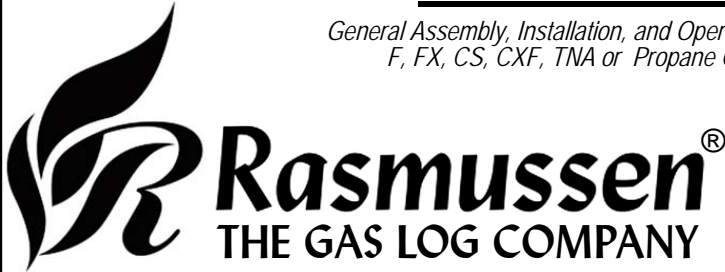


General Assembly, Installation, and Operation Instructions for use with Natural Gas Burners:
F, FX, CS, CXF, TNA or Propane Gas Burners: FA, FAX, CA, CXFA, TNA/LP



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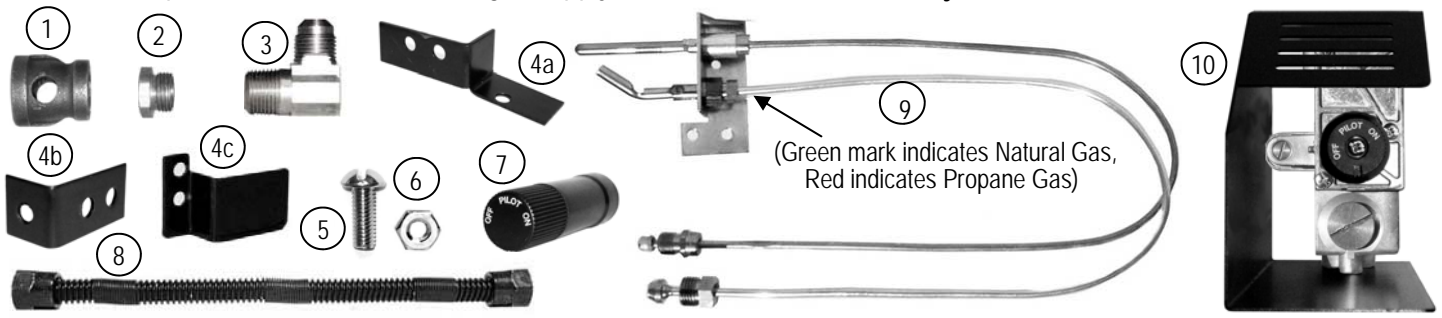
ATTENTION! READ INSTRUCTIONS CAREFULLY BEFORE ASSEMBLY
INSTALLER: LEAVE THIS MANUAL WITH THE APPLIANCE • CONSUMER: RETAIN THIS MANUAL FOR FUTURE REFERENCE

REQUIRED TOOLS AND MATERIALS

Adjustable Wrench, Pipe Wrench, Flat Head Screwdriver, Phillips Screwdriver, Pipe Sealing compound
(Only required if fittings not already prepared with pre-wrapped Teflon thread tape).

SPK3E PARTS LIST

- | | |
|--|---|
| 1. Air Mixer for LP Gas Burner Inlet Assembly (MA2) | 5. 10-32 x 3/8 bolts (qty. 3) |
| 2. Burner Orifice #'s 45, 49, 51,53 (01-XX) | 6. 10-32 Hex nut (qty. 3) |
| 3. Internally Tapped 3/8 Flared x 3/8 MIP Elbow (A2T) | 7. Valve Knob Extender (STV-KE2) |
| 4a. Pilot Support Bracket for F & TNA burners (PB-1) | 8. 10" flex Connector (SSCB-10) |
| 4b. Pilot Support Bracket for CS & CXF burners (PB-2) | 9. Pilot-Thermocouple Assembly (J95R -NG or -LP) |
| 4c. Thermocouple Heat Shield for left side gas supply (PB-4) | 10. "EASY" Safety Valve (STV-10) and Heat shield (HS-ST1) |



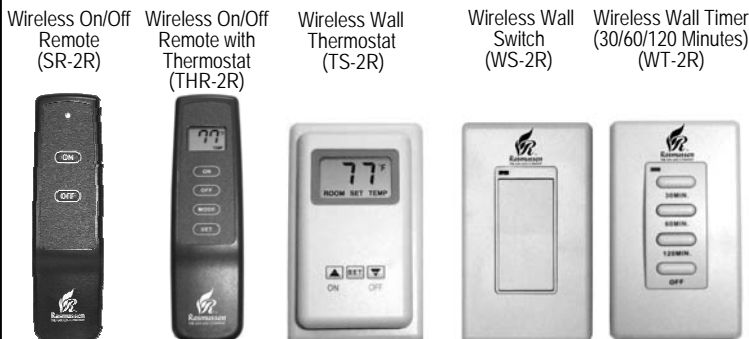
UPGRADE OPTIONS

"SE" "Remote Ready" Upgrade Kit (SE-UP1)

