



**Mobile Device**  
**SM-A042F/A042M**  
**/M045F Common**

# **SERVICE** *Manual*

## Contents

## **- Level 2 -**

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# 1. SVC Tech Information

## 1-1. Calibration Items

- 'O' mark items must be calibrated after repairing/replacing each part.

TSP Cal.	-	Force Touch Cal.	-	Optical Finger print Cal.	-
Speaker Cal.	-	Digital Hall IC Cal.	-	TOF Camera Cal.	-
Water Resistance	-	Ranging Sensor Cal	-	UWB Cal.	-
Multi Camera Cal.	O	mmWave RF Cal. (Only for USA/Japan)	-	UDC Cal.	-
Motor Cal.	-				

## 1-2. Part list which must be changed after reassembly

- No parts must to be changed after reassembly. (Hook Type)

## 1-3. JIG

- N/A

## 1-4. WRT Test Information

- It does not support water resistance. The test is not available.

## 1-5. AOD Setting Information

- It does not support AOD.

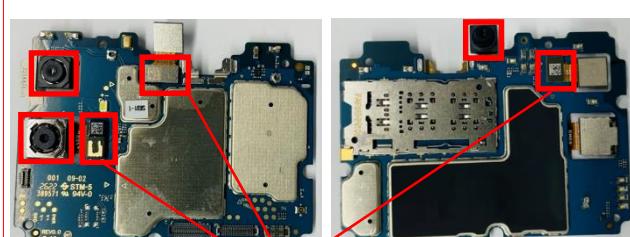
## 2. SVC Model Information

### 2-1. RAM & Storage size by region

Model Name	Region		SKU CODE Rule	Memory		SIM
				RAM	ROM	
A04e	Global	CIS	SM-A042F**D***	3	32	2-Nano
			SM-A042F**H***	3	64	
			SM-A042F**K***	4	128	
		Latin America	SM-A042M**D***	3	32	2-Nano
			SM-A042M**H***	3	64	
			SM-A042M**K***	4	128	
			SM-A042M**A***	3	32	Nano
			SM-A042M**F***	3	64	
			SM-A042M**M***	4	128	
		Manaus	SM-A042M**R***	3	32	2-Nano
			SM-A042M**P***	3	64	
			SM-A042M**Q***	4	128	
		SEA	SM-A042F**D***	3	32	2-Nano
			SM-A042F**H***	3	64	
			SM-A042F**K***	4	128	
		SWA	SM-A042F**D***	3	32	2-Nano
			SM-A042F**H***	3	64	
			SM-A042F**K***	4	128	
		MEA	SM-A042F**D***	3	32	2-Nano
			SM-A042F**H***	3	64	
			SM-A042F**K***	4	128	
		Africa	SM-A042F**D***	3	32	2-Nano
			SM-A042F**H***	3	64	
			SM-A042F**K***	4	128	
			SM-A042F**A***	3	32	Nano
			SM-A042F**F***	3	64	
			SM-A042F**I***	4	128	
M04	SWA	SWA	SM-M045F**D***	3	32	2-Nano
			SM-M045F**H***	3	64	
			SM-M045F**G***	4	64	
			SM-M045F**K***	4	128	

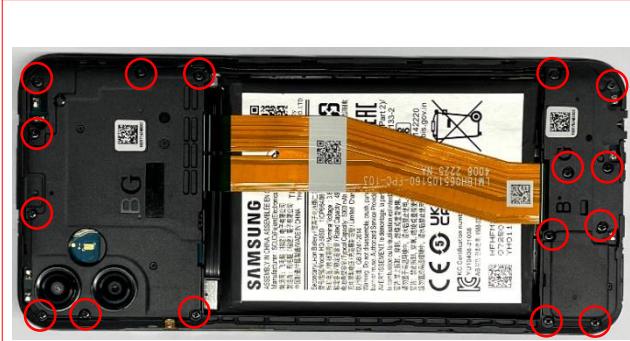
## 2. SVC Model Information

### 2-2. Disassembly & Reassembly (Important management points)

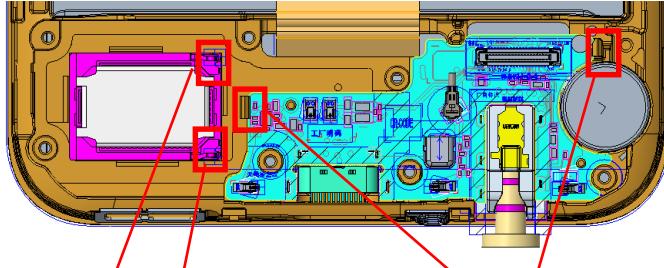


Connector 3ea on PBA.

**[Important management]**  
DO NOT touch the Camera lens without gloves.



Screws position



Note that the two shrapnel are on the right side to prevent leakage and reverse loading.

SUB PBA buckle

First align the plastic buckle on the right side and then tilt it to submerge it. Then align the small plate with the positioning column of the A shell and assemble it. Then push the earphone holder of the small plate with your thumb in the direction of the motor, and then vertically apply force to buckle the plastic buckle on the left side.

## 2. SVC Model Information

### 2-3. Disassembly & Reassembly (Battery replacement)

Do not reuse the battery after it has been removed. It must be replaced with a new battery.

\* Reusing a removed battery could lead to potential safety hazards

Type	Structure
 <p>Display Bracket Battery</p> <p>Inseparable part (Front Assy)</p>	<p>Display and Bracket are inseparable</p> <p>Battery replacement is required when Front Ass'y components are defected</p>

# 3. Product Function

## 3-1. Main Function

Item	Description
OS	Android S
Network	<p><b>2G</b> GSM : GSM850 / GSM900 / DCS1800 / PCS1900</p> <p><b>3G</b> WCDMA : B1 / B2 / B4 / B5 / B8</p> <p><b>4G</b> - FDD : B1 / B2 / B3 / B4 / B5 / B7 / B8 / B12 / B13 / B17 / B26 / B28 / B66 - TDD : B38 / B40 / B41 (2496MHz~2690MHz. Full Band)</p>
Battery	5,000 mAh
Processor	MT6765V/CBA ×1. OCTA Core (2.3GHz Quad(A53) + 1.8GHz Quad(A53))
Connectivity	GPS, GLONASS, Galileo, Beidou, BT5.0, USB 2.0 Type-C, OTG, Wi-Fi 802.11 802.11 b/g/n
Camera	<p><b>Rear</b> - Main : 13MP A/F, F2.2 - Depth : 2MP, A/F, F2.4</p> <p><b>Front</b> : 5MP, F/F, F2.2</p>
Display	6.517" HD+ 2.5D, In-cell, V-cut panel. 60Hz. 720 x 1600
RAM	3 / 4 GB
ROM	32 / 64 GB
Sensor	Accelerometer, Proximity Sensor, Light Sensor

# 4. Exploded View and Parts List

## 4-1. Electronical Part List

: Refer to '[01-SM-A042F\\_Common\\_Main Part List](#)' file which uploaded separately

## 4-2. Cellular phone Exploded View

: Refer to '[02-SM-A042F\\_Common\\_Exploded View](#)' file which uploaded separately

## 4-3. Cellular phone Parts list

: Refer to SVC PPL

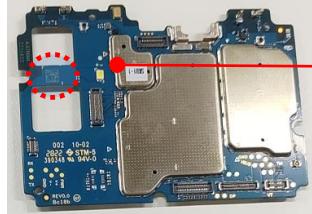
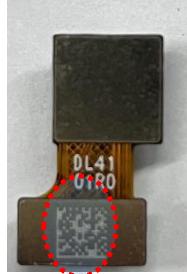
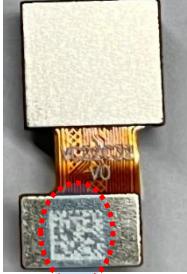
# 5. Components Layout

## 5-1. Components Layout



# 5. Components Layout

## 5-2. QR code Location

Part	Location
PBA	 
Display	 
Battery	 
Camera	 <span>5M</span>  <span>2M</span>  <span>13M</span>

# 6. Trouble Shooting (L2)

- 6-1. Display
- 6-2. Touch
- 6-3. Power, Charging
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- 6-6. Sensor
- 6-7. Connectivity (Wi-Fi, GPS)
- 6-8. No SVC
- 6-9. USIM

# 6-1. Display

## 6-1-1. Black Display

### 1) Symptom

- Description : No display after power on. Temporary no display or dimmed display



### 2) Defect Decision Conditions

- Noised images on the screen after turning on
- Check booting sound and no vibration .

