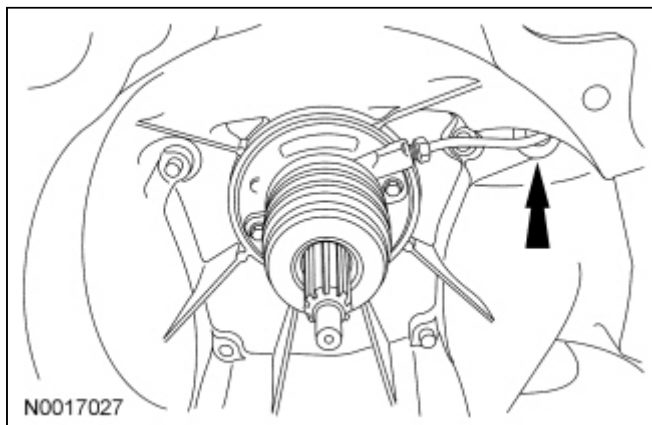


Transmission

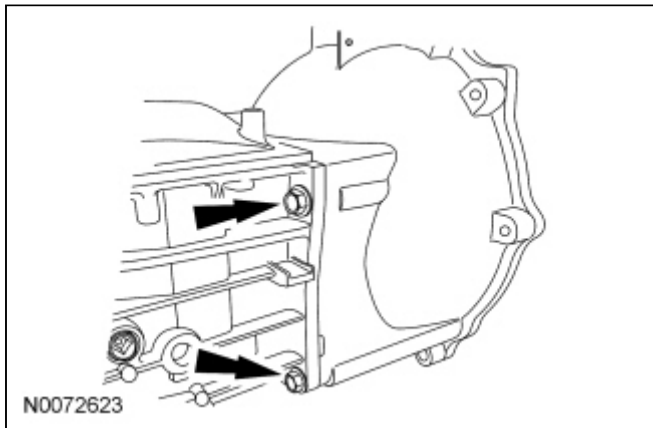
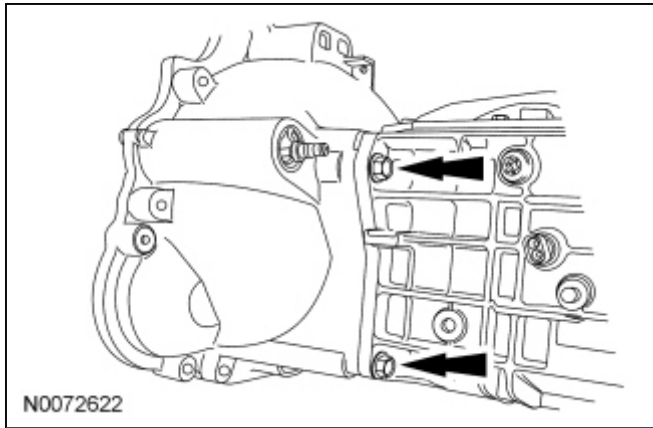
Special Tool(s)

 ST1186-A	Holding Fixture, Transmission 307-003 (T57L-500-B)
 ST1368-A	Puller, Bearing 205-D064 (D84L-1123-A) or equivalent
 ST2272-A	Remover, Front Wheel Hub 205-D070 (D93P-1175-B) or equivalent
 ST1516-A	Remover/Installer, Front Wheel Hub 204-069 (T81P-1104-C)
 ST1302-A	Staking Tool, Locknut 308-056 (T77J-7025-F)

