Technical Bulletin: Replacement of the I-button Port Cable

Applies to the following: ALL SQA-V (V, Vb, Ve, Vp and Vt)

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Problem description: I-Button Tests are not loading from the I-Button after repeated attempts. A "Communication Error!" is displayed on the V-Sperm screen (see Fig.1)

Explanation of the failure:

There can be an intermittent I-button communication failure between the SQA-V and the computer, due to a defect in the I-button port cable.



Figure 1: error message

Description of the solution: Install a new I-button port cable and a new I-button clip in the SQA-V. The clip will secure the I-button in place during the loading process and prevent a "communication error" as a result of movement.

Instructions for replacing the I-button port and intalling the Clip:

- 1. Disconnect the SQA-V from electricity; make sure the instrument is turned off.
- 2. Open the SQA-V: Release the 4 screws on the rear panel using a Philips screwdriver #2 (see Fig. 2).



Fig. 2: Release screws



Fig. 3: Open the SQA-V

3. Disconnect the cable connector of the I-button port cable from its location on the Main Board- J18 (see Fig. 4)

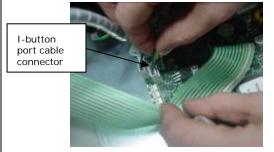


Figure 4: disconnect the cable connector

4. Remove the tie anchor mount that holds the cable bundle which is attached to the upper left corner of the main board (see Fig.5)



Figure 5: Remove the tie anchor mount





5. Carefully remove the white plastic wrap that holds the I-button port cable and cable bundle (see fig. 6)

Please note: SAVE the wrap - it will be used to re-attach the cable bundle at the end of the process.

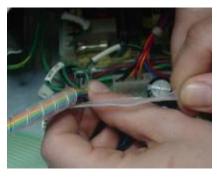


Figure 6: Remove the plastic wrap

 Release the nut which attaches I-button port to the front panel using a 22mm socket screwdriver or an adjustable monkey wrench (see fig.7)



Figure 7: Release the nut

7. Pull the damaged I-button port cable through the front panel (see Fig.8)



Figure 8: Pull the cable

- 8. Take the I- button clip and attach it to te NEW I-button port cable:
 - First insert the New cable into the metal ring (see Fig. 9)
 - Then carefully open up the clip and slip it completely over the blue area of the Ibutton – with the end of the clip touching the center metal part of the blue area (see Fig. 10 and 11 below)

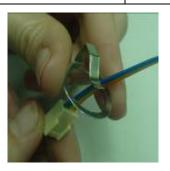


Figure 9: Insert the cable into the metal ring



Figure 10: "bend" the rim

9. Insert the New I button port cable back into the designated hole in the front panel (see Fig. 11)

Please note: The clip should be on the left side of the port-as shown in the figure.



Figure 11: Insert the cable into front panel

10. Fasten the I-button port to the inner side of the front panel using the nut and an adjustable monkey wrench (see Fig. 12)

Important: Please verify that the clip remains in the same configuration shown in Fig. 11

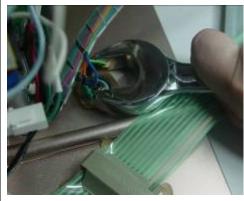


Figure 12: Fasten the I-button port

- 11. Re-attach the I-button port cable to the cable bundle; fasten the cables using the white cable wrap (Fig. 6).
- 12. Use a new tie anchor mount to re-attach the cable bundle to the upper left corner of the main board (Fig.5).
- 13. Connect the I-button port cable connector to its designated location on the main Board- J18. (Fig. 4).
- 14. Close the front and rear panels of the SQA-V, using a #2 Philips screw driver (Fig. 2).

15. At the end of the process, place the new label around the I-button port. The clip should be on the left side of the port and look like the picture shown in Figure 13.



Figure 13: at the end of the process



