

This product is intended for installation only by expert users. 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](http://www.ekwb.com) for updates.

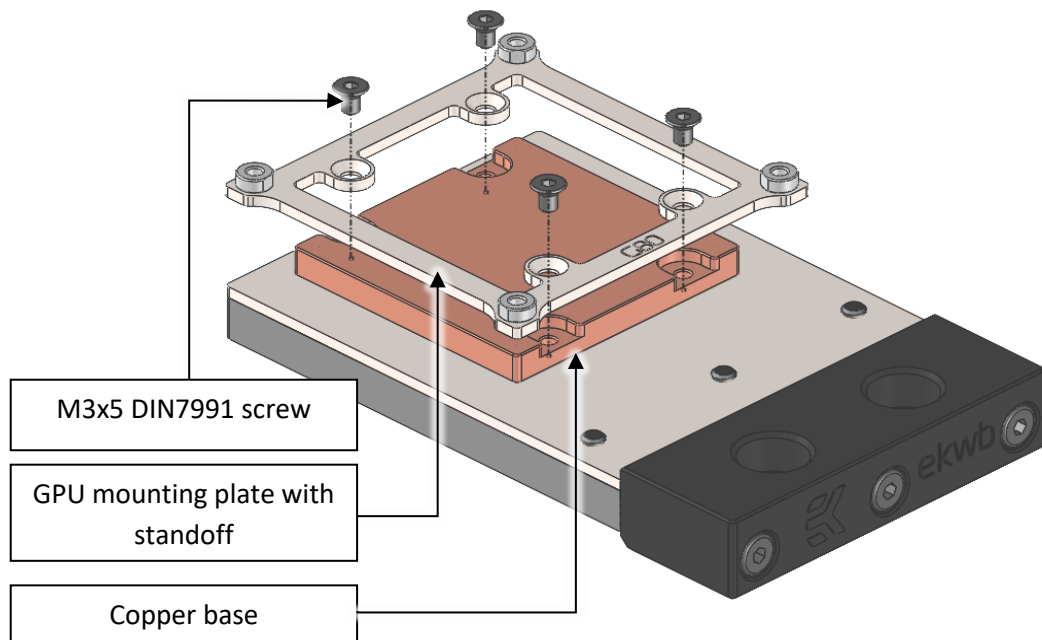
Before you start using this product please follow these basic guidelines:

1. **Please carefully read the manual before through before beginning with the installation process!**
2. **Please remove your motherboard from the computer to assure safest mounting process in order to prevent any possible damages to your CPU and/or motherboard's circuit board (PCB).**
3. **The EK-HFB and EK-ACF type 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.**
4. **The inhibiting use of corrosion coolants is always recommended for any liquid cooling system.**

## STEP 1: GENERAL INFORMATION ON PRODUCT COMPATIBILITY

Congratulations on your purchase of EK-Thermosphere. This item comes pre-assembled and ready for use on GeForce GTX 900 and - 1000(Ti)/Titan series graphics cards.

In order to install this product on graphics card other than mentioned above it is mandatory to exchange the mounting plate for alternative one which needs to be purchased separately!



## STEP 2: TABLE OF CONTENT

The following items are enclosed with each EK-Thermosphere unit:

- EK-Thermosphere /w pre-installed G80 mounting plate and 2.5mm M3 standoffs
- Mounting screws:
  - o M3x4 DIN7985 screws
  - o M2.5x4 DIN7985 screws
  - o Additional 3.9mm standoffs (M3 thread)
  - o Additional 2.1mm standoffs (M2.5 thread)
- Required set of 2.0mm Allen key and EK-UNI standoff key
- TIM EK-Ectotherm (1g)

