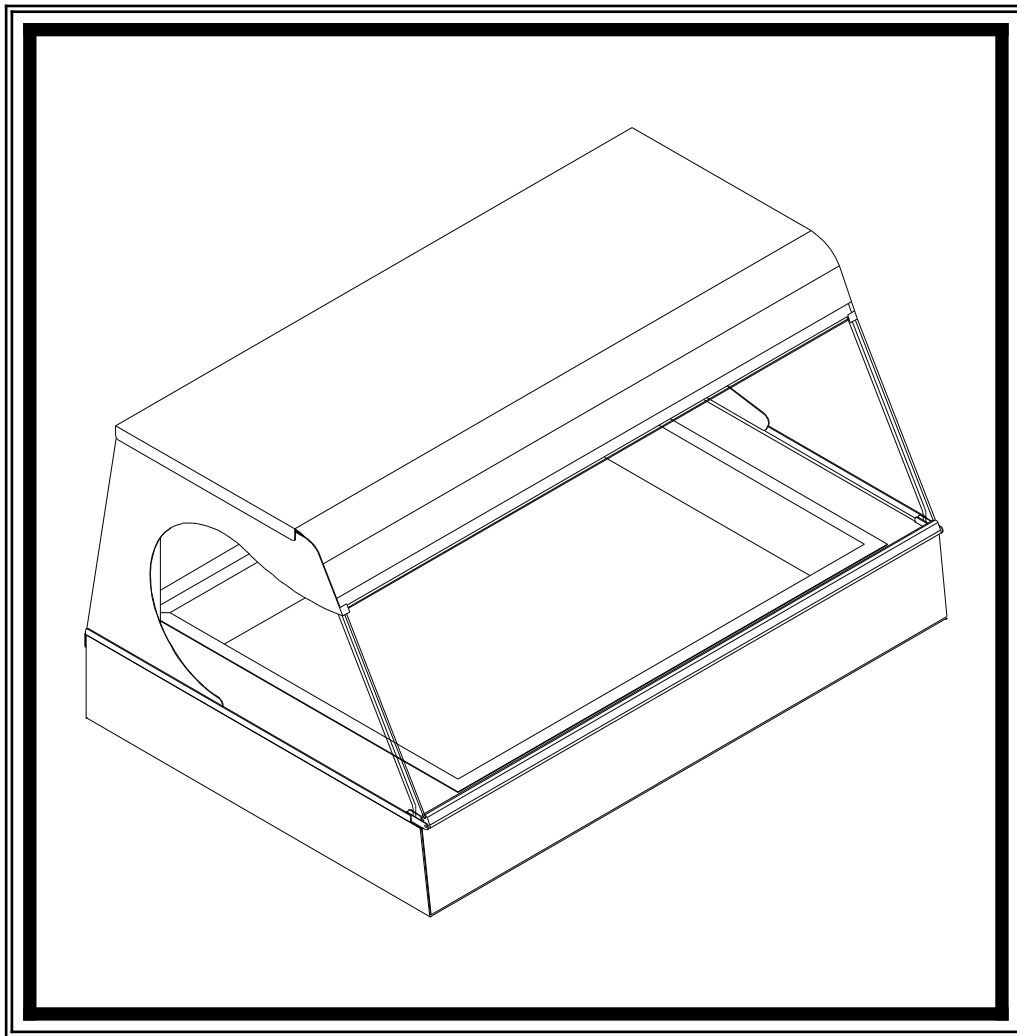




“An American Tradition Since 1954!”

MODEL HDM-4 AND HDM-6 PERFECT HOLD™ DELI CASE SERVICE AND PARTS MANUAL

Be sure ALL installers read, understand, and have access to this manual at all times.



Broaster®, Broasted®, Broasted Chicken®, Broaster Foods®, and Broasterie® are registered trademarks.
Usage is available only to licensed operators with written authorization from The Broaster Company.

The Broaster Company
2855 Cranston Road, Beloit, WI 53511-3991
608/365-0193 www.broaster.com

FOR YOUR SAFETY

Do not use or store gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance. Improper installation, adjustments, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

For the sake of safety and clarity, the following words used in this manual are defined as follows:



Indicates an imminently hazardous situation which, if not avoided, will result in serious injury or death.



Indicates a hazardous situation which, if not avoided, could result in serious injury or death.



Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

All adjustments and repairs shall be made by an authorized Broaster Company representative.

If there is a power failure, turn cook/filter switch OFF. On the Model 1800GH, also slide switch on gas valve OFF. DO NOT attempt to operate unit during a power failure.



Failure to read and understand this manual completely could result in serious injury or death. Be sure ALL operators read, understand and have access to this manual at all times.



Rags or paper containing cooking oil can catch fire if exposed to heat. Laundering will not remove the oil. Dispose of all oil-soiled papers and rags in a trash container that is in a ventilated area away from all cooking equipment or other heat sources such as direct sunlight.

TABLE OF CONTENTS

1 - ELECTRIC POWER SUPPLY	1 - 1
Model HDM-4 Wiring Diagram	1 - 2
Model HDM-6 Single Phase Wiring Diagram	1 - 3
Model HDM-6 Three Phase Wiring Diagram.....	1 - 4
2 - CONTROL PANEL SERVICE.....	2 - 1
Upper Control Panel.....	2 - 1
Lower Control Panel.....	2 - 1
ACCESS FOR SERVICE	2 - 1
DISPLAY LAMP DIMMER	2 - 2
Replacement	2 - 2
TIMER	2 - 2
Replacement	2 - 2
INDICATOR LIGHTS	2 - 3
Replacement	2 - 3
FUSE AND FUSE HOLDER	2 - 3
Fuse Holder Replacement	2 - 4
MAIN POWER SWITCH	2 - 4
Power Switch Replacement	2 - 4
THERMOSTAT	2 - 5
Replacement	2 - 5
Installation	2 - 5
3 - DISPLAY LAMPS AND HEATERS.....	3 - 1
DISPLAY LAMP SOCKETS	3 - 1
Replacement	3 - 1
HEATERS	3 - 1
Replacement	3 - 2
COOLING FAN.....	3 - 2
Replacement	3 - 3
4 - REPLACEMENT PARTS.....	4 - 1
Outer Parts	4 - 1
Upper Control Panel.....	4 - 3
Lower Control Panel.....	4 - 4

1 - ELECTRIC POWER SUPPLY



DANGER: Many sections in this manual pertain to checking and repairing electrical components. **High voltage** will be encountered in several instances. Only persons trained and equipped for checking high voltage shall undertake such repairs.

