E5515B-100D

SERVICE NOTE

Supersedes:
E5515B-100C

E5515B Wireless Communications Test Set (8960 Series)

Serial Numbers: US00000000/US99999999, GB00000000/GB43479999

Recover-On-Failure (ROF) Program for Multiple Module Identification, Replacement and Test Verification

To Be Performed By: Agilent-Authorized Personnel

Parts Required:

P/N	Description	Qty.
E5515-69829	MDC Module, Refurbished	1
E5515-61892[1]	RFIO Module, New	1
E5515-69843	DSP Module, Refurbished	1
0950-4702	HDD (Hard Disk Drive) Module, New	1

Note[1]: E5515-69891 RFIO Refurbished kit has been discontinued and is in a UTG status

Note: Refer to the Table 1 in the Situation section for affected module part numbers and identification/replacement criteria.

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION: **MODIFICATION RECOMMENDED**		
ACTION CATEGORY:	XX ON SPECIFIED FAILURE [[]] AGREEABLE TIME	STANDARDS LABOR: 1.5 Hours
LOCATION CATEGORY:	[[]] CUSTOMER INSTALLABLE [[]] ON-SITE XX SERVICE CENTER [[]] CHANNEL PARTNER	SERVICE INVENTORY: [[]] RETURN [[]] SCRAP [[]] SEE TEXT USED PARTS: XX RETURN [[]] SCRAP XX SEE TEXT
AVAILABILITY:	PRODUCT’S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: 30 NOV 2009
AUTHOR:	SW	PRODUCT LINE: PL13
ADDITIONAL INFORMATION: Inspect and modify on any repair. The cable routing can be inspected during a repair with the covers off and viewing the cable routing through the internal power supply ventilation holes between the ADC and DSP.		

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Situation:

This service note provides an overview of the Recover-On-Failure (ROF) program as it applies to E5515B/C/T Wireless Communications Test Sets returned to Agilent service centers for repair. Test Sets returned for routine calibration or maintenance are not covered by this program. E5515As are not covered by this program.

Up to four modules (MDC, RFIO, DSP, HDD) which have an increased potential for failure may require replacement. The revision of each suspect module in the Test Set must be identified and meet the replacement criteria in the table below. Once identified, the modules will be replaced and the Test Set should be verified for proper operation.

Table 1 – ROF Replacement Criteria:

Module/Board	Test Set	Test Set Serial Number	Module/Board Replacement Criteria	Comment
RFIO – RF Interface	E5515B	≤ GB4236 or ≤ US4236	< E5515-61248 or E5515-61812 Board P/Ns	E5515-61812 is a valid RFIO Board P/N. ≥ E5515-61248 Boards are good.
	E5515C/T	≤ GB4243 or ≤ US4243		
MDC – Measurement Down Converter	E5515B	≤ GB4347XXXX	< E5515-60562 Board P/N	≥ E5515-60562 Boards are good.
	E5515C/T	≤GB4430XXXX		
HDD – 10 GByte Hard Disk Drive	E5515B	GB4236XXXX through GB4420XXXX	All 10 GByte drives require replacement	Verify the size of the HDD with TDA or a visual inspection of the HDD label.
	E5515C/T	GB4236XXXX through GB4405XXXX		
DSP –Digital Signal Processor E5515-61218 (**Note**: The DSP module E5515-61218 includes the E5515-60176 DSP Processor Board and the E5515-60167 Interface Board.)		≤ GB4405XXXX	E5515-60167 Interface Board The faulty SRAM (U48) is manufactured by Cypress and is labeled “CY7C1021-“	You must visually verify the presence of the part number of the U48 SRAM on E5515-60167 DSP Interface board AND verify if a Compact Flash RAM is located on the E5515-60176 Processor board. Replace DSP module if it has the faulty U48 SRAM on the Interface board or the Compact Flash on the DSP. Note: A good U48 SRAM will have the “CY7C1021B-“ P/N or have another manufacturers name on it.
			E5515-60176 DSP Processor Board which has the Compact Flash	

Solution/Action:

NOTE: For more detailed installation information, refer to the "ROF for SSU Process" document. This can be obtained by contacting Spokane Service at **spokane_service@agilent.com**. This document is restricted to Agilent personnel.

NOTE: This service note supersedes the following E5515B Service Notes while it is in effect:

- **MDC** – E5515B-06E
- **RFIO** – E5515B-03B
- **DSP** – E5515B-08C
- **HDD** – E5515B-09B

Use the following steps to implement this program:

NOTE: Proper ESD precautions must be observed. Dust and dirt should be removed from the Test Set to ensure proper air flow.

STEP 1) Complete the Standard Repair

- **Repair the Test Set:** Repair the Test Set and verify for proper operation.

- **Fill out the Service Order (S.O.) with the correct repair parts(s), labor, and billing information:** Certain failures may result in replacement of one or more modules **not covered by the ROF program**. Modules and labor associated with these repairs should be charged according to the Test Set's warranty status (i.e. Trade Repair, Extended Warranty, Factory Warranty, etc.).

  If the Test Set failure **is** associated with an ROF module, document the replaced ROF part(s) and labor associated with the repair, enter the Billing Type as a "Factory Warranty", and reference the E5515B-100D Service Note.

STEP 2) Complete the ROF Process

- **Identify and Replace Module(s):** After the repair has been validated and documented, use the Troubleshooting and Diagnostic Application (TDA) to query the Test Set. TDA will identify which modules need to be replaced and/or visually inspected. Replace all modules that meet the replacement criteria. Refer to the "ROF for SSU Process" document for details.

- **Run User-Calibration(s), RF Path Maintenance and Test Set Verification:** After modules are replaced, perform all required User-Calibration, RF Path Maintenance (if RFIO was replaced) and run Test Set Verify to verify proper operation. Refer to the "ROF for SSU Process" document for details.

NOTE: *Completing the User-Calibration and test procedures maintain the integrity of the calibration interval. Re-certification of the Test Set is not required after completion of the ROF process.*

- **Fill Out S.O. with correct ROF part(s), labor, and billing information:**
  1. Add a Service Note “Repair Activity” section in the S.O. to document the incremental labor and parts used for the recovery.
  2. The Billing Type should be coded as “Factory Warranty”.
  3. Include the following information in the Problem Resolution Field of the S.O.:
     a. “2008/2009 ROF according to Service Note E5515B/C-100D”.
     b. List the ROF modules that were replaced (i.e., MDC, RFIO, DSP, HDD)

- **Customer Notification Letter and Test Set ROF Process Identification Label:** Include the “Customer Notification” letter in the paperwork returned with the Test Set. Place the label below (supplied by Spokane Service Engineering or self-made) onto the rear panel of the Test Set near the product option label:

2008/2009 ROF

MDC RFIO DSP HDD

- **Return/Dispose of Replaced Modules Properly:** Return the MDC and RFIO to SQF and the DSP module to Roseville. The HDD can be scrapped locally. See below shipping information.

Module Name	**Return Modules Labeled**	**Ship to Location**
MDC	E5515-61219	AMC
RFIO	E5515-61248	Scrap locally
DSP	E5515-61218	Scrap locally
HDD	All 10 GByte Drives	Scrap locally

<u>AMC Manufacturing Center</u>

Agilent Technologies
Attention: Lim, Choon-Siang, PL13 Field Returns
Bayan Lepas Free Industrial Zone
Penang, PG 11900
MALAYSIA

Contact Choon-Siang Lim for the account number. All charges will be billed to AMC.