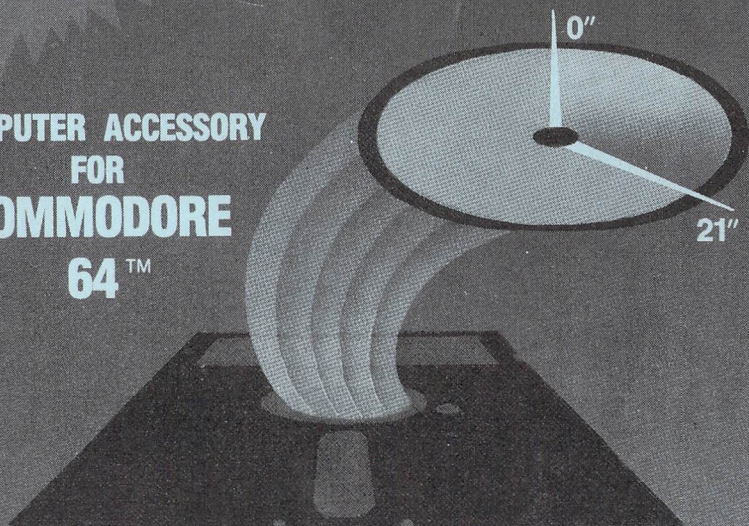


NEW FROM **VG** DATA SHACK

COMPUTER ACCESSORY
FOR
COMMODORE
64™



THE COPY PROGRAM

**21 SECOND
BACKUP™**

FAST: EXACT COPY OF ENTIRE DISKETTE IN 21 SECONDS.

SIMPLE: FULL BACKUP WITH A SINGLE KEYSTROKE.

RELIABLE: COPIES VIRTUALLY EVERYTHING EVERY TIME.

21 SECOND BACKUP

USER'S GUIDE

VERSION 4.1

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THIRD EDITION

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V.G. DATA SHACK provides this program and grants conditional license to the original owner for use ONLY to create backup copies of disk-based computer software already owned by the user. Any other use or application, transfer of possession, alteration or tampering, automatically TERMINATES your license to use this product.

LICENSE

You are permitted to:

A. Use this program to make backup copies of disks you already own and have obtained or purchased through legal means from a bona fide retail outlet, dealer/distributor, or previous owner.

B. Copy disks for use on any machine for backup purposes in support of your use of programs as specified in paragraph "A". Certain programs that are "copy protected" to inhibit copying shall remain as such in their form as duplicated by this program.

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Third Edition (MARCH 1988)
Version 4.1

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21 SECOND BACKUP

INTRODUCTION:

The 21 SECOND BACKUP is the FASTEST, the EASIEST to use and the most RELIABLE disk duplication system available for the Commodore-64 computer. The 21 SECOND BACKUP's versatility allows it to be used with one or two 1541 disk drives at no extra cost to the user.

The most significant feature of the 21 SECOND BACKUP is the speed and accuracy of its duplication procedure. This is derived from a rewritten disk operating system (DOS) and a hardware integrated device. In just 21 seconds the user is provided with an exact duplicate of an original diskette.

The 21 SECOND BACKUP automatically formats the disk and copies everything, including disk errors and various protection schemes, all at the touch of one keystroke. Making it so simple to use that even a novice or child can operate it.

NOTE: Since software houses are constantly improving their protection schemes, it is likely that disks will appear that the 21 SECOND BACKUP cannot duplicate. Please let us know if you find a disk you are not able to duplicate so that we can update your 21 SECOND BACKUP with proper revisions.

HARDWARE INSTALLATION :

The 21 SECOND BACKUP includes a hardware device which comes ready to work with 1 or 2 1541 disk drive(s). The following is the procedure to install this hardware device.

NOTE-(A): The new models of the 1541 disk drives being manufactured by Commodore in late 1985 & 1986 are not fully compatible to the 21-second backup program. This is due to the fact that Commodore has reallocated some memory locations in the new drives, rendering software compatibility problems. Fortunately these new drives can be used as destination drives when using 2-drive option with the 21-second program (cannot be used to load the 21-second backup program). These new model drives can be easily identified by turning the drive on, inserting a diskette in the drive and listening closely to hear if the motor is whirring, if you can hear the motor whirring then it is the new model 1541 and can only be used as a destination (2nd) drive.

NOTE-(B): Although the hardware device is easy to install, opening your disk drive may void your equipment warranty. you may want to contact your dealer for installation.

STEP 1

Before you install the hardware device, turn off and unplug the 1541 disk drive(s) and the Commodore-64 computer.

