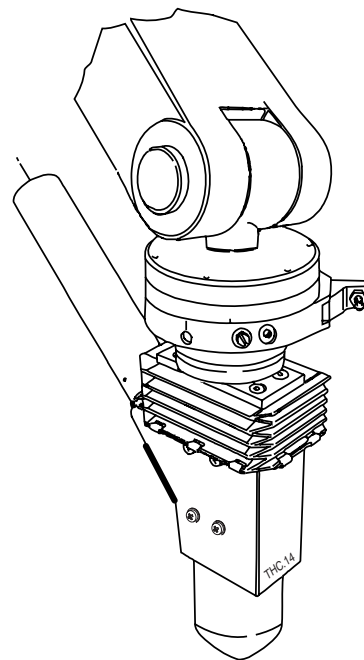
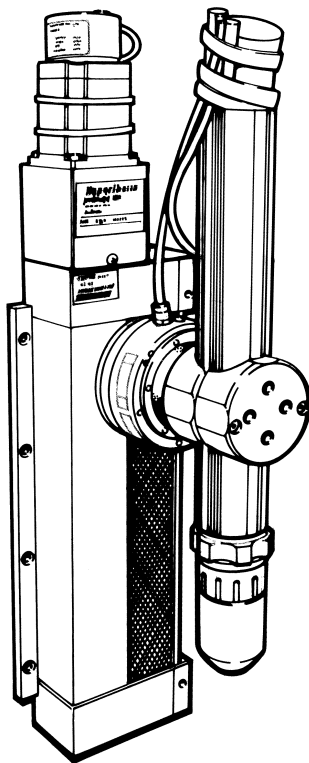


# ***command*<sup>®</sup> THC**

## **Plasma Interface PC Board Replacement and Calibration**

Kit 128408

***Kit Instructions***  
***803790 - Revision 1***



***Hypertherm***  
*The world leader in  
plasma cutting technology*

# ***Hypertherm***

## ***command THC***

### **Plasma Interface PC Board Replacement and Calibration**

**Kit 128408**

### **Kit Instructions IM-379 (P/N 803790)**

**Revision 1 - April 2000**

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# **Command THC Plasma Interface PC Board Calibration**

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# Command THC Plasma Interface PC Board Calibration

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## 128408 KIT CONTENTS




041671	Plasma Interface PC Board
803790	Instructions

## PURPOSE

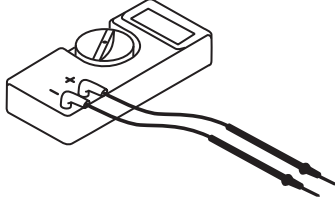


After installing the replacement PC board included with this kit, calibration of the THC system is required. These instructions provide calibration procedures.

# Command THC Plasma Interface PC Board Calibration

## REQUIREMENTS

 <h1 style="font-size: 2em; margin: 0;">WARNING</h1>	
	<b>ELECTRIC SHOCK CAN KILL</b> <ul style="list-style-type: none"><li>• 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.</li><li>• 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.</li></ul>
	<b>STATIC ELECTRICITY CAN DAMAGE CIRCUIT BOARDS</b> <ul style="list-style-type: none"><li>• Put on a grounded wrist strap BEFORE handling PC boards.</li></ul>

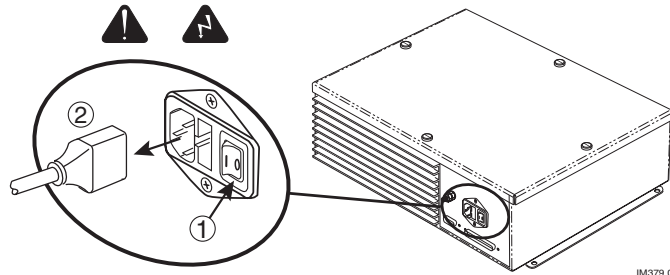
## Tools Needed

 <p>Digital Volt Meter</p>	 <p>#2 Phillips Screw Driver</p>  <p>Small, Flat Screw Driver</p>
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# HT4400 THC Plasma Interface PC Board Calibration

