



PARTS & SERVICE MANUAL

MHC-1 Holding Cabinet

Models 86007 & 86009



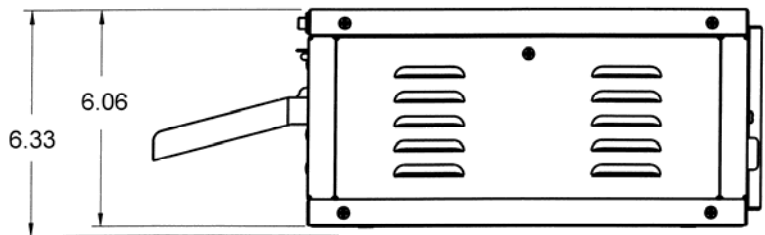
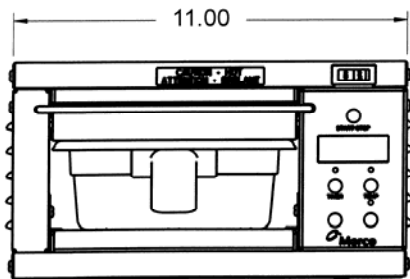
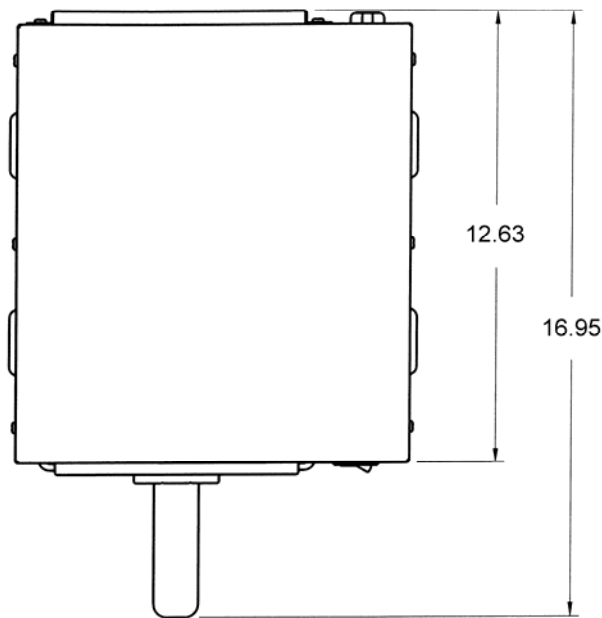
Model 86009 shown

P/N: L340134
REV: 5.13.08

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UNIT SPECIFICATIONS

Model #	Voltage	Amps	Watts	Hz.	Phase	Plug
86007 (Left Side Control)	120 VAC	3	360	60	1	6' NEMA 5-15P
86009 (Right Side Control)	120 VAC	3	360	60	1	6' NEMA 5-15P



SEQUENCE OF OPERATIONS

Power Supply	<p>Electrical power is supplied to the unit by a 3 conductor service for single phase. 120VAC Black conductor is hot. White conductor is neutral. Green and yellow conductor is ground. Power is permanently supplied to the main power switch.</p>
Heating Circuit	<p>Closing the main power switch supplies voltage to the power board and control board. The control is set to the desired temperature. The control then intermittently supplies 120VAC through the power board to the heater plates. Temperature is then controlled by the two temperature sensors sending a reference signal back to the control board.</p>

TROUBLESHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	EVALUATION
Holding Cabinet will not heat	Incoming Power Supply	Verify power cord is secured firmly in receptacle. Measure the incoming voltage. Check circuit breakers. Reset if required. Call power company if needed.
	Power Switch	Check continuity between switch terminals. Replace switch as needed.
	Power Board	Make sure wires are connected properly including ribbon cable. Check ground wire (green wires) including main power cable. Make sure the unit is grounded properly. If everything is right, replace the control board.
Unit doesn't reach desired temperature	Thermocouple	Check for continuity in circuit.
	Heat Element	Compare cavity temperature with display reading. Insert temperature probe into center of cavity. Acceptable temperature variation is +/- 20° from display reading. Check for loose connection. Check the Amp draw on each element for proper load. Check page 2 for rating information. If the amp draw is high or low, check the individual elements for opens, shorts and proper resistance. WITH POWER OFF: To check resistance of the elements, remove all leads from the elements and use a digital multimeter. The element resistance should be as follows: 120V – 87 ohms Replace heating element (shelf) as needed.
		Check thermostat (common wire). Please note that if thermostat is bad, both circuits will be bad.
Temperature is too high	Thermocouple	Check for incorrectly wired thermocouple. Thermocouple wire polarities are reversed.
	Heat Element	Compare cavity temperature with display reading. Insert temperature probe into center of cavity. Acceptable temperature variation is +/- 20° from display reading. Check for loose connection. Check the Amp draw on each element for proper load. Check page 2 for rating information. If the amp draw is high or low, check the individual elements for opens, shorts and proper resistance. WITH POWER OFF: To check resistance of the elements, remove all leads from the elements and use a digital multimeter. The element resistance should be as follows: 120V – 87 ohms Replace heating element (shelf) as needed.

TROUBLESHOOTING GUIDE (CONT'D)

Display reads unusual characters		Make sure wires are connected properly (grounded).
		If wires are grounded properly, new control board is needed.
On/Off switch doesn't light (but unit works properly)	Power Switch	Check wiring to switch.

HEAT SHELF – REPLACEMENT

1. Disconnect power.
2. Take out screws holding "L Brackets" in cavity.
3. Disconnect thermocouple and all power connections to board. Mark all wires for reassembly.
4. Take out power board.
5. Take out shelf mounting screws from both sides.
6. Remove shelves and feed wiring out of unit.



WARNING:

Be careful to avoid tearing the aluminum foil while working with wire connections.

