

8981A-02A

S E R V I C E N O T E

SUPERSEDES 8981A-02

HP 8981A Vector Modulation Analyzer

Serial Numbers: 3019A00425/3119A00470

Severe Quadrature Error caused by faulty power splitter

To Be Performed By: HP Service Center Only

Parts Required:

HP P/N	Description
08981-69023	Restored 08981-60023 Demodulator Assembly/With EPROMs
08981-90006	HP 8981A Operating Manual
08981-90008	HP 8981A Service Manual

Situation:

The HP 8981A may exhibit severe quadrature error resulting from the unbalanced condition of a faulty 90 degree power splitter used on the A10 Demodulator Assembly.

About 20 of the instruments listed above have faulty power splitters installed. On June 22, 1991 Stanford Park Division began to notify customers that their instruments may have these faulty power splitters.

Continued

DATE: 15 August 1991

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input type="checkbox"/> ON SPECIFIED FAILURE <input checked="" type="checkbox"/> AGREEABLE TIME	STANDARDS:	LABOR 2.0 Hours
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> HP LOCATION	SERVICE INVENTORY:	<input checked="" type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	USED PARTS:	<input checked="" type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AUTHOR: FS	ENTITY: 0400	RESPONSIBLE ENTITY: 0400	UNTIL: August 1993
ADDITIONAL INFORMATION:			

© 1991 HEWLETT-PACKARD COMPANY
PRINTED IN U.S.A.



Solution/Action:

The effected instruments should first be inspected for the faulty power splitters. If one of the defective splitters is installed, the A10 Demodulator Assembly must be replaced.

Inspection/Repair Procedure:

Electrostatic Discharge (ESD) can damage or destroy electronic components. The following inspection and repair should only be performed at an ESD safe workstation.

1. Locate the A10 Demodulator Assembly. It is located between the A9 and A11 assemblies. See Figure 8-14 in chapter 8 of the service manual.
2. Remove the A10 assembly from the instrument placing the assembly circuit side up.
3. Locate the A10U9 Power Splitter on the assembly. The location of the splitter is clearly marked on the silkscreen.
4. Inspect the power splitter. The power splitter is marked on the side with a serial number.

Defective power splitters are marked with serial numbers 425 to 519.

5. If the power splitter is defective, replace the A10 demodulator assembly with HP Part Number 08981-69023. Perform 3-43 Demodulator Check in the Operator Checks from Chapter 3 of the HP 8981A Operating Manual.
6. If the power splitter is OK, then re-install the old A10 Assembly. No further testing is required.

Note

The 08981-69023 comes with Custom EPROMs Which Must replaced when the A10 Assembly is replaced. Each EPROM is marked with the reference designator on its label.