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2012 FORD Expedition OEM Service and Repair Workshop Manual

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Differential Carrier

<i>205-03 Front Drive Axle/Differential</i>	<i>2022 F-150</i>
<i>Disassembly and Assembly</i>	<i>Procedure revision date: 06/22/2017</i>

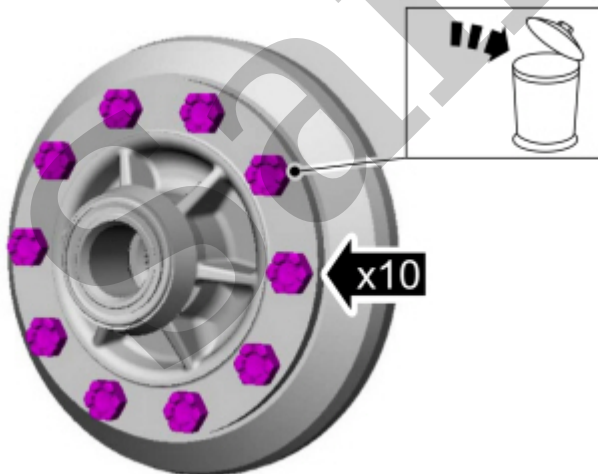
Differential Carrier

DISASSEMBLY

1. Remove the differential carrier.

Refer to: [Differential Carrier](#)(205-03 Front Drive Axle/Differential, Removal and Installation).

2. Remove and discard the differential ring gear bolts.

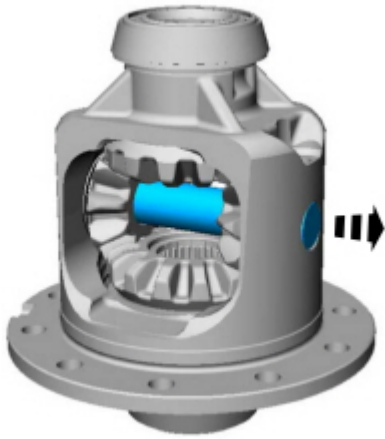


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3. NOTICE

Care should be taken not to damage the differential ring gear bolt hole threads.



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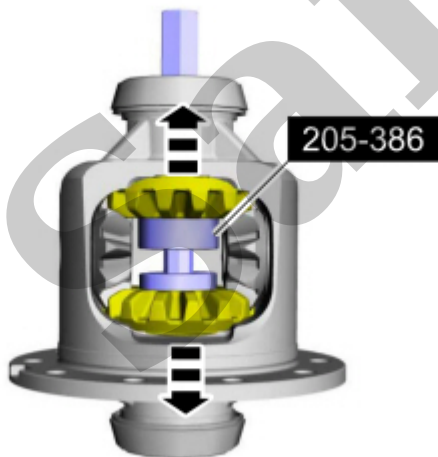
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6. **NOTE**

Do not over tighten the special tool.

Using the special tool, compress the differential side gear wave washers.

Use Special Service Tool : 205-386 (T97T-4205-D) Gauge, Differential (Traction Lock)



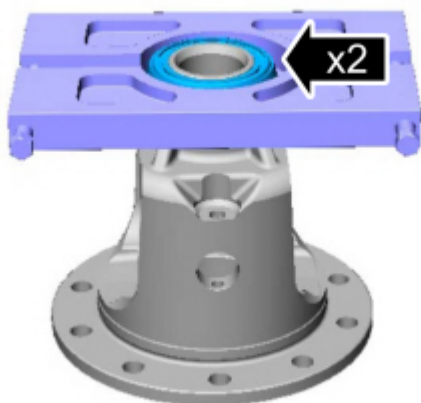
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7. Remove the differential pinion thrust washers and the differential pinion gears.

Use the General Equipment: Hydraulic Press

Use the General Equipment: Bearing Separator



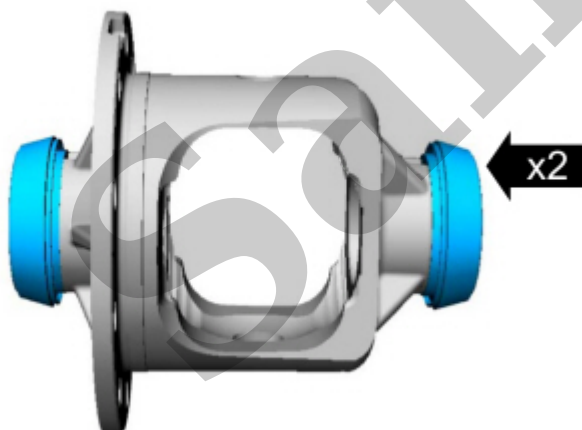
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ASSEMBLY

1. Using the general equipment; Install the new differential side bearings.

Use the General Equipment: Hydraulic Press



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2. Install the differential side gears in the differential carriers.

