

**LEGEND**

( )	ITEM #
□	WIRE LABEL
△	WIRE NUT
—○—	IN-LINE SPLICE
—□—	IN-LINE CONNECTOR
DS #	DOOR SWITCH
RS	RIGHT SIDE
LS	LEFT SIDE

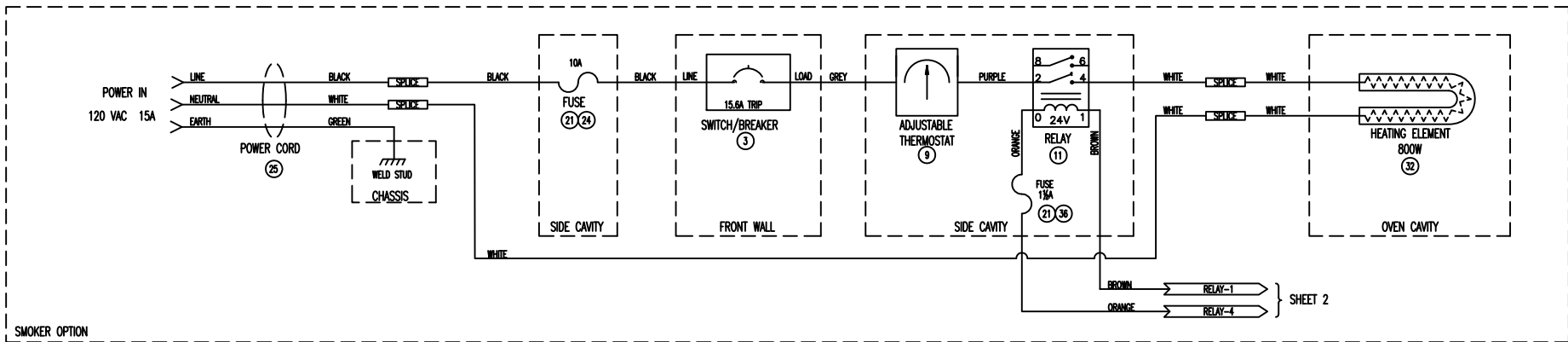
- NOTES.**
1. ALL WIRES 18AWG, STRANDED, 600V, 105°C, UNLESS NOTED OTHERWISE.
  2. SEE SHEET 5 FOR PARTS LIST.
  3. ALL GROUND/CHASSIS WIRING TO BE GREEN AND/OR GREEN WITH YELLOW STRIPE.
  4. TERMINAL NUMBERS IN PARENTHESES ARE FOR MCI TRANSFORMER.
  5. WIRES INDICATED WITH \*\*\* ARE 16 AWG & RATED 250°C



⑤1 THERMOCOUPLE EXTENSION CABLE, TYPE K, 2-WIRE, TEFLON JACKET - 200°C

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<b>ELECTRICAL SCHEMATIC - WIRING DIAGRAM</b>			
ZHANBO LI	EQUIPMENT:	BLAZE	
04-NOV-11	SCALE: NTS	REVISION: 23	SHEET: 1 OF 3
<b>HARDT EQUIPMENT MANUFACTURING INC.</b>			
1756 50th AVENUE, LACHINE, QUEBEC, CANADA, H8T-2K5 TEL: (514) 631-7271 FAX: (514) 631-7172			



SMOKER OPTION

LEGEND	
Ⓢ	ITEM #
□	WIRE LABEL
△	WIRE NUT
⊞	IN-LINE SPLICE
⊞	IN-LINE CONNECTOR

NOTES.

1. ALL WIRES 18AWG, STRANDED, 600V, 105°C, UNLESS NOTED OTHERWISE.
2. SEE SHEET 6 FOR PARTS LIST.
3. ALL GROUND/CHASSIS WIRING TO BE GREEN AND/OR GREEN WITH YELLOW STRIPE.

