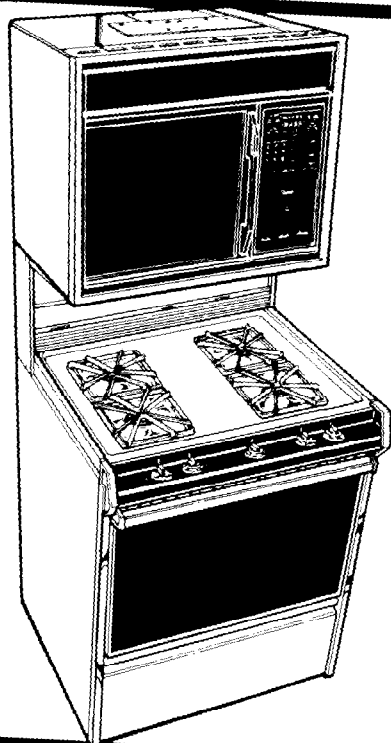


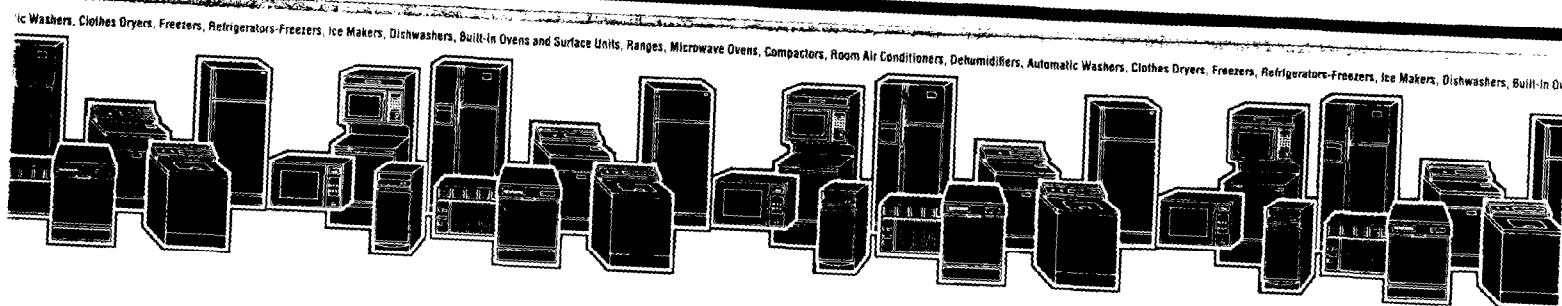
Installation Instructions



Whirlpool
Home Appliances

NOTE: INSTALLER: Leave installation instructions with the homeowner. HOMEOWNER: Keep installation instructions for future reference.

**30" Gas Eye-level
Microwave Range**



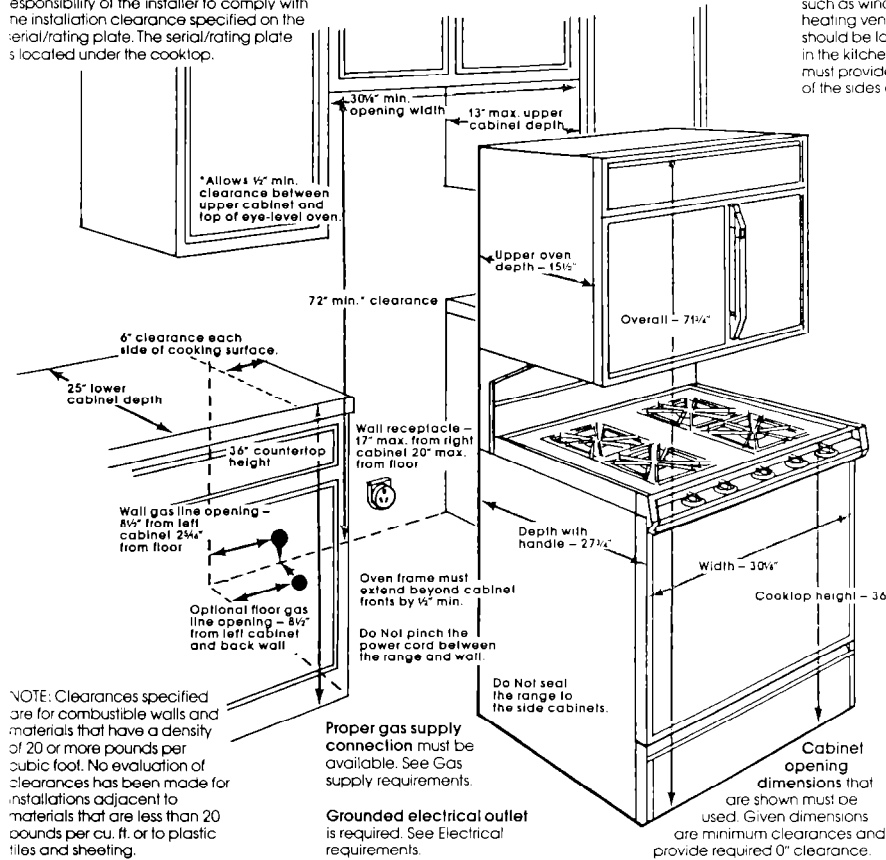
ic Washers, Clothes Dryers, Freezers, Refrigerators-Freezers, Ice Makers, Dishwashers, Built-in Ovens and Surface Units, Ranges, Microwave Ovens, Compactors, Room Air Conditioners, Dehumidifiers, Automatic Washers, Clothes Dryers, Freezers, Refrigerators-Freezers, Ice Makers, Dishwashers, Built-in Ovens

Before you start...

