

VULCAN

INSTALLATION & OPERATION MANUAL

ENDURANCE SERIES GAS RESTAURANT RANGES

MODEL

G36

**G36C*

G60

**G60C*

G260

**G260C*

**Availability to be announced.*



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

VULCAN-HART
DIVISION OF ITW FOOD EQUIPMENT GROUP, LLC

P.O. BOX 696, LOUISVILLE, KY 40201-0696
TEL. (502) 778-2791

WWW.VULCANHART.COM

FORM 35633 Rev. A (06-05)

IMPORTANT FOR YOUR SAFETY

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

POST IN A PROMINENT LOCATION THE INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE SMELL OF GAS IS DETECTED. THIS INFORMATION CAN BE OBTAINED FROM THE LOCAL GAS SUPPLIER.

IMPORTANT

IN THE EVENT A GAS ODOR IS DETECTED, SHUT DOWN UNITS AT MAIN SHUTOFF VALVE AND CONTACT THE LOCAL GAS COMPANY OR GAS SUPPLIER FOR SERVICE.

FOR YOUR SAFETY

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

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.

INSTALLATION, OPERATION AND CARE OF ENDURANCE SERIES GAS RESTAURANT RANGES

PLEASE KEEP THIS MANUAL FOR FUTURE USE

GENERAL

Vulcan ranges and ovens are produced with quality workmanship and material. These ranges are designed with efficiency in cooking performance, sanitation and ease of cleaning ability in mind. Proper installation, usage and maintenance of your range will result in many years of satisfactory performance.

The manufacturer suggests that you thoroughly read this entire manual and carefully follow all of the instructions provided.

OPTIONAL FIELD INSTALLABLE ACCESSORIES

DESCRIPTION	ACCESSORIES
Flue Devices	23" (584 mm) high stainless steel backsplash with plate shelf 23" (584 mm) high stainless steel backsplash with broiler mounting brackets Stainless steel 11" (279 mm) high riser
Flex Hose and Quick Disconnect	1" (25 mm) flex hose / disconnect, 4' (1219 mm) long.
Oven Racks	1 extra rack with standard and convection ovens.
Casters	Set of four 6" (152 mm) casters.

INSTALLATION

UNPACKING

This range 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 the range is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Carefully unpack range(s) and place in the approximate installation position, whether as a battery or single stand-alone range.

Remove parts (packed in a cardboard box) from oven cavity, or cabinet body, or on top of modular range(s).

If burner has been shipped using any package strapping devices, remove these before installing the range.

Before installing, check the electrical service (Convection Oven Models only) and type of gas supply (natural or propane) to make sure they agree with the specifications on the rating plate located on the inside of the burner box lower panel. The rating plate will show the voltage, phase, cycle, full load ampere, BTU, as well as the type of gas. If the supply and equipment requirements do not agree, do not proceed with the installation. Contact your dealer or Vulcan-Hart immediately.

LOCATION

The equipment area must be kept free and clear of combustible substances.

Installation clearances (32,000 and 35,000 BTU/hr.):

	COMBUSTIBLE CONSTRUCTION	NONCOMBUSTIBLE CONSTRUCTION
Back:	6" (152 mm)	0"
Right Side:	10" (254 mm)	0"
Left Side:	10" (254 mm)	0"

The installation location must allow adequate clearances for servicing and proper operation. A minimum front clearance of 35" (889 mm) is required.

The ranges are suitable for installation on combustible floors when 6" (152 mm) adjustable legs or casters are used. When legs or casters are removed, use only on noncombustible floors, curb, or platform, with front appliance projecting 3" (76 mm) beyond curb or platform.

Ranges with convection ovens should be installed on 6" (152 mm) legs or casters, allowing 6" (152 mm) clearance from the rear of the range.

All modular ranges are to be installed only on non-combustible floors.

The range(s) must be installed so that the flow of combustion and ventilation air will not be obstructed. Adequate clearance for air openings into the combustion chamber(s) must be provided. Make sure there is an adequate supply of air in the room to allow for combustion of the gas at the burners.

INSTALLATION CODES AND STANDARDS

Your Vulcan Range must be installed in accordance with:

In the United States of America:

1. State and local codes.
2. National Fuel Gas Code, ANSI-Z223.1 (latest edition). Copies may be obtained from The American Gas Association, Inc., 1515 Wilson Blvd., Arlington, VA 22209.
3. National Electrical Code, ANSI/NFPA-70 (latest edition). Copies may be obtained from The National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

In Canada:

1. Local codes.
2. CSA B149.1 Natural Gas and Propane Installation Code.
3. CSA C22.1 Canadian Electrical Code.

The above are available from the Canadian Standard Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6.

ASSEMBLY

The range is shipped as a complete unit and does not require field assembly.

Bumper Bars (Convection Oven only)

Bumper bars equipped with this unit must be installed. Failure to install bars may result in motor damage and will void the equipment warranty.

Legs

The range is supplied on 6" (152 mm) adjustable stainless steel legs. (For additional leg information see Leveling section of this manual).

