## Hand Held Plasma Cutter

Facility:	Written By:	Approved By:	Date Created:	Date of Last Revision

Hazards Present:	PPE or Devices Required:	Additional Training Required:
Sparks	Eye Protection (goggles or welders mask)	Owners Manual
Burns	Hand Protection	Equipment Maintenance
Fumes and gases	Respiratory Protection	
Electric shock		
Loose clothing/jewelry causing entanglement		

## **Safe Work Procedure:**

# Before cutting:

- 1. Inspect the tip of the torch, electrode and shield cup and replace any worn items.
- 2. Check gas/air pressure at the compressor or bottle gauge.
- 3. Turn on the plasma machine
- 4. Set the amp control (generally to maximum) and check air pressure.
- 5. Grind off any rust or paint where you plan to secure the ground clamp.
- 6. Place the ground clamp as close to the cut as possible, and lace the clamp on the work piece itself when possible. Check for any loose connections between the work cable and the clamp.

# **Cutting Steps**

- 1. Place drag shield on the edge of the base metal. Direct the arc straight down.
- 2. Raise the trigger lock, press the trigger and the pilot arc starts immediately
- 3. Begin to slowly move the torch across the metal
- 4. Adjust speed so sparks go through metal and out bottom of the cut. If sparks are not visible at the bottom of the plate, the arc is not penetrating the metal.
- 5. At the end of a cut, angle the torch slightly towards the final edge or pause briefly before releasing trigger to complete sever the metal
- 6. To cool torch, post-flow air continues for 20-30 seconds after releasing the trigger; pressing the trigger during post-flow instantly restarts the arc.

If an emergency situation occurs while conducting this task, or there is an equipment malfunction, engage the emergency stop and follow the lock out procedure

## REPORT ANY HAZARDOUS SITUATIONS TO YOUR SUPERVISOR

Guidance Documents/Standards:	This Safe Work Procedure will be reviewed any time
MB Workplace Safety & Health Act & Regulations:	the task, equipment or materials change and at a minimum of every three years
	Reviewed By WSH Committee:
	Date: