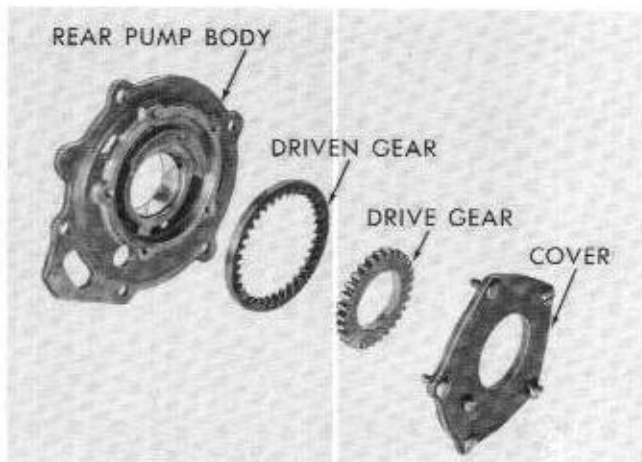


A. Disassembly of Rear Pump



1. Remove the pump cover screws and lockwashers, and remove the pump cover.
2. Using prussian blue, mark the pump drive and driven gears to assure correct assembly.

CAUTION Do not scratch the pump gears.

3. Remove drive and driven gears from the pump body.

B. Inspection of Rear Pump

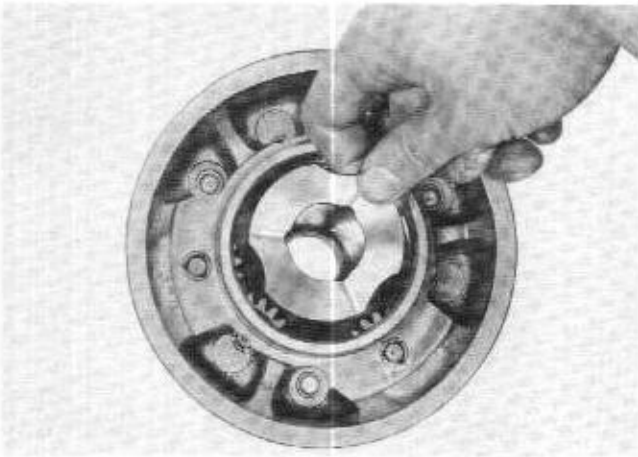
Wash all pump parts in clean solvent, and blow them dry before inspection.

1. Inspect the gear pockets, crescent, and inner bushing for scores.
2. Check fluid passages for obstructions.
3. Inspect gear bearing surfaces for scores, and inspect gear teeth for burrs.
4. Inspect mating surfaces and gasket surfaces for burrs.
5. Inspect pump cover bearing surface for scores.

C. Assembly of Rear Pump

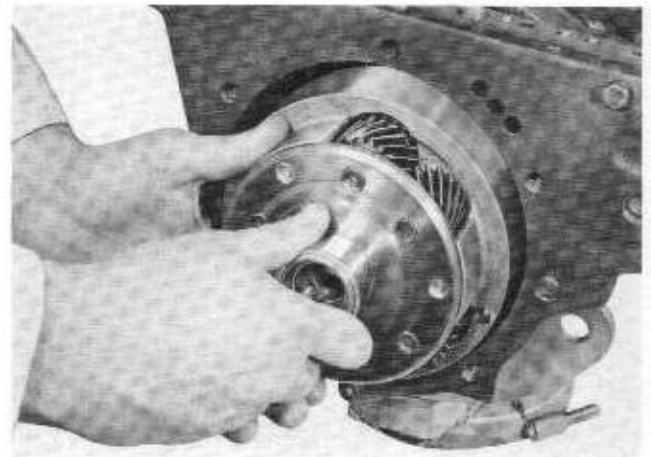
1. Install the driven gear in the rear pump body. Align the marks made during disassembly.
2. Install the drive gear...aligning the marks on the gears.
3. Install the rear pump cover, and secure it with its screws and lockwashers.
4. Check the movement of the gears to be sure they are free in the body.

