

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.

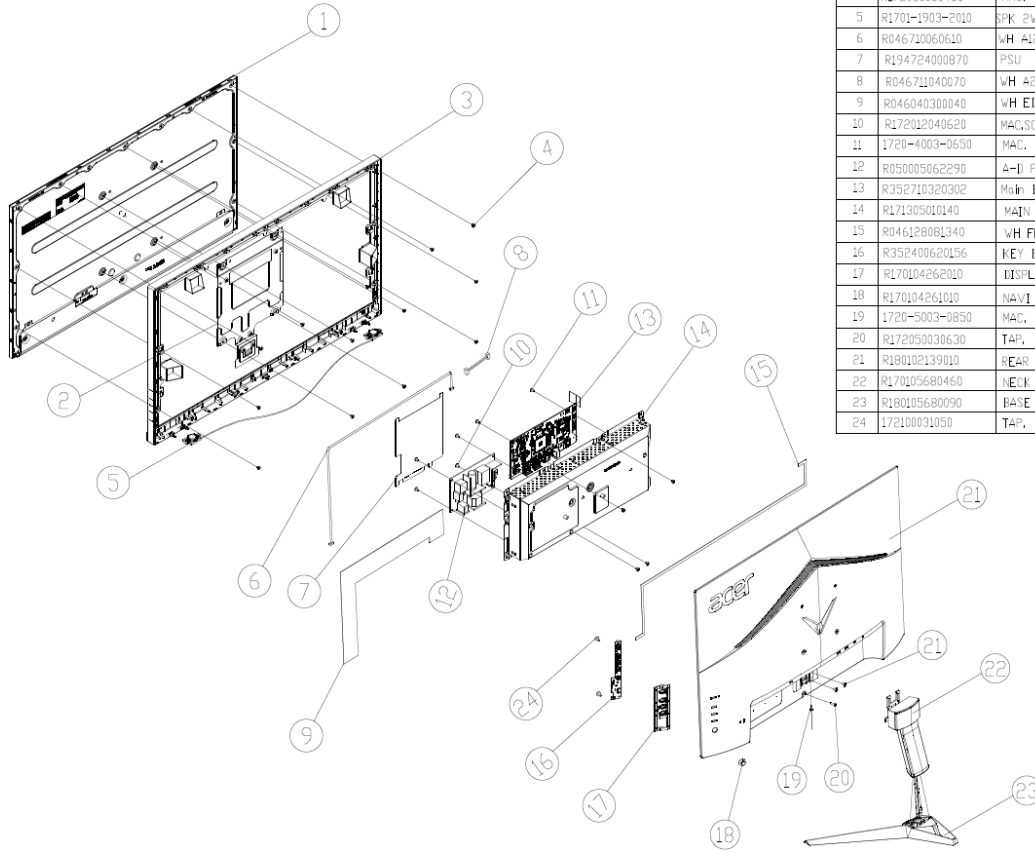
! To ensure following safety repairing behavior, put the replaced part on the components side of PWBA, not solder side.

! 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.

