



INSTALLATION & OPERATION MANUAL

ET SERIES STEAMERS

6-PAN

<i>ML-152043</i>	<i>C24ET 208/240 V.</i>
<i>ML-152044</i>	<i>C24ET 480 V.</i>
<i>ML-152039</i>	<i>C24ET-PS 208/240 V.</i>
<i>ML-152040</i>	<i>C24ET-PS 480 V.</i>
<i>ML-152035</i>	<i>C24ET-LWE 208/240 V.</i>
<i>ML-152036</i>	<i>C24ET-LWE 480 V.</i>

10-PAN

<i>ML-152045</i>	<i>C24ET 208/240 V.</i>
<i>ML-152046</i>	<i>C24ET 480 V.</i>
<i>ML-152041</i>	<i>C24ET-PS 208/240 V.</i>
<i>ML-152042</i>	<i>C24ET-PS 480 V.</i>
<i>ML-152037</i>	<i>C24ET-LWE 208/240 V.</i>
<i>ML-152038</i>	<i>C24ET-LWE 480 V.</i>



For additional information on Vulcan or to locate an authorized parts and service provider in your area, visit our website at www.vulcanequipment.com

IMPORTANT FOR YOUR SAFETY

THIS MANUAL HAS BEEN PREPARED FOR PERSONNEL QUALIFIED TO INSTALL THIS EQUIPMENT, WHO SHOULD PERFORM THE INITIAL FIELD START-UP AND ADJUSTMENTS OF THE EQUIPMENT COVERED BY THIS MANUAL.

⚠ WARNING

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

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

TABLE OF CONTENTS

IMPORTANT FOR YOUR SAFETY	2
GENERAL	4
LWE Series Steamers	4
Steam Cooking	4
INSTALLATION	4
UNPACKING	4
INSTALLATION CODES AND STANDARDS	5
LOCATION	5
LEVELING AND ANCHORING	5
ELECTRICAL CONNECTIONS	6
PLUMBING CONNECTIONS	6
Water Requirements	6
Water Treatment	6
Water Supply Connection	7
Filter System	7
Drain Connection	7
Drain Requirements	8
VENT HOOD	8
STARTUP	8
OPERATION	9
CONTROLS AND INDICATORS	9
Timer	9
READY Light (Green)	9
COOK Light (Red)	9
Power On/Off Switch (Top and Bottom Compartments)	9
PREHEATING	9
STEAMING	9
DAILY SHUTDOWN	10
EXTENDED SHUTDOWN	10
CLEANING	11
COOKING COMPARTMENT DRAIN	11
DRAINING THE GENERATORS	11
COMPARTMENTS	11
DOOR GASKET	11
LEAVE COMPARTMENT DOORS OPEN	11
GUIDELINES FOR MAINTAINING STAINLESS STEEL SURFACES	12
MAINTENANCE	12
WATER TREATMENT SYSTEM	12
REMOVAL OF LIME SCALE DEPOSITS	12
Items Required (not provided)	12
Deliming Schedule	13
Deliming Procedure	13
DOOR GASKET	13
DRAINING GENERATOR	13
COOKING GUIDELINES	14
PRODUCTS TO BE COOKED IN SOLID PANS	14
PRODUCTS TO BE COOKED IN PERFORATED PANS	15
TROUBLESHOOTING	17
SERVICE AND PARTS INFORMATION	18

INSTALLATION, OPERATION AND CARE OF MODEL C24ET SERIES STEAMERS

PLEASE KEEP THIS MANUAL FOR FUTURE USE

GENERAL

Vulcan convection steamers are produced with quality workmanship and material. Proper installation, usage and maintenance will result in many years of satisfactory performance. It is suggested that you thoroughly read this entire manual and carefully follow all of the instructions provided.

The C24ET6 and C24ET10 convection steamers are dual compartment, electric pressureless steam cookers with dual electric steam generators that maintain water temperature at approximately 195° F. At 208V and 480V, the C24ET6 is rated at 17.2kW, and the C24ET10 is rated at 25.6kW. At 240V, the C24ET6 is rated at 19.7kW, and the C24ET10 is rated at 26.4kW.

