

Instructions for Replacement of White-Rodgers 2-Stage Gas Valves (105782 and 1057821) with Honeywell Valves (113048 and 113049)

Qualified Cleveland Range authorized technicians must perform replacement of gas valves.

Read entire installation procedure before beginning replacement of White-Rodgers gas valve. Incorrect valve replacement could result in equipment damage, explosion, fire, personal injury, and/or death.

This kit contains parts and instructions for replacement of White-Rodgers gas valves (105782 and 1057821) on the SteamCraft Ultra 10 and Rotisserie. Depending on the unit, some parts in the kit will not be used. Recycle the unused parts.

Parts List for: KIT, REPLACEMENT, 2-STAGE GAS VALVE P/Ns FK113048 (NATURAL) and FK113049 (PROPANE)		
Part Number	Description	Qty Each
113048	VALVE, GAS, 2-STAGE, NATURAL, HONEYWELL (KIT FK113048 ONLY)	1
113049	VALVE, GAS, 2-STAGE, PROPANE, HONEYWELL (KIT FK113049 ONLY)	1
02565	BUSHING, HEX, 3/4 X 1/2, BLACK	1
113162	TUBE, FORMED, PILOT EXTENSION, SC10	1
113163	FITTING, COMPRESSION, 1/4TUBE X 1/4TUBE, STRAIGHT COUPLING	1
300746	HARNESS, EXTENSION, GAS VALVE, SC10	1
113161	NIPPLE, 1/8 NPT X 2.00, SCH 40 BRASS, TBE	1
106923	ELBOW, BRASS, 1/8 NPT X 1/8 NPT, 90 DEGREE	1
300747	WIRE ASSEMBLY, JUMPER, GAS VALVE, ROTISSERIE	1
300231	TERMINAL, FULLY INSULATED, FEMALE, 0.250 TAB, EXP. FLAIR	1
20352	TERMINAL, FULLY INSULATED, FEMALE, 0.188 TAB	1
260BDL	INSTR, REPLACEMENT OF WHITE-RODGERS 2-STG WITH H'WELL	1

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Replacement Procedure
2-Stage Gas Valve
Honeywell Replacing White-Rodgers

1. Remove unit from service. Unplug power cord and shut off gas supply. Remove control compartment access panel.
2. Label wires connected to White-Rodgers gas valve (HI, PV, C, and MV). Disconnect wires and pilot/igniter line from White-Rodgers gas valve.
3. Apply pipe thread sealant or teflon tape rated for natural and propane gas (rated sealant) to threads of 3/4 x 1/2 bushing (02565) from kit.
4. Screw bushing into INLET side of Honeywell valve from kit and tighten securely.
5. If you are working on a SteamCraft Ultra 10, continue with Steps 6 – 13. If you are working on a Rotisserie, skip to Step 14.
6. On SteamCraft Ultra 10, loosen unions on either side of White-Rodgers valve and remove valve from unit.
7. Carefully remove plumbing from White-Rodgers valve. Apply rated sealant to close nipples removed from White-Rodgers valve and assemble to Honeywell valve. Tighten securely.
8. With a compact tubing cutter, cut pilot tube 2-1/8" back from compression fitting. If necessary, ream or deburr pilot tube, making sure not to allow any chips or debris into tube. See Figure 1.



Figure 1

9. Get "U" shaped pilot tube (113162) and compression coupling (113163) from kit and securely assemble coupling to short side of "U" shaped tube.

10. Assemble other end of coupling to cut end (Step 8) of pilot tube. Tighten securely. See Figure 2.



Figure 2

11. Position Honeywell valve into unit with correct IN and OUT orientation. Tighten unions securely. Insert pilot tube into valve and tighten fitting.
12. Fasten extension harness (300746) from kit to wires labeled in Step 2 and removed from White-Rodgers valve. Connect red to HI, yellow to PV, white to C, and light Blue to MV. Route wires as shown in Figure 3. Fasten other end of extension harness to Honeywell valve (red to HI, yellow to PV, white to C, and light blue to MV).



Figure 3

13. Proceed to Step 29.

14. On Rotisserie, loosen compression fitting holding 1/2" aluminum tubing to top of White-Rodgers valve.
15. Loosen union at bottom of inlet pipe below valve. Remove screw from pipe clamp and remove valve from unit.
16. Carefully remove plumbing and fittings from White-Rodgers valve. Apply rated sealant to outlet compression fitting and inlet pipe removed from White-Rodgers valve and assemble to Honeywell valve. Tighten securely.
17. On Honeywell valve, remove outlet pressure tap plug and pilot connection compression fitting.
18. Using rated sealant, assemble brass plug removed from pilot connection on White-Rodgers valve to pilot connection on Honeywell valve.
19. Using rated sealant, assemble 1/8 pipe nipple (113161) from kit to outlet pressure tap connection on Honeywell valve.
20. Assemble 1/8 elbow (106923) from kit to 1/8 nipple using rated sealant.
21. Using rated sealant, assemble 1/8 brass tee removed from White-Rodgers valve to 1/8 elbow.
22. Get yellow/black stripe jumper wire from White-Rodgers valve and cut quick-connect terminal from end labeled MV (Step 2). Strip wire back 3/8".
23. Get orange wire assembly (300747) and blue quick-connect terminal (300231) from kit. Twist ends of yellow/black stripe jumper wire and orange wire assembly together and crimp into blue quick-connect terminal.
24. Connect blue quick-connect terminal to terminal marked MV on Honeywell valve. Connect other end of yellow/black stripe jumper wire labeled PV to terminal marked PV on valve. See Figure 4.

