

## PERFORMANCE DATA

### To Obtain Performance Data:

- Press and hold the **▼** (Down) button for two seconds (Fig. 1).
- While holding the **▼** (Down) button, press and hold the **Domestic Hot Water** (DHW) button (hold both buttons at the same time) (Fig. 1).
- Use the **▲** (Up) and **▼** (Down) buttons to scroll to the desired information described in Table 1. Performance Data (Fig. 2).
- The data for the performance number automatically appears in the display (Fig. 3).
- To exit performance data, repeat step 2 above.

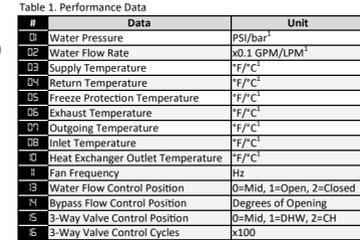
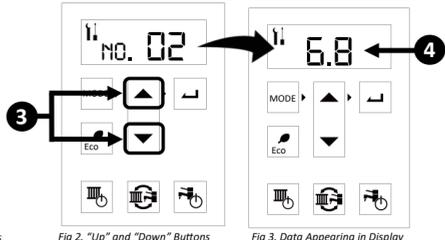
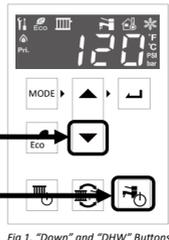


Fig. 1. "Down" and "DHW" Buttons

Fig. 2. "Up" and "Down" Buttons

Fig. 3. Data Appearing in Display

#	Data	Unit
01	Water Pressure	PSI/bar <sup>1</sup>
02	Water Flow Rate	x0.1 GPM/LPM <sup>1</sup>
03	Supply Temperature	°F/°C
04	Return Temperature	°F/°C
05	Freeze Protection Temperature	°F/°C
06	Exhaust Temperature	°F/°C
07	Outgoing Temperature	°F/°C
08	Inlet Temperature	°F/°C
09	Heat Exchanger Outlet Temperature	°F/°C
10	Fan Frequency	Hz
11	Water Flow Control Position	0=Mid, 1=Open, 2=Closed
12	Bypass Flow Control Position	Degrees of Opening
13	3-Way Valve Control Position	0=Mid, 1=DHW, 2=CH
14	3-Way Valve Control Cycles	x100

#	Data	Unit
15	Venturi Position	0=Closed, 1=Open
16	Venturi Cycles	x100
20	Pump Cycles	x100
21	Pump Hours	x10
22	Pump for Boiler	0=OFF, 1=ON
23	Pump for System (Pump 1)	0=OFF, 1=ON
24	Pump for System (Pump 2)	0=OFF, 1=ON
31	Outdoor Temperature	°F/°C
32	Additional Controllers Connected	See Table 3
40	Ennergization Hours	x100
41	Combustion Hours	x10
42	Combustion Cycles	x100
43	Combustion Hours (DHW)	x10
44	Combustion Cycles (DHW)	x100
45	Commissioning Cycles	x1

### Units of Measurement

- Press the "Mode" button.
- Press the **▲** (Up) or **▼** (Down) arrows to select a unit of measurement (refer to Table 2).

Units of Measurement	Temp.	Water Flow	Pressure
1: English	°F	gal/min	psi
2: Metric	°C	L/min	bar

Table 2. Units of Measurement

Controller Model	Controllers Connected	
	Connected	Not Connected
Controller Panel	__ _ 1	__ _
Additional Controller (BSC)	__ _ 1	__ _ 0
Additional Controller (BSC2)	__ _ 1	__ _
Additional Controller (BSC2)	1 _ _	0 _ _

Note: BC, BSC and BSC2 are PCB recognition position.