1. Remove the clutch slave cylinder and the retaining clip. Discard the retaining clip.

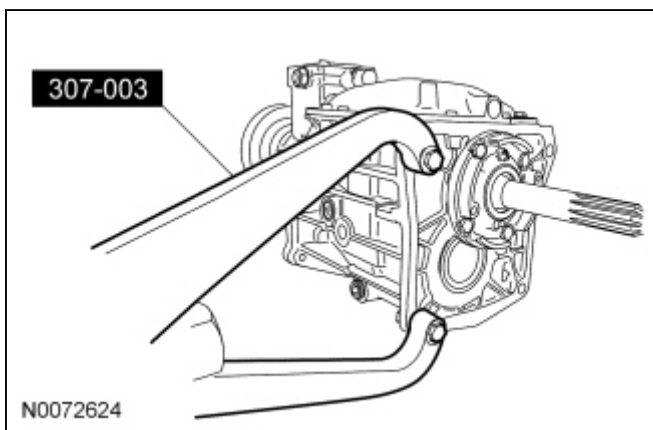


2. Remove the 4 clutch housing bolts.
 - Separate the clutch housing from the transmission.

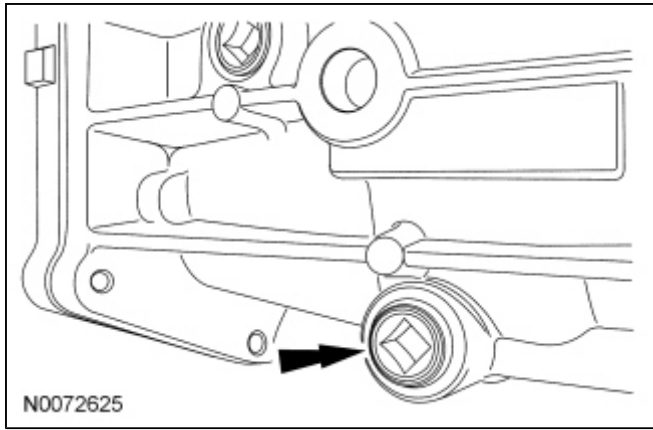


3. Clean the transmission exterior with solvent and dry with compressed air. During disassembly, clean all components with solvent and dry with compressed air.
4. **NOTE:** Position the gearshift lever in NEUTRAL.

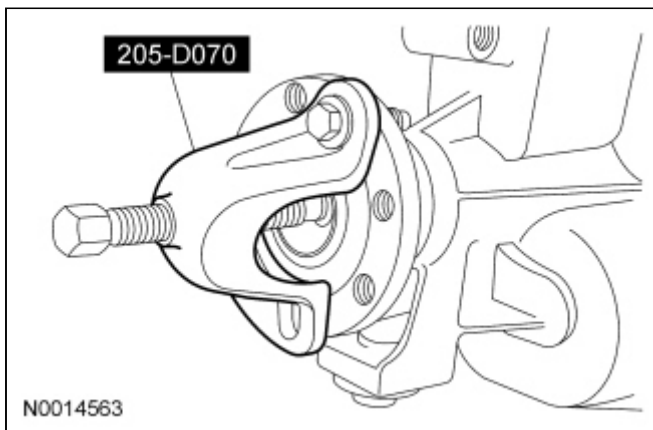
Attach the transmission to the Transmission Holding Fixture.



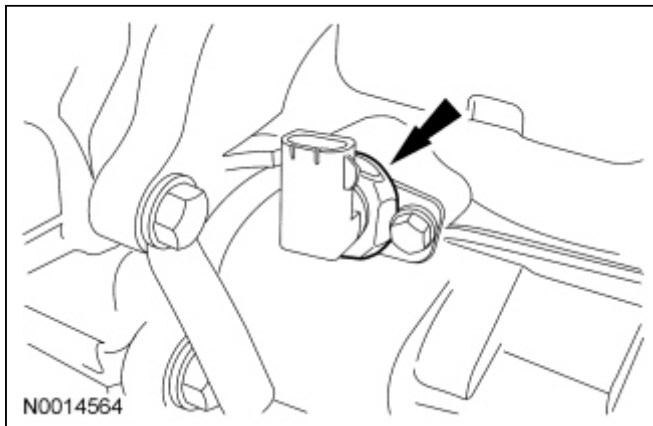
5. Remove the drain plug and drain the transmission fluid.



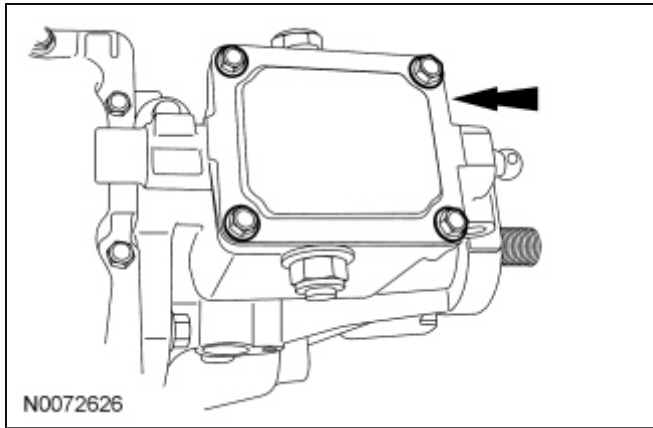
6. Remove the output shaft flange nut. Using the Front Wheel Hub Remover, remove the output shaft flange, the washer and the seal. Discard the seal.



