

YLOD

MOTHER BOARD REPAIR GUIDE

Disclaimer: please be advised if your ps3 is still in warranty on then send it back do not attempt this repair. The following repair is for faulty mother boards only and will not repair power supply issues or disc read errors. In following this guide I do not guarantee you will fix your ps3 and by attempting this repair YOU take full responsibility for any loss of hardware due to damage caused by following this guide!!!!!!!!!!!!

Ok so if you're reading this then you have experienced one of the worst things that can happen to your ps3!!!!!!!!!!
So follow these steps and let's get you back up and running!!!

Tools needed

Heat gun (temperature controlled preferably).

Isopropyl alcohol (acquire from chemist).

Vacuum cleaner or compressed air blower.

Phillips screw driver.

Flat blade screw driver or slotted torx bit.

Let's begin!

1. Remove warranty sticker and rubber foot that's positioned above hard drive bay.
This will invalidate any warranty.
2. Using a small flat blade screw driver or slotted torx bit, unscrew cover plate screw. See below.



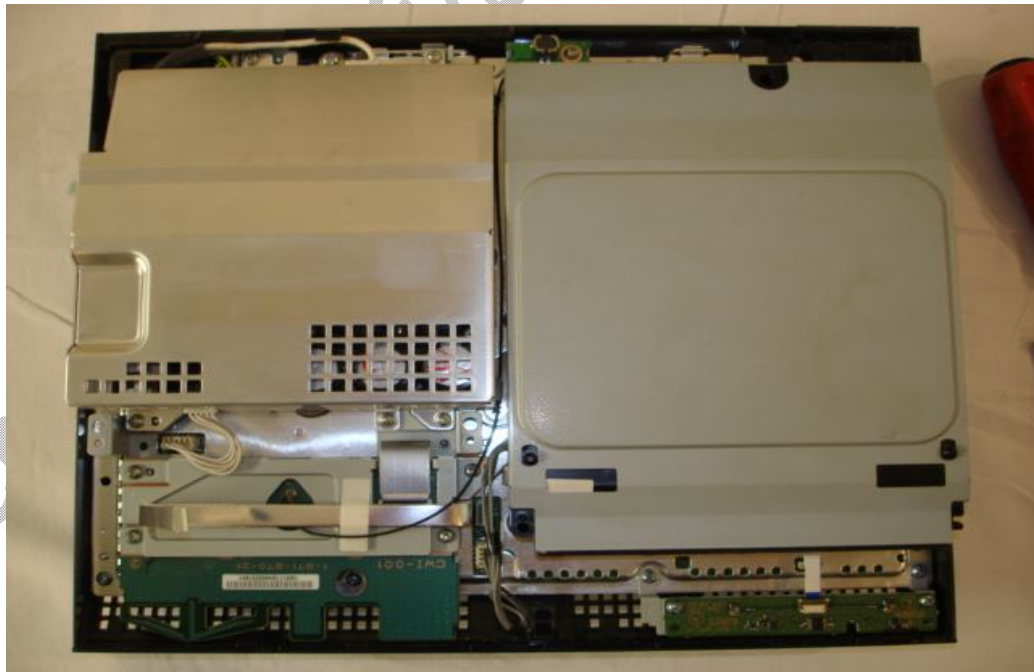
3. Slide cover plate towards the left until it stops and lift off.
4. Remove all Phillips screws marked noting size and position. See below.



