

MCW6000 & 6002 SERIES WATER-BLOCKS

INSTALLATION GUIDE FOR AMD™ K7 PROCESSORS

Parts list

| Parts | QTY | PARTS | QTY |
|--------------------------------|-----|----------------------------------|-----|
| MCW6000 or 6002-A™ water-block | 1 | Retention spring/clip assemblies | 2 |
| Worm drive clamps | 2 | SK7 hold-down plate | 1 |
| C eramique thermal compound | 1 | | |

This product is intended for expert users. Please consult with a qualified technician for installation. Improper installation may result in damage to your components. Swiftech 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.swiftnets.com for updates.

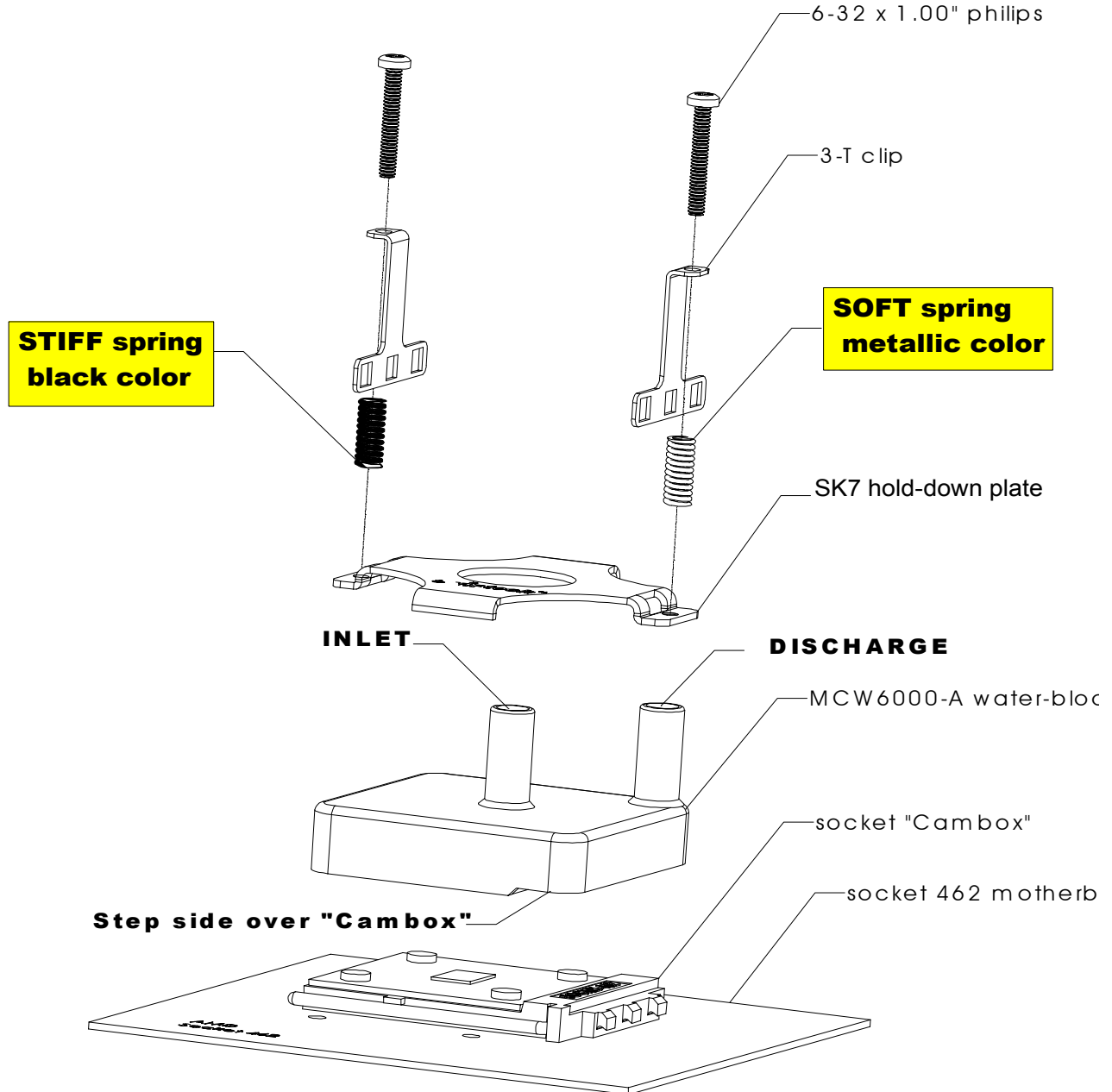


Figure 1

1. **Preparing your Motherboard**

- ❑ Remove the existing heat sink and carefully clean the CPU.
- ❑ Apply thermal compound: lightly coat the CPU with the provided Céramique™ thermal compound. Follow this link http://www.arctic silver.com/ceramique_instructions.htm for detailed instructions.



Rub some compound in base of water-block first, and then clean off with lint-free cloth

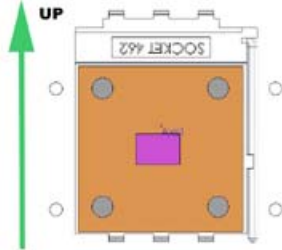


Apply small amount of compound on the CPU heat spreader

❑

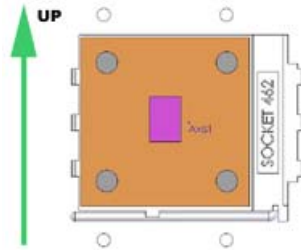
2. **Water-block orientation**

