

VULCAN

INSTALLATION & OPERATION MANUAL

7000 SERIES GAS OVENS

MODEL

7018A1	ML-104491
7088A1	ML-104492
7888A1	ML-104493
7086A1	ML-104494
7016A1	ML-104495
7066A1	ML-104496
7019A1	ML-104497
7099A1	ML-104498
7999A1	ML-104499
7096A1	ML-104500
7098A1	ML-104501
7988A1	ML-104502
7998A1	ML-104503



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.

TABLE OF CONTENTS

MODEL 7000 SERIES OVEN CONFIGURATIONS	4
Bake Ovens	4
Roast Ovens	5
Combination Bake & Roast Ovens	5
GENERAL	6
INSTALLATION	7
Unpacking	7
Location	7
Installation Codes and Standards	7
Assembly	8
Legs	8
Casters	8
Stacking Model 7016A1, 7018A1 and 7019A1 Ovens	8
Optional Steam Injector Nozzles	9
Gas Connections	10
Testing the Gas Supply System	10
Flue Connections	10
Leveling	10
Electrical Connections	11
Minimum Bypass (Burner Flame) Adjustment	11
OPERATION	12
Controls	12
Before First Use	12
Lighting and Shutting Down Pilot	13
Preheating	14
Loading Oven	14
Cooking Hints	14
Pan Capacities	14
Cleaning	15
MAINTENANCE	16
Replacing Optional Lamps	16
Vent	16
Service	16

MODEL 7000 SERIES BAKE OVEN CONFIGURATIONS



7018A1



7088A1



7888A1



7086A1



7016A1



7066A1

MODEL 7000 SERIES ROAST OVEN CONFIGURATIONS



7019A1



7099A1

Model 7999A1 not shown.

MODEL 7000 SERIES COMBINATION BAKE & ROAST OVEN CONFIGURATIONS



7096A1



7098A1



7988A1

Model 7998A1 not shown.

Installation, Operation and Care of VULCAN 7000 SERIES BAKE AND ROAST OVEN

KEEP THESE INSTRUCTIONS

GENERAL

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

Your Vulcan 7000 Series Bake and Roast Oven is produced with quality workmanship and material. Proper installation, usage and maintenance of your oven will result in many years of satisfactory performance.

All Model 7000 Series Bake and Roast Ovens are equipped with legs and adjustable feet. If desired, ovens may be mounted on a solid, noncombustible base in place of legs.

Optional equipment available includes an inspection window and oven light, and steam injector nozzles for use in baking hard crust breads.

Model designations are as follows. For additional stacking information, see "Stacking Models 7016A1, 7018A1 and 7019A1 Ovens" in this manual.

MODEL	SECTIONS	COMPARTMENTS	CONTROLS
BAKE OVENS			
7016A1	1	2	1
7066A1	2	4	2
7018A1	1	1	1
7088A1	2	2	2
7888A1	3	3	3
7086A1	2	3	2
ROAST OVENS			
7019A1	1	1	1
7099A1	2	2	2
7999A1	3	3	3
COMBINATION BAKE & ROAST OVENS			
7096A1	Roast 1	1 2	1 1
7098A1	Roast 1	1 1	1 1
7988A1	Roast 2	1 2	1 2
7998A1	Roast 1	2 1	2 1

INSTALLATION

UNPACKING

Immediately after unpacking, check for possible shipping damage. If the oven is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

There may be a large label located on the front of the oven which reads, "Remove this label before operation." To remove label, peel corner edges and slowly pull label off. If resistance is met, spray area with WD-40, wait several minutes, then slowly remove label.

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

LOCATION

The equipment area must be kept free and clear of combustible substances. The oven, when installed, must have minimum clearance from combustible construction of 0" from the sides and 6" from the rear; minimum clearance from non-combustible construction is 0" from the sides and 0" from the rear.

The installation location must allow adequate clearances for servicing and proper operation. A minimum front clearance of 36" is required.

The oven 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 oven burners.

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

INSTALLATION CODES AND STANDARDS

Your Vulcan 7000 Series Bake/Roast Oven 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).

ASSEMBLY

Legs

If oven is to be mounted on legs, assemble legs to the oven. Tip oven back and install two front legs with bolts through bottom of oven base frame. Tip oven forward, block up back and install rear legs.

