

ECO-TECH® PLUS

ELECTRIC CONVECTION STEAMER

INSTALLATION - OPERATION - MAINTENANCE



MODEL

ETP-10E



MARKET FORGE



Telephone: (802) 658-6600 Fax: (802)864-0183

www.marketforge.com

PN 14-0269 Rev C (1/17)

Your Service Agency's Address:

Model

Serial number

Steamer installed by

Installation checked by

IMPORTANT

WARNING: Improper installation, adjustment, alternation, service or maintenance can cause property damage, injury or death. Read the installation, operation and maintenance instructions thoroughly before installing or servicing this equipment.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

Do not attempt to operate this unit in the event of power failure.

Adequate clearances must be maintained for safe and proper operation.

The information contained in this manual is important for the proper installation, use, and maintenance of this steamer. Adherence to these procedures and instructions will result in years of trouble-free service. Please read this manual carefully and retain it for future reference.

ERRORS: Descriptive, typographic or pictorial errors are subject to correction. Specifications are subject to change without notice.

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Service Connections

ELECTRICAL CHARACTERISTICS

MODEL	kW	Phase	Amps Per Line						
			208V	220V	240V	380V	416V	480V	600V
ETP-10E	20	3	55.5	52.5	48.1	30.4	27.8	24.1	19.2

SERVICE CONNECTIONS

EC	Electrical Connection - 1 1/8" hole for electrical connection. Rating specified on data plate.
CW1	Cold Water - 3/8" (10mm) NPT, Maximum 50 PSI, Minimum 25 PSI.
D	Drain - 1-1/2" NPT male from the drain adapter (see illustration)

INSTALLATION CLEARANCE

Left Side	Right Side	Rear
3	6	6

NOTE: Allow 6" 152 mm of space on the right side if height of adjoining wall or equipment exceeds 29" 737 mm.

NOTE: All service connections are made at the rear of the unit.

NOTE: PVC and CPVC pipe are not acceptable materials for drains.

The drain piping must consist of temperature resistant material, greater than 160°F, and be of adequate diameter not to cause flow restriction. Improper materials may deform and cause restrictions, thus affecting performance.

WATER SUPPLY

Good quality water feed is the responsibility of the owner. Water quality must be within the following general guidelines.

TDS: 40-125 ppm	Chlorides: <25 ppm
Silica: <13 ppm	pH: 7.0 - 8.5
Chloramine: <0.2 ppm	Chlorine: <0.2 ppm
Hardness: 35-100 ppm	

The best defense against poor water quality is a water treatment system designed to meet your water quality conditions.

Appliance to be installed with backflow protection according to federal, state or local codes.

DIMENSIONS ARE IN INCHES [MM]

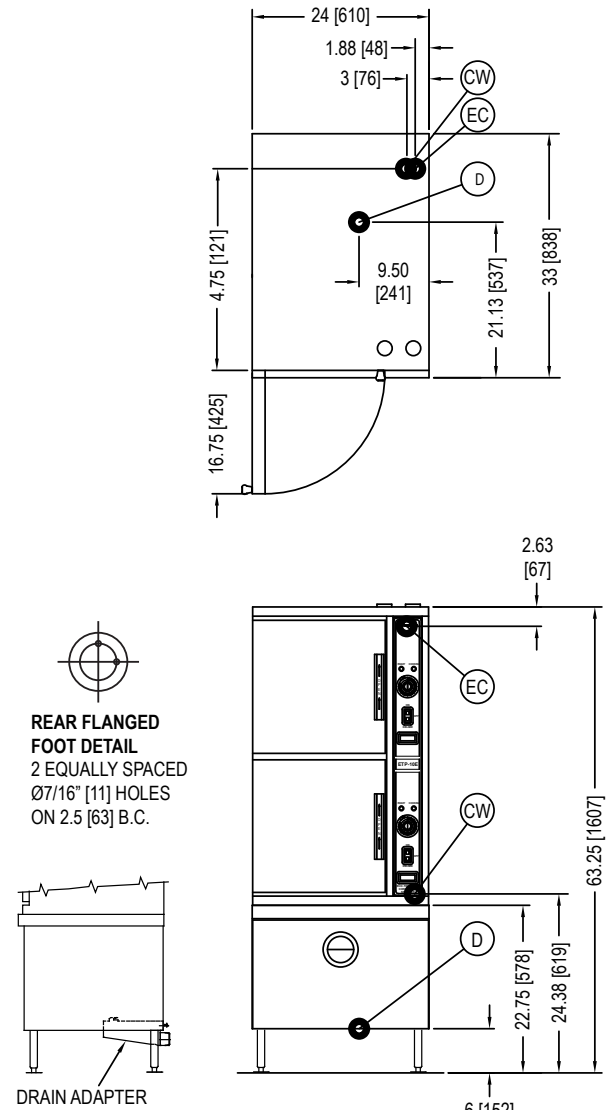


Figure 1

DESCRIPTION

The ETP-10E is an electric powered pressureless steam cooker. The cooking compartments are equipped with a three-piece door with inner gasket plate isolated from the exterior surface. Door latch operates by slam action for positive sealing of the door. Operating controls are displayed on a front-mounted panel and include indicator lights for ready and cooking modes, a timer to set cook times and a selectable hold cycle to keep food warm once cooked, a temperature display to monitor cavity temperature, and an illuminated ON/OFF/DELIME switch.

BASIC FUNCTIONING

The cooker is ready for operation when the READY light comes on.

At the end of the set interval, timer contacts switch to shut off the cooking operation and sound a signal buzzer. The buzzer is silenced by returning the timer dial to the OFF position. In the 'HOLD' mode, the cooker will maintain a safe food holding temperature at or above 150°F.

Steam emitted from the compartment along with liquid cooking drainage is directed through a removable drain screen inside the compartment. Drainage from the compartment as well as from the steam generators, after the appliance is shut-off, is directed to the drain box in the cabinet base.

