

MCX775-V<sup>™</sup> Heatsink

Installation Guide For Intel<sup>®</sup> Pentium<sup>™</sup> 4 processors

# Packing list

	-		-
Parts	Qty	Parts	Qty
MCX775-V™ Heat Sink	1	Snap-rivets	4
Standoffs	4	7/64 hex key	1
6-32 lock-nuts	4	Céramique™ Thermal compound	1
Fiber washers	10		

# Airflow direction Fan guard snap-rivet Fan 6-32 nylon spring-loaded screws Standoff

Standoff Motherboard fiber washer

Figure 1

# 1. Motherboard preparation

- a. Remove the motherboard from the chassis
  - . Install the standoffs though the holes, using fiber washers and locknuts as shown in figure 1 and tighten as follows:



Using preferably a ¼" socket tool to drive the standoff, hold the locknut with a <u>small</u> pair of pliers to prevent the locknut from spinning. Locknuts contain an embedded nylon insert designed to prevent the nut to loosen. For this reason, locknuts do not spin freely on the screw thread. This is normal. Simply tighten the nut by overcoming the slight resistance exerted by the nylon insert, until the standoff/nut assembly is secured on the motherboard, and apply a final lock without excessive force (otherwise the standoff stem may snap). Torque value should not to exceed 16 in. lbs.

c. Lightly coat the processor core with the provided Céramique™ Thermal compound (comprehensive instructions and tips with respect to application of the thermal compound may be found here: <u>http://www.arcticsilver.com/instructions.htm</u>

#### 2. Heatsink installation

- Do not install the fan onto the heatsink yet. Installation of the heatsink onto the processor requires that the fan be installed last.
- Position the heatsink onto the processor as shown in figure 1, aligning the retention screws with the standoffs.
- Engage the provided 7/64 hex-key through the fan retention bracket to reach the spring-loaded retention screws.
- Tighten the screws in a cross sequence: 1 3 2 4 as shown in figure 3, following the procedure described below:
  Hold the heatsink in the center to prevent it from tilting as shown figure 4. Start tightening screw #1 by two turns, then reach screw #3 and tighten it by two turns. You can release your hold on the heatsink once these first two screws have been engaged. Be careful not to cross thread! Screws should spin relatively freely into the standoffs except for the resistance created by the spring.
- Continue to gradually tighten all 4 screws until you feel that they have reached the bottom of the standoff. You can feel that they have reached the bottom once the nylon screws start twisting on their axis. Additional torque at this point is not necessary, and would only result in the Hex-key spinning inside the screw socket head (which will ultimately damage the screw).





Figure 4

□ The heatsink is now securely attached to the motherboard, and you can proceed with the fan installation, using the 4 snap-rivets included in your hardware package. Fan should always be positioned to blow downwards.

# 3. <u>Heatsink removal: Warning! Hydraulic suction causes the heatsink to strongly adhere to the processor. Do not attempt to lift</u> the heatsink off without loosening its bond from the processor first!

- □ Use the provided 7/64 hex key to very gradually unscrew the 4 socket screws in a cross pattern.
- Hold the heatsink between finger and index, and gently wriggle it to loosen it from the CPU (do not use excessive force when wriggling the heatsink)
- Once the CPU is loosened from the heatsink, slide it off in the horizontal plane as much as space permits, and then lift it up.
  Clean the surface of the CPU and the heatsink to get rid of old thermal compound. Reapply the proper amount of thermal compound
- Clean the surface of the CPU and the heatsink to get rid of old thermal compound. Reapply the proper amount of thermal compound on the CPU surface before you re-install the heatsink.

# 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.

# WARRANTY

Our products are guaranteed for 12 months from the date of delivery to the final user against defects in materials or workmanship. Pump is guaranteed for 24 months. During this period, they will be repaired or have parts replaced provided that: (1) the product is returned to the agent from which it was purchased; (II) the product has been purchased by the end user and not used for hire purposes; (III) the product has not been **misused**, handled carelessly, or other than in accordance with any instructions provided with respect to its use. This guarantee does not confer rights other than those expressly set out above and does not cover any claims for consequential loss or damage. This guarantee is offered as an extra benefit and does not affect your statutory rights as a consumer.