BLUECHIP BCD 5.25 1541-COMPATIBLE INSTALLATION

Required tools:

- Phillips screwdriver

- IC extractor or small, flat-bladed screwdriver. Needed for removal of the stock DOS ROM on the Bluechip circuit board. An IC extractor is recommended, but not necessary (the small screwdriver will suffice). However, if using a screwdriver, wrap a layer of tape around the tip to help prevent damage to the circuit board when prying.

- Hand or power drill. Necessary for installation of the ROM selector switch in the Bluechip case assembly.

Procedure:

1. If a diskette is present in the disk drive, remove it.

2. Make sure that the Bluechip power switch and the power switch on your computer are **OFF**. Also make sure that any other peripherals attached to the serial bus are also switched **OFF**.

3. Unplug the Bluechip power supply cord from its wall outlet.

4. Unplug all cables from the rear of the disk drive, including the power supply cable and serial bus cable(s).

5. Turn the Bluechip upside-down and remove the six screws from the bottom of the drive as indicated in Figure 1 below.

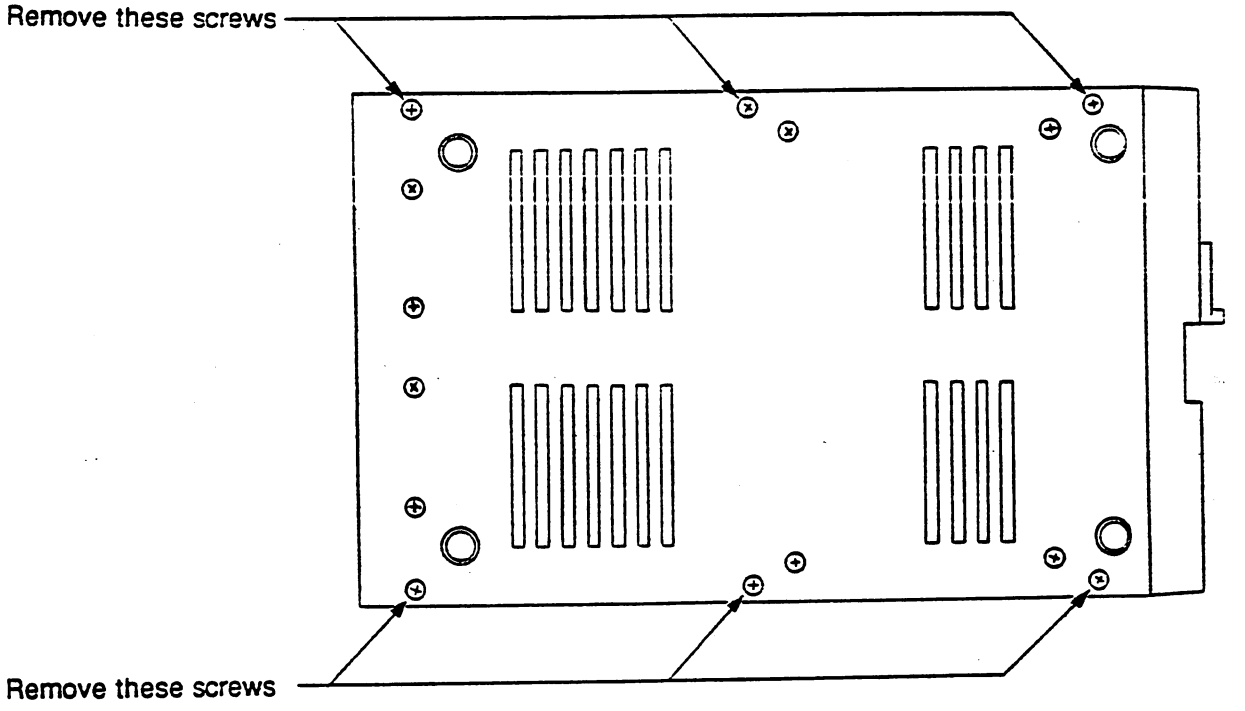

Figure 1 **BLUECHIP CASE SCREW REMOVAL**

6. Turn the Bluechip right-side up and remove the top cover.

7. If your drive has an interference shield covering the circuit board, remove the screws holding the shield in place, and then remove the shield. The circuit board should be visible after the shield has been removed.

