

PRESTIGE Venturi Replacement Kit



Kit Part Number:

- PSRKIT80 (PS 60)
- PSRKIT81 (PS 110 / PE 110)
- PSRKIT82 (PS 175)
- PSRKIT83 (PS 250)

Parts List (Fig.1)

- 1 - Venturi Mounting Gasket
- 2 - #25 Torx Wrench (not shown)
- 3 - (2) M5 x 12 Screws
- 4 - Venturi

Recommended Tools:

- Phillips Screwdriver
- Flat Blade Putty Knife

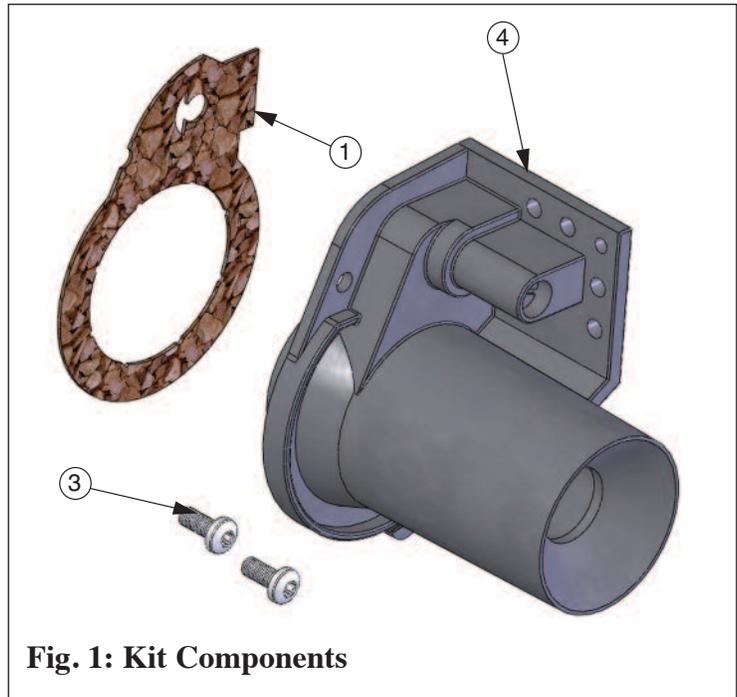


Fig. 1: Kit Components

! 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

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.

! 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.

! WARNING

For your safety, the boiler may be extremely hot. Ensure the boiler has properly cool prior to servicing. Failure to do so can cause severe personal injury.

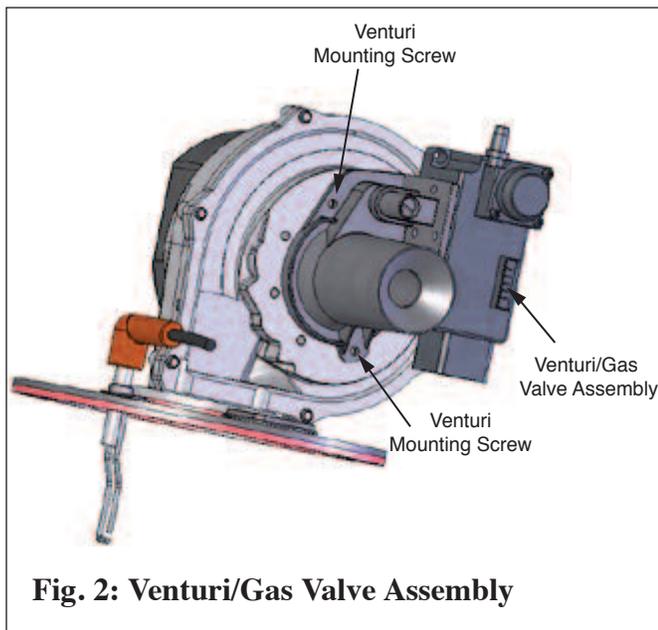
NOTICE

For appropriate venturi size to PRESTIGE Model, Reference Table 1 on page 3. The venturi size is listed on the label affixed to the venturi and is imprinted on the black venturi cone.

PRESTIGE Venturi Replacement Kit

Instructions

1. Turn power to the unit “OFF”.
2. Remove the front jacket panel. Swing away the Control Module panel (MCBA) or tilt down the Control Module panel (TriMax).
3. Shut off gas supply to the Prestige boiler at the main manual shutoff valve.
4. Disconnect the gas piping at the brass union located near the gas valve inside the boiler enclosure.
5. Using a Phillips screwdriver disconnect the rectifier cable to the gas valve (MCBA).



