TravelMate B3 / TM311R-31 / TM311RN-31 / TMB311-31 / TMB311R-31 / TMB311RN-31 / TravelMate B311R-31 / TravelMate B311RN-31

# 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 '<u>Disassembly procedures'</u> 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 <a href="http://www.acer.com/support">http://www.acer.com/support</a> 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 > 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 (<a href="http://www.acer.com/support">http://www.acer.com/support</a>)

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

#### WEEE Annex VII Component

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 laptop on flat while lower case should be upwards. Use screwdriver to remove 10 screw of lower case. The spec of NO 1 to NO 2 is SCREW\_M2.5\*6.7 mm\_0.8 mm\_4 mm\_BLACK, the spec of NO 3 to NO 13 is SCREW\_M2\*5 mm\_0.8 mm\_4 mm\_BLACK.



Figure 3-3. Lower case

Table 3-2. Lower case Screw

| Step       | Screw                                  | Quantity | Screw Type | Torque/kgfcm    |
|------------|--|----------|------------|-----------------|
| Remove     | SCREW_M2.5*6.7 mm_0.8<br>mm_4 mm_BLACK | 2        |            | 2.0+/-0.1kgf.cm |
| Lower case | SCREW_M2*5 mm_0.8<br>mm_4 mm_BLACK     | 11       |            | 2.5+/-0.1kgf.cm |

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 3-4. Lower case



Figure 3-5. Lower case

# Removing the Battery

1. Remove 2 screws from upper case.

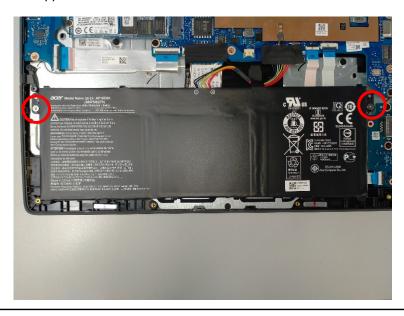


Figure 3-6. Battery

Table 3-3. Battery Screw

| Step           | Screw                               | Quantity | Screw Type | Torque/kgfcm     |
|----------------|-------------------------------------|----------|------------|------------------|
| Remove battery | SCREW_M2*4 mm_0.6<br>mm_5 mm_silver | 2        |            | 1.8+/-0.1 kgf.cm |

2. Remove the acetate cloth from the battery.

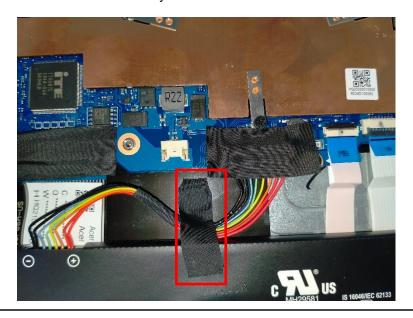


Figure 3-7. Battery

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

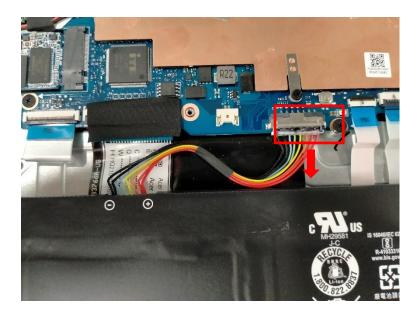


Figure 3-8. Battery

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



Figure 3-9. Battery

# Removing the SSD

1. Remove 1 screw from SSD.



Figure 3-10. SSD

Table 3-4. SSD Screw

| Step       | Screw                                       | Quantity | Screw Type | Torque/kgfcm     |
|------------|---|----------|------------|------------------|
| Remove SSD | SCREW_M2*3mm_0.65<br>mm_5mm_BLACK_BLA<br>CK | 1        |            | 1.5+/-0.1 kgf.cm |

2. Remove SSD from MB.



# Removing the WLAN module

1. Remove the acetate cloth on the WLAN cable.

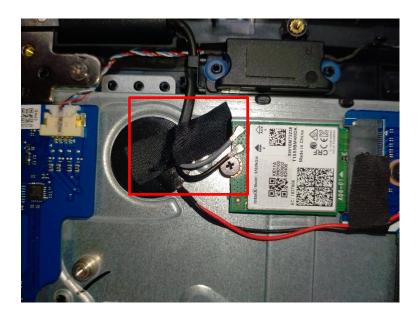
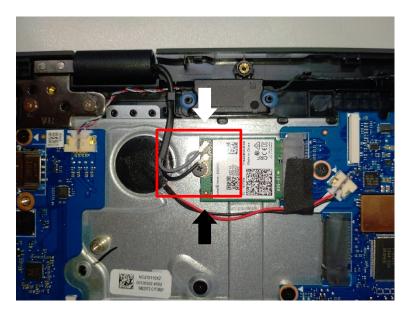


Figure 3-12. WLAN module

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



position.

