

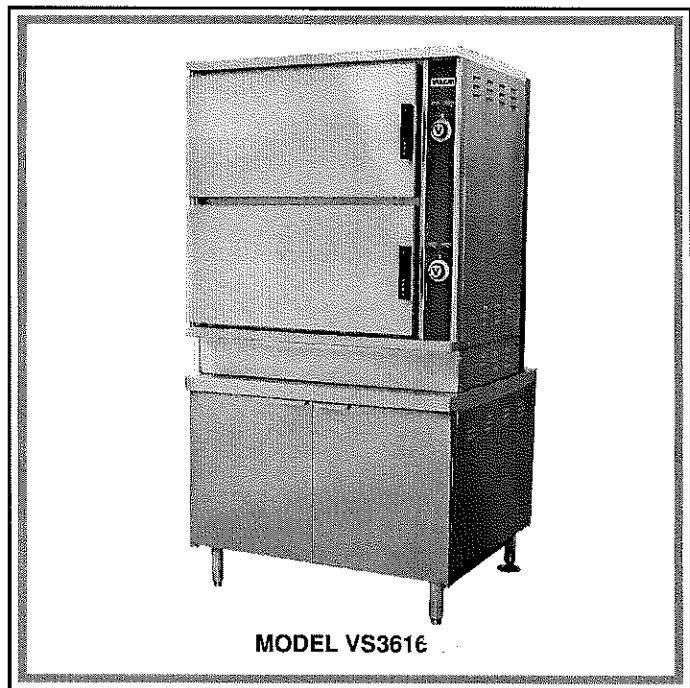
# **VULCAN**

## *INSTALLATION & OPERATION MANUAL*

### *CONVECTION STEAMER*

MODEL

VS3616



INSTALLATION AND OPERATION

It is recommended that this manual be read thoroughly and that all instructions be followed carefully. This manual should be retained for future reference.

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

ADEQUATE CLEARANCES MUST BE MAINTAINED FOR SAFE AND  
PROPER OPERATION

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WATER QUALITY STATEMENT

WATER QUALITY IS THE MAJOR FACTOR AFFECTING THE PERFORMANCE OF YOUR APPLIANCE. IF YOU ARE UNSURE OF WATER QUALITY, CONSULT A LOCAL WATER TREATMENT SPECIALIST AND HAVE THE WATER ANALYZED. YOUR WATER SUPPLY MUST BE WITHIN THESE GENERAL GUIDE LINES:

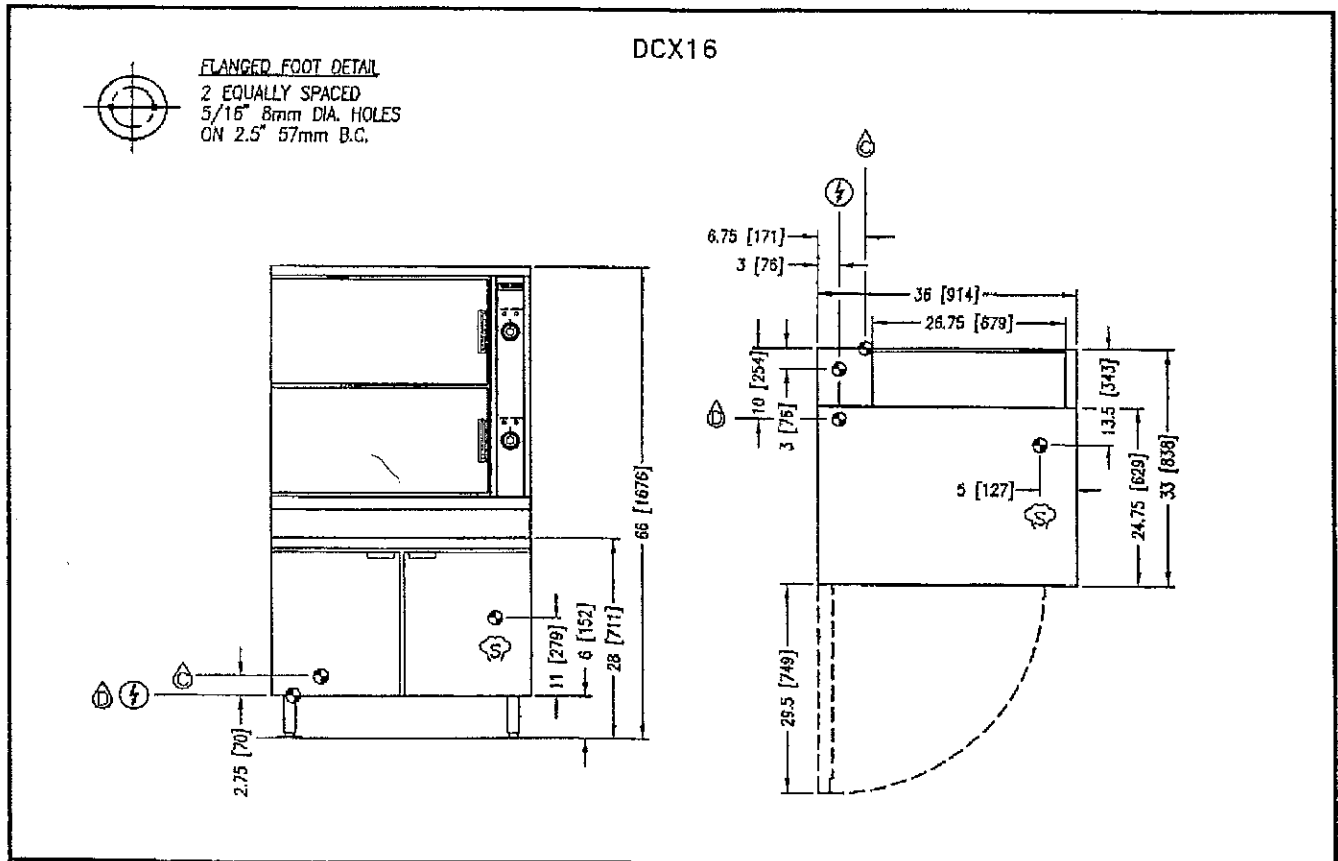
- |                        |                      |
|------------------------|----------------------|
| TOTAL DISSOLVED SOLIDS | LESS THAN 60 PPM     |
| TOTAL ALKALINITY       | LESS THAN 20 PPM     |
| SILICA                 | LESS THAN 13 PPM     |
| CHLORINE               | LESS THAN 30 PPM 1.5 |
| pH FACTOR              | 7.0-8.5              |

WATER WHICH FAILS TO MEET THESE STANDARDS SHOULD BE TREATED BY INSTALLATION OF A WATER CONDITIONER. FAILURE OR MALFUNCTION OF THIS APPLIANCE DUE TO POOR WATER QUALITY IS NOT COVERED UNDER WARRANTY.

## INSTALLATION AND SERVICE CONNECTIONS

### SERVICE CONNECTIONS

- Ⓣ - ELECTRICAL CONNECTION: 1/2" (13mm) conduit connection to controls.  
2 AMPS per compartment, 120-60-1 or 220-50-1
- Ⓛ - DRAIN: 2" (51mm) IPS piped to open floor drain. No Solid Connection.
- Ⓢ - COLD WATER: 3/8" (10mm) tubing at 25-50 PSI (170-345 kPa)
- Ⓢ - STEAM SUPPLY: 3/4" (19mm) IPS



## INSTALLATION AND SERVICE CONNECTIONS

### INSTALLATION INSTRUCTIONS

Set Cooker in place and level appliance using spirit level. Mark hole locations on floor through anchoring holes provided in flanged adjustable feet.

Remove appliance and drill holes into location marker on floor and insert proper anchoring devices.

Set Cooker back in proper position.

Re-level the appliance, levelling the unit left to right and front to back. Appliance should be elevated on the right 1/16" to 1/8" to assure proper compartment drainage.

Bolt and anchor appliance securely to the floor.

