

Service Note		
Product	Description:	Service note no.
M5000/X	Upgrade to PSU ver. 3	712 10 T049

IMPORTANT:

This modification should only be carried out by authorized technicians!

This modification only concerns M5000/Xs with serial no. between 281447/290000 and 283567/290269. If carried out on units with lower serial numbers, then a new Bus board and back panel are needed!

Please check all parts are included according to the part list on page 3

Upgrade procedure:

The upgrade must be done in correct order.

The 9 numbers in brackets are similar to the item no. for the actual spare part.

As additional help, take a look at the pictures on the last pages

1. Make a backup copy of the user presets and the application software.
2. TURN OFF POWER AND DISCONNECT THE POWER CORD.
3. Dismount the top and bottom lids.
4. Replace the right side panel with the new side panel fitted with the fan, see pic. 1.
5. Use the cable tie (575021011) for fastening the fan wires, see pic. 1.
6. Desolder/disconnect the 6 power wires at J7 on the BUS PCB.
7. At the PSU PCB; unplug the connector at CN1 (wires from power switch)
8. At the PSU PCB; unplug the connector at CN3 (yellow/green wire)
9. Remove the mounting panel + PSU PCB by unscrewing 8 screws, see pic. 2.
10. Disconnect the two Floppy Disc Drive (FDD) cables at the CPU PCB.
11. Push down the CPU PCB a little and carefully slide out backwards the FDD.
12. Replace the two spacers at the CPU PCB with the new shorter type (566015530), see pic. 3
13. Replace the left side panel with the new left side panel (583018012).
14. Take the FDD and remove the two metal holders by unscrewing 4 screws.
15. Mount the FDD on the new mounting panel (582004511) by use of two screws (563020030), see pic. 4.
16. Push down the CPU PCB a little and carefully slide in the FDD again.
17. For mainframes with CPU PCB ver. M5000-5 or M5000-6:
Make sure the mounting panel doesn't short circuit the battery.
Make sure the coil L1 fits into the hole in the new mounting panel, see pic. 5
18. Take the self-adhesive metal foil (591018711) and wrap it around the new metal shield (583005111). (might be done at delivery already)
19. Mount the new metal shield on the floppy drive by help of the tape attached to the metal shield.
20. Attach the CPU PCB to the new mounting panel by use of two screws (562000030), see pic. 5
21. Attach the new mounting panel to the side panel by use of two screws (562000030).
22. Connect the two FDD cables to the CPU PCB.
23. Mount the two new spacers (566024730) on the new mounting panel, see pic. 6

Service Note		
Product	Description:	Service note no.
M5000/X	Upgrade to PSU ver. 3	712 10 T049

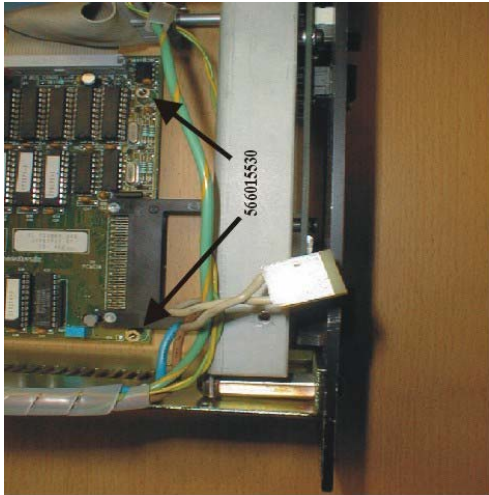
24. Remove the spiroband wrapped around the wires from the AC inlet.
25. Reduce the length of the yellow/green wire from the AC inlet. New length = 3.5inch / 8.8cm.
26. Mount/solder the crimp terminal+housing on the wire, and connect it to the side panel, see pic. 7.
27. Connect one end of the new long yellow/green wire (543030045) to the side panel, see pic. 7.
28. Wrap the spiroband around the 5 wires (2 wires from AC inlet, 2 ground lift wires, 1 long yellow/green wire), see pic. 8.
29. Place the 5 wires in the gap between the side panel and the FDD, see pic. 8.
30. Place the new insulation sheet (590019511) on top of the FDD. Make sure the two spacers fits into the holes, see pic. 9.
31. Place the new metal net (583019011) at the side panel, see pic. 9.
32. Place the new PSU PCB (720061011) on top of the new insulation sheet, see pic. 10.
33. Attach the PSU heatsink to the side panel by use of two screws (562000030) , see pic. 10.
34. Attach the PSU PCB to the two spacers use of two screws (562000030) , see pic. 10.
35. Connect the long yellow/green wire to J23 on the PSU PCB.
36. Connect the two power switch wires to J2 on the PSU PCB.
37. Solder in the two wires from the fan, blue wire to J3 pin1 and red wire to J3 pin2, see pic. 11.
38. Solder the 6 wires from the PSU into J7 on the BUS PCB. Take care to avoid short circuits and take extreme care to place them in correct order and, see pic. 12
39. Wrap the new spiroband (590000011) around the six PSU wires and the two fan wires, see pic. 10.
40. Use the cable ties (575021011) for fastening the wires to the PSU PCB, see pic. 11.
41. Turn on power and check the voltages at J1 on the PSU PCB.
 - Red: +5.1 VDC +/-0.05V
 - Black: 0VDC, Ground
 - Grey: -5.1VDC +/- 0.1V
 - Brown: +20.5VDC +/- 2V
 - Black: 0VDC, Ground
 - Blue: -20.5VDC +/- 2V
42. Check the fan is spinning.
The speed is controlled by the temperature, hence the speed is low at 20 degrees centigrade.
43. TURN OFF POWER AND DISCONNECT THE POWER CORD.
44. Mount top and bottom lid. Use new screws (561000030) on the top and the bottom.
45. Load in the user presets - if they were deleted.

