

Asus K53S - X156V Thermal Paste Replacement

hello all, we are going to renew the thermal paste.

Written By: Kevin D





TOOLS:

- Phillips #00 Screwdriver (1)
- Flathead 3/32" or 2.5 mm Screwdriver (1)
- IC Extractor/Connector Puller (1)
- Cotton Swab (1)
- iSesamo Opening Tool (1)
- Spudger (1)
- Arctic Silver Thermal Paste (1)
- Scalpel (1)
- Isopropyl Alcohol (1)
- Arctic Silver ArctiClean (1)

Step 1 — removing battery



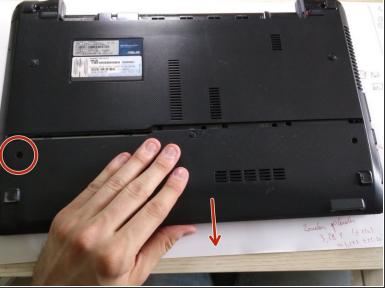




- remove battery by sliding the two release buttons to the right position.
- slide the battery away from the laptop

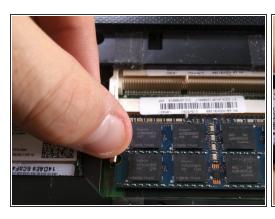
Step 2 — removing plastic plate RAM/HDD





- remove the 2 screws holding the plastic plate, underneath is the RAM/ WiFi and HDD
- the 2 screws are marked in red. afterwarts slide it away from the laptop
- (i) keep track of all the screws and parts. make a map or a plan.

Step 3 — removing RAM







- click the ram module out of there sockets.
- push the metal clips away from the module.

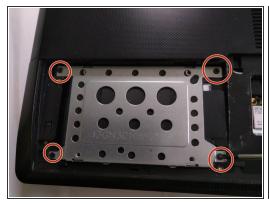
Step 4 — Remove wifi module



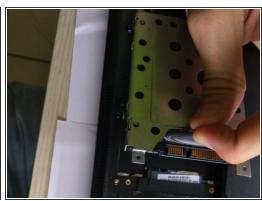


- remove the black and white wire.
- remove the screw.

Step 5 — removing hard disk

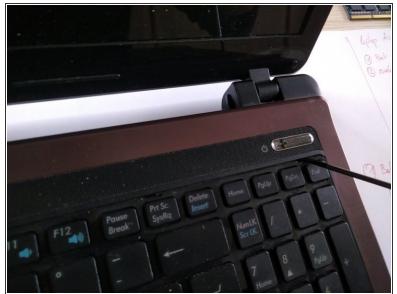






- remove the 4 screws holding the metal frame, holding the hdd to it's place.
- slide the frame and hard disk away from the case.

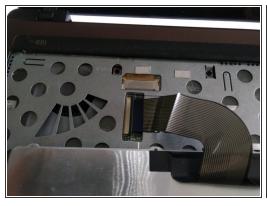
Step 6 — removing keyboard





click the keyboard loose. There are 5 clips to remove

Step 7 — keyboard second part

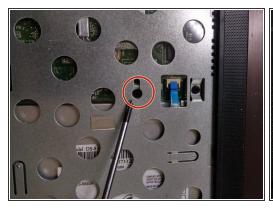


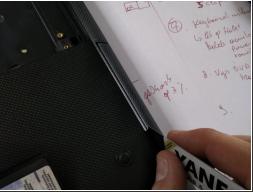




- be carefull with the flat cable from the keyboard.
- use a spudger to click the connector lid loose.
- i used the tip of a screwdriver.. but i know what i am doing.. if you are use to work on laptops you can use a screwdriver, if not use a plastic spudger.

Step 8 — remove DVD bay

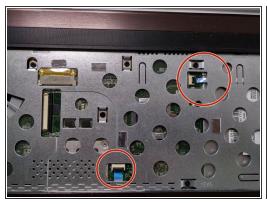




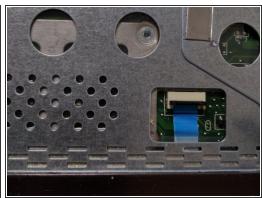


- remove the screw hidden under the keyboard.
- slide the dvd bay out.

