
INSTALLATION INSTRUCTIONS

Electric Heat Packages

Models:

EHWA018A-A05	EHWA030A-B09	EHWA036A-B15
EHWA018A-A08	EHWA030A-B15	EHWA036A-C05
EHWA018A-A10	EHWA030B-B15	EHWA036A-C09
EHWA024A-A05	EHWA030A-C05	EHWA036A-C15
EHWA024A-B05	EHWA030A-C09	EHWA036ADA05
EHWA024A-C05	EHWA030A-C15	EHWA036ADA10
EHWA030A-A05	EHWA030ADC05	EHWA036ADB09
EHWA030A-A10	EHWA036A-A15	EHWA036ADC05
EHWA030A-A15	EHWA036A-B05	EHWA036ADC09
	EHWA036B-B05	

For Use with W**AY Series
Wall-Mounted Air Conditioners



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Manual: 2100-782B
Supersedes: 2100-782A
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GENERAL INFORMATION

Description

The EHW series electric heater packages are field-installable heater packages suitable for use with Bard wall mount air conditioners. The packages consist of the electric heat strip, the heater control base (which includes the heat contactors and circuit breaker or toggle or rotary disconnects), installation instructions and wiring diagrams. See Table 1 for nominal electrical data and BTU output. **Before installation, check unit serial plate to ensure the heater package model to be installed is a listed heater package that is suitable for use with the Bard wall mount unit** (see Figure 6 on page 16).

Important

The equipment covered in this manual is to be installed by trained and experienced service and installation technicians.

Shipping Damage

Upon receipt of equipment, the carton should be checked for external signs of shipping damage. If damage is found, the receiving party must contact the last carrier immediately, preferably in writing, requesting inspection by the carrier's agent.

Unpacking the Electric Heat Package

Remove the heat package from the shipping carton. The heat package must consist of the following:

1. Basic heater.
2. Electric heat control base and wiring.
3. Installation instructions.
4. Two wiring diagrams, one to be applied to unit.
5. Adhesive label to re-mark serial plate to indicate new model number. This is attached to the front of these instructions.

TABLE 1
Electrical Data and BTU Output

Heater Package Model	Volts	Phase	Nominal KW	Nominal BTU
EHWA018A-A05	230/208	1	4.6/3.8	15,700/12,800
EHWA018A-A08	230/208	1	7.4/6.0	25,100/20,500
EHWA018A-A10	230/208	1	9.2/7.5	31,400/25,600
EHWA024A-A05	230/208	1	4.6/3.8	15,700/12,800
EHWA024A-B05	230/208	3	4.6/3.8	15,700/12,800
EHWA024A-C05	460	3	4.6	15,700
EHWA030A-A05	230/208	1	4.6/3.8	15,700/12,800
EHWA030A-A10	230/208	1	9.2/7.5	31,400/25,600
EHWA030A-A15	230/208	1	13.8/11.3	47,100/38,400
EHWA030A-B09	230/208	3	8.3/6.8	28,300/23,000
EHWA030A-B15	230/208	3	13.8/11.3	47,100/38,400
EHWA030B-B15	230/208	3	13.8/11.3	47,100/38,400
EHWA030A-C05	460	3	4.6	15,700
EHWA030A-C09	460	3	8.3	28,300
EHWA030A-C15	460	3	13.8	47,100
EHWA030ADC05	460	3	4.6	15,700
EHWA036A-A15	230/208	1	13.8/11.3	47,100/38,400
EHWA036A-B05	230/208	3	4.6/3.8	15,700/12,800
EHWA036B-B05	230/208	3	4.6/3.8	15,700/12,800
EHWA036A-B15	230/208	3	13.8/11.3	47,100/38,400
EHWA036A-C05	460	3	4.6	15,700
EHWA036A-C09	460	3	8.3	28,300
EHWA036A-C15	460	3	13.8	47,100
EHWA036ADA05	230/208	1	4.6/3.8	15,700/12,800
EHWA036ADA10	230/208	1	9.2/7.5	31,400/25,600
EHWA036ADB09	230/208	3	8.3/6.8	28,300/23,000
EHWA036ADC05	460	3	4.6	15,700
EHWA036ADC09	460	3	8.3	28,300

Wiring Main Power

1. On all installations, size unit power supply wiring for the minimum circuit ampacity requirement for the unit and heater package combination listed on the unit serial plate.

WARNING

Install properly sized power supply leads for the unit/heater combination minimum circuit ampacity as listed on the unit serial plate. Hazard of fire. Failure to install properly sized conductors could result in fire causing damage, bodily injury or death.

