

MODIFICATION RECOMMENDED

**E4423B-01E**

**S E R V I C E**

**N O T E**

Supersedes:  
E4423B-01D

## ESG "B" AP/DP Series RF Signal Generator

Serial Numbers: [0000A00000 / 9999Z99999]

**Defective Divider chip on the Frac-N/Divider board (A24) displays Error 511 "Output unleveled" and causes NO OUTPUT or UNSTABLE OUTPUT below 1GHz.**

**To Be Performed By: Agilent-Qualified Personnel**

**Parts Required:**

P/N	Description	Qty.
E4423-69019	Frac-N / Divider	1

## ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
<b>MODIFICATION RECOMMENDED</b>			
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS: LABOR: 1.0 Hours	
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY: <input checked="" type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT	USED PARTS: <input checked="" type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	AGILENT RESPONSIBLE UNTIL: August 7, 2007	
AUTHOR: PY      PRODUCT LINE: 15			
ADDITIONAL INFORMATION:			

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April 10, 2007

**Situation:**

The ESG-B AP/DP Family of Signal Generators has been experiencing failures in the Frac-N board assemblies. This is due to a failure in the divide-by-eight circuit of the Divider chip A24 U313 which causes the ESG to display Error 511 "Output unlevelled". All ESG-B AP/DP units with the serial numbers mentioned above may experience Error 511 along with UNSTABLE or NO OUTPUT below 1GHz. If this occurs, the A24 Frac-N/Divider Assembly (E4423-60019) needs to be replaced. This assembly should be ordered using part number E4423-69019 and should be treated as a warranty repair. The defective assembly should then be returned with documentation referencing this service note as "Error 511".

**Solution/Action:**

The resolution plan consists of the following:

1. Repair on failure.
2. Prevent future occurrences of Error 511 due to a defective divider chip (A24U313) by repairing the ESG-AP/DP in advance. When the ESG-AP/DP is returned for service or calibration, check the following:-
  - a) ESG-AP/DP's serial number falls within the above range.
  - b) Locate A24U313 (on the component side near P3).  
Note the manufacturer name, part number, and date code.

**Defective part**

HP 1GC1-4210

xx/xx/xx

If a) and b) are true, replace the A24 Frac-N assembly. Otherwise no prevention is necessary. Good parts show "Agilent" as the manufacturer.

**Good Part**

Agilent 1GC1-4210

xx/xx/xx