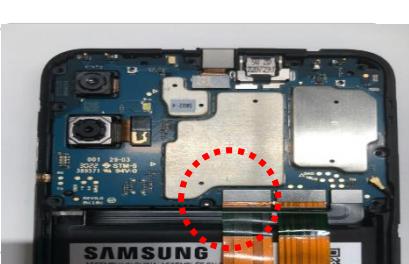
### 3) Repair Guide

- **Caution : Disconnect battery connector first when it shows.**

Image	Description
	<p>1. Check the charging notification sound or vibration when connected to charger.  - Should be no sound and no vibration.  - The device keep 'No display' status.</p>
	<p>2. Disassemble the device.  - Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</p>
	<p>3. Check the disassembled device for OOW.  - Water damage.  - Part burnt.  (Charging port, PBA, Battery and others)  - Broken traces and others.</p>

# 6-1. Display

## 6-1-1. Black Display (L2)

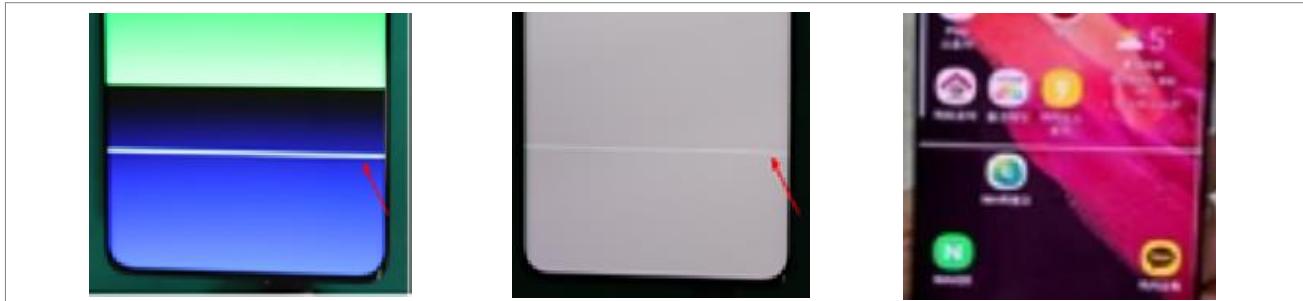
Image	Description
 	<p><b>[Attention]</b></p> <p>4. Disconnect Battery Connector at first.</p>
 	<p>5. Check the 'PBA ↔ Display' connector and connect it again when it connected improperly. After that, connect battery connector again and check the display.</p>
 	<p>6. Check the UB C2C connector and connect it again when it connected improperly. After that, connect battery connector again and check the display.</p>
 <div data-bbox="385 1354 645 1431" style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: 10px;"> * Need to change with battery </div>	<p>7. Exchange the display module with new one and check the device.</p>
 	<p>8. If not, finally, exchange the PBA with new one and check the device.</p>

## 6-1. Display

## 6-1-2. Bit defect (Horizontal line) (L2)

## 1) Symptom

- Description : Bit defect(Horizontal line) after power on.



## 2) Defect Decision Conditions

- Description : Even if the screen changes or the device reboots, the bit failure phenomenon remains.

### 3) Repair Guide

**- Caution : First of all, check if there is any damage or external impact on the device.**

Image	Description
 <div data-bbox="437 1110 711 1171" style="border: 1px solid black; border-radius: 10px; padding: 5px; width: fit-content; margin-left: 20px;">           * Checking external damage of the device         </div>	<ol style="list-style-type: none"> <li data-bbox="763 1110 1336 1210">1. Check if there is any damage of external impact on the device. (especially, Front Window)</li> </ol>
 <div data-bbox="195 1555 306 1574" style="margin-left: 20px;">           [AOD Jig]         </div>	<ol style="list-style-type: none"> <li data-bbox="763 1410 1336 1510">2. Disassemble the device.           <ul style="list-style-type: none"> <li data-bbox="789 1449 1336 1510">- Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</li> </ul> </li> </ol>
 <div data-bbox="450 1707 659 1768" style="border: 1px solid black; border-radius: 10px; padding: 5px; width: fit-content; margin-left: 20px;">           * Need to change with battery         </div>	<ol style="list-style-type: none"> <li data-bbox="763 1728 1258 1788">3. Exchange the <u>display module</u> with new one and check the device.</li> </ol>

## 6-1. Display

### 6-1-3. Screen overlap / shaking / flicker (L2)

## 1) Symptom

- Description : Screen overlap / shaking / blinking after power on. Temporary symptom or continuous maintenance.

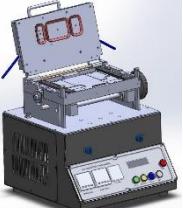
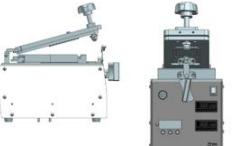


## 2) Defect Decision Conditions

- Description : You can see that symptom when something is changed or something is played on the screen of device. (ex : contents of Youtube[Mosaic Pattern], swap menu block on screen [ICON Crack])

### 3) Repair Guide

- Caution : Disconnect battery connector first when it shows.

Image	Description
 [AOD Jig]	<ol style="list-style-type: none"> <li>1. Disassemble the device. - Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</li> </ol>
 [AOD mini]	<ol style="list-style-type: none"> <li>2. Exchange the display module with new one and check the device.</li> </ol>
 * Need to change with battery	<ol style="list-style-type: none"> <li>3. If not, finally, exchange the PBA with new one and check the device.</li> </ol>

# 6-2. Touch

## 6-2-1. Touch Malfunction

### 1) Symptom

- Description : Abnormal touch(Ghost touch), No Touch and others

### 2) Defect Decision Conditions

- Description : Abnormal touch(Ghost touch), No Touch and others

### 3) Repair Guide

- Caution : First of all, check if there is any damage of external impact on the device.

Image	Description
	<p>1. Check if there is any damage of external impact on the device. (especially, Front Window)</p>
	<p>2. If possible, Input key string *#2663#, click TSP FW update(General). After that, check the *#0*# tsp test.  If the touch test is not work normally, check the next step.</p>
<div style="display: flex; justify-content: space-around; width: 100%;"> <span data-bbox="180 1576 280 1603">[AOD Jig]</span> <span data-bbox="504 1576 626 1603">[AOD mini]</span> </div>	<p>3. Disassemble the device. - Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</p>
	<p>4. Exchange the display module. with new one and check the device.</p>

# 6-2. Touch

## 6-2-1. Abnormal touch(Ghost touch)

Image	Description
	<p><b>[Attention]</b></p> <p>5. Disconnect Battery Connector (Ref. SOC401) at first.</p>
	<p>6. Check the 'PBA ↔ Display' connector and connect it again when it connected improperly. After that, connect battery connector again and check the display.</p>
	<p>7. Check the UB C2C connector and connect it again when it connected improperly. After that, connect battery connector again and check the display.</p>
<div data-bbox="390 1360 576 1422" style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: 10px;"> * Need to change with battery </div>	<p>8. Exchange the display module. with new one and check the device.</p>
	<p>9. If not, finally, exchange the PBA. with new one and check the device.</p>

# 6-3. Power, Charging

## 6-3-1. No Power

### 1) Symptom

- Description : No display & vibration after press power key.



### 2) Defect Decision Conditions

- Description : The phone no any display & vibration after booting.

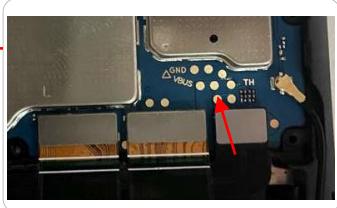
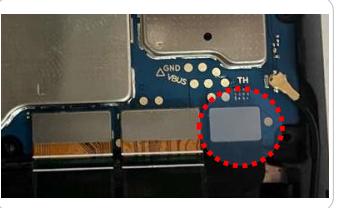
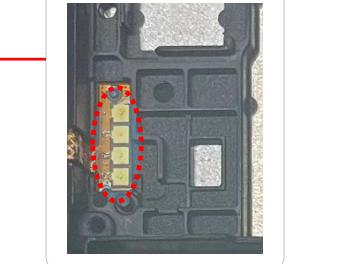
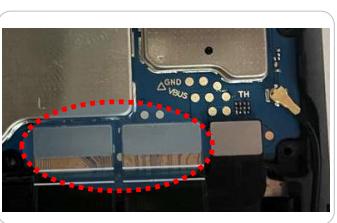
### 3) Repair Guide

- **Caution : Disconnect battery connector first when it shows.**

Image	Description
	<ol style="list-style-type: none"> <li>1. Check the charging notification sound or vibration when connected to charger.  <ul style="list-style-type: none"> <li>- Should be no sound and no vibration.</li> <li>- The device keep 'No Power' status.</li> </ul> </li> </ol>
	<ol style="list-style-type: none"> <li>2. Disassemble the device.  <ul style="list-style-type: none"> <li>- Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</li> </ul> </li> </ol>
	<ol style="list-style-type: none"> <li>3. Check the disassembled device for OOW.  <ul style="list-style-type: none"> <li>- Water damage.</li> <li>- Part burnt.            (Charging port, PBA, Battery and others)</li> <li>- Broken traces and others.</li> </ul> </li> </ol>

# 6-3. Power, Charging

## 6-3-1. No Power (L2)

Image	Description
 	<p>1. Check battery voltage(Ref. C7160) at first. (It's normal over 3.5v) If battery voltage is under 3.5v, charge the phone with charger.</p>
 	<p>2. Check the 'PBA ↔ Battery' connector(SOC11003) and connect it again when it connected improperly. After that, check to turn on the phone.</p>
 	<p>3. Check the 'PBA ↔ FPCB' for dirt(SOC11000) and clean it up when it's dirty. After that, check to turn on the phone.</p>
 	<p>4. Check the 'PBA ↔ LCD' connector(SOC12002) and connect it again when it connected improperly. After that, check to turn on the phone.</p>
 <div data-bbox="385 1541 576 1609" style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: 10px;"> * Need to change with battery </div>	<p>5. Exchange the Front Assy. with new one and check the device.</p>
 	<p>6. If not, finally, exchange the <u>PBA</u>. with new one and check the device.</p>

# 6-3. Power, Charging

## 6-3-2. Reboot during Power on

### 1) Symptom

- Description : reboot during power on



### 2) Defect Decision Conditions

- Description : The phone is rebooting during power on.

