

ALTO SHAAM® HALO HEAT®

Manual Control



500-S

Electronic Control



750-S



1000-S

with Manual Control
and casters

INSTALLATION OPERATION AND MAINTENANCE MANUAL

FOOD HOLDING CABINET

*Manual or Electronic
Control*

MODELS:

500-S

750-S

1000-S

W164 N9221 Water Street • P.O. Box 450 • Menomonee Falls, Wisconsin 53052-0450 U.S.A.

PHONE: 262.251.3800

800.558-8744 USA/CANADA

FAX: 262.251.7067 • 800.329.8744 U.S.A. ONLY

262.251.1907 INTERNATIONAL

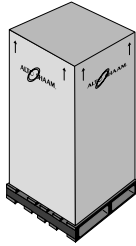
WEBSITE:

www.alto-shaam.com

ALTO-SHAAM® HOLDING CABINETS

UNPACKING and SET-UP

The Alto-Shaam Holding Cabinet has been thoroughly tested, checked for calibration, and inspected to insure only the highest quality cabinet is provided. When you receive your cabinet, check for any possible shipping damage and report it at once to the delivering carrier. See *Transportation Damage and Claims* section located in this manual.



The cabinet, complete with unattached items and accessories, may be delivered in one or more packages. Check to ensure that the following items have been received as standard with each unit.

500-S	2: SIDE RACKS	2: WIRE SHELVES
750-S	2: SIDE RACKS	3: WIRE SHELVES
1000-S	2: SIDE RACKS	4: CASTERS

Save all the information and instructions packed inside the cabinet. Complete and return the warranty card to the factory as soon as possible to assure prompt service in the event of a warranty parts and labor claim.

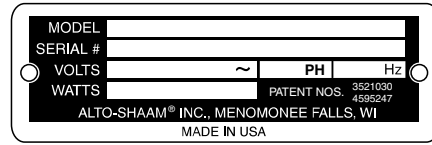
NOTE: All claims for warranty must include the full model number and serial number of the cabinet.

HEATING CHARACTERISTICS

The cabinet is equipped with a special heating cable. Through this Halo Heat concept, the heating cable is mounted against the walls of the unit to provide an evenly applied heat source controlled by a thermostat. The design and operational characteristics of the unit eliminate the need for a moisture pan or a heat circulating fan. Through even heat application, the quality of food products is maintained up to several hours or more.

ELECTRICAL INSTALLATION

1. An identification tag is permanently mounted on the cabinet.



2. Plug cabinet into a properly grounded receptacle ONLY, positioning the unit so the power supply cord is easily accessible in case of an emergency.

**ENSURE POWER SOURCE
MATCHES VOLTAGE STAMPED
ON NAMEPLATE OF UNIT**



3. If necessary, a proper receptacle or outlet configuration as required for this unit, must be installed by a licensed electrician in accordance with applicable, local electrical codes.

**Disconnect unit from power
source before cleaning
or servicing.**

**At no time should the inside or
outside of the cabinet be washed
down, flooded with water or
liquid solution. Do not clean
with water jet. NEVER STEAM
CLEAN. Severe damage or
electrical hazard could result.
Warranty becomes void
if unit is flooded.**

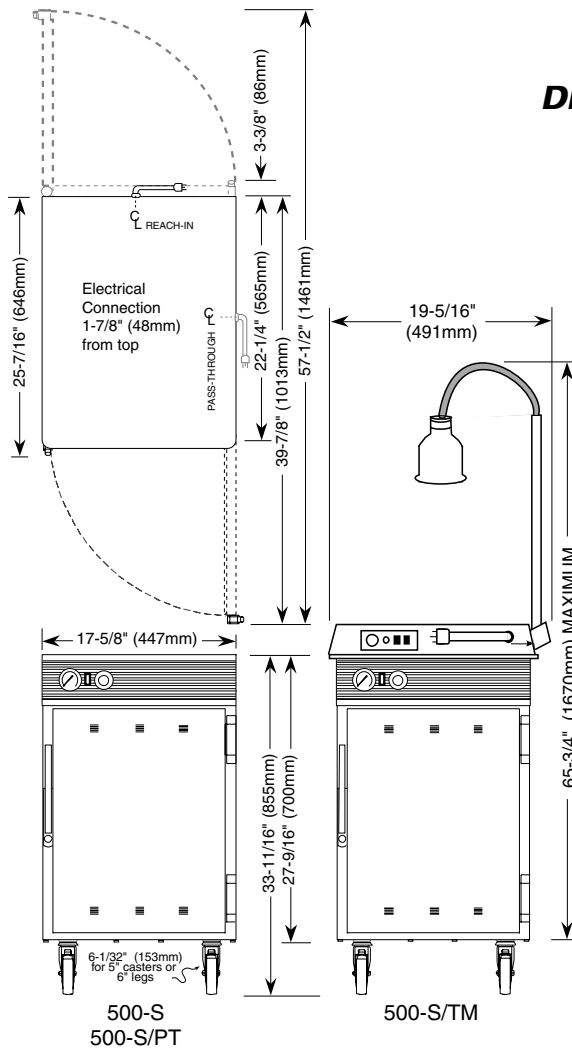


START-UP

1. The unit should be installed level and should NOT be installed in any area where it may be affected by steam, grease, dripping water, high temperatures or any other severely adverse conditions.
2. Before operating the cabinet, clean both the interior and exterior of the unit with a damp, clean cloth and mild soap solution. Rinse carefully.
3. Clean and install the cabinet side racks. Shelves should be positioned with the curved end up and toward the back of the unit.
4. Before operating the unit, become familiar with the operation of the controls. Read this manual and keep it in a secure location.

INSTALLATION

Outside Dimensions 500-S



Options & Accessories

Electronic Control	Specify on order as required
Electronic Control with multiple timers	Specify on order as required
HACCP/Kitchen Management Software	Contact factory
Bumper, Full-perimeter Rubber Assembly with Stem Casters .....	.44094
Carrying Handle Kit .....	.55662
Carving Holder	
➤ Prime Rib Holder	HL-2635
Castors, 3" (76mm) .....	.14227
Castors, 5" (127mm) .....	.4007
Drip Pan	PN-2122
Drip Tray - External .....	.4018
Legs, 6" (152mm) .....	.5205
Security Panel Package .....	.5002181
Shelf	
➤ Chrome Wire	SH-2107
➤ Stainless Steel Wire	SH-2326
Stacking Kit	
500-S on top of 500-S .....	.5001359
500-S on top of 500-TH/II .....	.5001359
500-S on top of 500-TH/III .....	.5001359
500-TH/II on top of 500-S .....	.5001359
500-TH/III on top of 500-S .....	.5000811
TMS Carvery on top of 500-S .....	.16222

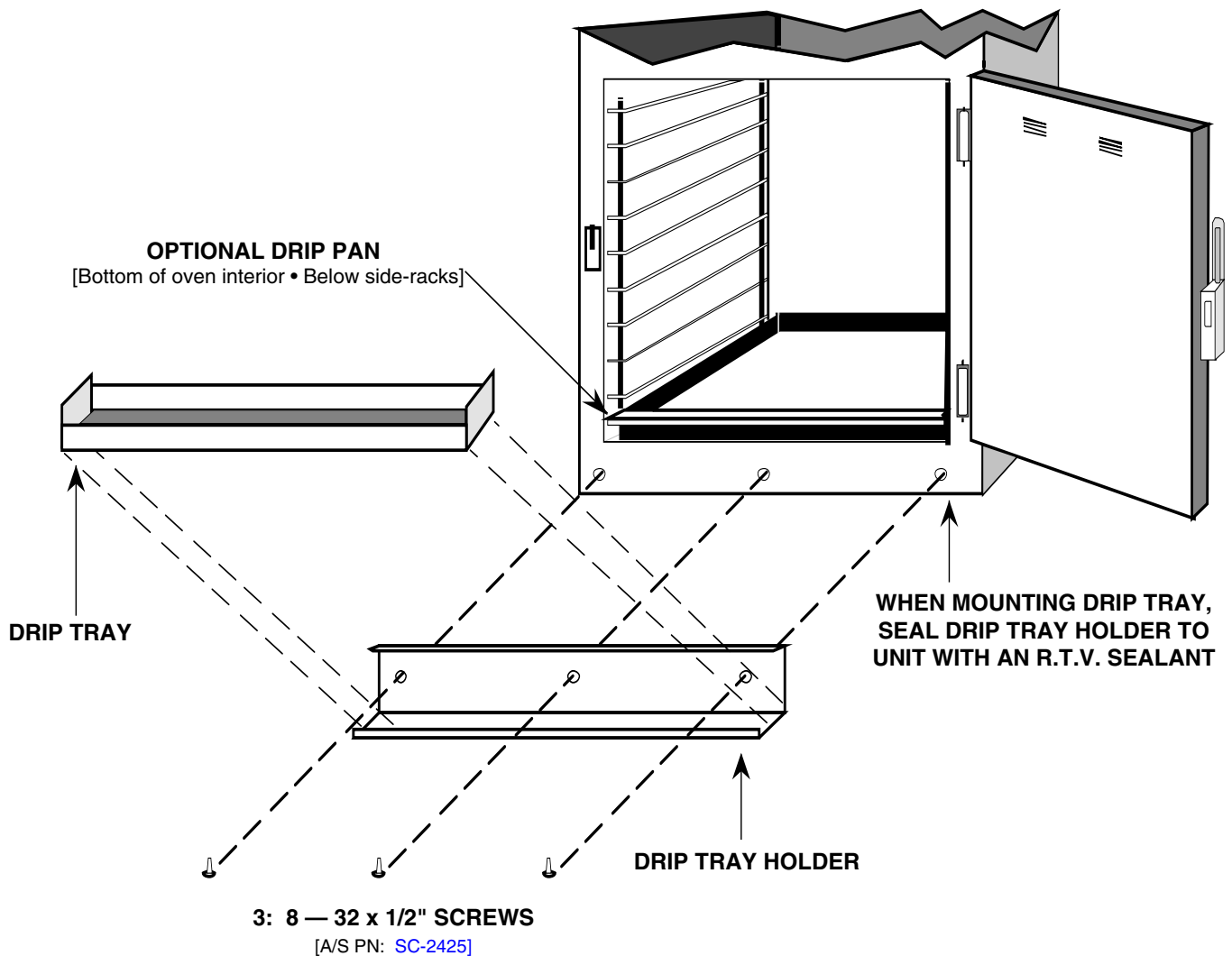
INSTALLATION

OPTIONAL DRIP TRAY MOUNTING INSTRUCTIONS



EXTERNAL DRIP TRAY PACKAGE: #4018

MODELS: 500-S OPTIONAL



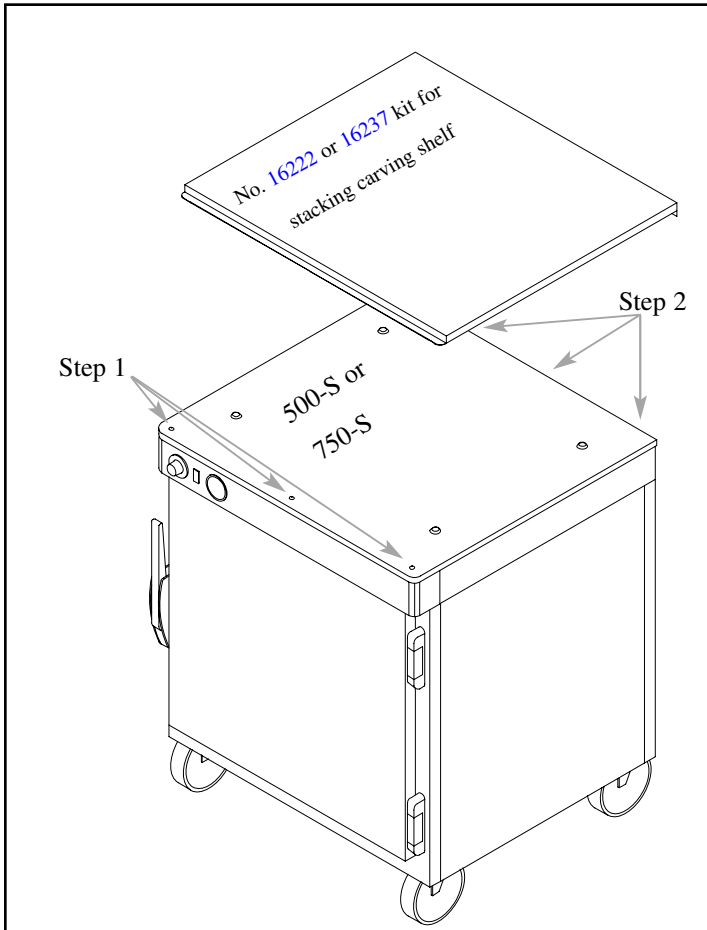
For on-site installation of the external drip tray, it is necessary to drill and tap 3 holes in the cabinet as shown on the above drawing. Use a 8 — 32 tap, 1/8" drill bit or #30 bit.

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Menomonee Falls, Wisconsin 53052-0450

INSTALLATION

Stacking Instructions



Using Stacking Platform from kits **16222** or **16237** to provide carving shelf:

1. Remove the three screws in the top plate at the front of the cabinet.
2. Remove the three screws in the back plate near the top of the cabinet.
2. Position the stacking platform on top of the unit with the flange in front, aligning the holes in the platform over the holes in the cabinet.
3. Reinstall the cabinet screws removed in steps 1 and 2 through the platform holes to attach it to the cabinet, front and back.
4. Place the carving shelf on the stacking platform.

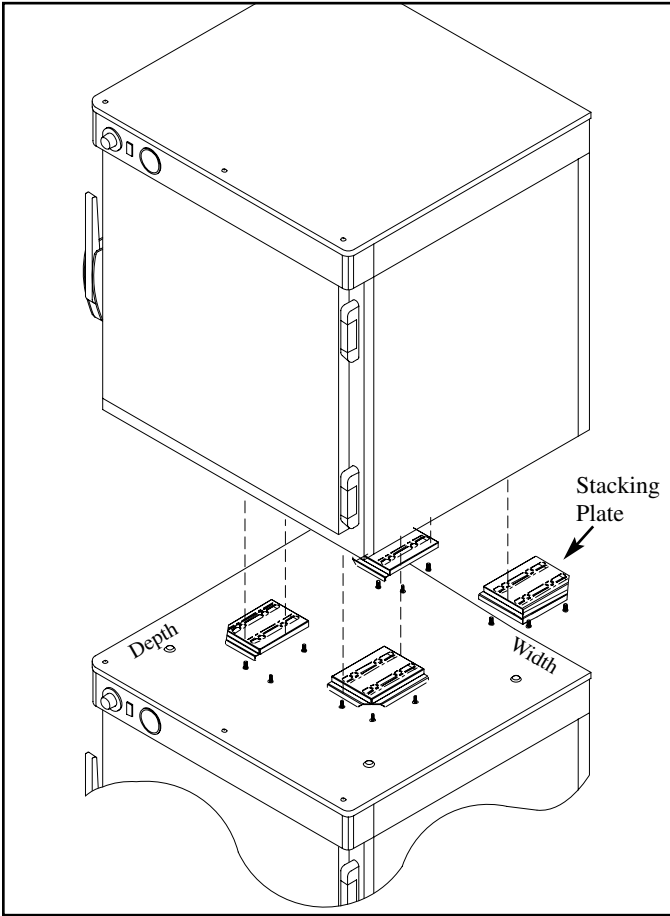
INSTALLATION

Stacking Instructions

STACKING PLATE INSTALLATION

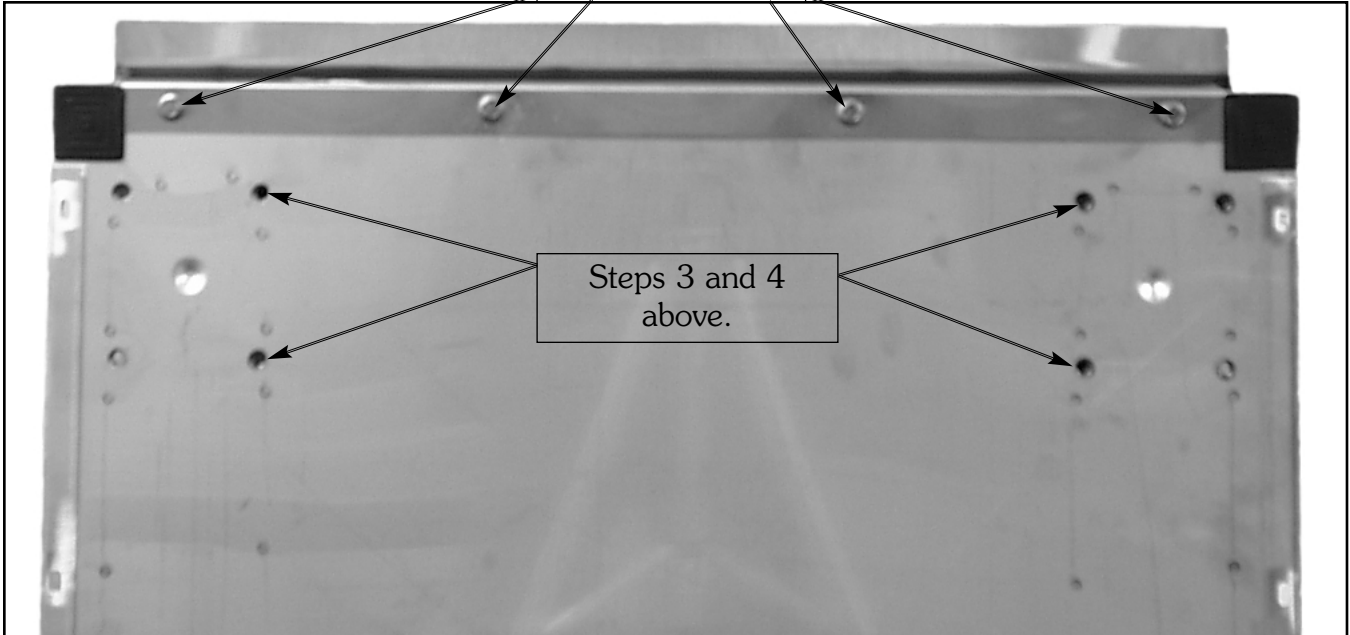
Kit #5001359

1. Measure the length and width of the top surface of the cabinet to be positioned at the bottom of the stacking equipment combination. Add 1/8-inch to both the length and the width dimension.
2. Turn the cabinet to be placed at the top of the stacking combination upside down so that the top surface is on the floor. Remove the eight (8) bolts located at the front (door side) and at the rear of the cabinet. Replace the bolts with the eight (8) nylon plugs provided in the stacking kit (RI-26196).
3. Place the four (4) stacking plates at each corner of the cabinet. Position the plates with the upright flange pointing up and to the outside of the cabinet. Align the holes in the stacking plates with the predrilled holes in the bottom of the cabinet using both the length and width dimensions obtained in step 1.
4. When the correct alignment has been achieved, loosely fasten each stacking plate with four (4) screws provided in the stacking kit. **DO NOT TIGHTEN SECURELY** since minor adjustments may be necessary.
5. Stack the cabinets and make any necessary minor adjustments to the stacking plates. When properly aligned, the door on the top cabinet should be flush with the door on the bottom cabinet.
6. When proper alignment has been made, remove the top cabinet from the stacking combination. Firmly secure all four stacking plates by individually removing each screw and reattaching it in combination with one of the square washers provided in the stacking kit.



