

Drive Pinion Flange

Special Tool(s) / General Equipment

 E232132	205-126 (T78P-4851-A) Holding Fixture, Drive Pinion Flange
 E238645	205-435 Installer, Differential Yoke TKIT-1999-F/FLM/LT
 E238646	205-437 Installer, Drive Nut, Yoke TKIT-1999-F/FLM/LT
 E238660	205-936 Pinion, Flange Installer TKIT-2009C-F TKIT-2009C-ROW
Flat Headed Screw Driver	
Three Leg Puller	
Tire Lever	

Materials

Name	Specification
Motorcraft® Premium Long-Life Grease XG-1-E1	ESA-M1C75-B

Removal

- NOTE:** The rear axle shafts must be removed for accurate pinion nut drag torque readings.

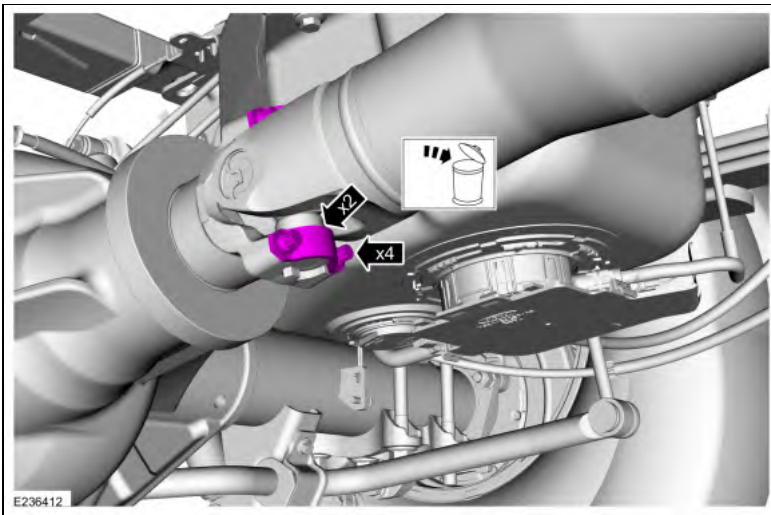
Remove the rear axle shaft.

Refer to: Axle Shaft (205-02E Wheel Hubs and Bearings - Full Floating Axle - Vehicles With: Ford 10.5 Inch Ring Gear, Removal and Installation).

- NOTE:** Rear straps shown, front straps similar.

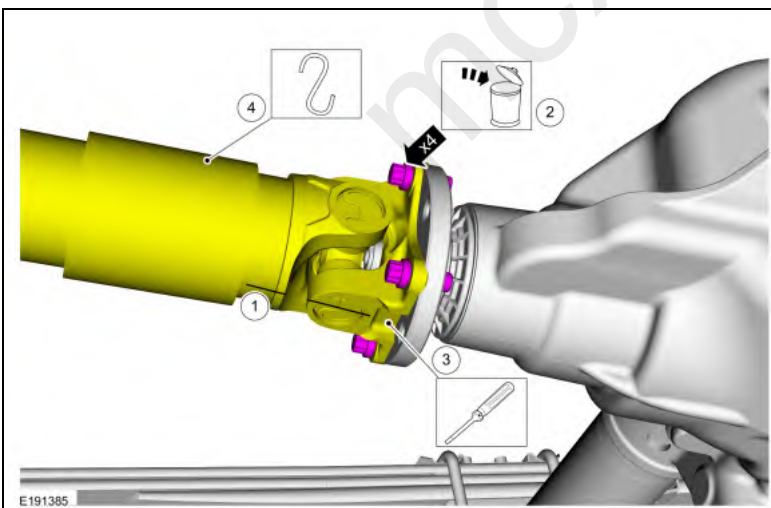
If equipped with a strap style pinion flange, remove and discard the U-joint strap bolts and straps.

