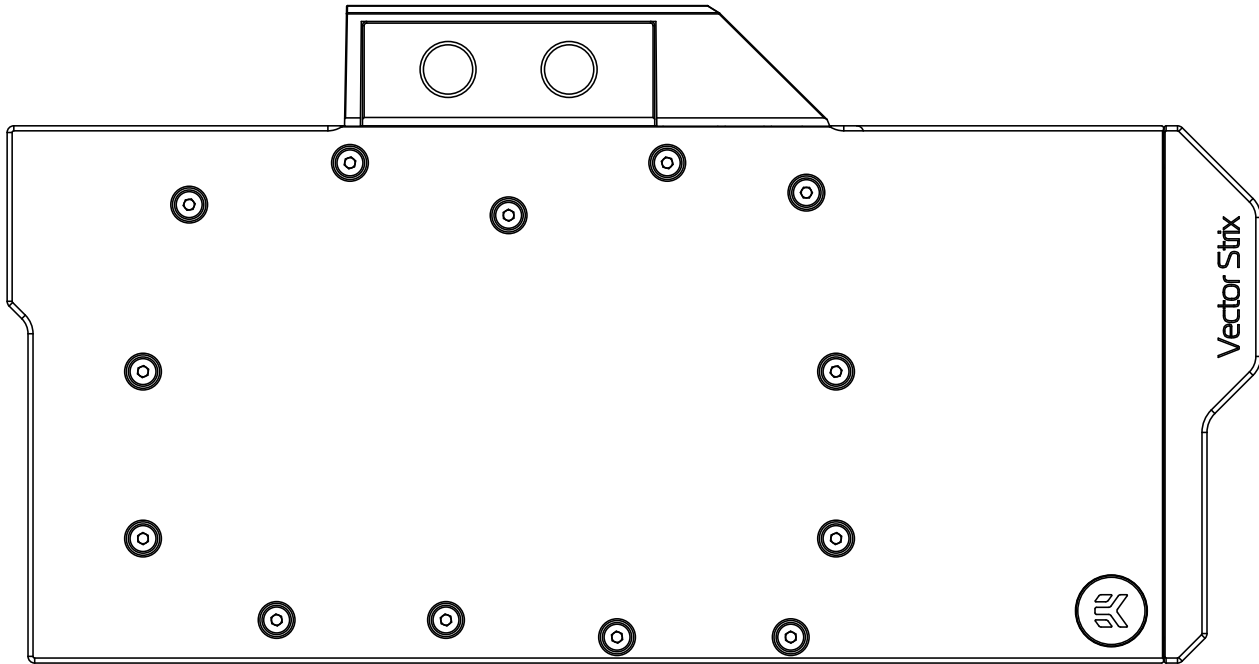# EK-Quantum
Vector Strix RX 6800/6900

GPU WATER BLOCK

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

Carefully read the manual before beginning with the installation process.

Remove your graphics card from the computer for the safest mounting process to prevent any possible damage to your GPU or its circuit board (PCB).

EK Fittings require only a small amount of force to screw them firmly in place since the liquid seal is ensured with the rubber O-ring gaskets.

The use of quality market-proven corrosion-inhibiting coolants is always strongly recommended for any liquid cooling system.

Do not use pure distilled water as a cooling liquid! For best results, EK recommends the use of EK-CryoFuel Coolants.
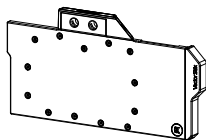
Make sure to bleed air out of your water block thoroughly in order to reach optimal performance.
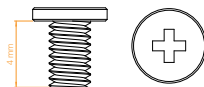
TABLE OF CONTENTS

Universal Mounting Mechanism - You may not need every screw from this package.
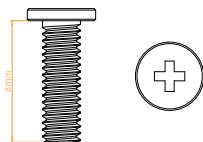EAN: 3831109872215

