2004 GENERAL INFORMATION

Maintenance and Lubrication - Hummer H2

SPECIFICATIONS

CAPACITIES - APPROXIMATE FLUID

Capacities - Approximate Fluid

	Specification		
Application	Metric	English	
Air Conditioning Refrigerant R-134a	1.6 lb	0.7 KS	
Axles			
• Front Axle	1.73 Liters	1.83 Pints	
• Rear Axle	2.6 Liters	2.75 Quarts	
Engine Cooling System	, 		
• 6.0L V8	12.7 Liters	13.0 Quarts	
Engine Crankcase			
• 6.0L V8	5.7 Liters	6.0 Quarts	
Fuel Tank	121.0 Liters	32.0 Gallons	
Transmission	,		
 4L60-E After Filter/Pan Removal 	4.7 Liters	5.0 Quarts	
• After Complete Overhaul - 4L60-E	10.6 Liters	11.0 Quarts	
Transfer Case	,		
Borg Warner 4484	1.4 Liters	1.5 Quarts	
Wheel Nut Torque	140 ft lb	190 N.m	

FLUID AND LUBRICANT RECOMMENDATIONS

Fluid and Lubricant Recommendations

Application	Fluid/Lubricant
Automatic Transmission	DEXTRON(R) III Automatic Transmission Fluid
Chassis Lubrication	Chassis Lubrication GM P/N 12377985 or equivalent or lubricant meeting requirements of NLGI # 2, Category LB or GC-LB
Clutch linkage Pivot Points	Engine Oil
Engine Coolant	50/50 mixture of clean, drinkable water and use only GM DEX-COOL(R) or Havoline DEX-COOL(R) coolant.
Engine Oil	Engine oil with the American Petroleum Institute Certified for Gasoline Engines "Starburst" symbol of the proper viscosity.
Front and Rear Axle	SAE 75W-90 Synthetic Axle Lubricant GM P/N 12378261 (Canadian P/N

	10953455) or equivalent meeting GM Specification 9986115.
Hood and Door Hinges	Multi-Purpose Lubricant, Superlube GM P/N 12346241 (Canadian P/N 10953474) or equivalent.
Hydraulic Brake System	Delco(R) Supreme II Brake Fluid GM P/N 12377967 (Canadian P/N 992667) or equivalent DOT P/N 3 Brake Fluid
Key Lock Cylinders	Multi-Purpose Lubricant, Superlube GM P/N 12346241 (Canadian P/N 10953474) or equivalent.
Outer Tailgate Handle Pivot Points and Hinges	Multi-Purpose Lubricant, Superlube GM P/N 12346241 (Canadian P/N 10953474) or equivalent.
Power Steering System	GM Power Steering Fluid GM P/N 1052884 - 1 pint, GM P/N 1050017 - 1 quart, (Canadian P/N 993294) - 1 pint, (Canadian P/N 992646) - 1 quart or equivalent.
Transfer Case	DEXRON(R) III Fluid GM P/N 12346143 (Canadian P/N 10952622).
Weatherstrip Conditioning	Dielectric Silicone Grease GM P/N 12345579 (Canadian P/N 1974984) or equivalent.
Weatherstrip Squeaks	Synthetic Grease with Teflon, Superlube GM P/N 12371287 (Canadian P/N 10953437) or equivalent.
Windshield Washer Solvent	GM Optikleen Washer Solvent GM P/N 1051515 (Canadian P/N 993033) or equivalent.

TIRE INFLATION PRESSURE SPECIFICATIONS

When you inflate the tires to the recommended inflation pressures, the factory-installed wheels and tires are designed to handle loads to the tire's rated load capacity. Incorrect tire pressures, or under-inflated tires, can cause the following conditions:

- Vehicle handling problems
- Poor fuel economy
- Shortened tire life
- Tire overloading

Check the tire pressure when the following apply:

- The tires are cool.
- The vehicle has not been driven for more than 3 hours.
- The vehicle has been driven less than 1.6 km (1 mi).

