
USE AND CARE MANUAL AND INSTALLATION INSTRUCTIONS

RLS 112, 312, 313, 335, 339, 340
341, 345, 346, 351, 352, 353, 354, 356,
357, 358, 640, ~~641~~ 661, 664, 666, 669,
679

RLS 113, 305, 306, 343, 664, 364, 365

RLS 258U

RLS 269, 379

RLS 342, 359, 368, 370, 371, 380, 395,
399

RLS 340U, 343U, 348U, 345U,
358U, 359U

RLS 666U

RLT/RMT 305, 306, 356

CONGRATULATIONS....

Your new all-modern range has been specially designed and built to give you many years of carefree cooking. You'll enjoy a new freedom in the kitchen with easier preparation of meals and a greater satisfaction in better cooking.

Be sure to read this Guide and the other material included with your range **CAREFULLY BEFORE USING YOUR RANGE**. By following a few simple directions you can make sure your fine new range will operate efficiently and accurately. For minimum utility and enjoyment, a little help on your part will be required. **BE SURE YOU KNOW HOW TO OPERATE YOUR RANGE!**

This manual consolidates information about our line of ranges, including free standing and eye-levels. Your particular model may have only part of the features described within this manual. Pertinent features not covered in this manual will be explained in other enclosed literature. Remember this book is intended as a guide to correct use and care of your new range and not as a cookbook or service manual.

PRIOR TO CALLING FOR SERVICE, PLEASE REFER TO THE SECTION IN THIS GUIDE ENTITLED "BEFORE YOU CALL FOR SERVICE."

FOR YOUR SAFETY

IF YOU SMELL GAS:

1. Open Windows
2. Don't touch electrical switches
3. Extinguish any open flames
4. Immediately call your gas supplier

FOR YOUR SAFETY

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

FOR YOUR SAFETY

Do not obstruct the flow of combustion and ventilation air.

WARNING: Improper installation adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

WARNING: 1. install or locate the product only in accordance with the provided installation instructions.

2. If not installed, operated and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness and which are known to cause cancer, birth defects or other reproductive harm.

For example, benzene is a chemical which is a part of the gas supplied to the cooking product. It is consumed in the flame during combustion. However, exposure to a small amount of benzene is possible if a gas leak occurs. Formaldehyde and soot are by-products of incomplete combustion. Properly adjusted burners with a bluish rather than yellow flame will minimize incomplete combustion.

WARNING

To reduce the risk of tipping of the appliance, the appliance must be secured by properly installed anti-tip device. To check if device is installed properly, look under the range with flashlight and verify that the anti-tip device is engaged.

NOTICE

The maximum gas supply pressure for these models must not exceed 14-inches W . C . P .

After the installation of this range has been completed the installer should leave this Use and Care Manual with the consumer who should retain it for future reference.

Be sure to read this Guide and the other material included with your range CAREFULLY BEFORE USING YOUR RANGE. By following a few simple directions you can make sure your new range will operate efficiently and accurately. For maximum utility and enjoyment, a little help on your part will be required. BE SURE YOU KNOW HOW TO OPERATE YOUR RANGE.

This manual consolidates information about our line of ranges, including free standing and eye-levels. Your particular model may have only part of the features described within this manual. Pertinent features not covered in this manual will be explained in other enclosed literature. Remember this book is intended as a guide to correct use and care of your new range and not as a cookbook or service manual.

The "Rating" plate containing the range model, serial number and code letter is located under the main top in the burner box area, or at the bottom of the front frame of the range. It may be observed by lifting the hinged top, or pulling out the broiler drawer. We suggest you record the information in the spaces provided on page 2.

OWNER'S REFERENCE

1. Model Number _____ Serial Number _____
 Color _____ Code _____

2. Dealer's Name _____
 Address _____ Phone _____

3. Date Purchased _____ Date installed _____

4. Installer's Name _____
 Address _____ Phone _____

5. Dealer Recommended Service Center:
 Name _____
 Address _____ Phone _____

The "Rating" plate containing the range model and serial numbers is located under the main top in the burner box area, or at the bottom of the front frame of the range. It may be observed by lifting the hinged top, or pulling out the broiler drawer. We suggest you record the information in the spaces provided above so they will be handy if for any reason you would require service.



This symbol on the nameplate means the product has been design certified by the Canadian Gas Association Laboratories.



This symbol on the nameplate means the product has been design certified by the American Gas Association Laboratories.

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INSTALLATION INSTRUCTIONS

NOTE TO INSTALLER: Leave these instructions with the appliance.

NOTE TO CONSUMER: Retain these instructions for future reference.

The installation, adjustment, and service of this range must be performed by a qualified gas installer or serviceman to insure proper operation and to avoid the possibility of injury to users or damage to the appliance.

1. YOUR RANGE WAS CAREFULLY INSPECTED AT THE FACTORY, BUT FINAL ADJUSTMENTS AND CHECKING FOR POSSIBLE LEAKS INCLUDING EXTERNAL CONNECTIONS MUST BE MADE AT THE TIME OF INSTALLATION.
2. The Range must be installed in compliance with local codes and in the absence of local codes, the installation must conform with THE NATIONAL FUEL GAS CODE, ANSI Z223.1-1984 and ANSI Z223.1a-1987 in the U.S.A. or the CAN 1-B 149. 1 & 2 installation codes in Canada.
3. THE APPLIANCE MUST BE ELECTRICALLY GROUNDED IN COMPLIANCE WITH LOCAL CODES AND IN THE ABSENCE OF LOCAL CODES WITH THE NATIONAL ELECTRICAL CODE ANSI/NFPA XI-LATEST EDITION in the U.S.A., or the Canadian Electrical Code, Part 1, CSA Standard C22. 1 in Canada. If this range has electrical components, it is equipped with a three prong grounding plug for your protection against shock hazard and should be plugged directly into a properly grounded receptacle, Do not cut or remove the grounding prong from this plug.
4. Note: If you have purchased a Heater Type Range refer to The installation and Adjustment of Heater and Range Installation and Instruction Manual.
5. Ranges that incorporate room heaters are not to be installed in mobile homes.
6. Ranges that do not contain room heaters and are to be installed in mobile homes must be installed in accordance with The Manufactured Home Construction and Safety, Standard Title 24 CFR, Part 3280, or when such standard is not applicable with The Standard for Manufactured Home installations 1982 (Manufactured Home Sites, Communities and Set-Ups) ANSI A225, I-1984 or with local codes, if range is to be installed in a mobile home, see illustration "A" on page 4 of the Owner's Guide Manual. illustration "A" shows how to install the range in the mobile home by bolting the range base to the floor through the holes provided for the leg levelers. Ranges are approved in Canada for installation in Recreational- vehicles. They must be installed in compliance with C.S.A. Standards, Z240.4.2 and Z240.6.2.
7. Connect range to $\frac{1}{2}$ " or $\frac{3}{4}$ " pipe, install manual shutoff valve in the gas lines, external to the unit and in an accessible location. Be sure you know where the gas shutoff valve is located so you know how and where to turn off gas to range.

The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of $\frac{1}{2}$ psig. (3.5 KPa)

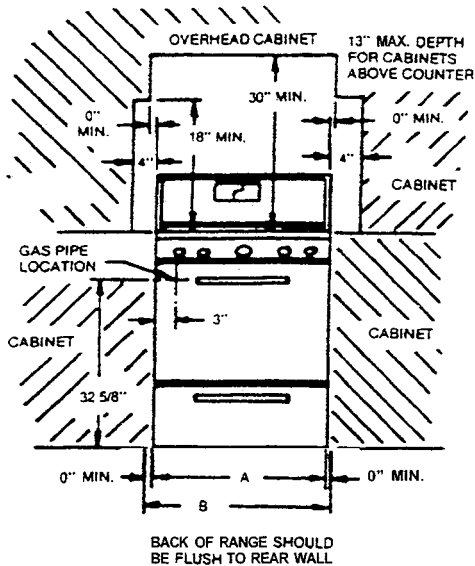
The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than $\frac{1}{2}$ psig. (3.5 KPa)

Pipe joint compound must be resistant to the effect of liquified petroleum gases.
8. The maximum gas supply inlet pressure must not exceed 14 inches water column. The gas supply pressure for checking the regulator should be at least 1 inch (3, 4 KPa) water column above the manifold pressure shown on the rating plate.
9. Any openings in the wall behind the range and in the floor under the range must be sealed.
10. Minimum horizontal distance from side of range to adjacent vertical combustible wall extending above and below the cooking top must be in accordance with rating plate specifications, and as shown on page 4.

Maximum depth of cabinets installed above cook top is 13". See Page 4.
11. Directions for the proper assembly of field-installed parts and accessories, such as backguards, are included with the accessory and/or covered within this manual.
12. Wiring diagrams when applicable will be located on the back of the appliance, and inserted within the pages of this manual.
13. Remove screw (C) holding burner plate (G) to support channel for shipping at each burner. See Fig. 2 Page 12.
14. Most ranges are equipped with universal (co-axial) valves Pre-Set for natural gas. For L.P. conversion see Pages 11 and 12.
15. For directions in obtaining replacement parts see instructions on the back cover of this manual.
16. Keep the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
17. Model With Sealed Top Burner System: On this model, the main top of the range does not lift up. To connect to gas supply, first remove burner caps by pulling straight upward. This will expose (2) screws at each burner. Remove the (8) screws and lift main top off the range — reference "Lift-Off" Top on page 19. Now you can see the burner box area. Connect gas supply line to pressure regulator located at left rear area of burner box as you face the front of the range. See numbers 1 through 16 above. While main top is off, you may also want to connect backguard electrical wiring plug (if so equipped) to range wiring receptacle. See Page 4.

Replace main top in reverse order from the above instructions. Tightly replace the (8) screws holding the burner bodies. Be sure to push burner caps down firmly.

MINIMUM CLEARANCE DIMENSIONS



FREESTANDING GAS RANGE

RANGE	A	B
20	20	20 1/4
24	24	24 1/4
30	30	30 1/4
36	36	36 1/4

"A" DIM = WIDTH OF UNIT
 "B" DIM = SUGGESTED OPENING

GAS PIPE LOCATION TYPICAL ALL RANGES

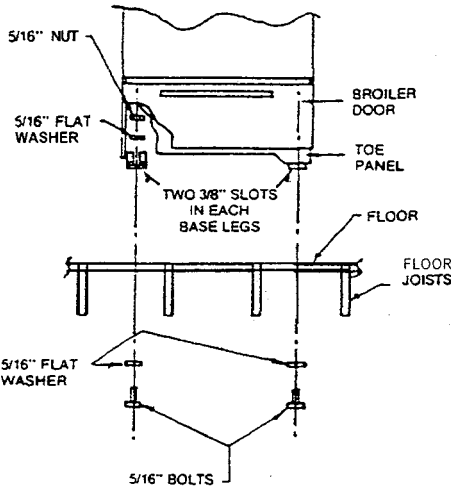
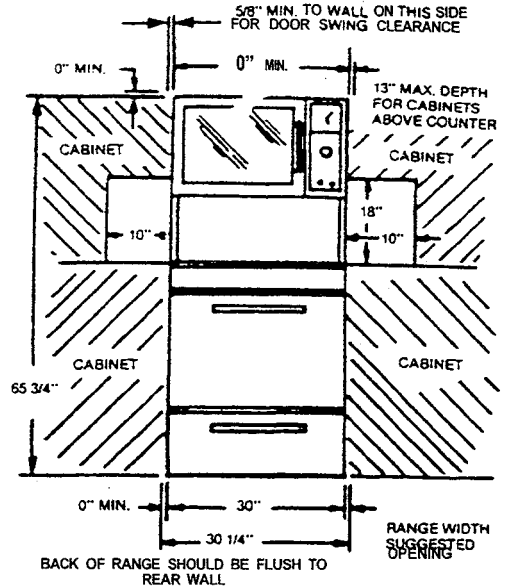
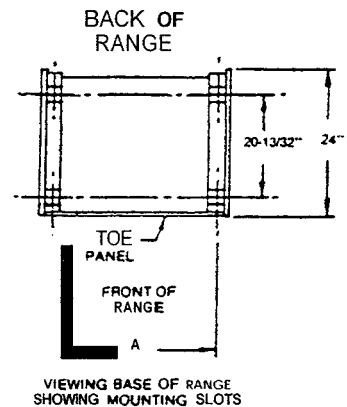


