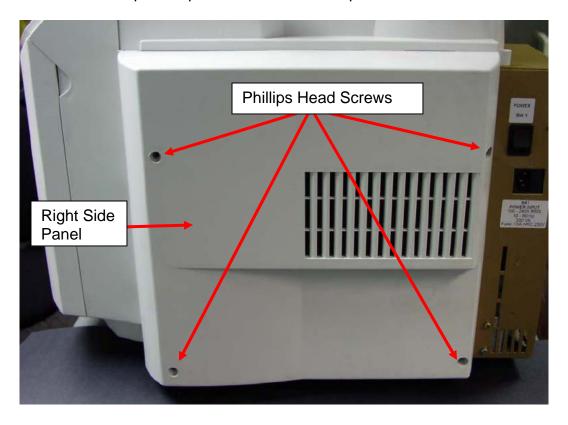
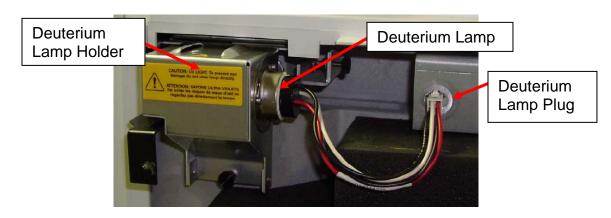


Changing the Deuterium Lamp on an S-Series or iCE 3300

To change the Deuterium lamp on the S-Series or iCE 3300 AA you will need a new Deuterium lamp. The part number of the lamp is P/N 9423 420 30004.



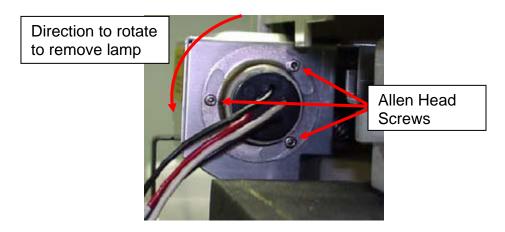
Remove the four Phillips head screws which hold the right side panel on. The panel can then be removed to gain access to the Deuterium lamp. Make sure the old deuterium lamp has been turned off in the software. Be careful the lamp may be hot and you should wait for it to cool down.



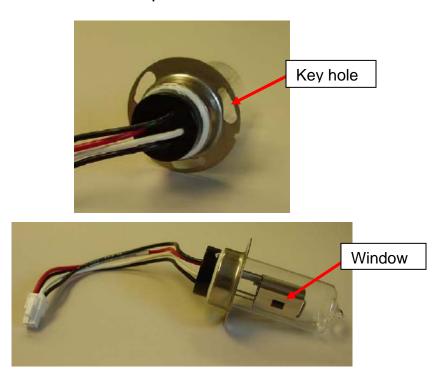
Scientific Instrument Division 5225 Verona Road Madison, WI 53711 1-800-532-4752 <u>www.thermofisher.com</u>



Unplug the deuterium lamp plug.



Loosen the three Deuterium lamp screws. These screws do not need to be removed. Rotate the Deuterium lamp base until the key holes align with the screws. Remove the Deuterium lamp.

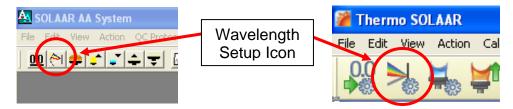


Note: Make sure the glass of the deuterium lamp is clean and free from finger prints.

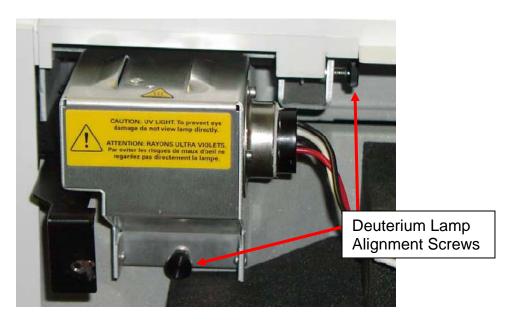


Insert the new Deuterium lamp into the holder aligning the three key holes with the screws on the holder. That will put the small window towards the instrument. Tighten the screws holding the lamp in place. Plug the Deuterium lamp connector back into it's socket.

The lamp will now need to be aligned. Power up the instrument and restart or reconnect the software. Select a method which uses the Deuterium background correction. This normally is any wavelength up to 320nm. Above 320nm the Deuterium spectrum is very weak.

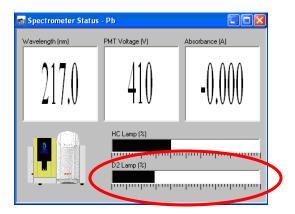


Using the wavelength setup icon will setup both the wavelength and the Deuterium signal.

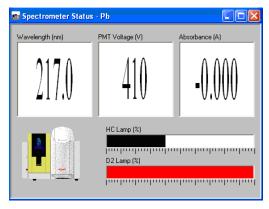


We will be using the Deuterium lamp alignment screws to maximize the Deuterium signal.

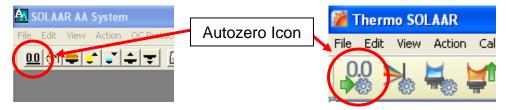




You will be using the D2 Lamp signal bar on the Spectrometer Status window of the SOLAAR software. Adjust the two Deuterium lamp alignment screws to maximize the bar graph.



If the bar graph turns red then the D2 Lamp signal has over-ranged. This can be corrected by clicking on the autozero icon (shown below) in the software and allowing the instrument to auto-zero the signals. Continue adjusting the two lamp alignment screws until the bar graph is maximized.



Once the Deuterium lamp signal is maximized then replace the side panel on the instrument using the 4 Phillips head screws.