Check the tires monthly or before any extended trip. Adjust the tire pressure to the specifications on the tire placard. Refer to <u>Label - Vehicle Certification</u> (w/o RPO Z49) or <u>Label - Vehicle Certification</u> (w/RPO Z49) in General Information. Install the valve caps or extensions on the valves. These keep out dust and water.

The kilopascal (kPa) is the metric term for tire inflation pressure. The tire pressure may be printed in both kilopascal (kPa) and psi. One psi equals 6.9 kPa.

Inflation Pressure Conversion Chart (Kilopascals to PSI)

kPa	psi	kPa	psi
140	20	215	31
145	21	220	32
155	22	230	33
160	23	235	34
165	24	240	35
170	25	250	36
180	26	275	40
185	27	310	45
190	28	345	50
200	29	380	55
205	30	415	60
	Conversion: 6	.9 kPa=1 psi	

Tires with a higher than recommended pressure can cause the following conditions:

- A hard ride
- Tire bruising
- Rapid tread wear at the center of the tire

Tires with a lower than recommended pressure can cause the following conditions:

- A tire squeal on turns
- Hard steering
- Rapid wear and uneven wear on the edge of the tread
- Tire rim bruises and tire rim rupture
- Tire cord breakage
- High tire temperatures
- Reduced vehicle handling
- High fuel consumption
- Soft riding

Unequal pressure on the same axle can cause the following conditions:

- Uneven braking
- Steering lead
- Reduced vehicle handling

MAINTENANCE ITEMS

Maintenance Items

Usage	Type/Part No.
Engine Oil Filter	AC Delco/PF44
Engine Air Cleaner/Filter	AC Delco/88944151
PCV Valve	AC Delco/CV948C
Spark Plugs	Denso/PTZ16R15 NGK/PZTR5A15
Fuel Filter	AC Delco/GF626
Wiper Blades (Front)	ITTA/15706394
Wiper Blade (Rear)	ITTA/15174476

MAINTENANCE

USING THE MAINTENANCE SCHEDULE

We at General Motors want to help you keep your vehicle in good working condition. But we do not know exactly how you will drive it. You may drive very short distances only a few times a week. Or you may drive long distances all the time in very hot, dusty weather. You may use your vehicle in making deliveries. Or you may drive it to work, to do errands or in many other ways.

Because of all the different ways people use their vehicles, maintenance needs vary. You may need more frequent checks and replacements. So please read the following and note how you drive. If you have any questions on how to keep your vehicle in good condition, see your GM Goodwrench dealer.

This schedule is for vehicles that:

- Carry passengers and cargo within recommended limits. You will find these limits on your vehicle's Certification/Tire label. Refer to <u>Label Vehicle Certification (w/o RPO Z49)</u> or <u>Label Vehicle Certification (w/RPO Z49)</u>.
- Are driven off-road in the recommended manner.
- Use the recommended fuel.

The services in <u>Scheduled Maintenance</u> should be performed when indicated. Refer to <u>Additional Required</u> Services and <u>Maintenance Footnotes</u> for further information.

CAUTION: Performing maintenance work on a vehicle can be dangerous. In trying to do some jobs, you can be seriously injured. Do your own maintenance work only if you have the required know-how and the proper tools and equipment for the job. If you have any doubt, see your GM Goodwrench(R) dealer to have a qualified technician do the work.

When you go to your GM Goodwrench dealer for your service needs, you'll know that GM-trained and supported service technicians will perform the work using genuine GM parts.

Owner Checks and Services tells you what should be checked, when to check it and what you can easily do to help keep your vehicle in good condition.

The proper replacement parts, fluids and lubricants to use are listed in <u>Fluid and Lubricant</u> <u>Recommendations</u> and <u>Maintenance Items</u>. When your vehicle is serviced, make sure these are used. All parts should be replaced and all necessary repairs done before you or anyone else drives the vehicle. We recommend the use of genuine GM parts.

