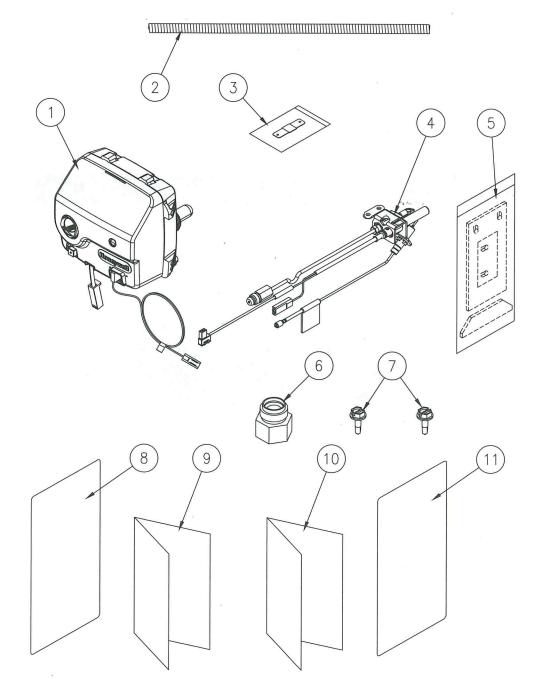
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LIST OF COMPONENTS (MOBILE HOME MODELS ONLY)



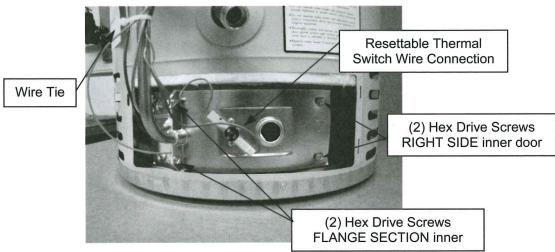
Item	Description	Item	Description
1	Gas Control (w/ red inner door wire)	7	#8-18 X 1/2 Tek Screw(s)
2	Feedline Spring	8	Lighting Instruction Overlay
3	In-Line Splice Connector	9	Installation Instructions
4	Pilot Assembly	10	Honeywell Instruction Sheet
5	Inner Door Gasket Kit	- 11	Control Diagnostic Code Label
6	Feedline Adapter		

Items shown may not be actual items included in kit

GAS CONTROL REPLACEMENT (HONEYWELL TO HONEYWELL) BRADFORD WHITE WATER HEATERS

- Step 1. Rotate knob of the Gas Control to the "OFF" position.
- Step 2. Turn off gas supply to the water heater.
- Step 3. Disconnect Gas Control from gas supply line.
- Step 4. Turn off water supply and drain water heater to a point below the Gas Control.
- Step 5. Remove outer jacket burner access door.
- Step 6. Remove RIGHT SIDE inner door.
 - a. Disconnect red wire leads from resettable thermal switch.
 - b. Remove (2) hex drive screws from RIGHT side inner door.
 - c. Remove (2) hex drive screws from FLANGE SECTION of inner door.
 - d. Remove right side inner door and set aside.





Step 7. Remove Gas Control from water heater.

a. Disconnect main burner feedline, pilot tube, piezo igniter wire, inner door wire (red) and thermopile wire (white) from Gas Control.

NOTICE

Feedline nut for natural Gas Control uses right hand threads, LP Gas Control uses left hand threads.

b. Remove Gas Control from water heater by rotating counter clockwise. It may be necessary to use a length of ½" NPT pipe threaded into inlet of control.

Step 8. Install new Gas Control into water heater.

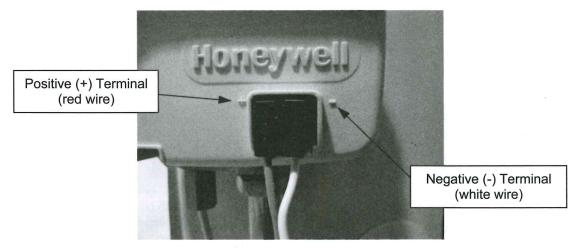
a. It may be necessary to use a length of ½" NPT pipe threaded into gas inlet of control.

!CAUTION

DO NOT OVER TIGHTEN. Use caution not to damage Gas Control. Gas control must be installed in proper upright position to assure the feedline will align properly at the inner door flange.

GAS CONTROL REPLACEMENT (HONEYWELL TO HONEYWELL) BRADFORD WHITE WATER HEATERS

b. Reattach main burner feedline, pilot tube, piezo igniter wire, (red) inner door wire, and (white) thermopile wire to Gas Control. Attach (red) inner door wire to the positive (+) terminal and the (white) thermopile wire to the negative (-) terminal.



c. Gather piezo igniter wire, thermopile wire (white), inner door wire (red), and pilot tube and secure along side of feedline using new wire tie provided.

Z CAUTION

Use back up wrench on wrench boss of Gas Control, never use back up wrench on body of Gas Control.

