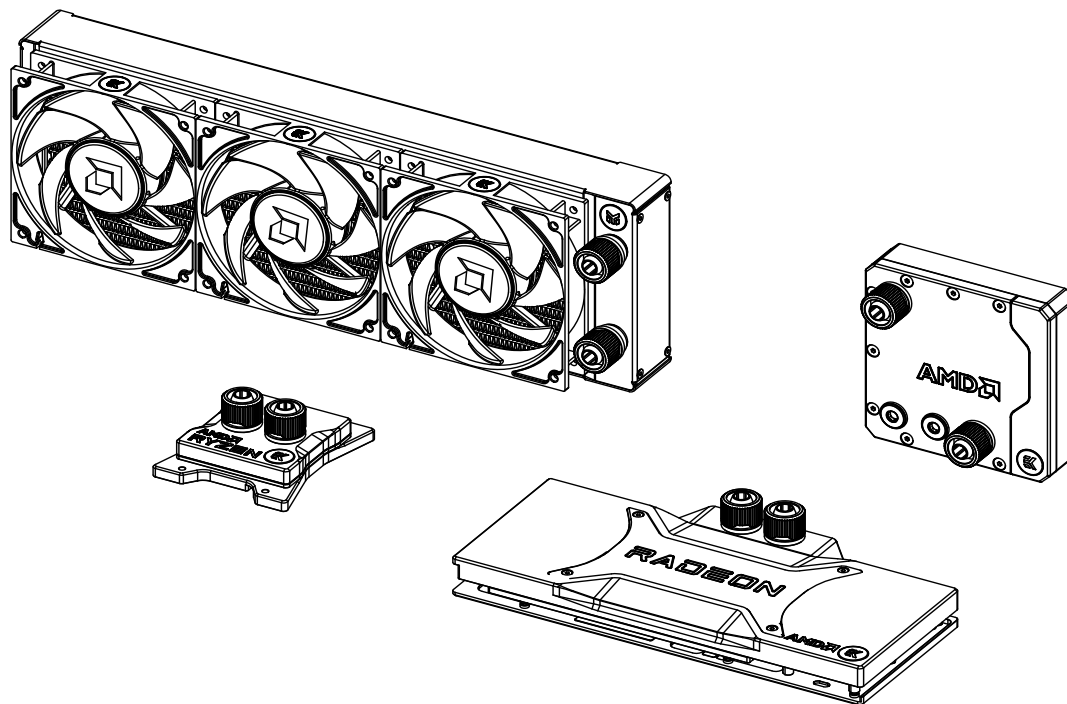


EK-Quantum Power Kit RX 6800/6900 D-RGB P360 - AMD Edition

LIQUID COOLING KIT



These products are intended for installation by expert users only. 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 all important notices, disclosures and warranty conditions printed on the back of the box.



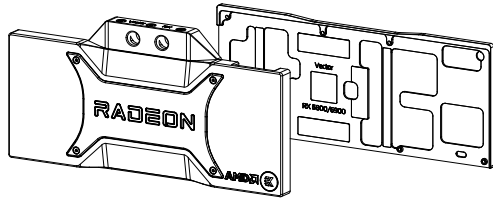
SAFETY PRECAUTIONS

1. Carefully read the manual before beginning with the installation process.
2. Keep the product away from the reach of children.
3. Check the component list and condition of the product before installation. If there is any problem, contact the shop where you have purchased the product to get a replacement or refund.
4. EKWB is not responsible for any damages due to external causes, including but not limited to, improper use, problems with electrical power, accidents, neglect, alteration, repair, improper installation, and improper testing.
5. CPU, GPU and motherboard are subject to damage if the product is incorrectly installed.
6. This product is CPU and GPU liquid cooling kit, comprising of individual, original EKWB parts. Combining this liquid cooling unit with parts other than EK Water Blocks products may lead to warranty loss.
7. Do not use pure distilled water! For best results EK recommends the use of EK-CryoFuel coolants!
8. The use of corrosion inhibiting coolants is always recommended for any liquid cooling system. EKWB recommends any of the EK-Cryofuel for worry-free usage.
9. Only G1/4 fittings with a parallel thread should be used (1/4" BSPP), maximum thread engagement is strictly 5.75mm!
10. 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.
11. The product warranty period is 24 months.

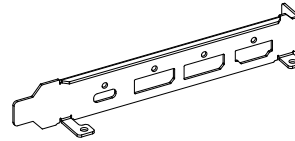
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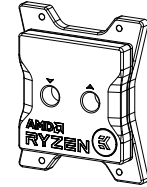
SCOPE OF DELIVERY



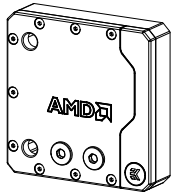
GPU Water Block (1) With a Backplate and Mounting Mechanism



Single-Slot I/O Bracket (1)



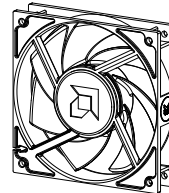
CPU Water Block (1) With a Mounting Mechanism



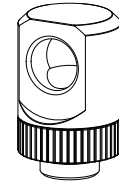
Reservoir (1) With a Mounting Mechanism



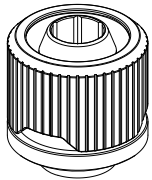
Radiator (1)



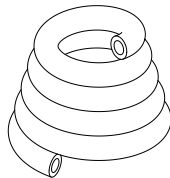
D-RGB Fans (3)



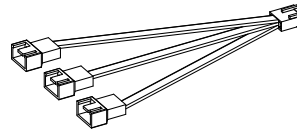
EK-Quantum Torque Rotary 90° (4)



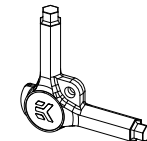
EK-Quantum Torque STC-10/16 (8)



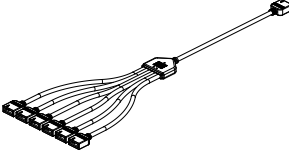
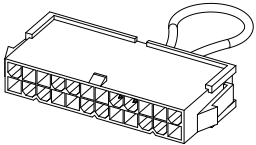
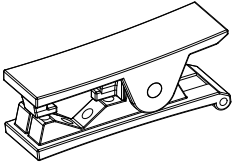
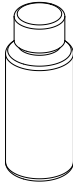
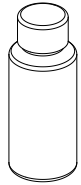
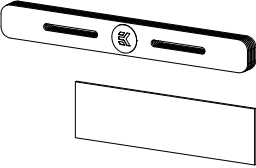

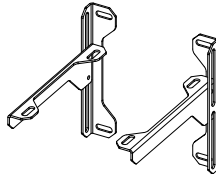
ZMT Tube



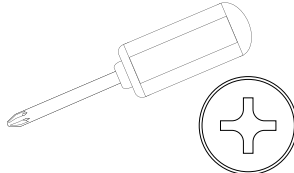
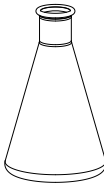
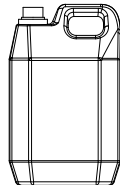
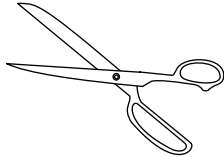
Fan Cable Y-Splitter (1)



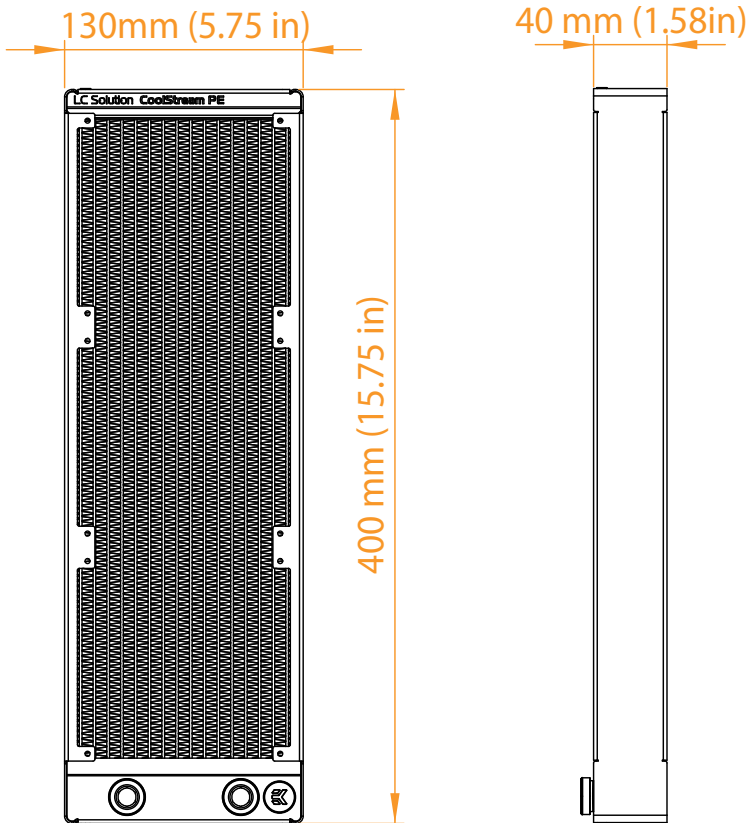
EK-Loop Multi Allen Key (1)

 <p>EK-D-RGB 6-Way Splitter Cable (1)</p>	 <p>ATX Bridging Plug (1)</p>	 <p>EK-Loop Soft Tube Cutter (1)</p>	 <p>EK-CryoFuel Clear Concentrate (1 x 100 mL)</p>
 <p>EK-CryoFuel Blood Red Concentrate (1 x 100 mL)</p>	 <p>EK-Loop CMS (1)</p>	 <p>Foldable Filling Bottle (1)</p>	 <p>EK-Loop Angled Bracket - 120mm (1) With a Mounting Mechanism</p>

REQUIRED TOOLS

<p>Phillips Head Screwdriver</p> 	<p>Mixing Bottle</p> 	<p>Distilled Water</p> 	<p>Scissors</p> 
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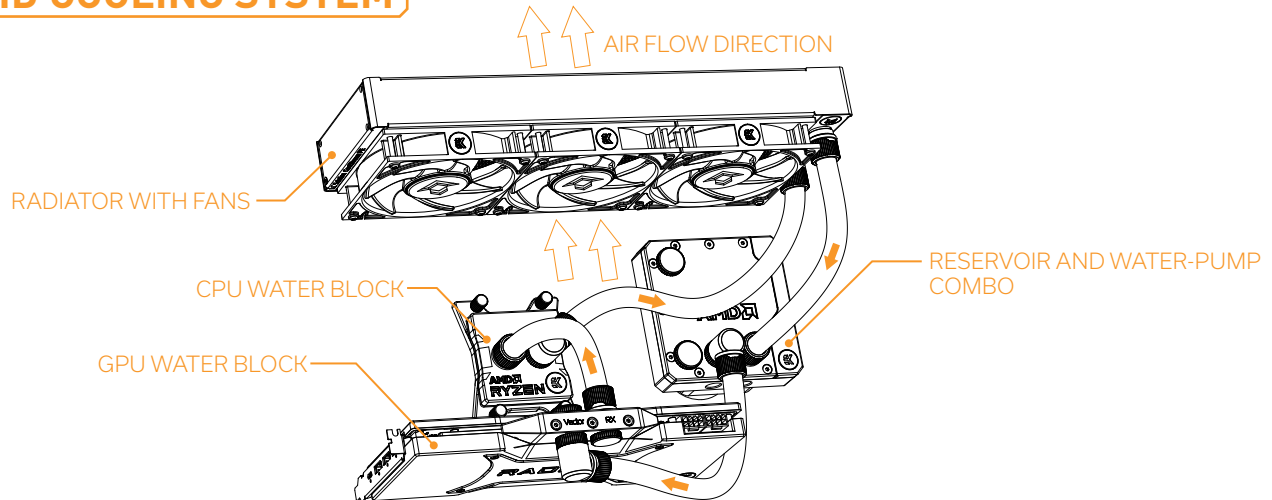
RADIATOR SPACE REQUIREMENTS



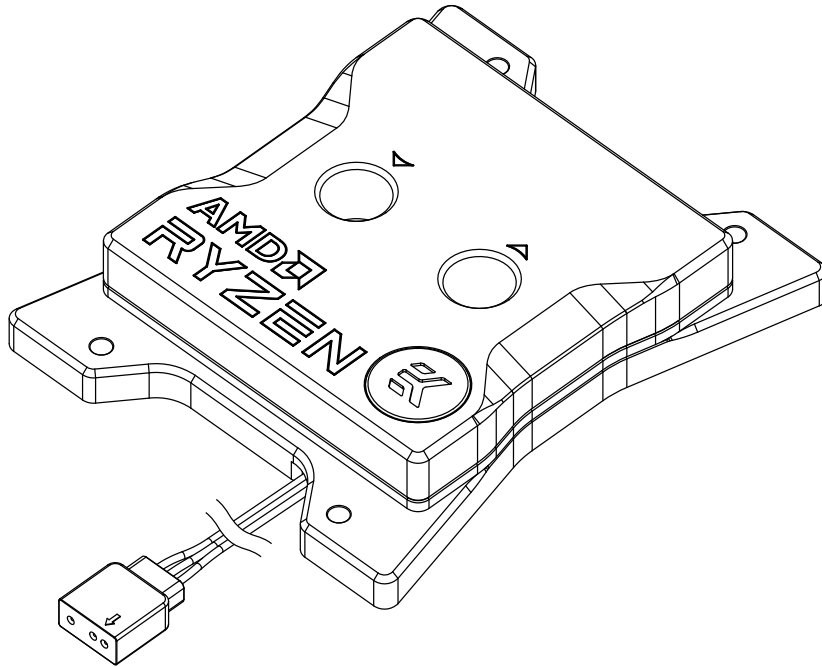
INSTALLATION TIPS FOR NOVICES

1. To lower the shipping cost, we have decided to enclose the coolant concentrate only. Therefore, you need to provide 1 liter (1L) of distilled water. You can find it at every gas station or supermarket.
2. **Never run this system on tap water** and always use the enclosed cooling concentrate in the right ratio.
3. **Never use alcohol**, alcohol derivatives, or alcohol-based solvents in the system. Using alcohol might result in permanent damage to water cooling KIT components, especially acrylic parts of the system.
4. It is best practice to do a proper 24-hour leak test before using your computer.
5. **If you spot any leaks, turn off the power immediately.**
6. Optimize tube length to prevent excessive bending and kinking of the tubing.
7. **Never let your pump run dry.** If this is happening for a prolonged period, you risk destroying the water pump's bearing, ultimately rendering the pump useless.
8. You are encouraged to periodically clean the radiator assembly as it will collect dust over time. It's best to be done with a soft wide-tip brush and a vacuum cleaner. See chapter **Cleaning Guide**.

