

Consumer Solutions & Support US Competency Center 600 North US Highway 45 Libertyville, Illinois 60048 Website: gs.mot.com

### FIELD SERVICE BULLETIN

FSB Number: LVCCFSB2006-121

Author: Tony Bryan Date: April 24, 2006

Total No. of Pages: 3

Subject: GSM PEBL U6 – Rear Housing Screw Torque

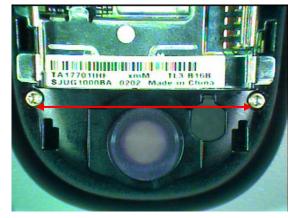
Phone Models: GSM PEBL U6

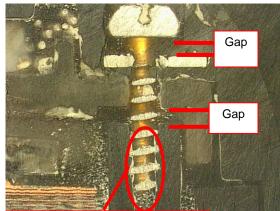
Level of Repair: 2

## **Problem**

Service is aware of an issue on GSM PEBL U6 phones identified during the NPI Analysis. Some units, returned with customer complaints related to "Power Down" and/or "Display", were found to have rear housing screws that had not been driven to the proper depth. Engineering was able to duplicate Power Down failures related to Battery Contact Bounce (no panic code written) and SIM Contact Bounce (SIM Bounce panic written) as a result of loose rear housing screws. The loose R-Hsg screws resulted in low contact force on the Battery and/or SIM Card Contacts. In addition, the loose screws were confirmed to be root cause of poor call performance failure on two units due to the antenna not being seated correctly on the antenna contact.

The issue occurred on the bottom two self-tapping R-Hsg Screws. The screw bosses were closely examined, confirming the screws were never driven in completely at factory assembly. After the screws were re-tightened to the proper settings, the failures could no longer be duplicated. See Images below.





Less than 4 threads engaged with F-Hsg boss.



Consumer Solutions & Support US Competency Center 600 North US Highway 45 Libertyville, Illinois 60048 Website: gs.mot.com

The Factory Quality Team has investigated this issue and confirmed failure can occur in production on some torque drivers with torque measuring on the low end of spec. Original Torque Specification was 1.25 in-lbs (+/- 10%). In addition, the factory found that the speed setting of the driver (high speed is about 700 rpm and low speed is about 500 rpm) can affect the torque and result in a higher rate of occurrence.

# **Solution**

## Short-Term:

Factory containment measures were put in place as of 3/15/2006.

- 1. Calibration of all torque drivers to high end of torque spec (1.30 in-lbs.)
- 2. Mandatory setting of all torque drivers to High Speed (700 RPM)
- 3. 2 x Re-Torque of screws at the above settings to ensure fully driven
- 4. 100% Inspection for 'loose screw' during assembly and at FQA Audits Global Distributions Centers were also notified and have been screening product for this issue as of 3/15/2006.

### Long-Term:

keypad.

A new torque study was completed by Factory and ME Team which has resulted in an increase in the Torque Specification for the R-Hsg Screws.

### New Torque Specification Target: 1.33 in-lbs.

(Upper Tolerance 1.37 in-lbs. / Lower Tolerance 1.30 in-lbs.)

Note: Over-Torque of the R-Hsg screws could lead to cosmetic and/or tactile issue with the

# **Field Service Action**

### **Customer Returns:**

When servicing GSM PEBL U6 customer returns, with a Month of Shipment (MOS) prior to April 2006 and returned with Customer Complaints related to "Power Down", "Display", and/or "Call Performance", then:

- 1. Ensure all four R-Hsg Screws are tightened to the proper torque by attempting to re-tighten with a calibrated torque driver. Using New Torque Specification noted above.
  - a. If the R-Hsg Screws are not found to be noticeably loose when attempting to tighten, then proceed with normal troubleshooting techniques to identify the problem, per the customer complaint.



Consumer Solutions & Support US Competency Center 600 North US Highway 45 Libertyville, Illinois 60048 Website: gs.mot.com

When servicing any GSM PEBL U6 customer returns, with a Month of Shipment (MOS) prior to April 2006, regardless of Customer Complaint, then:

- 1. Ensure all four R-Hsg Screws are tightened to the proper torque by attempting to re-tighten with a calibrated torque driver. Using New Torque Specification noted above.
- 2. Proceed with normal troubleshooting techniques to identify the problem, per the customer complaint.

**Note:** All Motorola Authorized Service Centers should be audited on a regular basis to ensure compliance with torque driver calibration.

## **Service Inventory:**

No Action.

## **Call Center Action**

When responding to customer inquiries on GSM PEBL U6 with complaints related to "Power Down", "Display", and/or "Call Performance", please inform the customer to return the unit to an authorized service center for repair, per this FSB.

# **Service Entry Code**

Please ensure that repairs of this type are logged in the Service Link database as follows:

### **Global M-Claims Codes:**

**Customer Complaint Code:** 

DIM00 (Display Main - No Detail Provided)

TON03 (Turn On/Off - Auto Power Down in Standby)

**Problem Found Code:** 

TON03 (Turn On/Off - Auto Power Down in Standby)

Reference Designator Code: H (Housing)
Repair Code: RAS04 (Reassemble - CSB/ FSB)