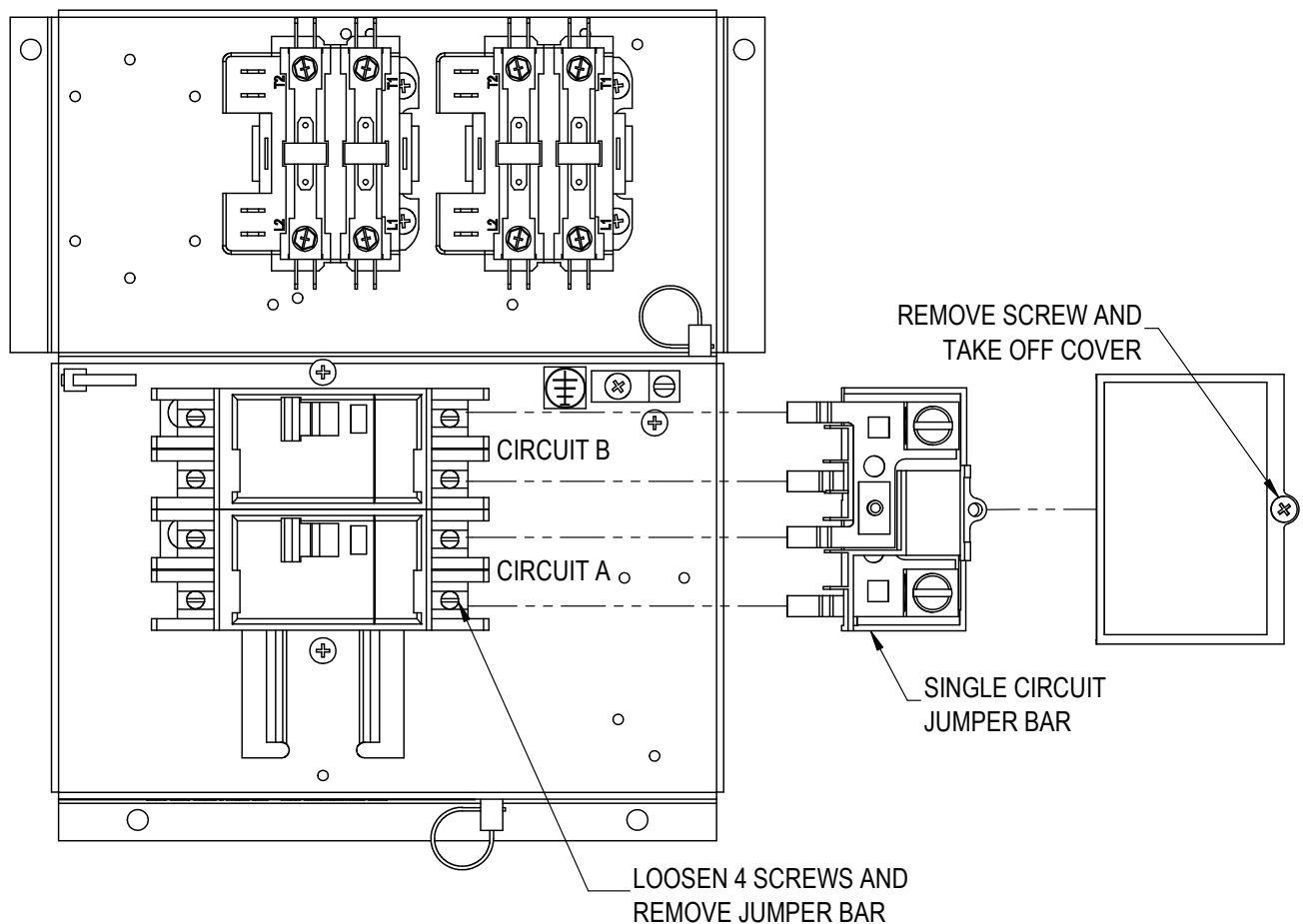
2. All heater packages covered by this manual are factory wired for single supply circuit. The following heater packages are field convertible to a dual supply circuit if required or desired:

EHWA030A-A15, EHWA036A-A15

To convert the above heater package to dual circuit configuration before installation, loosen four (4) screws holding jumper bar in place and remove jumper bar (see Figure 1). Circuits A + B are now identified on the heater package.

Wire should be sized to the minimum circuit ampacity as specified on the serial plates of units that accept this heater package for circuits A + B.

FIGURE 1
Wiring – Main Power



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INSTALLATION

Installation of Heater Package

1. Disconnect all power to unit before installation.

WARNING

Disconnect all power to unit before installing heater package. Hazard of electrical shock. Failure to disconnect power could result in injury or death.

2. Before installation, check unit serial plate to ensure that the heater package model to be installed is listed as a heater package suitable for use with the unit.

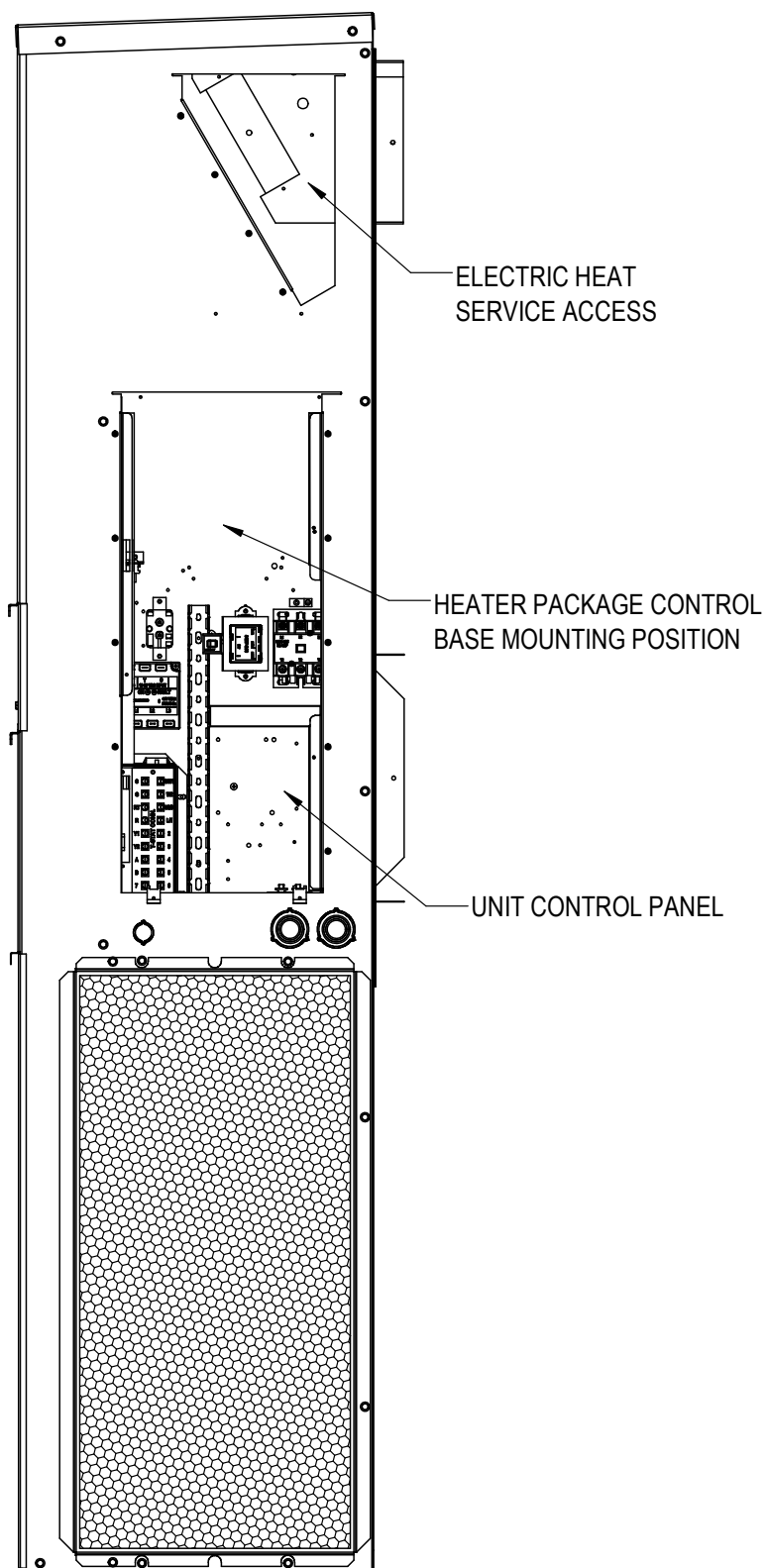
Under no circumstance shall a heater package be installed in a unit if the model number of the heater package does not appear on the unit serial plate.

