

Owners Manual



Checker Motors Corporation



1964

Know Your Checker . . .

You'll enjoy driving your new car much more after you acquaint yourself with its many features and advantages. This manual gives you valuable information about the operation and maintenance of your new Checker. Spend a few minutes reading these pages . . . your time will be repaid by the greater driving satisfaction and economy that have been built into the 40th Anniversary Checker.

Know Your Checker Dealer . . .

Your new Checker car deserves the kind of attention that only a Checker dealer can provide. You can depend on his factory approved facilities and all-around "know how" for the ultimate in maintenance and servicing. Wherever you drive—on business or for pleasure—a Checker dealer will be near to help keep your car in "top-running" condition.

CONTENTS

Service Policy	2	Clutch	24
Doors and Locks	2	Guide To Minor Trouble Shooting	24
Instruments and Controls	3	Electrical System	26
Standard Transmission	7	Air Conditioner	27
Driv-R-Matic Transmission	8	Seat Belts	27
Dual Range Transmission	9	Radio	28
Transmission Tips	10	Power Brakes	28
New Car Break-in	11	Power Steering	28
Heater and Defroster	13	Windshield Washer	28
Station Wagon Features	14	Overdrive	29
Wheel and Tire Care	15	Fuel Economy	30
Changing a Tire	16	License Data	31
Appearance	17	Specifications	31
Maintenance	18	Index	32
Lubrication	20	Warranty	33
Brake Adjustment	23		

SERVICE POLICY

When you accepted delivery of your Checker car, you received a Service Policy signed by your dealer. The Warranty on your Checker is a part of your Service Policy, and is printed in full on the inside back cover of your Owner's Manual. Parts replaced under the Warranty 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 signed your Service Policy—it will identify your car to any Checker dealer.

Your Checker comes to you as the result of 40 years of technical know-how and skilled craftsmanship. It has been fully inspected and road tested at the factory to insure trouble-free performance. Any necessary adjustments were done by your dealer—so that your new car would be ready for the road.



DOORS AND LOCKS

FOR YOUR CONVENIENCE

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

CHECKER DOOR LOCKS have been designed for passenger safety and the security of your car and possessions. Keep the doors locked when driving, and when you leave the car unattended.

To lock doors from the outside: The rear doors may be locked without the key by depressing the inside locking button, and then closing the door. The front doors lock with the key.

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 verticle position. Now push-in the button on the door handle and open door.

To unlock front doors from the inside:

Both front doors can be opened from the inside merely by lifting-up the door handle.

To unlock rear doors from the inside:

The rear doors can be opened from the inside in the same manner as the front doors, unless they are locked. 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 $\frac{1}{4}$ turn to the right until the latch snaps open. Return the key to the verticle 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

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.

FRESH AIR VENT has its control knob at the extreme left of the dashboard, just below the Ammeter. Use it to increase ventilation, and to control the amount of fresh air entering your car. This knob operates the left hand vent.

AMMETER, located directly above the fresh air vent, is an electrically operated, direct reading gauge that informs you if the battery is being charged by the generator. The indicator needle may normally be in the discharge area (left of center) when the engine is in idle or low speeds, with electrical circuits in use. At road speeds, the indicator should remain in the charge area or just to the right of center.

HEADLIGHT AND PARKING LIGHT SWITCH is a two-position switch located at the left of the dashboard. When you pull knob outward to the first of two positions, the switch turns on the parking lights and taillights. At the

second position, the headlight and taillights are on. Both positions illuminate the instrument panel lights, which can be dimmed and turned off by turning the switch knob to the right.

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, just press the beam selector, located on the left end of the floor board, with your left foot. A small red indicator light, located above the center of the speedometer will light-up whenever the high beams are being used.

WINDSHIELD WIPERS are vacuum operated, and are turned on by rotating the wiper knob to the right. The further you turn the knob, the faster the blades will sweep across the glass.

HEATER AND DEFROSTER CONTROLS are located just to the right of the steering column, and below the Water Temperature and Fuel gauges. Their operation is fully covered on page 13.

IGNITION LOCK is located on the lower dash, just to the right of the steering column, and controls the starter switch. To turn on the ignition system, as well as all other electrical

INSTRUMENTS AND CONTROLS

circuits, turn the key to the right. When you turn the key to the left, all circuits except ignition are completed, and you can operate the accessories with the engine off. Turn the ignition key to full right to activate the starter. Release the pressure on the key as soon as the engine starts. The ignition key can only be removed from the switch when it is in the "off" position.

CIGAR LIGHTER is located to the right of the Ignition Lock. 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.

TURN SIGNAL INDICATORS are two green-jewel lights positioned at either end of the dash. The proper light flashes when you have activated the turn signal lever to indicate left or right turn.

OIL PRESSURE GAUGE is the second gauge from the left, and it is a gauge that should be checked often. If the indicator drops below the normal operating pressure (20-40 lbs. at approximately 40 m.p.h.) you should investigate at once. NOTE: Normal operating pressure depends on the temperature and the viscosity of the engine oil. The pressure will generally be high until the engine warms-up.

SPEEDOMETER is the large gauge in the middle of the dash, directly above the steering column. Your car's for-

ward speed, in 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.

TEMPERATURE GAUGE, found at the right of the Speedometer, records the temperature of the engine coolant. Under normal operating conditions, with the engine thoroughly warmed-up, the indicator needle should read between 170° and 190°—depending on the outside temperature and the thermostat setting. A sudden temperature rise above normal should be investigated immediately.

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.

RADIO AND ELECTRIC CLOCK are located at the right of the instrument panel, above the glove compartment. Additional information is found in the section on optional equipment.

GEAR SELECTOR LEVER for both manual and automatic transmissions is positioned on the right side of the steering column.

INSTRUMENTS AND CONTROLS

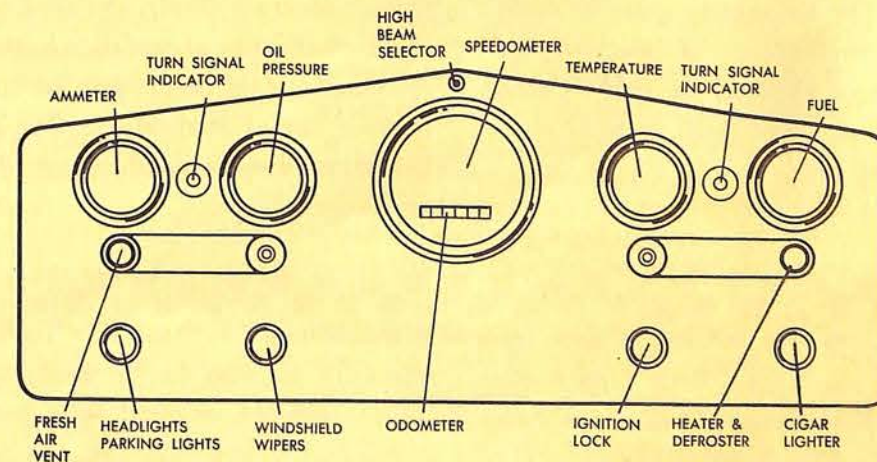
TURN SIGNAL LEVER, located on the left side of the steering column, is operated by moving the lever in the direction of the desired turn—upward for a right turn—down to turn left. The signal lever automatically returns to a neutral position after the turn has been completed.

