

1 INFO

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25/1-1.1 SERVICE TRAINING SCHEDULE FOR 1989, APRIL THUR JUNE.

COMMODORE SERVICE WILL BE CONDUCTING TRAINING CLASSES THROUGHOUT 1989. A OUTLINE WAS INCLUDED WITH MAILING OF ISSUE 23 DETAILING THE COURSES.

THE 1989 TRAINING SCHEDULE, APRIL THUR JUNE.

MONTH	DATE	TRAINING DAYS	PRODUCTS	STATUS
APR	4-7	TUES-FRI	CBM	CLOSED
APR	10-14	MON-FRI	MONITORS	CLOSED
MAY	8-12	MON-FRI	AMIGA	CLOSED
MAY	15-19	MON-FRI	MONITORS	CLOSED
JUN	7-9	WED-FRI	PC	CLOSED
JUN	12-16	MON-FRI	MONITORS	CLOSED

25/1-2.1 IMPORTANT CHANGE - MINIMUM PARTS ORDER OF \$50.00, ELIMINATED.

EFFECTIVE APRIL 3, THE REQUIREMENT THAT SERVICE PARTS ORDERS EXCEED \$50.00 WILL BE ELIMINATED. AUTHORIZED SERVICE CENTERS MAY ORDER PARTS WITH NO MINIMUM DOLLAR AMOUNT, SUBJECT TO THE FOLLOWING PROVISIONS.

- 1) PARTS ORDERS OF LESS THAN \$50.00 WILL BE SUBJECT TO A \$5.00 SURCHARGE AND THE SHIPPING CHARGES WILL BE BILLED TO THE SERVICE CENTER.
- 2) ON PARTS ORDERS BETWEEN \$50.00 AND \$99.99, THE SHIPPING CHARGES WILL BE BILLED TO THE SERVICE CENTER.
- 3) ON PARTS ORDERS WHICH EXCEED \$100.00 NO CHANGES IN POLICY HAVE BEEN MADE.

[NOTE: THIS BULLETIN WAS APPENDED TO THE TECHTOPICS ISSUE 24 MAILING, THE FIRST WEEK OF APRIL.]

25/1-3.1 EXTENDED C-TOC SERVICES - PAST BULLETINS ACCESSIBLE BY MODEL.

STARTING WITH ON-LINE ISSUE 25, PAST TECHTOPICS BULLETINS CAN BE ACCESSED BY MODEL NUMBER, UNDER PRODUCT LINE (AMIGA, CBM, PC).

NEW MENUS ALLOW USERS DIRECT ACCESS TO ANY BULLETINS ISSUED STARTING FROM TECHTOPICS ISSUE 18 (NOVEMBER 1987) THROUGH ISSUE 24 (JANUARY - MARCH 1989). WITH EACH NEW ISSUE BULLETINS FROM THE PREVIOUS ISSUE WILL BE ADDED TO THE HISTORY FILES.

ONLY REPAIR BULLETINS ARE LISTED, INFORMATION REGARDING RELEASES OF NEW TESTS, SERVICE MANUALS OR OTHER ENCLOSURES HAVE BEEN REMOVED IN ORDER TO KEEP THE HISTORY FILES AS CONCISE AS POSSIBLE.

IN ADDITION TO THE UNIT REFERENCES, TWO NEW OPTIONS APPEAR ON THE INFO SECTION MENU. THESE ARE POLICY INFORMATION, WHICH LISTS COMMODORE SERVICE BULLETINS REGARDING POLICY, AND GENERAL INFORMATION, WHICH LIST CURRENT WARRANTY RATES, SERVICE PHONE NUMBERS, HOW TO FILL OUT NARDA FORMS, AND OTHER IMPORTANT SERVICE INFORMATION.