## DIP SWITCHES

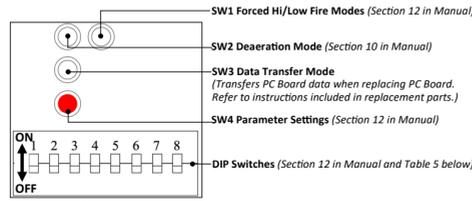


Fig. 4. PCB Board DIP Switches and Buttons

Table 5. DIP Switch Functions

#	DIP Switch Function
1	<b>Outdoor Temperature Sensor:</b> Enables or disables outdoor temperature sensor. <b>OFF (Default):</b> Outdoor Temperature Sensor in Use <b>ON:</b> Outdoor Temperature Sensor Not in Use
2	<b>Thermostat Usage:</b> Changes mode between Thermostat Usage and <b>Central Heating (CH)</b> Button. <b>OFF (Default):</b> Thermostat Used <b>ON:</b> CH button used. Boiler fires based on return water temperature
3	<b>DHW Recirculation:</b> Enables DHW Recirculation function for Pump 2 connection. <b>OFF (Default):</b> Pump 2 Connection Enabled for Second CH Zone Pump <b>ON:</b> DHW recirculation ON (Pump 2 connection for DHW Recirculation Pump)
4	<b>Simultaneous CH and DHW:</b> Enables simultaneous operation between CH and DHW. <b>OFF (Default):</b> DHW Priority <b>ON:</b> Simultaneous CH and DHW Permitted
5	<b>Gas Valve Solenoid:</b> Manually shuts down the integrated solenoid gas valve. <b>OFF (Default):</b> Normal Operation; <b>ON:</b> Fixed Closed (prevents boiler operation)
6	<b>Altitude Setting:</b> Sets the appropriate elevation of the boiler installation. <b>OFF/ON:</b> Depends on Altitude. See "Table 6. High Altitude DIP Switches" for specific DIP switch settings.
7	<b>Altitude Setting:</b> Sets the appropriate elevation of the boiler installation. <b>OFF/ON:</b> Depends on Altitude. See "Table 6. High Altitude DIP Switches" for specific DIP switch settings.
8	<b>Vent Type Selection:</b> Selects the venting material used. The boiler is set from the factory to be installed in a PVC venting system. If CPVC, PP, or other approved venting is used, this setting may be adjusted. See Section 5 in Manual for more information. <b>OFF (Default):</b> PVC <b>ON:</b> Higher Temperature Exhaust Vent Material (PP, CPVC, or Stainless Steel)

Table 6. High Altitude DIP Switches

ALTITUDE	DIP Switch 6	DIP Switch 7
0-2,000 ft (0-610 m) (Default)	OFF	OFF
2,001-5,400 ft (610-1,646 m)	ON	OFF
5,401-7,700 ft (1,646-2,347 m)	OFF	ON
7,701-10,200 ft (2,347-3,109 m)	ON	ON

### Important Safety Notes

There are a number of (live) tests required when performing electrical diagnostics on this product. Proceed with caution at all times to avoid contact with energized components inside the boiler. Only trained and qualified service technicians should attempt to repair this product. Before checking for resistance readings, disconnect the power source to the unit and isolate the item from the circuit (unplug it).

### Electrical Diagram

Refer to the Wiring Diagram attached to the back of the boiler front cover.

### Flame Rod

Place one lead of your meter to the flame rod and the other to the ground. When the unit is attempting to ignite, you should read more than 2 VAC.

### Amp Fuses

This unit has two (10) amp glass fuses located on the PCB Board. Remove the fuses and check continuity through fuse. If you have continuity through each fuse, then it is functioning. Otherwise, the fuse is blown and must be replaced.

<sup>1</sup> When the unit is operating.

## ELECTRICAL DIAGNOSTICS

Table 4. Diagnostic Points

COMPONENT	WIRE COLOR	VOLTAGE	RESISTANCE	PCB Connector	PIN
Power Supply	Black-White	108-132 VAC	N/A	CN24	1-3
Flame Rod	Yellow-Body	More than 2 VAC <sup>1</sup>	N/A	CN1	2
Spark Electrode	Red-Black	11-14 VDC <sup>1</sup>	N/A	CN1	11-22
Combustion Fan	Red-Black	7-48 VDC <sup>1</sup>	N/A	CN1	3-5
	White-Black	2-14 VDC <sup>1</sup>	N/A	CN1	5-9
Water Flow Control Device	Yellow-Black	11-14 VDC	N/A	CN1	5-7
	Red-Pink	N/A	40-60Ω	CN1	18-20
White-Blue	N/A	11-14 VDC	N/A	CN1	14-16
	Grey-Orange	Servo Valve Fully Open or Closed; Less than 1 VDC	N/A	CN1	11-29
Brown-Grey	Servo Valve in a Mid Position; 4-6 VDC	N/A	N/A	CN1	25-29
	Blue-White	N/A	33-43Ω	CN1	17-19
Yellow-Red (No.9)	N/A	11-14 VDC	N/A	CN1	13-15
	Black-Red (No.3)	11-14 VDC	N/A	CN1	11-29
Black-Brown	Close Position: Less than 1 VDC	Open Position: 4-6 VDC	N/A	CN1	26-29
	Black-Grey	Close Position: Less than 1 VDC	Open Position: Less than 1 VDC	CN1	24-29
By-Pass Flow Control Device	Red-Pink	N/A	40-60Ω	CN1	10-12
	White-Blue	N/A	40-60Ω	CN1	6-8
Brown-Grey	Servo Valve Fully Open or Closed; Less than 1 VDC	N/A	N/A	CN1	23-29
	Orange-Grey	11-14 VDC	N/A	CN1	11-29
3-way Valve	Pink-Red	N/A	40-60Ω	CN11	1-2
	White-Blue	N/A	40-60Ω	CN11	3-4
Gas Solenoid Valve	Yellow-Black	11-14 VDC <sup>1</sup>	15-25Ω	CN1	28-30
Outgoing Thermistor	White-White	N/A	N/A	CN11	18-19
	White-White	N/A	N/A	CN11	10-13
Inlet Thermistor	White-White	N/A	N/A	CN11	17-19
	White-White	N/A	N/A	CN11	16-19
Heat Exchanger Thermistor	White-White	N/A	N/A	CN11	15-19
	White-White	N/A	N/A	CN11	12-19
Supply Thermistor	White-White	N/A	N/A	CN11	10-20
Return Thermistor	White-White	N/A	N/A	CN11	10-14
Freeze Protection Thermistor	Black-Black	N/A	N/A	CN11	10-14
Transformer	White-Grey	108-132 VAC	N/A	CN18	1-2
	Red-Red	20-30 VAC (possible to measure at Output terminal as substitute position)	N/A	CN18	3-4
Overheat Switch	Black-Black	Less than 1 VDC	Less than 1Ω	7(CN11)-27(CN1)	
	Black-Red	11-14 VDC	N/A	CN1	11-29
Water Flow Sensor	Yellow-Black	4-7 VDC <sup>1</sup> More than 6 Hz (0.26 GPM)	N/A	9(CN11)-29(CN1)	
	Red-Black	11-14 VDC	N/A	CN1	11-29
Water Pressure Sensor	Yellow-Black	0 kPa: 655-745 mV; 200 kPa: 2,152-2,245 mV; 400 kPa: 3,655-3,745 mV	N/A	6(CN11)-29(CN1)	
	White-White	11-14 VDC	N/A	8(CN11)-29(CN1)	
Integrated Pump	White-Black	108-132 VAC	N/A	CN21	1-2
	Red-Black	11-14 VDC	N/A	CN8	1-2
Air Handler	Black-Black	11-14 VDC	N/A	CN2	1-4
Control Panel	Black-Black	11-14 VDC	N/A	CN2	1-4
Additional Controller(s)	White-White	11-14 VDC	N/A	CN29	1-3