Torque: 46 lb.ft (63 Nm)



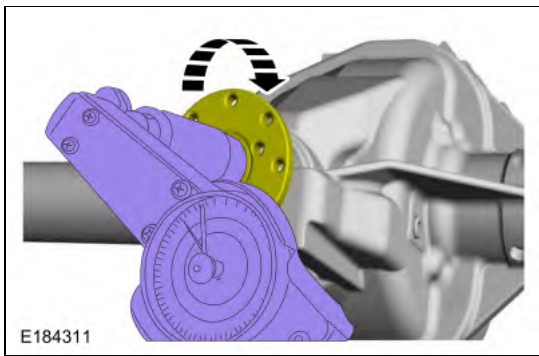
3. If equipped with a flange style pinion flange, disconnect the rear driveshaft from the pinion flange.
 1. Index-mark the driveshaft flange to the pinion flange to maintain alignment during installation.
 2. Remove and discard the driveshaft flange to pinion flange bolts.
Torque: 76 lb.ft (103 Nm)
 3. **NOTICE: The driveshaft flange fits tightly on the flange pilot. Never hammer on the driveshaft or any of its components to disconnect the driveshaft flange from the flange pilot. Pry only in the area shown with a suitable tool, to disconnect the driveshaft flange from the flange pilot or damage to the driveshaft flange can occur.**

Using a large flat headed screwdriver or tire lever, separate the driveshaft flange from the pinion flange.
Use the General Equipment: Flat Headed Screw Driver
Use the General Equipment: Tire Lever
 4. Support the driveshaft.

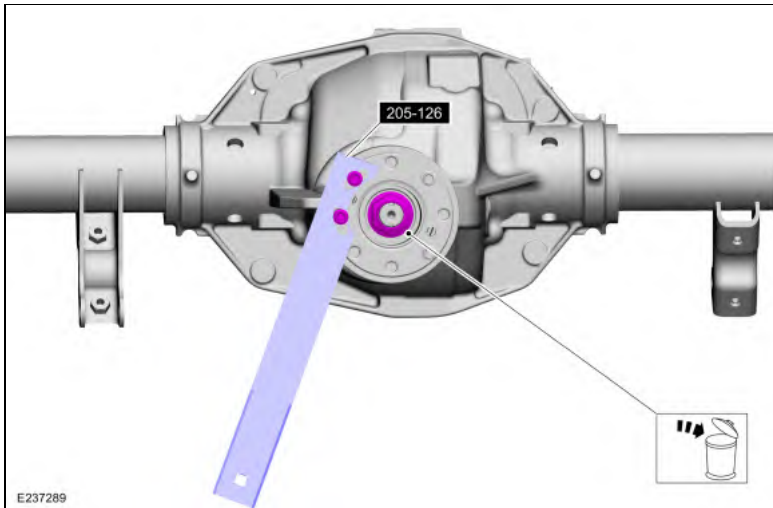


4. **NOTE: Rotational torque of the drive pinion flange must be measured and recorded using a Nm (lb-in) torque wrench for correct pinion bearing preload when reassembled. This will be the torque-to-turn measurement.**

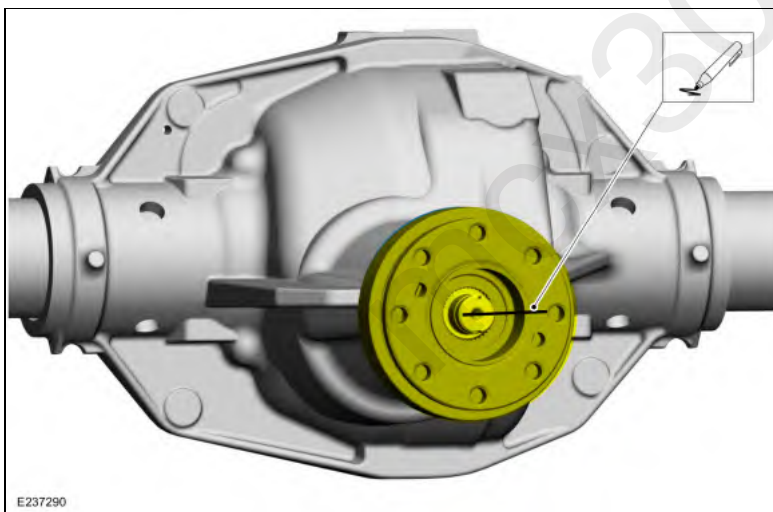
Using a dial type torque wrench, measure and record the rotational torque of the drive pinion.



5. Using the special tool to hold the pinion flange, remove and discard the pinion nut.
Use Special Service Tool: 205-126 (T78P-4851-A) Holding Fixture, Drive Pinion Flange.

