



## **INSTALLING AN ANDOVER UV FILTER IN AN API SO2 ANALYZER**

### **I. SCOPE:**

To guide you through installing a new Andover UV filter into your API SO2 analyzer.

### **II. PARTS:**

**KIT 93**            Andover UV filter & O-ring kit

### **III. TOOLS:**

7/16" wrench.

9/16" wrench.

Phillips head screwdriver.

Flat tip screwdriver.

Diagonal cutters.

### **IV. PROCEDURE:**

1. Turn the instrument off and unplug the unit from power.
2. Remove the cover from the unit and set aside.
3. Unplug the following electrical connections (see diagram page 3):
  - Cooler power
  - UV Detector ribbon cable
  - Grounding strap from UV detector cover to chassis
  - Rcell heater and thermistor connector
  - UV lamp
  - Shutter power
  - PMT Pre-amp cable (ribbon cable) at motherboard (J5)
4. Disconnect the 1/4" line and the 1/8" line from the top of the Rcell.
5. Remove the three #8 screws that hold the sensor assy into the chassis and lift the sensor assy out of the chassis.
6. Remove the four screws that hold the UV lamp and shutter cover to the sensor assy. Note if you have an older sensor assy, you might have to loosen screws that hold the shutter solenoid onto the back of the solenoid plate. Do not force the cover assy; if you bend the shutter you might get shutter warnings if the shutter begins to bind.
7. Remove the four screws that hold the UV filter to the shutter plate (see diagram page 5).
8. Install the new UV filter into the hole that the old one came out of.

NOTE: MAKE SURE THAT THE ARROW ON THE FILTER POINTS TOWARD THE CELL. IF THE ARROW DOES NOT POINT TOWARD THE CELL YOU MIGHT HAVE PREMATURE FAILURE OF THE UV FILTER.

9. Install the O-ring that is in the kit on top of the filter that you have just installed.
10. Put the retaining ring onto the O-ring & replace the screws that hold the retaining ring, O-ring & filter onto the plate.
11. When you Replace the UV filter with the new filter, ensure that you do not leave fingerprints on the filter when you install the new filter.
12. Reinstall the shutter cover and UV lamp assy in the reverse order of removal.
13. Reinstall the sensor assy into the unit in the reverse order of the removal and reconnect all of the electrical connectors (make sure that you don't forget the ribbon connector on the bottom of the detector).
14. Check the shutter operation to ensure that the shutter does not bind when it closes or opens.
15. Follow the directions in the manual for peaking the lamp & then do the lamp calibration.
16. Follow the quick calibration procedure in 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](mailto:customerservice@advpol.com)

