



OPERATION AND MAINTENANCE
INSTRUCTIONS FOR THE

HotSpot™ System

MODELS
HS-150 HS-150E

MANUAL NO. 5050-0194

REV. A

GENERAL INFORMATION

Before using your PACE HotSpot™ 150/150E System, read the following instructions and procedures to become familiar with its proper operation and maintenance. Used and maintained properly, it will perform reliably for many years.

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FIGURE 1. PACE HOTSPOT 150/150E SYSTEM

GENERAL INFORMATION

INTRODUCTION:

The PACE HotSpot 150/150E System is designed to aid you in providing auxiliary heat to the printed circuit board prior to and during removal or replacement of component(s).

There are two (2) versions of the HotSpot System:

- HS-150—domestic version operating on 120VAC, 50/60Hz, 300W
- HS-150E—export version operating on 240VAC, 50/60Hz, 600W

The HotSpot System can be used in a variety of ways (examples of which are as follows):

- Preheat assembly line, where several HotSpot Systems are used to preheat multiple printed circuits boards. Preheat times may require up to 30 minutes depending on your application.
- Small printed circuit board clamped onto the HotSpot System using the Thermal Selectivity Kit (6993-0102).
- Large printed circuit board clamped onto the Craft™ 100A System (5050-0191) Work Platform with the HotSpot positioned directly under the printed circuit board rework area to supply auxiliary interface heat.

SPECIFICATIONS:

HS-150

- **Power Requirements:**

120VAC, 50/60Hz, 300W

- **Physical Parameters:**

2 $\frac{1}{8}$ "H x 7 $\frac{5}{8}$ "W x 10 $\frac{3}{4}$ "D
(5.4cm H x 19.4cm W x 27.3cm D)

HS-150E

- **Power Requirements:**

240VAC, 50/60Hz, 600W

- **Physical Parameters:**

2 $\frac{1}{8}$ "H x 7 $\frac{5}{8}$ "W x 10 $\frac{3}{4}$ "D
(5.4cm H x 19.4cm W x 27.3cm D)

- **Heating Surface Temperature:**

Minimum Setting—Ambient
Maximum Setting—525 °F (274 °C)

GENERAL INFORMATION

SYSTEM IDENTIFICATION:

Table 1 and Figure 2 refers to identification and location of each part required for the installation and operation of the PACE HotSpot 150/150E System.

TABLE 1. SYSTEM IDENTIFICATION OF PACE HOTSPOT 150/150E SYSTEM

- MAIN POWER SWITCH—controls input power to system.
- PROBE/PLATE SWITCH—provides selection of either "Probe" or "Plate" for L.E.D. Temperature Display readout.
- PLATE KNOB—controls temperature to Heating Plate.
- PROBE KNOB—controls temperature setting to Probe.
- PLATE BUTTON—provides temperature set point readout on L.E.D. Temperature Display
- PROBE BUTTON—provides temperature set point readout on L.E.D. Temperature Display.
- L.E.D. TEMPERATURE DISPLAY—provides an accurate readout of Plate or Probe temperature.
- PROBE ALARM LIGHT—illuminates when Probe set temperature has been reached.
- ALARM SWITCH—provides an audible alarm when Probe set temperature is reached.
- °C LIGHT—illuminates when centigrade temperature readout is shown on L.E.D. Temperature Display. (**NOTE:** °C Light does not illuminate when °F is selected).
- TEMP DISPLAY SWITCH—provides either °C or °F readout on L.E.D. Temperature Display.
- HEATING PLATE—provides heat source to printed circuit board.
- FUSE (F1)—provides overload protection to the system.
- POWER CORD—provides main power from AC outlet to system.
- HEATING PLATE LOCKING LEVER—provides a positive locking of the Heating Plate in either the "UP" or "DOWN" position.
- CLAMPS—secure printed circuit board to Heating Plate surface.
- PROBE—provides a means of sensing temperature readout of printed circuit board surface to the L.E.D. Temperature Display.
- PROBE RECEPTACLE JACK—receptacle for Probe Plug.
- PROBE CLAMP BRACKET—provides a mounting for Probe Clamp.
- ANGLE BRACKET—mounting bracket for engaging HotSpot with Craft-100A X-Y Work Platform.

