C-128D INSTALLATION

Required Tools:

- Phillips Screwdriver

- IC extractor or small, flat-bladed screwdriver (for IC removal). If using a screwdriver, wrap a layer of tape around the tip to prevent damage to the circuit board when prying.

- Drill (hand or power) - required for permanent installation of the JiffyDOS ROM selector switch in the C-128D case.

Procedure:

1. Make sure the C-128D is switched OFF and that any peripherals (printer, disk drives, etc.) attached to the C-128D are also switched OFF.

2. Unplug the C-128D AC power cord from its wall outlet or outlet strip. Then, unplug ALL cables from the C-128D and remove any devices plugged into the Cartridge or User Ports.

3. Turn the C-128D upside-down and remove the two top cover holddown screws shown in Figure 1 below.

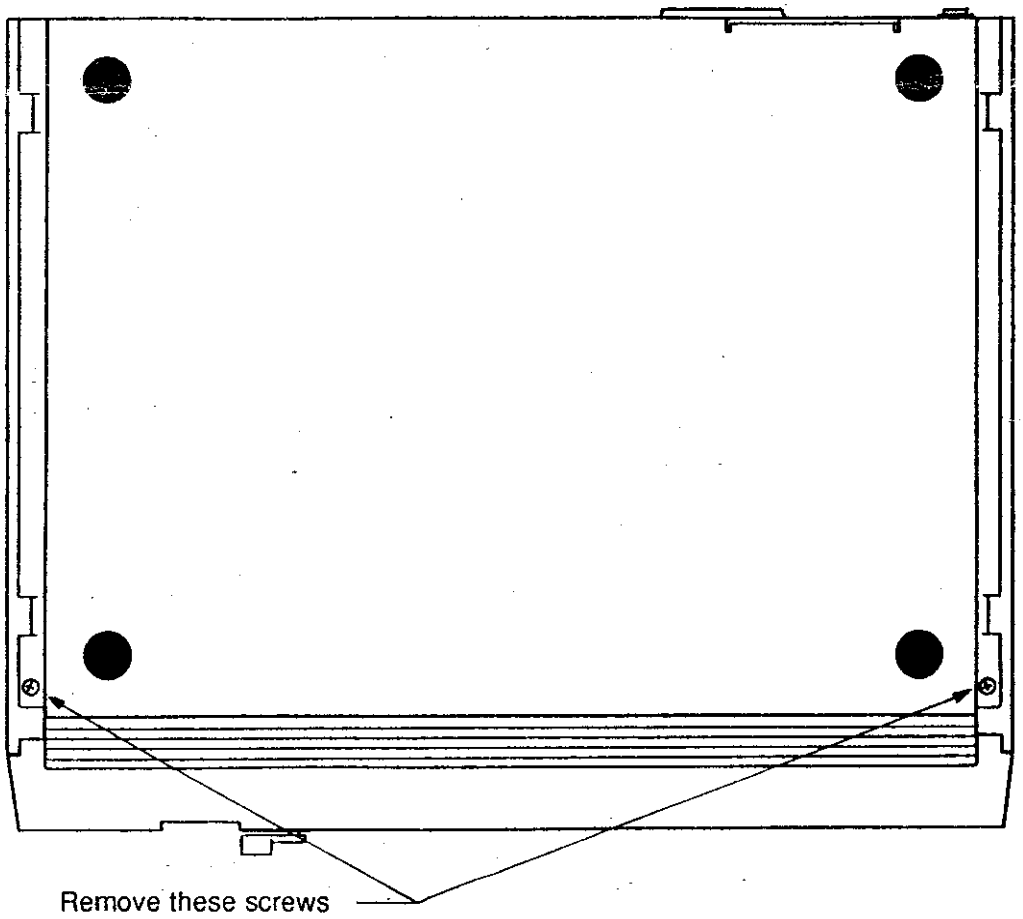

Figure 1 **LOWER CASE SCREW REMOVAL**

4. Turn the C-128D back over into its normal position and remove the three screws shown in Figure 2 below from the rear of the computer.

