

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](http://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.

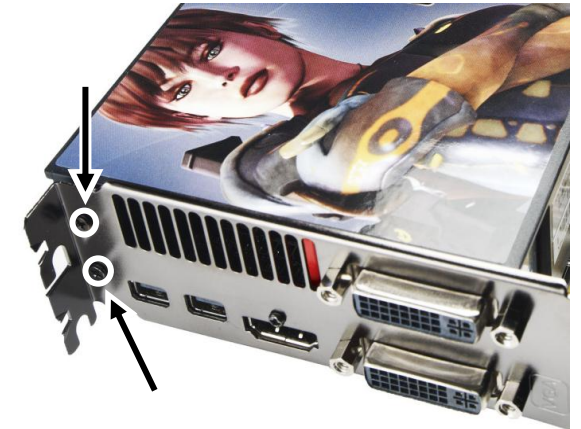
**The barb hose fittings require only a small amount of force to screw them in; otherwise the high flow fittings might break. These fittings do not need to be tightened with much force because the liquid seal is made using o-rings. The use of an algaecide and corrosion inhibitors is always recommended for any liquid cooling system.**

**STEP 1: GENERAL INFORMATION.** Sample picture of RADEON HD 6970 graphics card



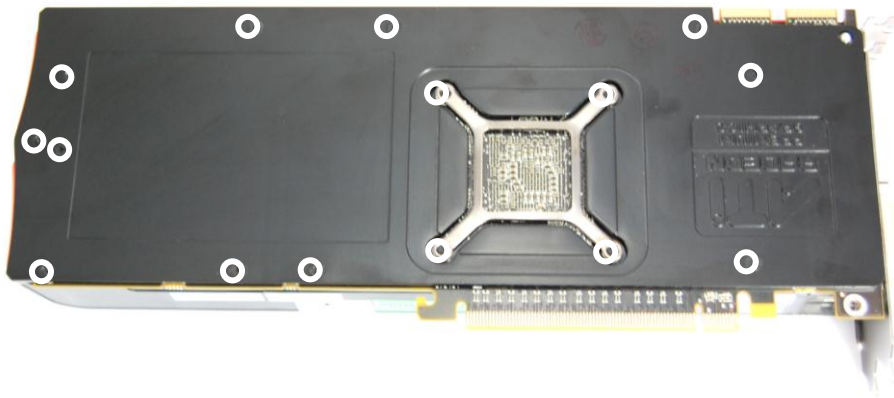
**STEP 2: PREPARING YOUR GRAPHIC CARD.**

1. REMOVING STOCK COOLER: Remove encircled screws:



**STEP 2 cont.: PREPARING YOUR GRAPHIC CARD.**

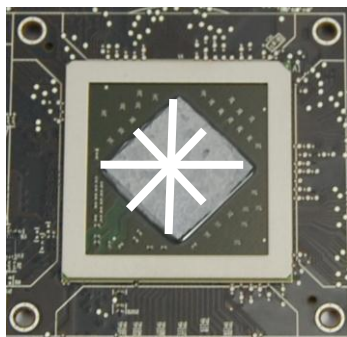
1 cont.. REMOVING STOCK COOLER. Remove all encircled screws. All heat sink assembly screws and backplate should be removed. There are 15 screws on the back of the graphic card.



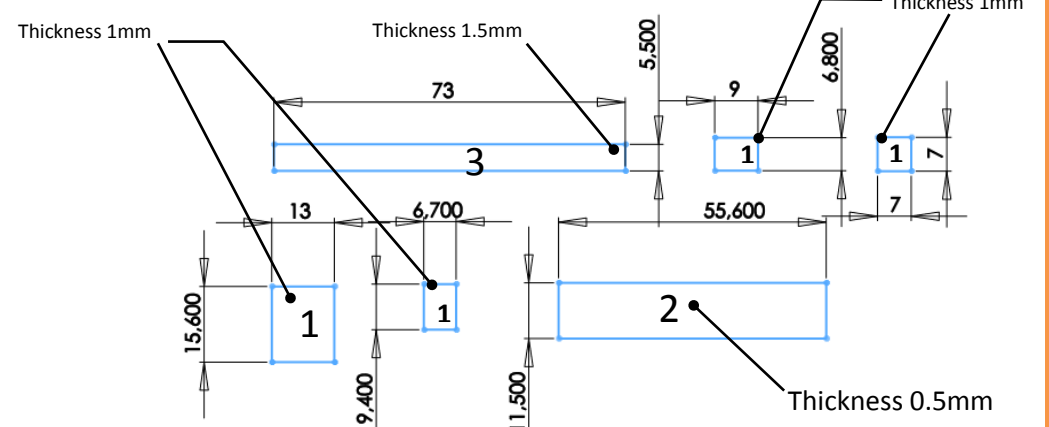
2. CLEANING THE PCB. Carefully detach the original heat sink after removing all fasteners securing it to the board and bracket. Wipe off the remains (by using non-abrasive cloth or Q-tip, as shown on sample photo) of the original thermal compound until the components and circuit board are completely clean. EKWB does not recommend using any liquids for removing paste.



