E4428C-09B

# SERVICE NOTE

Supersedes: E4428C-09A

E4428C - Signal Generator

Serial Numbers: AA00000000-ZZ47269999

OLD Power supply warranted replacement on failure.

**Parts Required:** 

P/N Description Qty.

0950-5037 Power Supply 1

## ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:				
MODIFICATION RECOMMENDED				
ACTION CATEGORY:	X ON SPECIFIED FAILURE [[]] AGREEABLE TIME	STANDARDS  LABOR: 1.5 Hours MAXIMUM		
LOCATION CATEGORY:	[[]] CUSTOMER INSTALLABLE [[]] ON-SITE X SERVICE CENTER [[]] CHANNEL PARTNER	SERVICE [[]] RETURN INVENTORY: [[]] SCRAP X SEE TEXT	USED XX RETURN PARTS: [[]] SCRAP [[]] SEE TEXT	
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: 1 MAR 2011		
AUTHOR: AKS		PRODUCT LINE: 15		
ADDITIONAL INFORMATION: On specific failure, a warranted replacement of the power supply <b>Revision B/C 0950-4031</b> with P/N: 0950-5037 Failed assembly is to be returned to the factory in the USA.				

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#### **Situation:**

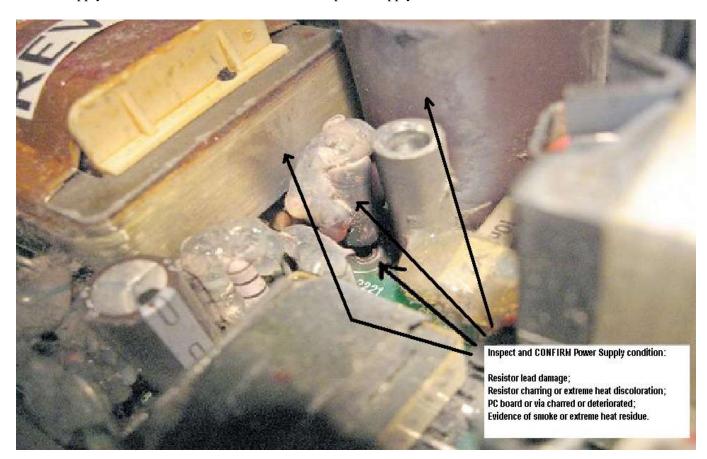
Older E4428C may experience a power supply failure of the original installed <u>0950-4031 Rev B/C</u> power supplies. Not a safety issue, the failures can occur due to the power supply PC board eventually deteriorating after being subjected to a prolonged exposure to the high temperature components associated with the power factor correction resistors.

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

1. For a suspected E4428C power supply failure, check the rear panel serial tag for a small black inspection dot (see image below). If a black dot is present, similar to what is depicted in the upper right corner, the instrument power supply has been previously replaced and no further action is required related to this Service Note.



- 2. If the dot is missing proceed to step 3.
- 3. **FOR THIS SPECIFIC FAILURE** where the power supply failed due to lead failure of R6 or R9 and/or PC board has deteriorated, as depicted in the photograph below, replace <u>failed</u> power supply P/N: 0950-4031 Rev B/C with current power supply P/N: 0950-5037.



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4. The associated PC board deterioration and failure location should clearly indicate from the evidence that the PC board or resistors arced or smoked at time of failure. Charring, discoloration and/or smoke residue should be present. The resistor and transformer above are strong indications that a catastrophic failure occurred.

**NOTE:** It is <u>normal</u> and <u>acceptable</u> for the green solder resist in the location of the resistors or the trace (front or reverse sides) to change color from green to a dark grey/brown.

### Identifying that the repair/replacement has been completed:

- 5. Using a permanent marker, place a black dot on the serial tag as depicted in step 1.
- 6. Reference this Service Note E4428C-09B in all documentation or correspondence.
- 7. Make a copy and fill out the Instrument Tracking Data Form below. Include this filled out form with the failed Power Supply and **RETURN** both to the factory (Shipping Address below) for tracking and analysis.

**NOTE:** This Service Note is only applicable to Power Supplies with P/N: 0950-4031 Rev B or C and for E4428C units with S/N: < xx4727xxxx.

If the Power Supply in a suspected E4428C failed for other than what is called out in this Service Note, once the Power Supply has been replaced, follow step 5 above to identify that this unit has a newer Power Supply. Doing so will assist in future quick recognition that a specific serialized unit has been repaired with a newer Power Supply, a Power Supply that is not covered by this Service Note.

E4428C-09B / E4438C-20B Power Supply SN Instrument Tracking Data Form	
Repair Date:	
Model Number:	
Model Serial Number:	
ISO / Repair Number:	
Reported Failure Symptom:	

**Shipping Address:** 

Agilent Technologies, Inc Service Support Engineering c/o Allen Stephens 4USH / Col 27BB 1400 Fountain Grove Parkway Santa Rosa, CA, USA 95403