ILLUSTRATION A

UNIT SIZE	DIM. A
20"	20 3/4"
24"	26 3/4"
30"	26 3/4"
36"	32 3/4"



BACKGUARD INSTALLATION INSTRUCTIONS

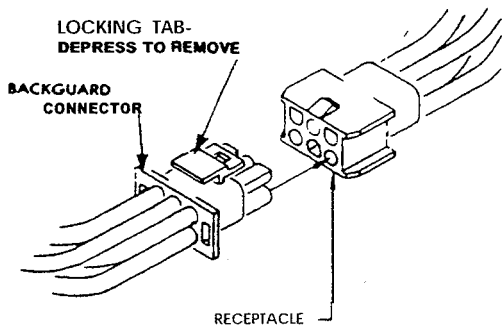


FIG. B

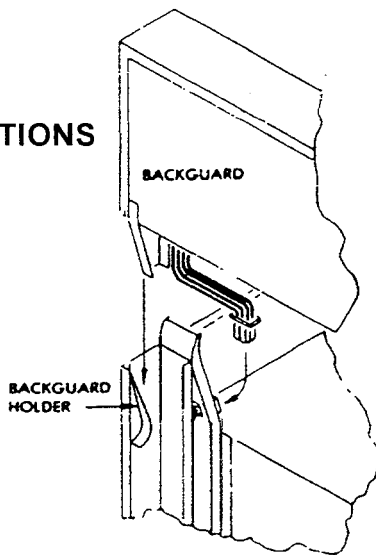
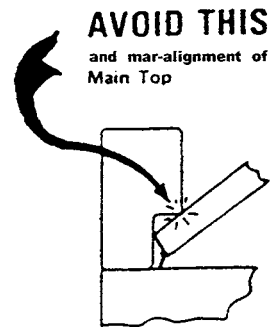


FIG. C



IF RAISED TOO HIGH, THE COOKTOP WILL HIT THE BACKGUARD FRAME, RESULTING IN CHIPPED ENAMEL.

- All mechanical connections MUST be made before making any electrical connections.
- Gas Ranges:
 - Insert backguard into backguard holders. Press backguard down until left and right backguard holder is completely engaged. (Fig. C)
 - (For gas ranges equipped with electric components) Raise lift top, insert backguard connector into receptacle located in right rear of burner box. (Fig. B & C)
- IMPORTANT:** Installer- Remove (4) sheet metal screws used in shipping to hold top burners in place upon making installation of this range. This note does not apply to sealed top burner models.

INSTALLATION OF ANTI-TIP BRACKETS

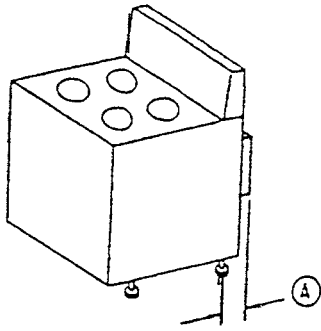


Fig. A

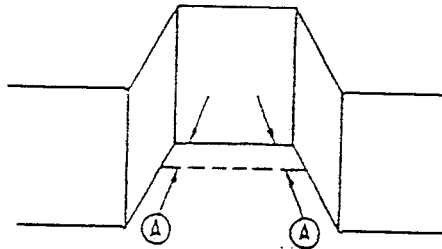


Fig. B

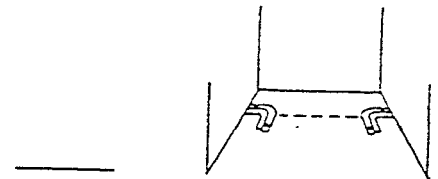


Fig. C

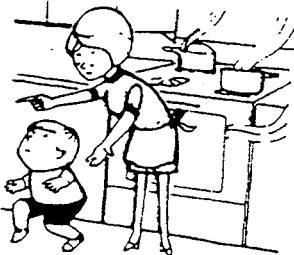
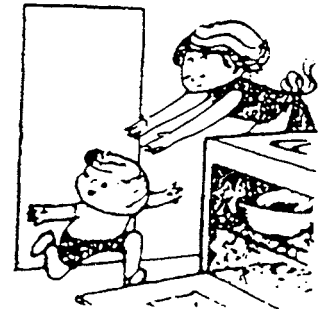
To install anti-tip bracket, carefully follow these instructions.

1. Prepare counter cutout per range installation instructions.
2. Measure the distance from the range leveling leg shaft to the rear most projection of the range (see Fig. A). This will be referred to as distance (A).
3. From the right rear edge of the prepared cutout, measure the distance (A) and mark a point. Repeat this procedure for the left side, then draw a straight line between these points (see Fig. B).
4. If installing unit against cabinet(s): Place the bracket with the inside edge against the straight line and the end against one of the cabinet's side (see Fig. C for possible locations). Mark (2) hole locations.
If installing unit without any cabinets: Position unit as it will be installed. Draw a line on the floor from front to back along one side of the range. Place the bracket with the inside edge against the straight line of instruction 3 and the end flush with the line you have just drawn. Mark (2) holes. The bracket can be placed on either side of the opening.
5. If mounting into wood flooring, drill (2) 3/32" holes as marked. If mounting into concrete, using a masonry drill bit, drill (2) 3/16" holes and insert plastic anchors. Position bracket and mount using supplied screws.
6. Turn the leveling legs out approximately 1/4". The range may now be pushed into position. Remove the lower drawer or panel and check that the leg has engaged the mounting bracket. If not, the bracket must be relocated to ensure engagement of the leveling leg into the bracket. If the range is moved from its original mounting location, the bracket must be removed and used for the new mounting location.

GENERAL SAFETY PRECAUTIONS

Most every item involved in our daily life can be hazardous if used improperly and **without** regard for sensible precautions. Following is a list of GENERAL SAFETY PRECAUTIONS which should be carefully read and referred to often as a routine SAFETY reminder. Consumer Product Safety is dependent on the user as well as the manufacturer! PLEASE READ AND OBSERVE THEM!

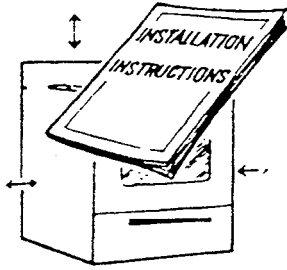
- A. **LOCATION:** If possible, the range should be located in the kitchen to avoid the main "traffic path" through the kitchen or where an open door might block a **passage way or create an** awkward working situation. If possible, it should be so located where cabinet working space is available on either side. Drafty locations **should** be avoided to **prevent pilot** outage and poor air circulation.



- B. **TEMPERATURES:** To cook, **you must have heat**. Some parts of the range are therefore going to get warm or even hot. Consider this in choosing a range location. Do not leave **children** alone or unattended near the range when it is in use. Let burner grids and other surfaces **cool before** touching them or leaving **them** where children **can** reach them.



- C. **DO NOT USE RANGE AS A HEATER:** NEVER use the range as a kitchen heater unless it is so designed. Prolonged use of **the range** without adequate ventilation can be hazardous. Oven controls and top burners are not designed for home heating and component failures that may result from such abuse are definitely not covered by **the** warranty.

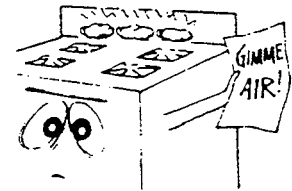


D. **INSTALLATION:** Installation, adjustment and service of this range must be performed only by a qualified gas range installer or serviceman. This is necessary to insure proper operation of the range and to avoid the possibility of damage to the range or injury to the users.

(1) **CLEARANCES:** Observe all the instructions on the rating plate for minimum clearances to any adjacent vertical combustible surfaces. "The clearances are also shown on page 4."

(2) **GROUNDING:** Check to be sure the range is properly grounded to avoid shock hazard.

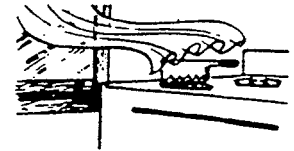
(3) **VENTING:** NEVER block the vents (air openings) of the range. They provide the air inlet and outlet which is necessary for the range to operate properly with correct combustion. The oven vent is located at the rear of the main top and horizontally at the center of the oven.



(4) **TYPE OF GAS:** Natural and LP (tank or bottle). Ranges which are factory assembled for one gas cannot be used on the other without some adjustments. Be sure your range is correctly adjusted by a qualified serviceman or installer for the type of gas on which it is to be used.

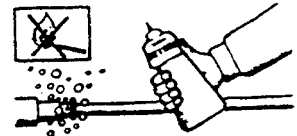
(5) **FLOOR COVERING:** NEVER install a range over inferior kitchen carpeting, vinyl tile or linoleum. These should be able to withstand at least 175 degrees without shrinking, warping, or discoloring.

E. **CURTAINS:** If your range is near a window, use an appropriate window treatment. Do not use long curtains which could blow over the top burners and create a fire hazard.

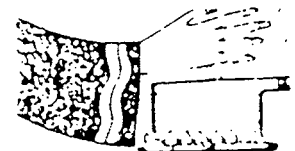


F. **WHEN YOU SMELL GAS:** If this is a new range installation, your installer has not done a proper job of checking for leaks. Connections can loosen in transportation. If a pilot goes out, you will detect a faint odor as your signal to relight the pilot. When relighting any pilot, make sure the burner controls are in the "OFF POSITION" and follow specific instructions described later in this manual.

If the range connections are not perfectly tight, you can have a small leak and therefore a faint gas smell. Finding a gas leak is usually not a "do it yourself" procedure. Some leaks can only be found with the controls in the "ON" position exposing the user to serious burns. Never use a match or flame to locate a leak. If you have already made sure the pilots are lit, turn off the gas to the range and call a qualified serviceman.



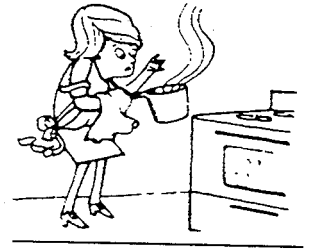
G. **CHILDREN** must be taught that the range and pans on it can be hot and that they must not play with the range controls. Storage of treats or items attractive to children should not be stored in cabinets above the range. Children must be taught NOT to use the oven door as a stepping stool to climb up onto the range to reach the cabinets above.



NOTE: Do not operate surface burners without utensils in place.

H. **CLOTHING:** Long flowing sleeves or loose clothing have no place in the kitchen. While attempting to obtain an item in a cabinet over a range or simply reaching across the top of a range to remove a pan could result in a sleeve catching on a pan handle and spilling the contents, also there is the possibility of the clothing catching on fire, resulting in a serious injury.

- I. **HOT POT HOLDERS:** Buy good, sturdy hot pot holders and use them. Dish towels or other substitutes can be the cause of a bad burn when they are too thin or become entangled. Keep pot holders dry. Wet pot holders create steam and cause burns. Avoid having pot holders near open flames **when** lifting utensils.

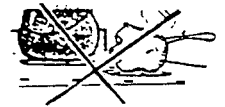


J. **UTENSILS:**

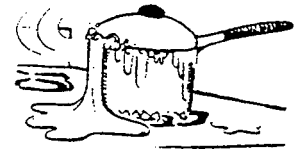
1. Avoid pans that are unstable and easily tipped. In choosing pans, **look** for easily grasped handles that will stay cool. Pans that are too **heavy** when filled can also be a hazard. If pan handles twist and cannot be tightened discard the pan. Of course you will use utensils only as intended. This is particularly important for glass cookware. Some **glass cookware** should be used only **in** the oven — some pans are classified as flame-ware and may be used on top of the range. Avoid the use of very small pans or pay special attention to their placement on the burner grate.

