E5515C-03D

# S E R V I C E N O T E

Supersedes: E5515C-03C

## E5515C Wireless Communications Test Set (8960 Series)

Serial Numbers: US0000000/US99999999, GB0000000/GB44309999

NOTE: Only MDC Boards with P/Ns E5515-60205, -60305, -60162, -60262 & -60462 should be replaced in Test Sets with serial prefixes noted above.

Incorrect, Unstable or No Measurement Results Require Replacement of Measurement Down Converter (MDC) Due to Defective Divider or Amplifier.

To Be Performed By: Agilent-Qualified Personnel

**Parts Required:** 

P/N Description Qty.

E5515-61829 Measurement Down Converter Kit (New) 1

## ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
MODIFICATION RECOMMENDED		
ACTION CATEGORY:	IMMEDIATELY X ON SPECIFIED FAILURE AGREEABLE TIME	STANDARDS: LABOR: 1.0 Hour
LOCATION CATEGORY:	CUSTOMER INSTALLABLE X ON-SITE X SERVICE CENTER	SERVICE X RETURN USED X RETURN INVENTORY: SCRAP PARTS: SCRAP SEE TEXT SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	AGILENT RESPONSIBLE UNTIL: 15 MAR 2006
AUTHOR: DT/LL	PRODUCT LINE: 13	
ADDITIONAL INFORMATION:		

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### **Situation:**

The Measurement Down Converter (MDC) may require replacement to resolve incorrect, unstable or no measurement results due to a defective divider or amplifier. Some user-calibration routines may also fail to complete due to the defective divider. The MDC is one of two receivers in the measurement subsystem which downconvert the RF signal for digital signal analysis. Test sets that exhibit these failure symptoms at elevated operating temperature (such as those found in test equipment racks) may resume normal operation on the bench, resulting in no-trouble-found diagnosis.

For the E1960A GSM Test Application the divider will exhibit failures in the 800-900 MHz band. For the E1962B cdma2000/IS-95/AMPS Test Application or E6702A/B cdma2000 Lab Application, completion of Channel Power Calibration (on the Channel Power Measurement screen) will stall or freeze at approximately 72% because of the defective divider. Failures due to the defective divider have been noted on test sets with MDC Board P/Ns E5515-60205, E5515-60305, E5515-60162, E5515-60262 and E5515-60462. Test sets with MDC Board P/N E5515-60562 contain the divider with improved reliability.

A defective amplifier can also cause incorrect or no measurement results. Incorrect measurements (including ORFS, PVT, and Phase Freq Error) will tend to read low. Failures due to the defective amplifier have been noted on test sets with MDC Board P/Ns E5515-60205, E5515-60305, E5515-60162, E5515-60262 and E5515-60462. Test sets with MDC Board P/N E5515-60562 contain the amplifier with improved reliability.

#### **Solution/Action:**

If the test set returns incorrect, unstable or no measurement results or fails to complete user-calibration routines, replace the Measurement Down Converter using the repair kit noted above. After replacement verify that the test set operates normally and returns correct measurements results. Recalibration is not required.