1 **KOOLANCE** **CPU-360, CPU-370 Installation Guide** v 1.1

⚠ **CAUTION:** Be sure to attach a Koolance system temperature probe (if available) to the CPU cooler during installation. Koolance system safety features may not function properly without the correct placement of this probe, and hardware damage can result.

Install two G 1/4 BSP threaded nozzles (sold separately) into the cooling block. Hand tighten all nozzles-- overtightening can damage the block and threads.

Remove any protective film from the bottom of the cold plate.

If a Koolance system is used, place the temperature sensor included with it on the edge or side of the water block's metal cold plate. *Make sure it is not covering any area that will be in contact with the CPU.*

DO NOT attempt to install the temperature probe in between the processor and cooler. Despite its thin size, it will interfere with CPU contact or burn-out the sensor.
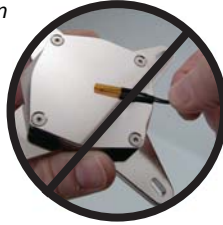
Trim out a piece of metal tape and apply it to keep the temperature probe in place. DO NOT stick metal tape or the temperature probe where the processor comes in contact with the cooler.

You can use a zip-tie to further secure the temperature probe wire to the CPU water block's tubing.

2 Some processors, like AMD sockets AM2/AM2+/AM3, may require removal of the motherboard's existing retention frame in order to install the Koolance water block.

If present, remove this retention frame by unscrewing its screws, or if plastic tabs are used, pulling out these locking tabs.

(Refer to bracket images on the following page for specific CPU post positioning.)

Threaded posts are screwed directly into the CPU block's rear bracket. Pliers or a small wrench may be required to fully tighten the posts.
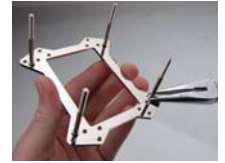
Place the rubber insulation pad over the bracket posts. This helps to protect the motherboard from damage and electrical shorting from the back plate.

From beneath the CPU socket, carefully insert the back plate posts through the motherboard mounting holes. The insulating pad will be sandwiched between the back plate and motherboard.

Apply thermal paste to the CPU directly. Spread the paste so that it evenly and thinly covers the CPU. A piece of thick paper (such as a business card) works well for this.

3 Two back plates may be included with your water block. Use the below diagrams to determine which holes your mounting posts must use.

AMD Socket AM2, AM2+, AM3

Intel Socket LGA 1156, 1155

Intel Socket LGA 775

Intel Socket LGA 1366

Place the water block over the mounting posts. If another top bracket is needed for your CPU, see details later on changing this.

The temperature sensor should already be installed on the cooler (if available).

Install the optional plastic washers over each post. These help protect the metal bracket from becoming scratched.
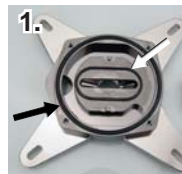
Place Springs   Tighten Thumb Nuts

Place retention springs, and then thumb nuts on each post.

Gradually tighten each thumb nut by hand. DO NOT OVERTIGHTEN!

4 **Changing the Top Bracket**

Two top brackets are included with the water block. Use the bracket that matches your CPU socket type.

Intel LGA 775, 1156/1155, 1366 Bracket

AMD AM2/AM2+/AM3 Bracket

To remove or replace the CPU mounting bracket, loosen the four top screws with the included wrench.

Opening the Water Block

The CPU water block can be opened (for cleaning, etc.) by carefully unscrewing the four bottom screws with the included wrench.

It is extremely important to reassemble the water block properly! There are several things to check:

1. **1.** Make sure both o-rings are smoothly in their grooves. These should never become warped or damaged.

2. **2.** The center impingement plate has side notches to align it with two metal tabs on the top cover.

3. **3.** The cold plate microfins must run *perpendicular* to the impingement plate slot!
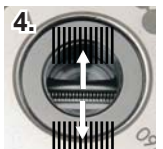
4. **4.** When the block is assembled, look down into the inlet hole to confirm proper fin direction. The microfins should look like a zipper.