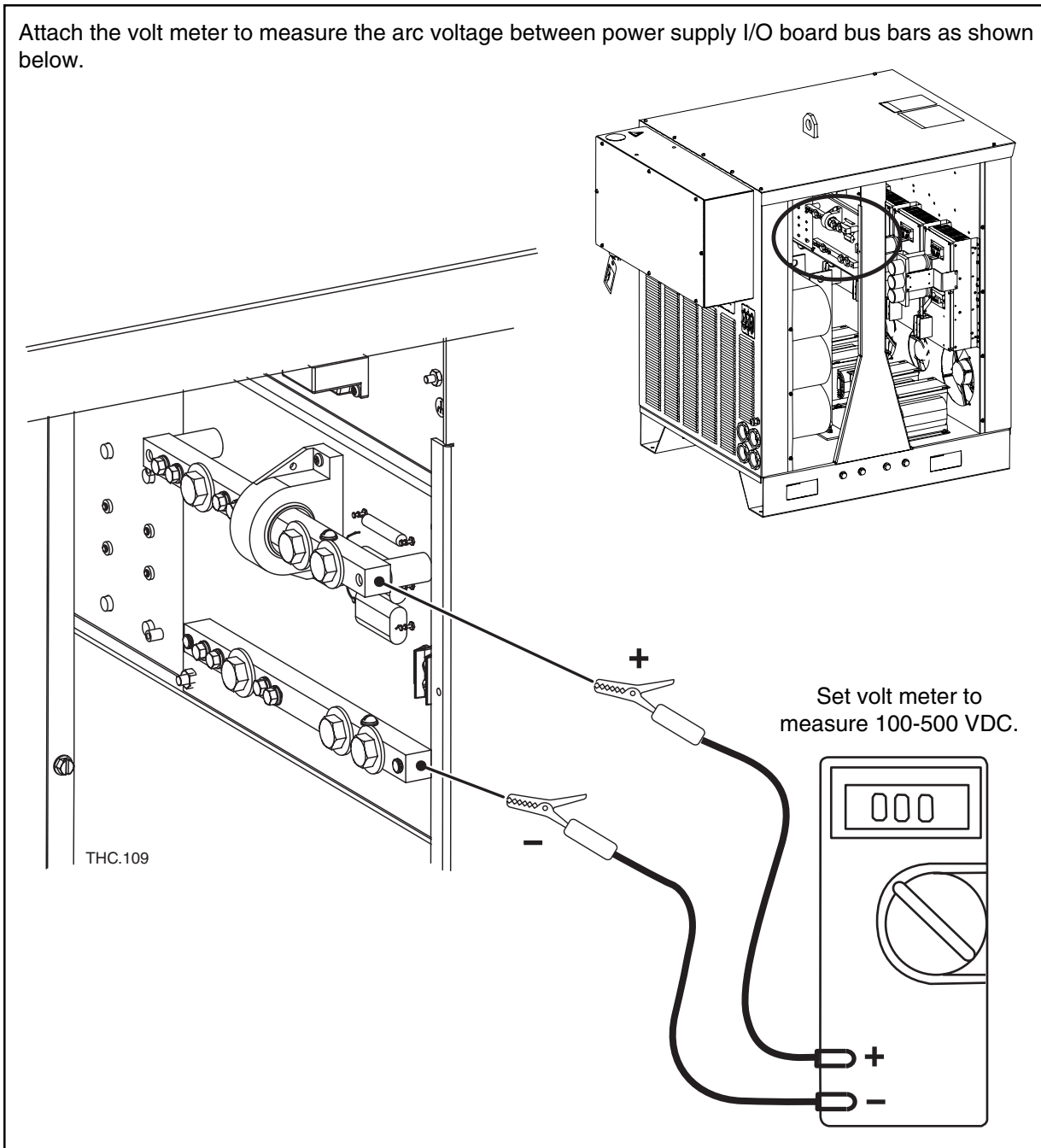
## HT4400 PROCEDURE

1. Turn off the power to the THC control module and to the power supply.



2. Install the replacement plasma interface PC board in to the HT4400 power supply and attach the electrical connections.

