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

SUPERSEDES: None

## HP 37711A T1/Datacom Tester Option 001

Serial Numbers: 0000U00000 / 3126U00201

**Duplicate Service Notes: 37701A-04** 

# Modification to correct an Automatic Gain Control problem on A6 Assembly

### Parts Required:

HP Part No.	Description	Reference Designator
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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:	☐ IMMEDIATELY ■ ON SPECIFIED FAILURE □ AGREEABLE TIME	STANDARDS: LABOR: 1.0 Hour	
LOCATION CATEGORY:	☐ CUSTOMER INSTALLABLE☐ ON-SITE☐ HP LOCATION	SERVICE	
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	RESPONSIBLE UNTIL: 02 August 1995	
AUTHOR: ER	ENTITY: 1400	ADDITIONAL INFORMATION:	

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#### 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 the following procedure for retrofit instructions.

#### Accessing the A6 Measurement Assy

#### Procedure:

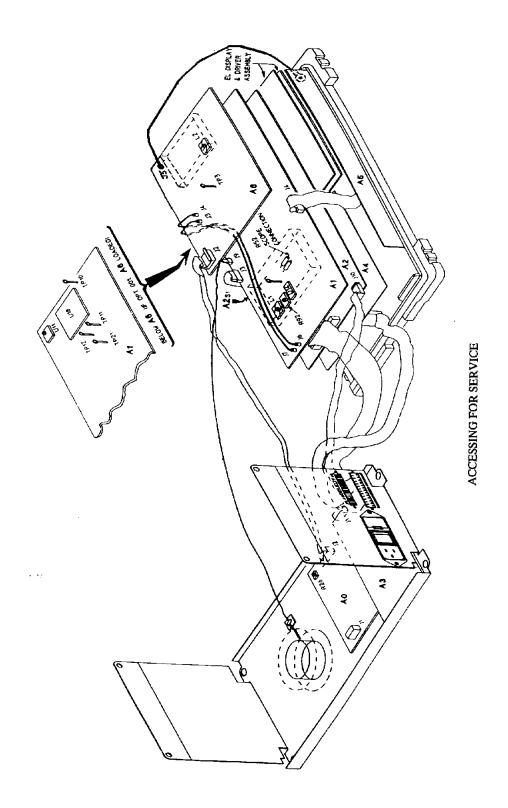
Use the following procedure to access the A6 parts to be replaced.

- 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.

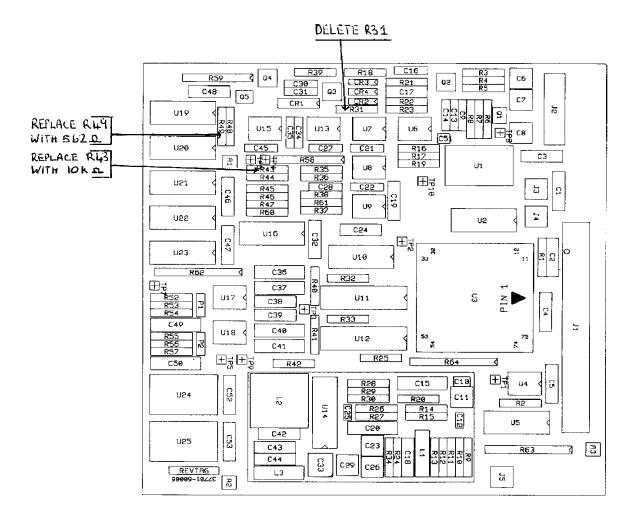
#### Performance Verification

- 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).

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A6 COMPONENT LOCATION LAYOUT