User's Manual

English / 한글

VGA WATER BLOCK
ZM-GWB 8800 GT/GTS (G92)
ZM-GWB 3850/3870

ZALMAN

◆**Please visit our website and watch the
ZM-GWB8800GT/GTS (G92), ZM-GWB3850/3870
installation video for easy installation.**

※ Please read this manual thoroughly before installation.

English version

⠿ Table of Contents

1) Test the product for leakage away from the system before installing it on the system. Once no leakage is confirmed, proceed with the installation and use.
2) Use approved coolant for computer water-cooling to prevent corrosion.
3) Use coolant tubes listed under the compatibility list.
4) Do not install the product if it interferes with any VGA components.
5) To maintain absolute leak-free operation, this product is not designed to be disassembled. Do not disassemble the product under any circumstances.

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.

1. Features

1) Zalman's innovative dimple-type processing technology allows lightness in weight and excellent cooling performance.
2) Pure aluminum-base material water block provides excellent heat transfer, and anodized base prevents corrosion.
3) High performance thermal pads with excellent elasticity provide great adhesion to all heat-generating components.
4) The optimized design allows easy installation and direct cooling of high heat generating components such as RAM and the FET chipset.

2. Specifications

ZM-GWB8800GT/GTS (G92)
1) Weight : 350g
2) Material : Pure Aluminum Alloy
3) Dimensions : 93(W) x 183(L) x 31(H)mm
4) Compatible Tubes (Outer x Inner) : 13x9mm, 12x8mm, 11x8mm,
10x8mm14x10mm, 12x10mm, 11x9mm

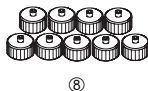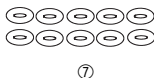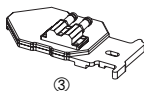**ZM-GWB3850/3870**
1) Weight : 380g
2) Material : Pure Aluminum Alloy
3) Dimensions : 85(W) x 117(L) x 31(H)mm
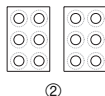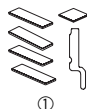4) Compatible Tubes (Outer x Inner) : 13x9mm, 12x8mm, 11x8mm, 10x8mm
14x10mm, 12x10mm, 11x9mm

ZM-GWB8800GT/GTS (G92)

① Thermal Pads
   - 20X78X1T, 7.5X7.5X1T (for FET Contact)
   - Four(4) 38X11X1T (for RAM Contact)
② Two(2) PVC Washer Plates
③ VGA Water Block Assembly
④ Thermal Grease
⑤ Two(2) Tube Clamps
⑥ Ten(10) Springs
⑦ Ten(10) O-rings
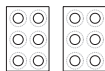⑧ Nine(9) Nuts
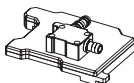⑨ Nine(9) Nipples
⑩ User's Manual

English

ZM-GWB3850/3870

① Thermal Pads
   - Three(3) 32 X 12 X 1T(for RAM Contact)
   - Four(4) 14 X 14.5 X 1T (for RAM and FET Contact)
② Two(2) PVC Washer Plates
③ VGA Water Block Assembly
④ FET Water Block
⑤ Radeon HD 3870 Install Bracket
⑥ Thermal Grease
⑦ Two(2) PVC Tube
⑧ Four(4) Tube Clamps
⑨ Eight(8) Springs
⑩ Eight(8) O-rings
⑪ Two(2) Bolts
⑫ Seven(7) Nuts
⑬ Seven(7) Nipples
⑭ User' s Manual

① ②

③ ④

⑤ ⑥ ⑦ ⑧

⑨ ⑩ ⑪

⑫ ⑬ ⑭

※ The specifications of any product may change without prior notice to improve performance. **ZALMAN**

ZM-GWB8800GT/GTS (G92)