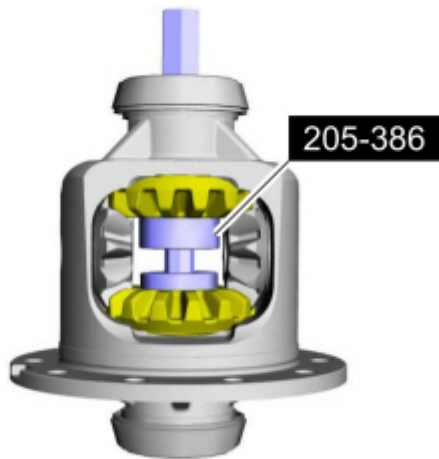
- Lubricate the differential wave washer with axle lubricant.

Material : Motorcraft® SAE 75W-85 Premium Synthetic Hypoid Gear Lubricant / XY-75W85-QL (WSS-M2C942-A)

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- Using the special tool, rotate the differential pinion gears to align with the differential pinion shaft bore and remove the special tool.

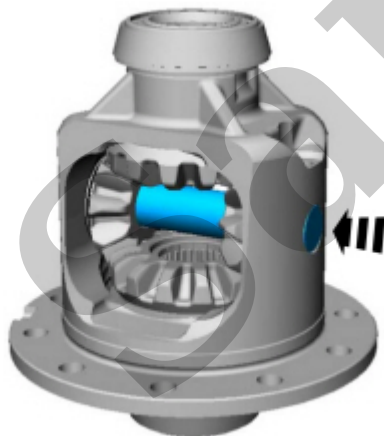
Use Special Service Tool : 205-386 (T97T-4205-D) Gauge, Differential (Traction Lock)



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- Install the differential pinion shaft.



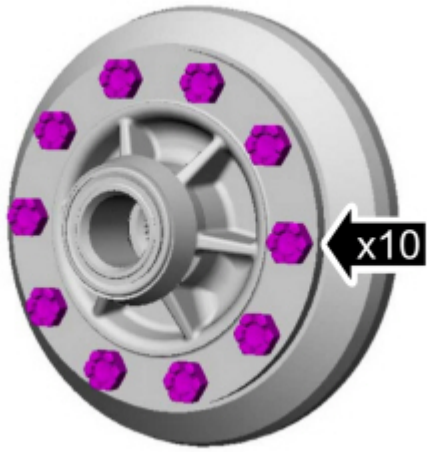
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6. **NOTE**

If a new pinion shaft bolt is unavailable, coat the threads with sealer.

Install the new differential pinion shaft bolt.



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9. Install the differential carrier.

Refer to: [Differential Carrier](#)(205-03 Front Drive Axle/Differential, Removal and Installation).

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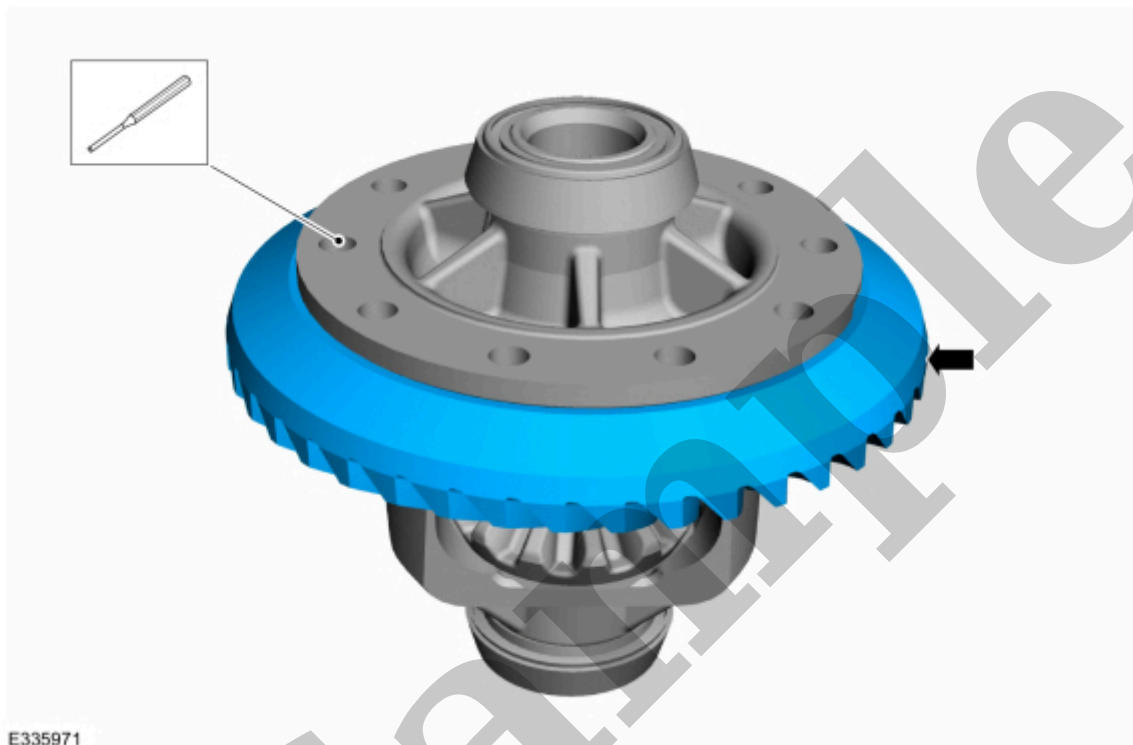
3. NOTICE