UNDER THE PARTS MENU, OPTIONS NOW ALLOW USERS TO SELECT COMMODORE STOCKED PARTS LISTS BY UNIT. NOTE THAT THE LISTS DO NOT CONTAIN PRICES, AVAILABILITY, OR SUBSTITUTIONS. CONSULT YOUR CURRENT ON-LINE PARTS SECTION AND THE CURRENT PARTS PRICE BOOK FOR COST INFORMATION. NOTE, ON THE PARTS LIST, AN ASTERISK (*) INDICATES THE PARTS ARE USED IN OTHER UNITS AS WELL.

25/1-4.1 SERVICE TRAINING SCHEDULE FOR 1989, JULY THUR DECEMBER.

THE NEW SERVICE TRAINING SCHEDULE AND COURSE OUTLINE IS CURRENTLY BEING MAILED TO ALL AUTHORIZED SERVICE CENTERS. CONTACT JOHN DIMEO FOR MORE INFORMATION.

MONTH	DATE	TRAINING DAY	PRODUCT	STATUS
JULY	10-14	MON-FRI	AMIGA	CLOSED
JULY	17-24	MON-FRI	MONITORS	OPEN
AUGUST	2-4	WED-FRI	AMIGA OPTIONS	OPEN
AUGUST	16-18	WED-FRI	PC	OPEN
AUGUST	21-25	MON-FRI	MONITORS	OPEN
SEPTEMBER	11-15	MON-FRI	AMIGA	OPEN
SEPTEMBER	18-22	MON-FRI	MONITORS	OPEN
OCTOBER	11-13	WED-FRI	AMIGA OPTIONS	OPEN
OCTOBER	18-20	WED-FRI	PC	OPEN
OCTOBER	23-27	MON-FRI	MONITORS	OPEN
NOVEMBER	6-10	MON-FRI	AMIGA	OPEN
NOVEMBER	13-17	MON-FRI	MONITORS	OPEN
NOVEMBER	27-29	MON-WED	AMIGA OPTIONS	OPEN
DECEMBER	4-8	MON-FRI	AMIGA	OPEN
DECEMBER	11-15	MON-FRI	MONITORS	OPEN

25/1-5.1 POINTS FOR PARTS PROGRAM, STARTS JULY 1, 1989.

THE POINTS FOR PARTS PROGRAM ALLOWS AUTHORIZED SERVICE CENTERS TO BUILD POINTS BASED UPON GROSS PARTS ORDERS. THESE POINTS MAY BE USED TO PAY FOR COMMODORE SERVICE TRAINING.

- 1) EACH MONTH POINT CERTIFICATES WILL BE MAILED TO ALL SERVICE CENTERS BASED ON GROSS PARTS SALES FOR THE PRIOR MONTH.
- 2) 150 POINTS WILL BE ISSUED FOR EACH \$1000.00 IN GROSS PARTS ORDERS.
- 3) POINT CERTIFICATES WILL BE ISSUED AT 50 POINT MINIMUM OR 100 POINT MAXIMUM VALUES.
- 4) IF LESS THAN 50 POINTS ARE EARNED FOR A CERTAIN MONTH THEY WILL BE CARRIED OVER AND CERTIFICATE WILL BE ISSUED WHEN TOTAL EARNED POINTS REACHES 50.
- 5) POINT CERTIFICATES MUST BE SUBMITTED ALONG WITH THE SERVICE TRAINING CONFIRMATION FORM.
- 6) POINT CERTIFICATES ISSUED FROM 7-1-89 THUR 12-31-89 MUST BE USED BEFORE 3-1-90 OR THEY BECOME INVAILD.
- 7) POINT CERTIFICATES WILL BE ISSUED FOR PARTS ORDERED THROUGH THE PARTS DEPARTMENT AND BILLED TO ACTIVE PARTS ACCOUNT NUMBERS ONLY.

25/1-6.1 RETURN OF DEFECTIVE PARTS TO PARTS DEPOT.

A LARGE NUMBER OF PARTS, RETURNED TO THE PARTS DEPOT AS DEFECTIVE, HAVE BEEN FOUND TO BE FULLY FUNCTIONAL AFTER BEING RE-TESTED BY IN-HOUSE TECHNICIANS.

