

Hypertherm

command THC

**Plasma Interface
Upgrade
Kit 128503**

**Kit Instructions
IM-380
(P/N 803800)**

Revision 0 - January 2000

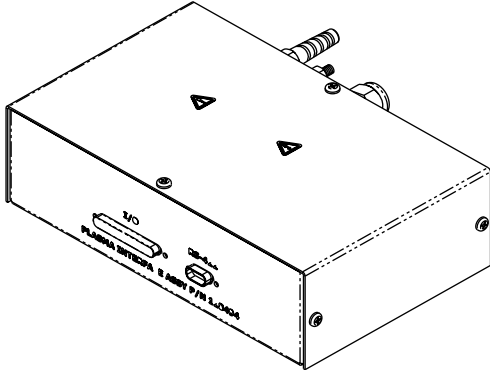
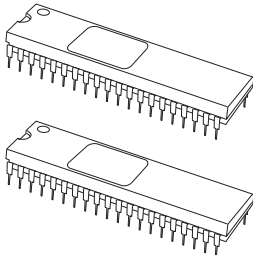
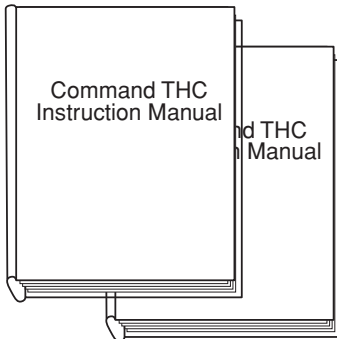
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128408 KIT CONTENTS

	128494 Command THC Plasma Interface Assembly
	081029 Real Time Microprocessor 081030 Interface Microprocessor
	802780 X-Y Command THC Instruction Manual 8022510 Robotic Command THC Instruction Manual

380.05

PURPOSE




To replace the plasma interface assembly or the interface PCB, the command THC must be upgraded with a new plasma interface assembly. The upgrade requirements include installing the new plasma interface assembly, installing 2 new control module microprocessors and recalibration of the THC system.

MAX200, HT2000 and HT2000LHF Initial Height Sensing (IHS)

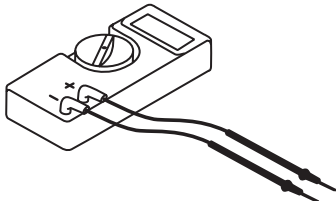



Initial height sensing (IHS) for the MAX200, HT2000 and HT2000LHF systems can now be accomplished using the new Command THC torch Ohmic Contact Sensing function. To take advantage of this enhancement, you will need a new torch retaining cap and a THC ohmic contact wire. See the applicable setup section of the instruction manual (802780) included with this kit for parts and installation requirements.

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INSTRUCTIONS

 <h1 style="margin: 0;">WARNING</h1>	
	<p>ELECTRIC SHOCK CAN KILL</p> <ul style="list-style-type: none">• Turn off the power and remove the input power plug from its receptacle before removing any access cover. If the power supply is directly connected to a line disconnect box, switch the line disconnect to OFF (O). In the U.S., use a "lock-out / tag-out" procedure until the service or maintenance work is complete. In other countries, follow appropriate national or local safety procedures.• Do not touch live electrical parts! If power is required for servicing, use extreme caution when working near live electrical circuits. Dangerous voltages exist inside the THC control module that can cause serious injury or death.
	<p>STATIC ELECTRICITY CAN DAMAGE CIRCUIT BOARDS</p> <ul style="list-style-type: none">• Put on a grounded wrist strap BEFORE handling PC boards.
<p>All work must be performed by a Hypertherm Distributor or a qualified technician.</p>	

