RECOMMENDED PROCEDURES FOR REDUCING ASBESTOS DUST DURING BRAKE SERVICING

Because studies have indicated that exposure to excessive amounts of asbestos dust may be a potential health hazard, OSHA has set maximum limits of levels of airborne asbestos dust to which workers may be exposed. Since most automotive friction materials normally contain a sizable amount of asbestos, it is important that people who handle brake linings and clutch facings understand the nature of the problem and know the precautions to be taken.

1. Areas where brake work is done should be set aside if possible, and entrances should be posted with an asbestos exposure sign as follows:

Asbestos
Dust Hazard
Avoid Breathing Dust
Wear Assigned Protective Equipment
Do Not Remain in Area Unless Your Work Requires It
Breathing Asbestos Dust May Be Hazardous To Your Health

2. The amount of asbestos in the dust from brake lining wear is normally at an extremely low level because of chemical breakdown during use, and if machining of friction material does not take place, simple procedures will minimize exposure. During brake servicing, the mechanic should wear a respirator approved by NIOSH for asbestos dust. It should be worn during all procedures starting with the removal of wheels and including reassembly.

3. When removing worn friction materials, remove the accumulated dust in the assemblies with an industrial vacuum cleaner equipped with a high efficiency filter system. If such equipment is not available, dust can be removed with a damp cloth. Do not use compressed air or dry brushing for cleaning unless the assembly is enclosed and properly exhausted.

4. Whenever possible, purchase friction materials preground and ready for installation. If machining is necessary, the precautions which must be taken are of extreme importance. This is the operation in brake service when exposure to asbestos dust may be at its highest. This increases the difficulty in complying with the OSHA standards. In addition to the approved respirator, there must be local exhaust ventilation such that worker exposures are maintained below the OSHA asbestos standards. If there is any question as to the efficiency of asbestos dust removal by the machine, the manufacturer should be contacted.

5. Industrial vacuum cleaner bags containing asbestos dust and cloths used for wiping brake assemblies should be sealed in plastic bags and labeled with the following warning label printed in letters of sufficient size and contrast to be readily visible and legible.

Caution
Contains Asbestos Fibers
Avoid Creating Dust
Breathing Asbestos Dust May Cause Serious Bodily Harm

All asbestos waste should be disposed of in accordance with OSHA and EPA asbestos regulations. During removal of vacuum bags, an approved respirator, as described in (2) above should be worn.

6. Good housekeeping is essential in a workplace where asbestos containing materials are handled. Industrial vacuum cleaners equipped with multiple stage high efficiency filters should be used for removing accumulations of asbestos dust and waste. Never use compressed air or dry sweeping for cleaning. Water or other dust suppressants should be applied if brooms are used.

7. Good personal hygiene practices are important in minimizing asbestos dust exposure. Do not smoke. Wash before eating. Shower after work. Change to work clothes upon arrival at work and change from work clothes at conclusion of work. Work clothing should not be taken home. Laundering of asbestos contaminated clothing shall be done so as to prevent release of airborne asbestos fibers in excess of the exposure limits.

CAUTION: DO NOT BREATHE ASBESTOS DUST

The above procedure is reproduced from the 1983 edition of FMSI's Brake Lining, Brake Shoe and Clutch Facing Automotive Data Book.