Installation and mounting manual for EK-VGA Supremacy HWBOT Edition 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 www.ekwb.com 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. **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.**
3. **This product is not compatible with EK-PSC compression fittings bigger than 10mm!**
4. **The use of quality, market proved corrosion inhibiting coolants is always strongly recommended for any liquid cooling system.**

STEP 1: GENERAL INFORMATION

Please remove your card from the computer to assure safest mounting process possible in order to prevent any possible damages to your PCB. Picture bellow represents the correct orientation of jet plate.
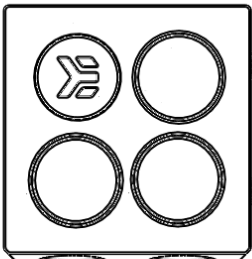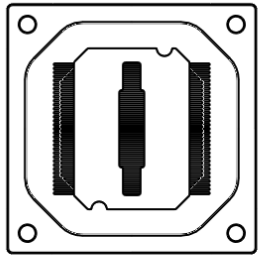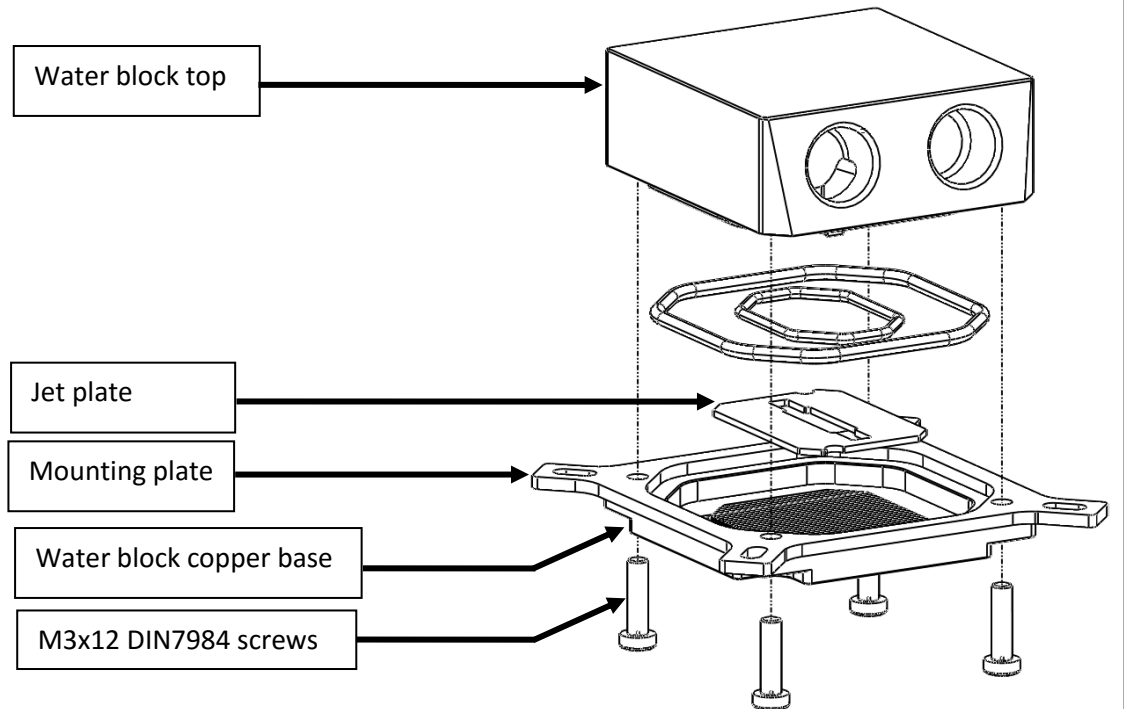

CORRECT
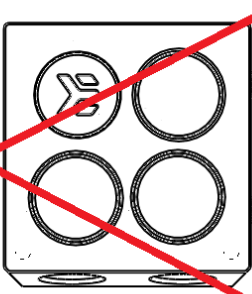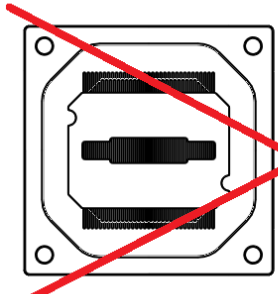
INCORRECT

STEP 1 cont.: GENERAL INFORMATION

Water block top

Jet plate

Mounting plate

Water block copper base

M3x12 DIN7984 screws

STEP 2: PREPARING YOUR HARDWARE

CLEANING THE GPU. Wipe off the remains (by using non–abrasive cloth or *qtip*) 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.