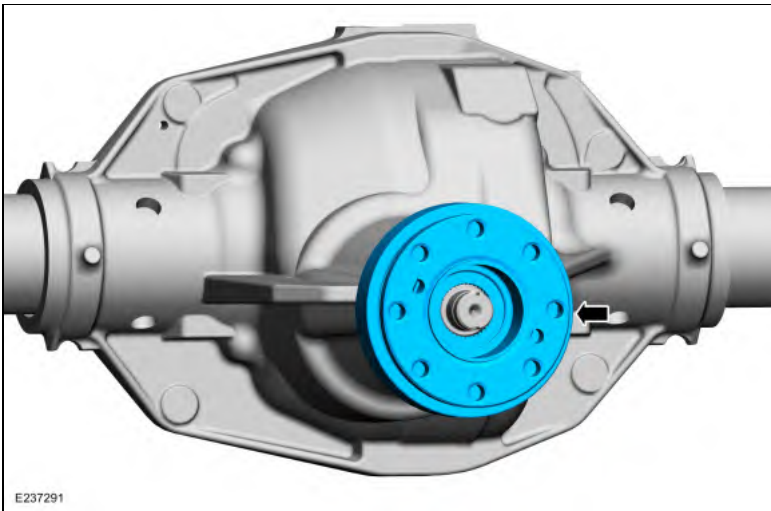


6. Mark the drive pinion flange and the drive pinion stem for reassembly.



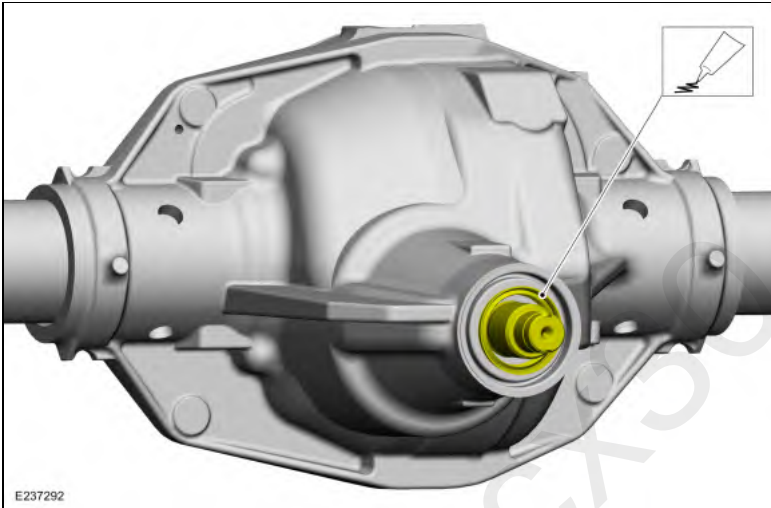
7. **NOTE:** 4 bolt flange shown, others similar.

Remove the pinion flange.
Use the General Equipment: Three Leg Puller

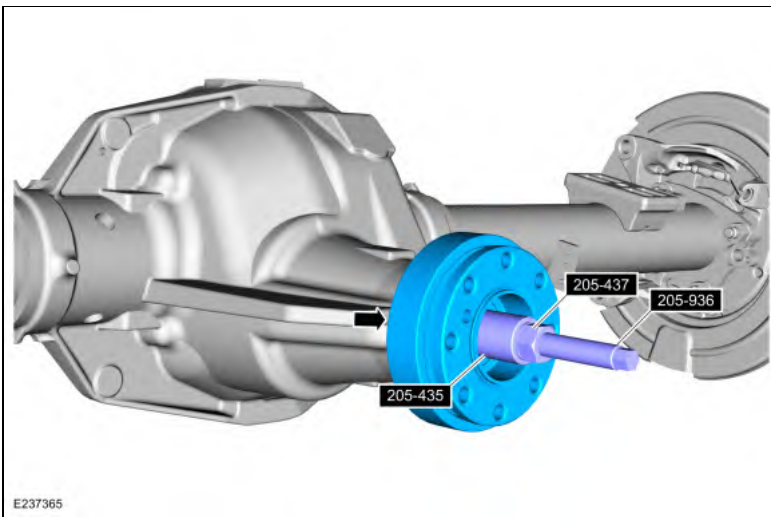


Installation

- 1. If necessary, install a new drive pinion seal.
Refer to: Drive Pinion Seal (205-02D Rear Drive Axle/Differential - Vehicles With: Ford 10.5 Inch Ring Gear, Removal and Installation).
- 2. Lubricate the drive pinion flange mating surfaces with grease.
Material: Motorcraft® Premium Long-Life Grease / XG-1-E1 (ESA-M1C75-B)



- 3. **NOTE:** Make sure drive pinion flange and drive pinion stem are phased correctly using previously applied mark.
Using the special tools, install the pinion flange.
Use Special Service Tool: 205-435 Installer, Differential Yoke. , 205-437 Installer, Drive Nut, Yoke. , 205-936 Pinion, Flange Installer.