GENERAL INFORMATION

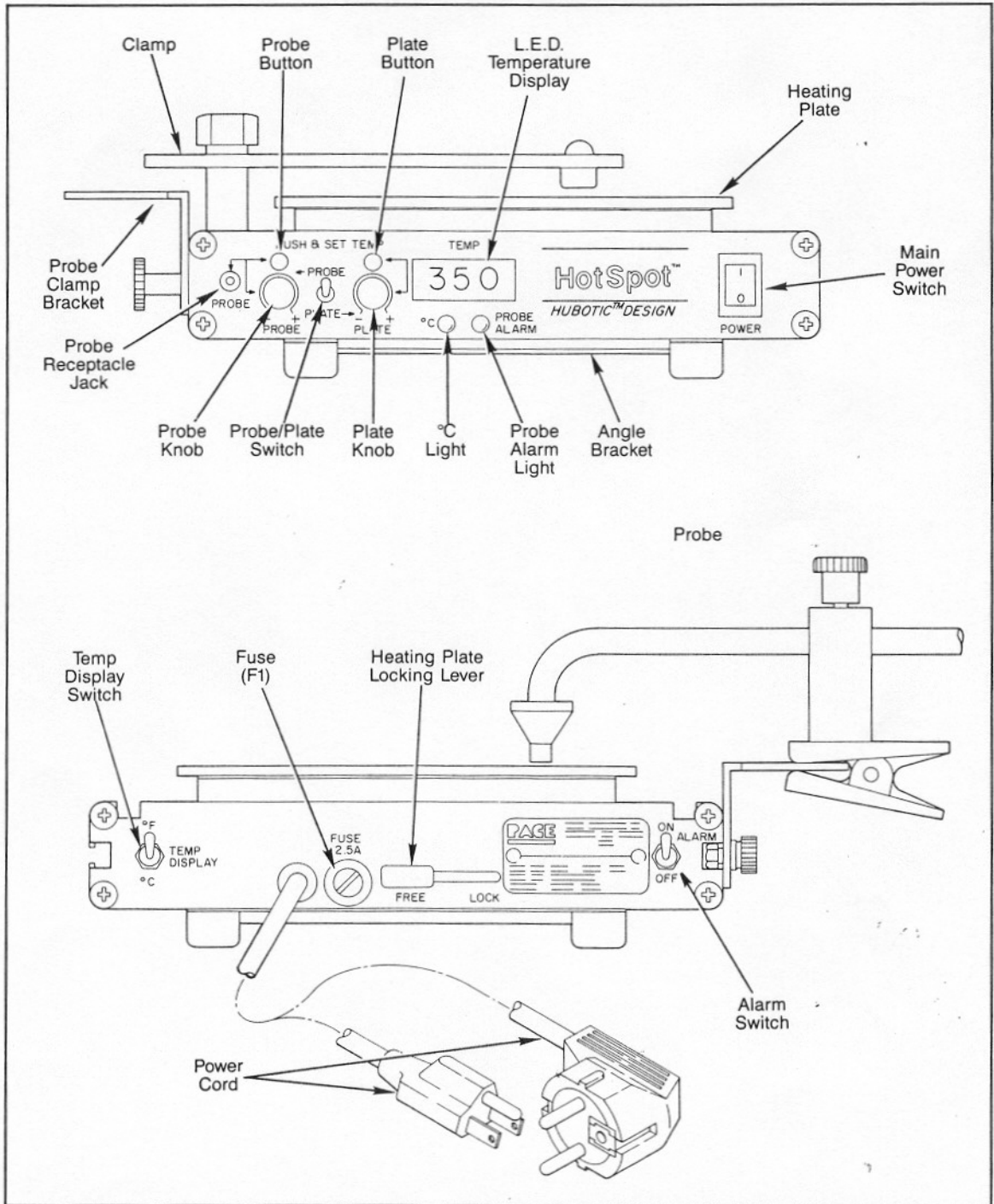


FIGURE 2. SYSTEMS IDENTIFICATION OF THE PACE HOTSPOT. 150/150E SYSTEM

SET-UP

SET-UP:

Place the PACE HotSpot 150/150E System on a workbench, suitable work surface or mounted on the Craft-100A X-Y Work Platform. Refer to Table 1 and Figure 2 for identification and location of the various parts, switches, and knobs described below. Perform the following procedures prior to placing your system into operation:

GENERAL

1. Plug the Power Cord into a 120V (220V export version) outlet.
2. From rear of unit, slide Clamp Assemblies into the top "T-Slots", secure with Clamp Knobs, refer to Figure 3.

