



**Technical Service Bulletin**

**PATIENT MONITORS**

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**Bulletin Type: AS NEEDED**

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**Manufacturer: Welch Allyn**

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**Subject:** TSB – SPOT LXI RoHS CONVERSION\_LED LCD

**Distribution Scope:** Welch Allyn Global Technical Support, Product, Field & Customer Service Teams. WA ASP's

**Product(s) Referenced:** All SPOT LXi 4500 devices

<b>Material Description</b>	<b>Material # (Contains Lead-Free solder)</b>	<b>Material # (Contains Lead solder)</b>
PCBA BP OEM, (MOD F) RoHS	409719	400387
ASSY, POWER HARNESS, SPOT ULTRA, RoHS	410000	400163
PCA, EDAC, ULTRA, RoHS	410004	400196
ASSY, CABLE, FLAT FLEX, SPO2	410007	400610
ASSY, LCD GND HARNESS, RoHS	410009	400750
PCA, BRAUN INTERFACE, SPOT ULTRA, RoHS	410008	400652
DISPLAY,LCD,320X240,LED,MONO ,3.3V,5.7"	720480	See Below (703354)
SURETEMP_OEM_WO-EDAC	409702	401184
MASIMO,MS-2011,PULSE OX MODULE	721395	712892
EVSPNELLCOR NELL3 PULSE OXIMETRY	704870 (OEM Label# <b>Nell3SR</b> )	704870 (OEM Label# <b>Nell3S</b> )
DISPLAY,LCD,320X240,BLITE,MON O,3.3V,5.7"	Not Used	703354
INVERTER, LCD	Not Used	700119
ASSY, BALLAST HARNESS, SPOT ULTRA	Not Used	400720

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**Summary:** This TSB communicates the release of new, Lead-Free materials and material numbers to support SPOT LXi 4500 RoHS compliance as well as the introduction of the new LED LCD Display. All SPOT 4500 Production and Service components that contain Lead solder are RoHS compliant by exemption until June 2016.

**Issue:** As part of producing the SPOT LXi 4500 to comply with RoHS, starting in mid-May 2014, and continuing through the end of 2014, Lead-Free solder repair parts with new part numbers will be incorporated into the SPOT LXi 4500.

The LED LCD display (720480) replaces the CCFL display (703354). With the installation of the LED LCD display, the LCD inverter (700119), and ballast harness assembly (400720) are no longer used.

Note: 720480 / DISPLAY,LCD,320X240,LED,MONO,3.3V,5.7" was introduced into production on June 18, 2014.

Note: All SPOT LXi 4500 devices will be manufactured using Lead-Free solder by no later than May 1, 2016.

**Action:** For the repair of ALL SPOT LXi 4500 devices, until April 30, 2016, Service Centers will exhaust the stock of materials and parts containing Lead solder prior to switching over to use of the Lead-Free solder materials. The Lead-Free solder materials are backwards compatible with devices containing existing lead solder materials. RoHS-compliant devices may be repaired with the materials containing Lead solder until June 2016, by which time, it is expected that all Production and Service stock of materials and parts containing Lead solder will be exhausted.

**Reference to Standards:** • 21 CFR Part 820, ISO 13485, MPD SOP-0002

**Updates:** Internet/Intranet

**Service Strategy:** The material numbers and materials containing Lead solder detailed in the **Products Referenced** section above will be available to order as service parts until all stock is exhausted or until May 1, 2016, whichever comes first. Service Centers will exhaust the stock of materials and parts containing Lead solder prior to switching over to use of the Lead-Free solder materials.

The Lead-Free solder Nellcor SpO2 board did not have a new material number assigned. The OEM label number did change and will be used to determine the material that contains Lead solder and the new, Lead-Free solder material:

Material Description	Material # (Contains Lead-Free solder)	Material # (Contains Lead solder)
EVSPNELLCOR NELL3 PULSE OXIMETRY	704870 (OEM Label# Nell3SR)	704870 (OEM Label# Nell3S)

**Note:** Current stock of CCFL displays (703354) & LCD inverters (700119) will be used in Production and Service until stock of each is exhausted. If a repair requires either of these parts after the stock of the needed component has been exhausted, devices will receive the LED LCD display (720480) as a replacement.

