



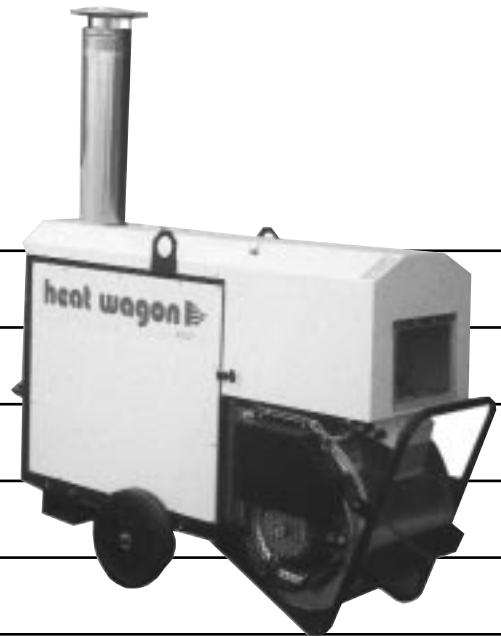
342 N. Co. Rd. 400 East
Valparaiso, IN 46383
888-432-8924 • Fax 219-462-7985
www.heatwagon.com

Installation and Maintenance Manual

Please retain this manual for future reference.

VF400

*Construction
Heater*



City of New York
Dept. of Buildings
