



Replacing the M6100 Hg Filters

Burnt Hg filters lower throughput and sensitivity. The filters(SP5954) cannot be cleaned they must be replaced.



Burnt filter

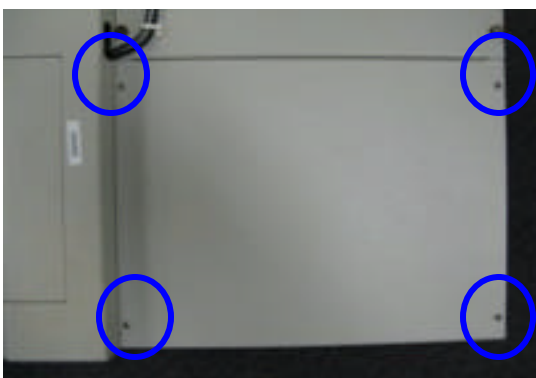


Tools needed

1. First ensure the software is closed and the power to the system has been disconnected.
2. Remove the autosampler from on top of the unit and set aside.

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

3. Remove the four screws on the top cover and the two on the right side to gain access to the electronics.

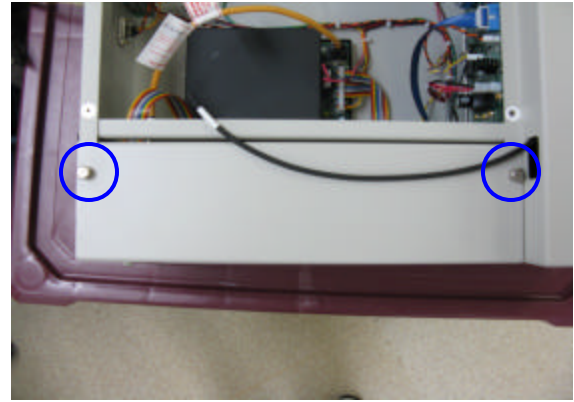
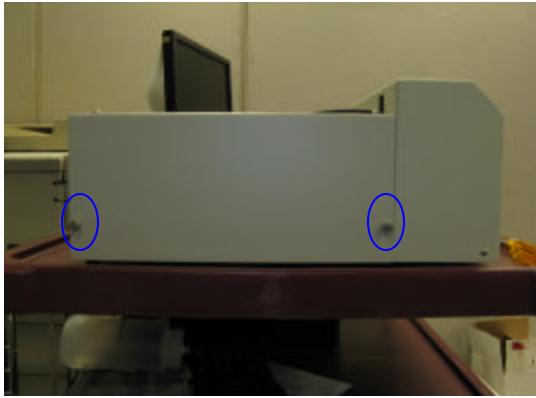


Top view



Right side view

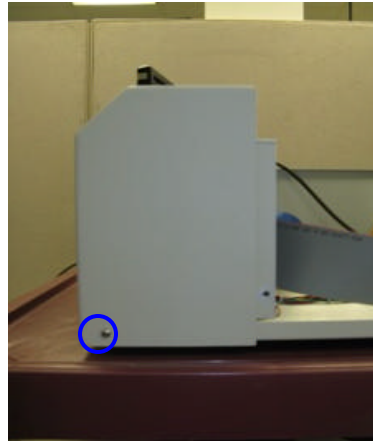
4. Loosen the two thumbscrews on the left side panel and the two on top of that panel. Set panel aside.



5. Remove the screws on the sides of the front cover. Feed the tubing ends through the access port as you pull the front cover forward.



Left



Right



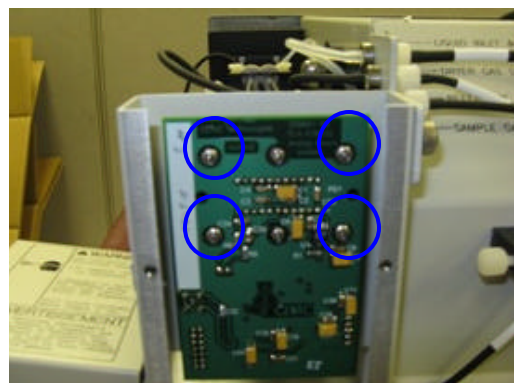
Access port

6. Remove the two screws and cover to expose the CCD board, then remove the four outside screws on the CCD board.

Note: Do NOT remove the two middle screws.



