

Desktop ROG Strix (G15DK)

Service Manual



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Safety precautions

- Before handling components, use a grounded wrist strap or touch a safely grounded object to avoid damaging them due
 to static electricity.
- Keep liquids or moisture away from your Notebook PC to avoid short circuits.
- Remove rings, watches, and any other metal objects from your hands.
- Hold components by the edges to avoid touching the ICs.
- Properly install all components before connecting the AC power. Do not use power adapters or batteries from other devices to reduce the risk of injury to persons due to fire or explosion. Use only certified power adapters or batteries supplied by the manufacturer or authorized retailers.
- Detach all clips or flaps before removing cables to prevent damage.
- Disconnect cables, connectors, and power plugs by pulling the plug evenly to avoid damage.
- Use the correct screw models on your Notebook PC to prevent damage.
- Confirm that the cable orientation is correct before connecting any cables.
- Fully remove all adhesive residue after removing and before installing any components.
- Photograph the appearance of cables, cable routing, connectors, and screws for later reference before proceeding with each step.

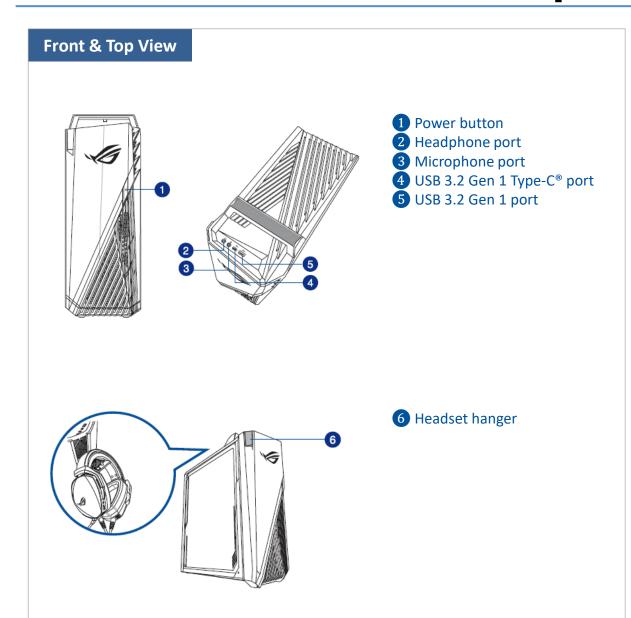


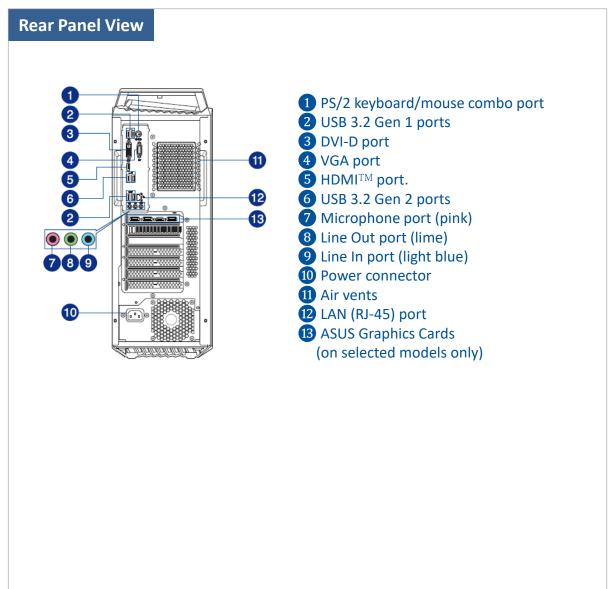
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ASUS Desktop ROG strix G15DK Overview