Step 2 above.

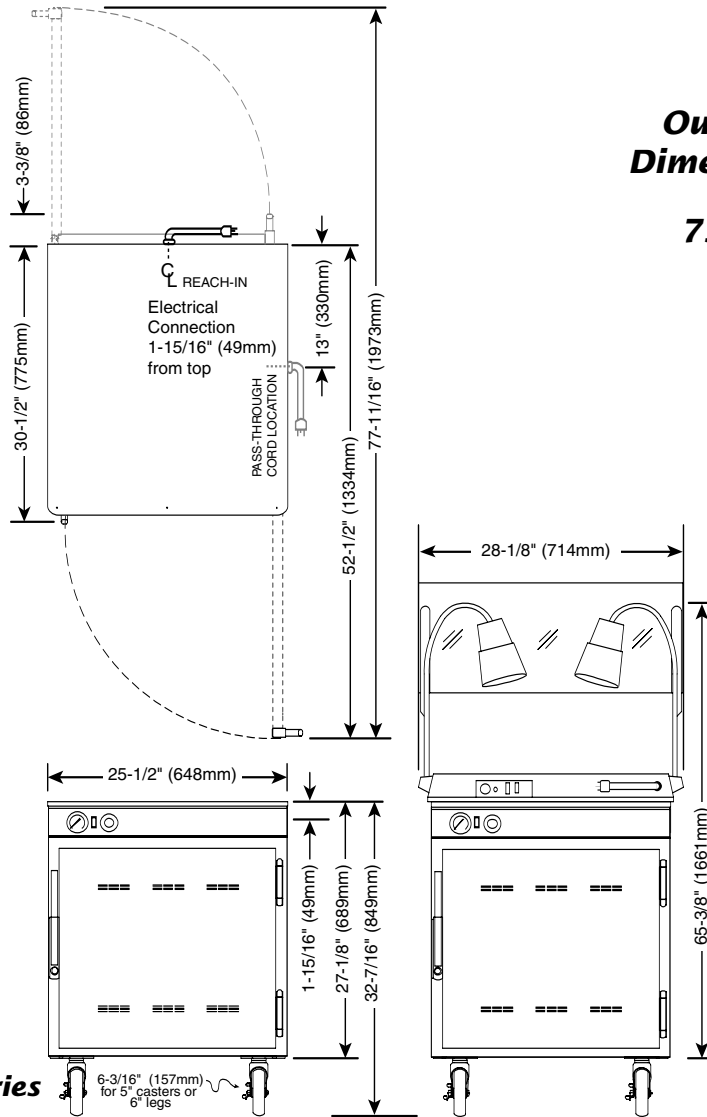
Steps 3 and 4 above.



INSTALLATION

Outside Dimensions

750-S



Options & Accessories

Electronic Control	Specify on order as required
Electronic Control with multiple timers	Specify on order as required
HACCP/Kitchen Management Software	Contact factory
Bumper, Full-perimeter Rubber Assembly with Stem Casters	.44107
Door with window	.55609
Drip Tray - External	.4020
Carrying Handle Kit	.55662
Carving Holder	
➤ Prime Rib Holder	HL-2635
➤ Ship Round Holder	.4459
Casters, 3" (76mm)	.14227
Casters, 5" (127mm)	.4007
Drip Pan	.1062
Drip Tray - External	.4020
Legs, 6" (152mm)	.5205
Security Panel Package	.5002180
Shelf	
➤ Chrome Plated Wire, Flat	SH-2105
➤ Chrome Plated Wire, Lip	SH-2327
➤ Stainless Steel Wire	SH-2324
Transport Handle Package	.55575
Stacking Kit	
750-S on top of 750-S	.5001359
750-S on top of 750-TH/II	.5001359
750-S on top of 750-TH/III	.5001359
750-TH/II on top of 750-S	.5001359
750-TH/III on top of 750-S	.5000811
BCS carvery on top of 750-S	.16237

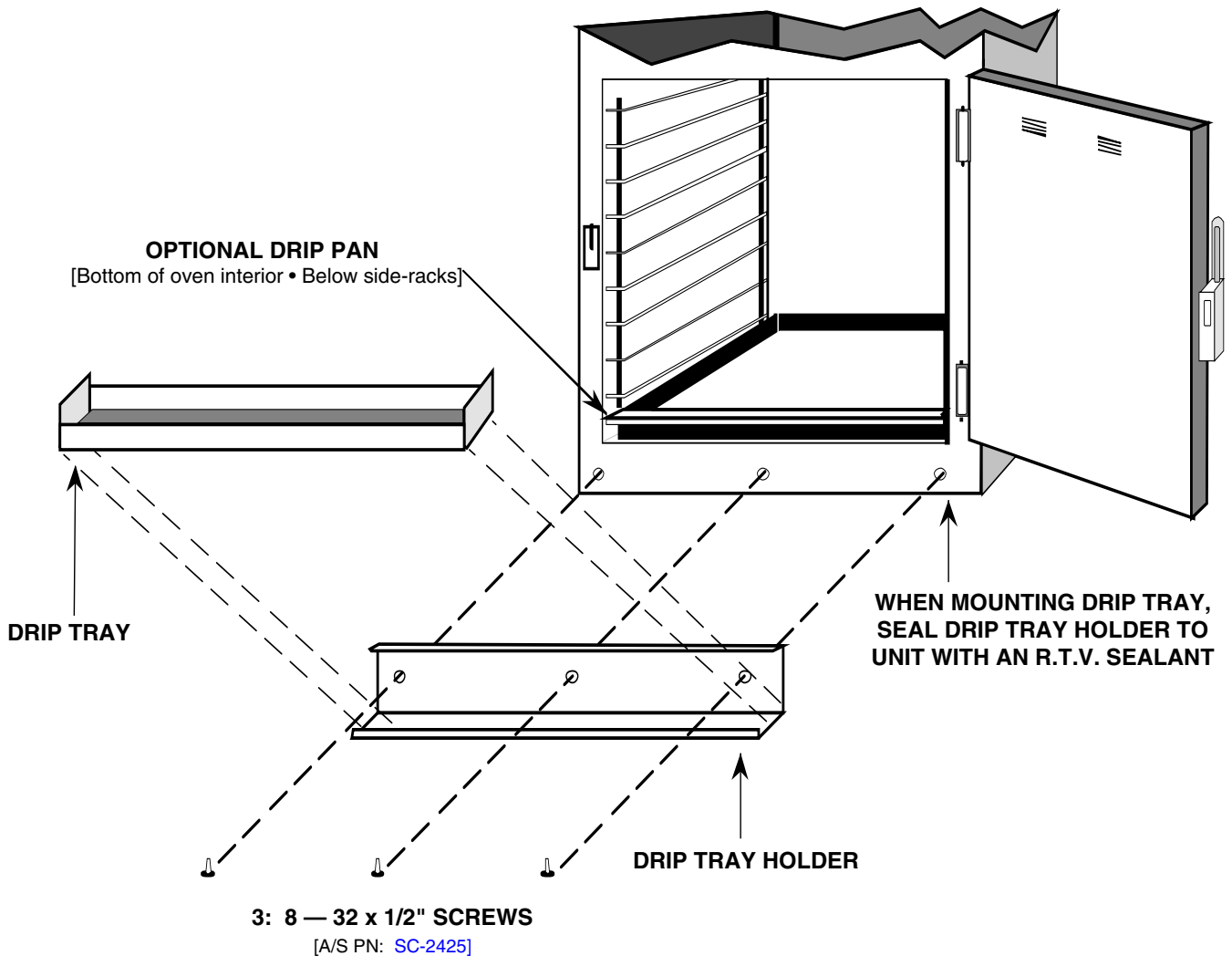
INSTALLATION

DRIP TRAY MOUNTING INSTRUCTIONS



EXTERNAL DRIP TRAY PACKAGE: #4020

MODEL: 750-S OPTIONAL



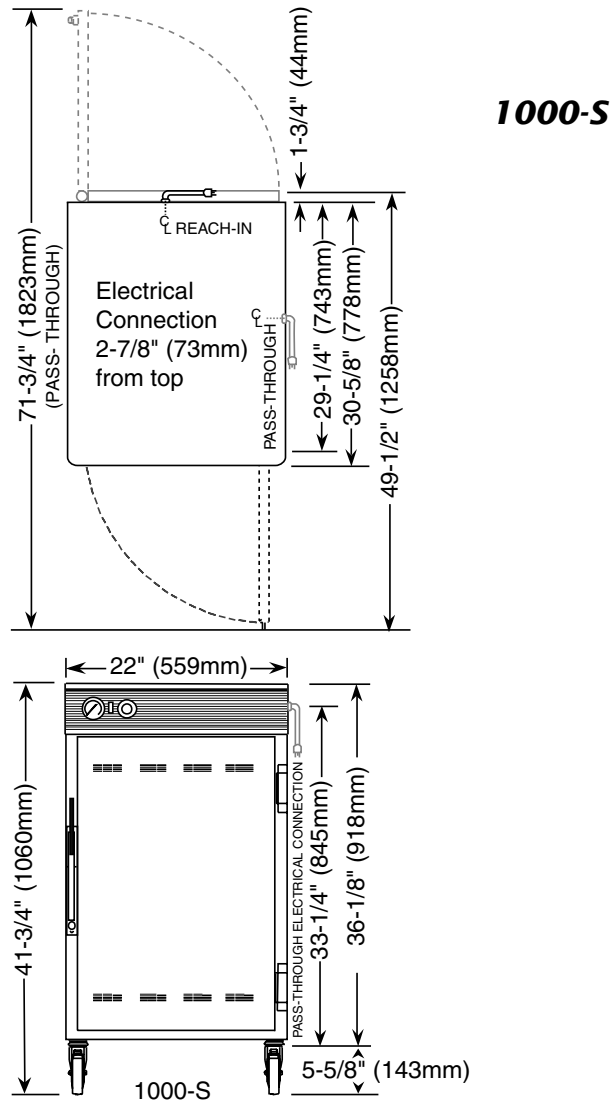
For on-site installation of the external drip tray, it is necessary to drill and tap 3 holes in the cabinet as shown on the above drawing. Use an 8 – 32 tap, 1/8" bit drill or #30 bit.

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INSTALLATION

■ Outside Dimensions ■



1000-S ■ Options & Accessories

Electronic Control	Specify on order as required
Electronic Control with multiple timers	Specify on order as required
HACCP/Kitchen Management Software	Contact factory
Bumper, Full-perimeter Rubber Assembly with Stem Casters . . . . .	.44119
Carrying Handle Kit . . . . .	.55662
Casters, 3" (76mm) . . . . .	.14227
Door, Window . . . . .	.15148
Legs, 6" (152mm) . . . . .	.5205
Pan Grid, Chrome, Wire	
➤ 18" x 26" Pan Insert . . . . .	.PN-2115
Security Panel Package . . . . .	.5002182
Shelf, Stainless Steel Wire	
➤ Reach-In . . . . .	.SH-2325
➤ Pass-Through . . . . .	.SH-2346
Stacking Kit, cabinets . . . . .	.5001359

OPERATION - MANUAL CONTROL

1. Preheat at 200°F (93°C) for 30 minutes.

When the thermostat is turned clockwise to the ON position, the indicator light will illuminate and will remain lit as long as the unit is calling for heat. Allow a minimum of 30 minutes of preheating before loading the holding cabinet with food. Closing the vents on the inside of the door will speed up the process. The indicator light will go OUT after approximately 30 minutes, or when the air temperature inside the unit reaches the temperature set by the operator.

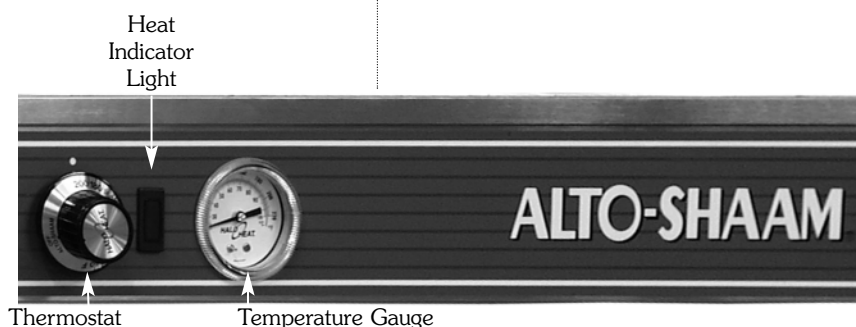
2. Load the cabinet with hot food only.

The purpose of the holding cabinet is to maintain hot food at proper serving temperatures. Only hot food should be placed into the cabinet. Before loading the unit with food, use a food thermometer to make certain all food products are at an internal temperature range of 140° to 160°F (60° to 71°C). All food not within the proper temperature range should be heated before loading into the holding cabinet.

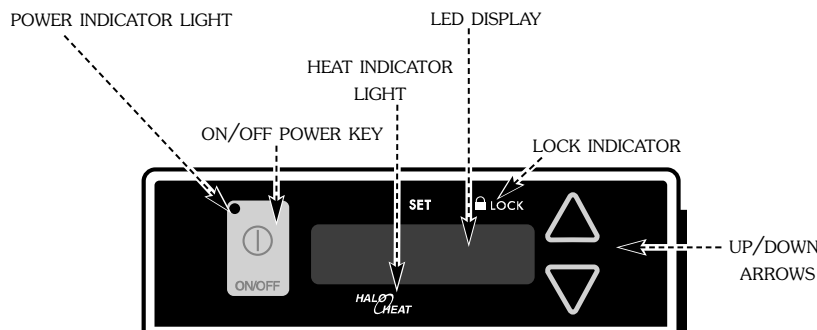
3. Reset the thermostat to 160°F (71°C).

Check to make certain the cabinet door is securely closed, and reset the thermostat to 160°F (71°C). **THIS WILL NOT NECESSARILY BE THE FINAL SETTING.**

The proper temperature range for the food being held will depend on the type and quantity of product. Whether or not the door vents should be open or closed will also depend on the type of food being held. When holding food for prolonged periods, it is advisable to periodically check the internal temperature of each item to assure maintenance of the proper temperature range.



OPERATION - ELECTRONIC CONTROL



ON/OFF KEY

Press the on/off key once and the power indicator light will illuminate. Press and hold the on/off key until the LED display turns off (at least three seconds) and on/off indicator goes out.

UP/DOWN ARROW KEY

The up and down arrow keys are used for a variety of settings when selecting the holding temperature. If an arrow key is pressed and released the display will show the current set temperature for two seconds. If an arrow key is held (at least eight seconds), the value will change at a rapid rate. If the arrow key is pressed and released in rapid succession, the set temperature will change by increments of one degree.