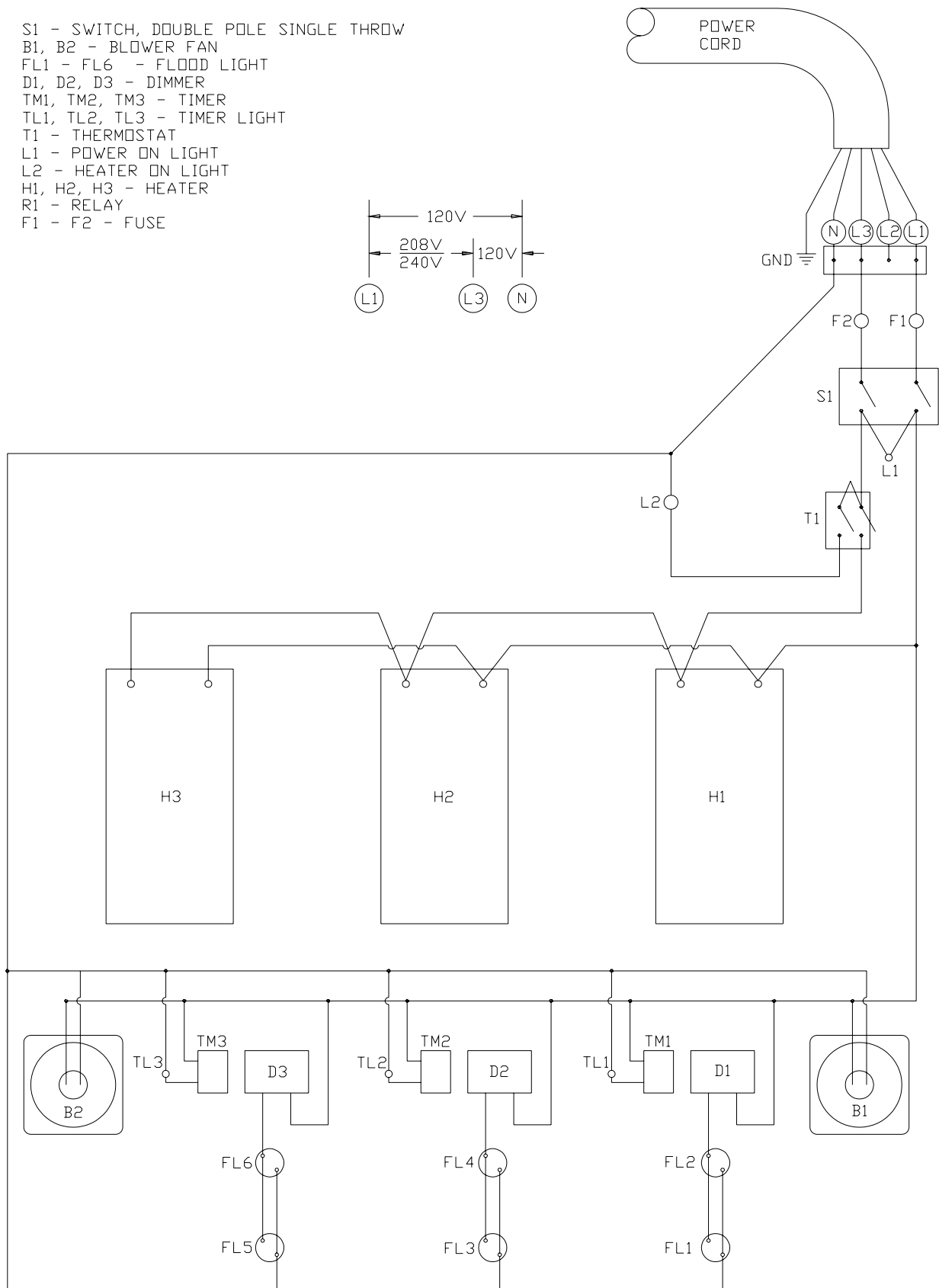
- If no component operates, check main power supply. Be sure main circuit breaker is ON and main fuses are good.
- Correct voltages are: HDM-4: 120/208 volts, 17 amp or 120/240 volts, 16 amp. HDM-6: 120/208/240 volt, 26 amp single phase, 120/208 volt, 19 amp three phase or 120/240 volt, 16 amp three phase.
- When servicing the unit, always check the dataplate to make certain proper parts are used and the correct service rendered.

Perform the following if the unit will not turn on:

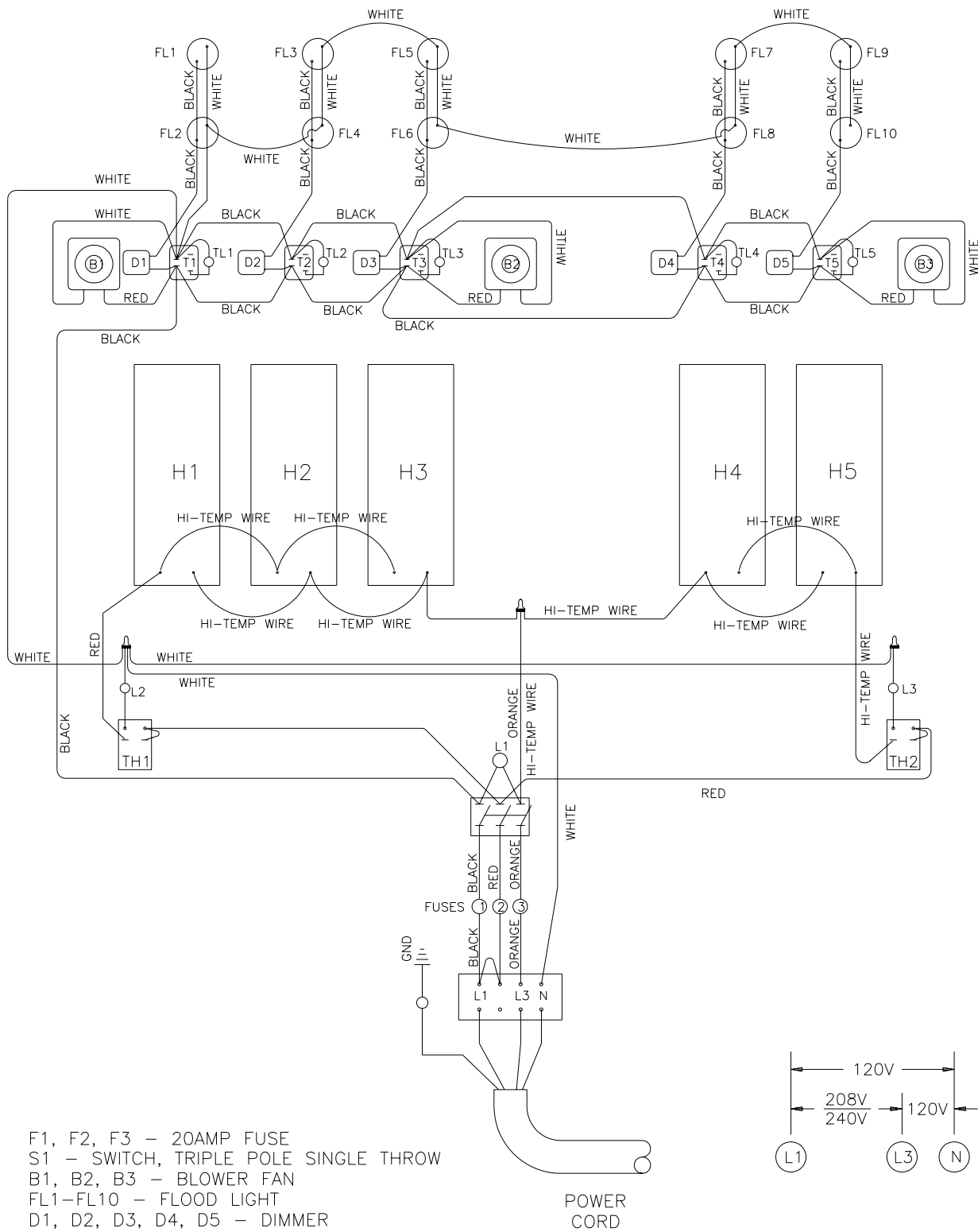
1. Disconnect main power supply.
2. Be sure all connections are tight. If power supply is proper, see TROUBLESHOOTING section.