Proper installation is your responsibility. A qualified technician should install this range. Make sure you have everything necessary for correct installation. It is the responsibility of the installer to comply with the installation clearance specified on the serial/rating plate. The serial/rating plate is located under the cooktop.

ALL OPENINGS IN THE WALL OR FLOOR WHERE THE RANGE IS TO BE INSTALLED MUST BE SEALED.

Check location where range will be installed. The range should be located away from strong draft areas such as windows, doors and strong heating vents or fans. The range should be located for convenient use in the kitchen. Recessed installations must provide complete enclosure of the sides and rear of range.



Remove all packing material from microwave oven cavity. Check the oven area for damage. See For Your Safety. If any damage is evident do not operate microwave oven until it is checked by an authorized Whirlpool service technician.

WARNING: Reaching over heated surface burners causes risk of being burned. To reduce risk, installation of cabinet storage above surface units should be avoided.

Important: Observe all governing codes and ordinances.

Mobile home installation

The installation of this range must conform to the Manufactured Home Construction and Safety Standards, Title 24 CFR, Part 32-80 (formerly the Federal Standard for Mobile Home Construction and Safety, Title 24, HUD, Part 280).

Copies of the standards listed may be obtained from:

*National Fire Protection Association
Batterymarch Park
Quincy, Massachusetts 02269

**American Gas Association
1515 Wilson Boulevard
Arlington, Virginia 22209

FOR YOUR SAFETY

Do not obstruct the flow of combustion and ventilation air.

FOR YOUR SAFETY

The maximum gas supply pressure for this gas range must not exceed 14 inches W.C.P.

FOR YOUR SAFETY

To avoid possible exposure to excessive microwave energy:

1. Do not attempt to operate this oven with the door open. Open-door operation can result in harmful microwave energy exposure.
2. Do not tamper with or defeat the safety interlocks.
3. Do not place objects between the oven front face and the door.
4. Do not allow soil or cleaner residue to accumulate on sealing surface of door.
5. Do not operate oven if damaged. The door **MUST** close properly to provide safe operation. Do not use the microwave if:
 - door is bent.
 - hinges and latches are broken or loose.
 - door seals, sealing surfaces or glass is broken.

The oven should only be adjusted and repaired by a qualified repair person.

6. Have a qualified repair person check oven for microwave leakage after a repair is made.

FOR YOUR SAFETY

If you smell gas:

1. Open windows.
2. Don't touch electrical switches.
3. Extinguish any open flame.
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

Special care must be taken when drilling holes into the wall. Electrical wires may be concealed behind wall covering.

WARNING:

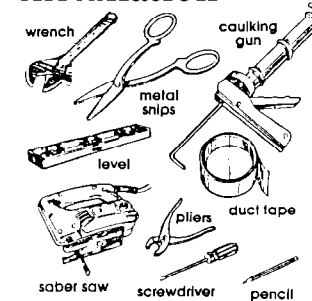
It is the customer's responsibility:

- To contact a qualified electrical installer.
- To assure that electrical installation is adequate and in conformance with National Electrical Code, ANSI/NFPA 70-1987* and local codes and ordinances.

WARNING:

The microwave oven in this unit is designed for household use only. Do not use microwave for commercial purposes.

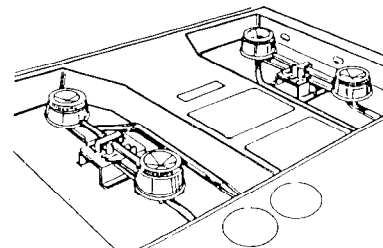
Tools needed for installation



Gas supply requirements

Observe all governing codes and ordinances.

A. This installation must conform with local codes and ordinances. In the absence of local codes, installation must conform with American National Standard, National Fuel Gas Code ANSI Z223.1-1987.**



B. Input ratings shown on the serial/rating plate are for elevations up to 2,000 feet. For elevations above 2,000 feet, ratings should be reduced at a rate of 4% for each 1,000 feet above sea level.

C. This range is equipped for use with NATURAL gas. It is certified by A.G.A. for NATURAL and L.P. gases with appropriate conversion. The serial/rating plate located under the cooktop has information on the type of gas that can be used. If this information does not agree with the type of gas available, check with the local gas supplier. See back cover for L.P. gas conversion instructions.

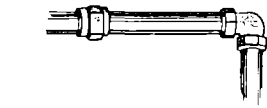
D. Provide a gas supply line of 3/4" rigid pipe to the range location. A smaller size pipe on long runs may result in insufficient gas supply. Pipe joint compounds resistant to the action of L.P. gas must be used. With L.P. gas, piping or tubing size can be 1/2" minimum. L.P. gas suppliers usually determine the size and materials used on the system.