### 3) Repair Guide

- **Caution : Disconnect battery connector first when it shows.**

Image	Description
	<p>1. Check power on current with Power Supply and ANYWAY JIG.</p>
	<p>1-1. Push down Anyway Jig switch 7,8      1-2. Power supply set to 4.4v      1-3. During booting, check current.</p>
	<p>2. If current is under 4A, check the battery connector connection and battery condition.</p>

# 6-3. Power, Charging

## 6-3-2. Reboot during Power on

Image	Description
	<p>3. If not, replace PBA.</p>

# 6-3. Power, Charging

## 6-3-3. Sudden Discharge in the idle state (L2)

### 1) Symptom

- Description : Battery level decreases rapidly in the idle state.

### 2) Defect Decision Conditions

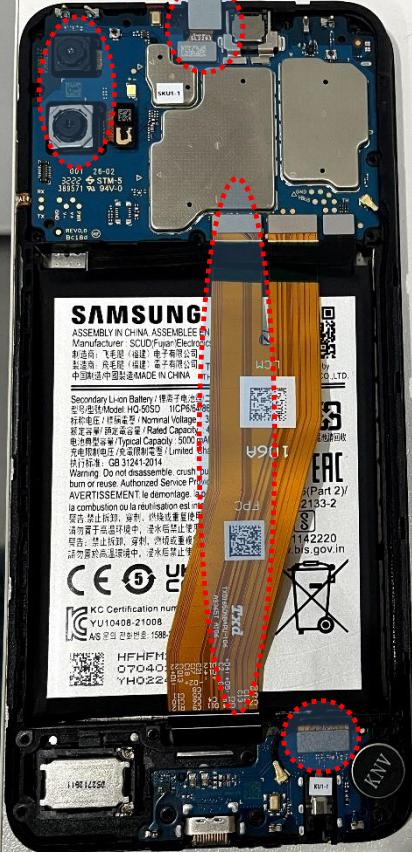
- Description : Battery level decreases rapidly in the idle state by abnormal current consumption.

### 3) Repair Guide

Image	Description
	<p>1. Check Power-off leakage current.</p> <p>1-1. Push down Anyway Jig switch 6,7,8</p> <p>1-2. Check Power-off leakage current.</p>
	<p>2-1. Check sleep current.</p> <ul style="list-style-type: none"> <li>. Push down Anyway Jig switch 7,8</li> <li>. After booting, Check sleep current.</li> </ul> <p>2-2. Check <math>-1\text{mA} \leq \text{Power-off leakage} \leq 2\text{mA}</math></p> <p>2-3. Check sleep current <math>\leq 13.5\text{mA}</math></p>
 <p>[AOD Jig] [AOD mini]</p>	<p>3-1 If there is Power-off leakage problem.</p> <p>3-2. Disassemble the device.</p> <ul style="list-style-type: none"> <li>- Refer to '<u><a href="#">Disassembly and assembly video guide for Galaxy A04e</a></u>' from the GSPN.</li> </ul>

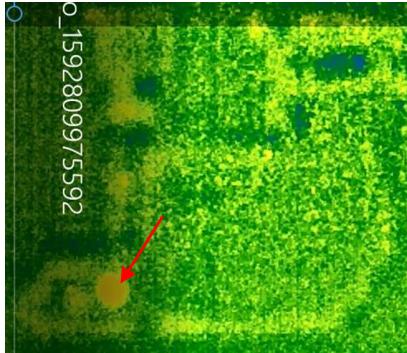
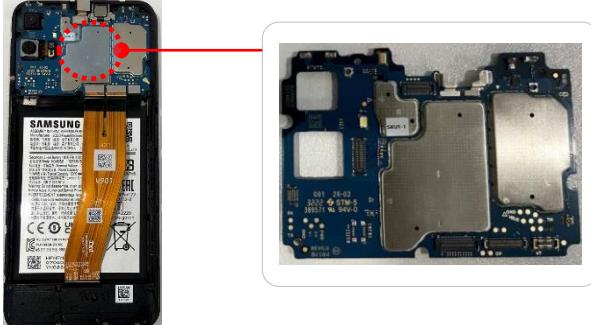
# 6-3. Power, Charging

## 6-3-3. Sudden Discharge in the idle state (L2)

Image	Description
	<p>4-1. If there is a thermal camera, check if there is a hot part and replace the hot part.</p> <p>4-2. If there isn't a thermal camera OR you can't find a hot part, detach the following parts one by one and recheck the leakage current. (Camera module, VT CAM, Sub FPCB &amp; UB FPCB, B to B connector)</p> <p>4-3. If leakage current goes down by detaching the part, replace the detached part by normal one.</p>
	<p>5. If leakage current doesn't go down OR the hot part can't be replaced, replace the PBA.</p>

# 6-3. Power, Charging

## 6-3-3. Sudden Discharge in the idle state

Image	Description
	<p>6-1. If there is a thermal camera, check if there is a hot part on PCB in the idle state and replace the hot part.</p>
	<p>(Thermal camera sample image) Search where the hotspot appears.</p>
	<p>6-2. If there isn't a thermal camera OR you can't find a hot part OR the hot part can't be replaced, replace the PBA.</p>

# 6-3. Power, Charging

## 6-3-5. No charging (Wire charging)



### 2) Defect Decision Conditions

- Description : No charging notification sound, vibration and UI when inserted TA.

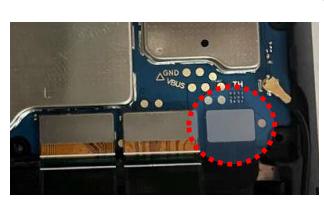
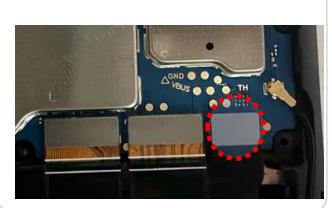
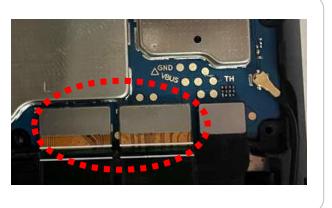
### 3) Repair Guide

- **Caution : Disconnect battery connector first when it shows.**

Image	Description
	<ol style="list-style-type: none"> <li>1. Check the charging notification sound or vibration when connected to charger. <ul style="list-style-type: none"> <li>- Should be no sound, no vibration and no UI.</li> <li>- Save the log and analyze it.</li> </ul> </li> </ol>
 <div style="display: flex; justify-content: space-around;"> <span data-bbox="213 1485 313 1514">[AOD Jig]</span> <span data-bbox="508 1485 630 1514">[AOD mini]</span> </div>	<ol style="list-style-type: none"> <li>2. Disassemble the device. <ul style="list-style-type: none"> <li>- Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</li> </ul> </li> </ol>
	<ol style="list-style-type: none"> <li>3. Check the disassembled device for OOW. <ul style="list-style-type: none"> <li>- Water damage.</li> <li>- Part burnt.</li> <li>(Charging port, PBA, Battery and others)</li> <li>- Damaged USB port pin.</li> <li>- Broken traces and others.</li> </ul> </li> </ol>

# 6-3. Power, Charging

## 6-3-5. No charging (Wire charging)

Image	Description
 	<p><b>[Attention]</b></p> <p>4. Disconnect Battery Connector at first.</p>
 	<p>5. Check the 'IF SUB PBA ↔ C2C connector' and connect it again when it connected improperly. After that, connect battery connector again and check wire charging when inserted TA.</p>
 	<p><b>[Attention]</b></p> <p>6. Disconnect Battery Connector at first.</p>
 	<p>7. Check the 'MAIN PBA ↔ C2C connector' and connect it again when it connected improperly. After that, connect battery connector again and check wire charging when inserted TA.</p>
 	<p>8. Exchange the IF SUB PBA with new one and check the device.</p>

# 6-3. Power, Charging

## 6-3-5. No charging (Wire charging)

Image	Description
	<p>9. If not, exchange the lcd with C2C connector with new one and check the device.</p>
	<p>13. If the device is not working normally after replacing the 'capacitors' and 'Charger IC', replace the MAIN PBA</p>

# 6-4. Camera

## 6-4-1. Entry Fail(Front Camera)

### 1) Symptom

- Description : Black display and can't turn on the front camera



### 2) Defect Decision Conditions

- Description : Black display instead of preview image or return to home screen

### 3) Repair Guide

- **Caution : Disconnect battery connector first when it shows.**

Image	Description
	<p>1. Execute Front Cam test of *###88###*.</p>
	<p>2. Disassemble the device.  - Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</p>
	<p><b>[Attention]</b></p> <p>3. Disconnect Battery Connector (SOC11003) at first.</p>