Components Top View

♦ VGA Card

♦ DDR

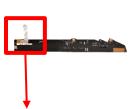
SSD



◆ D700TA M2 PAD 25X20X7



♦ LED CR BD



♦ GA15DH FRONT



♦ FRONT IO BD

LENS FOIL



CABLE

CONDUCTIVE

CLOTH

♦ POWER SW CABLE

◆ CABLE USB WIFI TO MB



♦ FIO USB CABLE

FIO GASKET



♦ USB2.0 CABLE



♦ HDD SATA CABLE



◆ AUDIO CABLE



◆ CR BD POWER CABLE



♦ FRONT LENS GASKET



◆ X500MA IO: 6USB/VGA/DVI/HDMI BLK



◆ D640MB STAND OFF M2*4.6H*4.75D



♦ WIFI MAIN ANTENNA



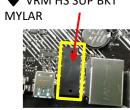
◆ RF ACETATE TAPE

◆ CONDUCTIVE CLOTH

GA15DH PSU GASKET



RF2 CONDUCTIVE CLOTH



♦ VRM HS SUP BKT

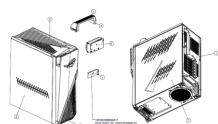


◆ USB CABLE ACETATE TAPE



♦ VRM HS SUP BKT





			SPINTABLE			
	A	SUS ASSEMBLY PIN	13PF02P0AM0201	13PF02P0AM0301	grry	NOTE
ITEM	ASUS P.N	DESCRIPTION	G15CE SUB ASSY	G15CE SUB ASSY W SPNL	Q1Y	NOTE
	13PF02P0AM0101	G15CE CHASSIS ASSY		V		13FDE2W9M36E11
	13PF02P0AM0401	GISCE CHASSIS ASSY UC	V		,	PUT IN ACCESSORY PACE
2	13PD02V0P08011	GA15DH TOP COVER	V	V	- 1	
3	13PD02V0P09011	GA15DH HANDLE COVER	V	V	1	ACCESSORY PACK
4	13PD02V0P10011	GA 15DH HANDLE CASE	V	V	1	ACCESSORY PACK
	13PD02V0AP0101	GA15DH FRONT BEZEL ASSY	V	V		
6	13PD02V0M04011	GA15DH FIO BRKT	V	V	1	
	13PD02V0M03011	GA15DH NETAL DOOR-R	V	V	1	
8	13PD02V0M02011	GA15DH METAL DOOR L	V		1	
9	13GMAEXH000W-5	SCREW#6-32 L6*H2.3 (B) W-NI	V	V	4	ACCESSORY PACK
10	13020-00371300	SCREW 85-32 L6*H2.3 (8)8-NH2N	V	V	1	ACCESSORY PACK
11	13020-00371700	SCREW #6-32*L6 (6)(6-NI-2N NY	V	V	7	ACCESSORY PACK
12	15G250500411	CORROSION PREVENTION (FOR TW)	V	V	1	
13	13050-86804000	SCREW N2.5'4L(4.5,1.6) (P) #1	V	V	2	ACCESSORY PACK
14	13GMBK3D040Z-1	SCREW M2.5*4L (K) B-ZN NY #1	V(20)	V(2)	Check (*)	
15	13050-B2304000	SCREW M2.5"4L(4.5.1) (R) #1		V	18	

♦ WIFI CARD

♦ M.2 WIFI CARD













◆ CPU COOLER







♦ CPU SOCKET







♦ HDD

♦ POWER SUPPLY





Components Bottom View





◆ MB PLATE AL







♦ DDR

♦ MAIN BOARD





nane de punt











♦ WIFI CARD

♦ LED CR BD





♦ M.2 SSD

♦ FRONT IO BD







Components top View (For Glass version)





Tighten HDD screws and paste the Mylar on the case when assembling.

◆ GA35DX GLASS DOOR ASSY



◆ GA35DX GLASS DOOR ASSY



♠ MID BKT ASSY



♦ GA15DH TOP LED BD



♦ GA15DH SIDE LED BD



♦ VRM SINK



◆ TOP LED BD CABLE



♦ GLASS LED CABLE





Appropriate Tools

Please prepare and select the appropriate tools to disassemble/assemble for the ROG Strix (G15DK) desktop.

Screwdriver

Please accord to different screw specification to choose different screwdriver and head.



Plastic Blade

Plastic Tweezers

Use a pair of tweezers to remove/insert/tidy cables.



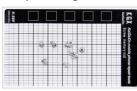
♦ Thickness Gauge

Thickness compass specification 0.05mm-1.5mm. Use it to measure the gap.



Magnetism Board

Suggest local buy magnetism board to place screw, avoid mix different type screw to cause assembly damage.