3. APPLYING THERMAL COMPOUND. Apply thermal compound: lightly coat both GPUs and bridge chip with electrically non-conductive thermal interface material (TIM) - for example: Arctic Cooling MX-2™ or MX-4™ thermal grease. EKWB recommends to apply thermal grease in cross form for best performance (see sample picture).



4. CUTTING THERMAL PADS. Your block comes with thermal pads, which have to be placed on chips (PLEASE REMOVE FOIL ON BOTH SIDES OF THERMAL PADS PRIOR TO INSTALLATION. WARNING: DIMENSION BELOW ARE SCALED.)

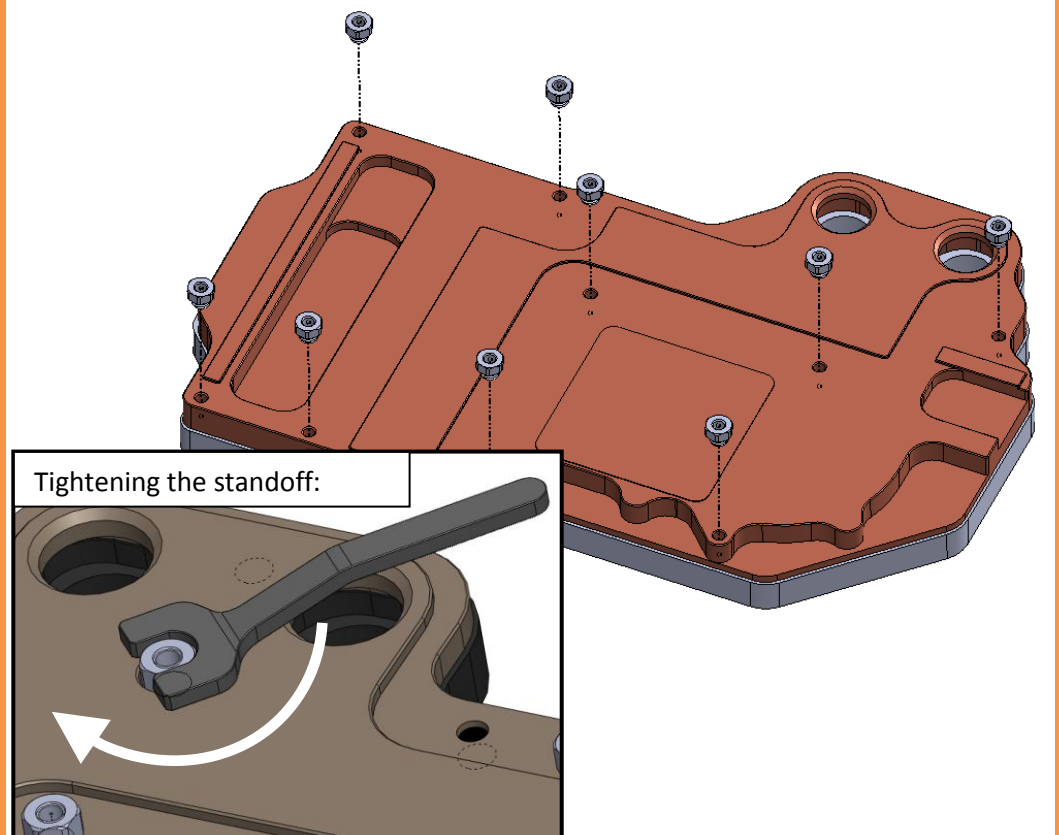


5. PLACING THERMAL PADS ON PCB. Place thermal pads on chips so that numbers on chips match size of thermal pads. Thermal pad number 2 and 3 will have to be cut by user to match all small power regulation chips (EKWB made sure users have more than enough pads to cover all surfaces that need to be covered to make block fully function). You can also use small drop of thermal grease on chips to make thermal pads more adhesive.



