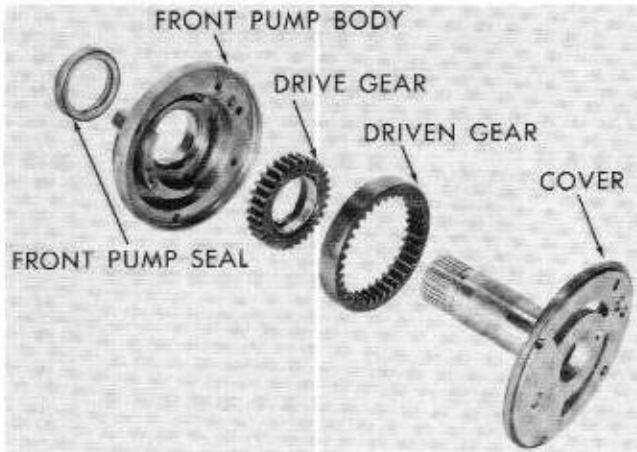


SECTION NINE—DISASSEMBLY, INSPECTION, INSTALLATION OF FRONT PUMP AND CHECKING SHAFT END PLAY

A. Disassembly of Front Pump



1. Remove the cover screws, and remove the cover from the front pump body.
2. Remove the gears from the body.

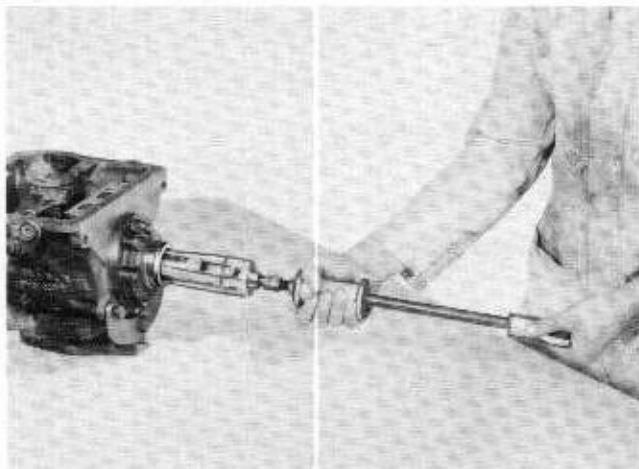
NOTE

Mark the gear with prussian blue to assure correct assembly.

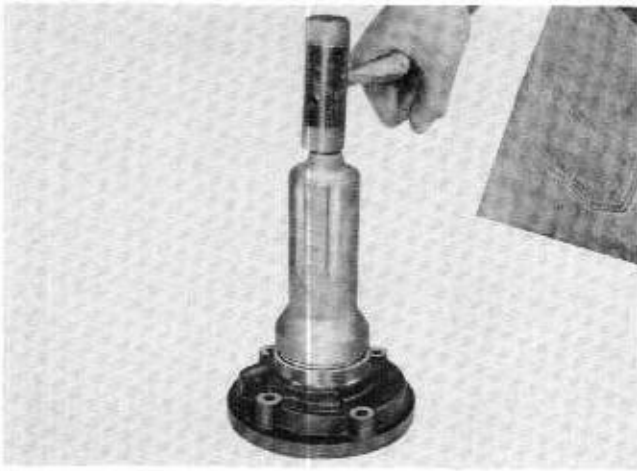
B. Inspection of Front Pump

Wash all parts in clean solvent, and blow them dry.

1. Inspect the bushing, gear pockets, and crescent for scores.
2. Inspect body and over cover mating surfaces for scores.
3. Inspect gear bearing surfaces for scores, and inspect gear teeth for burrs.
4. Inspect the stator support bearing surface and the bushing for scores.
5. Inspect the stator support splines for burrs and wear.
6. Check fluid passages for obstructions.



7. If inspection shows that it is necessary to remove the front pump seal, bolt the pump to the case. Then, using the remover shown, remove the seal.



8. Install a new front seal . . . using an installer to prevent damage to the seal, and to assure proper seating.

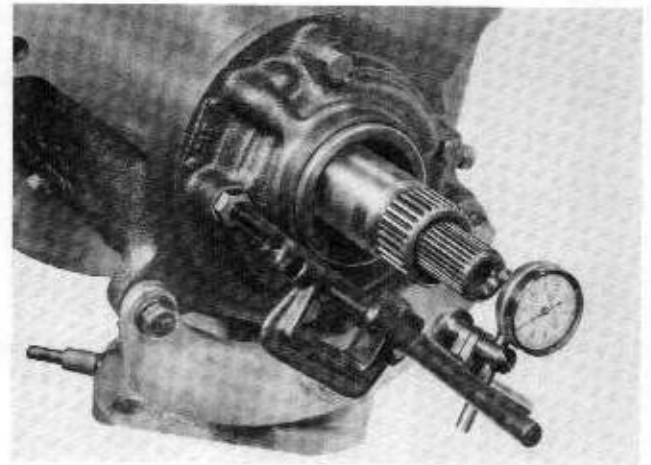
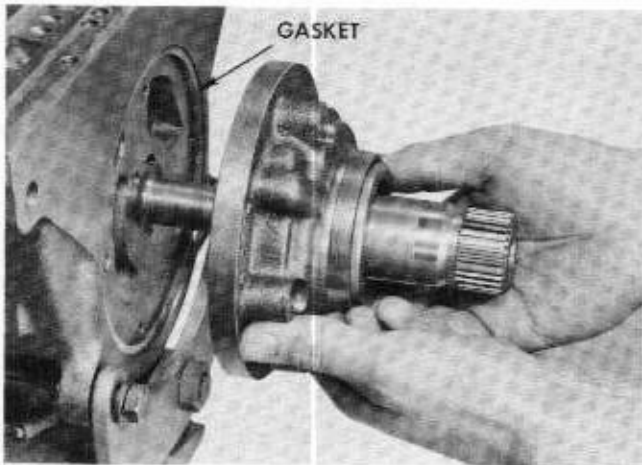
NOTE

Before installing the seal, coat it lightly with Permatex No. 3 to prevent seepage.

C. Assembly of Front Pump

1. Install the gears in the pump body -- aligning the marks made during disassembly.
2. Install the cover, and secure it with the cover screws and lockwashers. Torque the screws 1 to 3 foot-pounds.
3. Check the gears for free movement in the body.

D. Installation of Front Pump and Checking Shaft End Play



1. Install a new gasket in the counter-bore of the case, and install the front pump, securing it with three of the four pump bolts. Torque them 17 to 22 foot-pounds.
2. Check the turbine shaft end play which must be within .010 to .029 inch. (See instructions on page 108.) If end play is not within limits a new selective thrust washer must be installed.
3. After checking end play, remove the dial indicator set-up, and install the remaining front pump bolt.