EVGA®

# HYDRO COPPER

## GEFORCE® GTX™ 1080Ti

KINGPIN

WATERBLOCK

Installation Guide

NVIDIA®
GEFORCE®
GTX

The following instructions and pictures are provided to assist your installation of the EVGA GTX™ 1080 Ti K|NGP|N HYDRO COPPER Waterblock to your EVGA GeForce GTX™ 1080 Ti K|NGP|N graphics card. Please be careful installing the waterblock; there are several very small fasteners used that can be stripped if you are not careful. Please also note that use of this K|NGP|N HYDRO COPPER Waterblock requires the use of a custom watercooling loop (sold separately) to provide water/coolant to remove the heat from the graphics card to prevent overheating. FAILURE TO PROPERLY COOL THE HYDRO COPPER WATERBLOCK MAY CAUSE PERMANENT DAMAGE TO THE WATERBLOCK AND GRAPHICS CARD.

**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 |
|---|---|
| GTX™ 1080 Ti K\|NGP\|N | 11G-P4-6798-KR |

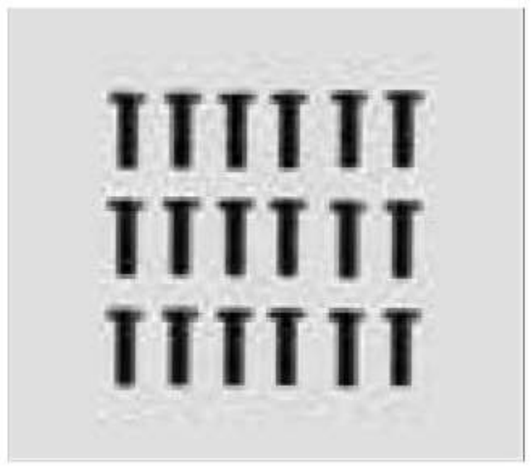
## Included Accessories:

| | |
|---|---|
| 1 | EVGA HYDRO COPPER |
| 2 | EVGA GPU Bracket P/N:201010000026707 |
| 3 | M2x6.8mm 18pcs screws. Use a Phillips #1 screwdriver to remove or fasten. P/N:207010000025064 |
| 4 | M2x6mm 4pcs screws. Use a Phillips #1 screwdriver to remove or fasten. P/N:207010000025063 |
| 5 | 78.5x31mm 1pcs Allen Key. P/N:207010000024982 |
| 6 | Thermal Grease |
| 7 | Plug fittings 4pcs. Pre-installed on waterblock |


1

1.

