARK, the engine must be running and the brake pedal must be pressed.

In 8-speed vehicles, the brake pedal must also be pressed to shift from NEUTRAL into DRIVE or REVERSE when the vehicle is stopped or moving at low speeds.

# Fuel Economy (ECON) Mode

The Fuel Economy (ECON) mode can improve the vehicle's overall fuel economy during normal driving conditions. Press the "econ" switch in the center stack of the instrument panel and a green light will indicate the ECON mode is engaged.

# Elecon A 110V POWER OFF

# Fuel Economy Mode Switch

When the Fuel Economy (ECON) Mode is engaged, the vehicle control systems will change the following:

• The transmission will upshift sooner and downshift later.

• The transmission will skip select gears during shifts to allow the engine to operate at lower speeds.

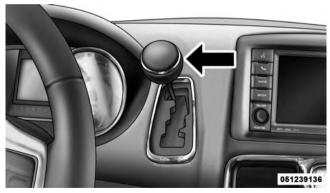
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- The torque converter clutch will engage at lower engine speeds and remain on longer.
- The engine idle speed will be lower.
- The overall driving performance will be more conservative.
- Some ECON mode functions may be temporarily inhibited based on temperature and other factors.

# Six-Speed Automatic Transmission

The transmission gear position display (located in the instrument cluster) indicates the transmission gear range. You must press the brake pedal to move the shift lever out of PARK (Refer to "Brake/Transmission Shift Interlock System" in this section). To drive, move the shift lever from PARK or NEUTRAL to the DRIVE position.

The electronically-controlled transmission provides a precise shift schedule. The transmission electronics are self-calibrating; therefore, the first few shifts on a new vehicle may be somewhat abrupt. This is a normal condition, and precision shifts will develop within a few hundred miles (kilometers).



Shift Lever

Only shift from DRIVE to PARK or REVERSE when the accelerator pedal is released and the vehicle is stopped. Be sure to keep your foot on the brake pedal when shifting between these gears.

The transmission shift lever has only PARK, REVERSE, NEUTRAL, and DRIVE shift positions. Manual downshifts can be made using the Electronic Range Select (ERS) shift control (described later in this section). Moving the shift lever to the left or right (-/+) while in the DRIVE position will select the highest available transmission gear, and will display that gear in the instrument cluster as 6, 5, 4, 3, 2, 1.

#### **Gear Ranges**

DO NOT race the engine when shifting from PARK or NEUTRAL into another gear range.

**NOTE:** After selecting any gear range, wait a moment to allow the selected gear to engage before accelerating. This is especially important when the engine is cold.

#### PARK

This range supplements the parking brake by locking the transmission. The engine can be started in this range. Never attempt to use PARK while the vehicle is in motion. Apply the parking brake when leaving the vehicle in this range.

When parking on a level surface, you may shift the transmission into PARK first, and then apply the parking brake.

When parking on a hill, apply the parking brake before shifting the transmission to PARK, otherwise the load on the transmission locking mechanism may make it difficult to move the shift lever out of PARK. As an added precaution, turn the front wheels toward the curb on a downhill grade, and away from the curb on an uphill grade.

#### WARNING!

- Never use the PARK position as a substitute for the parking brake. Always apply the parking brake fully when parked to guard against vehicle movement and possible injury or damage.
- Your vehicle could move and injure you and others if it is not completely in PARK. Check by trying to move the shift lever out of PARK with the brake pedal released. Make sure the transmission is in PARK before leaving the vehicle.
- It is dangerous to shift out of PARK or NEUTRAL if the engine speed is higher than idle speed. If your foot is not firmly pressing the brake pedal, the vehicle could accelerate quickly forward or in reverse. You could lose control of the vehicle and hit someone or something. Only shift into gear when

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(Continued)

# WARNING! (Continued)

the engine is idling normally and your foot is firmly pressing the brake pedal.

- Unintended movement of a vehicle could injure those in or near the vehicle. As with all vehicles, you should never exit a vehicle while the engine is running. Before exiting a vehicle, always apply the parking brake, shift the transmission into PARK turn the engine OFF, and remove the key fob. Once the key fob is removed, the shift lever is locked PARK, securing the vehicle against unwanted movement.
- When leaving the vehicle, always remove the key fob and lock your vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle.

(Continued)

# WARNING! (Continued)

- Allowing children to be alone in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the shift lever.
- Do not leave the key fob in or near the vehicle, or in a location accessible to children. A child could operate power windows, other controls, or move the vehicle.

The following indicators should be used to ensure that you have engaged the transmission into the PARK position:

• When shifting into PARK, firmly move the shift lever all the way forward and to the left until it stops and is fully seated.

- Look at the transmission gear position display and verify that it indicates the PARK position.
- With brake pedal released, verify that the shift lever will not move out of PARK

# **CAUTION!**

- Before moving the shift lever out of PARK, you must turn the ignition switch from the OFF position to the ON/RUN position, and also press the brake pedal. Otherwise, damage to the shift lever could result.
- DO NOT race the engine when shifting from PARK or NEUTRAL into another gear range, as this can damage the drivetrain.

#### REVERSE

This range is for moving the vehicle backward. Shift into REVERSE only after the vehicle has come to a complete stop.

#### NEUTRAL

Use this range when the vehicle is standing for prolonged periods with the engine running. The engine may be 5 started in this range. Apply the parking brake and shift the transmission into PARK if you must leave the vehicle.

# WARNING!

Do not coast in NEUTRAL and never turn off the ignition to coast down a hill. These are unsafe practices that limit your response to changing traffic or road conditions. You might lose control of the vehicle and have a collision.

# CAUTION!

Towing the vehicle, coasting, or driving for any other reason with the transmission in NEUTRAL can cause severe transmission damage. Refer to "Recreational Towing" in "Starting And Operating" and "Towing A Disabled Vehicle" in "What To Do In Emergencies" for further information.

# DRIVE

This range should be used for most city and highway driving. It provides the smoothest upshifts and downshifts, and the best fuel economy. The transmission automatically upshifts through underdrive first, second, third, and fourth gears, direct fifth gear and overdrive sixth gear. The DRIVE position provides optimum driving characteristics under all normal operating conditions. When frequent transmission shifting occurs (such as when operating the vehicle under heavy loading conditions, in hilly terrain, traveling into strong head winds, or while towing heavy trailers), use the Electronic Range Select (ERS) shift control (described below) to select a lower gear range. Under these conditions, using a lower gear range will improve performance and extend transmission life by reducing excessive shifting and heat buildup.

During cold temperatures, transmission operation may be modified depending on engine and transmission temperature as well as vehicle speed. This feature improves warm up time of the engine and transmission to achieve maximum efficiency. Engagement of the torque converter clutch is inhibited until the transmission fluid is warm (refer to the "Note" under "Torque Converter Clutch" in this section). During extremely cold temperatures (-16°F [-27°C] or below), operation may briefly be limited to third gear only. Normal operation will resume once the transmission temperature has risen to a suitable level.

#### Transmission Limp Home Mode

Transmission function is monitored electronically for abnormal conditions. If a condition is detected that could result in transmission damage, Transmission Limp Home Mode is activated. In this mode, the transmission remains in third gear regardless of which forward gear is selected. PARK, REVERSE, and NEUTRAL will continue to operate. The Malfunction Indicator Light (MIL) may be illuminated. Limp Home Mode allows the vehicle to be driven to an authorized dealer for service without damaging the transmission.

In the event of a momentary problem, the transmission can be reset to regain all forward gears by performing the following steps: 1. Stop the vehicle.

- 2. Shift the transmission into PARK.
- 3. Turn the ignition switch to the OFF position.
- 4. Wait approximately 10 seconds.
- 5. Restart the engine.
- 6. Shift into the desired gear range. If the problem is no **5** longer detected, the transmission will return to normal operation.

**NOTE:** Even if the transmission can be reset, we recommend that you visit your authorized dealer at your earliest possible convenience. Your authorized dealer has diagnostic equipment to determine if the problem could recur.

If the transmission cannot be reset, authorized dealer service is required.

# Electronic Range Select (ERS) Operation

The Electronic Range Select (ERS) shift control allows the driver to limit the highest available gear when the shift lever is in the DRIVE position. For example, if you shift the transmission into 3 (third gear), the transmission will not shift above third gear (except to prevent engine overspeed), but will shift down into second and first gears normally.

You can switch between DRIVE and ERS mode at any vehicle speed. When the shift lever is in the DRIVE position, the transmission will operate automatically, shifting between all available gears. Tapping the shift lever to the left (-) will activate ERS mode, display the current gear in the instrument cluster, and maintain that gear as the top available gear. Once in ERS mode, tapping the shift lever to the left (-) or right (+) will change the top available gear.

To exit ERS mode, simply press and hold the shift lever to the right (+) until "D" is once again displayed in the instrument cluster.

# WARNING!

Do not downshift for additional engine braking on a slippery surface. The drive wheels could lose their grip and the vehicle could skid, causing a collision or personal injury.

5

| Odometer           | 1 | 2   | 3   | 4   | 5   | 6   | D   |
|--------------------|---|-----|-----|-----|-----|-----|-----|
| Screen             |   |     |     |     |     |     |     |
| Display            |   |     |     |     |     |     |     |
| Actual             | 1 | 1–2 | 1–3 | 1–4 | 1–5 | 1–6 | 1–6 |
| Gear(s)<br>Allowed |   |     |     |     |     |     |     |
| Allowed            |   |     |     |     |     |     |     |

**NOTE:** To select the proper gear position for maximum deceleration (engine braking), tap the shift lever to the left (-) repeatedly as the vehicle slows. The transmission will shift to the range from which the vehicle can best be slowed down.

### **Overdrive Operation**

The automatic transmission includes an electronically controlled Overdrive (sixth gear). The transmission will automatically shift into Overdrive if the following conditions are present:

• the shift lever is in the DRIVE position,

- the transmission fluid has reached an adequate temperature,
- the engine coolant has reached an adequate temperature,
- vehicle speed is sufficiently high, and
- the driver is not heavily pressing the accelerator.

# **Torque Converter Clutch**

A feature designed to improve fuel economy has been included in the automatic transmission on your vehicle.

A clutch within the torque converter engages automatically at calibrated speeds. This may result in a slightly different feeling or response during normal operation in the upper gears. When the vehicle speed drops or during some accelerations, the clutch automatically disengages.

**NOTE:** The torque converter clutch will not engage until the transmission fluid and engine coolant are warm [usually after 1 to 3 miles (2 to 5 km) of driving]. Because the engine speed is higher when the torque converter clutch is not engaged, it may seem as if the transmission is not shifting into Overdrive when cold. This is normal. Using the AutoStick® shift control, when the transmission is sufficiently warm, will demonstrate that the transmission is able to shift into and out of Overdrive.

# DRIVING ON SLIPPERY SURFACES

### Acceleration

Rapid acceleration on snow covered, wet, or other slippery surfaces may cause the driving wheels to pull erratically to the right or left. This phenomenon occurs when there is a difference in the surface traction under the front (driving) wheels.

# WARNING!

Rapid acceleration on slippery surfaces is dangerous. Unequal traction can cause sudden pulling of the front wheels. You could lose control of the vehicle and possibly have a collision. Accelerate slowly and carefully whenever there is likely to be poor traction (ice, snow, wet, mud, loose sand, etc.).

### Traction

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tire and road surface. This is hydroplaning and may cause partial or complete loss of vehicle control and stopping ability. To reduce this possibility, the following precautions should be observed:

- 1. Slow down during rainstorms or when the roads are slushy.
- 2. Slow down if the road has standing water or puddles.
- 3. Replace the tires when tread wear indicators first become visible.
- 4. Keep tires properly inflated.
- 5. Maintain sufficient distance between your vehicle and the vehicle in front of you to avoid a collision in a sudden stop.

#### **DRIVING THROUGH WATER**

Driving through water more than a few inches/ centimeters deep will require extra caution to ensure safety and prevent damage to your vehicle.

### **Flowing/Rising Water**

### WARNING!

Do not drive on or across a road or path where water is flowing and/or rising (as in storm run-off). Flowing water can wear away the road or path's surface and cause your vehicle to sink into deeper water. Furthermore, flowing and/or rising water can carry your vehicle away swiftly. Failure to follow this warning may result in injuries that are serious or fatal to you, your passengers, and others around you.

# **Shallow Standing Water**

Although your vehicle is capable of driving through shallow standing water, consider the following Caution and Warning before doing so.

# **CAUTION!**

- Always check the depth of the standing water before driving through it. Never drive through standing water that is deeper than the bottom of the tire rims mounted on the vehicle.
- Determine the condition of the road or the path that is under water and if there are any obstacles in the way before driving through the standing water.
- Do not exceed 5 mph (8 km/h) when driving through standing water. This will minimize wave effects.

# CAUTION! (Continued)

- Driving through standing water may cause damage to your vehicle's drivetrain components. Always inspect your vehicle's fluids (i.e., engine oil, transmission, axle, etc.) for signs of contamination (i.e., fluid that is milky or foamy in appearance) after driving through standing water. Do not continue to operate the vehicle if any fluid appears contaminated, as this may result in further damage. Such damage is not covered by the New Vehicle Limited Warranty.
- Getting water inside your vehicle's engine can cause it to lock up and stall out, and cause serious internal damage to the engine. Such damage is not covered by the New Vehicle Limited Warranty.

# WARNING!

- Driving through standing water limits your vehicle's traction capabilities. Do not exceed 5 mph (8 km/h) when driving through standing water.
- Driving through standing water limits your vehicle's braking capabilities, which increases stopping distances. Therefore, after driving through standing water, drive slowly and lightly press on the brake pedal several times to dry the brakes.
- Getting water inside your vehicle's engine can cause it to lock up and stall out, and leave you stranded.
- Failure to follow these warnings may result in injuries that are serious or fatal to you, your passengers, and others around you.

### **POWER STEERING**

The standard power steering system will give you good vehicle response and increased ease of maneuverability in tight spaces. The system will provide mechanical steering capability if power assist is lost.

If for some reason the power assist is interrupted, it will still be possible to steer your vehicle. Under these conditions, you will observe a substantial increase in steering effort, especially at very low vehicle speeds and during parking maneuvers.

### NOTE:

- Increased noise levels at the end of the steering wheel travel are considered normal and do not indicate that there is a problem with the power steering system.
- Upon initial start-up in cold weather, the power steering pump may make noise for a short amount of time. This is due to the cold, thick fluid in the steering

system. This noise should be considered normal, and it does not in any way damage the steering system.

# WARNING!

Continued operation with reduced power steering assist could pose a safety risk to yourself and others. Service should be obtained as soon as possible.

# **CAUTION!**

Prolonged operation of the steering system at the end of the steering wheel travel will increase the steering fluid temperature and it should be avoided when possible. Damage to the power steering pump may occur.

# **Power Steering Fluid Check**

Checking the power steering fluid level at a defined service interval is not required. The fluid should only be

checked if a leak is suspected, abnormal noises are apparent, and/or the system is not functioning as anticipated. Coordinate inspection efforts through an authorized dealer.

# **CAUTION!**

Do not use chemical flushes in your power steering system as the chemicals can damage your power steering components. Such damage is not covered by the New Vehicle Limited Warranty.

# WARNING!

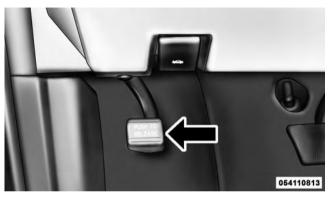
Fluid level should be checked on a level surface and with the engine off to prevent injury from moving parts and to ensure accurate fluid level reading. Do not overfill. Use only manufacturer's recommended power steering fluid.

If necessary, add fluid to restore to the proper indicated level. With a clean cloth, wipe any spilled fluid from all surfaces. Refer to "Fluids, Lubricants, and Genuine Parts" in "Maintaining Your Vehicle" for further information.

#### PARKING BRAKE

Before leaving the vehicle, make sure that the parking brake is fully applied and place the shift lever in the PARK position.

The foot operated parking brake is positioned below the lower left corner of the instrument panel. To apply the park brake, firmly push the park brake pedal fully. To release the parking brake, press the park brake pedal a second time and let your foot up as you feel the brake disengage.



#### Parking Brake

When the parking brake is applied with the ignition switch in the ON position, the "Brake Warning Light" in the instrument cluster will illuminate.

# NOTE:

- When the parking brake is applied and the automatic transmission is placed in gear, the "Brake Warning Light" will flash. If vehicle speed is detected, a chime will sound to alert the driver. Fully release the parking brake before attempting to move the vehicle.
- This light only shows that the parking brake is applied. It does not show the degree of brake application.

When parking on a hill, it is important to turn the front wheels toward the curb on a downhill grade and away from the curb on an uphill grade. For vehicles equipped with an automatic transmission, apply the parking brake before placing the shift lever in PARK, otherwise the load on the transmission locking mechanism may make it difficult to move the shift lever out of PARK. The parking brake should always be applied whenever the driver is not in the vehicle.

# WARNING!

- When leaving the vehicle, always remove the key fob from the ignition and lock your vehicle.
- Never leave children alone in a vehicle, or with access to an unlocked vehicle.
- Allowing children to be in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Children should be warned not to touch the parking brake, brake pedal or the shift lever.
- Do not leave the key fob in the ignition. A child could operate power windows, other controls, or move the vehicle.

# CAUTION!

If the Brake System Warning Light remains on with the parking brake released, a brake system malfunction is indicated. Have the brake system serviced by an authorized dealer immediately.

# ANTI-LOCK BRAKE SYSTEM (ABS)

The Anti-Lock Brake System (ABS) provides increased vehicle stability and brake performance under most braking conditions. The system operates with a separate computer to modulate hydraulic pressure to prevent wheel lock-up and help avoid skidding on slippery surfaces.

ABS is activated during braking under certain road or stopping conditions. ABS-inducing conditions can include ice, snow, gravel, bumps, railroad tracks, loose debris, or panic stops. You may experience the following when the brake system goes into anti-lock:

- The ABS motor running (it may continue to run for a short time after the stop)
- A clicking sound of solenoid valves
- Brake pedal pulsations
- A slight drop or fall away of the brake pedal at the end of the stop

## WARNING!

• The Anti-Lock Brake System contains sophisticated electronic equipment that may be susceptible to interference caused by improperly installed, or high output radio transmitting equipment. This interference can cause possible loss of anti-lock

#### (Continued)

5

# WARNING! (Continued)

braking capability. Installation of such equipment should be performed by qualified professionals.

- Pumping of the Anti-Lock Brakes will diminish their effectiveness and may lead to a collision. Pumping makes the stopping distance longer. Just press firmly on your brake pedal when you need to slow down or stop.
- The Anti-Lock Brake System cannot prevent collisions, including those resulting from excessive speed in turns, following another vehicle too closely, or hydroplaning.
- The capabilities of an ABS-equipped vehicle must never be exploited in a reckless or dangerous manner, which could jeopardize the user's safety or the safety of others.

(Continued)

# WARNING! (Continued)

• The ABS cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase braking or steering efficiency beyond that afforded by the condition of the vehicle brakes and tires or the traction afforded.

All vehicle wheels and tires must be the same size and type, and tires must be properly inflated to produce accurate signals for the computer.

# Anti-Lock Brake Warning Light



The "Anti-Lock Brake Warning Light" monitors the anti-lock brake system. The light will come on when the ignition switch is turned to the ON position and may stay on for as long as

four seconds.

If the "Anti-Lock Brake Warning Light" remains on or comes on while driving, it indicates that the anti-lock portion of the brake system is not functioning and that service is required. However, the conventional brake system will continue to operate normally if the "Brake Warning Light" is not on.

If the "Anti-Lock Brake Warning Light" is on, the brake system should be serviced as soon as possible to restore the benefits of anti-lock brakes. If the "Anti-Lock Brake Warning Light" does not come on when the ignition switch is turned to the ON position, have the bulb repaired as soon as possible.

If both the "Brake Warning Light" and the "Anti-Lock Brake Warning Light" remain on, the ABS and Electronic Brake Force Distribution (EBD) systems are not functioning. Immediate repair to the ABS system is required. Consult with your authorized dealer service center as soon as possible.

#### ELECTRONIC BRAKE CONTROL SYSTEM

Your vehicle is equipped with an advanced electronic brake control system that includes the Traction Control System (TCS), Brake Assist System (BAS) and Electronic Stability Control (ESC), Trailer Sway Control (TSC), and Hill Start Assist (HSA). These systems complement the Anti-Lock Brake System (ABS) by optimizing the vehicle braking capability during emergency braking maneuvers.

#### Traction Control System (TCS)

The Traction Control System (TCS) monitors the amount of wheel spin of each of the driven wheels. If wheel spin is detected, brake pressure is applied to the slipping wheel(s) and engine power is reduced, to provide enhanced acceleration and stability. A feature of the TCS functions similarly to a limited-slip differential, and controls the wheel spin across a driven axle. If one wheel on a driven axle is spinning faster than the other, the

system will apply the brake of the spinning wheel. This will allow more engine torque to be applied to the wheel that is not spinning. This feature remains active even if the ESC is in the "Partial Off" mode.

The "ESC Activation/Malfunction Indicator Light" (in the instrument cluster) will start to flash as soon as the tires lose traction and the wheels begin to spin. This indicates that the TCS is active. If the indicator light flashes during acceleration, ease up on the accelerator and apply as little throttle as possible. Be sure to adapt your speed and driving to the prevailing road conditions, and do not switch off the ESC or TCS.

# WARNING!

• The TCS cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase the traction afforded.

# WARNING! (Continued)

- The TCS cannot prevent collisions, including those resulting from excessive speed in turns, or hydroplaning.
- The capabilities of a TCS-equipped vehicle must never be exploited in a reckless or dangerous manner, which could jeopardize the user's safety or the safety of others.

# Brake Assist System (BAS)

The Brake Assist System (BAS) is designed to optimize the vehicle's braking capability during emergency braking maneuvers. The system detects an emergency braking situation by sensing the rate and amount of brake application, and then applies optimum pressure to the brakes. This can help reduce braking distances. The BAS complements the ABS. Applying the brakes very quickly results in the best BAS assistance. To receive the benefit of

the system, you must apply continuous braking pressure during the stopping sequence. Do not reduce brake pedal pressure unless braking is no longer desired. Once the brake pedal is released, the BAS is deactivated.

### WARNING!

- The BAS cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase the traction afforded by prevailing road conditions.
- The BAS cannot prevent collisions, including those resulting from excessive speed in turns, driving on very slippery surfaces, or hydroplaning.
- The capabilities of a BAS-equipped vehicle must never be exploited in a reckless or dangerous manner which could jeopardize the user's safety or the safety of others.

### **Electronic Stability Control (ESC)**

The Electronic Stability Control (ESC) enhances directional control and stability of the vehicle under various driving conditions. ESC corrects for over/under steering of the vehicle by applying the brake of the appropriate wheel to assist in counteracting the over/under steer condition. Engine power may also be reduced to help the vehicle maintain the desired path.

ESC uses sensors in the vehicle to determine the vehicle path intended by the driver and compares it to the actual path of the vehicle. When the actual path does not match the intended path, ESC applies the brake of the appropriate wheel to assist in counteracting the oversteer or understeer condition.

• Oversteer - when the vehicle is turning more than appropriate for the steering wheel position.

• Understeer - when the vehicle is turning less than appropriate for the steering wheel position.

# WARNING!

The Electronic Stability Control (ESC) cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase the traction afforded by prevailing road conditions. ESC cannot prevent all accidents, including those resulting from excessive speed in turns, driving on very slippery surfaces, or hydroplaning. ESC also cannot prevent accidents resulting from loss of vehicle control due to inappropriate driver input for the conditions. Only a safe, attentive, and skillful driver can prevent accidents. The capabilities of an ESC equipped vehicle must never be exploited in a reckless or dangerous manner

# WARNING! (Continued)

which could jeopardize the user's safety or the safety of others.

# **ESC Operating Modes**



The "ESC Off" switch is located in the center switch bank, next to the hazard flasher switch.

# ESC On

This mode is the normal operating mode for ESC on two-wheel drive vehicles. Whenever the vehicle is started, the ESC system will be in this mode. This mode should be used for most driving situations. ESC should only be turned off for specific reasons as noted below.

(Continued)

### **ESC Partial Off**

This mode is entered by momentarily pressing the "ESC Off" switch.

When in the "Partial Off" mode, the TCS portion of ESC, except for the "limited slip" feature described in the TCS section, has been disabled and the "ESC OFF Indicator Light" will be illuminated. When in the "Partial Off" mode, ESC will operate without engine torque management. This mode is intended to be used if the vehicle is in deep snow, sand or gravel conditions and more wheel spin than ESC would normally allow is required to gain traction. To turn ESC on again, momentarily press the "ESC Off" switch. This will restore the normal "ESC On" mode of operation.

### WARNING!

- When in "Partial Off" mode, the TCS functionality of ESC, (except for the limited slip feature described in the TCS section), has been disabled and the "ESC Off Indicator Light" will be illuminated. When in "Partial Off" mode, the engine power reduction feature of TCS is disabled, and the enhanced vehicle stability offered by the ESC system is reduced.
- Trailer Sway control (TSC) is disabled when the ESC system is in the "Partial Off" mode.

