TravelMate P6 / TMP614-51-G2 / TMP614-51T-G2 / TMP614-51G-G2/
TMP614-51TG-G2 / TravelMate P614-51-G2 / TravelMate P614-51T-G2 / TravelMate P614-51T-G2 / TravelMate P614-51TG-G2

Lifecycle Extension Guide

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Self-Repair

This chapter highlights the limited self-repair capabilities of the product.

Prior performing self-repair, familiarize yourself with the Safety Guidelines and Recommended Equipment sections first as described in the chapter "Disassembly Procedures".

Depending on model, the following key components are eligible for self-repair (if applicable);

- Battery pack
- HDD / SSD module
- DIMM module(s)
- WLAN module
- LTE module

If a particular key component is listed and thus would be eligible for self-repair, but is not described in the 'Disassembly procedures' section, then this component is either not present on the respective model, or it is present but embedded on the motherboard and therefore not eligible for self-repair.

⇒ NOTE:

Do not attempt to replace other components than those listed above.

⇒ NOTE:

For replacement parts, always use only Acer certified components in order to safeguard quality, optimum system performance, stability and reliability of the product.

NOTE:

Any damage to the product that occur during self-repair, or which has occurred as a result of a careless or unsuccessful self-repair attempt, is not covered by the standard product warranty.

Disassembly Procedures

Please refer to the chapter "Disassembly Procedures" for step by step disassembly instructions.

System BIOS & Driver Updates

Visit http://www.acer.com/support to discover the available system BIOS and Drivers for this product. After selecting the desired country/language, either enter the model name or product serial number, or select the product from the list of suggested models in order to get access to product-specific software and documentation.

To update system BIOS:

- Download the desired system BIOS version from the website
- Unzip the downloaded file to your computer
- Double-click the extracted file in order to initiate the update process
- The update process itself is fully automated and its progress is visualized by means of a progress indicator
- A visual notification is shown when the update is complete

⇒ NOTE:

Upgrading the system BIOS incorrectly, or intermittence of the system BIOS update process could harm the product.

⇒ NOTE:

System BIOS upgrades or downgrades, if not performed by an Acer Service Center or authorized Service Partner, are at own risk.

To update Drivers:

Run Windows Update in order to get the latest drivers from Acer:

- select the **Start** ## button
- go to Settings ॐ > Update & Security ♡ > Windows Update ♡
- Available Drivers will automatically be listed on screen., Press **Download** to start the download of the respective driver
- Installation of the driver will start automatically once the download is completed

Software Recovery

This product has embedded software recovery tools which can be used to either perform a partial or full software recovery, but also to create a Factory Default recovery media.

For more information about the software recovery options, how to perform a software recovery or creating a Factory Default recovery media, please refer to the chapter "Recovery" which is available in the User Manual of the product.

⇒ NOTE:

In the event of not being able to create a Factory Default recovery media, it is possible to obtain a copy of the recovery media through Acer Customer Service (http://www.acer.com/support)

This is not a free of charge service.

Disassembly Procedures

Safety Guidelines

This chapter contains step by step procedures on how to remove and de-install components from the computer. Use the following safety guidelines to ensure your personal safety. Each procedure included in this chapter assumes that you are preparing your computer for recycling and disposal. By performing any of these procedures you acknowledge that any remaining warranty applicable to your computer will be voided. Before you start any of the procedures in this chapter, make sure to read the following safety guidelines and the respective instructions within the chapter.

CAUTION!

- Turn off your computer and disconnect all power sources before opening the computer cover or panels.
- To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface at the same time as touching a connector on the back of the computer.
- Take off any metal objects on your arms or fingers such as bracelets, rings or watches and make sure your hands are completely dry. Even if your unit is unplugged, there may still be some remaining electric charge.
- If a component does not come out easily, do not forcefully remove it. Instead, check that you are removing it correctly and that no wires or other parts are in the way.
- When you disconnect a cable, pull on its connector or on its pull-tab, not on the cable itself. Some cables have connectors with locking tabs; if you are disconnecting this type of cable, press in on the locking tabs before you disconnect the cable.

Recommended Equipment

The following equipment are recommended to do the following maintenance procedures:

- Wrist grounding strap and conductive mat
- Flat screwdriver
- Philips screwdriver
- Polydrive screwdriver
- Plastic tweezers
- Flat plastic pry

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These components are classified as requiring selective treatment.

Pre-disassembly Instructions

Before proceeding with the disassembly procedure, make sure to do the following:

- 1. Turn off the power to the system and all peripherals.
- 2. Unplug the AC adapter and all power and signal cables from the system.
- 3. Place the system on a flat, stable surface.



