



Replacing the M6100 Hg Lamp

Tools and spare parts needed to complete this procedure:



.050 hex wrench, Phillips screwdriver

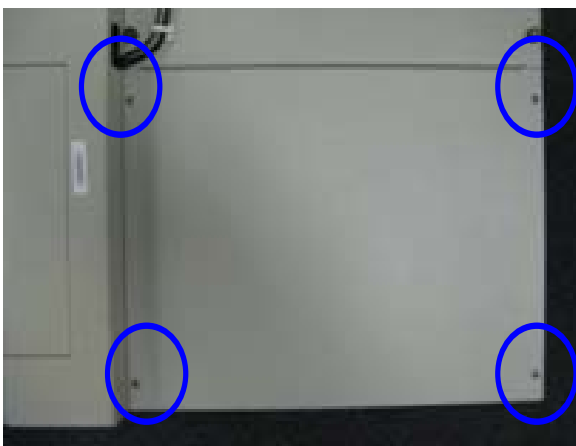


Hg lamp SP5603

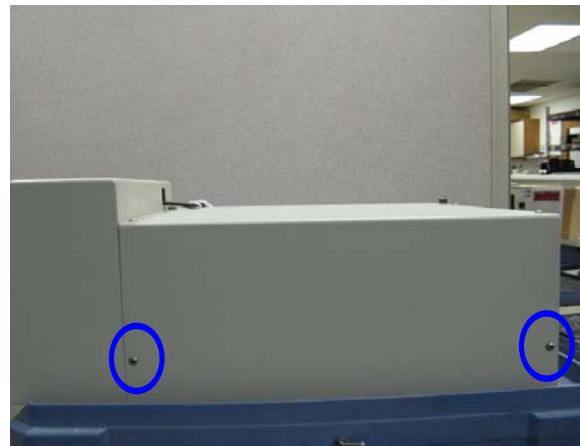
1. Ensure the software is closed and the power to the system has been disconnected.

Note: If it is necessary to disconnect the cabling from the autosampler, label and/or make note of the connections.

2. Remove the autosampler from the top of the mercury instrument and set aside.
3. Remove the four screws on the top cover and the two on the right side to gain access to the electronics.



Top view



Right side view

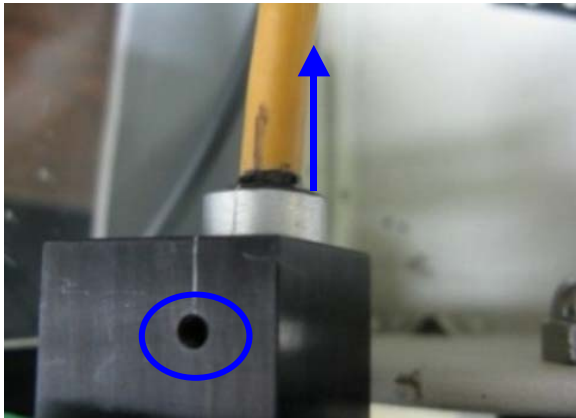
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4. Locate the lamp housing assembly inside the electronics case.



Lamp housing assembly(top left)

5. Loosen the recessed setscrew and remove the used lamp from the assembly.

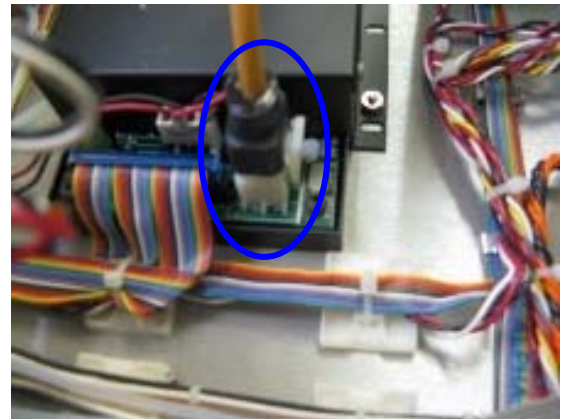


Set-screw

6. Disconnect the spent lamp and connect the new lamp's lead to the lamp manager.



Lamp Manager



Lamp lead connector

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Note: Some lamp leads have a “catch” which must be released to disconnect the lead, some do not.

7. Align the lamp with the factory mark or etching in the 12 o'clock position (in line with the set-screw).



Scribe and Mark



Setscrew

8. Carefully insert the lamp into the housing until it just touches then pull back approximately 1mm.

9. Tighten the set-screw and turn on the power to the system and lamp.

10. Allow a 15-minute warm-up and check the lamp voltage as shown.

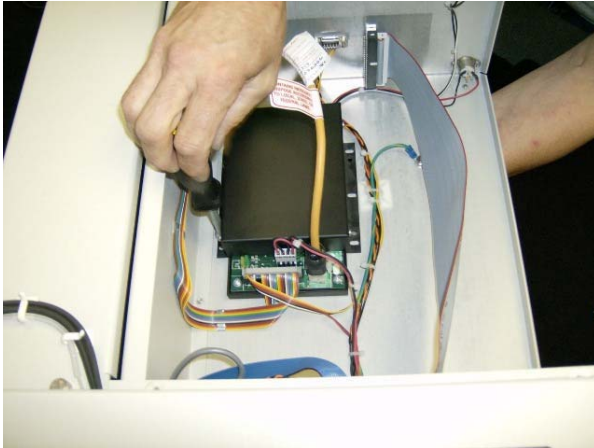


Using a voltmeter on auxiliary pins 6 & 7

Note: In most cases, adjustment of the lamp manager potentiometer is not necessary. If the lamp voltage is in the range of 0.6 – 0.85 VDC, close the case and operate the instrument normally. If the voltage is not in the range 0.6 – 0.85 VDC an adjustment is necessary to get the longest possible life cycle from your new CETAC lamp.

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11. If adjustment is needed, use a 5/16 nut driver to remove the 4 nuts from the lamp manager while holding each screw with a #2 Phillips as demonstrated.



Removing lamp manager

12. Use a jewelers standard screwdriver to rotate the potentiometer fully Clock-Wise until a faint clicking sound is heard.



Lamp Intensity potentiometer

13. Rotate the potentiometer counter Clock-Wise until a faint clicking sound is heard(both of the LEDs on the lamp manager will go out).

Note: Clock-Wise increases the voltage and counter Clock-Wise decreases the voltage.

14. Rotate the potentiometer clock-wise again until the lamp voltage reads approximately .700 volts DC and let it stabilize.

15. Make fine adjustments until the voltage is stable between 0.65 and 0.75 volts DC.