

## Replacement Instructions: Bypass Valve for RUR98i/e

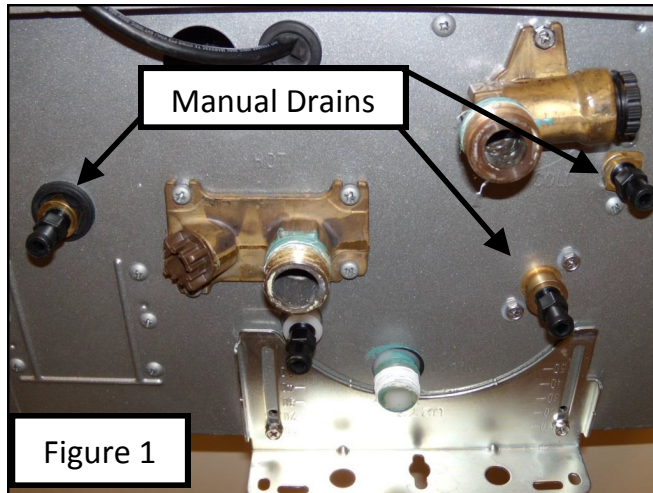
### **⚠ WARNING**

To protect yourself from harm, before performing maintenance:

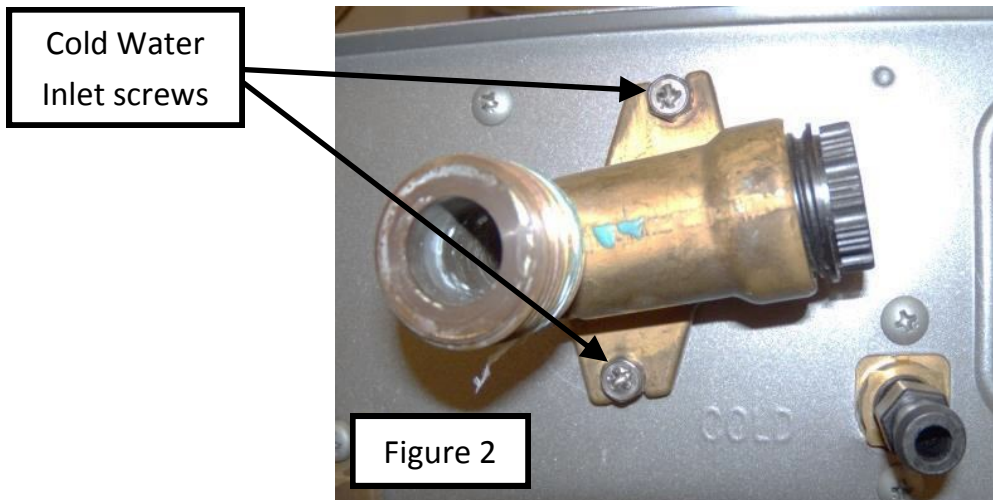
- Turn off the electrical power supply by unplugging the power cord or by turning off the electricity at the circuit breaker. (The temperature controller does not control the electrical power.)
- Turn off the gas at the manual gas valve, usually located immediately below the water heater.
- Turn off the incoming water supply. This can be done at the isolation valve immediately below the water heater or by turning off the water supply to the building.

1. Remove front panel by removing 4 screws securing it in place. Drain as much water as possible from the isolation valve kit.
2. Drain any remaining water from the following locations: (Figure 1)