SCHEDULED MAINTENANCE

Scheduled Maintenance

When the CHANGE ENGINE OIL light comes on, it means that service is required for your vehicle. Have your vehicle serviced as soon as possible within the next 600 miles (1,000 km). It is possible that, if you are driving under the best conditions, the engine oil life system may not indicate that vehicle service is necessary for over a year. However, your engine oil and filter must be changed at least once a year and at this time the system must be reset. Your GM Goodwrench dealer has GM-trained service technicians who will perform this work using genuine GM parts and reset the system.

If the engine oil life system is ever reset accidentally, you must service your vehicle within 3,000 miles (5,000 km) since your last service. Remember to reset the oil life system whenever the oil is changed. Refer to **GM Oil Life System - Resetting** for information on the engine Oil Life System and resetting the system.

When the CHANGE ENGINE OIL light appears, certain services, checks and inspections are required. Required services are described in the following for "Maintenance II" and "Maintenance II." Generally, it is recommended that your first service be Maintenance I, your second service be Maintenance II and that you alternate Maintenance I and Maintenance II thereafter. However, in some cases, Maintenance II may be required more often.

Maintenance I -Use Maintenance I if the CHANGE ENGINE OIL light comes on within ten months since vehicle was purchased or Maintenance II was performed.

Maintenance II -Use Maintenance II if the previous service performed was Maintenance I. Always use Maintenance II whenever the light comes on ten months or more since the last service or if the light has not come on at all for one year.

Scheduled Maintenance

Service	Maintenance I	Maintenance II
Change engine oil and filter. Reset oil life system. Refer to GM Oil Life System - Resetting . <i>An Emission Control Service</i> .	X	X
Lubricate chassis components. Refer to footnote #.	X	X
Visually check for any leaks or damage. Refer to footnote (j).	X	X
Inspect engine air cleaner filter. If necessary, replace filter. Refer to <u>Air</u> <u>Cleaner Element Replacement</u> . An Emission Control Service. Refer to footnote.	X	X

Rotate tires and check inflation pressures and wear. Refer to <u>Tire</u> <u>Rotation</u> .	X	X
Inspect brake system. Refer to footnote (a).	X	X
Check engine coolant and windshield washer fluid levels and add fluid as needed.	X	X
Perform any needed additional services. Refer to Additional Required Services .	X	X
Inspect suspension and steering components. Refer to footnote (b).	or	X
Inspect engine cooling system. Refer to footnote (c).	or	X
Inspect wiper blades. Refer to footnote (d).	or	X
Inspect restraint system components. Refer to footnote (e).	or	X
Lubricate body components. <i>Refer to footnote (f)</i> .	or	X
Check transmission fluid level and add fluid as needed.	or	X

ADDITIONAL REQUIRED SERVICES

The following services should be performed at the first maintenance service (I or II) after the indicated miles (kilometers) shown for each item.

Additional Required Services

Service	25,000 miles (41,500 km)	50,000 miles (83,000 km)	75,000 miles (125,000 km)	100,000 miles (166,000 km)	125,000 miles (207,500 km)	150,000 miles (240,000 km)
Inspect fuel system for damage or leaks.	X	X	X	X	X	X
Inspect exhaust system for loose or damaged components.	X	X	X	X	X	X
Change automatic transmission fluid and filter (severe service). <i>Refer to footnote (h).</i>	or	X	or	X	or	X
Change automatic transmission fluid and filter (normal service).	or	or	or	X	or	or
Change transfer case fluid. <i>Refer to footnote (g).</i>	or	X	or	X	or	X
Replace engine air cleaner filter. Refer to Air Cleaner Element Replacement. An Emission Control Service.	or	or	or	X	or	or
Replace spark plugs and inspect spark plug wires. <i>An Emission Control Service</i> .	or	or	or	X	or	or
Inspect positive crankcase						

ventilation (PCV) valve. <i>An Emission Control Service</i> .	or	or	or	X	or	or
Engine cooling system service (or every 5 years, whichever occurs first). An Emission Control Service. Refer to footnote (j).	or	or	or	or	or	Х
Inspect engine accessory drive belt. <i>An Emission Control Service</i> .	or	or	or	or	or	X

