

INSTALLATION AND OPERATION MANUAL FOR 77 SERIES & SG77 SERIES GAS RESTAURANT RANGES



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 OR MODIFICATION, 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.

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Installation, Operation and Care of 77 SERIES & SG77 SERIES GAS RESTAURANT RANGES

KEEP THESE INSTRUCTIONS FOR FUTURE USE

GENERAL

The manufacturer suggests that you thoroughly read this entire manual and carefully follow all of the instructions provided. Your 77 Series Gas Restaurant Range is produced with quality workmanship and material. Proper installation, usage and maintenance of your range will result in many years of satisfactory performance.

The 77 Series Range has one or two standard ovens; the SG77 Series Range has one or two forced air convection ovens.

INSTALLATION

UNPACKING

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.

Remove all shipping wire and wood blocking. Remove accessories (Fig. 1).

Before installing, verify that the type of gas supply (natural or propane) and electrical service agree with the specifications on the rating plate located on the inside lower front control cover. If the supply and equipment requirements do not agree, contact your dealer or Vulcan-Hart immediately.



Fig. 1

LOCATION

The range must be kept free and clear of combustible substances. The range, when installed, must have minimum clearance of 6" at the sides and 6" at the back from combustible construction, and 0" at the sides and 0" at the back from non-combustible construction.

The installation location must allow adequate clearances for servicing and proper operation. A minimum front clearance of 40" is required.

The range 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 must be provided. Make sure there is an adequate supply of air in the room suitable for the amount of combustion gas feeding the burners.

Do not permit fans to blow directly at the range. Wherever possible, avoid open windows next to the range. Avoid wall-type fans which create air cross currents within the room.

INSTALLATION CODES AND STANDARDS

Your Vulcan range must be installed in accordance with:

1. State and local codes, or in the absence of local codes, with:
2. National Fuel Gas Code, ANSI-Z223.1 (latest edition), available from the American Gas Association, Inc., 1515 Wilson Blvd., Arlington, VA 22209.
3. National Electrical Code ANSI/NFPA-70 (latest edition).

RANGES INSTALLED WITH CASTERS

For ranges equipped with casters, the installation shall be made with a connector that complies with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69 (latest edition), and a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use With Gas Fuel, ANSI Z21.41 (latest edition). Provide a gas line strain relief to limit movement of the range without depending on the connector and any quick-disconnect device or its associated piping to limit the range movement. Attach the strain relief to the rear of the range (Fig. 2).

Should it be necessary to disconnect the gas line strain relief, turn off the gas supply before disconnection. Reconnect this restraint before turning the gas supply on and returning the range to its installation position.

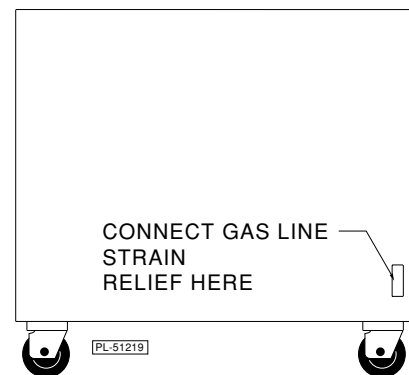


Fig. 2

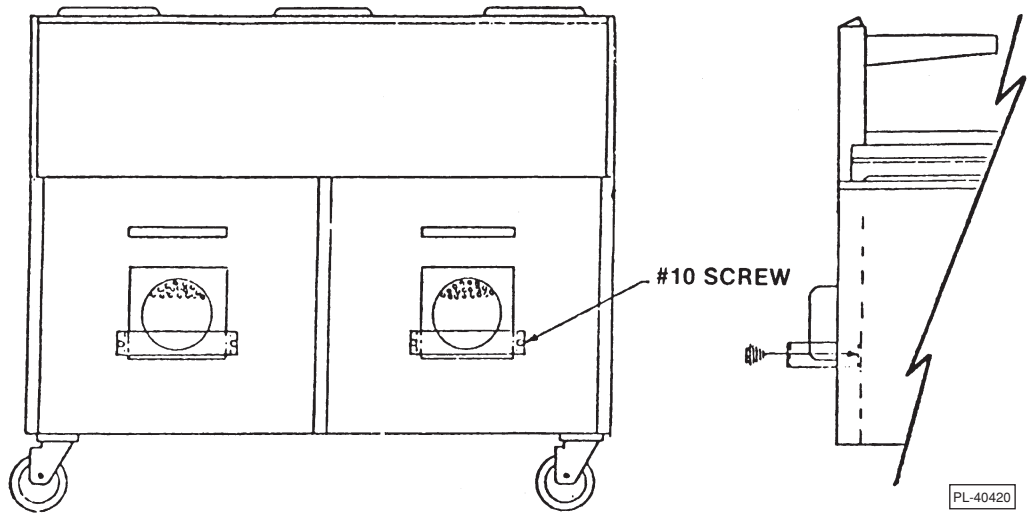
When this range is installed with casters, it must be installed with the casters supplied.

BUMPER BARS — SG77 SERIES INSTALLED ON CASTERS (Fig's. 3 & 4)

CAUTION: Failure to install bumper bars may cause motor damage and void the warranty.

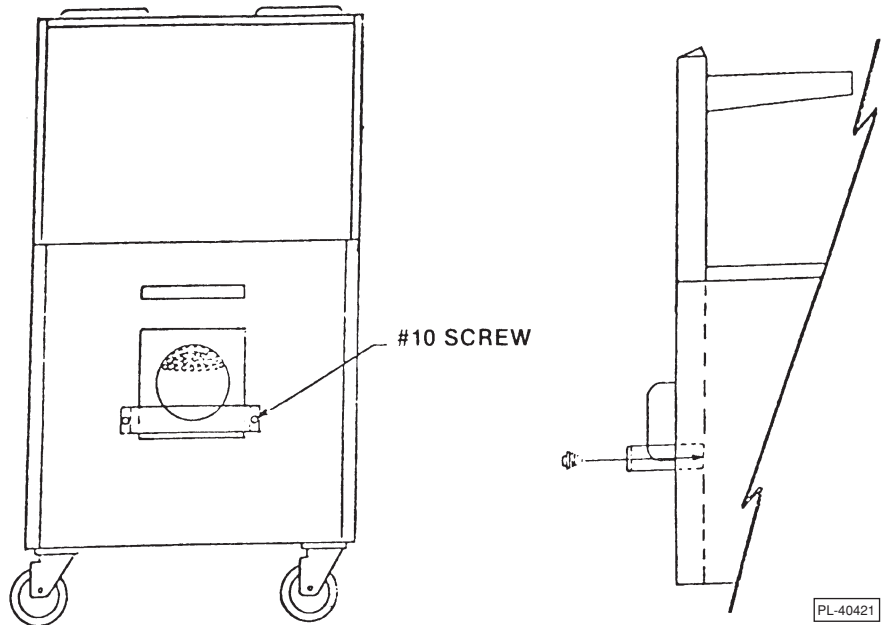
To install bumper bars:

1. Remove existing #10 screws.
2. Position bumper bars as shown.
3. Replace #10 screws and secure bumper bars as shown.



Models SG60 & 260L - 77R Restaurant Range

Fig. 3



Models SG36 & 160L - 77 Restaurant Range

Fig. 4

ASSEMBLY

High Shelf

The high shelf for this range is shipped as shown in Fig. 5, and is included in the range crate.

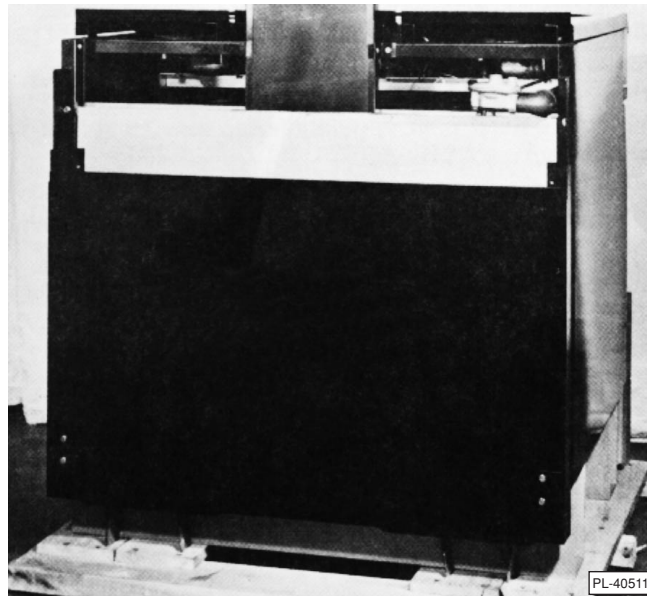


Fig. 5

With top cooking plates in their normal position, assemble splasher back to range (Fig. 6). Fasten in place with #10 sheet metal screws. Use the center bracing angle on 60, 160 and 260 Ranges.

Once splasher back is secured in position, slide shelf into mounting brackets (Fig. 7). Shelf will lock into position. On 36" ranges, fasten shelf with (4) self-tapping 10-24 screws. Ranges wider than 36" will require (2) additional bolts. There is a decal located on the front of the range showing the proper installation of the shelf to the backsplash. Remove this decal once assembly is complete.



Fig. 6

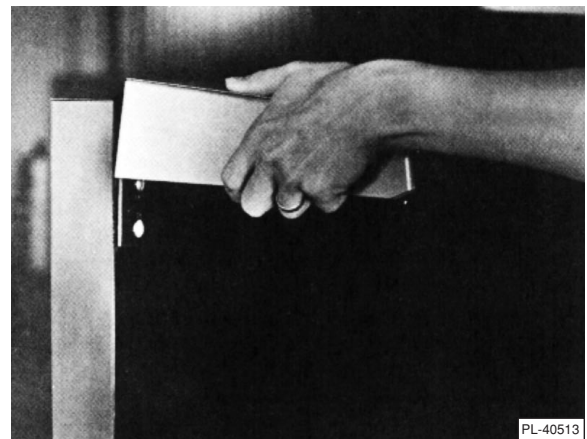


Fig. 7

Hot Top Section

Vulcan Restaurant Ranges with hot top sections use fire bricks to retain heat. The bricks are packed separately in the range oven. Proper installation positions of the bricks are shown in Fig. 8.

