

HAZARD INTENSITY LEVELS
 1. **DANGER:** Failure to comply will result in severe personal injury or death and/or property damage.
 2. **WARNING:** Failure to comply could result in severe personal injury or death and/or property damage.
 3. **CAUTION:** Failure to comply could result in minor personal injury or death and/or property damage.

Option CD2, CD3 & CD4
Installation of Downturn Air Nozzles
Applies: Models FT & SFT

Description / Application

Downturn nozzles are designed to direct the discharge air in a more vertical flow. These downturn nozzle packages apply to Reznor® Models FT and SFT only.

The option packages include:

Model	FT		SFT		FT and SFT											
Size	75		75		100		125		150		200		250		300	
Option CD2 Package P/N	160826		160827		160828		160829		160830		160831		160832		160833	
Components:	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N
Nozzle Side	2	149578	2	159059	2	159063	2	159060	2	159067	2	159065	2	159067	2	159065
Nozzle Top	1	149580	1	149580	1	159062	1	159062	1	159066	1	159066	1	159068	1	159068
Bag Assy (P/n 160814) includes: #10-16 x 1/2"lg screws	20	149563	20	149563	20	149563	20	149563	20	149563	20	149563	20	149563	20	149563
Installation Instructions	1	160808	1	160808	1	160808	1	160808	1	160808	1	160808	1	160808	1	160808
Option CD3 Package P/N	160834		160835		160836		160837		160838		160839		160840		160841	
Components:	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N
Nozzle Side	4	149578	4	159059	4	159063	4	159060	4	159067	4	159065	4	159067	4	159065
Nozzle Top	2	149580	2	149580	2	159062	2	159062	2	159066	2	159066	2	159068	2	159068
Bag Assy (P/n 160815) includes: #10-16 x 1/2"lg screws	34	149563	34	149563	34	149563	34	149563	34	149563	34	149563	34	149563	34	149563
Installation Instructions	1	160808	1	160808	1	160808	1	160808	1	160808	1	160808	1	160808	1	160808
Option CD4 Package P/N	160842		160843		160844		160845		160846		160847		160848		160849	
Components:	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N	Qty	P/N
Nozzle Side	2	149578	2	159059	2	159063	2	159060	2	159067	2	159065	2	159067	2	159065
Nozzle Top	1	149580	1	149580	1	159062	1	159062	1	159066	1	159066	1	159068	1	159068
Vertical Louver Top/Btm Member	2	159443	2	159443	2	159444	2	159444	2	159444	2	159444	2	159445	2	159445
Vertical Louver	4	160504	4	160501	6	160501	6	160502	6	160503	6	160505	10	160503	10	160505
Nozzle Angle Clip	2	149581	2	149581	2	159061	2	159061	2	159064	2	159064	2	159064	2	159064
Bag Assy (P/n 160816) includes: #10-16 x 1/2"lg screws	44	149563	44	149563	44	149563	44	149563	44	149563	44	149563	44	149563	44	149563
Installation Instructions	1	160808	1	160808	1	160808	1	160808	1	160808	1	160808	1	160808	1	160808

Figure 1 - Downturn Nozzle Parts & Dimensions

Labels in diagram:
 Nozzle Top, CD 2, 3, 4
 Nozzle Side, CD 2, 3, 4
 Nozzle Side, CD 3
 Nozzle Side, CD 2, 3, 4
 Nozzle Side, CD 3
 Nozzle Top, CD 3
 Horizontal louvers (must be removed from the heater and re-installed in the outlet of the downturn nozzle)

Outlet Nozzle Option CD2 & CD4 with 25° - 65° Range of Air Deflection

Models	Sizes	"A" Dim.
FT & SFT	75, 100, 125	9-1/16"
FT & SFT	150, 200, 250, 300	13-1/4"

Outlet Nozzle Option CD3 with 50° - 90° Range of Air Deflection

Models	Sizes	"A" Dim.
FT & SFT	75, 100, 125	15-11/16"
FT & SFT	150, 200, 250, 300	22-7/8"

Installation Instructions

WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operation and maintenance instructions thoroughly before installing or servicing this equipment.

Installation should be done by a qualified service agency in accordance with the instructions on this sheet and in compliance with all codes and requirements of authorities having jurisdiction.

Follow the instructions in the appropriate Section(s) for the option package being installed.

