OWNER'S MANUAL

1977

Checker Motors Corporation
KALAMAZOO, MICHIGAN 49007

TAXICAB
MARATHON

Know Your Checker

You'll enjoy driving your new Checker much more after you have acquainted yourself with its many features and advantages. This manual gives you valuable information about the operation and maintenance of your new vehicle and important safety information. It is supplemented by three convenient folders which provide additional consumer information, vehicle maintenance, emission controls and warranties. We urge you to read these publications carefully and follow the recommendations recorded to assist in the efficient operation of your Checker vehicle. The serial number of your Checker is affixed in five separate locations. (1) On a reference plate attached to firewall in the engine compartment, (2) at left upper corner of dash panel, (3) on the rear surface of left front door post, (4) on boss located on left side of transmission, and (5) on engine boss (rearward of distributor pad on 6-cyl and at front of cylinder block top surface on right hand bank for v/8 engines).

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OWNER SERVICE CERTIFICATE

When you accepted delivery of your Checker vehicle, you received an Owner Service Certificate issued by your dealer. The Warranty on your Checker is a part of your Service Certificate, and is printed in full therein. Parts replaced under the agreement are done so without charge for materials or labor by any authorized Checker dealer in the United States and Canada. Be sure that your dealer has issued your Service Certificate — it will identify your vehicle to any Checker dealer.

All information, illustrations and specifications contained in this manual are based on the latest product information available at the time of publication. The right is reserved to make changes at any time without notice.

Where dual mileages or dual time intervals are indicated for checks and maintenance the lower figures refer to vehicles used in severe service such as Taxicab, Commercial, and Trailer Towing.

DOORS AND LOCKS

FOR YOUR CONVENIENCE you received two sets of keys. The square-shaped key operates the ignition, while the doors, glove compartment and trunk are operated by the round-headed key. As a safety precaution, we suggest that you record the identifying key number so that duplicates may be obtained from your dealer or locksmith in the event of loss.

To lock doors from the outside: All doors may be locked without the key by depressing the inside locking button and then closing the door.

To lock doors from the inside: Any door may be locked from the inside by merely pushing down on the lock button.

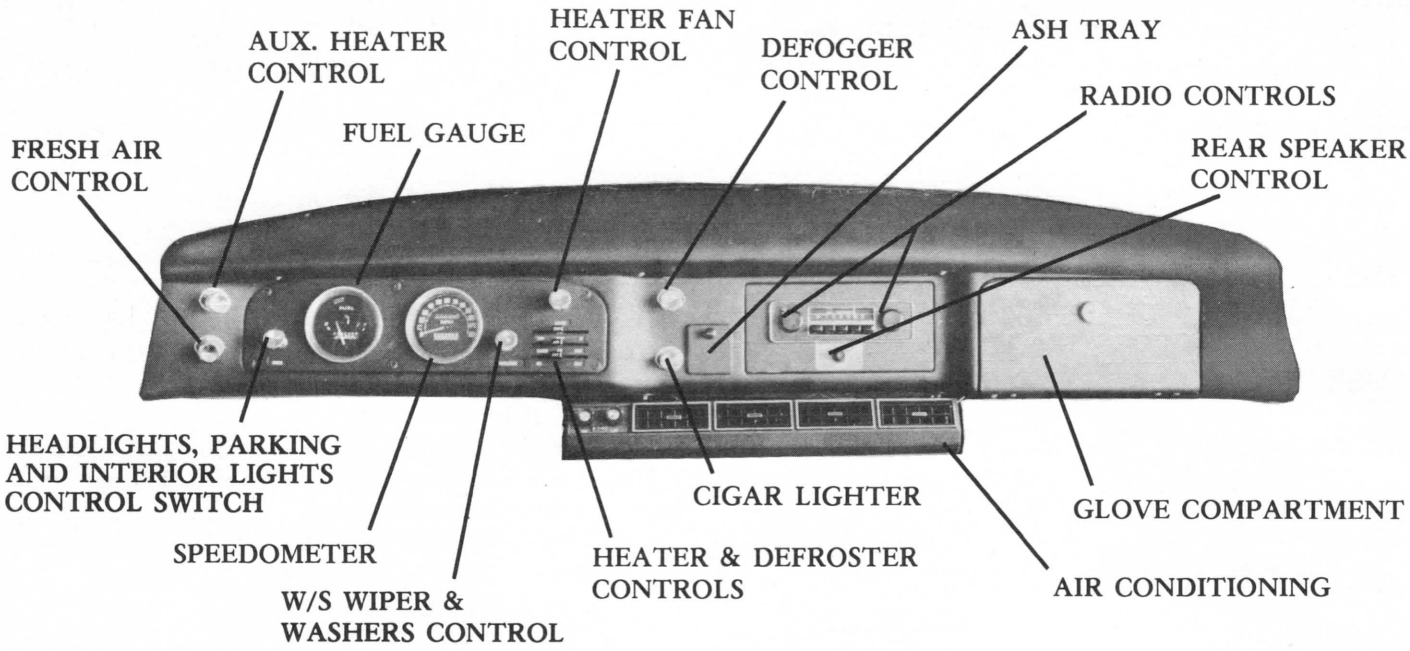
To unlock front doors from the outside: Turn your key forward, then return to vertical position. Now push-in the button on the door handle and open door.

To unlock doors from the inside: If the door is locked, you must pull the door lock button upward before the door handle can be raised.

TRUNK LOCK. You can unlock the trunk by turning the round-headed key ¼ turn to the right until the latch snaps open. Return the key to the vertical position for removal.

IF A LOCK FREEZES. If your trunk or door locks freeze in cold weather, heat the end of the key for a few seconds with a match or cigarette lighter—then place the key in the lock and open. It may be necessary to repeat the procedure several times. Do not force a key that will not turn, as this may result in the key breaking in the lock.

INSTRUMENTS AND CONTROLS



INSTRUMENTS AND CONTROLS for operating your new Checker are conveniently positioned so that you can see and use them with ease. As you drive, you will become familiar with their operation and location.

INSTRUMENTS, gauges and warning lights will show at a glance many important things about your car's performance. Familiarize yourself with their purpose and location. Make it a habit to scan the instruments after you start the motor and frequently while driving.

AUXILIARY HEATER CONTROL. Optional auxiliary underseat heater is controlled by a push-pull switch with two (2) stops. The first is SLOW fan speed and the second is FAST.

FRESH AIR CONTROL KNOB. Use it to increase ventilation and to control the amount of fresh air entering your car. This knob operates the left-hand vent. Pull out to increase air flow. Push in to decrease air flow.

HEADLIGHT, PARKING LIGHTS & INTERIOR LIGHTS are operated by a single switch. Pull knob outward to the first of two positions, the switch turns on the parking lights, tail-lights, license light, and side marker lights. At the second position, all the lights, plus the headlights, are on. Both positions illuminate the instrument panel lights, which can be dimmed or turned off by turning the switch knob clock-wise. Turn switch counter clock-wise to turn on interior lights.

FUEL GAUGE shows you the approximate level of gasoline in the fuel tank when the ignition is on. The position of the pointer will vary slightly during acceleration, braking, and when you are going up or down a hill.

SPEEDOMETER. Your car's forward speed, in kilometers per hour (k.p.h.) and miles per hour (m.p.h.), is shown on the Speedometer. The Odometer (mileage gauge), located beneath the Speedometer, records the total mileage that your Checker has been driven and is useful for keeping track of maintenance and gas mileage.

WINDSHIELD WIPERS are electric operated and turned on by rotating the wiper knob to the right. The first position is slow — the second position is fast.

WINDSHIELD WASHERS are operated by first turning the windshield wiper knob to the right to either the slow or fast position, and then pressing the wiper control knob. Pressing and holding the knob in will send water or cleaning fluid agent onto the windshield. Keep the container under the hood filled at all times. A cleaning solvent aids in the cutting of road film and grease from the windshield, and is recommended for constant use when temperature is above freezing. The solvent will not prevent the spray from freezing on the glass, so do not attempt to clean the windshield in freezing weather unless cold weather precautions have been taken.

When temperatures of freezing or below can be expected, you should use windshield washer anti-freeze and pre-warm the windshield with your defrosters before using the washers. Fill reservoir only 3/4 full in winter to allow for expansion if the solution should freeze. NOTE: To assure yourself of proper operation of your windshield washers, the washer reservoir should be cleaned and refilled at least twice annually to remove any deposits that may plug-up the system.

HEATER FAN CONTROL. Both heating and defrosting are accomplished with a single three-speed fan by rotating control knob to the right. First position is slow—second position is medium—third position is fast.

HEATER AND DEFROSTER CONTROLS. Your Checker's heater-defroster unit is a fresh-air type unit that provides effective year-round control of temperature. Both heating and defrosting are accomplished with a single blower. The amount of air and the direction of its flow are controlled by the sliding levers on the heater-defroster combination.

For maximum heating: Set the bottom lever marked "DEF" at HEAT, the center lever marked "AIR" at OPEN and the top lever marked "TEMP" at HIGH — then turn the heater's fan switch in a clockwise direction for the desired fan speed. For fast defrosting or to remove very heavy frost: Set the bottom lever at DEFROST, the center lever at OPEN and the top lever at HIGH — then turn fan control knob to desired speed.

For normal winter driving: Keep the bottom lever at HEAT and the center lever at OPEN. The top lever may then be positioned anywhere between LOW and HIGH to attain the desired temperature. The fan may be turned on at any time to speed circulation of air.

CIGAR LIGHTER. To use, merely depress the lighter knob. The lighter will stay-in until heated and automatically snap-out when it has reached the proper temperature.

REAR WINDOW DEFOGGER is an optional equipment item. It is controlled by a single pull-knob control. Switch has two blower speed positions, slow and fast. To operate, simply pull knob outward to position desired. Defogger is turned off by pushing knob forward.

ASH TRAYS. Your Checker has an ash tray in the center of the dashboard and two in the passenger compartment, at each arm rest. To remove front ash trays, merely press down on the snuffer plate and pull out. Rear ash trays must be lifted out of ash tray

RADIO. (Optional) Stations are selected with five push-buttons. A manual station selector knob is on the right of the console, while the knob on the left acts as the on-off switch, volume control and tune control. To reset any selector button on your console radio or to tune in another station within range, turn on the radio and let it play for about ten seconds to warm it up. Next, pull the button to be reset straight out until it stops. Then turn the tuning knob to the station setting you want for the button. When the sound is clearest and loudest, push the selector button all the way in to lock it to the station setting.

REAR SPEAKER CONTROL — Optional equipment — This control enables you to blend or modulate the volume of the front and rear seat speakers. As the control knob is turned counterclockwise the volume from the rear speaker is increased. Turning the knob clockwise increases the front speaker volume. The center position of the knob gives approximately equal volume from front and rear speakers.

