



# **ConvectionPro Steamers**

## **Installation, Operation & Service Manual**

This manual is updated as new information and models are released. Visit our website for the latest manual.

#### MODEL:

36CGM16.

36CEM16.

36CSM16,

36CDM16

For your future reference.
Model #
Serial #







Read the manual thoroughly. Improper installation, operation or maintenance can cause property damage, injury or death.



## STATEMENT OF RESPONSIBILITIES / DÉCLARATION DES RESPONSABILITÉS / DECLARACIÓN DE RESPONSABILIDADES

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Au cours de tout entretien d'un appareil Cleveland Range, tous les services publics (gaz, électricité, eau et vapeur) doivent être FERMÉS au niveau de l'appareil et le dispositif de fonctionnement doit être verrouillé suivant les pratiques approuvées de l'OSHA.

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Cuando se esté dando servicio o mantenimiento a un aparato de Cleveland Range, todos los servicios públicos (gas, electricidad, agua y vapor) deben estar APAGADOS para el equipo en cuestión y se debe seguir el procedimiento de cierre de operaciones de acuerdo con las prácticas aprobadas por la OSHA.

Los Representantes de Servicio calificados y autorizados de Cleveland Range, LLC tienen la obligación de actualizar constantemente sus conocimientos, destrezas, materiales y equipamiento.

# FOR YOUR SAFETY / POUR VOTRE SÉCURITÉ / PARA SU SEGURIDAD

#### **FOR YOUR SAFETY**

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

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

Do not spray aerosols in the vicinity of this appliance while it is in operation.

This appliance is not to be used by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

This appliance is not for use by children and they must be supervised not to play with it.

Retain this manual for your reference. The boiler base Tabletop is NOT a supporting surface. Death, Injury or Equipment Damage will result from mounting or placing anything on the Tabletop.

When the ON/OFF lever is turned to the OFF position, Steamer will remain HOT for some time. Avoid contact with hot surfaces and steam.

Death, Injury or Equipment Damage can result from touching any component inside this appliance when the power is connected.

#### **POUR VOTRE SÉCURITÉ**

Ne pas entreposer ou utiliser d'essence ou d'autres liquides ou vapeurs inflammables à proximité de cet appareil ou de tout autre appareil.

AVERTISSEMENT : Toute mauvaise pratique en matière d'installation, de fonctionnement, de réglage, de modification, d'entretien ou de maintenance peut causer des dommages matériels, des blessures ou la mort. Lisez la totalité des instructions d'installation et d'utilisation avant d'installer, d'utiliser ou d'entretenir cet équipement.

Ne pas pulvériser des aérosols dans le voisinage de cet appareil alors qu'il est en fonctionnement.

Cet appareil ne doit pas être utilisé par des personnes dont les capacités physiques, sensorielles ou mentales sont réduites, ou des personnes dénuées d'expérience ou de connaissance, sauf si elles ont pu bénéficier, par l'intermédiaire d'une personne responsable de leur sécurité, d'une surveillance ou d'instructions préalables concernant l'utilisation de l'appareil.

Cet appareil n'est pas destiné à être utilisé par des enfants et ils doivent être surveillés pour s'assurer qu'ils ne jouent pas avec l'appareil.

Conservez ce manuel pour votre référence.

#### PARA SU SEGURIDAD

No guarde ni use gasolina o cualesquiera otros líquidos o vapores inflamables en las cercanías de éste o cualquier otro aparato.

ADVERTENCIA: La indebida instalación, operación, ajuste, modificación, servicio o mantenimiento puede ocasionar daños a la propiedad, lesiones o muerte. Lea detenidamente las instrucciones de instalacion y de operación antes de instalar, poner a funcionar o dar servicio a este equipo.

No pulverice aerosoles en las proximidades de este aparato mientras está en funcionamiento.

Este aparato no debe ser utilizado por personas con capacidades físicas, sensoriales o mentales reducidas, o que no tengan la experiencia y los conocimientos adecuados, a menos que estas personas hayan recibido supervisión e instrucciones en cuanto al uso del aparato por la persona responsable de la seguridad de ellas.

Guarde este manual para su referencia.

## À

#### **WARNING / AVERTISSEMENT / ADVERTENCIA**



Improper installation, operation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation and operating instructions thoroughly before installing, operating or servicing this equipment. / Toute mauvaise pratique en matière d'installation, de fonctionnement, de réglage, de

modification, d'entretien ou de maintenance peut causer des dommages matériels, des blessures ou la mort. Lisez la totalité des instructions d'installation et d'utilisation avant d'installer, d'utiliser ou d'entretenir cet équipement. / La indebida installación, operación, ajuste, modificación, servicio o mantenimiento puede ocasionar daños a la propiedad, lesiones o muerte. Lea detenidamente las instrucciones de instalacion y de operación antes de instalar, poner a funcionar o dar servicio a este equipo.



Do not lean on or place objects on the equipment. / Ne vous penchez pas sur oune placez pas des objets sur la lèvre. / No se apoye ni coloque objetos en el labio.



Hot product and surfaces. / Produit et surfaces chaudes. / Producto y superficies calientes.

Do not touch. / Ne pas toucher. / No la toque





Stand clear of product discharge path when discharging hot product. / Écartez-vous du chemin de décharge d'un produit chaud. / Permanezca alejado de la ruta de descarga del producto al vaciar producto caliente.





Keep hands away from moving parts and pinch points. / Gardez les mains loin des pièces mobiles et des points de pincement. / Mantenga las manos lejos de piezas movibles y puntos de presión muy localizada.



Inspect unit daily for proper operation. / Inspectez l'unité tous les jours pour son bon fonctionnement. / Inspeccione diariamente el funcionamiento correcto de la unidad.



Pressurized device. / Appareil sous pression. / Dispositivo de presión.

Keep clear of pressure relief discharge. / Restez à l'écart de la soupape de sureté. / Permanezca alejado de la descarga de presión.



Do not climb, sit or stand on equipment. / Il ne faut pas monter, s'asseoir ni se tenir debout sur l'équipement. / No subirse, ni sentarse ni pararse sobre el equipo.



Surfaces and product may be hot! Wear protective equipment. /Les surfaces et le produit peuvent être chauds! Portez un équipement de protection. / ¡Las superficies y el producto pueden estar calientes! Utilice equipo protector.



Heavy / Lourd / Pesado

Team or mechanical lift. / Équipe ou remontée mécanique. / Equipo o elevador mecánico.



Floor may become slippery from product spillage. / Déversement de produit peut causer de plancher à être glissante. / Derrame de producto puede causar piso a ser resbaladizo.



Unit must be anchored as per manual. / Unité doit être ancrée selon les directives du manuel. / Unidad debe estar fijado según el manual.



Do not fill kettle above recommended level marked on outside of kettle. / Ne remplissez pas la chaudière en excès du niveau recommandé marqué sur la chaudière. / No llene la marmita arriba del nivel recomendado marcado fuera de la marmita.

