50/50 mix of ethylene glycol (or other suitable antifreeze) and water. Fill the system to ¾–1¼ in. (19–32mm) below the bottom of the filler neck. Reinstall the radiator cap.

➡If equipped with a fluid reservoir tank, fill it to the MAX level.

4. Operate the engine at 2000 rpm for a few minutes, then check the system for signs of leaks.

RADIATOR CAP INSPECTION

◗ See Figure 120

Allow the engine to cool sufficiently before attempting to remove the radiator cap. Use a rag to cover the cap, then remove by pressing down and turning counterclockwise to the first stop. If any hissing is noted (indicating the release of pressure), wait until the hissing stops completely, then press down again and turn counterclockwise until the cap can be removed.

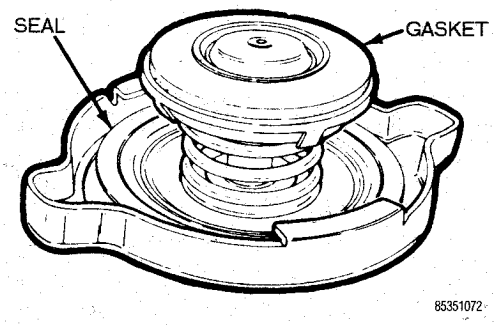

Fig. 120 Check the radiator cap's rubber gasket and metal seal for deterioration at least once a year

⁂ CAUTION

DO NOT attempt to remove the radiator cap while the engine is hot. Severe personal injury from steam burns can result.

Check the condition of the cap gasket and seal inside the radiator cap. The radiator cap is designed to seal the cooling system under normal operating conditions which allow the build-up of a specified amount of pressure (this pressure rating is stamped or printed on the cap). The pressure in the system raises the boiling point of the coolant to help prevent overheating. If the radiator cap does not seal, the boiling point of the coolant is lowered and overheating will occur. If the cap must be replaced, purchase a new cap according to the pressure rating which is specified for your vehicle.

Prior to installing the radiator cap, inspect and clean the filler neck. If you are reusing the old cap, clean it thoroughly with clear water. After installing the cap, make sure the arrows align with the overflow hose.

Brake Master Cylinder

FLUID LEVEL CHECK

Without Anti-Lock Brake System

◗ See Figures 121, 122 and 123

The master cylinder is located under the hood, on the left side of the firewall. To check the fluid, use a suitable prytool to unfasten the retaining clip from the lid of the reservoir. The fluid level should be within ¼ in. (6mm) of the top of the reservoir.

If the master cylinder is less than half full, there is probably a leak somewhere in the hydraulic system. Investigate the problem before driving the vehicle.

With Anti-Lock Brake System

◗ See Figure 124

1. Turn the ignition switch **ON** and allow the pump motor to operate until it automatically de-energizes.
2. The brake fluid level should be no lower than the MIN arrow indicator on the side of the reservoir. Add as necessary to raise the level to the MAX arrow indicator only.

➡Clean the cover before removing it and do not overflow the reservoir.

3. Turn the ignition switch **OFF**.

Clutch Master Cylinder

◗ See Figure 125

FLUID LEVEL CHECK

Clutch system fluid level is checked at the clutch master cylinder. The correct level of the fluid should be to the indicator ring in the reservoir. Replenish the supply with brake fluid meeting DOT 3 standards.

Power Steering Pump

◗ See Figures 126, 127, 128 and 129

FLUID LEVEL CHECK

The level of the fluid should be at the correct point on the dipstick attached to the inside of the lid of the power steering pump. Replenish the supply with DEXRON®II automatic transmission fluid.

Fig. 121 Wipe all dirt and dust from the reservoir cover and remove the cover retaining clip

Fig. 122 Carefully remove the master cylinder cover

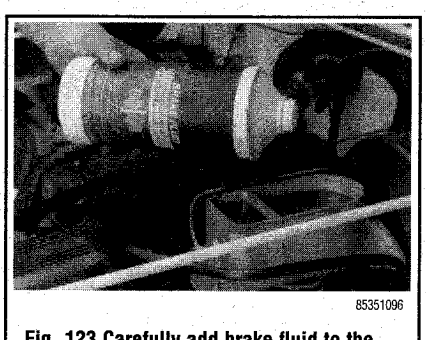

Fig. 123 Carefully add brake fluid to the master cylinder to the proper level. Remember brake fluid will remove the paint from any finish

