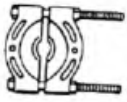


Output Shaft

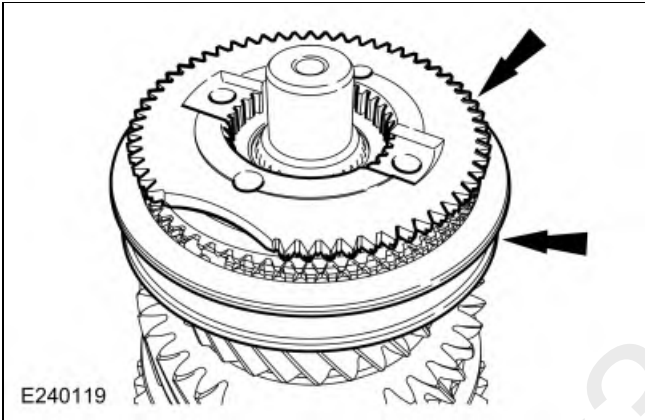
Special Tool(s) / General Equipment

	205-D064 (D84L-1123-A) Puller, Bearing
Three Leg Puller	
Hydraulic Press	

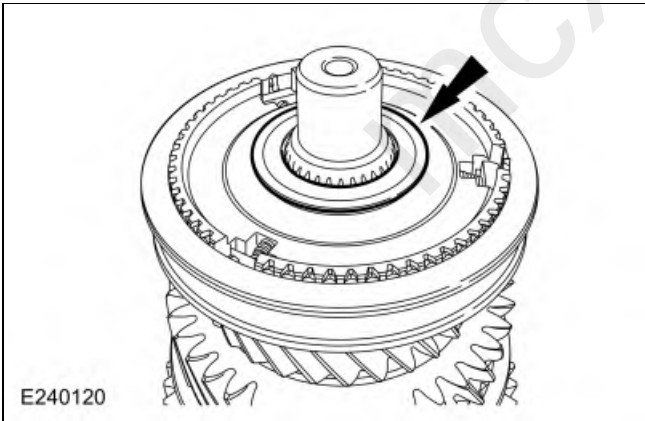
DISASSEMBLY

1. **NOTE:** Use the yoke to support the mainshaft in the upright position.

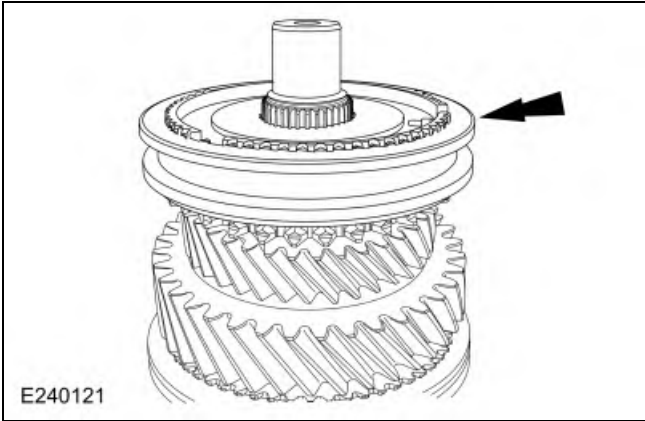
Remove the clutch cone and the synchronizer ring.



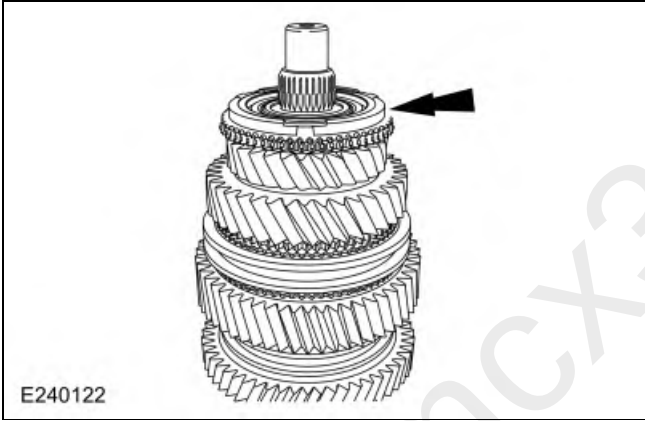
2. Remove the thrust washers and the roller bearing between the thrust washers.



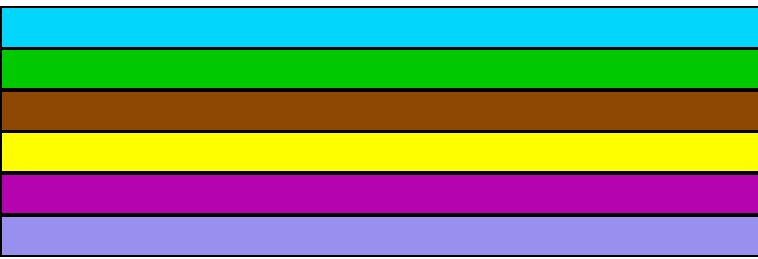
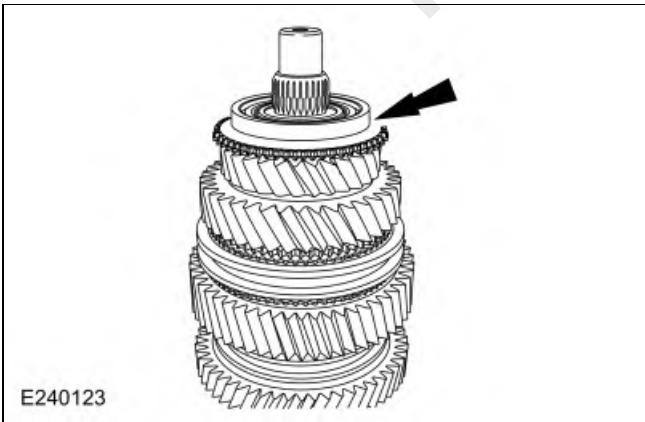
3. Remove the 3rd and 4th gear synchronizer assembly.



