

Differential Carrier

Special Tool(s) / General Equipment

 E232978	205-1027 Adjuster, Differential Bearing
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Materials

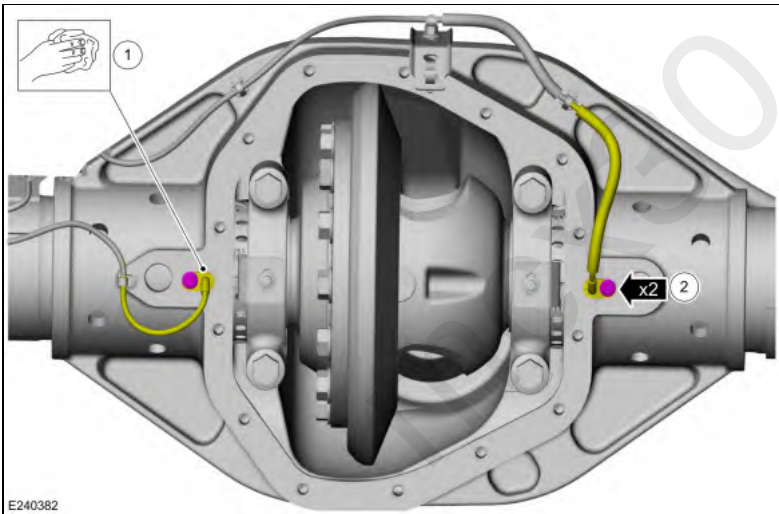
Name	Specification
Motorcraft® Metal Brake Parts Cleaner PM-4-A, PM-4-B	-

Removal

1. Remove the differential housing cover.
Refer to: Differential Housing Cover (205-02B Rear Drive Axle/Differential - Vehicles With: Dana M300, Removal and Installation).
2. Remove the axle shafts.
Refer to: Axle Shaft (205-02C Wheel Hubs and Bearings - Full Floating Axle - Vehicles With: Dana M275/Dana M300, Removal and Installation).
3. **NOTE:** Use compressed air to remove any foreign material before removing the component.

NOTE: Make sure that the sensor housing is clean and free of foreign material.

- Clean the ABS sensors and the area around them.
- Remove the ABS sensor bolts and position the ABS sensors aside.



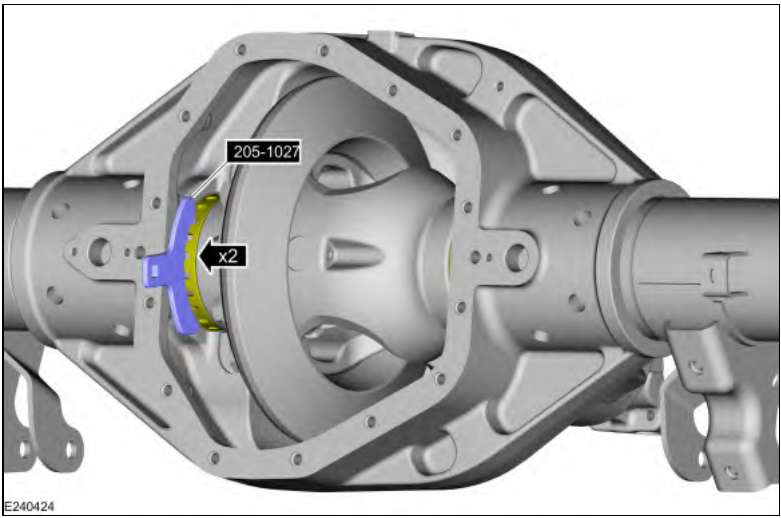
4. Remove bolts and the differential bearing adjuster locks.



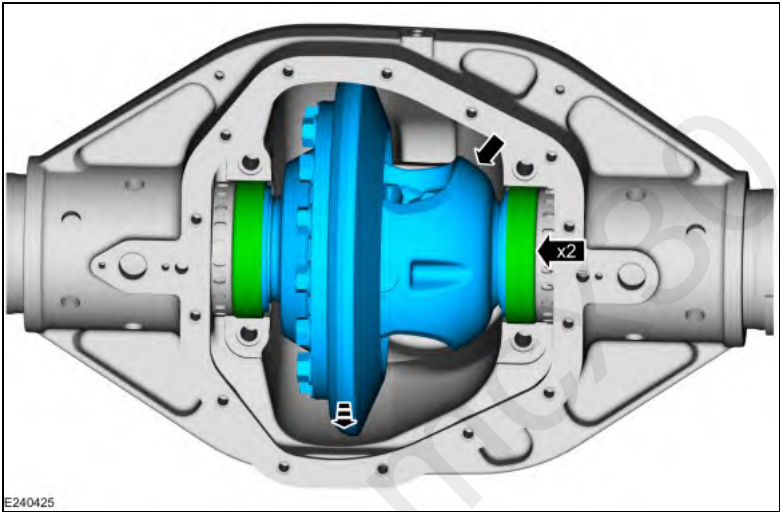
- Mark the differential carrier bearing caps.
- Remove the bolts and the differential carrier bearing caps.



