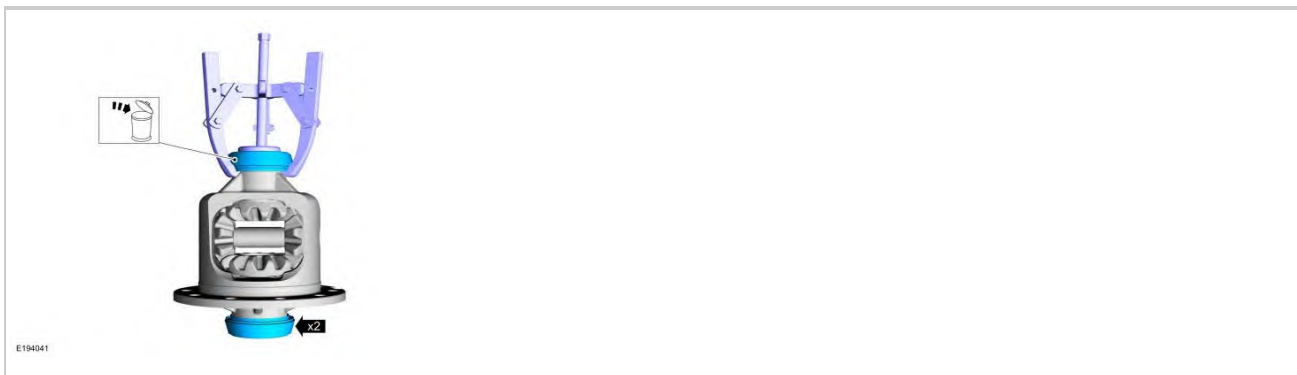




REMOVAL AND INSTALLATION > DIFFERENTIAL RING GEAR AND PINION > INSTALLATION

1.

Using the special tools, install the new differential bearings.

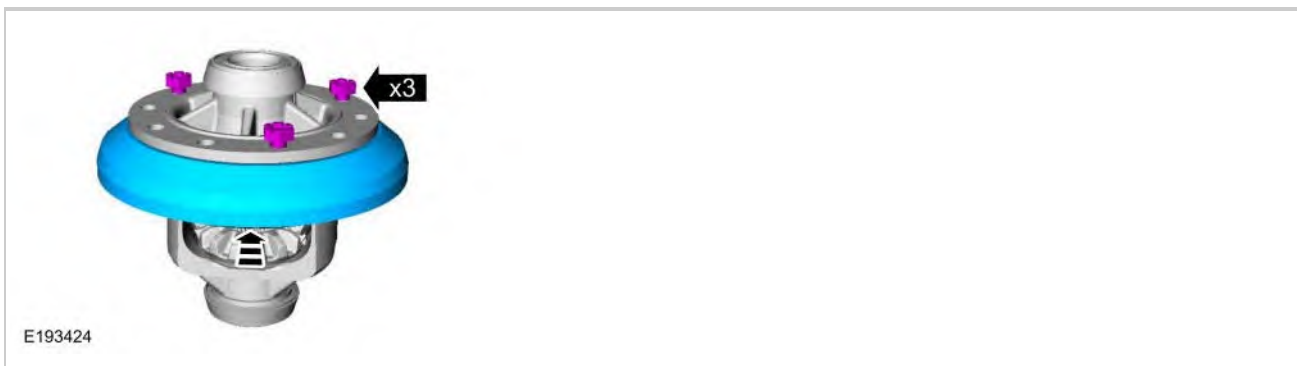
Use Special Service Tool: 205-010 (T57L-4221-A2) Installer, Differential Side Bearing.



2.

Install the ring gear onto the differential carrier. Align the ring gear using 3 new bolts. Using the general equipment: press the ring gear into place.

