Report a Problem

206-09 Anti-Lock Brake System (ABS) and Stability Control
Removal and Installation

2023 F-53 Motorhome, F-59 Commercial Stripped Chassis

Procedure revision date: 08/23/2023

Wheel Speed Sensor Ring

Special Tool(s) / General Equipment

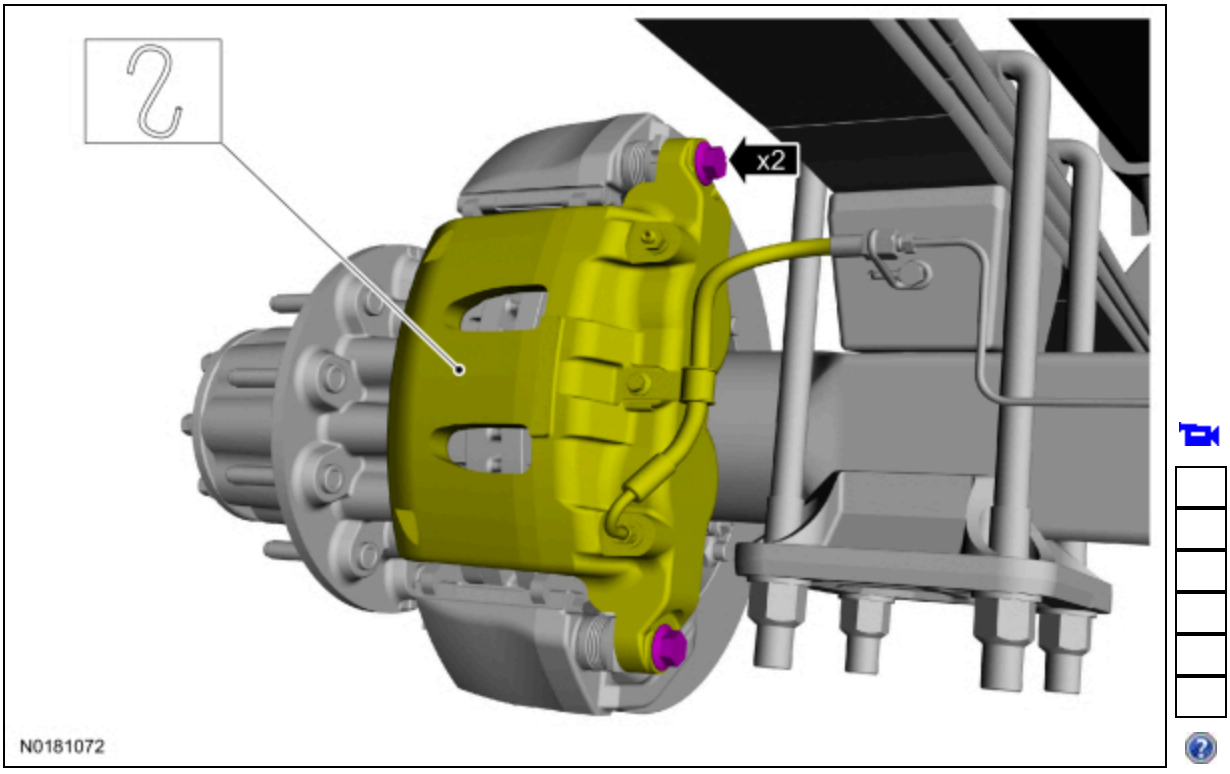
 E419648	206-132 ABS Tone Ring Installation Tool

Removal

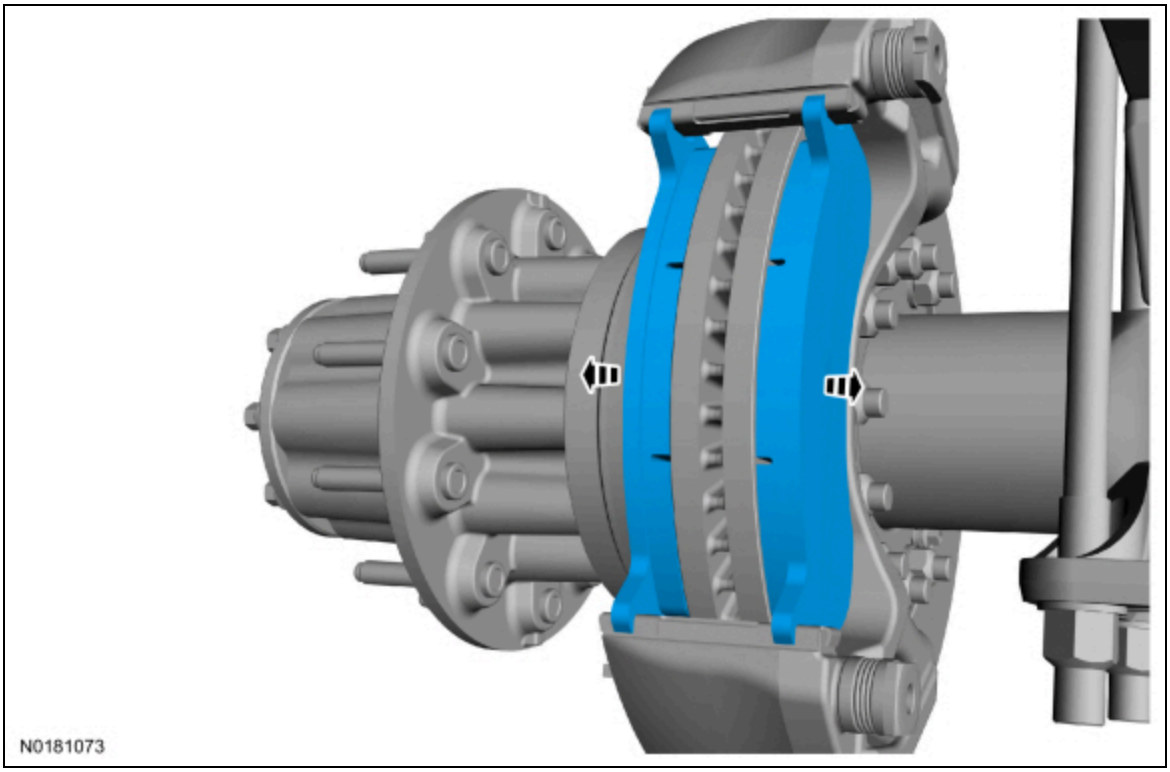
1. Remove the wheel and tire.
   Refer to: Wheel and Tire - Vehicles With: Single Rear Wheels (204-04 Wheels and Tires, Removal and Installation).
   Refer to: Wheel and Tire - Vehicles With: Dual Rear Wheels (204-04 Wheels and Tires, Removal and Installation).