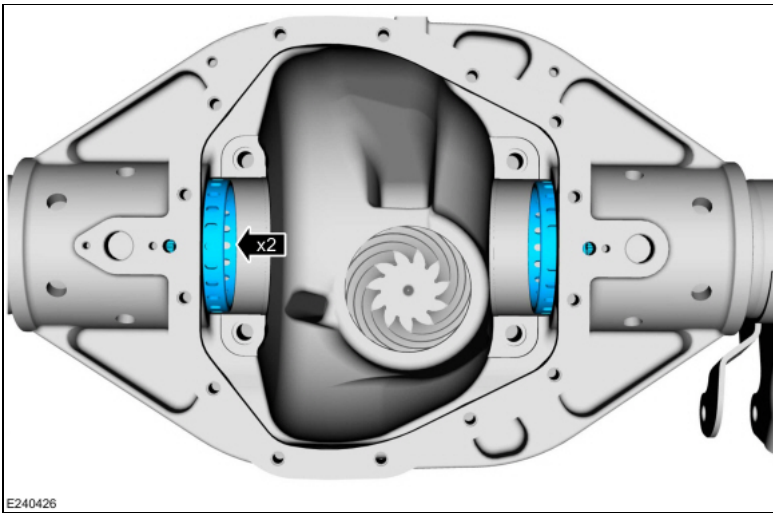
6. Loosen the differential bearing preload adjusters until there is just enough that a slight drag can be felt when pulling the differential carrier out. Use Special Service Tool: 205-1027 Adjuster, Differential Bearing.



7. Remove the differential carrier and differential carrier bearing cups.

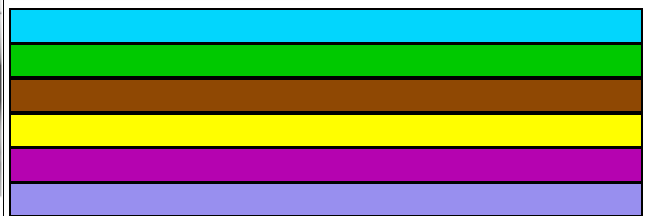
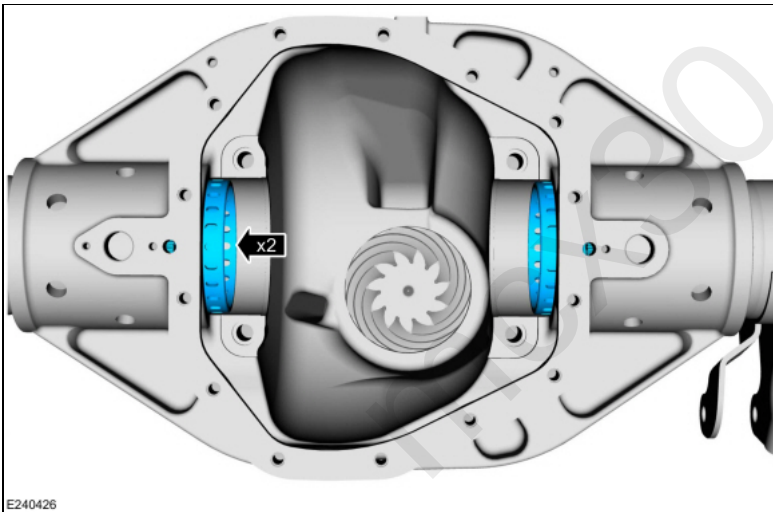