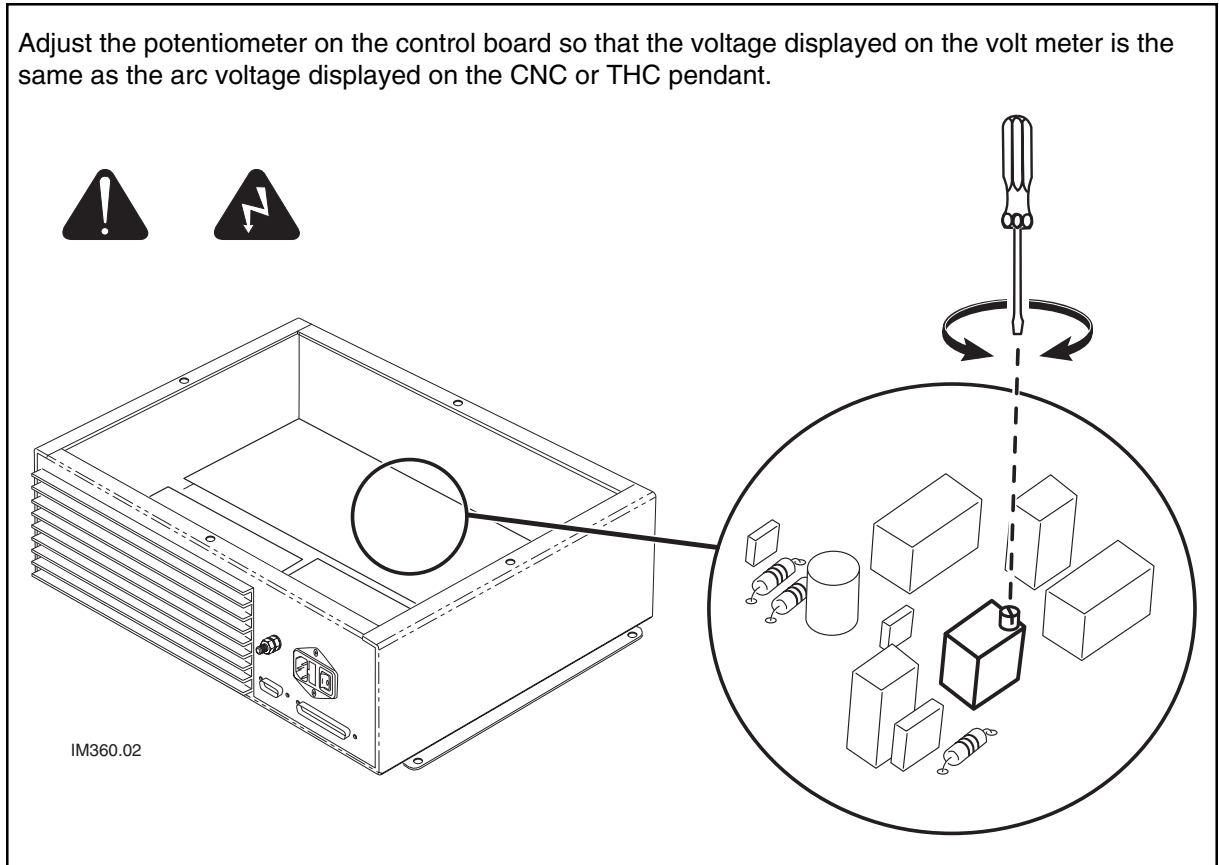
3. Attach the volt meter to measure the arc voltage between power supply I/O board bus bars as shown below.



# HT4400 THC Plasma Interface PC Board Calibration

4. Turn on the power to the THC control module and to the power supply.
5. Put the Command THC in MANUAL MODE.
6. Begin a cutting process and compare the voltage displayed on the volt meter to the arc voltage displayed on the CNC or THC pendant.

7. Adjust the potentiometer on the control board so that the voltage displayed on the volt meter is the same as the arc voltage displayed on the CNC or THC pendant.

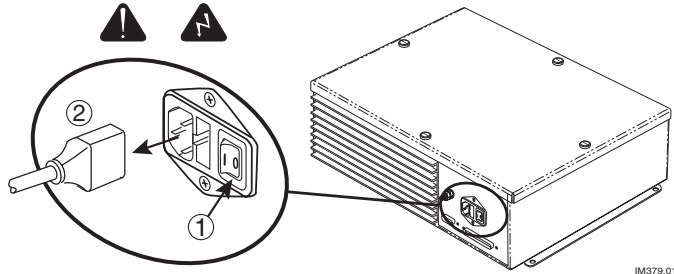


8. Turn off the power to the THC control module and to the power supply.
9. Remove the volt meter from the power supply.
10. Replace the access covers to the THC control module and to the power supply.

