T

IN CASE OF EMERGENCY

FOUR-WAY HAZARD WARNING FLASHER

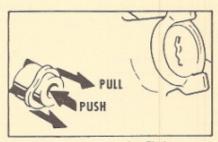


Figure 14 - Hazard Warning Flasher

Use the warning flasher to warn other drivers any time your vehicle becomes a traffice hazard, day or night.

Avoid stopping on the roadway if possible.

Turn on the hazard warning flasher by pushing in on the button (inside the collar) located on the column just below the steering wheel. The flasher will work with the ignition key either on or off.

The turn signals do not work when the hazard flashers are

If the brake pedal is depressed, the lights will not flash; they will stay on until the brake is released.

To turn off the flasher, pull the button collar out.

EMERGENCY STARTING

NOTE: Do not push or tow this vehicle to start it. Under some conditions, this may damage parts of the vehicle.

If your vehicle has a discharged battery, it can be started by using energy from another battery — a procedure called, "jump starting." Before resorting to jump starting, however, see information on the Battery Boost Switch on page 16.

JUMP STARTING (Use Only If Vehicle Cannot Be Started Using Battery Boost Switch)

CAUTION: Be sure to exactly follow the instructions given below or personal injury (particularly to eyes) or property damage may result from battery explosion, battery acid, or electrical (short circuit) burns.

THE MAJOR SAFETY PRECAUTION IS TO MAKE THE FINAL CONNECTION TO GROUND (a solid, stationary metallic object) on the engine at some distance from the battery. This helps reduce the chance of an explosion due to sparks.

To lessen the chance of an explosion, never expose the battery to open flames or electric sparks. Also, do not smoke near the battery. Batteries give off a gas which is inflammable and explosive.

To lessen the risk of injury in case an explosion does occur, wear eye protection or shield your eyes when working near any battery. Do not lean over a battery. Do not allow battery fluid to contact eyes, skin, fabrics, or painted surfaces because battery fluid is a corrosive acid. Flush any contacted area with water immediately and thoroughly. Also, get medical help if eyes are affected.

To lessen the risk of a short circuit, remove rings, metal watch bands, and other metal jewelry. Also, do not allow metal tools to contact at the same time the positive battery terminal (or any metal connected to this terminal) and any other metal on either vehicle. Make certain when attaching the jumper cable clamps to the positive terminals of the batteries that neither clamp contacts any other metal.

This vehicle has 12-volt battery and a negative ground electrical system. Make sure that the other vehicle also has a 12-volt battery and that the negative terminal is grounded (attached to a metal part of the vehicle). Its owner's manual may give you that information.

CAUTION: If unsure of the other vehicle's voltage (or if the voltage and ground on the other vehicle are different from your vehicle), do not try to jump start as a personal injury or severe damage to electrical and electronic parts may result.

Position the vehicle with the good (charged) battery so that the jump starting cables will reach. Do not allow vehicles to touch.

Turn off all electric motors and accessories in both vehicles. Turn off all lights except those needed to protect the vehicle or light up the work area. Turn off the ignition; apply the parking brake firmly and put the automatic transmission in "PARK" (manual transmission in "NEUTRAL") in both vehicles.

If the discharged battery has filler caps, check the fluid level. (Do not check with an open flame and do not smoke.) Add clear drinking water to the proper level if low, and replace caps before jump starting. If the battery is a Delco sealed type, do not try to jump start the vehicle, or charge, or test the battery if the test indicator in the battery is bright or light yellow (see illustration). Instead, install a new battery.

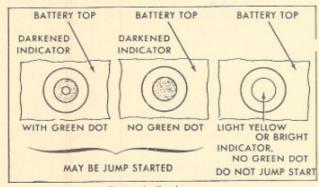


Figure 15 - Battery Charge Indication

For jumper cable connection instructions, see illustration. Make the connections in numerical order, as follows:

Connect the first jumper cable from the positive "+" (red) terminal on one battery to the positive "+" (red) terminal on the other battery. NEVER connect "+" (red) terminal to "-" (black), or "-" to "+".



IN CASE OF EMERGENCY (Continued)

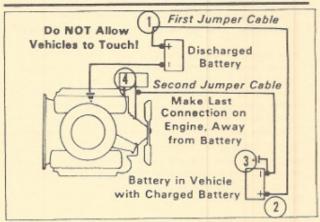


Figure 16 - Battery Jumper Cable Schematic

Next, connect one end of the second cable to the grounded negative "-" (black) terminal of the good (charged) battery.

Lastly, connect the other end of the second jumper cable to a solid, stationary, metallic point on the engine of the vehicle with the discharged battery but at a point away from the battery — 18 inches (450 millimeters) or more from the battery if possible. Do not connect it to pulleys, fans, or other parts that move. Don't touch hot manifolds which can cause severe burns. (The mounting brackets for the Delcotron generator, or the air conditioning compressor, generally make a good point for this final ground attachment. Take care that the jumper cable does not contact moving parts on or near the generator or compressor.)

Start the engine on the vehicle with the good (charged) battery and run the engine at a moderate speed.

Start the engine of the REVCON that has the discharged battery.

Remove the battery cables by reversing the above sequence exactly. Start by removing the last clamp first; that is, remove the jumper cable from the engine of the vehicle with the discharged battery as the first step.

ENGINE COOLANT

Your cooling system may overheat temporarily during severe operating conditions, such as:

Climbing a long hill on a hot day. Stopping after high-speed driving. Idling for long periods in traffic. Towing a trailer.

If the coolant temperature gauge needle goes over 250°F and your air conditioner is on, turn it off. If the gauge shows over 250°F while stopped in traffic, place the transmission shift lever in Neutral ("N").

The water temperature warning light will also come on to indicate overheating.

If the temperature gauge needle doesn't start to drop within a minute or two:

Pull over to a safe place and stop the vehicle. Set the parking brake and shift to "Park."

DON'T TURN OFF THE ENGINE. INCREASE THE EN-GINE IDLE SPEED until it sounds like it's going about twice as fast as normal idle speed. Bring the idle back to normal after two or three minutes.

If the temperature needle doesn't start to drop, NOW TURN OFF THE ENGINE and proceed as follows:

Open the engine hood. Look at the coolant level in the "see through" coolant recovery tank. The coolant level should be between the "Full Hot" and "Full Cold" marks on the tank. If the coolant appears to be "boiling," wait until it stops before proceeding further. (It should not be necessary to remove the radiator cap to check the coolant level, and it can be dangerous if the engine is still hot.

CAUTION: To help avoid the danger of being burned:

DO NOT REMOVE the coolant recovery cap while the coolant is boiling, and

DO NOT REMOVE the radiator cap while the engine and radiator are still hot.

Scalding fluid and steam can be blown out under pressure if either cap is taken off too soon.

If the coolant level is low:

Look for leaks at the radiator hoses and connections, heater hoses and connections, radiator, and water pump. See that the fan belts are not broken or off the pulleys, and that the fan turns when the engine is started.

Add coolant to the coolant recovery tank.

If the coolant level in the coolant recovery tank is at the correct level and the gauge needle is still in the warning zone, air may be trapped in the cooling system. This may prevent coolant from returning to the radiator. In this case, it may be necessary to add coolant directly to the radiator. (See page 28 for Coolant Replacement information.)

After the gauge needle is back to normal, resume driving at a reduced speed. Return to normal driving after about 10 minutes if the needle does not go back to the warning zone. Normal temperature for the coolant is 195° to 220°F.

JACKING

CAUTION: To reduce the possibility of personal injury:

Use this jack only for lifting vehicle during wheel changing. Never get beneath the vehicle when supported by this jack. Do not start or run the engine while vehicle is supported by this jack.

	JACKING POINT ON VEHICLE			
MODELS	FRONT	REAR		
ALL	Chassis Sub-frame "Box"	Housing Near Wheel at Centre of Tandem Only		

IN CASE OF EMERGENCY (Continued)

JACKING INSTRUCTIONS

Park on level surface and set parking brake firmly.

Set automatic transmission in "Park."

Turn on hazard warning flasher,

Remove any wheel opening cover, if equipped. Remove lugnut decor caps.

Loosen, but do not remove, wheel nuts by rotating wrench counterclockwise.

NOTE: Capped chrome nuts can be damaged if wheel nut wrench is not fully seated on wheel nuts.

Locate jack beneath vehicle (base must sit flat).

Block front and back of wheel diagonally opposite jack position.