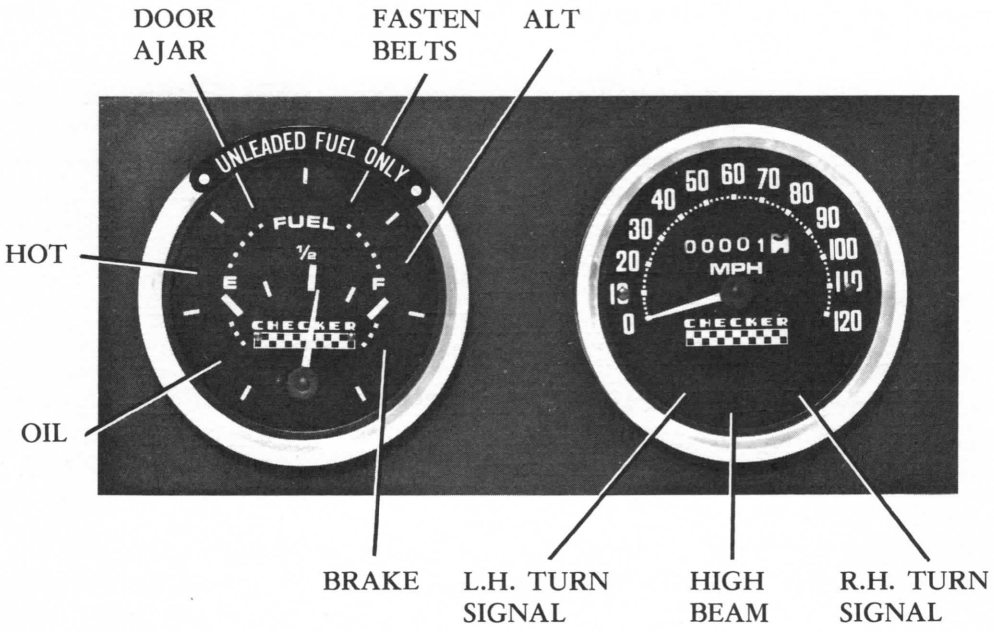
GLOVE COMPARTMENT. It has been furnished with a lock and may be locked or unlocked with the round-headed key that is used to operate the trunk lock.

AIR CONDITIONING. (Optional) The Checker air conditioner selectively controls cool, dry air which circulates within the car. The air conditioning controls are located on the L.H. front face of the evaporator housing, which is mounted under the dash in the center of the vehicle. The L.H. control knob is the on-and-off switch as well as regulating the fan speed from low to medium to high in three stages by turning control knob to right. The R.H. control regulates air conditioning unit air temperature. Coldest setting is obtained by turning knob to extreme right.

Individually selective air flow is possible by adjusting the swivel louvers, mounted across the face of the evaporator. The louvers can be aimed to circulate air in various directions.

Fresh outside air may be mixed with circulating air in the car at any time by opening the vent window or the fresh air intake. The fresh air intake is the push-pull chrome plated knob located at the far left of the instrument panel. If the car has been parked in the sun with the windows closed, maximum cooling rate can be had in a short time by opening the windows for a brief period when starting to drive. This will exhaust the accumulated warm air. After driving a short distance, simply close the windows for maximum cooling. In winter it is advisable to operate the air conditioner at short intervals to assure protective lubrication of working parts. This is the only regular service required.

NOTE: It is advisable to start the engine before operating the air conditioner to reduce the battery load and provide easier starting.



FUEL GAUGE SPEEDOMETER

DOOR AJAR WARNING LIGHT is operational with ignition on or off when any door or doors are not completely closed.

SEAT BELT WARNING LIGHT. The front seat belts are linked to a buzzer and light which remind occupants to fasten seat belts. (See Page 9)

HOT-ENGINE TEMPERATURE LIGHT. A red signal light "HOT" will appear momentarily when starting the car to let you know that it is operating. The only other time the "HOT" light should appear is when the engine reaches an abnormally-high temperature. If the light comes on during extreme driving conditions, such as an extended idle, turn off the air conditioner (if used) and run the engine slightly faster than idle speed with the transmission in neutral. If the light does not go off within a short period of time (1-2 minutes) then turn off the engine until the cause of overheating is corrected.

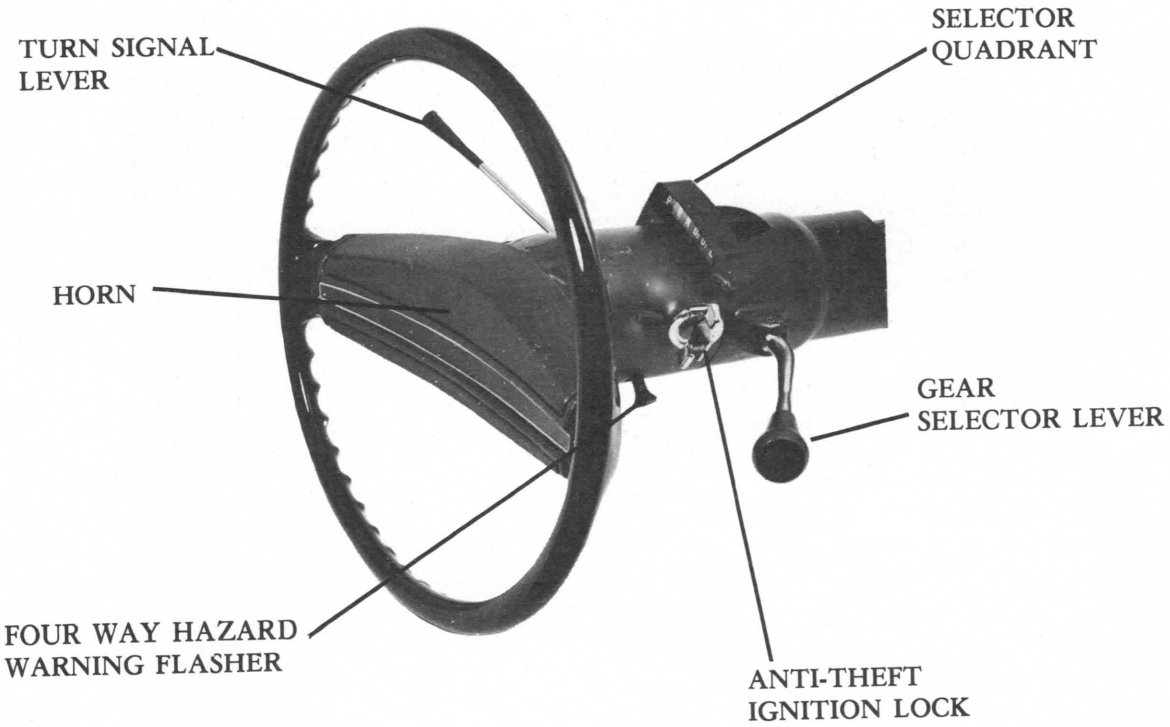
ALTERNATOR WARNING LIGHT. A red light "ALT" will appear with the ignition key in the "on" position and the engine not running. This light indicates the warning signal is operational. When the engine is started, the warning light should go out. If the red light comes on with the ignition key in the "off" position or with the engine running, have the charging system checked for malfunction.

OIL - ENGINE OIL PRESSURE LIGHT. A red light "OIL" will appear when the ignition is turned "on" informing you that the warning light is operational. When the engine starts and oil pressure builds up, the light will go out. Should the light go on while driving, stop the engine immediately and check the cause for the low oil pressure. This could be the result of dangerously-low oil level in the crankcase. Driving the car with low oil pressure can cause extensive engine damage.

BRAKE SYSTEM WARNING LIGHT. If low pressure has developed in either the front or rear brake systems, this red light will come on when the brake pedal is depressed. Have your Checker dealer locate and correct the trouble immediately. To assure you of proper operation, the Brake System Warning Light will operate each time the ignition switch is placed in the start position. This same warning light indicates that the parking brake is applied.

TURN SIGNAL ARROWS indicate operation of the left or right turn signal.

HIGH BEAM INDICATOR will light up whenever the headlight high beams are being used.



TURN SIGNAL LEVER, located on the left side of the steering column, is operated by moving the lever in the direction of the desired turn — upward for a right turn — down to turn left. The signal lever automatically returns to a neutral position after the turn has been completed. Lane change feature is also included — a slight pressure in either direction will operate turn signal, which will return to normal when pressure is released.

SELECTOR QUADRANT. Located on top of steering column. Refer to page 11.

HORN. The horn on your Checker is actuated by firmly pressing on the pad in the center of the steering wheel. As a good motorist, use of the horn should be kept at a minimum. However, acquaint yourself as soon as possible with this function of your car in order to be able to give a warning to a pedestrian or another motorist if necessary.

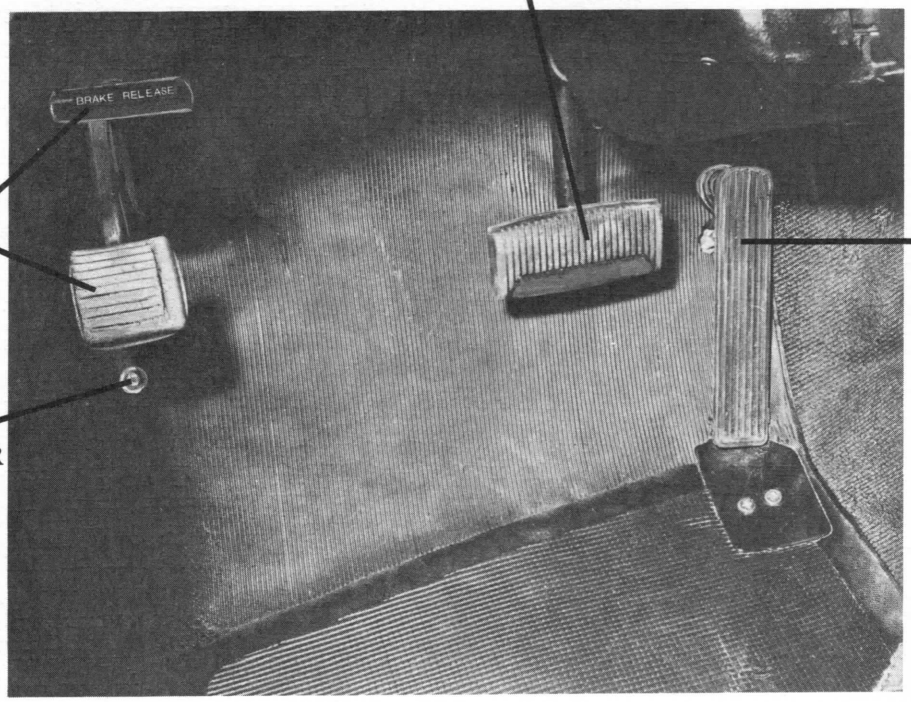
GEAR SELECTOR LEVER is positioned on the right side of the steering column. Refer to page 11.

FOUR WAY HAZARD WARNING FLASHER. In an emergency the switch is activated by simply pushing it in causing all four turn signals to flash simultaneously. It is cancelled by pulling outward.

ANTI-THEFT IGNITION, STEERING AND TRANSMISSION LOCK. The anti-theft lock, located on the right side of the steering column, has five positions. Starting from the full counterclockwise position, they are accessory, lock, off, run and start. In "lock" position, the steering and shift mechanisms are automatically locked along with the ignition system to provide added theft protection for your car. The transmission selector lever must be in "park" position before the key can be turned to the "lock" position. The ignition switch "accessory" position permits operation of electrical accessories when the engine is not running. The "off" position is provided so that the ignition can be turned off without locking the steering column or transmission linkage.

To start engine, as well as operate other electrical circuits, insert key and turn clockwise. Release pressure on key as soon as engine starts. The ignition key can be inserted or withdrawn only when the switch is in "lock" position.

