

# OWNER'S MANUAL

## ECO-TECH PLUS ATMOSPHERIC STEAMER

### WARNING:

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THIS MANUAL THOROUGHLY BEFORE INSTALLING, SERVICING OR OPERATING THIS EQUIPMENT.

### FOR YOUR SAFETY:

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER UNIT.

### CAUTION:

IN THE EVENT THAT THE OPERATOR SMELLS GAS PROPER INSTRUCTIONS MUST BE POSTED IN A PROMINENT LOCATION. THIS INFORMATION SHALL BE OBTAINED BY CONSULTING YOUR LOCAL GAS SUPPLIER.

### IMPORTANT:

DO NOT ATTEMPT TO OPERATE THIS UNIT IN THE EVENT OF A POWER FAILURE.

ADEQUATE CLEARANCES MUST BE MAINTAINED FOR SAFE AND PROPER OPERATION.

THE UNIT AREA MUST BE KEPT FREE AND CLEAR OF COMBUSTIBLES.

DO NOT OBSTRUCT THE FLOW OF COMBUSTION AND VENTILATION AIR.

CONTACT THE FACTORY, THE FACTORY REPRESENTATIVE OR LOCAL SERVICE COMPANY TO PERFORM MAINTENANCE AND REPAIRS SHOULD THE UNIT MALFUNCTION.

**MODEL: ETP-10G**



S-6501 Rev. A 05/07



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It is our policy to build equipment which is design certified by A.G.A./C.G.A. and N.S.F. However, a continuing program of product improvement makes it necessary to submit new models to the agencies as they are developed and consequently not all models bear the appropriate agency labels at all times.

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## INTRODUCTION

### PERFORMANCE CHECK:

**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.**

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 and gas 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° Fahrenheit (93° Celsius).
3. Check that "Ignition" light comes on when the burner pilot is ON.
4. 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.
5. Close compartment door. The COOKING light should now be illuminated and steam should be heard entering the compartment after about 45 seconds.
6. 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.
7. Open compartment door and observe that steam supply to chamber is cut off. "READY" light should again come on as "COOKING" light goes "OFF".
8. Close compartment door and let cooking cycle finish. When the timer returns to "0"

# INTRODUCTION

## DESCRIPTION:

The Eco-Tech Plus Atmospheric Steamer from Market Forge Industries is a stainless steel atmospheric steamer with two cooking compartments, each with an independent close-coupled atmospheric 42,000 BTU gas steam generator.

**Benefits:** The Eco-Tech Plus incorporates a water management system that reduces the amount of water used to condense generated steam, resulting in substantial savings on energy-related costs.

**Industry First!:** The ETP-10G is the only Atmospheric Twin Generator Steamer that comes complete with a self contained water filter system. The built-in system eliminates the hassle of where to put the filter and also provides a warning indicator when it is time to change the cartridges.

The Energy Star rating may qualify for rebates in your state. Consult your local utility company for details.

**Construction:** Eco-Tech Plus cooking compartments and cabinet are stainless steel with unitized body construction. Cooking compartments have removable left, right, and rear body panels. Each cooking compartment has a positive, fully insulated, slam-action door constructed of Type 300 stainless steel. Door gasket is a one-piece, NSF Approved silicone rubber gasket mounted on the inside of the door. Compartments are equipped with door interlock switches that automatically cut off power to the gas valve when the doors are opened.

## TECHNICAL SPECIFICATIONS:

**Cooking Compartment:** Each compartment is provided with stainless steel pan support racks and a stainless steel liner. The front edge of the bottom compartment contains a condensate drip trough that drains automatically to a water management tempering tank.

**Controls:** Each compartment is individually controlled by an on/off power switch and 60-minute electromechanical timer. At the end of the cooking time, a continuous signal will sound which can be silenced by returning the timer to the off position. An exclusive mode selector gives the operator the option of using each cooking cavity as a holding cabinet.

**Operation:** Each compartment utilizes a powerful close-coupled 42,000 BTU steam generator that supplies steam to the cooking compartments. Generators are held in the "ready" mode for quick response for heavy-demand situations. Each generator is rated at 42,000 BTU. Generator chambers are mounted at the rear of the steamer cavity and close-coupled to the steam compartment. Generators include as standard a pilotless ignition system, automatic water level control, low-water cutoff, safety relief valve, and preheat thermostat (190°F) and high limit. Each generator includes an access port for Total Concept delimer/descaler.

## DIMENSIONS AND CAPACITY:

Internal Dimensions of cooking compartments:  
14.5" Wide x 10.75" High x 23" Front-To-Back.  
(368 mm Wide x 273 mm High x 584 mm Front-To-Back) Allow 6" 152 mm of space on the right side if height of adjoining wall or equipment exceeds 29" 737 mm.

## Capacity:

Each cooking compartment will accommodate  
(9) 12" x 20" x 1" deep pans  
(5) 12" x 20" x 2 1/2" deep pans  
(3) 12" x 20" x 4" deep pans

## OPTIONAL:

- 12" x 20" x 1" perforated stainless steel pans.
- 12" x 20" x 2 1/2" perforated stainless steel pans.
- 12" x 20" x 2 1/2" solid stainless steel pans.
- 12" x 20" x 4" perforated stainless steel pans.
- 12" x 20" x 4" solid stainless steel pans.
- Total Concept Descaler (case of 4 gallons).
- Casters with Strain Relief.
- P.M. Plus.

# INTRODUCTION

## SERVICE CONNECTIONS

G	Gas Connection - 3/4" NPT (Male) 84,000 BTU's.
CW1	Cold Water - Generator - 3/8" O.D. tubing, Maximum 50 PSI, Minimum 25 PSI.
CW2	Cold Water - Condenser - 3/8" O.D. tubing, Maximum 50 PSI, Minimum 25 PSI.
D	Drain - 1/2" O.D. tube to open floor drain.
EC	Electrical Connection - 120 Volts AC, 60 Hz, single phase, comes with 6 foot cord. NEMA 5-15.

