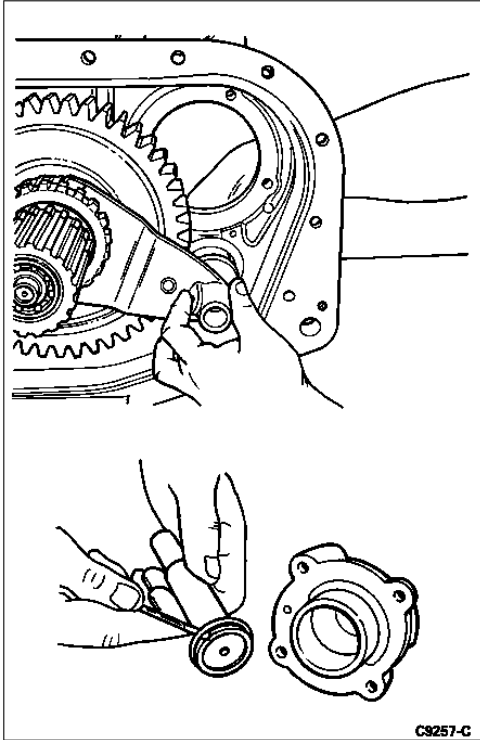
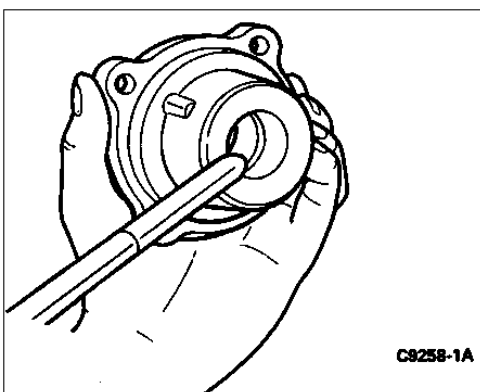


4. Pull the yoke bar from cylinder housing and remove shift yoke. If necessary, remove the O-ring from piston OD.



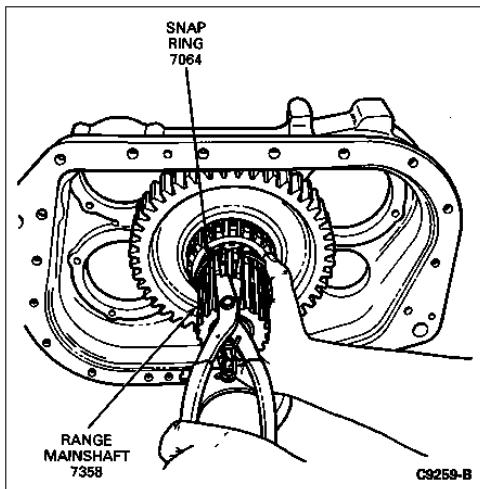
5. Remove the deep reduction cylinder housing and gasket from auxiliary housing. If necessary, remove the small O-ring from bore in cylinder housing.