BACK-UP LIGHTS turn on automatically when the ignition is on and when the transmission is in reverse. They illuminate the rear area, behind your car and warn drivers and pedestrians that you are operating in reverse.



PARKING BRAKE PEDAL must be pushed down all the way to apply the parking brake. To release the brake, pull the brake release lever, located to the left and below the dash. The "Brake" warning light operates when the brake is applied.

POWER BRAKE PEDAL on your Checker is designed to allow you to retain "pedal feel" even though the effort needed to apply the brakes is greatly reduced. This system uses a built-in protection that provides 2 to 3 power-assisted applications after the engine is shut off. When parking on steep grades, set the parking brake. Do not release the parking brake until you have started the engine. Check the power brake fluid reservoir every 12 months or 7500 miles.

Try to avoid sudden stops during the break-in period of your car. Slow, gradual stops will enable the brake linings to wear-in uniformly — for longer life.

ACCELERATOR. Your foot on this pedal determines how your car will react under all driving conditions. A heavy foot on the gas pedal will cause your car to accelerate faster than if you had used light pressure — but fast acceleration is seldom a necessity, and often dangerous. While your Checker's economy of operation is greatly affected by traffic conditions and the load in your car — it is chiefly determined by your rate of acceleration. Real gas economy can only be attained through intelligent use of your gas pedal.

HEADLIGHT BEAM SELECTOR enables you to use two beams for varying night driving conditions. The low beams provide the necessary light on lighted roads and streets. The high beams give you better long-range visibility on dark roads. To change from one set of beams to the other, simply press the beam selector, located on the left end of the floor board, with your left foot. A small green indicator light, located at lower center of the speedometer, will light up whenever the high beams are in use.

SEAT ADJUSTMENT is accomplished by moving the control knob (located at the left side of the front seat) to the rear and sliding the seat forward or backward to the desired position. NOTE: Adjust the seat only when the car is at a standstill.

REAR VIEW MIRROR. The center location of the rear view mirror allows you to see traffic conditions behind, with only a slight eye movement necessary. Get in the habit of glancing in your rear view mirror as you drive.

SUN VISORS control the sun's glare through the windshield and windows by tilting in both a downward and outward direction.

HEAD RESTRAINTS. Head restraints are provided to reduce whiplash injuries. Do not remove.

SEAT BELT RESTRAINT SYSTEM.

Lap and shoulder belts provide added security and comfort for you and your passengers. Proper use and care of these belts will assure continuance of this security.

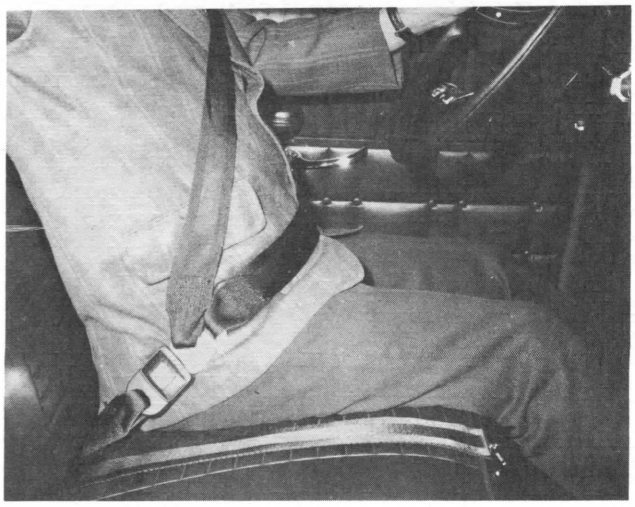
FRONT SEAT LAP-SHOULDER BELT COMBINATION

Adjust front seat to satisfaction of driver and sit erect and well back in seat.

In a single motion, pull the lap-shoulder belt webbing across lap far enough to permit inserting metal latch plate end of belt into the buckle, until a snap is heard. If webbing is not pulled out far enough to reach buckle, let lap belt rewind into its retractor to release lock mechanism, so belt can be pulled out to the proper length.

Position "lap" portion of belt across lap as LOW ON HIPS as possible. To reduce the risk of sliding under belt during an accident, adjust to SNUG FIT by pulling belt firmly across lap in direction of lap belt retractor so it can take up slack. The belt retractors are designed to automatically take up excess webbing.

The front seat shoulder belts in this vehicle are equipped with a "web sensitive retractor" which is designed to grip the belt *only* during a sudden stop or impact. At other times it is designed to move freely with the occupant.



CAUTION: *A snug fit a low lap belt position are essential to lessen the chance of injury in the event of an accident because this spreads the force exerted by the lap belt in a collision over the strong hip bone structure rather than across the soft abdominal area. To help lessent the chance of injury in the event of an accident—never use the same belt for more than one person at a time; avoid wearing belts in a twisted condition; and do not allow belts or hardware to become pinched between the seat structural [mattallic] members or in the door.*

For best restraint the slight tension on the shoulder caused by the shoulder belt retractor is desirable.

To unfasten belts, depress push button in center of buckle. When no longer in use, front seat lap-shoulder belts can be stowed by allowing them to rewind into their retractors.

NOTE: Take care not to let the "lap" portion of the belt twist while it is being rewound into the retractor. The bulk of the twisted belt may cause the retractor to jam so it will not rewind furhter, while at the same time the retractor locking mechanism may prevent the belt from being withdrawn. If your retractor becomes jammed, or other parts of the restraint system do not operate properly take the vehicle to your dealer for service.

BELT RESTRAINT BUZZER/LIGHT REMINDER

When the ignition key is turned to On or Start, a reminder light is designed to come on for four to eight seconds, to remind occupants to fasten their belt restraints.
If the driver has not buckled his belt restraint prior to turning the key to On or Start, a buzzer is designed to sound for four to eight seconds to remind him to do so.
If the belt restraint system or reminder system does not work as described, see your Checker dealer for information and assistance.

LAP BELTS [FOR REAR SEAT AND CENTER FRONT SEAT PASSENGERS]

Seating positions next to side windows have retractors which are designed to automatically take up excess webbing. These belts should be positioned, secured and released as described above under "Lap-Shoulder Belt Combination."
Lap belts at center seating positions also should be positioned, secured and released as described above, and adjusted to a SNUG FIT by pulling on the end of the belt extending from the adjustable latch plate.

To lengthen lap belt at center seating positions place adjustable latch plate at right angles to the belt webbing and pull on latch plate; belt should then slide easily through the adjustment feature.

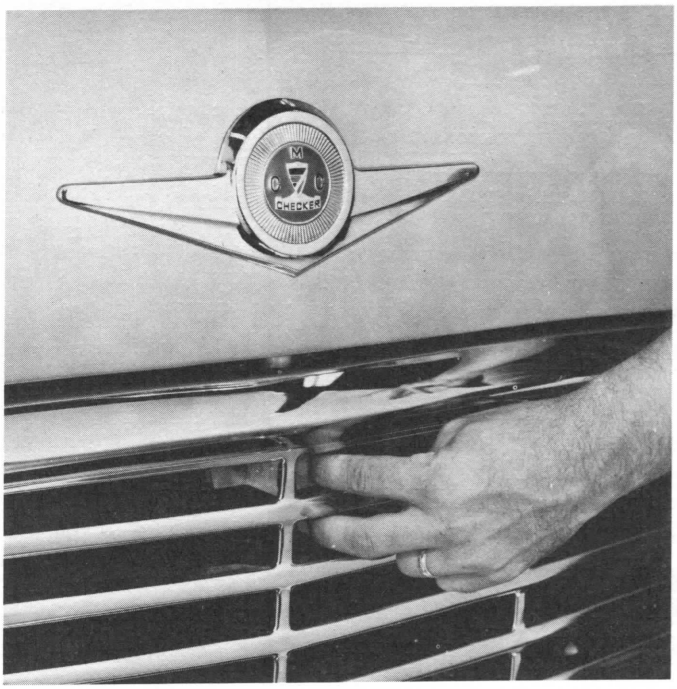
OPTIONAL SHOULDER BELTS [REAR SEAT, OUTBOARD]

When properly worn with a lap belt, a shoulder belt can provide additonal protection by preventing or minimizing impact with the car interior, by restraining forward motion of the upper torso in a collision. This is particularly true in the case of frontal force impact.

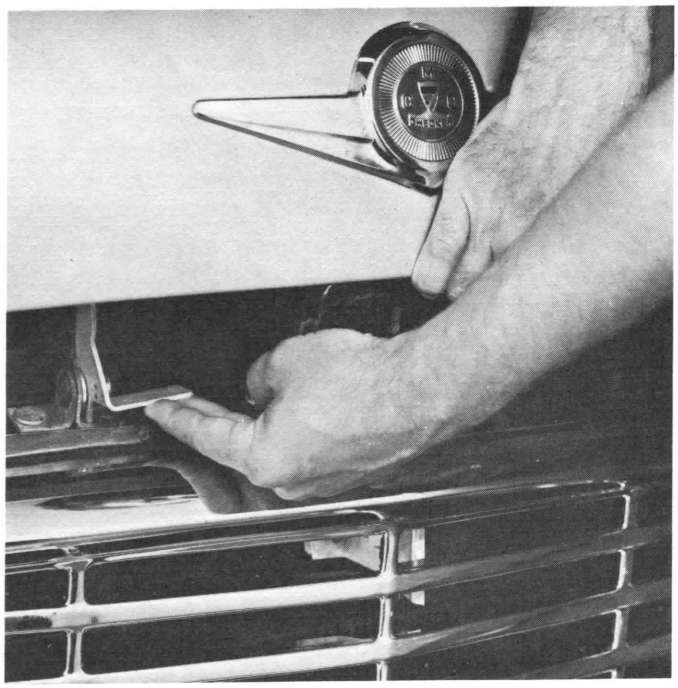
CAUTION: *Excessive slack could result in increased personal injury due to reduced restraint system effectiveness.*
Do not wear shoulder belt under the arm or otherwise improperly positioned. Such improper use could increase the chance of injury and/or the severity of injury in the event of an accident.

BELT RESTRAINT INSPECTION

Periodically inspect belts, buckles, adjustable latch plates, retractors, reminder systems, and anchors for damage that could lessen the effectiveness of the restraint system.
Keep sharp edges and damaging objects away from belts, and other parts of restraint system.
Replace belts if cut, weakened, frayed, or subjected to collision loads.
Check that anchor mounting bolts are tight.
Have questionable parts replaced.
Keep belts clean and dry.
Clean only with mild soap solution and lukewarm water.
Do not bleach or dye belts since this may severely weaken belts.



HOOD RELEASE LEVER



HOOD SAFETY CATCH

HOOD RELEASE LEVER is located just behind the upper center opening in the grille. To operate, move lever to right to release the hood lock, as demonstrated above.

HOOD SAFETY CATCH is located left of center between grille and hood. To operate, lift hood slightly and reach between grille and hood to release safety catch. The spring-balanced hood will remain up without assistance. Do not hold the release lever while closing hood.

AUTOMATIC TRANSMISSION

The Checker Marathon and Taxicab are equipped with a Turbo Hydra-Matic 400 Automatic Transmission as standard equipment.

