

Automotive TechTips

TIMKEN
Where You Turn

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Maximizing bearing performance and life remains an objective throughout The Timken Company, from design teams and manufacturing associates to our field sales team and distributors. TechTips help you install and maintain Timken® bearings, seals and components to maximize their life and performance and the systems in which they operate. For more information regarding Timken automotive products and services, visit www.timken.com or contact your local Timken distributor.

REMOVING & INSTALLING A HUB UNIT BEARING



Timken continues to lead the hub evolution by manufacturing assemblies that are uncompromised in quality, reliability and consistency. Proper hub removal and installation procedures can enhance the performance and life of hubs, axles, wheels, brakes and other components. Following are general recommendations for removing and installing hub assemblies.

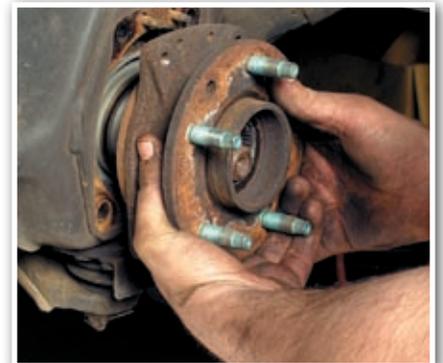
HUB UNIT BEARING REMOVAL

- 1 Raise vehicle and remove lug nuts and wheel.
- 2 Remove the brake caliper and rotor. The brake caliper should be supported, not hanging freely.



- 3 Remove the axle nut using an axle nut socket. Use the vehicle manufacturer's instructions regarding nut replacement.
- 4 If applicable, disconnect the ABS sensor wire from its mating connector point usually located in the wheel well

or on the chassis frame. Also, disconnect the sensor wire from the clips that are used to properly position the sensor wire in the wheel well or frame. Before removing, make a note of the proper orientation and positioning of the sensor wire and bearing.



5 Remove the bolts that attach the bearing to the steering knuckle. A puller may be required to remove the hub assembly from the knuckle. Care should be taken not to damage the knuckle or axle shaft.

6 Clean and inspect the steering knuckle. Use a fine file, wire brush, emery cloth or honing stone as appropriate to remove any debris, nicks or burrs.

HUB UNIT BEARING INSTALLATION

1 First, insert the new hub assembly into the steering knuckle. Check the positioning of the splines on the axle shaft as the hub assembly is inserted into the knuckle. *Note: Carefully position the two components so the splines are not damaged during this process. Never force the hub assembly on the shaft or strike with a hammer.*



2 Torque the knuckle-bearing mounting bolts to the vehicle manufacturer's specification using a torque wrench. An impact wrench is not recommended because it does not reliably impart the proper torque.

3 If applicable, connect the new ABS sensor that comes already attached to the new bearing to its mating connection point and clips in the wheel well and frame area.

4 Install the axle nut. Tighten the nut to the vehicle manufacturer's torque specification using a torque wrench. An impact wrench is not recommended because it does not reliably impart the proper torque.



5 Replace the brake rotor and brake caliper. All components should be clean from debris and burrs.



6 Replace the wheel and torque the lug nuts. Follow the vehicle manufacturer's recommendations regarding torque specification and retorquing requirements.

Additional information regarding Timken bearings, seals and hub assemblies can be found at www.timken.com or call 1-800-223-1954 then ask for Aftermarket.

WARNING Failure to follow this warning could create a risk of serious injury.

Proper maintenance and handling procedures are critical. Always follow installation instructions and maintain proper lubrication.

TechTips is not intended to substitute for the specific recommendations of your equipment suppliers.

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