DOMESTIC HOT WATER SENSOR KIT INSTRUCTIONS FOR CHB-100, CHB-130 Kit #550002958

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 can be used on a standard Indirect Hot Water tank. When it is connected to the boiler, sensor will control 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 front jacket.

WARNING

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

- **3.** Before inserting sensor into Indirect tank well, thoroughly coat sensor with Thermopaste supplied with sensor kit.
- 4. Slide sensor into well until it bottoms out. See figure 1.
- 5. Secure sensor wire to well with included clip. See figures 1 and 2.
- Route sensor wire to boiler low voltage terminal block. Remove the two resistors on terminals 7 & 8 of 8-pin terminal strip, item #155. See figure 4 - wiring diagram.
- **7.** Install sensor wires onto terminals 7 & 8. See figures 5 and 6.
- 8. Secure sensor wire.
- **9.** Restore power to boiler. Boiler will automatically recognize the sensor.

Figure 1 - Slide Sensor Into well of Indirect Tank



Figure 2 - Secure Sensor Wire to Well With Clip



Figure 3 - Sensor Wire Secured to Well With Clip



DOMESTIC HOT WATER SENSOR KIT

Thermopaste

Instructions

- **10.** See Installation, Operation & Maintenance Manual for adjusting DHW tank temperature and operation.
- **11.** Resume operation using Installation, Operation & Maintenance Manual.
- **12.** Verify proper operation by following START UP PROCEDURE in Installation, Operation & Maintenance Manual.
- **13.** Install front cover.

Figure

DOMESTIC HOT WATER SENSOR KIT FOR CHB-100 & CHB-130 #550002958 DESCRIPTION PART # QTY DHW Tank Sensor 1 -Clip 1 -

1

1

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<u>e 4 - Wiring Diagram</u>	155	Wir	nove both resistors. re sensor to 7 and 8.
	370 M 138 1 2 3 4 5 6 7 8	10 kOhm 1,8kOhm	120V
95 278 278 278 278 278 278 278 278		X2	$120V \\ 60Hz$ $N \downarrow L$ 10^{1}
	X7	81 kΩ	X4
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Figure 5 - Low Voltage Terminal Strip, CHB-130 Shown

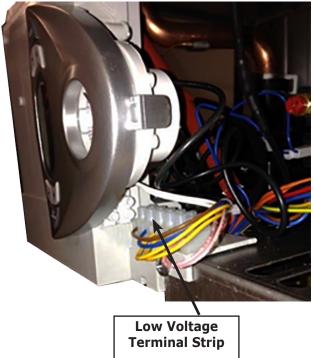
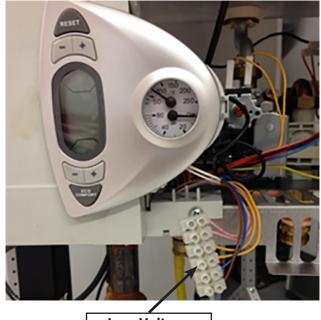


Figure 6 - Low Voltage Terminal Strip Removed from Boiler, CHB -130 Shown



Low Voltage Terminal Strip Removed

Figure 6

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