

CONVERSION INSTRUCTIONS: LP TO NATURAL GAS DIRECT VENT, GAS FIRED WATER BOILERS (HONEYWELL)



WARNING

This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction.



If the information in these instructions is not followed exactly, a fire, an explosion, or production of carbon monoxide may result, causing property damage, personal injury, or loss of life.

The qualified service agency is responsible for the proper installation of this kit.

The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with this kit.

DO NOT DESTROY THESE INSTRUCTIONS!!

Please read carefully and keep in a safe place for future reference



C.S.A. Certified
For Natural Gas Or Propane



Tested For 100 LBS.
ASME
Working Pressure



An ISO 9001-2000 Certified Company



ECR International
P.O. Box 4729
Utica, NY 13504

P/N# 37515702, Rev. B [02/09]

CONVERSION FROM LP TO NATURAL GAS - DIRECT VENT

KIT CONTENTS

ITEM	QTY.
Installation Instructions	1
Conversion Plate/Label	1
Pilot Orifice - Spark	1
Pilot Orifice - 24 Volt	1
Liquid Sealing Compound	1
Spring Kit	1

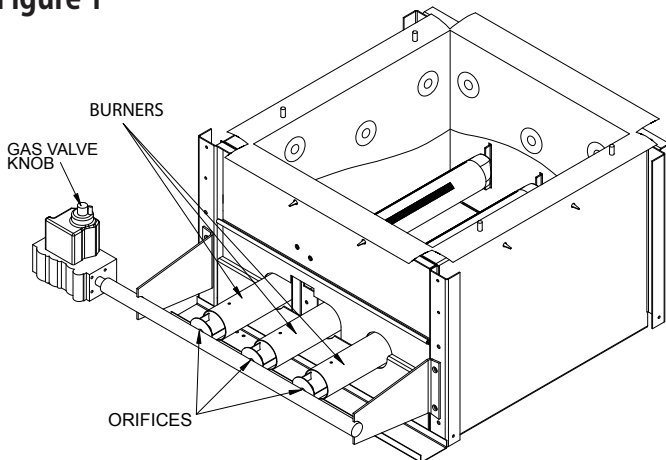
MAIN BURNER ORIFICES

BOILER SIZE	ORIFICE
50, 100, 150, 200, 250, 300	3.2
75	2.8
125	2.9
175	3.0

Tools Required

- Flat Head Screwdriver
- 1/4" Nut Driver
- 7/16" Open Ended Wrench
- 3/16" Allen Wrench
- 18" Manometer (or dial manometer)

Figure 1



Installation



CAUTION

The gas supply shall be shut off prior to disconnecting the electrical power, before proceeding with the conversion.

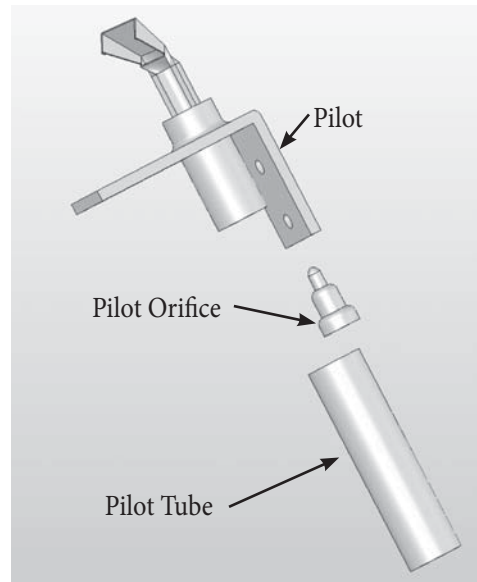
1. Turn off all electrical and gas supply to the boiler.
2. Remove front panel.
3. Remove burner access door. (Figure #1)
4. Remove main gas burner tubes. (Figure #1)
5. Remove main burner orifices. (Figure #1)
6. Install Natural gas main burner orifices found in kit.
7. Using a 7/16" wrench, disconnect the pilot tube from the pilot. (Figure #2)
8. Remove the pilot orifice. (Figure #2)
9. Install the Natural gas pilot orifice. (Figure #2)

PILOT ORIFICES


MFG.	PART NUMBER
ECR	1350001
Honeywell	390686-4

10. Apply liquid sealing compound (provided) to threads of the pilot assembly fitting.
11. Reattach the pilot tube to the pilot and securely tighten. (Figure #2)

Figure 2




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12. If LP main burner tubes exist replace them with NAT tubes. (Figure #3)
13. Remove the cover screw from gas valve pressure regulator. (Figure #4)
14. Remove adjustment screw by turning counterclockwise . (Figure #5)
15. Remove red LP gas spring. (Figure #5)

NOTICE

Parts for steps 16, 17, 25, and 26 are located in the honeywell natural gas conversion kit HW#394588 (ECR #VG00802) for VR8200, VR8204, VR8300 or VR8304 gas valve or conversion kit HW#391936 (ECR #VG00701) for a VR8440 gas valve.

16. Insert Stainless Steel Natural gas spring. (Figure #5). NOTE: If using kit #391936, make sure spring is inserted taper side down.
17. Install new adjustment screw. Assure the screw top is flush with the regulator top. (Figure #5)
18. Turn the pressure regulator adjustment screw clockwise  eight (8) complete turns. (This is a starting point for the manifold pressure.)
19. Install a manometer to the pressure tap on the outlet side of the gas valve. (Figure #4)
20. Turn on electric and gas supply.
21. Check for gas leaks around all gas connections using commercially available soap solution specifically made for leak detection.

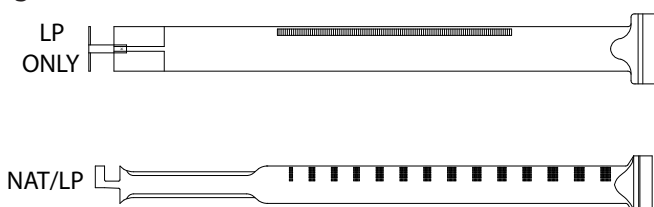


WARNING

DO NOT USE AN OPEN FLAME!

22. While the boiler is running adjust the manifold pressure to 3½" water column by turning pressure regulator adjustment screw.
23. Turn off electric and gas supply.
24. Remove the manometer and replace pressure tap cover screw securely.

Figure 3



25. Install Silver Natural gas regulator adjustment cover screw with o-ring. (Figure #5) NOTE: Honeywell kit #391936 does not require an o-ring.
26. Mount conversion label on gas valve.
27. Turn on electric and gas supply.
28. Cycle boiler to ensure proper operation and lighting.
29. Replace front panel.

NOTICE

The following steps must be completed in order to provide proper identification for customer service or technical support issues.

30. Copy the serial number from the old rating plate to the new one.
31. Mount the new rating plate over the old one.

Figure 4

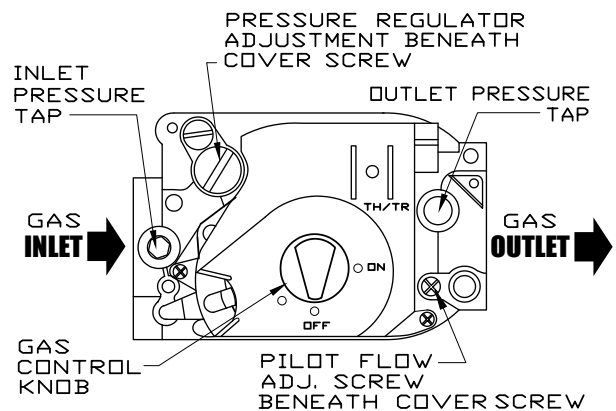


Figure 5