Step 9. Reinstall inner door assembly.

- a. Prior to reinstallation of inner door, fully inspect inner door gasket for the following:
 - Tears
 - Missing Material
 - •Dirt or debris
 - Cracks

- ·Gasket adhesion to inner door
- •Other imperfections that will

inhibit proper seal

If the gasket is not affected by any of the above, gasket replacement will not be required. If replacement is required, replace using new gasket kit following the instructions provided.

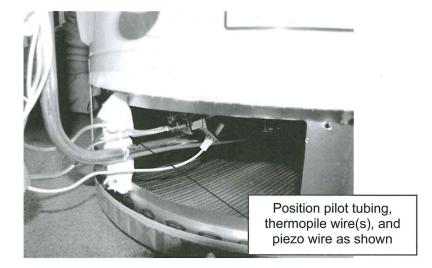
b. Clean any residual gasket residue or other debris from combustion chamber surface before installing the inner door/gasket assembly.

∠! WARNING

A seal breach may result in a fire or explosion causing property damage, personal injury or death.

GAS CONTROL REPLACEMENT (HONEYWELL TO HONEYWELL) BRADFORD WHITE WATER HEATERS

c. Position thermopile wire, pilot tube, and piezo igniter wire against left side inner door flange gasket. Be certain that thermopile wire, pilot tube, and piezo igniter wire are not in position to interfere with outer jacket burner access door when reinstalled.



! CAUTION

DO NOT route wires or pilot tubing through radiused channel with feedline.

- d. Firmly place right side inner door flange against the left side inner door flange and secure with (2) hex drive screws that were removed in step 6c, DO NOT over tighten screws.
- e. Align right side inner door to combustion chamber and verify the fastener holes of the combustion chamber are aligned with the right side inner door slotted openings. Verify seal integrity around combustion opening.
- f. Secure right side inner door using (2) hex drive screws that were removed in step 6b, DO NOT over tighten screws.
- Step 10. Reconnect (2) red wire leads from pilot assembly and Gas Control to resettable thermal switch.

NOTICE

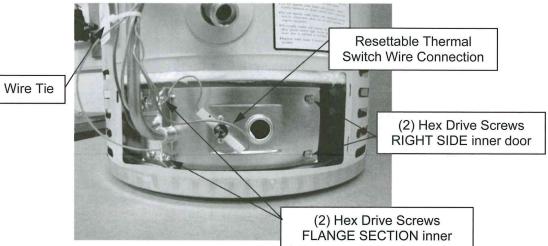
Wire terminations are interchangeable with either resettable thermal switch connection.

- Step 11. Replace outer jacket burner access door.
- Step 12. Reconnect gas supply to Gas Control and check for leaks with a soapy water solution.
- Step 13. Resume water supply to water heater. Be sure tank is full of water before resuming operation to the water heater.
- Step 14. To resume operation, follow the instructions located on the lighting instruction label or the lighting instructions located in the installation and operation manual.

GAS CONTROL REPLACEMENT (WHITE RODGERS/ROBERTSHAW TO HONEYWELL) BRADFORD WHITE WATER HEATERS

- Step 1. Rotate knob of the Gas Valve to the "OFF" position.
- Step 2. Turn off gas supply to the water heater.
- Step 3. Disconnect Gas Valve from gas supply line.
- Step 4. Turn off water supply and drain water heater to a point below the Gas Valve.
- Step 5. Remove outer jacket burner access door.
- Step 6. <u>For models WITHOUT a closed combustion chamber</u>, slide inner door to the right.
- Step 7. For models WITH a closed combustion chamber, remove RIGHT SIDE inner door.
 - a. Disconnect red wire leads from resettable thermal switch.
 - b. Remove (2) hex drive screws from RIGHT side inner door.
 - c. Remove (2) hex drive screws from FLANGE SECTION of inner door.
 - d. Remove right side inner door and set aside.





Step 8. Remove Gas Valve from water heater.

- a. Disconnect main burner feedline, pilot tube, and thermocouple from Gas Valve.
- b. If applicable, remove piezo bracket with piezo igniter from Gas Valve and discard.
- c. Remove Gas Valve from water heater, rotating counter-clockwise. It may be necessary to use a length of ½" NPT pipe threaded into inlet of control.

Step 9. Insert feedline spring into feedline.

- a. If feedline does not already have a spring installed in it, one must be installed prior to Gas Control installation.
- b. Fully insert feedline spring into main burner feedline.
- c. Mark the feedline spring and remove.
- d. Using wire cutters, cut the feedline spring approximately 1" 2" shorter than the length of the feedline to ensure no obstruction will be made between the feedline and Gas Control when installed.
- e. Reinsert spring cut to correct length into the main burner feedline.