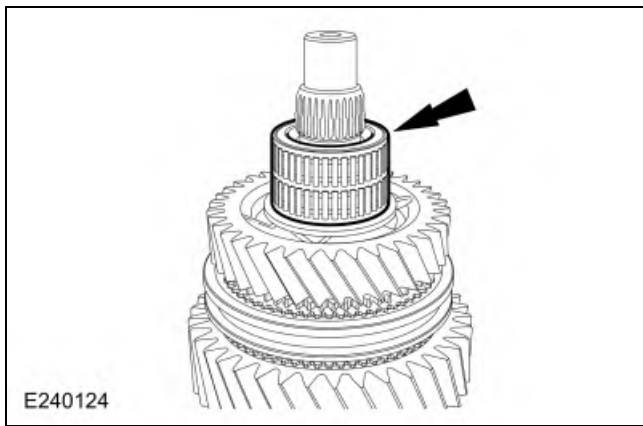
4. Remove the 3rd gear synchronizer ring.



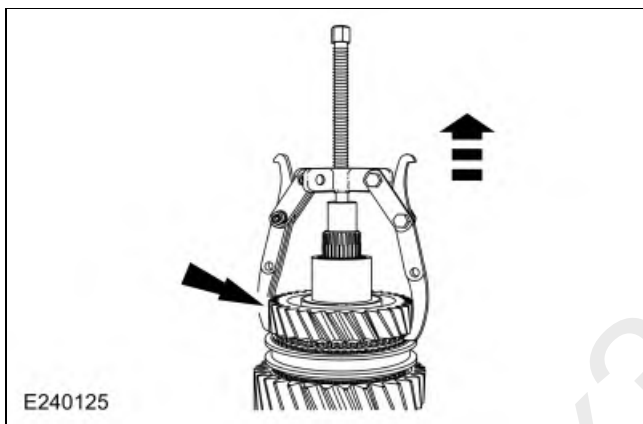
5. Remove the 3rd gear.



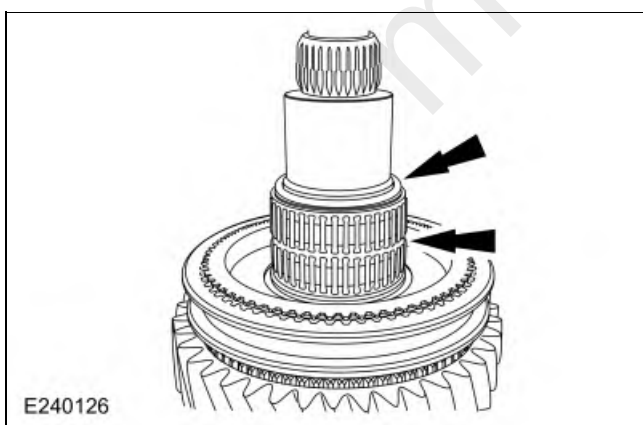
6. Remove the roller bearing.



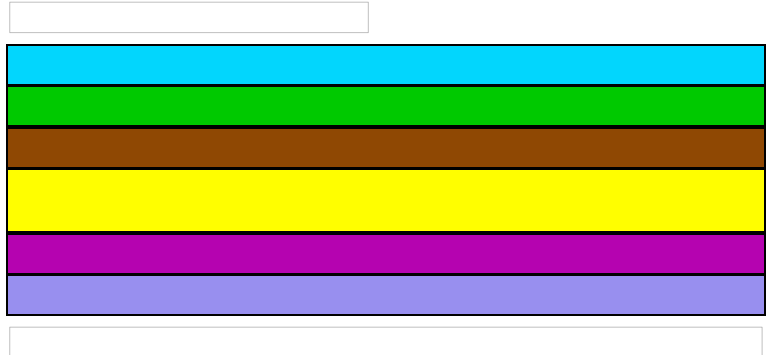
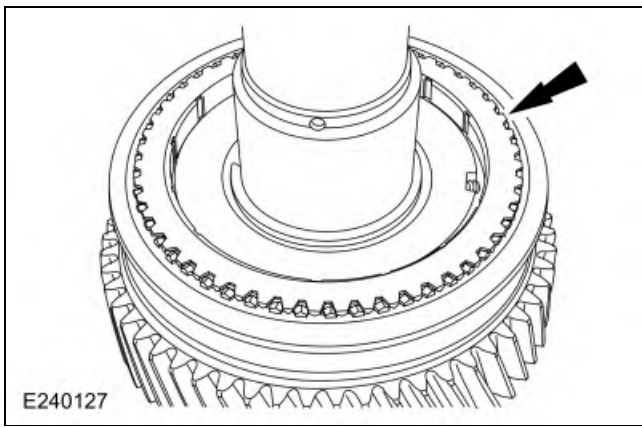
7. Using the three leg puller, remove the 3rd gear bushing and the 2nd gear.
Use the General Equipment: Three Leg Puller