MAINTENANCE FOOTNOTES

Footnotes

The U.S. Environmental Protection Agency or the California Air Resources Board has determined that the failure to perform this maintenance item will not nullify the emission warranty or limit recall liability prior to the completion of the vehicle's useful life. We, however, urge that all recommended maintenance services be performed at the indicated intervals and the maintenance be recorded.

#

Lubricate the front suspension, ball joints, steering linkage, transmission shift linkage and parking brake cable guides. Ball joints should not be lubricated unless their temperature is -12° C (10° F) or higher, or they could be damaged.

(a)

Visually inspect brake lines and hoses for proper hook-up, binding, leaks, cracks, chafing, etc. Inspect disc brake pads for wear and rotors for surface condition. Inspect other brake parts, including calipers, parking brake, etc.

(b)

Visually inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for proper hook-up, binding, leaks, cracks, chafing, etc. Visually check constant velocity joints, rubber boots and axle seals for leaks.

(c)

Visually inspect hoses and have them replaced if they are cracked, swollen or deteriorated. Inspect all pipes, fittings and clamps; replace with genuine GM parts as needed. To help ensure proper operation, a pressure test of the cooling system and pressure cap and cleaning the outside of the radiator and air conditioning condenser is recommended at least once a year.

Visually inspect wiper blades for wear or cracking. Replace blade inserts that appear worn or damaged or that streak or miss areas of the windshield.

(e)

Make sure the safety belt reminder light and all your belts, buckles, latch plates, retractors and anchorages are working properly. Look for any other loose or damaged safety belt system parts. If you see anything that might keep a safety belt system from doing its job, have it repaired. Have any torn or frayed safety belts replaced. Also look for any opened or broken air bag coverings, and have them repaired or replaced. The air bag system does not need regular maintenance.

(f)

Lubricate all key lock cylinders, hood latch assembly, secondary latch, pivots, spring anchor, release pawl, rear compartment hinges, outer liftgate handle pivot points, rear door detent link, roller mechanism, liftgate handle pivot points, latch bolt, fuel door hinge, cargo door hinge, locks and folding seat hardware. More frequent lubrication may be required when exposed to a corrosive environment. Applying silicone grease on weather-strips with a clean cloth will make them last longer, seal better and not stick or squeak.

(g)

Add fluid as needed. A fluid loss could indicate a problem; repair as needed. Check vent hose at transfer case for kinks and proper installation.

(h)

Change automatic transmission fluid and filter if the vehicle is mainly driven under one or more of these conditions:

- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher.
- In hilly or mountainous terrain.
- When doing frequent trailer towing.
- Uses such as found in taxi, police or delivery service.

(i)

Drain, flush and refill cooling system. Refer to **Fluid and Lubricant Recommendations** for what to use. Inspect hoses. Clean radiator, condenser, pressure cap and filler neck. Pressure test the cooling system and pressure cap.

(j)

A fluid loss in any vehicle system could indicate a problem. Have the system inspected and repaired and the fluid level checked. Add fluid if needed.

EXPLANATION OF SCHEDULED SERVICES

For time and/or mileage intervals of scheduled maintenance items, refer to **Scheduled Maintenance**.

The following text and illustrations describe the details of the required scheduled maintenance services.

For information on the proper fluids and lubricants, refer to Fluid and Lubricant Recommendations.