Pump jack up & down so tire just clears surface, (Always operate jack with a slow smooth motion.)

Replace wheel and slightly tighten wheel nuts. Wheel must be seated on hub.

Turn hydraulic release on jack to lower vehicle, then fully tighten wheel nuts in a criss-cross sequence.

Wheel nut torque should be set to specifications shown below.

WHEEL NUT TORQUE

CAUTION: When the Motor Home, or wheel, or fasteners are new, have a mechanic tighten wheel nuts with a torque wrench at 100, 1000, and 6000 miles (160, 1600, and 9600 kilometers). This precaution is necessary because the clamping system used on REVCON Motor Home wheels in some cases needs to seat before the fasteners will hold a uniform clamp load and remain fully tightened. Also have a mechanic tighten wheel nuts with a torque wrench as soon as possible after installing any wheel. In addition, nut tightness on all wheels should be set with a torque wrench every 6000 miles (9600 kilometers).

Use the correct torque listed for the type of wheels as shown in the table which follows. Wheel nuts should be tightened

	DESCRIPTION	TORQUE
REVCON WHEELS	5/8" and 9/16" Bolts	Power Torque (all bolts) 110 - 140 ft. lbs.
		Hand Torque (all bolts) 140 - 160 ft. lbs.

alternately and evenly to the correct torque in the sequence shown below. Never use oil or grease on studs or nuts. Im-

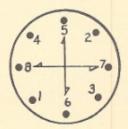


Figure 17 - Wheel Nut Torque Sequence

properly tightened wheel nuts could eventually allow the wheel to come off while the Motor Home is in motion, possibly causing loss of control. (Also see the caution in the Service and Maintenance section of this manual regarding the danger of mixing metric and customary fasteners.)

STOWAGE OF TIRE AND JACK

CAUTION: Always securely restow the spare tire assembly, all jacking equipment, and any covers or doors, using the means provided. This will help keep such things from being thrown about and injuring people in the vehicle in an accident.

TOWING YOUR REVCON

Proper equipment must be used to prevent damage to vehicles during any towing. State (Provincial in Canada) and local laws which apply to vehicle in tow must be followed. Get detailed towing instructions from your dealer.

Your vehicle may be towed on all six wheels, at speeds of less then 35 mph (60 km/h), for distances up to 50 miles (80 kilometers), provided the driveline and steering are normally operable. For such towing the steering must be unlocked, transmission in neutral, and the parking brake released. Connect to main structural parts of the vehicle. Do NOT attach to bumpers or brackets. Remember also that power brakes and power steering will not work when engine is "Off." REVCON does not recommend that the vehicle be towed in this manner.

If the vehicle is to be towed by a wrecker, use only equipment designed for this purpose following the instructions of the wrecker manufacturer. A safety chain system must be used for all towing. Your REVCON is provided with tow hooks at the front for lifting or towing. Please use them if lifting or towing is necessary.

FREEING VEHICLE FROM SAND, MUD, SNOW OR ICE

If your vehicle gets stuck in sand, mud, snow or ice, move the shift lever from Drive ("D") to Reverse ("R") in a repeat pattern. Apply a light pressure to the accelerator pedal while the transmission is in the "D" or "R" range, Remove your foot from the accelerator while shifting between ranges. Do not race the engine. For best traction, avoid spinning the wheels, Incorrect rocking of vehicle while stuck may result in damage to vehicle components.

CAUTION: Do not spin wheels faster than 20 mph (35 km/h). Personal injury and damage, including tire, transmission and/or front axle failure, may result from excessive wheel spinning.

If vehicle remains stuck after several rocking attempts, seek other assistance.



APPEARANCE CARE

CAUTION: Many cleaners may be poisonous or flammable, and their improper use may cause personal injury or damage the inside of the vehicle. Therefore, when cleaning the inside of the vehicle, do not use volatile cleaning solvents such as: acetone, lacquer thinners, enamel reducers, nail polish removers; or such cleaning materials as laundry soaps, bleaches or reducing agents (except as noted in the manufacturers cleaning instruction on stain removal.) Never use carbon tetrachloride, gasoline or naphtha for any cleaning purpose.

Because fumes are more dangerous in a small, enclosed space, be sure the vehicle is well ventilated while using any cleaning agent. Follow the manufacturer's advice in using such products.

CARE AND CLEANING OF INTERIOR TRIM

With the use of modern trim materials, it is VERY IMPORTANT that proper cleaning techniques and cleaners be used. Failure to do this on the first cleaning may result in water spots, spot rings, or setting of stains or soilage, all of which make it more difficult to remove in a second cleaning. If in doubt about cleaning interior items, ask your REVCON dealer's advice.

EXTERIOR

Frequent washing and a thorough cleaning after exposure are recommended to prevent damage to vehicle finish from calcium chloride and other salts, road tar, insects, tree sap, factory chemical and other foreign matter. Use either cold or lukewarm water. Never wash vehicle in the direct rays of the sun. Be very careful if you climb on the roof to stand on rivet "lines," where the reinforcement structure is attached to the outside skin, otherwise you may dent or damage the "stressed skin" of the vehicle.

UNDERBODY MAINTENANCE

Corrosive materials used for ice and snow removal and dust control can collect on the underbody. If these materials are not removed, accelerated corrosion (rust) can occur on underbody parts such as fuel lines, frame, floor pan, and exhaust system.

At least every spring, flush these materials from the underbody with plain water. Take care to clean well any areas where mud and other debris can collect. Sediment packed in closed areas of the frame should be loosened before being flushed.

If desired, your dealer can perform this service for you. Your dealer can also recommend additional underbody rust preventive materials which will help protect your vehicle from the corrosion.

SERVICE AND MAINTENANCE

CAUTION: As with any machine, care should be taken when making any check, doing any maintenance, or making any repair to avoid being injured. Improper or incomplete service could also lead to the vehicle itself not working properly which may result in personal injury, or damage to the vehicle or its equipment. If you have any question about carrying out some service, have the service done by a skilled mechanic.

REPLACEMENT FASTENERS

During vehicle maintenance, any fasteners used to replace older ones must have the same measurements and strength as those removed, whether metric or customary. (The numbers on the heads of metric bolts and on the surfaces of metric nuts show their strength. Customary bolts use radial lines to show this, while most customary nuts do not have strength markings.) Fasteners taken from the vehicle should be saved for re-use in the same spot when possible. Where a fastener cannot be used again, care should be taken to choose a replacement that matches the old one. For information and help, see your dealer.

CAUTION: This vehicle has some parts dimensioned in the metric system as well as in the customary system. Some of the fasteners are metric and are very close in dimension to well known customary fasteners in the inch system. Mismatched or incorrect fasteners can result in damage to the vehicle or possibly personal injury.

MAINTENANCE SCHEDULE

For owner convenience, a complete maintenance schedule will be found on the chart on page 29. It also briefly describes the safety, emission control, lubrication, and general service that your vehicle requires.

FUEL REQUIREMENTS

Your Heavy Duty Emission Class Vehicle engine is designed to operate on unleaded gasoline. It minimizes spark plug fouling and emission control system damage. The engine requires Premium grade fuel. If there is "knocking," a metallic rapping noise that sometimes happens during the combustion process, and the knocking persists, consult your dealer. Continuous or excessive knocking may result in engine damage. Failure to take steps to stop such knocking is misuse of the engine for which the manufacturing division is not responsible under the terms of the new vehicle warranty.

Use 91 octane rated unleaded gasoline meeting Federal Government regulations. The Federal Government specifies the minimum octane number of unleaded gasoline. Federal regulations require that pumps delivering such gasoline be labeled with the words: UNLEADED — MINIMUM 91 OCTANE RATED GASOLINE TO BE USED.

ENGINE OIL AND FILTER RECOMMENDATIONS

(GASOLINE ENGINES)

Use only SE or better quality engine oils (see markings on the containers).



Change the engine oil and the engine oil filter as outlined on page 33.

The oil and filter change intervals for your engine are based on the use of SE-quality oils and high-quality filters like AC oil filters. Use of non-SE oils or oil change intervals longer than listed on page 29, could reduce engine life and might affect your warranty.

Your engine was filled with an SE-quality engine oil when it was built. You do not have to change this oil before the suggested change period. Keep in mind your engine may use more oil when it is new. Check the oil level more often when your engine is new.

