ekwb
Installation and mounting manual for EK-VGA Supreme HF water block
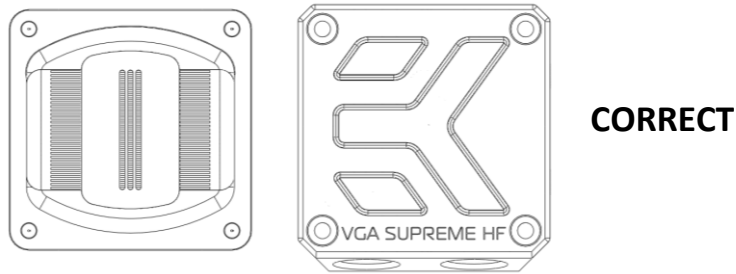## with "Easy Mount" mounting system

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.ekwaterblocks.com for updates. Before installation of this product please read important notice, disclosure and warranty conditions printed on the back of the box.
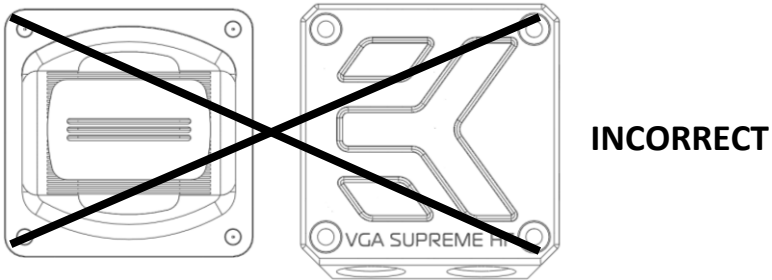
The barb hose fittings require only a small amount of force to screw them in; otherwise the high flow fittings might break. These fittings do not need to be tightened with much force because the liquid seal is made using o-rings. EK recommends only market tested premixed coolants with anticorrosion additive and algaecide for your 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.
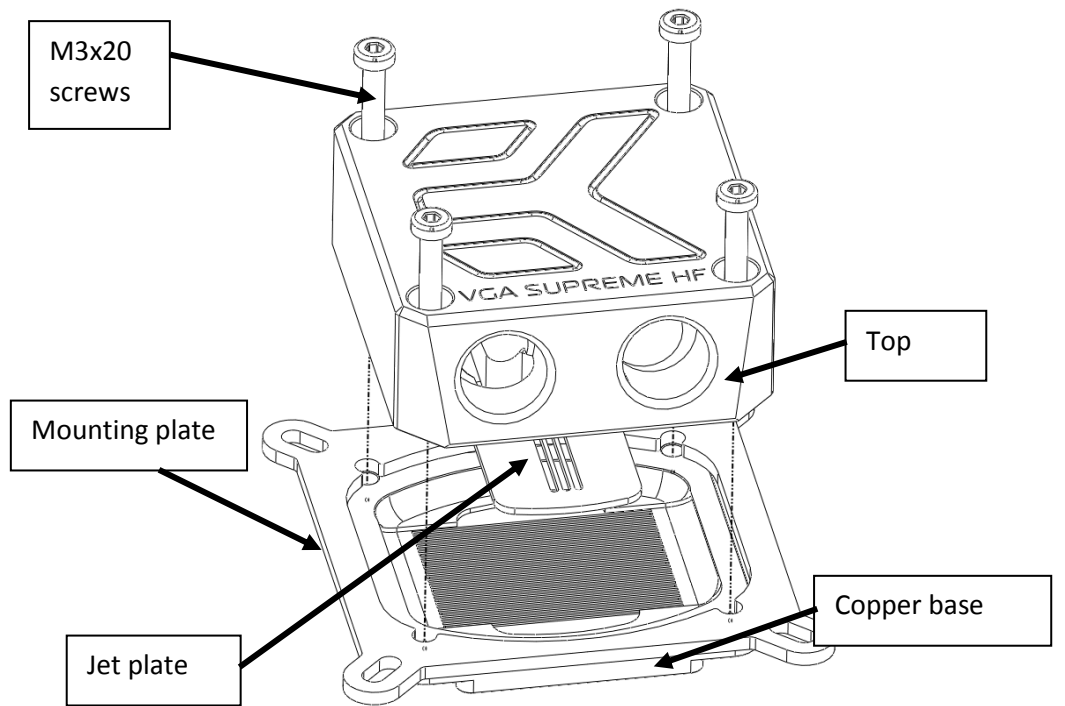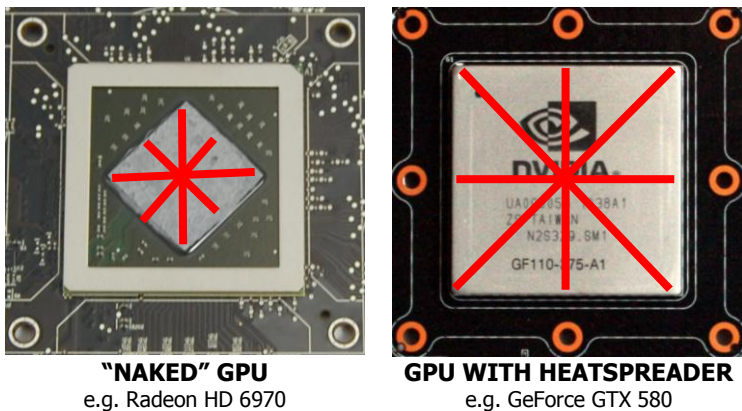

CORRECT

INCORRECT

STEP 1 cont.: GENERAL INFORMATION

- M3x20 screws
- Top
- Mounting plate
- Copper base
- Jet plate

STEP 2: PREPARING YOUR HARDWARE

CLEANING THE GPU. Wipe off GPU (by using non–abrasive cloth or Q-tip). EKWB does not recommend using any liquids for removing paste.