7. Remove the Output Shaft Speed (OSS) sensor.

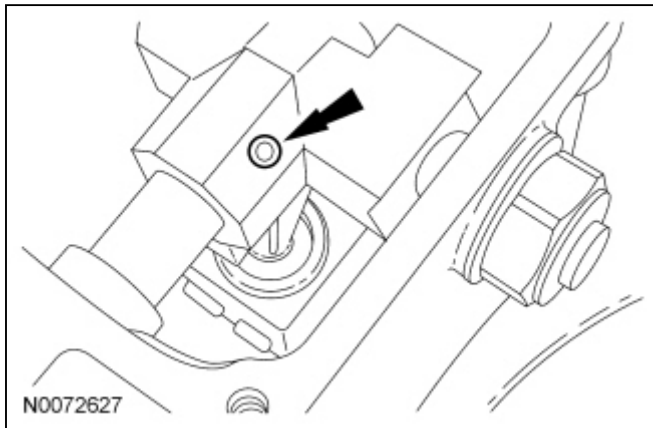


8. Remove the 4 bolts and pry the shift cover plate off.

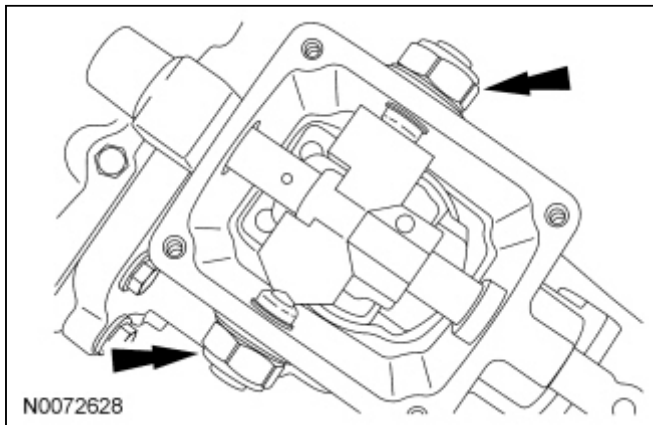


9. **NOTICE:** Do not attempt to remove the gearshift offset lever with the extension housing bolted in place. A lug, located on the bottom of the gearshift offset lever, meshes with the detent plate preventing enough rearward movement of the gearshift offset lever to allow removal.

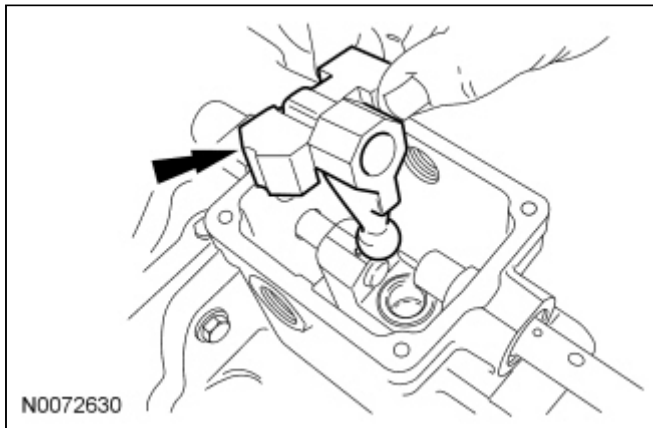
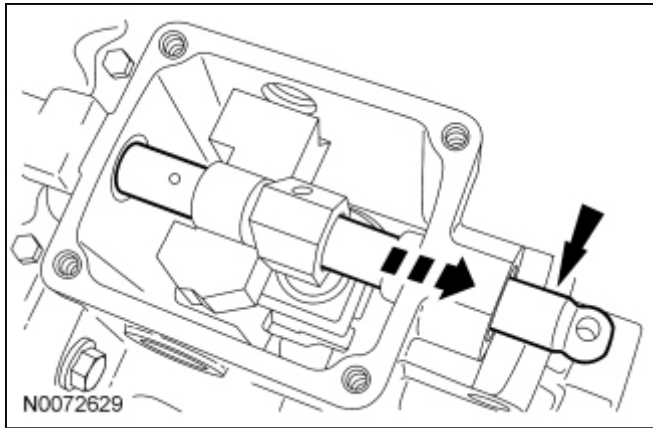
Using a suitable punch, remove the roll pin and discard.



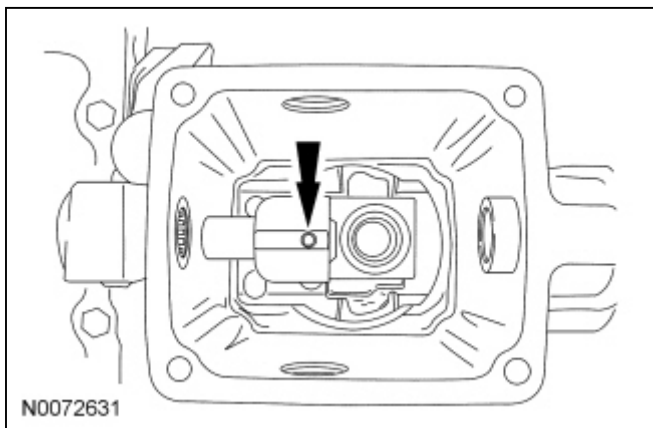
10. Remove the 2 shift detents.