The selector quadrant used with this transmission has six positions: (P) Parking (Lock and starting), (R) Reverse, (N) Neutral and starting, (D) Complete driving range, (S) Limited driving range and (L) Low. The selector lever should slide smoothly between "N" and "D" but for safety, it must be raised slightly to engage "P", "R", "S", and "L" positions.

P - Park. A positive transmission lock when parking or while starting the engine. The selector lever must be raised slightly to move in or out of the Park position. Do not move the lever to the Park position while vehicle is in motion.

R - Reverse. Enables vehicle to be operated in a reverse direction. Always bring vehicle to a complete stop before moving the selector lever into reverse.

N - Neutral. The out of gear position. It is provided for starting a stalled engine while the vehicle is in motion and for running the engine while standing with the brakes applied. Do not coast in neutral.

D - Drive Range. The driving range is for normal city and highway driving. This position permits the transmission to operate automatically through its complete range of gear ratios; low, intermediate and high and to select the proper ratio for load and road conditions.

AUTOMATIC TRANSMISSION

S - Super Range. Used when super performance is needed, such as: for increased acceleration in traffic, hill climbing, or "engine braking" downhill. The selector lever may be moved from "D" to "S" and visa versa, at any vehicle speed. It is suggested this range be used sparingly as its continued use will result in increased gasoline consumption.

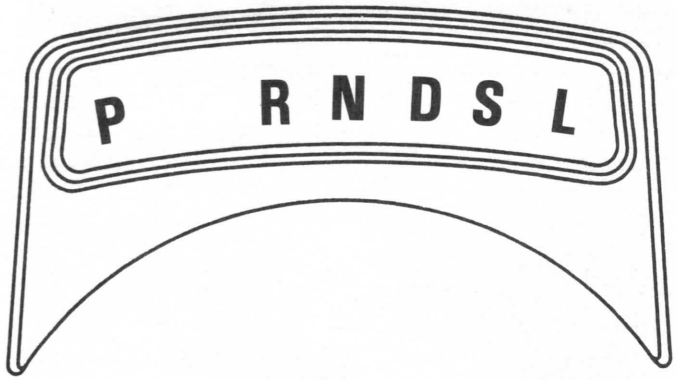
L - Low. For use in deep sand, mud or snow, ascending or descending steep grades. The selector lever may be moved to "L" position at any speed, but the transmission will only shift automatically into low range when car speed is under approximately 48 km/hr (30 m.p.h.). The transmission will not upshift from low range as long as the selector lever is in "L" Position.

CAUTION: Before descending a steep or long grade, down a mountain or hillside, reduce speed and shift into a low gear. Under such conditions, use the brakes sparingly to prevent them from overheating and reducing brake effectiveness. WHILE VEHICLE IS IN MOTION, DO NOT SHIFT INTO "L" WHEN TRAVELING ON SLIPPERY ROADS.

TOWING. Your Checker Vehicle may be towed on all four wheels, at speeds of less than 56 km/hr (35 m.p.h.), for distances up to 80 kilometers (50 miles), provided driveline, axle and transmission are otherwise normally operable. For such towing, parking brake must be released, transmission must be in neutral and ignition lock turned to "OFF" position. Attachments must be to main structural members of the vehicle, not to bumpers or bracketing. Safety chains or cables should be used. Remember that power brake and steering assists will not be available when engine is inoperative.

If vehicle must be towed beyond the 80 kilometers (50 mile) limit then it will be necessary to lift the rear wheels off the ground or remove the driveshaft. When towing your vehicle on its front wheels, the steering wheel should be secured to maintain a staright forward position. Never tow your vehicle, in this manner, at speeds exceeding 32 km/hr (20 m.p.h.).

FORCED DOWNSHIFT. When quick power or acceleration is desired to pass moving vehicles or to climb steep grades at



speeds between approximately 56 and 88 km/hr (35 and 55 m.p.h.), the transmission can be downshifted by depressing the accelerator pedal completely to the floor. It is also possible to obtain a forced downshift in "Drive" range at speeds under 48 km/hr (30 m.p.h.) by depressing the accelerator pedal part way down.

FREEING VEHICLE FROM SAND, ETC. If it becomes necessary to rock the vehicle to free it from sand, mud or snow, move the selector lever from "D" to "R" in a repeat pattern while simultaneously applying moderate pressure to the accelerator. Do not race the engine. Time the shift between gears to take advantage of the rocking motion of vehicle. If you are unable to free vehicle with this procedure, have it pulled out to prevent overheating and possible damage to the transmission.

AUTOMATIC TRANSMISSION DRIVING CAUTIONS

1. Do not accelerate in L, D or R with the brakes engaged — as this can cause damage to the transmission.
2. Do not use Low except for hard pulls at low speeds or for downhill braking.
3. Do not shift into Reverse without first coming to a complete stop.
4. Always engage the parking brake when parking your car.

GETTING UNDERWAY

ALWAYS FASTEN YOUR SEAT BELTS AND ADJUST BOTH INSIDE AND OUTSIDE REARVIEW MIRRORS

1. Apply the parking brake.

2. Place transmission selector in "P" or "N" ("P" preferred.)

A starter safety switch prevents starter operation while the transmission selector is in any drive position. (If it is necessary to re-start the engine with the car moving, place the selector lever in "N".)

3. Depress accelerator pedal and activate starter as outlined below for different conditions.

IMPORTANT: Do not keep the starter engaged for more than 15 seconds at a time. Wait 10 or 15 seconds before trying again.

Cold Engine—Depress accelerator pedal to floor and release slowly. Start engine. *Do not* kick down from fast idle. If engine starts, but fails to run, repeat this procedure. When engine is running smoothly (approximately 30 seconds), the idle speed may be reduced by slightly depressing the accelerator pedal and then slowly releasing.

CAUTION: Extended running of engine (5 minutes or more) without depressing accelerator pedal, could cause damage to engine or exhaust system due to overheating.

Warm Engine—L-6—*Depress accelerator* pedal about *halfway* and hold while cranking. Start engine.

V-8 *Do not* depress the accelerator pedal. Start engine with throttle closed. If crank time exceeds three seconds, depress accelerator pedal to one-third of travel while cranking.

Extremely Cold Weather —18° C. (Below 0° F.) Or After Car Has Been Standing Idle Several Days— Fully depress and release accelerator pedal two or three times before cranking the engine. *With foot off the accelerator pedal,* crank the engine by turning the key to the Start position and release when engine starts.

Engine Flooded
Depress accelerator pedal and hold to floor while starting until engine is cleared of excess fuel and is running smoothly. Never "pump" the accelerator pedal.

Warm-Up
Always let the engine idle for 20 to 30 seconds after starting and drive at moderate speeds for several miles, especially during cold weather.

Parking
When leaving your car unattended:
Set parking brake.
Place automatic transmission selector in Park.
Turn key to LOCK position.
Remove key (the buzzer is designed to remind you).
Lock all doors.

IMPORTANT: Do not park your car over combustible materials, such as grass or leaves, which can come into contact with the hot exhaust system and cause such materials to ignite under certain wind and weather conditions.

NOTICE: Do not leave your car unattended with the engine running. If the engine should overheat while your car is unattended, the temperature warning light or gauge would go unheeded, which could result in extensive damage to your car.

CAUTION. Never start or run your engine in a closed garage. Carbon monoxide gas, produced by the engine of every car, is poisonous and odorless. You cannot detect its presence.

NEW CAR BREAK-IN

You can operate your new car from its very first mile without adhering to a formal "break-in" schedule. However, during the first few hundred miles of driving you can, by observing a few simple precautions, add to the future performance and economy of your car.

It is recommended that your speed during the first 800 kilometers (500 miles) be confined to a maximum of 88 km/h (55 M.P.H.), but do not drive for extended periods at any one constant speed, either fast or slow. During this period, avoid full throttle starts and, it possible, avoid hard stops expecially during the first 320 kilometers (200 miles) of operation since brake misuse during this period will destroy much future brake efficiency.

Always drive at moderate speed until the engine has completely warmed up.

FUEL REQUIREMENTS

Your Checker Vehicle is designed to operate *only on unleaded* gasoline. Unleaded gasoline is essential for proper emission control system operation, and it will minimize spark plug fouling. The use of leaded gasoline can damage or severely reduce the effectiveness of the emission control system and result in loss of warranty coverage.

Use unleaded gasoline meeting the *minimum* octane specifications established by the Federal government. In compliance with Federal regulations, pumps dispensing such gasoline are labeled with the word UNLEADED and are equipped with dispensing nozzles which fit the filler neck of your car's gasoline tank.

Supplementary gasoline additives which contain lead and or phosphorus should not be used under any circumstances. Such additives can severely reduce the effectiveness of your catalytic converter.

TIPS FOR DRIVING ON SAND, SNOW OR ICE

If you should have to drive your Checker through loose sand or deep snow, shift the transmission to L position to keep moving at a steady pace. Avoid spinning the wheels — this will only cause them to dig deeper into the sand or snow. It is advisable to keep snow tires and chains at your disposal for when traction is extremely poor.

Should your rear wheels get stuck, keep a light, steady pressure on the accelerator. Do not race the engine. Shift back and forth between R and D positions. Time the shift between gears to take advantage of the rocking motion of your car. If you are still stuck after rocking the car, have it pulled out to prevent overheating and possible damage to the transmission.

To move your car on smooth ice, accelerate slowly to avoid spinning the wheels and skidding. All driving maneuvers made on ice should be slower than usual in order to maintain control. To stop, pump your brake pedal lightly to avoid sliding. If your car should skid, turn the steering wheel (not sharply) in the direction that the rear end is skidding—then slowly accelerate to straighten out.

FUEL ECONOMY

Here are some tips to help you get the most economical ride possible from your Checker.

Speed. After the car break-in period, moderate constant speeds provide the best mileage. Avoid gas-consuming stops and downshifts. Accelerate at a reasonable rate and get into top gear as soon as possible. Fast acceleration will only slow down the shifting process with automatic transmission.

Idling. Idle sparingly. If you park, even for a few minutes, turn off the engine. Do not idle your engine in cold weather — drive slowly until it is warm.

Stopping. Make gradual stops whenever possible. This habit will save brake linings and tires, as well as gasoline.

Tires. Keep correct tire pressure always — for soft tires waste gasoline. Too hard or too soft tires lead to uneven tread wear, give a poor ride and invite tire damage.

Wheel Alignment. Faulty wheel alignment will tend to waste gas and shorten tire life.

Mechanical Condition. Keep engine properly tuned in accordance with maintenance schedule to assure top mechanical efficiency necessary for good fuel economy.

WHEEL AND TIRE CARE

FOR MAXIMUM TIRE LIFE — WE SUGGEST THAT YOU . . .

1. Check air pressure regularly. Refer decal on front L.H. door post.
2. Rotate the tires at regular intervals.
3. Avoid fast "get-aways" and prolonged periods of high-speed driving.
4. Decrease your speed when rounding corners and making sharp turns.
5. Avoid hard, unnecessary braking.
6. Avoid chuckholes and sharp objects in the road when possible.

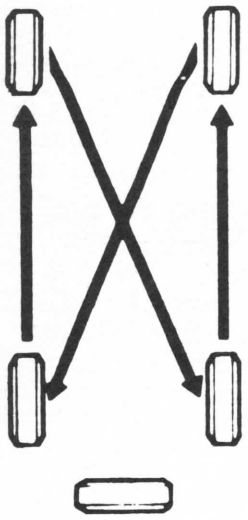
TIRE PRESSURE. A build-up in tire pressure while driving is quite normal. Putting less air in your tires causes under-inflation when tires cool and induces abnormal tire wear.