Engine Oil and Filter Change

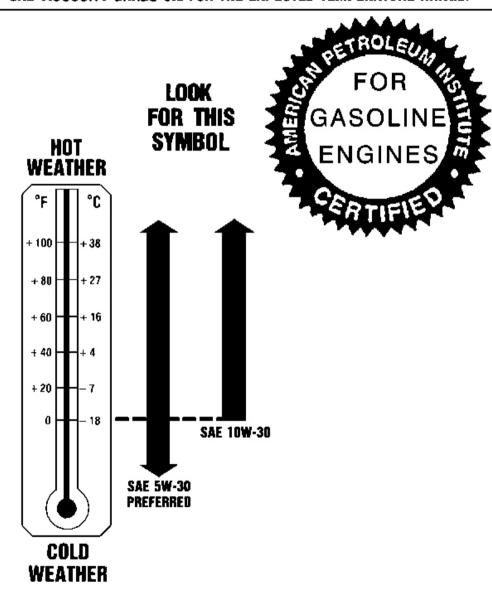
For information on the correct engine oil changing procedure, refer to **Engine Oil and Oil Filter Replacement** in Engine Mechanical-6.0L.

Gas Engine Oil Quality

Oils of the proper quality for the vehicle can be identified by looking for the STARBURST symbol. The STARBURST symbol indicates that the oil has been certified by the American Petroleum Institute (API), and is preferred for use in gasoline engines.

RECOMMENDED SAE VISCOSITY GRADE ENGINE OILS

FOR BEST FUEL ECONOMY AND COLD STARTING, SELECT THE LOWEST SAE VISCOSITY GRADE OIL FOR THE EXPECTED TEMPERATURE RANGE.



DO NOT USE SAE 20W-50 OR ANY OTHER GRADE OIL NOT RECOMMENDED

Fig. 1: Engine Oil Viscosity (United States and Canada)

Courtesy of GENERAL MOTORS CORP.

Engine Oil Viscosity

The recommended oil viscosity is SAE 5W-30.

NOTE:

Using oils of any viscosity other than those recommended could result in engine damage. When choosing an oil, consider the range of temperatures the vehicle will be operated in before the next oil change. Then, select the recommended oil viscosity.

Engine oil viscosity, or thickness, has an effect on the fuel economy and on the cold-weather operation, such as starting and oil flow. Lower viscosity engine oils can provide better fuel economy and cold-weather performance. However, higher temperature weather conditions require higher viscosity engine oils for satisfactory lubrication. When the temperature is consistently above -18°C (0°F), use SAE 10W-30. SAE 20W-50 or oils of other viscosity rating or quality designations are NOT recommended for use in any trucks at any time.

Chassis Lubrication

NOTE: Do not lubricate the parking brake cables. Lubrication destroys the plastic coating on the cable.

Refer to the illustration for the location of the lubrication points for the chassis. Lubricate the following components:

- The transmission shift linkage
- The park brake guides
- The underbody contact points
- The underbody linkage

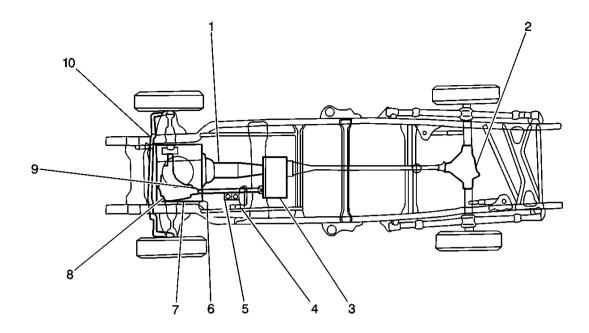


Fig. 2: Lubrication Points (4WD)
Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 2

Callout	Component Name
1	Transmission
2	Rear Axle Differential
3	Transfer Case
4	Clutch Actuator
5	Brake Master Cylinder
6	Oil Filter
7	Engine
8	Front Axle Differential
9	Front Propeller Shaft
10	Steering Linkage

