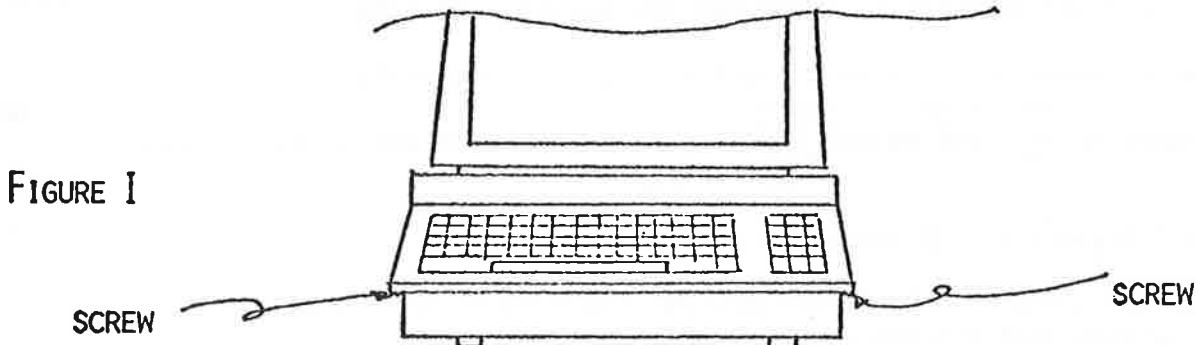
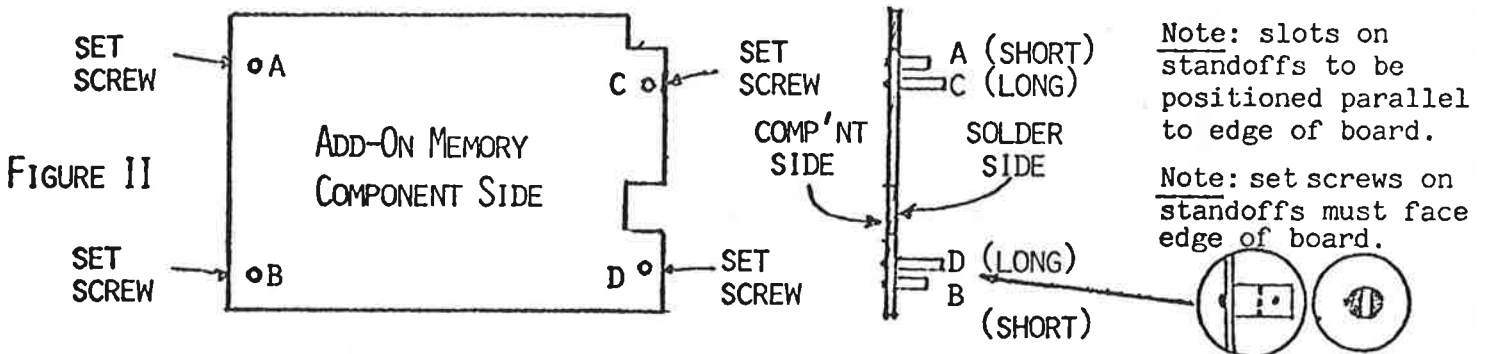


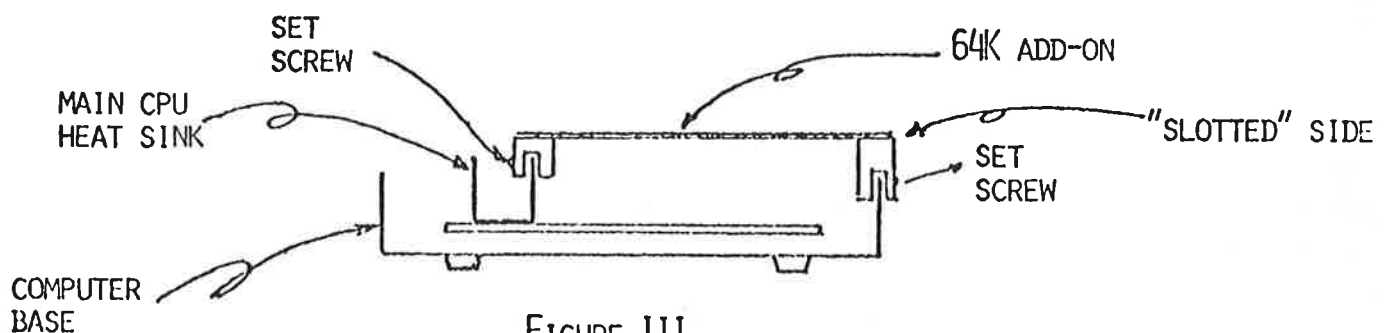
1. Turn Pet off and unplug power outlet.
2. Remove 2 screws holding cover to base. (see figure I).