## INSTALLATION CLEARANCE\*

Left Side	Right Side	Rear
3	8	6

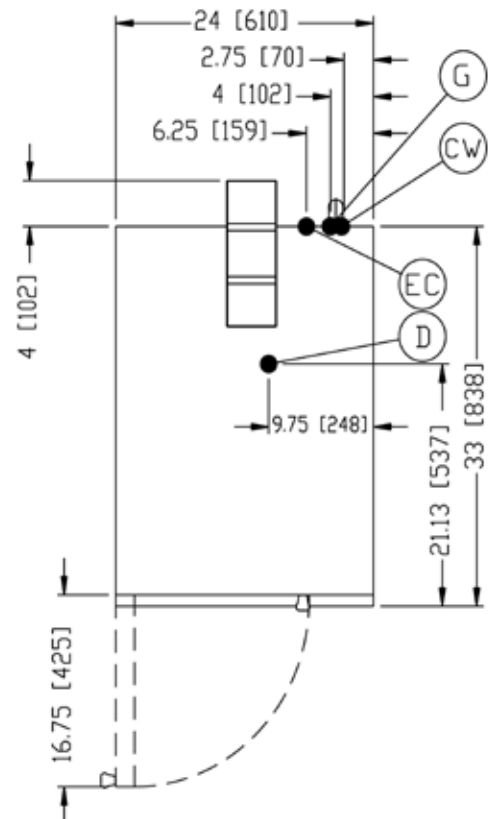
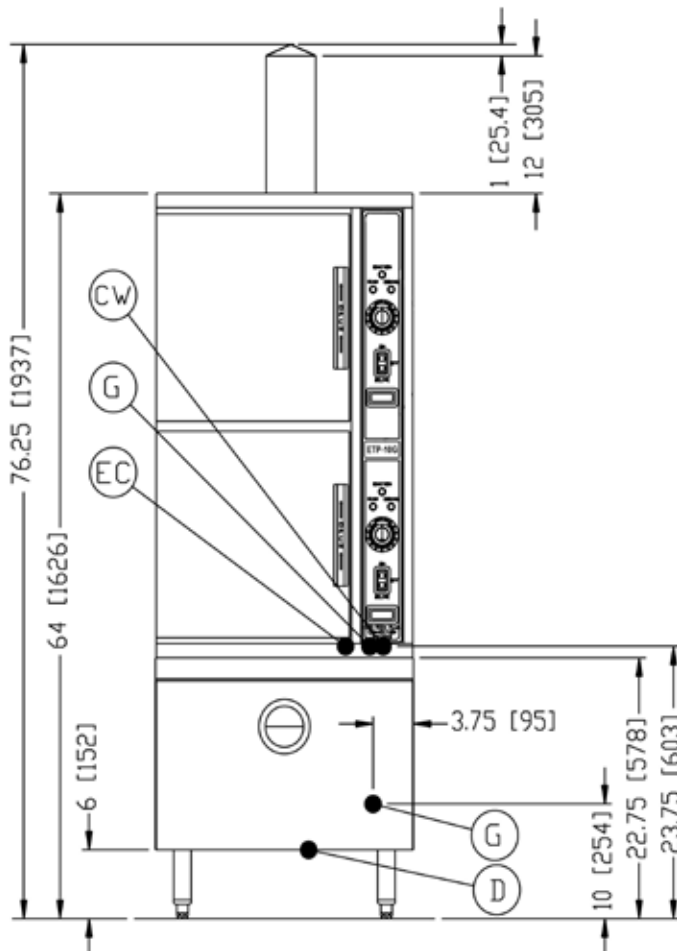
\* Use on non-combustible floors only.

Gas Connection: 1/2" NPT female 3 1/2" W.C. natural  
10" W.C. propane

**NOTES:** If the equipment is to be installed where the elevation exceeds 2,000 ft. (609.6 meters) above sea level, specify installation altitudes so that the proper gas orifices can be provided. Rated Input: 42,000 BTU per compartment.

All service connections are made at the bottom of the unit, in the 6" high space between the floor and the bottom of the cabinet.

**Drain:** 1 1/2" O.D. pipe coupled to 1 1/2" O.D. tempering tank drain. Do not make solid connection to floor drain. PVC and CPVC pipe are not acceptable materials for drains. Before connecting water to this unit, have water supply analyzed to make sure that hardness is no greater than 2.0 grains per gallon and a pH level is within the range of 7.0–8.5. Water that fails to meet these standards should be treated by the installation of a water conditioner. Equipment failure caused by inadequate water quality is not covered under warranty.



# INSTALLATION

## SETTING IN PLACE:

The location of installation must be under an exhaust hood, which will remove water vapor emitted when the cooker door is opened, and exhaust combustion fumes. Level the unit in final location by turning the adjustable feet. Using the cabinet top as a reference, obtain level adjustment left-to-right and front-to-back.

## MECHANICAL CONNECTIONS:

All electrical and plumbing connections are located on the rear panel of the unit. See 'SERVICE CONNECTIONS' on page 4 for location of mechanical connections.

## INSTALLATION CODES AND STANDARDS:

Installation must conform with local codes, or in absence of local codes, with the National Fuel Gas Code - ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSAB149.1 as applicable.

1. The appliance and its individual shut off valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of  $\frac{1}{2}$  psi.
2. The appliance must be isolated from the gas supply piping system by closing its individual manual shut off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than  $\frac{1}{2}$  psi.

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.

**WARNING:** Electrical grounding instructions - Units come equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug. (120 VOLT UNITS ONLY).

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

## EXHAUST FANS AND CANOPIES:

Canopies are set over ranges, ovens, kettles, etc., for ventilation purposes. It is recommended that a canopy extend 6" past the appliance and be located 6' 6" from the floor. Filters should be installed at an angle of 45 degrees or more with the horizontal. This position prevents dripping of grease and facilitates collecting the run-off grease in a drip pan, usually installed with the filter. A strong exhaust fan tends to create a vacuum in the room and may interfere with burner performance or may extinguish pilot flames. Makeup air openings approximately equal to the fan area will relieve such vacuum. In case of unsatisfactory performance on any appliance, check with the exhaust fan in the "OFF" position.

## WALL EXHAUST FAN:

Exhaust fans should be installed at least two feet above the vent opening at the top of the unit.

## CLEARANCES:

Adequate clearance must be provided in aisle and at the side and back. Adequate clearances for air openings into the combustion chamber must be provided, as well as for serviceability. Use appliance on noncombustible surface only. Minimum clearance from combustible and noncombustible construction, 3" on left side, 8" on right side and 6" from back.

**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.

## TO INSTALL:

1. Un-crate 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. Level the appliance using a spirit level.

# INSTALLATION

4. Be certain to leave adequate clearances for cleaning, maintenance and service.

## **GAS CONNECTION:**

1. The Serial and Rating Plate on the unit indicates the type of gas your unit is equipped to burn. DO NOT connect to any other gas type.
2. A 3/4" NPT line is provided at rear for the connection. Each compartment is equipped with an internal pressure regulator which is set at 3.5" W.C. manifold pressure for natural gas and 10" W.C. for propane gas. Use c" pipe tap on the burner manifold for checking pressure.

An adequate gas supply is imperative. Undersized or low pressure lines will restrict the volume of gas required for satisfactory performance. A steady supply pressure, between 6" W.C. and 14" W.C. for natural gas and 11" W.C. and 14" W.C. for propane gas is recommended. With all units operating simultaneously, the manifold pressure on all units should not show any appreciable drop. Fluctuations of more than 25% on natural gas and 10% on propane gas will create problems, affecting burner operation. Contact your gas company for correct supply line sizes.

Purge the supply line to clean out any dust, dirt or other foreign matter before connecting the line to the unit. Use pipe joint compound which is suitable for use with LP on all threaded connections.

Test pipe connections thoroughly for gas leaks.

**WARNING: NEVER USE AN OPEN FLAME TO CHECK FOR GAS LEAKS. CHECK ALL CONNECTIONS FOR LEAKS USING SOAPY WATER BEFORE USE.**

## **ELECTRICAL CONNECTION:**

120 VAC-60 Hz - Single Phase. Units with this electrical rating are factory supplied with a three-wire cord and three-prong plug which fits any standard 120V, three-prong grounded receptacle. A separate 15 amp supply is needed for each unit.

