

BFIT

BRYAN® BOILERS

Condensing with the Power to FIT



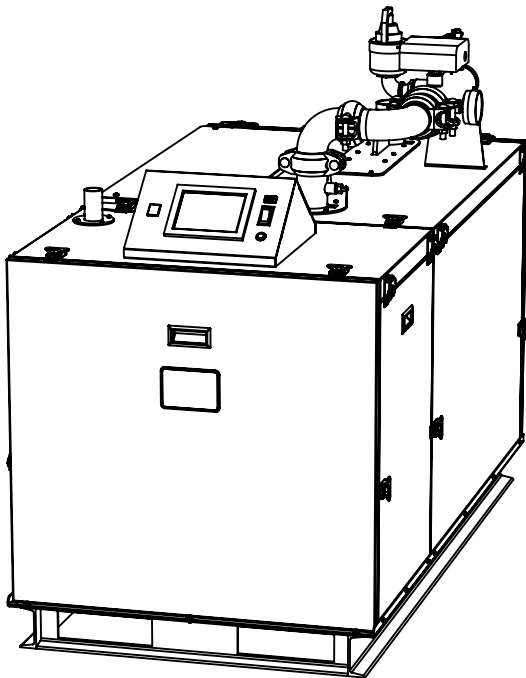
Intertek



Intertek

SPARE PARTS MANUAL

1000-4000 MBH



! WARNING

Asphyxiation Hazard. Fire Hazard. Explosion Hazard.

This appliance must be installed, serviced or repaired by a skilled and experienced service technician. Improper installation, adjustment, alteration, service or maintenance can cause severe personal injury, death, or substantial property damage. Read and understand these instructions and entire boiler manual before attempting to service boiler. Up to date boiler manual is posted on manufacturer's website.

! DANGER

Explosion Hazard. Electrical Shock Hazard. Burn Hazard.

Flammable gas, high voltage electricity, moving parts, and very hot water under high pressure. Assume that all gas and electric power supplies are off and that water temperature is cool before attempting any disassembly or service. Do not rely solely on temperature/pressure gauge to make this determination.

Heating Boiler Models

BFIT1000B	BFIT2500B
BFIT1250B	BFIT3000B
BFIT1500B	BFIT3500B
BFIT2000B	BFIT4000B

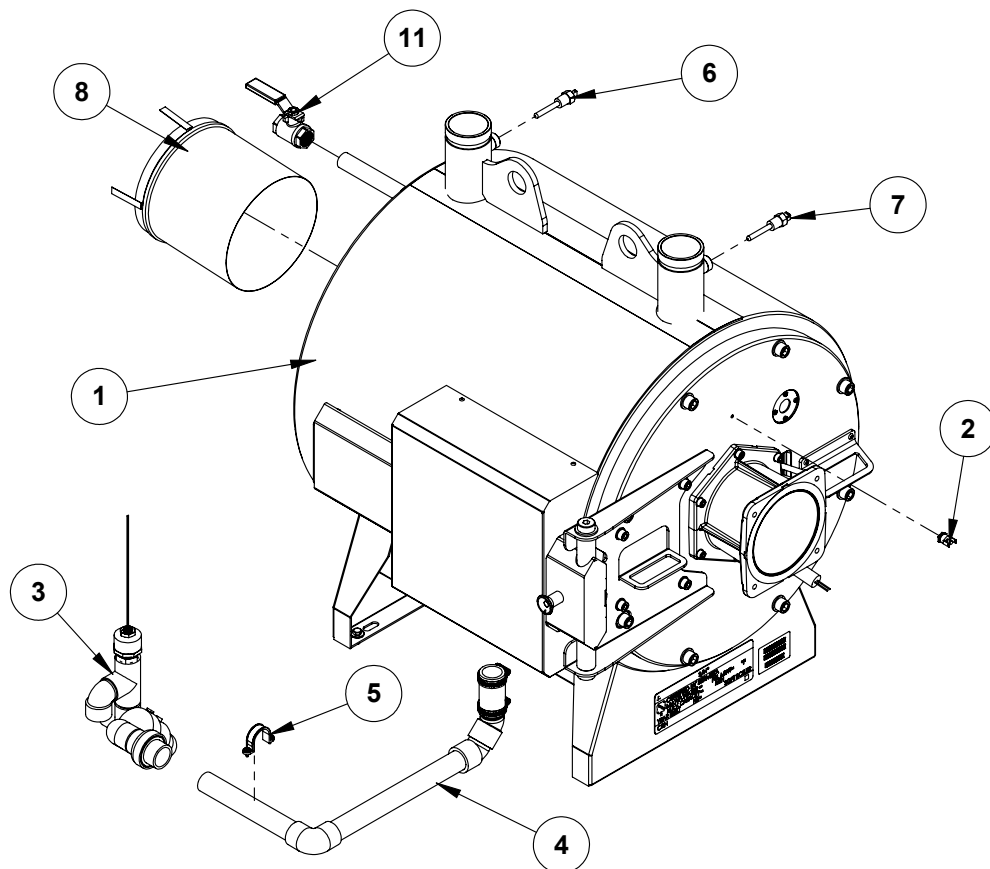
Water Heater/Hot Water Supply Boiler Models

