

HydroTherm®



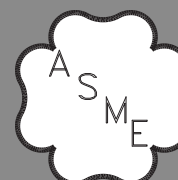
KN SERIES

Cast Iron Condensing Boilers
Models KN-6, KN-10, KN-16,
KN-20, KN-26 and KN-30

Boiler Manual

Installation and Operation
Instructions

Also read and follow:
KN Control Manual



MEA #444-05-E

MASS Plumbers
#G1-06-04-28

WARNING This manual is intended only for use by a qualified heating installer/technician. Read and follow this manual, all supplements and related instructional information provided with the boiler. Install, start and service the boiler only in the sequence and methods given in these instructions. Failure to do so can result in severe personal injury, death or substantial property damage.

WARNING **Do not use the boiler during construction.** Construction dust and particulate, particularly drywall dust, will cause contamination of the burner, resulting in possible severe personal injury, death or substantial property damage. The boiler can only be operated with a dust-free air supply. Follow the instruction manual procedures to duct air to the boiler air intake. If the boiler has been contaminated by operation with contaminated air, follow the instruction manual guidelines to clean, repair or replace the boiler if necessary.

CAUTION Affix these instructions near to the boiler/water heater. Instruct the building owner to retain the instructions for future use by a qualified service technician, and to follow all guidelines in the User's Information Manual.