Care should be taken not to damage the differential ring gear bolt hole threads.

Using the general equipments, remove the ring gear.

Use the General Equipment: Punch

Use the General Equipment: Copper Hammer

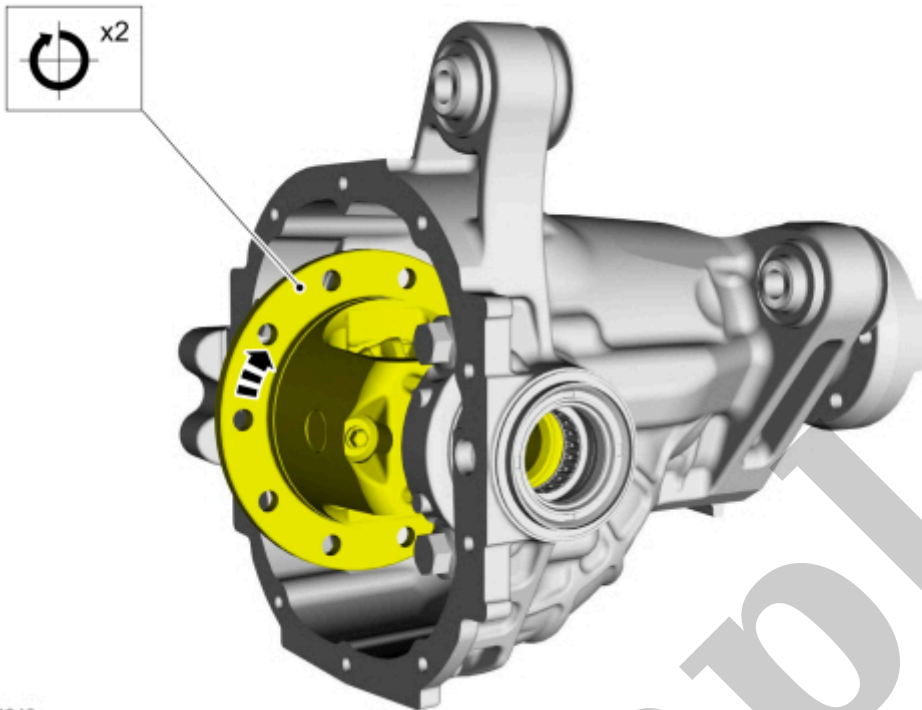


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4. Install the Differential carrier, differential carrier bearing cups and differential bearing preload shims.

[Click here to learn about symbols, color coding, and icons used in this manual.](#)

6. Rotate the differential carrier to make sure the bearings have seated correctly.



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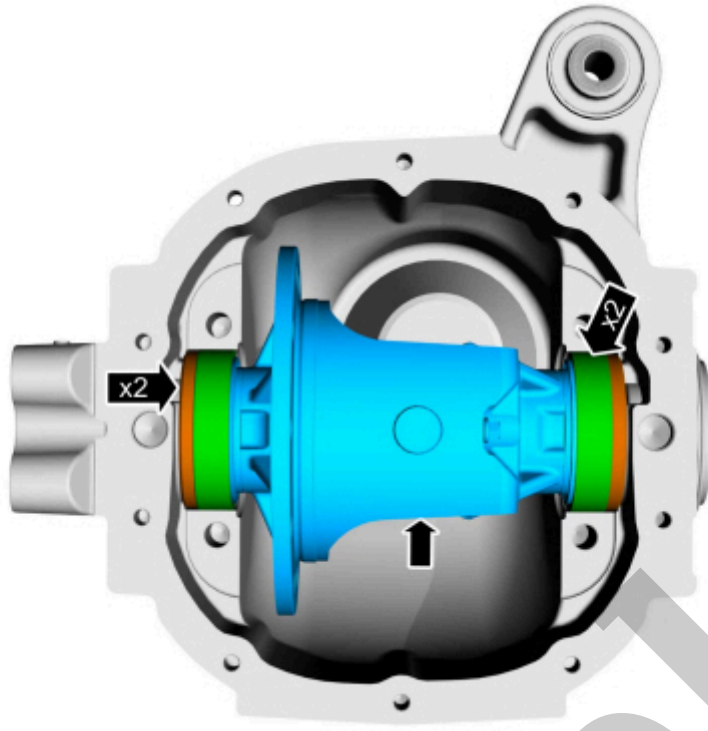
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7. Using the dial indicator, rotate the differential carrier and measure the differential carrier runout.