WARNING

Install only heater packages listed on unit serial plate. Hazard of fire or electrical shock. Failure to install listed heater package could result in fire, injury or death.

3. Remove electric heater access panel and control panel cover, both inner and outer (see Figure 2).
4. Install heat strip(s) through heater access opening. Position heat strip support rod in heater support hole 1, 2 or 3 as indicated in Table 2 on page 8 and Figure 3 on page 9.
5. Install heater control base into top of control panel as shown in Figure 5 on page 15. Secure with four (4) sheet metal screws provided.
6. Plug male 3-pin connector into mating connector mounted in control panel (see Figure 5).
7. Connect red compressor supply lead to L1 of terminal block. Connect black compressor supply lead to L2 of terminal block. If three phase, connect yellow supply lead to L3 of terminal block. See Figure 5 and wiring diagram.
8. Route wires from heater control base up through raceway in top right corner of control panel to the heaters (see Figure 5).
9. Wire heater package per wiring diagram supplied with the heater package. All wires are stamped with wire numbers that correspond with terminal numbers on the wiring diagram and stamped numbers on the heat strip. Limit switch wires are terminated with insulated quick connect terminals. See Figure 5.
10. Attach adhesive wiring diagram directly above unit wiring diagram on inner control panel cover.
11. Recheck all wiring. Break out appropriate circuit breaker tabs on inner control panel cover to allow trip lever to protrude. Replace control panel and heater access panels.
12. Resupply power to the unit and check for proper operation.
13. Re-mark serial plate with self-adhesive label attached to the front of this manual (see Figure 6 on page 16).

FIGURE 2
Electric Heater Access Panel and Control Panel Cover Locations



MIS-419

TABLE 2
References to Figures 3 and 4 for Model Number

Heater Package Model Number	Figure 3 Rod Support and Screw Mounting Position	Figure 4 Heater Terminal Identification Drawing
EHWA018A-A05	1	4A
EHWA018A-A08	1	4C
EHWA018A-A10	1	4C
EHWA024A-A05	1	4A
EHWA024A-B05	1	4B
EHWA024A-C05	1	4B
EHWA030A-A05	1	4A
EHWA030A-A10	1	4C
EHWA030A-A15	1 + 3	4G
EHWA030A-B09	1	4B
EHWA030A-B15	1 + 3	4H
EHWA030B-B15	1 + 3	4H
EHWA030A-C05	1	4B
EHWA030A-C09	1	4B
EHWA030A-C15	1 + 3	4E
EHWA030ADC05	1	4B
EHWA036A-A15	1 + 3	4F
EHWA036A-B05	1	4B
EHWA036B-B05	1	4B
EHWA036A-B15	1 + 3	4E
EHWA036A-C05	1	4B
EHWA036A-C09	1	4B
EHWA036A-C15	1 + 3	4E
EHWA036ADA05	1	4A
EHWA036ADA10	1	4C
EHWA036ADB09	1	4B
EHWA036ADC05	1	4B
EHWA036ADC09	1	4B