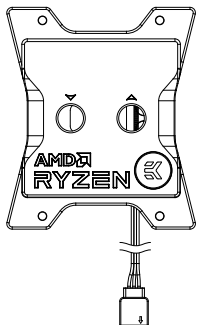
LIQUID COOLING SYSTEM



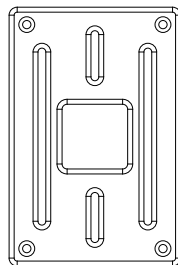
INSTALLING THE CPU WATER BLOCK



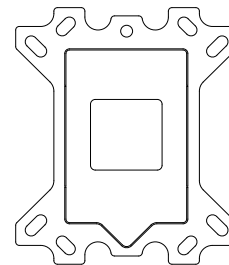
BOX CONTENTS



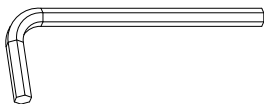
EK-Quantum Velocity D-RGB - AMD Ryzen Edition - CPU Water Block (1)



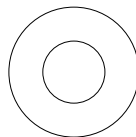
Metal Backplate (1)



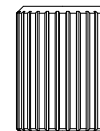
Rubber Gasket (1)



Allen Key 2.5mm (1)



M4 x 0.8 PA Washer (4)



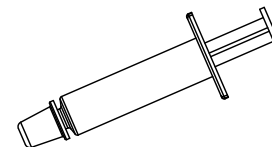
Thumb Nut (4)



Standoff (4)

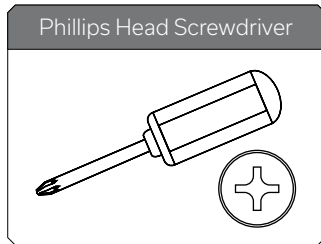


Spring (4)

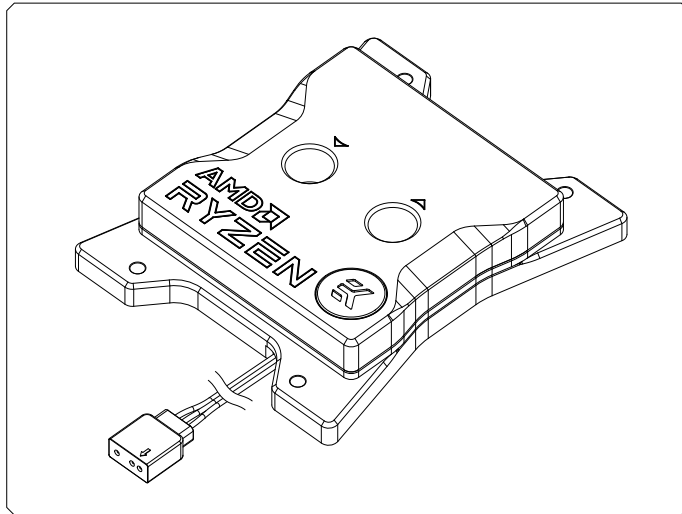


Thermal Grease (1)

REQUIRED TOOLS



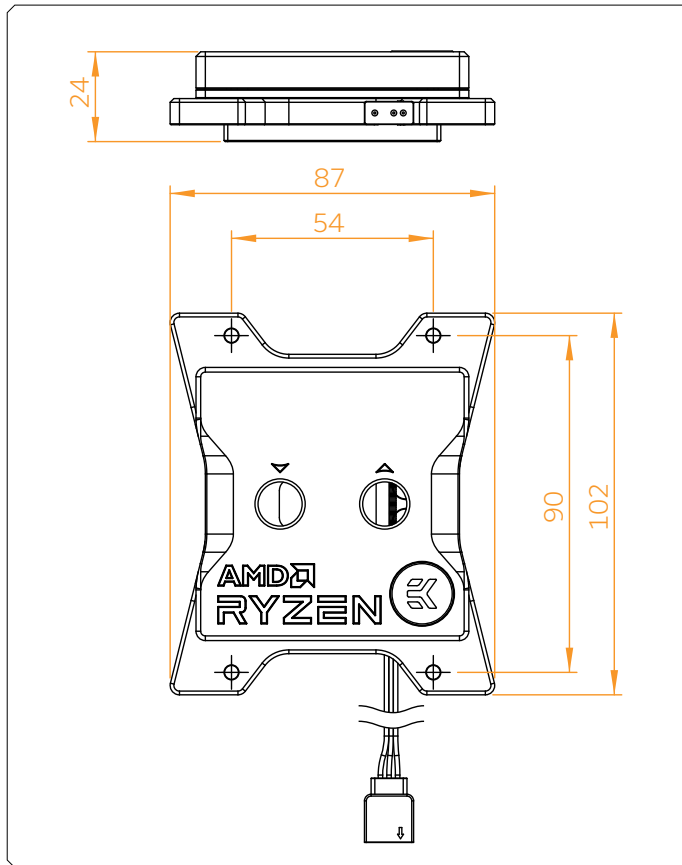
GENERAL INFORMATION ON WATER BLOCK COMPATIBILITY



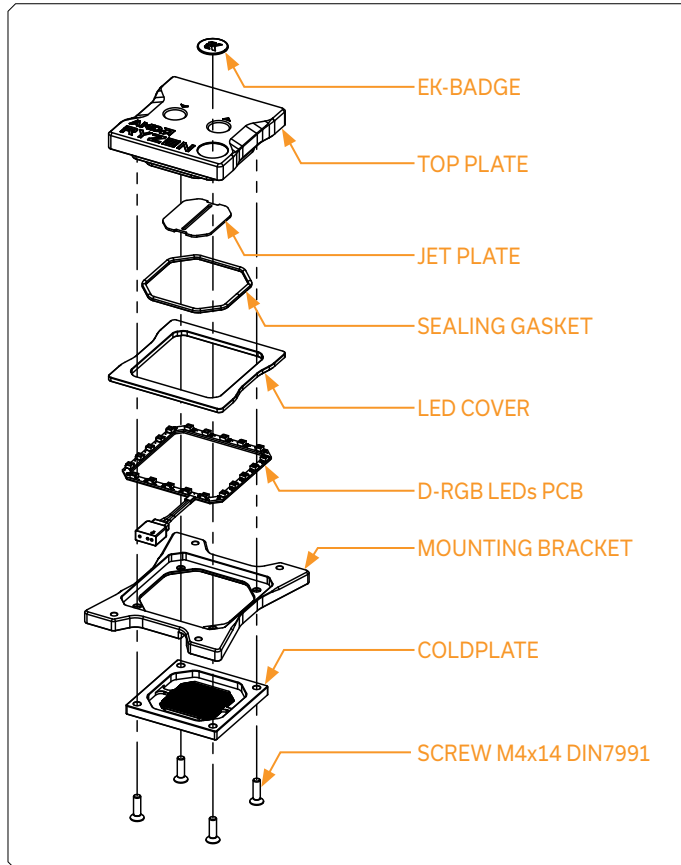
This CPU liquid cooling unit is pre-assembled for use with modern AMD desktop socket type motherboards. By default (out of the box) this water block supports the following CPU sockets:

- **AMD® socket AMx and FMx**

WATER BLOCK DIMENSIONS



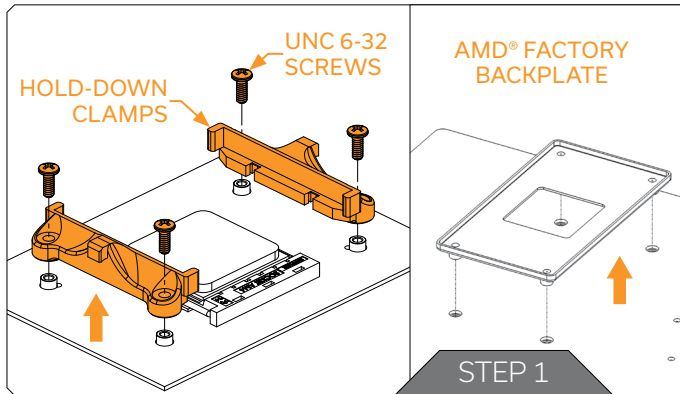
WATER BLOCK SPECIFICATIONS AND MAIN PARTS



Technical Specifications:

- Dimensions (LxHxW): 102 x 87 x 24 mm
- D-RGB (Addressable RGB) Cable Length: 300 mm
- D-RGB LED Count: 20
- D-RGB Connector: Standard 3-Pin (+5V, Data, Blocked, Ground)

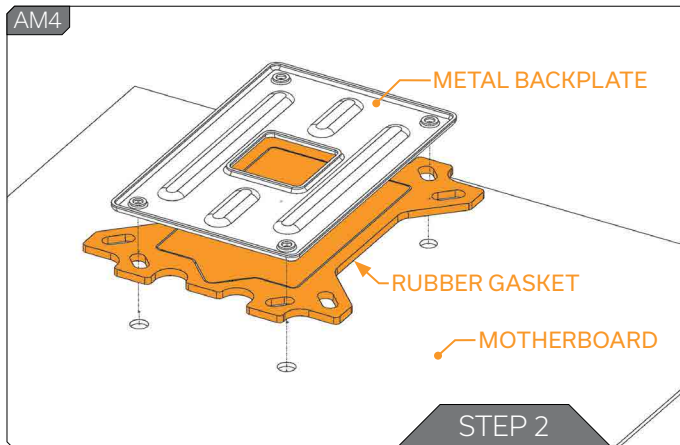
INSTALLING THE WATER BLOCK



AMx AND FMx SOCKET MOTHERBOARDS

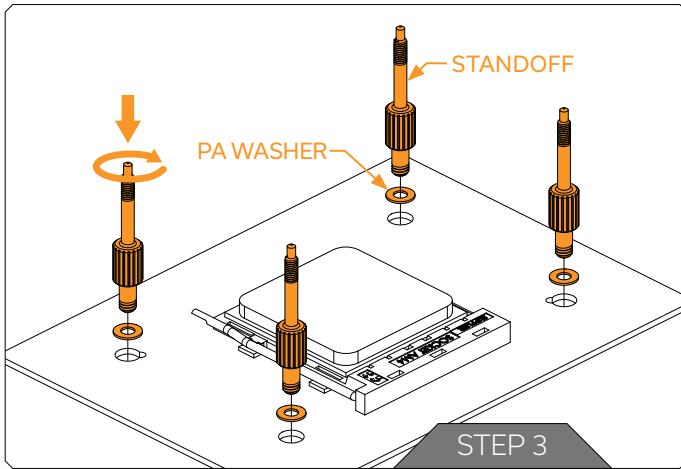
STEP 1

Use a Philips head screwdriver to remove four (4) UNC 6-32 screws securing the plastic hold-down clamps to the motherboard. Remove the clamps and the original motherboard backplate, and store them away. See the illustration to identify those parts.



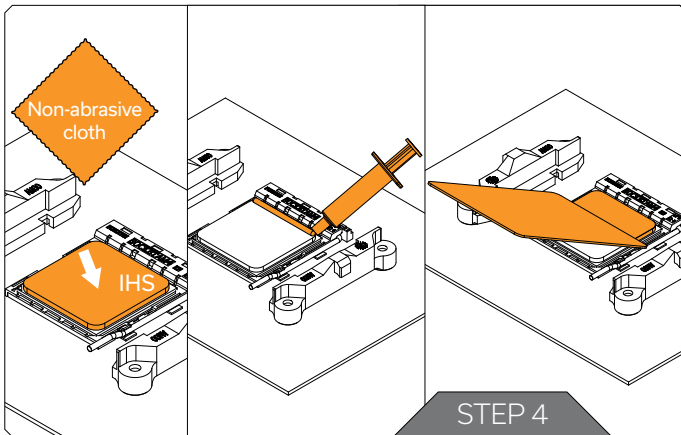
STEP 2

Turn your motherboard face down and position the Rubber Gasket and Backplate directly in line with the mounting holes. The ribbed side of the backplate should be turned face up! Once aligned, carefully rotate the motherboard assembly while holding the backplate in position with the other hand.



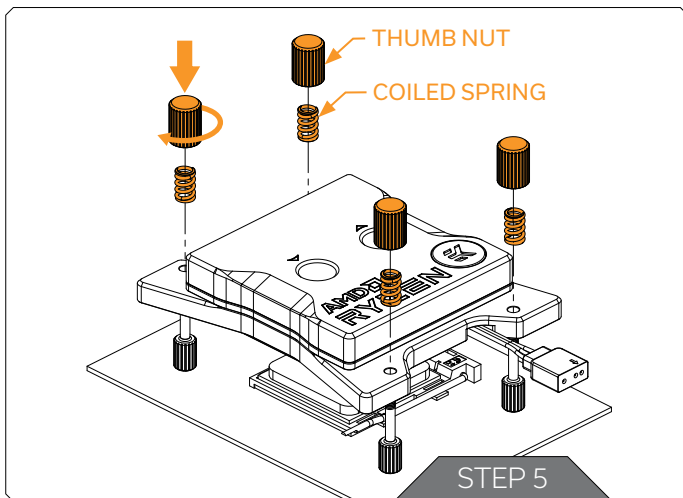
STEP 3

Loosely install all four standoffs and plastic washers before proceeding to tighten them completely. It is mandatory to install plastic washers as they prevent damage to the motherboard PCB. Using pliers or similar tools is not recommended.