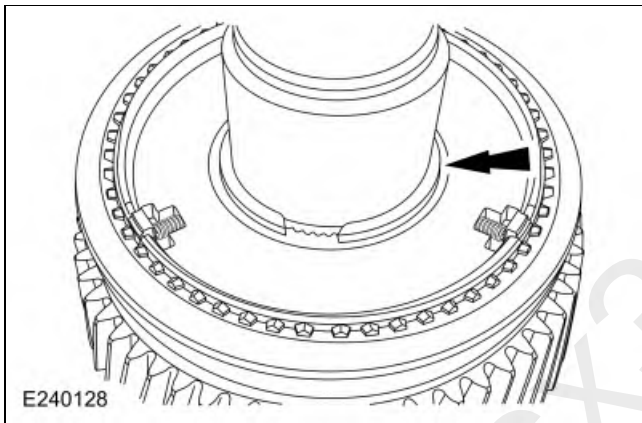
8. **NOTE:** A ball bearing is between the thrust washer and the mainshaft. The ball bearings are not interchangeable.
Remove the thrust washer, ball bearing and roller bearings.



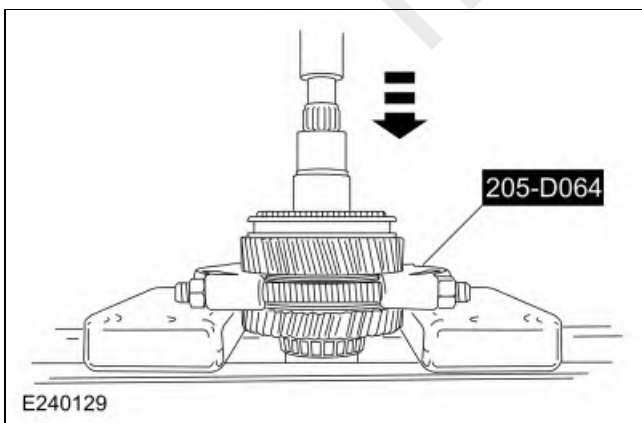
9. Remove the 2nd gear synchronizer ring.



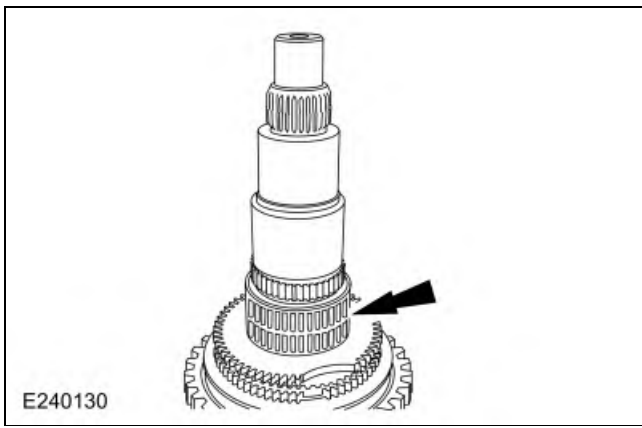
10. Remove the snap ring retaining the 1st and 2nd synchronizer assembly. Discard the snap ring.



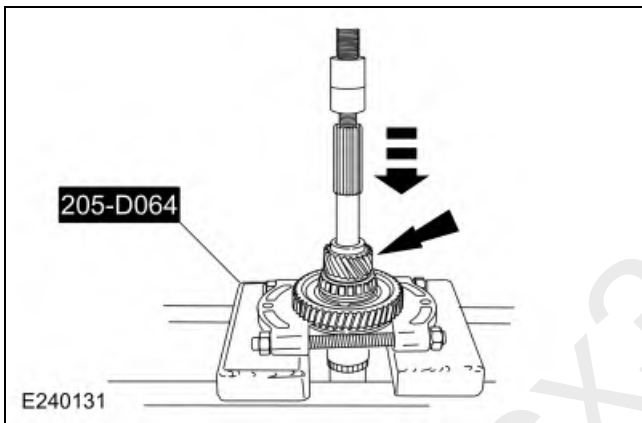
11. Using the special tool and a hydraulic press, remove the 1st and 2nd gear synchronizer assembly and the 1st gear.
 Use Special Service Tool: 205-D064 (D84L-1123-A) Puller, Bearing.
 Use the General Equipment: Hydraulic Press



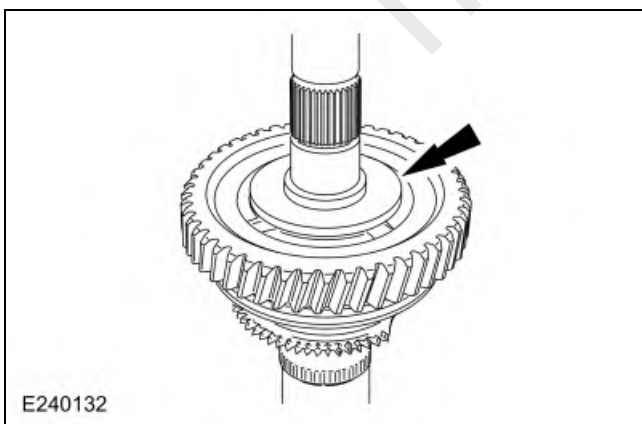
12. Remove the 1st gear roller bearing



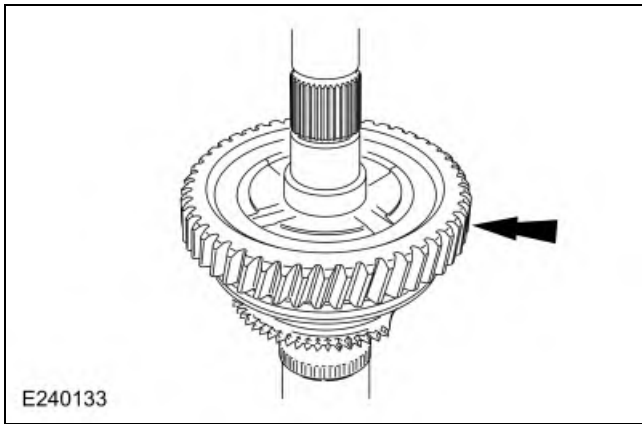
13. Invert the mainshaft. Using the special tool and a hydraulic press, remove the 5th gear and roller bearing.
 Use Special Service Tool: 205-D064 (D84L-1123-A) Puller, Bearing.
 Use the General Equipment: Hydraulic Press



