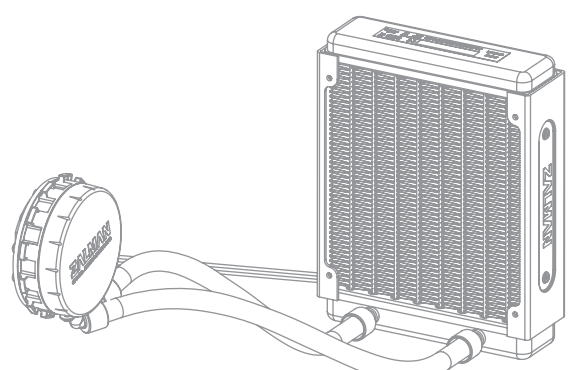




User's Manual

Liquid CPU Cooling system CNPS20LQ

Intel Socket 2011 / 1366 / 1156 / 1155 CPUs
AMD Socket FM2 / FM1 / AM3+ / AM3 / AM2+ / AM2 CPU & APUs



To ensure safe and easy installation, please read the following precautions. www.zalman.com

Precautions & Specifications

1. Precautions

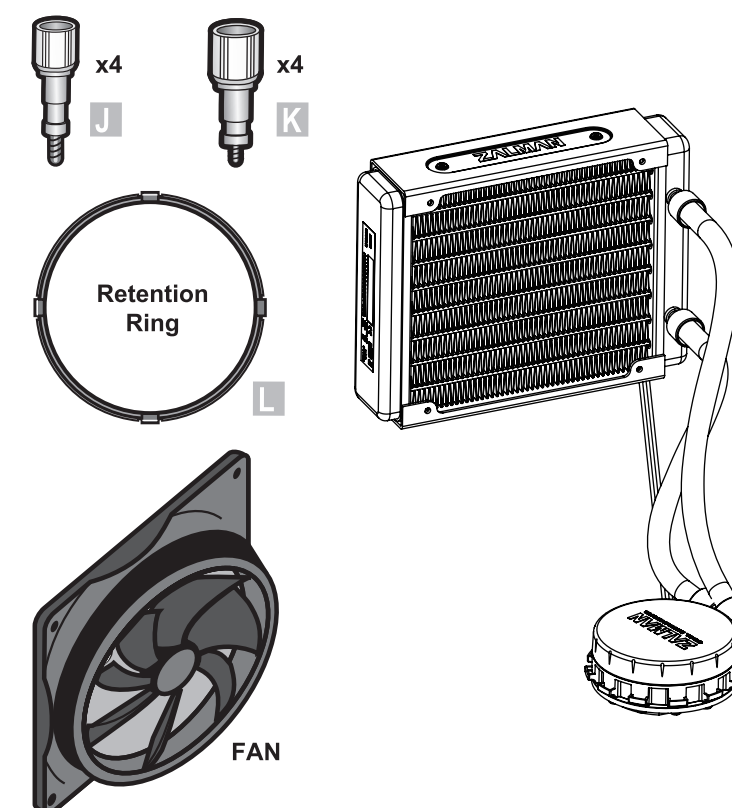
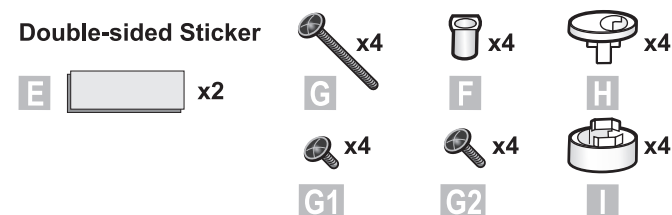
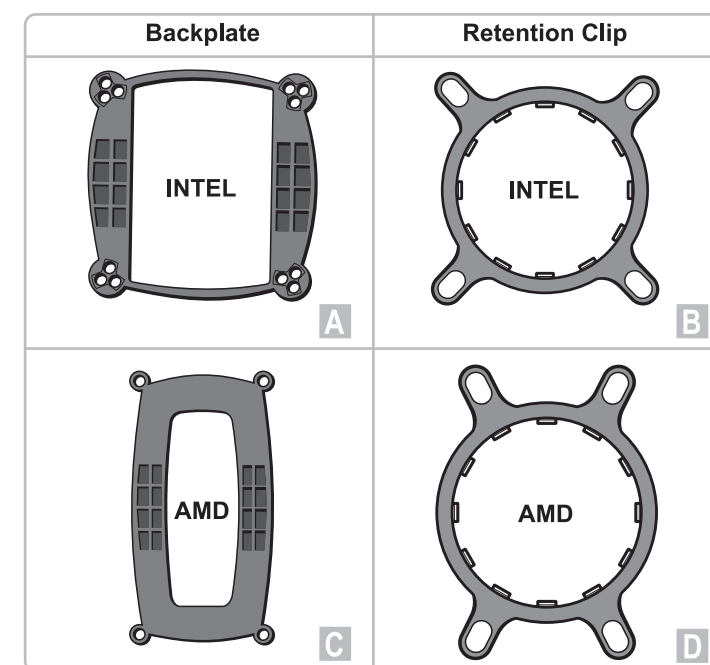
- Excessive force exerted on the fan may cause damage to the fan and/or system.
- Use and keep product away from reach of children and pets.
- Check the components list and condition of the product before installation. If any problem is found, contact the retailer to obtain a replacement.
- Zalman Tech Co., Ltd. is not responsible for any damages due to overclocking.
- Product design and specifications may be revised to improve quality and performance.

