

CONSUMER'S GUIDE TO GETTING YOUR BRAKES SERVICED

by Rick Muscoplat

September 14, 2008

vehix.com

You see the ads all over the place—Brake Jobs \$99. You're probably wondering how a shop can do the job for such a low price. Or maybe you're wondering if you should trust your family's safety to a bargain basement brake job. Stop wondering. By the time you finish this article, you'll know everything you need to shop for a quality brake job. We'll show you the difference between real premium brake parts and economy brake parts disguised as the real thing. You'll learn the difference between a faulty caliper and one that just needs a little grease. Finally, we'll give you some maintenance tips that can save you a small fortune on future brake repairs.

Bait and Up-Sell

Can a shop really do a top-notch brake job for just \$99? Not really. A \$99 brake job "special" is usually a "come-on"—a way to get you in the door. It's not really bait-and-switch because you do actually get new brake pads installed for \$99. But once the wheels are off your vehicle, you can be sure they'll find extra parts that "need replacing." When all is said and done, that \$99 brake job will probably cost you about \$500. Sure, you'll get a "lifetime" warranty. But two years from now you'll be back for warranty work, and that will cost you another \$250. That's when you discover a quality brake job is all about parts quality (or lack of it).

All Brake Parts Are Not Created Equal

Brake parts on new cars have to meet minimum federal safety standards. So do the original equipment manufacturer (OEM) brake parts sold through dealers. Most consumers are shocked when they discover those same safety standards don't apply the brake parts sold by wholesale and retail parts stores. Those brake parts don't have to meet ANY standards. None. Nada. That means any manufacturer can make a low quality part and label it as a "premium" brake part.

Quality brake pads stop you on a dime. But quality pads cost a lot of money. Repair shops can buy "no-

name" brake pads for as little as \$15/set. They come in a box labeled "premium quality," so legally they're not misrepresenting anything when they tell you they're installing premium parts. But how much quality can a manufacturer put into a set of pads that wholesale for \$15 (retail price \$27.10)? I'll let you be the judge. Here's an actual comparison of four brands of brake pads for a 1999 Ford Taurus. Keep in mind that the retail price of genuine (OEM) Ford brake pads is \$89.98.

Quality pads also include noise reducing shims. If the shop quotes you an additional price for shims, sometimes as high as \$29/set, that's additional proof that you're not getting true premium pads.

Economy brake pads don't dissipate heat very well and excessive heat buildup is the enemy of good braking. It increases stopping distance, wears out rotors, and reduces pad life. It can even warp the rotor. Because of premature wear, the shops that install these economy pads know you'll be back in about 20,000 miles for more brake work. Sure, you'll get a new set of economy pads for free because of the lifetime warranty (their cost \$15). But you'll have to pay for the labor AND a new set of rotors—the rotors aren't covered by the lifetime warranty. Of course, you'll pay the full retail price for the rotors. Cost of this second brake job? Around \$250. See you in another 20,000 miles.

Rotor Runaround

So far we've addressed pad quality. But the premium-versus-economy issues apply to rotors as well. Here's a comparison of two "premium" labeled rotors for the same 1999 Ford Taurus. A genuine Ford rotor sells for \$135.70. The Wagner brand rotor (top in photo) retails for \$93.20, while the other premium rotor sells for \$21.24. The rotor at the bottom of the photo may be labeled as premium quality, but it's easy to see the difference. Just compare the thickness of the friction surfaces on both. The Wagner brand rotor has more metal—2½ pounds more. It also has more cooling vanes.

You can't see the differences in the metallurgical content, but you can sure feel them in actual driving conditions. The premium rotor stops faster, cools better, runs quieter, and resists warping better.

OEM rotors can usually be machined (turned on a lathe) one time. The current recommendation from most car manufacturers is to re-use the old rotor surface if it is in good condition, rather than machine away more metal. Since economy rotors are already short on metal content right out of the box, future machine isn't even an option.