STEP 2

Open the disk drive by removing the four screws from the bottom corners of the disk drive(s) and lift the top cover from the disk drive.

STEP 3

Position the disk drive so the front of the disk drive is facing you. Locate and take note of the position of the 6522 chip (see diagrams 2A, 2B, and 2C for position of the 6522 chip). Gently remove the 6522 chip. (It is highly recommended that you use an inexpensive I.C. chip extractor to remove the 6522 chip).

STEP 4

Plug in the I.C. socket (see diagram 1) where you removed the 6522 chip. Make sure that the wire connected to the I.C. socket is pointing towards the left of the disk drive when facing the disk drive from the front.

STEP 5

Plug the 6522 chip into the I.C. socket so that the notch on the 6522 chip is in the same position as it was originally. (see diagrams 2A, 2B, and 2C to locate the notch on the 6522 chip).

STEP 6

Look at Diagrams 3A, 3B, and 3C guide the wire connected to the I.C. socket along the dotted lines as illustrated in the diagram. make sure the wire exits from just above the power switch located in the back of the 1541 disk drive.

STEP 7

Close the disk drive cover and replace all four screws. Plug the edge connector (see diagram 1) into the users port of the commodore-64 computer (the users port is the leftmost port on the back of the computer when viewed from the front.

STEP 8

Repeat steps 1 through 7 (if you are using 2 disk drives) for the second disk drive. **NOTE:** If second drive is a new model then look at and follow diagrams 2C, AND 3C.

NOTE: If you are using one disk drive, make sure to put the second I.C. socket back on the styrofoam pad provided and roll up the wire. DO NOT leave the second I.C. socket without the styrofoam pad provided for that purpose.

STEP 9

Now, replug and turn on the 1541 disk drive(s) and the commodore-64 computer. You are now ready to load the 21 SECOND BACKUP program.

NOTE: It is not recommended to remove the I.C. sockets from the 1541 disk drive(s) since the connection is completely transparent to the computer system. However you may choose to remove the edge connector from the computer.

LOADING INSTRUCTIONS:

Remove all cartridges and peripherals from the computer.
To load the 21 SECOND BACKUP insert the program disk in the disk drive and type: LOAD"\"",8,1

After a few seconds the introduction graphic screen will appear, asking you to HIT ANY KEY to continue. After hitting a key, the next prompt displayed will be; 1 OR 2 DISK DRIVE(S) ?.
Hit the number key 1 or 2 depending on how many disk drives you are using and hit RETURN.

NOTE:(For users with 2 disk drives). Both disk drives must be set at device 8, if one of the drives is physically changed to device 9 then the user must either install a switch to toggle between device 8 & 9 or put the drive back to its original state (device 8). The copier is designed such that both drives must be set at device 8.

PROGRAM USAGE:

If you choose the 2 drive option, (make sure the second disk drive is turned off and is firmly connected with the first disk drive) the program will prompt you to TURN ON THE SECOND DRIVE and hit any key to continue, (this procedure automatically initializes the second drive for program usage).

The user will next be confronted with the MAIN MENU:

At the main menu the user can select the different backup systems by pressing the letter Q. There are 3 backup systems to choose from: NORMAL BACKUP, SUPER BACKUP, and HALF TRACK SUPER BACKUP.

Normal backup: It is recommended to use this backup system first when attempting to backup an original disk, for it will backup most protection schemes which involve nibbling, gapping, syncs, and errors.

NEW Super backup : This system should be used only after unsuccessful attempts with the Normal backup. Super backup will duplicate disks by first scanning the original disk from track 0 to 40 and then duplicating the analyzed protection schemes found.

Half track super backup: Only when Normal and Super backup modes fail should this system be used. This system follows the same principle as Super backup except it also checks for half track protection schemes.

TROUBLE SHOOTING:

1. Program will not load.

Solution: Double check all connections, make sure disk drive(s) is not misaligned (even slight misalignment will cause problems). Initialize the drive (OPEN1,8,16,"I":CLOSE1)

2. Program loads but freezes after first prompts.

Solution: Make sure the hardware connections are firmly inserted (Refer back to steps 1 through 9), also remove any other peripherals connected to computer.

3. Program loads and Backs-up disk successfully but the copy doesn't load or run.

Solution: Make sure disk drive is in proper alignment, all connections are firmly connected, and the backup diskette is not defective. It is also possible that the disk you are attempting to copy has a protection scheme which the 21 SECOND BACKUP does not recognize. (Future updates of the 21 SECOND BACKUP will eliminate this problem.)

