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83885 Cast Aluminum Burner Door Lx150-200/500

FOR USE WITH Lx150-200 or Lx500 boilers

Applicable Boiler Models

- Lx150
- Lx200
- Lx500

Kit Contents

- 83885 burner door
- 82803 Flame Rod/Igniter Screws (4)
- 84993 Reset Safety Thermostat
- Red extension wire 14"
- Orange Wire 21"

Tools Required

- Torx T25 screwdriver
- 5/16" wrench
- 10mm wrench
- Torx T20 Screwdriver
- Pipe wrench

Burner door replacement Instructions

- 1) Turn off power and gas to the boiler.
- 2) Remove all electrical connectors attached to the burner door, gas valve, and blower motor.
- 3) Remove the flame rod and igniter.
- 4) Lx 500 boilers only, remove the 4 screws securing the blower to the extended air tube then remove the burner door assembly.
- 5) **Lx150-200 boilers only,** remove the burner door, gas valve and blower as an assembly
- 6) Remove the screws securing the extended air tube, to the burner door. Figure 4
- 7) Remove the ceramic refractory and the burner from the door
- 8) Inspect the burner, refractory, and burner door gasket, for damage or excessive wear; replace any damaged items prior to reassembly.
- 9) Lx 500 boilers only perform the wiring modification shown below.
- 10) Reassembly is the reverse of disassembly.



Flue gas leakage- Failure to properly reseal the burner door gasket will result in flue gas leakage which may lead to serious injury or death.



Gas leakage – The metallic tubing attached to the blower on the Lx300-400 boilers contains air and fuel while the burner is operating. Failure to reattach this tubing correctly will result in gas leakage which may lead to fire, explosion, serious injury, or death.



Refractory Ceramic Fibers (RFC) - Read handling instructions and warnings below.





Reset safety Limit Wiring Modification Lx500 only

- 1) **Note**: boilers originally equipped with the reset safety thermostat do not require the wiring modification.
- 2) Remove the red wire from the air proving switch and extend it using the provided red extension. Plug the extended wire onto the Reset Safety Thermostat. **Figures 2 and 3**
- 3) Plug the supplied orange wire onto the air switch and the Reset Safety Limit. Figures 2 and 3

Figure 2: Air switch

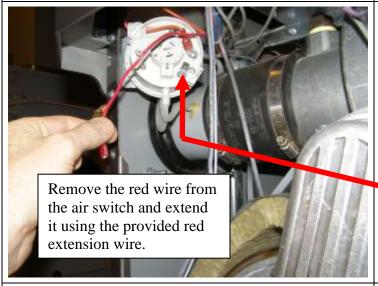


Figure 3: Reset Safety Thermostat

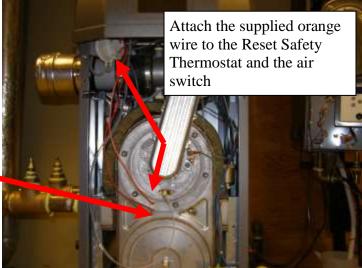
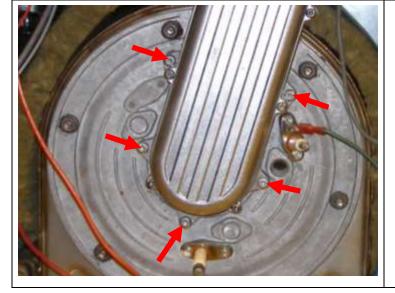


Figure 4: Extended Air Tube Screws



Refractory Ceramic Fibers (RFC)

Personal Protective Equipment Recommended - Read the following warnings and handling instructions carefully before commencing any service work in the combustion chamber. The insulating material on the inside of the burner door and at the back of the combustion chamber contain *Refractory Ceramic Fibers* and should not be handled without personal protective equipment.

Potential Carcinogen - Use of Refractory Ceramic Fibers in high temperature applications (above 1000°C) can result in the formation of Crystalline Silica (cristobalite), a respirable silica dust. Repeated airborne exposure to crystalline silica dust may result in chronic lung infections, acute respiratory illness, or death. Crystalline silica is listed as a (potential) occupational



carcinogen by the following regulatory organizations: International Agency for Research on Cancer (IARC), Canadian Centre for Occupational Health and Safety (CCOHS), Occupational Safety and Health Administration (OSHA), and National Institute for Occupational Safety and Health (NIOSH). Failure to comply with handling instructions in Table 16-1 may result in serious injury or death.

Crystalline Silica - Certain components confined in the combustion chamber may contain this potential carcinogen. Improper installation, adjustment, alteration, service or maintenance can cause property damage, serious injury (exposure to hazardous materials) or death. Refer to Table 16-1 for handling instruction and recommended personal protective equipment. Installation and service must be performed by a qualified installer, service agency or the gas supplier (who must read and follow the supplied instructions before installing, servicing, or removing this appliance. This appliance contains materials that have been identified as carcinogenic, or possibly carcinogenic, to humans).

Table 17-1 Handling Instructions for Refractory Ceramic Fibers (RCF)

Reduce the Risk of Exposure	Precautions and Recommended Personal Protective Equipment
Avoid contact with skin and eyes	Wear long-sleeved clothing, gloves, and safety goggles or glasses.
Avoid breathing in silica dust	 Wear a respirator with a N95-rated filter efficiency or better. ¹ Use water to reduce airborne dust levels when cleaning the combustion chamber. Do not dry sweep silica dust. Pre-wet or use a vacuum with a high efficiency filter.
Avoid transferring contamination	 When installing or removing RFCs, place the material in a sealable plastic bag. Remove contaminated clothing after use. Store in sealable container until cleaned. Wash contaminated clothing separately from other laundry.
First Aid Measures	If irritation persists after implementing first aid measures consult a physician. Skin - Wash with soap and water. Eyes - Do not rub eyes; flush with water immediately. Inhalation – Breathe in fresh air; drink water, sneeze or cough to clear irritated passage ways.

Notes:

For more information on Refractory Ceramic Fibers, the risks, recommended handling procedures and acceptable disposal practices contact the organization(s) listed below:

Canada (CCOHS): Telephone directory listing under Government Blue Pages Canada—Health and Safety—Canadian Centre for Occupational Health and Safety; or website http://www.ccohs.ca.

United States (OSHA): Telephone directory listing under United States Government—Department of Labor—Occupational Safety and Health Administration; or website http://www.osha.gov.

Respirator recommendations based on CCOHS and OSHA requirements at the time this document was written. Consult your local regulatory authority regarding current requirements for respirators, personal protective equipment, handling, and disposal of RCFs.