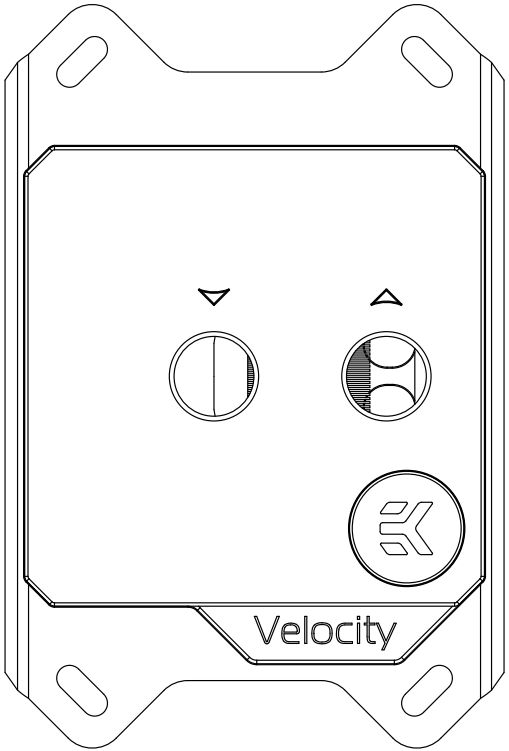
ekwb

Velocity - AMD

CPU 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 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:

Please carefully read the manual before beginning with the installation process!

Please remove your graphics card from the computer to assure safest mounting process in order to prevent any possible damages to your GPU and/or graphics card circuit board (PCB).

The EK 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.

The use of corrosion inhibiting coolants is always recommended for liquid cooling systems, and mandatory for nickel plated water blocks!

Do not use pure distilled water! For best results EK recommends the use of EK-CryoFuel coolants!

Make sure to thoroughly bleed air out of your water block, or you will not reach optimal performance!

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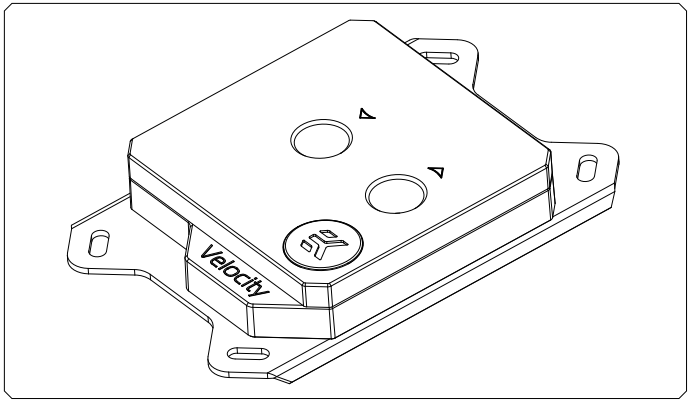
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GENERAL INFORMATION ON WATER BLOCK COMPATIBILITY



This CPU liquid cooling unit is pre-assembled for use with modern AMD desktop socket type motherboards. By default (out of the box) this water block supports the following CPU sockets:

- AMD® socket AMx and FMx

WHAT IS ENCLOSED

The following items are enclosed with each EK-Velocity water block:

- EK-Velocity AMD CPU water block.

- PreciseMount universal CPU mounting mechanism:
- M3 threaded thumb screws (4 pcs)
- LGA-2011 M3 threaded mounting studs (4 pcs)
- Springs (4 pcs)
- M3 threaded thumb nuts (4 pcs)
- Washers (4 pcs)

