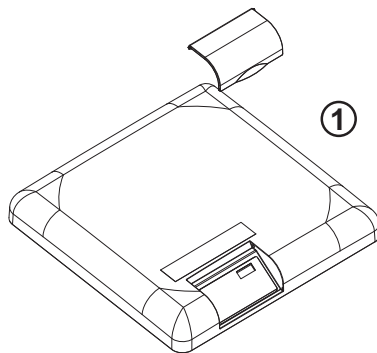
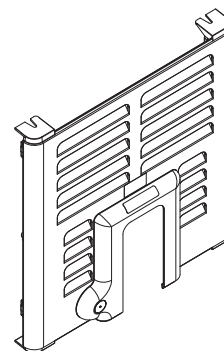
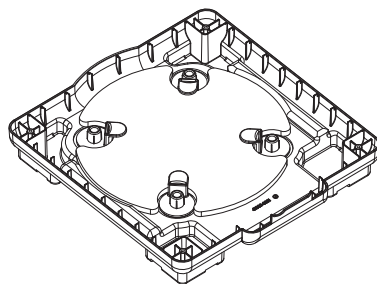
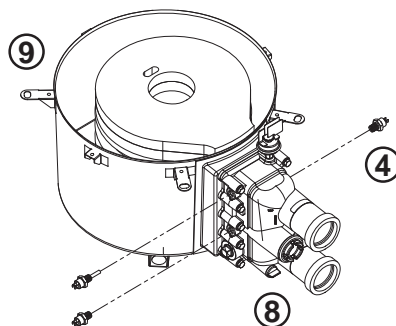
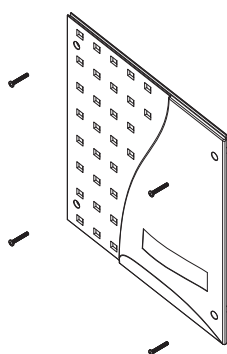
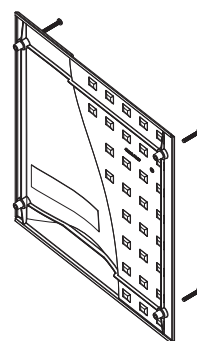
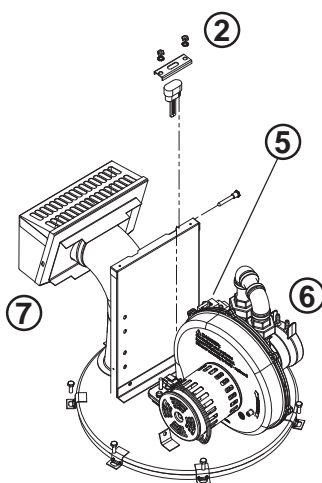
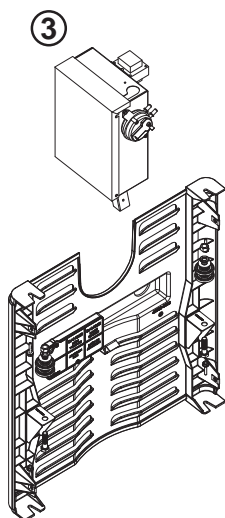


## MASTERTEMP HEATER REPLACEMENT PARTS

For complete  
Electrical System  
parts breakdown  
(Key Nos. 1 through 4),  
See Page 53



For complete  
Burner System  
parts breakdown  
(Key Nos. 5 through 7),  
See Page 51



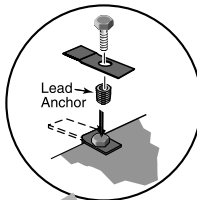
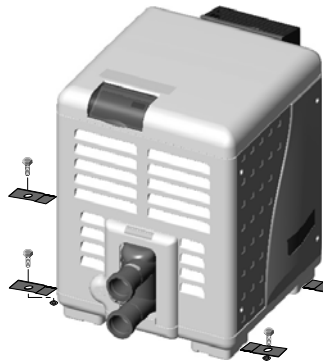
For complete  
Water System  
parts breakdown  
(Key Nos. 8 through 9),  
see Page 52

**Repair Parts are available from your Pentair dealer.**

If your dealer cannot supply you, call Customer Support at 1-800-831-7133.