- If the runout does not exceed the specification, install a new ring gear and pinion.

Use the General Equipment: Dial Indicator

- If runout exceeds the specification, the ring gear is true and the condition is due to differential carrier/differential bearing damage.
- Inspect the differential bearings and the differential carrier. Always install new differential bearings when installing a new differential carrier, or if a bearing condition is questionable.



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10. **NOTE**

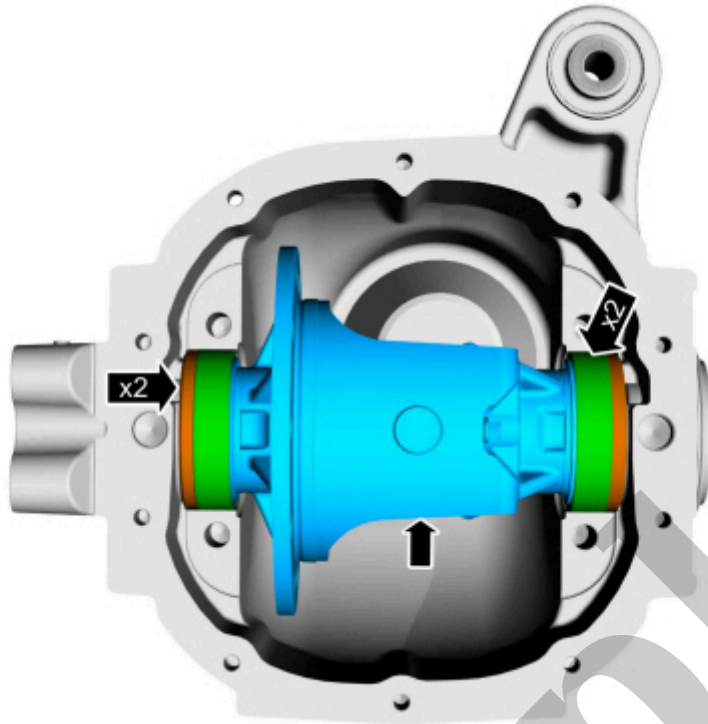
If necessary.

Using the special tool and the general equipment, remove and discard the differential bearings.

Use Special Service Tool : 205-D061 (D83T-4205-C2) Step Plate

Use the General Equipment: Two Leg Puller

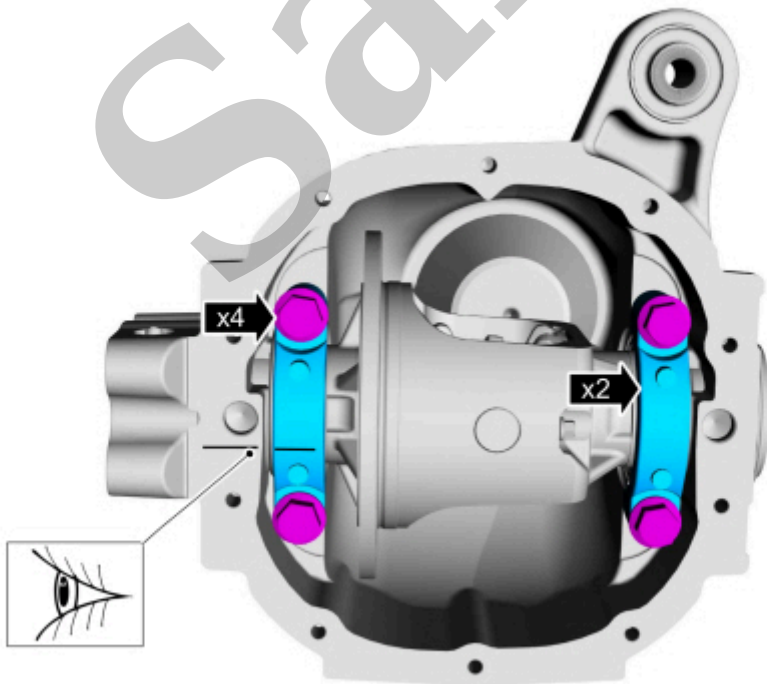
12. Install the Differential carrier, differential carrier bearing cups and differential bearing preload shims.



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13. Install the differential bearing caps and bolts. Align the differential bearing caps in there original location.



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