**NOTE:** To improve the vehicle's traction when driving with snow chains, or starting off in deep snow, sand or gravel, it may be desirable to switch to the "Partial Off" mode by pressing the "ESC Off" switch. Once the situation requiring ESC to be switched to the "Partial Off" mode is overcome, turn ESC back on by momentarily pressing the "ESC Off" switch. This may be done while the vehicle is in motion.

# ESC Activation/Malfunction Indicator Light And **ESC OFF Indicator Light**

The "ESC Activation/Malfunction Indicator Light" in the instrument cluster will come on when the ignition switch is turned to the ON position. It should turn off with the engine running. If the "ESC Activation/Malfunction Indicator

Light" comes on continuously with the engine running, a malfunction has been detected in the ESC system. If this light remains on after several ignition cycles, and the vehicle has been driven several miles (kilometers) at speeds greater than 30 mph (48 km/h), see your authorized dealer as soon as possible to have the problem diagnosed and corrected.

The "ESC Activation/Malfunction Indicator Light" (located in the instrument cluster) starts to flash as soon as the tires lose traction and the ESC system becomes active. The "ESC Activation/Malfunction Indicator Light" also flashes when TCS is active. If the "ESC Activation/ Malfunction Indicator Light" begins to flash during acceleration, ease up on the accelerator and apply as little throttle as possible. Be sure to adapt your speed and driving to the prevailing road conditions.

#### NOTE:

• The "ESC Activation/Malfunction Indicator Light" and the "ESC OFF Indicator Light" come on momentarily each time the ignition switch is turned ON.

- Each time the ignition is turned ON, the ESC system will be ON even if it was turned off previously.
- The ESC system will make buzzing or clicking sounds when it is active. This is normal; the sounds will stop when ESC becomes inactive following the maneuver that caused the ESC activation.



The "ESC OFF Indicator Light" indicates the Electronic Stability Control (ESC) is off.

#### Trailer Sway Control (TSC)

TSC uses sensors in the vehicle to recognize an excessively swaying trailer and will take the appropriate actions to attempt to stop the sway. The system may reduce engine power and apply the brake of the appropriate wheel(s) to counteract the sway of the trailer. TSC will become active automatically once an excessively swaying trailer is recognized. No driver action is required. Note that TSC cannot stop all trailers from swaying. Always use caution when towing a trailer and follow the trailer tongue weight recommendations. Refer to "Trailer Towing" in this section for further information. When TSC is functioning, the "ESC Activation/ Malfunction Indicator Light" will flash, the engine power may be reduced and you may feel the brakes being applied to individual wheels to attempt to stop the trailer from swaying. TSC is disabled when the ESC system is in the "Partial Off" mode.

### WARNING!

If TSC activates while driving, slow the vehicle down, stop at the nearest safe location, and adjust the trailer load to eliminate trailer sway.

# Hill Start Assist (HSA)

The HSA system is designed to assist the driver when starting a vehicle from a stop on a hill. HSA will maintain the level of brake pressure the driver applied for a short period of time after the driver takes their foot off of the brake pedal. If the driver does not apply the throttle during this short period of time, the system will release brake pressure and the vehicle will roll down the hill. The system will release brake pressure in proportion to the amount of throttle applied as the vehicle starts to move in the intended direction of travel.

## HSA Activation Criteria

The following criteria must be met in order for HSA to activate:

- Vehicle must be stopped.
- Vehicle must be on a 6% (approximate) grade or greater hill.

• Gear selection matches vehicle uphill direction (i.e., vehicle facing uphill is in forward gear; vehicle backing uphill is in REVERSE gear).

HSA will work in REVERSE and all forward gears when the activation criteria have been met. The system will not activate if the vehicle is placed in NEUTRAL or PARK.

# WARNING!

There may be situations on minor hills (i.e., less than 8%), with a loaded vehicle, or while pulling a trailer, when the system will not activate and slight rolling may occur. This could cause a collision with another vehicle or object. Always remember the driver is responsible for braking the vehicle.

# **Disabling/Enabling HSA**

If you wish to turn on or off the HSA system, it can be done using the Customer Programmable Features in the

5

Electronic Vehicle Information Center (EVIC). Refer to "Electronic Vehicle Information Center (EVIC)" in "Understanding Your Instrument Panel" for further information.

For vehicles not equipped with the EVIC, perform the following steps:

**NOTE:** You must complete Steps 1 through 8 within 90 seconds.

- 1. Center the steering wheel (front wheels pointing straight forward).
- 2. Shift the transmission into NEUTRAL.
- 3. Apply the parking brake.
- 4. Start the engine.
- 5. Release the clutch pedal (if equipped).

6. Rotate the steering wheel one-half turn to the left.

- 7. Press the "ESC Off" switch (located in the lower switch bank below the climate controls) four times within 20 seconds. The "ESC Activation/Malfunction Indicator Light" should turn on and turn off two times.
- 8. Rotate the steering wheel back to center and then an additional half-turn to the right.
- 9. Turn the ignition switch to the OFF position and then back to the ON position. If the sequence was completed properly, the "ESC Activation/Malfunction Indicator Light" will blink several times to confirm HSA is disabled.
- 10. Repeat these steps if you want to return this feature to it's previous setting.

# **Towing With HSA**

HSA will provide assistance when starting on a grade when pulling a trailer.

# WARNING!

• If you use a trailer brake controller with your trailer, your trailer brakes may be activated and deactivated with the brake switch. If so, when the brake pedal is released, there may not be enough brake pressure to hold the vehicle and trailer on a hill and this could cause a collision with another vehicle or object behind you. In order to avoid rolling down the hill while resuming acceleration, manually activate the trailer brake prior to releasing the brake pedal. Always remember the driver is responsible for braking the vehicle.

# WARNING! (Continued)

• HSA is not a parking brake. If you stop the vehicle on a hill without putting the transmission in PARK and using the parking brake, it will roll down the hill and could cause a collision with another vehicle or object. Always remember to use the parking brake while parking on a hill, and that the driver is responsible for braking the vehicle.

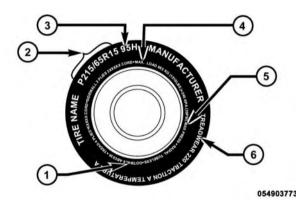
# HSA Off

If you wish to turn off the HSA system, it can be done using the Customer Programmable Features in the Electronic Vehicle Information Center (EVIC). Refer to "Electronic Vehicle Information Center (EVIC)" in "Understanding Your Instrument Panel" for further information.

(Continued)

#### TIRE SAFETY INFORMATION

Tire Markings



| 1 — U.S. DOT Safety Standards | 4 — Maximum Load            |
|-------------------------------|-----------------------------|
| Code (TIN)                    | 5 — Maximum Pressure        |
| 2 — Size Designation          | 6 — Treadwear, Traction and |
| 3 — Service Description       | Temperature Grades          |

#### NOTE:

- P (Passenger) Metric tire sizing is based on U.S. design standards. P-Metric tires have the letter "P" molded into the sidewall preceding the size designation. Example: P215/65R15 95H.
- European-Metric tire sizing is based on European design standards. Tires designed to this standard have the tire size molded into the sidewall beginning with the section width. The letter "P" is absent from this tire size designation. Example: 215/65R15 96H.
- LT (Light Truck) Metric tire sizing is based on U.S. design standards. The size designation for LT-Metric tires is the same as for P-Metric tires except for the letters "LT" that are molded into the sidewall preceding the size designation. Example: LT235/85R16.
- Temporary spare tires are spares designed for temporary emergency use only. Temporary high pressure

compact spare tires have the letter "T" or "S" molded into the sidewall preceding the size designation. Example: T145/80D18 103M.

Tire Sizing Chart

• High flotation tire sizing is based on U.S. design standards and it begins with the tire diameter molded into the sidewall. Example: 31x10.5 R15 LT.

| EXAMPLE:   |  |  |
|--|--|--|
| Size Designation:  |  |  |
| $\mathbf{P}$ = Passenger car tire size based on U.S. design standards  |  |  |
| "blank" = Passenger car tire based on European design standards        |  |  |
| LT = Light truck tire based on U.S. design standards                   |  |  |
| <b>T</b> or $S$ = Temporary spare tire                                 |  |  |
| 31 = Overall diameter in inches (in)                                   |  |  |
| 215 = Section width in millimeters (mm)                                |  |  |
| 65 = Aspect ratio in percent (%)                                       |  |  |
| <ul> <li>— Ratio of section height to section width of tire</li> </ul> |  |  |
| 10.5 = Section width in inches (in)                                    |  |  |

| EXAMPLE:  |  |  |  |
|---|--|--|--|
| $\mathbf{R}$ = Construction code  |  |  |  |
| — "R" means radial construction   |  |  |  |
| — "D" means diagonal or bias construction   |  |  |  |
| 15 = Rim diameter in inches (in)  |  |  |  |
| Service Description:  |  |  |  |
| 95 = Load Index   |  |  |  |
| — A numerical code associated with the maximum load a tire can carry  |  |  |  |
| H = Speed Symbol  |  |  |  |
| — A symbol indicating the range of speeds at which a tire can carry a load corresponding to its load index under certain operating conditions   |  |  |  |
| <ul> <li>— The maximum speed corresponding to the speed symbol should only be achieved under<br/>specified operating conditions (i.e., tire pressure, vehicle loading, road conditions, and<br/>posted speed limits)</li> </ul> |  |  |  |

| EXAMPLE:  |  |  |
|---|--|--|
| Load Identification:  |  |  |
| "blank" = Absence of any text on the sidewall of the tire indicates a Standard Load (SL) tire                   |  |  |
| Extra Load (XL) = Extra load (or reinforced) tire   |  |  |
| Light Load (LL) = Light load tire   |  |  |
| C, D, E, F, G = Load range associated with the maximum load a tire can carry at a specified pressure            |  |  |
| Maximum Load — Maximum load indicates the maximum load this tire is designed to carry                           |  |  |
| Maximum Pressure— Maximum pressure indicates the maximum permissible cold tire inflation pressure for this tire |  |  |

### **Tire Identification Number (TIN)**

The TIN may be found on one or both sides of the tire, however, the date code may only be on one side. Tires with white sidewalls will have the full TIN, including the date code, located on the white sidewall side of the tire.

Look for the TIN on the outboard side of black sidewall tires as mounted on the vehicle. If the TIN is not found on the outboard side, then you will find it on the inboard side of the tire.

| EXAMPLE:  |  |  |
|---|--|--|
| DOT MA L9 ABCD 0301   |  |  |
| DOT = Department of Transportation  |  |  |
| — This symbol certifies that the tire is in compliance with the U.S. Department of Transportation tire safety standards and is approved for highway use |  |  |
| MA = Code representing the tire manufacturing location (two digits)   |  |  |
| L9 = Code representing the tire size (two digits)   |  |  |
| ABCD = Code used by the tire manufacturer (one to four digits)  |  |  |
| 03 = Number representing the week in which the tire was manufactured (two digits)   |  |  |
| — 03 means the 3rd week   |  |  |
| <b>1</b> = Number representing the year in which the tire was manufactured (two digits)   |  |  |
| -01 means the year 2001   |  |  |
| — Prior to July 2000, tire manufacturers were only required to have one number to represent the   |  |  |

year in which the tire was manufactured. Example: 031 could represent the 3rd week of 1981 or 1991

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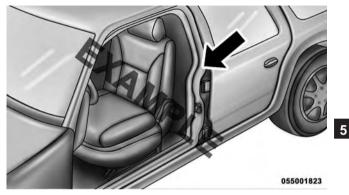
# **Tire Terminology And Definitions**

| Term  | Definition  |  |  |
|---|---|--|--|
| B-Pillar                                    | The vehicle B-Pillar is the structural member of the body located behind the front door.  |  |  |
| Cold Tire Inflation Pressure                | Cold tire inflation pressure is defined as the tire pressure after<br>the vehicle has not been driven for at least 3 hours, or driven less<br>than 1 mile (1.6 km) after sitting for a three hour period. Inflation<br>pressure is measured in units of PSI (pounds per square inch) or<br>kPa (kilopascals). |  |  |
| Maximum Inflation Pressure                  | The maximum inflation pressure is the maximum permissible<br>cold tire inflation pressure for this tire. The maximum inflation<br>pressure is molded into the sidewall.   |  |  |
| Recommended Cold Tire Inflation<br>Pressure | Vehicle manufacturer's recommended cold tire inflation pressure as shown on the tire placard.   |  |  |
| Tire Placard                                | A paper label permanently attached to the vehicle describing the vehicle's loading capacity, the original equipment tire sizes and the recommended cold tire inflation pressures.   |  |  |

### Tire Loading And Tire Pressure

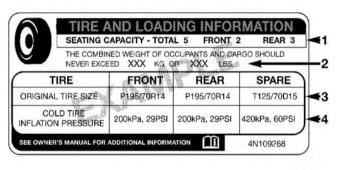
### Tire And Loading Information Placard Location

**NOTE:** The proper cold tire inflation pressure is listed on the driver's side B-Pillar or the rear edge of the driver's side door.



B-Pillar Location for Tire And Loading Information Placard

### Tire And Loading Information Placard



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### Tire and Loading Information Placard

This placard tells you important information about the:

1) number of people that can be carried in the vehicle

2) total weight your vehicle can carry

3) tire size designed for your vehicle

4) cold tire inflation pressures for the front, rear, and spare tires.

### Loading

The vehicle maximum load on the tire must not exceed the load carrying capacity of the tire on your vehicle. You will not exceed the tire's load carrying capacity if you adhere to the loading conditions, tire size, and cold tire inflation pressures specified on the Tire and Loading Information placard and in the "Vehicle Loading" section of this manual.

**NOTE:** Under a maximum loaded vehicle condition, gross axle weight ratings (GAWRs) for the front and rear axles must not be exceeded. For further information on GAWRs, vehicle loading, and trailer towing, refer to "Vehicle Loading" in this section.

To determine the maximum loading conditions of your vehicle, locate the statement "The combined weight of occupants and cargo should never exceed XXX lbs or XXX kg" on the Tire and Loading Information placard. The combined weight of occupants, cargo/luggage and trailer tongue weight (if applicable) should never exceed the weight referenced here.

# **Steps For Determining Correct Load Limit**

- 1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX lbs or XXX kg" 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 lbs or XXX kg.

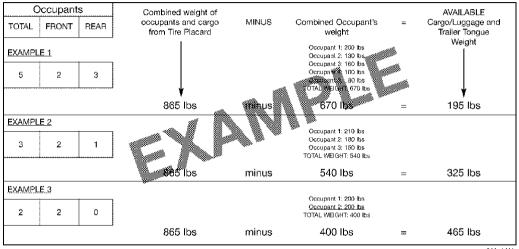
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if "XXX" amount equals 1,400 lbs (635 kg) and there will be five 150 lb (68 kg) passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs (295 kg) (since 5 x 150 = 750, and 1400 – 750 = 650 lbs [295 kg]).

STARTING AND OPERATING 495

- 5. Determine the combined weight of luggage and cargo **5** being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
- 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.

# NOTE:

- The following table shows examples on how to calculate total load, cargo/luggage, and towing capacities of your vehicle with varying seating configurations and number and size of occupants. This table is for illustration purposes only and may not be accurate for the seating and load carry capacity of your vehicle.
- For the following example, the combined weight of occupants and cargo should never exceed 865 lbs (392 kg).



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# WARNING!

Overloading of your tires is dangerous. Overloading can cause tire failure, affect vehicle handling, and increase your stopping distance. Use tires of the recommended load capacity for your vehicle. Never overload them.

# TIRES — GENERAL INFORMATION

### Tire Pressure

Proper tire inflation pressure is essential to the safe and satisfactory operation of your vehicle. Three primary areas are affected by improper tire pressure: Safety

# WARNING!

- Improperly inflated tires are dangerous and can cause collisions.
- Under-inflation increases tire flexing and can result in over-heating and tire failure.
- Over-inflation reduces a tire's ability to cushion shock. Objects on the road and chuckholes can cause damage that result in tire failure.
- Over-inflated or under-inflated tires can affect vehicle handling and can fail suddenly, resulting in loss of vehicle control.
- Unequal tire pressures can cause steering problems. You could lose control of your vehicle.

(Continued)

# WARNING! (Continued)

- Unequal tire pressures from one side of the vehicle to the other can cause the vehicle to drift to the right or left.
- Always drive with each tire inflated to the recommended cold tire inflation pressure.

### Economy

Improper inflation pressures can cause uneven wear patterns to develop across the tire tread. These abnormal wear patterns will reduce tread life resulting in a need for earlier tire replacement. Under-inflation also increases tire rolling resistance resulting in higher fuel consumption.

## **Ride Comfort And Vehicle Stability**

Proper tire inflation contributes to a comfortable ride. Over-inflation produces a jarring and uncomfortable ride. Both under-inflation and over-inflation affect the stability of the vehicle and can produce a feeling of sluggish response or over responsiveness in the steering.

Unequal tire pressures from side to side may cause erratic and unpredictable steering response.

Unequal tire pressure from side to side may cause the vehicle to drift left or right.

### **Tire Inflation Pressures**

The proper cold tire inflation pressure is listed on the driver's side "B" Pillar or rear edge of the driver's side door.

At least once a month:

• Check and adjust tire pressure with a good quality pocket-type pressure gauge. Do not make a visual judgement when determining proper inflation. Tires may look properly inflated even when they are under-inflated.

• Inspect tires for signs of tire wear or visible damage.

# CAUTION!

After inspecting or adjusting the tire pressure, always reinstall the valve stem cap. This will prevent moisture and dirt from entering the valve stem, which could damage the valve stem.

Inflation pressures specified on the placard are always "cold tire inflation pressure." Cold tire inflation pressure is defined as the tire pressure after the vehicle has not been driven for at least three hours, or driven less than 1 mile (1.6 km) after a three hour period. The cold tire inflation pressure must not exceed the maximum inflation pressure molded into the tire sidewall.

Check tire pressures more often if subject to a wide range of outdoor temperatures, as tire pressures vary with temperature changes. Tire pressures change by approximately 1 psi (7 kPa) per 12°F (7°C) of air temperature change. Keep this in mind when checking tire pressure inside a garage, especially in the winter.

Example: If garage temperature =  $68^{\circ}F$  ( $20^{\circ}C$ ) and the outside temperature =  $32^{\circ}F$  ( $0^{\circ}C$ ) then the cold tire inflation pressure should be increased by 3 psi (21 kPa), which equals 1 psi (7 kPa) for every  $12^{\circ}F$  ( $7^{\circ}C$ ) for this outside temperature condition.

Tire pressure may increase from 2 to 6 psi (13 to 40 kPa) during operation. DO NOT reduce this normal pressure build up or your tire pressure will be too low.

## **Tire Pressures For High Speed Operation**

The manufacturer advocates driving at safe speeds and within posted speed limits. Where speed limits or conditions are such that the vehicle can be driven at high speeds, maintaining correct tire inflation pressure is very important. Increased tire pressure and reduced vehicle loading may be required for high-speed vehicle operation. Refer to your authorized tire or original equipment vehicle dealer for recommended safe operating speeds, loading and cold tire inflation pressures.

## WARNING!

High speed driving with your vehicle under maximum load is dangerous. The added strain on your tires could cause them to fail. You could have a serious collision. Do not drive a vehicle loaded to the maximum capacity at continuous speeds above 75 mph (120 km/h).

# **Radial Ply Tires**

## WARNING!

Combining radial ply tires with other types of tires on your vehicle will cause your vehicle to handle poorly. The instability could cause a collision. Always use radial ply tires in sets of four. Never combine them with other types of tires.

### Tire Repair

If your tire becomes damaged, it may be repaired if it meets the following criteria:

- The tire has not been driven on when flat,
- The damage is only on the tread section of your tire (sidewall damage is not repairable) and
- The puncture is no greater than <sup>1</sup>/<sub>4</sub>" (6 mm)

Consult an authorized tire dealer for tire repairs and additional information.

Damaged Run Flat tires, or Run Flat tires that have experienced a loss of pressure should be replaced immediately with another Run Flat tire of identical size and service description (Load Index and Speed Code).

# All Season Tires – If Equipped

All Season tires provide traction for all seasons (spring, summer, fall and winter). Traction levels may vary between different all season tires. All season tires can be identified by the M+S, M&S, M/S or MS designation on the tire sidewall. Use all season tires only in sets of four; failure to do so may adversely affect the safety and handling of your vehicle.

## Summer Or Three Season Tires – If Equipped

Summer tires provide traction in both wet and dry conditions, and are not intended to be driven in snow or

on ice. Summer tires will not contain the all season designation or mountain/snowflake symbol on the tire sidewall. Use summer tires only in sets of four; failure to do so may adversely affect the safety and handling of your vehicle.

### **Snow Tires**

Some areas of the country require the use of snow tires during the winter. Snow tires can be identified by a mountain/snowflake symbol on the tire sidewall.

If you need snow tires, select tires equivalent in size and type to the original equipment tires. Use snow tires only in sets of four; failure to do so may adversely affect the safety and handling of your vehicle.

Snow tires generally have lower speed ratings than what was originally equipped with your vehicle and should not be operated at sustained speeds over 75 mph (120 km/h). For speeds above 75 mph (120 km/h) refer to

original equipment or an authorized tire dealer for recommended safe operating speeds, loading and cold tire inflation pressures.

While studded tires improve performance on ice, skid and traction capability on wet or dry surfaces may be poorer than that of non-studded tires. Some states prohibit studded tires; therefore, local laws should be checked before using these tire types.

# Spare Tire Matching Original Equipped Tire And Wheel – If Equipped

Your vehicle may be equipped with a spare tire and wheel equivalent in look and function to the original equipment tire and wheel found on the front or rear axle of your vehicle. This spare tire may be used in the tire rotation for your vehicle. If your vehicle has this option refer to an authorized tire dealer for the recommended tire rotation pattern.

# Compact Spare Tire – If Equipped

The compact spare is for temporary emergency use only. You can identify if your vehicle is equipped with a compact spare by looking at the spare tire description on the Tire and Loading Information Placard located on the driver's side door opening or on the sidewall of the tire. Compact spare tire descriptions begin with the letter "T" or "S" preceding the size designation. Example: T145/580D18 103M.

# T, S = Temporary Spare Tire

Since this tire has limited tread life the original equipment tire should be repaired (or replaced) and reinstalled on your vehicle at the first opportunity.

Do not install a wheel cover or attempt to mount a conventional tire on the compact spare wheel, since the wheel is designed specifically for the compact spare tire.

Do not install more than one compact spare tire and wheel on the vehicle at any given time.

# WARNING!

Compact spares are for temporary emergency use only. With these spares, do not drive more than 50 mph (80 km/h). Temporary use spares have limited tread life. When the tread is worn to the tread wear indicators, the temporary use spare tire needs to be replaced. Be sure to follow the warnings, which apply to your spare. Failure to do so could result in spare tire failure and loss of vehicle control.

# Full Size Spare – If Equipped

The full size spare is for temporary emergency use only. This tire may look like the originally equipped tire on the front or rear axle of your vehicle, but it is not. This spare tire may have limited tread life. When the tread is worn to the tread wear indicators, the temporary use full size

spare tire needs to be replaced. Since it is not the same as your original equipment tire, replace (or repair) the original equipment tire and reinstall on the vehicle at the first opportunity.

# Limited-Use Spare – If Equipped

The limited-use spare tire is for temporary emergency use only. This tire is identified by a label located on the limited-use spare wheel. This label contains the driving limitations for this spare. This tire may look like the original equipped tire on the front or rear axle of your vehicle, but it is not. Installation of this limited-use spare tire affects vehicle handling. Since it is not the same as your original equipment tire, replace (or repair) the original equipment tire and reinstall on the vehicle at the first opportunity.

# WARNING!

Limited-use spares are for emergency use only. Installation of this limited-use spare tire affects vehicle handling. With this tire, do not drive more than the speed listed on the limit-use spare wheel. Keep inflated to the cold tire inflation pressures listed on your Tire and Loading Information Placard located on the driver's side B-Pillar or the rear edge of the driver's side door. Replace (or repair) the original equipment tire at the first opportunity and reinstall it on your vehicle. Failure to do so could result in loss of vehicle control.

### Tire Spinning

When stuck in mud, sand, snow, or ice conditions, do not spin your vehicle's wheels above 30 mph (48 km/h) or for longer than 30 seconds continuously without stopping when you are stuck.

Refer to "Freeing A Stuck Vehicle" in "What To Do In Emergencies" for further information.

# WARNING!

Fast spinning tires can be dangerous. Forces generated by excessive wheel speeds may cause tire damage or failure. A tire could explode and injure someone. Do not spin your vehicle's wheels faster than 30 mph (48 km/h) for more than 30 seconds continuously when you are stuck, and do not let anyone near a spinning wheel, no matter what the speed.