# 6-4. Camera

## 6-4-1. Entry Fail(Front Camera)

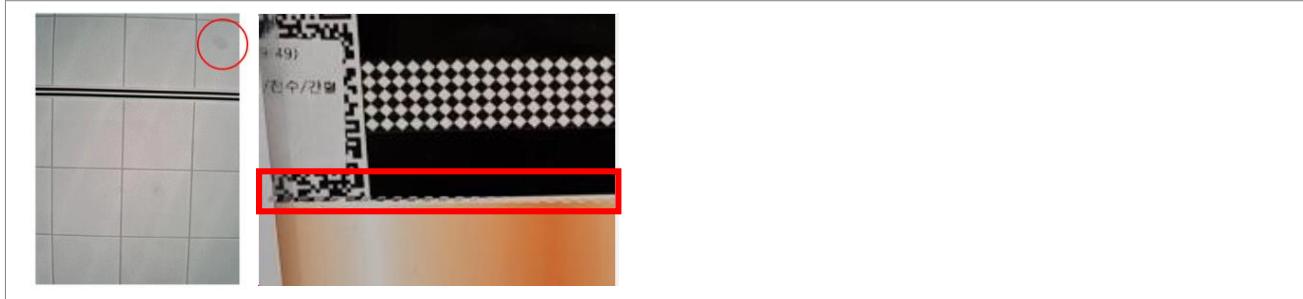
Image	Description
	<p>4. Check if the connector is disengaged at first.</p>
	<p>5. If connector is okay, replace the camera module with new one and check the device. (SOC9003)</p>
	<p>6. If not, finally, exchange the PBA.</p>

# 6-4. Camera

## 6-4-2. Abnormal Preview(Front Camera)

### 1) Symptom

- Description : Abnormal display of front camera

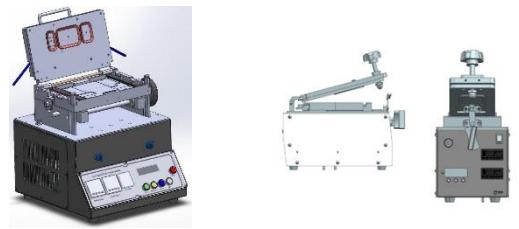
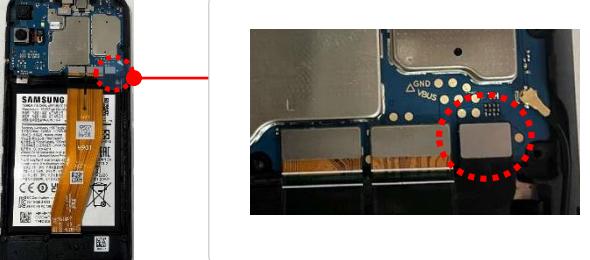


### 2) Defect Decision Conditions

- Description : Blemishes or dots on image

### 3) Repair Guide

- Caution : **Disconnect battery connector first when it shows.**

Image	Description
	<p>1. Check the camera hole.  - Should be clean and no particle.</p>
 <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span data-bbox="208 1560 309 1591">[AOD Jig]</span> <span data-bbox="511 1560 640 1591">[AOD mini]</span> </div>	<p>2. Disassemble the device.  - Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</p>
 <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span data-bbox="208 1560 309 1591">[Attention]</span> </div>	<p>3. Disconnect Battery Connector (SOC11003) at first.</p>

## 6-4. Camera

### 6-4-2. Abnormal Preview(Front Camera)

Image	Description
 	<p>4. Replace the camera module with new one and check the device. (SOC9003)</p>

# 6-4. Camera

## 6-4-3. Abnormal Preview(Front Camera)

### 1) Symptom

- Description : Black display and can't turn on the rear camera

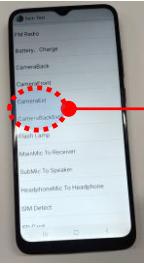
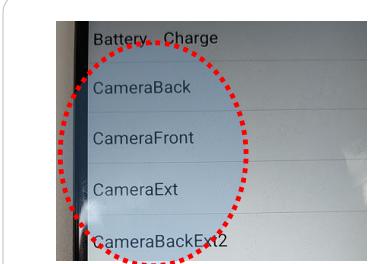
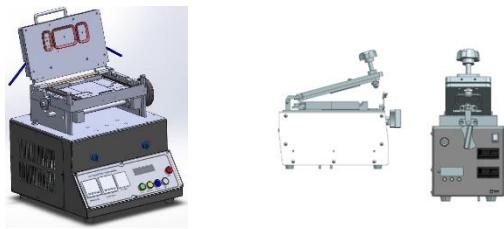
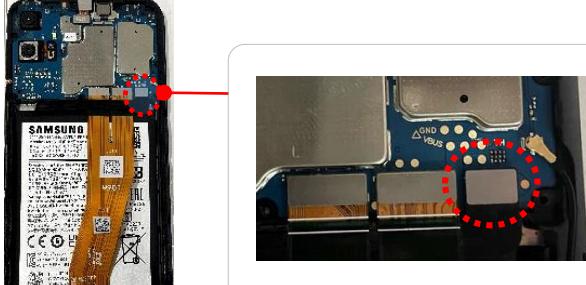


### 2) Defect Decision Conditions

- Description : Black display instead of preview image or return to home screen

### 3) Repair Guide

- **Caution : Disconnect battery connector first when it shows.**

Image	Description
 <div style="border: 1px solid black; padding: 5px; display: inline-block;">  </div>	<p>1. Execute cam test of *#*#88#*#*. to figure out which camera has defect.</p> <ul style="list-style-type: none"> <li>- Camera back : rear camera</li> <li>- Camera Front : Front camera</li> <li>- Camera backext : Depth camera</li> </ul>
 <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span data-bbox="213 1545 313 1576">[AOD Jig]</span> <span data-bbox="508 1545 630 1576">[AOD mini]</span> </div>	<p>2. Disassemble the device.</p> <ul style="list-style-type: none"> <li>- Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</li> </ul>
 <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span data-bbox="750 1701 904 1732">[Attention]</span> </div>	<p>3. Disconnect Battery Connector (SOC11003) at first.</p>

# 6-4. Camera

## 6-4-3. Abnormal Preview(Front Camera)

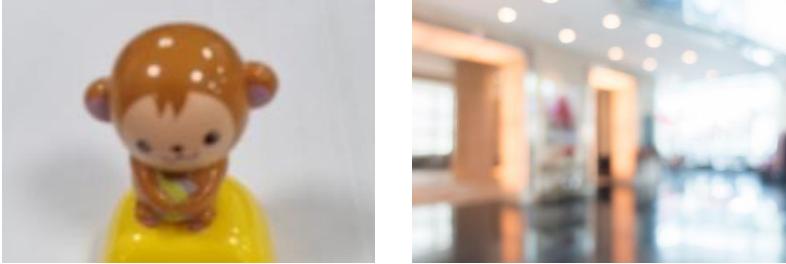
Image	Description
	<p>4. Check if the connector is disengaged at first.</p> <p>If connector is okay, replace the camera module with new one and check the device.</p> <ul style="list-style-type: none"> <li>- upper : Front camera</li> <li>- middle : Depth camera</li> <li>- lower : rear camera</li> </ul>
	<p>5. If not, finally, exchange the PBA.</p>

# 6-4. Camera

## 6-4-4. Abnormal AF(Rear Camera)

### 1) Symptom

- Description : Out of focus for rear camera



### 2) Defect Decision Conditions

- Description : The image of rear camera is out of focus.

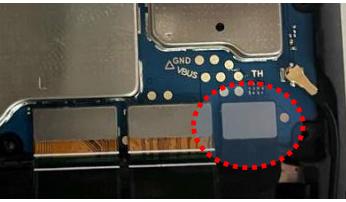
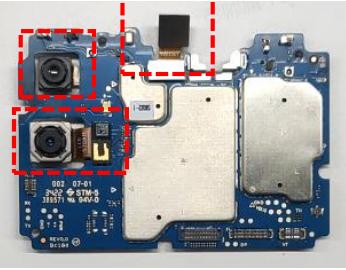
### 3) Repair Guide

- **Caution : Disconnect battery connector first when it shows.**

Image	Description
	<p>1. Check the camera deco glass.  - Should be clean and no particle.</p>
	<p>2. Execute cam test of *#*#88#*#*.to figure out which camera has defect.  - Camera back : rear camera  - Camera Front : Front camera  - Camera backext : Depth camera</p>
<p>[AOD Jig] [AOD mini]</p>	<p>3. Disassemble the device.  - Refer to '<u><a href="#">Disassembly and assembly video guide for Galaxy A04e</a></u>' from the GSPN.</p>

# 6-4. Camera

## 6-4-4. Abnormal AF(Rear Camera)

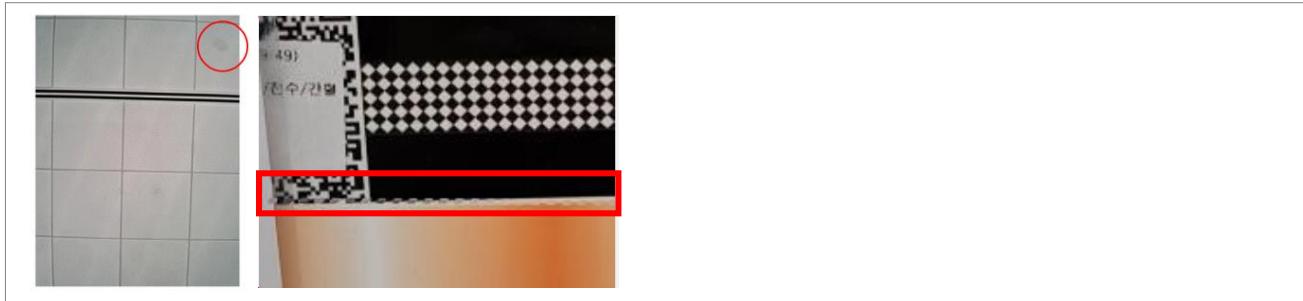
Image	Description
 	<p><b>[Attention]</b></p> <p>4. Disconnect Battery Connector (SOC11003) at first.</p>
 	<p>5. Replace the camera module with new one and check the device.</p> <ul style="list-style-type: none"> <li>- upper : Front camera</li> <li>- middle : Depth camera</li> <li>- lower : rear camera</li> </ul>
 	<p>6. If the device is not working normally with new resistors, exchange the PBA.</p>

