

The following instructions and pictures are provided to assist your installation of the EVGA RTX 2080 Ti / 2080 / 2070 XC Hydro Copper Waterblock Kit to the EVGA RTX 2080 Ti / 2080 / 2070 XC graphics cards. Please be careful installing the Kit; there are several very small fasteners used that can be stripped if you are not careful.

Please be sure to keep your original shroud, heatsink, and screws so your card can be returned to its original condition in case you ever need to submit for warranty.

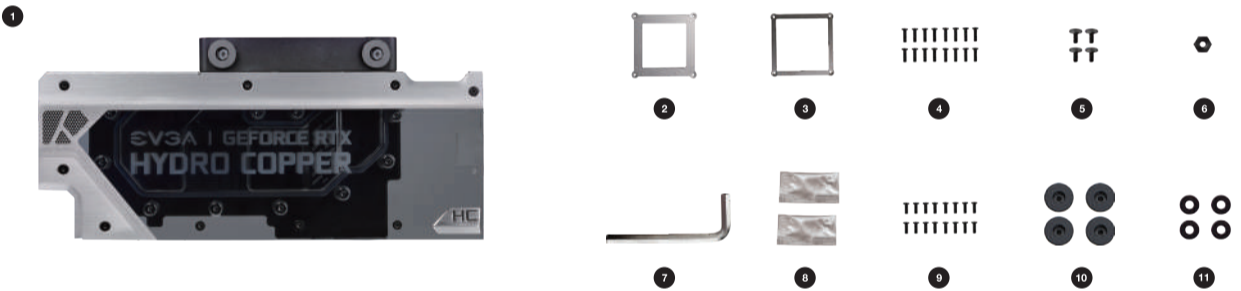
The instructions below will walk you through the removal of the original heatsink and fan(s), and installation of the EVGA Hydro Copper Waterblock module. Please see below for SKU's compatible with this cooler:

#	Graphics Cards	Part Number	Part Number
A	EVGA BLOWER (2 SLOT)	08G-P4-2070-KR	08G-P4-2180-KR
		08G-P4-2080-KR	11G-P4-2280-KR
		08G-P4-2170-KR	11G-P4-2380-KR
B	EVGA BLACK EDITION (2 SLOT)	08G-P4-2071-KR	08G-P4-2181-KR
		08G-P4-2081-KR	11G-P4-2381-KR
		08G-P4-2171-KR	11G-P4-2281-KR
C	XC ULTRA with RGB LED (2.75 SLOT)	08G-P4-2173-KR	
		08G-P4-2183-KR	
		11G-P4-2383-KR	
D	XC with RGB LED (2 SLOT)	08G-P4-2082-KR	11G-P4-2282-KR
		08G-P4-2172-KR	11G-P4-2382-KR
		08G-P4-2182-KR	
E	XC2 ULTRA with RGB LED (2.75 SLOT)	08G-P4-2185-KR	
		08G-P4-2187-KR	
		11G-P4-2385-KR	
		11G-P4-2387-KR	

Included Accessories:

- EVGA HYDRO COPPER
- 2080/2070 GPU Bracket P/N:20101D0000029148
- 2080 Ti GPU Bracket P/N:20101D0000029152
- M2x7mm 16pcs screws. Use a Phillips #1 screwdriver to remove or fasten. P/N:20701DB11E000014
- M2x4mm 4pcs screws. Use a Phillips #1 screwdriver to remove or fasten. P/N:20701DB11E000031

- 1pcs screw nut. Use a 5mm Hex Driver to remove or fasten. Do not use a standard wrench or pliers, as either may cause damage to the graphics card's PCB. P/N:207010000025066
- 78.5x31mm 1pcs Allen Key. P/N:20701D0000024786
- Thermal Grease
- M2x5mm 16pcs screws. Use a Phillips #1 screwdriver to remove or fasten. P/N:20701DB11E000032
- Plug fittings 4pcs. Pre-installed on waterblock
- Black Washer 4pcs. Paste on the back side of GPU bracket. P/N: 20608A0000000039



* Please note that the accessory list above covers all items expected to be included in the XC Hydro Copper Waterblock Kit. It is possible that you may receive extra accessories that will go unused after completion of the installation manual. Please follow all directions carefully, and contact EVGA Customer Service if you have any missing accessories or questions.

