



## **#11-QUICK CUT SAW- SAFE JOB PROCEDURE (FINAL- Oct./04)**

### **1. PURPOSE:**

The purpose of this procedure is to explain the step-by-step instructions in the use of a quick cut saw. These saws are widely used for cutting light steel sections and piping.

### **2. GENERAL**

**A quick cut saw is a high speed, fast cutting power tool.**

**Hand held portable circular cut-off saws are commonly known as quick-cut saws.**

### **3. SCOPE AND DEFINITION**

Quick cut saws are high-powered electric or gas saws compared to similar tools.

**Hazards include high-speed blade rotation, high vibration levels, high noise levels, blade exposure during operation, and exhaust from the internal combustion engine- the usual power source.**

### **4. PROCEDURE**

**WARNING:** Never modify or remove any of the quick cut saw components, specifically the wheel guard. Use only the correct cutting wheel for the job.

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Put on the appropriate PPE before use

### 4.1 Fueling:

- **Fuel or refuel only in a well-ventilated place.**
- **Smoking is strictly prohibited when filling the fuel tank.**
- Avoid fuelling on or near combustible absorbent materials such as wood.
- Gasoline spills are a fire hazard.
- Use a funnel to avoid spills.
- **Always turn off saw before fueling.**
- Do not overfill the saw or run it without securing the fuel cap.
- Only use the cap provided by the manufacturer.
- Gasoline seeping from the tank can saturate your clothing and be ignited by sparks created from cutting metal.

### 4.2 Inspection before cutting:

- Visually inspect the saw for leaks or damage.
- Inspect the cutting wheel for defects or damage (cracks or chips) prior to use. Do not use a cutting wheel that has been dropped or visibly damaged.
- Check all nuts, bolts, and the tension of the V-belt, to ensure safe and proper performance.
- Check throttle switch to ensure that it operates smoothly and without sticking.
- **Ensure that the wheel guard is in the proper position to protect operator.**

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### 4.3 Starting:

- **Start the saw in an area clear of people and obstacles. Under no circumstances should anyone be standing in front of the saw as it starts or is running.**
- Do not drop start, this is dangerous as you may lose control of the saw
- Put the saw on a smooth hard surface for starting.
- The guard should be properly set for the type of cut beforehand.
- Maintain a good balance and secure footing.
- Do not wrap the starter cord around your hand-this can cause injury.
- Place left hand on front handle bar and your right hand on rear handle and throttle trigger. Left-hand people should comply with this rule.

### 4.4 Cutting:

- Although skill in handling the saw can only be learned through practice, some safety considerations and operating techniques must always be kept in mind, even by the most experienced operators.
- **Do not use the saw on a ladder or any other insecure support if this is not possible every attempt should be made to provide additional support for the saw.**
- Work should be supported so that the disk or blade will not bind in the cut.

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- **Support heavier materials on both sides of the cut so the cut piece will not drop or roll onto the operator's foot. Lighter materials can generally be allowed to fall. In all cases the cut should be as close as possible to the supporting surface.**
- For cutting, keep the throttle wide open. Ease the blade down onto the cut line. Don't drop or jam the blade down hard. Move the saw slowly back and forth in the cut. Do not force the cutting wheel into the material.
- Hold the saw so that disk or blade is at right angles to the work and use only the cutting edge of the disk or blade. Never use the side of a disk for cutting. A worn disk will almost certainly shatter and may cause injury.
- **Position the saw in such a way that your body is clear of the cutting attachment. Do not reach or cut above shoulder height.**
- **Always use the saw so that it is always pulling away from you never pulling towards you .**
- Keep pressure on the saw reasonably light. Although more pressure may be necessary for hard materials, it can cause disk to chip or go "out of round". This in turn will make the saw vibrate. If lowering the feed pressure does not stop vibration, replace the disk.

### 4.5 Carrying:

- **Don't carry the saw any distance with the engine running.**
- Stop the engine and carry with the muffler away from you.
- Always stop the engine and make sure that the cutting wheel has stopped before placing on the surface.

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### **4.6 Kickback and Pull-in:**

- Kickback can happen extremely fast and with tremendous power. If the segment of the cutting wheel starts to climb out of the cut and it can throw the saw up and back toward the operator with great force.
- Pull-in occurs when the lower part of the cutting wheel is stopped suddenly- for instance by a cut closing up and binding. The saw pitches forward and can pull the operator off balance.
- **To protect against kickback and pull-in, maintain a well –balanced stance and two-handed grip on the saw at all times when cutting.**

### **5. EQUIPMENT/MATERIAL REQUIRED**

**Proper clothing shall be worn at all times when using the quick cut saw. When using a quick cut saw the worker should wear sturdy, close fitting apparel, avoid wearing loose –fitting jackets, jewelry and cuffed pants. The following is a list of PPE that should be worn when using a quick cut saw.**

- **Approved hard hat**
- **Approved safety footwear**
- **Approved safety glasses and face shield**
- **Class A type hearing protection**
- **Sturdy pair of gloves (preferably leather or anti-vibration gloves)**

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### 6. SPECIAL CONSIDERATIONS

#### 6.1 Training:

- **Operators shall be instructed in the care, maintenance and operations of quick cut saws.**
- They should receive oral instructions.

As a minimum the operator shall be instructed in:

- Care of the saw
- Installing disks and blades
- Mixing fuel and fuelling the saw
- Starting the saw
- Supporting and securing work to be done
- Proper cutting stance and grip
- Proper cutting techniques for different material
- How to inspect disks

#### 6.2 Care:

- **Quick cut saws must be serviced and maintained in accordance with the manufacturer instructions.**
- Replacement parts should be those recommended by the manufacturer.
- Cracked, broken or worn parts should be replaced before the saw is used again.
- Guards and air intakes should be cleaned regularly and often.