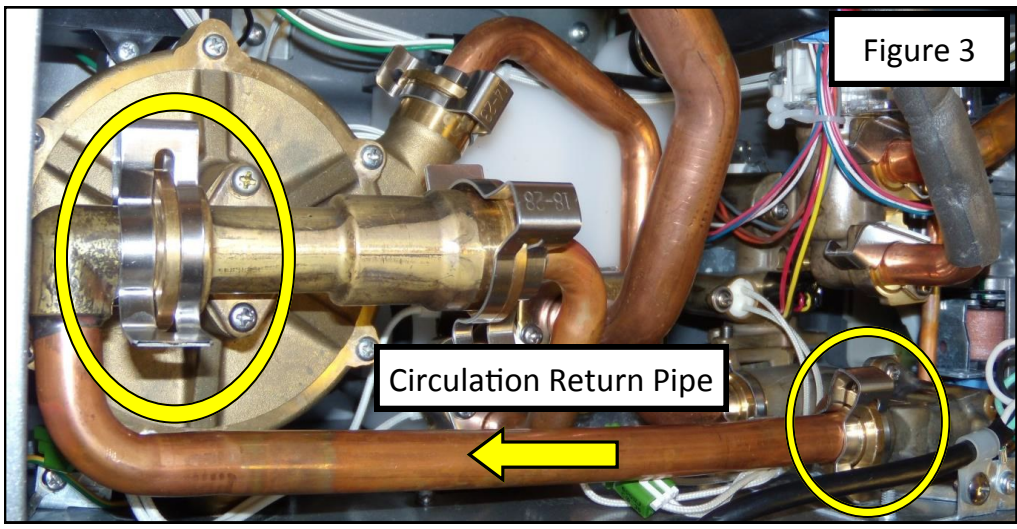
- Water Drain (copper hex drain)
- Check valve drain
- Pump Drain



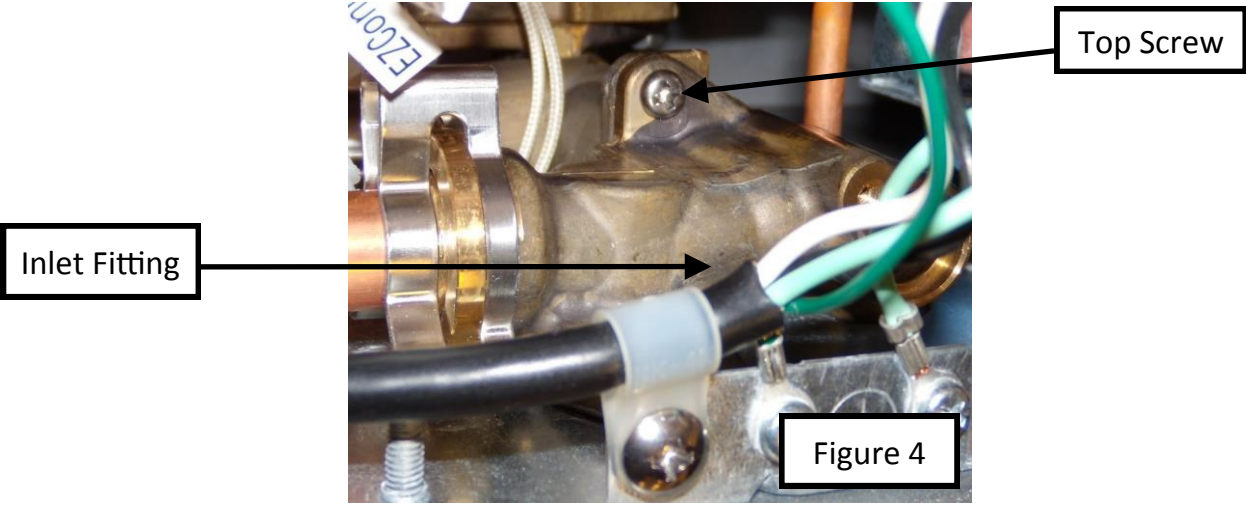
3. Remove cold water inlet/filter screen assembly (2 screws). (Figure 2)



