

Eco Tech®

ELECTRIC STEAM COOKER



MODELS:

ET-3E
ET-5E
ET-6E
SB-ET-3E
SB-ET-6E

COVERING

- INSTALLATION
- OPERATION
- SERVICE & PARTS

INSTALLATION AND OPERATION MANUAL



An Employee-Owned Company

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1. Introduction

1.1 Description

The Eco Tech[®] represents the latest in counter top steam technology, designed to apply the benefits of steam cooking to today's health-conscious menus. Ideal for batch cooking, à-la-carte, and rethermalization of individual entrées, the Eco Tech[™] puts the power of steam on your counter top. The Eco Tech[™] is a pressureless steam cooker consisting of:

- 3, 5, or 6-pan cavity
- Electric pressureless generator (6, 9, or 12-kW inputs)
- Mechanical controls
- Low water indicator
- Hold feature

These features and functions will be discussed in greater detail in Section 3.

A steam-on-demand steam generator system gives quick start-ups and efficient steam transfer to the cooking compartment, without the use of expensive vacuum pumps. In tests for energy efficiency and cooking times performed in accordance with ASTM standards, the Eco Tech[®] yielded impressive results over other similar counter top steamers.

With the “hold” feature, your Eco Tech[®] will keep cooked foods at 160°F until you are ready to serve, giving you more time between cooking and serving—it's a Market Forge exclusive.

As your operation grows, so does your Eco Tech[®]. By stacking multiple Eco Tech[®] models, you can accommodate up to 10 pans, creating a complete high-output steam cooking system.

1.2 Basic Functioning

To begin operation, the power switch is pressed into the ON position, illuminating the power light. Pour about 2 1/2 gallons water into the steam generator, located at bottom of cavity. **DO NOT** exceed the “**MAXIMUM WATER LINE**”. Turn the timer to approximately 15 minutes. This will energize the heating elements. At the end of 15 minutes the buzzer will go off, indicating that the unit is now ready to cook.

A steaming mode is selected with the timer/selector switch.

For continuous steam, set the selector timer knob to the “constant steam” position (the green area of the selector/timer switch). The cooker will continue to steam until the switch is moved to the “Hold/Idle” position.

If you desire a timed steam cooking cycle, just set the timer knob to the cook time (up to 60 minutes).

In the timed steam mode, the cooker will create steam for the duration of time you have set. Once the timer reaches the end of its cycle (0 minutes), the buzzer will sound. The buzzer is silenced by returning the timer knob to the “Hold/Idle” position, which ceases the steaming function. The generator will continue to idle at 170°F.

Each unit is equipped with a standard steam-and-hold feature. At the completion of the cooking cycle, place the timer knob to the “Hold/Idle” position.

The hold feature is controlled by a separate thermostat with an additional temperature gauge mounted just below the control panel. The unit will now act as a holding cabinet until you call for steam again. During this time, the generator will continue to idle at 170°F.

The steam generator is drained from the bottom of the unit. You need at least a 4” deep steam pan underneath the unit.

1.3 Service

Required service, both preventative and corrective, is explained in Sections 6 and 7. Should repairs be required, a network of authorized agencies is available to assist with prompt service. A current Directory of Authorized Service Agencies may be obtained by contacting:

Product Service Department
Market Forge Industries, Inc.
35 Garvey Street
Everett, Massachusetts 02149
Telephone: (617) 387-4100

The Model and Serial Numbers must be referenced when corresponding with Market Forge. The data plate containing the serial number is located on the top front of the steamer (body panel).

2. Installation

2.1 Assembly

The assembled Eco Tech® Pressureless Steam Cooker is shipped in a carton on a skid. Steps required for assembly are as follows:

1. Remove the carton and the unit off the skid.
2. Install the feet into the threaded mounting locations on the bottom of the unit.
3. Install a rack supports to the left & right inside of the cooking cavity mounting holes.
4. Install the vent strainer in the back inside the cooking cavity.
5. Mount the drip trough to the front of the unit.
6. Slide the ala-carte shelf into place on the slide guides.

2.2 Setting in Place

If possible, a location should be selected under an exhaust hood which will remove small amounts of vapor emitted from the cooker during normal operation. Next, level the unit after it is placed in its final location. This is accomplished by turning the bottom part of the adjustable feet. Using the cabinet top as a reference, obtain level adjustment left-to-right and front-to-back. **MAKE SURE UNIT IS LEVEL**

2.3 Service Connections

The only service connection at the back of the unit is the electrical connection. Please see the illustrations and table located in Table 2.1 for service connections, details, and dimensions.

2.3.1 Electrical Connections

CAUTION: USE COPPER WIRE ONLY FOR POWER SUPPLY CONNECTIONS.

Please refer to Table 2.1 for details of electrical service connections.

Electrical connection power supply should utilize wire suitable for 90°C.

MODEL: ET-3E

VOLTS	PHASE	AMPS	
		6Kw	9Kw
208V 60Hz	1 Ø 3 Ø	29 17	43 25
240V 60Hz	1 Ø 3 Ø	25 15	38 22
480V 60Hz	1 Ø 3 Ø	13 7	19 11

MODELS: ET-5E & ET-6E

VOLTS	PHASE	AMPS	
		9Kw	12Kw
208V 60Hz	1 Ø 3 Ø	43 25	58 34
240V 60Hz	1 Ø 3 Ø	37.5 22	50 29
480V 60Hz	1 Ø 3 Ø	19 11	25 15

Note: ET-3E 9kW & ET-5/6E 12kW factory options

Table 2.0

2.4 Reversing the Doors

The Eco Tech® Pressureless Steam Cooker has a reversible cooking compartment door for your convenience. This section contains instructions for reversing this door.

1. Turn off power to the unit.
2. Open the cooking compartment door
3. Remove the two screws that attach the top hinge to the front of the unit.
4. Slide the door upwards, off the bottom hinge.
5. Remove the two screws that attach the bottom hinge to the front of the units.
6. Remove the right and left side panels by unscrewing the 1 screw on each panel and sliding the panel down.

2. Installation *(continued)*

7. Remove the door interlock assembly by unscrewing the two nuts that hold it in place (assembly is attached to the screws in the top right hinge mounting holes, see fig. 2-1).
8. Remove the four screws in the right side hinge mounting holes and install them in the left side hinge mounting holes (where the hinges were originally mounted).
9. Using the nuts removed in step #6, reinstall the door interlock assembly onto the 2 screws in the lower left hinge mounting holes (see fig. 2-1) by moving the assembly over the cooking cavity to the other side of the unit. **Rotate the door interlock assembly 180° for installation**, so that the switch is now facing up.
10. Reinstall the top hinge and screws into the right lower hinge mounting holes. **Rotate the hinge 180° for installation**, so that the pin which the door rides on is now facing up. The hinge must be rotated because it will now function as the bottom hinge. **DO NOT COMPLETELY TIGHTEN THE HINGE MOUNTING SCREWS YET.** These will be used later for adjusting the door.
11. Remove the door latch assembly from the face of the unit. The 2 nuts mounting the door latch are located behind the face of the unit and must be accessed where the right side panel was removed.
12. Remove the two white hole plugs from the left door latch mounting holes, and insert them into the right door latch mounting holes (where the door latch assembly was originally mounted).
13. **Rotate the door latch assembly 180°**, and install into the left door latch mounting holes.

NOTE: Each stud on the latch assembly should have a plastic washer, a spring, a plastic washer and a Nyloc type nut,
14. To adjust the tension of the door latch, tighten both nuts down until the springs are fully compressed, then back each nut off 1 1/2 turn.
15. **Rotate the door 180° for mounting.**
16. Slide the remaining hinge into the top door bearing.
17. Slide the door and hinge assembly down onto the hinge which you have already mounted to the front of the unit. Use the two screws to mount the top hinge into the right upper hinge mounting holes. **DO NOT COMPLETELY TIGHTEN THE HINGE MOUNTING SCREWS YET.**
18. Slowly push the cooking compartment door closed until it is latched.
19. The cooking compartment door can now be raised, lowered, and/or rotated into position by bumping it with the palm of your hand or by using a small rubber mallet.
20. First, check the alignment at the front of the door by making sure that the striker in the door is centered with the latch mechanism on the front of the unit.
21. Square the door to the unit by raising or lowering the hinge side of the door, keeping the latch centered with the striker.
22. Visually inspect the door. Be sure that the door is square to the unit, the striker is centered with the latch, and the gasket is in contact with the entire lip of the cooking compartment.
23. Gently open the cooking compartment door, taking care not to move it out of position.
24. Tighten all 4 door hinge bracket mounting screws.
25. Close and visually inspect the door again, as described in step 22.
26. Reinstall the left and right side panels, using the screws for each panel.