FIGURE 3
Screw Mounting Holes

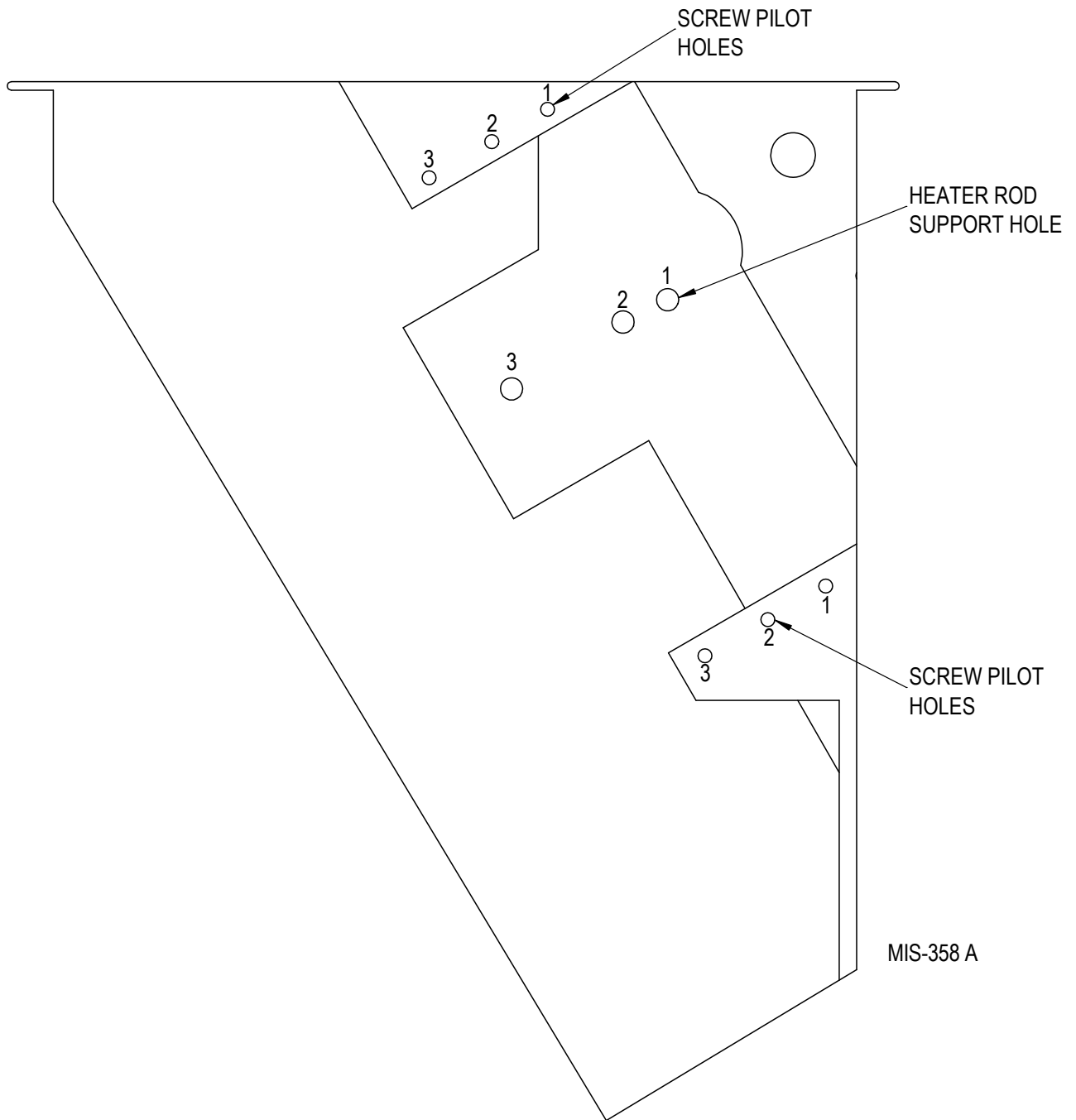


FIGURE 4A-D

FIGURE 4A

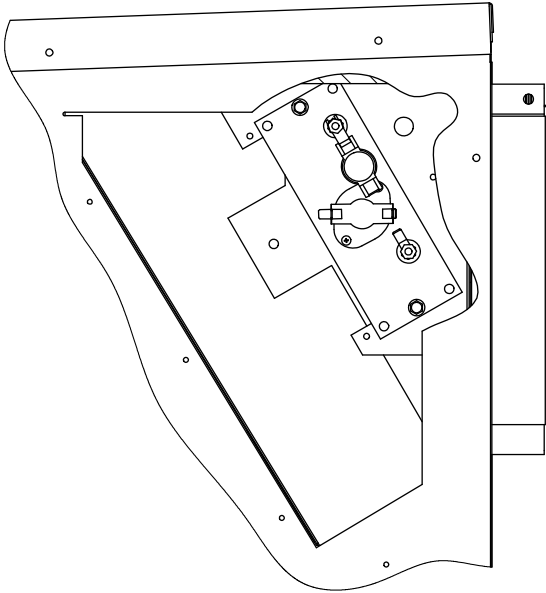


FIGURE 4B

