

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](http://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.

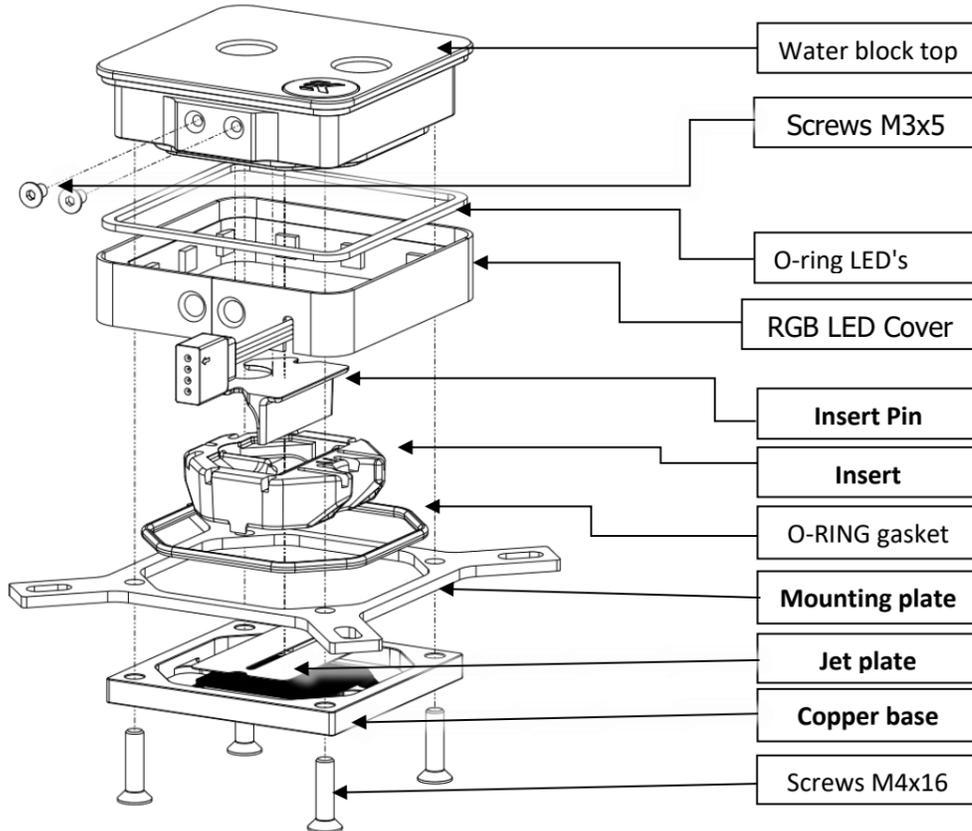
Before you start using this product please follow these basic guidelines:

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 High Flow 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.**

## STEP 1: GENERAL INFORMATION ON PRODUCT COMPATIBILITY

Congratulations on your purchase of EK-Supremacy EVO Upgrade Kit. This kit contains parts required to upgrade your existing EK-Supremacy EVO water block to EK-Supremacy EVO RGB standard.

The Copper Base, Jet plate, Insert, insert pin and Mounting Plate from EK-Supremacy EVO are to be **RE-USED** during this upgrade!



## STEP 2: TABLE OF CONTENT

The following items are enclosed with each EK-Supremacy EVO RGB Upgrade Kit:

- EK-Supremacy EVO RGB water block top
- Supremacy EVO RGB LED Cover assembly
- O-ring CPU
- O-ring LED's
- Allen (hex) key 2.5mm
- Allen (hex) key 2mm
- 2x screws M3x5 DIN7991
- 4x screws M4x16 DIN7991
- Additional:
  - o Thermal paste

**For steps following STEP 3.1 is it mandatory to re-use Mounting Mechanism and Backplate Assembly from your original EK-Supremacy EVO water block!**

## STEP 3.1: ASSEMBLING THE WATER BLOCK TOP WITH INSERTS AND JET PLATES

### 3) Assembling the water block:

**3.1)** Place your EK-Supremacy EVO water block on an even surface and remove the four M4x16 DIN7991 screws attaching the top to the copper base using the enclosed 2.5mm Allen key. Strip it of all parts and keep Mounting Plate(s) and Copper base only (see STEP 1 for disambiguration).