When moving utensils we suggest that they be lifted. Sliding may dislodge the grate.

2. Select utensils for the size of the burner being sure the selected utensil is large enough to properly contain food and avoid boilovers or spillovers. This will both save cleaning and prevent hazardous accumulations of food, since heavy spattering or spillovers left on the range can ignite. Pan size must allow for the volume of food to be added and for the fat to bubble **up**. A deep kettle is best for this. Foods high in water content such as potatoes, bubble more than those low in water content. Never leave a deep fat frying operation unattended.

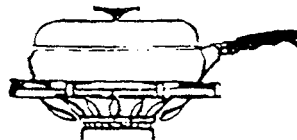


3. **HANDLES:** Always turn pan handles to the side or back of the range — not out in the room where they are easily hit, or where they will be over an adjacent burner.



4. **FLAME SIZE:** Top burner flame size should be adjusted so it does not extend beyond the edge of the cooking utensil. Excessive flame is hazardous as noted in **item H, Page 6**.

Flame should never extend beyond bottom of pan.



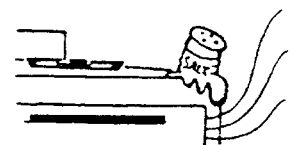
Turn handles to side or back — never over an adjacent burner.

5. **HOT UTENSILS:** Let hot pans cool in a safe place, out of reach of young children. Never set hot pans **on** a **combustible** surface.

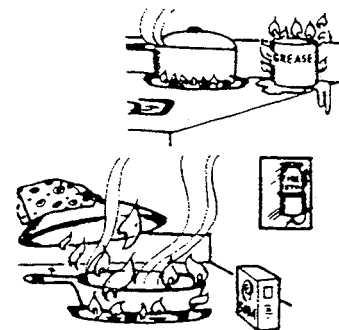
6. **USE OF HIGH FLAME:** When using a high flame, never leave any pans unattended **on** this heat setting for long periods. Hot fat is particularly hazardous since it can **become** hot enough to ignite.

K. **ALUMINUM FOIL:** Aluminum foil, when used improperly, is a cause of many range fires. Use it only as instructed, particularly in **the** oven. **IMPORTANT:** See **the pages on oven information** in this booklet for instructions on **correct use**.

L. **PLASTICS:** All plastics are vulnerable to heat, although some will withstand higher temperatures than others. **Keep all** plastics away from parts of the range which **may** become slightly more than warm when the range is in operation.

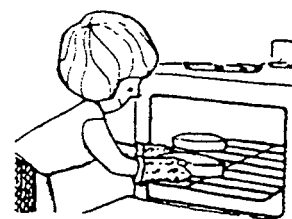


M. **GREASE:** Grease is flammable and should be handled carefully. Avoid letting grease deposits collect around the range in vent fans. Don't leave cans of drippings set around the range, refrigerate or dispose of them promptly. Let quantities of hot fat (a pan of deep fat for example) cool before attempting to move or handle it. Grease fires can often be extinguished by quickly putting on the pan lid or by covering with Baking Soda. **DO NOT ATTEMPT TO EXTINGUISH WITH WATER** because this will spread the fire.



N. **BROILER PAN:** Always remove the broiler pan from the compartment as soon as you finish broiling. It makes the pan much easier to wash and then there is no chance that the pan and drippings will be forgotten. Grease left in the pan can catch fire if the oven is used without removing the grease from the broiler pan. Remember too, that if meat is too close to the flame, the fat may ignite.

O. **OVEN USE:** Do not heat an unopened glass or metal container of food in the oven. Build up of pressure may cause the container to burst and cause serious personal harm and/or damage to the range. Always pull the oven rack out rather than reach into the hot oven to add or remove food. **Be sure to put racks back into the oven correctly after cleaning.** They are designed to lock and not tilt when properly inserted in the rack supports. The user is also warned of the potential hazards associated with using the oven for storage space.



P. **EYE-LEVEL OVEN USE:** Do not use eye-level ovens for items that are heavy, awkward to handle and/or which contain considerable amounts of hot fat. There can be a hazard in removing food (like a heavy roast with drippings) from a high oven.

Q. **WHEN REPLACING OVEN LIGHT BULBS(1)** Wait until oven and bulb are cool. (2) Always handle bulb with a dry (never a wet) cloth to protect hands. (3) If light bulb should break, **DISCONNECT POWER TO RANGE** by unplugging from outlet or by removing fuse or throwing circuit breaker. Wad a heavy dry cloth or pad into a ball and by applying pressure and turning, the shell can usually be unscrewed easily.



R. **MAINTENANCE:** Your range must be kept clean and free of accumulations of grease or spillovers which may ignite.

S. **AEROSOL DISPENSERS:** Avoid their use near a range as they may contain contaminants which may cause rust and corrosion. Some hair sprays inadvertently used around the range while in operation can be explosive.

T. Keep area around range clear from combustible materials, gasoline and other flammable vapors and liquids.

U. **OVEN:** Do not use your oven as a storage area. Flammable objects such as paper boxes may be ignited, canned foods and sealed containers can build up pressure and **explode** if subjected to enough heat.

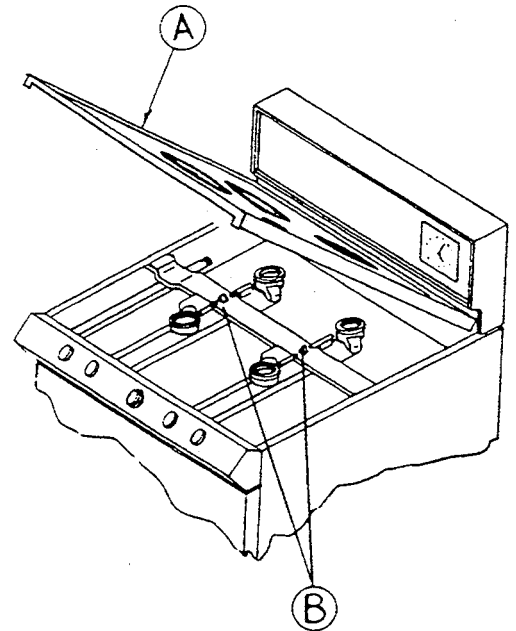
V. **BROILER PAN AND GRILL (CAUTION):** To eliminate the possibility of grease fires it is important to place the broiler grill in the broiler pan correctly. See the illustration on page 22 under Broiling in this manual.

W. GRIDDLE: Caution: If your range is equipped with a griddle located in the center of the cooktop: "TOP COVER MUST BE OPEN WHEN MAIN BURNER IS IN OPERATION. Failure to remove top cover may result in damage to the griddle and top cover.

LIGHTING INSTRUCTIONS

TOP BURNER LIGHTING:

Your range is equipped with either a standing pilot light that must be match lit initially or a spark ignition system that is electrically operated. If your range is equipped with a standing pilot you must first raise or remove the main top (A). See Page 18. The pilot (B) must be lit with a match. See Page 13 for Pilot Adjustment. Lower the top and from this time on, you need only to push in and turn the burner knob and the burner will light. **CAUTION:** Be sure the control knobs are in the "OFF" position when lighting pilots.

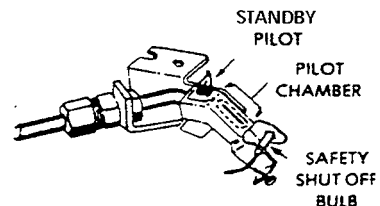


If your range is equipped with an electric ignition system, you need only to push in and turn the knob to the "Light" position and the burner will light. At this time you will hear a distinct "sparking" noise, when the burner is lit move the knob to the desired burner setting "off the light position", and the sparking noise will stop. The sealed top burner models have this same ignition system.

All concealed burners such as the Oven, Broiler or Kitchen Heater have automatic ignition under the control of a safety system. Should the pilot or igniter fail for any reason, the Main Burner gas will not be present until the pilot is re-lighted or the cause corrected.

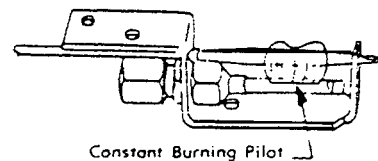
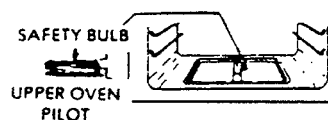
OVEN PILOTS FOR FREE-STANDING AND LOWER OVEN PILOT ON EYE-LEVEL RANGES

Make sure the oven thermostat is "OFF". Remove the broiler carriage. Hold a lighted match over the opening in the top of the pilot, located at the rear of the oven burner. When the constant pilot is burning steadily, check burner lighting. To do this, turn on the thermostat. The pilot flame will increase in size going down a chute and impinging on the capillary bulb. This pilot is also used on the lower oven of Eye-level Double Oven Models.



It may take up to 30 seconds for the oven burner to light after the thermostat has been turned on. This is normal and is the time required for the oven safety valve to function. Gas does not flow to the burner during this delay period. The beginning of gas flow will be indicated by a slight hissing sound and oven burner ignition will occur almost immediately or within four seconds.

On models with eye level ovens the high oven pilot is reached by removing the raised oven bottom and lighting the pilot at the side of the burner.



NOTE: If you have purchased a range having an electric ignition system the oven burner operation will function in one of the two following manners.

(1) **EQUIPPED WITH SPARK IGNITION:** To turn your oven on, depress and turn the control knob counter clockwise to the desired temperature. A distinct "sparking" noise will be heard at all burners including the top burners. When the oven pilot ignites the sparking will stop automatically and the oven burner will light in approximately 30-40 seconds.

(2) EQUIPPED WITH GLOWBAR IGNITION; To turn your oven on, depress and turn the control knob counter clockwise to the desired temperature. The igniter begins to heat up. When the igniter reaches ignition temperature, the valve will open allowing gas to flow to the burner, and the burner will light. As long as the oven requires heat, the igniter will continue to glow. When the oven reaches the desired temperature the igniter will shut-off. After approximately 30 seconds, the automatic valve will discontinue gas flow to the burner and the burner flame will extinguish. The oven will cool, causing the thermostat to activate. The entire process will be repeated. See Illustration "I".

(3) Eye-level or Double Oven Ranges have a spark ignition system the same as the Free Standing Ranges on the top burners and the lower oven burner. The Eye-level Oven is equipped with a glow bar igniter. When the upper thermostat is turned to the desired setting, the igniter is energized and the burner is ignited. The glow bar igniter will make no noise as found with the spark igniter. After the upper oven thermostat has been turned on, there will be a short delay before the oven burner will light.

