

# BLOCKED VENT SAFETY KIT

INSTRUCTIONS FOR TriFire BOILER  
FOR CHIMNEY INSTALLATIONS ONLY

## ⚠ WARNING

This kit must be installed by a qualified installer or service agency, in accordance with the manufacturer's instructions, and in accordance with all codes and requirements of the authority having jurisdiction. Failure to follow these instructions could result in fire or explosion resulting in property damage, personal injury, or loss of life.

**IMPORTANT:** Before beginning installation, verify that all components are present.

PART NUMBER	DESCRIPTION	QTY
550001930*	6" FLUE KIT (CONTAINS THE FOLLOWING)	
30656	6" COLLAR	1
30660	WMO-1 SAFETY CONTROL	1
240007547	WIRE HARNESS	1
550001931*	5" FLUE KIT (CONTAINS THE FOLLOWING)	
30655	5" COLLAR	1
30660	WMO-1 SAFETY CONTROL	1
240007547	WIRE HARNESS	1

\* Requires p/n 3001543 - Aquastat Assembly, Canada (Not part of kit, provided with Canadian boilers only)

## ⚠ WARNING

Read these installation instructions carefully and completely before installing this control.

Do not reset the safety device or restart the appliance unless the cause for its activation has been identified and corrected by a qualified technician. Ensure the switch and appliance has been serviced by a qualified technician prior to placing back into service. A qualified technician must perform annual inspection.

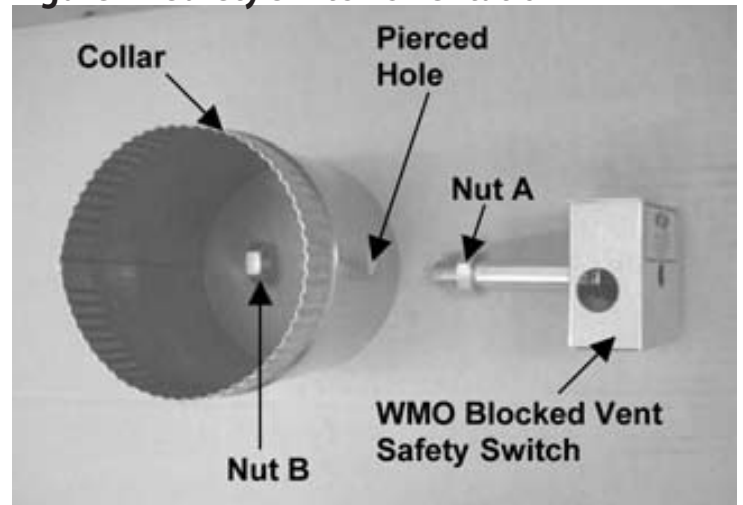
## ⚠ CAUTION

Ensure electrical power supply is disconnected before installing safety switch.

## ⚠ WARNING

For continued safe operation, the appliance including the switch requires annual inspection and maintenance by a qualified technician. Failure to properly maintain the appliance and switch can lead to property damage, personal injury or death.

**Figure 1 - Safety Switch Orientation**



Wiring must be in accordance with the current Canadian Electrical Code and any other applicable federal, provincial and local code requirements.

If installed within the United States, wiring must be in accordance with the current National Electrical Code and any other applicable federal, state and local code requirements.

## Installation Rear Breach

1. Remove Nut B from the pipe of the safety switch assembly. Tighten Nut A (remaining nut) onto the heat transfer tube as far as possible. See **Figure 1**.
2. Insert threaded pipe end into the pierced hole of the collar provided, then install the securing Nut B that was removed in step one.
3. Secure collar onto the breach of the appliance using three sheet metal screws. See **Figure 3 & 4** for correct positioning. The safety should be located in such a manner to permit future service.
4. The safety switch should be factory pre-wired. However, if replacing the wire, the two black wires go to each side of the switch and the green wire to the ground lug. (See **Figure 2**.)
5. The plug side of the electrical cable is plugged into the aquastat short connector. See **Figure 5**.