Figure 24 - Exploded View - Front - KN-6, 10 and 20

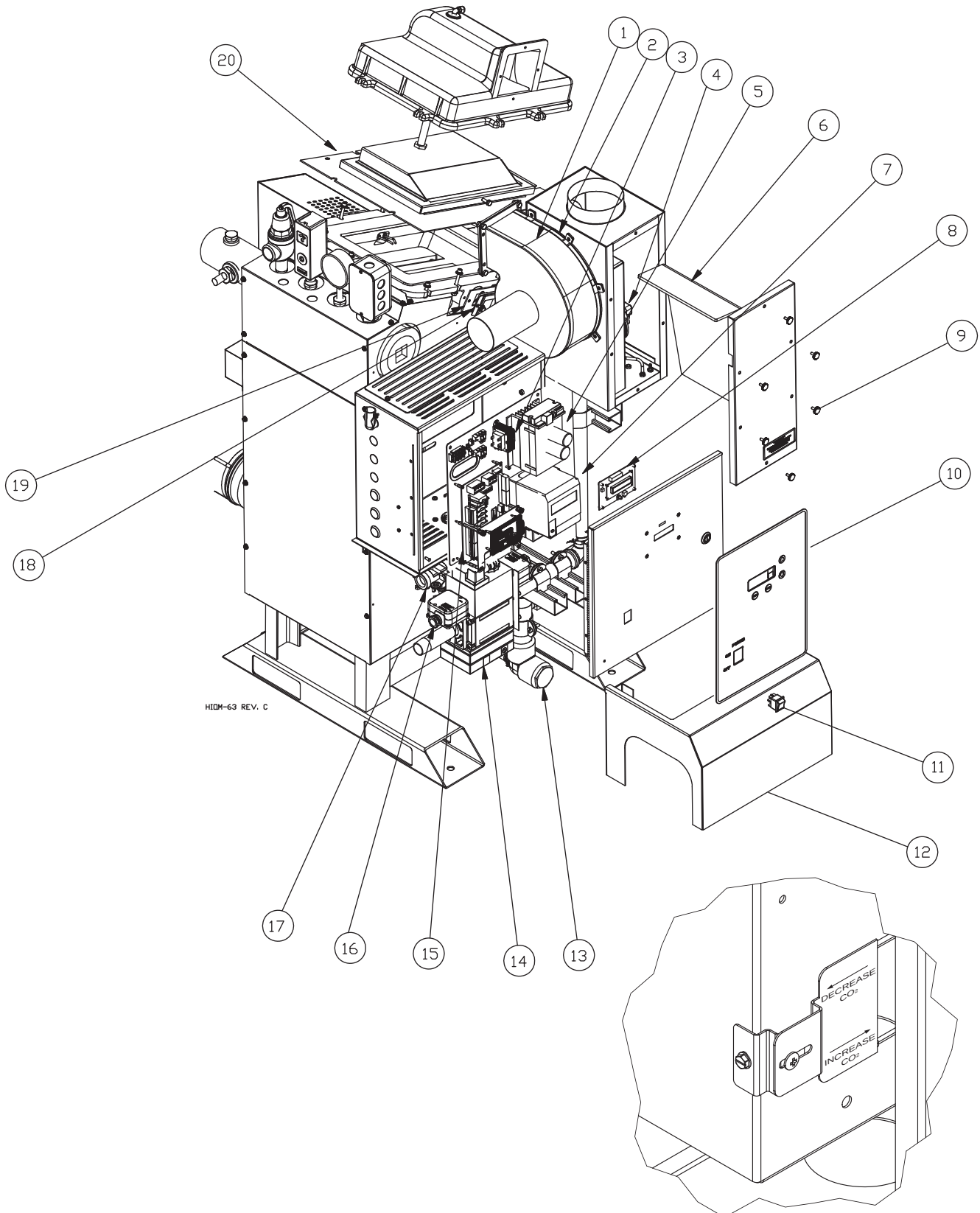
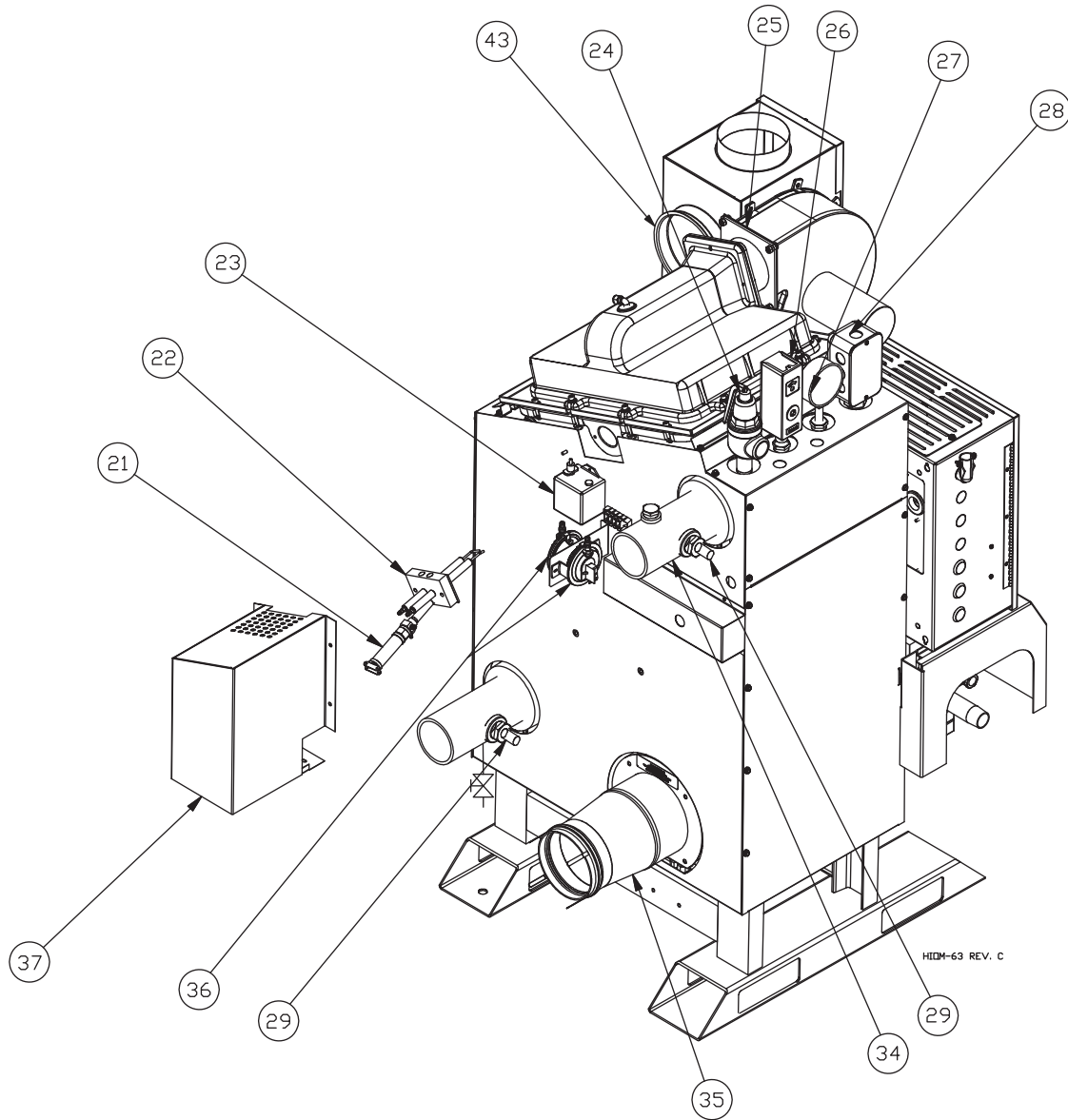


