



SPK3E - Manual "EASY" Control

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



Rasmussen GAS LOGS & GRILLS

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FORM: SPK3E-10-06

ATTENTION! READ INSTRUCTIONS CAREFULLY BEFORE ASSEMBLY

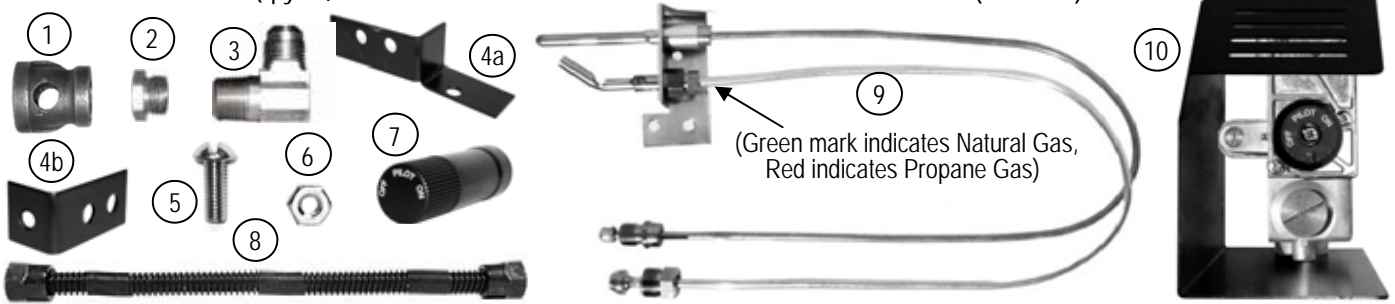
INSTALLER: LEAVE THIS MANUAL WITH THE APPLIANCE • **CONSUMER:** RETAIN THIS MANUAL FOR FUTURE REFERENCE

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



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)

Wireless On/Off Remote with Thermostat (THR-2R)



Wireless Wall Thermostat (TS-2R)



Wireless Wall Switch (WS-2R)

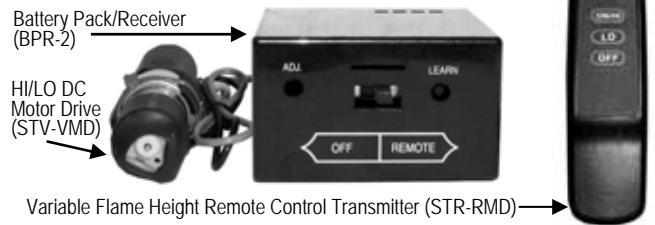


Wireless Wall Timer (30/60/120 Minutes) (WT-2R)



"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.