The Caliper Caper

A brake caliper is nowhere near as complicated as some repair shops would have you believe. To understand how a caliper works, think of a opposite side of the rotor. During the whole clamping process, the frame of the clamp moves towards you. To allow that movement in a braking system, the caliper slides on sturdy pins. The sliding action is critical to clamping and un-clamping. If the caliper doesn't slide easily, it causes uneven braking and uneven pad wear that shows up as "pulling to one side" and premature brake wear.

Brake calipers are designed to work in high heat conditions while getting hit with water, salt, ice, and snow. To reduce corrosion, car manufacturers install rubber boots to protect the slider pins. If the boots get torn, water and salt work their way into the slide in bores and corrode the metal. That reduces the caliper's ability to slide smoothly. Even if the boots are intact, the grease can dry out and harden. But that's not a reason to replace the entire caliper. Any shop can either re-lubricate the pins or replace them at a fraction of the price of a rebuilt caliper.

The shops that sell \$99 brake jobs try to replace calipers on every job. Why? Because they stock "loaded calipers"—two brake pads and a caliper packaged as a single unit. Selling pads and calipers as a set is a great way for the shop to make extra profit, but it's all at your expense. Brake experts say that calipers last an average of 8-10 years. If yours aren't that old and the shop wants to replace them, ask why. If the reason is sticking or uneven wear, and lubricating the slide pins doesn't help, authorize the replacement of the pins or the caliper bracket. However, if the caliper is leaking brake fluid (a rare

occurrence), or the dust seal is broken, you must either replace the caliper or pay to have it rebuilt.

Smart Shopping

Now you know the difference between quality parts and no-name economy parts masquerading as premium. But even name brand manufacturers offer several grades of brake pads, shoes, rotors, and drums. No matter what your budget, the advice is to avoid economy pads, even from a name brand manufacturer. OEM is the minimum quality level you should install. That's known as "service grade." Top-of-the-line products are referred to as "professional grade." That's what you want. Here's a list of the most respected manufacturers of brake pads, rotors, drums, and hardware:

- Raybestos: www.raybestos.com/
- Akebono: www.akebonobrake.com/
- Wagner: www.federal-mogul.com/
- Bendix: www.bendixbrakes.com/
- Morse: www.morseauto.com/
- NAPA: www.napabrakes.com
- CARQUEST: www.carquest.com/
- Beck Arnley: www.beckarnley.com/

Contact several shops and ask them if they install any of the listed brands. If so, ask for an "out-the-door" quote on replacing your brake pads and resurfacing your rotors. The price should run between \$175 and \$250 and must include shims and lubricating the slide pins. Finally, ask if all their technicians are ASE Certified in brake repair. If your experience is like most consumers, you'll find that the chain operated brake shops resent this kind of inquiry. Stay away from shops that carry their own brand of brake parts (if the parts are so good, why hide the manufacturer's name?).

Once you find a shop that installs any of these name brand parts, visit the manufacturer's web site and read up on the different types of pads and rotors they offer. Some of their products may be certified by independent testing laboratories like B.E.E.P. or D3EA. Those are the brake components you want installed in your vehicle. Then talk to the shop and agree on exactly which pad they will install. A reputable shop will be happy to talk about installing a true premium part, and you'll be regarded as a smart shopper. You'll wind up with a quality brake job at a fair price.

Tips To Longer Brake Life

New brake pads and rotors have a “break-in” period. Experts recommend the 30-30-30 approach. Thirty slow steady stops, from 30MPH, with 30 seconds cooling time between stops. That break in will ensure longer pad and rotor life and the best stopping power. The worst thing you can do to new pads and rotors is overheat them by slamming on the brakes at 60MPH.

Brake fluid is the lifeblood of your brake system. It contains anti-corrosive additives and seal conditioners. Unfortunately those additives wear out. When that happens, moisture and acids build up in the system. Seals harden and leak, and critical anti-lock brake valves corrode and stick. Now you’re talking major league repair bills (\$1,000). To prevent this damage, have your brake flushed every two years. Brake fluid flushing costs about \$50 and is the best thing you can do for your brake system.

While it’s up on the rack for flushing, pay the technician to re-lubricate the slide pins.