

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. Please remove your graphic card from the computer to assure safest mounting process in order to prevent any possible damages to your component circuit board (PCB).
3. The EK-HFB and EK-ACF 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.

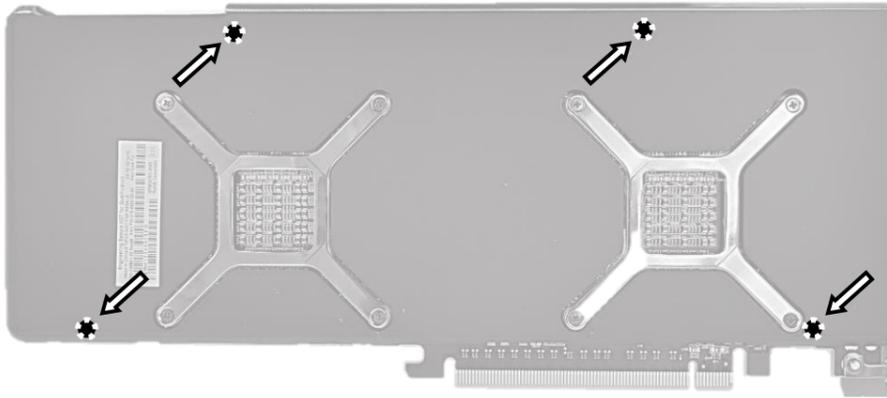
BAG CONTENT: Bag content is universal for all water blocks, you may not need all screws.

M2.5x4 AX1 20pcs	M2.5x6 AX1 6pcs	M3x4 DIN7985 2pcs	M2.5 PVC washer 22pcs

			(box intentionally left blank)
Thermal grease 1pc	EK plug G1/4 2pcs	6mm Allen key 1pc	
Replacement mounting mechanism: Radeon Pro Duo (EAN: 3831109872192)			

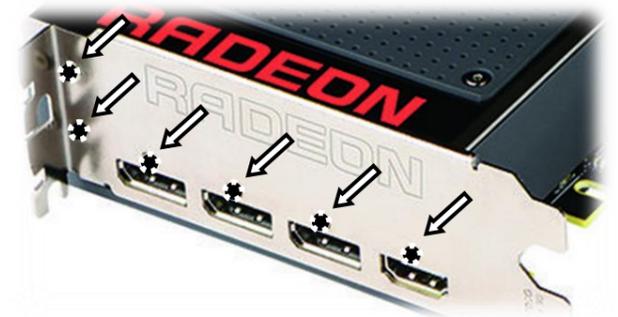
STEP 1: PREPARING YOUR GRAPHIC CARD.

REMOVING FACTORY PROVIDED BACKPLATE: Remove all encircled screws. There are up to 4 (four) screws on the graphics card backplate.



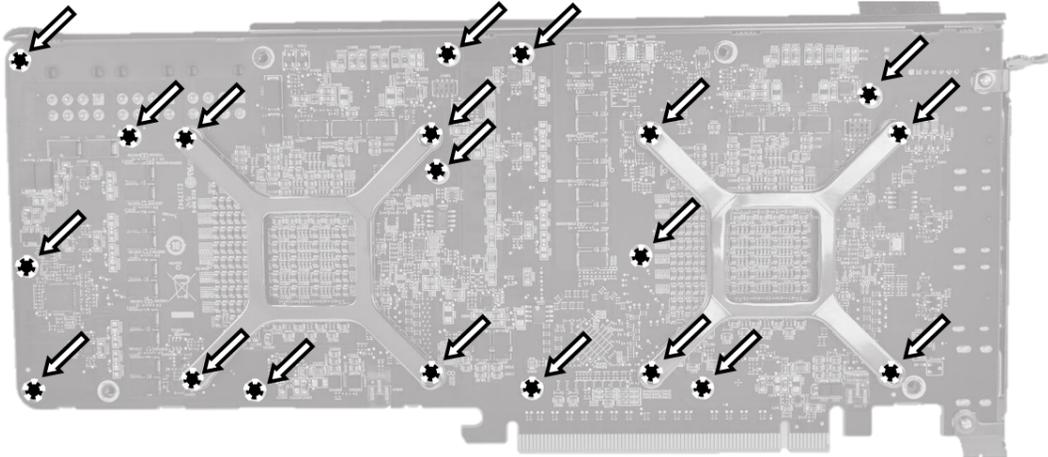
STEP 2: PREPARING YOUR GRAPHIC CARD.