2



3

4

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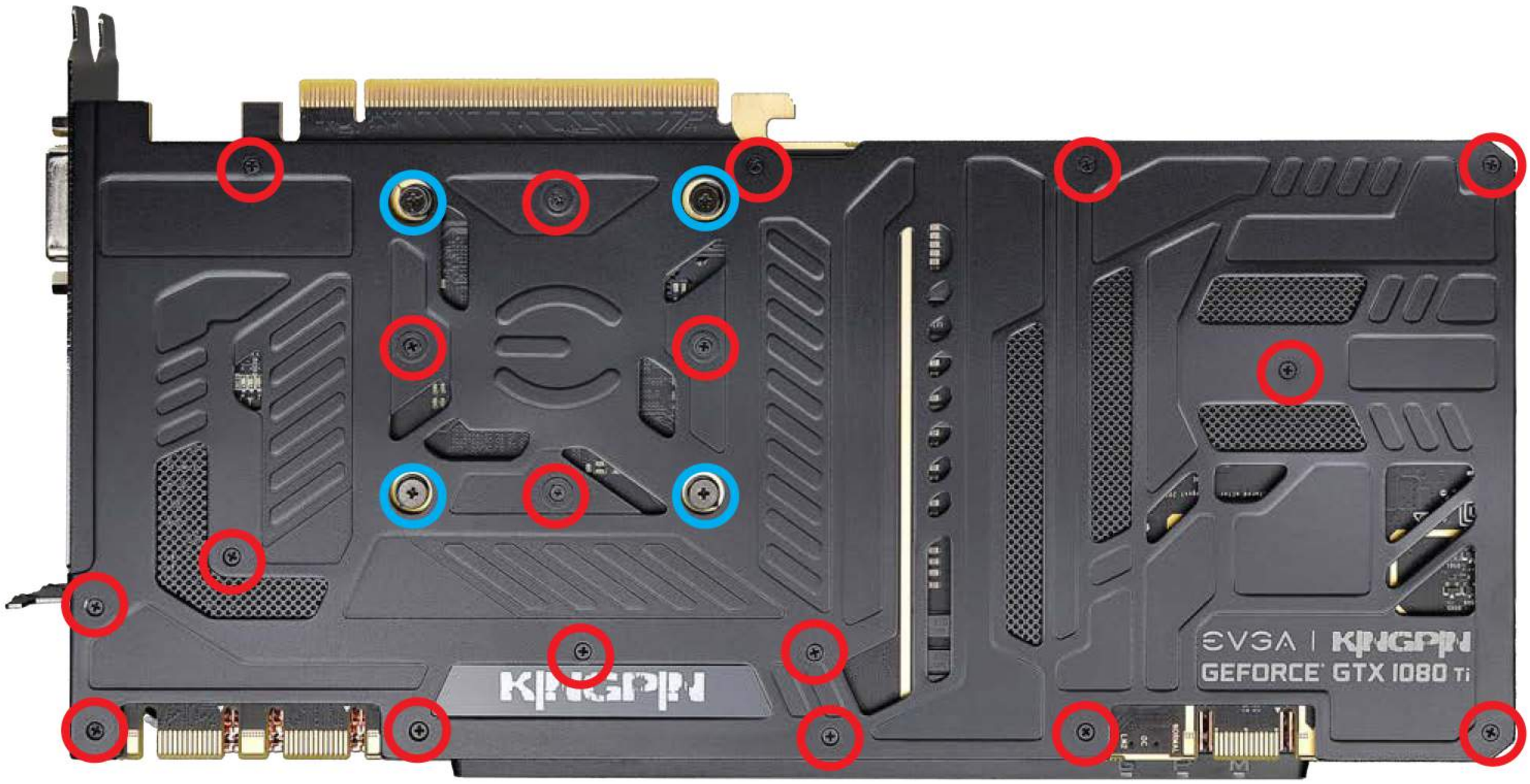
**See the instructions below.**

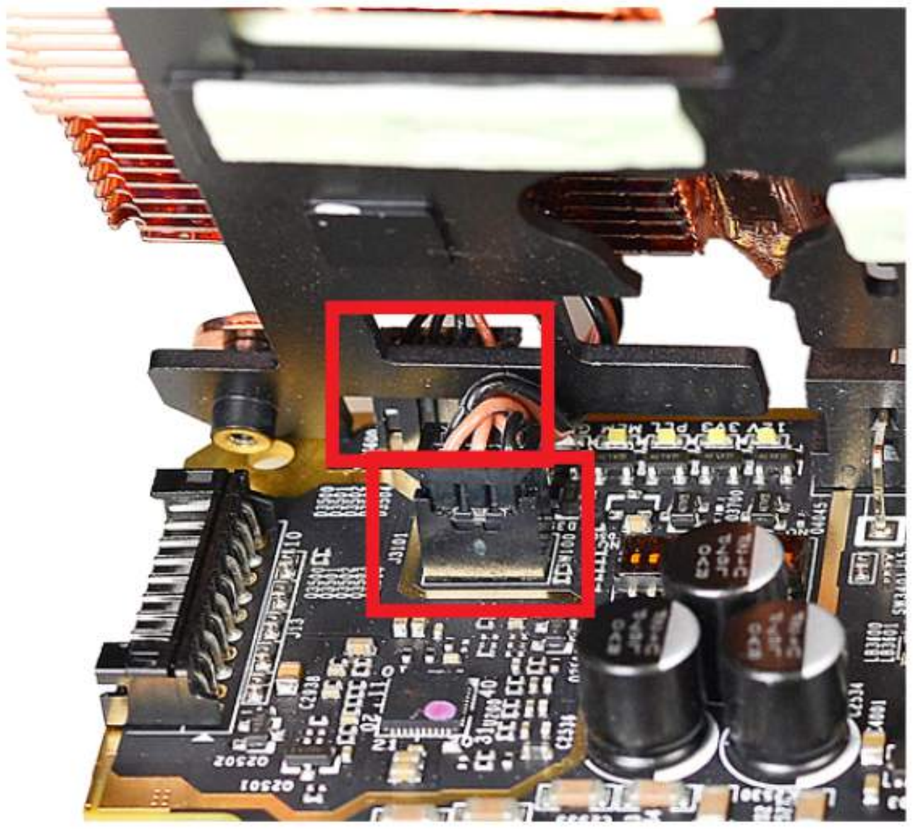
1. Remove the 4 spring screws and 18 backplate screws circled in the picture below, using a Phillips #1 screwdriver. The screws must be removed to disconnect the heatsink and shroud, but you do not need to remove the backplate. Carefully set aside the screws, as these screws will not be used again. Carefully turn the card over and proceed to Step 2.