2. Installation *(continued)*

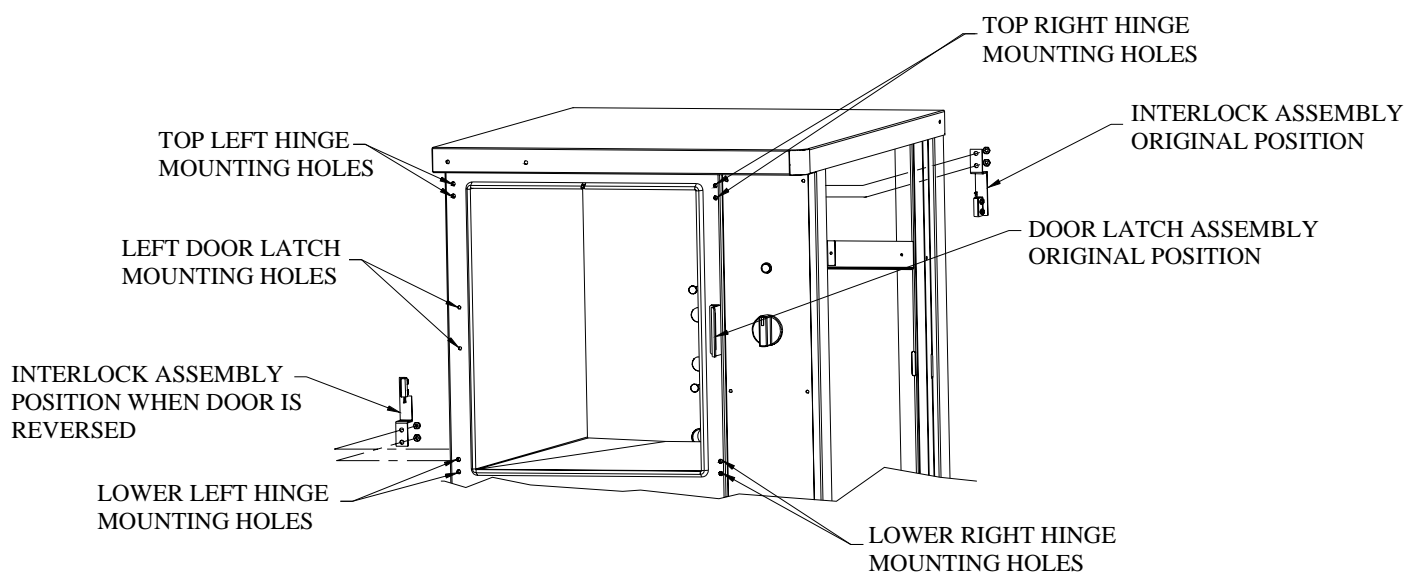
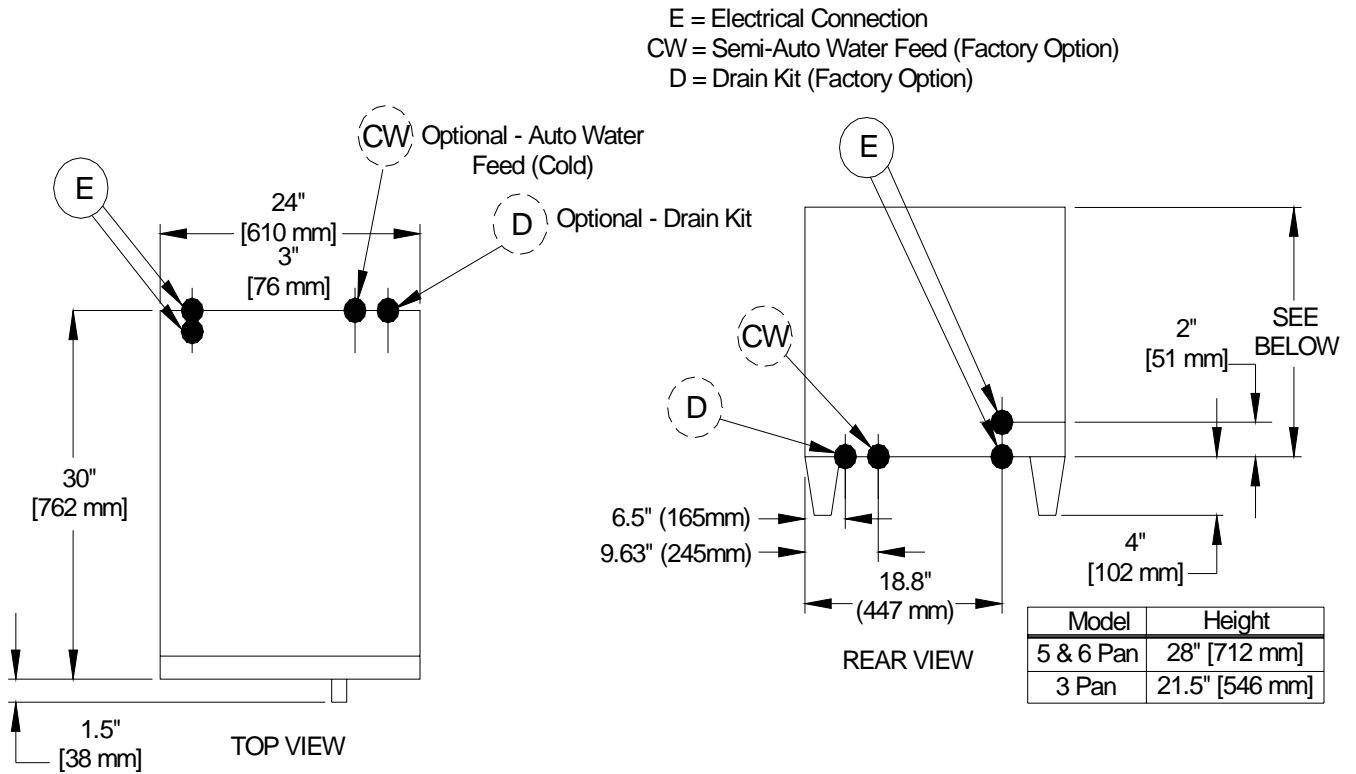


Fig. 2.1: Door Reversability

2. Installation *(continued)*

Table 2.1: Service Connections



Note: Water used in this unit, should have hardness of no greater than 2.0 grains per gallon and pH level is within the range of 7.0-8.5. Water which fails to meet these standards should be treated by installation of a water conditioner. **Equipment failure caused by inadequate water quality is not covered under warranty.**

INTERNAL DIMENSIONS			
Model	Height	Width	Depth
ET-3E	10.7" 271 mm	14.0" 356 mm	22.5" 571 mm
ET-5 & 6E	17.2" 436 mm	14.0" 356 mm	22.5" 571 mm

CAPACITY			
Pan Size	Number of Pans		
	ET-3E	ET-5E	ET-6E
12" x 20" x 1"	6	8	10
12" x 20" x 2 1/2"	3	5	6
12" x 20" x 4"	2	3	4

2. Installation (continued)

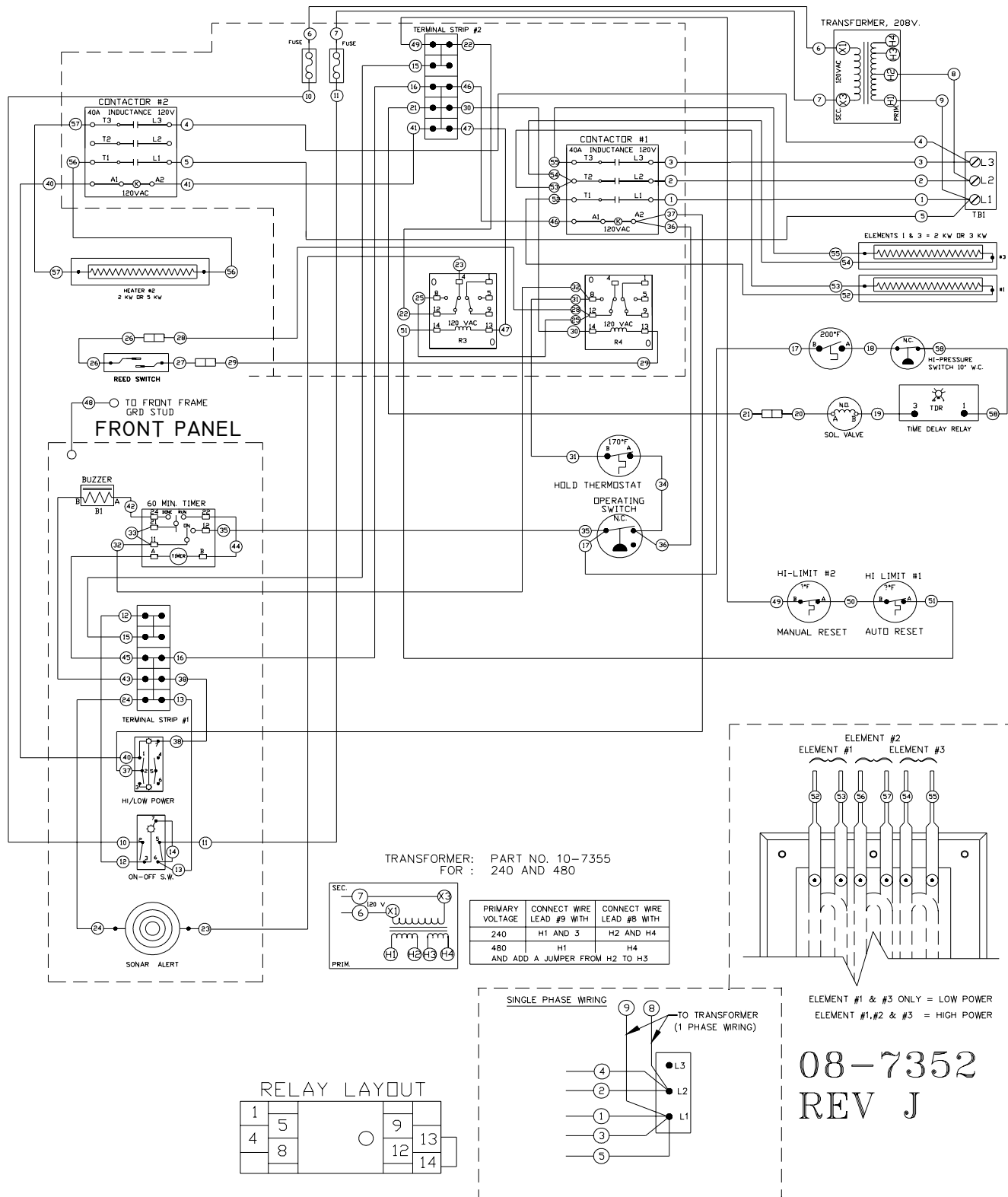


Fig. 2.2: Wiring Diagram

3. Initial Systems Inspection

3.1 General

This section contains information for you to test and familiarize yourself with the operation of the Eco Tech™.