See the instructions below.

- Remove the screws holding the heatsink/shroud
 - Remove the 16 screws circled in the picture to the right using a Phillips #1 screwdriver. It is not necessary to remove the backplate to complete the Hydro Copper installation; these screws hold the heatsink/shroud onto the card. Carefully set these aside, as these screws will not be used again.



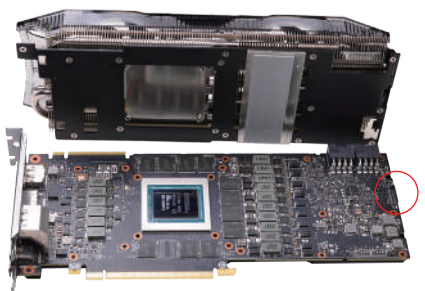
- For #A, #B, and #D 2slot models, remove the screws circled on the bracket below with a Phillips #1 screwdriver and set the screws aside. You will need to put it back after installation of waterblock.



- For #C and #E models, remove the screws circled on the bracket to the right with a Phillips #1 screwdriver and set the screws aside. You will need to put it back after installation of waterblock.



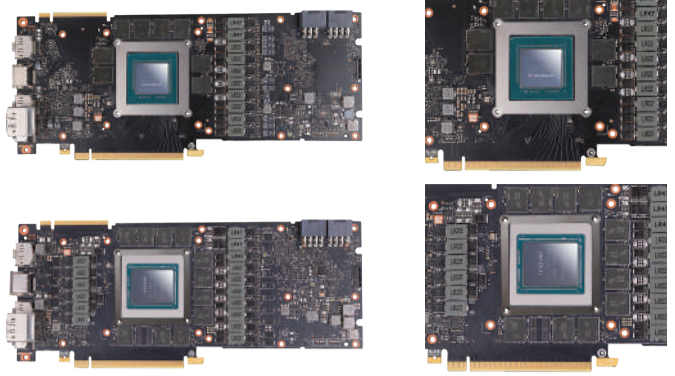
- Remove heatsink and fan, while carefully disconnecting fan and LED connectors
 - For all cards, carefully remove the original heatsink and fan. You may need to gently twist the thermal module to loosen up the heatsink from the thermal pads and GPU thermal grease. Once loose, gently lift the side of the heatsink to expose the fan and LED connector.



- Please be careful when removing the fan and LED connector, the wires can snap if pulled too hard. The safest way to remove the connector is with a small flat-head screwdriver, tweezers, or fingernails to raise the edge of the headers a little at a time. Set aside the heatsink/fan; it will no longer be needed for this Kit.

4. Clean the card for installation:

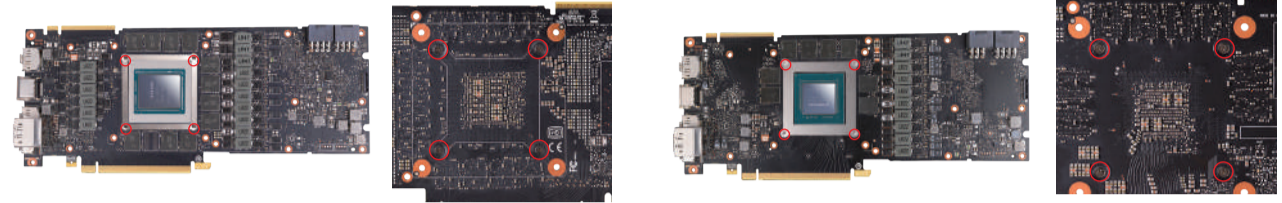
Remove all thermal grease on the GPU and remove any pads that stick on the PCB. Clean the GPU with high-percentage isopropyl alcohol and a lint-free cloth. You may try to reattach the thermal pads to the same location on the original cooler in case you need to return the card to its original state for warranty purposes. After you are finished cleaning, the card should look like these photos:



5. Install GPU Bracket

(a) Check the accessory list and install the correct GPU bracket for your GPU model. Align the mounting holes with the PCB, as shown in the photos to the right.

(b) Carefully turn the card over and use 4 #5 screws to fasten the GPU bracket, similar to the images below.