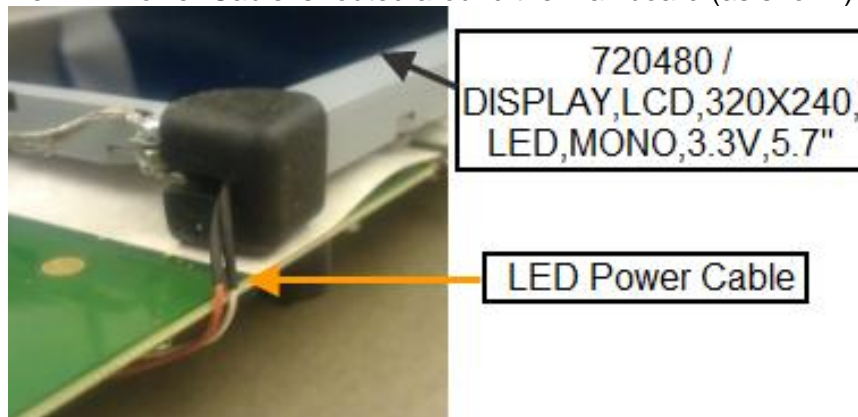
**Required Materials:**

Material Description	RoHS (NEW) Material #
PCBA BP OEM, (MOD F) RoHS	409719
ASSY, POWER HARNESS, SPOT ULTRA, RoHS	410000
PCA, EDAC, ULTRA, RoHS	410004
ASSY, CABLE, FLAT FLEX, SPO2	410007
ASSY, LCD GND HARNESS, RoHS	410009
PCA, BRAUN INTERFACE, SPOT ULTRA, RoHS	410008
DISPLAY,LCD,320X240,LED,MONO,3.3V,5.7"	720480
SURETEMP_OEM_WO-EDAC	409702
MASIMO,MS-2011,PULSE OX MODULE	721395
EVSPNELLCOR NELL3 PULSE OXIMETRY	704870 (OEM Label# <b>Nell3SR</b> )

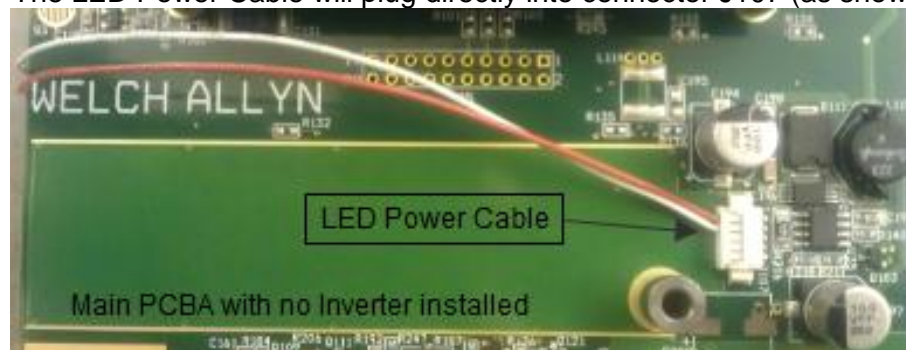
**Procedure:**

The LED LCD display (720480) replaces the CCFL display (703354), LCD inverter (700119), and ballast harness assembly (400720).