E. If local codes permit, A.G.A. approved flexible metal tubing is recommended for connecting this range to the gas supply line. Do Not kink or damage the flexible tubing when moving the range. A 1/2" male pipe thread is needed for connection to pressure regulator female pipe threads.



F. The supply line should be equipped with a shutoff valve. This valve should be located in the same room as the range and should be in a location that allows ease of opening and closing. Do Not block access to shutoff valve.



G. If rigid pipe is used as a gas supply line, a combination of pipe fittings must be used to obtain an in-line connection to the range. All strains must be removed from the supply and fuel lines so range will be level and in line.

H. The inlet pressure to the regulator should be as follows for both operation and checking regulator setting:

NATURAL GAS:
 Minimum pressure 6 inches
 Maximum pressure 14 inches
L.P. GAS:
 Minimum pressure 11 inches
 Maximum pressure 14 inches

I. Line Pressure Testing

Testing above 1/2 lbs. PSI (Gauge)

The range and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures greater than 1/2 psig (3.5 kPa).

Testing at 1/2 lbs. PSI (Gauge) or lower

The range 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 1/2 psig (3.5 kPa).

Recommended grounding method

DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE POWER SUPPLY CORD GROUNDING PRONG.

For your personal safety, this appliance must be grounded. This appliance is equipped with a power supply cord having a 3-prong grounding plug. To minimize possible shock hazard, the cord must be plugged into a mating 3-prong grounding type wall receptacle, grounded in accordance with the National Electrical Code, ANSI/NFPA 70-1987* and local codes and ordinances. See Figure 1. If a mating wall receptacle is not available, it is the personal responsibility and obligation of the customer to have a properly grounded 3-prong wall receptacle installed by a qualified electrician.

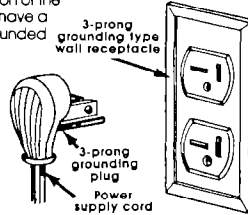


Figure 1

Venting requirements

Ductwork needed for installation is not included. Wall or roof caps used must have back-draft damper.

Determine which outside venting method needs to be used. Note: If a nonventing (recirculating) installation is desired, you will need to order Non-vent Kit B14023 and follow installation instructions provided with the kit.

The length of ductwork and number of elbows should be kept to a minimum to provide efficient performance. The size of the ductwork should be uniform. Do Not install two elbows together. Use duct tape to seal all joints in duct system. Ductwork can terminate either through the roof or wall. Figures 2-4 show common venting methods and what types of materials are needed. Use caulking to seal exterior wall or roof opening around exhaust hood.

Venting system must terminate to the outside. DO NOT terminate the vent in an attic or other enclosed space. This may result in a fire hazard.

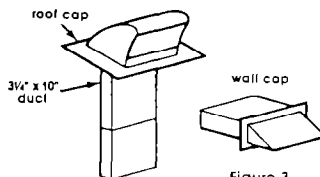
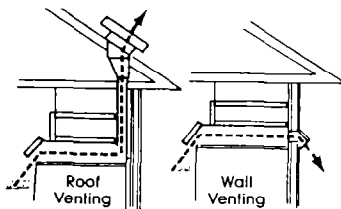


Figure 2
3/4" x 10" through the roof

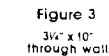


Figure 3
3/4" x 10" through wall

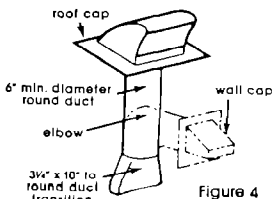
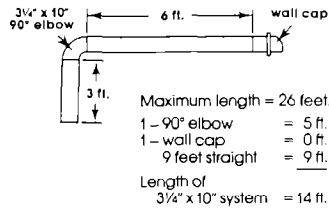


Figure 4
3/4" x 10" to round ductwork transition

Recommended duct length

Use 3/4" x 10" or 6" duct with a maximum length of 26 feet for duct system. For best performance use no more than three 90° elbows. To calculate the length of system you need add the equivalent feet for each duct piece used in the system. See the following example.

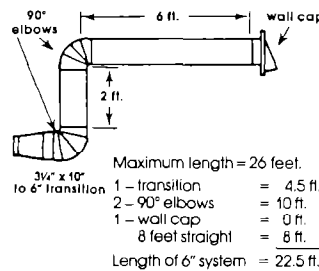
3/4" x 10" duct system



Recommended standard fittings

3/4" x 10" to 6" = 4.5 ft.	6" to 3/4" x 10" 90° elbow = 6 ft.	6" to 3/4" x 10" wall cap = 1 ft.
3/4" x 10" 90° elbow = 5 ft.	3/4" x 10" flat elbow = 12 ft.	3/4" x 10" wall cap = 0 ft.

6" duct system



Recommended standard fittings

3/4" x 10" to 6" = 4.5 ft.	3/4" x 10" to 6" 90° elbow = 5 ft.	6" to 3/4" x 10" to 90° = 9 ft.
90° elbow = 5 ft.	6" to 3/4" x 10" = 1 ft.	45° elbow = 2.5 ft.
6" wall cap = 0 ft.		

Electrical requirements

DANGER - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the appliance is properly grounded.