6. Apply Thermal Grease

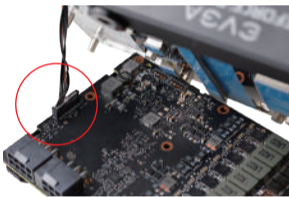
(a) Turn card over and apply thermal grease carefully to the GPU. Take care to avoid putting thermal grease on any other components. If you get thermal grease on other components, clean any affected areas with high-percentage isopropyl/rubbing alcohol.

(b) Install #1 EVGA HYDRO COPPER plug LED connector

For all models, connect the LED cable to the card based on the type of graphics card used:

1. 1 x 14Pin: If you have EVGA RTX 2080 Ti/2080/2070 models.

(c) Carefully line up the standoffs on the waterblock to their matching holes on the PCB. Gently lower the waterblock until it is fully seated on the PCB.

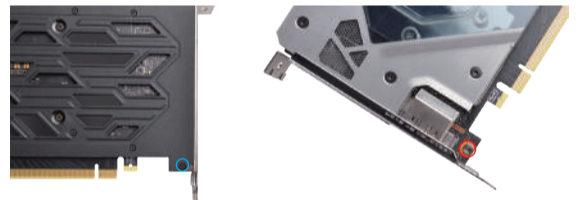


7. Complete installation

(a) Carefully turn the card and waterblock over. Tighten 15 #4 screws, circled in blue, and tighten 4 #5 screws, circled in red.

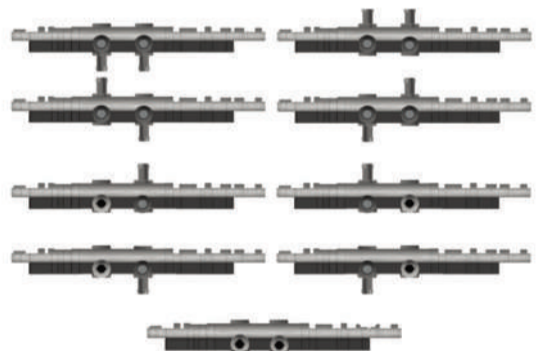
(c) Fasten 1#4 screw using 1#6 nut, as shown in the photos below.

(b) If your board is not a EVGA RTX model, tight 15#9 screws from back side of PCB to Hydro Copper.



At this point, your waterblock should be fully tightened and ready to test. As noted before, please use care to avoid overtightening, as this may strip the screws and/or damage the graphics card. Lastly, do not use power tools to install the waterblock or backplate.

8. Install your barb/compression fittings, included plug fittings, and hose clamps (if needed). The thread size is G1/4. You may use either the left or right side of the terminal as an inlet or an outlet; make sure that you use no more than one barb or compression fitting on the same side or you will drastically reduce cooling performance. Lastly, double-check to confirm that all terminal ports contain either a barb/compression fitting or a plug fitting. To properly position your fittings, follow the diagram to the right.



Important Information

EVGA XC Hydro Copper Waterblocks are leak tested at the factory before shipping to the customer. Regardless, it is still recommended to run a full leak test after installing the EVGA XC Hydro Copper Waterblock and connecting it to your water loop. The EVGA XC Hydro Copper Waterblock is compatible with RTX 2080 Ti and 2080/2070 EVGA Blower and XC/XC ULTRA/XC2/XC2 ULTRA/BLACK.

It is recommended to use distilled water or any other popular, certified, and approved liquid coolant. Using tap water or any other liquid not meant for water cooling will cause damage, including corrosion, to the EVGA XC Hydro Copper Waterblock. Damage caused by using an EVGA XC Hydro Copper Waterblock with improper liquids will void the limited 1 year warranty.

It is strongly recommended to avoid using aluminum components within the same loop as the EVGA XC Hydro Copper Waterblock. Mixing copper and aluminum may cause corrosion, which will void the limited 1 year warranty. Refer to your manufacturer's RTX 2080 Ti/2080/2070 warranty information before installing the EVGA XC Hydro Copper Waterblock. If you damage your RTX 2080 Ti/2080/2070 series graphics card due to improper installation, EVGA will not be held liable for physical damage to your RTX 2080 Ti/2080/2070 series graphics card or your EVGA XC Hydro Copper Waterblock.