

Section 6 Maintenance Schedule

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Maintenance Schedule

Introduction

Important: Keep engine oil at the proper level and change as recommended.



Have you purchased the GM Protection Plan? The Plan supplements the vehicle warranties. See the Warranty and Owner Assistance booklet or your dealer/retailer for details.

Maintenance Requirements

Maintenance intervals, checks, inspections and recommended fluids and lubricants as prescribed in this manual are necessary to keep this vehicle in good working condition. Any damage caused by failure to follow scheduled maintenance may not be covered by the vehicle warranty.

Your Vehicle and the Environment

Proper vehicle maintenance not only helps to keep the vehicle in good working condition, but also helps the environment. Improper vehicle maintenance can even affect the quality of the air we breathe. Improper fluid levels or the wrong tire inflation can increase the level of emissions from the vehicle. To help protect the environment, and to keep the vehicle in good condition, be sure to maintain the vehicle properly.

How This Section is Organized

This maintenance schedule is divided into four parts:

“Part A: Scheduled Maintenance Services” explains what to have done and how often. Some of these services can be complex, so unless you are technically qualified and have the necessary equipment, let your dealer/retailer do these jobs.

Your dealer/retailer has trained and supported service people that will perform the work using genuine parts.

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, have a qualified technician do the work. See *Doing Your Own Service Work on page 5-5*.

To purchase service information, see *Service Publications Ordering Information on page 7-10*.

“Part B: Owner Checks and Services” tells what should be checked and when. It also explains what can easily be done to keep the vehicle in good condition.

“Part C: Recommended Fluids and Lubricants” lists some recommended products necessary to help keep the vehicle properly maintained. These products, or their equivalents, should be used whether you do the work yourself or have it done.

“Part D: Maintenance Record” is a place to record and keep track of the maintenance performed on the vehicle. Keep the maintenance receipts. They may be needed to qualify the vehicle for warranty repairs.

Part A: Scheduled Maintenance Services

In this part are scheduled maintenance services which are to be performed at the mileage intervals specified.

Using the Maintenance Schedule

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

Because of all the different ways people use their vehicles, maintenance needs vary. You might 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 the vehicle in good condition, see your dealer/retailer.

This part tells you the maintenance services that should be done and when to schedule them.

When you go to your dealer/retailer for service, trained and supported service people will perform the work using genuine parts.

The proper fluids and lubricants to use are listed in Part C. Make sure whoever services the vehicle uses these. All parts should be replaced and all necessary repairs done before you or anyone else drives the vehicle.

This schedule is for vehicles that:

- carry passengers and cargo within recommended limits on the vehicle's Certification or Tire Information label. See *Loading the Vehicle on page 4-20*.
- are driven on reasonable road surfaces within legal driving limits.
- use the recommended fuel. See *Gasoline Octane on page 5-7* for gasoline engine vehicles or *What Fuel to Use on page 5-9* for diesel engine vehicles.

Scheduled Maintenance Supplements

If the vehicle has a Caterpillar® diesel engine, the owner manual is supplemented by the Caterpillar® Diesel Engine Operation & Maintenance Manual. If the vehicle has an Allison Transmission®, the owner manual is supplemented by an Allison Transmission® Operator's Manual. Always refer to these manuals for related maintenance services.

Scheduled Maintenance

The services shown in this schedule up to 100,000 miles (166 000 km) should be repeated after 100,000 miles (166 000 km) at the same intervals for the life of this vehicle. The services shown after 100,000 miles (166 000 km) should be repeated at the same miles (km) after those intervals for the life of this vehicle.

Gasoline engine vehicles and some DURAMAX[®] diesel and Isuzu diesel engine vehicles have a computer that lets you know when to change the engine oil. This is not based on mileage, but on engine operation and engine temperature. When the computer has calculated that the oil needs changing, the Engine Oil Life System will indicate that a change is necessary. See *Engine Oil Life System (Gasoline Engine)* on page 5-33 or *Engine Oil Life System (DURAMAX/Isuzu Diesel Engines)* on page 5-35 or *Engine Oil Life System (Caterpillar Diesel Engine)* on page 5-36.

The “Footnotes” at the end of this Maintenance Schedule further explain maintenance services.

See *Service Publications Ordering Information* on page 7-10.

100 Miles (160 km)

- Wheel stud nut service. (36)

1,000 Miles (1 600 km)

- Wheel stud nut service. (36)
- Rear axle air shift motor service. (10)

7,500 Miles (12 000 km)

- Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (Gasoline Engine)” in the Index. (2) (8)
- Check fluid levels (or every 3 months, whichever occurs first). (1) (5)
- Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- Spring-to-axle U-bolts and shackle bolts service. (15)
- Wheels and tires service. (14)
- Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)
- Parking brake service (or every 6 months, whichever occurs first). (21)
- Air brake service (or every 6 months, whichever occurs first). (32)
- Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)

- ❑ Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).
- ❑ Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
- ❑ Air brake chamber service (or every 2 months, whichever occurs first). (34)

15,000 Miles (24 000 km)

- ❑ Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (Gasoline Engine)” in the Index. (2) (8)
- ❑ DURAMAX/Isuzu Diesel Without Engine Oil Life System Only: Change engine oil and filter (or every 12 months, or every 750 hours of engine operation, whichever occurs first). (2) (39)
- ❑ DURAMAX/Isuzu Diesel With Engine Oil Life System Only: Check oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (DURAMAX/Isuzu Diesel)” in the Index. (2) (9)
- ❑ Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- ❑ Check fluid levels (or every 3 months, whichever occurs first). (1) (5)
- ❑ Gasoline Engine: Inspect engine air cleaner filter. If necessary, replace the filter. If vehicle is driven in dusty/dirty conditions, inspect filter at every engine oil change. See *Engine Air Cleaner/Filter* on page 5-37 for more information.
- ❑ Diesel Engine: Inspect engine air cleaner filter change indicator. If necessary, replace the filter. If vehicle is driven in dusty/dirty conditions, inspect filter change indicator at every engine oil change. See *Engine Air Cleaner/Filter* on page 5-37 for more information.
- ❑ Diesel Only: Replace fuel filter (or every 750 hours of engine operation, whichever occurs first).
- ❑ Steering system service. (12)
- ❑ Front and rear suspension service. (13)
- ❑ Spring-to-axle U-bolts and shackle bolts service. (15)
- ❑ Exhaust system service (or every 6 months, whichever occurs first). (2) (3) (16)
- ❑ Wheels and tires service. (14)
- ❑ Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)
- ❑ Parking brake service (or every 6 months, whichever occurs first). (21)
- ❑ Air brake service (or every 6 months, whichever occurs first). (32)
- ❑ Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)

- Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).
- Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
- Air brake chamber service (or every 2 months, whichever occurs first). (34)
- Air compressor dry element pleated paper air strainer service (or every 2 months, or every 800 hours, whichever occurs first).
- Thermostatically controlled engine cooling fan service. (3) (19)
- Shields and underhood insulation service. (3) (4) (20)
- Gasoline Engine: Air compressor remote mounted air filter dry element pleated paper air strainer service (or every 6 months or every 1800 hours, whichever occurs first).

