

1986 to 1988 Audi 5000s 1988 Audi 80 & 90 Brake Lining Dust Avoidance

Brake noise is mainly the result of vibrations between the various components of the brake caliper assembly.

The following procedure has proven effective in reducing brake noise and eliminating customer complaints arising from same.

To achieve maximum effectiveness, it is imperative that this procedure be followed completely.

Front Brake Caliper Service

The brake pads must have anti-vibration material such as Wagner's EMP on the back side of the pads (see Figure 1). A tube of EMP is supplied with most sets of Wagner brake pads. If re-installing the old pads, inspect the pads for glazing. Clean and deglaze them if necessary with sandpaper (Figure 2). Using a file, slightly chamfer or bevel the edges of the brake pad friction material (Figure 3). Take care not to overdo this as road debris could get caught between the pad and rotor and cause scoring of the rotor surface.

**WARNING: DO NOT BREATHE
BRAKE FRICTION MATERIAL DUST.**

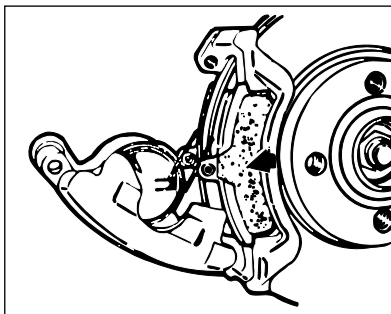


Figure 1

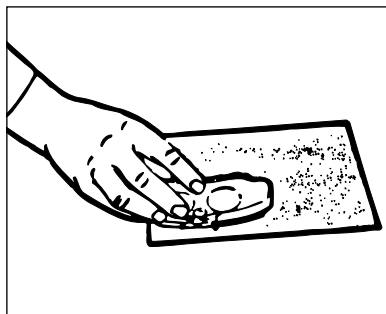


Figure 2

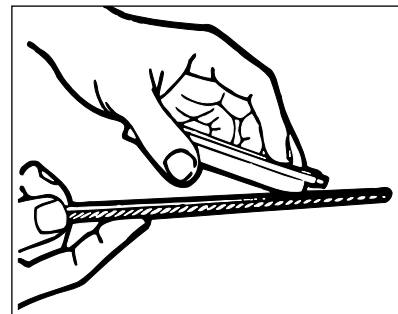


Figure 3

Next, clean the brake pad carrier contact points and apply high temperature moly lube (Figure 4). Also, clean and lubricate the portion of the caliper piston that contacts the brake pad (Figure 5).

Then, install the anti-noise shim into the piston and apply a thin coating of the high temperature moly lube onto the face of the shim (Figure 6). If the old shims are damaged or missing, they **MUST** be replaced (these are dealer items). All caliper hardware should be replaced. Apply a small amount of the moly lube to the pad springs (Figure 7) before completing re-assembly.