There are 4 possible socket orientations in socket A (socket 462) motherboards:



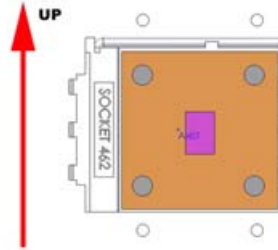
Case 1

Most common - OK



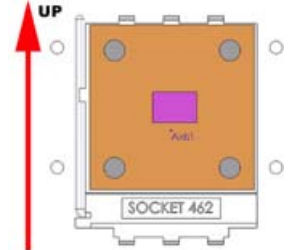
Case 2

Most common - OK



Case 3

Dual processor boards Caution!



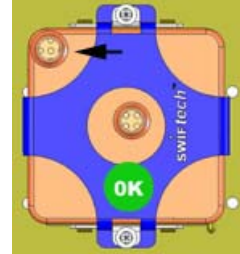
Case 4

Dual processor boards Caution!

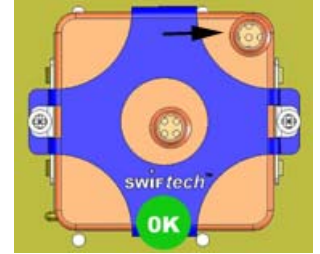
In order to bleed correctly during the fill and bleed operations, and while the system is standing upright, the water-block discharge should always be at the highest point, as shown in case 1 and 2.

If your block installs as shown in case 1 and 2, then proceed with installation instructions in paragraph 3.

If due to the socket orientation the water-block is oriented as shown in case 3 or 4, such as frequently encountered in dual processor boards for example, then the water-block must be bled PRIOR to installation onto the socket:

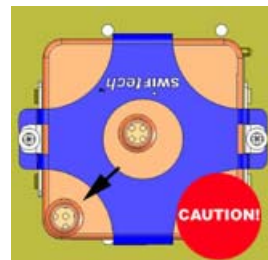


Case 1

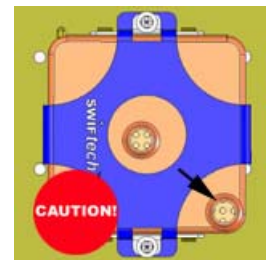


Case 2

Simply set-up your cooling circuit first, and while filling it up with fluid, hold the water-block in your hand with the discharge pointing upwards so that all the air trapped into the block will escape. Then attach the water-block onto the socket.



