

# GAS INSTALLATION MANUAL

# 24" BUILT-IN OVENS

### PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE

THE MANUAL IS INTENDED TO ASSIST IN THE INITIAL INSTALLATION AND ADJUSTMENTS OF THE RANGE.

# **SPECIAL WARNING**

ONLY QUALIFIED PERSONNEL SHOULD INSTALL OR SERVICE THIS RANGE.

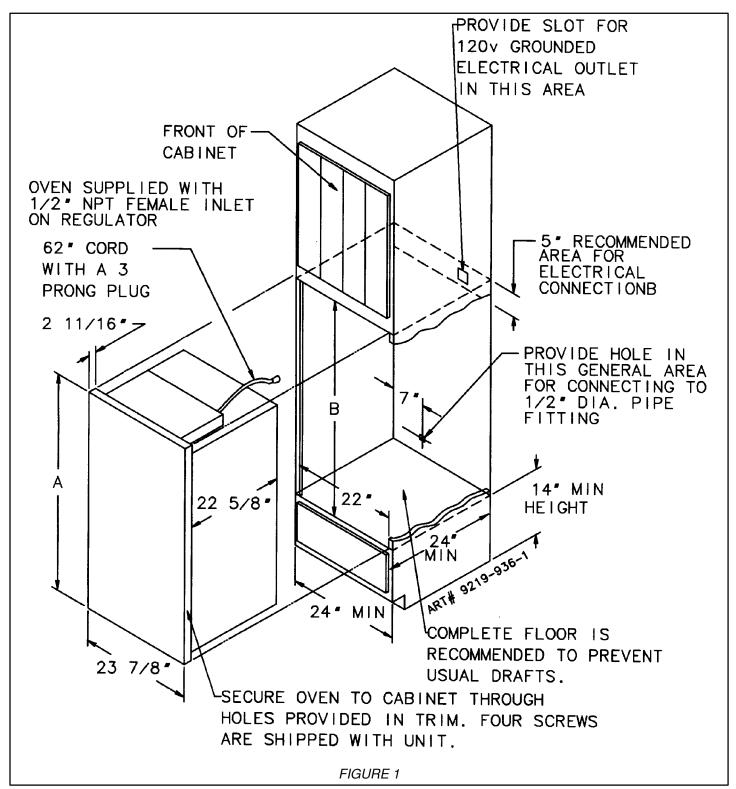
READ "SAFETY INSTRUCTIONS" IN USE & CARE BOOK BEFORE USING RANGE.

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE, MAINTENANCE OR USE OF OVEN CAN RESULT IN SERIOUS INJURY OR PROPERTY DAMAGE.

**CAUTION:** SOME CABINETS AND BUILDING MATERIALS ARE NOT DESIGNED TO WITHSTAND THE HEAT PRODUCED BY THE NORMAL SAFE OPERATION OF A LISTED APPLIANCE. DISCOLORATION OR DAMAGE, SUCH AS DELAMINATION, MAY OCCUR.

YOUR RANGE MAY NOT BE EQUIPPED WITH SOME OF THE FEATURES REFERRED TO IN THIS MANUAL.

# **INSTALLATION DRAWINGS**



### 24" GAS WALL OVENS

UPPER OVEN			LOWER OVEN OR BROILER			"A" OVEN FRAME SIZE		"B" CUTOUT DIMENSIONS		
WIDTH	HEIGHT	DEPTH	WIDTH	HEIGHT	DEPTH	WIDTH	HEIGHT	WIDTH	HEIGHT "A"	DEPTH
18"	14"	19″	18″	12"	19″	23 7/8"	46 5/16"	22"	45 3/8"	24"
18″	14"	19″	18″	6.25"	19″	23 7/8"	39 1/4"	22"	38"	24"

## INSTALLATION

A WIRING DIAGRAM IS ENCLOSED IN THE ENVELOPE WITH THIS BOOKLET; ALSO THERE IS A DIAGRAM GLUED TO THE UNIT, BEHIND CONTROL PANEL.

Check the oven model number plate to see if the oven is approved for installation in mobile homes and/or recreational vehicles. If approved the following items are applicable. NOTE: Oven model number plate is located under broiler bottom.

