

febi brake disc shields



Protecting vital safety components

The purpose of a vehicle's braking system is to create the necessary braking force in order to reduce the vehicles speed and to prevent it moving, when parked. The vehicle's braking system is required to give a rapid, balanced response when required, resulting in a short stopping distance, with even braking effect and precise control. It should also be resistant to road debris and corrosion, giving high reliability and durability.

There are two main types of friction brake used on vehicles; predominantly disc brakes are used on most of cars, whereas drum brakes are generally used for the rear brakes of smaller passenger cars. A characteristic of disc brakes are that, they have a much greater resistance to heat loads and heat dissipation capacity, in comparison to drum brakes. The direct contact of the friction material with the rotating brake disc, results in maintaining a high braking torque for a longer period. This means that they do not undergo mechanical distortion during operation, due to temperature build up compared to drum brakes. In addition, rapid distortion is prevented, by the uniform distribution of the friction material pressure on the brake disc's contact surface. However, there is a risk to the exposed brake disk surface from road debris and rapid temperature changes, which can lead to brake disc fractures and distortion. Therefore, protective shields are mounted behind the disc brake assembly protecting the brake discs, pads and hoses from constantly being exposed to dirt and dust contamination, from both the road and the friction material, that is produced as the pads and discs wear while being used. This consequently helps to maintain the vehicle's braking performance.

In turn, they also contribute to the protection of hot discs, by reducing the amount of sudden cold water that can splash them and cause them to distort or crack, whilst driving in wet road conditions.

They also protect the electronic components in the brake system, such as the wheel speed sensors, brake pad wear sensors and the associated wiring, from heat and debris, along with all the associated steering and suspension components that are close to the disc brake assembly.

This protective part of the disc brake system, along with other parts of the brake system are subject to evaluation, during routine maintenance and the regular vehicle inspection procedure mandated by national or subnational governments in many countries, in which a vehicle is inspected to ensure that it conforms to regulations, governing safety and emissions.



If the shields deteriorate due to corrosion or distortion, this can be a cause of the following:

- Premature wear and corrosion of the brake discs.
- Possibility of excessive contact with external factors, such as water and road debris, due to shield material losses caused by corrosion.
- Risk of damage to any of the fixings to the suspension and steering joints.
- Noise due to distortion, causing contact with rotating or moving parts.
- Excessive heat from the brakes affecting rubber or plastic components, causing melting or burning, if the shield is missing or completely corroded.



febi brake disc shields are manufactured from pressed steel and are precisely formed to match OE. The steel is treated with a galvanized coating and then painted to give excellent anti-corrosion protection. Therefore, an efficient and effective brake disc shield prevents the above-mentioned causes and extends the service life of the braking system, providing safety for the driver and other road users.



Rely on tested, OE matching quality replacement parts from febi. The entire range of replacement disc brake shields can be found at: partsfinder.bilsteingroup.com.

The febi brand is part of the bilstein group, the umbrella organisation for several other strong brands. Further information is available at: www.bilsteingroup.com.

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