Rotating all wheels, including the spare tire, every 7500 miles will greatly prolong the life of your tires. (See diagram for correct rotation.)

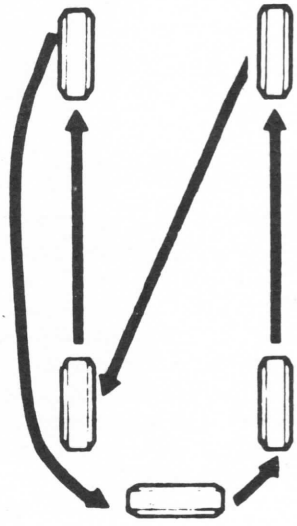
Heavy spots on wheels or tires cause bounce and wobble that increase wear and decrease tire life. It is recommended that all tires be balanced. Occasionally out-of-round tires are discovered to be the source of vibrations — this can be corrected by tire truing.

TIRE WEAR INDICATOR. The original equipment tires incorporate built-in tread wear indicators to assist you in determining when your tires have been worn to the point of needing replacement. These indicators appear as 12.7 mm (1/2 inch) wide bands when tire tread depth is 1.6 mm(1/16) inch or less. When the indicators appear in two or more adjacent grooves, tire replacement due to tread wear is recommended.

BIAS-BELTED OR BIAS-PLY TIRES

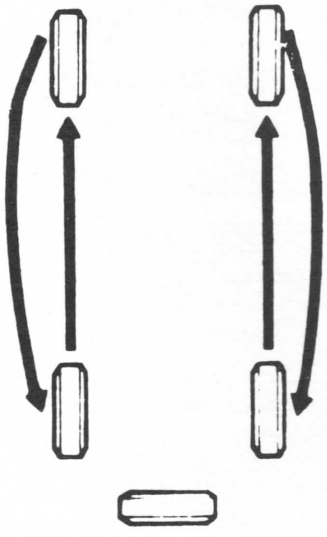


4 WHEELS

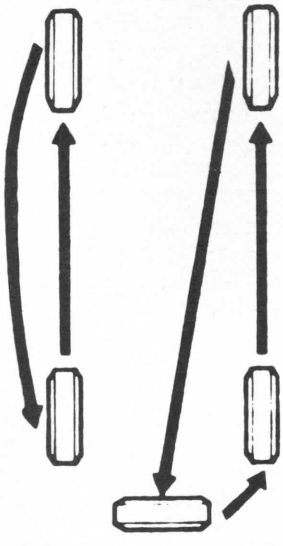


5 WHEELS

RADIAL TIRES



4 WHEELS



5 WHEELS

Wheels that are out-of-line will also cause abnormal tire wear, roughness, vibration and pulling to one side or the other. For normal driving, have your wheel alignment checked every 20,000 miles. Correct settings are:

MARATHON — TAXICAB

Caster ..... 2° Positive

Camber ..... 1/2° to 1-1/2° Positive

Toe-in ..... 1.6 mm - 3.1mm (1/16'' to 1/8'')

NOTE: All tire warranties and adjustments are handled by the tire manufacturer.

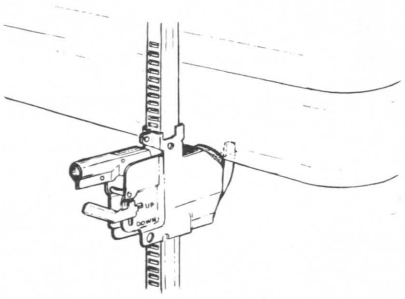
FRONT WHEEL BEARINGS should be repacked at 30,000 miles. When you have reached this mileage, the bearings must be thoroughly cleaned and inspected before repacking. Use a ''Hi-Temp'' wheel bearing lubricant Texaco product No. 1999, or equivalent, in the Marathon and Taxicab.

REAR WHEEL BEARINGS should be repacked at 30,000 miles. When you have reached this mileage, the bearings must be thoroughly cleaned and inspected before repacking. A lithium-base or sodium-base grease may be used — but it is unadvisable to mix the two bases when repacking the bearings. (See pages 23 and 24.)

SPARE WHEEL AND JACK STOWAGE. The spare wheel and tire, jack, and jack handle are stored in the trunk.

CHANGING A TIRE—MARATHON OR TAXICAB. Before the car is jacked up, apply the parking brakes and, as an added precaution against the car moving, place a large stone or block under the front and rear of one wheel. After you have loosened the wheel nuts, place the jack under the front or rear bumper, as shown in the illustrations, being careful to insure that the hook on the jack is inserted into the slot provided in the botton of the bumper bar. Then jack up the car and change the wheel. Tighten the wheel nuts on the replacement wheel and lower the car slowly to the ground. Check all the wheel nuts again to be sure that they are tight. We suggest that you have the damaged tire repaired immediately so that you do not drive for an extended period of time without a spare tire.

TAXICAB AND MARATHON



FRONT OR REAR

CAUTION: Never work under a vehicle supported only by the jack — use safety stands if it becomes necessary to be under vehicle.

TRAC-LOK EQUIPPED VEHICLES — DO NOT operate engine for any reason with one rear wheel off the ground as vehicle will move when power is transferred to the one wheel remaining on the ground.

APPEARANCE

It is not necessary to wax or polish the exterior of your Checker for at least 60 days. When polishing your car, remember that the fastest or easiest products to use are not always the best. Maintain your Checker's finish with frequent washings with water and small amount of mild detergent followed by a thorough rinsing. Dry to a high polish with a clean, damp chamois. (Never use hot water and do not wash the car in the hot sun.)

BRIGHT METAL TRIM. The metal trim on your Checker should be washed and cleaned frequently, especially during the winter, to avoid corrosion by materials used to clear roads. To prolong the appearance of chromed parts, wash and clean frequently and apply a protective coating of paste wax on all bright metal finishes.

INTERIOR. Your Checker's interior shoud be cleaned periodically to keep it in good condition. Most loose dirt and dust can be removed with a whisk broom. When washing is necessary, wash the fabric and vinyl coverings with a good frothy suds of neutral soap and warm water using a clean cloth or sponge. Wipe the surface several times with a clean, dry cloth and let air circulate freely over the wet upholstery.

STAINS. Here are some common stains and the best way to cope with them.

1. ***Dirt and Mud.*** Allow the stains to dry. Pick off the dried mud and clean with a vacuum cleaner. Go over the area lightly with cleaning fluid if the stains persist.
2. ***Grease and Oil.*** Sprinkle the area liberally with absorbent powder — then remove with a vacuum cleaner. Use cleaning fluid and absorbent cloths, while working from the outside toward the center. Soak up extremely fresh grease with cloths.
3. ***Tar.*** Pick off as much tar as possible with a dull knife — then rub the area with cleaning fluid and absorbent cloths. Repeat if necessary.
4. ***Chewing Gum.*** Cleaning fluid or absorbent rug cleaning powder should loosen the gum.
5. ***Candy, Chocolate or Cocoa.*** Pick off the crusted, dried particles with a dull knife and sponge from outside the spot toward the center, using clear, lukewarm water. Soak dry with rags — then sponge again with detergent suds and dry.

WHITEWALL CARE can usually be accomplished satisfactorily with a cloth dipped in water, with a mild soap added. Clean very dirty or scuffed tires with a good whitewall cleaner, following the directions on the container. Rinse the tires and wheels with clean cold water. Do not use strong caustics, as they may stain the bright metal wheel covers.

MAINTENANCE

BATTERY CARE. Check the water level in each battery cell at least every 7500 miles and more frequently during the hot summer months. If water is needed, add distilled water only and be careful not to overfill. The terminals should be cleaned with a baking soda and water solution and coated with a lubricant to prevent corrosion.

CAUTION: Keep lighted cigarettes and flame away from the open battery cells, as combustible hydrogen gas is always present.

NOTE: All battery warranties and adjustments are handled by the battery manufacturer.

ENGINE COOLING SYSTEM. The standard and recovery type cooling systems are designed to maintain the engine at proper operating temperatures. The recovery type cooling system is used as optional equipment on 1977 Checker vehicles. It has been filled at the factory with a high quality, inhibited, year-around oolant that meets the standards of General Motors Specification 1899-M. This coolant solution provides freezing protection to -29° C (-20° F) and it has been formulated to be used for two full calendar years or 30,000 miles, whichever first occurs, of normal operation without draining, provided the proper concentration of coolant is maintained.

For Recovery Systems Only—Check the coolant-level visually at the see through coolant reservoir at each oil change interval while the engine is at normal operating temperature. Do not remove radiator cap except for draining and refilling the system. Coolant level should be at the ''FULL HOT'' mark on the reservoir. If system is checked cold, the coolant level should be at the ''FULL COLD'' mark on the reservoir.

For Standard System—Check the coolant level only at the oil change intervals, unless there is evidence of leaking or overheating. Do not remove radiator cap when solution is hot and under pressure. Coolant level should be a maximum of one inch below the level of the filler neck when the engine is cold.

All systems—Add 50/50 mixture of high-quality ethylene glycol antifreeze and water if coolant additions are necessary. Do not overfill.

NOTE: If recommended quality antifreeze is used, supplemental inhibitors or additives claiming to provide increased capability are not necessary. They may be detrimental to the efficient operation of the system, and represent an unnecessary operating expense.

Every year, the cooling system should be serviced as follows:

1. Wash radiator cap and filler neck with clean water.
2. Check coolant for proper level and freeze protection.
3. Pressure test system and radiator cap for proper pressure holding capacity 105 kPa (15 psi)—standard, 98 kPa (14 psi)—recovery.
4. Tighten hose clamps and inspect all hoses. Replace hoses whenever checked, swollen or otherwise deteriorated.
5. Clean frontal area of radiator core and air conditioning condenser.

Every two years or 30,000 miles, whichever first occurs, the cooling system should be drained and refilled as follows:

1. Run engine, with radiator cap removed, until normal operating temperature is reached and upper radiator is hot (indicates thermostat is open).
2. With engine stopped, completely drain radiator coolant by opening petcock at bottom of radiator. (To speed this operation, the drain plugs in block can also be removed.).
3. Close radiator petcock and replace block drain plugs if removed and add sufficient water to fill system.
4. Run engine, drain and refill the system, as described in steps 1 through 4, a sufficient number of times until the drained liquid is nearly colorless.

5. Allow system to drain completely (and install block drain plugs, if removed).
6. Coolant Recovery System Only—Flush reservoir with clean water, and drain.
7. Add sufficient ethylene glycol coolant, meeting GM Specification 1899-M, to provide the required freezing and corrosion protection—at least a 50 percent solution -36° C (-34° F).

For both standard and recovery systems, fill radiator to the cold fill level -25mm (1'') below bottom of filler neck.

8. Run engine, with radiator cap removed, until normal operating temperature is reached. (Radiator upper hose becomes hot.)
9. Add coolant to within 25mm (1'') below bottom of filler neck and install radiator cap.
   For recovery systems, install radiator cap and then add sufficient coolant to reservoir to raise level to ''Full Hot'' mark.

It is the owner's responsibility to keep the freeze protection at a level commensurate with the temperatures which may occur in the area of vehicle operation.

