

FUTERA II INSTALLATION AND OPERATION INSTRUCTIONS

CHECKING & ADJUSTMENTS

On initial light-off, the installer may alter the preset factory settings to attain satisfactory combustion. An accurate manometer and flue gas analyzer must be used. Please see **Fire Testing** section 4 for combustion guidelines.

Spark Gap

With the main and pilot gas manual valves in the closed position energize the unit. Observe the trial for ignition to confirm that the spark is strong and continuous. If not, check and adjust the spark gap as shown in Figures 19, 20 & 20A.

Figure 19 – Spark Gap & Pilot Flame (500)

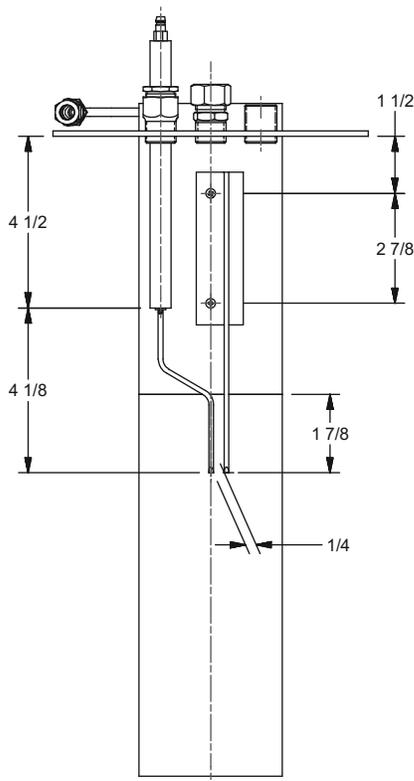


Figure 20 – Spark Gap & Pilot Flame (750-1900)

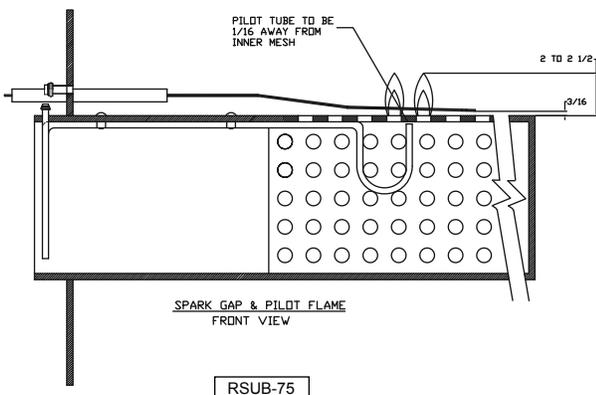
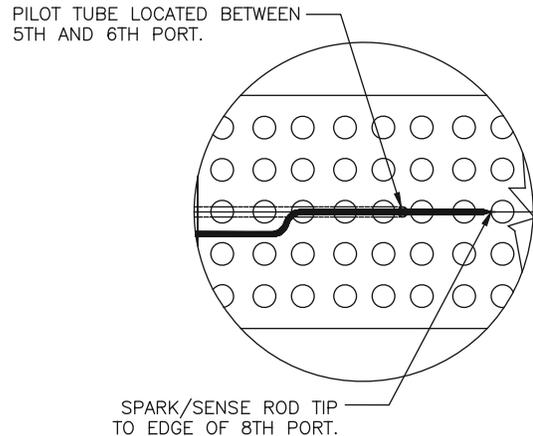


Figure 20A – Spark Rod Position Detail (750-1950)



Pilot Operation

With the manual main gas valve and manual pilot gas valve closed energize the unit and allow it to try for ignition until it goes into flame failure. The trial for ignition indicator light should illuminate immediately after the trial for ignition starts and stay on for approximately 15 seconds. The trial for ignition indicator light should go out and the flame failure indicator light illuminate immediately after flame failure. Open the manual pilot gas valve. A normal pilot ignition sequence should take place within 6 minutes of the initial flame failure. The trial for ignition indicator light should stay on. Recycle the pilot several times to confirm reliable operation.

Pilot Adjustment

The pilot burner flame should be well defined and **2 to 2 1/2 in, 50 to 64 mm** above the surface of the burner, Figure 19 & 20. To adjust the pilot the following steps must be taken:

1. Remove the pilot gas pressure regulator cap.
2. Turn the pressure regulator adjustment screw clockwise to increase the flame and counterclockwise to decrease it.
3. Replace the pressure regulator adjustment screw cap.

Fire Testing

1. For an on/off unit confirm that the low-fire side of the two-stage gas valve is set to its maximum setting. For a two-stage unit a 1/16 in. thick silicon spacer should be installed under the low-fire adjusting screw. Without this spacer it won't be possible to consistently set the low-fire pressure to **2.4 in, 61 mm WC**.
2. Follow the instructions in the "OPERATING INSTRUCTIONS" section starting on page 25 to fire the main burner. Upon ignition of the main burner adjust the high fire adjusting screw to obtain the high fire pressure listed in Table 12. On a two-stage unit disconnect the power from the high fire side of the gas valve and adjust the low fire, regulator. If the unit short cycles on low fire adjust the air box pressure and gas back pressure as outlined below.

CAUTION: Never force the regulator adjustment screw beyond the stop limits or damage to the regulator will occur!