HORN RING is the bright chrome ring mounted on top of the steering wheel. Depressing it at any point will enable you to sound the horn.

GLOVE COMPARTMENT is positioned at the lower center of the dashboard. It has been furnished with a lock

for the protection of your valuables, and may be locked or unlocked with the round-headed key that is used to operate the trunk lock.

HOOD RELEASE LEVER is located just behind the upper center opening in the grille. To operate, raise-up on the lever to release the hood lock. Keep the lever in the "up" position to release the safety catch, and lift the hood. The spring balanced hood will stay-up without assistance. To close, lower the hood gently, and press down firmly to lock. Do not hold the release lever while closing the hood.



FLOOR CONTROLS

PARKING BRAKE PEDAL, located under the left end of the instrument panel, must be pushed down all the way to apply the parking brake. To release the brake, pull-out the brake release knob, located to the left and below the dash. The optional Parking Brake Signal Light operates when the brake is on.

CLUTCH PEDAL (Manual Transmission) must be depressed all the way while you are shifting gears to avoid clashing and breaking the transmission. Do not rest your foot on the clutch pedal except when you are ready to shift gears. A clutch can become prematurely worn or completely ruined by "riding" it.

TRANSMISSIONS

Checker cars are manufactured with any one of three types of transmissions. 1. Standard: Three forward speeds and reverse, with manual shift. 2. "Driv-R-Matic" (Automatic) designed for use with the "L" head engine for economy and low speed operation. 3. "Dual Range" (Automatic) designed for use with the overhead valve engine affords maximum performance in normal city and highway driving.

BRAKE PEDAL is between the clutch and accelerator pedal. 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.

STANDARD TRANSMISSION

requires you to engage and disengage the clutch while shifting into the four gears—positioned in the familiar "H" pattern.

FIRST GEAR (Low) is used to start the car moving, and to attain initial speed. You should never shift into first when the car is in motion.

SECOND GEAR is used to attain additional speed. You should not start your car in second gear, as this practice tends to cause overheating and damage to the clutch. You may, however, downshift from third to second gear, to gain additional power at slow speeds.

THIRD GEAR (High) is your cruising gear for all normal driving conditions. Never use it to accelerate from a stop.

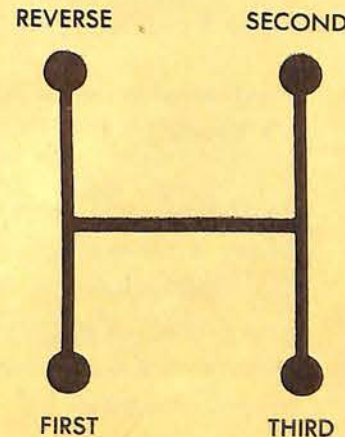
REVERSE. Your car must be brought to a complete stop before shifting into reverse, so as not to clash and chip the transmission gears.

NEUTRAL is used to start or idle your engine. Do not coast with the car in neutral at

any time. Leaving your transmission in one of the driving positions enables your engine to supply braking power when stopping, and helps you keep your car in control.

To avoid excessive wear on the clutch, transmission, and drive line, never shift from low directly to high—or start in second gear. Never change gears until you have fully depressed the clutch pedal. After shifting, you should fully engage the clutch to avoid slipping as the engine accelerates.

MANUAL TRANSMISSION PUSH STARTING. To start your car with the aid of a push, turn on the ignition switch, depress the clutch pedal to the floor, and shift to the second gear position. When you reach the speed of about 10 m.p.h., release the clutch pedal slowly. The engine should then turn over and start. Never tow your car in an attempt to start the engine. For safe towing, keep the gears in the neutral position. If your transmission is inoperative, your car should be towed with the rear wheels off the ground, or with the drive shaft disconnected.



DRIV-R-MATIC TRANSMISSION



If your Checker is equipped with Driv-R-Matic, your selector lever quadrant will have the following positions: (N) Neutral and starting, (D) Drive, (L) Low, and (R) Reverse. The selector lever should slide smoothly between N, D, and L, and for safe driving precaution, you must raise the lever to engage R.

N—Neutral is used to start the engine, and allow it to idle at a standstill.

D—Drive is used for normal forward driving. The transmission shifts automatically from low to intermediate to high, while in drive, to insure the utmost in economy and performance. The transmission also shifts down automatically so that the transmission is in the proper gear for the speed you are in.

L—Low is used to climb steep grades and to drive through deep sand, mud or snow—and to obtain power in getting underway while towing a trailer. Low is also used to descend steep grades in order to take full advantage of your

engine's braking power. Downshifts from D to L for additional braking should be made only when your car's speed is less than 40 m.p.h. You should make this change only on dry roads where traction is good—slippery roads may induce a dangerous skid. Low may also be used for faster acceleration from a standing start, but your car will remain in low gear until manually moved to D—which may be done at any time regardless of car speed.

R—Reverse. This position is used to move your car backward. The selector lever should be shifted to this position only when your Checker is at a standstill. Then accelerate slowly and carefully.

PASSING. When you are driving in D at speeds under 40 m.p.h. and maximum acceleration is desired to pass a slower vehicle, or to climb a steep hill—the transmission can be downshifted from third to second gear by fully depressing the accelerator. When the need for the extra power has passed, release the pedal and the transmission will shift back to third.

DUAL RANGE TRANSMISSION



Your selector quadrant has six positions in Dual Range transmission: (P) Parking (lock and starting), (R) Reverse, (N) Neutral and starting, (D2) Limited driving range, (D1) Complete driving range, and (L) Low. Your selector lever should slide smoothly between Neutral and D1, but for safety, it must be raised slightly to engage park, reverse and the low positions.

P—Park. Use this position to safely and positively lock the rear wheels when the car is stopped. It acts as a convenience in starting your car on a grade, or avoiding “creep” on cold days. Your 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 the car is in motion.

R—Reverse. This position is used to move the car backward. Raise the lever slightly to move in or out of reverse. Then accelerate with caution.

D2—Drive Range offers you a second or intermediate gear to reduce engine speed during initial acceleration. It is most useful when starting on slippery pavement, and in certain driving conditions such as passing slower vehicles or ascending hills.

D1—Drive Range is recommended for most normal driving conditions, and provides you with a complete driving range with a low gear start for increased power and acceleration in fast moving traffic or hilly country. In this range the transmission shifts-up from low through intermediate, to high when the proper speeds are reached, and automatically downshifts at speeds varying with throttle movement. The lever may be moved between D2 and D1 with the car traveling at any speed.

L—Low Range is for use in deep sand, mud or snow, ascending or descending steep grades—and where traffic conditions require continuous first gear driving. When braking, while descending steep grades, the transition from either Drive position to Low can be made at any car speed, if the accelerator is first released. When the lever is shifted to Low, while driving at speeds of more than 20 m.p.h., an immediate downshift to second speed will occur—with a shift to first gear following as the car speed is further reduced. You should never downshift to low on slippery pavements.

FORCED DOWNSHIFT. When driving in either D1 or D2, under approximately 58 m.p.h., additional acceleration can be obtained by fully depressing the gas pedal. Releasing it will automatically shift the transmission back into high gear.

