Prestige SOLO 399 Boiler
Natural to Propane Instructions

Kit Part Number: PSRKIT51

Kit Includes:
- Rating Label
- Conversion Label
- (1) Natural Gas Orifice
- T-25 Torx Wrench
- T-40 Torx Wrench

Recommended Tools

- Adjustable Wrenches
- Phillips-head Screwdriver
- Flat-blade Screwdriver
- 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 the proper order.**

⚠ WARNING

For your safety, turn off electrical power supply at service panel and allow unit to cool before proceeding. Failure to do so can cause severe personal injury or death.

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.

NOTICE

These instructions cover Natural to Propane conversion for MCBA and TriMax controlled Prestige boilers. Specific control related instructions are denoted as (MCBA) or (TRIMAX).

Prestige SOLO 399 Boiler
Natural to Propane Instructions

Installation of the Natural Gas Orifice

1. Turn off the electrical power supply to the boiler.

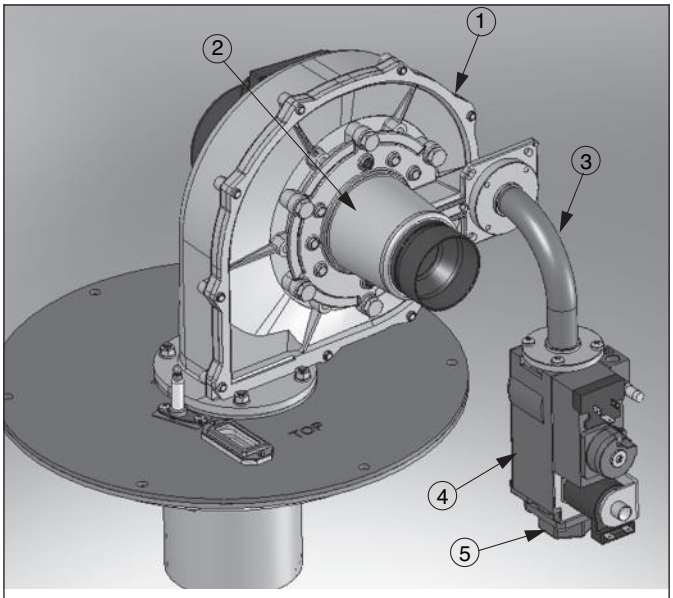
2. Close the external manual gas shut off valve to the unit.

3. Remove the front panel of the Prestige by removing the thumb screw 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 at the bottom of the control panel assembly. Swing open the control panel assembly (MCBA).

5. Slide control panel retaining clips inward and swing control panel down (TRIMAX).

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



1. Blower
2. Venturi Assembly
3. Gas Valve Extension Pipe
4. Gas Valve
5. Union

Fig. 1: Prestige 399 Burner Assembly

7. Disconnect the gas supply piping inside the Prestige at the union located below the gas valve. See Fig. 1.

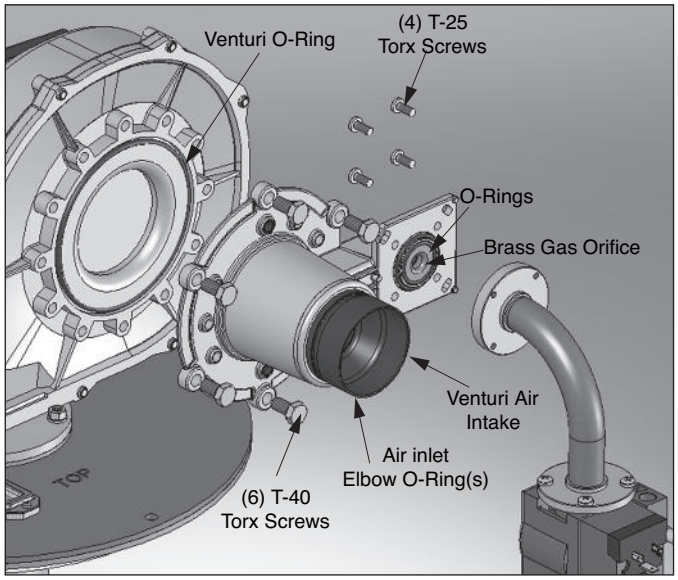


Fig. 2: Venturi/Gas Orifice Assembly

8. Disconnect the wiring from the gas valve.

9. Remove the six T-40 Torx screws securing the venturi to the blower. See Fig. 2.

10. Remove the gas valve/venturi assembly from the unit.

11. Remove the (4) T-25 Torx screws securing the gas valve extension pipe to the venturi. See Figs. 1 & 2.

12. Remove the existing propane gas orifice from between the gas valve extension pipe and venturi.

⚠ WARNING

There are O-ring gaskets between the venturi and blower housing and also between the venturi and gas valve extension pipe. These O-Rings must be reinstalled with the gas valve/venturi assembly. Use care not to damage these gaskets.