Installation

LOCATION

Allow space for plumbing and electrical connections. Minimum clearances are 3" (74mm) on the sides and 6" (152mm) on the back for proper air circulation. Allow adequate access for operating and servicing the steamer, 36" (915mm) at the front of the steamer and 15" (381mm) above the steamer.

MECHANICAL CONNECTIONS

All electrical and plumbing connections are located on the rear panel of the unit. See 'SERVICE CONNECTIONS' for location of mechanical connections.

WARNING

These procedures must be followed by qualified personnel or warranty will be voided. An open gap floor drain is required immediately below the appliance drain.

INSTALLATION CODES AND STANDARDS

Electrical grounding must be provided in accordance with local codes, or in the absence of local codes, with the National Electrical Code ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.2 as applicable.

Ventilation must be provided in accordance with local codes, or in the absence of local codes, with ANSI/NFPA 96 Standard for Ventilation and Fire Protection of Commercial Cooking Operations.

WIRING DIAGRAM FOR APPLIANCE IS LOCATED ON RIGHT HAND SIDE PANEL OF THE COOKER CABINET.

INSTALLATION PROCEDURES

1. Uncrate carefully. Report any freight damage to the freight company immediately.
2. Set the unit in place. Be certain to maintain the minimum clearances from combustibles and non-combustibles.
3. Using a spirit level or pan of water in the bottom of the steamer, adjust the levelling feet to level the steamer front-to-back and side to side.
4. Mark hole locations on the floor through the anchoring holes provided in the flanged adjustable feet. Remove the steamer and drill holes at marked locations on the floor. Insert proper anchoring devices.
5. Set steamer back in proper position.
6. Install bolts through anchoring holes and into anchors to secure the steamer to the floor. Seal bolts and flanged feet with Silastic or equivalent.

7. After the drain is connected, check for level by pouring water onto the floor of the compartment. All water should drain through the opening at the back of the compartment cavity.

WARNING

An open gap floor drain is required immediately below the appliance drain.

CAUTION

PVC OR CPVC are not acceptable materials for drains.

The drain piping must consist of temperature resistant material, greater than 160°F, and be of adequate diameter not to cause flow restriction. Improper materials may deform and cause restrictions, thus affecting performance.

INSTALLATING THE DRAIN ADAPTER

From the rear of the unit, position the drain adapter hooks through the slots in the floor of the cabinet base and align with the holes at the rear and fasten in place with provided screws.

When making the drain connection to the 1½" NPT male thread of the drain adapter, use a pipe wrench to firmly support the drain adapter nipple to prevent damage to the assembly.

STRAINERS and FILTERS will NOT remove all minerals from the water.

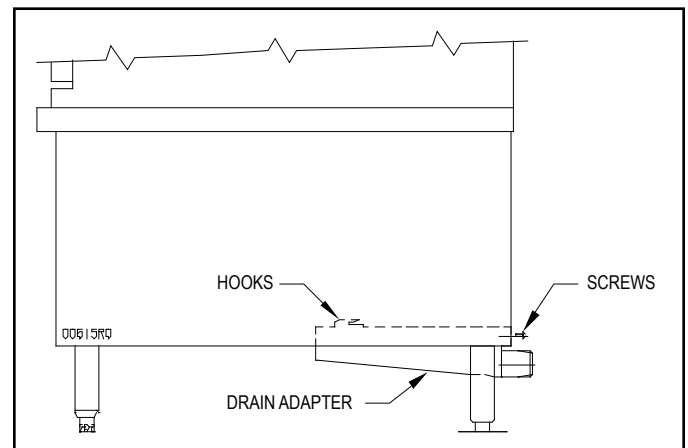


Figure 2

WATER CONDITIONING

Untreated water contains scale-producing minerals which can precipitate onto the surfaces in the steam generator. Due to the temperatures in the steam generator, the minerals can bake onto the surfaces and components. This can result in early component failure and reduced product life. Water level probes become coated with scale. Scale may bridge across the probe insulator from the metal extension, which senses the water level in the steam generator shell. Once this scale becomes wet, the water level control is unable to maintain the proper water level in the steam generator.

STRAINERS and FILTERS will NOT treat equipment for scale reduction.

This equipment is furnished with an CUNO® Commercial Series water filtration system. An initial flushing procedure for the filter system must be performed before using this equipment.

FILTER SYSTEM INSTALLATION SET-UP

1. Remove sanitary cap from cartridge. Install cartridge with a quarter turn to the right until cartridge comes to a complete stop. (A "click" is heard). See "Figure 3".
2. It is recommended that cartridges be replaced regularly, at no more than six-month intervals, to be assured of optimum performance. See "Figure 4".