TRANSMISSIONS

As your engine "breaks-in" and friction decreases, the idle speed tends to increase. At higher idle speeds, your car will tend to "creep" due to the increased power transmitted by the torque converter. It may then be necessary to have the idle speed lowered to overcome this situation.

It is possible to hold the car stationary, for limited periods only, on slight upgrades by lightly depressing the accelerator with the selector lever in any of the forward driving ranges—but this practice is not recommended for extended periods.

PUSHING TO START THE ENGINE should be done with the selector lever in Neutral until you have reached a speed of 25 to 30 m.p.h. At this speed, turn the ignition switch on and move your selector lever to D or D1, depending on your type of transmission. Note: It is recommended that the car be pushed rather than towed, as it will attain considerable speed when the engine starts unless the brakes are applied immediately.

TOWING. If it is necessary to have your car towed, the rear wheels should be lifted off the ground, or the driveshaft disconnected. When towing a vehicle on its front wheels, the steering wheel should be secured to maintain a straight forward position. Rocking the car in mud, snow and sand is best accomplished by holding a light, steady pressure on the accelerator and moving the selector lever between R and L. Never tow a car at speeds exceeding 20 m.p.h.

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 at speeds of less than 40 m.p.h.
3. Do not shift into Reverse or Park without first coming to a complete stop.
4. Always engage the parking brake when parking your car, and place the selector lever in the Park position.

GETTING UNDERWAY

1. To get underway with automatic transmission, place the selector lever in the N or P position. The engine will not start in any other position. To start a manual transmission, place the shift lever in neutral, and depress the clutch pedal to the floor.
2. Turn the ignition key all the way to the right, and then release as soon as the engine starts.

STARTING A COLD ENGINE

1. Press the accelerator down all the way to set the automatic choke.
2. Let-up on the pedal about half way (do not repeat this process, as pumping the accelerator will only cause your engine to flood).
3. Turn the ignition key to the right and hold only until the engine starts—then release the key.

GETTING UNDERWAY

WITH THE ENGINE ALREADY WARM

1. Press the accelerator about half way down and hold it there.
2. Turn the key to operate the starter. If the engine does not start, hold the accelerator to the floor and operate your starter. As soon as the engine starts, release the accelerator and the key.

STARTING A FLOODED ENGINE. If your engine becomes flooded, hold the accelerator all the way to the floor

while turning the key. Pumping the accelerator will only cause more gasoline to flood the engine.

WARM-UP. Let the engine idle for a short time after starting, and then drive at moderate speeds for several miles, especially during cold weather.

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

NEW CAR BREAK-IN. How you drive your car during its initial mileage will have an important effect on its future operation. It is advisable to drive at a moderate speed for 10 to 15 minutes after starting, to allow time for the engine, transmission, and rear axle to warm-up to normal operating temperature. The engine requires progressive break-in at various speeds, before it is advisable to run it continuously at all speeds.

You can get your Checker off to a good start by observing a few simple operating rules during the first few hundred miles you drive the car.

1. First 500 miles: Do not exceed 45 m.p.h. Vary the

driving speeds below this figure during the period to allow the moving parts of your engine to polish and "bed-down". Sustained slow speeds can be just as harmful during the break-in period as sustained high speeds.

2. Do not exceed 55 m.p.h. for the second 500 miles. Use the same precautions suggested for the first 500 miles.
3. Change the engine oil when you reach 1,000 miles. Break-in oil should be drained and replaced with the proper viscosity oil recommended on the lube chart on page 21.

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 second gear, in manual transmission, (L position with automatic transmission) 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 first and reverse gears (R and L with automatic transmission). 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.

LIGHTS

LIGHTS. A single switch operates most of your car's lights. The headlights, parking lights, instrument panel, license and taillights all work from the same pull-switch on your dashboard. The high headlight beam and turn signal lights are covered on page 4.

To move your car on smooth ice, shift to second or third gear (D with automatic transmission) and 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.

REFUELING. Your Checker car is engineered to operate efficiently under all driving conditions on a good grade of Regular gasoline. The use of Premium fuel will *not* result in more efficient operation. If you plan to travel outside of the United States or Canada, check with a travel agent or your local auto club to find locations where suitable fuels for your Checker are available.

Back-up Lights (optional) 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.

EQUIPMENT

ASH TRAYS. Your Checker has two ash trays on either side of the glove compartment, and an ash receiver in the back panel of the front seat, for rear seat passengers. To remove both the front and rear ash trays, merely press-down on the snuffer plate and pull out.

AUTOMATIC CLOCK (Optional) features a special mechanism for automatically regulating itself when it is reset.

REAR VIEW MIRROR. The center location of the rear view mirror allows you to see traffic conditions behind, with

HEATER AND DEFROSTER

Your Checker's heater-defroster unit is a single unit that provides effective year-round control of temperature, and the amount, force and distribution of outside air entering the car. 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 top lever at Heat, the center lever at On and the lower lever at Warmer—turn the Fan on.

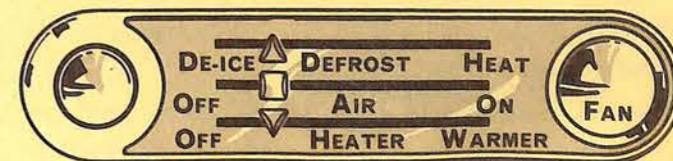
For fast defrosting or to remove very heavy frost: set the top lever at De-ice, the center lever at On and the lower lever at Warmer—turn the Fan on.

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.

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

For normal winter driving: keep the top lever at Heat, the center lever at On. The lower lever may be positioned between Heater and Warmer to attain the desired temperature. The Fan may be turned-on at any time to speed the circulation of warm air.



STATION WAGON FEATURES

Your Checker station wagon has been designed with exceptional features to increase your driving pleasure.

The rear of the second seat's back rest becomes a flush part of the cargo floor when folded down. This may be accomplished with a single movement, or by an optional power device operated from behind the steering wheel. A toggle switch, mounted on the dash, allows you to lower and raise the second seat without leaving the wheel.

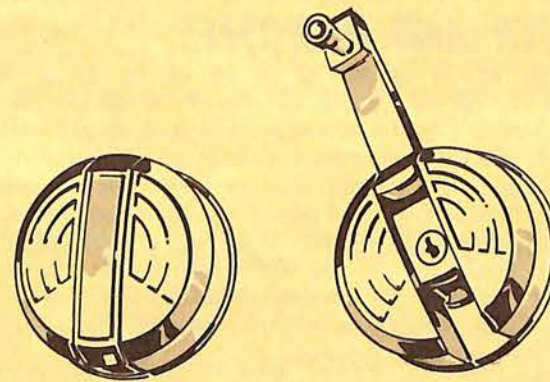
The **SPARE TIRE** compartment is located beneath the rear of the cargo floor. It is covered by a hinged door that can be held open, for easy access, by an attached folding support.

TAILGATE WINDOW OPERATION.

1. First swing out the window regulator handle.
2. Then move the window regulator selector lever to the Open position (if the selector lever is in the Lock position, you must first use your key to unlock it).
3. Wind the window to the full Down position.
4. Now move the window regulator selector lever to the Fold position and snap the handle closed.
5. Pull the control handle (inside gate) upward and open the tailgate.