Maintain cooling system freeze protection at -29° C (-20° F) or below to ensure protection against corrosion and loss of coolant from boiling even though freezing temperatures are not expected.

Add ethylene glycol base coolant that meets GM Specification 1899-M when coolant additions are required because of coolant loss or to provide additional protection against freezing at temperatures lower than -29° C (-20° F).

NOTE: Alcohol or methanol base coolants or plain water are not recommended for your Checker at any time.

RADIATOR PRESSURE CAP. The radiator cap, proper pressure type, must be installed tightly, otherwise coolant may be lost and damage to engine may result from overheating. Radiator pressure caps should be checked periodically for proper operation.

THERMOSTAT. The cooling system is protected and controlled by a thermostat installed in the engine coolant outlet to maintain a satisfactory operating temperature of the engine. This thermostat is designed for continuous use through both winter and summer and need not be changed seasonally. When replacement is necessary, use 195° Thermostat.

ENGINE OIL AND FILTER RECOMMENDATIONS

Use only SE engine oil

Change oil each 7,500 miles, 12 months, or whichever occurs first, *except* under the following conditions.*

—driving in dusty conditions
—trailer pulling
—extensive idling
—short-trip operation at freezing temperatures (engine not thoroughly warmed-up).
—commercial applications such as taxicabs & police cars

*Under these conditions, change oil each 3 months or 3,000 miles, whichever occurs first.

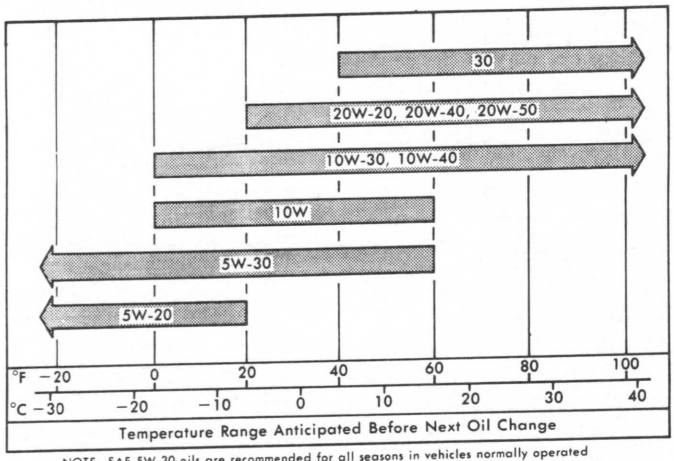
Operation in dust storms may require an immediate oil change.

Replace the oil filter at the first oil change, and every second oil change thereafter, if mileage (7,500 miles) is the determining factor. If time (12 months) is the determining factor, then change oil filter with every oil change. AC oil filters provide excellent engine protection.

See your Checker dealer for advice on the frequency of oil and filter changes under unusual driving conditions.

The above recommendations apply to the first change as well as subsequent oil changes. The oil change interval for your Checker vehicle is based on the use of SE oils and quality oil filters. Oil change intervals longer than those listed above will seriously reduce engine life and may affect Checker obligation under the provisions of the New Vehicle Warranty.

RECOMMENDED SAE VISCOSITY NUMBER



NOTE: SAE 5W-30 oils are recommended for all seasons in vehicles normally operated in Canada. SAE 5W-20 oils are not recommended for sustained high-speed driving.

NOTE: Non-detergent and other low quality oils are specifically not recommended. Only the use of SE engine oils and proper oil and filter change intervals assure you of continued proper lubrication of your engine.

A high quality SE oil was installed in your engine at the factory. It is not necessary to change this factory-installed oil prior to the recommended normal change period. However, check the oil level more frequently during the break-in period since higher oil consumption is normal until the piston rings become seated.

CHECKING ENGINE OIL LEVEL

The engine oil should be maintained at proper level. The best time to check it is as the last step in a fuel stop. This will allow the oil accumulation in the engine to drain back in the crankcase. To check the level, remove the oil gauge rod (dip stick), wipe it clean and reinsert it firmly for an accurate reading. The oil gauge rod is marked ''FULL'' and ''ADD.'' The oil level should be maintained in the safety margin, neither going above the ''FULL'' line nor below the ''ADD'' line. Reseat the gauge firmly after taking the reading.

SUPPLEMENTAL ENGINE OIL ADDITIVES

The regular use of supplemental additives is specifically not recommended and will increase operating costs. However, supplemental additives are available that can effectively and economically solve certain specific problems without causing other difficulties. For example, if higher detergency is required to reduce varnish and sludge deposits resulting from some unusual operational difficulty, a thoroughly tested and approved additive—''G.M. Super Engine Oil Supplement''—is available at your Checker dealer.

AUTOMATIC TRANSMISSION uses only fluids identified Dexron II or equiv. Check the fluid level at engine each oil change period, using the following procedure:

1. Drive vehcile approximately 15 miles making frequent stops and starts, to bring transmission up to normal operating temperature (approximately 82-88° C (180-190° F).
2. Park vehicle on a level surface.
3. Place selector lever in ''Park'', apply park brake, and leave engine running.
4. Remove dipstick and wipe clean.
5. Reinsert dipstick until cap seats.
6. Remove dipstick and note reading.

If fluid level is at or below the ADD mark, add sufficient fluid to raise the level to the FULL mark. One pint raises the level from ADD to FULL. DO NOT OVERFILL.

CHANGING FLUID. Under normal driving conditions, the transmission fluid should be changed every 60,000 miles. If your vehicle is driven extensively in heavy city traffic during hot weather, or is used to pull a trailer, change fluid every 15,000 miles. Likewise, operators of vehicles in commercial use (such a taxicab, limousine or patrol car service) where the engine idels for long periods, should change fluid every 15,000 miles.

After removing fluid from the transmission sump, approximately 7-1/2 pints U.S. measure (6 pints Imperial measure) of fresh DEXRON II fluid or equiv. will be required to return fluid level to proper mark on the dipstick.

SUMP FILTER. During every fluid change the transmission sump filter should be replaced.

AIR CLEANER SERVICE. Your car receives its power from a mixture of gasoline and air. The air is taken into the system through the air cleaner so it's important to replace the air cleaner at required intervals. A dirty air cleaner reduces engine efficiency.

When replacement of Air Cleaner filter element is necessary, an AC ACron air filter element is recommended.

NOTICE: *Do not remove the engine air cleaner unless temporary removal is necessary during repair or maintenance of the vehicle. When the air cleaner is removed backfiring can cause fire in the engine compartment.*

CHASSIS LUBRICATION. The chassis should be lubricated as shown on the chart on pages 23 and 24. If your car is operated in dusty, wet, slushy or muddy conditions, you should lubricate the running gear more often. Lubricate immediately under the above conditions to flush out water and foreign matter.

SPARK PLUGS. The spark plug should be replaced with AC type (R45TS for V/8) and (R46TS for 6 cylinder) at intervals shown in Maintenance Schedule. Install plugs with 15 ft. lbs. torque and gap adjusted to 1.14 mm(.045'') for V/8 and .89 mm (.035'') for 6 cylinder.

DISTRIBUTOR AND IGNITION TIMING. Your Checker vehicle is equipped with a distributor referred to as High Energy Ignition (HEI) which requires no contact points or condenser. The V-8 engines incorporates the ignition coil intergral with the distributor. The new HEI provides 35,000 volts output for better performance and improved fuel economy. Also less maintenance is required because there are no contact points to replace.

Ignition timing is adjustable following the specifications shown on label under the hood. Also the distributor cap and rotor should be inspected for cracks, carbon tracking and terminal corrosion. Clean or replace as necessary.

ADJUST FAN BELT by loosening the alternator adjusting arm lockbolt and the lower support bolt. Pry the alternator outward. When the correct belt tension is obtained, tighten the lower support bolt and the adjusting arm lockbolt and re-check the tension. The belt is tensioned correctly if it can be deflected inward, by hand, approximately 9.5-12.7 mm (3/8 to 1/2 in.) between the fan pulley and the alternator. Keep the belt tension within given limits, as too tight a belt will put undue strain on driven units. If too loose, inefficient alternator and overheating will result. After preliminary run-in, the belt tension should be 75 lbs., minimum.

CARBURETOR CARE is vital to gas mileage. If your Checker idles and accelerates properly, carburetor adjustment is not needed. The carburetor air-fuel mixture calibration is preset by carburetor manufacturer, only idle speed can be adjusted. IMPORTANT: A filter is incorporated in the carburetor at the inlet tube fitting. The filter should be inspected during each tune-up service or more often if necessary. Filter must be replaced if contaminated. Refer to maintenance schedule for service intervals.

POWER STEERING functions whenever the engine is operating and serves to greatly reduce the effort required to steer and park your Checker. With the engine off, the car steers as if it had conventional steering. The power steering reservoir is an integral part of the pump and should be checked for proper oil level every 12 months or 7500 miles. If oil is needed, use only power steering fluid GM #9985010 or TEXACO #TL 4634. Do not allow dirt to fall into the reservoir when the cover is removed.

BRAKE ADJUSTMENT to compensate for normal lining wear is done automatically in all Checker vehicles. The Marathon and taxicab are equipped with front disc brakes, which automatically adjust as brake lining wears. Rear brake lining wear is automatically compensated by self-adjusters, which are actuated when the brakes are applied and the vehicle is moving in the reverse direction.

REMINDER: The front disc brakes have a built-in wear indicator that is designed to make a high frequency squealing, or cricket-like warning sound when the linings are worn to where replacement is required. The sound will occur intermittently or continuously when wheels are rolling, but will disappear when the brake pedal is applied firmly. See also the various brake checks listed in the Checker maintenance schedule folder.

PARKING BRAKE ADJUSTMENT. To adjust parking brake cable depress the parking brake pedal about 1/2 in. and remove all slack from the cable at the clevis (located near the center of the vehicle, frame). Apply the parking brake after the cable adjustment, then release to make sure that sufficient slack remains in the cable so that the brake will not drag.

EVAPORATIVE EMISSION CONTROL SYSTEM CANISTER FILTER. The filter in the bottom of the Evaporative Emission Control Canister positioned at front of left inner fender requires replacement every 24 months or 30,000 miles of operation.

BUMPER ENERGY ABSORBING DEVICES:
Taxicab and Marathon front and rear bumpers are equipped with energy absorbing devices located between the bumper and frame. They are designed to absorb impact energy and restore the bumper to its original position after a low-speed collision (0-5 mph).

Recommendations for handling Energy Absorbing Devices. Units are under gas pressure.

A. Do not attempt to repair.
B. Do not weld.
C. Do not apply heat.
D. Relieve the gas pressure if unit is to be scrapped. With a heavy metal punch and hammer, break the weld at the sealing ball in the end of the piston tube.

Recommendations for handling a unit, when as a result of collision the Energy Absorbing Device cannot extend.

A. Stand clear of the bumper.
B. Provide positive restraint such as a chain or cable.
C. Relieve the gas pressure by drilling a small hole in the piston tube near the bracket attached to the bumper.
D. Remove the unit from vehicle only after the gas pressure has been relieved.

Recommendations to avoid damaging Energy Absorbing Devices.