BFIT1000W	BFIT2500W
BFIT1250W	BFIT3000W
BFIT1500W	BFIT3500W
BFIT2000W	BFIT4000W

NOTICE

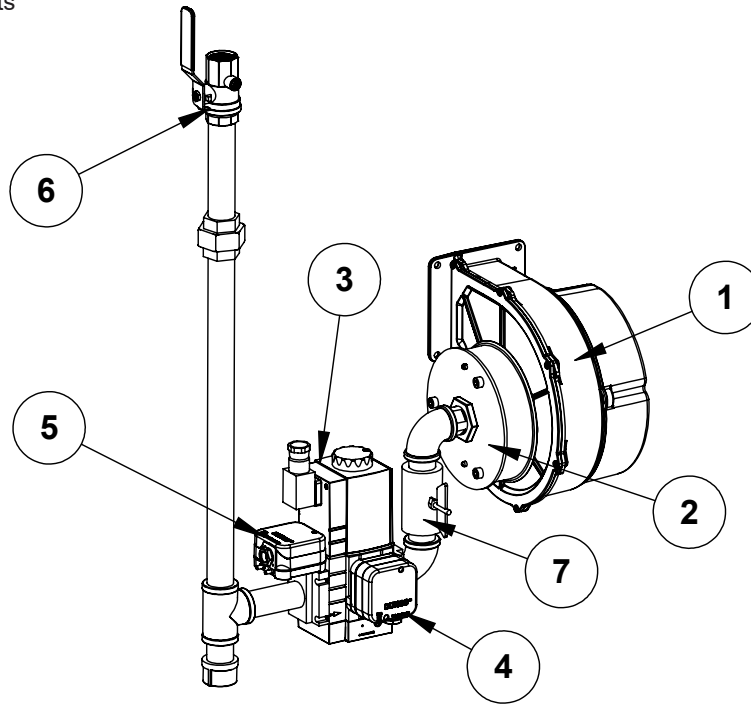
The replacement parts noted in this manual are for a standard appliance. Different features or components may have been supplied based on the requests of the customer. Consult factory for repair parts on non-standard controls and components.

Parts can be ordered through your local representative.

**Table 1: Heat Exchanger Assembly Part Numbers**

Item No.	Descriptions	Model Size							
		1000	1250	1500	2000	2500	3000	3500	4000
1	Heat Exchanger	Contact Local Representative							
2	Thermal Fuse	112119-01							
3	Condensate Trap	112120-01							
4	Condensate Drain line	112085-01		112085-02	108265-01		108592-32		
5	Condensate Clamp	108629-01							
6	Inlet Temp. Sensor	112081-01							
7	Outlet Temp. Sensor	112082-01							
8	Vent Adapter (includes gasket)	112083-01		112083-02	108361-01	108592-41		108592-40	
9	Stack Temp Sensor	112084-01							
10	Air pres. line connector	112122-01							
11	Drain Valve	112242-02							
12	Vent Gasket (heat exchanger)		112132-02			108861-31		108861-32	
Water Heater Part Numbers*									
1	Heat Exchanger	Contact Local Representative							
11	Drain Valve	112242-01							

* For water heater parts, replace part numbers with the corresponding part numbers above.