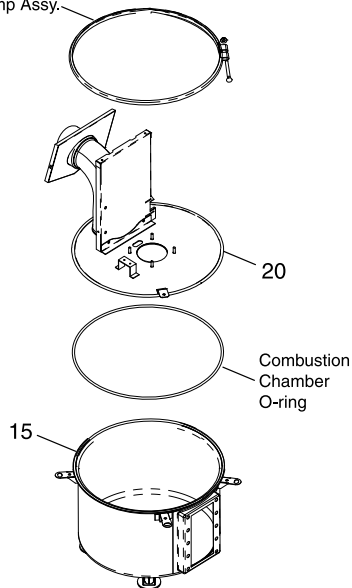
## MASTERTEMP HEATER REPLACEMENT PARTS

For Heater mounting bolts and clamps, purchase separately Bolt Down Bracket Kit, Part No. 460738.

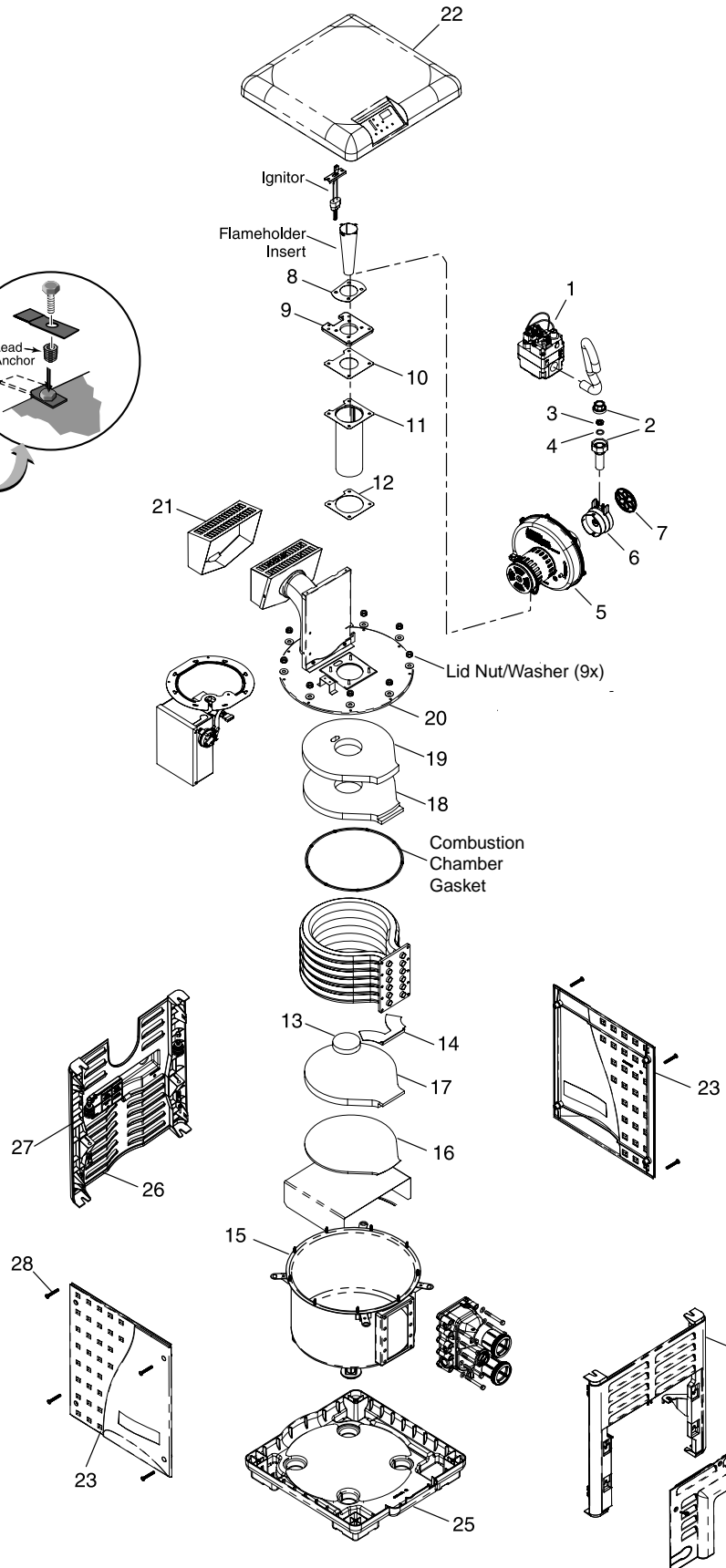


### CLAMP LID TUB DESIGN

Combustion Chamber Clamp Assy.



For heaters manufactured between 1/12/2009 and 10/31/2013 (clamp lid tub design)  
Note: Kits also include Clamp Assembly, O-Ring and Silicon Tube (see page 52)



# MASTERTEMP HEATER REPLACEMENT PARTS

## REPAIR PARTS – BURNER SYSTEM

Key No.	Part Description	Qty.	Model				
			175NA 175LP	200NA 200LP	250NA 250LP	300NA 300LP	400NA 400LP
1	Combination Gas Control Valve Kit	1	42001-0051S	42001-0051S	42001-0051S	42001-0051S	42001-0051S
2	3/4" Union	2	38404-4097S	38404-4097S	38404-4097S	38404-4097S	38404-4097S
3	Gas Orifice	1					
4	Gas Orifice O-Ring	1					
•	Gas Orifice Kit – NG (Incl. Key Nos. 3 and 4)†		460794	77707-0431	460739	460753	77707-0411
•	Gas Orifice Kit – Propane (Incl. Key Nos. 3 and 4)†		460795	77707-0461	460740	460754	77707-0441
•	NG to Propane Conversion Kit (Incl. Key Nos. 3 and 4)†		460794	77707-1461	460741	460755	77707-1441
•	Propane to NG Conversion Kit (Incl. Key Nos. 3 and 4)†		460795	77707-1431	460742	460756	77707-1411
5	Air Blower Kit						
	Natural Gas Units	1	77707-0251	77707-0251	460743	460757	77707-0253
	Propane Units	1	77707-0254	77707-0254	460744	460758	77707-0256
•	Air Orifice Kit (Includes Key Nos. 6 and 7)	1	460798	77707-0111	460745	460759	77707-0113
6	Air Orifice	1					
7	Air Orifice Grill	1	42001-0114S	42001-0114S	42001-0114S	42001-0114S	42001-0114S
•	Blower/Adapter Plate Gasket Kit (Includes Key Nos. 8, 9, 10, 12)	1	77707-0011	77707-0011	77707-0011	77707-0011	77707-0011
•	Flameholder Kit (Includes Key Nos. 10, 11, 12, 13 and on 300 & 400 models only - Flameholder Insert)	1	77707-0202	77707-0202	460746	77707-0203	77707-0204
8	Blower/Adapter Plate Gasket	1					
9	Blower Adapter Plate	1					
