

**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.**

**REZNOR** *Thomas & Betts*

## Elbow Heat Exchanger Tube with Reflector Option UC2

Installation Form RGM 456-L

APPLIES TO: **INFRA-REZ™ Heater Models TR/TR-H**

### Description/Application

The elbow ("L" shaped) heat exchanger tube is used to adapt this tubular radiant heater to a specific location. The elbow tube may be installed in any length of system from 20 to 70 feet. Follow the selected configuration in the Configuration and Suspension Booklet (Form RGM 607). **IMPORTANT: Layout the system only as illustrated. The elbow tube must be located relative to the combustion chamber and heat exchanger tubes.** If the configuration

is altered by use of a 5-ft heat exchanger tube, follow carefully the guidelines restricting the location of 5-ft heat exchanger tubes.

The elbow heat exchanger tube option includes its own separate aluminum reflector which must be field assembled and installed. The elbow reflector and the straight reflectors adjacent to it cannot be rotated.

Option UC2, Package P/N 120713, includes:

Qty	P/N	Description
1	120535	90° Heat Exchanger Elbow ("L" Tube)
1	144415	Right Elbow Shield Half
1	144416	Left Elbow Shield Half
1	144417	Elbow Reflector Side
1	143474	Reflector Hardware Bag
<i>Consisting of</i>		
1	120716	1/2" Stainless Steel Worm Drive Clamp
1	120677	Reflector Bracket
15	26490	#10-32 Keps Nut
2	113807	#10 Flat Washer
15	113275	#10-32 x 1/2" lg Screw
1	116017	Tube Connection Bag (includes parts list)

**Figure 1 - 90° Heat Exchanger Elbow ("L" Tube) in Option UC2 Package -- See page 2 for illustration of reflector pieces**



### Installation Instructions -- Reference Heater Installation Manual

Installation should be done by a qualified agency in accordance with these instructions and in compliance with all codes and requirements of authorities having jurisdiction.

1. Install the burner/control box, combustion chamber tube, and any heat exchanger tubes before the elbow tube. Carefully read and follow the instructions in the heater installation manual and the hardware packages.
2. **Turbulator Strip Sections** -- If the following conditions apply, install two sections of the turbulator strip in the straight heat exchanger tube before attaching the elbow tube. Follow the instructions in the heater installation manual.

Install two turbulator strip sections before the elbow tube only when **BOTH** of the following conditions apply:

- 1) the elbow tube is **adjacent** to the tail pipe **AND**
- 2) the heater and installation comply with the following

\*To install a heater above 2000 ft elevation, that heater must either be factory-built for the required elevation or field-converted to that elevation. Check the rating plate or field-conversion label for allowable installation site elevation.

Size	Elevation of Site*	with Straight Tube Length
75	0-8000 ft	40 feet
100	0-8000 ft	40, 45, 50 feet
125	0-8000 ft	40, 45, 50 feet
150	0-8000 ft	50, 55, 60 feet
175	0-2000 ft	50, 55, 60, 65, 70 feet
200	0-2000 ft	50, 55, 60, 65, 70 feet

3. **Connect the Elbow Tube** -- Slide the expanded end of the elbow tube over the last suspended tube. (**NOTE:** The elbow tube does not require a suspension point.) Follow the illustrated instructions in the hardware bag to connect the tubes (same procedure as the straight heat exchanger tubes).
4. Following the layout, suspend and connect the remainder of the tubular system according to the instructions in the heater installation manual.

(continued)