**Table 2: Gas Train Part Numbers**

Item No.	Descriptions	Model Size							
		1000	1250	1500	2000	2500	3000	3500	4000
1	Combustion Blower, Single Phase	112118-01		120-240V, 1ph: 112118-02			208-240V, 1ph: 108262-02	-	-
	Combustion Blower, Three Phase	-		208-240V, 3ph: 112118-03 380-480V, 3ph: 112118-04					
2	Swirl Plate Kit	112093-01		112093-02	P20271			108592-82	
3	Gas Valve	112090-01		112090-02					
4	High Gas Pres. SW	112088-01							
5	Low Gas Pres. SW	112089-01							
6	Main Shutoff Valve	112242-04		112242-05		806603053		806604691	
7	Secondary Shutoff	112242-03				806603042		81660726	
8*	Gas Train Support	112094-01		112094-02	-	-	-	-	-
9*	Gas Valve Throttle Flange	112091-01		112091-02	-	-	-	-	-
10*	Gas Valve Inlet Flange	112092-01		112092-02	-	-	-	-	-
11*	Air Proving SW tubing	112053-01							
12*	Blower Adapter Gasket	112279-02		-	-	-	-	-	-

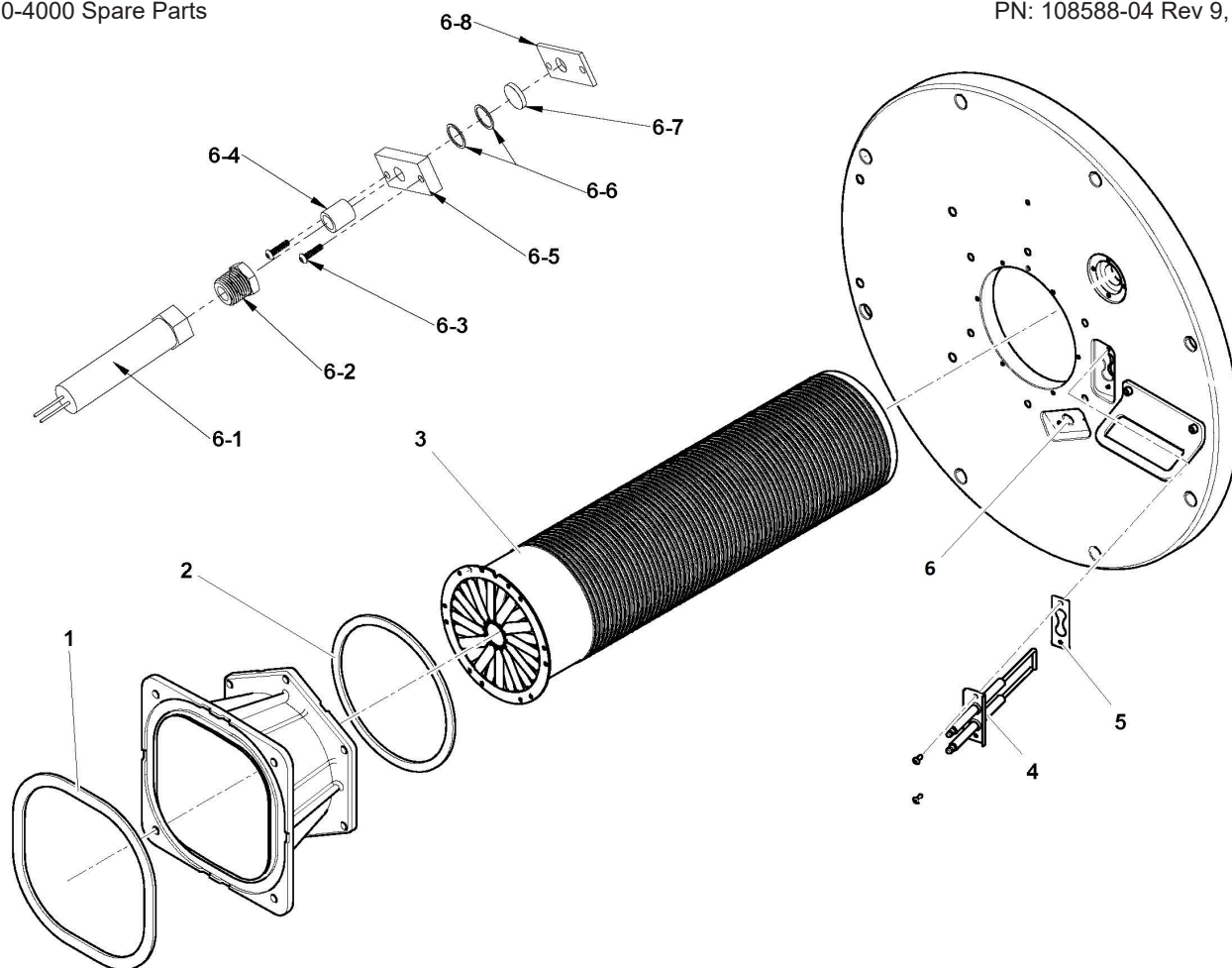
* Not shown in the drawing

Table 3: 1500 Dual Gas Part Numbers

Dual Gas 1500		
3-1	Natural Gas Valve	112090-02
3-2	Propane Gas Valve	112090-01
6-1	Natural Main Shutoff	112242-05
6-2	Propane Main Shutoff	112242-04