# **Tread Wear Indicators**

Tread wear indicators are in the original equipment tires to help you in determining when your tires should be replaced.



1 — Worn Tire 2 — New Tire These indicators are molded into the bottom of the tread grooves. They will appear as bands when the tread depth becomes 1/16 in (2 mm). When the tread is worn to the tread wear indicators, the tire should be replaced. Refer to replacement tires in this section for further information.

# Life Of Tire

The service life of a tire is dependent upon varying factors including, but not limited to:

- Driving style
- Tire pressure

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- Distance driven
- Performance tires, tires with a speed rating of V or higher, and summer tires typically have a reduced tread life. Rotation of these tires per the vehicle maintenance schedule is highly recommended.

# WARNING!

Tires and the spare tire should be replaced after six years, regardless of the remaining tread. Failure to follow this warning can result in sudden tire failure. You could lose control and have a collision resulting in serious injury or death.

Keep dismounted tires in a cool, dry place with as little exposure to light as possible. Protect tires from contact with oil, grease, and gasoline.

### **Replacement Tires**

The tires on your new vehicle provide a balance of many characteristics. They should be inspected regularly for wear and correct cold tire inflation pressure. The manufacturer strongly recommends that you use tires equivalent to the originals in size, quality and performance when replacement is needed. Refer to the paragraph on "Tread Wear Indicators". Refer to the Tire and Loading Information placard or the Vehicle Certification Label for the size designation of your tire. The Load Index and Speed Symbol for your tire will be found on the original equipment tire sidewall. See the Tire Sizing Chart example found in the Tire Safety Information section of this manual for more information relating to the Load Index and Speed Symbol of a tire.

It is recommended to replace the two front tires or two rear tires as a pair. Replacing just one tire can seriously affect your vehicle's handling. If you ever replace a wheel, make sure that the wheel's specifications match those of the original wheels.

It is recommended you contact your authorized tire or original equipment dealer with any questions you may have on tire specifications or capability. Failure to use equivalent replacement tires may adversely affect the safety, handling, and ride of your vehicle.

# WARNING!

- Do not use a tire, wheel size or rating other than that specified for your vehicle. Some combinations of unapproved tires and wheels may change suspension dimensions and performance characteristics, resulting in changes to steering, handling, and braking of your vehicle. This can cause unpredictable handling and stress to steering and suspension components. You could lose control and have a collision resulting in serious injury or death. Use only the tire and wheel sizes with load ratings approved for your vehicle.
- Never use a tire with a smaller load index or capacity, other than what was originally equipped on your vehicle. Using a tire with a smaller load index could result in tire overloading and failure. You could lose control and have a collision.

# WARNING! (Continued)

• Failure to equip your vehicle with tires having adequate speed capability can result in sudden tire failure and loss of vehicle control.

# **CAUTION!**

Replacing original tires with tires of a different size may result in false speedometer and odometer readings.

# TIRE CHAINS (TRACTION DEVICES)

Use of traction devices require sufficient tire-to-body clearance. Follow these recommendations to guard against damage:

• Traction device must be of proper size for the tire, as recommended by the traction device manufacturer.

- Install on front tires only.
- 225/65R16 and 235/60R16 tires with the use of a traction device that meets the SAE type "Class S" specification is recommended.
- Due to limited clearance, P225/65R17 and 225/65R17 tires with a Security Chain Company (SCC) Super Z6 low profile traction device or equivalent is recommended.

### WARNING!

Using tires of different size and type (M+S, Snow) between front and rear axles can cause unpredictable handling. You could lose control and have a collision.

# **CAUTION!**

To avoid damage to your vehicle or tires, observe the following precautions:

- Because of restricted traction device clearance between tires and other suspension components, it is important that only traction devices in good condition are used. Broken devices can cause serious damage. Stop the vehicle immediately if noise occurs that could indicate device breakage. Remove the damaged parts of the device before further use.
- Install device as tightly as possible and then retighten after driving about ½ mile (0.8 km).
- Do not exceed 30 mph (48 km/h).
- Drive cautiously and avoid severe turns and large bumps, especially with a loaded vehicle.
- Do not drive for prolonged period on dry pavement.

### 5

#### (Continued)

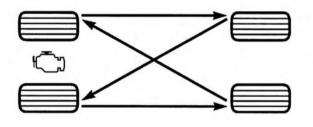
# CAUTION! (Continued)

- Observe the traction device manufacturer's instructions on the method of installation, operating speed, and conditions for use. Always use the suggested operating speed of the device manufacturer's if it is less than 30 mph (48 km/h).
- Do not use traction devices on a compact spare tire.

# TIRE ROTATION RECOMMENDATIONS

The tires on the front and rear of your vehicle operate at different loads and perform different steering, driving, and braking functions. For these reasons, they wear at unequal rates. These effects can be reduced by timely rotation of tires. The benefits of rotation are especially worthwhile with aggressive tread designs such as those on all season type tires. Rotation will increase tread life, help to maintain mud, snow and wet traction levels, and contribute to a smooth, quiet ride.

Refer to the "Maintenance Schedule" for the proper maintenance intervals. The reasons for any rapid or unusual wear should be corrected prior to rotation being performed. The suggested rotation method is the "rearward cross" shown in the following diagram. This rotation pattern does not apply to some directional tires that must not be reversed.



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**Tire Rotation** 

### TIRE PRESSURE MONITOR SYSTEM (TPMS)

The TPMS will warn the driver of a low tire pressure based on the cold inflation tire placard pressure requirements found on the tire placard label located on the driver's-side B-pillar.

The tire pressure will vary with temperature by about 1 psi (7 kPa) for every 12°F (6.5°C). This means that when the outside temperature decreases, the tire pressure will decrease. Tire pressure should always be set based on cold inflation tire pressure. This is defined as the tire pressure after a vehicle has not been driven for more than three hours - and in outside ambient temperature. **Refer to "Tires – General Information" in "Starting and Operating" for information on how to properly inflate the vehicle's tires.** The tire pressure will also increase as the vehicle is driven - this is normal and there should be no adjustment for this increased pressure.

The TPMS will warn the driver of a low tire pressure if the tire pressure falls below the low pressure warning threshold for any reason, including low temperature effects, or natural air pressure loss through the tire.

The TPMS will continue to warn the driver of low tire pressure as long as the condition exists, and will not turn off until the tire pressure is at or above recommended cold tire placard pressure. Once the low tire pressure warning has been illuminated, the tire pressure must be increased to the recommended cold tire placard pressure in order for the "Tire Pressure Monitoring Telltale Light" to be turned off. The system will automatically update and the "Tire Pressure Monitoring Telltale Light" will extinguish once the updated tire pressures have been received.

**NOTE:** The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) to receive this information.

For example, your vehicle may have a recommended cold (parked for more than three hours) tire placard pressure of 35 psi (241 kPa). If the ambient temperature is 68°F (20°C) and the measured tire pressure is 30 psi (207 kPa), a temperature drop to 20°F (-7°C) will decrease the tire pressure to approximately 26 psi (179 kPa). This tire pressure is sufficiently low enough to turn on the "Tire Pressure Monitoring Telltale Light." Driving the vehicle may cause the tire pressure to rise to approximately 30 psi (207 kPa), but the "Tire Pressure Monitoring Telltale Light" will still be on. In this situation, the "Tire Pressure Monitoring Telltale Light" will turn off only after the tires have been inflated to the vehicle's recommended cold tire placard pressure value.

# **CAUTION!**

- The TPMS has been optimized for the original equipment tires and wheels. TPMS pressures have been established for the tire size equipped on your vehicle. Undesirable system operation or sensor damage may result when using replacement equipment that is not of the same size, type, and/or style. Aftermarket wheels can cause sensor damage. Do not use aftermarket sealants or balance beads if your vehicle is equipped with a TPMS, as damage to the sensors may result.
- After inspecting or adjusting the tire pressure always reinstall the valve stem cap. This will prevent moisture and dirt from entering the valve stem, which could damage the TPMS sensor.

### NOTE:

- The TPMS is not intended to replace normal tire care and maintenance, or to provide warning of a tire failure or condition
- The TPMS should not be used as a tire pressure gauge while adjusting your tire pressure.
- Driving on a significantly under-inflated tire causes **5** the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.
- The TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, using an accurate tire pressure gage, even if under-inflation has not reached the level to trigger illumination of the "Tire Pressure Monitoring Telltale Light."

• Seasonal temperature changes will affect tire pressure, and the TPMS will monitor the actual tire pressure in the tire.

# **Base System**

The TPMS uses wireless technology with wheel rim mounted electronic sensors to monitor tire pressure levels. Sensors, mounted to each wheel as part of the valve stem, transmit tire pressure readings to the Receiver Module.

**NOTE:** It is particularly important for you to check the tire pressure in all of your tires regularly and to maintain the proper pressure.

The Basic TPMS consists of the following components:

- Receiver Module
- Four Tire Pressure Monitoring Sensors
- TPMS Telltale Warning Light

Tire Pressure Monitoring Low Tire Pressure Warnings



The "Tire Pressure Monitoring Telltale Light" will illuminate in the instrument cluster, a "LOW TIRE PRESSURE" message will display

in the instrument cluster, and an audible chime will be activated when one or more of the four active road tire pressures are low. Should this occur, you should stop as soon as possible, check the inflation pressure of each tire on your vehicle, and inflate each tire to the vehicle's recommended cold tire placard pressure value (located on the placard label on the driver's-side B-Pillar). The system will automatically update and the "Tire Pressure Monitoring Telltale Light" will extinguish once the updated tire pressures have been received. **NOTE:** The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) to receive this information.

The "Tire Pressure Monitoring Telltale Light" will flash on and off for 75 seconds, and remain on solid when a system fault is detected. The system fault will also sound a chime. If the ignition switch is cycled, this sequence will repeat, providing the system fault still exists. The "Tire Pressure Monitoring Telltale Light" will turn off when the fault condition no longer exists. A system fault can occur with any of the following scenarios:

- 1. Jamming due to electronic devices or driving next to facilities emitting the same radio frequencies as the TPMS sensors.
- 2. Installing some form of aftermarket window tinting that affects radio wave signals.

- 3. Accumulation of excessive snow and/or ice around the wheels or wheel housings.
- 4. Using tire chains on the vehicle.
- 5. Using wheels/tires not equipped with TPMS sensors.

### Vehicles With Compact Spare

- 1. The compact spare tire (if equipped) does not have a TPMS sensor. Therefore the TPMS will not monitor the pressure in the compact spare tire.
- 2. If you install the compact spare tire in place of a road tire that has a pressure below the low-pressure warning limit, upon the next ignition switch cycle, a chime will sound, a "LOW TIRE PRESSURE" message will be displayed and the "Tire Pressure Monitoring Telltale Light" will turn on.

- 3. After driving for up to 20 minutes above 15 mph (24 km/h), the "Tire Pressure Monitoring Telltale Light" will flash on and off for 75 seconds and then remain on solid.
- 4. For each subsequent ignition switch cycle, a chime will sound, the "Tire Pressure Monitoring Telltale Light" will flash on and off for 75 seconds and then remain on solid.
- 5. Once you repair or replace the original road tire and reinstall it on the vehicle in place of the compact spare tire, the TPMS will automatically update, and the "Tire Pressure Monitoring Telltale Light" will turn off as long as no tire pressure is below the low-pressure warning limit in any of the four active road tires.

**NOTE:** The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) for the TPMS to receive this information.

# Premium System – If Equipped

The TPMS uses wireless technology with wheel rimmounted electronic sensors to monitor tire pressure levels. Sensors mounted to each wheel as part of the valve stem transmit tire pressure readings to the Receiver Module.

**NOTE:** It is particularly important to regularly check and maintain proper tire pressure in all the tires.

The Premium TPMS consists of the following components:

- Receiver Module
- Four TPMS Sensors
- Various TPMS messages, which display in the Electronic Vehicle Information Center (EVIC), and graphics displaying tire pressures
- TPMS Telltale Warning Light

### **TPMS Low Pressure Warnings**

The "Tire Pressure Monitoring Telltale Light" will illuminate in the instrument cluster, and an audible chime will be activated when one or more of the four active road tire pressures are low. In addition, the EVIC will display a "LOW TIRE" message and a graphic display of the pressure value(s) with the low tire(s) flashing. An "Inflate Tire to XX" message will also be displayed.

Should a low tire condition occur on any of the four active road tire(s), you should stop as soon as possible, and inflate the low tire(s) that is flashing on the graphic display to the vehicle's recommended cold tire pressure value as shown in the "Inflate Tire to XX" message. The system will automatically update, the graphic display of the pressure value(s) will stop flashing, and the "Tire Pressure Monitoring Telltale Light" will extinguish once the updated tire pressure(s) have been received.

**NOTE:** The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) to receive this information.

#### SERVICE TPM SYSTEM Message

The "Tire Pressure Monitoring Telltale Light" will flash on and off for 75 seconds, and remain on solid when a system fault is detected. The system fault will also sound a chime. The EVIC will display a "SERVICE TPM SYS-TEM" message for a minimum of five seconds. This text message is then followed by a graphic display, with - - in place of the pressure value(s) indicating which TPMS Sensor(s) is not being received.

If the ignition switch is cycled, this sequence will repeat, providing the system fault still exists. If the system fault no longer exists, the "Tire Pressure Monitoring Telltale Light" will no longer flash, the "SERVICE TPM SYSTEM"

message will not be present, and a pressure value will be displayed instead of dashes. A system fault can occur by any of the following scenarios:

- 1. Jamming due to electronic devices or driving next to facilities emitting the same radio frequencies as the TPMS sensors.
- 2. Installing some form of aftermarket window tinting that affects radio wave signals.
- 3. Accumulation of excessive snow and/or ice around the wheels or wheel housings.
- 4. Using tire chains on the vehicle.
- 5. Using wheels/tires not equipped with TPMS sensors.

The EVIC will also display a "SERVICE TPM SYSTEM" message for a minimum of five seconds when a system fault possibly related to an incorrect sensor location fault is present. In this case, the "SERVICE TPM SYSTEM"

message is then followed by a graphic display with pressure values still shown. This indicates that the pressure values are still being received from the TPM sensors but they may not be in the correct vehicle position. The system still needs to be serviced as long as the "SERVICE TPM SYSTEM" message exists.

# Vehicles With Compact Spare

- 1. The compact spare tire (if equipped) does not have a TPMS. Therefore, the TPMS will not monitor the pressure in the compact spare tire.
- 2. If you install the compact spare tire in place of a road tire that has a pressure below the low-pressure warning limit, upon the next ignition switch cycle, the "Tire Pressure Monitoring Telltale Light" will remain on, the "LOW TIRE PRESSURE" message will be displayed, a chime will sound, and the EVIC will still display a flashing pressure value in the graphic display.

- 3. After driving the vehicle for up to 20 minutes above 15 mph (24 km/h), the "Tire Pressure Monitoring Telltale Light" will flash on and off for 75 seconds and then remain on solid. In addition, the EVIC will display a "SERVICE TPM SYSTEM" message for a minimum of five seconds and then display dashes (--) in place of the pressure value.
- 4. For each subsequent ignition switch cycle, a chime will sound, the "Tire Pressure Monitoring Telltale Light" will flash on and off for 75 seconds and then remain on solid, and the EVIC will display a "SERVICE TPM SYSTEM" message for a minimum of five seconds and then display dashes (--) in place of the pressure value.
- 5. Once you repair or replace the original road tire, and reinstall it on the vehicle in place of the compact spare, the TPMS will update automatically. In addition, the "Tire Pressure Monitoring Telltale Light" will turn off and the graphic in the EVIC will display a new

pressure value instead of dashes (- -), as long no tire pressure is below the low pressure warning limit in any of the four active road tires.

NOTE: The vehicle may need to be driven for up to 20 minutes above 15 mph (24 km/h) in order for the TPMS to receive this information.

### **General Information**

This device complies with Part 15 of the FCC rules and RSS 210 of Industry Canada. Operation is subject to the following conditions:

5

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

The TPM sensors are regulated under one of the following licenses:

| United States | MRXC4W4MA4    |
|---------------|---------------|
| Canada        | 2546A-C4W4MA4 |

# FUEL REQUIREMENTS

# 3.6L Engine



This engine is designed to meet all emissions regulations and provide excellent fuel economy and performance when using high-quality unleaded "regular" gasoline having an octane rating of 87. The use

of premium gasoline is not recommended, as it will not provide any benefit over regular gasoline in these engines. Light spark knock at low engine speeds is not harmful to your engine. However, continued heavy spark knock at high speeds can cause damage and immediate service is required. Poor quality gasoline can cause problems such as hard starting, stalling, and hesitations. If you experience these symptoms, try another brand of gasoline before considering service for the vehicle.

Over 40 auto manufacturers worldwide have issued and endorsed consistent gasoline specifications (the Worldwide Fuel Charter, WWFC) which define fuel properties necessary to deliver enhanced emissions, performance, and durability for your vehicle. The manufacturer recommends the use of gasolines that meet the WWFC specifications if they are available.

### **Reformulated Gasoline**

Many areas of the country require the use of cleaner burning gasoline referred to as "Reformulated Gasoline." Reformulated gasolines contain oxygenates and are specifically blended to reduce vehicle emissions and improve air quality.

The manufacturer supports the use of reformulated gasolines. Properly blended reformulated gasolines will provide excellent performance and durability of engine and fuel system components.

### **Gasoline/Oxygenate Blends**

Some fuel suppliers blend unleaded gasoline with oxygenates such as Ethanol. Fuels blended with oxygenates may be used in your vehicle.

# CAUTION!

DO NOT use gasoline containing Methanol or gasoline containing more than 10% Ethanol. Use of these

(Continued)

# CAUTION! (Continued)

blends may result in starting and driveability problems, damage critical fuel system components, cause emissions to exceed the applicable standard, and/or cause the "Malfunction Indicator Light" to illuminate. Pump labels should clearly communicate if a fuel contains greater than 10% Ethanol.

Problems that result from using gasoline containing Methanol or gasoline containing more than 10% Ethanol are not the responsibility of the manufacturer and may not be covered under warranty.

# E-85 Usage In Non-Flex Fuel Vehicles

Non-FFV vehicles are compatible with gasoline containing 10% ethanol (E10). Gasoline with higher ethanol content may void the New Vehicle Limited Warranty. 5

If a Non-FFV vehicle is inadvertently fueled with E-85 fuel, the engine will have some or all of these symptoms:

- operate in a lean mode
- OBD II "Malfunction Indicator Light" on
- poor engine performance
- poor cold start and cold drivability
- increased risk for fuel system component corrosion

To fix a Non-FFV vehicle inadvertently fueled once with E-85 perform the following:

- drain the fuel tank (see your authorized dealer)
- change the engine oil and oil filter
- disconnect and reconnect the battery to reset the engine controller memory

More extensive repairs will be required for prolonged exposure to E-85 fuel.

# **MMT In Gasoline**

MMT (Methylcyclopentadienyl Manganese Tricarbonyl) is a manganese-containing metallic additive that is blended into some gasoline to increase octane. Gasoline blended with MMT provides no performance advantage beyond gasoline of the same octane number without MMT. Gasoline blended with MMT reduces spark plug life and reduces emissions system performance in some vehicles. The manufacturer recommends that gasoline without MMT be used in your vehicle. The MMT content of gasoline may not be indicated on the gasoline pump, therefore, you should ask your gasoline retailer whether the gasoline contains MMT. MMT is prohibited in Federal and California reformulated gasoline.

### Materials Added To Fuel

All gasoline sold in the United States is required to contain effective detergent additives. Use of additional detergents or other additives is not needed under normal conditions and they would result in additional cost. Therefore, you should not have to add anything to the fuel.

### **Fuel System Cautions**

# CAUTION!

Follow these guidelines to maintain your vehicle's performance:

- The use of leaded gas is prohibited by Federal law. Using leaded gasoline can impair engine performance and damage the emissions control system.
- An out-of-tune engine or certain fuel or ignition

# CAUTION! (Continued)

malfunctions can cause the catalytic converter to overheat. If you notice a pungent burning odor or some light smoke, your engine may be out of tune or malfunctioning and may require immediate service. Contact your authorized dealer for service assistance.

• The use of fuel additives, which are now being sold as octane enhancers, is not recommended. Most of these products contain high concentrations of methanol. Fuel system damage or vehicle performance problems resulting from the use of such fuels or additives is not the responsibility of the manufacturer.

**NOTE:** Intentional tampering with the emissions control system can result in civil penalties being assessed against you.

(Continued)

# **Carbon Monoxide Warnings**

# WARNING!

Carbon monoxide (CO) in exhaust gases is deadly. Follow the precautions below to prevent carbon monoxide poisoning:

- Do not inhale exhaust gases. They contain carbon monoxide, a colorless and odorless gas, which can kill. Never run the engine in a closed area, such as a garage, and never sit in a parked vehicle with the engine running for an extended period. If the vehicle is stopped in an open area with the engine running for more than a short period, adjust the ventilation system to force fresh, outside air into the vehicle.
- Guard against carbon monoxide with proper maintenance. Have the exhaust system inspected every

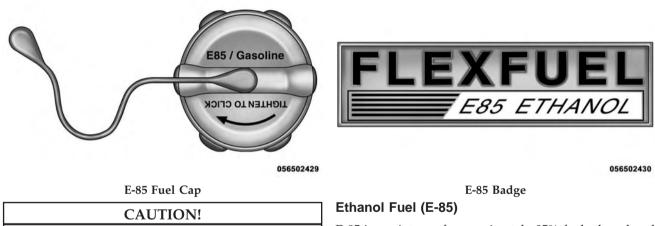
# WARNING! (Continued)

time the vehicle is raised. Have any abnormal conditions repaired promptly. Until repaired, drive with all side windows fully open.

# FLEXIBLE FUEL — IF EQUIPPED

# E-85 General Information

The information in this section is for Flexible Fuel vehicles only. These vehicles can be identified by a unique fuel filler door label that states **Ethanol (E-85) or Un-leaded Gasoline Only.** This section only covers those subjects that are unique to these vehicles. Please refer to the other sections of this manual for information on features that are common between Flexible Fuel and gasoline-only powered vehicles.



Only vehicles with the E-85 fuel filler door label can operate on E-85.

E-85 is a mixture of approximately 85% fuel ethanol and 15% unleaded gasoline.

# WARNING!

Ethanol vapors are extremely flammable and could cause serious personal injury. Never have any smoking materials lit in or near the vehicle when removing the fuel filler tube cap (gas cap) or filling the tank. Do not use E-85 as a cleaning agent and never use it near an open flame.

# **Fuel Requirements**

If your vehicle is E-85 compatible, it will operate on unleaded gasoline with an octane rating of 87, or E-85 fuel, or any mixture of these two fuels.

For best results, a refueling pattern that avoids alternating between E-85 and unleaded gasoline is recommended. When you do switch fuel types it is recommended that:

- you do not add less than 5 gallons (19 Liters) when refueling
- you drive the vehicle immediately after refueling for at least 5 miles (8 km)

Observing these precautions will avoid possible hard starting and/or significant deterioration in driveability during warm up.

### NOTE:

- Use seasonally adjusted E-85 fuel (ASTM D5798). With non-seasonally adjusted E-85 fuel, you may experience hard starting and rough idle following start up even if the above recommendations are followed, especially when the ambient temperature is below 32°F (0°C).
- Some additives used in regular gasoline are not fully compatible with E-85 and may form deposits in your

engine. To eliminate driveability issues that may be caused by these deposits, a supplemental gasoline additive, such as MOPAR® Injector Cleanup or Techron may be used.

# Selection Of Engine Oil For Flexible Fuel Vehicles (E-85) And Gasoline Vehicles

FFV vehicles operated on E-85 require specially formulated engine oils. These special requirements are included in MOPAR® engine oils, and in equivalent oils meeting Chrysler Specification MS-6395. The manufacturer only recommends engine oils that are API Certified and meet the requirements of Material Standard MS-6395. MS-6395 contains additional requirements, developed during extensive fleet testing, to provide additional protection to FCA US LLC engines. Use MOPAR® or an equivalent oil meeting the specification MS-6395.

### Starting

The characteristics of E-85 fuel make it unsuitable for use when ambient temperatures fall below  $0^{\circ}F$  (-18°C). In the range of  $0^{\circ}F$  (-18°C) to 32°F (0°C), you may experience an increase in the time it takes for your engine to start, and a deterioration in driveability (sags and/or hesitations) until the engine is fully warmed up.

**NOTE:** Use of the engine block heater (if equipped) is beneficial for E-85 startability when the ambient temperature is less than  $32^{\circ}F$  (0°C).

# **Cruising Range**

Because E-85 fuel contains less energy per gallon/liter than gasoline, you will experience an increase in fuel consumption. You can expect your miles per gallon (mpg)/miles per liter and your driving range to decrease by about 30%, compared to gasoline operation.

# **Replacement Parts**

Many components in your Flexible Fuel Vehicle (FFV) are designed to be compatible with ethanol. Always be sure that your vehicle is serviced with correct ethanol compatible parts.

# **CAUTION!**

Replacing fuel system components with non-ethanol compatible components can damage your vehicle.

