

# Section Replacement Instructions

## Hazard definitions

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

## Kit contents

- 6" Square cut seal
- 3" Square cut seal
- 4' Cope seal
- Instructions

## Replacement instructions

1. Clean mating section(s) for any debris that may be left after removal of section(s) to be replaced.
2. Remove any grit from port machined surfaces with a clean rag (and isopropyl alcohol if needed to remove rust or sediment).

**WARNING** Do not use petroleum-based cleaning or sealing compounds in boiler system. Severe damage to system components can result, causing substantial property damage.

3. Place 6" and 3" sealing rings in appropriate port opening grooves. See Figure 1. If sealing ring slips out of groove, stretch ring gently for several seconds, then reposition in groove.
4. Firmly apply cope seal into section grooves, but **do not** flatten.
5. Join sections together and insert tie rods (or draw rods). Oil threads on the rods. Install nuts on one end approximately halfway up the threads. Start a nut with washer on end to be tightened.
6. Tighten tie rods (or draw rods) evenly until the sections are metal to metal at  $45 \pm 5$  foot-pounds. **Do not back off nuts.**
7. After completing the section replacement, replace all boiler components. Follow complete instructions in Boiler Manual to place back in service.

### WARNING

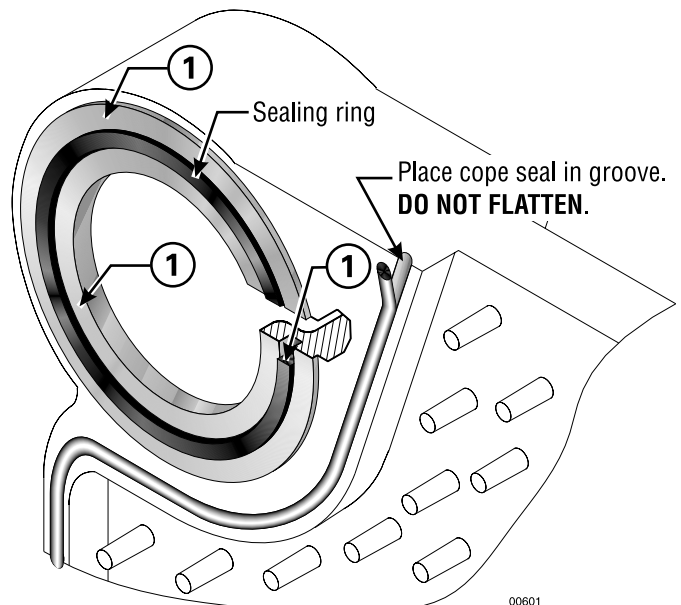
This replacement is to be installed by a qualified service technician in accordance with the manufacturer's instructions and all codes and requirements of the authority having jurisdiction. Failure to follow instructions could result in serious injury or property damage. The qualified service technician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

Figure 1

- ① Clean machined surfaces (as shown) thoroughly with a clean rag and isopropyl alcohol. Also clean flat machined surface on opposite side of section (not shown in drawing). **DO NOT USE PETROLEUM BASED SOLVENTS.**



00601

# 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.