2. **NOTICE: Do not allow the brake caliper to hang from the hose or damage to the brake hose may occur.**

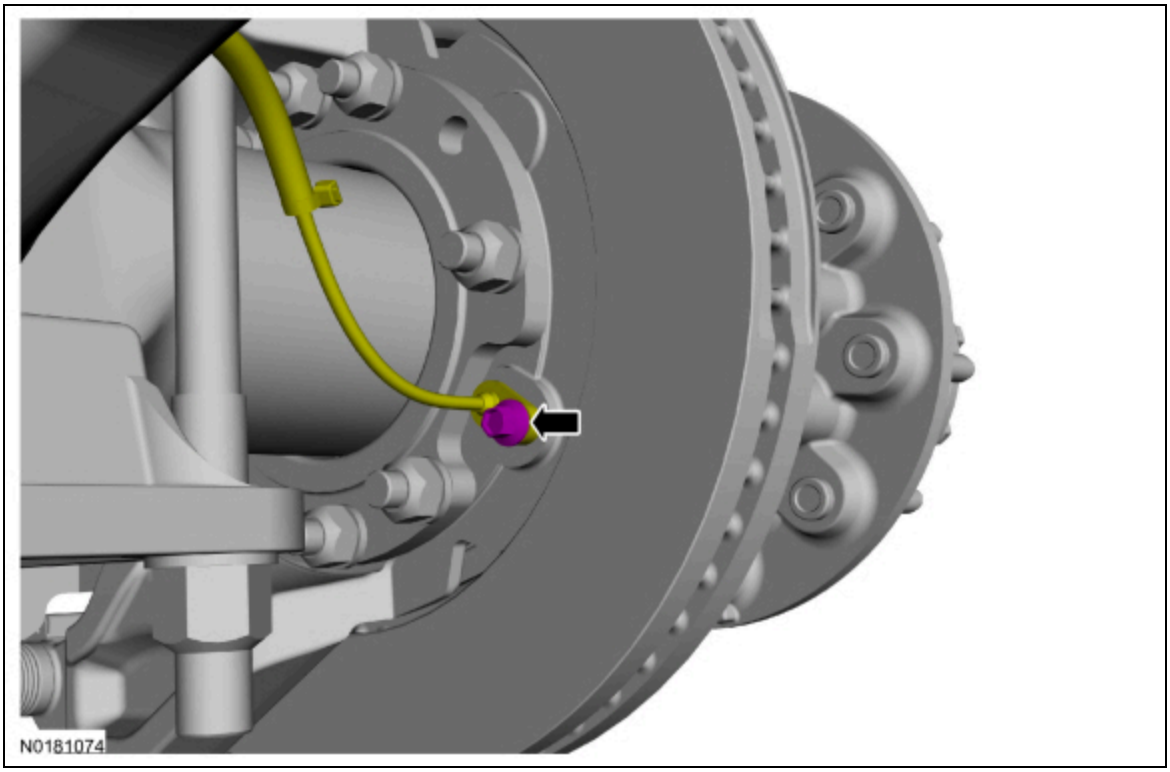
   Remove the bolts and position the brake caliper aside.



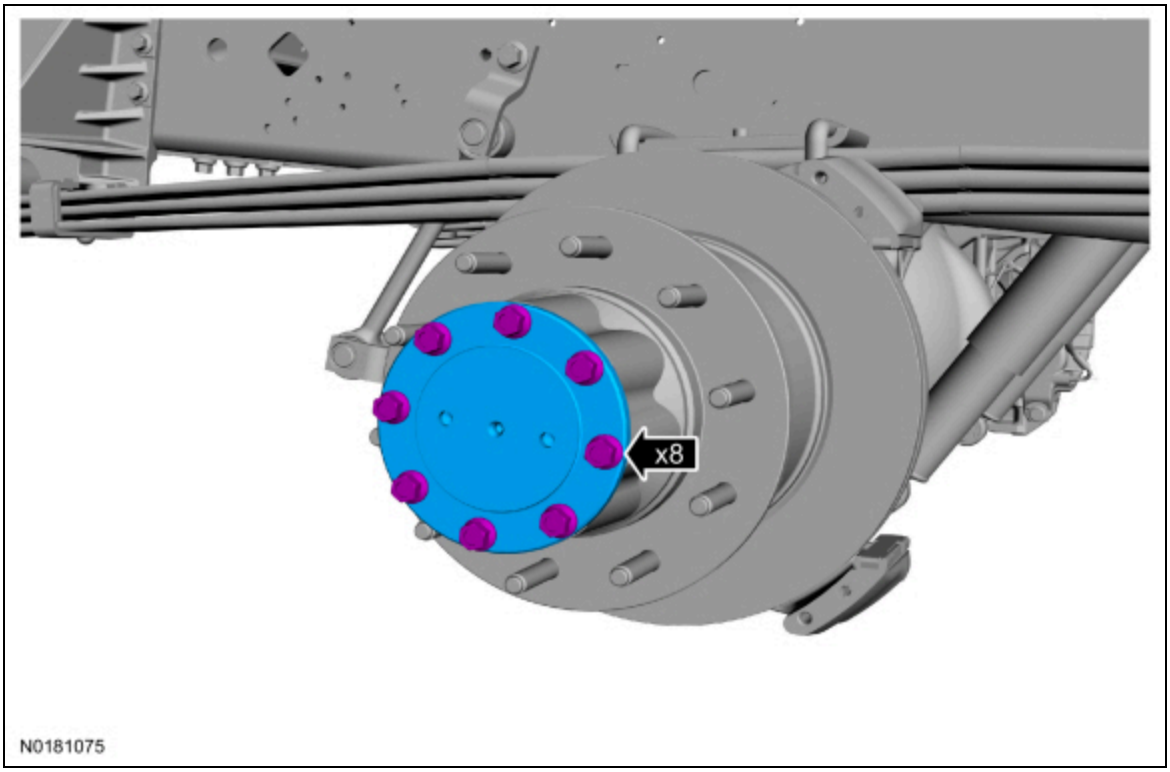
3. Remove the brake pads.



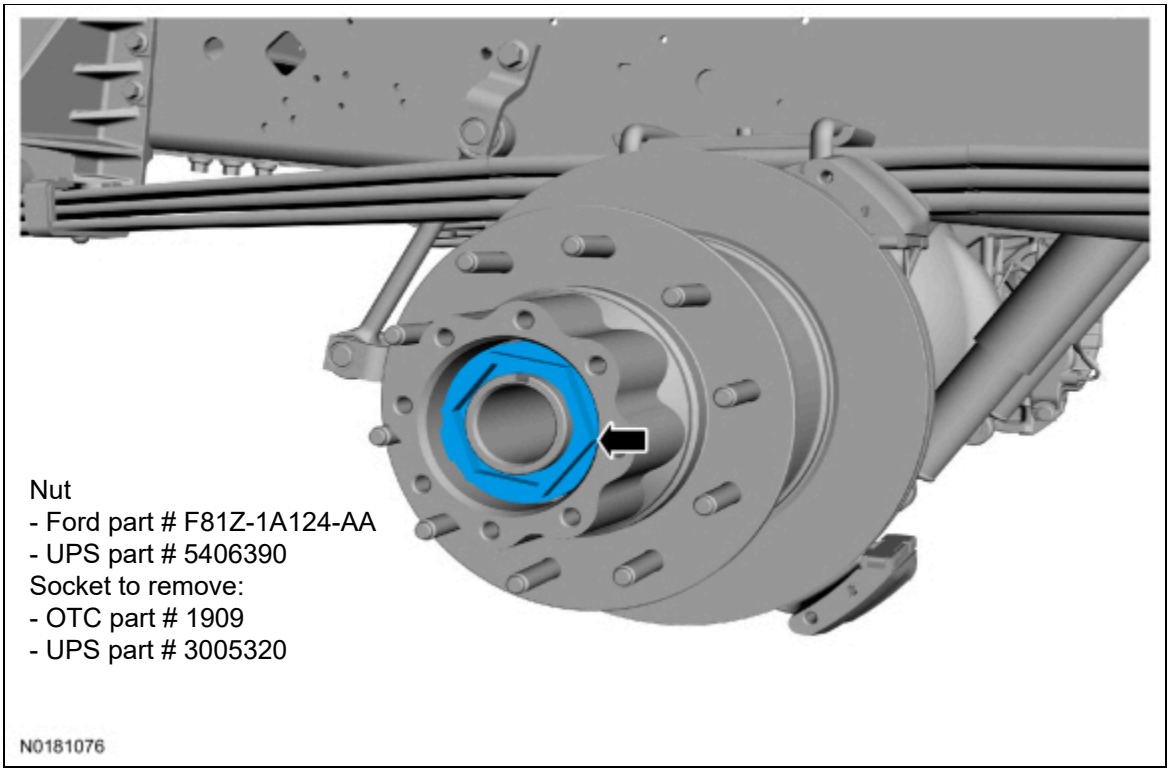
4. Remove the bolt and position the rear wheel speed sensor aside.



