
Propane to Natural Gas Conversion Kit for PERFORMANCE Products



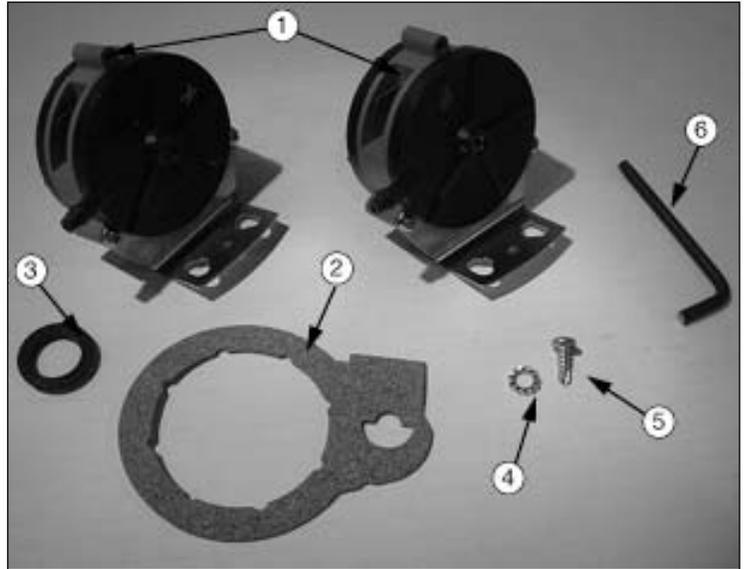
Kit Part Number PGRKIT08

Parts List

- 1 - 2.7" wc pressure switch (Red label).
- 1 - 1.84" wc pressure switch (Yellow label).
- 1 - Self tapping screw.
- 1 - Lock washer.
- 1 - Wire tie.
- Venture to blower housing gasket.
- Orifice gasket.
- Rating label.
- # 25 torex wrench.

Recommended tools:

1. Pipe wrench.
2. Phillips screw driver.
3. Needle nose pliers.
4. Flat bladed putty knife.
5. # 25 torex wrench. (Furnished in kit.)



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.

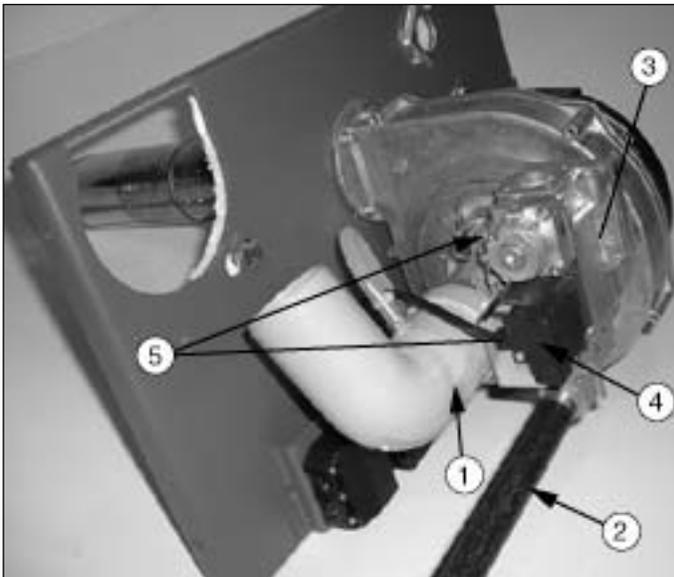
WARNING

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.

Propane to Natural Gas Conversion Kit for PERFORMANCE Products

Instructions:

1. Turn power to the unit "OFF".
2. Shut off gas supply to the inlet of the unit at the main manual shutoff valve to the unit.
3. Disconnect the gas supply piping to the PERFORMANCE product.
4. Remove air inlet elbow from the venturi.
5. Unscrew the Phillips screw attaching the rectifier plug to the gas valve and remove the plug.
6. Remove the two torx screws attaching the venturi/gas valve from the blower housing. Remove the venturi/gas valve assembly from the blower housing. Use torx wrench supplied in kit to remove screws.



1. Air inlet elbow
2. Gas inlet pipe
3. Gas valve
4. Rectifier plug and Phillips head screw
5. Venturi mounting screws. Attaching gas valve/venturi to blower/motor assembly. (two screws)

NOTICE

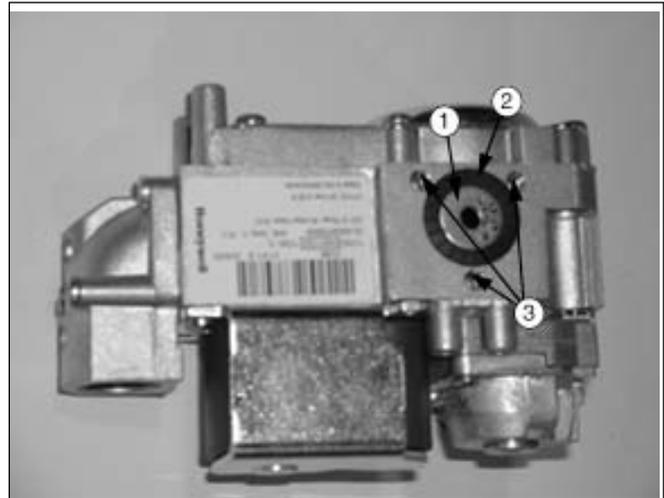
There is a gasket between the venturi and blower housing. If the gasket "sticks" to the blower housing use a flat bladed putty knife to remove any gasket material. Make sure not to scratch or score the mating surface on the blower housing.

7. Remove the three screws attaching the gas valve to the venturi. Use torx wrench supplied in kit to remove screws. Note orientation of the venturi to the gas valve for reassembly.
8. Remove the brass propane orifice.

