

ADJUSTMENT OF MANIFOLD PRESSURE FOR REPLACEMENT VALVE 60-102787-05

**Models: RGFG, RGGE,
(-) 97V**USA, (-) 97V**KSA, and (-)98V**USA**

NOTE: HIGH FIRE MUST BE ADJUSTED BEFORE LOW FIRE

ADJUSTING THE VALVE

Important! Instructions for valve pressure adjustment for this valve are critical and must be followed for correct operation of the valve. The adjustment screw is a digital adjustment dial and must be adjusted 1 click at a time for the control to recognize the adjustment. A minimum of 5 seconds for the control to recognize the adjustment and a few seconds to balance out must be observed. If more than one click of adjustment is made before the control recognizes the click the valve will no longer adjust! The valve adjustment must be taken back to the point on the valve that the adjustment was initiated or power cycled to allow the valve to create a new home position.

High and low fire adjustment is the same but high fire must be adjusted before low fire.

The adjustment wheel is shipped from the factory in the nominal position (noted as position A on the wheel).

The wheel adjusts manifold pressure digitally and can be adjusted four full revolutions each direction.

- Four revolutions (or 64 clicks) clockwise will increase pressure
- Four revolutions (or 64 clicks) counterclockwise will decrease pressure

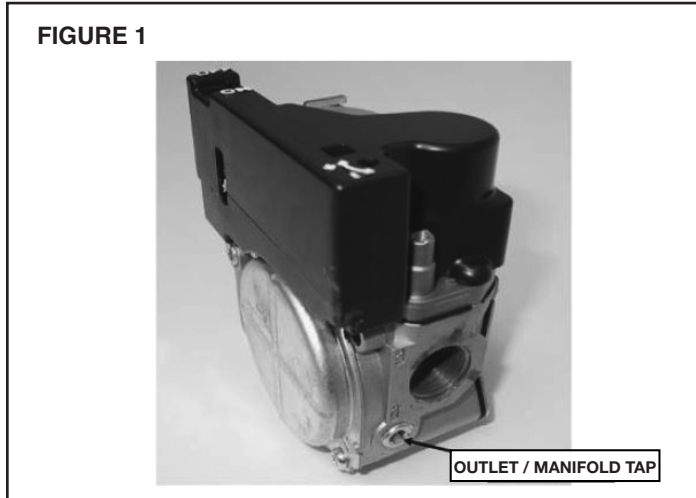
Important: The wheel will spin more than four revolutions each way but will only register 64 clicks. Each click is a very minimal adjustment and several clicks may be required to adjust the pressure to the necessary target.

Once the maximum adjustment (64 clicks high or low) is reached, the wheel can be turned in the opposite direction and this will cause the pressure to also move in the opposite direction. The first click in the opposite direction will cause a pressure change in the opposite direction even if the maximum adjustment in the original direction has been exceeded by several clicks. If power to the furnace (and therefore the gas valve) has been interrupted and the adjustment wheel turned while power is off, the outlet pressure of the valve will not be adjusted and will remain the same and will be re-assigned to the new wheel selection.

HIGH FIRE ADJUSTMENT

1. Disconnect electrical power to the furnace.
2. Remove all thermostat connections and jumper R to W1.
3. Turn gas manual shut-off valve located outside the furnace to the CLOSED position.

IMPORTANT: Be sure that the gas manual shut-off valve located outside the furnace has been in the CLOSED POSITION for at least five minutes. Remove the outlet/manifold pressure tap plug in the gas valve.



4. Install field supplied pressure tap to the outlet/manifold tap. Connect the positive pressure hose from a manometer to the pressure tap.
5. Locate the model for which you are replacing this valve:
 - For (-) 97V**USA/KSA, (-) 98V**USA:**
Set dip switch SW10 to the "OFF" position and dipswitch SW11 to the "ON" position (this will force the furnace to operate at the maximum firing rate (100%) only).
 - For RGFG/RGGE:**
Position Test Switches S4-2(off) and S4-3 (on).
Note: Power must be cycled to attain 40% firing rate.

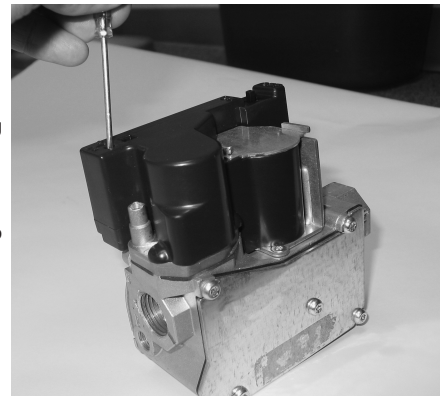
6. Replace the blower compartment door.
7. Turn gas manual shut-off valve located outside the furnace to the OPEN position.
8. Connect furnace electrical power supply or toggle valve off to allow the furnace to shut down and cool with the blower off delay.
9. **For (-) 97V**USA/KSA, (-) 98V**USA Models Only:** After ignition, allow furnace to operate and complete the pressure switch calibration before checking maximum firing rate outlet/manifold pressure.

Note: The manifold gas pressure to be:
3.5" W.C. (± 3) for natural gas.
10.0" W.C. (± 5) for LP gas.

10. To adjust the outlet/manifold pressure, insert a small slotted screwdriver into the opening at the top of the valve. See Figure 2. **Adjust using "Adjusting Valve" section above.**

FIGURE 2
SERVO CONTROLLED GAS VALVE PRESSURE ADJUSTMENT

NOTE: The adjustment wheel will not stop rotating when it hits the maximum or minimum position. Instead, it will continue to rotate to the opposite adjustment. Use the letters on the wheel as a guide.



11. Repeat steps 9 and 10 if necessary.
12. Disconnect electrical power to the furnace.

LOW FIRE ADJUSTMENT

1. Locate the model of furnace you are installing valve for.

For (-) 97VUSA/KSA, (-) 98V**USA:**

Set dip switch SW10 to the "ON" position and dipswitch SW11 to the "OFF" position (this will force the furnace to operate at the minimum firing rate (40% only).

For RGFG/RGGE:

Position Test Switches S4-2(on) and S4-3(off). Note: Power must be cycled to attain 40% firing rate.

2. Replace the blower compartment door.
3. Connect furnace electrical power supply.
4. **For (-) 97V**USA/KSA, (-) 98V**USA Models Only:** After ignition, allow furnace to operate and complete the pressure switch calibration before checking minimum firing rate outlet/manifold pressure.

Note: The manifold gas pressure to be:
0.56" W.C. (\pm .1) for natural gas.
1.60" W.C. (\pm .2) for LP gas.

5. To adjust the outlet/manifold pressure, insert a small slotted screwdriver into the opening at the top of the valve (see Figure 2.) **Adjust using "Adjusting Valve" section above.**

6. Repeat steps 4 and 5 if necessary.
7. Disconnect electrical power to the furnace.
8. Set dipswitch SW10 to the "OFF" position.
9. Turn gas manual shut-off valve located outside the furnace to the CLOSED position.
10. Remove outlet/manifold pressure tap. Replace and tighten outlet/manifold plug.
11. Turn gas manual shut-off valve to the OPEN position. Check for gas leaks using an approved leak detector.

Do NOT use a flame of any kind to check for leaks.

Repair any leaks before continuing with this procedure.

FIGURE 2
SERVO CONTROLLED GAS VALVE PRESSURE ADJUSTMENT

NOTE: The adjustment wheel will not stop rotating when it hits the maximum or minimum position. Instead, it will continue to rotate to the opposite adjustment. Use the letters on the wheel as a guide.