ENABLE/DISABLE BEEPER

A beeper sounds when an error code is displayed. To choose between beeper on and beeper off mode, the control must be OFF, then press and hold the down arrow key until either "ON" or "OFF" is shown in the LED display. Release arrow key when desired mode is displayed.

FAHRENHEIT / CELSIUS

With the control OFF, to choose between Fahrenheit and Celsius, press and hold the up arrow key until either °F or °C is shown in the LED display. Release key when desired setting is displayed.

The control has a four-digit LED display. When the display is ON, it will show current holding temperature, as well as diagnostic information.

CONTROL LOCK

The warmer controls can be locked so that no changes can be made to the set temperature.

To **lock the display**, press and hold the ON/OFF key and the Up Arrow key at the same time. The lock indicator will illuminate. When the lock indicator is illuminated, additional programming will not be functional other than the key sequence required to unlock the panel.

To **unlock the display**, press and hold the ON/OFF key and the Down Arrow key at the same time. The lock indicator will extinguish. The panel keys will resume normal function.

1. Preheat at 200°F (93°C) for 30 minutes.

Press the ON key, and set the temperature to 200°F (93°C) by using the UP/DOWN arrow keys. Allow a minimum of 30 minutes preheating time before loading the drawer warmer with food. The LED heat indicator light will go "OUT" after approximately 30 minutes preheat time, or when the air temperature inside the unit reaches the temperature set by the operator.

2. Load with pans of hot food only.

The purpose of the warmer is to maintain hot food at proper serving temperature. Only hot food should be placed into the unit. Before loading with food, use a food thermometer to make certain all products are at an internal temperature range of 140° to 160°F (60° to 71°C). Any food product not within the proper temperature range should be heated before loading into the unit.

3. Reset the control to 160°F (71°C).

Check to make certain the drawer is securely closed, and reset to 160°F (71°C) by using the UP/DOWN keys.

THIS WILL NOT NECESSARILY BE THE FINAL SETTING.

The proper temperature range will depend on the type and quantity of product. When holding food for prolonged periods, it is advisable to periodically check the internal temperature of each item with a food thermometer to assure maintenance of the proper temperature range of 140° to 160°F (60° to 71°C).

EXCLUSIVE FEATURES

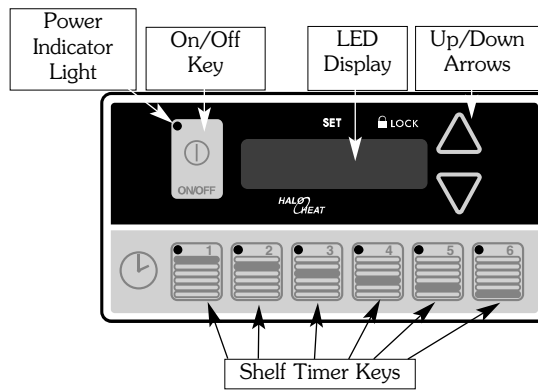
HEAT RECOVERY

The patented SureTemp™ heat recovery system in this unit will immediately compensate for any loss of heat when the door is opened. In order to maintain a more consistent cavity temperature, the control will automatically apply heat to the unit's interior while the door is open and for a short time after the door is closed. If the door remains open for more than three minutes, the solid state electronic control will sound three rapid beeps every ten seconds until the door is closed.

HACCP & KITCHEN MANAGEMENT SOFTWARE

These holding units can be ordered equipped with the HACCP/Kitchen Management option for connection to a PC. The units also have the capability of being connected to the internet via a Gateway device. This can provide temperature recording data as well as setup and diagnostic information which can be used for HACCP documentation.






The Multiple Shelf Timer Key option is available for hot food holding units with the electronic control. These keys monitor food safety by using a timer-based "First-In, First-Out" product management system. Products should be cooked to HACCP recommended internal temperature and then held in the unit. The Timer system allows operator to select holding times when the unit is loaded. Multiple timer keys correspond to various pan locations in the holding unit. As the timers expire, alarms notify the operator.



Timer Programming Information

1. Turn On/Off Power Key OFF.


 Press the On/Off Key until the display turns OFF (at least 3 seconds) and On/Off Key's Power Indicator Light goes out.

Note: *The following steps can only be done when the On/Off Power Key is OFF.*


2. Set Shelf Timer Keys.

 Press and hold a Shelf Timer Key (at least 3 seconds) until a value is shown in the LED display.
 Use the Up or Down Arrow Key to change the time desired.


3. Set Additional Timer Keys.

 Repeat step 2 for each Shelf Timer Key to be programmed.

4. Turn On/Off Power Key ON.


 When selected timers have been programmed, press the On/Off key to turn ON unit. Power Indicator Light will illuminate.

5. Press Shelf Timer Key.

 Press selected Shelf Timer Keys to activate. Shelf LED display will illuminate and the count down will begin.

The Shelf Timer Key LED with the least amount of time remaining will flash slowly and the LED display will alternate between hold temperature and time remaining.

6. Turn OFF alarm.

 Listen for beeping alarm. Press flashing shelf timer key to turn OFF alarm.

Reprogram Shelf Timer Keys

If you wish to reprogram holding times, turn OFF power. Press the desired Timer Shelf Key and input new time using Up or Down Arrow Key. Turn unit ON and press each Shelf Timer Key to start the count downs.

Important Note: *Timer Station Key retains initial time settings in memory. Count down times are cancelled when On/Off Key is turned OFF. It may help to note any remaining count down times before reprogramming.*

Power Failure: *The Power Indicator Light by On/Off Power Key will blink to indicate a power failure. To stop the blinking, simply depress On/Off Key. The memory will not be impaired.*

GENERAL HOLDING GUIDELINES

Chefs, cooks and other specialized food service personnel employ varied methods of cooking. Proper holding temperatures for a specific food product must be based on the moisture content of the product, product density, volume, and proper serving temperatures. Safe holding temperatures must also be correlated with palatability in determining the length of holding time for a specific product.

Halo Heat maintains the maximum amount of product moisture content without the addition of water, water vapor, or steam. Maintaining maximum natural product moisture preserves the natural flavor of the product and provides a more genuine taste. In addition to product moisture retention, the gentle properties of Halo Heat maintain a consistent temperature throughout the cabinet without the necessity of a heat distribution fan, thereby preventing further moisture loss due to evaporation or dehydration.

HOLDING TEMPERATURE RANGE		
MEAT	FAHRENHEIT	CELSIUS
BEEF ROAST — Rare	140°F	60°C
BEEF ROAST — Med/Well Done	160°F	71°C
BEEF BRISKET	160° — 175°F	71° — 79°C
CORN BEEF	160° — 175°F	71° — 79°C
PASTRAMI	160° — 175°F	71° — 79°C
PRIME RIB — Rare	140°F	60°C
STEAKS — Broiled/Fried	140° — 160°F	60° — 71°C
RIBS — Beef or Pork	160°F	71°C
VEAL	160° — 175°F	71° — 79°C
HAM	160° — 175°F	71° — 79°C
PORK	160° — 175°F	71° — 79°C
LAMB	160° — 175°F	71° — 79°C
POULTRY		
CHICKEN — Fried/Baked	160° — 175°F	71° — 79°C
DUCK	160° — 175°F	71° — 79°C
TURKEY	160° — 175°F	71° — 79°C
GENERAL	160° — 175°F	71° — 79°C
FISH/SEAFOOD		
FISH — Baked/Fried	160° — 175°F	71° — 79°C
LOBSTER	160° — 175°F	71° — 79°C
SHRIMP — Fried	160° — 175°F	71° — 79°C
BAKED GOODS		
BREADS/ROLLS	120° — 140°F	49° — 60°C
MISCELLANEOUS		
CASSEROLES	160° — 175°F	71° — 79°C
DOUGH — Proofing	80° — 100°F	27° — 38°C
EGGS —Fried	150° — 160°F	66° — 71°C
FROZEN ENTREES	160° — 175°F	71° — 79°C
HORS D'OEUVRES	160° — 180°F	71° — 82°C
PASTA	160° — 180°F	71° — 82°C
PIZZA	160° — 180°F	71° — 82°C
POTATOES	180°F	82°C
PLATED MEALS	180°F	82°C
SAUCES	140° — 200°F	60° — 93°C
SOUP	140° — 200°F	60° — 93°C
VEGETABLES	160° — 175°F	71° — 79°C
The holding temperatures listed are suggested guidelines only.		

In an enclosed holding environment, too much moisture content is a condition which can be relieved. A product achieving extremely high temperatures in preparation must be allowed to decrease in temperature before being placed in a controlled holding atmosphere. If the product is not allowed to decrease in temperature, excessive condensation will form increasing the moisture content on the outside of the product.

Most Halo Heat holding equipment is provided with a thermostat control between 60° and 200°F (16° to 93°C). If the unit is equipped with vents, close the vents for moist holding and open the vents for crisp holding.

If the unit is equipped with a thermostat indicating a range of between 1 and 10, use a metal-stemmed indicating thermometer to measure the internal temperature of the product(s) being held. Adjust the thermostat setting to achieve the best overall setting based on internal product temperature.

CARE and CLEANING



The cleanliness and appearance of this unit will contribute considerably to operating efficiency and savory, appetizing food. Good equipment kept clean works better and lasts longer.

THOROUGHLY CLEAN THE UNIT DAILY

1. Disconnect unit from power source, and let cool.
2. Remove all detachable items such as shelves, side racks, and drip pan. Clean these items separately.
3. Clean interior metal surfaces of the unit with a damp, clean cloth and any good commercial detergent or grease solvent at the recommended strength. Use a plastic scouring pad or oven cleaner for difficult areas. Rinse carefully to remove all residue and wipe dry.



NO SCRAPERS



NO STEEL PADS

4. Wash door gasket with a clean cloth and hot, soapy water. Rinse carefully and dry.
5. To help maintain the protective film coating on polished stainless steel, clean the exterior of the unit with a cleaner recommended for stainless steel surfaces. Spray the cleaning agent on a cloth and wipe with the grain of the stainless steel.

Always follow appropriate state or local health (hygiene) regulations regarding all applicable cleaning and sanitation requirements for foodservice equipment.

NOTE: Avoid the use of abrasive cleaning, compounds, chloride based cleaners, or cleaners containing quaternary salts. Never use hydrochloric acid (muriatic acid) on stainless steel.

***At no time should the inside or outside of the unit be washed down, flooded with water or liquid solution.
NEVER STEAM CLEAN.
Do not use water jet to clean.***



CAUTION

Severe damage or electrical hazard could result.

Warranty becomes void if unit is flooded.



CAUTION

SANITATION

Food flavor and aroma are usually so closely related that it is difficult, if not impossible, to separate them. There is also an important, inseparable relationship between cleanliness and food flavor. Cleanliness, top operating efficiency, and appearance of equipment contribute considerably to savory, appetizing foods. Good equipment that is kept clean, works better and lasts longer.

Most food imparts its own particular aroma and many foods also absorb existing odors. Unfortunately, during this absorption, there is no distinction between GOOD and BAD odors. The majority of objectionable flavors and odors troubling food service operations are caused by bacteria growth. Sourness, rancidity, mustiness, stale or other OFF flavors are usually the result of germ activity.

The easiest way to insure full, natural food flavor is through comprehensive cleanliness. This means good control of both visible soil (dirt) and invisible soil (germs). A thorough approach to sanitation will provide essential cleanliness. It will assure an attractive appearance of equipment, along with maximum efficiency and utility. More importantly, a good sanitation program provides one of the key elements in the prevention of food-borne illnesses.

A controlled holding environment for prepared foods is just one of the important factors involved in the prevention of food-borne illnesses. Temperature monitoring and control during receiving, storage, preparation, and the service of foods are of equal importance.

The most accurate method of measuring safe temperatures of both hot and cold foods is by internal product temperature. A quality thermometer is an effective tool for this purpose, and should be routinely used on all products that require holding at a specific temperature.

A comprehensive sanitation program should focus on the training of staff in basic sanitation procedures. This includes personal hygiene, proper handling of raw foods, cooking to a safe internal product temperature, and the routine monitoring of internal temperatures from receiving through service.

Most food-borne illnesses can be prevented through proper temperature control and a comprehensive program of sanitation. Both these factors are important to build quality service as the foundation of customer satisfaction. Safe food handling practices to prevent food-borne illness is of critical importance to the health and safety of your customers. HACCP, an acronym for Hazard Analysis (at) Critical Control Points, is a quality control program of operating procedures to assure food integrity, quality, and safety. Taking steps necessary to augment food safety practices are both cost effective and relatively simple. While HACCP guidelines go far beyond the scope of this manual, additional information is available by contacting:

Center for Food Safety and Applied Nutrition
Food and Drug Administration
1-888-SAFEFOOD

INTERNAL FOOD PRODUCT TEMPERATURES		
HOT FOODS		
DANGER ZONE	40° TO 140°F	(4° TO 60°C)
CRITICAL ZONE	70° TO 120°F	(21° TO 49°C)
SAFE ZONE	140° TO 165°F	(60° TO 74°C)
COLD FOODS		
DANGER ZONE	ABOVE 40°F	(ABOVE 4°C)
SAFE ZONE	36°F TO 40°F	(2°C TO 4°C)
FROZEN FOODS		
DANGER ZONE	ABOVE 32°F	(ABOVE 0°C)
CRITICAL ZONE	0° TO 32°F	(-18° TO 0°C)
SAFE ZONE	0°F OR BELOW	(-18°C OR BELOW)

SERVICE SECTION

MANUAL CONTROL

THERMOSTAT and HEAT LIGHT SEQUENCE

Whenever the thermostat is turned "ON," the heat indicator light will indicate the power ON/OFF condition of the heating cable, and consequently, the cycling of the cabinet as it maintains the dialed cavity temperature. If the light does not illuminate after normal start-up, the main power source, thermostat, and/or light must be checked. If the warming cabinet does not hold the temperature as dialed, the calibration of the thermostat must be checked. If the warmer fails to heat or heats continuously with the thermostat "OFF," the thermostat must be initially checked for proper operation. If these items are checked and found to be in order, a continuity and resistance check of the heating cable should be made. *SEE CIRCUIT DIAGRAM.*

THERMOSTAT CALIBRATION

The thermostat is precision calibrated at the factory. Normally, no adjustment or recalibration is necessary unless the thermostat has been mishandled in transit, changed or abused while in service. A thermostat with a sensing bulb operates on hydraulic pressure, consequently, any bending of the bulb results in a change in its volume, and alters the accuracy of the thermostat calibration.

A thermostat should be checked or recalibrated by placing a quality, thermal indicator at the center of an empty holding cavity. *DO NOT CALIBRATE WITH ANY FOOD PRODUCT IN THE CABINET.* The thermostat should be set at 140°F (60°C), and should be allowed to stabilize at that setting for a minimum of one hour. Following temperature stabilization, the center of the thermal swing of the air temperature within the cabinet should approximately coincide with the thermostat dial setting.

If calibration is necessary, the calibration screw should be adjusted with great care. The calibration screw of the thermostat is located in the thermostat dial shaft. With the shaft held stationary, a minute, clockwise motion of the calibration screw appreciably lowers the thermostat setting. A reverse, or counter-clockwise motion appreciably raises the thermostat setting. After achieving the desired cycling of the thermostat, the calibration screw must be sealed. Place a few drops of enamel sealant directly on the calibration screw. *(RED NAIL POLISH OR EQUIVALENT IS ACCEPTABLE.)*

TROUBLE SHOOTING CHECKLIST • ELECTRONIC CONTROL

Repairs should be made by authorized service agents only.

TROUBLE	POSSIBLE CAUSE	REMEDY
Unit does not operate.	Insufficient power supply.	Check power source.
	Defective power cord or plug.	Check and replace if necessary.
No display in electronic control.	Faulty power supply board.	Check line voltage for 24V across pins 7 and 8 on the power supply board and across terminals J9 and J10 on the electronic control.
	Faulty electronic control.	Replace control.
Cannot control temperature but sensor and electronic control checks O.K.	Faulty relay	Replace relay.
	Heating element grounded.	Replace element.
Temperature readout incorrect.	Dirty or faulty sensor.	Check sensor at 32°F (0°C). If Ohm reading is 100, replace display.
	Faulty control.	If Ohm reading is not 100, replace sensor.

SERVICE SECTION



Disconnect the unit from power source before cleaning or servicing.