Model C24ET6 can accommodate three 2 1/2" deep (6.4 cm) steam pans per compartment. Model C24ET10 can accommodate five 2 1/2" deep (6.4 cm) steam pans per compartment. The C24ET6 and C24ET10 electric convection steamers are designed for cooking vegetables, eggs and other foods, in commercial kitchens. Each compartment has a 0-60 minute timer, as well as a constant steam feature. The buzzer requires manual shutoff. The steamer is equipped with a cabinet base with flanged feet for floor mounting.

This manual is applicable to the models and ML numbers listed on the cover page. Procedures apply to all models unless specified otherwise.

LWE Series Steamers

The low water and energy use steamers (LWE) provide energy and water saving steam generation that meets ENERGY STAR® performance levels. The steamers feature electronic PID Controllers and Solid State Contactors that work together to "pulse" power to the heating elements during a cook cycle and reduce the amount of electrical energy and water consumed.

Steam Cooking

Atmospheric steamers offer an efficient way to produce many foods in either small portions or larger batches. Atmospheric convection steam cooking will steam cook fresh foods or will steam defrost and cook frozen foods providing the maximum color, flavor and nutritional value with the least expenditure of energy and labor. The atmospheric steaming compartment allows the operator to open and close the door anytime during a cooking cycle. The generator element will shut off when the door is opened then re-start when the door is closed.

INSTALLATION

Before installing, verify that the electrical supply agrees with the specifications on the data plate located on the front of the machine. If the supply and equipment requirements do not agree, do not proceed with the installation. Contact your dealer or Vulcan immediately.

This unit is shipped pre-wired for 208/60/3 or 480/60/3. 240V and single-phase operation require changes to the heater connection 240/60/3, 240/60/1 and 208/60/1. This unit will operate at 60Hz or 50Hz. Conversions must be made by a Vulcan authorized service technician. The LWE series is not available in single phase.

UNPACKING

This steamer was inspected before leaving the factory. The transportation company assumes full responsibility for safe delivery upon acceptance of the shipment.

Immediately after unpacking, check for possible shipping damage. If steamer damage is found, save the packaging material and contact the carrier within 5 business days of delivery.

INSTALLATION CODES AND STANDARDS

In the United States of America:

1. State and Local Codes
2. National Fuel Gas Code, ANSI/z223.1/NFPA #54 (latest edition). Copies may be obtained from The American Gas Association, Accredited Standards Committee Z223@ 400 N. Capital St. NW, Washington D.C. 2001 or the Secretary Standards Council, NFPA, 1 Batterymarch Park, Quincy MA 02169-7471.

NOTE: In the Commonwealth of Massachusetts:

All gas appliances vented through a ventilation hood or exhaust system equipped with a damper or with a power means of exhaust shall comply with 248 CMR.

3. Vapor Removal from Cooking Equipment, NFPA#96 (latest edition).
4. Copies may be obtained from The National Fire Protection Association, 1 Batterymarch Park, Quincy MA 02169-7471.
5. National Electrical Code, ANSI/NFPA-70 (latest edition). Copies may be obtained from The National Fire Protection Association, 1 Batterymarch Park, Quincy MA 02169-7471.

In Canada, the steamer must be installed in accordance with:

1. Local codes.
2. Canadian Electrical Code (CSAC 22.2 No. 3, latest edition) available from the Canadian Standards Association, 5060 Spectrum Way, Mississauga, Ontario, Canada L4W 5N6.

LOCATION

Allow space for plumbing and electrical connections. Minimum clearance is 6" (15.2 cm) on the back for proper air circulation. Allow adequate access for operating and servicing the steamer: 36" (91.4 cm) at the front of the steamer, 15" (38 cm) above the steamer and 18" (45.7 cm) on the right and left sides of the steamer.

LEVELING AND ANCHORING

Position the steamer in its final installed location. Place a level on the horizontal area of the cabinet. Adjust the feet to level the steamer in both the left-to-right and front-to-rear directions.

Steamers should be elevated in the front just enough, about $\frac{1}{16}$ " to $\frac{1}{8}$ " (2 to 3 mm), to provide proper draining. Do this by rotating the adjustable feet in the proper direction 1 to $1\frac{1}{2}$ turns after leveling. Check drainage in the steamer compartments by pouring a small amount of water in the compartment. All the water should drain.

The feet have holes in the flanges for anchor bolts.

ELECTRICAL CONNECTIONS

⚠ WARNING Electrical and grounding connections must comply with the applicable portions of the National Electrical Code and/or other local electrical codes.