Seal bolts and flanged feet with Silastic or equivalent compound.

### INFORMATION TO STEAM FITTER

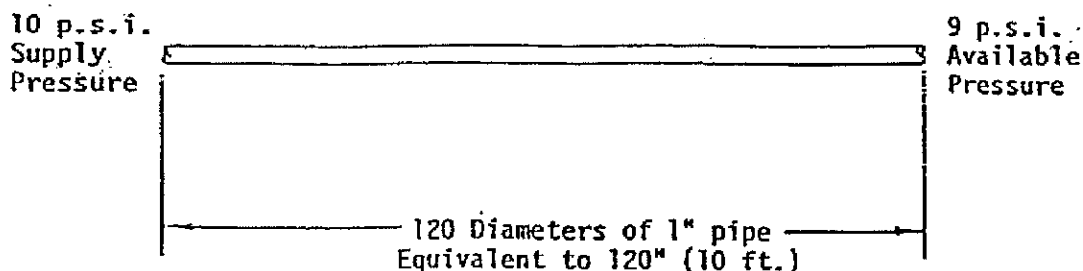
Each cooking compartment requires approximately 2.5 BHP (86.25 lbs. of steam per hour) to operate satisfactorily.

Assuming availability of 30 p.s.i. supply steam pressure immediately to the appliance, then pipe sizes of 1/2" or 3/4" or 1" will deliver respectively 90, 165, or 385 lbs. of steam per hour to the appliance Heat Exchanger. From the foregoing to use 1/2" pipe line would most likely prove inadequate.

An extremely important consideration is the pressure drop that will occur through the steam supply line from its point of origin to the appliance. The greater the length of piping and number of valves and elbows, the greater will the pressure losses.

Consider a pressure drop of 1 (one) p.s.i. for each straight length of pipe equivalent to 120 diameters of that pipe. Thus, a 1" pipe having a straight length of 120" (10 ft.) is equivalent to 120 diameters of that pipe and will a pressure loss of 1 p.s.i. through that pipe.

### EXAMPLE

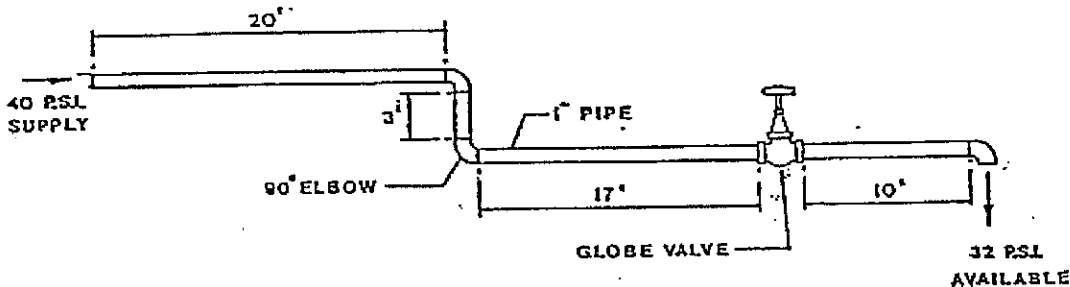


**INSTALLATION & SERVICE CONNECTIONS**

Note, in 3/4" pipe size, that a Standard 90 Elbow, an Angle Valve and a Globe Valve are equivalent to 1.8 feet, 10 feet and 18 feet respectively of straight pipe.