To close the window, simply reverse the procedure. If it is desirable to leave the tailgate window unlocked, the window regulator selector lever must be left in the Fold position before closing the handle. As a safety precaution, the tailgate cannot be opened until the retractable rear window has been lowered.

To raise or lower the power assisted tailgate window, actuate the toggle switch on the lower edge of the dash—or insert the key in the tailgate window regulator. Turn right to lower and left to raise.



LOCKED
VIEW

OPEN
VIEW

WHEEL AND TIRE CARE

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

1. Check air pressure regularly.
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.

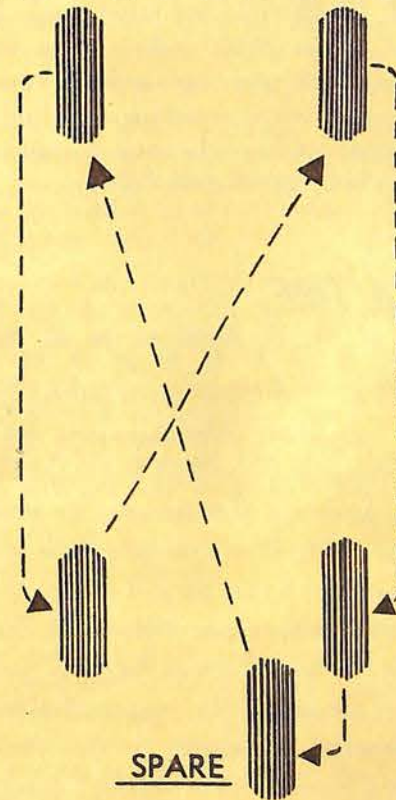
TIRE PRESSURE. A build-up in tire pressure while driving is quite normal. Putting less air in your tires causes under-inflation when tires cool, and induces abnormal tire wear.

Rotating all wheels, including the spare, every 5,000 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 shorten life. Your Checker dealer will be happy to balance your car's wheels to prevent this unnecessary wear.

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. Here are the correct settings:

Caster	1° to 2°	Positive
Camber	1/2° to 1 1/2°	Positive
Toe-In	1/16" to 1/8"	



WHEEL AND TIRE CARE

FRONT WHEEL BEARINGS are factory-packed with a lubricant designed to last 20,000 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 inadvisable to mix the two bases when repacking the bearings.

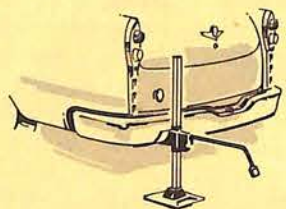
CHANGING A TIRE

CHANGING A TIRE. 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 illustration. 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.

SPARE WHEEL AND JACK STOWAGE. The spare wheel and tire, jack, and jack handle are stored in the luggage compartment of sedans, and under the rear section of the station wagon's floor. Lift the handle, flush to the floor of the station wagon, for easy access to the spare tire, and tire changing equipment.



FRONT VIEW



REAR VIEW

APPEARANCE

The exterior of your Checker is finished for maximum durability and beauty. It is not necessary to wax or polish it 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 fine 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 erosion 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 should be washed at least once a month 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 white-wall 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.

INTERNAL MAINTENANCE

BATTERY CARE. Check the water level in each battery cell at least every 1,000 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. If removal of the battery is necessary, be sure to first disconnect the ground terminal.

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

COOLING SYSTEM CARE. The coolant in your Checker operates under pressure, due to the radiator cap which has a spring pressure of about 4 lbs. Under pressure, the coolant's boiling point is raised above normal. As long as the dash panel heat indicator stays within the operating range, the system is functioning properly and the cap should be left alone.

In spring and fall, when it is necessary to drain the system, first remove the pressure cap. Then open the drain valves at the bottom of the radiator and on the side of the engine block. It is recommended that anti-freeze be used for one season only. In the spring, drain and discard the old anti-freeze, and install fresh anti-freeze in the fall. A rust preventive should be used in the cooling system during the summer. **NOTE:** To remove the radiator pressure cap, turn slowly to the left. Stop if a hissing noise is heard, and

allow the pressure to subside before completely removing the cap. A 180° thermostat was put in your car for the best heater and engine performance. Use permanent type anti-freeze with this thermostat. If you use an alcohol or methanol type anti-freeze, change the thermostat to a lower heat-range type. (A 170° F thermostat is standard on the "L" head engine unless otherwise specified). Be sure that the cooling system has been thoroughly cleaned and inspected before the anti-freeze is added.

ENGINE OIL RECOMMENDATIONS AND REQUIREMENTS. Do not change the "break-in" oil in your Checker until you have driven 1,000 miles. After this distance, the engine oil should be changed at intervals of 3,000 to 4,000 miles under average driving conditions. When operating in dusty areas, or for short trips with outside temperatures at freezing or below, it is recommended that the oil be changed more often.

Recommended Engine Oil Types For Various Climatic Conditions.

Recommended Engine Oil Types For Various Conditions

Temperatures Expected	S.A.E. Number Recommended	Acceptable Multigrade
32° to 110° F	20 W	10 W - 30
0° to 32° F	10 W	10 W - 20
Below 0° F	5 W	5 W - 20

NOTE: Petroleum-base oils identified as "for service MS or DG" are recommended for the Checker engine.

INTERNAL MAINTENANCE

ENGINE DIPSTICK. Your engine's dipstick is located on the engine's left side. Check the oil level at each gas stop to make sure that the level is somewhere in the recommended area. Do not add oil unless the oil level is on the second mark or below on the dipstick. The two marks represent a quart difference in oil level. Do not overfill.

OIL FILTER. The optional oil filter has a throw-away filter unit that can be removed from the adapter by hand. Turn the replacement unit until the gasket contacts the seat—tighten another half turn. The filter should be changed at the initial drain period, and at every 4,000 mile interval after that. An extra quart of oil will be required for the filter.

STANDARD TRANSMISSION requires a good grade of multi-purpose, or all purpose gear oil. We suggest S.A.E. #90 for year around use, and #80 for extremely cold climates.

AUTOMATIC TRANSMISSION uses only fluids identified by "AQ-ATF", Armour Qualification—Automatic Transmission Fluid Type A. Check the fluid level each 1,000 miles, using the following procedure: Apply the parking brake and place the transmission in Neutral. At idle speed, move the selector lever through all the positions to distribute the fluid. Return to Neutral (to D2 with Dual Range transmission) with the engine still running at idle speed in both cases.