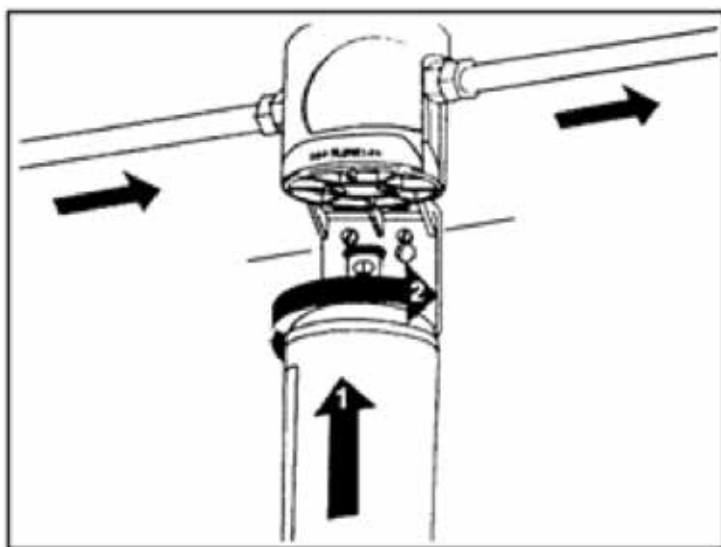


Figure 3

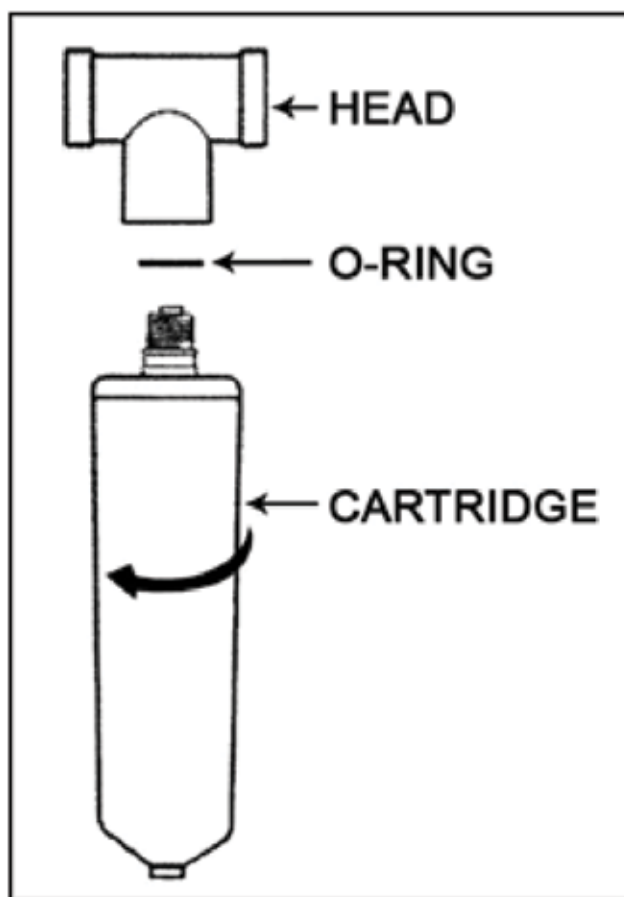


Figure 4

To replace cartridge:

- a. Shut off inlet water.
- b. Open a downstream valve to relieve pressure.
- c. Unscrew the cartridge in the direction shown in the illustration and discard.
- d. Lubricate o-ring of new cartridge with water. DO NOT use petroleum jelly.
- e. Install by turning new cartridge toward the right until it comes to a complete stop. DO NOT over tighten. (Never use tools to tighten a cartridge).
- f. Turn on inlet valve, bleed air through a downstream valve until water appears clear, and check for leaks. System is now ready for use.

Installation

FILTER CHANGE PROCEDURE

NOTE: This system is equipped with an internal shut-off valve.

1. Turn cartridge slowly to the left, about 1/4 turn, until it stops (when arrows line up). At this position, both inlet and outlet ports are closed and water pressure has been relieved.
2. Pull used cartridge straight down and discard. Note: There may be a small amount of residual water drainage after pressure is relieved and during cartridge removal.
3. Moisten o-ring with a food grade lubricant and push new cartridge into filter head. Turn cartridge 1/4 turn to the right until it stops (when arrows line up). Top surface of cartridge will become flush with bottom of the head when fully engaged.
4. Open downstream valve (if installed) and flush new filter cartridge for two minutes, expelling any trapped air and carbon fines. Water may run cloudy with air but will quickly clear.

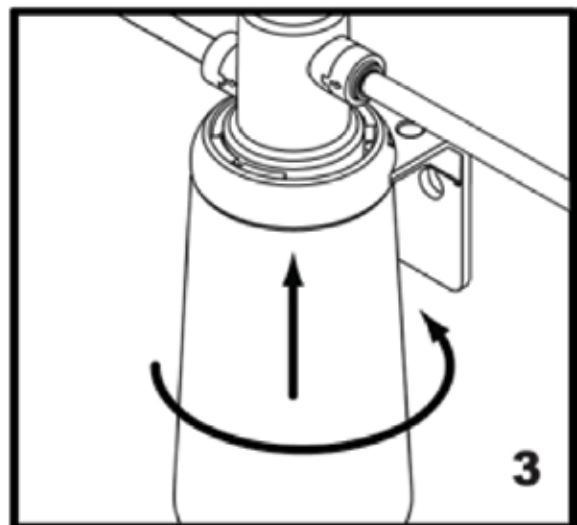
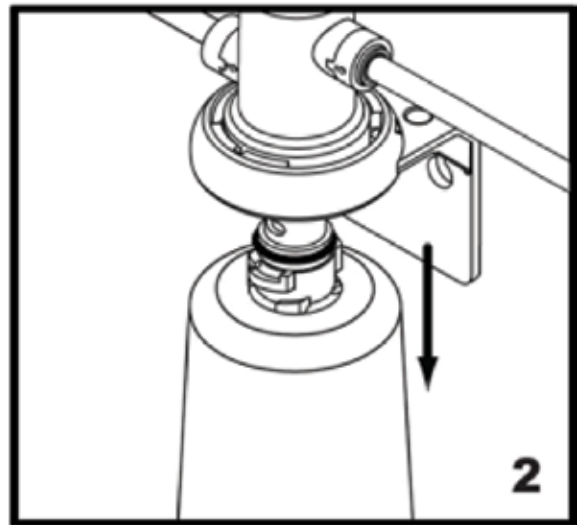
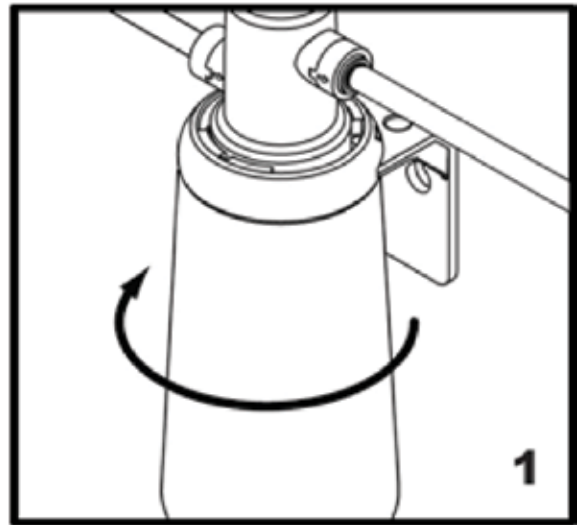


Figure 5



WARNING

The steamer and its parts are hot. Use care when operating, cleaning or servicing the steamer. The cooking compartment contains live steam. Stay clear while opening door.