Use the General Equipment: Hydraulic Press

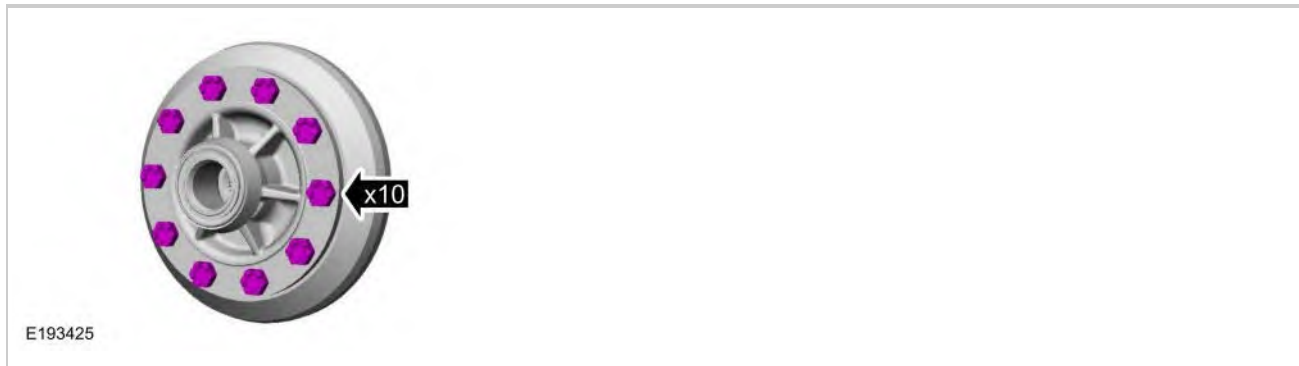


3.

Install the remaining new ring gear bolts.

Torque

: 94 lb.ft (128 Nm)



4.

If removed. Using the special tool install the new drive pinion oil baffle.

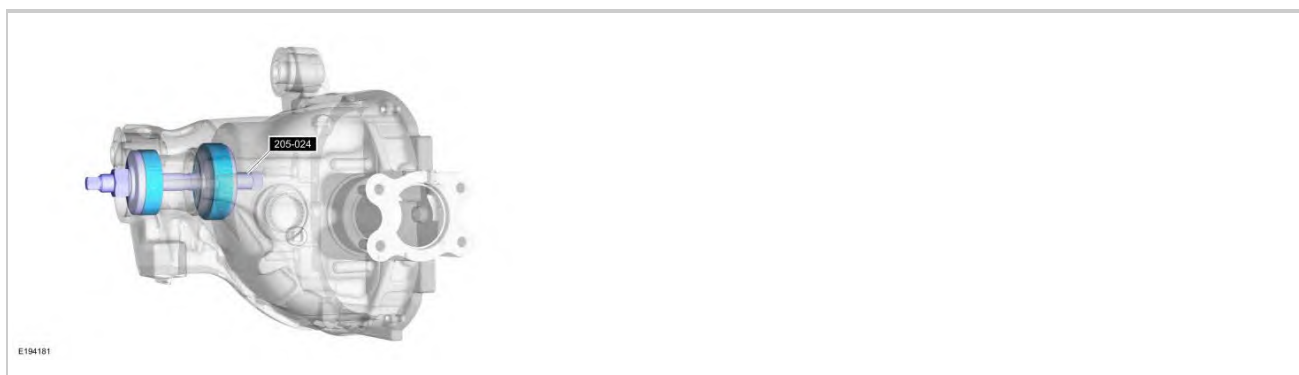
Use Special Service Tool: 205-D044 (D81T-4221-A) Installer, Differential Carrier Bearing.



5.

Using the special tools, install the new drive pinion bearing cups.

Use Special Service Tool: 205-024 (T67P-4616-A) Installer, Drive Pinion Bearing Cup.



6.

 **NOTE:** Use the same drive pinion bearings and the drive pinion bearing adjustment shim from the drive pinion bearing adjustment shim selection procedure for final assembly or damage to the component may occur.

 **NOTE:** Install new drive pinion bearings without any additional lubricant since the anti-rust oil provides adequate lubricant without upsetting the drive pinion bearing preload settings.

Assemble the special tools using the new inner and outer drive pinion bearings.

Use Special Service Tool: 205-105 (T76P-4020-A3) Adapter for 205-S127, 205-109 (T76P-4020-A9) Adapter for 205-S127, 205-110 (T76P-4020-A10) Gauge Block, 205-111 (T76P-4020-A11) Adapter for 205-S127 Pinion Depth Gauge, 205-129 (T79P-4020-A18) Disc, Gauge.