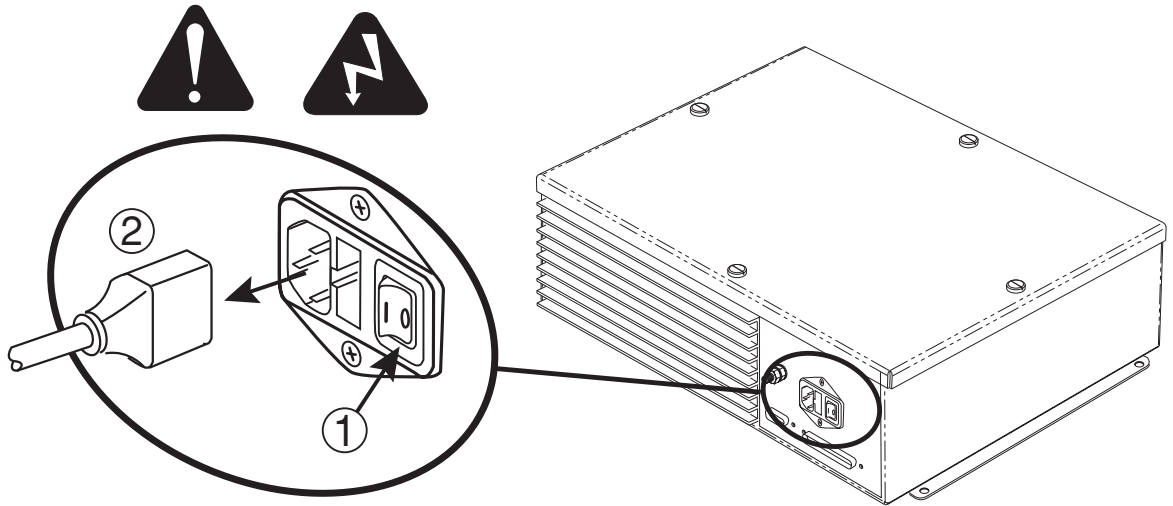
Tools Needed

 <p>Digital Volt Meter</p>	 <p>Flat Screw Driver</p>	 <p>Small, Flat Screw Driver</p>
	 <p>#2 Phillips Screw Driver</p>	

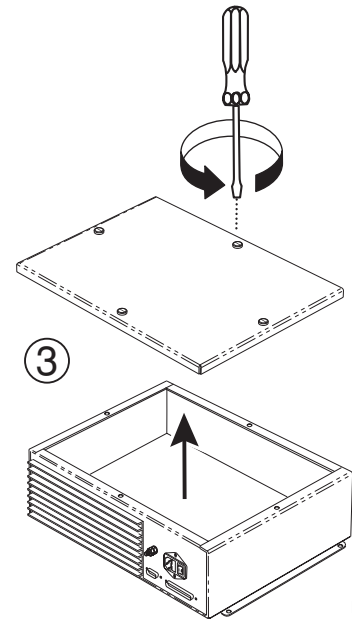
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Procedure

1. Turn off the power to the power supply.
2. Turn off the power to the THC system and remove power cord.



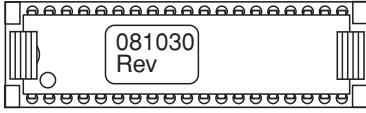
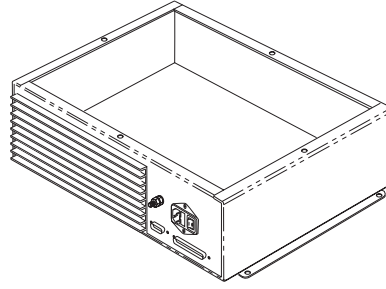
3. Remove the THC control module cover.



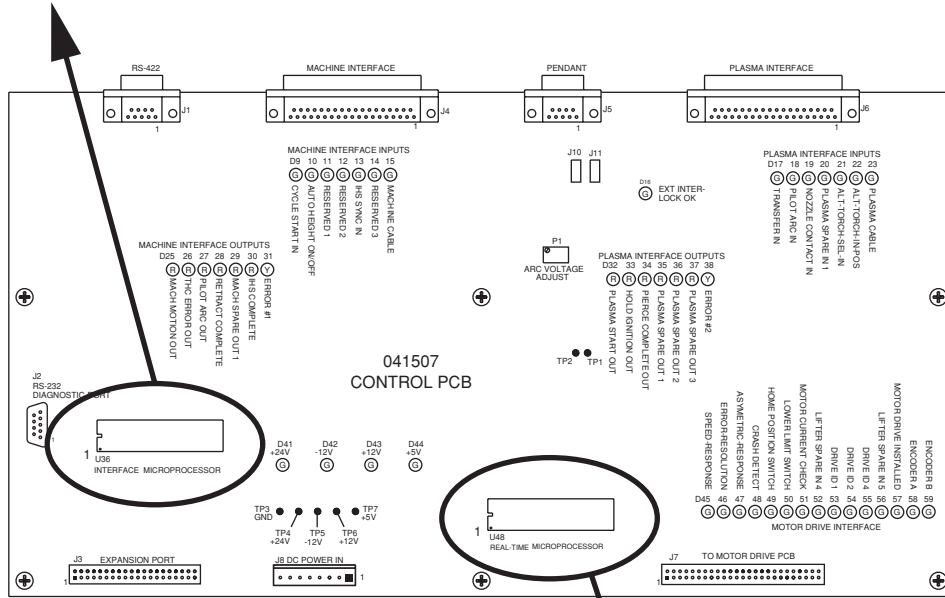
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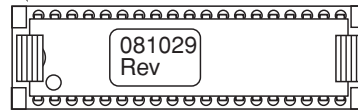
4 Remove and discard the 2 microprocessors from the control PCB.