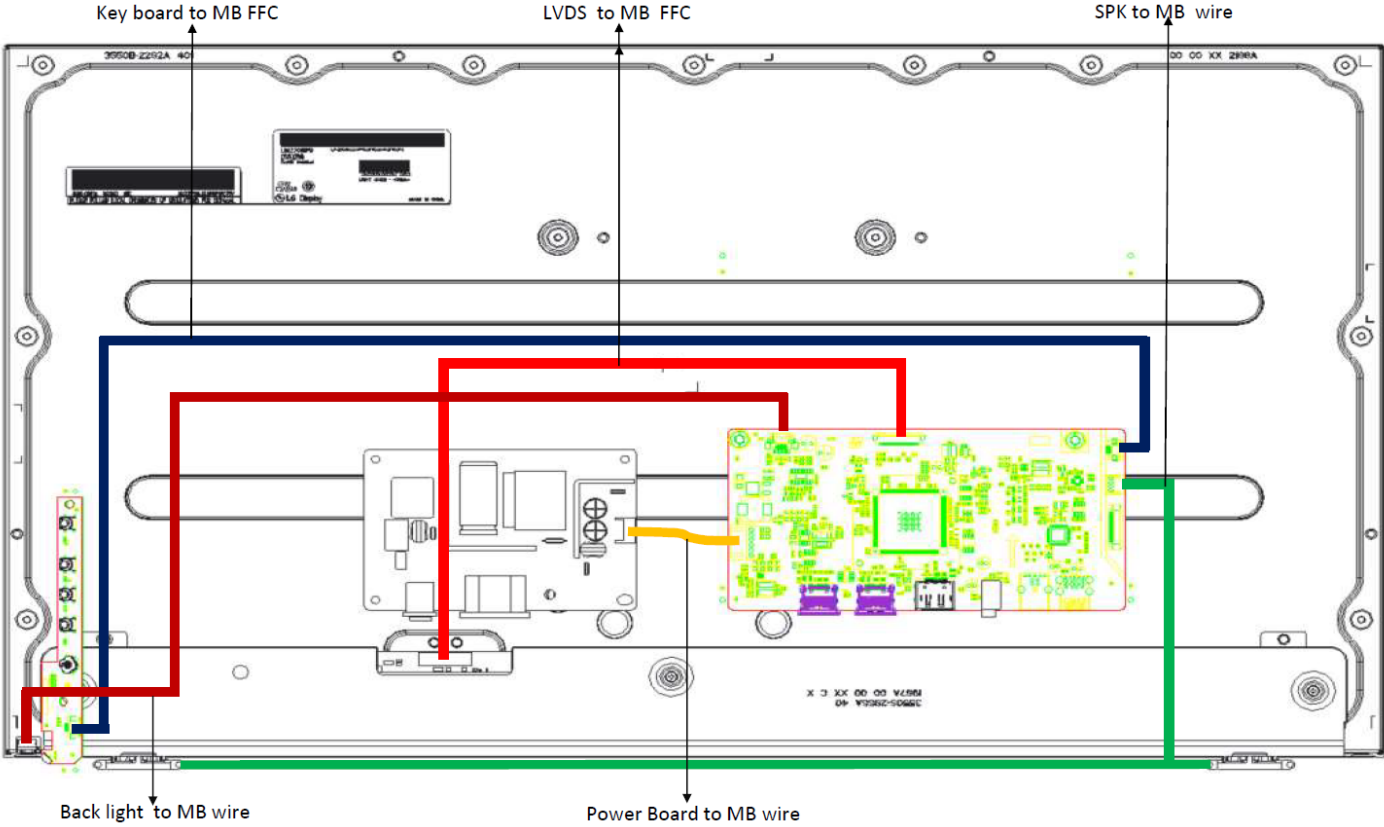
! The fusion point of Lead-Free solder requested in the degree of 220°C.

1. Exploded Diagram



ITEM	PART NO.	Description
1	R021102700561	LM270VF9-SSA1 FHD 24Hz (4ER)
2	R171305008210	Shielding_holder_Inrk(SGCC 0.2T)(KG27I)
3	R180101141020	MID FRAME(ABS 94-HB/GA35A400XVG272X)ASSY
4	R172050030450	MAC. SCREW-MI #3.0*4.0L, BLK-NI
5	R1701-1903-2010	SPK 2W 4ohm 28.5*22*8mm(R600mm*H200mm) VELD for BV277 LF
6	R046710060610	WH A12S1-H06/41007H00-6P #28 550mm W/B LF
7	R194724000870	PSU MYLAR BLACK(158*129*10.4)(KG27I)
8	R046711040070	WH A2501-H04/A2501-H06 #24 80mm W/B LF
9	R046040300040	WH EDP 30P(0.5mm)#40 300mm(Acetate#KAPTON#3M) Blue LF
10	R172012040620	MAC.SCREW=H-LWM4*6L NI
11	1720-4003-0650	MAC. SCREW-MRF #3.0*6.0L, BLK-NI
12	R050005062290	A-D PSU 3.42A 19V (A1D-65W1-A 1900(w/o SW)_120x80mmx1
13	R352710320302	Main BO for Acer VG272 Xnrip(x) (LGD LM270VF9-SSA1)
14	R171305010140	MAIN SHIELDING (SGCC 0.5T)(KG27I Inrip(x))
15	R046128081340	WH FFC 8P(0.5mm)740mm(GFOLD)90V(AB+A5)LF
16	R352400620156	KEY ID ASSY (B247Y&V247Y)
17	R170104262020	DISPLAY KEY(ABS 94-HB/J13417B5)(BV247Y)
18	R170104261010	NAVI KEY(ABS 94-HB/J13417B5)(BV247Y)
19	1720-5003-0850	MAC. SCREW-MI #3.0*8.0L, BLK-NI
20	R172050030630	TAP. SCREW-TI #3*10.0L, BLK-NI
21	R180102139010	REAR COVER(ABS 94-HB/GA35A400)(VG272UP Inrip(x) Assy
22	R170105680460	NECK ASSY(VG272X)(Red F)
23	R180105680090	BASE (ABS 94-HB)(VG03)ASSY
24	172100031050	TAP. SCREW-TI #3*10.0L, BLK-NI