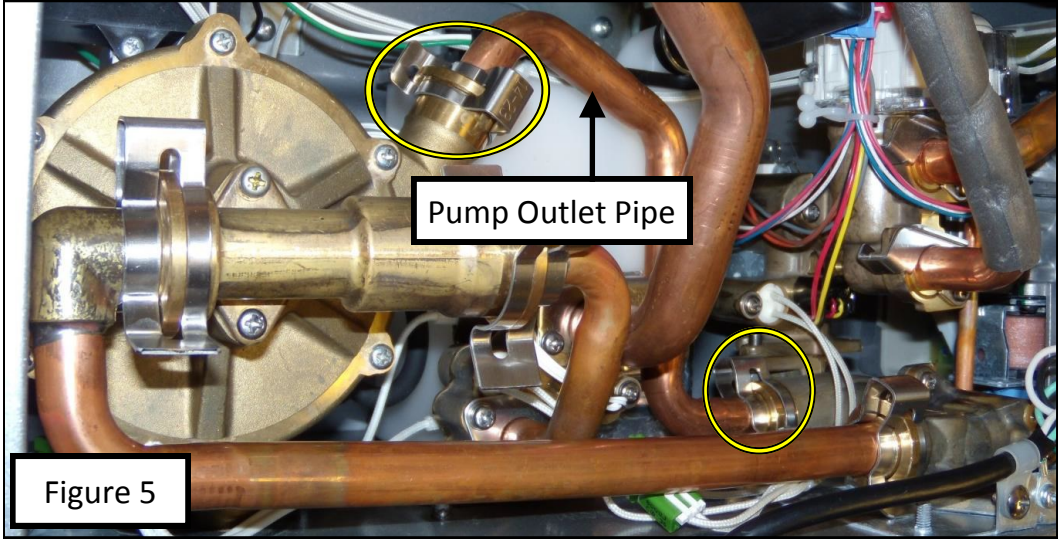
4. Remove circulation return pipe from cold water inlet fitting and pump inlet by removing retaining clips. Then slide pipe left to disconnect from fittings. (Figure 3)



5. After circulation return pipe has been removed, remove 2 screws attaching cold water inlet fitting to check valve assembly. 1 screw is seen here. The second screw is underneath the fitting (not shown). (Figure 4)



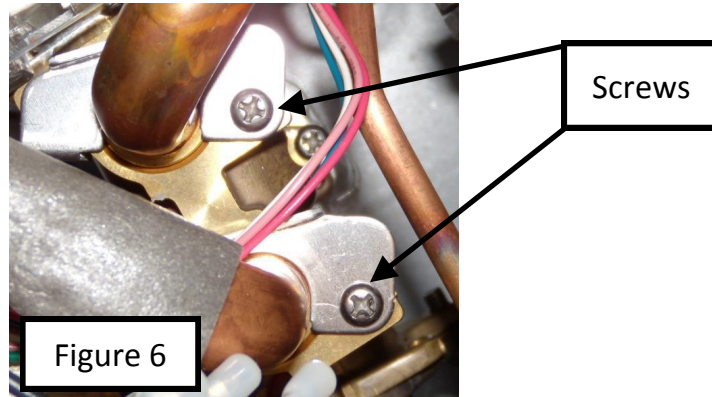
6. Remove inlet fitting from water heater.
7. Remove pump outlet pipe by removing pipe retaining clips at pump and check valve assembly. (Figure 5)



8. Once clips are removed, pull pump end of pipe out first. Rotate pipe forward to clear pump then slide pipe to left to remove it from check valve assembly.