Model HDM-4 Wiring Diagram:

S1 - SWITCH, DOUBLE POLE SINGLE THROW
 B1, B2 - BLOWER FAN
 FL1 - FL6 - FLOOD LIGHT
 D1, D2, D3 - DIMMER
 TM1, TM2, TM3 - TIMER
 TL1, TL2, TL3 - TIMER LIGHT
 T1 - THERMOSTAT
 L1 - POWER ON LIGHT
 L2 - HEATER ON LIGHT
 H1, H2, H3 - HEATER
 R1 - RELAY
 F1 - F2 - FUSE



Single Phase Wiring Diagram:



F1, F2, F3 – 20AMP FUSE
S1 – SWITCH, TRIPLE POLE SINGLE THROW
B1, B2, B3 – BLOWER FAN
FL1–FL10 – FLOOD LIGHT
D1, D2, D3, D4, D5 – DIMMER
T1, T2, T3, T4, T5 – TIMER
TL1, TL2, TL3, TL4, TL5 – TIMER LIGHT
TH1, TH2 – THERMOSTAT
L1 – POWER ON LIGHT
L2, L3 – T-STAT ON LIGHT
H1, H2, H3, H4, H5 – HEATER

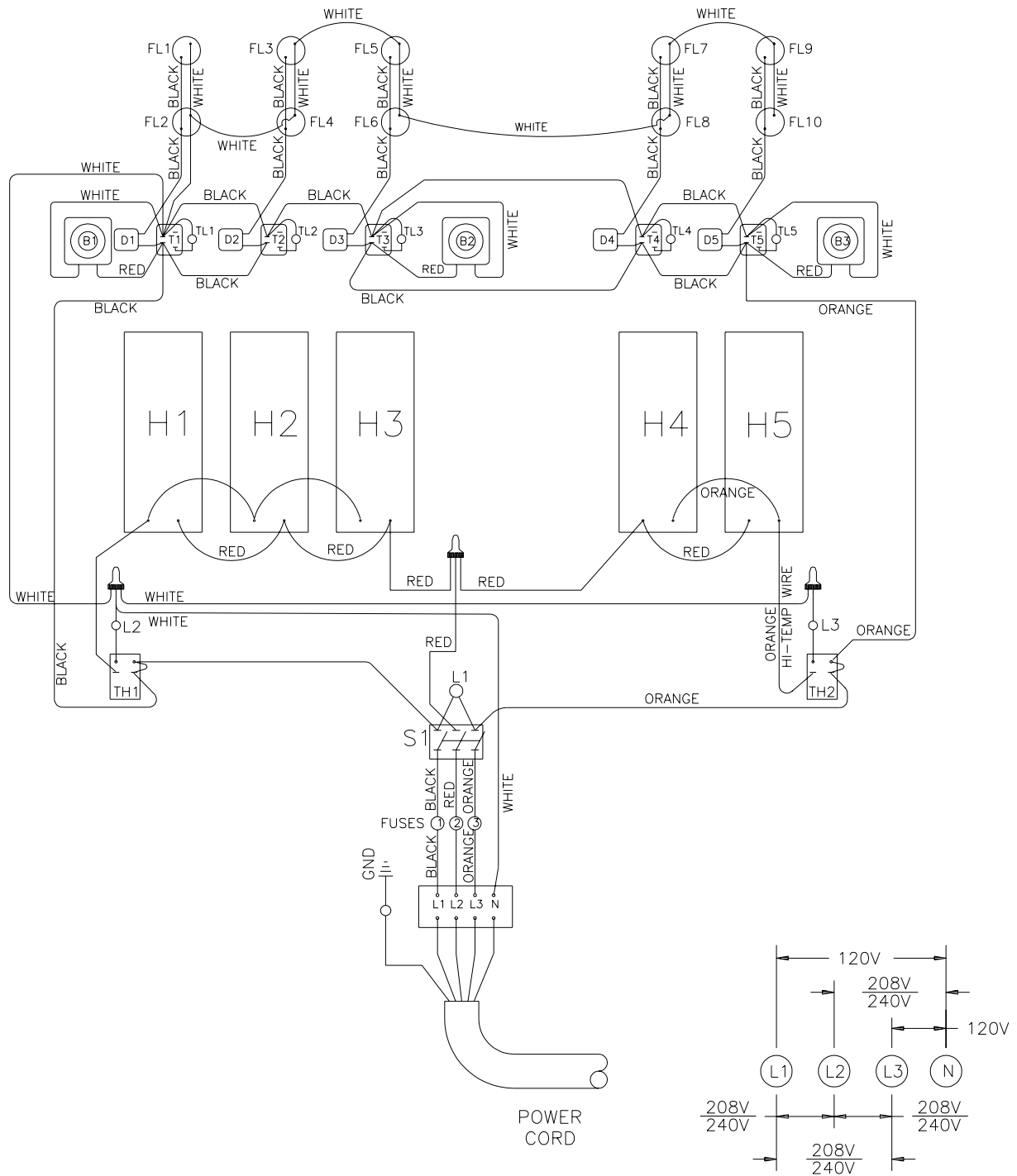
The diagram shows a three-phase system with phases L1, L3, and N. The voltage between L1 and L3 is 120V. The voltage between L1 and N is 208V. The voltage between L3 and N is 240V. A 120V load is connected between L1 and L3.

WIRING DIAGRAM
MODEL HDM-6
120/208/240V-1 PH

14900

Model HDM-6

Three Phase Wiring Diagram:



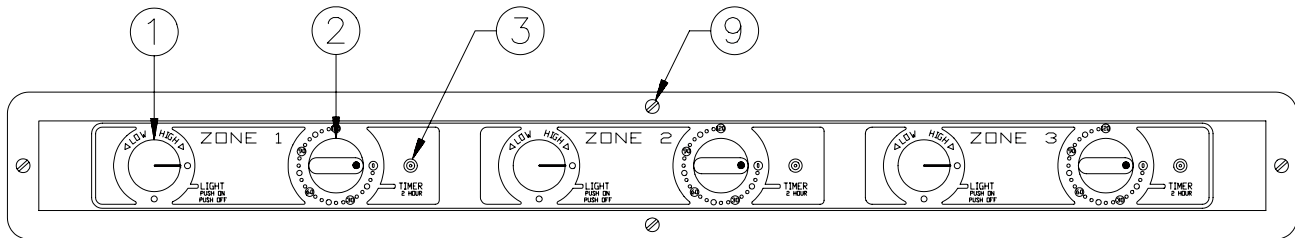
F1, F2, F3 - 20AMP FUSE
 S1 - SWITCH, TRIPLE POLE SINGLE THROW
 B1, B2, B3 - BLOWER FAN
 FL1-FL10 - FLOOD LIGHT
 D1, D2, D3, D4, D5 - DIMMER
 T1, T2, T3, T4, T5 - TIMER
 TL1, TL2, TL3, TL4, TL5 - TIMER LIGHT
 TH1, TH2 - THERMOSTAT
 L1 - POWER ON LIGHT
 L2, L3 - T-STAT ON LIGHT
 H1, H2, H3, H4, H5 - HEATER

