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Issued By	:	Date of Issue	:
Approved By	:	Date of Approval	:

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1. Sub-assembly Instructions

1.1 Fan / Filter Sub-assembly

- a) Place fans label side down on bench. Note fan cable orientation. (See *Photo 2*)
- b) Position fan panel on top fans and Fan Guards in fan panel. (See *Photo 1*)
- c) Assemble using 8 off snap rivets.
- d) Tie wrap cables together so cables are same length. Tie wrap cables to fan mounting hole. (See *Photo 2*). **Note: It is not necessary to twist fan cable together as twisted pair.**
- e) Finally locate Fan Filter pad in front recess in Fan Panel.



Photo 1



Photo 2

1.2 PSU Sub-assembly

- a) Remove PSU from packaging.
- b) To PSU switch assemble red button and 2 off M3x14 Hex stand-offs. (See Photo 3 and 4).



Photo 2



Photo 3

1.3 PCB Mounting Plate Sub-assembly

The Passive Backplanes and CPU Motherboards are assembled to the PCB Mounting Plate, on metal and plastic spacers. This section deals with the assembly of the metal spacers. Assembly of the plastic spacers is detailed in a later section.

Each type of board is secured too two hex spacers, one in each alternate corner. The Mounting Plate has a mix of 4.0 and 3.2 holes. You will assemble the hex spacers to the 3.2 holes.

- a) The location of the top LH hole is the same for all Backplanes and Motherboards. Fasten a M3x13 Hex Spacer to the plate using and M3 screw. (See Photos 5 and 6).
- b) Select a 3.2 hole on the RH side of the Mounting Plate, a set of holes are located mid way down this side. Fasten a M3x13 Hex Spacer as before.