8. If needed.
Remove the differential preload adjusters.

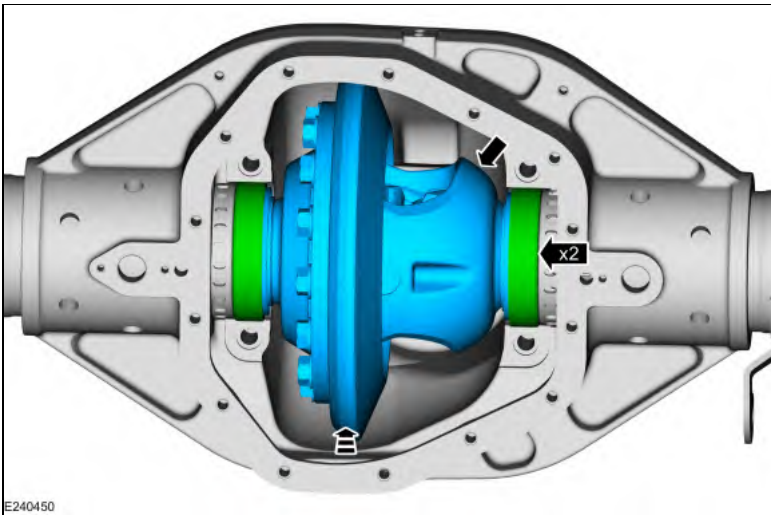


Installation

- 1. If removed.
Screw in the differential preload adjusters enough to install the differential carrier.



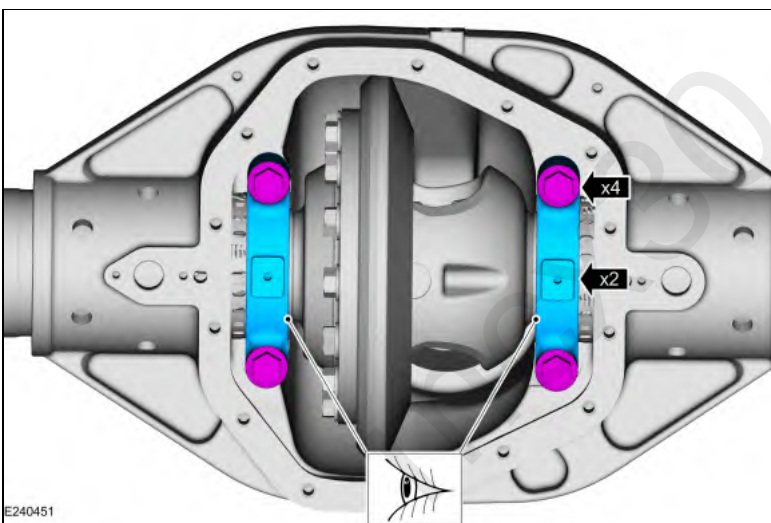
- 2. Install the differential carrier and differential carrier bearing cups.



3. **NOTE:** The differential bearing caps and differential bearing cap bolts need to be installed in the same location as removed.

NOTE: Only tighten the bolts finger tight at this stage.

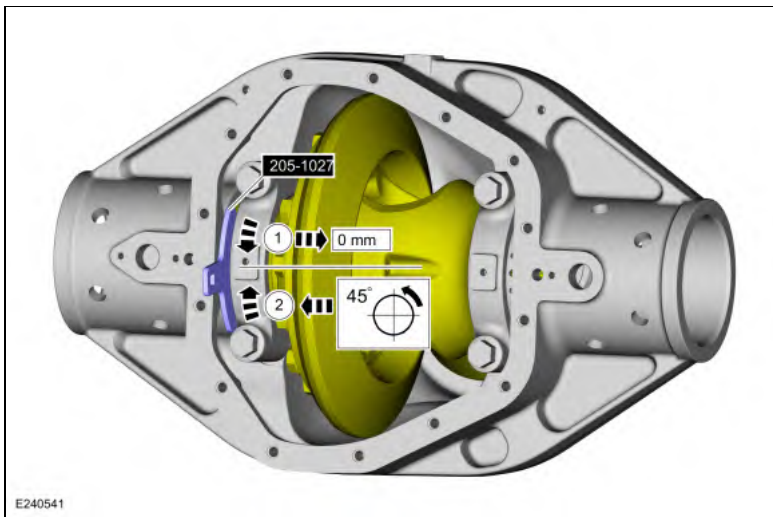
Install the differential bearing caps and differential bearing cap bolts hand tight.



