



PBR Australia Pty Ltd

ACN 006 530 427

helpline: 1300 369 727

email: [pbr\\_enquiries@pbr.com.au](mailto:pbr_enquiries@pbr.com.au)

[www.pbr.com.au](http://www.pbr.com.au)

## Technical Bulletin TBR01

### ROTOR FITTING TIPS

Compare rotors to the ones that have been removed to ensure they are correct. Some vehicles, such as Holden Commodores, have had running changes made to the brake system and may have different size rotors fitted.

If the rotor is a removable hub type, clean the hub surface on which the rotor will be mounted. The assembly surface must be free from rust, flat and free from burrs. When tightening the hub bolts on this type of rotor ensure the bolts are tightened to the manufacturers recommended torque using the correct pattern. Over tightening of these bolts by using an impact gun will distort the new rotor, causing runout and in some cases the rotor will fracture.

The faces of the new rotor have a protective coating applied. Before installation, clean bearing caps, wheel stud thread, all machined surfaces and ABS tone wheel (if applicable). Also ensure the hub is thoroughly clean before installation. This must be removed using an acetone or trichloroethylene based solvent. Using petrol or other type products will leave a residue of oil or wax affecting the braking performance. These cleaning fluids are usually highly flammable and harmful if vapours are inhaled for prolonged periods. Manufacturer's warnings should be strictly adhered to.

When refitting the new rotors, use a torque wrench to tension the wheel bearings to manufacturer's specifications. Torquing the wheel bearings correctly will prevent excessive disc rotor runout.

Inspect the calipers for correct operation. Sticking or binding calipers will cause the rotors to overheat and distort.

When replacing the disc pads, ensure the friction material is suitable for the vehicle and driving conditions. Fitting the incorrect friction material may cause excessive rotor wear or overheating of the rotor causing runout.

Disc pads should only be replaced in axle pairs. A mixture of friction material can affect the braking performance.

Inspect the steering and suspension components for wear or damage. Problems in this area may cause vibrations or pulsation's during braking, giving the impression the rotors have excessive runout or disc thickness variation.

Ensure the master cylinder and all hydraulic components are operating correctly. If the master cylinder or any of the hydraulic components are holding pressure it will cause the rotors to overheat and distort.

On ABS equipped vehicles ensure the rotor supplied has the same number of teeth on the pole ring as the rotor you have removed. Fitting rotors with different numbers of teeth on the pole rings may cause increased or a fault logged in the ABS system.

If the new rotor has been supplied without the pole ring fitted, the old pole ring must be removed and refitted onto the new rotor. Ensure the pole ring runout is within the manufacturer's is within the manufacturer's specification after refitting the pole ring.

When removing and refitting rotors on ABS equipped vehicles, take care to prevent the pole ring striking the tip of the wheel speed sensor. The wheel speed sensor may be damaged causing a fault to be logged in the ABS system.

After fitting the new rotor, the brake pedal will need to be pumped several times to bring the disc pads into contact with the rotor. If the brake pedal is pushed to the floor on a vehicle where the master cylinder has not been overhauled or replaced, the seals may be damaged from the dirt or scale that builds up at the end of the bore. To prevent damage to the master cylinder, only push the brake pedal its normal travel when pumping the pedal after fitting new rotors.

Rotors should only be replaced in axle pairs as a mixture of new and worn rotors can cause a variation in braking performance.

It is not necessary to machine new disc brake rotors before installation on the vehicle. New rotors from PBR are manufactured to be within OE specifications. Parallelism, runout and disc thickness variation are all checked at the time of packaging the parts for shipment. By machining new rotors, the thickness is reduced which will shorten the life of the new part. In most cases, Aftermarket disc brake lathes are unable to reproduce the precise standards that the new PBR rotors are manufactured to.