S E R V I C E N O T E

SUPERSEDES: None

HP 54510A Oscilloscope

Serial Numbers: 0000A00000 / 3022A02580

Test Failure

During the input resistance performance test the fifty ohm resistor measures slightly out of specification on the high side, i.e., 50.6 or 50.7 ohms. (Usually not greater than 51 ohms).

Duplicate Service Note:

54503A-05 54504A-02 54502A-06

To Be Performed By: HP-Qualified Personnel or Customer

Parts Required:

HP Part No. Description

54503-69102 Grounding Spring (2 required per attenuator)

Continued

DATE: 04 May 1994

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
MODIFICATION RECOMMENDED		
ACTION CATEGORY:	☐ IMMEDIATELY ☐ ON SPECIFIED FAILURE ☐ AGREEABLE TIME	STANDARDS: LABOR: 1.5 Hours
LOCATION CATEGORY:	■ CUSTOMER INSTALLABLE■ ON-SITE■ HP LOCATION	SERVICE
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	RESPONSIBLE UNTIL: 04 May 1996
AUTHOR: TG	ENTITY: 0800	ADDITIONAL INFORMATION:

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Situation:

Due to elastomer compression, instruments in the above serial number range may fail the Input Resistance Performance Test as called out in the Service Manual.

Solution/Action:

Upon specified failure, or if the Processor board must be removed for any reason, perform the following procedure to replace the blue elastomeric grounding gaskets with gold-plated grounding springs:

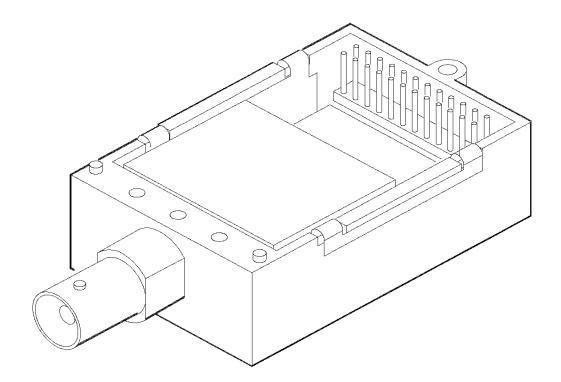
- 1. Remove the two screws securing each Attenuator Assembly to the A1 Processor board.
- 2. Carefully ease each of the Attenuator Assemblies out of the connector on the A1 board.
- 3. Using a suitable implement, gently ease the two retaining spring clips from each attenuator assembly. (See Figure 2)
- 4. Using a pair of tweezers, grip one of the connector pins and gently ease the substrate assembly (connector end first) from the attenuator housing. (See Figure 2)
- 5. Inspect the substrate assembly for damage.
- 6. Remove the blue elastomeric gaskets (2 ea) from the gasket recesses in the base of the attenuator housing. (See Figure 2)
- 7. Using tweezers fit the new gold-plated grounding springs into the gasket recesses.
- 8. Insert the substrate assembly into the housing, gold contact end first. Carefully locate the gold contact under the center conductor of the housing BNC connector. (See Figure 2)
- 9. Seat the substrate assembly in place and check that the gold-plated grounding springs are properly seated in the gasket recesses.

NOTE

To check for proper seating of the gold-plated grounding springs, slide the substrate assembly first to one side and then the other and check for the reflection of the grounding springs on the wall of the module housing.

- 10. Fit the spring clips back into place ensuring that they are sprung into position over the external side lugs. (See Figure 1)
- 11. When installing each module back onto the A1 board, first ensure that the locating pins on the housings are fully inserted into the two holes on the board then insert and tighten the front screw.
- 12. Insert and tighten the rear screw.
- 13. Reassemble the instrument in accordance with the Service Manual.

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Attenuator Assembly Figure 1

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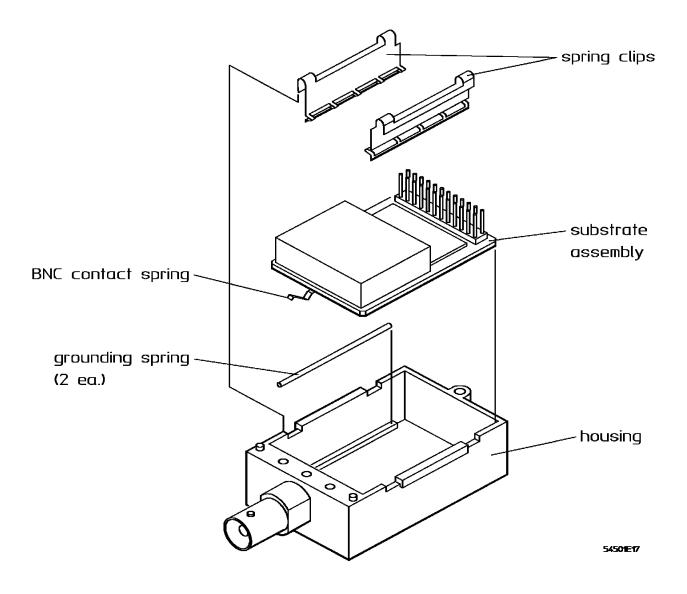


Figure 2