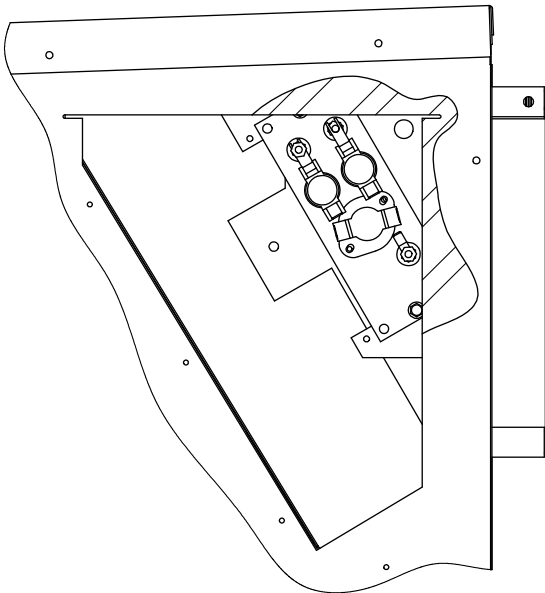


FIGURE 4C

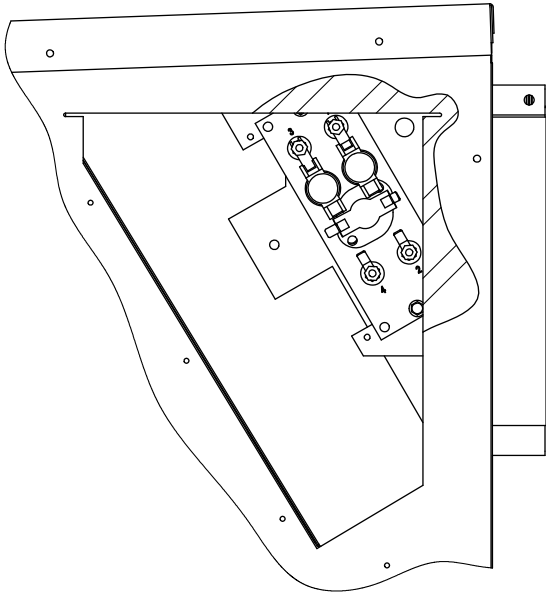
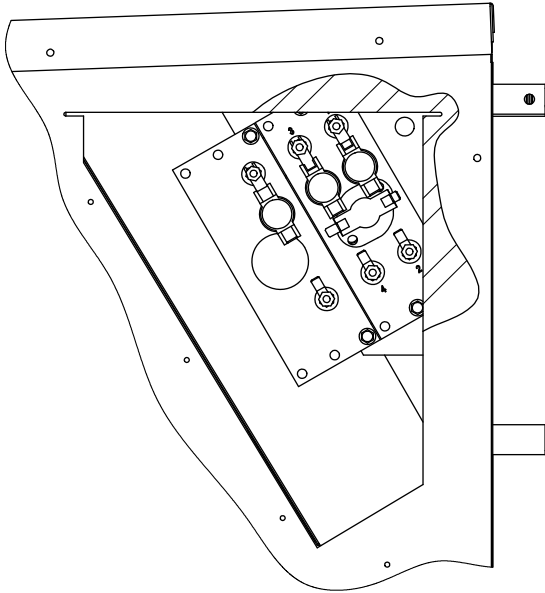
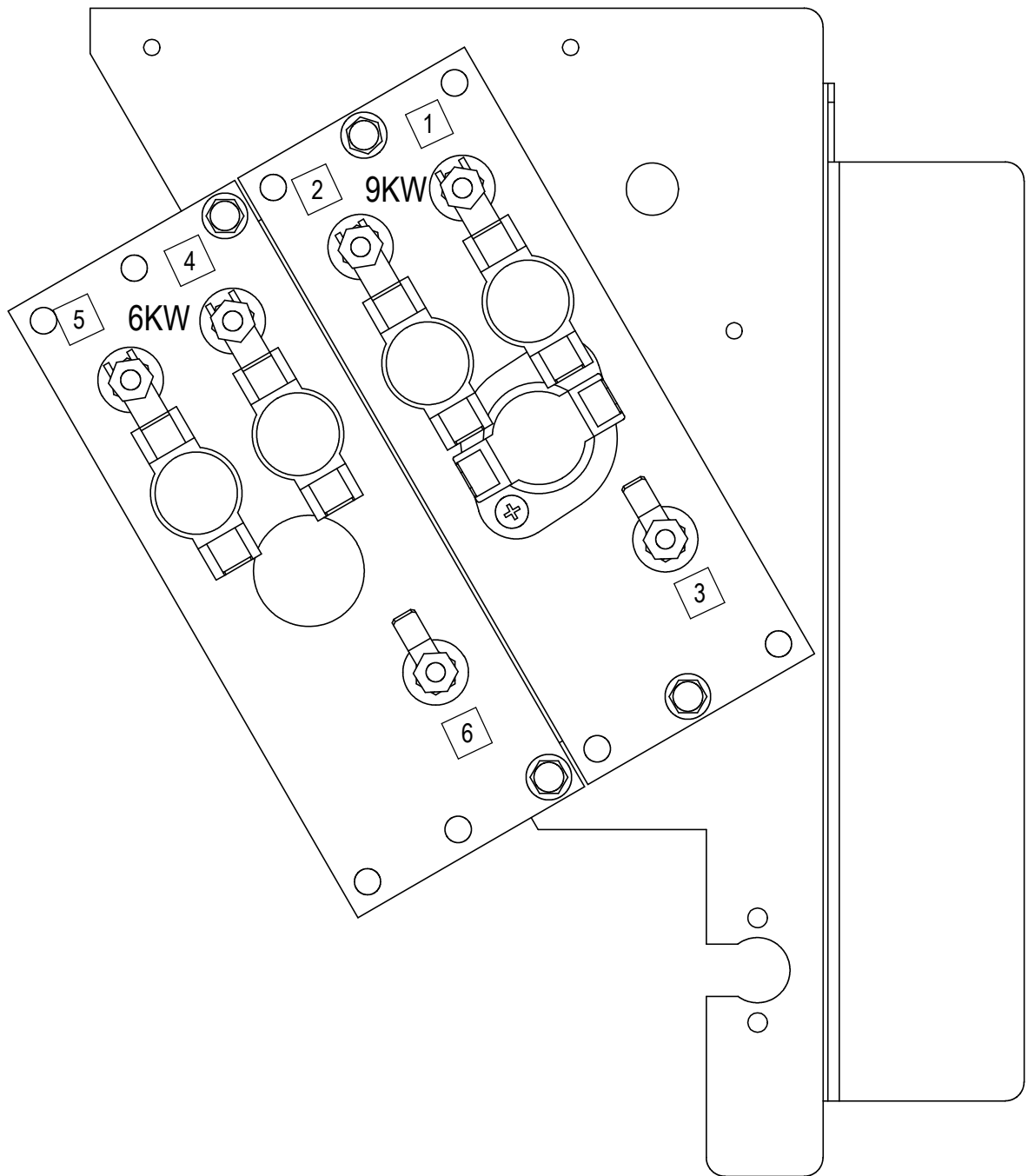