10	Flameholder/Adapter Plate Gasket	1					
11	Flameholder Assembly	1					
12	Flameholder/Combustion Chamber Gasket*	1					
13	Flameholder Insulation Cap	1					
•	Flameholder Insert	1					
14	Condensate Evaporator Plate	1					
15	One Piece Metal Chamber/Combustion Chamber Assembly	1	474095♦ 474957♦♦ 42001-0200S♦♦♦ 77707-0008	474095♦ 474957♦♦ 42001-0200S♦♦♦ 77707-0008	474095♦ 474957♦♦ 42001-0200S♦♦♦ 77707-0008	474095♦ 474957♦♦ 42001-0200S♦♦♦ 77707-0008	474095♦ 474957♦♦ 42001-0200S♦♦♦ 77707-0008
•	Insulation Kit (Includes Key No. 13,14,16,17,18,19)	1					
16	Bottom Outer Insulation Blanket*	1					
17	1" Bottom Inner Insulation	1					
18	1" Top Insulation	1					
19	Top Outer Insulation Blanket*	1					
•	Lower Enclosure Insulation	1	42001-0074S	42001-0074S	42001-0074S	42001-0074S	42001-0074S
20	One Piece Metal Elbow/Combustion Chamber Cover Assembly	1	474094♦ 474958♦♦ 42001-0214S♦♦♦ 474201♦ 474952♦♦	474094♦ 474958♦♦ 42001-0214S♦♦♦ 474201♦ 474952♦♦	474094♦ 474958♦♦ 42001-0214S♦♦♦ 474201♦ 474952♦♦	474094♦ 474958♦♦ 42001-0214S♦♦♦ 474201♦ 474952♦♦	474094♦ 474958♦♦ 42001-0214S♦♦♦ 474201♦ 474952♦♦
•	Combustion Chamber O-Ring Kit	1					
21	Metal Vent Cover	1	42002-0005S	42002-0005S	42002-0005S	42002-0005S	42002-0005S
	Cover Assembly	1	42001-0214S	42001-0214S	42001-0214S	42001-0214S	42001-0214S
22	Heater Top	1	42002-0034Z	42002-0034Z	42002-0034Z	42002-0034Z	42002-0034Z
23	Side Panel {Service Panel}	1	42002-0039	42002-0039	42002-0039	42002-0039	42002-0039
24	Side Panel {Manifold}	1	42002-0033	42002-0033	42002-0033	42002-0033	42002-0033
25	Heater Bottom	1	42002-0031	42002-0031	42002-0031	42002-0031	42002-0031
26	Side Panel {Flue Stack}	1	42002-0032	42002-0032	42002-0032	42002-0032	42002-0032
27	J-Box Cover	1	42002-0041	42002-0041	42002-0041	42002-0041	42002-0041
28	Screw Kit, Panel	1	474292	474292	474292	474292	474292
•	Combustion Air Intake Duct Connection Kit	1	461031	461031	461031	461031	461031