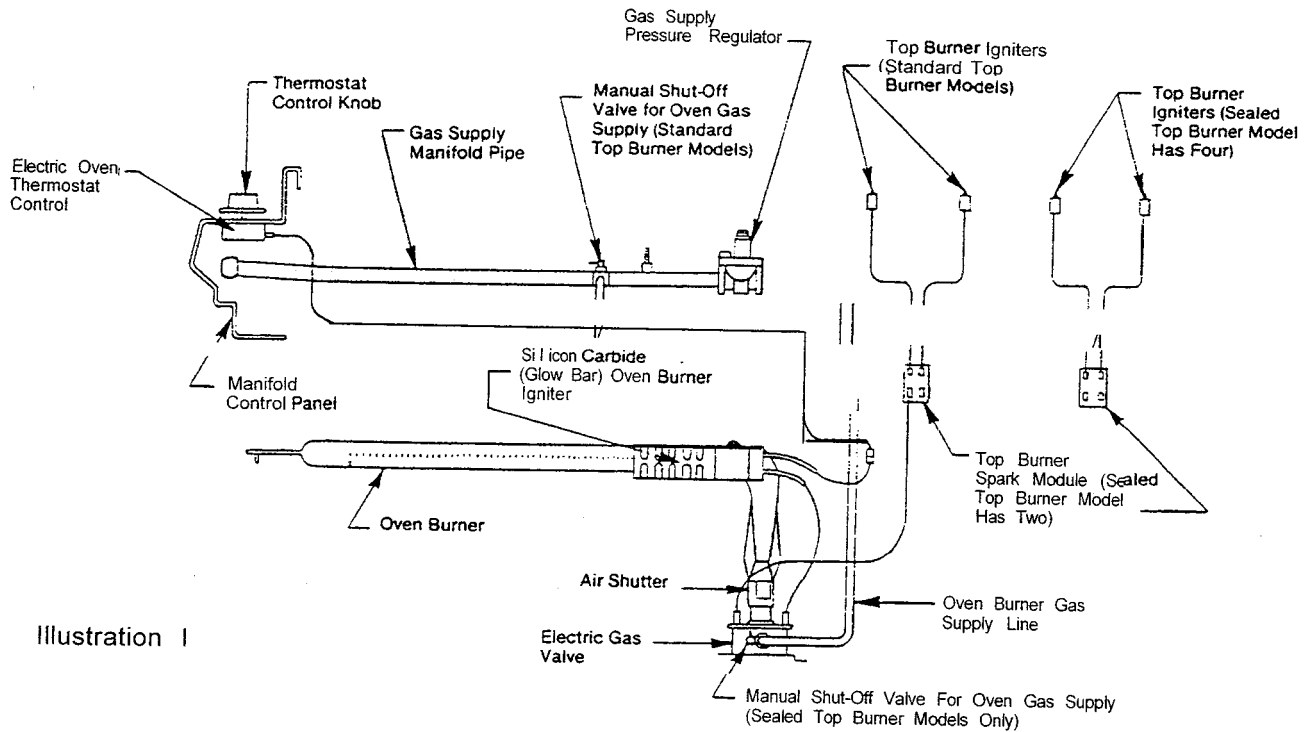


Illustration I

TO OPERATE YOUR RANGE DURING AN ELECTRICAL POWER FAILURE

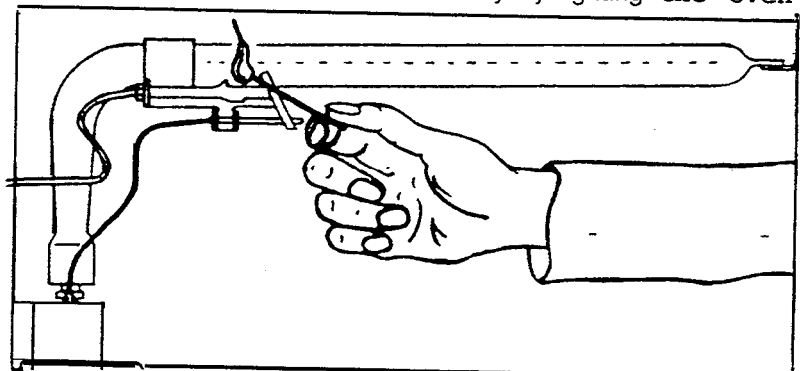
TOP BURNERS Spark or Glowbar Ignition

Hold a lighted match to the desired burner head and turn the corresponding control knob to the "Lite" position. After the burner lights adjust flame size as required.

OVEN BURNER Spark Ignition (Only)

The lower oven in both Free Standing and Eye-Level Ranges can be operated safely by lighting the oven burner pilot in the following manner.

- (1) Remove the broiler carriage.
- (2) Turn the thermostat past the 140° mark.
- (3) Hold a lighted match at the top forward section of the pilot (See diagram). When the pilot lights, the oven burner will then light within the next 30-40 seconds, therefore, you must quickly remove your hand from the broiler compartment.
- (4) Replace the broiler carriage.



NOTE: The oven of any range equipped with a glowbar igniter will not operate during a power failure.

GENERAL INSTRUCTIONS

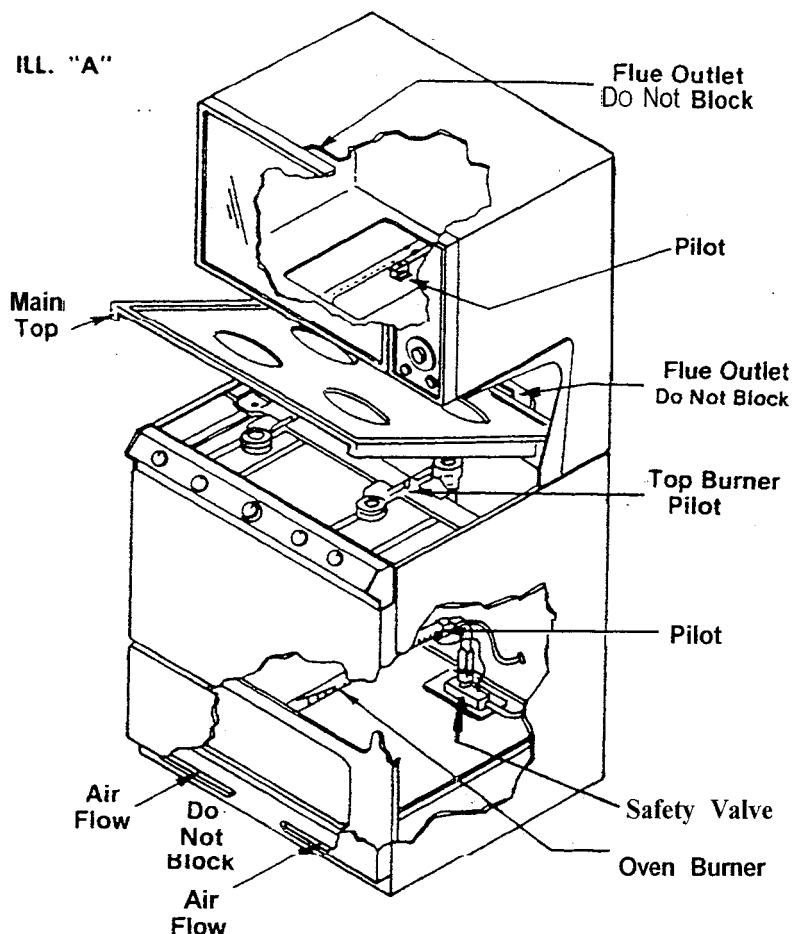
1. It is necessary never to allow anything to block off the air inlet at the base of the range nor should the flue outlet be covered. If either of these conditions exist, the range will not perform as intended.
2. TOP BURNER VALVES TYPES — ALL VALVE KNOBS ARE PUSHED IN TO TURN ON.

The following valve types will be encountered depending on the model:

- (A) One quarter *turn* (90 degrees) from off to full on. From full position the flame will reduce to the input needed as you turn back towards Off.
- (B) Hi-Low 180 degrees valves. One quarter turn (90 degrees) from OFF to the full ON position. A detent will be felt at this position. As you continue to turn counter clockwise to the Low or 180 degree position, the flame will gradually reduce to the lowest setting.

In this low position the flame can be adjusted to the exact minimum desired setting for repetitive holding heats by means of a simmer setting screw in the center of the valve stem.

To adjust, remove the knob while valve is in this Low position. While holding the valve stem so it does not turn, insert a small flat blade screwdriver into the stem and turn in either direction until the flame is the height desired. Avoid turning so low the flame is not sustained. This adjustment will not affect the flame height at the Hi position.



3. If the need should arise, such as a burner that will not light, it will be possible to view the pilots in the following manner.
 - (A) On all ranges you need only to lift the main top to view the top burner pilots. See Illustration "A".
 - (B) Lower oven burners and pilots may be viewed by simply opening the broiler door and viewing into the broiler compartment. The burner is above the broiler opening and the pilots will be mounted at the back of the burner on either the right or left hand side.
 - (C) When viewing the oven burner and pilot in the upper oven of the Eye-level Range you must first remove the oven bottom. This will expose both the oven burner and the pilot.

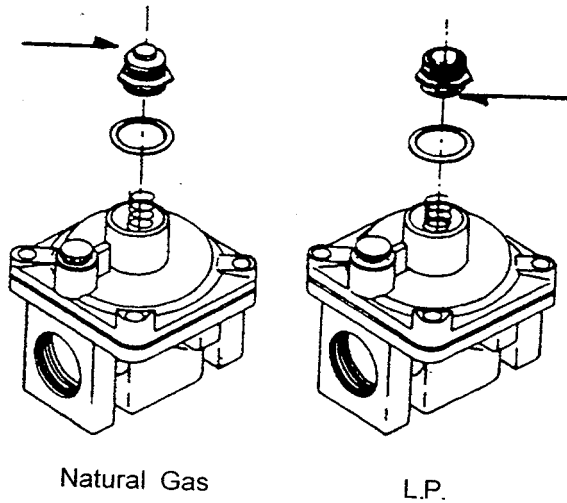
L.P. CONVERSION PROCEDURES

All ranges are normally shipped set for use with natural gas. The conversion from natural gas to L.P. should be made by your L.P. dealer or a qualified installer in the following manner.

1. **PRESSURE REGULATOR:**

This range is equipped with a convertible pressure regulator. To convert, follow the illustration below.

FIGURE 1

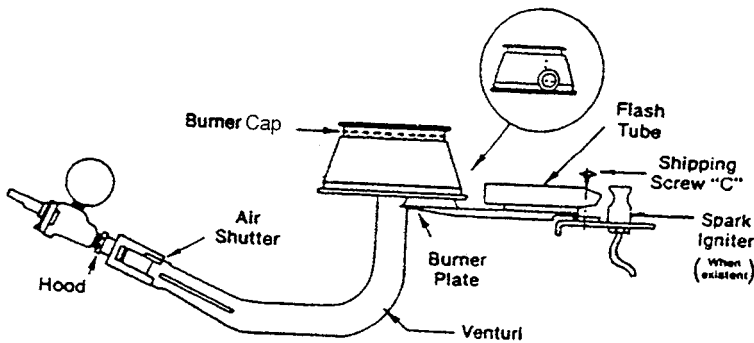


1. Remove the cap from the pressure regulator.
2. Invert and reinstall spring guide as shown in Fig. 1.
3. Replace the cap.
4. Oven thermostat: Turn the thermostat selector to the L.P. gas setting. To do this remove the oven thermostat knob by pulling it straight off the thermostat shaft. After the knob has been removed the gas selector will be exposed. Rotate it to the L.P. setting and replace the knob. **NOTE:** The oven thermostat on glowbar oven ignition systems does not need to be adjusted for L.P.

2. **STANDARD TOP BURNERS:**

To convert to L.P. see Figures 2 & 3.

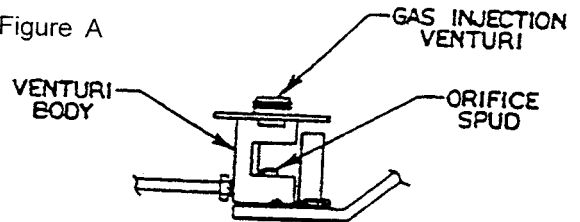
FIGURE 2



1. Turn all the valve hoods down until snug against the pin. Same as in Fig. 3.

SEALED TOP BURNER SYSTEMS:

Figure A



1. Remove main top as instructed in number 17 on page 3. Remove the orifice spuds on each venturi body, shown in figure "A". This is done by inserting a 5/16" nut driver into gas injection venturi and unscrewing orifice spud. Retain the natural gas orifice spuds with range for later use.
2. Locate the L.P. orifice spuds packed with range. They should be attached with a wire to the manifold pipe in the area in front of the pressure regulator. Insert L.P. orifice spuds into each venturi body and screw down tight.
3. Replace main top by following instruction 17 on page 3.

3. **OVEN BURNER:**

To convert to L.P. see Figure 3.

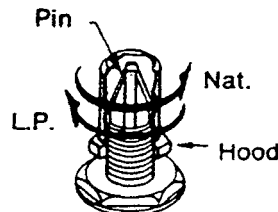


FIGURE 3

1. Turn the hood on the oven burner safety valve down snug against the pin. (Do not over tighten.)

4. **OVEN THERMOSTAT:**

Turn the thermostat selector to the L.P. gas setting. Note: The oven thermostat on glowbar oven ignition systems does not need to be adjusted for L.P.