WIRING DIAGRAM
 MODEL HDM-6
 120/208V-3 PH
 120/240V-3 PH

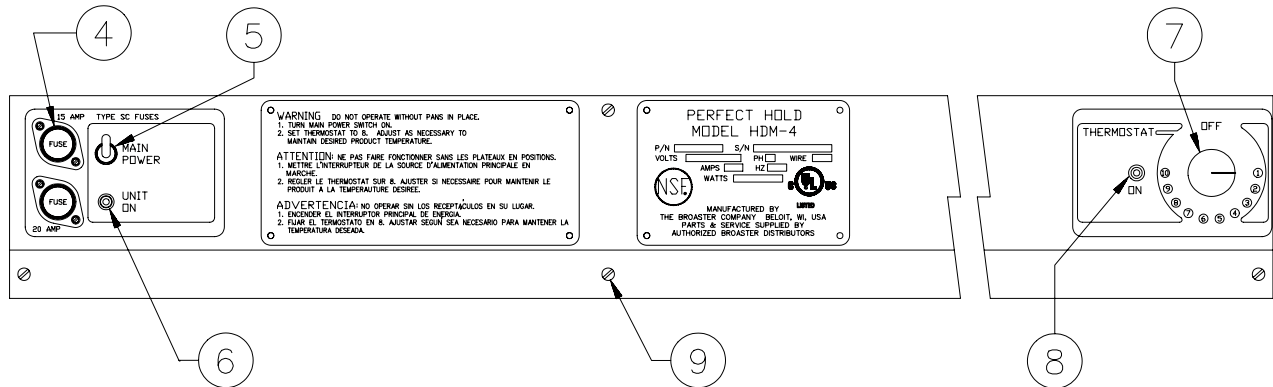
14814

2 - CONTROL PANEL SERVICE

Upper Control Panel:



Lower Control Panel:



1. Display Lamp Dimmer: Push to turn lamps on or off. Rotate to adjust brightness up or down.
2. Timer: Shows time countdown to help determine product freshness.
3. Timer Indicator Light: Illuminates when timer is activated.
4. 15 Amp Fuse and 20 Amp Fuse: 15 amp fuse protects the heating elements and 20 amp fuse protects the heating elements and display lamps.

Note: HDM-6: Three 20 Amp fuses are mounted in the power input box.
5. Main Power Switch: Turns unit on or off.

6. Unit On Indicator Light: Illuminates when main power switch is turned on.
7. Thermostat: Regulates well temperature.
8. Thermostat Indicator Light: Illuminates when thermostat is turned on.

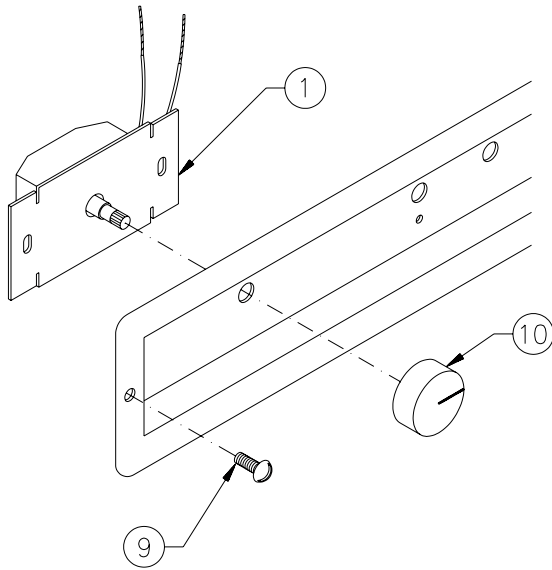
ACCESS FOR SERVICE

1. Disconnect main power supply.
2. Remove screws (9) from desired panel.
3. Pull panel out and down so back is visible.

DISPLAY LAMP DIMMER

Replacement:

1. See ACCESS FOR SERVICE.



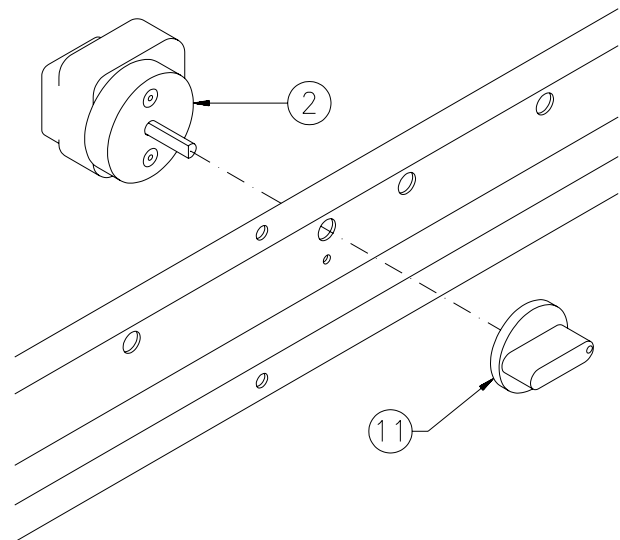
2. Remove dimmer knob (10).
3. Disconnect dimmer wires.
4. Remove mounting screws from the dimmer.
5. Install new dimmer (1) in reverse order. Be sure all wire connections are secure and in their original location.

TIMER

1. See ACCESS for service.
2. Check all terminals and connections. Refer to wiring diagram.
3. Rotate timer knob.
4. With needle nose pliers, disconnect side terminal from timer.
5. Check across side and lower terminals with an ohmmeter. Meter should indicate a closed circuit.

Replacement:

1. See ACCESS FOR SERVICE.

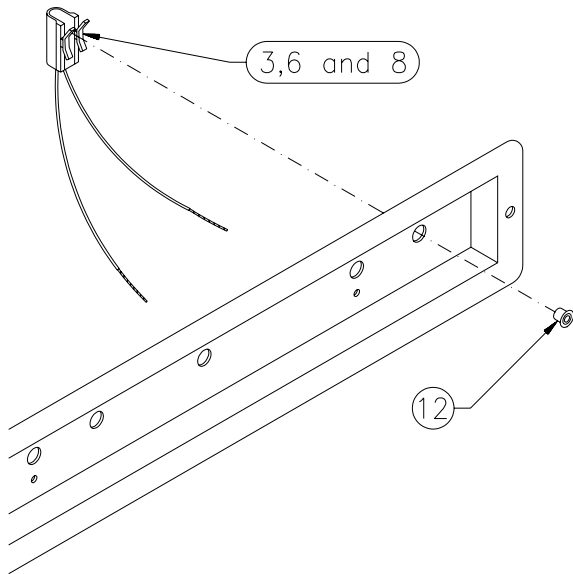


2. Remove timer knob (11).
3. Disconnect timer wires.
4. Remove mounting screws from the timer.
5. Install new timer (2) in reverse order. Be sure all wire connections are secure and in their original location.

