

Installation of the Liquid MetalPad in a Sony Playstation 3

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Introduction

The Coollaboratory Liquid MetalPad consists of only metal and no non-metallic additives. The situation when the Liquid MetalPad changes' (melting) is at [approximately 58°C from solid to liquid](#). When you are using the revolutionary Liquid MetalPad, it has to melt only once with a "BurnIn" process to achieve full performance.

This manual describes the installation with a Sony Playstation 3. For this installation a Playstation with 60GB was chosen, the used cooler can be different according to the revision. Please note that you should install the Liquid MetalPad with the methods set out within this manual, as it could otherwise damage your Sony Playstation 3. With tensioning your Sony Playstation 3 the warranty or defects liability period which is given by the manufacturer ceases.

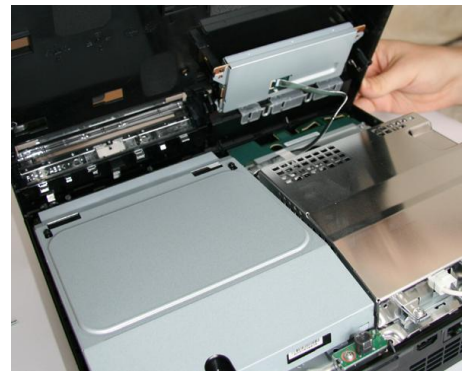
Attention: The Sony Playstation 3 has an emergency stop and warns the user, when the console got too hot. When the installation of the Coollaboratory Liquid MetalPad for consoles is correct, there isn't much fear of a shutdown and the cooling performance is improved once more. The performance of the Liquid MetalPad is also satisfactory devoid of the BurnIn, after the BurnIn at approx. 58°C the optimal performance potential of the product is displayed. Please notice that the cooler has enough contact pressure on both processors before start running.



Tensioning of the Playstation 3

Attention: Please be sure that the Sony Playstation 3 is disconnected completely from its power source and be very careful when disassembling. Please keep the order of the screws in mind, for the fast and problem-free assembly of the components of the Sony Playstation 3 after the installation of the Coollaboratory Liquid MetalPad.

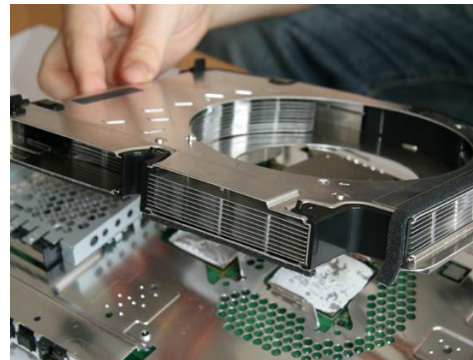
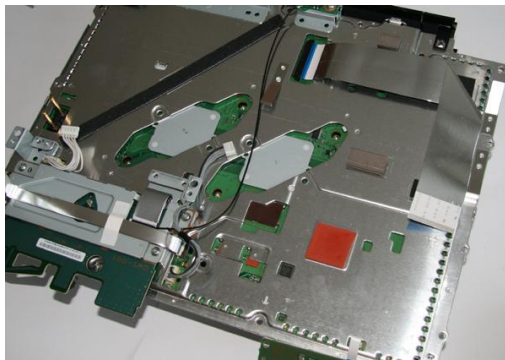
The Sony Playstation 3 has a cover, which has the Playstation writing on it. On the rear side is the warranty seal, behind that is the screw which is needed for the tensioning. With removing the warranty seal the guaranty and warranty by the manufacturer and seller ceases. After the removal of the cover some screws have to be unfixd. Then the Sony Playstation 3 can be opened carefully. Please notice that the connection leads are not ripped out of their fitting, but the arrestor is unfixd carefully and then the cable can be pull out.



After the removal of the Blue-Ray Player, the Front-Panel components and the power supply, the four screws for the cooler fitting have to be unfixd. These screws can be removed in inbuilt state or in the further process. If all sidwise screws of the fixing of the motherboard are unfixd and the hard disk is removed, the motherboard and the big cooler which in situated under it can be took out of the rear side of the Sony Playstation 3. When taking out, the motherboard has to be lifted from the rear side carefully.



