#### **JOB HAZARD ANAYLYSIS**

### **Mechanic**

Page 1 of 3



Work Duties	Hazards	Recommendations
Equipment Maintenance	Electric shock, parts shooting and striking worker, getting caught in equipment, cuts from sharp edges	Shut off any power source before working, Have appropriate PPE depending
Heavy lifting	Use proper lifting techniques, limit duration of repetitive motion.	Always know your weight limit, lift with your legs, get help if needed.
Working with power tools	Cuts, abrasive, electric shock, injury form flying debris, tripping over power cords	Keep tools in good condition.
Using hand tools	Cuts, pinches, smashes, punctures, severing of fingers.	Keep tools in good condition. Inspect tools before use. Wear safety glasses. Work away from yourself. Use normal caution required for all hand tools.
Using ladders or step-ladders	Ladder collapsing; Slipping and falling from ladder	Inspect ladder before use. Use ladder at proper height Make sure the ladder in assembled, locked and on leve ground. Do not exceed weight limit for ladder. Do not stand on the top or top rung of ladder and make sure a co-worker is holding ladder if any higher than a step- ladder.
Working with pneumatic parts	Getting sprayed with hot or cold water, steam, refrigerates. Injuries from shooting parts from air build-up.	Slowly open valves to release pressure and wear safet glasses.



THE OHIO STATE UNIVERSITY

Job Hazard Analysis

Office of Environmental Health and Safety http://www.ehs.osu.edu/

### JOB HAZARD ANAYLYSIS

# Mechanic

Work Duties	Hazards	Recommendations
Working around electricity.	Electric shock; electrocution.	Shut off power to work area. Use lock-out device to ensure power is not inadvertently switched on. Always test before beginning work to verify that power is off. Remove tools and other metals from body. If you must work with electricity on, wear safety glasses and leather gloves. Have coworker with you in case there is a problem. If work area is wet, clean up standing water before working with electricity; wear rubber boots and gloves.
Soldering and brazing using oxygen/acetylene outfit.	Explosion, burns, inhalation of fumes	Check hose and connections for leaks prior to using, work in well-ventilated areas, Don't solder around flammable materials wear proper PPE and burn away from yourself, use correct solder for the job and have a person stand by as a fire watch.
Storing or transporting compressed gas cylinders	Explosion of compressed gas, rupture of valve	Do not allow cylinder valves or the regulators to come in contact with grease, oil, or other lubricants. Always install a protective valve cover and secure cylinders to a stand or wall, wear proper PPE.
Battery work	Eye injuries, acid spills, explosion	Wear eye protection, utilize safety junction box starting vehicle with jumper cables, and wear gloves and protective coveralls.
Steam cleaning	Eye injuries, scalding burns	Wear protective gloves and safety glasses. Direct steam flow always away from body.
Working under lifted vehicles (when hoist is not used)	Bodily injuries	Use safety stands.



Job Hazard Analysis

Office of Environmental Health and Safety <u>http://www.ehs.osu.edu/</u>

## Mechanic

Page 3 of 3

Work Duties	Hazards	Recommendations
Using grinders	Eye, hand and bodily injuries	Select proper grinder (stationary or portable) with proper wheel grit for job. Wear eye protection always. Wear glovesalways. Keep guards properly adjusted. Keep tool rest adjusted to within 1/8 inch of wheel on stationary grinders.
Cleaning parts with toxic materials	Eye injuries, skin irritation, fire	Wear eye protection. Wear latex gloves. Do not smoke near flammable substances. Refer to Safety Data Sheet (SDS) for proper handling, storage and disposal.
Changing/repairing tires	Dirt particles in eye, pinching/smashing fingers, slipping, back injury, falling, flying wheels	<ul> <li>Wear safety goggles. Keep head away from air. Keep fingers and toes at safe distance from slide hammer.</li> <li>Remove ring with special tire irons. Hold on to the ring as it comes off. Use proper body mechanics keeping back straight and utilizing leg muscles to lift heavy items. Place tire in position using proper lifting motion. Do not drop tire. Check split ring while inflating, if it doesn't seat, deflate the tire and reposition ring.</li> </ul>
Removing fuel tanks on vehicles	Skin burns, or irritation, explosion, fire	<ul> <li>No smoking, welding or running of electrical equipment in area. Drain fuel into approved sealed container.</li> <li>Wear goggles and rubber gloves. Have fire extinguisher in immediate area and know how to use. Refer to MSDS for proper handling of volatile substances.</li> </ul>

Job Hazard Analysis

Office of Environmental Health and Safety <u>http://www.ehs.osu.edu/</u>