\* Not available separately.

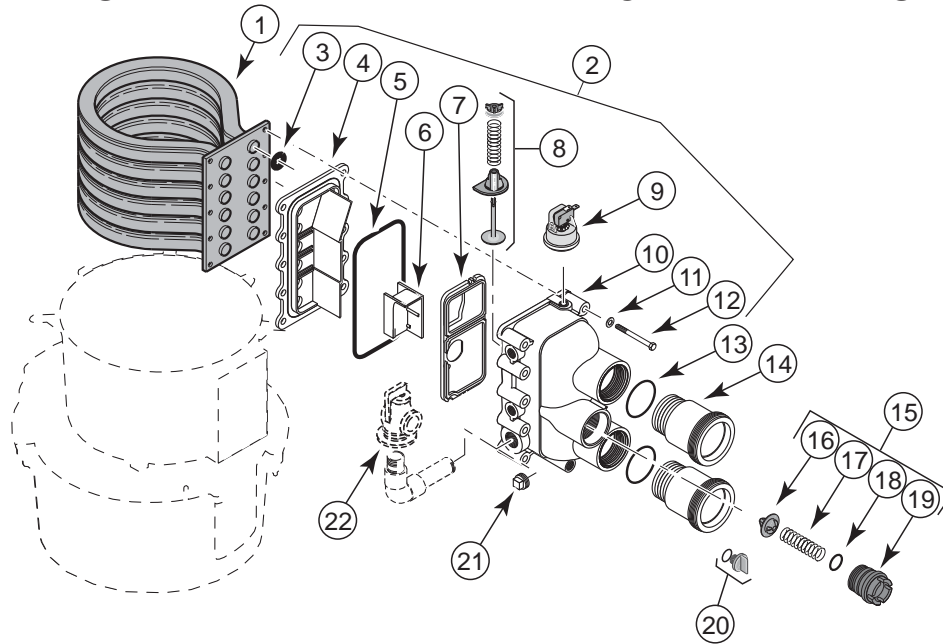
† Not included with heater. Order separately.

♦ For heaters manufactured between 1/12/2009 and 10/31/2013 (clamp lid tub design)  
Note: Kits also include Clamp Assembly, O-Ring and Silicon Tube.