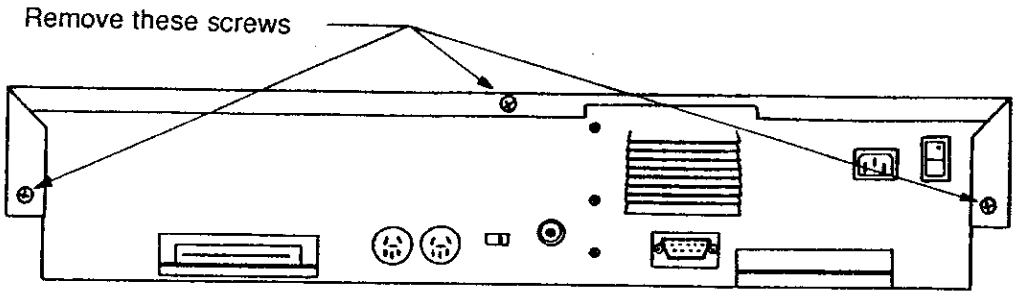

Figure 2 **REAR PANEL CASE SCREW REMOVAL**

5. Slide the top cover of the C-128D back about 1 inch towards the rear of the computer. Then, remove the top cover by lifting it straight up.

6. Locate the Kernal and 1571 ROMs using the diagram shown in Figure 3 on the next page. Remove both of these ROMs from their sockets using the IC extractor or small screwdriver. Lift the ROMs out slowly by alternately prying each end upward a little at a time. If using a screwdriver, be careful not to damage the circuit board while prying.

For future reference, label the stock ROMs as they are removed.

NOTE

You may want to remove the 1571 drive mechanism in order to gain easier access to the 1571 ROM (the drive mechanism covers the area where the 1571 ROM is located as indicated by the dotted lines in Figure 3).

To remove the drive mechanism:

a. Remove the three drive mechanism mounting screws from both sides of the drive.

b. Pull the diskette lever off of its shaft. This will allow the drive mechanism to be slid back toward the rear of the C-128D.

c. Slide the drive mechanism back toward the rear of the computer, and when it is clear of the front casing, tilt it over backwards so that it is out of the way of the 1571 ROM.

