



Prestige SOLO 80-110 - ACVMax Boilers Natural to Propane Instructions

Applicable Kit Part Numbers:

- PARKIT62 (PA 80)
- PARKIT63 (PA 110)

Kit Includes:

- Rating Label
- Conversion Label
- (1) Propane Gas Orifice

Recommended Tools

- Adjustable Wrenches
- Phillips-Head Screwdriver
- 4mm Allen Wrench
- Flat-blade Screwdriver
- Calibrated Combustion Analyzer

WARNING

Indicates a potentially hazardous situation which, if ignored, can result in substantial property damage, serious injury, or death.

NOTICE

Indicates special instructions on installation, operation or maintenance, which are important to equipment but not related to personal injury hazards.

WARNING

Failure to follow instructions below can result in substantial property damage, serious injury, or death.

- Instructions are for a qualified installer or service technician.
- Read all instructions before proceeding.
- Follow instructions in proper order.

NOTICE

Upon completion of the conversion from Natural Gas (NG) to Propane (LP), affix the new rating label included in the kit to the unit adjacent to the existing rating label. **DO NOT** affix the new label over the existing rating label. Add propane conversion labeling to the gas valve.

WARNING

For your safety, turn off electrical power supply at service panel before proceeding to avoid possible electrical shock hazard. Failure to do so can result in substantial property damage, serious injury, or death.

NOTICE

These instructions cover NG to LP conversion for ACVMax controlled Prestige Solo 80 and 110 boilers only. Each kit is supplied with one orifice suitable for use with that particular boiler model.

Prestige SOLO 80-110 - ACVMax Boilers

Natural to Propane Instructions

1.0 Installation of the Propane Orifice

1. Turn off the electrical power supply to the boiler.
2. Close the manual gas shut off valve to the unit.
3. Remove the front panel of the Prestige by removing the screws along the bottom edge of the unit. Pull the bottom of the panel forward and then lift up to remove the front panel from the unit.
4. Remove the air inlet elbow from the venturi using a twist and pull motion. See Fig. 1.
5. Disconnect the gas supply piping inside the Prestige enclosure at the nut located on the bottom of the gas valve. See Fig. 1.

NOTICE

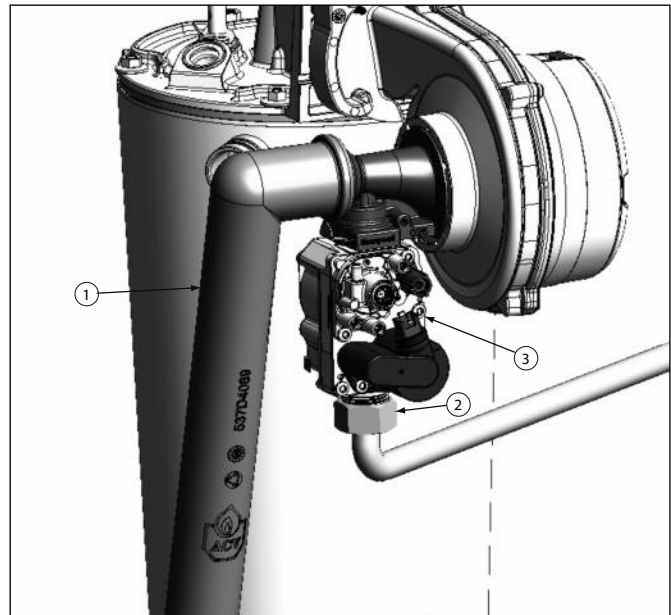
There is a gasket between the gas valve and the gas piping. This gasket must be reinstalled when the gas piping is reconnected onto the gas valve. Use care not to damage the gasket.

6. Remove Molex plug from gas valve.
7. Remove the retaining clip from the venturi assembly. See Fig. 2.

NOTICE

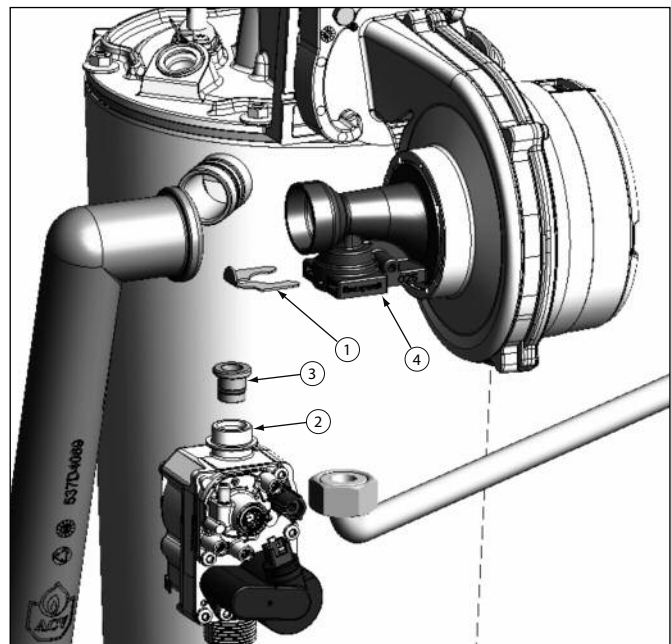
There is an o-ring between the venturi and the gas valve. This o-ring must be reinstalled when the gas valve is installed back into the venturi. Use care not to damage the o-ring.