## PARAMETER SETTINGS

- To access the parameter settings, press and hold the red button on the PCB Board for five seconds (Fig. 5).

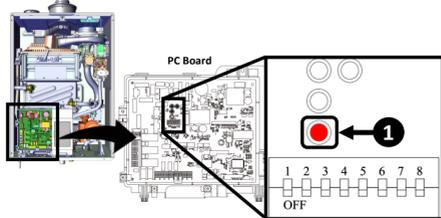


Fig. 5. Red Button on PCB Board

- Press the "Mode" button on the controller (Fig. 6).
- Press the **▲** (Up) or **▼** (Down) arrows to select a parameter setting. Press the "Select" button (Fig. 7).

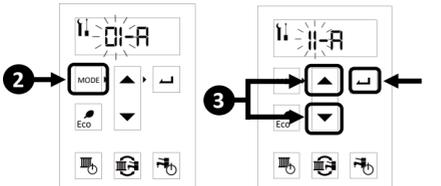


Fig. 6. "Mode" Button

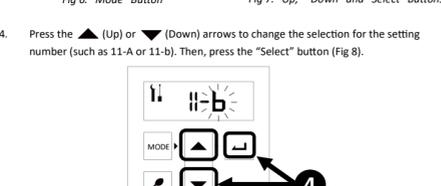


Fig. 7. "Up", "Down" and "Select" Buttons

- Press the **▲** (Up) or **▼** (Down) arrows to change the selection for the setting number (such as 11-A or 11-b). Then, press the "Select" button (Fig. 8).

Fig. 8. "Up", "Down" and "Select" Buttons

- To exit parameter settings and enter normal operation mode, press either the red button on the PCB board or the "Mode" button on the controller.

For more information on parameter settings, refer to the I-Series Condensing Boiler Installation and Operation Manual.