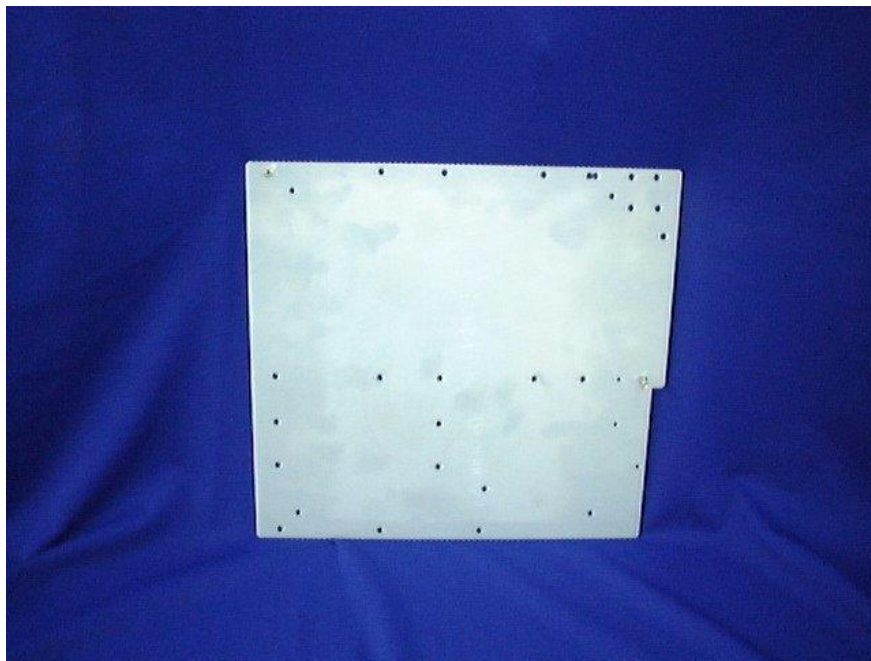


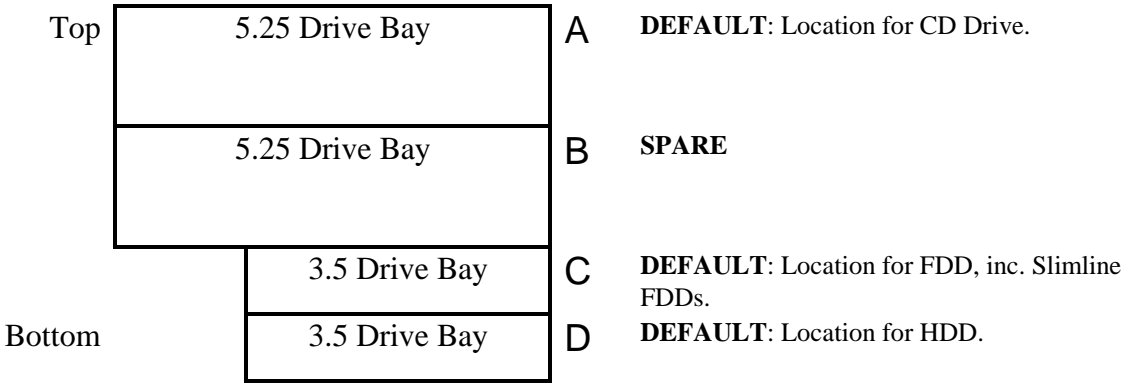
Photo 5



Photo 6

1.4 Horizontal Drive Cage Sub-assembly

The drive bays in the Drive Cage are identified as follows:



The above configuration is the standard setup. (See photo 7)



Photo 7

- a) Assemble CD Drive (Optional) into drive bay A, using 4 off M3 screws.
- b) Assemble 3.5 FDD into drive bay C, using 4 off M3 screws.
- c) Assemble 3.5 HDD into drive bay D, using 4 off UNC6/32 screws.
- d) Clip 5.25 blanking panel into drive bay B.
- e) Assemble **threaded** Bush Spacer to AVM and locate in rear AVM positions. (See photo 8).



Photo 8

1.5 Front Panel Sub-assembly

It is recommended that the assembly of the Front Panel is left until it is ready to be assembled to the chassis. This helps to prevent scratches and chips to paint work.



Completed Front Panel Sub-assembly

- a) Insert Lock into hole in Front Panel centre section. Slide Horse Shoe Clip into position on inside face. (See photo 9). Note position of Cam (latch), shown in the locked position in the photo.
- b) Half peel backing from Overlay and locate on Lock bezel. (See photo 10).
- c) Carefully align Overlay to metalwork, ensure overlay is straight and true as possible. Press down to form bond.
- d) Remove the remaining backing and press down.



Photo 9



Photo 10

2 Chassis Assembly

2.1 Ancillary Items Assembly

- a) Peel backing from Control Panel Overlay and carefully affix to Chassis. (See photo 11).

NOTE: Ensure Overlay is square and true to edge of metalwork.

- b) Peel backing from Foam Bezel and affix to inside of Chassis front panel. (See photo 12)

NOTE: Ensure Foam Bezel is square and true to edge of metalwork, as much as possible.



Photo 11

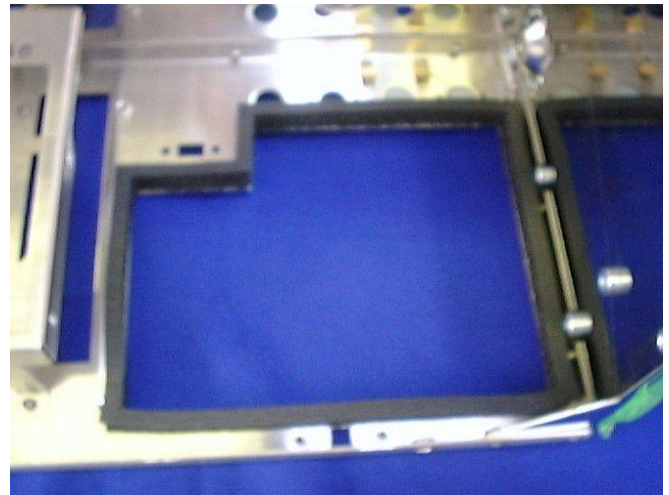


Photo 12

- c) Assemble Reset Switch Cable to Chassis front panel. Push to snap into place. Note polarising bump on switch body. (See photos 13 and 14)

- d) Locate 6 pin mini DIN connector on Keyboard cable, in hole on back of Chassis front panel. Fasten to Chassis using 2 off 2.5x8 thermoplastic screws. (See photos 13 and 14).

NOTE: Orientation of mini Din connector, polarising hole to top.

Attach earth tab receptacle to earth tab on Chassis.



