



04-012C
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UV LAMP REPLACEMENT/ADJUSTMENT PROCEDURE IN "A" AND "E" SERIES ANALYZERS

I. PURPOSE:

To inform the user on the proper steps to replacing and recalibrating a UV lamp in a SO₂ analyzer and to deduce when is the proper time to replace a Lamp. This procedure works for all "A" and "E" series Sulfur analyzers.

II. TOOLS:

Potentiometer Trimmer or a small flat head screwdriver
Phillips head screwdriver

III. PARTS:

KIT000236 (A or E series UV Lamp)

IV. PROCEDURE:

With the instrument on for at least 30 minutes, remove the screws holding the cover in place and remove the cover.

1. Use the <TST> buttons on the front panel until the UV LAMP reading is displayed.
2. Adjust the Gain potentiometer on the UV reference preamp until the UV LAMP reading is at its minimum value.
3. Refer to figure 1 for locations of the UV lamp and Gain potentiometer for "E" style instruments. Refer to Figure 2 for location in "A" style instruments.
4. Loosen the thumbscrew to allow the lamp to move freely. When adjusting the UV lamp make sure to hold onto the heat shrink portion of the lamp and not the very top. First, slowly move the UV lamp up and down while monitoring the UV LAMP display to read maximum value. Then slowly rotate the lamp left and right while monitoring the UV LAMP display to read maximum value
5. Finger tight the thumbscrew.
6. Adjust the UV reference POT to approximately 3500 mV.
7. If the UV lamp will not adjust to 3500mv then you should plan on replacing the UV lamp soon. If the UV LAMP display is lower than 1000mV after peak adjustment, it is recommended to have a replacement lamp on hand. Most UV lamps that produce a UV lamp reading above 600 mV are still in good condition and will give correct readings. If the UV LAMP reading is below 600 mV after peaking the lamp it will cause the instrument to read incorrectly and must be replaced.
8. If you have to replace the lamp go to step 9. If the UV lamp is good go to step 13.
9. Turn off power to the analyzer and unplug the power cable.
10. Disconnect the connectors on each wire of the UV lamp for an "A" series analyzer or the single 8pin connector for an "E" series analyzer. Loosen the thumbscrew and pull the UV lamp out of its holder and replace it with the new UV lamp connecting both wires back up (There is no polarity on the UV lamp and it can be wires can be hooked both ways) if you have an "A" or the single 8pin connector if you have an "E".
11. Plug the analyzer back in and turn the power back on. Allow 30 minutes for warm up.
12. Go back to step 2 of this procedure and repeat the UV lamp peaking process.

13. The next step is to calibrate the UV lamp. To do this follow press the following buttons on the front panel. <Setup><More><Diag><Enter> Press <next> until “UV Lamp Calibration” is displayed and Press <Enter>. The analyzer will then display the current UV lamp reading. Press <Enter> and then <exit><exit><exit> to return to the front panel.
14. Replace the Cover to the analyzer and return it to normal operation.
15. After following these steps you will have to perform a factory calibration on the analyzer. Please see your operations manual for instruction on how to perform this procedure.

FIGURE 1
E-SERIES INSTRUMENTS

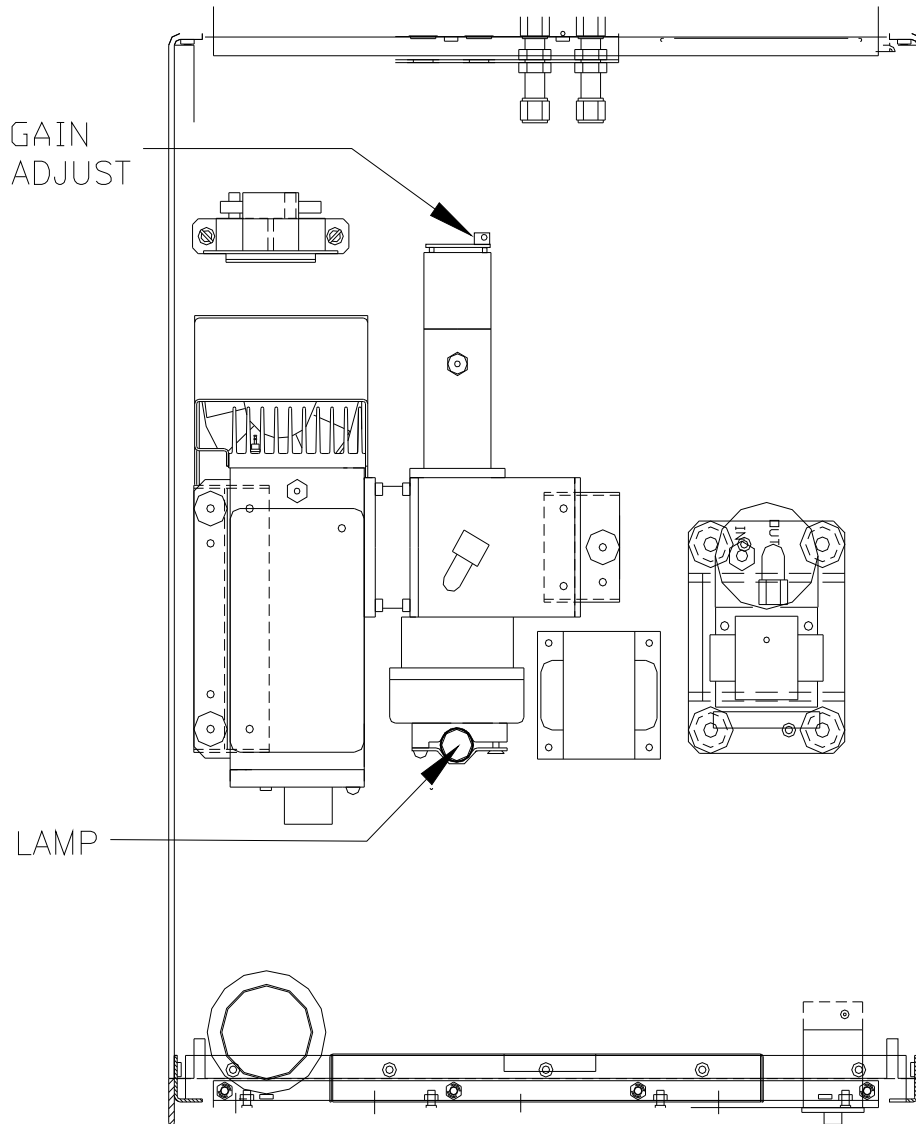


FIGURE 2
A STYLE INSTRUMENTS