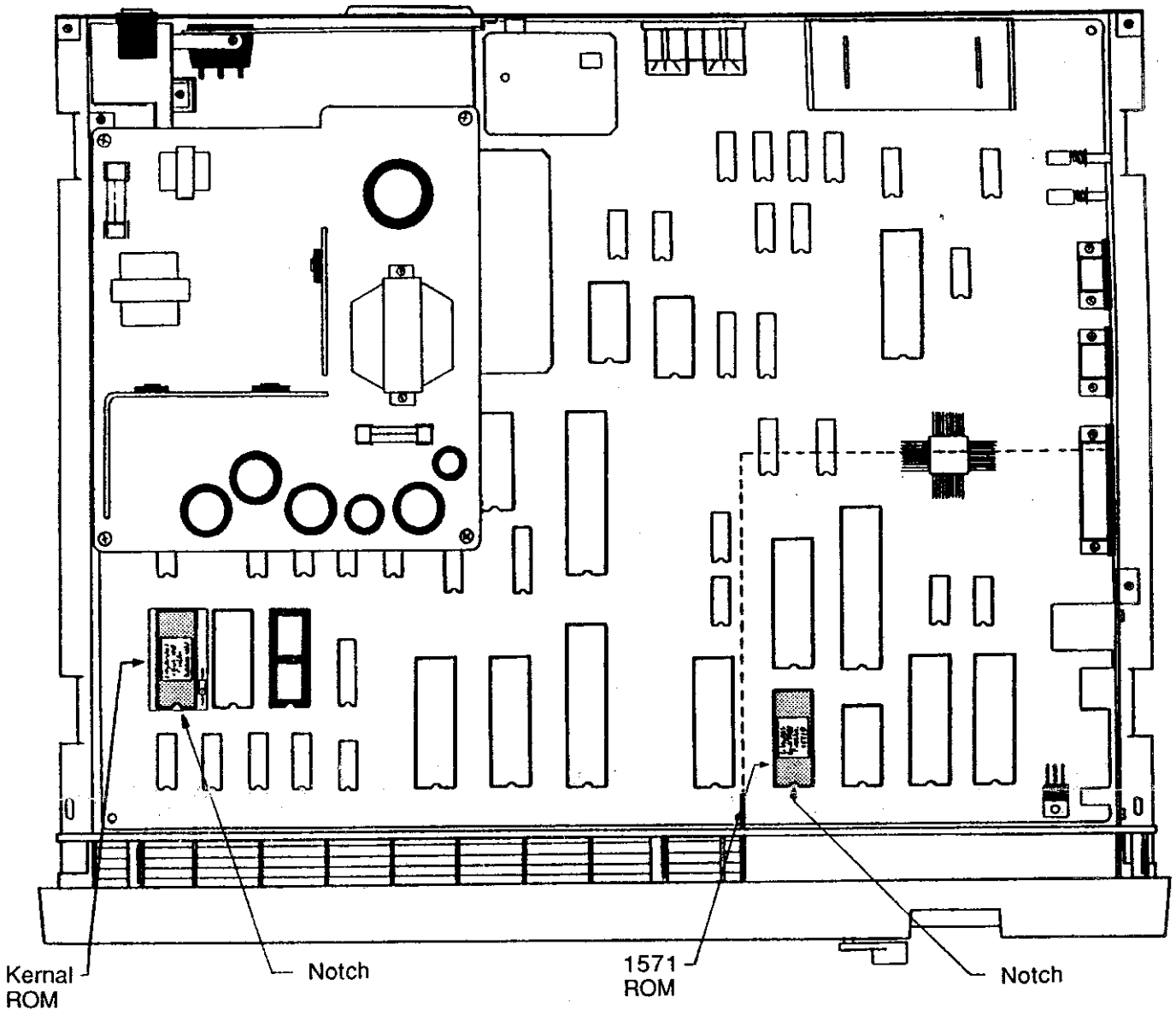

Figure 3 **LOCATION OF C-128D KERNAL AND 1571 ROMS**

7. Remove the JiffyDOS ROM assemblies marked **KERNAL-128D** and **1571D** (see Figure 4) from their protective packing. Put the stock Kernal ROM and 1571 ROM back into the packing for safe keeping. DO NOT DISCARD THE STOCK ROMS.

Figure 4 **JIFFYDOS C-128D KERNAL AND 1571 ROMS**

8. Inspect the JiffyDOS ROMs carefully. If you observe any severely bent pins, carefully straighten them with a pair of tweezers.

9. "Test fit" the JiffyDOS KERNAL-128D and 1571D ROMs into their respective sockets on the C-128D circuit board (refer to Figure 3).

   Make sure that the KERNAL-128D and 1571D ROMs are in the correct sockets, and MAKE SURE THAT THE NOTCHES IN THE ROMS FACE THE FRONT OF THE COMPUTER AS SHOWN IN FIGURE 3.

10. Make sure that all pins on the JiffyDOS ROM assemblies are aligned properly with the sockets on the C-128D circuit board.

    Again, make sure that the KERNAL-128D and 1571D ROMs are in the proper locations and that THE NOTCHES IN THE ROMS FACE THE FRONT OF THE C-128D AS SHOWN IN FIGURE 3 ON THE PREVIOUS PAGE.

11. When the ROMs are correctly positioned, carefully press them into their sockets using firm pressure on top of the ROMs.

    MAKE SURE THE ROMS ARE SEATED EVENLY AND COMPLETELY IN THEIR SOCKETS.

12. If you removed the drive mechanism from its mounts in order to gain access to the 1571 ROM, replace it at this time and secure it with its mounting screws.

13. Drill a 1/4" hole in the C-128D case assembly for the Kernal Selector Switch. A suggested location for the switch is given below in Figure 5.

    Before drilling, make sure that the switch will not interfere with any of the internal components of the C-128D. Also, make sure that the switch will not interfere with any cartridges, cables, interfaces, or other devices which plug into or connect to your computer.