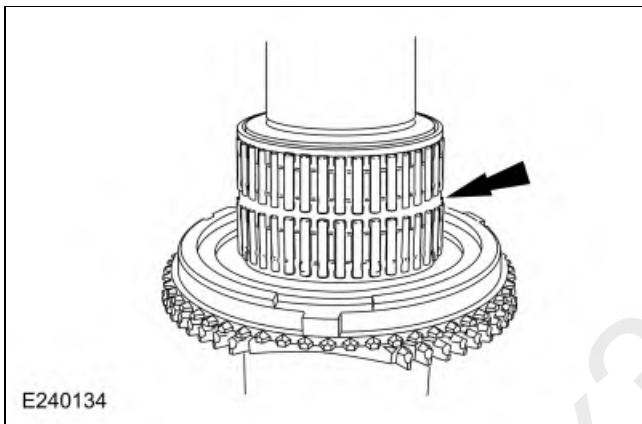
14. **NOTE:** A ball bearing is between the thrust washer and the mainshaft. The ball bearings are not interchangeable.
 Remove the thrust washer and the ball bearing.



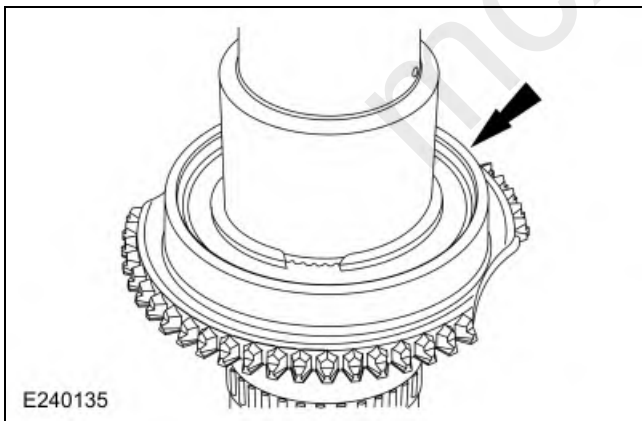
15. Remove the reverse gear and synchronizer assembly.



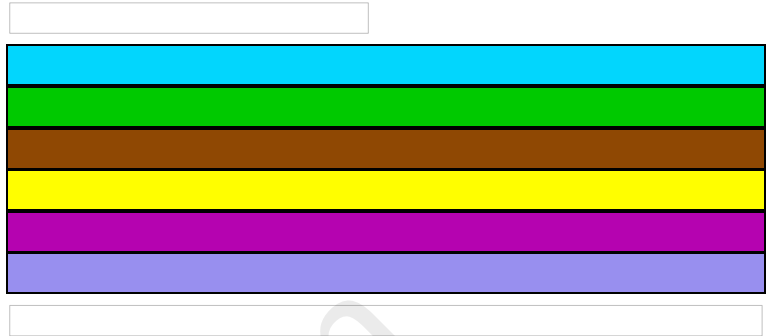
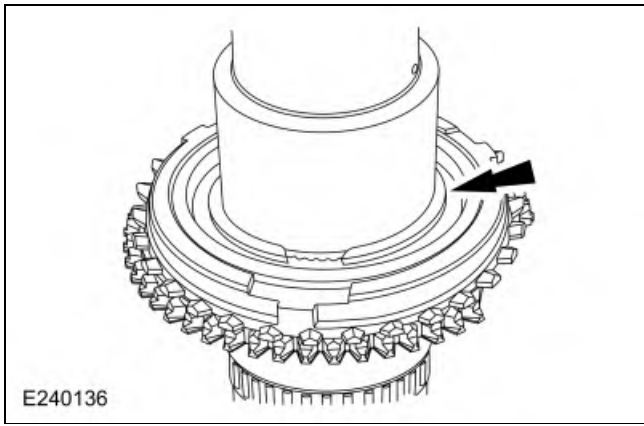
16. Remove the reverse gear roller bearing.



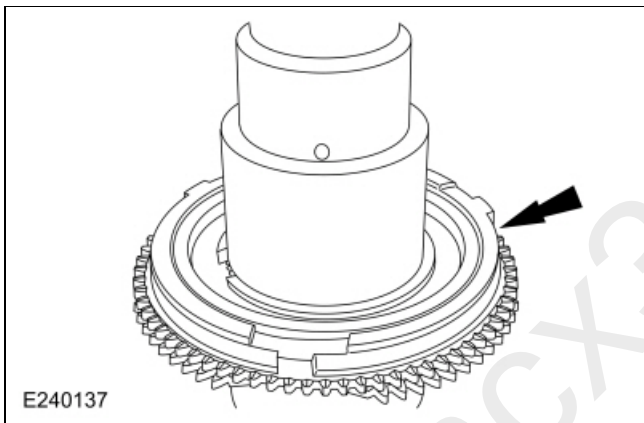
17. Remove the synchronizer ring.