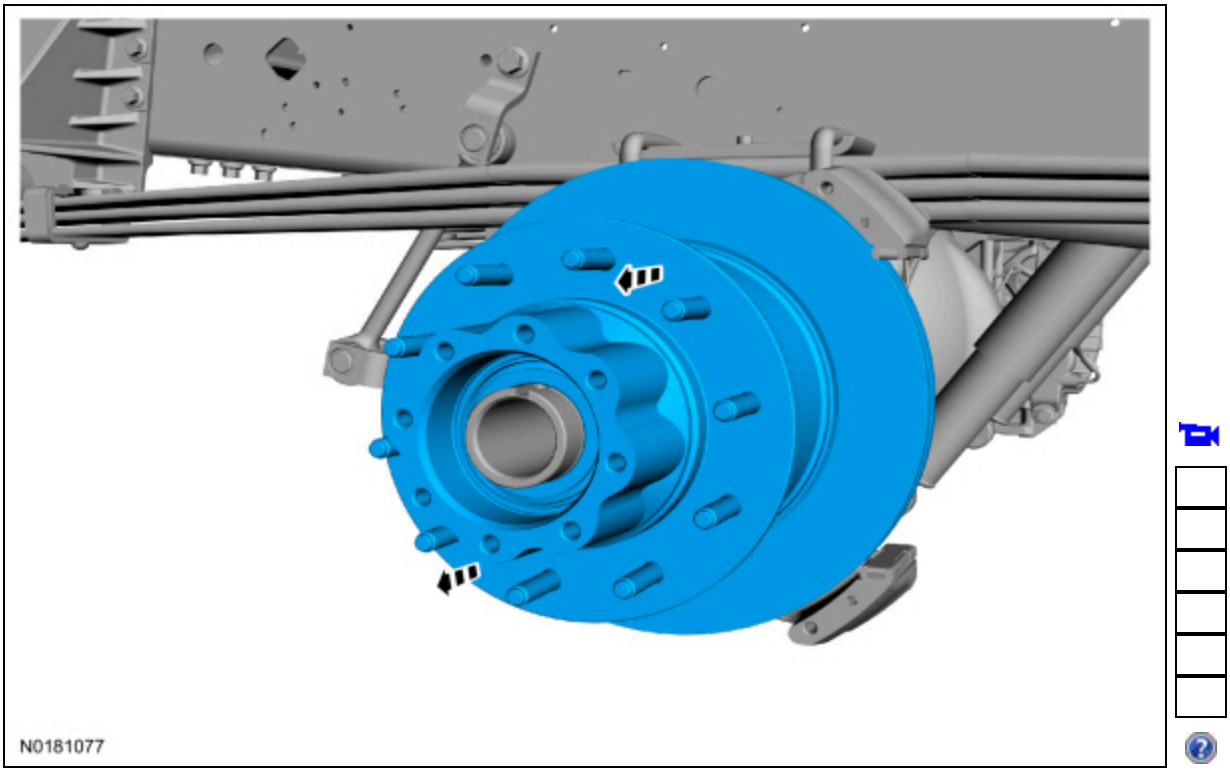
5. Remove the bolts and the axle shaft.



