



## Removal and Replacement of rear wheel bearing hub assemblies

on an 1985 Corvette (C4) with no anti-skid wheel sensor.

by Jack A. Earl & John Parker

If your Corvette rear wheel/tire assembly has too much movement or you've been told by an alignment shop that your rear wheel bearings need replacement don't worry. The replacement isn't too difficult and can be accomplished in half a day. The bearing hub assemblies are about \$120 for each side.

Please be safe doing a job like this! Besides smashed fingers, scrapped knuckles, and bruised arms there is always the risk of the car crushing you to death. In other words, use your brain and be safe.

### SPECIAL TOOLS NEEDED

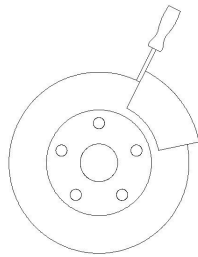
1/2"-drive x 36mm socket (for axle nut)

Torx #55 (for bearing hub bolts)



### REMOVAL (These steps are for one side)

- 1) Secure front wheels so the car won't roll off with you underneath it (that would hurt).
- 2) Loosen (but do not remove) the five lug nuts on the rear wheel.
- 3) Jack up car and secure on jack stands (this is much easier with a floor jack placed on each side of the car).
- 4) Remove the lug nuts and rear tire.
- 5) Place transmission in neutral.
- 6) Remove cotter pin and locking retainer.
- 7) Insert a screwdriver into disc vent and turn rotor against caliper.



- 8) Loosen nut and remove nut and washer with 36mm socket.



- 9) Remove the inserted screwdriver.
- 10) Remove calipers bolts (2 each).
- 11) Tie up caliper with baling wire to prevent tension on brake line.
- 12) Slide off the brake rotor.
- 13) Remove three bolts holding wheel bearing hub assembly (easier said than done!).

Notes:

This is the most difficult part of the job.

They are very tight! We had two people with one person using their foot on the breaker bar. This task is much easier with two people.

The drive shaft can be rotated so the U-joint is positioned to allow access to the Torx bolts.

I had to use an assortment of 1/2"-drive extensions and a swivel.



- 14) Once the three bolts are removed the bearing assembly will slide right off. There is a little maneuvering because of the parking brake assembly and the parking brake cable.

### **BREAK TIME**

Take a short break and savor the accomplishment.

### **INSTALLATION**

- 1) Wipe the splines on the axle so they are clean.
- 2) Place a small amount of grease on the splines, the axle threads, the circumference of the bearing assembly where it contacts the emergency brake assembly (this is to help with the installation).
- 3) Install the bearing assembly (don't forget to hook up the parking brake cable if you disconnected it). This task is a little tricky due to the return spring on the emergency brake assembly. I just tilted and rotated the bearing assembly during the installation.
- 4) Start one of the Torx bolts (don't forget the washer). This task is a little challenging because the bearing assembly and parking brake assembly have to align just perfect. Do not tighten the bolt until the other two are installed.
- 5) Once all three bolts are installed, torque the three Torx bolts to 66 ft-lbs.
- 6) Slide the brake rotor back on.
- 7) Reinstall the brake caliper and tighten the two bolts.
- 8) Insert a screwdriver into disc vent and turn rotor against caliper.

- 9) Install the axle washer and 36mm nut.
- 10) Torque nut to 164 ft-lbs.
- 11) Install locking retainer and cotter pin.
- 12) Place wheel back on and start the five lug nuts (lightly snug the nuts).
- 13) Lower the car back on the ground.
- 14) Torque the five lug nuts in a criss-cross pattern to 100 ft-lbs.

### **BREAK TIME**

Take a short break and savor the accomplishment. Breaks are important in life. Congratulate yourself for doing a good job and saving yourself a little bit of money.

This job is a lot easier than the C3 Corvette! I plan to write an article on how to change the C3 (1963-1982) rear wheel bearings in the future. I think the Chevrolet Corvette Engineers did a great job when they designed the C4 Corvette suspension.