29-05-E

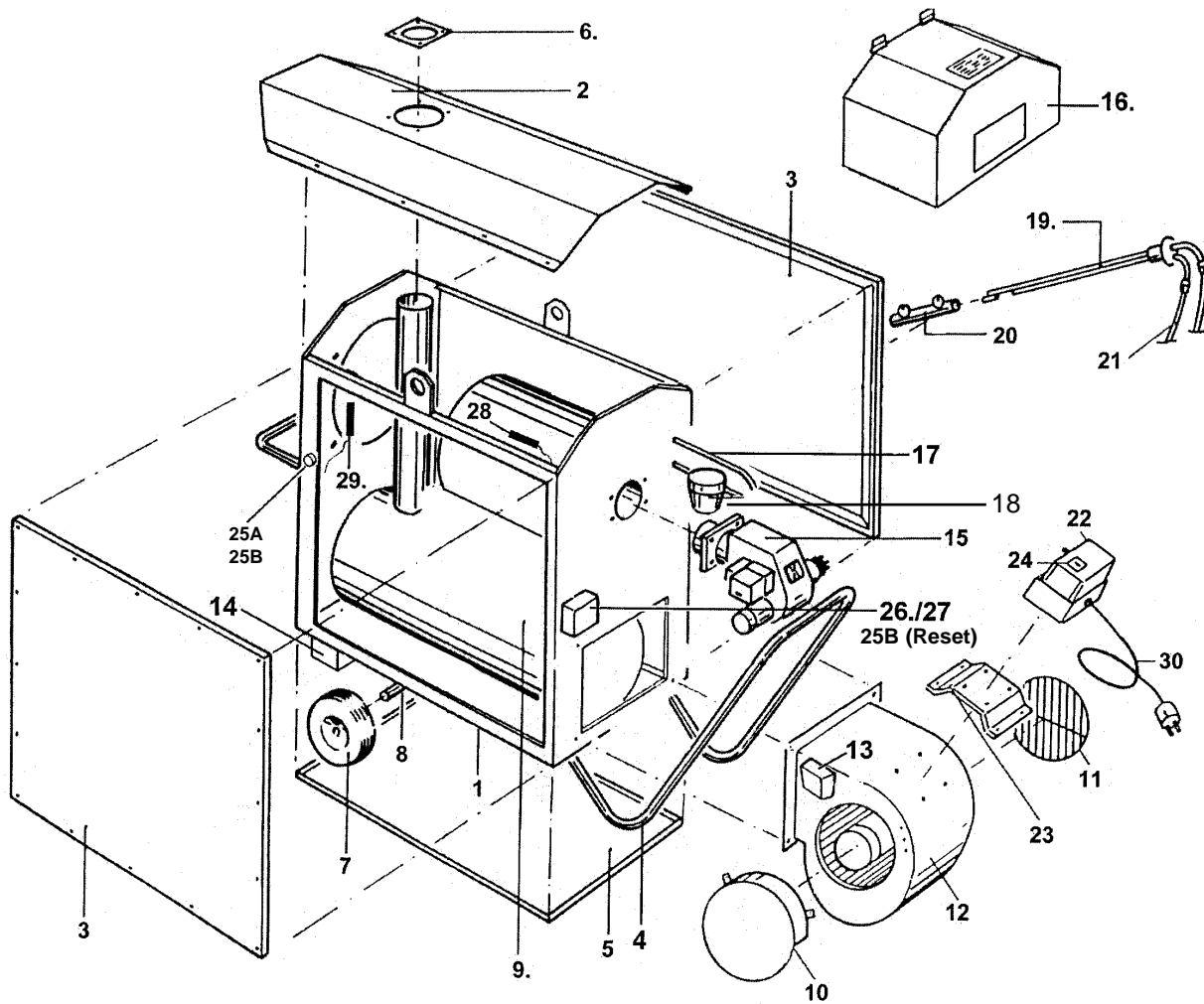


C US



CAUTION: Do not use this heater in a space where gasoline or other liquids having flammable vapors are stored.

Heat Wagon VF400 Parts List

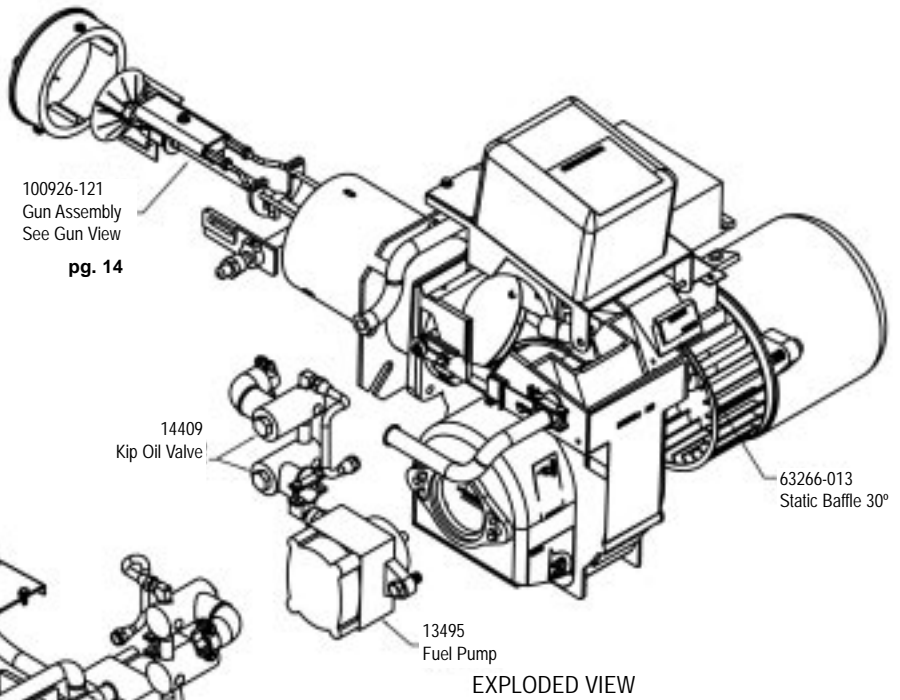
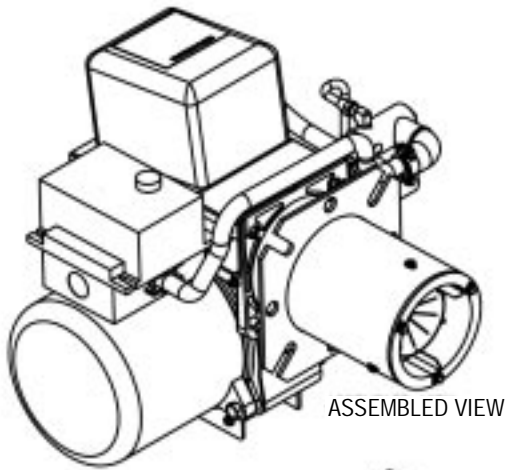