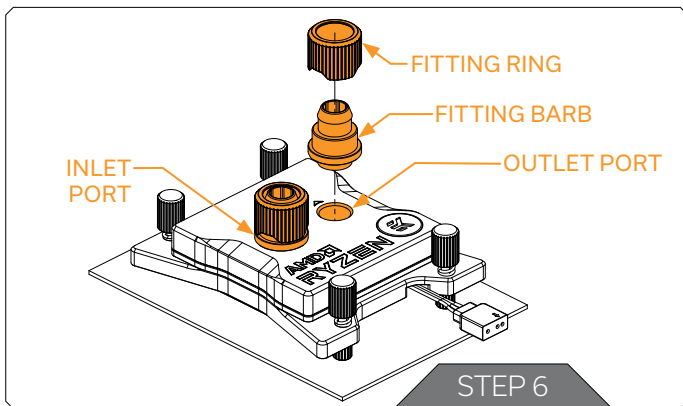
STEP 4

Wipe the IHS clean using a non-abrasive cloth or Q-tip, as shown in the image. Once it's clean, apply a line of Thermal Compound to one edge of the IHS and use a plastic card or something similar to spread it evenly. The layer of Thermal Compound must be thin and even in thickness over the entire surface of the IHS. The excessive or uneven application will lead to poor performance!



STEP 5

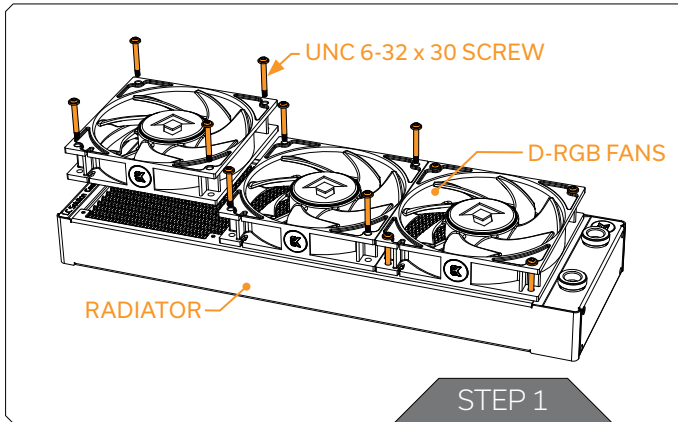
Remove the protective sticker and position the CPU water block onto the standoffs. Place the springs and thumb nuts over each standoff before tightening them two revolutions at once, in a cross pattern. Do not tighten them fully until all of them are partially screwed in.



STEP 6

Tighten the fitting bars in a clockwise direction until the O-ring underneath is compressed.

INSTALLING THE RADIATOR AND FANS



Before positioning the fans on the radiator, decide if you want them to serve as the hot air exhaust (**Method 1** - when fans are placed on the exhaust) or to receive the coldest air possible (**Method 2** - when they're placed on the air inlet).

The first method results in an overall decrease in temperature throughout the entire computer chassis but also leads to slightly higher liquid temperatures. A reversed airflow is a viable option, but you should always strive to achieve the unidirectional airflow throughout the chassis.

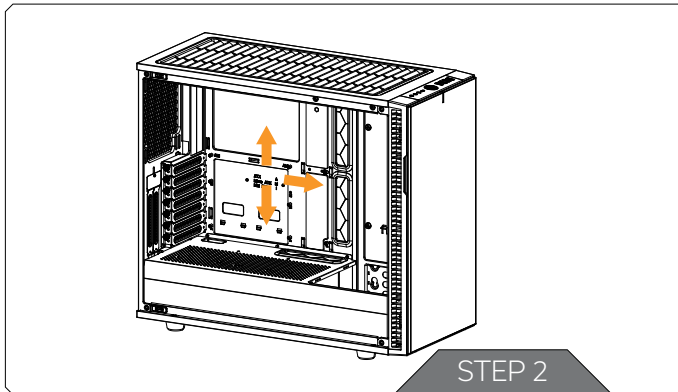
METHOD 1

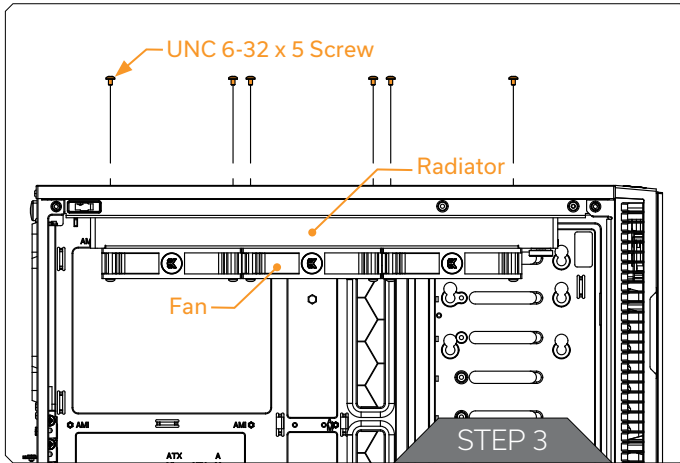
STEP 1

Take four (4) UNC 6-32 x 30mm screws for each fan and screw them in. Use the enclosed Allen key to tighten the screws in the clockwise direction.

STEP 2

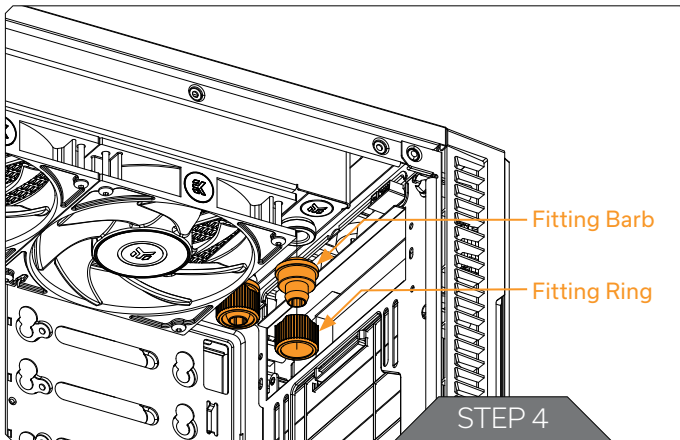
Prepare your suitably-sized PC chassis for the installation of the radiator unit. The position of the unit in the chassis depends on its size, fan mounting holes, and hardware that is installed. You must make sure the unit fits into the case. Usually, cases already have standard pre-drilled fan-mounting holes, and you should look for those with a spacing of 105mm (for standard 120mm computer cooling fans).





STEP 3

Align the holes of the radiator with the ones in the PC chassis. Take four (4) UNC 6-32 x 5mm screws for each fan and guide them through the holes in the chassis, then screw them into the threaded holes of the radiator. Tighten them in a clockwise direction using the enclosed Allen key.



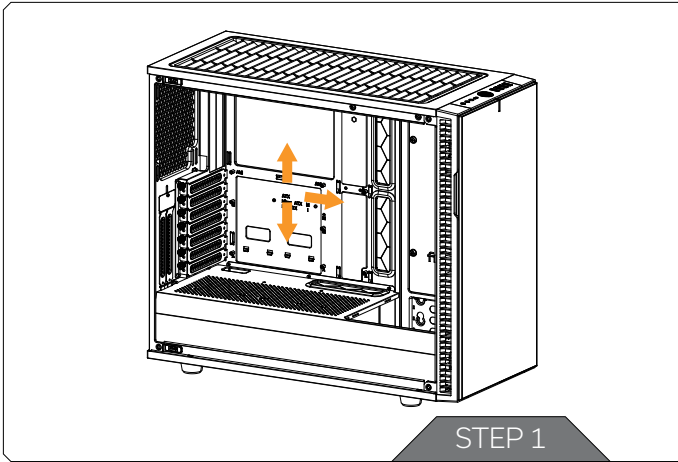
STEP 4

Install the compression fitting on both G1/4 extender openings of the radiator. Tighten the fitting barbs in the clockwise direction. The installation of the radiator and fans is now complete.

METHOD 2

STEP 1

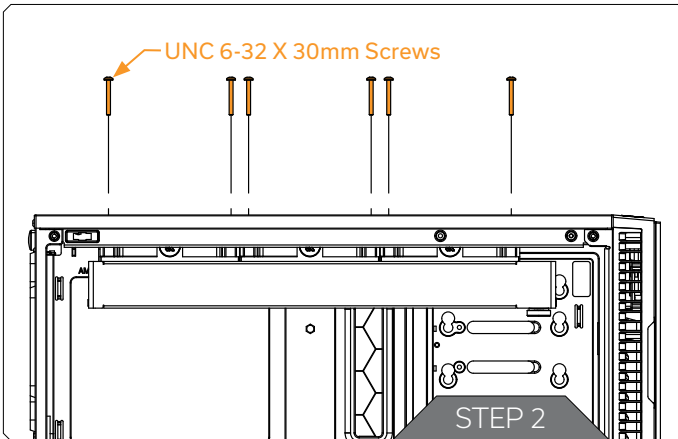
Prepare your suitably-sized PC chassis for the installation of the radiator unit. The position of the unit in the chassis depends on its size, fan mounting holes, and hardware that is installed. You must make sure the unit fits into the case. Usually, cases already have standard pre-drilled fan-mounting holes, and you should look for those with a spacing of 105mm (for standard 120mm computer cooling fans).

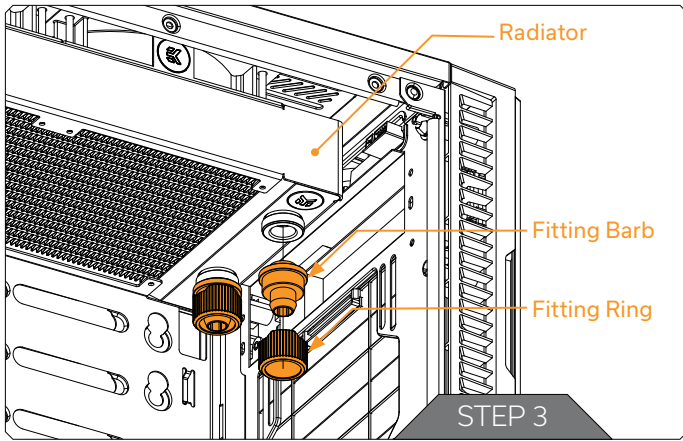


STEP 2

Align the holes of the radiator and fans with the ones in the PC chassis.

Take four (4) UNC 6-32 x 30mm screws for each fan and guide them through the holes of the chassis and fans, then screw them into the threaded holes of the radiator. Tighten them in a clockwise direction using the enclosed Allen key.





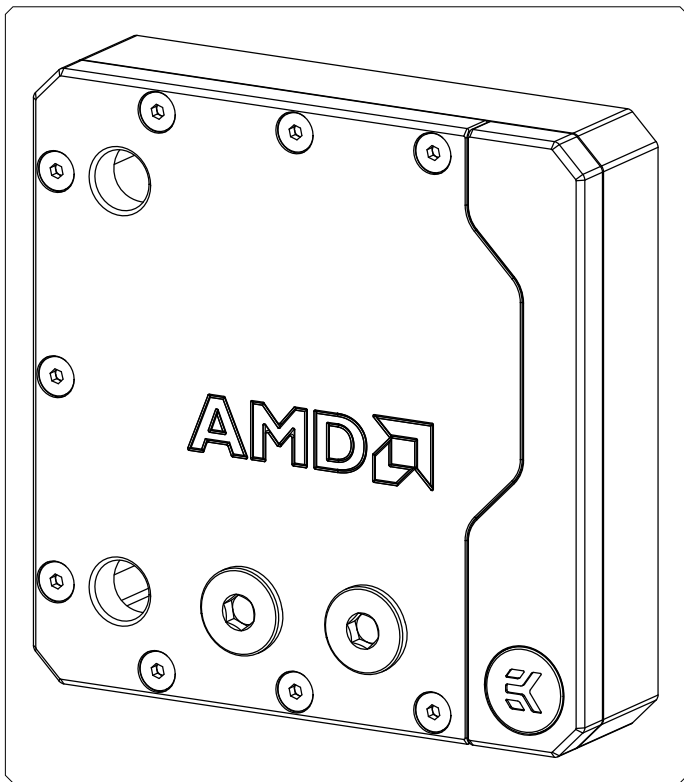
STEP 3

Install compression fittings on both G1/4 openings of the radiator. Tighten the fitting barbs in the clockwise direction until the gasket underneath is compressed.

The installation of the radiator and its cooling fans is now complete.

OPTIONAL: EK-Quantum Power Kit also comes with four pieces of EK-Torque 90° Angled Fittings, which can be installed on the Pump-Reservoir Combo unit, CPU/GPU unit, or Radiator.

