

PreSet Hub Installation Procedures

CAUTION! Failure to fill the hub with the correct amount of lubricant can cause premature failure of the PreSet hub assembly.

IMPORTANT! Use the Proper hubcap for the type lubricant you intend to use.

1. Use only clean parts for service. If light corrosion has formed on the spindle, it is important that you remove it and thoroughly clean the spindle before beginning installation.
2. Lubricate the bearings using the same lubricant that is used in the wheel end. Lubricate the inner lip of the seal. Apply a light coat of grease to the spindle to prevent corrosion. Be sure to cover both the bearing and seal journals.
3. If this is a re-installation, the seal must be replaced. Be sure to follow all manufacturer's instructions, including use of the correct seal installation tool. Lubricate the seal bore in the hub and outside diameter of the seal before installation.
4. Lubricate the inside diameter of the seal with a light film of oil and install the PreSet hub all the way onto the spindle. Allow the temporary plastic alignment sleeve, if present, to be pushed out of the PreSet hub as it is installed onto the spindle. If an alignment sleeve was pushed out, it can be discarded. Once the hub is on the spindle, **do not remove the outer bearing**. Removing the outer bearing may cause the seal to become mis-aligned, resulting in premature seal failure. If the outer bearing must be removed, the hub must be supported to prevent seal misalignment.
5. For one-piece spindle nut systems like the Pro-Torq® or Axilok®, torque the nut to a minimum of 250 ft. lbs. **Do not back off the spindle nut**. Engage any locking device that is part of the spindle nut system. If the locking device cannot be engaged when the nut is at 250 ft. lbs., advance the nut until engagement takes place and the nut is locked. If a double nut or jam nut system is being used, torque the inner nut to 300 ft. lbs. **Do not back off the spindle nut**. Advance the inner nut, if necessary, to install the locking ring. Install the outer nut with 200 ft. lbs. of torque. Be sure to engage any locking device. ConMet does not recommend a one-piece "castellated" type nut system for use with PreSet® hubs.
6. Install the hubcap. A ConMet PreSet hubcap, or approved equivalent, is required to aid in identification of the assembly in the field, and to ensure adequate venting. The hubcap bolt holes must be free of debris, such as silicon gasket sealer, to ensure that the bolts will tighten properly to avoid leaks. Torque the hub cap bolts to 12 to 18 ft-lbs. Always use new gaskets (see ConMet Technology Bulletin No. ENG-02-98 for more details on hubcap assembly.) Use flat or split type washers. Do not use star type lock washers.
7. Use any oil from the ConMet approved lubricant list in manually adjusted system (Service Bulletin #10009945 Rev A). Fill the hub with oil. Hubs without oil fill holes should have oil added through the hubcap. It may be necessary to add lubricant more than once if high viscosity oil is used. The recommended fill is between the "full" line on the hubcap and the bottom of the rubber fill plug.

* If semi-fluid grease is used, contact ConMet for specific instructions and recommended fill levels

Torque Applied to Spindle Nuts

One piece nuts systems – 250 ft-lb minimum torque – Advance nut to engage locking system
Multiple piece nut systems – Inner nut 300 ft-lb minimum torque – Advance nut to install locking ring
Outer Nut 200 ft-lb engage locking system

This information is intended as a reference only. Consolidated Metco does not assume any liability in the event of improper use or mismatch of components. For additional information, see www.conmet.com.

Manual Wheel Bearing Adjustment Procedures TMC RP618

1. **Lubricate** the bearings with clean lubricant of the same type used in the axle sump or hub assembly.
2. Install the wheel hub and bearing onto spindle and **Torque** the inner adjusting nut to **200 ft-lbs** while rotating the hub assembly.
3. **Back off** the inner adjusting nut one full turn. Rotate the wheel.
4. **Re-torque** the inner adjusting nut to **50 ft-lbs** while rotating the wheel hub assembly.
5. **Back off** the inner adjustment nuts as per chart below.

Axle Type	Threads Per Inch	Final Back Off
Steer (front non-drive)	12	1/6 turn*
	18	1/4 turn*
	14	1/2 turn
	18	
Drive	12	1/4 turn
	16	
Trailer**	12	1/4 turn
	16	

6. **Install** the locking washer.
7. **Install and torque** the outer jam nut as per chart below. (Be sure to install or activate any locking device.)

	Nut Size	Torque
Steer (front non-drive)	No Jam Nut Install Cotter Pin	
	Under 2-5/8"	200-300 ft-lbs
Drive	Dowel Washer	300-400 ft-lbs
	Tang** washer	200-275 ft-lbs
Trailer***	2-5/8" and over	300-400 ft-lbs

8. Use a **dial indicator** to verify acceptable endplay of .001"- .005"
(NOTE: If end play is not within specification, readjustment is required.)

* Single Nut

** Positive adjustment wheel bearings (a product of Rockwell International), use 250- 300 ft-lbs on adjusting nut and jam nut. See Rockwell Field Maintenance Manual No. 14.

*** For single axle (13,000-19,000 lb capacity) with tang washers, consult manufacturer's specifications.

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