Casters

Ranges mounted on casters must use a flexible connector (not supplied by Vulcan) that complies with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69 • CSA 6.16 and a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use With Gas Fuel, ANSI-Z21.41 • CSA 6.9. In addition, adequate means must be provided to limit movement of the appliance without depending on the connector and the quick-disconnect device or its associated piping to limit appliance movement. Attach the restraining device at the rear of the range as shown in Fig. 1.

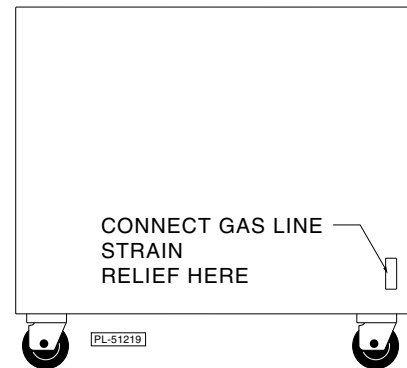


Fig. 1

If disconnection of the restraint is necessary, turn off the gas supply before disconnection. Reconnect this restraint prior to turning the gas supply on and returning the range to its installation position.

Separate instructions for installing casters to the range are included with the casters.

Note: If the range is installed on casters and is moved for any reason, it is recommended that the range be releveled front to back and side to side for even baking.

RANGE TOP SECTIONS

1. Remove top grate.
2. Remove burner/venturi/pilot assembly and discard all packing materials in the drip pan basin,
3. Make sure the burner/venturi assembly is in the proper position (Fig. 13, 14 & 15 in this manual).
4. Install all knobs.

GRIDDLE

The range is shipped with the griddle in place for cooking. No farther griddle installation is required, except for models G260 and G260C with a broiler/griddle.

BROILER GRIDDLE BRICKS

1. Remove six 5 1/4" x 2 1/4" (133 x 57 mm) and six 5 1/4" x 5 1/16" (133 x 129 mm) bricks from the shipping box packaged in the oven cavity.
2. Install the 5 1/4" x 2 1/4" (133 x 57 mm) bricks to the left and right hand sides of the broiler by inserting the bricks individually through the front opening in the broiler. Angle the brick sideways for easy fit between the burner edges. Set the bricks flat in place resting on the broiler side and burner edges. Push each brick as far to the rear of the broiler as possible to ensure easy fit of last brick.
3. Install the remaining six 5 1/4" x 5 1/16" (133 x 129 mm) bricks to the center section as described in step 2. Place the bricks on the center burner edges only.

LEVELING

To level the range, place a carpenter's level on the range top and check leveling of the unit side to side and front to rear. Achieve leveling by turning each foot section of the unit's leg as needed. Turning the foot in a counter clockwise direction will increase height and clockwise will decrease

BACKSPLASH/ SHELF

This range is supplied with a standard 23" (584 mm) high backsplasher with a 22" (559 mm) high mounted plate shelf. To install the backsplasher and plate shelf, follow steps 1 through 9 below.

1. Remove the crating material for the backsplasher/plate shelf. The backsplasher/plate shelf is crated resting against the rear of the range.
2. Remove the entire back row of burner grates from the range top (Fig. 2).



Fig. 2

3. Lift backsplash up above the range and slide the channels evenly into the spaces provided at the rear of the range (Fig. 3). Do not force the backsplasher channels down. Guide the backsplasher evenly into place until it stops.

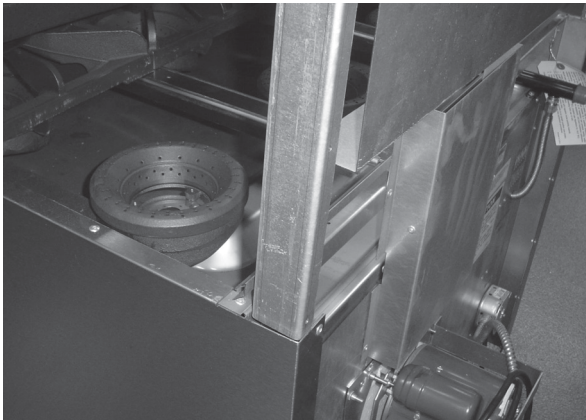


Fig. 3



Fig. 4

4. When the backsplasher comes to a stopping point, from the rear of the unit, reach down and carefully pull the splasher back panel out away from the range (Fig. 4).
5. Resume sliding the backsplasher channels evenly down until it stops again. Do not force backsplasher channels down.
6. At the second stopping point, move to the front of the range and carefully pull the bottom of the backsplasher front panel forward. Continue to slide the backsplasher down onto the range until it is resting squarely over the rear top support channel (Fig. 5 & 6).



Fig. 5

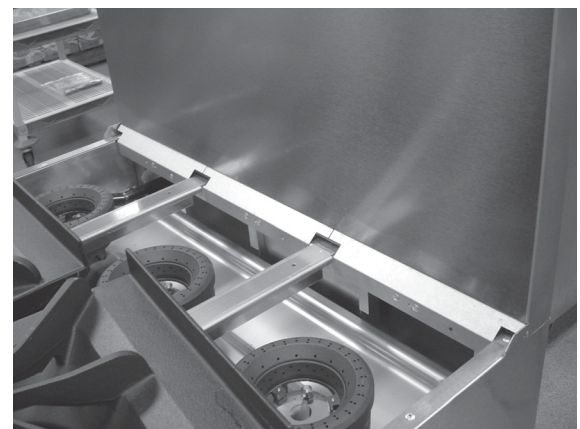


Fig. 6

7. Place the entire row of rear burner grates back in place on the range top.

- Lift the plate shelf and hang this onto the top of the backsplasher (Fig. 7).
- From the rear of the range, secure the plate shelf to the backsplasher by placing four $\frac{1}{4}$ x 20 x $2\frac{5}{16}$ (6 x 509 x 59 mm) bolts provided into the existing bolt holes and tighten (Fig. 8).