Figure 3-12. WLAN module

3. Remove 1 screw on the WLAN module.



Figure 3-13. WLAN module

Table 3-5. WLAN Screw

| Step        | Screw                               | Quantity | Screw Type | Torque/kgfcm     |
|-------------|-------------------------------------|----------|------------|------------------|
| Remove WLAN | SCREW_M2*3 mm_0.65<br>mm_5 mm_BLACK | 1        |            | 1.5+/-0.1 kgf.cm |

4. Remove the WLAN module from the MB.



Figure 3-14. WLAN module

# Removing the USB board

1. Remove 2 screws on the IO board.

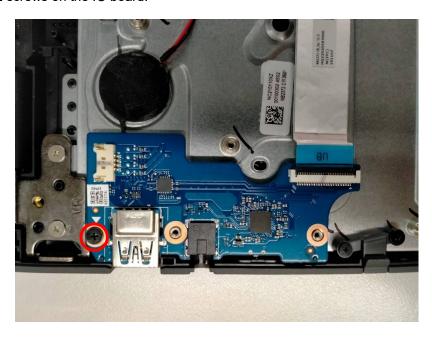
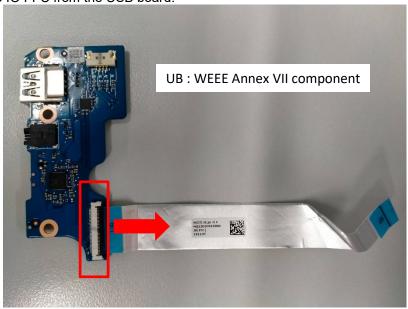


Figure 3-19. USB board Table 3-7. USB board screw

| Step                | Screw                               | Quantity | Screw Type | Torque/kgfcm        |
|---------------------|-------------------------------------|----------|------------|---------------------|
| Remove<br>USB board | SCREW_M2*3 mm_0.65<br>mm_5 mm_BLACK | 1        |            | 1.5+/-0.1<br>kgf.cm |

2. Remove the IO FFC from the USB board.



# Removing the RJ45 board

1. Remove 2 screws on the RJ45 board.



Figure 3-21. RJ45 board Table 3-8. RJ45 board screw

| Step                 | Screw                               | Quantity | Screw Type | Torque/kgfcm        |
|----------------------|-------------------------------------|----------|------------|---------------------|
| Remove<br>RJ45 board | SCREW_M2*3mm_0.6<br>5 mm_5 mm_BLACK | 2        | Sinne      | 1.5+/-0.1<br>kgf.cm |