MODEL 500-S CABLE HEATING SERVICE KIT		
No. 4878 (one kit per unit cavity)		
includes:		
CB-3045	Cable Heating Element	85 feet
CR-3226	Ring Connector	4
IN-3488	Insulation Corner	1 foot
BU-3105	Shoulder Bushing	4
BU-3106	Cup Bushing	4
ST-2439	Stud	4
NU-2215	Hex Nut	8
SL-3063	Insulating Sleeve	4
TA-3540	Electrical Tape	1 roll

MODEL 750-S CABLE HEATING SERVICE KIT		
No. 4874 (one kit per unit cavity)		
includes:		
CB-3044	Cable Heating Element	108 feet
CR-3226	Ring Connector	4
IN-3488	Insulation Corner	1 foot
BU-3105	Shoulder Bushing	4
BU-3106	Cup Bushing	4
ST-2439	Stud	4
NU-2215	Hex Nut	8
SL-3063	Insulating Sleeve	4
TA-3540	Electrical Tape	1 roll

MODEL 1000-S CABLE HEATING SERVICE KIT		
No. 4874 (one kit per unit cavity)		
includes:		
CB-3044	Cable Heating Element	108 feet
CR-3226	Ring Connector	4
IN-3488	Insulation Corner	1 foot
BU-3105	Shoulder Bushing	4
BU-3106	Cup Bushing	4
ST-2439	Stud	4
NU-2215	Hex Nut	8
SL-3063	Insulating Sleeve	4
TA-3540	Electrical Tape	1 roll

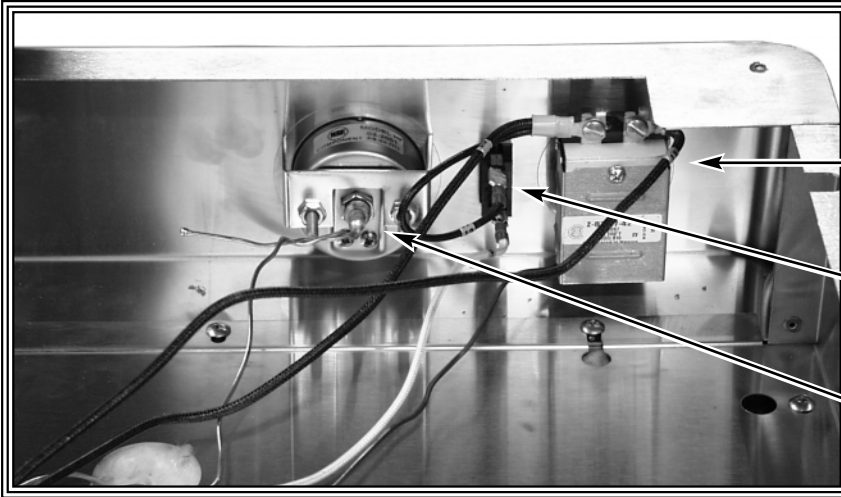
Service Parts	500-S/HD	500-S/HD/PT	500-S/STD	500-S/STD/PT
Description	Part Numbers			
Manual or Electronic Units				
Side rack for shelf, s/s ea., standard, 208/240V	SR-2214	SR-2214	SR-2214	SR-2214
Side rack for G/N pans, s/s, option, 230V	14978	14978	14978	14978
Shelf, chrome plated wire, ea., use with SR-2214	SH-2107	SH-2107	SH-2107	SH-2107
Shelf, stainless steel wire, ea., use with SR-2214 or 14978	SH-2326	N/A	SH-2326	N/A
Bottom	16253	16253	16253	16253
Casing Back, heavy duty	16260	16260	N/A	N/A
Casing Back, standard	N/A	N/A	16250	16250
Side, heavy duty	16259	16259	N/A	N/A
Side, standard	N/A	N/A	16251	16251
Front Trim	16261	16261	16261	16261
Bonnet	44145	44145	44145	44145
Control Top	44111	44111	44111	44111
Circuit Breaker, 230V ONLY	SW-33788	SW-33788	SW-33788	SW-33788
Stacking Hardware, cabinet over cabinet	5001359	5001359	5001359	5001359
Stacking Adapter, carving station over cabinet	16222	16222	16222	16222
Door Assembly, slab, RH or LH	15326	15326	15326	15326
Door Handle	HD-24171	HD-24171	HD-24171	HD-24171
-Mounting Screws for handle (4)	SC-2073	SC-2073	SC-2073	SC-2073
-Mounting Screws for latch (2)	SC-2070	SC-2070	SC-2070	SC-2070
Door Hinge, ea.	HG-2015	HG-2015	HG-2015	HG-2015
Door Gasket, ea.	GS-23790	GS-23790	GS-23790	GS-23790
Rubber Bumper Assembly option, full perimeter	44094	44094	44094	44094
-Bumper, Rubber, 8' (2428mm)	BM-24766	BM-24766	BM-24766	BM-24766
-Caster, stem, 5" (127mm) swivel w/brake	CS-24875	CS-24875	CS-24875	CS-24875
-Caster, stem, 5" (127mm) rigid	CS-24874	CS-24874	CS-24874	CS-24874
Insulation	IN-2381	IN-2381	IN-2381	IN-2381
Manual Units				
Control Face, Manual	16258	16258	16258	16258
Panel Overlay, Manual	PE-24659	PE-24659	PE-24659	PE-24659
Thermostat, Manual, 125V, 208/240V, 230V	TT-33626	TT-33626	TT-33626	TT-33626
Heat Indicator Light, Manual, 125V	LI-3493	LI-3493	LI-3493	LI-3493
Heat Indicator Light, Manual, 208/240V, 230V	LI-3923	LI-3923	LI-3923	LI-3923
Temperature Gauge, Manual	GU-3273	GU-3273	GU-3273	GU-3273
Thermostat Knob, Manual, Fahrenheit degrees	KN-3469	KN-3469	KN-3469	KN-3469
Thermostat Knob, Manual, Celsius degrees	KN-3474	KN-3474	KN-3474	KN-3474
Cordset, Manual, 125V	CD-3232	CD-3232	CD-3232	CD-3232
Cord, Manual, 208/240V	CD-3551	CD-3551	CD-3551	CD-3551
Cord, Manual, 230V	CD-3922	CD-3922	CD-3922	CD-3922
Electronic Units				
Control Face	16262	16262	16262	16262
Power Supply Board	BA-33554	BA-33554	BA-33554	BA-33554
Electronic Control, Hold ONLY, w/O KITCHEN MGMT	5000872	5000872	5000872	5000872
Electronic Control, Hold ONLY, WITH KITCHEN MGMT	5000873	5000873	5000873	5000873
Electronic Control, Hold w/TIMER, w/O KIT.MGMT.	5000874	5000874	5000874	5000874
Electronic Control, Hold w/TIMER, WITH KIT.MGMT.	5000875	5000875	5000875	5000875
Sensor	SN-33541	SN-33541	SN-33541	SN-33541
Terminal block for sensor	BK-33546	BK-33546	BK-33546	BK-33546
Relay	RL-33558	RL-33558	RL-33558	RL-33558
Reed Switch	SW-33559	SW-33559	SW-33559	SW-33559
Terminal Circuit Strip (2)	TM-33560	TM-33560	TM-33560	TM-33560
Latch Plate, Electronic	PA-24657	PA-24657	PA-24657	PA-24657
Panel Overlay, Electronic	PE-24660	PE-24660	PE-24660	PE-24660
Panel Overlay, Electronic Timer	PE-24661	PE-24661	PE-24661	PE-24661
Cordset, 125V	CD-3232	CD-3232	CD-3232	CS-3232
Cordset, 208/240V	CD-3551	CD-3551	CD-3551	CD-3551
Cordset, 230V	CD-3922	CD-3922	CD-3922	CD-3922
Beeper	BP-3567	BP-3567	BP-3567	BP-3567

Service Parts	750-S/HD	750-S/HD/PT	750-S/STD	750-S/STD/PT
Description	Part Numbers			
Manual or Electronic Units	→			
Side rack for shelf, s/s ea., standard, 208/240V	SR-2219	SR-2219	SR-2219	SR-2219
Side rack for G/N pans, s/s, option, 230V	14979	14979	14979	14979
Shelf, chrome, wire, ea., use with SR-2219	SH-2105	SH-2327	SH-2105	SH-2327
Shelf, stainless steel wire, ea., use with SR-2214 or 14978	SH-2324	N/A	SH-2324	N/A
Bottom	44099	44099	44099	44099
Casing Back, heavy duty	16228	N/A	N/A	N/A
Casing Back, standard	N/A	N/A	16225	N/A
Side, heavy duty	16229	16229	N/A	N/A
Side, standard	N/A	N/A	16224	16224
Front Trim	16235	16235	16235	16235
Bonnet	16232	16232	16232	16232
Control Top	44097	44097	44097	44097
Circuit Breaker, 230V ONLY	SW-33788	SW-33788	SW-33788	SW-33788
Stacking Hardware, cabinet over cabinet	5001359	5001359	5001359	5001359
Stacking Adapter, carving station over cabinet	16237	16237	16237	16237
Door Assembly, slab, RH or LH	15324	15324	15324	15324
Door Handle	HD-24171	HD-24171	HD-24171	HD-24171
-Mounting Screws for handle (4)	SC-2073	SC-2073	SC-2073	SC-2073
-Mounting Screws for latch (2)	SC-2070	SC-2070	SC-2070	SC-2070
Door Hinge, ea.	HG-2015	HG-2015	HG-2015	HG-2015
Door Gasket, ea.	GS-23778	GS-23778	GS-23778	GS-23778
Rubber Bumper Assembly option, full perimeter	44107	44107	44107	44107
-Bumper, Rubber, 10' (3048mm)	BM-24766	BM-24766	BM-24766	BM-24766
-Caster, stem, 5" (127mm) swivel w/brake	CS-24875	CS-24875	CS-24875	CS-24875
-Caster, stem, 5" (127mm) rigid	CS-24874	CS-24874	CS-24874	CS-24874
Insulation	IN-2381	IN-2381	IN-2381	IN-2381
Manual Units	→			
Control Face	16234	16234	16234	16234
Panel Overlay, Manual	PE-24662	PE-24662	PE-24662	PE-24662
Thermostat, Manual, 125V, 208/240V, 230V	TT-33626	TT-33626	TT-33626	TT-33626
Heat Indicator Light, Manual, 125V	LI-3493	LI-3493	LI-3493	LI-3493
Heat Indicator Light, Manual, 208/240V, 230V	LI-3923	LI-3923	LI-3923	LI-3923
Temperature Gauge, Manual	GU-3273	GU-3273	GU-3273	GU-3273
Thermostat Knob, Manual, Fahrenheit degrees	KN-3469	KN-3469	KN-3469	KN-3469
Thermostat Knob, Manual, Celsius degrees	KN-3474	KN-3474	KN-3474	KN-3474
Cordset, Manual, 125V	CD-3232	CD-3232	CD-3232	CD-3232
Cord, Manual, 208/240V	CD-3551	CD-3551	CD-3551	CD-3551
Cord, Manual, 230V	CD-3922	CD-3922	CD-3922	CD-3922
Electronic Units	→			
Control Face	16230	16230	16230	16230
Power Supply Board	BA-33554	BA-33554	BA-33554	BA-33554
Electronic Control, Hold ONLY, w/O KITCHEN MGMT	5000872	5000872	5000872	5000872
Electronic Control, Hold ONLY, WITH KITCHEN MGMT	5000873	5000873	5000873	5000873
Electronic Control, Hold w/TIMER, w/O KIT.MGMT.	5000874	5000874	5000874	5000874
Electronic Control, Hold w/TIMER, WITH KIT.MGMT.	5000875	5000875	5000875	5000875
Sensor	SN-33541	SN-33541	SN-33541	SN-33541
Terminal block for sensor	BK-33546	BK-33546	BK-33546	BK-33546
Relay	RL-33558	RL-33558	RL-33558	RL-33558
Reed Switch	SW-33559	SW-33559	SW-33559	SW-33559
Terminal Circuit Strip (2)	TM-33560	TM-33560	TM-33560	TM-33560
Latch Plate, Electronic	PA-24657	PA-24657	PA-24657	PA-24657
Panel Overlay, Electronic	PE-24663	PE-24663	PE-24663	PE-24663
Panel Overlay, Electronic Timer	PE-24664	PE-24664	PE-24664	PE-24664
Cordset, 125V	CD-3232	CD-3232	CD-3232	CD-3232
Cordset, 208/240V	CD-3551	CD-3551	CD-3551	CD-3551
Cordset, 230V	CD-3922	CD-3922	CD-3922	CD-3922
Beeper	BP-3567	BP-3567	BP-3567	BP-3567

Service Parts	1000-S/HD	1000-S/HD/PT	1000-S/STD	1000-S/STD/PT
Description	Part Numbers			
Manual or Electronic Units	----->			
Side rack for shelf, s/s ea., standard	SR-2120	SR-2120	SR-2120	SR-2120
Shelf, stainless steel wire, ea.	SH-2325	SH-2346	SH-2325	SH-2346
Bottom	44154	44154	44154	44154
Casing Back, heavy duty	16383	16383	N/A	N/A
Casing Back, standard	N/A	N/A	16393	16393
Side, heavy duty	16382	16382	N/A	N/A
Side, standard	N/A	N/A	16392	16392
Front Trim	16381	16381	16381	16381
Bonnet	16385	16385	16385	16385
Control Top	44155	44155	44155	44155
Circuit Breaker, 230V ONLY	SW-33788	SW-33788	SW-33788	SW-33788
Door Assembly, slab, RH or LH	15147	15147	15147	15147
Door Handle	HD-24171	HD-24171	HD-24171	HD-24171
-Mounting Screws for handle (4)	SC-2073	SC-2073	SC-2073	SC-2073
-Mounting Screws for latch (2)	SC-2070	SC-2070	SC-2070	SC-2070
Door Hinge, ea.	HG-2535	HG-2535	HG-2535	HG-2535
Door Gasket, ea.	GS-23794	GS-23794	GS-23794	GS-23794
Rubber Bumper Assembly option, full perimeter	44119	44119	44119	44119
-Bumper, Rubber, 10' (3048mm)	BM-24766	BM-24766	BM-24766	BM-24766
-Caster, stem, 5" (127mm) swivel w/brake	CS-24984	CS-24984	CS-24984	CS-24984
-Caster, stem, 5" (127mm) rigid	CS-24983	CS-24983	CS-24983	CS-24983
Insulation	IN-2381	IN-2381	IN-2381	IN-2381
Manual Units	----->			
Control Face, Manual	16386	16386	16386	16386
Panel Overlay, Manual	PE-24942	PE-24942	PE-24942	PE-24942
Thermostat, Manual, 125V, 208/240V, 230V	TT-33626	TT-33626	TT-33626	TT-33626
Heat Indicator Light, Manual, 125V	LI-3493	LI-3493	LI-3493	LI-3493
Heat Indicator Light, Manual, 208/240V	LI-3516	LI-3516	LI-3516	LI-3516
Heat Ind. Light, Manual, 230V	LI-3923	LI-3923	LI-3923	LI-3923
Temperature Gauge, Manual	GU-3273	GU-3273	GU-3273	GU-3273
Thermostat Knob, Manual, Fahrenheit degrees	KN-3469	KN-3469	KN-3469	KN-3469
Thermostat Knob, Manual, Celsius degrees	KN-3474	KN-3474	KN-3474	KN-3474
Cordset, Manual, 125V	CD-3232	CD-3232	CD-3232	CD-3232
Cord, Manual, 208/240V	CD-3551	CD-3551	CD-3551	CD-3551
Cord, Manual, 230V	CD-3922	CD-3922	CD-3922	CD-3922
Electronic Units	----->			
Control Face, Electronic	16387	16387	16387	16387
Power Supply Board	BA-33554	BA-33554	BA-33554	BA-33554
Electronic Control, Hold ONLY, w/O KITCHEN MGMT	5000872	5000872	5000872	5000872
Electronic Control, Hold ONLY, WITH KITCHEN MGMT	5000873	5000873	5000873	5000873
Electronic Control, Hold w/TIMER, w/O KIT.MGMT.	5000874	5000874	5000874	5000874
Electronic Control, Hold w/TIMER, WITH KIT.MGMT.	5000875	5000875	5000875	5000875
Sensor	SN-33541	SN-33541	SN-33541	SN-33541
Terminal block for sensor	BK-33546	BK-33546	BK-33546	BK-33546
Relay	RL-33558	RL-33558	RL-33558	RL-33558
Reed Switch	SW-33559	SW-33559	SW-33559	SW-33559
Terminal Circuit Strip (2)	TM-33560	TM-33560	TM-33560	TM-33560
Latch Plate, Electronic	PA-24657	PA-24657	PA-24657	PA-24657
Panel Overlay, Electronic	PE-24943	PE-24943	PE-24943	PE-24943
Panel Overlay, Electronic Timer	PE-25487	PE-25487	PE-25487	PE-25487
Cordset, 125V	CD-3232	CD-3232	CD-3232	CD-3232
Cordset, 208/240V	CD-3551	CD-3551	CD-3551	CD-3551
Cordset, 230V	CD-3922	CD-3922	CD-3922	CD-3922
Beeper	BP-3567	BP-3567	BP-3567	BP-3567

