# REPAIR PART INSTALLATION MANUAL

CONDENSATE PAN REPLACEMENT - S1-328164\*

FOR USE WITH MODELS: ALL CONDENSING - 95+ AFUE - 33" GAS FURNACES

#### **GENERAL INFORMATION**

REPAIR PART NUMBER	CONDENSATE PAN NUMBER	BTU (CAPACITY)	RESTRICTOR HOLE SIZE
S1-32816424000	843804	40,000	0.56 IN
S1-32816447000	1071715	60,000 (Non-Modulating)	0.66 IN
S1-32816418000	843668	60,000 (Modulating)	0.78 IN
S1-32816448000	1071716	80,000 (Non-Modulating)	0.80 IN
S1-32816419000	843669	80,000 (Modulating)	0.88 IN
S1-32816449000	1071717	100,000 (Non-Modulating)	0.90 IN
S1-32816420000	843670	100,000 (Modulating)	1.00 IN
S1-32816421000	843801	120,000 (Non-Modulating)	1.09 IN
S1-32816422000	843802	120,000 (Modulating)	1.13 IN
S1-32816423000	843803	130,000	1.13 IN

This instruction provides details to properly change out a condensate collection pan used on all 33 inch 95% + AFUE condensing gas furnaces. By properly following these instructions, the condensate pan can be replaced in a safe effective manner and future issues such as water leakage will be avoided.

The factory assembly method specifies 20 +/- 3 in-lbs of torque to install condensate pan to the vestibule sheet metal panel and the combustion blower assembly to the condensate pan. For the replacement of a condensate pan in the field where a torque gun is not readily available, the following guidelines should be followed. All cautions must be used and if any condensate pan screw is stripped, it must be replaced with the next larger size screw to ensure against leaks. The next larger size screw must be field provided. If combustion blower assembly mounting nutserts on the pan are stripped or missing, a new condensate pan must be used.

### NOTICE

Some furnace models REQUIRE blocked condensate pressure switch replacement when installing this pan. The S1-02435776000 (-.40"w.c.) switch must be changed to the S1-02435812000 (-.20"w.c.) switch.

### **INSTALLATION**

### Replacing condensate pan in the field:

 Turn the power off to the furnace. Remove any wiring, vent pipe connections, or other components that may restrict access to the combustion blower assembly and condensate pan. Make notes to ensure that pressure switch wiring, hoses, and any other components are later installed in the same location(s) from where they were removed.

- Become familiar with the condensate plumbing inside the furnace, especially where the two condensate hoses attach to the pan. Remove hoses from pan.
- Loosen screw on rain gutter that clamps vent pipe to rain gutter.
- Disconnect power wiring connected to combustion blower assembly.
- 5. Disconnect pressure switch hose(s) and wiring.
- Remove the four screws holding the combustion blower assembly on the condensate pan, and save screws for later installation of combustion blower assembly.
- Rotate combustion blower assembly off of vent pipe and remove from furnace.
- Remove all screws holding the condensate pan against the vestibule panel. Save all screws for later condensate pan installation. Remove condensate pan.
- Wipe off the outlet of the secondary heat exchanger, including the laminate plate around it, such that there is no oil residue remaining.

## **A CAUTION**

Make sure to not tighten screws to the point that condensate pan can crack.

If a torque wrench is not available to install the replacement condensate pan, use only a hand tool for the installation.

Only tighten the screws until the gasket is compressed between the condensate pan and the furnace.

- 10. Install the new condensate pan by securing it to the vestibule panel in accordance with the INSTALL SCREWS sequence shown in Figure 1. The condensate pan must be sealed tightly against the furnace vestibule panel. All stripped screws must be replaced with larger #10 screws (field provided).
- 11. Reinstall the two condensate hoses in the original locations on new condensate pan.

### NOTICE

The failed condensate pan may have originally required the use of a restrictor ring inside the combustion blower assembly. The new condensate pan requires that no restrictor ring be present in the combustion blower assembly. If the combustion blower assembly has a restrictor ring, it MUST BE REMOVED before installation to prevent a whistling sound from occurring.

- 12. Locate the combustion blower assembly onto the condensate pan, and secure it on the pan in accordance with the CAUTION and NOTICE above. The combustion blower assembly must be sealed tightly against the condensate pan.
- Install hoses removed earlier from combustion blower assembly. Verify two condensate hoses are in correct locations on condensate pan.
- Before cycling the furnace, make sure all wiring, vent connections, or other modifications to the furnace are reinstalled.
- 15. Once the change out is complete and power is turned on, allow the furnace to run long enough for the condensate trap to fill with water. Ensure that the furnace is operating properly and that the replacement condensate pan is not leaking.

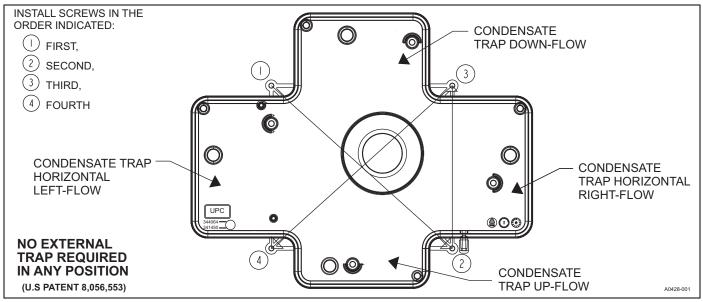


FIGURE 1: Condensate Pan Fastener Mount Sequence