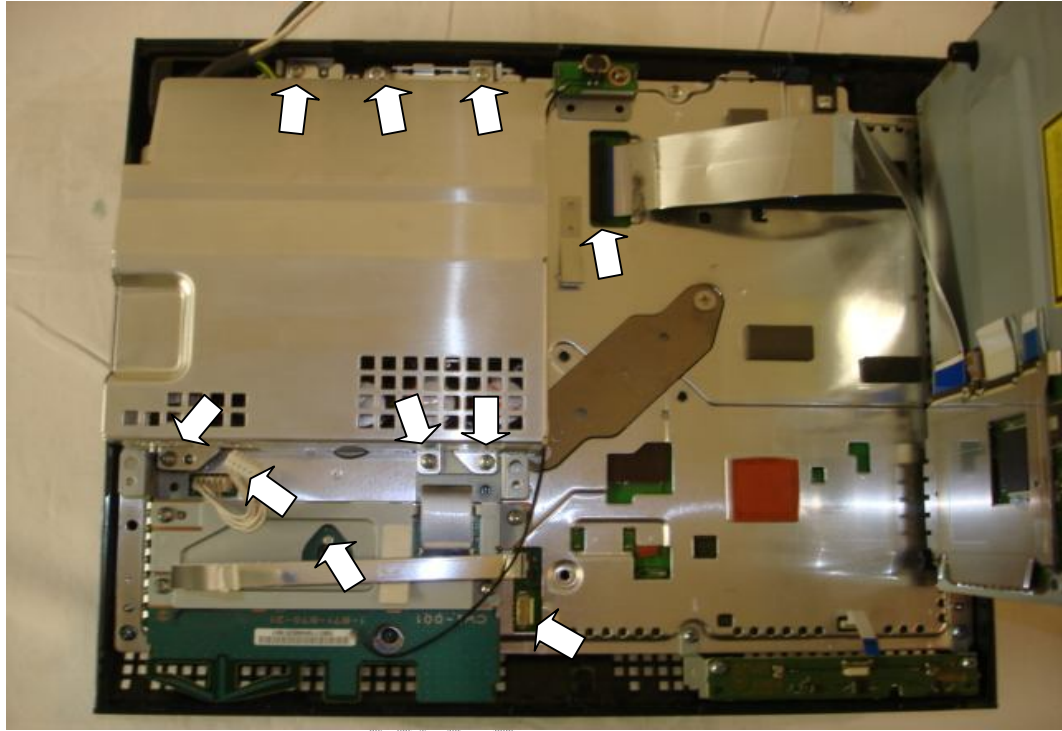
5. Hinge case towards you until disengaged and then tilt towards the left. See below.



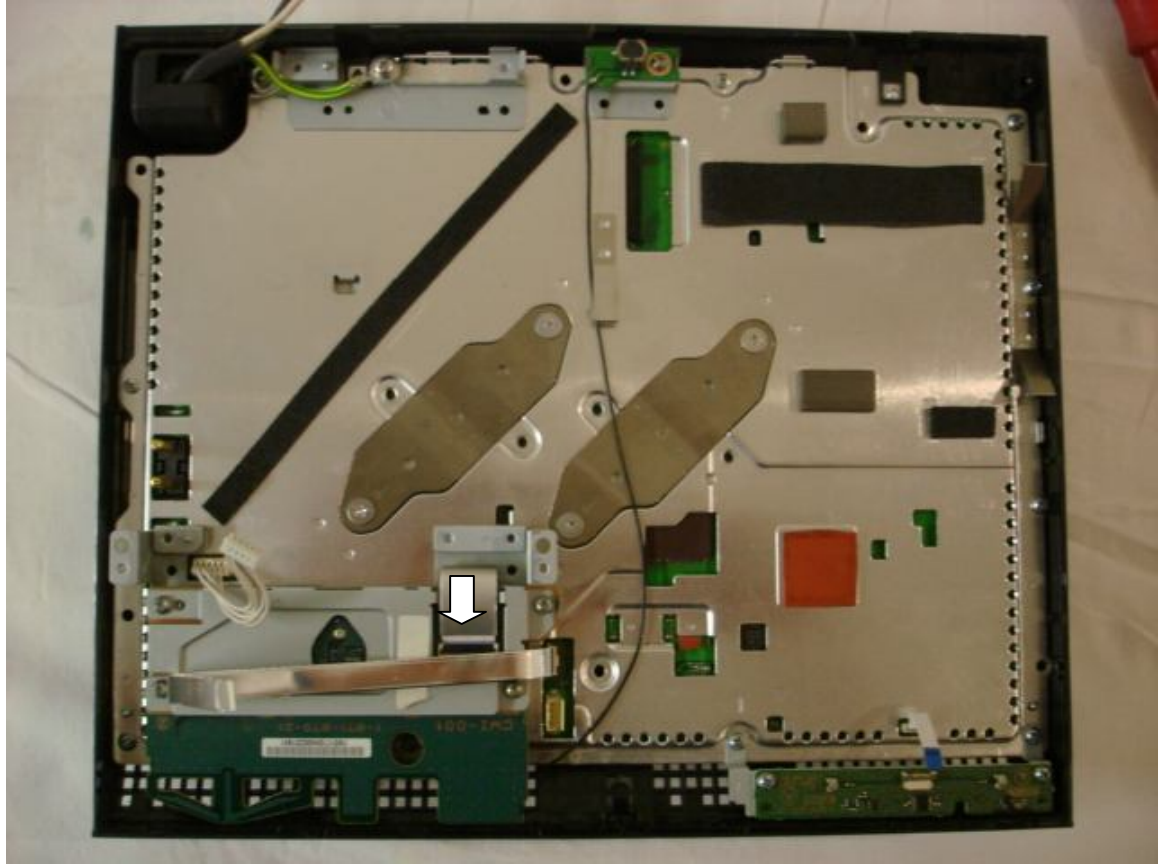
6. Remove ribbon cable by carefully lifting black part of connector (locking tab).



