

Automotive Brake Systems

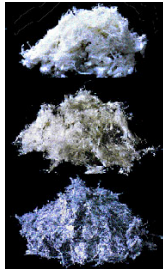
## **Brake Service Safety**

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## **Asbestos**

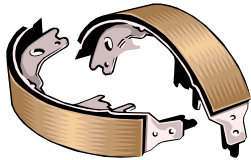
- Asbestos is a silicate compound that is very resistant to heat
- Exposure to asbestos particles as small as .0002" is a serious health hazard



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## **Asbestos in Automobiles**

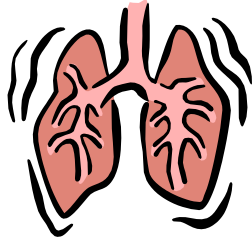
- New vehicles were required to be asbestos free in 1994
- Domestically manufactured service parts were required to be asbestos free in 1996



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## **Asbestos Health Hazards**


- Millions of microscopic fibers are released during a brake job
- Asbestos exposure can lead to asbestosis and cancer
- Fifteen to thirty year latency period



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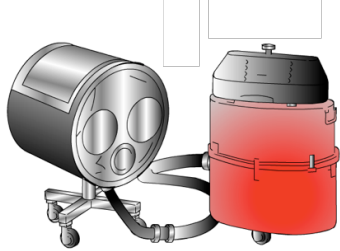
## **Working With Asbestos**

- Use approved wet or HEPA brake dust collection equipment
- Properly dispose of the brake dust, solvents, fluids and brake components generated during brake system service



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## **HEPA Asbestos Equipment**



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## Brakes System Service

- Never use an air hose to blow off brake assemblies
- Never use aerosol sprays to clean brake assemblies
- Breathing organic or metallic dust particles is not healthy



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## Brake Fluid


- Poly glycol brake fluids act as a solvent on most paints
- Brake fluids are hydroscopic and must be stored in sealed containers
- Used brake fluid must be disposed of as hazardous waste



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## Aerosol Brake Cleaner

- Most aerosol brake cleaning solvents are flammable
- Vapors from aerosol brake cleaning solvents may be toxic
- Many chlorinated hydrocarbon solvents may be absorbed through the skin with toxic effects



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## Brake Service Tools

- Using the proper tools and procedures during brake system service can prevent component damage and personal injury
- Know how to properly use your tools



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## Review

Which of the following safety warnings must be followed when handling asbestos dust?

- A. Compressed air and/or brushes must not be used to clean asbestos from brake components.
- B. Asbestos dust must be placed in a sealed and labeled bag for disposal.
- C. A high efficiency cartridge or air line respirator must be worn to avoid breathing asbestos dust.
- D. All of the above answers are correct.

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