

S E R V I C E N O T E

SUPERSEDES: None

3070 Boardtest System**Serial Numbers:** 0000A00000 / 9999Z99999**Software Revision:** B.02.75 and Above**To Be Performed By:** HP-Qualified Personnel or Customer**New Diagnostic Capability and On-Line Service Documentation.****Situation:**

HP 3070 Software version B.02.75 includes several changes that can make troubleshooting faster and easier. The changes include enhanced HP 3070 Diagnostics, on-line Service Documentation, and a new on-line troubleshooting flowchart that combined for a new troubleshooting strategy.

Diagnostic Program Changes

The changes to diagnostics program that are implemented with B.02.75 are: Level two menu 'Full Testhead' changed to 'Pin Card Relay Tests'. The new menu item will run all of the relay tests on all cards in the testhead except the Control Card and the ASRU Card. The Diagnostic Configuration has an added selection titled 'Relay Report Limit'. This field defaults to 5 (five) and determines the number of relays displayed by the 'Diagnose Relay' report. When running tests from the level 2 menu 'Module Cards', softkey f5 changes from 'History' to 'Diagnose Relays'. 'Diagnose Relays' uses "Fault Detective" to isolate relays on HybridPlus Pin Cards. Descriptions on how to use these changes are a part of the on-line HP 3070 Module/Slot Troubleshooting Flowchart.

DATE: July 1997

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

INFORMATION ONLY

AUTHOR:

HB

ENTITY:

0980

ADDITIONAL INFORMATION:

New Troubleshooting Strategy

All of the diagnostic changes listed above and the new on-line Module/Slot Troubleshooting Flowchart are a part of a new troubleshooting strategy. This strategy is designed to isolate the most common testhead failures in the fastest possible time. The new strategy for isolating to the failing Module/Slot and relays is documented in the on-line version of "HP 3070 Module/Slot Troubleshooting Flowchart". Blocks of the flowchart are linked to text files describing how to execute that step of the flowchart. Since this strategy is designed to isolate THE MOST COMMON failures (a single module with a specific slot failing and HybridPlus Pin Card relays), it will not necessarily help troubleshoot other types of problems except by eliminating the most common. The second block of the on-line flowchart "Introduction to Module/Slot Troubleshooting" describes what types of problems are covered by the flowchart and those that are not. The "Repair I Service Manual", Revision G, Section 1A, provides instruction on how to troubleshoot problems not covered by the "Module/Slot Troubleshooting Flowchart".

The 'HP 3070 Module/Slot Troubleshooting Flowchart' is designed as a troubleshooting tool for use with a two day training course. The course is designed to allow customer technicians the ability to repair the most common failures without the investment of the five day training course. Technicians trained in the two day course will not have the knowledge to troubleshoot beyond the process documented in the flowchart and are referred to a fully trained 3070 Technician or the HP Customer Response Center for assistance to solve problems that are beyond the level their training. Just because this troubleshooting flowchart was developed for use with a two day training course does not mean HP CEs or customer repair personnel who attended the five or seven day course should not use it. The process is designed to isolate the most frequent failures faster and can help anyone trained to service the HP 3070 repair these failures.

Accessing The On-Line Service Information

You can access the on-line service information via the Work Menu 'Help' function. The 'Help' function will display 'HP 3070 Service Manuals', by activating this selection, you have access to the following on-line HP 3070 Service Manuals:

- "Navigating the Troubleshooting Flowchart"
- "HP 3070 Module/Slot Troubleshooting Flowchart"
- "HP 3070 Repair Manuals" -- same as the updated hardcopy of the "Repair I & II" Manuals"
- "HP 3070 Telecom Theory & Repair Manual"

The link 'Navigating the Troubleshooting Flowchart' provides instructions for using Adobe Acrobat Reader to read the on-line service information. Following this paragraph is an excerpt from the "Repair I Service Manual" Chapter 1A, Revision G titled "Troubleshooting Before and After B.02.75 Software". This excerpt describes the process for accessing the on-line service documentation. Troubleshooting Before and After B.02.75 Software Before HP 3070 software revision B.02.75, in order to troubleshoot the system you must have completed a five-day or seven-day lecture/lab service training course. This was necessary to provide the high level of knowledge and skill needed to understand the system hardware, run the diagnostic software, and interpret the test failure messages to affect a repair. With software revision B.02.75, an on-line troubleshooting tool exists to guide you through a streamlined troubleshooting process. This tool focuses on module/slot repair: isolating a defective card. Replacing a card results in the shortest down-time. Further, if a HybridPlus Pin Card is identified, a new diagnostic tool isolates defective relays on the card. Relay replacement results in the least costly repair. To use these new tools you need only have completed a two-day

training course. With software revision B.02.75, HP 3070 service documentation is also on-line for reference. If your system has revision B.02.75 or later software, and you have completed at least the two-day training, proceed to "Module/Slot Troubleshooting" on page 3. If your system is running an older version of software, proceed to "Conventional Troubleshooting Techniques" on page 4.

Module/Slot Troubleshooting

To access the on-line module/slot troubleshooting guide (flowchart):

1. Log in as 'service1'.
2. Move the mouse pointer outside of all small windows, press and hold the right mouse button to invoke the Work Menu, then drag the pointer to 'Help' and release the right button to select it.
3. Click on 'HP 3070 Service Manuals'. This will launch Acrobat Reader.
4. Move the mouse pointer to 'HP 3070 Module/Slot Troubleshooting Flowchart'. When the Hand changes to a Pointing Finger, click it.
5. Click on the Magnifying Glass icon on the tool bar; this will change the mouse pointer to a magnifying glass. Move the magnifying glass mouse pointer to the upper left corner of the screen and click; this will magnify the screen so you can read the text (Ctrl-left-click de-magnifies the screen).
6. If you are not familiar with Adobe Acrobat, click on 'Click Here to Start'. 'Navigating the Troubleshooting Flowchart' explains how to move through the flowchart and how to use the Acrobat Reader tools to modify the screens for ease of use.
7. If you are familiar with Adobe Acrobat, but not with the HP 3070 Module/Slot Troubleshooting Process, move the mouse pointer to the 'Introduction to Module/Slot Troubleshooting' circle under 'Click Here to Start'. When the pointer changes to a Pointing Finger, click it. This will link you to a text file that explains how to proceed with troubleshooting.

At the end of every text screen is a button called 'Troubleshooting Flowchart'. You can click this button to return to the flowchart or click the Double-Left-Arrow icon to return to the flowchart. A copy of the troubleshooting flowchart is also provided on a fold-out diagram in the front cover of the Repair I Manual.

If the module/slot troubleshooting process fails to result in a repair, and you are a two-day-trained service person, call your HP customer engineer or HP's Customer Response Center (CRC) at 1-800-633-3600 (U.S. only). If you are a fully-trained service person, proceed to "Conventional Troubleshooting Techniques" on page 4.