BECAUSE OF THE INCREASED COST TO THE SERVICE DEPARTMENT DUE TO INCORRECT ANALYSIS BY FIELD SERVICE TECHNICIANS, NEW PROCEDURES FOR RETURNING PARTS FOR CREDIT ARE BEING IMPLEMENTED.

THESE PROCEDURES WILL REQUIRE AUTHORIZED SERVICE CENTERS TO COMPLETE A FORM AND ATTACH IT TO THE SUB-ASSEMBLY BEING RETURNED. IN ADDITION, PACKING REQUIREMENTS FOR DISK DRIVES AND PCB ASSEMBLIES WILL BE EXPLICITLY DEFINED AND PACKING MATERIALS WILL BE PROVIDED BY THE PARTS DEPARTMENT.

FURTHER DETAILS WILL BE ANNOUNCED IN THE NEAR FUTURE.

25/1-7.1 WARRANTY EXTENSIONS FOR CUSTOMER UNITS - NEW PROCEDURES.

EFFECTIVE JULY 1, 1989 APPROVALS FOR WARRANTY EXTENSIONS ON COMMODORE PRODUCTS WILL BE GRANTED VIA THE 800 TECH HOT LINE INSTEAD OF BY WRITTEN AUTHORIZATION.

CUSTOMERS REQUESTING A WARRANTY EXTENSION WILL BE INSTRUCTED TO TAKE THE UNIT TO AN AUTHORIZED SERVICE CENTER, WHO IN TURN, MUST CALL THE 800 SERVICE HOT LINE TO OBTAIN APPROVAL FOR THE

WARRANTY EXTENSION. DO NOT RELEASE THE 800 TECH HOT LINE TELEPHONE NUMBER TO THE CUSTOMER!

THE COMMODORE SERVICE TECHNICIAN WILL MAKE THE DECISION BASED ON THE CONDITION OF THE UNIT AND CIRCUMSTANCES AS DESCRIBED BY THE AUTHORIZED SERVICE CENTER TECHNICIAN. A WARRANTY EXTENSION APPROVAL NUMBER WILL BE ISSUED, AND THIS NUMBER MUST BE INDICATED ON THE NARDA FORM WHEN IT IS RETURNED TO COMMODORE FOR LABOR AND PARTS REIMBURSHMENT.

THIS NEW PROCEDURE IS BEING IMPLEMENTED TO INSURE THAT QUALIFIED TECHNICIANS DETERMINE THE EXACT NATURE OF THE PROBLEM AND ALSO TO REDUCE PAPER WORK AND TURN-AROUND TIME.

25/1-8.1 MCGRAW HILL CBM PRODUCTS WARRANTYS ARE VALID AND TO BE HONORED.

A SPECIAL MARKETING PROMOTION FROM MCGRAW HILL CONTINUING EDUCATION CENTER AND COMMODORE OFFERS A WARRANTY ON CBM PRODUCTS. THE FORM (BF 970 (711)), IS TO BE CONSIDERED VALID AND CAN BE USED BY THE CUSTOMER IN PLACE OF A PROOF OF PURCHASE.

25/1-9.1 PAST DUE ACCOUNTS RESULTS IN CANCELLED PARTS ORDERS.

ALL SPARE PARTS ORDERS YOU MAY HAVE PENDING WILL BE CANCELLED IF YOUR ACCOUNT IS OVER DUE OR THERE IS A PROBLEM WITH YOUR CREDIT.

YOU WILL BE ADVISED IF YOUR ACCOUNT STATUS HAS LEAD TO THE CANCELLATION OF YOUR PARTS ORDERS.

IMPORTANT - KEEP YOUR ACCOUNT CURRENT.

END 24/1.