♦♦ For heater manufactured AFTER 10/31/2013 (New 9-bolt lid tub design)

♦♦♦ For heater manufactured BEFORE 1/12/2009

## MASTERTEMP HEATER REPLACEMENT PARTS



### REPAIR PARTS – WATER SYSTEM

Key No.	Part Description	Qty.	Model			
			175NA - 200NA 175LP - 200LP	250NA 250LP	300NA 300LP	400NA 400LP
1	Tube Sheet Coil Assembly Kit ( <b>NA, LP Series</b> ) (Includes Key No.3)	1	77707-0232 474058♦	460747 474059♦	77707-0233 474060♦	77707-0234 474061♦
1	Tube Sheet Coil Assembly Kit ( <b>NA - HD Series</b> ) (Includes Key No.3)	1	— —	473710 474063♦	— —	77707-0244 474065♦
1	Tube Sheet Coil / Combustion Chamber Kit ( <b>ASME SERIES</b> ) Bronze Header - Key Nos. 3-12, 15, 20-22,	1	— 472732Z	460941 474097♦ 474955♦♦	— — —	460940 474096♦ 474956♦♦
1	Tube Sheet Coil / Combustion Chamber Kit ( <b>HD ASME SERIES</b> )	—	—	474349, 474954♦♦	—	474350, 474953♦♦
2	Manifold Kit (Includes Key Nos. 3-14, 21, & Key Nos. 5-7 in "Electrical System", Page 53	1	77707-0014 474200	460748 474200	77707-0015 474200	77707-0016 474200
•	Basic Manifold Kit (includes Key No. 3,5,10-14)	( )	77707-0117(6)	460749(8)	77707-0118(10)	77707-0119(12)
3	Coil/Tubesheet Sealing O-Ring Kit	( )	77707-0117(6)	460749(8)	77707-0118(10)	77707-0119(12)
4	Manifold Bottom Plate	1				
5	Manifold O-Ring	1				
•	O-Ring Kit (Incl. Key Nos. 3, 5)	1	77707-0120	77707-0120	77707-0120	77707-0120
6	Manifold Insert*	1				
7	Manifold Baffle Plate	1				
8	Manifold Bypass Valve	1	77707-0001	77707-0001	77707-0001	77707-0001
9	Water Pressure Switch	1	42001-0060S	42001-0060S	42001-0060S	42001-0060S
10	Manifold	1				
11	5/16" Washer, S.S.	10				
12	5/16x18x2-3/4" Hex Cap screw	10				
13	Connector Tube O-Ring	2	U9-226	U9-226	U9-226	U9-226
14	Connector Tube Kit (Includes 1 Connector Tube and 1 O-Ring)	2	77707-0017	77707-0017	77707-0017	77707-0017
15	Thermal Regulator Kit (Incl. Key No. 16, 17, 18, 19 and Spring Clip)	1	77707-0010	77707-0010	77707-0010	77707-0010
16	Thermal Regulator (Includes Spring Clip)	1	38000-0007S	38000-0007S	38000-0007S	38000-0007S
17	Thermal Regulator Spring	1				
18	Thermal Regulator Cap O-Ring	1	35505-1313	35505-1313	35505-1313	35505-1313
•	Thermal Regulator Spring Clip	1				
19	Thermal Regulator Cap	1				
20	Drain Plug	1	U178-920P	U178-920P	U178-920P	U178-920P
21	3/4" Pipe Plug	1	U78-60ZPS	U78-60ZPS	U78-60ZPS	U78-60ZPS
22	Pressure Relief Valve (Recommended - (Purchase Separately)	1	38674-0719	38674-0719	38674-0719	38674-0719