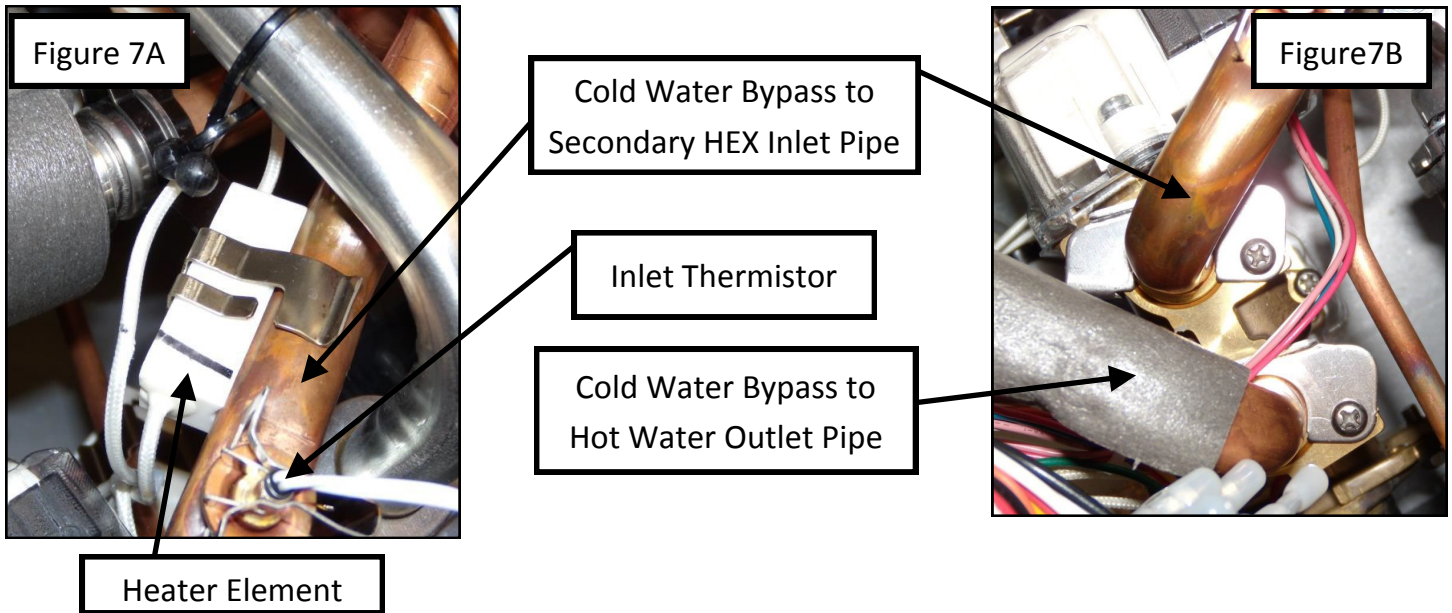


- Remove 2 screws from metal retention clips securing bypass valve outlet pipes. Once clips are removed, pull pipes out from bypass valve. (Figure 6)

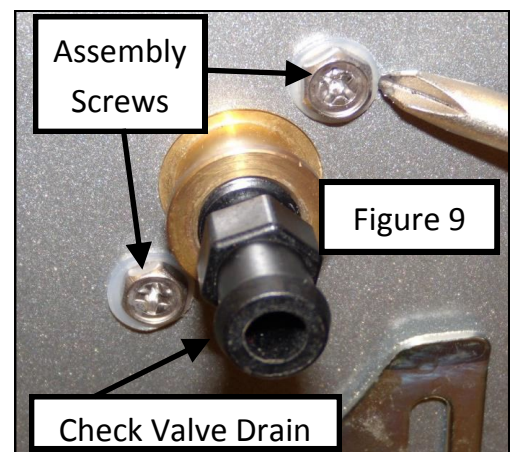
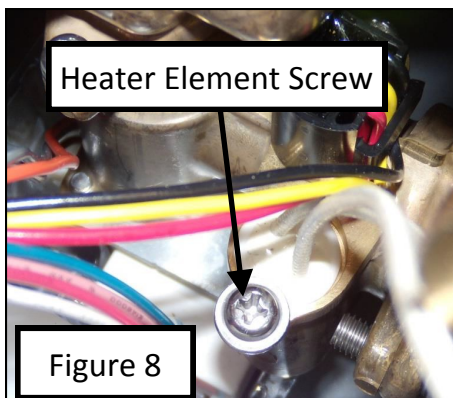


- Remove cold water bypass-to secondary hex inlet pipe by removing spring clip. Remove thermistor connected to pipe by removing spring clip holding it to pipe. Remove thermistor from the pipe. (Note cold water bypass-to hot water outlet pipe is soldered to hot water outlet pipe and cannot be removed) (Figure 7A and 7B)

