



**00-016C  
2 May, 2007**

**INSTALLING HC SCRUBBER INTO M701 ZERO AIR MODULES.**

**I. PURPOSE:**

To provide instructions for installing a HC scrubber into a M701 zero air module.

**II. TOOLS:**

1. 7/16" wrench
2. 1/2" wrench
3. 9/16" wrench
4. #2 Phillips tipped screwdriver
5. Flat tipped screwdriver

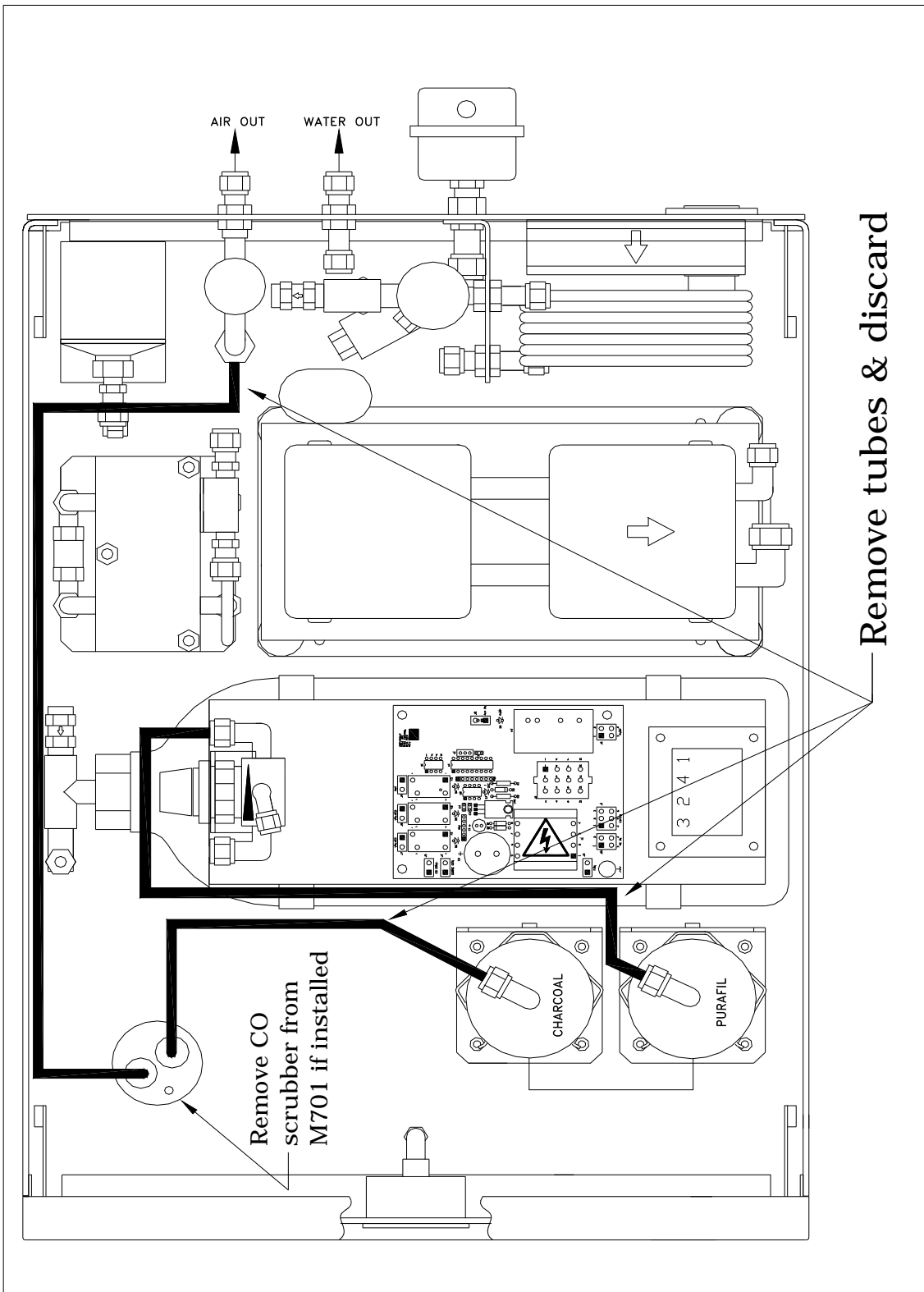
**III. PARTS:**

KIT000040

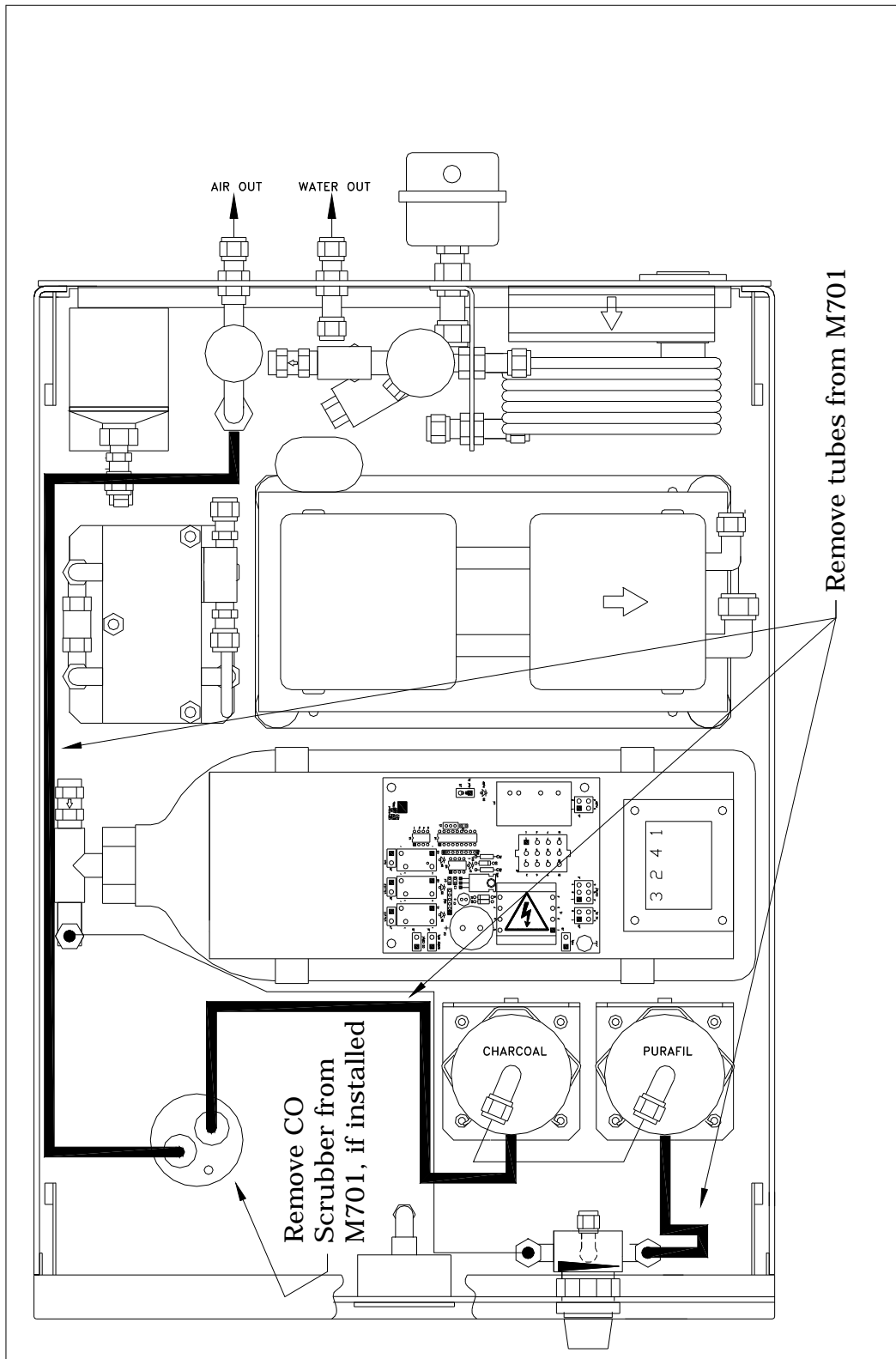
**IV. PROCEDURE:**

1. Turn the M701 off, then turn it on and wait 3 minutes. Turn the M701 back off again. This drains the M701 water trap so that no water migrates when you are working on it.
2. Unplug the power from the back of the M701.
3. Put the M701 on a workbench and remove the cover.