22,500 Miles (36 000 km)

- Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (Gasoline Engine)” in the Index. (2) (8)
- Check fluid levels (or every 3 months, whichever occurs first). (1) (5)
- Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- Inspect door hinge pins and bushings and replace as necessary.
- Cooling system service. Clean the cooling system filter cap with clean water, clean the core, pressure test the cap and the system for proper pressure capability, and inspect condition of cooling and heater hoses and clamps. Replace hoses if cracked, swollen, or damaged.
- Wheels and tires service. (14)
- Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)
- Parking brake service (or every 6 months, whichever occurs first). (21)
- Air brake service (or every 6 months, whichever occurs first). (32)
- Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)
- Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).
- Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
- Air brake chamber service (or every 2 months, whichever occurs first). (34)
- Air brake system valve service (or every 3 months, or every 900 hours, whichever occurs first). (37)

- ❑ Air intake system service (or every 24 months, whichever occurs first). (3) (4) (23)
- ❑ Evaporative Control System service, if equipped, (or every 24 months, whichever occurs first). (2) (24) †
- ❑ Rear axle air shift motor service. (10)

24,000 Miles (40 000 km)

- ❑ Lubricate U-joints (or every 6 months, whichever occurs first).

30,000 Miles (48 000 km)

- ❑ Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (Gasoline Engine)” in the Index. (2) (8)
- ❑ DURAMAX/Isuzu Diesel Without Engine Oil Life System Only: Change engine oil and filter (or every 12 months, or every 750 hours of engine operation, whichever occurs first). (2) (39)
- ❑ DURAMAX/Isuzu Diesel With Engine Oil Life System Only: Check oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (DURAMAX/Isuzu Diesel)” in the Index. (2) (9)
- ❑ Check fluid levels (or every 3 months, whichever occurs first). (1) (5)

- ❑ Gasoline Engine: Inspect engine air cleaner filter. If necessary, replace the filter. If vehicle is driven in dusty/dirty conditions, inspect filter at every engine oil change. See *Engine Air Cleaner/Filter* on page 5-37 for more information.
- ❑ Diesel Engine: Inspect engine air cleaner filter change indicator. If necessary, replace the filter. If vehicle is driven in dusty/dirty conditions, inspect filter change indicator at every engine oil change. See *Engine Air Cleaner/Filter* on page 5-37 for more information.
- ❑ Diesel Only: Replace fuel filter (or every 750 hours of engine operation, whichever occurs first).
- ❑ Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- ❑ Gasoline Engine Only: Replace fuel filter(s) (or every 12 months, whichever occurs first). (2)
- ❑ Check restraint system. (40)
- ❑ Steering system service. (12)
- ❑ Front and rear suspension service. (13)
- ❑ Spring-to-axle U-bolts and shackle bolts service. (15)
- ❑ Exhaust system service (or every 6 months, whichever occurs first). (2) (3) (16)
- ❑ Wheel bearing (grease type) service (and whenever hubs are removed). (22) (36)
- ❑ Wheels and tires service. (14)

- ❑ Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)
- ❑ Parking brake service (or every 6 months, whichever occurs first). (21)
- ❑ Air brake service (or every 6 months, whichever occurs first). (32)
- ❑ Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)
- ❑ Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).
- ❑ Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
- ❑ Air brake chamber service (or every 2 months, whichever occurs first). (34)
- ❑ Air compressor dry element pleated paper air strainer service (or every 2 months, or every 800 hours, whichever occurs first).
- ❑ C600, C700, and C800 Gasoline Engines Only: Engine drive belts service (or every 12 months, whichever occurs first.) (17)
- ❑ Thermostatically controlled engine cooling fan service. (3) (19)
- ❑ Shields and underhood insulation service. (3) (4) (20)

- ❑ Gasoline Engine: Air compressor remote mounted air filter dry element pleated paper air strainer service (or every 6 months or every 1800 hours, whichever occurs first).

37,500 Miles (60 000 km)

- ❑ Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (Gasoline Engine)” in the Index. (2) (8)
- ❑ Check fluid levels (or every 3 months, whichever occurs first). (1) (5)
- ❑ Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- ❑ Wheels and tires service. (14)
- ❑ Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)
- ❑ Parking brake service (or every 6 months, whichever occurs first). (21)
- ❑ Air brake service (or every 6 months, whichever occurs first). (32)
- ❑ Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)
- ❑ Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).

- ❑ Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
- ❑ Air brake chamber service (or every 2 months, whichever occurs first). (34)

45,000 Miles (72 000 km)

- ❑ Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (Gasoline Engine)” in the Index. (2) (8)
- ❑ DURAMAX/Isuzu Diesel Without Engine Oil Life System Only: Change engine oil and filter (or every 12 months, or every 750 hours of engine operation, whichever occurs first). (2) (39)
- ❑ DURAMAX/Isuzu Diesel With Engine Oil Life System Only: Check oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (DURAMAX/Isuzu Diesel)” in the Index. (2) (9)
- ❑ Check fluid levels (or every 3 months, whichever occurs first). (1) (5)
- ❑ Gasoline Engine: Replace engine air cleaner filter. See *Engine Air Cleaner/Filter on page 5-37* for more information.
- ❑ Diesel Engine: Inspect engine air cleaner filter change indicator. If necessary, replace the filter. If vehicle is driven in dusty/dirty conditions, inspect filter change indicator at every engine oil change. See *Engine Air Cleaner/Filter on page 5-37* for more information.
- ❑ Diesel Only: Replace fuel filter (or every 750 hours of engine operation, whichever occurs first).
- ❑ Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- ❑ Cooling system service. Clean the cooling system filler cap with clean water, clean the core, pressure test the cap and the system for proper pressure capability, and inspect condition of cooling and heater hoses and clamps. Replace hoses if cracked, swollen, or damaged.
- ❑ Inspect door hinge pins and bushings and replace as necessary.
- ❑ Steering system service. (12)
- ❑ Front and rear suspension service. (13)
- ❑ Spring-to-axle U-bolts and shackle bolts service. (15)
- ❑ Exhaust system service (or every 6 months, whichever occurs first). (2) (3) (16)
- ❑ Wheels and tires service. (14)
- ❑ Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)
- ❑ Parking brake service (or every 6 months, whichever occurs first). (21)
- ❑ Air brake service (or every 6 months, whichever occurs first). (32)
- ❑ Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)