After the cooker is completely assembled, all packaging materials removed, and all service connections are made, all systems must be given a thorough checkout before being put into operation. We begin by making sure that the drain valve is closed and the empty drain pan is in its proper position. Pour about 2 1/2 gallons of water into the bottom of the cooking cavity or up to the **“MAXIMUM WATER LINE”**. Mount both racks and the Ala - Carte - Shelf in place. Confirm that all service connections are correct. Close the cooking compartment door, and turn the timer knob to 15 minutes.

3.2 Warm-up

Push the power switch to the “ON” position. The heaters will energize. After 15 minutes the buzzer will go off, indicating that the steamer is ready to cook. The temperature gauge will indicate a 212°F temperature. At this time you may choose either to load food to cook or turn the timer knob to “hold / idle” mode prior to actual cooking. In the hold / idle mode, the temperature gauge will show a temperature of around 170°F.

3.3 Timed Steam Mode

Set the selector/timer knob to 10 minutes and close the door. The temperature gauge will slowly register increasing temperatures up to 212°F.

When the timer reaches 0 minutes, the buzzer will sound. The buzzer is silenced by returning the selector/timer knob to the “hold / idle” position.

3.4 Constant Steam Mode

The constant steam mode overrides all other cooking modes. This mode is entered by turning the selector/timer knob to the “constant steam” position on the dial (green area). With the knob set for constant steam, and the door closed, the temperature gauge should indicate a temperature of 212°F.

3.5 Hold / Idle Mode

You enter this mode by placing the selector/timer knob to the “Hold / Idle” position. This mode only works if the steaming cycle has been completed and the door has been left closed. The cooking cavity will hold product between 150°F - 190°F

3.6 High / Low Power Switch

Your Eco-Tech® comes with a unique “High / Low Power” system. This feature allows smaller portions to be cooked with less power. If your menu demands are reduced, the Eco - Tech allows you to save energy. This is a Market Forge exclusive!

3.7 Low Water Signal

During cooking, the water in the steam generator will keep evaporating. When the generator is nearly empty, the heaters, for safety reasons, will be turned off and a beeper will sound, indicating an abrupt end to the cooking mode and a need to add water until the beeper turns off.

3.8 Shut Down

No special procedure is necessary for shutting the unit down. Simply press the power switch into the “OFF” position, and open the drain valve at the bottom. The indicator lights on the control panel will go out, and the generator will drain. Then empty the drain pan.

Caution: When the unit is not in use, leave the cooking compartment door slightly ajar to prolong the life of the door gasket.

4. Operation

4.1 Controls and Indicators

The controls and indicators used to operate the Eco Tech[®] pressureless steam cooker are listed and described in Table 4.1.

4.2 Operating Procedures

This section includes general instructions for daily operation of the Eco Tech[™] pressureless steam cooker. You should review Sections 3.1 through 3.6 of this manual if you are unfamiliar with the functions of the Eco Tech[™]. If you require more detailed technical information on the various Eco Tech[™] systems and their functions, please refer to Section 5 of this manual, “Principles of Operation.”

4.2.1 Startup and Preheating

The Eco Tech[™] pressureless steam cooker requires a simple startup procedure:

1. With the drain closed, pour clean water into the empty steam generator up to the “**MAXIMUM WATER LINE**”
2. Press the power switch into the “on” position.

3. With the door closed, turn the timer knob to 15 minutes.

The heaters will be energized. After 15 minutes, the buzzer will go off, indicating that the steamer is ready to cook. You may at this time either decide to cook in a constant steam/timer mode or turn the timer knob to “hold/idle” mode to idle the steamer around 170°F.

4.2.2 Cooking—Mechanical Controls

Note: The temperature gauge needs to indicate temperatures above 150°F before cooking.

1. Slide pans of food into the cooking compartment pan support racks.
2. Firmly close the cooking compartment door.
3. Begin steaming by rotating the selection/timer knob to either the constant steam position or a desired cooking time.
4. At the end of the cook cycle (the buzzer will sound when the timer has timed out to zero), return the timer knob to the “Hold/Idle” position, which will turn off the buzzer.
5. If the unit is in constant steam mode, it will continue to provide steam to the cavity until the selector/timer is turned to the “Hold/Idle” position. Opening the door will interrupt the flow of steam to the cavity.

Table 4.1: Controls and Indicators

Power Switch	Located in the middle of the control panel. Pressing this button into the “on” position will supply power to the unit. Pressing this button into the “off” position will cut off power to the generator.
Timer Knob	Located near the top of the control panel. Turn the timer knob to set the cook time.
Temperature Gauge	Located at the bottom of the control panel, it is used to monitor the internal temperature of the cooking compartment during the steam or “Hold/Idle” mode.
Constant Steam Position	Located on the timer knob (selection/timer switch), the constant steam feature is entered by turning the knob clockwise to the green area (marked constant steam).
No Water Alarm	Located below the power switch of the control panel. This will give an audible signal when the generator needs to be refilled with clean water.
High & Low Power Switch	Located on the control panel just below the 60 Minute Timer. This switch allows the end user to choose between power options. “ HIGH ” mode is for full capacity. “ LOW ” mode is for reduced capacity.

4. Operation *(continued)*

4.2.3 Shutdown and Daily Cleaning

After each period of daily operation, the steamer should be drained and cleaned. Simply press the power switch into the “OFF” position, and follow the cleaning steps outlined below.

1. Place an empty 4" deep steam pan under the steamer, and turn drain valve to “OPEN.” Allow all water to drain & cool before emptying the pan.
2. Allow the steamer to cool before removing rear strainer, left and right racks, and ala-carte shelf.
3. Wash cooking compartment and steam generator interiors using a mild detergent. Rinse and dry thoroughly.
4. Remove drip/spill trough.
5. Wash all removed pieces with a mild detergent and non-abrasive pad. Rinse and dry thoroughly.
6. Replace all removed parts.
7. Leave the door slightly ajar to prolong life of the door gasket.

7. If “Total Concept” is needed repeat above procedure, replacing vinegar with “Total Concept”.

4.3 Periodic Cleaning

If you should experience build up of lime or mineral deposits in the steam generator, it may be cleaned easily using vinegar & water. If dealing with severe scaling use Market Forge’s descaling product, “Total Concept™” with water.

1. With drain closed, fill generator with 2 gallons water and 1/2 gallon vinegar. Close door
2. Turn power switch to “ON”.
3. Place timer into “HOLD” mode. Let run for one hour.
4. Open door. Turn the drain valve to “OPEN.” Allow Vinegar/Water solution to drain into the pan. Empty as needed.
5. Refill steamer with water, and drain again flushing out any remaining vinegar/water solution. Empty as needed.
6. Replace any removed parts, close valve, and refill steamer. Steamer is now ready for use.