NOTE: If you encounter any more difficulties not already mentioned in the trouble shooting section, please let us know in writing.

After selecting one of the backup systems, by pressing the letter N, S, or H, the user will be returned back to the main menu where the user must select the VERIFY option. This option can be selected by simply pressing the letter V to toggle between verify OFF or ON. NOTE: Selecting verify ON will slightly increase duplication time since the duplicating system selected must rescan the original disk several times for optimum accuracy before writing to the backup disk.

The user must next press the letter S to start the duplication process. The next prompt will ask the user to INSERT ORIGINAL DISKETTE IN FIRST DRIVE AND BACKUP IN SECOND DRIVE. (Users with only one disk drive will be prompted to INSERT ORIGINAL and a few seconds later will be prompted to INSERT BACKUP, this will be repeated 4 more times until the backup is completed).

NOTE: Make sure your original diskette has a write protect tab on it.

21. SECOND BACKUP
(HARDWARE DEVICE)

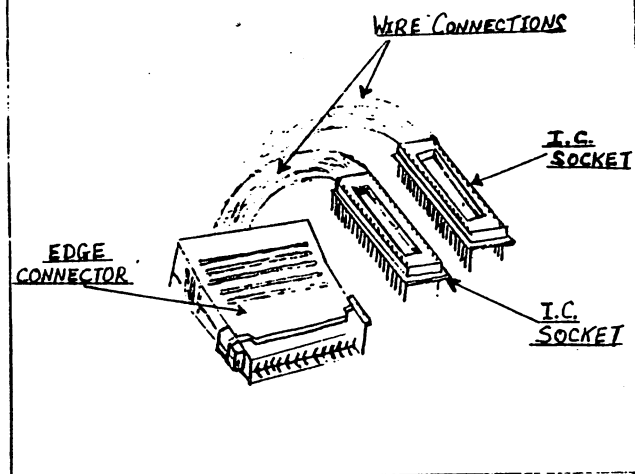


DIAGRAM-1

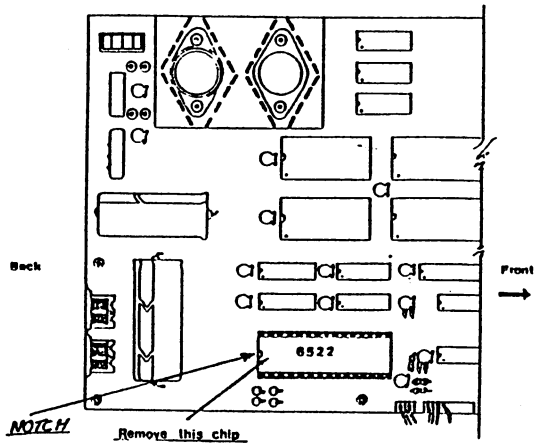


Diagram 2a: 1541 circuit board : Revision A

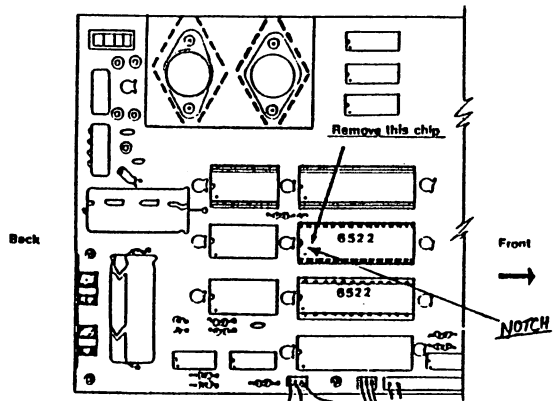
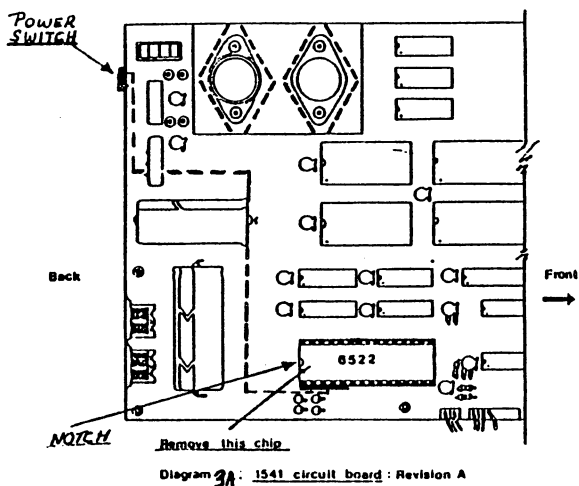
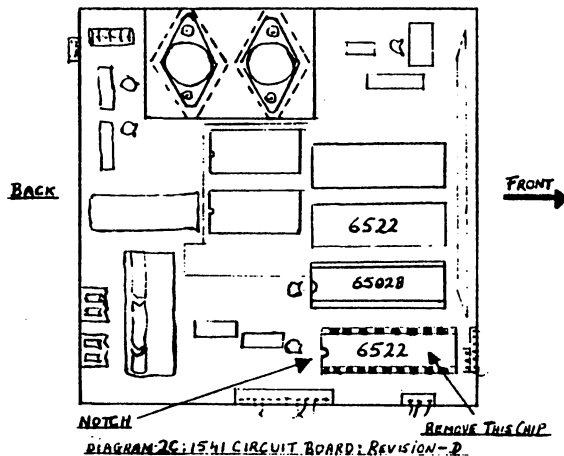


