

## **FIELD SERVICE BULLETIN**

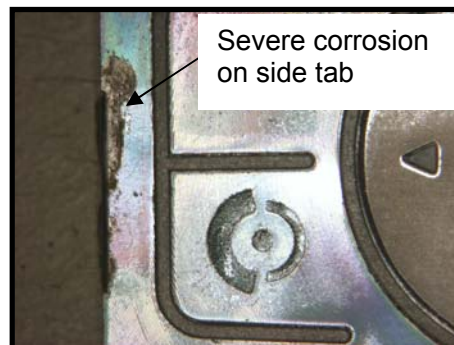
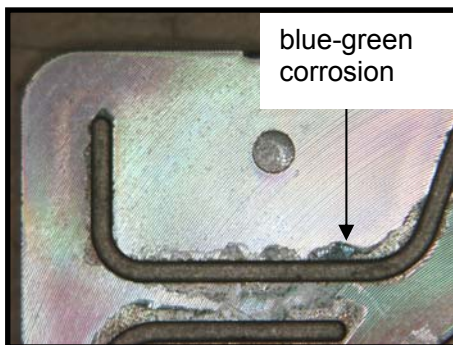
FSB Number: BJCCFSB2005-338  
Author: Jianfeng Ma  
Date: November 18, 2005  
Total No. Of Pages: 3  
Subject: **GSM V3 Keypad Corrosion**  
Model Affected: GSM V3  
Level of Repair: 2

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### **Problem**

Service is aware of an issue identified during the V3 MOL Analysis. Some units were found paint peeling off and corrosion on metal keypad after several months of usage. The corroded keypad will also produce a metallic tang smell. There are two suppliers for V3 keypad, SamYoung and Sinco, but only SamYoung were found affected by this issue. Analysis revealed root causes as below:

1. Rustiness starts from the character etching area and spread to other surface. If the copper sheet is not cleaned perfectly after etching, then the etching surface can be contaminated and the surface starts the corrosion.
2. High temperature/humidity loosens the adhesion of coat to metal surface.
3. The thickness of the coating on the surface of the keypads is inconsistent.



### **Solution**

Short term solution:

1. Improve current cleaning process. Changing the base plating location from Sam Young to Interplex, the copper plate supplier, contributes to improve cleaning before plating. (by the end of Oct, 2005)

2. SamYoung added more air conditioner and dehumidifier to control Temp. & humidity at old and new coating line. Temp. & humidity is very important factors in spray booth, coating room and material mixing room. The control spec. for them is  $25 \pm 5^{\circ}\text{C}(\text{T})$  and  $50 \pm 10\%(\text{H})$ . (by the end of Sep, 2005)

Long term solution:

Improve coating thickness. Sam Young has started to increase coat thickness over the whole surface of metal foil by changing coating process parameter. Test result is under evaluation.

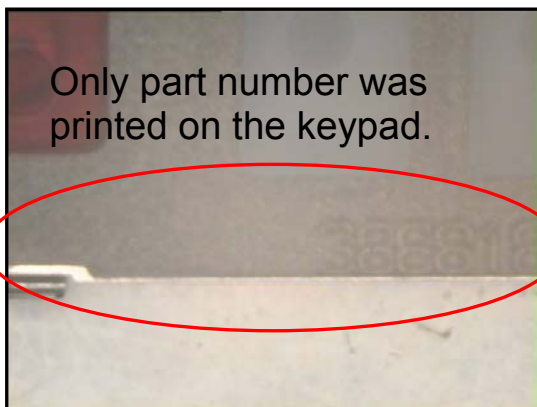
**Note:** Since there are no any marks on this improved keypad, we are not able to identify the build date from the parts itself.

### **Field Service Action**

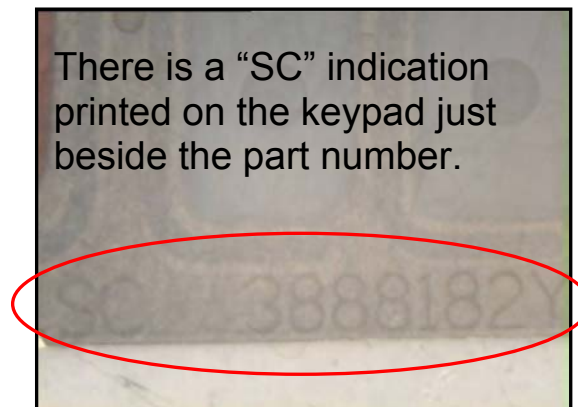
#### **Customer Returns:**

For V3 phones returned to Service Centre with the Customer Complaint of “Main Keypad - wear” or “paint peeling off/corrosion”, “metallic smell”, please use visual screening to determine that SamYoung main keypad has corrosion on its surface as above pictures.

- a. Identify the supplier name by printing behind the keypad, shown as below pictures.
- b. Then replace the failed SamYoung keypad with a good new one following the disassembly procedure on the service manual.



SamYoung Keypad



Sinco Keypad

#### **Service Inventory:**

New order should be for Sinco keypad parts or SamYoung keypad parts built after the end of September, 2005. (PN: 3888182Y03 for English; 3888182Y04 for PRC; for other regions, please check regional spare parts list.)



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**Call Center Action:**

If the customer calls with the above mentioned symptoms, please direct the customer to return the unit to an authorized service center for repair, per this FSB.

**Service Entry Codes**

Please ensure that repairs of this type are logged on to the applicable database as follows:

**Global M-Claims Codes:**

**Customer Complaint Codes:** MKP04 (Main Keypad - wear)  
**Problem Found Code:** MKP04 (Main Keypad - wear)  
**REF Designator Code:** KYPD(Key Pad)  
**Repair Code:** RMP10 (Replace Mechanical Part - CSB/ FSB)  
RTW02 ( Replaced level 2 part per CSB )