8. Remove the gas valve from the venturi assembly by pulling down. See Fig. 2.
9. Remove the brass natural gas orifice from the top of the gas valve and install the appropriate brass propane orifice from Table 1. The black rubber o-rings must remain attached to the propane orifice and to the gas valve. See Fig. 2.



1. Air Inlet Elbow
2. Gas Piping Connection Nut
3. Gas Valve

Fig. 1: Prestige Burner Assembly



1. Venturi/Gas Valve Retaining Clip
2. Gas Valve/Venturi O-ring
3. Brass Orifice
4. Venturi

Fig. 2: Venturi/Gas Valve Assembly

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Natural to Propane Instructions

Table 1: Propane Gas Orifice

Model	Orifice Size
Solo 80	0.142 inch (3.6 mm)
Solo 110	0.175 inch (4.45 mm)

⚠ WARNING

Failure to retain the rubber o-ring on the gas valve will cause an improper seal between the gas valve and the venturi resulting in a potential risk of a gas leak. Any potential gas leakage can result in substantial property damage, serious injury, or death.

⚠ WARNING

Ensure the proper orifice for the model is installed per Table 1. Failure to comply will affect input rate and combustion of the boiler which can result in substantial property damage, serious injury, or death.

NOTICE

For the reassembly process do not use adhesive on the venturi/gas valve o-ring, the orifice o-ring, or the gas valve/piping gasket.

10. Reinstall the gas valve into the venturi assembly.
11. With the gas valve in place, reinstall the venturi/gas valve retaining clip to hold the gas valve in place. Ensure the retaining clip is properly installed by pulling down on the gas valve and verifying the gas valve is secure.
12. Reconnect Molex plug to the gas valve electrical connection.

13. Ensure the gas valve/piping gasket is in place, reconnect the gas piping connection and open the manual gas shut off valve. Before placing the Prestige boiler back into operation check and test all gas connections for leaks. Repair leaks if found.

⚠ WARNING

Do not check for gas leaks with an open flame. Use a bubble test. Failure to check for gas leaks can result in substantial property damage, serious injury, or death.

14. Reattach the air inlet elbow to the venturi.
15. Replace the front jacket panel and secure with screws.
16. Turn on the electrical power supply to the Prestige boiler and return the unit back to service.

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Natural to Propane Instructions

2.0 Combustion Test and Adjustments

- The installer **MUST** perform a complete combustion check to ensure the following combustion levels in Table 2 are met at high and low input firing rates and the burner is operating at optimum conditions.

Table 2: Recommended Propane Combustion Settings

High Fire	CO ₂ Range	10.7 to 12.0%
	CO ₂ Target	11.0%
	O ₂ Range	2.7 to 4.7%
	O ₂ Target	4.2%
Low Fire	CO ₂ Range	0.5 to 0.6% Lower than H.F. CO ₂
	O ₂ Range	0.8 to 0.9% Higher than H.F. O ₂
	CO Max	150 ppm

! WARNING

The combustion testing and adjustments must be performed by a qualified installer, service agency or the gas supplier. All combustion measurements must be performed with calibrated equipment to ensure proper readings and accuracy.

! WARNING

Failure to perform a complete combustion test at both high and low input rates may result in incomplete combustion and the production of carbon monoxide, which can result in substantial property damage, serious injury, or death.

! WARNING

The combustion levels should be measured at high firing rate. If the combustion levels are not within the range given in Table 2 for Low Fire after adjusting High Fire, shut the boiler down and contact Triangle Tube Technical Support Department. Failure to comply with this requirement can result in substantial property damage, serious injury, or death.

! WARNING

The gas valve outlet pressure is factory set to the correct value and does not require field adjustment or measurement. Measurement or adjustments could result in damage to the gas valve and can result in substantial property damage, serious injury, or death.

- Press the round INSTALLER button. See Fig. 3.

