

This document will provide a quick guide to the set up and operating procedure of the Techno WinCNC Plasma Cutter.



The Techno CNC Plasma System is powered by 220 volt single phase power.

Safety Information!

1. **Before operating**, ensure proper ventilation.
2. **DO NOT** operate this machine without proper training.
3. **DO NOT** operate unattended.
4. **DO NOT** wear jewelry or loose clothing when operating machine.
5. **Wear proper eye protection.**
6. **Wear proper protective clothing.**
7. **Keep clothing and hair away from the Torch and hot metals.**
8. **Keep all areas around the Torch free of flammable materials**, including but not limited to wood, flammable material scraps, clothing, cleaning solvents, plastic and more.
9. **In case of emergency**, have fire extinguishing equipment available.
10. Make sure the **Ground Clamp (Work Lead) is connected** to material being cut.
11. **Before servicing**, disconnect **all** power sources.



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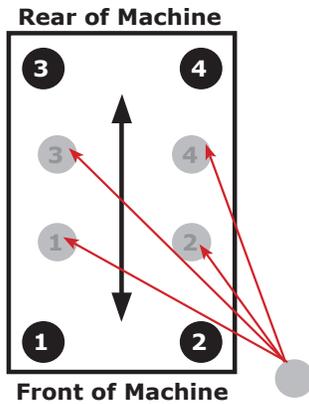
PLASMA FORKLIFT GUIDE

I. SAFETY WARNING: DO NOT LIFT OR MOVE MACHINE USING GANTRY



Fig. 1.1

- Please note the 4 Forklift Tubes on the front and rear of the machine.
- If required, there are 4 Forklift Tubes on the sides of the machine.



1.1



NOTE: Forklift capacity must be adequate to safely lift the machine.

For safety and to prevent damage to the machine and cables, Lift Machine Using Forklift Tubes ONLY

II. MEASURING FORKS AND FORKLIFTING MACHINE

2.1

Left Side



23"

Right Side



23"

Fig. 2.1

Measuring the distance between the forks.

(shown in Fig 2.1).

2.2

Be very careful not to damage the wiring and/or the plumbing underneath the machine.

Take care not to damage the machine. Slowly move in close to the machine.

Forklift your machine up from the floor and remove the wooden pallet.



Fig. 2.2

28"

It is recommended that you have professional riggers conclude the installation if you are uncomfortable with this method.



WARNING! READ, FOLLOW AND UNDERSTAND THE TORCH MANUAL BEFORE BEGINNING USE.

- 1) *Use a welding screen when operating Plasma Torch.*
- 2) *Wear proper eye protection.*
- 3) *Wear proper protective clothing.*
- 4) *Disconnect all power before adjusting, loading, or replacing any materials or consumables on the machine table or torch.*
- 5) ***CUT MATERIAL AND MACHINE WILL REMAIN HOT FOR MANY MINUTES AFTER PLASMA TORCH HAS BEEN SHUT OFF. LET COOL ACCORDINGLY. ALWAYS USE GLOVES TO AVOID BURNS AND SHARP EDGES.***
- 6) *Disconnect all power before servicing the CNC machine or torch. The machine may have multiple power sources, disconnect all power sources.*
- 7) *Ensure proper ventilation is setup and used during operation of Plasma Torch.*
- 8) *Install Plasma Cutter on a non-flammable surface only.*
- 9) *Keep all areas around the Plasma Torch free of flammable materials, including but not limited to wood, flammable material scraps, clothing, cleaning solvents, plastic and more.*
- 10) *Keep clothing, hair, and jewelry away from the Plasma Torch and hot metals.*
- 11) *Do not operate unattended.*
- 12) *Have appropriate fire extinguishing equipment available in case of emergency.*
- 13) *Refer to MSDS for material being cut for material-specific safety instructions. Stainless steel can be particularly dangerous.*

DANGER!

MULTIPLE POWER SOURCES
Disconnect All Power
Sources before Servicing

This Equipment has 2 Power Sources
To Disconnect Power:
Unplug power cord to this panel from receptacle.
And Disconnect and lock out
power to Plasma Torch.



