

Guidance note

**Asbestos materials in the automotive
maintenance and repair industry**

2007

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The use of asbestos friction products was banned from the end of 2003 and, as a result, these products can no longer be sold or fitted to vehicles.

While modern vehicles have asbestos-free parts, there is asbestos in brakes, clutches and gaskets of many older or imported vehicles. Asbestos was used in gaskets, particularly where heat can be a problem such as in engine heads and vehicle exhaust manifolds.

The ban does not apply to parts with asbestos already in place in vehicles before 31 December 2003. However, under the ban, when it is time for these parts to be replaced, non-asbestos products must be used.

This guidance note provides information on how to avoid exposure to asbestos dust when removing products containing asbestos from vehicles.

Asbestos fibres

Anybody who works with brakes, clutches or replaces gaskets knows dust is always present. Dust from wear and tear on brakes and clutches, or generated when gaskets are removed, can be a serious health hazard if it contains asbestos fibres.

These fibres vary in size with some sizes collecting in the lungs causing cancer such as mesothelioma and other life threatening diseases. Mesothelioma is a fatal disease that is caused by exposure to asbestos and to which there is no known cure. If they become airborne, very small asbestos fibres, that cannot be seen by the naked eye, can linger around long after a job has been finished and can be breathed deep into the lungs by anyone in the workplace, including customers.

Although a business may fit non-asbestos parts to vehicles, it cannot be sure that the parts removed from customers' vehicles do not contain asbestos. Common sense and good practice dictate that, unless you are confident that the parts are non-asbestos, you should treat all brake linings, brake pads and gaskets as though they contain asbestos.

Ways of protecting yourself from dangerous fibres and dust

- Working on brakes, clutches or removing gaskets can be dirty, so cleaning down the job before starting work is usually one of the first tasks. The best way of protecting yourself is to avoid any work practice that allows fibres or dust to be generated and become airborne. See the following section for work practices to minimise asbestos fibres in the air.

- When you work on jobs that could involve asbestos, make sure you use the safety equipment provided by your employer and that the respiratory protection (mask) is the correct type and adequate to protect your health.

Employers have a responsibility to provide suitable safety equipment designed for the task at hand. To be effective, this equipment must be in good working order and used correctly. Training must be provided for employees in the proper selection, fitting, use, storage and maintenance of respiratory protective devices.

Work practices to minimise asbestos fibres and dust in the air

Don't use compressed air

The most dangerous work practice is using compressed air to clean parts that could contain asbestos. **Never use compressed air or air driven tools to clean brake and clutch parts or to help remove gaskets.**

Compressed air spreads fibres from the job throughout the workplace and breathing in these fibres would be a certainty. The fibres can cover walls, ceilings, floors, tools and clothes.

Even if the work is done out in the open air, never allow anyone in your workplace to use compressed air when working on brakes, clutches or gaskets.

Use tools that do not create dust

Hand tools tend to produce less dust than power tools. The less dust the less risk from asbestos fibres.

Some air tools and rattle guns have their air outlet at the front causing air to be blown onto the job raising dust. These tools are to be avoided when working on jobs where there is a risk of asbestos.

The same applies when removing old gaskets that could contain asbestos, use hand tools rather than any powered tools or processes that may create dust.

Don't clean parts by either dry brushing, dry sweeping or by hitting them against a surface

The work area must not be cleaned by dry brushing or dry sweeping. These practices cause dust to become airborne.

Use a vacuum cleaner with a HEPA filter

Specially designed vacuum cleaners are useful for removing any loose fibres and dust from parts or jobs. The only vacuum cleaners that should be used are those with a High Efficiency Particulate Air (HEPA) filter. These filters trap dust particles and fibres of the size that are most harmful.

Using household or industrial vacuum cleaners without HEPA filters is not recommended, as they will not trap fibres or dust of the size that can cause harm. They tend to blow the harmful fibres and dust back out into the surrounding air where they can be breathed in.

Some types of HEPA vacuum cleaners have special enclosure systems that fit around the job. The better enclosures have glove attachments allowing a person to do the job without getting dust on their hands.

When using a vacuum system, it is important to follow the maker's instructions on how to safely dispose of any fibres or dust that are trapped.

Take care when wet cleaning

Wetting parts or jobs before starting work helps to keep fibres and dust from becoming airborne. A common practice is spraying parts or jobs with water and a wetting agent such as detergent.

Hand or pump sprays are widely used to clean parts or whole jobs. This method is only effective if it is low pressure spraying and a fine mist is used. A fine mist wets the fibres and dust so that they cannot become airborne. Large droplets can cause fibres and dust to be thrown into the air.

Collect any run-off in a tray or container placed under the job. Disposal of this waste must be in a manner that avoids future contamination once it dries out.

Use ventilation systems where appropriate

Although asbestos products must no longer be installed in vehicles, well designed and maintained ventilation systems in the workplace help lower the risk of breathing in any harmful dust and fibres from products already in place. These systems are important in workplaces that remove, re-line and bond frictional surfaces to vehicle parts.

Machines such as sanders and grinders used in the brake bonding process should be fitted with properly designed and filtered extraction systems to remove and trap any dust that is created.

Wear a respirator (mask)

When removing materials that may contain asbestos, wear an appropriate respirator if there is a risk of inhaling fibres.

It is also advisable to wear a respirator when filing, drilling, sanding and grinding brake and clutch parts or removing gaskets that do not contain asbestos.

An approved respirator is one that complies with the Australian/New Zealand Standard, AS/NZS 1716. If the respirator meets that standard it will be marked on its box.

Information on choosing the correct respirator is provided in Australian/New Zealand Standard, AS/NZS 1715.

Keep your work area clean

Clean work areas frequently. The immediate work area should be cleaned up after each job that could have involved asbestos to prevent fibres and dust accumulating in the workplace. Ensure that the waste is disposed of properly.

Dispose of parts safely

When disposing of used parts containing asbestos material, they must be separated from other material for disposal and placed in labelled air-tight plastic bags or containers.

An environmental health officer at the local government authority will advise of the requirements for disposing of parts or material that may contain asbestos. The Department of Environment and Conservation's information sheet, *Disposal of material containing asbestos* contains further information on disposal and is available at www.dec.wa.gov.au

Change clothes and wash after work

If you believe a job will expose you to asbestos fibres, consider using disposable overalls. These will prevent contaminated work clothes being taken home to be washed.

If you can, wash at work and change into clean clothes before going home. Asbestos fibres can be carried from one place to another on clothing, hair or the body. This means that, if you are not careful, you could contaminate the family car or home.

Tell your doctor

When having a health check-up, tell your doctor that you work with material that might contain asbestos.

Responsibilities for safety and health at the workplace

These responsibilities for employers and employees mean that, when working on brakes, clutches or gaskets where asbestos may be present, employers and employees must adopt safe work practices.

Employers

Employers have a 'duty of care' to provide and maintain a safe working environment so that, as far as practicable, employees are not exposed to hazards. This includes providing appropriate information, instruction, training and supervision.

The 'duty of care' also includes implementing arrangements to ensure, as far as practicable, that the use, handling, storage, transporting and disposal of substances (such as those containing asbestos) are carried out in a manner so that employees are not exposed to hazards.

Where it is not practicable to avoid hazards at the workplace, adequate personal protective clothing and equipment (such as respirators) must be provided.

Employees

Employees are required to use the protective clothing and equipment provided to them by the employer in the manner in which they have been instructed to use them.

Employees also have a 'duty of care' to co-operate with their employer by not placing themselves and other people at the workplace at risk.