

Basic Initial Brake Bed-In

For optimal use of any given brake system, the pads and rotor have to be compatible with each other. The bed-in procedure establishes that compatibility between the pad and rotor. This is achieved by a combination of rubbing speed, temperature, line pressure, and Inertia. Bed-in is also influenced by pad and rotor material chemistries. It is always recommended that only compatible pads and rotors be used in any given application.

Why Proper Bedding-in is Important

1. Gradually heat treats the rotor and eliminates any thermal shock in the rotor.

Burn off volatiles and moisture from the resin that is near pad surface. This will eliminate "green fade."
Establish a layer of transfer film about a few microns thick on the rotor surface. Shearing of the film during friction is an effective source of friction force. Otherwise, when using a freshly ground rotor without the transfer film, the main friction force would come from cutting, plowing, or scoring the asperities on the rotor surface. This leads to inconsistent braking effectiveness.

4. Mate the two surfaces to a near perfect geometrical match, so that the contact area is high, and therefore the friction force is increased.

5. The performance of a fresh rotor/fresh pad system would be inconsistent. This is due to ever-changing structures and properties of the two mating materials. Bed-in of pads and rotor will form a stable transfer film.6. If bedding in procedure is not applied, a stable transfer film may not be established for a long time. In other words, the rotor surface would have to be constantly regenerating a film that is not quite stable for a long time. This effect would reduce the performance and increase the wear.

Basic Bed-In Procedure

During pad or disc break-in, do not come to a complete stop, so plan where and when you do this procedure with care and concern for yourself and the safety of others. Please Note - If you come to a complete stop before the break-in process is completed there is the chance for non-uniform pad material transfer or pad imprinting to take place and the results will be an irritating vibration during braking.

1. After installing new disc rotors and/or brake pads, perform eight to ten slow downs applying moderate pressure from approximately 30 – 40 MPH (50 -- 60 kph) *without coming to a stop.*

2. Make an additional two to three slow downs applying heavy pressure from approximately 40 – 45 MPH (60 - 70 kph) *without coming to a stop.*

3. DO NOT DRAG BRAKES!

4. Allow at least 15 minutes for brake system to cool down.

5. During cool down, while the car is at rest, DO NOT APPLY THE BRAKES! If you do, material will be transferred from the pads to the rotor, and the results will be an irritating vibration during braking.

After step 4 your new disc rotors and/or pads are ready for normal use. Be aware that the full bedding in process can take up to 190 – 300 miles (300 – 500 kms) depending on driving style. During this period try and avoid any high speed hard braking to a dead stop.