TESTING UNIT

Once the steamer is installed and all mechanical connections have been made, thoroughly test the steamer before operation.

1. Check that proper water, drain and electrical connections have been made.
2. Turn main power switch ON. After approximately 10 minutes, the "READY" light should come on, indicating that the water temperature is approximately 200°F (93°C).
3. When the "READY" light comes on, set timer to the "5 minute" position. With door open, observe that no steam is entering the compartment and that the "COOKING" light is OFF.
4. Close compartment door. The COOKING light should now be illuminated and steam should be heard entering the compartment after about 45 seconds.
5. The tempering tank does not discharge to drain until the water in the top of the tank reaches 130°F or the unit is shut off and the generators are allowed to drain.
6. Open compartment door and observe that steam supply to chamber is cut off. "READY" light should again come on as "COOKING" light goes "OFF".
7. Close compartment door and let cooking cycle finish. When the timer returns to "0" position, a buzzer will sound signaling the end of the cooking cycle. Buzzer must be manually turned off by setting the timer to its "OFF" position.
8. Complete the above steps for each cooking compartment.
9. To shut the steamer down, turn the main power switch OFF and leave the compartment doors slightly open to allow the inside to dry out.

BEFORE FIRST USE

Clean the protective oils from all surfaces of the steamer. Use a non-corrosive, grease dissolving commercial cleaner, following manufacturer's directions. Rinse thoroughly and wipe dry with a soft clean cloth.

Operating Instructions

 **CAUTION**

Live steam and accumulated hot water in the compartment may be released when the door is opened.

 **CAUTION**

An obstructed drain can cause personal injury or property damage.

PREHEATING

Before each initial operation of the cooker, and at any other time when the cooking compartment is cold, a one-minute preheating period is required. To preheat the cooker, put steam source into operation and proceed as follows:

1. Close cooking compartment door.
2. Set 60-Minute Timer Dial to "1-minute" setting.
3. Turn off buzzer, which sounds to indicate cooking is complete, by setting the Timer Dial to OFF position.
4. The steamer is now ready to cook.

COOKING

 **CAUTION**

Live steam and accumulated hot water in the compartment may be released when the door is opened.

Before loading the cooker, be sure compartment is hot (See preheating instructions above).

1. Slide pans of food into cooking compartment pan supports.
2. Close cooking compartment door.
3. Set timer cooking time:
 - a. HOLD - for holding cooked foods in a warm state. Will maintain the cooking cavity at or above 150°F (65°C).
 - b. 60-MINUTE TIMER - for timed cooking. Set timer to the required cooking time (see Cooking Guide).
4. The cooking cycle may be interrupted at any time by opening the compartment door. To resume operation, close the door.

5. Turn off buzzer, which sounds to indicate cooking is complete, by setting timer dial to the OFF position.
6. Open door slightly at first letting most of the steam out of the compartment and then fully open the door.
7. Unload by sliding pans of food from pan supports.

 **CAUTION**

An obstructed drain can cause personal injury or property damage.

Frequently check that the compartment drain and plumbing is free of all obstructions. Never place food containers, food or food portion bags in the cooking compartment in such a way that the compartment drain becomes obstructed.

Each compartment is equipped with a removable drain screen. Frequently check the drain screen for accumulation of food particles. Should food particles accumulate against, or clog the drain screen, remove it, clean it thoroughly and then replace it in its original position.

SHUT DOWN PROCEDURE

No shut-down procedure is required for the cooker except to check that both timer dials are in the OFF position and that both compartment doors are open. When all cooking has been completed for the day, the steam source must be shut off.

COMPLETE SHUTDOWN

1. Set timer to "OFF" and turn power switch "OFF". Steam generators will drain automatically.
2. Turn water supply "OFF".
3. Disconnect power supply.
4. Leave door (s) ajar.

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. Remove left and right side pan supports by lifting up and off mounting studs. Remove the drain screen in the rear of the compartment. Wash with a mild detergent. Rinse and set aside for reassembly.
2. Wash cooking compartment interior using a mild detergent and water. Rinse and dry thoroughly.
3. Replace pan supports and drain screen in compartment and leave door open.

DRAINAGE

Cooking Compartment Drainage

The bottom of the cooking compartment is angled slightly toward the rear of the unit. This assures that any build-up condensate or spills will be directed toward the drain, which is located at the rear bottom center of the cooking compartment. Any liquid exiting the cooking compartment runs down the cooking compartment drain tube and into the condensate tank.

Drip/Spill Trough Drainage

The Pressureless Steam Cooker has a drip/spill trough below the cooking compartment door. It will catch any condensate gathering on the front of the unit when the door is opened.

ADJUSTMENT FOR HIGH ALTITUDE LOCATIONS

The steamer has been factory set so that when it is ON, and during the READY phase, it will maintain water temperature in the steam generator tank at approximately 200°F (93°C) (just below water boiling point). However, for high altitude locations, an authorized service agency must adjust the steamer to achieve this temperature.