ITEM	PART#	DESCRIPTION	ITEM	PART#	DESCRIPTION
1	HWP 2109001	HEATER FRAME	24	HWP 26400	MAIN SWITCH
2	HWP 2109002	COVER PLATE	25	HWP 21800	OVERHEAT LIMIT SWITCH
3	HWP 2109003	SIDE PANELS (2)	25A	HWP 21800	OVERHEAT LIMIT SWITCH (bimetallic)
4	HWP 2109004	REAR HANDLE	25B	HWP 21400**	OVERHEAT LIMIT (CAPILLARY)
5	HWP 2109005	BOTTOM PLATE	26	HWP 40850	THERMOSTAT BOX
6	HWP 2109006	FLUE COLLAR	27	HWP 20579	HEATER CONTROL UNIT
7	HWP HW1065	WHEEL (2)	28	HWP 20581	FAN SENSOR (FOR POS. #27)
8	HWP 2109008	WHEEL SHAFT	29	HWP 20582	BURNER SENSOR (POS. #27)
9	HWP 2109009	BURNER CHAMBER ASSEMBLY	30	HWP HC1020	POWER CORD & PLUG
10	HWP 2109010	FAN GUARD, LEFT	NOT SHOWN IN DIAGRAM		
11	HWP 2109011	FAN GUARD, RIGHT	HWP 2436	CONTACTOR	
12	HWP 12440	FAN, COMPLETE	HWP 46950	CAPACITOR	
13	HWP 40900	FAN CONNECTION BOX	HWP 2453	THERMOSTAT	
14	HWP 2109014	FORKLIFT EYE	HWP 80200	POWER CORD & PLUG (2 PCS.)	
15	HWP 120008	BURNER VF400	HWP 2109031	RADIATION SHIELD (UPPER)	
16	HWP 2109016	BURNER COVER	HWP 12000	SMOKE FLUE W/RAIN CAP	
17	HWP 211153	OIL PREHEAT COIL	HWP 2453	REMOTE THERMOSTAT	
18	HWP 120009	OIL FILTER	HWP 100428	GASKET FOR 12008	
19	HWP 120004	OIL WAND	HWP 21724011	FLANGE ADJ. FOR 12008	
20	HWP 120005	OIL WAND HOLDER	HWP 40850SS	SILICONE SEAL - 40850 THERM. BOX	
21	HWP 120020	OIL HOSE (2 PCS.)	HWP 210047	RUBBER EDGE SEAL (SOLD PER FOOT)	
22	HWP 41000	MAIN CONTROL BOX		(30 FEET PER HEATER)	
23	HWP 2109023	BRACKET, MAIN CONTROL BOX		KIT TO CHANGE OVERHEAT LIMIT	
			180036		

Also see Control Box Parts page 16 .

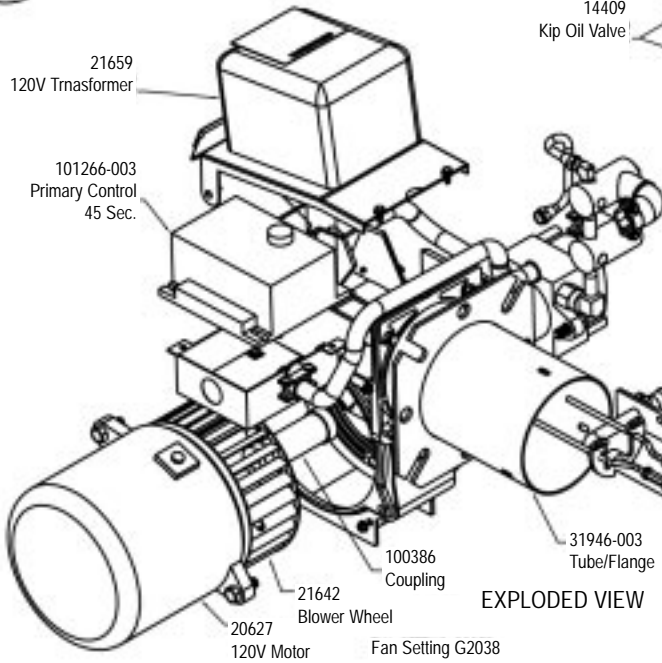
**Note: Overheat limit switch - New design (capillary tube)
S/N M2728-2746, M4769 and greater

WAYNE BURNER PARTS BREAKDOWN



21659
120V Trnasformer

101266-003
Primary Control
45 Sec.