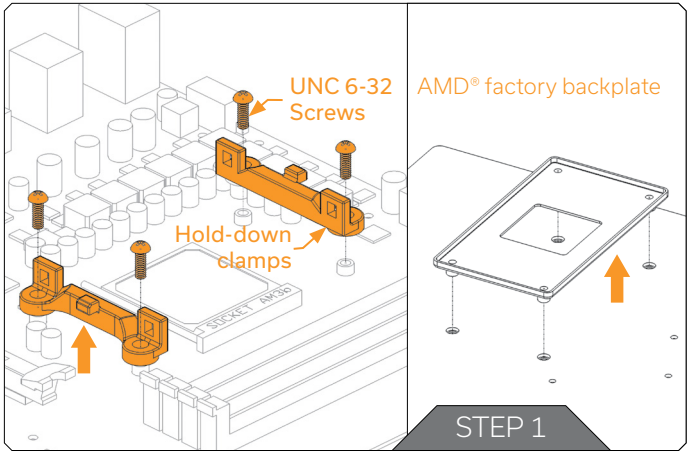
- EK-Velocity Backplate
- Backplate rubber gasket
- AMD® socket AMx and FMx

- Allen (hex) key 2.5mm

- Additional Inserts and Jet plates:
- Jet J2 (0.8mm* thick)

- Thermal Grizzly Hydronaut (EKWB 1.0g) thermal grease

INSTALLING THE WATER BLOCK

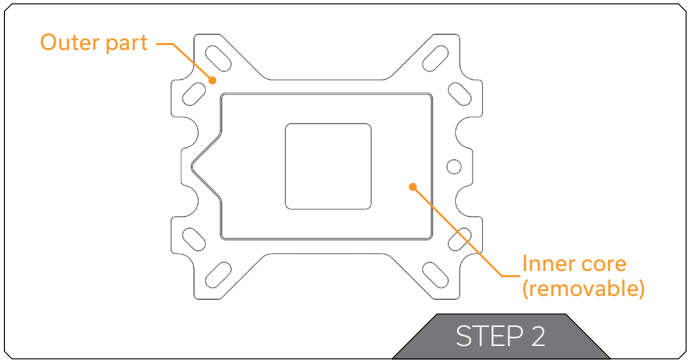


AMx AND FMx SOCKET MOTHERBOARDS

STEP 1

Removing of the original plastic hold-down clamps and the factory backplate:

Using Philips-head screwdriver remove the four UNC 6-32 screws securing the original plastic hold-down clamps around the socket as shown on the sketch. Remove the original AMD® backplate and the hold-down clamps and store them away. See sketch for further part identification.

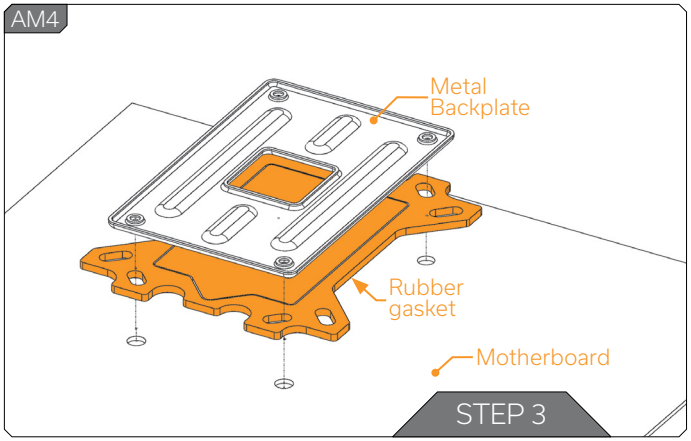


STEP 2

Preparing backplate rubber gasket

The enclosed rubber gasket is essential part of the backplate and mounting system and must be used every time you install this water block on your motherboard.

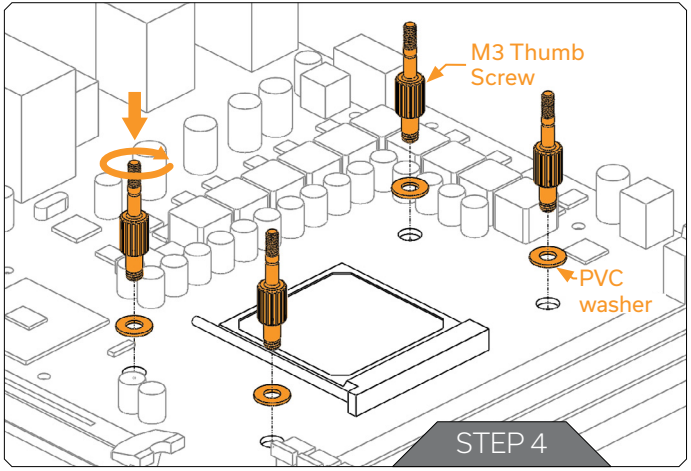
⚠ With AMD® Sockets you should use whole rubber backplate including the inner core.



