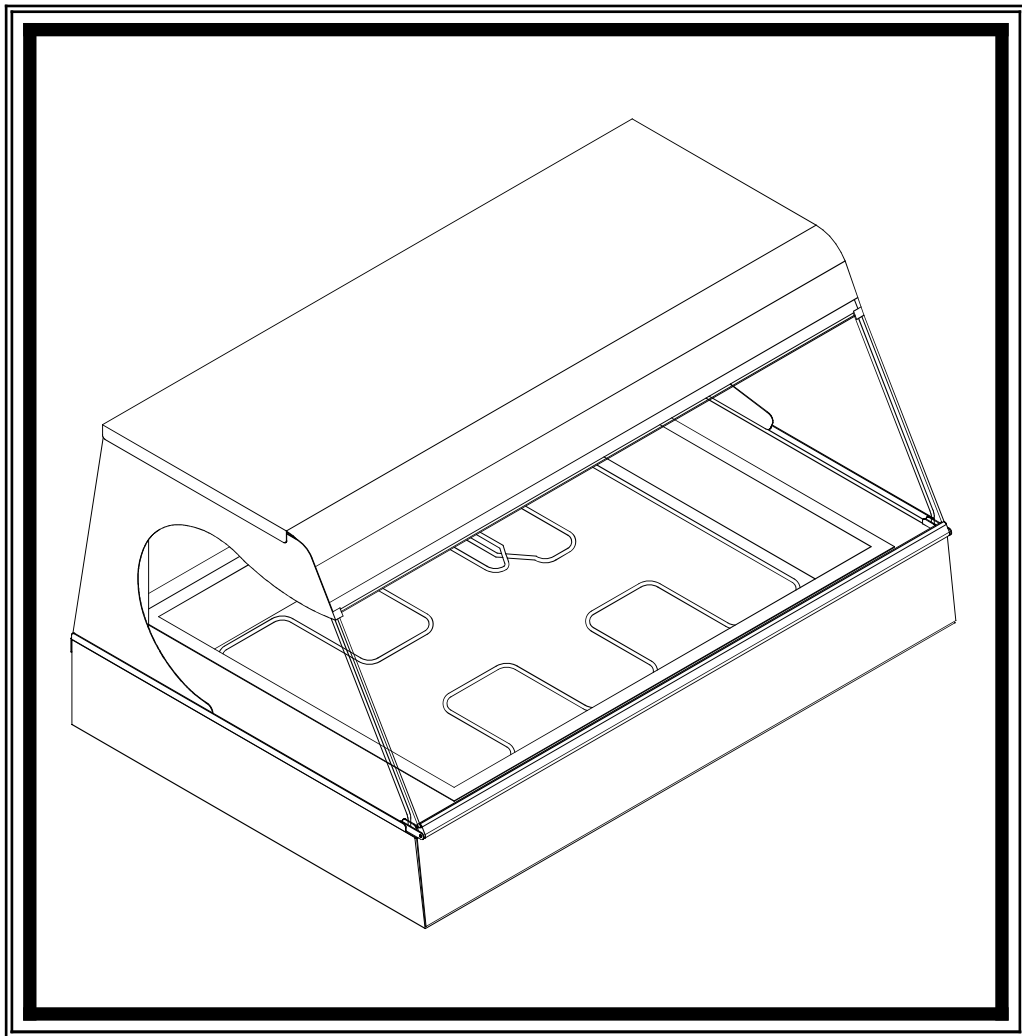


BROASTER[®]
EQUIPMENT

SERVICE AND PARTS MANUAL
BROASTER[®] HDM-4 AND HDM-6
PERFECT HOLD[™] DELI CASE

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



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

WARNING

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:

DANGER

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

WARNING

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

CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in minor injury, property damage or both.

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

If there is a power failure, turn power switch OFF. DO NOT attempt to operate unit during a power failure.

WARNING

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.

WARNING

Rags or papers 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.

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1 - ELECTRIC POWER SUPPLY



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.

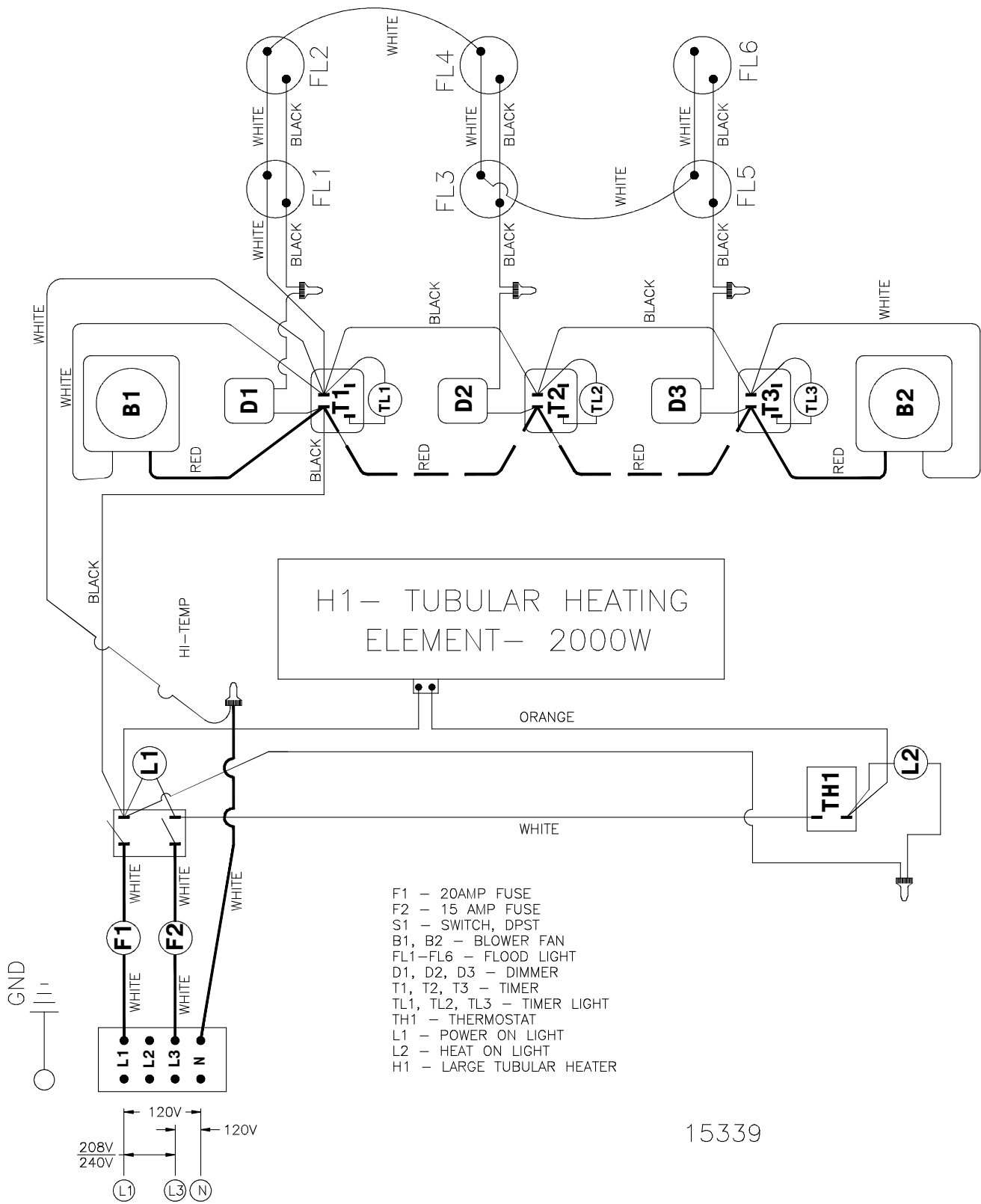
- If no component operates, check main power supply. Be sure main circuit breaker is ON and main fuses are good.
- Correct voltages are described in chart below.
- When servicing the unit, always check the data plate to make certain proper parts are used and the correct service rendered.