OIL VISCOSITY

Engine oil viscosity (thickness) has a noticeable effect on fuel economy. Lower viscosity engine oils can provide increased fuel economy; however, higher temperature weather conditions require higher viscosity engine oils for satisfactory lubrication. The following chart lists the engine oil viscosities that will provide the best balance of fuel economy, engine life, and oil economy.

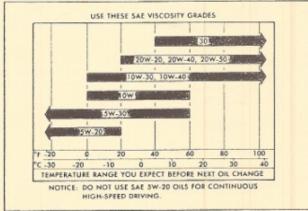


Figure 18 - Oil Viscosity Chart

CHECKING OIL LEVEL

Electronic Oil Dipstick — The use of the electronic oil dipstick was described on page 15. A metal dipstick also is supplied with the REVCON to check engine oil level if desired. Disconnect the spring at the top of the oil dipstick tube. Pull out the orange electronic dipstick. Check the oil level with the metal dipstick as required. Carefully reinstall the orange electronic dipstick. Do not damage the sensor at the bottom.

Warm — The best time to check the engine oil level is when the oil is warm, such as during a fuel stop. First, allow about five (5) minutes for the oil to drain back to the oil pan. Then pull the dipstick out, wipe it clean, and push it back down all the way. Now pull the dipstick out and look at the oil level on the dipstick. Some dipsticks are marked with "Add" and "Full" lines. Others are marked "Add 1 OT" and "Operating Range." In all cases, keep the oil level above the "Add" line. Push the dipstick back down

all the way after taking the reading, Add oil if needed.

Cold — If you check the oil level when the oil is cold, do not run the engine first. The cool oil will not drain back to the pan fast enough to give a true oil level.

ENGINE OIL ADDITIVES

There are many extra engine oil helpers or additives for sale. Your engine should not need these extra additives if you use SE-quality engine oil and change it as suggested. If you think your engine has an oil related problem, talk to your authorized dealer. If needed, your dealer can provide you with a tested and approved oil additive called "GM Engine Oil Supplement."

AUTOMATIC TRANSMISSION FLUID RECOMMENDATIONS

Use only automatic transmission fluid labeled DEXTRON®II You can buy this fluid from your dealer or other service outlets.

CHECK THE FLUID LEVEL WITH CARE

Check the automatic transmission fluid level at each engine oil change. Before checking the fluid level, set the parking brake and then start the engine. Apply the regular brakes and then move the shift lever through all of the gear ranges, ending in "Park." You must check the fluid level with the engine running at slow idle and the vehicle level.

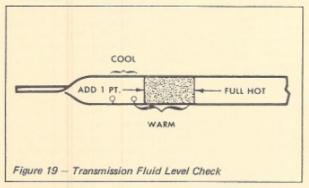
NOTE: You cannot read the correct fluid level if you have just driven the vehicle for a long time at high speed, in city traffic in hot weather, or if the vehicle has been pulling a trailer. Wait until the fluid has cooled down (about 30 minutes).

Remove the dipstick. Carefully touch the wet end of the dipstick to find out if the fluid is cool, warm or hot. Wipe it clean and push it back in until the cap seats. Pull out the dipstick and read the fluid level.

If it felt cool (about room temperature), the level should be 1/8 to 3/8 inch (3 to 10 millimeters) below the "Add" mark. The dipstick has two dimples below the "Add" mark to show this range.

If it felt warm, the level should be close to the "Add" mark (either above or below).

If it was too hot to hold, the level should be at the "Full" marks.



Add just enough DEXRON®II fluid to fill the transmission. It takes only one pint (0,5 litre) to raise the level from "Add" to "Full" with a hot transmission.



Do not overfill the transmission. Overfilling can cause foaming and loss of fluid, which could result in transmission damage. Automatic transmissions are often overfilled because the fluid level is checked when the fluid is cold. When cold, the dipstick shows that fluid should be added. However, the cold low reading is normal; the fluid level will rise about 3/4 inch (19 millimeters) as the fluid warms up from 60°F to 180°F (16°C to 82°C).

AUTOMATIC TRANSMISSION DRAIN INTERVALS

Change the transmission fluid and change the filter (or clean the screen) as outlined on page 29.

ENGINE COOLING SYSTEM

The coolant recovery system is standard. The coolant in the radiator expands with heat, and the overflow is collected in the recovery tank. When the system cools down, the coolant is drawn back into the radiator.

The cooling system has been filled at the factory with a quality coolant that meets GM Specification 1899-M. Because the cooling system has been designed to use coolant rather than plain water, the coolant solution should be used year round. It has many advantages, such as:

Provides boiling protection up to 262°F (128°C).

Protects against rust and corrosion in the cooling system.

Maintains the proper engine temperature for efficient operation and emission control.

Allows proper operation of the coolant gauge.

The coolant should be replaced in accordance with the maintenance schedule on page 28.

COOLING SYSTEM CARE

It is not usually necessary to remove the radiator cap to check the coolant level. Open the hood and look at the "see through" coolant recovery tank. This should be done at regular intervals, such as during fuel stops. When the engine is cold, the coolant level should be at or slightly above the "Full Cold" mark on the tank. When the engine has fully warmed up, the level should be at or slightly below the "Full Hot" mark on the tank. If the coolant level is low, remove the cap on the coolant recovery tank. Add enough of a 50/50 mixture of a good quality ethylene glycol (antifreeze) and water to the tank to bring the level up to the proper mark. Reinstall the cap on the tank.

There are conditions which can happen, such as air being trapped in the system, that may affect the coolant level in the radiator. It is recommended that the coolant level in the radiator be checked at periodic intervals such as at the time of engine oil changes when the engine is cold. Follow steps 1, 8, 9, and 10 of the following section "Coolant Replacement," (page 24), for radiator cap removal and coolant addition method.

If coolant has to be added more than four times a year, either to the recovery tank or to the radiator, see your dealer for a cooling system check.

NOTE: If the proper quality antifreeze is used, there is no need to add extra inhibitors or additives that claim to improve the system. They may be harmful to the proper operation of the system.

COOLANT SYSTEM SERVICE

The cooling system should be serviced as follows:

- Wash the radiator cap and filler neck with clean water. See step 1 of "Coolant Replacement," (page 24,) to remove radiator cap.
- Check the coolant level in the radiator and have it tested for freeze protection. Add ethylene glycol antifreeze, if needed, to maintain the specified freeze protection.
- Have the cooling system and radiator cap tested for a pressure capacity of 15 psi (105 kPa). If a replacement cap is needed, use an AC-Delco cap, or an equivalent cap, designed for coolant recovery systems and specified for your model.
- Tighten all radiator and heater hose clamps and inspect all hoses. Replace the hoses if they are "checked" or swollen, or otherwise worn.
- Clean the front of the radiator core and air conditioning condenser to remove dirt and other objects. Also clean the auxiliary engine and/or transmission oil cooler if the vehicle has them.

COOLANT REPLACEMENT

1. Remove the radiator cap when the engine is cool:

Turn the cap slowly to the left until it reaches a "stop." (Do not press down while turning the cap.)

Wait until the pressure is relieved (indicated by a hissing sound), then press down on the cap and continue to turn it to the left.

CAUTION: To help avoid the danger of being burned, do not remove the radiator cap while the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure if the cap is taken off too soon.

- When the cap is removed, run the engine until the upper radiator hose is hot (this shows that the thermostat is open and the coolant is flowing through the system).
- Stop the engine and open the radiator drain valve to drain the coolant. (Drainage may be speeded by removing the drain plugs in the block.)
- Close the drain valve (install block drain plugs, if removed). Add water until the system is filled and run the engine until the upper radiator hose is hot again.
- Repeat steps 3 and 4 several times until the drained liquid is nearly colorless.



- Drain the system and then close the radiator drain valve tightly. (Install block drain plugs, if removed.)
- Disconnect all hoses from the coolant recovery tank. Remove the tank and pour out any fluid. Scrub and clean the inside of the tank with soap and water. Flush it well with clean water and drain. Reinstall the tank and hoses.
- Add enough ethylene glycol coolant (meeting GM Specification 1899-M) and water to provide the required cooling, freezing, and corrosion protection. Use at least a 50% solution, -34°F (-37°C), but no more than a 70% solution. Fill the radiator to the base of the filler neck and fill the coolant recovery tank to the "Full Hot" mark. Install recovery tank cap.
- Run the engine, with the radiator cap removed, until the upper radiator hose is hot.
- With the engine idling, add coolant to the radiator until it reaches the bottom of the filler neck. Install the radiator cap, making sure that the arrows on the cap line up with the overflow tube.