20627
120V Motor

21642
Blower Wheel

Fan Setting G2038

100386
Coupling

EXPLODED VIEW

31946-003
Tube/Flange

100531-001
Air Cone

100926-121
Gun Assembly
See Gun View

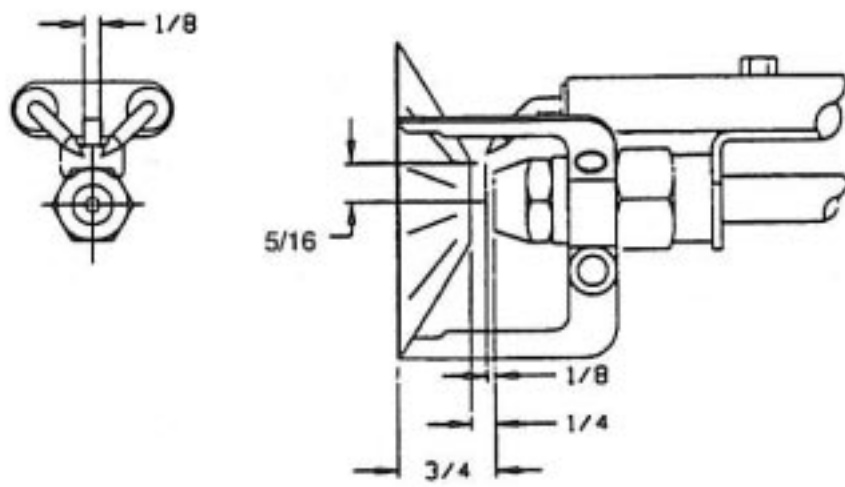