- ❑ Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).
- ❑ Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
- ❑ Air brake chamber service (or every 2 months, whichever occurs first). (34)
- ❑ Air brake system valve service (or every 3 months, or every 900 hours, whichever occurs first). (37)
- ❑ Air compressor dry element pleated paper air strainer service (or every 2 months, or every 800 hours, whichever occurs first).
- ❑ Thermostatically controlled engine cooling fan service. (3) (19)
- ❑ Shields and underhood insulation service. (3) (4) (20)
- ❑ Rear axle air shift motor service. (10)
- ❑ Air intake system service (or every 24 months, whichever occurs first). (3) (4) (23)
- ❑ Evaporative Control System service, if equipped, (or every 24 months, whichever occurs first). (2) (24) †
- ❑ Gasoline Engine: Air compressor remote mounted air filter dry element pleated paper air strainer service (or every 6 months or every 1800 hours, whichever occurs first).

48,000 Miles (75 000 km)

- ❑ Lubricate U-joints (or every 6 months, whichever occurs first).

50,000 Miles (80 000 km)

- ❑ Inspect air compressor discharge port (or every 6 months or every 1,800 hours, whichever occurs first.)

52,500 Miles (84 000 km)

- ❑ Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (Gasoline Engine)” in the Index. (2) (8)
- ❑ Check fluid levels (or every 3 months, whichever occurs first). (1) (5)
- ❑ Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- ❑ Wheels and tires service. (14)
- ❑ DURAMAX® Diesel Engine Only: Adjust valve lash (or every 2,625 hours of engine operation, whichever occurs first). (18)
- ❑ Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)
- ❑ Parking brake service (or every 6 months, whichever occurs first). (21)
- ❑ Air brake service (or every 6 months, whichever occurs first). (32)

- ❑ Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)
- ❑ Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).
- ❑ Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
- ❑ Air brake chamber service (or every 2 months, whichever occurs first). (34)

60,000 Miles (96 000 km)

- ❑ Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (Gasoline Engine)” in the Index. (2) (8)
- ❑ DURAMAX/Isuzu Diesel Without Engine Oil Life System Only: Change engine oil and filter (or every 12 months, or every 750 hours of engine operation, whichever occurs first). (2) (39)
- ❑ DURAMAX/Isuzu Diesel With Engine Oil Life System Only: Check oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (DURAMAX/Isuzu Diesel)” in the Index. (2) (9)
- ❑ Gasoline Engine Only (Vehicles with GVW greater than 16,000 lbs): Spark plug service. (2) (25)
- ❑ Check fluid levels (or every 3 months, whichever occurs first). (1) (5)

- ❑ Gasoline Engine: Inspect engine air cleaner filter. If necessary, replace the filter. If vehicle is driven in dusty/dirty conditions, inspect filter at every engine oil change. See *Engine Air Cleaner/Filter* on page 5-37 for more information.
- ❑ Diesel Engine: Inspect engine air cleaner filter change indicator. If necessary, replace the filter. If vehicle is driven in dusty/dirty conditions, inspect filter change indicator at every engine oil change. See *Engine Air Cleaner/Filter* on page 5-37 for more information.
- ❑ Diesel Only: Replace fuel filter (or every 750 hours of engine operation, whichever occurs first).
- ❑ Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- ❑ Gasoline Engine Only: Replace fuel filter(s) (or every 12 months, whichever occurs first). (2)
- ❑ Inspect door hinge pins and bushings and replace as necessary.
- ❑ Check restraint system. (40)
- ❑ Steering system service. (12)
- ❑ Front and rear suspension service. (13)
- ❑ Spring-to-axle U-bolts and shackle bolts service. (15)
- ❑ Exhaust system service (or every 6 months, whichever occurs first). (2) (3) (16)
- ❑ Wheel bearing (grease type) service (and whenever hubs are removed). (22) (36)

- ❑ Wheels and tires service. (14)
- ❑ Isuzu Diesel Engine Only: Adjust valve lash (or every 2,625 hours of engine operation, whichever occurs first). (18)
- ❑ Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)
- ❑ Parking brake service (or every 6 months, whichever occurs first). (21)
- ❑ Air brake service (or every 6 months, whichever occurs first). (32)
- ❑ Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)
- ❑ Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).
- ❑ Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
- ❑ Air brake chamber service (or every 2 months, whichever occurs first). (34)
- ❑ Air compressor dry element pleated paper air strainer service (or every 2 months, or every 800 hours, whichever occurs first).
- ❑ C600, C700, and C800 Gasoline Engines Only: Engine drive belts service (or every 12 months, whichever occurs first). (17)

- ❑ Thermostatically controlled engine cooling fan service. (3) (19)
- ❑ Shields and underhood insulation service. (3) (4) (20)
- ❑ Gasoline Engine: Air compressor remote mounted air filter dry element pleated paper air strainer service (or every 6 months or every 1800 hours, whichever occurs first).

67,500 Miles (108 000 km)

- ❑ Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (Gasoline Engine)” in the Index. (2) (8)
- ❑ Check fluid levels (or every 3 months, whichever occurs first). (1) (5)
- ❑ Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- ❑ Cooling system service. Clean the cooling system filler cap with clean water, clean the core, pressure test the cap and the system for proper pressure capability, and inspect condition of cooling and heater hoses and clamps. Replace hoses if cracked, swollen, or damaged.
- ❑ Wheels and tires service. (14)
- ❑ Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)
- ❑ Parking brake service (or every 6 months, whichever occurs first). (21)

- ❑ Air brake service (or every 6 months, whichever occurs first). (32)
- ❑ Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)
- ❑ Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).
- ❑ Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
- ❑ Air brake chamber service (or every 2 months, whichever occurs first). (34)
- ❑ Air brake system valve service (or every 3 months, or every 900 hours, whichever occurs first). (37)
- ❑ Rear axle air shift motor service. (10)
- ❑ Air intake system service (or every 24 months, whichever occurs first). (3) (4) (23)
- ❑ Evaporative Control System service, if equipped, (or every 24 months, whichever occurs first). (2) (24) †

72,000 Miles (115 000 km)

- ❑ Lubricate U-joints (or every 6 months, whichever occurs first).

