

Base Insulation Replacement Instructions

Hazard definitions

WARNING Hazards that can cause severe personal injury, death or substantial property damage.

CAUTION Hazards that will or can cause minor personal injury or property damage.

NOTICE Special instructions on installation, operation or maintenance that are important but not related to personal injury or property damage.

WARNING This replacement is to be installed by a qualified service technician in accordance with the manufacturer's instructions and all codes and requirements of the authority having jurisdiction. Failure to follow instructions could result in serious injury or property damage. The qualified service technician performing this work assumes responsibility for this addition.

WARNING The boiler contains ceramic fiber and fiberglass materials. Use care when handling these materials per page 2 of these Instructions. Failure to comply could result in severe personal injury.

Kit contents

- Front, back and (2) side insulation boards
- (2) Staples to secure insulation boards to base
- Retort cement
- (4) Bolts and nuts to secure block to base
- Instructions

Prepare new insulation panels

Refer to Figure 1. Front and back panels are factory cut to proper width. For five and nine section boilers, front and back panels are also factory cut for proper length. For all other sizes, the front and back must be trimmed for proper length ("A" dimension in the table below).

Number of sections	"A" dimension	Number of sections	"A" dimension
3	7 $\frac{7}{8}$ "	7	19 $\frac{3}{8}$ "
4	10 $\frac{3}{8}$ "	8	22 $\frac{3}{8}$ "
5	13 $\frac{3}{8}$ "	9	25 $\frac{3}{8}$ "
6	16 $\frac{3}{8}$ "		

Disassembly of boiler

1. Turn off electric power and gas supply to boiler.

WARNING For your safety, disconnect gas and electric supply to boiler before servicing.

2. Disconnect water piping and vent system from boiler.
3. Remove draft hood (GWA) or inducer (GWI), all jacket panels (see WARNING, page 2), controls, and wiring (label wires for easier reconnection).
4. Cover burners with paper or rag to keep them clean during repairs.
5. Remove bolts securing block to base and lift block assembly (see WARNING, page 2) from base.

CAUTION Block assembly is heavy — care must be taken to avoid personal injury.

6. Remove retort cement from top of base assembly and bottom of boiler block assembly by scraping until surface is clean.

7. Remove insulation board from front, back, and sides of burner compartment. See WARNING on page 2.

Suggested technique: Make horizontal knife cut through center of insulation. Remove staples holding insulation. Pry out at cut, using screwdriver.

8. Dispose of insulation board properly. See WARNING, page 2.

Install new insulation board and reassemble boiler (see WARNING on page 2)

1. Install front and back insulation board in burner compartment.
2. Install side insulation boards by wedging the front and rear pieces in place. Insulation boards should be flush with top of base assembly on all four sides.

NOTICE Do not attempt to force insulation in position in one operation, as it may crack.

3. Insert $\frac{3}{4}$ " staples as shown in Figure 1 with one side of staple through small hole in top flat edge of burner compartment and other side of staple in insulation board to secure each side piece.

4. Spread retort cement on top of base. See Figure 1.

5. Reposition boiler block assembly on the base.

CAUTION Block assembly is heavy — care must be taken to avoid personal injury.

6. Using bolts and nuts provided in kit, fasten block assembly to base. For best results, tighten opposite corners until block is secured.

WARNING Check retort cement seal between block assembly and base to ensure a gas-tight seal. Failure to do so could result in severe personal injury or death.

7. Verify seal around flue collector hood is intact and provides a gas-tight seal. Reseal questionable areas with retort cement (GWA) or high temperature silicone (GE RTV 700 or equivalent) (for GWI only).

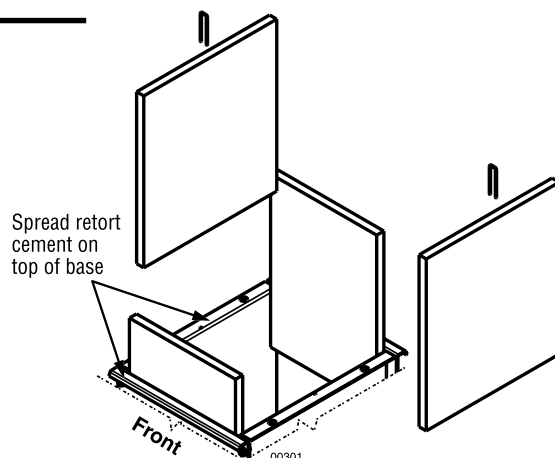
WARNING Failure to provide a gas-tight seal to collector hood could result in severe personal injury or death.

8. Reassemble remainder of boiler system by installing jacket, draft hood (GWA) or inducer (GWI), vent system, controls, wiring, water piping, electrical and gas piping.

9. Remove paper or rag covering burners. Vacuum any debris on burners.

10. Follow start-up and checkout procedures from Boiler Manual to verify proper operation.

Figure 1



Handling ceramic fiber and fiberglass materials

REMOVAL OF COMBUSTION CHAMBER LINING OR BASE PANELS

WARNING

The combustion chamber lining or base insulation panels in this product contain ceramic fiber materials. 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 (Group 1).":

- 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 web site at <http://www.cdc.gov/niosh/homepage.html>. NIOSH approved respirators, manufacturers, and phone numbers are also listed on this web site.
 - Wear long-sleeved, loose fitting clothing, gloves, and eye protection.
- Apply enough water to the combustion chamber lining or base insulation to prevent airborne dust.
- Remove combustion chamber lining or base insulation from the boiler and place it in a plastic bag for disposal.
- Wash potentially contaminated clothes separately from other clothing. Rinse clothes washer thoroughly.

NIOSH stated First Aid.

- Eye: Irrigate immediately
- Breathing: Fresh air.

REMOVAL OF FIBERGLASS WOOL — OR —

INSTALLATION OF FIBERGLASS WOOL, COMBUSTION CHAMBER LINING OR BASE PANELS:

WARNING

This product contains fiberglass jacket insulation and ceramic fiber materials in combustion chamber lining or base panels in gas fired products. Airborne fibers from these materials have been listed by the State of California as a possible cause of cancer through inhalation.

- 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 fiberglass wool 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 web site at <http://www.cdc.gov/niosh/homepage.html>. NIOSH approved respirators, manufacturers, and phone numbers are also listed on this web site.
 - Wear long-sleeved, loose fitting clothing, gloves, and eye protection.
- Operations such as sawing, blowing, tear out, and spraying may generate airborne fiber concentration requiring additional protection.
- Wash potentially contaminated clothes separately from other clothing. Rinse clothes washer thoroughly.

NIOSH stated First Aid.

- Eye: Irrigate immediately
- Breathing: Fresh air.

