Technical Publications
Litho U.S.A.

507187-02
09/2015
Supersedes 507187-01

REPLACEMENT HEAT EXCHANGER

INSTALLATION INSTRUCTIONS FOR REPLACEMENT HEAT EXCHANGER KITS FOR USE WITH 80% EFFICIENCY DOWNFLOW FURNACES

⚠WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a licensed professional HVAC installer (or equivalent), service agency or the gas supplier.

⚠WARNING

Disconnect power before servicing unit.

Shipping & Packing List

Package 1 of 1 contains the following:

1 - Heat exchanger assembly
1 - Collector box gasket
1 - Orifice plate gasket

Application

See table 1 for unit capacities, cabinet width and corresponding replacement kits.

Table 1
Heat Exchanger Replacement Kits

Unit Capacities	Cabinet Width	Replacement Kit No.	Replacement Catalog No.
045	A -- 14-1/2”	612998-11	14D60
070	A -- 14-1/2”	612988-12	14D61
070V	A -- 14-1/2”	612998-06	14D55
070X	A -- 14-1/2”	612998-15	14D64
070	B -- 17-1/2”	612998-14	14D63
090	B -- 17-1/2”	612998-07	14D56
090	C -- 21”	612998-08	14D57
090X	B -- 17-1/2”	612998-16	14D65
110	C -- 21”	612998-09	14D58
110X	C -- 21”	612998-17	14D66

Installation

Refer to figure 1 as you disassemble the the unit. Place papers or protective covering in front of the furnace before removing the heat exchanger assembly.

1 - Turn off both electrical and gas power supplies to furnace.
2 - Remove flue pipe, top cap, flue chase and internal flue pipe assembly from the unit.
3 - Label the wires from gas valve, rollout switch, primary limit switch and make-up box then disconnect them.
4 - Remove the screws that secure the combustion air inducer/pressure switch assembly to the collector box.
5 - Remove the collector box located behind the combustion air inducer.
6 - Disconnect gas supply piping. Remove the screw securing the burner box cover and remove cover. Remove the four screws securing the burner manifold assembly to the vestibule panel and remove the assembly from the unit.
7 - Remove screws securing burner box and remove burner box.
8 - Remove screws from both sides, top and bottom of vestibule panel.
9 - Remove heat exchanger. It may be necessary to spread cabinet side to allow more room. If so, remove five screws from the left side or right side of cabinet. See figure 2.
10- Visually inspect inside the burners and crossovers for any blockage caused by foreign matter. If burners and crossovers are clean move to next step. If necessary, run a vacuum cleaner with a soft brush attachment over the face of burners. Remove any blockage. Figure 1 shows burner detail.
11- Visually inspect the combustion air inducer. If the assembly is clean move to the next step. If necessary, use a wire brush to clean. Use compressed air to clean off debris and any rust.
12- Reinstall heat exchanger in vestibule. (Replace the five screws in the cabinet from step 9 if removed).
13- Replace the collector box gasket and orifice plate gasket with gaskets provided. Reinstall collector box, combustion air assembly, internal flue pipe and flue chase. **Seal internal flue pipe to combustion air inducer with high temperature RTV.** Reinstall all screws to the collector box and combustion air inducer. Failure to replace all screws may cause leaks.
14- Reinstall burner box, manifold assembly and burner box cover.
15- Reconnect all wires.