4. Operation *(continued)*

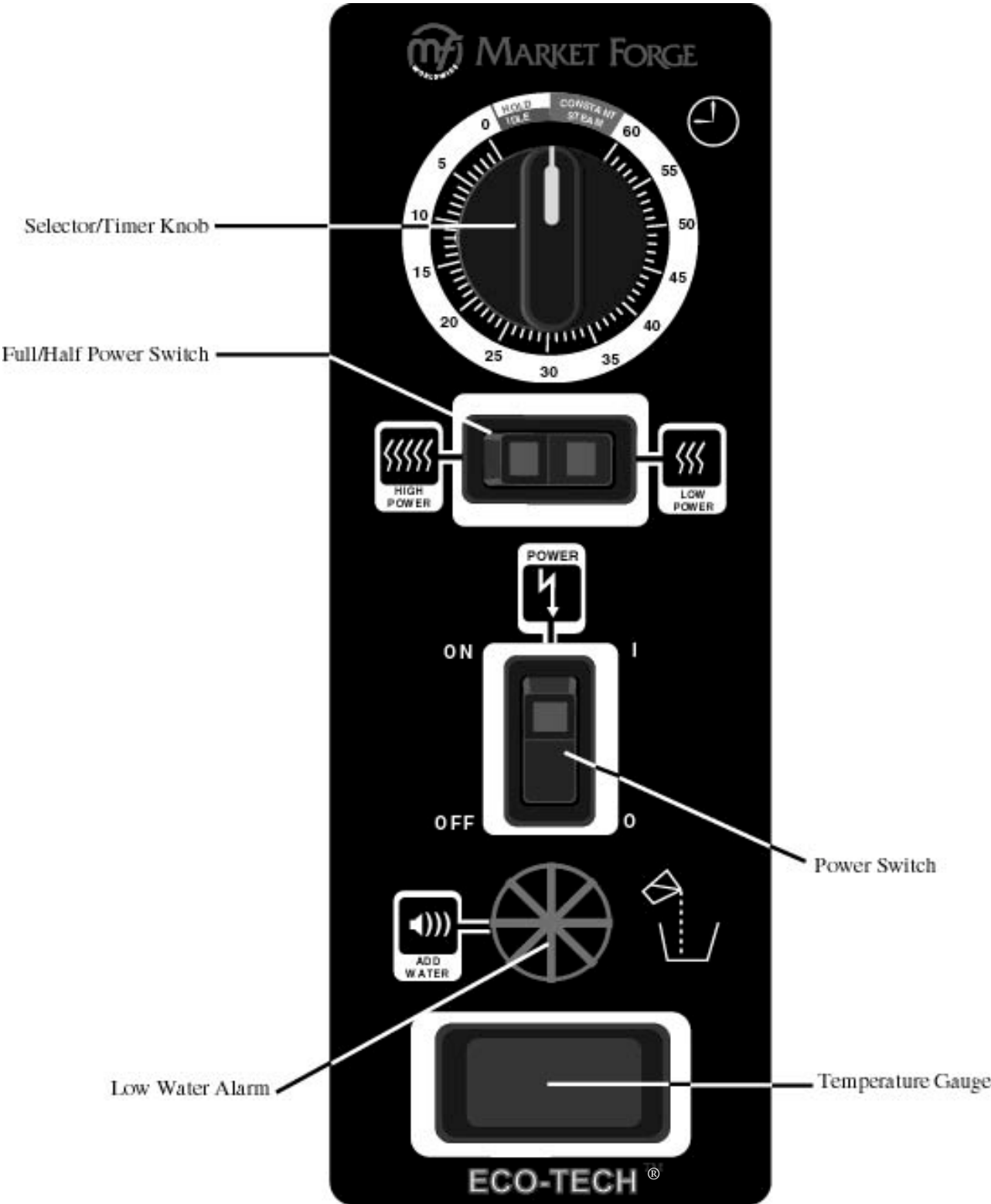


Fig. 4.1: Control Panel, Mechanical Timer

5. Troubleshooting

5.1 General

The information in this section is intended to assist the operator, maintenance and the service personnel in locating the source of problems which may occur with the cooker. Before following any of the procedures given in this section,

the operator/maintenance person should be thoroughly familiar with Section 4 (“Operation”) of this manual.

If the problem cannot be readily corrected without the use of tools, the operator/maintenance person should contact the nearest Market Forge service agency for assistance.

TROUBLE	POSSIBLE CAUSE	REMEDY
POWER light does not come on when the POWER switch is pressed into the on position.	<ol style="list-style-type: none"> 1. No power to unit. 2. Fuse blown. 3. Faulty POWER switch. 	<ol style="list-style-type: none"> 1. Be sure the power supply is on. 2. Replace fuse. 3. Check/replace POWER switch (P/N 08-6549).
Steam continuously leaks through the door gasket.	<ol style="list-style-type: none"> 1. Misaligned door. 2. Faulty pressure switch. 	<ol style="list-style-type: none"> 1. Check to be sure cooking compartment door is properly aligned. (See Section 6.7.) 2. Replace the pressure switch (P/N 08-6502).
Steam generator will not fill.	<ol style="list-style-type: none"> 1. Open drain valve. 	<ol style="list-style-type: none"> 1. Close drain valve.
Generator will not create steam.	<ol style="list-style-type: none"> 1. 208/240/480 power supply is not connected or not turned on. 2. Cooking compartment door is ajar. 3. Cooking compartment door is ajar. 4. Faulty door magnet or magnetic reed switch. 5. Lime buildup in the steam generator. 6. Faulty circuit breaker. 7. Faulty control panel TIMER. 	<ol style="list-style-type: none"> 1. Check to be sure 208/240/480 power is connected and on. 2. Check to be sure that the cooking compartment door is closed and latched. 3. Check to be sure cooking compartment door is properly aligned. 4. Check magnet (P/N 08-5027) and reed switch (P/N 08-6308). Replace if needed. 5. Clean the generator per Section 4.3. 6. Check circuit breaker at your 208/240/480 volt service connection. Reset if necessary. 7. Check/replace control panel Timer if necessary (P/N 08-6563).

5. Troubleshooting *(continued)*

TROUBLE	POSSIBLE CAUSE	REMEDY
Generator will not create steam <i>(continued)</i>	8. Faulty heaters. 9. Wiring short. 10. No water in generator. 11. Faulty exhaust valve.. 12. Faulty preheat thermostat. 13. Faulty pressure switch.	8. Check/replace heaters. 9. Check wiring at terminals. 10. Add 2 gallons of water. 11. Check/replace exhaust valve (P/N 08-4952). 12. Check/replace preheat thermostat (P/N 08-6586) 13. Check/replace w.c. pressure switch (P/N's 08-6502 & 08-6580)
Generator continues to create steam when the cooking compartment door is opened.	1. Faulty magnet reed switch (contacts failed closed). 2. Wiring short..	1. Check magnetic reed switch Replace if necessary (P/N 08-6308). 2. Checking wiring at terminals.
Generator dosen't drain when the drain valve is opened.	1. Clogged or kinked generator drain line. 2. Clogged generator drain hole.	1. Check to be sure that the generator drain line is not kinked and is free of debris. 2. Check to be sure the generator drain hole is free of debris.
Steamer fails to hold.	1. Faulty hold thermostat. 2. Faulty contactor. 2. Faulty timer.	1. Replace (P/N 08-6588). 2. Replace (P/N 10-5944) 3. Replace (P/N 08-6464)

6. Maintenance

6.1 General

This section contains both preventive and corrective maintenance information. Preventive maintenance may be performed by maintenance personnel at the establishment in which the cooker is installed. It is recommended that user personnel never attempt to make repairs or replacements to the equipment. Assistance in service methods or a current directory of authorized agencies may be obtained from Market Forge Industries.

6.2 Daily Cleaning

After each period of daily operation (more frequently as required to maintain cleanliness), the cooker should be thoroughly cleaned by completing the following steps:

1. Place a 4" deep steam pan under the steamer, and turn drain valve to "OPEN." Allow all water to drain before emptying the pan.
2. Allow the steamer to cool before removing rear strainer, left and right racks, and ala-carte shelf..
3. Wash cooking compartment and steam generator interiors using a mild detergent. Rinse and dry thoroughly.
4. Remove drip/spill trough.
5. Wash all removed pieces with a mild detergent and non-abrasive pad. Rinse and dry thoroughly.
6. Replace all removed parts.
7. Leave the door slightly ajar to prolong life of the door gasket.

6.3 Preventive Maintenance

A good preventive maintenance program begins with the daily cleaning procedure described above. Additional preventive maintenance operations are presented in this section. In establishments that employ full-time maintenance personnel, the tasks described can be assigned to them. For other installations, tasks requiring mechanical or electrical experience must be performed by an authorized service agency.

CAUTION: Under no circumstances should hardware (or parts) be replaced with a different size or type other than as specified in the parts list. The hardware used in the cooker has been selected or designed specifically for its application, and the use of other hardware may damage the equipment, can present a safety hazard, and will void any warranty.

The following sections set forth minimum preventive maintenance procedures that must be completed periodically to assure continued trouble-free operation.

6.4 Periodic Cleaning

If you should experience build up of lime or mineral deposits in the steam generator, it may be cleaned easily using vinegar & water. if dealing with severe scaling use Market Forge's descaling product, "Total Concept™" with water.

1. With drain closed, fill generator with 2 gallons water and 1/2 gallon vinegar. Close door.
2. Turn power switch to "ON".
3. Place timer into "HOLD" mode. Let run for one hour.
4. Open door. Turn the drain valve to "OPEN". Allow Vinegar/Water solution to drain into the pan. Empty as needed.
5. Refill steamer with water, and drain again flushing out any remaining vinegar/water solution. Empty as needed.
6. Replace any removed parts, close valve, and refill steamer. Steamer is now ready for use.
7. If "Total Concept™" is needed repeat above procedure, replacing vinegar with "Total Concept™".

6. Maintenance *(continued)*

6.5 Control Panel Electrical Service Access

The control panel assembly is mounted on the front of the unit. It houses all the controls and indicators that are used to operate the Eco Tech[®]. In order to service any of the control panel electrical components, the control panel assembly must be removed from the front of the unit.

CAUTION: Be sure to disconnect the power supply from the unit before servicing any electrical components.

PROCEDURE

1. Remove the 6 screws that fasten the control panel assembly onto the front of the unit.
2. Gently move control panel assembly out away from unit.

NOTE: A ground strap acting as a restraint prevents the control panel from putting unnecessary strain on wires and connections.