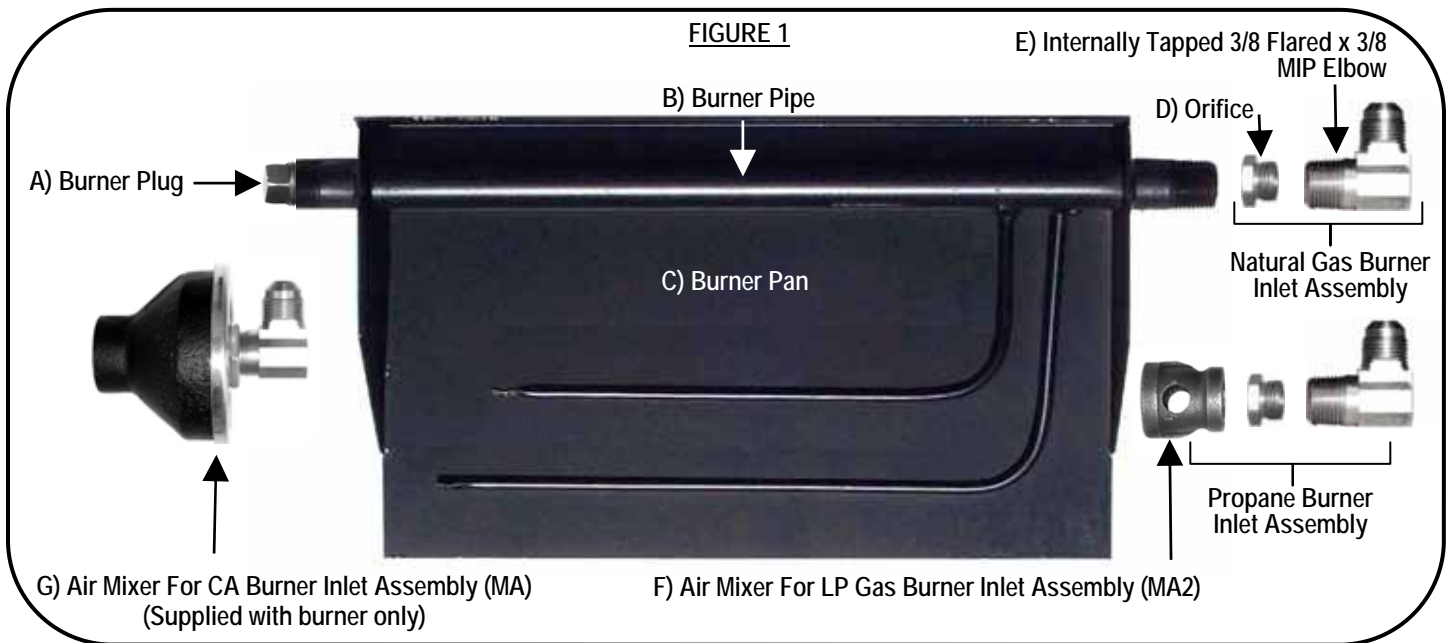
What sets Rasmussen Safety Pilot Kits apart from those of other manufacturers, aside from quality, is the ease and affordability with which our valve can be upgraded from manual operation to one of several remote control devices!

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.

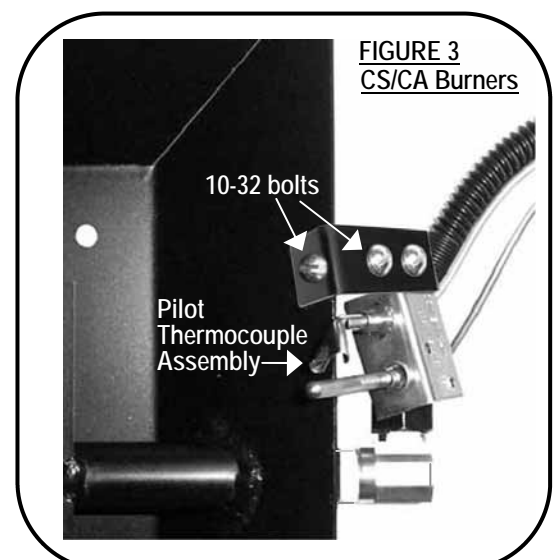
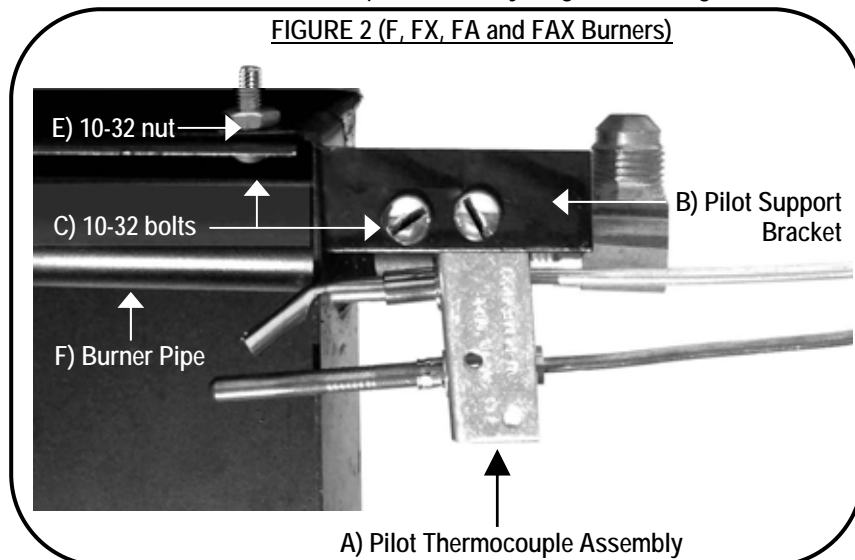