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PARTS

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- 25/2-3.1 NEW "FATTER" AGNUS 8372 - W/ 1MB CHIP RAM AVAILABLE SOON.
- 25/2-4.1 A2000 REVISION 6 PCB PART NUMBER.
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- 25/2-1.1 UPDATE #4 FOR YELLOW PARTS PRICE BOOK.

PART NUMBER	DESCRIPTION	UNIT	RETURN CREDIT	DEALER BILLING	SUGGESTED RETAIL
1540001-03	1541 PCB ASSY	1541		\$48.00	
250408-01	SX64 CPU PCB ASSY	SX64		\$64.50	
250409-01	SX64 I/O PCB ASSY	SX64		\$64.50	
250410-01	SX64 FDC PCB ASSY	SX64		\$64.50	
250443-01	C16 PCB ASSY	C16		\$42.50	
310163-01	PLUS 4 PCB ASSY	+4		\$42.50	
325519-03	ALPS DRIVE ASSY	SX64		\$48.00	
601201-79	1526 PCB ASSY	1526/802		\$64.50	

- 25/2-2.1 PARTS LIST BY UNIT - NEW ON-LINE FEATURE IN PARTS SECTION.

A NEW SECOND MENU NOW APPEARS WHEN YOU SELECT THE PARTS SECTION (2) ON THE C-TOC MAIN MENU. THIS NEW OPTION ALLOWS USERS TO SELECT COMPUTERS, DISK DRIVES, ACCESSORIES, MONITORS OR PRINTERS. A THIRD MENU THEN APPEARS LISTING THE UNIT PARTS LIST AVAILABLE UNDER PRODUCT COLUMNS.

AS STATED IN THE INFO SECTION OF THIS ISSUE, ONLY COMMODORE STOCKED PARTS ARE LISTED, THE LISTINGS DO NOT CONTAIN PRICES, AVAILABILITY, OR SUBSTITUTIONS. CONSULT YOUR CURRENT PARTS PRICE BOOK AND THIS ON-LINE SECTION FOR INFORMATION ON COSTS OR CHANGES IN STATUS.

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25/2-3.1 NEW "FATTER AGNUS 8372 - W/ 1MB CHIP RAM AVAILABLE SOON.

THE PARTS DEPARTMENT IS ACCEPTING ORDERS FOR THE NEW "FATTER" AGNUS, 8372, WHICH CAN ADDRESS 1 MEGABYTE OF CHIP RAM (SEE THE AMIGA SECTION OF THIS ISSUE FOR INSTALLATION INSTRUCTIONS).

THE CBM PART NUMBER FOR "FATTER" AGNUS IS 318069-02. DEALER BILLING IS \$78.50, SUGGESTED RETAIL IS 130.80.

25/2-4.1 A2000 REVISION 6 PCB PART NUMBER.

THE LATEST A2000 PCB REVISION 6, WITH 1 MEG DRAMS WILL BE AVAILABLE SOON FROM THE PARTS DEPARTMENT.

PART NUMBER	DESCRIPTION	RETURN CREDIT	DEALER BILLING
312720-05	A2000 PCB REV6 (NTSC)	\$225.00	\$520.00

END 25/2.

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AMIGA

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 25/3-3.1 A2000 GURU MESSAGE ON POWER UP W/ REV 6 PCB.
 25/3-4.1 A2286 REV 6.1 TO REV 8.1 BOARD EXCHANGE.
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- 25/3-1.1 A2000 PCB FIELD UPGRADE TO REVISION LEVEL 4.5.

THE FOLLOWING INSTRUCTIONS DETAIL THE CHANGES WHICH MUST BE IMPLEMENTED TO UPGRADE A U.S. MANUFACTURED A2000 PCB FROM REVISION 4.0 (OR HIGHER) TO REVISION 4.5. CURRENT PRODUCTION BOARDS ARE EITHER REV 4.5 W/O NEW AGNUS OR REV 6 WITH NEW AGNUS. ALSO NOTE, SOME REV 6 PCBs MAY HAVE DRAM TOWER AND STATIC COLUMN DRAMS, SOME MAY NOT. FIELD UPGRADES ARE NOT RECOMMENDED ON REV 3.X PCBs.