## **PLUMBING CONNECTIONS:**

**NOTICE: EQUIPMENT NOT INSTALLED IN ACCORDANCE TO THESE GUIDE LINES MAY VOID THE WARRANTY.**

**WARNING: PLUMBING CONNECTIONS MUST COMPLY WITH APPLICABLE SANITARY, SAFETY AND PLUMBING CODES.**

**CAUTION: AN OBSTRUCTED DRAIN CAN CAUSE PERSONAL INJURY OR PROPERTY DAMAGE.**

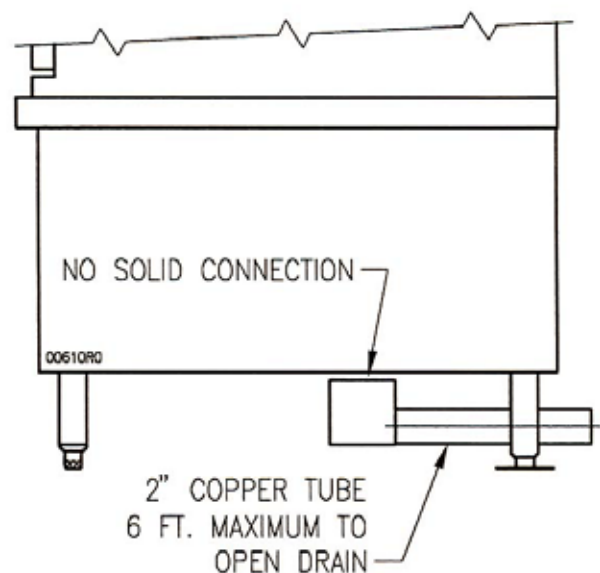
Two water lines are provided. Connect water supply lines to the 3/8" copper tubes at the rear of the steamer.

One line is for supply of water to the generator and one for cold condensate water to condense live steam entering the drain line.

## **DRAIN CONNECTIONS:**

**WARNING: AN OPEN GAP FLOOR DRAIN IS REQUIRED IMMEDIATELY BELOW THE APPLIANCE DRAIN.**

**CAUTION: PVC OR CPVC ARE NOT ACCEPTABLE MATERIALS FOR DRAINS.**



# INSTALLATION

## **WATER CONDITIONING:**

It is important that the water supplied to the generator be softened to no more than 2.0 grains of hardness and have a pH of 7.0 to 8.5. This degree of hardness can be easily obtained with the use of a properly maintained water softener. The use of a water meter will determine the water consumption and when the water softener needs regeneration or recharging. Failure to comply with these water condition standards may void the warranty.

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 remove all minerals from the water.

# OPERATION

**WARNING: IN THE EVENT OF MAIN BURNER IGNITION FAILURE, A 5 MINUTE PURGE PERIOD MUST BE OBSERVED PRIOR TO RE-ESTABLISHING IGNITION SOURCE. IF SO EQUIPPED, SOME UNITS WILL AUTOMATICALLY RE-ATTEMPT IGNITION.**

**WARNING: IN THE EVENT A GAS ODOR IS DETECTED, SHUT DOWN EQUIPMENT AT THE MAIN SHUT OFF VALVE AND CONTACT THE LOCAL GAS COMPANY OR GAS SUPPLIER FOR SERVICE.**

## **LIGHTING:**

1. Ensure power, gas and water supply is on.
2. Turn power switch "ON".
3. Generator tank will begin filling with water.
4. Once water level has been reached, the ignition light will come on and remain on throughout the operation of the appliance.
5. When the READY light comes on the steamer is ready for use.

## **SHUTDOWN STAND-BY:**

Set timer to "OFF" position and leave door slightly open.

## **COMPLETE SHUTDOWN:**

1. Set timer to "OFF" and turn power switch "OFF". Generator will drain automatically.

2. Turn water supply "OFF".
3. Turn gas supply "OFF"
4. Disconnect power supply.

## **PREHEATING:**

Before each initial operation of the cooker, and at any other time when the cooking compartment is cold, a 5-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 "5-minute" setting.
3. Turn off buzzer, which sounds to indicate cooking is complete, by setting the Timer Dial to OFF position.

## **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.

1. Slide pans of food into cooking compartment pan supports.
2. Close cooking compartment door.

# OPERATION

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.
4. Set timer to the required cooking time (see Cooking Guidelines).
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. Close manual gas shut off valve.

4. Disconnect power supply.

**CAUTION: WHEN THE UNIT IS NOT IN USE, LEAVE THE COOKING COMPARTMENT DOORS UNLATCHED TO PROLONG THE LIFE OF THE DOOR GASKET.**

## **CLEANING:**

1. After each period of daily operation (more frequently as required to maintain cleanliness), the cooker should be thoroughly cleaned by completing the following steps:
2. 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.
3. Wash cooking compartment interior using a mild detergent and water. Rinse and dry thoroughly.
4. Replace pan supports and drain screen in compartment and leave door open.

## **COOKING COMPARTMENT DRAINAGE:**

The bottom of the cooking compartment is angled slightly toward the rear of the unit. This assures that any condensate build-up 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.

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**CAUTION: AN OBSTRUCTED DRAIN CAN CAUSE PERSONAL INJURY OR PROPERTY DAMAGE.**



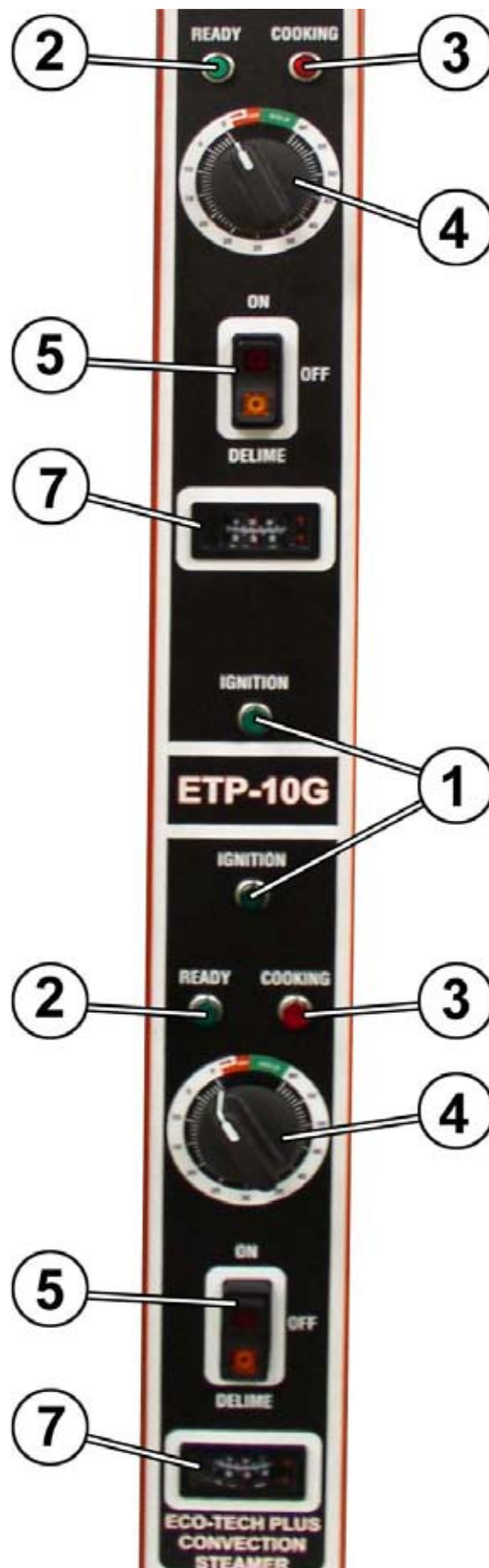
# OPERATION

## CONTROLS:

1. Ignition Light:  
When lit, indicates that pilot burner has been ignited.
2. Ready Pilot Light:  
When lit, indicates steam generator has reached 200° Fahrenheit (93°C) and is ready for the cooking cycle.
3. Cooking Pilot light:  
When lit, indicates that a cooking cycle is in progress.
4. Timed Cooking/Hold Mode:  
Set the cooking time (0-60 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).
5. Main Power Switch:
  - 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.
  - Off: The steam generator will drain. No lights.
  - Delime: Closes the drain valve while CLR liquid is being poured into the steam generator during the Delime procedure. Amber light will ignite on the main power switch.
6. Buzzer: (not shown)  
Signals end of cooking period.
7. Temperature Display:  
Shows temperature within the cooking cavity.

