



# CONTROL PCBA MEMBRANE PAD REPLACEMENT KIT (P/N 461105)

FOR MASTERTEMP® AND MAX-E-THERM® HEATER

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## INSTALLATION INSTRUCTIONS



**FAILURE TO FOLLOW ALL INSTRUCTIONS AND WARNINGS CAN RESULT IN SERIOUS BODILY INJURY OR DEATH.** THIS PRODUCT SHOULD BE INSTALLED AND SERVICED ONLY BY A QUALIFIED POOL SERVICE PROFESSIONAL. INSTALLERS, POOL OPERATORS AND OWNERS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS IN THE HEATER INSTALLATION AND USER'S GUIDE BEFORE USING THIS PRODUCT. THESE INSTRUCTIONS MUST BE LEFT WITH THE POOL OWNER.

Pentair heater related products are available at <https://www.pentair.com>.  
Call (800) 831-7133 for additional free copies of these instructions.

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## IMPORTANT SAFETY INSTRUCTIONS READ AND FOLLOW ALL INSTRUCTIONS SAVE THESE INSTRUCTIONS

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### Control PCB Membrane Pad replacement Instructions for the USA and Australian heater

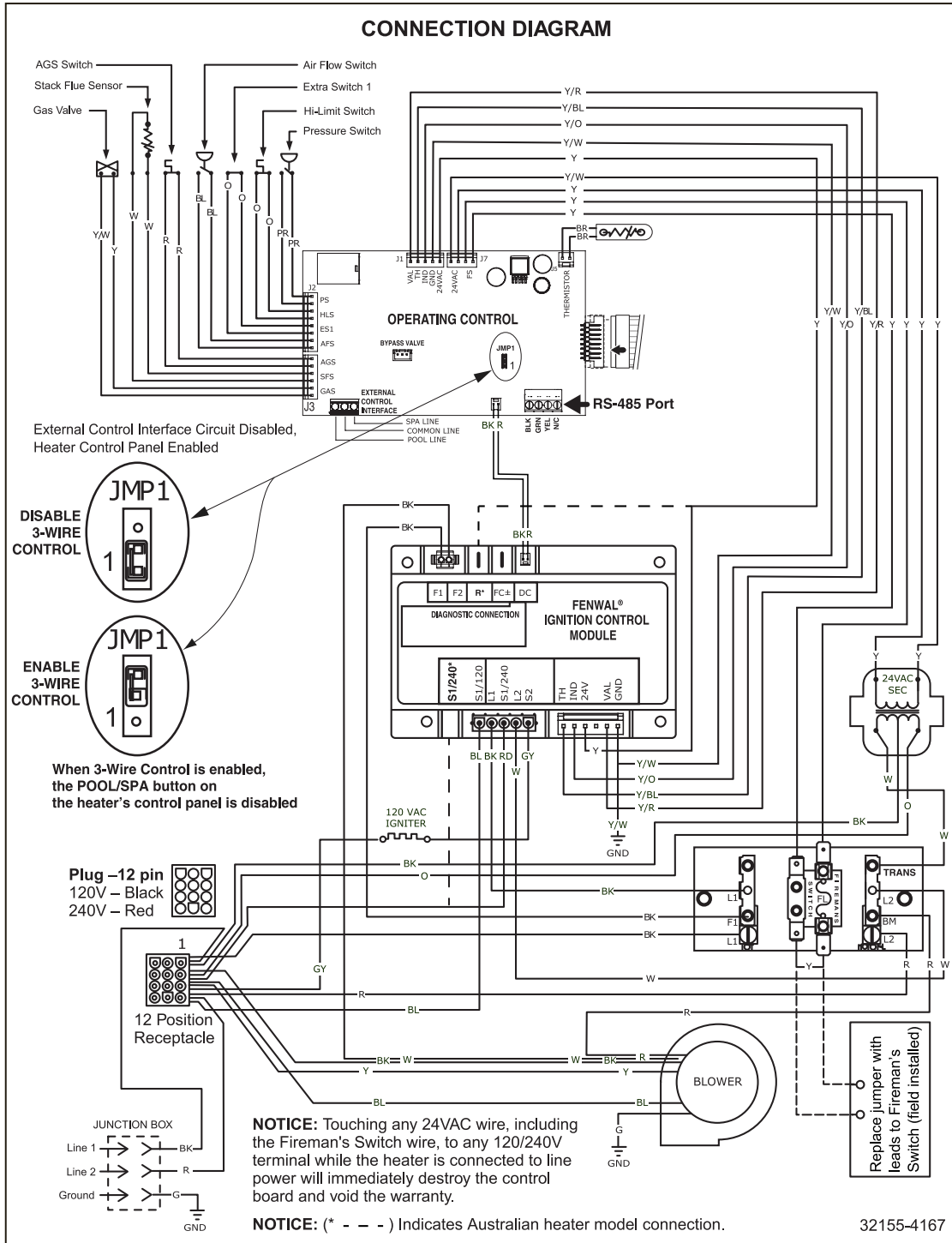
For heaters that do not have RS-485 communication capability, the following instructions describe how to replace the PCBA, and Membrane Pad in a MasterTemp or Sta-Rite pool and spa heater (USA and Australia model) for RS-485 compatible.