6. Remove the hub nut.

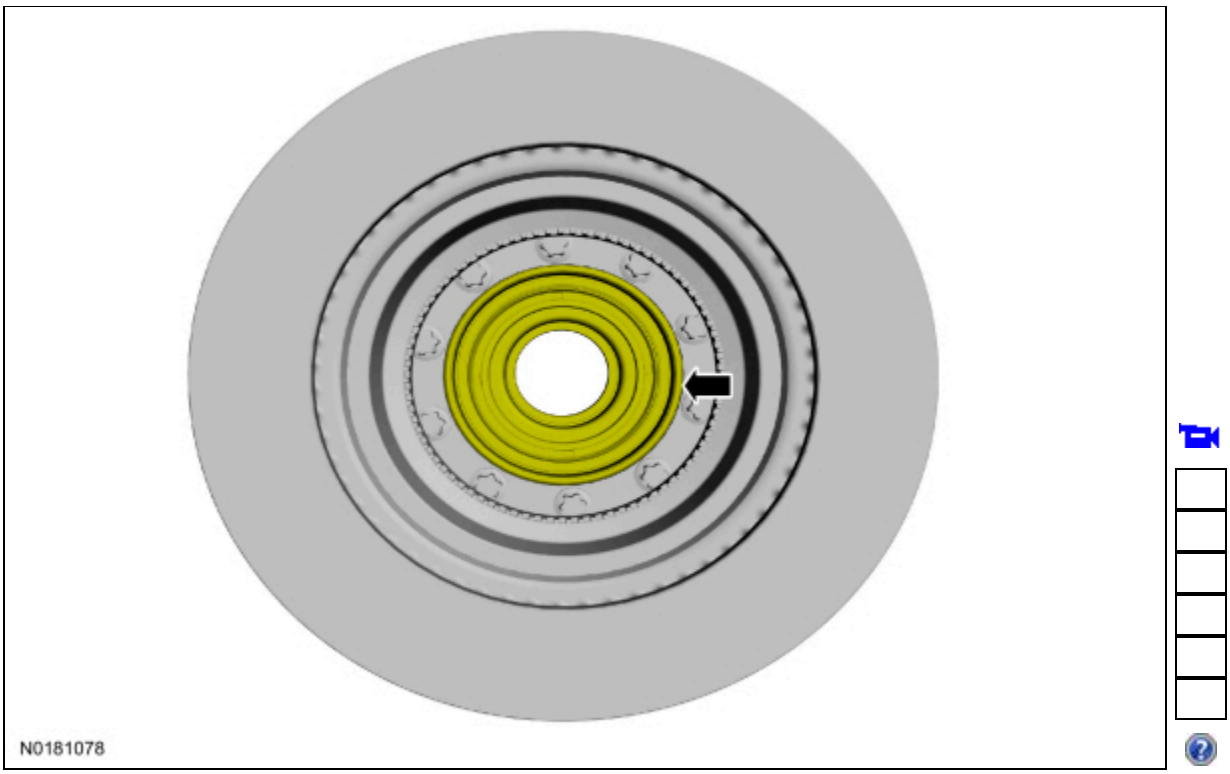


7. Remove the wheel hub and brake disc.



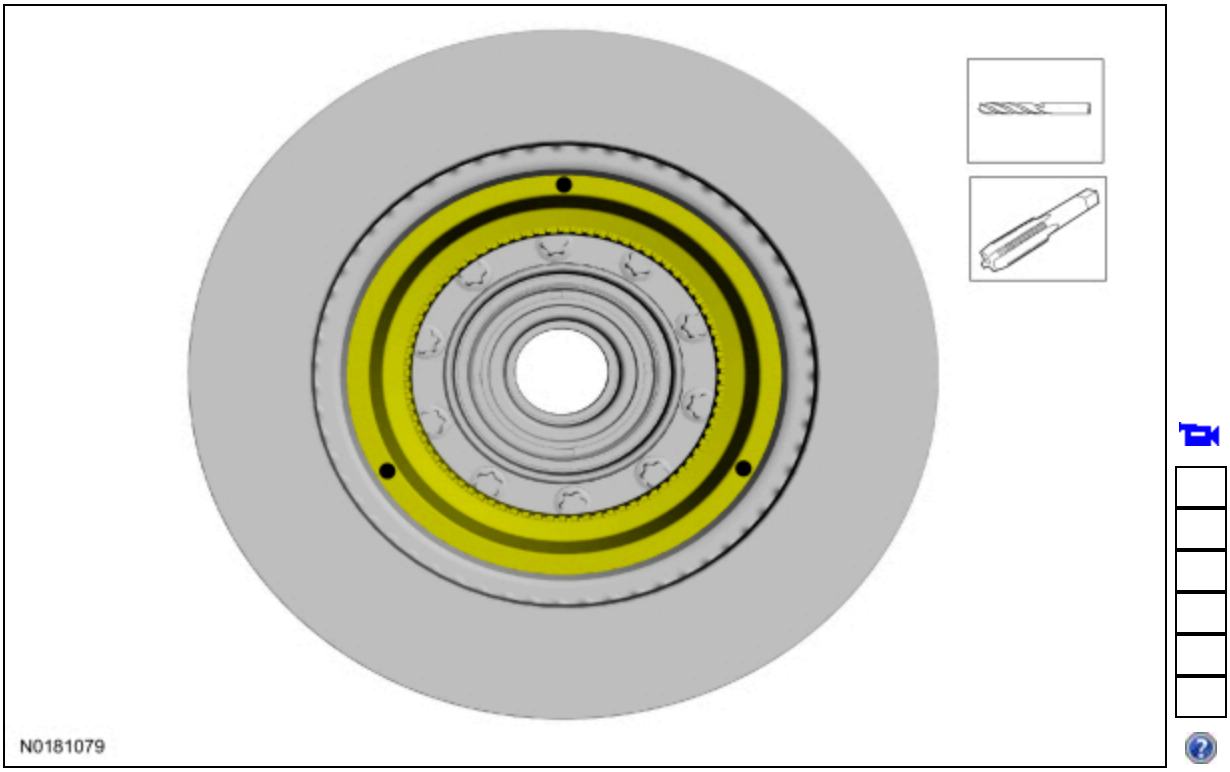
8. **NOTICE: Do not allow metal shavings or foreign debris to fall into the wheel bearing cavity or damage to the bearings may occur.**

   Cover the wheel bearings using shop towels.

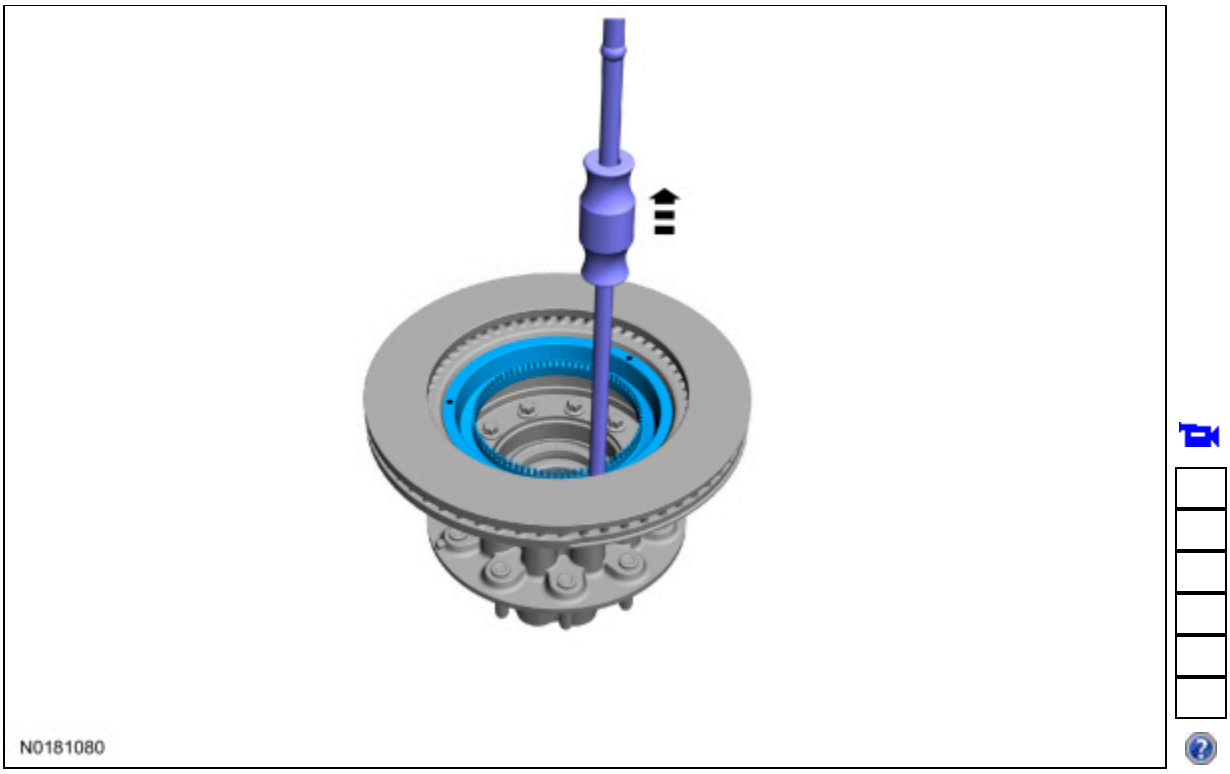


9. **NOTE:** *Size the holes according to the bolts that will be used with the slide hammer adapter. Make sure the holes are equally spaced.*

   Drill and tap 3 holes in the outer portion of the wheel speed sensor ring as shown.