18. Remove the snap ring retaining the clutch cone. Discard the snap ring.



19. Remove the clutch cone.

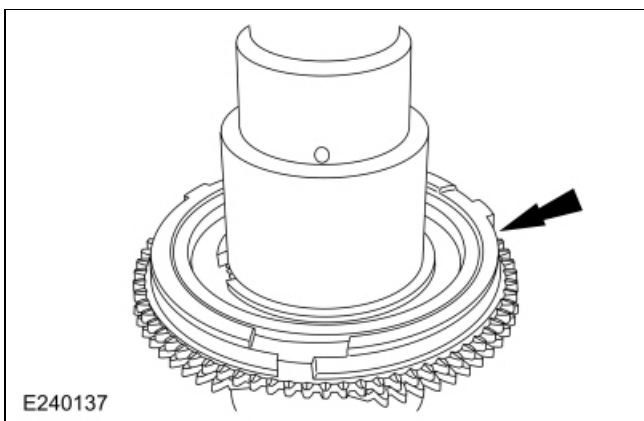


ASSEMBLY

1. Inspect the mainshaft and all mainshaft components for wear or damage.
2. **NOTICE: Do not reassemble the mainshaft dry. Apply lubricant throughout the assembly procedure or damage can occur on start-up.**

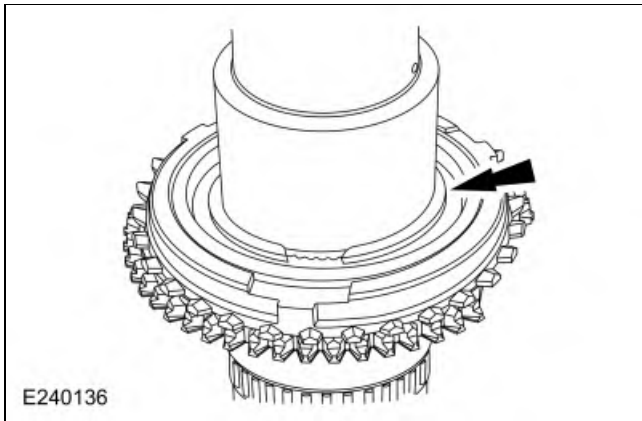
NOTE: Lubricate all mainshaft components with the specified transmission fluid.

Install the clutch cone.

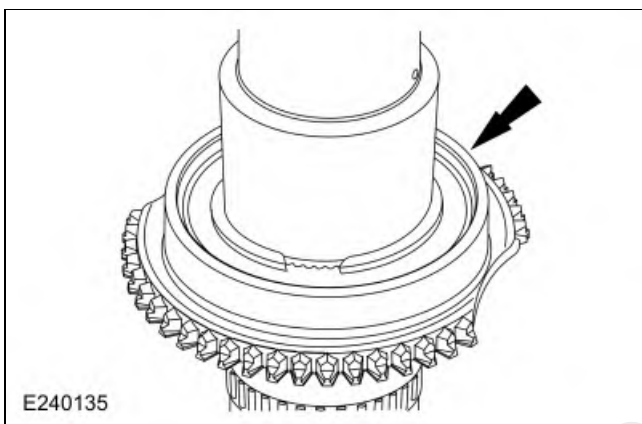


3. **NOTE:** *Install a new snap ring.*

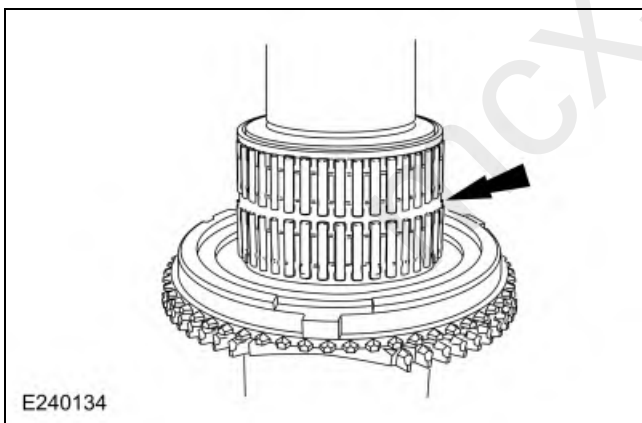
Install the snap ring retaining the clutch cone.



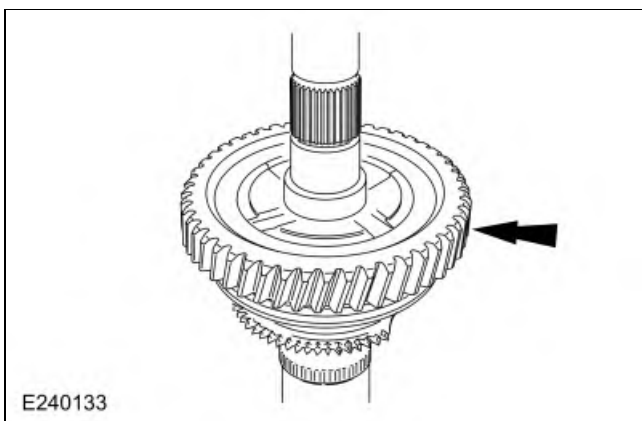
4. Install the synchronizer ring.



