

MODIFICATION RECOMMENDED –
CORRECTS MANUFACTURING OR DESIGN DEFECTS

MSO8104A-01A

S E R V I C E N O T E

Supersedes:
MSO8104A-01

MSO8104A – 8000 Series Oscilloscopes

Serial Numbers: MY45000105 – MY45000154

USB connectors disconnect from the motherboard in 8000 and 80000B Series oscilloscopes.

To Be Performed By: Agilent-Qualified Personnel or Customer

Parts Required:

P/N 0470-2123	Description RTV Silicone	Qty. 1
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Loctite 5145; Agilent part number 0470-2123 RTV Silicone.

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	X IMMEDIATELY [] ON SPECIFIED FAILURE [] AGREEABLE TIME	STANDARDS: LABOR: 1.0 Hours	
LOCATION CATEGORY:	[] CUSTOMER INSTALLABLE X ON-SITE X DEMO-HUB	SERVICE INVENTORY: [] RETURN [] SCRAP X SEE TEXT	USED PARTS: [] RETURN [] SCRAP X SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE		AGILENT RESPONSIBLE UNTIL: January 31, 2007
AUTHOR: [initials] BA PRODUCT LINE: PL1A			
ADDITIONAL INFORMATION:			

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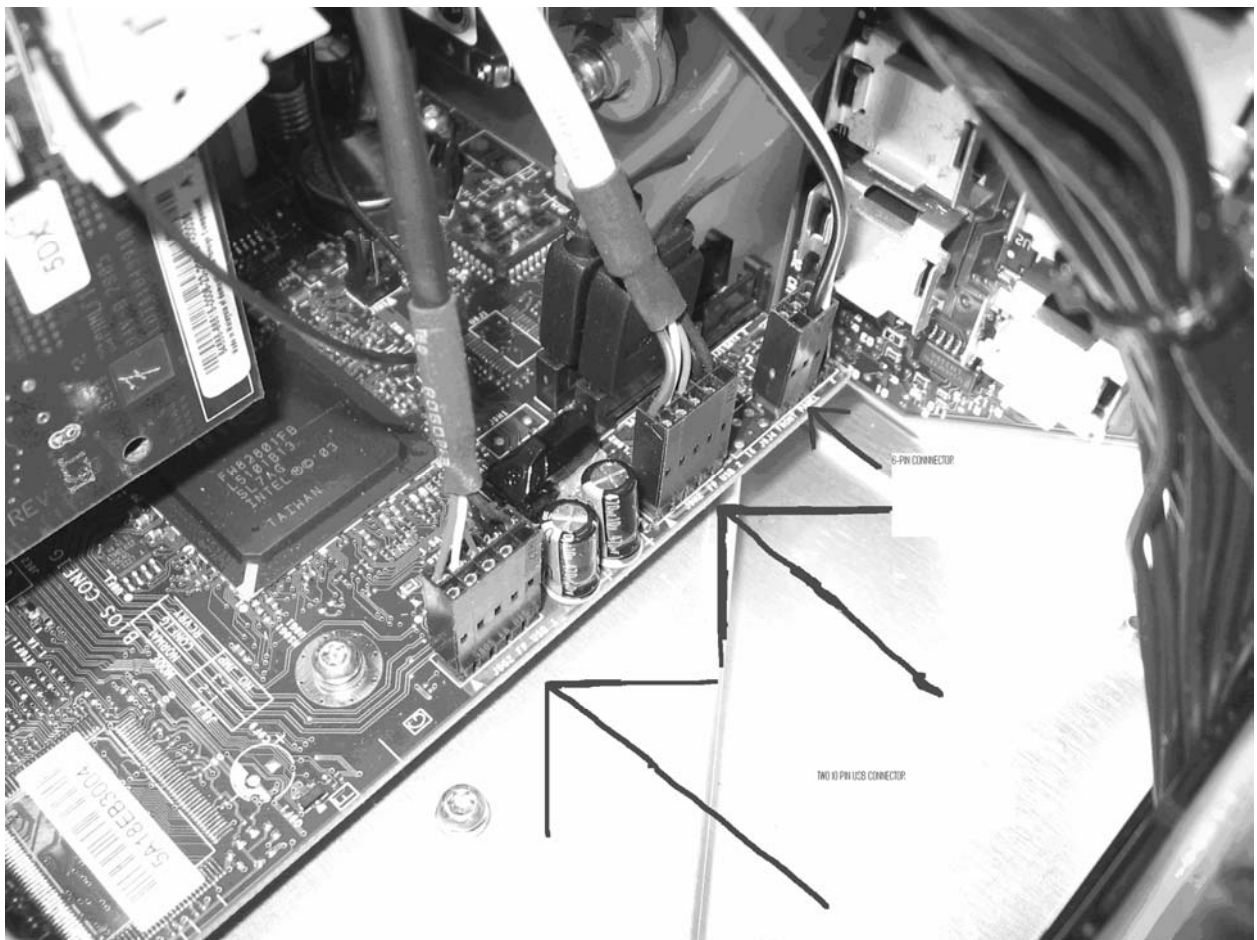


February 9, 2006

Situation:

This picture shows the (2) 10-pin USB connector for the front panel USB port cable (labeled as J962FPUSB1 and J9H2PFUSB2 on the motherboard) and touch screen cable and the (1) 6-pin connector for the motherboard switch cable plugged (labeled as J9J4 Front Panel on the motherboard) into the 915 motherboard.