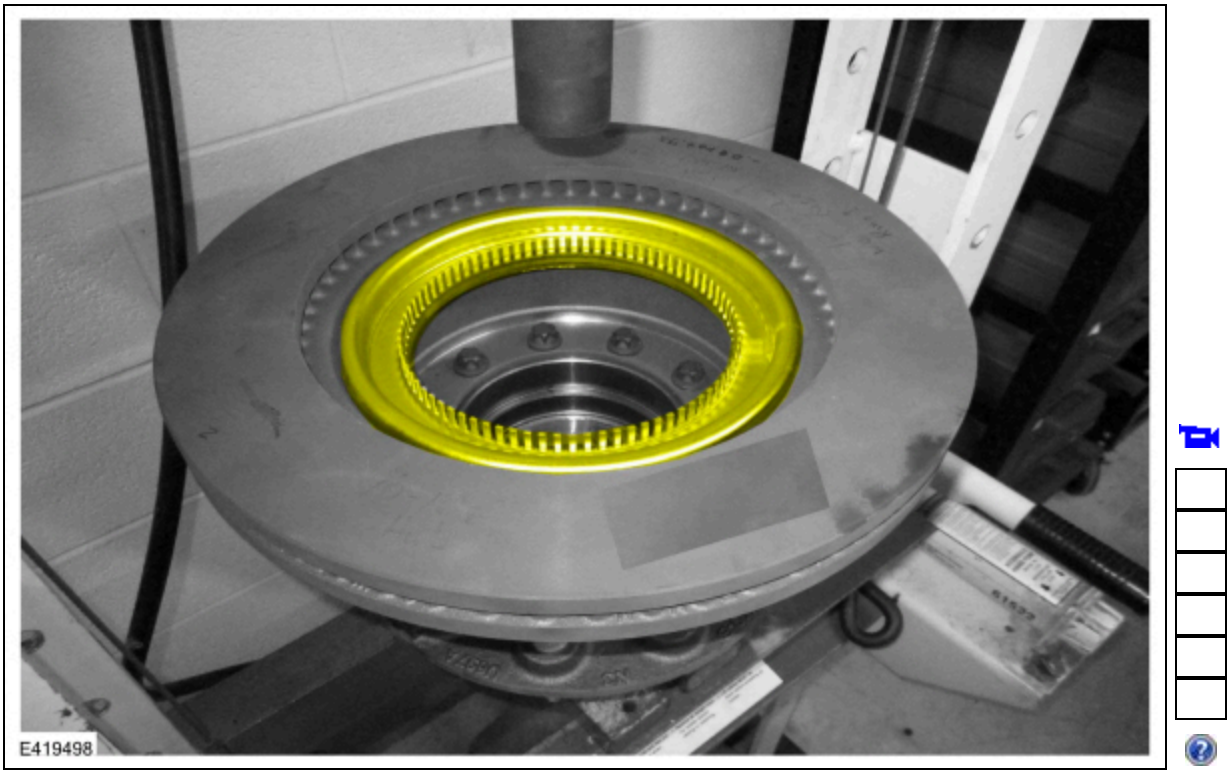


10. Using a slide hammer and adapter (such as a dent puller adapter) and alternating using all 3 holes, remove the wheel speed sensor ring.



