

# DOMESTIC HOT WATER SENSOR FOR INDIRECT STORAGE TANK KIT 550003189 INSTRUCTIONS FOR HEAT ONLY BOILER MAH, DCB

Kit installation shall be completed by qualified agency.

## **⚠ WARNING**

Fire, explosion, asphyxiation and electrical shock hazard. Improper installation could result in death or serious injury. Read this instruction and understand all requirements, including requirements of authority having jurisdiction, before beginning installation. Installation not complete until appliance operation verified per Installation, Operation & Maintenance Manual provided with boiler.

Sensor is used on a standard Indirect Hot Water tank. When connected to boiler the sensor will measure Indirect Tank temperature.

1. Follow instructions To TURN OFF GAS TO APPLIANCE found on Operating Instructions label on boiler or in Installation, Operation & Maintenance Manual. Verify all electrical power to boiler is turned off.

## **⚠ WARNING**

Electrical shock hazard. Turn OFF electrical power supply at service panel.

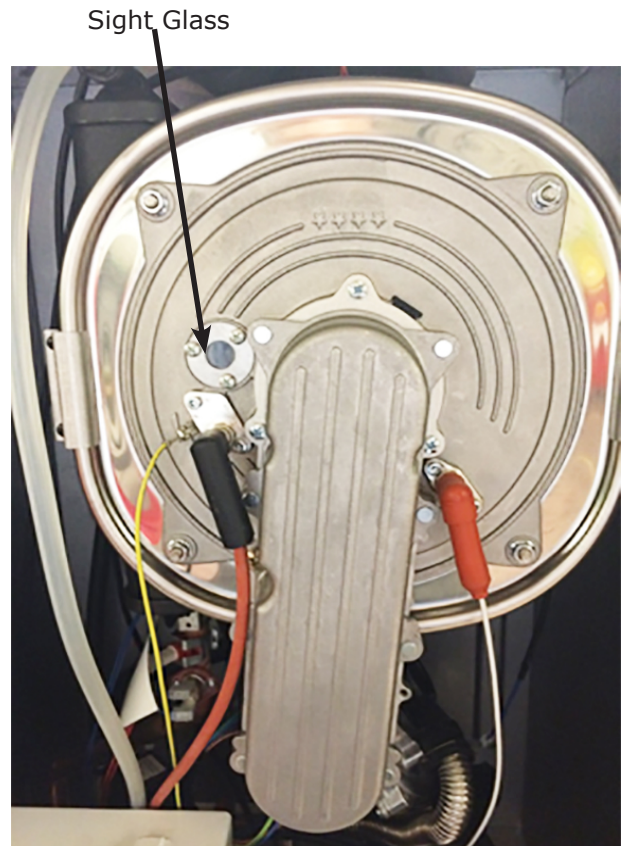
2. Remove two (2) screws at bottom of front cover. Lift cover up and off.

## **⚠ WARNING**

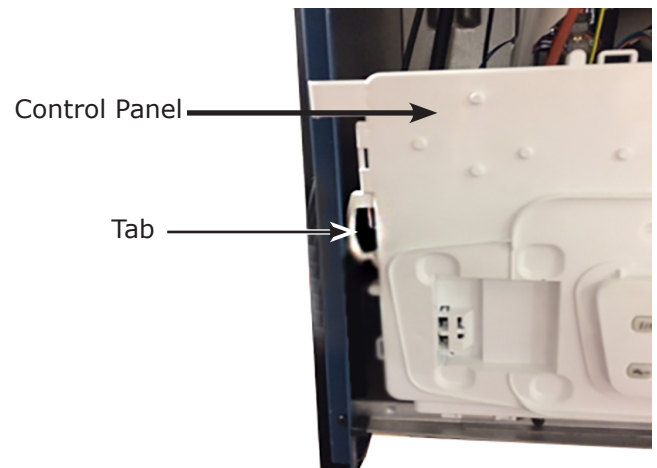
Burn hazard. Verify heat exchanger has cooled or use appropriate personal protection equipment.

3. Inspect combustion chamber through sight glass. Verify flame is not present. See Figure 1.
4. Press tab and rotate control panel to downward position. See Figure 2.
5. Before inserting sensor into Indirect tank well, thoroughly coat sensor with thermal paste supplied with sensor kit.
6. Slide sensor into well until it bottoms out. See Figures 3 and 4.
7. Secure sensor wire to well with included clip. See Figures 4 and 5.