CAUTION

Clamp rubber tips *should not* come in contact with Heating Plate.

3. From rear of unit, slide the optional Probe Clamp Bracket into the side "T-Slot" and secure with the Knurled Nuts, refer to Figure 4. (NOTE: The Probe Clamp Bracket can be mounted to either side).
4. Place the Main Power Switch to the "ON" position. (NOTE: Red color is visible at top of Switch).

PLATE

5. Position °C/°F Switch (located on rear of unit) to desired readout, refer to Figure 5. (NOTE: If °C is selected, the °C Light will illuminate on the front panel).
6. Set Probe/Plate Switch (located on front panel) to Plate position, refer to Figure 6.
7. Depress Plate Button (located above the Plate Knob), rotate Plate Knob clockwise or counterclockwise to reach the desired temperature setting. (NOTE: Observe the L.E.D. Temperature Display for preferred setting), refer to Figure 6.
8. Release the Plate Button.
9. The HotSpot System is now operational. Allow a heat-up time of approximately 10 minutes for Heating Plate to reach selected temperature level.

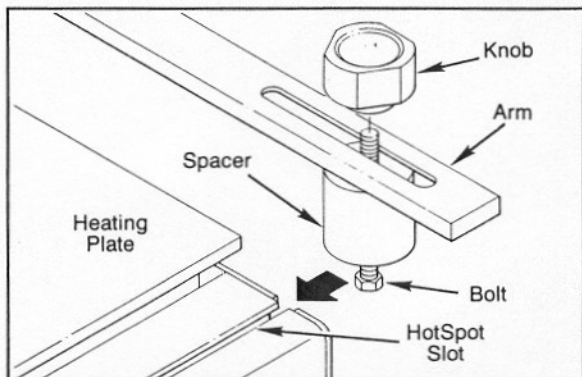


FIGURE 3. ATTACHING CLAMP ASSEMBY

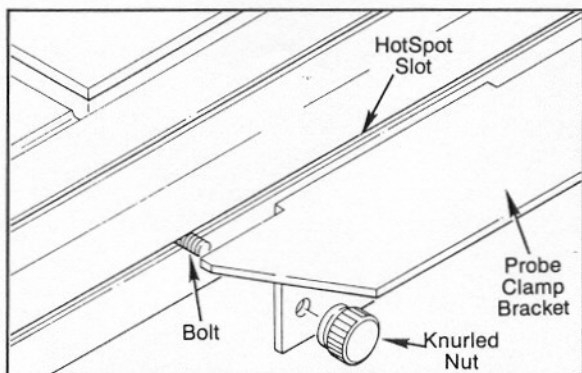


FIGURE 4. PROBE CLAMP BRACKET

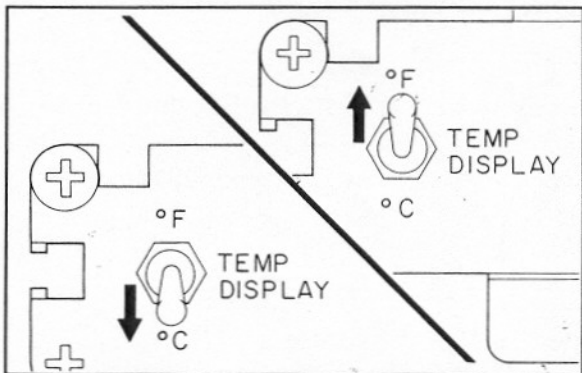


FIGURE 5. °C/°F SWITCH SETTING

PROBE (Optional Accessory)

10. Attach Probe to Probe Clamp Bracket, refer to Figure 7.
11. Insert the Probe Plug into the Probe Jack Receptacle, refer to Figure 8.
12. Set Probe/Plate Switch to Probe position, refer to Figure 9.
13. Depress Probe Button. Rotate Probe Knob clockwise or counterclockwise to reach the desired temperature setting. Release Probe Button. (**NOTE:** Observe the L.E.D. Temperature Display for preferred setting), refer to Figure 9.
14. Probe is now ready to read temperature of printed circuit board surface. (**NOTE:** Accuracy of Probe temperature readout is determined by thermal transfer loss between PCB to Probe contact. Losses of 25°F are not uncommon.)