Fig. 7



Fig. 8

NOTE: For broiler mounting, assemble the backsplasher/plate shelf as described in steps 1 through 9, then follow instructions provided by the broiler manufacturer for mounting the broiler to the plate shelf.

GAS PRESSURE REGULATOR

A gas regulator is shipped packaged separately with this unit in the oven cavity area.

This regulator must be installed by an authorized service person before the unit is placed into operation. See unit data plate, riveted inside the lower front kick panel, for pressure regulator setting information.

- Locate either a $\frac{3}{4}$ " or 1" (19 or 25 mm) NPT gas connection pipe protruding through the back of the unit.
- Cover the pipe threads with pipe joint compound resistant to propane gases.
- Screw the regulator onto the pipe hand tight with flow direction arrow pointing towards the back of the unit and the regulator adjustment in the up right position.
- Using a pipe wrench, tighten the regulator securely in the upright position.

Note: The regulator is preset and should not require any additional adjustments.

The pressure regulator must be mounted horizontally to ensure the proper preset outlet pressure. If mounted in any other direction, the outlet pressure must be rechecked and possibly reset.

A leak limiter is supplied with every regulator to allow excess gas pressure to escape. Do not obstruct the limiter or the gas regulator, as obstruction may cause the regulator to malfunction.

GAS CONNECTIONS

CAUTION: All gas supply connections and any pipe joint compound used must be resistant to the action of propane gases.

WARNING: PRIOR TO LIGHTING, CHECK ALL JOINTS IN THE GAS SUPPLY LINE FOR LEAKS. USE SOAP AND WATER SOLUTION. DO NOT USE AN OPEN FLAME.

After piping has been checked for leaks, all piping receiving gas should be fully purged to remove air.

TESTING THE GAS SUPPLY SYSTEM

When test pressures exceed $\frac{1}{2}$ psig (3.45 kPa), the range and its individual shutoff valve must be disconnected from the gas supply piping system.

When test pressures are $\frac{1}{2}$ psig (3.45 kPa) or less, the range must be isolated from the gas supply system by closing its individual manual shutoff valve.

FLUE CONNECTIONS

DO NOT obstruct the flow of flue gases from the flue located on the rear of the range. It is recommended that the flue gases be ventilated to the outside of the building through a ventilation system installed by qualified personnel.

From the termination of the flue to the filters of the hood venting system, a minimum clearance of 18" (457 mm) must be maintained.

Information on the construction and installation of ventilating hoods may be obtained from the standard for "Vapor Removal from Cooking Equipment," NFPA No. 96 (latest edition), available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

ELECTRICAL CONNECTIONS (CONVECTION OVEN ONLY)

WARNING: ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

WARNING: DISCONNECT THE ELECTRICAL POWER TO THE MACHINE AND FOLLOW LOCKOUT / TAGOUT PROCEDURES.

WARNING: APPLIANCES EQUIPPED WITH A FLEXIBLE ELECTRIC SUPPLY CORD ARE PROVIDED WITH A THREE-PRONG GROUNDING PLUG. IT IS IMPERATIVE THAT THIS PLUG BE CONNECTED INTO A PROPERLY GROUNDED THREE-PRONG RECEPTACLE. IF THE RECEPTACLE IS NOT THE PROPER GROUNDING TYPE, CONTACT AN ELECTRICIAN. DO NOT REMOVE THE GROUNDING PRONG FROM THIS PLUG.

The range is designed for 120 volt power supply or optional 240 volt single phase, 15 amp, 50/60 Hz power supply.

All 120 volt ranges are supplied with a flexible electric supply cord and plug and must be plugged into the proper receptacle before turning on gas. If the appliance is not equipped with a grounding plug and electric supply is needed, ground the appliance by using the ground lug provided. All 240 volt electric systems are manufactured for hard wire installation connections. (Refer to the wiring diagram shipped with this unit in instructional material packet.) An electrical diagram is attached to the back near the motor mounting area.

Do not connect the range to electrical supply until after gas connections have been made.

OPERATION

WARNING: THE APPLIANCE AND ITS PARTS ARE HOT. USE CARE WHEN OPERATING, CLEANING OR SERVICING THE APPLIANCE.

CONTROLS

Range Top Burner Valve — Allows gas to flow to the top burners. To open valve, turn knob counterclockwise. To close valve, turn knob clockwise.

Yellow Gas Shut-off Valve — Allows gas to flow to the range top. To open valve, turn knob counterclockwise. To close valve, turn knob clockwise.

Thermostat / Safety Valve — Regulates the oven temperature and pilot safety thermostat. The thermostat temperature range is from LOW at approximately 300°F (149°C) to HI at approximately 550°F (288°C). Turn thermostat clockwise to increase temperature and counterclockwise to decrease temperature.