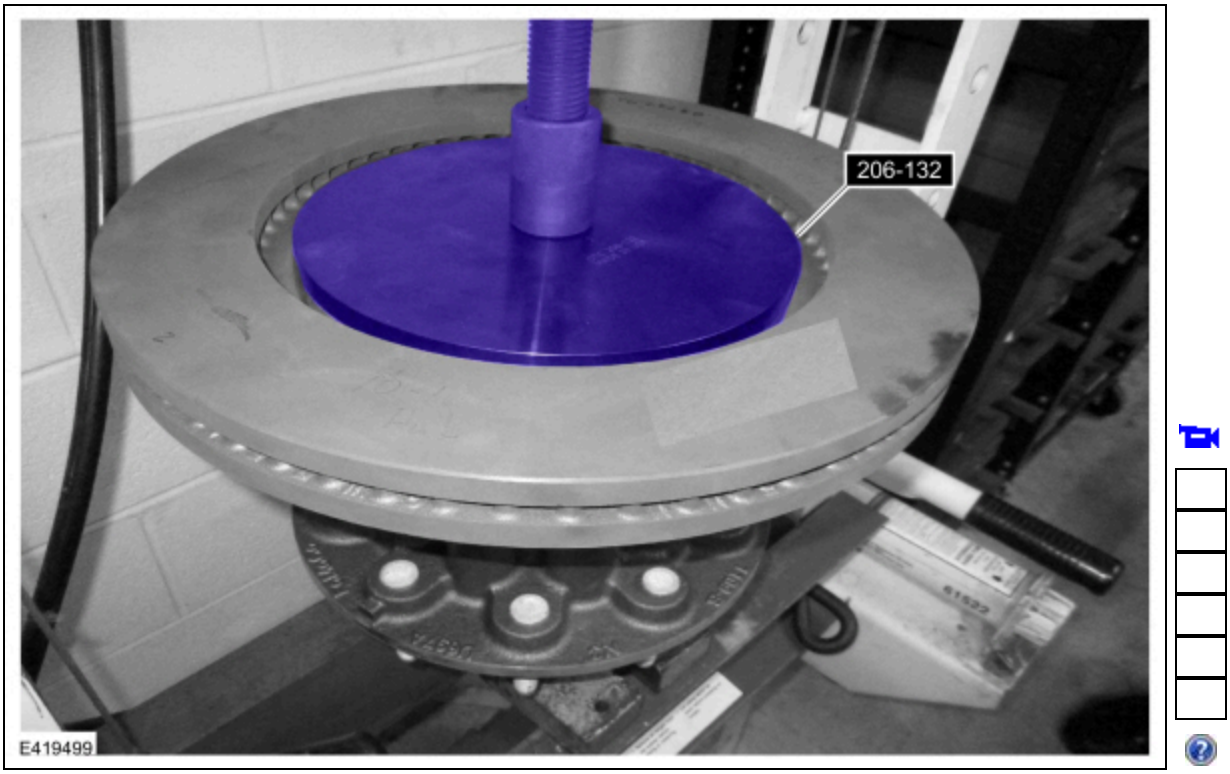
Installation

1. Place the brake disc and hub assembly on a press. Center the tone ring on the hub.



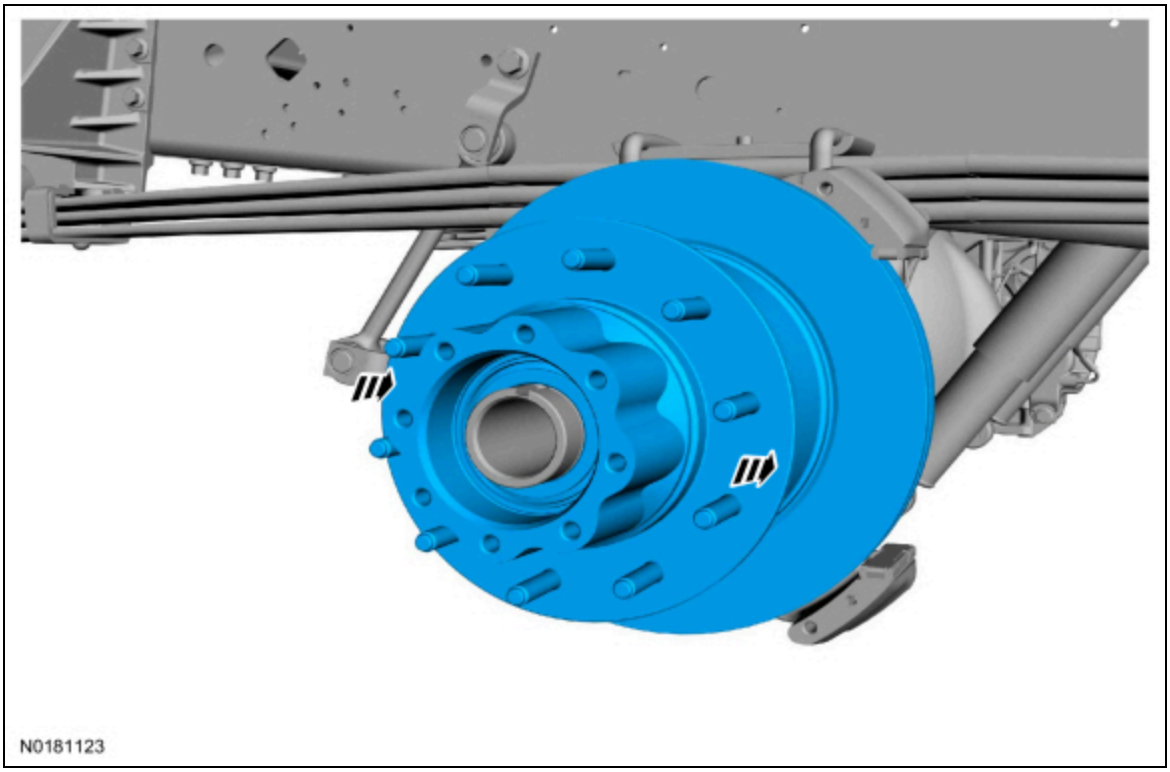
2. **NOTE:** *The sensor ring may shift slightly at first when applying pressure. Continue to apply pressure and the ring will center itself.*

   Using the press and the special tool install the sensor ring.
   Use Special Service Tool: 206-132 ABS Tone Ring Installation Tool.



3. **NOTICE: Do not make contact with the wheel speed sensor ring when installing the wheel hub and brake disc assembly or damage to the sensor ring may occur.**

   Install the wheel hub and brake disc.

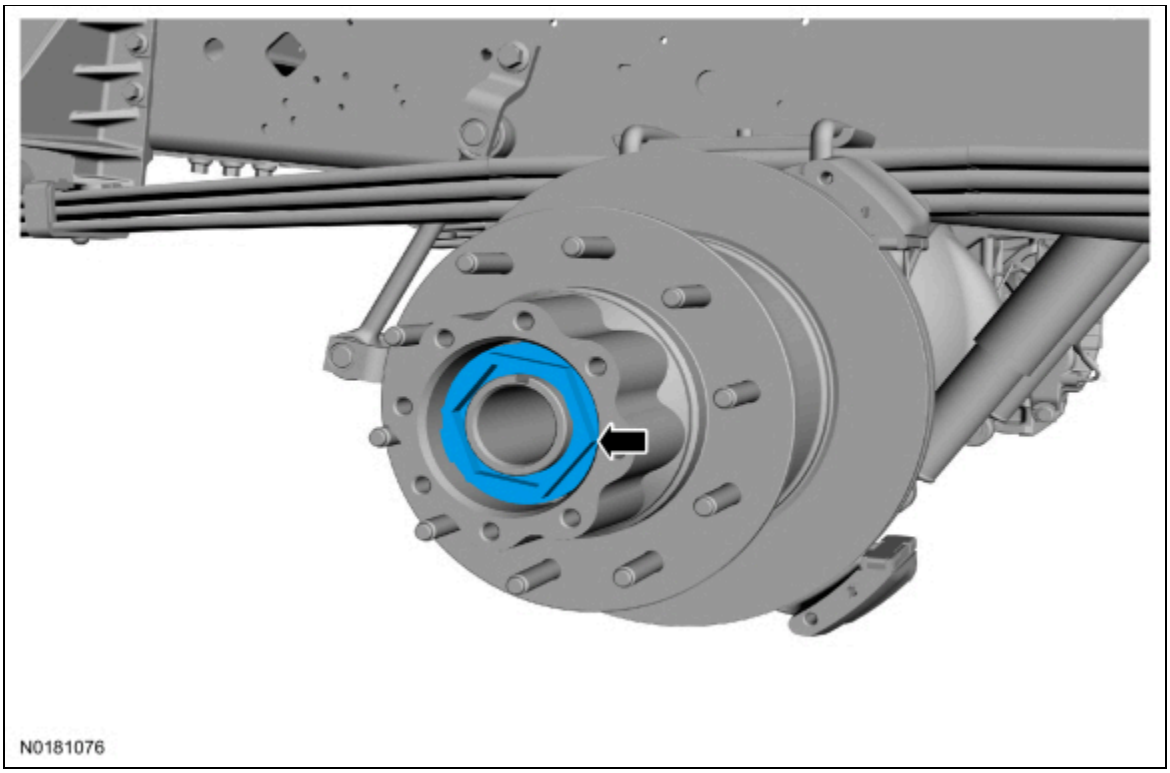


4. Tighten the hub nut in the following sequence.
    1. Tighten the hub nut.
       Torque: 70 lb.ft (95 Nm)

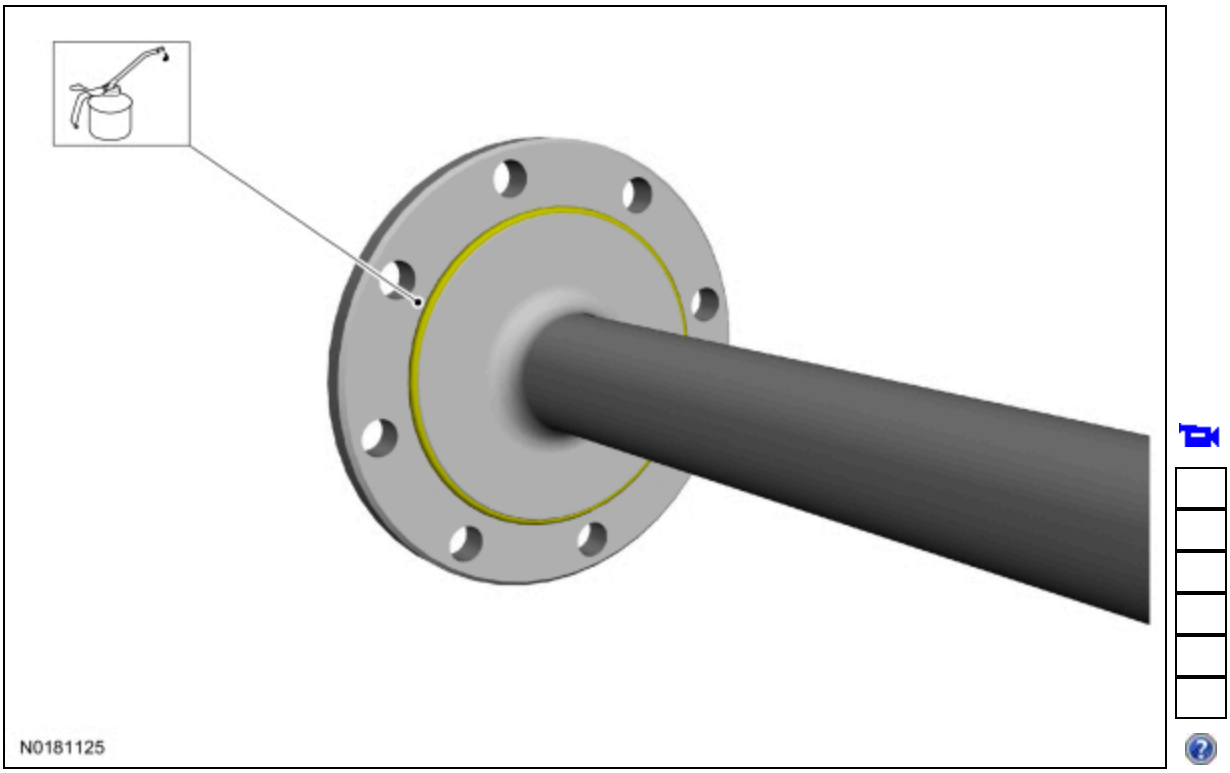
    2. Loosen the hub nut 90 degrees.

