VARIAN

Number: SHT-900LC-09

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SERVICE How To

Model Number:	Originator:	Topic
900 Series LC	**Des Wichems**	**Replacement of the PDA detector main PWB in a 900 Series LC system**

Removal & Replacement Procedures for the Main PWB for the PDA detector in a 900 Series LC

Removing the old PWB

1. Switch off detector and unplug mains cable.
2. Remove the detector's top main cover which is held by two screws on each side.
3. Remove the two screws (**1**) securing the small side panel and lower it down as shown in *Figure 1*.

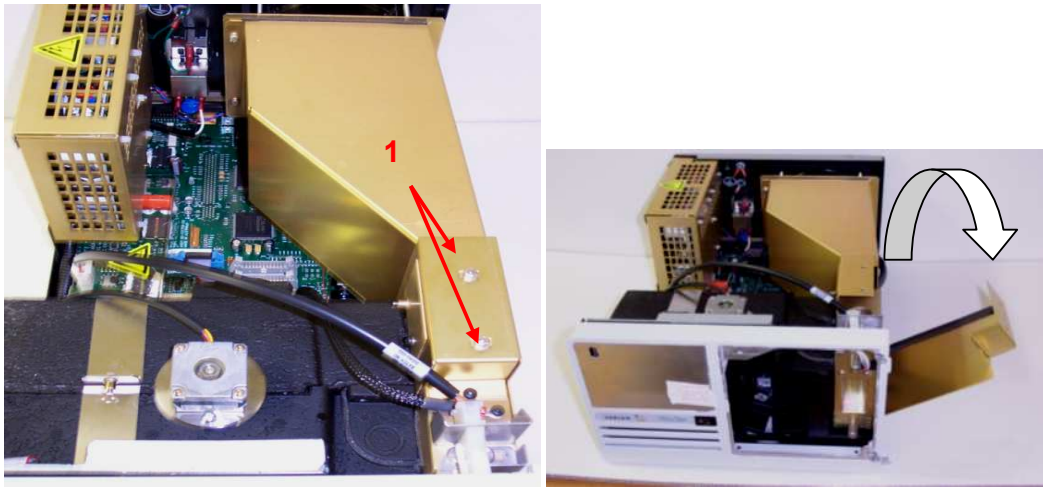

Figure 1: Removing the cooling vent

4. Locate and remove the two screws at the rear of the detector (**2**) used to secure the fan baffle. Then, swing the baffle to the right as shown (*Figure 2*).

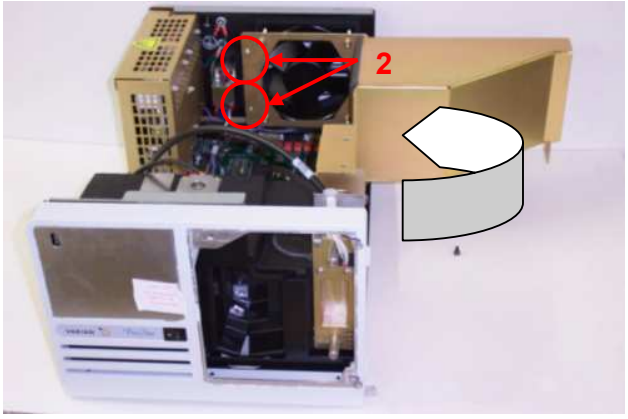

Figure 2: Removing the Fan Baffle

5. Locate and remove the two screws (**3**) on the rear panel.

Figure 3: Removing the Screws from the Back of the Detector

6. Remove the optics module as described in the Optics section of the Service manual.
7. Remove the earth lug screw (**4**) located on the Processor PWB (*Figure 4*).

Figure 4: Earth Lug Screw on Main PWB

8. Remove the single screw holding down the power supply module (**5**). This is located on the outer edge of the detector adjacent to the power supply module (*Figure 5*).