Perform the following if any part of the unit will not turn on:

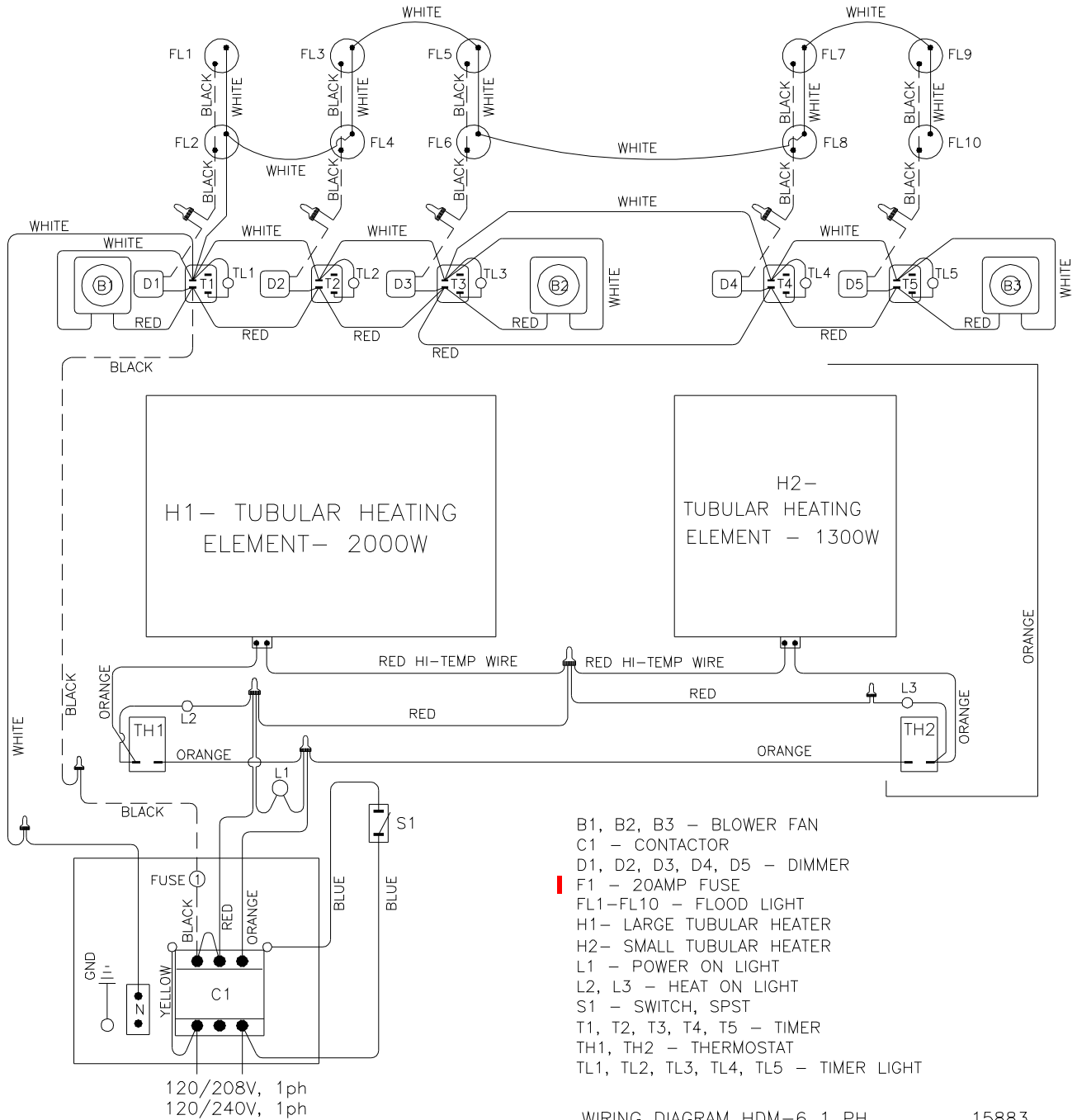
1. Disconnect main power supply.
2. Be sure all connections are tight.
3. See chart below to confirm proper input power.

DELI CASE MODEL	VOLTS	HZ	WATTS	AMPS	PLUG CONFIG	PHASE
HDM-4 - 4 ft Complete Deli Case	120/240	60	2900	15	4-wire grounded	1 PH
HDM-4 - 4 ft Countertop Deli Case	120/240	60	2900	15	4-wire grounded	1 PH
HDM-4 - 4 ft Complete Deli Case	120/208	60	2900	16	4-wire grounded	1 PH
HDM-4 - 4 ft Countertop Deli Case	120/208	60	2900	16	4-wire grounded	1 PH
HDM-6 - 6 ft Complete Deli Case	120/208	60	4500	16	5-wire grounded	3 PH
HDM-6 - 6 ft Countertop Deli Case	120/208	60	4500	16	5-wire grounded	3 PH
HDM-6 - 6 ft Complete Deli Case	120/240	60	4500	15	5-wire grounded	3 PH
HDM-6 - 6 ft Countertop Deli Case	120/240	60	4500	15	5-wire grounded	3 PH
HDM-6 - 6 ft Complete Deli Case	120/208 /240	60	4500	30	4-wire grounded	1 PH
HDM-6 - 6 ft Countertop Deli Case	120/208 /240	60	4500	30	4-wire grounded	1 PH

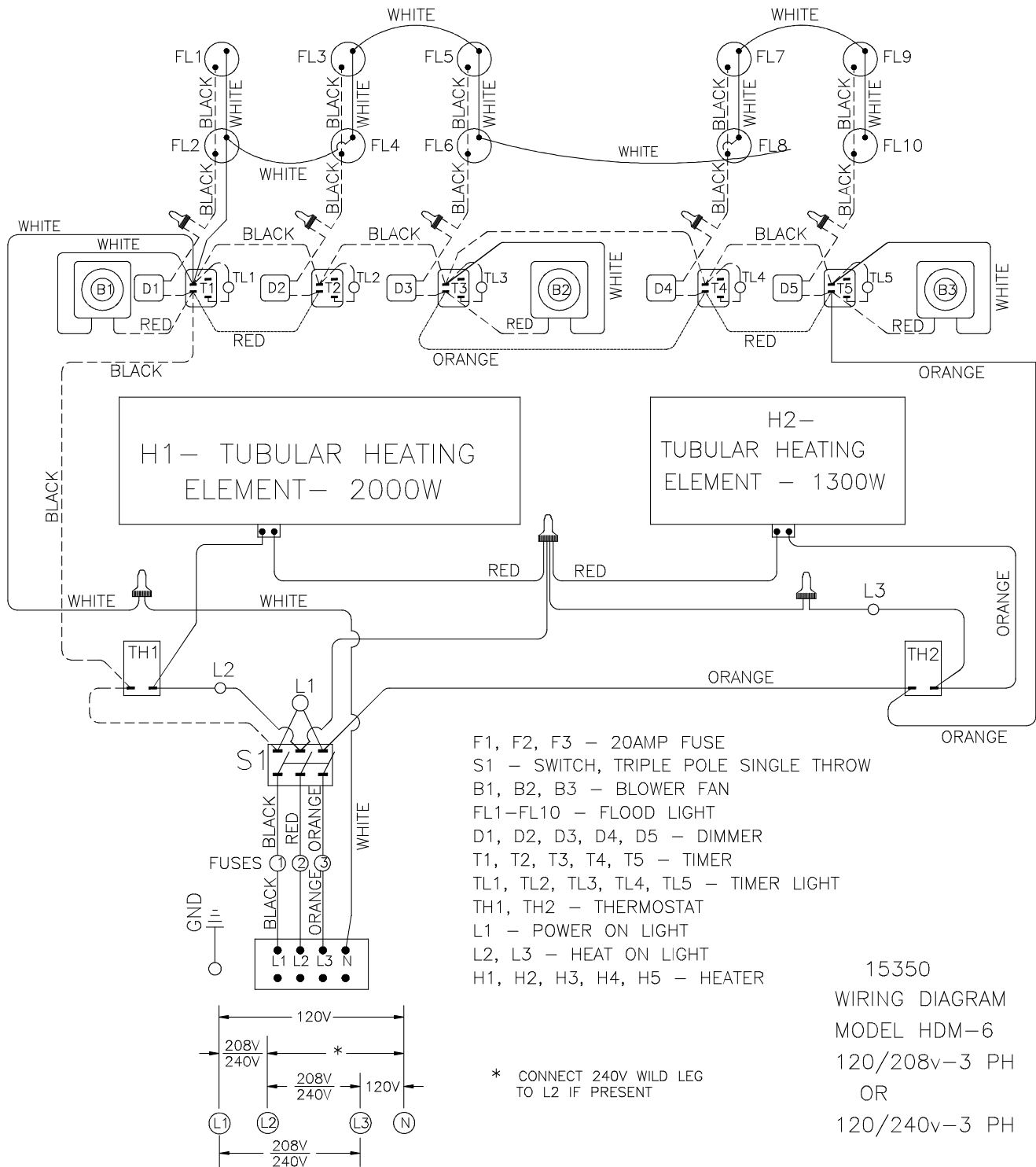
Model HDM-4 Wiring Diagram:



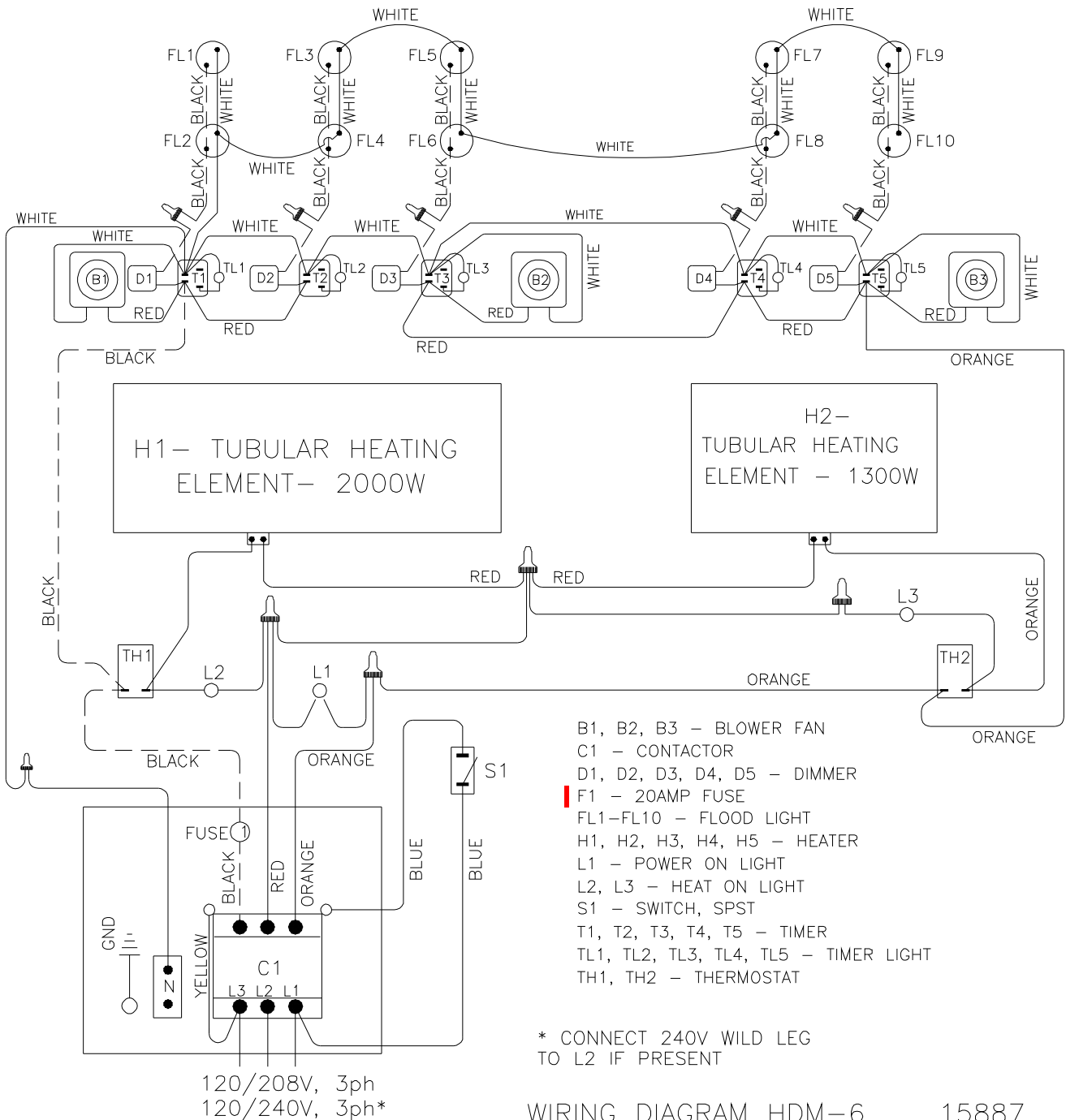
Model HDM-6 Single Phase Wiring Diagram: (EFFECTIVE BD6A40)



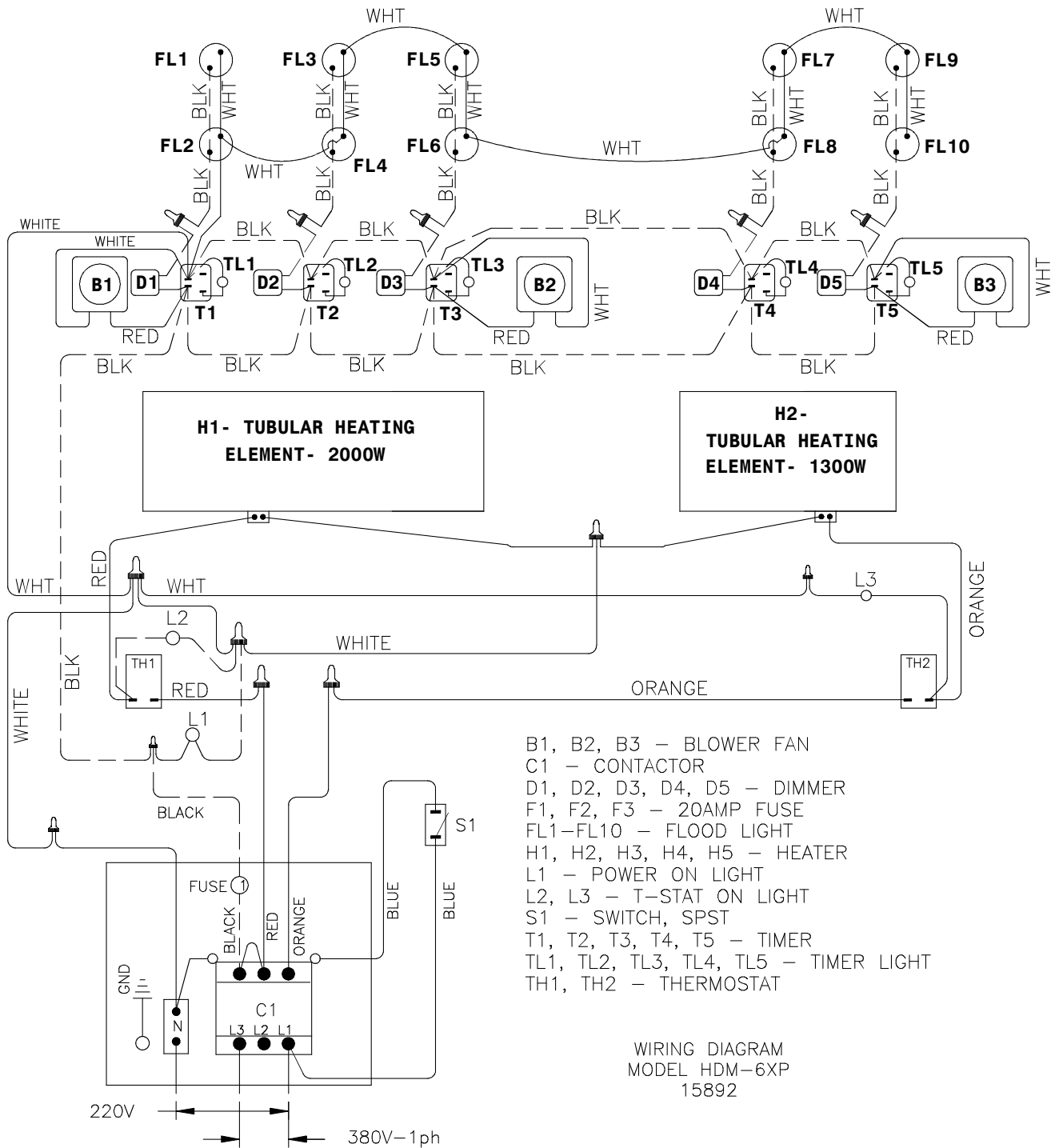
Model HDM-6 Three Phase Wiring Diagram:



Model HDM-6 Three Phase Wiring Diagram: (EFFECTIVE BD6A40)

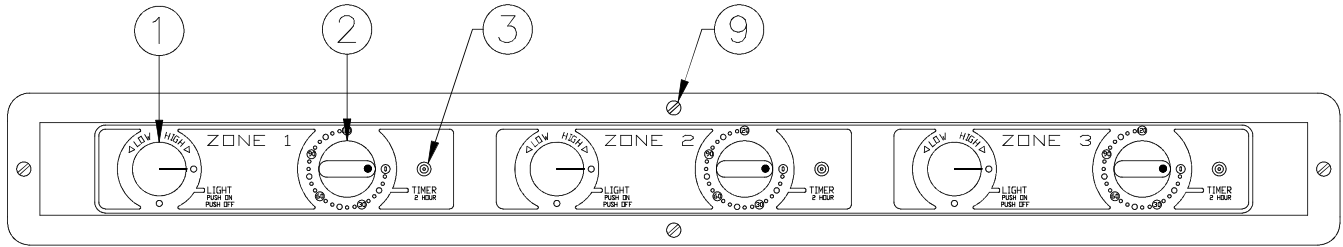


Model HDM-6XP

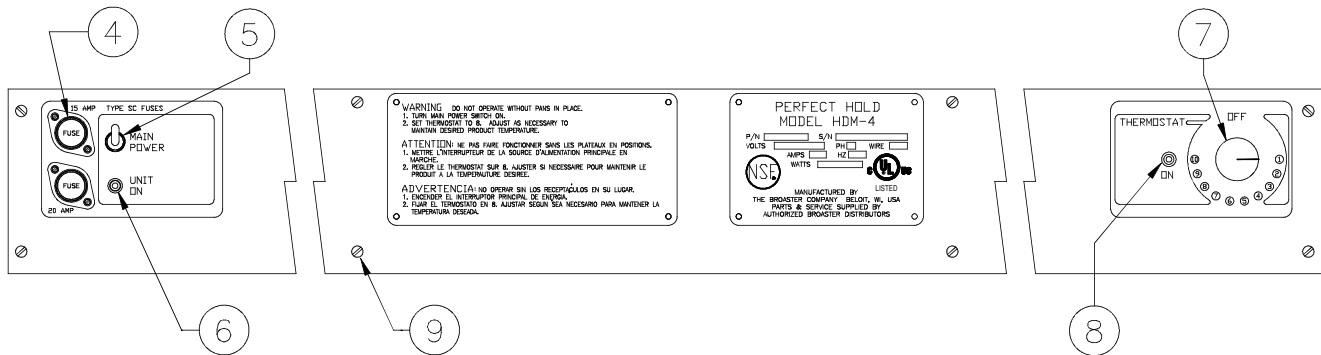


2 - CONTROL PANEL SERVICE

Upper Control Panel:



Lower Control Panel:



1. Display Lamp Dimmer: Push to turn lamps on or off. Rotate to adjust upper heating and 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.

NOTICE 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. (Qty-2 on HDM-6)
8. Thermostat Indicator Light: Illuminates when thermostat is calling for heat.

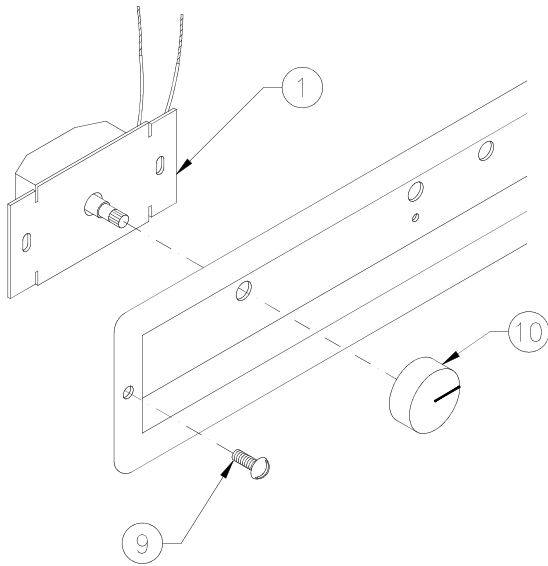
ACCESS FOR SERVICE

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.



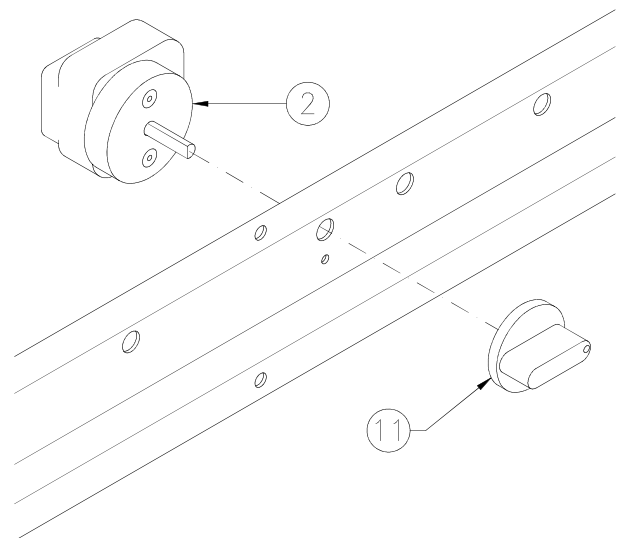
2. Remove dimmer knob (10).
3. Disconnect dimmer wires.
4. Remove mounting screws from the dimmer.
5. Install new dimmer (1) in reverse order. Be sure all wire connections are secure and in their original location.

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.

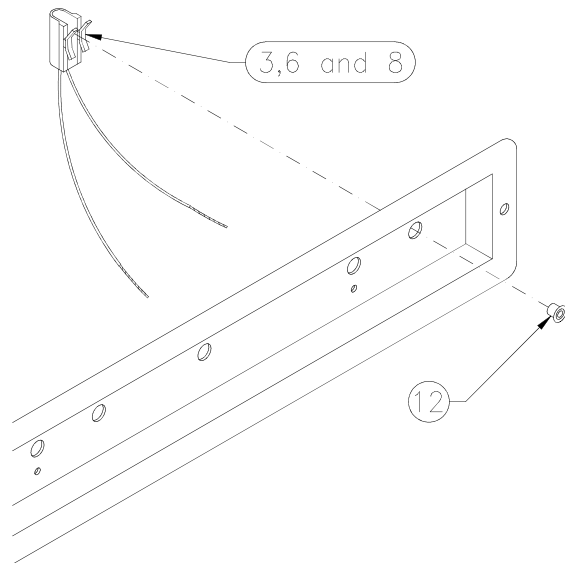


2. Remove timer knob (11).
3. Disconnect timer wires.
4. Remove mounting screws from the timer.
5. Install new timer (2) in reverse order. Be sure all wire connections are secure and in their original location.

INDICATOR LIGHTS

Replacement:

1. See ACCESS FOR SERVICE.



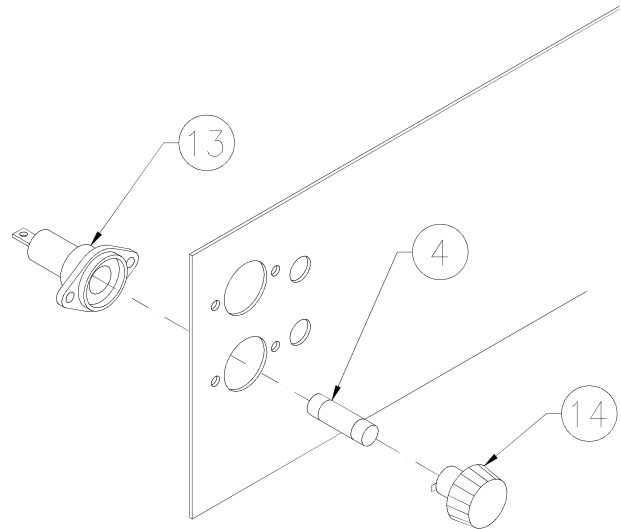
2. Disconnect wires.
3. Push down on light fixture (3, 6 and 8) located behind the control panel. Slide fixture toward wire end until lens (12) is free of fixture.
4. Install new indicator light in reverse order. Be sure all wire connections are secure and in their original location.

