



INSTALLING AN IZS SYSTEM INTO AN M400A THAT HAS NO OPTIONS

I. SCOPE:

To guide you through installing an IZS system into an M400A analyzer that has no options.

II. PARTS:

KIT000084	IZS system without feedback
KIT000085	IZS system with feedback

III. TOOLS:

7/16" wrench
9/16" wrench
Flat tip screw driver
Phillips head screw driver
Diagonal cutters

IV. PROCEDURE:

1. Remove analyzer from service & put onto a workbench.
2. Remove power from the analyzer & remove the cover.
3. Fold down the rear panel of the analyzer.
4. Screw the zero air scrubber clip onto the inside of the rear panel (see rear panel diagram Page 4).
5. Put zero air inlet fitting into the rear panel in the hole labeled "dry air".
6. Remove the clear tube from the rear panel inlet that is labeled "sample"
7. Locate the three electrical connectors that have the heat shrink on them. Two are between the power supply module (PSM) & the UV lamp power supply module (UV lamp PSM). The other one is in front of the PSM next to the pump.
8. Remove the heat shrink from the electrical connectors with a knife, making sure that you do not cut the cables or damage the connectors.
9. Install the ozone gen. From the kit into the analyzer between the UV lamp PSM, put the ozone gen. into the analyzer such that the valve is facing the rear of the analyzer. Do not tighten the mounting screws yet. (See diagram of analyzer layout & the ozone generator diagram Page 5).
10. Connect the clear tube that you removed from the rear panel sample inlet to the common port of the valve. This is the port that faces the rear of the analyzer.

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11. Connect the longer tube from the kit to the last port of the valve, this is the port that faces the bench.
12. Connect the other end of the tube to the sample inlet on the rear panel of the analyzer labeled "sample"
13. Connect the electrical wires that you located to the connectors on the ozone generator bracket. There should be two electrical connectors.
14. Put the IZS scrubber into the plastic clip on the rear panel so that the larger 1/4" tube is down.
15. Connect the 1/4" tube to the "dry air" inlet of the rear panel connections.
16. Put the 1/8" tube from the IZS scrubber to the particulate filter on top of the ozone generator.
17. Tighten the ozone generator into the chassis using the flat tip screwdriver.
18. Close the rear panel & make sure that none of the tubes bind as you are closing the rear panel. If they bind then re-route the tubes so that they do not bind when you close the rear panel.
19. Remove the flow block from the analyzer (see diagram of analyzer layout & the flow block diagram Page 5 & Page 7).
20. Install the heater & thermistor into the flow block with a light coat of the supplied thermal grease. Install the bracket onto the flow block such that the electrical wires from the heater & thermistor come up from the bottom.
21. Install the flow block into the analyzer with the electrical connectors facing the rear of the analyzer; make sure that you put the insulator between the flow block & the chassis.
22. Be careful that when you install the bracket that you do not damage the pressure transducers.
23. Connect the 5 pin electrical connector from the wiring harness onto the connector on the bracket.
24. If you have purchased the ozone generator with the feed back detector, plug the connector from the detector onto the motherboard J8.
25. Remove the two electrical connectors from the UV lamp PSM. Remove the UV lamp PSM from the chassis of the analyzer by removing the screws from the bottom of the chassis.
26. Install the new UV lamp PSM into the chassis & tighten the screws.
27. Connect the four pin electrical connector into J1 of the UV lamp PSM (the lower connector on the PSM).
28. Install the bench lamp into the middle electrical connector of the UV lamp PSM (J2), & finally install the ozone generator lamp into J3 of the UV lamp PSM (upper connector).
29. Apply power to the analyzer & turn the unit on.
30. Press the following buttons "SETEUP_MORE_VARS_929_ENTER_JUMP_59_ENTER" you should be @ "FACTORY_OPT", if not press the next button until you come to "FACTORY_OPT" then press "EDIT" & change this number to:
 - 2 If you have ozone gen. W/O detector
 - 4 If you have ozone gen. With detector
 Press "ENTER & EXIT" to the sample menu.
4. Turn the unit off & then back on again.
5. Go into the DIAG menu & do the leak check (follow the manual).

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6. If you have any leaks you are going to have to find the leaks & fix them before you calibrate the unit or this unit will not work correctly.
7. Measure the flow @ the rear panel @ the sample port. Press the CALS button & measure the flow @ the “dry air” inlet & they should be close to the same.
8. Press “SETUP_MORE_DIAG_ENTER_NEXT to FLOW CALIBRATION_ENTER enter in the value that you just measured @ the rear panel then press “ENTER_EXIT” to the sample menu.
9. If you have the ozone gen. with the detector, follow the IZS lamp adjustment procedure in your manual.
10. Check to make sure that all of the temps & flows are correct @ the front panel.
11. Calibrate the bench to your standard & then go into the DIAG menu & do the ozone generator calibration per the manual.