After the above conversion has been completed, turn on the gas and adjust burner air shutters for proper flame. See pages 13 and 14.

TOP BURNER AIR SHUTTER ADJUSTMENT

The air shutter adjustment for each of the top burners and oven burner is located at the open end of the valve tube and rests on the hood of the valve. (See Fig. 2, Page 12). NOTE: Top burner air shutter adjustment is possible on sealed top burner models.

Should the air shutter need adjusting, rotate the air shutter to allow more or less air into the burner tube needed.

If the air intake is properly adjusted, the flame will be steady, relatively quiet and have approximately sharp blue cone. (Usually about center of air shutter adjustment). (See Fig. 4).

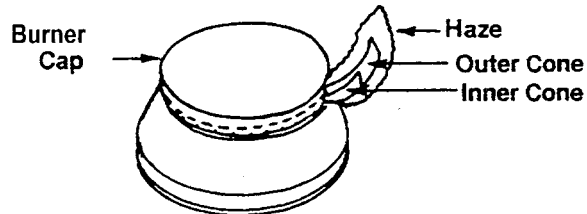


FIGURE 4

FIGURE 4

The small inner cone should have a very distinct blue flame $\frac{1}{4}$ " to $\frac{1}{2}$ " long.

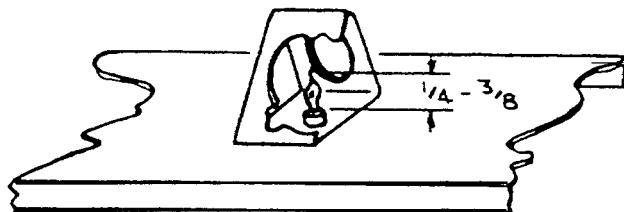
The outer cone is not as distinct as the inner cone.

If the air shutter is adjusted so that too much air flows into the burner, the flame will appear unsteady possibly not burning all the way around and will be noisy (like a blow torch).

If the air flow to the burner is insufficient, there will be no sharp blue cones in the flame, and the flame also burn with yellow tips and cause soot to accumulate on utensils used over the burner. To remedy adjust air shutter to allow more air to flow into the burner.

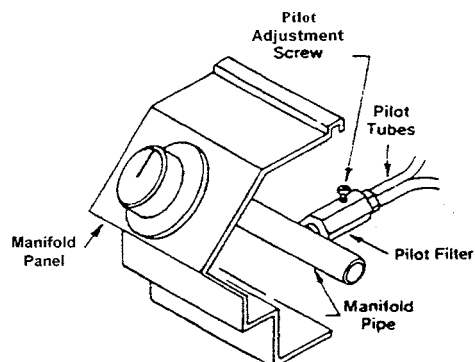
TOP BURNER PILOT ADJUSTMENT:

TOP BURNER PILOT



ADJUST PILOT FLAME TO $\frac{1}{4}$ " to $\frac{3}{8}$ " TO TIP OF FLAME

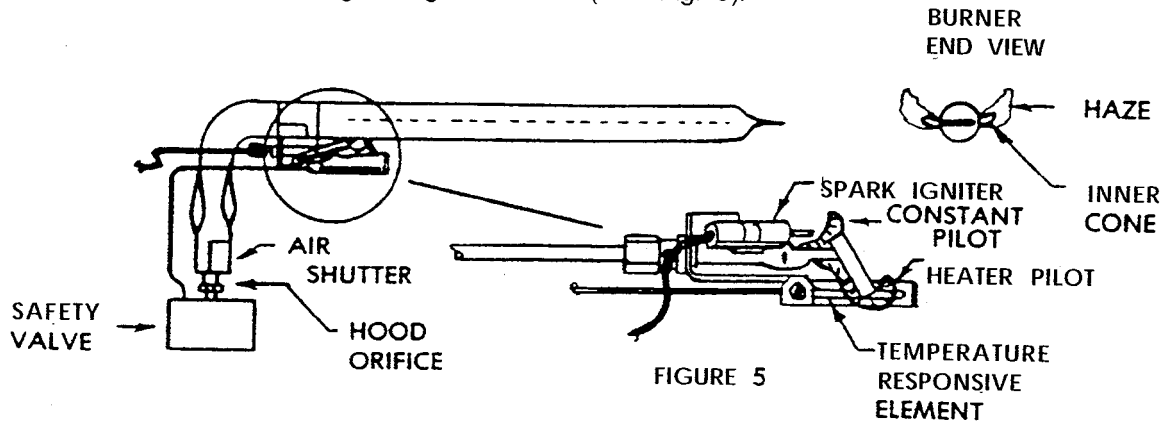
Top pilot adjustment can be made by turning the adjusting screw located on the pilot filter.



OVEN BURNER AIR SHUTTER ADJUSTMENTS

The oven burner flame should be a **clean blue with distinct inner cones** $\frac{1}{4}$ to $\frac{1}{2}$ inch long. A soft **lazy** flame with indistinct cones means over gassed or not enough air. A noisy blowing flame means too much air.

If adjustments are necessary, you must first loosen the screw located at the top of the air shutter, then rotate the air shutter to the correct setting. Retighten screw (See Fig. 5).



RANGE THERMOSTAT

Gas conditions vary in different localities. To insure proper operation of the range, two basic adjustments should be checked when the range is installed as follows:

- (1) The heater pilot located on the oven burner, if equipped (See thermostat instruction sheet enclosed).
- (2) The oven burner air shutter (See Fig. 5).

HEATER PILOT ADJUSTMENT (IF USED)

Remove the oven bottom so the pilot can be viewed. Push thermostat knob and turn to a 300° setting, this **opens** the thermostatic valve in the thermostat and allows gas to flow to the heater pilot. The heater pilot flame should just envelop the temperature responsive element.

If the heater pilot flame does NOT envelop the temperature responsive element, the following steps should be taken:

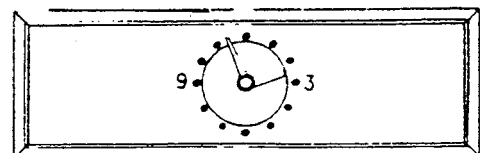
- A. Leaving the thermostat dial set at 300°, remove the thermostat knob.
- B. The heater pilot adjusting cartridge screw **can** be seen by viewing through the exposed round hole on control panel and looking to the lower right hand side of the thermostat shaft.
- C. Using a screwdriver, turn the slotted heater pilot adjusting cartridge screw in either direction until **pilot flame** just envelops the temperature responsive element. (See Fig. 5).
- D. Replace thermostat knob.
- E. Replace oven bottom.

Note: On many models there is no separate Heater Pilot Adjustment. It adjusts with the Constant Pilot.

CLOCK AND TIMER OPERATION

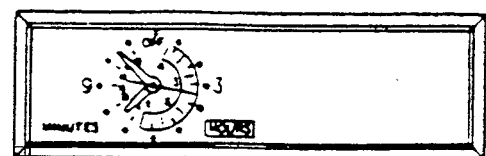
The following pages describe operation of the **various** clocks used on various models. You should be able to identify the clock (if existent) used on your range by association **with the pictures**.

Type "A" timer is a time of day clock. To set, **turn knob** and set to correct time.



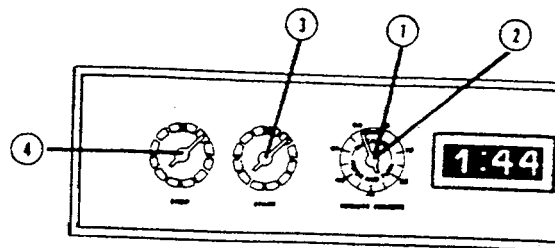
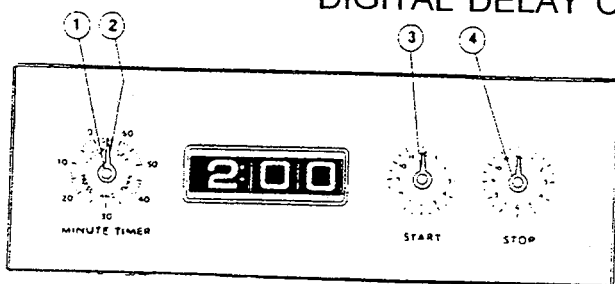
TYPE A

Type "B" timer is a time of day clock and signal timer. To set time of day, depress knob and set correct time. To use signal timer, do not depress knob. Turn counter clockwise for the desired time interval. At the **end** of set time an alarm will sound (bun or **chime**). To shut off the **alarm**, turn **knob** clockwise until pointer is at "off".



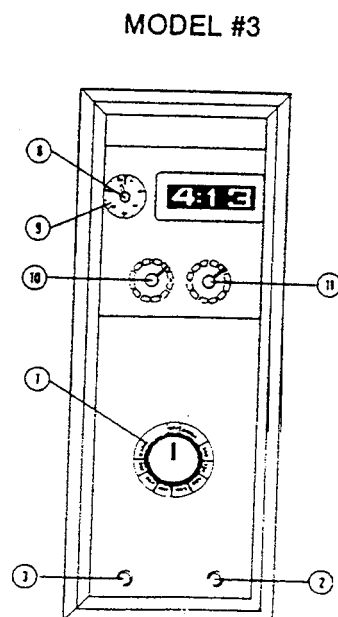
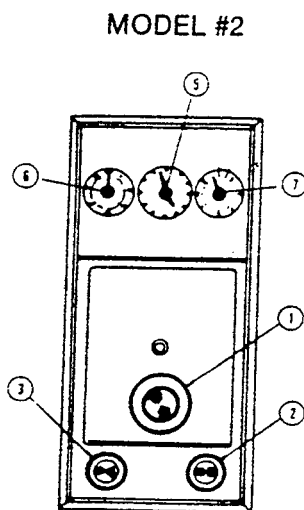
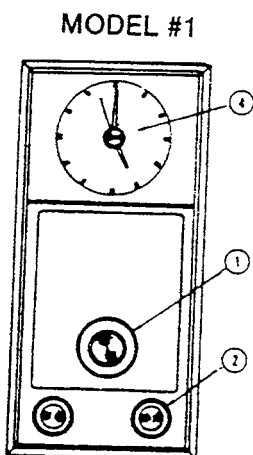
TYPE B

DIGITAL DELAY COOK AND OFF TIMER "C"



- I. SETTING AUTOMATIC CLOCK FOR "MANUAL" (EVERYDAY OVEN) OPERATION AND TIME OF DAY:**
1. Depress "**START KNOB**" (no. ③ above) and while depressed, turn pointer a full 360° turn — allow knob to "**pop out**".
 2. Depress "**STOP KNOB**" (no. ④ above) — knob will remain "**in**" for "MANUAL" oven operation.
 3. If time of **day** is wrong, depress "**MINUTE TIMER KNOB**" (no. ① above) and rotate knob clockwise to correct time day.
- II. SETTING INTERVAL TIMER:**
1. **DO NOT PRESS** — just turn "**MINUTE TIMER KNOB**" (no. ① above) clockwise and set "**MINUTE TIME POINTER**" (no. ② above) to desired time interval.
 2. At the end of time interval, a bell or buzzer will sound until "**MINUTE TIMER POINTER**" (no. ② above) is turned "OFF".
- III. COOK NOW — STOP LATER**
1. Depress "**STOP KNOB**" (no. ④ above) and turn pointer to hour you want to stop cooking.
 2. Depress "**START KNOB**" (no. ③ above) and while depressed, turn pointer a full 360° turn — allow knob to "**pop out**".
 3. Set oven thermostat dial to desired temperature.
 4. When cooking time is finished, depress "**STOP KNOB**" (no. ④ above) to return oven to "MANUAL" operation then turn oven thermostat dial to "OFF".
- NOTE:** No automatic range timer is laboratory accurate, so allow 10 to 20 minutes less time than regular attended cooking to avoid over-cooking.
- IV. COOK LATER — STOP LATER**
1. Depress "**STOP KNOB**" (no. ④ above) and turn pointer to hour you want cooking to stop.
 2. Depress "**START KNOB**" (no. ③ above) and while depressed, turn pointer to hour you want cooking to begin.
 3. Set oven thermostat dial to desired temperature.
 4. When cooking time is finished, depress "**STOP KNOB**" (no. ④ above) to return oven to "MANUAL" operation and turn oven thermostat to "OFF".
- NOTE:** If at any time your oven won't come on, check clock knobs "STOP" and "**START**" which must be positioned as per instruction I above.
- With "**START KNOB**" **OUT AND** "**STOP KNOB**" **IN**, the pointer on the start dial will rotate and follow the digital time of day — the pointer on the stop dial will not rotate.