75,000 Miles (120 000 km)

- ❑ Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (Gasoline Engine)” in the Index. (2) (8)
- ❑ DURAMAX/Isuzu Diesel Without Engine Oil Life System Only: Change engine oil and filter (or every 12 months, or every 750 hours of engine operation, whichever occurs first). (2) (39)
- ❑ DURAMAX/Isuzu Diesel With Engine Oil Life System Only: Check oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (DURAMAX/Isuzu Diesel)” in the Index. (2) (9)
- ❑ Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- ❑ Check fluid levels (or every 3 months, whichever occurs first). (1) (5)
- ❑ Gasoline Engine: Inspect engine air cleaner filter. If necessary, replace the filter. If vehicle is driven in dusty/dirty conditions, inspect filter at every engine oil change. See *Engine Air Cleaner/Filter on page 5-37* for more information.
- ❑ Diesel Engine: Inspect engine air cleaner filter change indicator. If necessary, replace the filter. If vehicle is driven in dusty/dirty conditions, inspect filter change indicator at every engine oil change. See *Engine Air Cleaner/Filter on page 5-37* for more information.

- Diesel Only: Replace fuel filter (or every 750 hours of engine operation, whichever occurs first).
- Steering system service. (12)
- Front and rear suspension service. (13)
- Spring-to-axle U-bolts and shackle bolts service. (15)
- Exhaust system service (or every 6 months, whichever occurs first). (2) (3) (16)
- Wheels and tires service. (14)
- Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)
- Parking brake service (or every 6 months, whichever occurs first). (21)
- Air brake service (or every 6 months, whichever occurs first). (32)
- Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)
- Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).
- Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
- Air brake chamber service (or every 2 months, whichever occurs first). (34)

- Air compressor dry element pleated paper air strainer service (or every 2 months, or every 800 hours, whichever occurs first).
- Fuel tank, fuel cap and fuel lines service (or every 72 months, whichever occurs first). (2) (26) †
- Exhaust Gas Recirculation (EGR) system inspection (if equipped) (or every 72 months, whichever occurs first). (2) (27)
- Thermostatically controlled engine cooling fan service. (3) (19)
- Shields and underhood insulation service. (3) (4) (20)
- Gasoline Engine: Air compressor remote mounted air filter dry element pleated paper air strainer service (or every 6 months or every 1800 hours, whichever occurs first).

82,500 Miles (132 000 km)

- Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See "Engine Oil (Gasoline Engine)" in the Index. (2) (8)
- Check fluid levels (or every 3 months, whichever occurs first). (1) (5)
- Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- Wheels and tires service. (14)
- Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)

- ❑ Parking brake service (or every 6 months, whichever occurs first). (21)
- ❑ Air brake service (or every 6 months, whichever occurs first). (32)
- ❑ Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)
- ❑ Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).
- ❑ Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
- ❑ Air brake chamber service (or every 2 months, whichever occurs first). (34)

90,000 Miles (144 000 km)

- ❑ Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (Gasoline Engine)” in the Index. (2) (8)
- ❑ DURAMAX/Isuzu Diesel Without Engine Oil Life System Only: Change engine oil and filter (or every 12 months, or every 750 hours of engine operation, whichever occurs first). (2) (39)
- ❑ DURAMAX/Isuzu Diesel With Engine Oil Life System Only: Check oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (DURAMAX/Isuzu Diesel)” in the Index. (2) (9)
- ❑ Check fluid levels (or every 3 months, whichever occurs first). (1) (5)
- ❑ Gasoline Engine: Replace engine air cleaner filter. See *Engine Air Cleaner/Filter* on page 5-37 for more information.
- ❑ Diesel Engine: Inspect engine air cleaner filter change indicator. If necessary, replace the filter. If vehicle is driven in dusty/dirty conditions, inspect filter change indicator at every engine oil change. See *Engine Air Cleaner/Filter* on page 5-37 for more information.
- ❑ Diesel Only: Replace fuel filter (or every 750 hours of engine operation, whichever occurs first).
- ❑ Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- ❑ Cooling system service. Clean the cooling system filler cap with clean water, clean the core, pressure test the cap and the system for proper pressure capability, and inspect condition of cooling and heater hoses and clamps. Replace hoses if cracked, swollen, or damaged.
- ❑ Gasoline Engine Only: Replace fuel filter(s) (or every 12 months, whichever occurs first). (2)
- ❑ Check restraint system. (40)
- ❑ Steering system service. (12)
- ❑ Front and rear suspension service. (13)
- ❑ Spring-to-axle U-bolts and shackle bolts service. (15)

- ❑ Exhaust system service (or every 6 months, whichever occurs first). (2) (3) (16)
 - ❑ Inspect door hinge pins and bushings and replace as necessary.
 - ❑ Wheel bearing (grease type) service (and whenever hubs are removed). (22) (36)
 - ❑ Wheels and tires service. (14)
 - ❑ Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)
 - ❑ Parking brake service (or every 6 months, whichever occurs first). (21)
 - ❑ Air brake service (or every 6 months, whichever occurs first). (32)
 - ❑ Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)
 - ❑ Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).
 - ❑ Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
 - ❑ Air brake chamber service (or every 2 months, whichever occurs first). (34)
 - ❑ Air brake system valve service (or every 3 months, or every 900 hours, whichever occurs first). (37)
 - ❑ Air compressor dry element pleated paper air strainer service (or every 2 months, or every 800 hours, whichever occurs first).
 - ❑ C600, C700, and C800 Gasoline Engines Only: Engine drive belts service (or every 12 months, whichever occurs first). (17)
 - ❑ Thermostatically controlled engine cooling fan service. (3) (19)
 - ❑ Shields and underhood insulation service. (3) (4) (20)
 - ❑ Rear axle air shift motor service. (10)
 - ❑ Air intake system service (or every 24 months, whichever occurs first). (3) (4) (23)
 - ❑ Evaporative Control System service, if equipped, (or every 24 months, whichever occurs first). (2) (24) †
 - ❑ Gasoline Engine: Air compressor remote mounted air filter dry element pleated paper air strainer service (or every 6 months or every 1800 hours, whichever occurs first).
- 96,000 Miles (152 000 km)**
- ❑ Lubricate U-joints (or every 6 months, whichever occurs first).