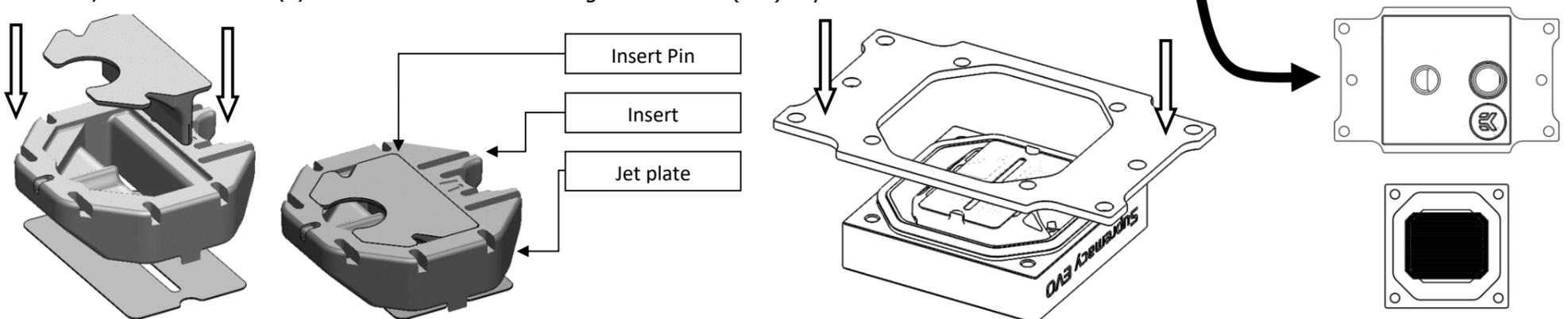
**3.2)** Re-use insert and assemble Insert and Insert Pin as shown on photo below. It is mandatory to install the Insert Pin and Insert in correct way, there is only one way to install it. You will feel the pin sitting flush when placed correctly into the water block Insert.

**3.3)** Place the Insert assembly on to the CPU water block top. There is only one correct orientation possible – the outlet port must not be blocked!

**3.4)** Place the Jet plate onto the water block top assembly. You will feel the jet plate locking into the position when placed correctly on top of the Insert assembly.

**3.5)** Place the desired mounting plate on to the top of EK-Supremacy EVO RGB top. You will feel the mounting plate locking into the position when placed correctly on to the top. Reseat the o-ring gasket if necessary

**3.6)** Carefully place copper base to waterblock top assembly, make sure gaskets stay in place! **Beware of copper base orientation!** Repeat previous steps if necessary. Screw in all four (4) M4x16 DIN7991 screws using 2.5mm Allen (hex) key.



## STEP 4: PREPARING BACKPLATE RUBBER GASKET (FOR INTEL LGA-2011 SKIP THIS STEP)

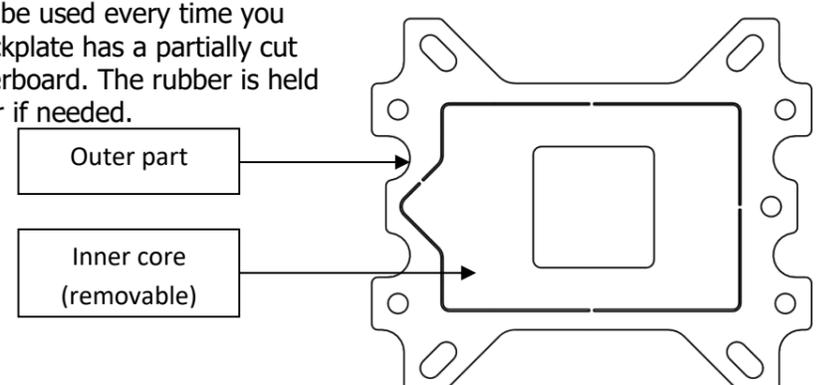
The enclosed rubber gasket is essential part of the backplate and mounting system and must be used every time you install this water block on any motherboard apart from LGA-2011 socket type. The rubber backplate has a partially cut inner part which needs to be removed when installed on Intel LGA-115x and LGA-1366 motherboard. The rubber is held on four places and can be peeled away with hand. These two pieces can be reassembled later if needed.

### Intel LGA-115x and LGA-1366 socket:

Remove the inner core of the rubber and use the outer part only.

