



FIELD SERVICE BULLETIN

FSB Number: LVCCFSB2003-130
Author: Tony Bryan/Rajesh Verma
Date: December 10th, 2003
Total No. of Pages: 4
Subject: **GSM Triplets – Antenna Issue**
Model Affected: V300, V500, V525
Level of Repair: 3

Problem

Service has been made aware of an issue with some of the antennas supplied by Centurion. Problem being, when the antenna is over-torqued onto the radio, Antenna load is shifted, which results in Total Radiated Power (TRP) performance degradation. The degradation in TRP is most severe in the 850 MHz band and is less severe in the 900, 1800, and 1900 bands respectively. See chart below.

Band of Operation	Approx. Loss in TRP (dB)
850 MHz	3 dB
900 MHz	1 dB
1800/1900 MHz	Negligible Loss

The effect of the loss in TRP may cause the user to have trouble placing / receiving calls or calls may be dropped. The Root Cause of this issue was determined to be an antenna assembly issue at Centurion. The tang of the meander is not properly in place before the connector is mounted. This causes an intermittent electrical condition that occurs when the antenna is torqued onto the phone. **Note: The antenna can not be visually inspected for this defect.**

Approximate Exposure:

214,000 V300 units with the suspect antennas
239,000 V500/V525 units with the suspect antennas

Solution

Automated fixtures have been implemented by Centurion to replace manual bending of the tang. A screening process, which includes a screening fixture to over-torque antenna, has been defined and implemented by the Quality team at Centurion in place to both fix production and identify means for sorting existing in house material.

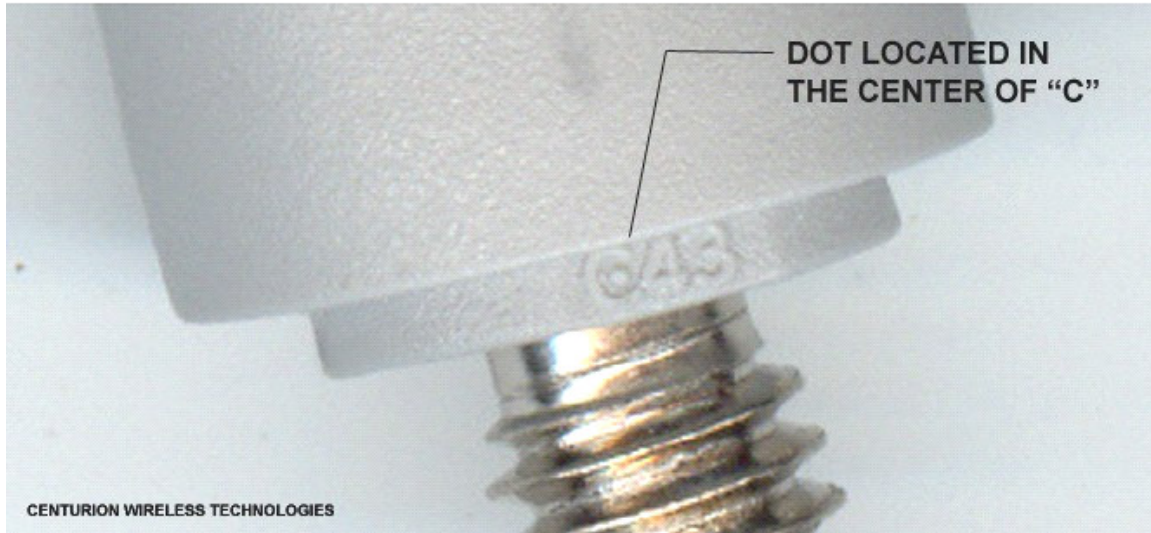
Centurion has replaced inventories with antennas processed after Nov.20th when all process improvements and screening was in place. New parts, built after Nov. 20th, are uniquely marked with a “Dot” inside the “C” at base of plastic. Screened parts will be marked with a “Red Dot” at the metal tip. See Figure 1.0 below.



