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27/1-1.1 SERVICE TRAINING SCHEDULE, OCTOBER - DECEMBER 1989.

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

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

27/1-2.1 SERVICE TRAINING SCHEDULE, JANUARY - JUNE 1990.

1990 TRAINING SCHEDULE, JANUARY THRU JUNE.
 PLEASE CONTACT JOHN DIMEO FOR MORE INFORMATION.

MONTH	DATE	TRAINING DAYS	PRODUCTS	STATUS
JANUARY	15-19	MON-FRI	AMIGA	OPEN
JANUARY	22-26	MON-FRI	MONITORS	OPEN
FEBRUARY	7-9	WED-FRI	PC	OPEN
FEBRUARY	12-16	MON-FRI	MONITORS	OPEN
FEBRUARY	19-23	MON-FRI	AMIGA	OPEN
MARCH	7-9	WED-FRI	CBM	OPEN
MARCH	12-16	MON-FRI	MONITORS	OPEN
MARCH	19-23	MON-FRI	AMIGA	OPEN
MAY	2-4	WED-FRI	PC	OPEN
MAY	7-11	MON-FRI	MONITORS	OPEN
MAY	14-18	MON-FRI	AMIGA	OPEN
JUNE	6-8	WED-FRI	CBM	OPEN
JUNE	11-15	MON-FRI	MONITORS	OPEN
JUNE	18-22	MON-FRI	AMIGA	OPEN

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27/1-2.2 ENCLOSURE: 1990 SERVICE TRAINING COURSE OUTLINE.

INCLUDED WITH ISSUE 27 IS A COURSE OUTLINE FOR THE
1990 SERVICE TRAINING PROGRAM, THROUGH JUNE 1990.

27/1-3.1 SERVICE TRAINING POINTS FOR PARTS CERTIFICATES MAILED.

CERTIFICATES FOR PARTS PURCHASES JULY, AUGUST, SEPTEMBER,
AND OCTOBER HAVE BEEN MAILED.

THESE CERTIFICATES ARE VALID THROUGH JUNE 1, 1990.

END 27/1.

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PARTS

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 27/2-2.1 LEVEL 1 REPIAR KITS NOW AVAILABLE.
 27/2-3.1 ERRATUS #2 - PARTS PRICE BOOK ISSUED SEPT. 1, 1989.

- 27/2-1.1 C-64 POWER SUPPLY SPECIAL SALE.

SAVE \$3.30 ON C-64 POWER SUPPLIES DURING OUR SPECIAL PRE CHRISTMAS SALE. THIS OFFER IS VALID FROM 10/15/89 THRU 11/30/89 AND AVAILABLE IN CASE LOTS OF 16 POWER SUPPLIES.

REGULAR PRICE	\$19.80
SPECIAL PRICE	\$16.50

YOU SAVE \$ 3.30 EACH

ORDER NOW, LIMITED SUPPLIES.

- 27/2-2.1 LEVEL 1 REPAIR KITS NOW AVAILABLE.

THE LEVEL 1 REPAIR KITS, ANNOUNCED IN TECHTOPICS ISSUE 26, ARE NOW AVAILABLE FROM THE PARTS DEPARTMENT.

THESE KITS CONTAIN MAJOR ASSEMBLIES FOR QUICK REPAIRS, AND BONUS POINTS FOR TRAINING.

PLEASE SEE ATTACHED SHEETS FOR DETAILS ON THESE KITS.

- 27/2-3.1 ERRATUS #2 - PARTS PRICE BOOK ISSUED SEPT. 1, 1989.

PLEASE MAKE TO FOLLOWING ADDITIONS, SUBSTITUTIONS, AND CORRECTIONS TO THE RED PARTS PRICE BOOK ISSUED SEPT. 1, 1989.