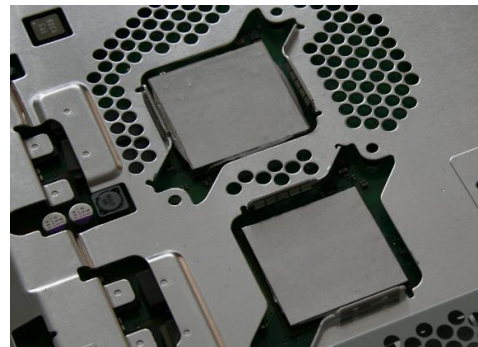
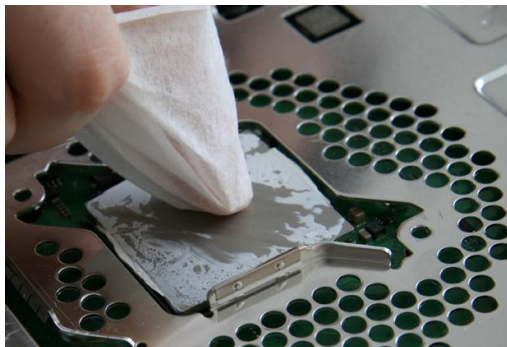
As soon as the four screws of the arrestor of the cooler have to be unfixd, the cooler can be detached carefully. The heat conduction paste, which was applied from the manufacturer, can possibly arrange a strong hold between cooler and processors. Therefore please move the cooler carefully a bit to left and to the right side. After short time and less expenditure of energy you can detach the cooler.



Installation of the Coollaboratory Liquid MetalPad

In normal case there is a heat-conductive paste between the CPU cooler and the processor. Non-metallic heat-conductive paste has the disadvantage that it cannot transfer the generated heat from the source to the cooler completely. Remove the old heat-conductive paste or heat-conductive pad from the cooler and processor. The surfaces have to be free of fats and residues. Particularly suitable are cleaning cloths, for example for cleaning glasses.

Please check the area of contact measures after cleaning the surfaces of the processor and cooler. The measure delivered by Coollaboratory is 42x42 millimeters. There is a small difference in size between the both processors (CELL und RCX), therefore it is necessary to customize the Liquid MetalPad with a cutting tool. The Liquid MetalPad should not overlap over the edges of the contact surface.



Put one Liquid MetalPad (after the cut) on each processor and then install the cooler on the processor.

Please test in advance if the processors and the cooler have enough contact pressure. This could be tested with a very thin layer of heat conduction paste after the first cleaning. Now you assemble the cooler on appro and then take it off again. The heat conduction paste should leave a mark of the processors on both coolers. If one or both cooler lay not orderly on the processors, is an installation without a modification of the metal cladding perhaps not possible.

Attention: If the cooler has none or not enough contact with the processor, we have to advise against the installation of the Coollaboratory Liquid MetalPad. Under these circumstances an Installation could lead to damages of the Sony Playstation 3. If you like to use our heat conduction pads nevertheless, the contact pressure should be guaranteed in advance.

Assembling of the Sony Playstation 3

After the cooler is assembled orderly and fixed with the backplates, you can assembly the Sony Playstation 3 again. Please do again all steps of the disassembly but this time backwards. Please notice that you use the correct screws and that the cables were fixed with the flap mechanism when fastening the data cables. (for example the ribbon cable of the Blue-Ray Player)

Please check again, that all components of the console are installed correctly, before the upper barrier and the cover are assembled. When the Sony Playstation 3 is assembled again, none of the screws should be left over. Please remember that you put the hard disk into the Playstation again and fix it with the arrestor lever.

BurnIn und completion of the Installation

For the completion of the installation the Coollaboratory Liquid MetalPad have to be melted. This happens likewise in the PC system with short-term achievement of the melting temperature of 58°C. After the BurnIn the Coollaboratory Liquid MetalPad unfolds its whole performance and conducts the heat to the cooler much more than a usual heat conduction paste.

Removing of the Coollaboratory Liquid MetalPad

If you want to remove the Liquid MetalPad, you can peel it off the both processors and coolers carefully. Depending on the structure of the surface it should peel off very easy and may leave small residues. You can remove these quickly and simply with the metal grinding pad.

You can also leave the residues in the depressions on the contact areas, because they rather improve the cooling performance when using other pastes.

Problems and solutions

- *The sound level of my Sony Playstation 3 is not improved.*

Unfortunately each console is different and individual where heat emission and sound level is concerned. Here a comparison is very difficult. By own internal tests the raise of the revolution speed of the radiator and also up to the avoiding of to high revolution speed stages could be reached. Customers are reporting different successes, but the former contact of the heat conduction paste of the manufacturer and the adjustments of the fan control is very important.

- *The cooler of my Sony Playstation 3 have no correct contact to the processors, is the application anyway possible?*

If the cooler has none or not enough contact with the processor, we have to advise against the installation of the Coollaboratory Liquid MetalPad. If there is no contact between processor and cooler, the Sony Playstation 3 can overheat and the Liquid MetalPad which lays on the processor could drop down at a temperature over 58°C. If you like to use our heat conduction pads nevertheless, the contact pressure should be guaranteed in advance.