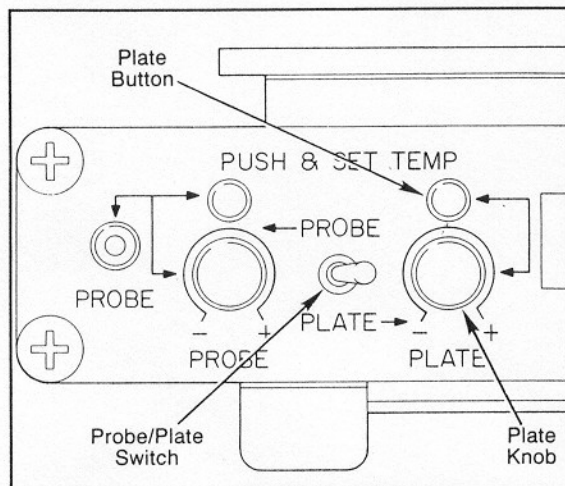


FIGURE 6. PLATE SWITCH POSITION

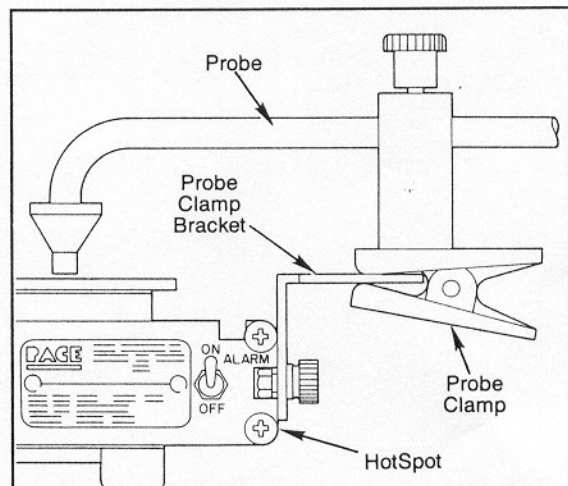


FIGURE 7. ATTACHING PROBE TO BRACKET

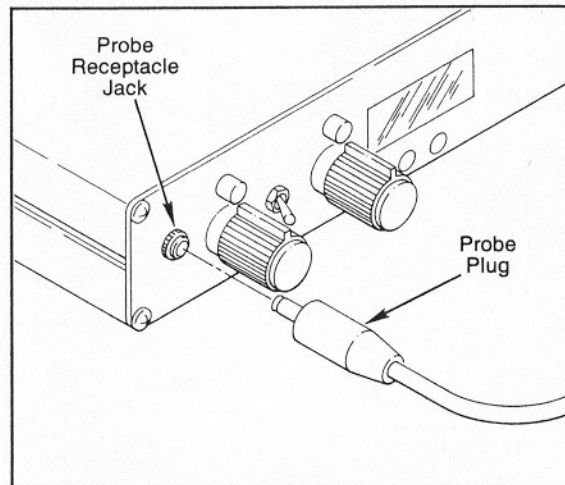


FIGURE 8. ATTACHING PROBE PLUG

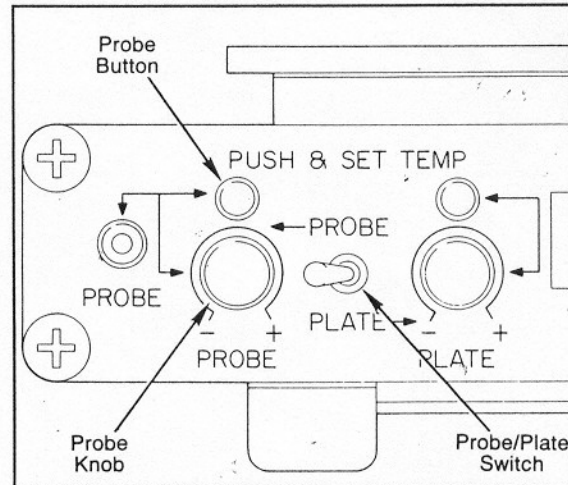


FIGURE 9. PROBE SWITCH POSITION

OPERATION

OPERATION:

INDIVIDUAL USAGE

1. Lock Heating Plate in the "DOWN" position.
2. Position and clamp printed circuit board to the Heating Plate. (**NOTE:** Single sided boards only).
3. Position and heat the printed circuit board rework area using the Thermal Selectivity Kit (refer to 5050-0195 for instructions on preparing Thermal Selectivity Kit materials).
4. Place Probe on printed circuit board, adjust Probe Clamp and Probe Clamp Bracket to the desired position. (**NOTE:** Probe Assembly is an optional accessory).

CRAFT-100A USAGE

• Small PCB's

5. Position HotSpot on Craft-100A X-Y Work Platform.
6. Engage Angle Bracket (located on bottom of unit between the two rear Feet Bumpers) with back edge of Craft-100A X-Y Work Platform. Secure HotSpot with X-Y Work Platform by sliding HotSpot forward until the front and rear Feet Bumpers stradle the X-Y Work Platform.
7. Lock Heating Plate in the "DOWN" position.
8. Position and heat the printed circuit board rework area using the Thermal Selectivity Kit (refer to 5050-0195 for instructions on preparing Thermal Selectivity Kit materials).
9. Place Probe on printed circuit board, adjust Probe Clamp and Probe Clamp Bracket to the desired position. (**NOTE:** Probe Assembly is an optional accessory).

• Large PCB's

10. Engage Angle bracket (located on bottom of unit between the two rear Feet Bumpers) with back edge of Craft-100A Work Platform. Secure HotSpot with X-Y Work Platform by sliding HotSPot forward until the front and rear Feet Bumpers stradle the X-Y Work Platform.
11. Lock Heating Plate in the "DOWN" position.
12. Attach the template onto the HotSpot (refer to 5050-0195 for mounting instructions).
13. Mount printed circuit board to Craft-100A X-Y Work Platform (refer to 5050-0191 for instructions).
14. Release Locking Lever to place the Heating Plate in a free-floating position allowing heating surface of Heating Plate to engage the rework area.
15. Place Probe on printed circuit board, adjust the Probe Clamp and Probe Clamp Bracket to the desired position. (**NOTE:** Probe Assembly is an optional accessory).

A HELPFUL HINT

When reworking or repairing printed circuit boards, it is suggested that you use more than one HotSpot System in order to create an assembly line to help speed up repair process. This assembly line process will allow preheat time on each printed circuit boards prior to rework. (**NOTE:** Preheat time may require up to 30 minutes depending on your applications).

