

Installation manual for EK-RAM Monarch series water block

This product is intended for installation only by expert users. Please consult with a qualified technician for installation. Improper installation may result in damage to your equipment. EK Water Blocks assumes no liability whatsoever, expressed or implied, for the use of these products, nor their installation. The following instructions are subject to change without notice. Please visit our web site at <u>www.ekwb.com</u> for updates. Before installation of this product please read important notice, disclosure and warranty conditions printed on the back of the box.

Before you start using this product please follow these basic guidelines:

- 1. Please carefully read the manual before through before beginning with the installation process!
- 2. Please remove your motherboard from the computer to assure safest mounting process in order to prevent any possible damages to your CPU and/or motherboard's circuit board (PCB).
- 3. The EK High Flow and EK-PSC type fittings require only a small amount of force to screw them firmly in place since the liquid seal is ensured by the rubber o-ring gaskets.
- 4. The use of corrosion inhibiting coolants is always recommended for any liquid cooling system.

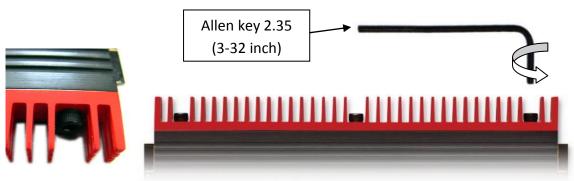
STEP 1: GENERAL INFORMATION. Sample picture of Corsair® Dominator® GT memory module



STEP 5: APPLYING THERMAL COMPOUND

STEP 2: REMOVING THE STOCK COOLER.

Using the encased allen key please remove all three encircled screws in order to remove the factory installed aluminum heatsink fins. All heatsink assembly screws should be removed. Keep the two out of three original 3-32 screws (of each memory module) as you will need them later.



STEP 3: CLEANING THE SURFACES

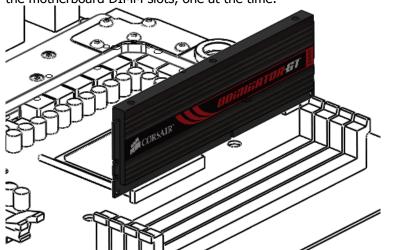
Carefully detach the original stock cooler after removing **all** screws securing it to the board. Wipe off the remains (by using non–abrasive cloth or *qtip*, as shown on sample photo) of the original thermal compound until the components and circuit board are completely clean. EKWB recommends the use of denatured alcohol for removing TIM leftovers.



STEP 4: INSTALLING THE MEMORY MODULES

Please install all (two or four – depending on your water block variant) of your Corsair® Dominator® GT memory modules into the motherboard DIMM slots, one at the time.

Apply thermal compound: lightly coat the top of the DIMM modules with <u>electrically non-conductive</u> thermal compound - for example Arctic Cooling MX-2 $^{\text{TM}}$, MX-4 $^{\text{TM}}$ or GELID GC-Extreme $^{\text{TM}}$. EKWB recommends to apply thermal grease in line form due to the specific design of this water block (see sample picture). Avoid applying the paste into the threaded openings!

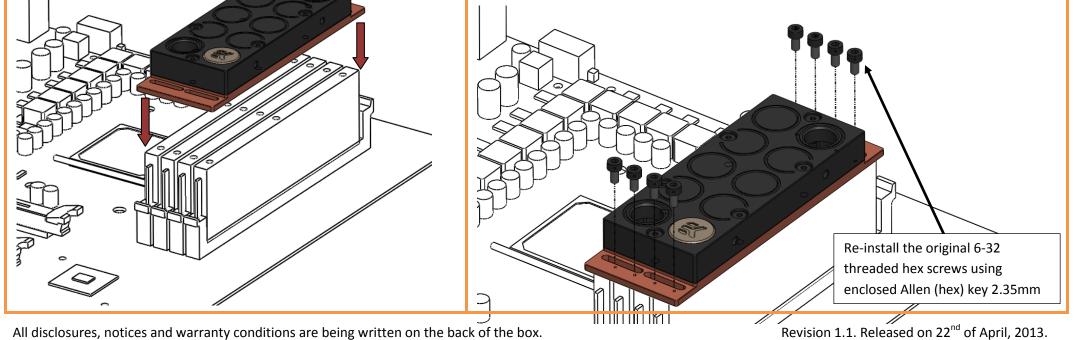


STEP 6: PLACING BLOCK ON DIMM MODULES

During this process please make sure you align threaded holes on the memory modules with holes on the water block.