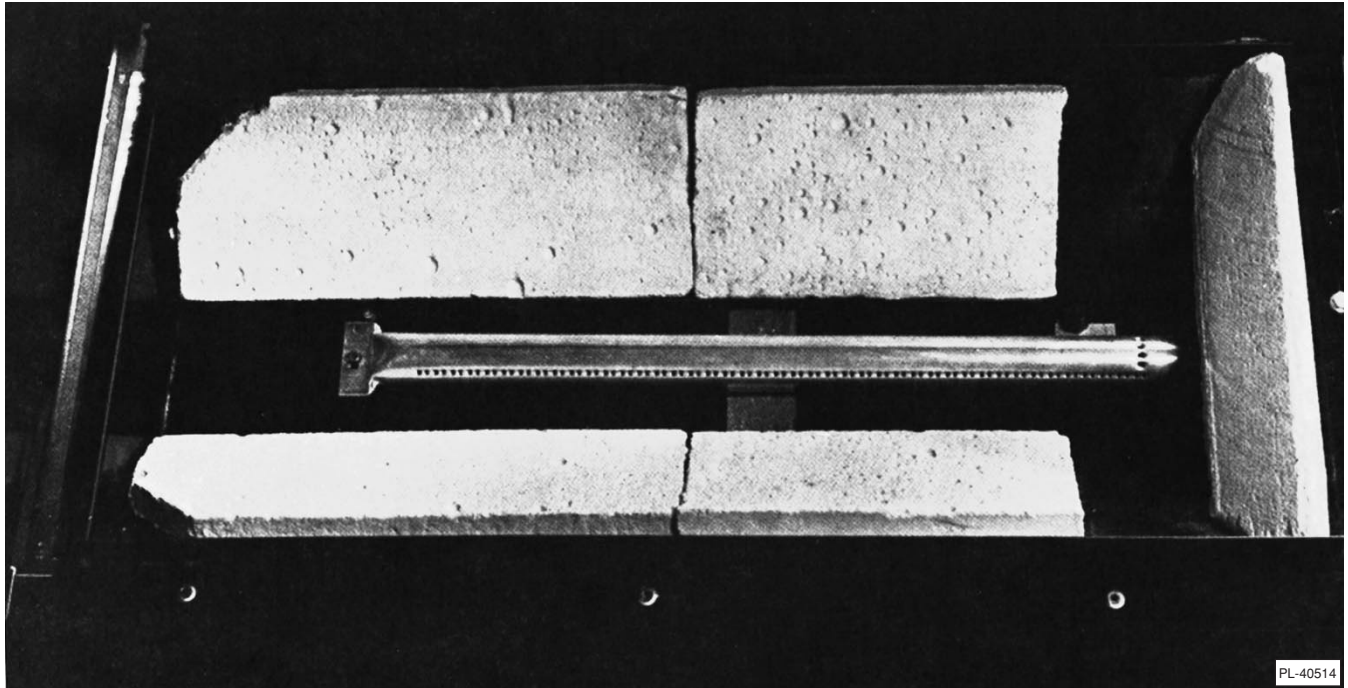


Fig. 8

Broiler-Griddle Section

Vulcan Restaurant Range Broilers are equipped with ceramic radiants. These radiants are packed separately in the range oven. Proper installation positions of the radiants are shown in Fig. 9.

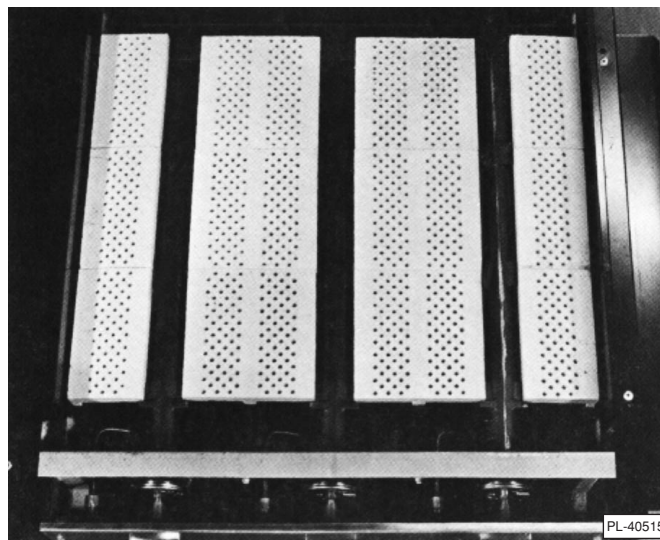


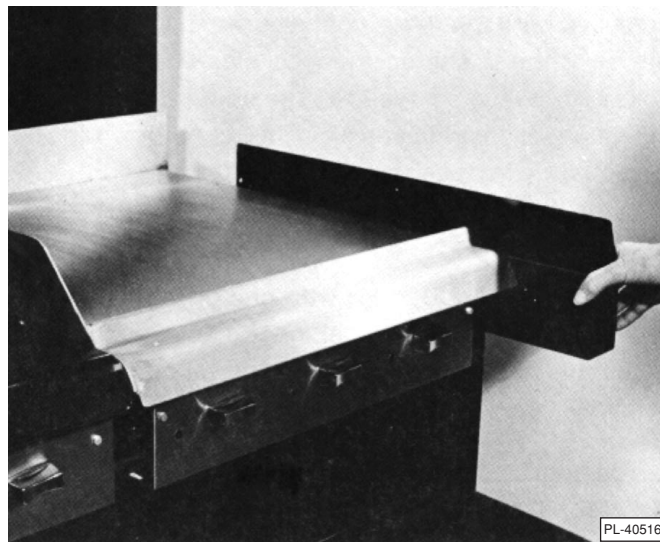
Fig. 9

Conventional Griddles

Refer to "Hot Top Section" for installation of fire brick for conventional griddles.

Adjust burners as sharp as possible without flashback.

Install grease collectors on side of range (Fig. 10).



Griddle area shown with protective shipping solvent.

Fig. 10

LEVELING

Place a carpenter's level inside the oven cavity across the oven rack. Level the range from front to back and from side to side by turning the adjustable legs. To adjust, tilt the range to one side. Using channel locks, unscrew the adjustable leg insert as required. Repeat this procedure as necessary for each leg.

NOTE: Casters for this range are of the non-leveling type. Therefore, the floor surface must be level. If the floor surface is not level, the range will experience cooking problems until it is level.

GAS CONNECTIONS

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

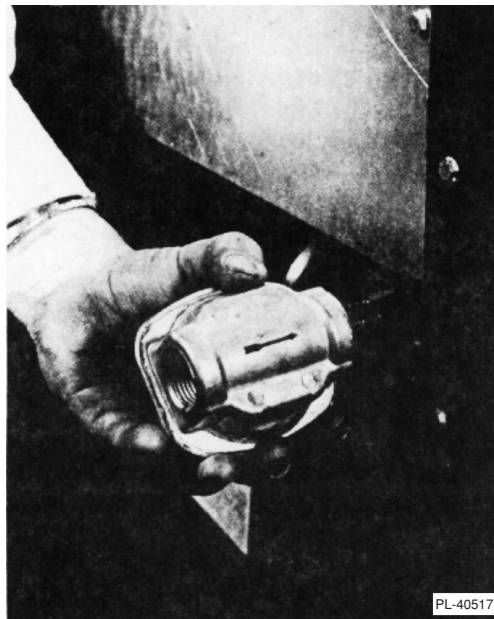
Each range is factory equipped for use with the type of gas specified on the range rating plate. This rating plate is located on the reverse side of the kick panel.

Connect gas supply to the range. Make sure the pipes are clean and free of obstructions, dirt, and piping compound.

Codes require that a gas shutoff valve be installed in the gas line ahead of the range.

Ranges are equipped with fixed burner orifices for proper range operation elevation.

On some models, the gas pressure regulator is factory installed on the manifold pipe at the rear of the range, and on some models, the regulator is packaged separately. The arrow on the regulator shows the direction of gas flow (Fig. 11).



