Appendix G: Hardware Upgrade Kit

Important: This procedure only applies to platesetters whose operating systems need upgrading from Windows 95 to Windows 2000.

Important: The Pre-installation procedures **MUST BE** performed prior to any hardware or software upgrades.

- Open the right side door of the platesetter.
- Close Lotem Controller and the Service Shell client.
- Shut down the Lotem, including the main power supply.

Replacing the Boards, Cables and COM Outputs

Note: Use an anti-static bracelet when working with the boards.

1. In order to gain greater access to the E-box, remove the screws securing it to the mainframe and then slightly rotate the E-box.
2. Using the anti-static bag provided in this kit, remove the NUC board and return it to stock.
3. Disconnect cable J6 from the top right hand corner of the motherboard.

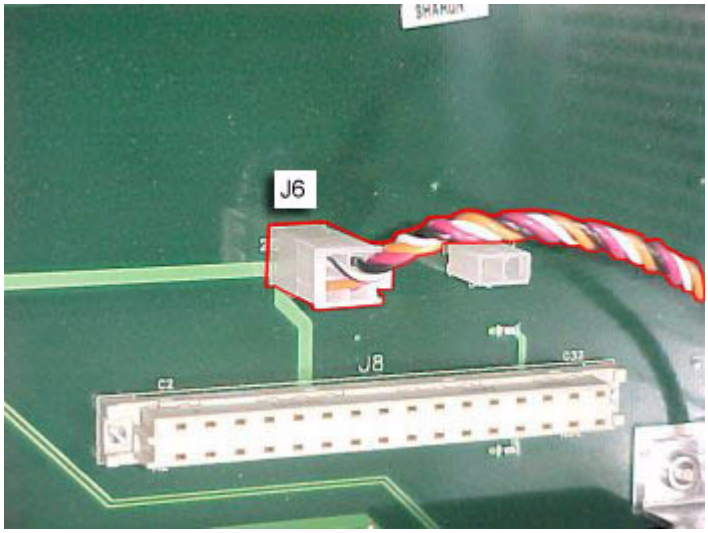


Figure 1: Disconnect cable J6.

4. Ensure that the cable and all other wires are disconnected, then pull out the hard disk tray.
5. Release the PS2, COM2 and bracket.
6. Disconnect the cables from the SBC 686 CPU board and remove the board.

7. Disconnect cable J2 from the top left hand side of the E box.

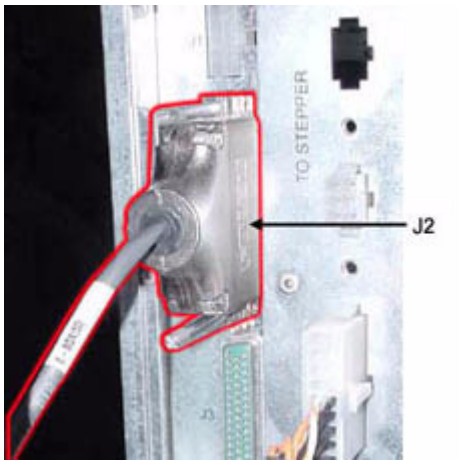


Figure 2: Disconnect cable J2.

8. Remove one of the slot blocks from the PC unit.



Figure 3: Remove one of the slots.

9. Replace the disk's power cable with the new cable.

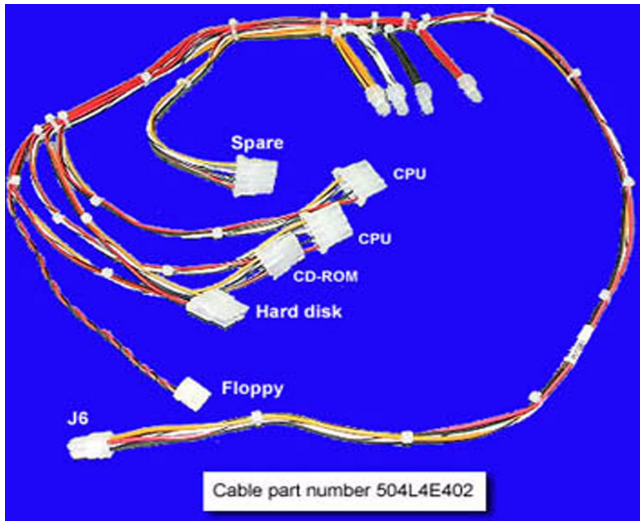


Figure 4: Replace the disk's power cable.

Note: The order of the connections is not important. The Spare connection is left unconnected and may be used in the future.