If you have questions regarding this procedure or any API equipment, please contact an API Customer Service representative at:

Phone: (858) 657-9800

Email: customerservice@advpol.com

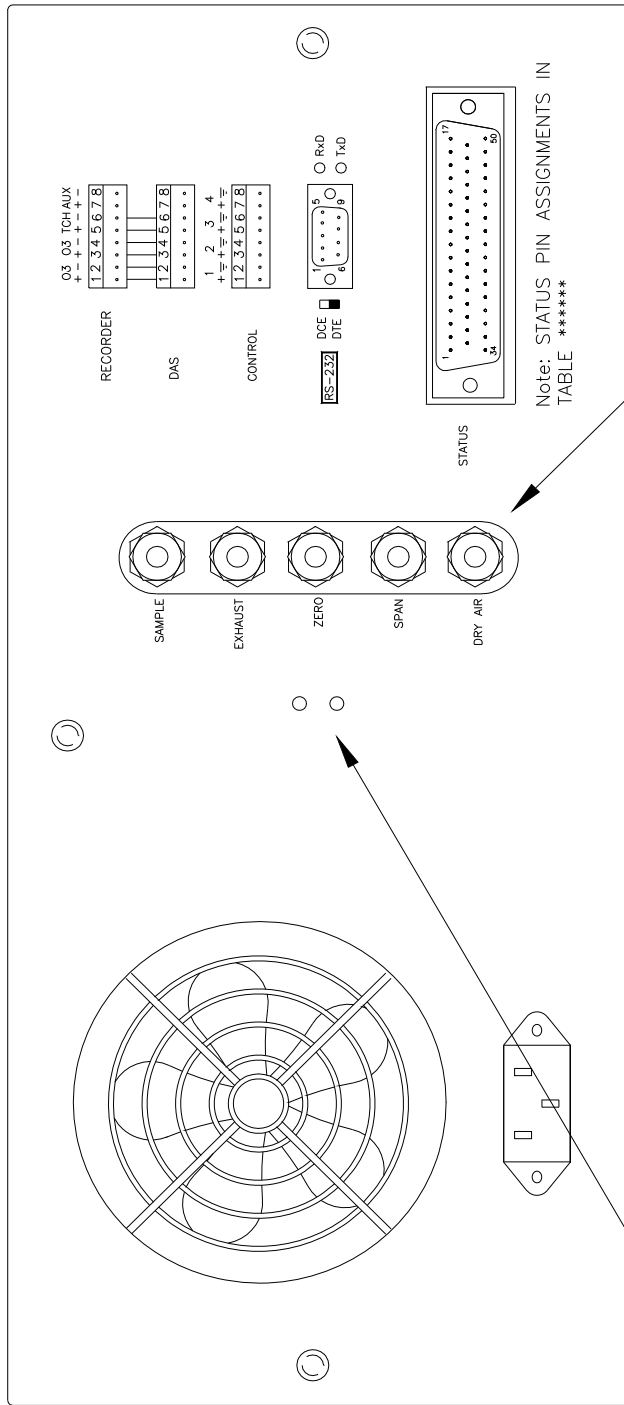
Fax: (858) 657-9816