## Blocked Vent Safety Confirmation Procedure

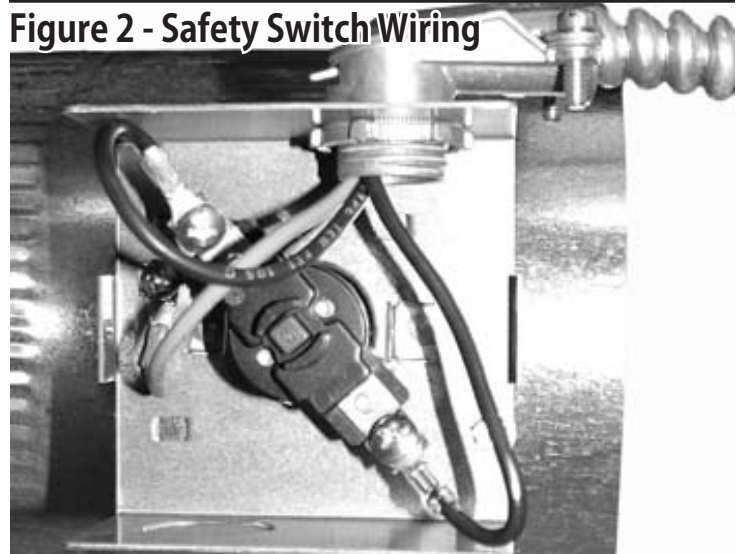
1. Once appliance installation is complete, the proper start up procedure should be performed as indicated in the installation manual included with the appliance. At no time should the blocked vent safety turn the burner off provided start up and installation is completed properly. Ensure inspection doors and over fire draft access ports are closed. Venting connections must be secure.
2. Shut thermostat off and allow appliance to cycle off. Turn supply voltage to the appliance off after cycle is complete.
3. Disconnect one connection of the blocked vent safety switch.



Refer to system check out procedure section before operating.

4. Restore supply voltage to the appliance.
5. Turn thermostat up to establish a call for heat.

**Figure 2 - Safety Switch Wiring**



6. The appliance should not start the heating cycle. Boiler burners will not start. There should be no power to the Aquastat.
7. Shut thermostat off and allow appliance to cycle off. Shut off supply voltage to the appliance after cycle is complete.
8. Re-connect wiring connection of the blocked vent safety switch.
9. Restore supply voltage to the appliance.
10. Turn thermostat up to establish a call for heat.
11. The burner should initiate a call for heat as normal. Confirm burner settings such as draft, smoke and CO2.
12. Adjust thermostat set point.
13. Burner should shut down when thermostat heating call is satisfied.



If for any reason the system has shut down during operation, the cause of the system failure should be investigated and corrected before resetting the safety switch and re-starting the system.

## Maintenance

### NOTICE

For continued safe operation, the appliance and switch require annual inspection and cleaning by a qualified technician.

14. Disconnect power to the appliance.
15. Remove the two screws securing the WMO-1 vent switch assembly cover and remove cover.

**Figure 3 - Acceptable Mounting Position 1**



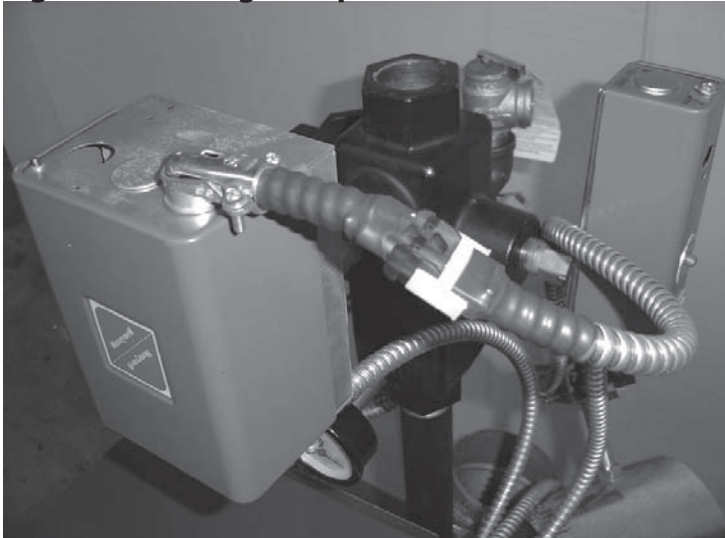
16. Remove the wiring connections from the terminals of the thermal switch.
17. Remove one of the two bolts securing the thermal switch to the assembly base and loosen the other.

**NOTICE**

Do not dent or scratch the surface of the thermal switch. If the thermal switch is damaged, replacement is required.

18. Remove thermal switch and clean residue or particulates from surface.
19. Clean any residue or particulate accumulated inside the heat transfer tube.
20. Secure the thermal switch to the assembly base.
21. Secure wiring connections to the terminals of the thermal switch. The two black wires attach to the switch terminal and the green wire to the ground lug. See **Figure 2**.