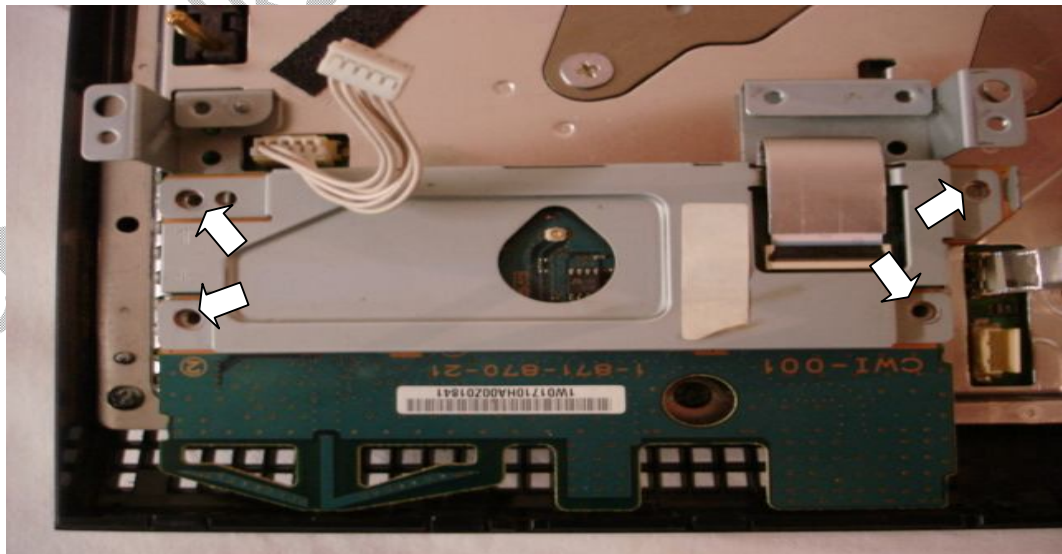
7. Lift/tilt blue ray drive towards the right whilst disconnecting power cable and the large ribbon (lift tab) underneath. See below.



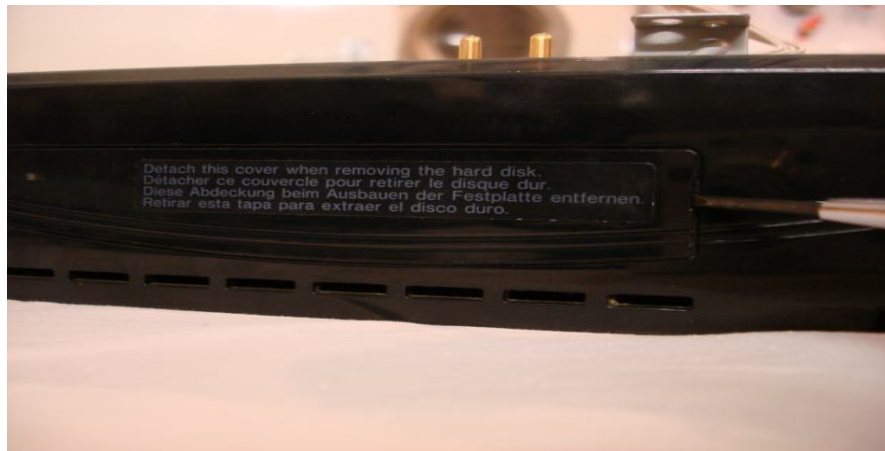
8. Remove 5 screws and the earth wire screw on psu, and unplug connector plug.
Before removal of psu unplug small bnc connector (black wire) and remove tape on side of psu, now lift off psu.
See below.



9. Now remove the wide ribbon from connector (lift tab) unscrew the four screws on the Bluetooth board and remove. See below.



