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82596

## Ti100-150, Matrix 100(V) Heat Exchanger Assembly,

Non ASME C/W Plastic Flue Box



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.



The installation of this kit must be performed by a qualified boiler technician. Installing this kit without the proper background and training is hazardous and may result in property damage or death.

## **Applicable Boiler Models**

- Ti100 Non ASME
- Ti150(C) Non ASME
- Matirx M100
- Matrix M100(V)

## **Kit Contents**

- 83395 Heat Exchanger Assembly Lx150
- 82054-2 Venturi Gasket, Cork
- 82766 Blower Gasket Thin
- 83291-1 (Ti100-150) Flue Adaptor Replacement Kit
- 83140 Flame Probe Wire (Ti100-150)
- 82992 Manifold Limit
- 83223-1 Low Water Pressure Switch
- 83462 Street Tee Brass
- 82539 Auto Air Vent
- 82368 Compression nut washer (2)
- Installation Instructions

## **Tools Required**

- Pliers
- Phillips #2 screwdriver
- Flat Screwdriver
- 1/4" nut driver or wrench
- 5/16" nut driver or wrench
- 10mm wrench
- ½" Wrench
- 7/16" Wrench

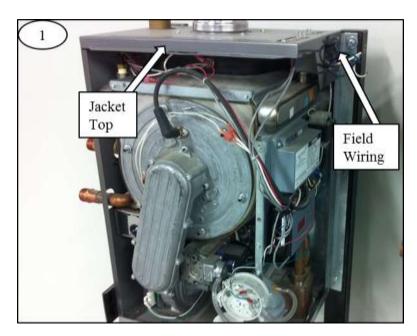
Heat Exchanger.
Assorted parts as listed.







- 9/16" Wrench
- Pipe wrench
- Torx T25 Screwdriver
- Torx T20 Screwdriver
- Saw to remove venting
- Adjustable wrench



- Turn off power and gas to the boiler.
- Remove field wiring.
- Remove the exhaust and air inlet venting.
- Remove the jacket top.

- Drain the boiler: use a wet/dry vacuum to help remove excess water.
- Disconnect the supply and return piping from the heat exchanger.



Use the provided compression nut washers

when reconnecting pipes to the new heat exchanger.

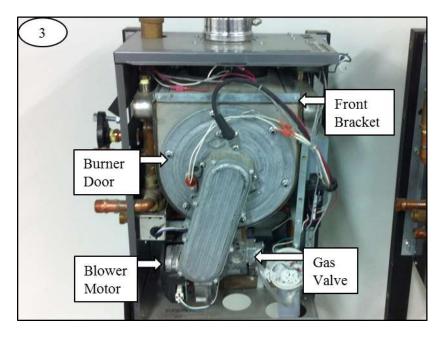
CAUTION

Failure to correctly reattach and seal the

boiler piping will result in water leakage causing property damage.

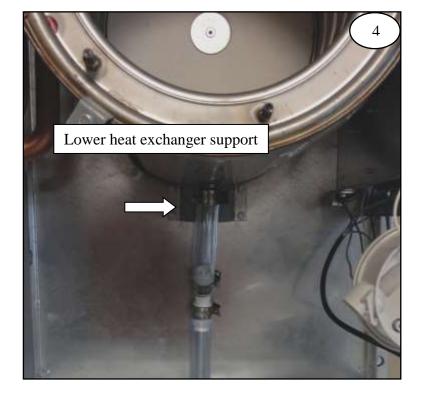






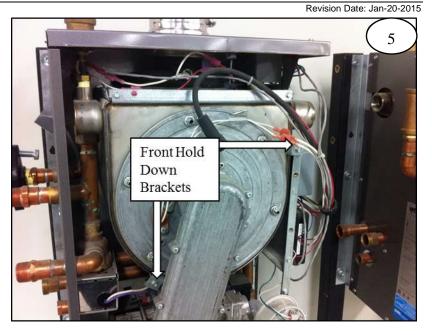
- Remove the gas line from the gas valve.
- Remove wiring attached to the burner door, blower motor, gas valve, and safety limits.
- Remove the gas valve, blower motor, and burner door as an assembly.
- Remove the blower motor and gas valve from the burner door assembly.
- Remove the front bracket.

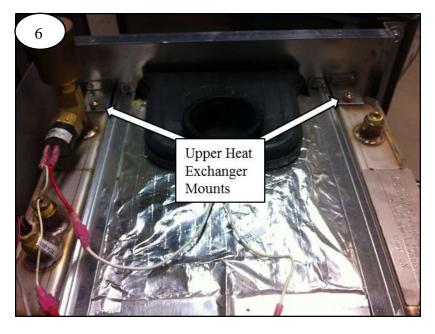
- Disconnect the condensate drain from the bottom of the condensate Y fitting.
- Remove the lower heat exchanger support bracket.





• Remove the remaining hold down brackets.





- Remove the upper heat exchanger mounts.
- Remove the heat exchanger.
- Remove condensate tubes from the bottom of the heat exchanger and transfer to the new one.
- Install sensors and safety limits on the new heat exchanger.
- Transfer the blower motor and gas valve to the new burner door.
- Reassemble in reverse order.

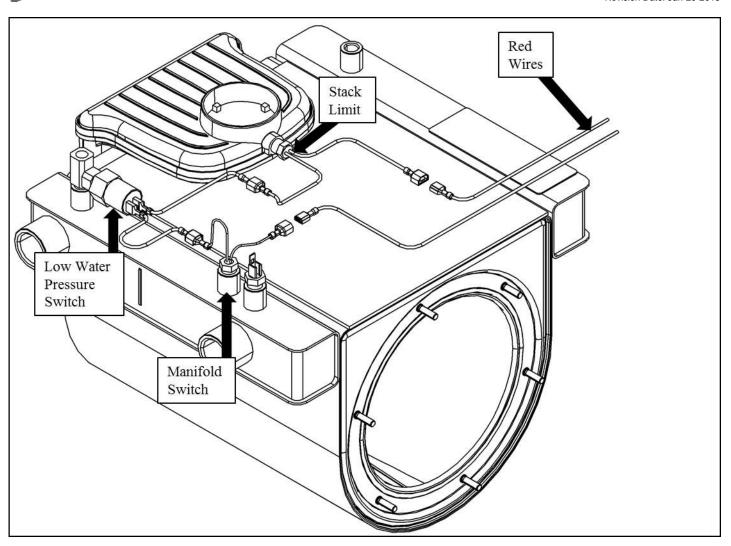
CAUTION

Do not over-tighten the nuts on the upper heat exchanger mounts during reassembly. Over tightening could cause a leak which could cause property damage.



Do not over tighten the nuts on the burner door. Over tightening nuts could cause gasket failure and result in exhaust leakage into building causing personal injury or death.





**▲**WARNING

Failure to properly attach the venting or condensate drain and check for leaks may cause flue gas leakage causing serious injury or death.

**▲**WARNING

Gas Leakage: Failure to properly reconnect the gas line and check for leaks may result in leakage causing serious injury or death.