IT IS THE RESPONSIBILITY OF THE CUSTOMER TO PAY FOR THESE ENHANCEMENTS.

THESE UPGRADES ARE NOT REQUIRED FOR PROPER HARDWARE OPERATION, AND IT IS SOLELY WITHIN THE CUSTOMERS DISCRETION TO HAVE THEM IMPLEMENTED. ANY PROBLEMS RESULTING FROM IMPROPER INSTALLATION OF THESE UPGRADES BY THE SERVICE CENTER WILL VOID THE CREDIT ISSUED FOR A RETURNED REPAIRABLE UNIT.

- 1) THE FOLLOWING COMPONENTS WILL EITHER NOT BE INSTALLED, OR WILL BE REMOVED IF INSTALLED.

R901, C917, C902	(SHOULD NOT BE INSTALLED, LOCATED LEFT OF CN601, LAST EXPANSION CONNECTOR ON AMIGA BUS, NEAR PIN 1.)
C910, C911	(FIX FOR HYTEK KEYBOARDS, LOCATED OFF KEYBOARD CONNECTOR, CN300.)
C905, C908	(C908 LOCATED ABOVE CRYSTAL X1, C905 LOCATED BELOW GARY PIN20.)
C230, C240	(LOCATED ABOVE U204, U303, THE TWO ICS BETWEEN THE 34 PIN DRIVE CONNECTOR AND THE 8520 U301.)

- 2) 1.2 KICKSTART ROM IS REPLACED WITH 1.3 KICKSTART ROM. (1.3 ROM IS PN# 315093-02)
- 3) INSTALL RP904, RP905, RP906 ONLY IF U205 AND U206 ARE 74HC244 TYPE ICS. (RESISTOR PACK IS 4.7K OHM X 5, 6 PIN, PN# 902441-31). DO NOT INSTALL IF U205 AND U206 ARE HCT TYPE 244. RP905 IS LOCATED BETWEEN U205 AND U206, RP906 IS LOCATED BETWEEN PAULA AND DENISE, RP904 IS LOCATED TO THE RIGHT OF DENISE.

25/3-1.1 A2000 PCB FIELD UPGRADE TO REVISION LEVEL 4.5. (CONT)

- 4) ADD .01 uF CAP ON J300. ADD THIS CAP ON SOLDER SIDE OF PCB, FROM PIN 2 (MIDDLE PIN ON CONNECTOR) TO GROUND (USE EITHER OF THE GROUND PADS LOCATED, ON THE SOLDER SIDE, DOWN AND TO THE RIGHT, ABOVE PAULA BETWEEN PINS 46 AND 48).
- 5) ADD 3.3K OHM RESISTOR TO U605, FROM PIN 11 TO PIN 20.
- 6) ADD 470 OHM RESISTOR TO D800, CATHODE SIDE, TO THE SECOND PAD FROM THE LEFT, UNDER CN605. (D800 IS LOCATED TO THE LEFT OF THE REAL TIME CLOCK IC AT U801).
NOTE: ON REV 4.3 AND ABOVE THIS RESISTOR IS ON PCB AS R1000, LOCATED TO THE LEFT OF Q302.
- 7) IF R5719 IS PRESENT (LOCATED OFF PIN1 OF CN400, PWR CONN), ADD 470 OHM RESISTOR BETWEEN VCC AND CPU SIDE OF R106. (USE PAD LOCATED TO THE RIGHT OF U100, THE 68000, BETWEEN PINS 11 AND 12, AND THE PAD ON THE GROUND TRACE WHICH RUNS UNDER PIN 14 OF THE 68000.)
- 8) REPLACE GARY IC, THE 5719, AT U102, WITH A MOS MANUFACTURED TYPE, IF IT IS A TOSHIBA MANUFACTURED TYPE. PART NUMBER FOR GARY IS 318072-01, ONLY MOS TYPE ARE IN STOCK.