Remove shipping harnesses from the burner area. If oven is to be placed on legs, do not remove burner shipping harness until legs have been assembled to the oven. To remove shipping harnesses, dismantle the oven deck and insulation pans. Remove 1 cotter pin and 2 wire straps from the burner area. Replace insulation pans and oven deck.

Castors

If casters are assembled to the oven, the installation must be made using a connector (not supplied by Vulcan) 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 restraining device for the gas line to limit movement of the oven without depending on the connector and/or any quick-disconnect device or its associated piping to limit oven movement. Attach the restraint at the rear of the oven (Fig. 1).

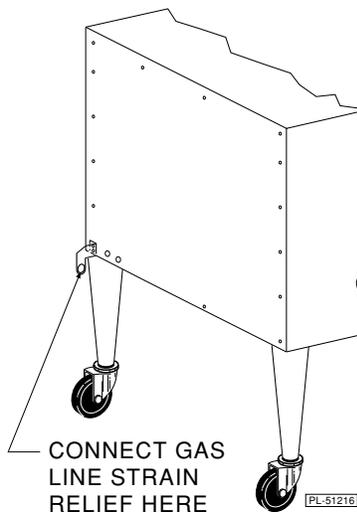


Fig. 1

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 oven to its originally installed position.

Stacking Model 7016A1, 7018A1 and 7019A1 Ovens

The Vulcan 7000 Series Oven is offered in three different configurations:

- Bake Oven 7016A1 and 7018A1.
- Roasting Oven 7019A1.
- Baking and Roasting Oven 7096A1 or 7098A1 Combination Ovens.

These ovens can be mounted interchangeably starting with the largest section on the bottom. The factory shipping tags will be marked accordingly. For the purpose of stacking positions, the suffix letter at the end of the model number is your guide:

- T — Top Section
- M — Middle Section
- B — Bottom Section

If you do not have one of the above suffix letters at the end of your model number, it is a single section stand-alone oven (no stacking is required).

1. Mount upper section on top of lower section. Be sure flue risers are properly aligned.
2. Secure both ovens together with 1 right and 1 left stacking collar (Fig. 2). Fasten collars to ovens using 14 #10-24 screws provided.
3. Install the 3/4" gas connection pipe (Fig. 2).

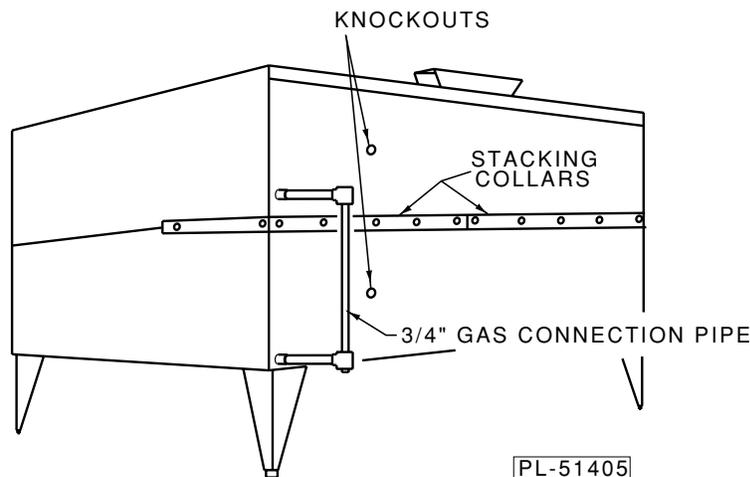


Fig. 2

Optional Steam Injector Nozzles

Nozzles are available for injecting steam into the oven for baking hard rolls, vienna bread, french bread and hard crust breads. Other products do not need steam. The nozzles are furnished at no charge upon request.

To install the nozzle(s), remove the knockout(s) (Fig. 2) from the back of the oven and the plug(s) from the oven cavity. Insert the nozzle(s) provided.

It is important that the oven steam be low pressure (2¹/₂ lb. to 5 lb. per square inch), that condensation be taken from the steam line before it enters the oven, and that steam be sufficiently saturated to give the baker the vapor cloud effect that he needs.

A 1/4 HP boiler for each large (42" x 32") compartment is recommended.