It is the owner's responsibility to:

Maintain cooling system freeze protection at -20°F (-29°C) to ensure protection against corrosion and loss of coolant from boiling. This should be done even if freezing temperatures are not expected.

Add ethylene glycol base coolant that meets GM Specification 1899-M when coolant has to be added because of coolant loss or to provide added protection against freezing at temperatures lower than -20°F (-29°C); -35°F (-37°C) in Canada.

NOTE: Alcohol or methanol base coolants or plain water alone should NOT be used in your vehicle at any time. They will boil at a lower point than that at which the hot light indicator (or temperature gauge) works, and they do not provide proper protection against corrosion.

RADIATOR PRESSURE CAP

The radiator cap, a 15 psi (105 kPa) 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. If replacement is required, an AC-Delco cap is recommended.

THERMOSTAT

The engine coolant temperature is controlled by a thermostat. It stops coolant flow through the radiator until a preset temperature is reached. This thermostat is installed in the engine coolant outlet on the engine block. The same thermostat is used in both winter and summer. When a replacement is needed, AC-Delco parts are recommended.

DRIVE AXLE/DIFFERENTIAL

Add lubricant, if needed, to fill to level of filler plug hole. Use SAE 80W or SAE 80W-90 GL-5 gear lubricant. (For those vehicles driven in Canada, use SAE 80W GL-5 gear lubricant.) You can also use GM 1052271 or 1052272 gear lubricant, available at your dealer.

TRANSFER CASE

Add lubricant, if needed to level of fill plug hole. Use recommended lubricant. Tighten fill plug to 20 ft. lbs. torque.

POWER STEERING

Check the fluid level in the pump reservoir at each oil change

Add GM Power Steering fluid GM No. 1050017 (or equivalent) as necessary to bring level into proper range on filler cap indicator depending upon fluid temperature.

If at operating temperature (approximately 150°F (66°C) which would be hot to the touch), fluid should be between 1/2 and 3/4 full. If at room temperature (approximately 70°F (21°C), fluid should be at the 1/2 full level. Fluid does not require periodic changing.

BRAKE MASTER CYLINDER

Check master cylinder fluid level in both reservoirs. If the fluid is low in the reservoir, it should be filled to a point about 1/4-inch below lowest edge of each filler opening with Delco Supreme No. 11 or DOT-3 fluids.

HYDRO-BOOST BRAKE SYSTEM HYDRAULIC PUMP

On vehicles equipped with power steering, the power steering pump also is used as the hydro-boost pump. See the section on the Power Steering System when checking fluid level or adding fluid.

NOTE: Power steering fluid and brake fluid cannot be mixed since seal damage may result.

AIR CLEANER ELEMENT

When replacement of air cleaner filter element is necessary, an AC air filter element is recommended.

Operation of vehicle in dusty areas will necessitate more frequent replacement. Your dealer can be of assistance in determining the proper replacement frequency for the conditions under which you operate your vehicle.

CAUTION: If the air cleaner is removed during repair or maintenance, be sure to put it back on correctly. If the air cleaner is not correctly installed, there could be a fire in the engine compartment (if there should happen to be a backfire), or other engine malfunction.

FRONT WHEEL BEARINGS

The front wheel bearings have been engineered and selected to last at least 24,000 miles without repacking. Should a seal get damaged or leak, they should be serviced immediately.

NOTE: Tapered roller bearing used in this vehicle have a slightly loose feel when properly adjusted. They must never be over tightened (preloaded) or severe bearing damage may result. Consult your authorized dealer for service. Damage can occur if service procedures are not followed. Longfiber or viscous type greases should not be used. Do not mix wheel bearing lubricants. Never attempt wheel bearing service yourself. Have a qualified service department do it. See page 29.

FRONT SUSPENSION AND STEERING LINKAGE

Lubricate fittings with water resistant EP Chassis Lubricant which meets GM Specification 6031M.

NOTE: Ball joints should not be lubricated unless their temperature is 10°F (-12°C), or higher. During cold weather, they should be allowed to warm up as necessary before being lubricated.



CHASSIS LUBRICATION

Lubricate the following points with water-resistant EP chassis lubricant-

Steering Linkage and Suspension

- Upper and lower ball joints 4 fittings.
- 2. Bell crank 1 fitting.
- 3. Idler arm 1 fitting.
- 4. Drag link 2 fittings.
- 5. Intermediate rod 2 fittings.
- 6. Tie rods 4 fittings.

Drive Shafts

- 1. Drive shaft slip joint 1 fitting.
- Half shafts to each front wheel: Slip joint — 1 fitting

FRONT DRIVE SHAFTS (AXLE TO WHEEL HUB)

Lubricate inboard carden joint and slip joint. Check condition of the rubber boot over the constant velocity joint at the outboard end (wheel end) of the shaft. If grease is leaking from the boot have your dealer or service dept. change it immediately and re-pack the C/V joint.

BATTERY

Your new vehicle battery needs no periodic maintenance. Its top is permanently sealed (except for two small vent holes) and has no filler caps. You will never have to add water.

CAUTION: Follow the precautions listed in the Jump Starting Section (see the "In Case of Emergency" section (page 19), in this manual) when working on or near the battery. Personal injury (particularly to eyes) or property damage may result from battery explosion, battery acid, or electrical (short circuit) burns.

TIRES

The tires installed on your vehicle, shown on the Vehicle Certification Label, are engineered to provide a proper balance of performance characteristics for normal vehicle operation. This section contains some tips on how you can obtain the most benefit from these tires. See page 28 in this manual for "Important Information on Vehicle Loading."

TIRE INFLATION PRESSURE

The cold inflation pressures for your factory installed tires are listed on the Certification Label. Your tires must be inflated to these pressures to obtain the GVWR (Gross Vehicle Weight Rating) or GAWR (Gross Axle Weight Rating). Incorrect tire inflation pressures can have adverse effects on tire life and vehicle performance. Too low an air pressure causes increased tire flexing and heat build-up. This weakens the tire and increases the chance of damage or failure and can result in tire overloading, abnormal tire wear, adverse vehicle handling, and reduced fuel mileage. Too high an air pressure can result in abnormal wear harsh ride and also increase the chance of damage from road hazards.

Lower inflation pressures can be used with reduced vehicle loads. After finding the load on each tire by weighing the vehicle on a scale, the minimum cold inflation pressures can be found in the Tire/Wheel Load & Inflation Pressure Chart (see page 106).

Tire inflation pressures should be checked at least monthly (including the spare if so equipped). Always check tire inflation pressures when tires are "cold."

- The "cold" tire inflation pressure applies to the tire pressure when a vehicle has not been driven more than one mile (1.6 kilometers) after sitting for three hours or more.
- 2. It is normal for tire pressures to increase 4 to 8 pounds per square inch (30 to 60 kilopascals) or more, when the tires become hot from driving. Do not "bleed" or reduce tire inflation pressures after driving your vehicle. Bleeding serves to reduce "cold" inflation pressure and increase tire flexing which can result in tire damage and failure.
- 3. For sustained driving at speeds over 65 mph (100 km/h), where such speeds are permitted by law, cold inflation pressures should be increased 10 psi (70 kPa) above those stated in the Tire/Wheel Load and Inflation Pressure Charts for the load being carried. Do not exceed the wheel capacity limit shown in the Wheel Code and Limits Charts.

Sustained speeds over 65 mph (100 km/h) are not advised where the 10 psi (70 kPa) pressure increase would exceed the wheel capacity limit.

For special operating conditions, cold inflation pressures may be increased up to 10 psi (70 kPa) above those shown in the table. For correct inflation at load see your local tire dealer or the tire inflation specifications put out by the tire manufacturer.

CAUTION: Be sure to keep the tires properly inflated. A tire that is run while significantly underinflated will overheat to the point where the tire may blow out and/or catch fire, possibly resulting in damage to the vehicle and its contents and/or personal injury to its occupants and persons in the area.

- For proper inflation pressures when towing trailers, see page 106 in this manual.
- 5. Always use a tire pressure gauge (a pocket-type gauge is advised) when checking inflation pressures. A visual inspection of tires for inflation pressures is not enough, especially in the case of radial tires. Underinflated radial tires may look similar to correctly inflated radial tires. If the inflation pressure on a tire quite often is found to be low, have your dealer correct the cause.
- Be sure to reinstall the tire inflation valve caps, if they are so equipped, to prevent dirt and moisture from getting into the valve core which could cause air leakage.
- If an air loss occurs while driving, do not drive on the deflated tire more than is needed to stop safely. Driving even a short distance on a deflated tire can damage a tire and wheel beyond repair.

