

LIFECYCLE EXTENSION GUIDE



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Safety Notice

Any person attempting to service this chassis must familiarize with the chassis and be aware of the necessary safety precautions to be used when serving electronic equipment containing high voltage



Important Safety Notice

Product Announcement:

This product is certificated to meet RoHS Directive and Lead-Free produced definition. Using approved critical components only is recommended when the situation to replace defective parts. Vender assumes no liability express or implied, arising out of any unauthorized modification of design or replacing non-RoHS parts. Service providers assume all liability.

Qualified Repairability:

Proper service and repair is important to the safe, reliable operation of all series products. The service providers recommended by vender should being aware of notices listed in this service manual in order to minimize the risk of personal injury when perform service procedures. Furthermore, the possible existed improper repairing method may damage equipment or products. It is recommended that service engineers should have repairing knowledge, experience, as well as appropriate product training per new model before performing the service procedures.

NOTICE:

! To avoid electrical shocks, the products should be connected to an authorized power cord, and turn off the master power switch each time before removing the AC power cord.

! To prevent the product away from water or exposed in extremely high humidity environment.

! To ensure the continued reliability of this product, use only original manufacturer's specified parts.

! To ensure following safety repairing behavior, put the replaced part on the components side of PWBA, not solder side.

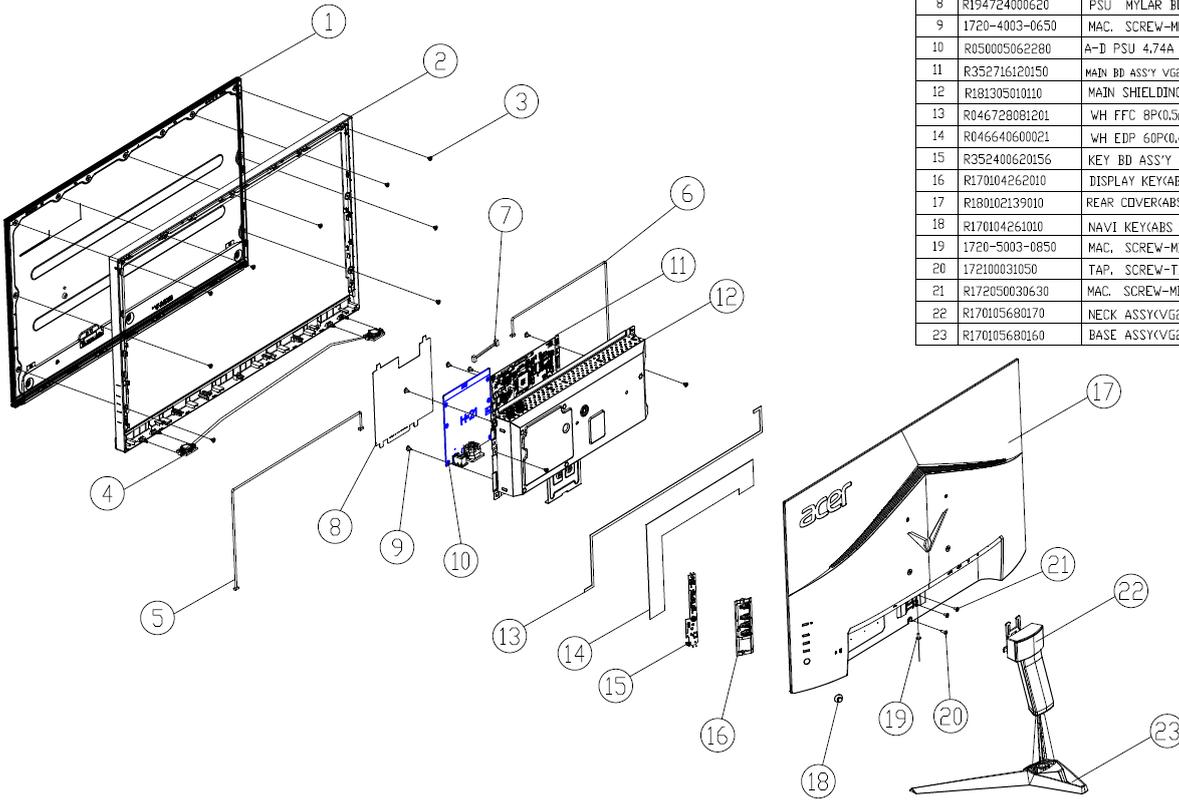
! To ensure using a proper screwdriver, follow the torque and force listed in assembly and disassembly procedures to screw and unscrew screws.