FIGURE 4D



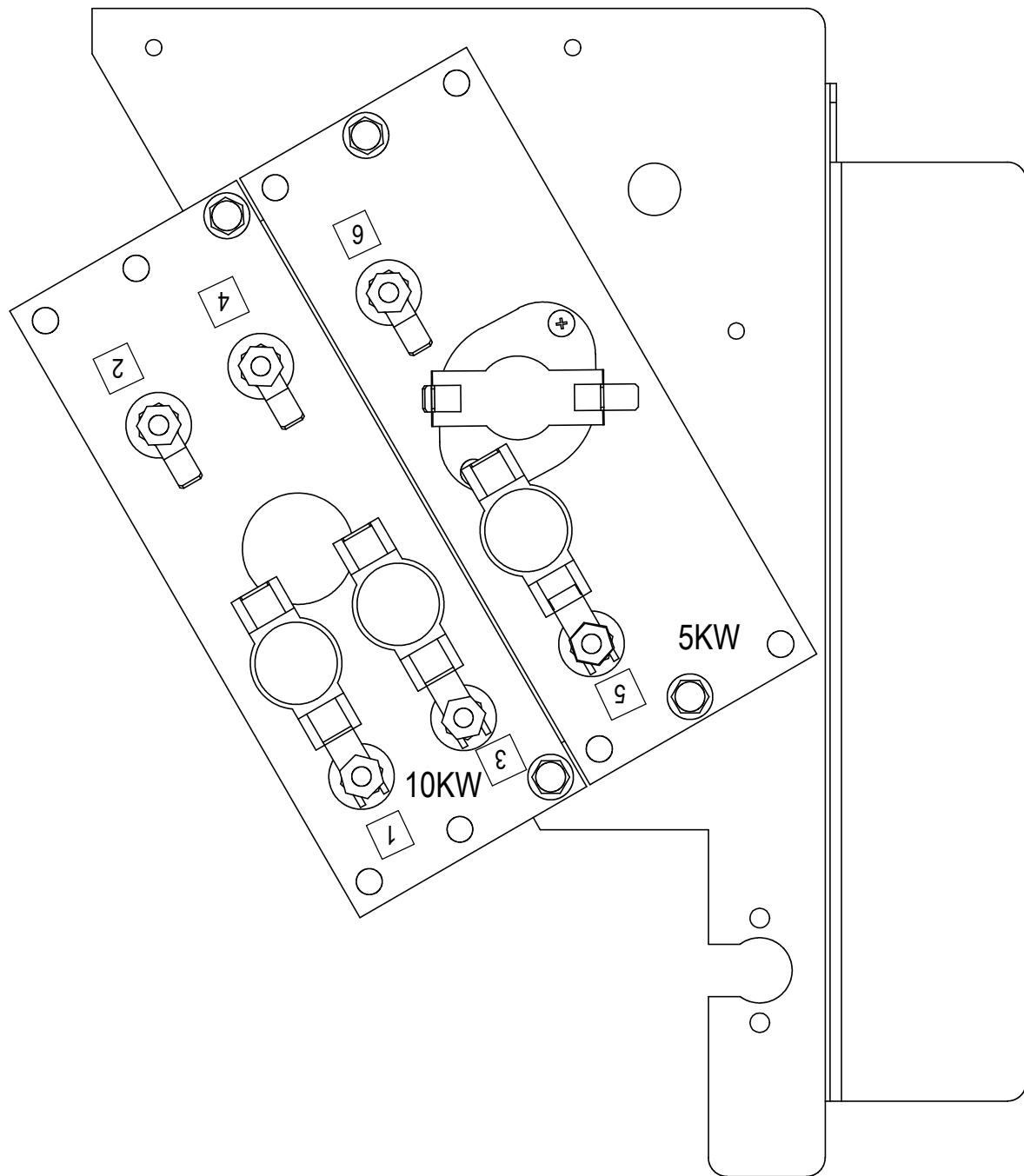
MIS-4422 A

FIGURE 4E
Installing Heater Package with
Two Heat Strips



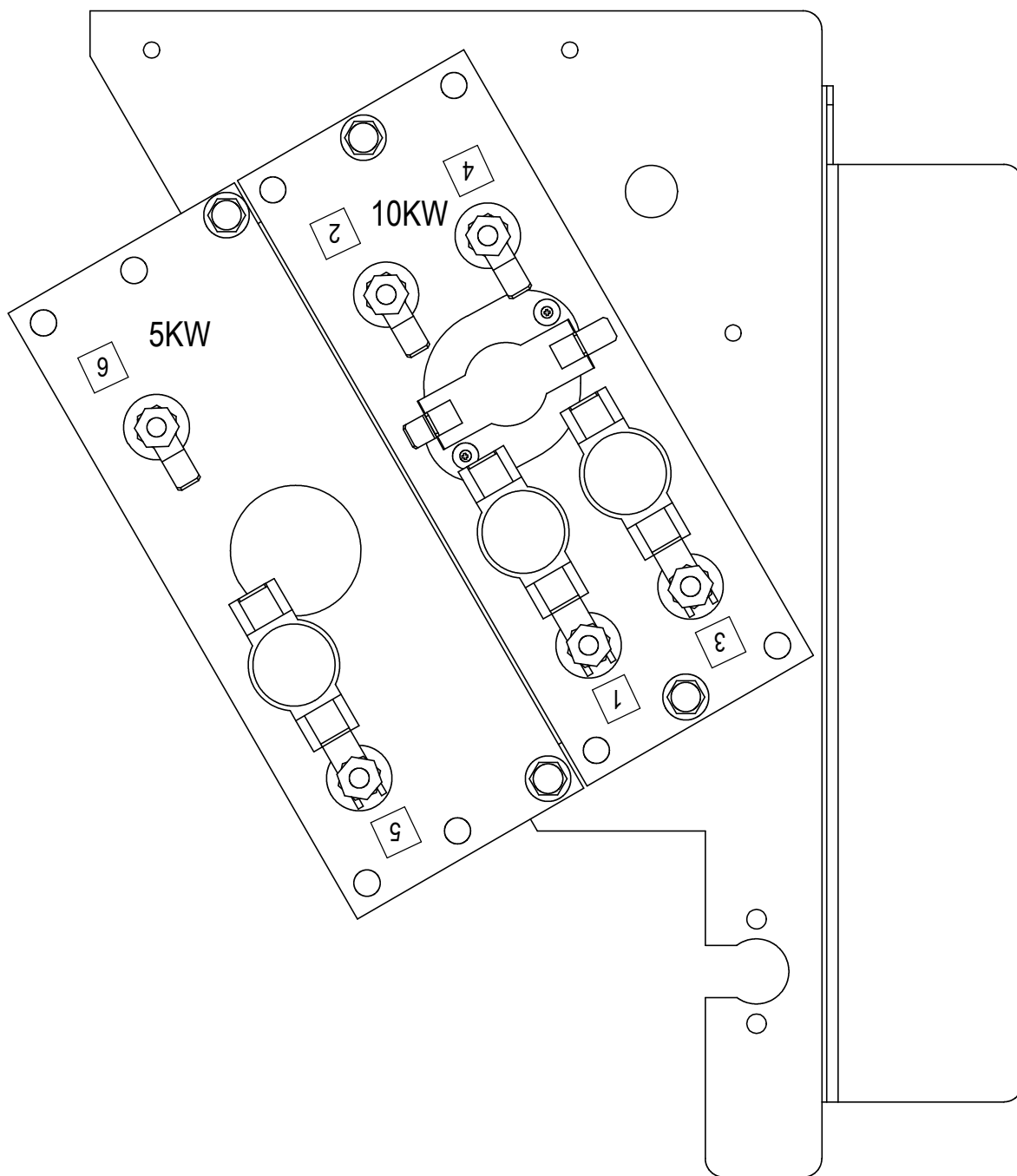
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FIGURE 4F
Installing Heater Package with
Two Heat Strips



