

INFORMATION ONLY – DOES NOT COMMUNICATE  
A MODIFICATION OR SAFETY CONDITION

## E5070B-07C

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

Supersedes:  
E5070B-07B

E5070B ENA Series Network Analyzer, 300 kHz to 3 GHz

Serial Numbers: [0000A00000 / 9999Z99999]

**When replace A1 SOURCE BOARD from E5071-6x551 or E5071-6x561 to E5071-6x571 in repair, update E5070B Operating System at the same time.**

**Parts Required:** See solution

## ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

**INFORMATION ONLY**

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ADDITIONAL INFORMATION:

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**Situation:**

When using the A1 source board (E5071-66571/69571) in repairs, Rev A.05.00 or later firmware is required. If customer unit's firmware version is less than Rev.A.05.00, it should be updated by changing the operating system. With Rev A.03.60 or below version firmware, an error message "Power on test failed (A1 not found)" is shown at lower left part on a display at power on. With Rev A.03.62 or A.04.00 version firmware, any of messages "Power on test failed (A1 DC-bus, 0x00000010)", "Power on test failed (A1 DC-bus, 0x00000020)", or "Power on test failed (A1 DC-bus, 0x00000030)" is shown at power on.

To avoid troubling on customers, especially after a system recovery timing, update the E5070B operating system if customer unit's firmware is Rev.A.4.00 or below.  
Please refer to the service note E5070B-10A for installing the operating system.

**Solution/Action:**

**When customer's original A1 module is E5071-6x551 or E5071-6x561, and its original firmware version is Rev A.04.00 or below,**

**Parts Required**

<b>P/N</b>	<b>Description</b>	<b>Qty.</b>
E5071-69571 (or E5071-66571)	A1 Source board module	1

Update the E5070B operating system in accordance with the service note E5070B-10A. Then, replace A1 module and perform A1 "Source Board" in spot adjust menu in the E5070B/E5071B adjustment program.

Then execute the following programs to verify that the replacement has been successfully completed.  
Internal/External Test  
Performance test

At last, attach the last page of this note to the unit to inform customer that the firmware version has been updated.

\*1 Refer to the E5070B/E5071B service manual chapter 6, A1 Source board replacement part for the detail procedure

**When customer's original A1 module is E5071-6x551 or E5071-6x561, and its original firmware version is Rev A.05.00 or later,**

**Parts Required**

<b>P/N</b>	<b>Description</b>	<b>Qty.</b>
E5071-69571 (or E5071-66571)	A1 Source board module	1

Replace the A1 module and perform A1 "Source Board" in spot adjust menu in the program.  
There is no need to update the operating system because customer's firmware is a higher version.  
No need to attach the last page.

**Retrofit Time**

Assembly Time:	0.5 hour
Adjustment Time:	No additional time due to this service note.
Performance Tests Time:	No additional time due to this service note.
Total Time:	0.5 hour

## Note to Customer: Firmware Upgrade Notice

Your unit has failure of the source board module, and we replaced it with the latest model. This was done to update the operating system. Along with this operating system update, the firmware version was updated to Rev.A.05.00 or later in order to assure correct operation of the new source board.

This firmware upgrade adds some new features as listed below, and it might require some changes in operational procedures at your location; however, this firmware update is necessary for using the latest source board module. Accordingly, we would like you to use these new features, however if you do not need them kindly turn them off. Please refer to the latest user's guide for detailed information on new features. Thanks for your understanding.

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You can download the latest user's guide by going to [www.agilent.com/find/ena](http://www.agilent.com/find/ena) and then selecting "Manuals & Guides" from the "Key library information" menu.

### **Additional features from Rev.A.04.00**

Changes of A.05.00, and

- Add Limit line offsets
- Add Ripple limit line
- Add Bandwidth limit

### **Additional features from Rev.A.03.62**

Changes of A.04.00, and

- Add Point trigger function
- Add Imbalance 3 and 4 parameters for SE-SE-Bal measurement (Fixture simulator)
- Add 7mm calibration kit such as 85031B and 85050C/D

### **Additional features from Rev.A.03.60**

No new features

### **Additional features from Rev.A.03.54**

- Add Auto Power Range set function

### **Additional features from Rev.A.03.53**

Change of A.03.54, and

- Add Initial Source Port Control feature

### **Additional features from Rev.A.03.50**

Changes of A.03.53, and

- Maximum output power limitation (-10 dBm)
- Add "SDEV" to CALC:SEL:FUNC:TYPE command parameter

### **Additional features from Rev.A.03.01**

Changes of A.03.50, and

- VBA Usability Enhancement
- ECal Functionality Enhancement
- Embedding/De-embedding Enhancement

### **Additional features from Rev.A.03.00**

Changes of A.03.01, and

- Add system characteristic impedance (Z0) set feature