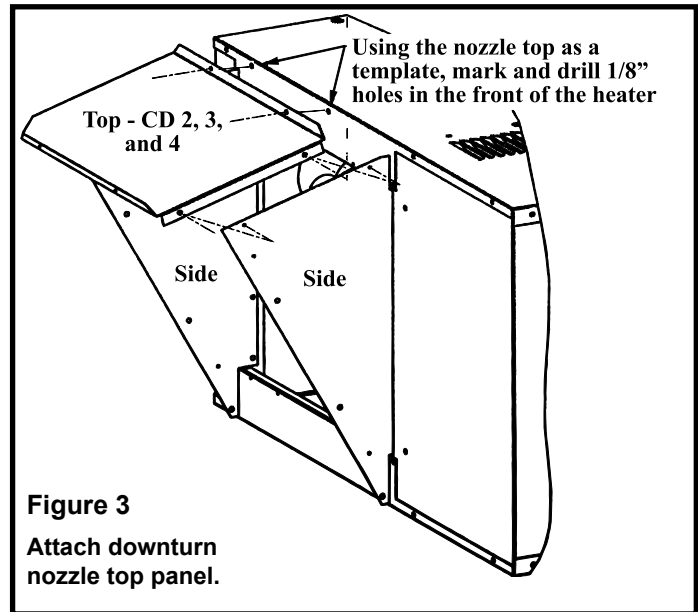
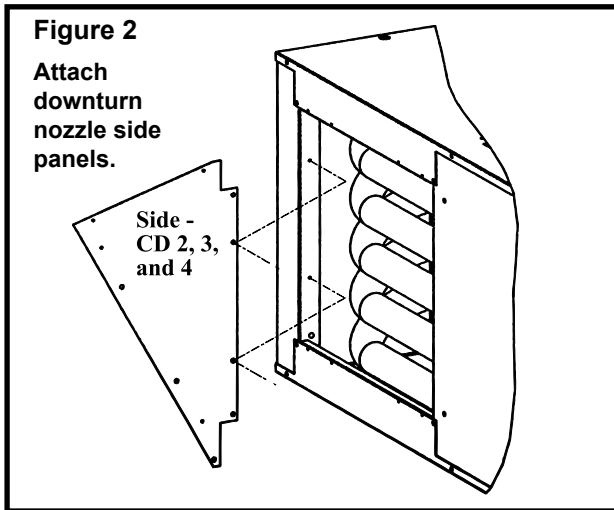
Option Package	Instructions
Options CD2 or CD3	Section A
Option CD4	Sections A & B

Tools Required: Drill, 1/8" diameter drill bit & Phillips Screwdriver

INSTALLATION NOTE: Whenever possible, always insert screws with pointed ends inside the nozzle.

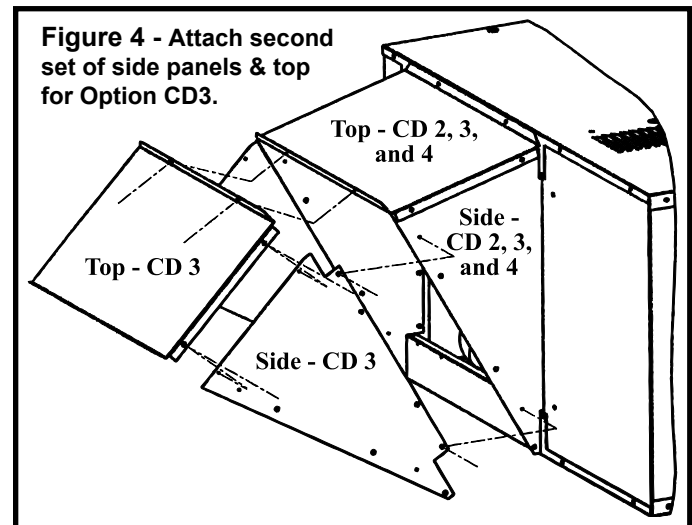
SECTION A

1. If the heater is installed, turn off the gas & electric power.
2. **Remove the Horizontal Louver Assembly** - Remove the horizontal louver assembly that is factory-installed in the front of the heater (screws are on the sides). Save the screws and the louver assembly. This louver assembly will be re-inserted in the outlet of the downturn nozzle.
3. **Install the Downturn Nozzle Side Panels (See Figure 2).** Use the same holes and screws that held the louver assembly (removed in Step 2) to attach the side panels of the downturn nozzle.



4. **Attach the Downturn Nozzle Top Panel (See Figure 3)** Using the nozzle top panel as a template, mark and drill a series of 1/8" diameter holes in the front of the heater. Using the screws in the kit, attach the nozzle top to the front of the heater and to the nozzle sides.