WARNING

The steamer and its parts are hot. Use care when operating, cleaning or servicing the steamer. The cooking compartment contains live steam. Stay clear when opening door.



CAUTION

An obstructed drain can cause personal injury or property damage.

Control Panel

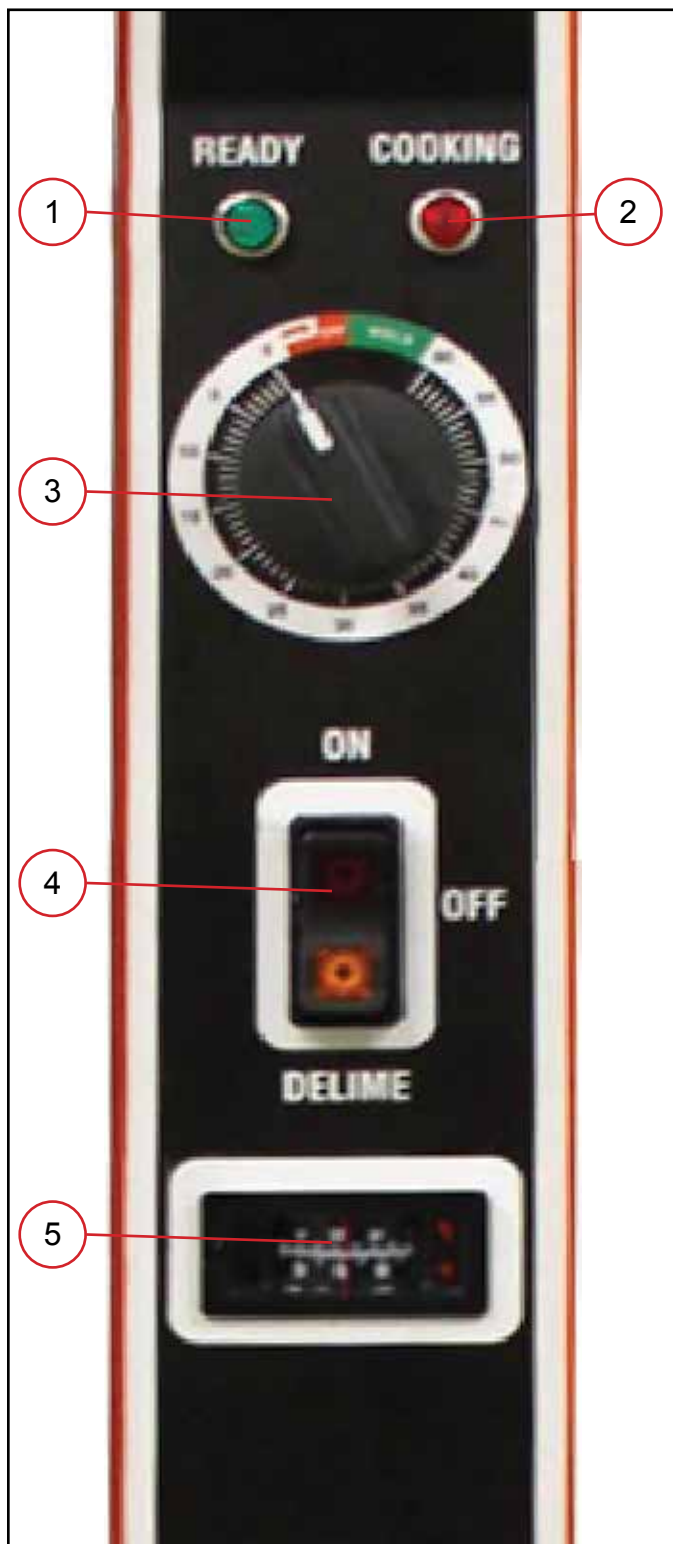


Figure 6

1. **Ready Light** - When lit, indicates steam generator has reached 200°F (93°C) and is ready for the cooking cycle.
2. **Cooking Light** - When lit, indicates that a cooking cycle is in progress.
3. **Timed Cook/Hold Mode** - Set the cooking time (0 to 60 minutes) - steam cooking will begin after the door is closed. The cooking cycle will be interrupted if the door is opened during the cooking cycle; resume cooking by closing the door. Hold - For keeping cooked foods warm after cooking, at or above 150°F (65°C).
4. **Main Power Switch** - The steam generator will automatically fill and begin heating to the pre-set temperature for standby. Red light will ignite on the main power switch.
 - a. ON - The steam generator will automatically fill and begin heating to the pre-set temperature for standby. Red light will ignite on the main power switch.
 - b. OFF - The steam generator will drain. No lights.
 - c. DELIME - Closes the drain valve while "Total Concept" is being poured into the steam generator during the Delime procedure. Amber light will illuminate.
5. Temperature Display - Shows temperature within the cooking cavity.
6. Buzzer - Signals end of cooking period (not shown).

