

S E R V I C E N O T E

SUPERSEDES: None

8593E Spectrum Analyzer

Serials:0000A00000 to 3513A99999
0000U00000 to 9999U99999

Modification to A14 Log Amplifier Assy to control overshoot problem

To Be Performed By: Agilent Personnel or Qualified Customer Personnel

Duplicate Service Notes:

- 8591E-08
- 8593E-10
- 8594E-10
- 8595E-10
- 8596E-10

Parts Required:

| Part No. | Qty. | Description |
|-----------|------|-----------------------------|
| 0360-0124 | 1 | Terminal, single pin |
| 0180-4136 | 1 | Capacitor, tantalum 10 ufd. |
| 9320-6209 | 1 | Label, 08590-60373 |

Continued

DATE: January 1996

ADMINISTRATIVE INFORMATION

| | | | | | |
|---------------------------------|--|-------------------------|---|-------------|---|
| SERVICE NOTE CLASSIFICATION: | | | | | |
| MODIFICATION RECOMMENDED | | | | | |
| ACTION CATEGORY: | <input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME | STANDARDS: | Labor 1.5 Hour | | |
| LOCATION CATEGORY: | <input checked="" type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER | SERVICE INVENTORY: | <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT | USED PARTS: | <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT |
| AVAILABILITY: | PRODUCT'S SUPPORT LIFE | | AGILENT RESPONSIBLE UNTIL: January 1998 | | |
| AUTHOR: PS | ENTITY: 5320 | ADDITIONAL INFORMATION: | | | |

Situation:

An overshoot problem has been observed when users make power vs time measurements on a PHS like signal even without the PHS DLP. The analyzer has this overshoot for fast turn on large dynamic range bursts (50 dB or so). This is generally associated with Digital Communication types of measurements.

Contact Paul Schmiedeberg at (707) 577-2941 or by desk memo and a packet of parts will be supplied for the modification.

Solution/Action:

A 10 ufd. capacitor is added to the +11 volt regulated circuit. The capacitor is actually tied to the +11 V2 output to ground. The effect of the capacitor is to suppress the overshoot that has been experienced as described in the Situation description.

1. Lift the top lead of R112 from the circuit board at Point B, see Figure 1.
2. Place the terminal stud (p/n 0360-0124) into Point B and solder in place.
3. Place the (+) end of the capacitor (C78) into the hole at Point A and solder into place.
4. Wrap the (-) lead of C78 and the loose lead of R112 around the terminal stud in Point B and solder.
5. Apply one label with the 08590-60373 imprinted to the assembly over the 5062-8261 part number and place one label on the rear panel for quick identification of the modified Log assembly.

After re-assembly, the only calibration necessary is to run the Cal Freq and AmpEd self test from the front panel of the spectrum analyzer.

