

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:					
<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 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: End of GMS period		
AUTHOR: BD	ENTITY: 5320		ADDITIONAL INFORMATION:		



**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:**

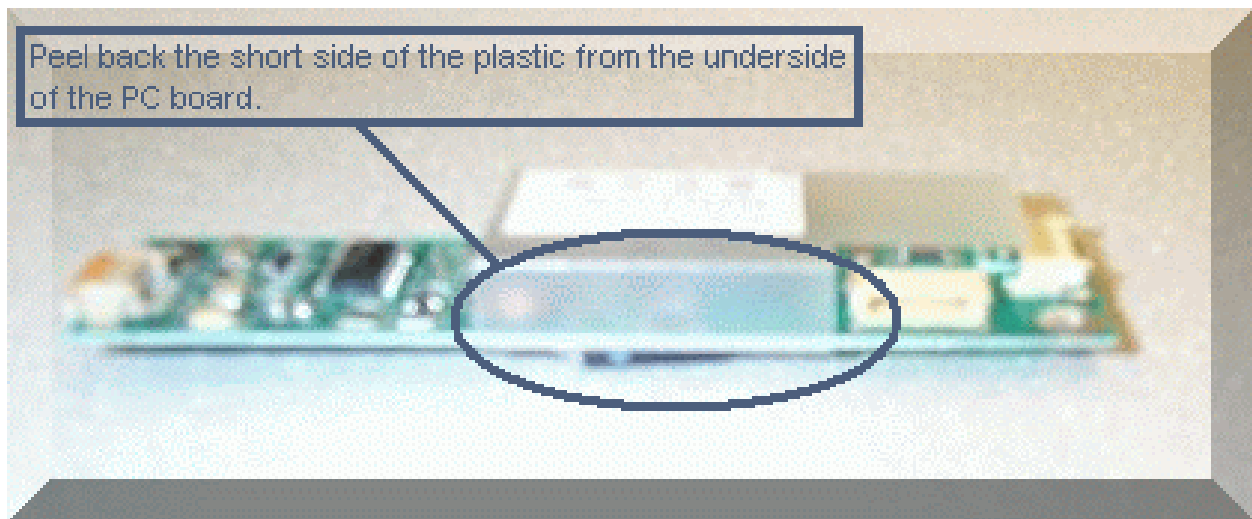
Instruments within the above serial range can experience an intermittent screen "flicker" due to a cold solder joint on pin 7 of the transformer on the backlight inverter board. The backlight inverter board attaches to the front panel interface board (A1A1) on the analyzer. The attached figures below 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:

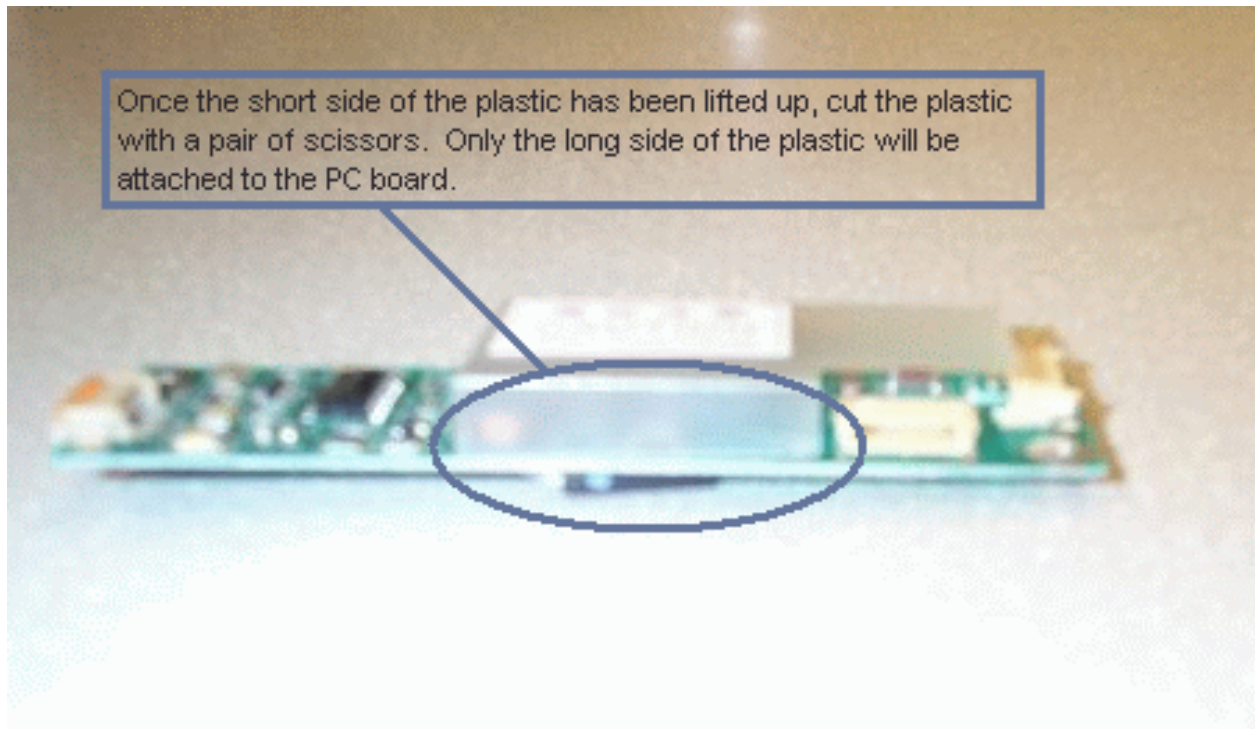
- 1) Peel back the plastic shield on the backlight inverter board. See Figure 1.



