Quick Reference Guide

Machine Homing: Drive the X and Y axis to the lower left of the table or 6" from the stop switches. In the *Machine* box click *Set-Home All*. Your machine will travel to the switches and set the tables home position.

Correct Program Zeroing: Drive the machine to the desired location to start. In the **Program** box click *Set-SensePowermaxXXZero*. This will touch off the torch and zero it. Next, in the **Program** box select *Set-ZeroX/Y*. This will zero the X and Y axis. Ensure the Coordinates are all **0.0000**.

Evaluation Version in CNC: Controller is not connected to pc. Click the plungers to connect.

Not Connected   Connected

Table Controls Erratic/Incorrect: Incorrect setup file loaded due to incorrectly powering down. Select *Configuration/Load/Helical .setup file/Open* after the correct setup file loads close out of the Configuration.

Error toolpath goes outside of the machine envelope: In **CAM** ensure that the zero placement is in the 0,0 intersection of the graph. Also, that the drawing is within the sheet boundaries as well as the boundaries in **CNC**.

Torch Diving: Ensure correct settings in CAM, Amperage, Material Thickness and Hypertherm machine is set to correct amperage. Check consumables for correct amperage and wear. Ensure voltage in **CNC** is within +/- 5 of targeted voltage. Ensure correct Z axis zeroing was done and or *Touch Off* is checked.

Torch Raising: Remove consumables and inspect. Clean torch's sheild of debris or replace.

Failed to Detect Arc Error or No Fire: In **CAD** check that the correct fabhead is selected in *Project Settings*. Check the Hypertherm for error codes. Error code meanings can be found in the Hypertherm and BOSS Table manuals. Check ground clamp for corrosion and locking end for tighness at the Hypertherm. Replace consumables.

Torch Fails to Cut Material: Check for proper settings in **CAM**, proper amperage on power unit. Check consumable tip for wear and correct amperage. Refer to cut chart that selected consumables are correct size or selection.

X,Y,Ya,Z Motor Fault: In **CNC** click *Reset Motor Drives*. This will refresh the program in the servo motors, clearing any faults.

Scribe Wont Vibrate: Remove hose from the top of the scribe. Pour 1 drop of tool oil into the scribe and install the hose. With the scribe on tap the side of the scribe with a wrench. This will clear any debris in the scribes airway.

Powering On: Power on the Belkin power strip, Power on the controller, Power on the pc.

**Powering Off**:Power off the pc, Power off the controller, Power off the power strip.

Homing

Homing sets the dimensions for the tables driving perameters **ONLY**. Once homed the program will zero the machines coordinates. **This is not used to zero material or program coordinates!**

Zeroing sets the start point for a cut that is determined in **CAM** and the material location of your choosing. Zero the Z by selecting *Sense Powermax Zero* and the X,Y by selecting *Zero X and Y.*

Zeroing
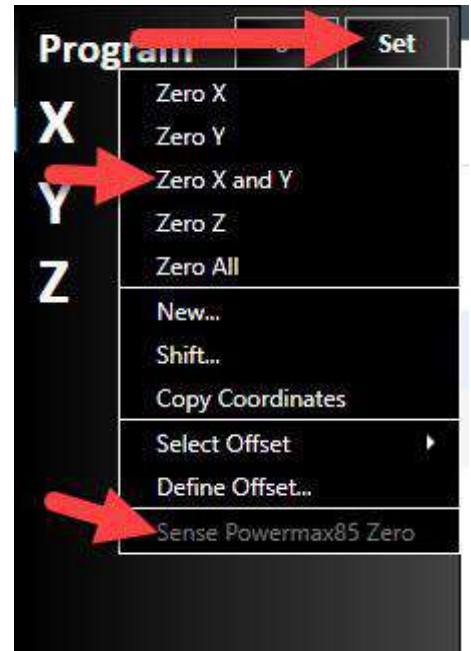
Powermax Error Codes

Warning/Fault codes (refer to operator manual)	
0-12	Low input gas pressure: warning
0-13	AC input unstable: warning
0-19	Power board hardware protection
0-20	Low gas pressure
0-21	Gas flow lost while cutting
0-22	No gas input
0-30	Torch consumables stuck
0-32	End of consumable life
0-40	Over temperature
0-50	Retaining cap off
0-51	Start/trigger signal on at power up
0-52	Torch not connected
0-60	AC input voltage error
0-61	AC input unstable: shutdown
0-98	Internal communication failure
0-99	System hardware fault – service required

BOSS Tables Technical Support

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