1. REMOVING STOCK COOLER and BRACKET: Remove encircled screws on the bracket using Philips head screwdriver, including the four smaller ones above each DP/HDMI video outputs.

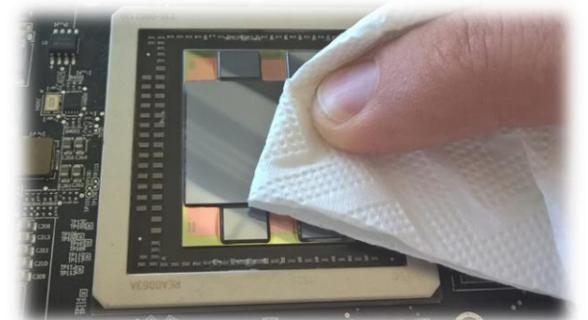


STEP 3: PREPARING YOUR GRAPHIC CARD

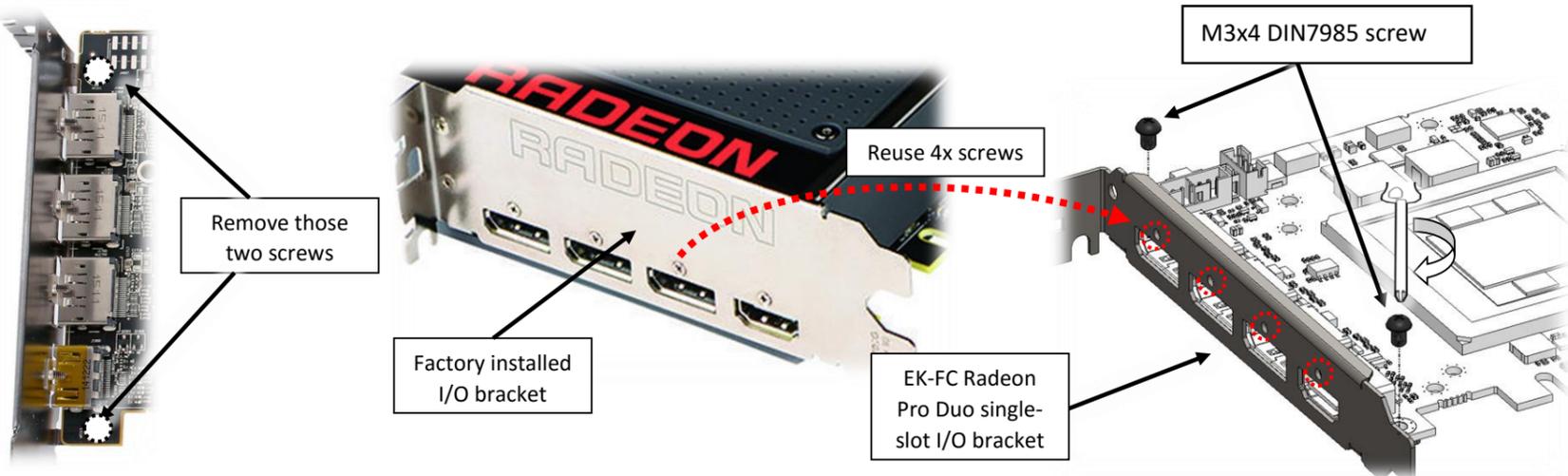
REMOVING STOCK COOLER. Remove all encircled screws. All heat sink assembly screws should be removed, including self-adhesive washers on both sides of the PCB (if present). There are up to 20 screws on the back of the graphics card. After you remove the housing do not forget to unplug the fan.



