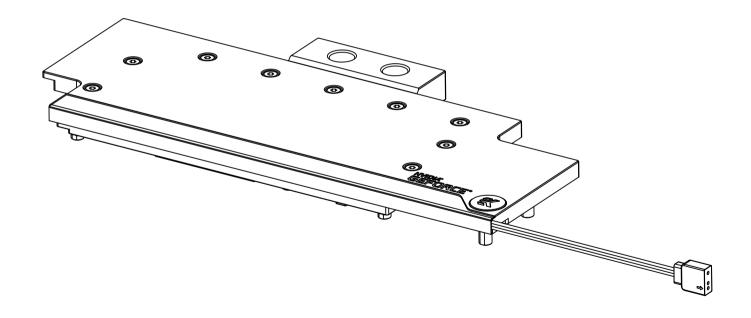


# EK-Classic GPU Water Block RTX 2080Ti D-RGB

**GPU WATER BLOCK** 



This product is compatible with RTX 2080 and RTX 2080 Ti graphics card. It is intended for installation by expert users only. Please consult with a qualified technician since improper installation may result in damage to the equipment. EK 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 website at www.ekwb.com for updates. Before the 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:

Carefully read the manual before beginning with the installation process.

Remove your graphics card from the computer for the safest mounting process and to prevent any possible damages 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.

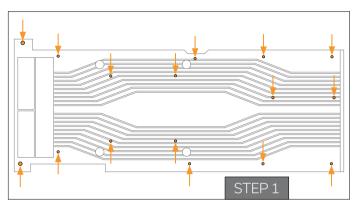
The use of quality market-proven corrosion-inhibiting coolants is always strongly recommended for any liquid cooling system.

Do not use pure distilled water as a cooling liquid! For best results, EK recommends the use of EK-CryoFuel Coolants.

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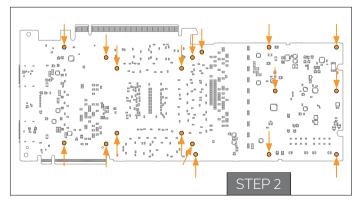
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#### PREPARING THE GRAPHICS CARD



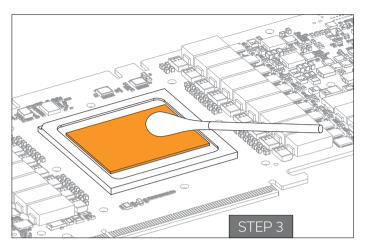
### STEP 1 REMOVING THE FACTORY-PROVIDED BACKPLATE

Remove all encircled screws using a Phillips head screwdriver. All heat sink assembly screws should be removed, including self-adhesive washers on both sides of the PCB (if present).



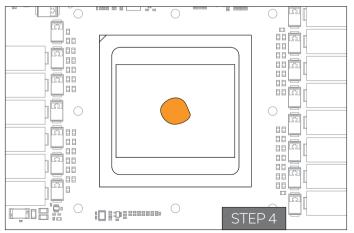
## STEP 2 REMOVING THE STOCK COOLER

Remove all encircled screws using a Phillips head screwdriver (4 springs) and a 4mm hex socket. All heat sink assembly screws should be removed, including self-adhesive washers on both sides of the PCB (if present). After the removal of housing, do not forget to unplug the fans.



### STEP 3 CLEANING THE PCB

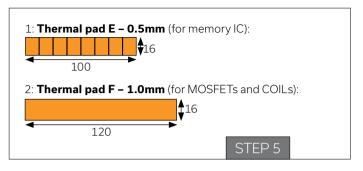
Carefully detach the original stock cooler after removing all screws that are securing it to the board. Wipe off the remains of the original thermal compound using a nonabrasive cloth or Q-tip, as shown in the sample image, until the components and circuit board are completely clean. EK recommends the use of denatured alcohol for removing TIM leftovers.

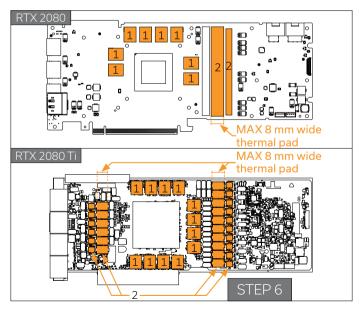


### STEP 4 APPLYING THERMAL COMPOUND

Wipe off the remains of the original thermal compound using a nonabrasive cloth or Q-tip until all components and circuit board are completely clean.

**Applying Thermal Compound:** Lightly coat the NVIDIA GPU chip with enclosed EK-TIM Ectotherm thermal grease. For best performance, EK recommends applying thermal grease in the form of a cross (see sample image).