Clean all the dirt from the dipstick-filler cap located at the extreme right rear engine compartment. Remove the dip-

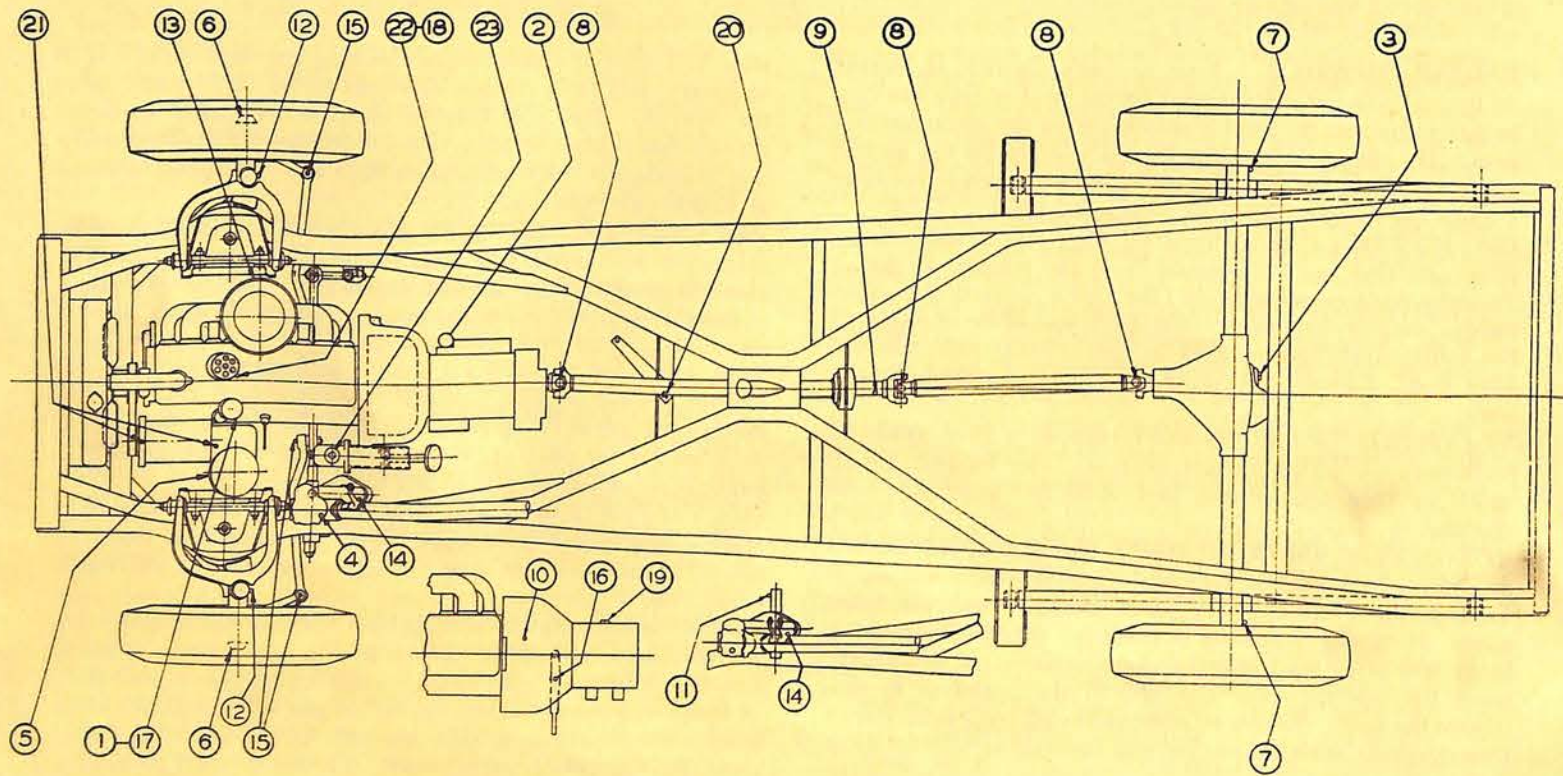
stick and wipe it clean before checking the fluid level. If necessary, add fluid to raise the level to the "full" mark on the dipstick. The area between the first two marks on the dipstick represents one pint. Do not overfill. It is suggested that you change the transmission fluid and adjust the bands at 15,000 mile intervals.

AIR CLEANER SERVICE. Black smoke or sluggish acceleration will warn you that the air filter element needs cleaning or replacing. Inspect the element every 5,000 miles—more frequently under extremely dusty conditions. Blow accumulated dust and dirt from the inside of the filter element with a low pressure air stream, or by gently tapping it against a solid object. **CAUTION:** Prevent oil from contacting the paper filter, as it will clog the element and act as a binder for dust drawn into the cleaner. Replace the paper filter element every 15,000 miles.

OIL FILTER CAP is fitted with a filter that should be washed in gasoline or cleaning fluid, and oiled with engine oil. The necessity for this procedure depends on driving conditions.

FUEL PUMP. The fuel pump filter bowl should be cleaned periodically to prevent contaminated gas from being pumped into the carburetor. To clean, loosen the bolt at the bottom of the glass bowl and move the bail to one side. Lift out the bowl with the ceramic filter element. Wipe the bowl and clean the filter with air pressure. Clean the upper part of the filter where the gasket is fitted. When reassembling the filter, make sure that the gasket seals properly.

LUBRICATION CHART



LUBRICATION CHART

No.	Unit	No. of Places	Lubricant	Total Capacity	Check Periods	Remarks
1	Engine	1	See Page 18	5 Qts. to Refill	Each Fuel Stop	Drain and Refill Every 3,000 Miles
2	Transmission—Automatic	1	Type A — Transmission Fluid	10 Qts. to Refill	Every 1,000 Miles	Drain and Refill Every 15,000 Miles
3	Differential—Except Powr-Lok	1	E. P. Hypoid Gear Lube S.A.E. #90	3 Lbs. to Refill	Every 1,000 Miles	Change Every 15,000 Miles
3a	Differential—Power-Lok	1	API-GL-4 Type For Use in the Powr-Lok Differential	3 Lbs. to Refill	Every 1,000 Miles	Change Every 15,000 Miles
4	Steering Gear	1	E. P. Hypoid Gear Lube S.A.E. #90	12 Ozs. to Refill	Every 2,000 Miles	Oil Plug in Housing Cover
5	Power Steering Pump	1	Type A — Suffix A Transmission Fluid	2 Qts. to Refill	Every 2,000 Miles	Add Fluid to Cover Element in Reservoir
6	Wheel Bearing—Front	2	Rust Inhibited — All-Purpose Grease	Each ¼ Lb. Approx.	Every 10,000 Miles	Remove Wheel, Clean and Repack
7	Wheel Bearing—Rear	2	Rust Inhibited — All-Purpose Grease	As Required	Every 10,000 Miles	Pressure Fitting — Do Not Overload
8	Universal	3	Mineral Base Oil — S.A.E. #140	As Required	Every 1,000 Miles	Pressure Fittings
9	Slip Joint—Propeller Shaft	1	Rust Inhibited — All-Purpose Grease	As Required	Every 2,000 Miles	Pressure Fitting
10	Bearing—Clutch Throwout (Standard)	1	Rust Inhibited — All-Purpose Grease	As Required	Every 2,000 Miles	Pressure Fitting — Thru Hole in Pan Underneath
11	Cross Shaft—Clutch Throwout (Standard)	1	Rust Inhibited — All-Purpose Grease	As Required	Every 2,000 Miles	Pressure Fitting
12	Steering Knuckle Ball Joint	4	Aluminum Soap Base Grease	As Required	Every 2,000 Miles	Relieve Load and Swing Wheels While Lubricating
13	Air Cleaner—Dry Type	1	CAUTION: Keep Oil From Element	None	Every 4,000 Miles	Remove: Clean Cartridge by Tapping Gently
14	Gear Shifter	1	Rust Inhibited — All-Purpose Grease	As Required	Every 2,000 Miles	Pressure Fitting in Lever
15	Steering Linkage	5	Rust Inhibited — All-Purpose Grease	As Required	Every 2,000 Miles	Pressure Fittings
16	Clutch Throwout Yoke (Standard)	1	Rust Inhibited — All-Purpose Grease	As Required	Every 2,000 Miles	Pressure Fitting — Lightly
17	Oil Breather Cap	1	Engine Oil	As Required	Every 2,000 Miles	Wash in Kerosene and Refill
18	Distributor Rotqr—Felt	1	Engine Oil	2 or 3 Drops	Every 2,000 Miles	Oil Sparingly
19	Transmission Manual Shift (Standard)	1	Mineral Base Gear Oil S.A.E. 90 Winter	2½ Lbs. to Refill	Every 1,000 Miles	Change Every 15,000 Miles
20	Parking Brake Lever	1	Rust Inhibited — All-Purpose Grease	As Required	Every 2,000 Miles	Pressure Fitting
21	Generator	2	Engine Oil	Few Drops	Every 2,000 Miles	Oil Cup on Each End — With Oil Can
22	Distributor	1	Engine Oil	Few Drops	Every 2,000 Miles	Oil Cup on Side — With Oil Can
23	Master Cylinder	1	Brake Fluid S.A.E. 70 R3 Specification	Keep Filled	Every 2,000 Miles	Under Hood
	MISC. HINGES, ACCEL. LINKAGE PINS, BRAKE AND CLUTCH CONTROL PINS, ETC.		Machine Oil	Few Drops	Every 2,000 Miles	With Oil Can