NOTE: In P position, pilot remains on. In OFF position, pilot is extinguished. During shut down and operation, align the OFF and P positions (as required) of the oven knob with the tick mark (* or V) indicator on the label or sheet metal located above the knob. This indicator should also be used as the temperature set mark.

Fan Switch — Turns fan on and off.
(Convection Ovens Only - Fan turns ON when door is closed. Fan turns OFF when door is opened)

BEFORE FIRST USE

Griddles

Griddle tops are shipped with a protective coating of grease. Remove this film only when the griddle plate is being cleaned prior to its first cooking use. Use a non-corrosive, grease dissolving commercial cleaner, following manufacturer's directions. Rinse thoroughly and wipe dry with a soft clean cloth. Clean all accessories. Rinse thoroughly and wipe dry.

Caution: This griddle plate is steel, but the surface is soft and can be scored or dented by careless use of spatulas or scrapers. Be careful not to dent, scratch or gouge the plate. Do not try to knock off loose food that may be on the spatula by tapping the corner edge of the spatula on the griddle surface.

A new griddle surface must be seasoned to do a good cooking job. The metal surface of the griddle is porous. Food tends to get trapped in these pores and stick. It is important to season the griddle with cooking oil before using the griddle. Seasoning will give the griddle surface a slick, hard finish from which food will easily release.

Season the griddle top plate at low setting. Pour one ounce of cooking oil onto the plate per square foot of the griddle surface. With an insulated cloth, spread the oil over the entire griddle surface. Wipe off any excess oil. Repeat this procedure 2 to 3 times until the griddle has a slick looking surface.

Ovens

New ovens require a burn off period to break in the oven and eliminate unappetizing odors from penetrating the food product. These odors are typically from curing of the porcelain enamel oven cavity parts.

Turn on unit gas and set the thermostat to 475°F (246°C). Allow the oven to operate at this temperature for 30 to 45 minutes.

NOTE: Under normal operation, the backsplash and shelf will become hot to touch.

LIGHTING AND SHUTTING DOWN PILOTS

TOP SECTIONS

Open Top, Griddle Top, Broiler and Cheesemelter Pilots

1. Turn the gas supply valve and yellow front gas shut off valve to the ON position.
2. Light all standing pilots. Pilot access can be reached through the slotted opening near each burner valve knob.
3. Turn the burner valve ON to the desired heat.
4. If burners fail to light, turn off all valves, wait 5 minutes and repeat steps 1-3.
5. To shut down, turn the burner valve to the OFF position.
6. For complete shut down, turn all burner valves to the OFF position. Turn the yellow front gas shut off valve to the OFF position. Turn off appliance gas supply.

OVEN SECTIONS

Standard Oven With Standing Pilot

1. To light the oven pilot, push the oven control knob in, turning the knob to the P pilot position. With the knob depressed, ignite the oven pilot. Continue to depress the knob for 1 minute or until pilot remains lit. Once the pilot ignites, release the knob. Turn the oven control knob to the desired temperature setting. If ignition fails, turn the oven control knob to OFF. Wait 5 minutes and repeat the above procedure.
2. For temporary shut down, depress and turn the oven control knob to P pilot position.
3. For extended shut down, depress and turn the oven control knob to the OFF position.
4. Turn OFF the main gas supply.

Note: The pilot is accessible for lighting through the lower burner box area. Before proceeding with the lighting instruction drop kick panel down. Lighting the pilot is accessible through the rectangular opening in burner box to gain access to the pilot.

Convection Oven with Standing Pilot

1. To light the oven pilot, close the door. Push the oven control knob in and turn the knob to the P pilot position. With the oven control knob remaining depressed, ignite the oven pilot. Continue to depress the oven control knob for 1 minute or until pilot remains lit. Once the pilot ignites, release the oven control knob. Push the power switch ON. Turn the oven temperature dial to desired setting. If ignition fails, push the power switch and oven control knob OFF, wait 5 minutes and repeat the above procedure.
2. For temporary shut down, push the power switch OFF(I), depress and turn the oven control knob to P pilot position.
3. For extended shut down, push the power switch to OFF(I), depress and turn the oven control knob to the OFF position.

Note: The pilot is accessible for lighting through the lower burner box area. Before proceeding with the lighting instruction drop kick panel down. Use the rectangular opening in burner box to gain access to the pilot for lighting.

OPERATING SUGGESTIONS

Open-Top Ranges

Open-top ranges are quickly lighted and require no preheating time. Light only as many burners as needed.

Open top burners have a wide low to high burner flame adjustment range. This allows for better simmering performance at the lowest possible stabilized setting. When simmering, turn the burner valve knob down until you reach the optimum lowest burner flame setting to maintain the desired simmer point.

Griddle Top Ranges

Heat top thoroughly before using. The top can be kept hot with burners turned partially down. During off periods, turn the burners down or heat only half the top.

Standard Oven Cooking

Allow time to preheat ovens before using (25 minutes to 400°F [204°C]). The oven thermostat regulates temperature from a low setting at approximately 300°F (149°C) to high setting at approximately 550°F (288°C). If properly used, the automatic temperature control will cut gas and food costs. Do not turn on maximum heat all the time. Turn thermostat down to LOW when oven is idling, or turn the oven control to "P" when not in use.