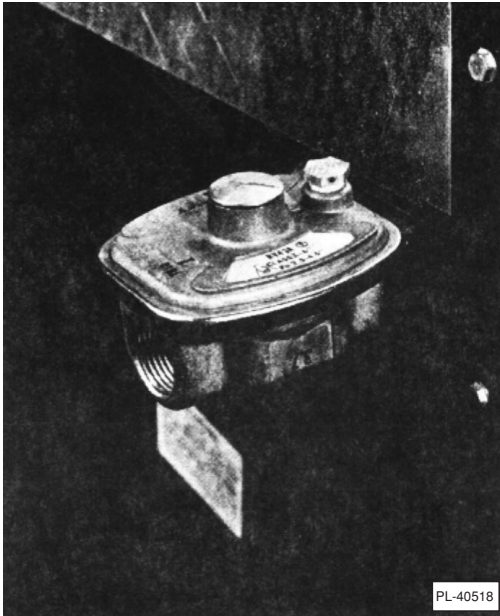
Standard Oven

Fig. 11

While connecting the range to the gas supply, the pressure regulator must be mounted horizontally to ensure proper preset outlet pressure (see Fig. 12 for standard oven and Fig. 13 for convection oven). If the regulator is mounted in any other position, the outlet pressure must be reset.

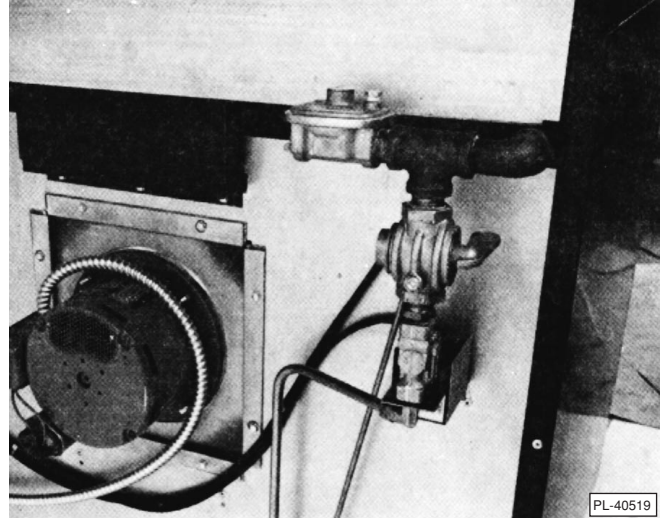
Pressure regulators must be design certified by American Gas Association Laboratories and must have regulation capacity for the total connected load and must have a pressure adjustment range to allow adjustment for manifold pressure marked on the range rating plate.

Unless the manifold pressure on all connected appliances is the same, a separate regulator must be supplied for all ranges having different manifold pressures.



Standard Oven

Fig. 12



Convection Oven

Fig. 13

Natural gas regulators are preset for 3.7" W.C. (Water Column); propane gas regulators are preset for 10.0" W.C. (Water Column).

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

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.

ORIFICE DATA

| | Natural | Propane |
|----------------------------|---------|---------|
| Open Top Burner | 48 | 57 |
| Hot Top Burner | 43 | 55 |
| Griddle (Not Over Broiler) | 48 | 57 |
| Griddle (Broiler) | 52 | 63 |
| Oven | 36 | 51 |

FLUE CONNECTIONS

DO NOT obstruct the flow of flue gases from the flue duct 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 range flue vent to the filters of the hood venting system, an 18" minimum clearance 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 (SG77 Models Only)

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

WARNING: APPLIANCES EQUIPPED WITH AN ELECTRICAL SUPPLY CORD ARE PROVIDED WITH A THREE-PRONG GROUNDING PLUG WHICH MUST BE CONNECTED TO A PROPERLY GROUNDED RECEPTACLE. IF THE RECEPTACLE IS NOT THE PROPER GROUNDING TYPE, CONTACT AN ELECTRICIAN. DO NOT REMOVE THE GROUNDING PRONG FROM THE PLUG.

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

A complete set of wiring diagrams are packaged in a separate envelope and shipped with the range. A wiring decal may also be found on the inside lower front panel.

ADJUSTMENTS

Standard ranges, equipped with pressure regulators and fixed orifices, have been adjusted at the factory and should require no further adjustment.

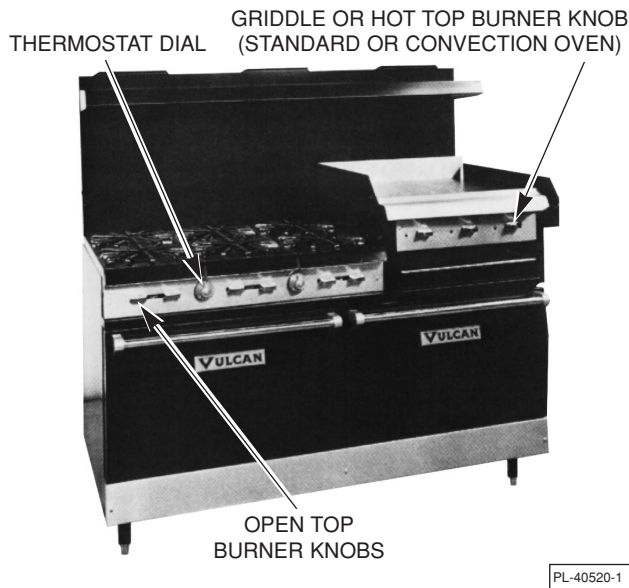
All adjustment procedures associated with pilot lighting must be performed **by a qualified Vulcan-Hart installation or service person.** (See Service Manual.) The bypass (minimum burner) flame adjustment must be made at the time of installation.

OPERATION

WARNING: THE RANGE AND ITS PARTS ARE HOT. BE VERY CAREFUL WHEN OPERATING, CLEANING OR SERVICING THE RANGE.

CONTROLS

Controls for the Standard Oven Restaurant Range are shown in Fig. 14; controls for the Convection Oven Restaurant Range are shown in Fig. 15.