CONTROL PANELS FOR EYE LEVEL MODELS



ALL MODELS

1. Eye level thermostat knob
2. Work light switch
3. Oven light switch

MODEL No. 1

4. **Time of day clock and minute minder.** To set time of day "PUSH" knob #4 and turn in either direction. To set minute minder, "TURN" knob clockwise to desired time interval. At the end of time interval, an alarm will sound (buzz or chime). To shut off alarm, turn knob until pointer is at "OFF".

MODEL No. 2

5. Time of day clock. To set, turn knob #5 in either direction.
6. Minute minder. To set, turn knob #6 clockwise to desired time interval. At the end of timer interval, an alarm will sound (buzz or chime). To shut off alarm, turn knob until pointer is at "OFF".
7. Programmed oven timer (lower oven only) located at right of time of day clock. This timer indicates number of "cooking hours". To set, rotate knob #7 clockwise to the desired number of hours to cook. Turn the lower oven thermostat to the desired oven temperature. "Cooking Starts Immediately". At the end of the cooking period, the timer hand will be at "hold". The oven temperature will then drop to a keep warm holding temperature and will remain at this setting until the food is removed. At this point, turn the thermostat to off and the clock from "hold" to "man" (manual), or reset for additional cooking operations.

"IMPORTANT"

Failure to return the timer to "manual" will result in the temperature not going above 200° the next time the oven is used.

MODEL No. 3

- 8.& 9. To set time of day, "PUSH" knob #8 and rotate in either direction until the correct time appears in the window at right. To set minute minder, "TURN" knob #8 to the desired time interval (shown on dial #9). When the time has elapsed, an alarm will sound (buzz or chime). To shut off alarm, turn knob until pointer is at "OFF".
- 10.&11. Programmed oven timer. (LOWER OVEN ONLY)

This model has an oven timing system different than any of those described previously. All others utilize a system described as cook and hold. This system is referred to as, delay cook and off.

The delay cook and off system, allows the user to program the oven to come on after a given delay, stay on for a pre-set time, and then shut off.

EXAMPLE: The user could place an item in the lower oven at 4:00 p.m.. Set the start time at 5:00 p.m., by pushing the start time knob (indicated as knob #10 in the above illustration) and turning the pointer to 5 on the dial, the user could then set the stop time for 6:00 p.m., by pushing knob #11 and turning pointer to the 6 on the dial. At this point, the range is programmed and you need now only to set the lower oven thermostat to the cooking temperature. The user can then attend to other chores. The oven will remain off from 4:00 p.m. until 5:00 p.m.. It will then automatically come on and bake the item in the oven from 5:00 p.m. until 6:00 p.m.. It will then shut off.

"IMPORTANT"

After a programmed cooking operation has been completed, the user must "PUSH" the stop time knob #11 "IN" for manual operation and also turn the thermostat knob to "OFF". If the user remembers to push the stop time knob to manual, and fails to return the thermostat knob to off, the oven will come on and stay on at the thermostat setting.

If the user turns the thermostat off, but fails to push the stop time knob #11 in for "manual", the oven will not come on when the thermostat knob is turned on.

NOTE: Many unnecessary service calls are made because the user forgets to push the stop time knob, returning it to manual operation.

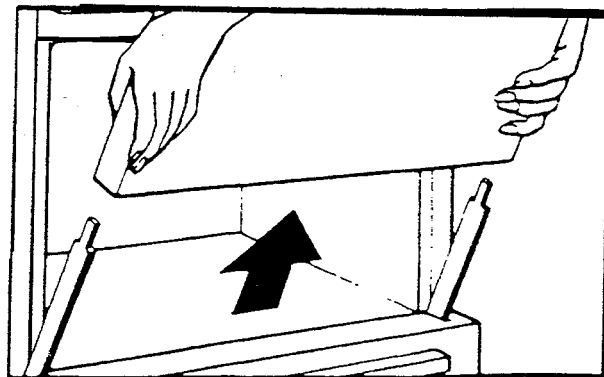
FEATURES

THE LIFT-OFF OVEN DOOR

To remove, open the door about 3" to the special "stop" position. Grasp the door on each side and lift STRAIGHT up and off the hinges. DO NOT IMMERSE THE OVEN DOOR IN WATER.

TO REPLACE OVEN DOOR

Position slots in bottom of door over the hinges that are in the "out" position, then lower it slowly and evenly over both hinges at the same time.



***NOTE:** When removing or replacing the oven door be careful not to hit the door hinge with much force, because it may snap closed against the front of the range. If this should happen you need only to pull the hinges to the open position before attempting to replace the door.

CAUTION: Do not place fingers behind hinges as this could result in injury.

GRIDDLE AND 5TH BURNER

Your range has the added feature of a griddle that can also be converted to a 5th burner.

The griddle should be conditioned before using it the first time. To condition, wash thoroughly and dry, then rub one teaspoon of vegetable oil (Wesson, Crisco, etc.) over the Teflon surface.

To use the griddle, first remove the porcelain cover and be sure the griddle is in place. Turn the control on high and preheat 3 - 5 minutes (griddle is preheated if water droplets will sizzle when sprinkled on the surface.) When preheated, turn the flame down to maintain temperature be careful not to over heat the griddle as that can cause permanent staining of the Teflon coating.

Caution: If your range is equipped with a griddle located in the center of the cooktop: "TOP COVER MUST BE OPEN WHEN MAIN BURNER IS IN OPERATION." Failure to remove top cover may result in damage to the griddle and top cover.

There is a small hole at the front of the griddle, when preheating the griddle you can look through the hole to be sure the burner is lit.

There is a well located under the front of the griddle. Excess grease and oil will drain into this well after cooking. Grease should not be allowed to remain in the well, remove often and clean.

After cooking, allow to cool, then wash with soap and water, rinse and dry thoroughly. A plastic scrubbing pad may be used to remove grease and baked on stains. Do not use metal scouring pads or harsh scouring powders on the Teflon surface.

If a 5th burner is needed, the griddle may be removed and replaced with the extra burner grate. The 5th burner will operate the same as the other 4 burners.

DOUBLE OVEN DOUBLES YOUR COOKING CONVENIENCE

If your range has two ovens, you can cook at two different temperatures at the same time because you have separate oven controls. Hot rolls can be baked at 400° while roast beef is cooking at 325°. Or, you can broil steaks while you are baking pies, potatoes, etc. at a lower temperature.

Two ovens let you cook in quantity* If you have a freezer, you can bake bread, pies, cakes or cookies for months ahead, at one time.

You can keep vegetables and other food warm in one oven while meat is still cooking in the other oven. Or, you can cook a whole dinner in one oven and warm the serving dishes or bake biscuits in the other.

The interior temperature of the upper oven (with the thermostat off) will generally be above room temperature due to the constant burning pilot, so it should not be used for storage, such as breads.

KEEPING IT CLEAN

Porcelain: The porcelain enamel on your range is the acid-resisting titanium type. This is the highest quality enamel available commercially. With proper care, it will give you many years of fine service. The porcelain is very serviceable and simple to clean, but because it is glass, it will not withstand rough handling or abuse.

For Cleaning Porcelain Enamel: Use warm soapy water. Avoid abrasive cleaners. Although the porcelain enamel is acid resistant, if any acid-base food or liquid such as lemon juice is spilled on the range, wipe off at once.

For Cleaning Pre-Painted Bodysides: Use only mild soapy water and a soft cloth. DO NOT use cleaning products which contain ammonia, as it may remove the painted finish.

To Clean Regular Porcelain Ovens: Make sure oven is turned "OFF" and oven is cool. Remove shelves.

Clean interior of oven with a strong solution of detergent, then wipe with a clean damp cloth and dry.

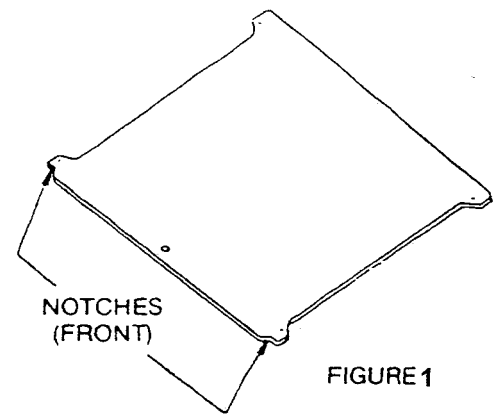
When food or grease has burned on the oven lining, apply a strong oven cleaning compound such as "Easy-Off" or "Jiffy". Follow directions on the package, but avoid applying to front flanges or sides of end panels because it may destroy the baked enamel finish, Avoid applying these compounds to oven door seals or plated surfaces.

A small saucer of ammonia placed overnight in a cold oven will make cleaning much easier.

Oven racks, oven bottom, broiler pan and grill are all removable for easy cleaning.

Oven racks may be cleaned in your sink with dish cloth and detergent. If spillage has remained on racks for an extensive period, more vigorous cleaning with steel wool soap pad may be required.

Removable Oven Bottom: Prior to removing the oven bottom for cleaning purposes, note the proper position - lift and pull forward. Soap and warm water will clean food spillage if wiped up as soon as range has cooled. Upon reinstallation, be certain the notches on the two front corners are facing toward the front of the oven. (See Fig. 1)



THE OVEN THAT "CLEANS ITSELF" WHILE COOKING

You are way ahead of the cleaning game if you have chosen a range that features a Continuous-Cleaning Oven.

Your new Continuous Cleaning oven is designed to reduce kitchen drudgery and save you many hours of labor. The sides, tops and back of your oven have been coated with a new Ceramic Finish of Porcelain Enamel. Heat plus the cleaning characteristic of this coating provide the conditions for your oven to clean itself automatically, while you bake or roast.

Most spills and spatters gradually disappear while you cook at regular oven temperatures. However, some self cleaning may leave light spots and stains on the oven surface. Don't be alarmed, since these spots and stains should gradually fade away with additional oven usage.

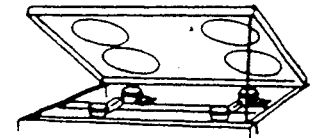
Heavy spill overs or excessive spattering are difficult to clean, however, as you cook they will disappear with some help from the user if you follow the recommendations listed below.

Remove excess spills, soils and solid substances with a damp cloth immediately after each cooking. On occasion, some spots could require treatment with a damp sponge or synthetic mesh pad plus a mild solution of liquid soap, which should be washed immediately with clean water. Avoid harsh abrasive powders, liquid, aerosol cleaners, scouring pads, oven cleaning compounds, and scraping tools. Operating the oven empty at higher temperatures (400 degrees maximum) for one or two hours aids the cleaning and will further assist the removal of spots and stains.

Additional pleasure will be obtained from the Continuous Cleaning feature of your oven if you use a shallow pan or aluminum foil slightly larger than the cooking container directly on the next rack under casseroles, pies, and other dishes which might boil over, to avoid massive spillovers on the oven surface.

NEVER COVER AN OVEN RACK COMPLETELY WITH ALUMINUM FOIL.

Hinged "Lift-Up" Top: Some ranges have a hinged top, which can be raised to allow easier cleaning. To raise the top, grasp each side at the front or if the range is between cabinets, remove the front burner grates, grasp the burner openings and lift up. When the top has been raised, place the support rod (if equipped) which is located on the right side, and place under the front edge of the top. To lower, lift slightly and return support rod to its resting position, then gently lower top into position. NOTE: The top on sealed top burner models does not lift up.

