

## Installing Wheel Seals in Adjustable and Pre-Adjusted Wheel End Systems

Always handle seals with care and use the proper tools and installation methods when installing seals. Always select the correct type and size of seal for your application and operating conditions. The following steps will help guide you through the process of wheel seal replacement.



### Step 1

Remove all rust, scale and old sealant from the axle shoulder. Use a file to remove sharp edges from the axle shoulder. Clean axle bearing journals; inspect for excessive wear. Clean spindle threads with a wire brush.

*Always follow OEM guidelines to determine when spindles need to be replaced.*



### Step 2

Drain old lubricant from the hub cavity. Thoroughly clean and inspect the hub bore. Remove all rust and scale paying special attention to the seal chamfer. Remove any burrs from this area.



### Step 3

Lean the wheel assembly at a 45 degree angle, or place it flat on the floor.



### Step 4

Clean the wheel bearing and check for excessive wear or damage. Always replace damaged bearings in complete sets. Lubricate the inner bearing, then place it in the bearing cup.



### Step 5

Insert the hub seal onto the correct seal installation tool.



### Step 6

Align the tool by placing the bearing guide into the inner bearing race.



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### Step 7

Using a 3 to 5 lb. hammer, drive the seal into the bore until the sound of impact changes and the tool rebounds.



### Step 8

Lubricate the seal I.D. with the same lubricant to be used in the hub.



### Step 9

Using a wheel dolly, align the hub assembly with the spindle. Carefully push hub forward until the seal I.D. passes the spindle threads, being careful not to deform the seal. Fill hub cavity with fresh lubricant; proceed to fully install the assembly.



### Step 10

Lubricate the outer bearing cone; place it in the cup. Install the adjusting nut and tighten prior to removing the dolly.



### Step 11

Using a torque wrench, adjust the wheel bearings to the vehicle manufacturer's or TMC specifications. Verify the final endplay with a dial indicator.

**⚠ WARNING** Failure to observe the following warnings could create a risk of serious injury.

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

Never spin a bearing with compressed air. The rollers may be forcefully expelled.

*TechTips is not intended to substitute for the specific recommendations of your equipment suppliers. Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.*

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