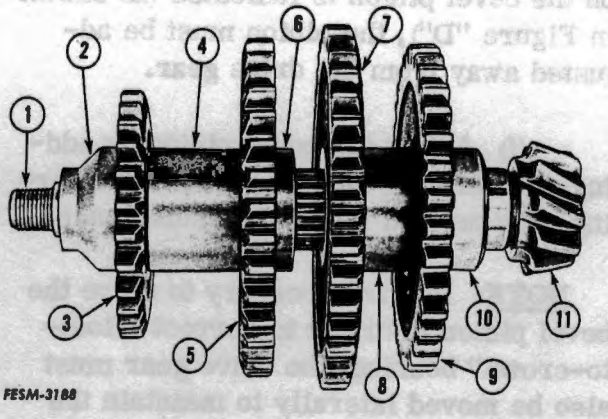
10. Install the transmission countershaft, spacers, gears, front bearing, bearing retainer and shims and the countershaft nut. Do not torque nut at this time. Refer to Specifications for spacer lengths. Be sure to install a new O-ring and gasket.



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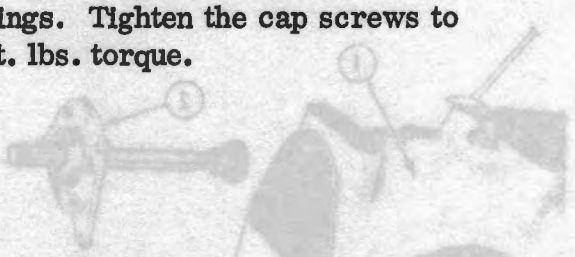
1. Countershaft
2. Spacer
3. 3rd speed gear
4. Spacer
5. 2nd speed gear
6. Spacer
7. 1st speed gear
8. Spacer
9. Reverse speed gear
10. Spacer
11. Bevel pinion

11. Install the differential assembly in the transmission case. The drive gear must be on the left with the teeth facing right.

12. Install the R.H. carrier bearing if it was removed.

13. Keeping pre-load shim pack correct as previously established, install the bearing retainers, new oil seals and new O-rings. Tighten the cap screws to 35 ft. lbs. torque.



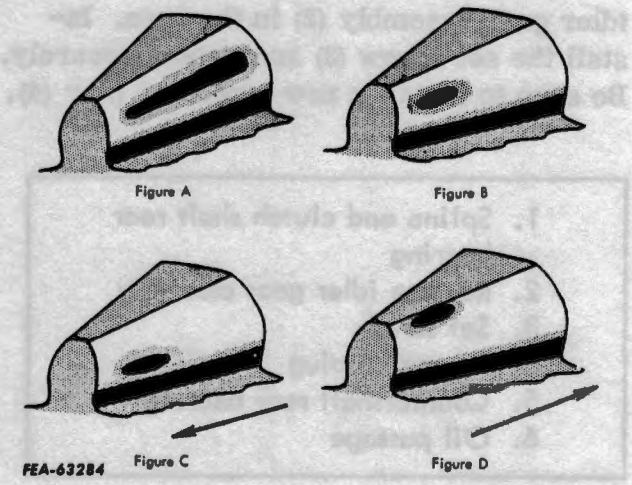
14. Check the backlash, between the drive gear and countershaft bevel pinion, and the gear teeth bearing pattern as follows:

(a) Apply a thin coat of red lead or prussian blue to the bevel pinion teeth faces, then rotate the gears by hand and observe the bearing pattern.

Some deflection will occur under load. Allowance is made in gear design to prevent concentration of load on tooth edges.

(b) Hand testing and very light loads should provide a pattern as shown in Figure "B". When load and deflection increases the pattern will progress as in Figure "A".

(c) The desirable (no load) pattern in Figure "B" is the result of adjusting the differential drive gear lateral position to the specified range of .003" to .005" backlash.



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