STEP 3

Install backplate rubber gasket and place metal backplate for AMD® socket to the back of your motherboard RIBBED SIDE UP! (facing away from the motherboard) Align the holes on the motherboard with holes on rubber gasket and backplate.

Carefully rotate motherboard assembly with front side facing up with one hand while holding the backplate and rubber in place with the other hand.

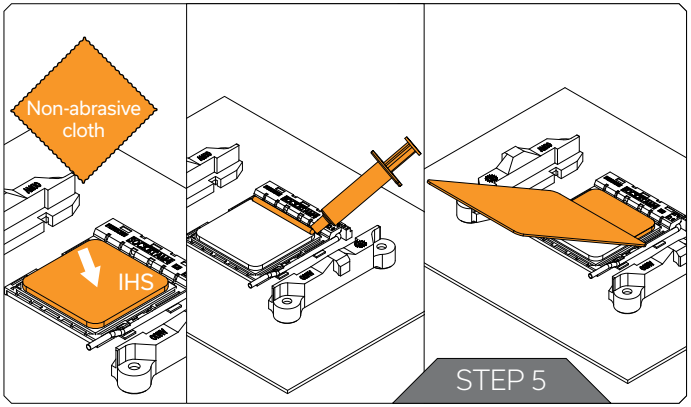


STEP 4

Prepare the foil bag with mounting mechanism, which is enclosed with the CPU water block delivery.

Install four (4) M3 thumb screws onto your motherboard. It is mandatory to put 0.7mm plastic washer underneath each of the M4 thumb screws. Tighten the screws to the metal backplate until you reach the end of the thread. Using tools (such as pliers) is not recommended.

Continue installation by following the instructions on page 6 from STEP 2

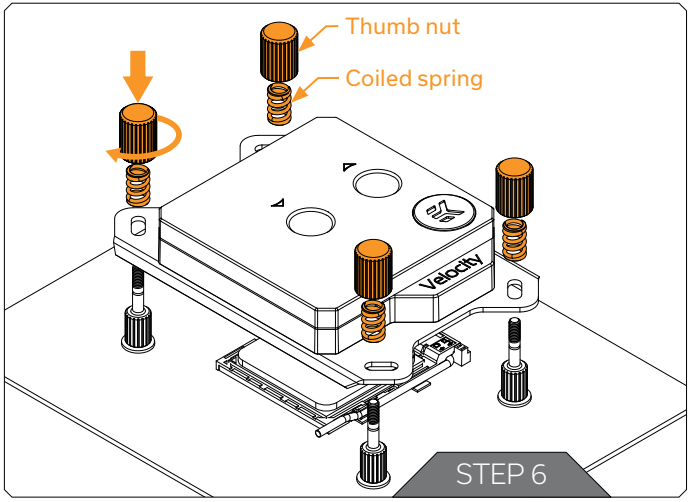


STEP 5

leaning the CPU: Wipe the CPU's contact surface (by using non-abrasive cloth or Q-tip, as shown on sample photo).

Applying thermal compound: On a clean IHS, apply a line of thermal compound and spread it over the whole CPU heat spreader (IHS) with a credit card or equivalent - see sample photo on left.

The layer of thermal compound must be thin and even in thickness through the whole surface of the IHS. Too thick application could lead to poor performance. This method applies for Thermal Grizzly Hydronaut thermal compound (3830046998477).