FIGURE 4 (CXF AND CXFA Burners)

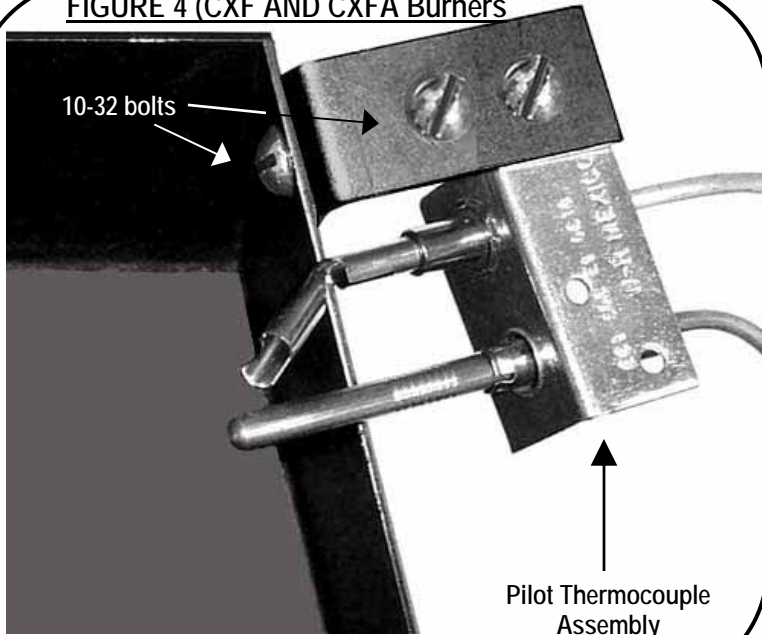


FIGURE 5 (TNA / TNA-LP Burners)