Kit to upgrade from "ME" to "SE" functionality. Includes: Solenoid, Receiver and batteries. One of four **Wireless Remote Transmitter Devices*** is also required (each sold separately, see below)

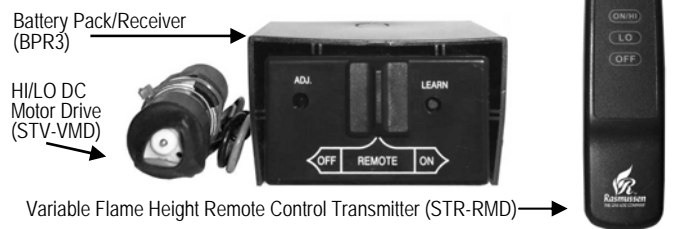


***Wireless Remote Transmitter Devices** (each sold separately)
See instructions included with remote devices for operation.



"RE" "Variable Flame Height" Remote Control Upgrade Kit (RE-UP1)

Kit to upgrade from "ME" or "SE" to "RE" functionality. Includes: DC Motor Drive, Receiver, Transmitter and batteries.



Our optional Ceramic Log House accessory (RH2) offers heat protection for the Battery Pack/Receiver while being pleasing to the eye.

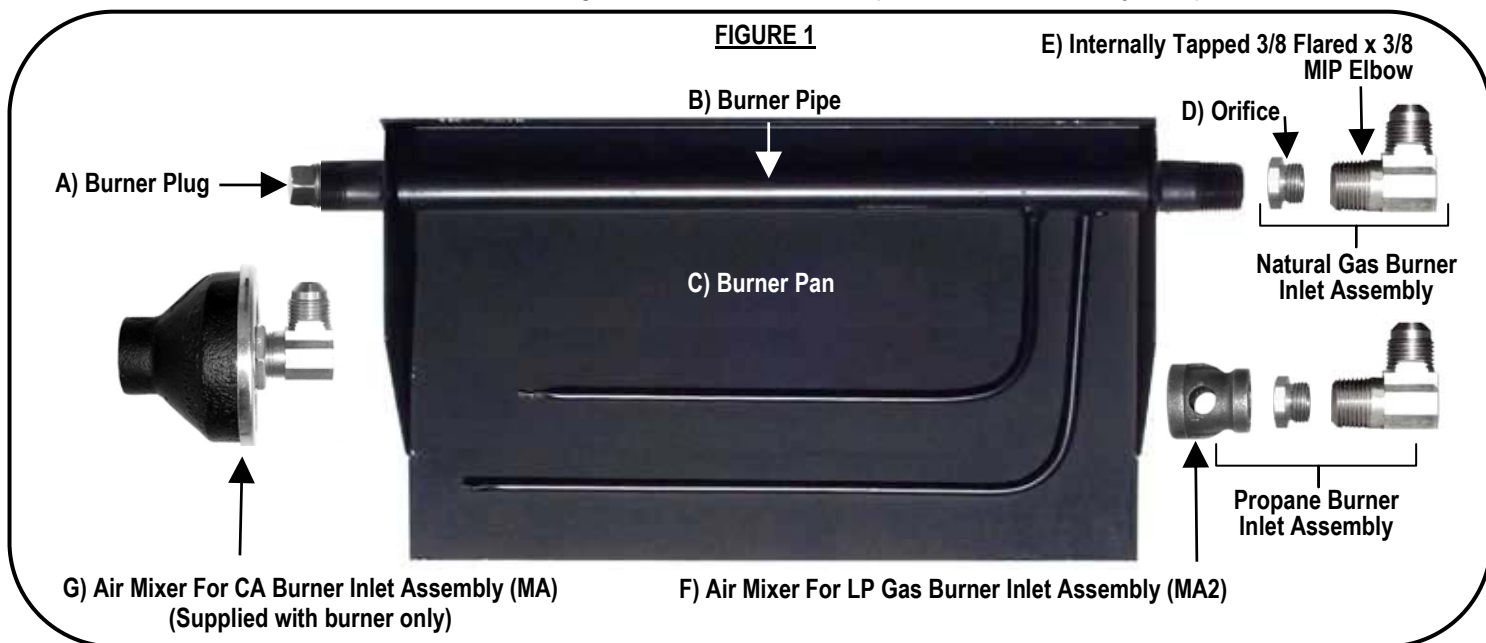


ASSEMBLY

STEP ONE: BURNER PAN FITTINGS (Figure 1)

NOTE: If fittings do not come pre-wrapped with Teflon threaded tape, pipe compound must be applied to the non-flared threads.

