



Technical Service Bulletin

Cardio Products

Welch Allyn, Inc.®
4341 State Street Road
Skaneateles Falls, New York 13153-0220 USA

Bulletin Type: As Needed

Tel: 1-315-685-4100 Fax: 1-315-685-4653
www.WelchAllyn.com

Date: 2009-10-15

SAP DIR #: 20011611

Subject: TSB - New CP100/CP200 Main PCBA and Wire Harness with ESD shield.

CAR Number: N/A

Distribution Scope: WA Internal
WA Technical Support, Product Service, & International Service Centers

Product(s) Referenced: CP100 and CP200 Electrocardiographs

SW Version: N/A

Serial No. / Lot Code: CP100: S/N 10008271 and higher starting 2009-10-15
CP200: S/N 20009392 and higher starting 2009-10-15

Summary: New PCBA 405472 (ASSY, MAIN PCA, CP100/200 PATTERN 8) replaces old 404800 (ASSY, MAIN PCA, NORMANDY PATTERN 7, PLUS).
New harness 714834 (HARNESS W/ ESD SHIELD) replaces 700157 (HARNESS, PWR SUPPLY TO MAIN PCB (W002)).
Add cable tie mount 113P463 (CABLE TIE MOUNT).
Add foam strip 78P567 (FOAM STRIP, .75 SQUARE).
Add foam strip 703772 (DBL COATED FOAM TAPE, .062 THK. 1" W).
Add Nomex ESD shield 714833 (ESD SHIELD, NOMEX).
Remove label 704167 LABEL, STATIC COVER.

Issue: Increase the current delivered to the USB port to fully support bar code scanner and wireless radio operation. *Wireless connectivity support is not available with this HW release and remains a potential future option.* Eliminate reworks on the main PCBA.

Address electrical component obsolescence issues and support the migration to a lead-free solder process for the PCBA. (405472 is not a lead free solder process although many of the components are lead free).

Increase the device immunity to electrostatic discharge.

Action: The new 405472 PCBAs will become available immediately. Service centers should use up any inventory of 404800 first and ultimately replace the 404800 with material 405472.

It is recommended to use the new shield assembly 714834 and associated mounting hardware for all CP100 or CP200 repairs associated with lock up problems, and for all units that must be opened for the repair activity.

It is not recommended to replace the 404800 PCBA with the new 405472 PCBA unless there is a confirmed problem with the PCBA. Repair experience indicates that changing the PCBA when no defect is found often does not eliminate a reported lock up problem.

The new shield assembly 714834 and associated mounting hardware shall be installed whenever using the new 405472 PCBA.

Reference to Standards:

- 21 CFR Part 820, ISO 13485, MPD SOP-0002

Updates:

Technical Manual	<input type="checkbox"/>	Repair Tool	<input type="checkbox"/>
Service Plan	<input type="checkbox"/>	Internet/Intranet	<input type="checkbox"/>
Procedures	<input type="checkbox"/>	Price List	<input type="checkbox"/>
Training Material	<input type="checkbox"/>	Other	