Table 7. Parameter Settings

Parameter Number	Setting Description	Selection				Record date and parameter when individual parameters have been adjusted factory default.			
		A	b	C	d	Parameter Value	Date Adjusted	Parameter Value	Date Adjusted
00	Pressure Indication on the Control Panel. The current pressure will cycle on the controller display.	Yes	No						
01	Outdoor Reset Curve. This parameter is available when Dip Switch 1 is in the OFF (default) position. Select the proper curve from below.	Curve 1	Curve 2	Curve 3	Curve 4				
02	Boost. This parameter is available when Dip Switch 1 is in the OFF (default) position. Boost Mode increases the CH set temperature above the outdoor reset curve target when the boiler has been running on an unusually long call for heat.	No	30 Minutes	60 Minutes					
03	Maximum Outdoor Temperature at which the Boiler will Fire in CH Mode. Parameter is available when Dip switch 1 is in the OFF (default) position. This sets the maximum outdoor temperature the boiler will fire in CH mode.	No Maximum	77°F (25°C)						
10	Maximum DHW Set Point Temperature. This selects the maximum DHW set point temperature.	120°F (49°C)	140°F (60°C)						
11	How Long Diverter Valve is in DHW Position. This selects the length of time the 3-way valve will stay in the DHW position after using DHW even if a CH demand is present.	3 Minutes	10 Seconds						
12	DHW Recirculation Piping Setup. This parameter is available when Dip switch 3 is in the ON position. Ensure this setting corresponds to the DHW recirculation piping.	Crossover Valve	Dedicated Return						
13	DHW Recirculation with Timer Relay Input. This parameter is available when Dip switch 3 is in the ON position. This enables an external timer to also control the timing for DHW recirculation to more directly correspond to the customer's needs.	Yes	No						
14	CH Temperature Limitation During Simultaneous Operation. This parameter is available when Dip switch 3 or 4 is in the ON position. This enables the CH temperature setting to be limited during simultaneous DHW and CH operation.	Yes	No						
15	3-Way Valve Position During Simultaneous Operation. This parameter is available when Dip switch 3 or 4 is in the ON position. This adjusts the 3-way valve position to open the CH side more for when the flow of the CH side is reduced due to DHW demand. This may restrict the DHW capacity.	Normal	Additional CH						
16	LC (Limescale Condition) Check. This setting enables the boiler to check for limescale conditions in the DHW side of the plate heat exchanger.	Available	No Detection						
17	Adjust DHW Temperature Setting. Enables the DHW output temperature to be adjusted without adjusting the set point temperature to make up for system temperature losses.	0°F (0°C)	1.8°F (1°C)	3.6°F (2°C)	5.4°F (3°C)				
18	DHW Continuous Operation Time. This setting adjusts the maximum continuous operating time of DHW, whether in DHW priority or simultaneous modes.	120 Minutes	60 Minutes	180 Minutes	Unlimited				
40	Linked Operation Between CH Pump 1 and 2. This parameter enables linked operation between the CH Pump 1 and 2.	No	Yes (Linked Together)						
41	Linked Operation Between Main Boiler Pump and CH Pump 1. This enables the linked operation between the main boiler pump and CH pump 1.	No	Yes (Linked Together) (if selected, hydraulic)						
42	Main Pump Runs When the Target Temperature is Achieved. This selects the mode of the main pump running when the target setpoint is achieved.	Continuously	Intervals						
43	External Pump Runs When the Setpoint Temperature is Achieved. This selects the mode of the external pump(s) running when the target setpoint is achieved.	Same as Main Pump	Does Not Run						
44	External Pump Runs When Freeze Protection is in Operation. This selects how the external pump operates when freeze protection is in operation.	Does Not Run	Same as Main Pump						
45	Freeze Protection Level. This selects the freeze protection level. Selecting "B" will prevent the boiler from operating in freeze protection mode more than necessary.	Default	When Boiler is Installed						
46	The Differential Temperature from Ceasing Fire to Firing Again. How much temperature drop is permitted by the supply water thermistor before the boiler will fire again.	Normal	Quick						
47	CH Setting Temperature. 86-166°F (30-74°C) The Time Which the Boiler is Not Allowed to Fire Again for CH. This selects the time which the boiler will not be able to fire again for CH after the burner has shutdown.	27°F (15°C)	15°F (8°C)						
48	Will the boiler shut down on a high return water temperature. This setting is for whether the boiler will shut down at high return water temperatures.	Yes	No						
49	Not Available.								
50	Gas Type. For selecting gas type when conducting gas conversion.	Natural Gas	Liquid Propane						
51	Not Available.								
52	Vent Material Used. This selects the venting material used. The boiler is set from the factory to be installed in a PVC venting system. If CPVC, PP, or other approved venting is used, this may be adjusted. See section "5.4 PVC Venting Safety Switch" for more information.	PVC	Material other than PVC, CPVC/PP/Other						

## DIAGNOSTIC CODES

### To Display Diagnostic Codes:

- Press and hold the "DHW" button for two seconds and then the **▲** (Up) button simultaneously (Fig. 9).
- The last nine maintenance codes display and flash one after the other.
- To exit diagnostic codes and return the boiler to normal operation, press and hold the "DHW" button for two seconds, and then the **▲** (Up) button simultaneously.

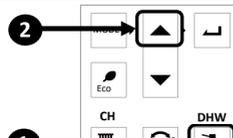


Fig. 9. "Up" and "DHW" Buttons

Table 8. Error Reset

Error Code	Description	Reset Method
Power Reset	Heat Exchanger Overheat (140), Venturi Control Issue (800) can be reset by shutting down power to the boiler.	Ensure the harness and connector are not wet.
Interlock Reset	Venturi (170) and Solenoid Valve Circuit (520) can be reset by pushing and holding buttons SW1 and 2 for five seconds.	Ensure the inlet water filter and bypass filter are clean and free of debris. Ensure the DHW recirculation pump is connected to the DHW Pump Terminal.
Combustion Error During DHW	Error can be reset by closing faucet.	Ensure the capacity of the recirculation pump is sized appropriately for the piping (DHW recirculation pump should be higher than 1-3 GPM).
Other Reset	Other error can be reset by Domestic "On/Off" button or "Central Heating" (CH) button.	Ensure air is removed from the recirculation line.