1. Ensure that the **BURNER PLUG** (Figure 1A.) is inserted into the opposite end of the **BURNER PIPE** (Figure 1B) and wrench tightened.
 2. Thread the Natural Gas or Propane Burner Pan Inlet Assembly into the **BURNER PAN** (Figure 1C).
- **Natural Gas Burners (NG)** (F, FX, CS, CXF, TNA) Insert the **BURNER ORIFICE** (Figure 1D) into the **INTERNALLY TAPPED 3/8 FLARED x 3/8 MIP ELBOW** (Figure 1E) and wrench tighten. (Orifices and Fittings are provided with the Burner Pan)
 - **Propane Burners (LP)** (FA, FA-X, CA, CXFA, TNA/LP) requires **MA** (Figure 1F) or **MA-2** (Figure 1G) **AIR MIXER ASSEMBLY**. Insert the Internally Tapped 3/8 Flared x 3/8 MIP Elbow and wrench tighten. Thread the Air Mixer onto the 3/8 Flared x 3/8 MIP Elbow and wrench tighten with air intake hole positioned horizontally and parallel with the floor.



STEP TWO: ATTACH PILOT (Figures 2 thru 5)

NOTE: The following pilot attachment instructions apply to each burner model shown in Figures 2 thru 5.

With the **PILOT THERMOCOUPLE ASSEMBLY** (Figure 2A) attached to the **PILOT SUPPORT BRACKET** (Figure 2B), insert the **10-32 BOLTS** (Figure 2C) through the pre-drilled holes of the Pilot Support Bracket and into the threaded holes of the Pilot Thermocouple Assembly (Figure 2A). Tighten with flathead screwdriver.

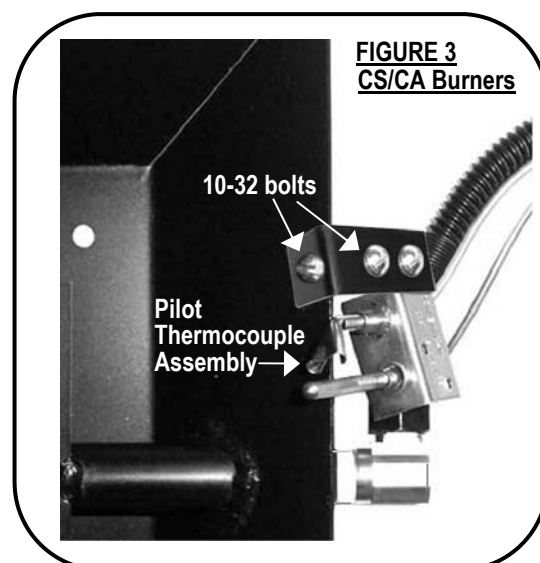
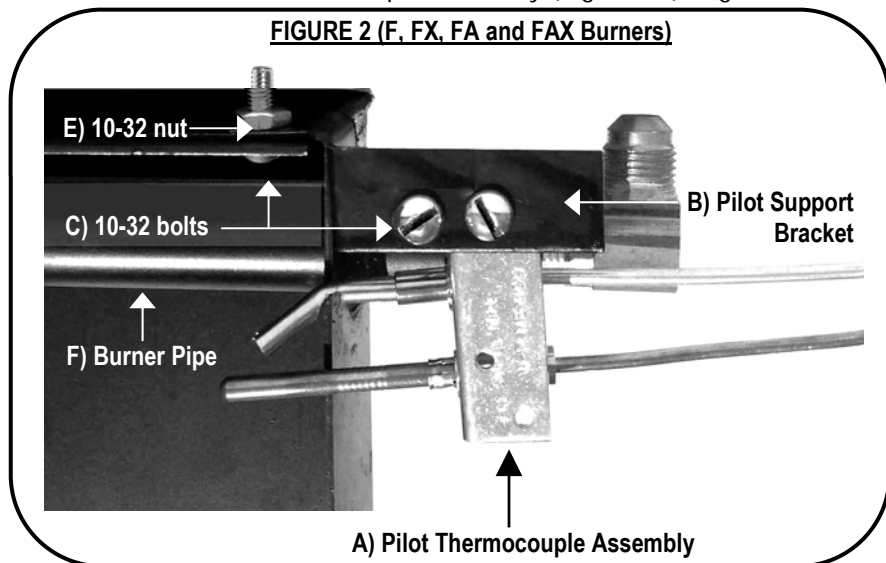


FIGURE 4 (CXF AND CXFA Burners)

