

# The ConMet Connection

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## Part Two of a Three-Part Series on Preventative Maintenance for Hub Assemblies

# Attention to Detail Key to 12 month/ 100,000 Mile Wheel Hub Inspection

Part two of the ConMet Connection's three-part series on preventative maintenance for hub assemblies outlines proper inspection requirements at 12 months or 100,000 miles, whichever comes first.

### PREPARATION

**Warning:** Vehicles on jacks can fall, causing serious personal injury or property damage. Never work under a vehicle supported by a jack without supporting the vehicle with stands and blocking the wheels. Wear safe eye protection

1. Park the vehicle on a level surface. Block the wheels to prevent the vehicle from moving.
2. Raise the axle until the tires are off the floor.
3. Place safety stands under the vehicle frame or under each axle spring seat (see figure 1).
4. Remove the tire and wheel assembly using procedures specified by the wheel manufacturer (see figure 2).

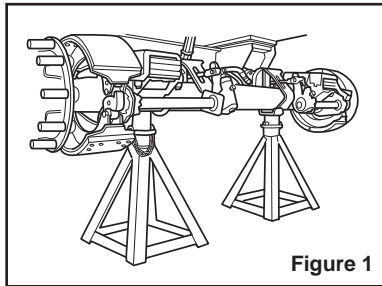


Figure 1

### INSPECT COMPONENTS

Check for the following:

- Loose, damaged or missing fasteners
- Loose, damaged or missing hubcaps

### INSPECT FOR LEAKS

1. Check that no lubricant is present around the hubcap or on the wheel.
  - If lubricant is present, investigate the cause and take corrective action.
2. Check that no lubricant is present on the hub, brake hardware or brake shoes.
  - If lubricant is present, check the inboard seal and replace as necessary.

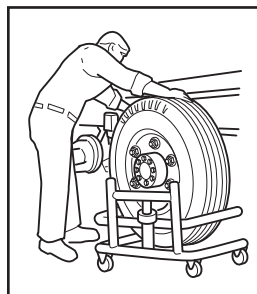


Figure 2

### INSPECT FOR PROPER LUBRICANT LEVEL AND CONDITION

1. Allow any air in the lubricant to escape prior to inspection. Visually inspect the lubricant for discoloration. Under normal conditions, the lubricant will darken. A white or milky appearance indicates water contamination.

2. Visually inspect the lubricant for foreign materials such as metal shavings, rust or other contaminants. A magnet can be used to detect any metallic materials that may be present in the lubricant.

3. If the inspection indicates contamination, service the wheel hub according to instructions in the PreSet® service manual.

**Caution:** Do not mix different types of lubricants. Only use lubricants approved by the seal manufacturer. For a complete list, refer to the Lubricant Compatibility Listing on [www.conmet.com](http://www.conmet.com).

**Note:** On wheel ends filled with semi-fluid grease, remove the hubcap and verify that sufficient grease is flowing through the bearing rollers and that the ends of the bearing are lubricated. Check to be sure there are no signs of contamination present. If additional grease is required, use the fill hole in the barrel of the hub to add additional grease until grease flows from the outboard bearing. Use caution not to overfill the hub as it could lead to improper venting and seal leaks.

### FUNCTIONAL CHECKS

Rotate the hub and check for free, smooth, and quiet rotation. If rotation is hampered, the hub should be serviced immediately.

### CHECK END PLAY

1. Remove the hubcap or drive axle shaft. Use an appropriate container to catch the lubricant. Attach the magnetic base of the dial indicator to the spindle. Touch the dial indicator stem to the hubcap mounting surface (see figure 3).

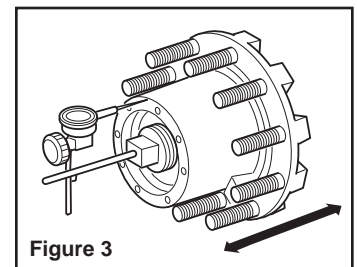


Figure 3

2. Grasp two wheel studs across from each other. Pull and push while oscillating the hub.
3. Measure the end play by calculating the difference between the minimum and maximum dial indicator readings.

**Caution:** If end play exceeds 0.006-inch (0.15 mm), service the hub.

**Next issue of the ConMet Connection:** Part Three in the three-part series on preventative maintenance for hub assemblies will cover recommended service at 5 years/ 500,000 miles or in conjunction with the second brake service.