Figure 1: Standard picture of Front Panel



Following a single 3.2" drop in the top to bottom axis it was determined that these three cable connections will begin to separate from the motherboard. The following picture shows the results of a single 3.2" drop.

Figure 2: Results of 3.2" drop of oscilloscope (looking at mirror).



A mirror was used to aid in showing how the connectors begin to disconnect. Notice the gold pins visible under the connector on the left; the connector on the right was re-seated to show the contrast following the single drop. There are two known instances where one or more of these three cable connections have disconnected completely during transit

Solution/Action:

1. Disconnect the power cable.
2. Disconnect all oscilloscope probes and BNC input cables from the front panel.
3. Disconnect any other cables, such as mouse, keyboard, printer, or GPIB cables.

4. Remove the two Torx T20 screws securing the side handle.
5. Remove the four Torx T20 screws that secure the rear feet (two in each foot).
6. Remove the four Torx T20 screws that secure the top sleeve and the bottom sleeve to the chassis.
7. Place the unit so the bottom is facing up.
8. Remove the eight Torx T10 screws that secure the bottom sleeve to the chassis.
9. Set the unit on its bottom. Carefully slide the top cover off of the frame by pulling the front panel and the cover away from each other.
10. Following the assembly of the 915 motherboard into the chassis and connecting the touch screen cable (D8104-61604), USB cable (D8104-61602) and motherboard switch cable (54855-61624) to the 915 MB; be sure that the connectors are seated down against the MB completely. 6.
11. With the connectors seated properly; room temperature vulcanization (RTV) silicone will be applied to the USB connectors to secure the connectors to the MB. Use the following RTV: Loctite 5145; Agilent part number 0470-2123. Loctite 5145 is an electronic grade RTV silicone that is non-corrosive and translucent.