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27/2-3.1 ERRATUS #2 - PARTS PRICE BOOK ISSUED SEPT. 1, 1989. (CONT)

PART NUMBER	DESCRIPTION	PRODUCT	DEALER BILLING	ACTION
1540001-03	PCB ASSY - LONG	1540/1541		NLA
1540048-01	PCB ASSY - ALPS	1541	88.00	REMOVE- SUB
251868-01	POWER SUPPLY ASSY	1541	SUB TO 1540002-01	
252083-02	DRIVE ASSY - NEWT	128D/1571		USED ON- 1571 ALSO
252092-01	DRIVE ASSY - ALPS	1571	SUB TO 314673-01	
310163-01	PCB ASSY	+4		NLA
312711-01	DRIVE ASSY, HARD 20 MB - WESTERN DIGITAL		CHANGE DESCRIPTION	
312711-02	DRIVE ASSY, HARD 20MB - WD OR EPSON		CHANGE DESCRIPTION	
314093-01	KEY SINGLE	VIC		NLA
314673-01	KIT 1571 REPLACEMENT (FROM ALPS DRIVE TO NEWT)		\$148.50	
314675-01	KIT A1000 DRIVE REPLACEMENT (327142-01 IS FOR A500, KIT ADDS BRACKET TO ALLOW USE IN A1000)		\$110.00	
315739-02	MANUAL USER 2286/2088		CHANGE TO -03	
317746-01	DISKETTE, 1.3 WB	A500/A2000	CHANGE TO -03	
318029-02	IC 8520R4 1MHZ CIA		SUB TO -03 (2MHZ)	
326114-01	CASE, BOTTOM C64			NLA
327136-01	INSULATION SHEET A1000			NLA

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27/2-3.1 ERRATUS #2 - PARTS PRICE BOOK ISSUED SEPT. 1, 1989. (CONT)

PART NUMBER	DESCRIPTION	PRODUCT	DEALER BILLING	ACTION
328191-01	IC 6570-33 A1000			SUB TO -02
380042-01	KIT, PC10-1 HD MOUNTING			NLA
380778-06	IC BIOS PC-EMUL	\$7.70		ADD
380787-01	IC FDC 9268			SUB TO 312710-01
380788-04	IC BIOS PC-EMUL			SUB TO 380778-06
390306-01	IC 8742 KB CNTRL PC40-III			SUB TO 390341-01
602070-05	IC RGBI MB7051G3 1902/1080			SUB TO 602073-85
602073-85	IC MB7112E RGBI 1902/1080	\$8.25		ADD
602191-03	CAP ELECT 2200UF 1403			SUB TO 602190-12
903508-04	CORD POWER			SUB TO 252164-01

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AMIGA

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 27/3-1.1 A2000 REV6.0 AND REV6.1 BOARDS.
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 27/3-8.1 A2091 MEMORY AUTO-CONFIGURATION LIMITATIONS.
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 27/3-9.2 ENCLOSURE: A2630 SYSTEM SCHEMATICS.
 27/3-10.1 A2620/A2630 IC MEMORY 262,144 ADDRESS X 4 BIT DRAM.

27/3-1.1 A2000 REV6.0 AND REV6.1 BOARDS.

THE A2000 REV6 MOTHERBOARD WAS IMPLEMENTED TO CHANGE TO 256KX4 DRAMS, DUE TO THE SHORTAGE OF 256KX1 DRAMS. THIS COINCIDED WITH THE RELEASE OF THE NEW AGNUS CHIP (8372) THAT SUPPORTS 1MB OF CHIP RAM.

IT HAS COME TO OUR ATTENTION THAT SOME EXPANSION BOARDS DO NOT WORK AS RELIABLY IN SOME REV 6 MOTHERBOARDS AS IN PREVIOUS REVS. REV6.2 MOTHERBOARDS CORRECT THIS CONDITION.

THE ABOVE STATEMENT WAS ISSUED BY WEST CHESTER ENGINEERING OCTOBER 4, 1989. THE FOLLOWING TWO AMIGA SERVICE BULLETINS (27/3-2.1 AND 27/3-3.1) DETAIL THE PROCEDURES FOR FIELD SERVICE.

27/3-2.1 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 MOTOROLA TYPE 68000 CPU IC'S WHICH HAVE A MASK CODE OF 0B26.