5. Install the reverse gear roller bearing.

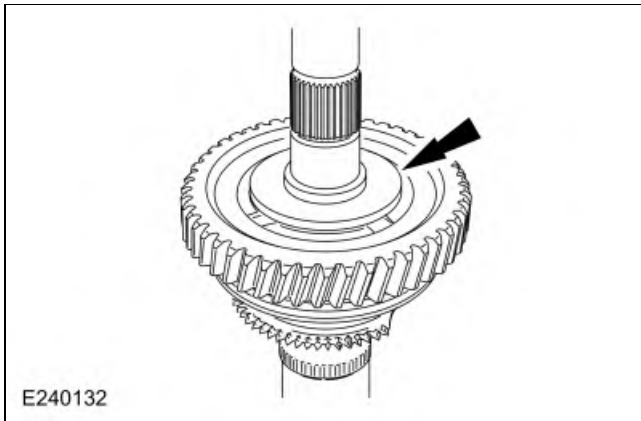


6. Install the reverse gear and synchronizer assembly.



7. **NOTE:** The ball bearings are not interchangeable and must be aligned with the thrust washer notch.

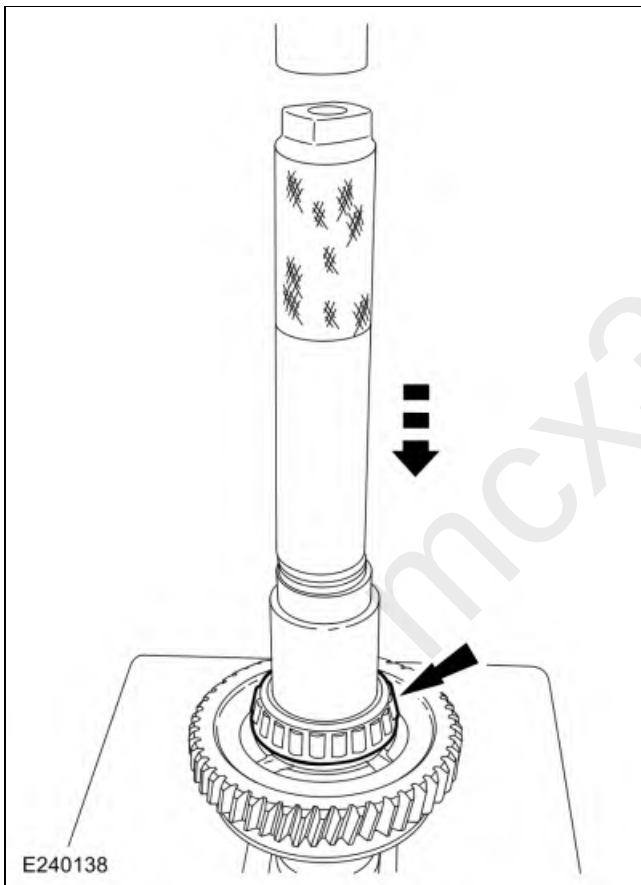
Install the ball bearing and the thrust washer.



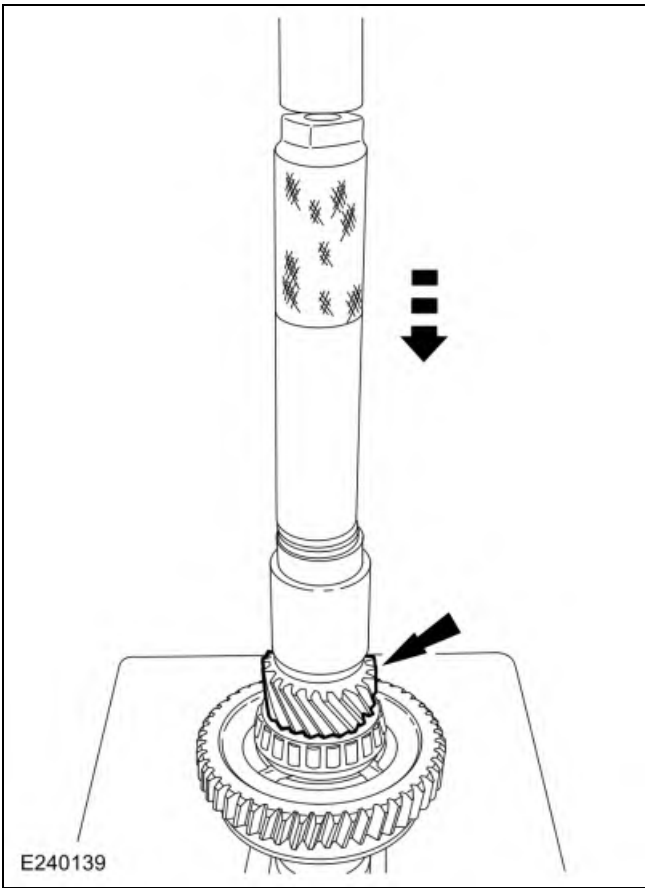
8. **NOTICE:** Drive the output shaft rear bearing onto the mainshaft by the inner race only. Using the outer race will damage the bearing. Press the bearing down until it is seated against the stop.

Using a hydraulic press, install the roller bearing onto the mainshaft.