5. If installing Option CD3 (nozzles with two sets of side panels and two tops) - Attach the two additional nozzle side panels to the side panels already installed. Attach the additional top to the new sides and the top installed in Step 4. (See Figure 4)



6. **Re-Install the Horizontal Louver Assembly**
 Attach the horizontal louver assembly removed from the front of the heater to the side panels at the outlet of the downturn nozzle. Adjust the louvers to obtain the desired air deflection.

CAUTION: To avoid getting burned, adjust the louvers while the heater is not in operation. If adjustments are required after the heater is in operation, wear protective gloves.

7. **Installation of Option CD2 or CD3 is complete - If you are installing Option CD4** - follow the instructions in **Section B** to add the vertical louvers.

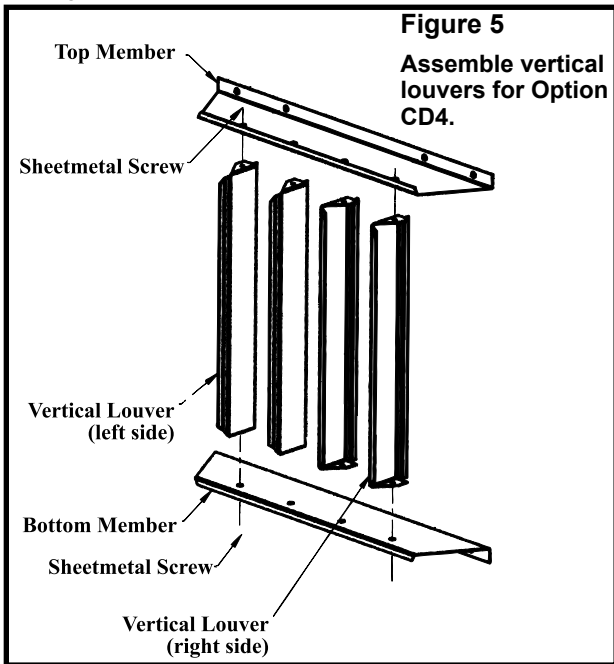
- √ **If option installation is complete and the heater is installed**, be sure that it is level. Turn on the electrical power and gas. Light the heater following the lighting instructions.
- √ **If the option installation is complete and the heater is not installed**, follow the instructions in the heater installation/operation manual to complete the installation.

SECTION B

Additional Instructions for Installing Vertical Louvers in Option CD4

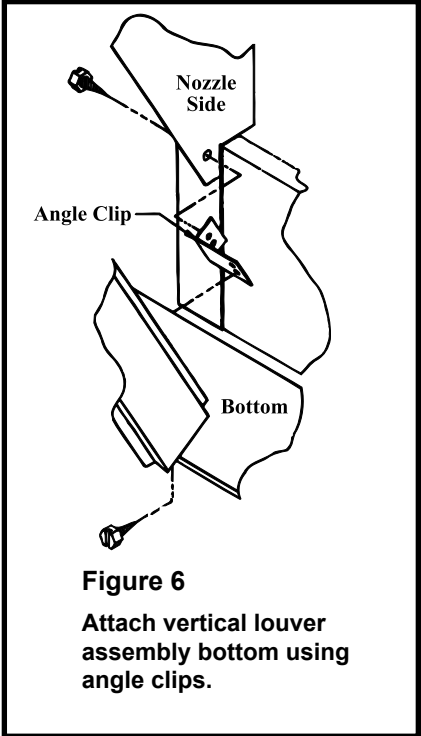
Follow the instructions that apply to your application for installing the downturn nozzle. If the heater is installed, do not re-light it until after the vertical louvers have been installed.

1. **Assemble the Louvers** - Assemble vertical louvers to the top and bottom members using the sheet metal screws provided. (See Figure 5)
- a) Vertical louver edges should extend beyond the front outer end of the louver top and bottom members.
 - b) Stops are designed so that the right half of the louvers turn right and the left half of the louvers turn left.



2. **Attach the Vertical Louver Assembly** - Screw the top member of the assembled vertical louvers to the top of the downturn nozzle.

3. **Install Angle Clips (See Figure 6)** - To attach the bottom of the vertical louver assembly, use the angle clips in the option package. Attach the angle clips to the nozzle sides and to the bottom member of the louver assembly as shown in the illustration.



4. **Installation is complete.**

CAUTION: To avoid getting burned, adjust the louvers while the heater is not in operation. If adjustments are required after the heater is in operation, wear protective gloves.

- √ **If the heater is installed**, be sure that it is level. Turn on the electrical power and gas. Light the heater following the lighting instructions.
- √ **If the heater is not installed**, follow the instructions in the heater installation/operation manual to complete the installation.