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ELECTRICAL SCHEMATIC - SMOKER OPTION			
ZHANBO LI	EQUIPMENT:	BLAZE	DRAWING NO:
			99-4145
04-NOV-11	SCALE: NTS	REVISION: 23	SHEET: 2 OF 3
<b>HARDT EQUIPMENT MANUFACTURING INC.</b>			
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36	0	0	1	5581	-	FUSE, 1 1/2A
35	0	2	0	4098	-	REED PROXIMITY SENSOR MK21 BLAZE FRENCH DOOR
34	2	2	0	7127	-	FUSE, 12A, TIME DELAY
33	1	1	0	20306	-	SUPPRESSOR, 250VAC, 1000 , 0.1µF
32	0	0	1	4412	-	HEATING ELEMENT, 115VAC, 800W
31	17 in.	17 in.	0	6516	-	THERMOCOUPLE EXTENSION CABLE, TYPE-K, 2-WIRE, 260C, 24AWG, POLYMER JACKET
30	1	1	0	7811	-	ELECTRONIC THERMOSTAT BOARD, WITH POTENTIOMETER
29	1	1	0	6643	-	LAMP, RED LED 12V, PANEL-MOUNT
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27	1	1	0	4587	-	TEMPERATURE DISPLAY ASSY
26	1	1	0	4220.2.875	99-4009-A	PROBE, TEMPERATURE (TYPE-K)
25	1	1	1	4571	-	POWER CORD, 9' LONG
24	0	0	1	4087	-	FUSE, 10A, TIME DELAY
23	1	1	0	4065	-	FUSE, 4A, TIME DELAY
22	1	1	0	20260	-	FUSE, 2A
21	4	4	2	5474	-	FUSE HOLDER, SINGLE
20	1	2	0	4102	-	SENSOR, REED, S/S M5 THREAD
19	1	1	0	4302	-	BUZZER, 24V
18	1	1	0	4021	-	GAS VALVE
17	1	1	0	6719	-	FLAME SENSOR DUAL PROBE
16	0	0	0	-	-	-
15	1	1	0	6999	-	SI IGNITER
14	1	1	0	4268	-	CONNECTOR BLOCK, CERAMIC
13	1	1	0	6721.RELAY	-	IGNITION CONTROL MODULE CP ELECTRONICS
12	1	1	0	8998	-	LIGHT BULB MR11 XENON 12V 20W
11	1	1	1	4053M	-	RELAY, 24V, DPST
10	1	1	0	3120	-	MOTOR, 1/4HP, 120V/60HZ (ALT. # 3162)
9	0	0	1	4460	-	THERMOSTAT, ADJUSTABLE, CAPILLARY & BULB
8	1	1	0	4326	-	TIMER, ADJUSTABLE, ELECTRO-MECHANICAL
7	1	1	0	3787	-	TRANSFORMER, 115/12VAC, 40VA
6	1	1	0	4010	-	TRANSFORMER, 120/24VAC, 40VA
5	1	1	0	4563	-	SWITCH MANUAL ADVANCE / IGNITION RESET, NOx2
4	1	1	0	4320	-	SWITCH, MAIN, CONTACT N.C.
3	1	1	1	4067	-	CIRCUIT BREAKER, SEALED, 240VAC, 15.6A TRIP
2	1	1	0	11009	-	TERMINAL BLOCK, 12 POSITION
1	0	0	0	-	-	-
ITEM	QTY BASE UNIT	QTY FRENCH DOOR UNIT	QTY SMOKER OPTION	PART #	DRAWING #	DESCRIPTION

FOR REFERENCE ONLY  
(SEE NOTE 1)

NOTES.

1. PARTS LIST IS INCLUDED FOR CONVENIENCE OF REFERENCE ONLY.  
REFER TO DOCUMENT # TBD FOR DEFINITIVE PARTS LIST.
2. WIRING AND ASSOCIATED CONNECTING TERMINALS NOT INCLUDED.

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ELECTRICAL SCHEMATIC -- BOM			
ZHANBO LI	EQUIPMENT:	BLAZE	DRAWING NO:
			99-4145
04-NOV-11	SCALE: NTS	REVISION: 23	SHEET: 3 OF 3
<b>HARDT EQUIPMENT MANUFACTURING INC.</b>			
1756 50th AVENUE, LACHINE, QUEBEC, CANADA, H8T-2Y5 TEL: (514) 631-7271 FAX: (514) 631-7172			