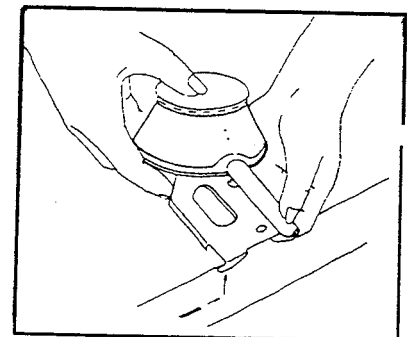


CAUTION: Take care in raising the top. If raised too high, the top will hit the backguard frame, resulting in chipped enamel.

"Lift-Off" Top: Some ranges have tops that lift completely off for easier cleaning. The top is hooked into brackets in the back instead of having hinges. To remove top, first remove the cool burner grates and chrome reflector pans. Grasp each side of the top at front or, if range is between cabinets, grasp burner openings in the top. Lift front of top enough to clear the control panel, then lift and pull forward the back of the top to unhook it from support brackets. To replace top, hook rear of top into brackets. Then lower front of top slowly, being careful not to hit control panel.

Burner Grates are light and easy to handle. After cooling, simply put them in your dishpan for washing.

Top Burners — require little care other than to wipe off the head of each burner. If a **boilover** occurs, the burner can be easily lifted out so burner port holes can be cleaned with a **stiff wire**. There are no **bolts** or screws to **remove**, (screws used to hold burners in place for shipping should have been removed when the range was installed.) Simply turn burner slightly to release "Tab" marked (A). Then lift out. When replacing, be sure Tab (A) is locked securely in position on the burner support.



Sealed Top Burner System — Models with this type of top burners do not have large hole openings in the main top around the burners. Instead, the top is "sealed" so that food or spills cannot go down inside the range. To clean the burners, remove the burner grates and then remove the burner by pulling straight upward. This will expose the gas injection venturi. Be sure nothing falls into this venturi while the burner is removed. See Figure 2.

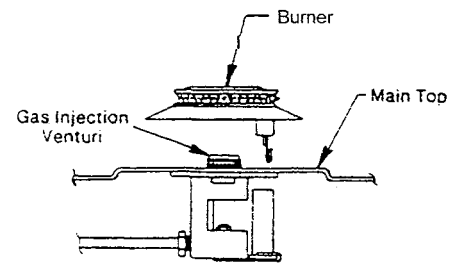


FIGURE 2

The burners can now be put into your dishpan for washing. Use a dishcloth or non-abrasive pad to wash them. If the burners are stained, they can be immersed in a solution of (2) tablespoons of "Dip It" cleaner per quart of boiling water. Soak for (20) minutes, making sure burners are completely submerged. Remove them from solution, cool slightly and then rinse thoroughly with cold water. Be sure solution is completely rinsed off both the inside and outside. Let burners dry at room temperature or dry by placing them in a 170° oven for ½ hour. (Protect hands when removing hot burners from oven.) Be sure burners are dry, as water lodged in burner parts may cause an uneven flame, or interfere with electronic ignition.

If small holes in burner are plugged, they can be cleaned with a straight pin or opened paper clip. **DO NOT USE A WOODEN PICK TO CLEAN THE HOLES.** There are small holes above and below the igniter body that should always be clean (see Figure 3).

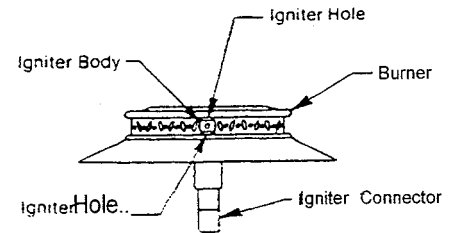


FIGURE 3

To replace the burners, center over the gas injection venturi and place igniter connector (see Figure 3) into hole directly behind venturi opening. Push burner down firmly until base is flat on main top, especially the rear of the burner where the igniter connector is inserted.

Decorative Trim: Do not use abrasive cleaners such as "Brillo" pads to clean bright decorative chrome trim. Use warm, soapy water and soft cloth.

The backguard base, immediately above the vent area, will collect by-products of combustion and cooking. This area should be constantly kept clean to avoid an accumulation. A light application of mineral oil (on a soft cloth) applied to this area will help prevent rusting or corrosion.

Certain areas of the manifold panels and the backguards are decorated with a screened and baked painted design and finish. These surfaces should also be cleaned with warm soapy water and soft cloth. **DO NOT USE A BRILLO TYPE SOAP PAD ON THESE SURFACES.**

GENERAL PRECAUTION: CAUSTIC AEROSOL CLEANERS! As you have read this manual you will have noted the several warnings concerning the necessary care in using strong, chemical aerosol or "brush on" cleaners. This is not a general condemnation but each have specific uses and their limitations must be observed when used for cleaning your range.

Use them only to clean the interior of "The Regular Porcelain Ovens" as described on page 17.

DO NOT use them on painted surfaces such as the body sides, manifold panel and backguard panels. DO NOT use them on decorative trim or chrome plated oven racks or plated door hinges. DO NOT use them on the thermostat capillary bulb in the top of the oven. DO NOT use them on exterior porcelain enameled panels because they may etch the glossy surface.

OVEN COOKING

Operation: your range is equipped with a modern low temperature thermostat. To ignite the lower oven burner simply turn dial directly from "OFF" to the desired temperature setting and wait approximately 60 seconds. This delay is the safety mechanism in your oven at work.

In order to maintain temperatures as low as 160° F and accurately control temperatures at all settings, the oven burner will cycle from "full on" to "full off" (except at "broil"). Do not be alarmed if there are no flames on the burner when opening the door to check food.

Temperature in the oven is transmitted to the thermostat by the capillary bulb or tube located near the top of the oven. It must always be in position and should not be bent. When there is no flame at the burner it means the oven has reached the temperature shown on the dial. As the oven cools because the heat is being used to cook the food, the temperature drops slightly below the dial setting and the burner will ignite to the "full on" condition. This "cycle" will continue throughout the baking operation.

Preheating the Oven: Accurate baking time is more satisfactory with a PRE-HEATED oven. Set the oven control knob to the correct temperature about 10 minutes before placing food to be cooked in the oven. Preheating is also necessary when using temperatures below 225 degrees and for biscuits, cookies, cakes and other pastries.

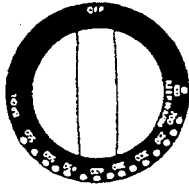
Preheating is generally not necessary for other operations such as roasting or whole meal cooking of long duration.

Set Dial for correct Temperatures: The following conversion may be helpful:

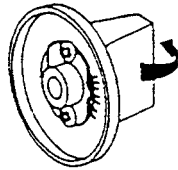
TERM	TEMPERATURE (degrees F)
Very Slow 250 and 275
Slow 300 and 325
Moderate 350 and 375
Hot 400 and 425
Very Hot 450 and 475
Extremely Hot 500 and 525

If after using oven for a period of time, you believe foods are consistently underdone or overdone, make the following adjustments:

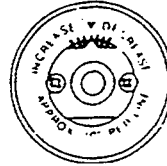
1. Gently pull **oven temperature control knob** straight out from control panel.
2. Turn knob over and use a Phillips head screwdriver to loosen (but do not remove) the two screws in the pointer plate. Each line above the plate represents a 10 °F temperature change. The plate is factory set to point at the middle line.
3. Hold knob by the handle and turn the knob skirt to the next line in the direction indicated by the arrow heads shown on the knob skirt, to either increase or decrease oven temperature; clockwise to decrease and counter clockwise to increase oven temperature.
4. Tighten screws with pointer at new line and replace knob on control panel. Use oven for a period of time, and repeat above procedure if necessary. Move **knob skirt only one line each time!**



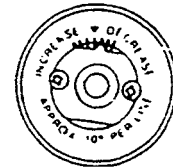
1. Remove knob.



2. Turn knob over.



3. Factory set position.



4. Loosen screws, adjust knob skirt, tighten screws, replace knob.

GENERAL OVEN INFORMATION

If using only one rack, food should be positioned near center of oven. If using more than one rack, allow 3" to 4" between racks.

All 1" to 2" between edge of utensil and oven wall or adjacent utensils; incorrect pan placement prevents proper circulation of air. Stagger pans on different racks, do not place one directly under the other.

NEVER place pans directly on oven bottom.

DO NOT cover entire rack with aluminum foil.

DO NOT cover oven bottom with aluminum foil; this is a radiating surface.

DO NOT place aluminum foil directly under utensil or it will reflect heat away causing soggy or light bottom crusts.

To catch spillovers, cut a piece of foil just a little larger than the pan and place on rack 3" to 4" below pan, dull side down.

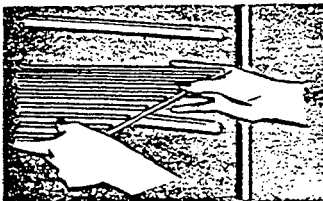
Cookie sheets must be of such size to leave 1" to 2" space from all sides of the oven.

Use bright or light colored aluminum pans for best baking results. Dark pans absorb heat and cause over-browning.

Bake biscuits and cookies on a flat sheet or an inverted pan.

For glass baking utensils reduce recommended heat about 25 degrees. Use flat pans and a size recommended in the recipe. Cake pans should be filled about two-thirds full.

It is not advisable to keep cooked foods at serving temperature any longer than necessary — preferably no more than 1½ to 2 hours.



Self Stop Oven Racks: To remove an oven rack, pull rack out until it stops, then tilt up slightly and slide out of oven.

To replace rack, lay the rack on top of the guides, push rack toward the rear until it stops, tilt up slightly and push into place.

Adjust the position of the oven racks when the range is cold.

See page 14 through 16 for the operating description of automatic clocks, timers, etc.

BAKING PROBLEMS

CAKE UNDERSIZED

1. Too little leavening
2. Batter overbeaten
3. Pan too large
4. Temperature too high
5. Ingredients not at room temperature

CAKE FALLS

1. Too much shortening, liquid, or sugar
2. Too much leavening
3. Short bake or too slow
4. Pan too small
5. Stale baking powder

CAKE HAS TUNNELS

1. Not enough shortening
2. Overmixing after adding flour
3. All-purpose flour used

CAKE HIGH IN MIDDLE

1. Too much flour
2. Temperature too high

SPONGE CAKE FALLS OUT OF PAN

1. Pan greased
2. Too much sugar
3. Insufficient baking

CAKE IS UNEVEN

1. Pans. not staggered
2. Batter uneven in pans
3. Warped pans
4. Range not level
5. Pans touching sides

MUFFINS PEAKED OR TUNNELED

1. Overmixing

PIE CRUST BURNS ON EDGE

1. Temperature too high
2. Pans touching each other or oven wall
3. Edge of crust too thin

CAKE SOGGY OR RUBBERY

1. Batter undermixed
2. Too little leavening
3. Too much liquid
4. Temperature too low
5. Egg yolks underbeaten

PIE HAS SOAKED CRUST

1. Temperature too low at start of bakin
2. Filling too juicy
3. Shiny pans — reflect heat away
4. Aluminum foil under pan

PIE SHELL SHRINKS

1. Pastry stretched in pan
2. Too much water
3. Shell not pricked enough

BROWNING PATTERN UNEVEN

1. Utensils too large
2. Utensils used together made of different materials
3. Racks too close together or too close to bottom
4. Flue obstructed

BISCUITS PALE

1. Temperature too low
2. Too much flour
3. Pan too deep, invert or use cookie sheet

BISCUITS — LIGHT TOPS BROWN BOTTOMS

1. Dark or heavy pan — use shiny cookie sheet
2. Pan too deep or too large

COOKIES DARK ON BOTTOM

1. Cookie sheet too low
2. Cookie sheet too wide or too long for oven
3. Uneven heat distribution in oven

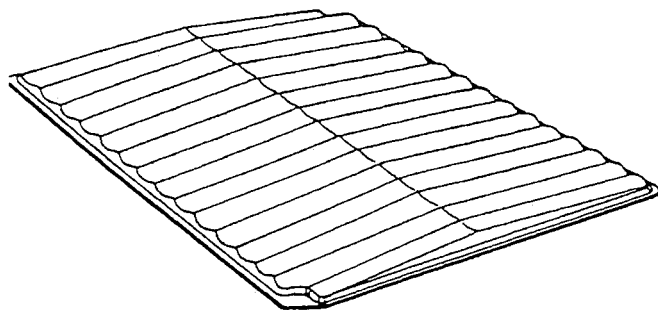
BROILING

(Reread General Safety Precautions — Pages 5 through 9)

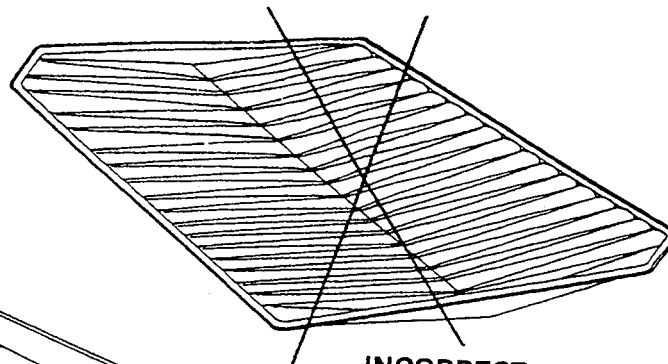
CAUTION

It is very important that the grid be placed correctly in the pan for proper *drainagé* of cooking grease into the lower pan. The following illustrations show the correct and incorrect placement of the grid. Incorrect placement can cause grease accumulation around the food. It also may result in overheated grease and cause a grease fire.

