



REPLACING OF UV LAMPS IN API M100A SERIES ANALYZERS

I. SCOPE:

To help you with the setup of a new UV lamp installation into an API M100A series analyzer.

II. PARTS:

KITxx1

III. TOOLS:

Phillips head screwdriver

IV. PROCEDURE:

1. Remove the cover and power from the analyzer.
2. Remove the two white electrical connectors from the old UV lamp.
3. Loosen the thumbscrew and the two Phillips head screws that hold the UV lamp into the lamp holder.
4. Remove the lamp from the lamp holder by pulling up gently. If the lamp does not move, then loosen the screws more and then try again. **BE CAREFUL WITH THE LAMP AS IT IS GLASS AND EXCESSIVE FORCE WILL BREAK IT.**
5. Install the new lamp and tighten the two Phillips head screws until the holder is tight enough to prevent the lamp from slipping down when you let go of the lamp, but loose enough so that you can grab the lamp and turn it.

CAUTION: WHEN YOU ARE TRYING TO MOVE THE LAMP DO NOT GRAB THE LAMP FROM THE TOP, AS YOU WILL SPIN THE PLASTIC TOP OFF THE LAMP. GRAB LOWER ON THE LAMP SO THAT YOU HAVE A HOLD ON THE GLASS PORTION OF THE LAMP.

6. Plug the lamp into the two white electrical connectors.
7. Turn the unit on and allow the lamp to warm up for approximately two hours.
8. When the lamp is warm and stable, push the test button on the front panel to get to the UV LAMP mV.
9. Grab the lamp on the glass portion and turn the lamp left and right to obtain the highest number then push the lamp up and down to obtain the highest number. If the UV lamp voltage on the front panel exceeds 5000 mV then you are going to have to "off" peak the lamp so that this reading is 3500 mV. To "off" peak the lamp push the lamp straight down slowly until the UV lamp voltage on the front panel is 3500 mV.

10. When this is done follow the UV lamp calibration in the factory calibration section 9.1.6 in your manual. When you are done with this, you can calibrate the analyzer and put it back into service.

NOTE: UV lamps typically decrease in intensity over its life but some lamps will increase in intensity (which is why you peak the lamp to 3500 mV not 4500 mV) when they are new. They will usually settle out after 3 weeks or so. When this shifting of intensity is going on you are going to be collecting valid data, as the UV lamp compensation will compensate for the lamp intensity fluctuations. This compensation is dependent on the lamp calibration being done.

ENSURE THAT ANY TIME YOU MOVE THE LAMP YOU DO THE LAMP CALIBRATION IN THE DIAG MENU.