25/3-2.1 INSTALLATION OF NEW "FATTER" AGNUS IN THE AMIGA 2000.

THE NEW "FATTER" AGNUS 8372 IC (PN#318069-02) WHICH CAN ADDRESS 1 MEGABYTE OF CHIP RAM WILL REQUIRE THE FOLLOWING MODIFICATIONS TO THE A2000 PCB FOR PROPER OPERATIONS. WITHOUT THESE MODIFICATIONS THE IC WILL ADDRESS ONLY 512K OF CHIP RAM AND OPERATE ONLY IN NTSC MODE. NOTE: A2000 REV 6 PCB COMES JUMPERED FOR 1 MEG.

NOTE: USE CORRECT IC EXTRACTOR TOOL WHEN REMOVING F. AGNUS FROM THE SOCKET. THIS TOOL IS AVAILABLE FROM THE PARTS DEPT. PART NUMBER IS 314874-01, COST IS \$20.00.

- 1) LOCATE JUMPER J101 (TO THE LOWER RIGHT OF POWER CONNECTOR CN400). MOVE SHORTING BLOCK TO THE LEFT, SHORTING PINS 2 AND 3. NOTE: SEE PAGE 13 OF A2000 SYSTEM SCHEMATICS, THIS JUMPER WILL ENABLE ADDRESS LINE 19 FROM THE 68000 WHICH CONTROLS THE 1 MEG ADDRESS RANGE.
- 2) LOCATE JUMPER PAD J500 (TO THE LOWER LEFT OF THE 8520 AT U301). THIS IS A TWO (2) PAD JUMPER WITH A TRACE CONNECTING THE TWO PADS. WITH A SHARP EXACTO KNIFE CUT THE TRACE WHICH CONNECTS THE PADS. BE CAREFUL NOT TO ALLOW THE BLADE TO SLIP AND CUT ANOTHER TRACE. NOTE: SEE PAGE 9 OF A2000 SYSTEM SCHEMATICS, CUTTING THIS TRACE KEEPS THE EXRAM SIGNAL FROM BEING TIED TO GROUND. NOTE: ON SOME PCBs THIS MAY BE A PORT TYPE JUMPER, IN WHICH CASE YOU REMOVE THE SHORTING BLOCK.

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25/3-2.1 INSTALLATION OF NEW "FATTER" AGNUS IN THE AMIGA 2000. (CONT)

- 3) LOCATE JUMPER J102 (TO THE RIGHT OF J101, ABOVE X1 CRYSTAL)
CLOSED = NTSC, OPEN = PAL. CUT CONNECTING TRACE FOR PAL ONLY.

A DIAGRAM SHOWING THE LOCATIONS OF THESE JUMPERS WILL BE PACKED WITH EACH "FATTER" AGNUS (PN# 318069-02) SHIPPED.

25/3-3.1 A2000 GURU MESSAGE ON POWER UP W/ REV 6 PCB.