Water Block Assembly

Nipple

O-ring

PVC Washer

Spring

Nut

Water Block Assembly

FET Water Block

Nipple

O-ring

PVC Washer

Spring

Nut

✻ The specifications of any product may change without prior notice to improve performance. **ZALMAN**
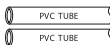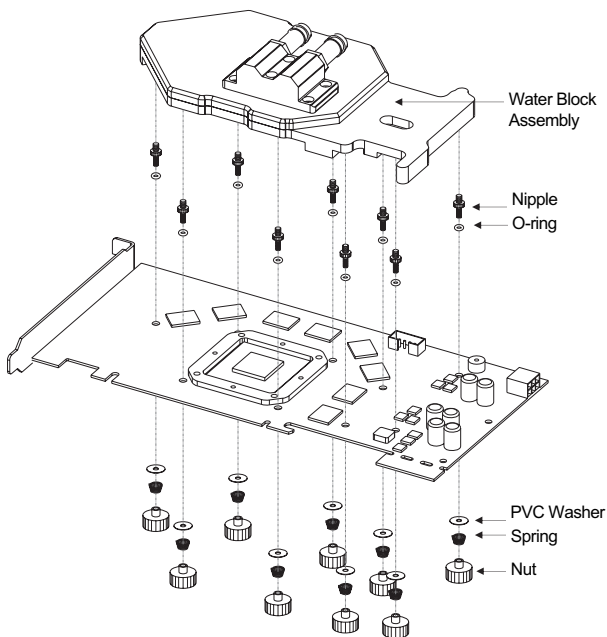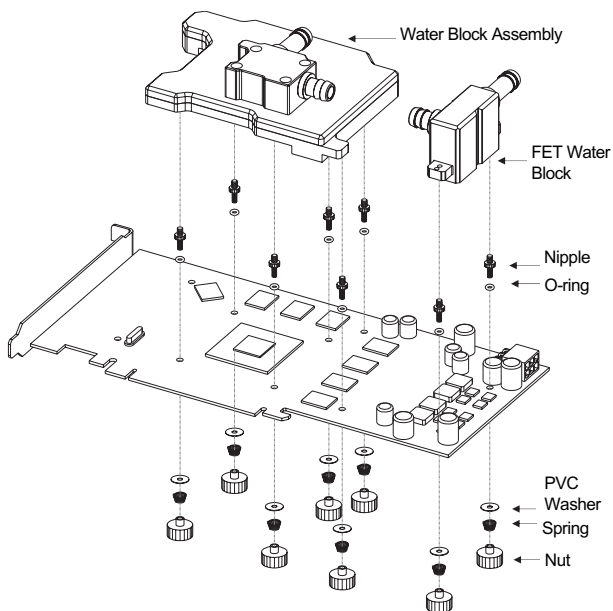
5. Installation

ZM-GWB8800GT/GTS (G92)

Nipple

Install Tap
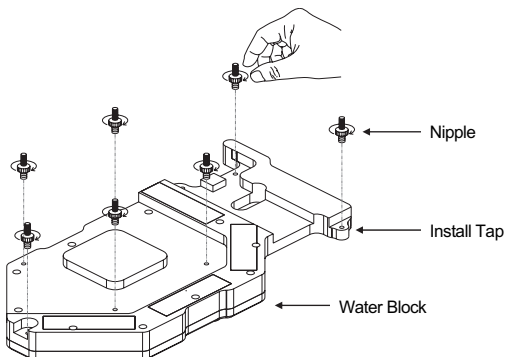
Water Block

ZM-GWB3850/3870

Radeon HD 3870
Install Tap

Radeon HD
3850 Install Tap

Nipple

Bolt

Radeon HD 3870
Install Bracket
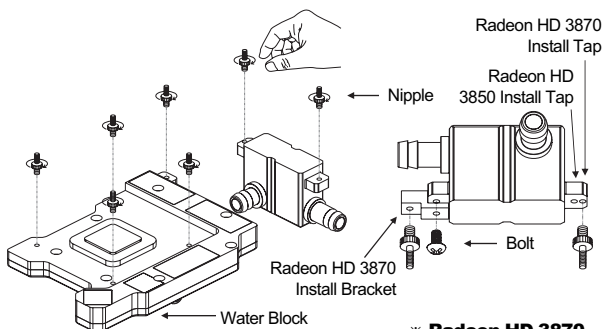
Water Block