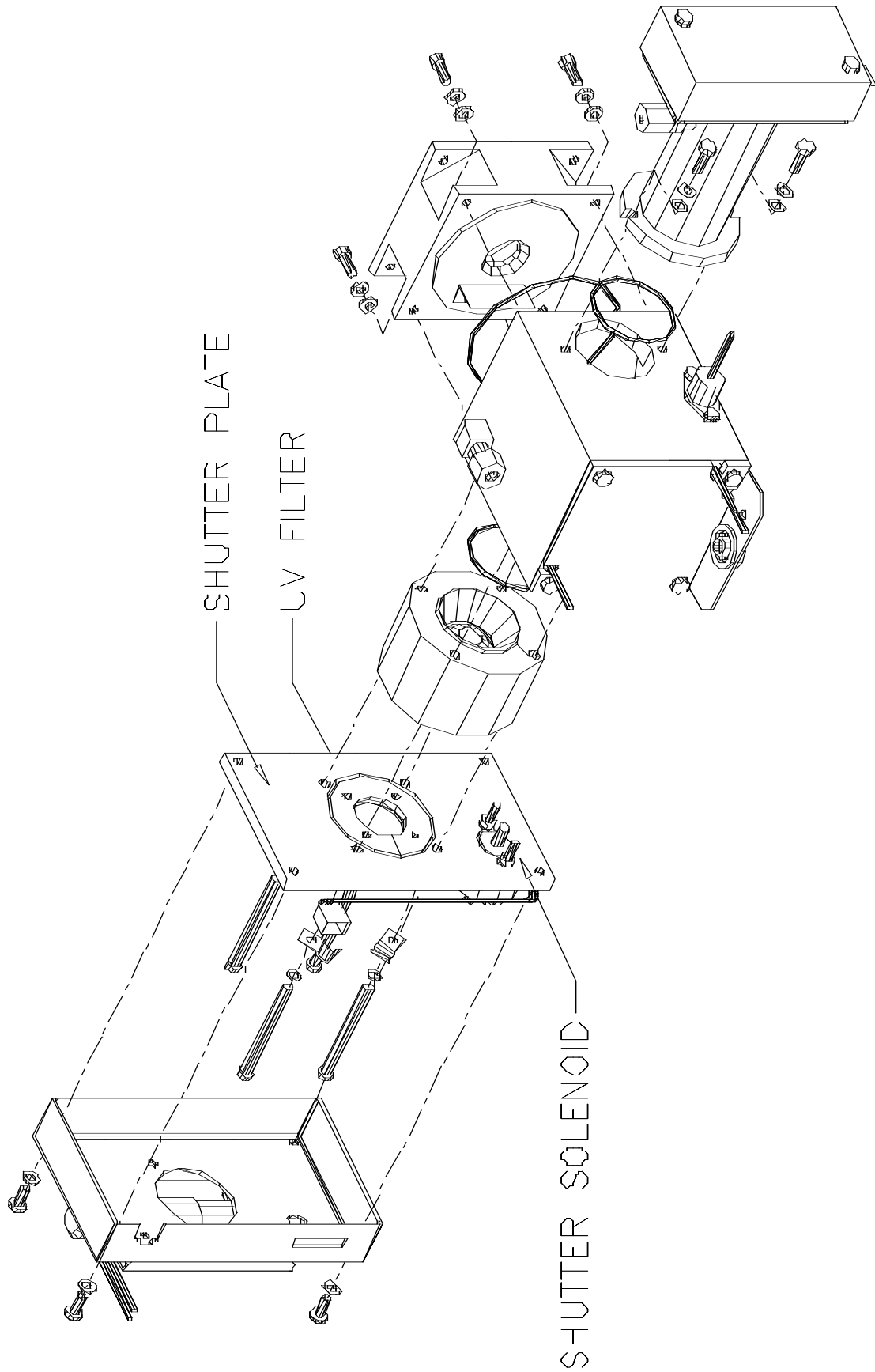
Fax: (858) 657-9816

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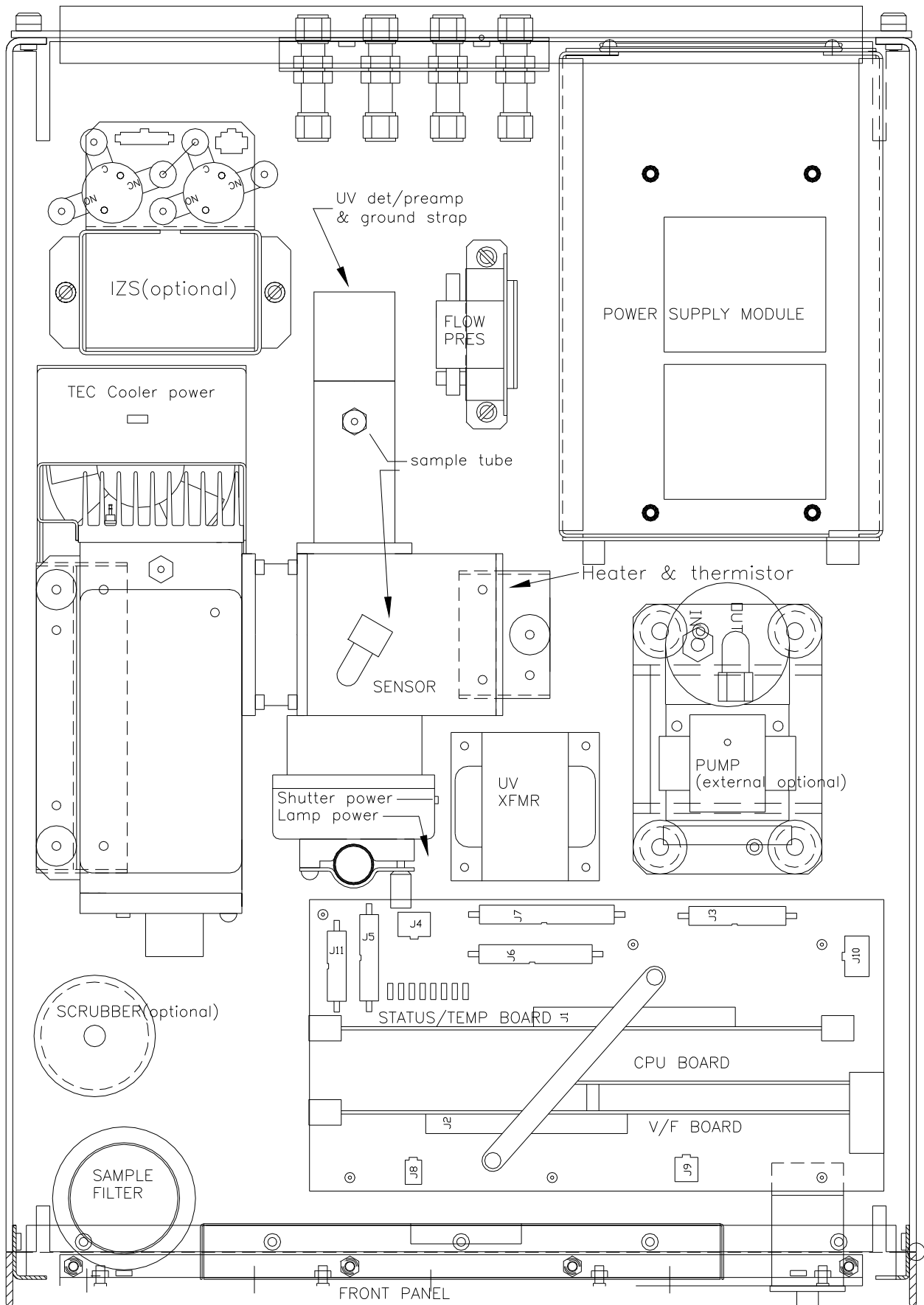