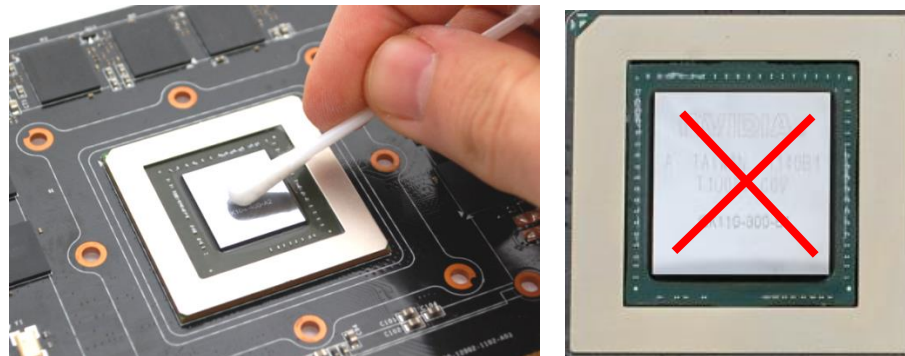
**Alternative mounting plates available for separate purchase through EK Webshop and Partner Reseller Network:**

- EK-Thermosphere Mounting Plate **G92**: 53x53mm (EAN: 3831109805299)
- EK-Thermosphere Mounting Plate **R600**: 54x54mm (EAN: 3831109805282)
- EK-Thermosphere Mounting Plate **GF560**: 51x61mm (EAN: 3831109805312)
- EK-Thermosphere Mounting Plate **G200**: 61x61mm (EAN: 3831109805305)

## STEP 3: PREPARING THE GRAPHICS CARD

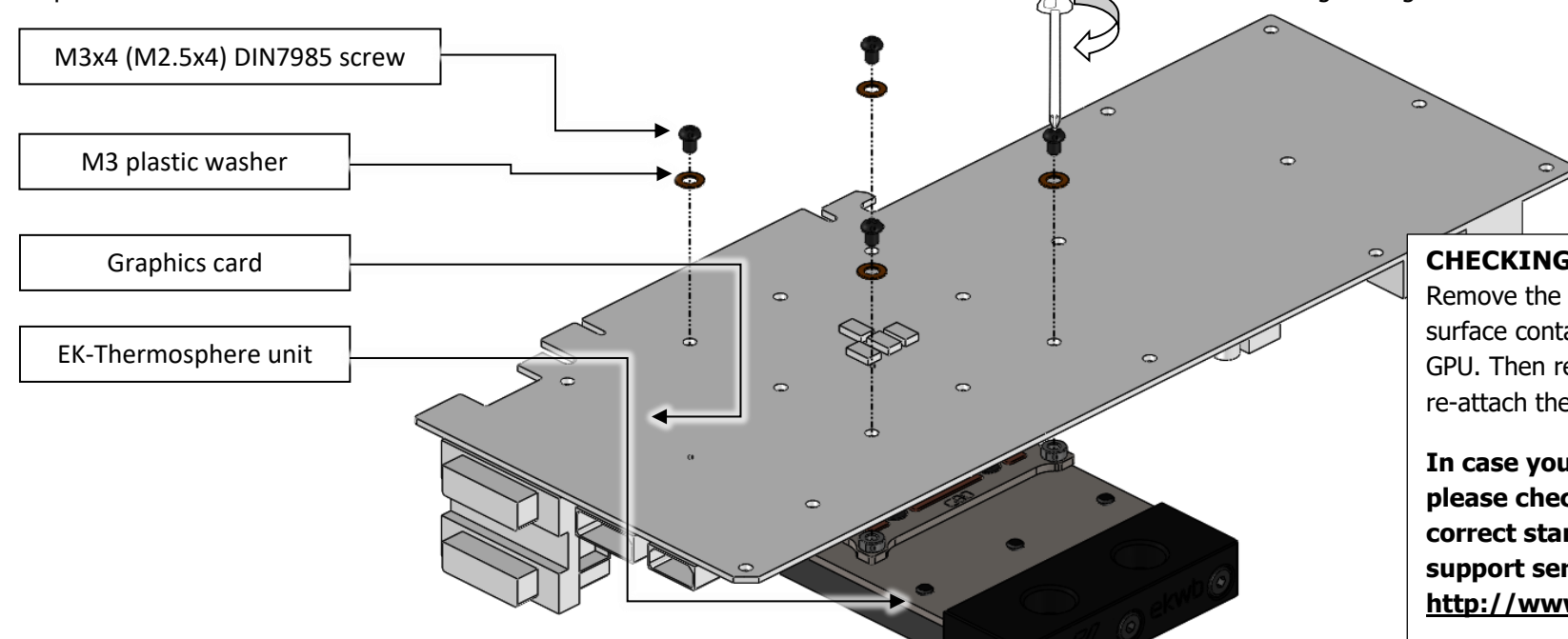
**1. CLEANING THE CARD:** Carefully detach the original stock cooler after removing **all** screws securing it to the board. Wipe off the remains (by using non-abrasive cloth or *qtip*, as shown on sample photo) of the original thermal compound until the components and circuit board are completely clean. EKWB recommends the use of denatured alcohol for removing TIM leftovers.

