

Worksite: _____ Instructor: _____ Date/Time: _____

Topic C624: Cut-Off Saws (A)

Introduction: Cut-off saws can be used for cutting concrete, masonry, tile, sheet metal, rebar, steel beams, angle iron, and steel or aluminum channeling. The most commonly used cut-off saws are portable and gas powered with blades up to sixteen inches in diameter. Following are safety guidelines for properly operating and maintaining cut-off saws:

Hazards: Cut-off saws are very powerful and can be dangerous. Hazards include high-speed blade rotation, exposure to the blade during operation, and exhaust fumes from the internal combustion engine. Cut-off saws can create large clouds of dust when dry-cutting masonry and can create hot sparks when used to cut metal. Cut-off saw hazards include cuts, kick-back injuries, exposure to carbon monoxide and dust, burns, particles hitting the eyes, and injuries due to broken blades or unsecured material.

- Always use caution and follow all of the safety procedures when operating cut-off saws.
- Make sure employees are trained in the proper use of cut-off saws. Ensure no one is in the immediate area where sawing is taking place.
- Always wear the proper personal protective equipment (PPE).
- Make sure saws are in good working order, equipped with the correct blades, with all of the safety guards are in place.
- Ensure all material that is to be cut is secured to keep it from shifting during cutting.
- Use caution around sharp edges left after all material has been cut. Always wear gloves to avoid cuts and abrasions.

Training: Employees must read the operators manual and receive instructions on the proper care, maintenance, and operation of cut-off saws. The operating manual must be available on the job site for ready reference when the saw needs adjustment or repair. Following are the minimum instructions that an operator must receive prior to using a cut-off saw:

- Selecting, Installing, and inspecting blades
- Mixing fuel and fueling the saw, Saw maintenance
- Starting the saw, Proper saw operation, Saw shut down
- Proper cutting stance and grip
- Use of respiratory and eye protection
- Initial inspection of cut-off blades and guards

Care: Cut-off saws must be serviced and maintained according to the manufacturers' instructions. Use only replacement parts recommended by the manufacturer. Cracked, broken, or worn parts must be replaced before the saw is used. Guards and air filters must be cleaned regularly. Blades must be inspected prior to installation. Correct any blade vibration before attempting to make a cut. In confined areas, make sure that ventilation is adequate. Cut-off saws release carbon monoxide gas which is highly toxic.

- Shut off the saw before adding fuel. Keep fuel container away from work area. Do not spill fuel on hot exhaust parts.
- Use caution when preparing the oil/gasoline mixture, and when fueling the saw. No smoking or other ignition sources are allowed in the area where fuel is mixed or where saws are fueled. Let the saw cool-off before refueling.
- Always fill the tank in a well-ventilated area at least ten feet from where the saw will be used. Always wipe spilled fuel off of the saw.
- Avoid fueling the saw near formwork or other flammable material. Use a funnel to avoid spills.
- Do not overfill the saw or start it without securing the gas cap. Gasoline leaking from the tank can saturate clothing and ignite from sparks generated while cutting. Never start saws where gasoline is stored, or where fuel has been spilled.
- Check all of the fuel lines on the saw for leaks. Vibrations from normal operation can loosen parts and cause a gas leak.
- Always start the saw in a clear area. Employees must stay clear of the front of the saw when it's running.
- Always rest the saw on a smooth hard surface when starting. Make sure the blade guard is operating properly.
- Remember, after the engine has started, release the throttle and make sure that the engine runs properly and slows to an idle without the blade moving.
- Make sure to rev the engine several times to ensure that the blade spins freely, and turns smoothly on the arbor.

Support: One of the major hazards with cut-off saws occurs when the operator fails to support and secure the material to be cut. The saw is very powerful and can throw unsecured material causing severe injury. Standing on material to hold it down is not recommended. For repeated cuts of masonry or pieces of metal, use a jig designed and built to hold material in place for ideal safety and efficiency. Remember that eye protection is always required when operating any type of cut-off saw.

Conclusion: Cut-off saws must be used for their intended purpose. Never attempt to use them for anything other than those purposes. Utilize these safety guidelines when operating and maintaining cut-off saws.

Employee Attendance: (Names or signatures of personnel who are attending this meeting)

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_____	_____	_____
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These guidelines do not supersede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.