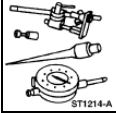
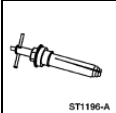
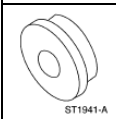
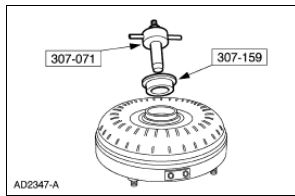


End Play Check

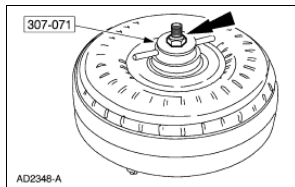
Special Tool(s)

 <p>ST1214-A</p>	Dial Indicator Gauge with Holding Fixture 100-002 (TOOL-4201-C)
 <p>ST1196-A</p>	End Play Gauge, Torque Converter 307-071 (T80L-7902-A)
 <p>ST1941-A</p>	End Play Gauge, Transmission 307-159 (T86P-7902-A)

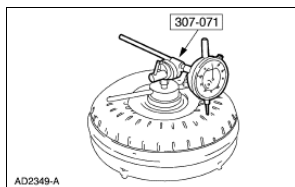
1. Install the special tools into the torque converter.



2. Tighten the nut.

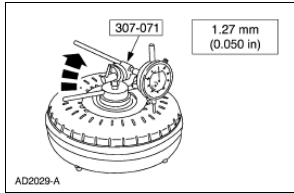


3. Install the special tool.



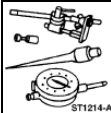


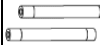




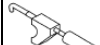

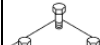


4. **NOTE:** If the indicator reading is above specification, install a new or remanufactured torque converter.

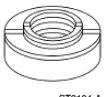
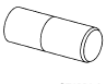

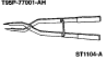

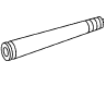

With the stylus contacting the converter shell and the dial indicator set to zero lift up on the handles of the checking tool.



Transaxle

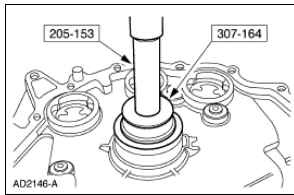
Special Tool(s)

 ST1214-A	Dial Indicator Gauge with Holding Fixture 100-002 (TOOL-4201-C)
 ST1255-A	Adapter for 303-224 (Handle) 205-153 (T80T-4000-W)
 ST2464-A	Installer, Steering Gear Pinion Bearing 211-161 (T90C-3504-DH)
 ST1631-A	Handle, Torque Converter 307-091 (T81P-7902-C)
 ST1933-A	Installer, Halfshaft Output Fluid Seal 307-157 (T86P-1177-B)
 ST2194-A	Gauge, Servo Rod 307-161 (T86P-70023-A)
 ST1942-A	Gauge, Servo Rod 307-162 (T86P-70023-B)
 ST1943-A	Installer, Stator Case Bearing 307-164 (T86P-70043-B)
 ST1945-A	Lifting Fixture, Clutch Pack 307-171 (T86P-70389-A)
 ST1929-A	Installer, Torque Converter Fluid Seal 307-186 (T87L-77837-AH)
 ST1950-A	End Play Gauge 307-187 (T87P-70014-AH)
 ST2179-A	Plate, Transmission Air Test 307-239 (T91P-7006-A)
 ST2107-A	Gauge Bar, Shim Selection 307-300 (T94P-77000-Q)

 ST2104-A	Remover, Reverse Clutch/Planet Set 307-314 (T94P-77001-FH)
 ST1934-A	Aligner, Output Shaft Fluid Seal 307-317 (T94P-77001-JH)
 ST2108-A	Gauge, Shim Selection 307-320 (T94P-77001-MH)
 ST1904-A	Pliers, Retaining Ring 307-343 (T95P-77001-AHR)
 ST1633-A	Alignment Gauge, TR Sensor 307-351 (T79L-70010-A)
 ST1937-A	Remover/Installer Bearing Tube 308-025 (T75L-7025-C)
 ST1938-A	Remover, Bearing Collet Sleeve 308-049 (T77F-7025-C)

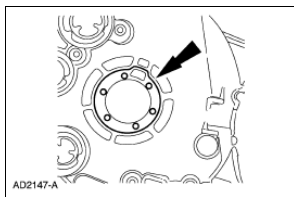
1. **NOTE:** Place the transaxle in the horizontal position.

Using the special tools, install the drive sprocket bearing, if it was removed.