2. Remove the FFC from the RJ45 board.



Figure 3-22. RJ45 board

### Removing the MB

1. Remove the acetate cloth from the KB FFC connector.

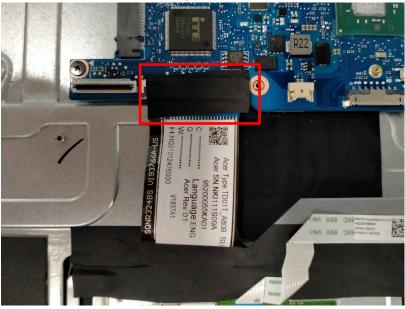


Figure 3-29. MB

2. Disconnect the FP FFC, KB FFC, LCD cable, LVDS cable (Glass version) from the MB .( All of them are ZIF connectors)



Figure 3-30. MB

3. Turn over the battery from the uppercase.

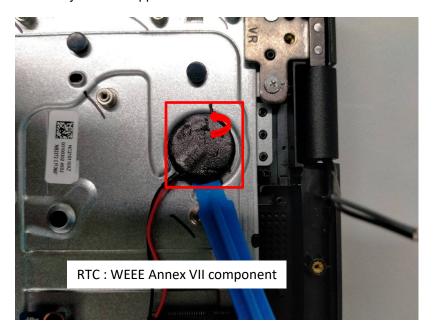


Figure 3-31. MB

4. Remove 6 screws on the MB.

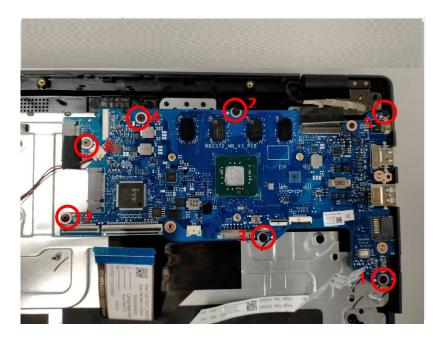


Figure 3-32. MB Table 3-10. MB Screw

| Step      | Screw                              | Quantity Screw Type |         | Torque/kgfcm        |
|-----------|------------------------------------|---------------------|---------|---------------------|
| Remove MB | SCREW_M2*3mm_0.65<br>mm_5 mm_BLACK | 7                   | Control | 1.5+/-0.1<br>kgf.cm |

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



Figure 3-33. MB

# Removing the Touchpad module

1. Disconnect the TP FFC connector on the touch pad, then remove it from the touch pad.



Figure 3-34. Touch pad module

2. Remove the conductive cloth from the touchpad and upper case



Figure 3-35. Touch pad module

3. Remove 4 screws on the TP bracket. Then remove the TP bracket from the upper case.

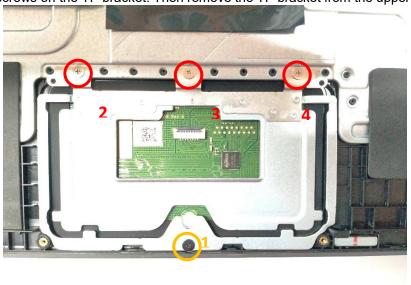


Figure 3-36. Touch pad module Table 3-11. Touchpad Screw

| Step                | Screw   | Quantity | Screw Type | Torque/kgfcm        |
|---------------------|---|----------|------------|---------------------|
| Demove              | SCREW_M2*3mm_0.<br>65 mm_5 mm_BLACK                             | 1        |            | 1.8+/-0.1<br>kgf.cm |
| Remove<br>Touch pad | SCREW_M2.0*L3.0_T<br>0.65_D6.5*3.65mm_0.<br>65 mm_6.5 mm_silver | 3        |            | 1.8+/-0.1<br>kgf.cm |

