Prestige SOLO 60, 175 and 250 Boilers Natural to Propane Instructions

Kit Part Number: PSRKIT33

Kit Includes:

- Rating Label
- Conversion Label
- (3) Propane Gas Orifices
- T-25 Torx Wrench

Recommended Tools

- Standard Adjustable Wrenches
- Phillips-Head Screwdriver
- Flat-blade Screwdriver
- T-40 Torx Wrench
- Calibrated Combustion Analyzer

⚠ WARNING

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

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 severe personal injury or damage if ignored.

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

NOTICE

Upon completion of the conversion from Natural to Propane, 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 cause severe personal injury or death.

NOTICE

These instructions cover NG to LP conversion for MCBA and Trimax controlled Prestige boilers. Specific control related instructions are denoted as (MCBA) or (TRIMAX).

Prestige SOLO 60, 175 and 250 Boilers
Natural to Propane Instructions

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 mounting screw(s) along the upper edge of the unit. Lift the panel up and pull forward to remove the front panel from the unit.

4. Remove the Phillips head retaining screw from the control panel. Open the display panel cover and swing the control panel out (MCBA).

5. Remove the air inlet elbow from the venturi using a twist motion.

6. Disconnect the gas supply piping inside the Prestige enclosure at the brass union located just below the gas valve.

7. Unscrew the Phillips screw securing the rectifier cable / plug to the gas valve. Disconnect the rectifier plug from the gas valve (MCBA).

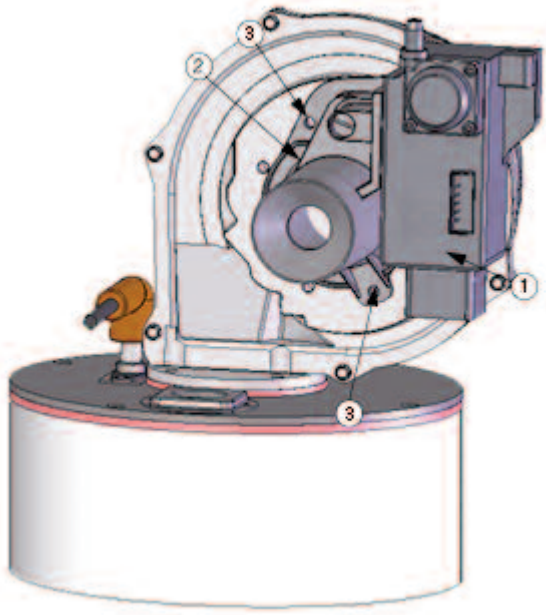
8. Remove Molex plug from gas valve (TRIMAX).

9. Remove the two T-25 Torx head screws used to mount the venturi / gas valve assembly to the blower. Do not discard the screws. Dismount the venturi / gas valve assembly from the blower. See Fig. 1.

NOTICE

There is a gasket between the venturi and the blower housing. This gasket must be reinstallated when the venturi is mounted back onto the blower. Use care not to damage the gasket.

10. Using a T-25 Torx wrench remove the three mounting screws attaching the gas valve to the venturi. Note the orientation of the gas valve to the venturi for reference later when the gas valve is reassembled to the venturi.



1. Gas Valve
2. Venturi
3. T-25 Torx Head Screws. Attaching Gas Valve/Venturi to Blower Housing

Fig. 1: Prestige Burner Assembly

11. Install the appropriate brass propane orifice from Table 1 in the gasket between the gas valve and the venturi. The black rubber gasket must remain attached to the gas valve. See Fig. 2 page 3.

Table 1: Propane Gas Orifice

Model	Orifice Size
Solo 60	0.120 inch (3.1 mm)
Solo 175	0.221 inch (5.6 mm)
Solo 250	0.250 inch (6.3 mm)

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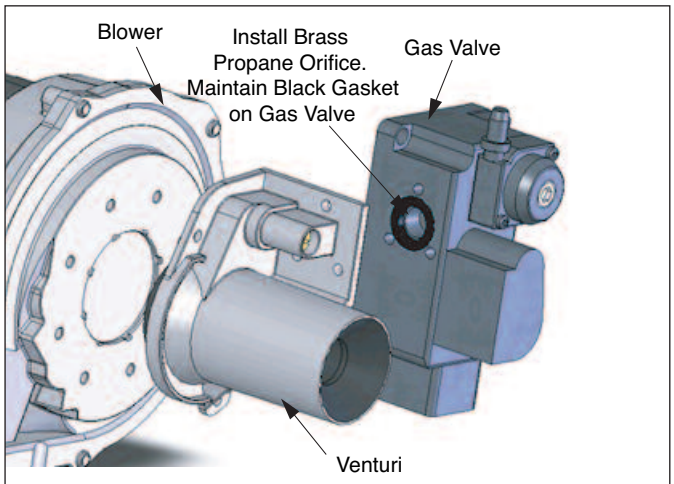

Fig. 2: Venturi/Gas Valve Assembly

NOTICE

The Solo 60 contains a natural gas orifice. This orifice must be remove prior to the installation of the propane orifice.

⚠ WARNING

Failure to retain the rubber gasket 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 may result in death, serious injury or substantial property damage.

⚠ WARNING

Ensure the proper orifice for propane as given in Table 1. Failure to comply will affect input rate and combustion of the boiler which may result in death, serious injury or substantial property damage.

12. Reassemble the gas valve onto the venturi using the three T-25 Torx head screws. Ensure the gas valve is orientated with the venturi correctly.

13. With the venturi / blower gasket in place, reassemble the venturi / gas valve assembly to the blower housing using the two T-25 Torx head screws.

NOTICE

For the reassembly process do not use adhesive on the venturi / blower gasket.