Table 9. Diagnostic Codes

Code	Description
02	<b>Continuous DHW</b> This code will display when DHW is in continuous operation for extended periods of time. Ensure there are no open faucets. • Ensure there are no leaks in fixtures or the plumbing system.
100	<b>Air Supply or Exhaust Blockage/Condensate Trap is Full</b> Fan current inlet check error. • Ensure condensate line and trap is not blocked. • Ensure internal air filter is clean with no obstructions. • Ensure high altitude setting is set properly (See Table 6. High Altitude DIP Switches). • Ensure combustion air and exhaust vents are not blocked and the approved venting materials are being used. • Ensure either the exhaust ring or intake cap is removed properly. • Ensure vent length is within limits. • Check fan for debris and ensure wheel turns freely. • Verify fan check valve is not stuck between fan casing and burner body.

Code	Description
10	<b>No Ignition (Unit Not Turning On)</b> Ignition Error. • Check that the gas is turned on at the boiler, gas meter, and/or propane cylinder. • Bleed all air from the gas lines. • Check the ground wire for the PCB Board. • Ensure the flame rod wire is connected. • Ensure the igniter is operational. • Ensure the venting is installed in accordance with the I-Series Boiler Installation and Operation Manual. • Check that the surface of the electrode and flame rod are clean. • Check gas solenoid valves for open or short circuits. • Verify gas orifice installed is correct for the gas system the unit is installed in. • Check flame rod voltage to ground during ignition.

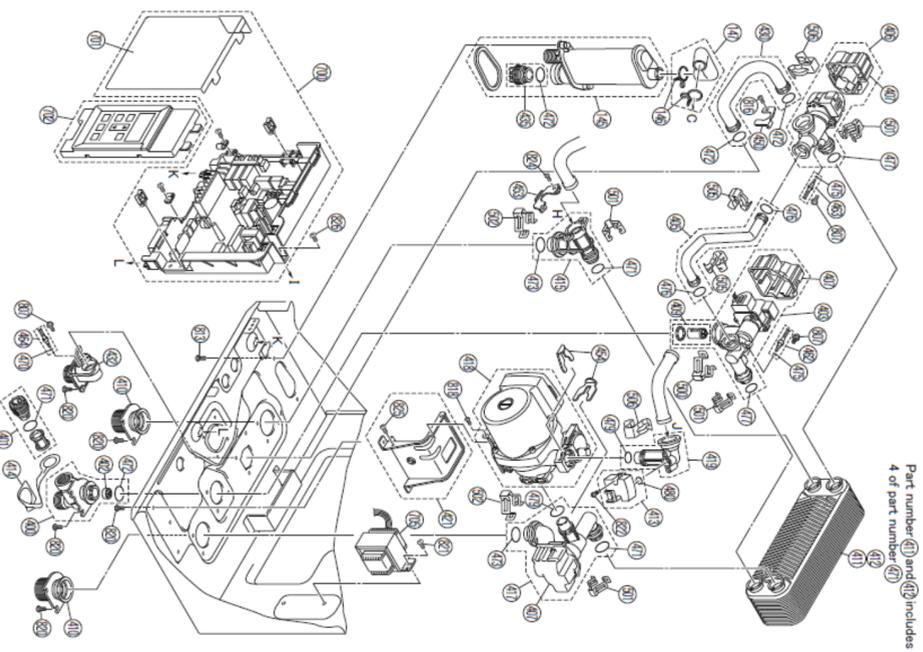
Code	Description
60	<b>3-Way Valve</b> • Measure the resistance values and voltage of the 3-way valve control. • Replace the 3-way valve control device. • Check the CH system water quality to confirm it is within recommended range and to prevent valve failures.

Code	Description
68	<b>Hot Water Supply Temperature Abnormality</b> • If the DHW water temperature is higher than the set point temperature because the boiler bypass servo fails to close. • Measure resistance values and voltage of the bypass flow control. • Replace the bypass flow control device if needed; otherwise, check the inlet thermistor and heat exchanger thermistor wiring for damage. • Measure the resistance of the sensor. • Clean the sensor of any scale buildup present. • Replace if needed.