Figure 3-1. Front View

Removing the Lower case

1. Place the notebook on flat while lower case should be upwards. Use TORX screwdriver to remove 11 screws of lower case.

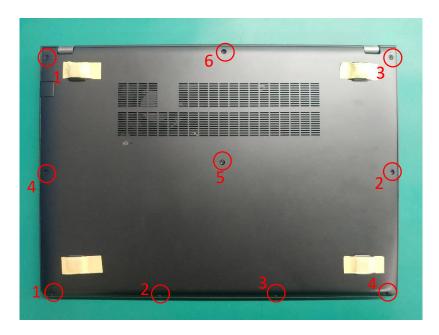


Figure 3-2. Lower case

2. Open the buckle with a pick as showed figure 3-4, then remove the lower case from the bottom side as shown in picture.

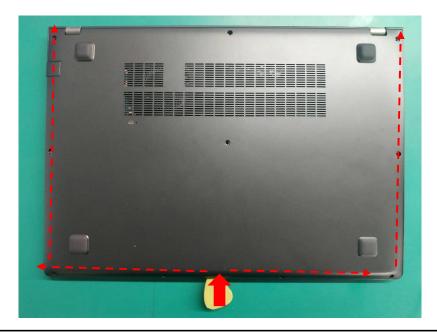


Figure 3-3. Lower case

Removing the Battery

1. Remove the acetate cloth from the battery connector.

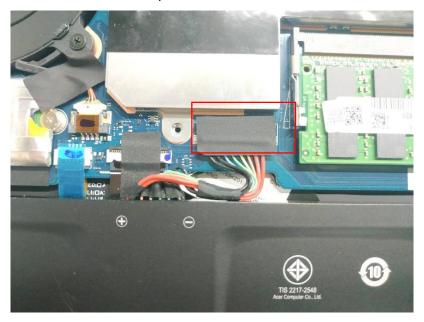


Figure 3-4. Battery

2. Disconnect the battery cable from the MB as shown in picture.



Figure 3-5. Battery

3. Remove the battery from the MB as shown in picture.

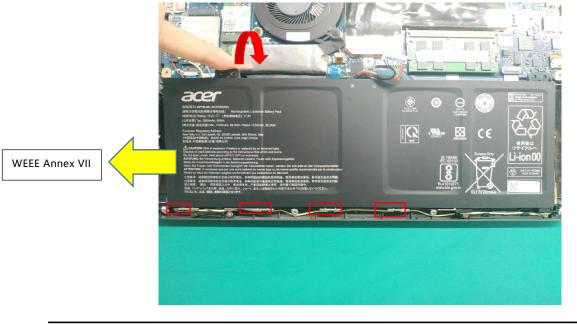


Figure 3-6. Battery

1. Remove the acetate cloth on the SSD and FAN cable.

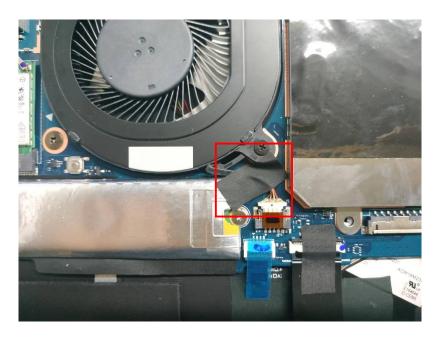


Figure 3-7. SSD

2. Remove 1 screw from SSD.



Figure 3-8. SSD

3. Remove SSD from MB.

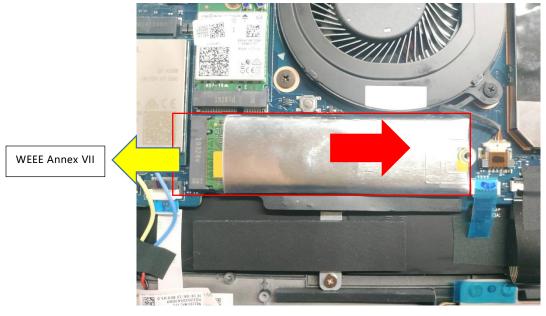


Figure 3-9. SSD

⇒ NOTE:>

AL-foil mylar only exist on the LTE configuration. WIFI no need.