Alcohol 95%



Glove



Dust-free Cloth



Thermal Grease



Cable Tie (Local Buy)





Needle nose pliers





SLIDE DOOR

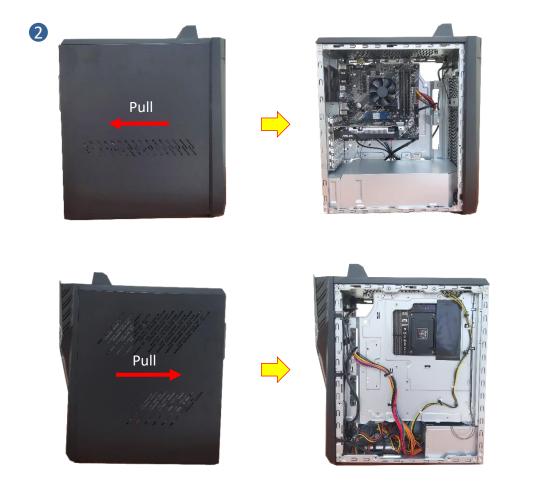
Disassembly Notice

Please be sure to pull out adapter and disconnect the battery.

Step 1 : Remove screws *4pcs. Step 2 : Pull the side doors*2pcs.

Screws	QTY	Spec	Torque (kgf-cm)
10	4	SCREW #6-32 L6*H2.3 (B)B-NI-ZN	8.0±0.5







SLIDE DOOR (L)



SLIDE DOOR (R)



VGA CARD

Disassembly Notice

Please be sure to pull out adapter and disconnect the battery.

Step 1 : Remove screws *2pcs.

Step 2: Press and unlock the VGA card.

Step 3: Take out the VGA card.

Screws	QTY	Spec	Torque(kgf-cm)
	2	SCREW #6-32*L6 (B)B-NI-ZN NY	4.0± 0.5









DDR & SSD CARD

Disassembly Notice

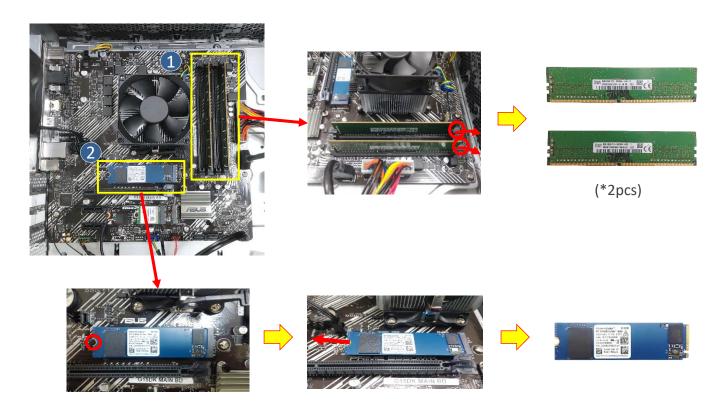
Please be sure to pull out adapter and disconnect the battery.

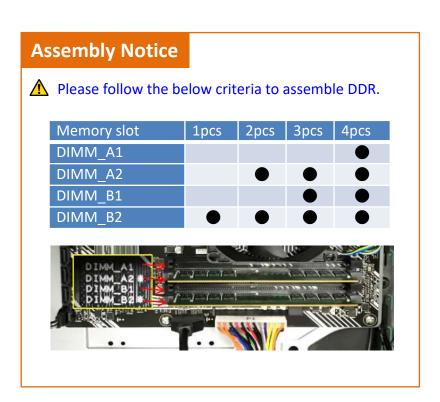


Step 1: Unlock then remove DD	R *2pcs.
-------------------------------	----------

Step 2 : Remove screw *1pcs then take out the SSD *1pcs.

Screws	QTY	Spec	Torque (kgf-cm)
	1	M2*3L(4.6,0.8) (K)#1	2.0 ±0.2







WIFI CARD & M.2 WIFI CARD

Disassembly Notice

Please be sure to pull out adapter and disconnect the battery.



Step 1: Disconnect the RF CABLE (connectors)*2p

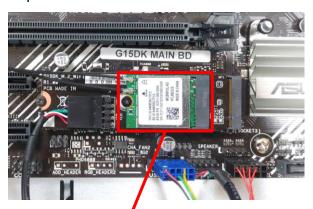
Step 2 : Remove the screw *1pcs.

Step 3: Remove WIFI CARD.

Step 4 : Disconnect CABLE USB WIFI TO MB connector *1pcs.