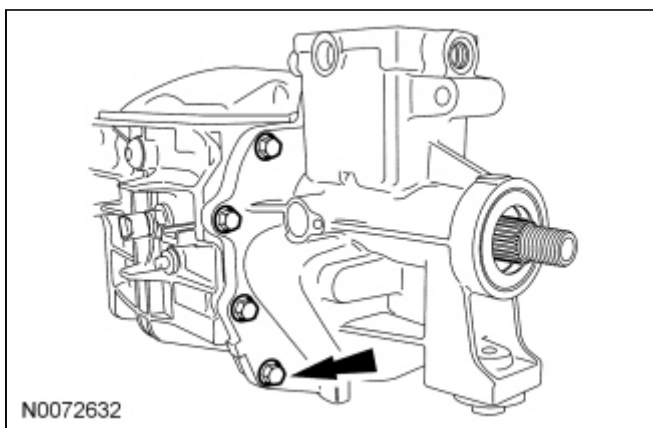
11. Move the gearshift shaft rearward, then remove the shift lever. Remove the gearshift shaft.



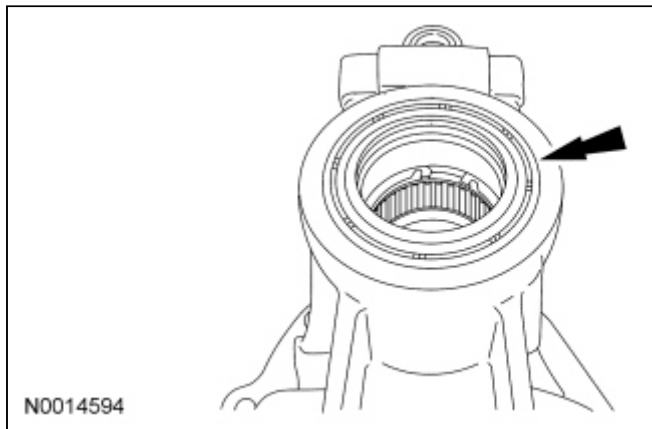
12. Using a suitable punch, remove the gearshift offset lever roll pin and discard.



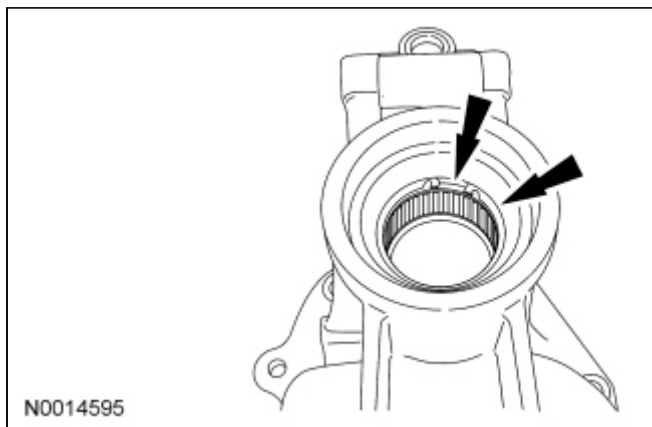
13. Remove the 7 extension housing bolts and the identification tag.
- Carefully pry the extension housing to break the gasket seal.



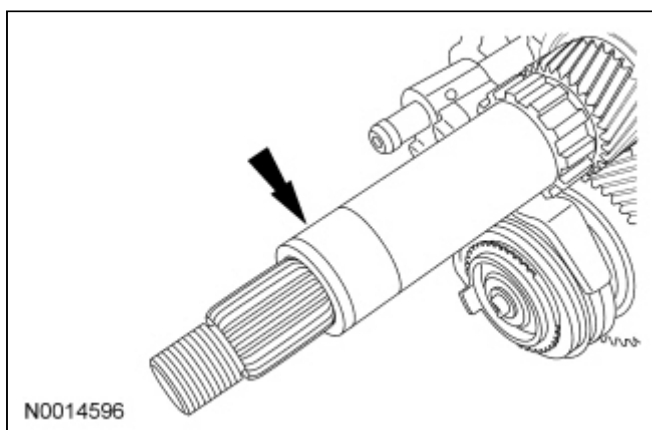
14. Remove the extension housing and the gearshift offset lever as an assembly.
15. Remove the gearshift offset lever and the split pin.
16. Using a hammer and a drift, remove the output shaft seal from the inside. Discard the seal.



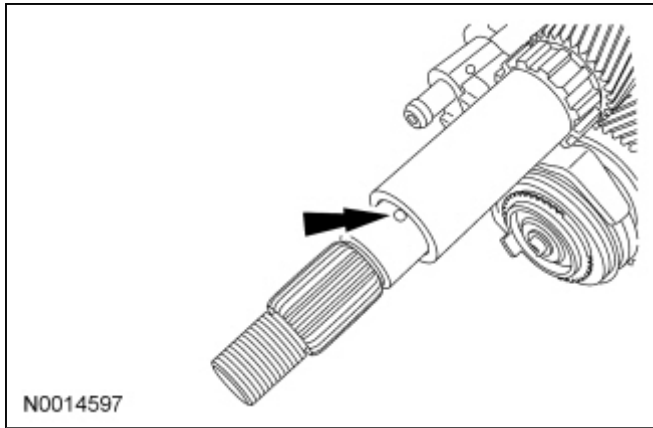
17. Remove and discard the snap ring, then using a hammer and a drift, remove the output shaft bearing.