10. Remove hard drive cover, see below.



11. Unscrew blue hard drive screw and disengage hard drive by sliding towards gap in the bay. See below.

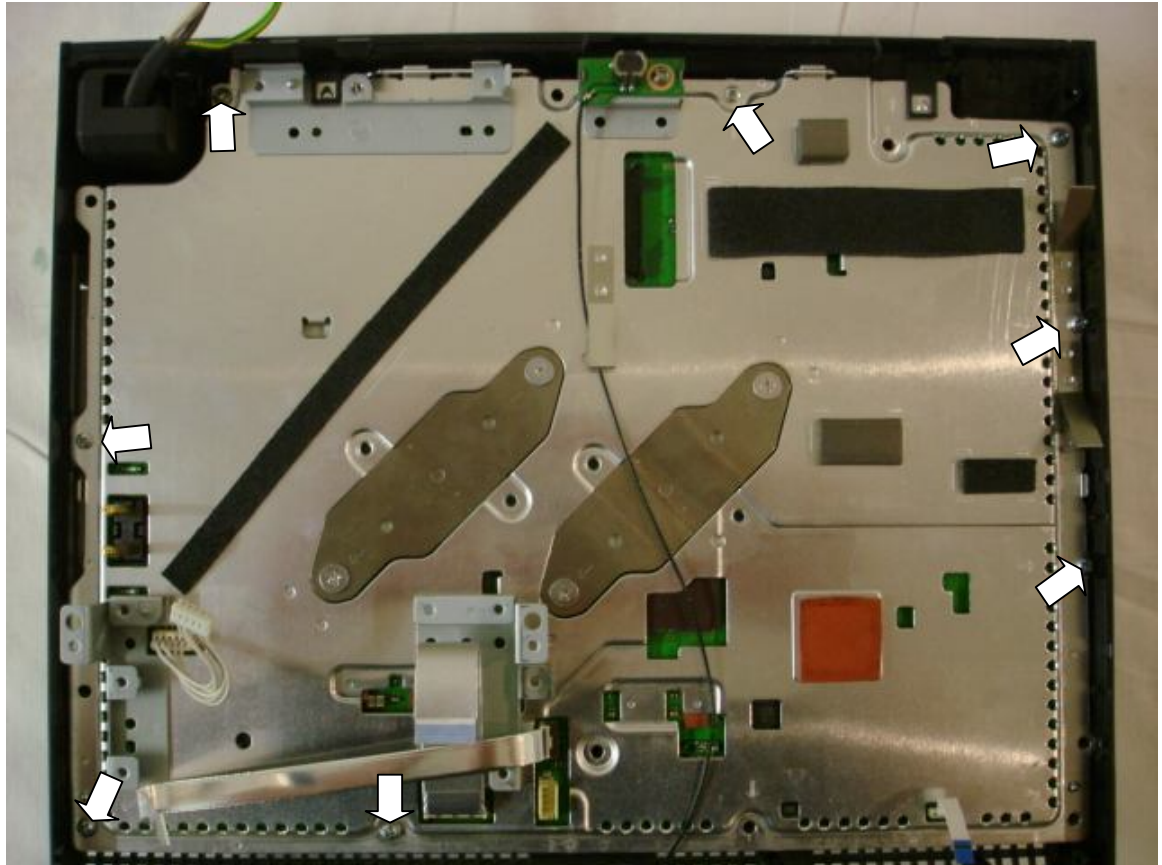


