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

SUPERSEDES: NONE

E4401B, E4402B, E4403B, E4404B, E4405B, E4407B, E4408B, and E4411B ESA Spectrum Analyzer family. Also E7401A, E7402A, E7403A, E7404A, and E7405A EMC Pre-Compliance Analyzers.

## Intermittent screen "flicker" due to a cold solder joint

## **ESA Spectrum Analyzer Serial Numbers:**

| E4401B-07 | US39010101 / US40240610 |
|-----------|-------------------------|
| E4402B-07 | US39010101 / US40241334 |
| E4403B-06 | US39010101 / US40240745 |
| E4404B-06 | US39010101 / US40240716 |
| E4405B-06 | US39010101 / US40240518 |
| E4407B-06 | US39010101 / US40241203 |
| E4408B-06 | US39010101 / US40240473 |
| E4411B-07 | US39010101 / US40241566 |

### **EMC Analyzer Serial Numbers:**

| E7401A-05 | US39110101 / US40240361 |
|-----------|-------------------------|
| E7402A-05 | US39110101 / US40240208 |
| E7403A-05 | US39110101 / US40240139 |
| E7404A-05 | US39110101 / US40240128 |
| E7405A-05 | US39110101 / US40240198 |

To Be Performed By: Agilent Service Centers Only

Continued

DATE: January 2001

### ADMINISTRATIVE INFORMATION

| SERVICE NOTE CLASSIFICATION: |   |   |  |  |
|------------------------------|---|---|--|--|
| MODIFICATION RECOMMENDED     |   |   |  |  |
| ACTION<br>CATEGORY:          | <ul><li>☐ IMMEDIATELY</li><li>☐ ON SPECIFIED FAILURE</li><li>☐ AGREEABLE TIME</li></ul> | STANDARDS:  LABOR 1.0 Hours   |  |  |
| LOCATION<br>CATEGORY:        | ☐ CUSTOMER INSTALLABLE☐ ON-SITE☐ SERVICE CENTER   | SERVICE ☐ RETURN USED ☐ RETURN PARTS: ☐ SCRAP ☐ SEE TEXT ☐ SEE TEXT |  |  |
| AVAILABILITY:                | PRODUCT'S SUPPORT LIFE  | AGILENT RESPONSIBLE UNTIL: End of GMS period                        |  |  |
| AUTHOR: BD                   | ENTITY: 5320  | ADDITIONAL INFORMATION:   |  |  |

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#### Parts Required:

No specific part numbers, just the tools to take apart the ESA Front Frame assembly. You will also need scissors, solder, and a soldering iron.

#### Situation:

Instruments within the above serial range can experience an intermittent screen "flicker" due to a cold solder joint on pin 7 of the transformer on the backlight inverter board. The backlight inverter board attaches to the front panel interface board (A1A1) on the analyzer. The attached figures below in the Solution/Action section can be referenced on the procedure to use to correct for this problem.

The backlight inverter board and LCD display are procured together as an assembly from NEC. Manufacturing has troubleshot screen flicker issues to poor solder quality on pin 7 of the transformer on the backlight inverter board. NEC has been notified and an inspection process implemented in manufacturing to cure this problem.

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

If an ESA or EMC analyzer is returned and the fail description relates to a display problem (no display or intermittent "flicker"), Agilent Service Centers should remove the backlight inverter board and perform the following procedure:

1) Peel back the plastic shield on the backlight inverter board. See Figure 1.

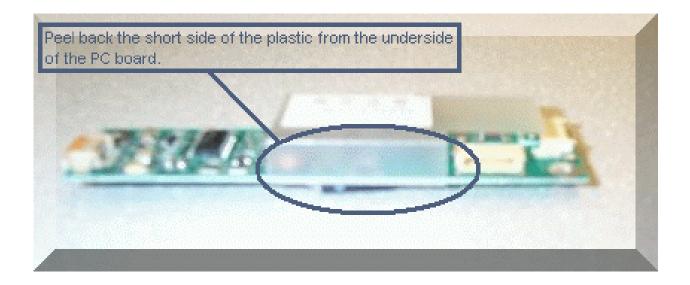


Figure 1\_

2) Cut the plastic with a pair of scissors. See Figure 2.

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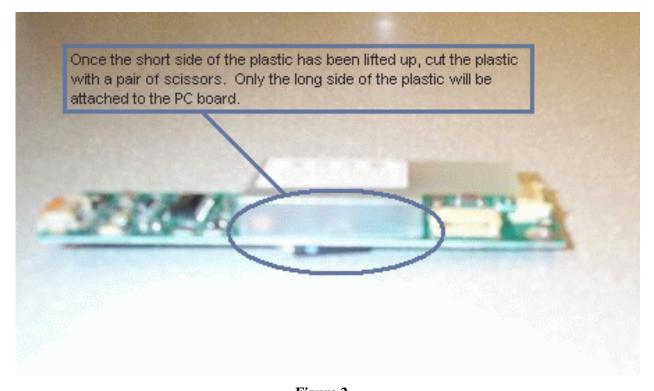


Figure 2
3) Re-solder pin 7 of the transformer on the backlight inverter board. See Figure 3.

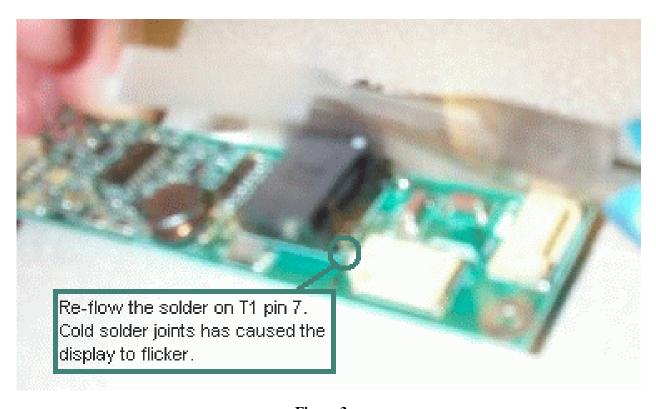


Figure 3