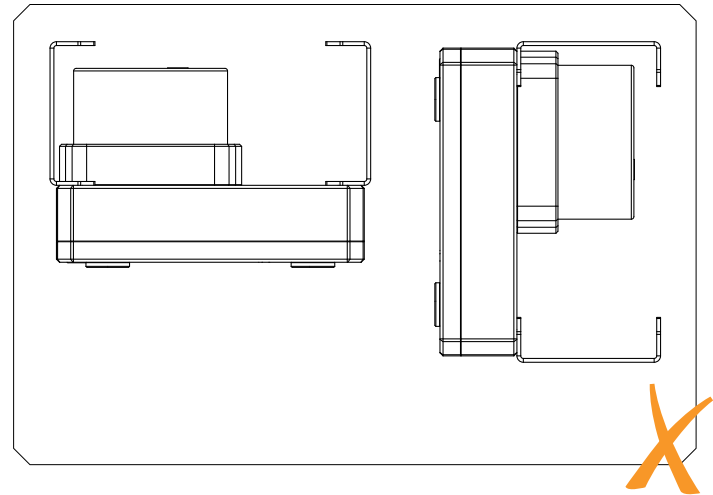
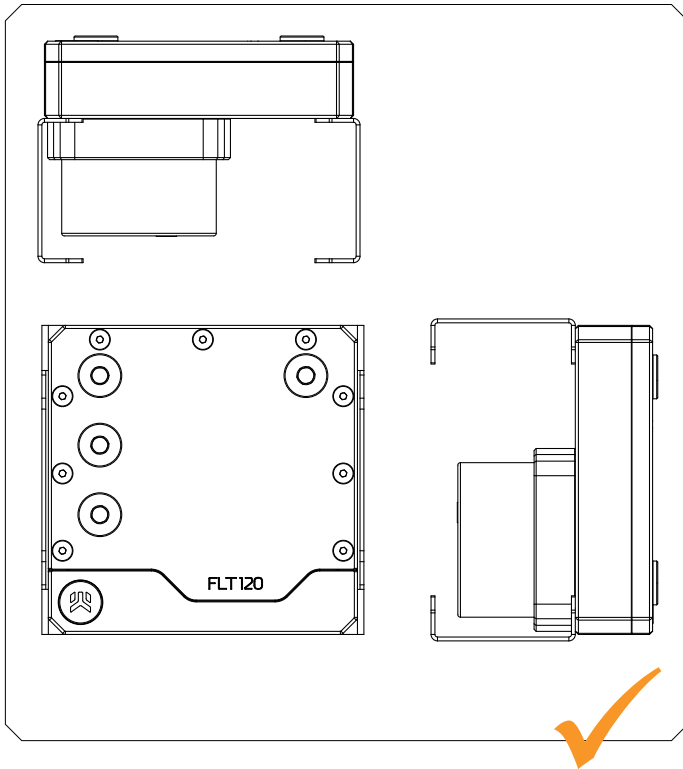
INSTALLING THE PUMP-RESERVOIR COMBO UNIT



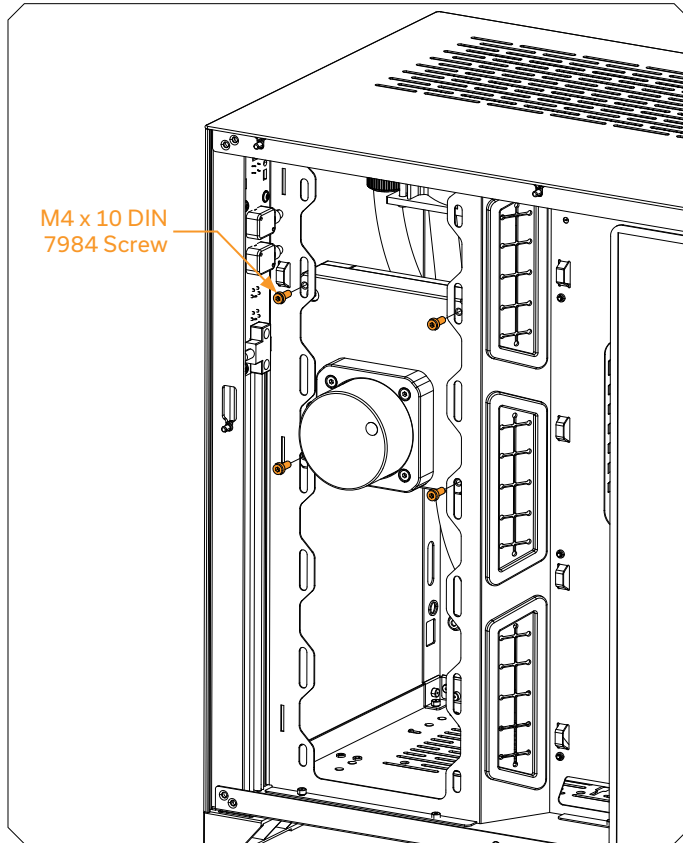
There are many ways to install the pump-reservoir unit as it utilizes a standard fan mounting hole pattern with 105 mm spacing, the same as all EK radiators. The mounting holes have standard M4 threads with maximum engagement of 10mm. Use of longer screws or screws with incorrect threads such as those intended for fans or radiators may damage your product!

FLT Reservoir can be mount in multiple directions.
Vertically and horizontally position is optional.

Do not mount FLT Reservoir when the pump is in dead position.

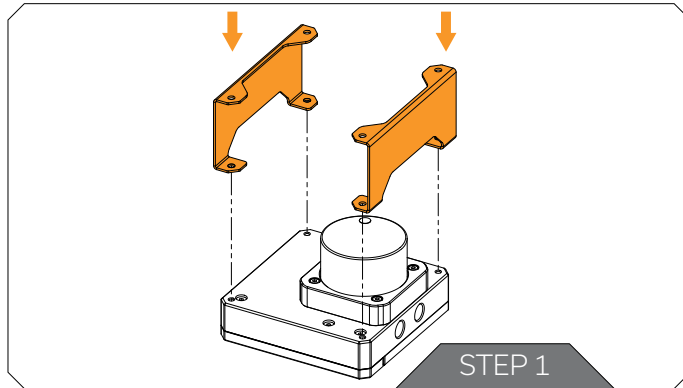


INSTALLING THE PUMP-RESERVOIR UNIT DIRECTLY TO THE CHASSIS



Using the included M4 screws you can mount the reservoir directly to your chassis or any other standard fan mounting location.

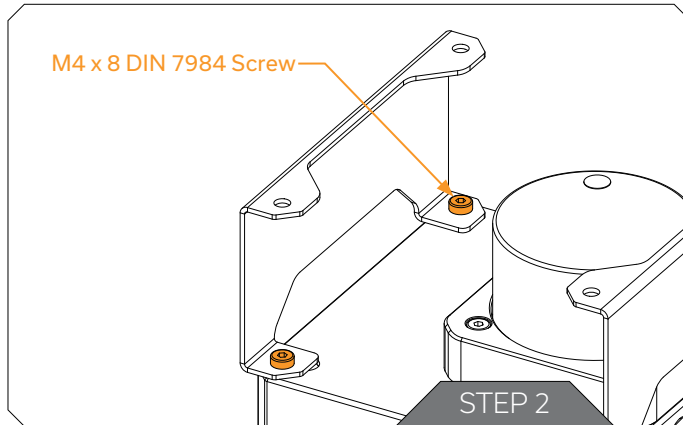
INSTALLING THE PUMP-RESERVOIR UNIT WITH THE SUPPLIED MOUNTS



To enable installation of the reservoir onto fans, radiators or where clearance for the pump is required EK supplies a pair of FLT mounts along with M4 nuts, washers and additional screws. They can be positioned across any pair of mounting holes in several orientations.

STEP 1

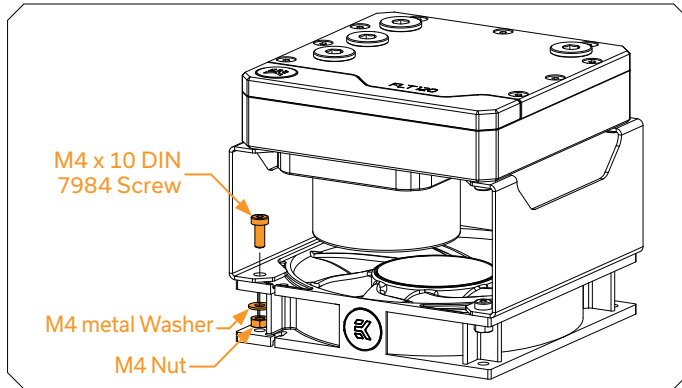
Position the mounts as desired on the reverse side of the reservoir.



STEP 2

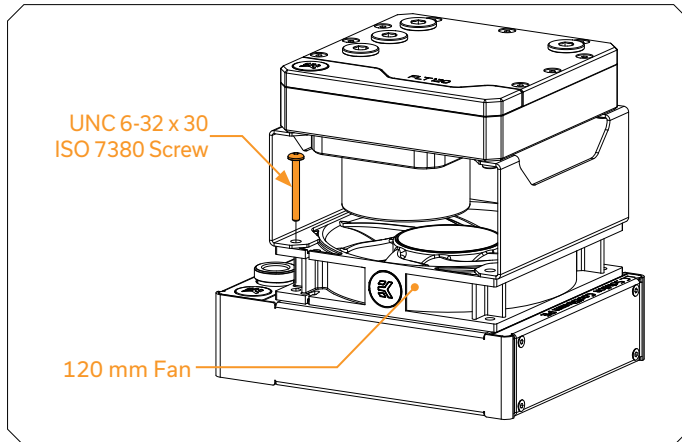
Screw the mounts in place using supplied M4x8 screws and 2.5mm allen key.

INSTALLATION OPTIONS



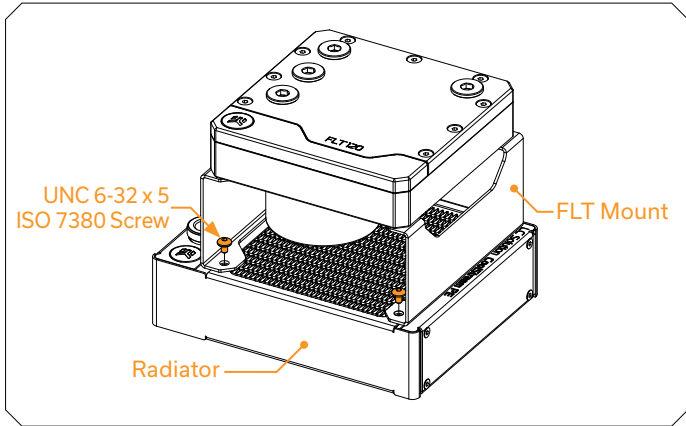
3a.

Included M4 nuts, washers and M4x10 screws can be used to mount the flat reservoir to a fan.



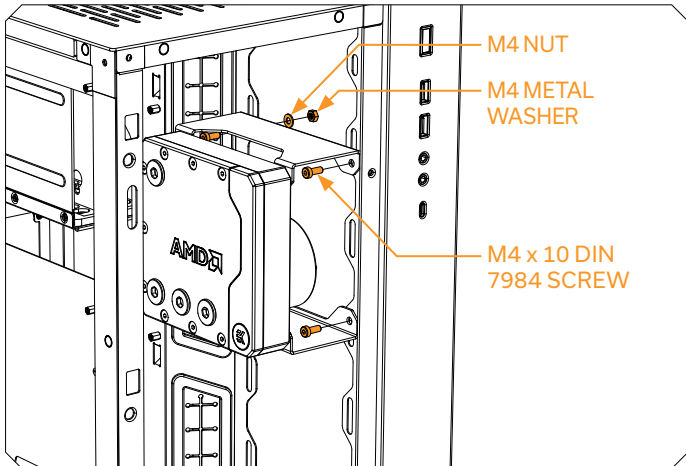
3b.

Using 30mm long screws supplied with your radiator the reservoir can be mounted onto the radiator and 25mm thick fans together.



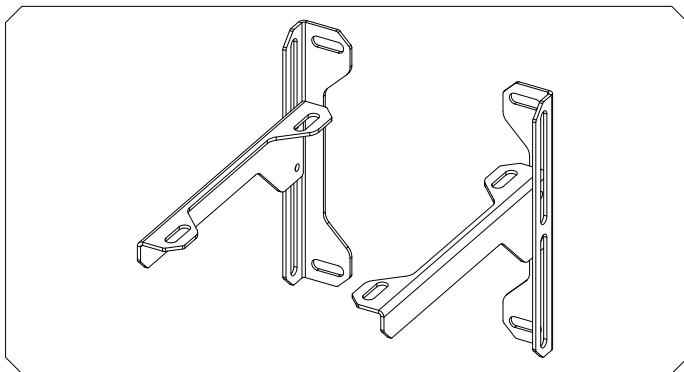
3c.

Alternatively the shorter 5mm long screws from the radiator may be used to mount only the reservoir.



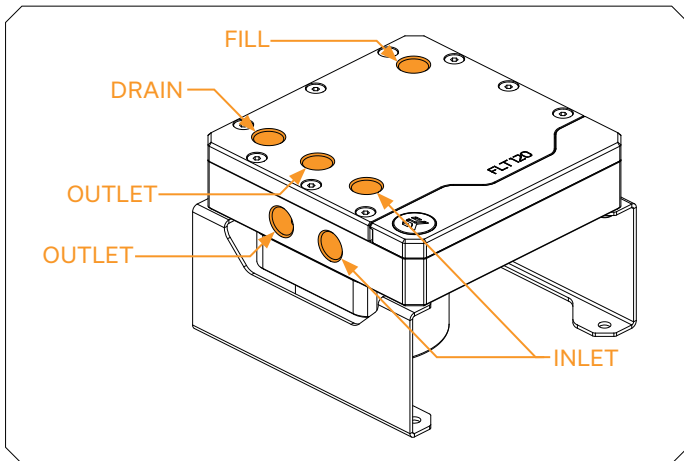
3d.

