Hypertherm

HD4070

THC Calibration when Replacing the Plasma Interface Board

Kit 128519

Kit Instructions IM-384 (P/N 803840)

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THC Calibration when Replacing the Plasma Interface Board

In This Bulletin:

IMPORTANT

If your HD4070 is not equipped with a Command THC, these calibration procedures are not required.

THC Calibration when Replacing the Plasma Interface Board

128519 KIT CONTENTS

041616	Plasma Interface PC Board
803840	Instructions

PURPOSE

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

If your HD4070 is not equipped with a Command THC, these calibration procedures are not required.

THC Calibration when Replacing the Plasma Interface Board

REQUIREMENTS

WARNING

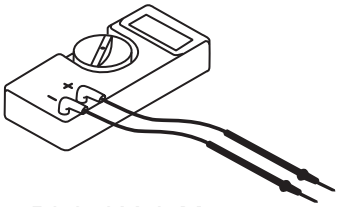
ELECTRIC SHOCK CAN KILL

- **Turn off the power supply 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 power supply that can cause serious injury or death.**

STATIC ELECTRICITY CAN DAMAGE CIRCUIT BOARDS

- **Put on a grounded wrist strap BEFORE handling PC boards.**

Tools Needed



Digital Volt Meter

#2 Phillips Screw Driver