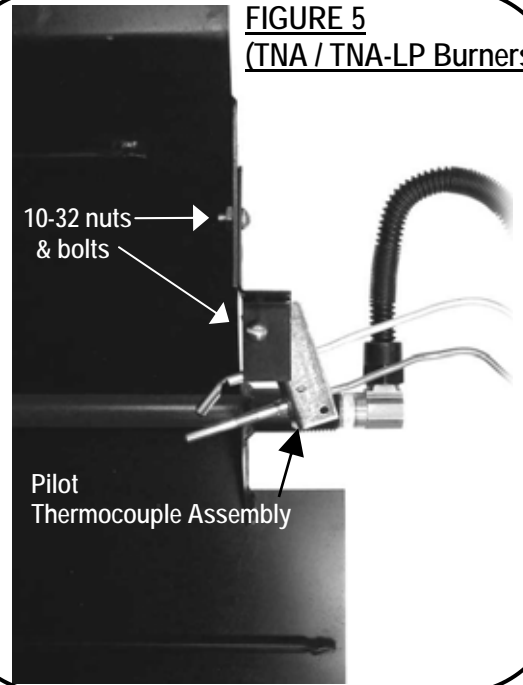
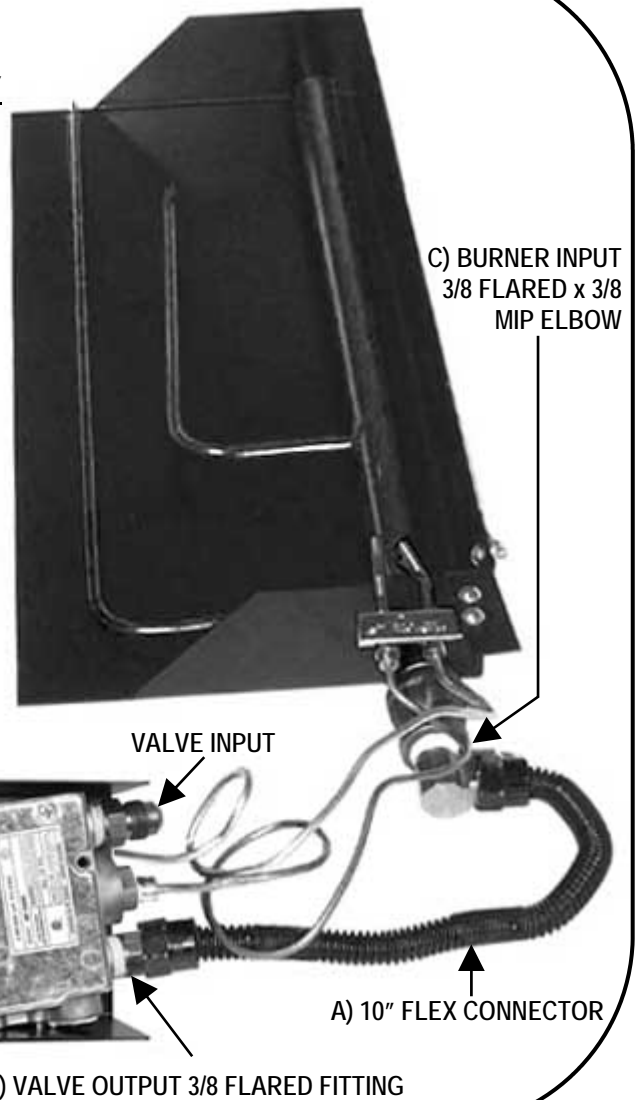
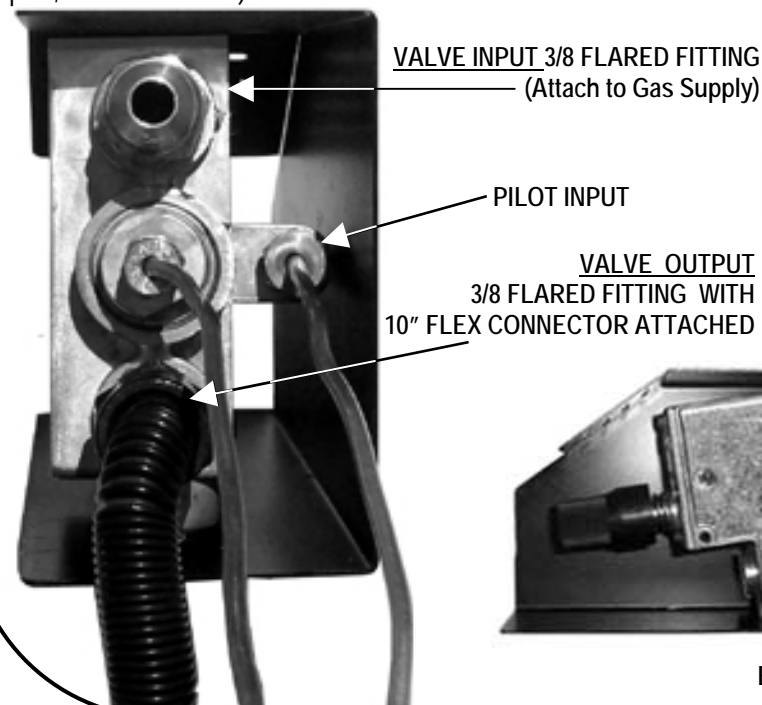


FIGURE 6

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).



IMPORTANT!