# Maintenance

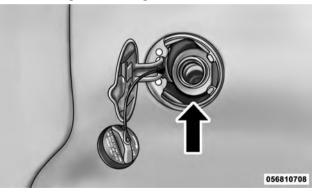
# CAUTION!

Do not use ethanol mixture greater than 85% in your vehicle. It will cause difficulty in cold starting and may affect driveability.

# ADDING FUEL

# Fuel Filler Cap (Gas Cap)

The gas cap is located behind the fuel filler door on the left side of the vehicle. If the gas cap is lost or damaged, be sure the replacement cap is for use with this vehicle.





**NOTE:** The driver's side sliding door cannot be opened while the fuel door is open. This feature operates only when the sliding door is fully closed prior to opening the fuel door.

# **CAUTION!**

- Damage to the fuel system or emissions control system could result from using an improper fuel tank filler tube cap (gas cap). A poorly fitting cap could let impurities into the fuel system and may cause the "Malfunction Indicator Light (MIL)" to turn on, due to fuel vapors escaping from the system.
- To avoid fuel spillage and overfilling, do not "top off" the fuel tank after filling.

# WARNING!

- Never have any smoking materials lit in or near the vehicle when the gas cap is removed or the tank is being filled.
- Never add fuel when the engine is running. This is in violation of most state and federal fire regulations and may cause the MIL to turn on.
- A fire may result if gasoline is pumped into a portable container that is inside of a vehicle. You could be burned. Always place gas containers on the ground while filling.

### NOTE:

• When the fuel nozzle "clicks" or shuts off, the fuel tank is full.

- Tighten the fuel filler cap until you hear a "clicking" sound. This is an indication that the fuel filler cap is properly tightened.
- If the gas cap is not tightened properly, the MIL may come on. Be sure the gas cap is tightened every time the vehicle is refueled.

# Loose Fuel Filler Cap Message

If the vehicle diagnostic system determines that the fuel filler cap is loose, improperly installed, or damaged, a "gASCAP" message will display in the odometer or a "CHECK GASCAP" message will be displayed in the Electronic Vehicle Information Center (EVIC). Refer to "Electronic Vehicle Information Center" in "Understanding Your Instrument Panel" for further information. Tighten the fuel filler cap until a "clicking" sound is heard. This is an indication that the fuel filler cap is

properly tightened. Refer to "Onboard Diagnostic System" in "Maintaining Your Vehicle" for further information.

If the problem continues, the message will appear the next time the vehicle is started. See your authorized dealer as soon as possible.

# VEHICLE LOADING

As required by National Highway Traffic Safety Administration regulations, your vehicle has a certification label affixed to the driver's side door or B-Pillar.

If seats are removed for carrying cargo, do not exceed the specified GVWR and GAWR.

# Vehicle Certification Label

Your vehicle has a Vehicle Certification Label affixed to the drivers side "B" Pillar or the rear of the driver's door.

The label contains the following information:

- Name of manufacturer
- Month and year of manufacture
- Gross Vehicle Weight Rating (GVWR)
- Gross Axle Weight Rating (GAWR) front
- Gross Axle Weight Rating (GAWR) rear
- Vehicle Identification Number (VIN)
- Type of Vehicle
- Month Day and Hour of Manufacture (MDH)

The bar code allows a computer scanner to read the VIN.

# Gross Vehicle Weight Rating (GVWR)

The GVWR is the total allowable weight of your vehicle. This includes driver, passengers, and cargo. The total load must be limited so that you do not exceed the GVWR.

# Gross Axle Weight Rating (GAWR)

The GAWR is the maximum capacity of the front and rear axles. Distribute the load over the front and rear axles evenly. Make sure that you do not exceed either front or rear GAWR.

# WARNING!

Because the front wheels steer the vehicle, it is important that you do not exceed the maximum front or rear GAWR. A dangerous driving condition can result if either rating is exceeded. You could lose control of the vehicle and have a collision.

### Tire Size

The tire size on the Vehicle Certification Label represents the actual tire size on your vehicle. Replacement tires must be equal to the load capacity of this tire size.

# **Rim Size**

This is the rim size that is appropriate for the tire size listed.

# **Inflation Pressure**

This is the cold tire inflation pressure for your vehicle for all loading conditions up to full GAWR.

# Curb Weight

The curb weight of a vehicle is defined as the total weight of the vehicle with all fluids, including vehicle fuel, at full capacity conditions, and with no occupants or cargo loaded into the vehicle. The front and rear curb weight values are determined by weighing your vehicle on a commercial scale before any occupants or cargo are added.

# Overloading

The load carrying components (axle, springs, tires, wheels, etc.) of your vehicle will provide satisfactory service as long as you do not exceed the GVWR and the front and rear GAWR.

The best way to figure out the total weight of your vehicle is to weigh it when it is fully loaded and ready for operation. Weigh it on a commercial scale to ensure that it is not over the GVWR.

Figure out the weight on the front and rear of the vehicle separately. It is important that you distribute the load evenly over the front and rear axles.

Overloading can cause potential safety hazards and shorten useful service life. Heavier axles or suspension components do not necessarily increase the vehicle's GVWR.

### Loading

To load your vehicle properly, first figure out its empty weight, axle-by-axle and side-by-side. Store heavier items down low and be sure you distribute their weight as evenly as possible. Stow all loose items securely before driving. If weighing the loaded vehicle shows that you have exceeded either GAWR, but the total load is within the specified GVWR, you must redistribute the weight. Improper weight distribution can have an adverse effect on the way your vehicle steers and handles and the way the brakes operate.

**NOTE:** Refer to the "Vehicle Certification Label" affixed to the rear of the driver's door for your vehicle's GVWR and GAWRs.

### TRAILER TOWING

In this section you will find safety tips and information on limits to the type of towing you can reasonably do with your vehicle. Before towing a trailer, carefully review this information to tow your load as efficiently and safely as possible.

To maintain the New Vehicle Limited Warranty coverage, follow the requirements and recommendations in this manual concerning vehicles used for trailer towing.

### **Common Towing Definitions**

The following trailer towing related definitions will assist you in understanding the following information:

# Gross Vehicle Weight Rating (GVWR)

The GVWR is the total allowable weight of your vehicle. This includes driver, passengers, cargo and tongue weight. The total load must be limited so that you do not

exceed the GVWR. Refer to "Vehicle Loading/Vehicle Certification Label" in "Starting and Operating" for further information.

# Gross Trailer Weight (GTW)

The GTW is the weight of the trailer plus the weight of all cargo, consumables and equipment (permanent or temporary) loaded in or on the trailer in its "loaded and ready for operation" condition. The recommended way to measure GTW is to put your fully loaded trailer on a vehicle scale. The entire weight of the trailer must be supported by the scale.

# Gross Axle Weight Rating (GAWR)

The GAWR is the maximum capacity of the front and rear axles. Distribute the load over the front and rear axles evenly. Make sure that you do not exceed either front or

rear GAWR. Refer to "Vehicle Loading/Vehicle Certification Label" in "Starting and Operating" for further information.

# WARNING!

It is important that you do not exceed the maximum front or rear GAWR. A dangerous driving condition can result if either rating is exceeded. You could lose control of the vehicle and have a collision.

# Tongue Weight (TW)

The tongue weight is the downward force exerted on the hitch ball by the trailer. In most cases it should not be more than 10% of the trailer load. You must consider this as part of the load on your vehicle.

### **Frontal Area**

The frontal area is the maximum height multiplied by the maximum width of the front of a trailer.

### **Trailer Sway Control**

The trailer sway control can be a mechanical telescoping link that can be installed between the hitch receiver and the trailer tongue that typically provides adjustable friction associated with the telescoping motion to dampen any unwanted trailer swaying motions while traveling.

If equipped, the electronic Trailer Sway Control (TSC) recognizes a swaying trailer and automatically applies individual wheel brakes and/or reduces engine power to attempt to eliminate the trailer sway.

### Weight-Carrying Hitch

A weight-carrying hitch supports the trailer tongue weight, just as if it were luggage located at a hitch ball or some other connecting point of the vehicle. These kinds of hitches are the most popular on the market today and they are commonly used to tow small and medium sized trailers.

### Weight-Distributing Hitch

A weight-distributing system works by applying leverage through spring (load) bars. They are typically used for heavier loads to distribute trailer tongue weight to the tow vehicle's front axle and the trailer's axle(s). When used in accordance with the manufacturer's directions, it provides for a more level ride, offering more consistent steering and brake control thereby enhancing towing 5 safety. The addition of a friction/hydraulic sway control also dampens sway caused by traffic and crosswinds and contributes positively to tow vehicle and trailer stability. Trailer sway control and a weight distributing (load equalizing) hitch are recommended for heavier tongue

weights (TW), and may be required depending on vehicle and trailer configuration/loading to comply with gross axle weight rating (GAWR) requirements.

# WARNING!

- An improperly adjusted weight-distributing hitch system may reduce handling, stability, braking performance, and could result in a collision.
- Weight-distributing hitch systems may not be compatible with surge brake couplers. Consult with an authorized hitch and trailer manufacturer or a reputable authorized Recreational Vehicle dealer for additional information.



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Without Weight-Distributing Hitch (Incorrect)





057005171

With Weight-Distributing Hitch (Correct)

Improper Adjustment Of Weight-Distributing Hitch (Incorrect)

057005172

# **Trailer Hitch Classification**

The following chart provides the industry standard for the maximum trailer weight a given trailer hitch class can tow and should be used to assist you in selecting the correct trailer hitch for your intended towing condition.

| Trailer Hitch Classification Definitions |                      |
|--|----------------------|
| Class                                    | Max. Trailer Hitch   |
|  | Industry Standards   |
| Class I - Light Duty                     | 2,000 lbs (907 kg)   |
| Class II - Medium Duty                   | 3,500 lbs (1 587 kg) |
| Class III - Heavy Duty                   | 5,000 lbs (2 268 kg) |

| Trailer Hitch Classification Definitions               |   |  |
|--|---|--|
| Class  | Max. Trailer Hitch                      |  |
|  | Industry Standards                      |  |
| Class IV - Extra Heavy                                 | 10,000 lbs (4 540 kg)                   |  |
| Duty   | , i i i i i i i i i i i i i i i i i i i |  |
| Refer to the "Trailer Towing Weights (Maximum          |   |  |
| Trailer Weight Ratings)" chart for the Maximum         |   |  |
| Gross Trailer Weight (GTW) towable for your given      |   |  |
| drivetrain.  |   |  |
| All trailer hitches should be professionally installed |   |  |
| on your vehicle.                                       |   |  |

# Trailer Towing Weights (Maximum Trailer Weight Ratings)

The following chart provides the maximum trailer weight ratings towable for your given drivetrain.

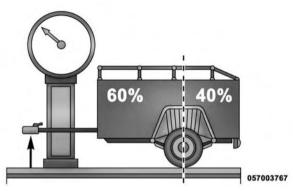
| Engine/<br>Transmission  | GCWR (Gross<br>Combined Weight<br>Rating) | Frontal Area         | Max. GTW (Gross<br>Trailer Weight)                    | Max. Tongue<br>Weight |  |
|--|---|----------------------|---|-----------------------|--|
| 3.6L/Automatic   | 8,750 lbs (3 969 kg)                      | 40 sq ft (3.72 sq m) | Up to 2 persons &<br>Luggage 3,600 lbs<br>(1 633 kg)* | 360 lbs (163 kg)      |  |
|  | 8,750 lbs (3 969 kg)                      | 40 sq ft (3.72 sq m) | 3 to 5 persons &<br>Luggage 3,350 lbs<br>(1 519 kg)*  | 335 lbs (152 kg)      |  |
|  | 8,750 lbs (3 969 kg)                      | 40 sq ft (3.72 sq m) | 6 to 7 persons &<br>Luggage 3,000 lbs<br>(1 360 kg)*  | 300 lbs (136 kg)      |  |
| * For vehicles equipped with Fold-in-Floor seating, the Gross Trailer Weight must be reduced by 100 lbs (45 kg).<br>Refer to local laws for maximum trailer towing speeds. |   |                      |   |                       |  |

**NOTE:** The trailer tongue weight must be considered as part of the combined weight of occupants and cargo, and should never exceed the weight referenced on the Tire and Loading Information placard. Refer to "Tire Safety Information" in "Starting and Operating" for further information.

## Trailer And Tongue Weight

Always load a trailer with 60% to 65% of the weight in the front of the trailer. This places 10% to 15% of the Gross Trailer Weight (GTW) on the tow hitch of your vehicle. Loads balanced over the wheels or heavier in the rear can cause the trailer to sway **severely** side to side which will cause loss of control of the vehicle and trailer. Failure to load trailers heavier in front is the cause of many trailer collisions.

Never exceed the maximum tongue weight stamped on your bumper or trailer hitch.



Consider the following items when computing the weight on the rear axle of the vehicle:

- The tongue weight of the trailer.
- The weight of any other type of cargo or equipment put in or on your vehicle.
- The weight of the driver and all passengers.

**NOTE:** Remember that everything put into or on the trailer adds to the load on your vehicle. Also, additional factory-installed options or dealer-installed options must be considered as part of the total load on your vehicle. Refer to the "Tire and Loading Information" placard for the maximum combined weight of occupants and cargo for your vehicle.

## **Towing Requirements**

To promote proper break-in of your new vehicle drivetrain components, the following guidelines are recommended.

### CAUTION!

• Do not tow a trailer at all during the first 500 miles (805 km) the new vehicle is driven. The engine, axle or other parts could be damaged.

# CAUTION! (Continued)

• Then, during the first 500 miles (805 km) that a trailer is towed, do not drive over 50 mph (80 km/h) and do not make starts at full throttle. This helps the engine and other parts of the vehicle wear in at the heavier loads.

Perform the maintenance listed in the "Maintenance 5 Schedule." Refer to "Maintenance Schedule" for the proper maintenance intervals. When towing a trailer, never exceed the GAWR or GCWR ratings.

(Continued)

# WARNING!

Improper towing can lead to a collision. Follow these guidelines to make your trailer towing as safe as possible:

- Make certain that the load is secured in the trailer and will not shift during travel. When trailering cargo that is not fully secured, dynamic load shifts can occur that may be difficult for the driver to control. You could lose control of your vehicle and have a collision.
- When hauling cargo or towing a trailer, do not overload your vehicle or trailer. Overloading can cause a loss of control, poor performance or damage to brakes, axle, engine, transmission, steering, suspension, chassis structure or tires.
- Safety chains must always be used between your vehicle and trailer. Always connect the chains to

# WARNING! (Continued)

- the hook retainers of the vehicle hitch. Cross the chains under the trailer tongue and allow enough slack for turning corners.
- Vehicles with trailers should not be parked on a grade. When parking, apply the parking brake on the tow vehicle. Put the tow vehicle transmission in PARK. For four-wheel drive vehicles, make sure the transfer case is not in NEUTRAL. Always, block or "chock" the trailer wheels.
- GCWR must not be exceeded.
- Total weight must be distributed between the tow vehicle and the trailer such that the following four ratings are not exceeded:

1. GVWR

2. GTW

(Continued)

## WARNING! (Continued)

#### 3. GAWR

4. Trailer tongue weight rating for the trailer hitch utilized.

#### **Towing Requirements – Tires**

- Do not attempt to tow a trailer while using a compact spare tire.
- Proper tire inflation pressures are essential to the safe and satisfactory operation of your vehicle. Refer to "Tires - General Information" in "Starting and Operating" for proper tire inflation procedures.
- Check the trailer tires for proper tire inflation pressures before trailer usage.

- Check for signs of tire wear or visible tire damage before towing a trailer. Refer to "Tires - General Information" in "Starting and Operating" for the proper inspection procedure.
- When replacing tires, refer to "Tires General Information" in "Starting and Operating" for the proper tire replacement procedures. Replacing tires with a higher load carrying capacity will not increase the vehicle's **5** GVWR and GAWR limits.

#### **Towing Requirements – Trailer Brakes**

- Do not interconnect the hydraulic brake system or vacuum system of your vehicle with that of the trailer. This could cause inadequate braking and possible personal injury.
- An electronically actuated trailer brake controller is required when towing a trailer with electronically

actuated brakes. When towing a trailer equipped with a hydraulic surge actuated brake system, an electronic brake controller is not required.

• Trailer brakes are recommended for trailers over 1,000 lbs (454 kg) and required for trailers in excess of 2,000 lbs (907 kg).

# **CAUTION!**

If the trailer weighs more than 1,000 lbs (454 kg) loaded, it should have its own brakes and they should be of adequate capacity. Failure to do this could lead to accelerated brake lining wear, higher brake pedal effort, and longer stopping distances.

# WARNING!

- Do not connect trailer brakes to your vehicle's hydraulic brake lines. It can overload your brake system and cause it to fail. You might not have brakes when you need them and could have a collision.
- Towing any trailer will increase your stopping distance. When towing you should allow for additional space between your vehicle and the vehicle in front of you. Failure to do so could result in a collision.

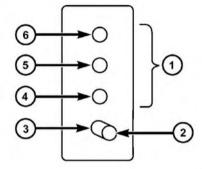
## Towing Requirements – Trailer Lights And Wiring

Whenever you pull a trailer, regardless of the trailer size, stoplights and turn signals on the trailer are required for motoring safety.

The Trailer Tow Package may include a four- and sevenpin wiring harness. Use a factory approved trailer harness and connector.

**NOTE:** Do not cut or splice wiring into the vehicles wiring harness.

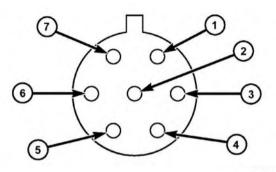
The electrical connections are all complete to the vehicle but you must mate the harness to a trailer connector. Refer to the following illustrations.



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#### Four-Pin Connector

| 1 — Female Pins | 4 — Park            |
|-----------------|---------------------|
| 2 — Male Pin    | 5 — Left Stop/Turn  |
| 3 — Ground      | 6 — Right Stop/Turn |



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#### Seven-Pin Connector

- 1 Battery
- 2 Backup Lamps
- 3 Right Stop/Turn
- 4 Electric Brakes

5 — Ground 6 — Left Stop/Turn 7 — Running Lamps

## Towing Tips

Before setting out on a trip, practice turning, stopping, and backing up the trailer in an area located away from heavy traffic.

#### Automatic Transmission

The DRIVE gear can be selected when towing. However, if frequent shifting occurs while in DRIVE, use the Electronic Range Select (ERS) shift control to select a lower gear range.

**NOTE:** Using a lower gear range while operating the vehicle under heavy loading conditions will improve performance and extend transmission life by reducing excessive shifting and heat build up. This action will also provide better engine braking.

If you REGULARLY tow a trailer for more than 45 minutes of continuous operation, then change the transmission fluid and filter as specified for "police, taxi, fleet, or frequent trailer towing." Refer to the "Maintenance Schedule" for the proper maintenance intervals.

## Electronic Speed Control – If Equipped

- Do not use in hilly terrain or with heavy loads.
- When using the speed control, if you experience speed drops greater than 10 mph (16 km/h), disengage until you can get back to cruising speed.
- Use speed control in flat terrain and with light loads to maximize fuel efficiency.

## Cooling System

To reduce potential for engine and transmission overheating, take the following actions:

# City Driving

When stopped for short periods, shift the transmission into NEUTRAL and increase engine idle speed.

# **Highway Driving**

Reduce speed.

## Air Conditioning

Turn off temporarily.

## RECREATIONAL TOWING (BEHIND MOTORHOME, ETC.) Towing This Vehicle Behind Another Vehicle

| Towing Condition | Wheels OFF the Ground | All Models  |
|------------------|-----------------------|-------------|
| Flat Tow         | NONE                  | NOT ALLOWED |
| Dolly Tow        | Front                 | ОК          |
|                  | Rear                  | NOT ALLOWED |
| On Trailer       | ALL                   | ОК          |

## **Recreational Towing – All Models**

Recreational towing is allowed ONLY if the front wheels are OFF the ground. This may be accomplished using a tow dolly or vehicle trailer. If using a tow dolly, follow this procedure:

- 1. Properly secure the dolly to the tow vehicle, following the dolly manufacturer's instructions.
- 2. Drive the front wheels onto the tow dolly.

- 3. Firmly apply the parking brake. Place the transmission in PARK.
- 4. Properly secure the front wheels to the dolly, following the dolly manufacturer's instructions.
- 5. Release the parking brake.

## CAUTION!

DO NOT flat tow this vehicle. Damage to the drivetrain will result.

## **CAUTION!**

Towing this vehicle in violation of the above requirements can cause severe transmission damage. Damage from improper towing is not covered under the New Vehicle Limited Warranty.

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| HAZARD WARNING FLASHERS                           | □ Securing The Spare Tire     |
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| IF YOUR ENGINE OVERHEATS                          | □ Road Tire Installation      |
| JACKING AND TIRE CHANGING                         | JUMP-STARTING                 |
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## HAZARD WARNING FLASHERS

The Hazard Warning flasher switch is located in the lower center area of the instrument panel.



Press the switch to turn on the Hazard Warning flasher. When the switch is activated, all directional turn signals will flash on and off to warn oncoming traffic of an emergency. Press the switch a second time to turn off the Hazard Warning flashers.

This is an emergency warning system and it should not be used when the vehicle is in motion. Use it when your vehicle is disabled and it is creating a safety hazard for other motorists.

When you must leave the vehicle to seek assistance, the Hazard Warning flashers will continue to operate even though the ignition is placed in the OFF position.

**NOTE:** With extended use the Hazard Warning flashers may wear down your battery.

# IF YOUR ENGINE OVERHEATS

In any of the following situations, you can reduce the potential for overheating by taking the appropriate action.

- On the highways slow down.
- In city traffic while stopped, place the transmission in NEUTRAL, but do not increase engine idle speed.

NOTE: There are steps that you can take to slow down an impending overheat condition:

- If your air conditioner (A/C) is on, turn it off. The A/Csystem adds heat to the engine cooling system and turning the A/C off can help remove this heat.
- You can also turn the temperature control to maximum heat, the mode control to floor and the blower control to high. This allows the heater core to act as a

supplement to the radiator and aids in removing heat from the engine cooling system.

## CAUTION!

Driving with a hot cooling system could damage your vehicle. If temperature gauge reads "H", pull over and stop the vehicle. Idle the vehicle with the air conditioner turned off until the pointer drops back into the normal range. If the pointer remains on the "H", turn the engine off immediately, and call for service.

## WARNING!

You or others can be badly burned by hot engine coolant (antifreeze) or steam from your radiator. If you see or hear steam coming from under the hood,

# WARNING! (Continued)

do not open the hood until the radiator has had time to cool. Never try to open a cooling system pressure cap when the radiator or coolant bottle is hot.

## JACKING AND TIRE CHANGING

# 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.
- Being under a jacked-up vehicle is dangerous. The vehicle could slip off the jack and fall on you. You could be crushed. Never put any part of your body under a vehicle that is on a jack. If you need to get

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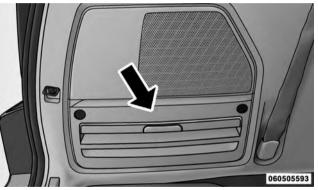
# WARNING! (Continued)

under a raised vehicle, take it to a service center where it can be raised on a lift.

- Never start or run the engine while the vehicle is on a jack.
- The jack is designed to be used as a tool for changing tires only. The jack should not be used to lift the vehicle for service purposes. The vehicle should be jacked on a firm level surface only. Avoid ice or slippery areas.

## Jack Location

The jack, jack handle and winch handle tools are stowed behind the rear left side trim panel in the rear cargo area. Turn the two cover latches to release the cover.



Jack And Tool Location

Remove the pouch containing the scissors jack, jack handle, and tools.

#### Spare Tire Removal

The spare tire is stowed inside a protective cover located under the center of the vehicle between the front doors by means of a cable winch mechanism. The "spare tire drive" nut is located on the floor, under a plastic cap at the front of the floor console or under front super console forward bin liner.

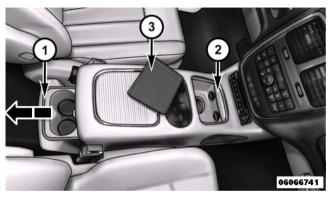


# Spare Tire Location To Access Spare Tire Winch Drive Nut

To access the spare tire winch drive nut and lower the spare tire, you will need to refer to one of the following center console configurations.

## Super Console

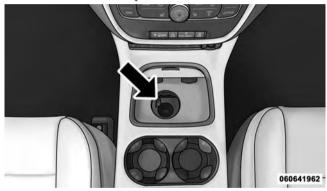
For vehicles equipped with the Super Console, the spare tire winch assembly drive nut is located beneath the console.





- 1 Lower Drawer
- 2 Front Drawer
- 3 Front Drawer Liner
- 1. Pull the lower drawer out from the rear of the floor console to gain clear access of the tire winch drive nut.

