

Not All Brakes are Created Equal | Ceramic vs. Metallic Brake Pads

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February 24, 2020



It is impossible to overstate how important your brakes are to your vehicle. They are your first and most important safety device.

However, beyond knowing what they are, most people know surprisingly little about these essential items.

The components in your brakes that come into contact with your wheel rotors are called brake pads. Brake pads create the friction that brings your car to a stop. For this reason, they are often made of very durable materials.

However, brake pads do a lot of work. As a result, they wear down very easily and need regular replacement.

While many materials have been used historically in making brake pads, these days most vehicles use ceramic or metallic brake pads to get the job done.

When it comes time to replace the brake pads on your vehicle, you may be asked to choose between ceramic or metallic pads. Let's take a look at the differences between the two.

Metallic Brake Pads

Metallic brake pads, sometimes referred to as semi-metallic brake pads, are made up of somewhere between 30%-70% metals, depending on the manufacturer. Those metals include iron, steel, copper, and other alloys.

These brake pads are made up of graphite lubricant and a number of fillers in addition to these metals. The makeup of these compounds varies depending on the manufacturer and model.

The biggest advantage of metallic brakes is that they are excellent at conducting heat. This allows them to not only withstand more heat, but also to cool off more quickly.

However, they do have disadvantages in comparison to ceramic brakes. They are, by far, much noisier. This means they will be much louder while you are driving.

In addition, they also put more strain on the rotors than ceramic pads do. As a result, they produce much more dust and debris.

Ceramic Brake Pads

Developed in the 1980s, ceramic brake pads have steadily increased in popularity. These brake pads are made from the same material used in plates and pottery. However, the ceramic used in brakes is much more dense and rugged.

Ceramic brakes also contain copper fibers. This helps them conduct heat away from the wheel and increase friction.

Compared to metallic brakes, ceramics are very quiet when they operate. They give off very little sound when the brakes are being used.

In addition, ceramic brakes operate very cleanly. They don't kick up much dust—a constant

problem with the old asbestos brake pads. Ceramic brakes also function well in a wider range of climates and temperatures.

However, ceramic brakes are typically much more expensive than their asbestos or metallic counterparts. They also are less conductive than metallic brakes. This means that more heat is transferred into the rest of the braking system, which can wear that system down over time.

Also, ceramic brakes are not recommended for people who live in areas with extreme cold or for those who drive in racing conditions.

Ceramic vs. Metallic Brake Pads — The Verdict

At StrutDaddy's, we are committed to using only premium components. That's why we use only the finest ceramic brake pads on all of our brake jobs.

Our ASE-Certified technicians have seen a lot of cars and a lot of brakes. Our experience has shown ceramic brakes to be longer lasting, quieter, and producing less brake dust than other materials.

“Fix it once, fix it right” is the philosophy we live by. Part of that philosophy is using only the best components. When it comes to brakes, that means high-quality ceramic brake pads.

We stand by the quality of all of our services with the StrutDaddy's Service Guarantee. Repairs are guaranteed up to 36 months or 36,000 miles.

Don't wait to service your brakes! Use our [handy online service request form](#) or call us at (336) 599-4911 to schedule an appointment.



Written by Strut Daddy's