The Techno CNC Plasma
System is powered by 220 volt
single phase power.

WORK LEAD TERMINAL



Make sure the Ground Clamp
(Work Lead) is connected to
the material being cut.



Please make sure the CNC Plasma
is properly grounded using the
grounding lug provided on the rear
leg of the machine.



Have a licensed electrician perform
all electrical connections based on
your electrical codes!

II. Techno CNC Plasma Installation

Machine and Controller Connections

1.1 The Electronics are housed in the large controller box as shown in Figure 1.1. When unpacking the machine, avoid twisting the plastic conduit that guides the cables to the motors.

1.2 Open the front and back of the controller box

1.3 Unpack the computer and monitor and mount them on the controller. The PC fits on the side shelf and the monitor rests on top.

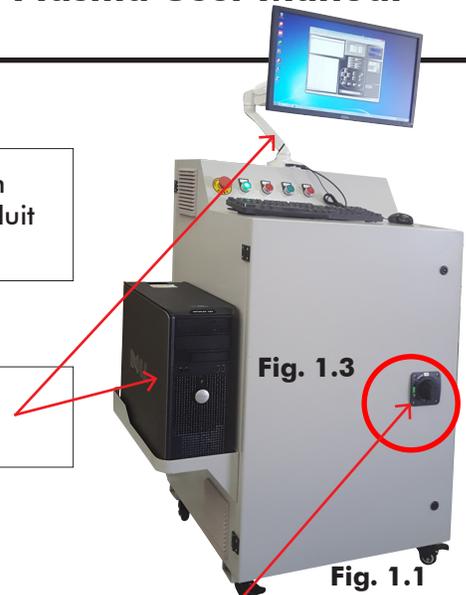


Fig. 1.3

Fig. 1.1

1.4 Plug the labelled cables into their proper places. 2 labelled interface cables, 1 monitor and 2 USB for mouse and keyboard.



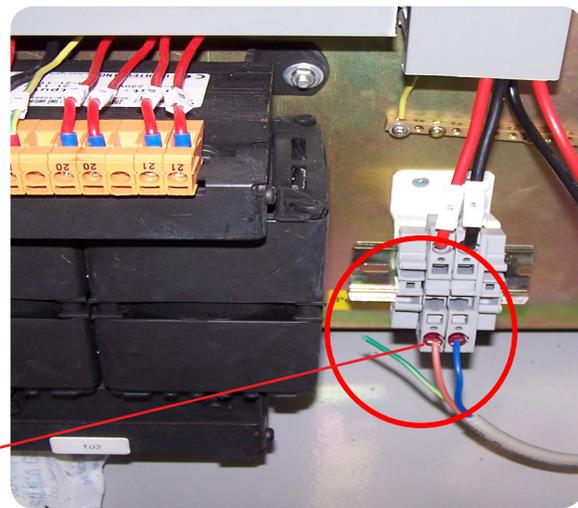
Fig. 1.4

See PC and Controller Interface Connections on page 25.

1.5 The terminal for the 220 volt connection is located at the bottom front of the box.



Fig. 1.5



Have a suitably qualified person connect the 220V to the terminals. Make sure that all local electrical codes are obeyed. For single phase machine, connect power to L1 and L3 only.



WARNING: Read this setup thoroughly before running the machine. Have a licensed electrician perform all electrical connections based on your local codes!

I Ib. Plasma Torch Connections

When hooking up the plasma torch, be sure to use appropriate power. See Hypertherm documentation or refer to quote for details.

Please read and understand the Hypertherm torch manual before operating the machine.



Make sure the torch and grounding clamp are plugged in.



Hypertherm Machine Interface Cable from Controller box

Both the Hypertherm torch and the plasma machine need compressed air to operate. If there is no air going to the plasma machine, you will receive an error saying "E-STOP". You will NOT be able to move both the x and y axis until compressed air is connected to the machine.

The error "E-STOP" will also appear when the torch is not in its correct position. This acts as an e-stop if the torch knocks into something while in motion.

Compressed air is required to operate