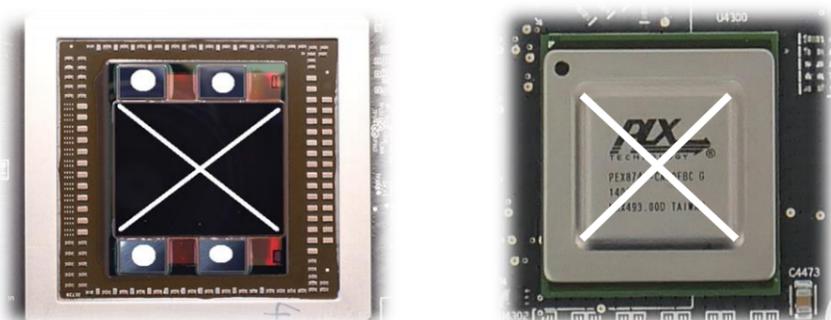
2. CLEANING THE PCB. Carefully detach the original stock cooler after removing all screws securing it to the board. Wipe off the remains (by using non-abrasive cloth or *qtip*, as shown on sample photo) of the original thermal compound until the components and circuit board are completely clean. EKWB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



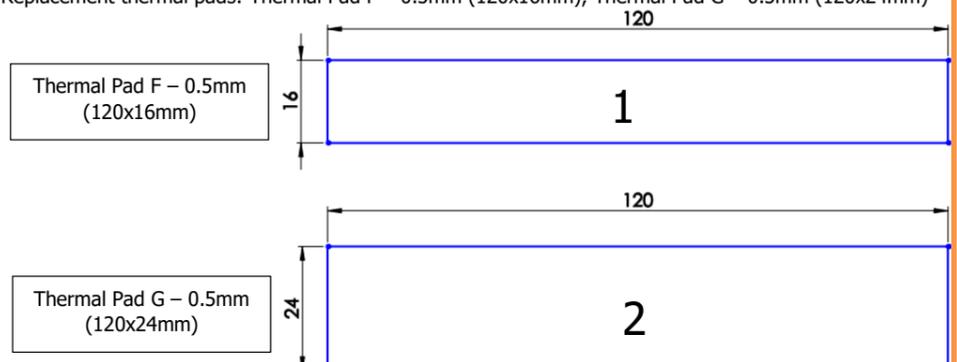
3: REPLACING THE ORIGINAL I/O BRACKET Remove two Philips screws securing the original two-slot I/O bracket to the circuit board. Remove the four screws that secure the tab of the I/O bracket to the circuit board as well. Replace the original I/O bracket with enclosed EK-FC Radeon Pro Duo single-slot I/O bracket and install it using four original screws and use it on single slot bracket. Secure the bracket tab using M3x4 DIN7985 screws.



4. APPLYING THERMAL COMPOUND. Apply thermal compound: lightly coat AMD chip (GPU + HBM stack) with enclosed EK-TIM Ectotherm™ thermal grease. EKWB recommends to apply thermal grease on GPU in cross form for best performance (see sample picture). Apply dot of TIM on each HBM module die (4 pcs) as shown on picture below:

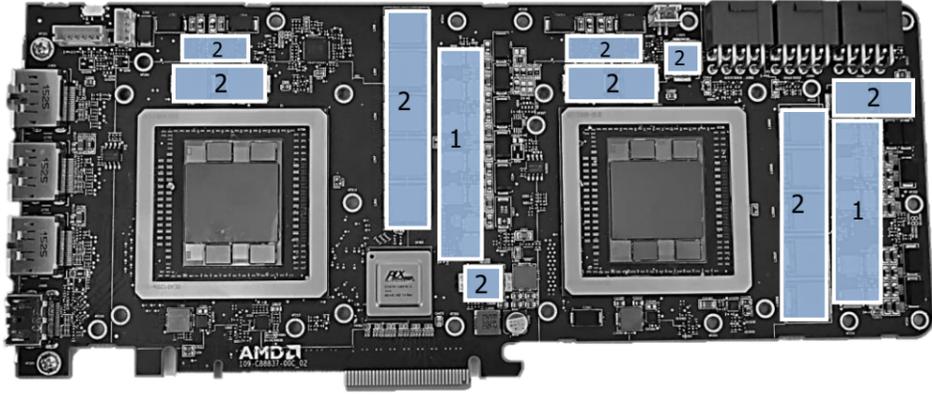


5. CUTTING THERMAL PADS. Your block comes with thermal pads. You have to cut the pads to smaller chunks in order to cover all the VRM components such as MOSFETs and drivers. PLEASE REMOVE THE PROTECTIVE FOIL FROM BOTH SIDES OF THE THERMAL PADS PRIOR TO INSTALLATION. Replacement thermal pads: Thermal Pad F – 0.5mm (120x16mm), Thermal Pad G – 0.5mm (120x24mm)