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.

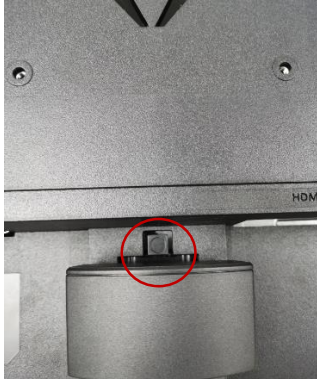
Tool Description:

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

4. Assembly and Disassembly Procedures

➤ Disassembly Procedure

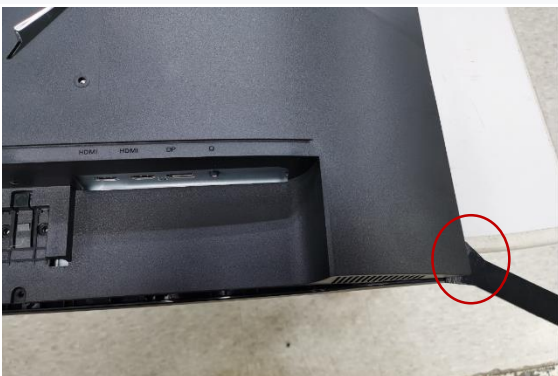
Step. 1 Pull the base & neck assembly out



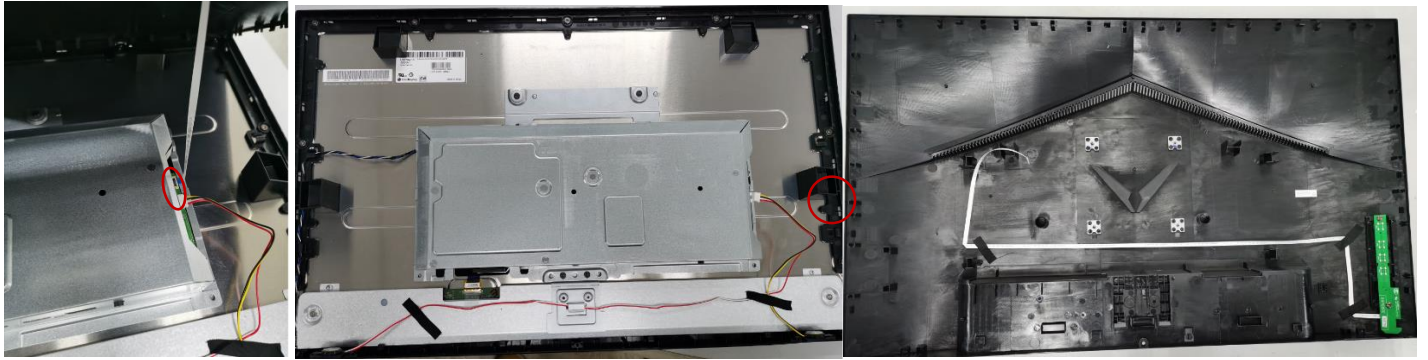
Step.2 Unscrew four screws using a screwdriver