D. Installation of Pinion Carrier, Output Shaft, and Rear Pump in Case

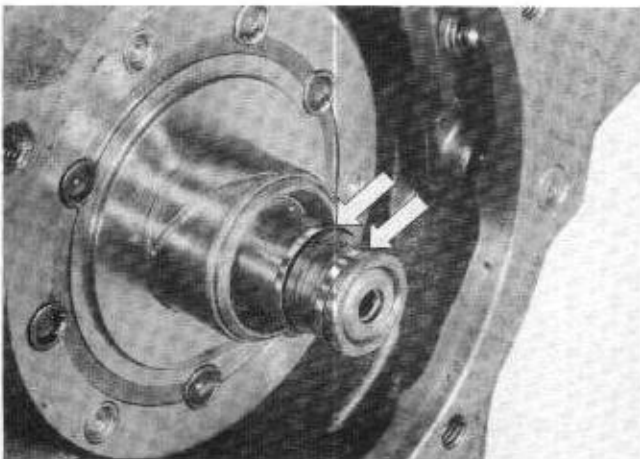


1. Install the bronze thrust washer in the planet carrier.

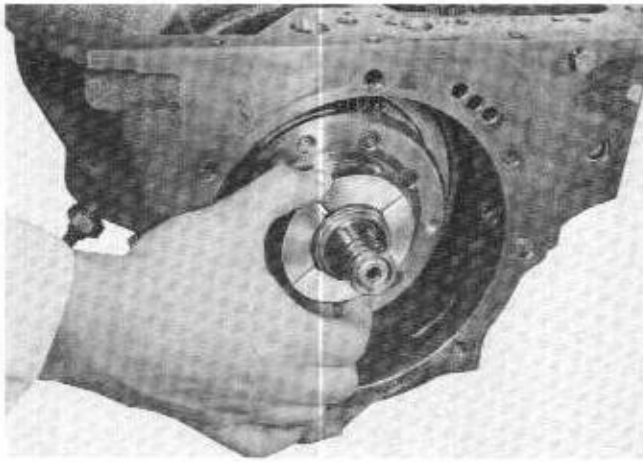
NOTE On 1951-54 models, install the washer on the thrust face behind the primary sun gear.



2. Install the pinion carrier...meshing the pinions with the primary sun gear.



3. Install two seal rings on the primary sun gear shaft. Check them for free movement in their grooves, and turn their gaps up to prevent damage to them when the output shaft is installed.

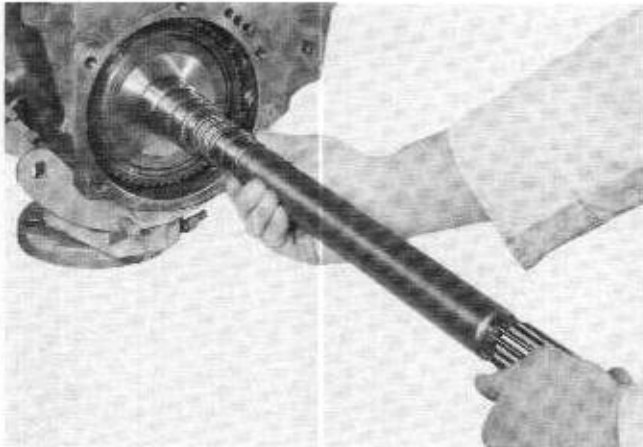


4. Install a selective thrust washer on the pinion carrier. Hold it in place with petrolatum.

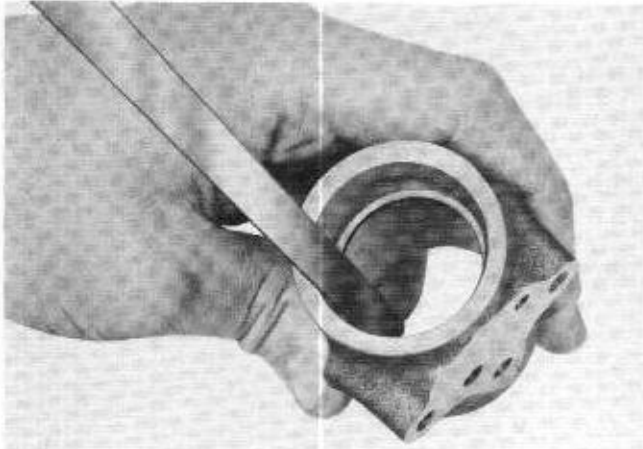
NOTE If turbine shaft end play was not within limits when checked during disassembly (page 108), replace it with a selective washer of proper thickness. The selective washers are available in the following thicknesses:

.063 to .061 .076 to .074
.069 to .067 .083 to .081

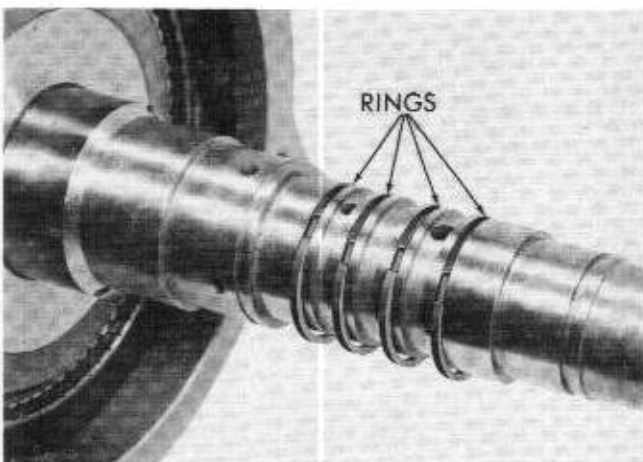
If end play of the turbine shaft is over limits, select a bigger washer. If it's under limits, select a smaller washer.



5. Install the output shaft, carefully meshing its internal gear with the planetary pinions.



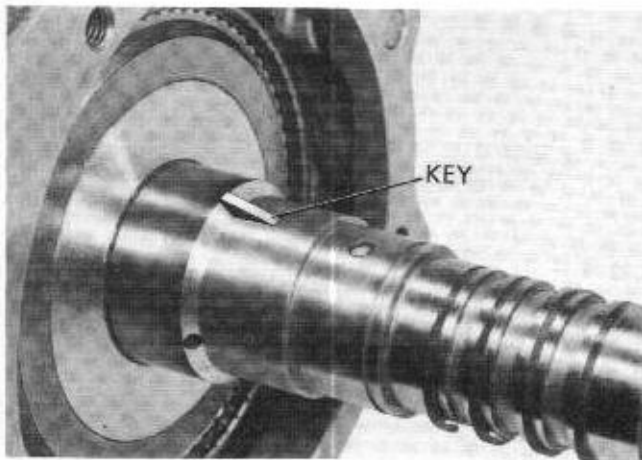
6. Install four rings in the distributor sleeve and check them for a slight ring gap. Remove the rings.



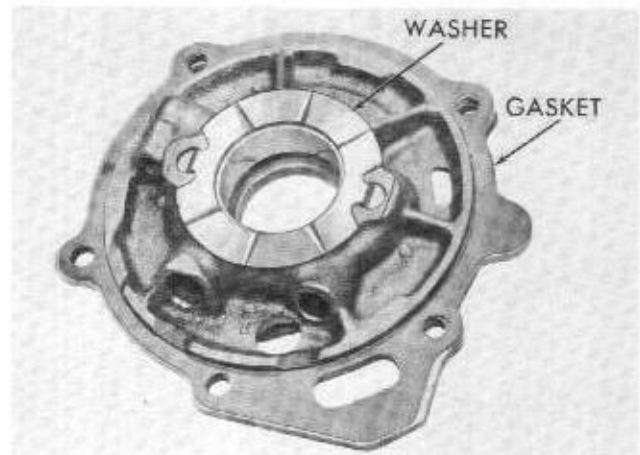
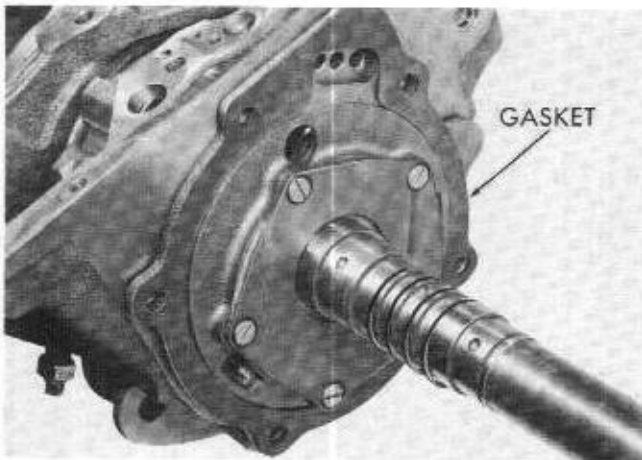
7. Install the four rings in the output shaft grooves. Check them for free movement in the grooves.

Chapter IV

Section SEVEN



8. Place the rear pump drive key in the keyway on the output shaft,



9. Install a new gasket on the front of the pump... holding it in place with fluid, and install the thrust washer on the pump body with the bronze side up.
10. Install the rear pump--being careful to index the key and keyway-- and install a new gasket on the rear of the pump.