#### **Mobile Homes**

The installation of an oven designed for mobile home installation must conform with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 (formerly the Federal Standard for Mobile Home Construction and Safety, Title 24 HUD, (Part 280) or, when such standard is not applicable, the Standard for Manufactured Home Installations, ANSI A225.1/NFPA 501A, or with local codes.

In Canada the range must be installed in accordance with the current CSA Standard C22.1 - Canadian Electrical Code Part 1 and Section Z240.4.1 - Installation Requirements for Gas Burning Appliances in Mobile Homes (CSA Standard CAN/CSA - Z240MH).

### **Recreational Vehicles**

The installation of an oven designed for recreational vehicles must conform with state or other codes or, in the absence of such codes, with the Standard for Recreational Vehicles, ANSI A119.2-latest edition.

In Canada the oven must be installed in accordance with CAN/CSA - Z240.6.2 - Electrical Requirements for R.V.'s (CSA Standard CAN/CSA - Z240 RV Series) and Section Z240.4.2 - Installation Requirements for Propane Appliances and Equipment in R.V.'s (CSA Standard CAN/CSA - Z240 RV Series).

#### Clearance Dimensions

For complete information in regard to the installation of wall ovens and clearances to combustible wall above the cooking top see the installation drawings.

### **Locating The Unit**

The installation diagram, gives the minimum dimensions of the cabinet cut-out for the oven. The dimensions given are for the oven bottom to be a minimum of 14" inches above the floor. The recess in which the oven is to be installed should have a solid floor and be so constructed as to provide a complete enclosure around the recessed portion of the oven to prevent drafts which may result in inconsistent and unsatisfactory burner and baking performance, it should be perfectly level to provide a solid, level foundation for the oven unit. The openings in the enclosure for gas and electric service should be sealed before the oven is installed.

For **SAFETY CONSIDERATIONS** fasten the oven to the cabinet with the four (4) screws (shipped with the unit) through the holes in the trim behind the oven and broiler doors. The unit should **be leveled** properly before being secured to the cabinet.

## **CONNECTING THE OVEN**

### **Electric Supply**

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70.

In Canada the oven must be installed in accordance with the current CSA Standard C22.1 - Canadian Electrical Code Part 1.

#### **ELECTRICAL SUPPLY CONNECTION:**

The oven requires 120 volts, 60 cycle alternating current from an outlet capable of supplying 15 amperes.

### **WARNING**

### **Electrical Grounding Instructions**

This appliance 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.

### **WARNING**

DISCONNECT ELECTRICAL SUPPLY BEFORE SERVICING THE APPLIANCE.

### **Gas Supply**

Installation of this oven must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1-latest edition.

In Canada the oven must be installed in accordance with the current CGA Standard CAN/CGA-B149 - Installation Codes for Gas Burning Appliances and Equipment and/or local codes.

#### GAS SUPPLY CONNECTION:

A TRAINED SERVICEMAN OR GAS APPLIANCE INSTALLER MUST MAKE THE GAS SUPPLY CONNECTION. Leak testing of the appliance shall be conducted by the installer according to the instructions given below in section h.

NATURAL GAS SUPPLY LINE MUST HAVE A NATURAL GAS SERVICE REGULATOR. INLET PRESSURE TO THIS APPLIANCE SHOULD BE REDUCED TO A MAXIMUM OF 14 INCHES WATER COLUMN (0.5 POUNDS PER SQUARE INCH (P.S.I.) LIQUIFIED PETROLEUM (L.P.)/PROPANE GAS SUPPLY LINE MUST HAVE A L.P. GAS PRESSURE REGULATOR. INLET PRESSURES IN EXCESS OF 0.5 P.S.I. CAN DAMAGE THE APPLIANCE PRESSURE REGULATOR AND OTHER GAS COMPONENTS IN THIS APPLIANCE AND CAN RESULT IN A GAS LEAK.

- a. A GAS CUTOFF VALVE SHOULD BE PUT IN AN ACCESSIBLE LOCATION IN THE SUPPLY LINE AHEAD OF THE UNIT, FOR TURNING ON AND TURNING OFF GAS SUPPLY. If the unit is to be connected to house piping with flexible or semi-rigid metal connectors for gas appliances, CONNECTOR NUTS MUST NOT BE CONNECTED DIRECTLY TO PIPE THREADS. THE CONNECTOR MUST BE INSTALLED WITH ADAPTORS PROVIDED, WITH THE CONNECTOR.
- b. The house piping and/or oven connector used to connect the oven to the main gas supply must be clean, free of metal shavings, rust, dirt and liquids (oil or water). Dirt, etc. in the supply lines can work its way into the range manifold and in turn cause failure of the gas valves or controls and clog burners.