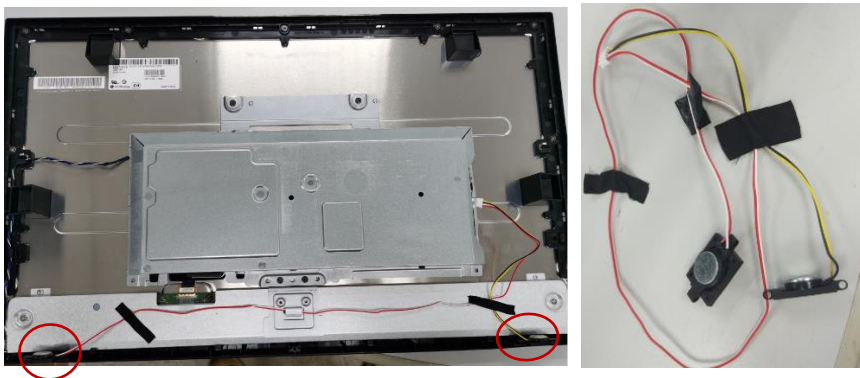
• Step. 3 Use tools to separate the R/C shell from the middle frame



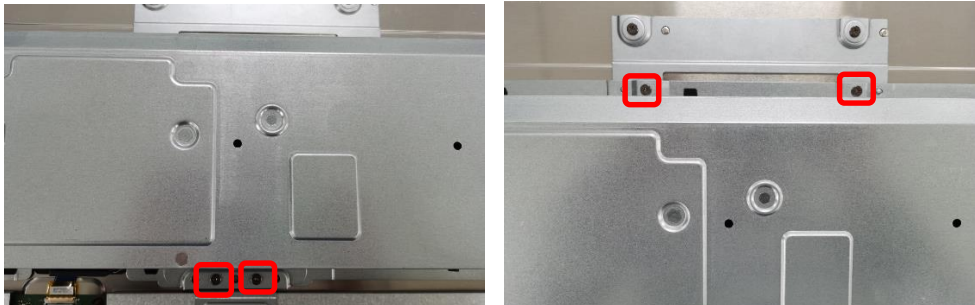
Step 4. Pull up the Rear Cover and pull out 2 pcs connectors



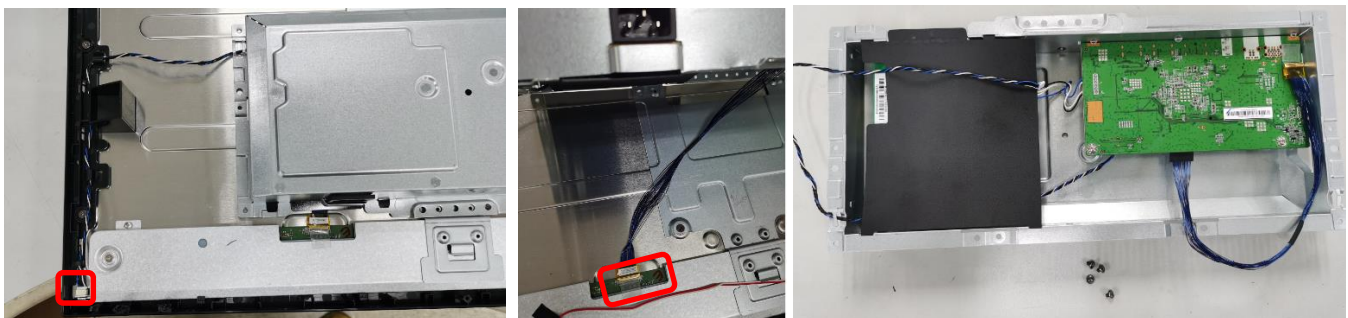
Step.5 Separate 2pcs SPK from MID_FRAME .