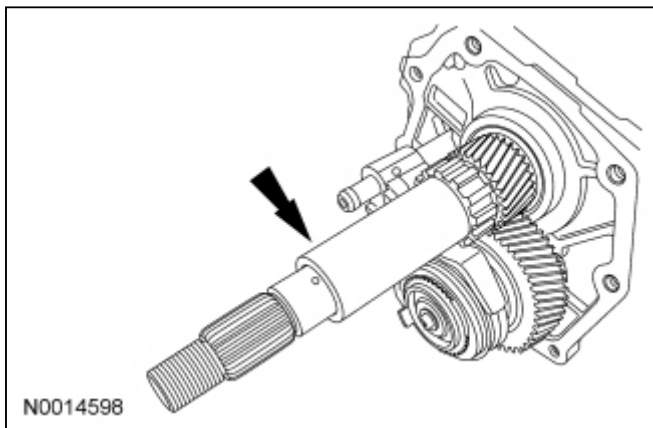
18. Remove the small output shaft spacer.



19. Remove the check ball.

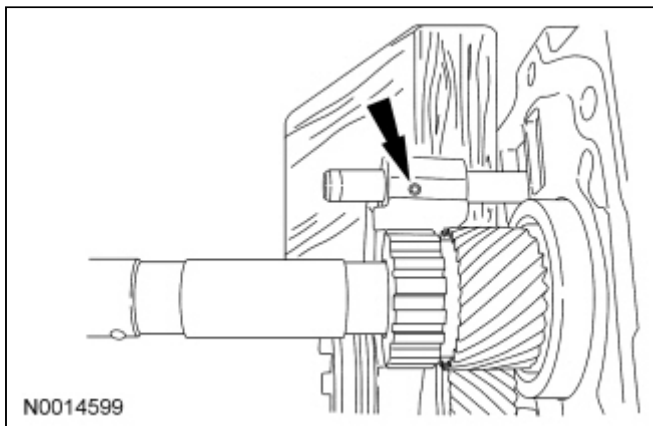


20. Remove the large output shaft spacer.

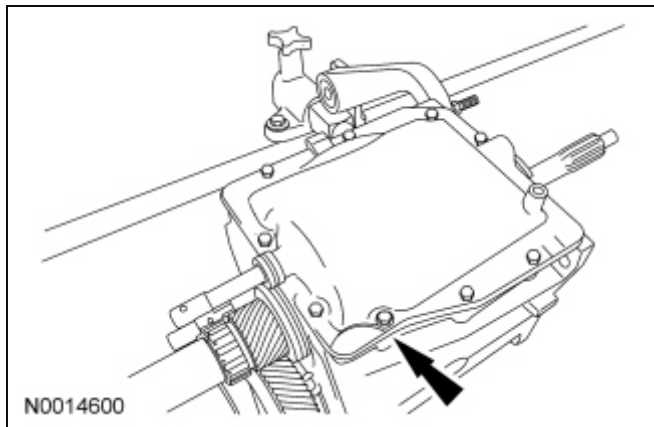


21. **NOTICE:** Support the reverse gear shift rail with a block of wood to prevent damaging the shift rail.

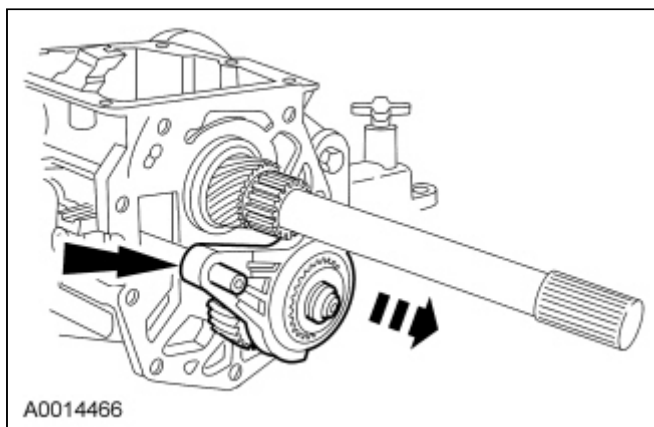
Remove the roll pin and discard.



