# 1 INFO

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SECTION 1 - INFO

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26/1-1.1 SERVICE TRAINING SCHEDULE, OCTOBER - DECEMBER 1989.

26/1-2.1 IMPORTANT WARRANTY POLICY INFORMATION.

26/1-1.1 SERVICE TRAINING SCHEDULE, OCTOBER - DECEMBER 1989.

1989 TRAINING SCHEDULE, OCTOBER THUR DECEMBER. PLEASE CONTACT JOHN DI MEO FOR MORE INFORMATION.

MONTH	DATE	TRAINING DA	AYS PRODUCTS	STATUS
OCTOBER OCTOBER OCTOBER NOVEMBER NOVEMBER NOVEMBER DECEMBER DECEMBER	11-13 18-20 23-27 6-10 13-17 27-29 4-8 11-15	WED-FRI WED-FRI MON-FRI MON-FRI MON-FRI MON-WED MON-FRI MON-FRI	AMIGA OPTS PC MONITORS AMIGA MONITORS AMIGA OPTS AMIGA MONITORS	OPEN OPEN OPEN OPEN OPEN OPEN OPEN

26/1-2.1 IMPORTANT WARRANTY POLICY INFORMATION.

ALL SERVICE CENTERS AUTHORIZED BY COMMODORE FOR WARRANTY REPAIRS MUST COMPLY WITH COMMODORE'S OFFICIAL PRODUCT WARRANTY POLICIES.

AUTHORIZED SERVICE CENTERS ARE REQUIRED TO SERVICE ANY COMMODORE PRODUCT, WITHIN THE PRODUCT LINES FOR WHICH THEY ARE AUTHORIZED, PROVIDED THE CUSTOMER CAN PRODUCE A VALID PROOF OF WARRANTY, REGARDLESS OF PLACE OF PURCHASE.

REFUSAL TO SERVICE A VALID IN-WARRANTY COMMODORE PRODUCT MAY RESULT IN CANCELLATION OF YOUR SERVICE CONTRACT.

END 26/1.

## 2 PARTS

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- 26/2-0.0 INDEX PARTS SECTION TECHTOPICS 24.
- 26/2-1.1 NEW SERVICE PARTS PRICE BOOK SEPTEMBER 1, 1989.
- 26/2-2.1 NEW MAJOR COMPONENT KITS AVAILABLE IN OCTOBER.
- 26/2-3.1 NEW AMIGA IC REPAIR KIT 314067-03 REPLACES -02 KIT.
- 26/2-4.1 ERRATUS #1 PARTS PRICE BOOK ISSUED SEPT. 1, 1989.
- 26/2-1.1 NEW SERVICE PARTS PRICE BOOK SEPTEMBER 1, 1989.

THE NEW EDITION OF THE SERVICE PARTS PRICE BOOK IS BEING MAILED TO ALL COMMODORE AUTHORIZED SERVICE CENTERS THIS WEEK.

THE EFFECTIVE STARTING DATE FOR THIS PARTS PRICE BOOK IS SEPTEMBER 1, 1989. DEALER BILLING PRICES ARE NOT INCREASED, SOME SELECTED PCB CHARGES AND CREDITS HAVE BEEN ADJUSTED.

26/2-2.1 NEW MAJOR COMPONENT KITS AVAILABLE IN OCTOBER.

THREE NEW "LEVEL 1" REPAIR KITS WILL BE AVAILABLE IN OCTOBER FROM THE PARTS DEPARTMENT. IN ADDITION TO THE DOLLAR SAVINGS SERVICE CENTERS RECIEVE BY PURCHASING THESE KITS, BONUS POINTS TOWARD SERVICE TRAINING ARE INCLUDED.

THE THREE NEW "LEVEL 1" KITS ARE:

314032-10 A500 LEVEL 1 REPAIR KIT \$800.00 314032-20 A2000/2000HD/A2500 LEVEL 1 REPAIR KIT \$2,666.00 314032-30 PC10/20/40-III/COLT LEVEL 1 REPAIR KIT \$1,266.00

KIT CONTENTS AND DETAILS ARE AS FOLLOWS:

314032-10 A500 LEVEL 1 REPAIR KIT DEALER BILLING \$800.00

PURCHASE OF THE LEVEL 1 A500 REPAIR KIT INCLUDES 120 POINTS TOWARD SERVICE TRAINING.

