



Environmental Health and Instructional Safety Safe Work Practices for the Auto Shop

The following equipment is used in the Auto Shop. Please read each of the safe work practices, sign the final page, and return the signed page to EH&IS at T 1475.

¼” Finger Tip Ratchet TMR739

1. Prolonged exposure to vibration may cause injury.
 2. Do not exceed the maximum working air pressure.
 3. Always wear safety goggles.
 4. Always wear hearing protection.
 5. When operating the tool, always keep the body and hands away from the working attachment fixed to the tool.
 6. When using the tool, adopt a firm footing and/or position and grip the tool sufficiently only to overcome any reaction forces that may result from the tool doing work. Do not over-grip.
 7. Never use the tool if there is any chance of coming into contact with live electricity.
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45-Stainless Steel Polish

1. Chemical ingredients: paraffin oil, petroleum spirits, limonene, & isopropyl alcohol
 2. Health Effects & routes of entry
 - a. Skin: itching, scaling, reddening, & de-fatting
 - b. Eyes: redness, watering, & itching
 - c. Inhalation: respiratory tract irritation, and central nervous system depression
 - d. Chronic exposure hazard (eyes, inhalation, & skin)
 3. Gloves: nitrile
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5MF96 OTC 1824 20-Ton Shop Press

1. Keep hands out of the work area during a pressing operation.
2. Locate the press in an isolated area, or shield the press to minimize danger to others.
3. Work pieces must be well supported and aligned so that ram force is straight, and parts being pressed cannot slip out or break.

4. To prevent accidental slippage, bolster support pins must be in place before placing a work piece on the press bed or starting a pressing operation. Stay out from underneath the bolster.
 5. Do not stress adapters beyond their capacities.
 6. Use only the pump handle supplied with the bottle jack.
 7. Wear eye protection that meets ANSI Z87.1 and OSHA standards.
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6XG40 Milwaukee 6521-99 Sawzall

1. Always wear leather gloves and denim pants.
 2. Always hold the sawzall foot firmly to the work, and never remove the blade from the work until it has fully stopped.
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Battery Cable Stripper 5046

1. Never unplug a battery while it is charging.
 2. Always turn off the charger before unplugging the battery.
 3. Always wear a face shield, apron, and gloves when handling or maintaining batteries. Sulfuric acid can burn eyes and skin. If acid splashes in eyes flush for 15 minutes.
 4. Batteries should be used for 8 hours, charged for 8 hours, and allowed to rest for 8 hours.
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Battery Tester EECS303A

1. Using this equipment may expose operator to risk of explosion, and batteries contain highly corrosive sulfuric acid.
 2. Wear safety goggles and protective clothing, user and bystander.
 3. Wear protective gloves.
 4. Make sure someone can hear you or is close enough to provide aid when working near battery.
 5. Have plenty of water and soap nearby. If battery acid contacts skin, clothing or eyes, flush exposed area with soap and water for 10 minutes. Seek medical help.
 6. Do not touch eyes while working near battery.
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Chemical Guard

1. Chemical ingredients: toluene, acetone, propane, butane, isobutyl acetate, pentyl acetate, & 2-propoxyethanol
2. Health Effects & routes of exposure

- a. Eyes: tearing, swelling, redness, & excessive blinking
 - b. Skin: itching, redness, de-fatting, and drying
 - c. Inhalation: coughing, sneezing, and central nervous system depression including nausea, vomiting, headache, dizziness, & unconsciousness
 - d. Ingestion: nausea, vomiting, diarrhea, & lung damage (aspiration of vomit)
 - e. Chronic exposure hazard (eyes, inhalation, & skin)
3. Gloves: nitrile
 4. Respirator cartridge: P100 filter & organic vapors
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Cold Water Hi-Pressure Washer SEPW1001

1. Do not place hand over end of nozzle while spraying or adjusting nozzle.
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Dayton Model 3Z918 16 1/2" Drill Press

1. Always wear eye protection goggles complying with ANS Z87.1
 2. Wear ear protectors (plugs or muffs) during extended periods of operation.
 3. Wear protective hair covering to contain long hair.
 4. Do not wear loose clothing, gloves, neckties or jewelry that may catch in moving parts.
 5. Never place your fingers in position where they could contact the drill or other cutting tool if the work piece should unexpectedly shift.
 6. Never operate drill press with protective cover on the unused shaft end of the motor removed.
 7. Position the work piece to against the column whenever possible. If it is too short, clamp the piece solidly to the table with the clamp provided or with a C-clamp. This is to prevent the drill bit from grabbing the work piece from your hands, which can result in injury.
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Evapro Model 2000E Smoke & Leak Detection Machine

1. Change the smoke-producing solution in the EVAPro once a year.
2. Use only UltraTraceUV Smoke Solution No. P0716UV.
3. Do not use with running vehicle engine.
4. Wear eye protection that meets OSHA standards (ANSI Z87.1).

