

Vent Body Retrofit Kit

Kit No. 42001-0404

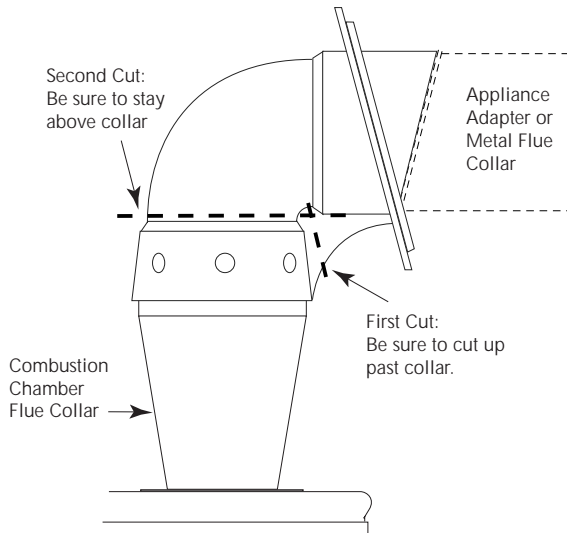


Figure 1

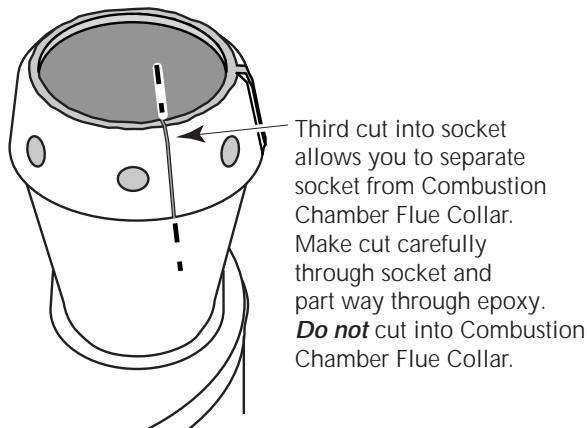


Figure 2

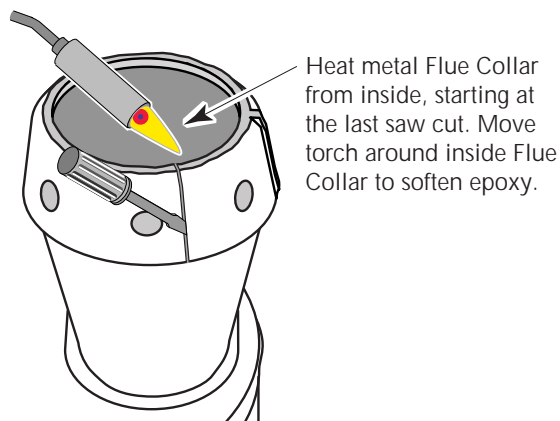


Figure 3: After third cut, heat flue collar and pry plastic collar off. Clean up metal flue collar with torch and screwdriver or putty knife.

Safety Precautions:

⚠ WARNING Risk of fire, explosion, and electrical shock. Heater service and repair must be performed by a qualified installer, service agency, or the gas supplier.

⚠ WARNING Burn hazard. If heater has been operating, allow it to cool for at least half an hour before touching the Flue Collar or the plastic Vent Body.

⚠ WARNING Carbon monoxide hazard. Check all flue and vent pipe joints for leaks.

Probe Installation

⚠ WARNING Risk of fire, explosion, and electrical shock. Heater service and repair must be performed by a qualified installer, service agency, or the gas supplier.

Tools Required:

You will need the following tools to make this installation:

- 1 Reciprocating saw with a 6"x24t Bi-metal blade
- 1 Propane torch
- 1 Putty knife
- 1 Phillips screwdriver
- 1 Straight-blade screwdriver
- 1 Electric drill with 5/32" and 3/8" bits
- 1 Wire brush
- 1 5" capacity C-clamp
- 180 grit (or finer) sandpaper
- Isopropyl alcohol

NOTICE: You must purchase the appropriate Appliance Adapter Kit for your venting installation. Do not try to save and reuse the Appliance Adapter you are removing from the heater.

