

MCW462-U Water-block

Installation Guide for Intel® processors

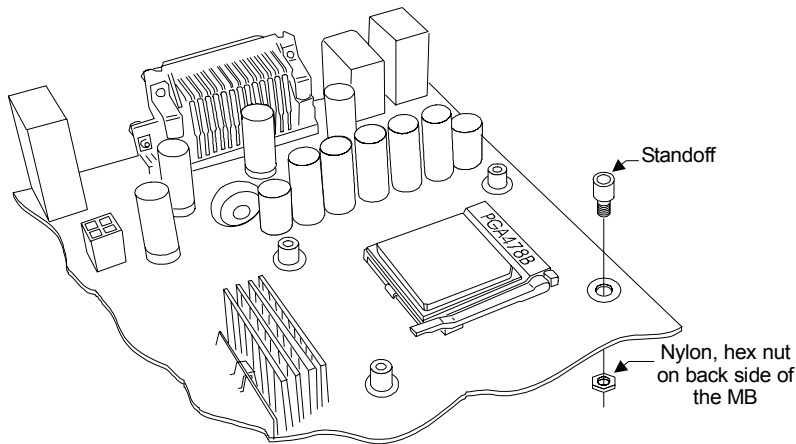
Parts list

Parts	AMD	INTEL	QTY	PARTS	AMD	INTEL	QTY
Water-block	Common to both		1	Nylon 6-32 Hex nuts	Common to both		4
6-32 x 1 1/2" screws (for HS)	Common to both		4	Black fiber washers	X		8
Standoffs	Common to both		4	Thermal grease	Common to both		1
Springs	Common to both		4	Tube insert	Common to both		2
Nylon flat washers	X		8	P4 brackets		X	2
Nylon shoulder washers	X		4	4-40 socket screws		X	4

I. Preparing the motherboard

You must uninstall your MB prior to installing the MCW462-U water-block.

- Install standoffs in MB

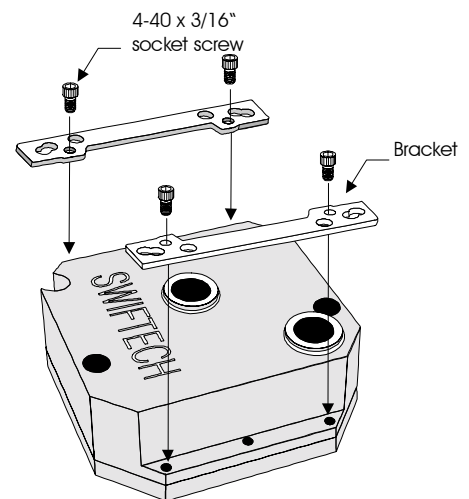


Remove the stock heatsink support base (the black plastic frame that clips down to your motherboard). This will reveal the four mounting holes we use to install our standoffs. Install a standoff in each one of the holes. Keep the standoff centered over the MB holes, and secure with nylon hex nuts on backside of the MB. If you are going to assemble/disassemble the heat sink frequently, we recommend finishing the installation by putting a drop of "Crazy Glue" at the junction between standoff & MB, and between nylon hex nut & MB. This will lock the standoff onto the MB, and further prevent it from spinning lose during frequent assembly and disassembly operations.

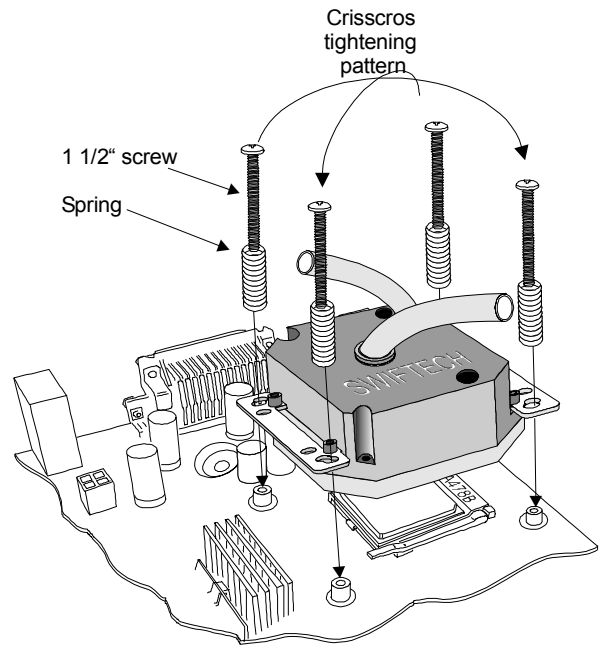
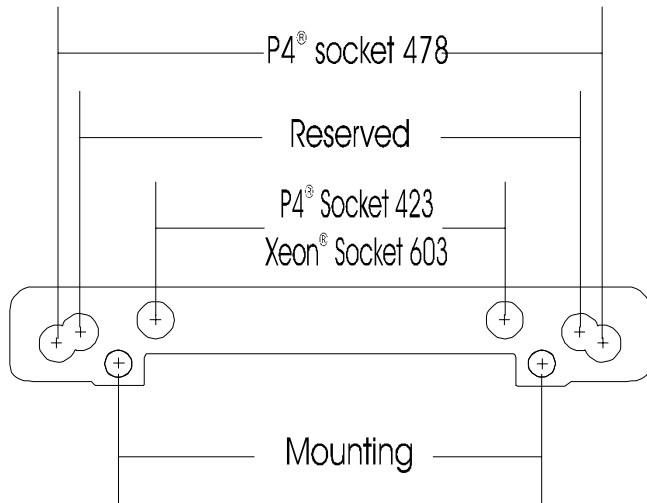
- Re-install the MB inside the case.