10. Insert the hard disk tray back into place. Make sure you do not short circuit the wires.
11. Connect the power cable to the floppy, hard disk and CD-ROM connectors.
12. Connect the power cable splitter to the power cable and the CPU connectors.
13. Reconnect cable J6 to the motherboard.
14. Insert the new SBC 786 board with the COM brackets and the SBC 786 connector outputs as shown in figures 4 and 5.
15. Ensure that the length of the flat cable to the hard disk (40 pins) is not more than 1 meter.

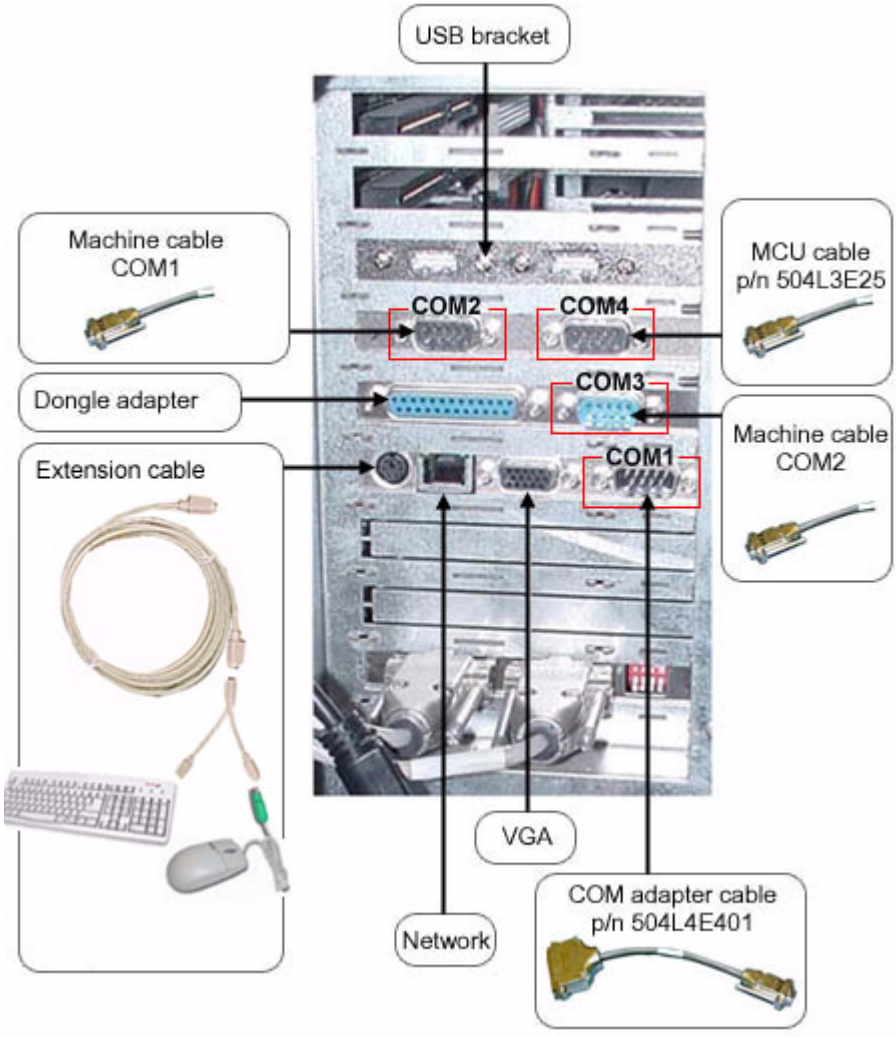
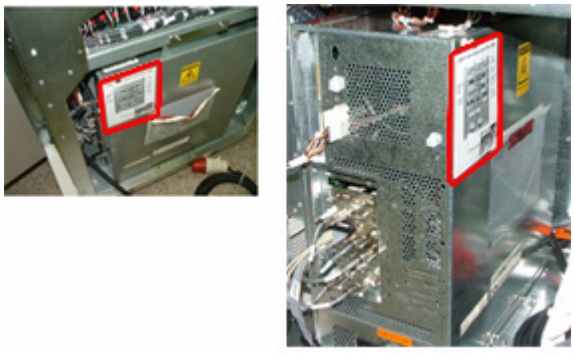


Figure 5: Insert the new SBC 786 board.