! Using Lead-Free solder to well mounted the parts.

! The fusion point of Lead-Free solder requested in the degree of 220°C.

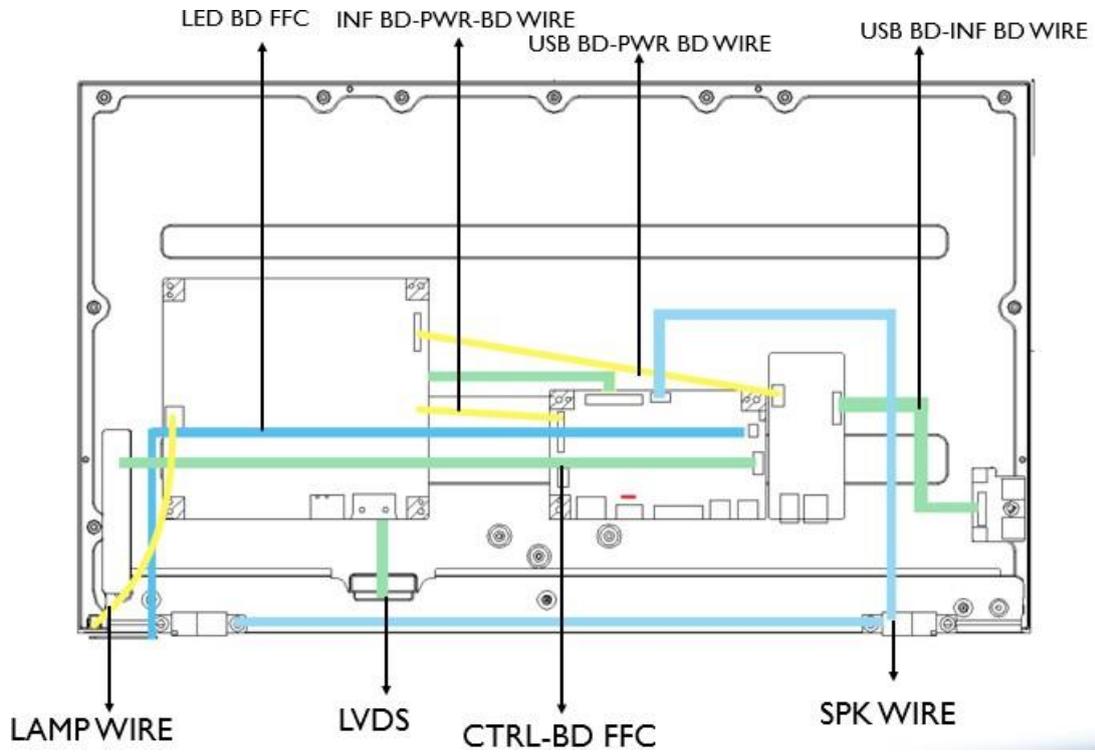
1. Exploded Diagram

1.1 Product Exploded Diagram



ITEM	PART NO.	Description
1	LM270WQA-RSANI	LM270WQA-SJAI
2	R180101138010	MID FRAME(ABS 94-HB/GA35AA00XVG272UP) ASSY
3	R172050030450	MAC. SCREW-MI M3.0*4.0L, BLK-NI
4	R1701-1903-2010	SPK 2W 4ohm 28.5*22*8mm(R600mm*L200mm) VECO For BV277 LF
5	R046730120010	WH A1251-H12/A1007H00-6P-2L*2 #28 550mm/450mm W/B LF
6	R046730120010	WH A1251-H12/A1007H00-6P-2L*2 #28 550mm/450mm W/B LF
7	R046711080010	WH A2501-H08/A2501-H06 #24 100mm W/B LF
8	R194724000620	PSU MYLAR BLACK(150*140*10.3)
9	1720-4003-0650	MAC. SCREW-MRF M3.0*6.0L, BLK-NI
10	R050005062280	A-D PSU 4.74A 19V (ADD-90W1_120x134mmx1.6t)_Acer VG272U P
11	R352716120150	MAIN BD ASSY VG272U_p_bnlpx (MST9UB6R02XLM270WQA-RSANDXK+
12	R181305010110	MAIN SHIELDING (SGCC 0.5T)XVG272UP (bnlpx) ASSY
13	R046728081201	WH FFC 8P(0.5mm) 780mm(3FOLD)60V(A8+AS)LF
14	R046640600021	WH EDP 60P(0.4mm)#40 300mm(Acetate+KAPTON+3M) Blue LF
15	R352400620156	KEY BD ASSY (B247Y&V247Y)
16	R170104262010	DISPLAY KEY(ABS 94-HB/J13417B5)(BV247Y)
17	R180102139010	REAR COVER(ABS 94-HB/GA35AA00XVG272UP (bnlpx) Assy
18	R170104261010	NAVI KEY(ABS 94-HB/J13417B5)(BV247Y)
19	1720-5003-0850	MAC. SCREW-MI M3.0*8.0L, BLK-NI
20	172100031050	TAP. SCREW-TB #3*10.0L, BLK-NI
21	R172050030630	MAC. SCREW-MI M3.0*6.0L, BLK-ZNNI(HEAD DIAMETER 7.0)
22	R170105680170	NECK ASSY(VG272UP)(BLUE)
23	R170105680160	BASE ASSY(VG272UP)(BLUE)