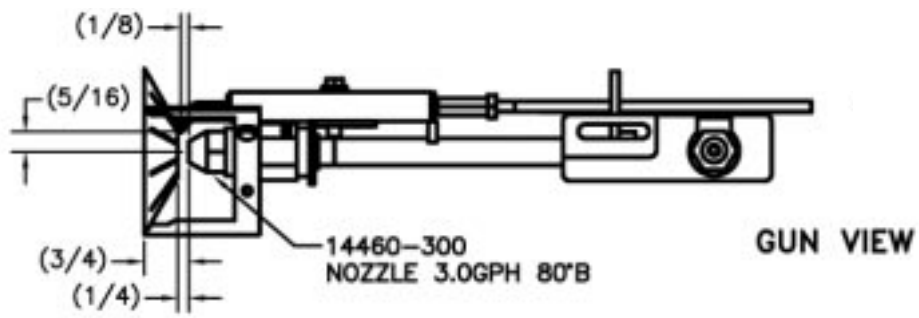
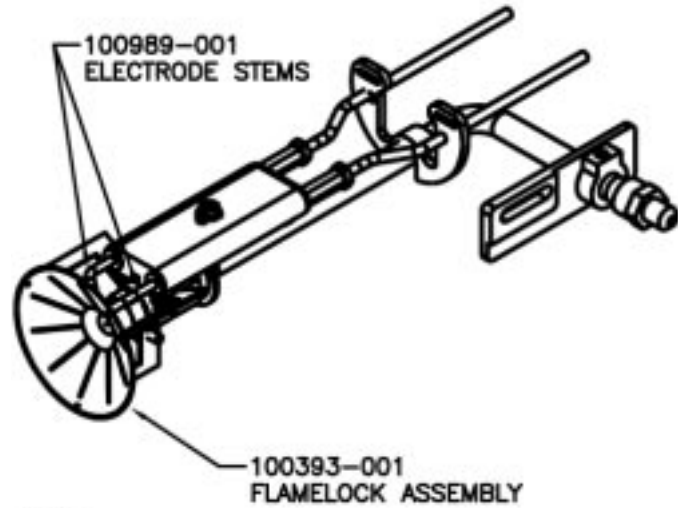
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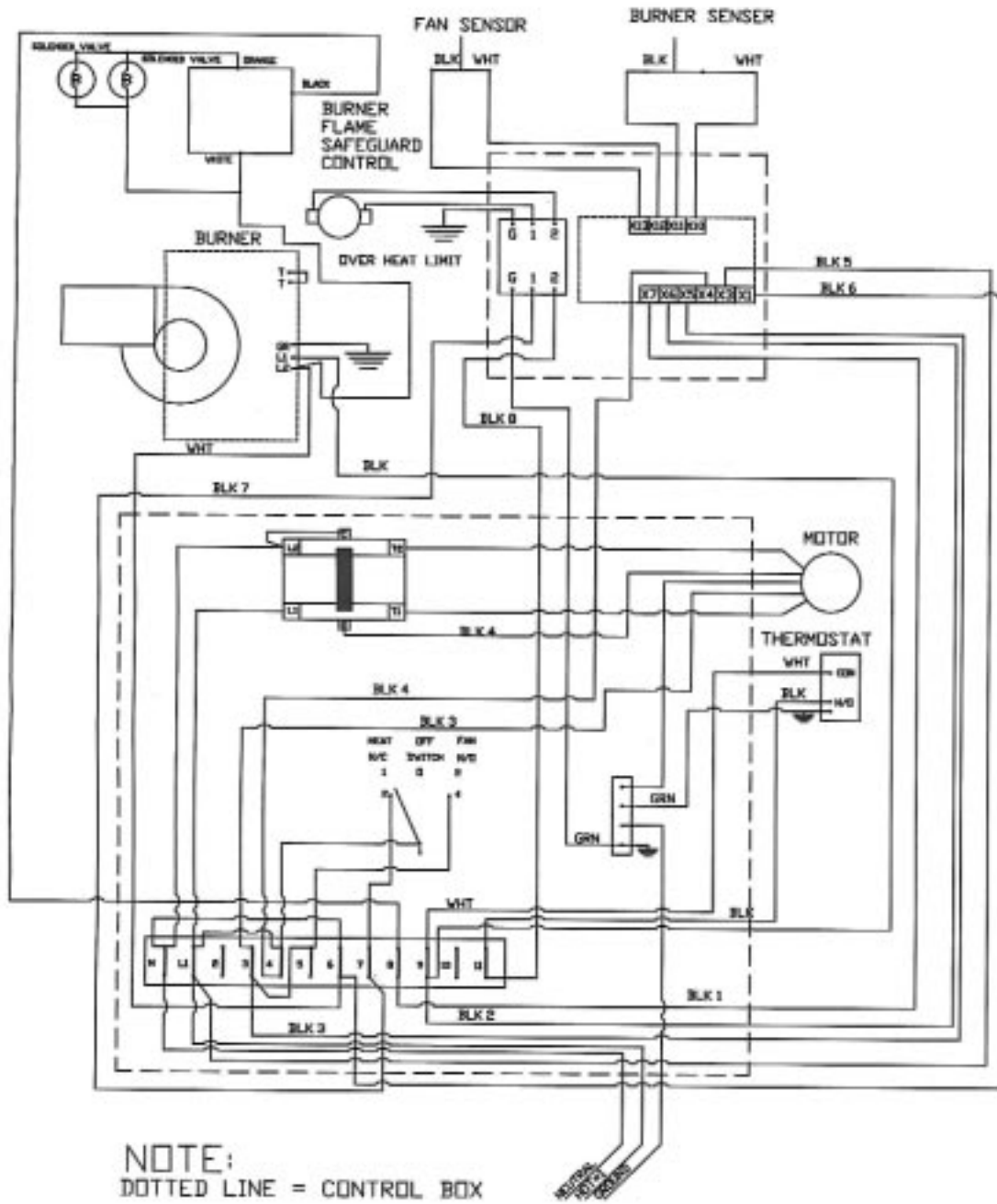
14409
Kip Oil Valve