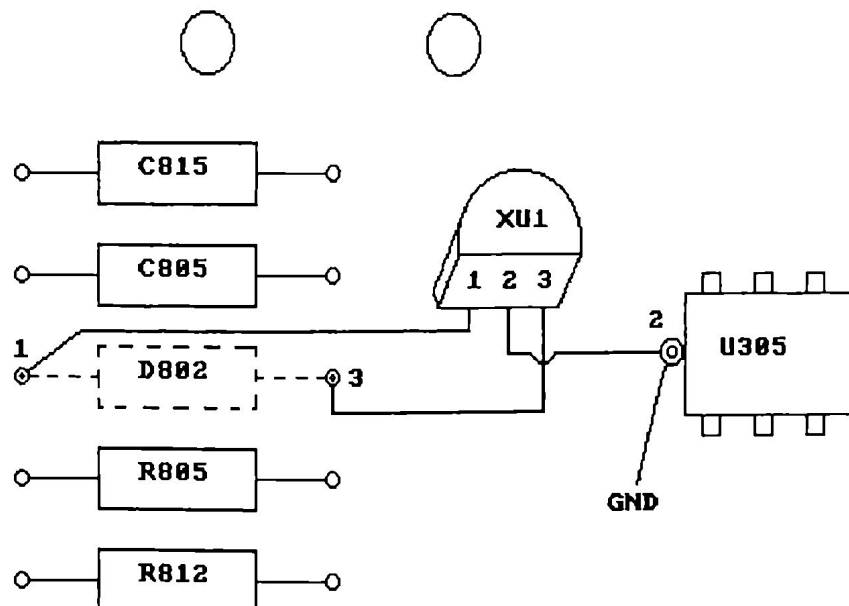
NEW DRAMS MAY RETAIN DATA FOR AS LONG AS FIVE (5) MINUTES AFTER POWER OFF. AN ADVISORY MESSAGE ON POWER UP MAY INDICATE THAT THE ERROR MESSAGE GENERATED BY POWER OFF HAS BEEN RETAINED. PRESSING THE LEFT MOUSE BUTTON WILL ALLOW THE SYSTEM TO RESUME A NORMAL START UP.

A MITSUMI PST518B, RESET IC (CBM PN# 328156-02) SHOULD BE INSTALLED AS FOLLOWS:

LOCATE U305 (TO THE LEFT OF CN303, 34 PIN DRIVE CABLE).
LOCATE D802 (DOWN, TO THE RIGHT OF U305).
INSTALL PST518B (DESIGNATED XU1) USING INSULATION TUBING AS REQUIRED TO PREVENT THE POSSIBILITY OF SHORTS.

SOLDER PIN 1 OF XU1 TO +5 VOLT SIDE OF DIODE D802.
SOLDER PIN 2 OF XU1 TO GND, USE PLATED HOLE AT THE BASE OF IC U305.
SOLDER PIN 3 OF XU1 TO THE ANODE SIDE OF DIODE D802.

DIAGRAM 25/3-3.2



25/3-3.1 A2000 GURU MESSAGE ON POWER UP W/ REV 6 PCB. (CONT)

THIS FIX SHOULD BE DONE IF REQUESTED BY THE CUSTOMER,
AND WILL BE COVERED, AS A COMPONENT LEVEL REPAIR,
UNDER WARRANTY.

25/3-4.1 A2286 REV 6.1 TO REV 8.1 BOARD EXCHANGE.

SOME A2286 BRIDGEBOARDS WILL DISPLAY PARITY ERRORS.

THERE IS NO FIELD FIX ISSUED FOR THIS PROBLEM. PLEASE
REQUEST A "RETURN AUTHORIZATION" NUMBER FROM YOUR
SALES CONTACT, AND RETURN THE A2286 FOR EXCHANGE.

END 25/3.

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CBM

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 25/4-1.1 C64C - E TYPE PCB ASSEMBLIES VIDEO PROBLEMS.
 25/4-2.1 1541B - RESISTOR CHANGE, ALPS OR NEWTRONICS TYPE DRIVE.
 25/4-3.1 R/W HYBRID IC, PN#251853 IS NOT INTERCHANGABLE FOR 1541B/1571.

- 25/4-1.1 C64C - E TYPE PCB ASSEMBLIES VIDEO PROBLEMS.

THE PARTS DEPOT HAS RECEIVED SEVERAL C64C E TYPE PCB ASSEMBLIES BACK FROM SERVICE CENTERS.

THE DEFECTIVE BOARDS DISPLAYED NO VIDEO OUTPUT. THE SOURCE OF THE PROBLEM HAS BEEN TRACED TO DEFECTIVE RF MODULATORS.

RF MODUALTORS FOR THE E TYPE PCB ARE PART NUMBER 252405-01 AND HAVE A DEALER COST OF \$11.55.

- 25/4-2.1 1541B - RESISTOR CHANGE, ALPS OR NEWTRONICS TYPE DRIVE.