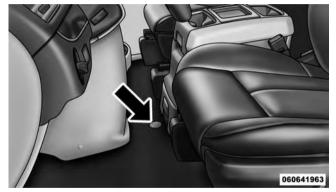
- 2. Open the front drawer to expose the storage compartment.
- 3. Remove the liner from the console's storage compartment to access the spare tire winch drive nut.



**Drive Nut Access** 

Premium/Base/Cargo Center Console

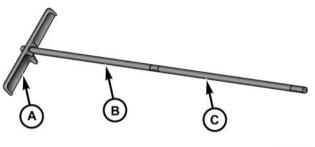
Pull the Winch Cover assembly plug (if equipped) to access the winch drive nut.



Winch Cover Assembly Plug (If Equipped)

## **Spare Tire Tools**

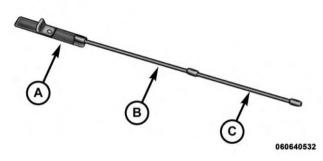
The tool pouch contains three pieces and can be assembled into a spare tire hook; to remove the compact spare tire/cover assembly from under the vehicle, or a Winch T-handle; to raise/lower the compact spare tire/ cover assembly.



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#### Assembled T-handle

- A Spare Tire Hook/T-handle
- B Extension 1
- C Extension 2



Assembling The Spare Tire Hook

- A Spare Tire Hook/T-handle
- B Extension 1
- C Extension 2

## **Spare Tire Removal Instructions**

The spare tire is located under the vehicle beneath the center console area.



#### Spare Tire And Cover

1. Assemble the spare tire tools into a T-handle and place the square end over the spare tire winch drive nut.

2. Rotate the nut to the left until the winch mechanism stops turning freely. This will allow enough slack in the cable to allow you to pull the spare tire out from underneath the vehicle.

## **CAUTION!**

The winch mechanism is designed for use with the winch T-handle only. Use of an air wrench or other power tools is not recommended and can damage the winch.

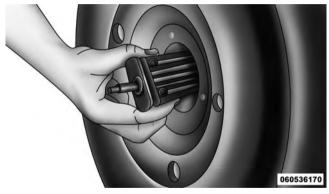
3. To remove the compact spare tire/cover assembly, assemble the winch T-handle extensions to form a spare tire hook, and pull the spare tire out from under the vehicle.



Pulling Spare Tire

**NOTE:** If either front tire is flat it may be necessary to jack up the vehicle to remove the compact spare tire/ cover assembly from under the vehicle.

4. Stand the tire/cover assembly upright and remove the wheel spacer by squeezing the winch retaining tabs together. Push the retainer through the spare tire to release it from the wheel.



**Removing Wheel Spacer** 

## **Preparations For Jacking**

1. Park the vehicle on a firm, level surface. Avoid ice or slippery areas.

## 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 being hit when operating the jack or changing the wheel.

- 2. Turn on the Hazard Warning flasher.
- 3. Set the parking brake.
- 4. Place the shift lever into PARK.
- 5. Turn OFF the ignition.

6. Block both the front and rear of the wheel diagonally



opposite the jacking position. For example, if changing the right front tire, block the left rear wheel.

**NOTE:** Passengers should not remain in the vehicle when the vehicle is being jacked.

# **Jacking Instructions**

# WARNING!

Carefully follow these tire changing warnings to help prevent personal injury or damage to your vehicle:

• Always park on a firm, level surface as far from the edge of the roadway as possible before raising the vehicle.

# WARNING! (Continued)

- Turn on the Hazard Warning flasher.
- Block the wheel diagonally opposite the wheel to be raised.
- Set the parking brake firmly and set an automatic transmission in PARK; a manual transmission in REVERSE.
- Never start or run the engine with the vehicle on a jack.
- Do not let anyone sit in the vehicle when it is on a jack.
- Do not get under the vehicle when it is on a jack. If you need to get under a raised vehicle, take it to a service center where it can be raised on a lift.
- Only use the jack in the positions indicated and for lifting this vehicle during a tire change.

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#### WARNING! (Continued)

- If working on or near a roadway, be extremely careful of motor traffic.
- To assure that spare tires, flat or inflated, are securely stowed, spares must be stowed with the valve stem facing the ground.



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Jack Warning Label

### **CAUTION!**

Do not attempt to raise the vehicle by jacking on locations other than those indicated in the Jacking Instructions for this vehicle.

**NOTE:** Refer to the "Compact Spare Tire" section of "Tires – General Information" for information about the spare tire, its use, and operation.

- 1. Loosen (but do not remove) the wheel lug nuts by turning them to the left one turn while the wheel is still on the ground.
- 2. There are two jack engagement locations on each side of the vehicle body. These locations are on the sill flange of the vehicle body.



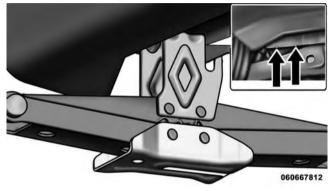
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Jack Locations

## **CAUTION!**

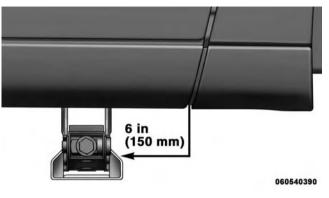
Do not attempt to raise the vehicle by jacking on locations other than those indicated.

Rear jack locations are between a pair of down-facing tabs on the sill flange of the vehicle side body.



#### **Rear Jacking Locations**

Front jack location is on the sill flange of the vehicle body and is located 6 in (150 mm) from door edge.



#### Front Jack Locations

**NOTE:** In some situations the jack may need to be placed on its side in order to be pushed under the vehicle. Return the jack to its correct orientation once it is under the vehicle.

# WARNING!

Being under a jacked-up vehicle is dangerous. The vehicle could slip off the jack and fall on you. You could be crushed. Never get any part of your body under a vehicle that is on a jack. If you need to get under a raised vehicle, take it to a service center where it can be raised on a lift.

- 3. Place the wrench on the jack screw and turn to the right until the jack head is properly engaged in the described location. Do not raise the vehicle until you are sure the jack is securely engaged.
- 4. Raise the vehicle by turning the jack screw to the right, using the swivel wrench. Raise the vehicle only until the tire just clears the surface and enough clearance is obtained to install the spare tire. Minimum tire lift provides maximum stability.

# WARNING!

Raising the vehicle higher than necessary can make the vehicle less stable. It could slip off the jack and hurt someone near it. Raise the vehicle only enough to remove the tire.

- 5. Remove the wheel lug nuts, for vehicles with wheel covers, remove the cover from the wheel by hand. Do not pry the wheel cover off. Then pull the wheel off the hub.
- 6. Install the compact spare tire. Lightly tighten the lug nuts.

# **CAUTION!**

Be sure to mount the spare tire with the valve stem facing outward. The vehicle could be damaged if the spare tire is mounted incorrectly.



**Mounting Spare Tire** 

# WARNING!

To avoid the risk of forcing the vehicle off the jack, do not tighten the wheel nuts fully until the vehicle

# WARNING! (Continued)

has been lowered. Failure to follow this warning may result in personal injury.

**NOTE:** Do not install the wheel cover on the compact spare.

- 7. Lower the vehicle by turning the jack screw to the left.
- 8. Finish tightening the lug nuts. Push down on the wrench while at the end of the handle for increased leverage. Tighten the lug nuts in a star pattern until each nut has been tightened twice. The correct wheel nut tightness is 100 ft lbs (135 N·m).If in doubt about the correct tightness, have them checked with a torque wrench by your authorized dealer or at a service station.
- 9. Lower the jack to its fully-closed position.

# WARNING!

A loose tire or jack thrown forward in a collision or hard stop could endanger the occupants of the vehicle. Always stow the jack parts and the spare tire in the places provided. Have the deflated (flat) tire repaired or replaced immediately.

- 10. Place the deflated (flat) tire and compact spare tire cover assembly in the rear cargo area. **Do not stow the deflated tire in the spare tire location.** Have the full-sized tire repaired or replaced, as soon as possible.
- 11. Stow the cable and wheel spacer before driving the vehicle. Reassemble the winch handle extensions to form a "T" and fit the winch T-handle over the drive nut. Rotate the nut to the right until the winch mechanism clicks at least three times.

**NOTE:** Refer to the "Spare Tire Tools" section for instructions on assembling the T-handle.

- 12. Stow the jack, jack handle and winch handle tools back in the stowage compartment.
- 13. Check the compact spare tire pressure as soon as possible. Correct the tire pressure, as required.

## Securing The Spare Tire

1. Assemble the winch handle extensions to form a T-handle and fit the winch T-handle over the drive nut. Rotate the nut to the left until the winch mechanism stops turning freely. This will allow enough slack in the cable to allow you to pull the wheel spacer out from under the vehicle.

### WARNING!

A loose compact spare tire/cover assembly, thrown forward in a collision or hard stop could endanger the occupants of the vehicle. Always stow the compact spare tire with the cover assembly in the place provided.

#### **CAUTION!**

The winch mechanism is designed for use with the winch T-handle only. Use of an air wrench or other power tools is not recommended and can damage the winch.

2. Assemble the winch handle extensions to form the spare tire hook, and pull the wheel spacer from under the vehicle.

3. Turn the compact spare tire so that the valve stem is down, and place the tire into the spare tire/cover assembly. Slide the wheel spacer through the center of the wheel and spare tire/cover assembly, so that the two retainer tabs snap out and engage the spare tire cover on the opposite side.

## **CAUTION!**

The compact spare tire/cover assembly must be used when the compact spare tire is stored. Failure to use this cover could drastically reduce the life of the compact spare tire.

#### WARNING!

Verify that both retainer tabs of the wheel spacer have been properly extended through the center of

#### (Continued)

# WARNING! (Continued)

the wheel and spare tire/cover assembly. Failure to properly engage both retainer tabs could result in loss of the spare tire and cover assembly, which will cause vehicle damage and may cause loss of vehicle control.

- 4. Using the winch T-handle, rotate the drive nut to the right until the compact spare tire/cover assembly is drawn into place against the underside of the vehicle.
- 5. Continue to rotate the nut to the right until you hear the winch mechanism click three times. It cannot be overtightened. Check under the vehicle to ensure the compact spare tire/cover assembly is positioned correctly against the underside of the vehicle.

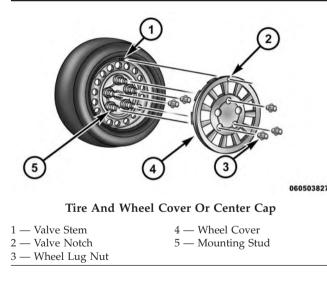
# **CAUTION!**

The winch mechanism is designed specifically to stow a compact spare tire only. Do not attempt to use the winch to stow the full size flat tire, or any other full-size tire. Vehicle damage may result.

# **Road Tire Installation**

# Vehicles Equipped With Wheel Covers

- 1. Mount the road tire on the axle.
- 2. To ease the installation process for steel wheels with wheel covers, install two lug nuts on the mounting studs which are on each side of the valve stem. Install the lug nuts with the cone shaped end of the nut toward the wheel. Lightly tighten the lug nuts.



3. Align the valve notch in the wheel cover with the valve stem on the wheel. Install the cover by hand,

snapping the cover over the two lug nuts. Do not use a hammer or excessive force to install the cover.

4. Install the remaining lug nuts with the cone shaped end of the nut toward the wheel. Lightly tighten the lug nuts.

#### WARNING!

To avoid the risk of forcing the vehicle off the jack, do not tighten the wheel nuts fully until the vehicle has been lowered. Failure to follow this warning may result in personal injury.

- 5. Lower the vehicle to the ground by turning the jack handle counterclockwise.
- 6. Finish tightening the lug nuts. Push down on the wrench while at the end of the handle for increased leverage. Tighten the lug nuts in a star pattern until

each nut has been tightened twice. The correct tightness of each lug nut is 100 ft/lbs (135 N·m). If in doubt about the correct tightness, have them checked with a torque wrench by your authorized dealer or service station.

7. After 25 miles (40 km) check the lug nut torque with a torque wrench to ensure that all lug nuts are properly seated against the wheel.

## Vehicles Without Wheel Covers

- 1. Mount the road tire on the axle.
- 2. Install the remaining lug nuts with the cone shaped end of the nut toward the wheel. Lightly tighten the lug nuts.

# WARNING!

To avoid the risk of forcing the vehicle off the jack, do not tighten the wheel nuts fully until the vehicle has been lowered. Failure to follow this warning may result in personal injury.

- 3. Lower the vehicle to the ground by turning the jack handle counterclockwise.
- 4. Finish tightening the lug nuts. Push down on the wrench while at the end of the handle for increased leverage. Tighten the lug nuts in a star pattern until each nut has been tightened twice. The correct tightness of each lug nut is 100 ft/lbs (135 N·m). If in doubt about the correct tightness, have them checked with a torque wrench by your authorized dealer or service station.

5. After 25 miles (40 km) check the lug nut torque with a torque wrench to ensure that all lug nuts are properly seated against the wheel.

#### JUMP-STARTING

If your vehicle has a discharged battery it can be jumpstarted using a set of jumper cables and a battery in another vehicle or by using a portable battery booster pack. Jump-starting can be dangerous if done improperly so please follow the procedures in this section carefully.

**NOTE:** When using a portable battery booster pack follow the manufacturer's operating instructions and precautions.

## CAUTION!

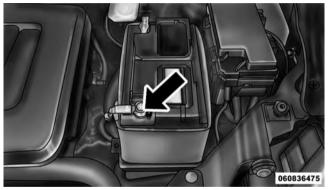
Do not use a portable battery booster pack or any other booster source with a system voltage greater than 12 Volts or damage to the battery, starter motor, alternator or electrical system may occur.

### WARNING!

Do not attempt jump-starting if the battery is frozen. It could rupture or explode and cause personal injury.

## **Preparations For Jump-Start**

The battery in your vehicle is located on the left side of the engine compartment.



**Positive Battery Post** 

# WARNING!

- Take care to avoid the radiator cooling fan whenever the hood is raised. It can start anytime the ignition switch is ON. You can be injured by moving fan blades.
- Remove any metal jewelry such as rings, watch bands and bracelets that could make an inadvertent electrical contact. You could be seriously injured.
- Batteries contain sulfuric acid that can burn your skin or eyes and generate hydrogen gas which is flammable and explosive. Keep open flames or sparks away from the battery.
- 1. Set the parking brake, shift the automatic transmission into PARK and turn the ignition to LOCK.
- 2. Turn off the heater, radio, and all unnecessary electrical accessories.

3. If using another vehicle to jump-start the battery, park the vehicle within the jumper cables reach, set the parking brake and make sure the ignition is OFF.

#### WARNING!

Do not allow vehicles to touch each other as this could establish a ground connection and personal injury could result.

### **Jump-Starting Procedure**

### WARNING!

Failure to follow this procedure could result in personal injury or property damage due to battery explosion.

# **CAUTION!**

Failure to follow these procedures could result in damage to the charging system of the booster vehicle or the discharged vehicle.

- 1. Connect the positive (+) end of the jumper cable to the positive (+) post of the discharged vehicle.
- 2. Connect the opposite end of the positive (+) jumper cable to the positive (+) post of the booster battery.
- 3. Connect the negative end (-) of the jumper cable to the negative (-) post of the booster battery.
- 4. Connect the opposite end of the negative (-) jumper cable to a good engine ground (exposed metal part of the discharged vehicle's engine) away from the battery and the fuel injection system.

# WARNING!

Do not connect the cable to the negative post (-) of the discharged battery. The resulting electrical spark could cause the battery to explode and could result in personal injury.

- 5. Start the engine in the vehicle that has the booster battery, let the engine idle a few minutes, and then start the engine in the vehicle with the discharged battery. Once the engine is started, remove the jumper cables in the reverse sequence:
- 6. Disconnect the negative (-) jumper cable from the negative (-) post of the vehicle with the discharged battery.
- 7. Disconnect the negative end (-) of the jumper cable from the negative (-) post of the booster battery.

- 8. Disconnect the opposite end of the positive (+) jumper cable from the positive (+) post of the booster battery.
- 9. Disconnect the positive (+) end of the jumper cable from the positive (+) post of the discharged vehicle.

If frequent jump-starting is required to start your vehicle you should have the battery and charging system inspected at your authorized dealer.

# CAUTION!

Accessories plugged into the vehicle power outlets draw power from the vehicle's battery, even when not in use (i.e., cellular phones, etc.). Eventually, if plugged in long enough without engine operation, the vehicle's battery will discharge sufficiently to degrade battery life and/or prevent the engine from starting.

#### FREEING A STUCK VEHICLE

If your vehicle becomes stuck in mud, sand or snow, it can often be moved using a rocking motion. Turn the steering wheel right and left to clear the area around the front wheels. Then shift back and forth between DRIVE and REVERSE while gently pressing the accelerator. Use the least amount of accelerator pedal pressure that will maintain the rocking motion, without spinning the wheels or racing the engine.

### **CAUTION!**

Racing the engine or spinning the wheels may lead to transmission overheating and failure. Allow the engine to idle with the transmission in NEUTRAL for at least one minute after every five rocking-motion cycles. This will minimize overheating and reduce the risk of transmission failure during prolonged efforts to free a stuck vehicle. **NOTE:** Press the "ESC Off" switch, to place the Electronic Stability Control (ESC) system in "Partial Off" mode before rocking the vehicle. Refer to "Electronic Brake Control System" in "Starting and Operating" for further information. Once the vehicle has been freed, press the "ESC Off" switch again to restore "ESC On" mode.

### **CAUTION!**

- When "rocking" a stuck vehicle by shifting between DRIVE and REVERSE, do not spin the wheels faster than 15 mph (24 km/h), or drivetrain damage may result.
- Revving the engine or spinning the wheels too fast may lead to transmission overheating and failure. It can also damage the tires. Do not spin the wheels above 30 mph (48 km/h) while in gear (no transmission shifting occurring).

# WARNING!

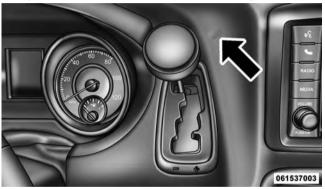
Fast spinning tires can be dangerous. Forces generated by excessive wheel speeds may cause damage, or even failure, of the axle and tires. A tire could explode and injure someone. Do not spin your vehicle's wheels faster than 30 mph (48 km/h) or for longer than 30 seconds continuously without stopping when you are stuck and do not let anyone near a spinning wheel, no matter what the speed.

# SHIFT LEVER OVERRIDE

If a malfunction occurs and the shift lever cannot be moved out of the PARK position, you can use the following procedure to temporarily move the shift lever:

1. Turn the engine OFF.

3. Using a small screwdriver or similar tool, remove the shift lever override access cover (located near the top right of the shift lever in the instrument panel).



Shift Lever Override Access Cover 4. Press and maintain firm pressure on the brake pedal.

2. Firmly apply the parking brake.

- 5. Insert the screwdriver or similar tool into the access hole, and push and hold the override release lever forward.
- 6. Move the shift lever to the NEUTRAL position.
- 7. The vehicle may then be started in NEUTRAL.
- 8. Reinstall the shift lever override access cover.

### TOWING A DISABLED VEHICLE

This section describes procedures for towing a disabled vehicle using a commercial wrecker service.

| Towing Condition | Wheels OFF the Ground | ALL MODELS   |
|------------------|-----------------------|--|
| Flat Tow         | NONE                  | If transmission is operable:   |
| Wheel lift       | Rear                  | <ul> <li>Transmission in NEUTRAL</li> <li>25 mph (40 km/h) max speed</li> <li>15 miles (24 km) max distance</li> </ul> |
|                  | Front                 | OK   |
| Flatbed          | ALL                   | BEST METHOD  |

Proper towing or lifting equipment is required to prevent damage to your vehicle. Use only tow bars and other equipment designed for this purpose, following equipment manufacturer's instructions. Use of safety chains is mandatory. Attach a tow bar or other towing device to main structural members of the vehicle, not to bumpers or associated brackets. State and local laws regarding vehicles under tow must be observed.

If you must use the accessories (wipers, defrosters, etc.) while being towed, the ignition must be in the ON/RUN position, not the ACC position.

If the key fob is unavailable or the vehicle's battery is discharged, see "Shift Lever Override" in this section for instructions on shifting the transmission out of PARK for towing.

# **CAUTION!**

- Do not use sling type equipment when towing. Damage to the fascia will occur.
- When securing the vehicle to a flatbed truck, do not attach to front or rear suspension components. Damage to your vehicle may result from improper towing.
- Do not push or tow this vehicle with another vehicle as damage to the bumper fascia and transmission may result.

The manufacturer recommends towing your vehicle with all four wheels OFF the ground using a flatbed. If flatbed equipment is not available, and the transmission is operable, the vehicle may be flat towed (with all four wheels on the ground) under the following conditions:

• The transmission must be in NEUTRAL.

- The towing distance must not exceed 15 miles (24 km).
- The towing speed must not exceed 25 mph (40 km/h).

If the transmission is not operable, or the vehicle must be towed faster than 25 mph (40 km/h) or farther than 15 miles (24 km), it must be towed with the front wheels OFF the ground (using a flatbed truck, or wheel lift equipment with the front wheels raised).

#### **CAUTION!**

Towing faster than 25 mph (40 km/h) or farther than 15 mi (24 km) with front wheels on the ground can cause severe transmission damage. Such damage is not covered by the New Vehicle Limited Warranty.

### **CAUTION!**

Towing this vehicle in violation of the above requirements can cause severe engine and/or transmission damage. Damage from improper towing is not covered under the New Vehicle Limited Warranty.

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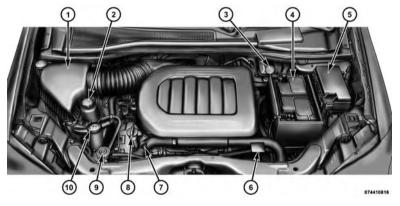
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#### ENGINE COMPARTMENT — 3.6L



- 1 Air Filter
- 2 Power Steering Fluid Reservoir
- 3 Brake Fluid Reservoir
- 4 Battery
- 5 Totally Integrated Power Module (Fuses)

6 — Engine Coolant Reservoir
7 — Engine Oil Dipstick
8 — Engine Oil Fill
9 — Coolant Pressure Cap
10 — Washer Fluid Reservoir

### ONBOARD DIAGNOSTIC SYSTEM - OBD II

Your vehicle is equipped with a sophisticated onboard diagnostic system called OBD II. This system monitors the performance of the emissions, engine, and automatic transmission control systems. When these systems are operating properly, your vehicle will provide excellent performance and fuel economy, as well as engine emissions well within current government regulations.

If any of these systems require service, the OBD II system will turn on the "Malfunction Indicator Light (MIL)." It will also store diagnostic codes and other information to assist your service technician in making repairs. Although your vehicle will usually be drivable and not need towing, see your authorized dealer for service as soon as possible.

# **CAUTION!**

- Prolonged driving with the MIL on could cause further damage to the emission control system. It could also affect fuel economy and driveability. The vehicle must be serviced before any emissions tests can be performed.
- If the MIL is flashing while the engine is running, severe catalytic converter damage and power loss will soon occur. Immediate service is required.

### Loose Fuel Filler Cap Message

If the vehicle diagnostic system determines that the fuel filler cap is loose, improperly installed, or damaged, a "gASCAP" message will display in the odometer or a "CHECK GASCAP" message will be displayed in the Electronic Vehicle Information Center (EVIC). Refer to

"Electronic Vehicle Information Center (EVIC)" in "Understanding Your Instrument Panel" for further information. Tighten the gas cap until a "clicking" sound is heard. This is an indication that the gas cap is properly tightened.

Press the odometer reset button to turn the message off. If the problem persists, the message will appear the next time the vehicle is started. This might indicate a damaged cap. If the problem is detected twice in a row, the system will turn on the MIL. Resolving the problem will turn the MIL light off.

#### EMISSIONS INSPECTION AND MAINTENANCE PROGRAMS

In some localities, it may be a legal requirement to pass an inspection of your vehicle's emissions control system. Failure to pass could prevent vehicle registration.



For states that require an Inspection and Maintenance (I/M), this check verifies the "Malfunction Indicator Light (MIL)" is functioning and is not on when the engine is running, and that the OBD II system is ready for testing.

Normally, the OBD II system will be ready. The OBD II system may **not** be ready if your vehicle was recently serviced, recently had a dead battery or a battery replacement. If the OBD II system should be determined not ready for the I/M test, your vehicle may fail the test.

Your vehicle has a simple ignition key-actuated test, which you can use prior to going to the test station. To check if your vehicle's OBD II system is ready, you must do the following:

- 1. Cycle the ignition switch to the ON position, but do not crank or start the engine.
- 2. If you crank or start the engine, you will have to start this test over.
- 3. As soon as you cycle the ignition switch to the ON position, you will see the MIL symbol come on as part of a normal bulb check.
- 4. Approximately 15 seconds later, one of two things will happen:
- The MIL will flash for about 10 seconds and then return to being fully illuminated until you turn OFF

the ignition or start the engine. This means that your vehicle's OBD II system is **not ready** and you should **not** proceed to the I/M station.