**Figure 1**

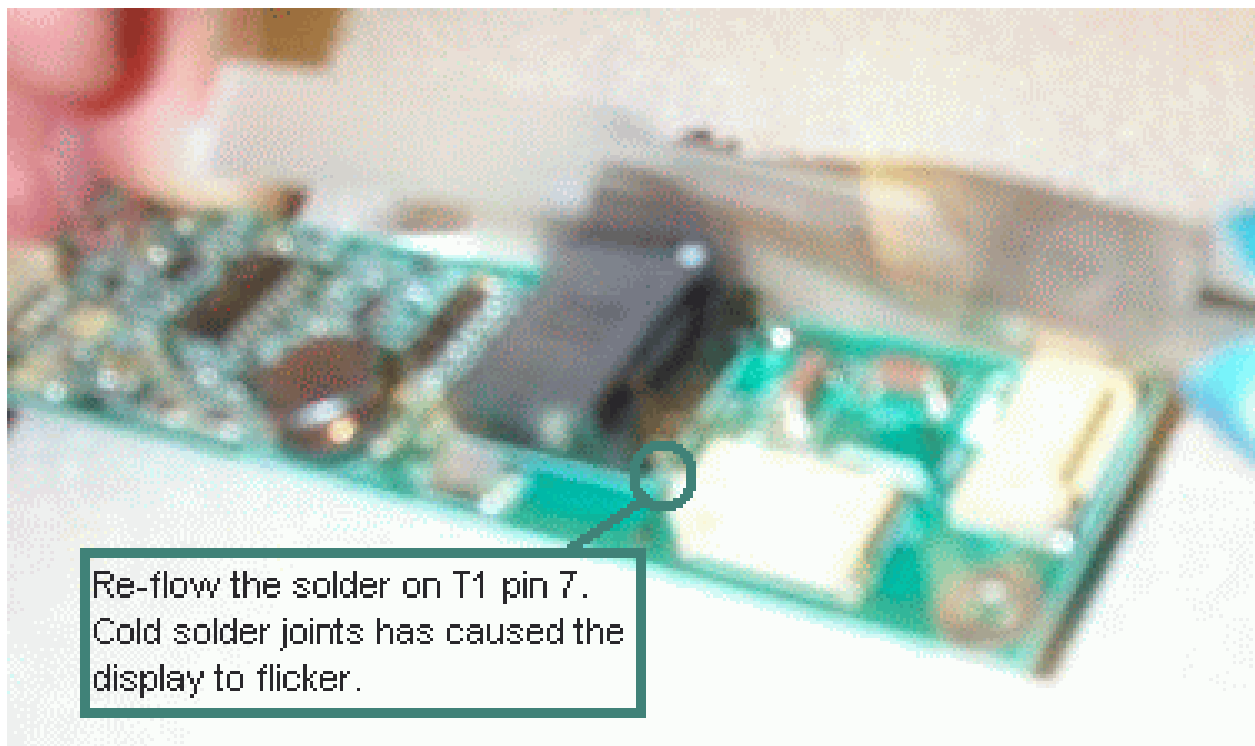
- 2) Cut the plastic with a pair of scissors. See Figure 2.

*Continued*



**Figure 2**

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



**Figure 3**