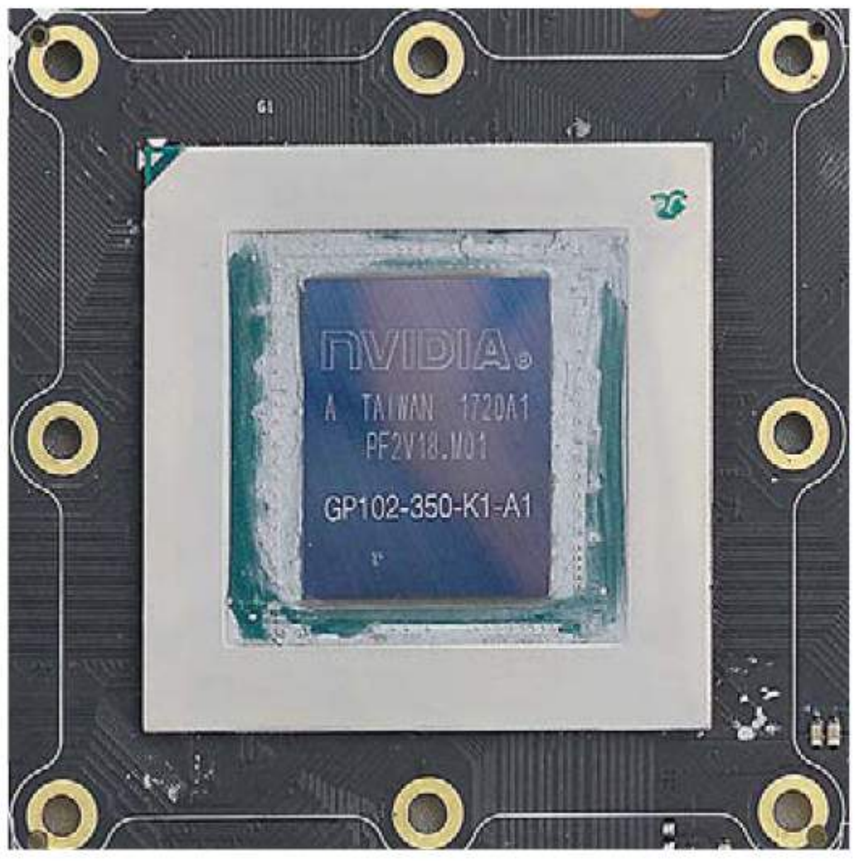

2.

2. Remove heatsink and fan, while carefully disconnecting fan and LED connectors.
(a) 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 wires/headers. The K|NGP|N has 2x LED headers (left photo) and 3x fan headers (right photo).

(b) Please be careful when removing the fan and LED headers; the wires can snap if pulled too hard. The safest way to remove the connectors is with a small flat-head screwdriver, tweezers, or fingernails to raise the edge of the headers a little at a time. It is recommended to first remove the 3 fan and 1 LED headers on the periphery of the card before removing the last LED header. Gently lift the side of the heatsink to expose the last LED header and carefully detach the header.
After removing the headers, set aside the heatsink/fan; it will no longer be needed for this Kit.




3. 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:

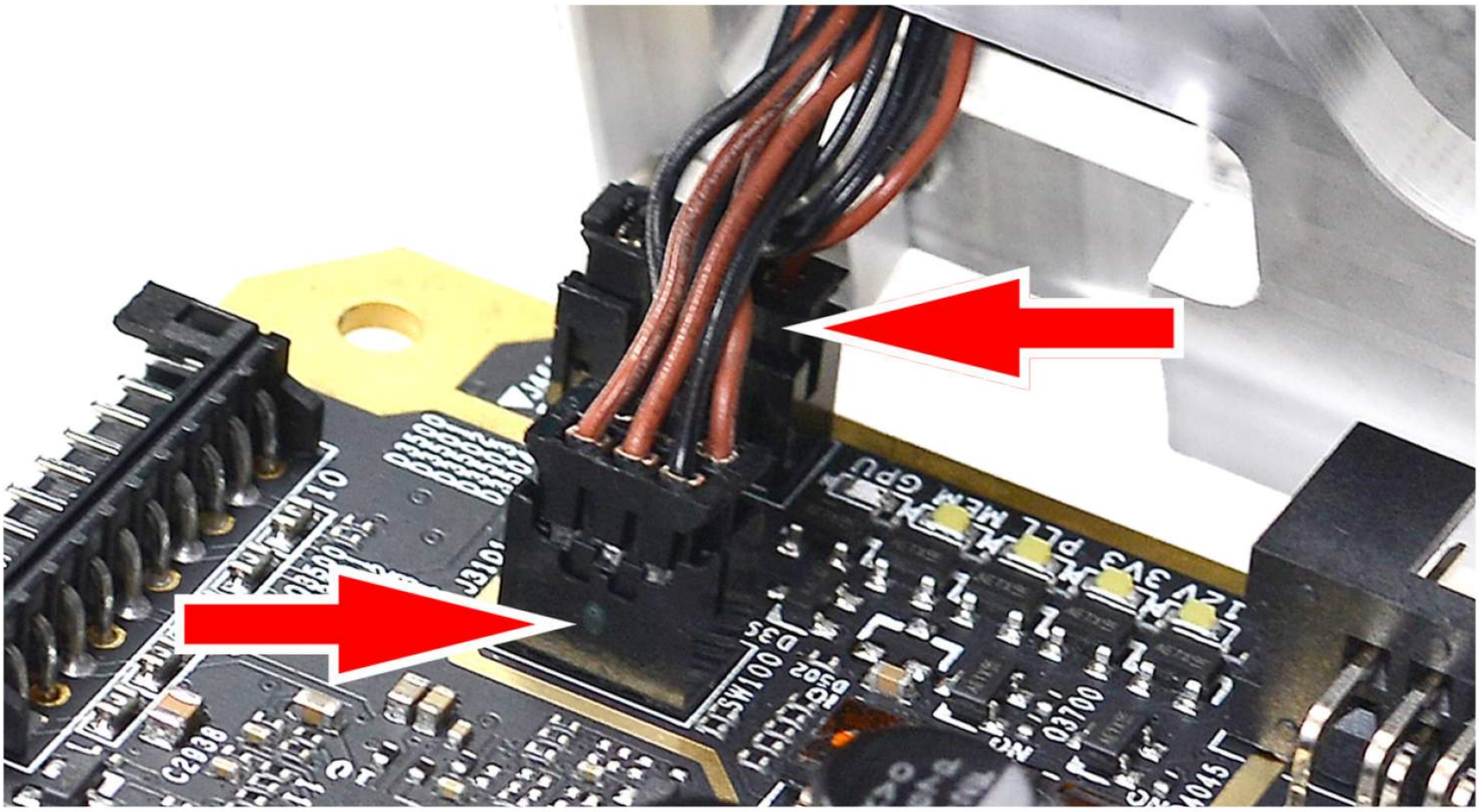



4. Install GPU Bracket and apply thermal grease
(a) Install #2 GPU Bracket. Align the screw threads and mounting holes with the PCB, as shown in the left photo below. Hold the bracket in place and carefully turn the card over. Tighten 4 #3 screws, as shown in the right photo below. Carefully turn the card back over.


(b) Apply thermal grease to the GPU when you are ready to install the waterblock. There are many different ways to correctly apply thermal grease, so please use the photo below as a reference for how much to apply. Take care to avoid putting thermal grease on any other components. If you do get thermal grease on other components, clean any affected areas with high percentage isopropyl alcohol and a lint-free cloth or cotton swabs prior to installation of the waterblock.