**Figure 1 - Sight Glass & Heat Exchanger Cover**



**Figure 2 - Control Panel and Tab**



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8. Remove M2 control cover by removing screw attaching it to back of control panel.
9. Route sensor wire from storage tank to boiler M2 terminal block (#9 and #10). If necessary extend sensor cable length to reach control. Use AWG 18 wire; not to exceed 25 ft. See Figure 6 - wiring diagram.
10. Install sensor wires onto M2 terminals 9 & 10. See Figure 6 & 7.
11. Replace M2 terminal strip cover. Secure with screw.
12. Secure sensor wire, provide adequate strain relief and anti-shorting protection.
13. Position control assembly in upward position.
14. Restore power to boiler. Set parameter P03 to 05. Then boiler will recognize the tank sensor. See Commissioning Guide included with this kit.
15. See Installation, Operation & Maintenance Manual for adjusting DHW tank temperature and operation.
16. Verify proper operation.
17. Resume operation using OPERATING INSTRUCTIONS found on Operating Instructions label on boiler or in Installation, Operation & Maintenance Manual.
18. Install front panel. Secure with two screws at bottom of front panel.

**Figure 3 - Slide Sensor Into well of Indirect Tank**



**Figure 4 - Secure Sensor Wire to Well With Clip**

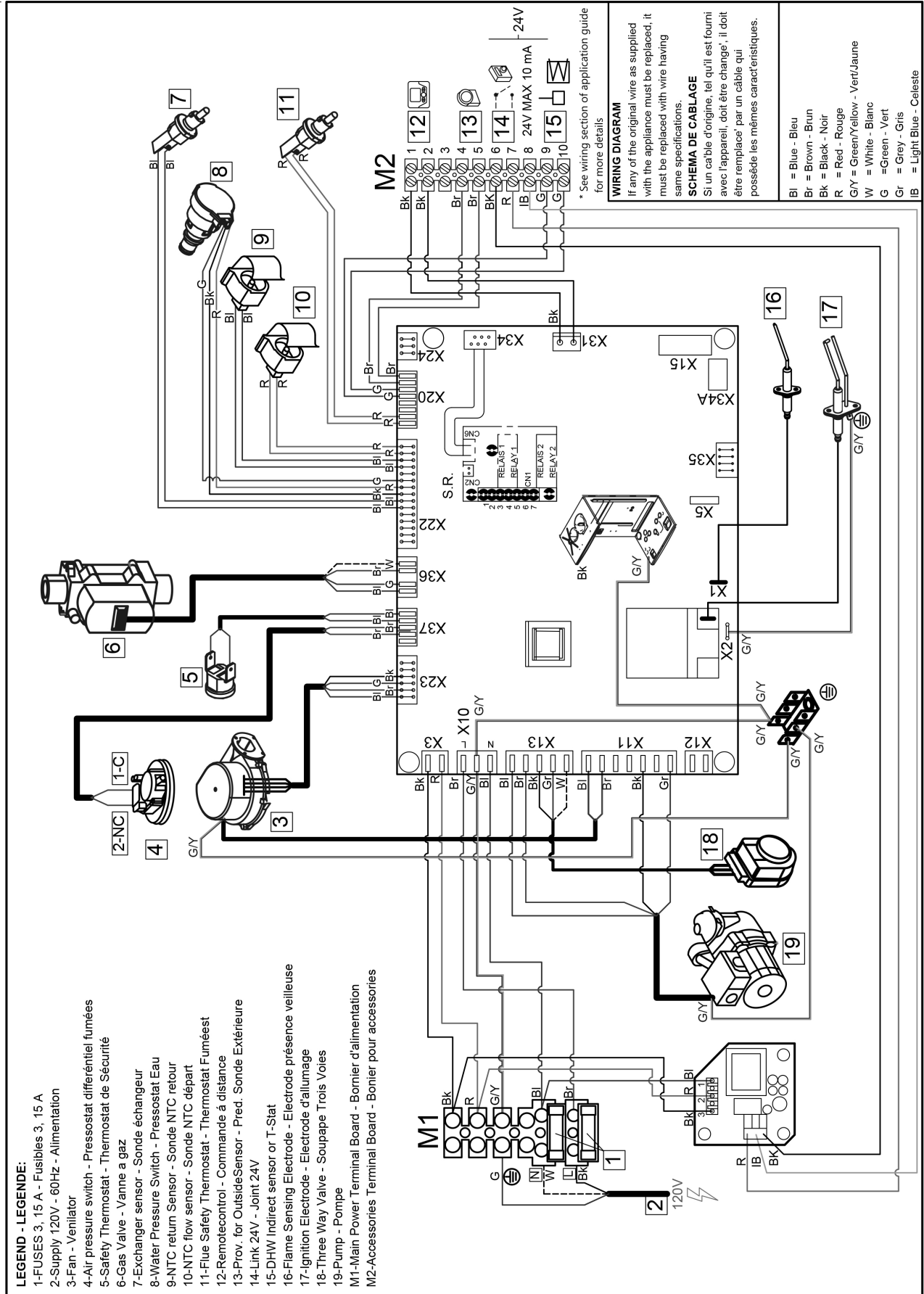


**Figure 5 - Sensor Wire Secured to Well With Clip**



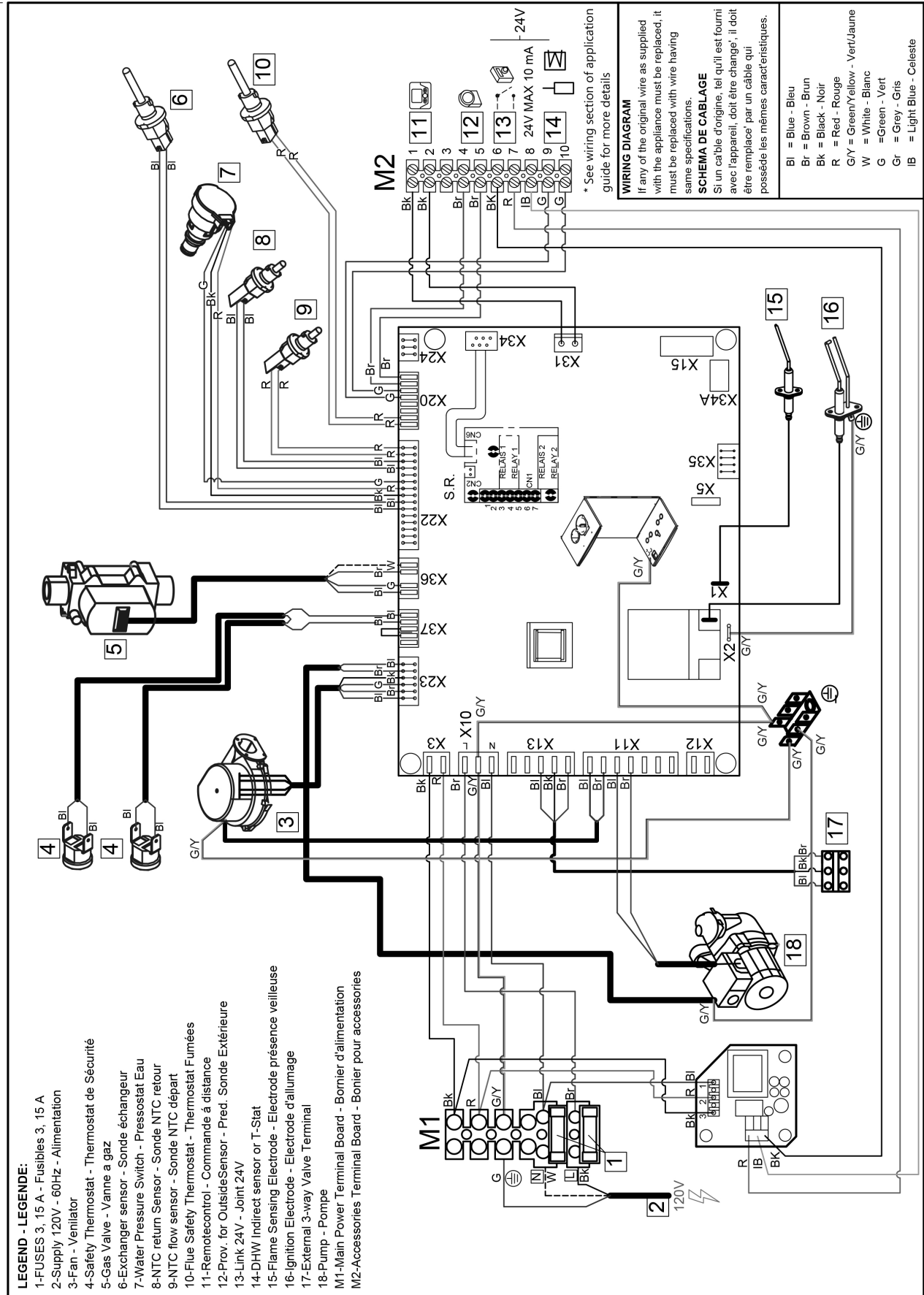
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Figure 6 - Wiring Diagram - 125 / Heat Only