Note:

For sizes other than 1500, the same gas valve and shutoff valve is used for both natural and propane gas trains. Use Table 2.

**Table 4: Burner Door Assembly Part Numbers**

Item No.	Descriptions	Model Size							
		1000	1250	1500	2000	2500	3000	3500	4000
1	Blower/Fan Gasket Outlet Gasket	112279-01		108861-04					
2	Burner Gasket	108861-05				108861-24			
3	Burner (with Gasket)	112080-01		112080-02	108861-12	108861-19			
4	Ignition Electrode	112079-01							
5	Ignition Gasket	108861-09							
6	UV Scanner Assembly	112086-01							
6-1	UV Scanner	112086-02							
6-2	1/2" X 1/4" Bushing	806600524							
6-3	UV Mounting Screws	108507-01							
6-4	1/4" Close Nipple	806600048							
6-5	UV Mounting Plate	108380-01							
6-6	UV Sight Glass Gasket	T20073							
6-7	UV Sight Glass	108309-01							
6-8	UV Mounting Gasket	108241-07							
7*	Observation Port Assembly	112133-01							
8*	Burner Door Insulation	112124-01				108861-29			
9*	Burner Door Gasket	112125-01				108861-27			
10*	Burner Door Rope Gasket	112126-01				108861-28			
11*	HX Divider Insulation	112127-01				108861-30			

