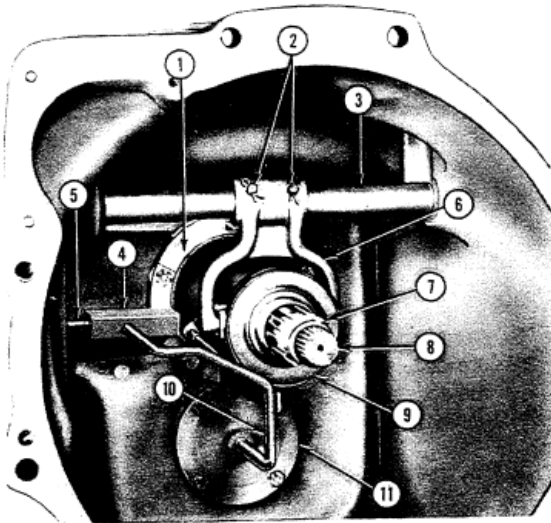


### A. Removal and Disassembly

1. Drain the oil from the transmission by removing the drain plug from the rear axle center housing. Be prepared to drain approximately 17 U.S. gallons (14.16 Imp. gallons).
2. Separate the engine from the transmission as described in Part 9, "COMPONENT REMOVAL".
3. Dual Power Transmissions: Remove the planetary gear set, page 23, and omit steps 4 through 9 below.



**Figure 51**  
**Transmission Front End**

1. Release Hub Support
2. Clevis Pins
3. Clutch Release Cross Shaft
4. Manifold Inlet
5. Lubrication Inlet Tube
6. Release Fork
7. Input Shaft
8. PTO Shaft
9. Release Hub and Bearing Assembly
10. Lubrication Supply Tube
11. Main Countershaft Bearing Retainer

4. Remove the cotter pins and the clevis pins (2), Figure 51, from the clutch release fork (6), and pull the cross shaft (3) from the case to release the fork.
5. Remove the fork (6) and the clutch release bearing (9).
6. Pull the transmission input shaft (7), Figure 51, from the release hub support (1).
7. Remove the lubrication inlet tube (5), Figure 51, from the lubrication supply manifold (4).
8. Remove the two bolts securing the manifold tube assembly to the transmission and remove the assembly by pulling it straight out. Remove the O-ring seals from the tube.
9. Remove the remaining three hex head bolts securing the release hub support (1), Figure 51, and pull the support from the front of the transmission. Remove the gasket from the support and transmission.
10. Remove the four bolts from the main countershaft bearing retainer (11). Pry the retainer from the case evenly and gently to avoid binding. The main countershaft will sag down slightly when the retractor is removed. Remove the gasket from the retainer.

### B. Inspection and Repair

1. Dual Power Transmissions: Inspect the planetary gear set components as outlined under "PLANETARY GEAR SET OVERHAUL", page 23, and omit steps 2 through 7 below.
2. Inspect the transmission input shaft (7), Figure 51, for damage or excessive wear. Note any damaged splines. Install a new shaft if necessary.
3. Examine the clutch release hub (4), Figure 40, and bearing (1) for excessive wear or damage. If necessary, remove the bearing from the hub using Tool Number 951, a suitable step plate from Kit 630-S, and a suitable hydraulic press as shown in Figure 40. Install new parts using a suitable step plate from Kit 630-S, a convenient

