E5515C-100D

<u>SERVICE NOTE</u>

Supersedes: E5515C-100C

E5515C/T Wireless Communications Test Set (8960 Series)

Serial Numbers: US00000000/US99999999, GB00000000/GB44309999

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

Note¹: E5515-69891 RFIO Refurbished kit has been discontinued and is in a UTG status

Note: Refer to the table 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 [[]] RETURN INVENTORY: [[]] SCRAP [[]] SEE TEXT	USED PARTS:	XX RETURN [[]] SCRAP XX SEE TEXT	
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL	: 30 NOV 2	009	
AUTHOR: SW		PRODUCT LINE: PL13			
ADDITIONAL INFORMATION: Inspect and modify on any repair. The cable routing can be inspected during a repair with the					

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.

ROF Replacement Criteria:

ROF Replacement			Modulo/Doord	
Module/Board	Test Set	Togt Cot	Module/Board	
Wiodule/Board	Test Set	Test Set	Replacement	Comment
		Serial Number	Criteria	
RFIO – RF Interface	E5515B	≤ GB4236 or	< E5515-61248	E5515-61812 is a valid
		≤ US4236		RFIO Board P/N.
	E5515C/T	\leq GB4243 or	or E5515-61812	≥ E5515-61248 Boards
		≤ US4243	Board P/Ns	are good.
MDC – Measurement	E5515B	≤GB4347XXXX	Dourd 1/145	
Down Converter	E3313B	\leq OD434/ $\Lambda\Lambda\Lambda\Lambda$	< E5515-60562	≥ E5515-60562 Boards
Bown converter	E5515C/T	≤GB4430XXXX	Board P/N	are good.
		_	Board 1/11	are good.
HDD – 10 GByte Hard	E5515B	GB4236XXXX		
Disk Drive		through		Verify the size of the
		GB4420XXXX	All 10 GByte drives	HDD with TDA or a
			require replacement	visual inspection of the
	E5515C/T	GB4236XXXX		HDD label.
		through		
		GB4405XXXX		
DSP –Digital		\leq GB4405XXXX	E5515-60167	You must visually verify
Signal Processor			Interface Board	the presence of the part
E5515-61218				number of the U48
			The faulty SRAM	SRAM on E5515-60167
			(U48) is manu-	DSP Interface board
AT 1 THE DOD			factured by Cypress	AND verify if a Compact
(Note: The DSP			and is labeled	Flash RAM is located on
module E5515-61218			"CY7C1021-"	the E5515-60176
includes the E5515-				Processor board.
60176 DSP Processor			E5515-60176 DSP	Replace DSP module if it
Board and the E5515-			Processor Board	has the faulty U48
60167 Interface			which has the	SRAM on the Interface
Board.)			Compact Flash	board or the Compact
			Compact Masii	Flash on the DSP.
				Tash on the DSI.
				Note: A good U48
				SRAM will have the
				"CY7C1021B-" P/N or
				have another manu-
				facturers name on it.

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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 E5515C and E5515T service notes while it is in effect:

- o MDC E5515C-03D, No E5515T Service Note issued
- o **RFIO** E5515C-02A, E5515T-03
- o **DSP** E5515C-05C, No E5515T Service Note issued
- o **HDD** E5515C-06B. No E5515T Service Note issued

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 <u>repair</u> parts(s), labor, and billing information: Certain failures may result in replacement of one or more modules <u>not covered by the ROF program</u>. 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 <u>is</u> 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 E5515C-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.

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- 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

AMC Manufacturing Center

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.