HEAT EXCHANGER CLEANING KIT INSTRUCTIONS Kit #550003212 HEAT ONLY & COMBI CONDENSING, WALL MOUNTED, GAS BOILER

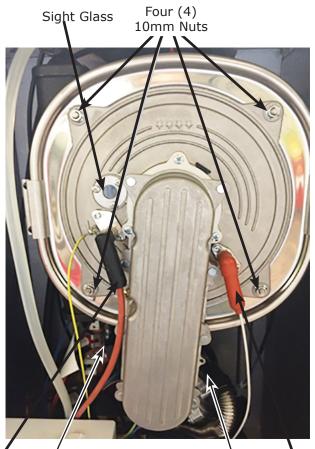
Kit installation shall be completed by qualified agency.

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.

Figure 1 - Sight Glass & Heat Exchanger Cover



Igniter / Inducer

Gas Line Retainer Clip Sensor **WARNING**

Combustion chamber insulation in this product contains ceramic fiber material. Ceramic fibers can be converted to cristobalite in very high temperature applications. The International Agency for Research on Cancer (IARC) has concluded, Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group1). Avoid breathing dust and contact with skin and eyes. Use NIOSH certified dust respirator (N95). This type of respirator is based on the OSHA requirements for cristobalite at the time this document was written. Other types of respirators may be needed depending on the job site conditions. Current NIOSH recommendations can be found on the NIOSH website athttp://www.cdc.gov/niosh/homepage.html. NIOSH approved respirators, manufacturers, and phone numbers are also listed on this website. Wear long-sleeved, loose fitting clothing, gloves, and eye protection. Apply enough water to the combustion chamber lining to prevent dust. Wash potentially contaminated clothes separately from other clothing. Rinse clothes washer thoroughly.

NIOSH stated First Aid. Eye: Irrigate immediately. Breathing: Fresh air.

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.

A WARNING

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

- 2. Turn power and gas off to the boiler.
- **3.** Remove two (2) screws at bottom of front jacket cover. Lift jacket up and off.

WARNING

Burn hazard. Verify heat exchanger, igniter, and flame sensor have cooled or use appropriate personal protection equipment before removing.

- **4.** Inspect combustion chamber through sight glass. Verify flame is not present. See Figure 1.
- 5. Allow Boiler to cool.

HEAT EXCHANGER CLEANING KIT INSTRUCTIONS

- **6.** Disconnect condensate trap drain from bottom of boiler. Place a bucket to collect any soot or dirt and cleaning solution under condensate location. See Figure 3.
- **7.** Remove clip for gas line which attaches mixer to blower assembly. After removing gas line connection, cover opening of gas line with piece of duct tape. See Figure 4.
- **8.** Remove electrical connectors from inducer. See Figure 4.
- **9.** Remove Flame Sensor and Igniter plugs. Remove igniter ground wire. See Figure 5.
- **10.** Remove 4 nuts from combustion chamber cover. Remove combustion chamber cover, gasket and blower assembly. Gently place burner cover assembly off to side. Figure 5.
- **11.** Cover control panel and all other components below heat exchanger with plastic bags provided.
- **12.** Inspect burner, electrodes position and insulation, cleaning or replacing if necessary. See Figure 6 Burner Gasket.
- **13.** Examine seals, insulation and gaskets, replacing if necessary.
- **14.** Place protector for target wall insulation securely at rear of heat exchanger compartment.
- **15.** Vacuum all loose debris from heat exchanger compartment.
- **16.** Brush heat exchanger with brush provided, vacuum again.
- **17.** Spray entire heat exchanger thoroughly with 50/50 mix of vinegar and water (field provided) let set for 10 minutes.
- **18.** Brush and vacuum entire surface again. Repeat this step until you have used all 16 oz. in spray bottle.
- **19.** Rinse entire heat exchanger with water thoroughly.
- **20.** Assure condensate trap is not blocked. Disconnect elbow from condensate drain. Unscrew sump from botton of condensate trap. Remove any deposits from the sump and trap. Clean as necessary. Replace elbow and sump.
- **21.** Re-install condensate trap and hose to unit and rinse heat exchanger surface again. Remove protector from target wall insulation in rear of heat exchanger chamber.

ling

Figure 2 - Control Panel and Tab

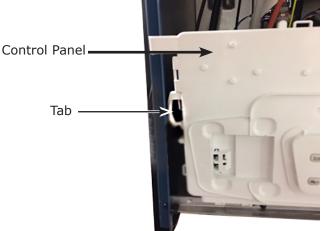


Figure 3 - Condensate Drain

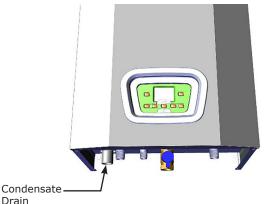
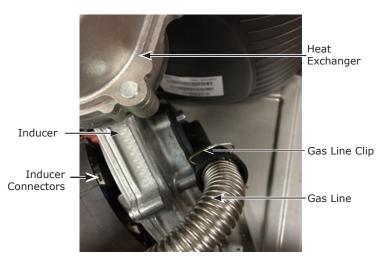


Figure 4 - Gas Line Clip



22. Replace supplied heat exchanger gasket.

HEAT EXCHANGER CLEANING KIT INSTRUCTIONS

Figure 5 - Combustion Chamber Cover Assembly

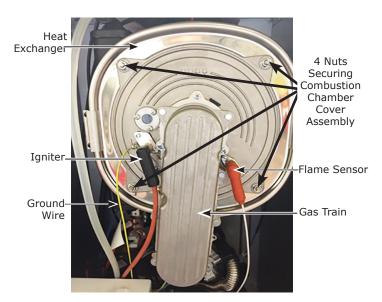
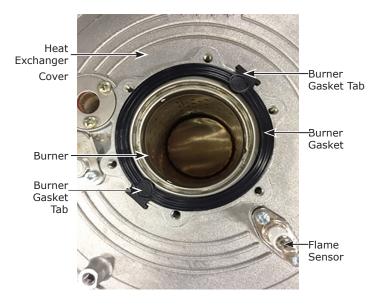


Figure 6 - Burner Gasket Tabs



- 23. Place Combustion chamber cover back into place and tighten all 4 nuts back down. Proper bolt torque is 4 ft-lbs. See Figure 5
- **24.** Remove duct tape piece from gas line, reinsert back into blower assembly and secure with clip into place. See Figure 4.
- **25.** Re-connect ground, spark, flame sensor & igniter cable. See Figure 5
- **26.** Re-connect wire harnesses to blower assembly.
- 27. Remove plastic bags.
- **28.** Place control in the upward position and check all operations of appliance.
- 29. Turn power and gas on.
- 30. Check for leaks in gas line.
- **31.** Commission Boiler following the Commissioning Guide included with this kit.
- **32.** Resume operation using OPERATING INSTRUCTIONS found on Operating Instructions label on boiler or in Installation, Operation & Maintenance Manual.
- **33.** Install front panel. Secure with two screws at bottom of front panel.
- 34. Verify proper operation.

HEAT EXCHANGER CLEANING KIT 550003212 -Includes:		
Description	PART #	Qty
GLOVE, LATEX, LG	-	4
SHIELD, HEAT EXCHANGER , TARGET WALL	-	1
HX CHAMBER GASKET	-	1
BURNER GASKET	-	1
POLY BAGS	-	4
BRUSH, 2'X3', WITH HANDLE 1' STIFF BRISTLE	-	1
COMMISSIONING GUIDE	240011376	1
INSTRUCTIONS	240011648	1