

Technical Bulletin- Blank Lower Operational Screen

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

Issue date: October 12, 2010

Problem description: The lower, operational screen of the SQA is blank, but lit OR it displays black lines on a yellow background.

Procedure

STEP 1:

1. Re-install the SQA-V software.
2. If the software is successfully installed and the screen is still blank – go to **Step 2**
3. If the software was not installed successfully based on:
 - a. **ACK error:** This is a FLASH MEMORY failure. The SQA-V must be sent back to MES LTD for repair as an RMA.
 - b. **TIME OUT error:** This is a communication failure between the SQA and the PC. Verify that the SQA-V is connected to the correct COM port on your PC and also that the COM port is defined properly.
 - c. **If the port is functioning:** Press the SERVICE button while sequentially switching the device on and off twice. Try to install the software again. If the installation fails again –go to **Step 2**.

STEP 2:

1. Make sure that the SQA-V is turned off and disconnected from any source of electricity.
2. Open the SQA-V.
3. Verify that the harness that connects the user screen and the main board is in the correct position and is properly connected (see Figure 1).
4. If the problem persists go to **Step 3**.

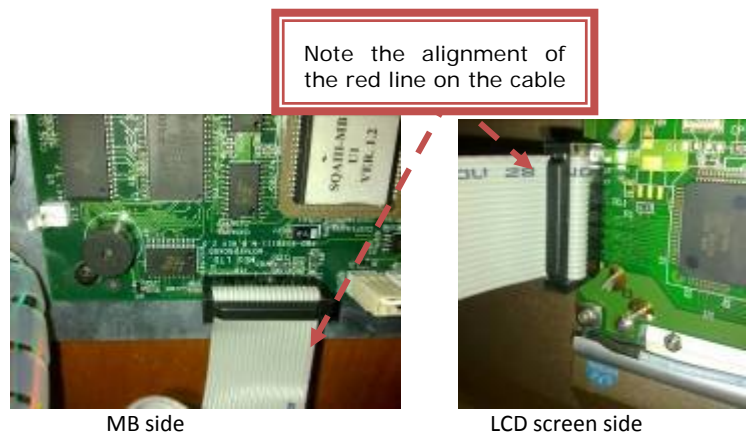


Figure 1: Verify the flat cable is properly connected

STEP 3:

1. Verify that the harness connecting the main board to the PC is properly connected (RS232 cable).
2. Tighten the harness connector at location J5 on the main board (see Figure 2).
3. If the problem persists go to Step 4.

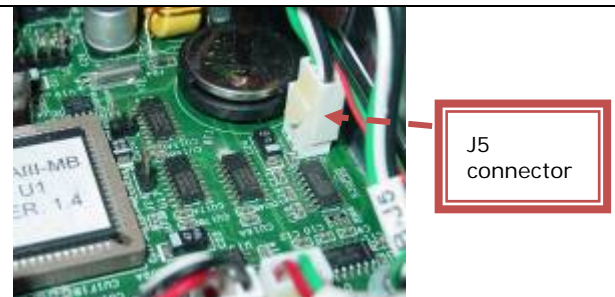


Figure 2: J5 connector on the main board

STEP 4:

1. Verify that the Main board processor is positioned according to the instructions in Appendix 1 of this bulletin.
2. Replace the processor if the problem persists.
3. If the screen is still blank after replacing the processor- go to **Step 5**.

STEP 5:

1. Replace the LCD operational screen according to the instructions in Appendix 2 of this bulletin. The instructions can also be found on Page 19 in the SERVICE MANUAL.
2. If the problem persists with the new screen – send the SQA back to the manufacturer (MES) for a repair RMA.



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Appendix 1: Instructions for RE-SEATING or REPLACING the SQA PROCESSOR

Stage 1: Re-seating the processor to the correct position:

1. Turn off the SQA and disconnect the power supply cable.
2. Remove the 4 screws on the rear panel using a Philips screw driver #2 (Fig.1) and open the SQA (Fig.2)
3. Slightly press the center of the processor with an index finger to re-seat it into the correct position. (Fig. 3).
4. Close the SQA and replace the 4 Phillips screws on the rear Panel.
5. Connect the power cable of the SQA-V.
6. Turn the SQA on and run the SELF TEST.
7. If the SQA-V passes, the repair process is complete.
8. If the SQA-V does not turn-on or fails self-test, go to stage 2.

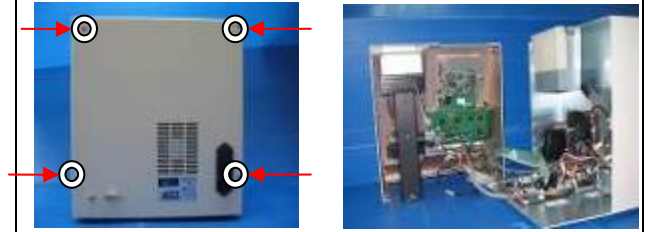


Fig. 1-2: Open the SQA-V

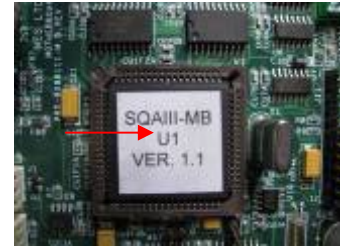


Figure 3: Apply downward pressure to the processor

Stage 2: Replace the damaged processor:

1. Turn off the SQA and disconnect the power supply cable.
2. Release the 4 screws on the rear panel using a Philips screw driver #2 and open the SQA.
3. Remove the damaged processor using tweezers (see Fig.4).