*Not shown in drawing

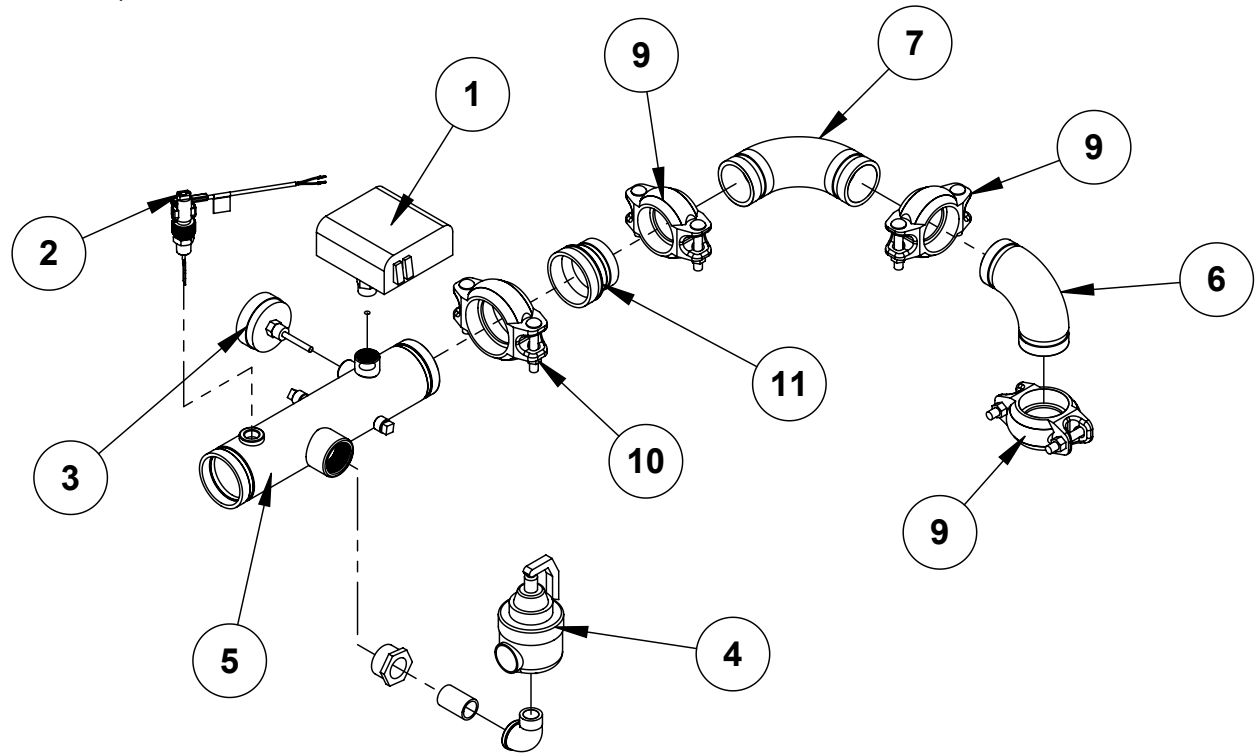
Table 5: Electronics and Controls Part Numbers

Item No.	Descriptions	AMP Model Size							
		1000	1250	1500	2000	2500	3000	3500	4000
1	Main Boiler Control	112078-10				112078-11			
2	Display	112077-02							
3	On/Off switch	112244-03							
4	Power Supply, 24VDC (Display)	112110-03							
5	24 VAC Transformer	112110-01							
6	Line Voltage PCB-01	112111-01							
7	Field Device PCB-02	112112-01							
8	Limits PCB-03	112113-01							
9	Sensors PCB-04	112114-01							
10	EMS PCB-05	112115-01							
11	Comm. PCB-06	112116-01							
12	Ignition Transformer	111998-01							
13	Ignition Cable Assy.	112117-15							
14	Air Proving SW	112052-03				108394-04			
15	Blocked Vent SW	112087-01							
16	Blocked Vent SW Line	112122-01							
17	Line Voltage Transformer	112110-04 (208-480V only)							
18	Condensate Float SW	112121-01							
19	Fuse Kits	1 ph: 112109-01, 208-240V 3 ph: 112109-02, 480V 3 ph: 112109-03							

