

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.

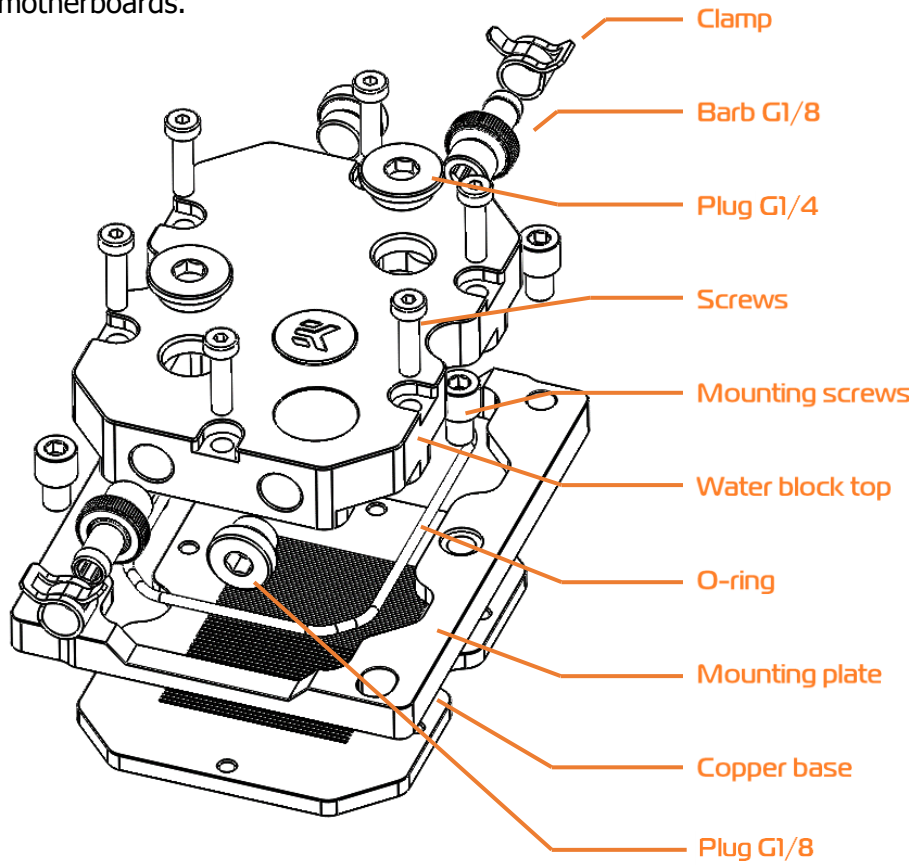
Before you start using this product please follow these basic guidelines:

1. Please carefully read the manual before through before beginning with the installation process!
2. Please remove your 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).
3. The EK-HFB, EK-HDC and EK-ACF type fittings require only a small amount of force to screw them firmly in place as 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.

STEP 1: GENERAL INFORMATION ON PRODUCT COMPATIBILITY

STEP 2: TABLE OF CONTENT

Congratulations on your purchase of EK-Annihilator EX/EP water block. This water block is pre-assembled for use with modern Intel® Processors with LGA 3647 socket for server and workstation type motherboards.