Diagram 2b: 1541 circuit board : Revision B/C



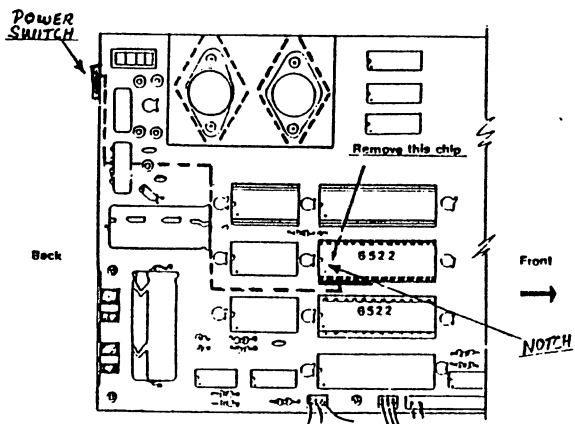


Diagram 3B: 1541 circuit board: Revision B/C

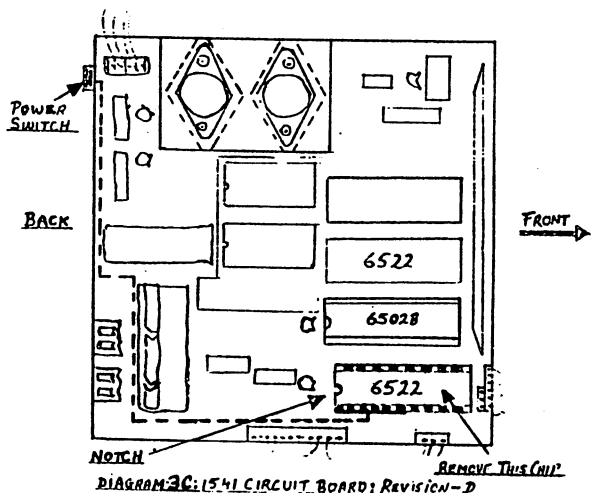
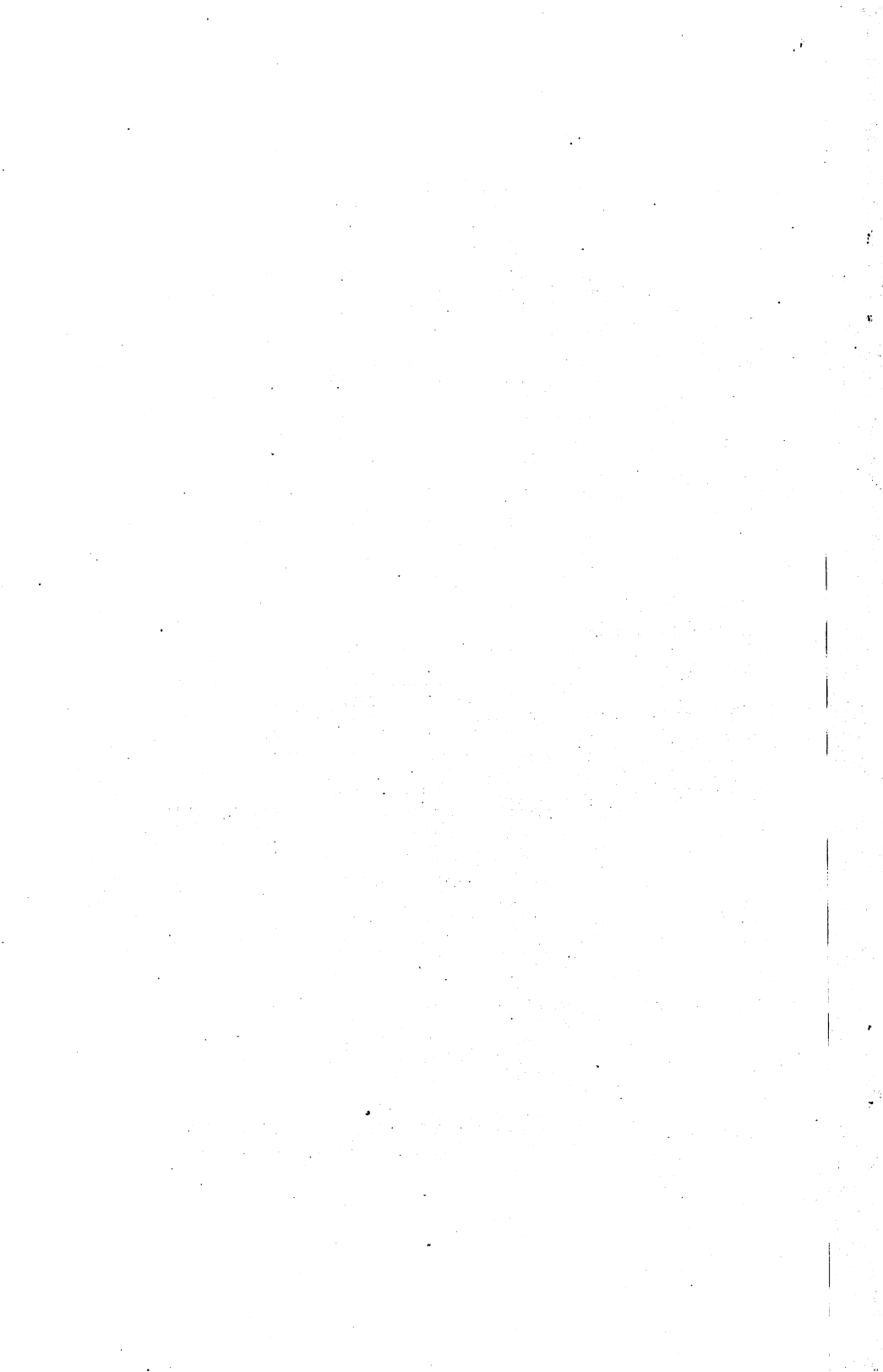