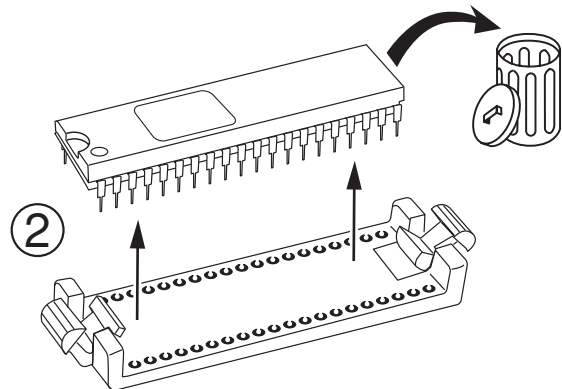
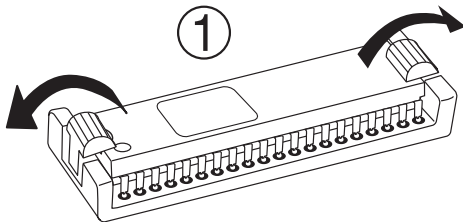
INTERFACE MICROPROCESSOR



IM380.04

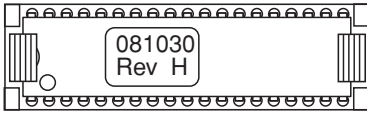
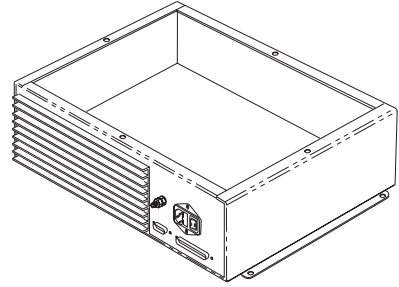


REAL TIME MICROPROCESSOR

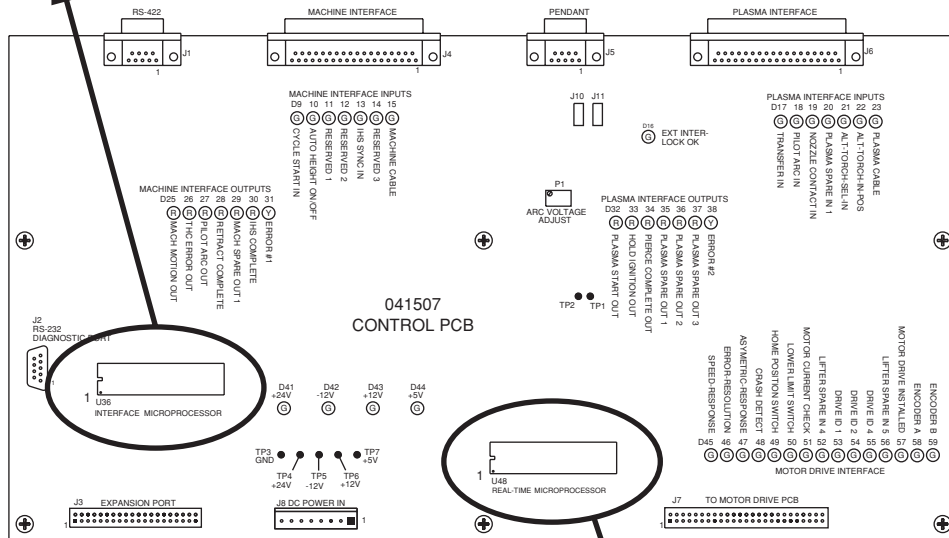


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5 Install the new microprocessors into the control PCB.