#### SERVICING / ENTRETIEN / SERVICIO



Have a qualified service technician maintain your equipment. / Demandez à un technicien en entretien et en réparation qualifié d'effectuer l'entretien de votre équipement. / Haga que un técnico de servicio calificado mantenga su equipo



Ensure kettle is at room temperature and pressure gauge is showing zero or less prior to removing any fittings. / Assurez-vous que la chaudière est à température ambiante et que le manomètre est à zéro ou moins avant de retirer des accessoires. / Asegúrese de que la marmita esté a temperatura ambiente y el manómetro esté mostrando cero o menos antes de retirar cualquier accesorio.



Remove electrical power prior to servicing. / Coupez l'alimentation électrique avant l'entretien. / Desconecte la energía eléctrica antes de darle servicio.

Risk of electric shock. / Risque de choc électrique. / Riesgo de choque eléctrico.

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#### **GENERAL SAFETY**

#### A. Laws, Codes, and Regulations

- 1. The installation of this appliance must conform with:
  - a. The National Fuel Gas Code, ANSI Z223.1 / NFPA 54 (latest edition), or the Natural Gas and Propane Installation Code CSA B149.1, or local codes, as applicable.
  - b. The National Electrical Code, ANSI/NFPA 70 (latest edition), or the Canadian Electrical Code, CSA C22.2, or local codes, as applicable.
    - When installed, the appliance must be electrically grounded in accordance with the above.
    - NOTE: This appliance is not GFI (GFCI) compatible.
  - c. The Food Code (latest edition) of the Food and Drug Administration (FDA).
- 2. This equipment is to be installed to comply with the applicable federal, state, or local plumbing codes
- 3. Instructions must be read in their entirety before starting this appliance.
- 4. Installation must comply with all local fire and health codes.

#### **B. Gas Leak Instructions**

# Post instructions to be followed if the user smells gas. Display the instructions in a prominent location. Obtain the instructions from the local gas supplier.

Until the leak is stopped, observe the following precautions in addition to the posted instructions.

- Do not light or start any appliance.
- · Do not touch any electrical switch.
- · Do not use any phone in the building.
- Immediately call the gas supplier from a phone away from the building. Follow the gas supplier's instructions.
- If the gas supplier cannot be reached, call the fire department.

#### C. Operational Safety

The Operational Safety section outlines minimum safety policies and procedures for operating one or more Cleveland Range appliances.

- **1.** Do not store anything on top and underneath the appliance.
- 2. KEEP THE APPLIANCE AREA FREE AND CLEAR OF COMBUSTIBLES.
- **3.** Proper air supply for ventilation and combustion is REQUIRED for and CRITICAL to safe, efficient operation of this appliance.
- **4.** Place non-slip draining anti-fatigue mats rated for use in wet, greasy, or dry work areas on the floor in front of the appliance and other locations as needed. Obtain the best mats for your needs from your local supplier.
- 5. Wear BOOTS appropriate to the work area to help protect feet, and to help prevent slips and falls.
- **6.** Allow only qualified Cleveland Range authorized service representatives to service the appliance.
- 7. Use only factory authorized repair parts.
  - a. Maintain written records of appliance service, maintenance, and repair.

## A DANGER

#### DO NOT TRY TO LIGHT BURNERS WITH A FLAME.

This appliance has an electronic ignition system, which automatically lights burners, senses flame, and controls gas flow. Burners cannot be lit with a flame. DEATH, INJURY, OR EQUIPMENT DAMAGE may result.

## A DANGER

**DEATH, INJURY OR EQUIPMENT DAMAGE** may result from an improperly adjusted gas control and ignition system. Do not alter any adjustments on the electronic control or gas valve.

If adjustment is required, contact an authorized service center. Cleveland Range is in no way responsible for the operation or safety of this equipment if the controller, valve, or igniter probe are adjusted by anyone other than a qualified Cleveland Range authorized service representative.

## A DANGER

#### **BURN and SCALD HAZARD**

Exposure to steam, condensate, and hot surfaces can cause death, burns, and scalds. To avoid injury:

- Do NOT breathe steam or condensate.
- Stand on the hinge side and away from the appliance and slowly open the cooking compartment door.
- Open the door slightly to allow steam, condensate, and heat to vent before looking or reaching into the cooking compartment.
- Always wear DRY heatproof gloves when reaching into the cooking compartment or handling hot items. Wet or damp gloves conduct heat and may cause burns when handling hot items.

Failure to follow these precautions can result in death, burns, and scalds.

## **▲**WARNING

This appliance is not GFI (GFCI) compatible. Do not use a GFI (GFCI) circuit.

Using a GFI (GFCI) circuit can result in injury, equipment damage, and property damage.

#### **Product Information**

- **A. PRODUCT INFORMATION** This manual covers the operation of Cleveland Range model 36CGM16, 36CEM16, 36CSM16 and 36CDM16 and the standard features and options available on this appliance.
  - Other than the selection of options, there are presently no significant design, parts, or operating differences among appliances with this model numbers.
  - For further information, contact your Cleveland Range sales representative or Cleveland Range.

#### **B. MODEL NUMBERS AND SERIAL NUMBERS**

- Cleveland Range, LLC assigns two product identification numbers to each appliance: a model number and a serial number.
- 2. Please provide this information when you contact Cleveland Range or a qualified Cleveland Range authorized service representative:

•	Model Number	
•	Serial Number	(Write the Model Number of your appliance here.)
		(Write the Serial Number of your appliance here.)

#### C. PRODUCT INFORMATION PLATE

The Product Information Plate on the left side of the appliance lists:

- Model
- Serial Number
- Clearances
- Power and Wiring Requirements
- Fuel Gas Type and Requirements

#### CI. HEAT STANDBY FEATURE

The steamer has a Heat Standby Feature to keep the Steam Generator near steaming temperature between cooking operations. When timed models have the timer set to zero, the Heat Standby Feature will turn the burners on every 6 minutes for 20 seconds as long as the steamer is ON and has water in it.

- Do not work near or above the exhaust flue whenever power is on.
- There is no warning to Heat Standby burner ignition.

### Installation, Use and Care Instructions

#### **INSTALLATION**

## **WARNING**

Installation of this equipment must be accomplished by qualified installation personnel, working to all applicable local and national codes. Improper installation of this product could cause injury or damage.

DO NOT store or use gasoline or other flammable vapors and liquids

in the vicinity of this or any other appliance.

The flooring that will be directly under the boiler must also be made of a noncombustible material.

#### **INSTALLATION SAFETY**

Cleveland Range equipment is designed and built to comply with applicable standards for manufacturers. Include among those certifications agencies which have approved the safety of the equipment design and construction are: UL, A.G.A, NSF,ASME,CSA,CGA and others.

Cleveland Range equipment is designed and certified for safe operation only when permanently installed in accordance with local and/or national codes. Many local codes exist and it is the responsibility of the owner and installer to comply with these codes.