4. Lift the bottom up and remove the touch pad module from the upper case.

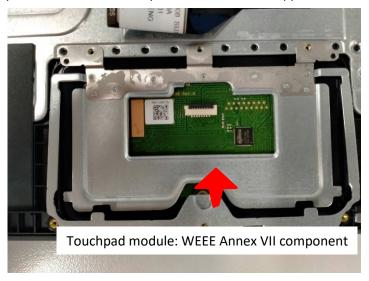


Figure 3-37. Touch pad module

# Removing the LCD panel

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



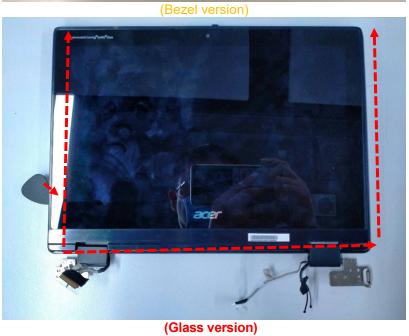


Figure 3-45. LCD bezel

2. Remove the acetate cloth on the LCD cable and Camera cable(Bezel version).

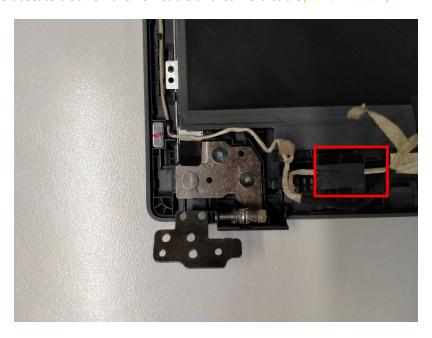


Figure 3-46. LCD panel

3. Pull the easy-pull-glue out of the LCD.

#### **⇒** 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 (Bezel version).

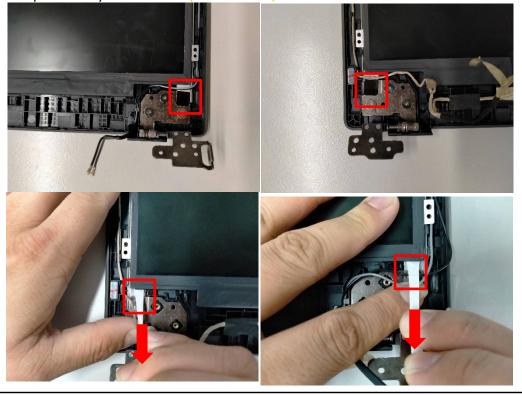


Figure 3-47. LCD panel

4. Disconnect the LCD cable from the camera module and LED module.



(Bezel version)



(Glass version)

Figure 3-48. LCD panel

5. Pick up the LCD cable from the LCD cover groove, flip the LCD panel from the top , then remove the LCD from the LCD cover.

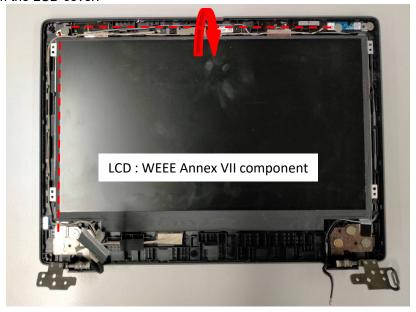


Figure 3-49. LCD panel



(Bezel version)



(Glass version)

Figure 3-50. LCD panel

6. Disconnect the LCD cable from the LCD.

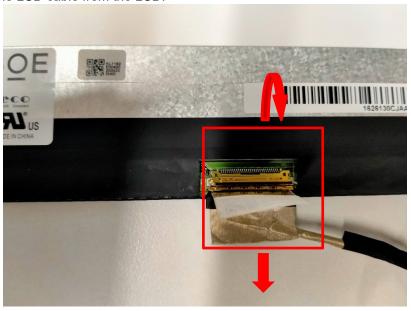


Figure 3-51. LCD panel

### **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<br>Enter to reboot.  |
| Equipment configuration error   | Press <b>F2</b> (during POST) to enter the BIOS utility, then press <b>Exit</b> 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<br>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 v  | our local | service cent  | er to fin  | d out how | to obtain the | part or replace | vour device. |
|-------------------|-----------|---------------|------------|-----------|---------------|-----------------|--------------|
| i icase contact y | oui iocai | JCI VICE CCIT | CI LO IIII | a oat now | to obtain the | part or replace | your acvice. |

# **Exploded Diagrams**

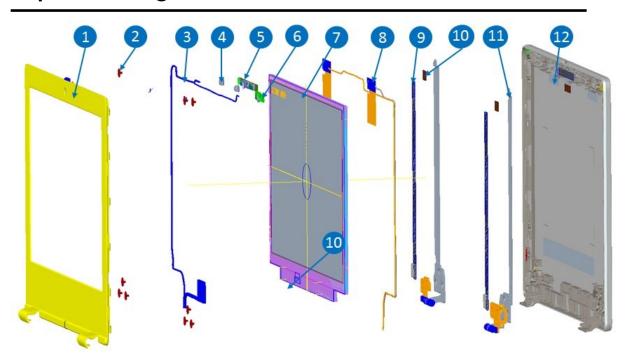


Figure6-1. Exploded Diagram (180°)

Table 6-1.Exploded Diagram

| Item | Description | Acer Part #  | Item | Description        | Acer Part #  |
|------|-------------|--------------|------|--------------------|--------------|
| 1    | BEZEL       | 60.VMUN8.002 | 7    | LCD PANEL          | KL.1160D.019 |
| 2    | SCREW       | 86.VMUN8.001 | 8    | ANTENNA            | 50.VMUN8.004 |
| 3    | LCD CABLE   | 50.VMUN8.005 | 9    | EASY-PULL<br>GLUE  | 47.VMUN8.001 |
| 4    | MIC RUBBER  | 47.VMUN8.002 | 10   | CONDUCTIVE<br>FOAM | 47.VMUN8.003 |
| 5    | CAMERA      | KS.0HD06.012 | 11   | HINGE              | 33.VMUN8.001 |
| 6    | LED BOARD   | 55.VMUN8.003 | 12   | LCD COVER          | 60.VMUN8.001 |