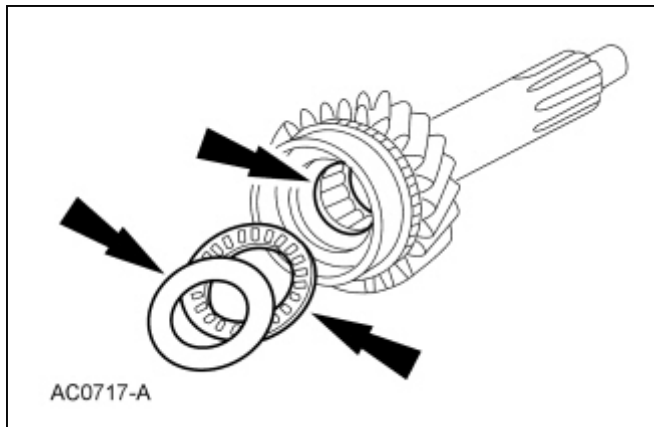
22. Remove the 10 case cover bolts. Carefully pry the case cover to break the gasket seal. Lift the case cover and slide it toward the filler plug side of the case to clear the reverse gearshift lever.



23. Rotate the transmission with the output shaft facing upward.
24. Remove the 5th speed synchronizer snap ring, the thrust washer, the reverse brake ring and the synchronizer blocking ring.
25. Remove the 5th speed cluster gear, the synchronizer blocking ring, the synchronizer assembly and the 5th gear shifter fork as an assembly.

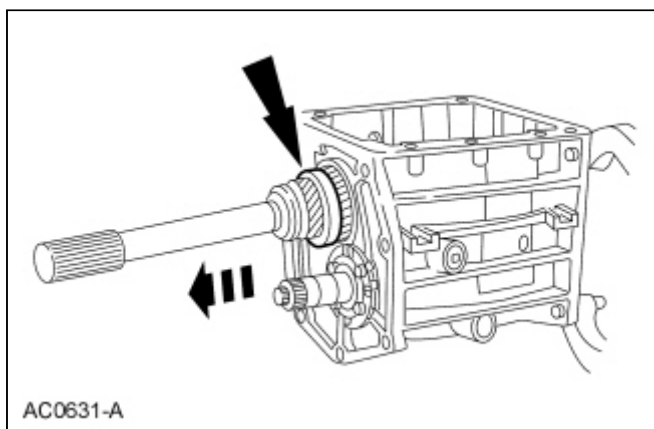


26. Rotate the reverse gear shift rail clockwise to disengage the ball stud from the reverse gearshift lever. Pull the reverse gear shift rail rearward slightly. Rotate the reverse gear shift rail counterclockwise to align the ball stud with the slot in the case and remove the reverse gear shift rail.
27. Loosen the rear bearing cup in the case. Pull upward on the mainshaft and remove the 5th gear.
28. Rotate the transmission with the input shaft facing upward.
29. **NOTE:** The input shaft bearing retainer is notched. Carefully pry the retainer to break the gasket seal.
Remove the 4 input shaft bearing retainer bolts and the input shaft bearing retainer.
30. **NOTE:** Make sure not to drop the 15 roller bearings, the input shaft bearing spacer, the thrust bearing or thrust washer from the rear of the input shaft when removing.
NOTE: Rotate the input shaft until the flat on the 4th gear clutching teeth align with the countershaft cluster gear.
Remove the input shaft.
31. Remove the 4th gear synchronizer ring, the thrust washer, the thrust bearing, the input shaft bearing spacer and the 15 roller bearings.

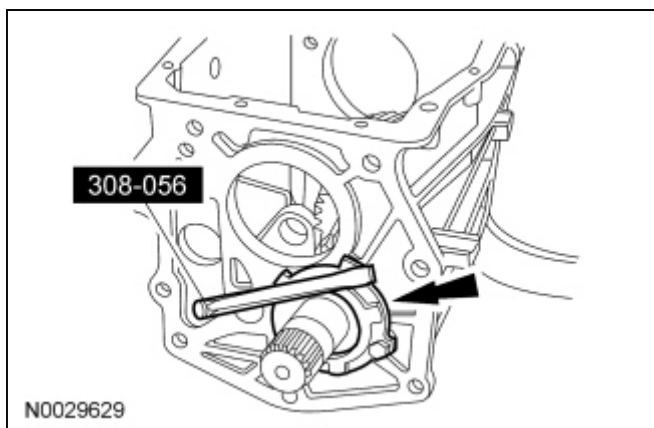


32. **NOTE:** If the output shaft rear bearing cup sticks, it is misaligned in the case bore. To free the output shaft rear bearing cup, work the output shaft assembly back and forth in the case.

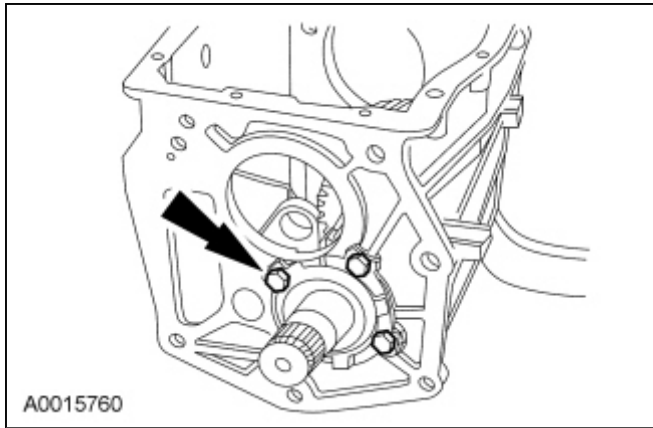
Remove the output shaft rear bearing cup.



