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Burner Plate Ceramic disk Tft60-110, VM110(P)
Replacement Instructions

Applicable Boiler Models
- Tft60, Tft85, Tft110
- VM110, VM110P

Kit Contents
- Burner plate ceramic disk

Tools Required
- 10mm Wrench
- 5/16” Nut Driver
- 1/4” Nut Driver
- Phillips #2 Screw Driver (8” shank)
- Phillips #2 standard Screw Driver
- Torx T25 Screwdriver
- Pipe wrench
- Adjustable wrench

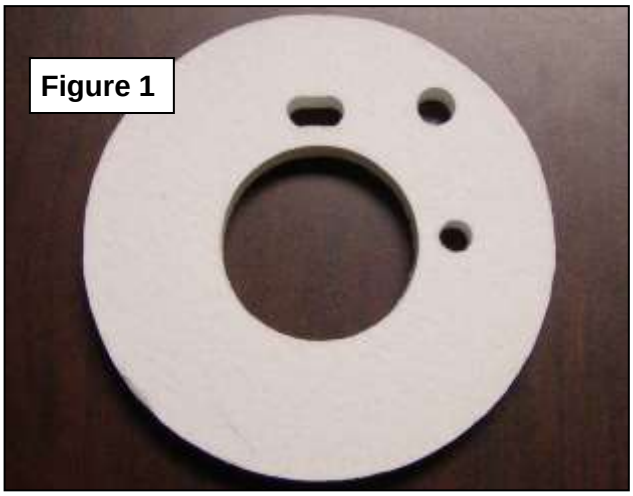
Figure 1

Replacement Instructions
1) Turn off power and gas to the boiler.
2) Disconnect the gas line at the union in the boiler cabinet.
3) Remove the flame probe, and the ignition electrode.
4) Remove the electrical connectors from the blower motor and disconnect the gas valve harness at the pink wire disconnects.
5) Remove the screws securing the venturi to the blower motor and take off the gas valve, venturi and air inlet as an assembly. **Refer to Figure 2**
6) Remove the access panel from the top of the boiler. **Refer to Figure 3**
7) Remove the blower mounting screws **NOTE:** a long Philips #2 screwdriver will be required to access the right rear blower screw.

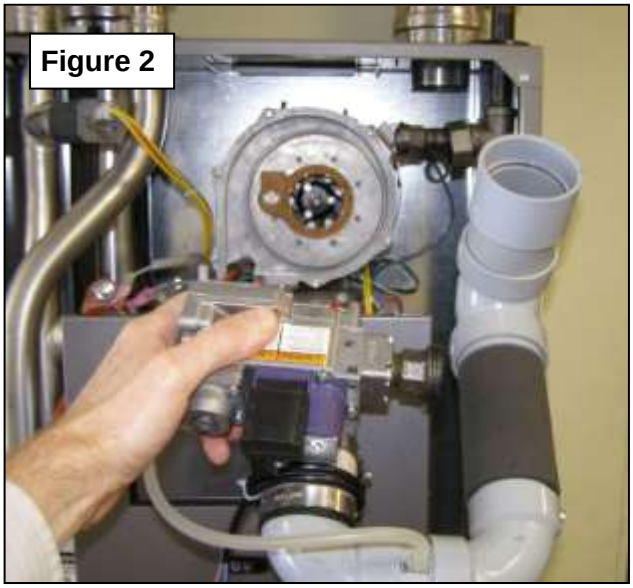
Figure 2

See Warnings below regarding handling of ceramic refractory.

⚠ WARNING

8) Remove the burner plate.
9) Inspect the burner plate gasket for hardening or cracking and replace as necessary
10) Line up the holes in the new burner plate ceramic disk with the holes in the burner plate so that the flame rod, peep hole and igniter openings are not obstructed. Reinstall the flame rod and igniter. These will help correctly position the burner plate ceramic disk.
11) While holding the burner plate disk in place put the burner plate and disk back in place making sure that the openings in the plate line up with the openings in the ceramic disk. **Refer to Figure 4**
12) Install the burner plate retaining nuts and torque them to approximately 4 lb-ft or until the gasket bulges slightly.
13) Reinstall the blower motor, and gas valve-air inlet

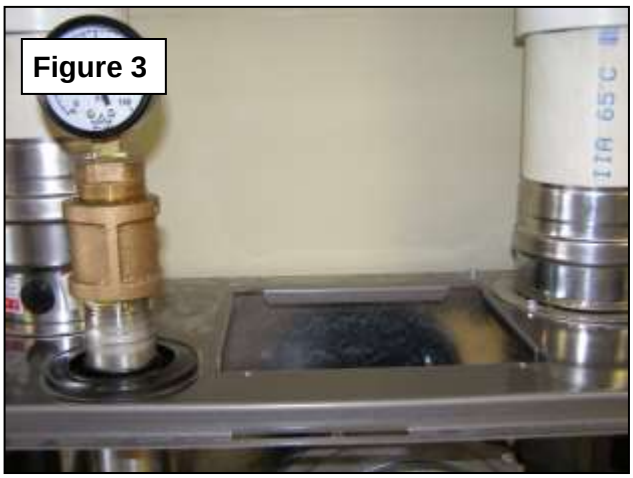
Figure 3

assembly in reverse order.

⚠ DANGER **Explosion Hazard** – Ensure that the blower motor gasket and the gas valve to venturi gasket are sealed. Failure to comply will cause gas leakage which may result in an explosion, serious injury or death.

⚠ DANGER **Flue gas Leakage** - Failure to properly reseal the burner plate gasket will result in flue gas leakage potentially leading to serious injury or death.

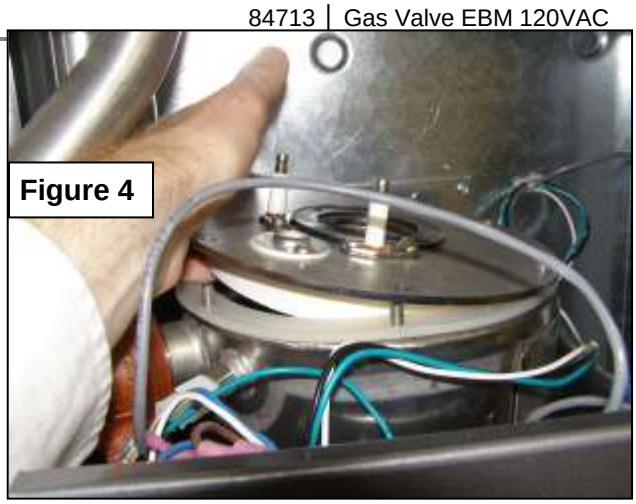

Figure 4

⚠ WARNING **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.

⚠ WARNING **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:

[1] 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.

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.