2. Wiring connectivity diagram



3. Mechanical Instruction

Tools Required

List the type and size of the tools that would typically can be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

Tool Description:

- working table
- Screw-driver
- Knife
- glove
- cleaning cloth
- ESD protection

4. Assembly and Disassembly SOP

VG272U

4.1 Disassembly Procedures

Preparation before disassemble

1. Clean the room for disassemble
2. Identify the area for monitor
3. Check the position that the monitors be placed and the quantity of the monitor ;prepare the area for material flow; according to the actual condition plan the disassemble layout
4. Prepare the implement, equipment, materials as bellow:
 - 1) working table
 - 2) Screw-driver
 - 3) knife
 - 4) glove
 - 5) cleaning cloth
 - 6) ESD protection

Step. 1

Pull the base & neck assembly out



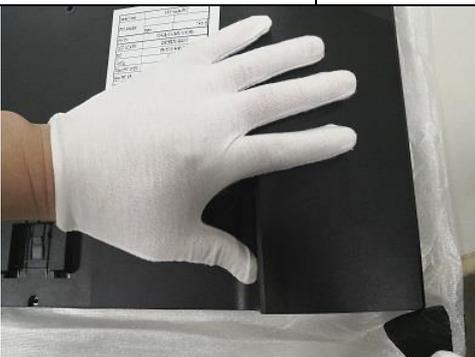
Step. 2

Unscrew four screws



Step. 3

Separate hooks between MID_FRAME and R/C



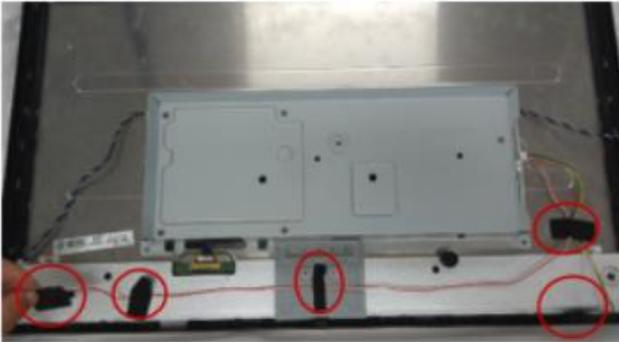