1. Disconnect the SoDIMM connector as below picture.

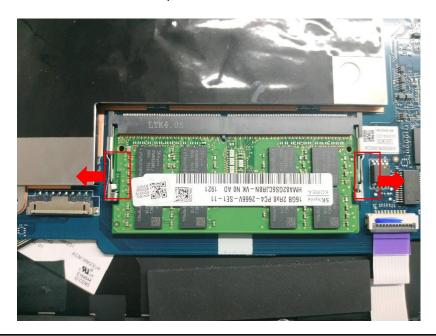


Figure 3-10. So-DIMM

2. Remove the SoDIMM from the MB.

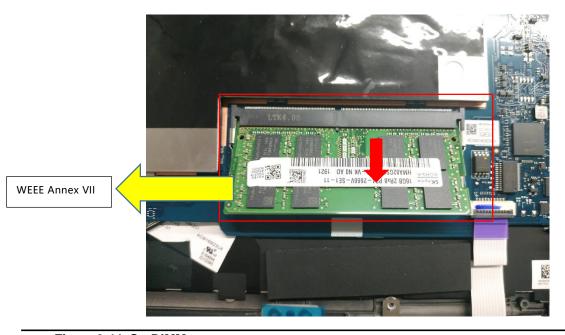


Figure 3-11. So-DIMM

1. Remove the acetate cloth from the WLAN cable.



Figure 3-12. WLAN module

2. Disconnect the WLAN cable connectors on the WLAN module. Please notice the color and position.



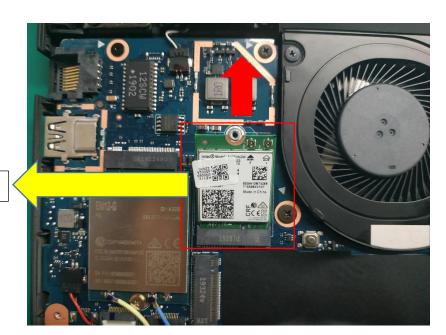
Figure 3-13. WLAN module

3. Remove 1 screw on the WLAN module.



Figure 3-14. WLAN module

4. Remove the WLAN module from the MB.



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Figure 3-15. WLAN module

1. Disconnect the fan connector from the MB.

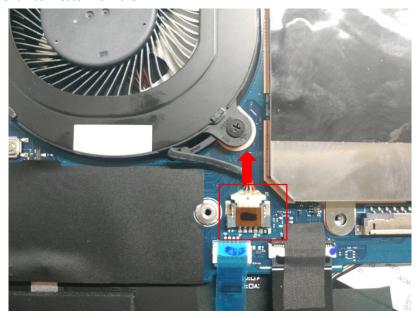


Figure 3-16. FAN

2. Remove 2 screws on the FAN.

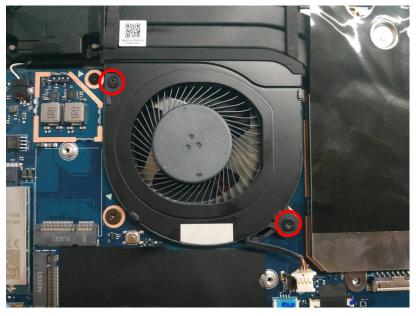


Figure 3-17. FAN

3. Remove the fan from the MB.

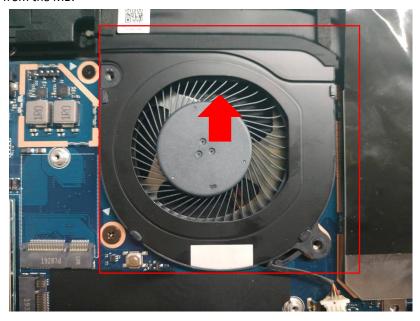


Figure 3-18. FAN

1. Remove 1 screw on the LTE MB shielding cover. (LTE ONLY, WIFI SKIP TO STEP 3)

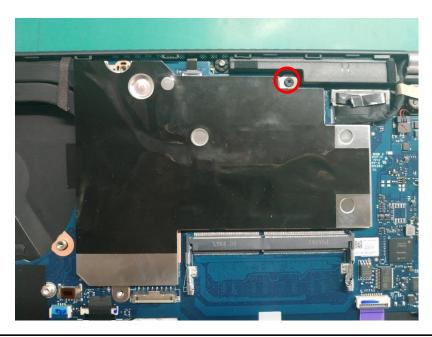


Figure 3-19. LTE shielding cover

2. Remove LTE shielding cover from the uppercase, there are 9 clips on the MB. (LTE ONLY, WIFI SKIP TO STEP 3)

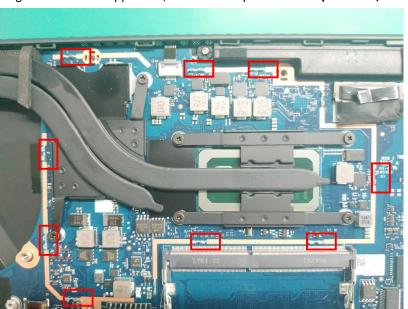