Step 5 : Remove the screw *1pcs.

Step 6: Remove M.2 WIFI CARD.



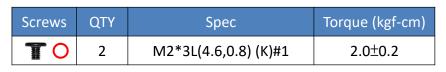


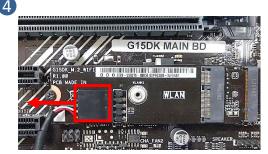


















A Please according to below image to assemble RF cable.

Assembly Notice





FAN

Disassembly Notice

Please be sure to pull out adapter and disconnect the battery.

Step 1 : Disconnect (yellow mark) FAN connector *1pcs.

Step 2: Remove 4 screws on the outside of iron grid.

Step 3: Take out the Fan*1 pcs.

Screws	QTY	Spec	Torque (kgf-cm)
	4	M5*10L (F) W-NI (TP5)	8.0±0.5

1 Disconnect (yellow mark)













MAIN BOARD with CPU COOLER & CPU

Disassembly Notice

Please be sure to pull out adapter and disconnect the battery.

Step 1 : Disconnect (yellow mark) connectors *8pcs.

Step 2: Remove screws *8pcs (Red and green mark).

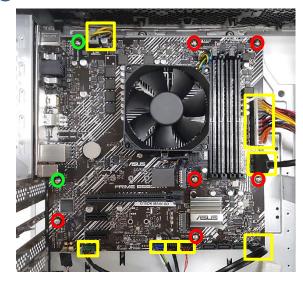
Step 3: Take out the Main Board. Step 4: Remove the CPU Cooler.

Step 5 : Remove the CPU.

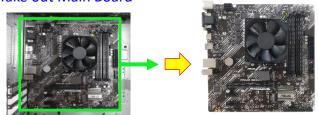
Step 6 : Remove the CPU Cooler socket

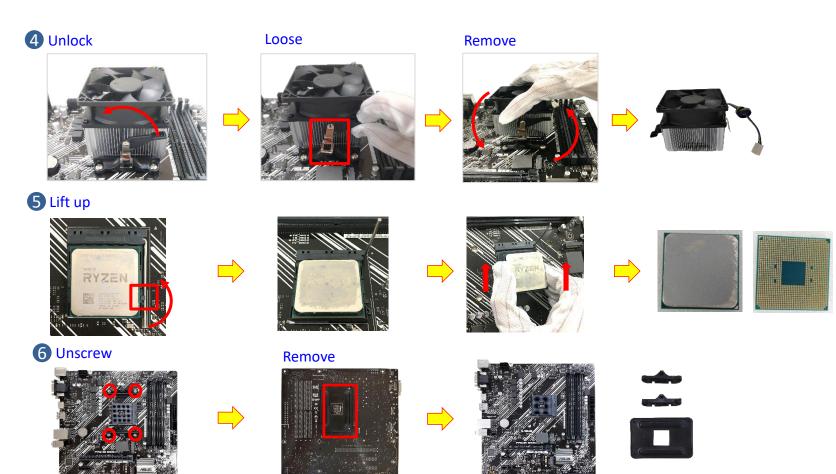
Screws	QTY	Spec	Torque (kgf-cm)
	2	M3*4L (6.3,2.05) (P) #2	6.0±0.5
	6	SCREW #6-32 L6*H2.3 (B) W-NI	8.0±0.5

1 Disconnect (yellow mark)



- 2 Unscrew (Red and green mark)
- 3 Take out Main Board





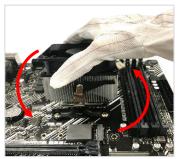


MAIN BOARD with CPU COOLER & CPU

CPU COOLER Disassembly Notice

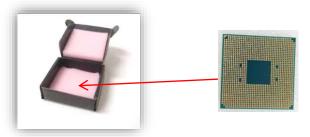


If the CPU COOLER is hard to disassemble, please move the COOLER left and right to separate.

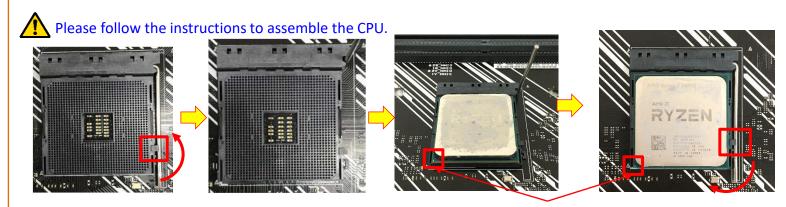




Pin facing down on Processor packaging to protect the CPU.