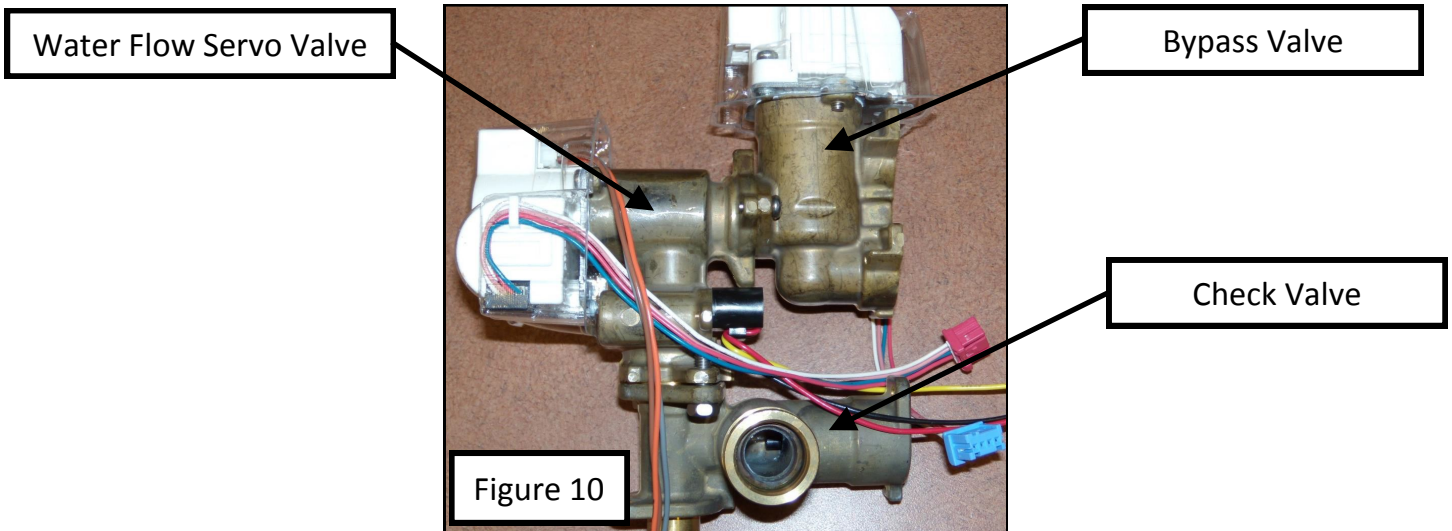
- Remove heater element from pipe. (Figure 7A)



- Disconnect all wiring harnesses from WFSV and Bypass Valve.
- Remove WFSV heater element by removing 1 screw securing it in place. (Figure 8)
- Remove 2 screws securing check valve assembly to bottom of unit. (Figure 9)
- Remove check valve drain from check valve.