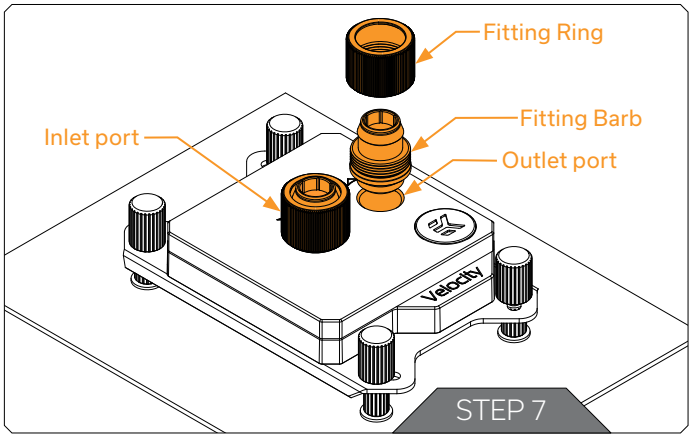


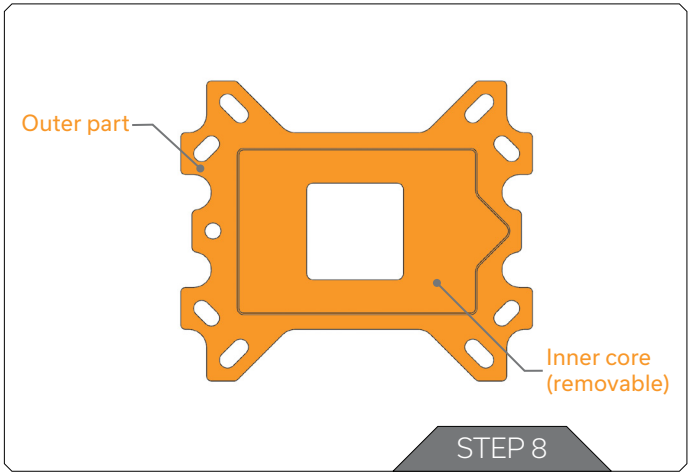
STEP 6

Align the water block over the mounting screws on the motherboard with pre-installed CPU.

Before proceeding with the installation It is mandatory to remove the protective foil from the backside of the water block.

Place an enclosed compression spring and thumb nut over each M3 thumb screw. 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.





STEP 7

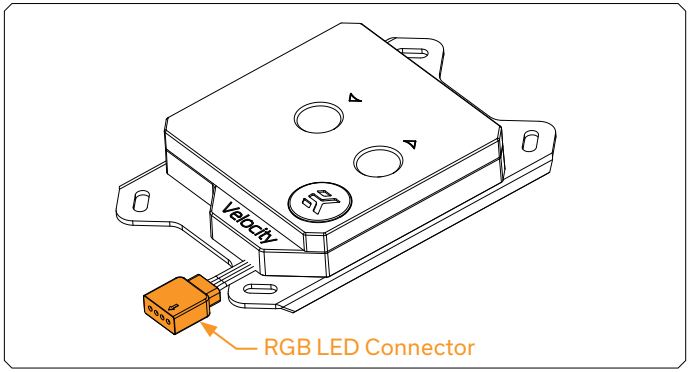
Tighten the fitting barbs in clockwise direction until the gasket underneath is compressed.

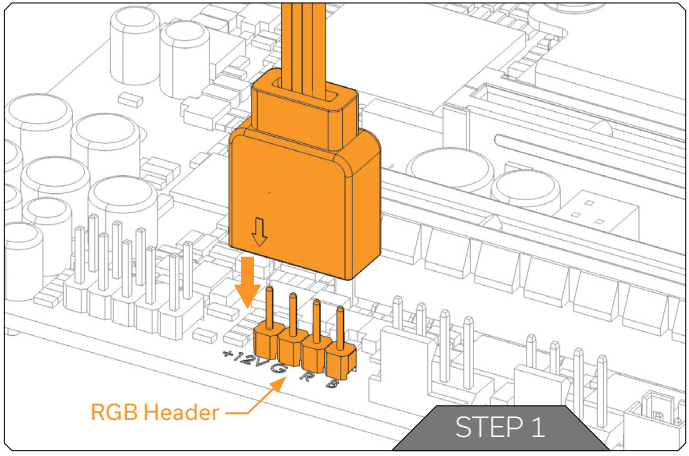
The installation of the CPU water block is now complete.