Service Strategy: N/A

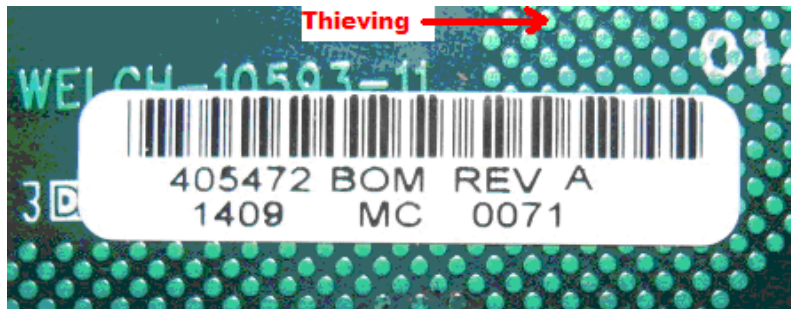
Required Tools: N/A

- Required Materials:**
1. 405472 (ASSY, MAIN PCA, CP100/200 PATTERN 8)
 2. 714834 (HARNESS W/ ESD SHIELD)
 3. 113P463 (CABLE TIE MOUNT)
 4. 761077-1 (WIRE TIE)
 5. 78P567 (FOAM STRIP, .75 SQUARE) (For cable tie mount 113P463)
 6. 703772 (DBL COATED FOAM TAPE, .062 THK. 1" W) Used between harness 714834 and base assembly 400042.
 7. 714833 (ESD SHIELD, NOMEX) Insulator between harness 714834 and PCBA 405472.

Quality Process for failed units or components: N/A

Procedure: The following procedure describes assembly using the new components specified. Additional material numbers listed in the procedure have not been affected by this change.

Note: The new main PCBA 405472 is distinctly recognizable by the **thieving** used in the PCB manufacturing process. See the example below.



1. Replace the old harness with the new 714834 (HARNESS W/ ESD SHIELD) and connect the harness to the Power Supply (703611). Install Foam Strip (78P567) onto the Cable Tie Mount (113P463). Install the cable tie mount into housing 400042 located as shown. Justify the cable tie mount to the rib and boss as pictured (Figure 1).

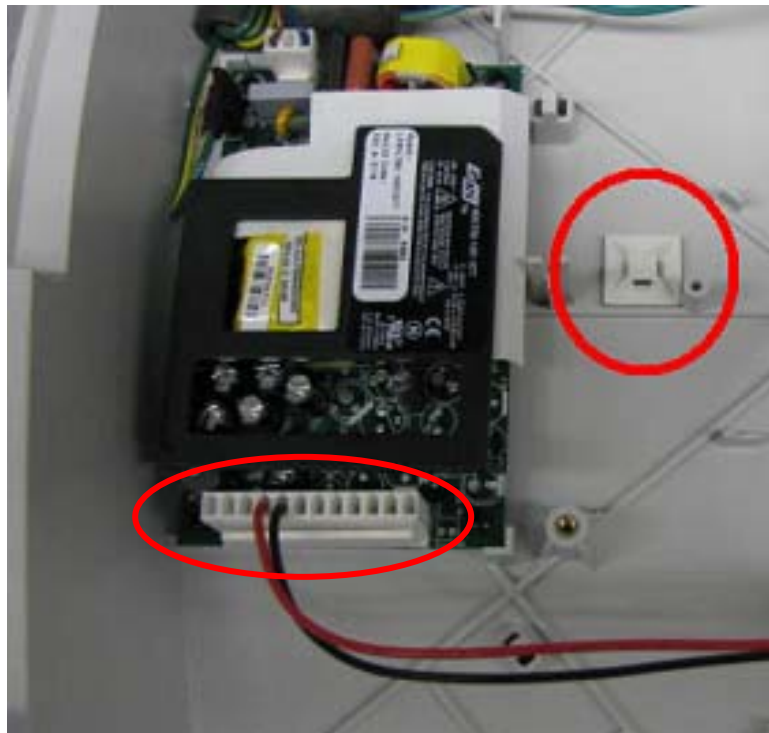


Figure 1

2. Install approximately 2" of foam tape (703772) into housing located as shown. Justify the tape to the ribs as pictured (Figure 2).