GAS CONNECTIONS

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

The oven is equipped for a $\frac{3}{4}$ " gas pipe connection. Pipe gas supply to the oven. Make sure the pipes are clean and free of obstructions, dirt and piping compound. When connecting the gas supply to the oven, it is important that adequate size piping be run to the point of connection at the oven with as few elbows or tees as possible. Refer to piping charts or consult local gas company for piping size.

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

All ovens are shipped with a factory preset pressure regulator. Natural gas pressure regulators are preset for 3.7" W.C. (Water Column). Propane gas pressure regulators are preset for 10" W.C. (Water Column). No further Water Column adjustment should be required. The pressure regulator is installed in the horizontal position. If the pressure regulator is to be installed in any other position, a field adjustment of the pressure regulator will be required.

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 oven 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 oven must be isolated from the gas supply system by closing its individual manual shutoff valve.

FLUE CONNECTIONS

From the termination of the oven flue vent to the filters of the hood venting system, a minimum clearance of 18" must be maintained.

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

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).

This oven is equipped with a flue deflector. An optional down draft diverter may be ordered. When the diverter is supplied, it may be connected to a Type "B" vent.

LEVELING

Be sure that oven is level. Place a carpenter's level or pan of water on the oven deck. Level oven front-to-back and side-to-side by turning the adjustable feet. If the oven is not installed on legs, the floor must be level at the installation position.

ELECTRICAL CONNECTIONS

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

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 GROUNDING THREE-PRONG RECEPTACLE. IF THE RECEPTACLE IS NOT THE PROPER GROUNDING TYPE, CONTACT AN ELECTRICIAN. DO NOT REMOVE THE GROUNDING PRONG FROM THIS PLUG.

Ovens equipped with the optional inspection window and interior light are supplied with a cord and plug.

MINIMUM BYPASS (BURNER FLAME) ADJUSTMENT (Fig. 3)

This adjustment must be made at the time the oven is installed. Be sure oven burner pilot flame is ignited. To adjust this flame:

1. With oven cold, turn dial counterclockwise slowly from "Low Stop," until bypass seat just snaps on.
2. Remove dial.
3. With a screwdriver, turn bypass flame adjuster screw counterclockwise to increase the bypass flame or clockwise to decrease the entire burner to a minimum stable flame.
4. Replace dial.

CAUTION: While making this adjustment, if the oven should become heated while the dial is set at a low range (below 350°F), the bypass flame will shut off completely. If this occurs, turn dial counterclockwise slowly until the bypass gas snaps on. Then check bypass adjustment as described above.

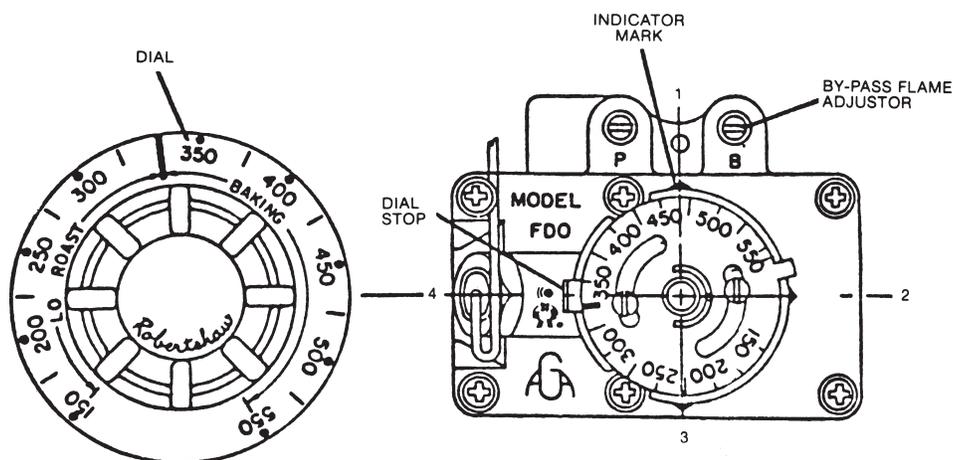


Fig. 3

OPERATION

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

CONTROLS (Fig. 4)

Burner Valve — when opened, allows gas to flow to the oven burner. To open valve, turn knob counterclockwise; to close valve, turn knob clockwise.

Ignition Button — used to reset the oven pilot. To operate, push button in and follow pilot lighting instructions in this manual.

Thermostat — used to regulate amount of heat needed to cook a product. Temperature ranges from 150°F (66°C) to 500°F (260°C). Turn knob counterclockwise to increase heat and clockwise to decrease heat.