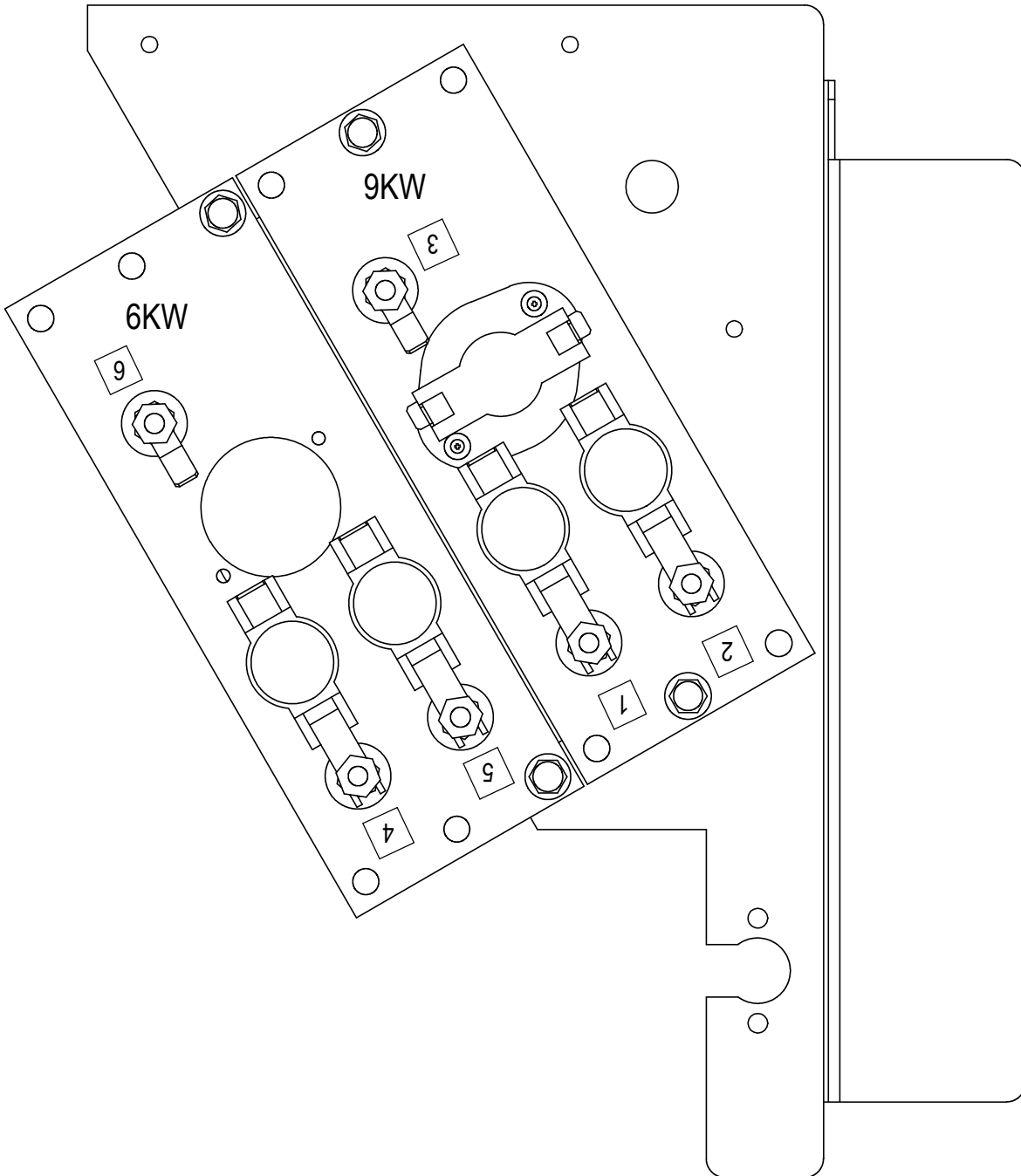
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FIGURE 4G
Installing Heater Package with
Two Heat Strips



