

# REPLACING BRAKE DRUMS, SHOES, OR PADS



Replacing brakes may expose you to dangerous chemicals, asbestos dust, sharp edges and musculoskeletal disorders.

## Hazard: Asbestos Dust

### Details

- Found in older brakes or machine-fit linings to brake drums, clutch linings and disc pads
- Special care is needed while cleaning brake assemblies and clutch housings, grinding brake linings and sweeping floors

Note: The combination of smoking and exposure to asbestos is especially dangerous.

### Threat

- Asbestosis, a disabling lung disease
- Asbestosis may lead to lung cancer up to 25 years after exposure
- Gastrointestinal cancer caused by eating asbestos- contaminated food

### Safe Work Guidelines

#### Before You Start

- Consult the joint health and safety committee's asbestos assessment for information about exposure in your workplace

#### While You Are Working

- Make certain your work area is well ventilated with a mechanical local exhaust, or wear a supplied-air positive-pressure respirator; if necessary, consult a hygienist or a ventilation engineer to make sure that you have the proper exhaust system
- Keep your hair covered and wear protective clothing like coveralls that you can take off to avoid carrying the dust with you
- Remove dust using a vacuum equipped with a high efficiency particulate air (HEPA) filter; do not bang the drum to remove dust or blow dust out of brake drums or clutch housings with an air line
- If a vacuum is not available, wet the assembly with a wet-washing unit, low-pressure water or gentle spray; then wipe with a clean, damp rag and dispose of the used rags in a plastic bag while they are still wet. Carefully close the bag without disturbing the asbestos.
- Collect washings and dust on floors and around equipment and dispose of them using a vacuum with a HEPA filter or by wet-sweeping
- Use a slow-turning lathe to reduce dust instead of grinding brake linings
- See Regulation 837: Designated Substance – Asbestos

## When You Are Finished

- Vacuum your coveralls
- Leave your protective clothing at work so that your employer can have it cleaned
- Wash your hands and face well before eating
- Shower after working with asbestos

## Hazard: Brake Fluids

### Details

- Contain polyethylene glycol ethers that can drain to the shop floor

### Threat

- Slipping, falling, injury
- Skin irritation
- Nervous system depression
- Liver and kidney damage
- Environmental contamination

### Safe Work Guidelines

- Capture brake fluids in a container
- Clean spills immediately
- Wear appropriate personal protective equipment, as indicated in the product's MSDS, such as gloves and/or barrier creams

## Hazard: Sharp Edges

### Details

- May be found on a rusty brake drum or cutting arm of brake lathe

### Threat

- Cuts and bruises

### Safe Work Guidelines

- Avoid sliding your hands down on the drum while you are mounting it on the brake lathe
- Wear leather gloves

## Hazard: Working in a Fixed Position

### Details

- Muscles tire quickly when you stay in a fixed position, placing them at higher risk of injury

### Threat

- Muscle strain and associated tendon, nerve, disc or joint pain (common areas at risk include your neck, shoulder, elbow, wrist, and low back)

### Safe Work Guidelines

- Keep parts, tools and supplies as close to you as possible
- Use height-adjustable controls on hoists and platforms to place vehicles and parts in the ideal work zone (e.g., if you're standing, between your shoulder and elbow height)
- Try to work on the outside of the car as much as possible
- (Note: If you are working under the car you may not have sufficient head room, so find as good a working position as possible)
- If possible, use two hands to support hand tools
- Take frequent, short breaks:
  - For short jobs: 15 second break for every 1-2 min. of work
  - For long jobs: 5 minute break every 15-20 min. of work
- Change to a task that involves moving around or uses a different body part to improve your blood flow

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