

'Big Brake Kit' Bedding-In Procedure

Exige S models specified with the 'Performance Pack' and other Elise/Exige variants fitted with 4-piston front calipers, require a brake bedding-in procedure to be followed before the brakes are used heavily. This procedure should also be applied if and whenever new brake pads and/or discs are fitted.

WARNING; This procedure should be carried out only on a closed track or deserted straight road, paying appropriate consideration to any other track or road users. An observer passenger should be carried to assist in this regard.

The purpose of brake pad bedding is to:

- Transfer a layer of friction material onto the disc faces to achieve maximum performance;
- Stabilise compressible materials to avoid a spongy pedal;
- Boil off volatile elements in the friction compound;
- Align the pad and brake disc surfaces for full contact.

If the pads are not bedded in correctly, or are used aggressively straight after fitting, pad glazing may occur. This condition results from resins in the pad material crystallising on both the pad friction surface and the brake disc surface, producing brake judder and vibration. Also, rapidly escaping volatile elements and moisture from the resin, in seeking an immediate escape route

out of the friction compound, can create small fissures that can lead to cracking and chunking of the material. The potential for disc overheating and distortion will also be reduced by the correct bedding-in procedure.

Bedding Procedure:

- a) To generate some heat in the discs and pads, perform 4 to 6 brake applications with medium pedal pressure from around 70 mph (110 km/h) to 40 mph (60 km/h), allowing around 30 seconds between events.
- b) Immediately after this procedure, carry out one brake application with heavy pedal pressure, without activating the ABS, from around 70 mph (110 km/h) to 30 mph (50 km/h).
- c) Perform 3 or 4 brake recovery applications to clean the discs and pads, using light pedal pressure from around 70 mph (110 km/h) to 40 mph (60 km/h).
- d) Repeat (b) and (c) a further 2 or 3 times. The brakes may now be considered fully bedded.

New Pads on Used Discs

If new brake pads are to be fitted on used discs, it is recommended to chamfer the leading edges of the pad to allow optimum bedding. The chamfer should be about 45 degrees and 1 to 2mm across.