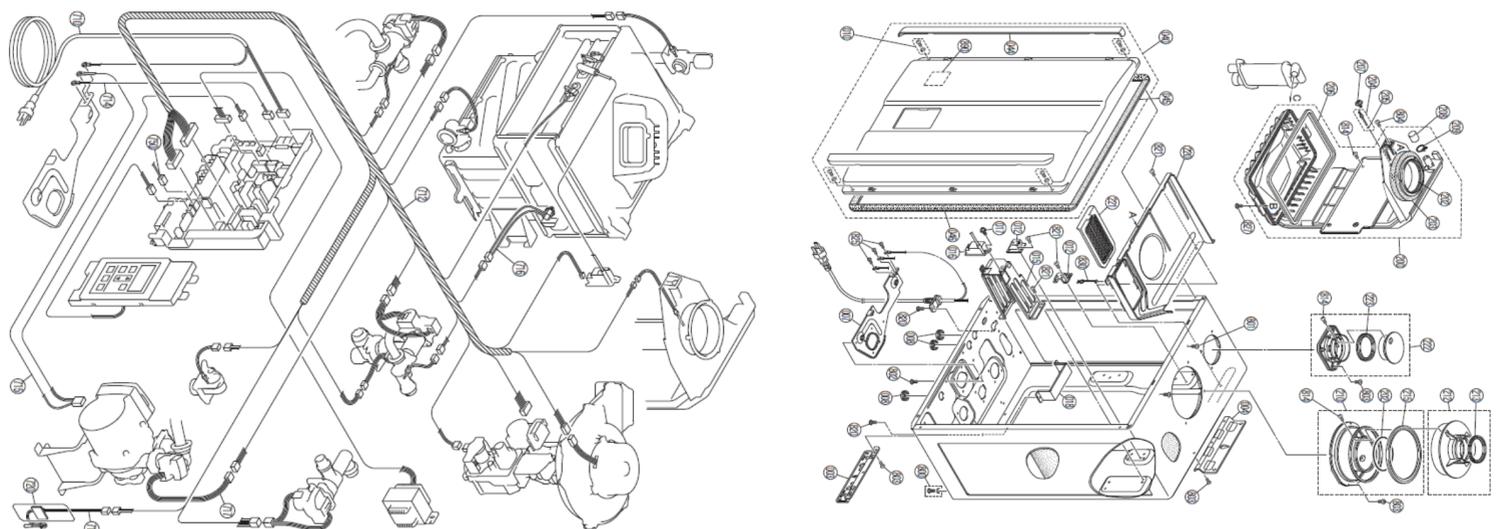
070 00012 66882 6

Gas Conversion Kits		
Models	Gas Type	Kit Number
i120C	NG/LPG	803000040
i090C		
i060C		