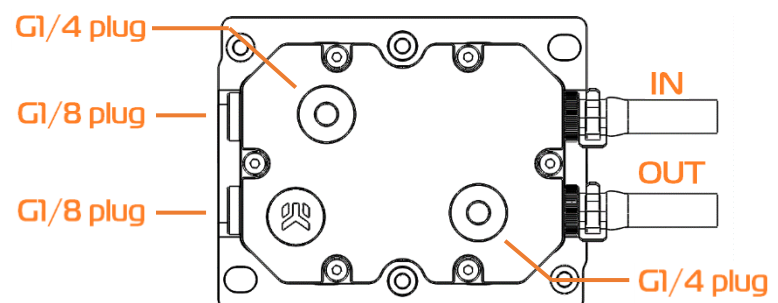
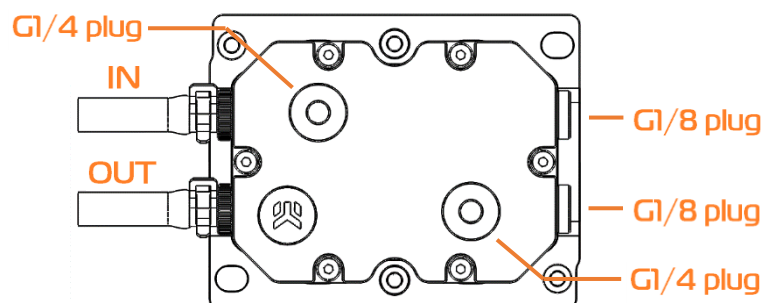
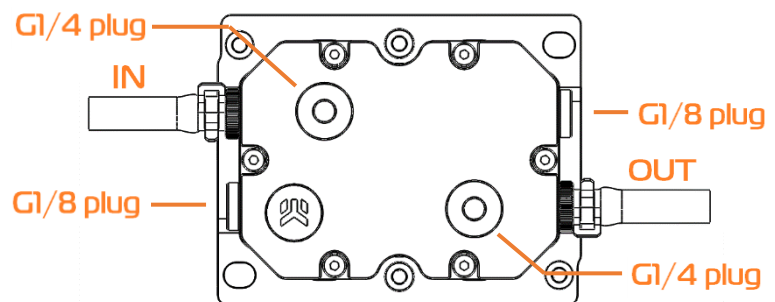
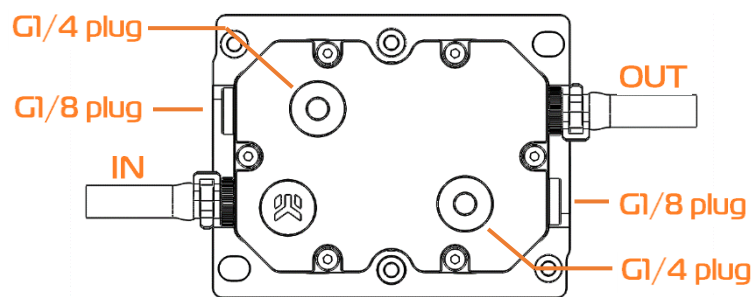
Thermal grease	EK plug G1/4	EK plug G1/8	Mounting screw	HFB Fitting Barb
1pc	2pcs	4pc	4pcs	2pcs

4mm Allen key	3/16 Allen key	5mm Allen key	6mm Allen key	Clamp
1pc	1pc	1pc	1pc	2pcs

STEP 3: ANNIHILATOR INLET AND OUTLET PORTS

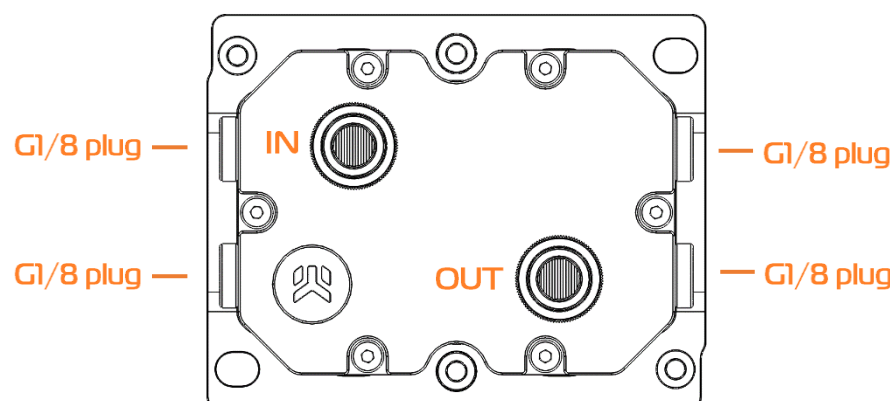
STEP 3a: G1/8 ports configuration:

4 ports G1/8 are available for low profile server cooling solution. You can connect it in four different ways. You can switch between IN-OUT port. Make sure, that both G1/4 and G1/8 plugs are in place, tightened firmly.



STEP 3b: G1/4 ports configuration:

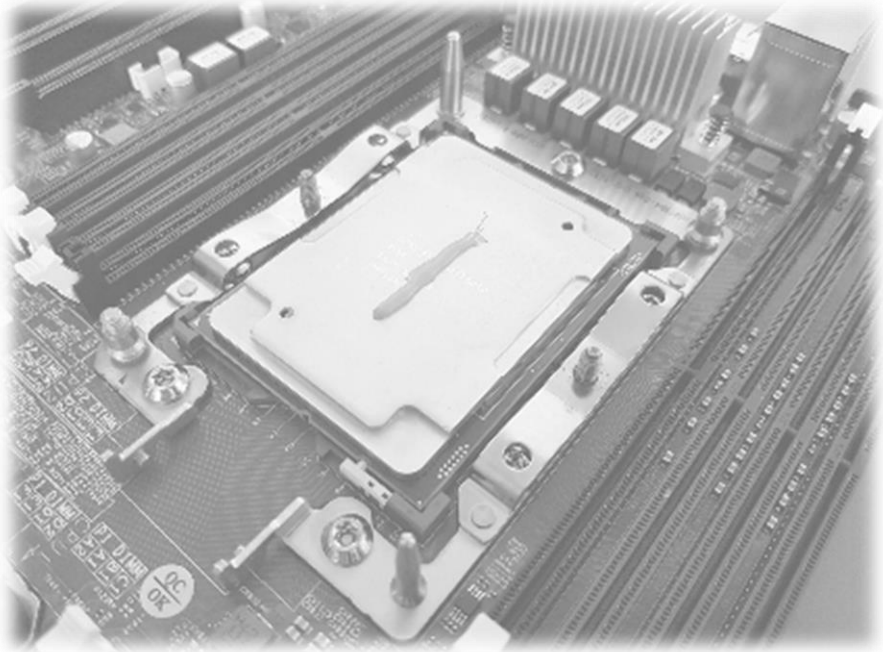
2 ports G1/4 are available for normal use of water block for workstations. IN-OUT orientation doesn't matter, you can use any G1/4 port as IN or OUT. Make sure, that all G1/8 plugs are in place, tightened firmly.



STEP 4: PREPARING CPU AND APPLYING THERMAL GREASE (TIM)

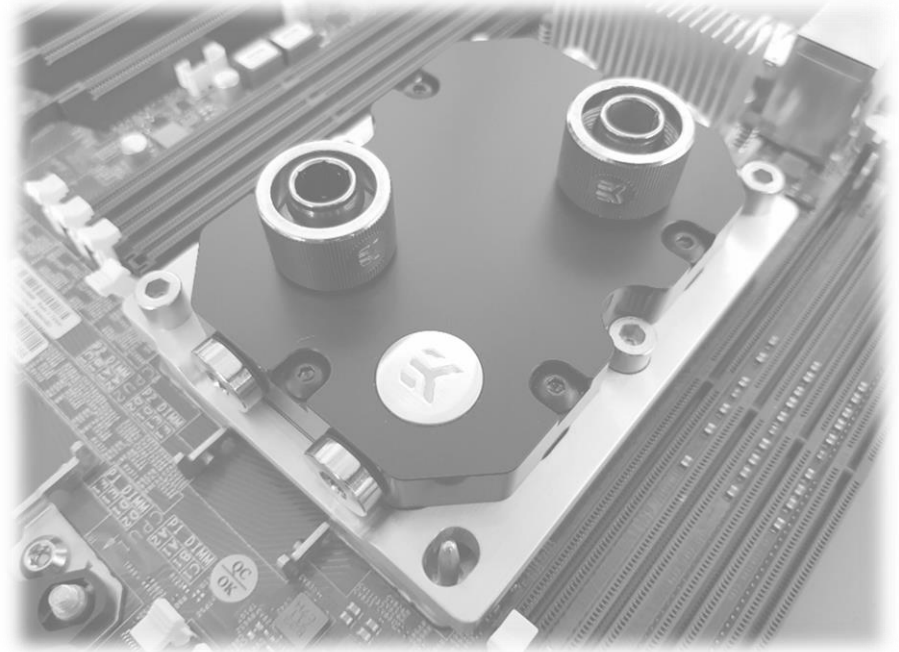
Cleaning the CPU: Wipe the CPU's contact surface (by using non-abrasive cloth or *Q-tip*).

Applying thermal compound: EK recommends a blob or line method of applying the enclosed EK-TIM Ectotherm™ thermal compound to the CPU heatspreader (IHS) - see sample photo on right. The quantity of about pea size is just about right. There is no need to cover the whole IHS. Applying too much thermal grease will have negative impact on the cooling performance!