Figure 3-20. LTE shielding cover

3. Loosen the 6 screws on the thermal module ,the screws can't be removed.

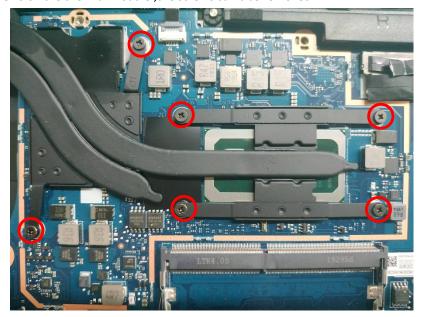


Figure 3-21. Thermal module

4. Lift up the thermal module with both hands from the uppercase.

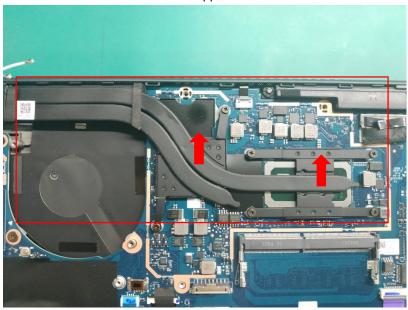


Figure 3-22. Thermal module

1. Disconnect the LTE antenna cable connector on the MB, please notice the color and position.



Figure 3-23. LTE module

2. Remove 1 screw from the LTE module.



Figure 3-24. LTE module

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Figure 3-25. LTE module

1. Remove two acetate cloths from the LTE antenna cable.

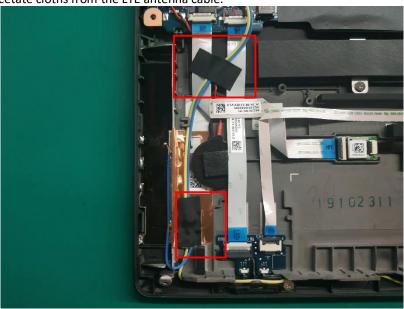


Figure 3-26. Smart card

2. Separate the LTE main antenna (yellow color) from the bottom of the uppercase.



Figure 3-27. Smart card

3. Disconnect the smart card FFC connector on the MB.

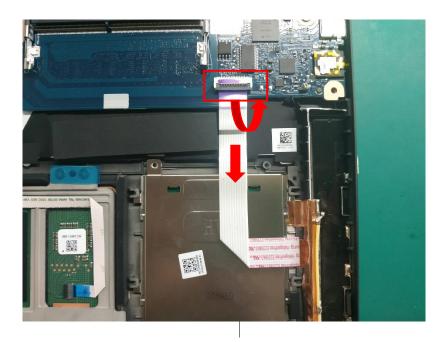


Figure 3-28. Smart card

4. Remove 2 screws on the smart card.



Figure 3-29. Smart card

5. Remove the smart card bracket and rubber from the uppercase.

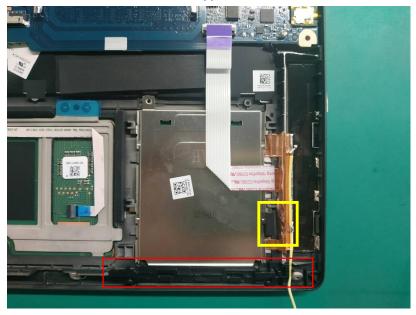


Figure 3-30. Smart card

6. Push the smart card down, then remove the smart card.

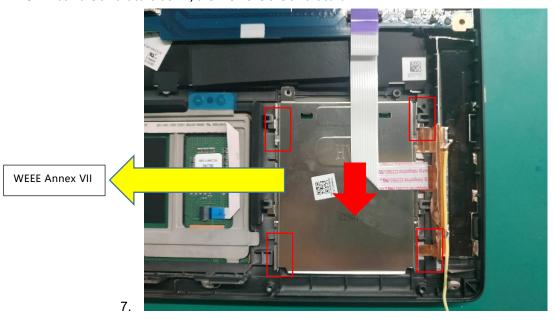