Model 260L-77R Standard Oven Restaurant Range
Fig. 14

Model SG36L-77R Convection Oven Restaurant Range
Fig. 15

- | | |
|---------------------------------------|---|
| Thermostat Dial | — Standard Oven: Allows the operator to regulate oven temperature from Low to 500°F. Convection Oven: Snap acting, on-off type control which allows operator to regulate oven temperature from 150°F to 500°F. |
| Open Top Burner Knobs | — Regulate gas flow to top burners. Flame increases by turning knob counterclockwise and decreases by turning knob clockwise. |
| Griddle or Hot Top Burner Knob | — Regulates gas flow to griddle or hot top burner. Heat increases by turning knob counterclockwise; decreases by turning knob clockwise. |
| Power Switch | — Convection Oven: Main on-off switch controls power supply to convection oven control. |
| Heating Light | — Convection Oven: Illuminates when heat is being supplied to oven. |

LIGHTING AND SHUTTING DOWN PILOTS

NOTE: All adjustment procedures associated with pilot lighting must be performed **by a qualified Vulcan-Hart installation or service person.**

Oven Pilot — Standard Oven

1. Turn main gas supply ON. Remove lower front panel and lift lighting hole cover.
2. Depress the reset button located behind the lower front panel and light pilot with a lit taper (Fig. 16). Continue to hold reset button in for 1 minute.
3. If pilot fails to light, turn main gas supply OFF and wait 5 minutes before repeating Steps 1 and 2.
4. After pilot is lit, turn the thermostat dial to the desired setting.

Nightly Shutdown: Turn oven thermostat OFF.

Extended Shutdown: Turn oven thermostat OFF. Turn main gas supply OFF.

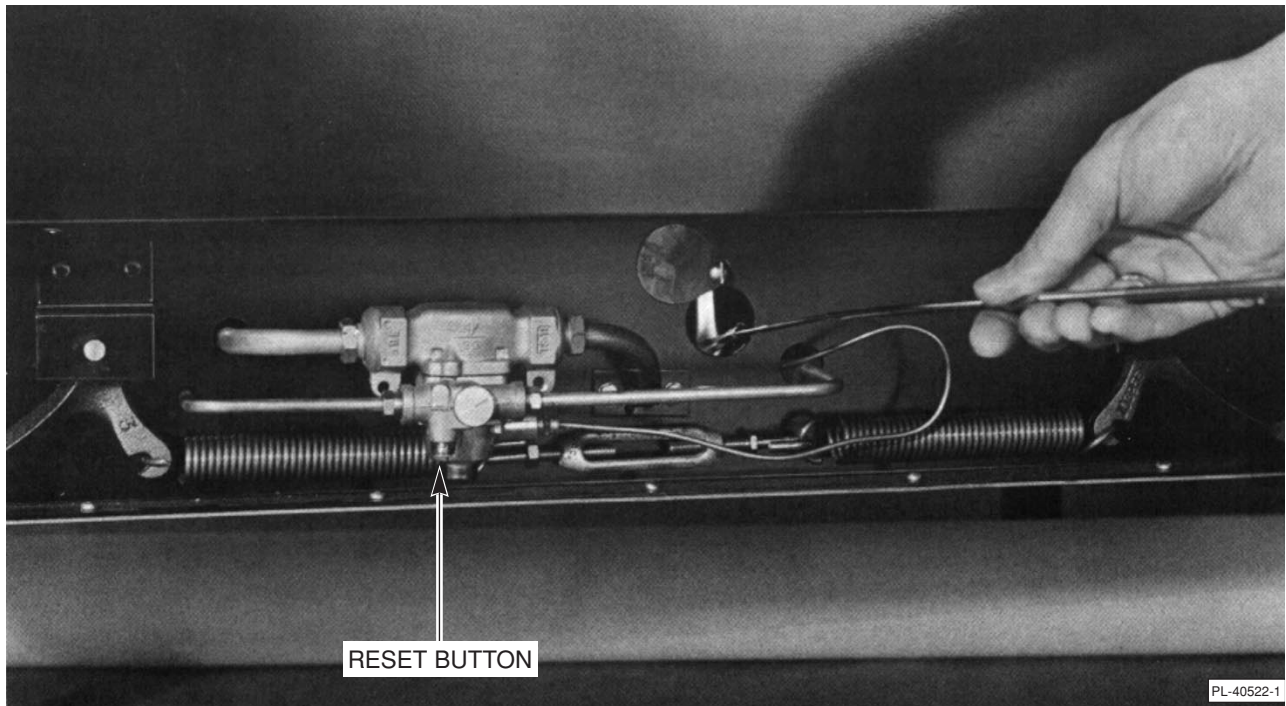


Fig. 16

Oven Pilot — Convection Oven

1. Turn main gas supply ON. Turn oven valve ON. Remove lower front panel and lift lighting hole cover.
2. Depress the reset button located behind the lower front panel and light pilot with a lit taper (Fig. 17). Continue to hold reset button in for 30 seconds until pilot remains on.
3. If pilot fails to light, turn power switch OFF and wait 5 minutes. Then repeat Step 2.
4. Turn power switch ON. Set thermostat dial to desired temperature.

Nightly Shutdown: Turn oven thermostat OFF. Turn power switch OFF.

Extended Shutdown: Turn oven thermostat, oven valve, power switch and main gas supply OFF.