STEP 5: INSTALLING THE WATER BLOCK

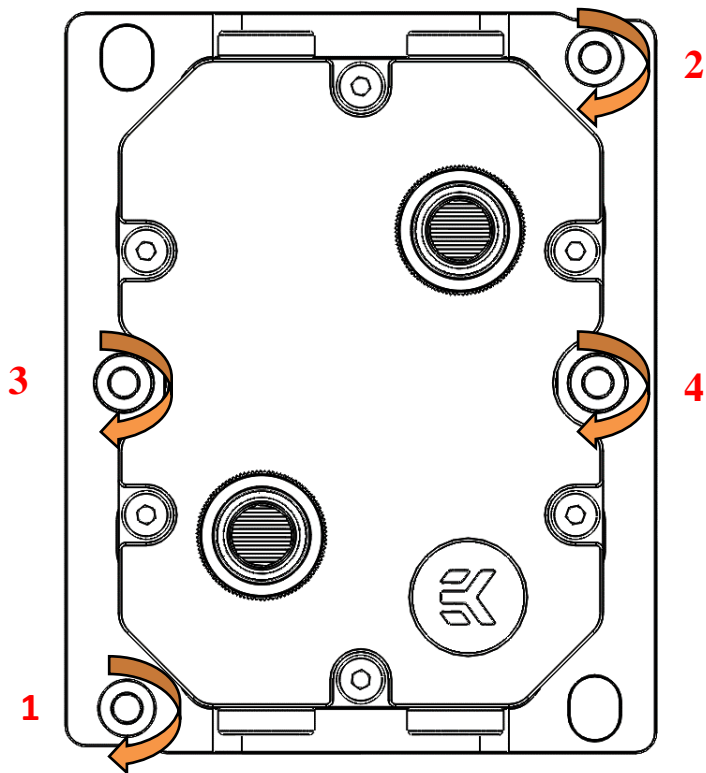
- 1) On majority of motherboards the EK-Annihilator EX/EP can be successfully installed with motherboard already being pre-fitted to the computer chassis. Still, it is best practice to place a motherboard on an even surface with front side facing up.
- 2) Install CPU and apply TIM (thermal grease) as shown in STEP 5
- 3) Align water block above the LGA 3647 socket on motherboard with pre-installed CPU.
- 4) Tighten the screws using 4mm Allen Key the cross pattern.



STEP 6: CONNECTING THE WATER BLOCK TO THE COOLING LOOP

5a: Tightening sequence:

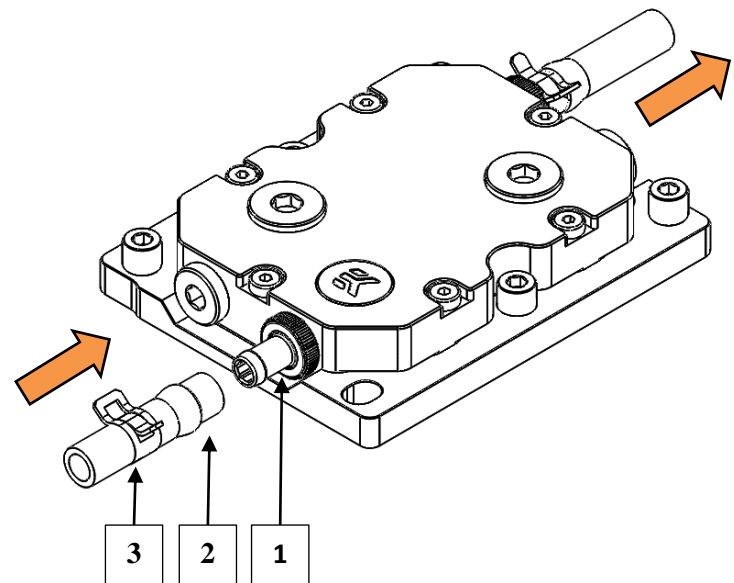
You have to tighten the screws in cross pattern sequence using 4mm Allen Key. Do not overtighten the screws!



Step 6a: Connecting G1/8 fittings with tube:

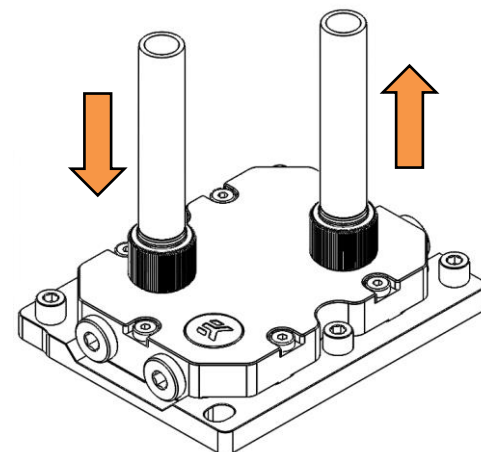
Carefully identify the direction of the flow in your circuit. EK recommends the use of EK-HFB Fitting 6mm G1/8 and EK-Tube ZMT 6/9mm Matte Black tubing.

1. Install Barb 1/8 [1] to the CPU block by using 3/16 Allen Key.
2. Mount Clamp [3] to the tubing [2]
3. Mount the tube [2] to the barb [1]



Step 6b: Connecting G1/4 fittings with tube:

Carefully identify the direction of the flow in your circuit. EK recommends the use of EK-ACF fittings.



The use of biocide containing and corrosion inhibiting coolant is always recommended for any liquid cooling system. EK recommends using EK-CryoFuel.