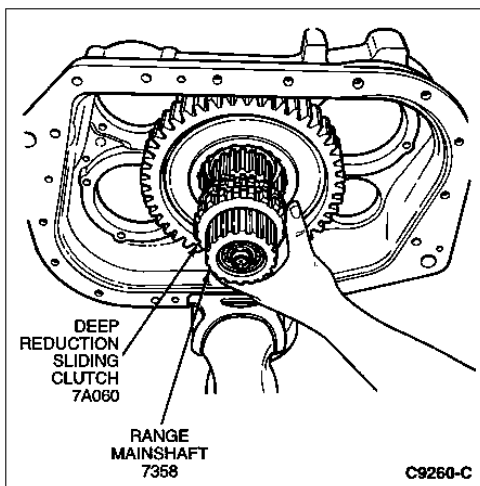
REMOVAL AND INSTALLATION

Range Mainshaft Assembly, Removal

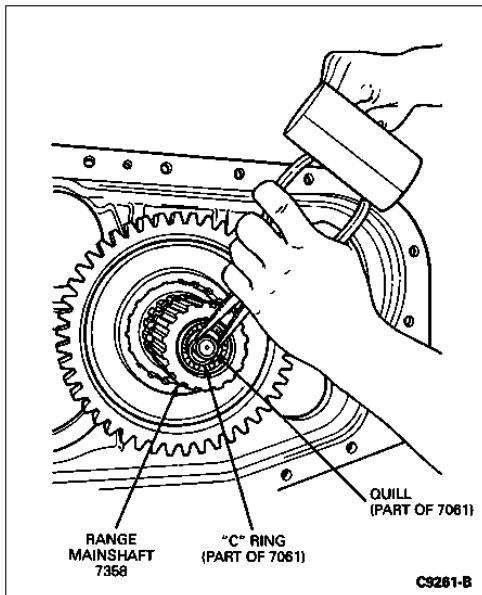
1. Remove snap ring from range mainshaft.



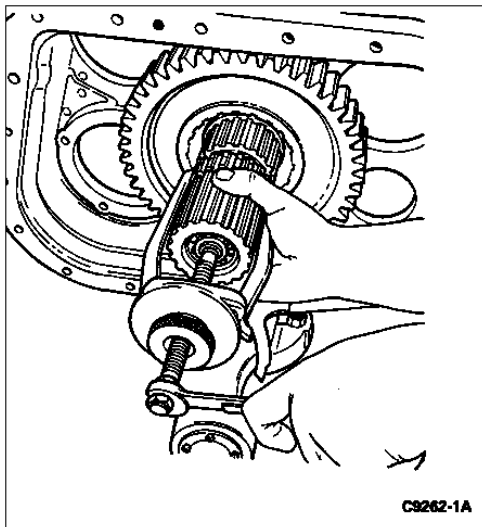
2. Remove deep reduction sliding clutch.



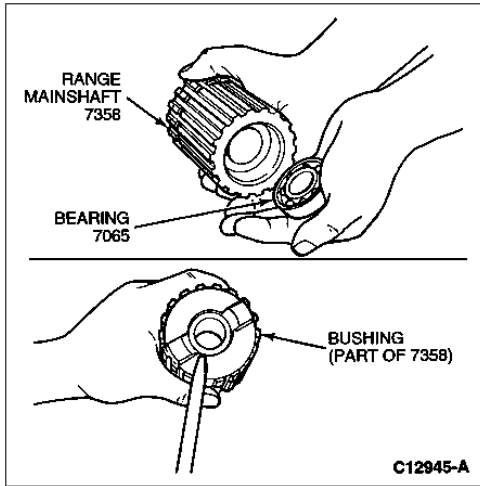
3. Remove the C ring from groove at front of mainshaft quill.



4. Insert 2-Jaw Puller D81L-1002-A or equivalent, behind range mainshaft and pull from quill.



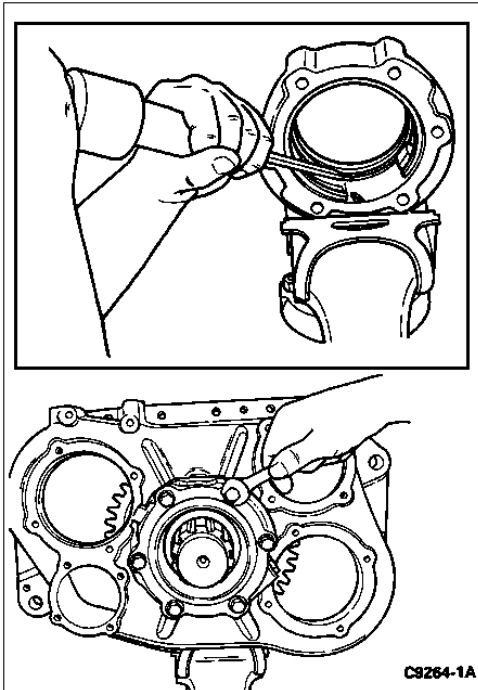
5. Remove the front bearing from bore in range mainshaft. If necessary, press the bushing from mainshaft bore.