In no event shall Cleveland Range assume any liability for consequential damage or injury resulting from installations which are not in strict compliance with out installation instructions. Specifically, Cleveland Range will not assume any liability for damage or injury resulting from improper installation of equipment, including but not limited to, temporary or mobile instructions.

#### Installation Instructions

- 1. These instructions must be retained by the owner/user for future reference. Gas-fired boilers are only to be installed in non-combustible areas that have provisions for adequate air supply. The term "boiler" will be used synonymously with "steam generator".
- 2. Position: For proper operation and drainage, the equipment must be level. It should be placed next to an open floor drain. DO NOT POSITION THE UNIT DIRECTLY ABOVE THE FLOOR DRAIN. Observe all clearance requirements to provide air supply for proper operation, as well as sufficient clearance for servicing. The surrounding area must be free and clear of combustibles. Dimensions and clearance specifications are shown on the specification sheet.
- 3. Install in accordance with local codes and/or the National Electric Code ANSI/NFP A No. 70-1987. Installation in Canada must be in accordance with the Canadian Electri-cal Code CSA Standard C22.1. Equipment that is con-nected to electricity must be grounded by the installer. A wiring diagram is provided inside the base cabinet.

4. The drain line outlet discharges exhaust steam and hot condensate. Connect 1-1/2-inch IPS piping (or larger) to extend the drain line to a nearby open floor drain. Up to two elbows and six feet of 1-1/2-inch IPS (or larger) exten-sion pipe should be connected to the drain termination. Drain piping extended six to twelve feet, or using three elbows, should be increased to 2-inch IPS No more than two pieces of Cleveland Range equipment should be connected to one common drain line. The maximum length of extension from the drain termination should not exceed six feet and use no more than two elbows. The extension piping must have a gravity flow and vent freely to the air. This drain outlet must be free-vented to avoid the creation of back pressure in the steamer cooking Compartments. To ensure a vented drain line, DO NOT, UNDER ANY CIRCUMSTANCES, CONNECT THE DRAIN OUTLET DIRECTLY TO THE FLOOR DRAIN OR SEWER LINE. Do not run the drain line discharge into PVC drain piping or any other drain piping material not capable of sustaining 180°F operation.

Note: Direct-steam connected pressure steamers do not require cold water connection, and therefore steps 5 and 6 do not apply. Refer directly to step 7.A kettle fill faucet, if so equipped, requires a hot and/or cold water connection. Toe data contained in step 5 for a>ld water also applies to hot water.

5. Connect COLD water supply plumbing to the line strainer. (Never Connect hot water to the boiler water fill line strainer.) Constant flow pressure must be maintained between 35 and 60 psi, and not experience a pressure drop below 35 psi when other appliances are used. If the water pressure exceeds 60 psi. a pressure reducing valve must be installed in the water supply plumbing to reduce the water pressure to less than 60 psi. Locations and pressure data are shown on the specification sheet. 1/4-inch IPS plumbing is sufficient for water supply lines up to 20 feet in length but water supply lines longer than 20 feet should be at least 3/8-inch IPS. Flush water supply lines thoroughly before connecting them to the unit. Use water which is low in total dissolved solids content and low in gas content to prevent internal scaling, pitting and corrosion of the steam generator, and carry-over of minerals into the steam. Water which is fit to drink can still contain highly detrimental impurities.

**NOTE**: If equipped with a kettle and kettle water fill swing spout, 3/8-inch (10mm) hot and/or cold water connections will be required at the swing spout valve.

- 6. Turn on the Cold water supply to the unit. Ensure that the manual water valve, inside the base cabinet is open.
- 7. Connect the primary fuel supply in accordance with the following instructions. Location and other data are shown on the specification sheet

For Gas-Fired Steam Generators: Post in a prominent location, instructions to be followed in the event the user smells gas. This information shall be obtained by contacting local gas supplier. Install a sediment trap ( drip leg) in the gas supply line, then connect gas supply piping to the boiler gas valve piping. GAS-FIRED EQUIPMENT IS DESIGNED FOR INSTALLATION ONLY IN NON- COMBUSTIBLE LOCATIONS. THIS INCLUDES THE FLOORING THAT WILL BE DIRECTLY UNDER THE EQUIPMENT. Location, plumbing size, and pressure data are shown on the specification sheet. Boilers rated less than 225,000 BTU require 3/4-inch IPS gas supply piping, and boilers rated at 225,000 BTU or more require 1-inch IPS gas supply piping. Natural gas pressure must be between 4"- 14" water column, and L.P. gas supply pressure must be between 12" - 14" Water column. NEVER EXCEED 14' WATER COLUMN (1/2 psi) GAS PRESSURE. If the gas supply pressure exceeds 14" water column, a pressure regulating valve must be installed in the gas supply plumbing to reduce the gas pressure to less than 14" Water column. Installation must be in accordance with local codes or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1-1984. Installation in Canada must be in accordance with Installation codes for Gas Burning. Appliances and Equipment B149.1 and B149.2. Use a gas pipe joint compound which is resistant to LP gas. Turn the gas valve control knob to ON (the word "on" on the knob will be opposite the index on the valve's body). Test all pipe joints for leaks with soap and Water solution. Never obstruct the flow of combustion and ventilation air. Observe all clearance requirements to provide adequate air openings into the combustion chamber. 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 test pressures in excess of 14" water column (1/2 psi or 3.45 kPa). The appliance must be isolated from the gas supply piping system at test pressures equal to or less than 14" water column (1/2 psi or 3.45 kPa). A permanent 115 volt electrical connection is required at the junction box. The junction box location is shown on the specification sheet. The unit must be electrically grounded by the installer.

**For Electric-Powered Steam Generators**: Connect electric power: location and data are shown on the specification sheet. Provide connection as required by the unit; either directly to the single contactor, or to the terminal block (when equipped with multiple contactors). Electric supply must match power requirements specified on the data plate inside the base cabinet. The copper wiring must be adequate to carry the required current at the rated voltage. Separate fused disconnect switch must be supplied and installed. The unit must be electrically grounded by the installer.

**For Steam Coil Steam Generators:** Connect steam supply piping to the input side of the steam coil. Location and pressure data are shown on the specification sheet. Incoming steam pressure must be regulated between 35 and 45 psi. A 3/4-inch strainer equipped with a 20 mesh stainless steel screen must be supplied and installed at the incoming steam connection point. Flush the steam line thoroughly before connecting it to the boiler. To ensure an adequate volume of steam, the branch steam supply line must be 3/4-inch IPS minimum. Connect the inverted bucket trap to the outlet end of the steam coil. Fill the trap with water before installing it. A permanent 115 volt electrical connection is required at the junction box. The junction box location is shown on the specification sheet. The unit must be electrically grounded by the installer.