NOTICE POWER ON indicator light and THERMOSTAT indicator light are 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.

NOTICE Replace fuse with correct amperage fuse. See label.

Fuse Holder Replacement:

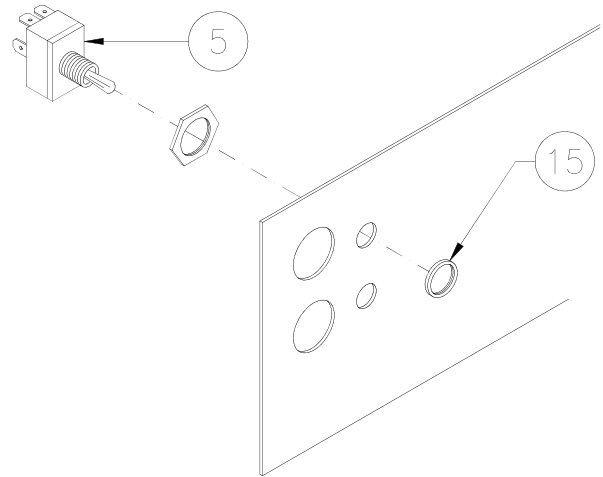
1. See ACCESS FOR SERVICE.
2. Remove fuse (4) from fuse holder (13).
3. Remove wires from fuse holder.
4. Remove mounting screws then remove fuse holder.
5. Install new fuse holder in reverse order. Be sure all wire connections are secure and in their original location.

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:

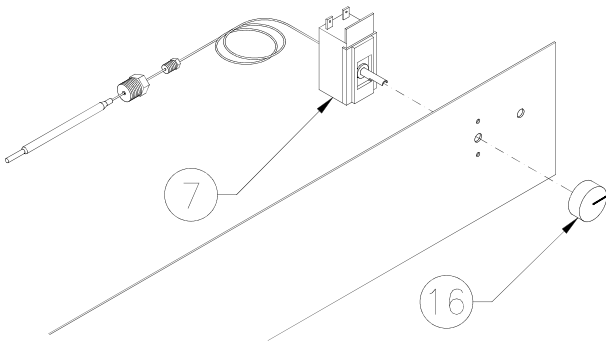
1. See ACCESS FOR SERVICE.



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

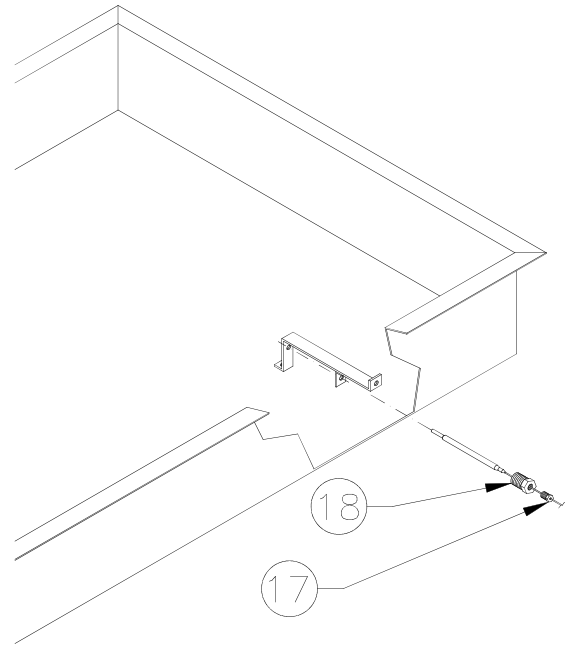
1. See ACCESS FOR SERVICE.



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:

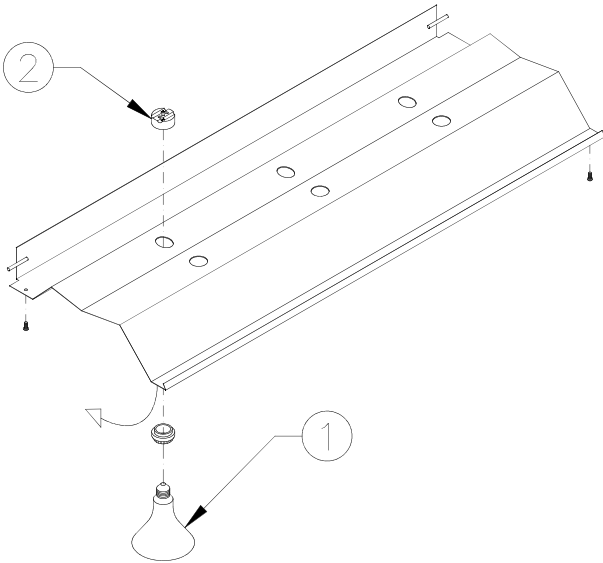
1. Slide bulb into bulb guard.
2. Install large capillary nut and tighten.
3. Install small cinch nut finger tight. Turn 1/4 with a wrench. DO NOT over-tighten small cinch nut, thermostat damage may occur.

3 - DISPLAY LAMPS, HEATERS AND COOLING FANS

DISPLAY LAMP SOCKETS

Replacement:

1. Disconnect main power supply.

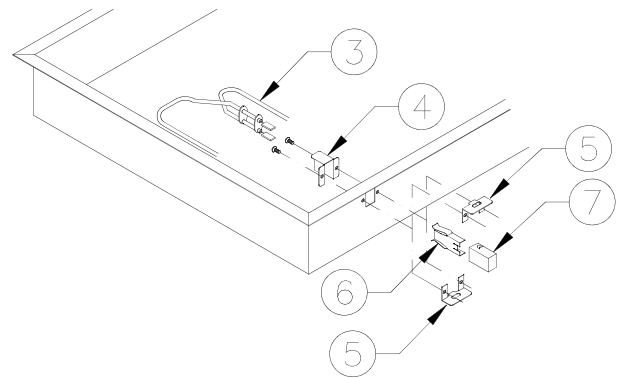


2. Remove display lamps (1).
3. Remove screws from awning.
4. Pivot awning down and toward control side of the unit.
5. Remove wires from heat lamp socket (2).
6. Unscrew two halves of socket to remove.
7. Install new socket in reverse order. Be sure all wire connections are secure and in their original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

HEATING ELEMENT RECEPTACLES

Replacement:

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



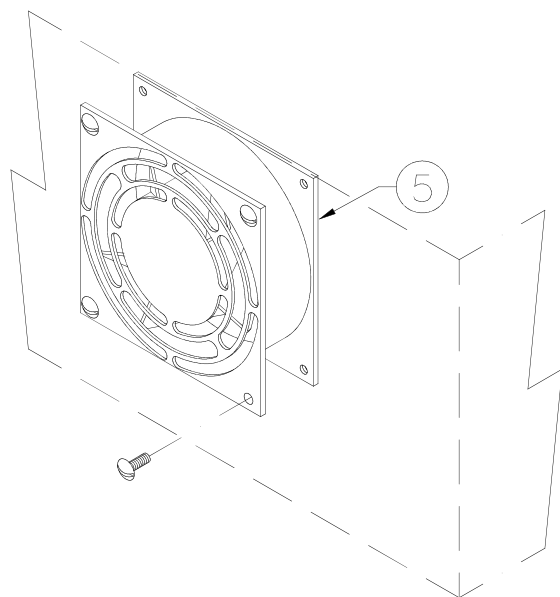
3. Unplug element(s) (3) from receptacle(s) and remove from well.
4. Disconnect wires leading to receptacle. Note that wires cannot be removed from receptacle housing and must be disconnected from the opposite end (wire nut or quick connect terminal).
5. From inside of well, remove the 2 screws holding receptacle assembly in place.
6. Remove retaining guard (4) by sliding upwards until it is free.
7. Receptacle assembly can now be pushed out from the inside of the well and removed.

