

# Rebuilding an Amiga 1200

Shown below is a photo documentary of a project to rebuild an old Amiga 1200 computer into a slightly less older Sun Sparc 20 case. This page is split up into 3 sections, Before the Rebuild, After The Rebuild, and Conclusion.

The juicy pictures are in Section 2.

## Section 1

## Before The Rebuild - The Original A1200



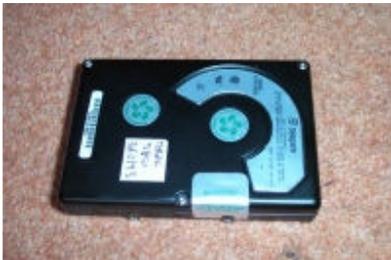
(1) This is the Basic Amiga 1200 just after purchase in May 2002, it is connected to a small green screen monitor via the composite video out socket.



(2) The ubiquitous silver Commodore SVGA adaptor, which is the most painless way of hooking up a proper monitor. The thin black wire on the left is the composite video out still connected to the green screen monitor.



(3) A Digital (the manufacturer not the type) 17" monitor, running Workbench 3.0 at 640x480 using the 'Multisync' display driver. I've experimented with custom monitor files, and found that 'Multisync' still yields the best results for an AGA only Amiga.



(4) The old Hard Disk Drive the A1200 arrived with. I think the capacity is 120mb. It's very noisy though. Immediately replaced with ...



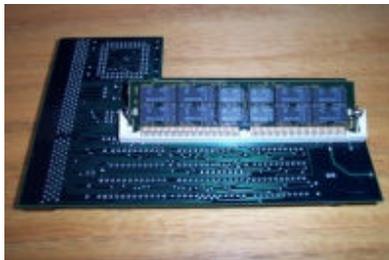
(5) ... a newer 800mb drive, taken from a Toshiba Libretto. Notice the rubber bands holding it in place. This is because the screw holes on the bracket didn't line up with the drive. This solution works well.



(6) A standard PCMCIA (or PC Card) network adaptor. This card is NE2000 compatible and works perfectly with the cnet.device driver and AmiTCP, both of which can be found on [AmiNET](#).



(7) The front view of the Magnum RAM8 expansion card. This card slots into the trapdoor slot of the Amiga 1200, and adds upto 8mb of extra memory (making a total of 10mb). It also adds a battery backed up clock. These pictures are now part of the archive on the [Big Book Of Amiga Hardware](#).



(8) The back view of the RAM8 card, showing the simm socket, this socket can take a standard PC 72 pin simm. This card was replaced by a proper 68040 accelerator card from 'Phaze 5' later on.

## Section 2

## After The Rebuild - The 'New' A1200D(Sparc)



(9) The 'New' A1200D(Sparc) in all it's glory. The whole of the A1200 is now housed inside an old Sparc 20 case. The picture here shows Workbench 3.9 and AmiDock running, again in 'MultiSync' mode. The monitor is an old Gateway 19" which sadly died a few days later. Notice the rather cheeky [Amiga.org](http://Amiga.org) mouse mat.



(10) Side photo showing the 8x CDROM (I have faster, but 8x seemed fast enough) and the floppy drive (DF0:) mounted below it, a slight bit of case modification was done here, so that the original floppy eject button could be used. Floppy disks eject and insert perfectly.



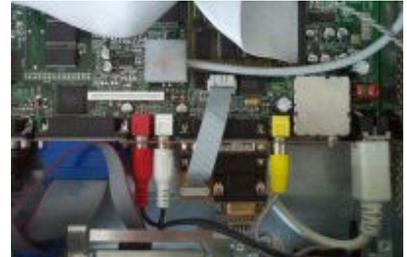
(11) Another side photo showing the other side of the case. Here you can see the slot that has been cut for PCMCIA network card. I toyed with the idea of getting two angle brackets for the PCMCIA slot so that the card could be mounted inside, but then realised that in future I may want to insert other PCMCIA devices.



(12) The back panel. The sparc 20 case has a detachable back panel, which made it easier to fit the new sockets. On the left are the keyboard and power sockets, with parallel, serial, audio, video along the bottom, and mouse, joy, vga along the top. The red button on the far right is a reset button hooked into the keyboard adapter.



(13) The A1200 motherboard inside the sparc 20 case. Due to lack of space, I decided to keep the PSU external. In this picture you can see the mother-board housed across the back part of the case, with the CDROM/Floppy and HDD in the front part. Obscured by the floppy ribbon cable is the 68040 Accelerator card, which is loaded with a 32mb SIMM. The black box attached to the side of the HDD bracket is the PC Keyboard Adapter.



(14) A closer look at the umbilical cables that connect the motherboard to the outside world. Most of these connectors were bought from Maplin (A UK based component store). Where possible I used crimped end connectors to make things easier. Unfortunately I couldn't find a VGA 15-pin crimped connector, so had to manually solder each wire in the ribbon cable! Even though no-one can see them when the case is closed, I used colour coded plugs for the Audio and Video. Detail is everything.



(15) A different angled picture, detailing the positioning of the CDROM/Floppy and the HDD. A nice feature of the sparc 20 case is that the drive brackets 'pop-off' the case, making quick swap-outs of drives very easy. I used these brackets in situ as they were perfectly located. The HDD is now a 3.5" IDE drive (4Gb), via a 4-way IDE buffered controller.



(16) A close-up picture of the custom DIN sockets installed for the keyboard and PSU. The Keyboard socket (top) is the usual 'AT' style 5-pin DIN, and the PSU socket (bottom) is also a 5-pin DIN, but with different pin layouts (similar to the C64 power socket). Obviously this prevents the keyboard and PSU from being plugged in incorrectly.



(17) This is the bit I'm least happy with, as it involved a lot of compromise. This is a re-housed PC-AT power supply. I used the original Amiga PSU cables and the original Amiga PSU on/off switch. I mounted a small fan in the top of the box to provide cooling, but it creates too much noise so is disconnected at the moment. I am still trying to decide on the best solution for this, so that I can run the A1200D twenty-four-seven.

## Section 3

## Conclusion & Future Plans

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Overall I'm quite happy with the rebuild. I need to re-visit the Power Supply, and I may even just try and source a larger plastic box that I can fit an unmodified AT PSU into. The Amiga works perfectly (for an old machine), and I have successfully installed the latest version of AmigaOS on to it (3.9) and have configured TCP/IP and connected to the Internet over my router with it.

**UPDATE:** After I compiled this guide I obtained a BVision Graphics Card and a BlizzardPPC accelerator card, both of which fitted into the 'trap door' area of Amiga motherboard. The PPC card sped the Amiga up from 14Mhz to 240Mhz, and the BVision card enabled graphics resolutions of 1024x1768 in true colour.

However, it was at this point I discovered that my Amiga motherboard was the wrong revision to run the BlizzardPPC card properly, and I started suffering random boot up hangs. Although it is well documented how to 'patch' older motherboards to get round this, I decided to cut my losses, and call it a day on this project. I reluctantly dismantled the Amiga down to its component parts, and sold them all on eBay, actually making a profit in the process!

Lastly, for all those who say 'Why didn't you just put it in a tower?' Well, everyone puts their A1200s into towers, I don't like towers, I have too many PC Towers as it is, and I wanted to do something different.

Jaruzel, May 2005

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