

# Heater Kit for Series 90 Modular Accessory System Installation, Operation and Maintenance Instructions

## INTRODUCTION

**NOTE:** For M.A.S. housing assembly, installation and maintenance, refer to Installation, Operation and Maintenance Manual part number 07334.

The Series 90 Modular Accessory System heater is designed to maintain the internal temperature of the unit between 80°F and 95°F. It consists of a resistive heating element, mounting hardware, and a thermostat.

The power consumption of the heater for all voltages is approximately 10 watts. The resistive value of the heating element changes for the different voltage ratings as identified in the following table:

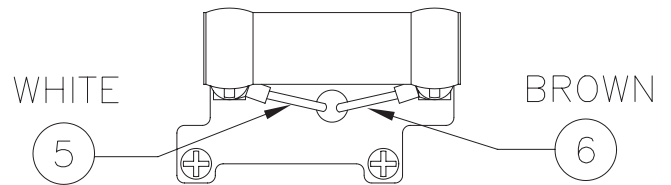
SUPPLY VOLTAGE	RESISTIVE VALUE (OHMS)
120 VAC	1500
12 VDC	15
24 VDC	50

**CAUTION:** Ensure that the heater voltage rating is compatible to the power supply and to the M.A.S.; the heater element is marked with its value in ohms. Heaters with voltage ratings different from the M.A.S. voltage rating may be installed if wired independently from other components.

The heater is not available in combination with D2 (double pole-double throw) switches.

## ASSEMBLY:

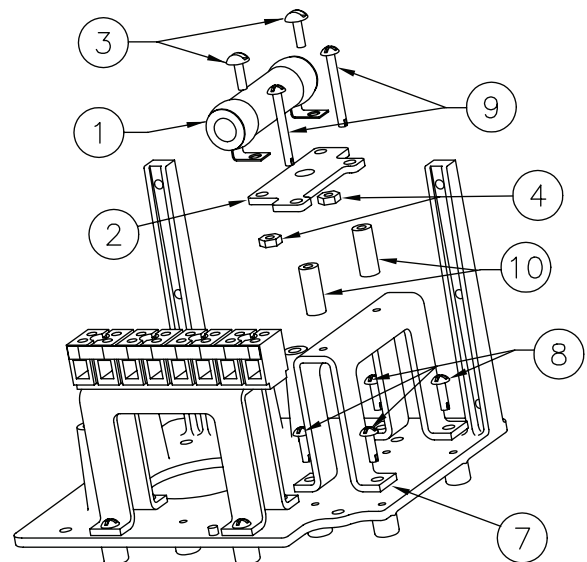
1. Assemble heater element (item 1) to mounting bracket (item 2) using two #4-40 x 3/8" screws (item 3) and #4-40 nuts (item 4) provided. The heater lead lugs must be bent to a 90° angle as shown. Use pliers to bend the metal lugs as close to the heater as possible.



2. Attach the lead wires (item 5 & 6) under the screw heads as shown and tighten the screws. Route the leads through the center hole in the bracket.
3. M.A.S. units may contain one or two terminals strips depending on the options installed in the unit. For this reason the heater mounts differently in each.

### If one terminal strip is present:

4. Install the bracket (item 7) provided as shown using the four #4 x 3/8" self-tapping screws (item 8).
5. Mount the heater assembly to the bracket using two #4 x 1" self-tapping screws (item 9) and two spacers (item 10) provided.



**If two terminal strips are present:**

**Note:** Some kit parts will not be used.

- Remove the two screws that retain the terminal block (item 11) to its bracket.
- Mount the heater assembly to the top of the terminal block using two #4 x 1" self-tapping screws (item 12) provided.

**For one and two terminal strips:**

- Locate the thermostat (item 13) in a convenient location — away from rotating parts. One suggested location is shown in the sketch at right. Use a wire tie (item 14) to hold the thermostat in place.

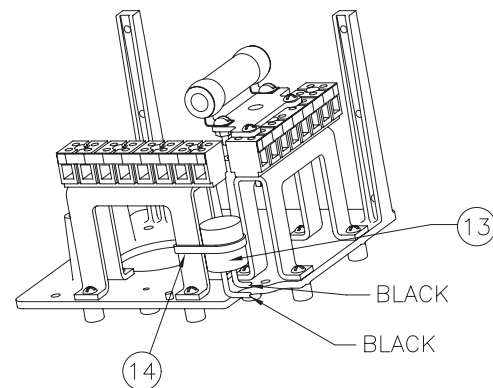
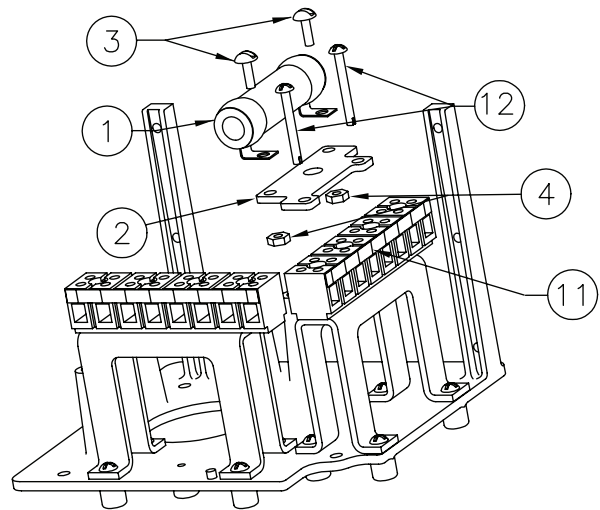
## WIRING

The heater must be connected to a constant (non-switching) power supply to maintain internal temperature. If intermittent use is desired, power to the heater can be switched.

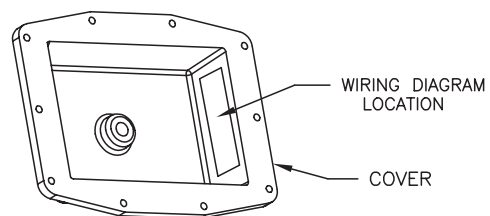
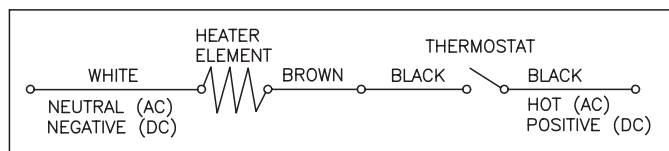
Make connections using the closed end splices provided. Note that no connections will be made to the terminal strips.

Refer to wiring diagram below.

- Connect the white wire from the heater element to the neutral (if AC) or negative (if DC) side of the power supply.
- Connect the brown wire from the heater element to one of the black leads from the thermostat.
- Connect the other black wire from the thermostat to the hot (if AC) or positive (if DC) side of the power supply.
- Attach wiring diagram to inside end of M.A.S. cover as shown below.



WIRING DIAGRAM



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