8. Receptacle mounting brackets (5) will come apart once assembly is out of well. Note that slots in receptacle bracket and receptacle clip line up with tabs on receptacle.
9. Receptacle clip (6) can be removed by pulling side tabs open slightly while separating it from the receptacle (7).
10. To replace receptacle assembly, follow the steps above in reverse order.

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.



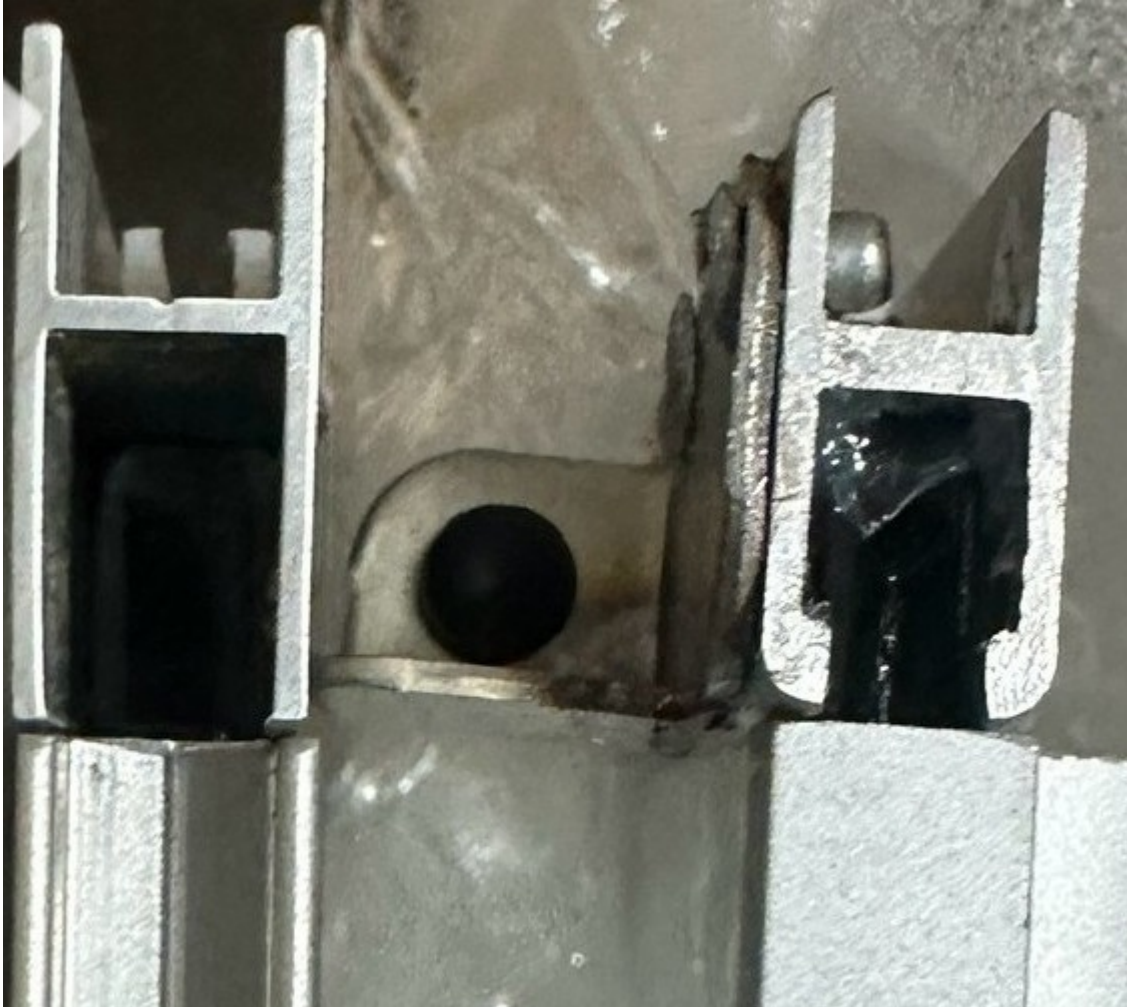
4. Disconnect one wire from suspected fan (5).
5. Check across two wires with an ohmmeter. Meter should indicate a closed circuit. If not, fan is faulty.

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.

A

B



Replacing the glide on the bottom rail of the door, depends on the shape of the rail.

If the bottom rail looks like fig. **A** then the replacement part is glide P/N 18369.
If the bottom rail looks like fig. **B** then the replacement part is glide P/N 14258.

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	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, 18369*	4	14258, 18369*
RH Door Assembly**	22	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

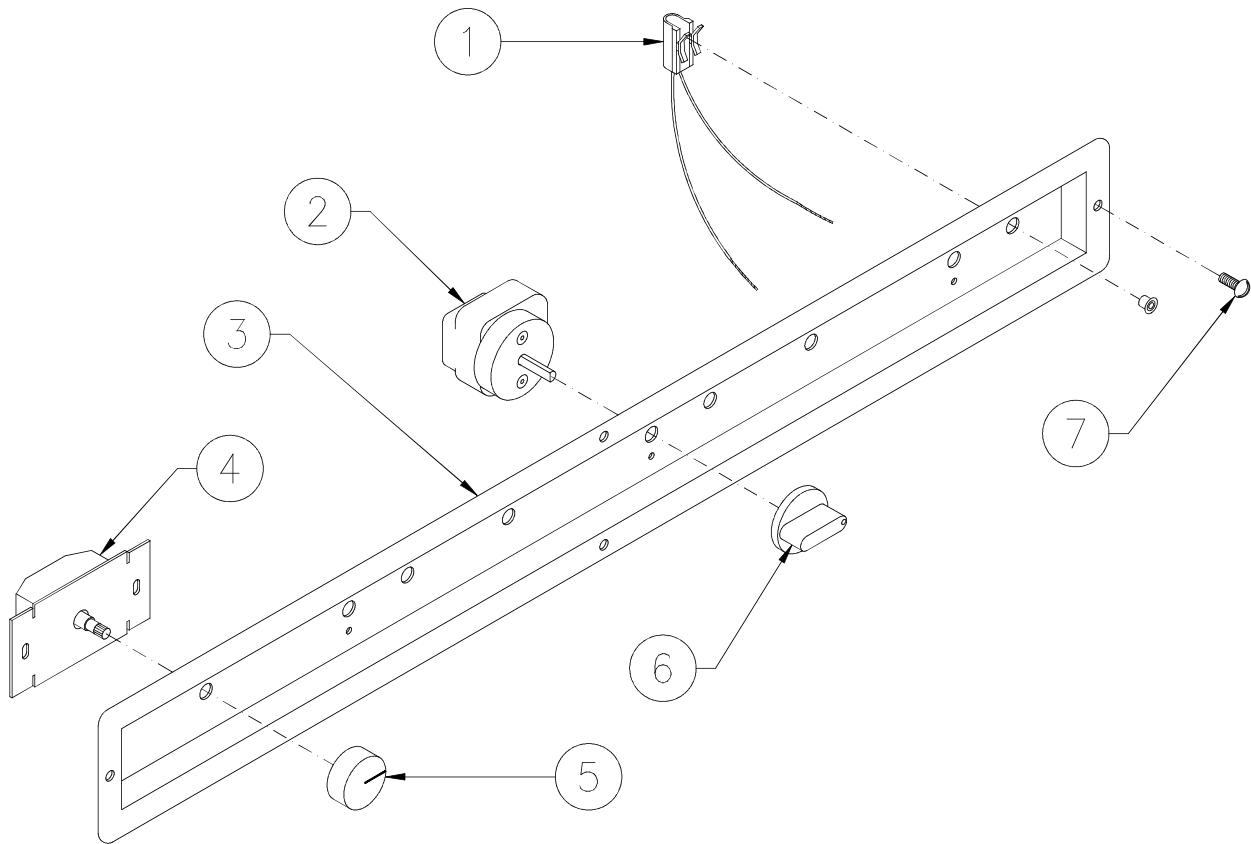
* If built after 12/01/2024 or later.