REV.	DATE	SUMMARY
0	13 JUNE 2007	NEW DRAWING.
1	30 JULY 2007	EXTENSIVE CHANGES AFTER REVIEW.
2	15 OCTOBER 2007	EXTENSIVE CHANGES AFTER FIRST PROTOTYPE BUILD.
3	18 OCTOBER 2007	FURTHER CHANGES AFTER REVIEW.
4	24 OCTOBER 2007	CORRECTION TO PARTS LIST.
5	10 JANUARY 2008	ADD SAFETY LOCKOUT ALARM.
6	04 FEBRUARY 2008	CHANGE CIRCUIT BREAKER TO "15A TRIP".
7	06 MARCH 2008	CHANGES AFTER FURTHER PROTOTYPE ASSEMBLY.
8	14 APRIL 2008	FURTHER CHANGES DURING PROTOTYPE ASSEMBLY.
9	10 JANUARY 2009	CHANGES AFTER PROTOTYPE TRIALS.
10	12 JANUARY 2009	ADD "SMOKER" OPTION.
11	25 FEBRUARY 2009	ADD "FRENCH DOOR" UNIT (OPTION).
12	31 MARCH 2009	CHANGE CURRENT RATING OF FUSE IN SMOKER UNIT AND CORRECT ITEM NUMBER BALLOON.
13	26 AUGUST 2009	CORRECT PART NUMBER FOR FLAME PROBE. REF: CCR # 804.
14	02 NOVEMBER 2009	ADD SNUBBER TO DOOR CIRCUIT. REF: CCR# 869.
15	25 NOVEMBER 2009	<p>1) CHANGE VALUE OF FUSE IN SMOKER OPTION FROM "2A" TO "1.5A". REF: CCR878.</p> <ul style="list-style-type: none"> <li>• SHEET 3, "ELECTRICAL SCHEMATIC - SMOKER OPTION", ZONE 11/12-E/F.</li> <li>• SHEET 4, "PARTS LIST - ELECTRICAL COMPONENTS", ITEM 22 (P/N FROM "20206" TO "5585").</li> </ul> <p>2) CHANGE FUSE IN MOTOR DRIVE CIRCUIT FROM "10A" TO "12A TIME DELAY". REF: CCR884.</p> <ul style="list-style-type: none"> <li>• SHEET 1, BLOCK DIAGRAM, ZONE 9E-9F.</li> <li>• SHEET 2, ELECTRICAL SCHEMATIC, ZONE 9D-9E.</li> <li>• SHEET 4, PARTS LIST - ELECTRICAL COMPONENTS, ITEM 24 , CHANGE QTY. OF BASE UNIT AND ON FRENCH DOOR UNIT FROM "1" TO "0".</li> <li>• SHEET 4, PARTS LIST - ELECTRICAL COMPONENTS, ADD NEW ITEM 34, "FUSE, 12A, TIME DELAY", P/N 4089, QTY. "1" FOR BASE UNIT AND FRENCH DOOR UNIT.</li> </ul>
16	29 JULY 2010	<p>1) CHANGE IGNITION MODULE FROM WHITE-RODGERS TO CP.</p> <p>2) CHANGE IGNITER FROM NITRIDE TO GLOWING IGNITER.</p>