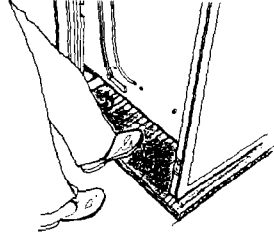
A 120 Volt, 60 Hz, AC only, 20 Ampere-fused electrical supply is required. A time-delay fuse or circuit breaker is recommended. It is recommended that a separate circuit serving only this appliance be provided. **DO NOT USE AN EXTENSION CORD.**

Wiring diagrams are included on Panel C of these instructions. A technical sheet that includes the wiring diagrams can be found behind the control panel.

Now start...

With range in kitchen.

- 1.** Remove racks and other parts from inside oven.

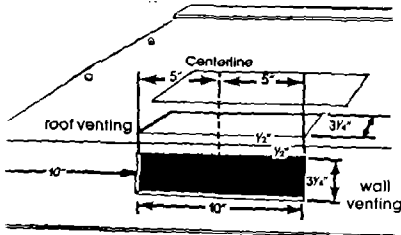


- 2.** Place one foot on the shipping base. Tilt range forward slightly to free rear legs. Gently lower range to floor. Tilt range backwards until front legs are free.

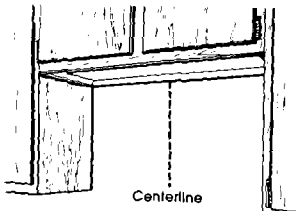
- 3.** Remove shipping materials, tape and protective film from range. Do not remove cardboard shipping base at this time.

- 4.** Screw in the leveling legs to a point where the range base does not touch the floor.

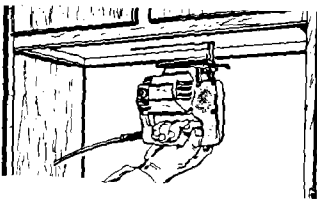
- 5.** Determine which venting method (roof or wall venting or ventless) you need to use. This range is manufactured for outside venting. If a nonventing (recirculating) installation is desired, you will need to order Non-vent Kit 814023 and follow installation instructions provided with the kit.



- 6.** Remove cover from appropriate vent opening in hood (roof or wall venting).



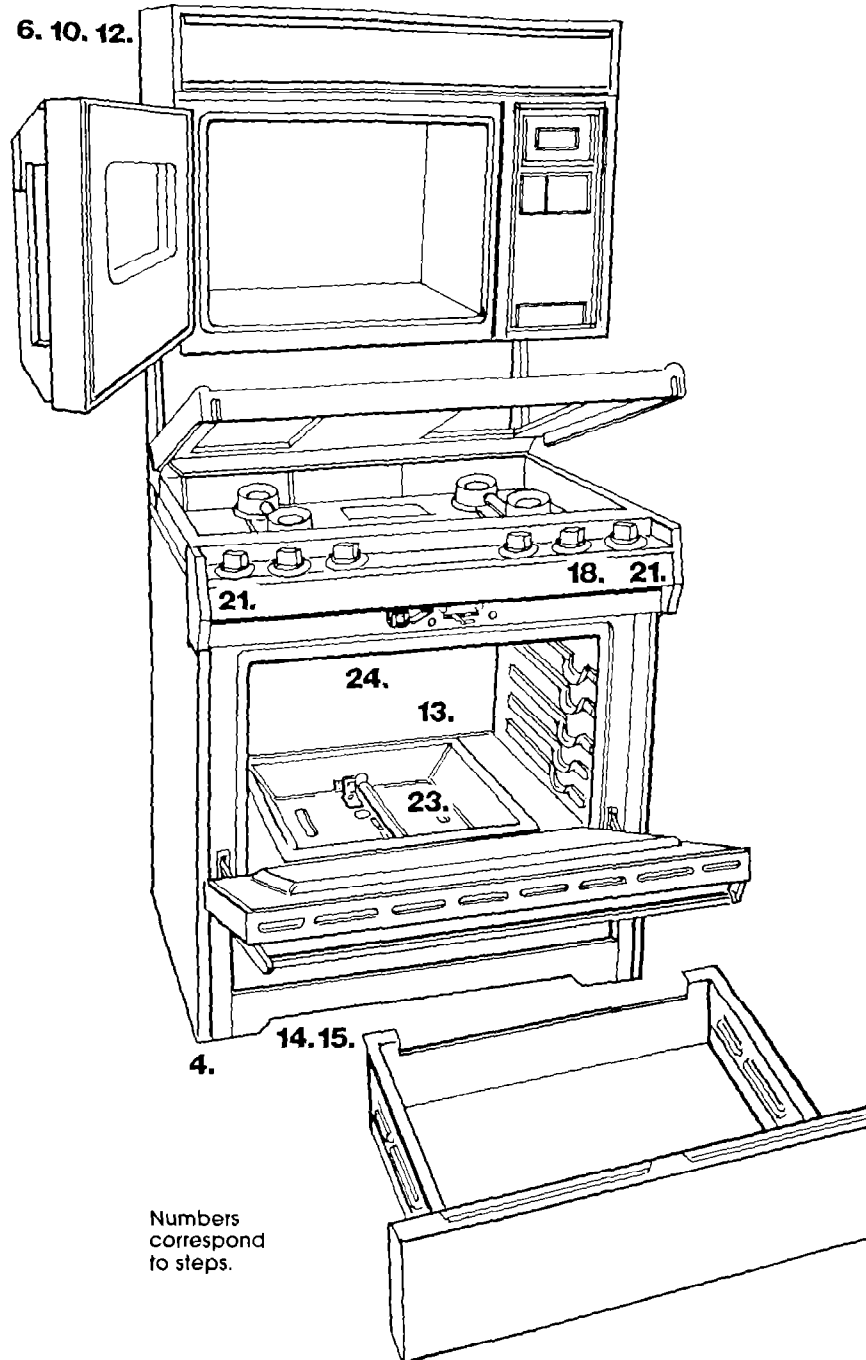
- 7.** Determine and clearly mark a vertical line in the area the vent opening will be made.