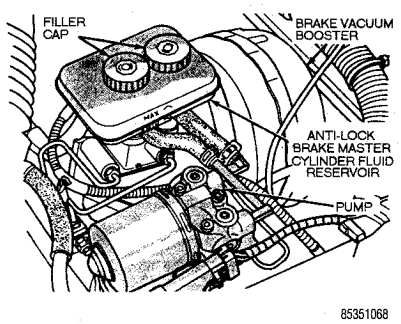

Fig. 124 Reservoir fluid level—with anti-lock brakes

Fig. 125 Clutch master cylinder reservoir cap

Fig. 126 Twist the cap until it can be lifted from the reservoir

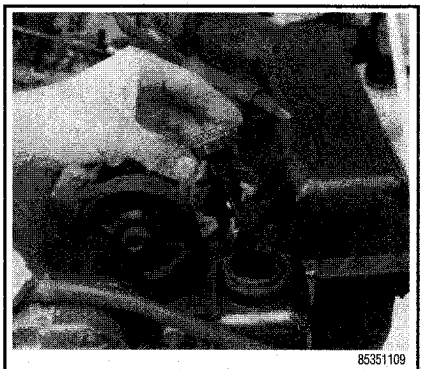

Fig. 127 Power steering fluid reservoir dipstick

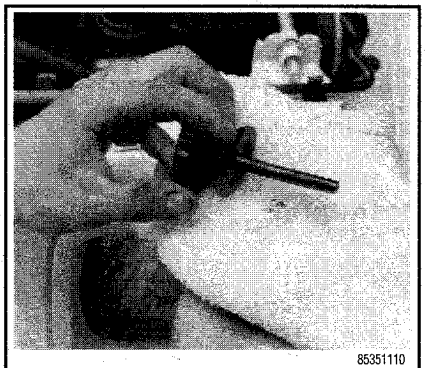

Fig. 128 The fluid level should be at the correct point on the dipstick

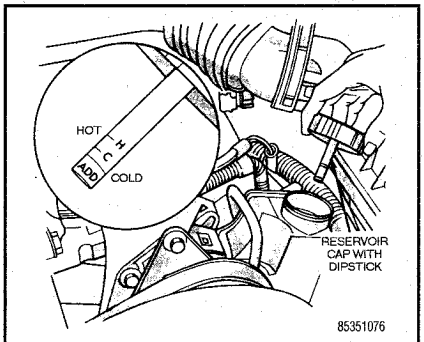

Fig. 129 Common power steering fluid dipstick. Note the different levels for hot and cold conditions

Manual Steering Gear

FLUID LEVEL CHECK

All models use a steering gear which is packed with grease. There is normally no need to add lubricant.

Chassis Greasing

The vehicle should be greased according to the intervals in the Preventive Maintenance Schedule at the end of this section.

Water resistant EP chassis lubricant (grease) should be used for all chassis grease points.

Every year or 7,500 miles (12,077 km), whichever comes first, the front suspension ball joints (both upper and lower on each side) should be greased. Most vehicles covered in this guide are equipped with grease nipples on the ball joints, although some may have plugs which must be removed and nipples fitted.

⁂ WARNING

Do not pump so much grease into the ball joint that excess grease squeezes out of the rubber boot. This destroys the watertight seal.

Jack up the front end of the Jeep and safely support it with jackstands. Block the rear wheels and firmly apply the parking brake. If the vehicle has been parked in temperatures below 20°F (−6°C) for any length of time, park it in a heated garage for an hour or so until the ball joints loosen up enough to accept the grease.

Depending on which front wheel you work on first, turn the wheel and tire outward, either full-lock right or full-lock left. You now have the ends of the upper and lower suspension control arms in front of you; the grease nipples are visible pointing up (top ball joint) and down (lower ball joint) through the end of each control arm. If the nipples are not accessible enough, remove the wheel and tire.

Wipe all dirt and crud from the nipples or from around the plugs (if installed). If plugs are on the vehicle, remove them and install grease nipples in the holes (nipples are available in various thread sizes at most auto parts stores). Using a hand operated, low pressure grease gun loaded with a quality chassis grease, grease the ball joint only until the rubber joint boot begins to swell out.

STEERING LINKAGE

The steering linkage should be greased at the same interval as the ball joints. Grease nipples are installed on the steering tie rod ends on most models. Wipe all dirt and crud from around the nipples at each tie rod end. Using a hand operated, low pressure grease gun loaded with a suitable chassis grease, grease the linkage until the old grease begins to squeeze out around the tie rod ends. Wipe off the nipples and any excess grease. Also grease the nipples on the steering idler arms.

PARKING BRAKE LINKAGE

Use chassis grease on the parking brake cable where it contacts the cable guides, levers and linkage.

AUTOMATIC TRANSMISSION LINKAGE

Apply a small amount of clean engine oil to the kickdown and shift linkage points at 7,500 mile (12,077 km) intervals.

Body Lubrication and Maintenance

LOCK CYLINDERS

Apply graphite lubricant sparingly through the key slot. Insert the key and operate the lock several times to be sure that the lubricant is worked into the lock cylinder.