Fig. 4

BEFORE FIRST USE

Clean oven deck and oven lining with warm water and detergent solution. Rinse thoroughly and wipe dry with a soft clean cloth.

Before using oven for the first time, it must be "burned in" to release any odors that might result from heating the new oven lining. Set thermostat to highest temperature and operate oven for one hour.

LIGHTING AND SHUTTING DOWN PILOT

1. Turn on main gas supply.
2. Turn burner valve ON and purge air from line. Turn burner valve OFF.
3. Wait 5 minutes, then turn burner valve ON and depress ignition button. Using a lit taper, ignite oven pilot (Fig. 5). Continue to hold button in for approximately 30 seconds, then release.
4. If pilot goes out, turn burner valve off and wait 5 minutes before relighting.
5. Repeat this procedure until pilot stays lit.
6. Set thermostat to desired temperature.

Lighting instructions also may be found on the oven control panel.

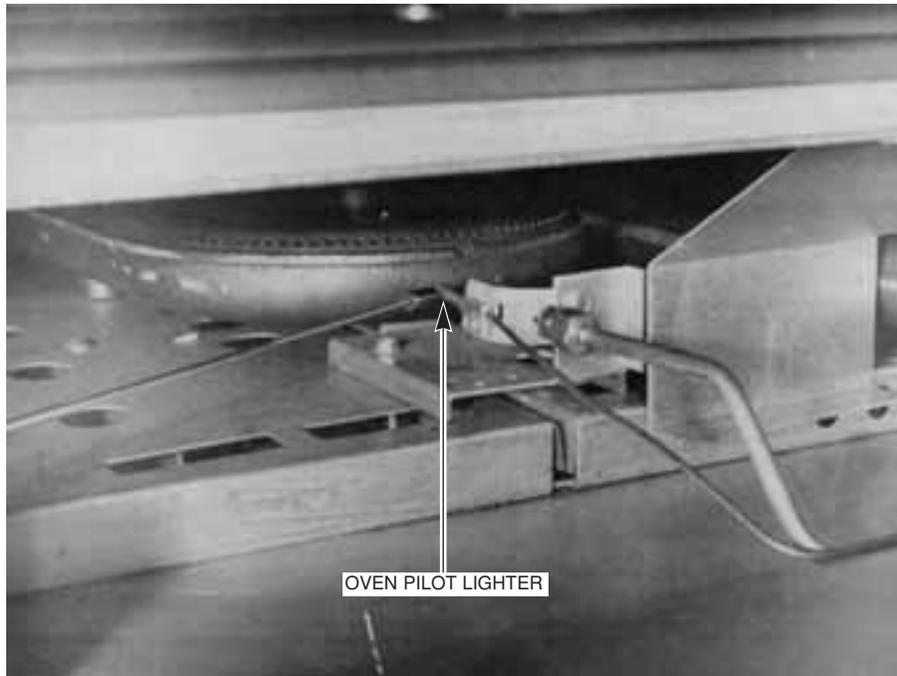


Fig. 5

Shutdown

1. Turn burner valve OFF.
2. Turn thermostat OFF.

Extended Shutdown

1. Turn burner valve OFF.
2. Turn thermostat OFF.
3. Turn main gas supply OFF.

PREHEATING

Set thermostat knob to desired temperature and allow oven to preheat for approximately 15 minutes before loading.

LOADING OVEN

1. When using 2- or 4-deck sections that have one control for two compartments, load both compartments simultaneously. If a quantity sufficient for only one compartment is to be baked, load only the compartment with the thermostat bulb. **DO NOT** stagger loading.
2. Always load each shelf evenly, spacing pans away from each other and side walls of oven.
3. Whenever possible, always load each oven section fully. Never add product to a section after goods already in oven have started to bake; unbalanced baking will result.
4. Roast ovens with center removable shelves are equipped with adjustable slides located in the side linings. When shelf is removed, close slides; when shelf is in position, open slides.

COOKING HINTS

Keep door opening during baking to a minimum for best product results.

The use of a meat thermometer is recommended for all roasting operations.

Multi-deck ovens with a single combustion chamber and thermostat must not be expected to have the same even heat distribution and flexibility that are characteristic of the single-deck sections.