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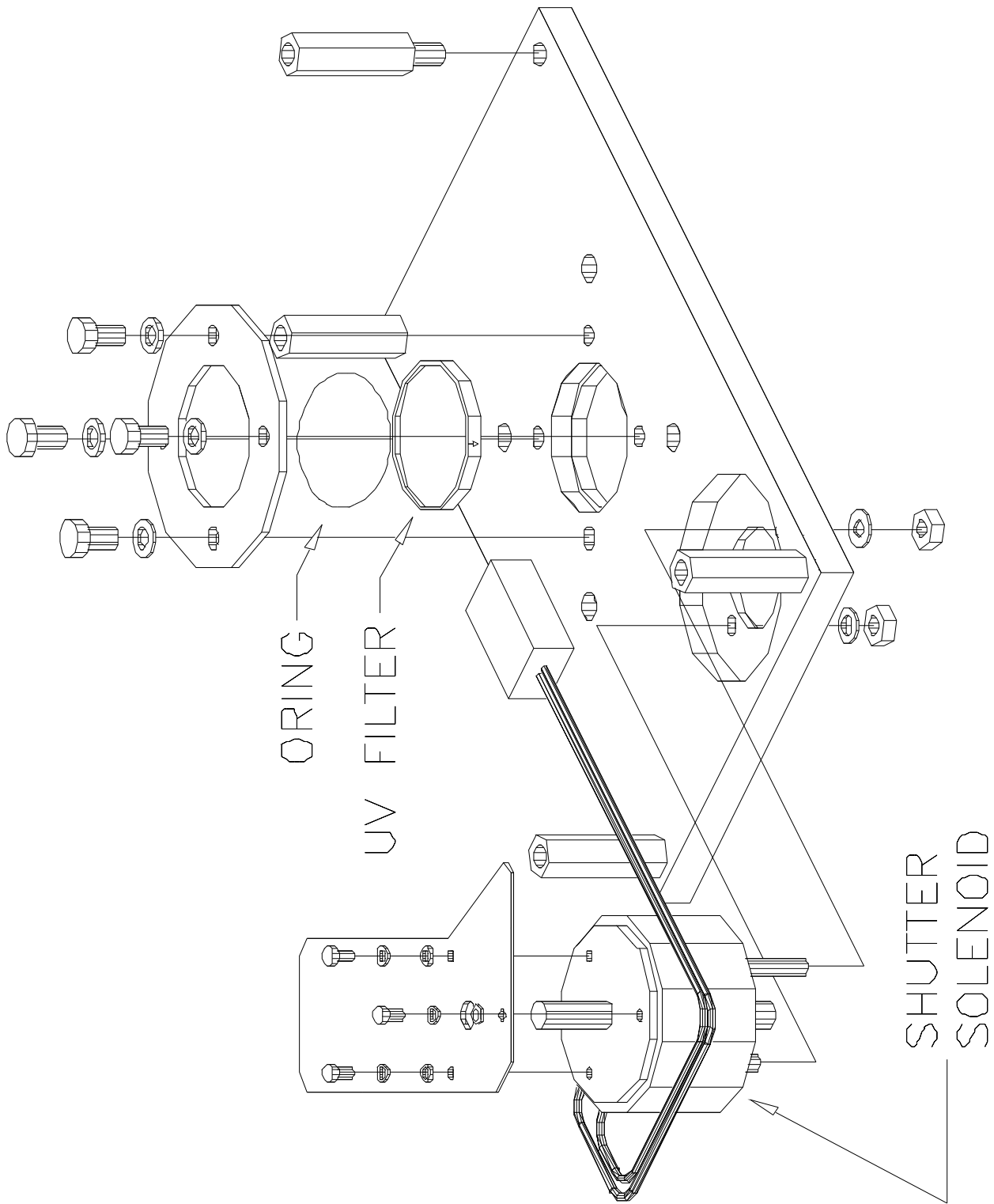
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