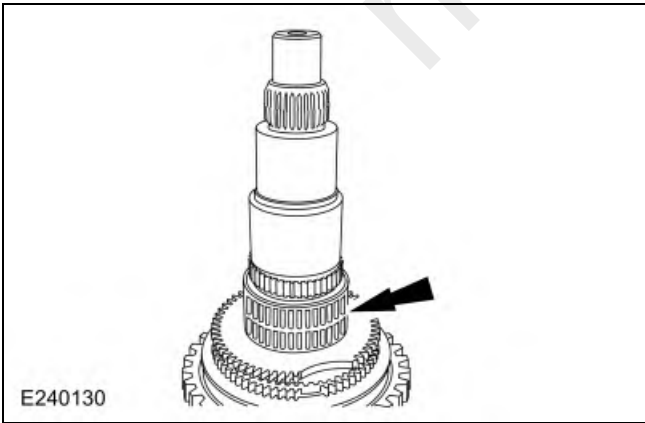
Use the General Equipment: Hydraulic Press



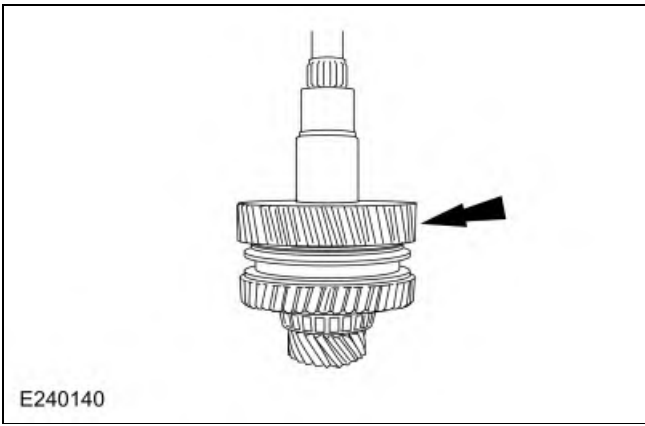
9. Using a press, install the 5th gear.



10. Invert the mainshaft assembly. Install the 1st gear roller bearing.



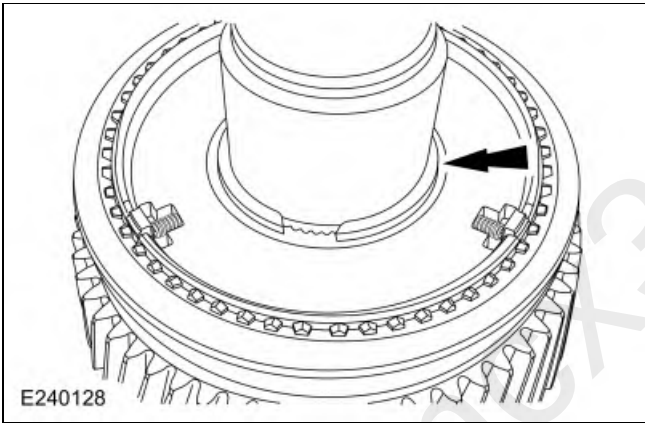
11. Install the 1st gear.



12. **NOTE:** Align synchronizer assembly with the 3 grooves.

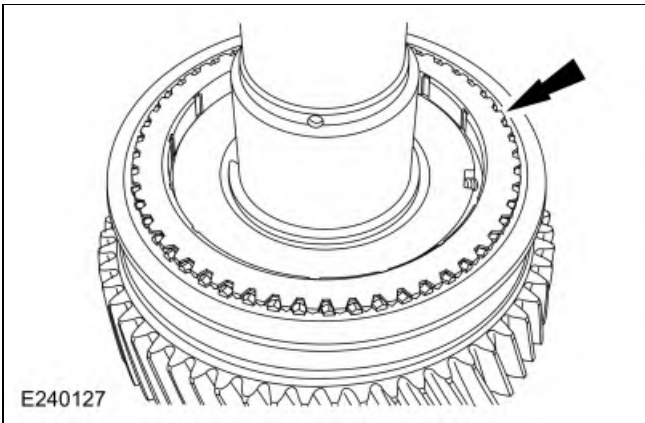
NOTE: Install a new snap ring.

Install the 1st and 2nd synchronizer assembly and the snap ring.



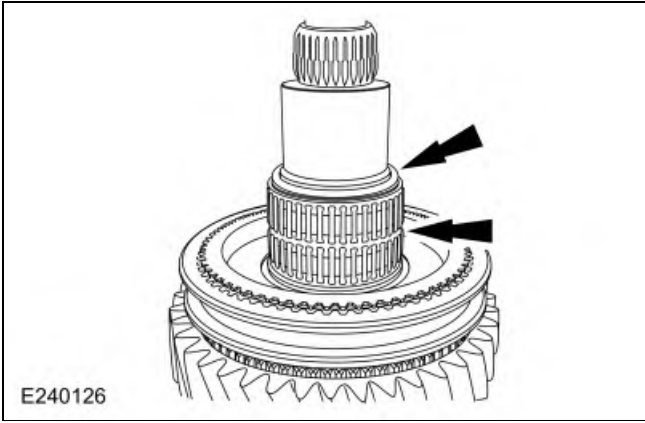
13. **NOTE:** Align the synchronizer assembly with the 3 grooves.

Install the 2nd gear synchronizer ring.

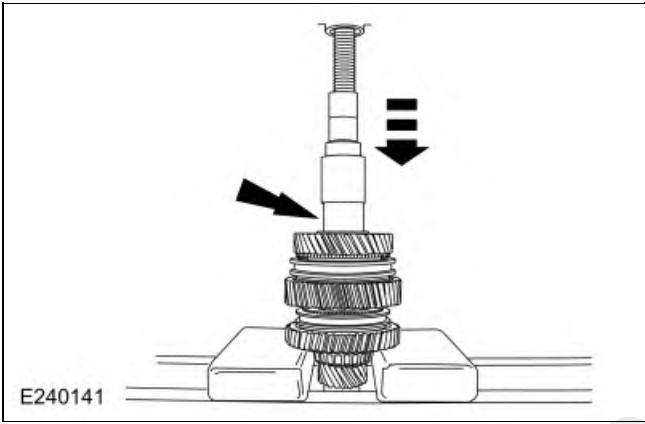


14. **NOTE:** Align the thrust washer notch with the ball bearing.