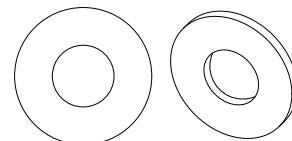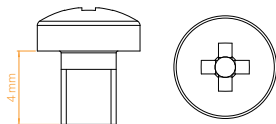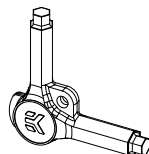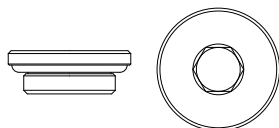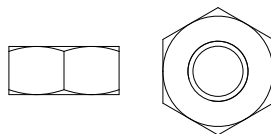|		
EK-Quantum Vector RX 6800/6900	M2.5 x 4 AX1 Screw (20 pcs)	M2.5 x 6 AX1 Screw (13 pcs)
M2.5 x 8 AX1 Screw (2 pcs)	Thermal Grease (1 pc)	M2.5 PVC Washers (20 pcs)
M3 x 4 DIN7985 Screw (2 pcs)	EK-Loop Multi Allen Key (1 pc)	Allen Key 2.5. mm (1 pc)
EK-Plug G1/4 (2 pcs)	M2.5 Nut (6 pcs)	Thermal Pad F 1.0 mm (3 pcs)
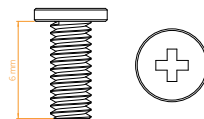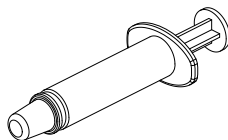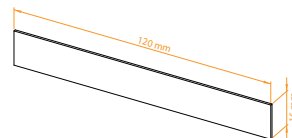
WATER BLOCK DIMENSIONS

300.5 mm

194.5 mm

165.5 mm

19.5 mm

142 mm

157.5 mm

Vector Strix

17.5 mm
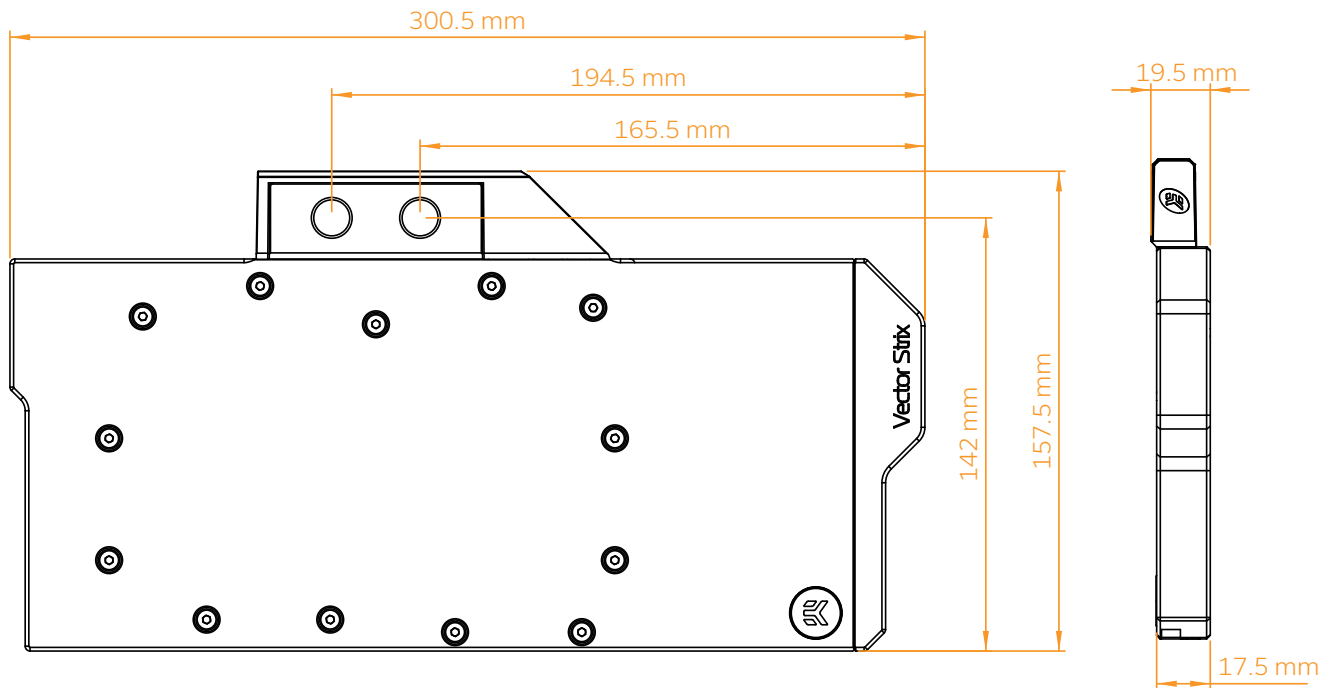
TECHNICAL SPECIFICATIONS AND WATER BLOCK PARTS