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27/3-2.1 A2000 CR REV 6.0 PCB EXPANSION BUS PROBLEM (CONT)

PARTS DEPARTMENT IS STOCKING SIGNETICS TYPE 68000'S UNDER PART NUMBER 390084-03, DEALER BILLING IS \$18.50. PLEASE NOTE: NO REIMBURSEMENTS 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 0B26 WILL BE RETURNED TO THE SERVICE CENTER WITH NO CREDIT ISSUED. IF AFTER REPLACING THE 68000 WITH A SIGNETICS TYPE THE PROBLEMS STILL OCCUR, THEN THE PCB WILL HAVE TO BE REPLACED.

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.

[REPEAT OF 26/3-4.1]

27/3-3.1 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 WITH A HARD DISK DRIVE OR OTHER EXPANSION HARDWARE WHICH USES THE 12 VOLT SOURCE WILL NOT 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-ORIENTING 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.

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27/3-3.1 A2000 POWER SUPPLY - 12 VOLT CAN EFFECT VIDEO. (CONT)

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 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.

[REPEAT OF 26/3-5.1]

27/3-4.1 A2620/A2630 COPROCESSOR NEW ROM UPGRADE.

A NEW SET OF ROMS FOR BOTH THE A2620 AND A2630 HAVE BEEN RELEASED AND WILL BE AVAILABLE THROUGH THE PARTS DEPARTMENT SOON. THE NEW PART NUMBERS ARE 390282-04 AND 390283-04.

THE NEW ROMS CORRECT AUTOCONFIG AND OUT OF MEMORY ERRORS.

27/3-5.1 A590 FAST FILE SYSTEM UPDATE.

THE A590 HARD DRIVE COMES WITH FACTORY INSTALLED SOFTWARE. ON SOME UNITS THE FAST FILE SYSTEM WHICH WAS INSTALLED NEEDS TO BE UPDATED FOR CERTAIN THIRD PARTY SOFTWARE TO OPERATE CORRECTLY.

TO UPDATE THE A590 WITH THE NEW VERSION OF FAST FILE SYSTEM USE THE INSTALL DISK, WHICH IS INCLUDED WITH THE A590, OPEN THE WINDOW MARKED "UPDATE FASTFILE" AND CLICK.

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27/3-5.1 A590 FAST FILE SYSTEM UPDATE. (CONT)

THE NEW VERSION OF FAST FILE WILL AUTOMATICALLY BE INSTALLED BY THIS OPERATION.

27/3-6.1 A2286 UPGRADE ROMS V3.6 AND PAL CHIPS

THE FOLLOWING IC'S ARE AVAILABLE FOR UPGRADING THE A2286.

ROM - U57 - PART NUMBER 380682-03
ROM - U56 - PART NUMBER 380683-03
PAL I - U33 - PART NUMBER 380686-05
PAL III - U55 - PART NUMBER 380684-02

THESE ROMS FIX THE AUTO-CONFIGURATION ERRORS (LIBRARY NOT FOUND AND AMOUSE SETUP FAILURE) AND PROTECTION MODE SOFTWARE CRASHES (WITH CERTAIN THIRD PARTY PROGRAMS THAT LOCK UP).

THE ROM UPGRADE IS COVERED UNDER WARRANTY AND A STANDARD CARD REPLACEMENT RATE OF \$25.00 WILL BE CREDITED TO YOUR ACCOUNT. ALL FOUR CHIPS MUST BE REPLACED. IN ORDER FOR CREDIT TO BE ISSUED, THE OLD IC'S MUST BE RETURNED TO THE PARTS DEPARTMENT.

27/3-7.1 A2088 UPGRADE ROM

A NEW ROM REVISION HAS BEEN ISSUED TO UPGRADE THE A2088.

ROM - U28 - PART NUMBER - 380778-06

THIS ROM FIXES AUTO-CONFIGURATION ERRORS CAUSED BY SOME THIRD PARTY SOFTWARE AND HARDWARE.

