



**00-013C
2 May, 2007**

INSTALLING THE PLUMBING RETROFIT KIT# 97 IN THE M701 ZERO AIR GENERATOR

I. PURPOSE:

We have modified the pneumatic flow through the M701 zero air generator to improve the performance of the M701 when the hydrocarbon option is present. With the old design, we have noticed that there may be as much as 2 to 3 PPB of NO_x and as little as 1 PPB of NO_x on some M701's. If you suspect that you may have this problem contact the Sales Department and order KIT000097. The following instructions will guide you through the installation procedure.

II. TOOLS:

9/16" wrench
Small adjustable wrench
#2 Phillips head screw driver.

III. PARTS:

KIT000097

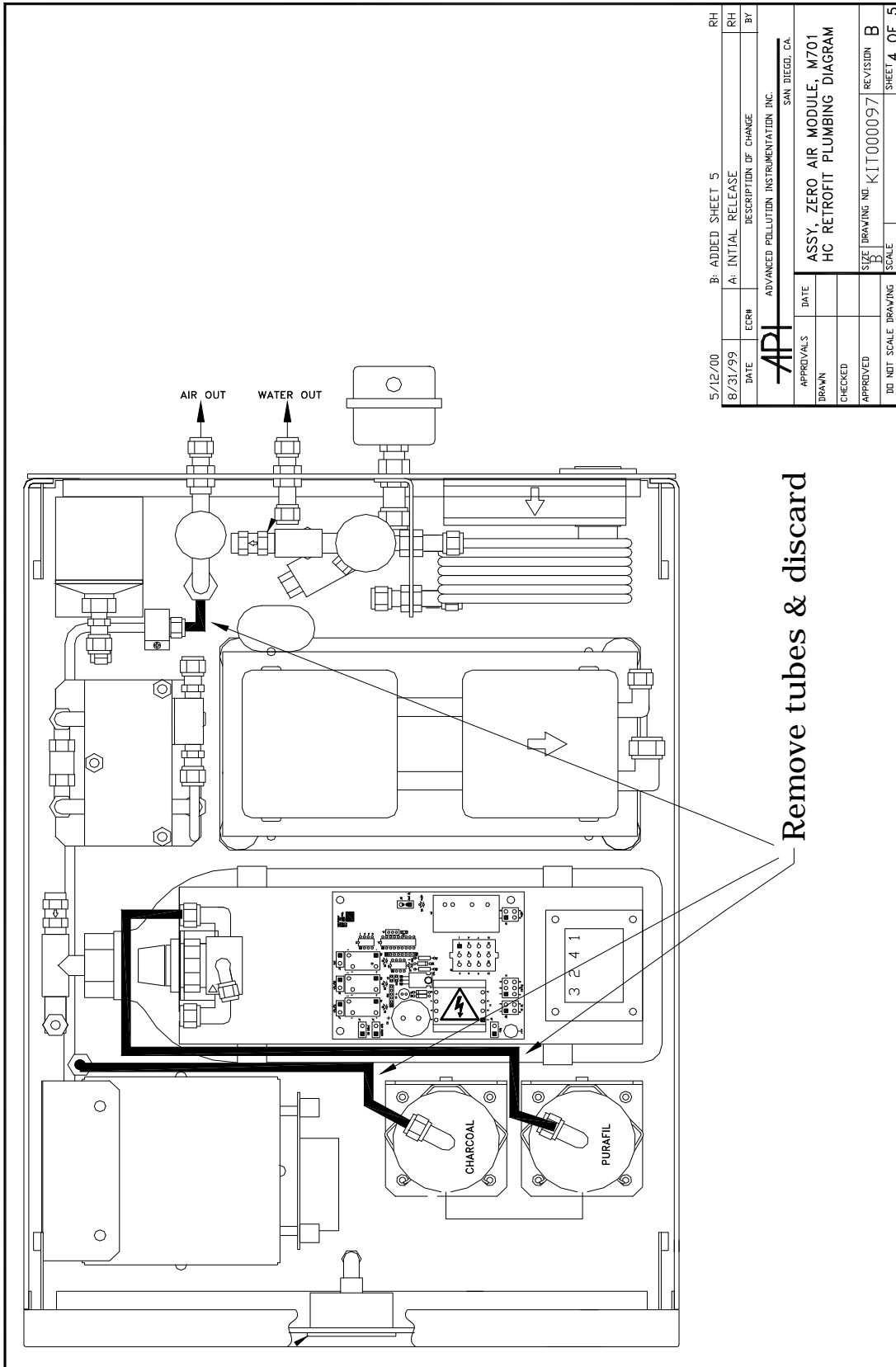
IV. PROCEDURE:


1. Turn off power on the front panel of the M701 zero air generator.
2. Remove power cord from rear panel.
3. Remove cover from M701.
4. Remove the three tubes from the instrument that are highlighted on page 3

Caution: there may be air still in the system that might escape when you open the system, this is not a danger but only a caution.