INTERFACE MICROPROCESSOR

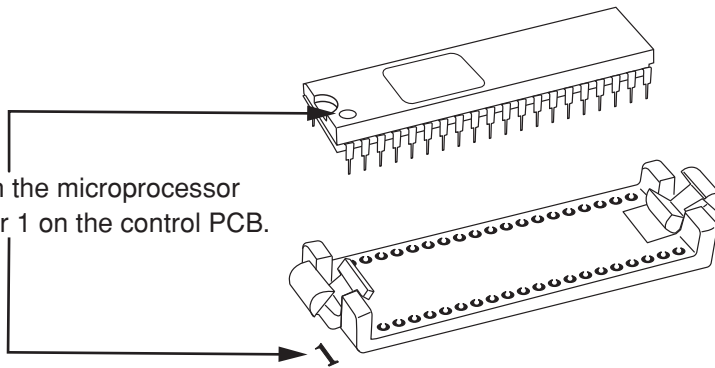


IM380.01



REAL TIME MICROPROCESSOR

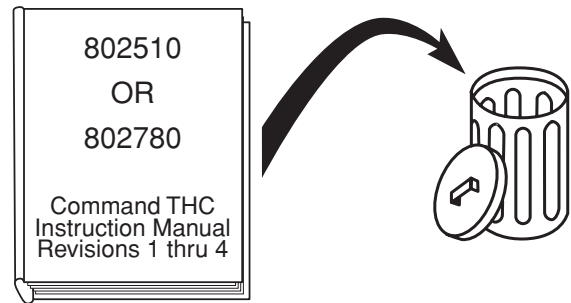
Align the dot on the microprocessor with the number 1 on the control PCB.



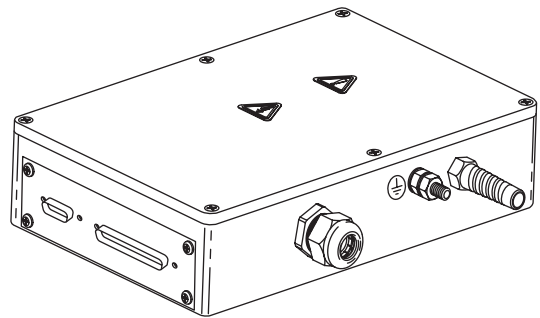
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6. Before removing the old plasma interface assembly, mark all of the wire connections so that they can be reinstalled correctly.

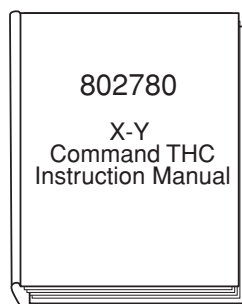
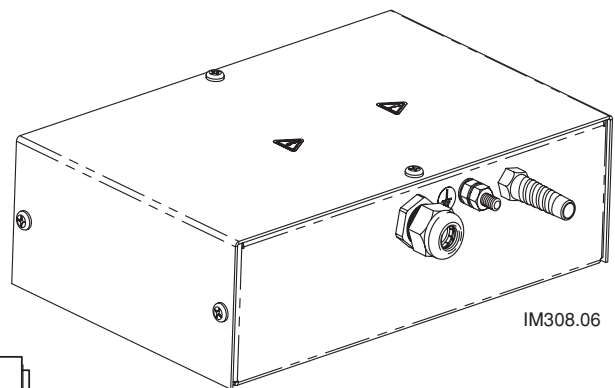
7. Discard your existing Command THC Instruction Manual.



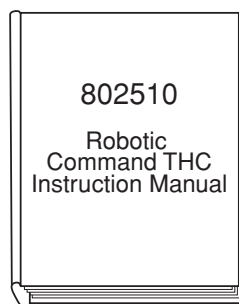
8. Remove the old interface assembly.