Figure 3-31. Smart card

1. Remove the acetate cloth from the KB FFC connector, remove the blue mylar from the KB backlight connector.

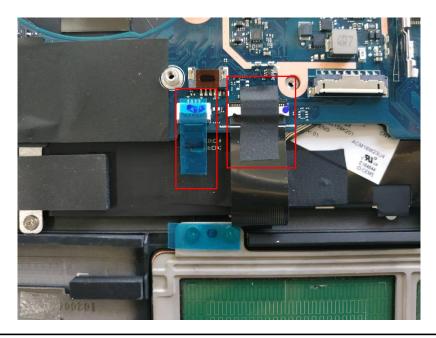


Figure 3-32. MB

2. Remove the conductive cloth on the hinge, lift the EDP cable by the mylar handle on the EDP cable connector.

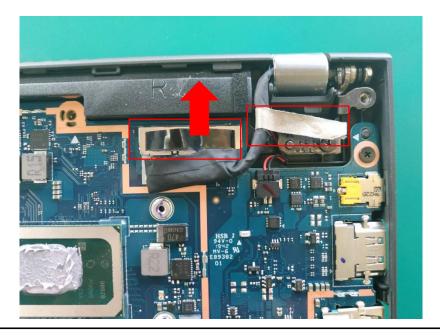


Figure 3-33. MB

3. Disconnect the KB FFC, Speaker cable (L+R), KB backlight FFC, Power button cable from the MB.

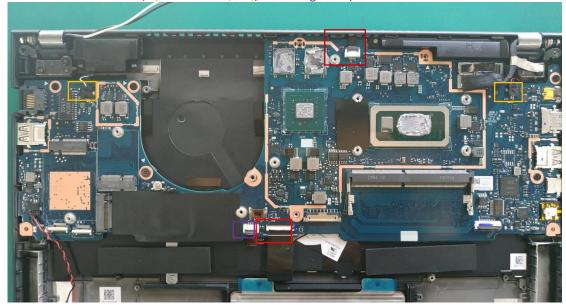


Figure 3-34. MB

4. Remove 4 screws (CM2*5 MM_0.8 MM_4.5 MM) and 1 screw (CM2*2.5 MM_0.8 MM_6 MM) from the MB.



Figure 3-35. MB

5. Lift the MB from the left side of the upper case.

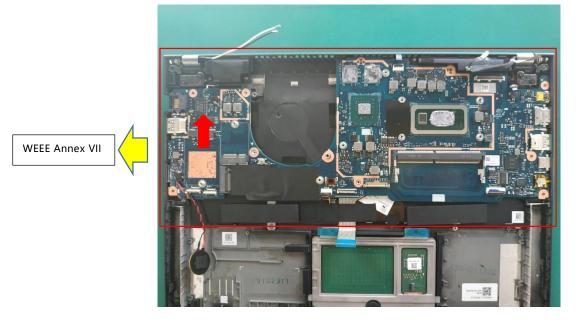


Figure 3-36. MB

Removing the Upper case

1. Remove 4 screws on the upper case (2 screws on each side).

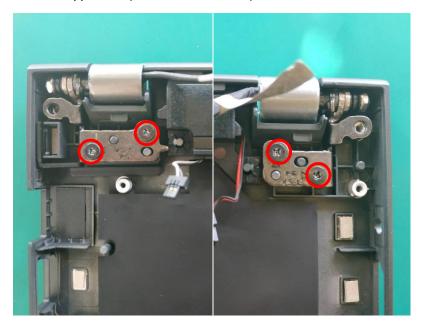


Figure 3-37. upper case

2. Remove the upper case.

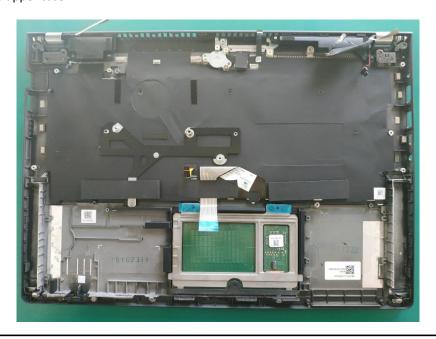


Figure 3-38. upper case

Removing C support and C KLOCK bracket

1. Remove 2 screws on the C support bracket, then remove the C support bracket.

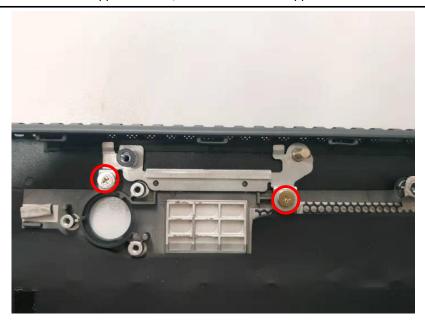


Figure 3-39. C support bracket

2. Remove the C KLOCK (security lock) bracket from the uppercase.