※ **Radeon HD 3870**

1) Nipple Installation
① Install the Nipple onto the Install Tap on the base side of the Water Block.
   Note
   · Use a tool such as Long Nose Pliers to firmly tighten the Nipples.
   · Radeon HD 3850/3870 users, please refer to the diagram shown on the lower section of page 7 for installation details.
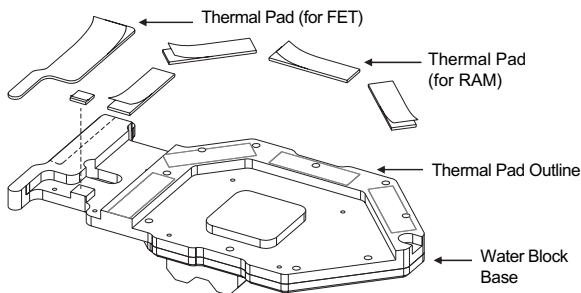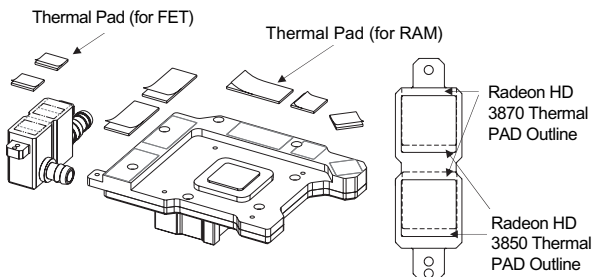
2) Thermal Pad Attachment
① Clean the contact surface of the VGA Chipset completely.
② Attach each Thermal Pad to line up with the Thermal Pad Outlines indicated on the Water Block's base as shown in the diagram below.
   Note
   · If the Thermal Pads are crookedly attached or attached on the wrong place, then carefully remove them and attach properly.
   · Be cautious while attaching so that the Thermal Pads do not get bent or damaged.
   · Exerting too much pressure on the Thermal Pads while attaching could cause compression, which could lead to a gap between the Thermal Pads and the Water Block when installed on a VGA card.
   · Use of tweezers or a knife will make it easier to peel off the protective film from the Thermal Tapes.
   · Radeon HD 3850/3870 users, please refer to the diagram shown on the upper section of page 9 for installations details.

Thermal Pad (for FET)

Thermal Pad (for RAM)

Thermal Pad Outline

Water Block Base

ZALMAN

Thermal Pad (for FET)

Thermal Pad (for RAM)

Radeon HD 3870 Thermal PAD Outline

Radeon HD 3850 Thermal PAD Outline

3) Thermal Grease Application

Evenly apply the Thermal Grease on the GPU surface that comes in contact with the VGA Water Block.

VGA Card

Thermal Grease

GPU
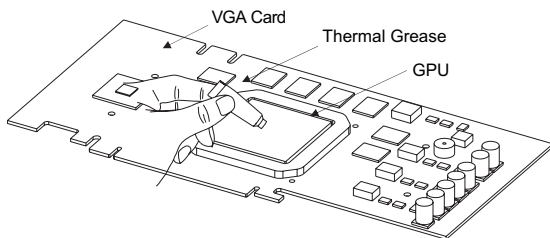
4) VGA Water Block Installation

① Insert the O-ring into the Nipple.
② Insert the Nipples installed on the VGA Water Block into the Mounting Holes after aligning them.
③ Install the PVC Washers, Springs, and Nuts on the back side of the VGA card in the mentioned order.

Nipple

O-Ring

PVC Washer

Spring

Nut
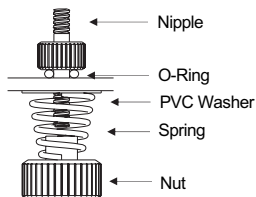
Note

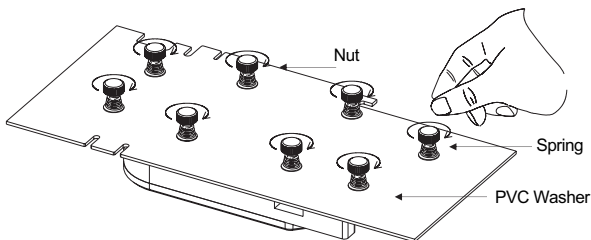· Check to see if the Water Block's base side is in proper contact with the VGA chipset before finishing the installation.

· Assembling the Springs with the Nuts prior to installation will ease the installation process.