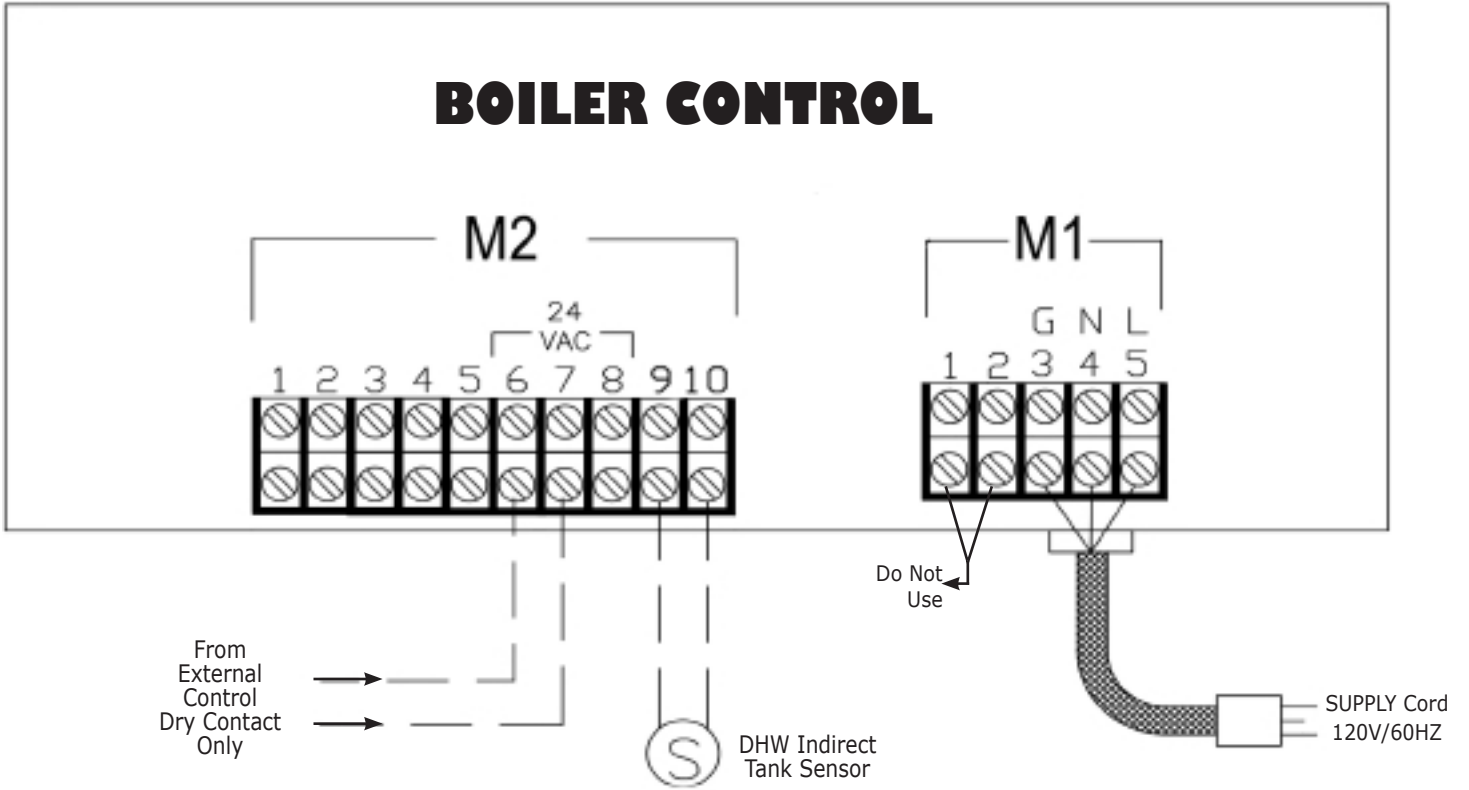
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Figure 7 - Wiring Diagram - 165 / Heat Only



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**Figure 7 - M2 Terminal Strip / Attach Tank Sensor Wire To #9 and #10**



Do Not use 120V Thermostat Terminals M1 (#1 and #2).

Temperature Deg F	Resistance in Ohms
32	32505
60	15689
70	11935
77	10000
100	8060
110	4732
120	3748
130	3104

<b>DOMESTIC HOT WATER SENSOR KIT 550003189</b>		
<b>DESCRIPTION</b>	<b>PART #</b>	<b>QTY</b>
DHW Tank Sensor	-	1
Clip	-	1
Thermopaste	-	1
Instructions	240011464	1

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