Step. 4

Pull up the Rear Cover and pull out all connectors



Step. 5

Separate SPK from MID_FRAME ,Main-Shielding and LCM



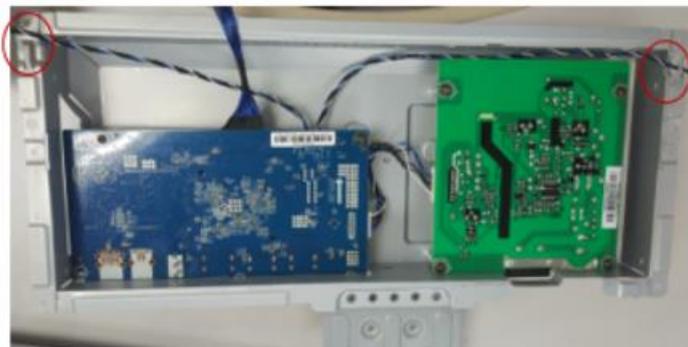
Step. 6

Unscrew two screws and remove main-shielding from LCM



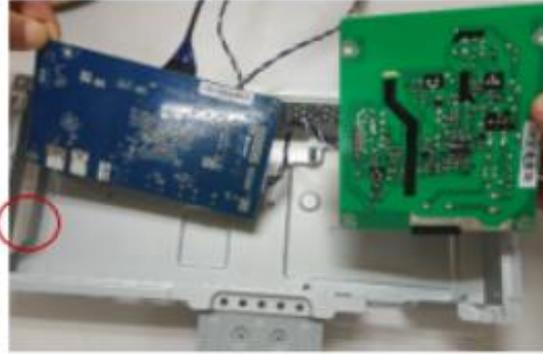
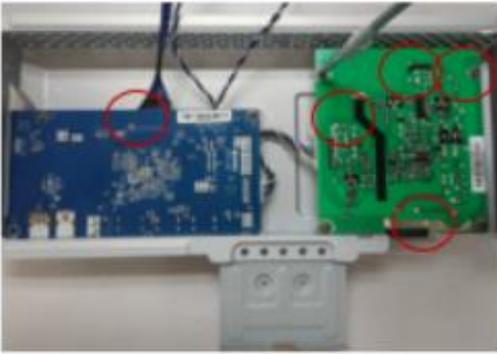
Step. 7

Separate mylar and move wires from shielding's hook



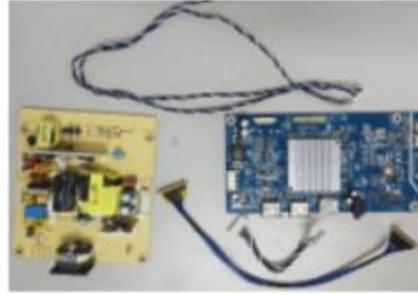
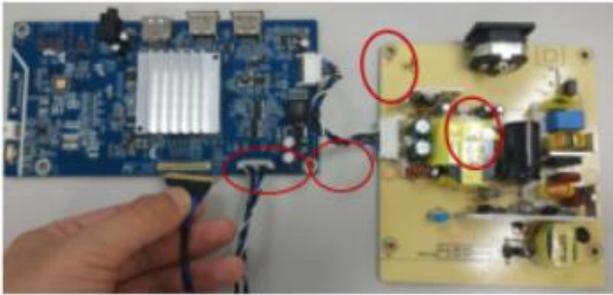
Step. 8

Unscrew six screws and remove main board PCBA from main shielding.



Step. 9

Remove connector cable and separate main board and power board



Step. 10

Unscrew nine screws and separate MID FRAME and LCM



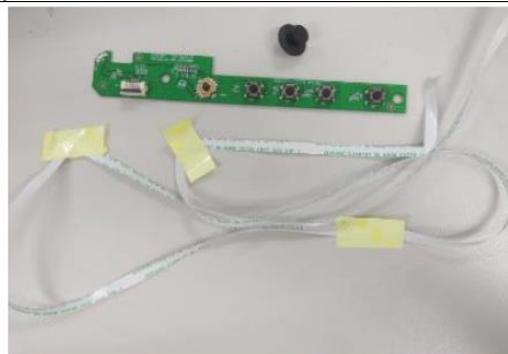
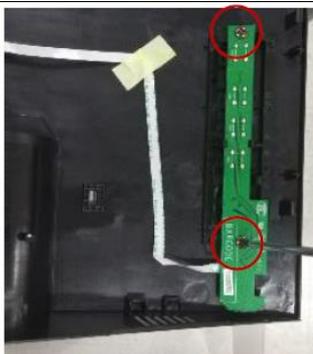
Step. 11

Unscrew six screws and remove main board PCBA from main shielding.



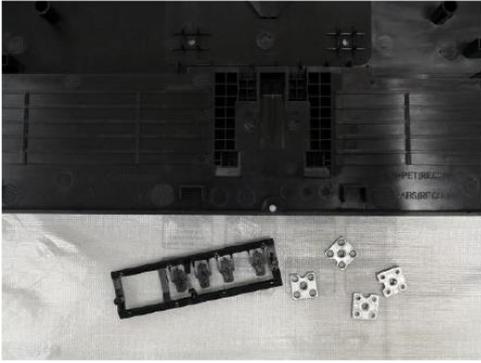
Step. 12

Unscrew two screws and disassemble key board from rear cover and separate navi key& cable



