

INSTALLATION INSTRUCTIONS FOR REPLACEMENT HEAT EXCHANGER KITS (75W30 - 75W32 & 86W41) FOR USE WITH SINGLE-STAGE AND TWO-STAGE HIGH EFFICIENCY DOWN FLOW GAS 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 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

Application

See tables 1 and 2 for unit capacity and corresponding replacement kits.

**Table 1
Single-Stage Furnace Capacity and Replacement Kit Numbers**

Unit Capacity	Replacement Kit No.	Replacement Catalog No.
070	605996-23	75W30
090	605996-24	75W31
110	605996-25	75W32

**Table 2
Two-Stage Furnace Capacity and Replacement Kit Numbers**

Unit Capacity	Replacement Kit No.	Replacement Catalog No.
070	605996-23	75W30
090	605996-43	86W41
110	605996-25	75W32

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 electrical and gas supplies to the furnace.
- 2 - Remove the furnace access panels.

- 3 - Disconnect the wires from the gas valve.
- 4 - Remove gas supply line connected to gas valve. Remove the burner box cover (if equipped) and remove gas valve/manifold assembly.
- 5 - Remove sensor wire from sensor. Disconnect 2-pin plug from the ignitor.
- 6 - Disconnect wires from flame roll-out switches.
- 7 - Loosen clamps at vent elbow. Disconnect condensate drain tubing from flue collar. and remove the vent elbow.
- 8 - Loosen clamps and remove combustion air intake flexible connector if equipped.
- 9 - Remove four burner box screws at the vestibule panel and remove burner box. Set burner box assembly aside.
NOTE - If necessary, clean burners at this time. Follow procedures outlined in Burner Cleaning section.
- 10 - Mark and disconnect all combustion air pressure tubing from cold end header collector box.
- 11 - Mark and remove wires from pressure switch assembly. Remove pressure switch assembly. Keep tubing attached to pressure switch assembly.
- 12 - Disconnect the plug from the combustion air inducer. Remove two screws which secure combustion air inducer to collector box. Remove combustion air inducer assembly. Remove ground wire from vest panel.
- 13 - Remove electrical junction box from the side of the furnace.
- 14 - Disconnect condensate line from cold end header box.
- 15 - Loosen clamps on exhaust and air intake pipe seal plate. Slide exhaust and intake pipes up and out to clear blower deck. Remove exhaust and air intake pipe seal plate.
- 16 - Mark and disconnect any remaining wiring to heating compartment components. Disengage strain relief bushing and pull wiring and bushing through the hole in the blower deck.
- 17 - Remove the primary limit from the vestibule panel.
- 18 - Remove two screws from the front cabinet flange at the blower deck. Spread cabinet sides slightly to allow clearance for removal of heat exchanger.



- 19 - Remove screws along vestibule sides which secure vestibule panel and heat exchanger assembly to cabinet. Remove two screws from blower rail which secure top heat exchanger flange. Remove heat exchanger from furnace cabinet.
- 20 - Reinstall replacement heat exchanger into cabinet making sure that the clamshells of the heat exchanger assembly are engaged properly into the support bracket on the blower deck. Remove the indoor blower to view this area through the blower opening.
- 21 - Re-secure the supporting screws along the vestibule sides and top to the cabinet.
- 22 - Reinstall cabinet screws on front flange at blower deck.
- 23 - Reinstall the primary limit on the vestibule panel.
- 24 - Route heating component wiring through hole in blower deck and reinsert strain relief bushing.
- 25 - Reinstall electrical junction box.
- 26 - Reinstall exhaust and air intake pipe seal plate. Reinstall exhaust and air intake pipes and tighten clamps on pipe seal plate.
- 27 - Reinstall the cold end header box.
- 28 - Reinstall the combustion air inducer. Reconnect the combustion air inducer to the wire harness.
- 29 - Reinstall pressure switch assembly and reconnect pressure switch wiring.
- 30 - Carefully connect combustion air pressure switch tubing from pressure switches to proper ports on cold end header collector box.
- 31 - Reinstall condensate trap.
- 32 - Secure burner box assembly to vestibule panel using four existing screws. **Make sure burners line up in center of burner ports.**
- 33 - Reconnect exhaust piping and exhaust drain tubing.
- 34 - Reconnect flame roll-out switch wires.
- 35 - Reconnect sensor wire and reconnect 2-pin plug from ignitor.
- 36 - Reinstall gas valve manifold assembly. Reconnect gas supply line to gas valve.
- 37 - Reinstall burner box cover if equipped.
- 38 - Reconnect plug to gas valve.
- 39 - Replace the blower compartment access panel.
- 40 - Follow lighting instructions on unit nameplate to light and operate furnace for 5 minutes to ensure the furnace is operating properly.
- 41 - Check all piping connections, factory and field, for gas leaks. Use a leak detecting solution or other preferred means.

⚠ 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.

- 42 - Replace heating compartment access panel.