Service Note		
Product	Description:	Service note no.
M5000/X	Upgrade to PSU ver. 3	712 10 T049

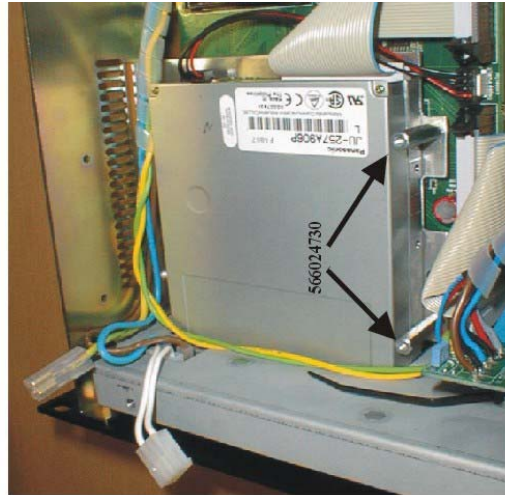
Part list:

Item no.	Part description	Quantity
-	Complete Power Supply board ver.3, 5502-3 (712062011)	1
591018711	Self-adhesive metal foil	1
583005111	Metal shield for diskdrive for M6000, R5074-1	1
-	Fan on side panel	1
582004511	mounting panel, R5009-10	1
583019011	Metal Net R5060-0	1
590019512	Insulation sheet R5072-1	1
523032011	6.3x0.8mm FASTON	1
543030045	300mm Yellow/green wire 18 AWG 1007 UL/CSA	1
561000030	3x5 RH Screw Hexagonal hole ISO 7380	10
566015530	M3x8mm Hexagonal Metal Spacer	2
566024730	M3x28mm Hexagonal Metal Spacer	2
563020030	3.0x4mm UHJx Z Pozidriv screw DIN 965	2
575021011	2.5x 98mm Cable tie	3
583018012	Left Side panel for TCM5000 R5029-0M	1
562000030	SWAGEFORM M3x6mm PAN BLACK ZINK	6
590000011	Spiroband T25F-C	0,2m
712100520	Service note no. 712 10 05 20	1

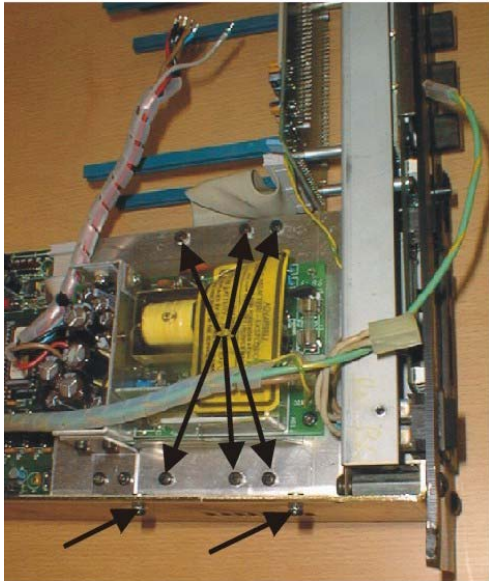
Service Note		
Product	Description:	Service note no.
M5000/X	Upgrade to PSU ver. 3	712 10 T049