THIS IS AN IN-LINE CHANGE AND IS NOT COVERED UNDER STANDARD WARRANTY. DEALER BILLING IS \$7.70.

27/3-8.1 A2091 MEMORY AUTO-CONFIGURATION LIMITATIONS.

THE A2091 HARD DISK CONTROLLER INCLUDES SOCKETS FOR THE INSTALLATION OF DRAM CHIPS FOR MEMORY EXPANSION. JUMPERS ARE PRESENT ON THE BOARD, AND ARE DESCRIBED IN THE USERS MANUAL WHICH SUPPORT THE PRESENCE OF NONE, 512K, 1M, 2M-BYTE OF MEMORY, HOWEVER ONLY THE NONE AND THE 2M-BYTE SETTINGS WORK CORRECTLY IN ALL SYSTEM CONFIGURATIONS. IF EITHER THE 512K OR 1M SETTING IS USED THE BOARD MAY NOT FUNCTION CORRECTLY, DEPENDING ON WHETHER OTHER BOARDS CONTAINING MEMORY ARE PRESENT AND ARE IN SLOTS THAT ARE CONFIGURED BY THE SYSTEM BEFORE THE SLOT CONTAINING THE A2091. WHEN THIS SITUATION OCCURS THE WRONG "BANK" OF CHIPS ON THE A2091 IS SELECTED AND THE SYSTEM WILL NOT BOOT.

IN MOST CASES THE INITIAL INSTALLATION OF THE A2091 WILL NOT CAUSE ANY IMMEDIATE PROBLEM, BUT CONCERN EXISTS THAT WHEN THE CUSTOMER ADDS ADDITIONAL BOARDS TO THE SYSTEM, THE CONFIRGUATION WILL CHANGE AND THE A2091 BOARD WILL NO LONGER WORK. OBVIOUSLY, THIS WOULD LEAD TO SOME CONFUSION ABOUT WHICH BOARD IS ACTUALLY CAUSING PROBLEMS.

WE STRONGLY RECOMMEND USING ONLY THE NONE AND 2M-BYTE SETTINGS, HOWEVER IF THE SMALLER SETTINGS ARE REQUIRED THEN THE BEST OPTION IS TO PUT THE A2091 BOARD IN THE "FIRST" SLOT. IN ALL US PRODUCTION (REV4 AND REV6) MOTHERBOARDS, THIS IS THE SLOT NEAREST THE POWER SUPPLY (NOT INCLUDING THE CO-PROCESSOR SLOT). ON OLDER MOTHERBOARD REVISIONS, IT IS THE SLOT FARTHEST AWAY FROM THE POWER SUPPLY.

27/3-9.1 A2630 SYSTEM SCHEMATICS, CBM PN# 314033-01 RELEASE.

MAILED WITH TECHTOPICS ISSUE 27, FOR AMIGA AUTHORIZED SERVICE CENTERS ONLY, ARE THE A2630 SYSTEM SCHEMATICS.

27/3-9.2 ENCLOSURE: A2630 SYSTEM SCHEMATICS.

ENCLOSED IN TECHTOPICS ISSUE 27, CBM PN# 314033-01 A2630 SYSTEM SCHEMATICS.

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27/3-10.1 A2620/A2630 IC MEMORY 262,144 ADDRESS X 4 BIT DRAMS.

COMMODORE PARTS DEPARTMENT DOES NOT SUPPLY DRAM IC'S FOR MEMORY UPGRADES. THE FOLLOWING VENDORS (VENDOR PART NUMBER INCLUDED) HAVE BEEN QUALIFIED FOR USE IN THE A2620 OR A2630. THESE ARE "ZIP" TYPE IC'S.

NEC	D424256V-10
TOSHIBA	TC51425AZ-10
MATSUSHITA	MN414256L-10
FUJITSU	MB81C4256-10

PLEASE NOTE: USER MANUALS RECOMMEND CUSTOMERS TAKE THEIR UNITS TO AN AUTHORIZED SERVICE CENTER TO HAVE MEMORY UPGRADES DONE.