97,500 Miles (156 000 km)

- Gasoline Engine Only: Check engine oil life system. If engine oil and filter are changed, reset system. See “Engine Oil (Gasoline Engine)” in the Index. (2) (8)
- Check fluid levels (or every 3 months, whichever occurs first). (1) (5)
- Chassis lubrication service (or every 6 months, whichever occurs first). (11)
- Wheels and tires service. (14)
- Hydraulic brake service (or every 6 months, whichever occurs first). (6) (36)
- Parking brake service (or every 6 months, whichever occurs first). (21)
- Air brake service (or every 6 months, whichever occurs first). (32)
- Air brake automatic slack adjuster service (or every 500 hours, whichever occurs first). (33)
- Check air brake relay valve operation and check for leaks (or every month, or every 300 hours, whichever occurs first).
- Clean air brake application valve (or every 3 months, or every 300 hours, whichever occurs first). Lubricate linkage.
- Air brake chamber service (or every 2 months, whichever occurs first). (34)

100,000 Miles (160 000 km)

- Diesel Only: Inspect engine drive belt; replace as necessary.
- Gasoline Engine Only (Vehicles with GVW of 16,000 lbs or less): Spark plug service. (2) (25)
- Change power steering fluid (or every 36 months, whichever occurs first). (12)
- Replace power steering reservoir filter element (or every 24 months, whichever occurs first).
- Wheel bearing (oil type) service (and whenever hubs are removed). (22) (36)
- Except four-wheel drive: Front axle service. (31)
- Four-wheel drive only: Front axle service. (30)
- Four-wheel drive only: Transfer case service. (30)
- Rear axle service — Eaton[®], Rockwell[®], Spicer[®] axles (or every 12 months, whichever occurs first). (30)
- Exhaust brake service, if equipped. Check for excessive spindle free play and smooth operation. Lubricate ball joint cap.
- Inspect air compressor discharge port (or every 6 months or every 1,800 hours, whichever occurs first).

- ❑ Manual transmission (ZF 6-speed only) fluid replacement (or every 48 months, whichever occurs first).
- ❑ Trailer brake hand control valve service (or every 12 months, or every 3,600 hours, whichever occurs first). (35)

120,000 Miles (192 000 km)

- ❑ C600, C700, and C800 Gasoline Engines Only: Replace engine drive belts.
- ❑ C400 and C500 Gasoline Engines Only: Engine drive belts service (or every 12 months, whichever occurs first). (17)
- ❑ DURAMAX Diesel Only: Diesel Particulate Filter (DPF) service. Then every 100,000 miles (160 000 km). (7) (38)

150,000 Miles (240 000 km)

- ❑ Cooling system service (or every 60 months since last service, whichever occurs first). (2) (29)
- ❑ Diesel Engine Only: Inspect engine drive belt; replace as necessary.
- ❑ Isuzu Diesel Only: Diesel Particulate Filter (DPF) service (or every 4,500 hours, whichever occurs first). Then every 150,000 miles (240 000 km), or every 4,500 hours, whichever occurs first. (7)

200,000 Miles (320 000 km)

- ❑ Rear axle service — Eaton[®], Rockwell[®], Spicer[®] axles (or every 12 months, whichever occurs first). (30)
- ❑ Remove, disassemble, clean, and inspect the air brake trailer supply valve (or every 2 years, or every 7,200 hours, whichever occurs first).
- ❑ Diesel Engine Only: Inspect engine drive belt; replace as necessary.

250,000 Miles (400 000 km)

- ❑ Four-wheel drive only: Front axle service. (30)
- ❑ Four-wheel drive only: Transfer case service. (30)
- ❑ Manual transmission (except ZF 6-speed) fluid replacement (or every 60 months, whichever occurs first).

300,000 Miles (480 000 km)

- ❑ Rear axle service — Eaton[®], Rockwell[®], Spicer[®] axles (or every 12 months, whichever occurs first). (30)
- ❑ Remove, disassemble, clean, and inspect the air brake air dryer (or every 3 years, or 10,800 hours, whichever occurs first). Replace desiccant.
- ❑ Isuzu Diesel Only: Diesel Particulate Filter (DPF) service (or every 4,500 hours, whichever occurs first). Then every 150,000 miles (240 000 km), or every 4,500 hours, whichever occurs first. (7)

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.

(1) = If your vehicle has an Allison Transmission[®], your owner manual is supplemented by an Allison Transmission[®] Operator's Manual. Always refer to these manuals for related maintenance services.

(2) = An Emission Control Service.

(3) = A Noise Emission Control Device.

(4) = Applies to vehicles sold in the United States and is recommended for vehicles sold in Canada.

(5) = Check fluid level in brake master cylinder, power steering pump, front and rear axles, transmission, and hydraulic spring parking brake pump (if equipped). A low fluid level in the brake master cylinder can indicate worn brake linings and should be checked accordingly.

(6) = 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 caliper assemblies. Check brake pedal for excessive free play or travel (or every 6 months, whichever occurs first) and have serviced if needed. Check brakes more often if driving habits and conditions result in frequent braking.

(7) = Check for filter ash, sensor adjustment, and sensor hose restriction. Clean as needed. This service can be complex; you should have your dealer/retailer perform this service.

(8) = This vehicle has the Engine Oil Life System. This system will show you when to change the engine oil and filter — usually between 3,000 miles (5 000 km) and 7,500 miles (12 000 km) since your last oil change. Under severe conditions, the indicator may come on before 3,000 miles (5 000 km). Never drive your gasoline engine vehicle more than 7,500 miles (12 000 km) or 12 months without an oil and filter change.

Remember to reset the Engine Oil Life System whenever the oil is changed. For more information, see *Engine Oil Life System (Gasoline Engine)* on page 5-33 or *Engine Oil Life System (DURAMAX/Isuzu Diesel Engines)* on page 5-35 or *Engine Oil Life System (Caterpillar Diesel Engine)* on page 5-36.

(9) = This vehicle has the Engine Oil Life System. This system will show you when to change the engine oil and filter — usually between 3,000 miles (5 000 km) and 15,000 miles (24 000 km) since your last oil change. Under severe conditions, the indicator may come on before 3,000 miles (5 000 km). Never drive your diesel engine vehicle more than 15,000 miles (24 000 km), or 12 months, or 750 engine hours, without an oil and filter change.

Remember to reset the Engine Oil Life System whenever the oil is changed. For more information, see *Engine Oil Life System (Gasoline Engine)* on page 5-33 or *Engine Oil Life System (DURAMAX/Isuzu Diesel Engines)* on page 5-35 or *Engine Oil Life System (Caterpillar Diesel Engine)* on page 5-36.