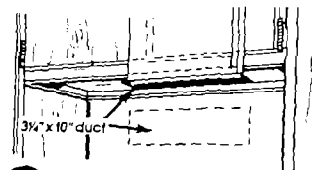
- 8.** To vent through the roof, mark on the underside of the cabinet $1\frac{1}{2}$ " in from back wall. Measure and mark a line 5" to right and left of the centerline. Then measure $3\frac{1}{4}$ " towards the front of the cabinet and mark another line as before. Use a saber saw to cut a rectangular opening for ductwork. The opening must be large enough to fit $3\frac{1}{4}$ " x 10" duct system.

To vent through the wall, measure from the floor 71" and 67 $\frac{1}{4}$ " and mark on the back wall. Measure and mark a line 5" to right and left of the centerline at both heights. Use a saber saw to cut a rectangular opening for ductwork. The opening must be large enough to fit $3\frac{1}{4}$ " x 10" duct system.

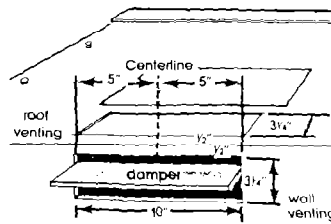
6. 10. 12.



Numbers correspond to steps.



- 9.** Install duct through the vent opening in the upper cabinet or wall. Complete the venting system according to the method needed. See Venting requirements. Use caulking to seal exterior wall or roof opening around exhaust hood.

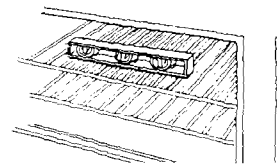


- 10.** Attach damper to selected vent opening. If damper is attached to the back of hood, be sure damper hinge is toward the top.

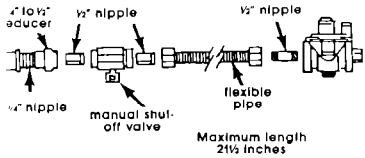
- 11.** Plug the electrical cord into the grounded outlet.

Use caution when moving this appliance to prevent damage to floor coverings. Before moving, make sure cardboard shipping piece is under range to prevent floor damage.

- 12.** Move range close to cabinet opening. Remove cardboard shipping piece from under range. Move range into cabinet opening and center. Connect ductwork to range hood.

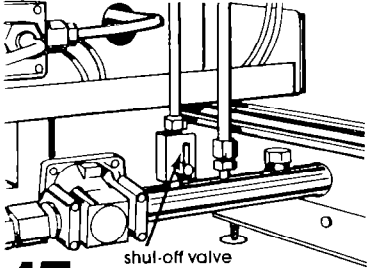


- 13.** Place rack in oven. Place level on rack, first side to side then front to back. If the range is not level, remove storage drawer, then screw the legs up or down to adjust. NOTE: Oven must be level for satisfactory baking conditions.



WARNING: THE REGULATOR IS DIE CAST. IF THE CONNECTION IS MADE TOO TIGHT, IT WILL CRACK, RESULTING IN A GAS LEAK AND POSSIBLE FIRE OR EXPLOSION.

14. Remove storage drawer. Assemble the flexible connector from the gas supply pipe to the pressure regulator in this order: 3/4" nipple, 3/4" to 1/2" reducer, 1/2" nipple, manual shut-off valve, 1/2" nipple, union, 1/2" nipple.



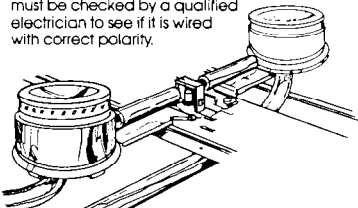
15. Use pipe joint compound resistant to the action of L.P. gas to seal all gas connections. Check that the shut-off valve is open between the regulator and gas valves. If flexible connections are used, be certain connectors are not kinked.

16. Open the shut-off valve in the gas supply line. Wait a few minutes for gas to move through the gas line.

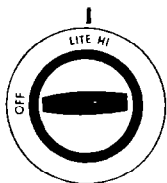
17. Use a brush and liquid detergent to test all gas connections for leaks. Bubbles around connections will indicate a leak. If a leak appears, shut off gas valve controls and adjust connections. Then check connections again. **NEVER TEST FOR GAS LEAKS WITH A MATCH OR OTHER FLAME.** Clean all detergent solution from range.