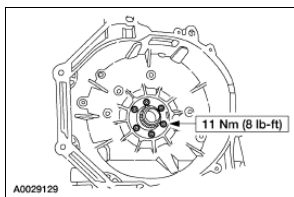


2. **NOTE:** The bolt holes are offset and the drive sprocket can only be aligned one way.

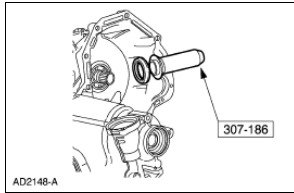
Install the driven sprocket support.



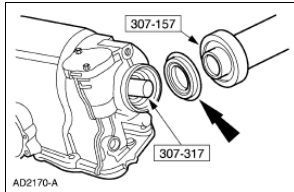
3. Install the bolts.



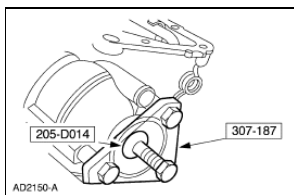
4. Using the special tool, install the converter impeller hub seal.



5. Using the special tools, install the right hand output shaft seal.

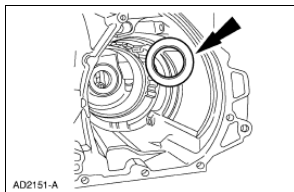


6. Install the special tool.

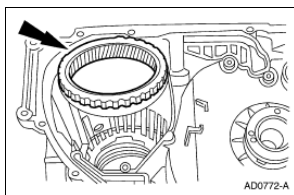


7. Rotate the transaxle to a vertical position.

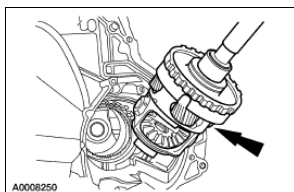
8. Install the No. 19 thrust bearing.



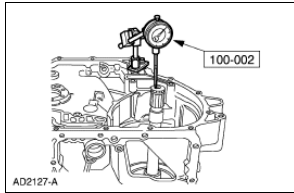
9. Install the final drive ring gear.



10. Install the final drive differential assembly and snap ring. Align the opening of the snap ring with the lube transfer tube passages.



11. Install the special tool.

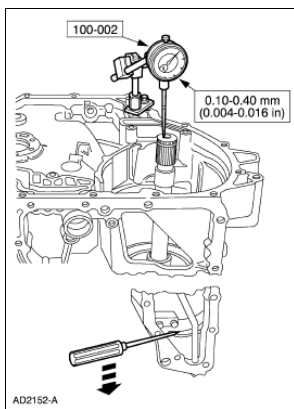


12. Using the special tools installed, carry out the end clearance check.

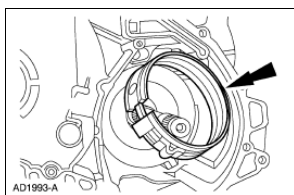
- Pry up on the bottom of the final drive assembly.
- Back out the screw on the End Plate Gauge until it no longer contacts the output shaft.
- Zero out the dial indicator.
- Tighten the screw on the bottom of the End Plate Gauge to 5 Nm (44 lb-in).
- Record the reading on the dial indicator.
- The clearance should be within specification; if it is not within specification a selective thrust washer is available. Refer to the No. 18 selective thrust washer chart.

No. 18 Selective Thrust Washers

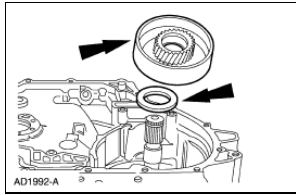
Washer Thickness	Identification	Part Number
1.28-1.18 mm (0.050-0.46 inch)	Red (No. 1)	F2DZ-7G103-A
1.38-1.28 mm (0.054-0.050 inch)	Green (No. 2)	F2DZ-7G103-B
1.48-1.38 mm (0.058-0.054 inch)	Blue (No. 3)	F2DZ-7G103-C
1.58-1.48 mm (0.062-0.058 inch)	Black (No. 4)	F2DZ-7G103-D
1.68-1.58 mm (0.066-0.063 inch)	White (No. 5)	F2DZ-7G103-E
1.78-1.68 mm (0.070-0.066 inch)	Brown (No. 6)	F2DZ-7G103-F
1.88-1.78 mm (0.074-0.070 inch)	Gold (No. 7)	F2DZ-7G103-G



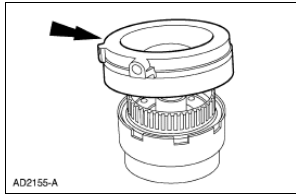
13. Install the low and intermediate band. Align the anchor pin pocket with the anchor pin.