Cleaning the Burner Assembly (if needed)

- 1 - Turn off electrical and gas power supplies to furnace. Remove upper and lower furnace access panels.
- 2 - Disconnect the 2-pin plug from the gas valve.
- 3 - Remove the burner box cover (if equipped).
- 4 - Disconnect the gas supply line from the gas valve. Remove gas valve/manifold assembly.
- 5 - Loosen clamps and remove combustion air intake flexible connector (if equipped).
- 5 - Mark and disconnect sensor wire from the sensor. Disconnect plug from the ignitor at the burner box.
- 6 - Remove four screws which secure burner box assembly to vest panel. Remove burner box from the unit.
- 7 - Use the soft brush attachment on a vacuum cleaner to gently clean the face of the burners. Visually inspect the inside of the burners and crossovers for any blockage caused by foreign matter. Remove any blockage.
- 8 - Reinstall the burner box assembly using the existing four screws. Make sure that the burners line up in the center of the burner ports.
- 9 - Reconnect the sensor wire and reconnect the 2-pin plug to the ignitor wiring harness.
- 10 - Reinstall combustion air intake flexible connector (if equipped), secure using existing clamps.
- 11 - Reinstall the gas valve manifold assembly. Reconnect the gas supply line to the gas valve. Reinstall the burner box cover.
- 12 - Reconnect plug to gas valve.
- 13 - Replace the blower compartment access panel.
- 14 - Refer to instruction on verifying gas and electrical connections when re-establishing supplies.
- 15 - Follow lighting instructions to light and operate furnace for 5 minutes to ensure that heat exchanger is clean and dry and that furnace is operating properly.
- 16 - Replace heating compartment access panel.

**PARTS IDENTIFICATION
(Single-Stage Furnace Shown)**

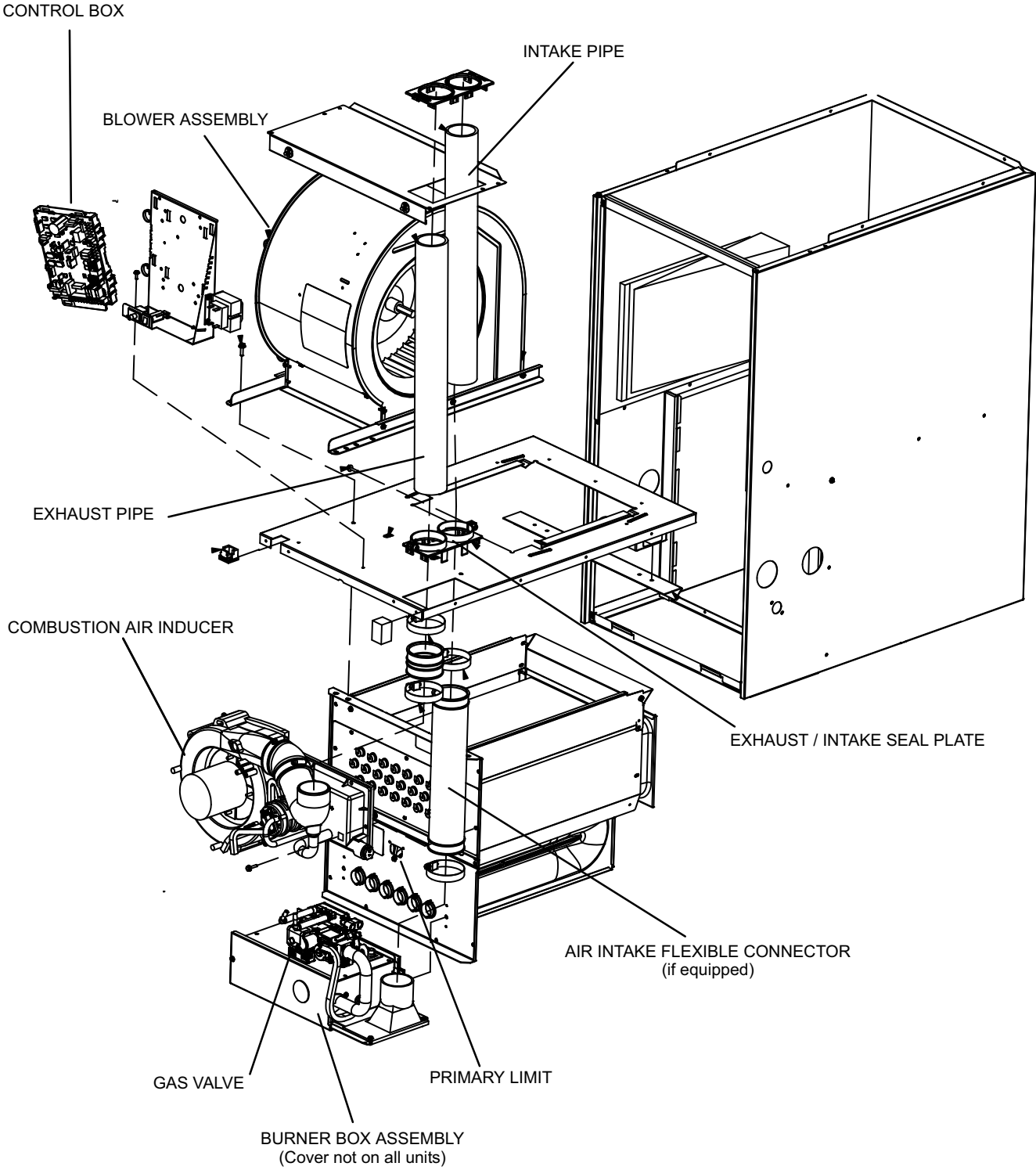


FIGURE 1