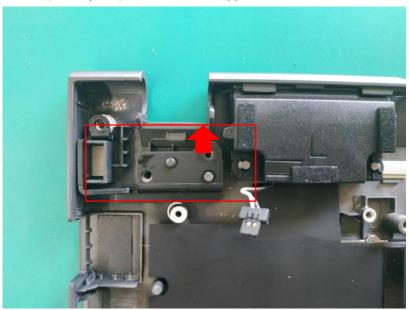


Figure 3-40. C KLOCK bracket

Removing the Touchpad module,

1. Remove two blue mylars on the touchpad screws.

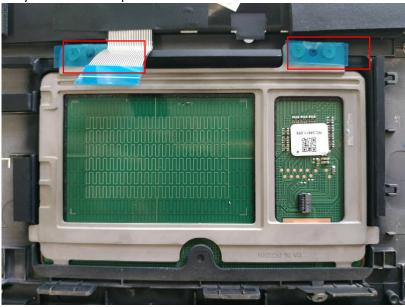


Figure 3-41. Touch pad module

2. Remove 4 screws from the upper case.

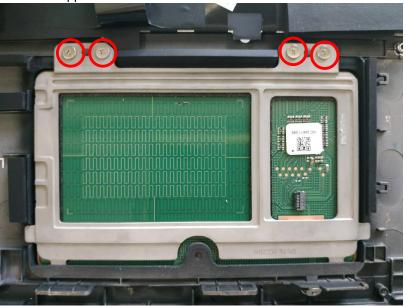


Figure 3-42. Touch pad module

3. Remove the touch pad module from the upper case.

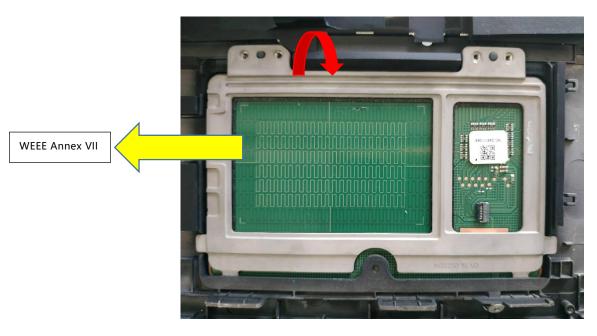


Figure 3-43. Touch pad module

Removing the Keyboard

1. Remove foam from C cover.

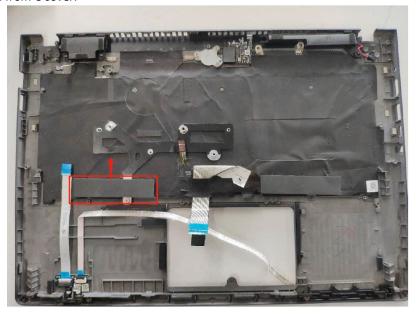


Figure 3-44. Keyboard

2. Remove the hardware bracket from the C cover with a screwdriver

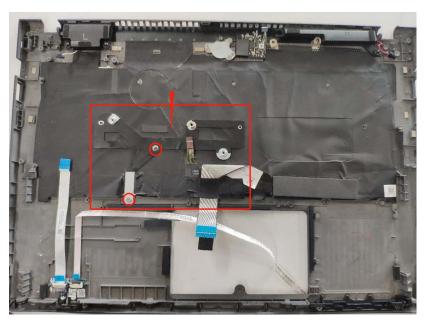


Figure 3-45. Keyboard

3. Remove the screws on the back of the keyboard with a screwdriver and take the keyboard out from C cover

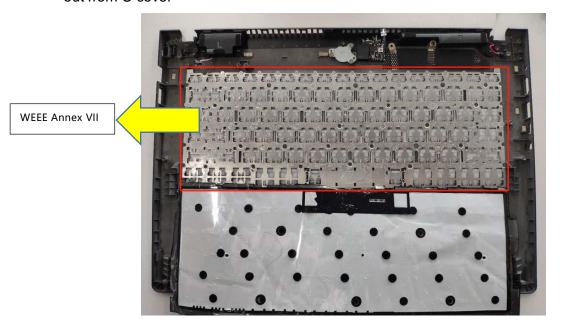


Figure 3-46. Keyboard



Figure 3-47. Keyboard

Removing the LCD

1. Open the bezel from the left or right inner side as below, then remove the bezel from the LCD cover.

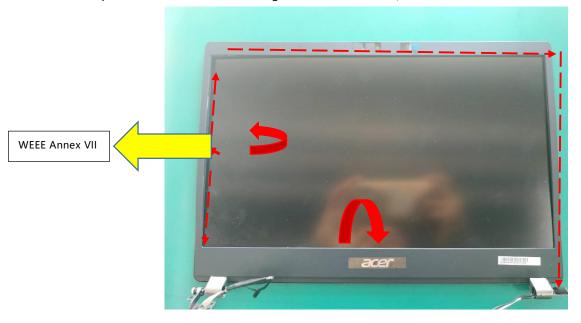


Figure 3-48. LCD bezel

2. Remove the left hinge rubber and right hinge rubber. **NOTE:** The inside of the hinge rubber is marked with the character "L" or "R".





