Front Disc Brake Service

A How-To article by Alan Trimble, batauto.com Associate Editor

Does your car make awful grinding or squealing noises every time you apply the brakes?

Does your steering wheel shake like crazy when the brakes are applied?

If you answered "yes" to either of the above questions, your front brakes are probably in need of service.

There's no need to panic. Front disc brakes can be serviced by nearly anyone, provided the proper tools and methods are used.

Follow along as we replace the front brake pads and rotors on a 1992 Chevy Cavalier.

1. Raise the front end of the car and support it with jackstands. Use a quality jack and stands. Consult your owner's manual for proper jacking points.

2. Remove the wheelcovers and wheels.

3. Remove the caliper bolts. In this instance, a 3/8" Allen head socket is needed. Other cars may use a Torx head fastener or a conventional hex bolt.

4. Remove the caliper. Remove the brake pads from the caliper. Slide the rotor from the wheel hub. Remove the caliper pins from their bores. Inspect the caliper pin bushings, caliper piston dust seal and the flexible brake hose for wear or damage. Replace worn or damaged parts.

Note: If the rotors have never been removed before, there may be a small "zip nut" holding the rotor to the wheel stud. Cut the zip nut off and discard it. Its sole purpose is to prevent the rotor from falling off during vehicle assembly.

5. Using a large C-clamp, compress the caliper piston.

NOTE: If the your vehicle is equipped with ABS, **open the bleeder screw before you compress the caliper piston!** This will prevent contamination of the ABS Hydraulic Control Unit.

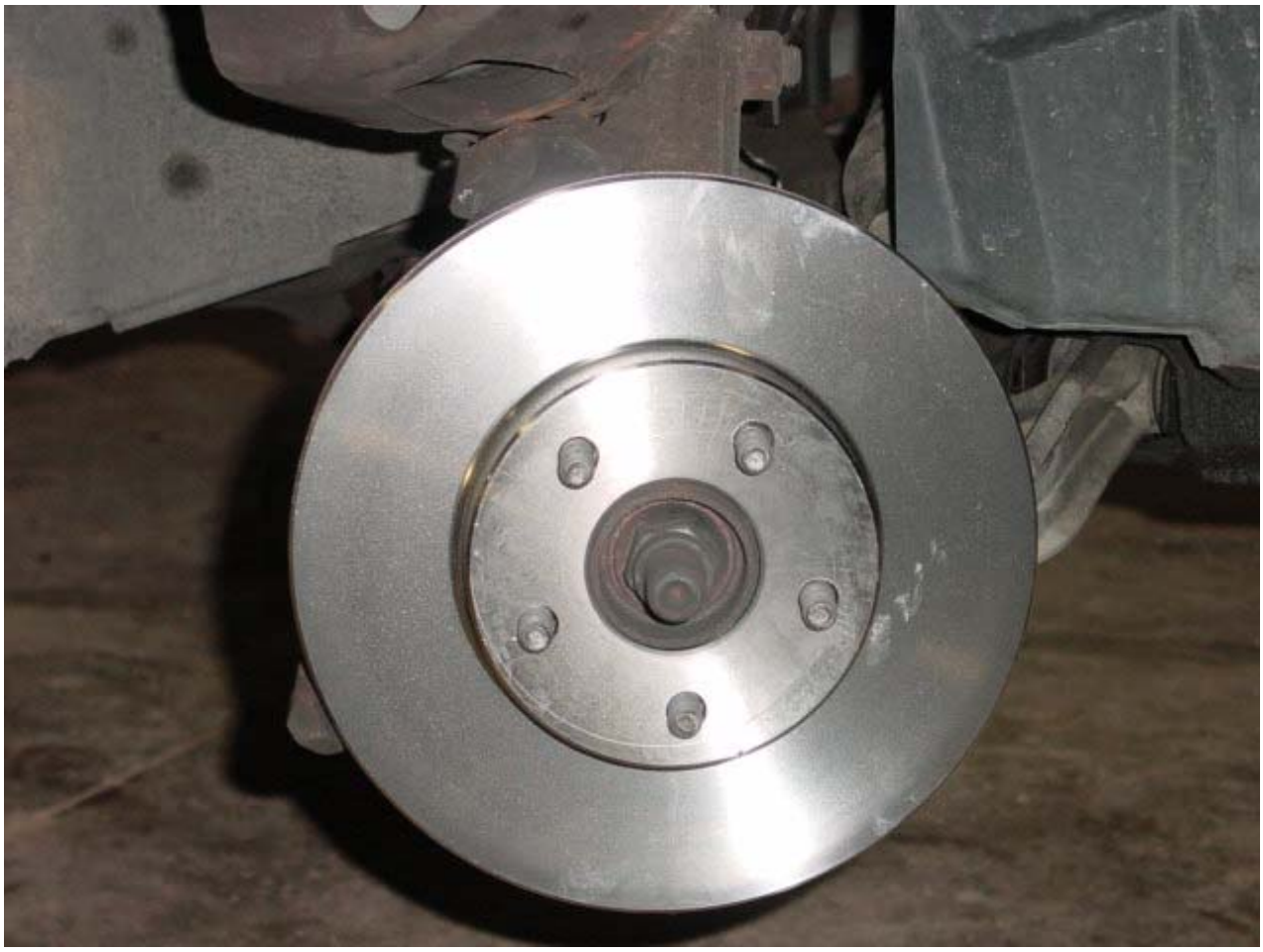
6. Lube the caliper pins and bushings with a synthetic grease. Shown above are (counter-clockwise from top) Sta-Lube Synthetic Brake Caliper Grease, GM Silicone Lubricant (in white packet) and Motorcraft Silicone Brake Caliper Grease and Dielectric Compound. Any of the above are acceptable. **DO NOT** use petroleum based grease. Petroleum based grease can cause the caliper bushings to swell. This binds the caliper and causes premature brake pad wear.

