


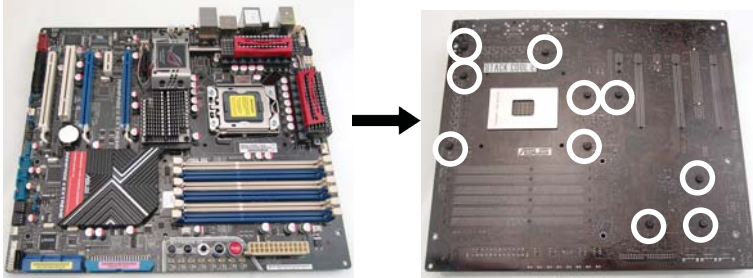
# 1 KOOLANCE Universal "MB" Motherboard Block Guide v 1.0

NOTE: Koolance full-coverage motherboard water blocks are designed for specific models. The corresponding board for each block is described on the Koolance website.

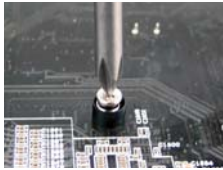


**CAUTION:** Removal of the original heat sink may void your manufacturer's hardware warranty. Please consult the manufacturer if unsure, and keep all original parts in case of a return/RMA.

 Your mainboard may use a variety of screws or plastic tabs to mount the stock heat sink(s). With the board upside-down, disassemble the heat sink by removing these screws or tabs. In some cases, there may be additional screws above the motherboard that require removal.



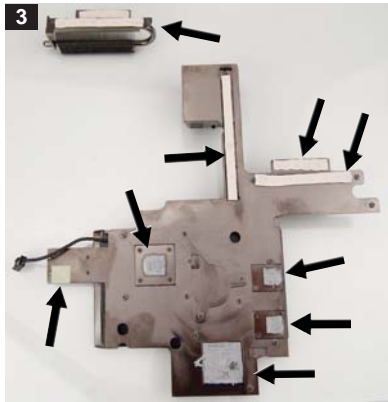
Typical heat sink screws



Removal with screwdriver

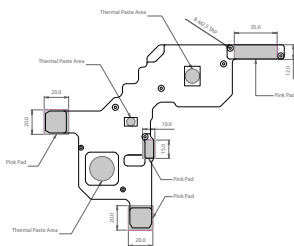


Remove plastic tabs using small pliers



Compare the stock heat sink to the new water block. Areas covered by thermal paste or pads on the original heat sink will require thermal interface material on the corresponding areas of the new water block.

If a diagram is included with your water block, use it to help locate the required locations of new thermal interface material. After cutting the pads (described below), attach them to the block in these areas.



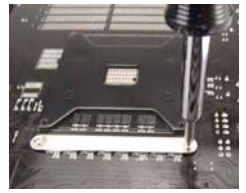
The thermal pad sheet must be cut into pieces needed for your motherboard contact areas. Use the diagram included with your water block to determine the approximate size and type (if multiple colors are included).

Gray thermal pads have plastic film on *both sides* that must be removed before application. White/Pink thermal pads only have plastic film on *one side* (white) that must be removed. Do this after cutting the proper shapes.



# 2

Keep watch for special areas beneath the motherboard that use separate mounting brackets or heat sink plates. These components might be reused by the Koolance water block.

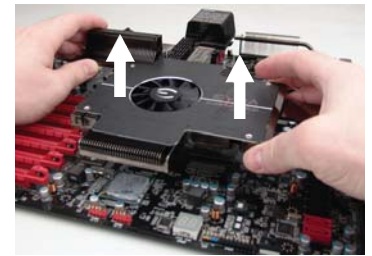
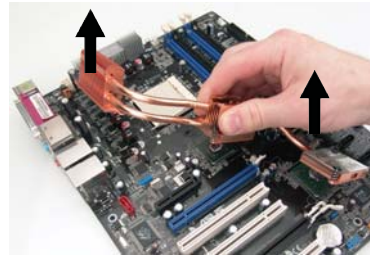


Separate heat sink bracket beneath VRReg area



Certain areas above the motherboard may use separate heat sinks. If the water block is designed to cool these areas, these additional heat sinks must be removed.

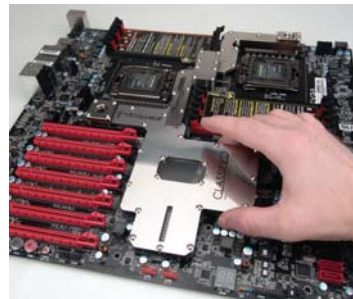
With all necessary screws and locking tabs removed beneath and above the motherboard, the heat sink assembly can now be **carefully** removed from the motherboard. Unplug any fan connections to the original heat sink.



Factory thermal paste may present additional resistance while removing the heat sink assembly. After removal, wipe any residual thermal material from the motherboard.

# 4

Thermal paste may be required on areas like chipsets and controller chips. Spread thermal compound on these areas thinly and evenly using the included paste packet, or a piece of thick paper (such as a business card).



With thermal material in place, carefully position the water block against the mainboard. Hold both together while turning the board upside-down to install the mounting screws.



If screws and insulating washers are included with your Koolance water block, use these to mount the block to the motherboard. If not, use the original heat sink's hardware to mount the water block.



Koolance mounting screw and insulation washer



If your water block has an option for LED lighting, slide each LED light into the small receptacles in the edge of the acrylic water block body. A small drop of hot glue can help hold each LED in place. The LED strip will connect to either a power supply or motherboard fan header, depending on its design.