IMPORTANT

WHEN DRILLING, MAKE SURE THAT YOU DEVISE SOME METHOD TO KEEP THE METAL SHAVINGS OUT OF THE C-128D.

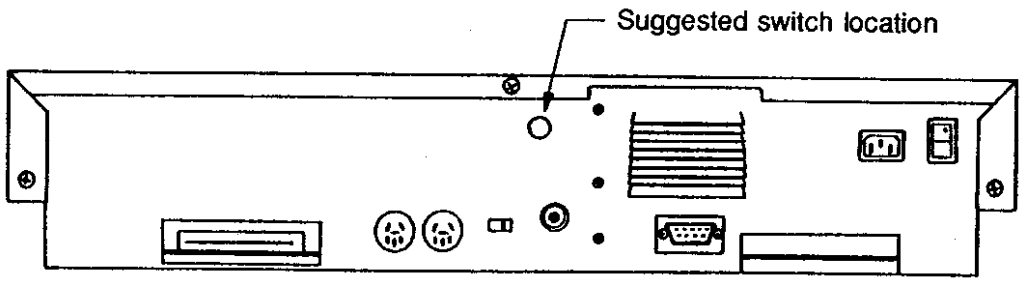

Figure 5 **SUGGESTED SWITCH LOCATION**

14. After drilling, clean the C-128D to make sure it is free from any metal shavings.

15. Install the Kernal Selector Switch into the hole just drilled in the case. Secure it with the hardware provided with the switch.

16. Replace the C-128D top cover. To do this, first lower the cover straight down so that the tabs and holes on the cover and base assembly align. Next, slide the cover forward and into position. Replace the five mounting screws that secure the cover from below and at the rear (refer to Figures 1 and 2).

17. Replace the AC power supply cable and video cables. Replace the keyboard cable. **Remember to plug the power supply cable back into a working outlet.**

Installation Checkout Procedure:

1. Turn on your monitor or TV. Let it warm up.

2. Switch the C-128D ON. The normal C-128D power-up screen should appear. If the JiffyDOS Kernal is selected, the line ***** JIFFYDOS/128 V5.0 ***** will appear in addition to the usual display.

   IF THE SCREEN REMAINS BLANK AFTER YOUR COMPUTER IS POWERED ON, IMMEDIATELY SWITCH POWER OFF. PROCEED WITH "KERNAL TROUBLESHOOTING" BELOW:

   Also, observe the disk drive light when power is switched on. The light 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 DISK DRIVE LIGHT STAYS ON OR BLINKS REPEATEDLY, IMMEDIATELY SWITCH POWER OFF. PROCEED WITH "1571 TROUBLESHOOTING" ON THE NEXT PAGE.

KERNAL TROUBLESHOOTING

a. Recheck all connections you have made to the computer. Make sure that the power supply cable and video cable have been properly connected. **Make sure the power supply cable has been plugged into a working outlet.** If any cabling errors have been made, correct the errors and try powering up the C-128D again.

b. If the problem is not with the cables, power down the C-128D, remove all cables, and open up the C-128D case according to the procedure used earlier. Remove the KERNAL-128D ROM from its socket and then reinstall it following Steps 8-11. **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 has been reinstalled, and the C-128D has been reassembled, try powering up the computer again.

c. If Steps a and b both fail, remove the JiffyDOS KERNAL-128D ROM and reinstall the stock Kernal ROM. Install the stock ROM by following the same procedure you used when installing the JiffyDOS ROM. Make sure that the notch on the stock ROM is oriented correctly (toward the FRONT of the computer). Try powering up the C-128D again. If the computer powers up properly, return the JiffyDOS KERNAL-128D ROM to Creative Micro Designs for replacement under warranty. If your computer does not power up properly with the stock ROM installed, seek the assistance of a qualified technician.