TIRE INSPECTION AND ROTATION

 Inspect your tires daily. Look for bulges, penetrations, cracks, cuts, and/or oil contamination. If any such damage



is found, have it inspected by a qualified tire inspector and repaired or discarded immediately, at his discretion.

 Although your Maintenance Schedule may recommend rotating tires at 6000 mile intervals, you should only rotate tires if necessary. If the tires are wearing evenly, there is no need to rotate them. If uneven wear is experienced, it may be due to a variety of reasons. Ask your dealer for advice if uneven tire wear persists.

CAUTION: Before installing wheels, remove any build up of corrosion on the wheel mounting surface and brake drum or disc mounting surface by scraping and wire brushing. Installing wheels without good metal-to-metal contact at the mounting surfaces can cause the wheel nuts to loosen, which can later allow a wheel to come off while the vehicle is moving, possibly causing loss of control.

WHEEL/TIRE ALIGNMENT AND BALANCE

Proper front-end alignment improves tire tread mileage, Your vehicle's front-end suspension parts should be inspected often and aligned when needed. Improper alignment will not cause the vehicle to vibrate. However, improper toe alignment will cause the front tires to roll at an angle which will result in faster tire wear. Incorrect caster or camber alignment will cause your front tires to wear unevenly and can cause the vehicle to "pull" to the left or right.

Proper tire balancing provides the best riding comfort and helps to reduce tire tread wear. Out of balance tires can cause annoying vehicle vibration and uneven tire wear such as cupping and flat spots.

TIRE TRACTION

A decrease in driving, cornering, and braking traction occurs when water, snow, ice, gravel, or other material is on the road surface. Driving practices and vehicle speed should be adjusted to the road conditions.

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tire and road surface. This is known as hydroplaning and may cause partial or complete loss of traction, vehicle control, and stopping ability. To reduce the chance of traction loss, follow these tips:

- 1. Slow down during rainstorms or when roads are slushy.
- 2. Slow down if road has standing water or puddles.
- 3. Replace tires when tread wear indicators are showing.
- Keep tires properly inflated.

If you equip your vehicle with snow tires, use snow tires of the same size, load range, and construction type (bias, bias-belted, or radial) as your other tires.

Snow tires should be inflated 10 psi above the cold inflation pressures for the load being carried. However, do not exceed the wheel capacity limits shown on page 102.

Vehicle speed should be limited to 65 mph (100 mn/h) with truck-type snow tires.

SNOW CHAINS

NOTE: Your REVCON is a front-wheel-drive vehicle; only mount chains to front wheels.

To prevent chain damage to your vehicle:

Install the chains as tightly as possible, then tighten again after driving 1/4 to 1/2 mile (0.4 to 0.8 kilometers).

Do not exceed 45 mph (70 km/h), or the chain manufacturer's speed limit if lower.

Drive in a restrained manner avoiding large bumps, potholes, severe turns and other maneuvers which could cause the tires to bounce up and down.

Follow the chain manufacturer's instructions,

TIRE REPLACEMENT

CAUTION: Do not mix different construction types of tires on your vehicle (such as radial, bias, and bias-belted tires) except in emergencies, because vehicle handling could be affected and may result in loss of control.

You should replace your tires when:

Your tires are worn to a point where 2/32 inch (1.6 millimeters) or less tread remains, or the cord or fabric is exposed.
 To help you detect this, your tires have built-in tread wear indicators that appear between the tread grooves when the tread depth is 2/32 inch (1.6mm) or less. When the indicators appear in two or more adjacent grooves at three spots around the tire, the tire should be replaced.



Figure 20 - Tire Tread-Wear Indicators

- Your tire tread or sidewall is cracked, cut, or snagged deep enough to expose the cord or fabric.
- 3. Your tire has a bump, bulge, or split.
- Your tire sustains a puncture, cut, or other injury that can't be correctly repaired because of the size or location of the injury.

When replacing tires, you should use the same size, load range, and construction type (bias, bias-belted, or radial) as the original tires on your vehicle (see the Certification Label). Use of any other size or type tire may affect load carrying capacity, ride, handling, speedometer/odometer calibration, vehicle ground clearance, and tire clearance to the body and chassis. If replacing only a single tire, it should be paired on the same axle with the least worn tire of the



WHEEL REPLACEMENT

Wheels must be replaced if they become damaged (for example: bent, heavily rusted, leak air) or if wheel nuts often become loose. Do not use bent wheels which have been straightened, and do not use inner tubes in leaking wheels which are designed for tubeless tires. Such wheels may have structural damage and could fail without warning.

The wheels originally equipped on your vehicle will provide optimum life up to the maximum load and inflation pressures shown in the Wheel Code and Limits Chart. Maximum loads, maximum inflation pressures, wheel identification codes, and wheel sizes are stamped on each wheel. Service tested and approved wheels are available from your authorized dealer. When obtaining wheels for any reason from any other source, the replacement wheels should be equal in load capacity, inflation pressure capacity, diameter, width, offset and mounting configurations to those originally installed on your vehicle.

A wheel of the wrong size or type may adversely affect load carrying capacity, wheel and bearing life, brake cooling, speedometer/odometer calibration, stopping ability, headlight aim, bumper height, vehicle ground clearance, and tire clearance to the body and chassis. Replacement with "used" wheels is not advised: they may have been subjected to harsh treatment or very high mileage and could fail without warning.

NOTE: The use of wheels and/or tires with higher load carrying limits than originally equipped on your vehicle does not in itself increase the GAWR or the GVWR of the vehicle.

Wheels having diameters ranging from 16 through 19.5 inches that have been certified for radial tire application have the word "radial" stamped on the rim. Wheels in the 16 inch through 19.5 inch diameter range without the "radial" identification stamp are not to be used with radial tires. Because of the different stresses exerted by radial tires, these wheels could become fatigued and fail without warning.

Proper replacement wheels can be obtained from your dealer.

TIRE WARRANTY

Tires are warranted by the tire manufacturers. Warranty information is included in the manufacturer's warranty folder furnished with your vehicle.

REVCON MOTOR HOME MAINTENANCE SCHEDULE

To retain the safety, dependability, and emission control performance originally built into your REVCON, it is essential that it receive periodic inspections, maintenance, and service parts replacement.

IMPORTANT NOTE: Maintenance services should be performed by your authorized REVCON dealer or any other qualified automotive service or repair establishment which is competent to provide such services and which can be relied upon to use proper parts and practices.

In addition to the in-shop type services detailed in the schedule, this manual also includes safety checks which you, the vehicle owner or driver, should perform periodically.

EXPLANATION OF VEHICLE MAINTENANCE SCHEDULE

Presented below is a brief explanation of each of the services listed in the preceding REVCON Maintenance Schedule.

NORMAL VEHICLE USE — The owner's or driver's maintenance instructions contained in this maintenance schedule are based on the assumption that your vehicle will be used as designed:

To carry passengers and cargo within the limitations indicated on the certification label.

On reasonable road surfaces within legal operating limits, as a general rule, for at least several miles (kilometers) on a daily basis.

Unusual operating conditions will require more frequent vehicle maintenance as specified in the respective sections included below.

* Also a Safety Service

After each of the following maintenance services has been performed, it is recommended that you insert the month, day, and the mileage in the maintenance schedule under the appropriate "Owner Service Log" column.

SECTION A - LUBE & GENERAL MAINTENANCE

- A-1 CHASSIS Lubricate all grease fittings in front suspension, steering linkage*, and on drive axle universal joints. Lubricate transmission cable and gearshift linkage*, hood latch, hood and door hinges, parking brake cable guides*, parking linkage, propeller shaft slip joint, universal joints, and brake and throttle pedal springs. Lubricate suspension and steering linkage every 2 months or 3000 miles (4800 km) when operating under dusty or muddy conditions. Check all oil lines for leaks or damage.
- A-2 FLUID LEVELS Check level of fluid in brake master cylinder*, power steering pump*, radiator, axles, transmismission and windshield washer*. Keep engine freeze protection to -34° F (-37° C) or the lowest expected outdoor temperature. Engine coolant also prevents corrosion. Large fluid loss in any of these units may point out a problem. Repair these problems promptly. A low fluid level in the brake master cylinder can indicate worn disc brake pads, and should be checked accordingly.
- A-3 AXLE/CASE Every 4 months or 6000 miles (9600 km) check front axle and transfer case and add lubricant when necessary. Lubricate propeller shaft slip joint and drive axle, and universal joint. Check vent breather on front axle and transfer case for leaks and proper installation.
- A-4 DRIVE SHAFT C. V. JOINTS Every 4 months or 6000 miles, check the boot protecting the constant velocity universal joint at the wheel end of the front wheel drive shafts. If it is leaking grease, damaged or cut, it must be replaced immediately.