READ THESE WARNINGS PRIOR TO OPERATION

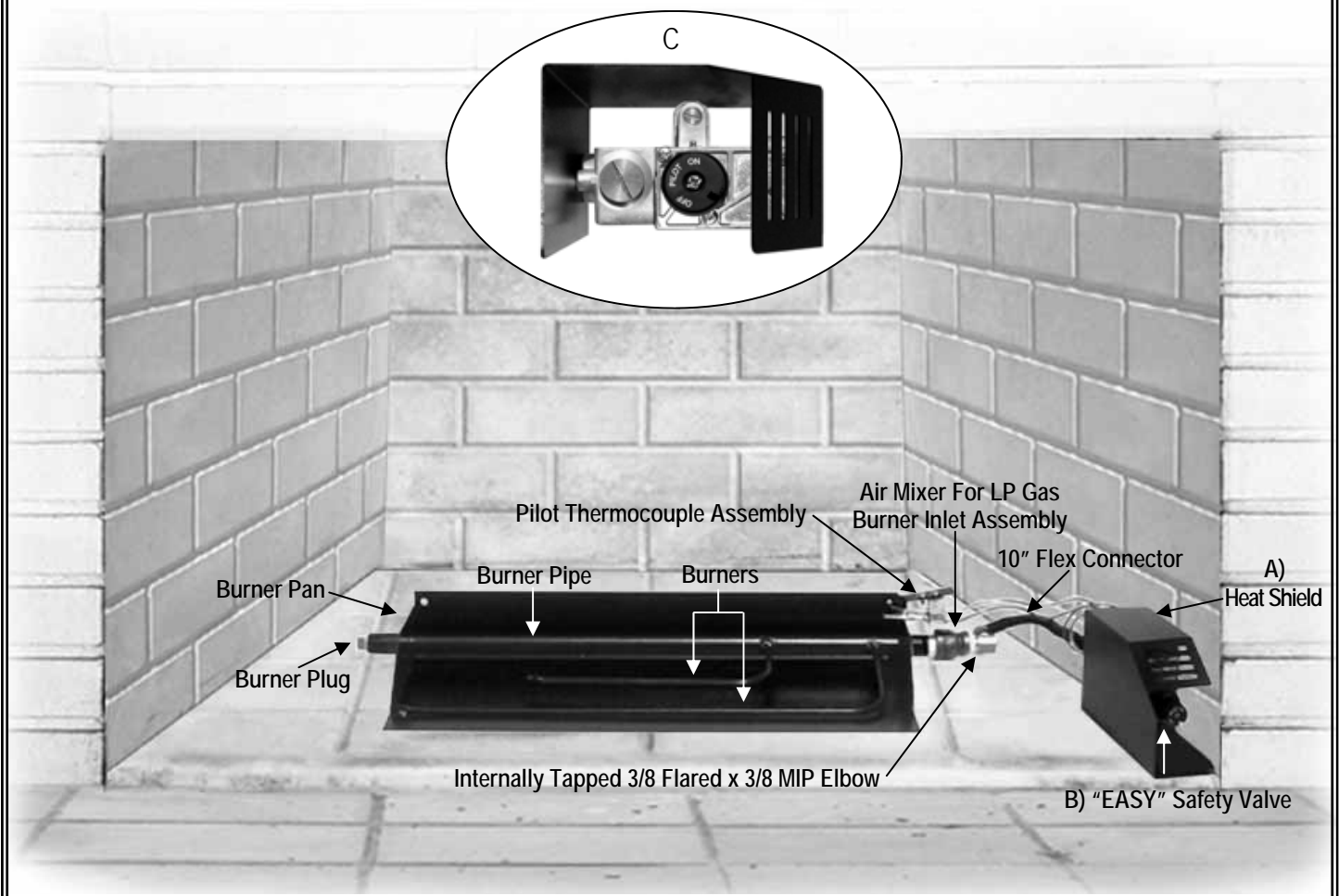
IMPORTANT!

- **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 7A). 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.

FIGURE 7

SUGGESTED FIREBOX LAYOUT AND REQUIRED PARTS

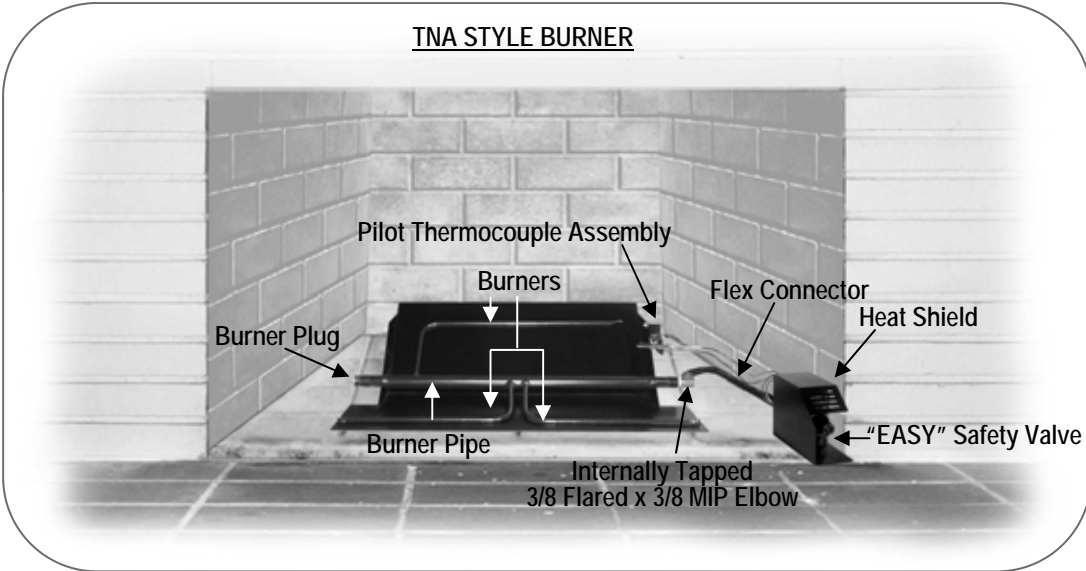
The "EASY" Safety Valve can be adversely affected by heat and **must** be placed as far forward and to the side of the burner pan as possible (Figure 7B). It may also be placed open face side down with heat shield up as shown in Figure 7C. The example below shows an FX style burner. For other styles of burners see next page.



