Motherboard Changes

From November 1999, the Remote Power Supply and CPU unit have a new motherboard, Celeron processor, and DIMM memory modules. Changes in the motherboard format require changes to the CPU metal, labels, and small hardware. The CMOS settings also change, see the next page.
Models 090-126-xx, serial number prefix "BS11954" or higher (that is, all models after Nov 1999), use the new 480-039-00 motherboard, and DC power cable, so you can replace with the same.

Models 090-096-xx, with serial number prefix "AW", and models 090-126-xx, serial number prefix "BS11953" or lower (i.e. before Nov '99), use the original 480-023-00 (CE-modded version is 080-113-00) motherboard. If you have to replace the motherboard and no originals are available, then you will need:

    Parts required:
1.   qty. 1   329-087-03   "MICRO PROC CELERON 300MHZ"
2.   qty. 1   480-016-00   "SDRAM DIMM 2MX64 4K 3.3V"
3.   qty. 1   480-039-00   "OEM PCB MOTHER CB50-BX"
4.   qty. 1   480-043-00   "OEM FAN MICROPROC"
5.   qty. 1   550-391-00   "FAB PLATE CVR MOUSE D8PWR" cover plate for old PS/2 mouse hole
6.   qty. 1   550-534-00   "PLATE CVR DB25" cover plate for old parallel port hole
7.   qty. 3   700-011-00   "MCH 4-40X1/4 BTNSKT BLKOX" for attaching cover plates
7.   qty. 3   706-059-00   "STDF NYL SNAPIN .5IN NO 6"
8.   qty. 3   740-003-00   "TYRAP 8IN BLK"
9.   qty. 1   840-375-00   "LBL KEYBOARD/CDATA D8" label with obsoleted port locations removed

Note: The new motherboard uses a different BIOS with different CMOS settings. New position of headers on motherboard ends up leaving excess on ribbon cables, which can be bundled out of the way using tie-wraps. There were originally holes cut in the chassis for the mouse and parallel port on the old motherboard. The new motherboard uses a card-slot assembly with these ports on it. To reduce EMI radiation, the unused port holes must be covered up. Some metal pieces have been created for this purpose, and attach with screws.

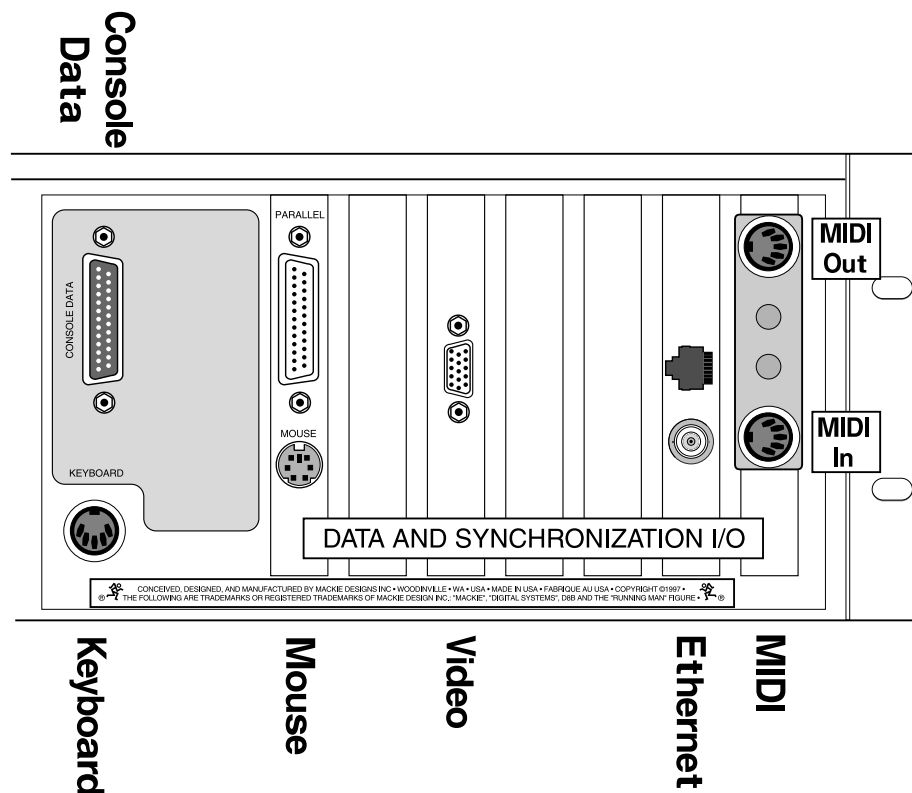NOTE: For models 090-096-xx, serial number prefix "AW":
If the 040-281-00 DC power cable (the "umbilical cord" between the CPU and the console) needs replacing on these old units, it will require major rework because the new cable (040-294-00) will not fit these old chassis. If you want to try:
1.   qty. 1   040-294-00   "CBL DC PWR BRDSHLD D8PWR" New
2.   qty. 1   329-087-03   "MICRO PROC CELERON 300MHZ" can't use old one in new motherboard
3.   qty. 1   480-016-00   "SDRAM DIMM 2MX64 4K 3.3V" can't use old memory in new motherboard
4.   qty. 1   480-039-00   "OEM PCB MOTHER CB50-BX"
5.   qty. 1   480-043-00   "OEM FAN MICROPROC" use new fan
6.   qty. 1   550-535-00   "FAB CRDRCK D8 CPU NO-PS2" card
7.   qty. 1   550-542-00   "PNT TOP D8 CPSU"
8.   qty. 1   550-543-00   "FAB CHASSIS D8 CPSU"
9.   qty. 10   700-028-00   "SEMS 6-32X1/4 PHP BLKZC"
10.   qty. 3   706-059-00   "STDF NYL SNAPIN .5IN NO 6"
11.   qty. 3   740-003-00   "TYRAP 8IN BLK"
12.   qty. 1   840-375-00   "LBL KEYBOARD/CDATA D8"

CMOS settings

NOTE: from November 1999 (serial numbers with prefix "BS11954" or higher), the motherboard changed to 480-039-00, and there are different CMOS settings:

Press and Hold <Delete> key to go to BIOS Setup program
Using the arrow keys, select STANDARD CMOS SETUP, Press <Enter> ("Page Up" and "Page Down" keys, and number pad can be used to change BIOS values).
Change the Date to current day, month, year. Press <Enter>
Change Time to current time (24-hour clock), Press <Enter>
Make sure all HARD DRIVES on table are set to "AUTO" MODE
Change "Halt On:" to "All, But Keyboard", Press <Enter>
Back out to root menu by pressing <Esc>
Select "BIOS FEATURE SETUP" and make sure "Boot Sequence" is "A,C,SCSI". <ESC>
Select CHIPSET FEATURES SETUP, Press <Enter>
Change "PCI 2.1 Compliance" to "Enabled".
Change "Spread Spectrum" to "Enabled" and then <ESC> to main BIOS menu.
Select INTEGRATED PERIPHERALS, <Enter>
Change "Init Display First" to "PCI Slot", <Enter>
Make sure "Onboard Serial Port 1" is set to "3F8/IRQ4" and "Onboard Serial Port 2" is set to "2F8/IRQ3", then press <ESC> to return to the main BIOS menu.
Select SAVE & EXIT SETUP. Type "Y" for yes, <Enter>

The rear panel looks like this, for those units built with the new motherboard