Photo 13

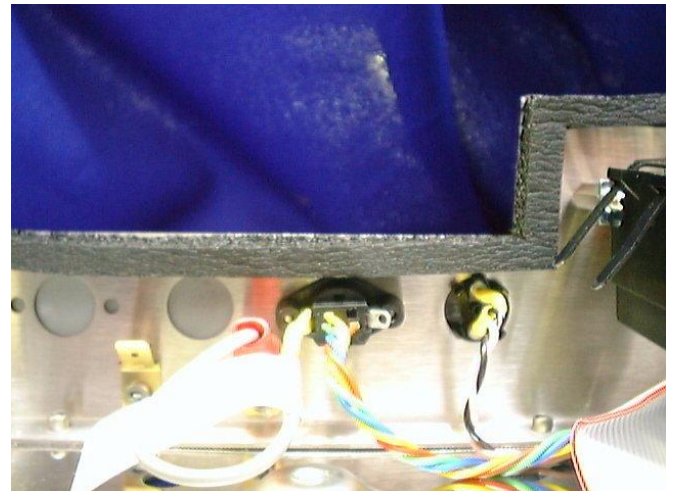


Photo 14

- e) Assemble **threaded** Bush Spacer to AVM and fasten to LH Chassis side on perforated dimple, using M4x12 screw. (See photo 15)
- f) Assemble 2 off Bush Spacers to AVMs and fasten to Chassis Card Guide Bracket, using M4x12 screw. (See photo 16).

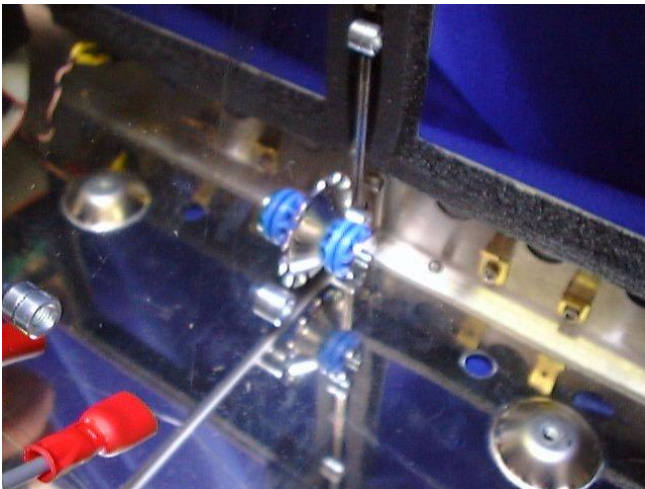


Photo 15



Photo 16

- g) Assemble Drive Cage Earth Cable to M4 stud on LH Chassis side. Assemble in accordance with Aixxx. (See photo 17)



Photo 17

2.2 PCB Mounting Plate and Backplane to Chassis Assembly

- a) Position Mounting Plate in Chassis on five dimples. Cut-out on Mounting plate to the RH side. Fasten to Chassis using 4 off M4 screws. (See photo 18 and 19)
- b) Using the Backplane as a template identify the mounting holes in the Plate and assemble the plastic spacers.



Photo 18



Photo 19

- c) Locate the Backplane on the spacer spigot. Press down on the PCB to click into place. Fasten Backplane to Chassis via top left and bottom right holes, using 2 off M3 screws. (See photos 20 and 21)

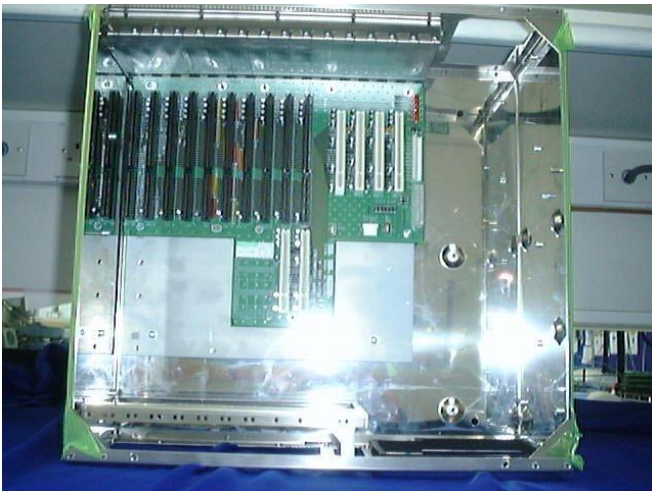


Photo 20



Photo 21

- d) Identify the Card Guide holes in the Chassis Card Guide Bracket corresponding to the connector positions on the Backplane. Snap the Card Guides into place. (See photo ??)

2.3 Fan Sub-Assembly to Chassis Assembly

- a) Position the Fan sub-assembly near to the hole on the front LH side of the Chassis. Pull the fan cables through the Utilities Status Display (USD) PCB hole. (see photo 22).
- b) Fasten the Fan panel to the Chassis, using 4 off M4 screws.
- c) Connect the fan cables to the spring terminals on the USD PCB.

