Motorola Mobility LLC
222 West Merchandise Mart Plaza
Suite 1800
Chicago, IL 60654, USA
Website: https://motorola-global-portal.custhelp.com/app/mymotorola/portal

REWORK FIELD SERVICE BULLETIN

FSB Number	CHRAEFSB2017-33
Author	Tony Bryan
Date	09/07/2017
Subject	Moto Z2 Play - Turn On/Off - Battery Wire Routing/Damage
Model Affected	XT1710 (All)
Level Of Repairs	Level 1

Problem:

Motorola is aware of a potential customer experience issue on the Moto Z2 Play product related to Turn On/Off issues. Some users reported that their Moto Z2 Play device would randomly power itself off and/or not power on. Engineering analysis of the returned devices found that the Battery Wires were not properly routed during initial assembly. See Figure 1.0 below.

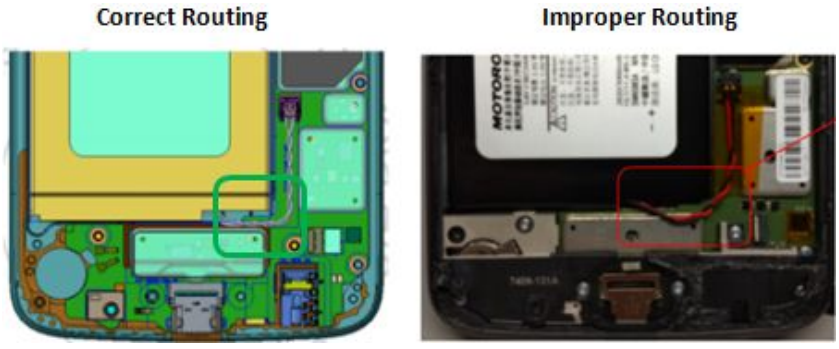

Figure 1.0 - Battery Wire Routing

In this case, the improperly routed Battery Wires rest on top of PCBA Shield (SH500) and will be further pressed against the shield once device is fully assembled causing damage to the rubber insulation, and resulting in a potential short circuit. See figure 2.0 below.

- A soft short will affect battery impedance and result in erratic battery metering and/or

random power downs if Battery Safety Circuit is tripped.
- A hard short will result in device no longer powering up.

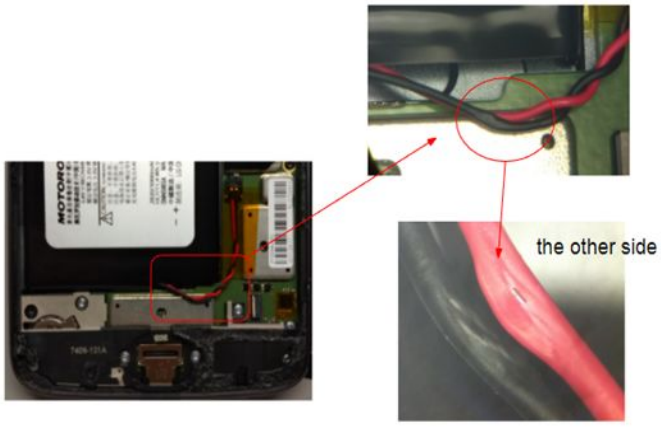

Figure 2.0 - Battery Wire Damage

Solution:

Short-Term: Assembly Process Improvement - Completed 8/28/2017
- Highlighted issue to both Factory and Service Teams and added a 2nd 100% inspection point to verify wire-routing before moving to the next assembly process.

Long-Term: Engineering Change Request (ECR) - Completed 9/11/2017
- New Part Added to BOM: 4mmx16mm Kapton Tape [P/N: SD78C22444 (Old Ref P/N: 11017623093)] which is placed across SH500 to guide wires around the PCBA Shield SH500. See Figure 3.0 below for details on proper placement.

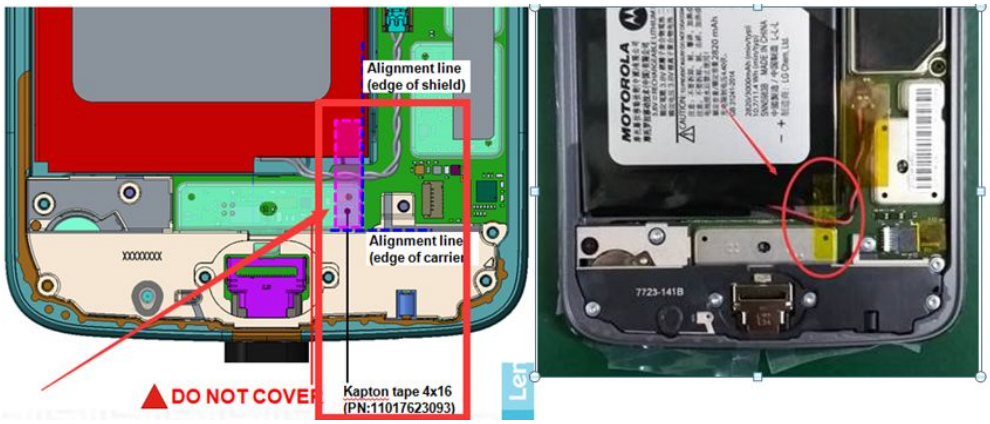

Figure 3.0 - New Kapton Tape Placement [P/N: SD78C22444 (Old Ref P/N: 11017623093)]