MAINTENANCE

CHASSIS LUBRICATION. The chassis should be lubricated at 1,000 mile intervals, as shown on the chart on page 21. 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 plugs should be cleaned and the gaps adjusted every 5,000 miles for maximum engine performance, gas mileage and easy starting. The electrodes should be filed square, and the gap adjusted to .030". Reinstall with 30 ft. lbs. torque on L-Head engine (14mm. plugs), and 34 ft. lbs. torque on Valve-in-Head engine (16mm. plugs). To maintain peak efficiency, install new plugs every 10,000 miles.

IGNITION TIMING. Timing should be done with a stroboscope, with the engine running at normal operating temperature, and the distributor vacuum regulator disconnected. Loosen the distributor clamping screw. Connect the stroboscope low tension lead to the battery voltage, and high tension cable to the number one cylinder plug. Clean off the timing marks on the front of the crankshaft pulley—chalk mark zero or top dead center position. Run the engine at approximately 4000 rpm—direct the light beam onto the damper pulley markings. With the chalk mark at top center, steady the opposite indicator, and rotate the distributor until the following readings are taken on the opposite indicator:

Valve-in-Head	3½° B.T.D.C.
L-Head Engine	4½° B.T.D.C.

Tighten the clamping screws on the distributor and connect the vacuum regulator.

DISTRIBUTOR. The distributor should be checked and serviced every 10,000 miles. Keep the breaker-points clean, set to the correct gap, and parallel to each other. To clean the points, remove the distributor cover and turn the crankshaft until the points close. Lift off the rotor, remove the terminal nut to release contact breaker spring, and lift the nylon rocker off the pivot post. Remove the screws from the fixed contact plate and lift out. Grayish-colored points (only slightly pitted) within .002 of correct gap setting need not be replaced or adjusted. If pitted or purple, the points may be dressed flat on a carborundum stone to eliminate pitting. If burned or badly pitted, the condenser is probably bad, and both the condenser and the points should be replaced.

If the points were merely dressed, clean off all traces of stone dust, and refit the contact plate securely with screws. Refit the rocker, apply a drop of oil to the pivot post, and secure the breaker spring with the terminal lock. Make sure that the point gauge is clean and the points aligned, making contact near the center. Turn the crankshaft until the rocker is on the peak of the cam lobe. Loosen the contact plate securing screws, and move the plate about the axis until the

MAINTENANCE

gauge (.020) has a good sliding fit between the points. Tighten the securing screws and recheck the setting. Adjust the stationary contact without bending the breaker arm. Use a light film of cam grease on the lobes—then replace rotor and cover. Add a few drops of medium weight engine oil to the outside of the base.

ADJUST FAN BELT by loosening the generator adjusting arm locknut and the two lower support bolts. Pry the generator outward. When the correct belt tension is obtained, tighten the lower support bolts and the adjusting arm locknut, and re-check the tension. The belt is tensioned correctly if it can be deflected inward, by hand, approximately 3/8 to 1/2 in. between the fan pulley and the generator. Keep the belt tension within given limits, as too tight a belt will put undue strain on driven units. If too loose, inefficient generator and overheating will result.

CARBURETOR CARE is vital to gas mileage. If your Checker idles and accelerates properly, carburetor adjustment is not needed. Mileage is affected by the idle system which supplies gas at speeds up to 25 m.p.h. An over-rich mixture causes gasoline waste and poor mileage. To correct an over-rich idle mixture, seek the leanest possible idle mixture (after break-in) by turning the idle needle in until the engine gets slightly rough—then back-off just enough to get a smooth-running engine.

BODY DRAIN HOLES eliminate water accumulation in

doors, and prevent rusting of the bottom panels. Clear and clean drain holes in each door once a month. These half-moon shaped holes are at the bottom of the door where the outer panel joins the door frame. Clear them with a screwdriver after the car is washed, or when you have driven in rainy weather. You should also clear the holes in the sill, rocker panels and spare tire well.

BRAKE ADJUSTMENT uses star-wheel adjuster links to expand the shoes into the drums, thus reducing lining clearance.

To adjust:

1. Remove the adjustment slot cover on the backing plate.
2. Insert the tool through the slot to engage the star-wheel adjuster. Use the slot edge as a fulcrum and move the tool to rotate the star-wheel to lock the brake drum.
3. Back-off the star-wheel until the drum turns freely (10-15 notches).
4. Adjust all wheels and parking brakes. Depress the parking brake pedal about 1/2 in. and remove all the slack from the cable at the clevis (located near the center of the car between the frame X-member). Use care not to pull the brake shoes away from the anchors. 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. Free brake pedal play should not exceed 3/8 in. Adjust by loosening the locknut on the eccentric bolt to obtain proper play. Tighten

MAINTENANCE

the locknut. Check the fluid level in the master cylinder every 2,000 miles.

CLUTCH. The clutch pedal must be adjusted periodically in order to maintain sufficient pedal travel to fully dis-

engage the clutch. Free-play, before effective clutch movement, should be 1 to 1 $\frac{3}{8}$ in. Adjustment is made by varying the length of the throwout lever rod. Lengthening reduces pedal free-play—shortening increases it.

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. If a dead battery is the cause of the trouble, start the engine by pushing the car.
3. Ignition switch: Contacts may not be closing properly. Turning the switch on and off several times may elim-

inate the trouble until you have time to replace the switch.

4. Solenoid and starter: The solenoid or starter can be made inoperative 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.

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 or the coil. If the spark is good and hot, check the fuel system.

GUIDE TO MINOR TROUBLE SHOOTING

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.

If car steers hard . . .

Low air pressure in the tires, wheels out of line, a lack of lubricant in the steering gear box, or a combination of any of these may be the cause.