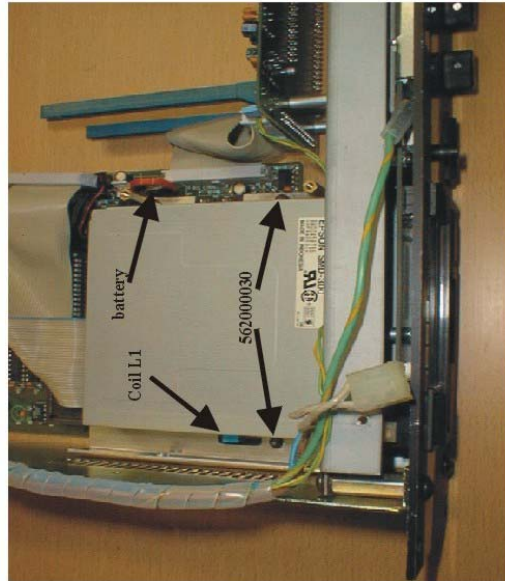
picture 3



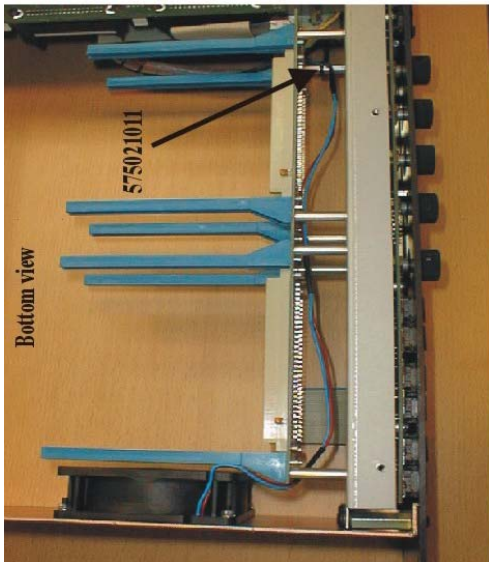
picture 6



picture 2



picture 5

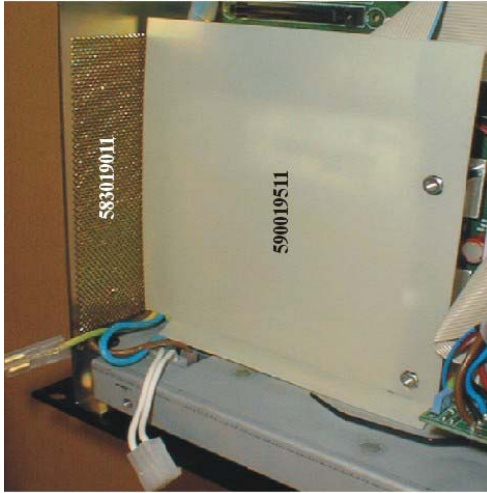


picture 1

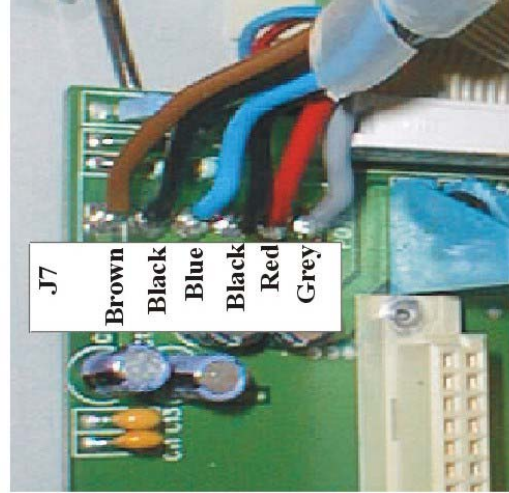


picture 4

Service Note		
Product	Description:	Service note no.
M5000/X	Upgrade to PSU ver. 3	712 10 T049



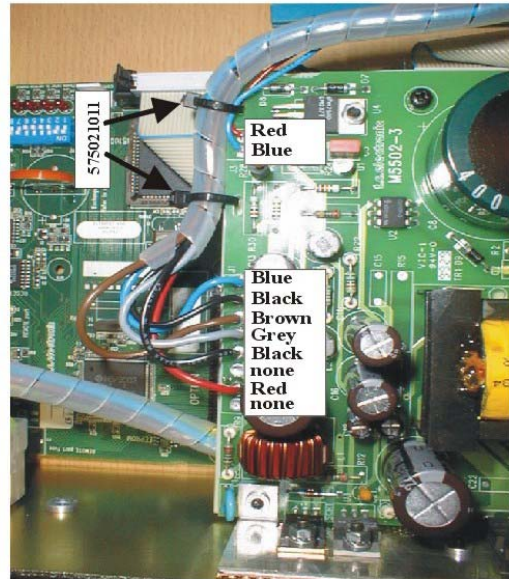
picture 9



picture 12



picture 8



picture 11



picture 7



picture 10