Electronic Ignition System – initial lighting and gas flame adjustments.

Electronic ignition systems operate within wide voltage limits, but proper grounding and polarity is necessary. In addition to checking that the outlet provides 120 volt power and is correctly grounded, the outlet must be checked by a qualified electrician to see if it is wired with correct polarity.



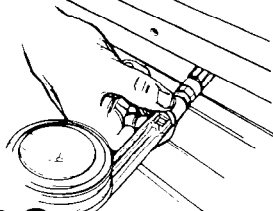
Cooktop and lower oven burner use electronic igniters in place of standing pilots. When the cooktop control knob is turned to the "LITE" position, the system creates a spark to light the burner. This sparking continues until the control knob is turned to the desired setting. When the oven control is turned on, the sparking will continue until oven pilot ignites. Then the sparking stops automatically.



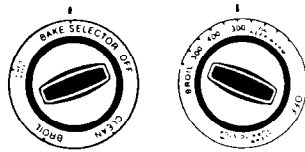
18. Check the operation of the cooktop burners. Push in and turn each control knob to "LITE" position. The flame should light within 4 seconds. **Do Not leave the knob in the "LITE" position after burner lights.**



19. After burner lights, turn control knob to "HI" position. Check each cooktop burner for proper flame. The small inner cone should have a very distinct blue flame 1/4" to 1/2" long. The outer cone is not as distinct as the inner cone.



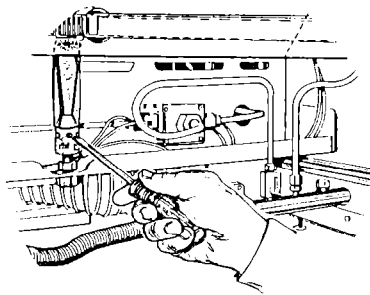
20. If burners need adjusting for proper flame, adjust the air shutter to the widest opening that will not cause the flame to lift or blow off of the burner. Repeat as necessary with each burner.



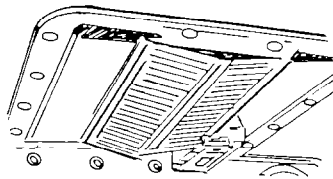
21. Check the operation of the oven burner. Remove oven racks and oven bottom. Push in and turn the oven selector knob to "BAKE". Turn the oven temperature control knob to 300°F. The oven burner should light in 50 to 60 seconds. This delay is normal. The oven safety valve requires a certain time before it will open and allow gas to flow.

Do Not attempt to insert any object into the openings of the protective shield that surrounds the igniter coil. Do not clean this area.

22. Check the oven burner for proper flame. This flame should be 1/2" long, with inner cone of bluish-green, and outer mantle of dark blue, and should be clean and soft in character. No yellow tips, blowing or lifting of flame should occur.



23. If oven flame needs to be adjusted, remove the drawer and locate the air shutter near the center rear of the range, next to the pressure regulator. Loosen screw and adjust the air shutter until the proper flame appears. Tighten screw. Replace drawer, oven bottom and oven racks.



24. Check the operation of the oven broil burner. Push in and turn the

oven control knob to "BROIL." The oven broil burner should light in 50 to 60 seconds. This delay is normal. The oven safety valve requires a certain time before it will open and allow gas to flow.

25. No adjustment of the oven broil burner is necessary. The hazy appearance of the flame is normal for this type of burner.



If microwave eye-level range does not operate...

Check that the circuit breaker is not tripped or the fuse blown. Check that power supply cord is plugged into wall receptacle.

If you need assistance...

During normal business hours the Whirlpool COOL-LINE® Service will answer any questions about operating or maintaining your range not covered in the installation instructions. The Whirlpool COOL-LINE® Service number is (800) 253-1301. Dial just as you normally dial long distance – the call is free.

When you call, you need the range model number and serial number. Both numbers can be found on the serial/rating plate located under the cooktop.

If you need service...

In the event your Whirlpool appliance should need service, call the dealer from whom you purchased the appliance or a Whirlpool franchised TECH-CARE® service company. He is in the Yellow Pages of your phone directory listed under "Appliances – Household – Major – Service or Repair." You can also obtain his name and number by dialing, free, within the continental United States the Whirlpool COOL-LINE® Service number, (800) 253-1301. A special operator will tell you the name and number of your nearest Whirlpool TECH-CARE® service outlet.

Maintain the quality built into your Whirlpool appliance – call TECH-CARE® SERVICE.

If you prefer to write...

Please include in your letter the model number, serial number, date of purchase and a complete description of your request or problem. This information will help us to provide exactly the assistance you need. Address your letter to:

Mr. Robert Stanley
Division Vice President
Whirlpool Corporation
2000 M-63 North
Benton Harbor, MI 49022

L.P. Gas Conversion

Converting to L.P. gas should be done by a qualified installer.

A.

Only a qualified installer should install or adjust your gas range. **Pressure Regulator:** The pressure regulator on your range may be one of five different types. Check Figures 5 - 9 to determine which pressure regulator you have to convert. Only follow the instructions that apply to that pressure regulator.