8. Locate the DOS ROM on the Bluechip circuit board using the diagram in Figure 2 below.

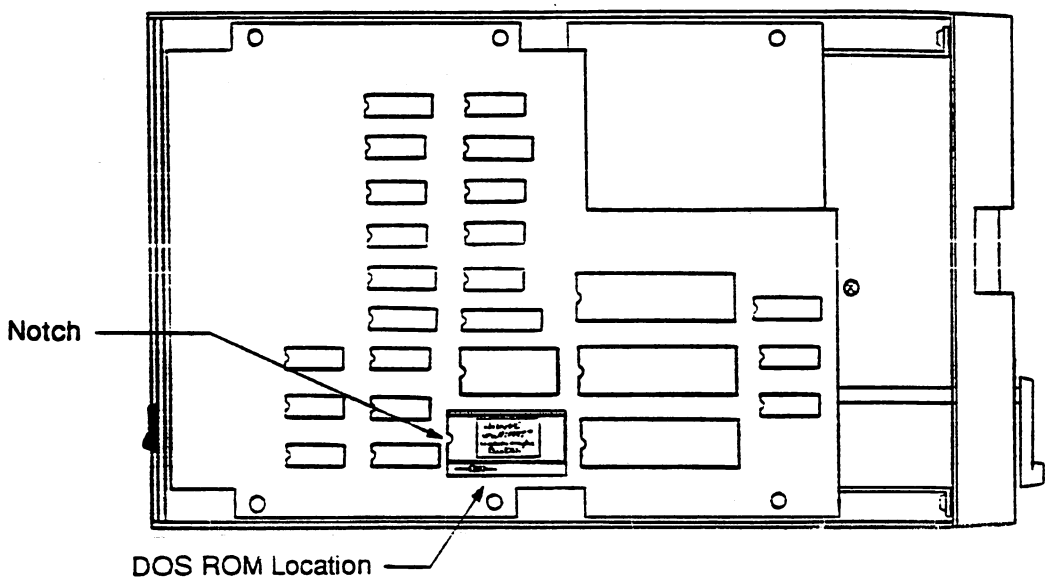

Figure 2 **BLUECHIP DOS ROM LOCATION**

9. Carefully remove the Bluechip DOS ROM from its socket using the IC extractor or small, flat-bladed screwdriver. Alternate lifting the ROM from each end, raising it from its socket a little at a time. If using a screwdriver, take care not to damage the circuit board or any of the circuit board components while prying.

10. Remove the JiffyDOS ROM labeled **BLUECHIP-41** from its packing.

11. Inspect the JiffyDOS Bluechip ROM carefully. If you observe any bent pins, carefully straighten them with a pair of tweezers.

12. "Test fit" the JiffyDOS Bluechip ROM on top of the empty DOS ROM socket.

VERY IMPORTANT

MAKE SURE THAT THE NOTCH ON THE JIFFYDOS ROM IS FACING THE REAR OF THE DRIVE AS SHOWN IN FIGURE 2 ABOVE.

13. With all pins on the JiffyDOS ROM properly aligned with the socket, and with the ROM notch facing rearward as shown in Figure 2, carefully press the Bluechip ROM into the socket using finger pressure until it is fully seated.

14. Replace circuit board interference shield removed in Step 7. Note: It is OK for the shield to contact the top of the JiffyDOS ROM.

15. Drill a 1/4" hole in the Bluechip case assembly to accomodate the JiffyDOS ROM selector switch. A recommended location is given in Figure 3 below.

    WHETHER YOU CHOOSE THIS LOCATION OR AN ALTERNATE ONE, MAKE ABSOLUTELY SURE THAT THE SWITCH IS POSITIONED SO THAT IT WILL NOT COME INTO CONTACT WITH ANY OF THE BLUECHIP'S INTERNAL COMPONENTS.

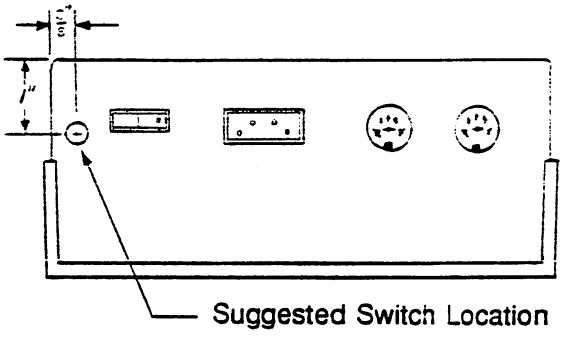

Figure 3 **SUGGESTED SWITCH LOCATION**

16. Install the JiffyDOS Selector Switch into the hole just drilled in the Bluechip case assembly and secure it using the hardware provided with the switch.