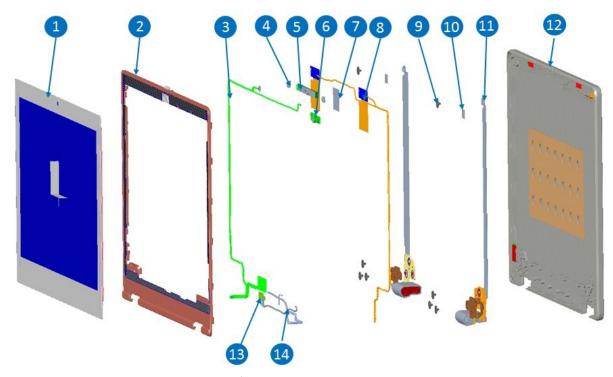


Figure 6-2. Exploded Diagram (360°)

Table 6-2.Exploded Diagram

| Item | Description         | Acer Part #  | Item | Description        | Acer Part #  |
|------|---------------------|--------------|------|--------------------|--------------|
| 1    | LCD PANEL           | 6M.VMVN8.001 | 8    | ANTENA             | 50.VMUN8.004 |
| 2    | BEZEL               | 60.VMUN8.002 | 9    | SCREW              | 86.VMUN8.001 |
| 3    | LCD CABLE           | 50.VMYN8.002 | 10   | CONDUCTIVE<br>FOAM | 47.VMUN8.003 |
| 4    | MIC RUBBER          | 47.VMYN8.002 | 11   | HINGE              | 33.VMYN8.001 |
| 5    | CAMERA              | KS.0HD06.012 | 12   | LCD COVER          | 6M.VMVN8.001 |
| 6    | LED BOARD           | 55.VMUN8.003 | 13   | HALL BOARD         | 55.VMXN8.002 |
| 7    | CONDUCTIVE<br>CLOTH | 47.VMYN8.001 | 14   | HALL CABLE         | 50.VMYN8.004 |

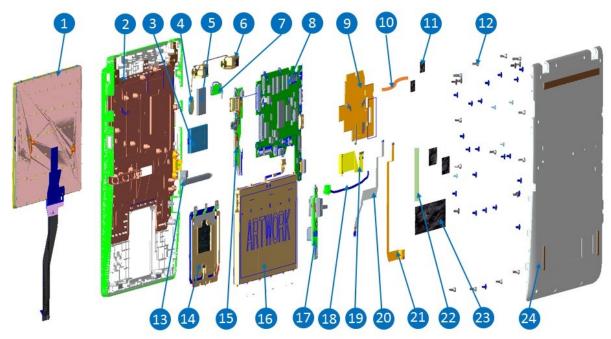


Figure 6-3. Exploded Diagram

Table 6-3. Exploded Diagram

| Item | Description       | Acer Part #         | Item | Description        | Acer Part #  |
|------|-------------------|---------------------|------|--------------------|--------------|
| 1    | KEYBOARD          | NK.I111S.09E        | 13   | PEN                | NC.23811.07R |
| 2    | UPPER<br>CASE     | 60.VN0N8.001        | 14   | TOUCHPAD<br>MODULE | 56.VMUN8.001 |
| 3    | SSD               | KN.1280B.010        | 15   | UB                 | 55.VMXN8.001 |
| 4    | RTC<br>BATTERY    | \Included in the MB | 16   | BATTERY            | KT.00304.012 |
| 5    | WLAN<br>MODULE    | KE.11A0N.010        | 17   | RJ45 BOARD         | 55.VMUN8.002 |
| 6    | SPEAKER           | 23.VMUN8.001        | 18   | PEN CABLE          | 50.VMYN8.001 |
| 7    | CAMERA            | KS.0HD06.012        | 19   | UB FFC             | 50.VMUN8.003 |
| 8    | MB                | NB.VMU11.004        | 20   | TP FFC             | 50.VMUN8.001 |
| 9    | THERMAL<br>MODULE | 24.VMUN8.001        | 21   | RJ45 BOARD<br>FFC  | 50.VMUN8.002 |
| 10   | CAMERA<br>CABLE   | 50.VMXN8.001        | 22   | TP<br>CONDUCTIVE   | 47.HE7N8.003 |

### **⇒** NOTE:

PN is just an example, 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**.