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

** Includes all glides.

All parts described as LH or RH are referenced from the operator's point of view.

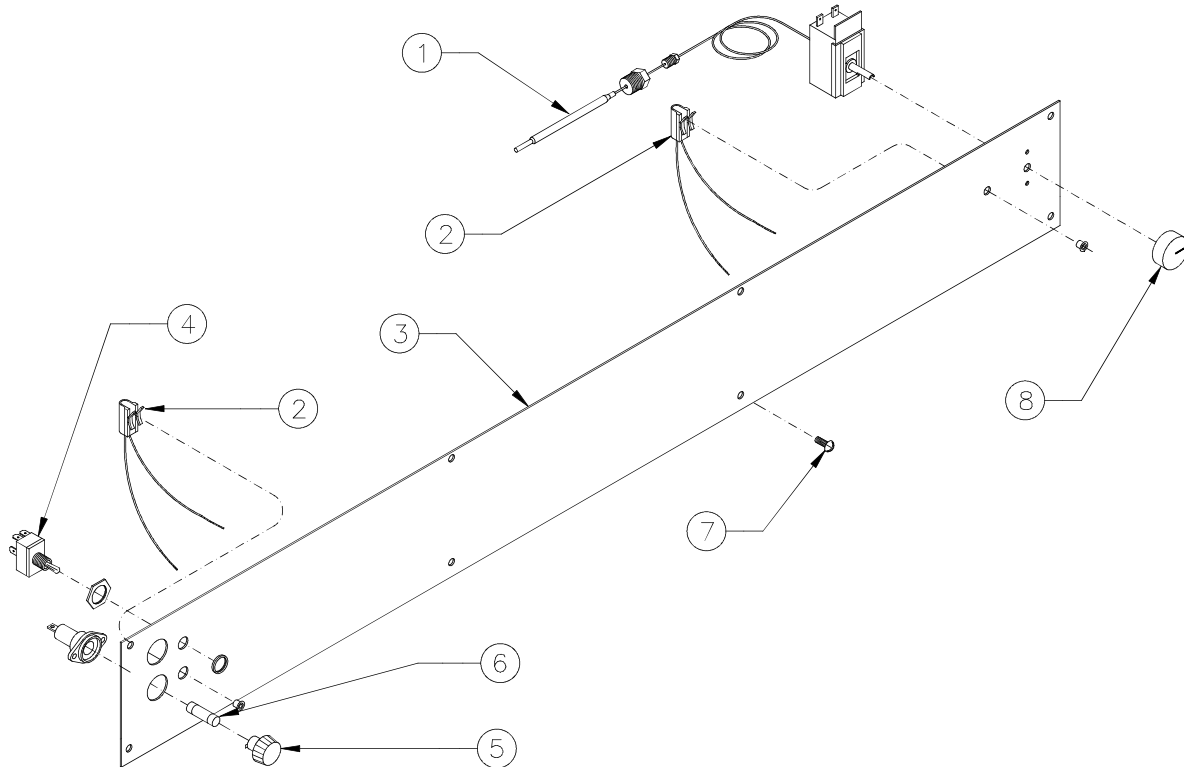
Upper Control Panel:



Description	Item No.	HDM-4		HDM-6	
		Qty Used	Part No.	Qty Used	Part No.
Indicator Light 120V	1	3	14340	5	14340
Indicator light 220V	1	3	15112	5	15112
Timer	2	3	12911	3	12911
Dimmer Panel	3	1	14337	1 1	14337(long) 14805(short)
Dimmer	4	3	14341	5	14341
Dimmer Knob	5	3	12912	5	12912
Timer knob	6	3	12912	5	12912
Screw	7	4	14963	8	14963

Power Input Parts HDM-

Lower Control Panel:



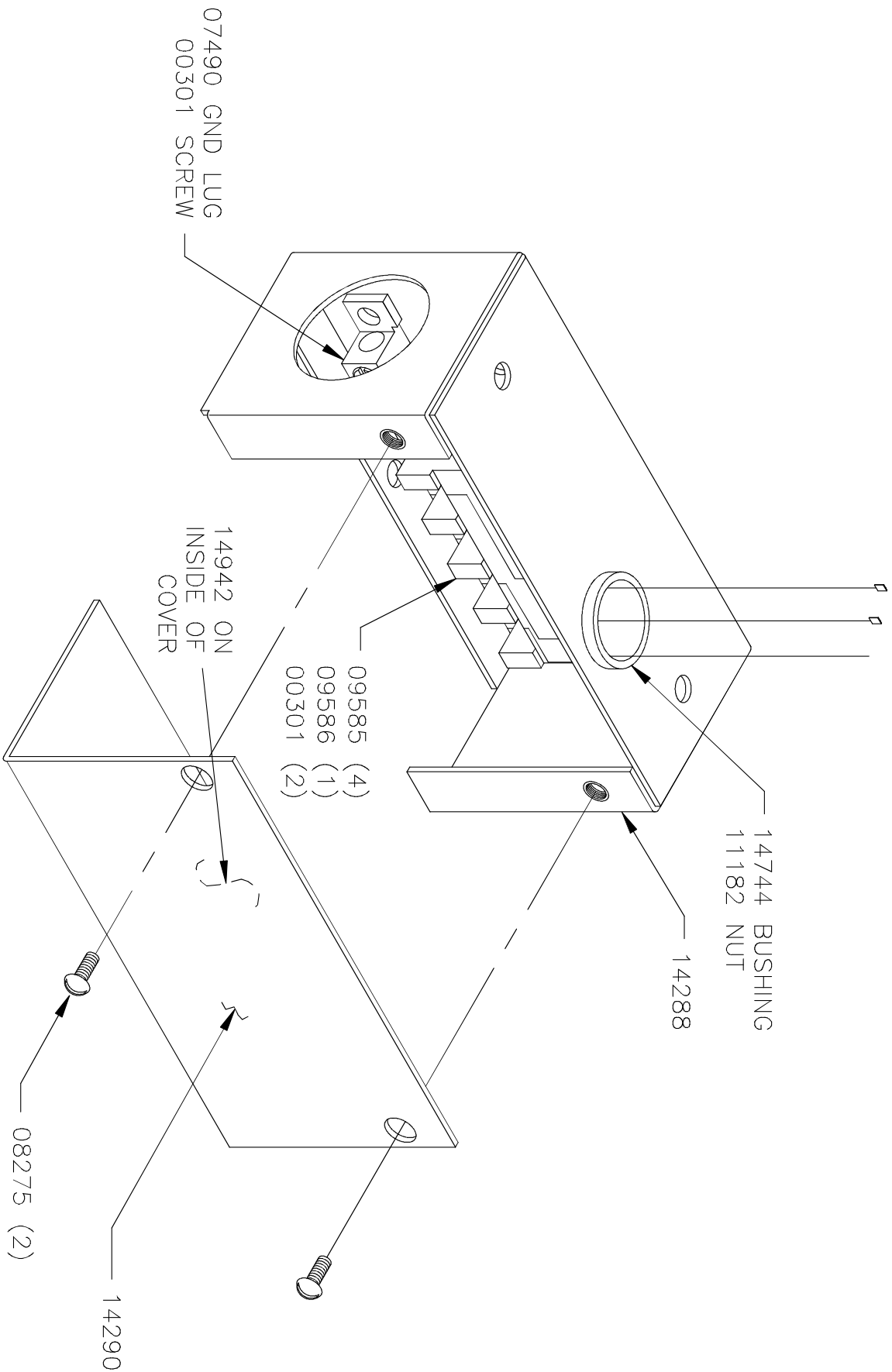
Description	Item No.	HDM-4		HDM-6	
		Qty Used	Part No.	Qty Used	Part No.
Thermostat	1	1	14308	2	14308
Red Light (220V)	2	2	10355	3	10355
Control Panel	3	1	15369	1	15338
Toggle Switch	4	1	14317	1	14772 17218**
Fuse Holder	5	1 1	11007(15 Amp) 14509(20 Amp)	1*(a)	14509 (20Amp)
Fuse	6	1 1	11008(15 Amp) 14510(20 Amp)	1*(a)	14510 (20Amp)
Screw	7	8	14963	12	14963
Knob - Thermostat	8	1	14442	2	14442
Ceramic Wire Nut	Not Shown	3	14911	3	14911