7. Inspect the rotors. This car had one scored rotor and both rotors were worn to within .060" of the discard specification. Both rotors also measured .009" runout, which caused a nasty vibration when braking. While the rotors could have been saved via machining, the owner opted to install new rotors for years of trouble-free braking.

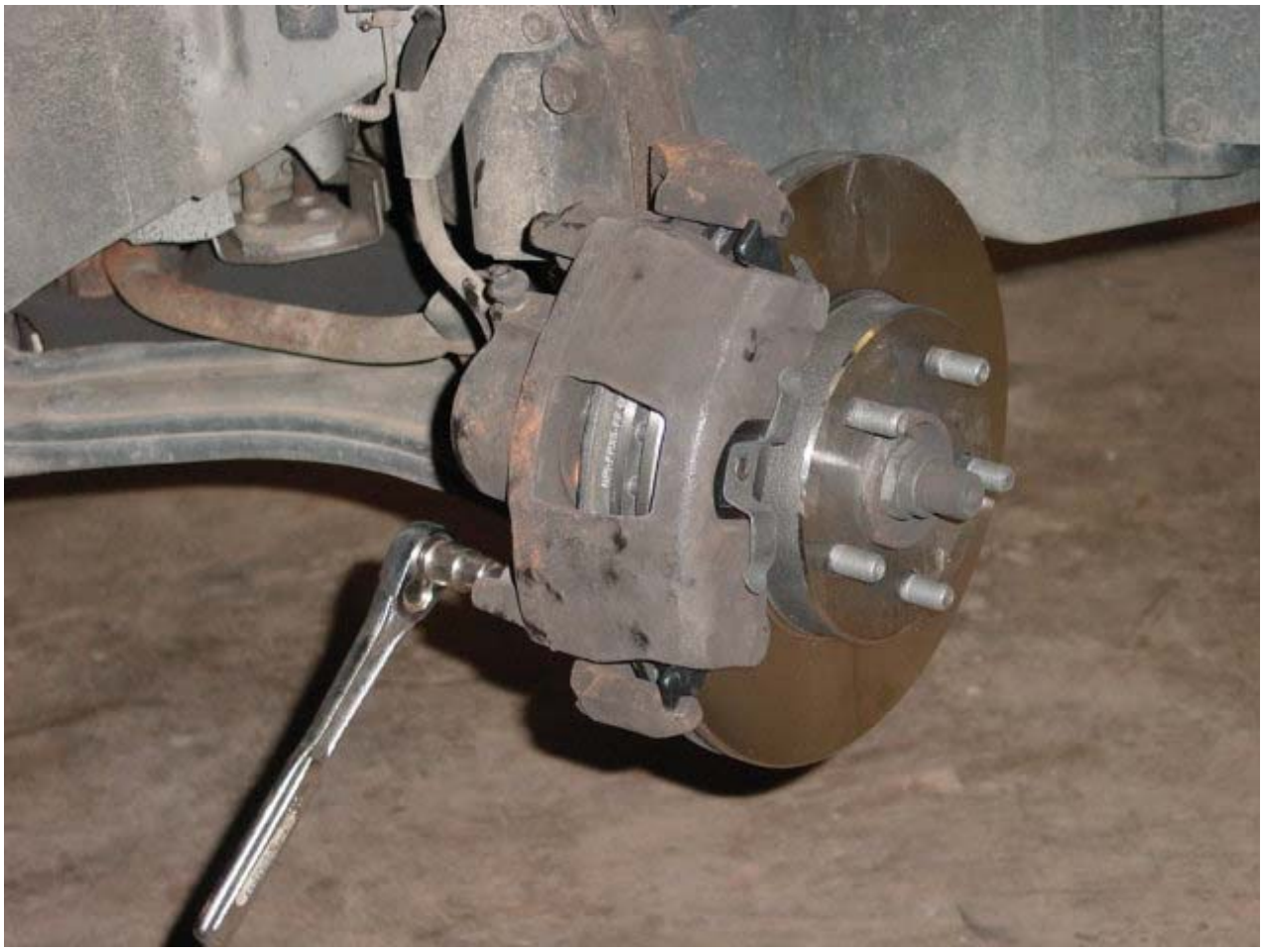
Raybestos brand parts were chosen for their quality and value. CRC brand Brake Parts Cleaner was used to remove any trace of machine oil from the new rotors.

Raybestos Elite brake pads come with anti-squeal shims pre-installed. If your replacement pads are not equipped with shims, ask your parts counterperson about a shim kit. Many brake parts manufacturers sell shim kits. Its usually a better value to buy the pads with shims installed, as opposed to buying a shim kit and a set of brake pads.

8. Match the old outboard pad to the new one. Note the location of the wear indicator. If the incorrect pad is installed (Right pad is installed on Left side) the wear indicator will not "chirp" when the pads are worn.



9. Clean the new rotor with Brake Parts Cleaner. Clean the wheel hub with a wire brush to remove any rust or corrosion. Install the new rotor.



10. Install the new pads on the caliper, then install the caliper. Torque the caliper pins to manufacturer's specification. Clean the rotor once again with Brake Parts Cleaner to remove any fingerprints or traces of oil/grease.

11. Repeat the procedure for the other side.

12. Install the wheels and torque the lug nuts to specs.

13. Install the wheel covers.

14. Pump the brake pedal at least 5 times to seat the caliper pistons against the brake pads.

15. Lower the car to the ground.

16. Check the brake fluid level. Add fluid as necessary.

17. Road test the car. Brake gently at first, then make 5-10 stops using moderate pedal pressure. This will "break in" the new pads and help reduce brake noise.

The above information is offered as a guide **ONLY.** When in doubt, consult your Manufacturer's Service Manual or a professional automotive technician.

Your feedback is GREATLY appreciated!! Please email your comments to: Contact Us

96 & newer vehicles are OBD2 systems
and REQUIRE A SCANNER, unless otherwise stated.
Warning: Please check for manufacturer specific codes and
confirm the trouble code descriptions with an appropriate manual.

Disclaimer: We cannot guarantee the accuracy of all information.
Please confirm the information with an appropriate manual
We try and make them as accurate as we can, but sometimes we all make mistakes.

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