A. Do not test the units by driving the vehicle into posts, walls, or barriers.
B. When removing a unit from a vehicle, support the end of the bumper from which the unit is being removed; this will prevent rotation of the other unit.
C. Do not rotate a unit unless it is necessary for alignment of the unit with the bumper bracket.
D. Do not immerse unit in solvents.

GUIDE TO MINOR TROUBLE SHOOTING

No matter how well the modern automobile is designed and maintained, it is prey to minor troubles caused by worn or damaged parts, maladjustments, dirt, moisture, etc. Difficulty might occur at a time when it is inconvenient for you to obtain prompt professional service for your Checker. This guide will aid you in finding minor abnormal conditions that may cause any of the symptoms listed below — but be sure to see your Checker dealer when precise adjustments or special tools or equipment are required.

Engine won't turn over . . .

1. Automatic transmission: Selector lever must be in N (Neutral) or P (Park) position.
2. Lights and Horn: If they do not work, the battery may be discharged or a cable loose or disconnected.
3. Ignition switch: Contacts may not be closing properly. Turning the switch on and off several times may eliminate the trouble until you have time to replace the switch.
4. Solenoid and starter: The solenoid or starter can be made in-operative by loose, disconnected or broken wires. If all the wires appear to be in good condition and properly connected, the trouble may actually be a faulty solenoid or starter.
5. Seat belt ignition interlock: Refer to page 9 in this manual.

Engine turns over but won't start . . .

1. Fuel gauge: You may be out of gas. If the gauge indicates fuel in the tank, the trouble may be in either the ignition or fuel system.
2. Spark plugs. Check for trouble in the ignition system by pulling off a plug wire and inserting a short piece of bare wire or other metal object into the wire terminal. Hold the wire about 3/16 in from the exhaust manifold and turn the engine over. No spark or a weak spark between the wire and the manifold may mean that the trouble is in the distributor. If the spark is good and hot, check the fuel system.

If the engine runs hot — these reasons can cause the overheating . . .

1. Insufficient coolant supply.
2. Loose fan belt.
3. Dirty cooling system.
4. Prolonged idling period.
5. Frozen cooling system.
6. Defective thermostat.
7. Overloading car, or pulling a heavy trailer in hot weather.
8. Tires underinflated during hot weather.
9. Dirt and bugs caught in radiator core.

If car steers hard . . .

Low air pressure in the tires, wheels out of line, a lack of fluid in power steering system, loose or broken belt or a combination of any of these may be the cause.

If brakes do not hold . . .

1. After driving through deep water, apply the brakes gently several times as the car is moving slowly.
2. If brakes have been subjected to abnormal use, as in mountain driving or after making a fast stop from high speeds — allow the brakes to cool.

If car rides poorly . . .

If your car is driven with less than the recommended tire pressure, an unpleasant and dangerous swaying or leaning may occur. Have your Checker dealer inspect and investigate any sudden abnormality in your car's ride.

If steering wanders or pulls at high speeds . . .

Various conditions can bring about this problem.

1. Soft tires
2. Out-of-line
3. Worn shock absorbers
4. An overloaded car
5. High cross-winds
6. A high crown in the center of the road

IMPORTANT:

1. Keep your engine properly tuned. Certain engine malfunctions, particularly involving the electrical, carburetion or ignition systems, may result in unusually high converter and exhaust system temperatures. *Do not continue to operate your vehicle if you detect engine misfire, noticeable loss of performance, or other unusual operating conditions but have it serviced promptly.* A properly tuned engine will help avoid malfunctions that could damage the catalytic converter, and will help maintain effective emission control and fuel economy. See your Maintenance Schedule folder for information on inspecting and maintaining the engine, exhaust system, and other vehicle components.

2. Do not park your car over combustible materials, such as grass or leaves, which can come into contact with exhaust system and cause such materials to ignite under certain wind and weather conditions.

3. Do not push or tow this vehicle to start. Under some conditions, this would damage the catalytic converter.

DISREGARD OF THESE WARNINGS COULD CAUSE DAMAGE TO THE CATALYTIC CONVERTER, TO THE VEHICLE, OR PROPERTY NEAR THE VEHICLE.

ELECTRICAL SYSTEM SERVICE

Your Checker vehicle has a 12-volt system protected by circuit breakers, fuses, and two fusible links. Circuit breakers are located as follows:

1. Headlight-taillight breaker — on the headlight switch under the dashboard.
2. Horn breaker — on the left inner front fender, above the horns.
3. All accessory breakers and fuses — in holder under dash panel.
4. Windshield wiper breaker — in holder under dash panel.
5. One 3-amp fuse protects the instrument panel light cluster.
6. Fusible link. Your Checker has two fusible links installed to separately protect the ignition and lighting circuits ahead of the circuit breaker block. Links are located in the main engine electrical harness at the starter solenoid battery terminal. An excessive overload will melt the fusible link and separate the link before other wiring is damaged. Determine the cause of the overload and then have the fusible link that has been damaged replaced.
7. Tail lamp fuse - 15 AMP in-line fuse in instrument panel harness at light switch.

BULB REPLACEMENT. In case of bulb failure, consult the replacement table (Page 21) and refer to the appropriate information below for the changing procedure. Replacement bulbs may be purchased from our Checker dealer, any automotive garage and most service stations.

HEADLIGHTS are sealed-beam units that can be replaced without disturbing the aim of the beam. Remove the screws from the trim ring door and from the inner retaining ring on the unit to be replaced. Remove the ring and the old unit — then plug in the replacement. Replace the retaining ring and the door. Headlight aim may be adjusted without removing trim ring door by inserting Phillip head screwdriver through access holes provided.

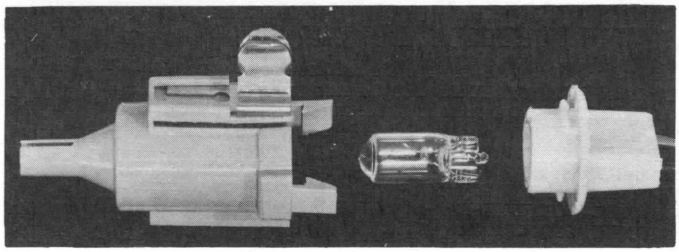
FRONT PARKING AND BACK-UP bulbs are easily replaced by first removing the lens screws. Then depress bulb in and twist half turn left and pull out. Reverse the procedure to install a new bulb. Use caution to position the gasket in place before tightening all the screws.

TAIL AND STOPLIGHT bulbs are replaced from within the luggage compartment by snapping out the bulb and socket from the rear of the taillamp assembly. Then depress bulb and twist half turn left and pull out. Reverse procedure to install new bulb.

LICENSE LAMP bulb is easily replaced by first removing the cover screws. Then depress bulb in and twist half turn left and pull out. Reverse the procedure to install a new bulb. Use caution to position the gasket in place before tightening all the screws.

FENDER MARKER LIGHTS. All models are equipped with amber side marker lights on front fenders and red side marker lights on rear fenders.

To replace bulbs on all four lamps, reach under the fender and turn bulb socket clockwise 1/8 turn and pull out. Bulbs are a snap fit, to remove — pull outward from socket. Install replacement bulb by snapping into socket. Install socket in lamp and turn counterclockwise 1/8 turn.



FIBER OPTIC LIGHT SOURCE is a bulb contained in a holder shown in the above illustration and is located in wiring harness under dash. To replace bulb, apply outward pressure to locking prongs and separate holder. Bulb is a snap fit, to remove pull outward from socket. Install replacement bulb by snapping into socket. Holder recesses must be lined up to reassemble. *Caution* — do not attempt to separate holder by pulling on lead wires.

FLASHERS are located in circuit breaker holder that is positioned under dash panel.

ELECTRICAL SYSTEM SERVICE

BULB REPLACEMENT TABLE

Bulb Location	*Bulb Manufacturer's No.*
Headlight	
Inner	4001
Outer	4002
High Beam Indicator (in rear of speedometer)	158
Parking Light	1157
Taillight	1157
Stop Light	1157
Directional Signal	
Front	1157
Rear	1157
Indicator (in rear of speedometer)	158
License Plate Lamp	97
Fuel Gauge and Warning Lights (in rear of fuel gauge)	158
Back-Up Light	1295
Dome Light	551
Radio Light	57*
Parking Brake Light	158
Side Marker Lamps	194
Fiber Optic Light Source	558
Speedometer Light	158
Transmission Indicator Lamp	1893
Seatbelt Reminder Lamp (rear of fuel gauge)	1893

* Optional

EMERGENCY STARTING

Checker vehicles cannot be started by pushing or towing the car.

A car with a discharged battery may be started by transferring electrical power from a battery in another car—called ''jump starting''.

JUMP STARTING

The following procedure is for use *only* under the following conditions. Departures from these conditions and procedures, could result in: (1) serious personal injury (particularly to eyes) or property damage from such things as battery explosion, battery acid or electrical burns, or (2) damage to electronic components in either vehicle. If all the conditions cannot be met, or if you are uncertain about them, we strongly recommend for your safety and that of your car that you leave the starting to a competent mechanic.

The battery in the other vehicle must be of the *same nominal voltage*, 12 volts, and must be *negatively grounded.* Use of a booster battery of a higher nominal voltage, or which is positively grounded may result in serious personal injury or property damage.

TO JUMP START:

1. Position the two vehicles so they are NOT touching. Set parking brake and place automatic transmission in ''PARK'' in each vehicle. Also turn off lights, heater and all other unnecessary electrical loads.

2. Remove vent caps from both the booster and the discharged batteries. Lay a cloth over the open vent wells of each battery. These two actions help reduce the explosion hazard always present in either battery when connecting ''live'' booster batteries to ''dead'' batteries.

3. Attach one end of one jumper cable to the positive terminal of the *booster battery* (identified by a red color, ''+'' or ''P'' on the battery case, post or clamp) and the other end of same cable to positive terminal of *discharged battery.*

4. Attach one end of the remaining negative cable to the negative terminal (black color, or ''N'') of the *booster battery,* and the other end to the alternator mounting bracket. (*Do not connect directly to negative post* of dead battery)—taking care that clamps from one cable do not inadvertently touch the clamps on the other cable. Do not lean over the battery when making this connection.

5. Start the engine in the vehicle that is providing the jump start (if it was not running). Let run a few minutes, then start the engine in the car with the discharged battery.

6. Reverse the above sequence exactly when removing the jumper cables. Reinstall vent caps and dispose in a safe manner any cloths used to cover vent wells, as the cloths may have corrosive acid on them.

CAUTION: *Never expose battery to open flame or electric spark - battery action generates hydrogen gas which is flammable and explosive. Don't allow battery fluid to contact eyes, skin, fabrics, or painted surfaces — fluid is a sulfuric acid solution which could cause serious personal injury or property damage. Flush any contacted area immediately with water. Wear eye protection such as industrial safety spectacles or goggles when working on or near battery. Remove rings, metal watch bands and other metal jewelry before jump starting or working around a battery. Be careful in using metal tools and equipment. If such metal should contact the positive battery terminal [or metal in contact with it] and any other metal on the car, a short circuit may occur which could cause personal injury. Batteries and battery acid should always be kept out of reach of children.*

OPTIONAL EQUIPMENT

TRAC-LOK REAR AXLE gives constant driving force at both rear wheels, especially in slippery driving conditions. This positive drive feature shifts driving torque from one wheel to another automatically. Driving straight ahead, Trac-lok axle keeps the car more stable by preventing one wheel from spinning if poor traction is encountered. CAUTION: Since torque is shifted to the stationary wheel in the Trac-lok axle, never jack-up one rear wheel if the engine is to be run with the car in gear. Cars with Trac-lok axle feature should have the rear wheels removed for balancing.