NOTICE

For the reassembly process do not use adhesives on ANY gasket surface.

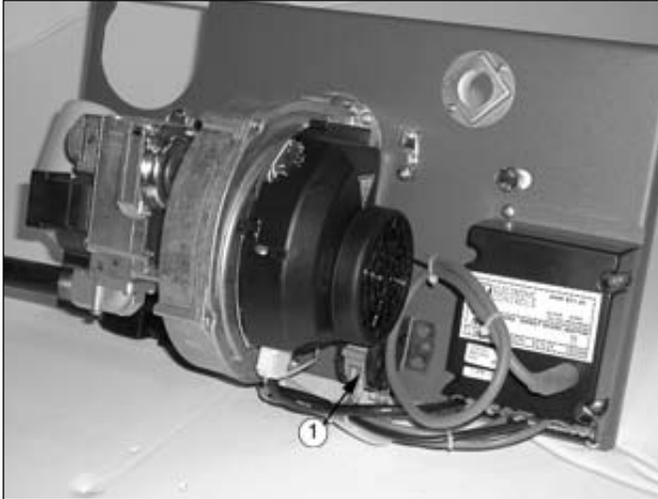
10. Take the gas valve, orifice gasket and three screws from the kit and reassemble the gas valve to the venturi.



1. Brass propane orifice. (only used with propane)
2. Orifice gasket
3. Locations for gas valve to venturi mounting screws.

Propane to Natural Gas Conversion Kit for PERFORMANCE Products

11. With the venture to blower housing gasket in place reassemble the venture/gas valve to the blower housing.
12. Reconnect the rectifier plug to the gas valve using the Phillips head screw.
13. Reattach air inlet elbow to the venture.



1. Pressure switch

Chart 1: Pressure Switch Selection Chart

PG Model	Natural Gas (inch w.c.)	Propane (inch w.c.)	High Altitude (Above 5000 feet)	
			Natural Gas (inch w.c.)	Propane (inch w.c.)
PG-25	1.84 " w.c.	3.35" w.c.	n/a	n/a
PG-30	1.84 " w.c.	3.35" w.c.	n/a	n/a
PG-35	1.84 " w.c.	3.35" w.c.	3.35" w.c.	3.35" w.c.
PG-40	2.7 " w.c.	3.35" w.c.	2.7 " w.c.	2.7 " w.c.
PG-45	2.7 " w.c.	3.35" w.c.	2.7 " w.c.	2.7 " w.c.

n/a -Models not available.

Refer to the chart 1 to determine if the pressure switch needs to be replaced with one supplied in the kit.

NOTICE

If from the chart above it has been determined the pressure switch does not require replacing then proceed to step 20.

14. Remove the two wire leads from the pressure switch.

15. Remove the rubber tube from the pressure switch.
16. Unscrew the self tapping screw attaching the pressure switch to the burner mounting plate. Discard the old pressure switch.
17. Insert the self tapping screw into the pressure switch mounting bracket and then place the lock washer between the mounting bracket and burner mounting plate before reassembly. Tighten the screw.

NOTICE

For proper operation the pressure switch should be fastened in the vertical position. The lock washer will help to “hold” the pressure switch in place while tightening the bracket.

18. Attach the rubber tube to the barbed fitting on the pressure switch. Use the wire tie to hold the tube on the back side of the barbed fitting.

Table 2 - Recommended Air Shutter Setting

Model	Natural gas	Propane	5000 feet elevation		8000 feet elevation	
			Natural gas	Propane	Natural gas	Propane
BG-25	N/R	3.5	n/a	n/a	n/a	n/a
BG-30	N/R	3.5	n/a	n/a	n/a	n/a
BG-35	N/R	3.5	4	3.5	3.5	3.75
BG-40	N/R	N/R	2	N/R	N/R	N/R
BG-45	N/R	N/R	N/R	N/R	N/R	N/R

n/a -Models not available.

N/R - Air Shutter not required. (For these units an adjustable air shutter is NOT supplied with the unit.)

19. Attach the two wire leads to the pressure switch.
20. Based on information from chart 2 either adjust the air shutter as recommended or remove the adjustable air shutter as stated.
21. Replace the rating label on the PERFORMANCE unit with the new Natural Gas rating label from the kit.
22. Remove ALL labels that refer to propane.
23. Using pipe dope compatible with propane gas reconnect the gas supply piping to the PERFORMANCE product.

Propane to Natural Gas Conversion Kit for PERFORMANCE Products

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.

24. Ensure the vent system and air inlet duct are fully assembled and installed prior to the startup of the Performance burner.
25. It is recommended that the installer perform a complete combustion test to ensure the following levels are met and the burner is operating at optimum conditions:
 - O2 - 4.0% to 4.5%
 - CO2 - 9.5% to 10.0% (natural)
 - CO - 0 to 50ppm

WARNING

Failure to perform a complete combustion test may result in incomplete combustion and the production of CO, which can cause severe personal injury, death or substantial property damage.

26. Remove the air inlet duct and adjust the air shutter (if applicable) to achieve the recommended combustion levels. Rotation of the air shutter clockwise (toward 0) will increase the O2 level. Rotation of the air shutter counterclockwise will decrease the O2 level. The CO2 level will response opposite of the O2 level.

NOTICE

Ensure the setscrew on the air shutter is tightened fully. Ensure the air inlet duct is fully assemble and connected to the air inlet adapter prior to conducting the combustion test.

WARNING

If the O2 level is measured below 4.0% with an air shutter setting of 0 or with the air shutter removed contact Triangle Tube's Engineering Department immediately. Do not attempt any further adjustments.