6. Remove Molex plug from gas valve (TriMax).
7. Remove the air inlet elbow from the venturi.

NOTICE

Note the orientation of the venturi / gas valve assembly and the venturi gasket in relation to the blower housing when disassembling the venturi / gas valve assembly.

8. Using the #25 Torx wrench from the kit remove the 2 venturi mounting screws attaching the venturi / gas valve assembly to the blower, see Fig. 2. Remove the venturi / gas valve assembly from the blower.

NOTICE

There is a gasket between the venturi and the blower housing. If the gasket “sticks” to the blower housing use a flat blade putty knife to remove any gasket material. Make sure not to scratch or score the mating surface on the blower housing.

9. Remove the three screws attaching the gas valve to the venturi as shown in Fig. 3. Use Torx wrench supplied in kit to remove screws. Note orientation of the venturi to the old gas valve for reassembly of the new venturi on the gas valve.
10. Reassemble the gas valve, using the existing three Torx screws to the venturi. See Fig. 3.

WARNING

Ensure the gas valve/orifice gasket is in place before reassembling the gas valve and venturi. Failure to do so can result in death, serious injury or substantial property damage.

NOTICE

For propane installations a brass orifice is located inside the gas valve/orifice gasket. This orifice must be placed inside of the new gas valve/orifice gasket before reassembly.

WARNING

Failure to insert the propane brass orifice, on propane installations, before reassembling the gas valve and venturi can result in the production of carbon monoxide due to incomplete combustion and may result in death, serious injury or substantial property damage.

PRESTIGE Venturi Replacement Kit

NOTICE

For the reassembly process do not use adhesive on any gasket surface.

11. Install the venturi gasket on the venturi and reassemble the venturi / gas valve assembly to the blower housing using the (2) M5 x 12 mounting screws supplied in the kit. Use the #25 Torx wrench to tighten all screws and secure the assembly.

Table 1: Venturi Sizes

| PRESTIGE Model | Venturi Size |
|----------------|--------------|
| PS 60 | 055 |
| PS 110 | 002 |
| PE 110 | |
| PS 175 | 052 |
| PS 250 | 051 |

12. Reconnect the rectifier plug to the gas valve using the Phillips head screw (MCBA).
13. Reconnect Molex plug to the gas valve (TriMax).
14. Reconnect the brass gas piping union connection. Open the main manual gas shutoff valve before placing the PRESTIGE unit 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.

15. Reattach the air inlet elbow to the venturi.
16. Reposition the Control Module panel and reattach the front jacket panel.

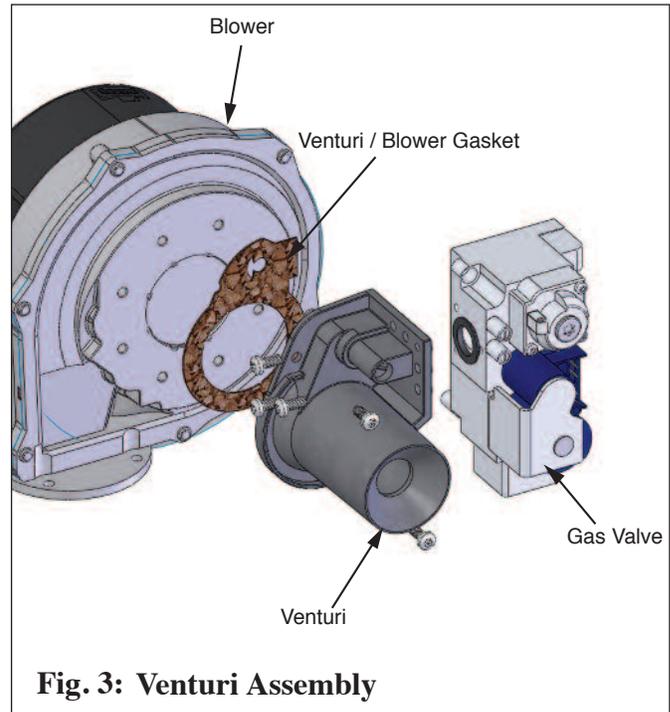


Fig. 3: Venturi Assembly

17. Turn the electrical power “ON” to the PRESTIGE to return the unit back into service.

COMBUSTION TEST/ADJUSTEMENT

It is recommended that the installer perform a complete combustion check to ensure the following combustion levels are met at high and low inputs and the burner is operating at optimum conditions.

