# Automobile Repair Services Meeting Kit




Automobile repair services include inspections, maintenance, and repairs to vehicles. Repairs may require computer analysis, fluid changes, parts changes, or major mechanical work, exposing workers to fire and explosion hazards, chemicals, ergonomic strains, awkward postures, and tool and machinery safety concerns.

## SPECIFIC HAZARDS IN REPAIR SHOPS

**Mechanical:** Use caution with jacks and aerial lifts. Know the rated capacity and the weight and center of gravity of the vehicle. When you use a jack, test to see if the vehicle is supported before you work underneath. Use support stands to protect you if the vehicle falls. When you use the aerial lift, know the vehicle’s lift points to ensure a balanced and stable lift. Periodically inspect and maintain your jacks and lifts.

Other mechanical hazards include moving engine parts such as drive belts, pulleys, and fans. Know where these parts are and keep your hands clear of them. Don’t lean over or reach into the engine compartment while someone else is behind the ignition key or revving the engine. Watch for rotating parts that can pull in your hand, sleeve, and arm and cause severe injury. Take caution around air bag technology; disable it before you begin work.

**Burns:** Hot fluids can scald your skin; allow the engine to cool before you work with hot parts and fluids. Never open the radiator cap on a hot engine. Prevent shop fires. Don’t smoke around fuels or fuel-related parts. Don’t smoke or get sparks near the battery; it can give off explosive hydrogen. Use caution when working on fuel lines. Bleed line pressure and use a rag to absorb drips and sprays. Store flammable rags in fire-safety cans with self-closing lids.

## HEALTH AND SAFETY ISSUES FOR MECHANICS IN AUTO REPAIR SERVICES

- Exposure to chemicals, solvents, solder.
- Exposure to gasoline or diesel exhaust.
- Risk of electrical shock or burns.
- Fire risk from fuels and other products.
- Burns from battery acid, hot surfaces, exhaust, etc.

- Potentially working in confined spaces.
- Welding hazards, including UV radiation.
- Working with compressed air.
- Working near rotating parts.
- Working with explosive items, such as air bags.
- Bursting of tires while repairing or installing.
- Extreme temperatures.
- Risk of pain or injury from awkward positions, repetitive manual tasks, or lifting heavy objects.
- Risk of falling objects when working under vehicles.
- Possibility of working at heights.
- Risk of eye injury from flying particles.
- Risk of hand injuries.
- Slips, trips and falls.
- Working with various hand tools, power tools and equipment.
- Stress.
- Shift work or extended work days.
- Working alone.
- Possible exposure to asbestos.
- Exposure to noise.
- Dealing with hostile customers.

## BEST SAFE WORK PRACTICES FOR MECHANICS IN REPAIR SERVICES

- Use, maintain and store personal protective equipment according to manufacturer’s recommendations.
- Learn about chemical hazards, WHMIS and SDSs.
- Know how to report a hazard.
- Follow good housekeeping procedures.
- Keep tools and equipment in good working order.
- Avoid awkward positions, and repetitive tasks, or take frequent breaks.
- Learn safe lifting techniques.
- Follow a recommended shift work pattern, and know the associated hazards.
- Inspect work area before work starts to identify potential hazards and their controls.
- Follow workplace policies and procedures relating to preventing workplace violence and harassment
- Get training, read, and understand the material safety data sheet on the chemicals you use.
- Know where emergency exits and equipment are located.
- Get fire extinguisher training.

## FINAL WORD

Automotive work can require long days; pace yourself to prevent fatigue. Take frequent mini-breaks and rotate your work tasks throughout the day. Moving in and around a vehicle and reaching into cramped engine and electrical compartments may require awkward postures that can lead to ergonomic strains and sprains. Get the proper tools to allow you to reach your tasks comfortably and safely. Auto parts are heavy, so use proper lifting methods.