4. Fold down the front panel.
5. Remove the tubes that are specified on Page 3 or 4 of this note. Note that there are two different configurations. One with the regulator on the tank and the other with the regulator on the front panel.
6. Please note that your M701 might not have the CO scrubber in it. There will only be one tube that goes from the Charcoal scrubber to the output filter on the rear panel of the M701, not from the charcoal to the CO scrubber and then to the rear panel.
7. Locate the HC scrubber, the large cooling coil (Tube 3) and the small copper tube (Tube 2) in the KIT.
8. Connect the two pieces of copper tubing to the HC scrubber. Tube 2 is the input of the HC scrubber and connects to the Front fitting on the HC scrubber. Tube 3 is the output of the HC scrubber and connects to the rear fitting of the HC scrubber (see diagram page 5).
9. Install the HC scrubber into the chassis of the M701 with the cooling coils on the outboard side of the M701. The tubing of the cooling coil should run down the M701 toward the rear of the M701. (See diagram page 5). The HC scrubber is held into the chassis with 4 screws through the bottom of the M701.
10. If your M701 has the regulator on the front panel install Tube 1B (from your KIT) from the regulator to the input to the HC scrubber.
11. If your M701 has the regulator on the tank install tube 1A (from your KIT) from the regulator to the input to the HC scrubber.