(10) = Inspect rear axle air shift motor for fluid leaks. Remove plug to check fluid level. Inspect air lines and hoses for proper hook-up, binding, leaks, etc. Inspect at 1,000 miles (1 600 km) and 22,500 miles (36 000 km) and then every 22,500 miles (36 000 km) thereafter.

(11) = Chassis Lubrication Service: Lubricate all grease fittings in front suspension, front axle, and steering linkage. Do not lubricate kingpin bushings with air pressure equipment; instead, use a hand grease gun to ensure complete purge and eliminate sealer cap distortion. Front axle tie rod ends, both upper and lower kingpin fittings, and both steering linkage relay rod ends should be greased with the vehicle loaded on the ground and wheels turned straight ahead, not with the vehicle on a hoist. Apply kingpin bushing lubricant to both upper and lower kingpin grease fittings until new lubricant purges from between the upper shim pack and thrust bearing. Lubricate transmission and shift linkage, hood latches and hood hinges, parking brake lever pivot, clevis pins and linkage, disc brake caliper rails, clutch linkage and release bearing (if equipped), bearing pads, propshaft universal joints, brake camshaft bracket, slack adjusters, pedal shaft, clutch cross shaft, clutch pedal springs, and clutch cable bushing at transmission. Lubricate suspension, axle, and steering linkage more often when operating under dusty or muddy conditions and in excessive off-road use. Frequently power-washed vehicles will require more frequent lubrication.

(12) = Check steering system:

- Look for damaged, loose, or missing parts. Inspect the steering linkage relay rod and tie rod ends for looseness or lack of lubricant. Also look for parts showing signs of wear or lack of lubrication. Replace parts as needed. Also check steering gear mounting bolts, pitman arm nut, gear housing upper cover and side cover attaching bolts, steering column mounting bolts and cardan joint clamp bolts; tighten if necessary. See the service manual.
- Inspect power steering hoses, tubes, and fittings for leaks. Hoses and lines must not be twisted, kinked, or tightly bent. Make sure clips, clamps, supporting tubes, and hoses are in place and properly secured.
- Check steering gear for leakage around pitman shaft and housing. If leakage is evident (lubricant oozing out, not just oily film), leak should be corrected immediately.

(13) = Check front and rear suspension. Look for damaged, loose, or missing parts or parts showing signs of wear or lack of lubrication. Replace parts as needed.

(14) = Adjust tire pressures as indicated on the Certification or Tire Information label for optimum tire life. See *Tires on page 5-77* for further details. Check tires for excessive or abnormal wear or damage. Also check for damaged wheels. Replace wheels and/or tires as needed.

(15) = Check spring-to-axle U-bolts and shackle bolts for proper torque. See the service manual for torque sequence and specifications. When parts are replaced, the torque must be checked and adjusted more often during the first 6,000 miles (10 000 km). Check torque at 500 miles (800 km) and 2,000 miles (3 000 km) after first use of parts.

(16) = Check complete exhaust system, including DPF pressure lines, and cab areas near the exhaust system 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 driver compartment. Needed repairs should be made at once. To help maintain system integrity, replace exhaust pipes whenever a new muffler is put on.

(17) = Check all gasoline engine drive belts for cracks, fraying, and wear. Replace as needed.

(18) = Adjust valve lash. Incorrect valve clearance will result in increased engine noise and reduced engine output.

(19) = With the engine off and below normal operating temperature, check to see that the thermostatically controlled engine cooling fan can be rotated by hand on viscous-operated drives. Replace as needed.

(20) = Check shields and underhood insulation for damage or looseness. Adjust or replace as needed.

(21) = Inspect parking brake drum and linings for wear or cracks and check linkage and adjustment.

(22) = Wheel bearing service:

- Grease type — Clean, inspect, and lubricate with the proper wheel bearing grease at designated intervals or when hubs are removed. See *Part C: Recommended Fluids and Lubricants on page 6-32*.
- Oil-filled type — Some wheel bearings are lubricated by axle lubricant. When you have oil-filled hubs, use lubricant identical to that used in the axle. Lubricant change intervals are the same for front and rear axles. However, you must maintain the proper oil level between change intervals. See *Front Wheel Bearings with Oil-Filled Hubs on page 5-76* and *Part C: Recommended Fluids and Lubricants on page 6-32*.

(23) = Check the air intake system installation to see that gaskets are seated properly and all hose connections, fasteners, and other components are tight. Tighten connections and fasteners or replace parts as required.

(24) = Evaporative Control System Service, if equipped: Check all fuel and vapor lines and hoses for proper connections and correct routing (or every 24 months, whichever occurs first). Replace parts as needed.

(25) = Replace spark plugs. Inspect wires for damage. Check the wire boot and boot heat shield fit at spark plugs and coil. Replace parts as needed.

(26) = Check the fuel tank, fuel cap and fuel lines for damage which could cause leakage. Inspect fuel cap for correct sealing ability and any indications of damage. Check fuel cap gasket for even filler neck imprint. Replace parts as needed.

(27) = Check Exhaust Gas Recirculation (EGR) system as described in the service manual. See *Service Publications Ordering Information on page 7-10*.

(28) = Inspect Electronic Vacuum Regulator Valve (EVRV) filter for excessive contamination or plugging. If needed, clean filter with solution of soap and water, let dry and install.

(29) = Drain, flush, and refill cooling system. This service can be complex; you should have your dealer/retailer perform this service. See *Part C: Recommended Fluids and Lubricants* on page 6-32 for what to use. Inspect hoses. Clean radiator, condenser, pressure cap, and neck. Pressure test cooling system and pressure cap. For Caterpillar® diesel engines, always refer to the Caterpillar® Diesel Engine Operation & Maintenance Manual for coolant recommendations and change intervals.

(30) = Change the lubricant. See *Part C: Recommended Fluids and Lubricants* on page 6-32.

(31) = Front axle service: Re-pack upper kingpin roller bearing.