**CAUTION: LIVE STEAM AND ACCUMULATED HOT WATER IN THE COMPARTMENT MAY BE RELEASED WHEN THE DOOR IS OPENED.**

Your steamer has been factory set when "ON" to maintain water temperature during the READY phase at approximately 200° F (93°C) just below water boiling point. If the steamer is used at higher elevations (above 2000 feet), a qualified technician should adjust the READY phase temperature down to an appropriate temperature, below the boiling point of water.



# OPERATION

## TEST KITCHEN BULLETIN: Facts On Parade

1. Frozen vegetables should always be cooked in perforated 12" x 20" x 2 ½" (1/1 65 mm) pans 7 ½ lbs. (34 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 ½" (1/1 65 mm) pans for the most nutritious results.
4. There is a safety microswitch 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.

## STEAM COOKING:

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.

# MAINTENANCE

## **PREVENTIVE MAINTENANCE:**

A good preventive maintenance program begins with the daily cleaning procedure. 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 should be performed by an authorized service agency.

The following paragraphs 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.

**WARNING:** DISCONNECT THE POWER SUPPLY TO THE APPLIANCE BEFORE CLEANING OR SERVICING.

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## **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.  
**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.
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.

***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.
3. Clean around burner air mixer and orifice if lint has accumulated. Side cover must be removed to clean this area.

***Monthly:***

1. Clean around burner air mixers, louvered panels if grease or lint has accumulated.

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.

# MAINTENANCE

## NEVER SPRAY WATER INTO ELECTRIC CONTROLS OR LOUVERS. MONTHLY REMOVAL OF SCALE DEPOSITS

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 CLR TREATMENT KIT available from your authorized service agent.

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

### DELIMING PROCEDURE:

Both generators must be delimed individually.

**WARNING: READ AND FOLLOW INSTRUCTIONS ON THE CLR BOTTLE. USE PLASTIC OR RUBBER GLOVES TO AVOID SKIN CONTACT. IF CLR COMES IN CONTACT WITH SKIN, RINSE WITH CLEAN WATER.**

1. Completely drain steam generator by setting on/off switch to "OFF". Set cooking timer to 0.
2. Set on/off switch to DELIME.
3. Unscrew the deliming cap at the top side of steamer. The left port is for the lower generator and the right port is for the upper generator. Slowly pour 20 ounces of solution into generator to avoid spillage. Replace the deliming cap so it seals tightly. Turn power switch to on.
4. Operate steamer in READY cycle for ½ hour, then turn on/off switch "OFF" and allow generator to drain.
5. Flush cycle: Turn on/off switch to "ON". When ready light comes on, switch to "OFF" to flush generator. Repeat this step three times to completely flush generator.
6. Clean exterior and interior. Use a mild solution of soap and water. Rinse with clean water.
7. Dry with a soft cloth. LEAVE COMPARTMENT DOOR OPEN WHEN NOT IN USE.
8. The steamer is now ready for use. Turn off for overnight shutdown.

## DOOR GASKET REPLACEMENT:

The cooking compartment door gaskets are made of a silicone-type rubber material that is very durable but subject to wear during normal operation. Should the gasket leak replace it.

1. Open the cooking compartment door.
2. Remove the four screws on the outside of the door frame, and remove the door panel assembly.
3. Remove the six screws from the gasket plate in the door panel assembly.
4. Remove the gasket plate and the door gasket from door panel.
5. Install the new door gasket to the door panel. Replace the gasket plate and six screws.
6. Reassemble the door panel assembly in the door frame using the four screws.
7. Gasket replacement is now complete.

Door may be difficult to close until gasket has compressed to conform to opening. Leaving door closed overnight will compress gasket.

## EXTERIOR PANEL REMOVAL:

**WARNING: To prevent hazard in servicing the cooker, be certain that the steam supply boiler is shut down, the cold water shut-off valve is closed, and the electrical disconnect circuit breaker for the Cooker/Boiler unit is OFF before removing side panels.**

Access to all internal plumbing and electrical assemblies is from the right side. The right-side panel is removed by removing the bottom screws from panel. Gas controls are located in the lower cabinet and are accessible from the front of the unit.

## 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

# MAINTENANCE

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.

## REMOVAL OF SCALE DEPOSITS:

See Deliming Procedure, Page 8.

# TROUBLE-SHOOTING

## GENERAL TROUBLE-SHOOTING GUIDE:

PROBLEM	PROBABLE CAUSE	REMEDY
COOKING INDICATOR LIGHT FAILS TO LIGHT WITH TIMER SET.	<ul style="list-style-type: none"> <li>a. Main power circuit breaker tripped.</li> <li>b. Door interlock switch contacts not closed.</li> <li>c. Door interlock switch faulty.</li> <li>d. Indicator light burned out.</li> <li>e. Faulty timer contacts.</li> <li>f. Faulty wiring.</li> </ul>	<ul style="list-style-type: none"> <li>a. Locate external circuit breaker for incoming power and place in ON position.</li> <li>b. Shut cooker door to close switch contacts. Check alignment of door with switch.</li> <li>c. Replace switch.</li> <li>d. Replace light.</li> <li>e. Replace timer.</li> <li>f. Inspect condition of wire and tightness of all connections. Correct as needed.</li> </ul>
STEAM FAILS TO ENTER COOKING COMPARTMENT WITH COOKING INDICATOR LIGHT ON.	<ul style="list-style-type: none"> <li>a. Faulty wiring.</li> </ul>	<ul style="list-style-type: none"> <li>a. Inspect condition of wire and tightness of all connections. Correct as needed.</li> </ul>
STEAM ENTERS COMPARTMENT CONTINUOUSLY WITHOUT THE COOKING OR READY LIGHT ON.	<ul style="list-style-type: none"> <li>a. Standby thermostat not set correctly.</li> <li>b. Faulty thermostatic switch.</li> <li>c. HOLD set on timer.</li> </ul>	<ul style="list-style-type: none"> <li>a. Adjust the thermostat lower.</li> <li>b. Replace thermostat.</li> <li>c. Rotate timer knob to 'OFF' position.</li> </ul>
TIMER DIAL NOT TURNING.	<ul style="list-style-type: none"> <li>a. Faulty timer motor.</li> <li>b. Faulty wiring.</li> </ul>	<ul style="list-style-type: none"> <li>a. Replace timer.</li> <li>b. Inspect condition of wire and tightness of all connections. Correct as needed.</li> </ul>

# TROUBLE-SHOOTING

BUZZER FAILS TO SOUND AT END OF TIMER SETTING.	a. Timer contacts faulty. b. Buzzer faulty. c. Faulty wiring.	a. Replace timer. b. Replace buzzer. c. Inspect condition of wire and tightness of all connections. Correct as needed.
STEAM FLOWS CONTINUOUSLY FROM DRAIN LINE WITH COOKER IN OPERATION.	a. Cold water not connected. b. Faulty cooling valve. c. Faulty wiring.	a. Turn on external shutoff valve. b. Replace cooling valve. c. Inspect condition of wire and tightness of all connections. Correct as needed.
*DOOR LEAKS.	a. Damaged door gasket. b. Clogged compartment drain or plumbing.	a. Check gasket for cuts and replace. b. Remove screen and clean drain line or plumbing.
*WATER FLOWS INTO COOKING COMPARTMENT.	a. Level control has failed. b. Water has very high resistance. c. Scale build-up on probe. d. Water fill solenoid valve.	a. Replace. b. Replace level control with high sensitivity control. c. Clean all probes d. Plugged, defective, clean or replace.
*WATER ACCUMULATES IN COMPARTMENT.	a. Plugged compartment drain.	a. Remove screen and clean drain line.
*WATER FLOWS INTO DRAIN DURING SHUTDOWN.	a. Cooling valve does not close.	a. Check valve for foreign material or damage.
*WATER NOT BEING SUPPLIED TO GENERATOR.	a. Water supply off. b. Supply water pressure too low. c. Defective water solenoid valve. d. Level Probe shorted. e. Defective water level control. f. Drain valve is open.	a. Check incoming water valve is on. b. Call supply agency. c. Replace or clean. d. Check and correct. e. Replace. f. Check valve, clean or replace.

