Australian Government Asbestos Safety and Eradication Agency



## Asbestos awareness for the automotive industry and historic vehicle enthusiasts



This guide provides information about where you might find asbestos in vehicles, the laws that relate to asbestos management and removal, and how to protect yourself and others from exposure to harmful asbestos fibres.



### Asbestos in vehicles

Asbestos was commonly used in machinery parts for many years because it allowed these parts to operate under high friction, pressure and heat. Australian vehicle manufacturers stopped using asbestos in their new vehicles in the late 1980s and early 1990s. However, asbestos-containing parts were still often used during routine servicing and repairs until asbestos was banned in Australia in 2003.



Asbestos parts can still be found in cars manufactured in countries where asbestos is not yet banned, as well as in classic, vintage, heritage and other historic vehicles. These products sometimes enter Australia unlawfully.

Automotive technicians, mechanics and others who repair vehicles, including historic vehicles, may come into contact with asbestos at some stage.

In this guide, classic, vintage, heritage and all other historic vehicles are referred to as historic vehicles. This includes cars, motorcycles, buses, trucks, agricultural vehicles, tractors, cranes, excavators and other special purpose vehicles.



#### Asbestos causes cancer

Inhaling asbestos fibres is associated with fatal diseases including asbestosis, lung cancer and mesothelioma. All these asbestos-related diseases contribute to approximately 4000 deaths in Australia each year.



You don't need a lot of exposure to asbestos fibres to develop a fatal disease later in life. If you are not trained in the safe handling of asbestos – don't touch it!





#### When is asbestos harmful?

Asbestos can be found in a friable or non-friable form.



**FRIABLE:** flaky, powdery, can be broken up easily with your fingers; or due to a work process, the asbestos material becomes such that it may be crumbled or reduced to powder by hand pressure. Can be found in dust from friction parts. It is extremely hazardous because the fine asbestos fibres can be easily released into the air and inhaled.



**NON-FRIABLE:** bonded as part of another compound, often cement or glue. Can be found as part of seals and gaskets, clutch plates and housing, brake pads and linings. It can be hazardous when disturbed, damaged or deteriorating.

If in any doubt about the type or condition of the asbestos material, you should treat it as friable.



#### Where can you find asbestos?

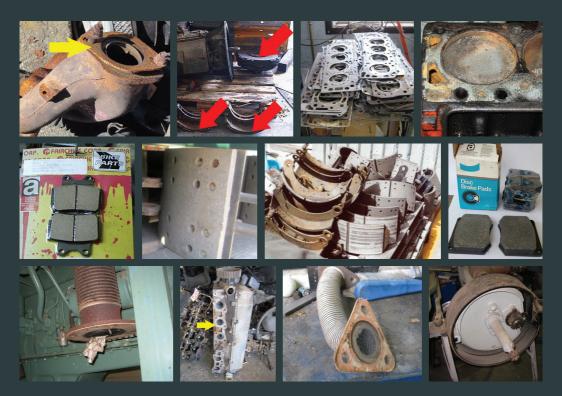
Asbestos-containing parts in Australian vehicles manufactured before 2003 that are still regularly used would have now been replaced through routine servicing.

However, asbestos parts can still be found in:

- older vehicles that may not have undergone regular servicing or parts replacement
- historic vehicles that still retain, or have been maintained using, original equipment manufacturer (OEM) parts
- used OEM parts sourced from vehicle wreckers or previous owners
- imported older vehicles from countries where asbestos is not yet banned.

Historically, asbestos was used in a number of areas including:

- brake pads and linings
- clutch plates and housings
- seals
- gaskets
- pipe wrap insulation (lagging)
- insulation to exhaust systems (flat & rope)
- firewalls
- plastic asbestos parts (seat bases, battery holders).
- Bituminous coatings underbody or soundproofing (interior floor pan, rear parcel shelf, boot, under bonnet and wheel arches).



### Asbestos in imported cars

Asbestos use is still allowed in many countries around the world. Even in some countries where asbestos is banned, small amounts may

be permitted. This means that goods manufactured outside Australia may contain asbestos or be labelled as 'asbestos free' while still containing low levels of asbestos.

These products are prohibited from entering Australia, as there is a complete ban on all forms of asbestos, with no tolerable levels here.

It is the responsibility of the importer to ensure that the vehicle they are importing does not contain asbestos.

There are ways of managing the risk of asbestos if you wish to import a historic vehicle. This may involve, for example, having certain parts replaced or removed before you import the vehicle. For more information, refer to the Australian Border Force's guidance on managing asbestos risk when importing motor vehicles.

# Asbestos in imported after-market parts

Automotive parts, such as gaskets and brakes, are still manufactured with asbestos in some countries, including China, and marketed globally. Importing these parts should be avoided unless nil asbestos content can be proven. 'Asbestos free' does not always mean no asbestos.

Even when purchasing automotive parts from suppliers in countries with asbestos bans, find out if these suppliers might be:

- shipping parts to Australia which have been manufactured in countries that allow asbestos
- assembling components that contain parts from different countries and marketing them with no indication of the country of origin.

If you are intending to buy online, know where the goods are coming from and what materials they are made with. Website businesses can be Australian based, but may send your order direct to an overseas supplier. If the goods are addressed to you, then you are the responsible importer.

Look for synthetic asbestos-substitute ingredients such as flexible graphite, aramid pulp or polytetrafluoroethylene (PTFE). Be wary of general raw material descriptions such as 'mineral fibres' or 'other materials'.





## How can I tell if something is asbestos?



It may be difficult to identify whether a vehicle component contains asbestos by simply looking at it.

The only way to be sure is to **have a sample tested** by a NATA (National Association of Testing Authorities) accredited laboratory. At present, there is no conclusive on-site test for the presence of asbestos.