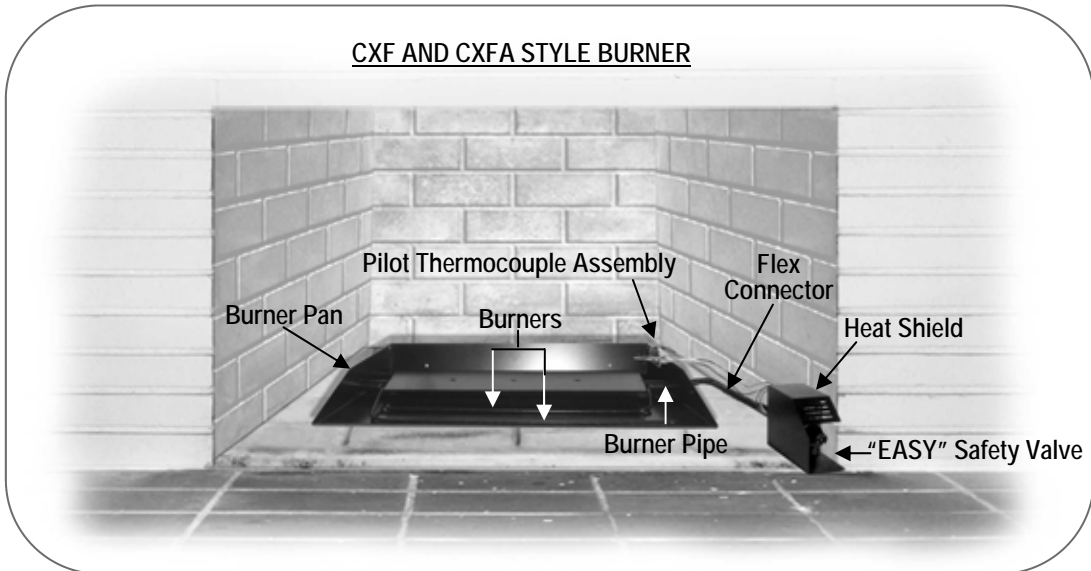
FURTHER SAMPLES OF FIREBOX LAYOUT

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

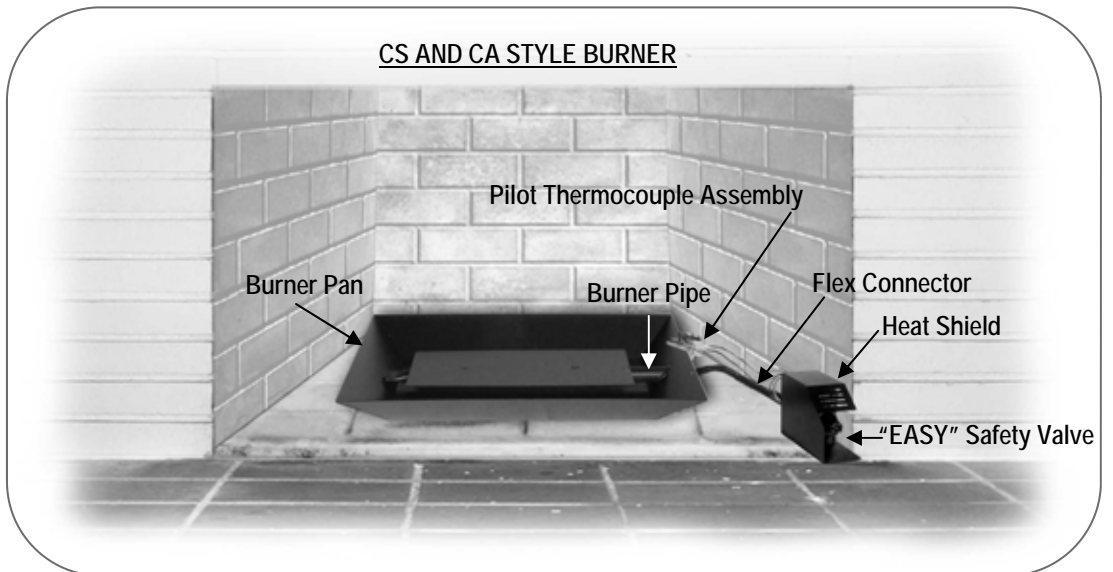
TNA STYLE BURNER



CXF AND CXFA STYLE BURNER



CS AND CA STYLE BURNER



LIGHTING AND OPERATION

STEP ONE: PILOT LIGHTING

1. Turn **VALVE KNOB** (Figure 8A) to "PILOT" position.
2. Depress and hold until air is bled and gas flows to Pilot (Figure 9A).
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 8 "EASY" SAFETY VALVE

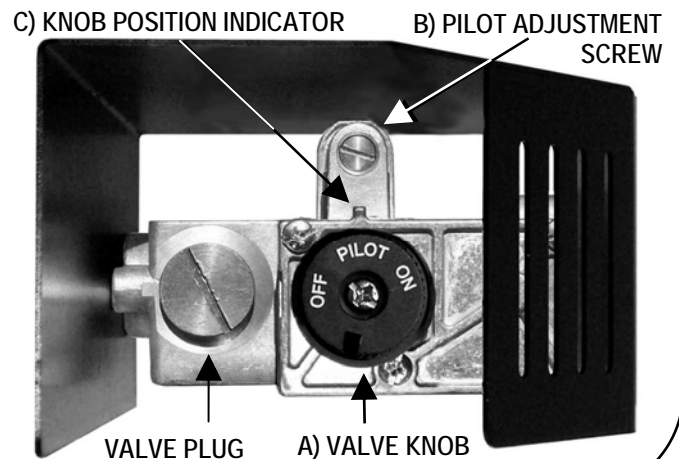
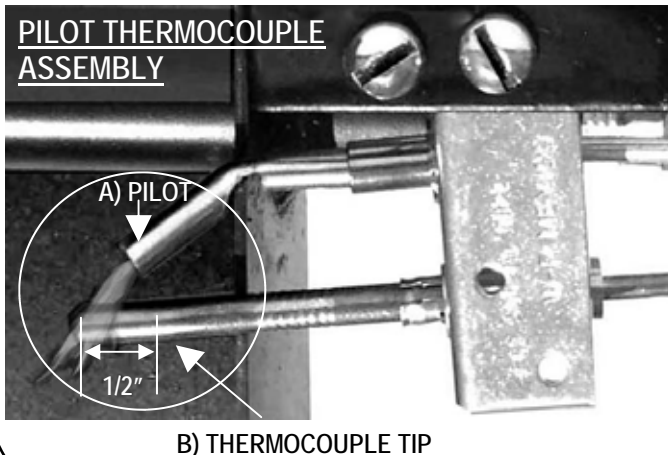


FIGURE 9

PILOT THERMOCOUPLE ASSEMBLY



STEP TWO: PILOT ADJUSTMENT

1. The Pilot flame should be steady, surrounding the **THERMOCOUPLE TIP** (Figure 9B).
2. If pilot flame adjustment is necessary, use a narrow long stem flathead screwdriver to turn **PILOT ADJUSTMENT SCREW** (Figure 8B) 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 10A).
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 8A). During the heating season leave valve knob in "PILOT" position for convenience. Otherwise, turn to "OFF" position for any prolonged non-use.

FIGURE 10

