



MOTOROLA
intelligence everywhere™

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

FIELD SERVICE BULLETIN

FSB Number: LVCCFSB2003-51
Author: Zaki Mashood
Date: January 23, 2004,
Total No. of Pages: 5
Subject: **Liquid Damage Detection Labels- Amended Rev A**
Model Affected: All technology and All platforms

Problem

Large amount of warranty cost is spent in the form of replacement of PCB's and freight charges by Motorola and Carriers. This is due to the fact that up to 10% Phones returned to service shops are identified as liquid damaged. There is no mechanism of a quick on the spot diagnosis method to detect the liquid damage.

Solution

Following extensive testing and reviews it has been established that our products need a mechanism in the form of a "Water Detect Label" to detect the liquid damage early in the service cycle. When the Water Detection Labels get wet, they change color from white to red permanently.

Two labels per phone will be placed.

- One (external) placed near the bar code label to be visible along with the bar code label.
- The second label (Internal) will be placed on the transceiver (PCB)

The Second label (internal) is a back-up / second identifier placed near the I/O connector (Accessory or External connector) on top of a Can/Shield or on the PCB on either side.

The exact location of the label will be determined by mechanical design team based upon the Z-axis stack-up. Ideal location includes primary water ingress locations. The external label will be used at the point of return to check if the phone was subject to liquid damage and dealt with accordingly. The internal label will be used to verify/confirm the liquid damage if the need arises.

Efforts are already underway to have water detect labels placed on all Motorola phones.



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

Field Service Action

Point of returns and / or Service Centers:

Effective immediately, please perform the following:

1. Look for the Water Detection Label and check for the color change (the label changes the color from white to red, as shown in the pictures) due to liquid contamination.
2. Phones without the Water Detect Label brought in for service at service level 2, 3 or 4 shops or replacing a phone or PCB from the Seed Stock do the following:
IF The repair do not require to open the phone then place only one external label. **DO NOT OPEN OR DISASSEMBLE THE PHONE ONLY TO PLACE THE INTERNAL LABEL.**
Else place two water detect labels per phone as instructed above and as shown in the pictures before returning the phone back to the customer.
3. Do not place labels on test points, contact points, and on small parts.
Do not cover the information on the bar code label.
Consider the Z-axis clearance.
5. For the Phones with postponeable housing place the external label on the endo, to be visible along with the bar code label.
6. All phones returning back to customer must have the water detect labels.
7. The part number of the label is 5485042F01



MOTOROLA
intelligence everywhere™

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

**WATER DETECT LABEL PLACED NEAR THE BAR CODE LABEL
(EXTERNAL) SHOWS THE COLOR CHANGE WHEN SUBJECT TO
LIQUID CONTAMINATION**

BEFORE



WATER DETECT LABEL
WHITE - NORMAL
BEFORE LIQUID
CONTAMINATION

AFTER



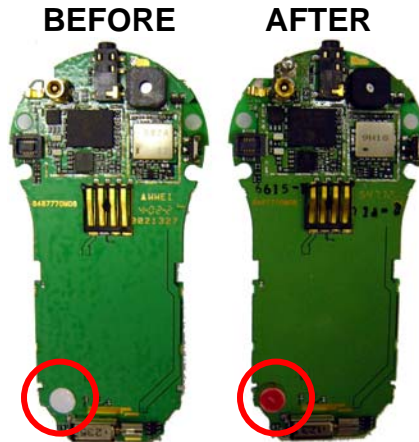
WATER DETECT LABEL
TURNS RED AFTER
LIQUID CONTAMINATION



MOTOROLA
intelligence everywhere™

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

**WATER DETECT LABEL PLACED ON THE TRANSCEIVER (PCB)
(INTERNAL) SHOWS THE COLOR CHANGE WHEN SUBJECT TO
LIQUID CONTAMINATION**



WATER DETECT LABEL
WHITE - NORMAL
BEFORE LIQUID
CONTAMINATION

WATER DETECT LABEL
TURNS RED AFTER
LIQUID CONATAMINATION



MOTOROLA
intelligence everywhere™

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

EXAMPLES OF WATER DETECT LABEL PLACED NEAR THE BAR CODE LABEL (EXTERNAL) TO BE VISIBLE ALONG WITH THE BAR CODE LABEL



EXAMPLES OF WATER DETECT LABEL PLACED ON THE TRANSCEIVER (PCB) (INTERNAL)