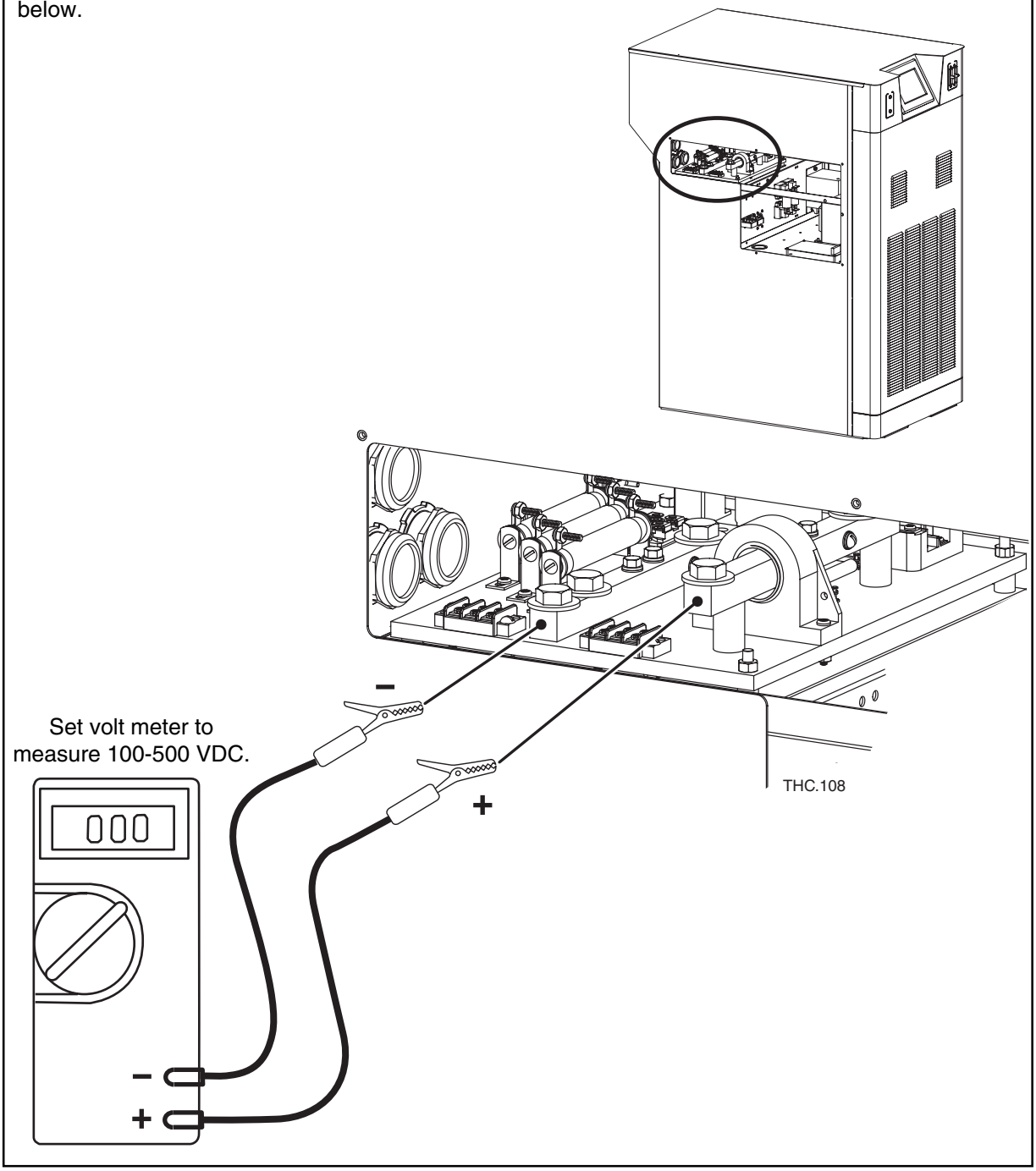
Small, Flat Screw Driver

PROCEDURE

1. Turn off the power to the power supply.

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

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



4. Turn on the power to the power supply.

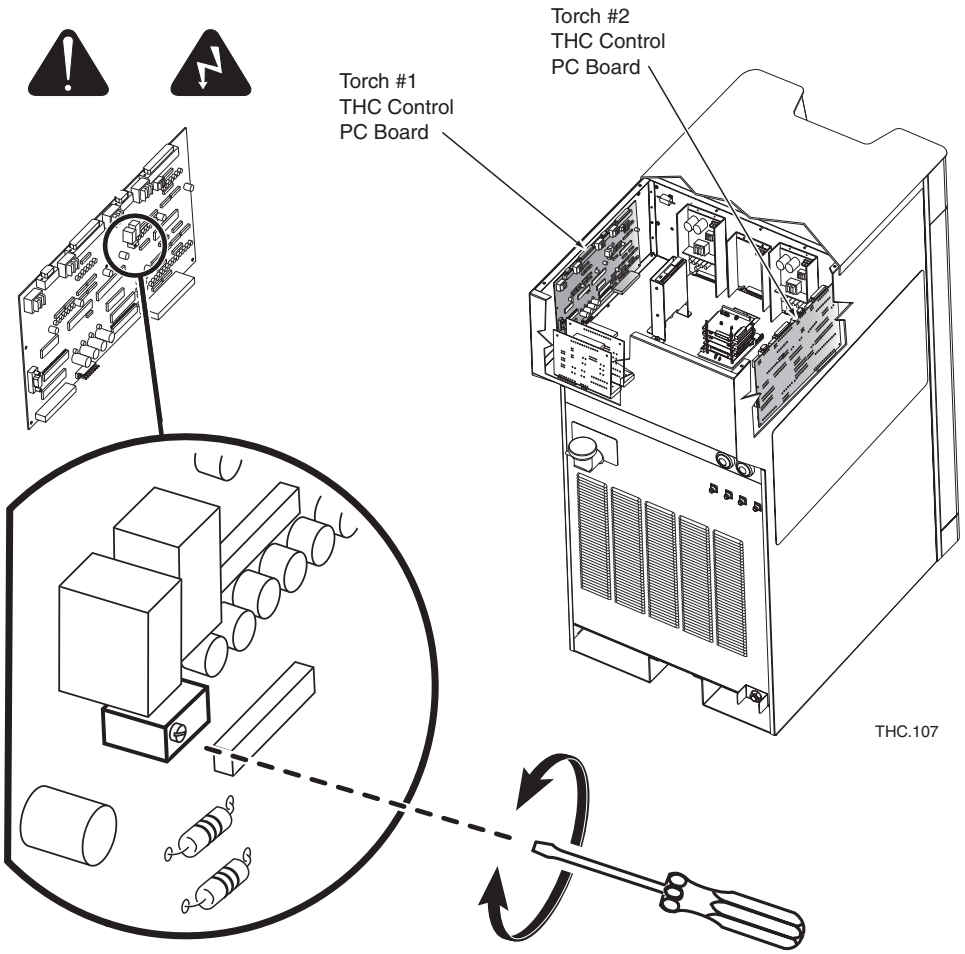
5. Put the Command THC in MANUAL MODE.

6. For 2-torch systems, select torch #1.

7. Begin a cutting process and compare the voltage displayed on the volt meter to the arc voltage displayed on the CNC or on the power supply display.

8 Adjust the potentiometer on the torch #1 THC control board so that the voltage displayed on the volt meter is the same as the arc voltage displayed on the CNC or on the power supply display.

9 For 2-torch systems, select torch #2 and begin a cutting process.
Adjust the potentiometer on the torch #2 THC control board so that the voltage displayed on the volt meter is the same as the arc voltage displayed on the CNC or on the power supply display.



10. Turn off the power to the power supply.

11. Remove the volt meter from the power supply.

12. Replace the access covers to the power supply.