5. Install the dipstick/filler plug.

**IMPORTANT:** The transmission, rear axle and hydraulic system operate from a common oil sump. Special attention must be given to keeping oil clean.

**HYDRAULIC SYSTEM OIL FILTER**

Check condition of the filter after first 50-hours. Clean or replace filter if necessary. Clean and check the filter every 300 hours and change it if damaged. The filter is located by the pump on the front left side of the engine.

1. Remove the attaching bolt from the cover and filter, Figure 40.

2. Remove the filter and check the O-ring. Replace if damaged.

3. Check the O-ring in the filter cover and replace if damaged.

4. Remove the oil filter and install a new one.

5. Assemble the unit reversing the above procedure.

**H.S.T. SYSTEM OIL FILTERS**

The H.S.T. System is provided with two filters; a suction filter and a cartridge type filter. Change the cartridge type filter after the first 50 hours. Thereafter change it every 300 hours.

Coat the gasket on the new filter with a film of oil. Screw the filter into place until the gasket contacts its mating surface, then turn the filter approximately 3/4 of a turn by hand. Do not overtighten, Figure 41.

**Figure 41 - H.S.T. System Filters**

Check the suction filter after first 50 hours and clean or change it if dirty. Thereafter clean the filter at every 300 hours and change the filter at every 600 hours.

**IMPORTANT:** Bleed the oil system after it has been installed filter and cover. Remove the bleed plug (Fig. 41) at the top of the filter body cover and let the air escape from the filter body, then installed the plug.

**LUBRICATION FITTINGS**

The following lubrication points (refer to the Lubrication chart, page 26 or 27) require the application of a good quality grease every 50 hours. In extremely dirty conditions, lubrication should be more often. Refer to page 30 for the type of grease that should be used.

- Steering linkage
- Pivot shaft
- Front wheel spindles
- Pedal shaft, Clutch and Brake Pedals
- 3-point linkage
- Front wheel drive king pins (if so equipped)
LUBRICATION AND MAINTENANCE

1. Wipe away all old grease and dirt from the lubrication fittings to prevent dirt or foreign material from entering the fittings when new grease is applied.
2. Use a high pressure grease gun to force in the new grease until clean grease oozes from the assembly being lubricated.
3. Wipe away any excess grease.

GENERAL MAINTENANCE

COOLING SYSTEM

The cooling system in your Ford Tractor has been filled with one year life antifreeze.

To obtain maximum efficiency and service life from the engine, it must operate at the correct temperature. This is dependent on the cooling system. The system should be kept filled with a 50/50 solution of permanent antifreeze and clear water.

Checking Coolant Level: Check the coolant level daily or every 10 hours. This check should be made when the engine is cold.

1. Remove the radiator cap and visually check the level of the coolant.

WARNING: The cooling system operates under pressure which is controlled by the radiator cap. It is dangerous to remove the cap while the system is hot. Always cover the cap with a thick cloth and turn the cap slowly counterclockwise to the first stop. Allow all pressure to escape before removing the cap completely.

2. If the coolant level is more than 1-1/2 to 2 inches (3.8 to 5 cm) below the bottom of the filler neck, add clean water or antifreeze solution as necessary. If the cooling system already contains antifreeze, add only antifreeze solution of the correct water/antifreeze mixture. Plain water will dilute the solution and weaken its protection.

IMPORTANT: Alcohol-type antifreeze is not recommended. Do not mix alcohol-type solution with permanent antifreeze.

3. Keep the radiator fins clear of chaff or dirt to allow free passage of air (Figure 44).

Draining and Flushing the Cooling System: Drain and flush the radiator and engine block every 12 months. Refill with a 50/50 mixture of long life (Ford) antifreeze, or equivalent, and clear water.

To Drain the System:

1. Remove the radiator cap and open the drain valve at both the radiator and the engine block. The radiator drain valve is located on the bottom right side of the radiator (Figure 42). The engine block drain valve is located on the left side of the engine. See Figure 43.

Figure 42 - Radiator Drain Valve

Figure 43 - Engine Block Drain Valve

2. After the coolant has drained, place a water hose in the radiator filler neck and run water through the system with the engine running. Make sure water is flowing from the block drain valve before starting the engine.
BRAKE ADJUSTMENT
Whenever the brake pedal travel becomes excessive, or if the travel of one pedal is unequal to that of the other, adjustment of each pedal should be made in the following manner:

1. Jack the tractor up until both rear wheels are free to turn. Support with safety stands.
2. Loosen the lock-nut, Figure 60, and rotate the brake rod as necessary until there is 3/4 - 1-3/16 inch (19-30 mm) of pedal free play. Lengthening the rod increases free play while shortening the rod decreases free play.
3. Test drive the tractor to make sure the braking action of both rear wheels is equal. Readjust as necessary.

CLUTCH PEDAL ADJUSTMENT
To obtain maximum clutch life, it is essential that the clutch pedal free travel be checked every 50 hours.
1. Remove the cotter pin and clevis pin.
2. Turn the clevis to increase or decrease pedal travel as required.
3. Install the filler plug and dipstick.

FOUR-WHEEL DRIVE
FRONT AXLE DIFFERENTIAL CASE AND FINAL REDUCTION GEAR CASES
Checking Oil Level: Check the oil level every 50 hours.
1. With the tractor standing level and the engine off, check the oil level with the dipstick, Figure 62.
2. The oil is at the correct level when the oil level is between the mark and lower end of the dipstick. If low, add new oil of the type specified, page 30, through the combined dipstick/fill plug. Do not fill beyond the mark on the stick, as the transmission will be overfilled.
3. Install the filler plug and dipstick.

Figure 60 — Brake Pedal Adjustment
Figure 61 — Clutch Pedal Free Travel Adjustment
Figure 62 — Turn Stop Bolt and Filler Plug