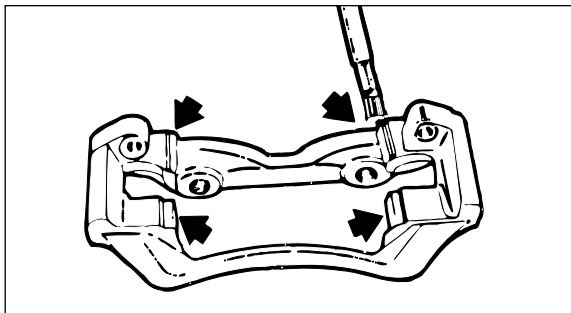


Figure 4

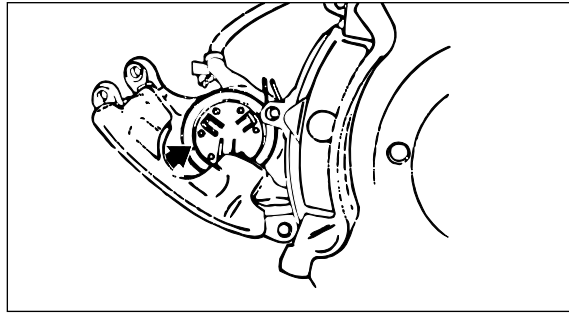


Figure 6

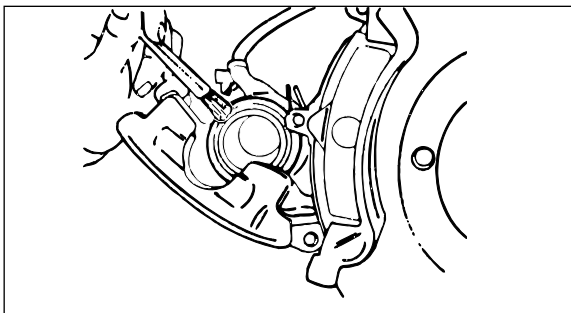


Figure 5

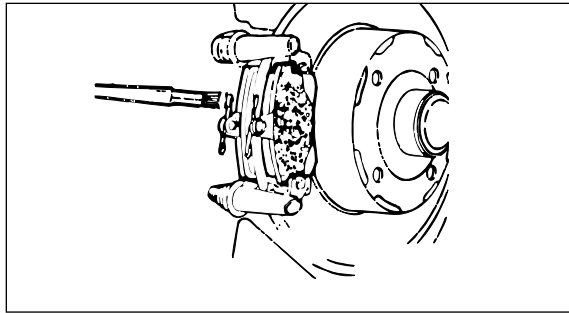


Figure 7

Rear Brake Caliper Service

Remove the brake pad carriers, clean the pad contact points and apply moly lube to this area (Figure 8). Then, as on the front brakes, deglaze the pads with sandpaper if necessary, chamfer the edges of the friction material and apply WAGNER EMP to the back side of the pads. Also, as with the front brakes, install new brake hardware and apply moly lube to all contact points.

Brake Rotor Service Front and Rear

Brake rotors will normally need to be resurfaced or replaced. When resurfacing existing rotors, the last step is to apply a non-directional surface finish. This creates the proper micro finish and eliminates the "phonograph" effect that is left by brake lathes. This can be done with a power disc type sander. First, lightly sand in a clockwise direction using the leading edge of the sanding disc (Figure 9). Then, continue to sand in a clockwise direction using the trailing edge of the sanding disc (Figure 10). On these vehicles (and any vehicle using semi-metallic pads), the front rotors should be finished using a 180-220 grit sand paper.

The rear pads are organic, therefore, this finish should be applied using an 80-grit sandpaper. Then, due to the magnetic field created during the turning process, all rotors should be washed off with a damp cloth (use alcohol, brake cleaner, or water). If this isn't done, small particles may score the rotors, as well as create brake noise. Although this BRAKE FAX is addressing specific Audi models, it is worth noting that most vehicles will experience fewer noise problems when these procedures are followed (allowing for variations in caliper design).

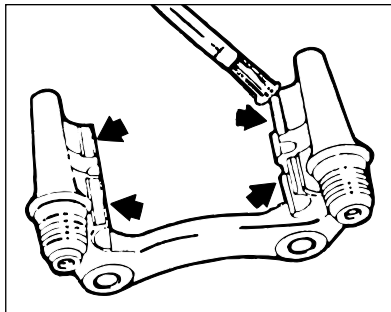


Figure 8

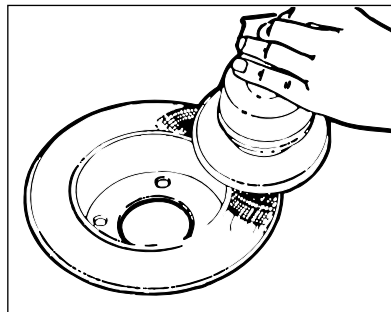


Figure 9

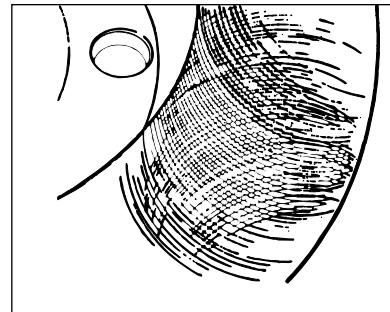


Figure 10

This Supplement to Brake Fax Bulletin No. 22 (dated July 1989) is being distributed to further emphasize the precautions that must be taken when working with brake linings. The Warnings in Bulletin No. 22 say "DO NOT BREATHE BRAKE FRICTION MATERIAL DUST." This supplement is a reminder to take all steps necessary to be in compliance with all appropriate OSHA Regulations including Sect. 1910.1001, Appendix F.

As with any brake repair, when sanding or filing brake pads as described in Brake Fax Bulletin No. 22, the proper precautions must be taken to

avoid breathing lining dust.

It is extremely important that no airborne particles be created. Wet the disc lining before beginning work and keep it wet during all filing or sanding. Do not blow or brush off the lining dust. The parts, tools and work area must be cleaned using a HEPA Vacuum System. The mechanic should wear an air purifying respirator, either a throw-away type or one with replaceable filters.

After sanding or filing the wet lining material, the mechanic should wash his hands thoroughly.

IMPORTANT

When working with brake shoes or pads, whatever their material composition-asbestos, semi-metallic or other non-asbestos materials:

Do **NOT** Breathe Dust

Do **NOT** Use Air Hose to Remove Dust

Do **NOT** Use Brush to Remove Dust

Do **NOT** Machine Pre-arc'd Lining

Do **NOT** Cause Dust to be Airborne

Follow OSHA 29 CFR 1910.1001, Appendix F, Work Practices and Engineering Controls for

Automotive Brake Operations - Non-mandatory.

For further information write Wagner, P.O. Box 247, Parsippany, NJ 07054.

DO Use HEPA Vacuum to Remove Dust

DO Dispose of Dust in a Sealed Container

DO Wear an Approved Respirator

DO Use Dust Collection Equipment if Machining