

## Frequently Asked Questions

### How do I complete furnace commissioning on a furnace model PVG?

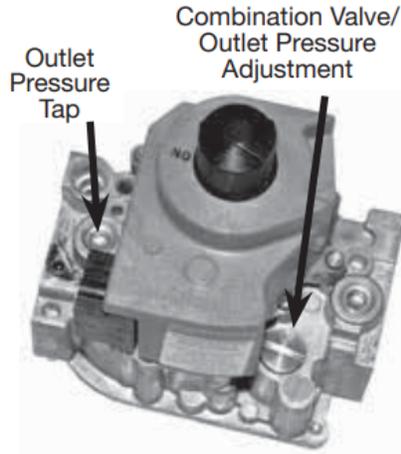
#### **Accessing and Beginning the Furnace Commissioning Tool:**

1. Press the program key (bullseye button) on the Carel controller. This will take you to the Main Menu.
2. Scroll down to Ctrl Variables and press the enter key.
3. Scroll down to Advanced and press the enter key.
4. Scroll down to Login, enter the service level password (9998). This will automatically bring you back to the Advanced menu.
5. Scroll down to Manual Overrides and press the enter key.
6. Scroll down until you find the menu titled, "IG Furnace Setup". It will prompt you to press the enter key to access and begin the furnace commissioning.
  - a. Note: Your unit must be enabled and running for this to function properly.
7. Follow the prompts of the furnace commissioning tool. It will walk you through what pressures to set at what times, and ask you questions along the way.
  - a. Further details on adjusting the pressures for the combination valve outlet, low fire, and high fire when the furnace commissioning tool prompts for it can be found below.
8. Once the combination valve outlet, high fire, and low fire pressure have been properly set, continue through the commissioning tool to verify proper furnace operation, and answer additional questions.
9. The tool will tell you when the furnace commissioning is complete.

#### **Adjusting the Combination Valve Outlet Pressure:**

1. Hook up a manometer to the combination valve outlet on the modulating furnace. Answer the furnace commissioning tool question that asks if this is complete (change "Complete: No" to "Complete: Yes").
2. The next step will state that the furnace is being called to high fire. With the furnace at high fire, set the pressure at the combination valve outlet to 5.0"WC for natural gas or 11.5"WC for LP gas.
  - a. Adjust the combination valve outlet's pressure adjustment screw. The adjustment screw is beneath a flathead screw cap. See Figure 1.

Figure 1: Combination Regulator Valve



3. Answer the commissioning tool's question that asks if this is complete.

**Adjusting the High Fire Setting on a Modulating Valve:**

1. Hook-up a manometer to the test port/s on the burner manifold/s in question when the commissioning tool prompts you to do so. Answer the furnace commissioning tool question that asks if this is complete.
2. The next step will state that the furnace is being called to high fire. The commissioning tool will prompt you to adjust manifold pressures in the correct order for your furnace configuration.
3. To set the high fire pressure setting on a modulating valve, Press and hold button #1 (see Figure 2) until the LED lights solid red on the modulating valve. Release once the LED is lit solid.
4. Observe the manifold pressure with the manometer and compare it to what the commissioning tool is asking for.
5. Adjust the modulating valve's pressure by pushing button #1 to increase the pressure and button #2 to decrease the pressure (see Figure 2). The gas pressures that the commissioning tool will ask for can be found in Figure 3.

Figure 2: EXA Modulating Gas Valve (With Cover Removed)

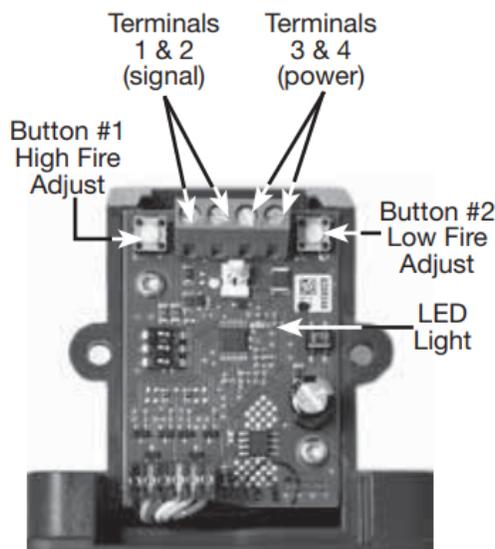


Figure 3: Gas Pressure Settings for High and Low Fire

High Fire Settings	
Natural Gas	3.5 in. wg
LP Gas	10.0 in. wg
Low Fire Settings	
Natural Gas	0.3 in. wg
LP Gas	1.0 in. wg

6. Save the high fire setting by simultaneously pressing and holding button #1 and button #2 (see Figure 2) until the LED turns off.

**Adjusting the Low Fire Setting on a Modulating Valve:**

1. Hook-up a manometer to the test port/s on the burner manifold/s in question when the commissioning tool prompts you to do so. Answer the furnace commissioning tool question that asks if this is complete.
2. The next step will state that the furnace is being called to low fire. The commissioning tool will prompt you to adjust manifold pressures in the correct order for your furnace configuration.
3. To set the low fire pressure setting on a modulating valve, Press and hold button #2 (see Figure 2) until the LED blinks red on the modulating valve. Release once the LED is blinking red.
4. Observe the manifold pressure with the manometer and compare it to what the commissioning tool is asking for.
5. Adjust the modulating valve's pressure by pushing button #1 to increase the pressure and button #2 to decrease the pressure (see Figure 2). The gas pressures that the commissioning tool will ask for can be found in Figure 3.
6. Save the low fire setting by simultaneously pressing and holding button #1 and button #2 (see Figure 2) until the LED turns off.