

SOLVING NOISE PROBLEMS

TIPS FOR CORRECT REMOVAL

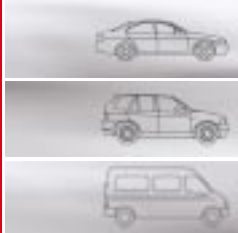
BRAKE PAD REMOVAL

If a road test is possible, carry this out first, and note the conditions under which the noise occurs.

REMOVAL PROCESS



- > Jack up the vehicle
- > Check the wheel for free rotation – if there is no free rotation, it means that the brake is not retracting **(Picture 1)**
- > Remove road wheel and check the installation – looking for:
 - score marks
 - uneven bedding patterns
 - uneven or taper wear
 - corrosion lip on the rotor
 - disc thickness variation
 - fluid leaks **(Picture 2)**
 - slide pin damage **(Picture 3)**
- > Check that the correct pads are fitted
- > Check that the pads are the correct way round in the caliper
- > Confirm that the pads are the correct way up in the caliper
- > Check that the pads fit freely in the brackets
- > Check that all caliper clips and springs are present and correct **(Picture 4)**
- > **Remove the pads and examine the friction surfaces to analyse potential problems which may be related to noise**



SYMPTOMS

TAPERED PADS



- APPEARANCE** Uneven wear, tapered pads
- CAUSE** Distorted caliper, caliper slides sticking, excessive caliper clearance
- EFFECT** Premature pad wear, uneven braking pressure, **noise**
- REMEDY** Replace pad set, maintain & service caliper
- NOTE** Some vehicles use pads that are tapered by design. Refer to the specific vehicle application, and if the tapering is beyond the normal specification, replace the brake pad

UNEVEN WEAR



- APPEARANCE** Uneven wear on pad surface
- CAUSE** Irregularly worn brake disc (a wear lip will be visible on the disc)
- EFFECT** **Squeal & judder**, premature pad wear
- REMEDY** Replace brake discs and pads

UNEVEN WEAR WITHIN AXLE



- APPEARANCE** One or more brake pad within the axle set will be excessively worn
- CAUSE** Caliper guide pins / piston sticking
- EFFECT** The vehicle pulls to one side while braking, uneven & rapid pad wear, **squeal & judder**
- REMEDY** Maintain all caliper slides & pistons, replace pads. Check discs

DAMAGED BACK PLATE



- APPEARANCE** Damaged back plate
- CAUSE** Incorrect assembly, excessive force used during fitting
- EFFECT** Braking inefficiency, irregular wear, **noise & judder**
- REMEDY** Replace full brake pad set

PISTON DAMAGE



- APPEARANCE** Anti-noise features (rubber-coat / shim) damaged by piston
- CAUSE** Piston not retracting fully, heavy brake use
- EFFECT** Overheating, **noise**
- REMEDY** Replace brake pad set, maintain caliper