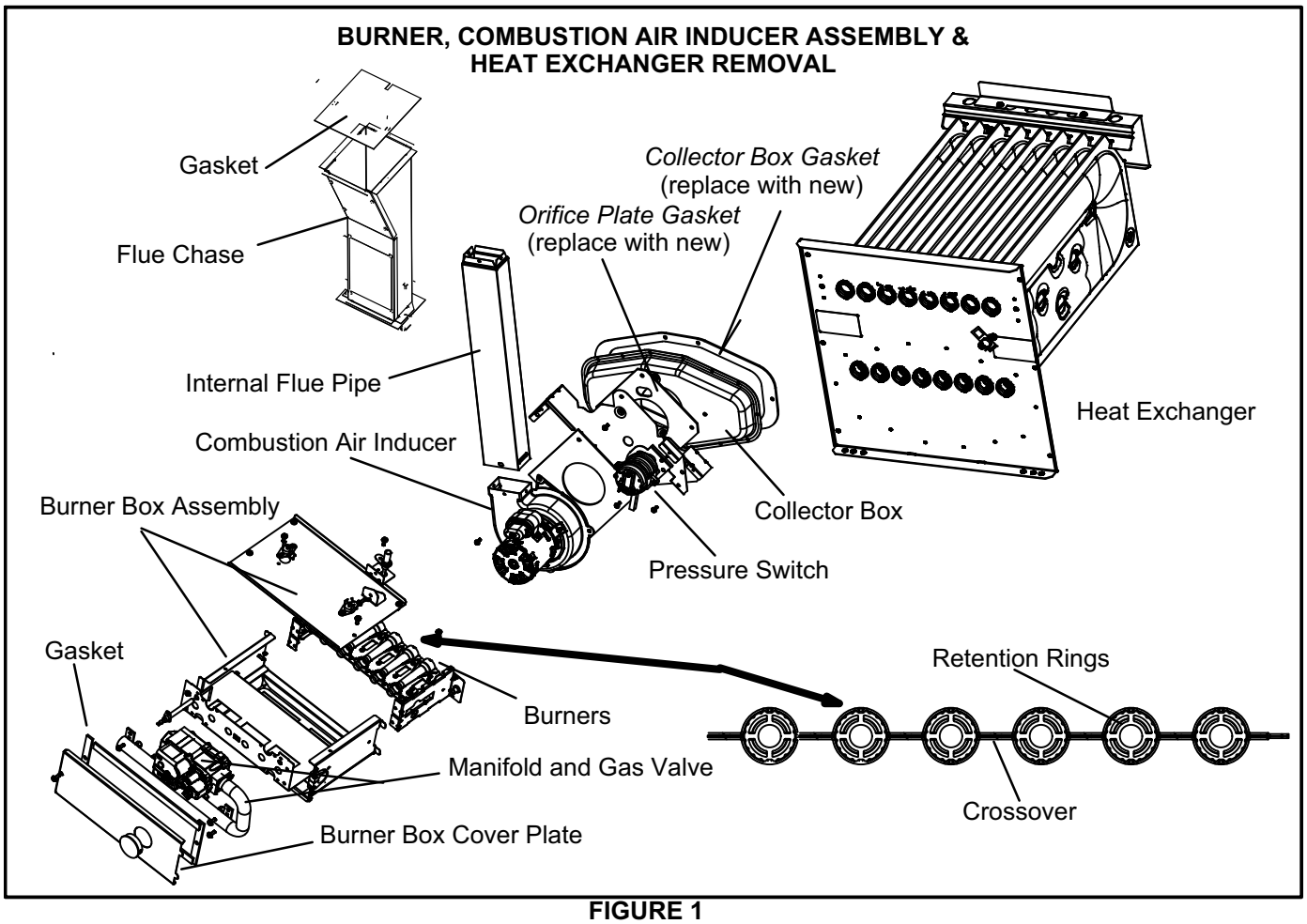

FIGURE 1

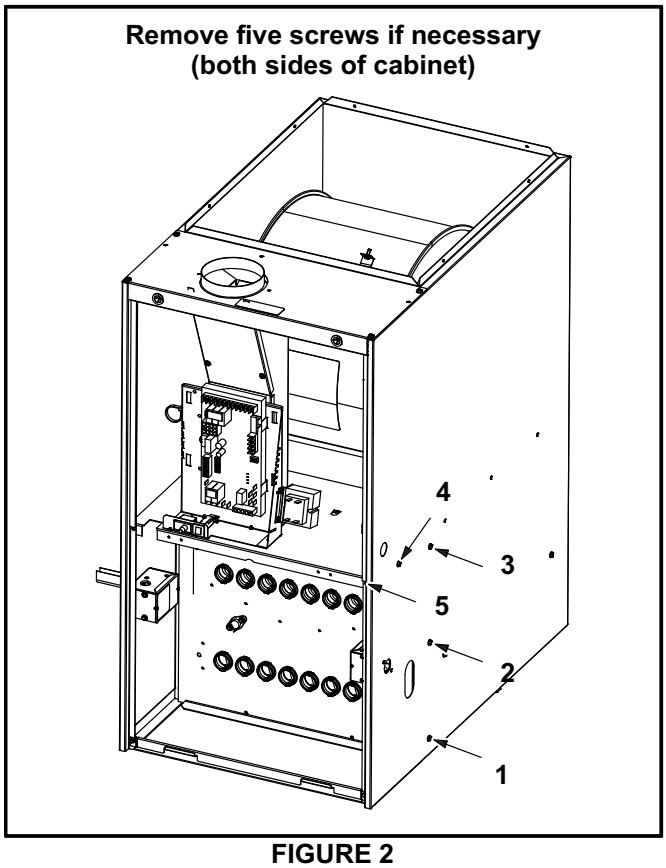

FIGURE 2

16- Reconnect top cap and vent pipe to combustion air inducer outlet.

17- Reconnect gas supply piping.

18- Turn on power and gas supply to unit.

19- Set thermostat and check for proper operation.

20- Check all piping connections, factory and field, for gas leaks. Use a leak detecting solution or other preferred means.

21- If a leak is detected, shut gas and electricity off and repair leak.

22- Repeat steps 21 and 23 until no leaks are detected.

23- Replace access panel.

⚠ CAUTION

Some soaps used for leak detection are corrosive to certain metals. Carefully rinse piping thoroughly after leak test has been completed. Do not use matches, candles, flame or other sources of ignition to check for gas leaks.