12. Remove hard drive, see below.

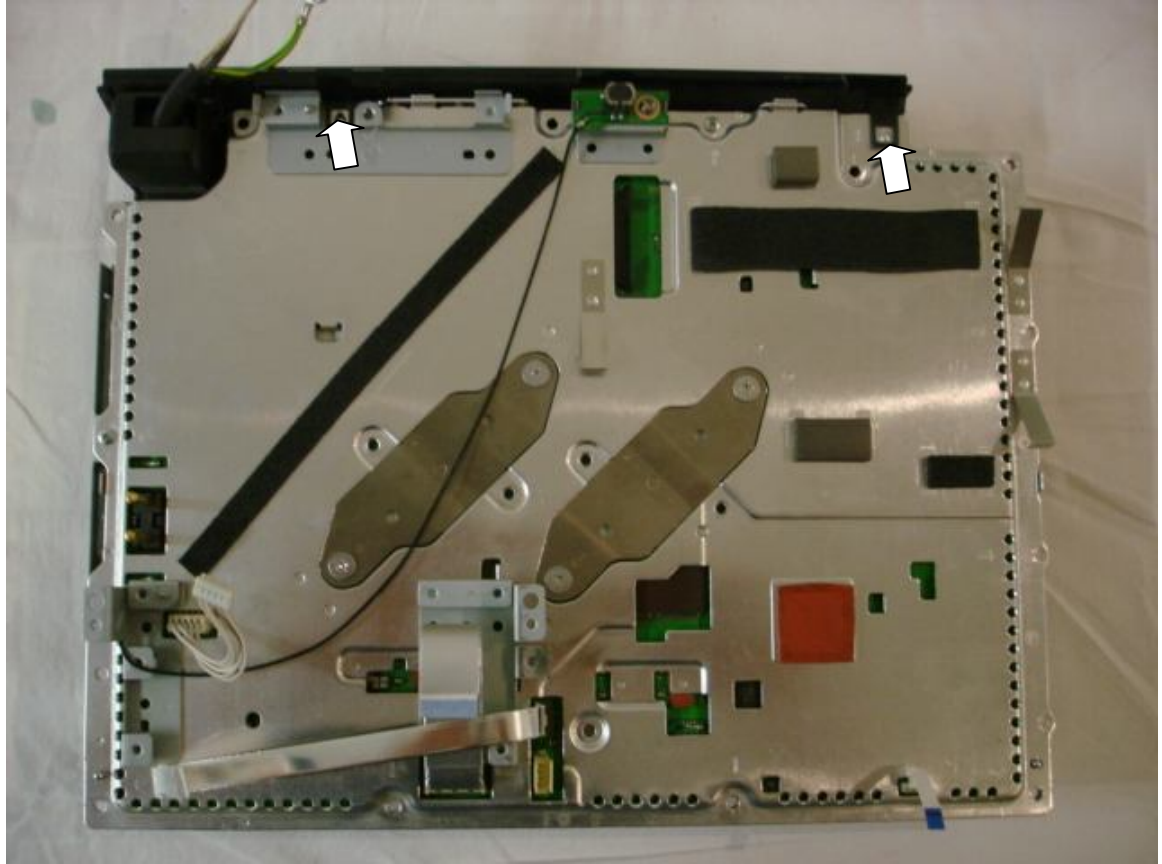


13. Unscrew 4 screws holding the bracket, on/off and eject control panel.
Remove small ribbon (lift tab) and remove control panel.