Red	+12V
Blue	GND

NOTE: The terminals are identified on the reference side of the USD PCB.



Photo 22

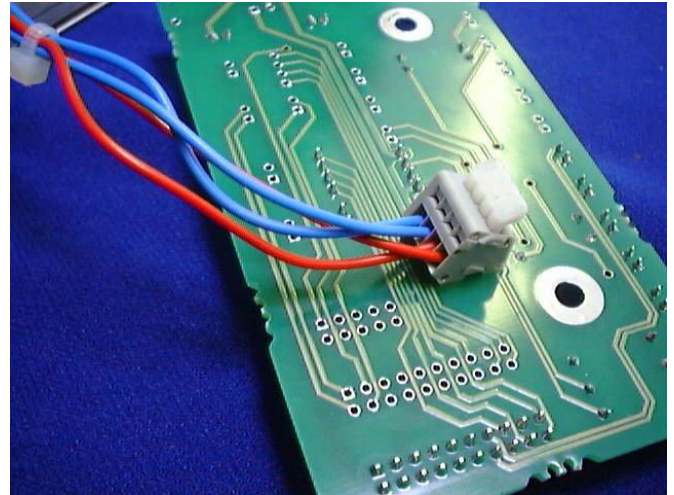


Photo 23

2.4 Utilities Status Display (USD) PCB to Chassis Assembly

- a) Carefully position the USD PCB on the Chassis front panel tabs and fasten to the Chassis using Snap Rivets. (See photo 24)
- b) Make connections as follows (See photo 25)

Keyboard Cable	J19
Reset Cable	J23
USD Power Cable	J17
USD Utilities	J13

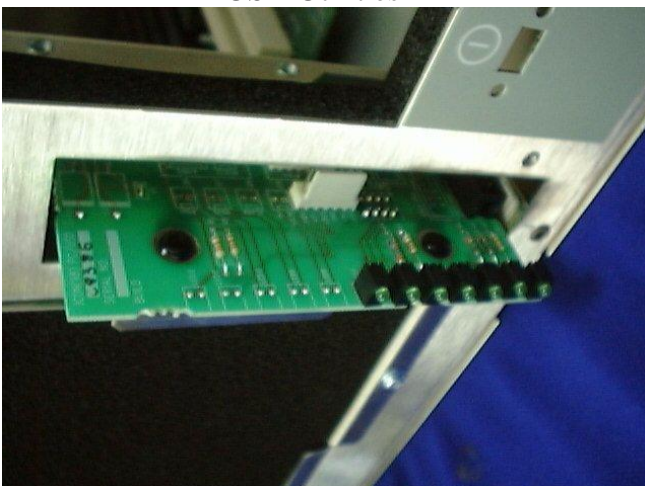


Photo 24

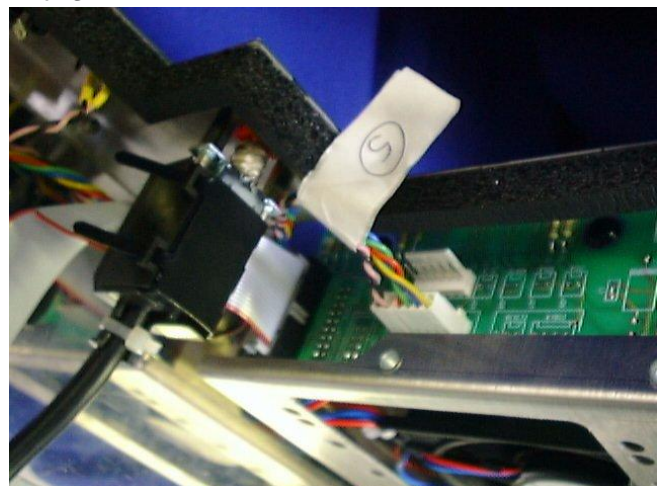


Photo 25

2.5 PSU Sub-assembly to Chassis Assembly



PSU sub-assembly in Chassis

- Position PSU in Chassis as shown in photo above.
- Loosely fasten the PSU to Chassis, using 4 off **M4 shake-proof washers** and UNC6/32 screws. (See photo 26)
- Fasten PSU tab to Chassis side face using an M3 screw. (See photo 27)
- Tighten UNC screws once tab screw has been tightened.