Fig. 4: Remove the damaged processor

4. Replace the old processor with a new processor according to the following directions:
 - Align the "dot" which is marked on the processor with the "Arrow" mark in the processor cavity (see Fig. 5-6).
5. Slightly press the center of the processor with an index finger to re-seat it into the correct position (Fig. 7).

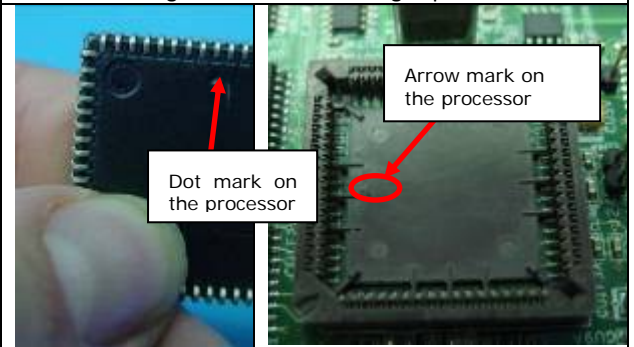


Fig. 5-6: Align the processor in the cavity correctly

6. Close the unit and screw back in the 4 Phillips screws on the rear Panel.
7. Connect the power cable, turn on the SQA and verify that it passes the SELF-TEST.



Figure 7: Re-seat the processor



Appendix 2: Instructions for replacing the LCD operational screen

SQA-V Gold and **SQA-V** Service Manual 17_MAY_2010

Operation Monitor

NOTE: Turn off the power supply to the SQA-V and disconnect the power supply cable from the back of the device before opening the SQA-V.

WARNING: DO NOT TOUCH the illuminated area of the LCD Backlight – HIGH VOLTAGE is supplied there.

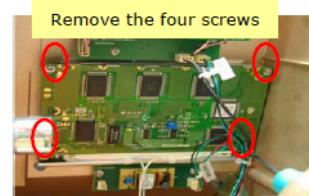
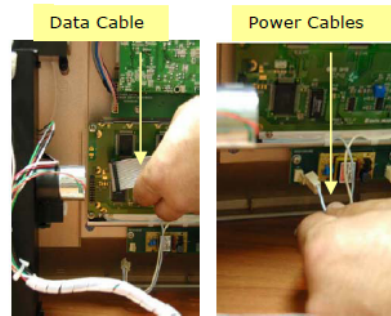
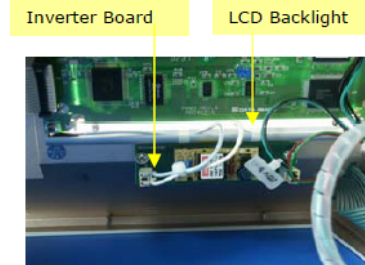
AFTER checking the LCD backlight, turn off the SQA-V and disconnect it from the main.

WARNING: The two ends of the flat cable must be connected in the same way at each of the hubs or the LCD may be burned!

9. Operation Monitor - Lower LCD Screen (Part# LCD-0009)

ISSUE #1: The SQA-V is ON, both power indicators are functioning and the fan is working. But the lower LCD screen (Operation Monitor) is not illuminated although data is displayed on the screen.

- Open the SQA-V.
- Check that the **LCD Backlight** is lit. If not, check the **input and output cables** of the inverter board.
- If the power supply is OK and the screen doesn't light up, replace the inverter board (Item#AS-9084111).
- Turn the SQA-V off and disconnect the cables connecting the inverter board to the main board and LCD screen.
- Using a Phillips screwdriver, remove the two screws that secure the old inverter board.
- Replace the inverter board with a new one and secure it with the two screws.
- Re-connect the cables of the inverter board.
- If the problem persists, contact Customer Support.

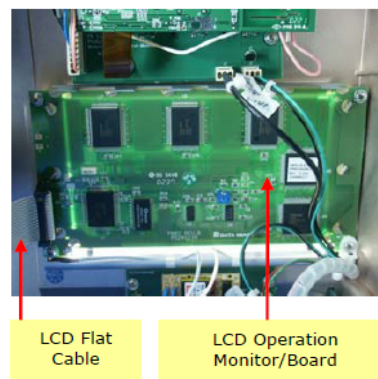


ISSUE #2: There is no data displayed on the screen in spite of the fact that the SQA-V is ON, both power indicators are functioning and the fan is working.

- Re-install SQA-V software.
- If this does not work, replace the processor on the main board (see Appendix section for instructions).

If replacing the processor does not work:

- Open the SQA-V and verify that the LCD cable, with the red lined side up is connected to the section designated with a 12 on the main board.
- Replace the flat cable if it appears damaged in any way.
- Re-start the SQA-V and see if the LCD operational screen is still blank. If yes, replace the screen:
- Disconnect the operational display data and power cable - note the four screws.
- Replace the screen & reconnect the data and power cables.



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