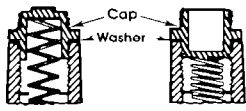
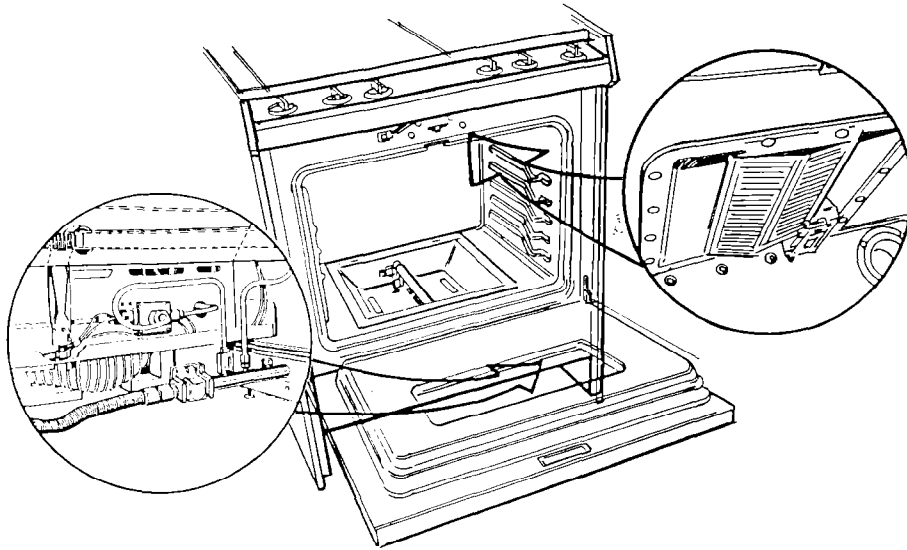
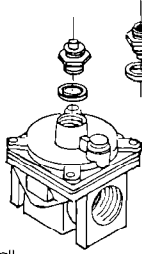


Figure 5

1. Remove the cap marked "NAT." and turn it over so it reads "L.P." Then replace the cap. Do not disturb or remove the spring beneath the cap. Check that the fiber washer is between the cap and the body of the regulator. See Figure 5 for the correct position of the cap.

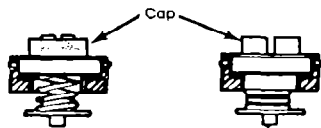


Figure 6

2. Remove the cap with screwdriver slot, turn it over, then replace the cap. This cap will then have the marking "LPG10". Do not disturb or remove the spring beneath this cap. See Figure 6.

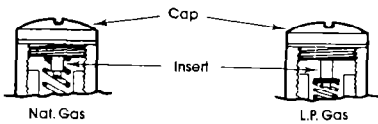


Figure 7

3. Remove the cap with screwdriver slot. Remove the black insert marked "NAT." from the cap (the insert fits very tightly). Reverse the insert and push it firmly back into the cap. The marking "L.P." should appear on the insert. Be sure the insert is pressed into the shoulder. Do not disturb the spring in the body of the regulator.

Replace the cap in the body of the regulator and tighten. See Figure 7

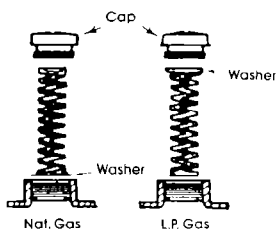


Figure 8

4. Remove the cap with screwdriver slot. Carefully remove the spring then the washer. Place the spring on the regulator first then the washer. Replace the cap over the washer and spring. Tighten cap. See Figure 8.

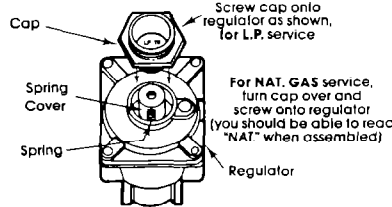


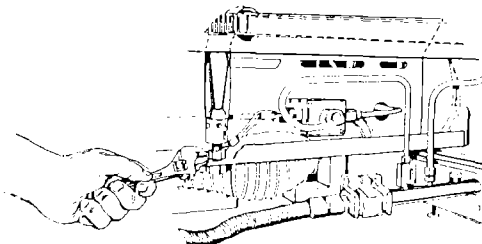
Figure 9

5. Use a wrench to unscrew the cap from the top by turning counter-clockwise. Turn the cap over so the hole end is up. Replace the cap and gasket on the regulator. DO NOT REMOVE THE PRESSURE REGULATOR

B.

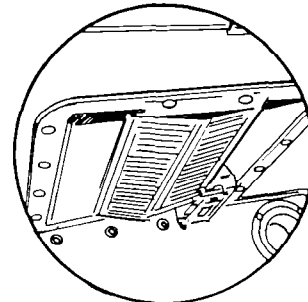
Cooktop Burners:

Screw the orifice hoods down 2 to 2½ turns. DO NOT OVERTIGHTEN. The burner flames cannot be properly adjusted if this conversion is not made. Adjust the air shutters for proper flame. See Panel D, Step 20. L.P. gas has a slightly yellow tip on top of burner flames in addition to the other proper characteristics.