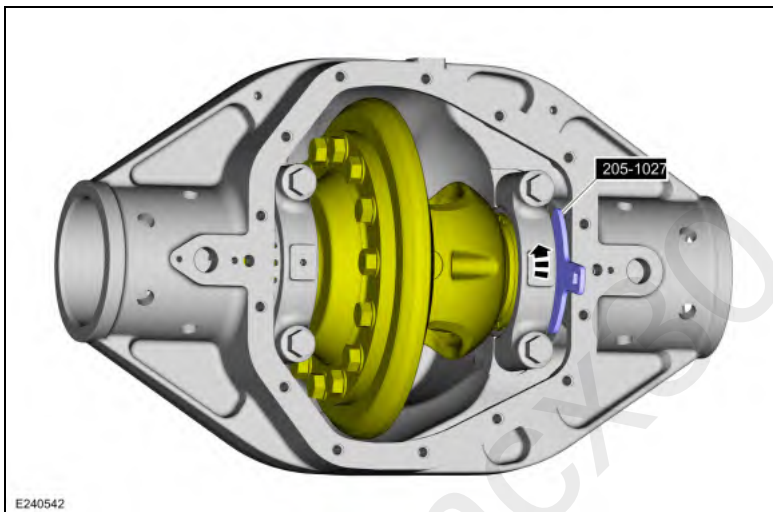
4.

Set ring gear and pinion gear mesh.

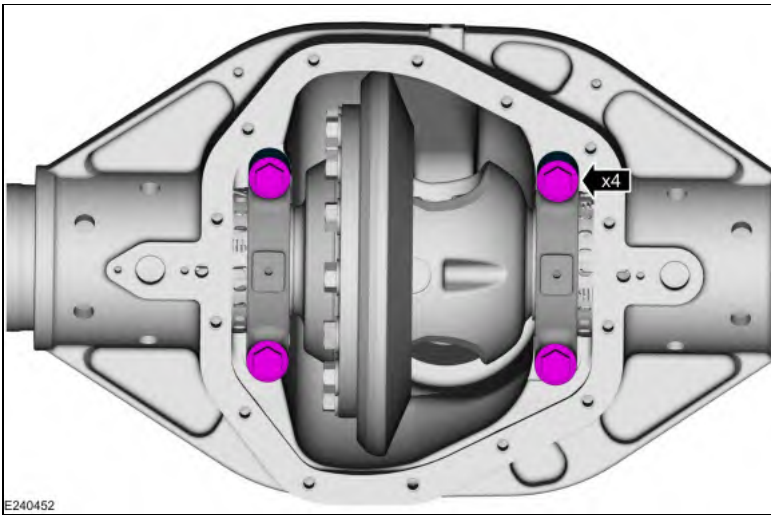
- Tighten the LH differential bearing preload adjuster until there is approximately zero gap between the ring gear and the pinion gear.
Use Special Service Tool: 205-1027 Adjuster, Differential Bearing.
- Back off the LH differential bearing preload adjuster about 45 degrees.



5. Tighten the RH differential bearing preload adjuster until the preload specification is achieved.
Refer to: Specifications (205-02B Rear Drive Axle/Differential - Vehicles With: Dana M300, Specifications).
Use Special Service Tool: 205-1027 Adjuster, Differential Bearing.



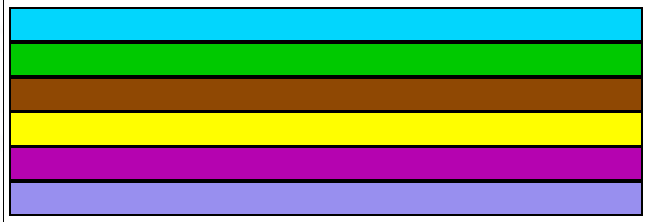
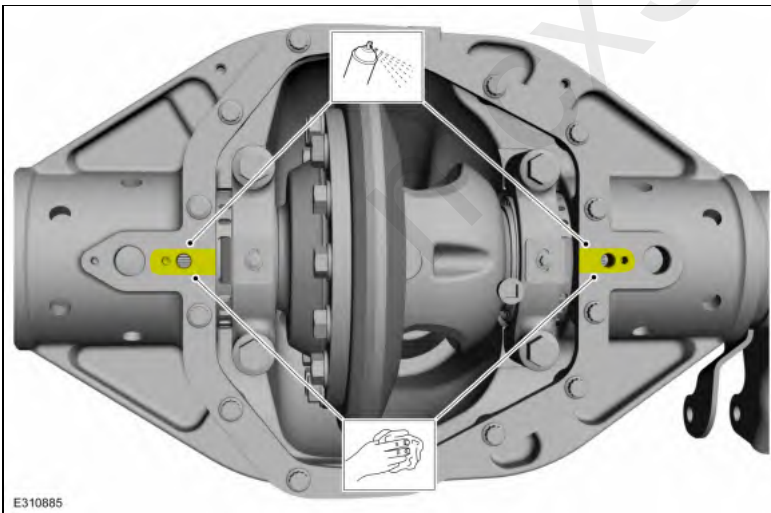
6. **NOTE:** *If the backlash needs to be adjusted after the backlash check, the differential carrier bearing cap bolts will need to be loosened.*
- Tighten the differential bearing cap bolts.
Torque: 201 lb.ft (272 Nm)