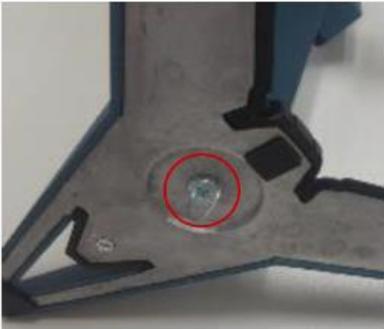
Step. 13

Separate wall-mount BKT and display key from rear cover



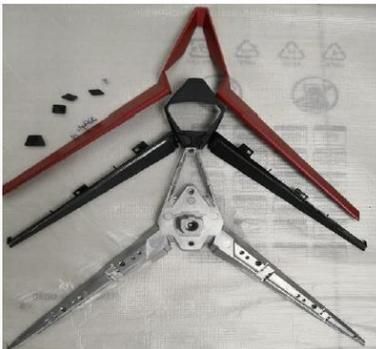
Step. 14

Unscrew the screw and separate base & neck assembly



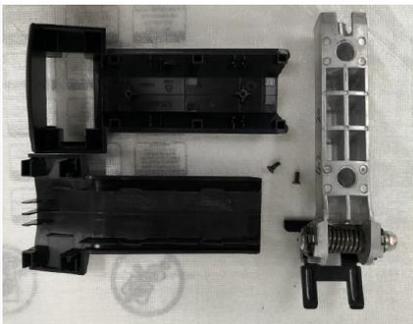
Step. 15

Remove four silicon rubbers and unscrew seven screws to separate metal and plastic cover



Step. 16

Separate back cover from neck , unscrew two screws and separate front cover from hinge assy.



NOTE: Circuit boards >10 cm² has been highlighted with the yellow rectangle as above image shows. Please detach the Circuit boards and follow local regulations for disposal.

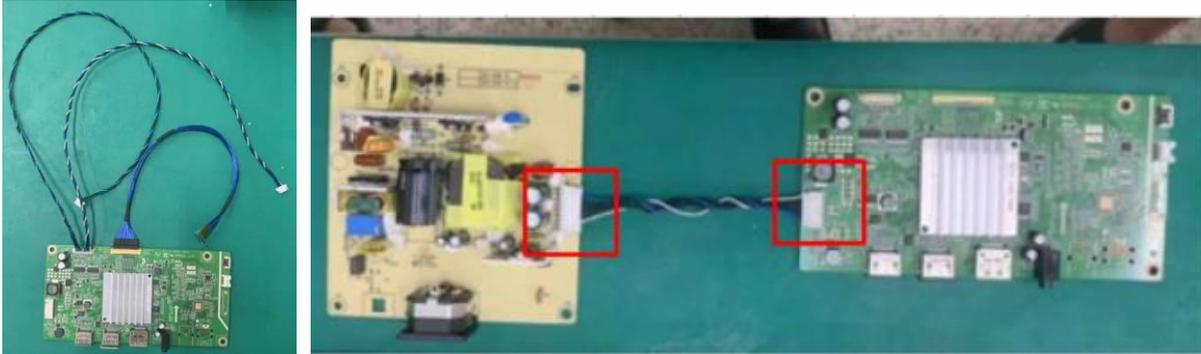
4.2 Assembly Procedures

Preparation before assemble:

1. Clean the room for work
2. Identify the area for material
3. Prepare the implement, equipment, materials as bellow:
 - 1) working table
 - 2) Screw-driver
 - 3) Knife
 - 4) glove
 - 5) cleaning cloth
 - 6) ESD protection