7. Reassemble in reverse order.

CONTROL BOARD – REPLACEMENT

1. Remove four (4) screws.
2. Disconnect ribbon cable.
3. Remove board.
4. Reassemble in reverse order.

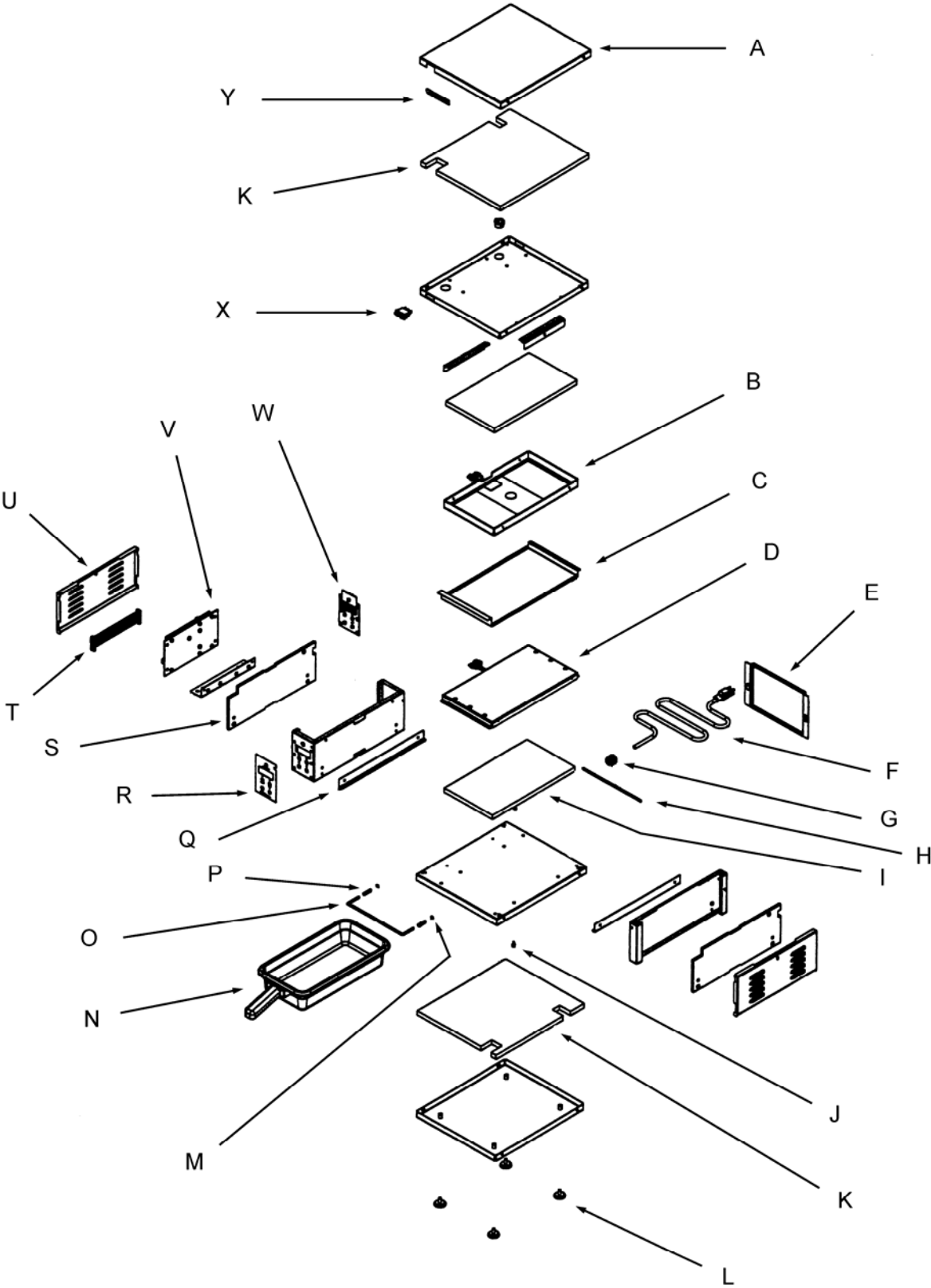


When replacing U.I. board, be sure ribbon cable is connected so that blue wire is facing towards interior of unit.

PARTS BREAKDOWN
MODEL 86007

LABEL	PART NUMBER	PART DESCRIPTION
A	340108	Top Cover Panel
B	340021	Upper Heater Subassembly
C	340020	Universal Tray Seal Panel
D	340019	Lower Heater Subassembly
E	340002	Rear Cover Panel
F	340003	Cordset
G	000170SP	Heyco Strain Relief Grommet
H	340004	Rear Retention Rod
I	340001	Heater Insulation Plate
J	340013	Hex Washer
K	340012	Top / Bottom Insulation
L	340011	Leg
M	340014	E-Style External Retaining Ring
N	340015	Plastic Tray
O	340016	Front Retention Rod
P	340017	Spring
Q	340018	Heater Plate Bracket
R	340107	Control Panel Label
S	340005	Side Insulation
T	340008	Ribbon Cable Subassembly
U	340007	Side Cover Panel
V	340006	Power Controller
W	340009	System Controller
X	340022	Illuminated Green Rocker Switch
Y	340023	Caution-Hot Label