## 6-4. Camera

## 6-4-5. Abnormal Preview(Rear Camera)

## 1) Symptom

- Description : Abnormal display of rear camera

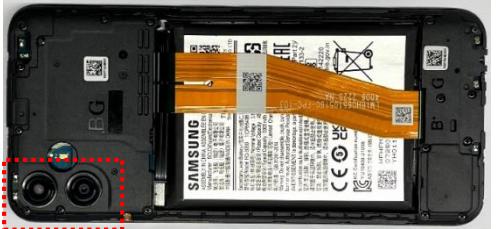
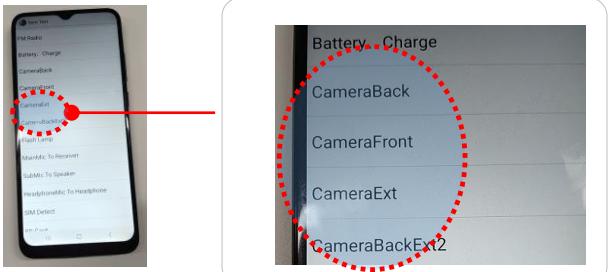


## 2) Defect Decision Conditions

- Description : Blemishes or dots on image

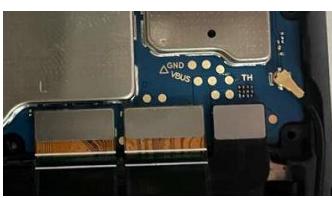
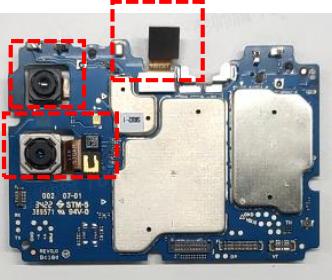
### 3) Repair Guide

- Caution : Disconnect battery connector first when it shows.

Image	Description
	<p>1. Check the camera deco glass and lens.  - Should be clean and no particle.</p>
	<p>2. Execute cam test of *#0*# to figure out which camera has defect.  - Camera back : rear camera  - Camera Front : Front camera  - Camera backext : Depth camera</p>
 <p>[AOD Jig]</p>	<p>3. Disassemble the device.  - Refer to '<u><a href="#">Disassembly and assembly video guide for Galaxy A04e</a></u>' from the GSPN.</p>

# 6-4. Camera

## 6-4-5. Abnormal Preview(Rear Camera)

Image	Description
 <div style="border: 1px solid black; padding: 5px; display: inline-block;">  </div>	<p><b>[Attention]</b></p> <p>4. Disconnect Battery Connector (SOC11003) at first.</p>
 <div style="border: 1px solid black; padding: 5px; display: inline-block;">  </div>	<p>5. Replace the camera module with new one and check the device.</p> <ul style="list-style-type: none"> <li>- upper : Front camera</li> <li>- middle : Depth camera</li> <li>- lower : rear camera</li> </ul>

# 6-5. Audio

## 6-5-1. SPK sound abnormal

### 1) Symptom

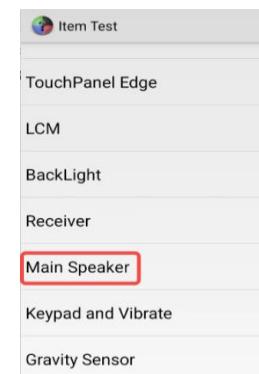
- Description : SPK sound is abnormal (low、zizi noise、mute .etc)

### 2) Defect Decision Conditions

- Description : The phone sounds abnormally

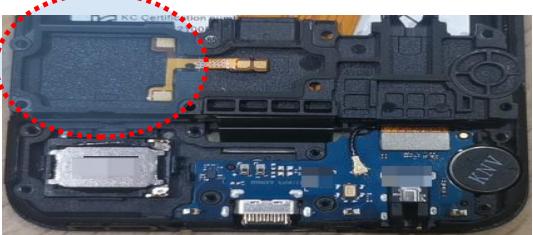
### 3) Repair Guide

**- Caution : Shut down device before exchanging the material**

Image	Description
	<p>1. Execute (*#*#88#*#*) on dial-board to enter engineering mode</p>
	<p>2. Click “Main Speaker” to reproduce NG item or check SPK function.</p> <p>-For further confirm ,please do following steps including cosmetic checking and swap module verification</p>

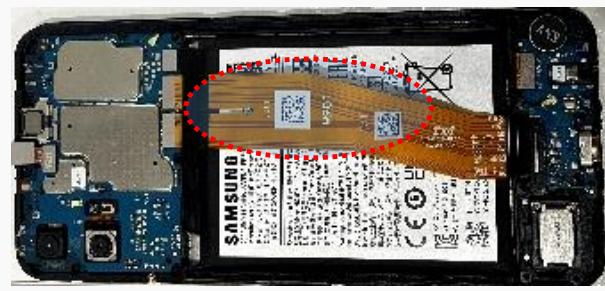
# 6-5. Audio

## 6-5-1. SPK sound abnormal

Image	Description
 <span data-bbox="138 522 347 549">SPK Hole Cosmetic</span> <span data-bbox="491 522 599 549">SPK foam</span>	<p>3. Checking SPK hole Cosmetic: nothing is abnormal (without damage and residual material .etc)          If it is ok, please disassemble device, and check SPK foam whether is ok. If all are OK, please reassemble to check.</p> <p>-For every checking item, that need to be verified whether device is working properly. If verify is ok, please continue next step.</p>
 <span data-bbox="192 1112 491 1139">SPK back cavity sealing box</span>	<p>4. If step 3 is ok, then you need to check cosmetic of SPK back cavity sealing box, to confirm whether it is ok. If ok, you need further reassemble them.</p> <p>-For every checking item, that need to be verified whether device is working properly. If verify is ok, please continue next step.</p>
 <span data-bbox="332 1576 437 1603">SUB PB</span> 	<p>5. Check KB Cosmetic and connector, if it is OK, please reassemble KB. If still OK, you need exchange a new KB to double check</p> <p>-For every checking item, that need to be verified whether device is working properly. If verify is ok, please continue next step.</p>

# 6-5. Audio

## 6-5-1. SPK sound abnormal

Image	Description
 	<p>6. Separate B shell from MB, check MB cosmetic. if it is OK, need to further check connector. If above checking points all OK, please reassemble MB, if still OK, you need exchange a new MB to double check.</p> <p>-For every checking item, that need to be verified whether device is working properly. if verify is ok, please continue next step.</p>
	<p>7. Check SPK Cosmetic, if it is OK .please reassemble SPK component, if still OK, you need exchange a new SPK to double check</p> <p>-For every checking item, that need to be verified whether device is working properly. if verify is ok, please continue next step</p>
	<p>8. If above checking points all are OK, you need check FPC(that is connected to screen). if cosmetic is ok , need to exchange a new FPC , then do further verification.</p> <p>-For every checking item, that need to be verified whether device is working properly.</p>

# 6-5. Audio

## 6-5-2. Earphone sound abnormal (TX&RX)

### 1) Symptom

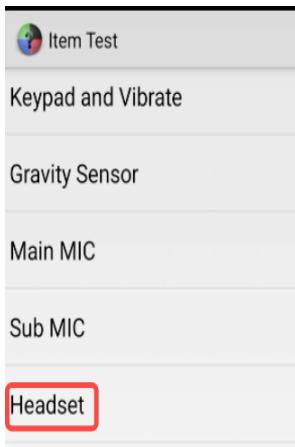
- Description : Earphone sound is abnormal (low、zizi noise、mute .etc)

### 2) Defect Decision Conditions

- Description : The phone sounds abnormally

### 3) Repair Guide

**- Caution : Shut down device before exchanging the material**

Image	Description
	<p>1. Execute (*#*#88#*#*) on dial-board to enter engineering mode</p>
	<p>2. Click “Headset” to reproduce NG item or check Headset function. -For further confirm ,please do following steps including cosmetic checking and swap module verification</p>

# 6-5. Audio

## 6-5-2. Earphone sound abnormal (TX&RX)

Image	Description
 <p data-bbox="213 542 501 572">Earphone plugin/out Hole</p>	<p>3. Checking EP plugin/out hole Cosmetic: nothing is abnormal (without damage and residual material .etc)          If it is ok, please disassemble device, and check EP socket whether is ok          If OK, please reassemble to check.</p> <p>-For every checking item, that need to be verified whether device is working properly. if verify is ok, please continue next step.</p>
 <p data-bbox="276 917 468 946">Earphone socket</p>	<p>4. Check KB Cosmetic and connector, if it is OK .please reassemble KB, if still OK, you need exchange a new KB to double check</p> <p>-For every checking item, that need to be verified whether device is working properly. if verify is ok, please continue next step.</p>