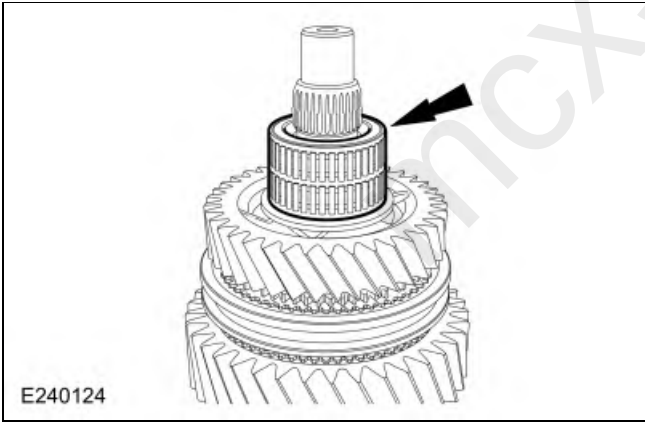
Install the roller bearings, ball bearing and thrust washer.



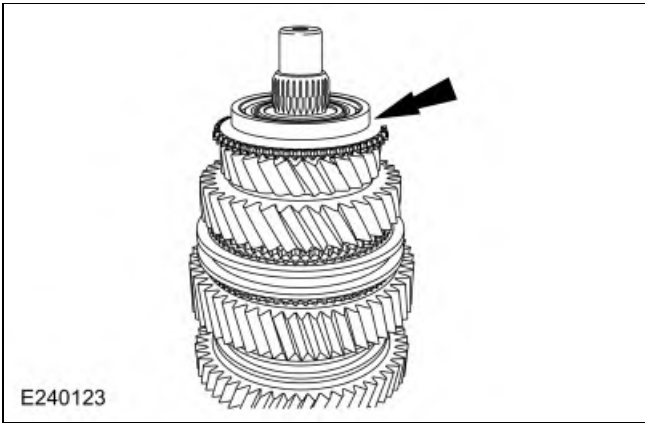
15. Using a hydraulic press, install the 3rd gear bushing.
Use the General Equipment: Hydraulic Press



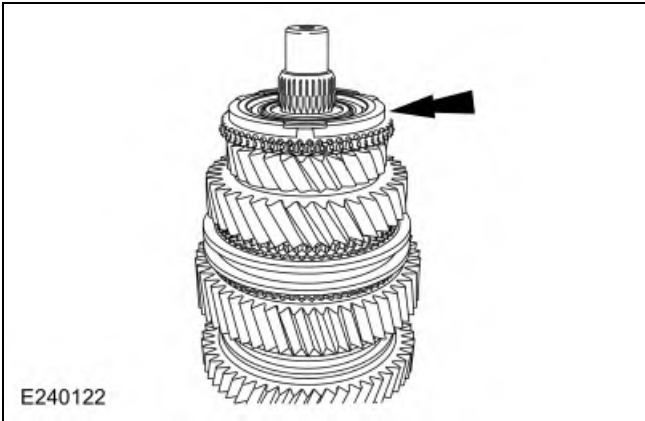
16. Install the roller bearing.



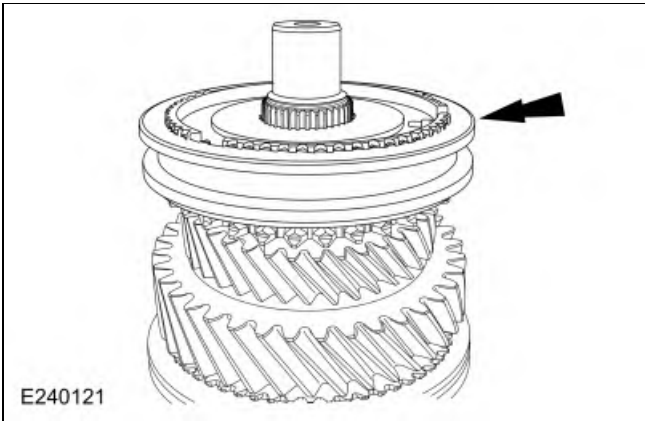
17. Install the 3rd gear.



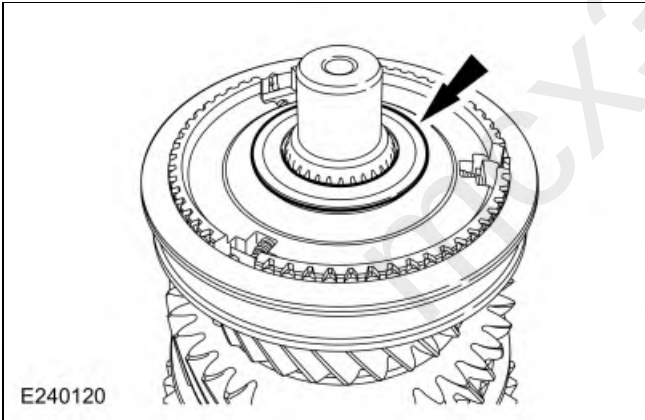
18. Install the 3rd synchronizer ring



19. Install the 3rd and 4th gear synchronizer assembly.



20. Install the 2 thrust washers and the roller bearing in between the thrust washers.



21. **NOTE:** Installing a new input shaft will affect mainshaft clearance. Carry out mainshaft clearance measurement.

Install the clutch cone and the synchronizer ring