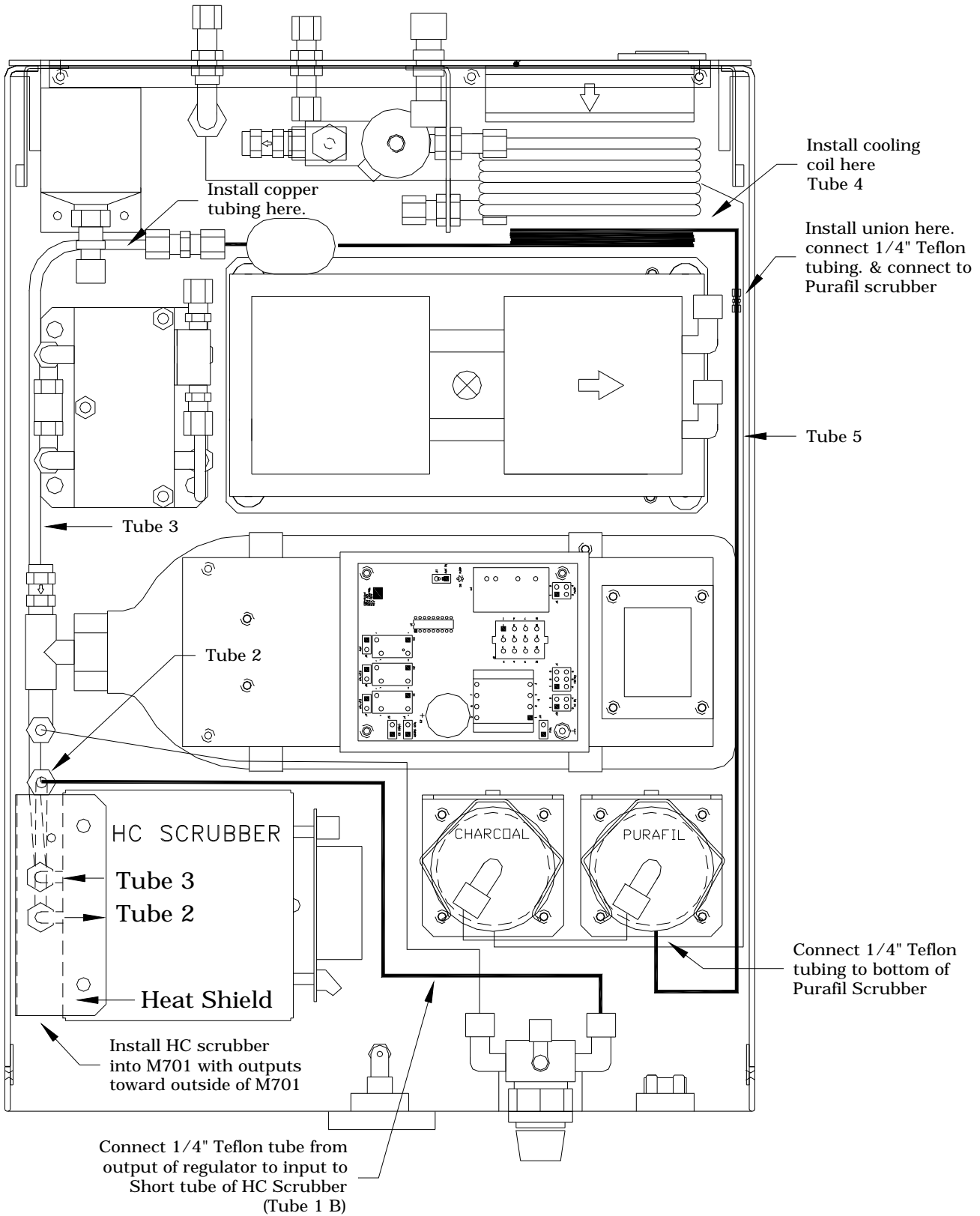
12. Locate the small cooling coil in the KIT (Tube 4) and install it into the M701 so that it will connect to the other end of the copper tube at the rear of the M701 (Tube 3). (See diagram page 5).
13. Locate Tube 5 in the KIT and connect it to the end of Tube 4.
14. Connect the front end of Tube 5 to the input to the Purafil scrubber (the bottom of the Purafil scrubber). If the connection tube for the two scrubbers has the jumper on the bottom, remove the scrubbers from the clip and turn them over so that the jumper is on the top.
15. IT IS IMPORTANT THAT THE AIR GOES THROUGH THE Purafil FIRST and THEN THROUGH THE CHARCOAL. IF IT DOES NOT GO THROUGH THE CHARCOAL LAST, YOU MIGHT NOT GET THE PERFORMANCE OUT OF THE ZERO AIR SOURCE THAT YOU WOULD EXPECT.
16. Ensure that when you lay the tubes into the chassis that they are not pinched or kinked and that air can flow through them.
17. Plug the small gray wire that goes into the temp control card on the HC scrubber into the mother board on the top of the tank. This connector plugs into j5 (j5 is written in white letters right on the pc card).
18. Now is a good time to do the maintenance on the m701. Change the charcoal and Purafil. When you have it back together goto the next step in this procedure.
19. Plug the power back into the m701 and cap the output of the m701. Turn the m701 on and the pressure should come up to 30 PSI or so in about 2 minutes. From 4 to 6 minutes the pump should shut off. When the pump does shut off, turn off the power switch on the front of the m701. The pressure on the front panel should not drop more than 2 PSI in 5 minutes.
20. If it does leak more than 2 PSI in 5 minutes find the leak in the m701 before you put the m701 back into service.
21. If you have problems with the m701 leaking or the pump not shutting off see the service note regarding trouble shooting the m701 zero air source 99-037-b.
22. Install the heat shield onto the outside of the HC scrubber so that it covers the two cooling coils.
23. Before putting the m701 back into service put the cover back onto it and put the screws into the cover.