APPLYING THERMAL COMPOUND: lightly coat GPU chip with enclosed Gelid GC-Extreme™. EKWB recommends to apply thermal grease in cross form for best performance (see picture below).
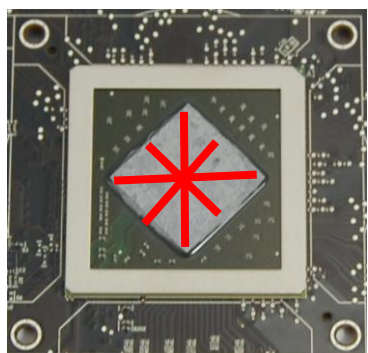
"NAKED" GPU
e.g. Radeon HD 6970
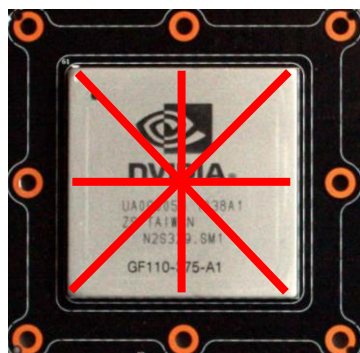
GPU WITH HEATSPREADER
e.g. GeForce GTX 580

Tahiti XT / Pro GPU
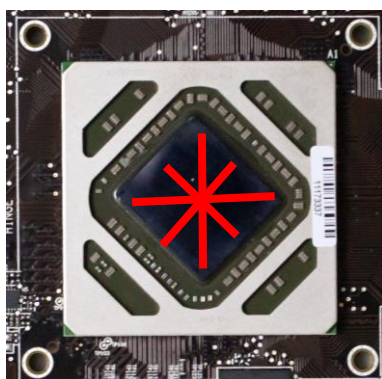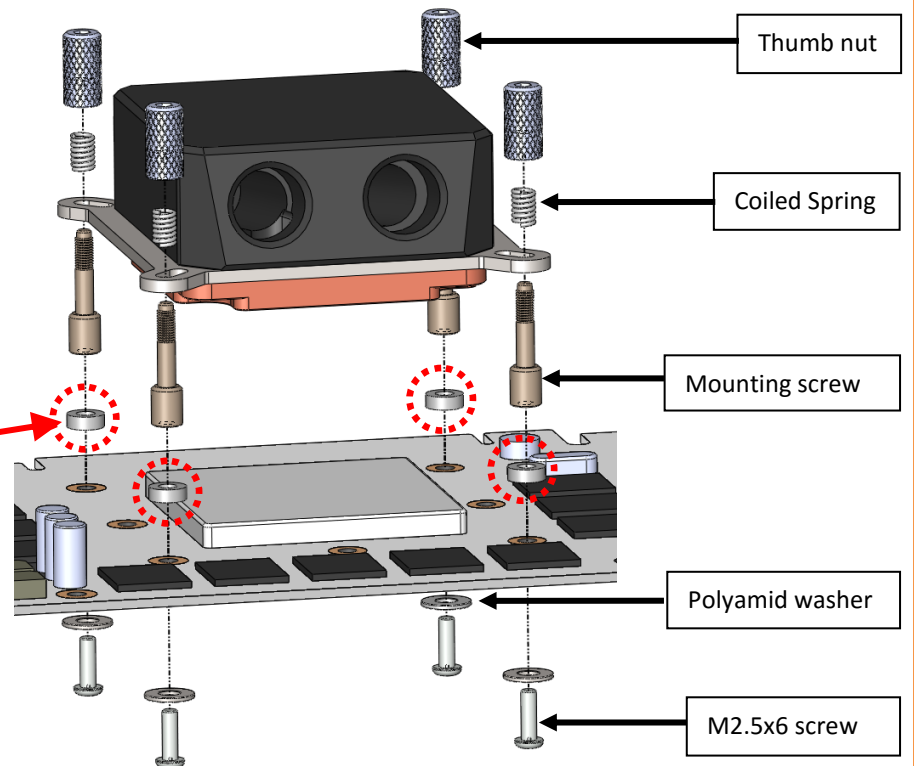e.g. Radeon HD 7970/7950

STEP 3: ATTACHING WATERBLOCK

Please make sure to install the waterblock so the G1/4 threaded inlet/outlet ports are turned away from the PCI-e connector slot! Only this way you will be able to connect block properly into loop.

Thumb nut is to be fastened by hand. Please use enclosed allen key only if necessary. Once thumb nut can't be turned any more the maximum mounting force has been reached.
If the mounting screw eventually starts turning maximum force has been reached.

!!!VERY IMPORTANT!!!