Retrofit Procedure

1. Turn off the filter pump and all electrical power to the heater.
2. Allow the heater to cool for at least half an hour before proceeding.
3. Unbolt and remove the Upper Left and Upper Right Jackets from the heater.
4. Disconnect the wires from the Stack Flue Switch.
5. Disconnect the vent pipe from the Metal Flue Collar or the Appliance Adapter (see Figure 1).
6. Remove the plastic Vent Body and the flue collar or Appliance Adapter with three cuts from a reciprocating saw (see Figures 1 and 2). Use a 6"x24t bi-metal blade.
7. Heat around the inside of the Combustion chamber Flue Collar with a propane torch to soften the epoxy (Figure 3); peel the plastic collar off the Combustion Chamber Flue Collar and scrape the Flue Collar clean with a putty knife.
8. Remove the 3/8-24 plug from the side of the Metal Elbow Assembly.
9. Apply UltraCopper[®] RTV Silicone (supplied) to the sealing faces of the Probe and its nut and install the Probe in the 3/8" hole in the Metal Elbow (Figure 4).
10. Apply UltraCopper[®] RTV Silicone to the sealing face of the nut and tighten it onto the Probe from inside the Metal Elbow.

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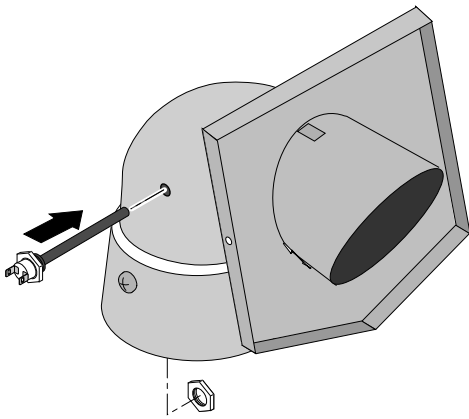


Figure 4: Apply 600°F RTV to sealing faces of probe and nut and install probe.

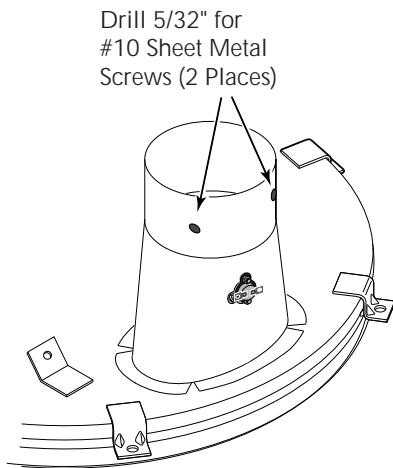


Figure 5: Drill Combustion Chamber Flue Collar as shown for sheet metal screws for Welded Vent Elbow Assembly.

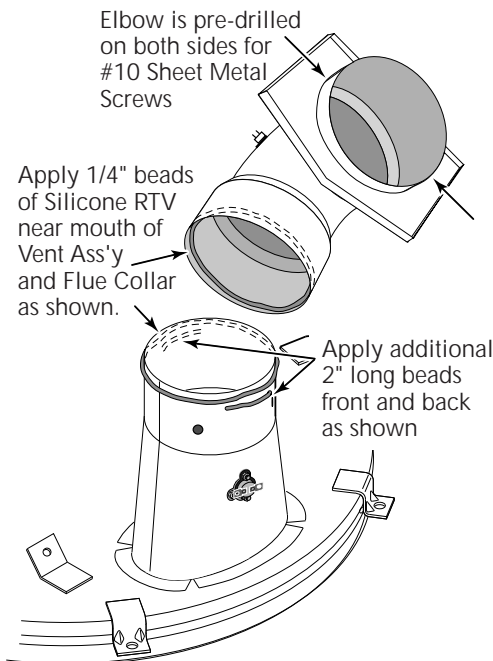


Figure 6: Apply Silicone RTV beads as shown. Spread out RTV with a tongue depressor or a rubber gloved finger.