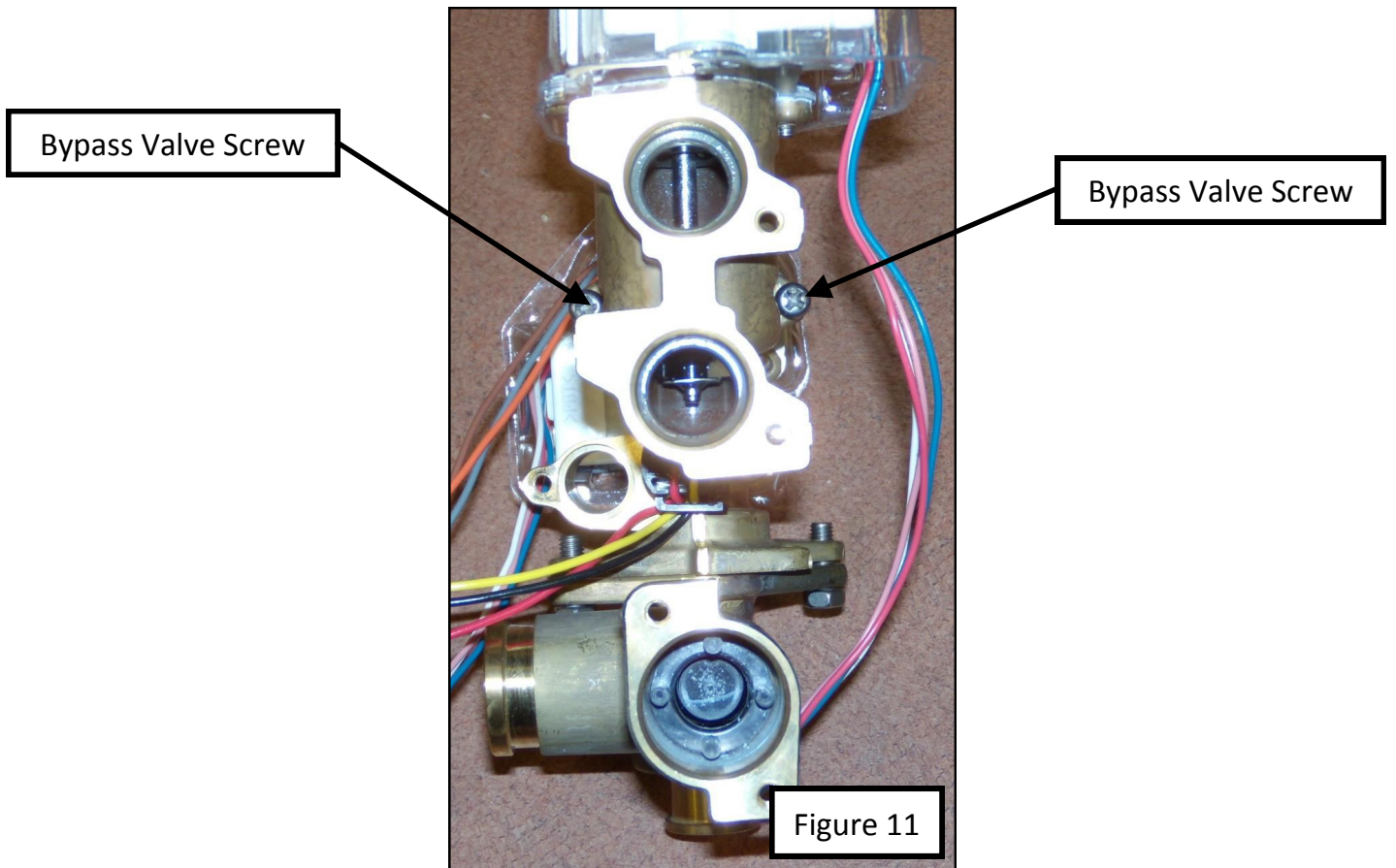


16. Remove WFSV, Bypass, and Check valve assembly. (Figure 10)



17. Disconnect Bypass Valve from assembly by removing 2 screws. (Figure 11)

18. Install new Bypass Valve by securing it to WFSV and Check Valve Assembly using 2 screws. (Figure 11)



## **Reassembly Instructions**

1. Place and properly seat WFSV, Bypass, and Check Valve assembly inside of unit.
2. Secure valve using 2 screws. Reinstall Check Valve Drain to Check Valve at the bottom of the unit. (Figure 9)
3. Reinstall WFSV heater element securing it with 1 screw. (Figure 8)
4. Reconnect all wiring harnesses to WFSV and Bypass Valve.
5. Reinstall heater element to Cold Water Bypass to Secondary Heat Exchanger Inlet Pipe. (Figure 7A)
6. Reinstall the thermistor from the pipe. Secure thermistor to pipe with the spring clip. Reinstall cold water bypass to secondary heat exchanger Inlet pipe by securing it with the spring clip. (Figure 7A and 7B)
7. Reinstall pipes into the bypass valve. Reinstall the 2 metal clips. Secure the metal clips into place with 2 screws. (Figure 6)
8. Reinstall the pump outlet pipe by rotating the pipe back for the proper angle then slide the pipe into the check valve. Slide the pump end back into place.
9. Secure the pump outlet pipe by reinstalling the pipe retaining clips at the pump and check valve assembly. (Figure 5)
10. Reinstall the inlet fitting to the water heater.
11. Using 2 screws secure the cold water inlet fitting to the check valve assembly. (Figure 4)
12. Reinstall the circulation return pipe by sliding it into place. Secure the pipe with 2 retaining clips. (Figure 3)
13. Reinstall the cold water inlet/filter screen assembly securing it with 2 screws. (Figure 2)
14. Ensure all drains have been installed and secured to the bottom of the water heater. (Figure 1)
15. Reactivate water supply to ensure no leaks.
16. Reactivate power and gas to the unit.
17. Test fire unit to ensure it is working in proper fashion.
18. Reinstall front panel using 4 screws.



Failure to correctly assemble the components according to these instructions may result in a water leak causing damage to persons and/or property.

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