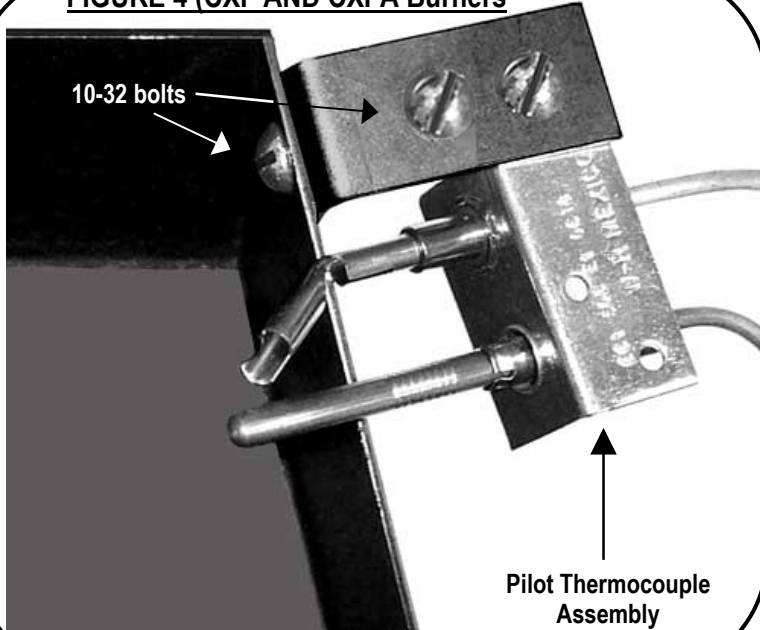


FIGURE 5 (TNA / TNA-LP Burners)

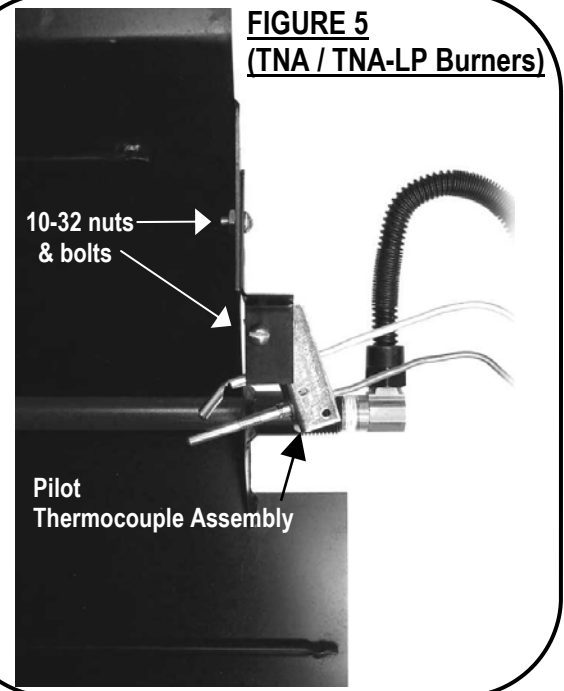
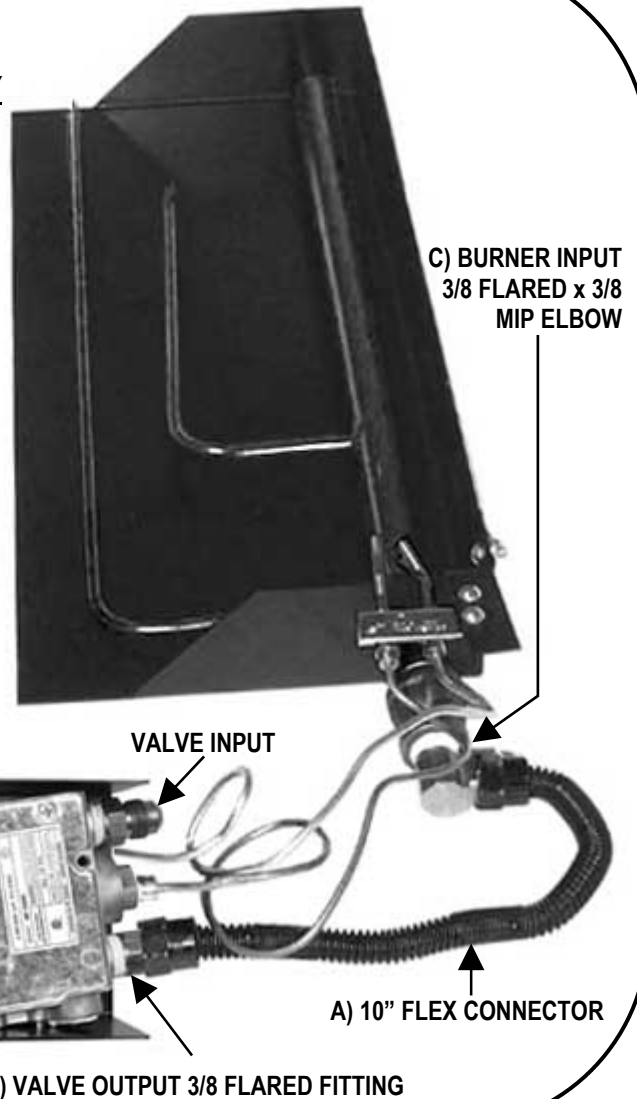
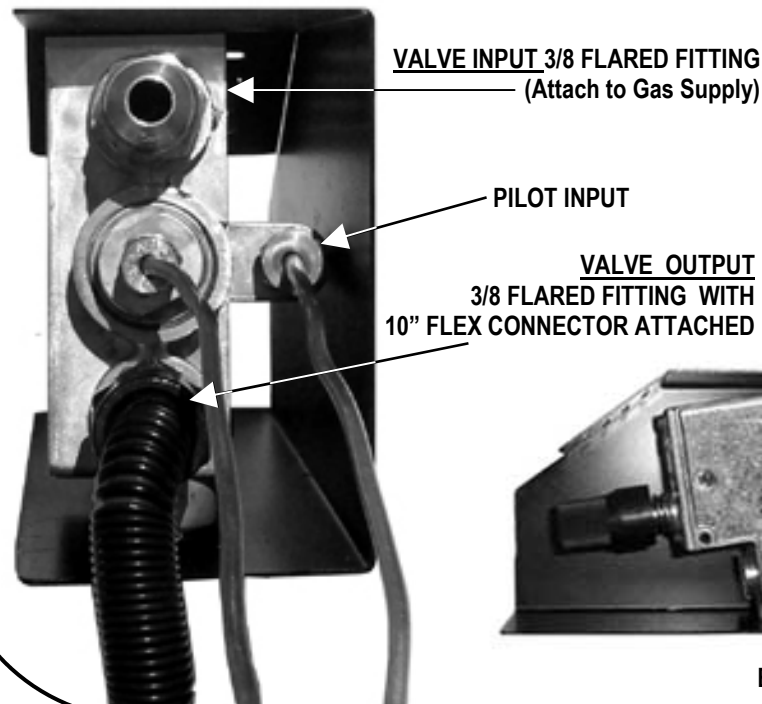