6.6 Door Adjustment

The cooking compartment door alignment, door handle tension, and latch tension are preadjusted at the factory during assembly. During normal usage, these should not need any attention. Note that when the cooking compartment doors are reversed, as described in Section 2.3 of this manual, the doors will need to be aligned and the door latch tension will need to be adjusted (the door handle will not need adjustment when the door is reversed).

6.6.1 Door Alignment

The cooking compartment doors are prealigned at the factory during assembly and should not need adjusting unless they are reversed. Should the doors need realignment, the procedure is as follows:

PROCEDURE

1. Open the cooking compartment door.
2. Loosen all screws (2 per hinge) that mount the upper and lower hinge brackets to the face of the unit using a flathead screwdriver. **DO NOT REMOVE THE SCREWS.**
3. Begin to retighten all 4 screws so that they are snug against the face of the unit. **DO NOT COMPLETELY TIGHTEN THE SCREWS.**
4. Slowly push the cooking compartment door closed until it is latched.
5. The cooking compartment door can now be raised, lowered, and/or rotated into position by bumping it with the palm of your hand or by using a small rubber mallet.
6. First, check the alignment at the front of the door by making sure that the striker in the door is centered with the latch mechanism on the front of the unit.
7. Square the door to the unit by raising or lowering the hinge side of the door, keeping the latch centered with the striker.
8. Visually inspect the door. Be sure that the door is square to the unit, the striker is centered with the latch, and the gasket is in contact with the entire lip of the cooking compartment.
9. *Gently* open the cooking compartment door, taking care not to move it out of position.
10. Tighten all 4 door hinge bracket mounting screws using a flathead screwdriver.
11. Close and visually inspect the door again, as described in Step 8.

6. Maintenance *(continued)*

6.6.2 Door Latch Tension Adjustment

Caution: Shut off main electrical power to unit.

PROCEDURE

1. Open the cooking compartment door.
2. Remove the control panel as described in section 6.5.
3. Tighten both nuts on the back of the latch until the springs are fully compressed.
4. Back each nut off 1 $\frac{1}{2}$ turn.
5. Remount the control panel.

6.6.3 Door Handle Tension Adjustment

PROCEDURE

1. Open the cooking compartment door.
2. Remove the 6 screws and washers from the top edge and from the bottom edge of the door.
3. Remove the inner door gasket mounting plate assembly from the outer door. Do not disassemble these three components—remove them as an assembly.
4. Tighten both nuts on the back of the handle until the springs are fully compressed.
5. Back each nut off 1 $\frac{1}{2}$ turn.
6. Remount the inner door gasket mounting plate assembly by assembling the 6 screws and washers.

6.7 Door Gasket Replacement

The cooking compartment door gaskets are made of a silicone type rubber material, which is very durable but subject to wear during normal operation. Should the gasket leak, readjust the door gasket to the unit *or* replace it.

PROCEDURE: REPLACE GASKET

1. Open the cooking compartment door.
2. Remove the (3) screws from the top of the door, and the (3) screws from the bottom of the door.
3. Remove the inner door, gasket plate and gasket.
4. Remove the (6) nuts on the back of the inner door.
5. Remove the door gasket mounting plate and the door gasket.
6. Install the new door gasket (REF. Table 7.3 for part number) to the mounting plate.
7. Reassemble the mounting plate with gasket to the inner door using the (6) nuts.

NOTE: Remember that the lip on the door gasket mounting plate must fit into the channel on the inside edge of the gasket to insure a proper seal.

8. Reassemble the inner door, mounting plate, and gasket with the outer door using the (3) screws on the top and bottom of the door.

PROCEDURE: To ADJUST GASKET TO UNIT

To prevent steam leaks around the door, adjust the gasket tension to cavity. Adjust the gasket by loosening the 6 screws on top and bottom of door, move inner door plate in or out, left side or right side, and tighten the 6 screws.

6. Maintenance *(continued)*

Fig. 6.1: Door Assembly

Table. 6.1: Door Assembly

ITEM NO.	PART NO.	PART NO.	DESCRIPTION	QTY.
	3 PAN	5 & 6 PAN		
1	91-5729	91-7692	OUTER DOOR	1
2	91-5766	91-7694	INNER DOOR	1
3	91-5731	91-7696	GASKET RETAINING PLATE	1
4	91-5286	91-7783	DOOR GASKET	1
5	91-5745	91-5745	DOOR HANDLE	1
6	09-1608	09-1608	STRIKER	1
7	08-5027	08-5027	MAGNET	1
8	91-5901	91-5901	MAGNET BRACKET	1
9	08-4600	08-4600	COMPRESSION SPRING	2

6. Maintenance *(continued)*

Table 6.2: Reed Switch Subassembly Part List

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	91-7690	BRACKET, REED SWITCH	1
2	08-6308	REED SWITCH	1
3	10-2512	WASHER, STAR	2
4	10-1979	SCREW, 4-40 X 7/16" LG	2
5	10-2524	LOCK WASHER	2
6	10-2380	NUT, 4-40	2