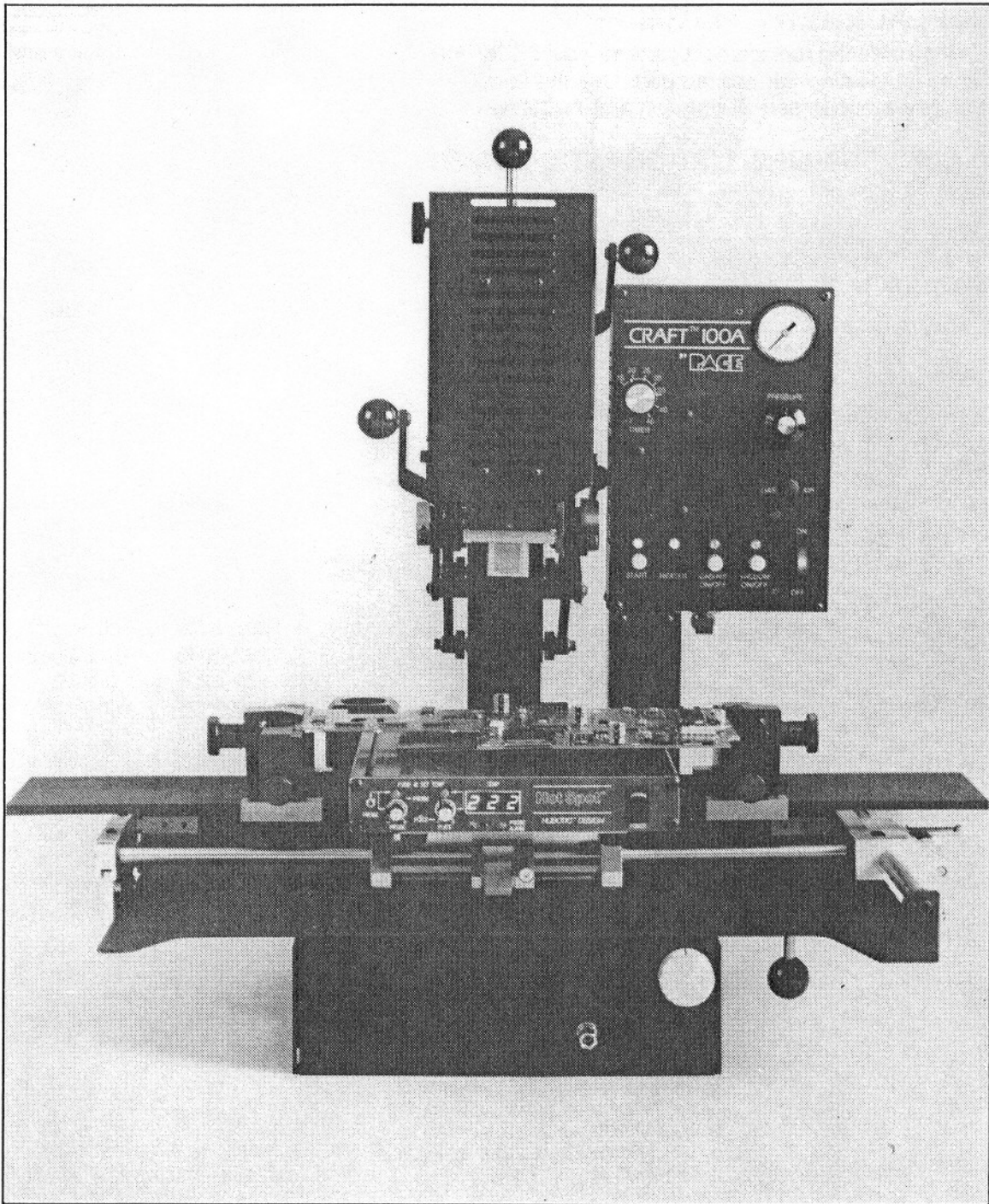


FIGURE 10. INTERFACING HOTSPOT 150/150E WITH CRAFT-100A SYSTEM

REPLACEMENT PARTS

REPLACEMENT PARTS

When ordering replacement parts for your PACE HotSpot 150/150E System, refer to Table 2 and Figure 11 locating the desired part. Use the item number in Figure 11, then refer to Table 2 for that item number, part description and PACE part number.

**TABLE 2. LIST OF REPLACEMENT PARTS COMMON TO
HOTSPOT 150/150E SYSTEM**
(Refer to Figure 11 for Item Number)

ITEM NO.	DESCRIPTION	PACE PART NO.	
		HS-150	HS-150E
	HotSpot System	8040-0001	8040-0002
1	Surface Plate and Heater Assembly	6040-0001	6040-0001
2	Probe Assembly (Optional)	7021-0001	7021-0001
3	Probe Clamp Bracket	1257-0112	1257-0112
4	Clamp Assembly	6040-0002	6040-0002
5	Clamp Arm	1321-0141	1321-0141
6	Spacer	1215-0094	1215-0094
7	Clamp Knob	1222-0044	1222-0044
8	Power Switch	1157-0006	1157-0006
9	Cap Switch	1171-0006	1171-0006
10	Probe Jack Receptacle	1207-0179	1207-0179
11	Knob	1222-0043	1222-0043
12	Fuse (F1), 3.15A SloBlo	1159-0221	1159-0221
13	Locking Lever Vinyl Grip	1209-0026	1209-0026
14	Power Cord	1332-0113	1332-0116
15	Thermal Selectivity Kit (Not shown)	6993-0102	6993-0102
—	Operation and Maintenance Manual	5050-0194	5050-0194