The wiring diagram is located inside the right cavity panel.

C24ET6 AND C24ET10 CURRENT DRAW

MODEL	PH	208V		240V		480V	
		Kw	A	Kw	A	Kw	A
C24ET6-LWE	3	17.0	53.0	17.0	41.0	17.0	20.4
C24ET10-LWE	3	30.0	94.0	30.0	72.2	30.0	36.1
C24ET6	1	17.0	82.0	17.0	71.0	n/a	n/a
	3	17.0	53.2	17.0	41.0	17.0	20.4
C24ET10	1	30.0	144.0	30.0	125.0	n/a	n/a
	3	30.0	94.0	30.0	72.2	30.0	36.1
C24ET6-PS	1	18.1	88.0	18.5	77.0	n/a	n/a
	3	18.1	53.2	18.5	46.5	18.5	22.6
C24ET10-PS	1	31.1	149.6	31.5	131.3	n/a	n/a
	3	31.1	94.0	31.5	75.0	31.5	38.3

PLUMBING CONNECTIONS

⚠ WARNING Plumbing connections must comply with applicable sanitary, safety and plumbing codes.

Water Requirements

Proper water quality can improve the taste of the food prepared in the steamer, reduce liming in the steam generator and extend equipment life. Water conditions vary from one location to another. Ask your municipal water supplier for details about your local water supply prior to installation. Presence of sediment, silica, excess chlorides or other dissolved solids may lead to a recommendation for alternate form(s) of water treatment. Test the water with the test strip included with the steamer. Other factors affecting steam generation are iron content, amount of chloridation and dissolved gases.

Water Treatment

A local water treatment specialist should be consulted before installation of steam generating equipment.

Supply Pressure	20 - 60 psig
Hardness*	No more than 3 grains
Silica	less than 13 ppm
Total Chlorine	less than 4.0 ppm
PH range	6.5 to 8
Undissolved Solids	less than 5 microns
*17.1 ppm = 1 grain of hardness	

If the water supply fails to meet these standards, it will be necessary to install a water conditioner on the generator water feed. The use of strainers or filters will not remove minerals from the water.

Water Supply Connection

Connect the treated cold water supply line to the 3/4" (19 mm) (male hose thread) inlet. Connect the untreated cold water supply line to the 3/4" (19 mm) (male hose thread) inlet marked UNTREATED WATER.

A water filter system is recommended for the water supply line going to the treated water inlet. Follow the recommendations for use and installation instructions shipped with the water filter. If a water filter is not installed, the steam generator warranty may be limited.

A manual shutoff valve must be provided in a convenient location near the steamer.

Filter System

If you decide to not install a scale-reducing filter system designed for steam equipment or use another manufacturer's system other than that recommended by Vulcan, please use these guidelines.

- If you are going to delime the unit with a deliming agent recommended for a pressure steam boiler and stainless steel generators, and you are on city or treated well water, you still must have a carbon block filter installed and maintained. Carbon block filters remove the chlorine and chloramine disinfectants from the water. Chlorine and chloramines will erode the boiler or steam generator and will result in a vessel failure, which is not covered under warranty.
- Water feed lines to the steamer must be flushed before final connection. Particles in the water could build up in the water and steam valves or clog tubing and components that maintain the water level and pressure in the boiler or steam generator. If the water supply is not free of sediment or is cloudy after several minutes of flushing, a sediment filter must be installed before use.

- If you have purchased a water filtration system from Vulcan, please follow the instructions provided with the water filtration system. At the time of installation you must register your steamer at www.vulcanequipment.com/filterreg or use the reply card supplied with your unit. You will need to register your steamer at each filter change to ensure your standard and extended warranty is maintained.

Drain Connection

The 1½" NPT threaded fitting on the condenser box must be extended a minimum of 12" (305 mm) - maximum of 72" (1829 mm) away from steamer base, to an open air gap type drain (Fig. 1). Do not reduce the 1½" NPT drain piping throughout its length. If the drain plumbing needs to exceed 72" (Max. 120"), then the drain must be increased to 2" diameter pipe.