This oven gives you double capacity because you can do pan work on both shelves. If you are cooking high roasts, the entire height of the oven can be utilized by removing a rack(s) and placing roast pan directly on the insulated oven bottom.

Moderate oven temperatures will produce better food, reduce shrinkage and keep maintenance costs down. Using a low temperature for roasting (recommended 325°F [162°C] or lower) will reduce meat costs by reducing shrinkage.

A pan of water (approximately 12" x 20" x 1" [305 mm x 508 mm x 25.4 mm]) may be placed in the oven bottom. This water supplies humidity to reduce shrinkage. If necessary, add water during roasting.

Convection Oven Cooking

If you have a convection oven, reduce your normal recipe temperature by 25°F (-3°C). Cooking time in a convection oven will vary slightly from your normal recipe time.

Cooking starts immediately in the convection oven. Yeast breads do not usually rise as much in the convection oven. It is, therefore, usually necessary to allow fuller proof, two and one half to three times increase in volume for the best results.

When baking pies in your convection oven, put three or four pies on an 18" x 26" (457 mm x 660 mm) sheet or bun pan. This procedure helps the bottom crust to bake, makes handling easier and reduces the possibility of boil over, which would spoil the appearance of the pies on the lower racks.

Pies and cobblers, fruit, custard and pumpkin pies in tins should be placed on 18" x 26" x 1" (457 mm x 660 mm x 25.4 mm) pans for baking.

LOADING AND UNLOADING THE OVEN

Open the door and load as quickly as practical to conserve heat. Take care to avoid spilling liquids while loading. Close the door and refer to recipe for cooking time.

Provide adequate space for product unloading. Rapid unloading will conserve heat and ensure proper preheating conditions for the next load, if applicable.

NOTE: With the thermostat in the "P" position, the oven can be used as a plate warmer. The oven pilot will maintain a temperature in the oven cavity of about 110°F (43°C).

CLEANING

WARNING: DISCONNECT THE ELECTRICAL POWER TO THE MACHINE AND FOLLOW LOCKOUT / TAGOUT PROCEDURES.

WARNING: SHUT OFF THE GAS BEFORE CLEANING THE APPLIANCE.

WARNING: THE APPLIANCE AND IT'S PARTS ARE HOT. BE VERY CAREFUL WHEN OPERATING, CLEANING OR SERVICING THE APPLIANCE.

Exterior surfaces may be cleaned using soft cloth and mild detergent. Do not use Dawn® dish detergent to clean the exterior or interior components of the range.

Do not use scouring powder. It is extremely difficult to remove completely. It can build up accumulations that will damage the oven.

Vulcan equipment is strongly constructed and is designed to give you long, satisfactory service at low cost, provided you give it proper care. Frequent cleaning and occasional adjusting should reward you with low operating and maintenance costs and faster, better service.

This range has been designed with sanitation and easy cleaning ability in mind. The entire top section of this range can be disassembled in approximately 60 seconds. Complete cleaning of the entire range can be accomplished in approximately 5 to 10 minutes. For complete cleaning instructions, refer to the Daily Cleaning section in this manual. For light cleaning instructions, refer to Clean After Each Use section in this manual. For griddle and broiler cleaning instructions, refer to Griddle or Broiler/Griddle Cleaning After Each Use and Daily Cleaning sections in this manual.

CLEAN AFTER EACH USE

Open Top, Oven and Exterior

1. Turn the yellow gas valve handle located on the front of the range to the OFF position (Fig. 9).
2. While the range top is still warm, use a soft cloth and solution of warm water with mild soap to wipe any excess grease and debris from the front top surface, backsplash and top grates. Be sure to rinse and dry all component parts thoroughly before cooking is resumed.



Fig. 9



Fig. 10

NOTE: After cooling, top grates may be lifted by hand to access the burner heads (Fig. 10). Burned on foods and grease are unsightly and will slow down the cooking speed as the debris blocks the flow of heat from the burner(s). When reinstalling the top grates, make sure the grate with the upward flange is placed in the rear.

3. Once the range has cooled, it is recommended that any spill over in the oven cavity or door area be wiped out using a soft cloth and solution of warm water and mild soap. During down times, the exterior of the range should be wiped off in the same manner.
4. To relight the top burners after cleaning, follow the LIGHTING AND SHUTTING DOWN PILOTS, TOP SECTIONS instructions in this manual.

DAILY CLEANING

This range has been designed with sanitation and easy cleaning ability in mind. The entire top section of this range can be disassembled in approximately 60 seconds. Complete cleaning of the entire range can be accomplished in approximately 5 to 10 minutes. Although these cleaning instructions are suggested minimum daily procedure, cleaning can be performed more often during the course of daily use. For quick and easy cleaning, follow the instructions below.

If time is limited, do not place range parts in a dishwasher. Wipe them off with a solution of warm water and mild soap, then rinse thoroughly before reinstalling the parts to the range.

To remove discoloration, use a nonabrasive cleaner. Always rub with the grain of the metal. Stainless steel and chrome areas of the range can be polished by using a soft dry cloth. If needed, add stainless steel polish to the soft cloth.