REMOVAL AND INSTALLATION

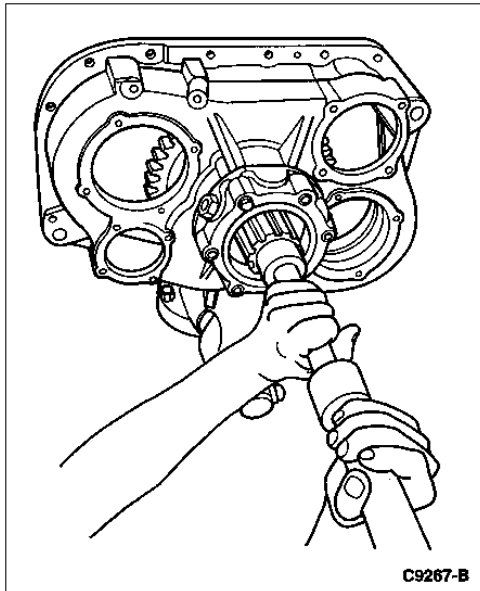
Output Shaft and Rear Bearing Assemblies, Removal

1. Remove the capscrews and remove the rear bearing cover and gasket. If necessary, remove the oil seal from cover.

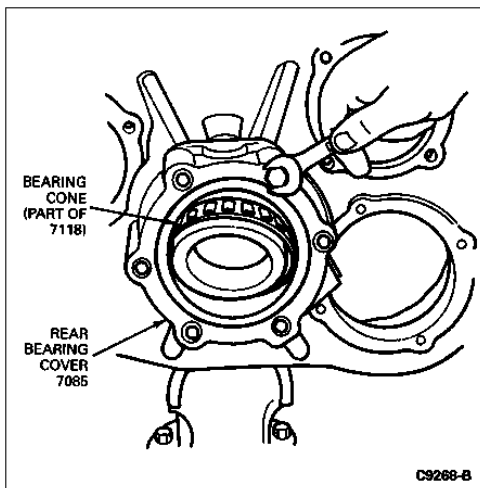


2. Remove the speedometer rotor or replacement spacer from output shaft.
3. Temporarily reinstall rear bearing cover on housing ONLY to catch rear bearing cone released from bore in the following step.
4. **NOTE: When applying force to rear of output shaft, DO NOT DAMAGE THREADS. Support front of shaft to avoid damaging the mainshaft quill once output shaft is free of bearing.**

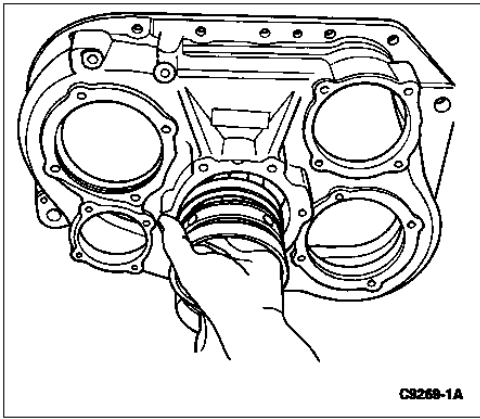
Use a soft bar and maul to drive the output shaft forward and through rear bearing assembly. This will cause the rear bearing cone to be released from bore in auxiliary housing.



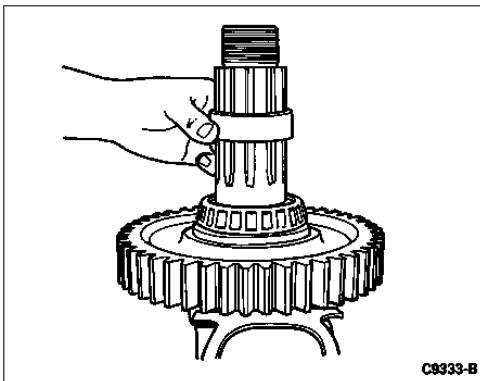
5. Remove rear bearing cover and outer output shaft bearing. Remove cover slowly as the bearing will be loose in the cover.