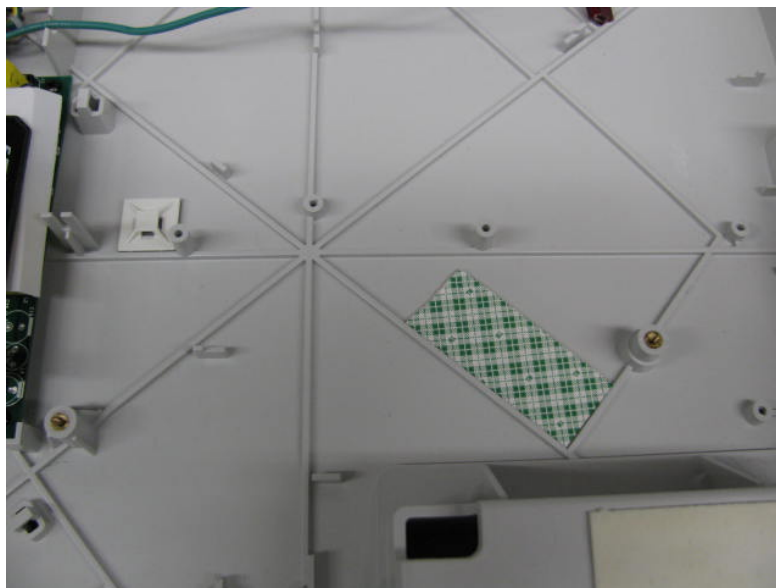


Figure 2

3. Remove backing from foam tape. Install the copper shield 714834 into the base housing copper side down making sure that the copper is aligned correctly and the hole is oriented over the mounting standoff as shown (Figure 3).

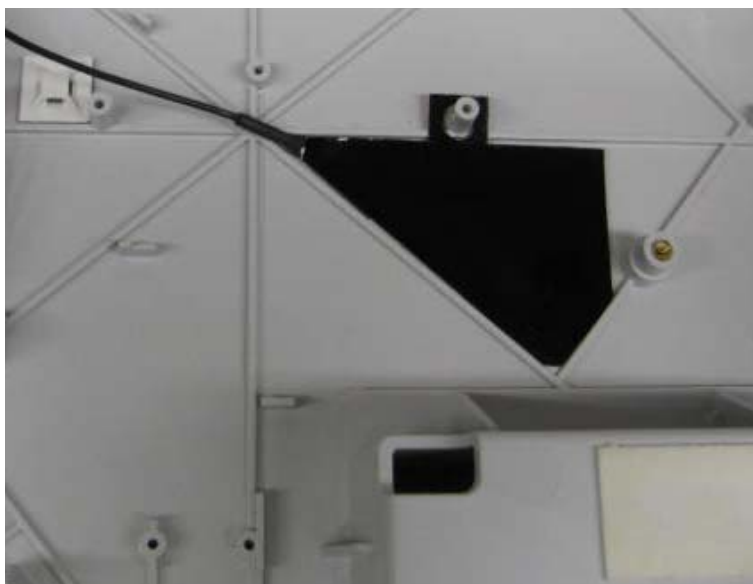


Figure 3

4. Install the Nomex insulator (714833) onto the standoff's as shown (Figure 4).



Figure 4

5. Install main board (405472) into housing using 5 Screws (106124-4). Connect (740068 long green/yellow wire) to the main board terminal J5 as shown (Figure 5).