13. Install the brass natural gas orifice and o-ring gaskets between the gas valve extension pipe and the venturi. Ensure that the orifice and gaskets are inside the retaining ring cast into the venturi.

NOTICE

Taper on gas orifice should face the gas valve extension pipe. See Figs. 1 & 2.

Table 1: Propane Gas Orifice

Model	Orifice Size
Solo 399	0.339" (8.6 mm)

⚠ WARNING

Failure to retain the O-ring gaskets between venturi and gas valve extension pipe will cause an improper seal resulting in a potential risk of a gas leak. Any potential gas leakage may result in death, serious injury or substantial property damage.

14. Reassemble the gas valve extension pipe onto the venturi using the four T-25 Torx head screws. Ensure that the gas valve extension pipe is properly oriented with the venturi.

⚠ WARNING

There is a gasket between the venturi and the blower housing. This gasket must be reinstalled. Use care not to damage the gasket.

15. With the venturi / blower O-ring in place, reassemble the venturi / gas valve assembly to the blower housing using the six T-40 Torx 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.

16. Reconnect the wiring to the gas valve as shown in Fig. 3.

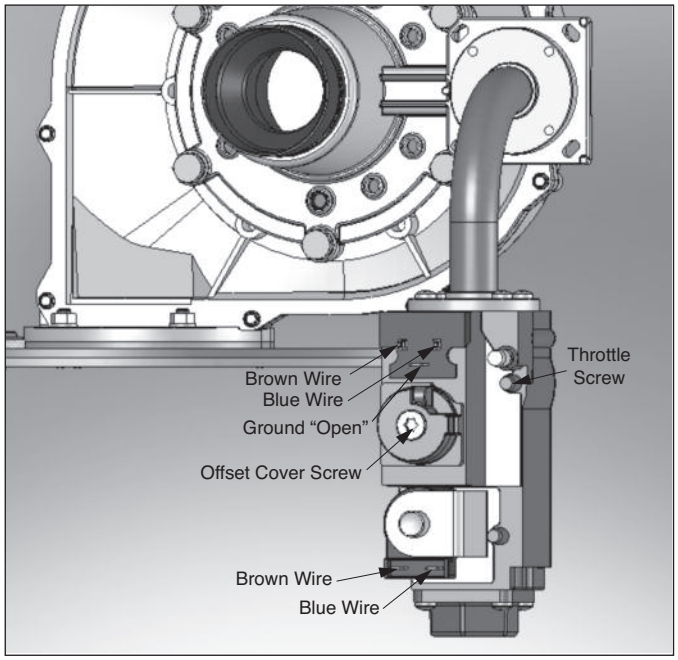


Fig. 3: Prestige 399 Gas Valve

17. Reconnect and tighten the internal gas supply union using two wrenches and open the external 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.

Prestige SOLO 399 Boiler
Natural to Propane Instructions

⚠ WARNING

There are O-ring gaskets between the air intake elbow and the venturi air intake. These gaskets must be installed with the air intake elbow. Use care not to damage the gasket.

18. With the air intake elbow O-rings in place, reassemble the air inlet elbow to the venturi.

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

20. Swing control panel up to engage retaining clips (TRIMAX).

21. Replace the front jacket panel and secure with the thumb screw along the upper edge.

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

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 - 3.7%	C02 Min - 10.0%
02 Max - 5.2%	C02 Max - 11.0%
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 (MCBA)

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 in Table 2, adjust the THROTTLE SCREW (see Fig. 3) using a flat-blade screwdriver.

⚠ WARNING

The throttle screw is highly sensitive and requires the use of a combustion analyzer for adjustment. An adjustment as small as an 1/8 of a turn can produce a large change in combustion levels.

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.

⚠ WARNING

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.

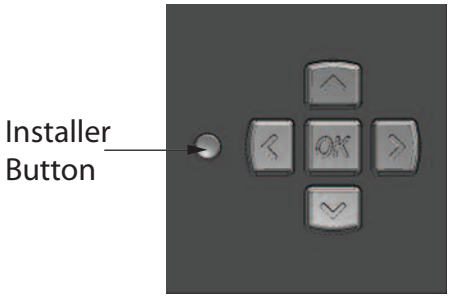


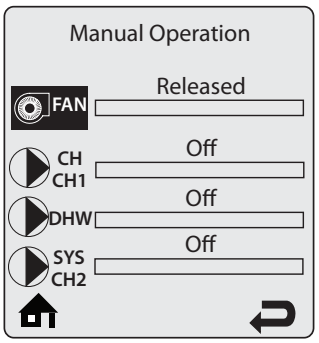
Fig. 4: Trimax Navigation Buttons

Trimax Control Procedure (TRIMAX)

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 in Table 2, adjust the THROTTLE SCREW (see Fig. 3) using a flat-blade screwdriver.

⚠ WARNING

The throttle screw is highly sensitive and requires the use of a combustion analyzer for adjustment. An adjustment as small as an 1/8 of a turn can produce a large change in combustion levels.

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, 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 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.