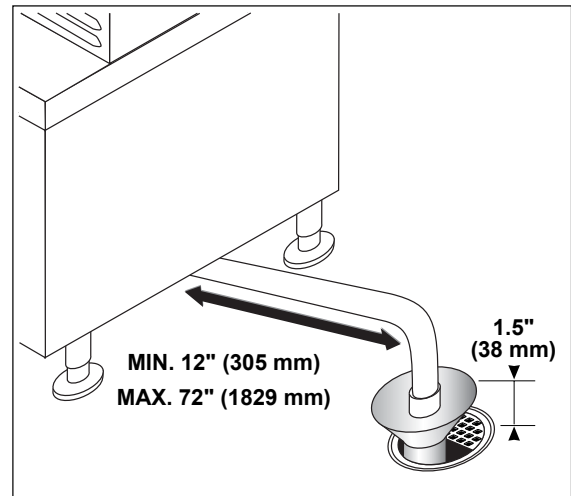


Figure 1

Provide a suitable floor sink with a minimum depth of 12" (305 mm). The floor sink is NOT to be directly under the steamer and should be at a distance so that steam vapors will not enter the steamer from underneath. **The drain should slope down away from the steamer ¼" for every foot of drain pipe length.** The drain pipe should be either iron or copper. DO NOT use PVC pipe; PVC pipe may lose its rigidity or glue may fail. A 1½" air gap is required for the drain.

Drain Requirements

1½" pipe with 3 elbows, 6-10 feet long, requires a standpipe

2" pipe with 3 elbows, 10-15 feet long, requires a standpipe

NOTICE In order to avoid any back pressure in the steamer, do not make a solid connection to any drain. FAILURE TO DO SO CAN DAMAGE THE STEAMER AND VOID THE WARRANTY.

Temperatures in the drain can briefly reach as high as 212°F (100°C). Local codes may require that the temperature of drain water be no greater than 140°F (60°C). Some provision for lowering the water temperature must be provided by the user or installer to meet this code requirement.

VENT HOOD

Local codes may require the steamer to be located under an exhaust hood. Information on the construction and installation of ventilating hoods may be obtained from *Vapor Removal from Cooking Equipment*, NFPA Standard No. 96 (latest edition).

STARTUP

⚠ 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 connections have been made.
2. Press the power switch to the on position. Each compartment has its own individual power switch. After approximately 15 minutes, the ready light should come on, indicating that the generator has reached operating pressure.
3. Open the door, set the timer to 5 minutes, and observe that no steam is entering the compartment, and that the ready light is off and the cooking light is off.
4. Close the compartment door. The cooking and ready lights should now be lit, and steam should be heard entering the compartment.

5. Check the drain line to be sure that water from the cold water condensate valve is flowing through the drain line.

NOTE: The drain condensate water does not flow until the drain box reaches 140°F.

6. Open the compartment door and observe that steam supply to the compartment stops, and that the cooking light turns off.
7. Close the compartment door and let the cooking cycle finish. When the timer returns to the 0 position, a buzzer will sound and the cooking light will turn off, signaling the end of the cooking cycle. To silence the buzzer, turn the timer dial to the OFF position.
8. Complete steps 3-7 for each cooking compartment.
9. Press the power switches to the off position. Leave the compartment doors slightly open to allow the inside to dry out.

OPERATION

⚠ 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 the door.

CONTROLS AND INDICATORS

The upper section of the steamer consists of two cooking compartments. Each compartment functions independently with its own controls (Fig. 2), and is a separate, sealed steam chamber during the cooking operation.

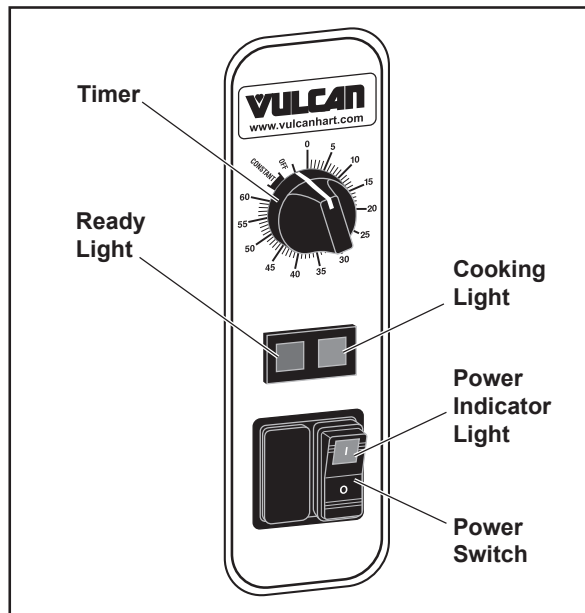


Figure 2

Timer

Used to set desired cooking cycle time. Timer range is 0-60 minutes or constant steam. Turn to the OFF position to silence the buzzer.