9. Install the new interface assembly per the revised instruction manual included with this kit.

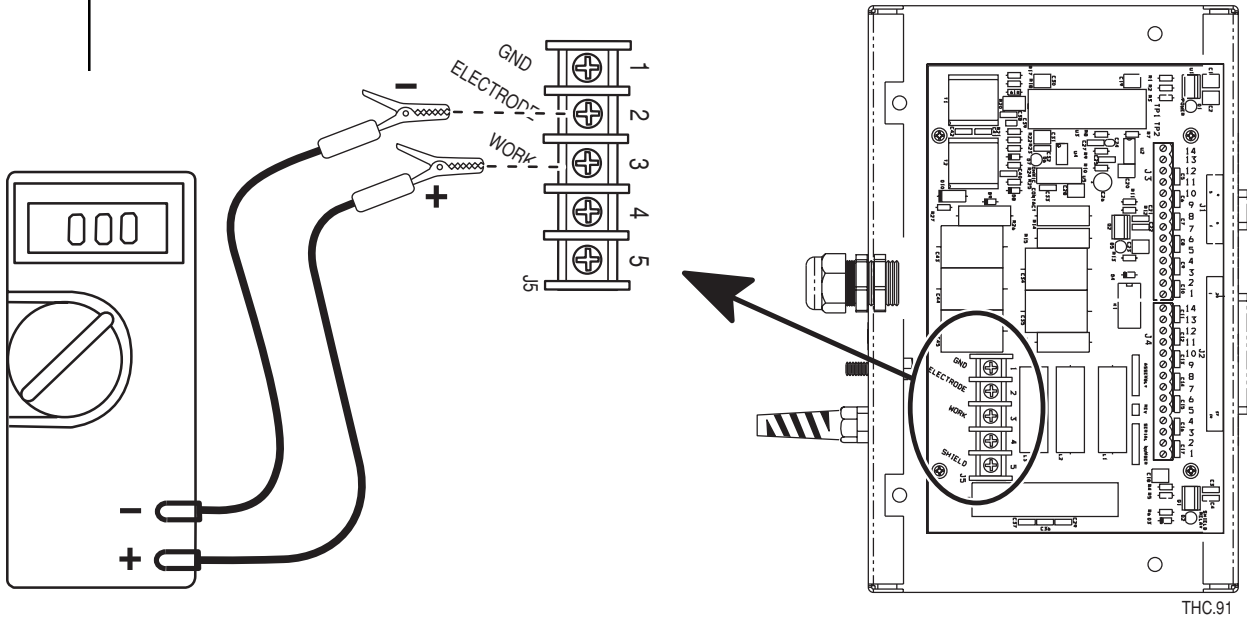


- OR -

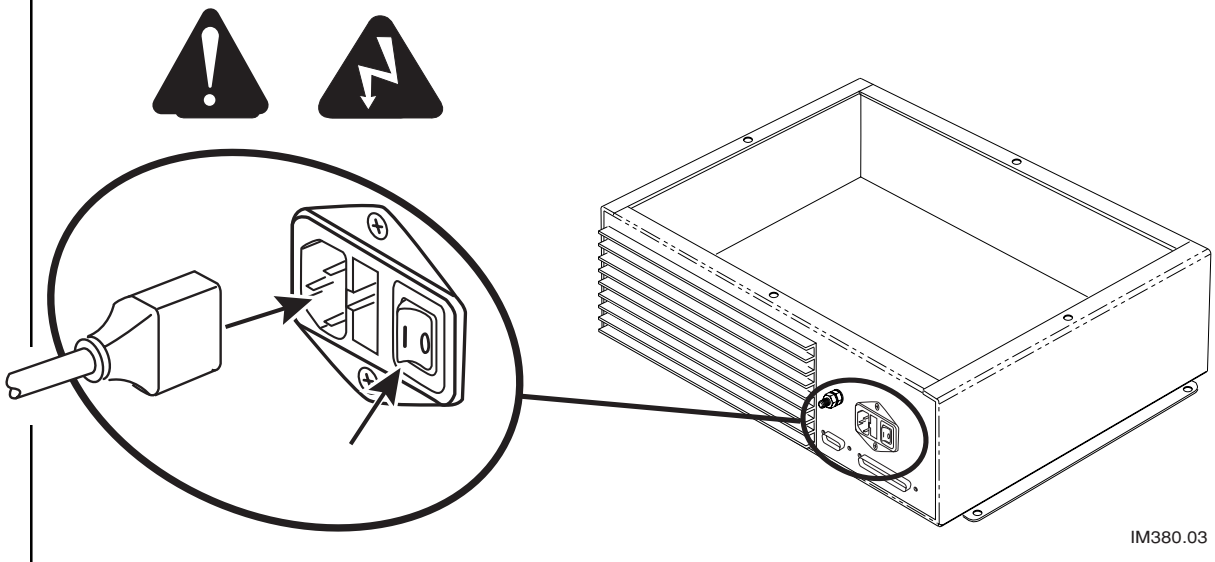


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- 10 Attach the volt meter to measure the arc voltage between J5-2 and J5-3 in the plasma interface assembly.