PAN CAPACITIES

Model	18"x26" Bun Pans	12"x20" Steam Table Pans	10" Pie Pans	9½"x5" 1-Lb. Loaves	13"x10½" Cup Tins	No. 3 Bean Pots	5" Round Casseroles	20"x28" Roast Pans	19"x4" Pull- mans	25 Lb. Turkey
7016A1	4	8	24	84	18	40	96	4	—	—
7066A1	8	16	48	96	36	80	192	8	—	—
7018A1	2	4	12	24	9	20	48	2	14	—
7088A1	4	8	24	48	18	40	96	4	28	—
7888A1	6	12	36	72	27	60	144	6	42	—
7086A1	6	12	36	72	27	60	144	6	42	—
7019A1	*2	*4	*12	24	*9	20	48	2	—	6
7099A1	*4	*8	*24	48	*18	40	96	4	—	12
7999A1	*6	*12	*36	72	*27	60	144	6	—	18
7096A1	*6	*12	*36	72	*27	60	144	6	—	8
7098A1	*4	*8	—	48	*18	40	96	4	—	8
7988A1	*6	*12	—	72	*27	60	144	6	—	8
7998A1	*6	*12	—	72	*27	60	144	6	—	16

*Compartment capacity of 12¼" high roast section may be doubled when extra removable center shelf is used.

CLEANING

WARNING: TURN OVEN OFF AND UNPLUG THE ELECTRICAL CORD (IF APPLICABLE) BEFORE CLEANING.

Clean interior and exterior of oven daily with warm water and detergent solution. Rinse thoroughly and wipe dry with a soft clean cloth.

Oven Inspection Window (Optional)

The oven inspection window may be cleaned with an oven cleaner compound or with a cloth dampened with detergent solution. Rinse thoroughly and dry with a soft clean cloth. Do not use scouring powder on the window; it will scratch and fog the glass, and it is easy to build up an accumulation of excess scouring powder which is extremely difficult to remove.

Stainless Steel (Optional)

Clean stainless steel with soap or detergent and water solution. Rinse thoroughly with warm water and wipe dry with a soft clean cloth. Addition of a rinsing agent will also help prevent spotting.

Stubborn stains that resist soap and water usually can be removed with a paste of water and mild scouring powder. When applying these powders, be sure to rub in the direction of the polish lines on the steel to preserve the original finish.

Fingerprints on highly polished surfaces of stainless steel can be minimized by applying a cleaner that will leave a thin, oily or waxy film. Apply cleaner and remove excess with a soft dry cloth. After using, subsequent fingerprints will usually disappear when wiped lightly with a soft dry cloth or with a cloth containing a little of the cleaner. If the surface is especially soiled to start with, wash first with soap or detergent and water.

To remove burned on foods and grease, soak with hot soapy water first. Using stainless steel wool or a sponge, apply a paste of scouring powder and water. Rub in the direction of the polish lines. Do not use ordinary steel wool on stainless steel surfaces. These particles can eventually rust and cause unsightly spots and stains. Rinse thoroughly and wipe dry with a soft clean cloth.

In and around ovens where temperatures reach 500°F or more, straw-colored or slightly darkened areas may appear on stainless steel. 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. Heat tint can be removed by scouring vigorously with stainless steel wool and a paste made of a scouring powder and water. Again, remember to rub in the direction of the polish lines. Rinse thoroughly and wipe dry with a soft clean cloth.

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

MAINTENANCE

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

REPLACING OPTIONAL LAMPS

WARNING: TURN OVEN OFF AND UNPLUG ELECTRICAL CORD BEFORE REPLACING LAMPS.

Lamps are located in the top of the oven, centered at the back.

1. Remove (4) 10-24 sheet metal screws, remove glass, and unscrew (2) bulbs.
2. Install (2) new G.E. incandescent 25 watt, 120 volt bulbs.
3. Replace glass and reinstall screws.

VENT

When oven is off and cool, annually examine flue and clear any obstructions.

SERVICE

Before calling for service, check the following:

- Make sure the gas supply is turned on.
- Make sure the pilot is lit.

Service and Parts Information

To obtain service and parts information concerning your 7000 Series Bake/Roast Oven, contact the Vulcan-Hart Service Depot in your area (refer to listing supplied with the oven), or Vulcan-Hart Company Service Department at the address or phone number shown on the front cover of this manual.