



## Brake Noises 101

When it occurs, brake noise may be irritating. However, some sounds are a very normal part of brake operation, while others may indicate a problem. How can you tell when noises from your vehicle's brakes are something to ignore or a problem that needs attention.

### Things to observe:

- Where does the brake noise seem to originate?
- At what speed does the noise occur?
- Does it happen when the brakes are cold, or when you have been driving for a while?
- Does it happen after multiple stops, or only after the first few stops?
- Does it happen in wet conditions (such as rain, humidity or after a car wash)?

Environmental concerns with asbestos have prompted automobile manufacturers to switch to semi-metallic brake linings, which provide excellent brake performance. However, because of the metal-to-metal contact between semi-metallic pads and the brake rotor, these pads may produce more noise than pads with asbestos or organic linings. As a result, some people may think the noise they hear indicates a problem with the braking system. A certain amount of noise from brake components is not unusual. More recently we have seen the introduction of ceramic brake materials which are a more superior product, but also more costly.

The following are generally considered characteristic of all braking systems. These noises do not generally indicate any malfunction of the braking system or improper operation, but may indicate it is time to perform normal brake service.

**Loud squeal noise** – Some disc brake pads come with wear indicators. If you have a continuous audible noise, present when driving but disappears when braking, then the pads probably need replaced.

**Grinding noise** – This noise may occur during the first few stops on rear drum brakes and on some front disc brakes due to the formation of surface corrosion. If the noise disappears after a few stops, it does not indicate a problem. If it does not disappear or the brake pedal pulsates you will probably need brake work right away.

**Trace squeak/squeal noise** – Semi-metallic brake linings may emit a soft squeak or squeal noise at medium speeds under light-to-medium braking. It may occasionally occur during the first few stops with cold brakes (especially in the morning), or in conditions of rain or high humidity.

**Groan noise** – It is perfectly normal for some ABS systems to make a groaning noise when the ABS is activated. On some vehicles equipped with automatic transmissions, a slight groan may be heard from the brakes just as the vehicle comes to a complete stop or when allowing the vehicle to creep forward slowly from a stop.



**ABS self-check** – If you hear a small click and feel slight brake pedal movement when first starting to drive (at 5-10 kilometers per hour), this is most likely the Anti-lock Braking system properly performing a self- check to ensure that the system is functioning properly.

If your vehicle develops brake noise, and you feel unsure about it's meaning, you should always take it to a qualified shop for an inspection and accurate diagnosis of your vehicle's brake system. Be aware of the various qualities and types of brake lining, drums and rotors that are available for your vehicle, while less costly brake components may provide satisfactory braking performance, the consequences may be noisy brake operation.

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