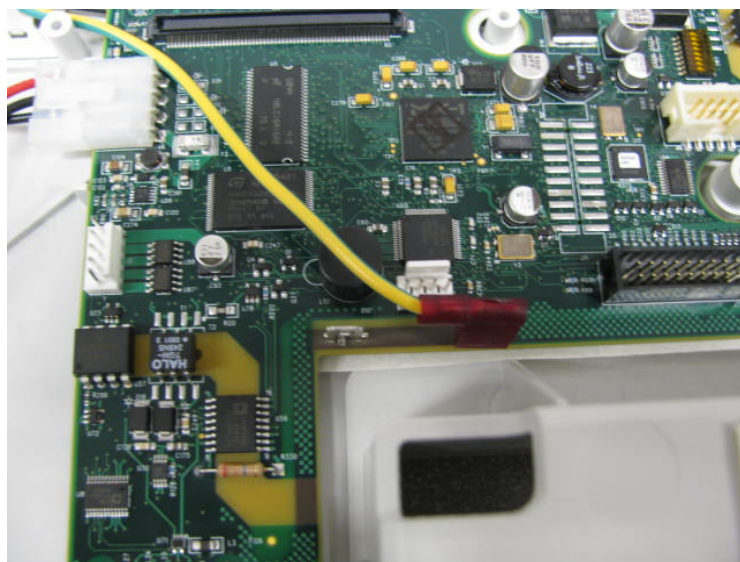


Figure 5

6. Fasten 740068 (long green/yellow wire) with a wire tie (761077-1). Circled area in picture below indicates wire tie location (Figure 6).

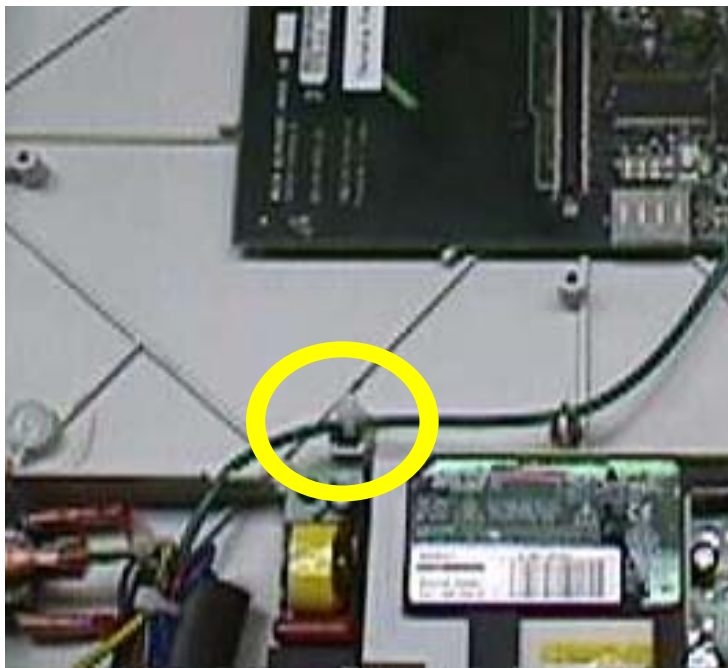


Figure 6

7. Using wire ties (761077-1), secure the wires from 714834 to the Base Housing. Orient wires as shown (Figure 7).



Figure 7

8. Connect wire harness 714834 to the main PCBA 405472 at J20. Secure both 704068 (green/yellow wire) and the ESD shield wire (black) to the Cable Tie Mount (113P463) as shown (Figure 8).

