



**SAFE WORK GUIDELINES**

# Removing Transmissions

There are many physical hazards related to removing transmissions, including electrical shock, slippery floors, sharp edges, falling debris, noise and weight.

**HAZARD**

**SAFE WORK GUIDELINES**

▶ **Slippery Floors**

**Details**

Created by transmission and other fluids.

**Threat**

Falls

- Wear CSA-approved safety boots with slip-resistant soles
- Immediately place absorbent material on spills

▶ **Sharp Edges**

**Details**

Present on a damaged car.

**Threat**

Cuts, bruises

- Take the time to use the right tools for the job at hand
- Wear leather gloves to protect against sharp edges and rusted or broken parts

▶ **Dirt and Debris**

**Details**

Can fall from the underside of the vehicle.

**Threat**

Eye injuries

- Wear safety glasses or goggles that are CSA-approved for the job when working under a vehicle to protect your eyes from rust, engine coolant and anything else that can fall from the bottom of the vehicle

▶ **Noise**

**Details**

Noisy tools such as impact tools can be louder than 90 dB.

**Threat**

Hearing damage, deafness

- Wear appropriate hearing protection and make sure that other workers near you are wearing hearing protection

## ► Falling or Moving Vehicle

### Details

Vehicles and parts that are not properly supported or attached can slip and fall or move.

### Threat

Serious injury or death

- Remove engines only from vehicles on the ground or on a proper lifting device

### Before You Start

- Wear CSA-approved safety shoes to protect your feet from falling objects
- Make sure that the vehicle is resting squarely on the lift
- Know the load limits of the lift and **do not** overload them
- If the hoist has a locking device, make sure that it is in place when the lift is up
- **Do not** block or tie open the lift controls when the lift is in motion
- **Do not** leave the lift controls when the lift is in motion

### While You Are Working

- Use 4 transmission jack stands of rated capacity to support the vehicle and to stabilize and equalize the load when removing the transmission
- **Do not** lower the vehicle onto the jack stands; this disengages the lift's locking devices
- **Do not** lower the lift too far or too quickly; this can cause the jack stands to move, causing the vehicle to fall
- Use an impact wrench when working on an elevated vehicle
- **Do not** use a cheater or break bar when working on an elevated vehicle; the sudden pushing or pulling force could cause the vehicle to shift and fall

### Maintenance

- Take the lift out of service and lock it out until it is repaired if it is:
  - leaking (air or hydraulic)
  - dropping abruptly
  - dropping slowly
  - stepping when being raised or lowered
  - jerky when being raised or lowered

## ► Weight

### Details

A transmission weighs between 200 and 500 lb.

### Threat

Serious back, hand or foot injuries

- Use at least 2 people to support the transmission when you lower the hydraulic ram of the jack or make sure that the transmission is well secured by fasteners on the jack
- Carefully pull the transmission and jack away from the engine

## ► Improper Use of Tools

### Details

Using the wrong tool for the job or using the correct one improperly.

### Threat

Hand and foot injuries

Back injuries

Musculoskeletal injuries

Scrapes, cuts, bruising

- Use the right tool for the job and read directions on its proper use and care; ask your supervisor if you are unsure
- **Do not** use extreme force in pulling, etc., when the vehicle is on the jack
- Use impact sockets on an impact tool; **do not** use standard sockets, which can shatter
- **Do not** carry tools, especially pointed tools, in your pocket—if you slip or fall, they can pierce your leg or kidney