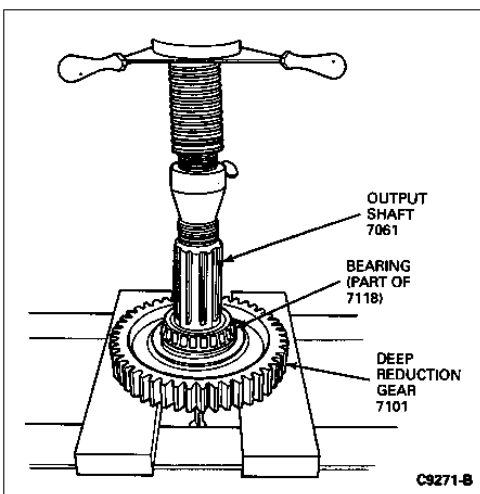
6. Remove the two bearing cups and outer spacer from bore in auxiliary housing.



7. Remove the bearing inner spacer from output shaft.

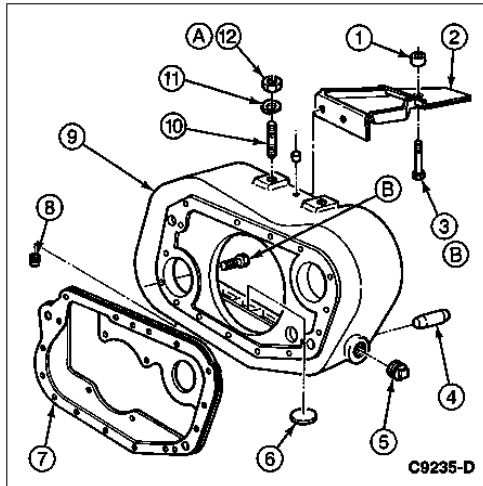


8. Using the front face of deep reduction gear as a base, press the output shaft through the bearing and gear. This will free the bearing, gear and washer. **DO NOT DAMAGE MAINSHAFT QUILL.**



9. Remove snap ring from hub of deep reduction gear, if necessary.

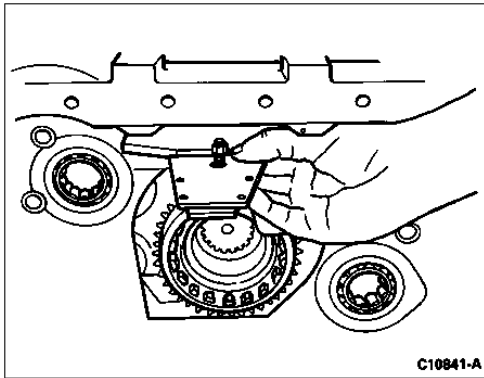
REMOVAL AND INSTALLATION

Auxiliary Intermediate Housing, Removal

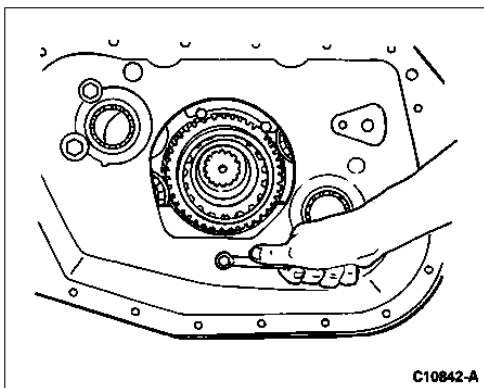
Item	Part Number	Description
1	7E010	Spacer
2	7961	Oil Trough
3	370519-S	Capscrew
4	∅	Dowel (Part of 7003)
5	353094-S	Pipe Plug
6	7E290	Magnet
7	7B343	Rear Case Gasket Plate
8	353051-S	Pipe Plug
9	7005	Housing
10	374423-S	Stud
11	44792-S	Lockwasher
12	33850-S	Nut
A	∅	Tighten to 230-251 Nm (170-185 Lb-Ft)
B	∅	Tighten to 47-61 Nm (35-45 Lb-Ft)

1. **NOTE:** There is a spacer on the 7/16 capscrew. Note its location for reassembly.

Remove the three capscrews and remove the oil trough from the intermediate housing.



2. Remove the remaining twelve cap screws and remove the intermediate housing from the transmission.



3. Locate and save the two inner auxiliary countershaft bearing spacers for reassembly. These are spacers only and must be installed at time of reassembly. The countershaft bearings may be removed for replacement at this time.