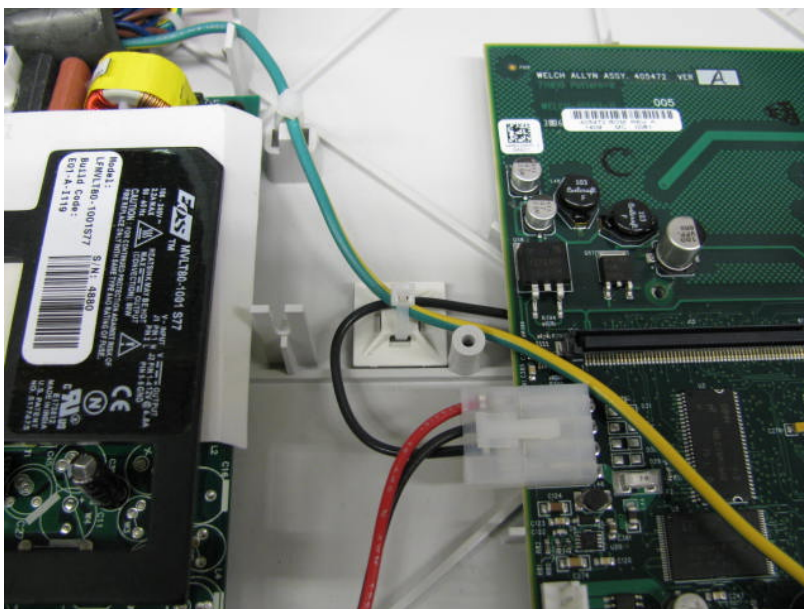


Figure 8

9. The completed base assembly should resemble the picture below (Figure 9).

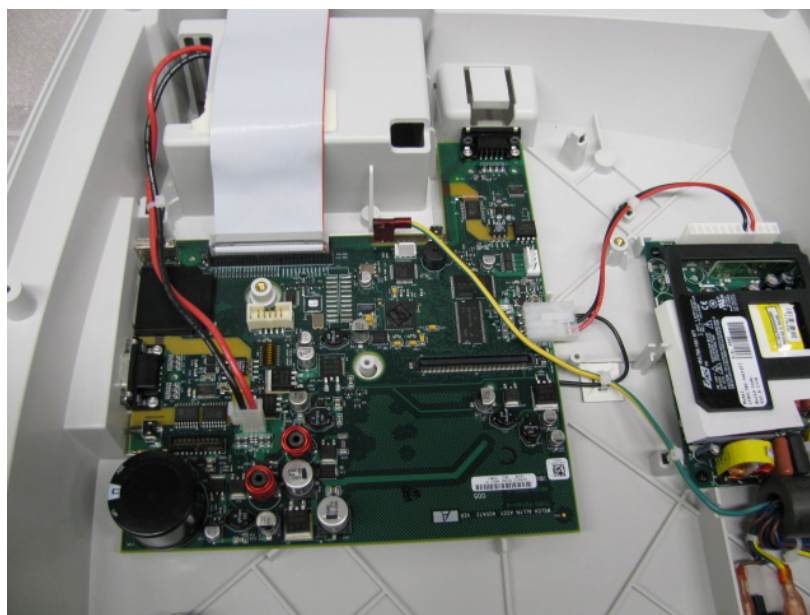


Figure 9

10. Remove the label 704167 to expose the static symbol as shown

THIS INFORMATION IS THE PROPERTY OF WELCH ALLYN, INC. AND AS SUCH SHALL NOT BE REPRODUCED, COPIED, OR USED AS A BASIS FOR THE MANUFACTURE OR SALE OF EQUIPMENT OR DEVICES WITHOUT THE EXPRESS WRITTEN PERMISSION OF WELCH ALLYN, INC.

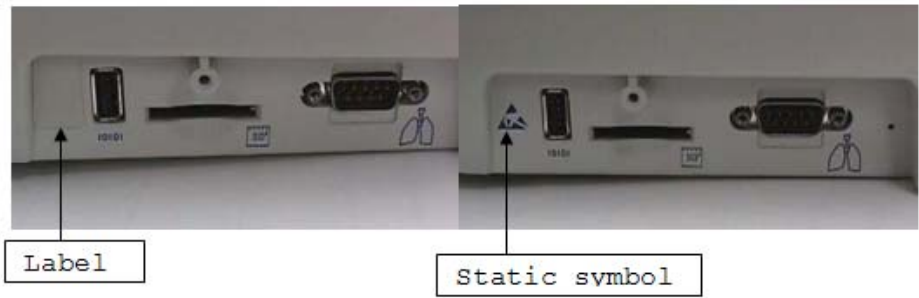


Figure 10

Quality Documents: **All service centers using SAP to record service transactions:** For each device serviced, record the service activity in SAP.
 All other service centers and Field Service: For each device serviced, complete and file a service report and attach to the service DHR.

Notes:

1. Contact the Welch Allyn Complaints Department to initiate or process a medical device complaint resulting 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

Revision History					
Version	Description	Change #	Init	Release Date	Appr
A	TSB – NEW PCBA AND WIRE HARNESS	D*	D*	D*	D*
D* - See SAP DIR for Change number, Approver Name and Date of Approval					