3. Assemble 4 standoffs with 4 phillips head screws, and set aside. (see figure II).



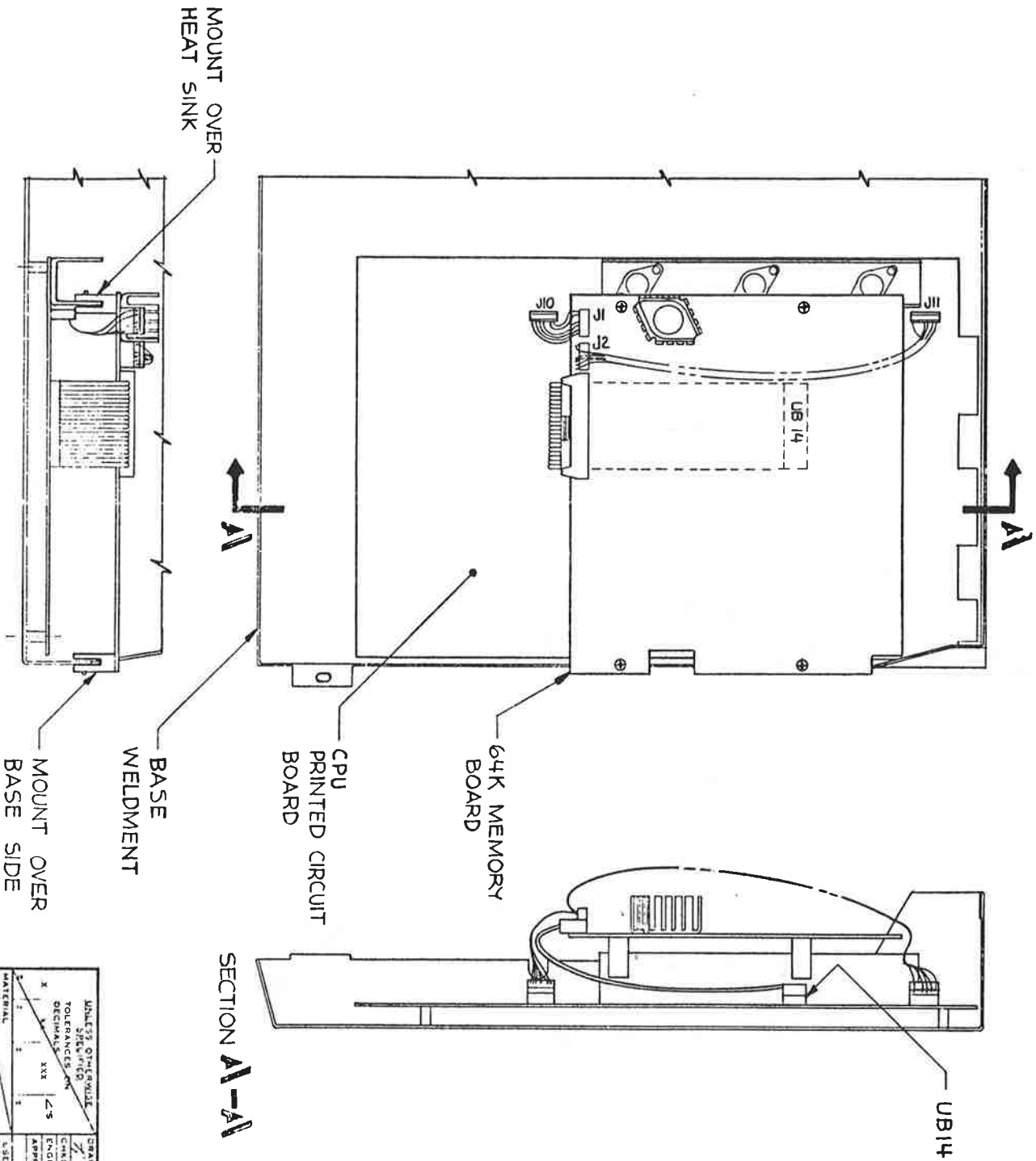
4. Using a small chisel head screwdriver, remove device 6502 MPU from position UB14 on the main CPU board. (save 6502)
5. Install flat ribbon cable into UB14 on main CPU board (replacing the removed 6502). Position cable such that it is facing front of computer.
6. Install long power harness to J11 on main CPU board. (note polarity). Position harness towards front of computer.
7. Install short harness to J10 on main CPU board. (note polarity).
8. Ascertain that the 3 cables are positioned towards front of computer.
9. Install the 64K memory add-on board over the main CPU board such that slotted side is on right hand side of computer.
10. Position standoffs such that, the 2 long ones straddle the edge of the computer base, while the 2 short ones straddle the main CPU board heat sink. (see figure III).