Case 3



Case 4

3. **Water-block installation**

CRITICAL PREAMBLE - MUST READ!

As shown in figure 1 page 1, there is a specific side allocated to each spring: the STIFF spring goes opposite to the socket cam-box, and the SOFT spring goes on the same side as the socket cam-box. The springs are color-coded to prevent any mistakes: the stiff spring has been plated with a black zinc coating, while the soft spring is zinc plated in a shiny metallic grey.

You MUST be extremely careful to respect this arrangement!

Not respecting this arrangement will result in unbalanced pressure, and prevent the water-block to sit flat onto the processor, resulting in high temperatures, and likely damage to the CPU.

Place the MCW6000 or 6002-A™ over the CPU as shown in figure 1 page 1.

The water-block step side MUST be located over the socket cam box. A label affixed to the base of the water-block clearly identifies which side this is.

- ❑ The retention clips should snap over each side, and hook onto the socket tabs. Make sure that the clips are properly aligned to fit snugly underneath the tabs.
- ❑ **Gradually** loosen (counter-clockwise) each spring-loaded screw to release the spring tension, checking that the clips remain engaged underneath the tabs.
TIP: if space permits, hold the clips pressed against the socket while loosening the screws, as shown in figure 2. This will prevent the clips for disengaging themselves from underneath the tabs at start-up.
- ❑ Continue backing off until **the head of the screw completely clears the top of the bracket, as shown figure 3.**
- ❑ **Double-check** to ensure that the clips have remained underneath the tabs.
- ❑ **Installation to the CPU is now complete !**

4. **Connecting the water-block(s) to the cooling circuit:**

- ❑ Carefully identify the direction of the flow in your circuit. For the MCW6000 to operate properly, the fitting located at the center of the water-block **MUST BE USED AS THE INLET.**
- ❑ **TIP! In multi-processor environments,** connect the two blocks in series: For example: pump discharge to inlet of processor 1, discharge of processor 1 to inlet of processor 2, and discharge of processor 2 to radiator.
- ❑ **Attaching the tubes:**
The MCW6000™ series ship with worm-drive type hose clamps. Secure the tubes as shown in the picture to the right (shown below with an AMD bracket), and tighten **firmly**.

5. **Type of Coolant:**

Being entirely made of copper, the MCW6000™ series may be used with pure water, and do not necessitate the use of anti-corrosion agents. The use of an algacide is nonetheless recommended in any liquid cooling system, and our HydrX™ additive also performs such function.

6. **Final inspection**

Once the installation is completed, it is always a good idea to test the circuit for leaks, prior to powering up the computer. **Do not test the water-block using city water pressure.** This will bow the top of the housing and render the block unusable (and will void your warranty). **Maximum pressure allowable for testing is 25 psi (1.7 bar)**

Troubleshooting help is available on our web site at www.swiftnets.com, or by calling customer support at 562-595-8009.

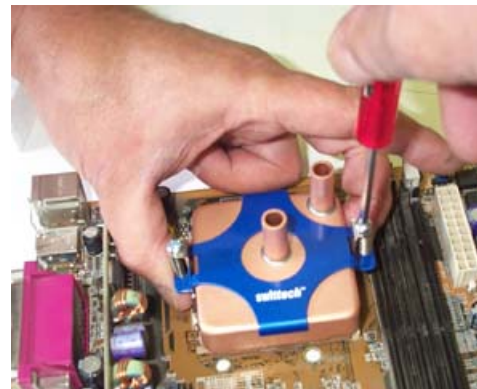


Figure 2



Figure 3



Tubes attached with the included worm-drive clamps

IMPORTANT DISCLOSURES

While all efforts have been made to provide the most comprehensive tutorial possible, Swiftech assumes no liability expressed or implied for any damage(s) occurring to your components as a result of using Swiftech cooling products, either due to mistake or omission on our part in the above instructions, or due to failure or defect in the Swiftech cooling products.

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