Disclaimer) Zalman Tech Co., Ltd. is not responsible for any damages due to external causes, including but not limited to, improper use, problems with electrical power, accident, neglect, alteration, repair, improper installation, or improper testing.

2. Specifications

Dimensions (Radiator)	153(L) x 120(W) x 38(H)mm	
Weight (Water Block)	195g	
Material	Base: Pure Copper / Fins: Aluminum	
Fan	Dimensions	120(L) x 120(W) x 25(H)mm
	Speed	900 - 2,000rpm ± 10%
	Bearing	Long life bearing
	Speed Adjustment	PWM (Pulse Width Modulation)
Connector	4-Pin (Fan), 3-Pin (Pump)	
PWM Duty Cycle	30 - 100% ± 5%	
Rated Voltage	DC 12V	

Components



Installation

* The following steps are for INTEL sockets. (For AMD sockets, use C & D instead.)

Socket 2011

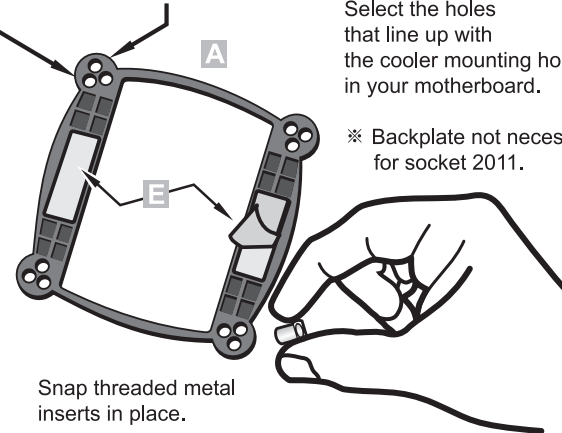
Skip directly to Step 3. Attach screws directly into the CPU socket studs. (Backplate not necessary)

Step 1 BACKPLATE PREPARATION

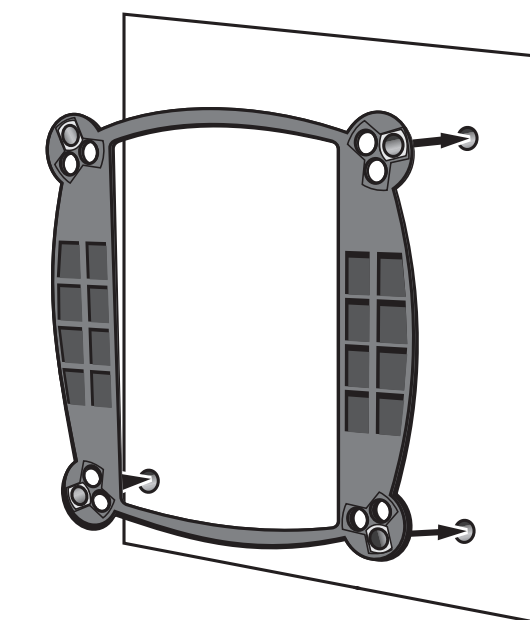
Socket 1155/1156 Socket 1366

Select the holes that line up with the cooler mounting holes in your motherboard.

* Backplate not necessary for socket 2011.



