Installation and mounting manual for EK-Supreme HF 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.ekwaterblocks.com</u> for updates. Before installation of this product please read important notice, disclosure and warranty conditions printed on the back of the box.

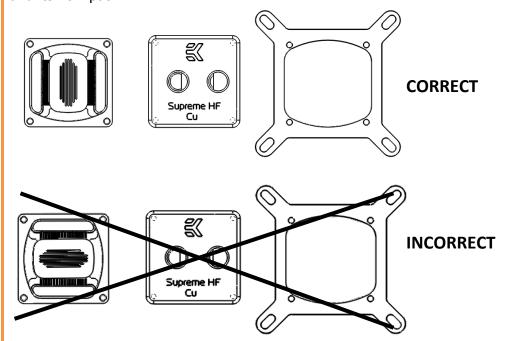
The barb hose fittings require only a small amount of force to screw them in; otherwise the high flow fittings might break. These fittings do not need to be tightened with much force because the liquid seal is made using o-rings. The use of an algaecide and corrosion inhibitors is always recommended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

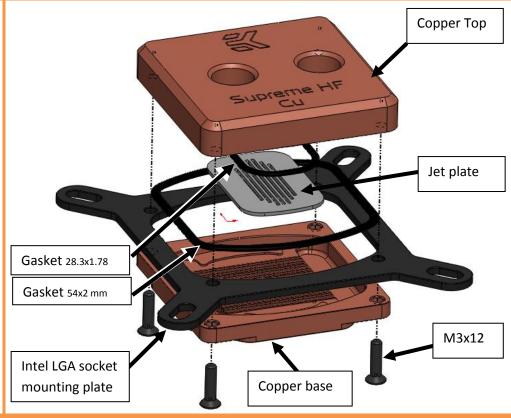
STEP 1: GENERAL INFORMATION

ekwb

STEP 2: THE DESIGN OF YOUR WATER BLOCK

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). Sample picture bellow represents the correct orientation of block and its flow path.

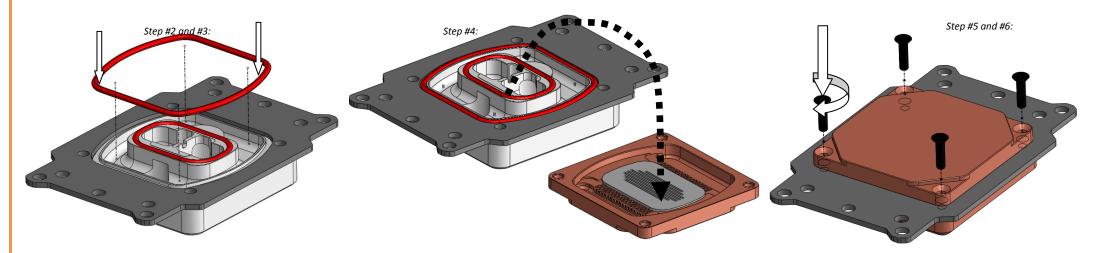




STEP 2.1 (optional): INSTALLING AMD MOUNTING PLATE

Place water block on an even surface and remove the four M3x12 DIN7991 screws attaching the top to the copper base using the enclosed 2mm allen key.
Place the AMD mounting plate on it.

- 3) Insert smaller gasket (28.3x1.78mm) into the milled groove and install larger gasket (54x2mm) into the gap between the mounting plate and copper top
- 4) Carefully rotate the top/mounting plate assembly with both hands and align it on top of the copper base with installed jet plate. Make sure gaskets stay in place!
- 5) Repeat step #3 and #4 if necassery. Using both hands press the waterblock assembly firmly together, rotate it and place it on it's back.
- 6) Screw in all four (4) M3x12 DIN7991 screws using the enclosed 2mm allen key.



STEP 3: INSTALLING BACKPLATE AND EASY MOUNT ASSEMBLY

STEP 3a: Intel LGA-775 and AMD socket motherboard:

1) Place motherboard on an even surface with front side facing down.