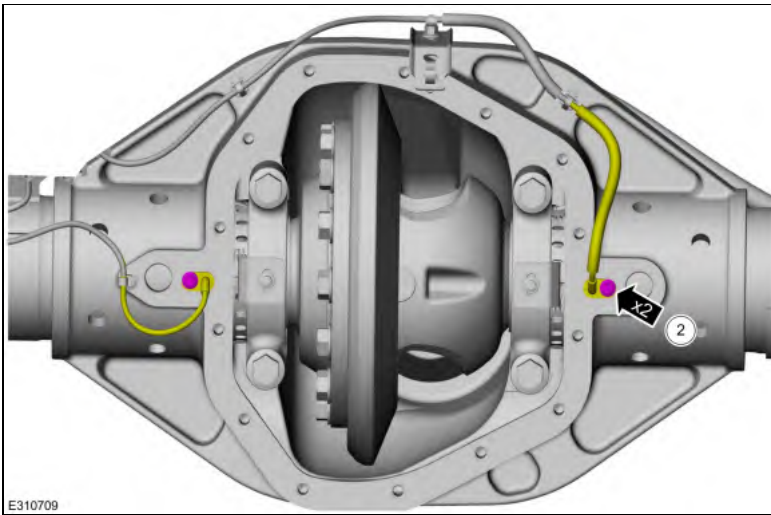
7. Check the ring gear backlash.
Refer to: Ring Gear Backlash Adjustment (205-02B Rear Drive Axle/Differential - Vehicles With: Dana M300, General Procedures).
8. **WARNING: Brake parts cleaner PM-4-A is irritating to skin, eye and respiratory tract. This product may cause central nervous system depression. Always consult the material safety data sheet before use. Due to the volume of PM-4-A used during cleaning procedure, the operator must ensure adequate local ventilation. The operator must wear an organic cartridge with particle filter respirator, eye protection (chemical goggles), Neoprene gloves and long sleeves. Failure to follow these instructions may result in serious personal injury.**

NOTICE: Make sure that the mating faces are clean and free of foreign material.

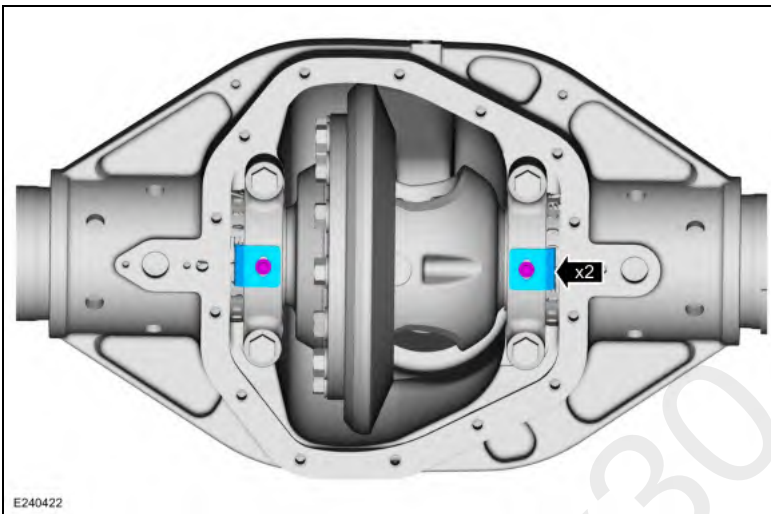
Before installing the ABS sensor, inspect the sensor housing to make sure the cavity is clean and free from foreign material.
Material: Motorcraft® Metal Brake Parts Cleaner / PM-4-A, PM-4-B



9. Position the ABS sensors and install the bolts.
Torque: 80 lb.in (9 Nm)



10. Install the differential bearing adjuster locks and adjuster lock bolts.
Torque: 142 lb.in (16 Nm)



11. Install the axle shafts.
Refer to: Axle Shaft (205-02C Wheel Hubs and Bearings - Full Floating Axle - Vehicles With: Dana M275/Dana M300, Removal and Installation).
12. Install the differential housing cover.
Refer to: Differential Housing Cover (205-02B Rear Drive Axle/Differential - Vehicles With: Dana M300, Removal and Installation).