REPLACEMENT PARTS

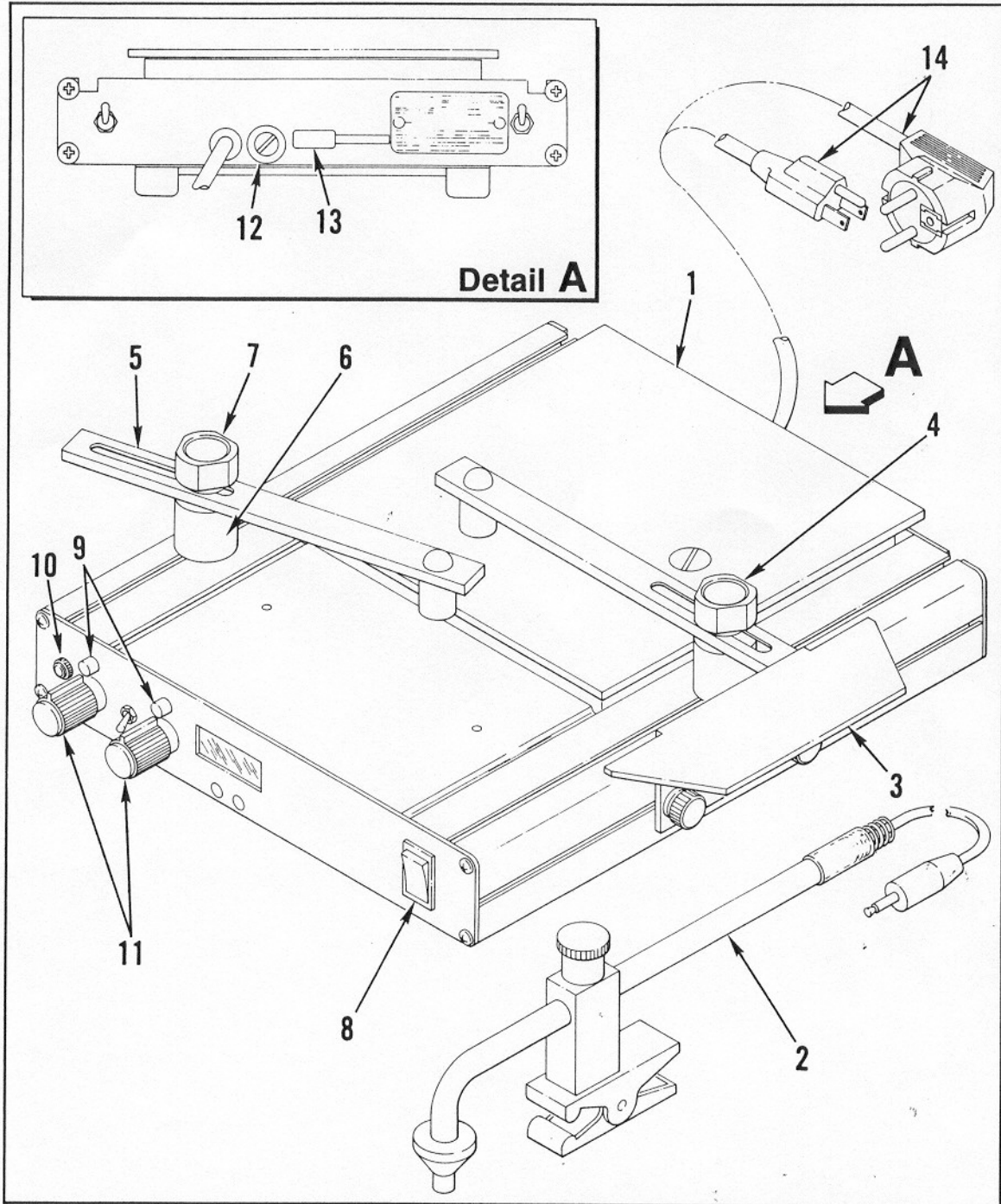


FIGURE 11. REPLACEMENT PARTS FOR HOTSPOT 150/150E SYSTEM