Manual Control • Service View • Top removed

**125V
Service View**



Thermostat
TT-33626

Heat Indicator light
LI-3493

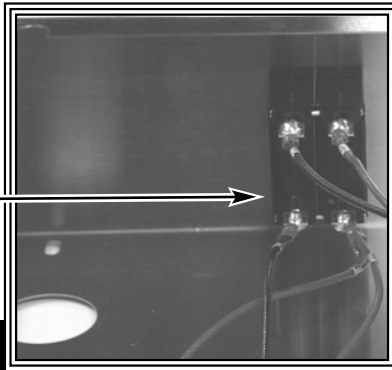
Temperature Gauge
GU-3273



**Remember to
disconnect the unit
from power source
before cleaning or
servicing.**



Circuit
Breaker
SW-33788

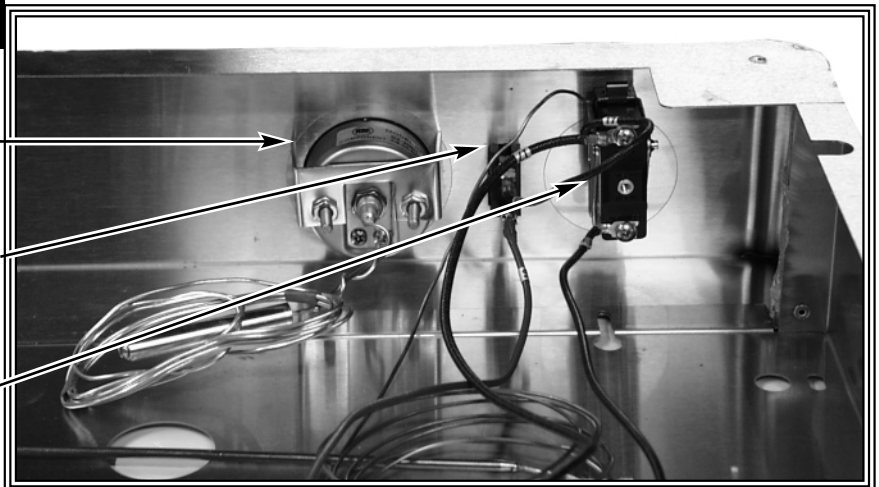


**230V
Service View**

Temperature Gauge
GU-3273

Heat Indicator Light
LI-3923

Thermostat
TT-33626

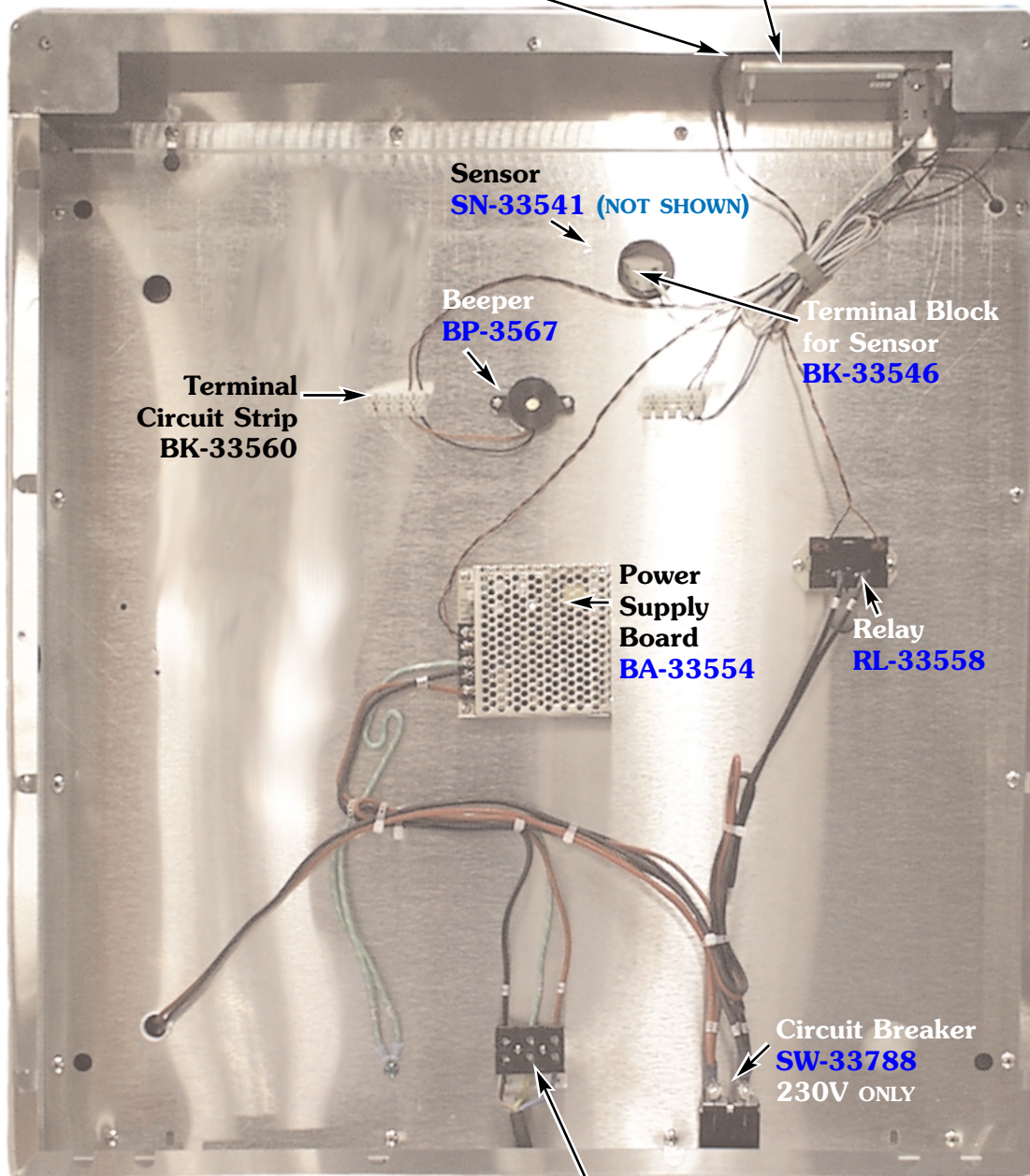


Electronic Control • Service View • Top removed

Front of cabinet

Electronic control (HOLD ONLY)
5000873 w/HACCP KITCHEN MGMT.
Electronic control w/TIMER
5000875 w/HACCP KITCHEN MGMT.

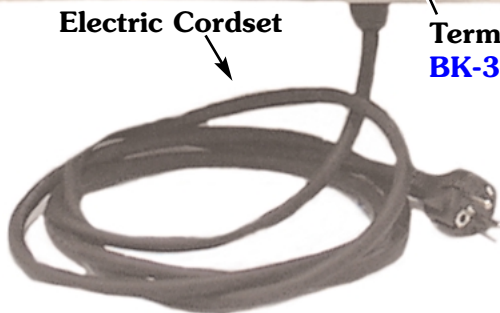
Electronic control (HOLD ONLY)
5000872 w/O HACCP KITCHEN MGMT.
Electronic control w/TIMER
5000874 w/O HACCP KITCHEN MGMT.



Back of Cabinet

Electric Cordset

Terminal Block BK-3019



CAUTION

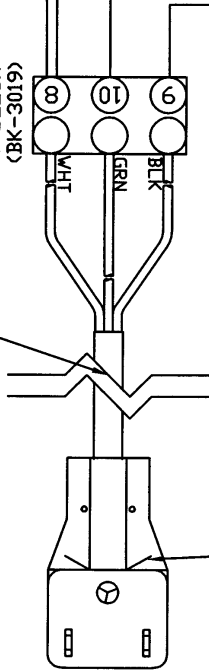
Remember to disconnect the unit from power source before cleaning or servicing.



120V-60HZ
1180W-9.8A

CORDSET, 14/3 SJTOW
(CD-3232)

T-BLOCK
(BK-3019)



ANGLE PLUG, NEMA 5-15P
15A/125V PLUG

HI-TEMP HEATING CABLE
(CB-3045) 23.6 DHMS (COLD)

HI-TEMP HEATING CABLE
(CB-3045) 23.6 DHMS (COLD)

PILOT LIGHT
(LI-3493)

THERMOSTAT
(TT-33626)

NOTE #1:

ALL NUMBERS IN () =
ALTO-SHAAM PART NUMBERS

NOTE #2:

SEE #B-8026
FOR WIRE ASSEMBLIES

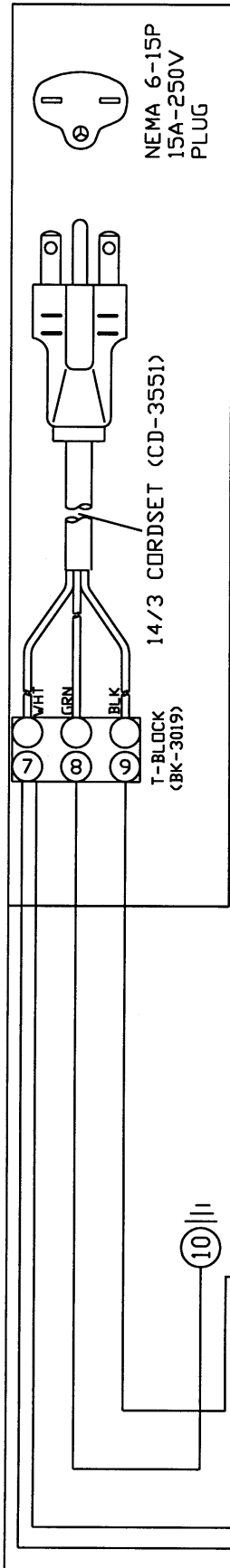
WIRING DIAGRAM

MODELS: 500-S,S/PT ('00) MANUAL (120V)

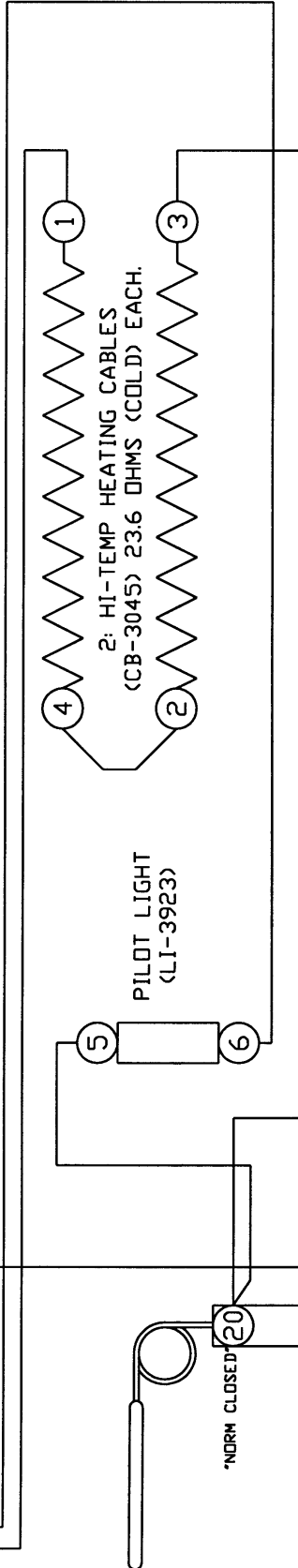
ALTO-SHAAM
MENOMONEE FALLS, WISC. 53052-450

BY: JRM SCALE: 1"=1' DWG: 7586
APP'D: P.E.D. DATE: 04/12/01 A-7586

NO.	REVISION	BY
1	07/08/02	CJB
2	01/24/03	CJB



TOTAL POWER= 208-240V, 50/60HZ, 1180Wmax, 4.9Amax
208V, 4.2A, 890W
220V, 4.5A, 990W
240V, 4.9A, 1180W



WIRING DIAGRAM

MODELS: 500-S,S/PT('00) MANUAL (208-240V)

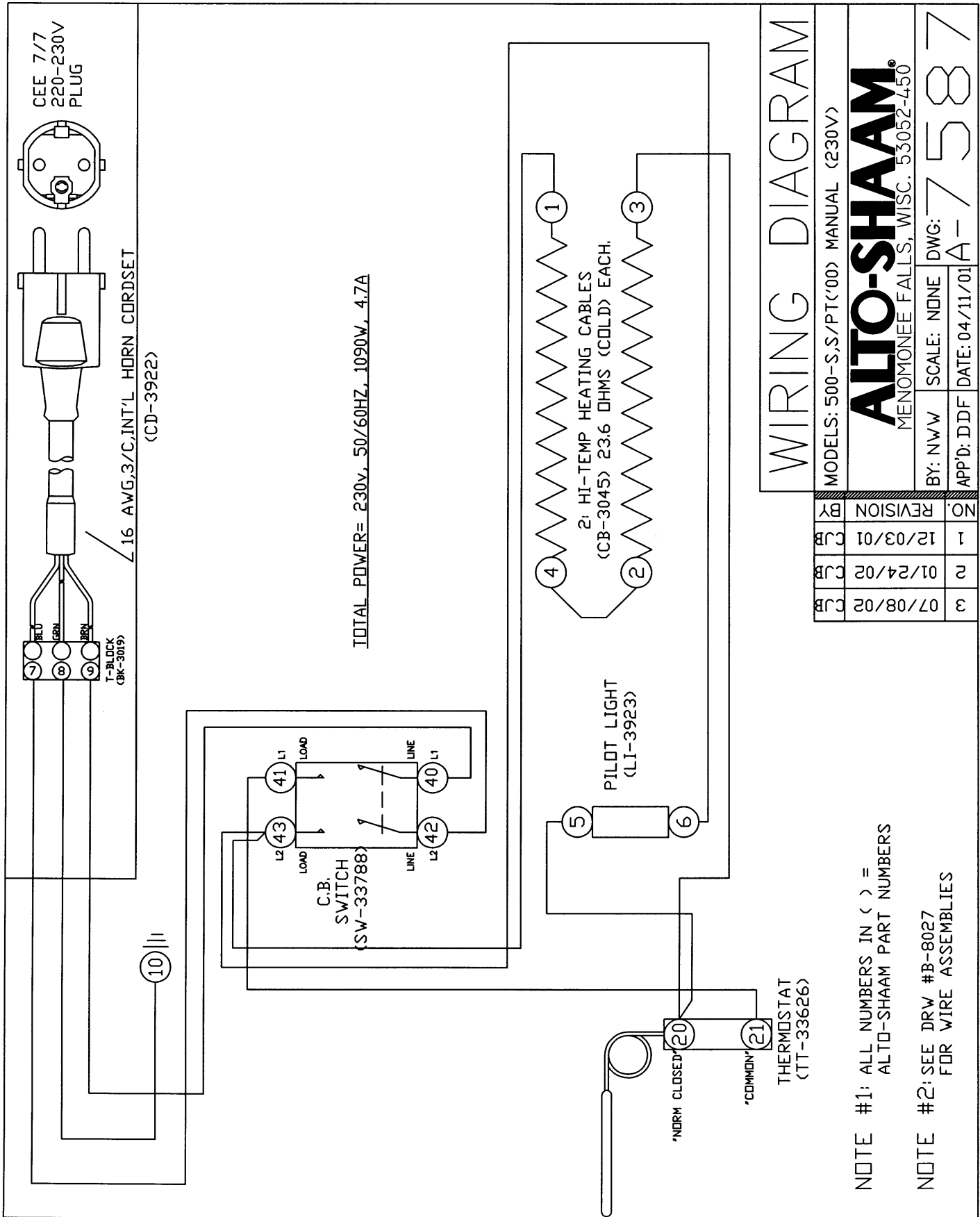
ALTO-SHAAM®
 MENOMONEE FALLS, WISC. 53052-450

NO.	REVISION	BY
1	07/08/02	CJB
2	01/24/03	CJB

NOTE #1: ALL NUMBERS IN () =
 ALTO-SHAAM PART NUMBERS

NOTE #2: SEE DRW #B-8074
 FOR WIRE ASSEMBLIES

BY: CJB SCALE: NDNE DWG: 7611
 APP'D: DDF DATE: 01/24/02 A-7611



WIRING DIAGRAM

NO	REVISION	BY
1	12/03/01	CJB
2	01/24/02	CJB
3	07/08/02	CJB

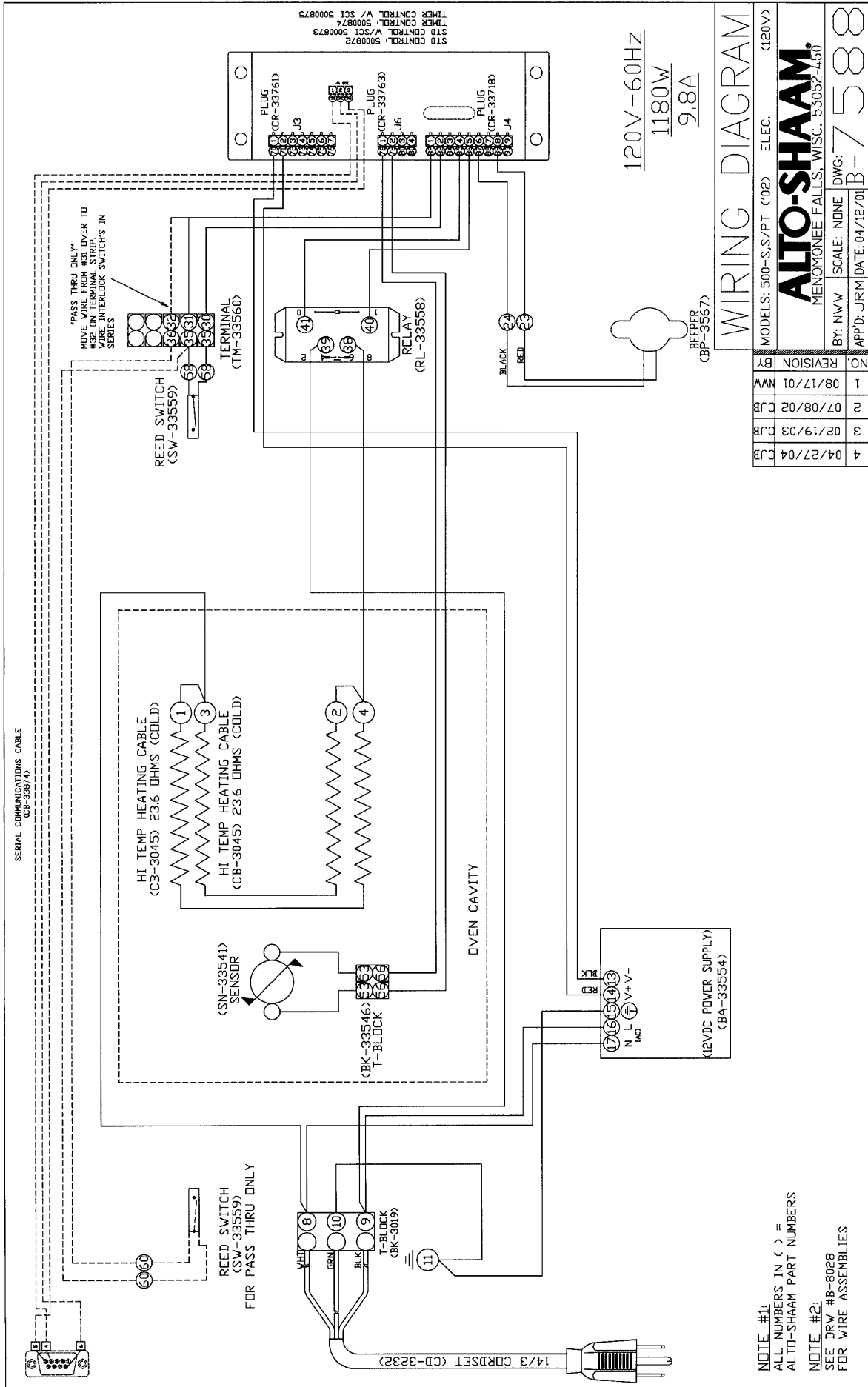
MODELS: 500-S, S/PT('00) MANUAL (230V)