# 6-5. Audio

## 6-5-2. Earphone sound abnormal (TX&RX)

Image	Description
 	<p>5. Separate B shell from MB, check MB cosmetic. if it is OK, need to further check connector. If above checking points all OK, please reassemble MB, if still OK, you need exchange a new MB to double check.</p> <p>-For every checking item, that need to be verified whether device is working properly. if verify is ok, please continue next step.</p>
	<p>6. If above checking points all are OK, you need check FPC (that is connected to screen). if cosmetic is ok, need to exchange a new FPC, then do further verification.</p> <p>-For every checking item, that need to be verified whether device is working properly.</p>

# 6-5. Audio

## 6-5-3. RCV sound abnormal

### 1) Symptom

- Description : RCV sound is abnormal (low、zizi noise、mute .etc)

### 2) Defect Decision Conditions

- Description : The phone sounds abnormally

### 3) Repair Guide

**- Caution : Shut down device before exchanging the material**

Image	Description
	<p>1. Execute (*#*#88#*#*) on dial-board to enter engineering mode</p>
	<p>2. Click “Receiver” to reproduce NG item or check RCV function.  -For further confirm ,please do following steps including cosmetic checking and swap module verification</p>

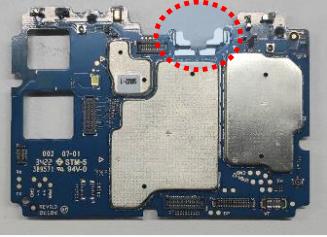
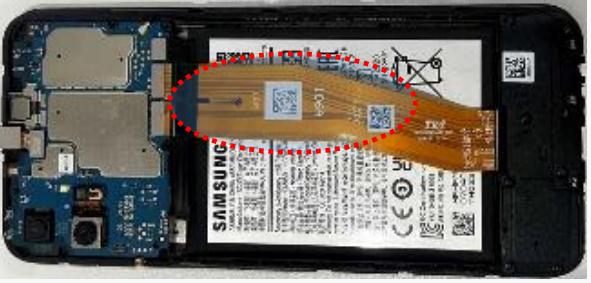
# 6-5. Audio

## 6-5-3. RCV sound abnormal

Image	Description
 RCV Deco	<p>3. Checking RCV hole Cosmetic: nothing is abnormal (without damage and residual material .etc)</p> <p>-For every checking item, that need to be verified whether device is working properly. if verify is ok, please continue next step.</p>
 SUB PBA	<p>4. Check KB Cosmetic and connector, if it is OK .please reassemble KB, if still OK, you need exchange a new KB to double check</p> <p>-For every checking item, that need to be verified whether device is working properly. if verify is ok, please continue next step.</p>
 Connector	

# 6-5. Audio

## 6-5-3. RCV sound abnormal

Image	Description
 	<p>5. Separate B shell from MB, check MB cosmetic、connector、RCV magnet steel&amp;spring steel.If above checking points all OK, please reassemble MB,if still OK,you need exchange a new MB to double check.</p> <p>-For every checking item,that need to be verified whether device is working properly.if verify is ok,please continue next step.</p>
 	<p>6.After separating MB,check RCV Component whether it is damaged or poor connect with MB.If all are OK, please reassemble RCV,if still OK,you need exchange a new RCV to double check.</p> <p>-For every checking item,that need to be verified whether device is working properly.if verify is ok,please continue next step.</p>
	<p>7.If above checking points all are OK,you need check FPC(that is connected to screen).if cosmetic is ok ,need to exchange a new FPC ,then do further verification.</p> <p>-For every checking item,that need to be verified whether device is working properly.</p>

# 6-5. Audio

## 6-5-4. Bottom MIC sound abnormal

### 1) Symptom

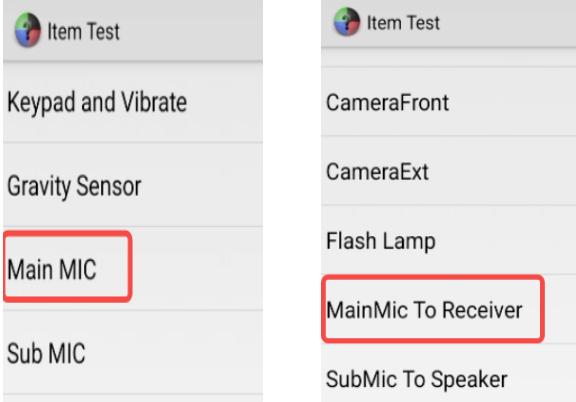
- Description : Bottom MIC sound is abnormal (low、zizi noise、mute .etc)

### 2) Defect Decision Conditions

- Description : The phone sounds abnormally

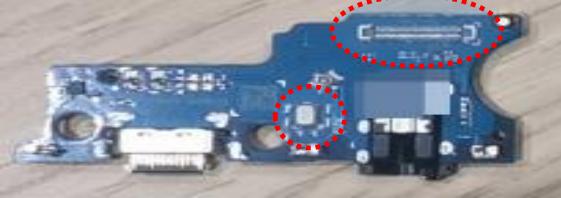
### 3) Repair Guide

**- Caution : Shut down device before exchanging the material**

Image	Description
 <p>*#*#88#*#*</p> <p>1 2 3 GHI ABC DEF 4 5 6 JKL MNO 7 8 9 PQRS TUV WXYZ * 0 # + ↺</p> <p>📞 ↺</p>	<p>1. Execute (*#*#88#*#*) on dial-board to enter engineering mode</p>
 <p>Item Test</p> <p>Keypad and Vibrate</p> <p>Gravity Sensor</p> <p>Main MIC</p> <p>Sub MIC</p> <p>Item Test</p> <p>CameraFront</p> <p>CameraExt</p> <p>Flash Lamp</p> <p>MainMic To Receiver</p> <p>SubMic To Speaker</p>	<p>2. Click “Main MIC”&amp;“MainMic To Receiver” to reproduce NG item or check Bottom MIC function.</p> <p>-Note:when checking “MainMic To Receiver”,need to guarantee RCV is OK.</p> <p>-For further confirm ,please do following steps including cosmetic checking and swap module verification</p>

# 6-5. Audio

## 6-5-4. Bottom MIC sound abnormal

Image	Description
 <p data-bbox="308 549 501 574">Bottom MIC Hole</p>  <p data-bbox="318 861 486 886">Sealing Rubber</p>	<p>3. Checking Bottom MIC hole Cosmetic: nothing is abnormal(without damage and residual material .etc)          If it is ok, please disassemble device, and check Sealing Rubber, whether is ok. If all are ok, please reassemble to check performance. If their cosmetic is bad, please exchange new material, then reassemble to check.</p> <p>-For every checking item, that need to be verified whether device is working properly. If verify is ok, please continue next step.</p>
 	<p>4. Check KB Cosmetic especially MIC and connector. meanwhile disassemble KB to check MIC foam .</p> <ul style="list-style-type: none"> <li>-1、 if all are OK , please reassemble KB,</li> <li>-2、 if foam is damaged, need to exchange new foam , then reassemble to check</li> <li>-3、 if above verifications still OK, you need exchange a new KB to double check</li> </ul> <p>-For every checking item, that need to be verified whether device is working properly. If verify is ok, please continue next step.</p>

# 6-5. Audio

## 6-5-4. Bottom MIC sound abnormal

Image	Description
 	<p>5. Separate B shell from MB, check MB cosmetic&amp;connector. If above checking points all OK, please reassemble MB, if still OK, you need exchange a new MB to double check.</p> <p>-For every checking item, that need to be verified whether device is working properly. If verify is ok, please continue next step.</p>
	<p>6. If above checking points all are OK, you need check FPC (that is connected to screen). If cosmetic is ok, need to exchange a new FPC, then do further verification.</p> <p>-For every checking item, that need to be verified whether device is working properly.</p>

# 6-5. Audio

## 6-5-5. Top MIC sound abnormal

### 1) Symptom

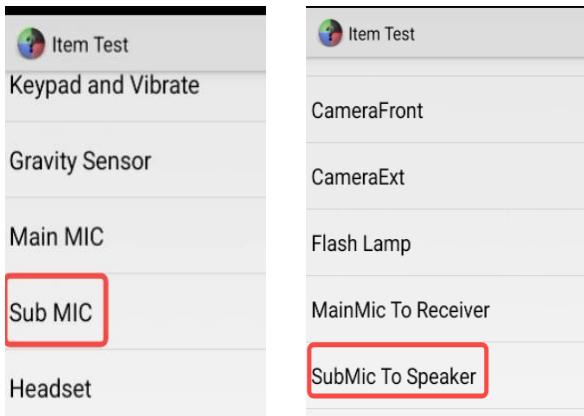
- Description : Bottom MIC sound is abnormal (low、zizi noise、mute .etc)