NOTE: REED SWITCH ASSEMBLY IS LOCATED ON INSIDE OF FRONT FRAME

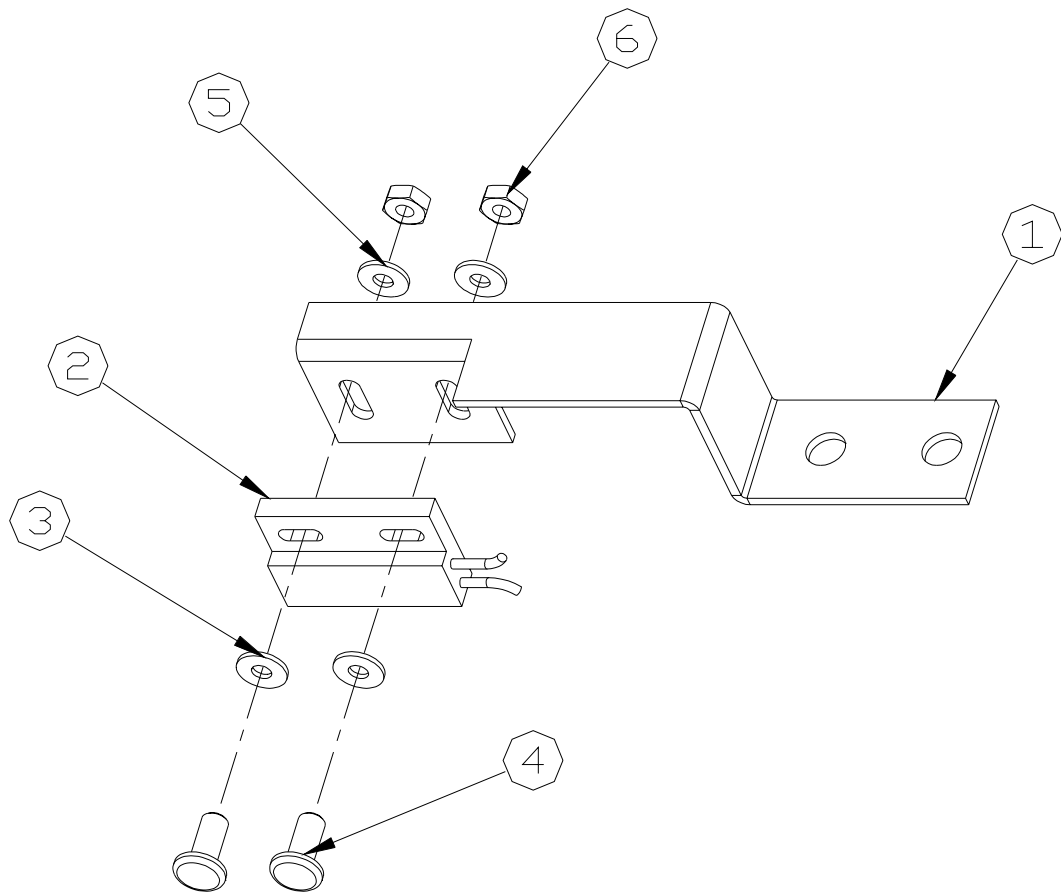


Fig 6.2: Reed Switch Subassembly Part List

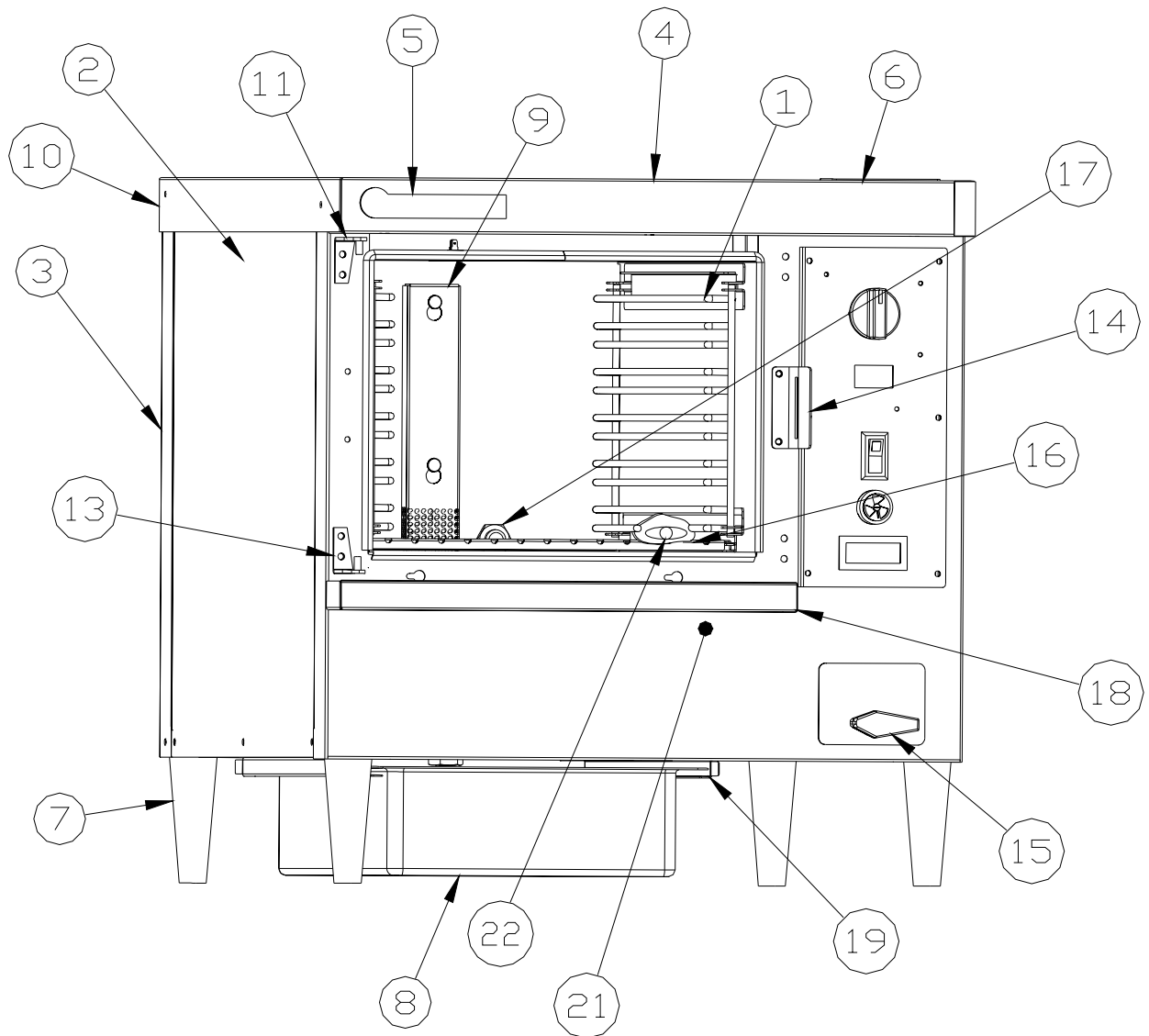
6. Maintenance *(continued)*

Table 6.3: Front View Assembly Parts List

ITEM NO.	PART NO.	PART NO.	DESCRIPTION	QTY.
	3-PAN	5 & 6-PAN		
1	91-5700	91-7699	RACK	1
2	91-6910	91-6911	PANEL, SIDE	2
3	91-6914	91-6915	REAR POST	2
4	91-7660	91-7660	PANEL, TOP	1
5	08-5894	08-5894	NAME PLATE CASTING	1
6	91-6976	91-6976	COVER, CLEAN PORT	1
7	08-7520	08-7520	LEG, ADJUSTABLE	4
8	08-6587	08-6587	DRAIN PAN	1
9	91-7684	91-7684	STRAINER	1
10	91-7660	91-7660	PANEL, TOP	1
11	91-6475	91-6475	HINGE, TOP	1
12	91-6912	91-6913	PANEL, REAR (NOT SHOWN)	1
13	91-6476	91-6476	HINGE, BOTTOM	1
14	91-6492	91-6492	LATCH, DOOR	1
15	REF	REF	MANUAL DRAIN VALVE, ASSEMBLY	1
16	91-6979	91-6979	SHELF, ALA CARTE	1
17	08-6586	08-6586	THERMOSTAT, PRE-HEAT 200°F	1
18	91-7497	91-7497	DRIP TROUGH	1
19	91-6886	91-6886	BRACKET, PAN HOLDER	1
20	91-7668	91-7668	REAR, ACCESS PANEL (NOT SHOWN)	1
21	98-1572	98-1572	STRAINER, MANUAL DRAIN (NOT SHOWN)	1
22	08-6588	08-6588	THERMOSTAT, HOLD 175°F	1

6. Maintenance *(continued)*

Fig 6.3: Front View Assembly Parts List



LOCATION OF STRAINER INSIDE
COOKING CAVITY (NOT SHOWN)

6. Maintenance *(continued)*

Table 6.4: Electric Subassembly Part List

ITEMNO.	PART NO.	DESCRIPTION	QTY.
1	91-6936	ELECTRIC MOUNTING PLATE	1
2	10-5944	CONTACTOR	2
3	08-6469	FUSE HOLDER	2
4	08-6468	FUSE, 250 V, 5A	2
5	08-6472	RELAY	2
6	08-6475	RELAY BASE	2
7	08-5229	CLIP HOLD DOWN RELAY	2
8	08-6566	RELAY, TIME DELAY	1
9	08-6552	TERMINAL	1

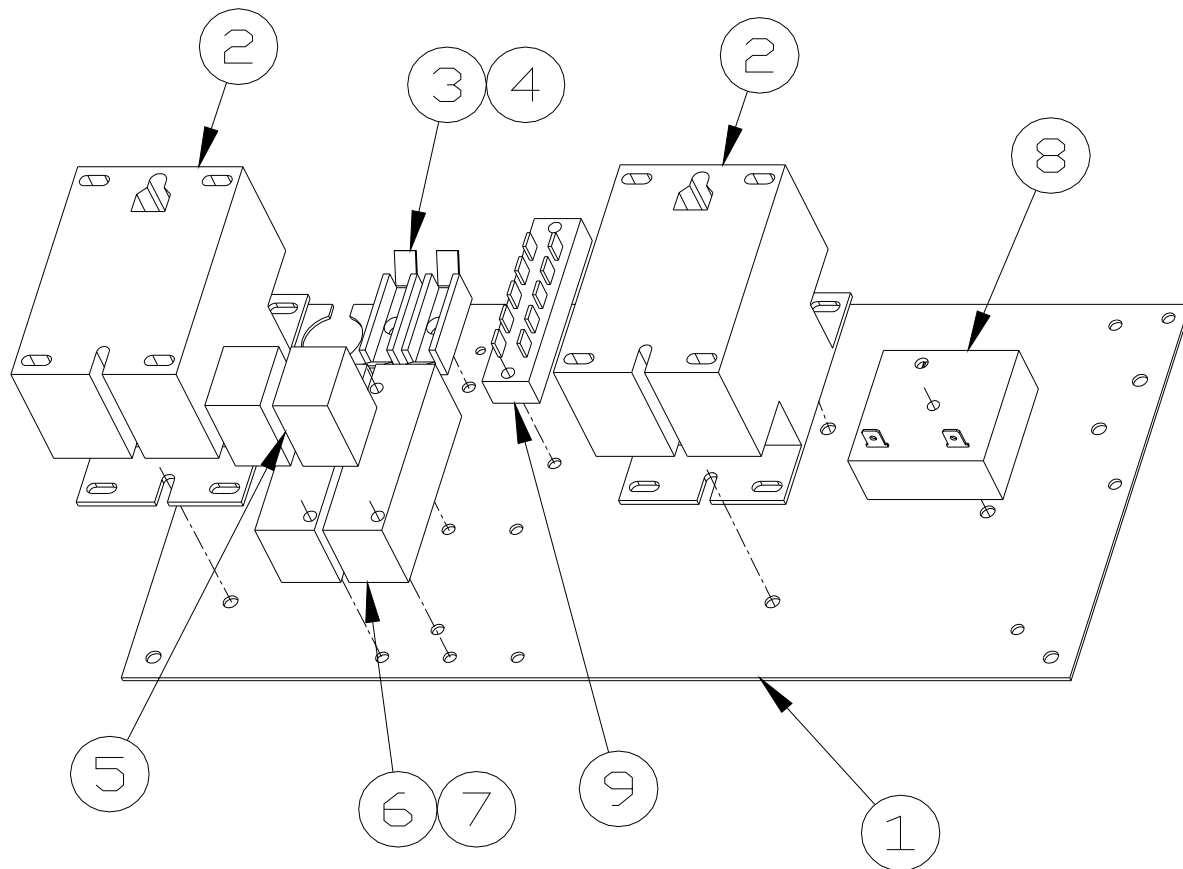


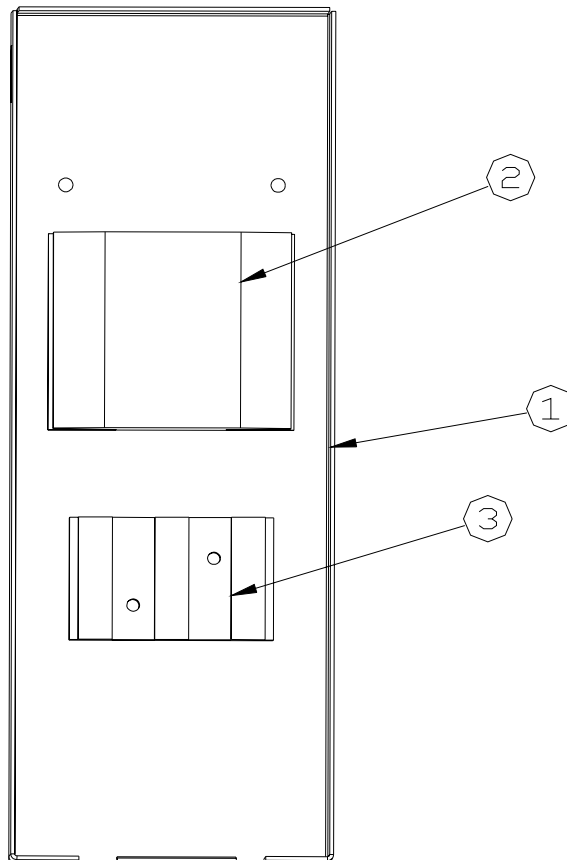
Fig 6.4: Electric Sub-Assembly Part List