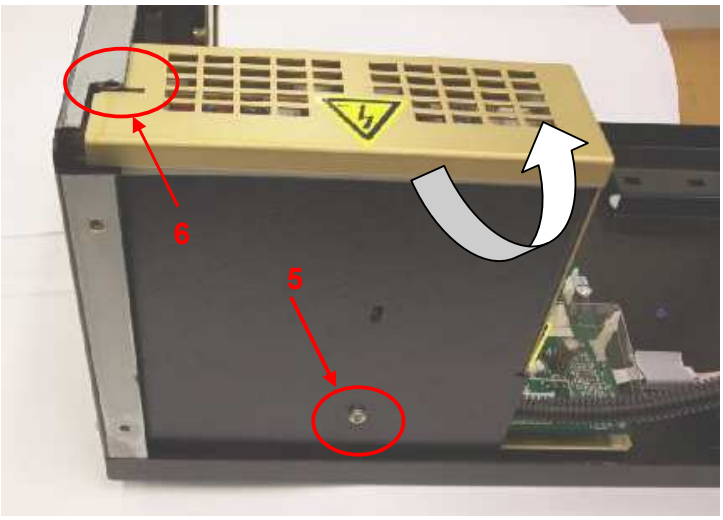

Figure 5: Power Module on the detector

9. Disengage the safety cover (**6**) and slide the power supply module toward the front of the detector (*Figure 5*). At this stage the mains supply input cables are still connected. Place the power supply module in the service position as shown in *Figure 6* below, and fasten in this position using the screw (**7**) which originally held it in place.

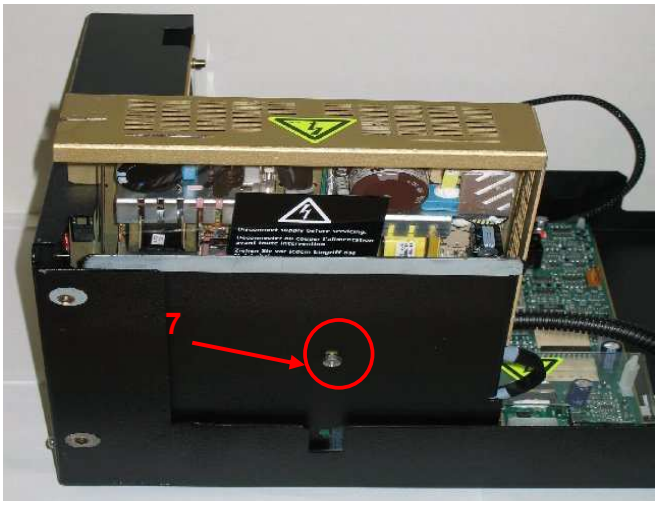

Figure 6: Securing the Power Supply

10. The Processor PWB will now be exposed. Disconnect all cables from the Processor PWB. The PWB can now be removed along with its mounting bracket.

Replacement the new PWB

11. When a new replacement Processor PWB is received, it will be accompanied by a new MAC address label *Figure 7*.

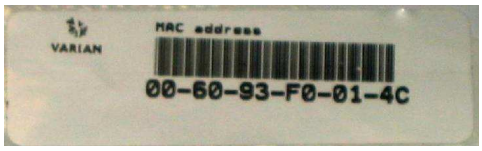

Figure 7: MAC Address Label Sticker

12. This label needs to be stuck over the existing one (located on the rear panel of the detector as shown below. The detector serial number will remain the same.

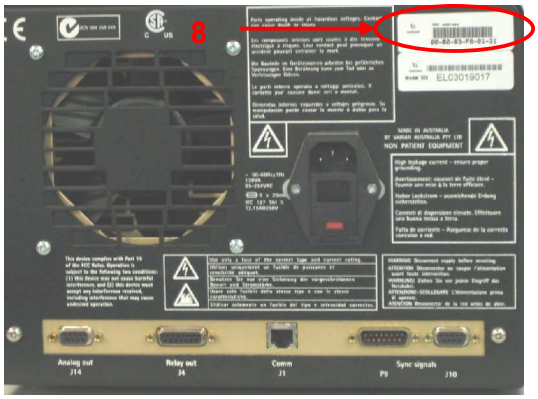

Figure 8: Sticker Location on the back of the Instrument.

13. The Processor PWB replacement procedure is the opposite of the removal procedure.

NOTE
Whenever this PWB is replaced, you must perform a Gain Calibration & 0%T calibration. Refer to the Diagnostics section for details.

Setting up the Main PWB in a PDA detector to communicate with the 900 Series MIB

14. Connect the Detector to your PC using a cross-over cable. Refer to ***SHT-PS325-02*** (Connecting the PC with a 325 dynamic IP crossover cable) for additional information on how to connect the PC to the detector using a cross-over cable. The procedure to connect the PDA detector is very similar and these instructions can be used to provide a concept as to how it is done.

15. Once the detector is communicating to the PC you need to select the *Diagnostics Tab* and the *Comms Tab* (**9**) from the Diagnostics menu in PolyVerify (*Figure 9*).