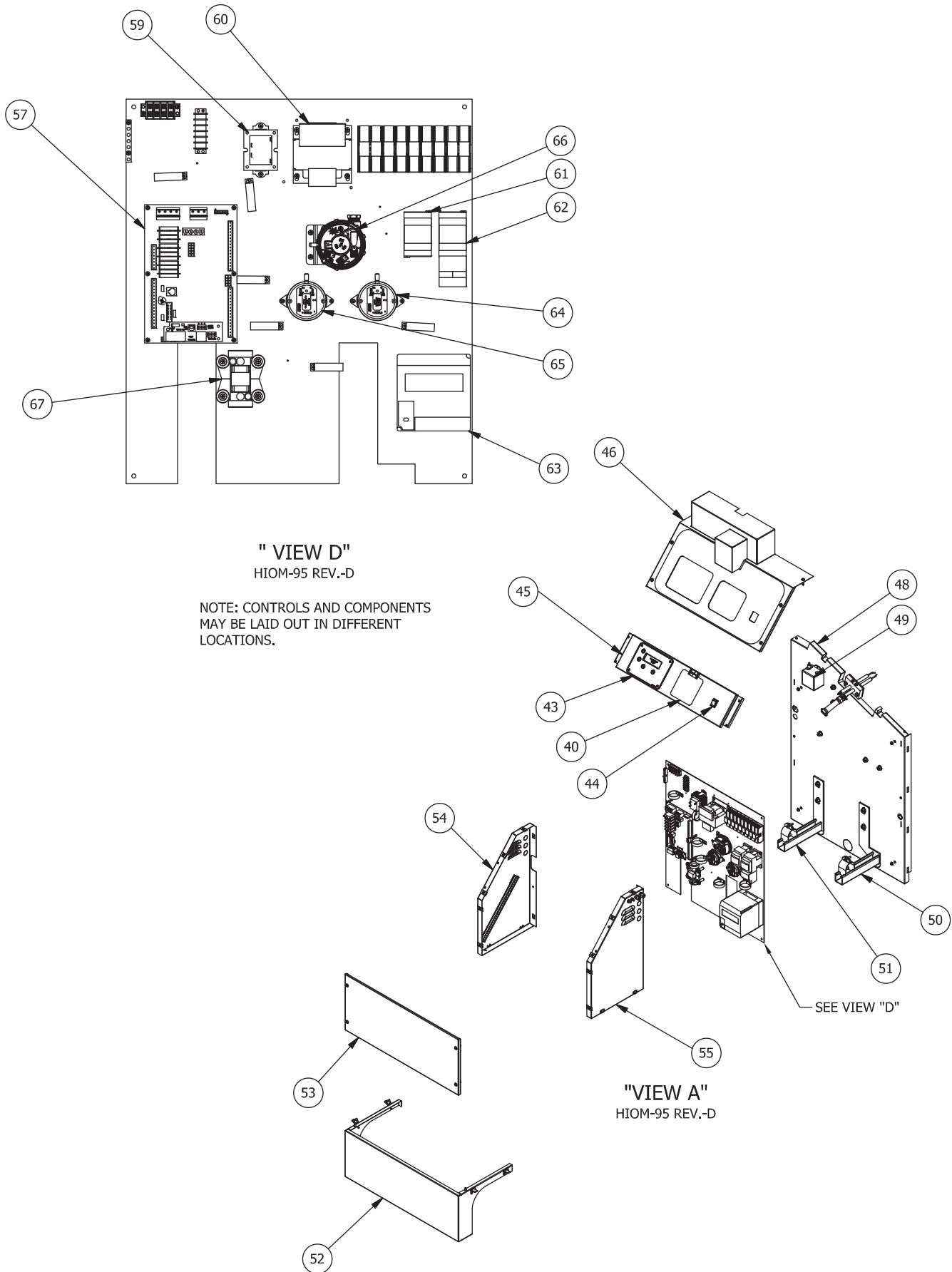
Figure 25 - Exploded View - Back - KN-6, 10 and 20