PRESSURELESS COOKER - FACTS ON PARADE

1. Frozen vegetables should always be cooked in perforated 12" x 20" x 2 ½" pans, 10 lbs. (4.5 kg) maximum per pan.
2. Frozen entrees should be underlined with a perforated pan for best results. If they are defrosted first, the heating time will be decreased.
3. Fresh foods may also be cooked in this unit. Vegetables and other foods where the stock is not to be retained should be cooked in perforated 12" x 20" x 2-1/2" pans for the most nutritious results.
4. There is a safety micro-switch on the door, which shuts off the steam each time the door is opened if the unit is in the cooking cycle.
5. Total cooking time will vary depending on the load, even though the timer setting is the same.
6. All foods, except cakes and pastry, can be cooked in a steam cooking unit.
7. Steam cooked meals have greater nutritional value since they retain most of their vitamins and minerals.
8. Because foods are cooked faster by the higher temperatures of steam cooking, they can be prepared closer to serving time, insuring maximum freshness.
9. Steam cooked foods have a higher percent yield more portions per dollar spent.
10. Food may be served from the same pan in which it is steam cooked, thus reducing food breakage since there is no extra handling or transferring of food from cooking pans to serving pans. It also reduces pot washing tasks.
11. Some important advantages of steam cooking are labor saving, reduced operating costs, space saving, and the lifting of heavy stock pots is eliminated.
12. Rice and spaghetti products, if thoroughly wet at the start of the cooking process, are very easily prepared.
13. Food such as potatoes, poultry, seafood, and some meats may be blanched in the steam cooker, thus reducing the total cooking time and grease absorption.
14. The steam cooker will loosen foods burned on pans making washing easier.
15. Solid pans are recommended when liquid is to be retained and perforated pans when the liquid is not to be retained.
16. Eggs may be cooked out of the shell if they are to be chopped which eliminates peeling after steaming.
17. The steam cooker can be opened during the cooking period to add or remove items.
18. Steam cooking information, including recommended pan size and type, weight per pan, cooking times and pan yields are given on the following pages of this bulletin.

Cooking Guide

The cooking times indicated in this list are based on a preheated cooking compartment. Preheat time for the Eco-Tech Plus Steamer is approximately 15 minutes.

Item	Approx. Frozen Wt. Per Pan	Recommended Pan Size 12" x 20" Perforated	Number of Pans	Timer Settings in Minutes	Approx. No. Cooked Servings Per Pan
FROZEN VEGETABLES					
Asparagus Spears	7 1/2 lbs (3.4 kg)	2-1/2" (65mm)	1-5	12-15	30 3 oz. (85 g)
Beans, Green Regular	6 lbs (2.7 kg)	2-1/2" (65mm)	1-5	10-15	25 3 oz. (85 g)
Beans, Green French Cut	6 lbs (2.7 kg)	2-1/2" (65mm)	1-5	5-7	25 3 oz. (85 g)
Beans, Lima	7 1/2 lbs (3.4 kg)	2-1/2" (65mm)	1-5	12-15	30 3 oz. (85 g)
Broccoli	6 lbs (2.7 kg)	2-1/2" (65mm)	1-5	4-6	25 3 oz. (85 g)
Brussel Sprouts	7 1/2 lbs (2.7 kg)	2-1/2" (65mm)	1-5	10-15	30 3 oz. (85 g)
Carrots	6 lbs (2.7 kg)	2-1/2" (65mm)	1-5	10-15	25 3 oz. (85 g)
Cauliflower	6 lbs (2.7 kg)	2-1/2" (65mm)	1-5	7-12	25 3 oz. (85 g)
Corn-Cut	7 1/2 lbs (3.4 kg)	2-1/2" (65mm)	1-5	8-12	30 3 oz. (85 g)
Mixed Vegetables	7 1/2 lbs (3.4 kg)	2-1/2" (65mm)	1-5	8-12	30 3 oz. (85 g)
Peas (Loose)	7 1/2 lbs (3.4kg)	2-1/2" (65mm)	1-5	3-5	30 3 oz. (85 g)
Spinach	9 lbs (4kg)	2-1/2" (65mm)	1-5	Must be defrosted	30 3 oz. (85 g)
Squash	12 lbs (5.4 kg)	2-1/2" (65mm)	1-5	Must be defrosted	50 3 oz. (85 g)
FROZEN PREPARED ENTREES					
Lobster Tails 6-8 oz. (170-255 g)	7-8 lbs (3.2-3.6 kg)	2-1/2" (65mm)	1-5	15-25	15 6 oz. (170 g)
Shrimp, C.D.P.	16-20 lbs (7-9 kg)	2-1/2" (65mm)	1-5	8-11	75 3 oz. (85g)
Shrimp, Green	16-20 lbs (7-9 kg)	2-1/2" (65mm)	1-5	11-15	50 3 oz. (85 g)
Bulk Pack, Frozen	3 1/2-4 lbs (1.6-1.8 kg)	2-1/2" (65mm)	1-5	35-45	10 6 oz. (170 g)
Bulk Pack, Defrosted	3 1/2-4 lbs (1.6-1.8 kg)	2-1/2" (65mm)	1-5	25-35	10 6 oz. (170 g)