Open Top

1. After cooling the range, remove and clean all top grates as described under Clean After Each Use or place the grates in a commercial dishwasher (Fig. 9, 10 and 11).



Fig. 11



Fig. 12

2. Remove cross support bars by lifting them straight up and off the front and rear supports. Clean the cross supports with soap and warm water or place them in a commercial dishwasher. The front and rear areas may be wiped off with soap and warm water (Fig. 12 and 13).

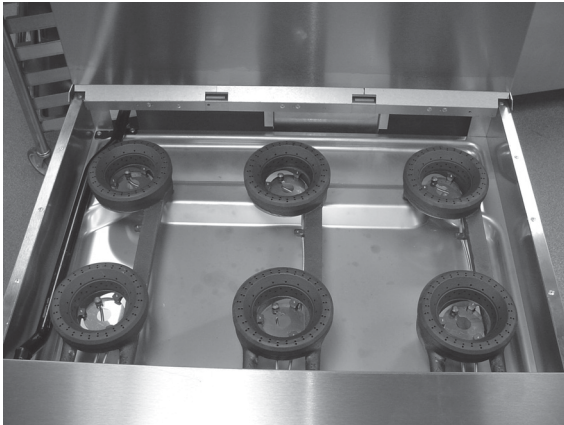


Fig. 13



Fig. 14

3. After cooling, remove the top rings from the burner heads (Fig. 14). These can be soaked in warm water with mild soap or placed in a commercial dishwasher for cleaning. Be sure to dry thoroughly before reinstalling. A quick method for cleaning is to remove the rings, turn ON the top burner, then lay the rings flip side down on the burner head for several minutes. This is a burn off cleaning process that will remove most debris from the burner ring and allow you to resume cooking quickly.

NOTE: During burn off cleaning process, the rings become HOT. Use care when handling.

4. To remove the Venturi/Burner assembly from the range, slightly lift up the rear of the assembly and pull it back towards the splasher area while lifting the assembly off the burner valve quick disconnect. Repeat step 4 until all the burner section assemblies are removed (Fig. 15, 16 and 17).

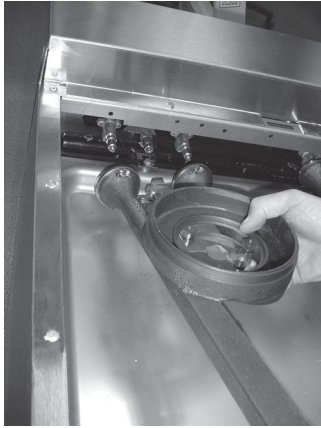


Fig. 15

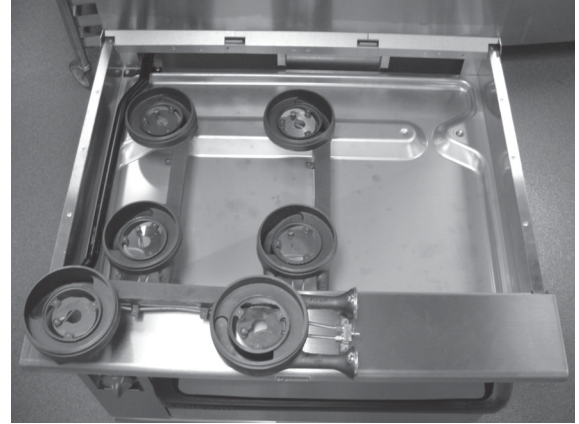


Fig. 16

NOTE: Burner/Venturi assembly may be cleaned using a nylon brush to remove crusty debris. The assembly may also be placed into a commercial dishwasher for cleaning. It is recommended that the assembly be left standing to air dry and the pilot tubing be blown out with air before reinstalling. Failure to allow the venturi to thoroughly dry will cause rusting and compromise the range operation. The venturi air shutter adjustment is important to the function of the range open top burner(s). The air shutter opening must be kept clean. The shutter is locked into place by use of a single screw. Be careful not to disturb the air shutter while cleaning. It is also recommended that before reinstalling, the entire outside areas of the Burner/Venturi assembly be coated with a spray on cooking oil to eliminate rusting. These parts are cast iron and will rust if not properly seasoned.

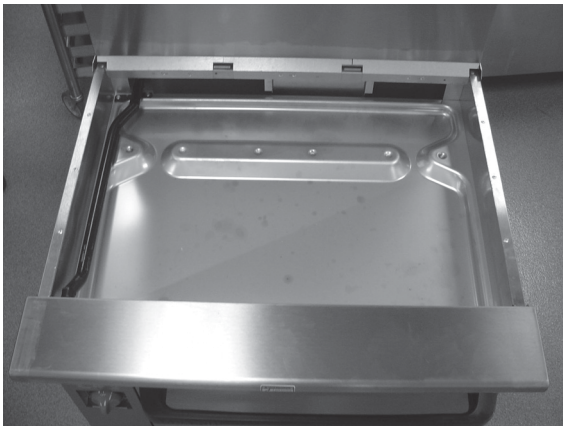


Fig. 17



Fig. 18

5. Clean the entire 12 quart basin area with warm water, mild soap and a soft cloth. Stubborn soils may be removed using a nylon scratch pad and mild detergent. Rinse and dry all areas thoroughly (Fig. 18).