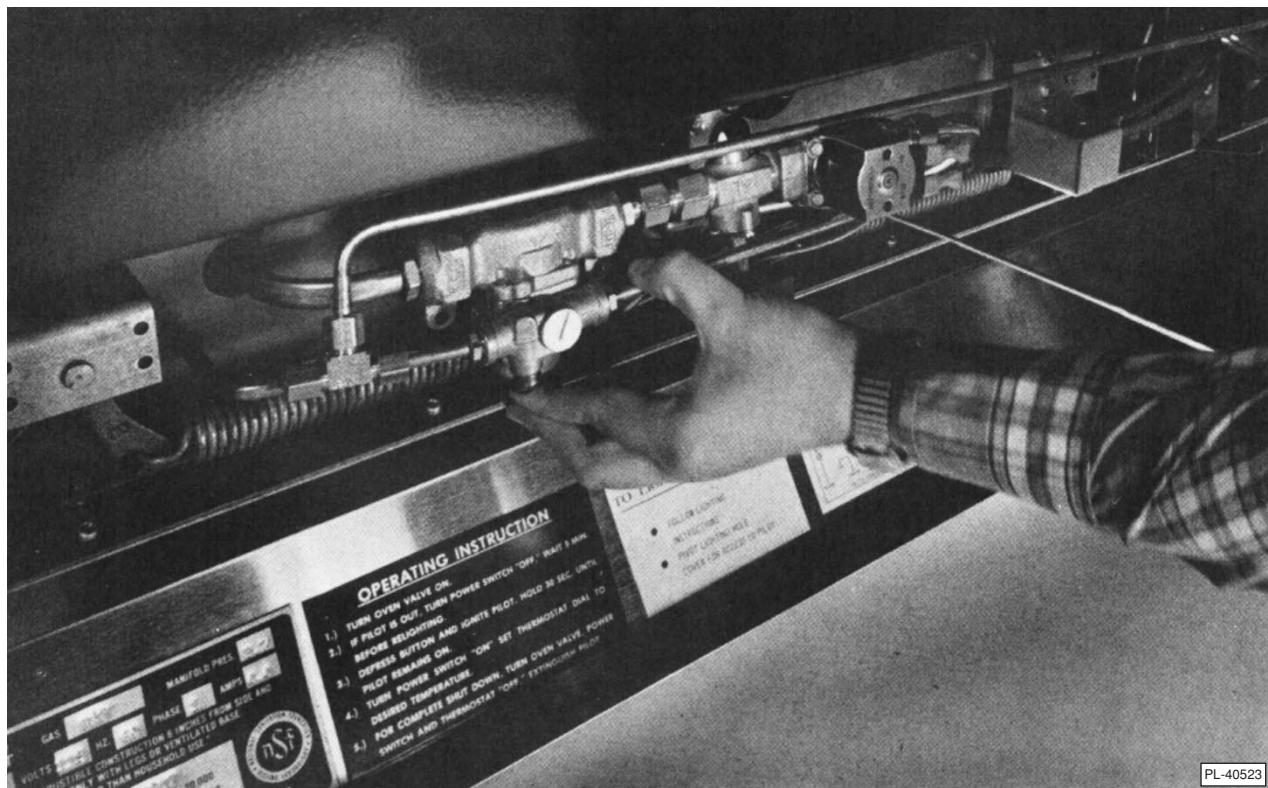


Fig. 17

Open Top Pilot

1. Remove all top section cover plates and griddles.
2. Turn main gas supply ON (all burner valves should be in OFF position).
3. Begin from the left range top side. Light each individual pilot from front to rear across the entire range top section. (When lighting broiler/griddle section, the pilot is tubular in shape.)
4. If any pilot fails to light or extinguishes, turn that burner valve to the OFF position. Wait 5 minutes, then relight.
5. After all pilots are lit, check that all burners are operational. To ignite burners, turn the burner valve knobs fully ON, starting from left to right.
6. Turn burners OFF and reassemble top sections.

Broiler/Griddle Section

The broiler/griddle sections are operated by the same burners as the open top section. When lighting the broiler/griddle section, remove the grid pan assembly, and using a taper, light the pilot from the underside of the griddle where the grid pan assembly was removed.

BEFORE FIRST USE

Cleaning Griddle Plate at Start-up

The griddle plate is shipped covered with a protective coating of grease. Remove this film only when the griddle plate is being cleaned prior to its first cooking use. Remove film by scraping the griddle surface with the straight edge of a large piece of stiff cardboard. For cleaning procedures, see CLEANING - GRIDDLE TOP in this manual.

Seasoning of Griddle Plate or Fry Top Section

CAUTION: This griddle plate is steel, but the surface is relatively soft and can be scored or dented by carelessly using a spatula. Be careful not to dent, scratch, or gouge the plate surface. 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.

CAUTION: Do not overheat the griddle plate by setting thermostats well above recommended temperatures. Overheating the plate may cause plate warpage, and will carbonize any grease on the plate and cause sticking.

Before first use of the griddle or fry top section, the cooking surface must be seasoned. The metal cooking surface is porous. Foods tend to get trapped in the surface pores and stick. Seasoning provides the cooking surface with a slick hard finish from which foods will release easily.

To season, heat griddle or fry top section at a low burner setting (300-350°F). Pour one ounce of cooking oil per square foot of surface over the griddle or fry top section. Spread oil over entire surface with an insulated cloth, creating a thin film.

After forming thin film over surface, wipe off excess oil with an insulated cloth. Repeat this procedure two or three times until griddle or fry top has a slick mirror-like surface.

USING THE RANGE

Griddle Plate and Fry Top Ranges

Heat top thoroughly before using. The top can be kept hot with burners turned partly down. During idle periods, turn burner down or keep only half the top heated.

Closed Top Ranges

Turn on all burners to heat top quickly. When operating temperature is reached, turn some of the rings down or off and you will save as much as 80% of gas. During idle periods, the pilot burner in the center will keep the top warm. As heat is well distributed over the entire top, you can cover it with utensils and use fewer rings.

Open Top Ranges

As these are quickly ignited and require no preheating time, light only as many as needed. Turn control knobs to HIGH to put each burner into operation; then adjust to a lower flame for better cooking results and to minimize gas usage. The left-hand control knob is for the rear burner; the right-hand control knob is for the front burner.

Standard Ovens

Use your normal recipe times and temperatures. Allow time to preheat oven before using (25 minutes at 400°F). The automatic heat control will cut gas and food costs if properly used. Do not turn on maximum heat all the time. Turn down to 250°F or turn off when oven is not in use or idling.

With this two-compartment oven, you get 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 shelf or racks and placing roast pan directly on the insulated oven bottom.

Moderate oven temperature will produce better food, reduce shrinkage and keep costs down. Use low temperature roasting method with oven temperature at about 325°F.

A pan of water may be placed in the oven bottom. This water supplies humidity to reduce shrinkage. If necessary, add water during roasting.

Convection Ovens

If you have a convection oven, reduce your normal recipe temperature by 25°F. 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, 2½ to 3 times increase in volume for the best results.

When baking pies in your convection oven, put 3 or 4 pies on an 18" x 26" sheet or bun pan. This procedure helps the bottom crust to bake, makes handling easier and reduces the possibility of boil over spoiling 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" pans for baking.