5) Tension Control of the VGA Water Block

Tighten/loosen the Nuts on the back side of the VGA card to control the tension between the VGA Water Block and the VGA Chipset.
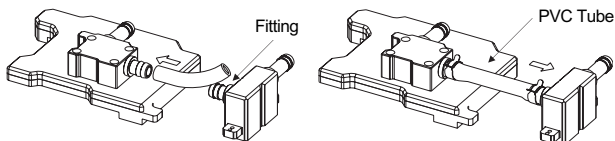
Note

· If the Nuts are turned too tightly, then the VGA chipset or VGA card may get damaged.

· Fully tightening one Nut at a time may result in damaging the VGA Chipset. Please tighten each Nut one rotation at a time until all are completely tightened.

· Make sure that the VGA Water Block does not interfere with the VGA cooler, capacitors, and other components of the VGA card.

6) FET Water Block Connection (ZM-GWB3850/3870)

Cut the enclosed PVC Tube to the appropriate Tube Length and install onto its Fittings as shown in the diagrams below.

Note

· Tube Length
  - Radeon HD 3850 VGA : 65mm
  - Radeon HD 3870 VGA : 50mm

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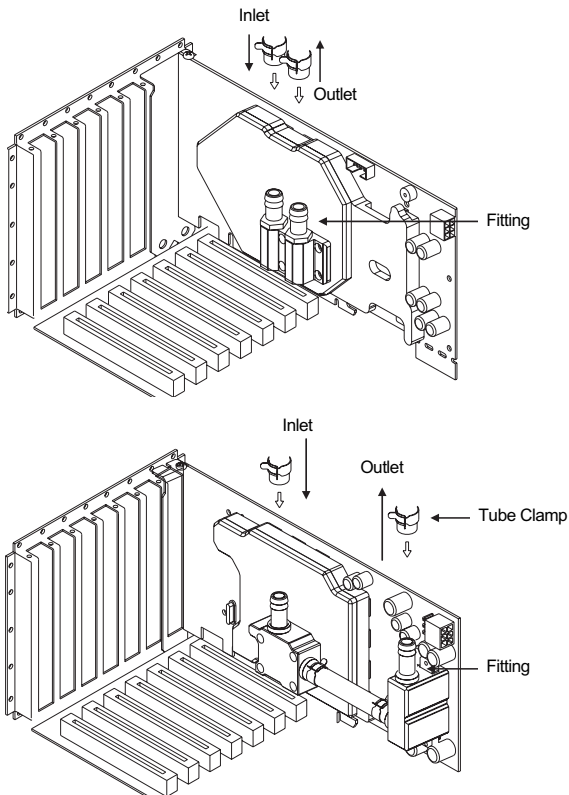
7) Installation of Tubes and Tube Clamps

Plug the tubes over the VGA Water Block's fittings and install the Tube Clamps.

Note

· Hold the VGA card with one hand when plugging the Tube into the Fitting.

· Use of a tool such as Long Nose Pliers when installing the Tube Clamp will ease the installation process.

Inlet

Outlet

Fitting

Inlet

Outlet

Tube Clamp

Fitting

Zalman Computer Noise Prevention Systems

Stable performance and a noiseless liquid cooling system can both be achieved with the use of Zalman's CPU Water Block, H.D.D Cooler, Noiseless Case Fan, and Northbridge Water Block.

CPU Water Block

Heatpipe H.D.D Cooler

Noiseless Case Fan

Northbridge Water Block

Heatpipe Cooled Modular Power Supplies

ZM500-HP

ZM600-HP

- Heatpipe cooling system on the main rectifier (output) diodes for maximum stability and minimum fan speed for ultra quiet operation
- Reduction in the PFC circuitry's switching FET heat generation by use of 3 Parallel switching FETs (normally 1 or 2 used)
- Modular design for convenient and tidy cable installation
- Blue LEDs for cool aethetics

High End Gaming PC Enclosures

GT 1000

- High-End Gaming Enclosure built with sturdy all aluminum panels
- Three tool-free, hinged magnetic panels, (2 Left, 1 Right) for easy installation and access to components.
- Tool-free installation of disk drives, fan controllers, audio interfaces etc.
- Accommodates up to 6 hard drives
- Luxurious and cool aesthetics.
- Color option: Black (Red LED Fans), Titanium (Blue LED Panel)

For more information, please visit our website.

Disposal of Old Electrical & Electronic Equipment
(Applicable in the European Union and other European countries with separate collection systems)

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