

S E R V I C E N O T E

SUPERSEDES: None

**54610B Oscilloscope**

**Serial Numbers:** 0000A00000 / 9999A99999

**Mod improves oscilloscope printing using RS-232 modules**

**Duplicate Service Notes:**

- 54600B-02
- 54601B-02
- 54602B-02
- 54603B-01
- 54610B-01
- 54651A-01
- 54652B-01
- 54656A-02
- 54658A-01
- 54659B-01

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

**Parts Required:** see text

*Continued*

DATE: June 1995

ADMINISTRATIVE INFORMATION

|                                 |  |                         |   |             |   |
|---------------------------------|--|-------------------------|---|-------------|---|
| SERVICE NOTE CLASSIFICATION:    |  |                         |   |             |   |
| <b>MODIFICATION RECOMMENDED</b> |  |                         |   |             |   |
| ACTION CATEGORY:                | <input type="checkbox"/> IMMEDIATELY<br><input checked="" type="checkbox"/> ON SPECIFIED FAILURE<br><input type="checkbox"/> AGREEABLE TIME        | STANDARDS:              | Labor 1.0 Hour  |             |   |
| LOCATION CATEGORY:              | <input checked="" type="checkbox"/> CUSTOMER INSTALLABLE<br><input type="checkbox"/> ON-SITE<br><input checked="" type="checkbox"/> SERVICE CENTER | SERVICE INVENTORY:      | <input type="checkbox"/> RETURN<br><input checked="" type="checkbox"/> SCRAP<br><input type="checkbox"/> SEE TEXT | USED PARTS: | <input type="checkbox"/> RETURN<br><input checked="" type="checkbox"/> SCRAP<br><input type="checkbox"/> SEE TEXT |
| AVAILABILITY:                   | PRODUCT'S SUPPORT LIFE   |                         | AGILENT RESPONSIBLE UNTIL: June 1997  |             |   |
| AUTHOR: CLD                     | ENTITY: 0840   | ADDITIONAL INFORMATION: |   |             |   |

**Situation:**

Instruments which have system ROM version 1.0 or 1.1 may experience problems while printing using the RS-232 interface modules (54651A, 54652B, 54656A, 54658A, 54659B). These problems may include but are not limited to:

- Printing ratio errors
- No form feed
- No response from printer
- Partial printout
- RS-232 defaults loaded during every power-up

Printing problems may be caused by:

- Cabling problems
- Wrong RS-232 settings
- Operating with unsupported printer
- Hardware failure in scope or interface ports (oscilloscope, module, or printer)
- Problem in 54600B/54601B/54602B/54603B/54610B operating system

**Solution/Action:**

Perform normal troubleshooting. Check to be certain that cable pin-out conforms to the specifications found in the users guide which comes with the module. The RS-232 menu containing the settings can be found under the Print/Utility menu. These settings should match the printer setup. The 54600 series oscilloscopes are compatible with printers that are PCL (Printer Control Language) and with plotters that are GL (Graphics Language). (Note that GL2 will not work.) To check for hardware failure, visually check all pins and connectors for damage. Check to be certain that the oscilloscope recognizes the module and measure the output levels of the RS-232 pins. Problems in the operating system may show up as a problem in the firmware, or the oscilloscope may not recognize the module.

If source of problem is determined to be in the operating system, upgrade oscilloscope unit with most current firmware revision. Kit containing firmware upgrades are available.

**Parts Required:**

P/N  
54601-68704  
54610-68704

**System ROM upgrade kits for:**  
54600B/54601B/54602B/54603B  
54610B