If brakes fail to fully release after stopping . . .

Dragging brakes, or a failure of the brakes to release, can sometimes be cured by backing your car up a few inches, and sharply applying the brakes. Brakes adjusted too well—so that you need only touch the pedal to apply the brakes—may also cause this problem. This condition does not constitute a good brake adjustment and will, at the slightest increase in temperature, expand the brake fluid—thus applying the brakes. Readjustment is the proper cure, but you can attain temporary relief by opening any one of the bleeder screws to relieve expansion and prevent the destroying of brake linings. You should have these services done properly at your Checker dealer's service department.

Brake pedal is low . . .

If the brake pedal must be pressed almost to the floor before the brakes respond, you may have air in the lines,

caused by an inadequate brake fluid level in the master cylinder. You can test this by pumping the pedal up and down when coming to a stop. If the pedal begins to "come up", the lines need not be bled. If the pedal position remains close to the floor, you are in need of an adjustment.

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. Investigate any sudden abnormality in your car's ride. Driving cannot be enjoyed when combatting a poor ride. You may also have your Checker dealer inspect the shock absorbers.

If steering wanders or pulls at high speeds . . .

Various conditions can bring about this problem.

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

ELECTRICAL SYSTEM SERVICE

Your Checker car has a 12-volt system protected by three circuit breakers. A malfunction will cause one of the breakers to give intermittent service in that circuit. The location of circuit breakers is as follows:

1. Headlight-taillight breaker—on the headlight switch under the dashboard.
2. Horn breaker—under the left inner front fender, above the horns.
3. All accessories (except the radio)—under the hood, on the cowl next to the master brake cylinder.

NOTE: The radio fuse is built into the power line from the ignition switch to the radio.

BULB REPLACEMENT. In case of bulb failure, consult the replacement table on this page, and refer to the appropriate information below for the changing procedure. Replacement bulbs may be purchased from your 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.

PARKING — TAIL — BACK-UP and STOPLIGHT bulbs may easily be replaced by first removing the lens screws. Then turn the defective bulb a half turn left and pull out. Reverse the procedure to install a new bulb. Use caution to put the gasket in place before tightening all the screws.

LICENSE LAMP bulb is easily replaced by simply removing the three screws from the housing.

INSTRUMENT PANEL LIGHTS are in snap-out sockets which can easily be removed or replaced with a slight hand pressure. Dome lights have snap-out lenses. Pinch the lens in the center to remove. Replace the bulb, and then snap the lens back with a slight hand pressure.

BULB REPLACEMENT TABLE

Bulb Location	Bulb Manufacturer's No.	
Headlight		
Inner	12 Volt	4001
Outer	12 Volt	4002
High Beam Indicator	12 Volt	57
Parking Light	12 Volt	1034
Taillight	12 Volt	1034
Stop Light	12 Volt	1034
Directional Signal		
Front	12 Volt	1034
Rear	12 Volt	1034
Indicator	12 Volt	57
License Plate Lamp	12 Volt	1034
Instrument Panel	12 Volt	57
Back-Up Light	12 Volt	1073*
Dome Light	12 Volt	1003
Radio Light	12 Volt	57*
Glove Compartment	12 Volt	57
Parking Brake Light	12 Volt	57*

*Optional

OPTIONAL EQUIPMENT

AIR CONDITIONER. Your Checker air conditioner selectively controls cool, dry air that circulates within the car. The dial-type controls are conveniently located on the driver's side of the instrument panel, just below the ammeter and oil pressure gauge. The lever gives full control of cooling temperature—pushing it towards the left lowers the temperature of the discharged air. Once set, the temperature is automatically maintained by a thermostatic control. The knob below the oil pressure gauge turns on the entire unit and regulates the fan speed from low, to medium to high, in three stages. Individually selective air flow is possible with scientifically pitched, adjustable swivelling louvers (mounted at either end of the lower dash panel), with a rotating air deflector in the center that provides complete control of air circulation. Louvers can be aimed to circulate air to either the front or rear seat compartments, or both—to provide the driver and all passengers with cool comfort.

Fresh outside air may be mixed with circulating air in the car at any time by opening a vent window or fresh-air intake. 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 minute when starting to drive. This will exhaust the accumulated warm air. Then close all the windows. In winter, it is advisable to operate the air conditioner at short intervals to assure protecting 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 to provide easier starting. Your air conditioner's magnetic compressor drive clutch has a shock-free, smooth engagement when the unit is turned on, and it is advisable not to turn on the unit if you are traveling at a speed of over 40 m.p.h.

SEAT BELTS provide maximum safety and comfort for you and your passengers. Available as an extra at your authorized Checker dealer, the seat belts fit special mountings provided as standard equipment for front seat installation. Special tools or drilling are not required for installation. Their proper usage and care will provide maximum safety in case of sudden stops and unexpected collisions.

Fastening the seat belt . . .

To fasten the safety belt properly, grasp the buckle and catch sections and place them around your waist. Force the catch into the open end of the buckle until an audible snap is heard. Adjust the belt firmly around the waist by pulling the end of the belt protruding from the buckle.

Releasing the belt . . .

You need only pull on the buckle lever to release the belt.

Care of seat belts . . .

To keep belts clean and dry, wash with a mild soap solution in lukewarm water. Keep the belts away from sharp edges and damaging objects—and inspect the belts periodically for cuts and damage that might lessen their effectiveness. Do not bleach or dye the belts, as this can weaken the fabric.

OPTIONAL EQUIPMENT

RADIO. A pushbutton radio in your Checker will add greatly to your driving pleasure. Stations are selected with five pushbuttons. 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, to tune in another station within range, turn on the radio and let it play for about ten minutes 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.

IMPORTANT: In the event of a national emergency, tune in the Civil Defense broadcasts by setting the dial pointer on 640 or 1240 kilocycles, marked on the dial of your radio by the Civil Defense triangle in a circle. These are the Conelrad stations.

POWER BRAKES on your Checker are designed to allow you to retain "pedal feel" even though the effort needed to apply the brakes is greatly reduced. This system uses a reserve tank that provides 2 to 3 power-assisted applications after the engine is shut off, so that the brakes operate as in a car not equipped with power brakes when the motor is not running. 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 2,000 miles. For maximum application efficiency, free pedal play should not exceed $\frac{1}{4}$ in. To

adjust free play, loosen the locknut on the eccentric bolt at the pushrod and rotate the bolt to obtain proper free play. Then tighten the locknut.

PARKING BRAKE ALARM LIGHT (Optional) is located to the right of the parking brake, and is illuminated when the parking brake is applied. It will warn you not to put the car in motion before releasing the parking brake.

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 2,000 miles. If oil is needed, use "Type A" automatic transmission fluid. Do not allow dirt to fall into the reservoir when the cover is removed.

WINDSHIELD WASHERS are operated by pressing the button within the windshield wiper control knob. Pressing it will send a measured amount of water or cleaning fluid agent onto the windshield. The wiper is then started by rotating the control knob to the right. 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.

OPTIONAL EQUIPMENT

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 the jar only $\frac{3}{4}$ full in winter to allow for expansion if the solution should freeze.