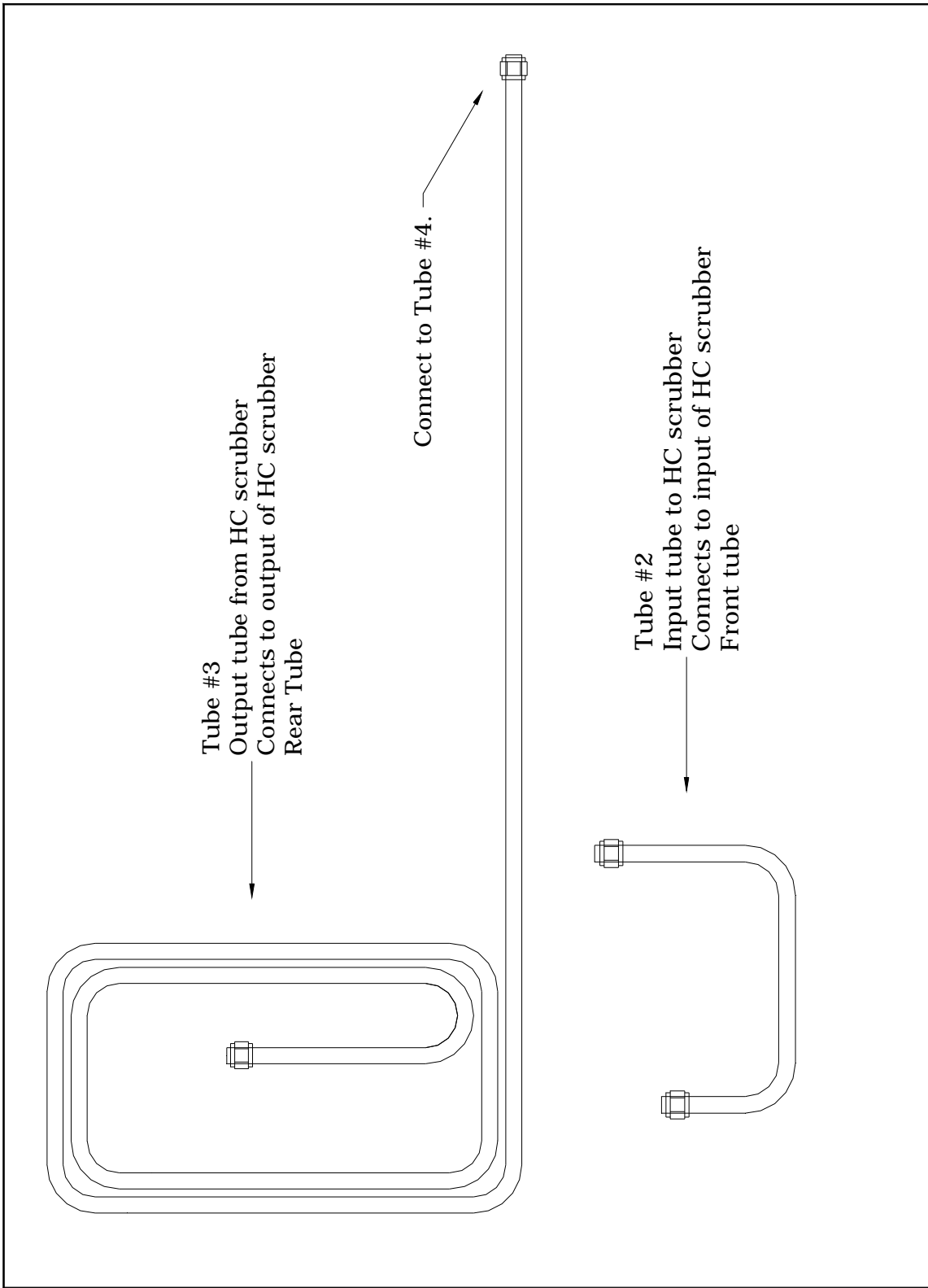
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