INDICATOR LIGHTS

Replacement:

1. See ACCESS FOR SERVICE.



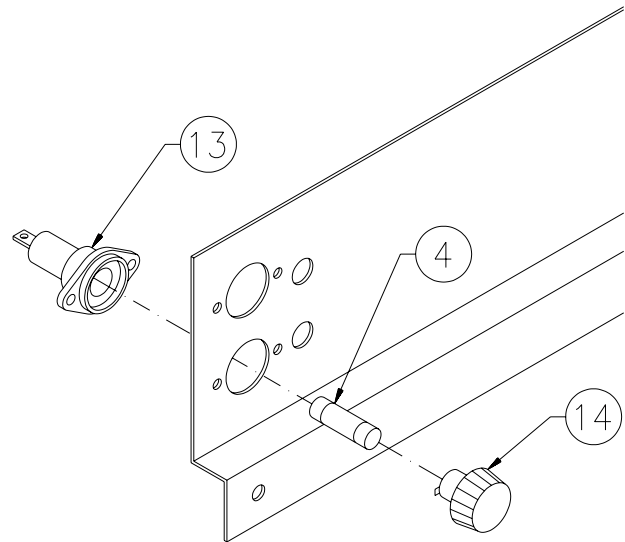
2. Disconnect wires.
3. Push down on light fixture (3,6 and 8) located behind the control panel. Slide fixture toward wire end until lens (12) is free of fixture.
4. Install new indicator light in reverse order. Be sure all wire connections are secure and in their original location.

Note: POWER ON indicator light is 240 volt all other indicator lights are 120 volt.

FUSE AND FUSE HOLDER (HDM-4 Only)

Note: HDM-6 fuses are located in the power input box.

1. See ACCESS FOR SERVICE.



2. Check all terminals and connections. Refer to wiring diagram.
3. With needle nose pliers, disconnect one side terminal from fuse holder (13).
4. Check across two terminals on fuse holder with an ohmmeter. Meter should indicate a closed circuit. If not, fuse may be faulty.
5. Remove fuse cap (14) and remove fuse (4). Check across fuse with an ohmmeter. Meter should indicate a closed circuit.

Note: Replace fuse with correct amperage fuse. See label.

Fuse Holder Replacement:

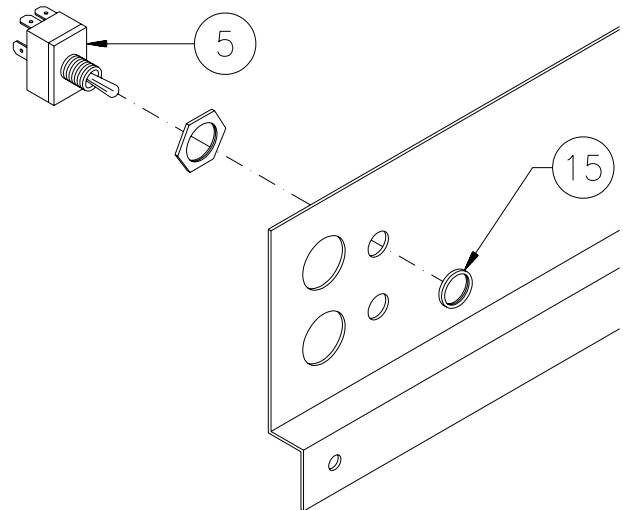
1. See ACCESS FOR SERVICE.
2. Remove fuse (4) from fuse holder (13).
3. Remove wires from fuse holder.
4. Remove mounting screws then remove fuse holder.
5. Install new fuse holder in reverse order. Be sure all wire connections are secure and in their original location.

MAIN POWER SWITCH

1. See ACCESS FOR SERVICE.
2. Check all terminals and connections. Refer to wiring diagram.
3. With needle nose pliers, disconnect two terminals (three on HDM-6) from top of power switch.
4. Turn power switch on.
5. Check across one top terminal and center terminal in line with top terminal with an ohmmeter. Meter should indicate a closed circuit.
6. Check across remaining terminals with an ohmmeter. Meter should indicate a closed circuit. If not, power switch is faulty.

Power Switch Replacement:

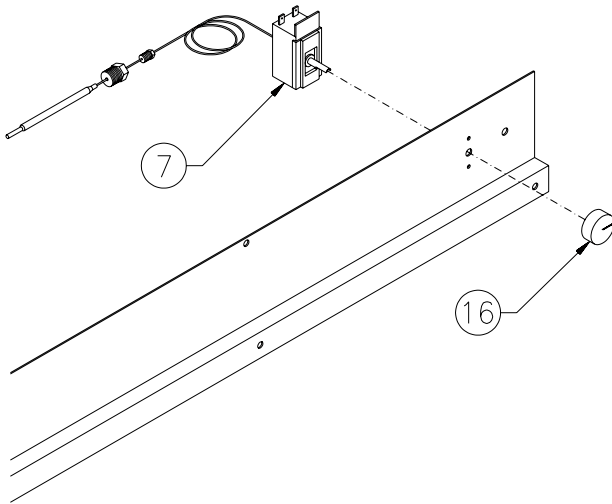
1. See ACCESS FOR SERVICE.



2. Disconnect wires.
3. Remove knurled nut (15) then remove power switch (5).
4. Install new power switch in reverse order. Be sure all wire connections are secure and in their original location.

THERMOSTAT

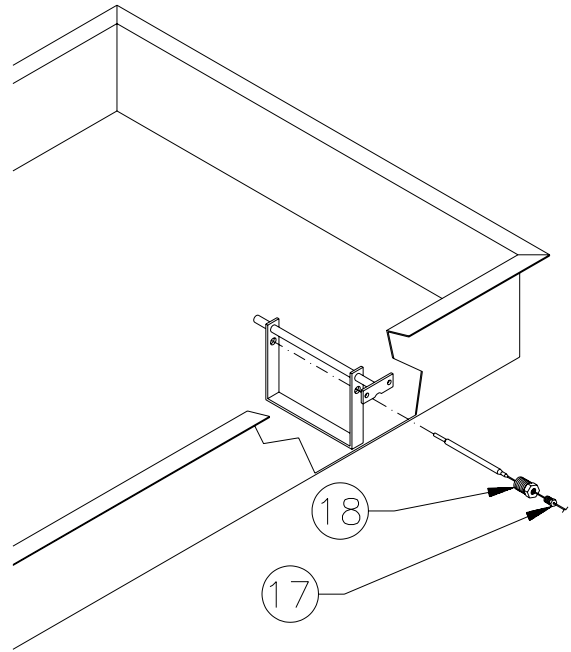
1. See ACCESS FOR SERVICE.



