

3582A-18

S E R V I C E N O T E

SUPERSEDES: None

HP 3582A/C Spectrum Analyzer

Serial Numbers: 0000A00000 / 9999A99999

Modification to prevent A1K6 input relay contacts from welding shut

Parts Required:

HP Part No.	Qty.	Description
0757-0407	1	R899 resistor 200 ohm (double order if doing both A1 boards)
0360-1647	2	TP15, TP16 Test Pin
0470-0959	1	Tac Pak adhesive

Situation:

Input boards (2) (03582-66501). Relay A1K6 contacts occasionally weld shut when switching input coupling from AC to DC coupling. The relay contacts short across the DC blocking capacitor A1C29 in the DC coupling mode and may weld shut, depending on the amount of residual charge remaining on A1C29. This situation only occurs when an operator must continually switch from AC to DC coupling or when the input range is continuously switched.

Continued

DATE: 20 February 1993

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
MODIFICATION AVAILABLE		
ACTION CATEGORY:	AGREEABLE TIME	<input type="checkbox"/> PERFORMANCE ENHANCEMENT <input checked="" type="checkbox"/> SERVICE/RELIABILITY ENHANCEMENT
LOCATION CATEGORY:	<input checked="" type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> HP LOCATION	AVAILABLE UNTIL: 20 February 1994
AUTHOR: DAA	ENTITY: A100	ADDITIONAL INFORMATION: Ref: PCO A1-9301045

Solution/Action:

A 200 ohm resistor was installed in the discharge path of A1C29 to decrease the current through A1K6 contacts.

Step 1. Remove A1 (03582-66501) board from instrument.

Step 2. On the TRACE side of the board, cut the horizontal section of the copper trace connecting C29 to K6 pin 5 and R14. Seal the cut with tak pak adhesive.

NOTE: This will isolate C29 from K6 and R14, providing a discharge path for C29 through the added resistor (R899).

Step 3. Remove the lower (+) end of C29 and install a test pin in the pad. Wrap loose end of C29 around this test pin.

Step 4. Remove one lead of R14 (lead closest to K6) and install a test pin in the pad. Wrap loose end of R14 around this test pin.

Step 5. Install R899 (200 ohm resistor) between the two test pins above. Solder leads to test pins.

Step 6. Perform the INPUT BOARD ADJUSTMENTS (para 5-25 on page 5-15) for Channels A and B. Update A1 schematic page 8-1-7/8-1-8.

End of Procedure.