# Powermax, MAX100, MAX200, HD3070, HT2000, HT2000LHF, and HT4001 THC Plasma Interface PCB Calibration

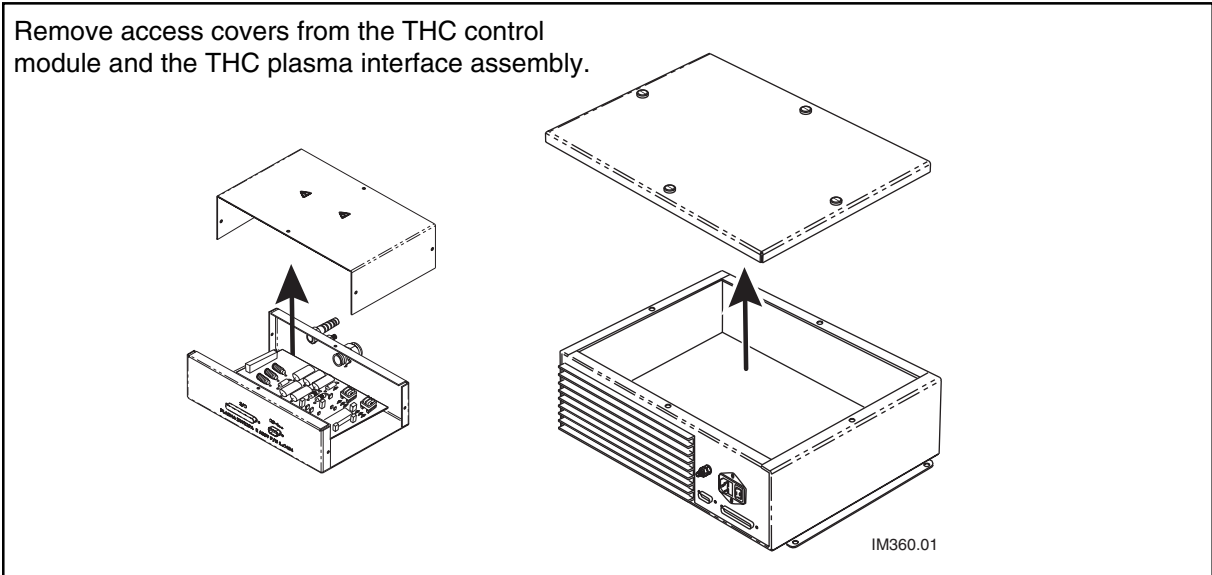
## POWERMAX, MAX100, MAX200, HD3070, HT2000, HT2000LHF, AND HT4001 PROCEDURE

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



IM379.01

3. Remove access covers from the THC control module and the THC plasma interface assembly.

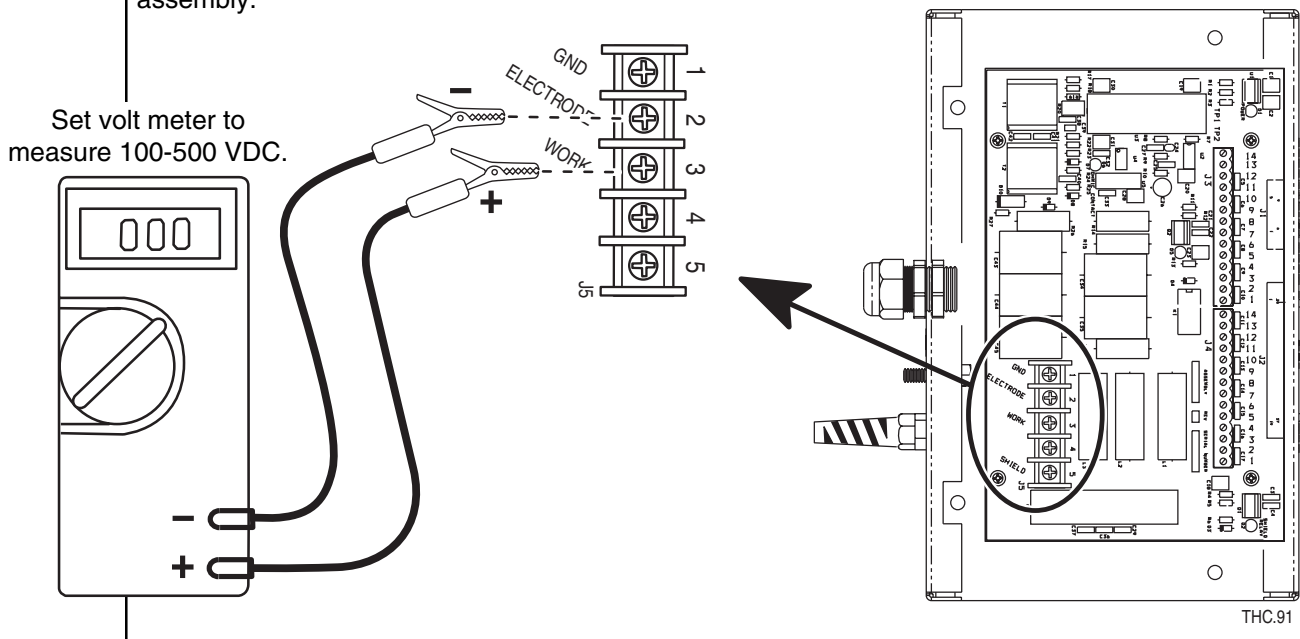


IM360.01

4. Install the replacement PC board in to the THC control module and attach electrical connections.

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

Set volt meter to measure 100-500 VDC.