5. Operating pressure must be 50-125 PSI (3.4-8.5 bar).
 6. Store and operate the EVAPro in upright position.
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Heavy Duty Cable Cutter 5042

1. This cutting tool is sharp, has nip points and can cut through bone.
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Lestronic II Battery Charger (Lester Electrical) & NAPA Nascar Battery Charger

1. To reduce risk of injury, charge only the liquid electrolyte (wet) lead acid rechargeable batteries. Other types of batteries may burst causing personal injury and damage.
 2. Do not expose charger to rain.
 3. Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.
 4. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
 5. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage.
 6. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure:
 - a. Pins on plug of extension cord are the same number, size, and shape as those of plug charger.
 - b. Extension cord is properly wired and in good electrical condition.
 - c. Wire size is large enough for AC ampere rating of charger. Ratings are: 70 AMP at 140 volts for Lestronic II Battery Charger and 30 AMP at 85-5000 volts for NAPA Nascar Battery Charger.
 7. Do not operate charger with damaged cord or plug; replace it immediately.
 8. Do not operate charger if it has received a sharp blow, been dropped, or damaged in any way. Take it to a qualified service center.
 9. Do not disassemble charger; take it to a qualified service center when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
 10. To reduce risk of electric shock, unplug charger from a live outlet or disconnect AC power to the outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.
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Lincoln All American: 2 Ton Jack, 3 Ton Jack, & 10 Ton Jack

1. Do not use to support a load or vehicle.
 2. Do not exceed rated capacity. Rated capacity is: 2 Ton, 3 Ton, and 10 Ton.
 3. Do not crawl under a vehicle/load when placing stands or support.
 4. Do not use to dolly a vehicle.
 5. Do not open oil filler plug for any reason unless jack is fully lowered.
 6. Do not move or dolly the vehicle while on the jack.
 7. Use only on hard level surface capable of sustaining the load.
 8. Center load on saddle.
 9. Lower a vehicle/load slowly.
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PowerLink Ferret 40 Battery Load Tester

1. Always wear eye protection when testing vehicles. Do not lay tools on a battery.
2. Before working on a vehicle, set the brakes and block the wheels.
3. Remove finger rings and metal wrist bands. They can short terminals and become very hot from electric current.
4. Keep work area well ventilated and free of exhaust.
5. Avoid electrical shocks caused by getting close to live ignition wires or touching the coil TACH terminal.
6. Keep spark producing devices at least 0.5m (18") above the floor to reduce the hazard of igniting gasoline vapor.
7. Do not let test leads wind up in a moving fan or pulley. Rout leads away.
8. Battery gas is highly explosive. If a battery explodes flush the acid away from peoples' skin with generous amounts of water. Follow up with baking soda and then more water.
9. Treat clothing, vehicle parts, and equipment similarly. Any acid traces inside equipment must be removed by generous rinsing.
10. Never use a wrench on the ungrounded battery terminal until the grounded one has been disconnected. Contact between the vehicle body metal and the hot terminal can cause sparks to ignite gas or even weld tools into a battery short circuit.
11. Keep the space around a battery well ventilated.

12. Do not make sparks or allow flames near batteries.

Thermadyne Firepower FP 130 MIG Welding System

1. Do not look at the arc without proper protection to the eyes.
 2. Do not weld on metals or coated metals in a confined area unless the operator and the people standing in the same area use an air-supplied respirator.
 3. Do not weld in a damp area or come in contact with a moist or wet surface when welding.
 4. Wear closed, non-flammable protective clothing, without pockets or turned up trousers.
 5. Wear a non-flammable welding helmet to shield the neck, face, and sides of the head. Keep welding mask glass clean. Replace it if it is cracked or chipped.
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Tire Changer-Model 4050A Single Stage, Center Post

1. Danger: Mis-matched tire and rim combinations explode!
 2. Do not exceed 40 PSI while seating beads.
 3. Do not exceed tire manufacturer's recommended air pressure as printed on sidewall of tire during inflation.
 4. Read and follow safety information and instructions.
 5. Keep hands and entire body back from inflating tire.
 6. Inflate tire with short bursts of air, checking pressure frequently.
 7. Inspect tire and rim carefully for correct size, wear, damage, or defects before mounting.
 8. Use approved tire bead lubricant.
 9. Use personal protective equipment (PPE): Safety glasses, Back support belts, Safety shoes/boots
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Wheel Balancer WB260B

1. Wear approved eye protection when removing and attaching weights.
2. Make sure the power switch on the left rear of balancer is OFF before plugging or unplugging the balancer.
3. Make sure the balancer is sitting on all three feet on a clean, level floor with no debris under the base.
4. Remove all stones, old weights, heavy dirt, and other debris from the wheel before balancing.



Environmental Health & Instructional Safety
(714) 278-7233, fax (714) 278-8240

Please sign below verifying that you have read the “Safe Work Practices for the Auto Shop”. Send the signed sheet to Kenna Schoenherr, T1475.

I, _____ (print name & Campus Wide ID Number) have read and understand the safe work practices listed above for the Auto Shop and will operate the designated machines in accordance with them, the manufacturer's operating instructions, and my supervisor's instructions.

Signature _____ **Date** _____