11. With Allen wrench tool tighten 4 sets screws on standoffs to secure add-on board.
12. Connect flat ribbon cable to edge connector on 64K add-on board.
13. Connect the long power harness to J2 on 64K board.(note polarity).
14. Connect the short harness to J1 on the 64K board. (note polarity).
15. Loosen 4 standoff screws and adjust board to it's left most position, retighten 4 screws.
16. Close Pet cover & reinstall 2 screws to secure cover to base.

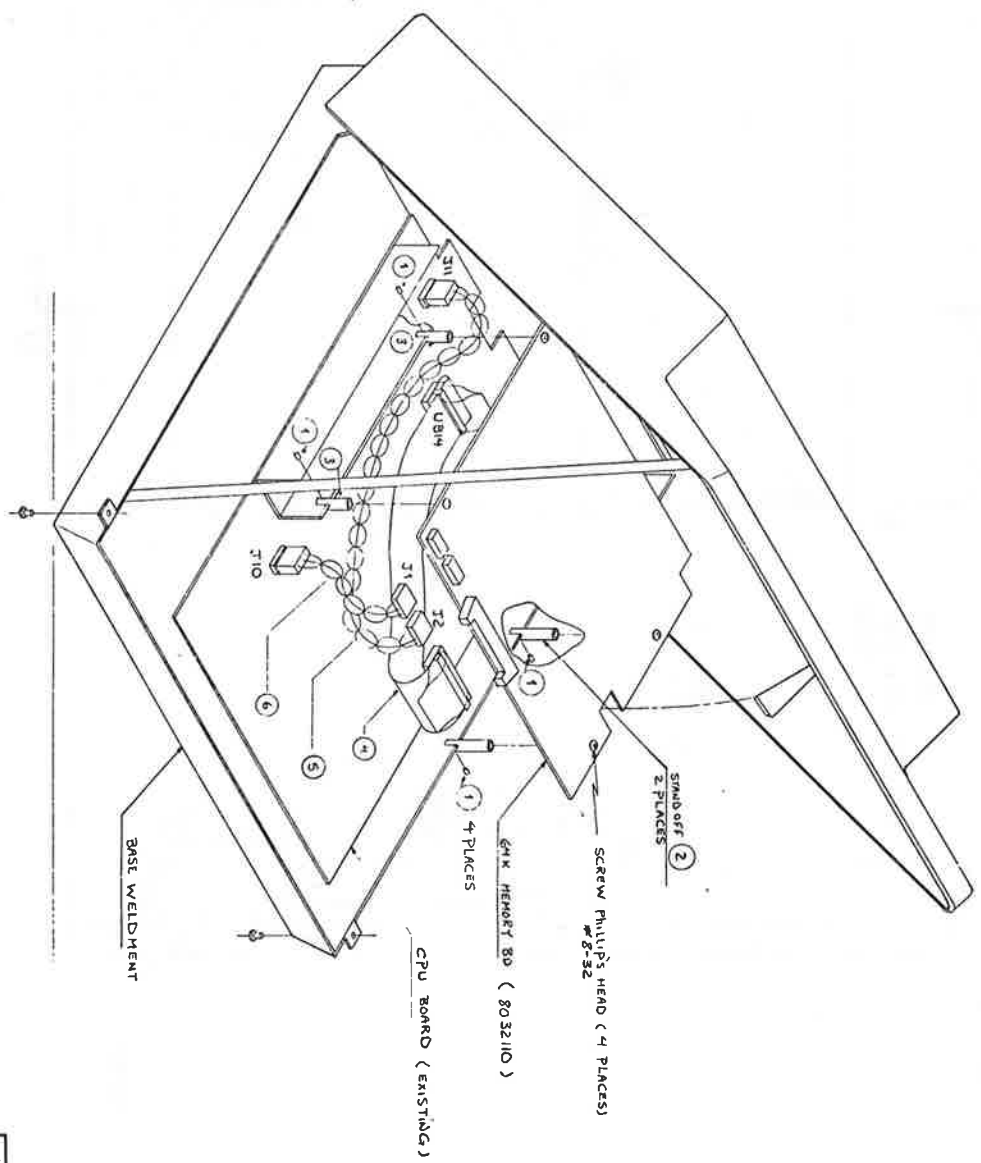
Note: At times the inside of the cover may rub the edge of the board during opening and closing of the computer cover.