Assembly Notice



CPU triangle must be aligned to MB triangle







MAIN BOARD with CPU COOLER & CPU

Assembly Notice Please be sure to pull out adapter and disconnect the battery.





Please make sure that re-smear thermal material on CPU Die, if thermal module have to be reassembled.

Step-1:

Using dust-free cloth with 95% alcohol to clean up the residual thermal grease on CPU& GPU Die.





Step-2:

Please use plastic tool (Plastic stick) to get Thermal Grease, and smear over CPU around 0.2~0.3mm thick.



Attention:

- 1.Please clean plastic tool with Dust-free cloth and 95% alcohol before using.
- 2.Please mix well before Thermal grease using (In case Oil-Grease separation).



FRONT COVER AND LED BOARD

Disassembly Notice

Please be sure to pull out adapter and disconnect the battery.



Step 1: Tear the CABLE CONDUCTIVE CLOTH and loose the POWER SW CABLE.

Step 2: Pull the latch slightly away.

Step 3: Disconnect the connectors *2pcs of the cable inside.

Step 4 : Turn over the front case and Remove screws *2pcs.

Step 5: Tear the FRONT LENS FOIL slightly (Yellow mark).

Step 6 : Remove screws *3pcs located on the LED board.

Step 7: Take out the LED CR BD *1pcs.

Screws	QTY	Spec	Torque (kgf-cm)
TO	2	M2.5*5L (4.6,1.7) (P) #1	3.0±0.5
TO	3	M2.5*4.2L(7.3,2.3) (P)+W	4.0±0.5







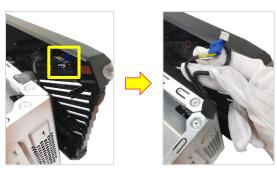




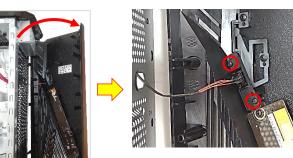
Please notice there have cable retaining on the front case and mainframe.











Unscrew









POWER SWITCH

Disassembly Notice

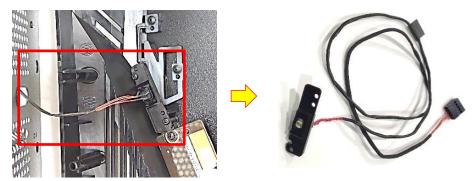
Please be sure to pull out AC POWER CORD.



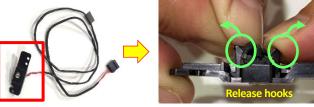
Step 1: remove POWER SWITCH HOLDER with POWER SW CABLE from front case.

Step 2: Release hooks (green mark) then take out POWER SW CABLE from POWER SWITCH HOLDER.





2 Release hooks









GA15DH POWER SW CABLE



POWER SWITCH HOLDER



Assembly Notice

A Please follow the steps below to assemble **POWER SWITCH HOLDER** and

POWER SW CABLE.

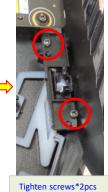


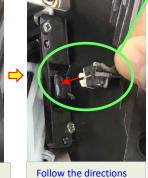






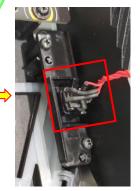






mark in green, Insert

down into the hole.



3 Tidy up cable and paste tape.



*When inserting the switch cable into the holder, please make sure the hooks no broken or deformation.