Technical Specification:
- Dimensions: (L x H x W) - 300.5 x 157.5 x 19.5 mm
- D-RGB cable length: 500 mm
- D-RGB LED count: 9
- D-RGB connector standard 3-pin (+5V, Data, Blocked, Ground)
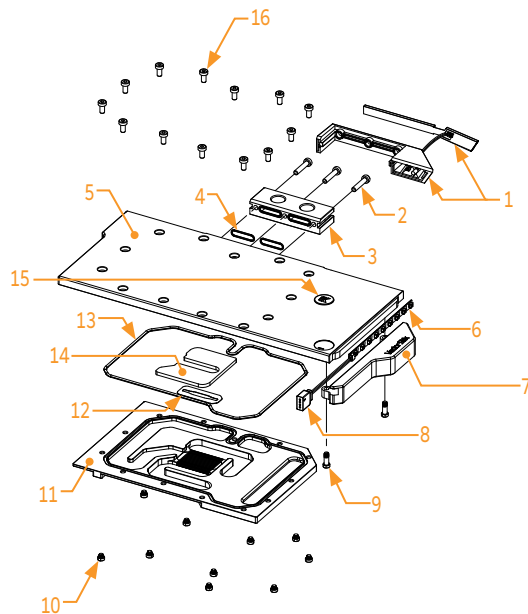
Position	EAN	Description	Quantity
1	103431	Terminal cover + D-RGB LED	1
2	8311	M4 x 20 DIN7984 Screw	3
3	101628	FC Terminal	1
4	5155	FC Terminal O-ring 15 x 1 mm	2
5	103345	Top plate (Plexi)	1
5	103346	Top plate (Acetal)	1
6	101290	LED D-RGB Strip	1
7	103348	Stickout (Black)	1
7	103350	Stickout (White)	1
8	101076	Wire harness	1
9	103145	Standoff M4-M2.5 x 2.50 - L13.6 mm	2
10	8533	Standoff M4/M2.5 x 2.5	10
11	103344	Coldplate	1
12	103340	Jet plate	1
13	103351	Main O-ring 165 x 2 mm	1
14	103605	Plexi insert	1
15	100663	EK Badge	1
16	9013	M4 x 8 DIN7984 Screw	13

PREPARING THE GRAPHICS CARD

STEP 1
REMOVING THE STOCK COOLER
Place your graphics card on the flat surface and carefully remove the stock cooler. Do not forget to unplug all the LED and fan connectors. Pay attention to the following steps when installing the **EK-Quantum Vector Strix RX 6800/6900** water block onto your graphics card.

STEP 2
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.