2. Check all terminals and connections. Refer to wiring diagram.
3. With needle nose pliers, disconnect one heater terminal from thermostat (7).
4. Rotate thermostat knob to any number greater than "0". Check across two smaller terminals on thermostat with an ohmmeter. Meter should indicate a closed circuit. If not thermostat is faulty.

Replacement:

1. See ACCESS FOR SERVICE.
2. Remove thermostat knob (16).
3. Disconnect wires from thermostat (7).
4. Remove mounting screws from the thermostat.



5. Loosen small cinch nut (17).
6. Remove large capillary nut (18).
7. Slide bulb out of bulb guard.

Installation:

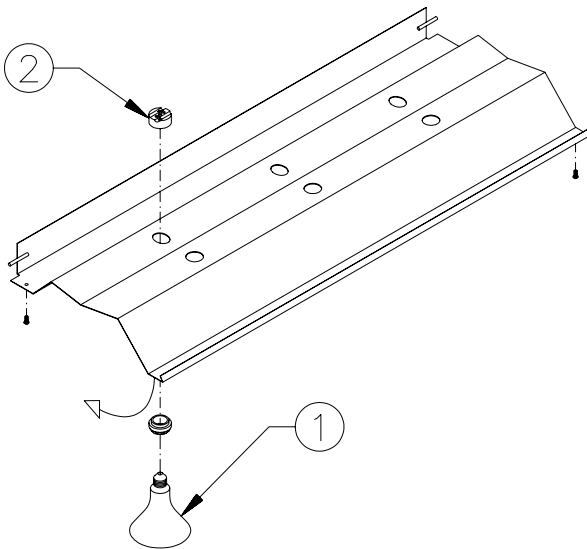
1. Slide bulb into bulb guard.
2. Install large capillary nut and tighten.
3. Install small cinch nut finger tight. Turn 1/4 with a wrench. DO NOT over-tighten small cinch nut, thermostat damage may occur.

3 - DISPLAY LAMPS, HEATERS AND COOLING FANS

DISPLAY LAMP SOCKETS

Replacement:

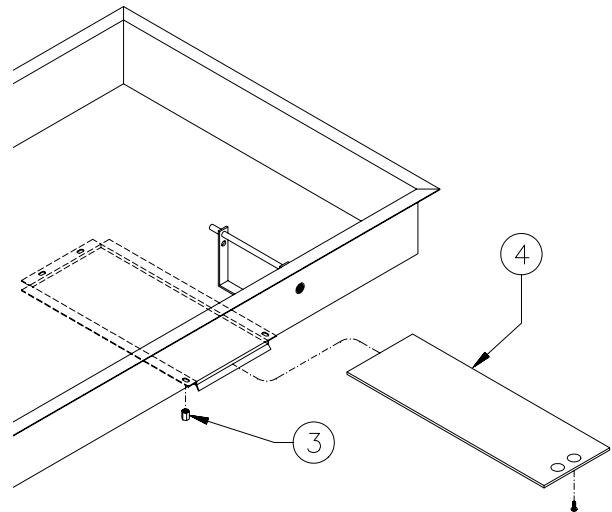
1. Disconnect main power supply.



2. Remove display lamps (1).
3. Remove screws from awning.
4. Pivot awning down and toward control side of the unit.
5. Remove wires from heat lamp socket (2).
6. Unscrew two halves of socket to remove.
7. Install new socket in reverse order. Be sure all wire connections are secure and in their original location.

HEATERS

1. Disconnect main power supply.
2. Remove mounting screws from lower control panel.



3. See THERMOSTAT Replacement. Slide thermostat bulb out of bulb guard.
4. Lift, control panel side, edge of the well up approximately 2 inches. Using a block of wood, block the well up.
5. Move aside insulation then loosen element plate nuts (3).
6. Slide heater (4) out from under the well as far as possible.
7. Check all terminals and connections. Refer to wiring diagram.
8. Disconnect one wire from the heater.
9. Check across two heater connections with an ohmmeter. Meter should indicate a closed circuit.

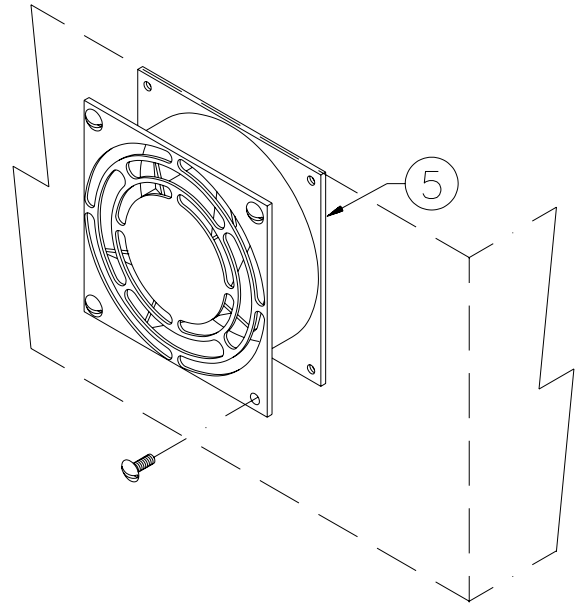
Replacement:

1. Disconnect main power supply.
2. Remove mounting screws from lower control panel.
3. See THERMOSTAT Replacement. Slide thermostat bulb out of bulb guard.
4. Lift, control panel side, edge of the well up approximately 2 inches. Using a block of wood, block the well up.
5. Move aside insulation then loosen element plate nuts (3).
6. Slide heater (4) out from under the well as far as possible. Remove wires from the heater.
7. Install in reverse order. Be sure all wire connections are secure and in their original location.

COOLING FAN

Two cooling fans (HDM-4) or three fans (HDM-6) cool upper component cavity.

1. Disconnect main power supply.
2. Remove screws from upper control panel.
3. Pull panel out and down so back is visible.