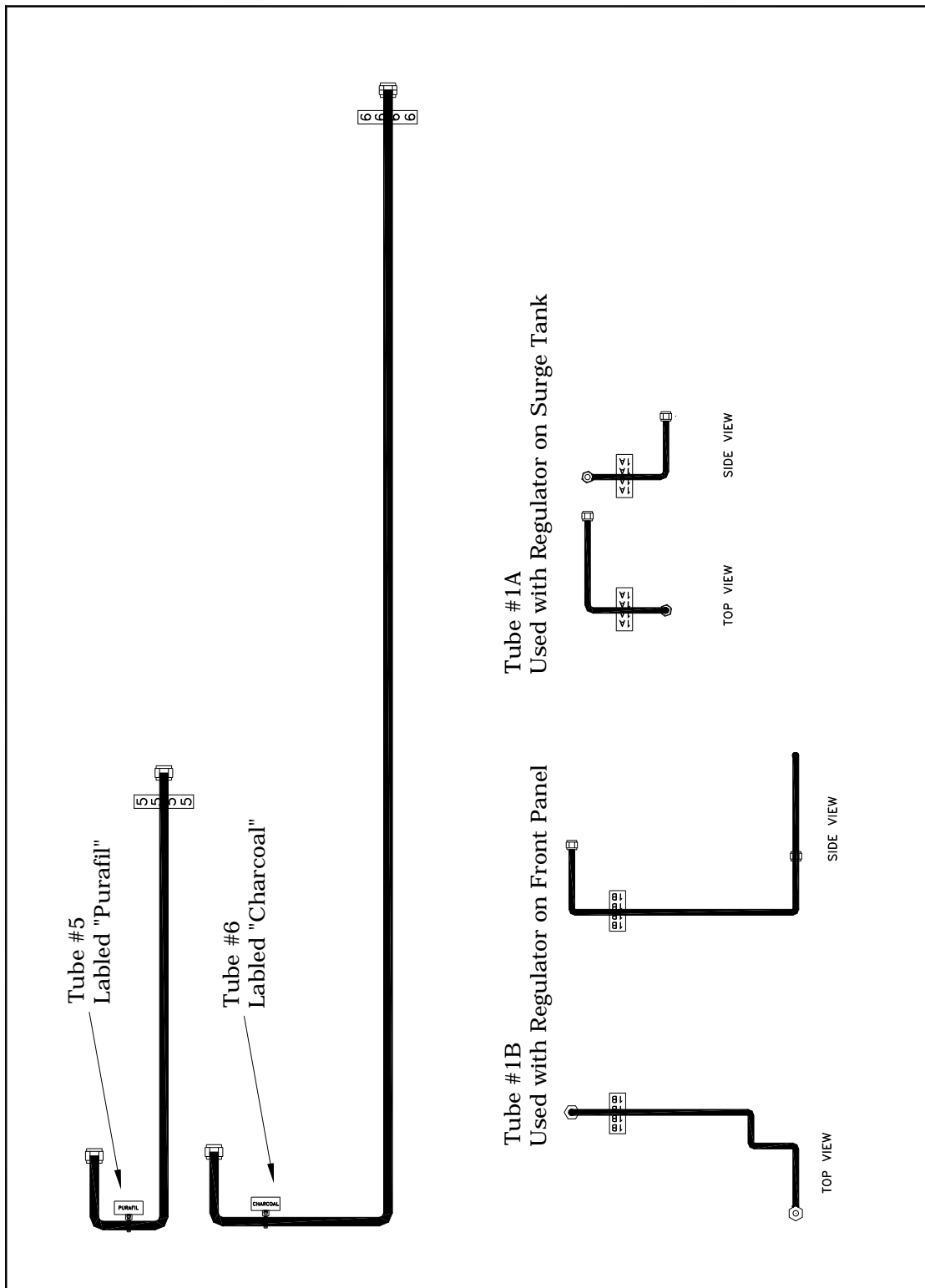


