MCW5002-X WATER-BLOCK

INSTALLATION GUIDE FOR XEON™ PROCESSORS

Parts list

Parts	QTY	PARTS	QTY
MCW5002-X™ assembly	1	Arctic Alumina Thermal compound	1
½" Barb fittings	2		

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.

1. **Preparing your Motherboard**
   - ❑ Remove the existing heat sink
   - ❑ Carefully clean the CPU.
   - ❑ Lightly coat the CPU with the provided 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.
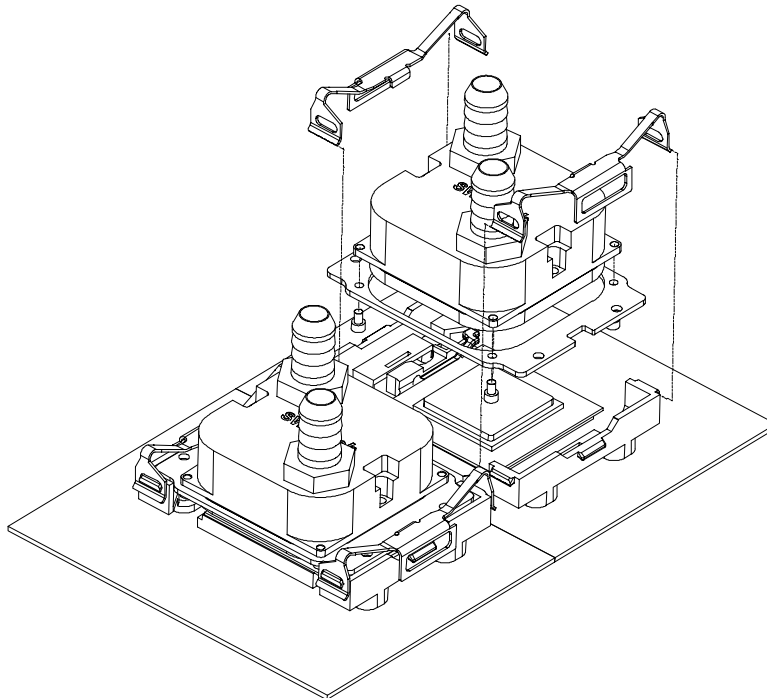
2. **Install the hose barbs into the MCW5002 Housing.**
   - ❑ Plastic barbs are provided with all the MCW5002 series water-blocks, please do not swap for brass barbs, as cell corrosion WILL result.
   - ❑ Thread sealant must be used when making up the threaded connection. The best sealant is 'Plumber's Goop' but Teflon tape can be used as well.
     - i. With Goop, fill the threads on the barb and screw in by rotating 1/2 turn forward, 1/4 turn back (this will help work the Goop into the water-block's female threads). After 24 hrs the goop will be quite solid.
     - ii. With Teflon tape, apply 3 to 4 wraps in a clockwise rotation with the threaded end facing you, then screw into the water-block's female threads without any backwards rotation. The Teflon sealed connection may be tested immediately.

   When properly made up there will be ~3/16" of thread showing under the 'nut' portion of the fitting.

MCW5002-X™ water-block installation

The MCW5002-X water-block installs using Intel validated OEM retention clips. Please use the retention clips, and installation guide provided with your motherboard for installation of the water-block onto the CPU.

In cases where the OEM retention clips are not desired or available, the MCW5002-X can also be installed with Swiftech's proprietary spring-loaded screws. Use part # MCX603-VSR2 located in the air cooling accessories section of our online store here: http://www.swiftnets.com/store/category.asp?CatID=1

MCW5002-X Installation with optional screw/spring assemblies

Remove the motherboard from the chassis, and remove the stock retention frames to expose the mounting holes.

Install the standoffs though the holes, using fiber washers and locknuts as shown in figure 2

Tighten the standoffs as shown figure 1, using a ¼" socket tool to drive the standoff, and a small pair of pliers to prevent the locknut from spinning. Torque value should not to exceed 16 in. lbs. In other words just tight, without excessive torque, otherwise the standoff stem may snap.