ELECTRICAL SCHEMATIC - WIRING DIAGRAM			
ZHANBO LI	EQUIPMENT:	BLAZE	DRAWING NO:
			99-4145
04-NOV-11	SCALE: NTS	REVISION: 23	SHEET: 4 OF 3
<b>HARDT EQUIPMENT MANUFACTURING INC.</b>			
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REV.	DATE	SUMMARY
17	09 SEPTEMBER 2010	<p>1) SHEET 1, BLOCK DIAGRAM:</p> <ul style="list-style-type: none"> <li>· ZONE 7H, IN LIGHTING BLOCK, REMOVE 1 (OF 2) LAMPS AND CHANGE NOTE FROM '2X10W' TO '20W'.</li> <li>· ZONE 13C, REMOVE IGNITION FAILURE SENSOR, CONNECTING INDICATOR LAMP DIRECTLY TO IGNITOR BOX, RENAME 'INDICATOR LAMP' TO 'IGNITION FAILURE'.</li> <li>· ZONE 10D/11D, CONNECT AUDIBLE ALARM DIRECTLY TO TIMER.</li> </ul> <p>2) SHEET 2, ELECTRICAL SCHEMATIC:</p> <ul style="list-style-type: none"> <li>· ZONE 15F/16F, AT ITEM 13, CHANGE FROM 'CIPC 629A' TO 'CIPC 629A'.</li> <li>· ZONE 8G/9G, IN OVEN CAVITY - LEFT SIDE WALL BLOCK, REMOVE ONE LAMP (ITEM 12), AND CHANGE NOTE FROM '2 X 10W' TO '20W'.</li> <li>· CHANGE DESCRIPTION OF WIRE FROM 'WHITE 250°C' TO 'WHITE' ( 5 PLACES), STARTING IN ZONE 13H/14H AT 'FASTON' AND ENDING IN ZONE 5D AT MAIN TERMINAL BLOCK (ITEM 2), TERMINAL 2D.</li> <li>ALSO, ON SAME WIRE, AT BOTH ENDS, ADD MARKER '3'.</li> <li>· CHANGE DESCRIPTION OF WIRE FROM 'RED 250°C' TO 'RED' (1 PLACE), STARTING IN ZONE 13G/14G AT 'FASTON' AND ENDING IN ZONE 15G AT IGNITION CONTROL (ITEM 13), TERMINAL 'HST'.</li> <li>ALSO, ON SAME WIRE, AT BOTH ENDS, ADD MARKER '3'.</li> <li>· ZONE 15H, BREAK BLACK AND RED WIRES NEAR INDICATOR LAMP (ITEM 29), LABEL WIRES FROM INDICATOR LAMP (ITEM 29), ONE 'RED', THE OTHER 'BLACK', CONNECT THE RED WIRE FROM THE INDICATOR LAMP (ITEM 29) TO THE RED WIRE PREVIOUSLY BROKEN, CONNECT THE BLACK WIRE FROM THE INDICATOR LAMP (ITEM 29) TO THE BLACK WIRE PREVIOUSLY BROKEN AND CHANGE ITS COLOR FROM 'BLACK' TO 'ORANGE'.</li> <li>ALSO, ON BOTH ENDS OF THE RED WIRE, ADD MARKER '4' AND ON BOTH ENDS OF THE ORANGE WIRE, ADD MARKER '5'.</li> <li>· CHANGE DESCRIPTION OF WIRE FROM 'BLACK 250°C' TO 'BLACK' (1 PLACE), START IN ZONE 13G/14G AT 'FASTON' AND ENDING IN ZONE 15F AT IGNITION CONTROL (ITEM 13), TERMINAL 'FI'.</li> <li>ALSO, ADD MARKER '3' AT END OF WIRE AT IGNITION CONTROL (ITEM 13).</li> <li>· ZONE 15F, AT IGNITION CONTROL (ITEM 13), TERMINAL 'TH', ADD LABEL 'BLUE' TO WIRE END.</li> <li>ALSO, IN ZONE 13E, REMOVE LABEL 'BLUE' FROM SAME WIRE.</li> <li>· ZONE 15F, AT IGNITION CONTROL (ITEM 13), TERMINAL '24C', ADD LABEL 'BROWN' AND ADD MARKER '3' TO WIRE END.</li> <li>ALSO IN ZONE 13F, REMOVE LABEL 'BROWN' FROM SAME WIRE.</li> <li>· ZONE 15E, AT IGNITION CONTROL (ITEM 13), AT TERMINAL 'MV2', REMOVE MARKER '3' FROM YELLOW WIRE.</li> <li>· ZONE 5G, AT MAIN TERMINAL BLOCK (ITEM 2), MOVE YELLOW WIRE FROM TERMINAL '12C' TO '12B'.</li> <li>· ZONE 5G, AT MAIN TERMINAL BLOCK (ITEM 2), MOVE YELLOW WIRE FROM TERMINAL '11C' TO '11B'.</li> <li>· ZONE 6E, ON BROWN WIRE THAT CONNECTS TO MAIN TERMINAL BLOCK (ITEM 2), TERMINAL 6D, CHANGE MARKER '8' TO '3'.</li> <li>· ZONE 5D, ON BLACK WIRE THAT CONNECTS TO MAIN TERMINAL BLOCK (ITEM 2), TERMINAL 2E, REMOVE MARKER '2'.</li> <li>· ZONE 5D, ON BLACK WIRE THAT CONNECTS TO MAIN TERMINAL BLOCK (ITEM 2), TERMINAL 1D, ADD MARKER '2'.</li> <li>· ZONE 8D, ORANGE WIRE CONNECTED BETWEEN FUSE (ITEM 22) AND RELAY (ITEM 11), MOVE WIRE FROM RELAY (ITEM 11), TERMINAL '0' TO TERMINAL '2'.</li> <li>· ZONE 11A, AT ADVANCE SWITCH (ITEM 5), CHANGE TERMINALS '3' &amp; '4' TO '4' &amp; '3' RESPECTIVELY.</li> <li>· ZONE 10A, MOVE BLACK WIRE WITH MARKER '1' FROM MAIN SWITCH (ITEM 4), TERMINAL 2, TO ADVANCE SWITCH (ITEM 5), TERMINAL 4.</li> <li>· ZONE 11D, CHANGE ITEM #20 TO ITEM #35 (2 PLACES) AND ADD ITEM #20 IN PARALLEL, USE LIGHT BLUE WIRE BETWEEN ITEMS #35 AND WIRE NUTS AND BLACK WIRE BETWEEN ITEM 20 AND WIRE NUTS.</li> <li>ZONE 11/2L, CHANGE NOTE 5 TO SPECIFY THAT ITEM #35 (QTY 2) APPLIES TO FRENCH DOOR UNIT ONLY AND THAT ITEM #20 APPLIES TO BASE UNIT ONLY.</li> </ul> <p>3) SHEET 3, ELECTRICAL SCHEMATIC, SMOKER OPTION:</p> <ul style="list-style-type: none"> <li>· ZONE 12F, CHANGE ITEM #22 TO ITEM #36.</li> </ul> <p>4) SHEET 4, PARTS LIST, ELECTRICAL COMPONENTS:</p> <ul style="list-style-type: none"> <li>· ITEM 12, CHANGE QTY BASE UNIT FROM '2' TO '1', CHANGE QTY FRENCH DOOR UNIT FROM '2' TO '1', CHANGE PART NUMBER FROM '4249' TO '8998', CHANGE DESCRIPTION FROM 'LIGHT FIXTURE, HALOGEN&lt; WITH BULB, 12V/10W'.</li> <li>· ITEM 20, CHANGE QTY FRENCH DOOR UNIT FROM '2' TO '0'.</li> <li>· ITEM 21, CHANGE QTY BASE UNIT FROM '3' TO '4', CHANGE QTY FRENCH DOOR UNIT FROM '3' TO '4'.</li> <li>· ITEM 22, CHANGE QTY SMOKER OPTION FROM '1' TO '0', CHANGE PART NUMBER FROM '5585' TO '20260', CHANGE DESCRIPTION FROM 'FUSE 1½A' TO 'FUSE 2A'.</li> <li>· ITEM 34, CHANGE QTY BASE UNIT FROM '1' TO '2', CHANGE QTY FRENCH DOOR OPTION FROM '1' TO '2', CHANGE PART NUMBER FROM '4089' TO '7127'.</li> <li>· ITEM 35 - NEW ITEM, QTY BASE UNIT '0', QTY FRENCH DOOR UNIT '2', QTY SMOKER OPTION '0', PART NUMBER '4098', DESCRIPTION 'SEE DESCRIPTION IN SET'.</li> <li>· ITEM 36 - NEW ITEM, QTY BASE UNIT '0', QTY FRENCH DOOR UNIT '0', QTY SMOKER OPTION '1', PART NUMBER '5581', DESCRIPTION 'FUSE 1½A'.</li> </ul>