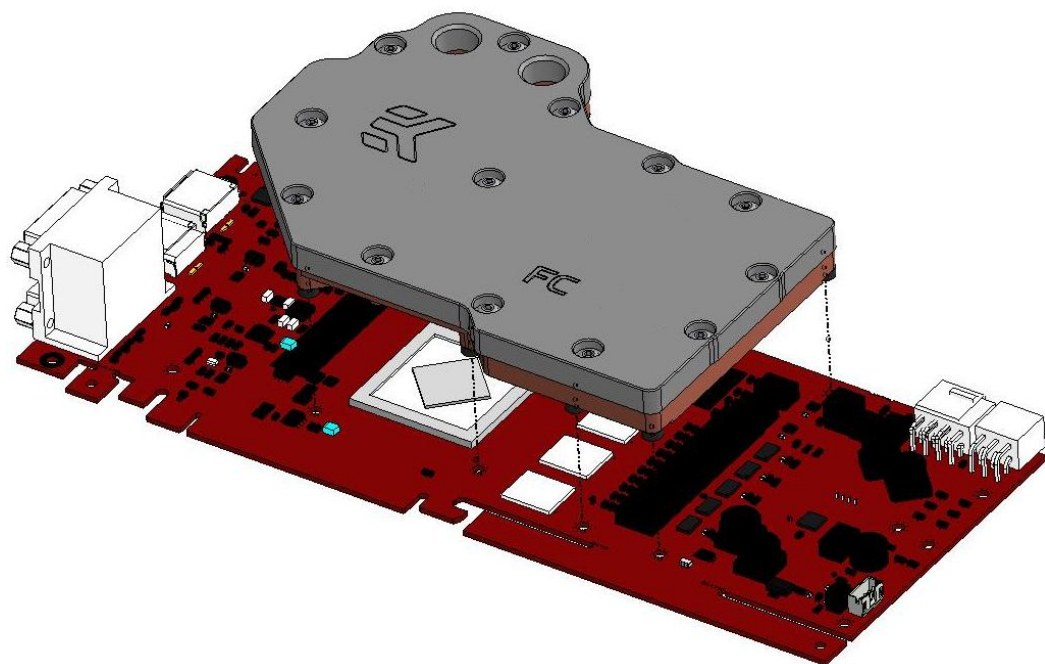
We highly recommend using small droplets of non-conductive thermal grease over each phase regulator!

6. PLACING STANDOFFS ON BLOCK. Brass standoffs are obligatory in order to attach this water block to the printed circuit board of the graphics card. Please use the encased key to screw them to the copper base of the water block.





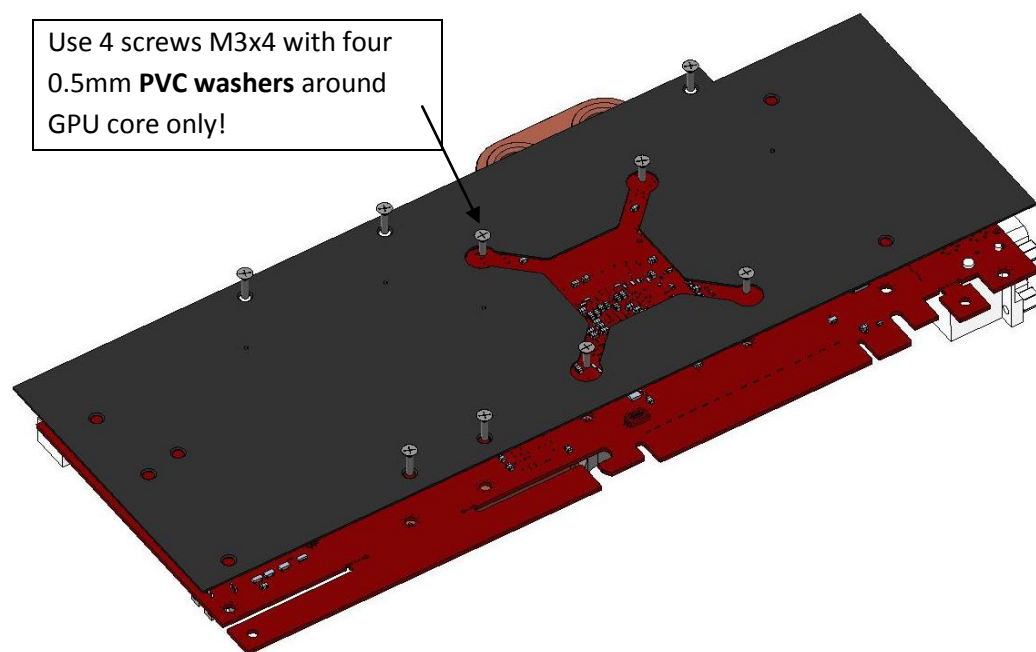
7. PLACING BLOCK TO GRAPHIC CARD. During this process please make sure you align mounting openings on PCB with threaded openings on block. Also pay attention not to use too much force by pressing block down to PCB. Chips are prone to cracking.