IMPROPER INSTALLATION WILL VOID CREDIT ISSUED FOR A RETURNED REPAIRABLE UNIT.

END 27/3.

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CBM

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27/4-1.1 C64/A PCB# 250407 WILL HAVE NO DUD VALUE AS OF 10/01/89.
27/4-2.1 1581 FDD - EXTENDED WARRANTY NO LONGER IN EFFECT.
27/4-3.1 WARRANTY CLAIMS FOR C64 A-TYPE PCB'S

27/4-1.1 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.

[REPEAT OF 26/4-1.1]

27/4-2.1 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 WERE PRODUCED
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.

[REPEAT OF 26/4-2.1]

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27/4-3.1 WARRANTY CLAIMS FOR C64 A-TYPE PCB'S

WHEN RETURNING A C64 A-TYPE PCB, PART NUMBER 250407-04,
AS A WARRANTY CLAIM, YOU MUST INCLUDE A COPY OF THE
CUSTOMERS BILL OF SALE.

IF IT IS A 90 DAY PARTS WARRANTY, YOU MUST PROVIDE US
WITH A COPY OF YOUR PURCHASE INVOICE.

SHOULD THERE BE NO PAPER WORK SENT WITH THE PCB, THE PCB
WILL BE RETURNED TO YOU AND NO CREDIT ISSUED.

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27/5-1.1 PC40-III QUANTUM HARDDRIVE UPGRADE.
27/5-2.1 COLT 286 SERVICE MANUAL, CBM PN# 314118-02 RELEASE.
27/5-2.2 ENCLOSURE: COLT 286 SERVICE MANUAL.

27/5-1.1 PC40-III QUANTUM HARDDRIVE UPGRADE.

UPGRADE ROM FOR THE PC40-III QUANTUM HARDDRIVES.

THE UPGRADE IS FOR THE (INTERMITTENT) 1782 CONTROLLER ERROR BEING FOUND ON THE PC40-III. IF THE ERROR IS HAPPENING ON EVERY BOOT-UP, THE PROBLEM IS NOT WITH THE ROM. IF YOU HAVE THE PROBLEM ON EVERY BOOT-UP, THE HARDDRIVE MUST BE REPLACED.

THE CHIP IS SOCKETED ON THE HARDDRIVE PCB AT LOCATION, IC201. THERE ARE THREE (3) DIFFERENT TYPES OF BOARDS ON THE DRIVES. TWO OF WHICH CAN BE UPGRADED.

THE METHOD TO DETERMINE THE REVISION IS TO LOOK AT THE REVISION OF THE ADAPTEC AIC-560 (IC206) COMPONENT ON THE HARDDRIVE PCB. IF THE IC IS MARKED "560AL", THIS DRIVE CANNOT BE UPGRADED AND MUST BE REPLACED THRU COMMODORE. IC'S MARKED "560BL" OR "560CL", INDICATE THE LATEST REVISION HARDDRIVE HARDWARE AND CAN BE UPGRADED WITH THE 6.8 ROM.

THE MODEL NUMBERS OF THE THREE TYPES OF DRIVES ARE:

940-40-9100 - CANNOT BE UPGRADED.
940-40-9102 - CAN BE UPGRADED.
940-40-9103 - DOES NOT NEED TO BE UPGRADED.

THE PART NO. IS 314035-01, THE DEALER BILLING IS \$20.00. THE FULL CREDIT WILL BE ISSUED BACK WHEN THE OLD ROM IS RETURNED TO COMMODORE.

27/5-2.1 COLT 286 SERVICE MANUAL, CBM PN# 314118-02 RELEASE.

MAILED WITH TECHTOPICS ISSUE 27, FOR PC AUTHORIZED SERVICE CENTERS ONLY, IS THE COLT 286 SERVICE MANUAL.

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27/5-2.2 ENCLOSURE: COLT 286 SERVICE MANUAL.

ENCLOSED IN TECHTOPICS ISSUE 27, CBM PN# 314118-02
COLT 286 SERVICE MANUAL.

END 27/5.