STEP 7: ATTACHING BLOCK TO DIMM MODULES.

By using 3-32 inch allen key screw in the original 3-32 screws provided with every Corsair® Dominator® memory module. EKWB recommends start screwing the other most screws and continue inwards. Do not tighten the screw completely until you have aligned all memory modules as straight as possible.



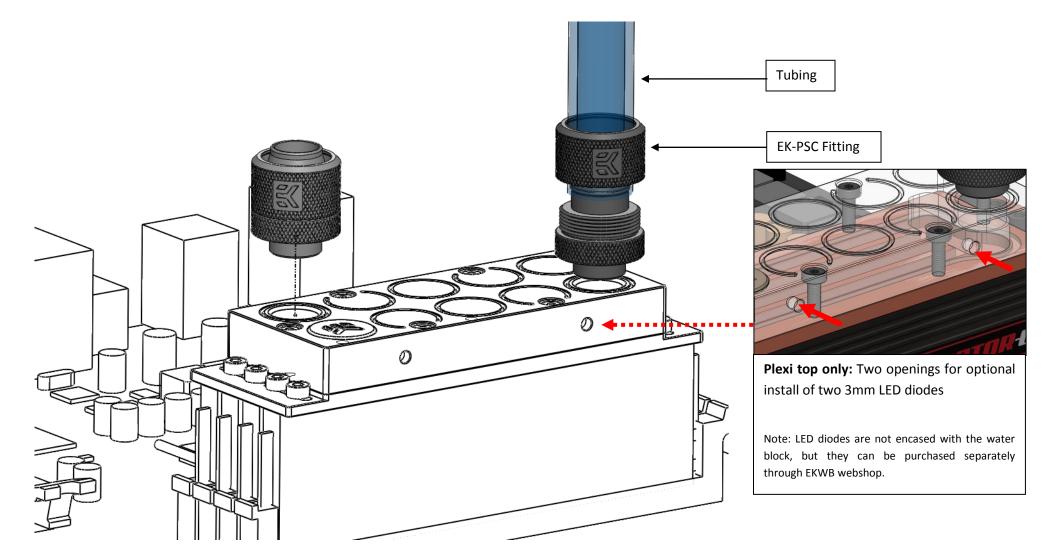
STEP 8: CHECKING FOR CONTACTS

Temporarily remove the water blocks to check for uniform surface contact between the block and the components. Note the pattern of contact on a piece of paper. Then repeat steps 5 to 7 to reattach the block applying more or less pressure to the areas where you have found it necessary.

STEP 9: POSITIONING FITTINGS

Screw in the two G1/4 threaded male fittings. Attach the liquid cooling tubes and connect the water-block(s) into the cooling circuit. EKWB recommends using EK-PSC fittings with the EK-RAM Monarch series water blocks. To ensure that the tubes are securely attached to the barb/fittings, please use hose clamps or an appropriate substitute. The barb hose fittings require only a small amount of force to screw them in; otherwise the high flow fittings might break. These fittings do not need to be tightened with much force because the liquid seal is made using o-rings.

Any G1/4 opening can be used as an inlet/outlet port or vice versa, flow orientation is not important and is thus not prescribed.



VERY IMPORTANT NOTICE:

Once the installation is completed, it is a recommended practice to test the cooling circuit for leaks prior to powering up the computer. We recommend a 24 hour leak test prior to powering up the computer. Do not test the water block using city tap water pressure. This will rupture the top of the housing and render the block unusable (and will void your warranty).

IMPORTANT DISCLOSURES:

While all efforts have been made to provide the most comprehensive tutorial possible, EKWB assumes no liability expressed or implied for any damage(s) occurring to your components as a result of using EKWB cooling products, either due to mistake or omission on our part in the above instructions, or due to failure or defect in the EKWB cooling products.

WARRANTY:

Our products are warranted against defects in materials or workmanship for a period of 24 months beginning from the date of delivery to the final user. During this period, products will be repaired or have parts replaced at our discretion provided that: (I) the product is returned to the agent from whom it was purchased; (II) the product has been purchased by an end user and has not used for commercial purposes; (III) the product has not been misused, handled carelessly, or used in a manner other than in accordance with the instructions provided describing its installation and proper use. This warranty does not confer rights other than those expressly set out above and does not cover any claims for consequential loss or damage. This warranty is offered as an extra benefit and does not affect your statutory rights as a consumer.

LEGAL DISCLAIMER:

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All disclosures, notices and warranty conditions are being written on the back of the box.

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