1541B TYPE PCBS, PCB ASSY #250448, WILL REQUIRE A CHANGE IN RESISTORS R5, R7, R29, AND R30, IF USED WITH AN ALPS DRIVE. REFER TO THE CHART BELOW FOR CORRECT VALUES.

DRIVE TYPE	LOCATION R5 & R7	R29 & R30
NEWTRONICS	1.2K 5%	3.6K 5% (VALUES AS SHOWN ON SCHEMATIC)
ALPS	453 OHMS 1%	3.48K 1%

THESE RESISTORS LIMIT THE WRITE CURRENT TO THE DRIVES. THEY ARE LOCATED OFF PINS 37 (Q) AND 38 (XQ) OF THE GATE ARRAY AT UC4.

- 25/4-3.1 R/W HYBRID IC, PN# 251853 NOT INTERCHANGABLE FOR 1541B/1571.

THE R/W HYBRID IC, PN# 251853 HAS TWO VERSIONS. PN# 251853-01 IS USED IN THE 1571, LOCATION U7. DO NOT SUBSITUTE PN# 251853-02 (USED ON THE 1541B AT UD1) IN THE 1571 DRIVE.

THE YELLOW PARTS PRICE BOOK LISTS 251853-02 FOR BOTH THE 1541B AND THE 1571. THIS IS INCORRECT, USE -01 FOR 1571 AND -02 FOR 1541B.

END 25/4.

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PC

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25/5-1.1 PC40-III VIDEO REPAIR TIP: IC/SOCKET CONTACT PROBLEMS.

25/5-1.1 PC40-III VIDEO REPAIR TIP: IC/SOCKET CONTACT PROBLEMS.

THE PC40-III VIDEO CONTROLLER CHIP, PVGA-1A PN# 390302-01, LOCATED AT U101, CAN EXHIBIT A NUMBER OF DIFFERENT SYMPTOMS IF A POOR CONTACT EXISTS BETWEEN THE IC AND THE 100 PIN PLCC (PLASTIC LEADED CHIP CARRIER).

THE SYMPTOMS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- NO VIDEO
- LOSS OF VIDEO SYNC
- SCRAMBLED TEXT
- CONTINUOUS SCROLLING OF SCREEN

NOTE: VIDEO MODE SWITCHES ON THE BACK OF UNIT SHOULD BE SET TO VGA COLOR (1 UP, 2 DOWN, 3 DOWN), SEE PAGE 64 IN PC40-III OPERATIONS GUIDE. THIS MODE INSURES THAT SOFTWARE USING COLOR MODES WILL RUN ON A MONOCHROME MONITOR.

IT WILL BE NECESSARY TO REMOVE THE DRIVE SUB-CHASSIS TO LOCATE U101.

- 1) TO INSURE PROPER CONTACT BETWEEN THE VIDEO CONTROLLER IC AND THE 100 PIN SOCKET (PLCC), INSERT THE IC ALL THE WAY DOWN INTO THE SOCKET BY APPLYING PRESSURE TO THE CORNERS OF THE IC WITH YOUR FINGERS.

WARNING: DO NOT ATTEMPT TO REMOVE THE VIDEO CONTROLLER IC FROM THE SOCKET WITHOUT THE PROPER IC EXTRACTOR. THIS TOOL IS AVAILABLE FROM COMMODORE PARTS - PN# 314874-01, DEALER COST IS \$20.00.

- 2) CHECK THAT GOOD CONTACT EXISTS WITH ALL SOCKETTED CHIPS.
- 3) USE STATIC-PROTECTION PROCEDURES, (SERVICER AND HARDWARE MUST BE AT THE SAME VOLTAGE POTENTIAL TO AVOID ELECTRO-STATIC DISCHARGE).

[NOTE THIS BULLETIN WAS APPENDED TO THE TECHTOPICS ISSUE 24 MAILING, FIRST WEEK OF APRIL.]

END 25/5.