FIGURE 6

STEP THREE: CONNECT BURNER AND PILOT GAS SUPPLY

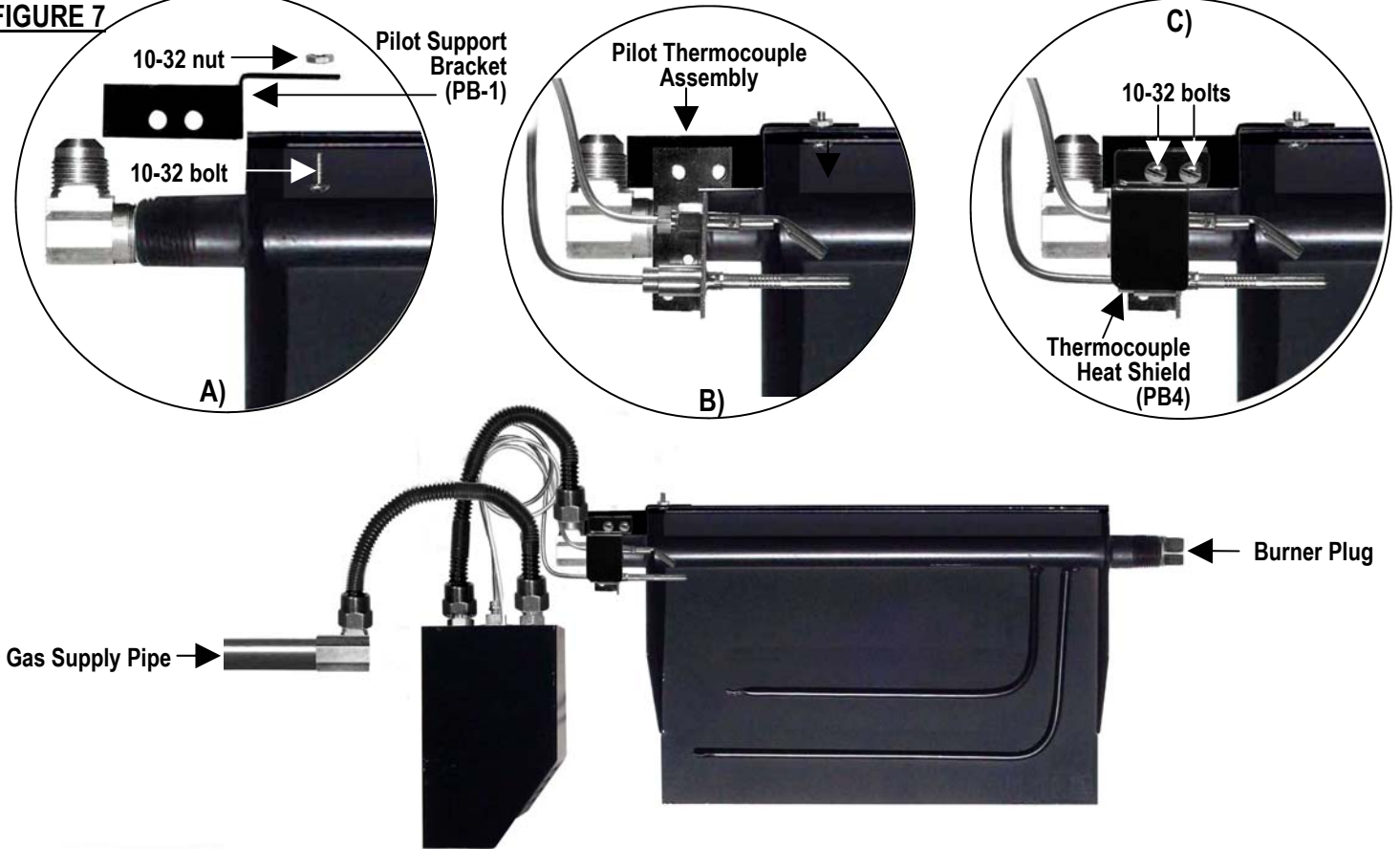
Connect **10" FLEX CONNECTOR** (Figure 6A) between the flared ends of the **VALVE OUTPUT 3/8 FLARED FITTING** (Figure 6B) and the **BURNER INPUT 3/8 FLARED 3/8 x MIP ELBOW** (Figure C). Bend the 10" Flex Connector to the optimum Valve position (forward and to the side of the Burner pan, low to the floor).