Torque

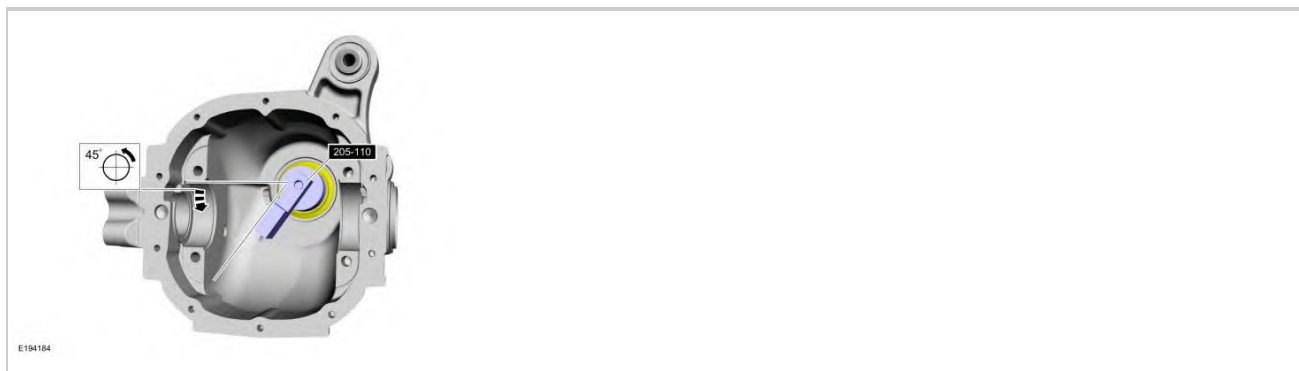
: 19 lb.in (2.2 Nm)



7.

Rotate the special tools several half turns to ensure correct seating of the drive pinion bearings.

Use Special Service Tool: 205-110 (T76P-4020-A10) Gauge Block.

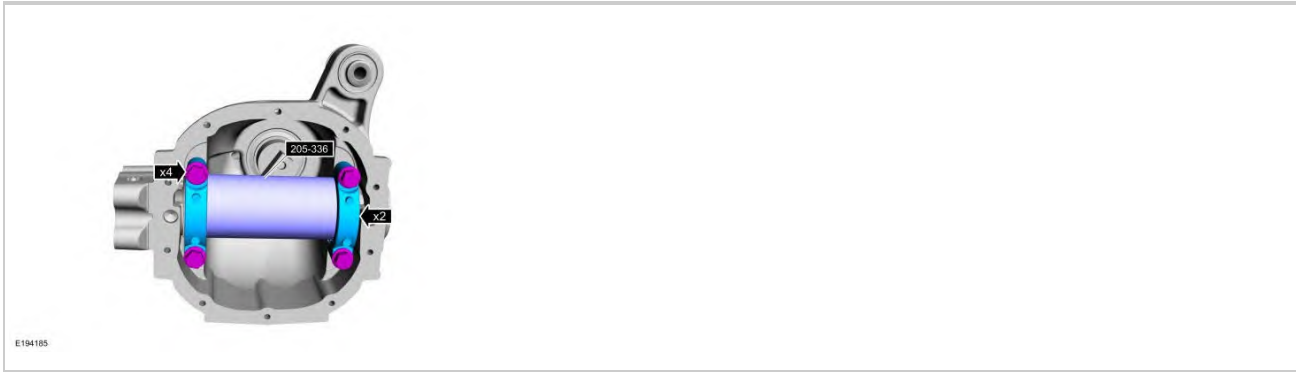


8.

Install the special tool, the differential bearing caps and the differential bearing cap bolts.

Torque

: 77 lb.ft (105 Nm)



9.



NOTE: Drive pinion bearing adjustment shims must be flat and clean.



NOTE: A slight drag should be felt for correct drive pinion bearing adjustment shim selection. Do not attempt to force the drive pinion bearing adjustment shim between the gauge block and the gauge tube. This will minimize selection of a drive pinion bearing adjustment shim thicker than required, which results in a deep tooth contact in final assembly of integral axle assemblies.