Diagram 3C: 1541 circuit board: Revision-D



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* * * * * 21 SECOND BACKUP * * * * *

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VERSION-4.1

WARRANTY REGISTRATION
(MUST BE SENT IN WITHIN SEVEN DAYS OF INVOICE DATE)

DATE : YR NO DY

PURCHASED FROM: -----
INVOICE No. : PRICE: \$

ADDRESS : -----
CITY : STATE: -----
ZIP CODE : PHONE No.: () -----

PURCHASER'S NAME: -----
ADDRESS : -----
CITY : STATE: -----
ZIP CODE : PHONE No.: () -----
COMMENTS : -----

PLEASE SEND TO: V.G. DATA SHACK
5625 GRANDE-ALLEE BLVD.
LOCAL 05
BROSSARD, QUEBEC, CANADA
J4Z 3G3

IMPORTANT: WARRANTY REGISTRATION IS VALID ONLY IF A COPY
OF DATED PROOF OF PURCHASE IS ATTACHED.

LIMITED WARRANTY

V.G. DATA SHACK, warrants to the original purchaser only, the enclosed program diskette and hardware device to be free from material defects for a period of 30 days. If a defect is discovered within this 30-day warranty period, and you have validated your warranty by returning the warranty registration, call the V.G. DATA SHACK technical & product support line at 1-(514)446-9663. The technician at V.G. DATA SHACK will give you a Return Authorization code number (RA#). Return the complete 21 SECOND BACKUP package (including the program diskette and hardware device) properly packaged and postage paid, to V.G. DATA SHACK with the RA# clearly written on the outside of the package. All packages without an RA# on the outside will be refused. At our sole option, we will repair or replace the diskette and/or hardware device, PROVIDED that the diskette and/or hardware device is mailed to V.G. DATA SHACK, shipping prepaid, with the RA# clearly exhibited on the exterior of the package.

This warranty is limited to repair or replacement only, exchanges or refunds are not permitted. This warranty does not cover failure or damage resulting from alteration, abuse, neglect, improper maintenance, theft, or excessive wear. After the initial 30-day warranty period, replacements shall be made, for a service charge, to registered owners ONLY. Any implied warranties, including warranties of merchantability and fitness, are hereby limited to 30 days from the date of purchase. Incidental or consequential damages resulting from breach of any express or implied warranties are hereby excluded.

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