Before proceeding with the installation It is mandatory to remove the protective foil from the backside of the water block.

With EK-Velocity series water blocks it is mandatory to use the port that is nearest to the center of the water block as INLET port. Mixing the ports may result in less than ideal thermal performance of the water block.

CONNECTING THE RGB LED STRIP (option)





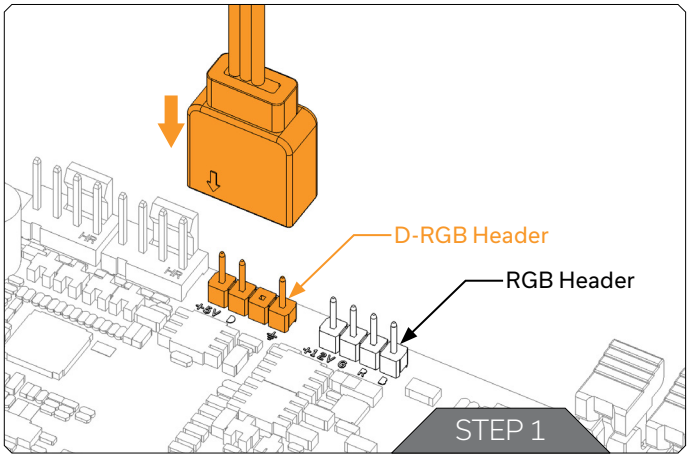
CONNECTING THE RGB LED STRIP

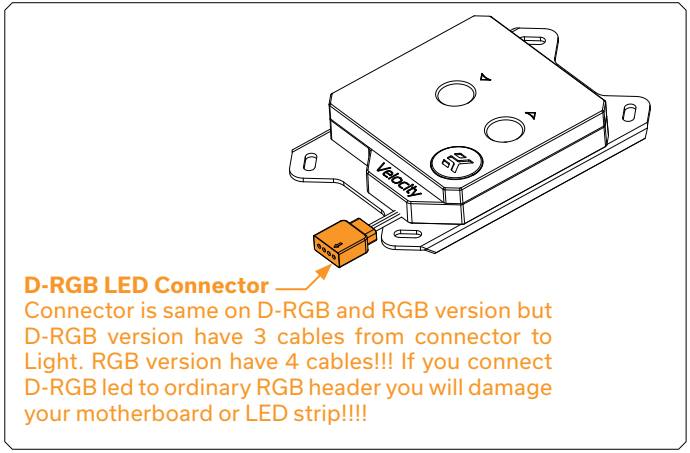
STEP 1

Plug the 4-pin connector from Water block's and Fan's RGB LED light to the RGB HEADER on the motherboard. The LED will work if the pin layout on the header is as follows: **+12V G R B**.

> ⚠ Please ensure that the arrow indicated on the connector is plugged into the +12V line as indicated on your motherboard.

Failure to do so, will damage your motherboard or LED strip.





CONNECTING THE D-RGB LED STRIP

STEP 1

Plug the 4-pin connector from Water block's D-RGB LED light to the DRGB HEADER on the motherboard. The LED will work if the pin layout on the header is as follows: **+5V, Digital, empty, Ground**.

Please ensure that the arrow indicated on the connector is plugged into the +5V line as indicated on your motherboard. If you put LED Diode to the 12V RGB HEADER you can damage the LEDs.

Failure to do so will damage your motherboard or LED strip.

Connector is the same on D-RGB and RGB versions, but D-RGB version has 3 cables from connector to PCB; RGB version has 4 cables. If you connect D-RGB led to ordinary RGB header you can damage your motherboard or LED strip.

SUPPORT AND SERVICE

For assistance please contact:
http://support.ekwb.com/

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