REVISIONS			
LTR ZONE	DESCRIPTION	DATE	APPROVED
A	PRODUCTION RELEASE	3/3/71	E C T
B	REV PER ECO 2144	7/6/71	J J



UNLESS OTHERWISE SPECIFIED TOLERANCES ON DECIMALS ARE: .10 .25 .50 .75 .10 .25 .50 .75		DRAWN BY: GAT	
MATERIAL: XXX		ENGR: APPR: NEST ASSY	
FINISH: 1		SCALE: 1/2" = 1"	
SIZE: C		SHEET: 1 OF 1	
Commodore INSTALLATION MEMORY, PET 64K 8032100 REV A			

REVISIONS		DATE	APPROVED
LIN	LOWE		
DESCRIPTION			



NOTES:

- ① PART OF STANDOFFS
- ② STAND OFF (FM 90769-02)
LENGTH 1.512 INCHES
- ③ STANDOFF (FM 90767-01)
LENGTH 1.062 INCHES.
- ④ CABLE, FLAT RIBBON
(FM 8032096-01)
- ⑤ CABLE ASSY, HARNESS (LONG)
(FM 8032097-01) 12-11"
- ⑥ CABLE ASSY, HARNESS (SHORT)
(FM 8032098-01) 51-310

TITLE: PERSPECTIVE DRAWING DATE: 80 3 21 00 SHEET: 3 of 4		PROJECT: 80 3 21 00 SHEET: 3 of 4	
DESIGNED BY: LOWE DRAWN BY: LOWE CHECKED BY: LOWE APPROVED BY: LOWE		COMMANDERS: LOWE DATE: 80 3 21 00 SHEET: 3 of 4	

TOGGLE.SEQ.....PAGE 0002

LINE#	CODE	LINE
0048	0041 8D FO FF	STA \$FFFO
0049	0444 8D 00 82	STA \$8200 ;WRITE TO SCREEN
0050	0447	;*****
0051	0447	; * T.V.PEEK 1-3 *
0052	0447	;*****
0053	0447 A9 AC	LDA #\$AC ;ENA PEEK 1
0054	0449 8D FO FF	STA \$FFFO
0055	044C 8D 02 82	STA \$8202 ;WRITE TO SCREEN
0056	044F	;*****
0057	044F	; * I/O PEEK 1-3 *
0058	044F	;*****
0059	0451 A9 CC	LDA #\$CC ;I/O PEEK 3
0060	0451 8D FO FF	STA \$FFFO
0061	0454 8D 00 E8	STA \$8202 ;WRITE TO E800
0062	0457	;*****
0063	0457	; * I/O PEEK 0-2 *
0064	0457	;*****
0065	0457 A9 CO	LDA #\$CO ; I/O PEEK 2
0066	0459 8D FO FF	STA \$FFFO
0067	045C 8D 00 E8	STA \$E800 ;WRITE TO E800
0068	045F 4C 12 04	JMP START ;LOOP BACK TO START
0069	0462	END

ERRORS = 0000

SYMBOL TABLE

SYMBOL VALUE
START 0412
END OF ASSEMBLY

commodore



COMMODORE EQUIPMENT LIMITED WARRANTY

Commodore Business Machines, Inc. (CBM) is proud to offer its customers the following warranty which covers our entire product line of PET computers and peripherals.

CONDITIONS

CBM limits this warranty to the original purchaser of this product.

Our products carry a full 90-day warranty from the date of purchase against all defects in material and workmanship. Should the product require servicing during this period, all parts and labor are warranted for an additional 30 days from the date of servicing.

Shipping and related charges, where applicable, incurred by CBM will be via United Parcel (surface only) unless otherwise specified and prepaid.

EXCEPTIONS

CBM products are warranted with the exception of the following conditions:

- * Repairs attempted by unauthorized personnel.
- * Abuse, accident, acts of God, or any other damage not resulting from defects in material or workmanship or beyond the control of CBM.
- * Altered or defaced serial number (In such cases, an out-of-warranty charge will be quoted the purchaser by the Dealer. If satisfactory, the Dealer will repair the unit and return same to the purchaser).

PROCEDURE

In the event the product requires servicing under this warranty, the original purchaser may return the defective unit along with suitable proof of purchase to any authorized Dealer. Should it be necessary, the Dealer may return the defective sub-assembly to Commodore for repair or replacement. Allowing up to two weeks for shipping from the Dealer to Commodore, a maximum of two weeks at Commodore, and two weeks for return to the Dealer is reasonable.