**\*NOTE:** THESE PROBLEMS ARE AN INDICATION OF SEVERE WATER CONDITIONS WHICH SHOULD BE CORRECTED IMMEDIATELY TO AVOID DAMAGE TO THE COMPONENTS AND PERFORMANCE OF THE STEAMER. CALL YOUR SERVICE AGENCY FOR ASSISTANCE.

## ELECTRICAL FAULT ISOLATION GUIDE:

FAILURE	FAULT LOCATION
WILL NOT OPERATE IN EITHER HOLD OR 60-MINUTE TIMER POSITIONS.	a. Incoming power b. Timer c. Door interlock switch d. Wiring
OPERATING IN HOLD POSITION BUT NOT IN 60-MINUTE TIMER POSITION	a. 60-Minute timer b. Wiring

# TROUBLE-SHOOTING

OPERATES IN 60-MINUTE TIMER POSITION BUT NOT IN HOLD POSITION	a. Timer b. Wiring c. Hold thermostat.
WITH COOK INDICATOR LIGHT ON AND STEAM ENTERING THE CAVITY, TIMER DIAL FAILS TO TURN.	a. Hold position set on timer. b. Timer motor c. Wiring
BUZZER FAILS TO SOUND AT END OF 60-MINUTE TIMER MODE.	a. 60-Minute timer contacts b. Buzzer c. Wiring
STEAM FLOWS CONTINUOUSLY FROM BOILER DRAIN LINE.	a. Cooling valve needs replacing b. Wiring

## ADJUSTMENTS:

All units are adjusted at the factory. In case of operation problems at initial installation, check type of gas supply and manifold pressure and compare it with information on the rating plate.

## BURNER TROUBLE-SHOOTING GUIDE:

PROBLEM	PROBABLE CAUSE	REMEDY
BURNERS DO NOT COME ON.	a. Gas supply is off. b. Power switch is off. c. Probe not sensing water level. d. Ignitor not functioning. e. Combination gas valve not opening.	a. Locate supply line and turn on. b. Locate switch on control panel and turn on. c. Clean probes, check wiring. d. Check ignition module, relay. e. Check that control knob is in the ON position, check that 24 volts is at the gas valve.
BURNERS PRODUCE CARBON DEPOSITS	a. Incorrect orifice size. b. Incorrect gas supply. c. Incorrect gas pressure.	a. Check size and correct. b. Check size and correct. c. Check gas pressure at manifold. Correct if necessary.
FLASH BACK	a. Burning inside mixer tube. b. Incomplete combustion. c. Sooting of burner. d. Miss-located ignitor.	a. Reduce primary air. b. Increase burner input. c. Increase primary air. d. Adjust ignitor.

**WARNING:** AT LEAST TWICE A YEAR, HAVE AN AUTHORIZED SERVICE PERSON CLEAN AND ADJUST THE UNIT FOR MAXIMUM PERFORMANCE.

**WARNING:** ADJUSTMENTS AND SERVICE WORK MAY BE PERFORMED ONLY BY A QUALIFIED TECHNICIAN WHO IS EXPERIENCED IN, AND KNOWLEDGEABLE WITH THE OPERATION OF COMMERCIAL GAS COOKING EQUIPMENT. HOWEVER, TO ASSURE YOUR CONFIDENCE, CONTACT YOUR AUTHORIZED SERVICE AGENCY FOR RELIABLE SERVICE, DEPENDABLE ADVICE OR OTHER ASSISTANCE AND FOR GENUINE FACTORY PARTS.

# TROUBLE-SHOOTING

## 60-MINUTE TIMER / TIMER CONTACTS:

Defective timer contacts will result in failure of cooker compartment to operate. When this occurs, remove the side panel and proceed as follows:

1. Turn off power to the cooker at external circuit breaker.
2. Disconnect all five wires from timer terminals.
3. Connect an ohmmeter between terminals 1 & 3.
4. Rotate timer dial beyond the "0-Minute" point (any setting) to obtain a reading of zero ohms on the ohmmeter. If zero ohm reading cannot be obtained, timer contacts are defective and the timer must be replaced.
5. Move ohmmeter leads to terminals 1 and 4.
6. Rotate timer dial to "0 - Minute" position (an audible click indicates correct position). If zero ohm reading cannot be obtained, the timer is defective and must be replaced.
7. Remove ohmmeter and replace all five leads on timer terminals.

## TIMER MOTOR:

A defective timer motor will cause continuous operation in the TIME mode, with the timer dial failing to return to the "0 - Minute" position.

To confirm timer motor condition, proceed as follows:

1. Carefully check motor wire leads and tighten loose connections.

**WARNING: Use care while working with control panel. Terminals carry 120 Volts.**

2. Turn on power to the steamer.
3. Set timer dial (any setting beyond "0 - Minute"). If operation is correct, the motor will turn the dial toward "0 - Minute". If the motor fails to operate, it is defective and the entire timer must be replaced.
4. Shut off power to the cooker.

## DOOR INTERLOCK SWITCH:

Malfunction of the cooker door interlock switch prevents timer indicator lights from turning on and steam generator from operating when the timer dial is set. If steam does not enter the compartment and

the cooking indicator light fails to turn on with the door latch securely engaged, the fault may be in the door interlock switch. Proceed as follows:

1. Turn off power to the cooker.
2. Disconnect wires to the door switch terminals.
3. Connect an ohmmeter between the terminals of the switch.
4. Actuate the switch by closing the cooking compartment door. If a zero reading cannot be obtained, the switch is defective and must be replaced.
5. Remove the ohmmeter and replace the leads on switch terminals.

## INDICATOR LIGHTS:

If the cooker compartment functions correctly, with the single exception that the indicator light fails to light during operation, the fault is a defective indicator light. A "burned out" or defective light is verified by using an AC volt-meter at the leads, with input power on the selector switch in the correct position for that timer, the timer set, and the door latches closed. If 120 volts is present, the fault is in the indicator light and requires replacement. If 120 volts is not present, the fault is in the wiring or control components (selector switch, timer or door switch).