• The MIL will not flash at all and will remain fully illuminated until you turn OFF the ignition or start the engine. This means that your vehicle's OBD II system is **ready** and you can proceed to the I/M station.

If your OBD II system is **not ready**, you should see your authorized dealer or repair facility. If your vehicle was recently serviced or had a battery failure or replacement, you may need to do nothing more than drive your vehicle as you normally would in order for your OBD II system to update. A recheck with the above test routine may then indicate that the system is now ready.

Regardless of whether your vehicle's OBD II system is ready or not, if the MIL is illuminated during normal vehicle operation you should have your vehicle serviced before going to the I/M station. The I/M station can fail your vehicle because the MIL is on with the engine running.

#### **REPLACEMENT PARTS**

Use of genuine MOPAR® parts for normal/scheduled maintenance and repairs is highly recommended to ensure the designed performance. Damage or failures caused by the use of non-MOPAR® parts for maintenance and repairs will not be covered by the manufacturer's warranty.

#### DEALER SERVICE

Your authorized dealer has the qualified service personnel, special tools, and equipment to perform all service operations in an expert manner. Service Manuals are available which include detailed service information for your vehicle. Refer to these Service Manuals before attempting any procedure yourself. **NOTE:** Intentional tampering with emissions control systems may void your warranty and could result in civil penalties being assessed against you.

#### WARNING!

You can be badly injured working on or around a motor vehicle. Only do service work for which you have the knowledge and the proper equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.

#### MAINTENANCE PROCEDURES

The pages that follow contain the **required** maintenance services determined by the engineers who designed your vehicle.

Besides those maintenance items specified in the fixed maintenance schedule, there are other components which may require servicing or replacement in the future.

# **CAUTION!**

- Failure to properly maintain your vehicle or perform repairs and service when necessary could result in more costly repairs, damage to other components or negatively impact vehicle performance. Immediately have potential malfunctions examined by an authorized dealer or qualified repair center.
- Your vehicle has been built with improved fluids that protect the performance and durability of your vehicle and also allow extended maintenance intervals. Do not use chemical flushes in these components as the chemicals can damage your engine,

# (Continued)

# CAUTION! (Continued)

transmission, power steering or air conditioning. Such damage is not covered by the New Vehicle Limited Warranty. If a flush is needed because of component malfunction, use only the specified fluid for the flushing procedure.

# Engine Oil

# Checking Oil Level

To assure proper engine lubrication, the engine oil must be maintained at the correct level. Check the oil level at regular intervals, such as every fuel stop. The best time to check the engine oil level is about five minutes after a fully warmed engine is shut OFF or before starting the engine after it has sat overnight.

Checking the oil while the vehicle is on level ground will improve the accuracy of the oil level readings. Maintain the oil level between the MIN and MAX markings on the dipstick. Adding one quart of oil when the reading is at the MIN mark will result in a MAX reading on these engines.

### CAUTION!

Overfilling or underfilling will cause oil aeration, or loss of oil pressure. This could damage your engine.

### Change Engine Oil

The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance. Refer to the "Maintenance Schedule" for further information.

NOTE: Under no circumstances should oil change intervals exceed 10,000 miles (16,000 km) or twelve months, whichever occurs first.

### **Engine Oil Selection**

For best performance and maximum protection under all types of operating conditions, the manufacturer only recommends engine oils that are API Certified and meet the requirements of Chrysler Material Standard MS-6395.

### American Petroleum Institute (API) Engine Oil Identification Symbol



This symbol means that the oil has been certified by the American Petroleum Institute (API). The manufacturer only recommends API Certified engine oils.

# CAUTION!

Do not use chemical flushes in your engine oil as the chemicals can damage your engine. Such damage is not covered by the New Vehicle Limited Warranty.

### Engine Oil Viscosity – 3.6L Engine

SAE 5W-20 engine oil is recommended for all operating temperatures. This engine oil improves low temperature starting and vehicle fuel economy.

The engine oil filler cap also shows the recommended engine oil viscosity for your engine. For information on engine oil filler cap location, refer to the "Engine Compartment" illustration in this section.

**NOTE:** SAE 5W-30 engine oil approved to Fiat 9.55535-S1 or Fiat 9.55535-S3 may be used when SAE 5W-20 engine oil meeting MS- 6395 is not available.

### Synthetic Engine Oils

You may use synthetic engine oils provided the recommended oil quality requirements are met, and the recommended maintenance intervals for oil and filter changes are followed.

### Materials Added To Engine Oil

The manufacturer strongly recommends against the addition of any additives (other than leak detection dyes) to the engine oil. Engine oil is an engineered product and its performance may be impaired by supplemental additives.

### Disposing Of Used Engine Oil And Oil Filters

Care should be taken in disposing of used engine oil and oil filters from your vehicle. Used oil and oil filters, indiscriminately discarded, can present a problem to the environment. Contact your authorized dealer, service station or governmental agency for advice on how and where used oil and oil filters can be safely discarded in your area.

#### **Engine Oil Filter**

The engine oil filter should be replaced with a new filter at every engine oil change.

#### **Engine Oil Filter Selection**

This manufacturer's engines have a full-flow type oil filter. Use a filter of this type for replacement. The quality of replacement filters varies considerably. Only high quality filters should be used to assure most efficient service. MOPAR® engine oil filters are a high quality oil filter and are recommended.

#### **Engine Air Cleaner Filter**

Refer to the "Maintenance Schedule" for the proper maintenance intervals.

# WARNING!

The air induction system (air cleaner, hoses, etc.) can provide a measure of protection in the case of engine backfire. Do not remove the air induction system (air cleaner, hoses, etc.) unless such removal is necessary for repair or maintenance. Make sure that no one is near the engine compartment before starting the vehicle with the air induction system (air cleaner, hoses, etc.) removed. Failure to do so can result in serious personal injury.

### **Engine Air Cleaner Filter Selection**

The quality of replacement engine air cleaner filters varies considerably. Only high quality filters should be used to assure most efficient service. MOPAR® engine air cleaner filters are a high quality filter and are recommended.

### **Exhaust System**

The best protection against carbon monoxide entry into the vehicle body is a properly maintained engine exhaust system.

If you notice a change in the sound of the exhaust system; or if the exhaust fumes can be detected inside the vehicle; or when the underside or rear of the vehicle is damaged; have an authorized technician inspect the complete exhaust system and adjacent body areas for broken, damaged, deteriorated, or mispositioned parts. Open seams or loose connections could permit exhaust fumes to seep into the passenger compartment. In addition, have the exhaust system inspected each time the vehicle is raised for lubrication or oil change. Replace as required.

# WARNING!

- Exhaust gases can injure or kill. They contain carbon monoxide (CO), which is colorless and odorless. Breathing it can make you unconscious and can eventually poison you. To avoid breathing CO, refer to "Safety Tips/Exhaust Gas" in "Things To Know Before Starting Your Vehicle" for further information.
- A hot exhaust system can start a fire if you park over materials that can burn. Such materials might be grass or leaves coming into contact with your exhaust system. Do not park or operate your vehicle in areas where your exhaust system can contact anything that can burn.

### CAUTION!

- The catalytic converter requires the use of unleaded fuel only. Leaded gasoline will destroy the effectiveness of the catalyst as an emissions control device and may seriously reduce engine performance and cause serious damage to the engine.
- Damage to the catalytic converter can result if your vehicle is not kept in proper operating condition. In the event of engine malfunction, particularly involving engine misfire or other apparent loss of performance, have your vehicle serviced promptly. Continued operation of your vehicle with a severe malfunction could cause the converter to overheat. resulting in possible damage to the converter and vehicle.

Under normal operating conditions, the catalytic converter will not require maintenance. However, it is important to keep the engine properly tuned to assure proper catalyst operation and prevent possible catalyst damage.

NOTE: Intentional tampering with emissions control systems can result in civil penalties being assessed against you.

In unusual situations involving grossly malfunctioning engine operation, a scorching odor may suggest severe and abnormal catalyst overheating. If this occurs, stop 7 the vehicle, turn off the engine and allow it to cool. Service, including a tune-up to manufacturer's specifications, should be obtained immediately.

To minimize the possibility of catalytic converter damage:

- Do not shut off the engine or interrupt the ignition, when the transmission is in gear and the vehicle is in motion.
- Do not try to start the engine by pushing or towing the vehicle.
- Do not idle the engine with any spark plug wires disconnected or removed, such as when diagnostic testing, or for prolonged periods during very rough idle or malfunctioning operating conditions.

# Maintenance-Free Battery

Your vehicle is equipped with a maintenance-free battery. You will never have to add water, nor is periodic maintenance required.

# WARNING!

- Battery fluid is a corrosive acid solution and can burn or even blind you. Do not allow battery fluid to contact your eyes, skin, or clothing. Do not lean over a battery when attaching clamps. If acid splashes in eyes or on skin, flush the area immediately with large amounts of water. Refer to "Jump-Starting Procedures" in "What To Do In Emergencies" for further information.
- Battery gas is flammable and explosive. Keep flame or sparks away from the battery. Do not use a booster battery or any other booster source with an output greater than 12 Volts. Do not allow cable clamps to touch each other.
- Battery posts, terminals, and related accessories contain lead and lead compounds. Wash hands after handling.

### **CAUTION!**

- It is essential when replacing the cables on the battery that the positive cable is attached to the positive post and the negative cable is attached to the negative post. Battery posts are marked positive (+) and negative (-) and are identified on the battery case. Cable clamps should be tight on the terminal posts and free of corrosion.
- If a "fast charger" is used while the battery is in the vehicle, disconnect both vehicle battery cables before connecting the charger to the battery. Do not use a "fast charger" to provide starting voltage.

#### Air Conditioner Maintenance

For best possible performance, your air conditioner should be checked and serviced by an authorized dealer at the start of each warm season. This service should include cleaning of the condenser fins and a performance test. Drive belt tension should also be checked at this time.

### CAUTION!

Do not use chemical flushes in your air conditioning system as the chemicals can damage your air conditioning components. Such damage is not covered by the New Vehicle Limited Warranty.

#### WARNING!

• Use only refrigerants and compressor lubricants approved by the manufacturer for your air conditioning system. Some unapproved refrigerants are flammable and can explode, injuring you. Other unapproved refrigerants or lubricants can cause the system to fail, requiring costly repairs. Refer to

#### (Continued)

# WARNING! (Continued)

Warranty Information Book, located on the DVD, for further warranty information.

• The air conditioning system contains refrigerant under high pressure. To avoid risk of personal injury or damage to the system, adding refrigerant or any repair requiring lines to be disconnected should be done by an experienced technician.

# **Refrigerant Recovery And Recycling**

R-134a Air Conditioning Refrigerant is a hydrofluorocarbon (HFC) that is endorsed by the Environmental Protection Agency and is an ozone-saving product. However, the manufacturer recommends that air conditioning service be performed by authorized dealer or other service facilities using recovery and recycling equipment.

**NOTE:** Use only manufacturer approved A/C system sealers, stop leak products, seal conditioners, compressor oil, and refrigerants.

### A/C Air Filter

Refer to the "Maintenance Schedule" for the proper maintenance intervals.

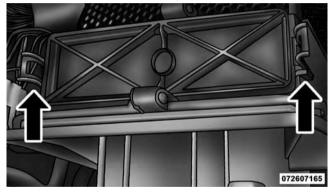
# WARNING!

Do not remove the A/C air filter while the blower is operating or personal injury may result.

The A/C air filter is located in the fresh air inlet behind the glove box. Perform the following procedure to replace the filter:

- 1. Open the glove compartment and remove all contents.
- 2. Push in on the sides of the glove compartment and lower the door.

- 3. Pivot the glove compartment downward.
- 4. Disengage the two retaining tabs that secure the filter cover to the HVAC housing, and remove the cover.



#### A/C Air Filter Replacement

5. Remove the A/C air filter by pulling it straight out of the housing.

6. Install the A/C air filter with the arrow on the filter pointing toward the floor. When installing the filter cover, make sure the retaining tabs fully engage the cover.

# **CAUTION!**

The A/C air filter is identified with an arrow to indicate airflow direction through the filter. Failure to properly install the filter will result in the need to replace it more often.

7. Rotate the glove compartment door back into position.

#### **Body Lubrication**

Locks and all body pivot points, including such items as seat tracks, door hinge pivot points and rollers, liftgate, tailgate, sliding doors and hood hinges, should be lubricated periodically with a lithium based grease, such as

MOPAR® Spray White Lube to assure quiet, easy operation and to protect against rust and wear. Prior to the application of any lubricant, the parts concerned should be wiped clean to remove dust and grit; after lubricating excess oil and grease should be removed. Particular attention should also be given to hood latching components to ensure proper function. When performing other underhood services, the hood latch, release mechanism and safety catch should be cleaned and lubricated.

The external lock cylinders should be lubricated twice a year, preferably in the Fall and Spring. Apply a small amount of a high quality lubricant, such as MOPAR® Lock Cylinder Lubricant directly into the lock cylinder.

#### Windshield Wiper Blades

Clean the rubber edges of the wiper blades and the windshield periodically with a sponge or soft cloth and a mild nonabrasive cleaner. This will remove accumulations of salt or road film.

Operation of the wipers on dry glass for long periods may cause deterioration of the wiper blades. Always use washer fluid when using the wipers to remove salt or dirt from a dry windshield.

Avoid using the wiper blades to remove frost or ice from the windshield. Keep the blade rubber out of contact with petroleum products such as engine oil, gasoline, etc.

**NOTE:** Life expectancy of wiper blades varies depending on geographical area and frequency of use. Poor performance of blades may be present with chattering, marks, water lines or wet spots. If any of these conditions are present, clean the wiper blades or replace as necessary.

#### **Adding Washer Fluid**

The fluid reservoir for the windshield washers and the rear window washer is shared. It is located in the engine compartment and should be checked at regular intervals.

Fill the reservoir with windshield washer solvent (not radiator antifreeze) and operate the system for a few seconds to flush out any residual water.

The washer fluid reservoir will hold a full gallon of fluid when the Low Washer Fluid Light illuminates.

#### WARNING!

Commercially available windshield washer solvents are flammable. They could ignite and burn you. Care must be exercised when filling or working around the washer solution.

After the engine has warmed, operate the defroster for a few minutes to reduce the possibility of smearing or freezing the fluid on the cold windshield. MOPAR® All Weather Windshield Washer Solution or equivalent, used

with water as directed on the container, aids cleaning action, reduces the freezing point to avoid line clogging, and is not harmful to paint or trim.

### **Cooling System**

### WARNING!

- When working near the radiator cooling fan, disconnect the fan motor lead or turn the ignition switch to the OFF position. The fan is temperature controlled and can start at anytime the ignition switch is in the ON position.
- You or others can be badly burned by hot engine coolant (antifreeze) or steam from your radiator. If you see or hear steam coming from under the hood, do not open the hood until the radiator has had time to cool. Never try to open a cooling system pressure cap when the radiator is hot.

#### **Coolant Checks**

Check the engine coolant (antifreeze) protection every 12 months (before the onset of freezing weather, where applicable). If the engine coolant (antifreeze) is dirty, the system should be drained, flushed, and refilled with fresh OAT coolant (conforming to MS-12106) only by an authorized dealer. Check the front of the A/C condenser for any accumulation of bugs, leaves, etc. If dirty, clean by gently spraying water from a garden hose vertically down the face of the condenser.

Check the coolant recovery bottle tubing for brittle rubber, cracking , tears, cuts and tightness of the connection at the bottle and radiator. Inspect the entire system for leaks.

With the engine at normal operating temperature (but not running), check the cooling system pressure cap for proper vacuum sealing by draining a small amount of engine coolant (antifreeze) from the radiator drain cock. If the cap is sealing properly, the engine coolant (antifreeze) will begin to drain from the coolant recovery bottle. DO NOT REMOVE THE COOLANT PRESSURE CAP WHEN THE COOLING SYSTEM IS HOT.

#### Cooling System – Drain, Flush, And Refill

If the engine coolant (antifreeze) is dirty or contains visible sediment, have an authorized dealer clean and flush with OAT coolant (antifreeze) (conforming to MS-12106).

Refer to the "Maintenance Schedule" for the proper maintenance intervals.

#### Selection Of Coolant

Refer to "Fluids, Lubricants, and Genuine Parts" in "Maintaining Your Vehicle" for further information.

# CAUTION!

- Mixing of engine coolant (antifreeze) other than specified Organic Additive Technology (OAT) engine coolant (antifreeze), may result in engine damage and may decrease corrosion protection. Organic Additive Technology (OAT) engine coolant is different and should not be mixed with Hybrid Organic Additive Technology (HOAT) engine coolant (antifreeze) or any "globally compatible" coolant (antifreeze). If a non-OAT engine coolant (antifreeze) is introduced into the cooling system in an emergency, the cooling system will need to be drained, flushed, and refilled with fresh OAT coolant (conforming to MS-12106), by an authorized dealer as soon as possible.
- Do not use water alone or alcohol-based engine coolant (antifreeze) products. Do not use additional

# CAUTION! (Continued)

- rust inhibitors or antirust products, as they may not be compatible with the radiator engine coolant and may plug the radiator.
- This vehicle has not been designed for use with propylene glycol-based engine coolant (antifreeze). Use of propylene glycol-based engine coolant (antifreeze) is not recommended.

### Adding Coolant

Your vehicle has been built with an improved engine coolant (OAT coolant conforming to MS-12106) that allows extended maintenance intervals. This engine coolant (antifreeze) can be used up to ten years or 150,000 miles (240,000 km) before replacement. To prevent reducing this extended maintenance period, it is important that you use the same engine coolant (OAT coolant conforming to MS-12106) throughout the life of your vehicle.

Please review these recommendations for using Organic Additive Technology (OAT) engine coolant (antifreeze) that meets the requirements of Chrysler Material Standard MS-12106. When adding engine coolant (antifreeze):

- We recommend using MOPAR® Antifreeze/Coolant 10 Year/150,000 Mile Formula OAT (Organic Additive Technology) that meets the requirements of Chrysler Material Standard MS-12106.
- Mix a minimum solution of 50% OAT engine coolant that meets the requirements of Chrysler Material Standard MS-12106 and distilled water. Use higher concentrations (not to exceed 70%) if temperatures below -34° F (-37° C) are anticipated.
- Use only high purity water such as distilled or deionized water when mixing the water/engine coolant (antifreeze) solution. The use of lower quality water will reduce the amount of corrosion protection in the engine cooling system.

Please note that it is the owner's responsibility to maintain the proper level of protection against freezing according to the temperatures occurring in the area where the vehicle is operated.

**NOTE:** Mixing engine coolant (antifreeze) types is not recommended and can result in cooling system damage. If HOAT and OAT coolant are mixed in an emergency, have a authorized dealer drain, flush, and refill with OAT coolant (conforming to MS-12106) as soon as possible.

#### Cooling System Pressure Cap

The cap must be fully tightened to prevent loss of engine coolant (antifreeze), and to ensure that engine coolant (antifreeze) will return to the radiator from the coolant recovery tank.

The cap should be inspected and cleaned if there is any accumulation of foreign material on the sealing surfaces.

### WARNING!

- The warning words "DO NOT OPEN HOT" on the cooling system pressure cap are a safety precaution. Never add engine coolant (antifreeze) when the engine is overheated. Do not loosen or remove the cap to cool an overheated engine. Heat causes pressure to build up in the cooling system. To prevent scalding or injury, do not remove the pressure cap while the system is hot or under pressure.
- Do not use a pressure cap other than the one specified for your vehicle. Personal injury or engine damage may result.

#### **Disposal Of Used Engine Coolant**

Used ethylene glycol-based engine coolant (antifreeze) is a regulated substance requiring proper disposal. Check with your local authorities to determine the disposal rules for your community. To prevent ingestion by animals or children, do not store ethylene glycol-based engine coolant in open containers or allow it to remain in puddles on the ground. If ingested by a child or pet, seek emergency assistance immediately. Clean up any ground spills immediately.

#### **Coolant Level**

The coolant bottle provides a quick visual method for determining that the coolant level is adequate. With the engine OFF and cold, the level of the engine coolant (antifreeze) in the bottle should be between the ranges indicated on the bottle.

The radiator normally remains completely full, so there is no need to remove the radiator cap unless checking for engine coolant (antifreeze) freeze point or replacing coolant. Advise your service attendant of this. As long as the engine operating temperature is satisfactory, the coolant bottle need only be checked once a month.

When additional engine coolant (antifreeze) is needed to maintain the proper level, only OAT coolant that meets the requirements of Chrysler Material Standard MS-12106 should be added to the coolant bottle. Do not overfill.

#### **Points To Remember**

**NOTE:** When the vehicle is stopped after a few miles/ kilometers of operation, you may observe vapor coming from the front of the engine compartment. This is normally a result of moisture from rain, snow, or high humidity accumulating on the radiator and being vaporized when the thermostat opens, allowing hot engine coolant (antifreeze) to enter the radiator.

If an examination of your engine compartment shows no evidence of radiator or hose leaks, the vehicle may be safely driven. The vapor will soon dissipate.

• Do not overfill the coolant expansion bottle.

- Check the coolant freeze point in the radiator and in the coolant expansion bottle. If engine coolant (antifreeze) needs to be added, the contents of the coolant expansion bottle must also be protected against freezing.
- If frequent engine coolant (antifreeze) additions are required, the cooling system should be pressure tested for leaks.
- Maintain engine coolant (antifreeze) concentration at a minimum of 50% OAT coolant (conforming to MS-12106) and distilled water for proper corrosion protection of your engine which contains aluminum components.
- Make sure that the coolant expansion bottle overflow hoses are not kinked or obstructed.
- Keep the front of the radiator clean. If your vehicle is equipped with air conditioning, keep the front of the condenser clean.

• Do not change the thermostat for Summer or Winter operation. If replacement is ever necessary, install ONLY the correct type thermostat. Other designs may result in unsatisfactory engine coolant (antifreeze) performance, poor gas mileage, and increased emissions.

#### **Brake System**

In order to assure brake system performance, all brake system components should be inspected periodically. Refer to the "Maintenance Schedule" for the proper maintenance intervals.

#### WARNING!

Riding the brakes can lead to brake failure and possibly a collision. Driving with your foot resting or riding on the brake pedal can result in abnormally

(Continued)

# WARNING! (Continued)

high brake temperatures, excessive lining wear, and possible brake damage. You would not have your full braking capacity in an emergency.

### Master Cylinder – Brake Fluid Level Check

The fluid level in the master cylinder should be checked when performing underhood services, or immediately if the "Brake System Warning Light" indicates system failure.

Clean the top of the master cylinder area before removing the cap. Add fluid to bring the level up to the top of the "FULL" mark on the side of the master cylinder reservoir.

Overfilling of fluid is not recommended because it may cause leaking in the system.

Add enough fluid to bring the level up to the requirements described on the brake fluid reservoir. With disc

brakes, fluid level can be expected to fall as the brake pads wear. However, low fluid level may be caused by a leak and a checkup may be needed.

Use only manufacturer's recommended brake fluid. Refer to "Fluids, Lubricants, and Genuine Parts" in "Maintaining Your Vehicle" for further information.

# WARNING!

• Use only manufacturer's recommended brake fluid. Refer to "Fluids, Lubricants, and Genuine Parts" in "Maintaining Your Vehicle" for further information. Using the wrong type of brake fluid can severely damage your brake system and/or impair its performance. The proper type of brake fluid for your vehicle is also identified on the original factory installed hydraulic master cylinder reservoir.

# WARNING! (Continued)

- To avoid contamination from foreign matter or moisture, use only new brake fluid or fluid that has been in a tightly closed container. Keep the master cylinder reservoir cap secured at all times. Brake fluid in a open container absorbs moisture from the air resulting in a lower boiling point. This may cause it to boil unexpectedly during hard or prolonged braking, resulting in sudden brake failure. This could result in a collision.
- Overfilling the brake fluid reservoir can result in spilling brake fluid on hot engine parts, causing the brake fluid to catch fire. Brake fluid can also damage painted and vinyl surfaces, care should be taken to avoid its contact with these surfaces.

(Continued)

### WARNING! (Continued)

• Do not allow petroleum based fluid to contaminate the brake fluid. Brake seal components could be damaged, causing partial or complete brake failure. This could result in a collision.

#### **Automatic Transmission**

#### Selection Of Lubricant

It is important to use the proper transmission fluid to ensure optimum transmission performance and life. Use only the manufacturer's recommended transmission fluid. Refer to "Fluids, Lubricants, and Genuine Parts" in "Maintaining Your Vehicle" for fluid specifications. It is important to maintain the transmission fluid at the correct level using the recommended fluid. No chemical flushes should be used in any transmission; only the approved lubricant should be used.

#### **CAUTION!**

Using a transmission fluid other than the manufacturer's recommended fluid may cause deterioration in transmission shift quality and/or torque converter shudder, and will require more frequent fluid and filter changes. Refer to "Fluids, Lubricants, and Genuine Parts" in this section for fluid specifications.

#### **Special Additives**

The manufacturer strongly recommends against using any special additives in the transmission.