APPLYING THERMAL COMPOUND. Apply thermal compound: lightly coat GPU chip with for example Arctic Cooling MX-2 ™ or MX-4 ™ thermal grease. 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

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.
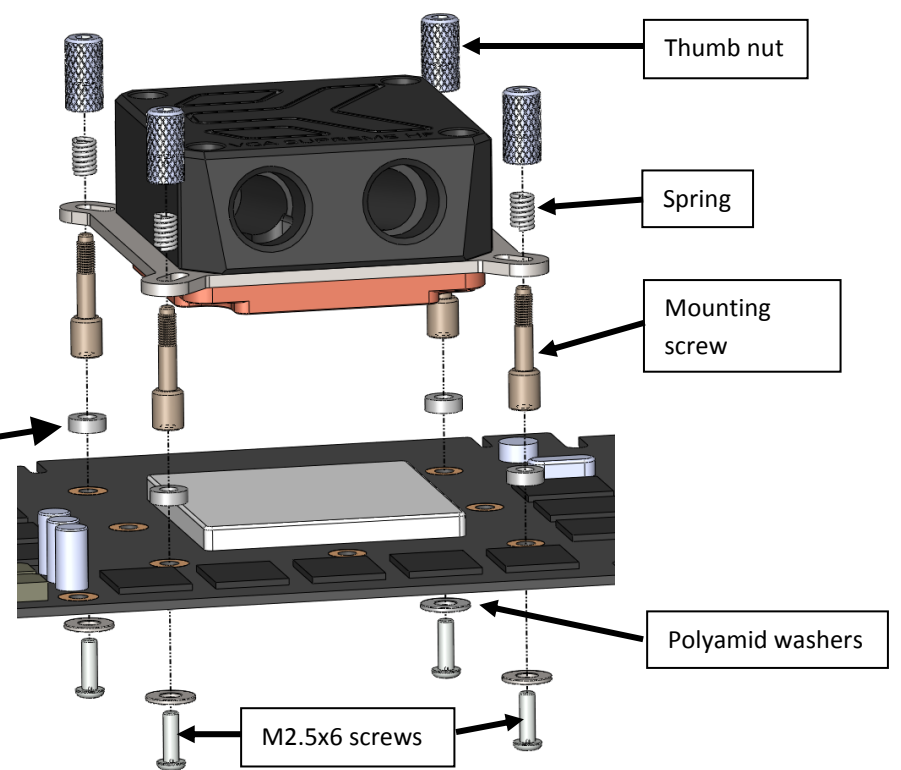If the mounting screw eventually starts turning maximum force has been reached.

!!!VERY IMPORTANT!!!

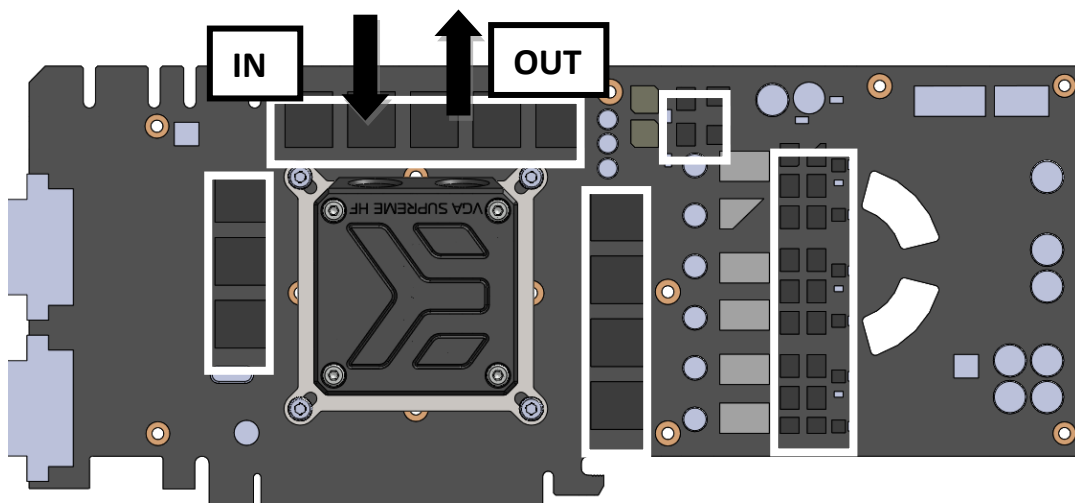**GPU WITH HEATSPREADER (IHS):**
Use standoffs (2.1mm)

»NAKED« GPU:
Replace standoffs with enclosed 0.8mm PVC

- Thumb nut
- Spring
- Mounting screw
- Polyamid washers
- M2.5x6 screws

STEP 4: CONNECTING WATERBLOCK

Carefully identify the direction of the flow in your circuit. For the EK-VGA SUPREME HF series water block to operate properly it is mandatory 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.

IN   OUT

All encircled chips must be passively cooled. This is only an example shown on GTX 480 reference design card. EK suggest you check stock cooler and find out which chips are being cooled by it and place heat sinks on same spaces that are being left exposed. Only this way you will provide some heat transfer from chips, thus optimizing performance of your system.

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.