ELECTRICAL SCHEMATIC - WIRING DIAGRAM

ZHANBO LI	EQUIPMENT:	BLAZE	DRAWING NO:	99-4145
04-NOV-11	SCALE: NTS	REVISION: 23	SHEET:	5 OF 3

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REV.	DATE	CCR	SUMMARY
18	04 NOVEMBER 2011		1) SHEET 4, PARTS LIST, ELECTRICAL COMPONENTS: · REPLACED PART, CHANGE PART NUMBER FROM '4188' TO '4102', CHANGE DESCRIPTION FROM 'SWITCH, REED, M8 THREAD' TO 'SENSOR, REED, S/S, M5 THREAD'
19	20 SEPTEMBER 2012		1) REPLACE CERAMIC MARETTES BY TERMINALS 2) CONVERT DRAWING FROM VISIO TO AUTOCAD, ADD DS#, LS , RS - INTO LEGEND. 3) ADD TWO DETAIL FOR CONNECTING (FOR SWING-DOOR AND FRENCH DOORS)
20	03 FEB 2014	#1994	SWITCH P/N 4563 WAS P/N 4322
21	2016-11-01	#2586	ADDED OPTION "C" FOR DD DOOR FRAME SENSOR, REMOVED BALLOON 37 AND 38
22	2017-03-28	-	IGNITION CONTROL MODULE CP ELECTRONICS PN:6721.RELAY IS REPLACE BY PN:7453 FLAME SENSOR DUAL PROBE PN:6719 IS REPLACE BY PN:7803 FLAME SENSOR, DUAL, THERMOCOUPLE TYPE K TERMINAL BLOCK EURO CERAMIC 30A 300V PN:7457 IS ADDED THERMOCOUPLE EXTENSION CABLE,TYPE-K IS ADDED REMOVE BLANK SHEET 1/7
23	2018-02-08	#2756	REVERSED TO REV 21, CREATED NEW DRAWING FOR THERMO SENSING, REPLACE FLAME SENSOR WIRE TO 16 AWG.

ELECTRICAL SCHEMATIC - WIRING DIAGRAM

ZHANBO LI	EQUIPMENT:	DRAWING NO:
	BLAZE	99-4145
04-NOV-11	SCALE: NTS	REVISION: 23 SHEET: 6 OF 3

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