Figure 3-49. Hinge rubber

3. Tear up the acetate cloths on the LCD gently.



Figure 3-50. LCD

4. Pull the easy-pull-glue out of the LCD cover.

⇒ NOTE:

During the pulling, it is necessary to apply even force and smoothness, and the force is not too strong until the glue is pulled away from the LCD cover.

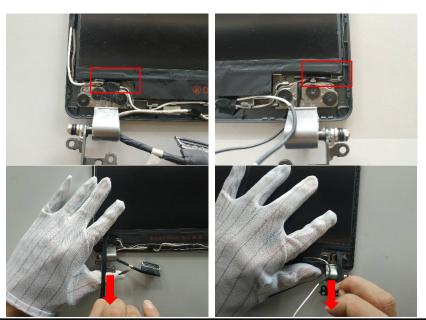


Figure 3-51. LCD

5. Flip the LCD panel from the top. Do not to pick up the LCD panel directly from the LCD cover. →WEEE Annex VII



Figure 3-52. LCD panel

6. Peel off the conductive cloth on the LCD gently.

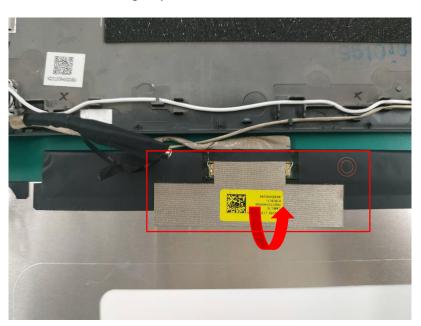


Figure 3-53. LCD panel

7. Open the latch then remove the LCD panel.

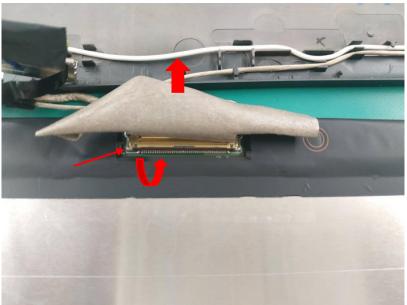


Figure 3-54. LCD panel

8. If it is a 30Pin LCD, please remove two residual mylar on the LCD cover.

NOTE: There are 2 thicknesses of LCD, corresponding to different thickness of the easy-pull-glue. The 30Pin LCD uses a 0.95mm thick glue with a layer of mylar. The 40pin LCD uses a thickness of 0.65mm.



Figure 3-55. LCD panel

Troubleshooting

Troubleshooting

This chapter shows you how to deal with common system problems. Read it before calling a technician if a problem occurs. Solutions to more serious problems require opening up the computer. Do not attempt to open the computer yourself; contact your dealer or authorized service center for assistance.

Troubleshooting tips

This computer incorporates an advanced design that delivers onscreen error message reports to help you solve problems.

If the system reports an error message or an error symptom occurs, see "Error messages" below. If the problem cannot be resolved, contact your dealer.

Error messages

If you receive an error message, note the message and take the corrective action. The following table lists the error messages in alphabetical order together with the recommended course of action.

Error messages	Corrective action
CMOS battery bad	Contact your dealer or an authorized service center.
CMOS checksum error	Contact your dealer or an authorized service center.
Disk boot failure	Insert a system (bootable) disk, then press Enter to reboot.
Equipment configuration error	Press F2 (during POST) to enter the BIOS utility, then press Exit in the BIOS utility to reboot.
Hard disk 0 error	Contact your dealer or an authorized service center.
Hard disk 0 extended type error	Contact your dealer or an authorized service center.

Error messages	Corrective action
I/O parity error	Contact your dealer or an authorized service center.
Keyboard error or no keyboard connected	Contact your dealer or an authorized service center.
Keyboard interface error	Contact your dealer or an authorized service center.
Memory size mismatch	Press F2 (during POST) to enter the BIOS utility, then press Exit in the BIOS utility to reboot.

If you still encounter problems after going through the corrective measures, please contact your dealer or an authorized service center for assistance.

FRU (Field Replaceable Unit) List

Please contact your local service center to find out how to obtain the part or replace your device.