16. Affix the **Lotem 800 II E-box Win. 2K cable layout** adhesive to the cover of the E-box.



17. Connect the USB to the SBC. Make sure the black wire faces outwards.

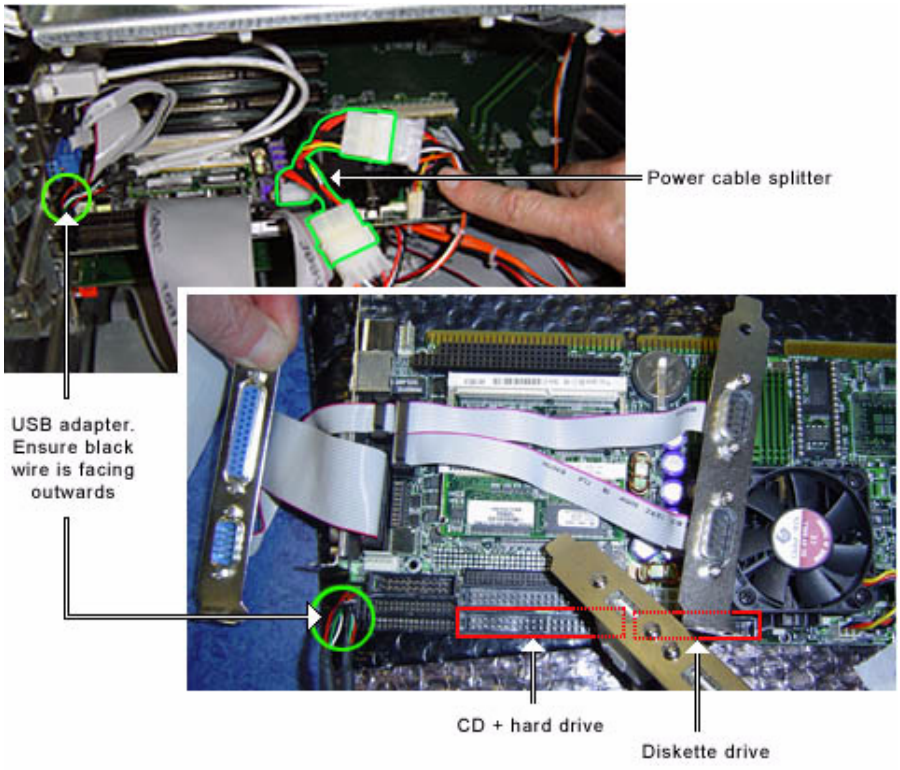


Figure 6: Connect the USB to the SBC

18. Connect the Com adaptor cable between Com 1 and J2 (E-box 50 pin) - removed in Figure 6.

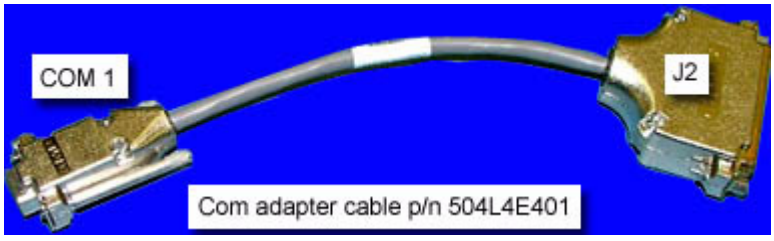


Figure 7: Connect the Com adapter cable.

19. Connect Machine Cable Com 1 to Com 2 of the SBC 786 board.

20. **Windows 2000 - Lotem Controller version 3.75**

    Connect one end of the extension cable to the SBC 786 board, and connect the Y splitter cable to the other end of the extension cable.

    The Y splitter cable has two connectors: One is labelled mouse and the other is labelled keyboard. Connect the mouse connector to the mouse and the keyboard connector to the keyboard.



Figure 8: Windows 2000 cable connections.

Windows 95 - Upgrading to Windows 2000
Connect Machine Cable Com 2 to Com 3 of the SBC 786 board.

Existing on site are two extension cables. One is connected to the keyboard, and one is connected to the mouse. Connect the opposite ends of these extension cables to the Y splitter cable and then connect the Y splitter cable to the SBC 786 board.