2) Install metal backplate together **with EPDM rubber washer** to the back of the motherboard PCB and insert two (2) or four (4) M4x14 screw through all openings, depending on the type of your motherboard (*see figure 1 and 2*)

3) Carefully rotate motherboard assembly with one hand while holding the screws and backplate with the other.

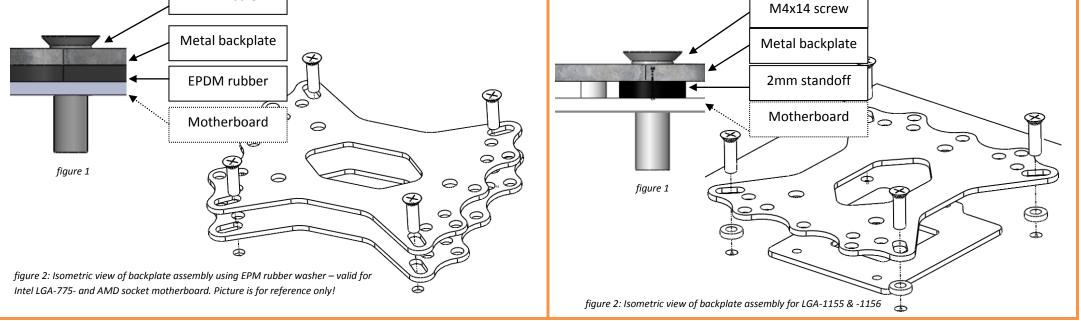
4) Install the rest of mounting system as shown (see STEP 4)

STEP 3b: Intel LGA-1155/1156 socket motherboard:

Place motherboard on an even surface with front side facing down.
Install metal backplate together with 2mm plastic standoffs to the back of the motherboard PCB and insert four (4) M4x14 screw through all four (4) openings. Align the metal backplate to fit three LGA-115x ILM BP screws as the metal backplate must sit on the LGA-115x ILM backplate (*see figure 1 and 2*)
Carefully rotate motherboard assembly with one hand while holding the screws and backplate with the other.

4) Install the rest of mounting system as shown (see STEP 4)

M4x14 screw



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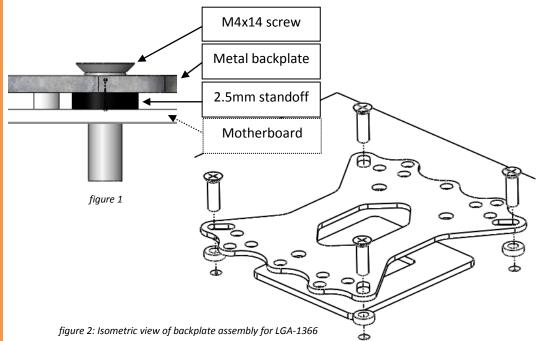
STEP 3: INSTALLING BACKPLATE AND EASY MOUNT ASSEMBLY STEP 3c: Intel LGA-1366 socket motherboard:

1) Place motherboard on an even surface with front facing down.

2) Install metal backplate together with **2.5mm** plastic standoffs to the back of the motherboard PCB and insert four (4) M4x14 screw through all four (4) openings. Metal backplate must sit on the LGA-1366 ILM backplate (see figure 1 &2)

3) Carefully rotate motherboard assembly with one hand while holding the screws and backplate with the other.

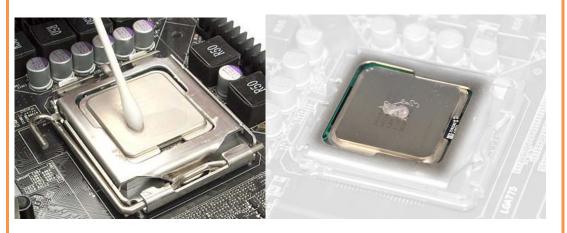
4) Install the rest of mounting system as shown (see STEP 4)