STEP 2

Thermal Pad F – 1.0 mm

16 mm

120 mm

1 mm

STEP 1

Thermal Pad F 1.0 mm

STEP 2
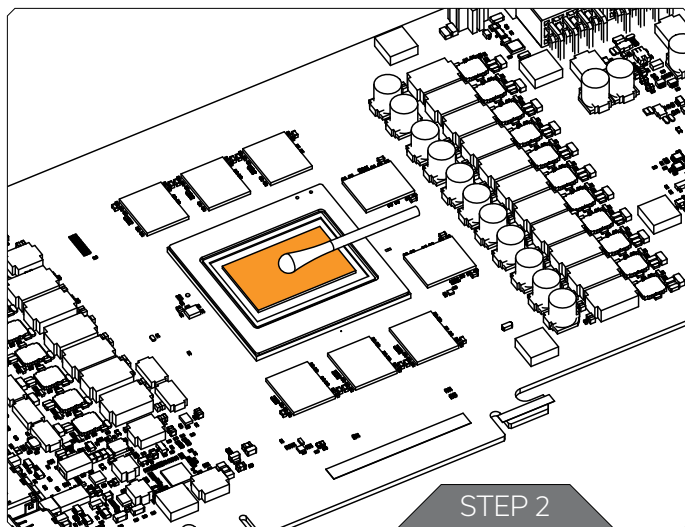
CUTTING AND PLACING THERMAL PADS

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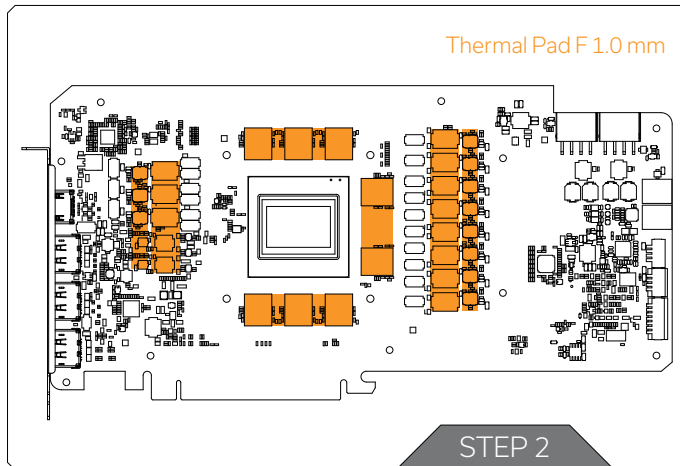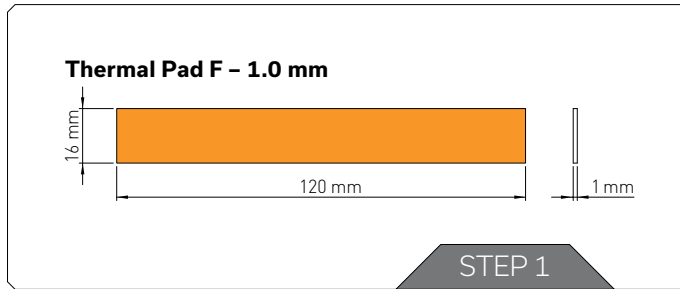
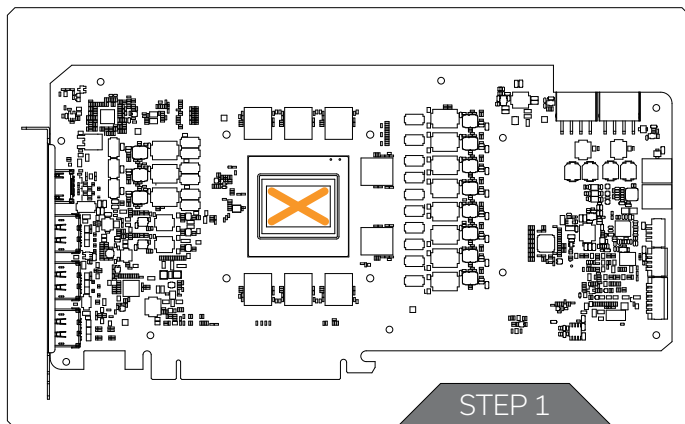⚠ You must remove the protective foil from both sides of the thermal pad before installation.