NOTICE

Use care in the reassembly of the venturi / gas valve to the blower housing not to cross thread the mounting screws. Support the weight of the venturi / gas valve assembly when threading the mounting screws.

14. Reconnect the rectifier plug to the gas valve and secure using the Phillips head screw (MCBA).

15. Reconnect Molex plug to the gas valve electrical connection (TRIMAX).

16. Reconnect the brass gas piping union 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 cause severe personal injury, death or substantial property damage.

17. Reattach the air inlet elbow to the venturi.

18. Reposition the control panel and reattach the retaining screw (MCBA).

19. Replace the front jacket panel and secure with thumb screw.

20. Turn on the electrical power supply to the Prestige boiler and return the unit back to service.

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Combustion Test and Adjustments

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

Table 2: Recommended Combustion Settings

02 Min - 2.7%	C02 Min - 10.7%
02 Max - 4.7%	C02 Min - 12.0%
CO Max - 100 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 cause severe personal injury, death or substantial property damage.

MCBA Instructions

1. Manually place the boiler into high fire mode by pressing the "MODE" button with "+" button simultaneously on the control panel display while in the Standby (STBY) mode.

NOTICE

The control panel will display a H followed by the current boiler temperature when placed into high fire test mode.

2. If the combustion levels during high fire is outside the recommended combustion settings adjust the THROTTLE SCREW (see Fig. 3) using a flat-blade screwdriver as follows:

   Counter-clockwise adjustment of the THROTTLE SCREW at High Fire:

   O2 decreases and CO2 increases

Clockwise adjustment of the THROTTLE SCREW at High Fire:

O2 increases and CO2 decreases

3. Once the combustion level is set at high fire, manually place the boiler into low fire mode by pressing the "MODE" button with "-" button simultaneously on the control display while in the Standby (STBY) mode.

NOTICE

The control panel will display a L followed by the current boiler temperature when placed into low fire test mode.

4. If the combustion levels (O_2 or CO_2) during low fire is not within +/- 0.2 of the combustion level measured at high fire, remove the offset cover screw and adjust the plastic OFFSET SCREW (see Fig 3) using a T-40 Torx wrench as follows:

Counter-clockwise adjustment of the OFFSET SCREW at Low Fire:

O2 increases and CO2 decreases

Clockwise adjustment of the OFFSET SCREW at Low Fire:

O2 decreases and CO2 increases

5. Press the "+" and "-" buttons simultaneously to shutdown the burner.

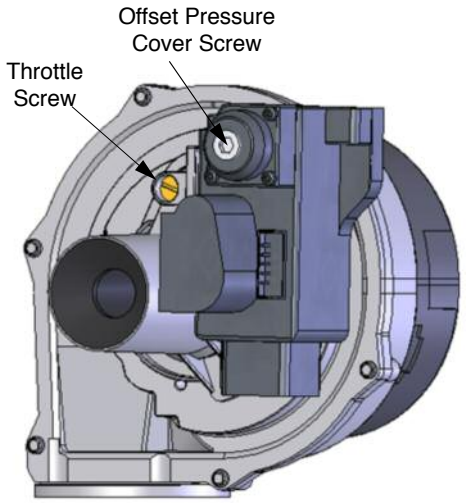


Fig. 3: Combustion Adjustment - Prestige Burner

Trimax Control Procedure

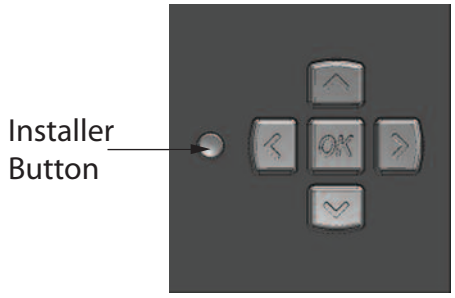


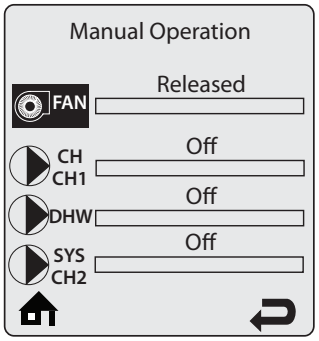
Fig. 4: Trimax Navigation Buttons

1. Press the round INSTALLER button. See Fig. 4.

2. 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.

3. Press the **RIGHT** button to highlight the Manual Operation icon then press the **OK** button.

4. Press the OK button while the FAN icon is highlighted to manually fire the burner and power the CH circulator.



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.

5. Press the **RIGHT** button to adjust the firing rate to 100% (high fire). Hold down the **RIGHT** button to rapidly increase the firing rate.

6. If the combustion levels during high fire are outside the recommended combustion settings adjust the THROTTLE SCREW (see Fig. 3) using a flat-blade screwdriver as follows:

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

O_2 decreases and $C0_2$ increases

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

O_2 increases and CO_2 decreases

7. 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 0% (low fire).

8. If the combustion level (O_2 or CO_2) during low fire is not within +/-0.2 of the combustion level measured at high fire. The offset cover screw and adjust the plastic OFFSET SCREW (see Fig. 3) using a T-40 Torx wrench as follows:

Counter-clockwise adjustment of OFFSET SCREW at Low Fire (0% firing rate):

O_2 increases and CO_2 decreases

Clockwise adjustment of OFFSET SCREW at Low Fire (0% firing rate):

O_2 decreases and CO_2 increases

9. Press the OK button while the fan icon is highlighted to shutdown the burner.

10. Press the **LEFT** or **RIGHT** button to highlight the home screen icon ⌂ to exit the service mode.