



FTG800-2400 High Efficiency Boiler Detailed Cleaning Instructions

⚠ WARNING

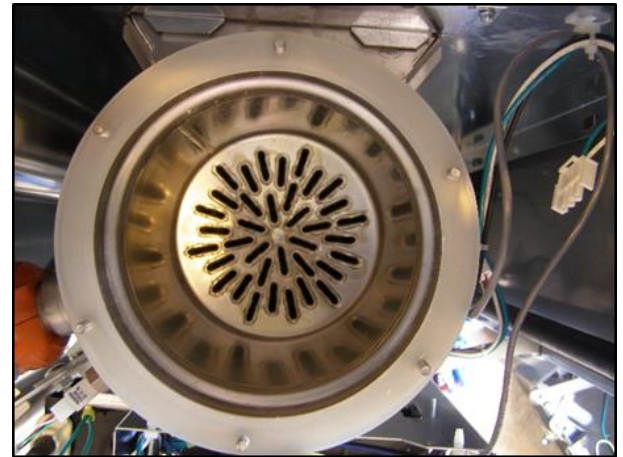
This boiler must be serviced by a qualified heating technician. Failure to properly maintain or service this appliance may result in property damage, serious injury to occupants or, death.

Applicable Models:

- FTG 800 - 2400

Tools Required

- Phillips #2 screwdriver
- 1/4" nut driver or wrench
- 5/16" nut driver or wrench
- 10mm wrench
- Pipe wrench
- Torque wrench ft-lb/Nm (Recommended, not required)
- Adjustable wrench
- Household white vinegar
- Stiff bristle, non-metallic scrub brush



New Combustion Chamber (TFT model shown)

NOTICE

Read these instructions through before beginning your cleaning procedure.

⚠ WARNING

Allowing any trinity boiler to operate with a dirty combustion chamber will not only adversely affect the operation of the boiler but will also void the warranty. Failure to clean the combustion chamber on a frequency that matches the needs of the application may result in fire, property damage, or death.

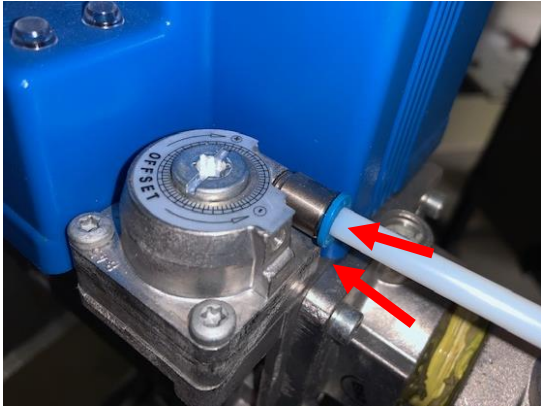


Dirty Combustion Chamber (TFT model shown)

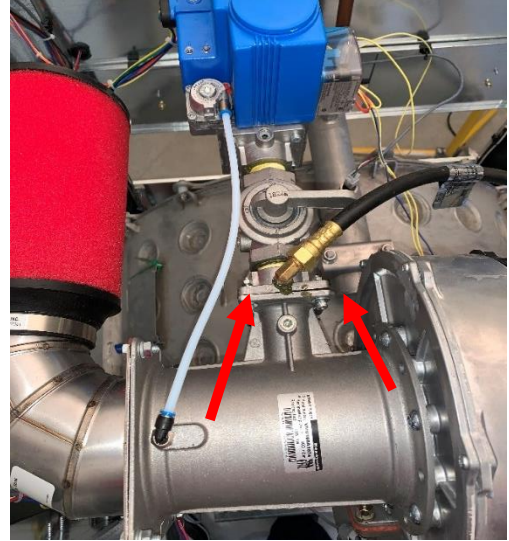
Steps:

- 1) Turn off power and gas to the boiler.
- 2) Disconnect the wires to the combustion fan motor igniter and flame rod.

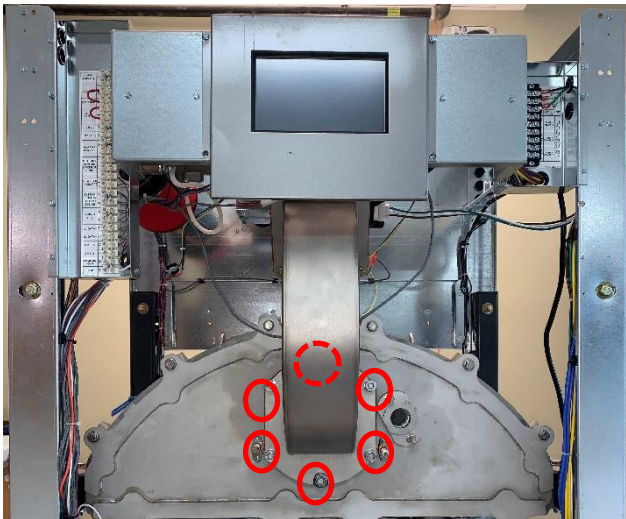
3) Disconnect the gas valve feedback line. Push the tubing toward the fitting then press the blue lock ring to remove the tube.



