MANUAL ADJUST CONVENTIONAL HUB

Wheel Bearing Adjustment Procedures

Reference TMC RP618

WARNING: Failure to fill the hub with the correct amount of lubricant can cause premature failure of the ConMet hub assembly, which, if not avoided, could result in death or serious injury.

IMPORTANT: Use the proper hubcap for the type of lubricant intended to be used.

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 bearings** 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 hub.
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.
6. **Install** the locking washer.
7. **Install and torque** the outer jam nut as per chart below.
8. **Use a dial indicator** to verify acceptable end play of .001" - .005" (NOTE: If end play is not within specification, readjustment is required. Be sure to install or activate any locking device).

Axle Type	Axle Spindle Threads Per Inch	Spindle Nut Type	Final Spindle Nut Backoff	Jam Nut Torque (ft-lbs)
Steer (Front non-driven)	12	Single Nut with Cotter Pin	1/6 Turn	Install Cotter Pin to Lock Spindle Nut Into Position (From Step 6)
	18		1/4 Turn	
	12	Double Nut System With Bendable Tang Washer or Dowel Pin and Washer	1/3 Turn	200 - 300
	14		1/2 Turn	
	18			
Drive	12	Double Nut System Dowel Pin and Washer	1/4 Turn	300 - 400
	16			
	12	Double Nut System With Bendable Tang Washer	1/4 Turn	200 - 275
	16			
Trailer	12	Double Nut System With Bendable Tang Washer or Dowel Pin and Washer	1/4 Turn	200 - 300
	16			

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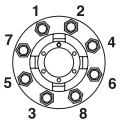
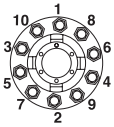
Torque Specifications

Item	Measurement	Torque (ft-lbs)	Notes
Ball Seat Wheel Nut	3/4 - 16 1 1/8 - 16	450 - 500 450 - 500	Always tighten the top nut first or pilot damage may result. Do not lubricate the faces of the hub, drum, wheel, or on the ball seats of the wheel nuts. The last nut rotation should be with a calibrated torque device.
Hub Pilot Wheel Nut	M22 x 1.5	450 - 500	Always tighten the top nut first or pilot damage may result. Apply two drops of oil between the nut and nut flange, and two or three drops to the outermost second or third thread of the wheel studs. Lightly lubricate the wheel pilots on the hub. The last nut rotation should be with a calibrated torque device.
Drive Studs, Installation Torque	3/4 - 16 5/8 - 18 9/16 - 18 1/2 - 20	70 - 90 40 - 90 40 - 60 40 - 60	Torque value is for drive axle stud installation only. For drive axle flange nuts, see axle manufacturer's recommendations for proper torque.
Hub Cap	5/16 - 18	12 - 18	Minimum SAE Grade 5 fasteners, flat washers only.
Oil Fill Plug	1/4 NPT 3/8 NPT 9/16 - 18	20 - 25 20 - 25 20 - 25	 O-Ring Style
Bolt-On ABS Ring Screw	8 - 32 1/4 - 20	18 - 22 in-lbs 155 - 165 in-lbs	- -
Disc Brake Rotor Screw	M8 x 1.25 M16 x 1.5 1/2 - 20 9/16 - 12 5/8 - 11 5/8 - 18	18 - 22 190 - 210 100 - 120 130 - 150 190 - 210 210 - 230	-
Disc Brake Rotor Nut (Stud in Hub)	5/8 - 18	190 - 210	-
Drive Axle Flange Nuts			See axle manufacturer's recommendations for proper drive axle nut torque.

WARNING: Always tighten the top nut first to fully seat the brake drum on the drum pilot and against the hub face. See the adjacent diagram for bolt tightening sequence, and tighten in order from 1 through 8 or 10, depending on the bolt pattern.





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