INSTALLATION INSTRUCTIONS FOR COLD END HEADER BOX KITS USED FOR ALL UPFLOW/HORIZONTAL & DOWNFLOW 90% EFFICIENCY GAS FURNACES

Shipping & Packing List

Package 1 of 1 contains:

1 - Cold end header box (CEHB)
1 - 3/4” drain trap parts bag
1 - Pressure switch (two-stage -045, -070 and -110 only)

NOTE - Pressure switches included in kits 95W89, 10F95 and 95W96 are for elevations below 4500’. Consult the appropriate Product Specifications manual for elevations over 4500’.

Application

Use the kits listed in tables 1, 2, 3 and 4 to replace the cold end header box in all furnaces equipped with a 1/2” drain or 3/4” drain. See figure 4.

⚠️ WARNING

This kit is to be installed by a licensed professional HVAC service technician (or equivalent) or other qualified agency in accordance with the manufacturer’s instructions, all codes and requirements of the authority having jurisdiction in the USA, and the requirements of the CSA-B149 installation codes in Canada. If the information in these instructions is not followed exactly, personal injury or loss of life may occur. The qualified agency performing this work assumes responsibility for this conversion.

⚠️ CAUTION

Before attempting to perform any service or maintenance, turn the electrical power to unit OFF at disconnect switch.

TABLE 1

Variable Capacity Furnace Kit Usage

<table>
<thead>
<tr>
<th>Input</th>
<th>Cold End Header Box Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>070</td>
<td>95W85</td>
</tr>
<tr>
<td>090</td>
<td>95W86</td>
</tr>
<tr>
<td>110</td>
<td>95W87</td>
</tr>
<tr>
<td>135</td>
<td>95W88</td>
</tr>
</tbody>
</table>

TABLE 2

Two-Stage Furnace Kit Usage

<table>
<thead>
<tr>
<th>Input</th>
<th>Cold End Header Box Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>045</td>
<td>95W89</td>
</tr>
<tr>
<td>070</td>
<td>10F95</td>
</tr>
<tr>
<td>090</td>
<td>95W98</td>
</tr>
<tr>
<td>110</td>
<td>95W96</td>
</tr>
<tr>
<td>135</td>
<td>96W64</td>
</tr>
</tbody>
</table>

TABLE 3

Single -Stage 92& 93 AFUE Furnace Kit Usage

<table>
<thead>
<tr>
<th>Input</th>
<th>Cold End Header Box Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>045</td>
<td>95W89</td>
</tr>
<tr>
<td>070</td>
<td>95W90</td>
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<tr>
<td>090</td>
<td>95W91</td>
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<tr>
<td>110</td>
<td>95W92</td>
</tr>
<tr>
<td>135</td>
<td>95W93</td>
</tr>
</tbody>
</table>

TABLE 4

Single -Stage 95 AFUE Furnace Kit Usage

<table>
<thead>
<tr>
<th>Input</th>
<th>Cold End Header Box Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>045</td>
<td>95W89</td>
</tr>
<tr>
<td>070</td>
<td>10F95</td>
</tr>
<tr>
<td>090</td>
<td>95W95</td>
</tr>
<tr>
<td>110</td>
<td>95W96</td>
</tr>
<tr>
<td>135</td>
<td>96W64</td>
</tr>
</tbody>
</table>

Installation

1. -Turn off power to unit.
2. -Remove access panel.
3. -Disconnect the condensate drain trap from the CEHB.
4. -Mark for identification and disconnect all combustion air pressure tubing from cold end header collector box. Keep tubing attached to pressure switches.
5. -Mark for identification and remove wires from pressure switches.
6. -Remove the pressure switch by carefully pressing the tab which secures the switch assembly to the cold end header box. See figure 1.
7. -Disconnect the electrical power wiring harness from the combustion air inducer. Disconnect the ground wire if separate from the plug.
8. -Loosen clamp securing flexible exhaust fitting to combustion air inducer.
9. Remove two screws which secure combustion air inducer to collector box. Remove combustion air inducer assembly.

10. Disconnect the condensate drain tubes from the CEHB.

11. Remove cold end header box.

12. Install replacement CEHB (box should be level) using existing screws.

13. Reconnect condensate drain lines to the cold end header box. If replacing a CEHB with a 1/2" drain on the left side, use the provided tubing from the trap assembly bag. Discard old tubing.

   Down flow only - Cap off unused drain on CEHB using provided cap in trap parts bag.

14. Re-install the pressure switch. For two-stage 045, 070 and 110 units only, replace pressure switch with pressure switch provided. Reconnect wires to the pressure switch. Take extra care not to bend terminals. Re-install tubing to CEHB. See figure 2 for proper tubing location.

15. Use the existing screws to reinstall combustion air inducer to the CEHB. Use a torque wrench to tighten screws to 30 in. lbs.

16. Tighten clamp securing flexible exhaust fitting to combustion air inducer.

17. Reconnect the electrical power wiring harness to the combustion air inducer. Reconnect the ground wire if separate from the plug.

18. Reconnect the condensate drain trap to the CEHB and prime trap. See figure 4.

19. Follow UNIT START UP procedure in unit Installation and Operation Manual provided with the unit.
FIGURE 2

Pressure Switch Tubing Location and Hook Up
(Variable Capacity Downflow shown)

1 - Black hose from front port on low-fire pressure switch to positive port on the gas valve.
2 - Red hose from rear port on low-fire pressure switch to the negative port on the gas valve.
3 - Red hose from front port on high-fire pressure switch to negative port on cold end header box.
4 - Black hose from rear port on high-fire pressure switch to positive port on cold end header box.

FIGURE 3

Pressure Switch Tubing Location and Hook Up
(Variable Capacity Upflow shown)

1 - Black hose from front port on low-fire pressure switch to positive port on the gas valve.
2 - Red hose from rear port on low-fire pressure switch to the negative port on the gas valve.
3 - Red hose from front port on high-fire pressure switch to negative port on cold end header box.
4 - Black hose from rear port on high-fire pressure switch to positive port on cold end header box.
TRAP / DRAIN ASSEMBLY USING 1/2" PVC OR 3/4" PVC

Optional Condensate Drain Connection

Adapter 3/4 inch slip X 3/4 inch mpt (not furnished)

90° Street Elbow 3/4 inch PVC (not furnished)

Condensate Drain Connection In Unit

To Drain

Optional Drain Piping From Trap

Drain Assembly for 1/2 inch Drain Pipe

1/2 inch PVC Pipe (Not Furnished)

90° Elbow 1/2 inch PVC (Not Furnished)

To Drain

Drain Assembly for 3/4 inch Drain Pipe

90° Elbow 3/4 inch PVC (Not Furnished)

To Drain

Coupling 3/4 inch slip X slip (Not Furnished)

Condensate Drain Connection In Unit

1 (25 mm) Min. 2 (50 mm) Max. Above Top Of Condensate Drain Connection In Unit

3/4 inch PVC Pipe (Not Furnished)

90° Elbow 3/4 inch PVC (Not Furnished)

1/2 inch PVC Pipe (Not Furnished)

90° Street Elbow 3/4 inch PVC (furnished)

To Trap

3/4 inch PVC Pipe (Not Furnished)

Drain Trap Assembly (Furnished)

Drain Trap Assembly with 1/2 inch Piping

Drain Trap Assembly with 3/4 inch Piping

Vent

1/2 inch

Condensate Drain Connection In Unit

To Drain

Vent

3/4 inch

Condensate Drain Connection In Unit

To Drain

Vent

5 Feet Maximum

7 (178)