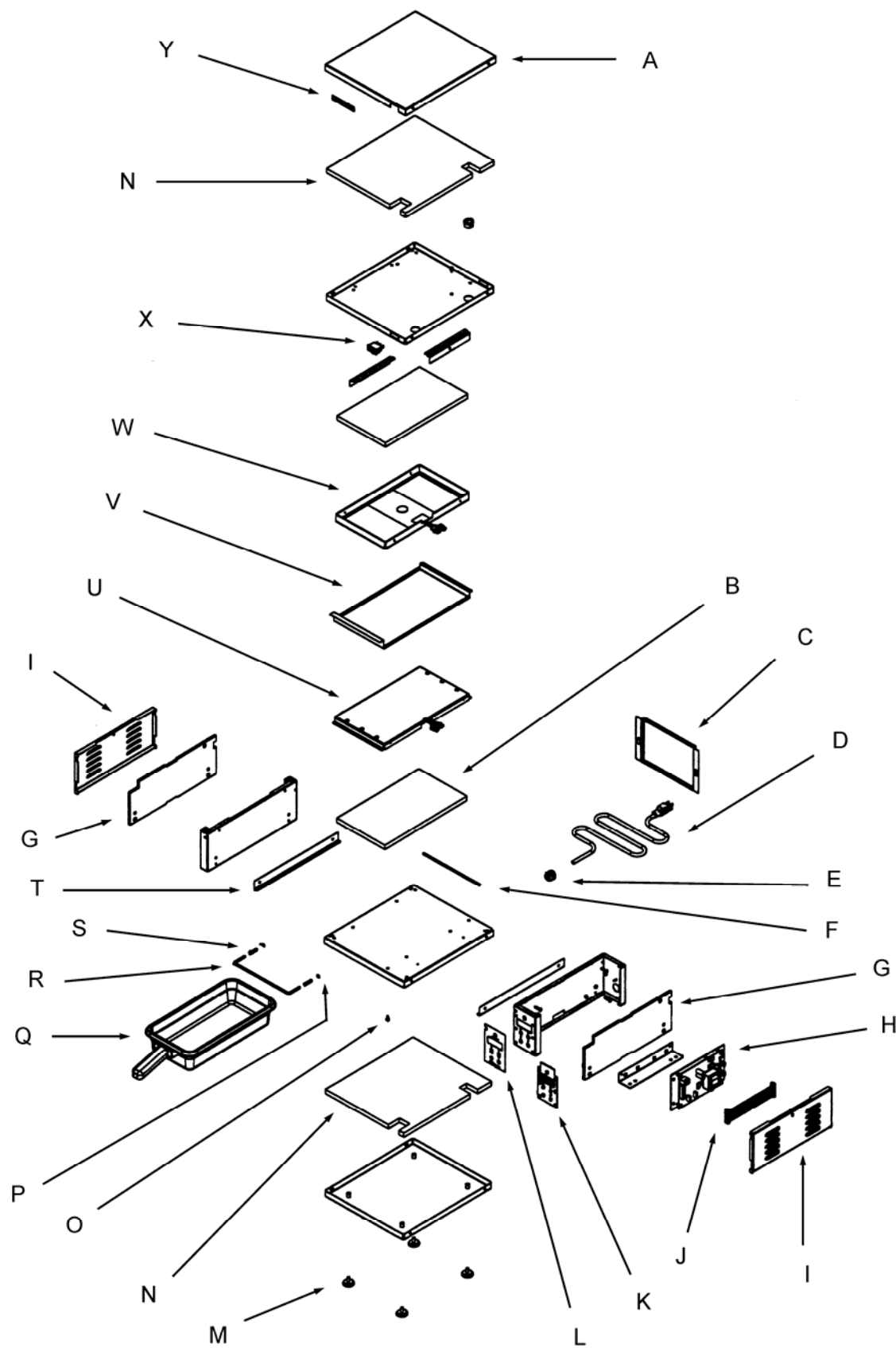
EXPLODED VIEW
MODEL 86007



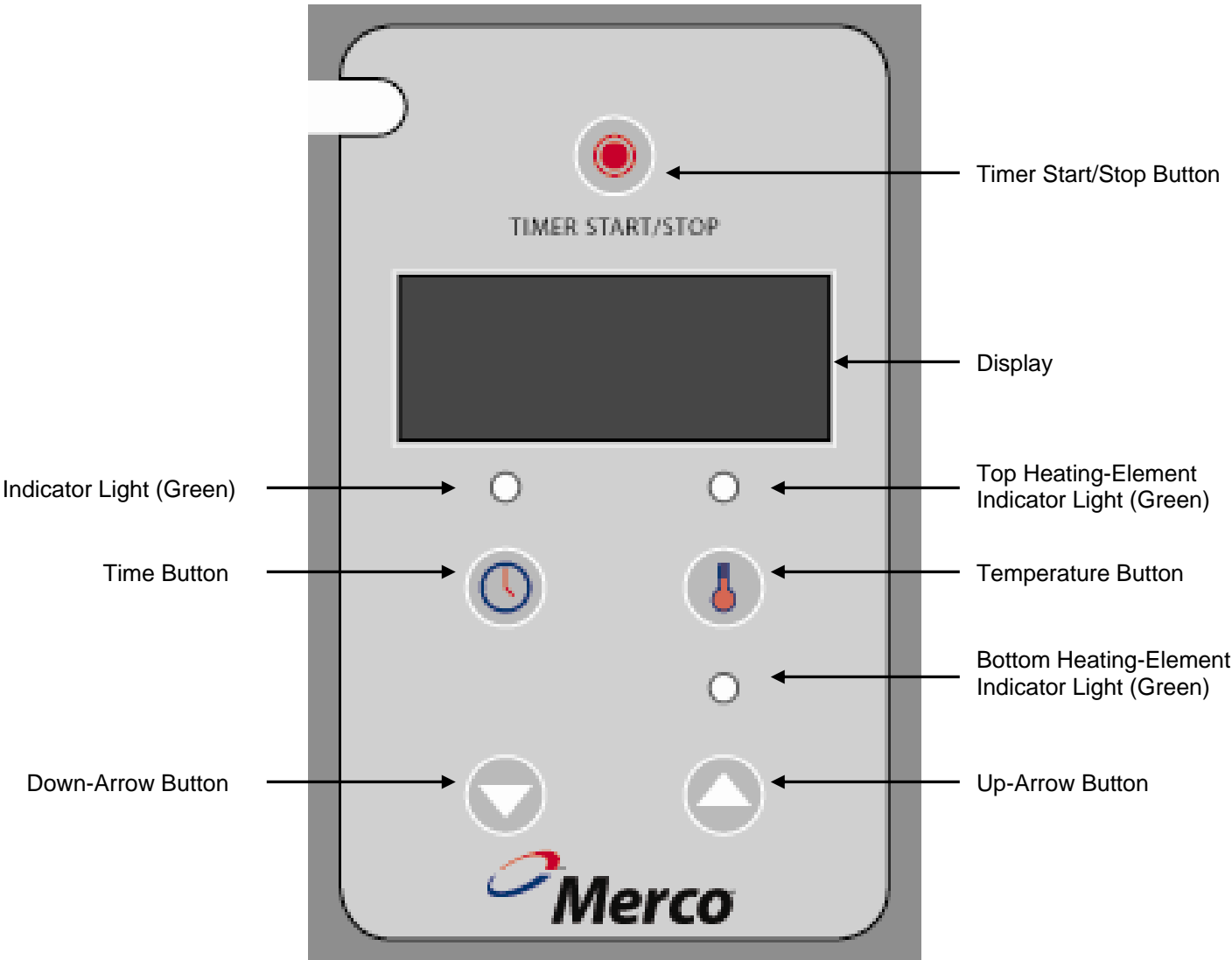
PARTS BREAKDOWN
MODEL 86009

LABEL	PART NUMBER	PART DESCRIPTION
A	340000	Top Cover Panel
B	340001	Heater Insulation Plate
C	340002	Rear Cover Panel
D	340003	Cordset
E	000170SP	Heyco Strain Relief Grommet
F	340004	Rear Retention Rod
G	340005	Side Insulation
H	340006	Power Controller
I	340007	Side Cover Panel
J	340008	Ribbon Cable Subassembly
K	340009	System Controller
L	340010	Control Panel Label
M	340011	Leg
N	340012	Top / Bottom Insulation
O	340013	Hex Washer
P	340014	E-Style External Retaining Ring
Q	340015	Plastic Tray
R	340016	Front Retention Rod
S	340017	Spring
T	340018	Heater Plate Bracket
U	340019	Lower Heater Subassembly
V	340020	Universal Tray Seal Panel
W	340021	Upper Heater Subassembly
X	340022	Illuminated Green Rocker Switch
Y	340023	Caution-Hot Label