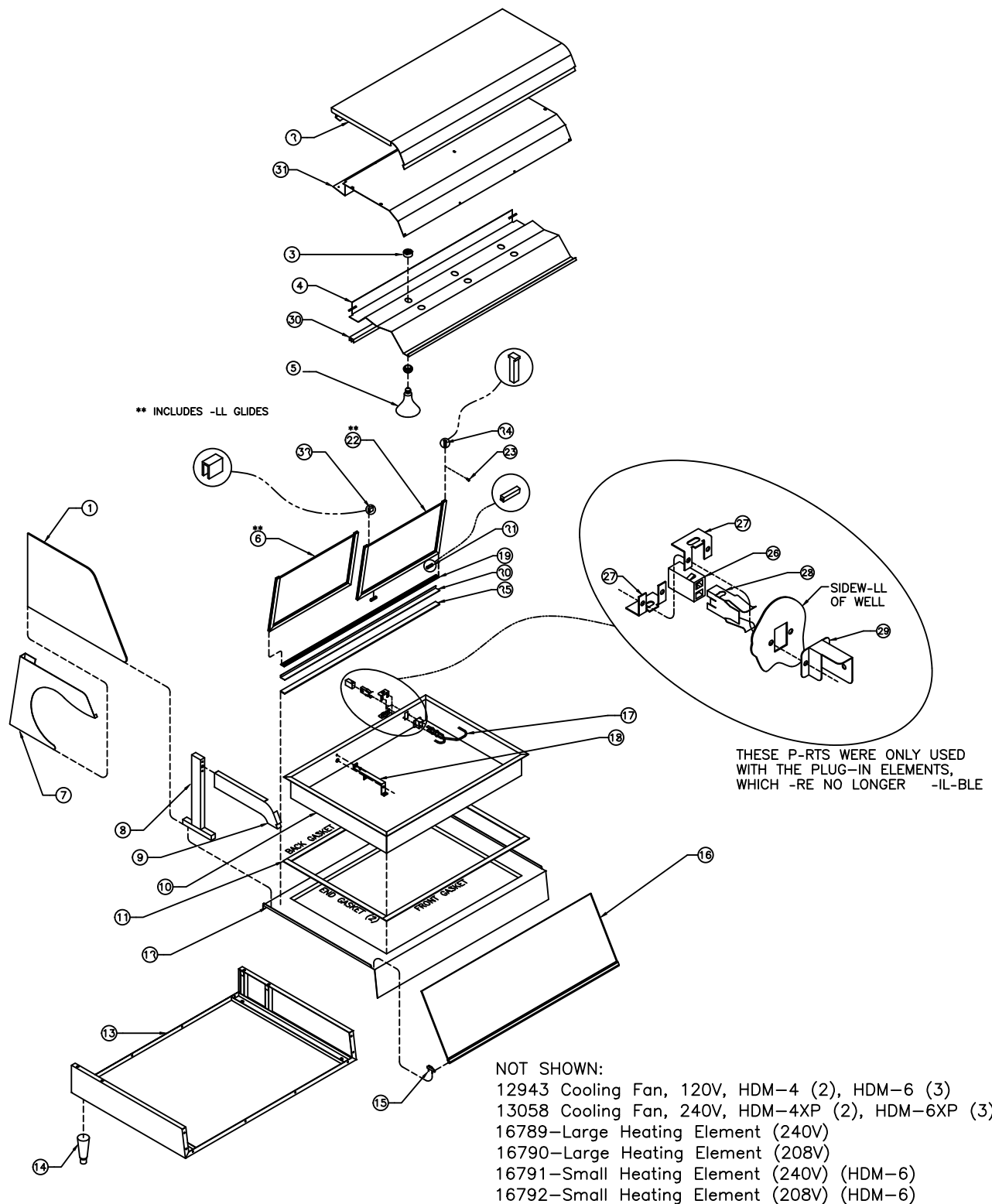
4. Disconnect one wire from suspected fan (5).
5. Check across two wires with an ohm-meter. Meter should indicate a closed circuit. If not, fan is faulty.

Replacement:

1. Disconnect main power supply.
2. Disconnect cooling fan wires.
3. Remove mounting screws from the fan then remove fan through control panel opening.
4. Install in reverse order. Be sure all wire connections are secure and in their original location.

4 - REPLACEMENT PARTS

Outer Parts:



Description	Item No.	HDM-4		HDM-6	
		Qty Used	Part No.	Qty Used	Part No.
Side Glass	1	2	14276	2	14276
Awning Cover	2	1	14251	1	14787
Light Socket	3	6	10969	10	10969
Light Bar Weldment	4	1	15300	1	15312
Heat Lamp 120V	5	6	13619	10	13619
Heat lamp 220V export units	5	6	Must be purchased locally	10	Must be purchased locally
LH Door Assembly**	6 ^a	1	14266	1	14766
Upright Cover*	7	1 Each	14521(LH) 14522(RH)	1 Ea	14521(LH) 14522(RH)
Upright Assembly*	8	1 Each	15296(RH) 15298(LH)	1 Ea	15298(LH) 15303(RH)
End Cap	9	1 Each	14248(LH) 14249(RH)	1 Ea	14248(LH) 14249(RH)
Well	10	1	15354	1 Ea	15354(4 foot) 15356(2 foot)
Well Gasket	11	1 2 1	4' Front 18268 End 18269 4' Back 18270	1 3 1 1 1	4' Front 18268 End 18269 4' Back 18270 2' Front 18271 2' Back 18272
Top Weldment	12	1	14226	2	14753
Base Weldment	13	1	14224	1	14751
Leg (Counter Top Model Only)	14	4	10110	6	10110
LH Hinge RH Hinge (shown)	15	1 Each	14270 14271	1 Ea	14270 14271
Front Window Assembly	16	1	14296	1	14776
Large Heating Element	17a	1	16789 (240V)	1	16789 (240V)
Large Heating Element	17b	1	16790 (208V)	1	16790 (208V)
Small Heating Element	17c	0	N/A	1	16791 (240V)
Small Heating Element	17d	0	N/A	1	16792 (208V)
Probe Guard Weldment	18	1	15328	2	15328
Bottom Door Guide	19	1	14261	1	14764
Back Door Retainer	20	1	15331	1	15332
Bottom Door Glide	21	4	14258	4	14258
RH Door Assembly**	22 ^a	1	14265	1	14765
Drive Screw	23	4	15362	4	15362
Top Door Glide (handle end)	24	2	14257	2	14257
Cooling Fan	Not Shown	2	12943	3	12943
Door Catch Spacer	25	1	15333	1	15334