For Direct-Steam Connected Steamers/Kettles: Collect steam supply piping to the input side of the line strainer. Location and pressure data are shown on the specification sheet. Flush the steam line thoroughly before connecting it to the steamer. To ensure an adequate volume of steam, the branch steam supply line must be 3/4-inch IPS minimum. (Direct-steam-connected kettles require 1/2-inch IPS pipe if the kettle total capacity is 20 gallons or less and 3/4-inch IPS pipe if the total capacity exceeds 20 gallons.) A permanent 115 volt electrical connection is required at the junction box. The junction box location is shown on the specification sheet. The unit must be electrically grounded by the installer.

#### **Installation Checks**

Proper operation of the Cleveland Convection PRO XVI steamer is dependent upon proper installation. After the steamer has been installed, a few quick checks could save unnecessary service calls.

- 1. The unit must be level
- 2. The Convection Pro XVI steamer requires a cold Water connection for proper, efficient operation. DO NOT USE HOT WATER. The cold water must be connected to the line strainer, located at the front lower-right of the steamer base.
- 3. Check that the manual water supply valve is open.
- 4. Check all water supply lines and valves for leaks.
- 5. Check that the water supply pressure and Water quality meet the requirements of installation paragraph.
- 6. On electric units, verify that the supply voltage meets the voltage requirements on the rating plate inside the base cabinet, and the voltage shown on the packing slip. Verify that the unit is protected with a separate fused disconnect, and is properly grounded in accordance with the National Electric Code.
- 7. On gas, steam coil, and direct-steam-connected units, verify that there is a 115 Volt connection at the handi-box located on the left side of the base at the bottom front.
- 8. On steam coil units, the incoming steam pressure must be 35 to 50 psi. Less than 35 psi will not effectively operate the unit. Pressure in excess of 50 psi must be reduced (with a pressure reducing valve) to 35 to 50 psi.

## **WARNING**

INJURY TO PERSONNEL AND EQUIPMENT DAMAGE may result from an improper drain connection.

- 9. Check that the drain lines meet the installation requirements specified in installation paragraph.
- 10. After completing checks 1 through 9, and correcting any deficiencies. refer to the Start-up and Preheat instructions in the Operation section. Verify that the unit operates properly, and make checks 11 and 12.
- 11. Check to ensure that the water in the boiler sight gage glass automatically stays about 1/3 full when the boiler is started up and operated.
- 12. Check to ensure that the steam pressure gage registers 10psi. The steam pressure is factory-adjusted to provide the proper pressure. In some cases, however, the factory setting may shift due to shaking in transit, and resetting will be required after installation. Proper adjustments and maintenance procedures are detailed on separate data sheet entitled "Steam Pressure Adjustments. Adjustments should be made only by qualified service personnel. The factory pressure settings shown in the accompanying chart should never be exceeded.

#### Gage Pressure Reading with No Steam Flow\* (Static Pressure)

Self-Contained Steam Generator, Gas or

<u>Electric</u> Operating Pressure Switch 10psi High Limit Safety Pressure Switch 15psi

Self-Contained Steam Coil Generator

Operating Pressure Switch

High Limit Safety Pressure Switch

Steam Supply Pressure Range

10psi
15psi
35-45psi

<u>Direct-Connect (to House Steam Supply)</u>

Steamer Pressure Reducing Valve
Steam Supply Pressure Range

10psi
15-45psi

#### **OPERATION**

Operation of the Cleveland Range Convection Pro XVI steamer is very easy. Each operator should read and under-stand the following procedures to effectively start, operate, and shut down the steamer each day. The owner(s) and operator (s) of this equipment should be aware that live steam can cause serious injuries, and pay particular attention to the WARNINGS in this text. These instructions are to be retained by the owner(s) and operator(s) for future reference.

#### **Controls and Control Panels**

There are two steam generator control arrangements and two steamer compartment control panels available for Cleveland Range Convection Pro XVI steamers. The steam generator controls are illustrated in Figure 1. The steamer compartment control panels are illustrated in Figures 2 and 3. Compare these figures with the equipment supplied, and identify which control and panel combinations apply.

#### **Steam Generator Controls**

The steam generator Controls are located on the front face of the steamer base unit. The switches are to the left of the pressure gage, as illustrated in Figure 1. Most Cleveland Range Convection Pro XVI steamers have a steam generator built into the base unit which supplies steam to the cooking compartments. However, an extremal steam supply may also be used. Units with a built-in boiler have both the POWER rocker switch and the STEAM momentary switch next to the pressure gage. Units with an external steam supply have the POWER rocker switch only. They do not have the STEAM momentary switch.

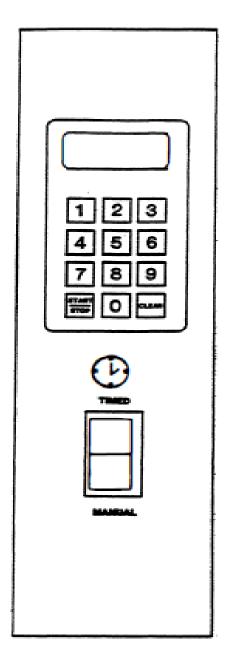
<sup>\*</sup>with or without kettle



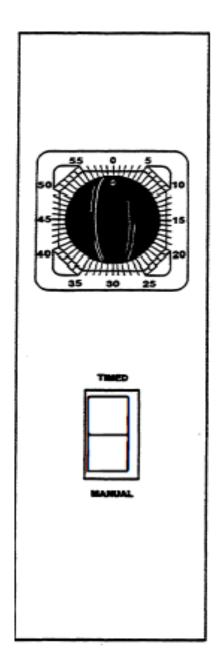




## **Control Panels**



**Key Pad Control Panel** 



**Dial Timer Control Panel** 

#### Start-up and Preheat

- 1. Inspect the steamer. Check the cooking compartments to ensure that the steam tubes and drain screens are in place and secure. Check inside the steamer base cabinet to ensure that the manual drain valve is closed and the manual water supply valve is open.
- 2. Start the steam supply. The steam supply is either an integral steam generator (boiler) built into the base unit, or an external steam supply.
  - For units without a built-in boiler, refer to the start-up procedures for the external steam supply and be sure it is running properly .As soon as the pressure gage on the Convection Pro XVI Steamer registers 10 psi, steamer preheating may begin. Skip then:remainder of step 2,and begin step 3, preheat instructions. For units with a built-in boiler, fill the boiler with water and start the steam generator as described in steps a. through d. below.
    - a. Press the ON end of the POWER on-off rocker switch located next to the steam pressure gage (Figure 1). The red indicator light in the POWER rocker switch turns on and the steam generator begins to fill with water. This takes about 5 minutes.
    - b. When the water level in the steam generator reaches a safe operating level, the amber light in the STEAM momentary switch turns on. Whenever the amber light is on, the heaters, steam supply, or burners are off, and no steam is being generated. The energy source (electric, gas, etc.) cannot be activated until the boiler contains sufficient water, indicated by the amber light.
    - c. Press the STEAM momentary switch to produce steam in the boiler. This activates the energy source (electric heaters, gas burners, or steam solenoid valve) and the amber light turns off. The STEAM switch must be pressed to re-start the steamer after it is shut off for any reason (including a brief power interruption). No attempt should be made to operate the equipment during a power failure. NOTE: For steamers with built-in gas-fired boilers: if the burners fail to ignite in four seconds, a safety circuit de-energizes the system. In this event, toggle the power rocker switch to the OFF position and back to the ON position. The amber light in the STEAM momentary switch lights. Wait five minutes, then press the STEAM momentary switch to start the burner ignition cycle once again.
    - d. About 20 minutes after starting the boiler in step C, the steam pressure gage on the unit base should register 10psi.
- 3. Preheat the Convection Pro XVI steamer cooking compartments. For accurate, efficient cooking times, the cook-ing compartments should be preheated during startup.
  - a. Close the compartment door by gently swinging it shut.
  - b. Refer to timer setting instructions under Automatic operation for the appropriate control panel. Set the timer for each compartment to one minute, and stan the cooking cycles. Steaming begins in each compan-menL NOTE: On Convection Pro XVI steamers equipped with the electronic keypad control panels, the timer does not begin counting down until the cooking compartment reaches operating temperature. This may take 2 or 3 minutes if the steamer has not been operating.
  - c. Steaming continues for the set one minute. When the preheating is completed, the steam automatically shuts off and a 3-second alarm sounds. The Convection Pro XVI steamer is ready for cooking operations.