**2. APPLYING THERMAL COMPOUND:** Wipe off the remains (by using non-abrasive cloth or *qtip*) of the original thermal compound until the components and circuit board are completely clean. Apply thermal compound: lightly coat GPU chip with enclosed Gelid GC-Extreme thermal grease. EKWB recommends to apply thermal grease in cross form for best performance (see sample picture).



## STEP 4: ATTACHING WATERBLOCK

Carefully position the water block with preinstalled standoffs on to the graphics card. During this process please make sure you align mounting holes on the PCB with holes on the water block (same applies for other tops). Also pay attention not to use too much force by pressing the block down to the PCB. Chip dies are prone to cracking. Use a Philips screwdriver screw with the enclosed M3x4 DIN 7985 screws. EKWB recommends users to start tightening the screws in cross pattern.



**CHECKING FOR PROPER CONTACT:**  
Remove the water block to check for uniform surface contact between the water block and the GPU. Then repeat sub-steps in previous section to re-attach the block.

**In case you fail to obtain good contact, please check again that you are using correct standoffs and/or contact our support service at <http://www.ekwb.com/support>.**

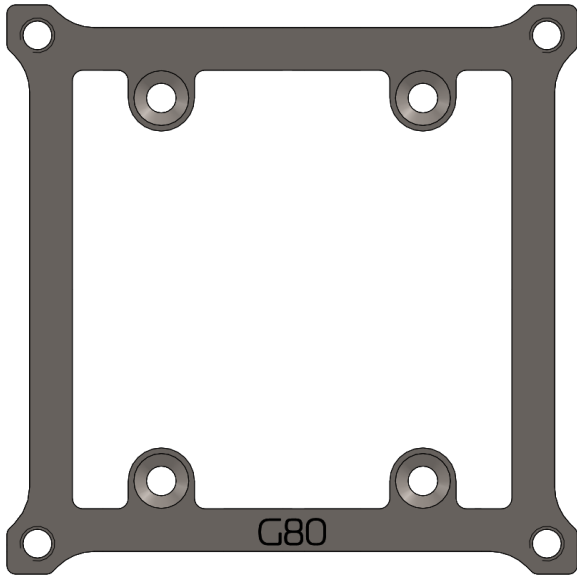
## STEP 5: INSTALLING ALTERNATIVE GPU MOUNTING PLATE (OPTIONAL)

Prior to take the next steps it is mandatory to remove the four M3x4 DIN7991 screws holding the mounting plate attached to the copper base. Use enclosed Allen key 2.0mm to remove the screws as shown in STEP 1.

After disassembling the mounting plate as shown on the STEP 1 please replace the metal hold-down plate with the plate of your choice.