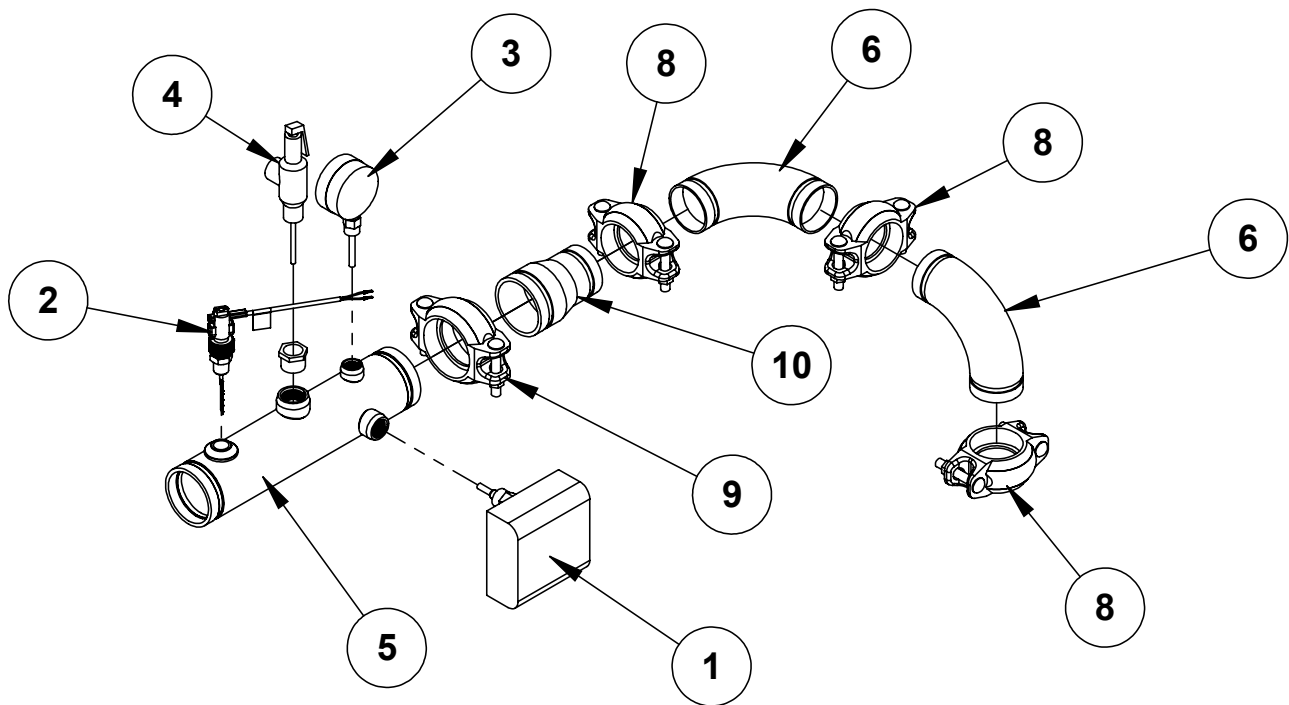
Table 6: Wire Harness Part Numbers

Item No.	Descriptions	Boiler Model Size							
		1000	1250	1500	2000	2500	3000	3500	4000
1	Line Voltage, Control Box	112117-03		112117-04					
2	Low Voltage, Control Box	112117-05		112117-06					
3	Lower Control Box	112117-07		-					
4	Line Voltage, Inside Jacket	112117-08							
5	Low Voltage, Inside Jacket	112117-09		112117-10					
6	Supply/Return sensors	112117-11							
7	LWCO and Flow Switch	112117-12							
8	Display, Low Voltage	112117-13							
9	ON/OFF SW, Line Voltage	112117-14							
10	Wire Harness Set	112117-01		112117-02					
Dual Gas*									
4	Line Voltage, Inside Jacket	108464-06							
-	Gas Selection SW	108464-07							
10	Wire Harness Set	108628-03				108628-04			

* For Dual Gas parts, part numbers under Dual Gas section replace the corresponding part numbers above.

**Table 7: Heating Boiler Outlet Manifold Part Numbers**

Item No.	Descriptions	Boiler Model Size							
		1000	1250	1500	2000	2500	3000	3500	4000
1	Low Water Cut-Off (LWCO)	112062-01							
2	Water Flow SW	112063-01							
3	Temp/Pres. Gauge								
	For relief valves of 30, 50, or 60 psi	103470-01							
	For relief valves of 75, 100, or 125 psi	103470-02							
	For 150 psi relief valve	103470-03							
4	Relief Valve								
	30 psi	112273-02		112273-11			81660335		81660336
	50 psi	112273-04		112273-12		81660357			
	60 psi	112273-06		112273-13			81660379		
	75 psi	112273-07			81660389			81660383	
	100 psi	112273-08					81660381		
	125 psi	112273-09			81660373			81660390	
	150 psi	112273-10							81660385
5	Water Manifold	108374-01				108592-36			
6	Short Radius Elbow	112306-01				104037-01			
7	Long Radius Elbow	108592-45				-			
8	Support Bracket	108592-46				108592-47			
9	Coupling 1	112243-02				104035-01			
10	Coupling 2	112243-03				-			
11	Concentric Reducer	108376-01				-			