Field Service Action:

When servicing any/all Moto Z2 Play customer returns, with a Month Of Shipment (MOS) prior to October 2017, that require disassembly as part of the normal repair process, then:

1. Carefully inspect the Battery Wires for proper routing, reference Figure 1.0 above.
    a. If Battery Wires are routed properly, then:

i. Place 4mmx16mm Kapton Tape [P/N: SD78C22444 (Old Ref P/N: 11017623093)], reference Figure 3.0 above.
ii. Proceed with normal Repair Process

b. If Battery Wires are improperly routed, then:
i. Replace the HZ40 Battery Pack [P/N: SNN5983A]
ii. Place 4mmx16mm Kapton Tape [P/N: SD78C22444 (Old Ref P/N: 11017623093)], reference Figure 3.0 above.
iii. Proceed with normal Repair Process

Note 1: X-Ray Inspection Method (alternative)
If access to X-Ray Machine is available, then this can be used to 100% screen devices for this issue at incoming prior to disassembly. See Figure 4.0 below for limit examples.

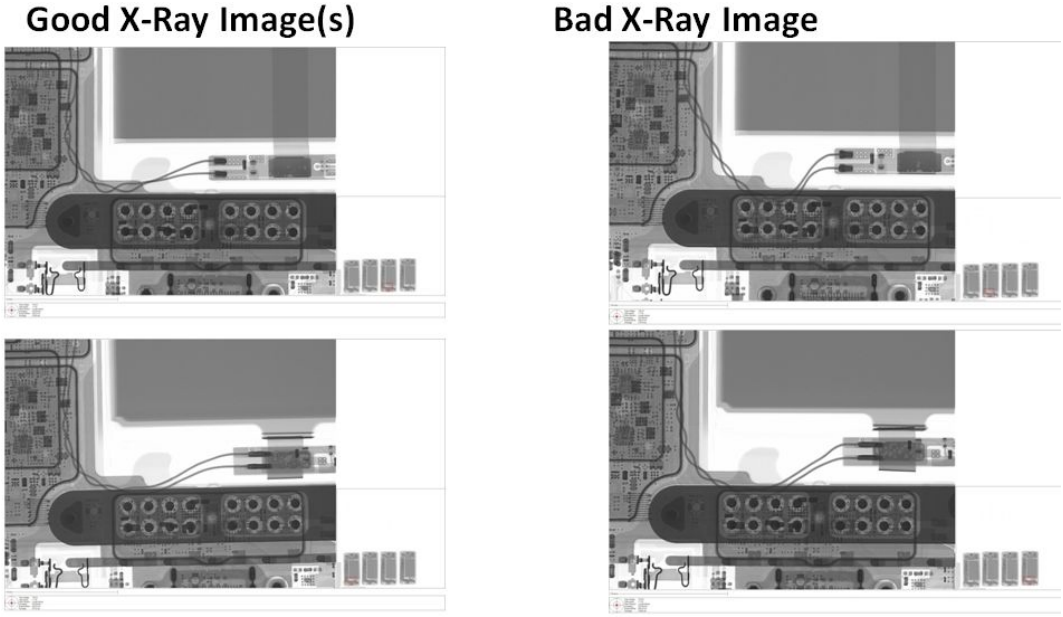

Figure 4.0 - X-Ray Limit Examples

Note 2: HZ40 Battery Pack [P/N: SNN5983A] Recovery
Global Service Team may choose to implement an offline Microscope Inspection Process to carefully inspect all replaced HZ40 Battery Packs [P/N: SNN5983A] for any sign of wire damage, reference Figure 2.0 above.

- If any sign of Battery Wire damage is found under microscope inspection, then HZ40 Battery Pack [P/N: SNN5983A] must be scrapped.
- If Battery Wire damage is not found under microscope inspection, then HZ40 Battery Pack [P/N: SNN5983A] may be reused.

Service Inventory:

- New Part added to SBOM (v1.9): 4mmx16mm Kapton Tape [P/N: SD78C22444 (Old Ref P/N: 11017623093)]
- Stock Existing Part: HZ40 Battery Pack [P/N: SNN5983A]

Call Center Action:

When responding to customers reporting Turn On/Off Issues on their Moto Z2 Play device, then:

1. Follow normal troubleshooting steps, including testing with multiple accessory chargers to rule out a bad accessory charger, to attempt to resolve the user's issue.
    a. If normal troubleshooting steps cannot resolve the issue, instruct the user to return the device to Motorola Service for repair, per this bulletin.

Service Entry Code:

Global M-Claims Codes:

Customer Complaint Code:
C0019 - Power On/Off Issues

Problem Found Code:
P0048 - Internal Battery Fail

REF Designator Code:
RD004 - BT

Repair Code(s):
R0013 - REPL LVL 2 Part CSB (if Battery Pack replacement is required)
R0005 - Reassemble -CSB (if Battery Pack replacement is not required)

Note:
Only apply the designated Service Entry Codes, listed in this bulletin, if the unit fails a test or has a customer complaint that matches the issue described in the bulletin
If the unit fails a test or has a customer complaint that does not match the issue described in the bulletin, the Service Entry Codes used should accurately reflect the true problem found
If the unit passes all tests and inspections and does not have a related customer complaint, the Service Entry Code used should be NFF