READY Light (Green)

When lit, indicates steamer is ready for the cooking cycle.

COOK Light (Red)

When lit, indicates steamer is in the cooking phase.

Power On/Off Switch (Top and Bottom Compartments)

Power on/off switch with indicator light.

PREHEATING

Preheat the cooking cavity when the steamer is first used for the day or whenever the compartment is cold. Keep the door closed during the preheat cycle.

- Turn the power switch to ON, and set the timer to 10 minutes to preheat the compartment.
- When the buzzer sounds, turn the timer to the OFF position. The steamer is ready to cook.

STEAMING

Each steaming compartment has its own controls. With the green READY light lit and the compartments preheated, the steamer is ready for use.

1. Open the compartment door.
2. Place pans of food to be cooked into the compartment and shut the door.
3. Set the timer to the desired cooking time. Steaming begins. The red COOK light will turn on.
4. The cooking cycle may be interrupted at any time by opening the compartment door. Close the door to resume cooking.
5. When the buzzer sounds, the timed steaming cycle has finished. Steaming stops, and the COOK light turns off. To silence the buzzer, turn the timer to the OFF position.

Refer to *Steam Cooking with Vulcan Kettles and Steamers* (packed with your steamer) for suggested cooking times. Also refer to the COOKING GUIDELINES in this manual. Size, weight, pan loading and product quality will affect cooking times and should be adjusted to your own requirements.

DAILY SHUTDOWN

1. Press the power switches to the OFF position.
2. Clean the compartment(s).
3. Leave compartment door open to allow cavity and door seal to dry.

EXTENDED SHUTDOWN

1. Press the power switches to the OFF position.
2. Allow to drain completely.
3. Turn off main power supply.
4. Turn off water supply.
5. Thoroughly clean cavities, door seals, etc.
6. Leave compartment door open to allow cavity and door seal to dry.

CLEANING

⚠ WARNING Disconnect the electrical power to the machine and follow lockout/tagout procedures before cleaning.

COOKING COMPARTMENT DRAIN

Keep compartment drains running freely. Inspect compartment drains daily for blockage. Remove any particles or debris from the perforated strainer daily (or more often if needed).

After cooking greasy foods or seafood, close the doors and operate each compartment for 25 to 30 minutes to flush any residual grease and oils down the compartment drain. Make a solution of warm water and non-chloride/chlorine/bleach based detergent and pour 1/2 gallon (1.9 liters) of it down each compartment drain. Rinse by pouring 1/2 gallon (1.9 liters) of hot water down each compartment drain.

DRAINING THE GENERATORS

To prevent malfunction of controls and clogging, it is essential to drain both generators every day. This will flush out any accumulated minerals from the feed water. It will also aid in preventing internal scale buildup which would interfere with proper generator operation. Failure to drain the generators every day will void the steamer warranty. The presence of minerals in suspension is indicated by a murky or milky condition in the first portion of the water drained.

⚠ WARNING The water being drained is hot and under pressure. Use care when cleaning or servicing the generator.

After the generator has been in operation, turn the unit off with the power switch located on the cooking compartment to drain the generator. The generator will drain for approximately 5 minutes, removing sediment, scale and lime buildup in the generator.

COMPARTMENTS

Wash the inside of the compartment with a solution of warm water and non-chloride detergent. Rinse with warm water. Once a week, thoroughly clean the exposed surfaces (sides, front, door and top) with a damp cloth and polish with a clean cloth. To remove discolorations, use a nonabrasive cleaner.

DOOR GASKET

Clean the gasket-sealing surface of the compartment door daily to remove food acids for maximum gasket life. Do not use any solvents or sharp instruments. Wash with a cloth moistened in a solution of mild detergent and warm water. Rinse with a fresh cloth moistened with warm water to remove all traces of detergent.

Wipe dry with a clean cloth. Never apply food oils or petroleum lubricants directly to the door gasket. Petroleum-based solvents and lubricants will reduce gasket life.