#### **COOKING OPERATIONS**

The control panels mounted on the cooking compartments regulate cooking operations. Although cooking operations are similar for all Convection Pro Steamers, regardless of control panel configuration, separate instructions are provided for each control panel type.

#### **Cooking Operations for The Key Pad Control Panel**

The electronic key pad control panel is illustrated in Figure 2.

The Cleveland Range Convection Pro XVI steamer has two cooking modes: Manual and Automatic. The Manual Mode provides continuous steaming and is turned on and off by the MANUAL/TIMED rocker switch. The Automatic Mode monitors cooking time and compartment temperature to provide accurate. efficient, uniform steam cooking.

NOTE: Whether using timed or manual cooking modes, optimum steam heat transfer, and therefore a higher quality food product is achieved when shallow, perforated, uncovered pans are used.

## **WARNING**

LIVE STEAM may cause severe burns. Use extreme caution when opening the steamer door. Turn face away from the steamer when first opening the door. Do not look into the cooking compartment until steam has cleared. Keep hands out of the cooking compartment to prevent burns.

#### **Manual Cooking Operation - Key Pad Controls**

Use manual mode for a continuous supply of steam for long periods, or if the required cooking time is unknown and frequent inspection is required.

- 1. Place the pan(s) of food into the cooking compartment.
- 2. To START the flow of steam, press the MANUAL end of the MANUAL/TIMED rocker switch located below the timer. Steam immediately starts flowing into the cooking compartment.
- 3. If food inspection is required during steaming, refer to the LIVE STEAM WARNING above. Use extreme caution when opening the steamer door during steaming opera-tions.
- 4. Although the timer can not turn the steam off in manual mode, it can be used as a conventional cooking timer. Refer to the timer setting instructions under Automatic Operation and set the timer. The timer will count down the set period and sound the buzzer, but IT WILL NOT TURN OFF THE STEAM AFTER THE ALARM SOUNDS.
- 5. To STOP the flow of steam. pres the TIMED end of the MANUAL/TIMED rocker switch. Steam stops flowing into the cooking compartment.

#### **Automatic Cooking Operation - Key Pad Controls**

Each Convection Pro XVI steamer cooking compartment is equipped with an independent electronic digital timer, which has a maximum setting of 99 minutes and 99 seconds. Each timer is connected to a temperature sensing device in the cooking compartment. THE SENSOR CIRCUIT ALLOWS THE TIMER TO COUNT DOWN ONLY WHEN THE COOKING COMPARTMENT IS AT THE PROPER COOKING TEMPERATURE. This assures uniformity in the cooking times as the timer automatically compensates for food product defrosting and/or heat-up time.

- 1. Place the pan(s) of food into the cooking compartment
- **2.** Clear and reset the timer. The timer can be set only when the COOKING TIME display time is clear. Press CLEAR key on the number pad to zero the timer.
- **3.** Set the desired cooking time. The cooking time display contains four digits. The left two digits are minutes, and the right two digits are seconds. The display 12:34 is set for 12minutes and 34 seconds.
- a. To set the cooking time. change the required cooking time to minutes and seconds., press the number keys for the minutes, and then press the number keys for the seconds. If the cooking time is 99 seconds or less only press the number keys for seconds.
- b. Example1. To set the timer for 1 hour and 15 minutes: Change 1 hour (60 min) and 15 minutes to 75 minutes. Press the following number keys in sequence: 7 5:0 0. The display will read 75:00 when properly set for 1 hour and 15 minutes.
- c. Example 2 To clear the time numbers set in example1, press the CLEAR key on the number pad. The display returns to 00:00.
- d. Example 3. To set the timer for 1.5 minutes: Change the time to 1 minute and 30second. Press the following number keys in sequence: 1 3 O. The display will read 01:30, when set for 1.5 minutes. All seconds method: Change the 1.5 minutes to 90 seconds and press 9 0. The display will read 00:90, when set for 1.5 minutes.
- **4.** Press the START/STOP key to start the timer. When the START/STOP key is pressed, steam enters the cooking compartment.
  - a. THE TIMER WIll BEGIN TO COUNT DOWN ONLY AFTER THE COOKING COMPARTMENT REACHES PROPER COOKING TEMPERATURE. The timer automatically delays to compensate for defrosting and/Or food product heat-up time.
  - b. For eample, a timer setting of 10 minutes may in fact take 11 or 12minutes for the timer to count down and the alarm to sound. This is normal. Heating the compartment and food to cooking temperature uses the additional time.
  - c. To stop or reset the timer, press and hold the START/STOP key. The cooking time display returns to the last time setting.
    - To restart the same time, press the START/STOP key.
    - o To set a new time press the CLEAR key, and set the new time.

- 5. When the timer counts down to Zero, an alarm sounds continuously. Press the START/STOP key to silence the alarm. 1hr cooking time display returns to the last time setting. Either run this same setting again or clear and reset the timer.
- 6. Example 4. To cook two 14 minutes cycles: Press the CLEAR key to clear the timer. Press the following number keys in sequence: 14 0 0. The display shows 14:00. Press the START/STOP key to start the timer. When the display counts down to zero, the alarm sounds. Press the START/STOP key, and the display returns to 14:00. Press the START/STOP key to start the second 14minute cycle.

#### **Cooking Operations for The Dial Timer Control Panel**

The dial timer control panel is illustrated in Figure 3.

The Cleveland Convection Pro XVI steamer bas two cooking modes: Manual and Automatic. The Manual Mode provides continuous steaming and is turned on and off by the MANUAL/TIMED rocker switch. The Automatic Mode monitors cooking time to provide accurate, efficient, steam cooking. NOTE: Whether using timed or manual cooking modes, optimum steam heat transfer, and therefore a higher quality food product, is achieved when shallow, per-forated, uncovered pans are used.

