Subject: Brake Rotor Lateral Run-out Correction Plates

Vehicle Involved: All vehicles with hubless knock-off type rotors

Condition: Lateral rotor run-out that exceeds original equipment specifications may be corrected with full contact shims. The following sequence outlines this procedure.

Repair Procedure: When resurfacing rotors thoroughly clean both the hub face and the rotor hat section. Prior to machining on a bench lathe, confirm that the lathe is properly maintained and adjusted. Bulletin 02-24 reviews brake lathe maintenance.

1. Index rotor to hub for least amount of run-out. Bulletin 03-02 reviews the indexing procedure. Install dial indicator and measure rotor lateral run-out.

2. If rotor run-out is less than .002 or manufacture’s specification the remaining brake service may now be completed.

3. If rotor run-out is greater than .002 or manufacture’s specification, continue the following steps to correct excessive lateral rotor run-out. See Fig. 1

4. With the dial indicator still in position, locate the amount and location of the “high spot”. Mark the rotor and the wheel stud closest to the location of maximum run-out. (Fig. 2) If the “high spot” is exactly between two studs, mark both studs.

5. Select the proper amount run-out plate for the specific year make and model. Correction plates are available in .003, .006, .009 increments.

6. The run-out plate will be installed between the hub and rotor.

7. Note the “V” notch on the correction plate. The “V” notch aligns with the high spot you located in step # 4. See (Fig. 3) If the high spot on the rotor is identified between two studs that are marked, center the “V” notch between the two marked studs.
8. Re-install the rotor to the hub with the correction plate in the proper position. Secure the rotor using all of the lug nuts and conical washers. Tighten lug nuts to proper specification.

9. Use the dial indicator to verify that run-out is within the required specifications. Fig. 4

10. You may now complete the remainder of the brake service procedures.

Fig. 1  
Fig. 2

Fig. 3  
Fig. 4