(32) = Air brake service:

- Inspect brake lines and hoses for proper hook-up, binding, leaks, cracks, chafing, etc. Inspect drum brake linings for wear or cracks. Inspect other brake parts at each wheel, including drums and wheel speed sensor wiring. Check brake pedal for excessive free play or travel (or every 6 months, whichever occurs first) and have serviced if needed. Check brakes more often if driving habits and conditions result in frequent braking. Replace air dryer cartridge only if excessive oil or moisture is present. A small amount of oil in the system is normal and should not be considered as a reason to replace the cartridge.
- Test air lines for leaks; tighten as needed. Replace compressor filter.
- Inspect air parking brake chamber for leaks and damage. Inspect lines and hoses for leaks, cracks, chafing, etc. Also check all attachments for tightness, wear, or damage. Note: The spring brake section of the rear brake diaphragms are non-serviceable.
- Replace the air compressor filter element, mounted on the air compressor. For remote air compressor intake service, refer to engine air cleaner filter replacement.
- Remove, disassemble, clean, and inspect the safety valve, service brake chambers, quick release valves, quick release/double check valve combinations, parking brake control valve, double check valves, pressure protection valves, and ether injector (if equipped).
- Remove, disassemble, and clean the application valve; replace parts showing wear.
- Remove, disassemble, clean, and inspect the spring brake control valve; replace rubber parts.

(33) = Clean and lubricate air brake automatic slack adjuster. Check pushrod travel and auto adjustment operation. Have serviced if needed.

(34) = Air brake chamber service: Check operation, mounting clamps, and air lines and check for leaks.

(35) = Trailer brake hand control valve service: Check operation; lubricate cam and follower.

(36) = Tighten the wheel stud nuts to the specified torque values at 100 miles (160 km). Thereafter, tighten them 1,000 miles (1 600 km) after each time the wheel is removed. See *Tightening the Wheel Nuts on page 5-82*.

(37) = Inspect and clean any accumulated dirt, gravel, or other foreign objects from the valves and valve boots as needed. Using light oil, lubricate brake pedal to brake application valve linkage components. Check any rubber boots for cracks, holes, or deterioration and replace if necessary.

(38) = Estimated minimum. Actual mileage depends on fuel and oil consumed.

(39) = If the vehicle has the Isuzu diesel engine and is used primarily for long trip, highway service, change the engine oil and filter every 18,000 miles (28 800 km), or every 12 months, or every 750 hours of engine operation, whichever occurs first.

(40) = Make sure any safety belt reminder light and safety belt assemblies 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.

Part B: Owner Checks and Services

These owner checks and services should be performed at the intervals specified to help ensure vehicle safety, dependability, and emission control performance.

For your safety and that of others, any of the safety-related components that may have been damaged in an accident should be checked and any needed repairs made before operating the vehicle.

At the minimum, these routine checks should be made every 6 months or 6,000 miles (10 000 km), whichever occurs first. Whenever repairs are needed, have them completed before operating the vehicle.

At Each Fuel Fill

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

Engine Oil Level Check

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

Check the engine oil level and add the proper oil if necessary. See *Engine Oil (DURAMAX Diesel Engine) on page 5-23* or *Engine Oil (Caterpillar Diesel Engine) on page 5-26* or *Engine Oil (Isuzu Diesel Engine) on page 5-26* or *Engine Oil (Gasoline Engine) on page 5-30*.

Engine Coolant Level Check

Check the engine coolant level and add DEX-COOL[®] coolant mixture if necessary. See *Engine Coolant on page 5-46*.

Windshield Washer Fluid Level Check

Check the windshield washer fluid level in the windshield washer fluid reservoir and add the proper fluid if necessary. See *Windshield Washer Fluid on page 5-52*.

Tire Inflation Check

Check tire inflation cold. Make sure the tires are inflated to the correct pressures. See *Loading the Vehicle on page 4-20* and *Inflation - Tire Pressure on page 5-78*.

At Least Twice a Year

Wiper Blade Check

Inspect wiper blades for wear, cracking, or contamination. Clean the windshield and wiper blades, if contaminated. Replace wiper blades that are worn or damaged. See *Windshield Wiper Blade Replacement on page 5-72* and *Windshield and Wiper Blades on page 5-93* for more information.

Weatherstrip Lubrication

Silicone grease on weatherstrips will make them last longer, seal better, and not stick or squeak. Apply silicone grease with a clean cloth. During very cold, damp weather more frequent application may be required. Part C tells you what to use.

Body Lubrication Service

Lubricate all exposed surfaces such as door checks, door lock bolts, lock strike plates, door hinge bushings, latches, and dovetail bumper wedges. Where oil holes are provided, a dripless oil can be used. The seat adjusters, seat track, door weatherstrips, and rubber cap bumpers should also be lubricated. Part C tells you what to use. More frequent lubrication may be required when exposed to a corrosive environment.

Parking Brake Check

Park on a fairly steep hill and hold the vehicle with the parking brake only. This checks holding ability. See *Parking Brake (With Hydraulic Brakes) on page 2-40* or *Parking Brake (With Air Brakes) on page 2-43*.

Starter Switch Check

CAUTION:

When you are doing this inspection, the vehicle could move suddenly. If the vehicle moves, you or others could be injured.

1. Before you start, be sure you have enough room around the vehicle.
2. Firmly apply both the parking brake and the regular brakes.
Do not use the accelerator pedal, and be ready to turn off the engine immediately if it starts.
3. On automatic transmission vehicles, try to start the engine in each gear. The starter should work only in P (Park) or N (Neutral). If the starter works in any other position, your vehicle needs service. On manual transmission vehicles, the starter should work only when the clutch pedal is all the way down.

Automatic Transmission Shift Indicator Check

Check that the indicator points to the gear chosen.

Steering Check

Be alert for any changes in steering action, abnormal front tire wear or steering wheel position. 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.

Brake System Check

Be alert to the low air warning light or tone alarm, or changes in braking action, such as repeated pulling to one side, unusual sounds when braking or increased brake pedal travel. Make sure air brake system reservoirs are drained daily with full system air pressure, and check system for leaks. Any of these conditions could indicate the need for brake system inspection and/or service.

Engine Cooling System Service

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

Exhaust System Inspection

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. Have it checked and/or repaired at once. See *Engine Exhaust on page 2-46* and *Running the Vehicle While Parked on page 2-51*.

Check to be sure that mud or dirt is not caked on the exhaust system, especially in the area of the diesel particulate filter and tailpipe. Clean the area as needed. See *Diesel Particulate Filter on page 2-47*.

At high mileages, the DPF becomes loaded with ash. This is normal. When the amount of ash loading is high, see your dealer/retailer for DPF cleaning or replacement.

Windshield Wipers and Washers Check

Check operation and condition of the wiper blades. Check the flow of the washer spray.

Defroster Check

Move the control to the defrost symbol and the fan to HI or the high symbol. Then check the airflow from the ducts at the inside base of the windshield.

Mirrors and Sun Visors Check

Check that friction joints hold mirrors and sun visors in place.