Step 9 — removing flat cables

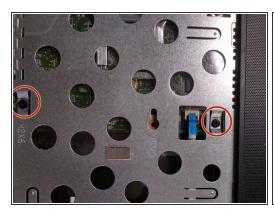


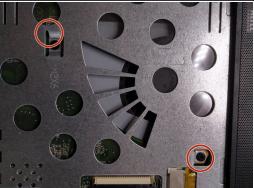


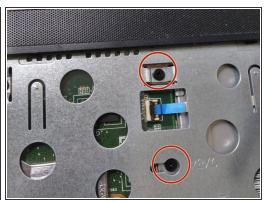


- remove the flat thin cables from there sockets.
- use a spudger, click the lid upwards and slide the flat cable out.

Step 10



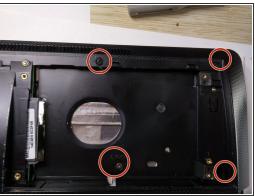




• remove the 6 screws (m2x6) holding the metal plate to the case.

Step 11 — remove screws on the bottom plate

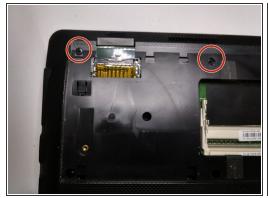






remove screws as shown in pictures.

Step 12 — remove screws bottom plate







remove screws as shown in pictures

Step 13 — removing case







slide an isesamo opening tool between the two plates. you will here clicks

Step 14 — reveal MAIN PCB







remove upper plate, revealing the main PCB.

Step 15 — removing cable to usb module







- remove the flat cable of the USB module, use a spudger to lift up the lid of the connector.
- gently slide out the flat cable

when removing the cable, be carefull they used a lot of adhessive to paste the cable to the plastic case.

Step 16 — removing LCD cable







- use the tip of a spudger or a tiny flathead screwdriver to push out the LCD cable from connector.
- be very very very carefull, if you tear tis cable or damage it, you will have to buy a new one.
- first lift the cable metal connector upwards (push it out) , very gently, then the other side untill you can remove the cable.

Step 17 — remove audio cable





use IC extractor pliers to remove the cable away from is socket.

Step 18 — remove screws main board

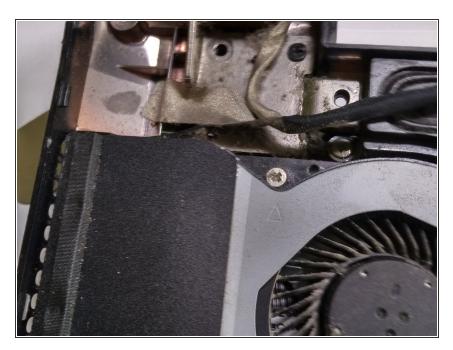






remove the 4 screws holding the main pcb ..

Step 19 — removing last screw.



 remove screw holding the fan tot the laptop.

Step 20 — removing main board







• lift the main board or motherboard up on the right side and slide it out.

Step 21 — FAN



release the fan from the main board by removing the connector with an IC extractor pliers.

Step 22



- loosen up the screws from the cooling pads on the CPU and GPU.
- You will have to tear the warranty sticker. it is a sticker in 3 parts.

Step 23 — removing fan and cooling pads

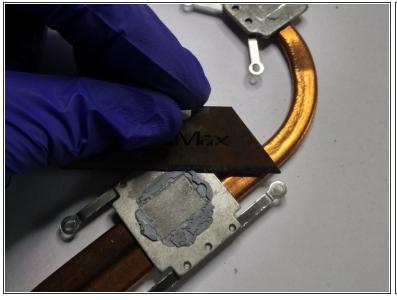






- remove the fan and cooling pads.
- you will see the old thermal paste.

Step 24 — removing thermal paste from pads.





- clean the cooling pads with an very sharp knife. or spudger...
- wear gloves, cause the thermal paste is very toxic.
- also this is a good time to blow out the fan with compressed air.

Step 25 — removing CPU and cleaning







- remove the old thermal paste from the processors, be very carefull, and use some artic silver liquid to clean them, and easely remove the thermal paste.
- you can remove the CPU by using a flathead screwdriver, the socket will move and you can pull the CPU out, maybe a good time to upgrade the CPU.

Step 26



- unfortunately i don't have a picture when i added some new thermal paste. But if you do: one drop on each processor is enough.
- (i) Check out the <u>thermal paste guide</u> for more information on how to apply thermal paste.

To reassemble your device, follow these instructions in reverse order.