Lastly the supplied M4 nuts, washers and M4x10 screws may be used to secure the reservoir to a case with the mounts. This is useful when there is no clearance behind for the pump or to prevent all airflow being blocked



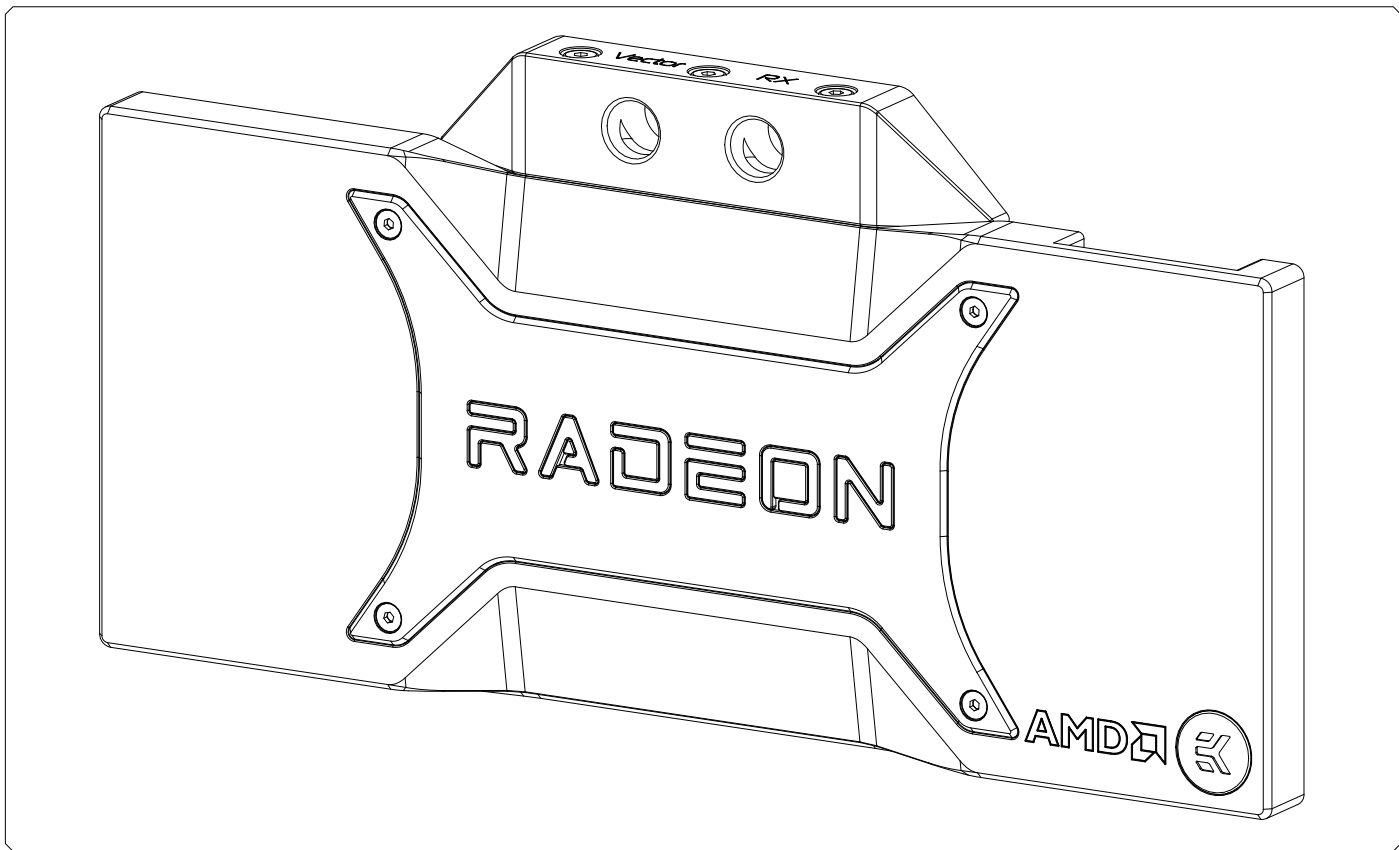
You may also use the EK-Loop Angled Bracket to install the pump-reservoir unit. For detailed instructions click on the link below:
<https://www.ekwb.com/shop/EK-IM/EK-IM-3831109825365.pdf>

ATTACHING THE FITTINGS



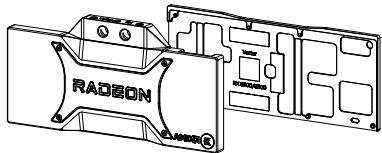
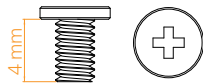
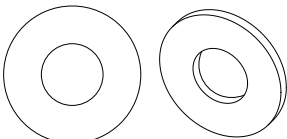
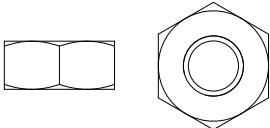
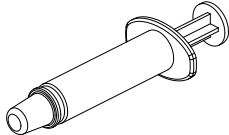


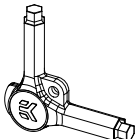
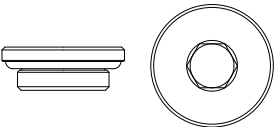
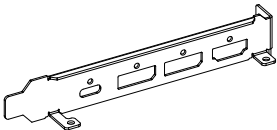
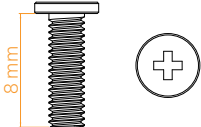
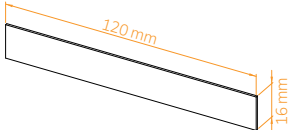
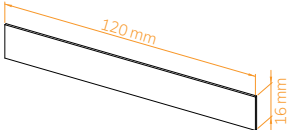
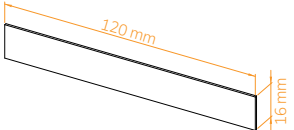
EK-Quantum Kinetic FLT has two inlet and two outlet ports, one of each must be used! All 4 unused ports should be blocked using G1/4 plugs.

INSTALLING THE GPU WATER BLOCK

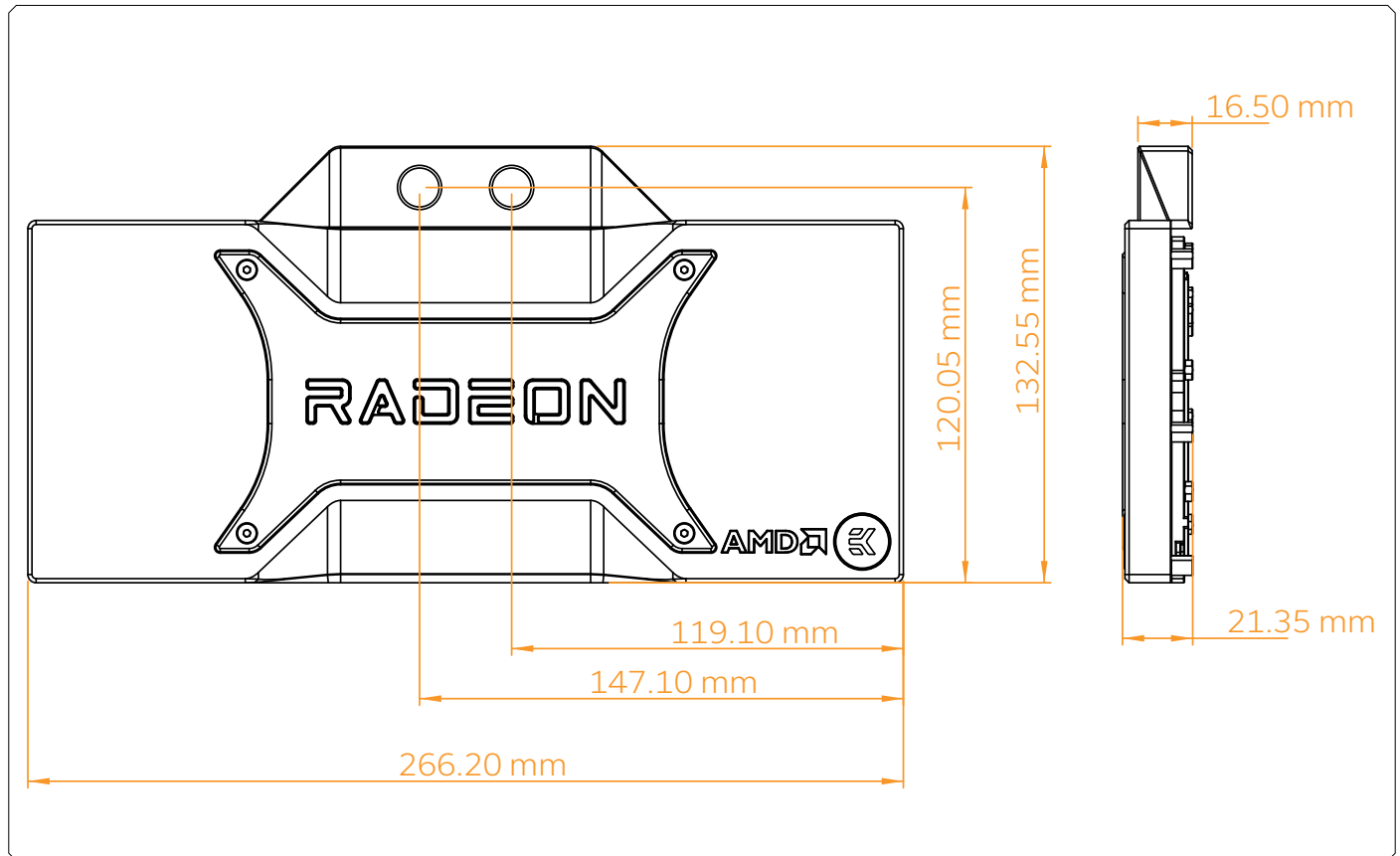


BOX CONTENTS

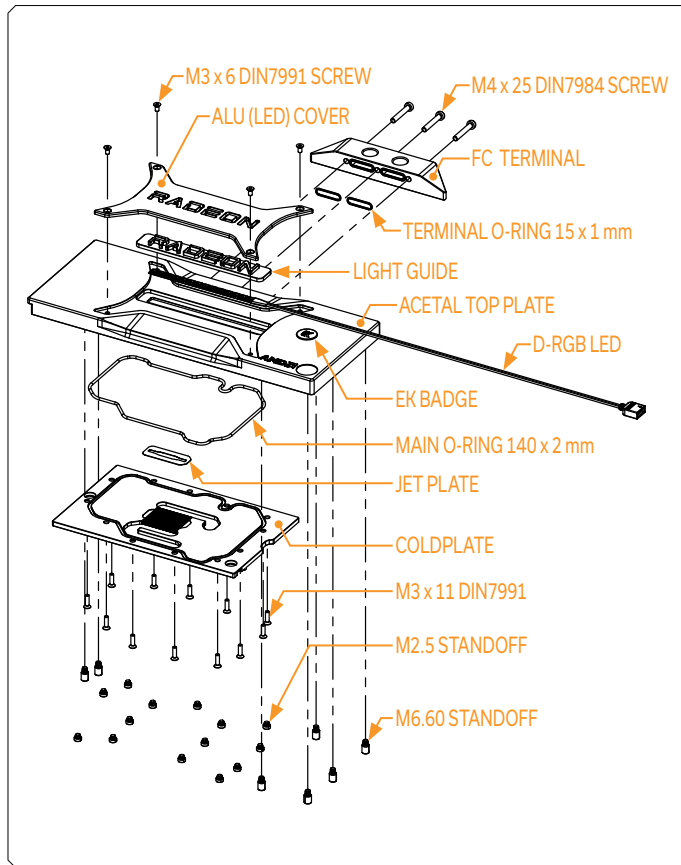
Universal Mounting Mechanism – You may not need every screw from this package.

 <p>EK-Quantum Vector RX 6800/6900 D-RGB - AMD Radeon Edition</p>		 <p>M2.5x4 AX1 Screw (30 pcs)</p>	 <p>PVC Washer M2.5 (28 pcs)</p>
 <p>M2.5 Nut (1 pc)</p>	 <p>Thermal Grease (1 pc)</p>	 <p>Allen Key 2 mm (1 pc)</p>	 <p>Allen Key 2.5 mm (1 pc)</p>
 <p>EK-Loop Multi Allen Key (1 pc)</p>	 <p>EK-Plug G1/4 (2 pcs)</p>	 <p>Single-Slot I/O Bracket (1 pc)</p>	 <p>M2.5x8 AX1 Screw (7 pcs)</p>
 <p>Thermal Pad F 1.0 mm (4 pcs)</p>	 <p>Thermal Pad F 1.5 mm (3 pcs)</p>	 <p>Thermal Pad F 2.0 mm (1 pc)</p>	

WATER BLOCK DIMENSIONS



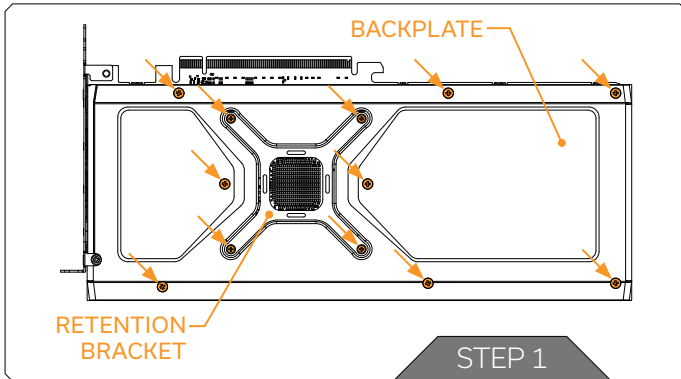
TECHNICAL SPECIFICATIONS AND WATER BLOCK PARTS



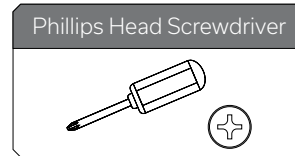
Technical Specification:

- Dimensions (LxHxW): 266 x 133 x 21.5 mm
- D-RGB (Addressable RGB) Cable - Length: 500 mm
- D-RGB LED Count: 14
- D-RGB Connector: Standard 3-Pin (+5V, Data, Blocked, Ground)

PREPARING THE GRAPHICS CARD

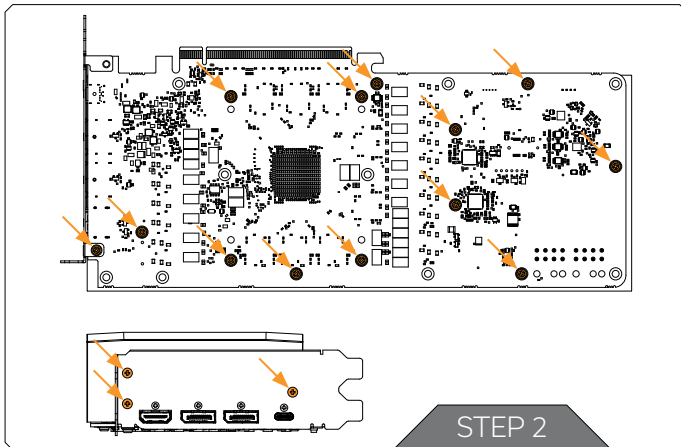


You will need the following tool:



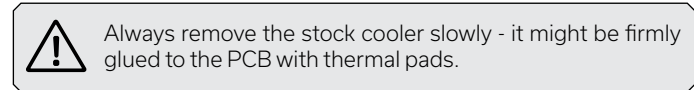
STEP 1 REMOVING THE STOCK BACKPLATE

Use the Phillips head screwdriver to unscrew the twelve (12) marked screws. Evenly untighten four (4) retention bracket screws for easier disassembly. Remove the Backplate and the Retention bracket from the backside of the GPU.