STANDARD OVEN CLEANING AFTER EACH USE AND DAILY

Once the oven has cooled, wipe off any spill over in the oven cavity or door assembly immediately. Use a solution of warm water and mild soap or place the removable oven parts into a commercial dishwasher. Standard oven racks, right, left and bottom oven liners are easily removed for cleaning.

1. After the oven has cooled, open the oven door and remove the oven rack (Fig. 19).
2. Lift up on the oven bottom and pull the bottom straight out of the oven cavity (Fig. 20).
3. Lift up on the right and left side liners (one at a time), disengaging the hanger flange of the liner from the top ledge inside the oven cavity. Pull the side liners straight out of the oven cavity (Fig. 21 and 22).



Fig. 19

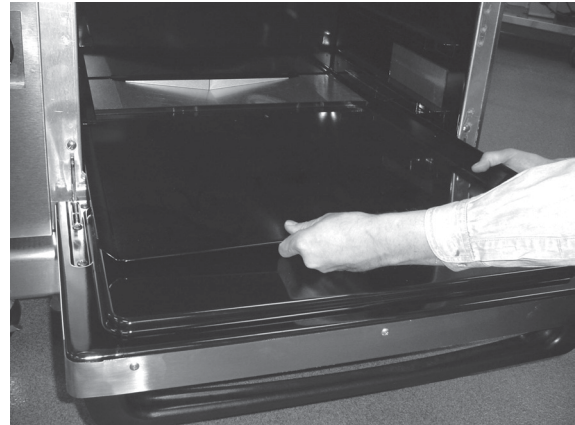


Fig. 20

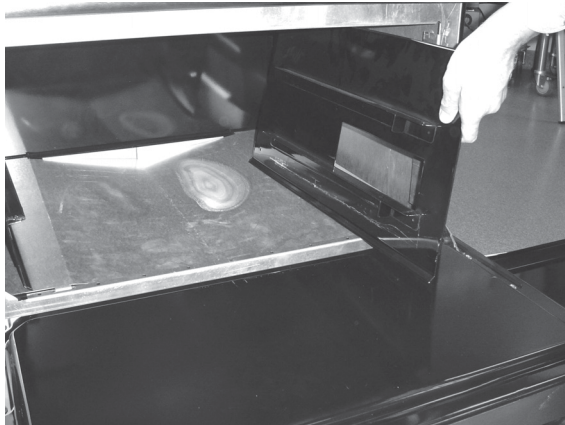


Fig. 21

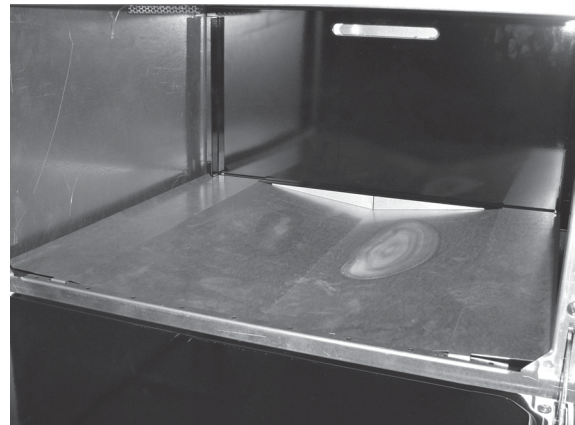


Fig. 22

NOTE: Stubborn soil marks such as burned on grease may be removed using a standard oven cleaner. Follow cleaner product directions.

4. Once all oven parts are clean and dry, reinstall by reversing steps 1 through 3.

NOTE: Liners are different from left to right. There is a hanger flange at the top of each liner. Reinstall liners so that the rectangular opening is in front and the rack guides are facing into the oven cavity. If the side liners hanger flange is not engaging easily, or the oven door is not closing completely, the liners may have been reinstalled on the wrong sides. This is a common error. Simply remove the oven bottom liner and reverse the side liners. Reinstall the oven bottom liner and check to ensure the oven door is closing completely.

CONVECTION OVEN CLEANING AFTER EACH USE AND DAILY

This oven section is a permanent one piece heat sealed construction and can not be disassembled for cleaning, with the exception of removing the oven rack(s).

Once the oven cavity is cool, remove the rack(s) as needed. Wipe off any spill over in the oven cavity or onto the oven door assembly immediately using a solution of warm water and mild soap. Rinse thoroughly and dry before placing the oven back into operation.

NOTE: Stubborn soil marks such as burned on grease may be removed using a standard oven cleaner. Follow cleaner product directions.

GRIDDLE TOP

CAUTION: When scraping off heavy deposits of grease or oil from griddle equipment, use only approved griddle scrapers. Particles of ordinary steel may become embedded in or lodge on the surface of the griddle plate. These particles will rust, causing unsightly stains and possible contamination of food.

Empty grease daily or as needed. Clean griddle top regularly.

KEEP GRIDDLE PLATE SURFACE CLEAN. To produce evenly cooked, browned products, keep griddle free of carbonized grease. Carbonized grease on the surface hinders the transfer of heat from the griddle surface to food. This results in spotty browning and loss of cooking efficiency, and carbonized grease tends to stick to the griddle foods, giving them a highly unsatisfactory and unappetizing appearance.