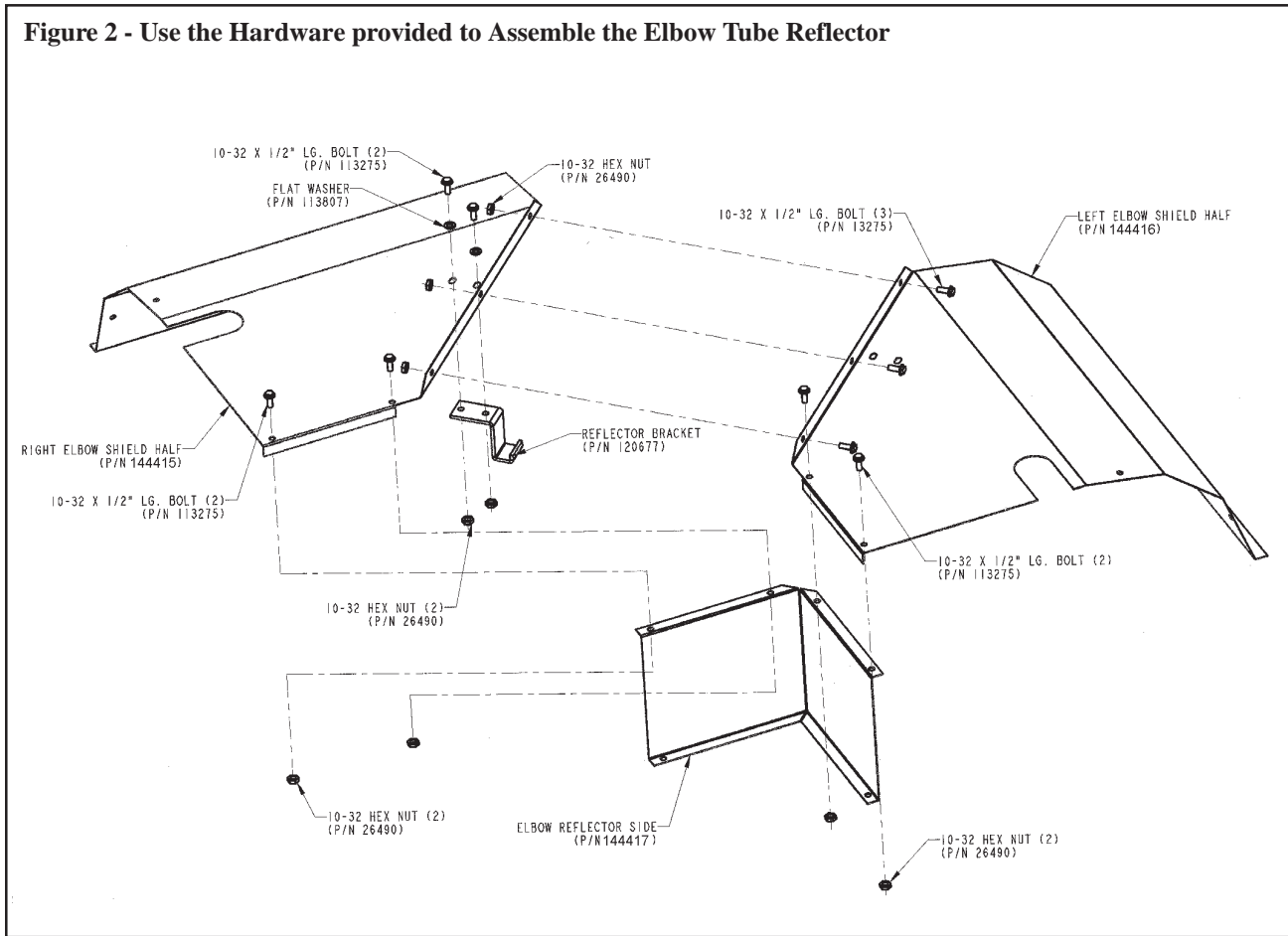
## Installation Instructions (cont'd)

5. **Install Straight Reflectors** -- Follow the instructions in the heater installation manual to install the reflectors on the straight sections of pipe. (NOTE: If an optional side shield is included, install the reflector brackets shipped in the tube cartons **and**

the reflector brackets in the side shield cartons -- total of four brackets and retainers per 10-ft tube.)

6. **Assemble Elbow Tube Reflector** -- Assemble the right and left shield half pieces and the reflector side as illustrated in Figure 2.

**Figure 2 - Use the Hardware provided to Assemble the Elbow Tube Reflector**



7. **Install the Assembled Elbow Tube Reflector** -- Position the assembled reflector on top of the elbow tube with the bracket at the center of the bend in the elbow. Locate the two pre-drilled holes on both ends of the assembled reflector where it overlaps the adjoining straight reflectors. Mark the holes on the straight reflectors. Remove the elbow reflector assembly and carefully drill 7/32" holes in the straight reflectors.

Unfasten the worm clamp. Re-position the elbow reflector on top of the tube with the bracket at the center of the elbow.

Wrap the clamp around the tube attaching the reflector bracket. Fasten the clamp to hold the reflector in place but do not tighten.

Use the remaining screws and nuts to attach the elbow reflector assembly to both adjoining straight reflectors. Tighten clamp securely.

8. Complete the installation by following the instructions in the heater installation manual.

NOTE: The elbow reflector and the straight reflectors adjacent to the reflector cannot be rotated.