    3. Tighten the hub nut.
       Torque: 18 lb.ft (24 Nm)

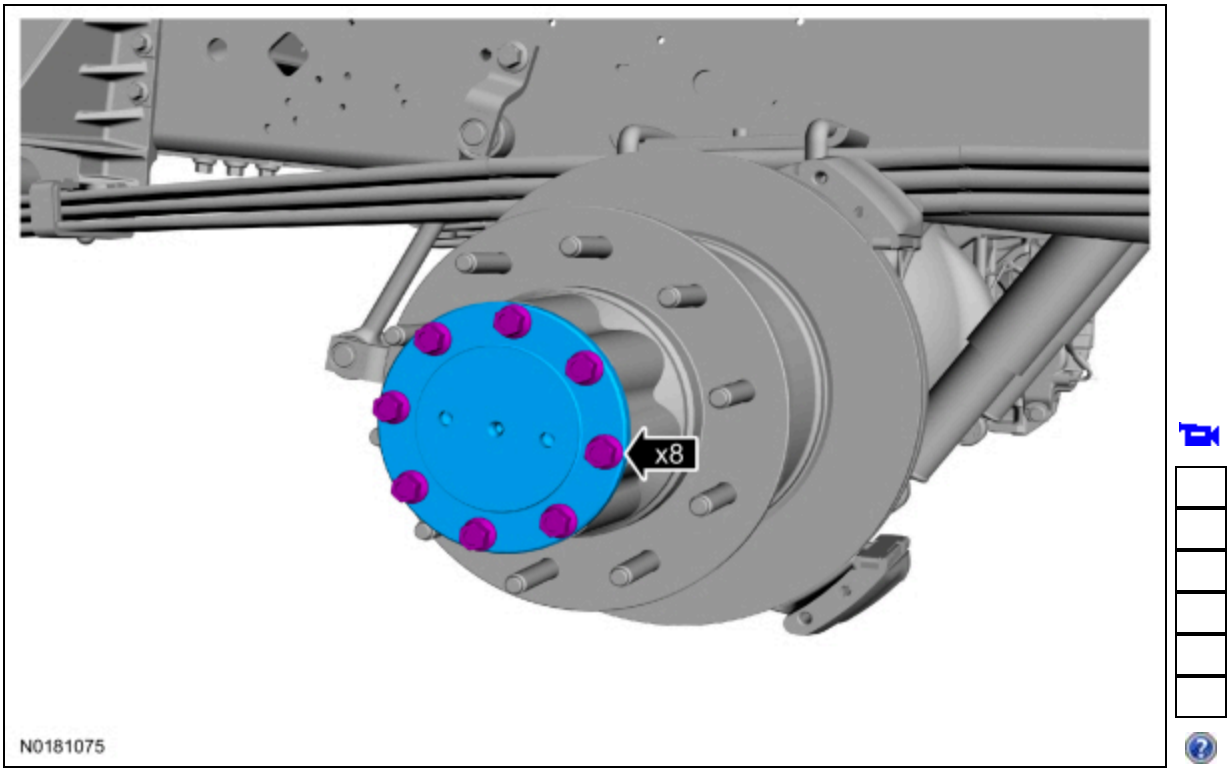
    - Final bearing adjustment has zero end play. The maximum torque to rotate the hub is 2.3 Nm (20 lb-in) when end play is zero.