13495
Fuel Pump

63266-013
Static Baffle 30°

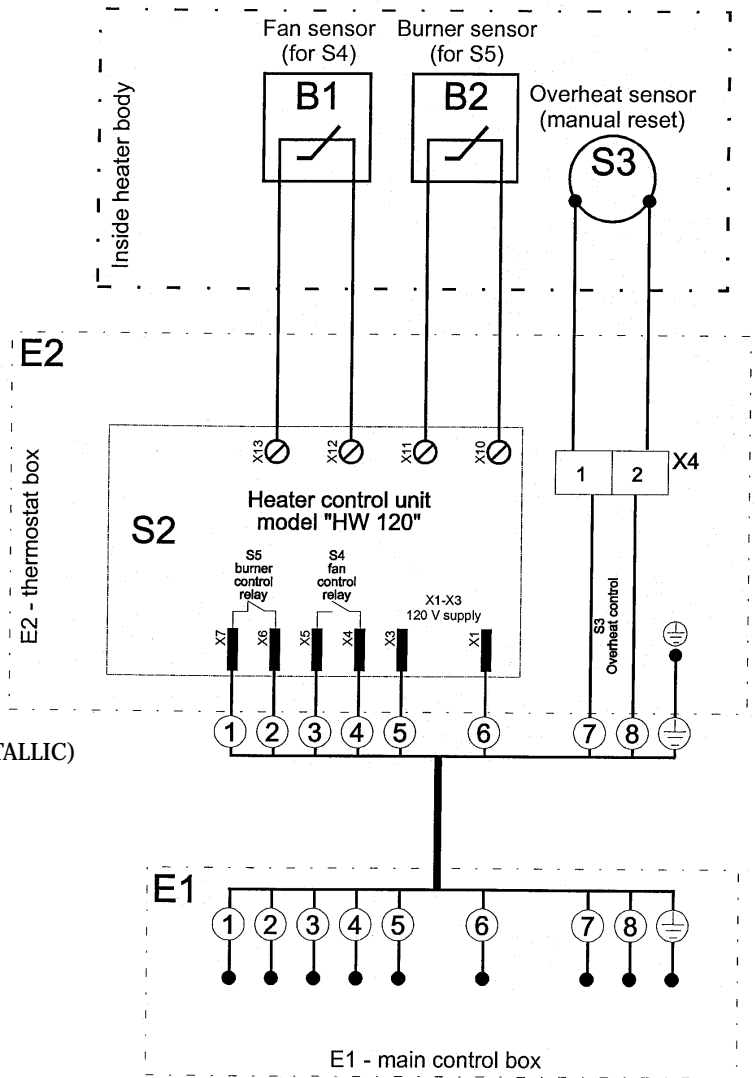
ELECTRODE SETTING





120 Volt 1 PH

ITEM	PART#	DESCRIPTION
E1	HWP 41000	MAIN CONTROL BOX
E2	HWP 40850	THERMOSTAT BOX
E3	HWP 40900	FAN CONNECTION BOX
S1	HWP 26400	MAIN SWITCH
S2	HWP 20579	HEATER CONTROL UNIT, MODEL HW120
B1	HWP 20581	FAN SENSOR (for S4)
B2	HWP 20582	BURNER SENSOR (for S5)
S3	HWP 21800	OVERHEAT LIMIT SWITCH (BIMETALLIC)
	HWP 21400	OVERHEAT LIMIT (CAPILLARY)
X1	HWP 36701	TERMINAL BLOCK (E1)
X2	HWP 36100	GROUNDING BLOCK (E1)
	HC1020	POWER CABLE & PLUG
X4	HWP 36701	TERMINAL BLOCK (E2)
X5	HWP 36701	TERMINAL BLOCK (E3)



SENSOR RESISTANCE CHART

Degrees Fahrenheit	Degrees Celcius	Resistance (1K Ohm Scale)*	Degrees Fahrenheit	Degrees Celcius	Resistance (1K Ohm Scale)*
-40	-40	330.6	185	85	1.07
-31	-35	239	194	90	0.9156
-22	-30	174.7	203	95	0.7862
-13	-25	129	212	100	0.6777
-4	-20	96.21	221	105	0.5863
5	-15	72.42	230	110	0.5069
14	-10	55.01	239	115	0.4433
23	-5	42.14	248	120	0.3873
32	0	32.55	257	125	0.3395
41	5	25.34	266	130	0.2985
50	10	19.87	275	135	0.2633
59	15	15.7	284	140	0.2328
68	20	12.49	293	145	0.2065
77	25	10	302	150	0.1836
86	30	8.059	311	155	0.1636
95	35	6.534	320	160	0.1455
100	40	5.329	329	165	0.1303
113	45	4.371	338	170	0.1169
122	50	3.604	347	175	0.1052
131	55	2.988	356	180	0.09484
140	60	2.489	365	185	0.08569
149	65	2.084	374	190	0.07757
158	70	1.753	383	195	0.070
167	75	1.481	392	200	0.063
176	80	1.256			

* Correct Ohm reading when sensors are at the above listed temperatures

120 Volt 1 PH

BLOWER MOTOR SCHEMATIC