### **PARTS**

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### 26/2-2.1 NEW MAJOR COMPONENT KITS AVAILABLE IN OCTOBER. (CONT)

PART NUMBER	DESCRIPTION	DEALER BILLING	RETURN CREDIT	COST
314067-03 327124-02 312503-01 312554-01	PCB A500 REV 6A/7 IC REPAIR KIT	\$71.50 \$385.00 \$180.00*** \$49.50 \$71.50 \$110.00 \$3.30	\$225.00	\$71.50 \$160.00 \$180.00 \$49.50 \$71.50 \$110.00 \$3.30
	L 1 KIT SAVINGS GS IN IC KIT INGS	\$870.80 \$800.00 \$ 70.80 \$75.35 SEF \$146.15	\$225.00 \$225.00 BULLETIN 26	\$645.80 \$575.80 /2-3.1

314032-20 A2000 LEVEL 1 REPAIR KIT DEALER BILLING \$2,666.00

PURCHASE OF THE A2000 LEVEL 1 REPAIR KIT INCLUDES 400 POINTS TOWARD SERVICE TRAINING.

PART NUMBER	DESCRIPTION	DEALER BILLING	RETURN CREDIT	COST
312716-02 312720-05 312828-01 314067-03 327124-03 380708-02	A2000 REV 6 PCB A2620 PCB 2MB IC REPAIR KIT	\$280.00 \$82.50 \$920.00 \$1200.00 \$180.00*** \$49.50 \$99.00 \$130.00	\$165.00 \$625.00 \$800.00	\$115.00 \$82.50 \$295.00 \$400.00 \$180.00 \$49.50 \$99.00 \$130.00
TOTAL KIT PRICE A2000 LEV *** SAVING	EL 1 KIT SAVINGS GS IN IC KIT	\$2941.00 \$2666.00 \$275.00 \$75.35 SEE \$350.35	\$1590.00 \$1590.00 BULLETIN 26	\$1351.00 \$1076.00 /2-3.1

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#### 26/2-2.1 NEW MAJOR COMPONENT KITS AVAILABLE IN OCTOBER. (CONT)

314032-30 PC LEVEL 1 REPAIR KIT

DEALER BILLING \$1266.00

PURCHASE OF PC LEVEL 1 REPAIR KIT INCLUDES 190 POINTS TOWARD SERVICE TRAINING.

PART NUMBER	DESCRIPTION	DEALER BILLING	RETURN CREDIT	COST
PC10/20/C	OLT TYPES			
312625-01 312637-02 313005-01	KEYBOARD PC10/20 PCB ASSY PC10/20 POWER SUPPLY KEYBOARD COLT 5.25 DRIVE ASSY	\$88.00 \$192.50 \$93.50 \$77.00 \$109.00	<b>\$75.00</b>	\$80.00 \$117.50 \$93.50 \$77.00 \$109.00
SUB TOTAL	A	\$560.00	\$75.00	\$485.00
PC40-III				
380825-01	KEYBOARD PCB ASSY PC40-III 5.25 DRIVE ASSY POWER SUPPLY	\$88.00 \$467.50 \$145.00 \$132.00	\$200.00	\$88.00 \$267.50 \$145.00 \$132.00
SUB TOTAL TOTAL (A - KIT PRICE PC LEVEL :		\$832.50 \$1392.50 \$1266.00 \$126.50	\$200.00 \$275.00 \$275.00	\$632.50 \$1117.50 \$991.00

26/32-3.1 NEW AMIGA IC REPAIR KIT 314067-03 REPLACES -02 KIT.

THE AMIGA IC REPAIR KIT HAS BEEN UPGRADED TO INCLUDE THE NEW 8372 AGNUS HI RES IC AND A SECOND 8520 IC CHIP.

THE NEW AMIGA IC REPAIR KIT PN# 314067-03 WILL REPLACE THE EARLIER VERSION KIT ( PN# 314067-02 ) WHICH IS NO LONGER AVAILABLE.

