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Current Best Practices for Preventing Asbestos Exposure Among Brake and Clutch Repair Workers

The guidance sets out regulatory standards and advice for non-commercial repair work on brake and clutch linings. Although the regulations are US regulations they could be seen as representing a reasonable view.

Excerpts from the guidance are reproduced below:

As a professional automotive technician, what work practices must I follow to reduce potential exposures to asbestos?

If you work in a commercial automotive shop that performs work on more than five pairs of brakes or five clutches per week, OSHA regulations require the use of one of the following work practices (or an equivalent method):

- **Negative-Pressure Enclosure/HEPA Vacuum System Method:** This type of enclosure and vacuum system has a special box with clear plastic walls or windows, which fits tightly around a brake or clutch assembly to prevent asbestos exposure.
- **Low Pressure/Wet Cleaning Method:** This specially designed low-pressure spray equipment wets down the brake assembly and catches the runoff in a special basin to prevent airborne brake dust from spreading in the work area.

If you work in a commercial automotive shop that performs work on no more than five pairs of brakes or five clutches per week, OSHA regulations allow you to use the following method instead:

- **Wet Wipe Method:** This method involves using a spray bottle or other device capable of delivering a fine mist of water, or amended water (water with a detergent), at **low pressure** to wet all brake and clutch parts. The brakes can then be wiped clean with a cloth.

As a home mechanic, what can I do to protect myself from asbestos exposure?

If you are not able to determine whether your brakes or clutch contain asbestos, you may want to consider having your brakes or clutch serviced at a commercial automotive shop. As noted above, OSHA requires special work practices for professional automotive technicians. If, however, this is not possible and you do not have access to the equipment professional automotive shops use to comply with the OSHA work practices, you may want to consider using the wet wipe method described in this brochure (www.osha.gov/SLTC/asbestos/standards.html). This method has been deemed acceptable by OSHA for shops that service no more than five brakes or clutches per week.

Work Practice Don'ts: It is recommended that you:

Do not use compressed air for cleaning. Compressed air blows brake and clutch dust into the air.
Do not clean brakes or clutches with a dry rag, brush (wet or dry), or garden hose.
Do not use an ordinary shop-vac without a high-efficiency particulate air (HEPA) filter to vacuum dust [type H vacuum cleaner in the UK]. Invisible particles of brake or clutch dust can stay in the air and on your clothes long after a job is complete.
Avoid taking work clothing home after performing brake and clutch work to prevent exposing your family to dust particles that may contain asbestos.

Work Practice Do's: It is recommended that you:

Use pre-ground, ready-to-install parts.
If a brake or clutch lining must be drilled, grooved, cut, bevelled, or lathe-turned use low speeds to keep down the amount of dust created.
Use machinery with a local exhaust dust collection system equipped with HEPA filtration to prevent dust exposures and work area contamination.

How do I dispose of waste containing asbestos?

Professional automotive technicians must dispose of waste that contains brake or clutch dust, including wet rags used to wipe this dust, in accordance with Federal and local regulations including the OSHA asbestos waste disposal regulations. Brake and clutch dust and other asbestos waste must be collected and disposed of in sealed, impermeable containers that are appropriately labelled. These regulations do not apply to home mechanics. EPA recommends that asbestos waste be double bagged and taken to a landfill that accepts asbestos waste. Check with your state department of health or local solid waste department to find an appropriate landfill.

Comment

The guidance seems to parallel the recent HSC recommendation to apply only limited protection measures when exposures are low and sporadic.

Very few uses of asbestos are still permitted in the UK, the supply and fitting of components containing asbestos was banned in 1999 with a total ban effective since 2005. There may be a small proportion of vehicles which still contain asbestos based friction components.

The above US guidance could be useful in assessing whether or not a breach of duty of care has occurred. HSE guidance on the removal of asbestos friction linings was made available in September 2006 [*asbestos essentials* a18]. There is no mention of the use of reduced pressure systems or local exhaust ventilation. HSE records show that brake and clutch linings can comprise 25% asbestos.