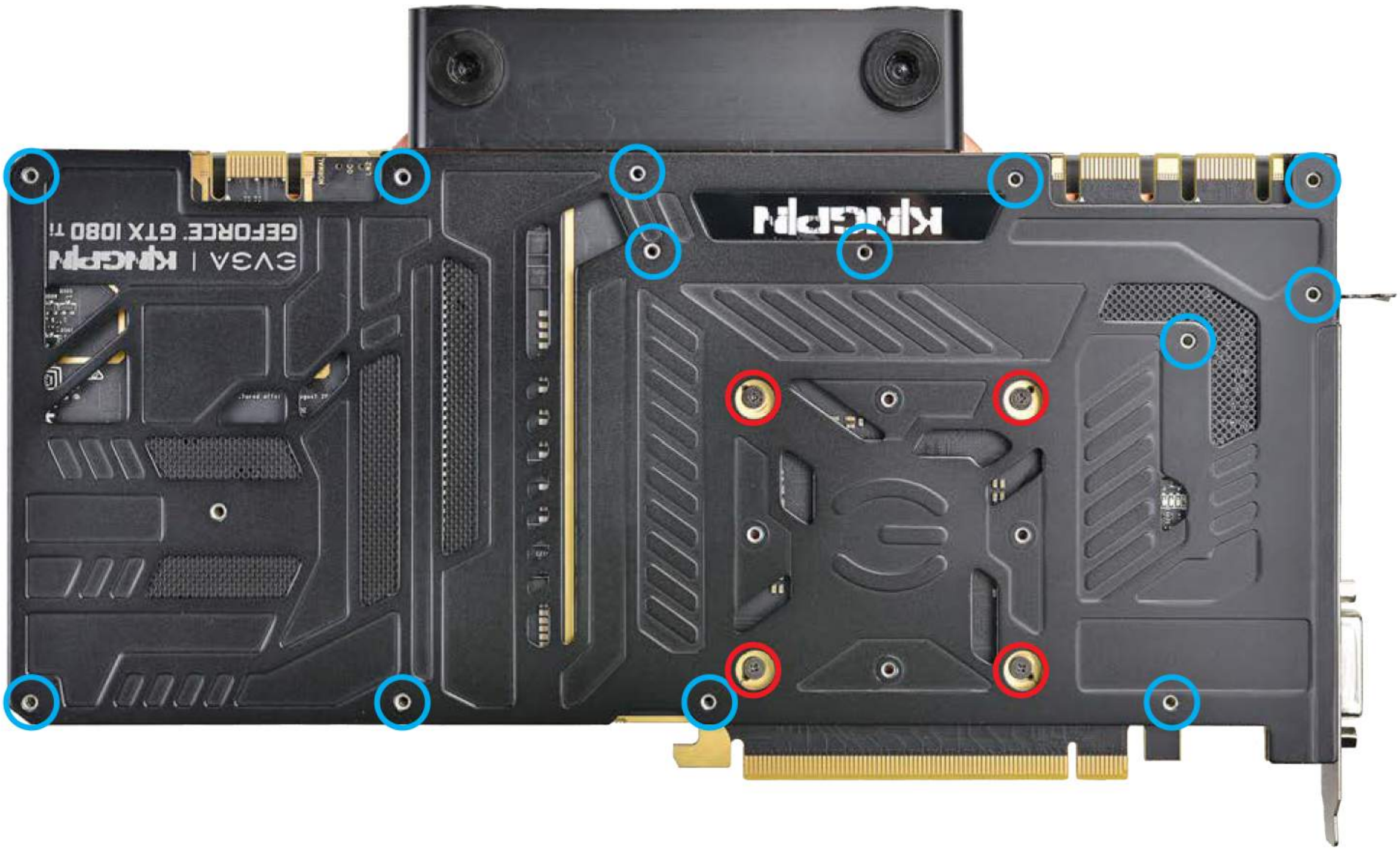
5. Install the EVGA K|NGP|N HYDRO COPPER

(a) 1. Please carefully remove any plastic protective tape from the #1 EVGA K|NGP|N HYDRO COPPER waterblock. Once complete, connect the 2 LED Connectors, as shown in the image below.



(b) 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.

6. Complete installation
Fasten the remaining backplate screws. Using the photo below, tighten 14 #3 screws (circled in blue) and 4 #4 screw (circled in red).



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.

7. Install your barbs/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 below:

**Important Information**

EVGA K|NGP|N 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 K|NGP|N Hydro Copper Waterblock and connecting it to your water loop. The EVGA K|NGP|N Hydro Copper Waterblock is exclusive only to the EVGA GTX 1080 Ti K|NGP|N graphics card PCB.

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 K|NGP|N Hydro Copper Waterblock. Damage caused by using an EVGA K|NGP|N 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 K|NGP|N Hydro Copper Waterblock. Mixing copper and aluminum may cause corrosion, which will void the limited 1 year warranty. Refer to your GTX 1080 Ti K|NGP|N warranty information before installing the EVGA K|NGP|N Hydro Copper Waterblock. If you damage your GTX 1080 Ti K|NGP|N series graphics card due to improper installation, EVGA will not be held liable for physical damage to your GTX 1080 Ti K|NGP|N series graphics card or your EVGA K|NGP|N Hydro Copper Waterblock.