### 2) Defect Decision Conditions

- Description : The phone sounds abnormally

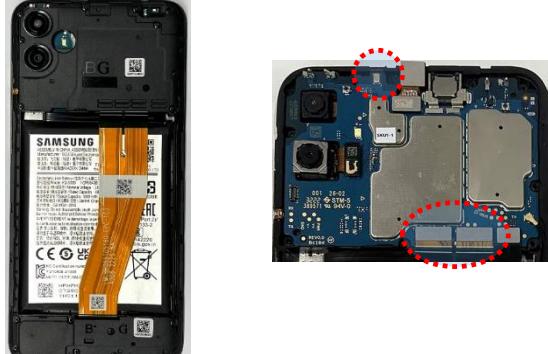
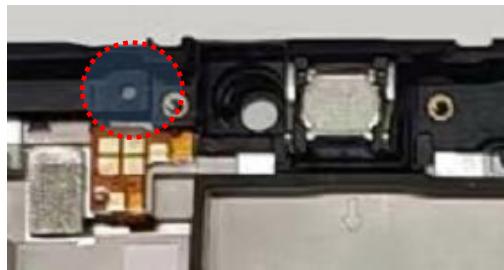
### 3) Repair Guide

**- Caution : Shut down device before exchanging the material**

Image	Description
	<p>1. Execute (*#*#88#*#*) on dial-board to enter engineering mode</p>
	<p>2. Click “Sub MIC” &amp; “SubMic To Speaker” to reproduce NG item or check Top MIC function.</p> <p>-Note:when checking “SubMic To Speaker”,need to guarantee SPK is OK.</p> <p>-For further confirm ,please do following steps including cosmetic checking and swap module verification</p>

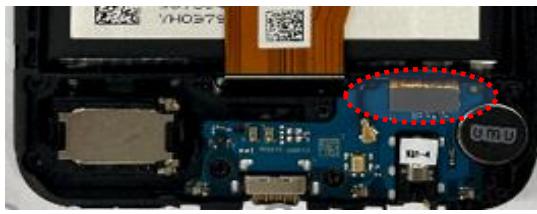
# 6-5. Audio

## 6-5-5. Top MIC sound abnormal

Image	Description
 <p>Top MIC Hole</p>  <p>Sealing Rubber</p>	<p>3. Checking Top MIC hole Cosmetic: nothing is abnormal(without damage and residual material .etc)          If it is ok,please disassemble device, and check Sealing Rubber, whether is ok. if all are ok, please reassemble to check performance. if their cosmetic is bad, please exchange new material, then reassemble to check.</p> <p>-For every checking item, that need to be verified whether device is working properly. if verify is ok, please continue next step.</p>
 <p>(SUB MIC)</p>  <p>Foam</p>	<p>4. Separate B shell from MB, check MB Cosmetic especially MIC and connector. meanwhile disassemble MB to check MIC foam .</p> <ul style="list-style-type: none"> <li>-1、 if all are OK , please reassemble MB,</li> <li>-2、 if foam is damaged, need to exchange new foam , then reassemble to check</li> <li>-3、 if above verifications still OK, you need exchange a new MB to double check</li> </ul> <p>-For every checking item, that need to be verified whether device is working properly. if verify is ok, please continue next step.</p>

# 6-5. Audio

## 6-5-5. Top MIC sound abnormal

Image	Description
	<p>5. Check KB Cosmetic and connector,if it is OK .please reassemble KB,if still OK,you need exchange a new KB to double check</p>
	<p>-For every checking item,that need to be verified whether device is working properly.if verify is ok,please continue next step.</p>
	<p>6.If above checking points all are OK,you need check FPC(that is connected to screen).if cosmetic is ok ,need to exchange a new FPC ,then do further verification.</p> <p>-For every checking item,that need to be verified whether device is working properly.</p>

# 6-6. Sensors and Sensor Hub

## 6-6-1. Sensors and Sensor Hub Problem

### 1) Symptom

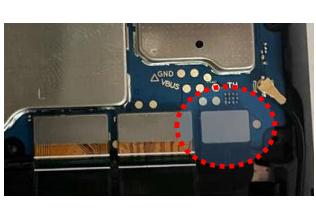
- Description : Any or all Sensors do not work. (6Axis, Magnetic, Barometer, Proximity/Ambient Light)

### 2) Defect Decision Conditions

- Description : No response.

### 3) Repair Guide

- **Caution : Disconnect battery connector first when it shows.**

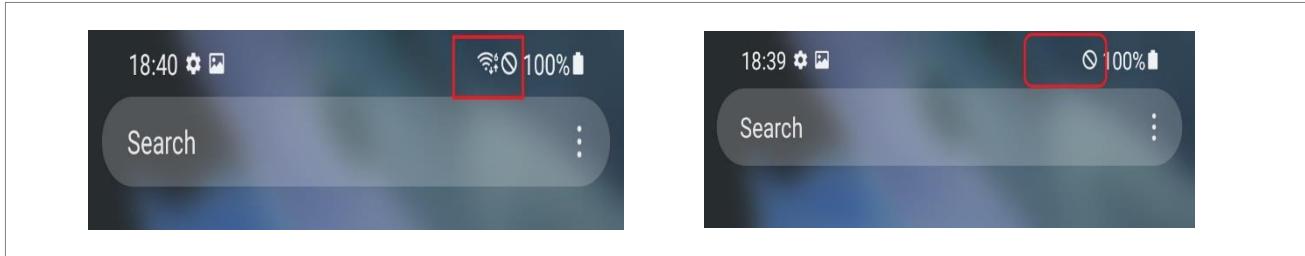
Image	Description
 [AOD Jig]	<p>1. Disassemble the device.            - Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</p>
  [Attention]	<p>2. Disconnect Battery Connector (SOC11003) at first.</p>
 	<p>3. Exchange the PBA with new one and check the device.</p>

# 6-7. Connectivity (Wi-Fi, GPS)

## 6-7-1. Wi-Fi Connection Problem

### 1) Symptom

- Description : Wi-Fi Connection Problem after Wi-Fi On.  
No Connection to AP or frequent disconnection

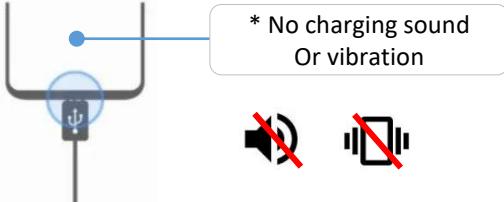
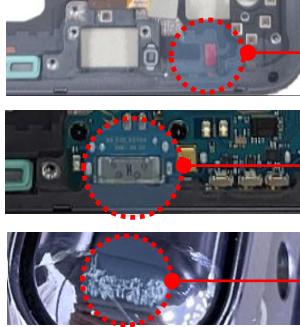


### 2) Defect Decision Conditions

- The phone shows Wi-Fi on without problem after rebooting.  
But It won't connect to AP or will be disconnected automatically after connection.  
Also, It shows weak Wi-Fi signal bar than normal device.
- Setting > Wi-Fi > SCAN : Number of APs is less than normal device when searching AP

### 3) Repair Guide

- **Caution : Disconnect battery connector first when it shows.**

Image	Description
 <p>* No charging sound Or vibration</p>	<ol style="list-style-type: none"> <li>1. Check the charging notification sound or vibration when connected to charger. - Should be no sound and no vibration. - The device keep 'No display' status.</li> </ol>
 <p>[AOD Jig] [AOD mini]</p>	<ol style="list-style-type: none"> <li>2. Disassemble the device. - Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</li> </ol>
 <p>Water indicator tripped USB charging port burnt Cracked case</p>	<ol style="list-style-type: none"> <li>3. Check the disassembled device for OOW. - Water damage. - Part burnt. (Charging port, PBA, Battery and others) - Broken traces and others.</li> </ol>

# 6-7. Connectivity (Wi-Fi, GPS)

## 6-7-1. Wi-Fi Connection Problem

Image	Description
	<p>1. Check Wi-Fi Function On</p> <ul style="list-style-type: none"> <li>- Enable Wi-Fi function</li> <li>- If it is ok, turn off the phone</li> </ul>
	<p>2. Check the back cover</p> <ul style="list-style-type: none"> <li>- If there is a magnetic on the back cover, remove it</li> </ul>
	<p>3-1 . Replace the PBA</p>

# 6-7. Connectivity (Wi-Fi, GPS)

## 6-7-2. GPS Problem

### 1) Symptom

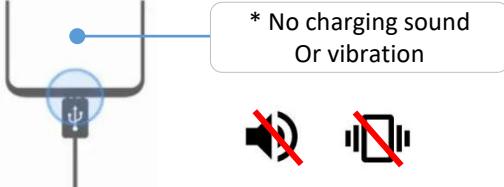
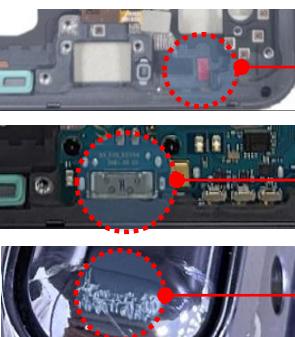
- Description : Received GPS signal problem after GPS On.