Table 2: Recommended Combustion Levels

| | Natural Gas | Propane |
|----------|-------------|---------|
| O2 Min. | 2.30% | 2.70% |
| O2 Max. | 5.30% | 4.70% |
| CO2 Min. | 8.80% | 10.70% |
| CO2 Max. | 10.50% | 12.00% |
| CO Max. | 100 ppm | 100 ppm |

PRESTIGE Venturi Replacement Kit

! 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 are outside the recommended combustion settings adjust the THROTTLE SCREW (see Fig. 4) 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 level at 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** using a T-40 Torx wrench (see Fig. 4) as follows:

Counter-clockwise adjustment of OFFSET SCREW at low fire:

O₂ increases and CO₂ decreases

Clockwise adjustment of OFFSET SCREW at low fire:

O₂ decreases and CO₂ increases

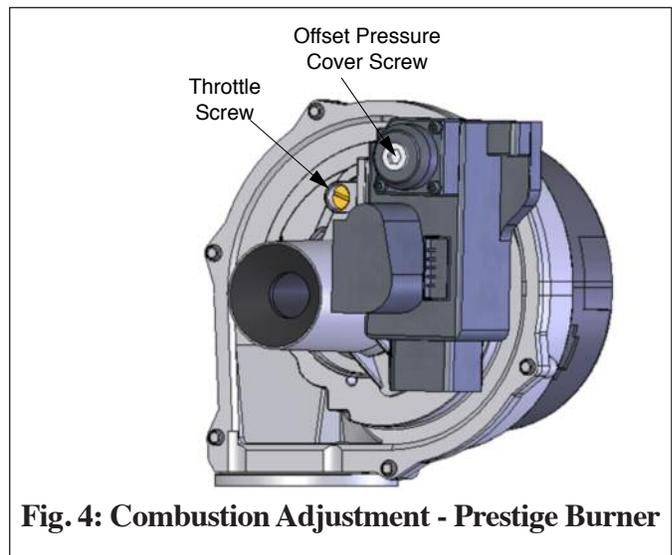


Fig. 4: Combustion Adjustment - Prestige Burner

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

PRESTIGE Venturi Replacement Kit

Trimax Instructions

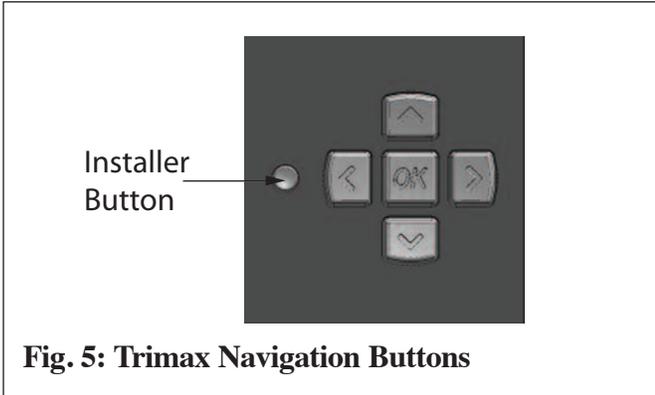
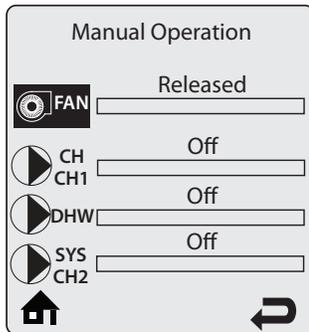


Fig. 5: Trimax Navigation Buttons

1. Press the round **INSTALLER** button. See Fig. 5.
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%. 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. 4) 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

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%.
8. If the combustion level 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. 4) using a T-40 Torx wrench as follows:

Counter-clockwise adjustment of OFFSET SCREW at low fire (0% firing rate):

O₂ increases and CO₂ decreases

Clockwise adjustment of OFFSET SCREW at low fire (0% firing rate):

O₂ decreases and CO₂ 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.