

Bulletin BPI 12-01

Subject: Importance of On-Vehicle Brake Lathe Use

Vehicles Involved: All Late-Model Vehicles

Condition: Vehicles prone to brake pulsation

Repair Procedure: Whether performing a brake job or solving a customer complaint, brake pulsation is an increasing problem for late-model vehicles. Not only in the aftermarket, this problem affects the OE vehicle manufacturers and dealer service departments as well.

OEMs have ample resources for identifying problems and providing solutions for their customers' satisfaction. Recent Technical Service Bulletins provided by Honda, Hyundai, Mazda, and Volkswagen address the issue of brake pulsation and stress the use of the on-vehicle brake lathe **exclusively** for rotor resurfacing. They no longer recommend **any** off-vehicle rotor machining.



The reason for this is to account for the runout in the rotor, hub flange, wheel bearings and the surface condition of the mating surfaces of the hub flange and rotor. The goal is to achieve .002" lateral runout or less, as installed on the vehicle.

As with all brake work, inspection of the rotors for cracks, severe discoloration or corrosion, and measurement of the thickness of the rotor should be performed. This is to ensure the rotors are serviceable before proceeding. After inspection, careful cleaning of the mating surfaces with the proper surface-conditioning discs and tools is important before machining operations are begun.

Follow the lathe manufacturer's instructions for setup and machining operation. Also important is to maintain the cutting tools as recommended to ensure the quality of the finish that is produced by the lathe.

After machining, clean the surface with hot, soapy water and a brush to remove any loose machining grit. Before removing the lathe hub adapter from the rotor, measure the thickness of the disc to ensure it is still above minimum thickness and recheck the lateral runout to see that it is within the .002" specification.