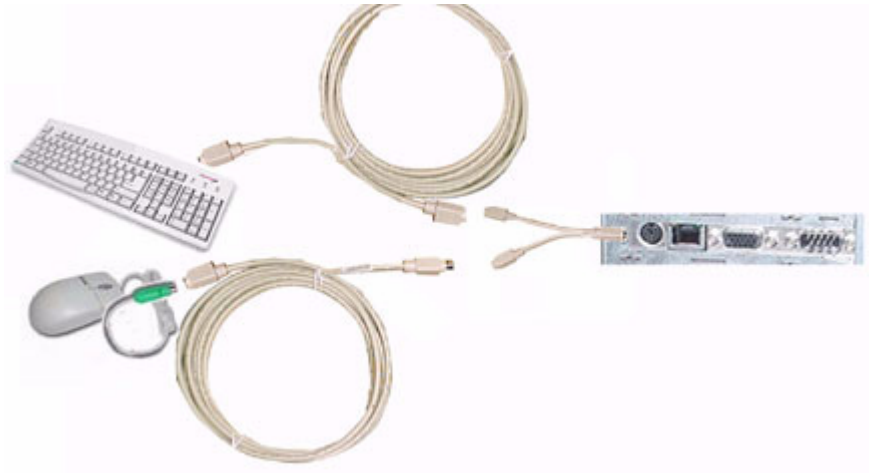


Figure 9: Upgrading from Windows 95 to Windows 2000.

21. Connect the dongle adaptor and the other relevant dongles. Mount them with bands to the left wall of the E-box:

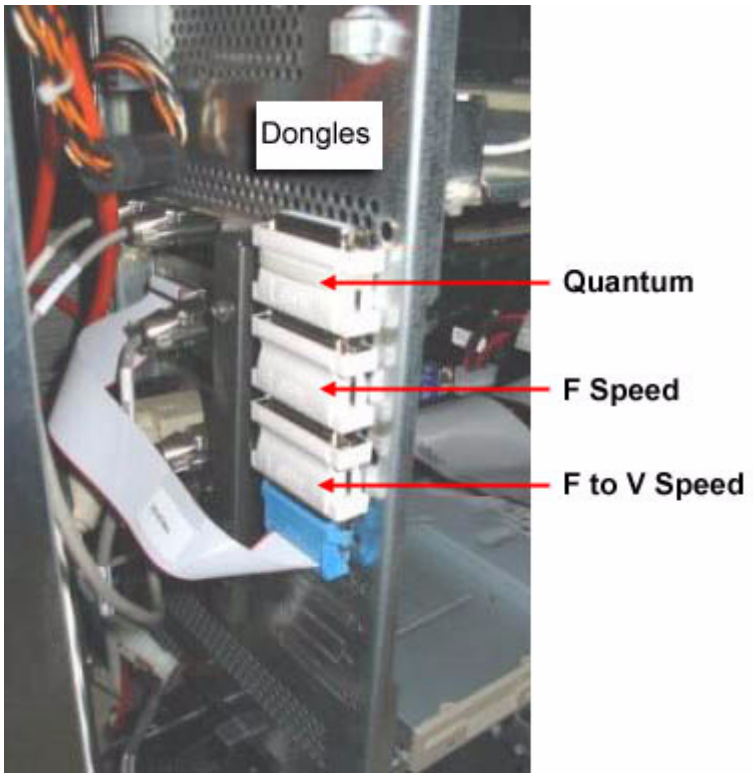


Figure 10: Connect the dongle adapter and the other relevant dongles.

22. Connect the monitorand network cable to the E-box.
23. If an MCU is installed, the RS-232 cable should be connected between Com4 and the MCU local motherboard (J8).
24. After completing the installation, the configuration should resemble the following schematic:

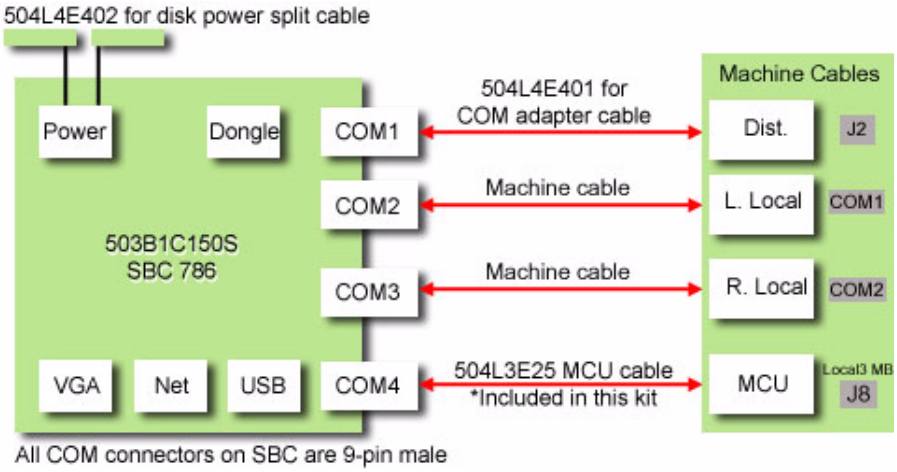


Figure 11: Schematic of configuration.