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### 26/32-3.1 NEW AMIGA IC REPAIR KIT 314067-03 REPLACES -02 KIT. (CONT)

314067-03 AMIGA IC REPAIR KIT DEALER BILLING \$180.00 CONTAINS:

PART NUMBER	DESCRIPTION	QUANTITY	DEALER BILLING
318070-01	8370 FAT AGNUS	1	\$49.50
318069-02	8372 AGNUS HI RE	S 1	\$78.50
252127-02	8364 PAULA	1	\$46.20
252126-02	8362 DENISE	1	\$43.20
318072-01	5719 GARY	1	\$11.00
318075-02	BUSTER	1	\$8.25
318029-03	8520 2MHZ CIA	2	\$18.70 (9.35 X 2)
			<del></del>
TOTAL			\$255.35
AMIGA IC	REPAIR KIT PRICE		\$180.00
SAVINGS			<b>\$75.35</b>

26/2-4.1 ERRATUS #1 PARTS PRICE BOOK ISSUED SEPT. 1, 1989.

> PLEASE MAKE THE FOLLOWING ADDITIONS AND CORRECTIONS TO THE NUMERIC SECTION OF THE RED SERVICE PARTS PRICE BOOK, ISSUED SEPTEMBER 1, 1989.

### ON PAGE 3:

314135-02	A2000 REV 6 SCHEMATICS	CHANGE FROM -01
314879-02	A500/A2000 SYSTEST V2.4.3	CHANGE FROM -01
314966-03	A500/A2000 V2.0 ALGN PROG	CHANGE FROM -02(2 PLACES)
314967-03	AMIGA ALIGN INSTRUCT V2.0	CHANGE FROM -02(2 PLACES)
314968-02	AMIGA ALIGN DISK DIGILOG	CHANGE FROM -01(2 PLACES)
314067-03	KIT AMIGA IC REPAIR	CHANGE FROM -02 AND,
		CHANGE COST TO \$180.00.
318069-02	IC 8372 AGNUS HR	ADD TO AMIGA IC KIT.
318029-03	IC 8520	CHANGE FROM -02 AND NOTE
		QUANTITY IS NOW TWO.
314032-10	KIT A500 LEVEL 1	ADD TO AMIGA KITS,
		DB IS \$800.00.
314032-20	KIT A2000 LEVEL 1	ADD TO AMIGA KITS,
		DB IS \$2,666.00.

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26/2-4.1 ERRATUS #1 PARTS PRICE BOOK ISSUED SEPT. 1, 1989. (CONT)

ON PAGE 4:

314998-01 MPS1230 SERVICE MANUAL ADD TO CBM STARTUP KIT, DB IS \$16.50, SR IS \$27.50.

ON PAGE 7:

314984-01 KIT PC10/COLT CPU DIAG

314032-30 KIT PC LEVEL 1

CORRECT DB IS \$137.50.

ADD TO PC KITS, DB IS \$1,266.00.

ON PAGE 9:

250448-01 PCB ASSY 1541B

REMOVE SUB:; CREDIT IS

\$40.00, DB IS \$88.00.

ON PAGE 10:

250785-02 CASE TOP ASSY

SUB: TO 252110-01

ON PAGE 11:

251968-02 IC ROM 1541B

SUB: TO -03, ADD 1541B TO PRODUCT CODE ON -03.

CHANGE DESCRIPTION FROM

CASE TO SHIELD.

ON PAGE 12:

252110-01 CASE TOP

CHANGE PRODUCT CODE

TO C64C-E.

ON PAGE 14:

312598-01

312589-01 INSULATION SHEET A500

312595-01 COVER EXPANSION A500

252016-01 SHIELD BOTTOM C128

DB IS 3.30, SR IS 5.50, REMOVE INCORRECT SUB:.

INCORRECT DESCRIPTION.
INVALID PART NUMBER,

REMOVE, CORRECT NUMBER

IS 312595-01.

ON PAGE 23:

318029-03 IC 8520

SUB: FROM -02.

ON PAGE 30:

390304-03 IC WD37C65B FDC PC40-III/COLT286 ADD DB IS \$44.00, SR IS \$73.30.

PLEASE NOTE, THESE CHANGES SHOULD ALSO BE MADE TO THE ALPHA SECTION AND UNITS SECTION.