Exploded Diagrams

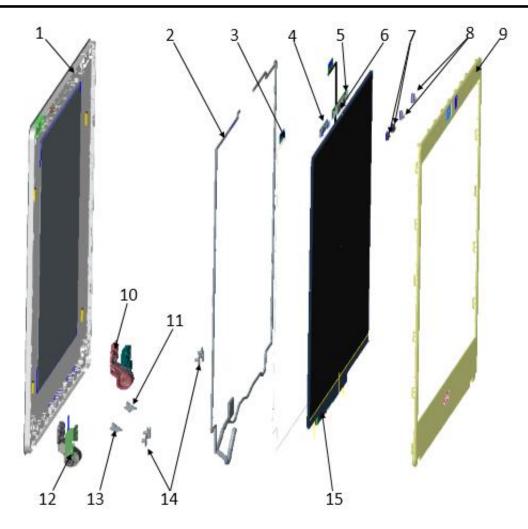


Figure 6-1. Exploded Diagram-part1
Table 6-1. Exploded Diagram-part1

No.	Description	Acer Part #	No.	Description	Acer Part #
1	A COVER ASSY	60.VM1N8.001	9	B COVER ASSY	60.VM1N8.002
2	CAM&LCD cable	50.VM2N8.001	10	Hinge Right	33.VM5N8.002
3		50.VM5N8.004(MAIN)/ 50.VM5N8.005(AUX)	11	HINGE CAP RUBBER Right	47.VM5N8.006
4	DMIC	55.VM1N8.001	12	Hinge Left	33.VM5N8.001
5	IR CAMERA	KS.FHD0Q.003	13	HINGE CAP RUBBER Left	47.VM5N8.005
6	BEZEL DIFFUSION MYLAR	47.VM5N8.004	14	Hinge Screw	86.VM5N8.001
7	DMIC Rubber	47.VM5N8.007	15	LCM Module	KL.14005.044
8	IR-HD_CAMERA MIC	47.VM5N8.008			

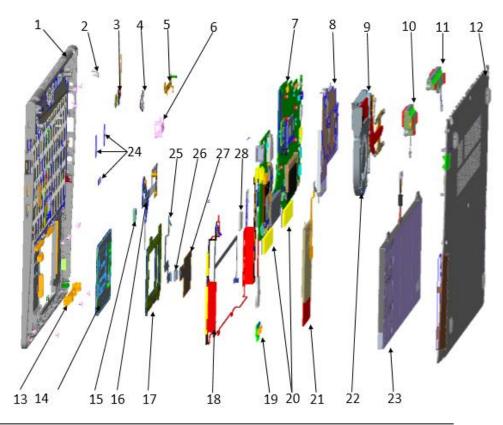


Figure 6-2. Exploded Diagram-part 2

Table 6-2. Exploded Diagram

No.	Description	Acer Part #	No.	Description	Acer Part #
1	C COVER ASSY	6B.VM6N8.001	15	SIM TRAY	33.VM6N8.001
2	Sys screw	86.VM5N8.003	16	KB BRACKET	\(The KB ASSY include the bracket.)
3	POA BUTTON	NC.22011.00D	17	TP BRACKET	\(The TP ASSY include the bracket.)
4	POA BUTTON BRACKET	33.VM5N8.003	18	LTE Antenna	50.VM6N8.001(MAIN)/ 50.VM6N8.002(AUX)
5	C SUPPORT BRACKET	33.VM5N8.004	19	LED PCBA	55.VM5N8.001
6	C KLOCK BRACKET	42.VM5N8.001	20	BATTERY SPONGE 3	\(The KB ASSY include the sponge.)
7	MB	NB.VLZ11.001	21	SMART CARD	54.VM5N8.001
8	GPU-CPU SHIELDING	33.VM2N8.001	22	FAN	23.VM5N8.001
9	Thermal module	24.VM5N8.001	23	BATTERY	KT.00304.014
10	SPEAKER LEFT	23.VM5N8.002	24	FAN MYLAR	47.VM5N8.015
11	SPEAKER RIGHT	23.VM5N8.003	25	NFC FFC	50.VLSN8.001
12	D COVER ASSY	60.VM6N8.001	26	NFC PCBA	55.VLSN8.001

13	SMART CARD FRAME	42.VM5N8.003	27	NFC Antenna	50.VLSN8.002
14	TOUCH PAD	56.VM5N8.001	28	SSD	KN.5120D.004

⇒ NOTE:

Take "NX.VLZSI.001" as an example, "Acer part#" is as above, please refer to the actual configuration;

To update your software

Please visit http://go.acer.com/?id=17883

To remove your personal data

- Option 1: Select Start ⇒ Settings ⇒ Update & Security ⇒ Recovery.

 Under Reset this PC, select Get started. Open Recovery settings.
- Option 2: Restart your PC to get to the sign-in screen, then press and hold down
 the Shift key while you select the Power icon > Restart in the lower-right corner
 of the screen. After your computer restarts, select Troubleshoot > Reset this PC.
- Option 3: Select Start

 , then press and hold down the Shift key while you select
 the Power

 icon > Restart to restart your computer into Recovery Mode. After
 your computer restarts, select Troubleshoot > Reset this PC.