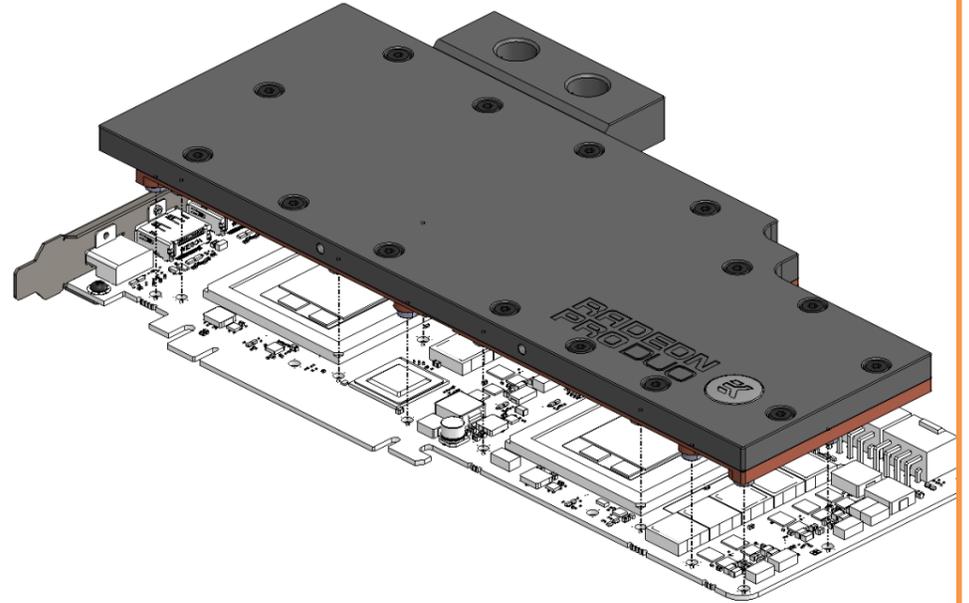


STEP 4: INSTALLING WATER BLOCK

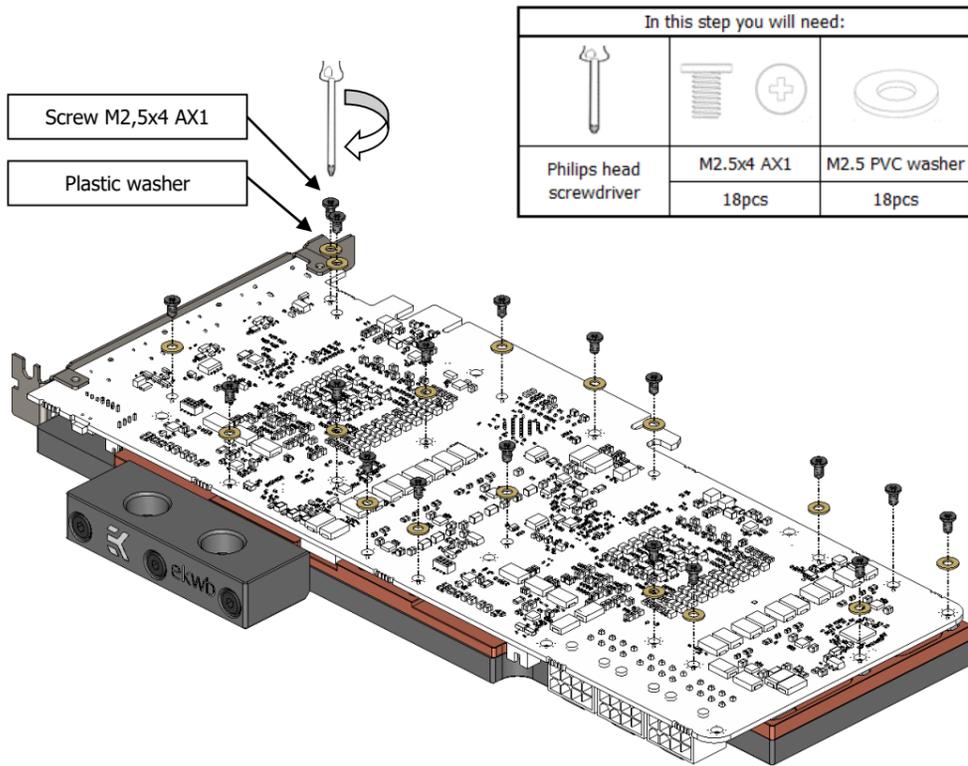
1. PLACING THERMAL PADS ON PCB. Place thermal pads on chips so that numbers on chips match size of thermal pads. EKWB made sure users have more than enough pads to cover all surfaces that need to be covered to make block fully functional.



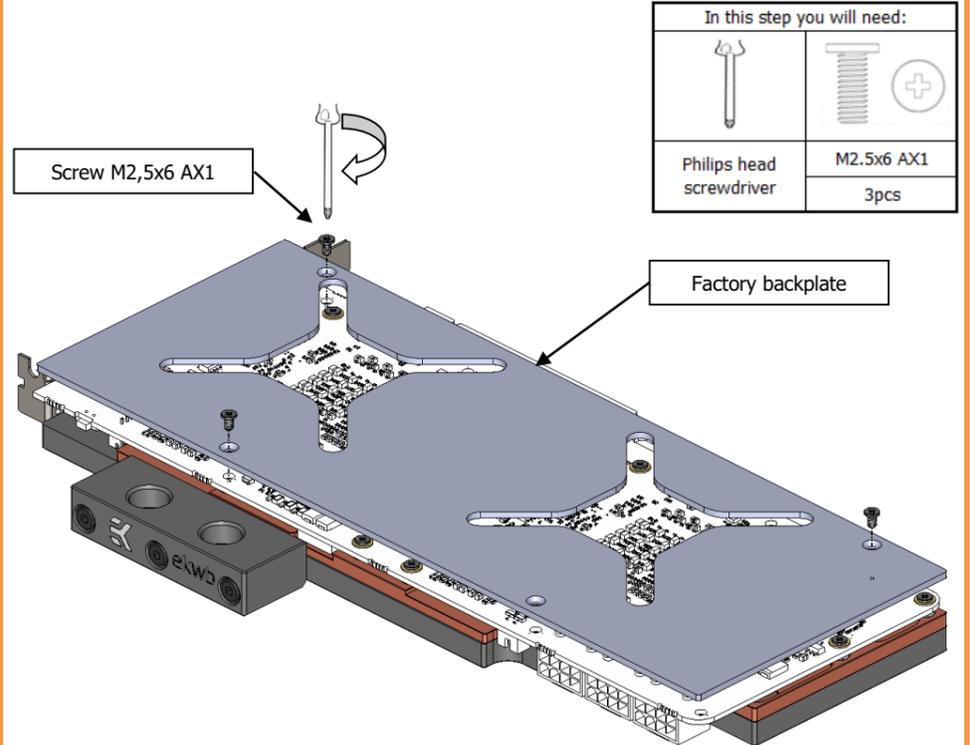
2. PLACING BLOCK TO GRAPHIC CARD. Carefully position the water block with preinstalled 2.5mm standoffs on to the graphics card. During this process please make sure you align mounting holes on PCB with holes on the water block. Also pay attention not to use too much force by pressing block down to PCB. Chip dies are prone to cracking.