END 26/2.

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- 26/3-0.0 INDEX AMIGA SECTION TECHTOPICS ISSUE 26.
- 26/3-1.1 A2286 REV 6.1 TO REV 8.1 BOARD EXCHANGE.
- 26/3-2.1 A2000 PCB FIELD UPGRADE TO REV 4.5.
- 26/3-3.1 A2620 COPROCESSOR ROM UPGRADE.
- 26/3-4.1 A2000 CR REV 6.0 PCB EXPANSION BUS PROBLEMS.
- 26/3-5.1 A2000 POWER SUPPLY 12 VOLT LOAD CAN EFFECT VIDEO.
- 26/3-6.1 A590 SERVICE MANUAL CBM PN# 314899-01 RELEASE.
- 26/3-6.2 ENCLOSURE: A590 SERVICE MANUAL.
- 26/3-7.1 A500 REVISION 6A/7 SCHEMATICS CBM PN# 314981-02 RELEASE.
- 26/3-7.2 ENCLOSURE: A500 REV 6A/7 SCHEMATICS.
- 26/3-8.1 A2000 REVISION 6 SCHEMATICS CBM PN# 314135-02 RELEASE.
- 26/3-8.2 ENCLOSURE: A2000 REV 6 SCHEMATICS.
- 26/3-1.1 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.

[ REPEAT OF 25/3-4.1 ]

26/3-2.1 A2000 PCB FIELD UPGRADE TO REV 4.5.

THE FOLLOWING INSTRUCTIONS DETAIL THE CHANGES WHICH MUST BE IMPLEMENTED TO UPGRADE A U.S. MANUFACTURED A2000 PCB FROM REV 4.0 (OR HIGHER) TO REV 4.5. CURRENT PRODUCTION BOARDS ARE EITHER REV 4.5 W/O NEW AGNUS OR REV 6 W/ NEW AGNUS. ALSO NOTE, SOME REV 6 PCBS MAY HAVE A 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.

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#### 26/3-2.1 A2000 PCB FIELD UPGRADE TO REV 4.5. (CONT)

1) THE FOLLOWING COMPONENTS WILL EITHER NOT BE INSTALLED, OR ARE TO 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 PIN 20.)

C230, C240 (LOCATED ABOVE U204, U303, THE TWO ICS BETWEEN THE 34 PIN DRIVE CONNECTOR AND THE 8520 AT U301.)

- 2) 1.2 KICKSTART ROM IS REPLACED WITH 1.3 KICKSTART ROM. (1.3 ROM IS CBM 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, CBM 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.

- 4) ADD .01 uF CERAMIC CAP ON J300. ADD THIS CAP ON SOLDER SIDE OF PCB, FROM PIN 12 (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, 1/4W RESISTOR TO U605, FROM PIN 11 TO PIN 20.
- 6) ADD 470 OHM, 1/4W 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.

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#### 26/3-2.1 A2000 PCB FIELD UPGRADE TO REV 4.5. (CONT)

- 7) IF R5719 IS NOT PRESENT ( LOCATED OFF PIN 1 OF CN400, POWER CONNECTOR.) 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.

[REPEAT OF 25/3-1.1]

26/3-3.1 A2620 COPROCESSOR ROM UPGRADE.

NEW ROMS ARE AVAILABLE FROM THE PARTS DEPARTMENT TO UPGRADE THE A2620 FOR USE WITH SOME THIRD PARTY HARDWARE ADD-ON BOARDS (GVP TYPE). THIS A RUNNING CHANGE AND IS NOT COVERED UNDER WARRANTY.

CBM PART NUMBERS FOR THE NEW ROMS ARE # 390282-02 FOR IC AT U4, AND 390283-02 FOR IC AT U5. BOTH ROMS MUST BE CHANGED FOR THE UPGRADE.

26/3-4.1 A2000 CR REV 6.0 PCB EXPANSION BUS PROBLEMS.