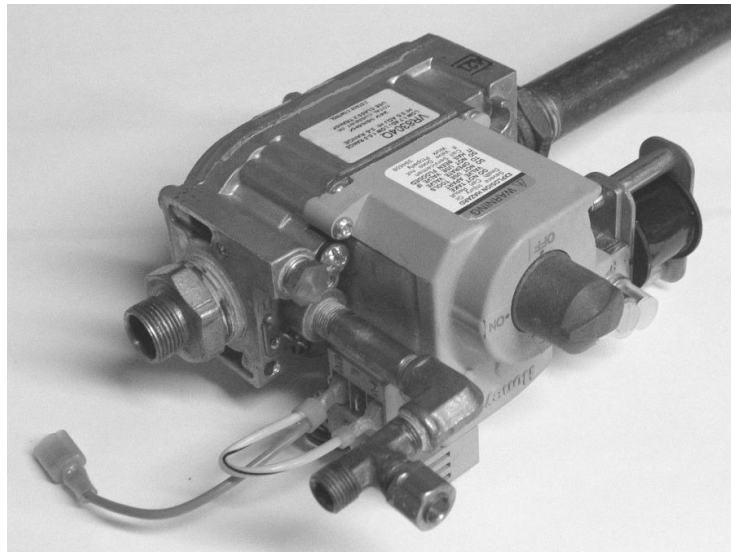


Figure 4

25. Position Honeywell valve into unit and secure inlet union, outlet compression fitting, and pipe clamp. Secure igniter tube to brass tee.

26. Connect wire labeled MV (Step 2) to pink male quick-connect terminal on orange wire assembly. Connect wire labeled C to terminal marked C on Honeywell valve.
27. Cut 1/4" quick-connect terminal off blue/red stripe wire labeled HI. Strip wire and crimp on 3/16" terminal (20352) from kit.
28. Connect blue/red stripe wire to HI terminal on Honeywell valve. See figure 5.

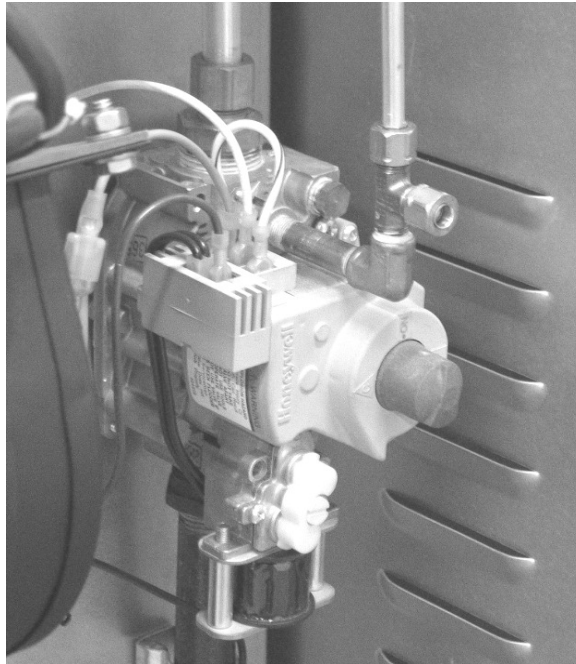


Figure 5

(Note: Igniter tube connects to pressure tap. Pilot connection is plugged.)

29. Turn on gas and check for leaks on inlet side of gas valve.
30. Connect manometer to outlet pressure tap on brass tee assembled to valve nipple in Step 21. Plug power cord in and turn unit on. During ignition cycle, check for pilot/igniter line leaks.
31. When main burner comes on, check for leaks on outlet side of gas valve.
32. Check outlet pressures (high and low) and adjust as needed (Note: You can manually switch valve to low stage by removing wire from HI terminal).

STEAMCRAFT ULTRA 10 AND ROTISSERIE MANIFOLD PRESSURES		
UNIT	NATURAL (HIGH/LOW)	PROPANE (HIGH/LOW)
SC ULTRA 10	3.5 / 2.0	10.0 / 4.2
ROTISSERIE	3.5 / 2.2	10.0 / 6.4

33. Shut unit off and remove manometer. Replace plug in outlet pressure tap. Replace access panel and return unit to service.