S E R V I C E   N O T E

SUPERSEDES: 4981A-06

HP 4981A Network Advisor

Serial Numbers: See text

Duplicate Service Notes:
4980A-06A
4982A-06A

J2171A Ethernet Interface/Main Network Board/5062-2178

Modification To Resolve "Hardware/Software Watchdog Timeout Errors"

To Be Performed By: HP-Qualified Personnel

Parts Required:

Part Number	Description
5062-9617	Main Network Interface Board

Situation:

J2171A Serial Numbers Effected: 0000A00000 / 3121A00288

Instruments originally shipped before 04 September 1991 can experience intermittent errors associated with the main board of the network interface. Errors can occur intermittently or as a hard failure during power-up or during instrument operation.

Continued

DATE: 25 June 1992

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 INVENTORY: ■ RETURN ☐ SCRAP ☐ SEE TEXT		USED PARTS: ■ RETURN ☐ SCRAP ☐ SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	RESPONSIBLE UNTIL: 01 January 1993		
AUTHOR: RCB	ENTITY: 3800	ADDITIONAL INFORMATION:		

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The most common bootup error message is:

ARTFATALerrorPC = XXXXXXXXX   <-- 29K program counter value
ARTFATALerrormajorcode = 3   <-- Watchdog error code
ARTFATALerrorminorcode = 0

The above message is displayed to the network advisor display screen from the
MS-DOS prompt line. This message is generated after the bootup loader process is
aborted.

The 3 most common runtime error messages are:

"Fatal system error - Unexpected 29K Trap"
"Fatal system error - Hardware Watchdog Timeout Error"
"Fatal system error - Software Watchdog Timeout Error"

The above messages are displayed sometime after a measurement is invoked. The
particular message is displayed within a red error message box and displayed as a
graphical window in the center of the network advisor display.

Solution:

The solution involves replacing the network interface module main board. Not all
boards will require this mod. See the "Inspection" section to determine if board has
already been modified.

Order the part number above to receive a board with the proper modifications.

Inspection

Not every instrument specified within the serial number range needs this modification
performed to it. An inspection of the main interface board will tell whether or not the
modification has already been performed. Reference the network advisor service
manual.

1. Remove the network interface module from the network advisor mainframe.

2. With the shiny sheet metal side up and the network connectors to the right, look
   into the vertical vents in the front right corner. If a wire is running from the last IC
   to the center of the board, the mod has already been performed. If the wire does
   not exist continue with the disassembly procedures and order a replacement.

Disassembly Procedures (after receiving replacement)

1. Remove the 6 torx holding the plastic cover in place.

2. Remove the hex screws that secure the Token-Ring connector.

3. Starting from the opposite side of the board that the AUI/BNC/TRIG IN/OUT
   connectors are on, begin removing the main PCB by pressing the locking standoffs
   and cautiously lifting the PCB out of the sheetmetal case half.

4. Several items must be removed from the old main board. Remove the items below and place in the identical location on the replacement assembly.

    4 memory SIMMs
    Ethernet (802.3 node card assembly) - if installed
    Token-Ring (802.5 node card assembly) - if installed
    Trigger IN/OUT BNC connector and cable

5. To re-assemble the network interface follow steps 1-4 in reverse order.

6. After attaching the network interface module to the network advisor mainframe, turn the power on and make sure the network advisor comes up to top level with no errors reported.

7. As an optional verification test, with the approval of your local network manager, connect the network advisor to a live or test network and run a simple measurement such as Ethernet Summary Stats or Token-Ring Summary Stats to insure data can be acquired from a live line.