STEP 2 REMOVING THE STOCK COOLER

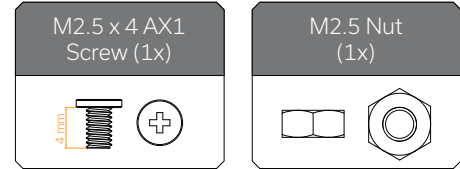
Use the Phillips head screwdriver to unscrew the sixteen (16) marked screws – thirteen (13) from the bottom side and three (3) from the side of the I/O Bracket. Carefully detach the PCB from the stock cooler and disconnect all cables connecting the stock cooler to the PCB.



OPTIONAL STEP
CHANGING THE STOCK 2-SLOT I/O BRACKET FOR THE SINGLE-SLOT I/O BRACKET

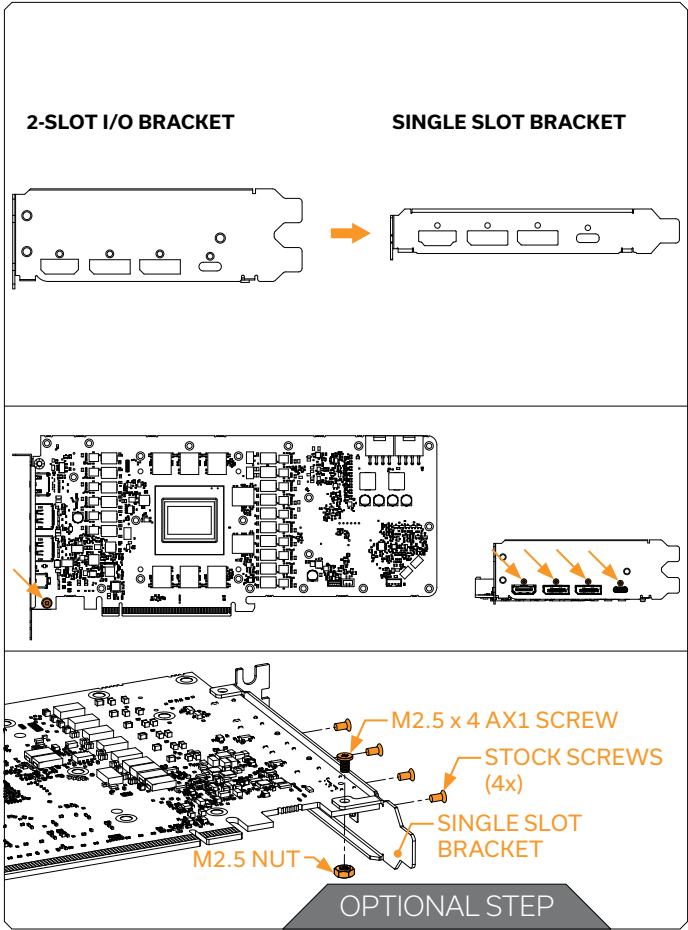
In case you prefer it that way, you can change the stock Two-Slot I/O Bracket for the Single-Slot Bracket enclosed in this package.

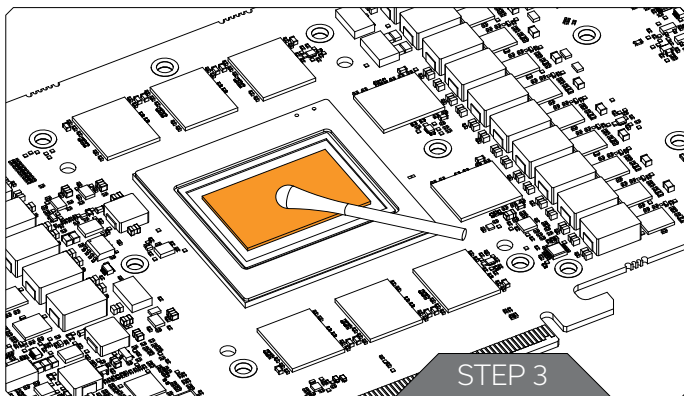
For this Step, you will need:



To remove the I/O Bracket, unscrew all five (5) screws marked in a diagram. Save the four (4) marked screws for later since you will need them to mount the new bracket.

Use four (4) stock screws that you saved and one M2.5 X 4 AX1 screw with the M2.5 nut to mount the Single-Slot Bracket.

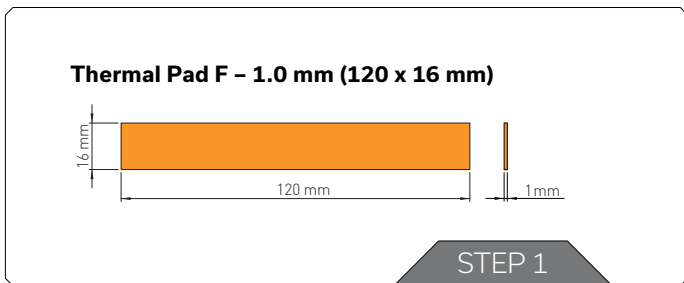




STEP 3 CLEANING THE PCB

Wipe off the remains of the original thermal compound using a nonabrasive cloth or Q-tip, as shown in the sample image, until the components and circuit board are completely clean. EK recommends the use of denatured alcohol for removing TIM leftovers. After that, remove all remaining stock thermal pads from the PCB.

CUTTING AND PLACING THERMAL PADS



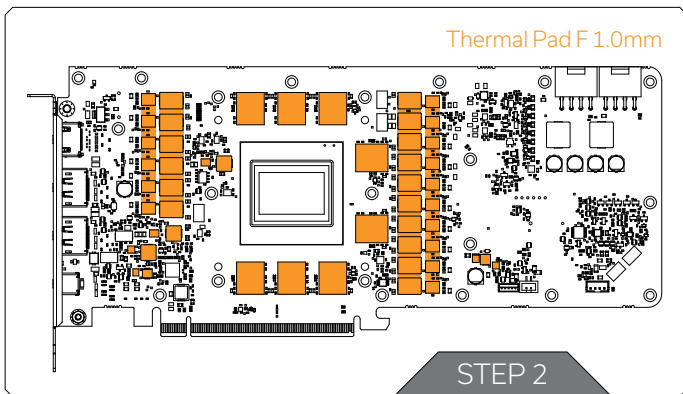
STEP 1

Your GPU water block comes with thermal pads that have to be cut into smaller pieces to cover all the VRM components, such as COILS, MOSFETs, and drivers.



You must remove the protective foil from both sides of the thermal pad before installation.

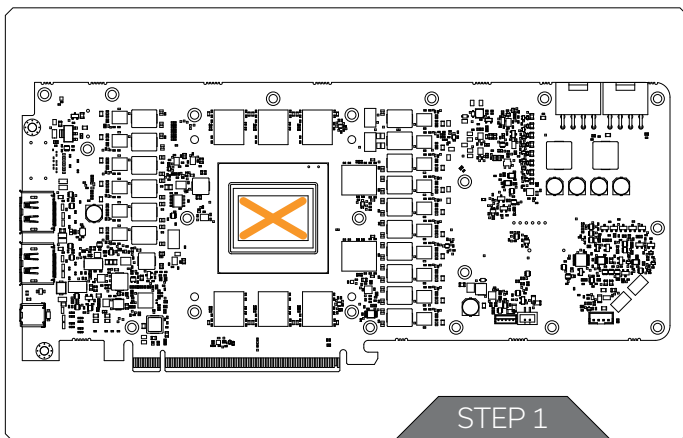
Thermal pads:
4x Thermal Pad F 1.0 mm - (120 x 16 mm) EAN: 3830046996732



STEP 2

Once cut to size, thermal pads should be placed on the PCB, as illustrated below. EK made sure to provide you with more than an adequate quantity of thermal pads to complete this Step.

APPLYING THERMAL COMPOUND



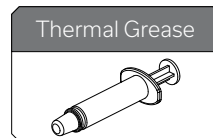
STEP 1

Apply the enclosed EK-TIM Ectotherm thermal grease (thermal compound) on the CPU heat spreader – IHS – as shown in the image. The layer of the thermal compound must be thin and even over the entire surface of the IHS.

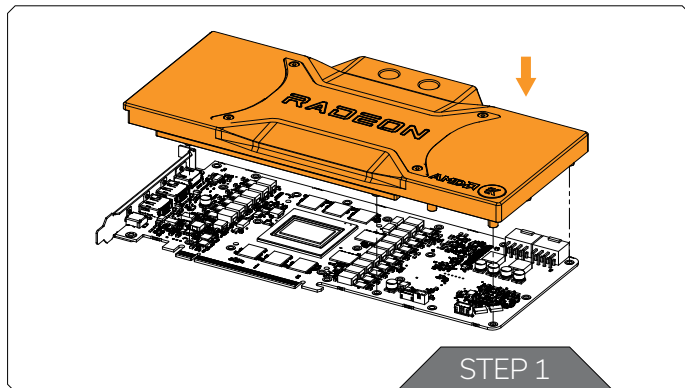


The excessive or uneven application of thermal grease may lead to poor performance!

For this Step, you will need:



INSTALLING THE WATER BLOCK



STEP 1

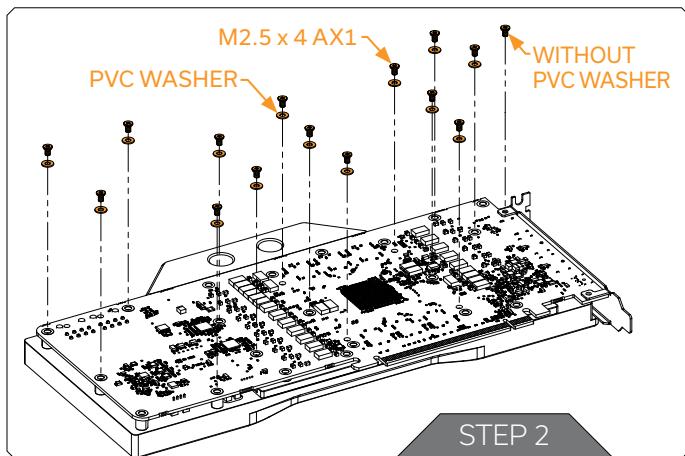
PLACING THE BLOCK ON THE GRAPHICS CARD

This procedure is the same for all full-cover water blocks.

Carefully position the water block with preinstalled standoffs on the graphics card. During this process, make sure you have aligned mounting holes of the PCB with holes of the water block (same applies to other tops).



Pay attention not to use too much force when pressing the block down to the PCB since chip dies are prone to cracking.



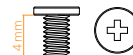
STEP 2

ATTACHING THE WATER BLOCK

Use fifteen (15) M2.5 X 4 AX1 screws and fourteen (14) M2.5 PVC washers. Tighten the screws evenly using the Phillips head screwdriver. EK recommends you start tightening the screws around the GPU core first and then continuing outward to prevent damage to the GPU.

For this Step, you will need:

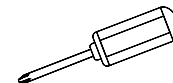
M2.5 x 4 AX1
15 pcs



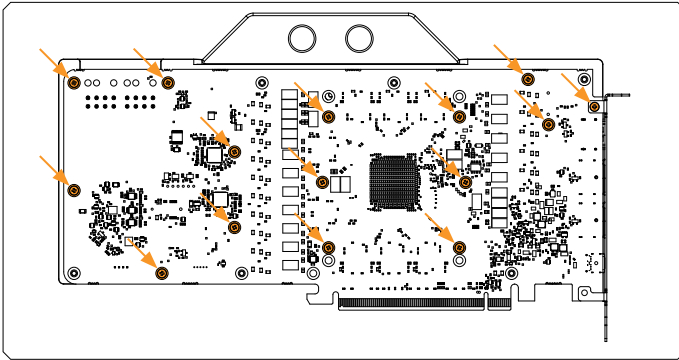
M 2.5 PVC Washer
14 pcs



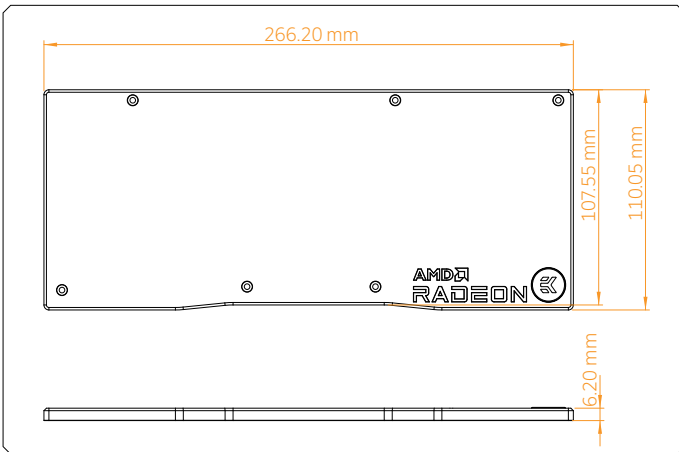
Phillips Head
Screwdriver



The screws must be present on the places marked below.