Cont'd on next page

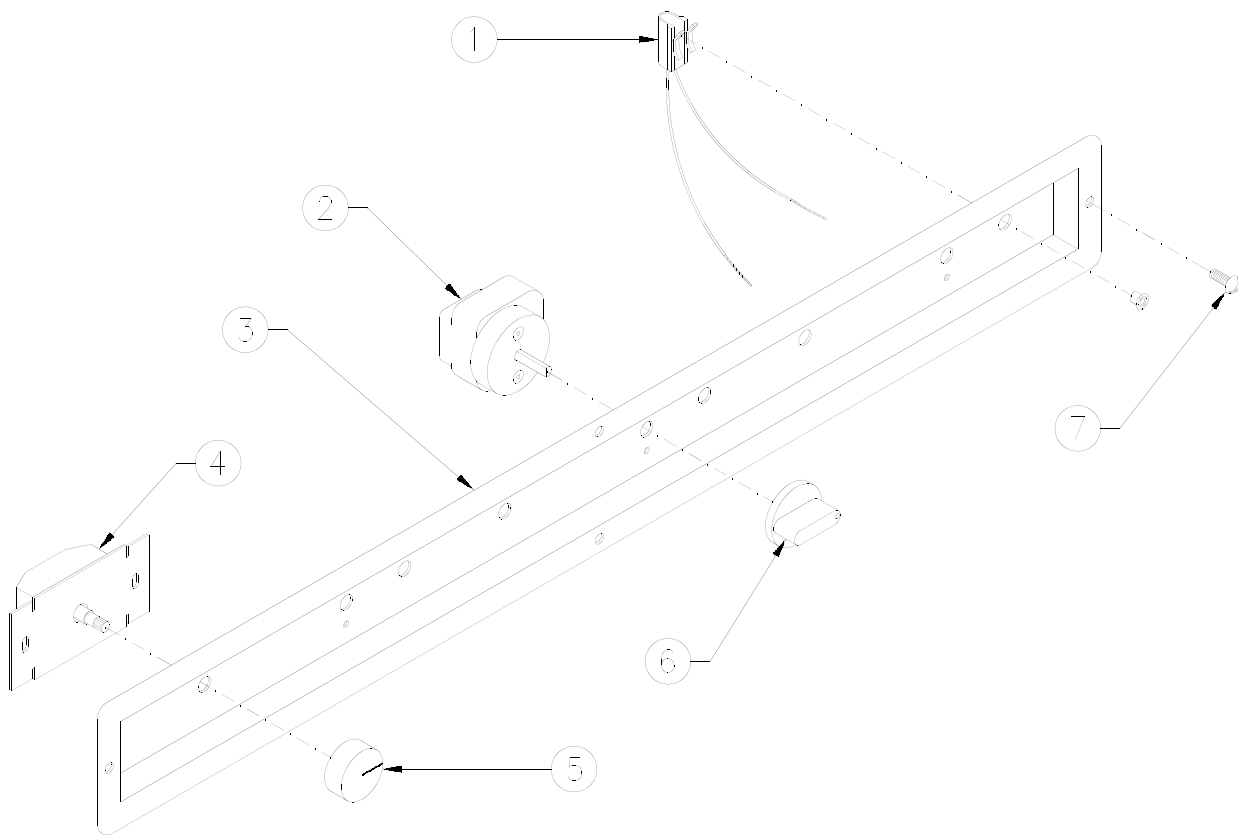
Description	Item No.	HDM-4		HDM-6	
		Qty Used	Part No.	Qty Used	Part No.
Receptacle	26	1	16103	2	16103
Bracket-Receptacle	27	2	15326	4	15326
Clip-Receptacle	28	1	15348	2	15348
Guard-Receptacle	29	1	15327	2	15327
Upper Door Guide	30	1	14262	1	14791
Inner Air Duct	31	1	15295	1	15310
Top Door Glide (Opp handle end)	32	2	15428	2	15428

*As viewed from the back of the unit.

** Includes all glides.

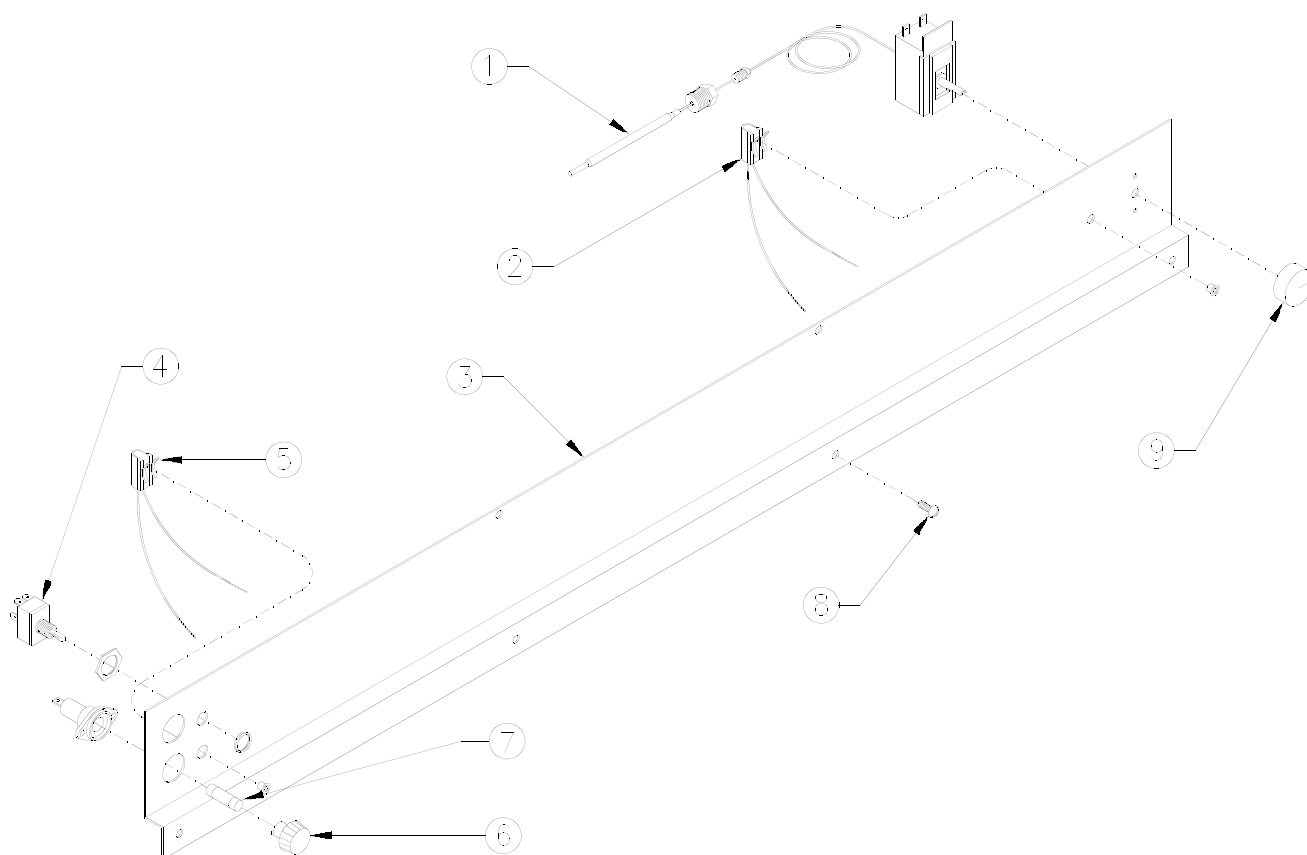
^a This designation is as viewed from the front of the unit.

Upper Control Panel:



Description	Item No.	HDM-4		HDM-6	
		Qty Used	Part No.	Qty Used	Part No.
Indicator Light	1	3	14340	5	14340
Timer	2	3	12911	3	12911
Dimmer Panel	3	1	14337	1 1	14337(long) 14803(short)
Dimmer	4	3	14341	5	14341
Knob	5	3	13616	5	13616
Timer knob	6	3	12912	5	12912
Screw	7	4	14963	8	14963

Lower Control Panel:



Description	Item No.	HDM-4		HDM-6	
		Qty Used	Part No.	Qty Used	Part No.
Thermostat	1	1	14308	2	14308
Red Light (120V)	2	1	10353	2	10353
Control Panel	3	1	14274	1	14782
Toggle Switch	4	1	14317	1	14772
Red Light (220V)	5	1	10355	1	10355
Fuse Holder	6	1 1	11007(15 Amp) 14509(20 Amp)	*3	14509 (20Amp)
Fuse	7	1 1	11008(15 Amp) 14510(20 Amp)	*3	14510 (20Amp)
Screw	8	6	14963	12	14963
Knob - Thermostat	9	1	14442	2	14442
Ceramic Wire Nut	Not Shown	3	14911	3	14911

* Located in power input box on HDM-6 only.



Broaster Company
2855 Cranston Road, Beloit, WI 53511-3991
608/365-0193
broaster.com