

MODIFICATION RECOMMENDED –  
CORRECTS MANUFACTURING OR DESIGN DEFECTS

**8563EC-06**

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

Supersedes:  
None

## 856xEC Portable Spectrum Analyzer

### Duplicate Service Notes:

**8560EC-06** Serials 4111A00352/4123A00524  
**8561EC-06** Serials 4111A00361/4123A00428  
**8562EC-06** Serials 4111A00497/4148A00760  
**8563EC-06** Serials 4111A01243/4148A01871  
**8564EC-06** Serials 4111A00502/4208A00642  
**8565EC-06** Serials 4111A00494/4208A00724

**Perform butch on A3 interface board to remove gated video problems**

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

**Parts Required:**  
**XTD-8 Torx driver**  
**Soldering Iron**

## ADMINISTRATIVE INFORMATION

|                                 |   |                                |   |
|---------------------------------|---|--------------------------------|---|
| SERVICE NOTE CLASSIFICATION:    |   |                                |   |
| <b>MODIFICATION RECOMMENDED</b> |   |                                |   |
| ACTION CATEGORY:                | <input type="checkbox"/> IMMEDIATELY<br>X ON SPECIFIED FAILURE<br><input type="checkbox"/> AGREEABLE TIME | STANDARDS:                     | LABOR: 0.5 Hours  |
| LOCATION CATEGORY:              | X CUSTOMER INSTALLABLE<br><input type="checkbox"/> ON-SITE<br>X SERVICE CENTER                            | SERVICE INVENTORY:             | <input type="checkbox"/> RETURN<br><input type="checkbox"/> SCRAP<br>X SEE TEXT |
| AVAILABILITY:                   | PRODUCT'S SUPPORT LIFE  | USED PARTS:                    | <input type="checkbox"/> RETURN<br>X SCRAP<br><input type="checkbox"/> SEE TEXT |
| AUTHOR: JCC                     | PRODUCT LINE: 12  | AGILENT RESPONSIBLE UNTIL: TBA |   |
| ADDITIONAL INFORMATION:         |   |                                |   |

© AGILENT TECHNOLOGIES, INC. 2002  
PRINTED IN U.S.A.



March 13, 2002

**Situation:**

Instruments with the above serial numbers will have problems with gated video. When gating a pulsed RF signal, the spectrum noise floor will drop below the screen while the signal peak will drop down to about 40 dB or below depending on the RBW/VBW settings. What causes this is a 220-pF capacitor connected from pin 2 of the switching IC, U109, to ground on the A3 interface board (part #08563-60174). The capacitor acts as a low pass filter and therefore will filter out pulses with higher pulse repetition frequencies.

**Solution/Action:**

Remove the capacitor. Unfold and remove the A3 interface board from the spectrum analyzer. Using a torx driver, remove the shielding. Locate capacitor C157 (220-pF, part #0160-4812) connected from R142 to ground. It's very distinct from the other caps and has plastic shielding around the exposed wire. Remove by soldering. Don't cut the wire. Label the board to show that service note 856xEC-06 has been applied.