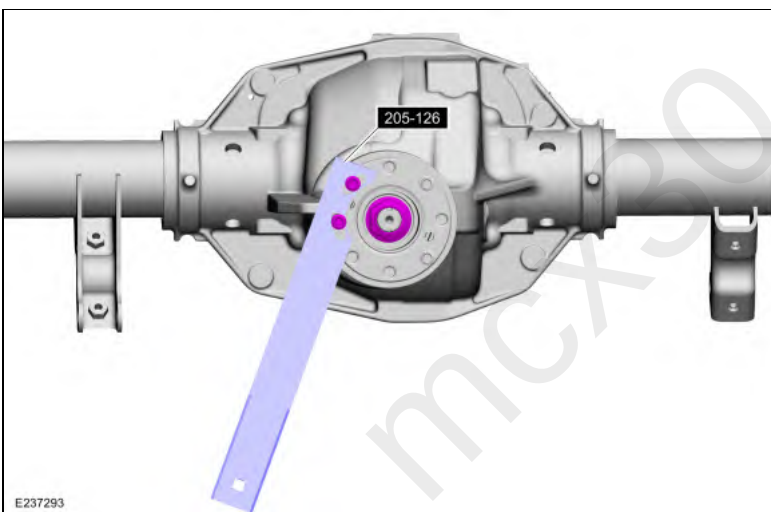
4. **NOTICE:** Under no circumstances is the pinion nut to be backed off to reduce drive pinion bearing preload. If reduced drive pinion bearing preload is required, a new drive pinion collapsible spacer and pinion nut must be installed or damage to the component may occur.

NOTE: When installing the drive pinion flange and pinion nut with no differential carrier installed, the drag torque (torque to turn) should be 2 to 3 Nm (16-29 in-lbs).

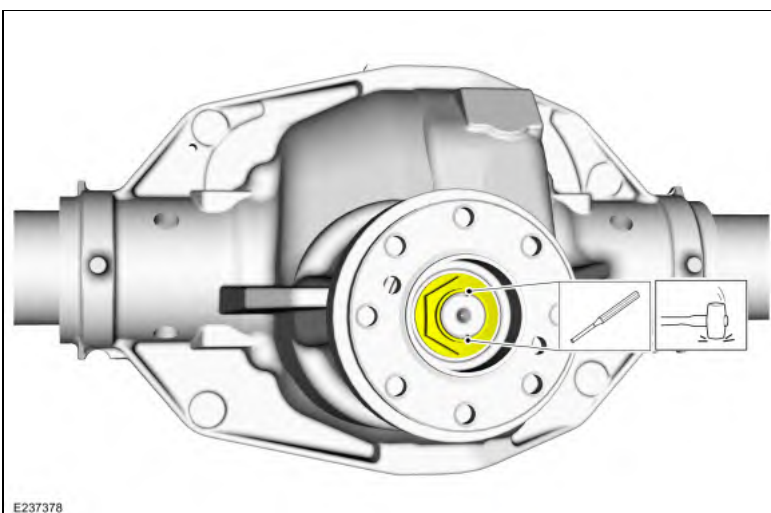
NOTE: Refer to the rotational torque previously recorded with the Nm (lb-in) torque wrench. Tighten the pinion nut in small increments until it is within 0.3 Nm (3 lb-in) of the reference measurement. If 0.3 Nm (3 lb-in) is exceeded, then the collapsible spacer will be damaged and a new collapsible spacer will be required.

NOTE:

Using the special tool to hold the pinion flange, install the new pinion nut.
Use Special Service Tool: 205-126 (T78P-4851-A) Holding Fixture, Drive Pinion Flange.



5. Stake the pinion nut.



6. If equipped with a 4 bolt flange pinion flange, connect the driveshaft.

- Torque:* 76 lb.ft (103 Nm)

If equipped with a strap style pinion flange, install the new U-joint strap bolts and the new straps.
Torque: 46 lb.ft (63 Nm)



8. Check the differential fluid level.
Refer to: Differential Fluid Level Check (205-02D Rear Drive Axle/Differential - Vehicles With: Ford 10.5 Inch Ring Gear, General Procedures).
9. Install the rear axle shaft.
Refer to: Axle Shaft (205-02E Wheel Hubs and Bearings - Full Floating Axle - Vehicles With: Ford 10.5 Inch Ring Gear, Removal and Installation).