**Figure 5 - Wiring at Aquastat**

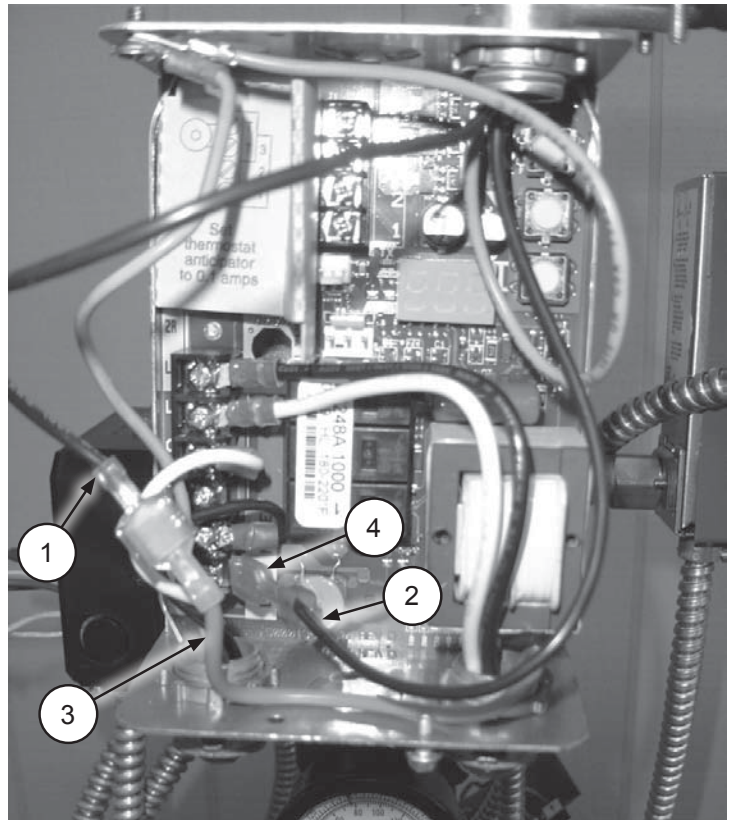


**Figure 4 - Acceptable Mounting Position 2**



22. Secure the cover of the assembly using the two screws removed in step 2.
23. Restore power to the appliance. Go to step 5 to confirm proper operation.

**Figure 6 - Wiring inside Aquastat**



1. Black wire - Blocked Vent Safety Switch
2. Black wire - Blocked Vent Safety Switch
3. Orange wire - to Burner
4. B1 Terminal