11. Check the fit between the Elbow and the Combustion Chamber Flue Collar. It should be a close, uniform fit all the way around – not more than 3/16" clearance at any point. If not, the Combustion Chamber Flue Collar is out of round. Use a C-clamp to gently round it up. The Elbow must fit and seat (bottom lip should be 4-3/8" above the Flue Collar flange) before applying any adhesive.
 12. Before applying any adhesive to the Metal Elbow or the Combustion Chamber Flue Collar, set the Elbow on the Flue Collar with the Elbow's detent mark aligned with the centerline of the Stack Flue Switch. Drill two 5/32" holes into the Combustion Chamber Flue Collar through the pre-drilled holes on opposite sides of the Elbow (Figure 5). These holes will take #10 sheet metal screws to mechanically lock the Elbow to the Combustion Chamber Flue Collar. Don't install the screws yet.
 13. The Metal Elbow Assembly (Figure 6) is predrilled to take #10 sheet metal screws to lock the Appliance Adapter to the Elbow Assembly after it has been RTV glued in place.
 14. Remove the Metal Elbow and degrease the gluing surfaces of the Combustion Chamber Flue Collar and the Elbow with isopropyl alcohol. *Do not touch these surfaces after they have been degreased.*
 15. Use the RTV supplied to apply two continuous 1/4" beads of RTV, one all the way around inside the Elbow, and the other all the way around outside the Combustion Chamber Flue Collar. Apply two additional 1/4" beads about 2" long to the Flue Collar, front and back (see Figure 6).
 16. Use a tongue depressor or a rubber-gloved finger to spread the RTV out uniformly over the gluing surfaces.
 17. Install the Elbow; align the Elbow and push straight down on it; Compress the Combustion Chamber Flue Collar until the Elbow is completely bottomed out. The bottom of the Elbow should be 4-3/8" above the Flue Collar flange. The detent mark on the Elbow must align with the centerline of the Stack Flue Switch and the holes must align with the 5/32" holes drilled in the Flue Collar in Step 12 (see Figure 5).
 18. Apply RTV to two of the #10 sheet metal screws supplied; secure the Elbow to the Flue Collar with them.
 19. Some Silicone RTV may squeeze out from under the lip of the Elbow Assembly. If so, pack it back around the bottom edge of the elbow to ensure a good seal, especially at the front and back of the joint. If no Silicone RTV has been squeezed out, apply additional RTV around the outside of the joint and pack it in to make a good seal.
 20. Connect the Stack Flue Switch wires to the new Probe. Do not remove the stack flue switch; it is sealed to the Combustion Chamber Flue Collar to prevent carbon monoxide/flue gas leaks.
 21. Reinstall the gas vent pipe to the heater, sealing all joints according to local code requirements and the vent manufacturer's instructions. Fasten the Appliance Adapter to the Elbow Assembly with UltraCopper® Silicone RTV and the last two #10 screws provided.
- NOTICE:** You have about 1/2 hour of working time after making the RTV joint. After the joint starts to cure, wait one hour before testing.
22. After one hour, fire heater for not more than one minute to test for exhaust leaks. Reseal any leaks that are found.
 23. Reinstall the Upper Left and Upper Right Jackets on the heater.
- NOTICE:** Wait 24 hours before firing heater continuously. This will allow the RTV to cure completely before exposing it to heat.

* Loctite Corp, Rocky Hill, CT 06067

REPAIR PARTS LIST

Part Description	Qty.	Part No.
Flue Temperature Probe Switch	1	42002-0009
3/8-24 Nut, S. S.	1	35407-0121
Welded Vent Elbow Assembly	1	42002-0209
3-oz. Tube 600°F RTV	2	30155-2003
#10x5/16" Sheet Metal Screws, S.S.	4	37336-4094