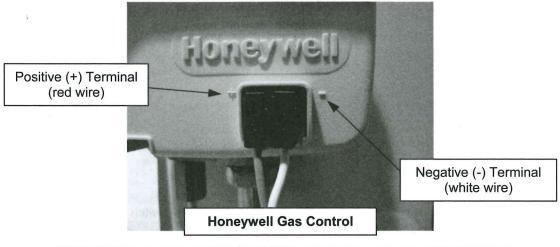
Step 10. Replace pilot assembly.

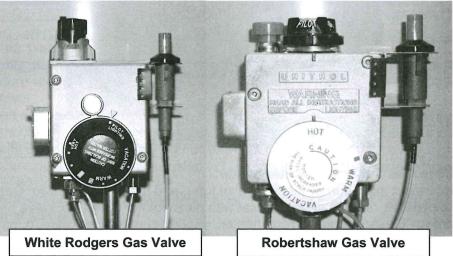
- a. Remove existing pilot from burner assembly and discard.
- b. Install new pilot assembly provided onto burner assembly, use caution not to bend pilot assembly bracket on feedline as this may change the relationship of the pilot to the main burner.

GAS CONTROL REPLACEMENT (WHITE RODGERS/ROBERTSHAW TO HONEYWELL) BRADFORD WHITE WATER HEATERS

Step 11. Install new Gas Control into water heater.

- a. Install new Gas Control. It may be necessary to use a length of ½" NPT pipe threaded into gas inlet of control.
- b. Reattach main burner feedline, pilot tube, piezo igniter wire, and (white) thermopile wire to Gas Control. If replacing a Robertshaw Gas Valve, <u>install feedline adapter</u> provided with kit prior to installing main burner feedline.
- c. Attach (red) inner door wire to the positive (+) terminal on the Gas Control.





- Step 12. Reconnect gas supply to Gas Control and check for leaks with a soapy water solution.
- Step 13. Resume water supply to water heater. Be sure tank is full of water before resuming operation to the water heater.
- Step 14. <u>For models WITHOUT a closed combustion chamber</u>, slide inner door left to close.
- Step 15. For models WITH a closed combustion chamber, reinstall inner door assembly.
 - a. Prior to reinstallation of inner door, fully inspect inner door gasket for the following:
 - Tears
 - Missing Material
 - Dirt or debris
 - Cracks

- ·Gasket adhesion to inner door
- •Other imperfections that will
- inhibit proper seal

GAS CONTROL REPLACEMENT (WHITE RODGERS/ROBERTSHAW TO HONEYWELL) BRADFORD WHITE WATER HEATERS

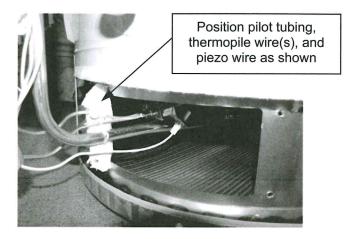
If the gasket is not affected by any of the previous imperfections, gasket replacement will not be required. If replacement is required, replace using new gasket kit following the instructions provided.

b. Clean any residual gasket residue or other debris from combustion chamber surface before installing the inner door/gasket assembly.

<u>/!\</u>WARNING

A seal breach may result in a fire or explosion causing property damage, personal injury or death.

c. Position thermopile wire, pilot tube, and piezo igniter wire against left side inner door flange gasket. Be certain that thermopile wire, pilot tube, and piezo igniter wire are not in position to interfere with outer jacket burner access door when reinstalled.



CAUTION

DO NOT route wires or pilot tubing through radiused channel with feedline.

- d. Firmly place right side inner door flange against the left side inner door flange and secure with (2) hex drive screws that were removed in step 7c, DO NOT over tighten screws.
- e. Align right side inner door to combustion chamber and verify the fastener holes of the combustion chamber are aligned with the right side inner door slotted openings. Verify seal integrity around combustion opening.
- f. Secure right side inner door using (2) hex drive screws that were removed in step 7b, DO NOT over tighten screws.

GAS CONTROL REPLACEMENT (WHITE RODGERS/ROBERTSHAW TO HONEYWELL) BRADFORD WHITE WATER HEATERS

Step 16a. For closed combustion chamber models except DS/DH, connect (2) red wire leads from pilot assembly and Gas Control to resettable thermal switch.

NOTICE

Wire terminations are interchangeable with either resettable thermal switch connection.

- Step 17. <u>For DS/DH models and open combustion chamber models only</u>, connect inline splice connector.
 - a. Connect in-line splice connector to the (red) wire leads from the Gas Control and pilot assembly.
- Step 18. Add wire tie to constrain wires to feedline.
 - a. Bundle wire leads and secure to feedline using wire tie provided. Be certain all wire terminations are outside of the combustion chamber and DO NOT contact any metal on the water heater.
- Step 19. Replace outer jacket door.
- Step 20. Add "lighting instruction overlay" label to water heater.
- Step 21. Add "control diagnostic codes" label to water heater.
- Step 22. To resume operation, follow the instructions located on the lighting instruction label or the lighting instructions located in the installation and operation manual.

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