Cooking Guide

Item	Approx. Frozen Wt. Per Pan	Recommended Pan Size 12" x 20" Perforated	Number of Pans	Timer Settings in Minutes	Approx. No. Cooked Servings Per Pan
VEGETABLES					
Beans, Snap Green or Waxed	6 lbs (2.7 kg)	2-1/2" (65mm)	1-5	18-22	25-30 3 oz. (85 g)
Beets, 2" Diameter	7 1/2 lbs (3.4 kg)	2-1/2" (65mm)	1-5	40-50	30-35 3 oz. (85 g)
Broccoli, Stalks 1/2-3/4"	6 lbs (2.7 kg)	2-1/2" (65mm)	1-5	14-18	25-30 3 oz. (85 g)
Carrots, Sliced	9 lbs (4 kg)	2-1/2" (65mm)	1-5	18-21	35-40 3 oz. (85 g)
Cauliflower, Trimmed 1-1/2" to 2"	6 lbs (2.7 kg)	2-1/2" (65mm)	1-5	12-16	30-35 3 oz. (85 g)
Corn on Cob Husked	1 dozen	2-1/2" (65mm)	1-5	10-15	12
Cabbage 1/4-1/6 of Head, Cored	5 lbs (2.25 kg)	2-1/2" (65mm)	1-5	14-18	15-20 4 oz. (115 g)
Onions, 2" Diameter	6 lbs (2.7 kg)	2-1/2" (65mm)	1-5	20-25	25-30 4 oz. (115 g)
Peas, Shelled	5 lbs (2.25 kg)	2-1/2" (65mm)	1-5	5-6	25-30 3 oz. (85 g)
Potatoes, French Fry Cut	10 lbs (4.5 kg)	2-1/2" (65mm)	1-5	18-21	50 3 oz. (85 g)
Potatoes, Regular Cut, 3"	10 lbs (4.5 kg)	2-1/2" (65mm)	1-5	35-40	50 3 oz. (85 g)
Spinach, Cleaned Cut	3 lbs (1.4 kg)	2-1/2" (65mm)	1-5	3-5	10-12 3 3/4 oz. (105 g)
Squash, Summer, Sliced 1" thick	7 lbs (3.2 kg)	2-1/2" (65mm)	1-5	7-10	30-35 3 oz. (85 g)
Squash, Winter Peeled	9 lbs (4 kg)	2-1/2" (65mm)	1-5	10-15	25-30 3 oz. (85 g)
Turnip, Dice	5 lbs (2.25 kg)	2-1/2" (65mm)	1-5	28-32	20-25 4 oz. (115 g)
CANNED VEGETABLES					
Canned, Vegetables	7 lbs. (3.2 kg)	2-1/2" (65mm)	1-5	5-10	25-30 3 oz. (85 g)
MISCELLANEOUS					
Eggs, in Shell	3 dozen	2-1/2" (65mm)	1-5	9-11	36 - 1 Egg Each
Eggs, out of Shell	4 dozen	2-1/2" (65mm)	1-5	6-8	48 - 1 Egg Each
Rice	4 lbs (1.8 kg)	2-1/2" (65mm)	1-2	18-22	60-65 3 oz. (85 g)
Spaghetti	3 lbs (1.4 kg)	2-1/2" (65mm)	1-2	18-22	40-45 4 oz. (115 g)

Cooking Guide

Item	Approx. Frozen Wt. Per Pan	Recommended Pan Size 12" x 20" Perforated	Number of Pans	Timer Settings in Minutes	Approx. No. Cooked Servings Per Pan
MEAT, POULTRY, FISH					
Chicken, Cut-up	8 lbs (3.6 kg)	2-1/2" (65mm)	1-5	20-30	15-20 2 oz. Protein (55 g)
Chicken, 4 lbs. Whole	3 each	4" (100 mm)	1-5	45-50	25-30 2 oz. Protein (55 g)
Fowl, 5 lbs. or more, Whole	2 each	4" (100 mm)	1-5	50-60	20-25 2 oz. Protein (55 g)
Fish, Fillets	3 lbs (1.4 kg)	2-1/2" (65mm)	1-5	10-15	12-15 2 oz. (55 g)
Frankforts	5 lbs (2.3 kg)	2-1/2" (65mm)	1-5	3-5	35-40 2 oz. (55 g)
Hamburgers, 3 oz. (85 g)	5 lbs (2.3 kg)	2-1/2" (65mm)	1-5	18-22	20-25 2 oz. Protein (55 g)
Meatballs, 1 oz. (30 g), size*	6 lbs (2.7 kg)	2-1/2" (65mm)	1-5	20-25	20-25 2 oz Protein (55 g)
Meatloaf *	15 lbs (6.8 kg)	2-1/2" (65mm)	1-5	40-50	50-60 2 oz. Protein (55 g)
Pork Chops, 4 oz., Loin Bone (115 g)	6 lbs (2.7 kg)	2-1/2" (65mm)	1-5	25-30	24 2 oz. Protein (55 g)
Sausage, 1 1/2 oz. (45 g)	6 lbs (2.7 kg)	2-1/2" (65mm)	1-5	18-21	18-20 2 oz. (55 g)
Turkey, On Carcass	20-22 lbs (9-10 kg)	2-1/2" (65mm)	1	2-2 1/2 hrs.	50-60 2 oz. Protein (55 g)
Turkey, Off Carcass	10-12 lbs (4.5-5 kg)	2-1/2" (65mm)	1-5	1-1 1/4 hrs.	55-65 2 oz. Protein (55 g)

* Raw weight for Meatballs and Meatloaf includes hamburger and extenders and yields 2 oz. (55 g) protein plus extenders or 3 oz. (85 g) total portion.

Your steamer efficiently cooks vegetables or other foods for immediate serving. Steam cooking should be carefully time controlled. Keep hot food holding time to a minimum to produce the most appetizing results. Prepare small batches, cook only enough to start serving, then cook additional amounts to meet demand. Separate frozen foods into smaller pieces to allow more efficient cooking.

Use a pan cover for pre-cooked frozen dishes that cannot be cooked in the covered containers in which they are packed if they require more than 15 minutes of cooking time. When cover is used, approximately one-third additional cooking time is necessary.

Cooking time for frozen foods depends on amount of defrosting required. If time permits, allow frozen foods to partially thaw overnight in a refrigerator. This will reduce their cooking time.

PREPARATION

Prepare vegetables, fruits, meats, seafood and poultry normally by cleaning, separating, cutting, removing stems, etc. Cook root vegetables in a perforated pan unless juices are being saved. Liquids can be collected in a solid 12" x 20" pan placed under a perforated pan. Perforated pans are used for frankfurters, wieners and similar items when juices do not need to be preserved. Solid pans are good for cooking puddings, rice and hot breakfast cereals. Vegetables and fruits are cooked in solid pans in their own juices. Meats and poultry are cooked in solid pans to preserve their own juices or to retain broth. Canned foods can be heated in their opened cans (cans placed in 12" x 20" solid pans) or the contents may be poured into solid pans.

PANS

The steamer compartment is designed to accept combinations of the pan of 12" x 20" (either solid or perforated) as shown on the following table.

Depth of Pan	Number of Pans per Compartment
1"	10
2-1/2"	5
4"	3
6"	2

Cleaning & Deliming

INTRODUCTION

A good preventive maintenance program begins with the daily cleaning procedure. The following paragraphs are set for minimum preventive maintenance procedures that must be completed periodically to assure continued trouble-free operation of the cooker.