33. Remove the output shaft assembly.
34. Using the Locknut Staking Tool, flatten the tabs on the countershaft rear bearing retainer.

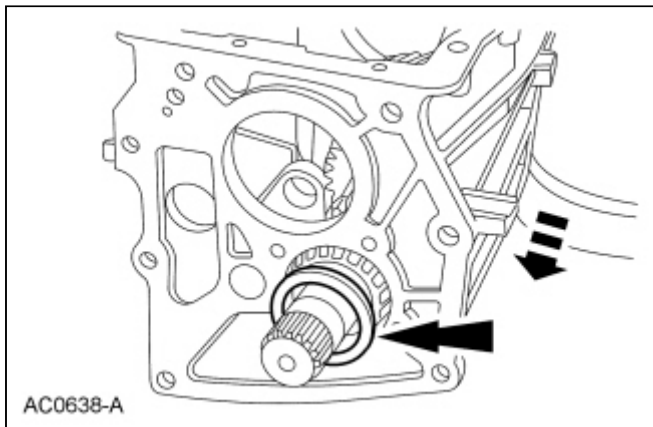


35. Remove the 4 bolts, the countershaft rear bearing retainer and the shim.

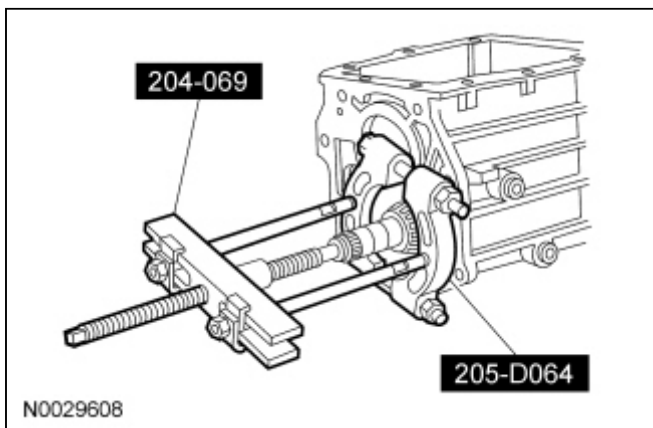


36. **NOTE:** If the bearing race sticks in the case, it is misaligned in the case bore. To free the race, work the countershaft cluster gear back and forth.

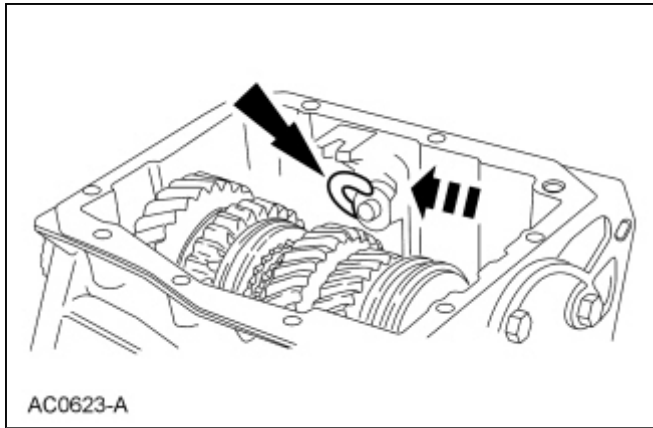
Remove the bearing race.



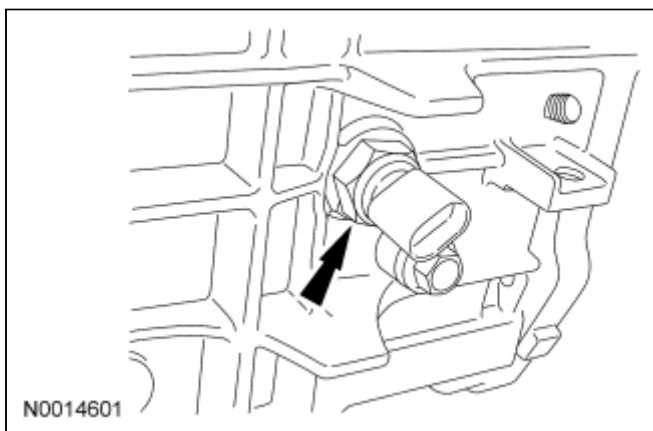
37. Using the Front Wheel Hub Remover/Installer and Bearing Puller, remove the rear countershaft bearing assembly.