6-32 philips screw

4-40 socket screw

Spring

Retention frame above housing ridges

nylon retaining washer

Motherboard

Standoff

black fiber washer
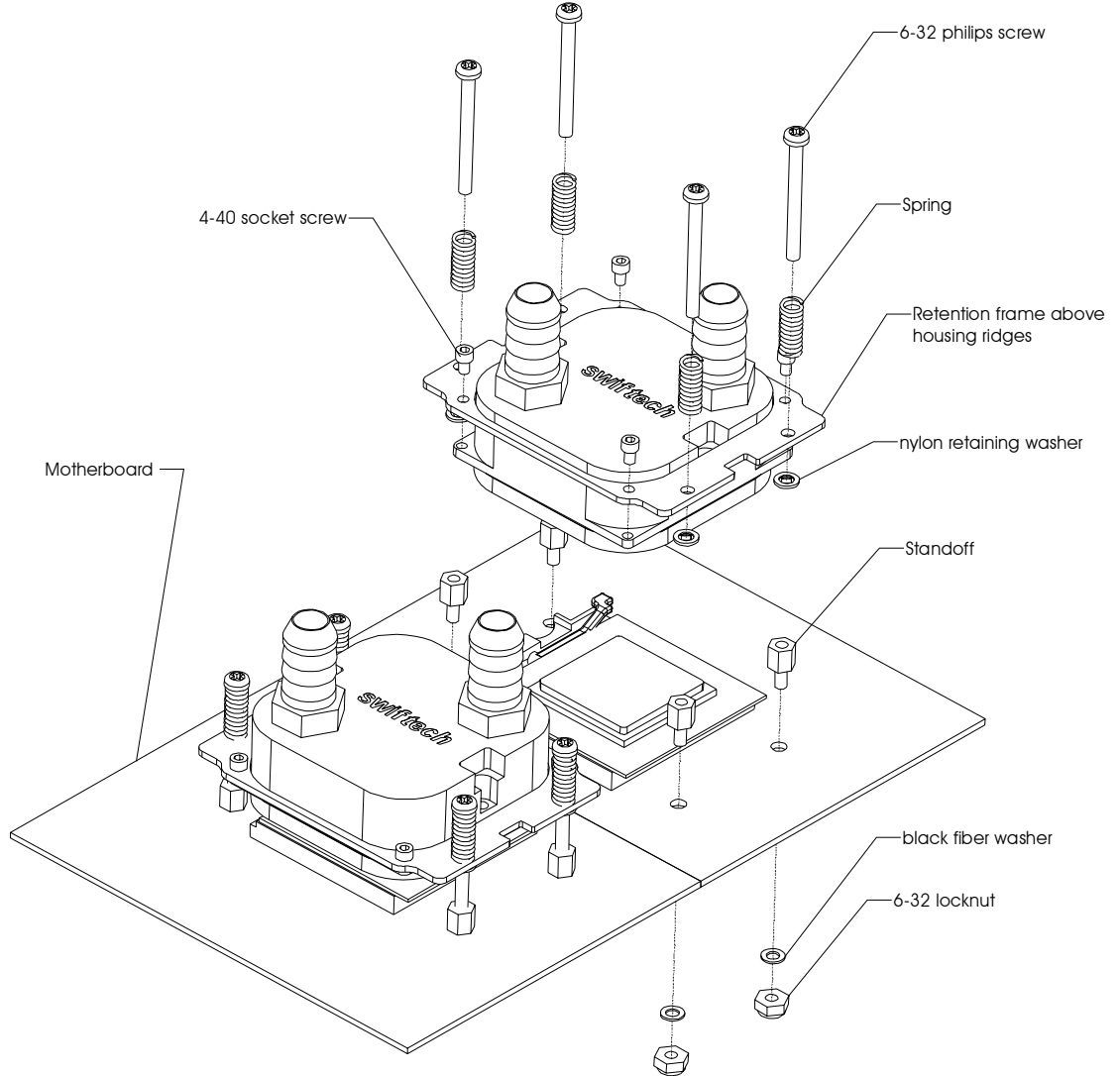
6-32 locknut

Figure 2

Figure 1

Tighten the spring-loaded screws in a crisscross pattern until the screws bottom out into the standoff. Once there, do not attempt to lock the screws any further, or they will jam into the standoff, and could prove difficult to remove if you ever need to uninstall the heatsink. **Installation is now complete.**

3. **Connecting the water-block(s) to the cooling circuit.**
   FAQS:
   ❑ Inlet and outlet are interchangeable.
   ❑ In Multi-Processor environments, optimal water-block performance will be achieved by connecting them in series (outlet of one connected to the inlet of the other).

5. **Type of Coolant:**
   a. For best performance, use 95% distilled water, and 5% Swiftech brand "HydrX" corrosion inhibitor (available here: http://www.swiftnets.com/store/category.asp?CatID=2, under the "accessories" section).

b. In ALL cases, you MUST use Distilled water AND a corrosion inhibitor with the MCW5002 water-block. Regular automotive anti-freeze is acceptable. Automotive manufacturers recommend that not less than 25% is used.

c. NEVER use tap water, even for a short-term test.

d. Not following paragraphs b and c above constitutes misuse (*) of the product, and will void your warranty.

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