In the event the in-warranty defective item cannot be repaired within 2 weeks from the date of receipt at Commodore, it will be replaced with a like item at no charge.

IN CASE OF DISSATISFACTION

If the defective item is not repaired or replaced within the stipulated period of time, or if the repair or replacement proves unsatisfactory, the purchaser is encouraged to phone or write: Manager, Customer Support, Commodore Business Machines, Inc., 950 Rittenhouse Rd., Norristown, PA 19403. A prompt and courteous answer is assured.

NOTES

1. The limitations as stipulated above are subject to the consumer regulations of the state in which the purchaser resides.
2. This warranty gives the purchase specific legal rights, and there may be other consumer rights which vary from state to state.

COMMODORE BUSINESS MACHINES

Valley Forge Corporate Center
950 Rittenhouse Road
Norristown, PA 19403

Please detach, fill out and return this portion to Commodore at the address written above.

Name _____

Address _____

Model _____ Serial No _____

Date of Purchase _____

Purchased from _____

P/N 119001-33A

```

J ,*****
Q ;# DEMO INSTRUCTIONS #
Q ;*****
Q ;
Q ;MEMORY CHECK PROGRAM
Q ;1.SYSTEM MUST BE AN 8032
Q ;2.INSTALL DISKETTE IN DRIVE 0
Q ;3. TYPE:LOAD"8032.MEM.PRG",08<RETURN>
Q ;   3A. SHIFT RUN/STOP WILL ALSO WORK
Q ;4. IF LOAD USED TYPE:RUN <RETURN>
Q ;5. GRAPHIC DISPLAY SHOULD APPEAR IMMIDIATELY
Q ;   AFTER PROGRAM HAS LOADED AND EXECUTED
Q ;
Q ; ALL DISPLAYS ARE FORMATTED THE SAME :
Q ;000000000: R/W 1 IS READ/WRITE BLOCK ONE,ETC.
Q ;CYCLES IS THE NUMBER OF PASSES FOR THAT 32K.SECTION
Q ;FAILS ARE THE CUMULATIVE FAILS FOR THAT 32K.SECTION
Q ;
Q ; THE SCREEN SHOULD REVERSE APPROXIMATELY EVERY
Q ;8 SECONDS. ON A BRIGHT SCREEN THE LOWER 32K. IS RUNNING
Q ;ON A DARK SCREEN THE UPPER 32K.IS RUNNING
Q ; THE NOTCH IN THE UPPER LEFT CORNER IS FOR SCREEN PEEK
Q ;
Q ; AS THIS PROGRAM EXECUTES ALMOST ENTIRELY FROM THE
Q ;64K.ADD-ON ANY FAILURES IN MEMORY ABOVE F800<HEX>
Q ;WILL CAUSE THE PROGRAM TO CRASH. THE MEMORY CHECK
Q ;IS A 00 TO FF AND AN AA TO 55 TRANSITION CHECK,
Q ;I.E. WRITE 00 CHECK 00,WRITE FF EVERY 4TH.BYTE,CHECK FF
Q ;SWAP FF WITH NEXT LOWEST BYTE,CHECK ETC. THE PROGRAM THEN
Q ;DOES THE SAME THING WITH AA AND 55 FOR A FAIRLY
Q ;COMPREHENSIVE ZERO TO ONE TRANSITION CHECK.
Q ;
Q ;
Q ; DEMO PROGRAM :
Q ;1. TYPE: LOAD"EXPANDED-DEMO",08 <RETURN>
Q ;2. WHEN READY APPEARS,TYPE: RUN <RETURN>
Q ;   PROGRAM EXECUTES THREE PROGRAMS FROM THE ADD-ON
Q ;   WITH COMMENTS
Q ;3. TYPE: LOAD"ADD-ON-LOAD",08 <RETURN>
Q ;4. TYPE: RUN <RETURN>
Q ;5. PET SHOULD RESPOND WITH SYSTEM NAME ?
Q ;6. RESPOND WITH THE TYPE OF BASIC YOU REQUIRE
Q ;   I.E. BASIC4.0/80 <RETURN>
Q ;7. PET SHOULD RESPOND BY LOADING FROM DRIVE ZERO
Q ;   AND GIVING THE STANDARD BOOT DISPLAY. HOWEVER,
Q ;   THE PET IS NOW EXECUTING FROM THE ADD-ON RAM.
Q .END

```