Cover



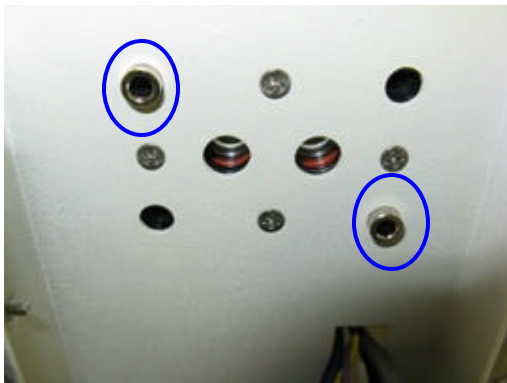
CCD board

7. Carefully pull the CCD board straight out.

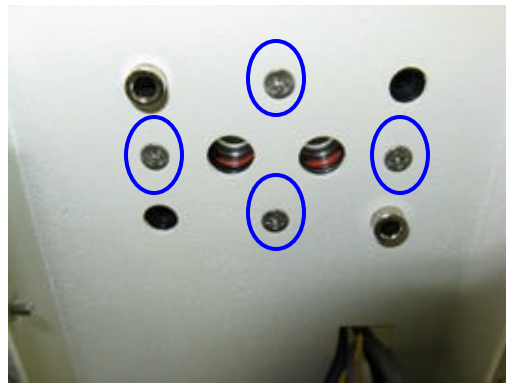
Note: Disconnecting the black coax cable may be necessary.



8. Pull the two standoffs out and remove the four bracket mounting screws.



Standoffs

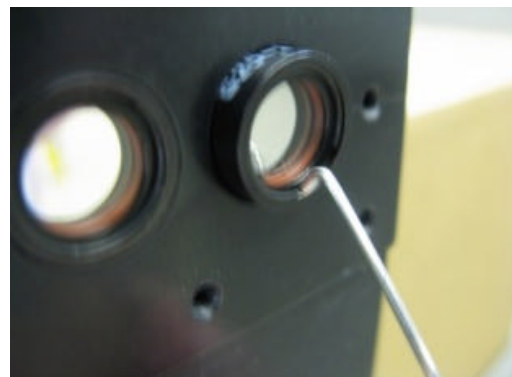


Mounting screws

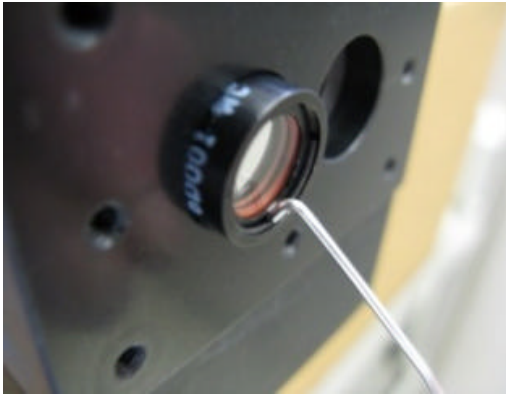
9. Make a hook on an end of the paperclip(A) and remove the burnt filters from the camera block(B,C).



