Rinnai®

Water Flow Control Assembly Kit 104000162

1. Turn off gas supply.

- 2. Turn off water supply. Drain all water from appliance.
- 3. Turn off 120v power supply.
- 4. Remove four screws securing the front panel. Remove front panel.

Remove controller assembly (indoor models only)

5. Remove temperature controller. Remove two screws for temperature controller bracket. Remove bracket.

Remove water flow servo valve

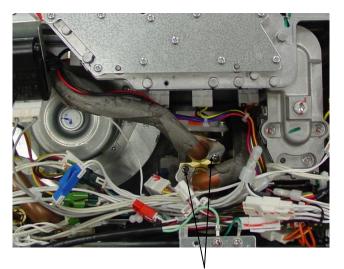
- 6. Remove two screws and retention clips at the bypass valve. Remove two copper tubes.
- 7. Remove four screws attaching the water inlet to the bottom of the water heater cabinet.
- Disconnect the wire harnesses (water flow sensor harness - black, yellow, red wires; bypass servo assembly harness - white, red, yellow, orange, brown wires, water flow servo valve harness - gray, brown, orange, yellow, white, pink, blue, red, heating element).
- 9. Pull out the water flow servo assembly and bypass servo assembly.
- 10. Remove two screws in order to separate the bypass servo assembly from the water flow servo assembly.

Reinstall water flow servo valve

- 11. Replace the O-ring (included in kit) between the water flow servo assembly and the bypass servo assembly. Attach the new water flow servo assembly to the bypass assembly with two screws.
- 12. Place inside the heater and attach the wire harnesses.
- 13. Replace the O-ring on the water inlet (included in kit). Attach the water flow assembly to the water inlet using four screws. The two shorter screws can be installed first to connect the water flow assembly to the bottom of the cabinet. Then install the two longer screws through the water inlet.
- 14. Replace the O-ring on the water lines (included in kit). Attach the two water lines to the bypass valve, with one bracket and one screw for each line.

Install controller assembly (indoor models only)

- 15. Install temperature controller bracket with two screws. Install temperature controller.
- 16. Turn on the water supply, power supply, and gas supply.
- 17. Open hot water tap and ensure there are no leaks at the water heater.
- 18. Install front panel using four screws.



Water flow servo assembly retention clip screws

Rinnai.

INSTALLATION INSTRUCTIONS

1. Turn off gas supply.

- 2. Turn off water supply. Drain all water from appliance.
- 3. Turn off 120v power supply.
- 4. Remove screw covers. Remove four screws securing the front panel. Remove front panel.

Remove controller assembly (indoor model only)

- 5. Remove one screw from ignitor module bracket. Remove bracket.
- 6. Remove temperature controller and bracket by sliding up and out of slots on cabinet.

Remove ignitor module (outdoor model only)

7. Remove two screws from ignitor module bracket. Remove bracket and module.

Remove fan assembly

- 8. Disconnect fan motor harness.
- 9. Disconnect air inlet thermistor harness. (indoor model only)
- 10. Release the fan duct from the left side by pinching open the metal clamp. (indoor model only)
- 11. Remove two screws that attach the fan assembly to the bottom of the combustion chamber.
- 12. Remove fan assembly.

Remove water flow servo valve and bypass valve

- 13. Remove two screws and retention clips at the bypass valve. Remove two copper tubes.
- 14. Remove two screws attaching the water inlet to the bottom of the water heater cabinet.
- 15. Remove two screws attaching the water flow servo valve to the bottom of the water heater cabinet.
- Disconnect the wire harnesses (water flow sensor harness - black, yellow, red wires, bypass servo assembly harness - white, red, yellow, orange, brown wires, water flow servo valve harness - gray, brown, orange, yellow, white, pink, blue, red).
- 17. Remove one screw that is securing ceramic heater. Remove ceramic heater from water flow servo assembly.
- 18. Pull out the water flow servo assembly and bypass servo assembly.
- 19. Remove two screws to separate the bypass servo assembly from the water flow servo assembly.

Reinstall water flow servo valve and bypass valve

- 20. Replace the O-ring (included in kit) between the water flow servo assembly and the bypass servo assembly. Attach the water flow servo assembly to the bypass assembly with two screws.
- 21. Place inside the heater and attach the wire harnesses.
- 22. Reinstall ceramic heater.
- 23. Replace the O-ring on the water inlet (included in kit). Attach the water flow assembly to the bottom of the water heater cabinet using two short screws. Then install the two longer screws through the water inlet.
- 24. Replace the O-ring on the copper lines (included in kit). Attach the two copper lines to the bypass valve, with one bracket and one screw for each line.

Reinstall fan assembly

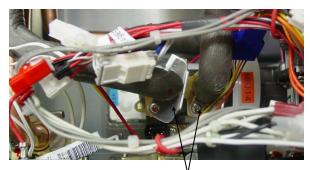
- 25. Reconnect fan motor harness.
- 26. Reconnect air inlet thermistor harness. (indoor model only)
- 27. Reinstall the fan duct. (indoor model only)
- 28. Install two screws that attach the fan assembly to the bottom of the combustion chamber.

Install controller assembly (indoor only)

- 29. Reinstall temperature controller and bracket.
- 30. Reinstall ignitor module bracket with one screw.

Install ignitor module (outdoor only)

- 31. Install bracket and ignitor module with two screws.
- 32. Turn on the water supply, power supply, and gas supply.
- 33. Open hot water tap and ensure there are no leaks at the water heater.
- 34. Install front panel using four screws. Reinstall screw covers.



Water flow servo assembly retention clip screws