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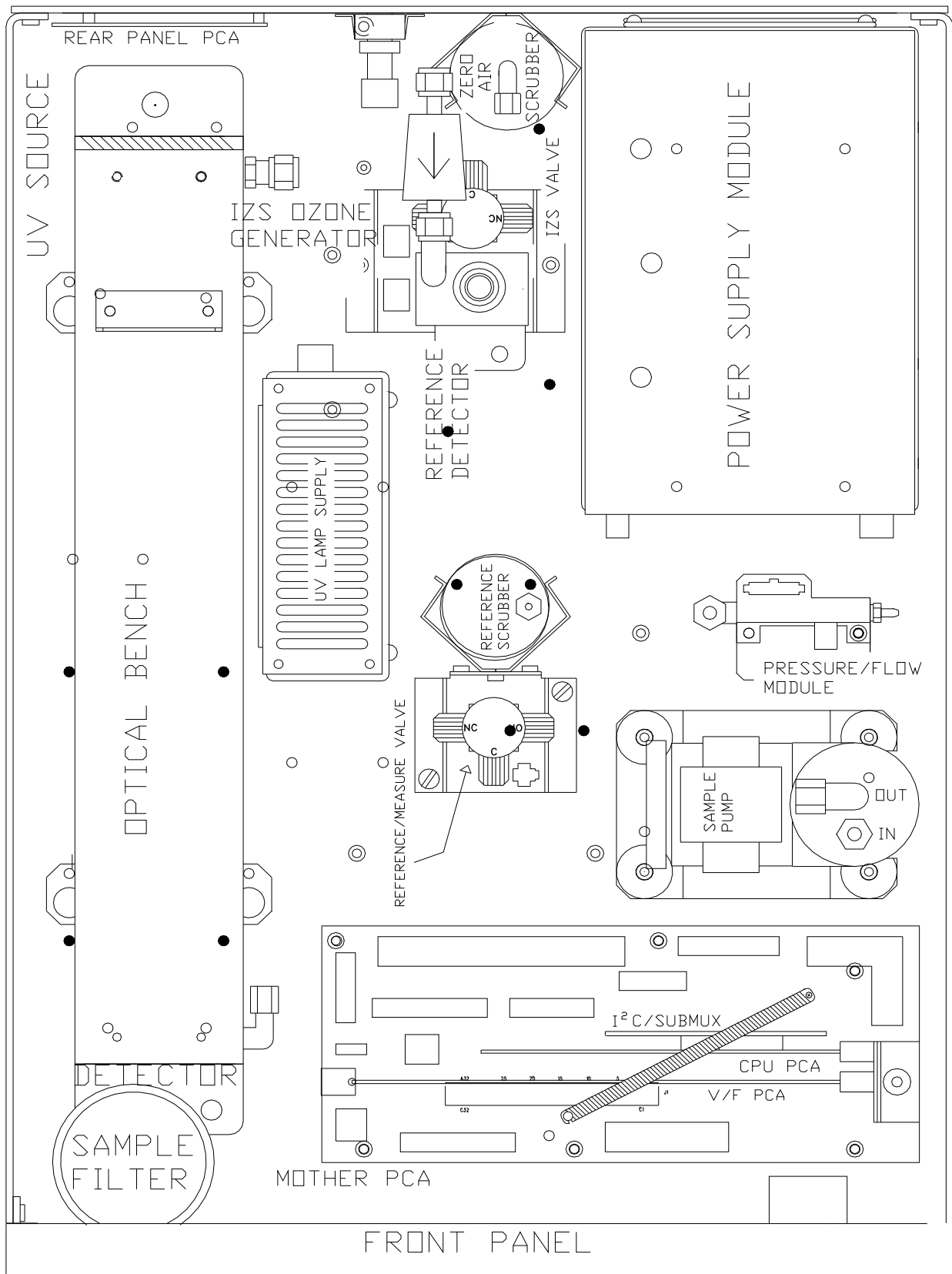
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screws for zero air scrubber
 NOTE: that zero air scrubber mounts in rear panel

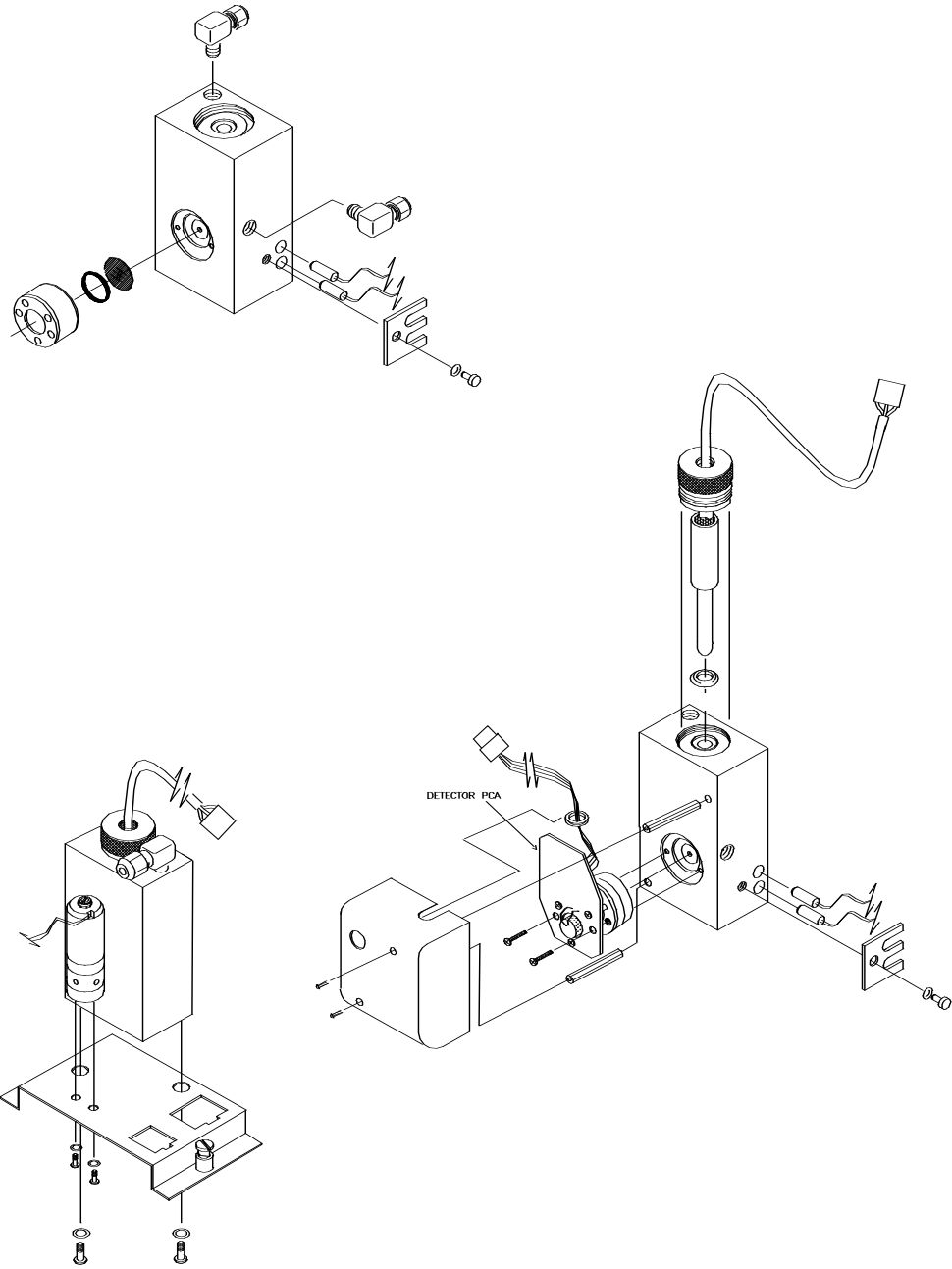
Fitting for Dry air inlet to zero air scrubber