Replacement thermal pads:
3x 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.
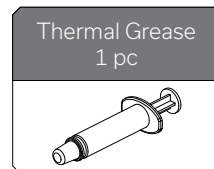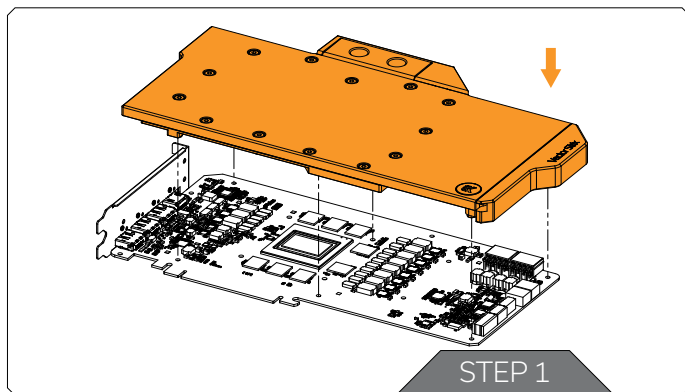
STEP 1

APPLYING THERMAL COMPOUND

STEP 1

Apply the enclosed EK-TIM Ectotherm thermal grease (thermal compound) on the GPU 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.

For this Step, you will need:

Thermal Grease
1 pc

INSTALLING THE WATER BLOCK

STEP 1

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.

M2.5 x 4 AX1 SCREW

M2.5 PVC WASHER
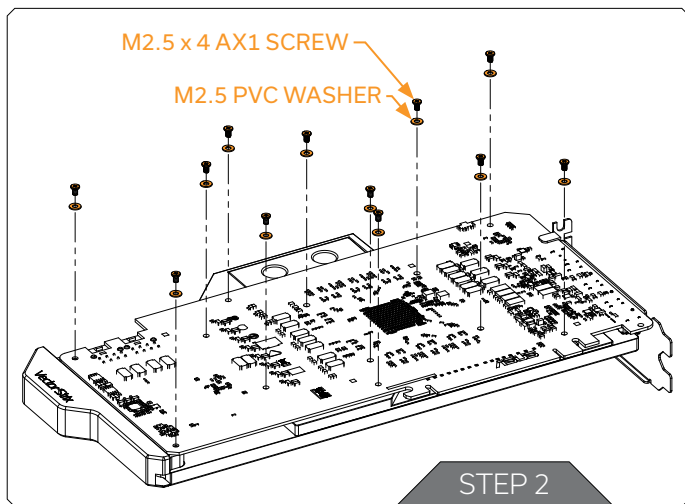
STEP 2

STEP 2
ATTACHING THE BLOCK TO THE GRAPHICS CARD

Use twelve (12) M2.5 x 4 AX1 Screws and 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 damaging the GPU.
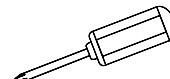
For this Step, you will need:

M2.5 x 4 AX1 12 pcs	M 2.5 PVC Washer 12 pcs	Phillips Head Screwdriver

CHECKING FOR CONTACT

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 www.ekwb.com/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 PCIexpress 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