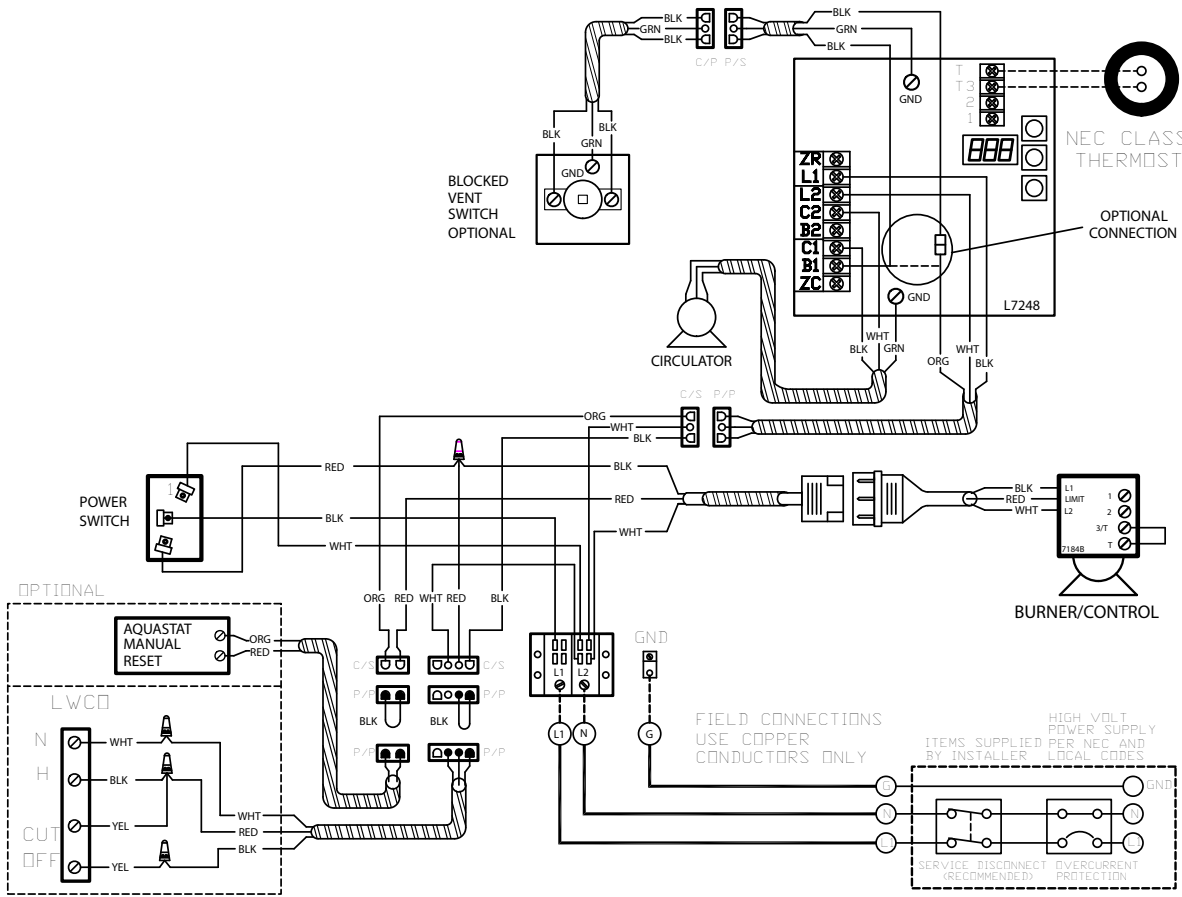
BLOCKED VENT SAFETY KIT- TriFire BOILER

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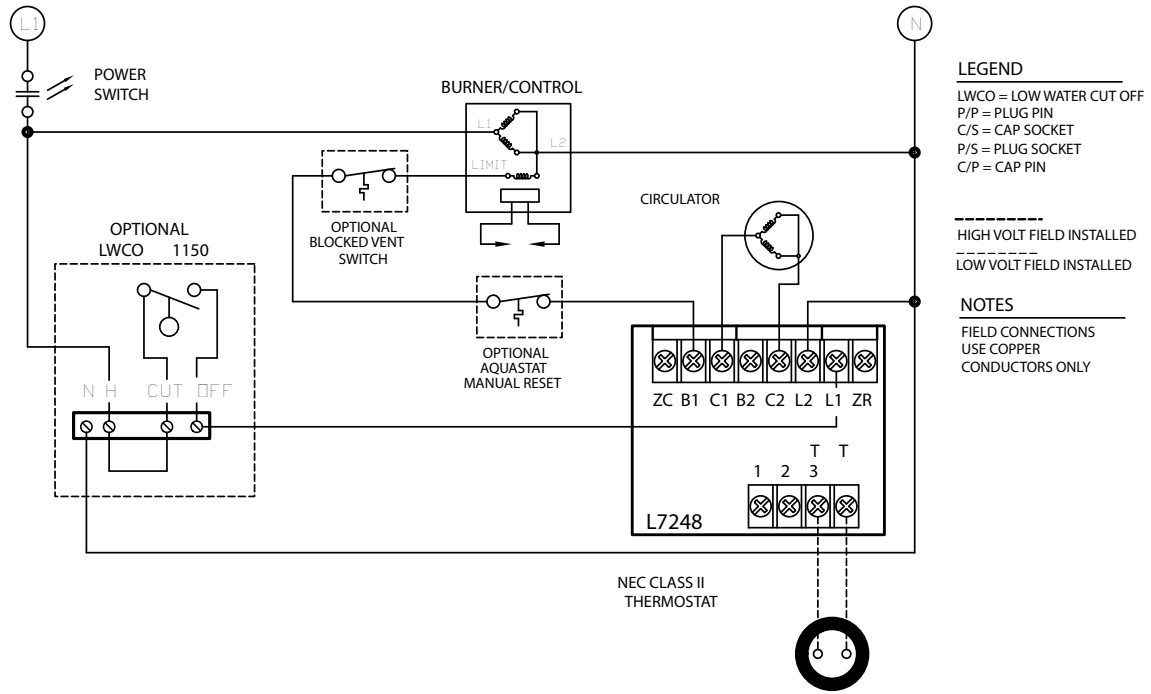
WIRING DIAGRAM

REVISION: B 08/25/08 pf

P/N: 240007363



WIRING SCHEMATIC



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