



## 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 advantages:**

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.



## **HAWK PERFORMANCE PAD BURNISHING PROCEDURE**

All brake pads have to be bedded-in with the rotor they will be used against. Even though Hawk Performance burnishes the pads in the factory, a transfer film must be generated at the pad and rotor interface for optimal performance. Whether it is new or used rotors, you must follow the bed-in steps listed below to maximize brake performance.

**Step 1.** Seal all brake ducts.

**Step 2.** Slowly engage brakes 6 to 8 times at medium speeds Do not drag brakes or come to a complete stop.

**Step 3.** Increase speeds to simulate race conditions; allow 6 to 8 high pressure (about 500 psi) snubs at racing speeds. Total engagements for Step 2 and Step 3 should be a maximum of 15 to 20.

**Step 4.** Remove brake duct seals. Allow the system to cool for about 15 minutes. Do not engage brakes while car is parked during cool down period.

Your Rotors and Hawk Performance Pads are now ready for race!

Do not sand or grind the brake pads or rotors after this burnishing procedure has been completed.