ALTO-SHAAM
MENOMONEE FALLS, WISC. 53052-450

BY: N/W SCALE: NONE DWG: 7587
APP'D: DDF DATE: 04/11/01 A-7587

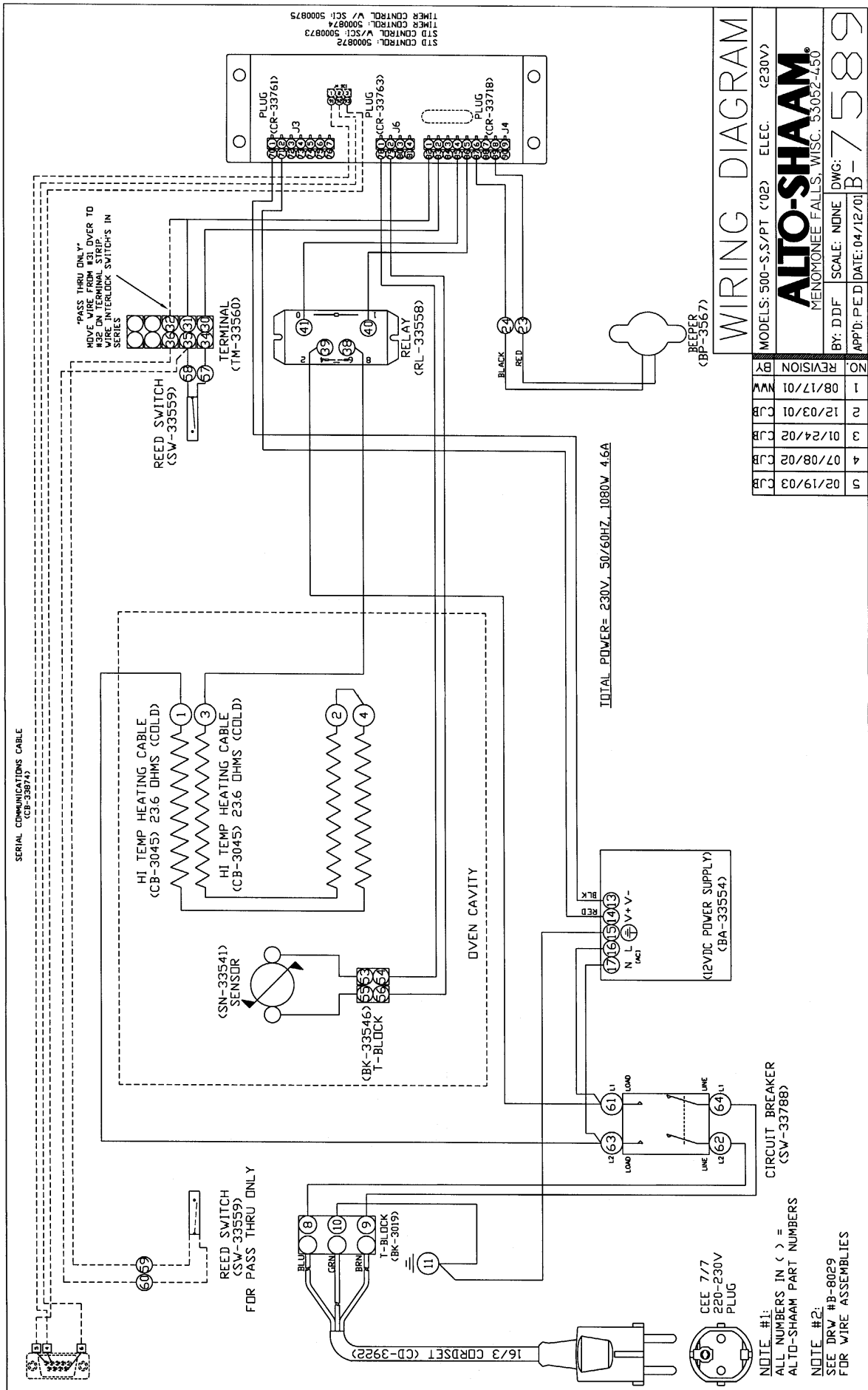
NOTE #1: ALL NUMBERS IN () =
ALTO-SHAAM PART NUMBERS

NOTE #2: SEE DRW #B-8027
FOR WIRE ASSEMBLIES



NOTE #1:
ALL NUMBERS IN () =
ALTO-SHAAM PART NUMBERS

NOTE #2:
SEE DRW #B-8028
FOR WIRE ASSEMBLIES



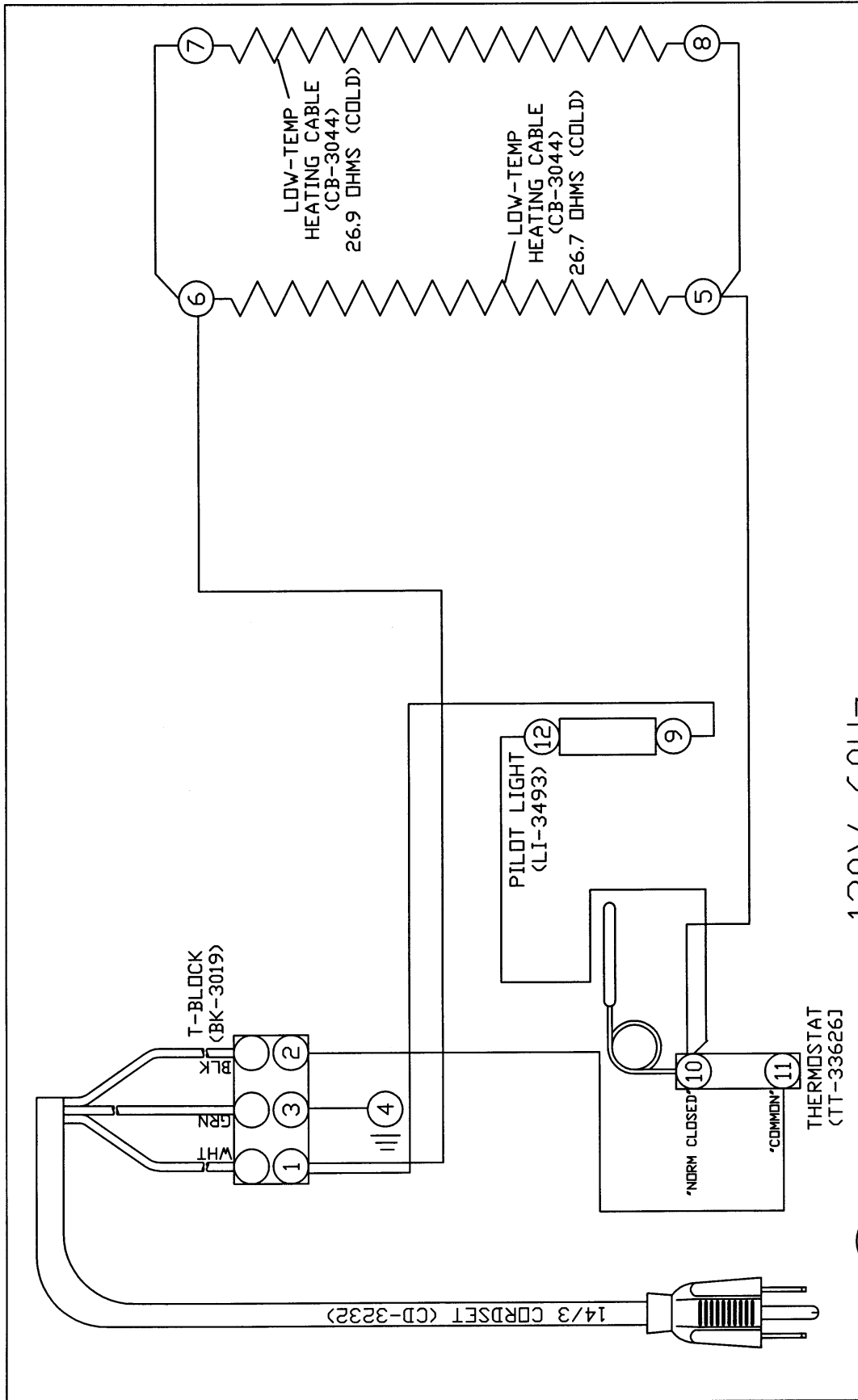
WIRING DIAGRAM

MODELS: 500-S.S/PT (02) ELEC. (230V)

ALTO-SHAAM
MENOMONEE FALLS, WISC. 53052-450

BY: D.D.F. SCALE: NONE DWG: B-7589
APP'D: P.E.D. DATE: 04/12/01

NO	REVISION	BY
1	08/17/01	NW
2	12/03/01	CB
3	01/24/02	CB
4	07/08/02	CB
5	02/19/03	CB



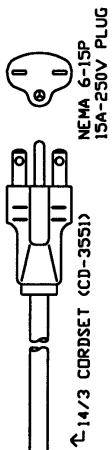
120V-60HZ
1040W-8.6A



WIRING DIAGRAM

MODELS: 750-S,S/PT ('00)		MANUAL 120V	
ALTO-SHAAM®			
MENOMONEE FALLS, WISC. 53052-450			
BY: N/W	SCALE: 1"=1'	DWG: A-7581	
APP'D: JRM	DATE: 03/19/01		
NO. 2	01/30/03	CJB	
NO. 1	07/01/02	CJB	
BY:	REVISION		

- NOTE #1: ALL NUMBERS IN () = ALTO-SHAAM PART NUMBERS
- NOTE #2: SEE DRW. #B-8019 FOR WIRE ASSEMBLIES



NEMA 6-15P
15A-250V PLUG

1/4\"/>

CORDSET (CD-3551)

4

1

2

3

1-BL DCK
(BK-3019)

1

2

3

WHT

GRN

BLK

1

2

3

4

5

6

11

12

18

19

16

17

PILOT LIGHT
(LI-3923)

THERMISTAT
(TT-33626J)

NORM CLOSED

COMMON

LOW-TEMP HEATING CABLE
(CB-3044)
EA. CABLE-26.8 OHMS (COLD)

12

11

6

5

TOTAL POWER: 208-240V, 50/60HZ, 1040W_{max}, 4.3A_{max}

208V, 3.7A, 780W

220V, 3.9A, 870W

240V, 4.3A, 1040W

WIRING DIAGRAM

MODELS: 750-S,S/PT('00) (MAN.) (208-240V)

ALTO-SHAAM®
MENOMONEE FALLS, WISC. 53052-450

BY: JMM

SCALE: NONE

DWG: A-7613

APP'D: D DF

DATE: 01/24/02

REVISION

NO. 1

01/30/03

BY

NO. 2

07/08/02

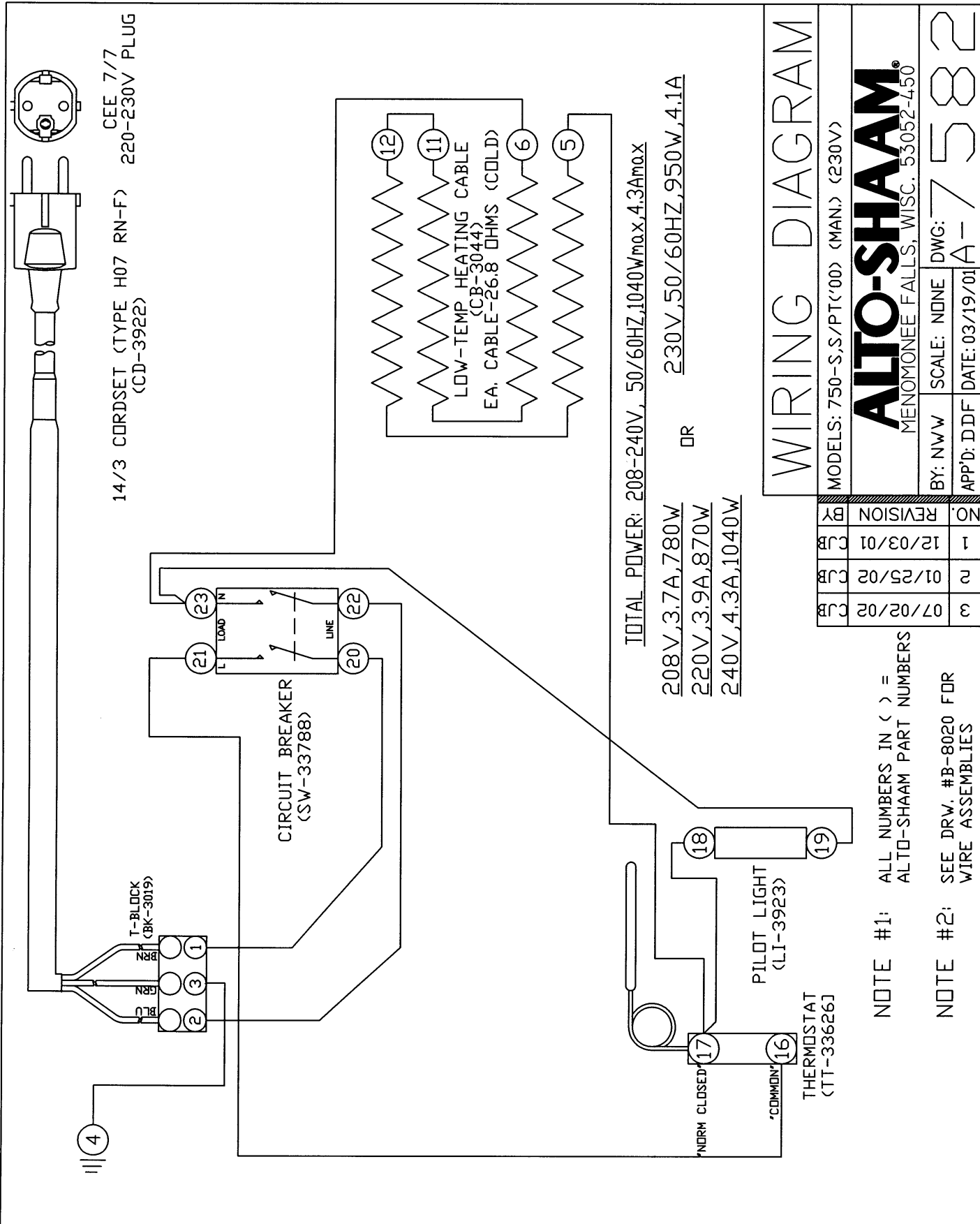
BY

ALL NUMBERS IN () =

ALTO-SHAAM PART NUMBERS

SEE DRW. #B-8076 FOR

WIRE ASSEMBLIES



14/3 CORDSET (TYPE H07 RN-F) 220-230V PLUG
(CD-3922) CEE 7/7

CIRCUIT BREAKER
(SW-33788)

T-BLOCK
(BK-3019)

LOW-TEMP HEATING CABLE
(CB-3044)
EA. CABLE-26.8 OHMS (COLD)

TOTAL POWER: 208-240V, 50/60HZ, 1040W max, 4.3A max
208V, 3.7A, 780W OR 230V, 50/60HZ, 950W, 4.1A
220V, 3.9A, 870W
240V, 4.3A, 1040W