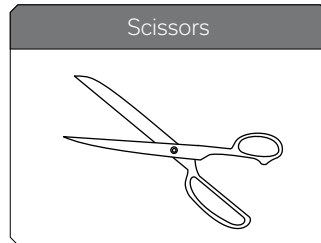
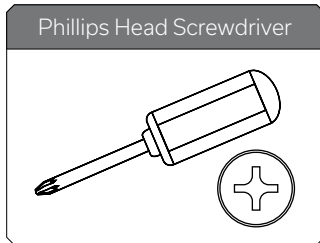


INSTALLING THE BACKPLATE

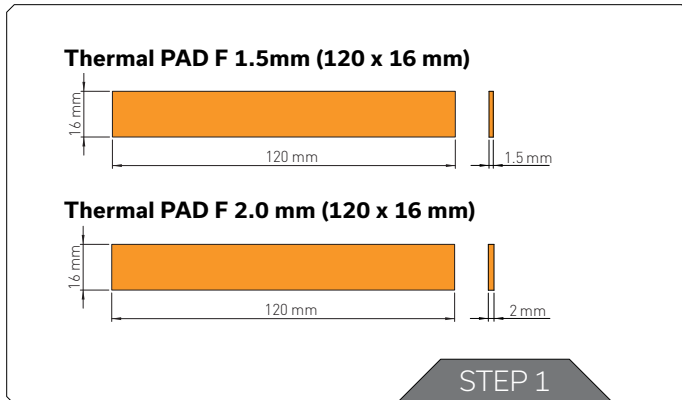


BACKPLATE DIMENSIONS

REQUIRED TOOLS



CUTTING AND PLACING THERMAL PADS



STEP 1

Your backplate comes with thermal pads that have to be cut into smaller pieces to cover all the VRM components. EK made sure to provide you with more than an adequate quantity of thermal pads to complete this Step.

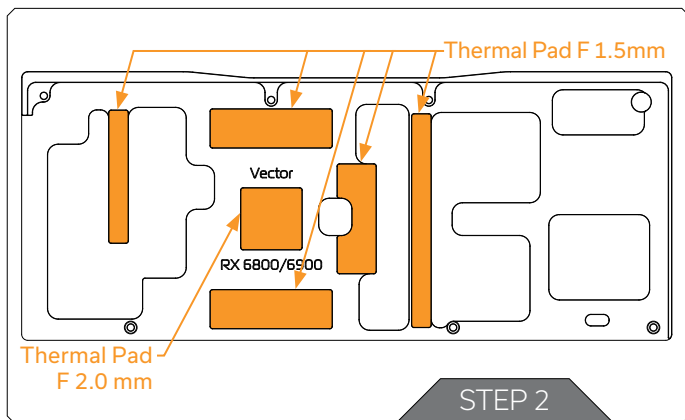


CAUTION: You must remove the protective foil from both sides of the thermal pad before installation.

Replacement thermal pads:

3x Thermal PAD F 1,5 mm - (120 x 16 mm) - EAN: 3830046996749

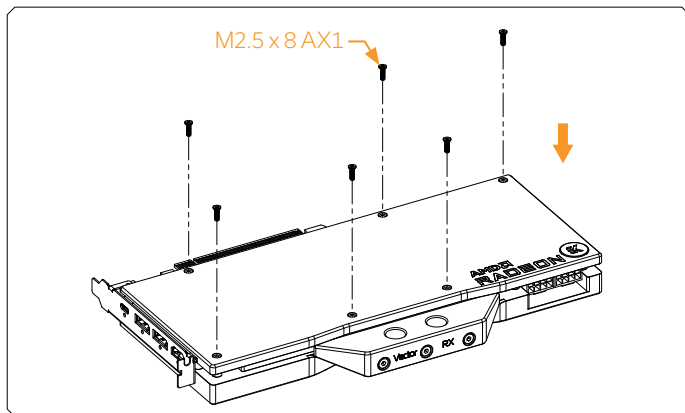
1x Thermal PAD F 2,0 mm - (120 x 16 mm) - EAN: 3830046996756



STEP 2

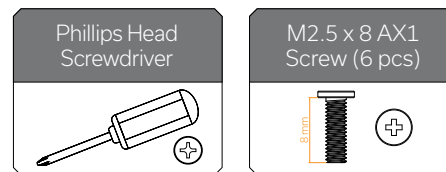
Once cut to size, thermal pads should be placed on the backplate, as shown on the diagram.

ATTACHING THE BACKPLATE



Place the backplate on the PCB and make sure all holes are aligned. Position an M2.5X8 AX1 screw in each of the six (6) mounting holes (as shown in the image) and tighten them evenly with a Phillips head screwdriver. **Do not use excessive force!**

For this Step, you will need:



CHECKING THE CONTACT IN CASE OF HIGH TEMPERATURES

If necessary, temporarily remove the water block to check for uniform surface contact between the block and components. Pay special attention to the VRM section of the graphics card. Check whether the water block makes contact with the intended integrated circuit. Then repeat Steps from the previous section to re-attach the block.



In case you fail to obtain good contact, please check again or contact our support service at <https://www.ekwb.com/customer-support/>.

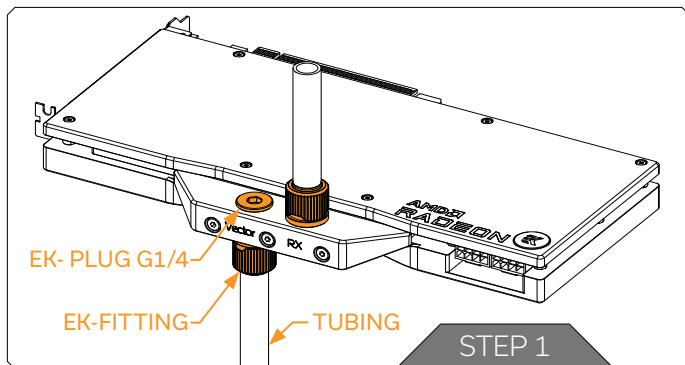
INSERTING THE GRAPHICS CARD INTO THE CHASSIS

Carefully lift your graphics card with the installed water block and insert it into your PC's motherboard PCIe expansion slot. Please keep in mind that your graphics card is heavier than before it was equipped with the water block.



You need to be very careful when handling the graphics card. Avoid all unnecessary manipulation of the water block assembly that might damage your card or water block.

INSTALLATION OF FITTINGS AND TUBING



STEP 1

Screw in two (2) G1/4 threaded male fittings. Attach the liquid cooling tubes and connect the water block(s) to the cooling loop.



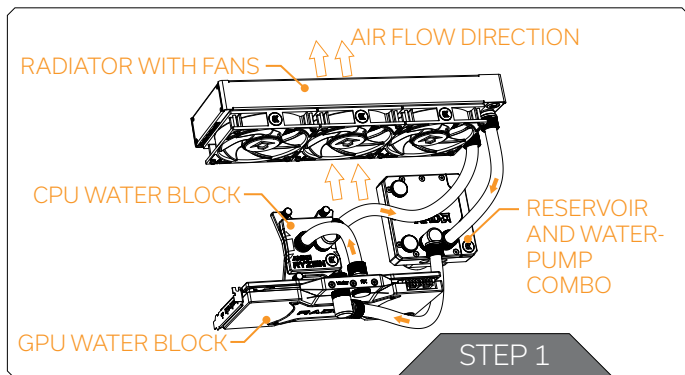
Do not forget to plug the remaining two openings with enclosed EK-Plug G1/4 or its equivalent.

EK recommends using EK fittings with all EK water blocks.



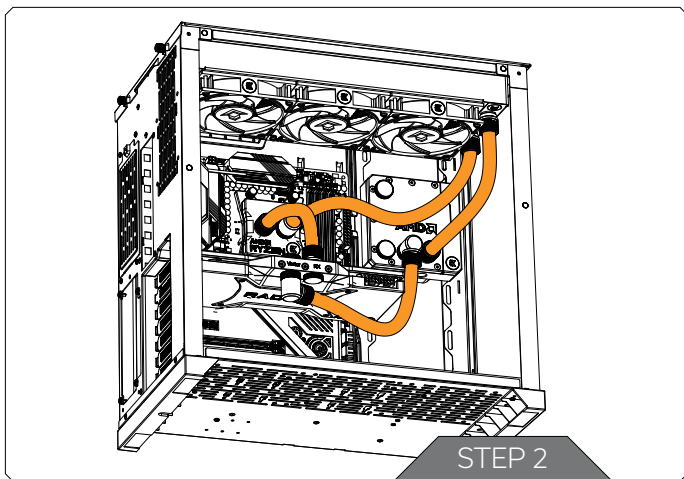
CAUTION: When using connectors other than EK fittings, pay special attention to the length of the fittings male G1/4" thread - 5mm is the maximum G1/4" thread length allowed!

CONNECTING THE TUBING



STEP 1

In order to successfully route your tubing, we recommend you check the liquid cooling scheme.

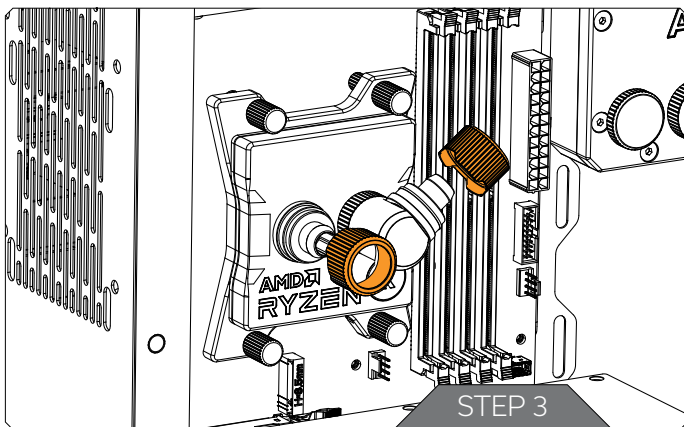


STEP 2

Try to visualize the tube route and then measure its distance by trying to fit it into the chassis. Mark the required length with a felt-tip pen.

Before you make the first cut, keep in mind that it's best to have 2–3cm in tube length to spare. You can always shorten the tube afterward.

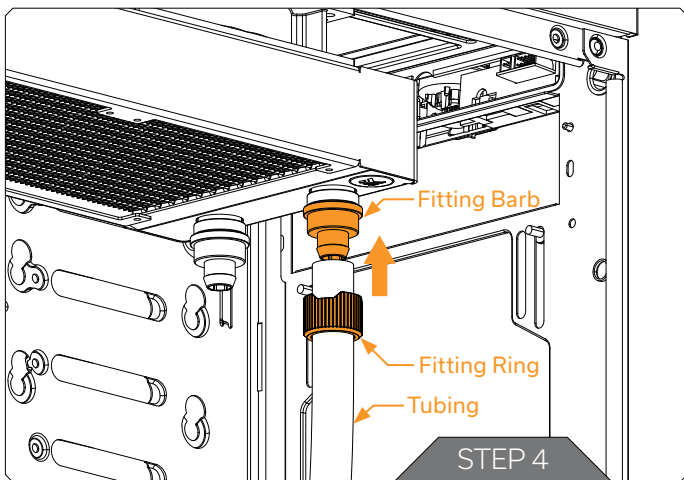
For the coolant to flow without restriction, make sure the tube is not bent or twisted.



STEP 3

If you assembled the components according to this installation manual, all the compression fittings should have already been installed.

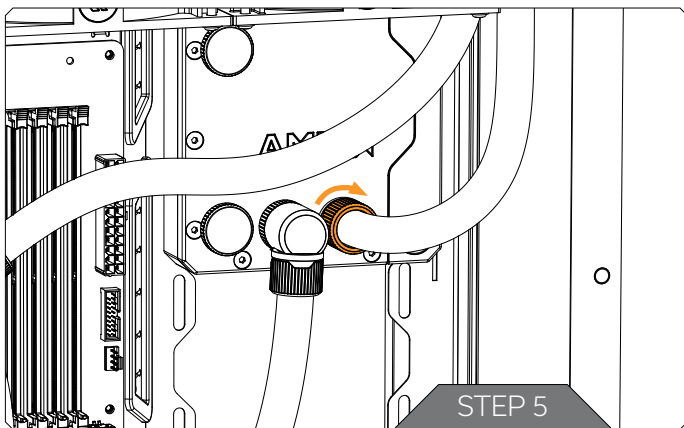
To fit the tubing onto the compression fittings, you will have to remove fitting rings by rotating them in a counter-clockwise direction.



STEP 4

Slide the fitting ring along the tube with the threaded side facing the fitting barb.

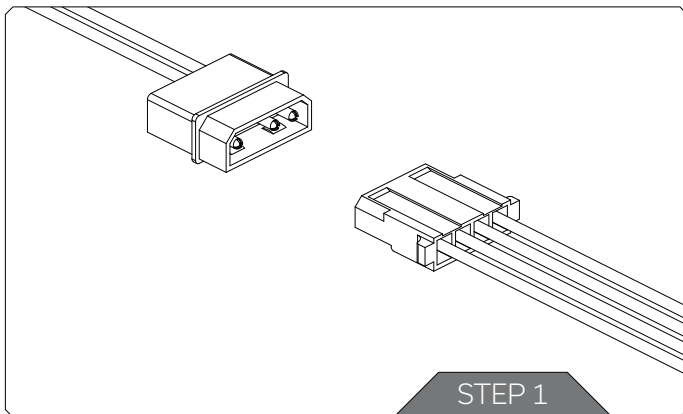
Install the tube on the fitting barb. You can do that by forcing it to slide over the edge as far as it goes. If needed, heat the tube in warm water.



STEP 5

Slide the fitting ring toward the fitting barb and tighten it in a clockwise direction as far as it goes. Repeat the procedure on all fittings to connect your liquid cooling loop.

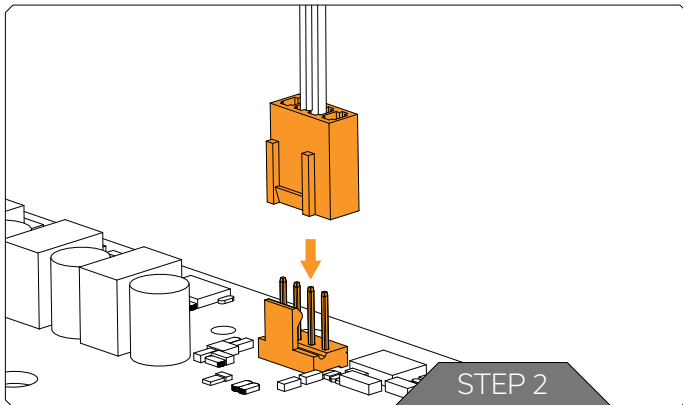
ELECTRICAL INSTALLATIONS



CONNECTING THE PUMP-RESERVOIR UNIT

STEP 1

Connect the 4-pin male Molex connector to the 4-pin female Molex connector of the power supply.