*After finishing the assembly process, press the power button to ensure the power button function is OK. (It has a click feeling is OK)



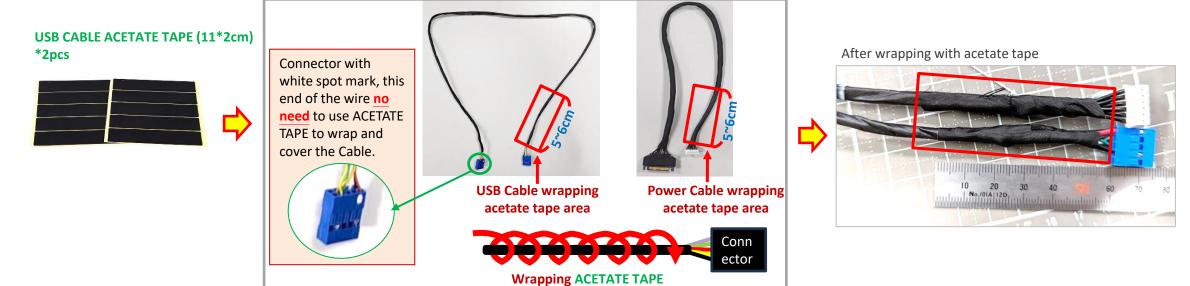
FRONT BEZEL ASSY

FRONT BEZEL Assembly Notice

NOTE! Before assembling the FRONT BEZEL ASSY, please carefully read the following assembly instructions.

When assembling the LED board, USB cable and power cord on the FRONT BEZEL ASSY, please make sure that the USB cable and power cord do not touch the PIN HEADER of the LED board, otherwise it may cause a short circuit and overheating. Please follow the steps below to confirm and assemble the power cord, USB cable, LED board.

Step-1 Please use **ACETATE TAPE** to wrap one end of the POWER Cable and USB Cable.



Step-2 Paste PINHEADER ACETATE FABRIC *3pcs to cover some of the pin headers on the LED control board.









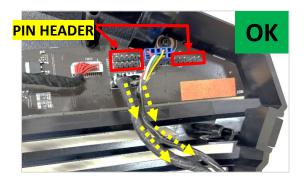




FRONT BEZEL ASSY

FRONT BEZEL Assembly Notice

Step-3 After connecting the POWER and USB cable to the LED board, **please tidy up the cables in the direction of the yellow arrow and be careful to avoid the PIN HEADER** (marked in red).

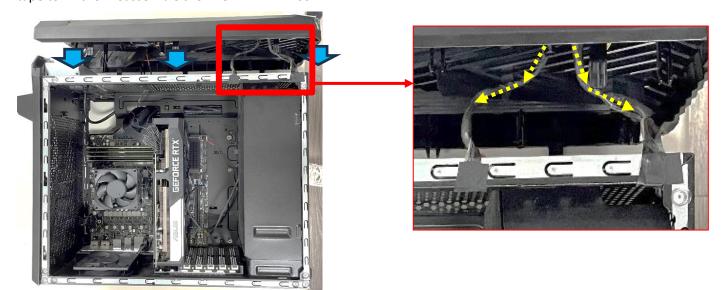








Step-4 Check that the cable direction must follow the yellow arrow, paste tape to fix then reassemble the FRONT BEZEL ASSY.





TOP COVER

Disassembly Notice

Please be sure to pull out adapter and disconnect the battery.



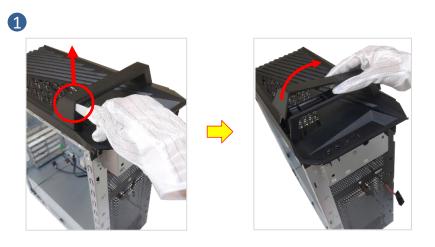
	Step 1:	Use the	Plastic Blade t	o Remove t	he Handle case.
--	---------	---------	-----------------	------------	-----------------

Step 2 : Remove screws *2pcs located on the end of the Handle.

Step 3: Pull the latch slightly away from the edge case until it's detached.

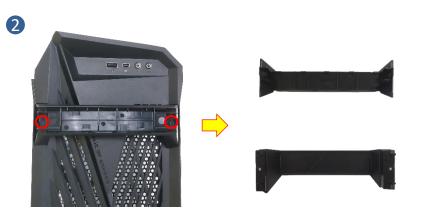
Step 4 : Take out the Top Case.

Screws	QTY	Spec	Torque (kgf-cm)
	2	SCREW M2.5*6L (5.5,0.8) (K) #1//KL,MACHINE NY B-ZN	3.0±0.5













FRONT IO BOARD

Disassembly Notice

Please be sure to pull out adapter and disconnect the battery.



Step 1: Remove screws *2pcs.

Step 2: Disconnect the USB 3.0 cable and Audio cable.

Step 3: Remove screws *2pcs.

Step 4: Separate FRONT IO BOARD and bracket.