LEAVE COMPARTMENT DOORS OPEN

Leave the compartment doors slightly open when the steamer is not in use. When the compartment is idle, never latch the door and apply pressure to the door gasket. Leaving the gasket under pressure can cause permanent deformation and reduce gasket life.

GUIDELINES FOR MAINTAINING STAINLESS STEEL SURFACES

There are four things that will break down stainless steel and allow corrosion to develop:

- 1) Abrasion
- 2) Deposits
- 3) Water
- 4) Chlorides

Avoid rubbing with steel pads, wire brushes or scrapers that can leave iron deposits on stainless steel. Instead, use plastic scouring pads or soft cloths. For stubborn stains, use products such as

Cameo™, talc or Zud First Impression™. Always rub parallel to the polish lines or with the grain.

Hard water will leave deposits that promote rust on stainless steel. Treated water from softeners or certain filters can eliminate these mineral deposits. Other deposits from food or lubrication must be properly removed by cleaning. Use mild detergent and non-chloride/chlorine/bleach based cleaners. Rinse thoroughly and wipe dry. Where appropriate, apply a polish recommended for stainless steel (such as Benefit™ or Super Sheen™) for extra protection and luster.

MAINTENANCE

⚠ 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.

WATER TREATMENT SYSTEM

A water treatment system is recommended for the steamer. Refer to your supplier's manual for normal maintenance procedures for proper scale-free operation.

REMOVAL OF LIME SCALE DEPOSITS

The steamer should be delimed when symptoms occur (see Troubleshooting Chart). This is in accordance with the minimum preventive maintenance schedule required by the Warranty.

⚠ WARNING Read and follow the instructions on the deliming material package. Avoid contact with skin and eyes. Wear plastic or rubber gloves and safety goggles when handling. Wash thoroughly after handling. If deliming solution comes in contact with the skin or eyes, rinse thoroughly with clean water.

⚠ 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.

NOTE: The capacity of the generator is approximately 1.8 gallons.

Items Required (not provided)

- Deliming material (Recommend "Scale Release")
- Funnel
- Plastic or rubber gloves
- Safety goggles or face shield
- Measuring cup
- 1-gallon container for mixing deliming solution
- Petrol-Gel Lubricant or equivalent foodgrade grease for coating deliming port threads

NOTE: Deliming solution may cause the surface of aluminum measuring tools to tarnish or etch.

Deliming Schedule

Hardness (Grains)	Deliming Schedule
0 to 5	6 Months
5 to 10	3 Months
10 to 15	Monthly
15 to 20	2 Weeks
20+	Other Water Treatment Is Required

Deliming Procedure

NOTE: This procedure is not intended to take the place of a water treatment program.

- Press the power switch to off. Wait 5 minutes for steam generator to completely drain and the drain valve to close.
- Turn cooking timers to OFF.
- Prepare deliming solution according to the instructions on the deliming material package. Follow all manufacturers' instructions. The generator and superheater capacity is approximately 1.8 gallons.
- Remove delime port cap located on the front ledge beneath the lower compartment and insert a funnel into the delime port (Fig. 3).
- Pour deliming solution into the steam generator slowly to avoid spillage.
- Remove funnel from delime port then rinse port and surrounding area with clean water. Wipe dry.
- Lightly coat delime port threads with Petrol-Gel then install delime port cap. Cap must be installed and tightened securely at all times.
- Turn power switch ON.
- When ready light comes on, turn cooking timer on for 3 minutes to delime the steam tubes and nozzles.
- After 40 minutes, turn power switch OFF and allow steam generator to completely drain, 5 minutes.
- Rinse steam generator with clean water:
 - Turn power switch ON. When ready light comes on, turn cooking timer on for 3 minutes to rinse the steam tubes and nozzles.
 - Turn power switch OFF and allow steam generator to completely drain.
 - Turn cooking timer to OFF.
 - Repeat steam generator rinse one time.
- Clean exterior and interior using a mild solution of soap and water. Rinse with clean water then dry with a soft cloth.
- Leave compartment door open when not in use.
- The steamer is ready for operation or shutdown.