LEFT SIDE GAS SUPPLY CONNECTION

Attach the Pilot Support Bracket (PB-1) to the left side of the burner pan using a 10-32 nut and bolt (Figure 7A), then place the Pilot Thermocouple Assembly over the bracket aligning the two screw holes (Figure 7b). Place the Thermocouple Heat Shield over the Thermocouple Assembly and bolt onto the Pilot Support Bracket using the supplied 10-32 nuts and bolts (Figure 7C).

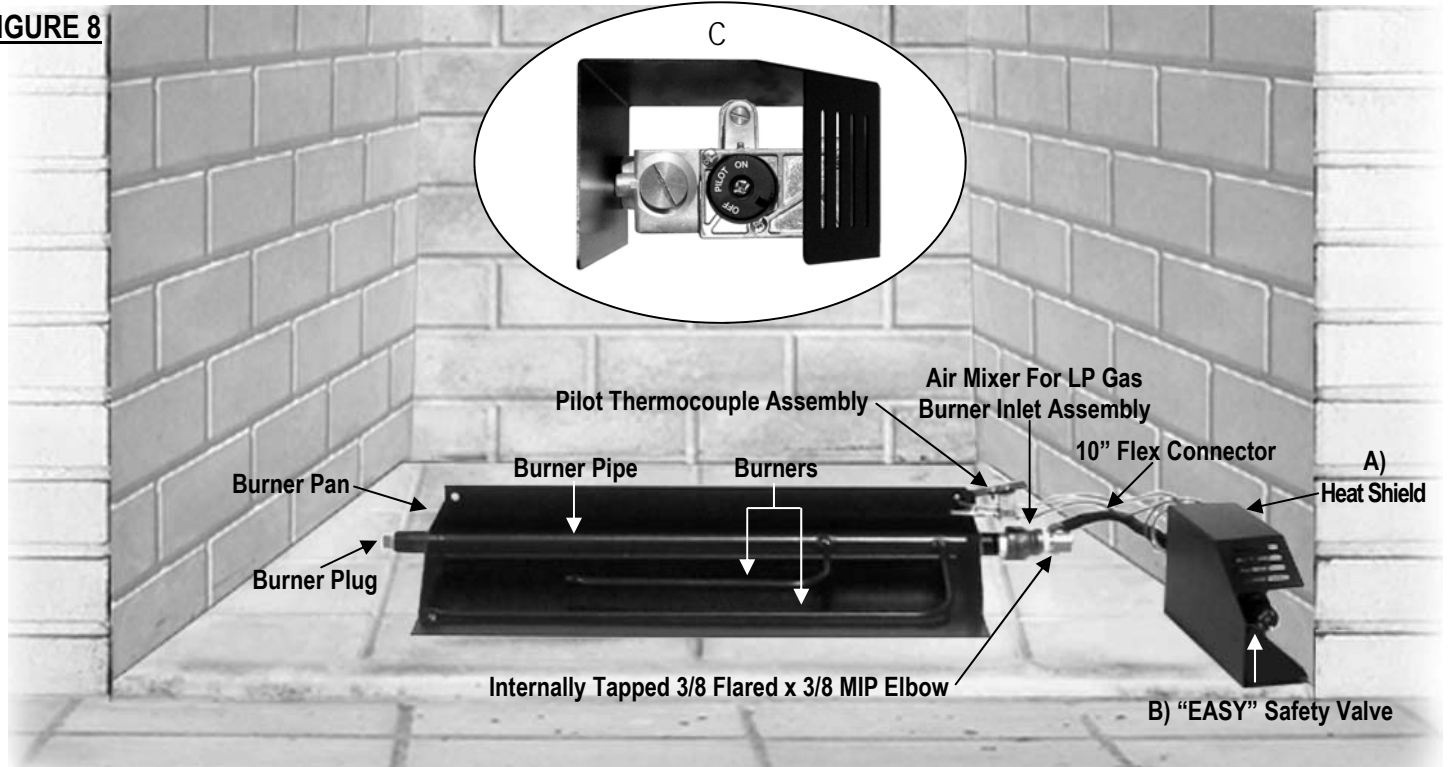
FIGURE 7



SUGGESTED FIREBOX LAYOUT AND REQUIRED PARTS

The "EASY" Safety Valve can be adversely affected by heat and must be placed as **far forward and to the side of the burner pan as possible** (Figure 8B). It may also be placed open face side down with heat shield up as shown in Figure 8C. The example below shows an FX style burner. For other styles of burners see next page.