4) Remove the four screws on the gas line to venturi flange.



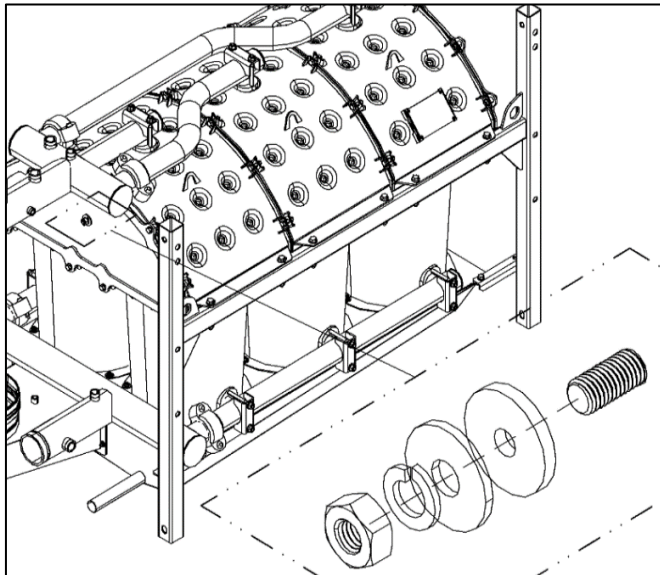
5) Remove the display side panels then remove the nuts securing the blower transition to the front door of the combustion chamber.



NOTICE

* Torque to 13 lb/ft During reassembly.

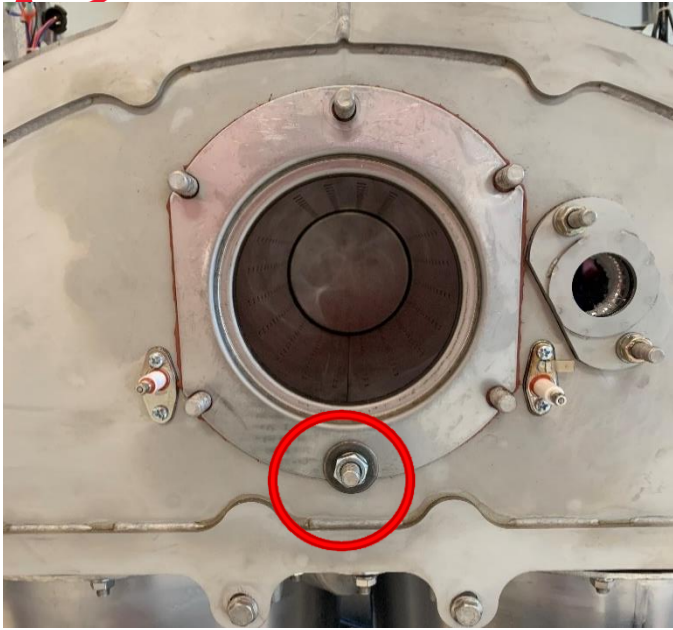
6) Remove the transition tube, combustion blower and intake tube as an assembly.



7) FTG 2000 – 2400 **ONLY**: Remove the rear sheet metal panel. Remove the burner retaining nut in the center of the rear burner door then on **all sized units**, remove the rear door to access the combustion chamber.

NOTICE

Torque burner retaining nut to 3.5 lb/ft max during reassembly.**



8) **Jam Nut:** Remove jam nut and then remove the burner.

NOTICE

During reassembly, check that the jam nut remains tight. Failure to do so may result in weakened flame signal and ignition failure. Torque to 3.5Lbft during reassembly. **

9): Remove the front burner door.

NOTICE

Use due care not to drop the plastic spacers.

NOTICE

*Torque burner door nuts to 13 lb/ft During reassembly.



- Vacuum loose debris from the combustion chambers then apply pressurized water or air through the tubes to clean them out.
- Use dry rags or plastic to protect electrical components from being damaged by dripping or spraying.
- Use a stiff bristled non-metallic brush to scrub the combustion chamber while flushing with water.
- Continue scrubbing and flushing until the water exiting the condensate trap is clean and clear and there is no debris in the combustion chamber.
- Soak the combustion chamber with household white vinegar and allow it to sit for 5-10 minutes
- Scrub the chamber again and then thoroughly flush the combustion chamber with plenty of clean water.

(TFT combustion chamber shown)



- Clean the condensate trap.
- Use dry rags for oily or sticky residue. Re-install the trap and pre-charge it with water
- Reassemble in reverse order

* If torque wrench is not available, tighten the burner plate nuts until the burner plate gasket bulges slightly.

Burner Plate Gasket – Do not over-tighten the burner plate nuts. This could result in gasket failure and a gas leak. This may result in fire, property damage, or death.

After reassembly perform the following check for leaks:

- With gas turned off disconnect the low voltage communications harness from the blower motor. This will cause the blower motor to run at high speed.
- Use a mixture of soap and water to check for leaks throughout the boiler assembly.
- Confirm there are no leaks, then, remove the blockage from the exhaust vent. And reconnect the communication wire harness to the blower.
- Check for proper operation including smooth ignition.
- Perform a combustion analysis (refer to the Installation and Operations Manual).