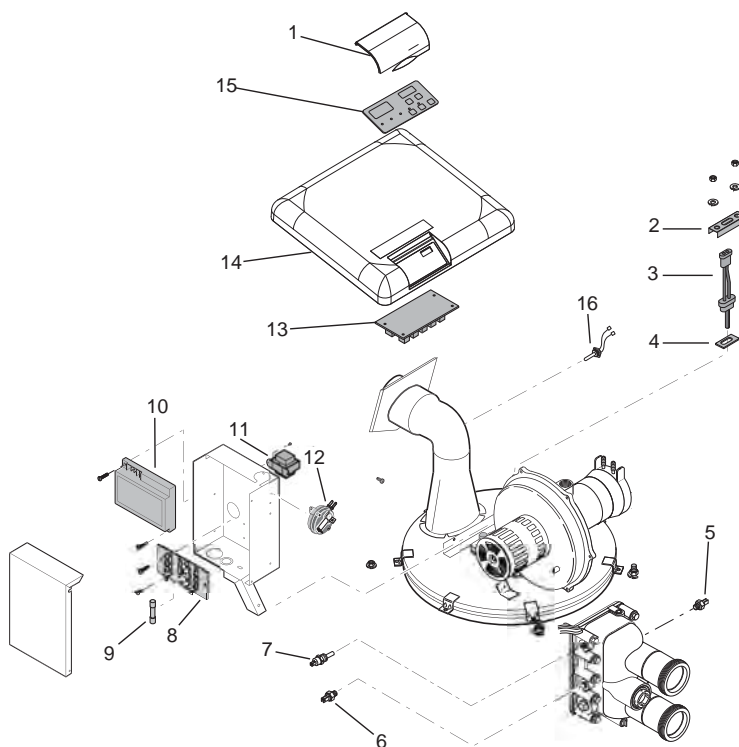
\* Not available separately. • Not illustrated.

♦ For heaters manufactured between 1/12/2009 and 10/31/2013 (clamp lid tub design) - Note: Kits also include Clamp Assembly, O-Ring and Silicon Tube.

♦♦ For ASME heater manufactured AFTER 10/31/2013 (New 9-bolt lid tub design)

♦♦♦ For heater manufactured BEFORE 1/12/2009

## MASTERTEMP HEATER REPLACEMENT PARTS



### REPAIR PARTS – ELECTRICAL SYSTEM

Key No.	Part Description	Qty.	Model			
			175NA - 200NA 175LP - 200LP	250NA 250LP	300NA 300LP	400NA 400LP
1	Heater Display Cover	1	42002-0035	42002-0035	42002-0035	42002-0035
2	Igniter Bracket	1	42001-0030S	42001-0030S	42001-0030S	42001-0030S
3	Igniter/Igniter Gasket Kit Incl. Key Nos. 3 and 4)	1	77707-0054	77707-0054	77707-0054	77707-0054
4	Igniter Gasket	1	42001-0066S	42001-0066S	42001-0066S	42001-0066S
5	Automatic Gas Shutoff Switch (AGS)	1	42002-0025S	42002-0025S	42002-0025S	42002-0025S
6	High Limit Switch	1	42001-0063S	42001-0063S	42001-0063S	42001-0063S
7	Thermistor	1	42001-0053S	42001-0053S	42001-0053S	42001-0053S
8	Terminal Board	1	42001-0056S	42001-0056S	42001-0056S	42001-0056S
9	Fireman's Switch Fuse (1.25A, 1-1/4")	1	32850-0099	32850-0099	32850-0099	32850-0099
10	Ignition Control Module	1	42001-0052S	42001-0052S	42001-0052S	42001-0052S
11	Transformer, 120/240V	1	42001-0107S	42001-0107S	42001-0107S	42001-0107S
12	Air Flow Switch	1	42001-0061S	42001-0061S	42001-0061S	42001-0061S
13	Control Board Kit (NA, LP Series)	1	42002-0007S	42002-0007S	42002-0007S	42002-0007S
•	Heater Wiring Harness - 120/240V	1	42001-0104S	42001-0104S	42001-0104S	42001-0104S
•	120/240 Volt Plug Kit	1	42001-0105S	42001-0105S	42001-0105S	42001-0105S
14	Heater, Top	1	42002-0034Z	42002-0034Z	42002-0034Z	42002-0034Z
15	Membrane Pad (NA, LP Series)	1	472610Z	472610Z	472610Z	472610Z
16	Stack Flue Sensor	1	42002-0024S	42002-0024S	42002-0024S	42002-0024S

• Not available separately.

\* Kit parts not available separately.