# CAUTION: DO NOT LIFT OR MOVE THE WALL OVEN BY THE DOOR HANDLES.

- c. Turn off all pilots and main gas valve of other gas appliances.
- d. Turn off main gas valve at meter.
- e. Before connecting the unit, apply pipe thread compound approved for LPG to all threads.
- f. Connect unit to gas supply. Use a backup wrench when pulling on end of regulator.

CAUTION: MAKE SURE THE CONNECTION DOES NOT SHIFT THE REGULATOR PIPE OUT OF POSITION.

- g. Turn on main gas valve at meter, and relight pilots at other gas appliances.
- h. Apply a non-corrosive leak detection fluid to all joints and fittings in the gas connection between the supply line shut-off valve and the range. Include gas fittings and joints in the range if connections were disturbed during installation. Check for leaks! Bubbles appearing around fittings and connections will indicate a leak. If a leak appears, turn off supply line gas shut-off valve, tighten connections, turn on the supply line gas shut off valve, and retest for leaks.

# CAUTION: NEVER CHECK FOR LEAKS WITH A FLAME.

# WHEN LEAK CHECK IS COMPLETE, WIPE OFF ALL RESIDUE.

 Adjust burner air shutter to the widest opening that will not cause the flame to lift or blow off the burner when cold.

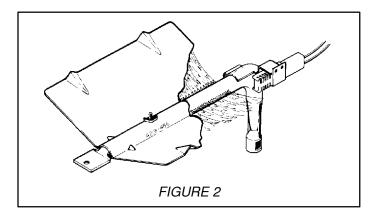
BEFORE LIGHTING ANY BURNER, SEE THAT ALL PACKING MATERIALS HAVE BEEN REMOVED FROM THE UNITS.

## **UNIT ADJUSTMENTS**

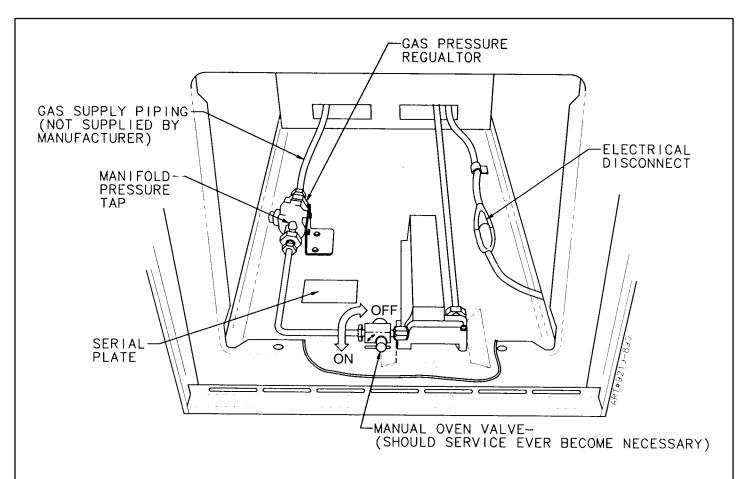
### **Wall Oven Adjustment**

# ELECTRIC IGNITION - BAKE BURNER WITH ELECTRIC GLOW BAR

a. The bake burner is equipped with an electric control system as well as an electric oven burner ignitor (figure 2). This control system requires NO adjustment. To operate, turn thermostat knob to any temperature setting or to broil. Current will flow to the ignitor. It will "glow" similar to a light bulb. (This glow may be reflected into the oven through the openings in the oven bottom). When the ignitor has reached a temperature sufficient to ignite gas, the electrically controlled oven valve will open and flame will appear at the oven burner. There is a time lapse from 30 to 45 seconds after the thermostat is turned ON before flame appears at the oven burner. When the oven has reached the dial setting, the glowing ignitor will go OFF. The burner flame will go "out" in 20 to 30 seconds after the ignitor goes "OFF". To maintain any given oven temperature this cycle will continue as long as the dial is at the given temperature. Figure 3 is an illustration of a typical range.