MOTOROLA
intelligence everywhere™

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

**IDENTIFICATION METHOD FOR ALL V300 & V500
ANTENNAS MANUFACTURED STARTING NOVEMBER 20th.**



IDENTIFICATION METHOD FOR ALL SORTED V300 & V500 ANTENNAS

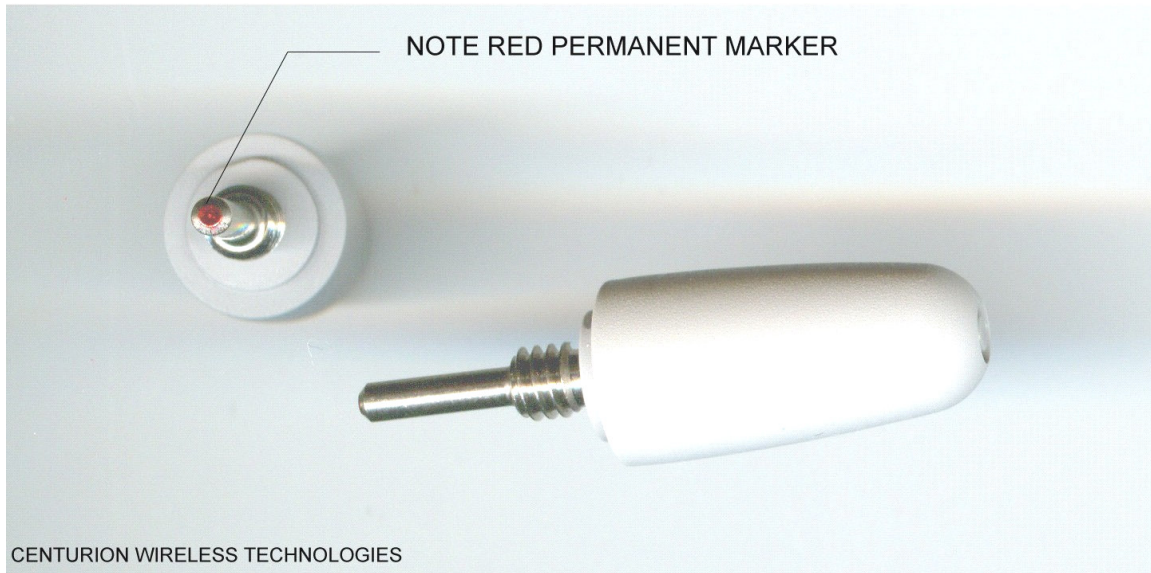


Figure 1.0 – Identification of New and Screened Parts



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

Field Service Action

Customer Returns:

When servicing GSM V300 customer returns, with a MOM (Month of Manufacture) prior to December 2003, and a customer complaint relating to “Call Performance” or “Dropped Calls”, then:

1. Replace antenna and retest through Radiated Parametric Testing to ensure Call Performance.
 - a. If unit is not repaired by replacing the antenna, then proceed with normal troubleshooting techniques as per the customer complaint.

When servicing GSM V500/V525 customer returns, with a MOM (Month of Manufacture) prior to December 2003, regardless of customer complaint, then:

1. Replace antenna and retest through Radiated Parametric Testing to ensure Call Performance.
2. Continue to service the unit as per the customer complaint.

***** All antennas replaced for this issue should be returned to the supplier via AAD. Please contact AAD, at the phone number listed below, and open a GCC to return the material.***

Motorola AAD Customer Service: 1-800-422-4210

Service Inventory:

Please quarantine all existing stock of the 8588912N01 V300 and 8589122N01 V500/V525 antenna and replace with new parts built after November 20, 2003. See Figure 1.0 for identification markings on new parts.

***** All quarantined antennas, from existing stock, should be returned to the supplier via AAD. Please contact AAD, at the phone number listed below, and open a GCC to return the material.***

Motorola AAD Customer Service: 1-800-422-4210



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

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:

CPR01 (Voice Call - Can't Make)

CPR02 (Voice Call - Can't Receive)

CPR05 (Voice Call - Drops Calls)

Problem Found: ANT02 (Antenna - Broken)

Reference Designator: Antenna

Repair: RAN06 (Replace Antenna CSB/FSB)

EPPRS Service Entry Codes

Complaint Code:

57 (Can't Make Calls)

58 (Can't Receive Calls)

59 (Drops Calls)

Repair Code: 16 (Antenna Electrical Fault)

Asia Service Entry Codes

Fault Code:

05 (No Rx/Tx/Page)

02 (Drops Calls)

Repair Code:

04 (Part Replaced)