GPU WITH HEATSPREADER (IHS): Use standoffs (2.1mm)
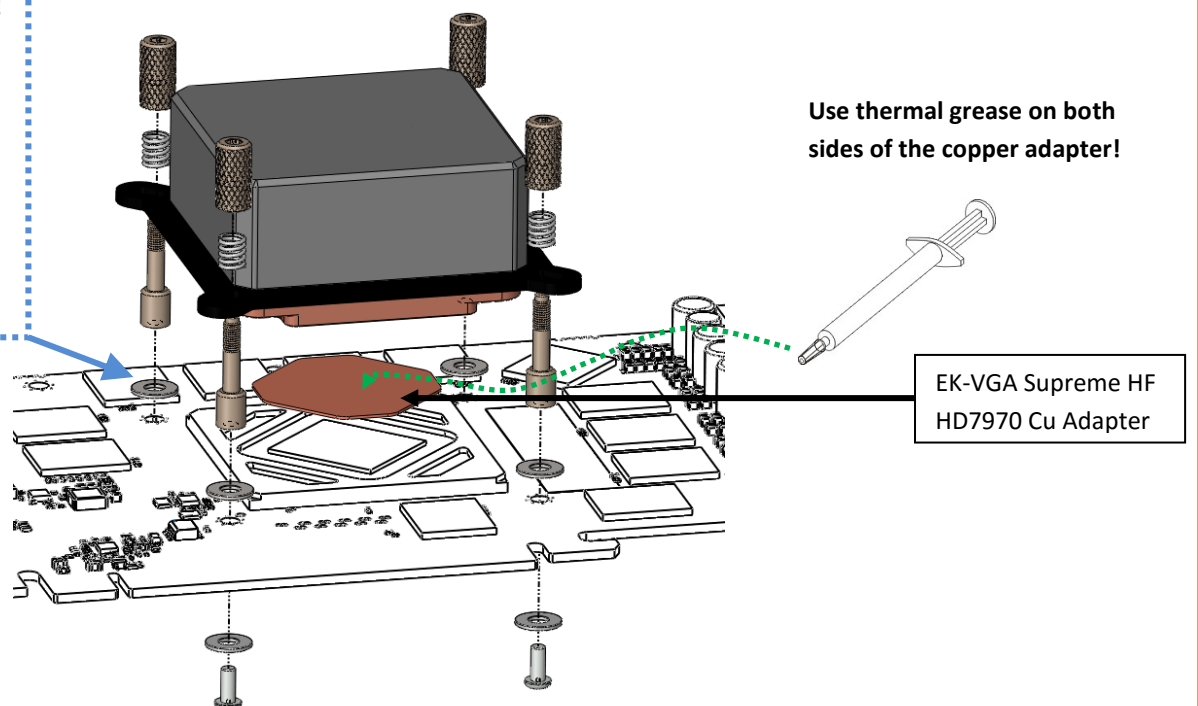**»NAKED« GPU:** Replace standoffs with enclosed 0.8mm PVC washers.

Thumb nut

Coiled Spring

Mounting screw

Polyamid washer

M2.5x6 screw

!!!VERY IMPORTANT!!!

Tahiti XT/PRO GPU: Use enclosed 0.5mm PVC washers on both side of the PCB. Do not use POM standoffs!

Use thermal grease on both sides of the copper adapter!

EK-VGA Supreme HF HD7970 Cu Adapter

STEP 4: CONNECTING WATERBLOCK

Carefully identify the direction of the flow in your circuit. For the EK-VGA Supremacy series water block to operate properly <u>it is mandatory</u> to use the dedicated INLET/OUTLET openings as shown on picture below. To ensure that the tubes are securely attached to the barb/fittings, please use hose clamps or an appropriate substitute.

