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RMC1E - Variable Flame Height "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



Kasmussengas logs & grills

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FORM: RMC1E-10-06

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

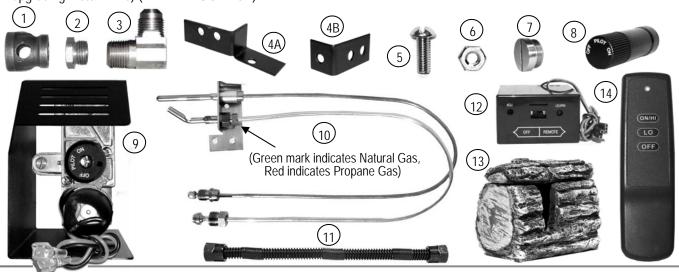
REQUIRED TOOLS AND MATERIALS

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).

RMC1E PARTS LIST

- 1. Air Mixer for LP Gas Burner Inlet Assembly (MA2)
- 2. Burner Orifice #53,49 and 45 (01-XX)
- 3. Internally Tapped 3/8 Flared x 3/8 MIP Elbow (A2T)
- 4a. Pilot Support Bracket for F & TNA burners (PB-1)
- 4b. Pilot Support Bracket for CS & CXF burners (PB-2)
- 5. 10-32 x 3/8 bolts (qty. 3)
- 6. 10-32 Hex nut (qty 1)
- Valve Plug (used when replacing, servicing or upgrading Motor Drive) (VALVE PLUG EASY).

- 8. Valve Knob Extender (STV-KE2)
- 9. "EASY" Safety Valve (STV-10) & Heat shield (HS-ST1)
- 10. Pilot Thermocouple Assembly (J95R -NG or -LP)
- 11. 10" flex Connector (SSCB-10)
- 12. Remote Receiver (BPR2)
- 13. Ceramic Log House (RH2) (Sold Separately)
- 14. Variable Flame Height Remote Control Transmitter (STR-RMD)



<u>UPGRADE OPTION</u> "SE" "Remote Ready" Upgrade Kit (SE-UP1)

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



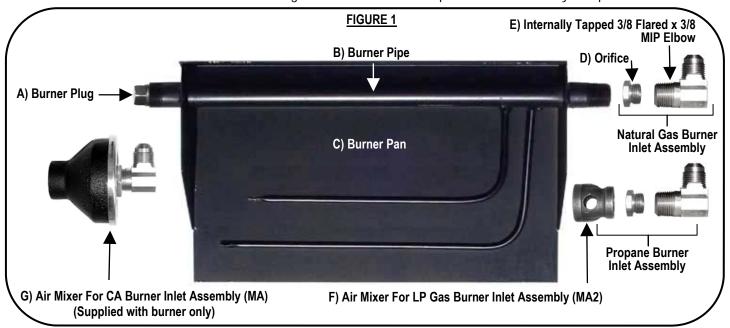
What sets Rasmussen Safety Pilot Kits apart from those of other manufacturers, aside from quality, is the ease and affordability with which our valve can be upgraded from manual operation to one of several remote control devices!

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.

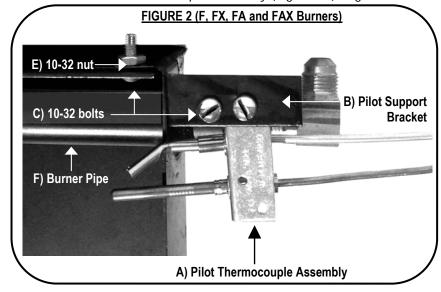
- 1. Ensure that the **BURNER PLUG** (Figure 1A.) is inserted into the opposite end of the **BURNER PIPE** (Figure 1B) and wrench tightened.
- 2. Thread the Natural Gas or Propane Burner Pan Inlet Assembly into the **BURNER PAN** (Figure 1C).
- Natural Gas Burners (NG) (F, FX, CS, CXF, TNA) Insert the 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.