LUBRICATION. Refer to Lubrication Chart.

SPECIFICATIONS AND TECHNICAL DATA

Marathon and Taxicab

Overall length ..... 5201 mm (204-3/4'')
A11E and A12E ..... 5429 mm (213-3/4'')
Height ..... 1594 mm (62-3/4'')
Width ..... 1930 mm (76'')
Wheelbase ..... 3048 mm (120'')
A11E and A12E ..... 3277 mm (129'')
Tread—Front ..... 1626 mm (64'')
Rear ..... 1600 mm (63'')
Capacities
Fuel tank ..... 81.4 ℓ (21.5 gal.)
Crankcase ..... 3.79 ℓ (4 qts.)
With oil filter ..... 4.26 ℓ (4-1/2 qts.
Automatic Transmission ..... 8.99 ℓ (19 pts.)
Rear Axle ..... 1.36 kg (3 lbs.)
Cooling System
With Heater ...6 cyl.-11.36 ℓ (12 qts.) V-8-16.09 ℓ (7 qts.)
..... 195°
Thermostat ..... See Page 16
Radiator Cap Pressure ..... Integral Type
Power Steering ..... V/8-1.14 mm (.045'')
Spark Plug Gap ..... 6 Cyl..89 mm (.035'')
..... (V/8) AC Type R-45TS
Spark plugs ..... (6 cyl.) AC Type R-46TS
..... See sticker affixed
Ignition Timing ..... under vehicle hood
Tappet Clearance
Intake ..... Hydraulic—No Adjustment Needed
Exhaust ..... Hydraulic—No Adjustment Needed

Electrical System ..... 12 Volt
Tire Information
Types ..... 4 Ply Rating and Tubeless
Size ..... G78 x 15
Recommended Inflation Pressure
Front and Rear All Models
See Sticker Affixed to L.H. Front Door Post
Engine Idle Speeds
See Sticker Affixed Under Hood of Vehicle

LICENSE DATA

Engine Type	6 Cyl.	350	305
Piston Displacement	O.H.V. 250 cu. in	V8 350 cu. in.	V8 305 cu. in.
No. of Cylinders	6	8	8
Cylinder Bore	3.88	4.0	3.736
Stroke	3.53	3.48	3.48
Compression Ratio	8.22:1	8.2:1	8.4:1
Taxable Horsepower	36.0	51.2	44.7
Firing Order	1-5-3 6-2-4	1-8-4-3 6-5-7-2	1-8-4-3 6-5-7-2
Gasoline Grade	Use only an unleaded fuel of at least 91 research Octane-symbol number 2.		

CATALYTIC CONVERTER. The catalytic converter is an emission control device added to the exhaust system to reduce hydrocarbon and carbon monoxide pollutants from the exhaust gas stream. The converter contains 1/8'' diameter beads which are coated with a catalytic material containing platinum and palladium. Use of the catalytic converter has the advantage of allowing the engine to be retuned for improved fuel economy and driveability.

The catalytic converter requires the use of unleaded fuel only.

Unleaded gasoline is used to reduce combustion chamber deposits corrosion, and to prevent lead contamination of the catalyst that would render it ineffective. *The use of leaded fuel will cause the catalytic converter to become ineffective as an emission control device.*

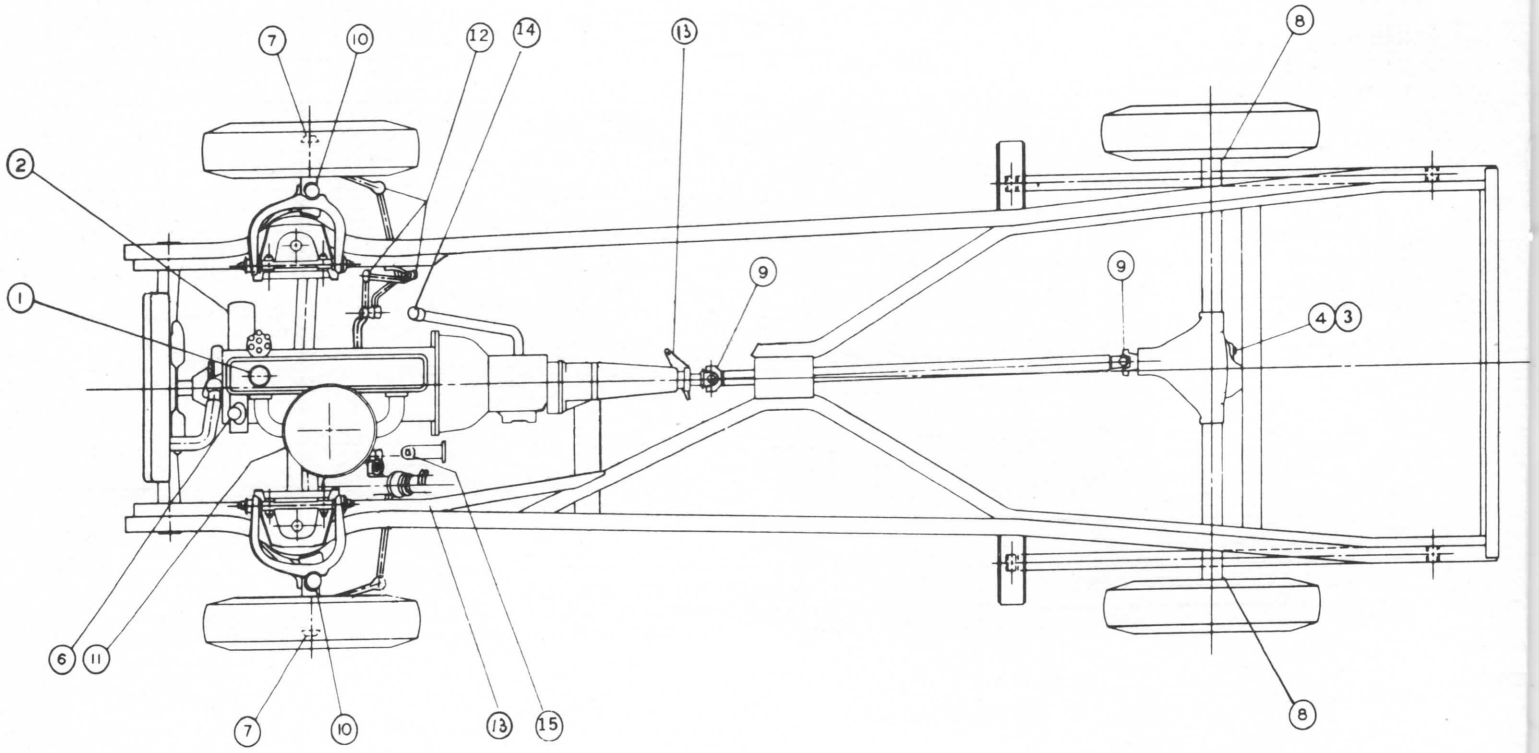
CAUTION: ***It is important to keep your engine properly tuned.***

LUBRICATION CHART — Marathon and Taxicab

NO.	UNIT	NO. OF PLACES	LUBRICANT	CAPACITY	REMARKS
1	Engine	1	SE 10 W 30 Oil	4½ Qts. w/ Filter	Drain and Refill Every 3,000/7,500 Miles
2	Oil Filter	1	- - - - - - - - - - - - - - - - - -	½ Qt.	Replace at first Oil Change Then Every Second Oil Change
3	Differential – Standard	1	Texaco 3450 or Equivalent	Keep Filled	Change Every 7,500/15,000 Miles
4	Differential – Trac-Lok	1	Texaco 3450 or Equivalent	Keep Filled	Change Every 15,000 Miles
6	Power Steering Pump	1	Power Steering Fluid GM #9985010 or Texaco #TL-4634	1¼ Qts.	Add as Required
7	Wheel Bearing – Front	2	"Hi-Temp" Wheel Bearing Lubricant Texaco Product #1999 or Equivalent	¼ Lb. Each	Every 30,000 Miles
8	Wheel Bearing – Rear	2	Marfak - #2 H.D. or Shell Alvania EP #2 or Equivalent	1 Oz. Each	Remove, Clean, Inspect and Repack
9	Universal	2	Rust Inhibited Lithium Base All Purpose Gr.	As Required	Pressure Fitting (All Four Bearings Must be Purged)
10	Steering Knuckle Ball Joint	4	Rust Inhibited Lithium Base All Purpose Gr.	As Required	Relieve Load, Swing Wheels, While Lubricating
11	Air Cleaner	1	Dry Type Caution – Keep Oil From Element		Replace Every 30,000 Miles
12	Steering Linkage	7	Rust Inhibited Lithium Base	- - - - - - - - - - -	Pressure Fitting
13	Parking Brake Lever	2	Rust Inhibited Lithium Base All Purpose Gr.	As Required	Spread on Slide Plates
14	Transmission – Automatic	1	"Dexron" or Dexron II Fluid or Equivalent	9½ Qts. Dry 7½ Pts. Refill	Drain and Refill Every 15,000/60,000 Miles
15	Master Cylinder Brake	1	Brake Fluid S.A.E. 70R3 Specifications or DOT-3	Keep Filled	Under Hood
	Misc., Hinges, Linkage and Pins		Machine Oil	Few Drops	With Oil Can

NOTE: Where dual mileages are shown above use the lower figure for vehicles used in taxicab, commercial, trailer towing, and other severe service.

MARATHON TAXICAB
LUBRICATION CHART



GAS STATION INFORMATION

GAS CAP. The fuel tank filler cap, located at left rear corner of vehicle, has a new two-step removal and installation procedure plus a pressure-vacuum safety relief valve. It is equipped with a double set of locking tangs. To remove:

Rotate cap one-quarter turn counterclockwise to clear the first set of tangs from the slots inside the filler neck. This will allow any residual pressure to escape.

Pull the cap outward and rotate one-quarter turn counterclockwise to clear second set of tangs and remove the cap.

To install, reverse this procedure.

NOTE: If this cap requires a replacement, only a cap with these same features must be used. Failure to use the correct cap can result in a serious malfunction of the system.

Replacement cap is Checker Part Number 704941.

GASOLINE RECOMMENDATION. Use only an unleaded fuel of at least 91 research octane - symbol number 2.

HOOD RELEASE LEVER. Refer to page 11 this manual.

ENGINE OIL DIPSTICK. Refer to page 18 this manual.

ENGINE OIL RECOMMENDATION. Use only high quality SE oils. See page 17 for oil viscosity reference.

TIRE INFLATION PRESSURES. Check at least monthly. Keep inflated to pressures shown on tire decal affixed to left front door post of your vehicle.

WINDSHIELD WASHER. Check reservoir fluid level, regularly. Refer to page 4 in this manual.

BATTERY. Check fluid at least every 7,500 miles. Refer to page 16 this manual.

INDEX

MAINTENANCE RECORD

DATE	MILEAGE	SERVICE PERFORMED

Checker Motors Corporation

Kalamazoo, Michigan 49007

SPECIFICATIONS SUBJECT TO CHANGE

PRINTED IN U.S.A.