EXPLODED VIEW
MODEL 86009

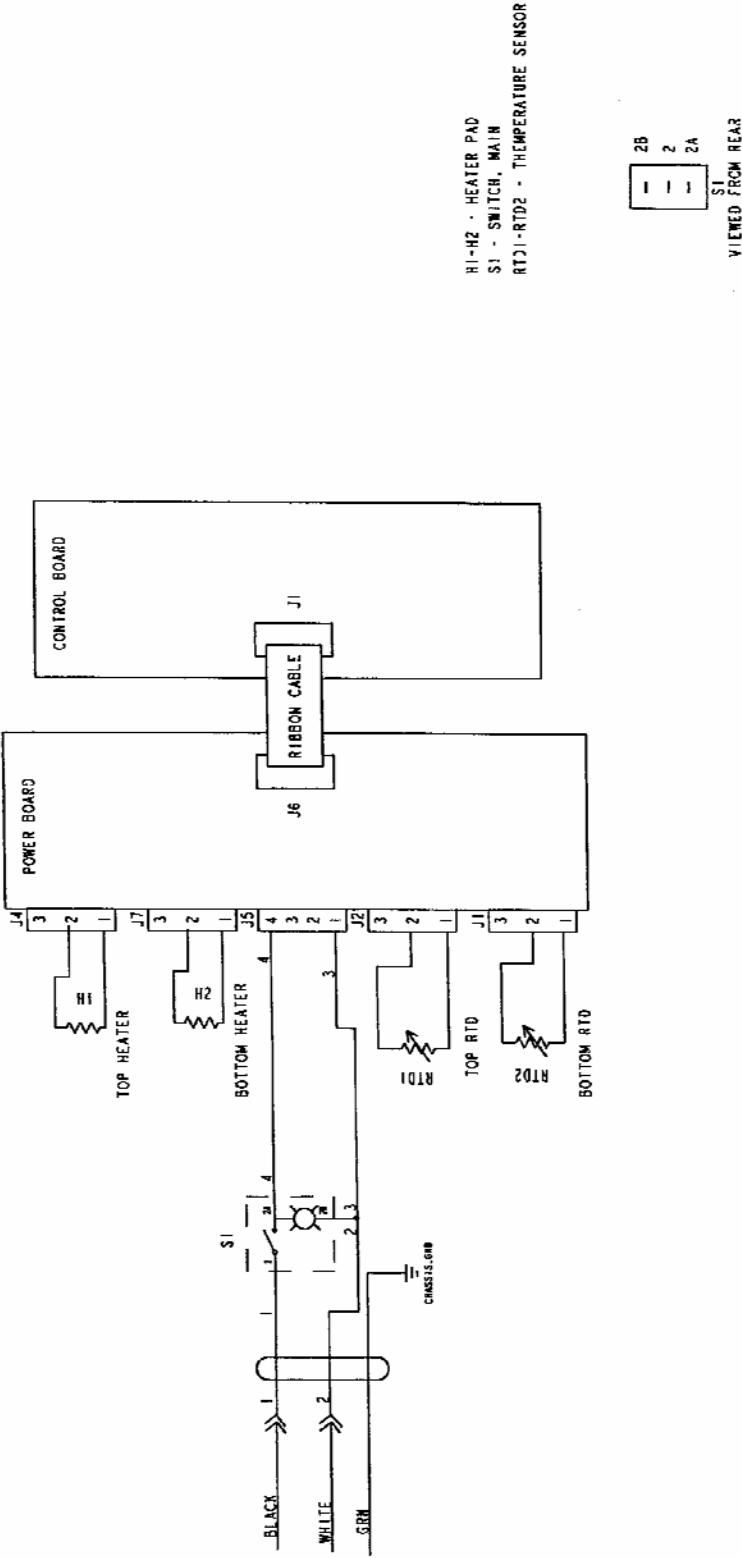


MHC-1 CONTROL PANEL



NOTE: For additional information concerning Menu and Product programming, please refer to MHC-1 Operator Manual.

WIRING DIAGRAM



20000024 A