When to Perform Services (Months or Miles/ Kilometres, Which- ever Occurs First)				OWNER'S SERVICE LOG Insert Month, Day and Mileage (i.e. May/5/6,000) In (Miles/Kilometres) Column Closest to Mileage When Service is Performed							
				6,000 (9 600)	12,000 (19 200)	18,000 (28 800)	24,000 (38 400)	30,000 (48 000)	36,000 (57 600)	42,000 (67 200)	48,000 (76 80
			Section A - Lubricat	tion and Ge	neral Main	tenance					
Every 4 months or	A-1	A-1 • Chassis Lubrication		1	1	1	1	,	1	1	1
6,000 miles	A-2	e Fluid Levels Check		1	1	1	1	1	1	1	1
(9 600 km) A-3		Axle and Transfer Case Check		1	1	1	1	1	1	1	1
1.00	A-4	Driveshaft CV Join	t Check	1	1	1	1	1	1	1	1
	A-5	* Engine Oil Chang	ie	1	1	1	1	1	1	1	1
	A-6	* Engine Oil Filter	Change	1		1	-	1		1	
See Explanation	A-7	Tire Rotation		1	1	1	1	1	1	1	1
	A-8	Drive Axle Lube C	nange				1				1
	A-9	Wheel Bearings Che	eck		1		1		1		1
Every 12 months or 12,000 miles (19 200 km)	A-10	* Cooling System (,		,		,		,	
Every 24,000 miles	A-11	Auto, Trans, Fluid	& Filter Change				1				1
(38 400 km)	A-12	Power Steering Ger		1	1	1	1	1	1	1	1
	A-13	Drive Transfer Case	Fluid				1				1
American Contractor			Section B-	Safety Mai	ntenance					11120	
Every 4 months or	B-1	Owner Safety Chec	les	1	,	1	1	,	1	,	1
6.000 miles	B-2	Tire, Wheel and Dis		1	1	,	1	1	1	1	1
(9 600 km)	B-3	Exhaust System Check		1	,	,	1	,	1	1	,
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	8-4	Suspension and Steering Check		1	1	1	1	,	1	1	1
	B-5	Brakes and Power 5		1	1	1	1	,	1	,	1
Every 12,000 miles (19 200 km)	B-6	* Engine Drive Bell	1	1		1	•	1	1	,	
Every 12 months or	B-7	Drum Brakes and P		1		1		1		1	
12,000 miles	B-8	Throttle Linkage Check			1		1		1		1
(19 200 km)	B-9	Bumpers			1		1		1		1
in the same of the same of			Section C - Emis	sion Contr	ol Mainten	ance					110-110-1
At 1st 4 months or	C-1	Engine Idle Speed	Adjustment	1	,		1		1		1
6, 000 miles — then at 12 month/12,000 mile intervals	C-2	Idle Stop Solenoid	Check	,	,		1		,		,
Every 12,000 miles	C-3	Spark Plug Wire Ch	eck & Plug Replacement		1		1		1		,
(19 200 km)	C-4		ust. & Distributor Check		1		1		1		,
	C-5	Air Cleaner Elemen			1		1		1		1
Every 12 months or	C-6	Carburetor Mountin		1		1		1		1	
12,000 miles	C-7	Thermo. Controlled		1		1		1		1	
(19 200 km) C-8		Manifold Heat Valve Check			1		1		1		1
C	C-9	Carburetor Fuel Filter Replacement			1		1		1		1
	C-10	Throttle Return Control Check			1		1		1		1
	C-11	PCV System Check			1		1		1		1
		- PCV Valve & Filter Service					1				1
Every 24 months or	C-12	ECS System Check				1				1	
24,000 miles	C-13	Fuel Cap, Lines and					1				1
(38 400 km)	C-14	Engine Idle Mixture	Adjust				1				1
	C-15	EFE System Check					1				1
	C-16	Vacuum Advance S	Particular de la constantina della constantina d				1				1
	C-17	Carburetor Choke (heck				1				1

- A-5 ENGINE OIL** Change every 4 months or 6000 miles (9600 km), whichever occurs first, or each 2 months or 3000 miles (4800 km) when the vehicle is operated under the following conditions: (a) Dust conditions. (b) Trailer pulling. (c) Frequent idling, (d) Short trips where engine does not thoroughly warm up. Change oil and filter as soon as you can after driving in a dust storm.
- A-6 ENGINE OIL FILTER** Replace at the first oil change, and then every second oil change if mileage, 6000 miles (9600 km), determines oil change. If time (4 months) determines oil change, or you change the oil at 3000 miles (4800 km) or 2 months, replace filter at each oil change.
- A-7 TIRES To equalize wear, rotate tires as per chart above. Adjust pressures as shown on the Certification Label, under the dash. Rotate radial tires at 6000 miles (9600 km), and then each 12,000 miles (19,200 km). In addition, rotate all tires whenever you see uneven wear.

A-8 DRIVE AXLE (DIFFERENTIAL)

On REVCON/Dana Axle, change lubricant every 24,000 miles (38,400 km). Change lubricant every 12,000 miles (19,200 km) on differential axles under severe operating

/ When to Perform Service

- A-9 WHEEL BEARINGS Front wheel bearings only require repacking with grease at 24,000 mile intervals unless seals fail. Check front steering knuckle around bearing seals for excessive lubricant loss (grease buildup around seal) at each 6000 miles or 4-month period. See page 25. For rear bearings, clean and repack every 12,000 miles. Use 5250 high-temperature lubricant.
- A-10 COOLING SYSTEM Each 12 months or 12,000 miles (19,200 km) wash radiator filler neck and cap with clean water. Test system and cap for proper pressure capacity. Tighten hose clamps and inspect all cooling and heater hoses. Replace radiator cap if faulty. Replace hoses at 24,000 miles

^{**} Also an Emission Control Service.



(38,400 km), or sooner if checked, swollen, or rotted. Clean outside of radiator and air conditioning condenser. Each 24 months or 24,000 miles (28,400 km), drain, flush, and refill system with new coolant as described on page 24.

A-11 AUTOMATIC TRANSMISSION FLUID — Change the transmission fluid and filter (or service the screen) every 12,000 miles (19,200 km) if the vehicle is mainly driven under one or more of these hot conditions.

In heavy city traffic where the outside temperature regularly reaches 90° F (32° C).

In hill or mountain areas.

Frequent trailer pulling.

If vehicle is not used mainly under any of these conditions, change the fluid and filter (or service the screen) every 24,000 miles (38,400 km).

- A-12 POWER STEERING GEAR Check for seal leakage around the pitman shaft and housing. If leakage is evidenced by oil oozing out — not just oily film. This should be corrected immediately.
- A-13 DRIVE TRANSFER CASE FLUID CHANGE Drain and refill with automatic transmission fluid according to instructions in chart on this page every 24,000 miles.

SECTION B - SAFETY MAINTENANCE

The owner or driver can check Items B1 (a) through (y), but only a qualified mechanic should check Items B-2 through B-9. For your safety and that of others, any of the safety items identified in this manual that may have been damaged in an accident should be checked. Make any needed repairs before driving the vehicle.

The following checks should be made each 6000 miles (9600 km) or 12 months, whichever comes first. Check more often when needed.

B-1 SAFETY CHECKS TO BE MADE BY OWNER OR DRIVER:

Promptly take any problems to a mechanic for service advice.

- (a) STEERING COLUMN LOCK (IF SO EQUIPPED) While parked, check by trying to turn the key to "Lock" in each gear range. The key should turn to "Lock" only when gear is in "Park."
- (b) STEERING COLUMN LOCK (WITH KEY RELEASE LEVER IF SO EQUIPPED)

While parked, check by trying to turn the key to "Lock" without depressing the lever. The key should turn to "Lock" only with the key lever depressed. The key should remove only in "Lock,"

(c) PARKING BRAKE – Park on a fairly steep hill and hold the vehicle with the parking brake only. This checks holding ability.