RAM IC	VRM IC
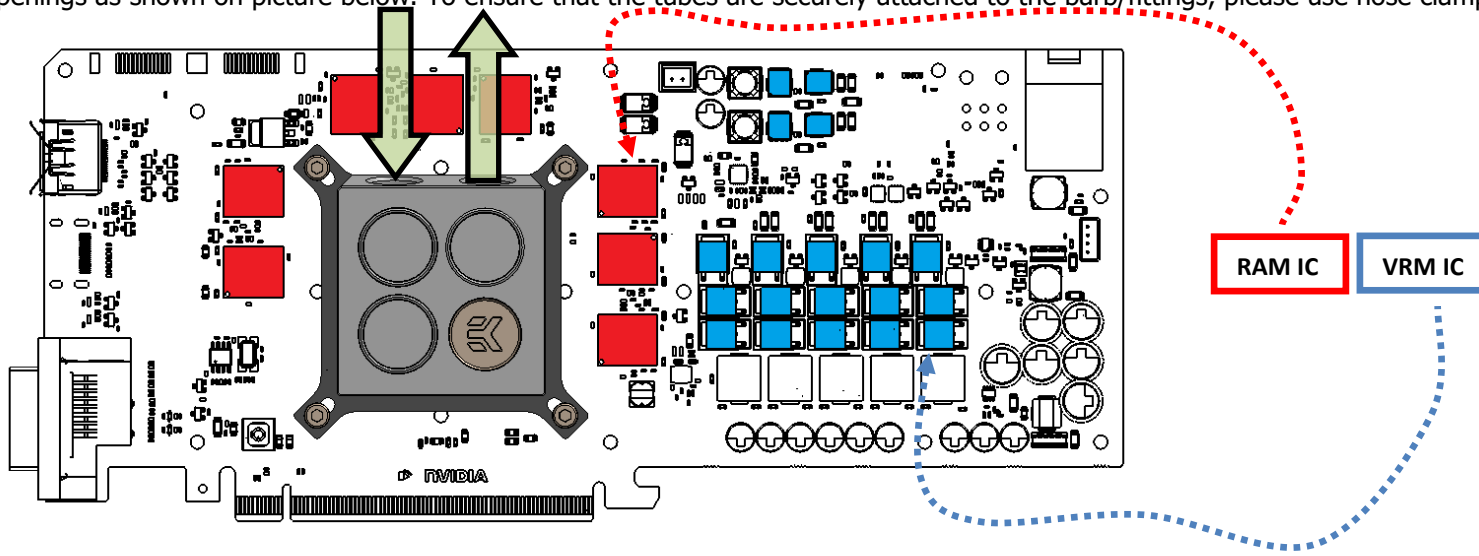
All chips, marked **RED** and **BLUE**, must be passively cooled. This is an example shown on GTX 680 reference design graphics card. EK suggests users to check their factory cooling solution and locate the ICs which are being actively cooled besides the GPU itself. We recommend applying self-adhesive heat-sinks on the same IC.
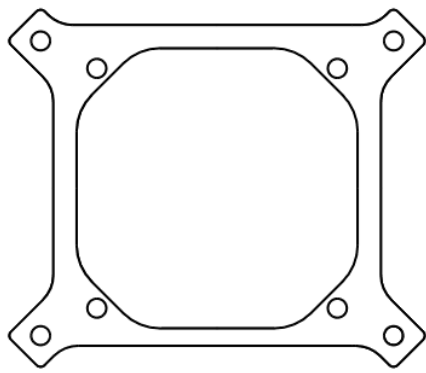
It is important to cool VRM- and RAM IC on modern high-performance graphics cards!
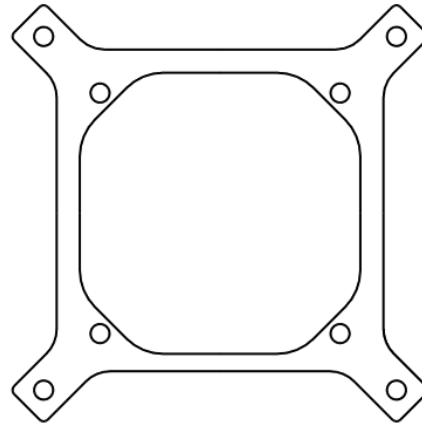
ADDITIONAL MOUNTING PLATE OVERVIEW

This product comes with additional mounting plates which even further expand the compatibility of EK-VGA Supremacy series water block. Please consult EK Cooling Configurator at http://www.coolingconfigurator.com for detailed compatibility list. Please note that due to the shear size of EK-VGA Supremacy the water block needs to be rotated 45° (in any direction) when using Mounting plate VGA Supremacy HD6770, furthermore it uses only two mounting holes.

Please follow STEP 1 on how to disassemble the EK-VGA Supremacy HWBOT Edition water block and install alternative mounting plate! Use enclosed Allen Key 2mm
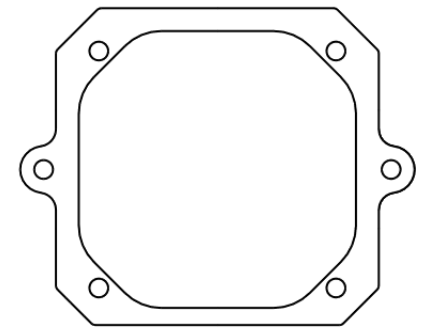
Mounting plate VGA Supremacy GF560	**Mounting plate VGA Supremacy GF2x0**	**Mounting plate VGA Supremacy HD6770**

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IMPORTANT DISCLOSURES

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 water pressure. This will rupture the top of the housing and render the block unusable (and will void your warranty). While all efforts have been made to provide the most comprehensive tutorial possible, EK Water Blocks assumes no liability expressed or implied for any consequential damage(s) occurring to your equipment as a result of using EK Water Blocks cooling products, either due to errors or omissions on our part in the above instructions, or due to failure or defect in the EK Water Blocks cooling products.

REQUIRED TOOLS:

philips screwdriver