WIRING DIAGRAM

MODELS: 750-S,S/PT<'00 (MAN.) (230V)

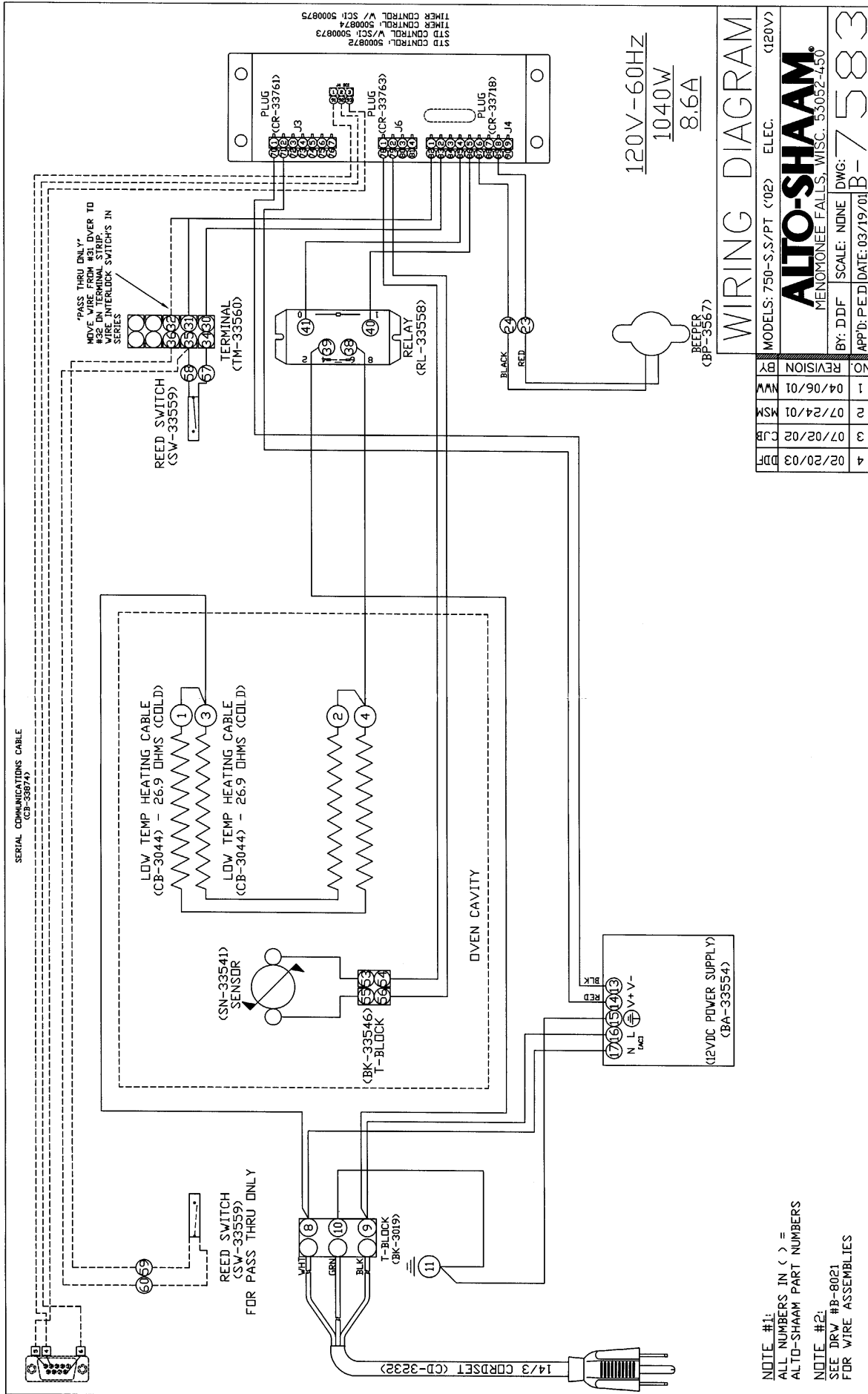
ALTO-SHAAM
MENOMONEE FALLS, WISC. 53052-450

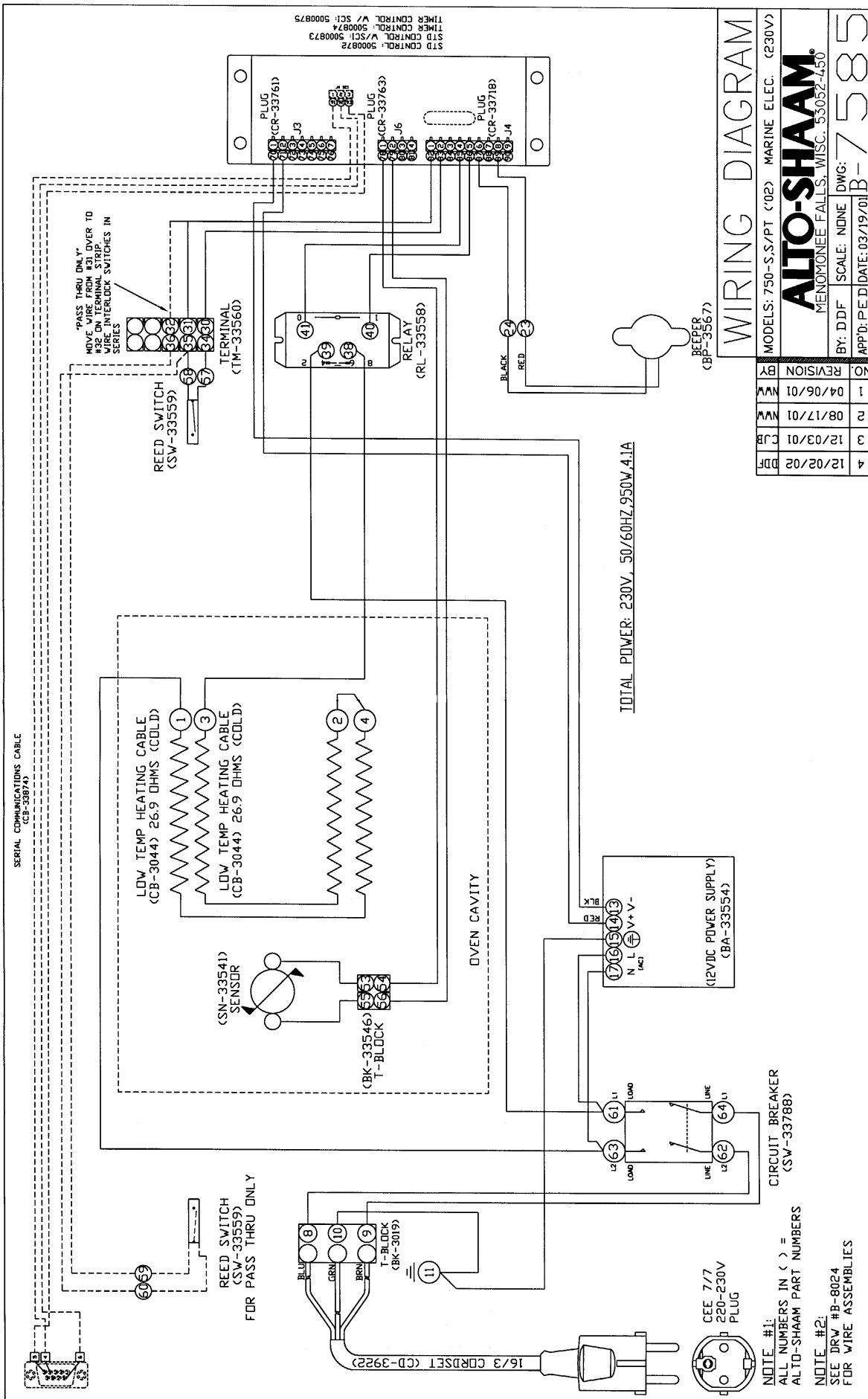
NO	REVISION	BY
3	07/02/02	CJB
2	01/25/02	CJB
1	12/03/01	CJB
NO		BY

NOTE #1: ALL NUMBERS IN () =
ALTO-SHAAM PART NUMBERS

NOTE #2: SEE DRW. #B-8020 FOR
WIRE ASSEMBLIES

BY: NWW SCALE: NONE DWG: 7582
APP'D: DDF DATE: 03/19/01 A-7582





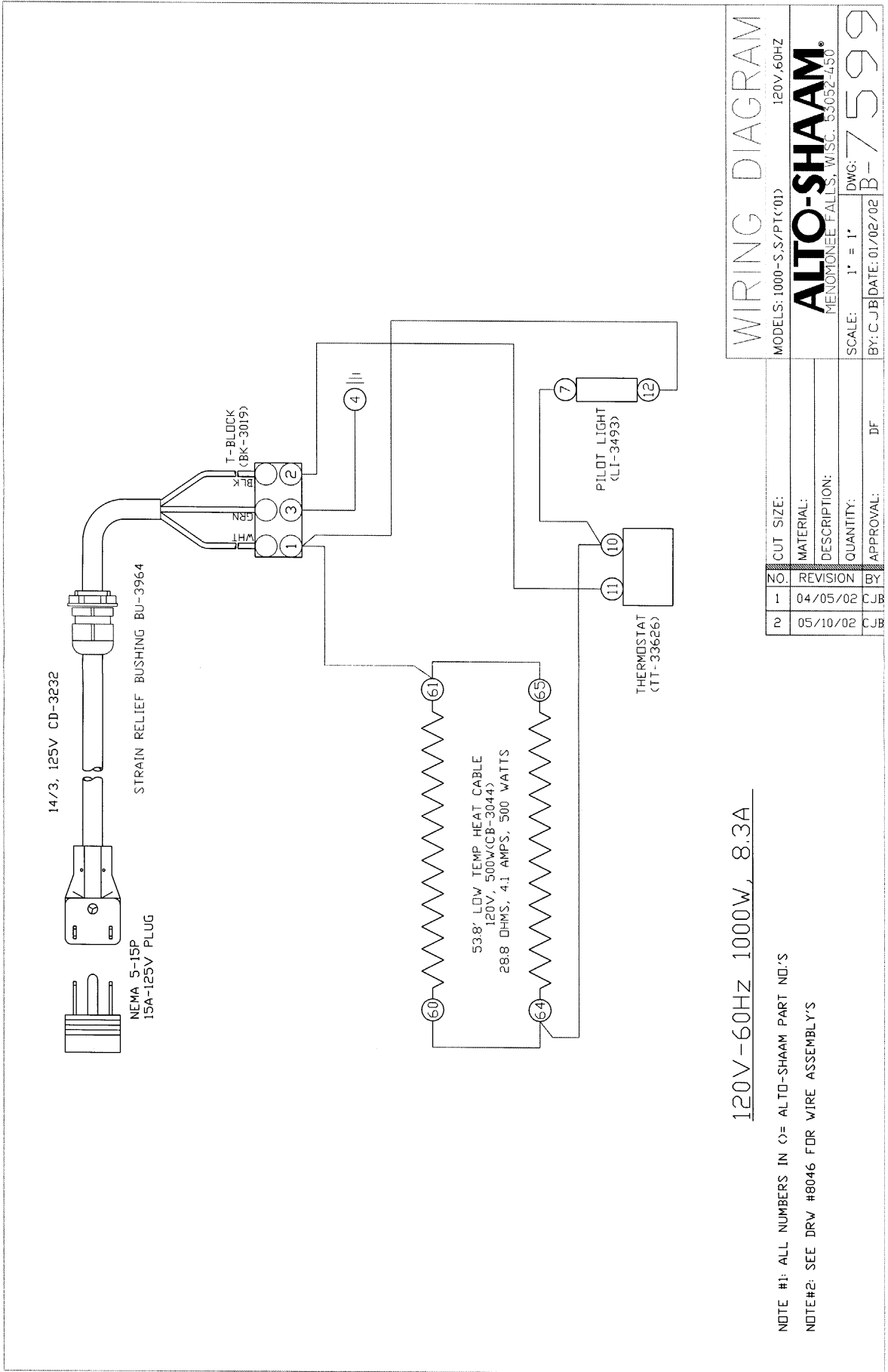
WIRING DIAGRAM

MODELS: 750-S.S./PT (02) MARINE ELEC. (230V)

NO	REVISION	BY
1	04/06/01	WV
2	08/17/01	WV
3	12/03/01	CJB
4	12/02/02	DDF

BY: DDF SCALE: NONE DWG: B-7585
APPD: P.E.D DATE: 03/19/01

ALTO-SHAAM
MEMONONEE FALLS, WISC. 53052-450



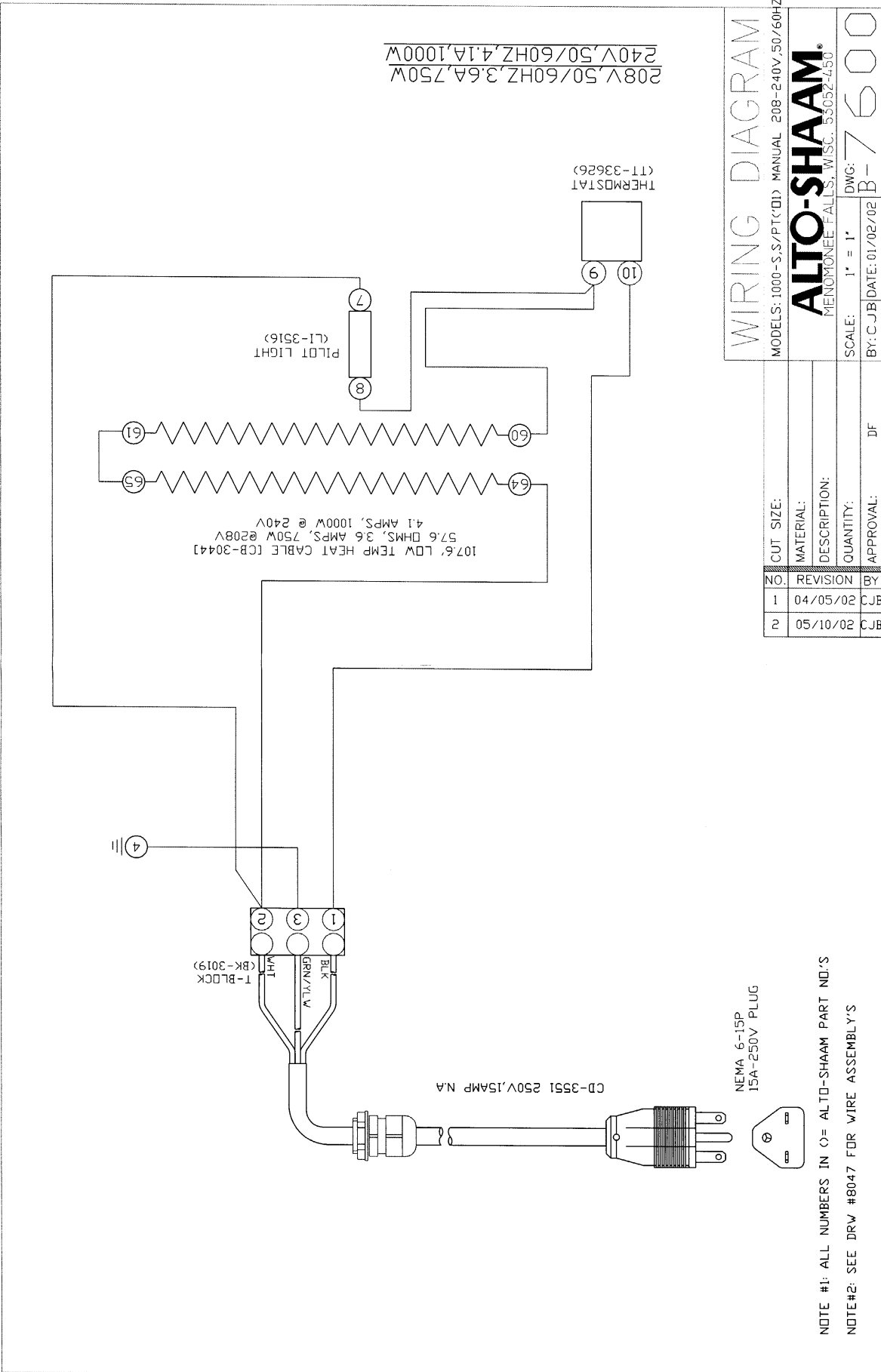
WIRING DIAGRAM

MODELS: 1000-S.S./PTC'01) 120V, 60HZ
ALTO-SHAAM®
 MENOMONEE FALLS, WISC. 53052-450
 SCALE: 1" = 1'
 BY: C.J.B. DATE: 01/02/02 DWG: B-7599