## BUZZER:

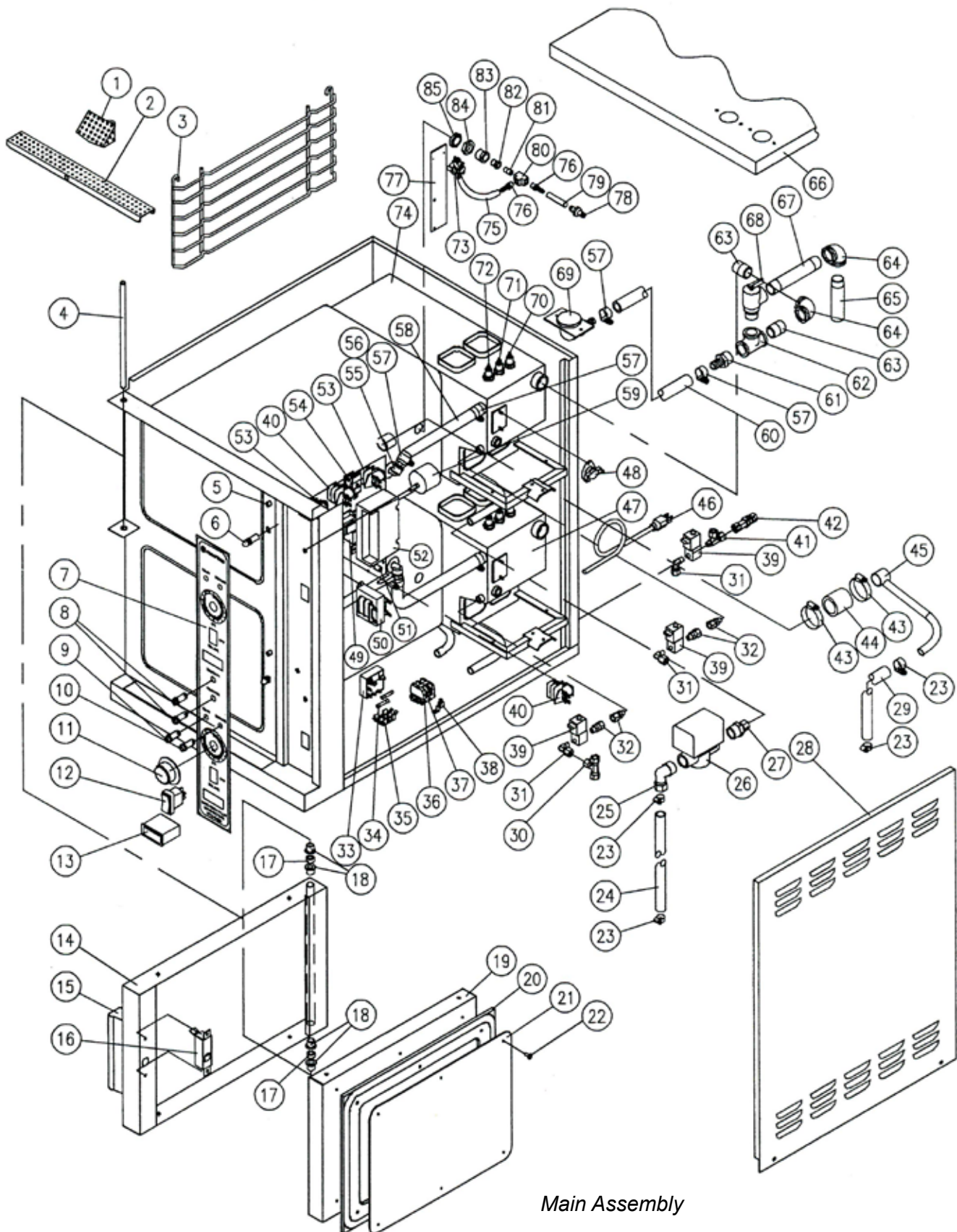
If the buzzer does not sound at the termination of the operator-selected timer setting (timer dial returned to "0 - Minute" position), the fault may be a defective buzzer. Buzzer operation is verified using an AC volt-meter at buzzer coil connections with input power on and selector switch and coinciding timer dial set at the "0 - Minute" position. If voltage is 120 volts, the fault is in the buzzer, which must be replaced. If 120 volts is not present, the fault is in the wiring or control components (timer or selector switch).

## WIRING:

Using an ohmmeter, wiring continuity between the connections shown on the wiring diagram is readily verified. This is best done in stages, removing only those wires required for each continuity check. As each lead is replaced, it should be checked for evidence of corrosion, and cleaned if necessary. All leads must be tightly attached so as to provide a good electrical connection.



# ILLUSTRATED PARTS



# ILLUSTRATED PARTS

ITEM	PART NO.	REF. NO.	DESCRIPTION	QTY.
1	97-6334	5224-2	Compartment Strainer	2
2	97-6177	8-5023	Perforated Trough	1
3	97-6175	2681-3	Pan Rack	4
4	97-6269	3977-2	Hinge Rod	1
5	97-6191	9-3213	Door Switch	2
	97-6429	39332	Switch Actuator	2
6	97-6178	8-5021	Striker	2
7	97-6430	7712-1	Control Panel Decal	1
8	97-6170	4-PL04	Ready Pilot Light, Green, 125V	2
9	97-5472	4-PL04-2	Ignition Pilot Light, Green, 28V	2
10	97-6171	4-PL07	Pilot Light, Red, 125V	2
11	08-3826		Knob	2
12	97-6367	9124-2	Switch, On/Off/Delime	2
13	08-7521		Temperature Indicator	2
	91-6491		Grommet	2
14	97-6227	8-5060-8	Outer Door Shell	2
15	97-6432	3903-2	Door Handle Assembly	2
16	97-6232	8-5068-9	Latch Assembly	2
17	97-6236	9-3366	Spacer	3
18	97-6261	8-5078	Bushing	8
19	97-6230	8-5065-8	Door Panel	2
20	97-6228	8-5063-8	Door Gasket	2
21	97-6229	8-5064-8	Gasket Retaining Plate	2
22	97-6233	9-1011-1	Gasket Panel Screws	12
23	97-6481	9017-2	Hose Clamp, 5/8"	4
**24	97-6434	9219-300	Hose, 5/8 I.D. x 30" Long, Upper Generator Drain	1
	97-6435	9219-120	Hose, 5/8 I.D. x 12" Long, Lower Generator Drain	1
25	97-6436	3-6910E	Brass Elbow, 5/8"C x 3/4" MPT	2
26	97-6210	3-S543	Blowdown Solenoid Valve	2
27	97-6209	3-6810E	Connector, 5/8" C x 3/4" MPT	2
28	97-6437	6440-1	Right Side Panel	1
**29	97-6438	9219-340	Hose, 5/8" I.D. x 3/4" Long, Upper Cavity Drain	1
	97-6439	9219-160	Hose, 5/8" I.D. x 16" Long, Lower Cavity Drain	1
30	97-6440	3-646	Brass Tee, 3/8"C	1
31	97-6188	3-696A	Brass Elbow, 3/8"C x 1/8" MPT	3
32	97-6344	3-686A	Brass Connector, 3/8" C x 1/8" MPT	4
33	97-6441	39294	Timer Relay, Cooling	1
34	97-6186	9092-2	Fuse, 2A, 250V	2
35	97-5864	9068-1	Fuse Holder	2
36	10-6962	4-22ES	End Section	1