17. Replace the Bluechip top cover, turn the drive over, and replace the six screws which hold the cover in place.

18. Reconnect the power supply cable to the rear of the Bluechip.

19. Plug the AC power supply cord into a working outlet.

20. Connect the serial bus cable between the Bluechip and your computer.

21. Proceed with the Installation Checkout Procedure found on the next page.

Installation Checkout Procedure:

NOTE: Some of the steps in the following Bluechip installation checkout procedure require the use of a JiffyDOS-equipped computer.

1. Switch the Bluechip ON. The activity light on the front of the drive should come on immediately as power is switched on, stay on for about one second, and then shut off as it normally does upon power-up.

   IF THE ACTIVITY LIGHT STAYS ON OR BLINKS REPEATEDLY, IMMEDIATELY SWITCH THE DRIVE OFF. THEN FOLLOW THE STEPS OUTLINED BELOW.

   1a. Recheck all cabling connections to the Bluechip. Make sure that the power supply and serial bus cables have been connected properly. **Make sure that the AC power cord has been plugged into a working outlet.** If any cabling errors have been made, correct the errors and try powering up the Bluechip again.

   1b. If the problem is not with the cabling, disassemble the Bluechip according to the procedure you used earlier. Remove the JiffyDOS ROM assembly from its socket and then reinstall it according to the procedure in Steps 11-13. **Make sure that the ROM notch is oriented correctly, that there are no bent pins, and that the ROM is seated snugly in its socket.** Once the JiffyDOS ROM assembly has been reinstalled and the drive has been reassembled, try powering up the Bluechip again.

   1c. If Steps 1a and 1b both fail, remove the JiffyDOS ROM assembly and reinstall the stock Bluechip DOS ROM. Follow the same procedure for installing the stock DOS ROM as you did for installing the JiffyDOS ROM assembly. Make sure that the notch on the stock DOS ROM is oriented correctly. Try powering up the Bluechip again. If it powers up properly, return your JiffyDOS Bluechip ROM assembly to Creative Micro Designs for replacement under warranty. If your disk drive does not power up properly, seek the assistance of a qualified technician.

2. Once the Bluechip has been powered up successfully, select JiffyDOS on your computer and then power it on (make sure that the power-on message on your computer indicates that JiffyDOS is active). Insert a known good diskette with a few programs on it into the Bluechip.

3. At your computer, type **@$** and **RETURN**. The activity light on the Bluechip should come on and a directory listing should appear on the screen.

   IF THE DIRECTORY LISTING DOES NOT APPEAR, OR AN ERROR MESSAGE IS DISPLAYED, SHUT OFF THE BLUECHIP AND YOUR COMPUTER. FOLLOW THE TROUBLESHOOTING PROCEDURE OUTLINED BELOW.

   3a. Make sure that JiffyDOS is selected on your computer. When JiffyDOS is selected, the power-on screen will display: **JIFFYDOS/64 VERSION x.x**, or **JIFFYDOS/128 VERSION x.x**. If you did not have JiffyDOS selected on your computer, select it now and try reading the disk directory again.

3b. Make sure that you have a known good disk in the Bluechip. Make sure that the disk is properly inserted in the drive.

3c. Recheck the serial bus cabling between your computer and disk drive. Correct any errors and try reading the directory again.

3d. If the problem persists, proceed with troubleshooting procedure 1b found on the previous page.

4. Test the operation of the Bluechip ROM selector switch. To do this, shut the Bluechip OFF, and then turn it back ON. **Make sure that your computer is in JiffyDOS mode.** Type **@** and **RETURN** on the keyboard (this will read and display the Bluechip status channel). Depending on the position of the ROM selector switch, one of the following messages will be displayed:

73,JIFFYDOS x.x 1541, 00, 00

73,CBM DOS V2.6 1541, 00, 00

Next, power off the Bluechip, select the alternate position on the ROM selector switch, and then power the Bluechip back on. Type @ and **RETURN** on the keyboard. This time, the other message should be displayed.

IF YOU CANNOT GET BOTH MESSAGES TO BE DISPLAYED, FOLLOW THE INSTRUCTIONS BELOW:

4a. Toggle the selector switch back and forth several times to break through any oxidation on the switch contacts and repeat this step (Step 4) from the beginning.

4b. If exercising the switch does not work, disasssemble the Bluechip and check the the switch wire connections at the switch and at the ROM assembly for shorts or breaks. Repair any evident problems (resolder the connections, if necessary), reassemble the drive, and then repeat Step 4 again.

4c. If the problem persists, return the JiffyDOS Bluechip ROM assembly to Creative Micro Designs for replacement under warranty. Please be sure to include a note explaining the problem.

5. After the selector switch has been checked out, the Bluechip is ready to use. If there are any more peripherals to connect to your system, shut off the Bluechip and your computer, and connect them at this time.