

S E R V I C E N O T E

SUPERSEDES: None

**HP 4991A LanProbe**

**Serial Numbers:** 3012A01008 / 3149A02708

**Modification to fix "Node Movement, or Node Hopping," and Network performance (throughput) problem.**

- 04991-66510            New Std..... Main Board (Rev. E)
- 04991-66519            New Opt 002..... Main Board (Rev. E)
  
- 04991-69515            Exchange Std.....Main Board (Rev. E)
- 04991-69517            Exchange Opt 002... Main Board (Rev. E)
  
- 04991-69511            Exchange Std .....Main Board (\*\*)
- 04991-69513            Exchange Opt 002... Main Board (\*\*)

\*\* Board numbers 04991-69511/69511 could be rev. D or E. The board must match the pictorial diagram below before modification. If it does not match-DO NOT MODIFY.

DO NOT modify Revision D version boards.

**To Be Performed By:** HP-Personnel

*Continued*

DATE: 07 January 1992

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
<b>MODIFICATION RECOMMENDED</b>			
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS:	LABOR: 1.0 Hours
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 checked="" type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	USED PARTS:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT
AUTHOR: NB	ENTITY: 3800	RESPONSIBLE ENTITY: 3800	UNTIL: 07 January 1994
		ADDITIONAL INFORMATION:	



**Situation:**

The HP4991A LanProbe node location is dependent upon receiving a well defined echo pulse from the HP4992A NodeLocator. This pulse has worked well in many applications until recently when the echo pulse began to create network performance problems or node location problems on some customer's networks.

The problems seen could be:

1. Node "Hopping/Movement" - This is seen as node distance measurements moving when the node has not moved.

(If this problem is seen with a Revision D board, DO NOT MODIFY. The board can only be replaced with a Revision E board and a modified NodeLocator. Customer MUST send in their HP4992A.)

2. Throughput performance - There is a noticeable delay (increased time delay) between transmitted data and/or refreshing screen (graphic/text) between nodes on a customer's network.

The problem is NOT caused by the HP4991A LanProbe but by the HP4992A NodeLocator. If by removing the HP4992A returns the network to its normal performance, perform this modification.

The modification is to lower the echo pulse amplitude and to modify the HP4991A amplifier to accept the new pulse which will not affect the network performance.

(If this problem is seen with a Revision D board, DO NOT MODIFY. Modify only the HP4992A NodeLocator.)

**Additional Modification Requirement:**

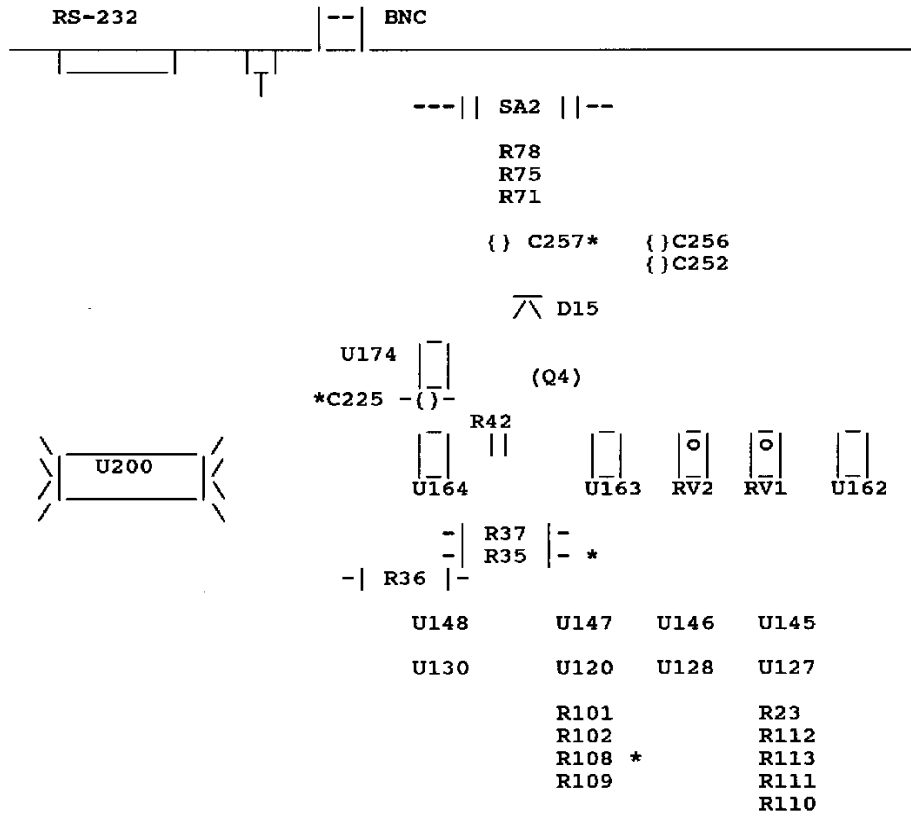
The HP4992A MUST also be modified. Please inform the customer to send in the HP4992A for NodeLocator modification per service note 4992A-02.

**Parts Required:**

Part No.	Value/Description	Name	Qty.
0160-7175	4700pf	Capacitor	1
0160-7172	1000pf	Capacitor	1
0757-0290	6.19Kohms	Resistor	1
04991-84337	"04991-66510"	Label	1
04991-84338	"04991-66519"	Label	1

**Modification:**

Pictorial: 4991A Rear right corner



**NOTE:**

Revision E boards have U200 heat sink. Rev. D boards DO NOT have the heat sink, it has a CHS1209 device.

**\* Using Pictorial:**

1. Locate C225, remove and install new C225 0160-7175 4700pf.
2. Locate C257, remove and install new C257 0160-7172 1000pf.
3. Locate R108 (10Kohm) and replace with new 0757-0290 6.19Kohms.
4. Locate R35 and remove.
5. Locate U164 and cut pin 7 at IC body (ensure no continuity).
6. Affix label 04991-84337 "04991-66510" if working on a 04991-66510 board, or use label 04991-84338 "04991-66519" on 04991-66519 board. Note that the new date code is A-3149-38. Remove the old label before applying the new one.