CAUTION

Under no circumstances should hardware (or parts) be replaced with a different length, 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 and will void any warranty.

CAUTION

Disconnect the power supply to the appliance before cleaning or servicing.

CAUTION

The steamer and its parts are hot. Use care when operating, cleaning or servicing the steamer. The cooking compartment contains live steam. Stay clear when opening door.

DAILY CLEANING

At the end of each day, or between cooking cycles if necessary:

1. Turn main power switch OFF.
2. Remove pans and racks from compartment and wash in sink.
3. Wash compartment interior with clean water.
4. Use warm soapy water with a cloth or sponge to clean exposed bead of door gasket, rinse with warm clear water and wipe with a dry cloth.

Wipe surfaces which touch door gasket with a cloth or sponge and warm soapy water, rinse with warm clear water and wipe with a dry cloth. Do not apply food oils or petroleum solvents or lubricants directly to door gasket or surfaces, which touch door gasket.

5. Remove drain screen from inside compartment drain. Using a plastic bottle brush and mild detergent, clean inside the drain opening ensuring there is no food residue or blockage. Clean the drain screen and replace in its original position.
6. Leave door slightly open when steamer is not in use.

CAUTION

Do not use cleaning agents that are corrosive.

NOTICE

Contact the factory, the factory representative or a local service company to perform maintenance and repairs should the appliance malfunction. Refer to warranty terms.

WEEKLY CLEANING

Weekly, or more often if necessary:

1. Clean exterior with a damp cloth and polish with a soft dry cloth.
2. Use a non-abrasive cleaner to remove discolorations.

Following daily and periodic maintenance procedures will enhance long-life for your equipment. Climatic conditions - salt air - may require more thorough and frequent cleaning otherwise the life of the equipment could be adversely affected.

It is NOT RECOMMENDED to use cleaning agents that are corrosive.

Use of cleaning agents that contain chloride, acids or salts which are corrosive may cause pitting and corrosion when used over a period of time; this will reduce the life of the appliance.

Should pitting or corrosion occur, this is not covered by warranty.

Follow the recommended cleaning instructions. Use a mild detergent, warm water and rinse thoroughly.

CAUTION

NEVER SPRAY WATER INTO ELECTRIC CONTROLS OR LOUVERS.



NOTICE

DELIME ONCE EVERY OTHER MONTH

DELIMING

It is recommended that your steamer be delimed once a month, or more often if necessary.

Should your steamer develop a heavy build-up of lime scale deposits, use the TOTAL CONCEPT TREATMENT KIT available from your authorized service agent.

Before beginning deliming procedures, ensure that water is not overflowing into the cooking compartment.

Both generators must be delimed individually.



WARNING

Read and follow instructions on the TOTAL CONCEPT bottle. Use plastic or rubber gloves to avoid skin contact. If TOTAL CONCEPT comes in contact with skin, rinse with clean water.



CAUTION

Do not open delimiting caps when unit is in operation. Do not open or close compartment doors when delimiting caps are not in place.

Before beginning deliming procedures, ensure that water is not overflowing into the cooking compartment.

GENERATOR DELIMING INSTRUCTIONS



CAUTION

Do not open or close compartment doors or operate unit when delimiting caps are not in place.

1. Turn the power switch "OFF" for three minutes, allowing the generators to completely empty.
2. Turn the power switch to the "DELIME" position.
3. Remove caps located on top right of steamer (left cap for top generator, right cap for bottom generator). Using a funnel and pouring slowly to avoid spilling, pour one quart (0.95 liters) of Market Forge's Total Concept delimiting solution into each generator.
4. Replace the delimiting caps and tighten. Turn power switch to "ON" for five minutes allowing the generator to completely fill.
5. Turn the power switch to the "DELIME" position. Unscrew the delimiting caps and add 1/2 quart (0.48 liters) of water for electric units.

6. Replace the delimiting caps and tighten. Turn the power switch "ON" for 30 minutes.
7. Flush the generators three times. Turn power switch to "OFF" for three minutes and the "ON" for five minutes.

STAINLESS STEEL

To remove normal dirt, grease or product residue from stainless steel, use ordinary soap and water (with or without detergent) applied with a sponge or cloth. Dry thoroughly with a clean cloth. Never use vinegar or any corrosive cleaner.

To remove grease and food splatters or condensed vapors that have baked on the equipment apply cleanser to a damp cloth or sponge and rub cleanser on the metal in the direction of the polishing lines on the metal. Rubbing cleanser as gently as possible in the direction of the polished lines will not mar the finish of the stainless steel. NEVER RUB WITH A CIRCULAR MOTION.

Soil and burnt deposits, which do not respond to the above procedure, can usually be removed by rubbing the surface with SCOTCH-BRITE scouring pads or STAINLESS scouring pads. DO NOT USE ORDINARY STEEL WOOL as any particles left on the surface will rust and further spoil the appearance of the finish. NEVER USE A WIRE BRUSH, STEEL SCOURING PADS (EXCEPT STAINLESS), SCRAPER, FILE OR OTHER STEEL TOOLS. Surfaces, which are marred, collect dirt more rapidly and become more difficult to clean. Marring also increases the possibility of corrosive attack. Refinishing may then be required.

TO REMOVE HEAT TINT

Darkened areas sometimes appear on the stainless steel surface where the area has been subjected to excessive heat. These darkened areas are caused by thickening of the protective surface of the stainless steel and are not harmful. Heat tint can normally be removed by the foregoing, but tint which does not respond to this procedure calls for a vigorous scouring in the direction of the polish lines using SCOTCH-BRITE scouring pads or a STAINLESS scouring pad in combination with a powdered cleanser. Heat tint action may be lessened by not applying or by reducing heat to equipment during slack periods.