14. Unscrew 8 screws, see below.

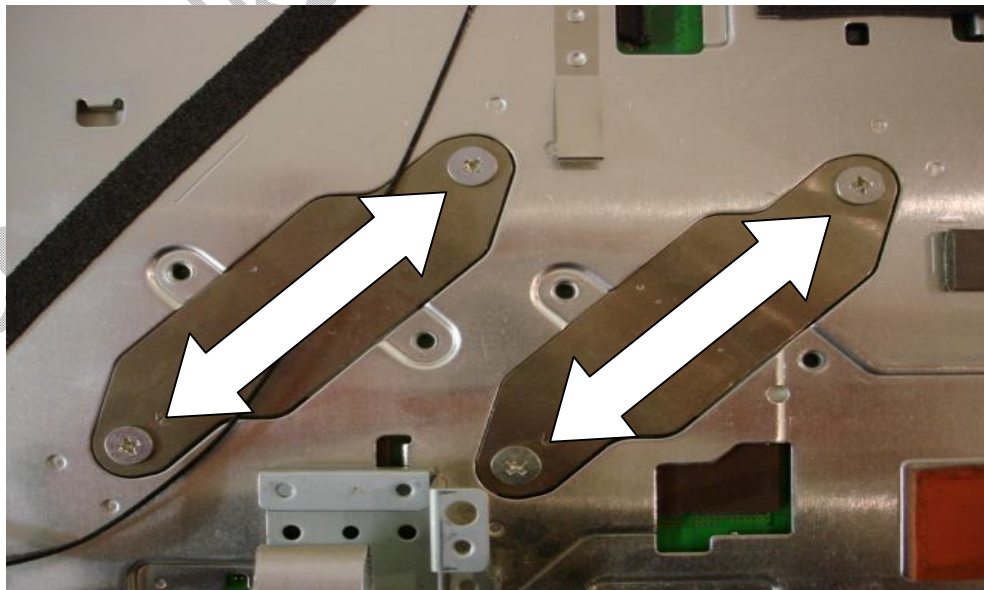


15. Lift enclosure out of plastic base, see below.

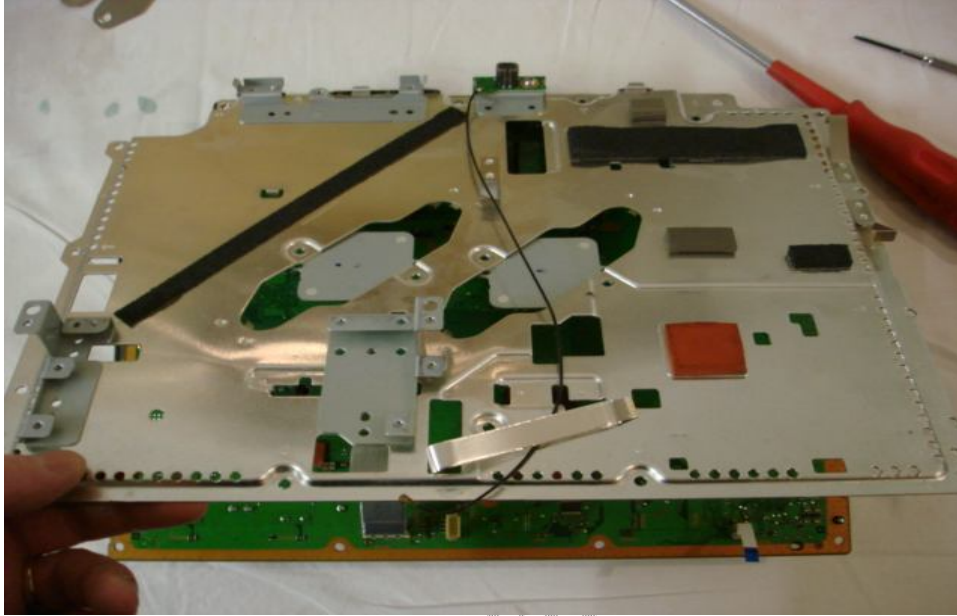


16. Now unclip black rear panel and remove.

17. Unscrew 4 screws and remove sprung brackets, see below.

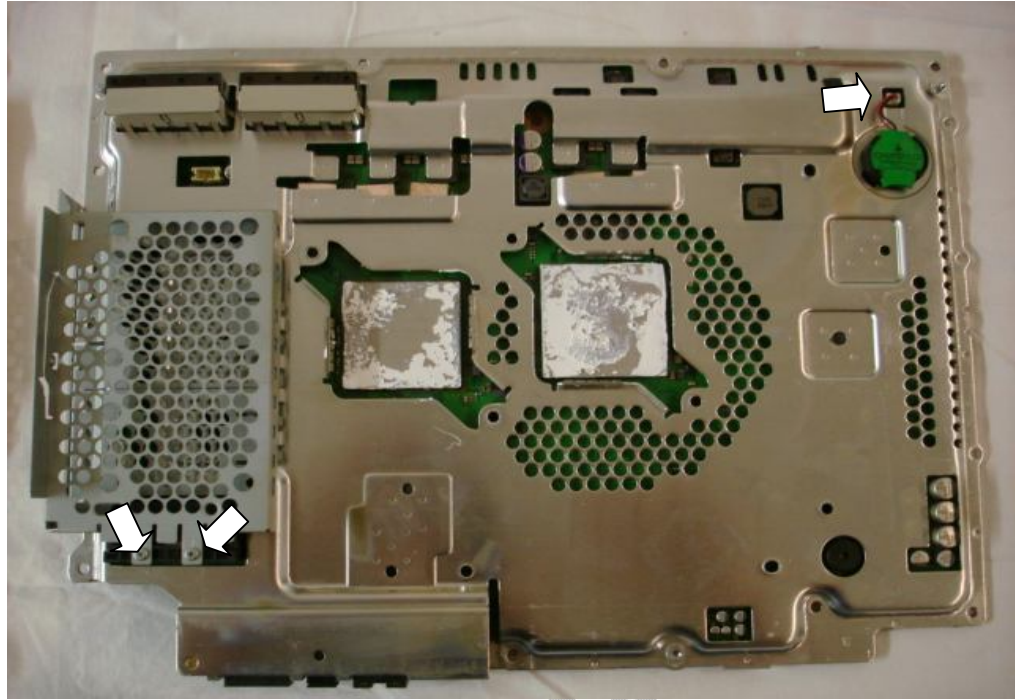


18. Lift of metal cover plate whilst allowing ribbons to pass through gaps in plate without damage, see below. (Taking note where heat sink rubbers are positioned).