**Table 8: Water Heater Outlet Manifold Part Numbers**

Item No.	Descriptions	Water Heater Model Size							
		1000	1250	1500	2000	2500	3000	3500	4000
1	Low Water Cut-Off	112062-01							
2	Water Flow SW	112063-01							
3	Temp/Pres. Gauge	103470-04							
4	Relief Valve	112272-01			109297-02	109297-03		816603992	
5	Water Manifold	108374-02				108374-03			
6	Elbow	109278-01				109278-02			
7	Support Bracket	109282-01				109282-02			
8	Coupling 1	112243-02				104035-01			
9	Coupling 2	112243-03				-			
10	Concentric Reducer	108376-01				-			

Jacket Panels, Gaskets and Trim Rings

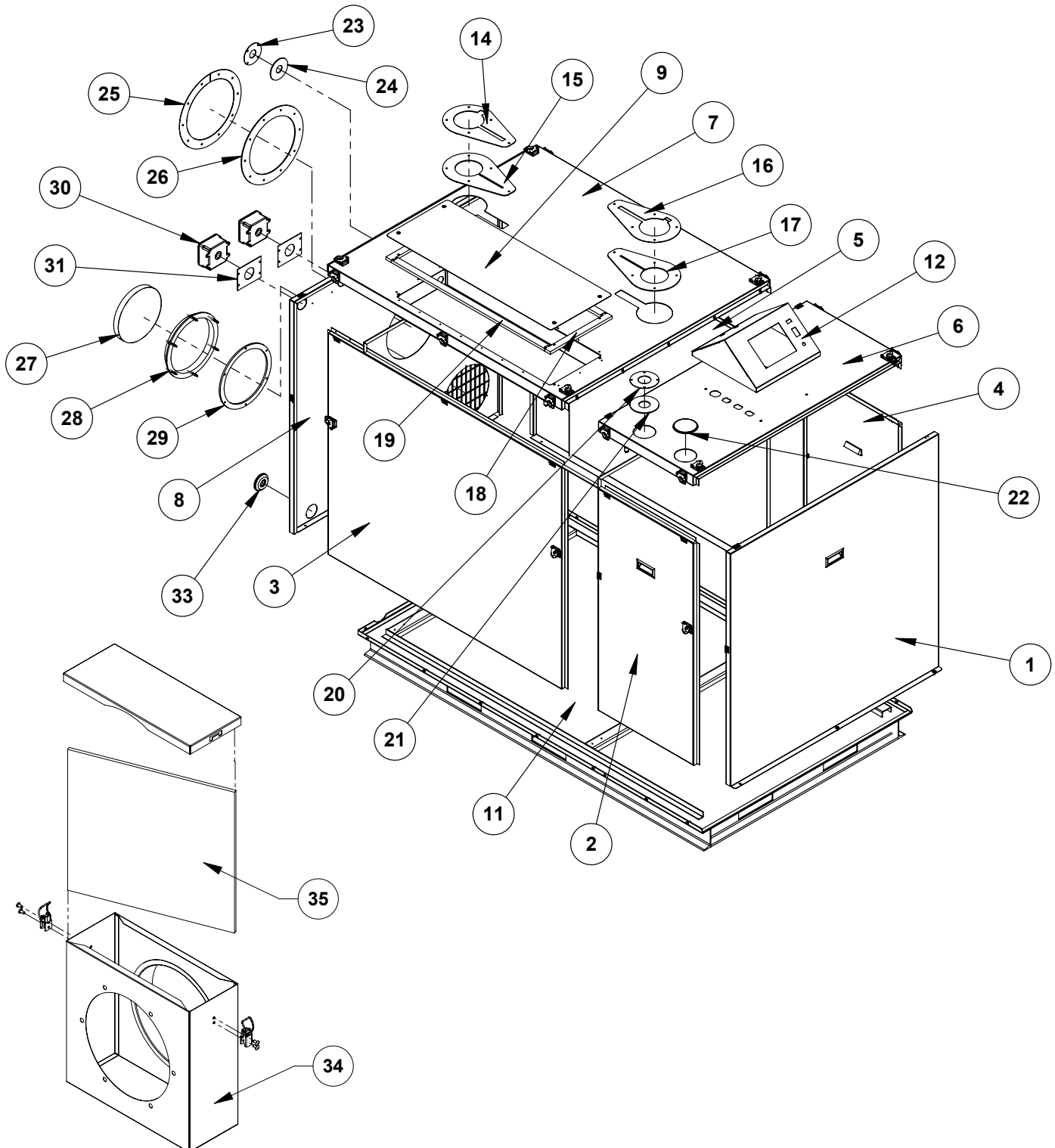


Table 9: Jacket and Gasket Part Numbers

Item No.	Descriptions	Boiler Model Size							
		1000	1250	1500	2000	2500	3000	3500	4000
1	Front Jkt. Panel (orange)	108254-02				108592-10			
	Front Jkt. Panel (gray)	112098-01				108592-03			
2	Front Left Jkt. Panel	112101-01		112101-02		108592-19		108592-63	
3	Back Left Jkt. Panel	112106-01		112105-02		108592-17		108592-59	
4	Front Right Jkt. Panel	112102-01		112102-02		108592-21		108592-65	
5	Back Right Jkt. Panel	112105-01		112105-02		108592-17		108592-59	
6	Front Top Panel	112100-01		112100-02		108592-11		108592-67	
7	Back Top Panel	112104-01		112104-02		108592-13		108592-61	
8	Back Panel	112103-01				108592-14		108592-69	
9	Control Box Cover	108253-04		108253-03					
10*	Lower Control Box Cover	108253-05		-					
11	Base Assembly	108235-01		108235-02		108235-03		108592-54	