#### Manual Cooking Operation - Dial Timer Controls

Use manual mode for a continuous supply of steam for long periods, or if the required cooking time is unknown and frequent inspection is required.

- 1. Place the pan(s) of food into the cooking compartment.
- 2. To START the flow of steam, press the MANUAL end of the MANUAL/TIMED rocker switch, located below the timer. Steam immediately starts flowing into the cooking compartment.
- 3. If food inspection is required during steaming; refer to the LIVE STEAM WARNING above. Use extreme caution when opening the steamer door during steaming operations.
- 4. Although the timer cannot turn the steam off in manual mode, it can be used as a conventional cooking timer. Refer to the timer setting instructions under Automatic Operation and set the timer. The timer will count down the set period and sound the buzzer, but IT WILL NOT TURN OFF THE STEAM AFTER THE ALARM SOUNDS.
- 5. To stop the flow of the steam, press the TIMED end of the Manual/Timed rocker switch. Steam stops flowing into the cooking compartment.

#### **<u>Automatic Cooking Operation - Dial Timer Controls</u>**

Each Convection Pro XVI steamer cooking compartment is equipped with an independent dial timer. This timer controls the cooking compartment steaming cycle. Use automatic mode when an exact cooking time is required. Stearn cooking begins when the timer is set, and automatically stops when the timer counts down to zero.

- 1. Check that the MANUAL/TIMED rocker switch is in the TIMED position. If it is not, press the TIMED end of the MANUAL/TIMED rocker switch.
- 2. Place the pan(s) of food into the cooking compartment.
- 3. Set the desired cooking time. Tum the dial until it points to the desired cooking time. When the dial timer is set, steam enters the cooking compartment.
- 4. When the timer counts down to zero, an alarm sounds for three seconds, and steam flow into the cooking compartment stops.

#### **Boiler Shutdown**

The red-lighted power switch must be shut off for 3 minutes a minimum of once every 8hours to automatically drain highly mineralized water from the boiler, which reduces the formation of scale. See step 1 in CARE AND CLEANING instructions, which follow.

### **Care and Cleaning**

The Cleveland Convection Pro XVI steamer must be cleaned regularly to maintain its fast, efficient cooking performance, and to ensure its continued safe, reliable operation.

1. The boiler must be drained (blowdown) after a maximum of 8 hours of use. If the boiler feedwater contains more than 60 parts per million of total dissolved solids, the boiler must have a blowdown more often. The frequency depending upon the mineral content of the feedwater. Blowdown means the boiler must be drained under pressure.

THE BOILER BLOWDOWN IS PERFORMED BY SIMPLY SHUTTING OFF THE STEAMER'S REDLIGHTED POWER SWITCH WHILE THE BOILER IS AT NORMAL 10 PSI OPERATING PRESSURE. WHEN THE BOTIOM OF THE POWER ROCKER SWITCH IS PRESSED, ITS REDLIGHT GOES OUT, AND THE DRAIN VALVE AUTOMATICALLY OPENS, DRAINING THE BOILER. AN AUTOMATICALLY-TIMED DRAIN WATER CONDENSER WILL FLUSH THE DRAIN FOR 3 MINUTES, THEN SHUT OFF. AFTER 3 MINUTES THE STEAMER IS READY TO BE RESTARTED. When steam is produced, the water in the boiler is being distilled. During this process, the minerals that come into the boiler with the water, remain in the boiler as the water boils away as steam. When allowed to accumulate, the water becomes highly mineralized, which results in erratic operation, lime build-up, corrosion, and premature electric heater failures. In some cases, complete boiler replacement becomes necessary, which is extremely expensive. By draining the boiler under pressure, most sediment present will be flushed down the drain.

2. The steamer is equipped with a drain in the back of the cooking compartment. No compartment should be operated without the drain screen in place. This screen prevents large food particles from entering and possibly plugging the drain line. Any restriction of the drain line may cause a slight build-up of back pressure in the compartment, resulting in steam leaks around the door gasket. It also may adversely affect the convection action of the steam in the compartment, which is critical to optimum performance. Pouring USDA approved drain cleaner through the compartment drains once a week will help to ensure an open drain. A manual (hand crank) drain auger, or "snake", may be safely used to clear obstructions in the compartment drains. Do not use a power-auger,as damage to the plastic drain system will result. With the steamer off, open the cooking compartment doors and allow the steamer to cool before cleaning the cooking compartments and their components.

- 3. At the end of each day's operation, wash the pan slides, steam tubes, door gaskets, and compartment interiors with mild detergent and warm water, either by hand or in a dishwasher. Rinse thoroughly with clear water. Rinse water should drain freely through the compartment drain openings. If it does not, the drain must be cleaned before using the steamer.
- 4. To prolong door gasket life, always leave compartment door ajar when not in use.
- 5. Exterior Care: Allow steamer to cool before washing. Use the same cleaners and cleaning procedures as for other kitchen surfaces of stainless steel and aluminum. Mild soapy water, with a clear water rinse, is recommended. Do not allow water to run into electrical controls. Always turn off equipment power before using water to wash equip-ment. Do not hose down the steamer.

## **WARNING**

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

#### **Maintenance**

Periodically, a qualified serviceman should summoned for routine preventative maintenance. The blowdown procedure will not completely remove the mineral deposits that adhere to the top of the boiler. A chemical descaling should be done by a boiler treatment specialist This should be done once a year in average water conditions, but in poor water areas it may be needed two or three times a year. Periodic boiler inspection should be made by a qualified serviceman. Once every three months., the cold water line strainer should be cleaned.

Cleveland Range supports a comprehensive network of Maintenance and Repair Centers (regional parts and service distributors) throughout the United States and Canada. Please contact your nearest distributor for the name of an authorized service agency in your area, or for replacement plans and information regarding the proper maintenance and repair of Cleveland Range equipment. In order to maintain the various agency safety certifications, only factory-supplied replacement parts should be used. The use of other than factory-supplied replacement parts will void the warranty.

## **Convection Steam Cooking Information**

Our Forced Convection Non-Pressure Steam Cooker is produced with two cooking compartments. Each compartment has the capacity to hold three, 12" x 20" x 2½" or up to six, 12" x 20" x 1" Cafeteria Pans.

The steamer is available with an Electric or Gas-fired, self-contained steam generator or can use existing building steam by Direct Connect or with Steam Coil (for impure building steam).

ELECTRIC	GAS
24 KW	200,000BTU
36 KW	250,000BTU
48 KW	300,000BTU
208V, 220V, 240V, 440V, 480V /3 Phase	

#### **DIRECT CONNECTED\***

STEAM COIL

\*Minimum psi 15 lbs. (uncontaminated steam) Minimum psi 35 lbs. (Within 6ft. of equipment inlet)

Maximum psi 50 lbs. (uncontaminated steam) Maximum psi 50 lbs. (Within 6ft. of equipment inlet)

\*This value represents steam requirement at unit.