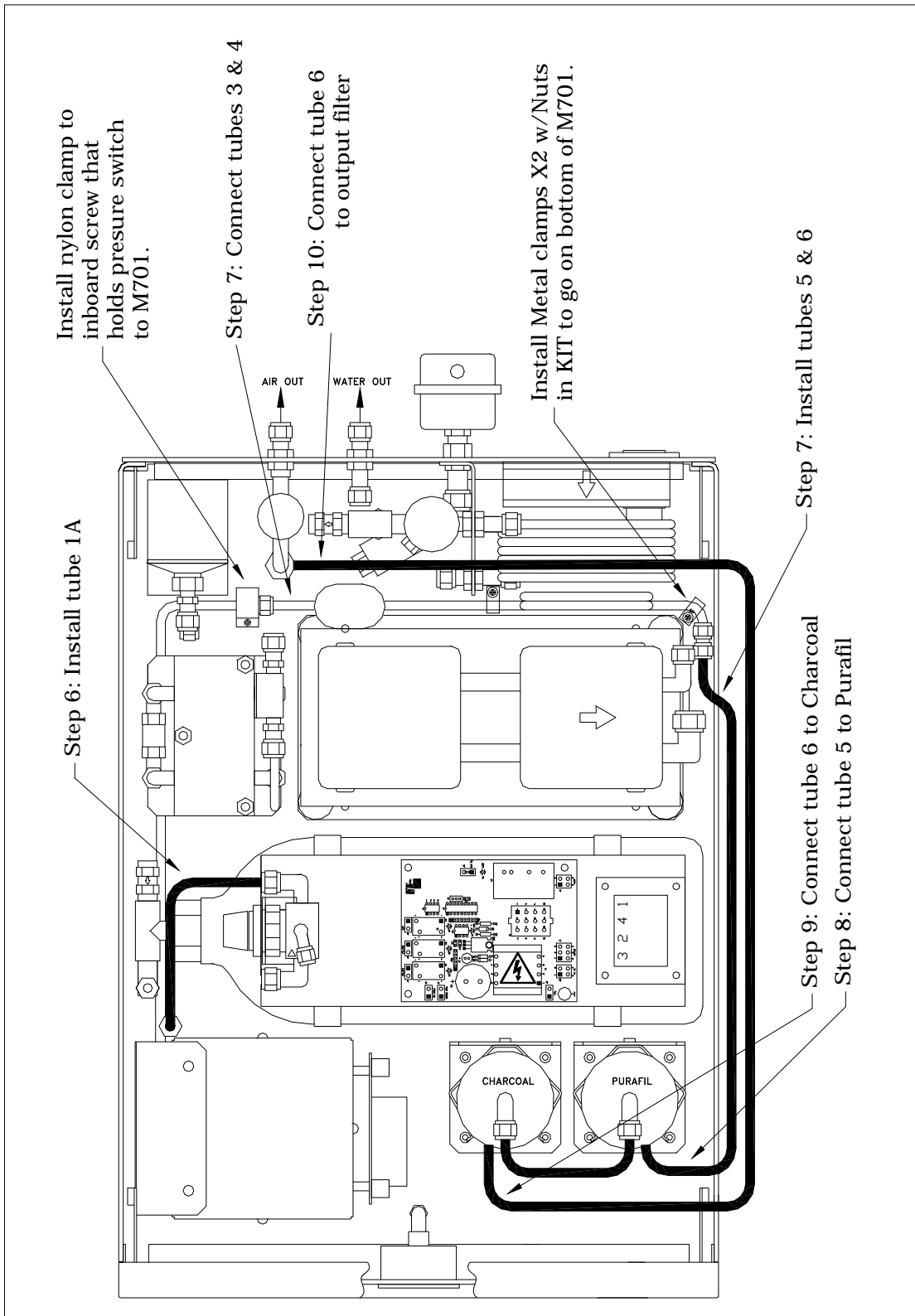
5. Remove the charcoal and Purafil canisters out of the M701 and turn them over so that the openings are at the bottom and the small connector tube that goes between them is on top.
6. Connect tube 1A from the kit from the output of the regulator to the input tube of the HC scrubber (Tube 2). See diagram on page 4, and check diagrams on page 6 and 7 for tubing identification.
7. Install tubes 4, 5 and 6 into the M701. Connect tube 4 to tube 3.
8. Connect tube 5 to the bottom of the Purafil canister.
9. Connect tube 6 to the bottom of the charcoal canister.
10. Connect the other end of tube 6 to the output filter on the rear panel.
11. Check to see if you have tightened all the tube fittings and all new tubing is secure and not rubbing against wires or parts of the 701 generator that move or vibrate.
12. Install nylon clamp with screw and washer to the inboard mounting screw that holds the pressure switch to the floor of the M701 (See diagram, Page 4).
13. Install the two metal clamps to hold down the tubing to the floor of the M701 using the screws provided in the KIT and the nuts that go on the bottom of the M701 (See diagram, on Page 4).

14. 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.
15. 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.
16. 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.
17. 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.
18. Install the cover onto the M701 and secure it with the screws. If you don't put the screws in the cover, it will rattle and make noise.
19. If you have any problems with the operation of the M701 read service note 99-037-B "TROUBLE SHOOTING M701 PRESSURE PROBLEMS".
20. For example if you cap the sample outlet of the M701 and the pump does not shut off in a few minutes, or does not shut off at all, following the service note (99-037-B) will determine what is wrong with the M701.



5/12/00	B: ADDED SHEET 5	RH
8/31/99	A: INITIAL RELEASE	RH
DATE	DESCRIPTION OF CHANGE	BY
	ECR#	
 ADVANCED POLLUTION INSTRUMENTATION INC.		
SAN DIEGO, CA		
APPROVALS	DATE	
DRAWN		
CHECKED		
APPROVED		
SIZE	DRAWING NO.	REVISION
B	KIT000097	B
100 NET SCALE	DRAWING SCALE	SHEET 4 OF 5

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