8. ATTACHING BLOCK TO GRAPHIC CARD. Please place back stock backplate without retention backplate of the GPU. By using Philips screwdriver screw in the enclosed M3x6 screws through the backplate into the block and M3x4 screws around GPU. EKWB recommends start screwing the screws around the GPU core and continue outwards.

**Alternative mounting method without backplate:** Use nine encased M3x4 screws and nine 0.5mm PVC washers only!

Use 4 screws M3x4 with four 0.5mm PVC washers around GPU core only!

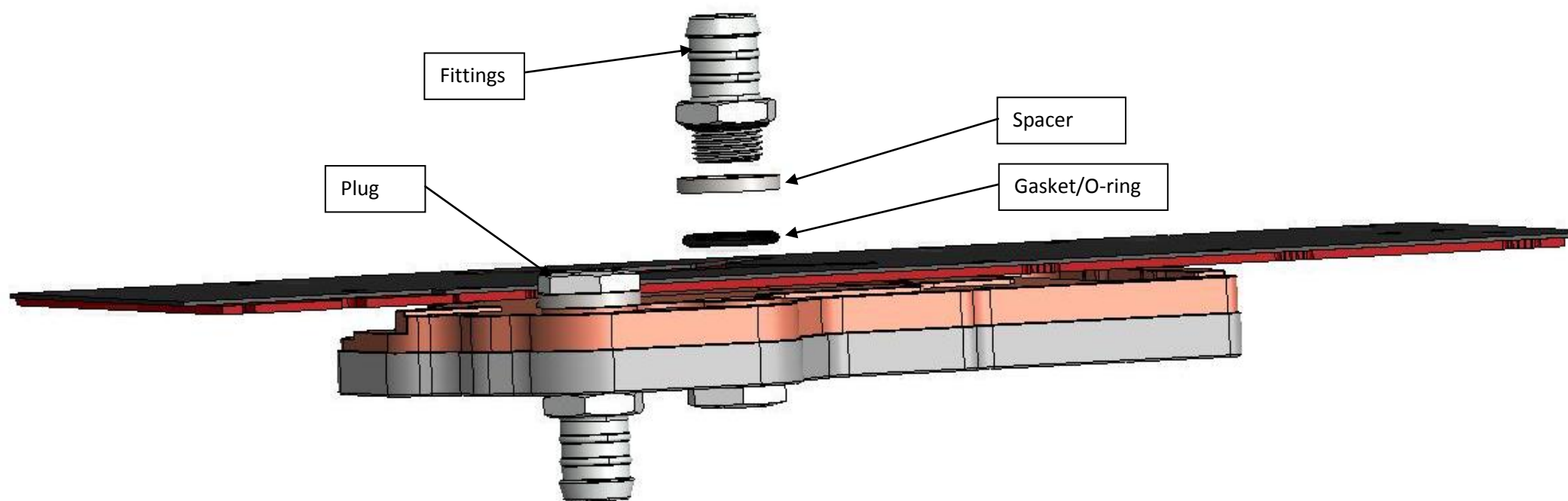


### STEP 3: CHECKING FOR CONTACTS

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 and 8 to reattach the block applying more or less pressure to the areas where you have found it necessary.

### STEP 4: POSITIONING FITTINGS

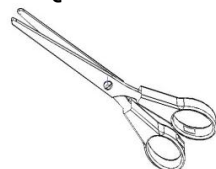
Please use spacer on copper base (see sample picture). Screw in the fittings and plugs (please use spacers only on copper base), attach the liquid cooling tubes and connect the water-block(s) into the cooling circuit. EKWB recommends using high flow fittings with the EK-FC 6970 series water blocks. To ensure that the tubes are securely attached to the barb/fittings, please use hose clamps or an appropriate substitute. The use of an algacide is always recommended for any liquid cooling system. You can use any opening as an inlet/outlet hole.



### STEP 5: INSERTING CARD IN YOUR PC CASE

Carefully lift your card with installed block and insert it in your PC case. Bear in mind that your card suddenly withstands extra weight thus again be very careful not to bend it or cause any other unneeded moves that might damage your card or block during installation.

### REQUIRED TOOLS AND MOUNTING SCREWS:



scissors



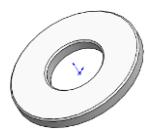
philips screwdriver



5 x screws M3x6 DIN965



4x (9x alternatively) screws M3x4 DIN7985



4x (9x alternatively) M3 PVC washers