SERVICE AND REPLACEMENT PARTS LIST - KN-6, KN-10 and KN-20

Item	Description	Part #	Model Size with Item Quantities Below		
			KN-6	KN-10	KN-20
NS	Jacket Assembly	70-1907	1		
		70-1917		1	
		70-1927			1
1	Blower Assembly	BM-1506	1		
		BM-1507		1	
		BM-1508			1
	Blower	58-1838-1	1	1	
		58-1844			1
2	Filter Box Gasket	59-1067	1	1	
		59-1072			3
3	50V Transformer	26-3211	1	1	1
NS	Communication Cable RS485	40-5409	1	1	1
NS	Ribbon Cable	40-5411	1	1	1
4	Pressure Switch - HUBA	02-4881	1	1	1
5	Frequency Drive	58-1750	1	1	
		58-1752			1
6	Combustion Air Filter	59-1069	1	1	
		59-1071			1
NS	Silicone Tape	10-5038	per foot		
7	Flame Safeguard RM7895C	02-4012	1	1	1
NS	Display Module S7800	02-4263	1	1	1
NS	Purge Timer ST7800	02-4014	1	1	1
NS	UV Amplifier, R7849B	02-4015	1	1	1
8	Display Board	02-4278	1	1	1
9	Thumb Screw	57-3657	6	6	6
10	Keypad Overlay	60-5633	1		
		60-5632		1	
		60-5614			1
11	Power Switch, Rocker	58-1536	1	1	1
12	Gas Train Shroud	03-1725	1	1	1
13	Condensate Drain Assembly (High)	70-1390	1	1	1
	Condensate Drain Assembly (Low)	70-1338	1	1	1
NS	Clean Out Cover	03-1830	1	1	1
NS	Clean Out Cover Gasket	59-1119	1	1	1
NS	Drain Pan Filter Screen	03-1826	1	1	1
14	Gas Valve DMV	02-1570	1	1	1
NS	Manual Shutoff Valve 1"	02-1575	2		
	Manual Shutoff Valve 1-1/4"	02-1569		2	
	Manual Shutoff Valve 1-1/2"	02-1578			2
NS	Main Gas Orifice (NG)	03-2027	1		
		03-2023		1	
		03-2019			1
NS	Gas Valve Orifice Gasket	59-1068	1	1	
15	HeatNet Board	02-4293	1	1	1
NS	5K Resistor	58-1831	1	1	1
NS	Harness (J4) VFD	70-2036	1	1	1
NS	Harness (J5) Ctrl	70-2037	1	1	1
NS	Harness Blower	70-2031	1	1	1
NS	Harness (J14) Transformer	70-2038	1	1	1
16	Low Gas Pressure Switch	02-4887	1	1	1
17	Air Pump	09-1518	1	1	1
18	Sight Glass	60-4280	1	1	1
19	Gasket Viewglass	59-1063	1	1	1