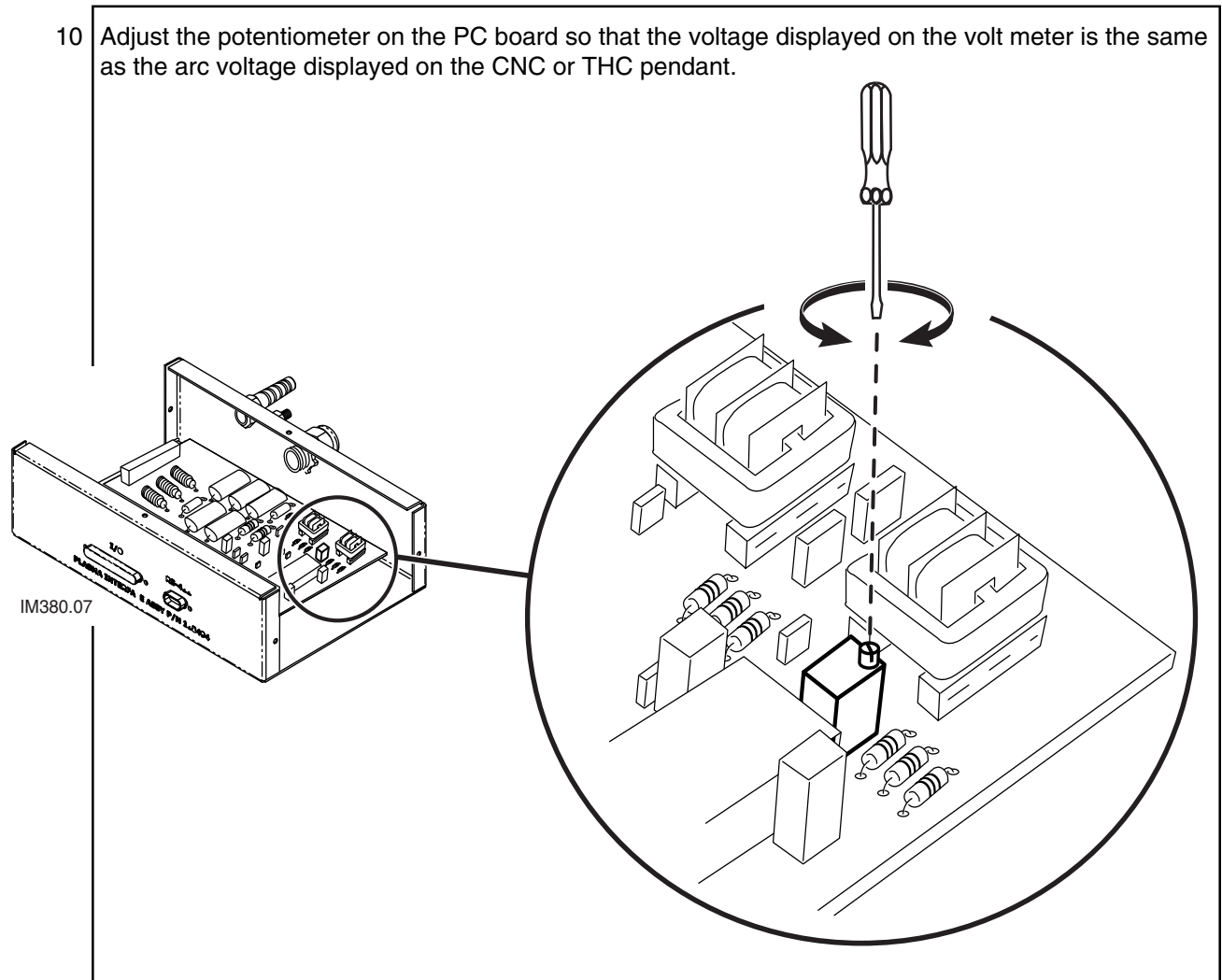
THC.91



# Powermax, MAX100, MAX200, HD3070, HT2000, HT2000LHF, and HT4001 THC Plasma Interface PCB Calibration

6. Replace power cord to the THC control module.
7. Turn on power to the THC and to the power supply.
8. Put the Command THC in MANUAL MODE.
9. Begin a cutting process and compare the voltage displayed on the volt meter to the arc voltage displayed on the CNC or THC pendant.

10. 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.



11. Turn off power to power supply and to THC system.
12. Remove volt meter from the plasma interface assembly.
13. Replace access covers to the THC control module and the THC plasma interface assembly.