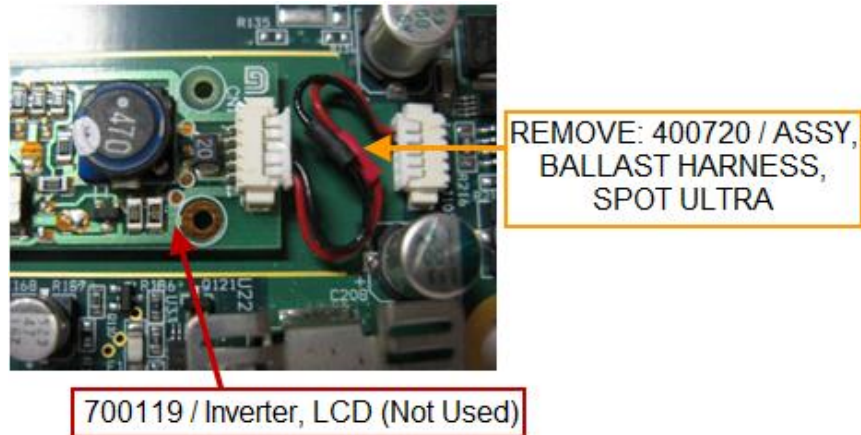
1. The LED Power Cable is routed around the mainboard (as shown):



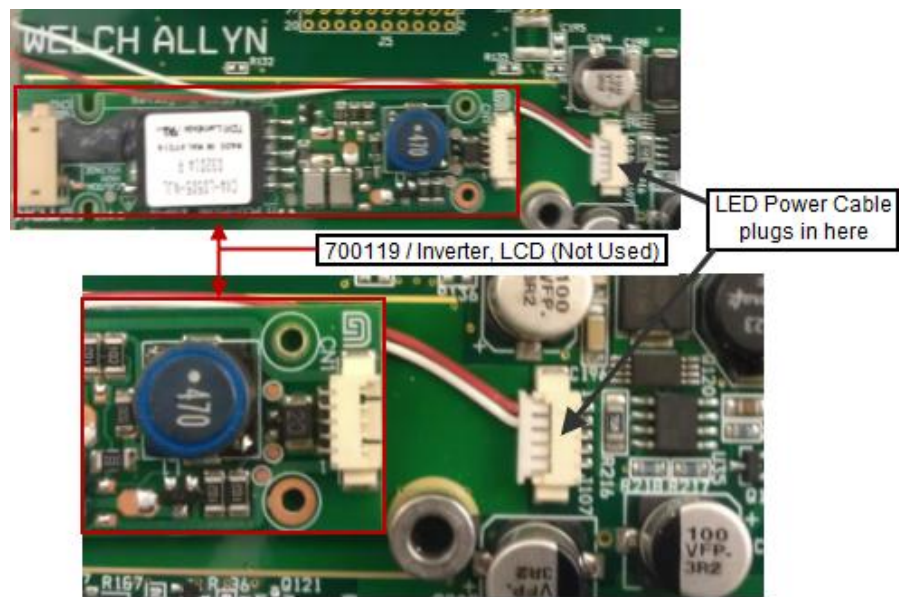
2. The LED Power Cable will plug directly into connector J107 (as shown).



- When replacing the CCFL display (703354) with the LED LCD (720480), remove the Ballast Harness assembly (p/n: 400720) from connector J107 and from the inverter board.



- With the Ballast Harness assembly removed, by-pass the inverter board with the LED Power Cable and plug it directly into connector J107 (as shown).



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**Quality Documents:**

**All service centers using SAP to record service transactions:** For each product serviced, record the service activity in SAP.

**All other service centers and Field Service:** For each product serviced, complete and file a service report and attach to the service DHR.

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**Notes:**

1. Contact the Welch Allyn regarding any questions or concerns from this or other issues.
2. Drawings, illustrations, and part numbers in this document are for reference purposes only and subject to change.

**End of Bulletin**

<b>Revision History</b>					
<b>Version</b>	<b>Description</b>	<b>Change #</b>	<b>Init</b>	<b>Release Date</b>	<b>Appr</b>
A	Initial Release	D*	SMB	D*	D*
D* SEE SAP DIR FOR CHANGE NUMBER, APPROVER NAME AND DATE OF APPROVAL					