Seat Adjuster Check

When adjusting a manual seat, be sure seat adjusters latch by attempting to move the seat after latching.

Lamps Check

Check panel lighting, warning lights, indicator lights, and interior lamps. On the outside, check: license plate lamps, sidemarker lamps, reflectors or lights on outside mirrors, headlamps, parking lamps, identification and clearance lamps, taillamps, brake lamps, turn signals, backup lamps, and hazard warning flashers. Have headlamp aim checked at once if beams seem improperly aimed.

Glass, Mirrors, Lamps, and/or Reflectors Condition Check

Look for broken, scratched, dirty, or damaged glass, mirrors, lamps, or reflectors that could reduce the view or visibility or cause injury. Replace, clean, or repair promptly.

Door Latches Check

Check that doors close, latch, and lock tightly. Check for broken, damaged, or missing parts that might prevent tight latching.

Hood Latches Check

Check that the hood closes firmly. Check for broken, damaged, loose, or missing parts that might prevent tight latching. Make sure the secondary latch, if the vehicle has one, keeps the hood from opening all the way when the primary latch is released.

Fluid Leaks Check

Check for fuel, coolant, oil, or other fluid leaks by looking at the surface beneath the vehicle after it has been parked for awhile.

Underbody Inspection

Corrosive materials used for ice, 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.

Engine Cover Check

Check that the cab's engine cover and seal, if the vehicle has one, are not torn or damaged. Be sure that the cover is clamped down firmly to the floor.

At Least Once a Year

Key Lock Cylinders Service

Lubricate the key lock cylinders with the lubricant specified in Part C.

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.

Tractor Protection (Breakaway) Valve Check

On air brake models, remove, disassemble, clean, and inspect the tractor protection (breakaway) valve.

Part C: Recommended Fluids and Lubricants

Fluids and lubricants identified below by name, part number, or specification can be obtained from your dealer/retailer.

Usage	Fluid/Lubricant
Engine Oil (Gasoline Engine)	Engine oil which meets GM Standard GM6094M and displays the American Petroleum Institute (API) Certified for Gasoline Engines starburst symbol. To determine the proper viscosity for your vehicle's engine, see "Engine Oil" in the Index.
Engine Oil (DURAMAX®/ Isuzu Diesel Engines)	Engine oils with the letters CJ-4 are required for your vehicle. The CJ-4 designation can appear either alone or in combination with other American Petroleum Institute (API) designations, such as API CJ-4/SL. These letters show API levels of quality. To determine the preferred viscosity for your vehicle's diesel engine, see "Engine Oil" in the Index.
Engine Oil (Caterpillar® Diesel Engine)	See the Caterpillar® Operation & Maintenance Manual for engine oil recommendations.

Usage	Fluid/Lubricant
Engine Coolant (Caterpillar® Diesel Engine)	See the Caterpillar® Operation & Maintenance Manual for engine coolant recommendations.
Engine Coolant (Gasoline Engine & DURAMAX®/ Isuzu Diesel Engines)	50/50 mixture of clean, drinkable water and use only DEX-COOL® Coolant. See <i>Engine Coolant on page 5-46</i> .
Hydraulic Brake System	Delco® Supreme 11 Brake Fluid or equivalent DOT-3 brake fluid.
Windshield Washer Solvent	Optikleen® Washer Solvent.
Clutch Bearing Lubricant	Clutch Bearing Lubricant (GM Part No. 12378484 or equivalent NLGI #3 consistency).
Exhaust Brake Ball Joint Cap Lubricant	High-Temperature Grease (GM Part No. U.S. 1051344, in Canada 903037) or NLGI #3 consistency.
Power Steering System	DEXRON®-VI Automatic Transmission Fluid.
Manual Transmission	Synthetic Manual Transmission Fluid (GM Part No. U.S. 88861952, in Canada 88861953).
Automatic Transmission	See the Allison Transmission® Operator's Manual for correct transmission fluid.

Usage	Fluid/Lubricant
Key Lock Cylinders	Multi-Purpose Lubricant, Superlube (GM Part No. U.S. 12346241, in Canada 10953474).
Chassis Lubrication	Chassis Lubricant (GM Part No. U.S. 12377985, in Canada 88901242) or lubricant meeting requirements of NLGI #2, Category LB or GC-LB.
Front Wheel Bearings (Except Oil Filled Hubs)	Wheel bearing lubricant meeting requirements of NLGI #2, Category GC or GC-LB (GM Part No. U.S. 1051344, in Canada 993037).
Front Wheel Bearings with Oil Filled Hubs	SAE 75W-90 Synthetic Axle Lubricant for Medium Duty Trucks (GM Part No. U.S. 89021675, in Canada 10953512).
Transfer Case (Four-Wheel Drive)	Manual Transmission Fluid (GM Part No. U.S. 88861800, in Canada 88861801).
Front Axle (Four-Wheel Drive)	SAE 75W-90 Synthetic Axle Lubricant for Medium Duty Trucks (GM Part No. U.S. 89021675, in Canada 10953512).

Usage	Fluid/Lubricant
Rear Axle and Rear Hubs	SAE 75W-90 Synthetic Axle Lubricant for Medium Duty Trucks (GM Part No. U.S. 89021675, in Canada 10953512).
Rear Axle Shift Motor Lubricant	Refrigerant Oil (GM Part No. U.S. 5416939, in Canada 10953496).
Propshafts and Splines	Wheel bearing lubricant meeting requirements of NLGI #2, Category GC or GC-LB (GM Part No. U.S. 1051344, in Canada 993037).
Cab — Door Hinges and Latches	Multi-Purpose Lubricant, Superlube (GM Part No. U.S. 12346241, in Canada 10953474).
Weatherstrip Conditioning	Weatherstrip Lubricant (GM Part No. U.S. 3634770, in Canada 10953518) or Dielectric Silicone Grease (GM Part No. U.S. 12345579, in Canada 992887).
Weatherstrip Squeaks	Synthetic Grease with Teflon, Superlube (GM Part No. U.S. 12371287, in Canada 10953437).

Part D: Maintenance Record

After the scheduled services are performed, record the date, odometer reading and who performed the service, and any additional information from "Owner Checks and Services" on the following record pages. Also, you should retain all maintenance receipts.

Date	Miles/km Or Hours	Serviced By	Maintenance Record

Date	Miles/km Or Hours	Serviced By	Maintenance Record

Date	Miles/km Or Hours	Serviced By	Maintenance Record