Automatic Transmission Fluid (ATF) is an engineered product and its performance may be impaired by supplemental additives. Therefore, do not add any fluid additives to the transmission. The only exception to this policy is the use of special dyes for diagnosing fluid

leaks. Avoid using transmission sealers as they may adversely affect seals.

# **CAUTION!**

Do not use chemical flushes in your transmission as the chemicals can damage your transmission components. Such damage is not covered by the New Vehicle Limited Warranty.

### Fluid Level Check

The fluid level is preset at the factory and does not require adjustment under normal operating conditions. Routine fluid level checks are not required, therefore the transmission filler tube is capped and no dipstick is provided. Your authorized dealer can check your transmission fluid level using a special service dipstick. If you notice fluid leakage or transmission malfunction, visit your authorized dealer immediately to have the transmission fluid level checked. Operating the vehicle with an improper fluid level can cause severe transmission damage.

# **CAUTION!**

If a transmission fluid leak occurs, visit your authorized dealer immediately. Severe transmission damage may occur. Your authorized dealer has the proper tools to adjust the fluid level accurately.

### Fluid And Filter Changes

Under normal operating conditions, the fluid installed at the factory will provide satisfactory lubrication for the life of the vehicle. Routine fluid and filter changes are not required. However, change the fluid and filter if the fluid becomes contaminated (with water, etc.), or if the transmission is disassembled for any reason.

### Appearance Care And Protection From Corrosion

## Protection Of Body And Paint From Corrosion

Vehicle body care requirements vary according to geographic locations and usage. Chemicals that make roads passable in snow and ice and those that are sprayed on trees and road surfaces during other seasons are highly corrosive to the metal in your vehicle. Outside parking, which exposes your vehicle to airborne contaminants, road surfaces on which the vehicle is operated, extreme hot or cold weather and other extreme conditions will have an adverse effect on paint, metal trim, and underbody protection.

The following maintenance recommendations will enable you to obtain maximum benefit from the corrosion resistance built into your vehicle.

## What Causes Corrosion?

Corrosion is the result of deterioration or removal of paint and protective coatings from your vehicle.

The most common causes are:

- Road salt, dirt and moisture accumulation.
- Stone and gravel impact.
- Insects, tree sap and tar.
- Salt in the air near seacoast localities.
- Atmospheric fallout/industrial pollutants.

## Washing

- Wash your vehicle regularly. Always wash your vehicle in the shade using MOPAR® Car Wash, or a mild car wash soap, and rinse the panels completely with clear water.
- If insects, tar, or other similar deposits have accumulated on your vehicle, use MOPAR® Super Kleen Bug and Tar Remover to remove.
- Use a high quality cleaner wax, such as MOPAR® Cleaner Wax to remove road film, stains and to protect your paint finish. Take care never to scratch the paint.
- Avoid using abrasive compounds and power buffing that may diminish the gloss or thin out the paint finish.

## **CAUTION!**

- Do not use abrasive or strong cleaning materials such as steel wool or scouring powder that will scratch metal and painted surfaces.
- Use of power washers exceeding 1,200 psi (8 274 kPa) can result in damage or removal of paint and decals.

## Special Care

- If you drive on salted or dusty roads or if you drive near the ocean, hose off the undercarriage at least once a month.
- It is important that the drain holes in the lower edges of the doors, rocker panels, and trunk be kept clear and open.
- If you detect any stone chips or scratches in the paint, touch them up immediately. The cost of such repairs is considered the responsibility of the owner.

- If your vehicle is damaged due to a collision or similar cause that destroys the paint and protective coating, have your vehicle repaired as soon as possible. The cost of such repairs is considered the responsibility of the owner.
- If you carry special cargo such as chemicals, fertilizers, de-icer salt, etc., be sure that such materials are well packaged and sealed.
- If a lot of driving is done on gravel roads, consider mud or stone shields behind each wheel.
- Use MOPAR® Touch Up Paint on scratches as soon as possible. Your authorized dealer has touch up paint to match the color of your vehicle.

#### Wheel And Wheel Trim Care

All wheels and wheel trim, especially aluminum and chrome plated wheels, should be cleaned regularly using mild (neutral Ph) soap and water to maintain their luster and to prevent corrosion. Wash wheels with the same soap solution recommended for the body of the vehicle.

Your wheels are susceptible to deterioration caused by salt, sodium chloride, magnesium chloride, calcium chloride, etc., and other road chemicals used to melt ice or control dust on dirt roads. Use a soft cloth or sponge and mild soap to wipe away promptly. Do not use harsh **7** chemicals or a stiff brush. They can damage the wheel's protective coating that helps keep them from corroding and tarnishing.

**NOTE:** Many aftermarket wheel cleaners contain strong acids or strong alkaline additives that can harm the wheel surface.

## CAUTION!

Avoid products or automatic car washes that use acidic solutions or strong alkaline additives or harsh brushes. These products and automatic car washes may damage the wheel's protective finish. Such damage is not covered by the New Vehicle Limited Warranty. Only car wash soap, MOPAR Wheel Cleaner or equivalent is recommended.

When cleaning extremely dirty wheels including excessive brake dust, care must be taken in the selection of tire and wheel cleaning chemicals and equipment to prevent damage to the wheels. Mopar Wheel Treatment or Mopar Chrome Cleaner or their equivalent is recommended or select a non-abrasive, non-acidic cleaner for aluminum or chrome wheels. Do not use any products on Dark Vapor or Black Satin Chrome Wheels. They will permanently

damage this finish and such damage is not covered by the New Vehicle Limited Warranty.

## CAUTION!

Do not use scouring pads, steel wool, a bristle brush, metal polishes or oven cleaner. These products may damage the wheel's protective finish. Such damage is not covered by the New Vehicle Limited Warranty. Only car wash soap, MOPAR Wheel Cleaner or equivalent is recommended.

**NOTE:** If you intend parking or storing your vehicle for an extended period after cleaning the wheels with wheel cleaner, drive your vehicle for a few minutes before doing so. Driving the vehicle and applying the brakes when stopping will reduce the risk of brake rotor corrosion. Dark Vapor Or Black Satin Chrome Wheels

#### **CAUTION!**

If your vehicle is equipped with Dark Vapor or Black Satin Chrome wheels DO NOT USE wheel cleaners, abrasives or polishing compounds. They will permanently damage this finish and such damage is not covered by the New Vehicle Limited Warranty. USE ONLY MILD SOAP AND WATER WITH A SOFT CLOTH. Used on a regular basis; this is all that is required to maintain this finish.

#### Stain Repel Fabric Cleaning Procedure – If Equipped

Stain Repel seats may be cleaned in the following manner:

• Remove as much of the stain as possible by blotting with a clean, dry towel.

- Blot any remaining stain with a clean, damp towel.
- For tough stains, apply MOPAR® Total Clean, or a mild soap solution to a clean, damp cloth and remove stain. Use a fresh, damp towel to remove soap residue.
- For grease stains, apply MOPAR® Multi-Purpose Cleaner to a clean, damp cloth and remove stain. Use a fresh, damp towel to remove soap residue.
- Do not use any harsh solvents or any other form of protectants on Stain Repel products.

#### Interior Care

#### **Instrument Panel Surfaces**

The instrument panel cover has a low glare surface, which minimizes reflections in the windshield. Do not use protectants or other products which may cause undesirable reflections. Use soap and warm water to restore the low glare surface.

#### **Cleaning Interior Trim**

Interior trim should be cleaned starting with a damp cloth, a damp cloth with MOPAR® Total Clean or equivalent, then MOPAR® Spot & Stain Remover or equivalent if absolutely necessary. Do not use harsh cleaners or Armor All®. Use MOPAR® Total Clean or equivalent to clean vinyl upholstery

## **Cleaning Leather Upholstery**

MOPAR® Total Clean or equivalent is specifically recommended for leather upholstery.

Your leather upholstery can be best preserved by regular cleaning with a damp soft cloth. Small particles of dirt can act as an abrasive and damage the leather upholstery and should be removed promptly with a damp cloth. Stubborn soils can be removed easily with a soft cloth and MOPAR® Total Clean or equivalent. Care should be taken to avoid soaking your leather upholstery with any liquid. Please do not use polishes, oils, cleaning fluids, solvents, detergents, or ammonia-based cleaners to clean your leather upholstery. Application of a leather conditioner is not required to maintain the original condition.

## WARNING!

Do not use volatile solvents for cleaning purposes. Many are potentially flammable, and if used in closed areas they may cause respiratory harm.

## **Cleaning Headlights**

Your vehicle is equipped with plastic headlights and fog lights (if equipped) that are lighter and less susceptible to stone breakage than glass headlights.

Plastic is not as scratch resistant as glass and therefore different lens cleaning procedures must be followed.

To minimize the possibility of scratching the lenses and reducing light output, avoid wiping with a dry cloth. To remove road dirt, wash with a mild soap solution followed by rinsing.

Do not use abrasive cleaning components, solvents, steel wool or other aggressive material to clean the lenses.

#### **Glass Surfaces**

All glass surfaces should be cleaned on a regular basis with MOPAR® Glass Cleaner, or any commercial household-type glass cleaner. Never use an abrasive type cleaner. Use caution when cleaning the inside rear window equipped with electric defrosters or the right rear quarter window equipped with the radio antenna. Do not use scrapers or other sharp instrument that may scratch the elements.

When cleaning the rear view mirror, spray cleaner on the towel or rag that you are using. Do not spray cleaner directly on the mirror.

#### Cleaning Plastic Instrument Cluster Lenses

The lenses in front of the instruments in this vehicle are molded in clear plastic. When cleaning the lenses, care must be taken to avoid scratching the plastic.

 Clean with a wet soft rag. A mild soap solution may be used, but do not use high alcohol content or abrasive cleaners. If soap is used, wipe clean with a clean damp rag.

## 2. Dry with a soft cloth.

#### Seat Belt Maintenance

Do not bleach, dye, or clean the belts with chemical solvents or abrasive cleaners. This will weaken the fabric. Sun damage can also weaken the fabric.

If the belts need cleaning, use MOPAR® Total Clean, a mild soap solution, or lukewarm water. Do not remove the belts from the vehicle to wash them. Dry with a soft cloth.

Replace the belts if they appear frayed or worn or if the buckles do not work properly.

## **Cleaning The Instrument Panel Cupholders**

## Removal

Pull the flexible liner from the cupholder drawer starting at one edge to ease removal.

### Cleaning

The liner is top shelf dishwasher safe, or you may follow the cleaning procedure below.

Soak the liner in a mixture of medium hot tap water and one teaspoon of mild liquid dish soap. Let soak for approximately 30 minutes. After 30 minutes, pull the

liner from the water and dip it back into the water about six times. This will loosen any remaining debris. Rinse the liner thoroughly under warm running water. Shake the excess water from the liner and dry the outer surfaces with a clean soft cloth.

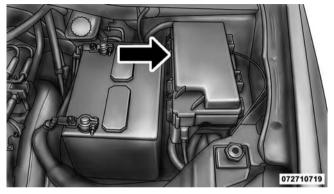
#### Installation

Place the liner into the cupholder drawer and press the liner into place so that the retention tabs seat into the corresponding openings in the drawer.

## FUSES

### **Totally Integrated Power Module**

The Totally Integrated Power Module is located in the engine compartment near the battery. Refer to the applicable "Engine Compartment" illustration in this section. This center contains cartridge fuses and mini-fuses. A label that identifies each component may be printed or embossed on the inside of the cover.



**Totally Integrated Power Module** 

#### **CAUTION!**

- When installing the Totally Integrated Power Module cover, it is important to ensure the cover is properly positioned and fully latched. Failure to do so may allow water to get into the Integrated Power Module, and possibly result in a electrical system failure.
- When replacing a blown fuse, it is important to use only a fuse having the correct amperage rating. The use of a fuse with a rating other than indicated may result in a dangerous electrical system overload. If a properly rated fuse continues to blow, it indicates a problem in the circuit that must be corrected.

The numbers inside the TIPM cover correspond to the following table.

| Cavity | Cartridge<br>Fuse | Mini-<br>Fuse | Description   |
|--------|-------------------|---------------|---|
| J1     | 40 Amp<br>Green   | _             | Power Folding<br>Seat                               |
| J2     | 30 Amp<br>Pink    |               | Power Liftgate<br>Module                            |
| J3     | 30 Amp<br>Pink    |               | Rear Door Mod-<br>ule                               |
| J4     | 25 Amp<br>Natural |               | Driver Door<br>Node                                 |
| J5     | 25 Amp<br>Natural | —             | Passenger Door<br>Node                              |
| J6     | 40 Amp<br>Green   |               | Antilock Brakes<br>Pump/Stability<br>Control System |

| Cavity | Cartridge<br>Fuse | Mini-<br>Fuse | Description   |
|--------|-------------------|---------------|---|
| J7     | 30 Amp<br>Pink    |               | Antilock Brakes<br>Valve/Stability<br>Control System                  |
| J8     | 40 Amp<br>Green   |               | Power Memory<br>Seat – If<br>Equipped                                 |
| J9     | 40 Amp<br>Green   |               | Partial Zero<br>Emissions Vehicle<br>Motor/Flex Fuel<br>– If Equipped |
| J10    | 30 Amp<br>Pink    |               | Headlamp Wash/<br>Manifold Tuning<br>Valve – If<br>Equipped           |
| J11    | 30 Amp<br>Pink    |               | Power Sliding<br>Door Module/   |

| Cavity | Cartridge<br>Fuse | Mini-<br>Fuse | Description                       | Cavity | Cartridge<br>Fuse | Mini-<br>Fuse | Description          |
|--------|-------------------|---------------|-----------------------------------|--------|-------------------|---------------|----------------------|
|        |                   |               | Anti-Theft Mod-                   |        |                   |               | Range                |
|        |                   |               | ule – If Equipped                 | J19    | 60 Amp            |               | Radiator Fan         |
| J12    | 30 Amp            |               | HVAC Rear                         |        | Yellow            |               |                      |
|        | Pink              |               | Blower, Radiator<br>Fan Motor     | J20    | 30 Amp<br>Pink    |               | Front Wiper<br>LO/HI |
| J13    | 60 Amp<br>Yellow  | —             | Ignition Off Draw<br>(IOD) – Main | J21    | 20 Amp<br>Blue    |               | Front/Rear<br>Washer |
| J14    | 40 Amp            | _             | Rear Window                       | J22    | 25 Amp            |               | Sunroof Module       |
|        | Green             |               | Defogger                          |        | Natural           |               |                      |
| J15    | 40 Amp            | —             | Front Blower                      | M1     | —                 | 15 Amp        | Rear Center          |
|        | Green             |               |                                   |        |                   | Blue          | Brake Lamp/          |
| J17    | 40 Amp            | —             | Starter Solenoid                  |        |                   |               | Brake Switch         |
|        | Green             |               |                                   | M2     | —                 | 20 Amp        | Front Fog Lamps      |
| J18    | 20 Amp            |               | Powertrain Con-                   |        |                   | Yellow        |                      |
|        | Blue              |               | trol Module Trans                 | L      |                   | 1             | 1                    |

| Cavity | Cartridge<br>Fuse | Mini-<br>Fuse     | Description   | Cavity | Cartridge<br>Fuse | Mini-<br>Fuse    | Description   |
|--------|-------------------|-------------------|---|--------|-------------------|------------------|---|
| M3     | _                 | 20 Amp<br>Yellow  | Front/Rear Axle<br>Locker, Vacuum<br>Pump Motor                     | M7     | _                 | 20 Amp<br>Yellow | Power Outlet #2<br>(BATT/ACC SE-<br>LECT) – Center  |
| M4     | _                 | 10 Amp<br>Red     | Trailer Tow   |        |                   |                  | Seat or with Con-<br>sole Rear  |
| M5     | _                 | 25 Amp<br>Natural | Inverter  | M8     |                   | 20 Amp<br>Yellow | Front Heated Seat<br>– If Equipped  |
| M6     |                   | 20 Amp<br>Yellow  | Power Outlet #1<br>(ACC), Rain Sen-                                 | M9     | _                 | 20 Amp<br>Yellow | Rear Heated Seat<br>– If Equipped   |
|        |                   |                   | sor, Cigar Lighter<br>(Instrument Panel<br>or with Console<br>Rear) | M10    | _                 | 15 Amp<br>Blue   | Ignition Off Draw<br>— Video System,<br>Satellite Radio,<br>DVD, Hands-Free<br>Module, Univer-<br>sal Garage Door<br>Opener, Vanity |

| Cavity | Cartridge<br>Fuse | Mini-<br>Fuse    | Description   | Cavity | Cartridge<br>Fuse | Mini-<br>Fuse    | Description   |
|--------|-------------------|------------------|---|--------|-------------------|------------------|---|
|        |                   |                  | Lamp, Streaming<br>Video Module –<br>If Equipped                            | M15    | _                 | 20 Amp<br>Yellow | Rear View Mirror,<br>Instrument Clus-<br>ter, Multi-  |
| M11    | _                 | 10 Amp<br>Red    | Climate Control<br>System   |        |                   |                  | Function Control<br>Switch, Tire Pres-                |
| M12    |                   | 30 Amp<br>Green  | Amplifier/Radio   |        |                   |                  | sure Monitor,<br>Glow Plug Mod-<br>ule – If Equipped  |
| M13    |                   | 20 Amp<br>Yellow | Instrument Clus-<br>ter, SIREN, Clock<br>Module, Multi-<br>Function Control | M16    |                   | 10 Amp<br>Red    | Airbag Module/<br>Occupant Classi-<br>fication Module |
|        |                   |                  | Switch – If<br>Equipped   | M17    |                   | 15 Amp<br>Blue   | Left Tail/<br>License/Park                            |
| M14    |                   | 20 Amp<br>Yellow | Trailer Tow – If<br>Equipped  |        |                   |                  | Lamp, Running<br>Lamps                                |

| Cavity | Cartridge<br>Fuse | Mini-<br>Fuse     | Description   | Cavity | Cartridge<br>Fuse | Mini-<br>Fuse     | Description                                       |
|--------|-------------------|-------------------|---|--------|-------------------|-------------------|---|
| M18    |                   | 15 Amp<br>Blue    | Right Tail/Park/<br>Run Lamp                            | M23    |                   | 10 Amp<br>Red     | Horn  |
| M19    |                   | 25 Amp<br>Natural | Powertrain  | M24    | _                 | 25 Amp<br>Natural | Rear Wiper  |
| M20    |                   | 15 Amp<br>Blue    | Instrument Clus-<br>ter Interior Light,<br>Switch Bank, | M25    |                   | 20 Amp<br>Yellow  | Fuel Pump, Die-<br>sel Lift Pump – If<br>Equipped |
|        |                   |                   | Steering Column<br>Module, Switch<br>Steering Wheel     | M26    |                   | 10 Amp<br>Red     | Power Mirror<br>Switch, Driver<br>Window Switch   |
| M21    |                   | 20 Amp<br>Yellow  | Powertrain  | M27    |                   | 10 Amp<br>Red     | Wireless Control<br>Module, Keyless               |
| M22    |                   | 10 Amp<br>Red     | Horn  |        |                   |                   | Entry Module                                      |

| Cavity | Cartridge<br>Fuse | Mini-<br>Fuse    | Description                                       | Cavity | Cartridge<br>Fuse | Mini-<br>Fuse | Description   |
|--------|-------------------|------------------|---|--------|-------------------|---------------|---|
| M28    |                   | 10 Amp<br>Red    | Powertrain,<br>Transmission<br>Control Module     | M34    |                   | 10 Amp<br>Red | Park Assist,<br>Heater Climate<br>Control Module,                       |
| M29    |                   | 10 Amp<br>Red    | Occupant Classi-<br>fication Module               |        |                   |               | Headlamp Wash,<br>Compass, Rear   |
| M30    |                   | 15 Amp<br>Blue   | Rear Wiper Mod-<br>ule, Power Fold-<br>ing Mirror |        |                   |               | Camera, Door<br>Lamps, Flash-<br>light, Relay Die-<br>sel Cabin Heater, |
| M31    |                   | 20 Amp<br>Yellow | Back-Up Lamps                                     |        |                   |               | Rad Fan Diesel –<br>If Equipped   |
| M32    |                   | 10 Amp<br>Red    | Airbag Module,<br>THATCHUM – If<br>Equipped       | M35    |                   | 10 Amp<br>Red | Heated Mirrors  |
| M33    |                   | 10 Amp<br>Red    | Powertrain  |        |                   |               |   |

| Cavity | Cartridge<br>Fuse | Mini-<br>Fuse     | Description  |
|--------|-------------------|-------------------|--|
| M36    |                   | 20 Amp<br>Yellow  | Power Outlet #3<br>(Instrument Panel<br>or with Console<br>Center) |
| M37    |                   | 10 Amp<br>Red     | Antilock Brakes,<br>Stability Control,<br>Stop Lamp, Fuel<br>Pump  |
| M38    |                   | 25 Amp<br>Natural | Door Lock/<br>Unlock Motors,<br>Liftgate Lock/<br>Unlock Motors    |

The power windows are fused by a 25 Amp circuit breaker located in the Totally Integrated Power Module.

## **VEHICLE STORAGE**

If you are leaving your vehicle dormant for more than 21 days, you may want to take steps to protect your battery. You may do the following:

- Remove the 60 Amp cartridge in the Totally Integrated Power Module (TIPM) labeled Ignition-Off Draw (IOD).
- Or, disconnect the negative cable from the battery.
- Anytime you store your vehicle, or keep it out of service for two weeks or more, run the air conditioning system at idle for about five minutes in the fresh air and high blower setting. This will ensure adequate system lubrication to minimize the possibility of compressor damage when the system is started again.

#### **REPLACEMENT BULBS**

#### Interior Bulbs

|                       | Bulb Number |
|-----------------------|-------------|
| Center & Rear Dome    | 578         |
| Lamp                  |             |
| Center & Rear Reading | 578         |
| Lamps                 |             |
| Front Door Courtesy   | 578         |
| Lamp                  |             |
| Front Header Reading  | 578         |
| Lamps – If Equipped   |             |

|   | Bulb Number |  |  |  |  |
|---|-------------|--|--|--|--|
| Instrument Cluster  | PC74        |  |  |  |  |
| Lamps   |             |  |  |  |  |
| Liftgate Lamp(s)  | 578         |  |  |  |  |
| Overhead Console Read-  | PC579       |  |  |  |  |
| ing Lamps   |             |  |  |  |  |
| Removable Console   | 194         |  |  |  |  |
| Lamp – If Equipped  |             |  |  |  |  |
| Visor Vanity Lamps 6501966  |             |  |  |  |  |
| <b>NOTE:</b> For lighted switches, see your authorized dealer for replacement instructions. |             |  |  |  |  |

#### **Exterior Bulbs**

|                            | Bulb Number             |
|----------------------------|-------------------------|
| Headlamp                   | H11                     |
| Fog Lamp – If Equipped     | PSX24W                  |
| Front Side Marker, Park/   | 3757A or PY27/7W        |
| Turn Signal                |                         |
| Rear Tail, Stop, Turn Sig- | LED (Serviced at Autho- |
| nal Lamp                   | rized Dealer)           |
| Center High-Mounted        | LED (Serviced at Autho- |
| Stop Lamp                  | rized Dealer)           |
| Backup Lamp                | 3157                    |
| License                    | 168                     |

**NOTE:** All of the interior bulbs are glass wedge base or glass cartridge types. Aluminum base bulbs are not approved and should not be used for replacement.

## **BULB REPLACEMENT**

#### Headlamps

- 1. Raise the hood to access the rear of the headlamp housing.
- 2. Slide the red lock tab rearward on the connector, then depress the tab and remove the connector from the bulb.
- 3. Twist the headlamp bulb and pull the bulb from the headlamp housing.
- 4. Install the new headlamp bulb and twist until locked into the headlamp housing.

## **CAUTION!**

Do not touch the new bulb with your fingers. Oil contamination will severely shorten bulb life. If the

## CAUTION! (Continued)

bulb comes in contact with an oily surface, clean the bulb with rubbing alcohol.

5. Connect the wiring connector to bulb and slide red lock tab forward.

#### Front Park/Turn Signal Lamps

- 1. Raise the hood to access the rear of the headlamp housing.
- 2. Twist the turn signal socket and remove from the headlamp housing, then pull the bulb out.
- 3. Push the new bulb into the socket and reinstall the socket by twisting until locked into the headlamp housing.

#### Fog Lamps

**NOTE:** Access to the fog lamp bulb is from the rear of the fascia. On the left rear side of the fascia, remove the push pin and lower the hinged access door on the air dam.

1. From behind the bumper fascia, or the access panel on the air dam, squeeze the two tabs on the side of the bulb socket and pull straight out from the fog lamp.

## **CAUTION!**

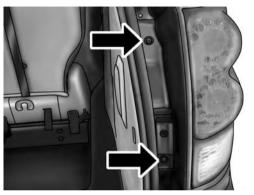
Do not touch the new bulb with your fingers. Oil contamination will severely shorten bulb life. If the bulb comes in contact with an oily surface, clean the bulb with rubbing alcohol.