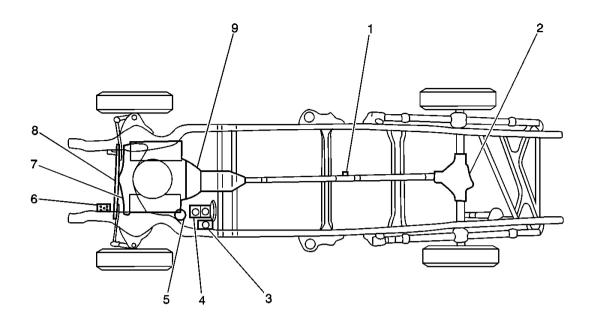


Fig. 3: Lubrication Points (Rear-Wheel Drive) Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 3

Callout	Component Name		
1	Propeller Shaft-Slip Joint		
2	Rear Axle Differential		
3	Clutch Actuator		
4	Master Cylinder		
5	Oil Filter		
6	Steering Gear		
7	Engine		
8	Steering Linkage		
9	Transmission		

Lubricating Joints that have Grease Fittings

Refer to the illustration for the location of the grease fittings.

IMPORTANT: Wipe off all dirt from the grease fitting before lubricating the joint. Do not lubricate the ball joints unless the temperature of the ball joints is at least -12°C (10°F). During cold weather, allow the ball joints to warm up as necessary before being lubricated. Use a low-pressure grease gun on all joints in order to prevent seal damage.

Apply grease slowly while watching the grease seal. Apply the grease until the grease is seen bleeding from the

seal. If the seal expands but you do not see any grease, do not apply any more grease. Allow time for the grease to bleed from the seal.

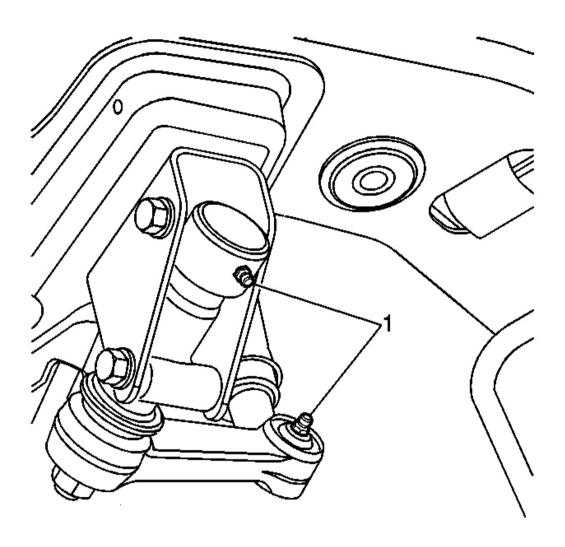


Fig. 4: Lubrication Fittings-Steering Linkage Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 4

Callout	Component Name
1	Lubrication Fittings

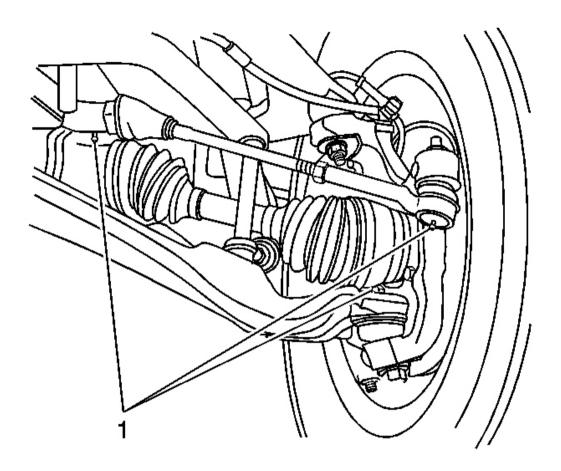


Fig. 5: Lubrication Fittings-Ball Joints Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 5

Callout	Component Name
1	Lubrication Fittings

Lubricate the steering linkage, the upper ball joint, and the lower ball joint.