II. Water-block installation

- Install the Pentium 4 mounting brackets as shown on the schematic to the right.
- **The case should** be laying flat on a table.
- **Insert the processor** into the socket, and lightly coat the processor core with high quality thermal compound. **Only a paper-thin coat is necessary.** It should be applied using preferably a razor blade, or a credit card, held between thumb and index at a 45-degree angle. It is critical to ascertain that the entire core is covered with a uniform coat of thermal compound. Thermal performance will dramatically decrease if any portion of the core is not covered by thermal compound. We recommend Arctic Silver or similar high-end compound for superior thermal conductivity.
- **Insert the tubing into your MCW462-U water-block prior to installing it onto the CPU.** The reason is that inserting the tubes into the fittings requires some strength, and it is preferable not to do this while the block is sitting on the CPU. If you are going to use soft vinyl tubing (transparent tubing), it is **IMPERATIVE** that you use the two plastic inserts provided with your kit.
- **Prepare 4 assemblies** composed of a 1 1/2" screw, and 1 spring.



- Identify the mounting holes on the bracket for your processor, as shown in the schematic below:



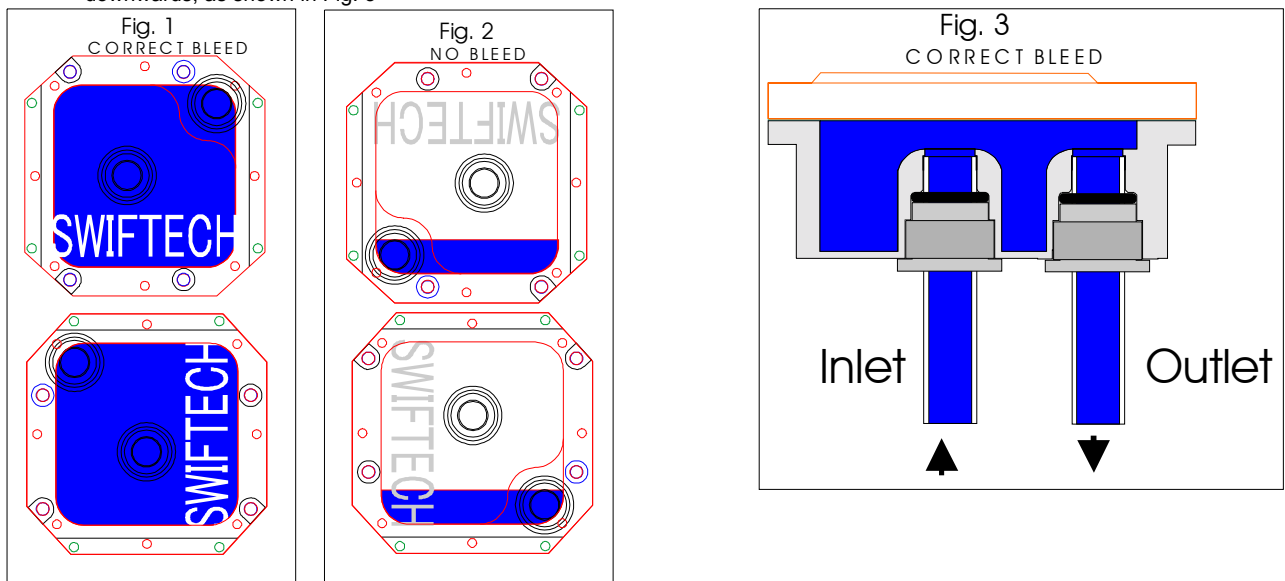
- Install MCW462-U on the CPU.** Orientation is important for bleeding purposes. Please look-up the critical bleeding instructions paragraph below prior to installing the block on the CPU.
- Gradually tighten the screws** in a crisscross pattern until you feel that they reach the bottom of the standoff. A "finger-tight" lock is sufficient. Over tightening may result in stripping the nylon hex nut. Conversely, adjustments such as tightening the screws only partially are **strictly prohibited**. Such attempts will result in improper contact between the CPU core and the heat sink, and result in CPU overheating.

CRITICAL BLEEDING INSTRUCTIONS:

The following applies mostly to dual processor installations. Depending on the orientation of the socket, it is critical to observe the position in which your water-block is oriented for bleeding purposes. Assuming that the computer is standing up, and that the water-block is facing you as shown in Fig.1 and Fig 2. below, Fig. 1 shows the two positions in which the MCW462-U will bleed correctly, and Fig. 2 shows the two positions in which the MCW462-U will **not** bleed.

Two solutions are available to bleed the water-block correctly:

- Bleed the water-block prior to installing on the CPU. Simply rotate the block in the position shown in Fig. 1.
- If you prefer to install the block first, then bleeding should be done with the computer laying down flat so that the Swiftech logo is facing downwards, as shown in Fig. 3



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