12	Display Box (orange)	108259-01							
	Display Box (gray)	112096-01							
13**	Latch Assembly	112246-04							
14	Inlet Trim Plate	108241-01		108241-02		108592-24			
15	Inlet Gasket	108241-04		108241-05		108592-25			
16	Outlet Trim Plate	108241-01				108592-24			
17	Outlet Gasket	108241-04				108592-25			
18	Short Control Box gasket	108592-51							
19	Long Control Box Gasket	108592-43		108592-44					
20	Gas Inlet Trim Plate	108241-16		108241-16		108874-32		108874-24	
21	Gas Inlet Gasket	108241-15		108241-17		108874-33		108874-25	
22	Gas Inlet Plug	108874-59				108874-60			
23	Drain Trim Plate	108241-13				108241-13			
24	Drain Trim Gasket	108241-15		108241-14	108241-15				
25	Stack Trim Ring	108242-01				108592-22		108592-73	
26	Stack Trim Gasket	8205660				108592-23		108592-74	
27	Air Filter	109071-01				108592-39		108592-70	
28	Air Inlet Ring	81156108				81156109		905180	
29	Air Inlet Ring Gasket	82056108				82056109		108592-38	
30	Junction Box	108631-01							
31	Junction Box Gasket	108509-01							
32**	208V+ Junction Box	1 ph: 108267-04, 3 ph: 108267-05							
33	Condensate Grommet	820SOL0002							
34†	Air Box and Lid Assembly	112107-01				110056-27		110056-28	
35†	Washable Air Filter	112108-01				T20215		110056-38	

* Lower control box used only on 1000 and 1250 models.

**Not shown in drawing.

† Items 35 and 34 replaced items 27 and 28.



Bryan Steam, LLC
Peru, IN 46970
Phone: 765-473-6651
Inquiry@bryansteam.com
www.bryanboilers.com