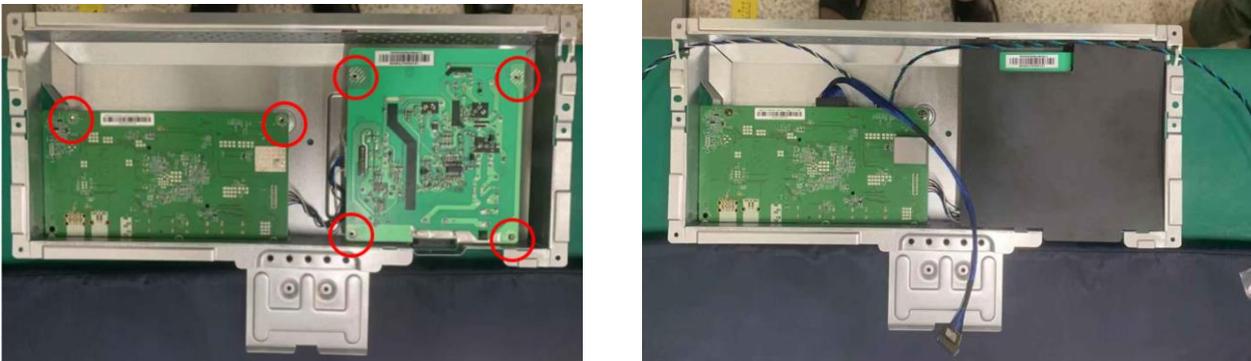
Step 1

Insert lamp wire & panel edp to the Main BD.
Connect LVDS to Main BD and Power BD



Step 2

Put the SHD on the worktable.
Locate Main BD and Power BD into the SHD.
Cover the mylar on Power BD
Lock 6 screws as the picture sequence.

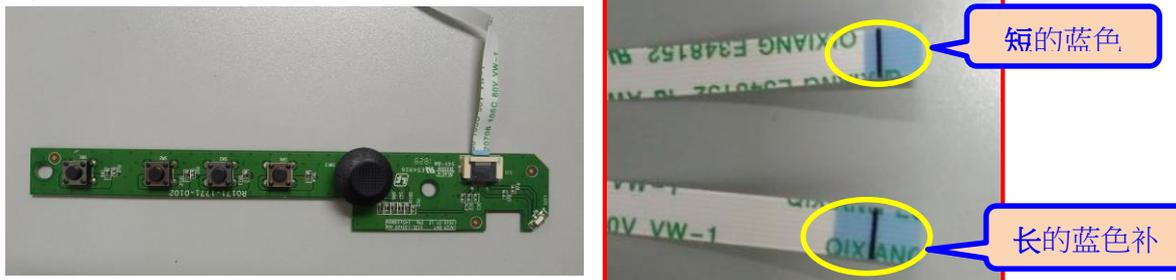


Step 3

Assemble navi key and FFC LED to the PCBA key BD as the picture 1.

Assemble the key BD on rear cover.
Lock two screws to the rear cover as below pic 2.
Fix the wire of speaker by yellow tape as below pic 3.

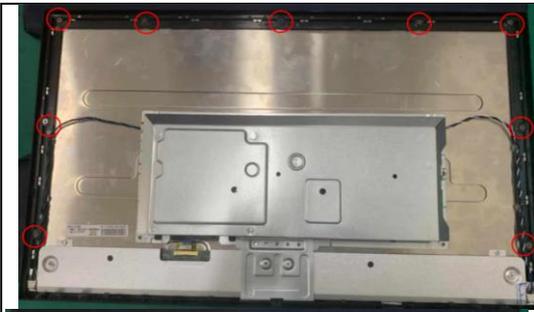
Pic 1



S2

Assemble the MF and panel

Take the Panel on the sponge cushion.
Insert the little connector of the lamp wire to panel as the picture 1, thread the lamp wire out of the hole of the MF. Assemble the MF onto the panel.
Lock 9 screws to the MF as the picture 2.
Insert the FFC wire to the Panel as the picture 3.



<p>S3 Assemble the key BD on R/C</p>	<p>Assemble navy key and FFC LED to the PCBA key BD as the picture 1. Assemble the key BD on rear cover. Lock two screws to the rear cover as below pic 2. Fix the wire of speaker by yellow tape as below pic 3.</p>
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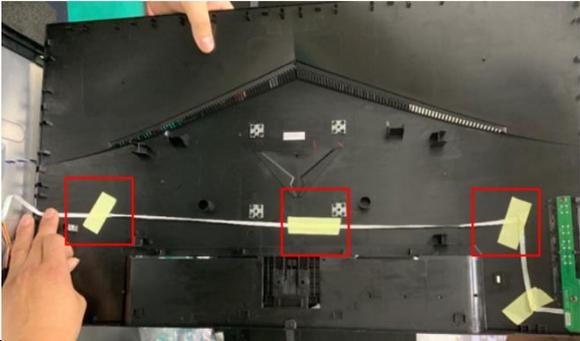
Pic 1



Pic 2



Pic 3



5. Troubleshooting

TROUBLESHOOTING

Before sending your LCD monitor for servicing, please check the troubleshooting list below to see if you can self-diagnose the problem.

