

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

1) Place water block on an even surface and remove the four M4x20 DIN7991 screws attaching the top to the copper base using the enclosed 2.5mm allen key.

- 2) Put the top on it's back and 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 plastic top
- 4) Carefully rotate the top/mounting plate assembly with both hands and place it on top of the copper base with installed jet plate.
- 5) Visually inspect if gaskets are seated correctly in the gaps. Repeat step #3 and #4 if necassery.
- 6) Screw in all four (4) M4x20 DIN7991 screws using the enclosed 2.5mm 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)



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Released on 14th of December, 2011.

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 Install the waterblock on your CPU. the socket. Wipe the CPU's contact surface (by using non-abrasive cloth or *O-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

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

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EK-Supreme HF series water block installation for socket LGA-2011

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STEP 1: INTEL SOCKET LGA-2011 WATER BLOCK INSTALLATION PROCEDURE

STEP 1a: Installation of thumb screws

1) Place motherboard with preinstalled Intel LGA-2011 processor on an even surface with front side facing up.

2) Install four (4) thumb screws into four M4 threaded stubs on the LGA-2011 socket integrated latch mechanism (ILM). The screws are to be installed using no tools (i.e. pliers).

3) Install Thermal Interface Material (TIM) or thermal grease as per installation manual. □



FOR CUSTOMERS WHO RECEIVED 'NEW' SCREWS:

Shipped from EK since Dec 16th 2011.

STEP 1b: Fastening the waterblock:

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.



FOR CUSTOMERS WHO RECEIVED 'OLD' SCREWS:

STEP 1b: Fastening the waterblock:

Install the waterblock on your CPU. Place an enclosed 2.5mm POM standoff (an integral part of EK-Backplate Universal also enclosed with this water block), a 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.



The NEW screws are clearly marked with two milled grooves for easier recognition

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