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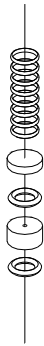
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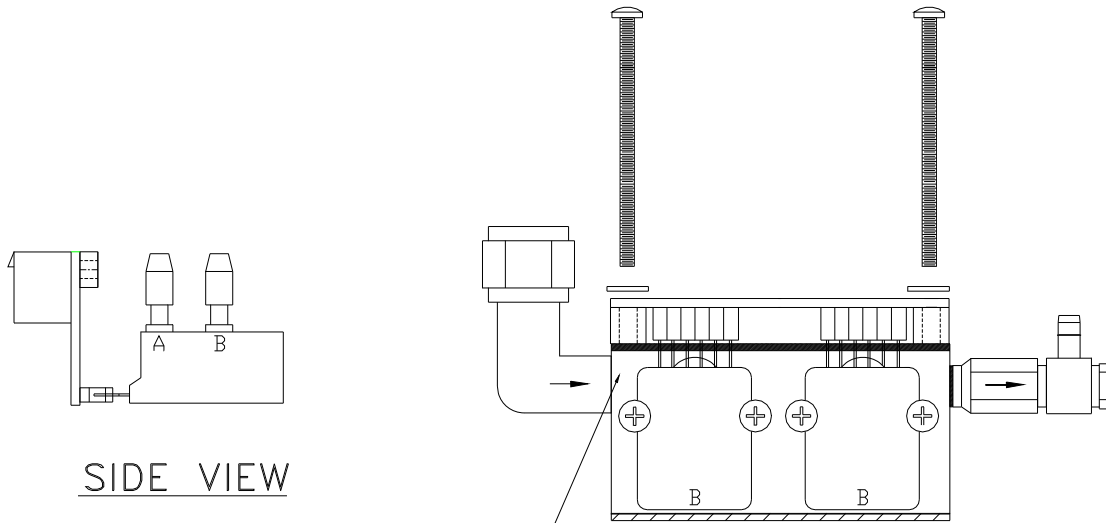
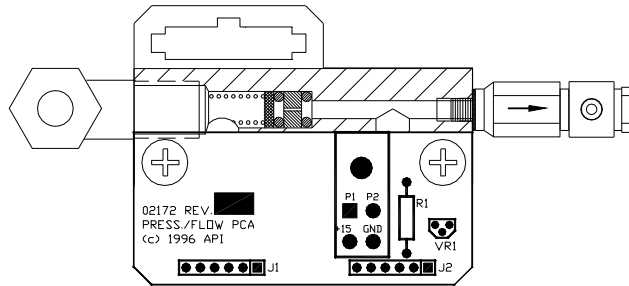
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M400A FLOW BLOCK



DETAIL A



SIDE VIEW

Electrical Connector Bracket

Install insulator between
flow block & chassis

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