NO.	REVISION	BY	APPROVAL
1	04/05/02	CJB	DF
2	05/10/02	CJB	DF

120V-60HZ 1000W, 8.3A

NOTE #1: ALL NUMBERS IN ○ = ALTO-SHAAM PART NO.'S
 NOTE #2: SEE DRW #8046 FOR WIRE ASSEMBLY'S



WIRING DIAGRAM

MODELS: 1000-S,S/PT<DI> MANUAL 208-240V, 50/60HZ

ALTO-SHAAM®
MENOMONEE FALLS, WISC. 53052-450

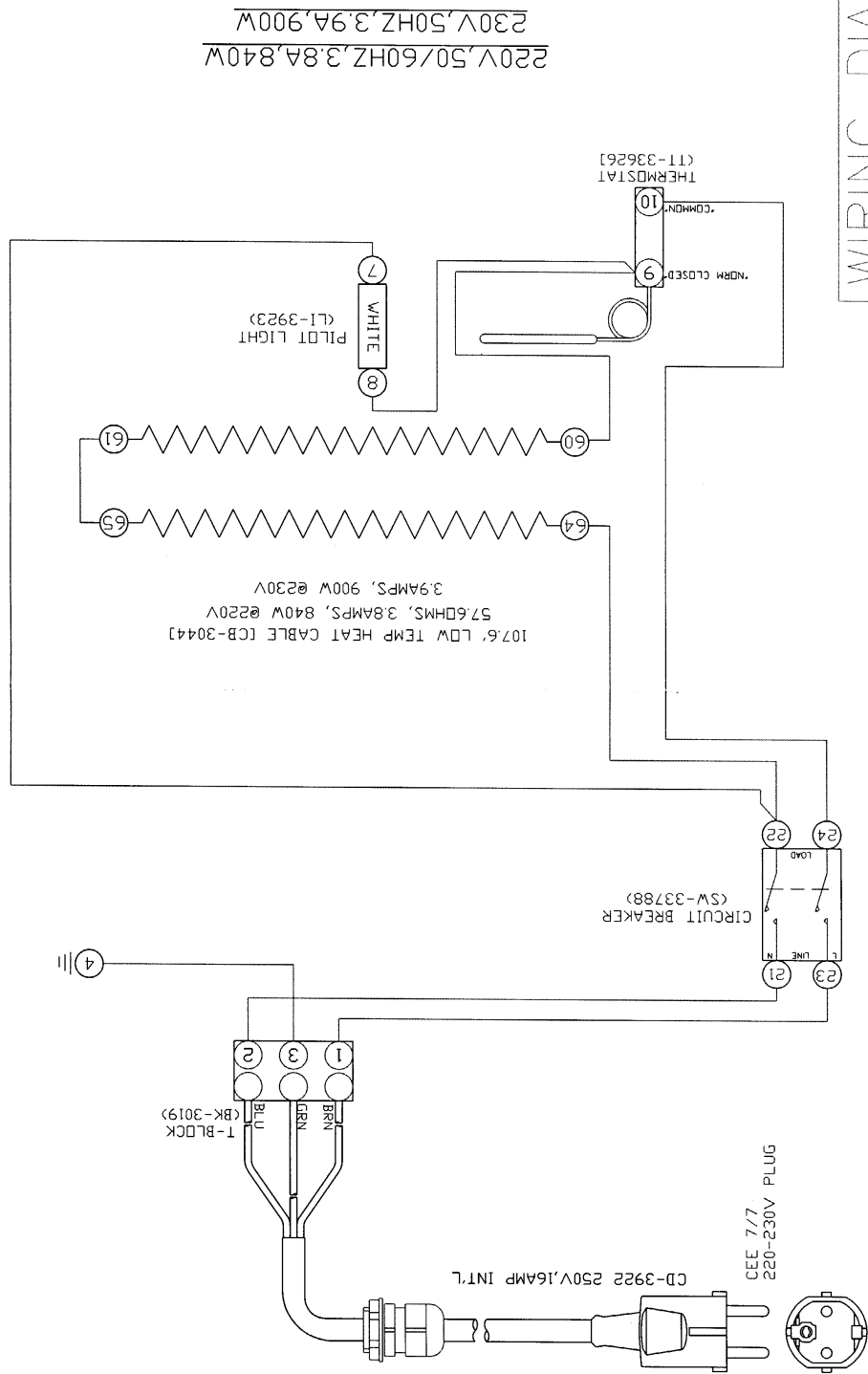
SCALE: 1" = 1'
BY: C.J.B. DATE: 01/02/02

DWG: B-7600

NO.	REVISION	BY
1	04/05/02	CJB
2	05/10/02	CJB

CUT SIZE:
MATERIAL:
DESCRIPTION:
QUANTITY:
APPROVAL: DF

NOTE #1: ALL NUMBERS IN ☉ = ALTO-SHAAM PART NO.'S
NOTE#2: SEE DRW #8047 FOR WIRE ASSEMBLY'S

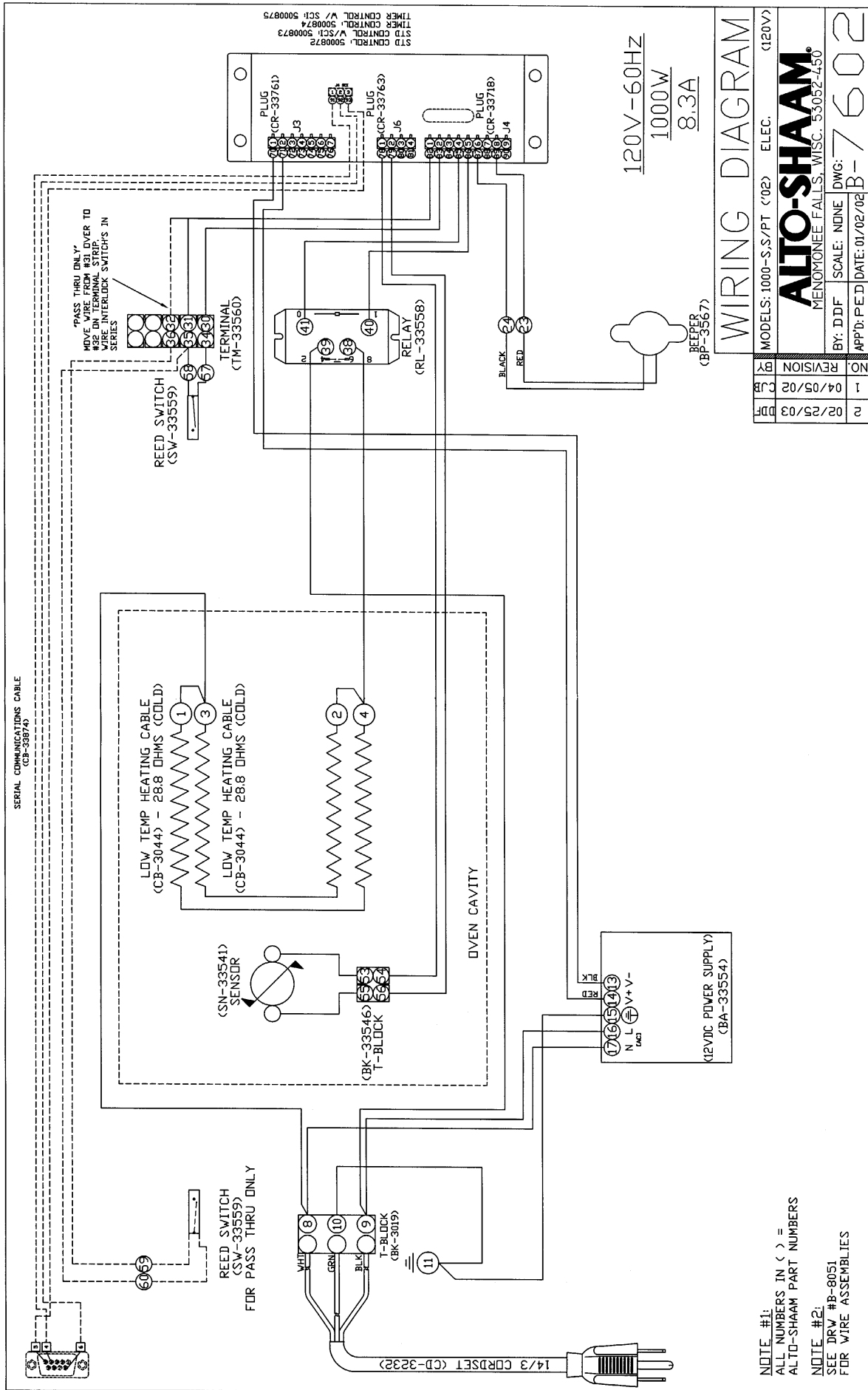


WIRING DIAGRAM

MODELS: 1000-S.S./PT('01) MANUAL 230V, 50HZ
ALTO-SHAAM®
 MENOMONEE FALLS, WISC. 53052-450
 SCALE: 1" = 1' DWG: B-7601
 BY: C.J.B. DATE: 01/02/02

NO.	REVISION	BY	DATE
1	04/05/02	C.J.B.	

NOTE #1: ALL NUMBERS IN ○ = ALTO-SHAAM PART NO.'S
 NOTE #2: SEE DRW #8048 FOR WIRE ASSEMBLY'S



WIRING DIAGRAM

MODELS: 1000-S,S/PT (02) ELEC. (120V)

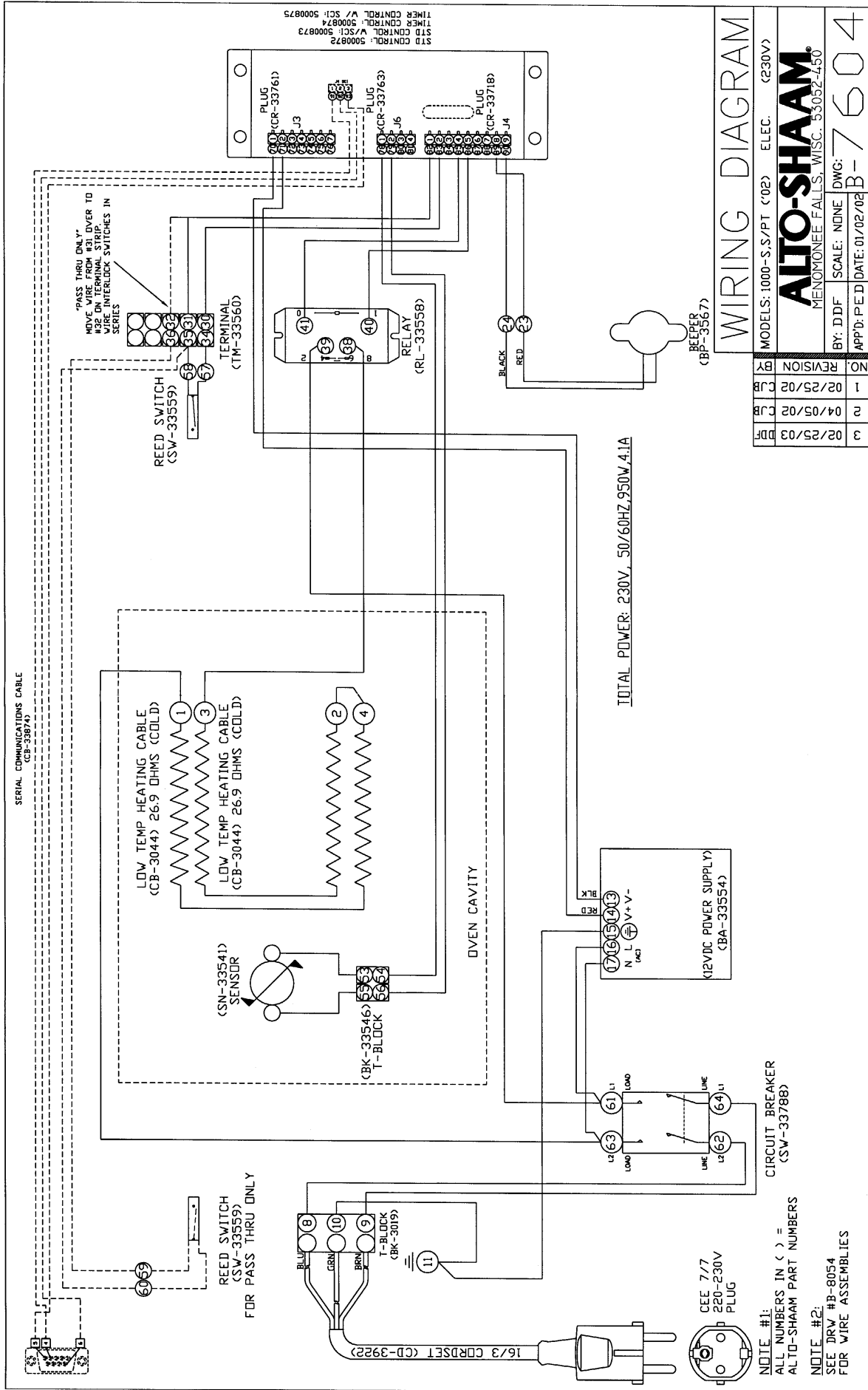
NO.	REVISION	BY
1	04/05/02	CJB
2	02/25/03	BDH

BY: D.D.F. SCALE: NONE DWG: B-7602
 APP'D: P.E.D DATE: 01/02/02

AUTO-SHAAM
 MENOMONEE FALLS, WISC. 55052-450

NOTE #1:
 ALL NUMBERS IN () =
 ALTO-SHAAM PART NUMBERS

NOTE #2:
 SEE DRW #B-8051
 FOR WIRE ASSEMBLIES



TRANSPORTATION DAMAGE and CLAIMS



LIMITED WARRANTY



All Alto-Shaam equipment is sold F.O.B. shipping point, and when accepted by the carrier, such shipments become the property of the consignee.

Should damage occur in shipment, it is a matter between the carrier and the consignee. In such cases, the carrier is assumed to be responsible for the safe delivery of the merchandise, unless negligence can be established on the part of the shipper.

1. Make an immediate inspection while the equipment is still in the truck or immediately after it is moved to the receiving area. Do not wait until after the material is moved to a storage area.
2. Do not sign a delivery receipt or a freight bill until you have made a proper count and inspection of all merchandise received.
3. Note all damage to packages directly on the carrier's delivery receipt.
4. Make certain the driver signs this receipt. If he refuses to sign, make a notation of this refusal on the receipt.
5. If the driver refuses to allow inspection, write the following on the delivery receipt:
Driver refuses to allow inspection of containers for visible damage.
6. Telephone the carrier's office immediately upon finding damage, and request an inspection. Mail a written confirmation of the time, date, and the person called.
7. Save any packages and packing material for further inspection by the carrier.
8. Promptly file a written claim with the carrier and attach copies of all supporting paperwork.

We will continue our policy of assisting our customers in collecting claims which have been properly filed and actively pursued. We cannot, however, file any damage claims for you, assume the responsibility of any claims, or accept deductions in payment for such claims.

Alto-Shaam, Inc. warrants to the original purchaser that any original part that is found to be defective in material or workmanship will, at our option, subject to provisions hereinafter stated, be replaced with a new or rebuilt part.

The labor warranty remains in effect one (1) year from installation or fifteen (15) months from the shipping date, whichever occurs first.

The parts warranty remains in effect one (1) year from installation or fifteen (15) months from the shipping date, whichever occurs first.

Exceptions to the one year part warranty period are as listed:

- A. Halo Heat cook/hold ovens include a five (5) year parts warranty on the heating element. Labor will be covered under the terms of the standard warranty period of one (1) year or fifteen (15) months.
- B. Alto-Shaam Quickchillers include a five (5) year parts warranty on the refrigeration compressor. Labor will be covered under the terms of the standard warranty period of one (1) year or fifteen (15) months.

This warranty does not apply to:

1. Calibration
2. Replacement of light bulbs and/or the replacement of display case glass due to damage of any kind.
3. Equipment damage caused by accident, shipping, improper installation or alteration.
4. Equipment used under conditions of abuse, misuse, carelessness or abnormal conditions.
5. Any losses or damage resulting from malfunction, including loss of product or consequential or incidental damages of any kind.
6. Equipment modified in any manner from original model, substitution of parts other than factory authorized parts, removal of any parts including legs, or addition of any parts.

This warranty is exclusive and is in lieu of all other warranties, expressed or implied, including the implied warranties of merchantability and fitness for purpose. In no event shall the Company be liable for loss of use, loss of revenue, or loss of product or profit, or for indirect or consequential damages. This warranty is in lieu of all other warranties expressed or implied and Alto-Shaam, Inc. neither assumes or authorizes any persons to assume for it any other obligation or liability in connection with Alto-Shaam equipment.

ALTO-SHAAM, INC.
Warranty effective January 1, 2000

RECORD THE MODEL AND SERIAL NUMBERS OF THE UNIT FOR EASY REFERENCE. ALWAYS REFER TO BOTH MODEL AND SERIAL NUMBERS IN ANY CONTACT WITH ALTO-SHAAM REGARDING THE UNIT.

Model: _____
Voltage: _____
Serial Number: _____

Date Installed: _____
Purchased From: _____

W164 N9221 Water Street • P.O. Box 450 • Menomonee Falls, Wisconsin 53052-0450 • U.S.A.

PHONE: 262.251.3800

FAX: 262.251.7067 • 800.329.8744 U.S.A./CANADA

WEBSITE:

800.558.8744 USA/CANADA

262.251.1907 INTERNATIONAL

www.alto-shaam.com