Lower Oven Burner:

Remove drawer. Screw the orifice hood down 2 to 2½ turns. DO NOT OVERTIGHTEN. The burner flame cannot be adjusted properly if this conversion is not made. The burner flame should be ½" long when air shutter is correctly adjusted. Adjust the air shutter as needed for proper flame. See Panel D, Step 23. Replace drawer, oven bottom and racks.

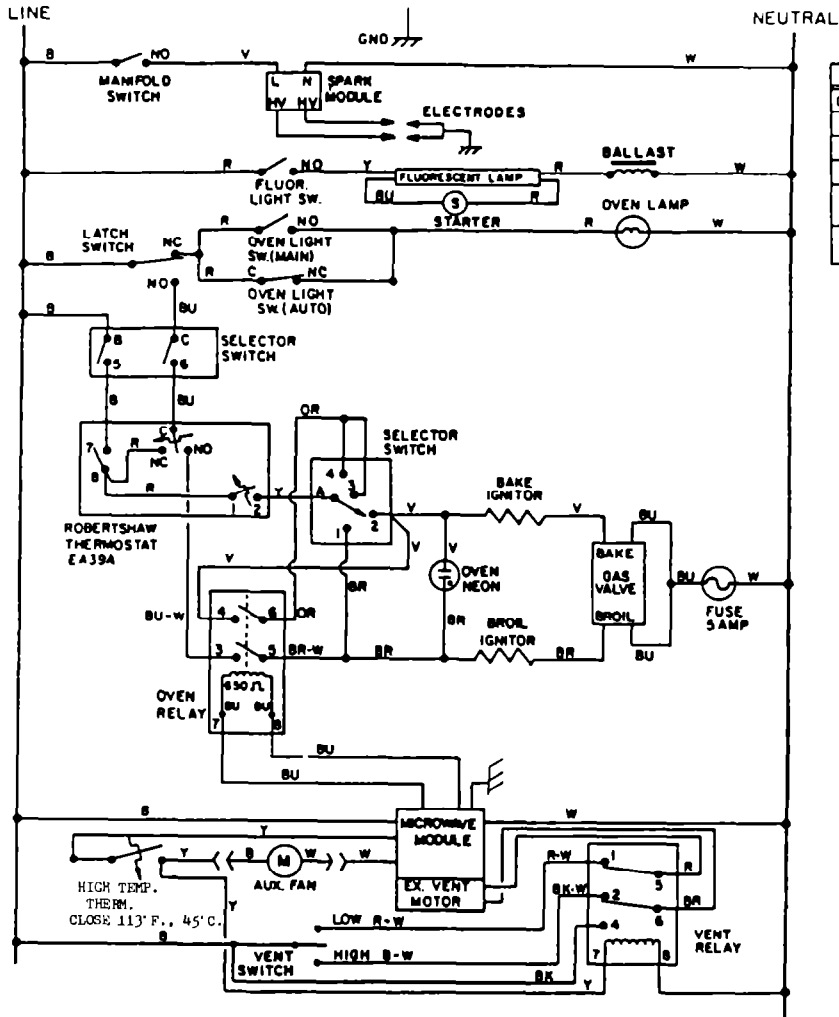


D.

Broil Burner: Remove the two screws fastening the broil burner assembly to the oven. Carefully, pull the burner towards you then downward to access the burner orifice spud in the rear wall. Extra care is needed to avoid breaking the igniter coil. Place burner screen side up in a safe area. Remove the Natural gas burner orifice spud. Install the L.P. burner orifice spud using a 3/64" nut driver. Place the Natural gas burner orifice spud in the burner box for future conversion. Replace the burner screen with louvers facing the rear of oven.

E.

After all the burners have been converted to L.P. gas usage and gas line is connected, check for leaks. Use a brush and liquid detergent to test all gas connections for leaks. Bubbles around connections will indicate a leak. If a leak appears, shut off gas valve controls and adjust connections. Then check connections again. NEVER TEST FOR GAS LEAKS WITH A MATCH OR OTHER FLAME.



THERMOSTAT EA39A				
DIAL POSITION	7-8	C-NC	C-NO	1-2
OFF	O	N.S.	N.S.	N.S.
BAKE	X	N.S.	N.S.	CYCLES
BROIL	X	N.S.	N.S.	CYCLES
CLEAN	O	X ABOVE 700°	X BELOW 700°	CYCLES

X = CLOSED
O = OPEN
N.S. = NOT SPECIFIED

SELECTOR SW. SCHEDULE	
POSITION	CONTACTS
OFF	A, B, C & D OPEN
BAKE	A-2, B-5, C & D OPEN
TIMED BAKE	A-3, B-5, C & D OPEN
BROIL	A-1, B-5, C & D OPEN
CLEAN	A-4, C-6, B OPEN

NOTES

- Color flagging is a common practice. When tracing wires, check for flags at each termination.
- All replacement wires must have same ratings as original wires.
- All wires 18 GA. and XL unless otherwise noted.
- Schematic conditions:
Selector in BAKE
Thermostat in BAKE
Lights off
Door unlatched and open
- For complete wiring schematic of microwave module see tech sheet located behind microwave control panel.

LOWER OVEN
MODEL
SM988PES (SERIES)