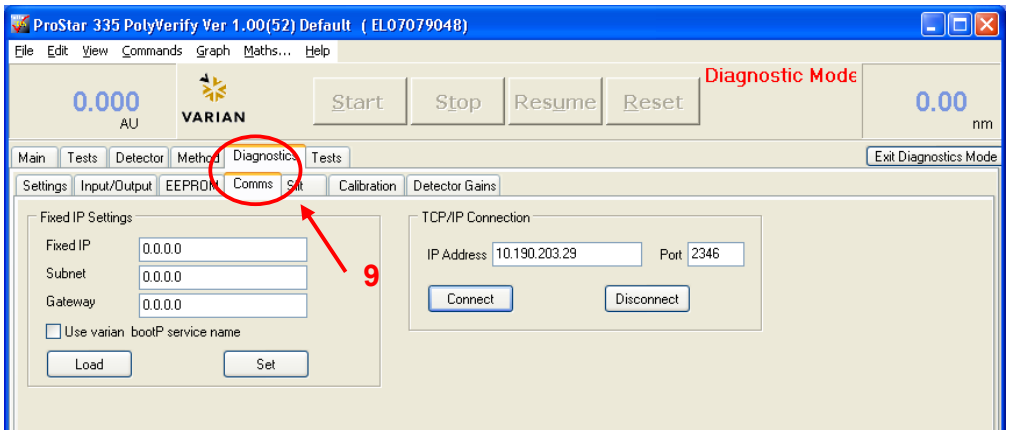

Figure 9: Selecting the Comms Tab in PolyVerify

16. Under the Fixed IP settings (**10**), type in the following settings (*Figure 10*);

    fixed IP : ***10.10.10.2***

    subnet: ***255.255.255.0***

    gateway: ***10.10.10.1***

    Settings are the same for the UV detector.

17. Click on the *Set* button (**11**), and once the Fixed Ip settings have been set, you can read them back to the PC by selecting the *Load* (**12**) button

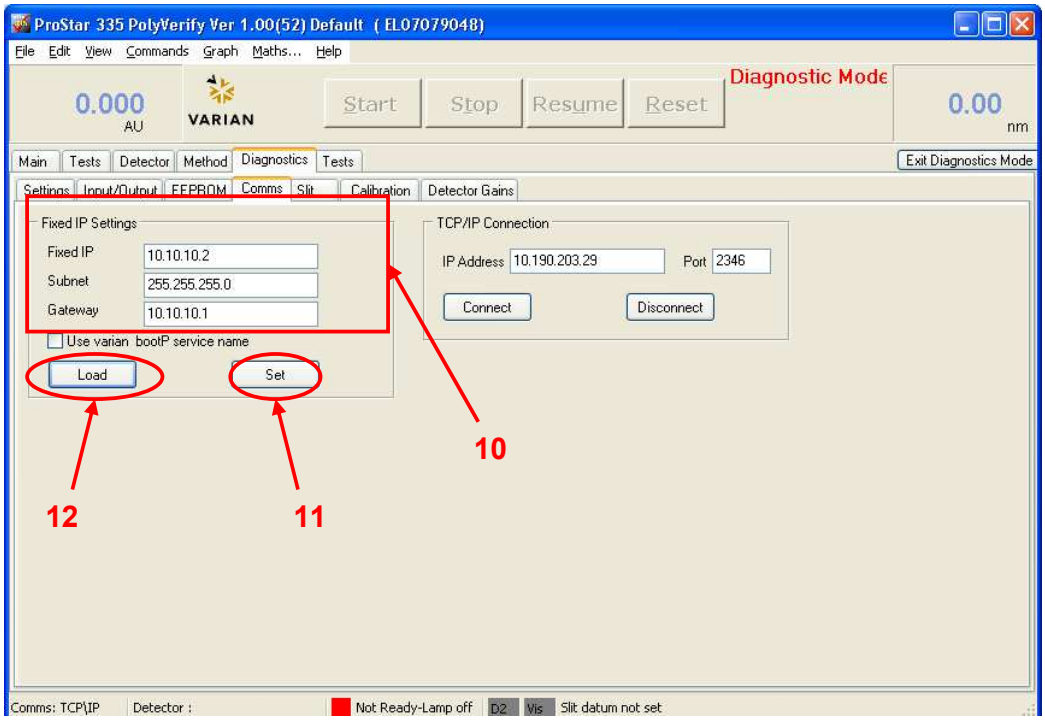

Figure 10; Inserting the IP Settings

18. Once the IP has been set to the address shown above, you can put the detector back into the 900 Series LC and it should communicate through the internal MIB.