The Convection Steamer, installed in restaurants, hotels, schools, hospitals, nursing homes, industrial cafeterias and penal institutes, serves 100 to 300 meals per hour. For school lunches, 150 to 500 meals per hour.

#### **SEAFOODS**

Steaming is an excellent method of cooking a variety of seafoods. From the freezer directly into the steamer gives you, the operator, portion control on expensive seafood products. Steamed fish is tender, succulent, flaky and table ready in a matter of minutes.

#### **VEGETABLES**

Steam cooking of vegetables, either fresh or frozen, enhances color, improves flavor, and helps retain vitamins when recommended Timer Settings are followed. Steaming fresh vegetables on perforated pans gives best results. Two to three institutional packages of frozen vegetables will fit into one, 12" x 20" x  $2\frac{1}{2}$ " Cafeteria Pan.

#### **ADDITIONAL IDEAS**

There are many applications for steam cooking besides vegetables and seafood:

- Eggs can be soft cooked, coddled, hard cooked, poached, scrambled, made into a custard or pudding. 25 dozen eggs can be hard cooked in 12 minutes using three, 12" x 20" x 2½" perforated pans in one compartment of the steamer.
- Momentary steam blanching of fruits, including eitrus and pineapple, simplifies skin removal.
- Dumplings, steamed breads. muffins, hot cereal, pasta, noodles, and rice can be prepared or reheated in the steamer.
- Beef and other meat, cooked by steaming, is moist, tender, and flavorful. The meat drippings from the catch pan can be used to make gravy, soups, or clear stock, or as a salt free broth for special diets.
- Turkey, chicken, and other poultry are tender, juicy when steamed then combined into a casserole, added to BBQ sauce, or browned under the broiler. Chicken pieces can be breaded, steamed, then finished in the deep fat fryer. It is crisp, delicious, and juicy.
- Hot dogs, sausage and other variety meats remain plump and juicy when steamed.
- Entrees such as lasagna, macaroni and cheese, or beef stew can be prepared from scratch. Frozen institution-al packs can be reheated in the steamer. It is not necessary to cover. Steam cooking is efficient, economical, and convenient. From steamer to steam table, it saves money in labor/time and of course the quality consistently remains the same.

## **Convection Steamer Timer Settings**

Timer settings are approximate due to the differences in food quality, age, shape and the degree of doneness desired. It is not necessary to add water. Perforated pans are recommended. Starred items (\*) must be cooked in solid pans or containers. Items marked with two stars (0) require handling in two steps. First, steam for approximately ½ the time shown, remove from steamer. separate thawed portion, or stir, and return to the steamer for the time remaining. The compensating feature of the timer allows the cooking compartment to reach cooking temperature before the preset time starts to count up.

	(in	Minutes)	SEAFOODS: Steam all seafo	ods on a perfo	rated pan with
VEGETABLES:	Fresh	Frozen	catch pan.		
Artichoke	12			(In Mi	inutes)
Asparagus, spears	4	6		Fresh	Frozen
Beans, green 2" cut	6	5	Clams in shell	3-5	
French cut	4	5**	Cod fillets, 5 oz. portions	3	4
whole	6	4	Crab legs, king	•	4-6
Broccoli, spears	3	2-3	Snow crab		2-4
flowerettes	2-3	1-2	Crab. live. 4 oz.	4	
chopped		6-8	3/4 - 1 lb.	12	
Brussels sprouts	4-5	4	Halibut, 6-8 oz. portions	4-6	6-8
Cabbage			Lobster, whole, 1 lb.	7-9	
12-16 wedges/head	4		Lobster tails, 8 oz.	7.5	8-10
Cabbage,			defrosted, butterflied		4-6
whole - to remove leaves	2		Mussels in shell	2	40
for cabbage rolls			Oysters in shell	2-4	
Carrots, baby whole	10	6		4-5	4-5
sliced, crinkle cut	7-8	3	Red snapper, 8 oz.	6	7
diced		2	Salmon steak, 8 oz.	3	4-6
Cauliflower, flowerettes	4-5	3-4	Shrimp, 10 ct. per lb. IQF	3	4-0
whole	10		5 lb. block, peeled &		6-8**
Celery, diagnonal cut 11/2"	3		deveined 30 ct.	(aceted -cc)	10**
diced	2	1	5 lb. block, green, 26-30 c	. (nested pan)	10
minced	1	·	FOOC (No diam Cined)	•	
Corn, yellow whole kernet	•	2	EGGS (Medium Sized):		
on cob. cobbettes	6	12**	Hard cooked for egg salad,		
Eggplant, sliced, diced	1	.2	potato salad	10-12	
Mixed vegetables	•	3-4	Soft cooked	3	
Mushrooms, whole (1½" dia.)	3	0.4	Coddled	6	
sliced	1		Poached in a cup	2-3	
Onjons, diced, sliced	2-3	1	Scrambled*	6-7**	
whole	2-3 4	2			
Peas, green	4	2	FRUITS:		
Potatoes, whole 8 oz.	30-35	۷	Blanch for peeling		
•	12-19		Fresh: Avocado		1
peeled, quartered, fresh	8-10		Apple, cored		i
peeled, diced	30-35		Grapefruit		1
Potatoes, sweet, whole		21**	Orange		i 1
Spinach leaf	2		Apricot	_	i
chopped	45	21**	Pineapple, whole		2
Squash, acorn halves	15 7		Dried*: add water to re-hydr	rato	2
butternut, quartered	,	20**	Apple Apple		10
whipped*	15 10	20**	Apple Apricot		10
spaghetti squash, halves	15-18		Peach		10
Tomatoes, whole, sliced*	20.25		Pear		10
Turnips, whole	20-25	2.4			10
Zucchini, sliced	2-4	2-4	Prune		10

## **Convection Steamer Timer Settings**

#### (continued)

#### **MEATS & POULTRY:**

Steam meats and poultry in nested pans. as juices can be used for gravy, sauces, beef stock and soups. The size of portion, thickness of cut, grade, should be considered when selecting a timer setting for doneness.

POULTRY:	Fresh	Frozen
Turkey, whole	6-8 min./lb.	6-8 min./lb.
Chicken, 5-8 oz. breaded pieces halves, 11/4 - 11/2 lb. per	18-20 min.	
half	20-24 min.	20-24 min.
PORK, SAUSAGE, HOT DOO	GS:	

Pork, Chop, 4 count/lb.	10 min.
Italian sausage, 4 oz. portion	10 min.
Ribs, 3 lb. and down	20-26 min.
Hot dogs, 8 count/ib.	2 min.

#### BEEF:

Cubes, 11/2"	6-7 min./lb.	6 min./lb.
Ground chuck for chili	4 min./lb.	4-6 min./lb.
Pot roast, choice	8-12 min./lb.	
Rump roast, choice		
boned, rolled, tied	12 min./lb.	
Meat loaf, 4 lb. loaf	5 min./lb.	
Liver, baby beef, 8 oz. slice	2-4 min.	2-4 min.
Corned beef, 6-8 lb. cut,		
add 1/2" water to pan	20-23 min./lb.	