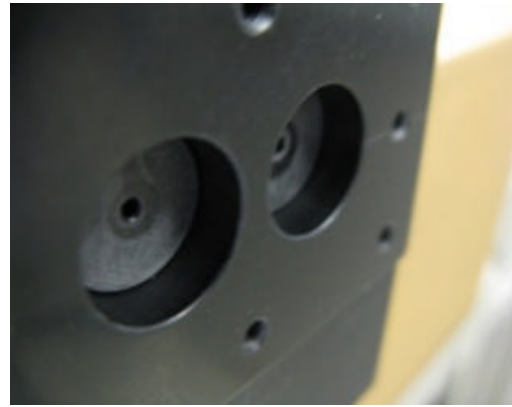
A



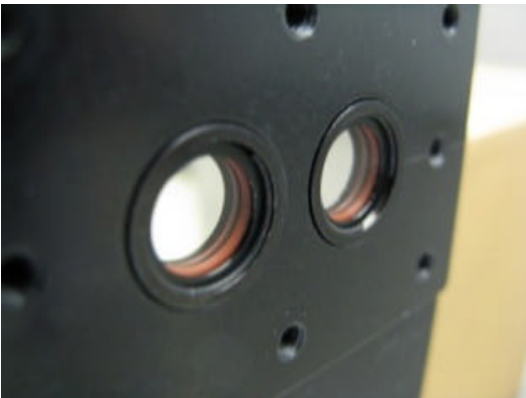
B



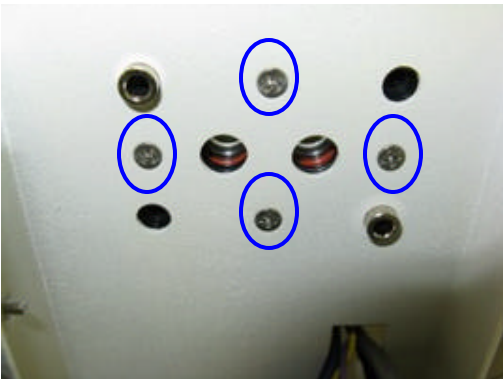
C



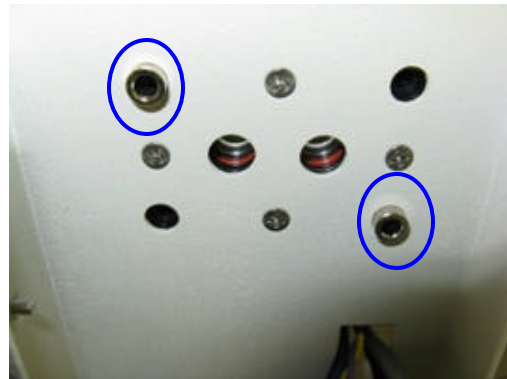
10. Ensure filters are clean(both sides), no particulate or fingerprints. Insert the new filters as shown.



11. Remount bracket with the four screws and insert the standoffs.

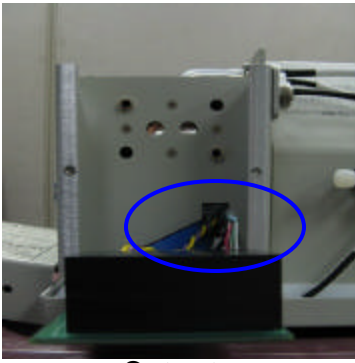


Screws

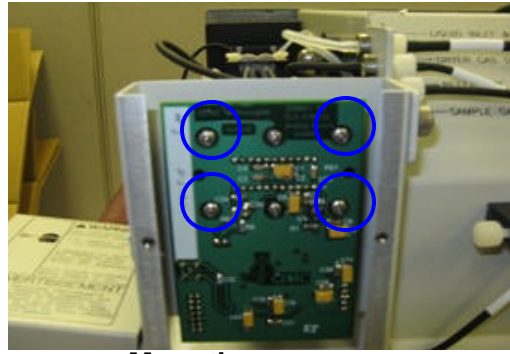


Standoffs

12. Ensure cables are routed through the cutout, remount the board.



Cutout



Mounting screws

13. Replace the cover.



Cover

14. Double check connections and apply power.

15. Before closing the case, allow instrument to warm up and test by going into the software.

16. Reassemble the case and operate normally.