





Pentair MasterTemp & Sta-Rite Max-E-Therm: Parts Matrix for "Connected Heater" Update – May 2021

Heaters without Connected Feature pre-5/7/2021

Connected Feature Introduced 5/7/2021

	REPLACE PCBA ONLY	REPLACE MEM. PAD ONLY	REPLACE ICM ONLY	REPLACE WIR. HAR. ONLY	UPGRADE TO CONNECTED	BYPASS VALVE KIT
MASTERTEMP™ / MASTERTEMP™ HD 	1. • New PCBA • New Membrane Pad • Instructions	9. • Old Membrane Pad (Five Button Version) <i>Note:</i> Use existing part numbers for MT and MET for this membrane pad.	2. • New ICM • Wiring Harness Adapter FWD • Instructions <i>Note:</i> LED for ICM included in wiring harness adapter.	4. • New Wire Harness • Wiring Harness Adapter BKWRD • Instructions <i>Note:</i> Flame current wire not used in this scenario.	6. • New PCBA • New Membrane Pad • New ICM • Wiring Harness Adapter FWD • Instructions <i>Note:</i> No LED for ICM needed in this adapter.	8. • IntelliValve • 3-way valve • Instructions <i>Note:</i> Can only be installed if heater has been upgraded.
MAX-E-THERM™ / MAX-E-THERM™ HD 	1. • New PCBA • New Membrane Pad • Instructions	9. • Old Membrane Pad (Five Button Version) <i>Note:</i> Use existing part numbers for MT and MET for this membrane pad.	2. • New ICM • Wiring Harness Adapter FWD • Instructions <i>Note:</i> LED for ICM included in wiring harness adapter.	4. • New Wire Harness • Wiring Harness Adapter BKWRD • Instructions <i>Note:</i> Flame current wire not used in this scenario.	6. • New PCBA • New Membrane Pad • New ICM • Wiring Harness Adapter FWD • Instructions <i>Note:</i> No LED for ICM needed in this adapter.	8. • IntelliValve • 3-way valve • Instructions <i>Note:</i> Can only be installed if heater has been upgraded.
CONNECTED MASTERTEMP™ / MASTERTEMP™ HD 	1. • New PCBA • New Membrane Pad • Instructions <i>Note:</i> All new PCBAs will come with membrane pad until cutoff date for old membrane pads.	10. • New Membrane Pad (Six Button Version)	2. • New ICM • Wiring Harness Adapter FWD • Instructions <i>Note:</i> LED for ICM included in wiring harness adapter.	4. • New Wire Harness • Wiring Harness Adapter BKWRD • Instructions <i>Note:</i> Flame current wire not used in this scenario.	N/A	8. • IntelliValve • 3-way valve • Instructions
CONNECTED MAX-E-THERM™ / MAX-E-THERM™ HD 	1. • New PCBA • New Membrane Pad • Instructions <i>Note:</i> All new PCBAs will come with membrane pad until cutoff date for old membrane pads.	10. • New Membrane Pad (Six Button Version)	2. • New ICM • Wiring Harness Adapter FWD • Instructions <i>Note:</i> LED for ICM included in wiring harness adapter.	4. • New Wire Harness • Wiring Harness Adapter BKWRD • Instructions <i>Note:</i> Flame current wire not used in this scenario.	N/A	8. • IntelliValve • 3-way valve • Instructions

All Membrane Keypads in this Column are Six Button Version.

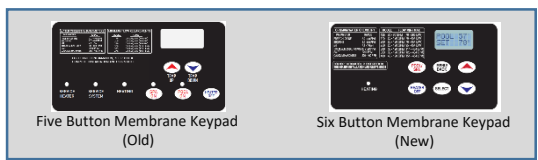
MULTI-PART KITS	
1.	461105
2.	476223
4.	461107
6.	476211
8.	462048

SINGLE-PART KITS	
9.	472610Z
10.	461106

● PART ONLY ● KIT

-What is the "Connected Heater":
 A running change to all Pentair MasterTemp & Sta-Rite Max-E-Therm heaters, which took place on the afternoon of 5/7/2021.

-All heaters made before 5/7/2021 have membrane keypads with five buttons, which identifies them as "Non-Connected" models.



Connected Heater Features:

- RS485 connection to IntelliCenter Automation
- Upgraded menu structure:
Flame strength indicator, Runtime, Cycle Count, Error Code Log
- Ability to control an external bypass valve
- Six button membrane keypad

How to Read a Serial Number to Determine Manufacturing Date:

The first four digits indicate the product line (ignore those digits).

The next three digits of the serial number are the day of the year:
 -January 1 would be 001.
 -December 31 would be 365.

The next two digits are the year:
 -2018 would be 18.
 -2021 would be 21.

Example: 246th day of 2012



And then all the rest of the digits are random (ignore those digits).

Example:
 123412621XXXXXXXXX
 the 126th day of 2021
 is May 6, 2021 (not a Connected Heater)

Example:
 123412721XXXXXXXXX
 the 127th day of 2021
 is May 7, 2021 (this is a Connected Heater)

Old Part Number	Description	Note:	Replaced by	Note:
42001-0052S	IGNITION CONTROL MODULE KIT	Also known as "ICM" or "Fenwal"	476223	New Ignition Control module comes with adaptors to make it backward-compatible (works in old & new heaters)
42002-0007S	KIT CONTROL BOARD BASIC	Also known as "PCBA"	461105	New Control Board Kit 461105 comes with "6 button" membrane keypad
42001-0104S	WIRING HARNESS DUAL VOLTAGE	Wiring Harness Replacement Kit	461107	New Wiring Harness comes with adaptors to make it backward-compatible
472610Z	SWITCH MEMBRANE REPLACEMENT	5 Button Membrane Keypad for Non-Connected Heaters	Not Changing	5 Button keypad is NOT going obsolete. Use 5 Button keypad as replacement part on older heaters

When replacing a control board on an older heater that has a 5 button keypad, you will also need to update the heater to have the 6 button keypad.