- b. In case servicing should become necessary, a manual gas valve to shut off the gas to the oven burner is supplied between the gas regulator and the oven burner valve. It is located at the front of the oven bottom or on right rear of gas regulator. See figure 3.
- c. The oven CANNOT be used during periods of power outage. In case of power failure, turn the thermostat to the OFF position.

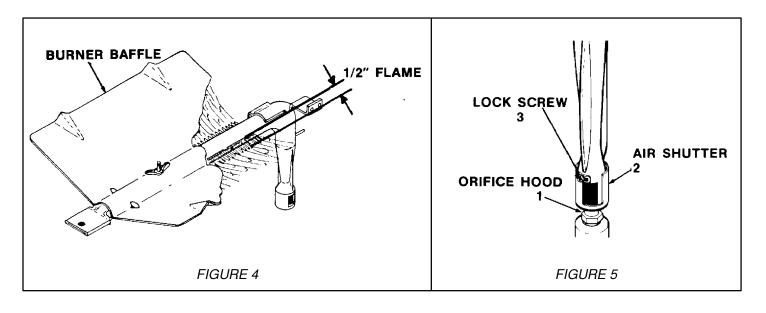


WHEN THE INSTALLER HAS COMPLETED INSTALLATION OF APPLIANCE, LEAVE THE APPLIANCE MANUAL SHUT-OFF VALVE IN THE "ON" POSITION.

FIGURE 3

#### **AIR SHUTTER - OVEN BURNER**

- a. The approximate length of the flame of oven burner is a 1/2 inch distinct blue flame, figure 4.
- b. Oven burner flame can be checked as follows, without burner baffle in place:
  - 1. Yellow flame on burner open burner air shutter to the
- widest opening that will not cause the flame to lift or blow off the burner when cold. (See #2 on figure 5.)
- 2. Distinct blue flame but lifting close burner air shutter to the point where it will not cause the flame to lift or blow off the burner when cold. (See #2 on figure 5.)



## **GAS CONVERSION**

#### General

All ovens are equipped with double coaxial (universal) orifices and with a convertible appliance pressure regulator. The unit model number plate states which gas it was adjusted for at the factory. To convert the unit to either Natural gas or LP gas will require adjustment of the orifice hood and air shutter on the burner and adjustment of the appliance pressure regulator converter cap.

Inlet pressure to the appliance pressure regulator should be as follows for both operation and checking of appliance pressure regulator setting:

INLET PRESSURE IN	NATURAL	LP
<b>INCHES OF WATER COLUMN</b>	GAS	<b>GAS</b>
Minimum	5	11
Maximum	14	14

# **Appliance Pressure Regulator Conversion**

The unit appliance pressure regulator must be set to match the type gas supply used. If converting from natural gas to LP gas, the appliance pressure regulator must be converted to regulate LP gas. If converting from LP gas to natural gas, the appliance pressure regulator must be converted to regulate natural gas.

TO CONVERT THE APPLIANCE PRESSURE REGULATOR FROM ONE GAS TO ANOTHER, DO EITHER (1), (2) OR (3) BELOW: YOUR UNIT WILL BE EQUIPPED WITH ONE OF THE THREE APPLIANCE PRESSURE REGULATOR TYPES SHOWN BELOW.

1. Remove the cap, push down and turn counter-clockwise. Turn the cap over and reinstall (figure 6).

**NOTE**: THE GAS TYPE YOU ARE CONVERTING TO MUST BE VISIBLE ON THE TOP OF THE INSTALLED APPLIANCE PRESSURE REGULATOR CAP.

Remove plastic dust cover from cap nut on top of appliance pressure regulator. Remove cap nut from appliance pressure regulator (plastic dust cover comes off with nut). "IMPORTANT" remove plastic dust cover from cap nut and reinstall on opposite side of cap nut.

Reinstall cap nut to appliance pressure regulator and replace dust cover. "CAUTION" be sure marking for the type of gas to which appliance pressure regulator has just been converted is visible in top of cap nut before replacing plastic dust cover. (See figure 7.)