IF PROBLEMS ON A2000 CR REV 6.0 PCB'S OCCUR, SUCH AS GURU CODES, AUTO-CONFIG OR SYSTEM HANGING UP, WITH SOME THIRD PARTY ADD-ON CARDS IT MAY BE THE RESULT OF THE MOTORLOA TYPE 68000 CPU IC'S WHICH HAVE A MASK CODE OF 0B26

PARTS DEPARTMENT IS STOCKING SIGNETICS TYPE 68000'S UNDER PART NUMBER 390084-03, DEALER BILLING IS \$18.50. PLEASE NOTE: NO REIMBURSHMENTS WILL BE ISSUED FOR 68000 ICS NOT PURCHASED FROM COMMODORE. IN ADDITION ANY MOTOROLA 68000 ICS RETURNED FOR CREDIT WHICH DO NOT HAVE A MASK CODE OF 0826 WILL BE RETURNED TO THE SERVICE CENTER WITH NO CREDIT ISSUED. IF REPLACING THE 68000 WITH A SIGNETICS TYPE DOES NOT CORRECT THE PROBLEM THEN THE PCB WILL HAVE TO BE REPLACED.

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26/3-4.1 A2000 CR REV 6.0 PCB EXPANSION BUS PROBLEMS. (CONT)

A SPECIAL WARRANTY RATE OF \$30.00 WILL BE PAID FOR REPLACEMENT OF THE SOCKETED MOTOROLA 68000'S WHICH HAVE A MASK CODE OF 0B26.

IF PROBLEMS PERSIST AFTER THE 68000 IS REPLACED, THE MOTHER BOARD WILL HAVE TO BE EXCHANGED FOR THE CURRENT REVISION 6.2, A2000 PCB ASSY.

26/3-5.1 A2000 POWER SUPPLY - 12 VOLT LOAD CAN EFFECT VIDEO.

A2000 UNITS WITH PHI HONG TYPE POWER SUPPLIES WHICH ARE NOT PLACING A SIGNIFICANT LOAD ON THE 12 VOLT SOURCE (NO HARD DRIVE OR OTHER ADD-ONS USING 12 VOLTS) MAY EXHIBIT VIDEO PROBLEMS. CONFIGURATIONS WIITH A HARD DISK DRIVE OR OTHER THIRD PARTY EXPANSION HARDWARE WHICH USES THE 12 VOLT SOURCE WILL NOT HAVE HAVE VIDEO FLICKER AND DO NOT REQUIRE THIS CHANGE.

VIDEO NOISE OR FLICKERING, WHICH OCCURS DURING DISK OR PROCESSOR ACTIVITY CAN BE IMPROVED BY RE-OREINTING OR BY REMOVING AND REPLACING WITH THE SAME VALUE, RESISTOR R215 (CBM PN#901550-118 1 OHM, 5%, 1/2W) AS DETAILED BELOW.

NOTE: THIS UPDATE IS FOR UNITS WITH "PHI HONG" TYPE POWER SUPPLIES ONLY.

LOCATE R215 (ABOVE PIN 40 OF 8520 AT U300), CLIP OR UNSOLDER THE LEFT-HAND LEAD OF R215 (SIDE TOWARD EMI200). AND THEN SOLDER A PIECE OF JUMPER WIRE OR RESISTOR LEAD TO THE FREE END OF R215, EXTENDING IT ENOUGH (3/4") TO REACH THE FEEDTHRU HOLE LOCATED BETWEEN EMI310 AND EMI301. (THIS FEEDTHRU HOLE IS ABOUT 1/4" ABOVE THE RIGHT SIDE OF R310.)

THE LEFT-HAND LEAD OF R215, AFTER BEING CLIPPED, WILL BE TOO SHORT TO REACH THE FEEDTHRU HOLE. YOU MAY EXTEND THE LEAD, AS DESCRIBED ABOVE, OR REPLACE R215 WITH A NEW RESISTOR (1 OHM, 5%, 1/2W) PLACING IT MID-WAY BETWEEN THE RIGHT SIDE FEEDTHRU HOLE OF R215 AND THE FEEDTHRU HOLE BETWEEN EMI310 AND EMI301. THERE ARE NO EXPOSED COMPONENTS OR TRACES BETWEEN THE TWO POINTS, HOWEVER A GOOD PROCEDURE WOULD INCLUDE INSULATING BOTH SIDES OF THE RESISTOR LEADS WITH SHRINK TUBING BEFORE SOLDERING.

