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STANDARD FIELD SERVICE BULLETIN

FSB Number	CHRAEFSB2017-17
Author	Tony Bryan
Date	05/25/2017
Subject	Moto G5 - Thermal Performance Improvements
Model Affected	XT1677 (India Only)
Level Of Repairs	Level 2

Problem:

Motorola is aware of a potential customer experience issue with the Moto G5 product in India market. Some Moto G5 users in India reported that the device was getting too warm during periods of heavy usage (WiFi/GPS/Gaming/Calls) and while Charging.

Engineering analysis determined that there was no functional problem with these Moto G5 devices. The customer experience issue was found to be directly related to the use of the Moto G5 product in India market, which has a high average ambient temperature of ~35 degrees celsius.

Solution:

Motorola implemented both hardware and software changes to help improve the thermal performance of the device in higher ambient temperature environments.

- **Software Change:** Integrated into latest approved software release for India region (NPP25.137-73), available for OTA Update as of 5/16/2017.
 - The CPU Frequency Throttling thresholds were modified to better manage thermal response of device for higher ambient temperature environments.
- **Hardware Changes:** Implemented in new factory production for XT1677 India models as of 5/30/2017.
 - Display/Touch Panel Assembly: The existing graphite material, internal to the LCD Display Panel, was changed to a new material with improved thermal properties to better dissipate heat from the front surface of the device. (New

- P/N: 5D68C08848[gray] & 5D68C08849[gold]).
- Battery Cover: The existing graphite material was changed to a new material, with improved thermal properties, to better dissipate heat from the back surface of the device. (New P/N: S948C19327[gold] & S948C19328[gray]).

Field Service Action:

A. When servicing any XT1677 Moto G5 customer returns in India with complaints related to "Device Heating", then:

- 1. Per normal Repair SOP, update the device to latest approved software release for India region (NPP25.137-73 or later) to pick-up of the software change.
- 2. Scrap existing Battery Cover and replace using only the new part numbers \$948C19327[gold] & \$948C19328[gray].
- 3. Following Service Manual, carefully disassemble the device and replace existing Display/Touch Panel Assembly using only the new part numbers 5D68C08848[gray] & 5D68C08849[gold].
- 4. Place black-dot markings on both the Display Flex Tail and IMEI Label, like shown in Figure 1.0 below, to indicate device has completed this service rework procedure.
- 5. Following Service Manual, carefully reassemble the device.
- 6. Per normal Repair SOP, complete full functional retest to ensure proper repair.



Figure 1.0 - Black-Dot Markings to indicate service rework completed

B. When servicing XT1677 Moto G5 customer returns in India with a complaint NOT related to "Device Heating", then:

- 1. Per normal Repair SOP, update the device to latest approved software release for India region (NPP25.137-73 or later) to pick-up of the software change.
- 2. Scrap existing Battery Cover and replace using only the new part numbers \$948C19327[gold] & \$948C19328[gray].
- 3. ONLY Replace the Display/Touch Panel Assembly if a functional issue is found and it is

required as part of normal repair process.

NOTE: Use the above repair case **B.** to deplete any existing inventory of old part numbers (5D68C07420/5D68C07418/5D68C07421/5D68C07419) before cutting over 100% to new part numbers as a running change.

Service Inventory:

New Parts added to SBOM: SBOM Release (v. 1.8) has been revised to include the following part number changes in support of this bulletin.

For XT1677 Moto G5 product repairs, All future orders should have old part numbers substituted for new part numbers as listed below.

- Change IN/IN AMZ XCVR from 5A78C07553/5A78C07501 to 5A78C08851/5A78C08850.
- Add TP LCM 5D68C08848/5D68C08849 for India (IN_PLT/IN_AMZ_PLT/IN/IN_AMZ).
 - India TP LCM change from 5D68C07420/5D68C07418/5D68C07421/5D68C07419 to 5D68C08848/5D68C08849.
- Add Battery Cover S948C19328/S948C19327 for India (IN_PLT/IN_AMZ_PLT/IN/IN_AMZ).
 - India Battery Cover change from \$58C07426/5\$58C07428/5\$58C07429/5\$58C07427 to \$948C19328/\$948C19327.

Call Center Action:

When responding to customers in India reporting issue with Device Heating on their XT1677 Moto G5 device, then:

- 1. Follow normal troubleshooting techniques for this type of customer complaint.
- 2. If normal troubleshooting cannot resolve, then assist user with returning their device for warranty repair, per this bulletin.

Service Entry Code:

Global M-Claims Codes:

Customer Complaint Code: C0024 - Overheats

Problem Found Code: P0012 - Main Display

REF Designator Code: RD007 - DIS

Repair Code: R0013 - REPL LVL 2 Part CSB

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