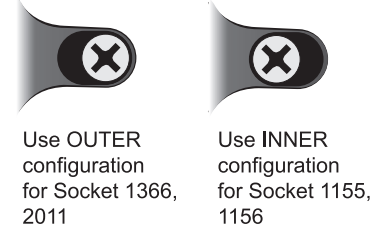
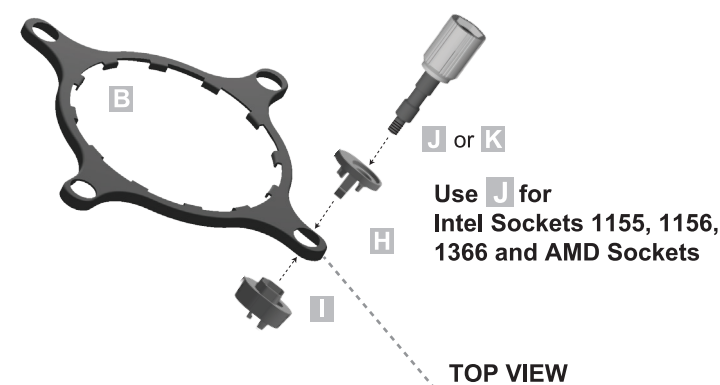
Step 2 ADHERE BACKPLATE TO THE REAR OF MOTHERBOARD



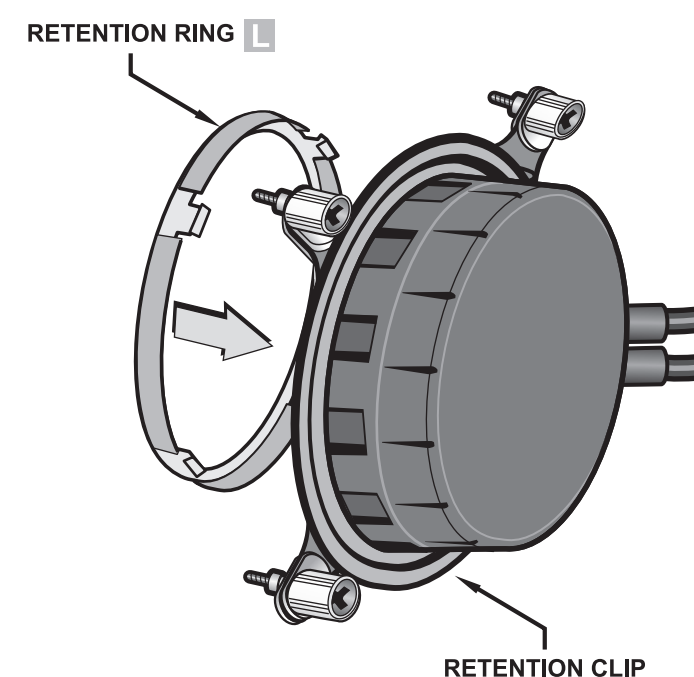
Line up inserts with holes on the back of motherboard.

Step 3 ASSEMBLE METAL RETENTION KIT

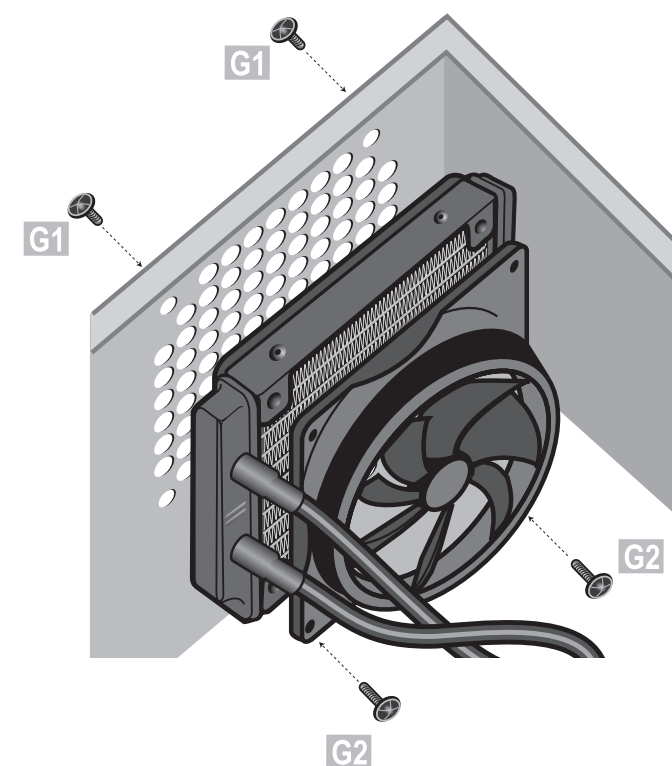
Combine and according to diagram.



