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- 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.

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 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 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 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 SOFT-
WARE 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 CONFIGURATION 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.