3. ATTACHING THE BLOCK TO THE GRAPHIC CARD. Use a Philips screwdriver screw with the enclosed 18 (eighteen) M2.5x4 AX1 screws. EKWB recommends users to start tightening the screws around the GPU core and continue outwards. Always use a plastic washer under each and every screw! If the washer is already present on the circuit board (usually around the four GPU core screw holes) there is no need for additional washer.



4. (OPTIONAL) ATTACHING THE FACTORY BACKPLATE TO THE GRAPHIC CARD: Please remove 3 (three) M2.5x4 AX1 screws and PVC washers that correspond to the holes of factory provided backplate. Use a Philips screwdriver with the enclosed 3 (three) M2.5x6 AX1 screws for installing the factory backplate.



STEP 5: CHECKING FOR CONTACTS

Temporarily remove the water block to check for uniform surface contact between the block and the components, pay special attention to the VRM section of the graphics card. Check whether the water block makes contact with the VRM. Then repeat sub-steps in previous section to re-attach the block. **In case you fail to obtain good contact, please check again your thermal pad thickness or contact our support service.**

STEP 6: INSTALLATION OF FITTINGS AND TUBING

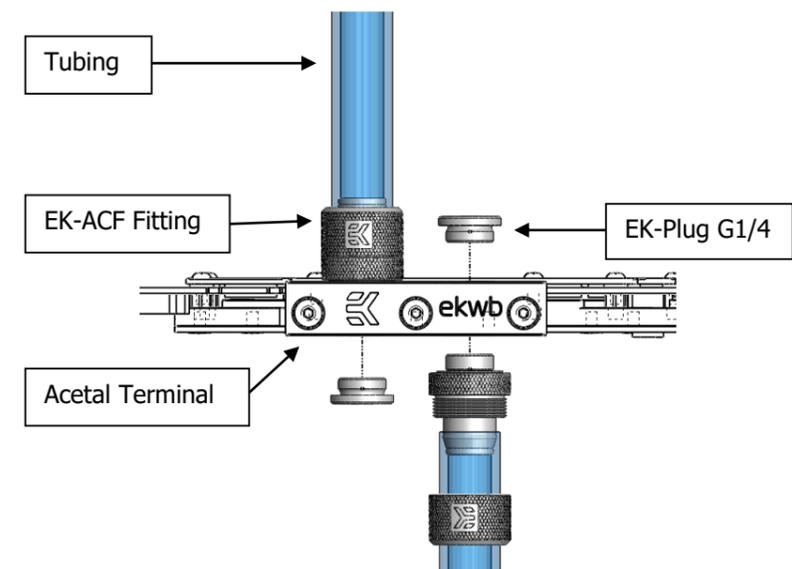
Screw in the two G1/4 threaded male fittings. Attach the liquid cooling tubes and connect the water-block(s) into the cooling circuit. **EKWB recommends using EK-ACF fittings with the EK-FC Radeon Pro Duo water block.**

When using fittings, other than compression type please ensure the tubes are securely attached to the barb/fittings. Use hose clamps or an appropriate substitute.

EKWB recommend to use LEFT side port as an inlet port for best performance. However this water block also operates flawlessly with reversed water flow.

CAUTION: In case of using connectors other than EK-ACF series compression fittings or EK-HFB barb fittings, take special attention to the length of the fittings' male G1/4" thread.

5mm is the maximum allowed G1/4" thread length!



STEP 7: INSERTING CARD IN YOUR PC CASE

Carefully lift your graphics card with installed block and insert it in your PC's motherboard PCI-express expansion slot. Please bear in mind that your graphics card is probably heavier than when it was equipped with original heat sink fan assembly. One needs to be very careful when handling the graphics card. Avoid all un-needed manipulation of the VGA/water block assembly that might damage your card or water block during final installation.

REQUIRED TOOLS AND MOUNTING SCREWS:



scissors



philips screwdriver