

Brake service on modern vehicles can involve a variety of different procedures, as various systems influence the approach a technician can take. Proper inspection and diagnostic processes are critical components of brake service. Checking what specific technology is equipped in each vehicle is also important and can make the difference between a routine brake service and an in-depth repair.

The following brake system tips will help refine your brake inspection and service skills while describing unique features that make modern-day brake service more intricate.



Perform a thorough disc brake inspection.

While measuring brake pad thickness is a good start, proper brake inspections require a complete check of all braking system components. Taking extra time to ensure customer satisfaction and prevent safety hazards can help bring your shop's reputation to the next level.

Begin every brake inspection by gathering information about the symptoms experienced by the driver and verifying the customer's concern. Remove the wheels and properly examine the inboard and outboard brake pad wear and thickness. Factors such as frozen caliper pistons or seized brake hardware can cause uneven wear to brake pads. If you notice uneven wear, remove the caliper and further inspect why the brake pads have worn unevenly. Next, verify the condition of the slide pins and dust seal on the caliper. Finally, check the condition of the brake fluid in the master cylinder and the hoses for cracks and wear. Never skip a step or rush during the brake inspection process, as brake safety is the number one priority regarding vehicle repair. Detailed brake inspections can also increase service bay turnover time by determining the proper repairs needed up front.

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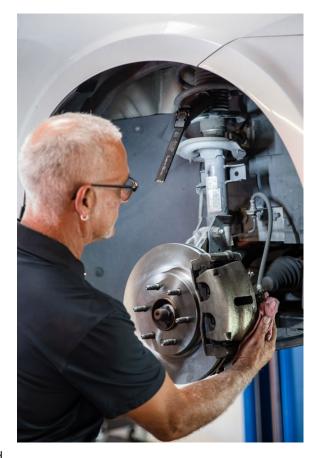
Diagnose braking issues efficiently.

A step-by-step approach is critical when searching for the root cause of a braking issue. If uneven wear on an inboard brake pad is evident, but the brake caliper piston retracts normally, begin checking for corrosion on the caliper slide pins. If corrosion is found or a pin appears frozen, you must properly clean and regrease or replace the affected caliper/bracket. If you fail to remedy the frozen slide pin, the customer may come back with repeat brake concerns, or worse. If rubber hoses and seals are swollen, replacing these components is not enough. To avoid a repeat failure, the contaminated brake fluid must be flushed out and replaced before replacing the rubber components.

3

Complete the brake service entirely.

To properly service disc brakes, you should not only replace the brake pads but also resurface or replace the rotors. In many cases, it is more cost-effective to replace brake rotors. Duralast rotors offer original equipment (OE) or better stopping power to ensure overall satisfaction and



brake quality. Make sure to clean caliper brackets and slide pins, and to replace the same components on both sides. When there is a caliper failure, it is good practice to replace them on both sides of the vehicle. While servicing brake calipers, it may be necessary to replace the brake pads and rotors. This is to ensure even stopping power on both sides of the vehicle. Work with your repair shop's service advisor to help explain what needs to be replaced on the braking system. Make sure to explain why each part failed and why replacing them is more beneficial overall.

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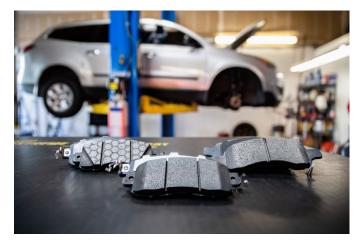
Choose the correct brake pad material.

When selecting replacement brake pads, several compounds are available. The type of brake pads you choose depends on the original brake pads installed, as well as the particular vehicle application. The vehicle's specific function and driver needs should also be considered when selecting the best fit. Overall, ceramic brakes are more durable and provide a higher amount of stopping power at normal temperatures. Semi-metallic brakes can be used in higher-performance applications but tend to wear out quicker than ceramic brakes. Duralast offers a selection of replacement brake pads that are of OE quality or better.

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Put the vehicle into service mode.

Putting the vehicle into service mode is essential when working on vehicles equipped with electronic parking brakes. Certain vehicles will apply the electronic parking brake when a driver or passenger door is opened. Never remove an electronic parking brake-integrated caliper without the vehicle in service mode, even if it is just a brake inspection. Failure to do so will result in caliper damage and loss of the system's brake fluid. The most common way to put a vehicle in



service mode is through the radio control prompts or with a scan tool. Once you verify the system has been properly put into service mode, you can begin rear brake service on that vehicle.

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Don't overlook emergency braking features.

As Advanced Driver Assistance Systems (ADAS) become more popular, the emergency braking features do as well. While these systems are evolving, so are customer complaints regarding braking concerns. A brake problem can be caused by a camera problem or a park sensor problem. If these systems aren't calibrated correctly, you may need to dive further into diagnosis. These problems can sometimes be fixed by recalibrating or cleaning the cameras, but this isn't always the case. Always use the latest diagnostic equipment available to you and verify that the vehicle's module is operating on the newest software available.

For more information on Duralast brakes, visit autozonepro.com/brakes.

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