

NY Thermal Inc.
Tel: (506) 657-6000
Toll Free: 1-800-688-2575
Fax: 1-506-432-1135
Web: www.nythermal.com
Email: info@nythermal.com

84673, 84674, 84675 & 84676 Tx51-151(C) Heat Exchanger Replacement Instructions

Applicable Boiler Models:

(pre s/n 72000)

- Tx51 (84673 heat exchanger)
- Tx81 (84674 heat exchanger)
- Tx101 (84675 heat exchanger)
- Tx151, Tx151C (84676 heat exchanger)

Kit Contents

- Heat Exchanger Assembly
- 84974 Inlet Pipe (Tx51 heat exchanger only)
- 84973 Inlet pipe (Tx81-151 heat exchanger only)
- 84972 Outlet Pipe (all heat exchangers)
- 84975 Pipe Clip (all heat exchangers) (2)
- 84976 O-ring Inlet/Outlet Tx51-151 (6)
- 84970 Outlet Pipe Combi block (Tx151 heat exchanger only)
- 84971 Inlet Pipe Combi block (Tx151 heat exchanger only)
- Outlet Sensor Clip (all heat exchangers)
- 84816 Ignition Electrode Wire (all heat exchangers)
- 84815 Flame Probe Cable (all heat exchangers)
- 85001 Brass Plug (Tx151 heat exchanger only)

Tools Required

- Phillips #2 screwdriver
- ¼" nut driver or wrench
- 5/16" wrench
- 3/8" wrench
- 10mm wrench
- Pipe wrench
- Flat Head Screw Driver
- Combustion Analyzer
- Needle Nose Pliers
- Wet/Dry Vacuum

Disassembly Instructions

- 1) Turn off power and gas to the boiler
- 2) Disconnect the gas line from the gas valve
- 3) Drain the boiler: using a wet/dry vacuum will help remove excess water.
- 4) Remove the air inlet at the venturi connection. **Refer to Figure 2.**
- 5) Disconnect the flame probe and igniter. **Refer to Figure 2.**
- 6) Disconnect the wire harnesses from the gas valve, flue sensor, thermal fuse, and blower motor.
- 7) Remove the flue sensor by pressing and turning it counter **clockwise**; **install it in the new heat exchanger. Make sure the o-ring remains with the sensor. Refer to Figure 2.**
- 8) Remove the auto air vent by pulling out the retaining clip and pulling up on the air vent. **NOTE:** When reinstalling the air vent ensure that the O-ring is in place before inserting the air vent. **Refer to Figure 2.**
- 9) Remove the flue adapter from the top of the boiler and condensate line from the bottom. **Refer to Figure 2.**
- 10) **On Combi Boilers** remove the copper pipes from the Combi block and then from the heat exchanger. When reinstalling the white plastic pipe retaining clips ensure they are oriented as shown in **Figures 4 and 5. NOTICE** it is not necessary to remove the field water connections from the bottom of the Combi boiler.
- 11) **Heat Only Boilers** remove the water connections from under the boiler then remove the boiler supply and return pipes.

Figure 1



- 12) For all boilers with serial numbers prior to 72000 the copper boiler pipes must be replaced with the pipes provided. **Refer to the Instructions on Page 3.**
- 13) Remove the heat exchanger hold down brackets. **Refer to Figure 3**
- 14) Remove the heat exchanger, blower and gas valve as an assembly.
- 15) Transfer the blower motor and gas valve to the new heat exchanger prior to installing the new heat exchanger.
- 16) Reassembly is the reverse of disassembly.
- 17) Operate the boiler at high fire and perform a combustion analysis according to the guidelines in the installation manual.

⚠ DANGER **Explosion Hazard** – Failure to properly install the combustion blower gasket may result in gas leakage, causing serious injury or death.

⚠ DANGER **Combustion Analysis** - Failure to perform a combustion analysis and adjust the gas valve according to the installation and operation manual will result in boiler malfunction and or excess carbon monoxide production which will result in serious injury, death.

Figure 2:

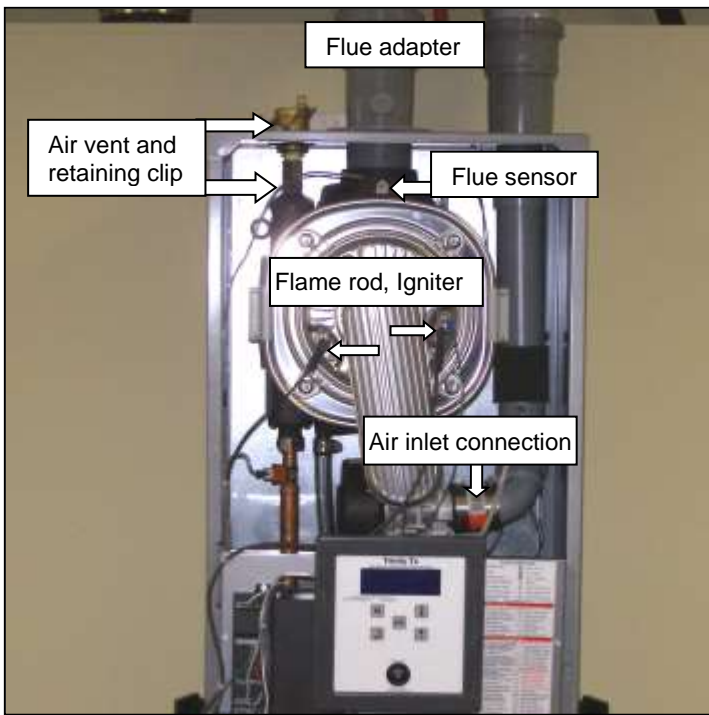


Figure 3:

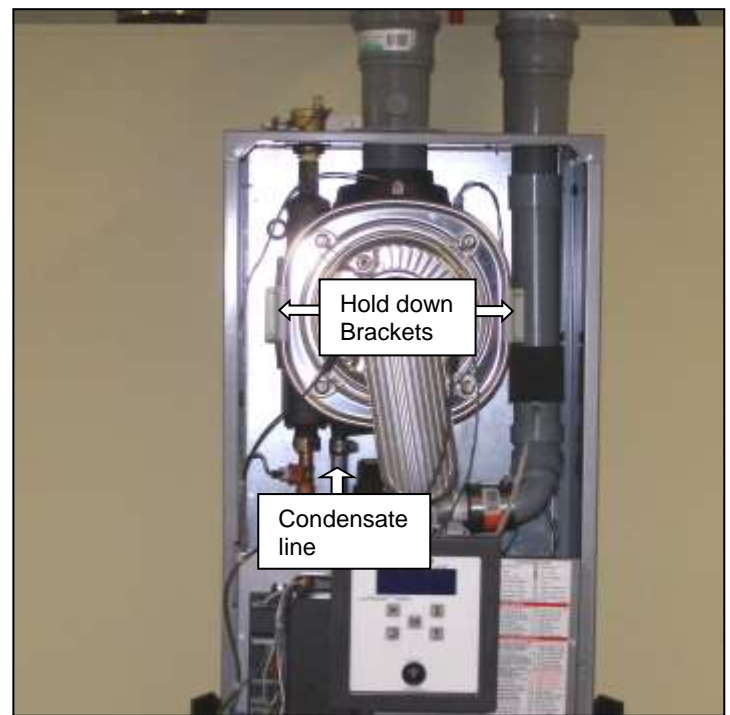
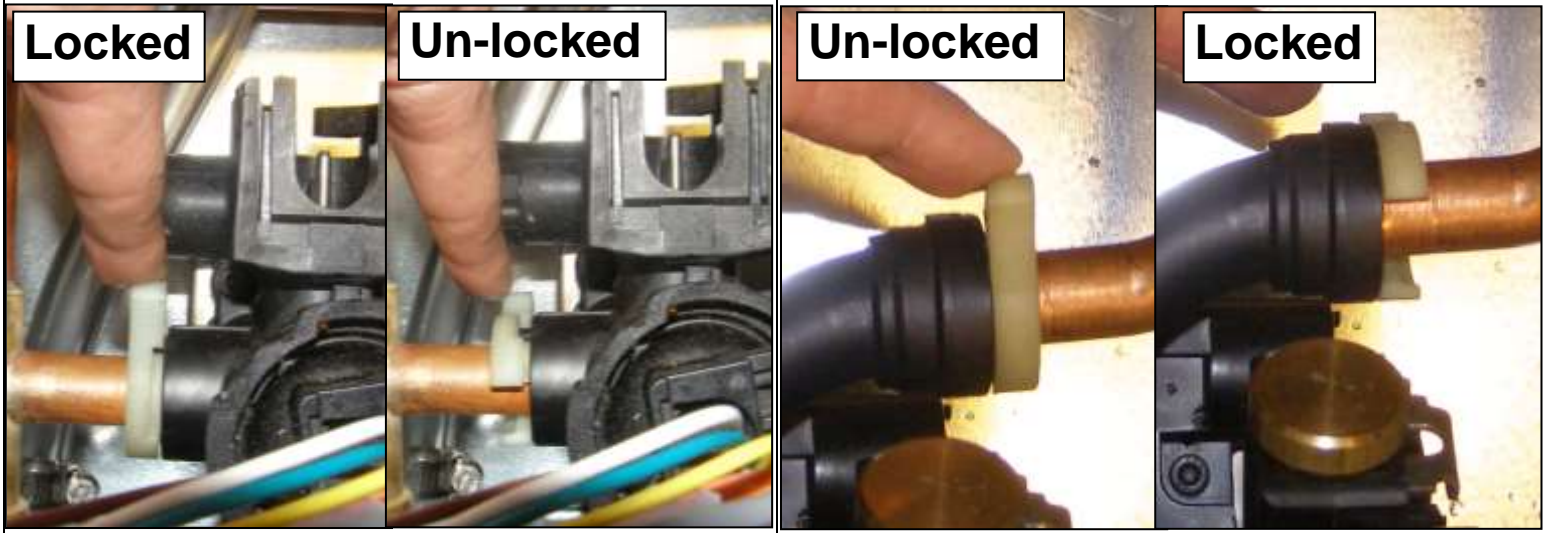


Figure 4: Left side Clips

Figure 5: Right side clip



Pipe Replacement Instructions

Note.. The replacement of the copper piping is only required on boilers with serial numbers 72000 or less

- 1) Remove the old pipes when removing the heat exchanger.
- 2) Install new O-rings in the grooves on the new pipes. **See Below.**
- 3) Use care when inserting the pipes that the O-rings do not catch and tear.
- 4) Install the supplied metal clips on the heat exchanger and re-use the white plastic clips on the Combi block. Refer to Figures 4 and 5

CAUTION **Water Leakage** – Ensure that the O-rings do not catch or tear when installing the new pipes. Failure to do so may cause water leakage causing property damage

