WIRE HARNESS KIT INSTRUCTIONS 050/075/100 Kit #550003200 150/200 Kit #550003201 299 Kit #550003202

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.

Laceration, burn hazard. Metal edges and parts may have sharp edges and/or may be hot. Use appropriate personal protection equipment to include safety glasses and gloves when installing or servicing this boiler. Failure to follow these instructions could result in minor or moderate injury.

Wire Harness Removal:

Tools required:

- Needle nose pliers
- Small (No. 1) phillips screwdriver
- Small wire ties
- 11/32" Nut Driver, Wrench or Socket
- 1/4" Nut Driver
- Side cutters
- 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

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

2. Remove front jacket panel.

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 or 2.

Figure 1 - Sight Glass 050/075/100/150/200

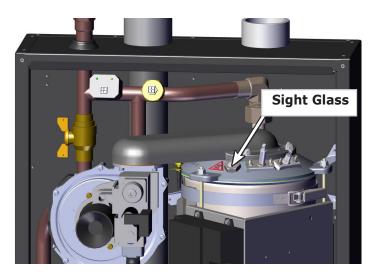
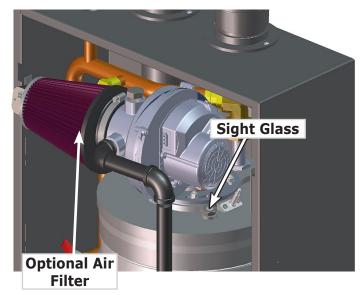


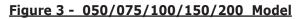
Figure 2 - Sight Glass 299

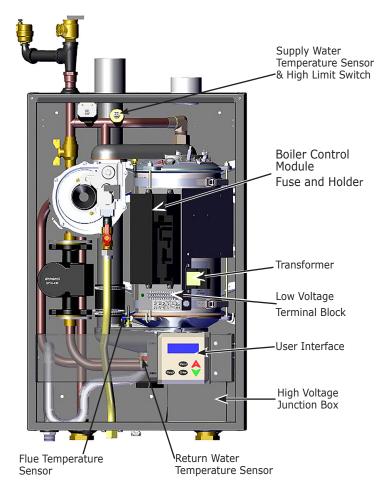


WIRE HARNESS KIT INSTRUCTIONS

- Remove retaining screw from high voltage junction box and remove cover. Remove two (2) screws holding high voltage terminal strip. Lift strip up and out. Leave field wiring attached to strip. Disconnect boiler connections from rear terminals.
- **5.** Remove low voltage terminal block from control panel. Disconnect boiler low voltage wires from terminal block.
- **6.** Disconnect wire harness from return water sensor.
- **7.** Disconnect wire harness from control module.
- **8.** Disconnect wire harness from pump relays (if equipped).
- **9.** Disconnect flame sensor cable from flame sensor. Remove right-side 8-32 hex nut using 11/32" nut driver, wrench or socket. Disconnect ground wire from stud.
- **10.** Disconnect two (2) wire harnesses from transformer, two (2) wire harnesses from blower motor, cables from Low Water Cutoff and high temperature supply switch.
- **11.** Remove retaining screw from gas valve connector and remove connector.
- **12.** Disconnect wire harness from heat exchanger pump.
 - Remove screw from pump electrical box cover. Remove cover.
 - Remove ground screw. Remove ground wire.
 - Loosen wire nuts. Disconnect wire harness from pump power wires.
 - Loosen strain relief. Remove wire harness from pump.
- 13. Disconnect ground screw wire.
- **14.** Disconnect wire harness from flue temperature sensor.
- **15.** Cut cable tie barbs holding harness to chassis. Remove wire harness from boiler.
- **16.** Squeeze tabs on 2 pin connector and remove from control panel (50-200).

Wire Harness Replacement:







Illustrations are meant to show general boiler concept only. Boiler may vary due to production date, model, size.

WIRE HARNESS KIT INSTRUCTIONS

1. Connect wire harness to control module. Figure 4 - 299 Model NOTICE Control module has two (2) 4-wire connectors (J2 and J4). Plug wires are labeled to assist in Supply Water connection to proper jack. Temperature Sensor & High **2.** Connect wire harness to pump relays (if equipped). Limit Switch Refer to pump relay labels and wire diagram for proper installation. 3. Attach green ground wire. Secure with green ground screw. Boiler Control Module 4. Connect low voltage wires to low voltage terminal Fuse and Holder block. Install low voltage terminal block to control panel using plastic terminal block clips. đ -Transformer **5.** Insert harness into boiler and secure by pushing cable tie barbs into chassis. 6. Connect flame sensor cable. Attach ground wire to right stud of flame sensor and secure with nut. Do not over-tighten. Flue Temperature Sensor 7. Connect igniter cable to control module. 8. Connect wire harness to low water cutoff and high temperature sensor supply switch. **9.** Connect wire harness to blower (2 places). **10.** Install gas valve harness. Attach gas valve harness to User Interface gas valve. Secure with integral screw. **11.** Connect high voltage leads to high voltage terminal strip. Return Water Secure high voltage terminal strip with two (2) screws. Temperature Sensor **12.** Connect wire harness to return water temperature sensor. (Behind User Interface) 13. Squeeze tabs on 2 pin connector and insert into control panel (50-200). **14.** Connect wire harness to flue temperature sensor. High Voltage Low Voltage **15.** Connect wire harness to heat exchanger pump. Junction Box Terminal Block

- Insert wire harness into pump junction box.
- Attach green ground wire to junction box. Secure with green ground screw.
- Connect wire harness black and white wires to pump wires. Wires are interchangeable.
- Insert strain relief into pump junction box.
- **16.** Attach high voltage terminal box cover. Secure with screw.
- **17.** Resume operation using OPERATING INSTRUCTIONS found on Operating Instructions label on boiler or in Installation, Operation & Maintenance Manual.
- Verify proper operation by following START UP PROCEDURE in Installation, Operation & Maintenance Manual.
- **19.** Install front jacket panel.

PARTS LIST

050/075/100 Wire Harness Kit #550003200			
DESCRIPTION	PART #	QTY	
Main Boiler 120V Wiring Assembly 50/075/100	-	1	
User Interface Wire Harness	-	1	
Strain Relief Bushing	-	1	
Low Voltage Terminal Block Clip	-	5	
Screw, 8-32 x 5/16, Self Tapping, Ground, Green	-	1	
Instructions	240011560	1	

150/200 Wire Harness Kit #550003201			
Main Boiler 120V Wiring Assembly 150/200	-	1	
User Interface Wire Harness	-	1	
Strain Relief Bushing	-	1	
Low Voltage Terminal Block Clip	-	5	
Screw, 8-32 x 5/16, Self Tapping, Ground, Green	-	1	
Instructions	240011560	1	

299 Wire Harness Kit #550003202			
Main Boiler 120V Wiring Assembly 299	-	1	
User Interface Wire Harness	-	1	
Strain Relief Cordgrip	-	1	
Strain Relief Nut	-	1	
Low Voltage Terminal Block Clip	-	5	
Screw, 8-32 x 5/16, Self Tapping, Ground, Green	-	1	
Instructions	240011560	1	

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