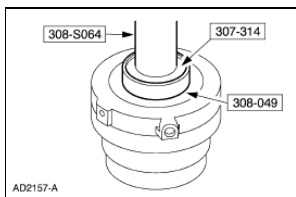
14. Install the No. 15 rear sun gear thrust bearing and race, and the rear sun gear and drum.



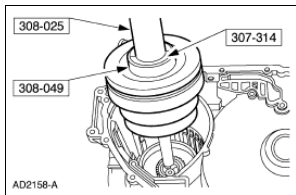
15. Install the reverse clutch onto the planet assembly.



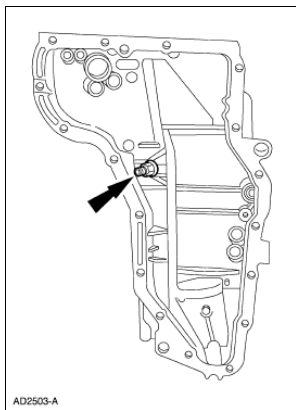
16. Assemble the special tools onto the planet assembly.



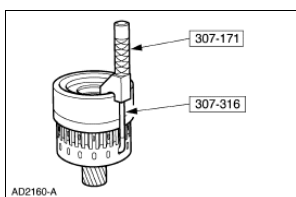
17. Using the special tools, install the planet and reverse clutch assembly.



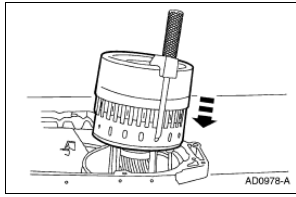
18. Loosely install the reverse anchor pin and bolt.



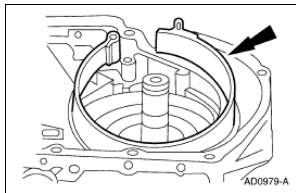
19. Install the special tools onto the front sun and shell assembly.



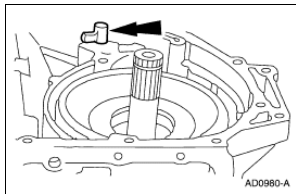
20. Install the front sun shell assembly.



21. Install the overdrive band.

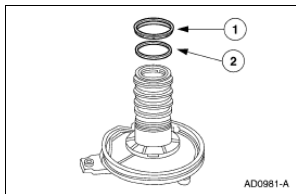


22. Install the plastic overdrive retainer.

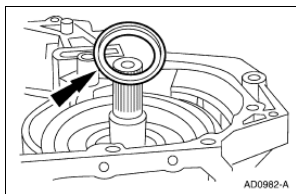


23. Remove the No. 8 sprocket thrust washer and the No. 9 bearing and race from the driven sprocket support.

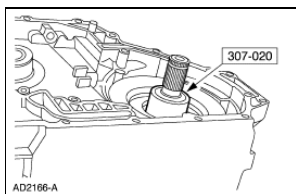
1. Remove the No. 9 bearing and race.
2. Remove the No. 8 sprocket support.



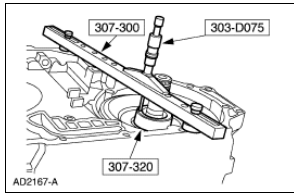
24. Install only the No. 9 needle bearing with the outer lip up.



25. Install the special tool.



26. Using the special tools, record the measurement. Take a measurement on both sides of the output shaft (180 degrees apart). Add both readings and divide by two to obtain reading A.



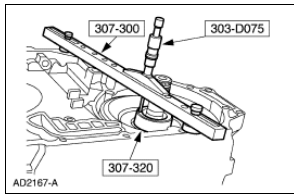
27. **NOTE:** Reading A and dimension C from this chart will be used in the selection of the No. 5 thrust washer.

Use reading A to select the correct No. 8 thrust washer from the No. 8 selective thrust washer chart.