6. Maintenance *(continued)*

Table. 6.5: Junction Box Assembly

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	91-7681	JUNCTION BOX	1
2	10-7356	TRANSFORMER, 208V ONLY	1
2	10-7355	TRANSFORMER, 240V & 480V	1
3	08-6555	TERMINAL BLOCK	1

Fig. 6.5: Junction Box Assembly



6. Maintenance *(continued)*

Fig. 6.6: Control Panel Assembly

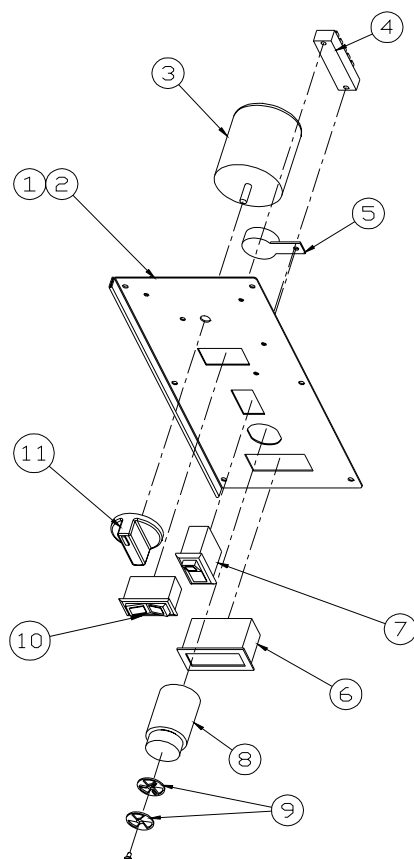
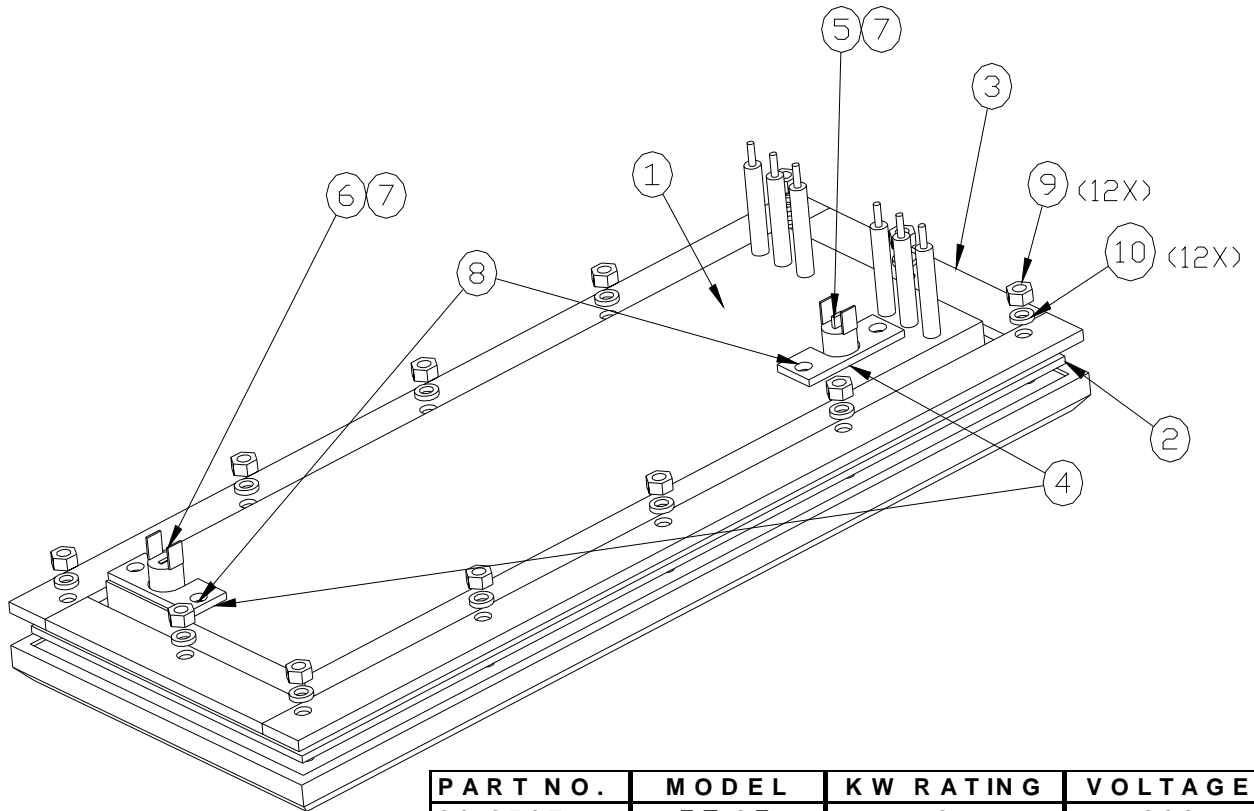


Table. 6.6: Control Panel Assembly

ITEM NO.	PART NO.	PART NO.	DESCRIPTION	QTY.
	3-PAN	5 & 6-PAN		
1	91-6891	91-6892	PLATE, CONTROL PANEL	1
2	91-7288	91-7288	LEXAN, CONTROL PANEL	1
3	08-6464	08-6464	TIMER, 60 MIN	1
4	08-6552	08-6552	TERMINAL STRIP	1
5	10-7395	10-7395	BUZZER	1
6	08-7521	08-7521	THERMOMETER	1
7	08-6549	08-6549	POWER SWITCH (ON/OFF)	1
8	09-6516	09-6516	LOW WATER ALARM	1
9	08-6575	08-6575	ALARM DECIBEL ADJUSTER	1
10	08-6597	08-6597	POWER SELECTION SWITCH	1
11	08-7516	08-7516	TIMER KNOB	1

6. Maintenance *(continued)*

Fig. 6.7: Heating Element Assembly



PART NO.	MODEL	KW RATING	VOLTAGE
08-6567	ET-3E	6	208
08-6568	ET-3E	6	240
08-6569	ET-3E	6	480
08-6570	ET-3,5 & 6E	9	208
08-6571	ET-3,5 & 6E	9	240
08-6572	ET-3,5 & 6E	9	480
08-7964	ET-5 & 6E	12	208
08-7965	ET-5 & 6E	12	240
08-7966	ET-5 & 6E	12	480

Table 6.7: Heating Element Assembly & Part No. Chart

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	SEE CHART	ELECTRIC ELEMENT	1
2	08-6598	GASKET, ELEMENT	1
3	91-6983	ELEMENT SUPPORT FRAME	1
4	91-6945	BRACKET, HI-LIMITS	2
5	08-6578	THERMOSTAT, SECONDARY HI-LIMIT 375°F	1
6	08-6576	THERMOSTAT, PRIMARY HI-LIMIT 300°F	1
7	08-7836	SPACER, HI-LIMIT	2
8	08-7938	SCREW, HEX HEAD, 8-32 X 1/2" LG, S.S.	4
9	10-2336	NUT, 1/4-20 THD, S.S.	12
10	10-2500	WASHER, LOCK, 1/4", S.S.	12