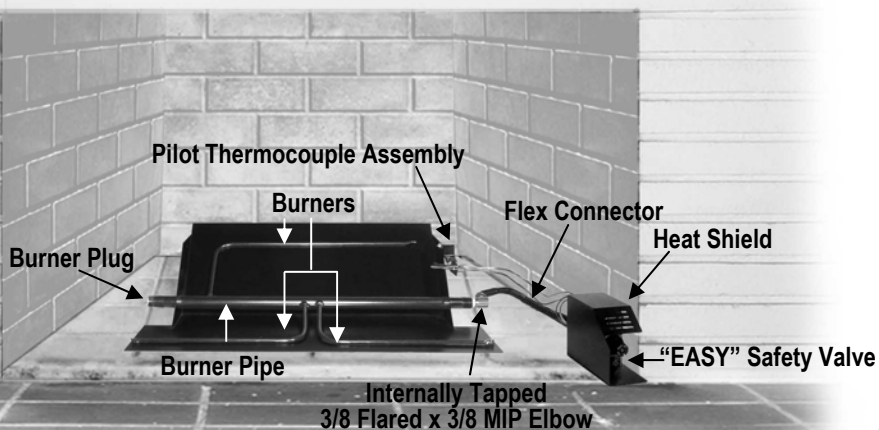
FIGURE 8



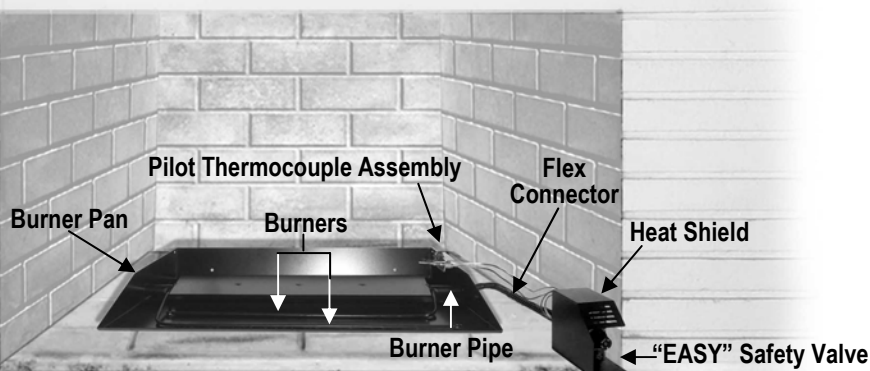
FURTHER SAMPLES OF FIREBOX LAYOUT

Each shown with "EASY" Safety Valve placed as far forward and to the side of the burner pan as possible.

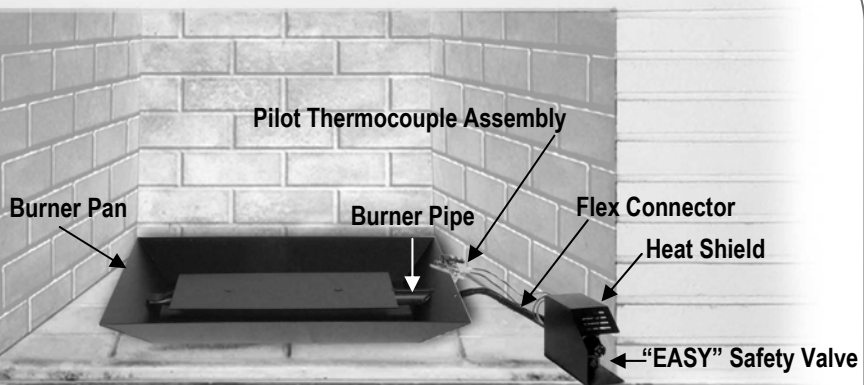
TNA STYLE BURNER



CXF AND CXFA STYLE BURNER



CS AND CA STYLE BURNER



LIGHTING AND OPERATION

STEP ONE: PILOT LIGHTING

1. Turn **VALVE KNOB** (Figure 9A) to “**PILOT**” position.
2. Depress and hold until air is bled and gas flows to Pilot (Figure 10A).
3. Light Pilot with a Match or Lighter.
4. Once Pilot is lit, continue to depress and hold until the Pilot flame remains lit (approximately 30 to 60 seconds).
5. If Pilot does not remain lit, depress and turn Valve Knob clockwise to “**OFF**” position and wait at least 5 minutes to allow gas to dissipate. Repeat steps 1 thru 4.