Figure 29 - Control Panel



SERVICE AND REPLACEMENT PARTS LIST - KN-16, KN-26 and KN-30

Item	Description	Part #	Model Size with Item Quantities Below		
			KN-16	KN-26	KN-30
NS	Elbow, Pilot	60-4256	1	1	1
NS	Pilot Tube	10-00105-002	1		
		10-00105-001		1	1
21	Ignitor Block Assembly	70-1345	1	1	1
21a	Electrode	04-1343	1	1	1
NS	Air Orifice	25-0063	1	1	1
NS	Ignition Cable 24"	16-00004-001	1	1	1
NS	Ground Cable 15"	16-00008-001	1	1	1
22	Condensate Drain Assembly (High)	70-1390	1	1	1
	Condensate Drain Assembly (Low)	70-1338			1
23	Manual Shutoff Valve 1-1/2"	02-1578	1	1	1
24	Regulator RV12LT	23-1014	1	1	1
25	Pilot Gas Valve V4046C	02-1749	1	1	1
26	1/8 Gas Cock	23-1016	1	1	1
27	Manual Shutoff Valve 1-1/2"	02-1578	1	1	1
28	Gas Valve MBC	11-00002-001	1	1	1
28a	Low Gas Pressure Switch	02-4887	1	1	1
28b	High Gas Pressure Switch	02-4886		1	1
30	Bolt Assembly	75-00203-001	14	20	34
31	Clean Out Cover	74-00202-001	1	1	1
32	Clean Out Cover Gasket	06-00001-001	1	1	1
33	Drain Pan Weldment	74-00201-004	1		
		74-00201-002		1	
		74-00201-001			1
34	Drain Pan Filter Screen	03-00263-001	1	1	
		03-1826			1
39	Low Water Cutoff	21-2061	1	1	1
40	Toggle Switch	58-1535	2	2	2
43	Display Board	02-4278	1	1	1
44	Power Switch, Rocker	58-1536	1	1	1
45	Hidden Panel Weldment	70-1480	1	1	1
46	Front Control Panel Weldment	70-1486	1	1	1
48	Front Jacket Panel	74-00212-001	1	1	1
49	Spark Generator Q652	26-3207	1	1	1
50	Gas Support Bracket (Right)	74-00213-001	1	1	1
51	Gas Support Bracket (Left)	74-00214-001	1	1	1
52	Gas Train Shroud	74-00221-001	1	1	1
53	Front Control Panel (Door)	03-00240-001	1	1	1
54	Front Panel (Left)	74-00216-001	1	1	1
55	Front Panel (Right)	74-00215-001	1	1	1
57	HeatNet Board	40-00751-001	1	1	1
NS	Ribbon Cable	40-00259-001	1	1	1
59	50VA Transformer	26-3211	1	1	1
60	250VA Transformer	15-00001-001		1	1
61	Blower Overload Relay	15-00101-001	1	1	1
62	Contactor (2 HP)	15-00102-001	2	2	2
NS	Pump Fuse (2 HP)	48-00602-002	1	3	3
63	Flame Safeguard RM7895C	02-4012	1	1	1
NS	Purge Timer ST7800	02-4014	1	1	1
NS	UV Amplifier, R7849B	02-4015	1	1	1
64	Air Pressure Switch NS2	02-5208	1	1	1
65	Air Pressure Switch NS2	14-00305-001	1	1	1
66	Pressure Switch - HUBA	02-4881	1	1	1
	Bracket, Pressure Switch	14-00302-001	1	1	1
67	Air Pump	09-1518	1	1	1
NS	HeatNet Overlay	82-00403-001	1	1	1
NS	Front Panel Overlay	82-00405-004	1	1	1
NS	Rating Label	42-2997	1	1	1