

Removing and Installing a Hub Unit Bearing

Driving conditions and installation practices can damage a worn hub. The symptoms below often indicate wheel bearing damage:

Snapping, Clicking or Popping

This noise is typically heard when making sharp turns and can indicate excessive bearing endplay from inadequate clamping. It can also indicate a worn or damaged outer CV-joint.

Grinding When the Vehicle is in Motion

The noise is normally heard when turning or when there is a shift in load and can suggest a loss of integrity such as roller or raceway damage. It typically suggests mechanical damage in a wheel-end system.

Knocking or Clunking

This noise is normally heard when shifting - either when changing directions or transitioning from accelerating to coasting. This noise can signal excessive play in the CV-joints or U-joints or excessive backlash in the differential gears, a condition not generally associated with bearings.

Humming, Rumbling or Growling

These noises normally associate with tire, electrical or drivetrain components. If bearing-related, the noise or vibration presents when driving in a straight line, but intensifies when slightly turning the steering wheel. Typically, the side opposite the rumbling is the defective side.

Wheel Vibration and/or Wobble

This sensation associates with a damaged or worn tire, wheel or suspension component or severe chassis misalignment. When related to the hub or bearing, this can indicate a mechanically-damaged bearing, or improperly torqued lug nuts.

Shudder, Shimmy or Vibration at a Constant Speed

This sensation associates with worn or damaged suspension components or tires that are

out-of balance or out-of-round. It is not normally indicative of hub or bearing damage.

Abnormal Side Pull When Brakes are Applied

Severe bearing looseness can cause excessive runout, making the brakes pulsate or pull. However, this usually indicates a defective caliper or equalizer and can also be a sign of worn brakes or rotors. The most common cause is a warped rotor due to the caliper not retracting.

Uneven Rotor or Brake Pad Wear

This normally indicates a bad caliper and/or a bad equalizer, which is not bearing-related. The most common cause is a warped rotor due to the caliper not retracting. Severe looseness related to a worn or damaged bearing can cause excessive runout, leading to uneven wear on the brake pads and/or rotor.