To keep the griddle clean, follow these simple instructions:

After Each Use

Clean griddle with a Scotch Bright pad or flexible spatula.

Daily

1. Thoroughly clean backsplash, sides and front. Remove grease drawer, empty it and wash it out in the same manner as any ordinary cooking utensil.
2. Clean griddle surface thoroughly. Use a griddle stone, griddle screen or Scotch Bright pad on the surface. While the griddle surface is still warm, using a griddle stone or screen, clean the griddle surface by rubbing left to right and front to back. A nylon pad may be used on a warm griddle surfaces but are not recommended for hot surfaces as this may cause a pad to melt. A detergent may be used on the plate surface to help clean it, but you must ensure the detergent is thoroughly removed.
3. Clean stainless surfaces with a damp cloth and polish with a soft dry cloth. To remove discolorations, use a nonabrasive cleaner.
4. Reseason griddle as explained under Before First Use in this manual.

BROILERS / GRIDDLE

Empty the broiler grease pan/trough daily or as often as necessary.

CAUTION: Remove the grease pan/trough slowly and be careful of liquid wave action.

It is recommended that the grease pan/trough be emptied whenever it is $\frac{3}{4}$ filled. The drip shield, grids and grease pan/trough should be washed with a mild grease-dissolving solution. Some chefs scrape the grid with a three-cornered metal scraper. Scrub the broiler chamber and body front frequently and you will have less smoking. For more extensive griddle top cleaning instructions, refer to Griddle Top Cleaning section in this manual.

EXTERIOR CLEANING

Daily

Clean exterior finish with a mild solution of soap or grease-dissolving cleaner.

STAINLESS STEEL

Here are a few simple cleaning procedures that have been found effective for keeping stainless steel equipment clean, sparkling and bright.

General Cleaning

Use ordinary soap or detergent and water for routine cleaning of stainless steel. To prevent water spots and streaks, rinse thoroughly with warm water and wipe dry with a soft clean cloth. The addition of a rinsing agent will also help prevent spotting.

Fingerprints

Fingerprints are sometimes a problem on highly polished surfaces of stainless steel. They can be minimized by applying a cleaner that will leave a thin oily or waxy film.

To use these cleaners, simply wipe on and remove excess with a soft dry cloth. After using, subsequent fingerprints will usually disappear when wiped lightly with a soft cloth or with a cloth containing a little of the cleaner. If the surface is especially dirty to start, wash first with soap or detergent and water.

Burned-On Foods and Grease

Soaking with hot soapy water will help greatly to remove burned-on foods and grease.

Heat Tint

Straw-colored or slightly darkened areas may appear on stainless steel in and around ovens and ranges where temperatures reach 500°F (260°C) or more. This "heat tint" is caused by a slight oxidation of the stainless steel and is not harmful.

To control or minimize this condition, never use more heat than is absolutely necessary.

Commercial heat tint remover products may be used.

Precautions

When scraping off heavy deposits of grease or oil from stainless steel equipment, never use ordinary steel scrapers. Particles of ordinary steel may become embedded in, or lodge on, the surface of the stainless steel. These will rust, causing unsightly stains and possible contamination of food. Where it is necessary to scrape, use stainless steel, wood, plastic or rubber tools.

MAINTENANCE & ADJUSTMENTS

WARNING: DISCONNECT THE ELECTRICAL POWER TO THE MACHINE AND FOLLOW LOCKOUT / TAGOUT PROCEDURES.

LUBRICATION

All moving parts must be checked for wear and lubricated. Contact your local Vulcan authorized servicer.

Motors in Vulcan convection ovens are permanently lubricated and require no additional maintenance.

FLUE

Annually check the flue when it is cool to be sure it is free of obstructions.

SERVICE AND PARTS INFORMATION

To obtain service and parts information, contact the Vulcan-Hart Service Agency in your area (refer to our website, www.vulcanhart.com for a complete listing of Authorized Service and Parts depots.

When calling for service, the following information must be available: Model number, device number, serial number, manufacture date (MD), gas type and voltage. This information can be found on the unit data plate, located behind the lower front kick panel. Removal of the kick panel is required to access the data plate.

TROUBLESHOOTING

OVEN

PROBLEM	CORRECTIONS
Uneven Baking Side to Side	Range not level. Uneven loading of the oven compartment. Side liners improperly installed. (Standard oven only) Wrong temperature setting for product.
Too Much Top Heat	Too high temperature. Thermostat needs calibration. (Call for service)
Pulling to Edge of Pan	Warped pans. Oven not level.
Uneven Bake - Front to Rear	Range not level front to back. Door not closing properly.
Dried Out Products	Too low temperature. Too long baking time. Thermostat calibration. (Call for service)
Pilot Outage (Pilot or Burner Will Not Light)	Call for service.
Excessive Meat Shrinkage	Roasting temperature too high.

TOP BURNER OPERATION

PROBLEM	CORRECTIONS
Excessive Valve Handle Temperatures Sticking Top Burner Valves	Check that oven door is closed. If door is properly closed, call for service.
Poor Ignition	Call for service.
Pilot and Burners Will Not Light	Check that main gas supply is turned ON. Turn the front gas shut-off valve to the ON position. Check that the burner assembly has been properly installed.