(VGA Mode)

Problems	Current Status	Remedy
No Picture	LED ON	<ul style="list-style-type: none"> Using OSD, adjust brightness and contrast to maximum or reset to their default settings.
	LED OFF	<ul style="list-style-type: none"> Check the power switch.
		<ul style="list-style-type: none"> Check if AC power cord is properly connected to the monitor.
LED displays amber color	<ul style="list-style-type: none"> Check if video signal cable is properly connected at the back of monitor. 	
	<ul style="list-style-type: none"> Check if the power of computer system is ON. 	
Abnormal Picture	Unstable Picture	<ul style="list-style-type: none"> Check if the specification of graphics adapter and monitor is in compliance which may be causing the input signal frequency mismatch.
	Display is missing, center shift, or too small or too large in display size	<ul style="list-style-type: none"> Using OSD, adjust RESOLUTION, CLOCK, CLOCK-PHASE, H-POSITION and V-POSITION with non-standard signals.
		<ul style="list-style-type: none"> Using OSD, in case of missing full-screen image, please select other resolution or other vertical refresh timing.
Abnormal Sound (Only Audio-Input model) (Optional)	No sound, or sound level is too low	<ul style="list-style-type: none"> Check the audio cable with the host PC is connected.
		<ul style="list-style-type: none"> Check if the volume setup of the host PC is in minimum position and try to raise the volume level.

(HDMI/DP Mode)

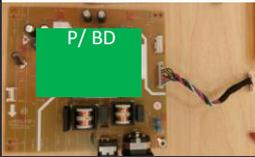
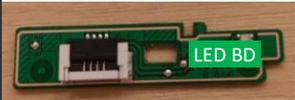
Problems	Current Status	Remedy
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LED displays amber color		<ul style="list-style-type: none"> Check if video signal cable is properly connected at the back of monitor.
		<ul style="list-style-type: none"> Check if the power of computer system is ON.
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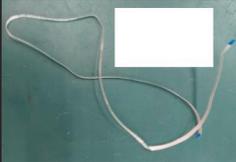
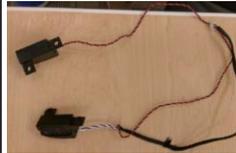
6. FRU List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of ACER B277. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

Please note that WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted on the printed Service Guide. For AUTHORIZED SERVICE PROVIDERS, your office may have a DIFFERENT part number code from those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional office to order FRU parts for repair and service of customer machines

NOTE: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional office on how to return it.

Category	ACER DESCRIPTION	Description	PART NO.
LCD			
	LED LCD Panel AUO 27" FHD None Glare M270HAN01.1 00 1000:1 14ms 250nits	LCDM 27W M270HAN01.1 00 Z	KL.27005.043
BOARD			
	MAIN BOARD 1A1H1DP+S USB	PCBA IF BD MI ADH+S USB B277	55.TBTM3.001
	POWER BOARD USB+SPK WITH WIRE	PCBA SPS BD MI USB+SPK B277	55.TBTM3.002
	FUNCTION KEY BOARD WITH BUTTON	PCBA CTRL BD MI B277	55.TBTM3.003
	USB BOARD	PCBA USB BD MI B277	55.TBTM3.004
	USB SIDE BOARD	PCBA USB SIDE BD MI B277	55.TBTM3.005
	LED BOARD	PCBA LED BD SMD B277	55.TBTM3.006

CABLE			
	CABLE-PANEL TO MAIN BOARD 30P 365MM	FFC LVDS 30P P1 365MM	50.TBTM3.003
	CABLE-FUNCTION KEY BOARD TO MAIN BOARD 8P 600MM	FFC 8P P1 600MM CTRL	50.TBTM3.004
	CABLE-POWER BOARD TO USB BOARD 6/6P 270MM	WIRE 6/6P 1007#26 270MM USB	50.TBTM3.005
	CABLE-USB BOARD TO USB SIDE BOARD 30P 170MM	FFC 30P P0.5 170MM USB3.0	50.TBTM3.006
	CABLE-LED BOARD TO MAIN BOARD 4P 615MM	FFC 4P P1 615MM LED	50.TBTM3.007
	CABLE-PANEL TO POWER BOARD 6/6P 175MM	WIRE 6/6P 1061 #30 175MM	50.TBTM3.008
SPEAKER/MICROPHONE			
	SPEAKER*2 2.5W 305/730MM	#SPK*2 2.5W 4OHM 305/730MM	23.TBTM3.001