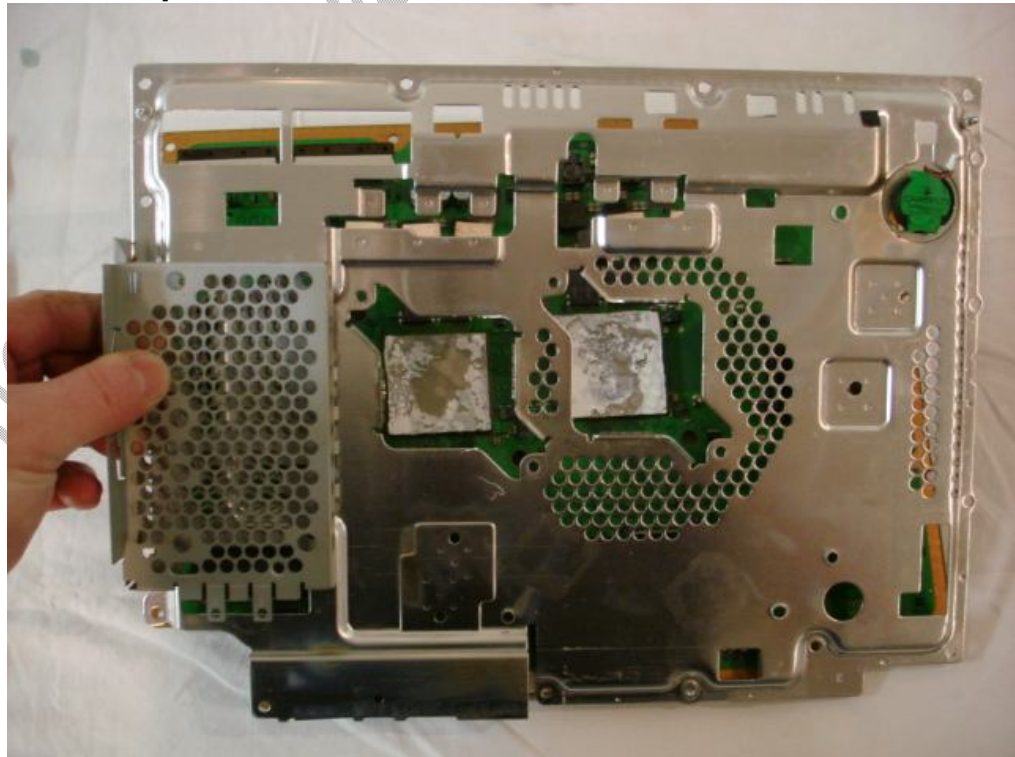


19. Supporting fan assembly turn board over, remove fan power connector and fan, see below.





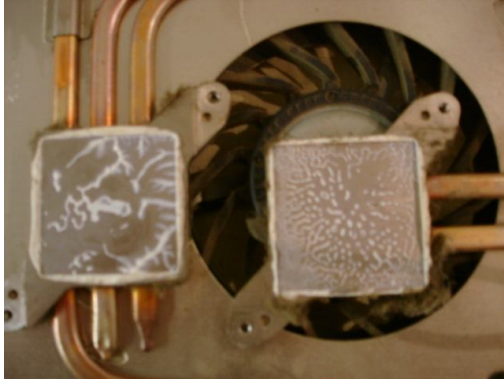
20. Remove 2 screws holding plate to hard drive connector and unplug battery connector. See above. Now remove plate. See below.



21. Clean off old heat sink compound from the 2 main processors using Isopropyl alcohol making sure all traces of the old heat sink compound has gone.
22. Clean both touch plates on bottom of fan/heat sink assembly with Isopropyl alcohol until all traces of the old heat sink compound has gone.
23. Now using a vacuum cleaner or compressed air blower get rid of all dust build up in the case and on all component parts of the ps3 (pay special attention to the fan assembly and heat sink fins **(MUST BE CLEAR OF DUST)**).
24. Typical example of dust build up. See below.



Ps3 case (dusty).