2. Disconnect the wire harness from the bulb.

3. Reconnect the wiring harness to the new bulb and reinstall by inserting the new bulb straight into the fog lamp until it locks into place.

# Rear Tail, Stop, Turn Signal, Side Marker And Backup Lamps

- 1. Raise the liftgate.
- 2. Remove the tail lamp assembly by removing the two screws from the inboard side. Use a fiber stick or similar tool to gently pry the light on the outboard side to disengage the two ball studs.



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## NOTE:

- If a screwdriver is used, make sure a soft material is placed between the vehicle body and tool so not to scratch the paint.
- The PRY location is best closest to the studs while dislodging them separately.

- 3. Twist the socket and remove from the lamp assembly.
- 4. Pull the bulb to remove it from the socket.
- 5. Replace the bulb, reinstall the socket, and reattach the lamp assembly.

#### Center High-Mounted Stop Lamp (CHMSL)

The CHMSL uses LED lamps that are not serviceable separately. The CHMSL must be replaced as an assembly. See your authorized dealer.

#### License Lamp

The license plate lamp is located under the tailgate light bar and above the license plate.

- 1. Using a small screwdriver, press inward the locking tab on the outboard side of the lamp assembly and pull down on the lamp assembly for removal.
- 2. Twist and remove the socket from the lamp assembly and pull the bulb out to remove.
- Push the bulb into the socket, twist the socket into the lamp assembly and reinstall the lamp assembly into place ensuring the locking tab is secure.

#### FLUID CAPACITIES

|  | U.S.        | Metric      |  |  |  |
|--|-------------|-------------|--|--|--|
| Fuel (Approximate)   | 20 Gallons  | 76 Liters   |  |  |  |
| Engine Oil with Filter   |             |             |  |  |  |
| 3.6L Engine (SAE 5W-20,<br>API Certified)  | 6 Quarts    | 5.6 Liters  |  |  |  |
| Cooling System *   |             |             |  |  |  |
| 3.6L Engine (MOPAR® Antifreeze/<br>Engine Coolant 10 Year/<br>150,000 Mile Formula or<br>equivalent)                   | 13.4 Quarts | 12.6 Liters |  |  |  |
| * Includes heater and coolant recovery bottle filled to MAX level. Add 2.9 Qts (2.8 L) if equipped with a rear heater. |             |             |  |  |  |

## FLUIDS, LUBRICANTS AND GENUINE PARTS

## Engine

| Component         | Fluid, Lubricant, or Genuine Part   |
|-------------------|---|
| Engine Coolant    | We recommend you use MOPAR® Antifreeze/Coolant<br>10 Year/150,000 Mile Formula OAT (Organic Additive<br>Technology) meeting the requirements of Chrysler Ma-<br>terial Standard MS-12106. |
| Engine Oil        | We recommend you use API Certified SAE 5W-20<br>Engine Oil, meeting the requirements of Chrysler Ma-<br>terial Standard MS-6395. Refer to your oil filler cap for<br>correct SAE grade.   |
| Engine Oil Filter | We recommend you use MOPAR® Engine Oil Filters.   |
| Spark Plugs       | We recommend you use MOPAR® Spark Plugs (Gap 0.043 in [1.1 mm]).  |
| Fuel Selection    | 87 Octane   |

## Chassis

| Component                | Fluid, Lubricant, or Genuine Part   |
|--------------------------|---|
| Automatic Transmission   | We recommend you <b>ONLY</b> use MOPAR® ATF+4® Automatic Transmission Fluid. Failure to use ATF+4® fluid may affect the function or performance of your transmission. |
| Brake Master Cylinder    | We recommend you use MOPAR® DOT 3 and SAE J1703 should be used. If DOT 3 brake fluid is not available, then DOT 4 is acceptable.                                      |
| Power Steering Reservoir | We recommend you use MOPAR® Power Steering Fluid<br>+4, MOPAR® ATF+4® Automatic Transmission Fluid.   |

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#### MAINTENANCE SCHEDULE

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance.

Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer tow, extremely hot or cold ambient temperatures, and E85 fuel usage will influence when the "Oil Change Required" message is displayed. Severe Operating Conditions can cause the change oil message to illuminate as early as 3,500 miles (5,600 km) since last reset. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km).

Your authorized dealer will reset the oil change indicator message after completing the scheduled oil change. If a scheduled oil change is performed by someone other than your authorized dealer, the message can be reset by referring to the steps described under "Electronic Vehicle Information Center (EVIC)/Oil Change Required" in "Understanding Your Instrument Panel" for further information.

**NOTE:** Under no circumstances should oil change intervals exceed 10,000 miles (16,000 km) or twelve months, whichever comes first.

#### Once A Month Or Before A Long Trip:

- Check engine oil level
- Check windshield washer fluid level
- Check the tire inflation pressures and look for unusual wear or damage
- Check the fluid levels of the coolant reservoir, brake master cylinder, and power steering and fill as needed
- Check function of all interior and exterior lights

#### Required Maintenance Intervals.

Refer to the maintenance schedules on the following page for the required maintenance intervals.

| At Every Oil Change Interval As Indicated By Oil |
|--|
| Change Indicator System:                         |

- Change oil and filter.
- Rotate the tires. Rotate at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Inspect battery and clean and tighten terminals as required.

| At Every Oil Change Interval As Indicated By Oil |
|--|
| Change Indicator System:                         |

- Inspect automatic transmission fluid if equipped with dipstick.
- Inspect brake pads, shoes, rotors, drums, hoses and park brake.
- Inspect engine cooling system protection and hoses.
- Inspect exhaust system.
- Inspect engine air cleaner if using in dusty or off-road conditions.

#### **Maintenance Chart**

Refer to the Maintenance Schedules on the following pages for the required maintenance intervals.

| Mileage or time passed<br>(whichever comes first)                                   | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 | 70,000  | 80,000  | 90,000  | 100,000 | 110,000 | 120,000 | 130,000 | 140,000 | 150,000 |
|---|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Or Years:   | 2      | 3      | 4      | 5      | 6      | 7       | 8       | 9       | 10      | 11      | 12      | 13      | 14      | 15      |
| Or Kilometers:  | 32,000 | 48,000 | 64,000 | 80,000 | 96,000 | 112,000 | 128,000 | 144,000 | 160,000 | 176,000 | 192,000 | 208,000 | 224,000 | 240,000 |
| Additional Inspections  |        |        |        |        |        |         |         |         |         |         |         |         |         |         |
| Inspect the CV joints.  |        | Х      |        |        | Х      |         |         | Х       |         |         | Х       |         |         | Х       |
| Inspect front suspension, tie rod<br>ends, boot seals, and replace if<br>necessary. | Х      |        | х      |        | х      |         | х       |         | х       |         | х       |         | Х       |         |
| Inspect the brake linings, replace as necessary.                                    | Х      |        | Х      |        | Х      |         | Х       |         | Х       |         | Х       |         | Х       |         |

| Mileage or time passed<br>(whichever comes first)  | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 | 70,000  | 80,000  | 90,000  | 100,000 | 110,000 | 120,000 | 130,000 | 140,000 | 150,000 |
|--|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Or Years:  | 2      | 3      | 4      | 5      | 6      | 7       | 8       | 9       | 10      | 11      | 12      | 13      | 14      | 15      |
| Or Kilometers:   | 32,000 | 48,000 | 64,000 | 80,000 | 96,000 | 112,000 | 128,000 | 144,000 | 160,000 | 176,000 | 192,000 | 208,000 | 224,000 | 240,000 |
| Adjust parking brake on vehicles<br>equipped with four wheel disc<br>brakes.                                   | Х      |        | х      |        | х      |         | Х       |         | х       |         | х       |         | Х       |         |
| Additional Maintenance   |        |        |        |        |        |         |         |         |         |         |         |         |         |         |
| Replace engine air filter.   |        | Х      |        |        | Х      |         |         | Х       |         |         | Х       |         |         | Х       |
| Replace cabin/air conditioning filter.   | Х      |        | х      |        | х      |         | Х       |         | Х       |         | Х       |         | Х       |         |
| Replace spark plugs<br>(3.6L engine). **   |        |        |        |        |        |         |         |         | Х       |         |         |         |         |         |
| Flush and replace the engine<br>coolant at 10 years or<br>150,000 miles (240,000 km)<br>whichever comes first. |        |        |        |        |        |         |         |         | Х       |         |         |         |         | х       |

| Mileage or time passed<br>(whichever comes first)   | 20,000 | 30,000 | 40,000 | 50,000 | 60,000 | 70,000  | 80,000  | 90,000  | 100,000 | 110,000 | 120,000 | 130,000 | 140,000 | 150,000 |
|---|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Or Years:   | 2      | 3      | 4      | 5      | 6      | 7       | 8       | 9       | 10      | 11      | 12      | 13      | 14      | 15      |
| Or Kilometers:  | 32,000 | 48,000 | 64,000 | 80,000 | 96,000 | 112,000 | 128,000 | 144,000 | 160,000 | 176,000 | 192,000 | 208,000 | 224,000 | 240,000 |
| Change automatic transmission<br>fluid and filter if using your ve-<br>hicle for any of the following: po-<br>lice, taxi, fleet, or frequent trailer<br>towing. |        |        |        |        | x      |         |         |         |         |         |         |         |         |         |
| Change automatic transmission fluid and filter.   |        |        |        |        |        |         |         |         |         |         | Х       |         |         |         |
| Inspect and replace PCV valve if necessary.   |        |        |        |        |        |         |         |         | Х       |         |         |         |         |         |

\*\* The spark plug change interval is mileage based only, yearly intervals do not apply.

#### WARNING!

- You can be badly injured working on or around a motor vehicle. Do only service work for which you have the knowledge and the right equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.
- Failure to properly inspect and maintain your vehicle could result in a component malfunction and effect vehicle handling and performance. This could cause an accident.

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#### SUGGESTIONS FOR OBTAINING SERVICE FOR YOUR VEHICLE

#### **Prepare For The Appointment**

If you are having warranty work done, be sure to have the right papers with you. Take your warranty folder. All work to be performed may not be covered by the warranty. Discuss additional charges with the service manager. Keep a maintenance log of your vehicle's service history. This can often provide a clue to the current problem.

#### **Prepare A List**

Make a written list of your vehicle's problems or the specific work you want done. If you've had an accident or work done that is not on your maintenance log, let the service advisor know.

#### **Be Reasonable With Requests**

If you list a number of items and you must have your vehicle by the end of the day, discuss the situation with the service advisor and list the items in order of priority. At many authorized dealer, you may obtain a rental vehicle at a minimal daily charge. If you need a rental, it is advisable to make these arrangements when you call for an appointment.

## IF YOU NEED ASSISTANCE

The manufacturer and its authorized dealer are vitally interested in your satisfaction. We want you to be happy with our products and services.

Warranty service must be done by an authorized dealer. 9 We strongly recommend that you take the vehicle to an authorized dealer. They know your vehicle the best, and are most concerned that you get prompt and high quality service. The manufacturer's authorized dealer have the

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facilities, factory-trained technicians, special tools, and the latest information to ensure the vehicle is fixed correctly and in a timely manner.

This is why you should always talk to an authorized dealer service manager first. Most matters can be resolved with this process.

- If for some reason you are still not satisfied, talk to the general manager or owner of the authorized dealer. They want to know if you need assistance.
- If an authorized dealer is unable to resolve the concern, you may contact the manufacturer's customer center.

Any communication to the manufacturer's customer center should include the following information:

- Owner's name and address
- Owner's telephone number (home and office)

- Authorized dealer name
- Vehicle Identification Number (VIN)
- Vehicle delivery date and mileage

## FCA USA LLC Customer Center

P.O. Box 21-8004

Auburn Hills, MI 48321–8004

Phone: (866) 726-4636

## FCA Canada Inc. Customer Center

P.O. Box 1621

Windsor, Ontario N9A 4H6

Phone: (800) 465-2001 English / (800) 387-9983 French

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#### In Mexico contact:

Av. Prolongacion Paseo de la Reforma, 1240

Sante Fe C.P. 05109

Mexico, D. F.

In Mexico City: 5081-7568

Outside Mexico City: 1-800-505-1300

# Customer Assistance For The Hearing Or Speech Impaired (TDD/TTY)

To assist customers who have hearing difficulties, the manufacturer has installed special TDD (Telecommunication Devices for the Deaf) equipment at its customer center. Any hearing or speech impaired customer, who has access to a TDD or a conventional teletypewriter (TTY) in the United States, can communicate with the manufacturer by dialing 1–800–380–CHRY. Canadian residents with hearing difficulties that require assistance can use the special needs relay service offered by Bell Canada. For TTY teletypewriter users, dial 711 and for Voice callers, dial 1 800 855-0511 to connect with a Bell Relay Service operator.

#### Service Contract

You may have purchased a service contract for a vehicle to help protect you from the high cost of unexpected repairs after the manufacturer's New Vehicle Limited Warranty expires. The manufacturer stands behind only the manufacturer's service contracts. If you purchased a manufacturer's service contract, you will receive Plan Provisions and an Owner Identification Card in the mail within three weeks of the vehicle delivery date. If you have any questions about the service contract, call the manufacturer's Service Contract National Customer Hotline at 1-800-521-9922 (Canadian residents, call (800) 465–2001 English / (800) 387–9983 French).

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The manufacturer will not stand behind any service contract that is not the manufacturer's service contract. It is not responsible for any service contract other than the manufacturer's service contract. If you purchased a service contract that is not a manufacturer's service contract, and you require service after the manufacturer's New Vehicle Limited Warranty expires, please refer to the contract documents, and contact the person listed in those documents.

We appreciate that you have made a major investment when you purchased the vehicle. An authorized dealer has also made a major investment in facilities, tools, and training to assure that you are absolutely delighted with the ownership experience. You will be pleased with their sincere efforts to resolve any warranty issues or related concerns.

# WARNING!

Engine exhaust, some of its constituents, and certain vehicle components contain, or emit, chemicals known to the State of California to cause cancer and birth defects, or other reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain, or emit, chemicals known to the State of California to cause cancer and birth defects, or other reproductive harm.

# WARRANTY INFORMATION

See the Warranty Information Booklet, located on the DVD, for the terms and provisions of FCA US LLC warranties applicable to this vehicle and market.

## **MOPAR® PARTS**

MOPAR® fluids, lubricants, parts, and accessories are available from an authorized dealer. They are recommended for your vehicle in order to help keep the vehicle operating at its best.

# **REPORTING SAFETY DEFECTS**

# In The 50 United States And Washington, D.C.

If you believe that your vehicle has a defect that could cause a crash or cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying the manufacturer.

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 authorized dealer, and the manufacturer.

To contact NHTSA, you may either call the Auto Safety Hotline toll free at 1–888–327–4236 (TTY: 1–800–424– 9153), or go to http://www.safercar.gov; or write to: Administrator, NHTSA, 1200 New Jersey Avenue, SE., West Building, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

# In Canada

If you believe that your vehicle has a safety defect, you should contact the Customer Service Department immediately. Canadian customers who wish to report a safety defect to the Canadian government should contact Transport Canada, Motor Vehicle Defect Investigations and Recalls at 1-800-333-0510 or go to http://www.tc.gc.ca/ roadsafety/

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# PUBLICATION ORDER FORMS

To order the following manuals, you may use either the website or the phone numbers listed below. Visa, Mastercard, American Express, and Discover orders are accepted. If you prefer mailing your payment, please call for an order form.

**NOTE:** A street address is required when ordering manuals (no P.O. Boxes).

# Service Manuals

These comprehensive Service Manuals provide the information that students and professional technicians need in diagnosing/troubleshooting, problem solving, maintaining, servicing, and repairing FCA US LLC vehicles. A complete working knowledge of the vehicle, system, and/or components is written in straightforward language with illustrations, diagrams, and charts.

## **Diagnostic Procedure Manuals**

Diagnostic Procedure Manuals are filled with diagrams, charts and detailed illustrations. These practical manuals make it easy for students and technicians to find and fix problems on computer-controlled vehicle systems and features. They show exactly how to find and correct problems the first time, using step-by-step troubleshooting and drivability procedures, proven diagnostic tests and a complete list of all tools and equipment.

## **Owner's Manuals**

These Owner's Manuals have been prepared with the assistance of service and engineering specialists to acquaint you with specific FCA US LLC vehicles. Included are starting, operating, emergency and maintenance procedures as well as specifications, capabilities and safety tips.

Call toll free at:

- 1-800-890-4038 (U.S.)
- 1-800-387-1143 (Canada)

# Or

Visit us on the Worldwide Web at:

• www.techauthority.com

# DEPARTMENT OF TRANSPORTATION UNIFORM TIRE QUALITY GRADES

The following tire grading categories were established by the National Highway Traffic Safety Administration. The specific grade rating assigned by the tire's manufacturer in each category is shown on the sidewall of the tires on your vehicle.

All passenger car tires must conform to Federal safety requirements in addition to these grades.

#### 652 IF YOU NEED CONSUMER ASSISTANCE

# 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 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 Grades

The Traction grades, from highest to lowest, are AA, A, B, and C. These 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.

# 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.

#### **Temperature Grades**

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. 109. Grades B and A represent higher levels of performance on the laboratory test wheel, than the minimum required by law.

# WARNING!

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

| Adding Engine Coolant (Antifreeze)                 |                                     |
|--|-------------------------------------|
| Adding Fuel  | Air Pressure, Tires                 |
| Adding Washer Fluid                                | Alarm Light                         |
| Additives, Fuel                                    | Alarm (Security Alarm)              |
| Adjustable Pedals                                  | Alterations/Modifications, Vehicle  |
| Airbag   | Antenna, Satellite Radio            |
| Airbag Deployment                                  | Antifreeze (Engine Coolant)         |
| Airbag Light                                       | Disposal                            |
| Airbag Maintenance                                 | Anti-Lock Warning Light             |
| Airbag, Side                                       | Anti-Theft System                   |
| Airbag, Window (Side Curtain)                      | Appearance Care                     |
| Air Cleaner, Engine (Engine Air Cleaner Filter)593 | Ashtray                             |
| Air Conditioner Maintenance                        | Assistance Towing                   |
| Air Conditioning                                   | Assist, Hill Start                  |
| Air Conditioning Controls                          | Auto Down Power Windows             |
| Air Conditioning Filter                            | Automatic Dimming Mirror            |
| Air Conditioning, Rear Zone                        | Automatic Door Locks                |
| Air Conditioning Refrigerant                       | Automatic Headlights                |
| Air Conditioning System                            | Automatic Temperature Control (ATC) |

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| Adding Coolant (Antifreeze)                     | Diagnostic System, Onboard  |
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| Coolant Level                                   | Dipsticks                   |
| Disposal of Used Coolant                        | Automatic Transmission      |
| Drain, Flush, and Refill                        | Oil (Engine)                |
| Inspection                                      | Power Steering              |
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| Electronic Speed Control (Cruise Control)    |
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| Electronic Vehicle Information Center (EVIC) |
| Emergency, In Case of                        |
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| Jacking                                      |
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| Emission Control System Maintenance |
|-------------------------------------|
| Engine                              |
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| Block Heater                        |
| Break-In Recommendations            |
| Checking Oil Level                  |
| Compartment                         |
| Compartment Identification          |
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| Oil                                 |
| Oil Selection                       |
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| Starting                            |
| Temperature Gauge                   |

| Engine Oil Viscosity               | Turn Signal                          |
|------------------------------------|--------------------------------------|
| Engine Oil Viscosity Chart         | Flash-To-Pass                        |
| Enhanced Accident Response Feature | Flexible Fuel Vehicles               |
| Entry System, Illuminated          | Cruising Range                       |
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| Event Data Recorder                | Fuel Requirements                    |
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| Exhaust System                     | Replacement Parts                    |
| Exterior Lights                    | Starting                             |
|                                    | Flooded Engine Starting              |
| Fabric Care                        | Floor Console                        |
| Filler Location Fuel               | Fluid Capacities                     |
| Filters                            | Fluid Leaks                          |
| Air Cleaner                        | Fluid Level Checks                   |
| Air Conditioning                   | Automatic Transmission               |
| Engine Oil                         | Brake                                |
| Engine Oil Disposal                | Cooling System                       |
| Flashers                           | Power Steering                       |
| Hazard Warning                     | Fluids, Lubricants and Genuine Parts |

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| Fog Lights                         |
|------------------------------------|
| Fog Light Service                  |
| Fold in Floor (Stow 'n Go) Seating |
| Freeing A Stuck Vehicle            |
| Fuel                               |
| Adding                             |
| Additives                          |
| Clean Air                          |
| Conserving                         |
| Economy Mode                       |
| Ethanol                            |
| Filler Cap (Gas Cap)               |
| Filler Door (Gas Cap)              |
| Gasoline                           |
| Gauge                              |
| Light                              |
| Materials Added                    |
| Methanol                           |
| Octane Rating                      |
|                                    |

| Requirements                   |
|--------------------------------|
| Saver Mode                     |
| Tank Capacity                  |
| Fuel, Flexible                 |
| Jueling                        |
| uel Optimizer                  |
| uel Saver                      |
| <sup>5</sup> uses              |
|                                |
| Garage Door Opener (HomeLink®) |
| Gas Čap (Fuel Filler Cap)      |
| Gasoline, Clean Air            |
| Gasoline (Fuel)                |
| Conserving                     |
| Gasoline, Reformulated         |
| Gauges                         |
| Coolant Temperature            |
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|---|------------------|
| Gear Ranges                                 | Replacing .      |
| Gear Select Lever Override                  | Time Delay       |
| General Information                         | Washers          |
| Glass Cleaning                              | Head Restrain    |
| Gross Axle Weight Rating                    | Heated Mirror    |
| Gross Vehicle Weight Rating                 | Heater           |
| Guide, Body Builders                        | Heater, Engine   |
| GVWR  | High Beam/Lo     |
|   | Hill Start Assis |
| Hands-Free Phone (Uconnect®)                | Hitches          |
| Hazard                                      | Trailer Towi     |
| Driving Through Flowing, Rising, or Shallow | HomeLink® (0     |
| Standing Water                              | Hood Release     |
| Hazard Warning Flasher                      | Hook, Coat       |
| Headlights                                  |                  |
| Bulb Replacement                            | Ignition         |
| Cleaning                                    | Кеу              |
| Lights On Reminder                          | Ignition Key R   |

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| Replacing                                    |
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| Trailer Towing                               |
| omeLink® (Garage Door Opener)                |
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| ook, Coat                                    |
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| nition                                       |
| Key  |
| nition Key Removal                           |

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| Illuminated Entry                  | Key-In Reminder           |
|------------------------------------|---------------------------|
| Immobilizer (Sentry Key)           | Keyless Entry System      |
| Infant Restraint                   | Key, Programming          |
| Information Center, Vehicle        | Key, Replacement          |
| Inside Rearview Mirror             | Keys                      |
| Instrument Cluster                 | Key, Sentry (Immobilizer) |
| Instrument Panel and Controls      |                           |
| Instrument Panel Cover             | Lane Change Assist        |
| Instrument Panel Lens Cleaning     | Lap/Shoulder Belts        |
|                                    | Latches                   |
| Interior Appearance Care           | Hood                      |
| Interior Lights                    | Lead Free Gasoline        |
| Intermittent Wipers (Delay Wipers) | Leaks, Fluid              |
| Introduction                       | Life of Tires             |
|                                    | Liftgate                  |
| Jack Location                      | Light Bulbs               |
| Jack Operation                     | Lights                    |
| Jump Starting                      | Airbag                    |
| * *                                | Alarm                     |

| Anti-Lock                                       |
|---|
| Automatic Headlights                            |
| Back-Up   |
| Battery Saver                                   |
| Brake Assist Warning                            |
| Brake Warning                                   |
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| Center Mounted Stop                             |
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| Electronic Stability Program (ESP) Indicator482 |
| Engine Temperature Warning                      |
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| Hazard Warning Flasher                          |
| Headlights                                      |
| Headlights On Reminder                          |
| High Beam Indicator                             |
| High Beam/Low Beam Select                       |

| Illuminated Entry                              |
|--|
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# INSTALLATION OF RADIO TRANSMITTING EQUIPMENT

Special design considerations are incorporated into this vehicle's electronic system to provide immunity to radio frequency signals. Mobile two-way radios and telephone equipment must be installed properly by trained personnel. The following must be observed during installation.

The positive power connection should be made directly to the battery and fused as close to the battery as possible. The negative power connection should be made to body sheet metal adjacent to the negative battery connection. This connection should not be fused.

Antennas for two-way radios should be mounted on the roof or the rear area of the vehicle. Care should be used in mounting antennas with magnet bases. Magnets may affect the accuracy or operation of the compass on vehicles so equipped. The antenna cable should be as short as practical and routed away from the vehicle wiring when possible. Use only fully shielded coaxial cable.

Carefully match the antenna and cable to the radio to ensure a low Standing Wave Ratio (SWR).

Mobile radio equipment with output power greater than normal may require special precautions.

All installations should be checked for possible interference between the communications equipment and the vehicle's electronic systems.



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