EK- PLUG G1/4

EK-FITTING

TUBING
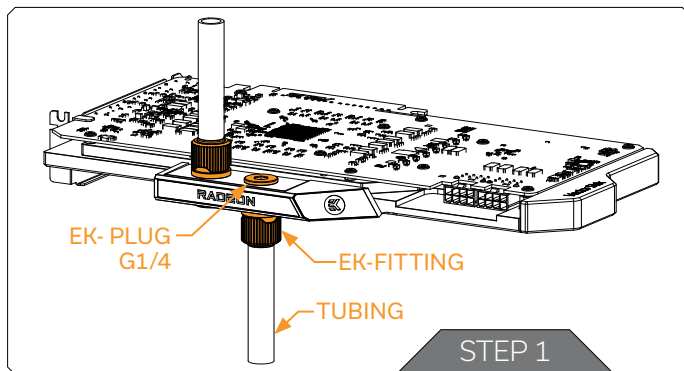
STEP 1

STEP 1

Screw-in two (2) G1/4 threaded male fittings. Attach the liquid cooling tubes and connect the water block to the cooling loop.
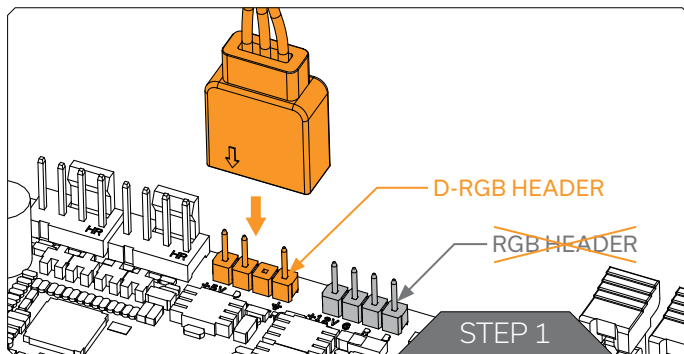
⚠ Do not forget to plug the remaining two openings with enclosed EK-Plug G1/4 or its equivalent.

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 D-RGB LED STRIP


D-RGB HEADER

RGB HEADER

STEP 1

STEP 1

Plug the **4-pin D-RGB** connector from the GPU water block to the D-RGB Header on your motherboard or controller. The LED strip will work only if the pin layout on the header is as follows: **+5V, Data, Empty, Ground**.

⚠ Incorrect installation or installation to a wrong header can damage to the LED strip or the header itself!

REPLACING THE LED STRIP (Optional)
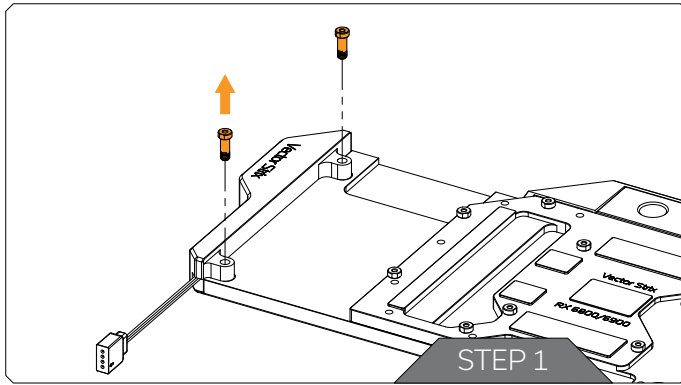
STEP 1
In case of replacing the D-RGB LED strip, two (2) Standoffs must be removed using 6 mm Hex Wrench (as shown in the picture).

TESTING THE LOOP

To ensure the installation of EK components was successful, we recommend you perform a 24-hour leak test.

When your loop is complete and filled with coolant, connect the pump to a PSU outside your system. Do not connect power to any of the other components. Turn on the PSU and let the pump run continuously.

Inspect all parts of the loop, and in case the coolant leaks, fix the issue and repeat the testing process. To prevent possible damage, please ensure that all hardware is dry before the system is powered on.

SUPPORT AND SERVICE

In case you need assistance or wish to order spare parts or a new mounting mechanism, please contact:
https://www.ekwb.com/customer-support/

For spare parts orders, refer to the page with "TECHNICAL SPECIFICATIONS AND WATER BLOCK PARTS" where you can find the EAN number of each part you might need.

Include the EAN number with quantity in your request. Mounting Mechanism EAN can be found under "BOX CONTENTS"

Thermal pads are readily available in the EK shop.

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