# CONTROL PCB/MEMBRANE PAD REPLACEMENT INSTRUCTIONS

## CONTROL PCB/MEMBRANE PAD - P/N 461105 (USA and Australia)

### Parts List

P/N	Description	Qty.
476201	MEM PAD MT 6 BUTTONS	1
476199	PCBA MT/MET HEATER WITH RS-485	1
476248	INSTALLATION INSTRUCTIONS	1



# CONTROL PCB/MEMBRANE PAD REPLACEMENT INSTRUCTIONS

When installing this kit, basic safety precautions should always be followed. Read and follow all instructions.

## Required installation tools:

- Powered socket/nut driver
- 1/4" nut driver bit
- 5/16" socket and nut driver
- 3/8" nut driver

**CAUTION! Before starting: Always disconnect AC power to the heater before proceeding with the wire harness replacement instructions.**

## To replace the membrane pad PCBA on a MasterTemp® Heater

### To open the heater:

**Heater location:** On an outdoor shelter installation, the exhaust discharges into a vent pipe. Orient the heater so that the vent pipe does not interfere with adjustment of the operating controls. The control panel located on the top panel can be rotated to any of the three sides of the heater for easy access.

1. Remove left side panel from the heater (Fig. 1 and Fig. 2). Remove the four (4) wing nuts holding the top in place.



FIG. 1.  
MasterTemp STD Heater



FIG. 2.  
MasterTemp 125 Heater

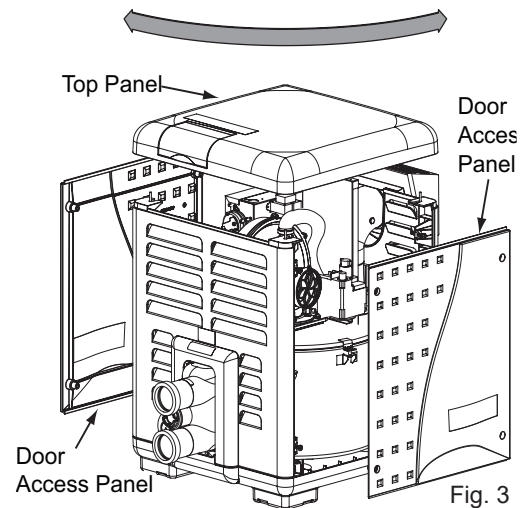


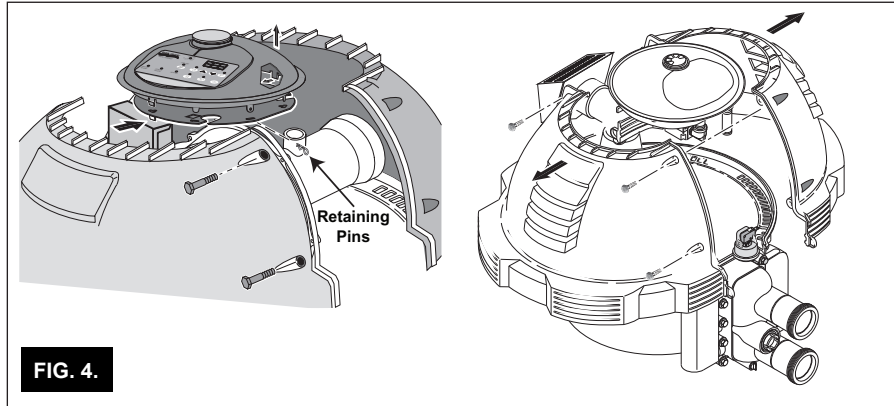
Fig. 3

2. Disconnect the wire harness from the back of the PCBA.
3. Disconnect the membrane pad from the PCBA.
4. Remove the four wing nuts that attach the Top Panel. Lift the top panel. Remove the four (4) screws holding the PCBA and remove the PCBA.
5. Peel the membrane pad from the top panel by pulling one of the corners. Set the panel aside.
6. Route the membrane pad connector through the top panel slot in order to connect it to the control board. Peel off the membrane pad backing
7. Align the membrane pad with the bottom of the recess in the lid and press firmly into place. Smooth the membrane pad with your hand.