CAUTION: Before checking (d) or (e) below, be sure to have enough room around the vehicle. Then firmly apply both parking brake and regular brake. Do not use the accelerator pedal. If the engine starts, be ready to turn off the ignition switch promptly. Take these precautions because the vehicle could move without warning and possibly cause personal injury or property damage.

RECOMMENDED FLUIDS & LUBRICANTS

USAGE	FLUID/LUBRICANT
Power steering system and pump reservoir	GM power steering fluid Part No. 1050017 or equivalent
Transfer drive box	Dexron II automatic transmission fluid
Differential - standard or locking Propeller shaft slip joint	SAE-80W or SAE-80W-90 GL-5 gear lubricant (SAE-80W-GL-5 in Canada)
Brake system and master cylinder	Delco Supreme 11 fluid or DOT-3
Hood Latch assembly	a. Engine oil b. WD 40 spray or equivalent
Hood and Door hinges	Engine oil
Automatic transmission shift linkage	Engine oil
Chassis lubrication	Chassis grease meeting requirements of GM 6031-M
Engine	"SE" Engine Oil conforming to GM specs GM 6136-M
Constant Velocity Universal Joint	GM Lubricant Part No. 1050679 or grease meeting requirements of GM 6040-M
Automatic transmission	Dexron II automatic transmission fluid
Parking brake cables	Chassis grease
Front wheel bearings	Lithium base 525 ⁰ high-temperature lubricant.
Body door hinge pins, hinge and linkage, folding seat, fuel door hinge	Engine oil
Windshield washer solvent	GM Optikleen washer solvent Part No. 1051515 or equivalent
Engine coolant	Mixture of water and high quality Ethylene Glycol base type anti- freeze conforming to GM Spec. 1899-M
Key Lock Cylinders	WO-40 Spray Lubricant or equivalent

NOTE: Fluids are lubricants identified with GM part numbers or

- (d) STARTER SAFETY SWITCH (AUTOMATIC TRANS— MISSION) — Check by trying to start the engine in each gear. The starter should crank only in "Park" and "Neutral."
- (e) Check page 19 for correct start sequence and warning light descriptions.
- (f) TRANSMISSION SHIFT INDICATOR Check that the indicator points to the gear chosen.
- (g) STEERING Be alert for any changes in steering action. An inspection or service is needed when: the steering wheel is harder to turn or has too much free play, or if there are strange sounds when turning or parking.
- (h) WHEEL ALIGNMENT, BALANCE AND TIRES Uneven or abnormal tire wear, or a pull right or left on a straight and level road may show the need for a wheel alignment. A vibration of the steering wheel or seat at



- normal highway speeds means a wheel balancing is needed. Check tire pressure when the tires are "cold," at least monthly (include the spare). Check the pressure more often if daily check shows it's needed (see page 28 for Driver's Daily Checklist). Adjust tire pressure as needed when changing loads.
- (i) BRAKES Watch for the "Brake" light coming on. Other signs of possible brake trouble are such things as: repeated pulling to one side, strange sounds when braking or between brake applications, or increased brake pedal travel. If you note one of these conditions, have the system checked promptly and repaired if needed.
- (j) EXHAUST SYSTEM Be alert for any changes in the sound of the exhaust system or any smell of fumes. These are signs the system may be leaking or overheating. Have it checked and/or repaired promptly.
- (k) WINDSHIELD WIPERS AND WASHERS Check the operation and condition of the wiper blades. Check the flow and aim of the washer spray.
- DEFROSTERS Turn the control lever to "DEF" and the fan lever to "HI." Then check the air flow from the ducts at the inside base of the windshield.
- (m) REARVIEW MIRRORS AND SUN VISORS Check that friction joints will hold mirrors and sun visors in place.
- (n) HORN Blow the horn now and then to be sure it works, Check all button locations.
- (o) LAP AND SHOULDER BELTS (IF SO EQUIPPED) Check belt system, including: webbing, buckles, latch plates, retractors, light and buzzer reminders, guide loops, clips, and anchors for proper operation, and for damage.
- (p) SEAT ADJUSTERS When adjusting a manual seat, be sure that seat adjusters latch, by pushing the seat forward and back.
- (q) SEATBACK RECLINER Check to see that seatback recliner (if present) is holding, by pushing and pulling on top of the seatback while it is reclined.
- (r) SEATBACK LATCHES Venicles with folding front seats (and folding rear seats) have mechanical seatback latches. They are designed to prevent forward motion of the seatback when the vehicle slows suddenly. Check to see that seatback latches are holding by pulling forward on the top of folding seatback.
- (s) LIGHTS AND BUZZERS Check panel lighting and warning lights (see page 15 for correct function of each warning system). On the outside, check: license plate lights, side marker lights, headlights, parking lights, taillights, brake lights, turn signals, backup lights, clearance lights, identification lights, and hazard warning flashers. Have headlight aim checked promptly if beams seem improperly aimed.
- GLASS Check for broken, scratched or damaged glass that could reduce vision or cause injury.
- (u) DOOR LATCHES Check that doors close, latch, and lock tightly.

- (v) HOOD LATCHES Check that hood closes firmly. Check for broken, damaged, or missing parts that might prevent tight latching. Check that springs are intact and all fasteners tight or adjusted correctly.
- (w) FLUID LEAKS Check for fuel, water, oil or other fluid leaks by looking at the surface beneath the vehicle after it has been parked awhile. Water dripping from the air conditioning system after use is normal. If you notice fuel fumes or fluid at any time have the cause found and corrected promptly.
- (x) SPARE AND JACK Check that spare tire, all jack gear, and any covers or doors are securely stowed at all times.
- (y) UNDERBODY Corrosive materials used for ice and snow removal, and dust control, can collect on the underbody. If these materials are not removed, accelerated corrosion (rust) can occur on underbody parts such as fuel lines, frame floor pan, and exhaust system. At least every Spring, flush these materials from the underbody with plain water. Take care to clean well any areas where mud and other debris can collect. Sediment should be loosened before being flushed.

SAFETY CHECKS TO BE MADE BY MECHANIC:

- B-2 TIRES, WHEELS AND DISC BRAKES During tire rotation, check disc brake pads for wear, and surface condition of rotors while wheels are removed (see Item A-7). Check tires for excessive or abnormal wear, or damage. Be sure that wheels are not bent or cracked and that wheel nuts have been tightened to the torque value and at the intervals indicated on page 27.
- B-3 EXHAUST SYSTEM Check the complete exhaust system. Check body areas near the exhaust system. Look for broken, damaged, missing, or out-of-position parts. Also, inspect for open seams, holes, loose connections, or other conditions which could let exhaust fumes seep into the passenger compartment. Dust or water in the passenger compartment may indicate a leak in the area. Needed repairs should be made at once. To help maintain system integrity, replace the exhaust pipes and resonators rearward of the muffler whenever a new muffler is put on. (Also see Item B-1 (j)).
- B-4 SUSPENSION AND STEERING Check front and rear suspension, and steering system. Look for damaged, loose or missing parts; also for parts showing signs of wear, or lack of lubrication. Replace questionable parts at once.
- B-5 BRAKES AND POWER STEERING Check lines and hoses for proper hook-up, binding leaks, cracks, chafing, etc. Any questionable parts should be replaced or repaired at once. When rubbing or wear is noted on lines or hoses, the cause must be corrected promptly.
- B-6 ENGINE DRIVE BELTS Check belts driving the fan, air pump, generator, power steering pump, and the air conditioning compressor. Look for cracks, fraying, wear and proper tension. Adjust or replace as needed.
- B-7 DRUM BRAKES AND PARKING BRAKE (See Item B-2 for disc brake check.) Check drum brake linings for wear or cracks. Also inspect other brake parts at each wheel, such as drums, wheel cylinders, etc. Check parking brake adjustment also when inspecting drum brake linings.



- NOTE: Check for damaged or missing parts, interference or binding. Fix any problems at once.
- B-8 THROTTLE LINKAGE Check for damaged or missing parts, interference or binding. Fix any problems at once.
- B-9 BUMPERS Check front and rear bumper systems for proper impact protection and clearance. Check also when a bumper looks out of position or if it was struck hard - even if no damage can be seen.