5. Inspect the axel shaft seal and install a new seal as necessary. Lubricate the axle shaft seal.

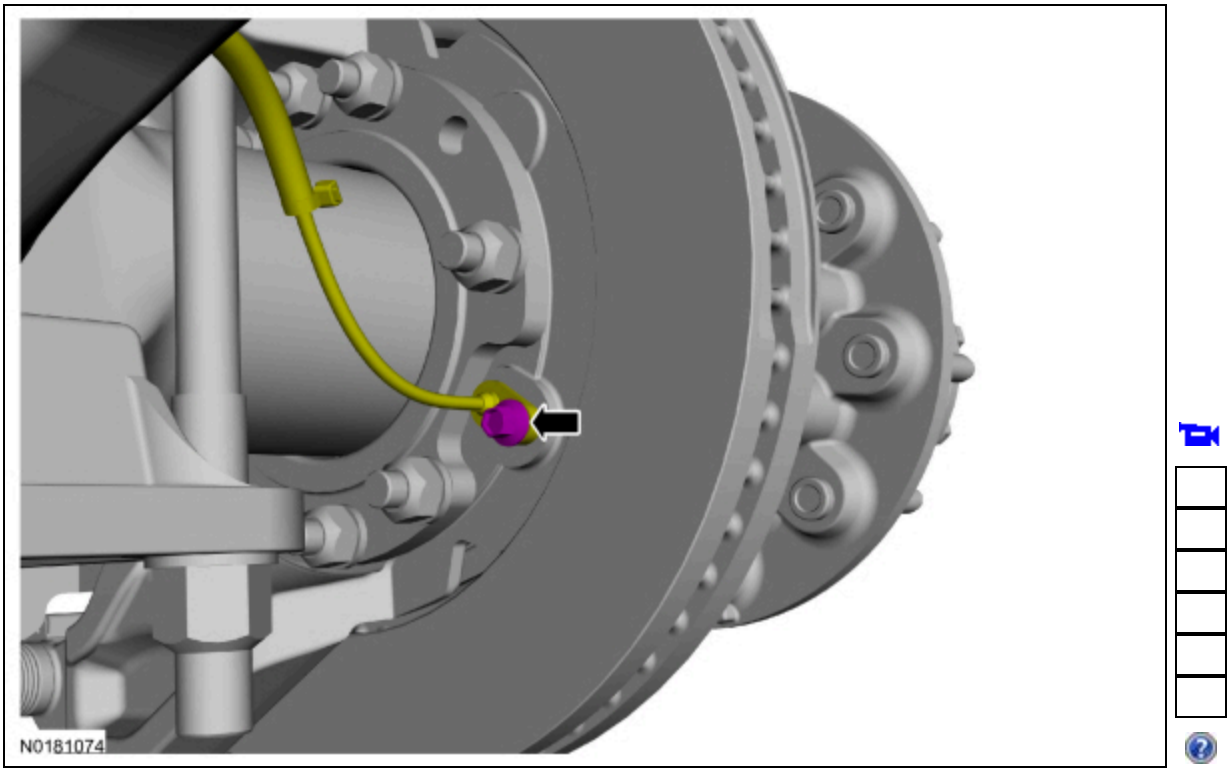


6. Install the axle shaft and the bolts and tighten in a cross pattern.
   Torque: 98 lb.ft (133 Nm)

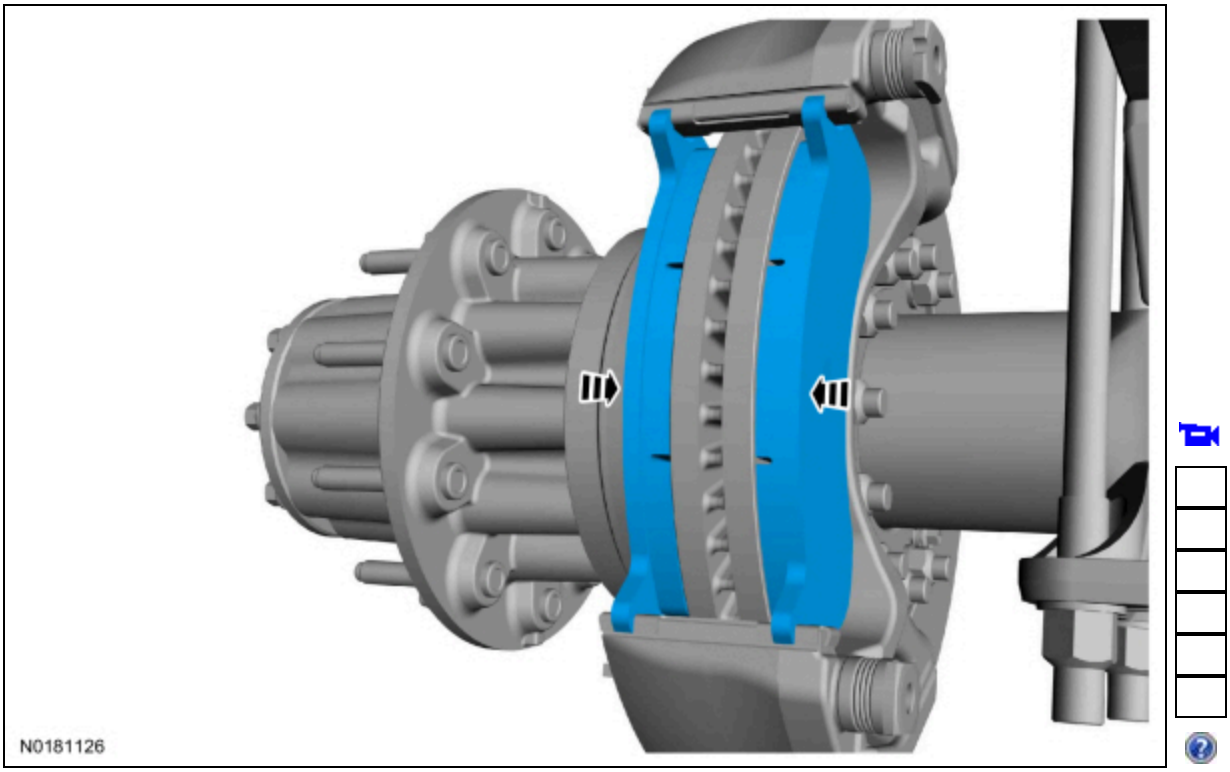


7. Position the wheel speed sensor and install the bolt.
   - For vehicles equipped with Hydro-Boost®:
     Torque: 177 lb.in (20 Nm)

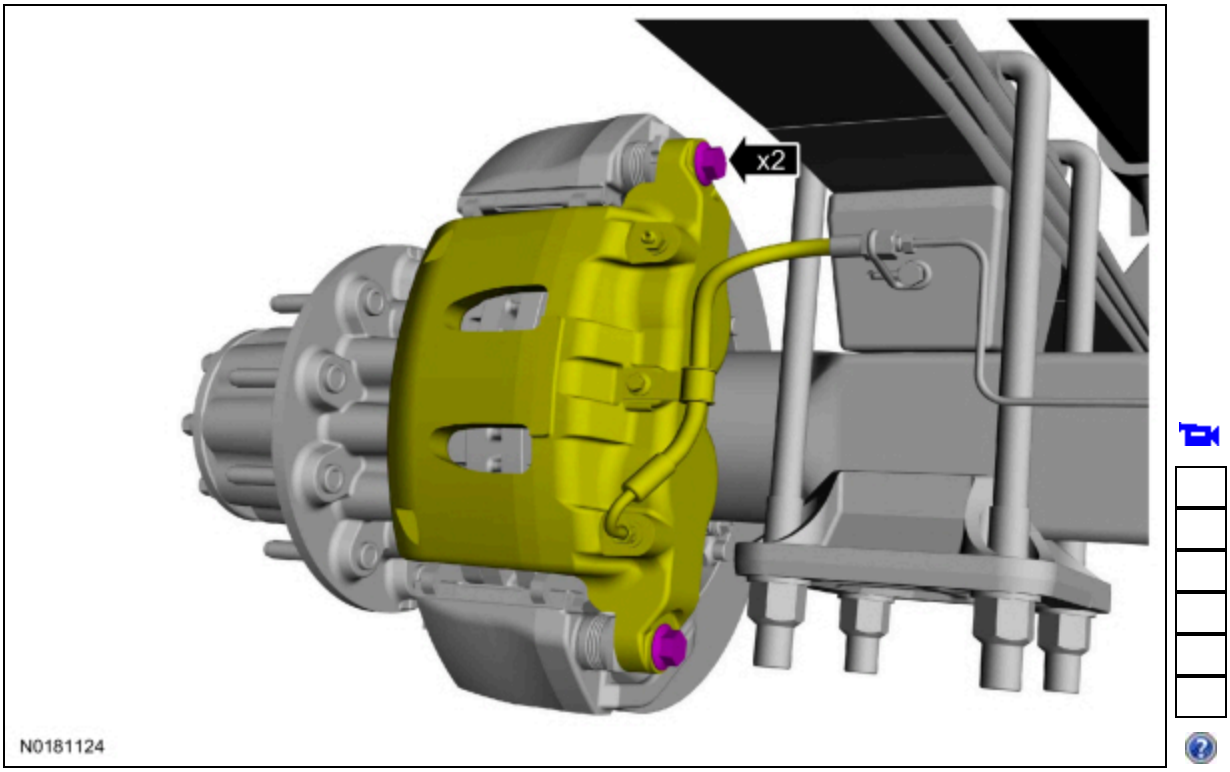
- For all other vehicles:
  Torque: 124 lb.in (14 Nm)



8. Install the brake pads.



9. Position the brake caliper and install the bolts.
   Torque: 100 lb.ft (136 Nm)



10. Install the wheel and tire.
    Refer to: Wheel and Tire - Vehicles With: Single Rear Wheels (204-04 Wheels and Tires, Removal and Installation).
    Refer to: Wheel and Tire - Vehicles With: Dual Rear Wheels (204-04 Wheels and Tires, Removal and Installation).