

By: [stickshift](#)

Here's the link to the article on the website it was published on:

<http://www.canadiandriver.com/articles/pw/brakedust.htm>

Unsilently Brake Dust (and what you can do about it)

by Paul Williams

Have you seen the new BMWs? Great-looking cars. Too bad about the black wheels, though. Actually, it's not just BMWs, and if your car has four-wheel disc brakes, it's not just the front wheels. Brake dust is the culprit. For the past several years, car owners have been plagued with this corrosive, unsightly and seemingly unbeatable coating on their fancy alloy wheels. It even creeps out from behind wheel covers on conventional steel wheels.

What's the explanation? The dust is the result of friction between the brake rotors and your car's brake pads. While braking, the newer, softer brake pad compounds are displaced and end up coating your wheel. On some cars it's really bad.

Brake "dust" is actually a combination of carbon fibers, metal filings and polymer adhesives. It's the adhesive residues that unfortunately stick everything to the wheels. Leave our wheels unattended in this condition and the coating becomes acidic. It etches into the finish of your wheels, seriously damaging them, so it's not just an appearance issue.

There are three ways to control brake dust. The first is to clean your wheels frequently (or should I say continuously?). The second is to install dust shields, and the third is to try changing your brake pads. Let's look at each option.

There are a number of wheel-cleaning products on the market, but most are corrosive and require careful handling. They belong to the "spray on, hose off" family of products that never really seem to do the trick. You'll still have to use a sponge or brush to do a proper job. In my experience, a soapy car wash solution and a soft mitt works just as well. Just don't use the mitt for the rest of your car.

A highly regarded product specifically designed for cleaning wheels is P21S alloy wheel cleaner. It's definitely the product of choice for many owners of cars with high-end wheels. P21S is a water-based, acid-free detergent recommended by several major automakers including Audi, Porsche, BMW, Volvo and Mercedes-Benz. It works on every type of wheels and wheel coating on the market. You spray it on, leave it for a while, flush the dissolved brake dust with water, detail and dry.

Remember that after cleaning and drying the wheels you can wax them. Most alloy wheels, after all, are painted. They respond well to a coat of wax, which will act as a first line of defense against brake dust. Buff them up just like you would your car.

The second approach to controlling brake dust is to use dust shields. For many years, Florida-based Kleen Wheels has offered shields that fit between the brake caliper and the wheel. Installation is simply a matter of removing the wheel, fitting the shield against its inside surface and replacing the wheel.

The shields are made of an aluminum alloy and come in sizes to fit all model cars, sport utilities and vans. They are also available for aftermarket wheels. The shields are "turbo-vented" and directional, permitting air to properly reach the brakes for cooling.

This is an effective way of virtually eliminating the transfer of dust to your wheels. You may have some concerns, however, if your car is a high-performance model, where brake cooling in track conditions will be a priority. That said, shields are available for the full line of Porsches, BMWs and Jaguars.

In fact, Jaguar, Lincoln and Ford have supplied Kleen Wheels shields as standard equipment on several of their models. If you're worried about affecting your warranty by installing dust shields, call your dealer.

Of course, the dust shields will hide your calipers. If you're running anodized, painted or otherwise "show" calipers, you'll have to give that some thought.

Kleen Wheels dust shields are available through a range of suppliers. Try your local speed shop or call Marcor Automotive of Hamilton, Ontario at 1-800-263-8621. They're a large distributor of automotive products. Prices run between \$60-75 a pair. Additional information can be found at [www.kleenwheels.com](http://www.kleenwheels.com).

Marcor is also the place to order the P21S products if you can't find a local supplier (the wheel detergent is \$22.92 for a 500ml kit and \$29.49 for a one-litre refill, plus shipping). You're likely to find these products at your local German car dealership, but compare pricing if you go there.

The third strategy for reducing brake dust is to change brake pads. Specifically, the move to a Kevlar, or carbon Kevlar pad as made by companies such as EBC and Porterfield, may reduce black dust and improve braking. These companies are emphatic in claims for low dust, high stopping power and minimal squealing. Have a look at [www.ebcbrakes.com](http://www.ebcbrakes.com) or [www.porterfield-brakes.com](http://www.porterfield-brakes.com) for more details.

Another option is the PBR Metal-master or PBR Deluxe Plus. These Australian pads have a high metal content, with less carbon. Eric Racette, owner of Ottawa's Speedstyle Automotive Tuning, retails a range of these specialty pads.

"Like all things, you give and you get," he says. "Some of the softer pads have great stopping power, but they make a lot of mess. The harder pads can be effective, too, but they're hard on your rotors."

Mr. Racette agrees that a correctly chosen aftermarket pad can reduce dust and provide effective braking. Cost for a pair of specialty front brake pads for an Acura Integra, for instance, will range from \$40 for the PBRs to \$107 for the popular EBC Greenstuff. Porterfield R-4s pads can retail for over \$150. All prices are plus installation.

So there you have it. Wash the wheels, deflect the dust or replace the pads. Or learn to love black.