### STEP 5 CUTTING THERMAL PADS

Your GPU water block comes with thermal pads, some of which are already pre-cut, while others have to be cut into smaller chunks to cover all the VRM components such as MOSFETs, drivers, and COILs.

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

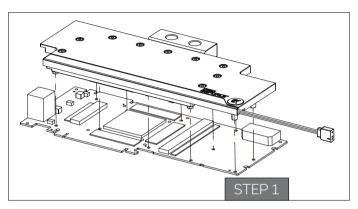
Replacement thermal pads:

Thermal Pad E - 0.5mm (RAM 8x) - EAN: 3830046996688 Thermal Pad F - 1mm (120x16mm) - EAN: 3830046996732

### STEP 6 PLACING THERMAL PADS ON PCB

Place thermal pads on the circuit board, as shown in the picture. Refer to numbering in the previous picture when applying thermal pads of different sizes or thicknesses. EK made sure to provide you with more than an adequate quantity of thermal pads to complete this Step.

#### **INSTALLING THE WATER BLOCK ON RTX 2080/RTX 2080 TI GRAPHICS CARD**

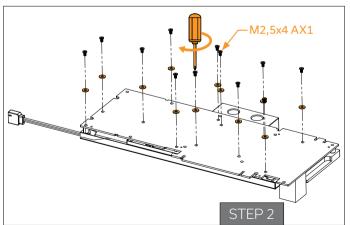


### STEP 1 PLACING THE WATER BLOCK ON THE GRAPHICS CARD

Carefully position the water block with preinstalled standoffs on the graphics card. During this process, please make sure you have aligned mounting holes on the PCB with holes on 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.

This procedure is the same for all Full Cover water blocks.



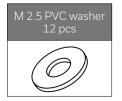
### STEP 2 ATTACHING THE BLOCK TO THE GRAPHICS CARD

Use a Phillips head screwdriver with the enclosed M2.5 x 4 AX1 screws. EK recommends you start tightening the screws around the GPU core and continue outward. Always use a plastic washer under each screw! If the washer is already present on the circuit board (usually around GPU core screw-holes), there is no need for additional washers.

For this Step, you will need:





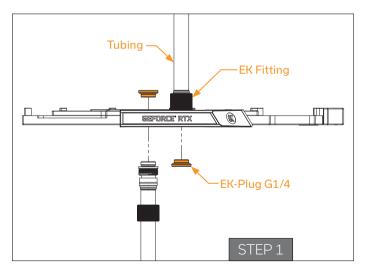


#### **CHECKING FOR CONTACTS**

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 that thermal pads are placed correctly or contact our support service at www.ekwb.com/support.

#### **INSTALLATION OF FITTINGS AND TUBING**



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

#### EK recommends using EK-Fittings with this water block.

To ensure the tubes are securely attached to the barb/fittings, please use hose clamps or an appropriate substitute.

You can use any opening as an inlet/outlet port.

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

**CAUTION:** In case of using connectors other than EK Compression Fittings, pay special attention to the length of the fittings' male G1/4" thread. 5mm is the maximum G1/4" thread length allowed!

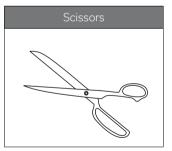
### INSERTING THE GRAPHICS CARD IN THE PC CASE

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

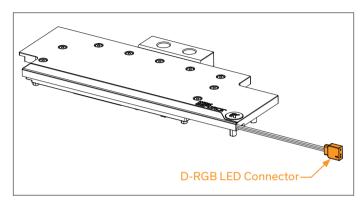
You need to be very careful when handling the graphics card. Avoid all unnecessary manipulation of the VGA-water block assembly that might damage your card or water block.

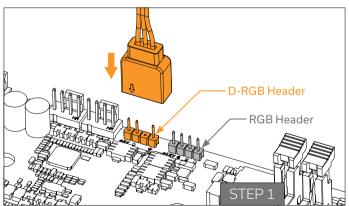
### **REQUIRED TOOLS**





#### **CONNECTING THE D-RGB LED STRIP**





#### STEP 1

Plug the 3-pin D-RGB connector from your GPU Water Block into a D-RGB header on your motherboard or controller. The LED Strip will only work if the pin layout on the header is as follows: **+5V, Data, Empty, Ground.** 



Incorrect installation or choosing the incorrect header may result in damage to the LED Strip or the header itself!

### SUPPORT AND SERVICE

In case you need assistance, please contact:

http://support.ekwb.com/

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### **SOCIAL MEDIA**

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