FIGURE 10

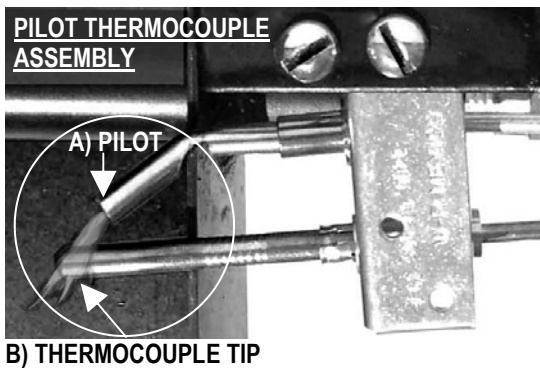
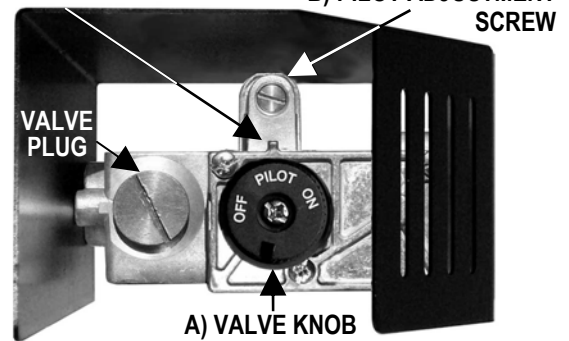


FIGURE 9 “EASY” SAFETY VALVE

C) KNOB POSITION INDICATOR B) PILOT ADJUSTMENT SCREW



STEP TWO: PILOT ADJUSTMENT

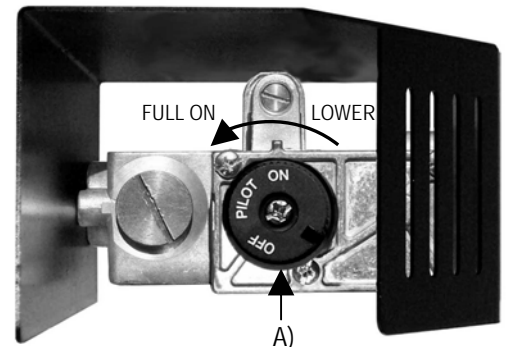
1. The Pilot flame should be steady, surrounding the **THERMOCOUPLE TIP** (Figure 10B).
2. If pilot flame adjustment is necessary, use a narrow long stem flathead screwdriver to turn **PILOT ADJUSTMENT SCREW** (Figure 9B) above.
3. Turn clockwise for less flame, counterclockwise for more.
4. If after pilot adjustment the burner begins to shutdown, re-adjust for a longer pilot flame.

STEP THREE: BURNER OPERATION

1. Turn **VALVE KNOB** counter clockwise to “**ON**” position (Figure 11A).
2. Adjust the burner flame height by turning the valve knob clockwise to lower and counter-clockwise to raise up to full on.

NOTE: The **VALVE KNOB** has complete control of gas to the pilot and burner. It cannot be turned to “**OFF**” without first depressing dial to the “**PILOT**” position and then rotating clockwise to “**OFF**” (see figure 9A). During the heating season leave valve knob in “**PILOT**” position for convenience. Otherwise, turn to “**OFF**” position for any prolonged non-use.

FIGURE 11



IMPORTANT!

READ THESE WARNINGS PRIOR TO OPERATION

IMPORTANT!

- **CHIMNEY DAMPER MUST BE WIDE OPEN!** The flue must vent all products of combustion. Damper and glass doors **MUST** be fully open before lighting or burning for proper ventilation and to prevent heat damage to valve.
- Your gas log set should be operated for the first 2-3 hours at a low flame setting to allow tempering of the refractory logs.
- **DO NOT REMOVE HEAT SHIELD** (Figure 8A). It is intended to prevent premature valve failure and voiding of warranty. Replace immediately if removed for any reason.
- The “**EASY Safety Control Valve** must be protected to a maximum ambient temperature of 225° F. Excessive heat to the valve is indicated by melted plastic or wiring on the valve body and is not warrantable.
- Allow an adequate period of cooling after use before closing glass doors.
- **NEVER** operate your gas log set with glass doors closed.