# ILLUSTRATED PARTS

37	10-6963	4-22TB	Terminal Block	2
38	97-5441	4-35EU	Ground Lug	1
39	97-6282	5162-1	Solenoid Valve	3
40	97-6193	9-3174-1	Relay DPDT, 120V	4
41	97-6327	3-716A	Brass Tee, 3/8"C x 1/8" MPT x 3/8"C	1
42	97-6442	39148	Bulk Head Union, 3/8"C	2
43	97-6443	9017-5	Hose Clamp, 1-1/16 - 2"	4
44	97-6444	9230-016	Drain Hose, 1-1/4" x 1-3/4" Long	2
45	97-6445	7714-1	Drain Tube Assembly	2
46	97-5702	4127-3	Cord Set, 120V	1
47	97-6418	7349-2	Generator Tank, Lower	1
48	97-6419	39355	High Limit Thermostat	
49	97-6194	4038-4	Liquid Level Control, 10K OHM	2
50	97-5701	9-3383	Transformer, 120-24V	2
51	97-6187	9126-1	Operating Thermostat	2
52	97-5572	9210-1	Ignition Module	2
53	97-6172	9-3175-1	Relay SPDT, 120V	2
54	97-6190	3821-1	Buzzer	2
55	97-6420	3-116CB	Brass Street Elbow, 3/8" FPT x 1/4" MPT	4
56	97-6421	9053-7	Brass Hose Barb, 5/8" x 3/8" MPT	4
57	97-6422	9017-3	Hose Clamp, 5/8 - 1-1/4"	12
58	97-6423	9219-112	Steam Diverter Hose, 5/8 I.D. x O.D. x 11-1/4" Long	4
59	08-6464		Timer, 60 Minutes, 120V	2
**60	97-6424	9219-210	Upper Delime Hose, 5/8" I.D. x 21" Long	1
	97-6425	9219-370	Lower Delime Hose, 5/8" I.D. x 37" Long	1
61	97-6426	9053-6	Brass Hose Barb, 5/8" x 3/4" MPT	2
62	97-6203	3-101E	Brass Tee, 3/4"	2
63	97-6204	3-112E	Brass Close Nipple, 3/4"	2
64	97-6202	3-100E	Brass Elbow, 3/4"	2
65	97-6368	5184-1	Relief Valve Extension	2
66	97-6427	4517-2	Top Panel	1
67	97-6428	3-113E5-1/2	Brass Nipple, 3/4" x 5 1/2"	2
68	97-6219	5286-1	Relief Valve, 5 PSI	2
69	91-7594		Reducing Elbow Assembly	2
	91-7765		Clean Port Plug	2
	08-7511		O Ring	2
70	97-6372	3738-7	Probe - High Level	2
71	97-6213	3738-8	Probe - Low Level	2
72	97-6212	3738-9	Probe - Low Level Cut Off	2
73	08-6502		Pressure Switch	2
74	97-6202	7349-1	Generator Tank, Top	1

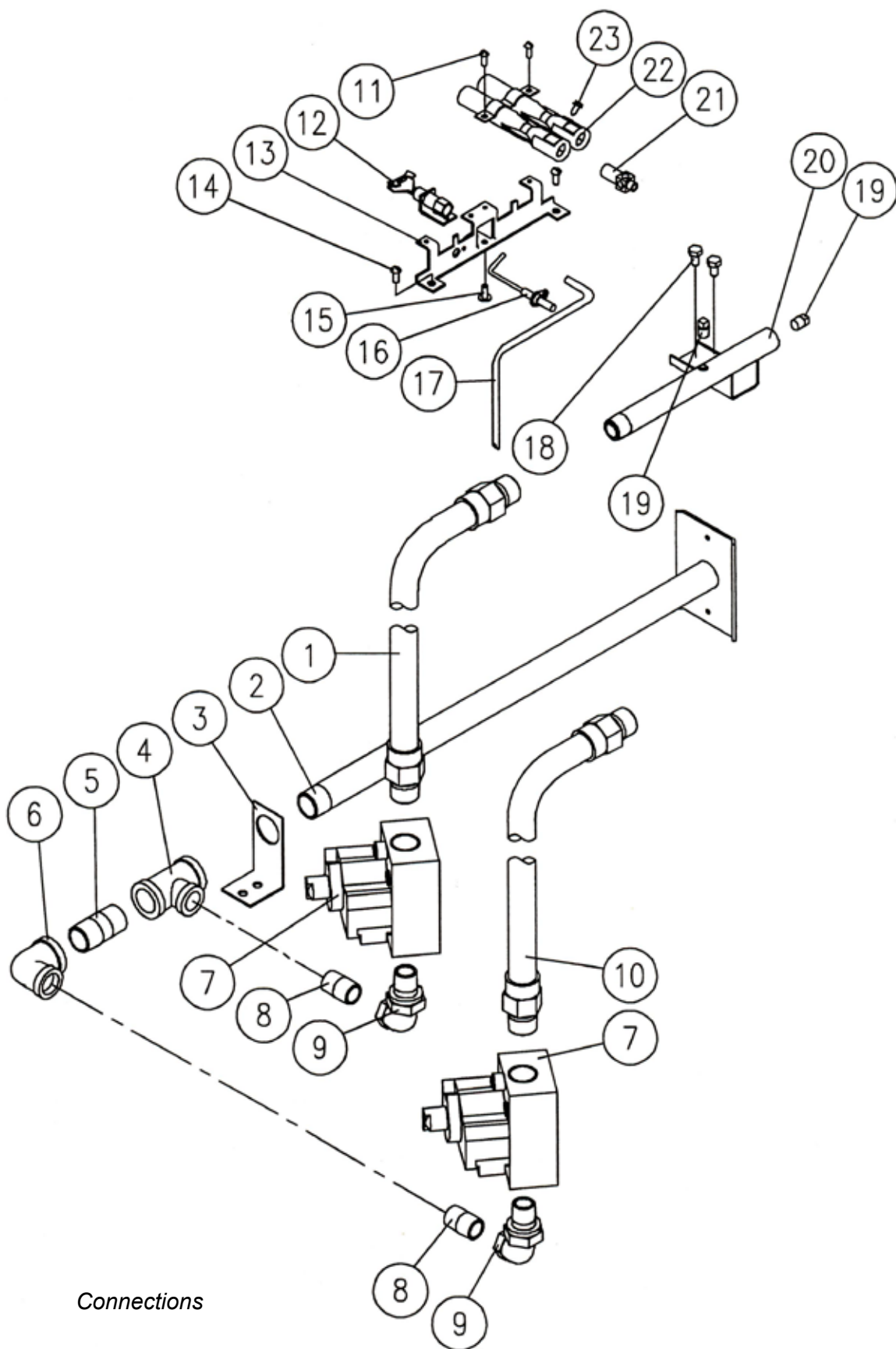
# ILLUSTRATED PARTS

75	97-6446	9222-080	Tubing, Pressure Switch, 1/4" I.D. x 8" Long	2
76	97-6447	9053-8	Brass Hose Barb, 1/4" x 1/8 MPT	4
77	97-6448	5703-1	Pressure Switch Bracket	2
78	08-5015		Vacuum Breaker	2
79	97-6449	39252	Tubing, Vacuum Break, 1/4" I.D. x 2" Long	2
80	97-6450	3-X101A	Brass Extruded Tee, 1/8" FPT	2
81	97-6451	3-112A	Brass Close Nipple, 1/8" NPT	2
82	97-6452	3-110BA	Brass Bushing, NPT, 1/4" to 1/8"	2
83	97-6453	3-110DB	Brass Bushing, NPT, 1/2" to 1/4"	2
84	97-6454	3-111D	Brass Locknut, 1/2" NPT	2
85	10-4586		Sealing Nut, 1/2" NPT	2
*86	97-6455	39447	Timer Relay, Operating	2

\* Not Shown.

\*\* Select as required.