Use a drive pinion bearing adjustment shim as a gauge for drive pinion bearing adjustment shim selection.

After the correct drive pinion bearing adjustment shim thickness has been determined, remove all of the Adapters.

10.



NOTE: The same drive pinion bearing from the previous steps must be used.

Install the drive pinion bearing and the selected drive pinion bearing adjustment shim until they are firmly seated on the drive pinion.

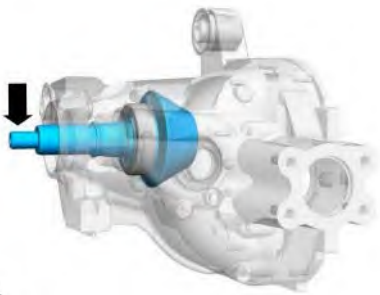
Use Special Service Tool: 205-005 (T53T-4621-C) Installer, Drive Pinion Bearing Cone.

Use the General Equipment: Hydraulic Press



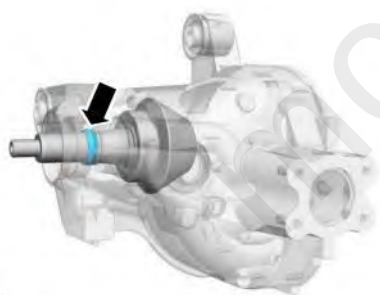
11.

Install the pinion gear.



12.

Install the new drive pinion collapsible spacer.



13.

Install the outer drive pinion bearing.



E194188

14.

Install the outer drive pinion oil slinger.



E194187

15.

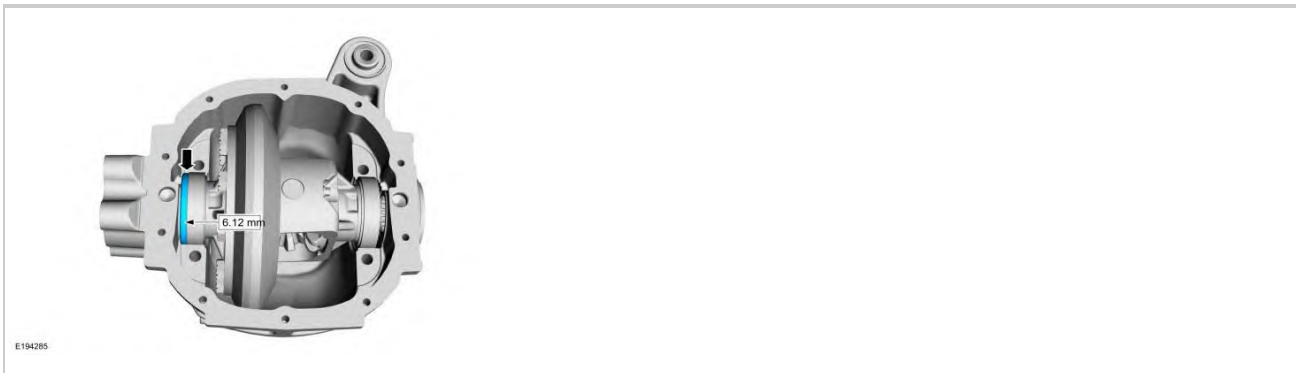
Install the differential carrier and the differential carrier bearing cups as a assembly.



E194264

16.

Install a 6.12 mm (0.241 in) differential bearing shim on the LH side of the differential bearing.



17.