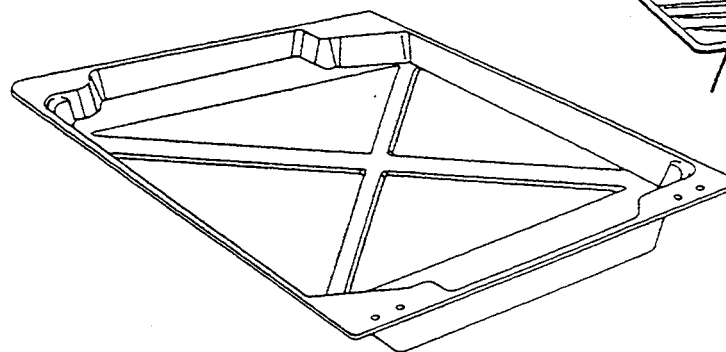
Many grease fires are caused by improper use of broiling pans and/or improper use of aluminum foil. If aluminum foil is used in the bottom of the pan be absolutely sure it does not block the drain vents along edges of the pan.



CORRECT



INCORRECT



Broiling is cooking by direct radiated heat from above the food. It is fast because no preheat time is required and it is cool because the compartment does not retain heat.

Broiler location will vary depending upon the model and type of range.

The oven and broiler door should be closed on lower oven gas models when broiling.

Wipe meat with a damp cloth and score edges by making shallow vertical cuts about 2 inches apart to prevent curling.

Place food on cold, ungreased broil grid or pan (if placed on a hot grid or pan food **will** stick). Do not cover the grid with foil which prevents the fat from draining away.

The distance of the food from the heat source is determined by the desired degree of doneness, the type of food, the thickness and other factors.

Turn the thermostat knob to the "Broil" position. When the thermostat is returned to "OFF" the oven is again ready for a baking operation.

Broiling guide charts in most cook books are approximate. Your personal experience will establish the most desirable time periods.

Use a spatula or tongs to turn meat. Grasp meat by the fat or bone as there will be loss of juices and flavor if fleshy part of meat is pierced during cooking.

Care of broiler: Remove broiler pan from compartment as soon as broiling is finished. Sprinkle grid with detergent and cover with wet paper towel to loosen grease and food particles.

Let pan cool; wash pan and grid in hot sudsy water.

TROUBLE-SHOOTING GUIDE

BEFORE YOU CALL THE SERVICE MAN:

A review of the following may save you a service call and if not it may help you explain the malfunction to the serviceman. Read the range operating instructions carefully — BE SURE YOU KNOW HOW TO OPERATE THE RANGE.

Do **not** expect your new range to operate exactly like your old one. Ovens on older ranges were frequently calibrated high which may make your new range seem, slightly slow by comparison.

1. If your range has electrical features, be sure the range is plugged in to a live power outlet.
2. **TOP BURNERS DO NOT LIGHT:**
 - (a) Make sure that pilots are lit. Lift the hinged cook top and hold a lighted match next to the "A" shaped pilot shield located between the front and rear burners.
 - (b) Make sure that burner ports on side of burner are not clogged.
 - (c) Make sure that burners are positioned correctly.
 - (d) Make sure that air shutters are in the same angular location as prior to cleaning. Note: Sealed top burner systems do not have air shutters.
3. **COOK-TOP-LIGHT 'WILL NOT COME ON**
 - (a) Check for burned out bulb. Work surface light may be easily removed on Double Oven Models. On Single Oven Models with Work Surface light in the backguard, the light is replaced by disconnecting the electric current supply line under the main top, then lifting the backguard up out of its retention stirrups and removing the back panel. Replace by reversing above procedure. Be sure to replace with a bulb that has the same number marked on it.
4. **OVEN LIGHT WILL NOT COME ON**
 - (a) Check bulb for looseness or burned out bulb. If burned out, replace with 40 watt heat resistant bulb. See Item Q under general safety precautions — Disconnect range from power source before servicing.
5. **OVEN DOES NOT HEAT**
 - (a) Be sure oven pilot is lighted.
 - (b) IF AUTOMATIC OVEN SYSTEM IS EXISTENT, MAKE SURE CLOCK HAS BEEN RETURNED TO THE MANUAL POSITION.
 - (c) Be sure range is connected to live electrical outlet.
6. **OVEN BURNER CYCLES ON AND OFF**
 - (a) This is a normal condition at settings below Broil.
 - (b) Burner should not cycle when thermostat is set to Broil.
7. **OVEN TEMPERATURE IS INACCURATE**
 - (a) Temperature is difficult to measure with inexpensive oven thermometer.
 - (b) Make sure thermostat capillary bulb (located in upper portion of oven) is in correct position, straight, not touching oven sides and not coated with oven cleaner.
 - (c) Check for blocked air.
 - (1) Improper use of aluminum foil.
 - (2) Blocking of oven vent (such as cloth on range top).
 - (3) Utensil problems.
 - (4) Oven bottom out of position.
 - (d) Make sure that temperature was set by turning knob directly from "OFF" to desired temperature setting, (not beyond and back).

IF SERVICE IS REQUIRED, contact an authorized Caloric service center in your area at:

New York City & Connecticut	800-727-2643	Massachusetts & Rhode Island	800-288-1 226
Northern New Jersey	201-288-1010	Chicago & Suburbs	3 12-860-2688
Southern New Jersey	800-523-2210	Los Angeles & Vicinity	213-531-1283
Maryland & Delaware	800-523-2210		0 R 800-876-4242
Southeastern Pennsylvania	2 15-672-7440		

In all others areas, contact your selling dealer, your local yellow pages or white pages for an authorized Caloric Service Center, or contact Caloric Corp., Consumer Relations Dept. at 215-682-4211.

WARRANTY

GAS & ELECTRIC RANGES "S" SERIES - LIMITED APPLIANCE PARTS WARRANTY

PARTS WARRANTY

Subject to certain but necessary WARRANTY LIMITATIONS LISTED BELOW. Caloric warrants all PARTS of this Caloric appliance against defects in material and workmanship for a period of three (3) years from the date of its delivery. Any replacement parts furnished at no cost to the purchaser in fulfillment of this warranty, are warranted only for the unexpired portion of the original warranty. Caloric's appliance parts warranty pertains only to the PARTS of the appliance, not the labor required for repair or replacement, which is the responsibility of the source from whom this appliance was purchased.

WARRANTY SERVICE

The selling dealer, builder, or utility from whom this appliance was purchased is responsible for advising the purchaser of the period of no-charge warranty service labor coverage, and how and from whom warranty service is available. Replacement parts under the terms of this warranty must be furnished by a franchised Caloric dealer or authorized Caloric service agency.

WARRANTY LIMITATIONS

Caloric's product warranty DOES NOT apply to glass parts, light bulbs, or fluorescent lamps. We warrant only that these will be commercially acceptable at the time of delivery and allow you 30 days to report any malfunctions to the selling agency from whom the appliance was purchased or the authorized service agency as advised by your selling agency.

Caloric's product warranty DOES NOT apply to the porcelain enamel surfaces, ceramic surfaces, painted surfaces, and decorative finishes, nor does it cover normal deterioration of finishes, bright metal and other trim. We warrant that all of these surfaces and finishes will be commercially acceptable at the time of delivery and allow you ninety (90) days from the date of purchase to report otherwise.

OWNERSHIP

The appliance PARTS warranty remains in force for three (3) years from the initial delivery Of the appliance, and continues in force for three (3) years from the initial delivery, even if relocated by the first or subsequent purchaser(s).

WARRANTY CONDITIONS

Caloric's appliance PARTS warranty DOES NOT apply to any appliance which has been subjected to alteration, misuse, abuse, accident, improper installation, delivery damage, or other than normal household use and service.

Caloric's PARTS warranty is LIMITED STRICTLY to the terms indicated herein, and no other expressed warranties or remedies thereunder shall be binding on us. TO THE EXTENT CONSISTENT WITH STATE AND FEDERAL LAWS: (1) ANY IMPLIED WARRANTIES SHALL BE LIMITED TO THE SAME TIME PERIODS STATED HEREIN FOR CALORIC'S EXPRESSED WARRANTIES, AND (2) CALORIC SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES UNDER ANY EXPRESSED OR IMPLIED WARRANTIES RELATING TO THE CALORIC APPLIANCE.

Caloric's warranty obligation on appliances located outside the contiguous 48 U.S. states and the District of Columbia shall be LIMITED STRICTLY to furnishing replacement parts and shall EXCLUDE service labor.

FEDERAL REGULATORY PROVISIONS

Some states do not allow limitations on how long an implied warranty lasts nor limitations or exclusions of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state, as well as rights under Federal Laws.

PURCHASER'S RESPONSIBILITIES

The purchaser will be responsible for the costs of any service calls requested to demonstrate or confirm the proper operation of the appliance, to correct an improper installation that the purchaser may have performed, or to correct malfunctions in the appliance created by operation of the appliance in a manner not prescribed by, or cautioned against, in the Caloric Use and Care Instructions.

PURCHASE REGISTRATION CARD

The purchaser should fill out and mail to Caloric the purchase registration card included with the appliance. This will help Caloric expedite any future communications regarding the appliance. Your warranty rights are conditioned upon the return of the Purchase Registration Card.

MODEL AND SERIAL NUMBERS

The appliance model number and serial number can be found on a nameplate attached to the appliance. The purchaser should always use the model number and serial number when talking to or writing to the dealer, builder, or utility from whom this appliance was purchased, the local authorized service agency, or Caloric.

FACTORY ASSISTANCE

If the purchaser is unable to locate an authorized service agency, or if the purchaser does not receive satisfaction from the source from whom the appliance was purchased, or from the local servicing dealer or agency, write to: Caloric Corporation, Consumer Relations Department, Tipton, Pennsylvania 19562-1499, or call AC215-682-421 1.

APPLIANCE SERVICE CONTRACT

Caloric Offers an Appliance Service Contract which makes it possible to protect yourself against future unexpected investments in functional, replacement components and related labor costs on your products after the expiration of your existing new product warranty. The protection provided by this plan goes into effect the day that your original warranty expires or when your payment is processed. You can have months of peace Of mind for only pennies a day.

Write today indicating model number, serial number, and the date the product was purchased, for an application for a Caloric Appliance Service Contract.

Write To: Caloric Corporation
ATTN: Consumer Relations Department
403 N. Main Street
Tipton, PA 19562-1499

Or Call: Caloric Corp., 215-682-421 1.