HOW TO USE OVERDRIVE. Overdrive offers you unequalled economy and smooth, quiet operation. You get an extra bonus in brisker performance due to higher axle ratios. You engage overdrive by pushing the control full-in. Do this at any speed without releasing the clutch. After that, and until your speed is lower than 20 to 30 m.p.h., or until accelerator is fully depressed (kickdown position), you will continue in overdrive. Descending steep hills, or in certain traffic conditions, you may prefer to use the engine's braking efforts by releasing the accelerator. Less wear, and heating of the brakes, and increased lining life will result.

TO LOCK OUT OVERDRIVE:

1. If the car is standing still—pull the control handle full out.
2. If the car is moving at less than 25 m.p.h.—accelerate the engine, and at the same time, pull the handle out.
3. If the car is moving more than 25 m.p.h.—press the accelerator to the floor. This puts the transmission in conventional gear. Once you are in conventional gear, pull the control handle full out.

NOTE: If it is ever necessary to push your car to start it, remember to first lock-out the overdrive.

POWR-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, Powr-lok axle keeps the car more stable by preventing one wheel from spinning if poor traction is encountered, thus adding an extra measure of safety under all driving conditions. **CAUTION:** Since torque is shifted to the stationary wheel in the Powr-lok axle, never jack-up one rear wheel if the engine is to be run with the car in gear. Cars with Powr-lok axle feature should have the rear wheels removed for balancing.

LUBRICATION. Powr-lok is factory filled with a special lubricant not generally available to the public. Under no circumstances should the standard grade rear axle lubricant be used. Add or repalce only with API-GL-4 type lubricant or equivalent.

FUEL ECONOMY

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

TIPS FOR EASY HIGHWAY MILES...

Your trips will be pleasant, more enjoyable, and safer if you practice these tips for easier highway miles . . .

Frequently shift your body position behind the wheel. This practice, with the occasional moving of the seat itself, will help to combat fatigue. NOTE: It is recommended that you only change seat position when the car is at a standstill.

You can also combat fatigue through conscious mental effort. If your finger muscles tighten-up as you grip the wheel, make an effort to relax them. If your feet get tired, and they may, due to tight shoes, or excessive warmth—there is a simple solution. Switch to soft, light shoes or sandals—but do not drive with shoes off.

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. Have an engine tune-up every 5,000 to 10,000 miles to assure top mechanical efficiency necessary for good gas mileage.

To relieve eye fatigue, vary the area in front of the car, on which you focus as you drive. Remember, however, to focus farther ahead as you increase your car's speed. If your eyes tire while driving during the day, try a good quality sunglasses. Dimming the instrument panel lights will help to make long trips at night easier.

Drive at various legal speeds for easier highway miles, especially while driving on a turnpike. This is a safety tip, but it also serves to reduce fatigue. Varying your speed decreases monotony, which is a major fatigue-causing factor. You will probably find that traveling at the low end of the legal speed limit is less tiring than driving at the legal maximum.

SPECIFICATIONS AND TECHNICAL DATA

Overall length	199½"
Height	62¾"
Width	76"
Wheelbase	120"
Ground clearance	7½"
Tread—Front	60"
Rear	62½"
Capacities	
Fuel Tank	23 gal.
Crankcase	5 qts.
With oil filter	6 qts.
Transmission (Std.)	2.6 qts.
Automatic Transmission	19 pts.
Rear Axle	3 pts.
Cooling System	
With Heater	13 qts.
Without Heater	12 qts.
Thermostat	180°
Radiator Cap Pressure	4 P.S.I.
Power Steering	Linkage Type
Ignition Timing	3½° BTDC
Spark Plug Gap032-.033
Distributor Point Gap020-.002
Cam Angle	39°
Breaker Arm Tension	17 to 20 oz.
Tappet Clearance (Hot)	
Intake017
Exhaust023

Gasoline Grade	Regular
Electrical System	12 Volt
Tire Information	
Types	4 Ply and Tubeless
Size—Sedan	6.70 x 15
Station Wagon	7.10 x 15
Recommended Inflation Pressure	
Front and Rear All Models	Cold 24 Hot 28
Engine Idle Speeds	
Automatic Transmission (In Drive)	375 rpm
Manual Transmission (In Neutral)	375 rpm

LICENSE DATA

	Overhead Valve	L-Head
Engine Type		
Piston Displacement	226 cu. in.	226 cu. in.
No. of Cylinders	6	6
Cylinder Bore	3-5/16	3-5/16
Stroke	4¾	4¾
Compression Ratio	8.00:1	7.3:1
Taxable Horsepower	26.33	26.33
Firing Order	1-5-3-6-2-4	1-5-3-6-2-4
Torque (16 ft.) erpm	198 @ 1800	180 @ 1400
Horsepower (erpm)	141 @ 4100	80 @ 3100

INDEX

Air Cleaner	19	Drain Holes	23	License Data	31	Speedometer	4
Air Conditioner	27	Electrical System	26	Lubrication	22	Starting	10
Ammeter	3	Bulbs	26	Engine	18	Engine Cold	10
Appearance Care	17	Distributor	22	Filter	19	Engine Warm	11
Ash Tray	13	Timing	22	Trans. Std.	19	Station Wagon	14
Battery	18	Fresh Air Vent.....	3	Trans. Auto.	19	Temperature Gauge ...	4
Brakes	23	Fuel	12	Powr-Lok Axle	29	Tires	15
Parking	6	Fuel Economy	30	Wheel Bearings	16	Transmission	6
Service	23	Fuel Pump	19	Chassis	22	Standard	7
Adjustment	23	Gasoline Gauge	4	Chart	21	Driv-R-Matic	8
Break-in Period	11	Glove Compartment...	5	Oil Filler Cap.....	19	Dual Range	9
Carburetor	23	High Beam Indicator...	3	Oil Pressure Gauge....	4	Trunk Lock	2
Cigar Lighter	4	Headlight Switch	3	Power Brakes	28	Turn Signal	5
Clutch	6	Heater and Defroster...	13	Power Steering	28	Warranty	33
Cooling System	18	Hood Release	5	Radio	28	Wheel Alignment	15
Anti-Freeze	18	Ignition	22	Spark Plugs	22	Windshield Wipers	3
Thermostat	18	Keys	2	Specifications	31	Windshield Washers ...	28
Fan Belt Adjust....	23						

WARRANTY

The Manufacturer warrants each new motor vehicle manufactured to be free from defects in material and workmanship under normal use and service, with obligation under this warranty being limited by the manufacturer of parts thereof, including all equipment or trade accessories (except tires) supplied by the Motor Vehicle Manufacturer, and which parts are returned within (90) days after making delivery of such vehicle to the said purchaser or before such vehicle has been driven four thousand (4,000) miles, whichever shall first occur, returned with transportation charges prepaid, and which its examination shall disclose to its satisfaction to have been thus defective; this warranty being expressly in lieu of all other warranties expressed or implied and of all other obligations or liabilities on its part, and it neither assumes nor authorized any other person to assume for it liability in connection with the sale of its vehicles.

Checker Motors Corporation has reserved the right to make any changes in design or to make additions to or upon its product without incurring any obligations to install the same on motor vehicles previously built.

CHECKER MOTORS CORPORATION
KALAMAZOO, MICHIGAN, U.S.A.