8. Place new PCBA into underside of cover and secure with four (4) mounting screws.
9. Reconnect the membrane pad to the PCBA (note the arrow on the membrane connector should be on the bottom) the upper jackets halves from the heater.
10. Connect the wire harness back in the PCBA.
11. Place top panel over the heater and secure it with four (4) wing nuts.

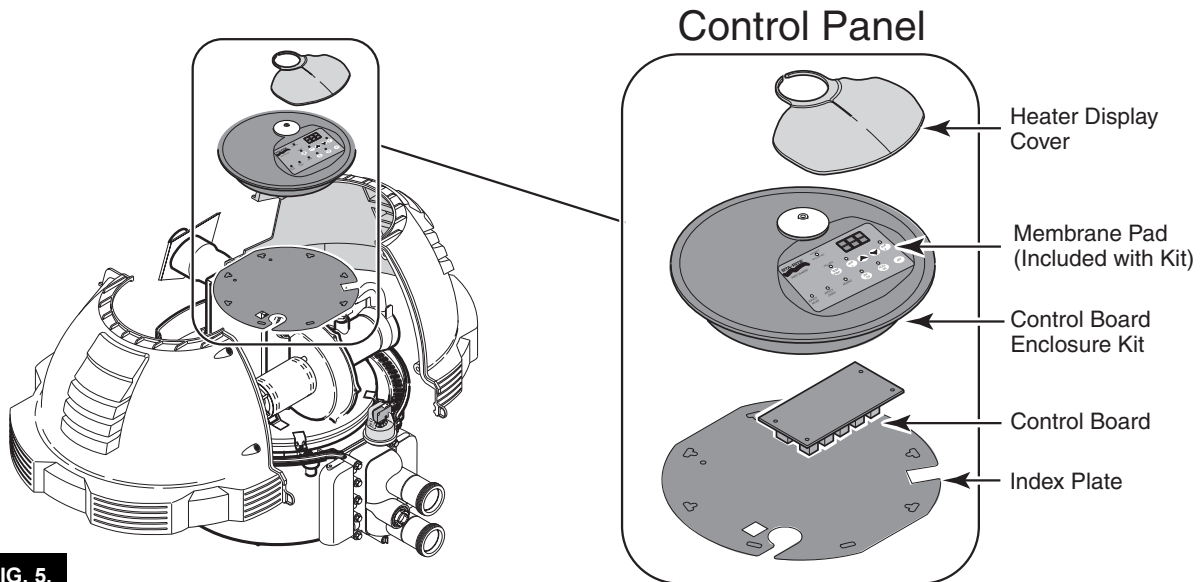
# CONTROL PCBA/MEMBRANE PAD REPLACEMENT INSTRUCTIONS

## To replace the Membrane Pad and PCBA on a Sta-Rite® Max-E-Therm

1. Unbolt the four bolts and separate the jackets halves. Pull hair pin clips (Fig. 4).
2. Press the plastic clips on the control panel assembly.
3. Lift control panel assembly off of support plate.
4. Disconnect the connectors from the control panel assembly.



5. Disconnect the wire harness from the back of the PCBA.
6. Disconnect the membrane pad from the PCBA.
7. Remove the four (4) screws holding the PCBA and remove the PCBA
8. Peel the membrane pad from the top panel by pulling one of the corners.
9. Route the membrane pad connector through the top panel slot in order to connect it to the control board. Peel off the membrane backing
10. Align the membrane pad with the bottom of the recess in the lid and press firmly into place. Smooth the membrane pad with your hand.
11. Place new PCBA into underside of cover and secure with four (4) mounting screws.
12. Reconnect the membrane pad to the PCBA (note the arrow on the membrane connector should be on the bottom)the upper jackets halves from the heater (Fig. 4).
13. Route the membrane pad connector through the top panel slot to connect to the control board. Peel of the membrane backing. Align the membrane pad properly onto the area of the top panel (Fig. 5).
14. Connect the wire harness back in the PCBA.
15. To complete the installation, reverse Steps 1 through 4 above.



## NOTES

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