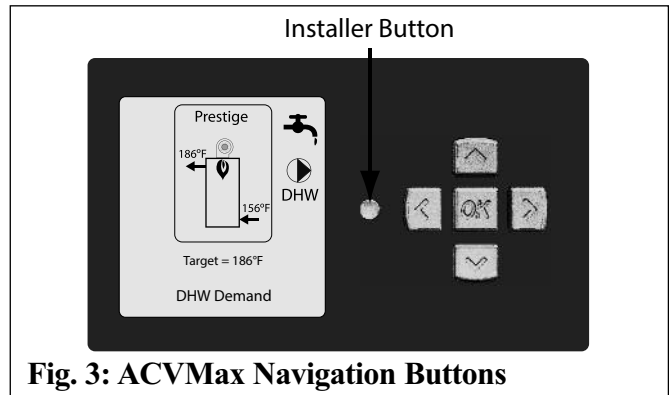



Fig. 3: ACVMax Navigation Buttons

- Enter the installer access code “054” by using the **LEFT** and **RIGHT** buttons to select a digit and the **UP** and **DOWN** buttons to change the digit. Press the **OK** button to enter the access code.
- Press the **RIGHT** button to highlight the Manual Operation icon  then press the **OK** button.
- Press the **OK** button while the FAN icon is highlighted to manually fire the burner and power the CH1 circulator (see Fig. 4).

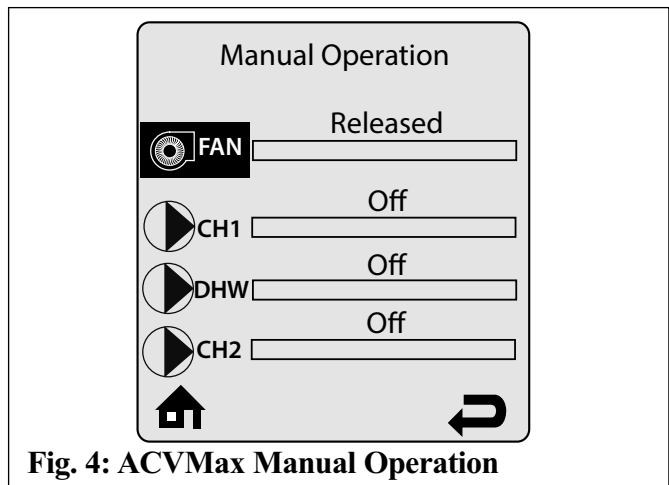


Fig. 4: ACVMax Manual Operation

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NOTICE

An adequate CH load must be present to dissipate the heat generated during the combustion test. If an adequate CH load is not available an indirect water heater can be used to dissipate the heat by creating a DHW call which will enable the DHW circulator.


6. Press the **RIGHT** button to adjust the firing rate to 100% (high fire). Hold down the **RIGHT** button to rapidly increase the firing rate.
7. If the combustion levels during high fire are outside the recommended combustion settings adjust the THROTTLE SCREW (see Fig. 5 on page 5) using a flat-blade screwdriver, or a 4mm allen key, as follows:

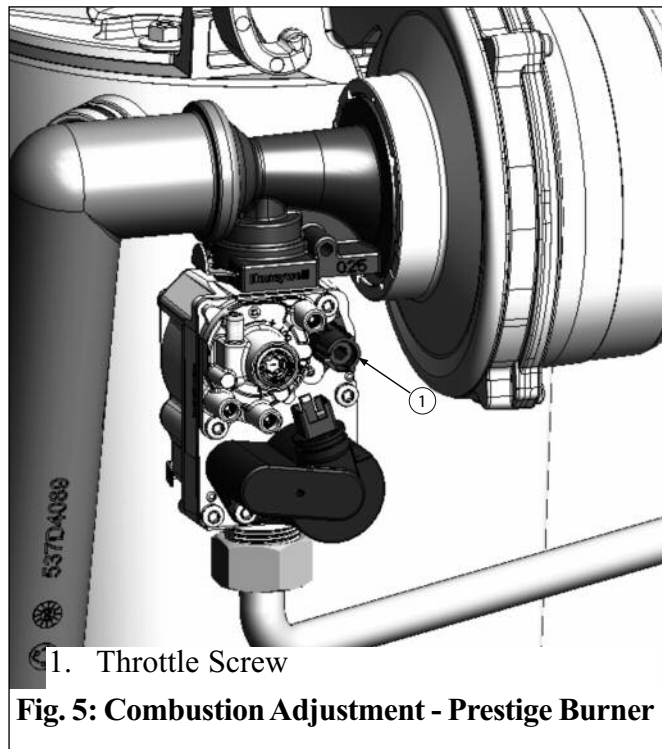
Counter-clockwise adjustment of the THROTTLE SCREW at High Fire (100% firing rate):

O₂ increases and CO₂ decreases

Clockwise adjustment of the THROTTLE SCREW at High Fire (100% firing rate):

O₂ decreases and CO₂ increases

8. Once the combustion level is set at high fire, manually place the boiler into low fire mode by pressing the **LEFT** button to adjust firing rate down to 1% (low fire) to verify low fire combustion settings.
9. If the combustion levels (O₂ & CO₂) during low fire are outside the recommended combustion settings in Table 2, contact Triangle Tube Technical Support Department for assistance.
10. Press the **OK** button while the fan icon is highlighted to shutdown the burner.
11. Press the **LEFT** or **RIGHT** button to highlight the home screen icon  to exit the service mode.



1. Throttle Screw
Fig. 5: Combustion Adjustment - Prestige Burner