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# 9100A 40 MEG HARD DISK UPGRADE KIT P/N 878801 INSTALLATION INSTRUCTIONS

ITEM NO.	DESCRIPTION	P/N	QUANTITY
1	Formatted 40M SCSI Hard Disk	879903	1
2	ROM set, U46 & U47, V5.0	874177	1
3	Installation Instruction Sheet	885231	1

These installation instructions are for 9100A 40 Meg Hard Disk Upgrade Kit P/N 878801.

### CAUTION

Components in this kit and in the 9100A Digital Test System are static sensitive. Insure that proper antistatic handling precautions are observed.

# **PURPOSE**

This kit upgrades a 9100A Digital Test System with a 40 Megabyte SCSI Hard Disk drive.

The following is an overview of the steps required for installation:

- Determine incomming software version.
- Remove the old hard disk drive (including the hard disk controller board, if present).
- Install the new 40 Meg hard disk drive.
- Replace the mainframe ROM set, if necessary with new V5.0 ROMS.
- · Set the new hard disk type.
- Load the 9100A software onto the new hard drive.

This kit cannot be customer installed.

#### EQUIPMENT NEEDED

In addition to the 9100A 40 Meg Hard Disk Upgrade Kit (listed above), the following equipment is needed to install this option:

9100 Service Utility Disk, V6.0, P/N 915681

# INSTALLATION INSTRUCTIONS

 Connect the 9100A to line power. Power up the 9100A and observe what system software version is presently on the drive. Determine which optional features are loaded by checking to see if the editor and IEEE software loads during the boot process. Note what disks will be required later when the software is to be loaded (See LOADING THE SOFTWARE).

- Remove the top cover of the 9100A by removing all five of the cover screws; two on each side and one in the middle front of the chassis bottom. Lift the top cover until it is clear of the front and rear panels, then turn it clockwise and set the front of the cover down on the left side of the frame.
- Remove the disk drive housing from the top cover (seven screws) and unplug the 50 pin ribbon cable.
- If the hard disk has a separate controller board, remove the controller board and the nylon stand-offs on which it is mounted.
- Remove the four mounting screws on the sides of the hard disk, and slide it out of the disk housing. Unplug the power cable and ribbon cables from the drive.
- 6. Slide the new 40 Meg hard disk into the disk housing and install the four mounting screws with the four nylon spacers. Connect the disk drive power cable and plug the 50 pin ribbon cable into the hard disk. Orient pin 1 of the ribbon cable to the side towards the drive's power connector.
- Reinstall the disk drive housing to the top cover using the seven screws removed earlier.
- If the U46 and U47 ROMs on the Main PCA are below version V5.0, remove U46 and U47 from the Main PCA and replace them with the new V5.0 ROMs from the kit. To configure the correct ROM size, cut the trace shorting the W2 jumper next to U28 on the Main PCA. W1, W3, and W4 should be shorted.

- Reinstall the top cover, being careful not to pinch the ribbon cables when closing the cover. Reinstall the five cover screws with the slotted shoulder screws in the two holes nearest the rear panel.
- Connect the 9100A to line power. Place the 9100 Service Utility Disk into the floppy drive. Hold down the SOFT KEYS, F2, and F4 keys while turning on power.
- When the Service Utility menu appears on the display, press the SET CONFIG softkey to select the Set Configuration utility.
- Press the correct softkeys to select the new configuration as follows:

Select type of unit 9100
Controller/hard disk type SCSI - 512 byte
IEEE-488 Interface Installed? \*
Select memory size \*
Select floppy disk type \*
Turn on disk error reporting NO
\*Use Current setting

13. When the display returns to the Service Utility menu, the new configuration has been stored in EEPROM. Take the Service Utility disk out of the drive and turn off the mainframe power.

The kit is now installed.

# LOADING THE SOFTWARE

- Obtain all of the required disks determined in Step 1 of Installation Instructions.
- Connect the 9100A to line power. Power up the 9100A while holding down the SOFT KEYS,F2, and F4 keys, to force it to boot from the floppy drive.
- When prompted by the 9100A, place System Disk 1 into the floppy drive and press any key to continue.
   Do the same for any remaining System Disks. At the prompt: Load any Optional Feature Disks?, press the NO softkey.
- 4. When the 9100A displays READY, reload the system software onto the hard disk by performing the following steps:
  - Insert appropriate System Disk 1 in floppy drive.

- b. Select: MAIN MENU: COPY FROM DR1 TO
- c. Press: ENTER/YES

When the copy is complete, remove System Disk 1 and repeat the copy process with remaining System disks.

- If the 9100 is a programmers station, or has optional features such as the IEEE-488 Interface Option, copy those disks to the hard drive.
- Copy the Master User's Disks to the hard drive. Insure they are the same version as the System disks.

The software is now loaded onto the hard disk.

# TESTING KIT INSTALLATION

- After the System disks, optional features disks, and Master User's disks are loaded onto the hard disk, restart the 9100A by pressing the RESTART key on the right side of the keypad.
- Check that the 9100A starts up from the hard disk with no errors except for the normal message: No Pod Connected. This checks that the system software was loaded.
- Press: SETUP MENU, → , SOFT KEYS, POD NAME, → , then HELP. The 9100A should list a full screen of pod types. Press the ↓ key (down arrow) approximately 9 times, check that there are about 30 different pod types. This insures that the Master User's Disks loaded properly. Press RESET to exit.
- 4. For systems that have the IEEE-488 Option; Press: SETUP MENU, → , and SOFT KEYS keys. Check that the IEEE softkey is present. This insures that the IEEE software loaded properly.
- 5. If the 9100A is a programmers station, connect a monitor and a programmer's keyboard. Turn on the monitor power and press EDIT on the 9100A front panel keypad. Check that the editor screen is displayed on the monitor. Press QUIT on the programmer's keyboard to exit the editor.

This completes installation test of the kit.