

37701A-04

S E R V I C E N O T E

SUPERSEDES: None

HP 37701A T1 Tester Option 001

Serial Numbers: 0000U00000 / 3126U00391

Duplicate Service Notes: 37711A-04

Modification to correct an Automatic Gain Control problem on A6 Assembly

To Be Performed By: HP-Qualified Personnel

Parts Required:

HP Part No.	Description	Reference Designator
0757-0442	Resistor 10 Kohm	A6R43
0757-0417	Resistor 562 ohm	A6R49

Situation:

When Pulse Shape measurements are being made (typically signals more than or equal to 19dB down from 0dBdsx), it is possible that the instrument may display the message "signal too low" and that no pulse shape is displayed in the pulse mask. This can be caused by lack of gain in the A6 Assembly, Automatic Gain Control circuitry.

Note: This problem affects Pulse Shape measurements only. All other measurements are unaffected. Pulse Shape self test will most probably pass back to back (0dBdsx).

Continued

DATE: 02 August 1993

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS:	LABOR: 1.0 Hour
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> HP LOCATION	SERVICE INVENTORY:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	USED PARTS:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AUTHOR: ER	ENTITY: 1400	RESPONSIBLE UNTIL :	02 August 1995
		ADDITIONAL INFORMATION:	



Action:

Delete resistors A6R31 (100 Kohm), A6R43 (100 Kohm) and R49 316 ohm). Add resistors A6R43 (10 Kohm) and A6R49 (562 ohm). A6R31 is not replaced.

See following procedure for retrofit instructions.

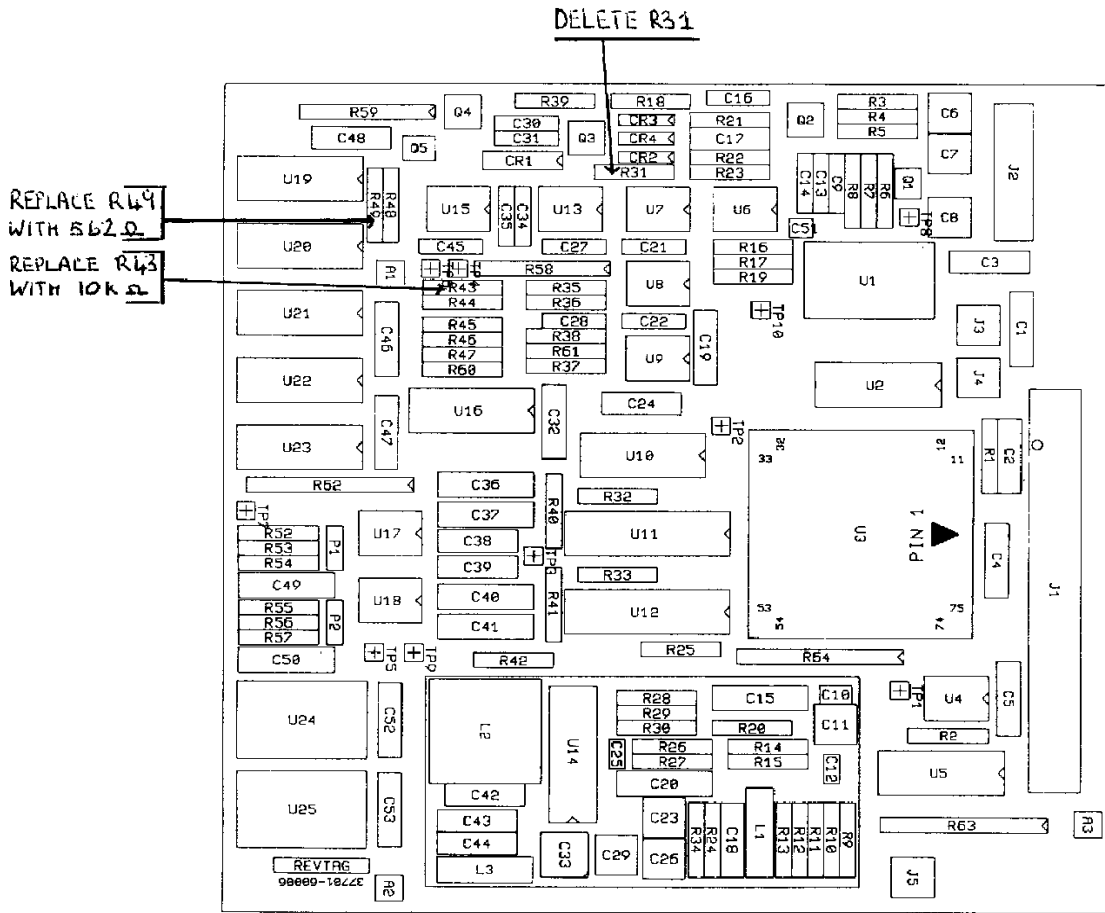
Accessing the A6 Measurement Assy**Procedure**

Use the following procedure to access the A6 parts to be replaced.

1. Switch off and remove the power from the instrument.
2. Place the instrument face down with the carrying handle away from you.
3. Remove the rear panel feet (four screws).
4. Lift off the instrument case. Note the warning "WARNING HIGH VOLTAGE WITHIN" found on the inner metal case.
5. Remove the inner metal case screws (four screws, two on either side).
6. Lift off the inner metal case and place it away from the main body of the instrument, to the extreme of the cable lengths. The Power Supply and the Power Fail Detector assemblies are removed with the metal case.
7. Use the A6 component location layout to identify the parts to be replaced.
8. Once the modification is completed, reassemble in reverse order.

Performance Verification

9. Connect the instrument TRANSMIT output to the RECEIVE input.
10. Press the instrument [FRAME] key and select [UNFRAMED].
11. Press the instrument [CODE] key and select [AMI].
12. Press the instrument [PATTERN] and select [1 IN 8].
13. Wait 15 seconds. Press [AUX] and select [PULSE SHAPE].
14. Ensure that both the positive and negative pulses displayed are within the mask shown and that T1.403 PASS is displayed adjacent to the mask (note: the display will alternate between positive and negative pulses continually).



A6 COMPONENT LOCATION LAYOUT