### AMD sockets:

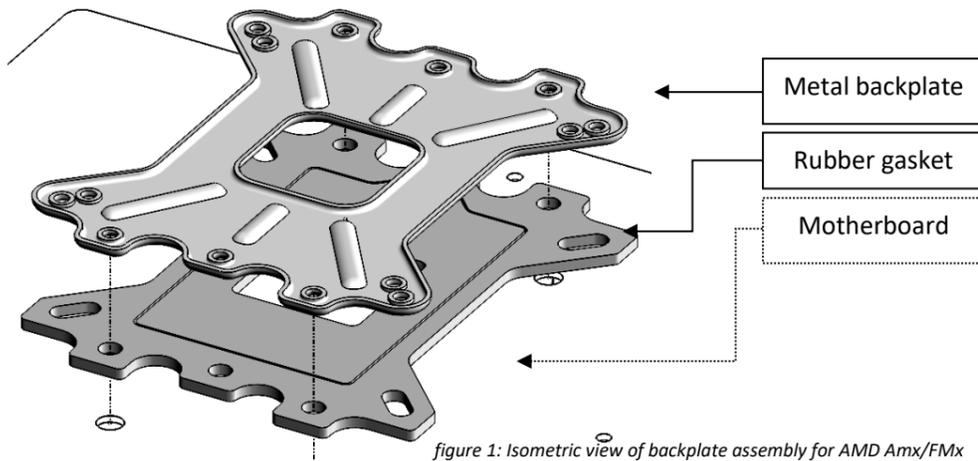
Use the whole rubber backplate including the inner core.



## STEP 5: INSTALLING THE WATER BLOCK:

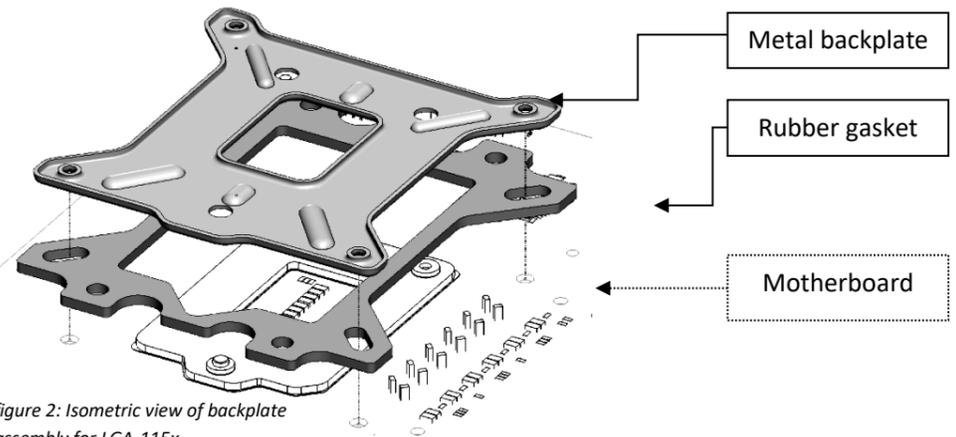
### STEP 5a: Intel LGA-775/1366 and AMD socket motherboard:

- 1) Place motherboard on an even surface with front facing down.
- 2) Install backplate rubber gasket - depending on your CPU platform (see STEP 4) - and place metal backplate for Intel LGA-1366 and AMD socket to the back of your motherboard **RIBBED SIDE UP!** Align the holes on the motherboard with holes on rubber gasket and backplate.
- 3) Carefully rotate motherboard assembly with front side facing up with one hand while holding the backplate and rubber in place with the other hand.
- 4) Install the rest of mounting system as per installation manual (see STEP 6)



### STEP 5b: Intel LGA-115x socket motherboard:

- 1) Place motherboard on an even surface with front facing down.
- 2) Install backplate rubber gasket depending on your CPU platform (see STEP 4) - and place metal backplate for Intel LGA-115x socket to the back of your motherboard **RIBBED SIDE UP!** Align the holes on the motherboard with holes on rubber gasket and backplate. **Make sure to orientate the rubber gasket to fit past the CPU socket ILM backplate.**
- 3) Carefully rotate motherboard assembly with front side facing up with one hand while holding the backplate and rubber in place with the other hand.
- 4) Install the rest of mounting system as per installation manual (see STEP 6)



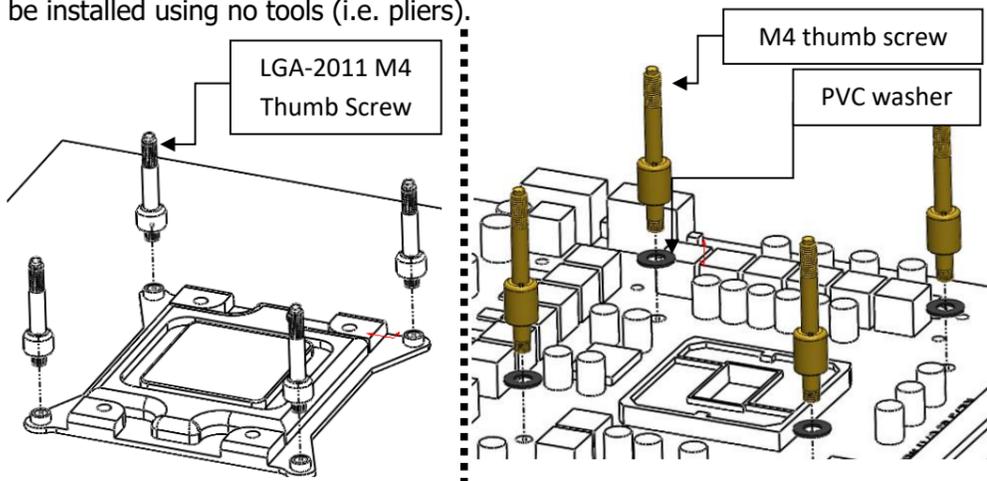
### STEP 5c: Installing the mounting system:

#### Intel Socket /115x/1366 and AMD sockets:

Install the M4 thumb screws of the PreciseMount mounting system onto your motherboard. It is mandatory to put 0.7mm plastic washer underneath each of the M4 thumb screws. Tighten the M4 thumb screw to the metal backplate with your hands until you reach the end of the thread. Using tools (such as pliers) is not recommended!

#### Intel Socket LGA-2011:

Install four (4) specific LGA-2011 M4 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).



### STEP 5d: Preparing your CPU and applying TIM:

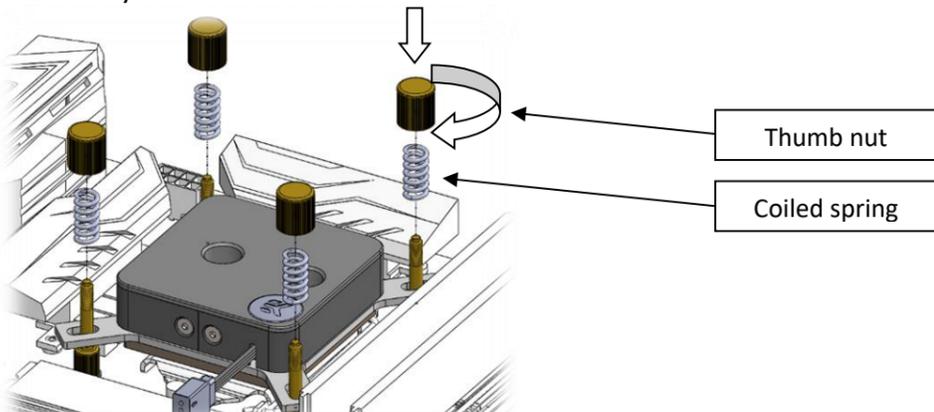
**Cleaning the CPU:** Once mounting mechanism is attached install the CPU into the socket. Wipe the CPU's contact surface (by using non-abrasive cloth or Q-tip, as shown on sample photo).

**Applying thermal compound:** EK recommends blob or line method of applying the enclosed Gelid GC-Extreme™ 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 IHS. Applying too much thermal grease will have negative impact on the cooling performance!



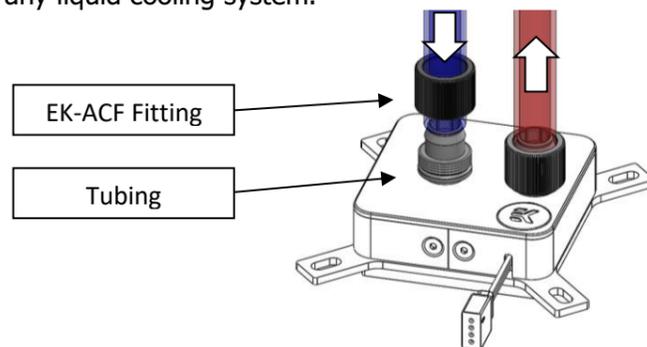
### STEP 5e: Fastening the waterblock:

Install the waterblock on your CPU. Place an enclosed compression spring and thumb nut over each M4 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 6: CONNECTING WATER BLOCK TO THE COOLING CIRCUIT

Carefully identify the direction of the flow in your circuit. For the EK-Supremacy EVO 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-ACF Fittings. When using fittings other than EK-ACF 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.

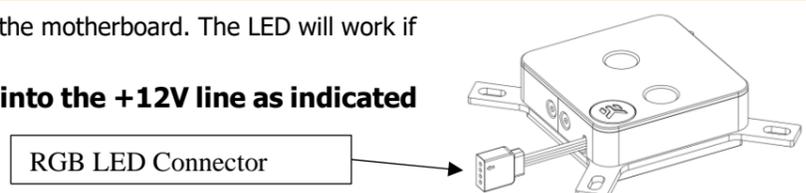


### STEP 7: CONNECTING THE RGB LED STRIP

Plug the 4-pin connector from Water block'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.



### REQUIRED TOOLS

allen key 2.5mm (enclosed), allen key 2mm (enclosed)