Background
This technical bulletin describes how to connect the wiring from a condensate removal pump with a safety switch to a Rinnai condensing water heater. A condensate removal pump with a safety switch may be required by local codes to turn the water heater off if the condensate removal pump fails.

Operation
The safety switch wires will be connected in parallel to the condensate trap level wiring of the water heater. If the pump fails then the safety switch is activated which creates a closed circuit. Once the water heater detects that this circuit is closed the water heater will shut down within one minute and have an error code 25 (condensate trap error).

Instructions
Connect the wires from the safety switch to the white and green wires coming from the condensate trap. The wiring on the safety switch must be connected to the normally open (NO) contacts. Route the pump wiring through any of the holes in the water heater case. Do not pinch the wiring with the front panel.

Rinnai recommends connecting the wires from the pump to the screw terminals on the condensate trap. Splice connectors could also be used.

NOTE: Do not connect the pump’s power through the Rinnai water heater.