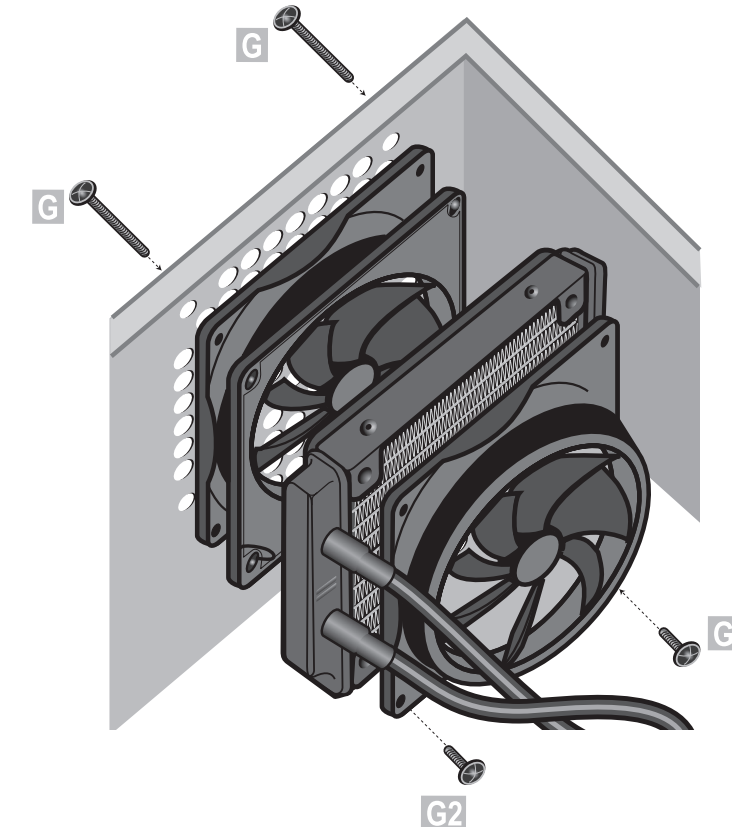
Step 4 a. ATTACH RETENTION CLIP (or for AMD) TO PUMP b. INSERT THE RETENTION RING INTO THE SPACE BETWEEN RETENTION CLIP & PUMP



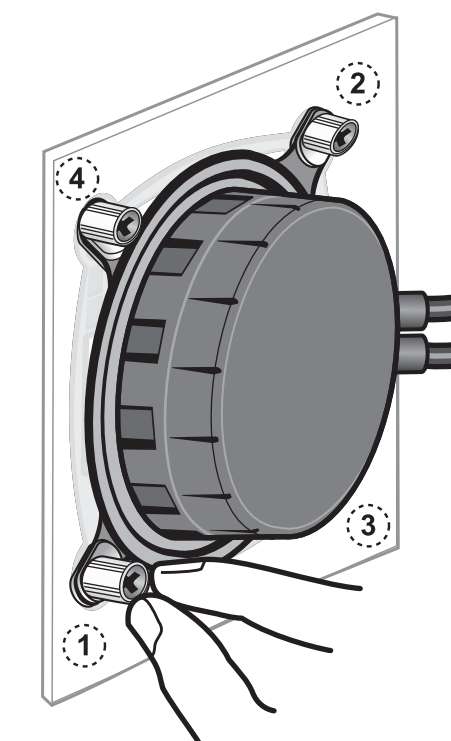
Step 5 MOUNT RADIATOR & FAN TO CHASSIS



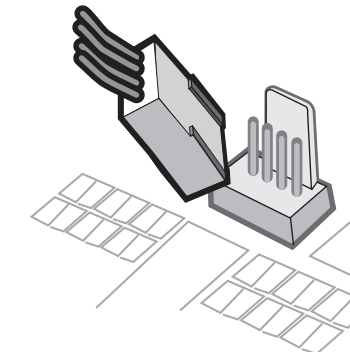
* FOR DUAL FAN CONFIGURATION, REFER TO DIAGRAM BELOW (FAN SOLD SEPARATELY)



Step 6 a. ATTACH PUMP TO MOTHERBOARD b. TIGHTEN SCREWS IN AN "X" PATTERN



Step 7 PLUG FAN CABLE INTO 4-PIN CPU FAN HEADER ON MOTHERBOARD



Step 8 CONNECT PUMP CABLE INTO A 3-PIN FAN HEADER ON MOTHERBOARD