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

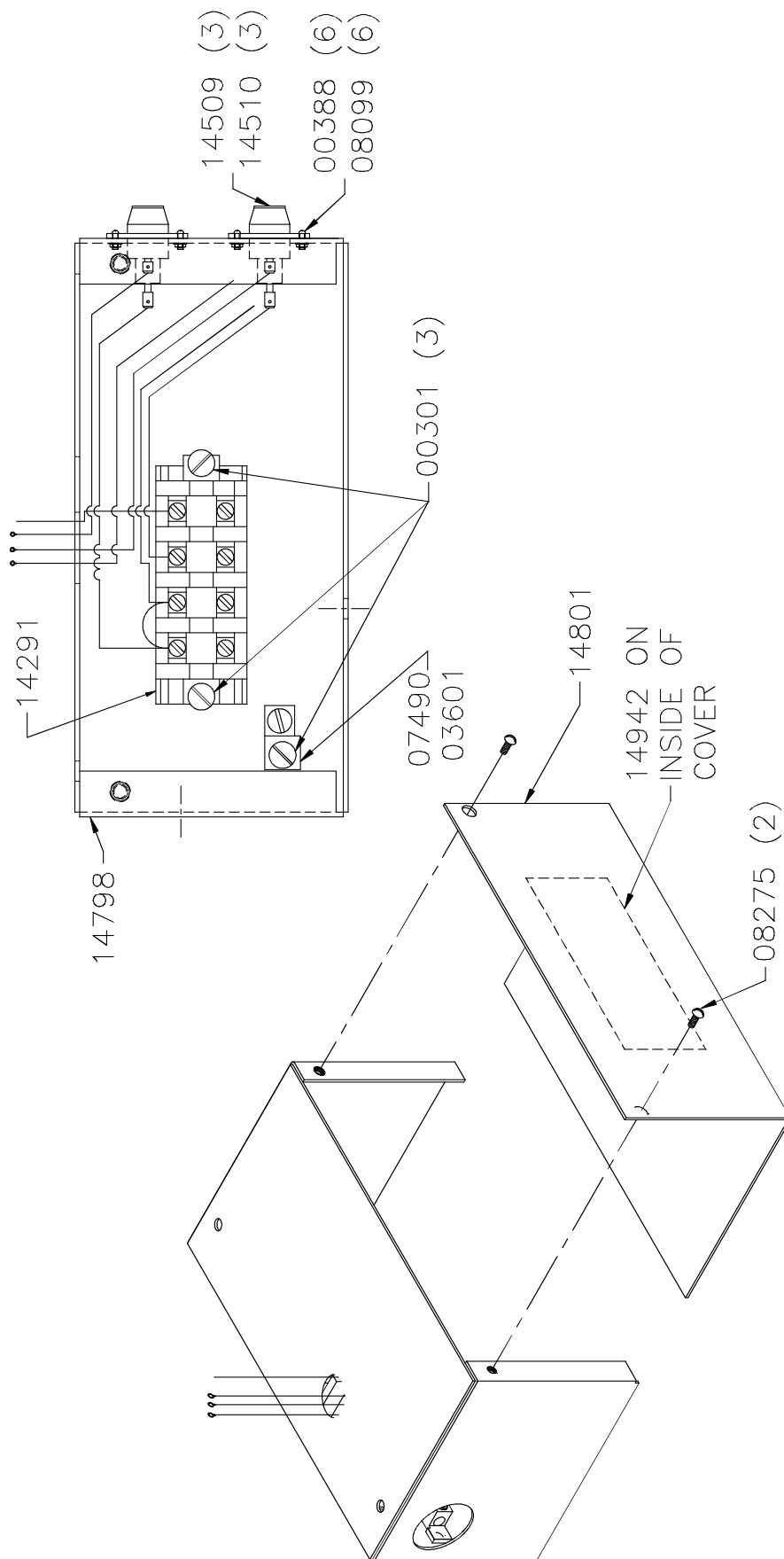
** Effective BD6A40

(^a) Prior to S/N BD6A40 there were 3 #14509 holders and 3 #14510 fuses

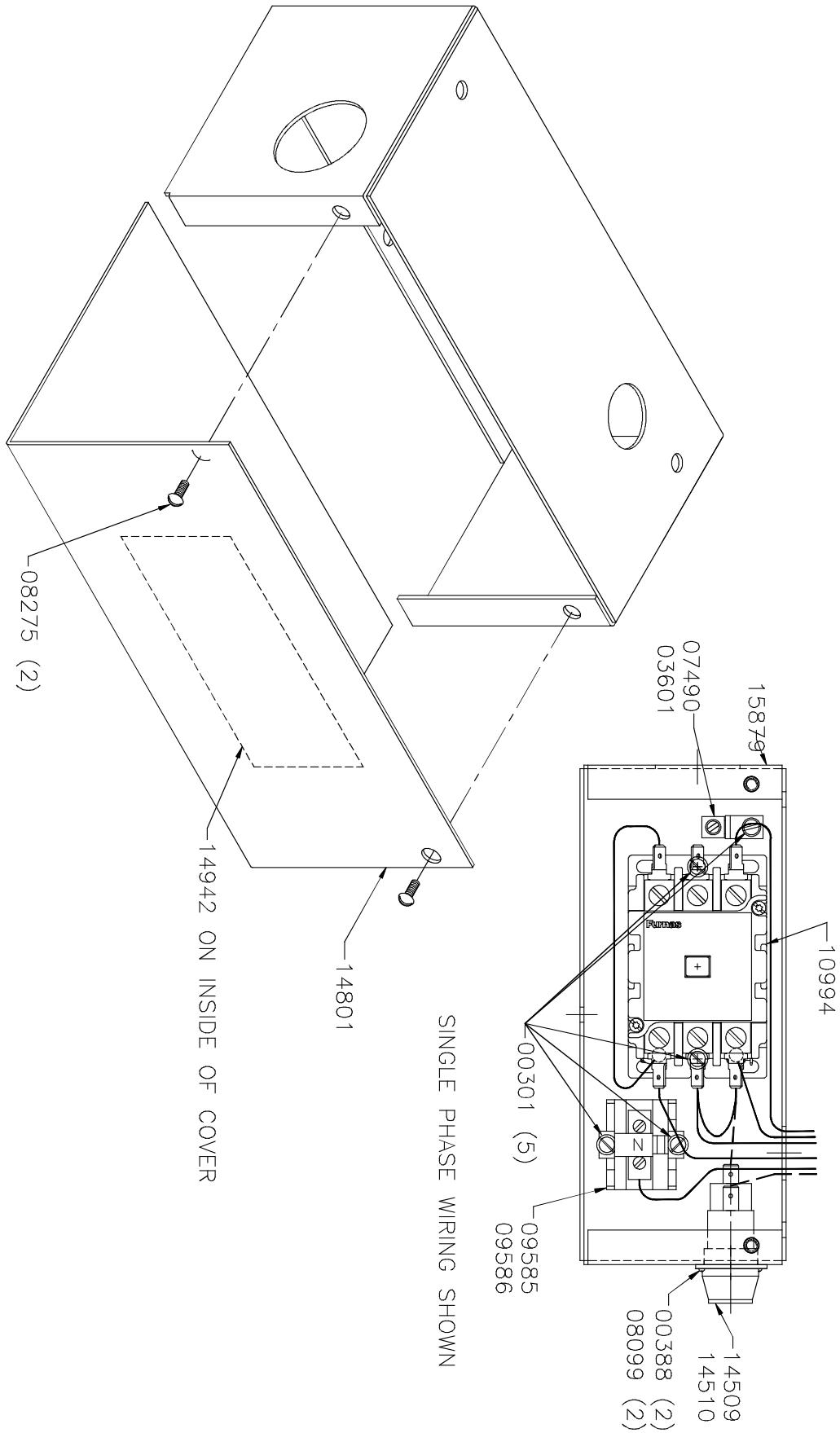
Power Input Parts HDM-



Power Input Parts HDM-6



Power Input Parts HDM-6 (EFFECTIVE BD6A40)





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