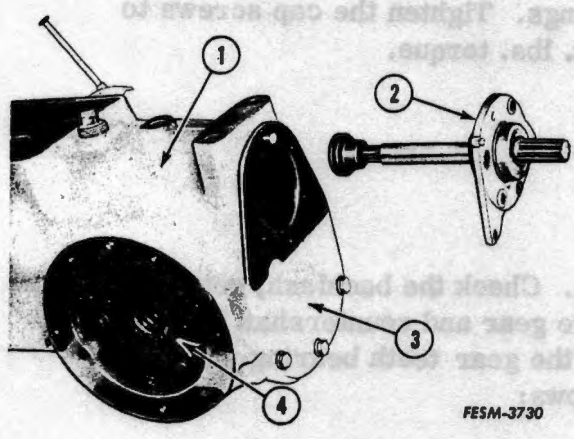
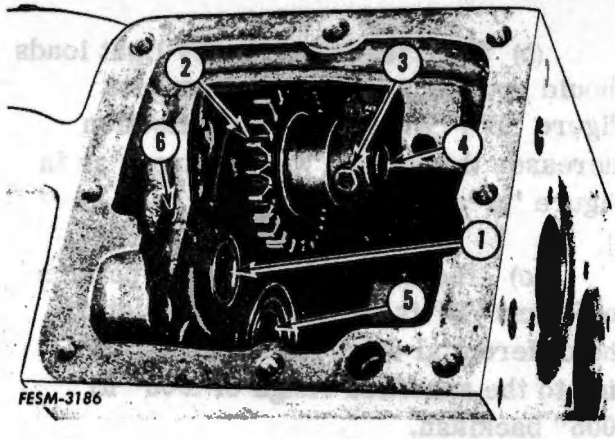
(d) Adjust the drive gear lateral position by removing shims from one side and installing the shims removed on the opposite side.

NOTE: Do not add or remove shims to change the total amount of shims in the previously established shim pack as this will change the bearing preload.

(e) Tooth bearing position from the root to the crown of the tooth is controlled by lateral position of the bevel pinion.



1. Transmission case
2. PTO assembly
3. PTO adapter plate
4. Differential bearing retainer



(1) If low tooth bearing position on the bevel pinion is indicated (as shown in Figure "C"), the pinion must be adjusted towards the drive gear.

(2) If high tooth bearing position on the bevel pinion is indicated (as shown in Figure "D"), the pinion must be adjusted away from the drive gear.

(f) Adjust the bevel pinion by adding or removing shims between the bearing retainer and the transmission case.

NOTE: If it is necessary to move the bevel pinion in or out to correct "Root-to-crown" bearing, the drive gear must also be moved laterally to maintain the specified backlash.

15. If equipped with PTO, use new gaskets and install the PTO adapter plate (3) and the PTO assembly (2). Be sure the PTO shifter lever and fork is in the shifter clutch groove. Tighten the cap screws to 35 ft. lbs. torque.

16. If the reverse idler bushing is to be replaced, press the bushing into the gear until the edge is flush with the gear face. Ream the bushing to the specified I.D. of .612 to .613 inch.

17. Install the reverse idler shaft and idler gear assembly (2) in the case. Install the set screw (3) and tighten securely. Be sure to install a new expansion plug (4).

1. Spline and clutch shaft rear bearing
2. Reverse idler gear assembly
3. Set screw
4. Expansion plug
5. Countershaft rear bearing
6. Oil passage