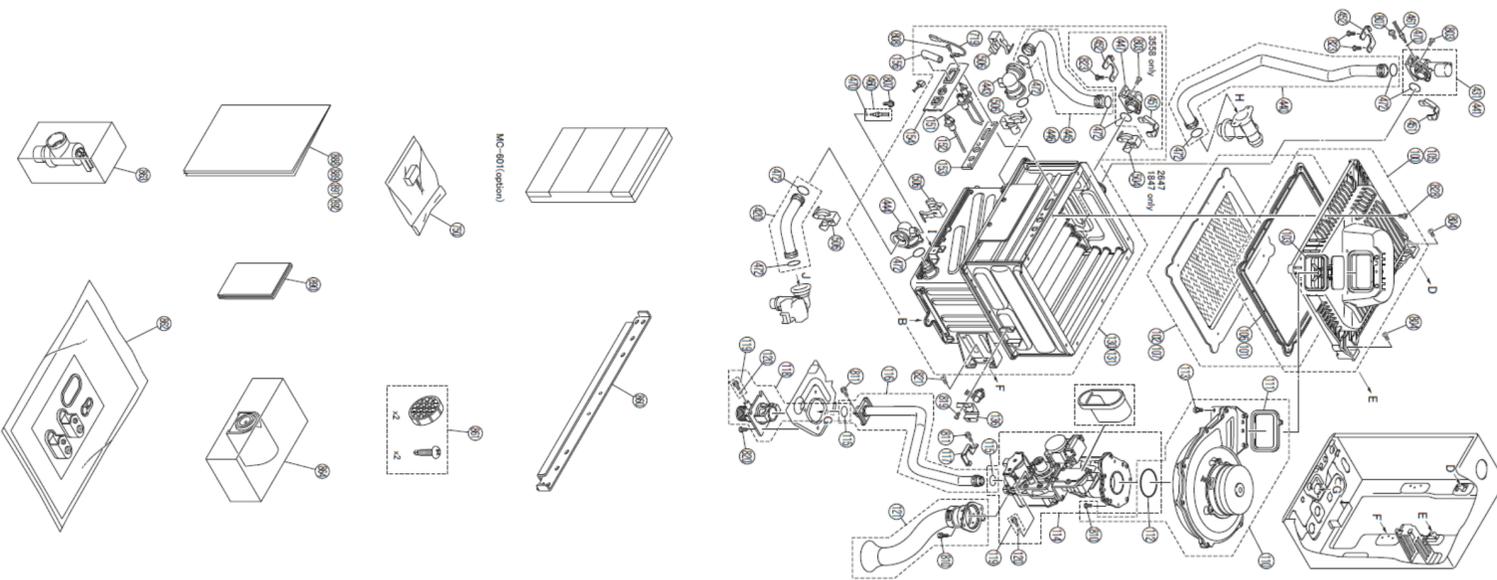


Part number 11 and 12 includes 4 of part number 11

ITEM	DESCRIPTION	PART NUMBER	i120C	i090C	i060C
003	Lower Wall Mount Bracket	109000281	1	1	1
004	Upper Wall Mount Bracket	109000594	1	1	1
007	Connection Reinforcement Plate	809000165	1	1	1
008	Rubber Bushing	CF79-41020-A	3	3	3
010	Residential Screw and Washer	106000645	4	4	4
012	Combustion Chamber Support Plate	109000597	2	2	2
015	Igniter Bracket	109000599	1	1	1
016	Igniter Assembly	105000230	1	1	1
017	Grounding Screw	CP-80452	1	1	1
018	Plate HEX Bracket	809000166	1	1	1
040	Front Panel Assy	809000167	1	1	1
044	Screw Cover	109000230	2	2	2
045	Front Panel Packing- Top	109000120	2	2	2
046	Front Panel Packing-Side FF	109000608	2	2	2
100	Burner Assembly-Large	806000049	1	1	1
101	Burner Gasket-Large	109000609	1	1	1
102	Burner Plate Assembly-Large	806000050	1	1	1
103	Combustion Check Valve Assembly	107000262	1	1	1
105	Burner Assembly-Medium	806000051	1	1	1
106	Burner Gasket-Medium	109000610	1	1	1
107	Burner Plate Assembly-Medium	806000052	1	1	1
110	Combustion Fan Assembly	108000081	1	1	1
111	Fan Mounting Packing	1090000611	1	1	1
112	O-ring	109000612	1	1	1
113	Hexagon Head Screw	Z0AA0514UK	3	3	3
114	Gas Valve Assembly	106000117	1	1	1
115	O-ring	109000252	2	2	2
116	Gas Connection Pipe	806000054	1	1	1
117	Gas Tube Bracket	109000635	1	1	1
118	Inlet Gas Supply Connection	106000119	1	1	1
119	Inlet Gas Test Port Screw	106000138	2	2	2
120	O-ring	M10B-13-4	2	2	2
121	Noise Filter	106000120	1	1	1
130	Heat Exchanger Assembly-Large	807000173	1	1	1
131	Heat Exchanger Assembly-Medium	807000174	1	1	1
136	OHS Bracket	109000614	1	1	1
145	Condensate Trap	807000175	1	1	1
146	Band RC98H/P/e, Cond Drain Tube, Bottom KT	109000138	2	2	2
147	Condensate Drain tube	807000176	1	1	1
151	Electrode	105000234	1	1	1
152	Flame Rod	105000234	1	1	1
153	Electrode Packing	109000617	1	1	1
154	Electrode Plate	109000618	1	1	1
156	Electrode Sleeve	109000620	1	1	1
200	Exhaust Duct Assy	808000050	1	1	1
202	O-ring	108000018	2	2	2
203	Exhaust Duct Packing	109000621	1	1	1
204	Thermistor	105000235	1	1	1
205	O-ring	107000323	1	1	1
206	Exhaust Duct Seal	808000051	1	1	1
207	Thermistor Screw	109000622	1	1	1
208	Combustion Analysis Port Cap	806000057	1	1	1
209	Band	109000137	1	1	1
210	Flue Connection Assembly	108000083	1	1	1
212	Exhaust pipe connection port - 2 inch	108000084	1	1	1