6. Maintenance *(continued)*

Fig. 6.8: Plumbing Assembly

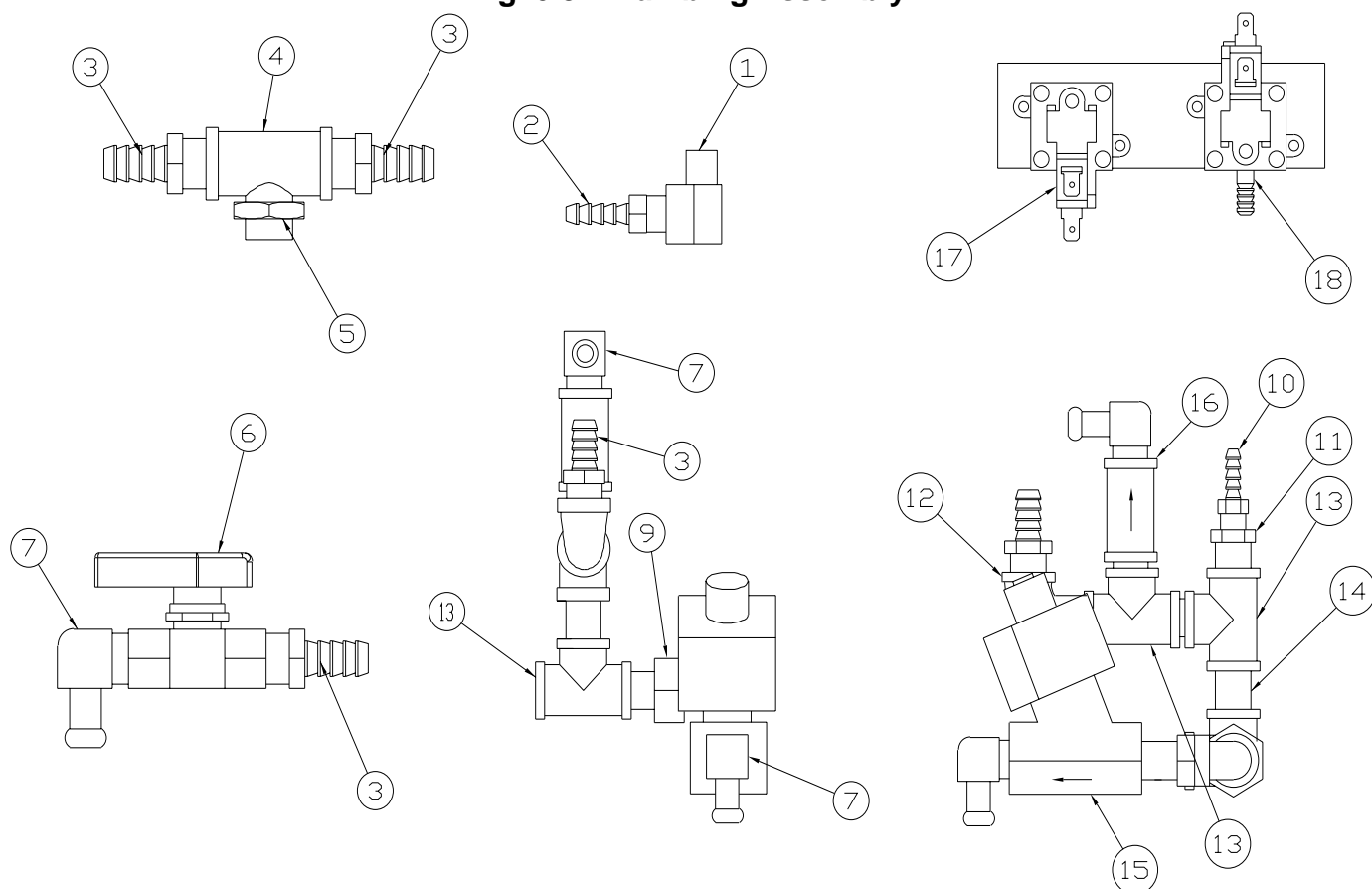


Table 6.8: Plumbing Assembly

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	10-1054	STREET ELBOW , 3/8" NPT	1
2	08-6579	HOSE BARB, 3/8" NPT X 1/2" ID TUBE	1
3	08-5072	HOSE BARB, 1/2" NPT X 1/2" ID TUBE	4
4	08-6581	TEE, 1/2" FEMALE X 1/2" FEMALE X 1/2" MALE	1
5	10-3343	NUT, 1/2" NPT	4
6	91-6937	DRAIN VALVE	1
7	10-0973	HOSE BEAD ELBOW , 1/2" NPT X 1/2" ID HOSE	3
8	08-5011	4-WAY TEE, 1/2" NPT (NOT SHOWN)	1
9	09-4844	UNION, 90 DEG, 1/2" NPT	1
10	08-4870	HOSE BARB, 1/4" NPT X 1/4" ID HOSE	1
11	10-3539	REDUCER, 1/2" NPT TO 1/4" NPT	1
12	10-2863	STREET ELBOW , 1/2" NPT	1
13	10-3352	TEE, 1/2" NPT	3
13a	98-1714	TEE, 1/2" MALE RUN, BRASS	1
14	90-7100	NIPPLE, CLOSE, 1/2" NPT	3
15	08-4952	SOLENOID VALVE	1
16	08-7937	CHECK VALVE, 1/2" THD	1
17	08-6580	HIGH PRESSURE SWITCH, 9" W.C.	1
18	08-6502	OPERATING PRESSURE SWITCH 3" W.C.	1
19	08-7534	TUBING, 1/2" ID X 3/4" OD	1
20	08-7535	TUBING, 1/4" ID X 1/2" OD	1

6. Maintenance *(continued)*

Fig. 6.9: Ship Board Assembly

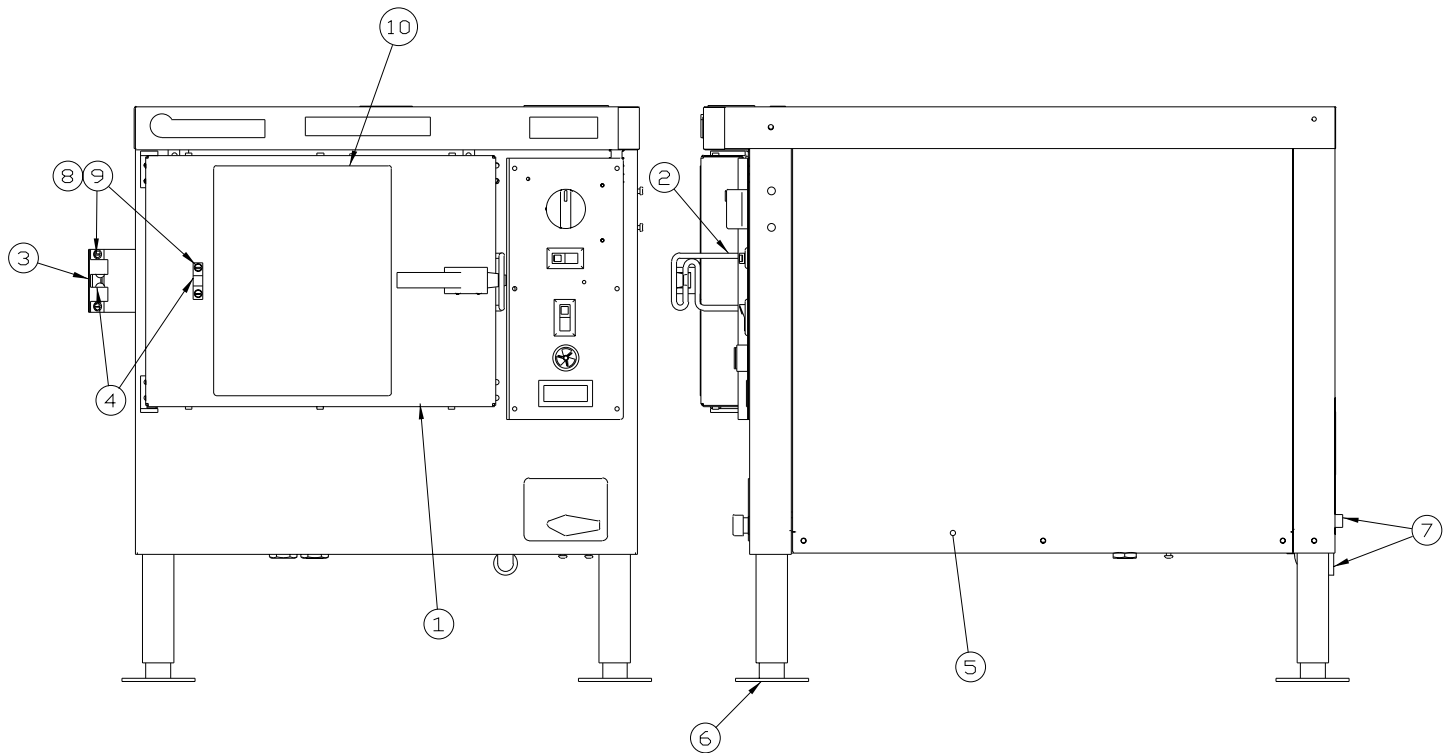


Table 6.9: Ship Board Assembly

ITEM NO.	PART NO.	PART NO.	DESCRIPTION	QTY.
	3-PAN	6-PAN		
1	98-1682	98-1685	ASSEMBLY DOOR SHIPBOARD ECO-TECH	1
2	98-1683	98-1684	PANEL, SIDE	2
3	98-1601	98-1601	LATCH (SPAGHETTI), DOOR, SB-ECO-TECH	1
4	98-1602	98-1602	BRACKET, DOOR HOLD MECH, SB-ECO-TECH	1
5	08-7957	08-7957	MECHANISM, DOOR HOLD LATCH,SHIPBOARD	1
6	98-1522	98-1522	FEET, ADJ. FLANGED 1 1/2" O.D.	4
7	98-1581	98-1581	KIT, HARD DRAIN, ECO-TECH	1
8	08-7967	08-7967	SCREW, 8-32, FLAT HEAD SLOTTED	2
9	10-2458	10-2458	NUT, ACORN, 8-32, S.S.	2
10	98-1687	98-1687	LABEL, OPERATING & CLEANING, SB-ECO-TECH	1