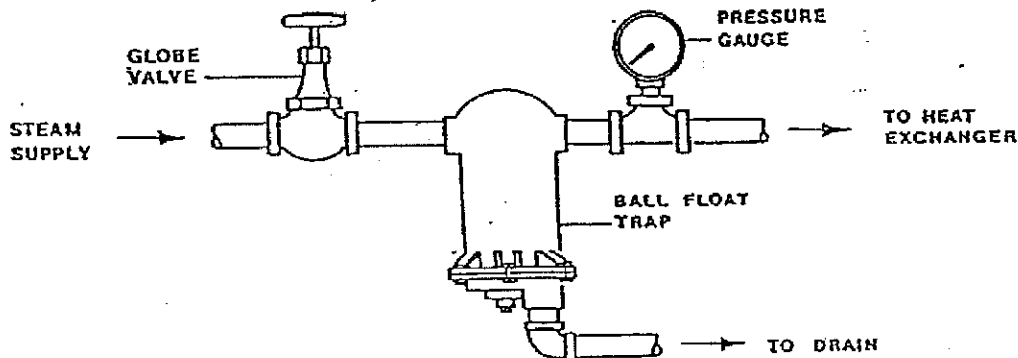
Similarity, in 1" pipe size, a standard 90 Elbow, and Angle Valve and a Globe Valve are equivalent to 2.2 feet, 12 feet and 23 feet respectively of straight pipe.

**EXAMPLE**



Total of above = 20 + 2.2 + 3 + 2.2 + 17 + 23 + 10 + 2.2 + 79.6 feet. Since each 10 foot is equivalent to 1 p.s.i. pressure loss, 79.6 feet is equivalent to approximately 32 p.s.i. from an original Boiler supply of 40 p.s.i.

It is suggested that, wherever possible, the steam supply line to the appliance be a separate line from the steam source. If the appliance must be supplied from a line supplying other appliances, the pipe sizes and pressure will have to be verified. Further, during idle periods, when the steam in the supply line is not in use, water will form from condensed steam in the supply line and it is advisable to prevent water pockets from forming in the steam line and impeding the steam flow when it is required. Therefore, contrive to have the steam supply line level or run slightly downwards towards the appliance. Install a Ball Float Trap near the appliance to drain out water (condensed steam) from the line to assure clean dry steam to the appliance.



## OPERATION INSTRUCTIONS

### COOKER SECTION

With Ready light ON, Cooker is ready for use.

1. Place pans of food to be cooked into compartment and shut door.
2. Set timer to cooking time desired.

Compartment will pre-heat to 185 F before the timer will start. Then pre-heat thermostat allows for varying product and size of portions to be cooked.

Cooking cycle may be interrupted at anytime by opening the compartment door and resumed again by closing door.

3. When buzzer sounds, it indicates the end of the cooking cycle and that no more steam is entering the compartment. Cooking light will go off and READY light will come ON. Buzzer must be shut off by turning the timer to its OFF position.

**WARNING: THE COOKING COMPARTMENT CONTAIN LIVE STEAM AND TO AVOID SCALDING AND/OR BURNS STAY CLEAR WHEN OPENING EACH DOOR.**

### SHUT DOWN

- a) To shut down cooking compartment, set timers to their OFF position and leave doors slightly open.
- b) At the end of the day, the steam supply must be shut off.

**NEVER SPRAY WATER INTO ELECTRIC CONTROLS**

**CONTACT THE FACTORY, THE FACTORY REPRESENTATIVE OR A LOCAL SERVICE COMPANY TO PERFORM MAINTENANCE AND REPAIRS SHOULD THE APPLIANCE MALFUNCTION. REFER TO WARRANTY TERMS.**

### PERIODIC MAINTENANCE

**NOTICE:** As a safety precaution, disconnect the power supply during cleaning or servicing.

#### CLEANING

1. Keep exposed cleanable areas of unit clean at all times.
2. Thoroughly wash oven cavities, door liners and pan racks at the end of each day or as required with a mild detergent and water to prevent bacterial growth and odours.
3. Wash gasket sealing surface daily with mild detergent to remove harmful food acids.
4. Clean around burner air mixer and orifice if lint has accumulated.
5. Visually assure carry over ports are unobstructed.
6. Rinse entire unit and dry. **DO NOT GET WATER** in electrical box or any electrical component.

## **TROUBLESHOOTING**

### **DOOR LEAKS**

1. Check for damage to door gasket.
2. Gasket may be adjusted if necessary by turning counter clockwise the screws in the gasket plate.

### **WATER ACCUMULATES IN THE COMPARTMENT**

1. Compartment drain screen clogged, remove and clean thoroughly and then replace.