Tire and Wheel Inspection and Rotation

Inspect the tires for abnormal wear or damage. Rotate the tires in order to equalize the wear and obtain maximum tire life. Refer to <u>Tire Rotation</u> in Tires and Wheels. If irregular or premature wear exists, refer to <u>Tire Diagnosis - Irregular or Premature Wear</u> or to <u>Tire Diagnosis - Waddle Complaint</u> in Tires and Wheels.

Accessory Drive Belt Inspection

Inspect the accessory drive belts for the following conditions:

- Cracks
- Fraying
- Wear
- Proper tension

Replace the accessory drive belt as needed. Belts can have many small cracks in individual ribs without affecting the performance. Refer to <u>Drive Belt Replacement - Accessory</u> or to <u>Drive Belt Replacement - Air</u> Conditioning in Engine Mechanical- 6.0L.

Automatic Transmission

Change the fluid and the filter according to the maintenance schedule intervals. Refer to <u>Automatic</u> <u>Transmission Fluid/Filter Replacement</u> in Automatic Transmission-4L60-E.

Automatic Transfer Case

Change the transfer case fluid. Refer to **Transfer Case Fluid Replacement** in Transfer Case BW 4484.

Spark Plug Wire Inspection

Clean the spark plug wires. Inspect the spark plug wires for burns, cracks or other damage. Inspect the wire boot fit at the coils and at the spark plugs. Replace the wires as needed. Refer to **Spark Plug Wire Replacement** in Engine Controls- 6.0L.

Spark Plug Replacement

Replace the spark plugs according to the maintenance schedule intervals with the correct type. Refer to **Spark Plug Replacement** in Engine Controls-6.0L.

For information on the correct type of spark plug, refer to **Maintenance Items** .

Fuel Filter Replacement

Replace the fuel filter according to the maintenance schedule intervals with the correct type.

For correct procedure refer to **Fuel Tank Replacement** in Engine Controls-6.0L.

Drive Axle Service

Change the axle fluid according to the maintenance schedule intervals.

For axle capacities refer to **Capacities - Approximate Fluid**.

For the procedure to check the fluid level of the front drive axle refer to **Lubricant Level Inspection - Front Drive Axle** in Front Drive Axle.

For the procedure to check the fluid level of the front drive axle refer to <u>Lubricant Level Inspection - Rear Drive Axle</u> in Rear Drive Axle.

Cooling System Service

Drain, flush and refill the cooling system with new coolant. Refer to **Draining and Filling Cooling System** in Engine Cooling.

GM OIL LIFE SYSTEM - RESETTING

The vehicle has a computer system that has a change engine oil light, indicating when to change the engine oil and filter. This is based on engine revolutions and engine temperature, and not on mileage. Based on driving conditions, the mileage at which an oil change will be indicated can vary considerably. For the oil life system to work properly, the system must be reset every time the oil is changed.

When the system has calculated that oil life has been diminished, it will indicate that an oil change is necessary. The change engine oil light will come on. The oil must be changed as soon as possible. It is possible that, if the vehicle is driven under the best conditions, the oil life system may not indicate that an oil change is necessary for over a year. However, the engine oil and filter must be changed at least once a year and at this time the system must be reset. If the system is ever reset accidentally, the oil must be changed at 3,000 miles (5 000 km) since the last oil change. Remember to reset the oil life system whenever the oil and filter is changed.

Resetting Procedure

- 1. Press the fuel information button until Engine Oil Life appears on the screen.
- 2. Press and hold the select button for five seconds.
- 3. OIL LIFE RESET will appear on the screen for 10 seconds.
- 4. The oil life system is reset.

OWNER CHECKS AND SERVICES

These owner checks and services should be performed at the intervals specified to help ensure the safety, dependability and emission control performance of your vehicle. Your GM Goodwrench dealer can assist you with these checks and services.

Be sure any necessary repairs are completed at once. Whenever any fluids or lubricants are added to your vehicle, make sure they are the proper ones, refer to **Fluid and Lubricant Recommendations**.

