

S E R V I C E N O T E

SUPERSEDES: None

3784A Digital Transmission Analyzer**Serial Numbers:** 0000U00000 / 9999U99999**Instructions to retrofit option 002 to a standard instrument.****To Be Performed By:** Agilent-Qualified Personnel**Situation:**

The standard 3784A may be fitted with option 002, Jitter Measurements. This Service Note details the required parts and instructions to complete the retrofit.

Parts Required:

Part No.	Qty.	Description
03785-60634	1	Jitter Generator Assy
03785-60635	1	Synthesizer Assy
03785-60336	1	VCO/Loop Filter Assy
03785-60437	1	Range Divider Assy
03785-60348	1	Measurement Assy
03785-60130	1	Power Supply Assy
03785-60070	1	Cable Assy
03785-60071	3	Cable Assy
03785-60072	1	Cable Assy
03785-60073	1	Cable Assy
03785-60074	1	Cable Assy
03785-60106	3	Cable Assy

Continued

DATE: April 1996

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

INFORMATION ONLY

AUTHOR:

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ENTITY:

1400

ADDITIONAL INFORMATION:

Labor 4.0 Hours

A38 card 03785-60138 replaced by 03785-60348

Modification Instructions:

1. Switch off the 3784A and remove the AC power line.
2. Remove the instrument top and bottom covers.
3. Remove the screws which secure the power supply assembly to the instrument side frame.

Note: These screws are clearly marked encircled in black.

4. Remove the existing power supply assembly (03785-60030) and fit the replacement power supply assembly (03785-60130).
5. Fit the remaining assemblies into the corresponding color coded slot in the 3784A card cage. Do not push the assemblies fully home.

Part No.	Description	Assembly No.
03785-60634	Jitter Generator Assy	A34
03785-60635	Synthesizer Assy	A35
03785-60336	VCO/Loop Filter Assy	A36
03785-60437	Range Divider Assy	A37
03785-60348	Measurement Assy	A38

6. Fit the cable assemblies between the board assemblies as described below.

Cable Assembly	Cable Routing
03785-60070	A37J1 to A32J4
03785-60071	A39J2 to A33J2
	A35J1 to A34J1
	A35J3 to A31J2

Note: Remove the existing cable from the EXT MODULATION IN port to A31J2 and connect it to A35J2.

Cable Assembly	Cable Routing
03785-60072	A37J3 to A36J1
03785-60073	A38J3 to A37J4
03785-60074	A37J2 to A36J3

7. Fit the following cables assemblies to the rear panel port and route them to the appropriate board assembly as described below.

Cable Assembly	Rear Panel Port	Board Assembly
03785-60106	RX REF CLOCK IN/OUT	A36J2
03785-60106	MEASUREMENT IN	A38J2
03785-60106	JITTER DEMOD OUT	A38J1

8. Push all the board assemblies fully home.
9. Locate DIL switch SW1 on the Processor board (A11) and set it as follows:

BITS							

1	2	3	4	5	6	7	8
OFF	OFF	OFF	ON	OFF	ON	OFF	OFF

Note: The ON position is clearly marked on the body of a switch.

10. Switch on the 37784A.
11. Select page 12 Self Test, Function [TYPE & REVISION], Instrument Type 3784A [Option 002].
12. Select Function [JITTER TESTS], Tx & Rx Jitter test [ALL] and press the EXEC key.
13. The jitter self test should display a PASS message at the end of the test. Should a failure occur, an error message will be returned. Refer to the Service Manual for troubleshooting information.
14. Replace the instrument top and bottom covers.