



## HOW TO TROUBLESHOOT PROBLEMS WITH WHEEL HUB ASSEMBLIES

Wheel hub assemblies can fail and require replacement for a number of reasons, making it important to troubleshoot problems if these warning signs occur. This troubleshooting includes listening for unusual noises, rotating tires to detect resistance or excessive amounts of play, and examining tires for abnormal amounts of wear and tear. Below are some proven troubleshooting methods can lead you in the right direction.

## **Unusual Noises**

Whistling, humming, howling, grinding and squeaking are all indicative of problems with wheel hub assemblies, making strange sounds a useful troubleshooting tool. Wheel hubs and bearings can make noise for a number of reasons, including a lack of lubrication or because of excessive friction, each of which is a serious problem that requires attention. Listening for unusual noises is best done when a vehicle is in motion, which makes this a simple troubleshooting technique.

## **Rotation Problems**

Lifting a vehicle and rotating a tire by hand is an effective way to determine if wheel hub assemblies are functioning properly. Applying lateral pressure while rotating the tire can reveal play in the wheel bearing which can be indicative of damaged bearings. Hand rotation is not 100% effective at troubleshooting maintenance issues, but it will give you a good indication of potential problems.

## Tire Wear & Tear

Abnormal wear and tear on tire treads can be indicative of multiple mechanical failures and maintenance issues, including worn or damaged wheel bearings. Physically inspecting tires by looking for abnormal wear patterns is a straightforward process that can help you hone in on trouble spots, without making you spend hours looking for root causes. If tires show the signs of uneven wear, it is time to inspect wheel hub assemblies.

Troubleshooting problems with wheel hub assemblies is an important process that can help correct minor issues before they turn into major problems that can cause accidents or breakdowns. Unusual noises, rotation problems and excessive wear on tires are all effective warning signs.