At Each Fuel Fill

It is important to perform these underhood procedures at each fuel fill.

Engine Oil Level

Inspect the engine oil level and add the proper oil if necessary. In order to select the proper fluids and lubricants, refer to **Fluid and Lubricant Recommendations**.

NOTE:

It is important to check your oil regularly and keep it at the proper level. Failure to keep your engine oil at the proper level can cause damage to your engine not covered by your warranty.

or

Engine Coolant Level

Check the engine coolant levels and add DEX-COOL(R) coolant mixture if necessary. Refer to **Fluid and Lubricant Recommendations** .

Windshield Washer Fluid Level

Check the windshield washer fluid level in the windshield washer tank and add the proper fluid if necessary. Refer to **Fluid and Lubricant Recommendations** .

At Least Once a Month

Tire Inflation

Check tire inflation. Make sure the tires are inflated to the pressures specified on the Certification/Tire label located on the driver door lock pillar. Refer to <u>Label - Vehicle Certification (w/o RPO Z49)</u> or <u>Label - Vehicle Certification (w/RPO Z49)</u>.

At Least Once a Year

Starter Switch Check

• Before you start, ensure that you have enough room around the vehicle in case the vehicle jumps suddenly.

IMPORTANT: Do not use the accelerator pedal, and be ready to turn off the engine immediately if it starts.

- Firmly apply both the park brake and the regular brake.
- On automatic transmission vehicles, try to start the engine in each gear. The starter should work only in PARK (P) or NEUTRAL (N). If the starter works in any other position, the vehicle needs service.

On manual transmission vehicles, put the shift lever in NEUTRAL (N), push the clutch down halfway and try to start the engine. The starter should work only when the clutch is pushed down all the way to the floor. If the starter works when the clutch is not pushed all the way down, the vehicle needs service.

Automatic Transmission Shift Lock Control Check

1. Before you start, be sure you have enough room around the vehicle. It should be parked on a level surface.

IMPORTANT: Be ready to apply the regular brake immediately if the vehicle begins to move.

- 2. Firmly apply the parking brake.
- 3. With the engine off, turn the key to the RUN position, but don't start the engine.
- 4. Without applying the regular brake, try to move the shift lever out of PARK (P) with normal effort.
- 5. If the shift lever moves out of PARK (P), the vehicle needs service.

Ignition Transmission Lock Check

- 1. With the vehicle parked, set the parking brake.
- 2. Try to turn the ignition key to LOCK in each shift lever position.
- 3. With an automatic transmission, the key should turn to LOCK only when the shift lever is in PARK (P).
- 4. With a manual transmission, the key should turn to LOCK only when you press the key release button.
- 5. On all vehicles, the key should come out only in LOCK.

Park Brake and Automatic Transmission PARK (P) Mechanism Check

CAUTION: When performing this check, the vehicle could begin to move. You or others could be injured and property could be damaged. Make sure there is room in front of the vehicle in case the vehicle begins to roll. Be ready to apply the regular brake at once, should the vehicle begin to move.

Follow this procedure to test the park brake and automatic transmission PARK mechanism:

- Park on a fairly steep hill, with the vehicle facing downhill.
- Keep your foot on the hydraulic brake pedal.
- Set the park brake.
- Check the park brake:
 - 1. Start the engine.
 - 2. Place the transmission in NEUTRAL.
 - 3. Slowly remove foot pressure from the regular brake pedal. If the vehicle moves, refer to **Park Brake Adjustment** in Park Brake.
- In order to check the PARK (P) mechanism of an automatic transmission, follow steps 1-3 above then do the following:
 - 1. Shift to PARK (P).
 - 2. Release all brakes.

Underbody Flushing Service

At least every spring, use plain water to flush any corrosive materials from the underbody. Take care to clean thoroughly any areas where mud and other debris can collect.		