A WARRANTY RATE OF \$30.00 WILL BE CREDITED FOR THIS UPGRADE.

### AN UPDATE FOR THE SERVICE TECHNICIAN

### 3 AMIGA

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26/3-6.1	A590 SERVICE MANUAL CBM PN# 314899-01 RELEASE.	
	MAILED WITH TECHTOPICS ISSUE 26, FOR AMIGA AUTHORIZED SERVICE CENTERS ONLY, IS THE NEW A590 SERVICE MANUAL.	
26/3-6.2	ENCLOSURE: A590 SERVICE MANUAL.	
	ENCLOSED IN TECHTOPICS ISSUE 26,#314899-01 A590 SERVCE	MANUAL.
26/3-7.1	A500 REVISION 6A/7 SCHEMATICS CBM PN# 314981-02 RELEAS	E.
	MAILED WITH TECHTOPICS ISSUE 26, FOR AMIGA AUTHORIZED SERVICE CENTERS ONLY, ARE THE A500 REV 6A/7 SCHEMATICS	•.
26/3-7.2	ENCLOSURE: A500 REV 6A/7 SCHEMATICS.	
	ENCLOSED IN TECHTOPICS ISSUE 26, #314981-02 A500 REV 6. SCHEMATICS.	A/7
26/3-8.1	A2000 REVISION 6 SCHEMATICS CBM PN# 314135-02 RELEASE.	
	MAILED WITH TECHTOPICS ISSUE 26, FOR AMIGA AUTHORIZED SERVICE CENTERS ONLY, ARE THE A2000 REV 6 SCHEMATICS.	
26/3-8.2	ENCLOSURE: A2000 REV 6 SCHEMATICS.	
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- 26/4-0.0 INDEX CBM SECTION TECHTOPICS ISSUE 26.
- 26/4-1.1 C64/A PCB# 250407 WILL HAVE NO DUD VALUE AS OF 10/01/89.
- 26/4-2.1 1581 FDD EXTENDED WARRANTY NO LONGER IN EFFECT.
- 26/4-3.1 1230 PRINTER SERVICE MANUAL CBM PN# 314998-01 RELEASE.
- 26/4-3.2 ENCLOSURE: 1230 PRINTER SERVICE MANUAL.
- 26/4-1.1 C64/A PCB# 250407 WILL HAVE NO DUD VALUE AS OF 10/01/89.

THE NEW BILLING PRICE FOR THE C64/A PCB IS \$42.50. THERE WILL BE NO DUD VALUE ISSUED AFTER OCTOBER 1, 1989.

26/4-2.1 1581 FDD - EXTENDED WARRANTY NO LONGER IN EFFECT.

TECHTOPICS ISSUE 18, NOVEMBER 1987, DESCRIBED A FIX FOR 1581 FLOPPY DISK DRIVES WHICH EXHIBITED DATA CORRUPTION PROBLEMS. THIS FIX INVOLVED REPLACING THE WESTERN DIGITAL FLOPPY DISK CONTROLLER IC (WD1770) AT LOCATION U4, WITH A WD1772 FDC (PN#310651-02). SEE CBM SECTION, BULLETIN 4-1.1 IN ISSUE 18 FOR DETAILS.

COMMODORE SERVICE HAS OFFERED AN EXTENDED WARRANTY TO CUSTOMERS WITH 1581 UNITS WHICH EXHIBIT DATA CORRUPTION PROBLEMS. ONLY A LIMITED NUMBER OF UNITS WHERE PROCDUCED USING THE WD1770 TYPE FDC. IN ADDITION, DATA CORRUPTION ONLY OCCURRED WHEN USING CERTAIN TYPES OF THIRD PARTY APPLICATION SOFTWARE.

EFFECTIVE OCTOBER 1, 1989, THE EXTENDED WARRANTY, WHICH WAS AVAILABLE UPON REQUEST, WILL NOT LONGER BE APPROVED.

26/4-3.1 1230 PRINTER SERVICE MANUAL CBM PN# 314998-01 RELEASE.

MAILED WITH TECHTOPICS ISSUE 26, FOR ALL AUTHORIZED SERVICE CENTERS, IS THE 1230 PRINTER SERVICE MANUAL.