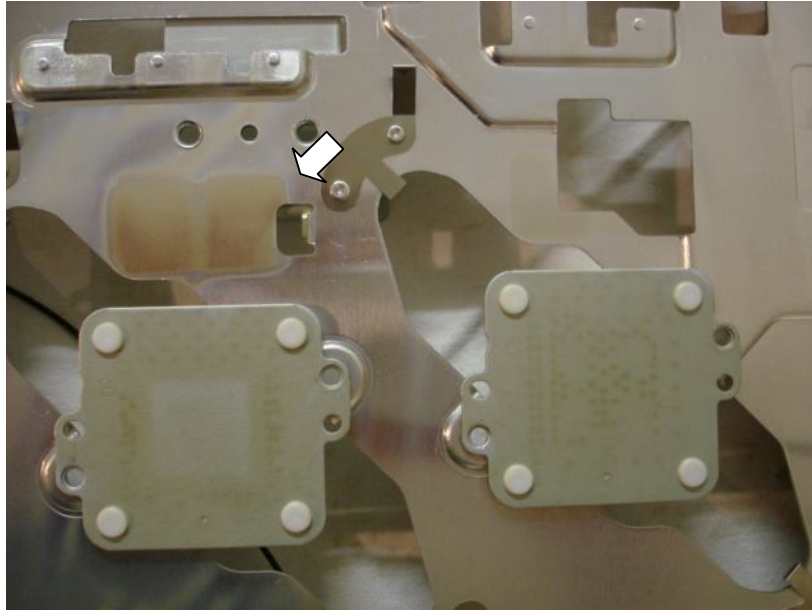
Heat sink plates before heat sink compound removed (dusty).

25. Once cleaned you should now have a nice pile of bits that looks something like this, see below.



Now for the tricky bit!

26. Check the top metal cover plate (underside) for burn-in marks, as you can see below this ps3 got very hot before it ylodged!



27. Place the ps3 mother board on a flat heat resistive surface (kitchen work top or melamine shelf will be fine).

28. Turn heat gun on and set temperature to 350 deg and the fan speed to low (**to high and it will move the surface mount bits**).

Allow gun to get up to temperature before continuing!!!!

29. Using a circular motion hold heat gun over areas outlined below (keep heat gun an inch above board/components at all times).

30. CPU side first.

31. After 15 to 20 seconds move onto the next area.
32. Once all marked areas have been heated/reflowed on the mother board LEAVE for at least 10 to 15 minutes to cool.
(DO NOT MOVE MOTHER BOARD WHILE COOLING).
33. A popping noise may be heard during cooling, don't worry this is normal.
34. NON CPU side.
35. After 10 to 15 seconds move onto the next area.
36. Once all marked areas have been heated/reflowed on the mother board LEAVE for at least 10 to 15 minutes to cool.
(DO NOT MOVE MOTHER BOARD WHILE COOLING).
37. A popping noise may be heard during cooling don't worry this is normal.



Heat sink compound still on in this picture, **remove before reflowing.**



Heat sink rubber pads still on in this picture **remove before reflowing** also **hold ribbons out of way while reflowing;**

.....
.....

.....**Congratulations!!**
You have just repaired you're ylodged ps3 mother board.

38. Now its time to apply new heat sink compound to the 2 processors, when doing this its always best to follow the manufacturers instructions but I believe the process is the same with all types (please check instructions that come with paste), before continuing
39. The paste I am using is called AKASA 450 it's a silver based compound with a thermal conductivity of 9.24w/m deg c and an operating range of 0 to 200 deg c.
You can buy it from most pc shops but I get mine from my local Maplin (I have been told that there is a better compound on the market called arctic silver but I haven't tried it as yet so the choice is yours).
40. Use syringe supplied and dispense a **small** worm of compound from top to bottom on the left hand side of processor chip, now using credit card supplied spread compound evenly and thinly over processor face (**to much is bad and not enough is also bad**) the ideal amount is when you can almost see through the paste.
41. Now repeat on the other processor.

42. See below.



NOW IT IS TIME TO REASSEMBLE THE PS3.

RETRACE YOUR STEP IN REVERSE TO REBUILD
MAKING SURE ALL RIBBON CABLES HAVE BEEN
FULLY INSTERTED INTO CONNECTORS AND LOCKED
DOWN IE. (TABS).

If you would like to ask any questions

Email me at gilksy1@btinternet.com

Or when you've fixed your ps3

Add me psn= gilksy

It would be nice to keep track of all repaired
ps3's using this guide.

Thank you for your time!!!!!!!!!!!!!!

**I'D JUST LIKE TO SAY THANKYOU TO
BOOMONT AND ACE_J66 FOR ALLOWING
ME TO DOCUMENT THE REPAIR OF THEIR
PS3'S (MY NEW PSN FRIENDS).**

email:gilksy1@btinternet.com