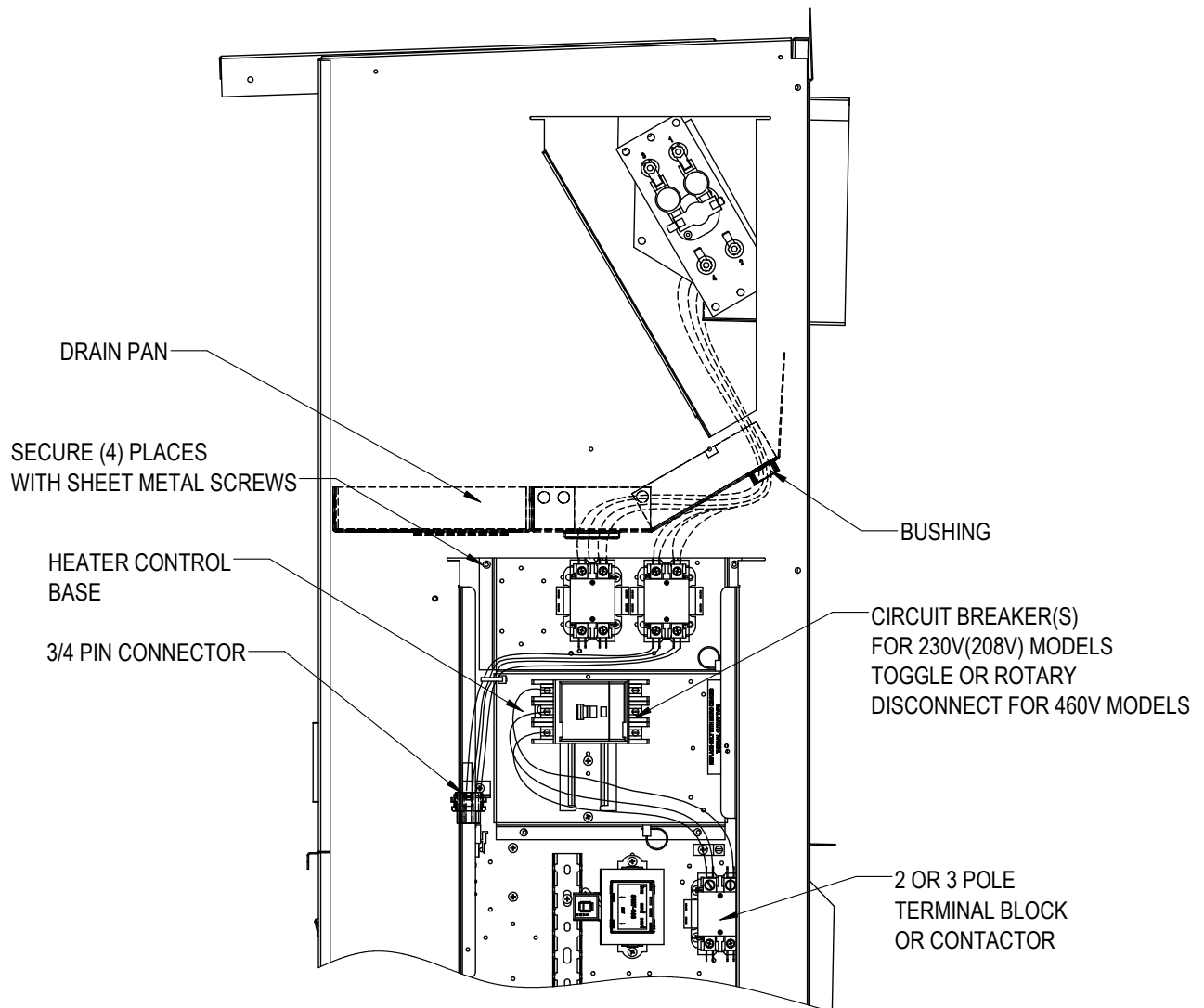
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FIGURE 4H
Installing Heater Package with
Two Heat Strips



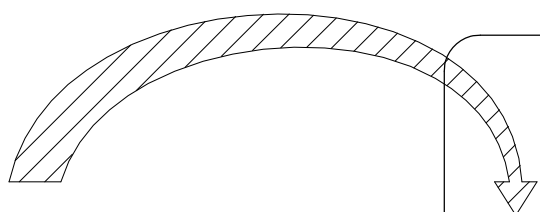
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FIGURE 5
Installing Heater Base
and Connecting Wiring



MIS-4436

FIGURE 6
Serial Plate Showing
Approved Heater Packages



{ x }	{ }	{ }	{ }	{ }	{ }	{ }	{ }	{ }	{ }
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ASSURE THAT SERIAL PLATE IS CLEAN AND DRY, REMOVE APPROPRIATE LABEL STRIP FOR KW REQUIRED AND REMARK SERIAL PLATE AS SHOWN FOR THE HEATER PACKAGE THAT IS INSTALLED

INSTALL ONLY HEATER PACKAGES LISTED HERE

BARD MANUFACTURING CO. INC., 1914 RANDOLPH DRIVE

(1)
APPROVED
HEATER

MODEL	PACKAGE	VAC~	HZ	PH
() C36HY-A00	NONE	230/208	60	1
() C36HY-A0Z	WMCBC-04A	230/208	60	1
(X) C36HY-A05	EHCH036A-A05	230/208	60	1
() C36HY-A10	EHCH036A-A10	230/208	60	1
() C36HY-A15	EHCH036A-A15	230/208	60	1

SHORT-CIRCUIT CUR
BRANCH CIRCUIT SELECT CURRENT 14.1A OPER

SERIAL NUMBER XXXXXXXXXXXXXXXX-XX

SUITABLE FOR PARTIAL OUTDOOR EXPOSURE IN THROUGH THE WALL
ALL MOTORS ARE THERMALLY PROTECTED

	VAC	HZ	PH	HP	FL
COMPRESSOR	230/208	60	1		
OUTDOOR MOTOR	230/208	60	1	1/3	1.9
INDOOR MOTOR	230/208	60	1	1/2	1.4
ERV	230/208	60	1		2.2 (C
HEATER PACKAGE				KW	FLA
EHCH036A-A05	230/208	60	1	4.6/3.8	20.0/18
EHCH036A-A10	230/208	60	1	9.2/7.5	40.0/36
EHCH036A-A15	230/208	60	1	13.8/11.3	60.0/54

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