26/4-3.2 ENCLOSURE: 1230 PRINTER SERVICE MANUAL.

ENCLOSED WITH TECHTOPICS ISSUE 26, #314998-01 1230 PRINTER SERVICE MANUAL.

END 26/4.

# PC

26/5-7.2

ISSUE 26 - JUL-AUG-SEPT 89 SECTION 5 - PC PAGE 1 26/5-0.0 INDEX - PC SECTION TECHTOPICS ISSUE 26. PC10-III REV 6 PCB ASSEMBLY - EXPANSION BUS PROBLEMS. 26/5-1.1 PC30/40-III VGA VIDEO PROBLEM IN 8MHZ MODE. 26/5-2.1 PC40-III BIOS V2.01 UPGRADE ROM RELEASE. 26/5-3.1 PC40-III DIAGNOSTIC KIT - CONTENTS CHANGE. 26/5-4.1 PC40-III PCB EXCHANGE KIT. 26/5-5.1 1402 MONITOR SERVICE MANUAL CBM PN# 602249-99 RELEASE. 26/5-6.1 26/5-6.2 26/5-7.1 ENCLOSURE: 1402 MONITOR SERVICE MANUAL.

26/5-1.1 PC10-III REV 6 PCB ASSEMBLY - EXPANSION BUS PROBLEMS.

ENCLOSURE: 1403 MONITOR SERVICE MANUAL.

PROBLEMS WITH THIRD PARTY HARDWARE ADD-ONS USING PC10-III REV 6 PCB ASSEMBLIES (ALSO USED IN PC20-III AND COLT), HAVE BEEN TRACED TO THE "IOREADY" SIGNAL WHICH WILL TRI-STATE WHEN IT IS NOT PULLED LOW BY PVC4.

1403 MONITOR SERVICE MANUAL CBM PN# 314882-01 RELEASE.

A FIELD FIX HAS NOT BEEN ISSUED FOR THIS PROBLEM. PCB# 312625-01 (MARKED REV 6.2) ARE AVAILABLE FOR EXCHANGES. THE NORMAL PC WARRANTY WILL COVER THE EXCHANGE.

PC30/40-III VGA VIDEO PROBLEM IN 8MHZ MODE. 26/5-2.1

> FOR PC30-III AND PC40-III PCB REVISIONS 8.0, 8.1, AND 8.2 ( CBM PN# 313055-01 ) DISPLAYING VGA VIDEO PROBLEMS, WHICH OCCUR WHILE OPERATING IN 8MHZ MODE MAY BE CORRECTED WITH THE FOLLOWING FIELD FIX. NOTE, THE SYMPTOMS ARE SCREEN BREAKING UP AND/OR "SNOW" ON THE SCREEN.

THE PCB REVISION NUMBER BECOMES 8.2B WITH THIS FIX.

- 1) REMOVE RESISTOR R120 (51 OHMS), AND REPLACE WITH 1K OHM RESISTOR.
- 2) REMOVE RESISTOR R907 (51 OHMS), AND REPLACE WITH 300 OHM RESISTOR.

PLEASE NOTE: PCB FOR PC30/40-III IS A FOUR LAYERED BOARD, BE CAREFUL, ANY DAMAGE TO THE MAIN ASSEMBLY DUE TO IMPROPER REPAIR TECHNIQUES BY THE SERVICE CENTER WILL VOID THE CREDIT FOR A RETURNED REPAIRABLE UNIT.

SECTION 5 - PC

PAGE 2

26/5-3.1 PC40-III BIOS V2.01 UPGRADE ROM RELEASE.

TWO NEW ROMS FOR THE PC40-III (AND PC30-III/COLT 286) ARE AVAILABLE FROM THE PARTS DEPARTMENT.

390339-03 IC BIOS V2.01 - LOW, AND 390340-03 IC BIOS V2.01 - HIGH HAVE A DEALER BILLING OF \$13.20. THIS IS A RUNNING CHANGE AND IS NOT COVERED UNDER WARRANTY.

THE FOLLOWING CHANGES HAVE BEEN MADE TO THE NEW ROMS.