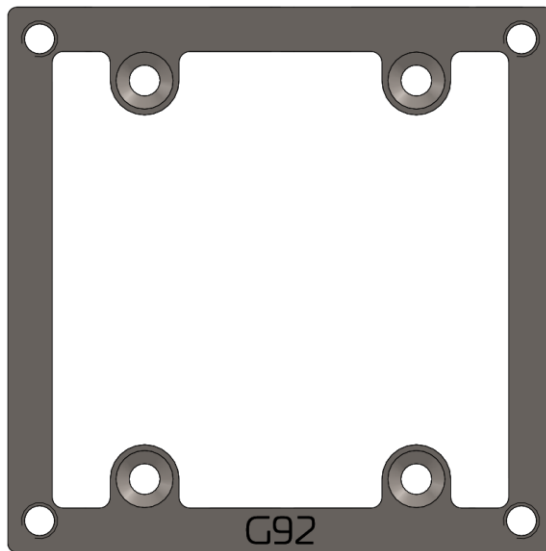
**OPTIONAL:** Remove existing standoffs using enclosed EK-UNI standoff key to install alternative sized ones if necessary (example: in order to use this water block with nVidia GeForce GTX 580 graphics card one must install 3.9mm M3-threaded standoffs (enclosed) onto the G80 Mounting plate).

Please follow the general fitting guideline below. For detailed compatibility list please visit <http://www.coolingconfigurator.com> !



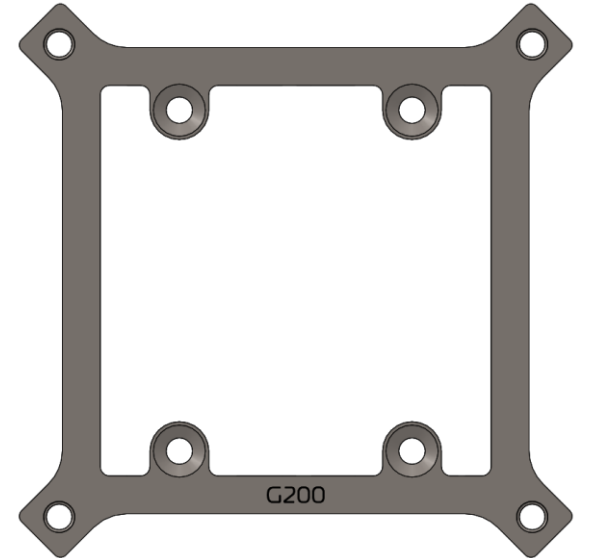
### G80 Mounting Plate:

- Used with 2.5mm standoffs (pre-installed):
  - for modern nVidia GeForce GTX 900 and - GTX 1000 family graphics cards (GP102, GP104).
- Used with 3.9mm standoffs (optional):
  - for nVidia GeForce 8800 GTS/GTX (G80) and GTX 465/470/480/560 448c/570/580 (GF100, GF110) family graphics cards



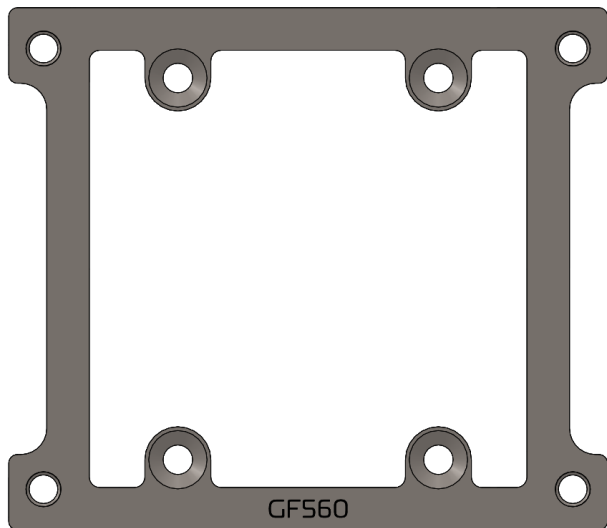
### G92 Mounting Plate:

- Used with 2.5mm standoffs (pre-installed):
  - for nVidia GeForce 8800 GT(S) and 9800 GT(X) family graphics cards (G92).
  - for ATi/AMD Radeon HD 3800, 4870/4890, 5800, 6900 series graphics cards
- Used with 2.1mm standoffs (optional):
  - for nVidia GeForce GTS 450 / GTX 550/650 (Ti)
  - for Ati/AMD Radeon HD 4850, 6800, 7800
  - for modern AMD Radeon R9 270(X) series graphics cards



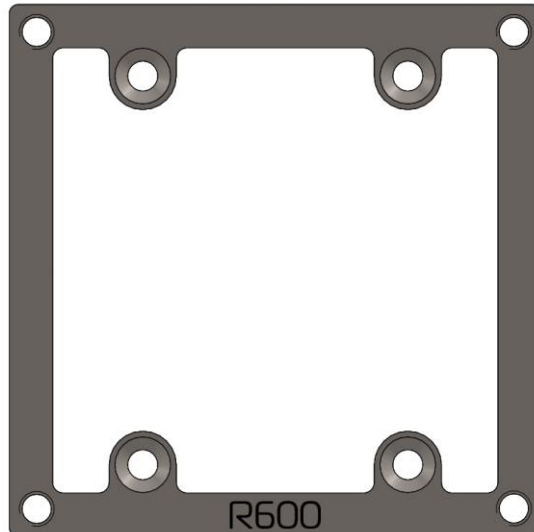
### G200 Mounting Plate:

- Used with 3.9mm M2.5 threaded standoffs:
  - for nVidia GeForce GTX 260/275/280/285 family graphics cards (G200, G200b)



### GF560 Mounting Plate:

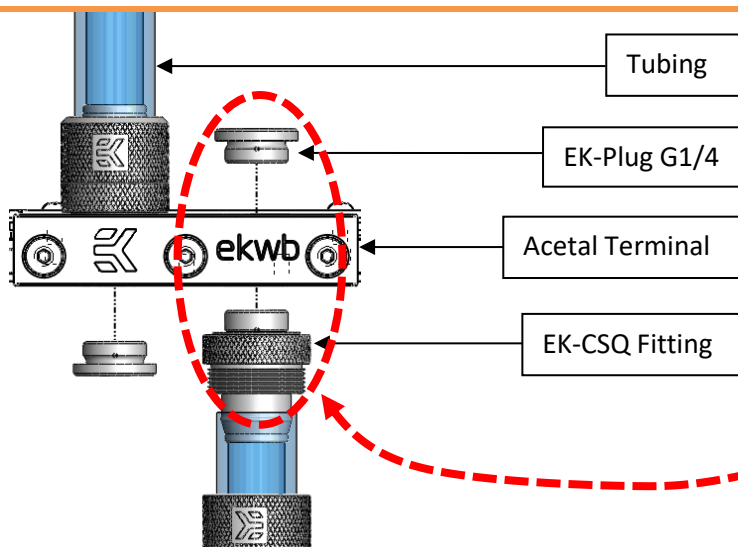
- Used with 3.9mm standoffs:
  - for nVidia GeForce GTX 460/560 (Ti) series graphics cards



### R600 Mounting Plate:

- Used with 2.5mm standoffs:
  - for AMD Radeon HD 7950/7970 series graphics cards
  - for modern AMD Radeon R9 280(X)/290(X) series graphics cards
  - for modern AMD Radeon RX 470/480 series graphics cards

**Caution:** GPU shim must be removed on some R600 and 7950/7970 series graphics cards.



Screw in the two G1/4 threaded male fittings. Attach the liquid cooling tubes and connect the water-block(s) into the cooling circuit. **EKWB recommends using EK-ACF fittings with the EK-FC water blocks.** To ensure that 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.

**CAUTION:** In case of using connectors other than EK-ACF or EK-HDC series compression fittings, take special attention to the length of the fittings' male G1/4" thread. In case the thread is longer than 5 mm please use the enclosed 1.8 mm nickel plated spacer!

5mm is the maximum allowed G1/4" thread length!

**PLEASE NOTE THE PREFERRED INLET PORT SIDE.**