INSERTING AND REMOVING STANDARD AND CONVECTION OVEN RACKS

Convection oven sections use different style racks and rack guides.

On ovens provided with oven rack stops, it is necessary to place the rack, including the support hook, along the top of the side liner runners and slide the rack completely to the rear of the oven compartment until the rack drops into place (Fig. 18).

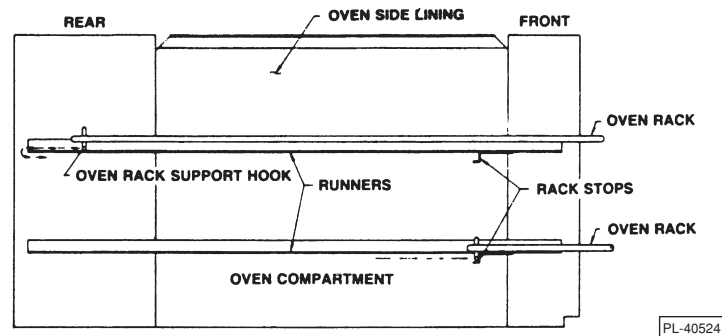


Fig. 18

To remove the racks, reverse this procedure by raising the rear of the oven rack support hooks above the runner and pulling the racks forward (Fig. 19).

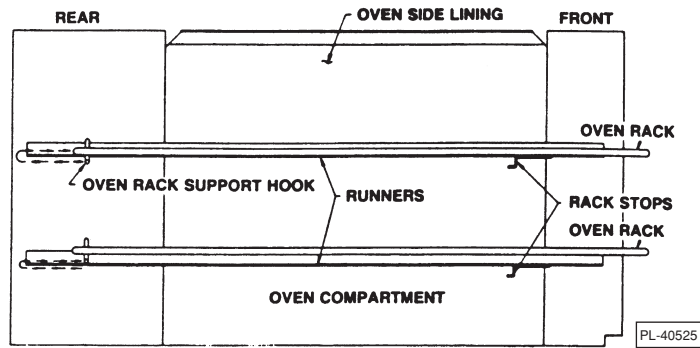


Fig. 19

RACK ARRANGEMENTS — CONVECTION OVENS

The convection oven has a maximum operating capacity of 3 racks (supplied) per oven cavity. The 5 position rack supports provide for maximum flexibility and proper rack spacing.

The following arrangements are recommended. The position numbers are in numerical sequence starting at the bottom (Fig. 20).

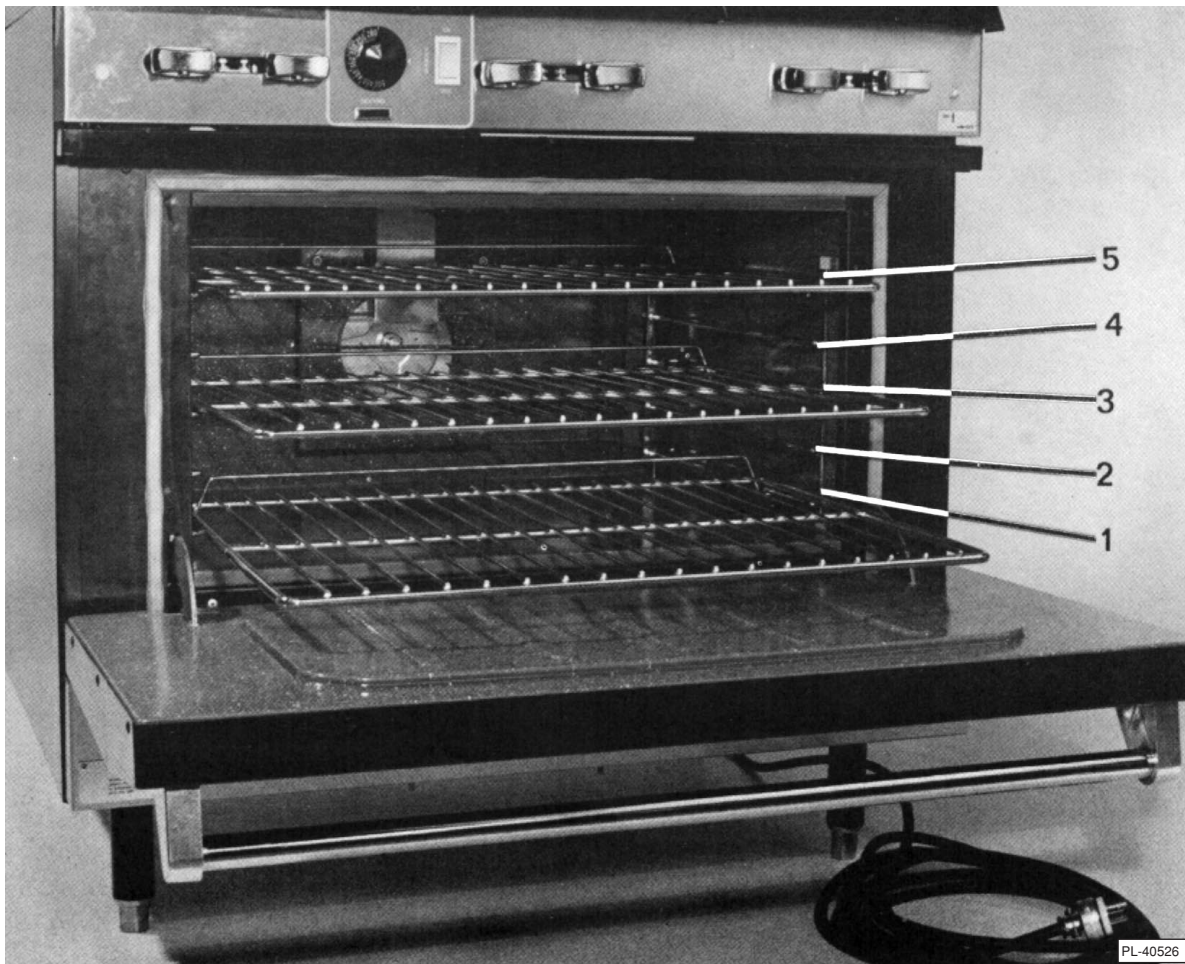


Fig. 20

Arrangement #1

Three racks in Positions #1, #3 and #5 for oven broiling, cookies or reconstitution of frozen meals as maximum capacity. Also recommended position for general baking in sheet pans with products not over 2¹/₂" high.