Asbestos professionals who can assist with identifying asbestos include:

- · occupational hygienists who have experience with asbestos
- · licensed asbestos assessors and removalists
- individuals who have undertaken a recognised training course in asbestos identification.

#### Always check if asbestos is present before you begin work:

- · review the manufacturer's specifications for the vehicle or part, or
- ask an **asbestos professional** for advice and have a sample tested.

### If you cannot confirm whether the material contains asbestos, assume that it is asbestos and take the necessary precautions.





#### What do Australian laws require?

There are **work health and safety (WHS) laws** related to asbestos management and removal that apply to all workplaces, including those working in the automotive industry.

- Business owners and employers must provide a safe working environment and training for workers who may come into contact with asbestos.
- Business owners and employers must **ensure other people are not exposed to asbestos** fibres so far as is reasonably practicable.
- Workers must take reasonable care for their own health and safety and not adversely affect the health and safety of other persons.

Automotive industry workers and mechanics carrying out asbestos-related work, for example removing asbestos parts, must:

- · be trained in asbestos identification, safe handling and control measures
- use equipment designed to capture or suppress airborne asbestos, and
- follow safe removal, decontamination and disposal methods.

While WHS laws do not apply to vehicle collectors and enthusiasts who aren't carrying out a business or undertaking in relation to the vehicle, **public health and environment protection laws** do apply. Enthusiasts and collectors should therefore take the same precautions as automotive workers to protect themselves, their families and their community from exposure to asbestos fibres.

#### If asbestos needs to be removed...

In most circumstances, WHS laws require asbestos to be removed from workplaces by a **licensed asbestos removalist.** 

There are two classes of licensed asbestos removalist:

- · Class A: authorised to remove all types of asbestos
- Class B: authorised to remove only non-friable asbestos materials

No more than  $10m^2$  of non-friable asbestos can be removed by a business or organisation without a license, except in the Australian Capital Territory (ACT) where any amount of asbestos material must be removed by a licensed asbestos removalist.

In Victoria the removal of less than 10m<sup>2</sup> of non-friable asbestos can only be done without a license where the total time of all asbestos removal work carried out in any period of 7 days is less than 1 hour. This does not mean that removing up to 10m<sup>2</sup> of non-friable asbestos is safe, just that it is legally allowed if all precautions are taken.

Further information on how to remove small amounts of asbestos is available in *Asbestos safety for trades and construction workers*.

You must comply with all the requirements of the work health and safety laws and environment protection laws in your state or territory. These laws can vary, so it is important that you check the requirements in your jurisdiction.

Regulators in each state and territory publish codes of practice and other types of guidance to help you comply.

#### When can asbestos be imported?

In very limited circumstances, asbestos-containing products are allowed to be imported into Australia. Permission to import asbestos, or goods containing asbestos, may be granted for the purposes of:

- research, analysis or display
- importation of waste from an Australian External Territory for disposal in a state or territory.

Applications are considered on a case by case basis. Generally, importing historic vehicles for display purposes is only allowed under controlled conditions in public galleries or museums and not for private display purposes.

For more information about meeting border requirements for asbestos in cars and other goods, see:

- Australian Border Force Prohibited Goods Asbestos
- Australian Border Force Managing the risk of asbestos when importing a motor vehicle
- Asbestos Safety and Eradication Agency Permits in very limited circumstances



# Things to consider before starting a job



Removing and replacing brake pads and linings, gaskets, seals, wheel rims, and clutch plates and housings are the biggest hazards for automotive industry workers.

Historic vehicle enthusiasts should also be mindful of insulation (pipe wrap and exhaust systems), seat bases, battery holders, underbody and soundproofing.

Extreme caution should also be taken when sanding asbestos-containing vehicle parts and cleaning out asbestos-containing dust. These activities are highly hazardous, as they release asbestos fibres which can be easily inhaled.

#### **Safety Tips**

- Wear the right personal protective equipment (PPE) and ensure it is fitted correctly
- □ Thoroughly wet down the asbestos material and keep it wet during your work to minimise dust first check that all electrical equipment is de-energised
- Do not use brooms or brushes to dry-sweep asbestos containing dust
- Do not use high-speed power tools to cut, grind, sand or drill asbestos materials
- Do not use high pressure water or compressed air to clean areas where asbestos dust may have settled, for example on wheel rims if asbestos is present in the brake material
- Do not leave asbestos materials where they may be broken or crushed
- □ Wrap asbestos waste (including any offcuts or contaminated items) in two layers of 200 µm plastic sheeting or double-bag in asbestos waste bags
- Ensure the packaged asbestos waste is transported securely and disposed at a designated asbestos-waste disposal facility as soon as possible after removal.
- □ Check the packaging of a part or information from the manufacturer to ensure that it is asbestos free.

Keep some important equipment in your workshop like a cartridge half face mask (P2), disposable overalls, disposable gloves and other equipment like a water spray bottle, 200 micron thick plastic bags and duct tape.



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#### **Further information:**

State and Territory work health and safety regulators have a range of resources on asbestos:

- NSW www.safework.nsw.gov.au
- QLD www.worksafe.qld.gov.au
- VIC www.worksafe.vic.gov.au
- TAS www.worksafe.tas.gov.au
- SA www.safework.sa.gov.au
- NT www.worksafe.nt.gov.au
- WA www.commerce.wa.gov.au/worksafe
- ACT www.worksafe.act.gov.au
- Cwth www.comcare.gov.au

#### Some other useful websites include:

Australian Manufacturing Workers' Union – www.amwu.org.au SafeWork Australia – www.safeworkaustralia.gov.au Australian Border Force – www.abf.gov.au/asbestos





