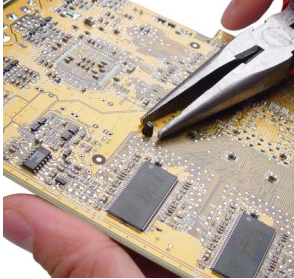


KOOLANCE™ GPU-180 Installation Guide v 1.1

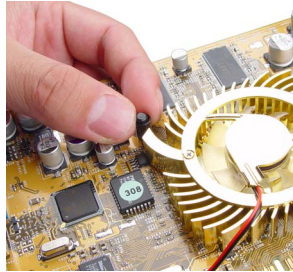
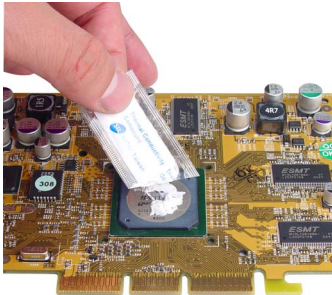
The video card or motherboard should be removed from the chassis in order to install the chipset cooler. The mounting screws are inserted from the back side of the board.



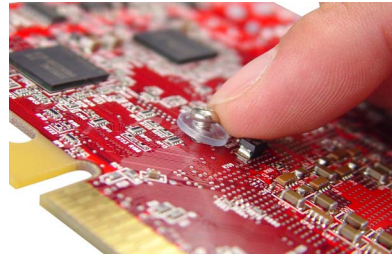
CAUTION: Removal of the original heat sink may void your manufacturer's hardware warranty. Please consult the manufacturer if unsure, and keep all original parts in case of a return/RMA. Koolance does not recommend using a liquid cooler on video cards or motherboards that lack standard mounting holes, or have heat sinks that are attached with only an adhesive (rather than screws or bolts).



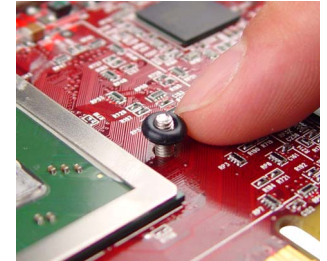
Beneath the board, the plastic tabs must be squeezed together with needle-nose pliers in order to free the original heat sink. (Some tabs have locking center pins which must first be removed from the top.)



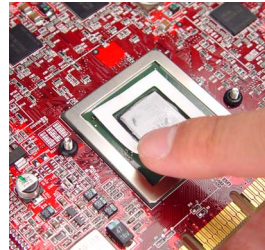
Once loosened, remove the original heat sink. Apply a thin layer of thermal interface compound onto the chipset if necessary.



Through the original heat sink mounting holes, insert both metal mounting screws from the back of the board. Make sure the plastic insulating washers are placed on each screw.

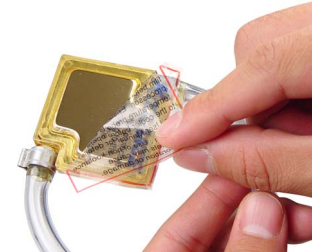


To help keep them secure, place rubber washers over the metal screws from above the board.

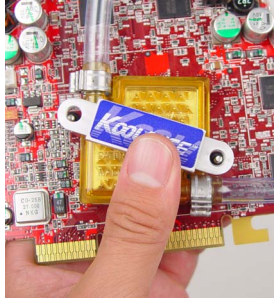
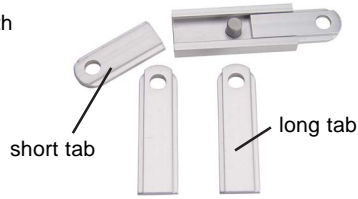


For ATI Radeon video chipsets, place the included adhesive foam pad around the chipset core for a flatter mounting surface.

Remove the protective tape from the bottom of the chipset cooler.



Two sets of bracket tabs are included with the chipset cooler. Use whichever tabs best align the cooler over the mounting screws.

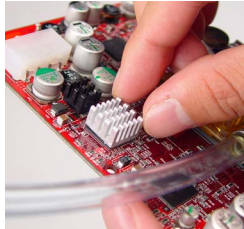


Place the liquid cooler onto the video or motherboard chipset and align the mounting bracket. The bracket is highly-adjustable for proper alignment.

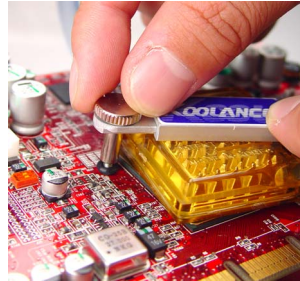
(NOTE: For some models of GPU-180 coolers, you may need to re-adjust your nozzles to provide more clearance for the bracket.)

Use the metal attachment nuts to fasten the mounting bracket to the chipset. Hand-tighten all video card components.

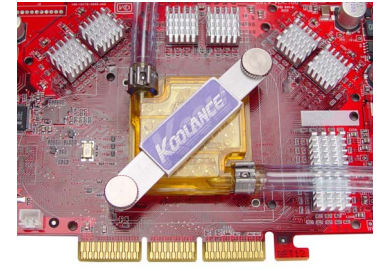
It is OK for the chipset cooler to sit diagonally on the video card or motherboard. Cooling efficiency will be the same.



Heat sinks are included for attachment to video memory chips for additional cooling. Depending on the video card, you may not require all 8 heat sinks.



(Chipset Cooler mounted on an ATI Radeon 9800 Pro)



(Chipset Cooler mounted on an nVidia GeForce FX 5900 Ultra)

Mounting on a P-4 Northbridge Chipset

Many motherboards for P-4 chips feature heat sinks which are "hooked" rather than bolted to the Northbridge chipset. Use the four attachment springs included with the GPU-180 cooler to secure the bracket to this type of chipset.