ITEM	DESCRIPTION	PART NUMBER	i120C	i090C	i060C
213	Exhaust Gasket - 2 inch	109000623	1	1	1
215	Air Supply Pipe Seal Ring	108000017	1	1	1
220	Air Supply Box	108000085	1	1	1
221	Air Supply Filter (set)	108000086	1	1	1
222	Air Supply Assembly	108000087	1	1	1
223	Air Supply Gasket - 2 inch	109000624	1	1	1
400	3/4 DHW Cold Connection	807000177	1	1	1
401	Water Supply Filter Plug Assembly	107000317	1	1	1
402	Rectifier (402) V232FFUW/WC/2526W	MBD1-15	1	1	1
403	Water Flow Servo and Sensor Assembly	807000178	1	1	1
405	Bypass Tube	807000179	1	1	1
406	Bypass Servo Assembly	807000180	1	1	1
407	Cover	107000093	3	3	3
409	Flow Turbine Assembly	807000181	1	1	1
410	CH Outlet Connection	807000182	2	2	2
411	Plate HEX-Large	807000183	1	1	1
412	Plate HEX-Medium	807000184	1	1	1
413	Water Pressure Sensor Assembly	807000185	1	1	1
414	Plug Band	109000018	1	1	1
415	Plate HEX-CH Heating Connection	807000186	1	1	1
417	3-Way Valve Assembly	807000187	1	1	1
418	Circulation Pump Assembly	807000188	1	1	1
419	Pump Connection Assembly	807000189	1	1	1
420	Pump-Plate HEX Connection Tube	807000190	1	1	1
421	Pump Stand	807000191	1	1	1
430	DHW Outlet Tube	807000192	1	1	1
431	Heat Exchanger Pipe Connection	807000193	1	1	1
432	DHW Outlet	807000194	1	1	1
435	Trap Drain Plug Assy	807000195	1	1	1
440	HEX-CH Heating Connection Pipe	807000196	1	1	1
441	Heat Exchanger Pipe Connection Assy-Medium	807000197	1	1	1
443	Secondary Heat Exchanger Outlet Fitting	807000198	1	1	1
444	Primary-Secondary Pipe Assy-Large	807000199	1	1	1
445	Primary-Secondary Pipe Assy-Medium	807000200	1	1	1
446	Primary-Secondary Pipe Assy-Medium	807000201	1	1	1
447	Primary-Secondary Connecting Fitting	807000202	1	1	1
450	Pipe Bracket	U211-322X01	1	1	1
451	Pipe Bracket	809000168	2	1	1
452	Retention Clip	809000169	2	1	1
453	Pipe Bracket	809000170	1	1	1
454	Clip	809000171	2	2	2
460	Thermistor Sensor	805000079	1	1	1
461	Thermistor Sensor	805000080	1	1	1
462	Thermistor Sensor	805000081	1	1	1
463	Thermistor Sensor	805000082	1	1	1
464	TWIN Thermistor	805000083	1	1	1
470	O-ring	807000215	3	3	3
471	O-ring	807000203	3	3	3
472	O-ring	807000204	14	13	13
473	O-ring	807000205	2	2	2
475	O-ring Water Heater 2 KT	M10B-2-4	2	2	2
476	O-ring	M10B-2-14	2	2	2
477	O-ring KT	M10B-2-16	2	2	2
478	O-ring, All Water Heaters 2 KT	M10B-2-18	1	1	1
479	O-ring	807000206	2	2	2



ITEM	DESCRIPTION	PART NUMBER	i120C	i090C	i060C
480	O-ring	807000207	1	1	1
500	Clip	109000636	1	1	1
501	Clip	809000172	4	4	4
502	Clip	809000173	2	2	2
504	Clip (i090C and i060C only)	809000174	1	1	1
505	Clip	109000639	2	2	2
506	Clip	109000638	6	6	6
700	PC Board Assembly-Combi	805000084	1	1	1
701	PCB Cover	809000175	1	1	1
702	Integrated Remote Control Assy	805000085	1	1	1
705	Transformer	805000086	1	1	1
710	Power Cord Assembly FF	105000238	1	1	1
712	Sensor Harness	805000087	1	1	1
714	Heater Ground Harness	805000088	1	1	1
715	Pump Harness	805000089	1	1	1
716	Over Heat Switch	105000299	1	1	1
717	Water Pressure Connection Harness	805000090	1	1	1
718	Thermistor Sensor	805000091	1	1	1
719	Igniter Ground Harness	105000243	1	1	1
720	Guide Seal	809000176	1	1	1
750	Remote Control Harness	105000249	1	1	1
800	Screw	109000746	4	4	4
801	Screw	CP-30583	2	2	2
802	Screw	ZB40408UK	3	3	3
803	Screw	CP-30580	17	15	15
804	Screw	109000648	3	3	3
807	Screw	U217-449	5	5	5
808	Screw	109000641	3	3	3
810	Screw	109000179	8	8	8
811	Screw	108000021	2	2	2
813	Screw	ZAD0408UK	2	2	2
814	Screw	109000651	6	6	6
816	Screw	CP-20883-410UK	1	1	1
818	Screw	ZFA80408SZ	2	2	2
819	Thermistor Screw	ZFA80408UK	2	2	2
820	Screw	809000177	22	22	22
821	Truss Screw	109000658	18	18	18
822	Screw	809000178	4	4	4
823	Screw	ZAA0408UK	3	2	2
824	Screw	809000179	1	1	1
825	Ground Screw	109000793	4	4	4
826	Screw	809000180	1	1	1
827	Screw	809000181	1	1	1
828	Screw	809000182	2	2	2
830	Cable Clip	809000183	8	8	8
860	Wall Bracket	109000628	1	1	1
861	Vent Screen Set	108000104	1	1	1
862	LP Conversion Office-Included	806000055	1	1	1
863	Pressure Relief Valve	807000211	1	1	1
864	Outdoor Temperature Sensor	805000096	1	1	1
888	User manual	800000114	1	1	1
889	Installation and Operation Manual	800000111	1	1	1
890	Tech sheet	800000115	1	1	1
891	User Manual-French	800000145	1	1	1
892	Installation and Operation Manual-French	800000146	1	1	1