

## FIELD SERVICE BULLETIN

FSB Number: LVCCFSB2006 - 159  
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Date: April 14, 2006  
Total No. of Pages: 4  
Subject: **3G V3x – Hall Effect Switch Sensitivity**  
Phone Models: 3G V3x  
Level of Repair: 2

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### Problem

Service is aware of an issue, identified during the V3x NPI returns. Customer returned units with complaints of “CLI Backlight not working”, “Intermittent CLI Display”, and “Dropped Calls While Opening the Flip.” Analysis revealed one of the flip screws, located precisely above the hall-effect sensor, deforms the flux field around the magnet and decreases the ability of the hall-effect sensor to detect the magnet. This in turn prevents the CLI display from working properly when closing, moving or shifting the flip assembly. On failed units, at approx. 10° (before closing flip), the backlight turned off and the wallpaper changed to carrier logo (barely visible), see fig 1, 2 and 3.



Fig. 1



Fig. 2



Fig. 3

Figs 1-3 CLI ON with wallpaper. CLI OFF and CLI OFF with carrier logo instead of wallpaper (changed from wallpaper to logo when CLI turns OFF)

### Normal Operation:

Under normal operation, the CLI backlight should turn on when closing the flip. The light should illuminate at approx. 35° angle and remain on, with flip closed. The light will then time out. (Time out is dependant on Settings and Carrier). Throughout this operation,

the wallpaper should remain the same. Wallpaper should not change to carrier logo, see fig 4.



CLI on with flip open at 35° CLI on, ~ 10° before closing

CLI on with flip closed

Fig. 4 Normal CLI operation

### **Solution**

#### **Short-term containment action:**

Implemented the “wiggle” screen test and the 4 lbs force to the flip test on the assembly line, to ensure that all, shipped, phones did not carry this problem. Implementation date 2/13/2006.

Modified factory test fixture (software) to detect the CLI display status, while flip open or closed. Release notes published on 2/1/2006.

#### **Long-term corrective action:**

Change all four (4) screws from Ferro-magnetic steel to stainless steel 0387726M12, see fig 5.

Modified Flip Inner Housing to move magnet in the Z direction by increasing the gap in the Z by 0.9 mm (see Flip Inner Housing 1571165C01 revision F) as of 3/6/2006.

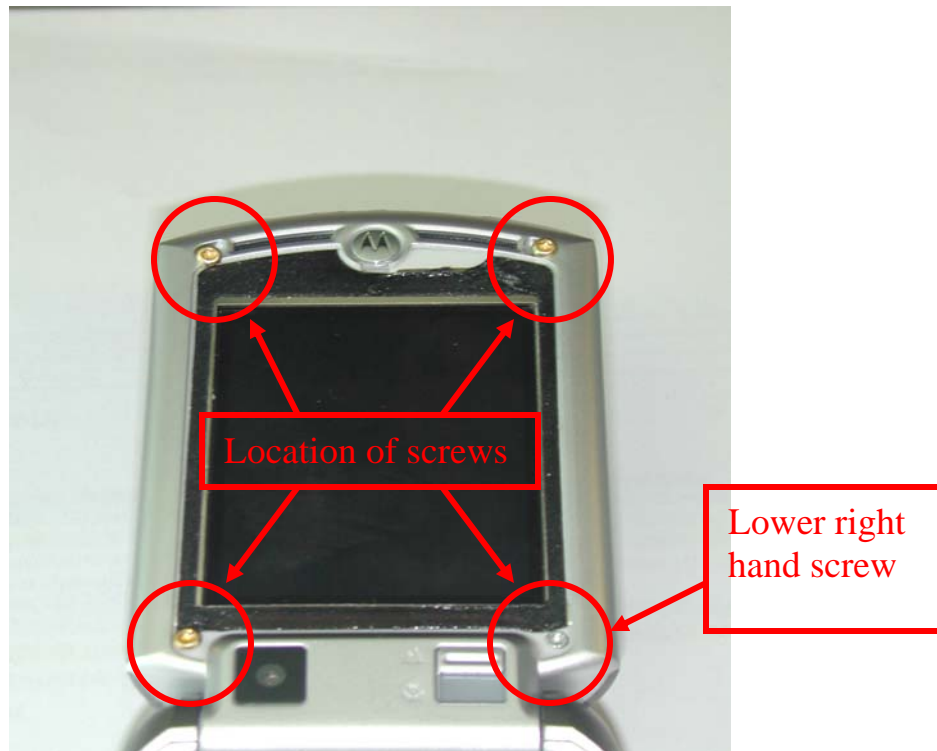


Fig. 5 Locations of Screws

**Service Action**

**Customer Returns:**

When servicing V3x with complains of “CLI Backlight not Working”, “Intermittent CLI Display”, and “Dropped Calls While Opening the Flip”, then:

1. Verify issue by closing the flip, applying pressure to the sideways of flip assembly, shifting or moving it sideways, see figs 1 - 3.
2. If issue is duplicated, replace the lower right hand screw on units manufactured prior 2/1/2006, see fig 5.
3. Upon changing the screw, verify issue does not re-occur.

**Note: When Servicing the Flip Assembly, replace all four (4) screw from Ferro-magnetic steel to stainless steel PN 0387726M12.**

**Service Inventory:**

Verify V3x inventory prior 2/1/2006 and replace the Ferro-magnetic steel screw with stainless steel 0387726M12, see fig 5.



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### **Call Center Information**

When responding to problem product inquiries on V3x where customer complains of “CLI Backlight not working”, “Intermittent CLI Display”, and “Dropped Calls While Opening the Flip”, direct them to their local Service Center per this FSB.

### **Service Entry Code**

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

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

**Customer Complaint Codes:** DIS07 (Display Secondary – No Backlight)  
TON04 (Turn On/Off – Auto power down in call)

**Problem Found Code:** TON (Turn on/off – power cycling/soft reset)

**REF Designator Code:** NA

**Repair Code:** RTW02 (Replace level 2 Part - CSB/FSB)