STEP 5: PREPARING YOUR CPU; APPLYING THE THERMAL GREASE

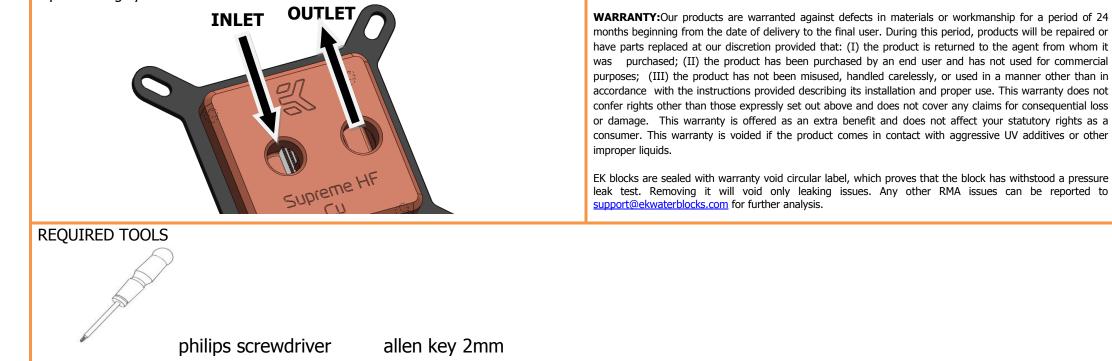
Cleaning the CPU: Once mounting mechanism is attached install the CPU into the socket. Wipe the CPU's contact surface (by using non-abrasive cloth or *Q-tip*, as shown on sample photo).

Applying thermal compound: EK recommends blob or line method of applying the enclosed Arctic Cooling MX-4[™] thermal compound to the CPU heatspreader (IHS) - see sample photo on right. The quantity of about two rice grains is just about right. There is no need to cover the whole HIS. Applying too much thermal grease will have negative impact on the cooling performance!



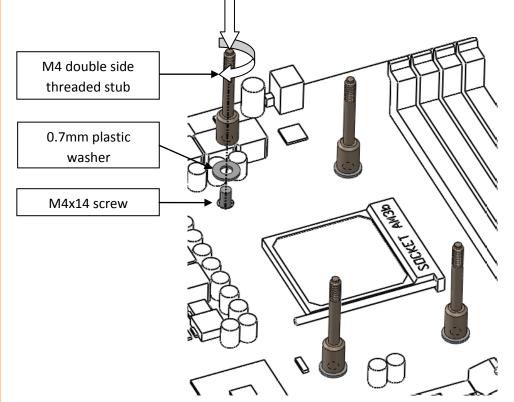
STEP 10: CONNECTING WATER BLOCK TO THE COOLING CIRCUIT

Carefully identify the direction of the flow in your circuit. For the EK-Supreme HF series water block to operate properly the G1/4 port nearest to the center of the water block MUST BE USED AS THE INLET PORT. EK recommends the use of EK-PSC fittings. When using fittings other than EK-PSC series please use hose clamps or appropriate substitute to secure the tubing to the barb. The use of biocide containing and corrosion inhibiting coolant is always recommended for any liquid cooling system.



STEP 4: INSTALLING THE MOUNTING SYSTEM

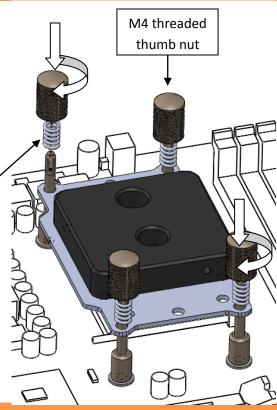
Install the remaining components of the mounting system onto your motherboard. It is mandatory to put 0.7mm plastic washer underneath each of the M4 threaded stubs. Once the stubs are installed tighen them with the philips head screwdriver.



STEP 6: INSTALLING THE WATER BLOCK

Install the waterblock on your CPU. Place an enclosed compression spring and thumb nut over each threaded stub. Start fastening two thumb nuts at a time, preferably in cross pattern and do not tighten them fully until all of them are partially screwed in. Then - using your fingers only - screw in all four thumb nuts until you reach the end of the thread.

Compression spring



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 tap 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.

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

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