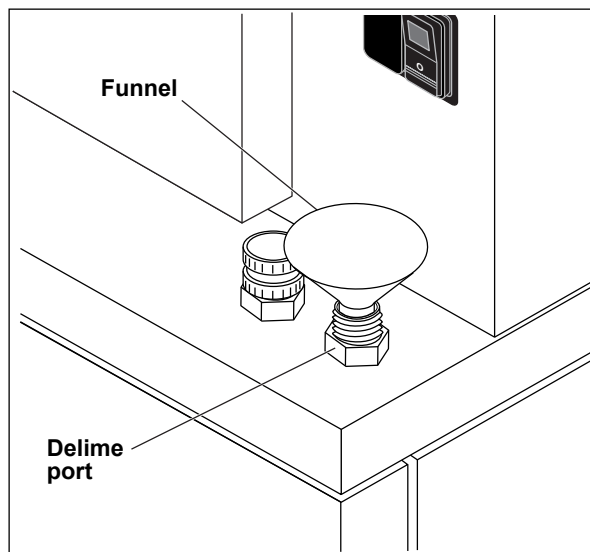


Figure 3

DOOR GASKET

If the door gasket is leaking due to a nick or cut, it must be replaced. Damage to the gasket sealing surface will cause steam leakage.

DRAINING GENERATOR

Drain each generator at the end of each day to flush out minerals and minimize scale buildup. Each generator drains automatically for approximately 5 minutes after the power switch is turned off.

COOKING GUIDELINES

The steamer steam cooks vegetables, frankfurters, eggs in their shells, and certain other meats or food items at atmospheric pressure.

These cooking guidelines are suggestions only. You should experiment with your food products to determine the cooking times that will give you the best results. Variables which affect cooking time include size, weight, thickness of foods, temperature, density, previous condition of the

foods (fresh, pre-blanched or frozen) and degree of doneness desired.

Perforated pans should always be used when possible. Perforated pans will reduce cooking times, promotes evenness of cooking and reduces moisture build up. When solid pans are used avoid covering the pan with a lid or plastic wrap during cooking.

PRODUCTS TO BE COOKED IN SOLID PANS

PRODUCT	TIME (MINUTES)	WEIGHT PER PAN
Eggs, Scrambled	9 to 12	8 doz.
Rice, Long Grain (Cover with 4 cups water/lb.)	23 to 25	2 lbs.
Pasta (Place perforated pan inside solid pan, cover with cold water)		
Spaghetti – Regular/Vermicelli	10 to 15	4 lbs.
Macaroni - Shells/Elbows	13 to 18	4 lbs.
Noodles - 1/2" Wide	10 to 15	4 lbs.
Lasagna Noodles	13 to 18	4 lbs.
Frozen Casseroles, Lasagna	33 to 35	Full Pan
Meat Loaf, 3-5 Lb. Each	38 to 40	15 lbs.
Beef		
Ground Chuck	19 to 25	10 lbs.
Sliced as Purchased	33 to 40	10 lbs.
Shrimp, Frozen, 10 Shrimp per Lb.	4 to 5	4 lbs.
Beans		
Baked	8 to 9	10 lb. Can
Refried	8 to 9	10 lb. Can
Canned Vegetables	5 to 6	10 lb. Can
Prunes, Dried	11 to 15	Full Pan

PRODUCTS TO BE COOKED IN PERFORATED PANS

PRODUCT	TIME (MINUTES)	WEIGHT PER PAN
SEAFOOD		
Clams		
Frozen	9 to 12	3 doz.
Fresh, Cherrystone	4 to 6	3 doz.
King Crab, Frozen		
Claws	3 to 4	2½ lbs.
Legs	3 to 6	4½ lbs.
Lobster Tail, Frozen	5 to 6	10 lbs.
Lobster, Live, 10" - 12"	4 to 5	4 Per Pan
Salmon Fillets, Frozen, 8 ounce each	4 to 5	7½ lbs.
Scallops, Fresh	3 to 4	3 lbs.
Scrod Fillets, Fresh	3 to 5	4 lbs.
EGGS		
Hard Cooked	14 to 15	4 doz.
Soft Cooked	8 to 10	4 doz.
Soft Yolk for Caesar Salad	5 to 8	4 doz.
MEATS		
Chicken — Breasts, Legs, Thighs	19 to 20	15 lbs.
Turkey, Frozen		
Breasts (2)	86 to 90	6 to 7 lbs. Each
Cut Lengthwise	53 to 55	20 to 25 lbs.
Corned Beef	40 to 75	6 to 8 lbs.
Hot Dogs and Wieners	2 to 3	80 to 100 Count
VEGETABLES		
Asparagus Spears		
Frozen	10 to 12	3 lbs.
Fresh	4 to 5	5 lbs.
Beans		
Green 2" Cut, Frozen/Fresh	5 to 6	5 lbs.
Lima, Frozen	7 to 8	5 lbs.
Baby Lima, Frozen	4 to 5	5 lbs.
Brussel Sprouts, Frozen	5 to 6	5 lbs.

