how to replace wheel bearing

Replacing a wheel bearing is a straightforward process that can be done in less than an hour. If you have access to the correct tools, the job should take no longer than 30 minutes.

Before you begin repairing your car's wheel bearing, it's important to determine if your vehicle has a "sealed" or "open" bearing. Sealed bearings have no openings on either side of the axle hub, while open bearings have openings on both sides of the axle hub. Both types come with grease fittings on either side of the hub, but only open bearings are meant to be greased regularly.

In most cases, it's recommended that you replace both inner and outer bearings together. This ensures that your wheels will run smoothly for years to come. You'll need one new inner and outer bearing for each side of your vehicle's wheels.

Locate the hub. Remove the brake caliper and the rotor. Securely support the vehicle.

The front wheels use a spindle that has bearings on both ends. To remove the bearing, you must remove the brake caliper and rotor first. You can do this by removing the caliper bolts and using a screwdriver to pry off the caliper bracket. Then use a hammer and chisel to knock out the rotor bolt.

You may want to support your vehicle before removing the rotor so that it does not damage other parts of your car or fall on someone below it. Remove any remaining brake pads from their brackets so that they won't fall out of place when you remove them later after installing new bearings.

After removing everything around it, remove one end cap from

each spindle with a socket wrench (large socket). If you find it difficult to remove, spray some penetrating oil into each socket before inserting it into each end cap again and turning it counterclockwise until free from vibration – this will ease removal from vibration during driving – no more noises!

Unbolt the hub from the steering knuckle.

Remove the old bearings and seals if they are not reusable. Inspect all parts for damage, especially the races. If any parts are damaged, replace them with new ones.

Clean out all metal chips and debris from inside the hub recesses and outer race areas. Use a wire brush or compressed air to clean out any dirt or grease from inside the hub bore and outer race area of each bearing. Clean all surfaces thoroughly with a solvent cleaner, such as brake cleaner or mineral spirits.

Lubricate new bearings with a good lubricant, such as anti-seize compound or engine oil (SAE 30). Apply about two drops into each bearing bore and one drop into each outer race area of each bearing. Tighten the new bearings by hand until snug against their respective races; then tighten an additional quarter turn with a socket wrench or rachet handle.

Inspect the bearings for a flat spot or damage to their outer surface.

Before inspecting the bearings, inspect the wheel hub for damage. If there is any evidence of damage, such as cracks or rust, replace the hub. The hub must be in good condition for the bearing to operate properly.

Inspect the bearings for a flat spot or damage to their outer surface. If you find either one of these conditions, replace both bearings in that wheel assembly at once.

If you find no evidence of damage and one or both bearings are making noise when you rotate them by hand, they may still have some life left in them; however, they should still be replaced soon because they will eventually fail completely and cause more costly damage if you wait too long.

Pack bearings with grease, and set into place.

You can set the bearings into place by hand or use a bearing press, which will make the job easier.

You'll want to pack the bearings with grease before installing them. This helps keep dirt and dust out of the bearing during assembly, and provides lubrication as you spin it.

The easiest way to apply grease is with a syringe (which is like a small tube). Once you have the bearings in place, squeeze some grease into each bearing until they're completely full.

If your bearings are pre-lubed and packed with grease when they arrive, skip this step.

Install new seals.

To install the new seals, first clean the axle hub and seal bore with brake cleaner. Then apply a thin coat of grease to the outside edge of each seal, and slip them into place. Install the new cotter pin, if one is used, and torque it to specifications.

Hold the wheel hub while you tighten the lugs or nuts evenly to manufacturer's specifications. When you're done, check for

free movement of each wheel before driving the vehicle.

Reinstall hub and rotor.

If the rotor is not damaged, reinstall it in the reverse order of removal, being careful to align the splines on the hub with those in the brake disc. If necessary, use a thin feeler gauge between the smooth edge of each spacer and its mating surface to determine when they are seated properly.

Mount caliper back on knuckle/axle housing.

Install retaining bolts and tighten them just enough to keep caliper from moving around, but not so much that you distort the brake pad or cause it to bind against anything inside the caliper.

Knowing how to change your own wheel bearings can save time and money.

A wheel bearing is a device that allows the wheel to spin smoothly on the axle. When the bearings fail, they can cause an annoying grinding noise while driving. In some cases, the noise may be loud and obvious, but in others it may be soft and subtle.

If you hear a grinding sound when you turn your steering wheel or when you hit bumps in the road, this could be a sign that your wheel bearings need to be replaced.

Make sure you have all of the tools necessary before starting your project. You will need wrenches, sockets, an impact wrench and possibly an air compressor if removing your wheels from the hub requires extra force or power from above.

Replacing a wheel bearing is not too difficult to do with the

proper tools. If left unrepaired, edges of the inner race and hub can cause grooving on the surface of the outer race and bearings will fail prematurely. Time and money are saved by replacing the entire assembly rather than individual parts.