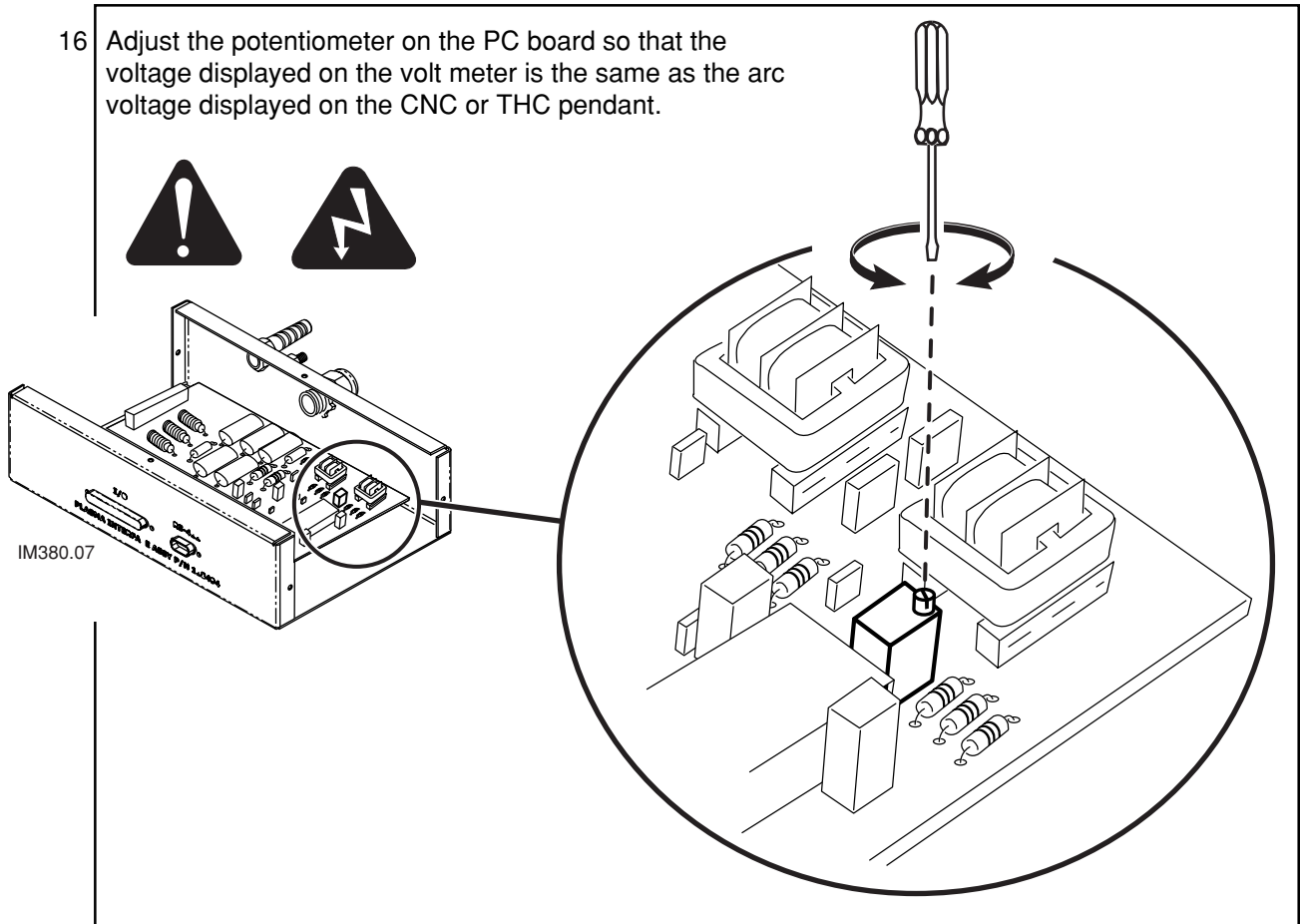


- 11 Replace the power cord to the THC control module.
- 12 Turn on the power to the THC.
- 13 Turn on the power to the power supply.



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- Put the Command THC in MANUAL MODE.
- Begin a cutting process and compare the voltage displayed on the volt meter to the arc voltage displayed on the CNC or THC pendant.
- Adjust the potentiometer on the PC board so that the voltage displayed on the volt meter is the same as the arc voltage displayed on the CNC or THC pendant.



- Turn off power to power supply and to THC system.
- Remove volt meter from the plasma interface assembly.

- Install the access cover to the THC plasma interface assembly and the control module.