SECTION C EMISSION CONTROL MAINTENANCE

- C-1 ENGINE IDLE SPEED Adjust to the specifications shown on the underhood label. You must use precise test equipment.
- C-2 IDLE STOP SOLENOID AND/OR DASHPOT Check that parts work properly. Replace them as needed.
- C-3 SPARK PLUG WIRES AND PLUG REPLACEMENT Clean wires. Remove corrosion on terminals. Check the wires for checks, burns, cracks or other damage. Check the boot fit at distributor cap and spark plugs. Replace wire if damaged or if corrosion cannot be cleaned. Replace spark plugs as shown on Maintenance Schedule, page 29.
- C-4 TIMING AND DISTRIBUTOR CAP Adjust timing to underhood label specifications. Check the inside and outside of the cap and rotor for cracks, carbon tracking and corrosion. Clean or replace as needed.
- C-5 AIR CLEANER ELEMENT Replace at mileage shown on schedule. Replace more often under dusty conditions. Ask your dealer for the proper replacement times for your driving conditions.
- C-6 CARBURETOR MOUNTING Torque mounting bolts and/or nuts at mileage shown on Maintenance Schedule.
- C-7 THERMOSTATICALLY CONTROLLED AIR CLEANER-Check all hoses and ducts for correct hookup. Be sure valve works properly.
- C-8 MANIFOLD HEAT VALVE Some engines are equipped with a manifold heat valve which should be inspected and repaired as necessary to insure free operation.
- C-9 CARBURETOR FUEL FILTER Replace at mileage shown on Maintenance Schedule or sooner if clogged.
- C-10 THROTTLE RETURN CONTROL (TRC) SYSTEM Check hoses for proper connections, cracking, abrasion, or deterioration and replace as necessary. Check for proper operation of system.
- C-11 POSITIVE CRANKCASE VENTILATION SYSTEM (PCV) — Check that system works properly and clean filter, if it is on the valve cover, each 12,000 miles (19,200 km). Each 24,000 miles (38,400 km), replace the valve, Replace worn or plugged hoses and filter if it is in the air cleaner. Clean filter if it is on the valve cover.
- C-12 EVAPORATION CONTROL SYSTEM (ECS) Check all fuel and vapor lines and hoses for proper hookup, routing, and condition. Check that purge valves work properly, if equipped. Remove canisters, check for cracks or damage. Replace as needed. Replace canister filter.
- C-13 FUEL CAP, FUEL LINES AND FUEL TANK Check the fuel tank, cap and lines for damage or leaks. Remove

fuel cap, check gasket for an even filler neck imprint, and any damage. Replace parts as needed.

- C-14 ENGINE IDLE MIXTURE At designated intervals or in case of a major carburetor overhaul, or when poor idle quality exists, adjust mixture by a mechanical method (lean drop), following the specifications shown on the label under the hood.
- C-15 EARLY FUEL EVAPORATION (EFE) SYSTEM —
 Check that valve works properly, and correct any binding.
 Check that thermal vacuum switch works properly. Check

hoses for cracks, rubbing, or decay. Replace parts as needed.

- C-16 VACUUM ADVANCE SYSTEM AND HOSES Check that system works properly. Check hoses for proper hookup, cracks, rubbing or decay. Replace parts as needed.
- C-17 CARBURETOR CHOKE AND HOSES Check that choke and vacuum break work properly. Correct any binding caused by damage or gum on the choke shaft. Check hoses for proper hookup, cracks, rubbing, or decay, correct as needed.

TRAILER TOWING TIPS

GETTING STARTED

Before entering traffic with a trailer equipped with electric brakes, start the vehicle and trailer moving and apply the trailer brakes by hand to be sure the trailer brakes are working and the trailer electrical system is connected.

CAUTION: Before going down a steep or long grade, reduce speed and shift the transmission into a lower gear to control your vehicle's speed. Try not to hold the brake pedal down too long or too often. This could cause the brakes to get hot and not work as well.

LONG UPHILL GRADES

When going up long grades, you can reduce the chance of engine overheating by down-shifting the transmission to a lower gear and reducing speed to 45 mph (70 km/h) or below.

PARKING

You should not park your REVCON with a trailer on a grade (hill). However, if you must park on a grade, these steps must be followed:

- 1. Apply regular brakes.
- Have someone place wheel chocks under trailer wheels.
- When wheel chocks are in place, release regular brakes until chocks absorb load.
- 4. Apply parking brake.
- 5. Place transmission in "PARK."

CAUTION: If the REVCON is parked on a grade, don't shift the transmission lever to "PARK" until the trailer wheels are chocked and the parking brake is set. If you do, the weight of the vehicle and trailer may exert so much force on the parking pawl in the transmission that it may be hard to get the shift lever out of "PARK."

When starting, after being parked on a grade:

- Apply regular brakes and hold until steps 2 and 3 (immediately preceding) are completed.
- 2. Start engine in "PARK,"
- 3. Shift into gear and release parking brake.
- 4. Release regular brakes and drive until the chocks are free.
- 5. Apply regular brakes and have helper remove chocks.



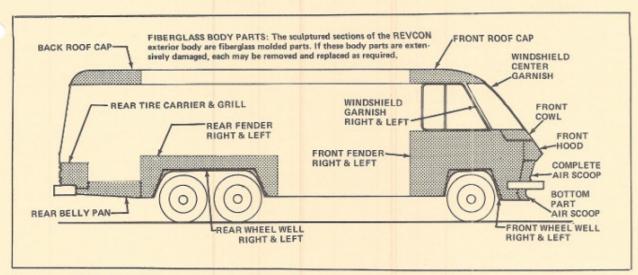


Figure 21 - Outside Fiberglass Body Parts Diagram

REVCON FLUID SPECIFIC	ATIONS	
Engine Oil and Filter Change: Dry Fill Oil Change with Filter Oil Change without Filter	7 Quarts 6 Quarts 5 Quarts	
Oil Filter Location and Type: Location — Backside of main crossmember Type: Fram PH 8A) Quaker State QS 8A AC PF2 GM 6435675 Motorcraft FL-1		
Radiator: Capacity (Dry fill including rear auto heater and wate Heat Exchanger)	30 Quarts er heater	
Transmission Hydramatic 475: Capacity (Complete overhaul)	14 Quarts	
Transfer Case: Capacity (Dextron II)	1 1/8 Quarts	
Differential- Capacity	7.2 pints	



WINDSHIELD REPLACEMENT — To gain access to the sealed edges of the windshield, the top, side, center, and cowl fiberglass trim must be removed.

- Separate the side trim from the cowl at the parting line (see figure A), by cutting the fiberglass and/or plastic filler with a hacksaw or other suitable tool.
- Remove the drip-rail over the windshield to expose the top trim rivets.
- Drill out the top trim rivets and pull the top and side trim away from the body. There are also rivets in the side trim which will become apparent as the trim is pulled away. Some plastic filler (see illustration) will be broken away as the side trim is removed.

- The cowl must be removed by detaching at the fender and at the firewall lip.
- Remove center trim which is sealed in place with rubber adhesive plus a single screw (see illustration).
- The windshield edges are now exposed to allow standard removal and installation procedures.
- Reinstallation of trim will require the repair of those areas cut during removal.
- 1) Rubber Sealant
- 2) Attaching Screw
- 3) Access Door
- 4) Top Trim
- 5) Center Trim
- 6) Break plastic filler here

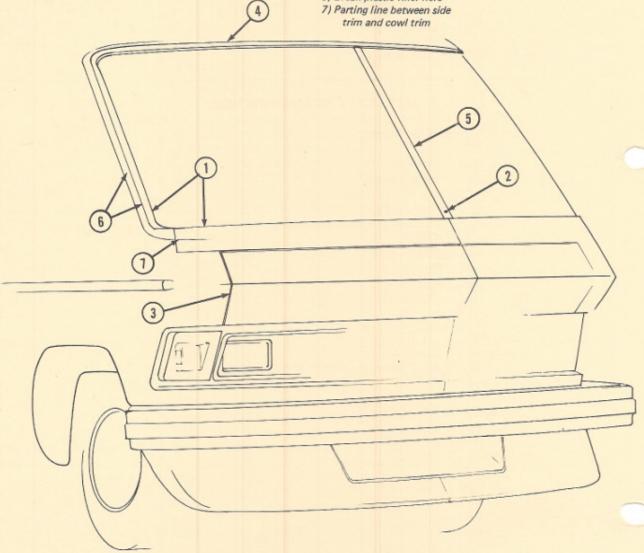


Figure A - Windshield Replacement