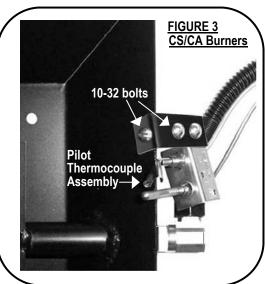


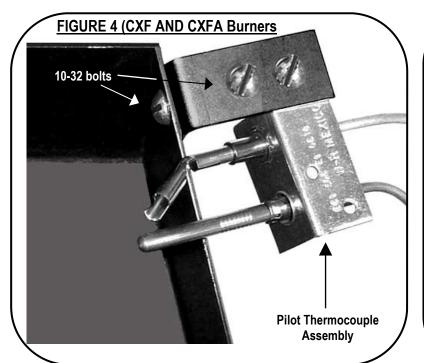
STEP TWO: ATTACH PILOT (Figures 2 thru 5)

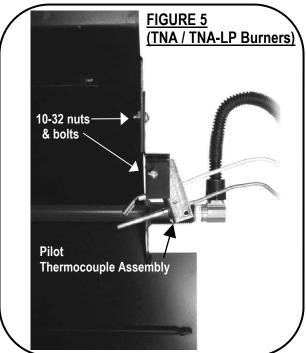
NOTE: The following pilot attachment instructions apply to each burner model shown in Figures 2 thru 5.

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.









C) BURNER INPUT

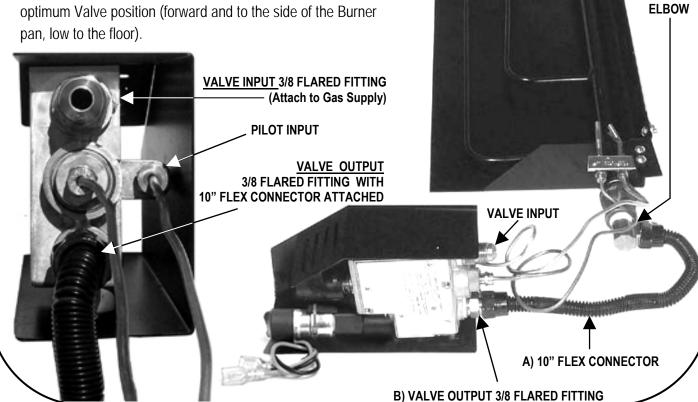
3/8 FLARED

x 3/8 MIP

FIGURE 6

STEP THREE: CONNECT BURNER AND PILOT GAS SUPPLY (FAX Style Burner with MA2 air mixer attached shown for example)

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).

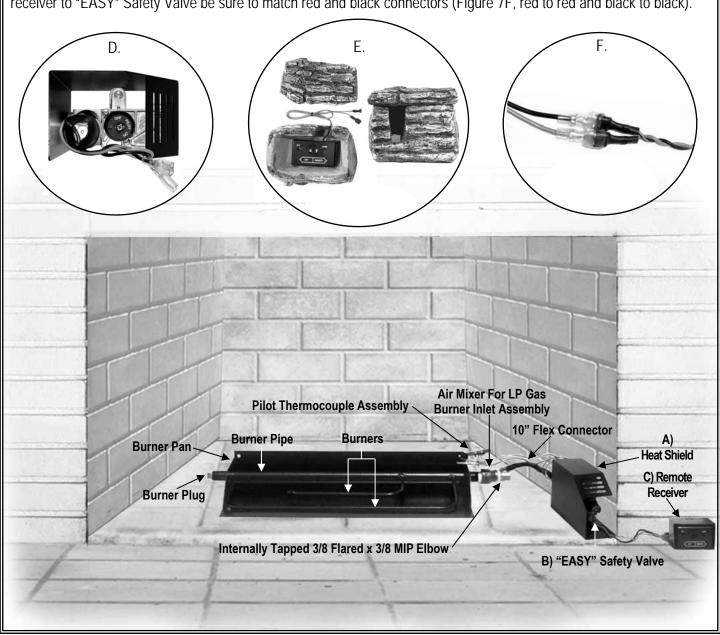


WARNING

- <u>DO NOT</u> 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.
- <u>NEVER</u> operate your gas log set with glass doors closed.
- DC POWER FROM THE RECEIVER OPERATES THIS UNIT. <u>DO NOT CONNECT TO A 115V AC LINE</u>. SAFETY CONTROLS DAMAGED BY HEAT OR AC ARE NOT COVERED BY WARRANTY.