Figure 3: Picture of cable connectors prior to application of RTV

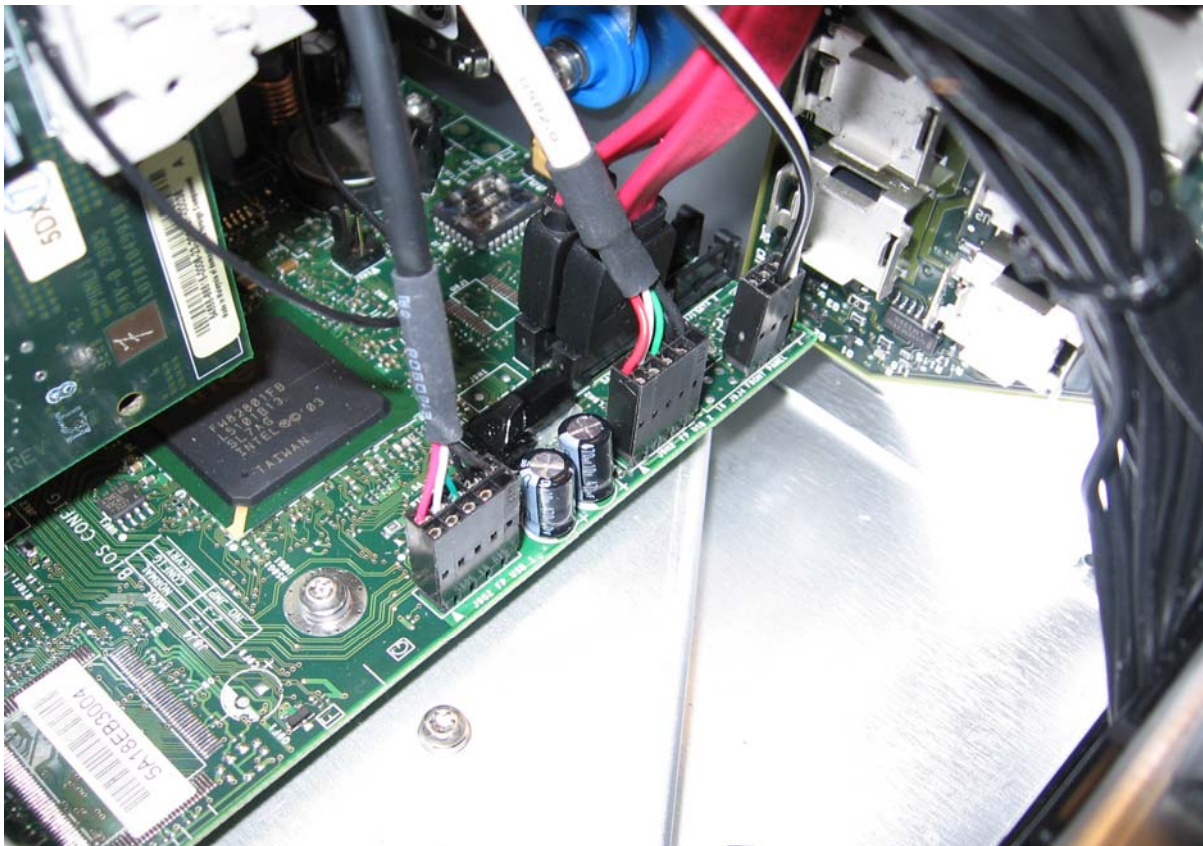
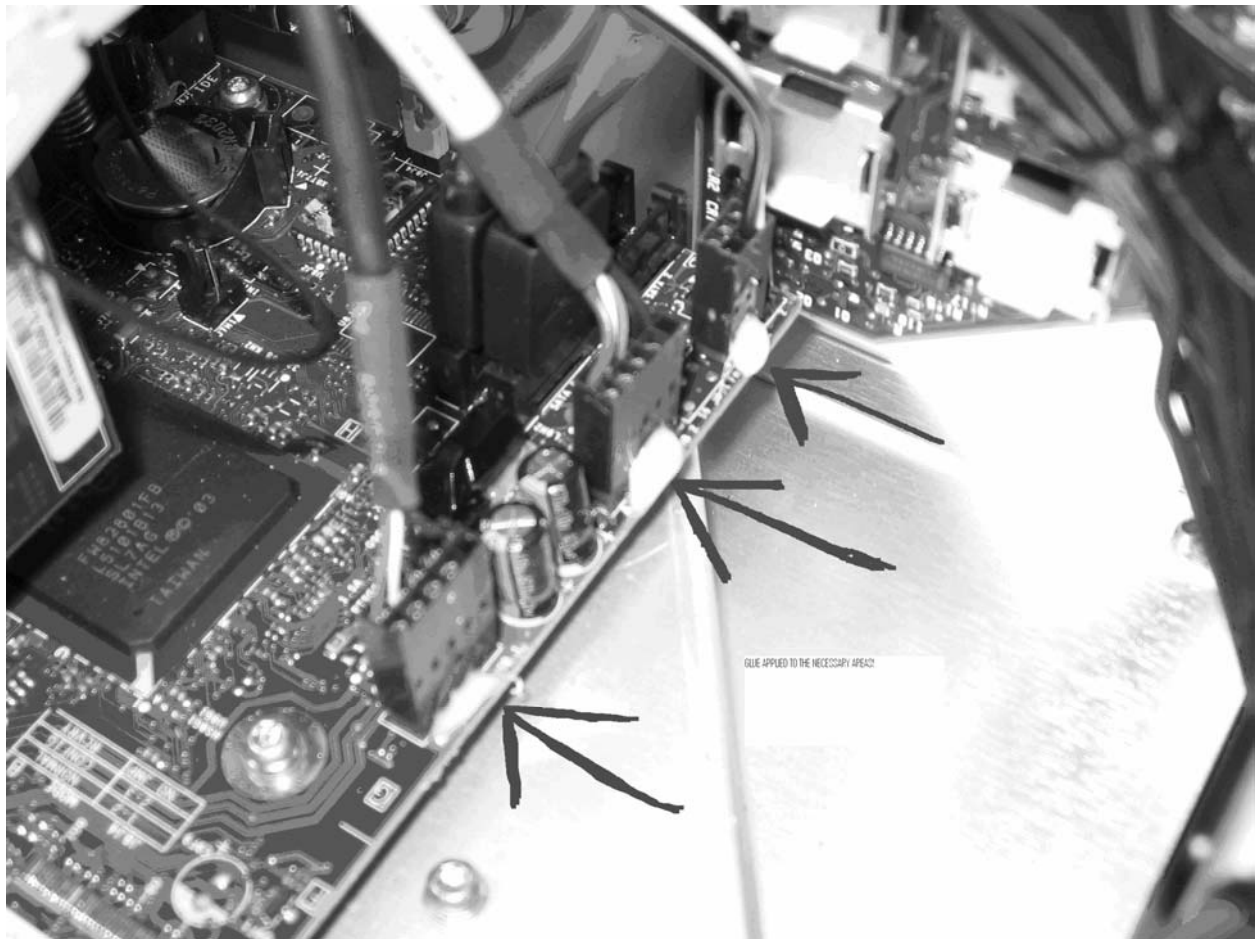


Figure 4: Picture of cable connectors following application of RTV



12. Apply RTV (p/n 0470-2123) at the center of each USB connector on the side facing the edge of the motherboard. Apply an amount that will make contact with the connector, the pin header, and the motherboard.
13. The RTV will be tack free after 60 minutes @ 50% relative humidity and will be fully cured within 24 hours; the cure times decrease in an environment with higher humidity.

Do not pull on the cables until the RTV has fully cured!