Arrangement #2

Two racks in Positions #2 and #4 for general baking in sheet pans, muffin pans, pie or cake tins, and pudding pans 3¹/₂" high with products not over 4" high. Can also be used for casseroles or meat dishes in #200 series food service pans 12" x 20" x 2¹/₂".

Arrangement #3

Two racks in Positions #1 and #4 for baking breads or cakes in loaf or tube pans and high meringue pies. Can also be used for casseroles, meat dishes or roasting in pans up to 4¹/₂" deep with products up to 5" high.

When mixed loading is regular practice, some users have developed other rack arrangements to suit their particular needs.

RACK ARRANGEMENTS — STANDARD OVENS

The Vulcan 77 Series standard oven is equipped with one rack per oven section. Each oven section has two rack positions. Proper rack positioning is to be determined by the individual cooking needs of the operator.

OVEN LOADING AND UNLOADING — STANDARD AND CONVECTION OVENS

When loading oven, open door and load as quickly as practical to conserve heat. Take care to avoid spilling liquids while loading. Close door and refer to recipe for cooking time.

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

CLEANING

WARNING: (SG77 MODELS ONLY) UNPLUG THE POWER SUPPLY CORD BEFORE CLEANING.

Griddle and Fry Top

Cleaning the griddle and fry top sections will produce evenly cooked, perfectly browned griddle products and will keep the cooking surface free from carbonized grease. Carbonized grease on the surface hinders the transfer of heat to the food. This results in loss of cooking efficiency and spotty browning which gives foods an unappetizing appearance. To keep griddle clean and operating at peak efficiency, follow these instructions:

After Each Use: Clean griddle with a wire brush or flexible spatula.

Once a Day: Thoroughly clean splash back, sides and front. Remove grease pan, empty and wash out in the same manner as any ordinary cooking utensil.

Once a Week: Clean griddle surface thoroughly. If necessary, use a griddle stone, wire brush or steel wool over the surface. Rub with the grain of the metal while still warm. A detergent may be used on the plate surface to help clean it, but the detergent must be thoroughly removed. Rinse thoroughly and wipe dry with a soft clean cloth. After cleaning, the griddle must be reseasoned to inhibit rusting and food sticking (see BEFORE FIRST USE in this manual for seasoning instructions).

If the griddle is to be shut down for an extended period, put a heavy coat of grease over the griddle plate.

Exterior

Clean exterior finish with a mild solution of grease dissolving cleaner. Rinse thoroughly and wipe dry with a soft clean cloth.

Range

While still warm, wipe top daily with a grease absorbing material to remove spillovers, grease, etc., before they burn in. A crust on top of the range looks unsightly and slows down cooking because it reduces the flow of heat to the utensil. Scrape if necessary.

Boil open top grates and burners weekly in a solution of washing soda and water. Clean drip pan under burners with a mild detergent solution. Rinse and wipe dry with a soft clean cloth.

All Ovens

Clean oven and oven door daily, especially if fruit pies or tomato sauces were baked, meats roasted, and if there has been spillovers.

Stainless steel ovens may be cleaned with a damp cloth. Stubborn soil may be removed with a detergent solution .

CAUTION: DO NOT use scouring powder on finishes. Scouring powder is extremely difficult to remove completely. It can build up accumulations that will damage the oven or remove corrosion resistant finishes.

Painted surfaces may be cleaned with a cloth and a mild detergent solution.

Remove nickel plate racks and rack supports and clean with a mild detergent solution.

After processing some foods at low temperatures, odors may linger in the oven. These odors may be eliminated by setting the thermostat at 500°F and allowing the oven to run unloaded for 30 to 45 minutes.

When scraping off heavy deposits of grease or oil from stainless steel equipment, never use ordinary steel scrapers and knives. 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.

Convection Ovens Only

Never block the Snorkel® tube. Keep the Snorkel tube clean at all times for proper operation of this oven.

MAINTENANCE

WARNING: (SG77 MODELS ONLY) UNPLUG POWER SUPPLY CORD BEFORE PERFORMING ANY MAINTENANCE OPERATIONS.

LUBRICATION (SG77 Models Only)

Motors in Vulcan convection ovens are permanently lubricated and require no additional maintenance. If the gas valve is hard to turn or leaking, contact your local service agency.

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 concerning this range, contact the Vulcan-Hart Service Depot in your area (refer to listing supplied with the range), or Vulcan-Hart Company Service Department at the address or phone number shown on the front cover of this manual.

TROUBLESHOOTING

OVEN

| PROBLEM | PROBABLE CAUSES |
|----------------------------|---|
| Too much bottom heat. | Insufficient heat input. Overactive flue |
| Uneven bake. | Too low temperature. Improper operation. |
| Side Burning | Improper bypass setting Fluctuating gas pressure. |
| Too much top heat. | Too high temperature. Faulty ventilation. Excessive heat input. Thermostat needs calibration. |
| Uneven bake side-to-side. | Range not level side-to-side. Oven burner, bottom or baffles improperly installed. |
| Uneven bake front-to-rear. | Overactive flue. Range not level front-to-back. Door not closing properly. |
| Pulling to edge of pan. | Warped pans. Oven not level. |
| Dried out products. | Too low temperature. Cooking time too long. Thermostat calibration. |
| Pilot outage. | Gas supply not sufficient. Pilot flame too low. Restriction in pilot orifice. Problem with check valve. CONVECTION OVEN MODELS ONLY: Cavity leaking. Gasket problems. Snorkel tube blocked. Blower running backwards. |
| Excessive meat shrinkage. | Roasting temperature too high. |

TOP BURNER OPERATION

| PROBLEM | PROBABLE CAUSES |
|---|--|
| Improper burner combustion. Excessive valve handle temperature. Sticking top burner valves. | Improper use, allowing improper ventilation. Poor door fit. Oven door left open. |
| Poor ignition. | Insufficient gas input. Poor air-to-gas adjustment. Restriction in pilot orifice. Restriction in main burner ignition port. Restriction in control valve. Restriction in gas orifice. |