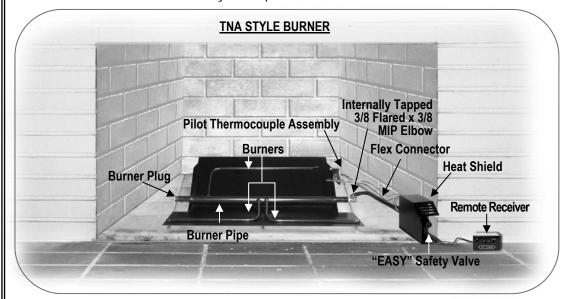
FIGURE 7 SUGGESTED FIREBOX LAYOUT AND REQUIRED PARTS

The "EASY" Safety Valve (Figure 7B) and Remote Receiver (Figure 7C) are both adversely affected by heat and <u>must</u> be placed as **far forward and to the side of the burner pan as possible** (bottom right). The "EASY" Safety Valve may also be placed open face side down with heat shield up as shown in Figure 7D. Our optional **Ceramic Log House** accessory (Figure 7E), offers heat protection for the Remote Receiver while being pleasing to the eye. When connecting receiver to "EASY" Safety Valve be sure to match red and black connectors (Figure 7F, red to red and black to black).

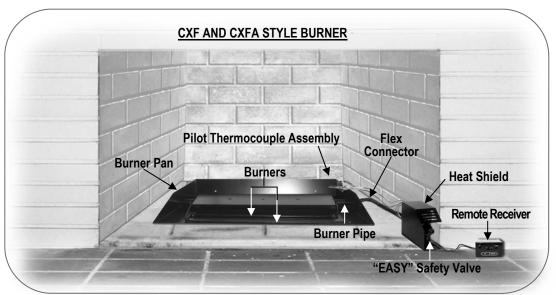


FURTHER SAMPLES OF FIREBOX LAYOUT

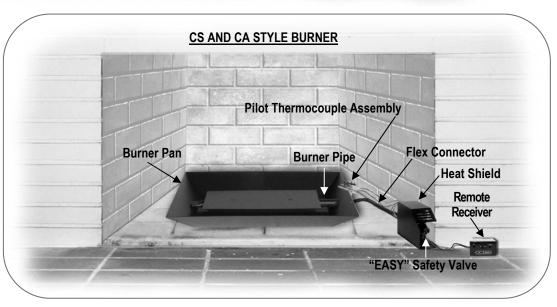
Each shown with "EASY" Safety Valve placed as far forward and to the side of the burner pan as possible.











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.

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).

LIGHTING AND OPERATION

STEP ONE: PILOT LIGHTING

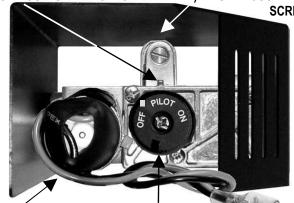
1. Turn **VALVE KNOB** (Figure 8A) to "**PILOT**" position.

- 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).
- 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

C) KNOB POSITION INDICATOR

B) PILOT ADJUSTMENT SCREW

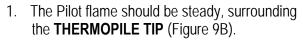


DC VARIABLE MOTOR DRIVE

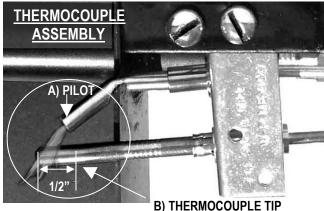
A) VALVE KNOB

FIGURE 9

STEP TWO: PILOT ADJUSTMENT



- If pilot flame adjustment is necessary, use a narrow long stem flathead screwdriver to turn PILOT ADJUSTMENT **SCREW** (Figure 8B) above.
- Turn clockwise for less flame, counter-clockwise for more.
- 4. If after pilot adjustment the burner begins to shutdown, re-adjust for a longer pilot flame.



STEP THREE: BURNER OPERATION

- Turn **VALVE KNOB** to "ON" position (Figure 10A) then slide switch on the **RECEIVER** (Figure 10B) to "REMOTE" position.
- Depress the "ON/HI" button on the **TRANSMITTER** (Figure 10C) until a click is heard. The burner will then lìght to "Full on"

NOTE: Reducing the burner flame can be achieved by pressing the "LO" button one beep at a time to the desired flame height. (Pressing the "ON/HI" button one beep at a time will raise the burner flame). To verify the burner is completely off, press the "OFF" button once. During the heating season leave valve knob in "PILOT" position for convenience. Otherwise, turn to "OFF" position for any prolonged non-use.

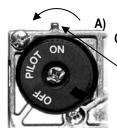


FIGURE 10 VALVE KNOB TURNED COUNTER-CLOCKWISE TO "ON" POSITION

> KNOB POSITION INDICATOR

B) RECEIVER SLIDE SWITCH IN "REMOTE" POSITION





<u>IMPORTANT!</u> 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. TO SHUTDOWN OVERNIGHT OR FOR ANY PROLONGED PERIOD, SLIDE RECEIVER SWITCH TO "OFF" POSITION (Figure 10B above)