3. Remove cap and forcibly snap out plastic plunger from bottom of cap. Turn plunger over and forcibly snap back in original location (figure 8).

**NOTE:** PLUNGER <u>MUST</u> SNAP INTO POSITION; THE GAS TYPE YOU ARE CONVERTING TO MUST BE VISIBLE ON LOWER SIDE OF PLUNGER.

# Checking Manifold Gas Pressure BUILT-IN OVENS:

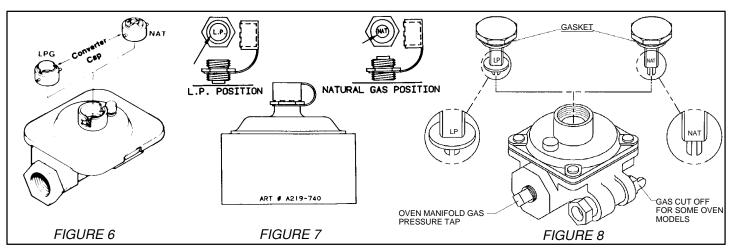
On built-in ovens, remove 1/8 inch pipe plug from front or side of gas pressure regulator, install 1/8" "B" valve, 1/8 inch piece of pipe, connect manometer, make sure main burner is on to obtain accurate pressure check.

Be sure the gas supply (house piping) pressure is at least one inch (1") above specified range manifold pressure. The gas supply pressure should never be over fourteen inches (14") water column.

# **Checking Pressure Of House Piping System**

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 1/2 lbs./sq. in. (13.8 in. W.C.).

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 1/2 lbs./sq. in. (13.8 in. W.C.).



### **ORIFICE CONVERSION**

#### 1. FROM NATURAL GAS TO LP/PROPANE GAS:

- a. Change the appliance pressure regulator from natural to LP setting. (See figure 6, 7 or 8).
- b. Screw the burner orifice hoods down tight against the pins. (See figure 9B). Use care to not over tighten. Over tightening can damage the coaxial pin inside the orifice hood.

**NOTE:** On units using Eaton Oven Safety Valve, screw the valve orifice hood down tight against the valve body. (See figure 9D). It is important that the hood be turned down as far as it can go to insure that complete conversion has occurred.

 Adjust burner air shutter to the widest opening that will not cause the flame to lift or blow off the burner when cold.

**NOTE:** Correctly adjusted sealed burners, can have flames that will lift or blow without a pot over the burner. These should be adjusted with a pot in place.

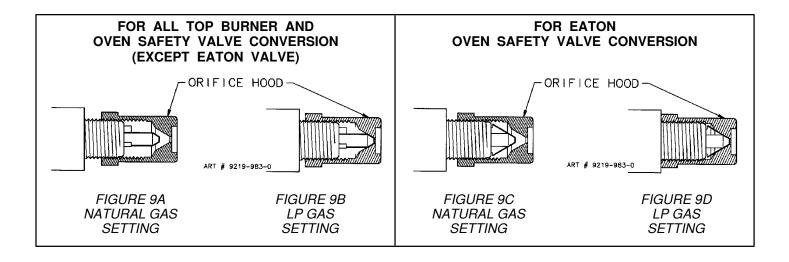
#### 2. FROM LP/PROPANE GAS TO NATURAL GAS:

- a. Change the appliance pressure regulator from LP to natural setting. (See figure 6, 7 or 8).
- b. Screw the burner orifice hoods away from the pins. (See figure 9A). Approximately 1 1/2 to 2 turns.

**NOTE:** On units using Eaton Oven Safety Valve, screw the burner orifice hoods away from pin (see figure 9C). Approximately 1 1/2 to 2 turns.

 Adjust burner air shutter to the widest opening that will not cause the flame to lift or blow off the burner when cold

**NOTE:** Correctly adjusted sealed burners, the flame will lift or blow without a pot over the burner. These should be adjusted with a pot in place.



#### **SERVICE - PARTS INFORMATION**

WHEN YOUR RANGE REQUIRES SERVICE OR REPLACEMENT PARTS, CONTACT YOUR DEALER OR AUTHORIZED SERVICE AGENCY. PLEASE GIVE THE

COMPLETE MODEL AND SERIAL NUMBERS OF THE RANGE WHICH IS LOCATED ON THE RANGE MODEL NUMBER PLATE.