



BASIC INITIAL BRAKE BED-IN FOR MOTORSPORT

WHAT IS 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.

BEDDING-IN AVANTAGES:

1. Gradually heat treats the rotor and eliminates any thermal shock in the rotor.
2. Burn off volatiles and moisture from the resin that is near pad surface. This will eliminate "green fade."
3. 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 FOR MOTOR SPORT

This procedure should only be followed for bedding in suitable race compound pads. Always consider the Brake pad manufacturers bedding in recommendations.

1. After installing new disc rotors and/or brake pads, block all brake ducts and perform 10 to 12 slow-downs applying moderate pedal pressure from approximately 70 – 80 Kph down to approximately 20 Kph allowing approximately 50 metres between applications.
2. Perform an additional 8 to 10 slow-downs applying heavier pedal pressure from approximately 90 – 100 Kph down to approximately 20 Kph allowing approximately 50 metres between applications.
3. **DO NOT DRAG BRAKES!**
4. Perform a lap at approximately 70% of race pace.
5. Perform a lap at approximately 80% of race pace.
6. Perform a cool down lap using the brakes as little as possible.
7. Return to the pit area and allow at least 1- 2 hours for brake system to cool down.
8. Remove all brake duct covers and inspect rotors and pads.

After step 8 your new disc rotors &/or pads are ready for race use.

For optimal performance it is best to bed new rotors with already bedded pads and bed new pads with already bedded rotors.