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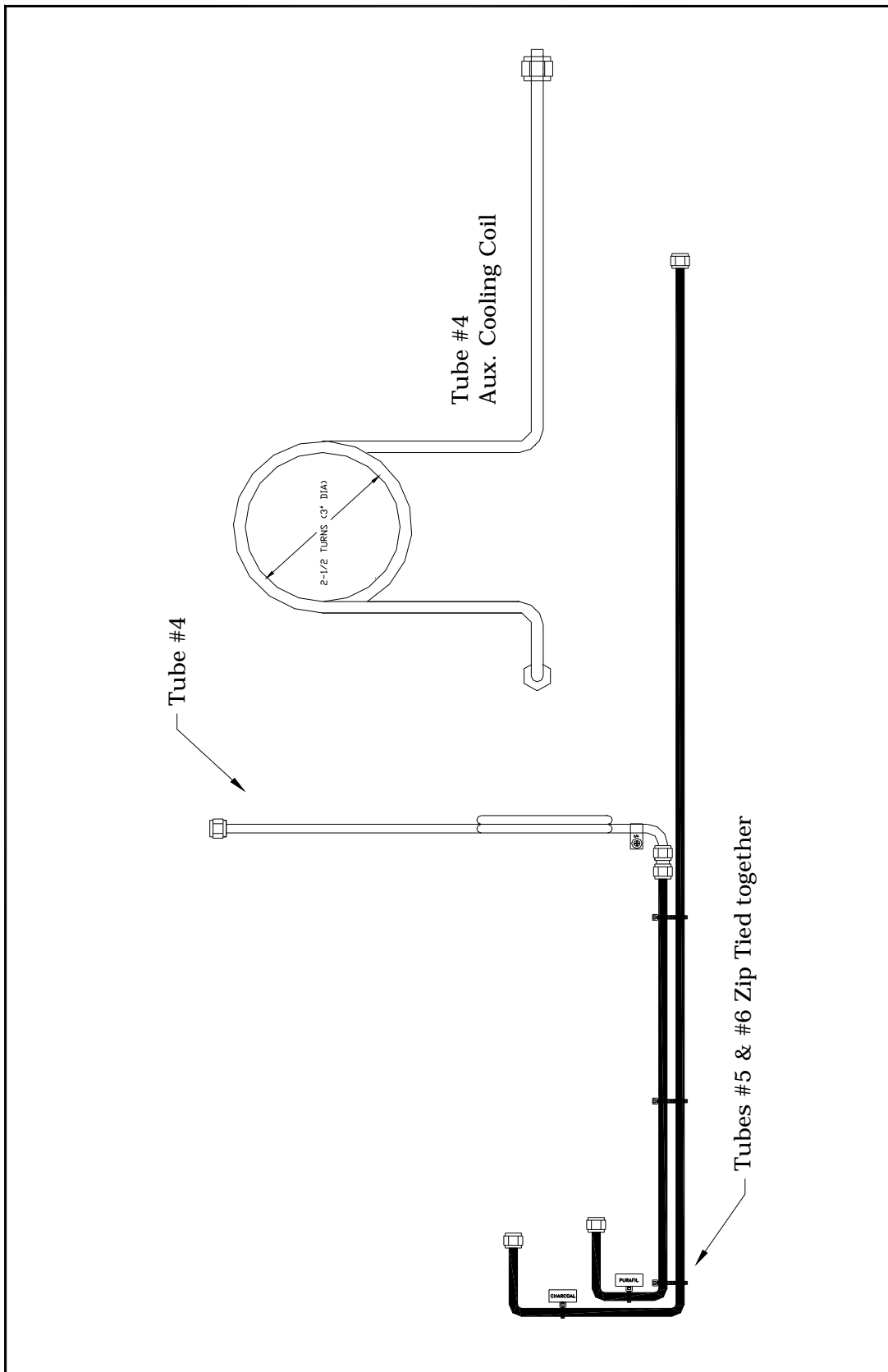


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