Unscrew







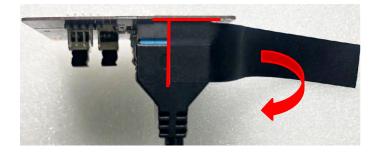


Screws	QTY	Spec	Torque (kgf-cm)
TO	2	M2.5*4L (K) B-ZN NY #1	3.0±0.3
TO	2	M3*4L (6.3,2.05) (P)	6.0±0.5

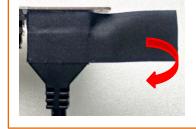
Assembly Notice

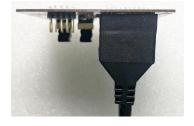
⚠ When assemble FIO USB cable on FRONT IO BOARD , please follow below steps to paste USB CABLE ACETATE TAPE.

Step1, Taking the ACETATE TAPE to align the centerline and parallel to the IO BOARD.



Step2, Winding it parallel.









Disassembly Notice

Please be sure to pull out adapter and disconnect the battery.

Step 1 : Remove screws *4pcs.

Step 2 : Disconnect the connectors *2pcs

Step 3: Take out the HDD.

Screws	QTY	Spec	Torque (kgf-cm)
	4	SCREW #6-32*6L(7.1,2.3) (B) #2	6.5±0.5

1 Unscrew







2 Disconnect





POWER SUPPLY

Disassembly Notice

Please be sure to pull out adapter and disconnect the battery.



Step 1: Disconnect the connector *1pcs.

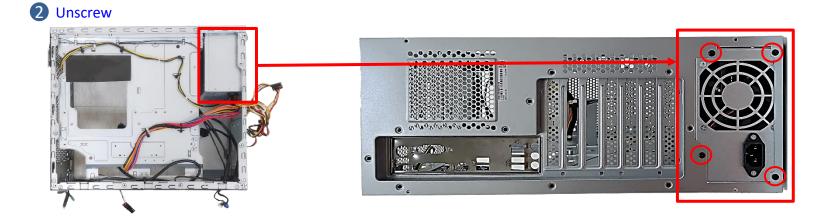
Step 2 : Remove screws *4pcs.

Step 3: Take out the POWER SUPPLY.

Screws	QTY	Spec	Torque (kgf-cm)
0	4	SCREW #6-32*L6 (B)B-NI-ZN NY	8.0±0.5

1 Disconnect









WIFI MAIN ANTENNA

Disassembly Notice

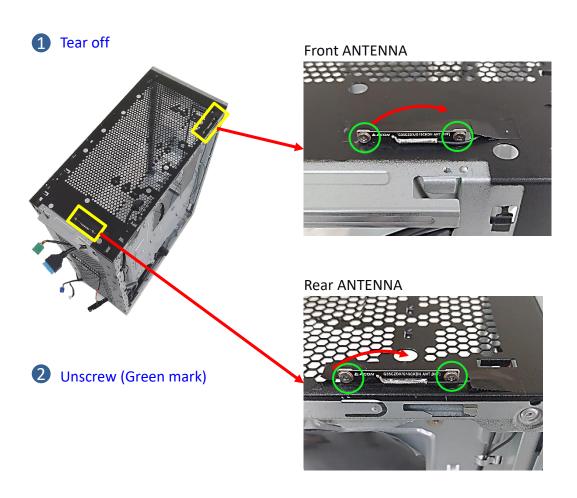
Please be sure to pull out adapter and disconnect the battery.

Step 1: Tear off the CONDUCTIVE TAPE.

Step 2 : Remove screws*4pcs.

Step 3 : Take out ANTENNA.

Screws	QTY	Spec	Torque (kgf-cm)
	4	M2*2.5L (K) W-NI #1 NY	2.0±0.2









WIFI MAIN ANTENNA

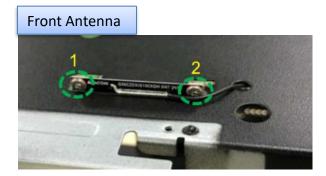
Assembly Notice Please be sure to pull out adapter and disconnect the battery.