STEP 2

Take the 4-pin PWM female connector and plug it to the male PWM header located on the motherboard.

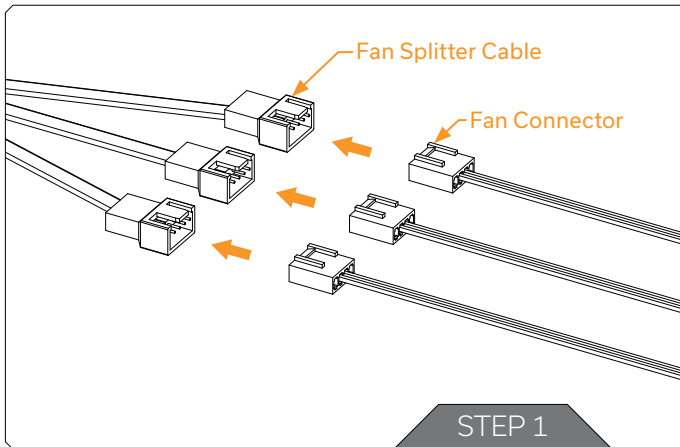
If possible, always use the CPU-dedicated fan headers. On the majority of motherboards, these headers usually offer the best PWM regulation.

CONNECTING THE FANS

STEP 1

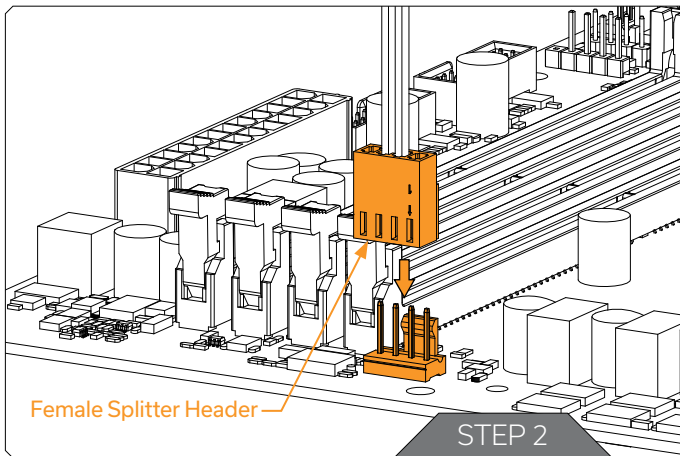
To connect the fans, you might need an EK-Cable Y splitter. Connect the female connectors from the fans with male connectors on the fan splitter cable.

The EK-Cable Y splitter comes enclosed with the Kit.



STEP 2

Connect the female splitter connector to a header located on the motherboard or fan controller. If possible, use a header designated for the CPU.



RECOMMENDED FILLING AND LEAK TESTING PROCEDURE

STEP 1

It is mandatory to do the following:

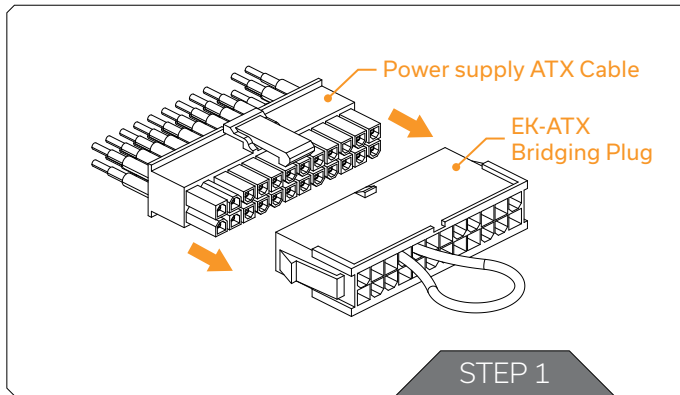
1. Disconnect all PSU power connectors on your PC (4/8-pin EPS, 24-pin ATX, PCIeexpress power, SATA power),
2. Plug the EK-ATX Bridging Plug (enclosed) into the 24-pin ATX PSU cable, which allows jump-starting your computer.

This procedure requires only the pump to be connected to the power supply (PSU). Everything else needs to be disconnected!



This Step must be done to prepare the power supply for the pump, so you can fill the water cooling loop with coolant and run the leak test.

Your system is now ready to be charged for the first time.



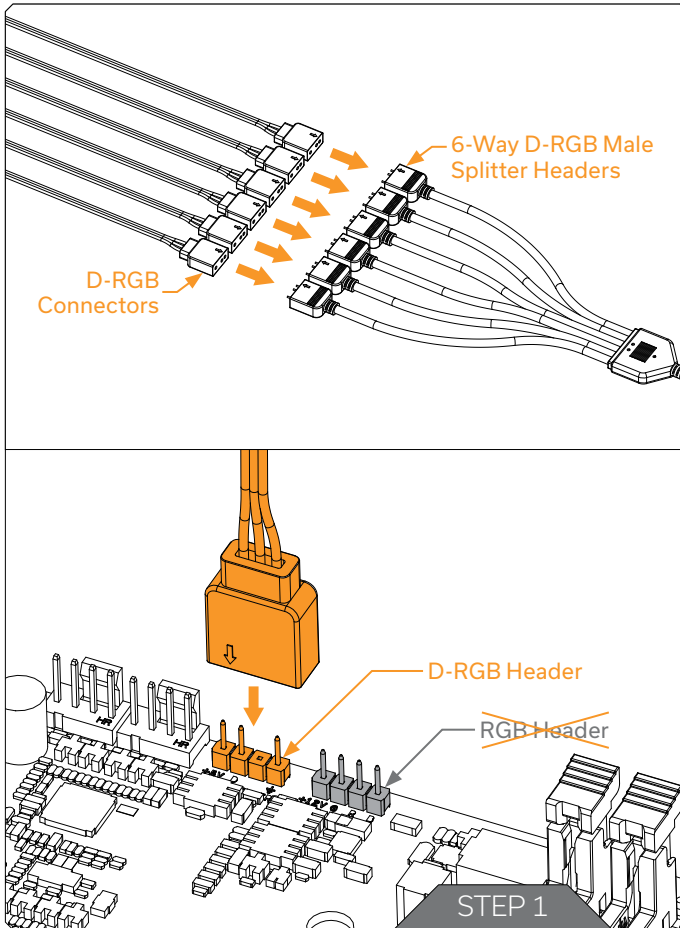
CONNECTING THE FANS, PUMP AND CPU D-RGB LIGHTS

STEP 1

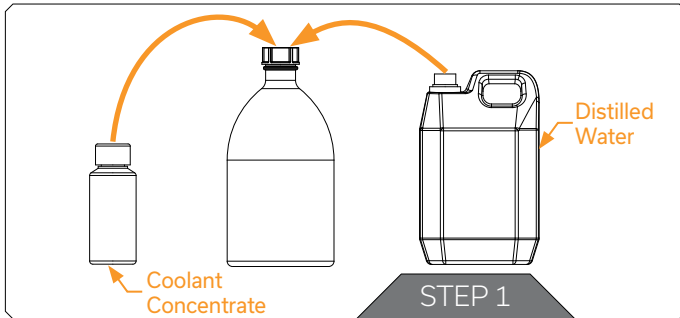
Connect the 3-pin D-RGB LED connector from the pump-reservoir unit, CPU water block and GPU water block, and fans to the D-RGB header on the motherboard. The lights will work if the pin layout on the header is as follows: **+5V, Data, Empty, Ground**.

Please ensure that the arrow indicated on the connector is plugged into the +5V line, as indicated on your motherboard. If you connect LEDs to the 12V RGB header, it will damage them.

You may use the enclosed 6-way D-RGB splitter cable to connect all the D-RGB cables into one header on your motherboard.



FILLING THE SYSTEM FOR THE FIRST TIME



STEP 1

Preparing the Cooling Liquid.

The coolant comes in the concentrated form. To prepare the cooling liquid, you must take 100mL of clear coolant concentrate (comes enclosed with the Kit) and mix it with 900mL of distilled water.

Make sure you mix it properly before pouring it into your water cooling loop.



Store the remaining liquid in the original bottle. Do not use any food or beverage containers!

STEP 2

Remove the top plug of your reservoir by unscrewing it in a counter-clockwise direction.



It is recommended to protect the exposed hardware with a few paper towels in case there is a leak, or you accidentally spill the coolant while pouring it.

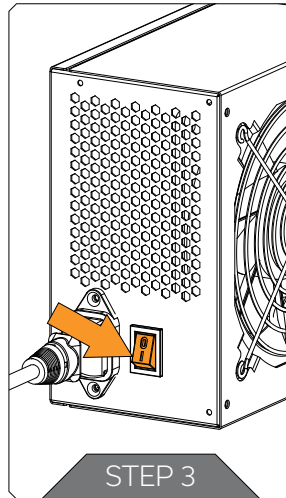
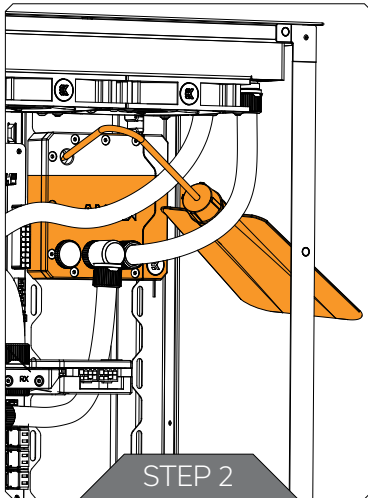
Take the pre-mixed coolant and pour it into the reservoir until the coolant level is about 2cm below the fill port.

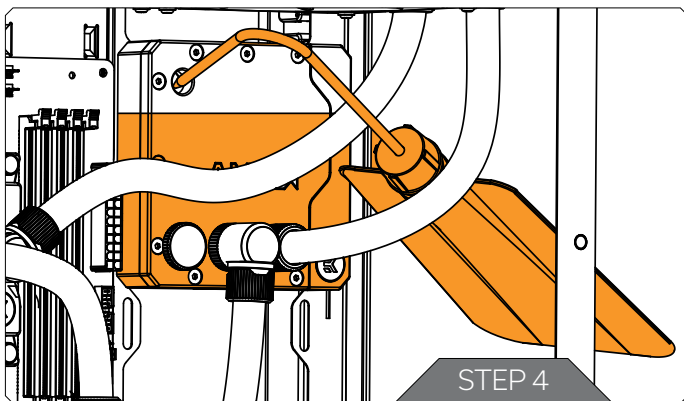
STEP 3



Please check if you have plugged in the EK-ATX Bridging Plug and EK-Cable Pump Testing Adapter correctly. Refer to the chapter: **Recommended Filling and Leak-Testing Procedure.**

Turn the power supply on for a brief moment to check if only the pump is running.





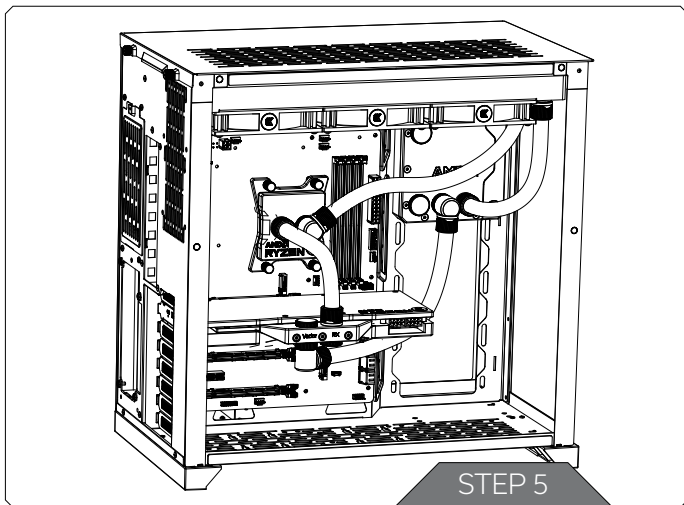
STEP 4

When you turn on the power supply, the coolant should be pushed from the reservoir toward other water cooling components. Therefore, you have to fill the coolant continuously while the pump is running.



Alternatively, you can cycle the power supply by turning it ON and OFF every few seconds to speed up the air bleeding process.

When the coolant level becomes steady, fill the reservoir until the coolant level is about 2cm below the fill port. Screw the reservoir top cover back in a clockwise direction.



STEP 5

Tilt your PC chassis in different directions to remove any air that might have remained trapped inside the radiator. You may need to add more coolant afterward.

STEP 6 24 HOUR LEAK TEST



It is best practice to run your pump for at least 24 hours to ensure your system is leak-free. Once the 24-hour leak test is completed without signs of leaking fluid, you are free to finish your build.

You will not need the ATX Bridging Plug cable anymore. Connect all the necessary cables to the motherboard, graphics card, and expansion drives.

MAINTENANCE TIPS

In order to obtain the best performance across the entire lifespan of the product, it is crucial to follow these maintenance tips.

1. DUST REMOVAL

It is mandatory to clean the dust **every 2-3 months**. EK recommends using a vacuum cleaner or compressed air to blow the dust away. The radiator is usually the dustiest, so pay special attention to it. Do not forget to turn off the computer and unplug the power supply. It is recommended to clean the dust outside.

2. CHECKING THE ELECTRICAL COMPONENTS

Once a year, you should check if the pump and fans are running as they should. The pump and fans must run silently without any rattling noises and must react to PWM duty cycle changes. All imperfections may lead to overheating and, ultimately, breakdown.

3. CLEANING THE UNIT

The unit should be thoroughly cleaned **every year**. You must let all the coolant out. The radiator must be flushed, the pump checked and cleaned, and the coolant replaced. It is also recommended to change the tubing.

4. USING PARTS DESIGNED AND MANUFACTURED BY EK

It is recommended to use only genuine EK Water Blocks liquid cooling gear and add-ons to prevent any performance, compatibility, or warranty issues.


SUPPORT AND SERVICE

For assistance please contact:


<http://support.ekwb.com/>

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