

WHAT TO OBSERVE WHEN CHANGING YOUR BRAKE PADS

While replacing the brake pads on most vehicles is relatively easy, the process does require some care and attention to detail to ensure that the brakes perform reliably and consistently in all driving conditions. With that in mind, here are some things to look out for when you are replacing brake pads on your vehicle.

Use the right brake pads



Brake pads are not created equal, meaning that high-quality brake pads are designed for specific applications. For instance, if you do a lot of towing you need brake pads that are formulated to cope with the extreme demands that high brake pressures and temperatures place on both brake rotors and brake pads when you are trying to stop a vehicle towing a heavy load.

Similarly, if you install brake pads that require very high temperatures to work - as designed for say, a competition-level car - on a family runabout, neither the brake rotors nor the brake pads will ever get hot enough to work as expected, if at all. Therefore, be sure that you are replacing your brake pads with pads that are formulated to suit your specific needs and requirements.

Rotor condition

Since there is no point in fitting good brake pads to worn rotors, check that the rotors on your vehicle are not scored, cracked, discoloured from excessive heat, or show excessive amounts of run-out.

While it may sometimes be possible to remove scoring and discolouration by having the rotors machined, bear in mind that all brake rotors are required by law to have a minimum thickness to prevent them from overheating, so not all brake rotors can be repaired.

If your brake rotors are damaged, the wiser option would be to replace them with at least OEM-equivalent rotors that are matched to the brake pads you are going to install, preferably sourced from the same supplier of brake parts. Note that all rust-inhibiting material on the friction surfaces and seating surfaces of new rotors must be removed with approved brake-cleaning solvents to ensure proper operation of the new rotors. For detailed information on the correct installation of brake rotors please refer to DBA's Technical Bulletin 'Fitting A Hat Type Disc Rotor'.

Check caliper movement

Most light vehicles use floating calipers that rely on guide pins to slide freely as the brakes wear down. If these guide pins bind in their bores for any reason be sure to remove them from the caliper and clean off all old lubricant, rust, and foreign material such as sand and fine dust.

If the guide pins are not worn, apply some copper-based anti-seize compound as a lubricant and re-install the guide pins, making sure that the small rubber boots that seal them to the caliper are not damaged in any way. Replace both the

guide pins and their rubber boots if either (or both) is not in perfect condition to prevent the brake calipers from binding, which could cause brake drag on the affected wheels.

Note that petroleum-based lubricant should never be used on calipers: these lubricants evaporate and as a result, they lose their lubricating properties very rapidly, thereby preventing the caliper(s) from moving freely.

Install all new supplied hardware



Fig.1 Worn rotor & Pad comparison

While not all brake pads require hardware like anti-squeal plates, wear indicators, and guide pin bolts, these parts are always included with high-quality brake pads such as DBA, for those applications that do require the use of specific hardware.

Installing new brake pads on old hardware could cause the new pads to bind or stick in the caliper, which can, and often does, seriously reduce both braking performance and the useful lives of brake pads.

Check wheel rotation

Once you have installed the new brake pads, fit the wheels and rotate each wheel by hand to verify that they rotate freely. The wheels should not drag, and there must be no scraping, grinding, or any other kind of mechanical noises present when you rotate the wheels.

If the wheels do drag, or there are mechanical noises present, remove the wheels, and retrace your steps to find



Fig.2 Worn Pad

and rectify the problem before placing the vehicle back into service. Not doing this could result in brake failure or seriously degraded braking performance.

Test brakes for proper operation

As the last step, test-drive the vehicle on a secluded road that is free of traffic to ensure that the brakes work as expected. However, always follow the prescribed brake pad bedding-in procedure to avoid damaging the new pads and/or rotors- possibly to the point where you'd need to replace both brake pads and brake rotors for a second time.