Photo 26



Photo 27

- Position PSU switch in hole on Chassis front panel. Fasten to Chassis using 2 off M3 screws. (See photos 28 and 29)

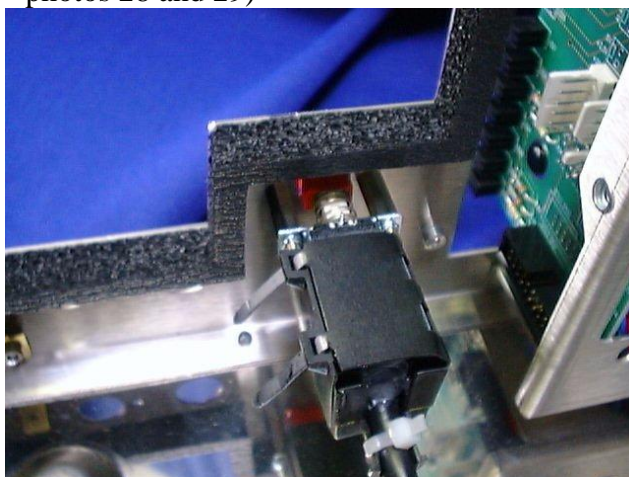
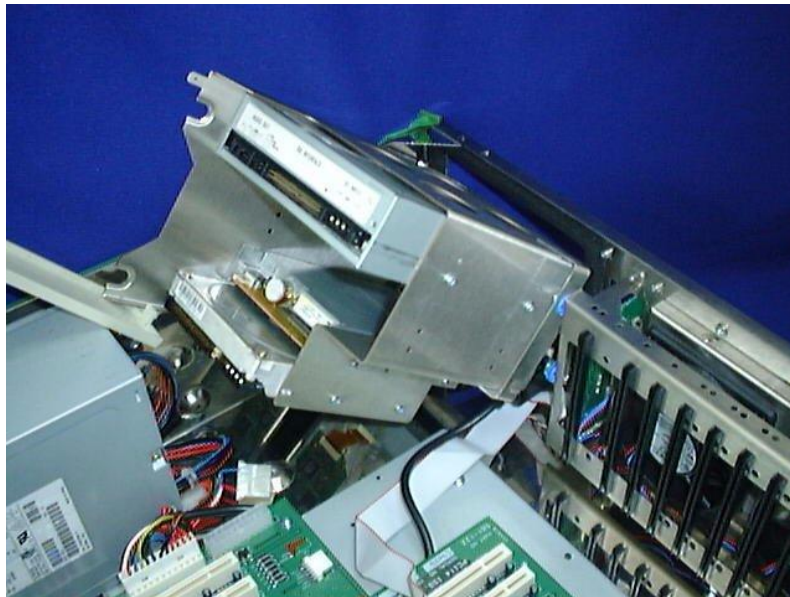


Photo 28



Photo 29

2.6 Drive Cage Sub-assembly to Chassis Assembly



Drive Cage assembly into chassis

- a) Locate the Drive Cage on the AVM at the angle as shown above and in photo 30.
- b) Carefully rotate the Drive Cage to the horizontal ensuring the AVMs locate into the bottom LH and RH cut-outs.

NOTE: the RH side AVM location can be viewed from the top between the Drive Cage and Chassis side.

- c) Align the rear AVMs with the Chassis RH side wall dimples. Fasten the AVMs using 2 off M4x12 screws. (See photo 31)
- d) Attach Earth Cable to tab at rear of Drive Cage. (See photo 31)

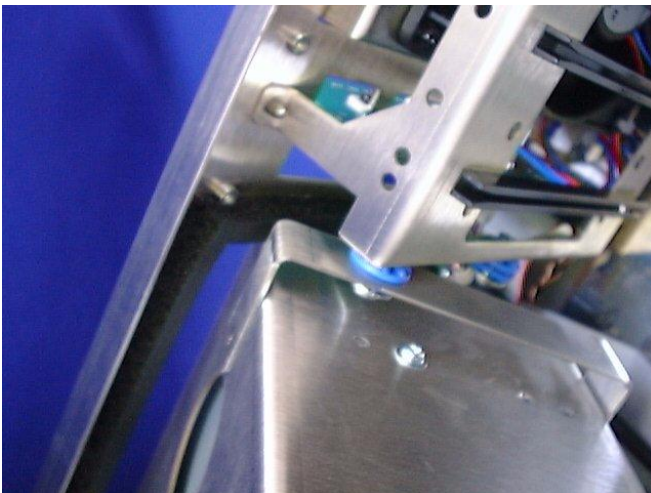


Photo 30



Photo 31