#### STEAKS:

Using a 34" to 1" steak, the steaming time listed below produces a "rare" steak. A "well done" steak is first stearned to the "rare" stage. then broiled or grilled for 11/2 minutes on each side. This "well done" steak shrinks less, is more tender and juicy; and, when served, is the same size as the "rare" steak.

Sirloin patties,	
chopped, 8 oz.	4 min.
Ribeye, 8 oz.	4 min.
Top butt steak, 6 oz.	4 min.
8 oz.	6 min.
Filet Mignon, butterflied —	
4 oz.	3 min.
6 oz.	3-4 min.
8 oz.	4 min.
10 oz.	5 min.
16 oz. whole (Chateaubriand)	8 min.

#### STEAKS:

Strip steak — 10 oz.	5 min.
12 oz.	7 min.
T-bone — 12 oz.	5 min.
16 oz.	8 min.
18 oz.	8 min.
22 oz.	10 min.

PREPARED ENTREES:	Fresh	Frozen
Full size pans Cabbage rolls, stuffed*	25 min.	20 min.
cover with tomato		
sauce & serve		
Casserole dishes**		
beef stew.	20-25 min.	25-30 min.
stroganoff	20-25 min.	25-30 min.
Lasagna*, freshly prepared	20-25 min.	25-30 min.
reheat each serving 4"	6-8 min.	12 min.

#### **DEHYDRATED FOODS:**

Potatoes*: 21/2# random sliced	
plus 5 cups cold water/lb.	12 min.

#### RICE & BEANS:

Rice*, long grain	
4 cups cold water/lb.	17 min.
Beans*, pre-soaked overnight,	
1 lb. beans + 11/4 qts. water	45 min.
Beans*, unsoaked,	
1 lb. beans + 11/2 qts. water	21/2 hrs.
Refried beans* 2 #10 cans	15-17 min

#### PASTA:

Steam in nested pans. Place pasta on 21/2" perforated pan used as a liner in a solid 21/2" pan. Cover pasta with cold water.

Egg noodles, 11/2" wide	4-6 min.**
Lasagna noodles	10-12 min.**
Macaroni, shells, elbow	10-12 min.**
Rigatoni	10 min.**
Spaghetti, vermicelli	8 min.**
Spaghetti, regular	10 min.**

SECT. III PAGE D

## **Troubleshooting**

The Troubleshooting Guide is a list of symptoms of problems that may occur during routine operation.

- "Problem" (left column) lists common operating problems.
- "Possible Cause" (center column) lists causes of problems in the order they should be checked.
- "Remedy / Reference" (right column) lists fixes for problems from easiest to hardest.
- "Notes" in "Remedy / Reference" column are at end of the Troubleshooting Guide.

# ATTEMPTING TO REPAIR OR CORRECT PROBLEMS REQUIRING A QUALIFIED CLEVELAND RANGE AUTHORIZED SERVICE REPRESENTATIVE VOIDS THE WARRANTY

#### **Troubleshooting Guide**

Problem	Possible Cause	Remedy/Reference
Switch light does not turn on when	Power turned off at main disconnects.	Turn on power at main disconnect switch.
POWER switch is pressed.		
POWER switch light on and steam	Water supply to steamer shut off.	Open water supply valves.
generator does not fill.	Water line strainer is clogged.	Clean water supply strainer.
	Water sensors shorted by scale, deposits.	Descale steam generator with USDA approved
		descaler.
	Inoperative controls or solenoid.	See note #1.
Steam generator does not make any	No water in steam generator.	See steam generator does not fill (above).
steam.	Gas models only	Turn off steam generator and open gas supply
	Gas supply valve closed.	valve. Refer to Service Manual.
	Electric models only	Descale steam generator with USDA approved
	Heating elements covered with scale.	descaler.
	Electric models only	See note #1.
	Heating elements damaged.	
	Water sensors covered by scale deposits.	Descale steam generator with USDA
		approved descaler.
	Inoperative controls.	See note #1.
Abnormal amount of steam coming	Hot water instead of cold water connected to	Make proper connections. Refer to Installation
from drain.	condenser fitting.	Manual.
	Water supply to condenser turned off.	Open water supply valve.
	Condenser water line strainer is clogged.	Clean out condenser water supply line.
		See note #1.
	Water supply line to the condenser blocked,	Repair or replace solenoid. See note #1.
	broken, or leaking.	
	Inoperative condenser solenoid.	Replace solenoid. See note #1.
	Inoperative controls.	Turn off electricity at main disconnect switch.
		See note #1.
Steam and/or water draining around	Drain clogged or covered.	Clean drain with USDA approved drain cleaner.
compartment door	Door gasket or door parts worn.	See note #1.
	Steamer not level.	See note #2.
	Hot water to condenser.	See note #2.
Reduced steam flow into cooking	Steam generator scale buildup.	Descale steam generator with approved
compartment.		descaler.
	Steam nozzle scale buildup.	See note #1.
	Steam solenoids scale buildup	See note #1.
	Electric models only	See note #4.
	Voltage too low for unit.	
	Electric models only	See note #1.
	Faulty heating element or controls.	
Steam flow does not stop when timer	Operating in manual mode.	Switch to timed mode for timer to be effective.
stops.	Stuck open steam valve.	See note #1.
	Inoperative controls inside cabinet.	Turn off electricity at main disconnect switch.
		See note #1.

Problem	Possible Cause	Remedy/Reference
Water leaking from bottom of cabinet.	Broken or loose plumbing inside steamer cabinet.	Turn off electricity at main disconnect switch and close water supply valve(s). See note #1.
Water leaking from water pipes or drain lines.	Plumbing needs repair.	See note #3.
Food takes too long to cook. (Cook in perforated pans when	Not enough steam movement in compartment. Hot water connected to	Make proper connections. Refer to Installation Manual.
possible.)	condenser line.  Pans too close to the bottom of cabinet.  Steam generator scale buildup.	Put pans in racks near top of cabinet.  Descale steam generator with USDA approved
	Compartment overloaded with too much food. Voltage too low for unit. Suggested cooking times are usually listed for cooking at sea level.	descaler. Put less food in pan. Use fewer pans. See note #4. Extend cooking times for altitudes above 2500 feet.
Compartment bottom dirty with food drippings.	Juices and /or food leaking from pans	Put a solid pan under perforated pans to catch drippings, or put less food in pan.

#### **TROUBLESHOOTING NOTES**

- If problem is inside the steamer, call an authorized service representative. Cleveland Range will not pay for non-warranty repair centers. For more information on products and services, contact your nearest Authorized Service Representative.
- 2. Proper installation of the Pressure Steamer is the responsibility of the owner or installer. Refer to Cleveland.
- 3. A licensed electrician should do repair to external wiring.
- 4. Repairs to external wiring should be done by a licensed electrician.



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