- 1) FDD RECALIBRATION PROBLEM WHICH CAUSED FAILURE IN DOS DISKCOPY PROGRAM HAS BEEN CORRECTED.
- 2) FLOPPY DISK CONFIGURATION PROBLEM ON HIGH DENSITY DRIVE HAS BEEN CORRECTED.
- 3) COMPATIBILITY PROBLEM IN GETTING OUT OF 286 PROTECTED MODE WHICH CAUSED MACHINE TO REBOOT WHEN RUNNING SOME THIRD PARTY SOFTWARE HAS BEEN FIXED.
- 4) CP/M 86 V1.0/4A BOOT PROBLEM. CP/M RUNS OUT OF STACK SPACE, NOT A BIOS PROBLEM, FIX ALLOWS CP/M TO BOOT, BUT IT CAN STILL CRASH DURING OPERATION.
- 26/5-4.1 PC40-III DIAGNOSTIC KIT CONTENTS CHANGE.

PC40-III DIAGNOSTIC KIT, PN# 314119-01, NO LONGER CONTAINS THE GREEN MOUSE 9 PIN FEMALE CONNECTOR, PN# 314119-05. IT IS INCLUDED IN THE LISTING OF CONTENTS ON PAGE ONE OF THE PC40-III DIAGNOSTIC MANUAL, HOWEVER IT WILL NOT BE INCLUDED IN THE PACKAGE.

THIS CONNECTOR WAS NOT A MOUSE CONNECTOR, IT WAS A SERIAL BUS BACK CONNECTOR FOR THIRD PARTY SERIAL CARDS.

26/5-5.1 PC40-III PCB EXCHANGE.

WHEN PC40-III PCB ASSEMBLIES REVISION 7.XX ARE REPLACED WITH PC40-III PCB ASSEMBLIES REVISION 8.XX A CHANGE IN THE PCB LAYOUT WHICH REVERSES PINS 16 AND 18 ON CN901 ( HD INTERFACE CONNECTOR ) WILL CAUSE THE HARD DRIVE NOT TO OPERATE UNLESS YOU REFORMAT THE HARD DRIVE.

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26/5-5.1	PC40-III PCB EXCHANGE. (CONT)
	A SPECIAL KIT, CBM PN# 314672-01, HAS BEEN ISSUED WHICH CONTAINS A NEW HARD DRIVE CABLE THAT CORRECTS PROBLEM WITHOUT HAVING TO REFORMAT THE HARD DRIVE.
	PC40-III PCB EXCHANGE KIT # 314672-01 CONTAINS:
	313055-01 PC40-III PCB ASSY R8.XX 314672-02 HARD DRIVE CABLE ASSY (TWISTED) 314672-03 INSTRUCTION SHEET
	PLEASE REFER TO THE CHART BELOW BEFORE REPLACING THE PC40-III PCB ASSY.
	ORIGINAL PCB REPLACEMENT PCB INSTRUCTIONS
	REV 7.XX REV 7.XX USE ORIGINAL HD CABLE REV 7.XX REV 8.XX USE TWISTED HD CABLE REV 8.XX REV 8.XX USE ORIGINAL HD CABLE REV 8.XX REV 7.XX USE TWISTED HD CABLE
26/5-6.1	1402 MONITOR SERVICE MANUAL CBM PN# 602249-99 RELEASE.
	MAILED WITH TECHTOPICS ISSUE 26, FOR PC AUTHORIZED SERVICE CENTERS ONLY, IS THE 1402 MONITOR SERVICE MANUAL.
26/5-6.2	ENCLOSURE: 1402 MONITOR SERVICE MANUAL.
	ENCLOSED WITH TECHTOPICS ISSUE 26, # 602249-99 MONITOR SERVICE MANUAL.
26/5-7.1	1403 MONITOR SERVICE MANUAL CBM PN# 314882-01 RELEASE.
	MAILED WITH TECHTOPICS ISSUE 26, FOR PC AUTHORIZED SERVICE CENTERS ONLY, IS THE 1403 MONITOR SERVICE MANUAL.
26/5-7.2	ENCLOSURE: 1403 MONITOR SERVICE MANUAL.
	ENCLOSED IN TECHTOPICS ISSUE 26, #314882-01 1403 SERVICE MANUAL.
	END 26/