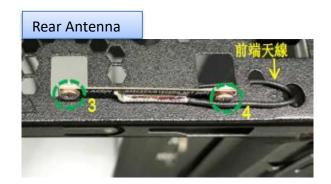




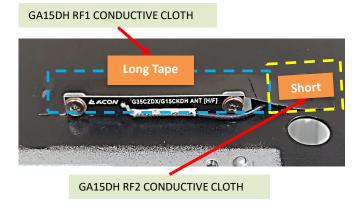
Please follow the instructions to tidy Antenna cables and EDP cable.



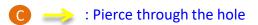




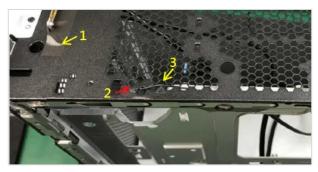
















WIFI MAIN ANTENNA

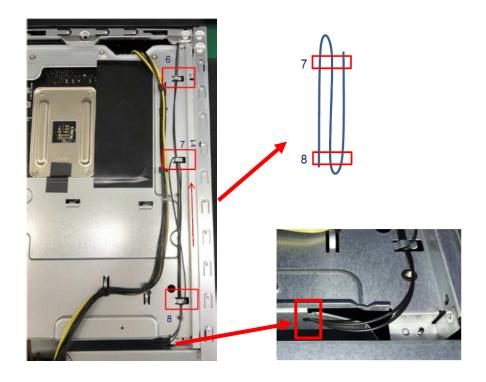
Assembly Notice Please be sure to pull out adapter and disconnect the battery.



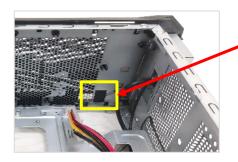


Tidy up the cable of the back mainframe as illustrated.

- D Clip the 2 Antenna cables into a hook at the place Point 6-8.
- Make a bend with the rear Antenna (the long Antenna) and vice versa in the opposite direction as illustrated points 7 & 8.

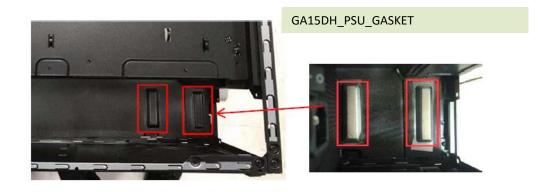


Paste RF ACETATE TAPE*1 pcs to fix Antenna cable.



GA15DH RF ACETATE TAPE

Paste the PSU GASKET to the inside of the case.





CABLE ASSEMBLY

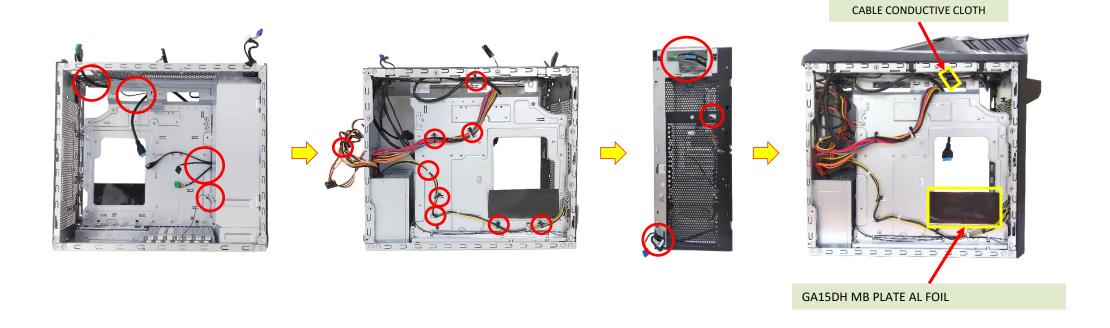
Assembly Notice Please be sure to pull out adapter and disconnect the battery.





Tidy up the cable of the back mainframe as illustrated.

Tidy up the cables as illustrated and stick Conductive tape.





Assembly Notice for Glass version

Assembly Notice Please be sure to pull out adapter and disconnect the battery.





Please follow the instructions below to assemble MID BKT ASSY. Updated MID BKT screws.(*Note: EN-0338329)

Screws	QTY	Spec	Torque (kgf-cm)
	1	#6-32 L6*H2.3 (B)	8.0 ±0.5
TO	1	M2.5*4L (K) B-ZN NY #1	3.0 ±0.3
	2	M3*6L (5.5,2.15) (P) #2	8.0 ±0.5