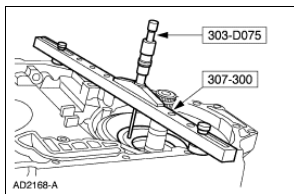
No. 8 Selective Thrust Washer Chart

Reading A	Washer Thickness	Dimension C	Color ID
42.88-43.10 mm (1.688-1.696 in)	1.43-1.53 mm (0.056-0.060 in)	1.48 mm (0.05 in)	Natural (No. 1)
43.11-43.43 mm (1.697-1.706 in)	1.68-1.78 mm (0.066-0.070 in)	1.73 mm (0.06 in)	Dark green (No. 2)
43.35-43.59 mm (1.707-1.716 in)	1.92-2.02 mm (0.075-0.080 in)	1.97 mm (0.07 in)	Light blue (No. 3)
43.60-43.77 mm (1.717-1.723 in)	2.17-2.27 mm (0.085-0.089 in)	2.22 mm (0.08 in)	Red (No. 4)
43.78-43.98 mm (1.724-1.731 in)		2.40 mm (0.09 in)	Black (No. 5)

28. Remove the special tools.



29. Using the special tools, record the measurement. Take a measurement on both sides of the No. 5 thrust washer mating surface of the overdrive drum (180 degrees apart). Add both readings, and divide by two to obtain reading B.



30. **NOTE:** Reading A was obtained during No. 8 thrust washer selection. Dimension C is found on the No. 8 thrust washer selection chart.

Subtract reading A from reading B and add the difference between A and B to dimension C. Record this reading as D.

Reading B: _____
- Reading A: _____
Difference: _____
+Dimension C: _____
Reading D: _____

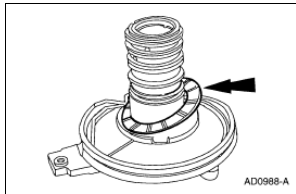
31. Use Reading D to select the correct No. 5 thrust washer.

No. 5 Support Thrust Washer Chart

Reading D	Washer Thickness	Color/ID
26.08-26.37 mm (1.027-1.038 in)	2.18-2.28 mm (0.086-0.090 in)	Green (No. 1)
26.38-26.61 mm (1.039-1.047 in)	2.43-2.53 mm (0.096-0.100 in)	Black (No. 2)
26.62-26.86 mm (1.048-1.057 in)	2.67-2.77 mm (0.105-0.109 in)	Natural (No. 3)
26.87-27.15 mm (1.058-1.068 in)	2.92-3.02 mm (0.115-0.119 in)	Red (No. 4)
27.16-27.50 mm (1.069-1.083 in)	3.26-3.36 mm (0.128-0.132 in)	Blue (No. 5)

32. **NOTE:** Use petroleum jelly to hold the No. 5 thrust washer in place.

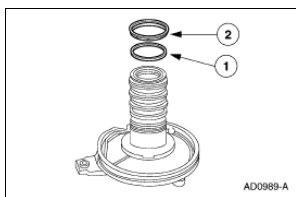
Install the No. 5 front support thrust washer.



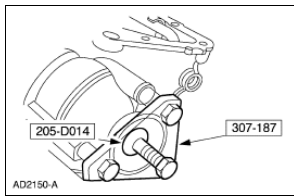
33. **⚠ CAUTION:** The No. 9 direct hub needle bearing may still be inside the transaxle from the No. 8 driven sprocket support thrust washer selection procedure.

Use petroleum jelly to hold bearing and washer in place.

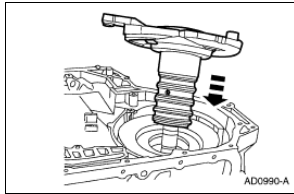
1. Install the correct No. 8 driven sprocket support thrust washer.
2. Install the No. 9 direct clutch needle bearing.



34. Remove the special tools.

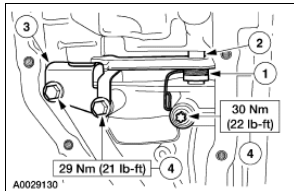


35. Install the driven sprocket support assembly.

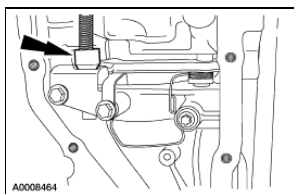


36. Install the park pawl abutment.

1. Install the parking pawl and the return spring.
2. Install the parking pawl shaft.
3. Install the park pawl abutment.
4. Install the bolts.

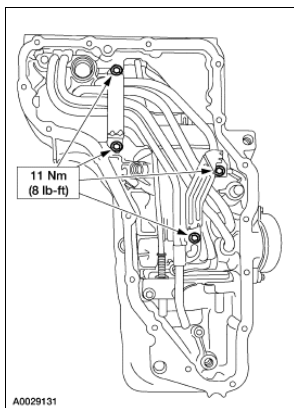


37. Install the parking lever actuating rod.



38. **NOTE:** All the fluid supply tubes must have new O-rings installed.

Install the fluid supply tubes and brackets.



39. Using the special tool, install the manual control lever shaft seal.