38. Remove the reverse gearshift lever retaining clip.



39. Using a Torx bit driver, remove the shift lever reverse pin.
40. Remove the reversing lamp switch.

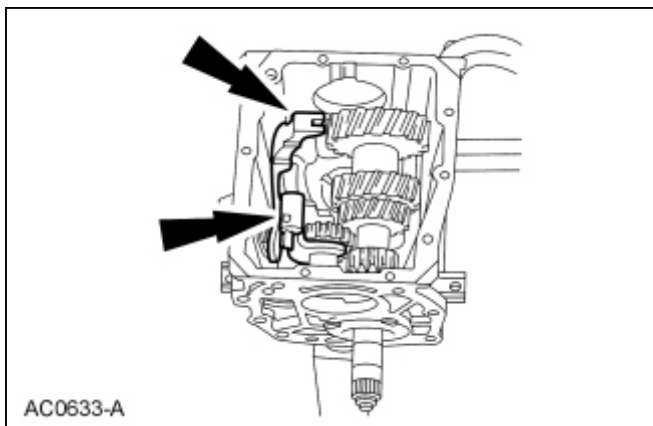


41. **NOTE:** Observe the location of the reverse gearshift lever, the reverse shift fork and the reverse positioning spring.

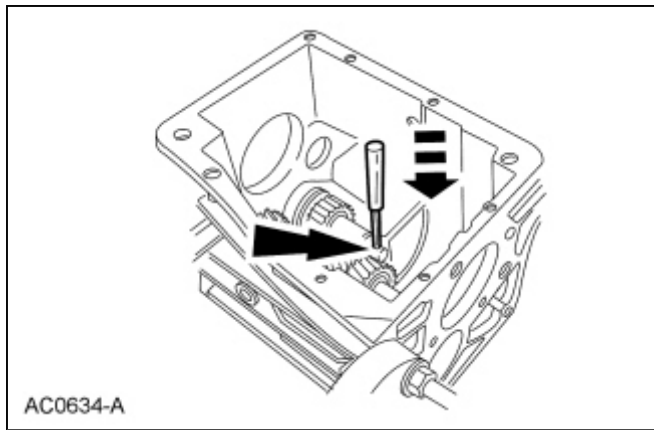
NOTE: Observe the rotation action of the reverse positioning spring.

NOTE: Hold the reverse gearshift lever and lift it upward as straight up as possible to remove the assembly.

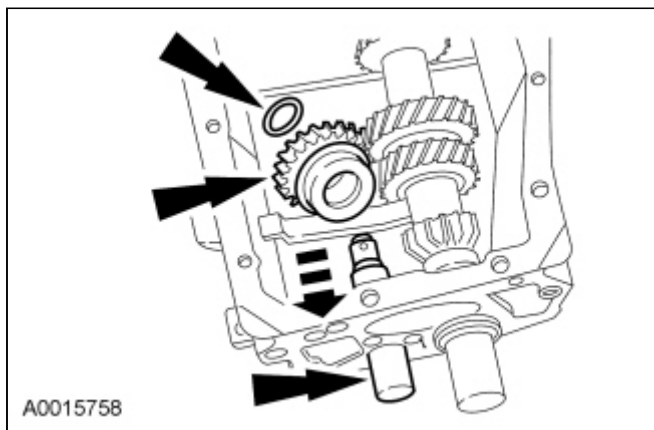
Remove the reverse gearshift lever, the reverse shift fork and the reverse positioning spring as an assembly.



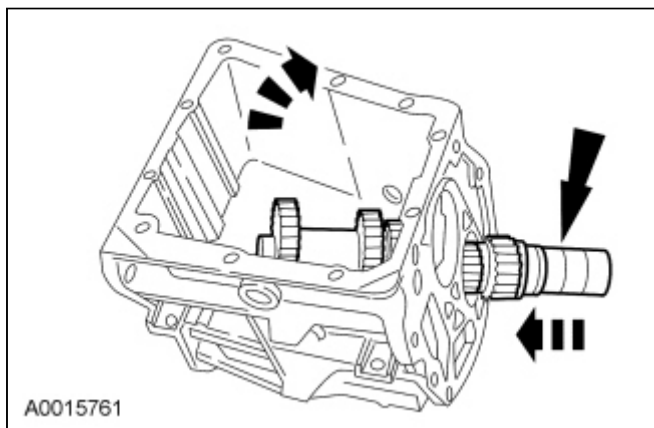
42. Using a suitable punch, remove the roll pin and discard.



43. Remove the reverse idler gear shaft, the reverse idler gear and bushing and the reverse gear overtravel stop.



44. Move the countershaft cluster gear rearward through the bearing bore. Tilt the assembly upward and remove it from the case.



45. Inspect the rail bearing for wear or damage. Remove the bearing as necessary. Using a suitable puller, remove the rail bearing from the transmission. Discard the rail bearing.
46. Inspect the main shift rail bearings for wear or damage. Remove the bearings as necessary. Using a suitable puller, remove the main shift rail bearings from the extension housing. Discard the bearings.
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