 **NOTE:** Apply pressure toward the left side to make sure the left differential bearing cap is seated.

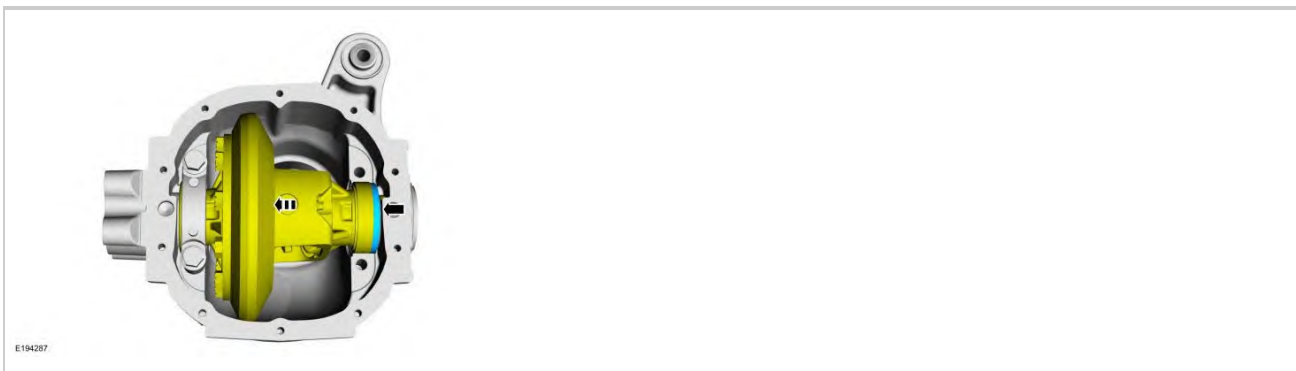
Install the left differential bearing cap and loosely install the differential bearing cap bolts.



18.

 **NOTE:** Apply pressure toward the left side to make sure the left differential bearing cap is seated.

Install progressively thicker differential bearing shims on the right side until the thickest differential bearing shim can be inserted by hand.



19.

1.

Install the RH differential bearing cap and bolts.

2.

Tighten the differential bearing cap bolts.

Torque

: 77 lb.ft (105 Nm)



20.

Rotate the differential carrier to make sure it turns freely.

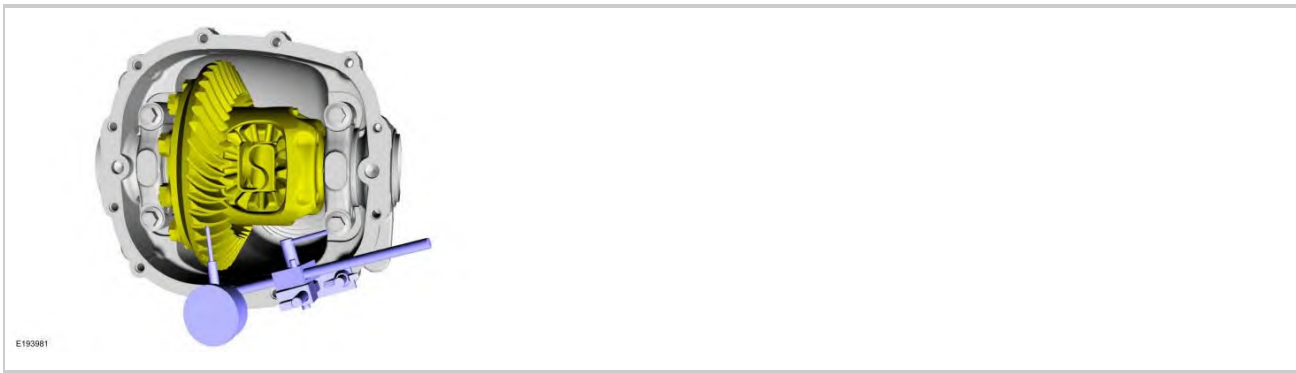


21.

Using the dial indicator, measure the differential ring gear backlash at 4 equally spaced points.

To correct for high or low backlash, increase the thickness of one differential bearing shim and decrease the thickness of the other differential bearing shim by the same amount. Refer to the following tables when adjusting the backlash. REFER to: Specifications .

Use the General Equipment: Dial Indicator



22.

 **NOTE:** Mark the differential bearing caps Top or Bottom and LH or RH appropriately before removing them. Always install the differential bearing caps in their original positions or damage to the component may occur.

Remove the differential cap bolts and the differential caps.



23.

1.

Measure the thickness of the selected right and left bearing shims.

Use the General Equipment: Caliper Gauge

2.

To establish differential bearing preload, increase both the left and right differential bearing shim thickness by 0.203 mm (0.008 in).