ET SERIES STEAMERS

PRODUCT	TIME (MINUTES)	WEIGHT PER PAN
VEGETABLES (Cont'd.)		
Broccoli		
Spears, Frozen	6 to 8	4 lbs.
Spears, Fresh	4 to 6	5 lbs.
Flowerettes, Frozen	4 to 6	5 lbs.
Cabbage, Fresh, 1/6 Cut	6 to 8	5 lbs.
Carrots		
Baby Whole, Frozen	6 to 8	7 lbs.
Crinkle Cut, Frozen	7 to 8	4 lbs.
Sliced, Fresh	9 to 11	9 lbs.
Cauliflower, Flowerettes		
Frozen	4 to 6	4 lbs.
Fresh	7 to 8	5 lbs.
Celery, 1" Diagonal Cut	5 to 7	5 lbs.
Corn		
Yellow Whole Kernel, Frozen	3 to 5	5 lbs.
Cobbettes, Frozen	6 to 8	27 Ears
Corn-On-Cob, Fresh	16 to 18	80 Ears
	16 to 18	54 Ears
	10 to 12	18 Ears
Peas, Green	4 to 6	5 lbs.
Potatoes, Whole Russet	50 to 55	40 lbs.
Spinach		
Chopped, Frozen	15 to 17	6 lbs.
Defrosted	4 to 5	6 lbs.
Fresh Cut	2 to 3	2 lbs.
Squash, Acorn Halves	22 to 25	10 Halves
Zucchini, Slices	6 to 8	10 lbs.
Frozen Mixed Vegetables	6 to 7	5 lbs.
FRUIT		
Fruit, Blanch for Peeling		
Grapefruit, Oranges	2 to 3	1 loose layer per pan
Pineapple, Whole for Cutting	2 to 4	

TROUBLESHOOTING

SYMPTOMS	POSSIBLE CAUSES	REMEDY
Steamer not steaming	No main power source.	Check the power source or circuit breaker.
	Power switch in OFF position.	Press power switch to the ON position.
	Door open.	Close door.
	Water not being supplied to steamer.	Refer to symptom <i>Water not being supplied to generator</i> below.
Steamer not heating/steaming properly	Excessive lime build up in the steamer.	Descale the steamer (see REMOVAL OF LIME SCALE DEPOSITS).
Door leaks	Excessive water pressure to the condensate non filtered supply	Install a water pressure regulator set to 60-20 PSI.
	Damaged door gasket.	Check door gasket for damage. If adjustment is needed, contact your Authorized Vulcan Servicer.
	Improper drain.	
	Drain clogged.	
Damage to gasket sealing surface.		
Water accumulates in compartment	Plugged drain or screen.	Clear compartment cavity screen. If symptom persists, contact your Authorized Vulcan Servicer.
	Unit not leveled properly.	See leveling instructions in the INSTALLATION section of this manual.
	Drain clogged.	Unclog drain.
Water not being supplied to generator	Water supply valve is off.	Turn valve on.
	Water pressure low.	Check water supply pressure.
	Water filter is plugged.	Refer to water filter manual. If symptom persists, contact your Authorized Vulcan Servicer.
	Valve inlet screen clogged.	Contact your Authorized Vulcan Servicer.
Steam is exiting from under steamer	Generator pressure is too high.	Contact your Authorized Vulcan Servicer.

SERVICE AND PARTS INFORMATION

To obtain service and parts information concerning this unit, contact the Vulcan Service Agency in your area, or contact the Vulcan Service Department at the address on the front cover of this manual.

Installation & Operation Manuals, Parts Catalogs, and Service Manuals are available at www.vulcanequipment.com found under the resources tab.

Technical Support

Vulcan Steamers Phone: 800-814-2028
 Email: steam.tech@itwfeg.com

When calling for service, the following information (located on your machine data plate) must be available:

Model Number

Serial Number

Manufacture Date (MD)

Voltage