1571 TROUBLESHOOTING

a. Disassemble the C-128D and check all cable connections to the 1571. Make sure that no cables have come loose from their connectors on the C-128D circuit board. Correct any cabling problems, replace the top cover, and try powering up the C-128D again.

b. If the problem is not with the cabling, disassemble the C-128D and remove the JiffyDOS 1571 ROM from its socket. Reinstall it according to the procedure in Steps 8-11. **Make sure that the ROM notch faces the front of the computer, that there are no bent pins, and that the ROM is seated snugly in its socket.** Once the JiffyDOS ROM has been reinstalled and the computer has been reassembled, try powering up the C-128D again.

c. If Steps a and b both fail, remove the JiffyDOS 1571 ROM and reinstall the stock 1571 DOS ROM. Follow the same procedure for installing the stock DOS ROM as you did for installing the JiffyDOS ROM. Make sure that the notch on the stock 1571 DOS ROM is facing the front of the computer. Try powering up the C-128D again. If the drive behaves properly, return your JiffyDOS 1571 ROM to Creative Micro Designs for replacement under warranty. If your drive does not power up properly, seek the assistance of a qualified technician.

3. Once you get the 128-mode screen and the drive light to come on properly, power the C-128D up in 64 mode (hold down the Commodore key while turning power on).

   IF THE SCREEN REMAINS BLANK IN 64 MODE, IMMEDIATELY SWITCH POWER OFF AND PROCEED WITH "KERNAL TROUBLESHOOTING" (STEP B) ON THE PREVIOUS PAGE.

4. Test the operation of the Kernal Selector Switch.

   128 Mode:

   a. Turn the C-128D OFF, and then back ON again. The power up screen should display the normal information. If the selector switch is in the JiffyDOS position, the last line of the power-up message will read:

      ***** JIFFYDOS/128 V5.0 *****

   b. Turn the C-128D OFF again, and then place the selector switch in its other position. Power up the C-128D. The alternate screen should be displayed.

   64 Mode:

   a. Turn the C-128D OFF, and then back ON while holding down the Commodore key. You should see either the normal 64-mode Commodore BASIC screen or the JiffyDOS screen, depending on the current setting of the selector switch. If JiffyDOS is selected, the power-on screen will read:

      ***** JIFFYDOS/64 VERSION 5.0 *****

   b. Turn the C-128D OFF, and then place the selector switch in its other position. Power up the C-128D again while holding down the Commodore key. The alternate screen should be displayed.

IF YOU CANNOT GET BOTH SCREENS TO BE DISPLAYED IN 64 AND/OR 128 MODES PROCEED WITH "SELECTOR SWITCH TROUBLESHOOTING" BELOW:

SELECTOR SWITCH TROUBLESHOOTING

a. Turn off the C-128D and toggle the Kernal Selector Switch back and forth several times (to break through any oxidation on the switch contacts) and then try the switch test again.

b. If exercising the switch does not work, disassemble the C-128D and check the switch wire connections at the switch and at the KERNAL-128D ROM assembly. Repair any evident problems (shorted or broken wires). Resolder the connections, if necessary.

c. If the problem persists, return the JiffyDOS KERNAL-128D ROM assembly to Creative Micro Designs for replacement under warranty. Please be sure to include a note explaining your problem.

5. Once the selector switch has been checked out, power the C-128D off, switch JiffyDOS on, and then turn power back on (make sure that the power-on message on indicates that JiffyDOS is active). Insert a known good diskette with a few programs on it into the disk drive.

6. At the keyboard, type **@$** and **RETURN**. The disk drive activity light 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 C-128D. FOLLOW THE TROUBLESHOOTING PROCEDURES OUTLINED BELOW.

   a. Make sure that JiffyDOS is selected. When JiffyDOS is selected, the power-on screen will display: JIFFYDOS/64 VERSION 5.0, or JIFFYDOS/128 V5.0. If you did not have JiffyDOS selected, turn off the computer, select JiffyDOS, switch power back on, and then try reading the disk directory again.

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

   c. Power the C-128D down and remove the top cover. Check all cable connections to the 1571. Make sure that no cables have come loose from their connectors on the C-128D circuit board. Correct any cabling problems, replace the top cover, and try reading the directory again.

   d. If the problem persists, proceed with "1571 TROUBLESHOOTING" (Step b) found on the previous page.

7. After the directory test has been successfully completed, the C-128D is ready to use. If there are any more peripherals to connect to your system, shut off your computer, and connect them at this time.