# ILLUSTRATED PARTS



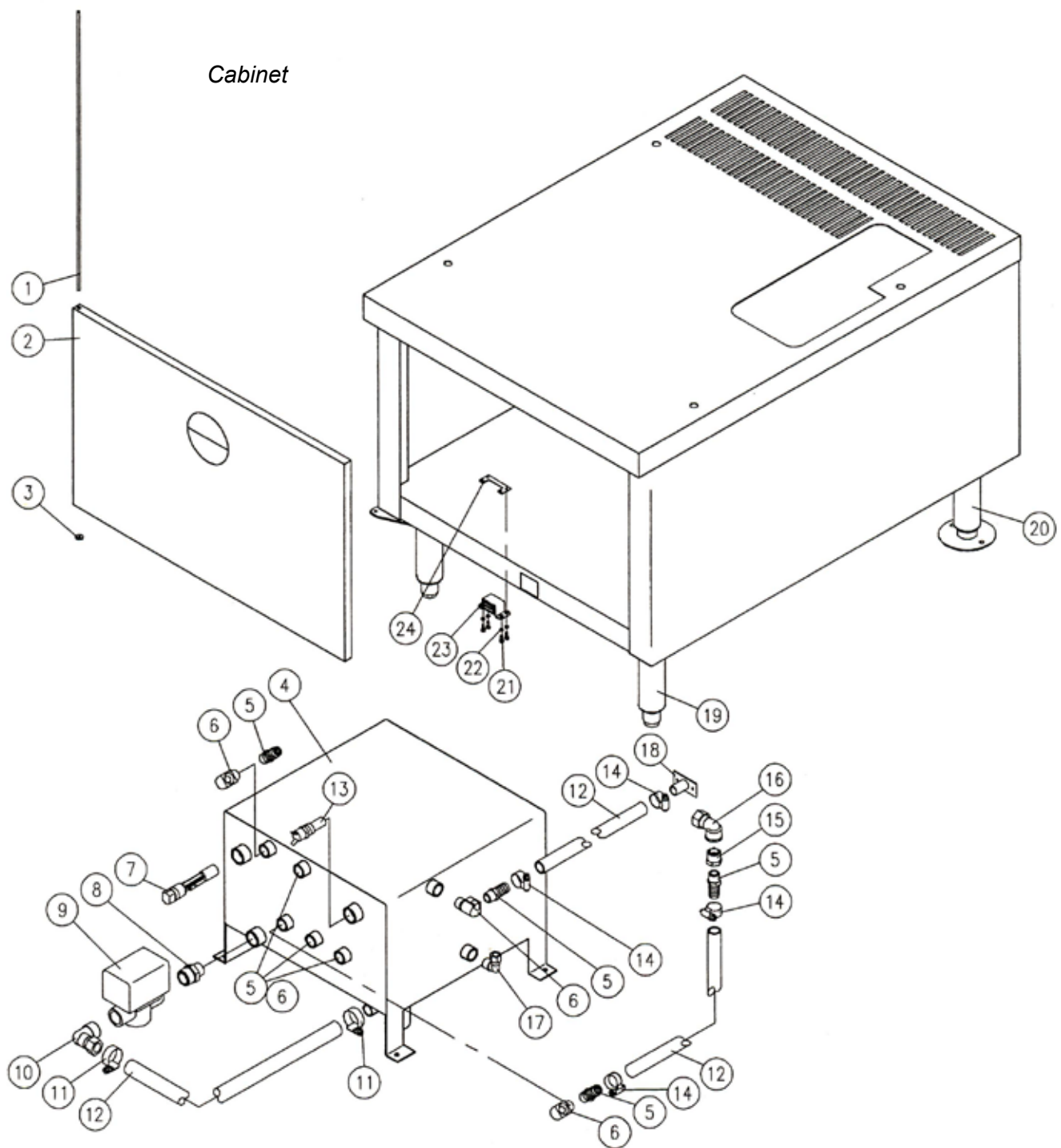
*Connections*

# ILLUSTRATED PARTS

ITEM	PART NO.	REF. NO.	DESCRIPTION	QTY.
1	97-6456	9026-36	Lower Gas Flex Tube, 5/8", O.D. x 36" Long.	1
2	97-6457	6433-3	Gas Supply Pipe Assembly	1
3	97-6459	4487-2	Bracket	1
4	97-6459	9013-7	Malleable Iron Tee, 3/4" x 3/4" x 1/2"	1
5	97-6460	9010-02	Nipple, 3/4" x 2" Long	1
6	97-5555	9014-1	90° Reducing Elbow, 3/4" NPT x 1/2" NPT	1
**7	97-6461	5450-1	Gas Valve, Natural Gas	1
	97-6462	5450-2	Gas Valve, LP Gas	1
8	98-6109	9009-000	Close Nipple, 1/2"	2
9	98-6122	3-U4BE	Union Elbow, 1/2"	2
10	97-6463	9026-42	Upper Gas Flex Tube, 5/8" O.D. x 42" Long	1
11	97-6464	T50C832-14	Hex Screw, 8 - 32 x 1/4"	8
**12	97-6244	5375-1	Pilot Burner, LP Gas	1
	97-6465	5375-2	Pilot Burner, Natural Gas	1
13	97-6245	6748-1	Burner Mounting Bracket	2
14	97-6466	M29S1032-38	Machine Screw, 10 - 32 x 3/8"	4
15	97-6467	M29X 1032-14	Machine Screw, 10 - 32 x 1/4"	4
16	97-6242	5362-1	Spark Electrode	2
**17	97-6468	5774-1	Pilot Tube - Top	1
	97-6469	5774-2	Pilot Tube - Bottom	1
18	97-6470	M50X1420-12	Machine Bolt, 1/4 - 20 x 1/2"	4
19	98-6124	9035-1	Plug, 1/8 NPT	2
20	97-6247	6949-1	Manifold	2
**21	97-6471	4951-55	Orifice, #55, Natural Gas	4
	97-6241	4951-63	Orifice, #63, LP Gas	4
22	97-6246	6749-1	Twin Burners	4
23	97-6472	A54C6-38	Screw, #6 x 3/8"	8

\*\* Select as required.

# ILLUSTRATED PARTS



# ILLUSTRATED PARTS

ITEM	PART NO.	REF. NO.	DESCRIPTION	QTY.
1	97-6473	4780-2	Hinge Rod	1
2	97-6474	5772-1	Cabinet Door Assembly	1
3	~NPN~	F01S-316	Flat Washer	1
4	98-3784		Tempering Tank	1
5	97-6421	9053-7	Brass Hose Barb, 5/8" x 3/8" MPT	7
6	97-6476	3-X115C	Brass Extruded, 90° Street Elbow, 3/8"	6
7	08-5023		Float Switch	1
8	97-6477	3-122ED	Hex Nipple, 3/4" MPT x 1/2" MPT	1
9	97-6210	3-S543	Tank Drain Solenoid	1
10	97-6478	3-6910E	Brass Elbow, 90°, 5/8" C x 3/4 MPT	1
11	97-6422	9017-3	Hose Clamp, 5/8 - 1-1/4"	2
12	97-6480	9219-140	Hose, 5/8" I.D. x 14" Long	3
13	08-6514		Tank Thermostat, C130°F	1
14	97-6481	9017-2	Hose Clamp, 3/8 - 7/8"	4
15	97-6482	3-110DC	Brass Bushing, 1/2" MPT to 3/8" FPT	1
16	97-6483	3-7010D	Brass Elbow, 90°, 5/8" C x 1/2" FPT	1
17	97-6346	3-696C	Brass Elbow, 90°, 3/8" C x 3/8" MPT	1
18	97-6484	5773-1	Vent	1
19	97-6485	39233	Bullet Leg	2
20	97-6486	39263	Adjustable Flanged Foot	2
21	97-6487	M93X 632-38	Pan Slot Head Screws, #6-32 UNC x 3/8" Long	4
22	97-6488	S01S-6	Spring Lock Washer, #6	4
23	97-6489	4777-1	Magnetic Catch	1
24	97-6490	4775-1	Magnetic Catch Plate	1