### 2) Defect Decision Conditions

- The phone shows GPS on without problem after rebooting.  
But It won't receive GPS signal after GPS On.  
Also, it shows weak performance than normal device while driving or using map

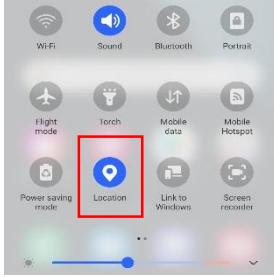
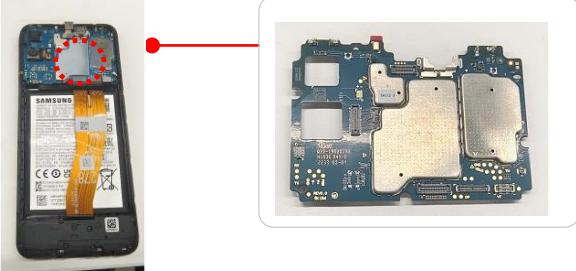
### 3) Repair Guide

- **Caution : Disconnect battery connector first when it shows.**

Image	Description
	<ol style="list-style-type: none"> <li>1. Check the charging notification sound or vibration when connected to charger. - Should be no sound and no vibration. - The device keep 'No display' status.</li> </ol>
 <div style="display: flex; justify-content: space-around; width: 100%;"> <span>[AOD Jig]</span> <span>[AOD mini]</span> </div>	<ol style="list-style-type: none"> <li>2. Disassemble the device. - Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</li> </ol>
 <div style="display: flex; justify-content: space-around; width: 100%;"> <span>Water indicator tripped</span> <span>USB charging port burnt</span> <span>Cracked case</span> </div>	<ol style="list-style-type: none"> <li>3. Check the disassembled device for OOW. - Water damage. - Part burnt. (Charging port, PBA, Battery and others) - Broken traces and others.</li> </ol>

# 6-7. Connectivity (Wi-Fi, GPS)

## 6-7-2. GPS Problem

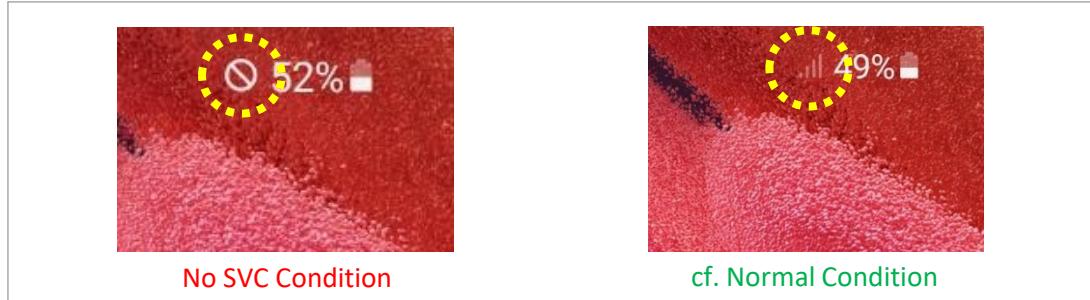
Image	Description
	<p>1-1. Check GPS is working properly - Setting - enable GPS function</p>
	<p>1-2. If not, replace the PBA</p>

# 6-8. NO SVC

## 6-8-1. NO SVC

### 1) Symptom

- Description : A prohibition mark shows on the right of the status bar instead of the antenna bars.

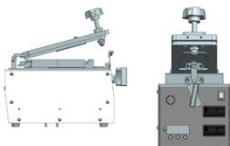


### 2) Defect Decision Conditions

- The phone continues to show this prohibition mark after rebooting or turning on and off airplane mode.
- Other phones around the phone maintain the normal condition.

### 3) Repair Guide

- **Caution : Disconnect battery connector first when it shows.**

Image	Description
 [AOD Jig]	<p>1. Disassemble the device.</p> <ul style="list-style-type: none"> <li>- Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</li> </ul>
 [AOD mini]	<p>[Attention]</p> <p>2. Disconnect Battery Connector at first.</p>

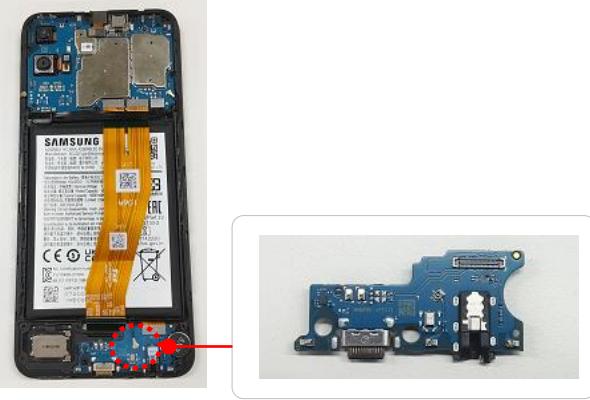
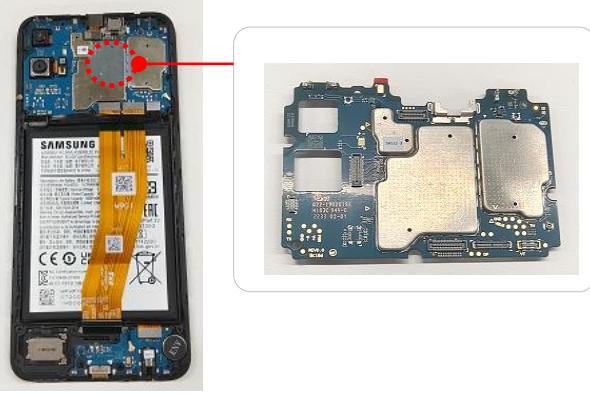
# 6-8. NO SVC

## 6-8-1. NO SVC

Image	Description
	<p>3. Check Antenna FPCB connectors are OK.</p> <p>Also, check FPCB condition.</p> <ul style="list-style-type: none"> <li>- Broken traces and others.</li> <li>- Little particles or dust which can disturb connections.</li> </ul>
	<p>4. Check Antenna C-clip is damaged.</p> <p>Also, check antenna contact points.</p>

# 6-8. NO SVC

## 6-8-1. NO SVC

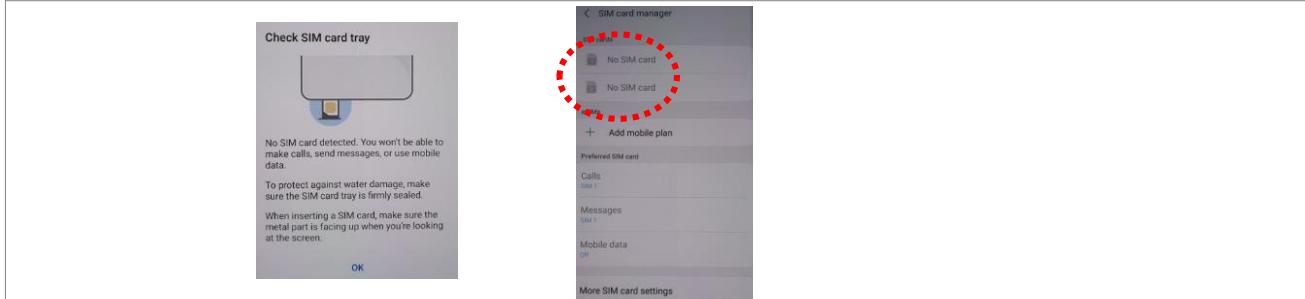
Image	Description
	<p>6-1. Check whether the SIM card slot of the mobile phone is properly inserted.</p>
	<p>6-2. If not, exchange the <u>SUB PBA</u> with new one and check the device</p>
	<p>7. Check the soldering status of RF chips and other electronic components on the PBA, and resolder it if the soldering status is not ok. After that, check the device is working normally.  If not, exchange the PBA.</p>

# 6-9. USIM

## 6-9-1. Abnormal USIM

### 1) Symptom

- Description : USIM card is not recognized.

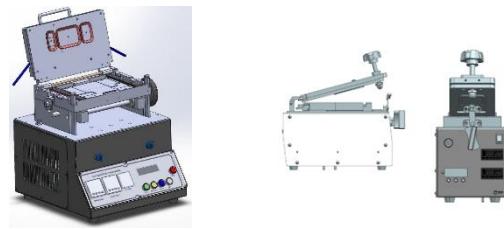
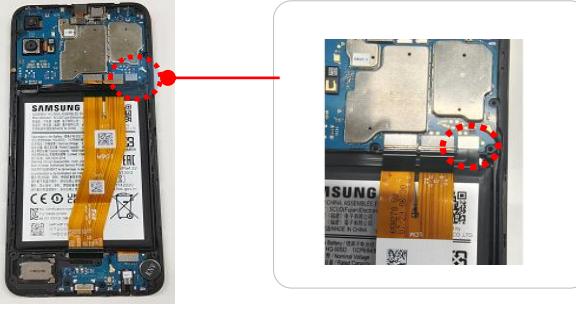


### 2) Defect Decision Conditions

- Description : The changed SIM card is not recognized.

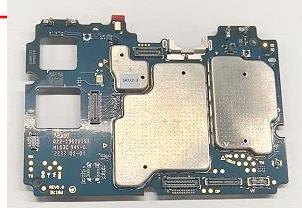
### 3) Repair Guide

- Caution : **Disconnect battery connector first when it shows.**

Image	Description
	<p>1. Check the USIM Card.  - Check if there is any problem using a normal SIM card.</p>
 <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span data-bbox="208 1560 309 1591">[AOD Jig]</span> <span data-bbox="511 1560 626 1591">[AOD mini]</span> </div>	<p>2. Disassemble the device.  - Refer to '<a href="#">Disassembly and assembly video guide for Galaxy A04e</a>' from the GSPN.</p>
	<p><b>[Attention]</b></p> <p>3. Disconnect Battery Connector (Ref. SOC11003) at first.</p>

# 6-9. USIM

## 6-9-1. Abnormal USIM

Image	Description
 	<p>4. Reboot, check the device is working normally. If not, exchange the PBA.</p>

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