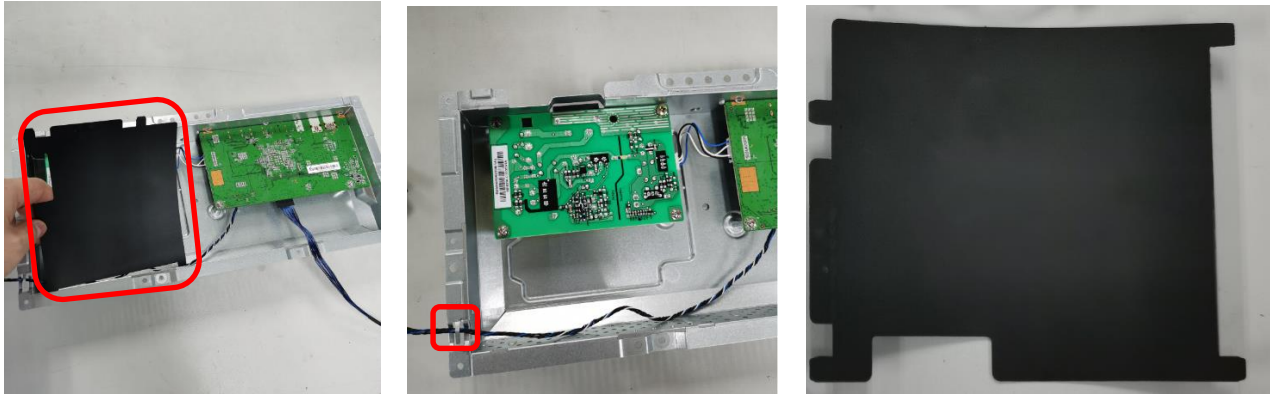
Step.6 Use screwdriver unscrew four screws .



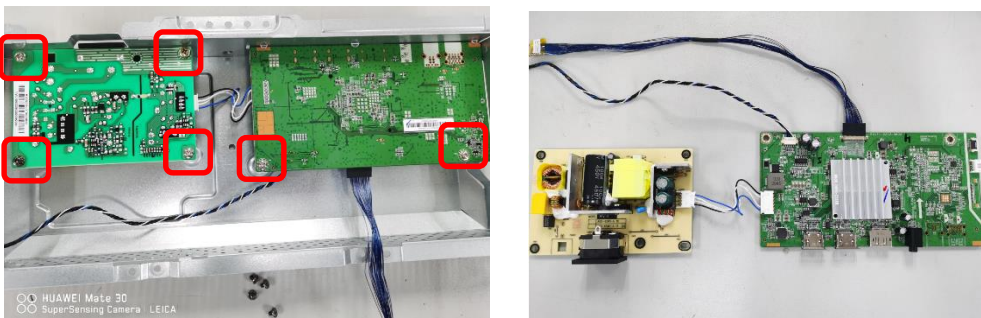
Step.7 pull out 2 Pcs connectors and remove main-shielding from LCM



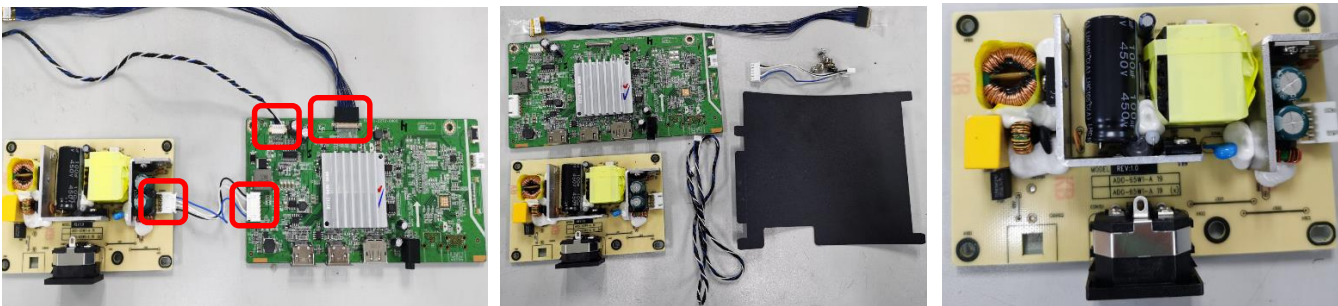
Step.8 Separate mylar and move wires from shielding's hook



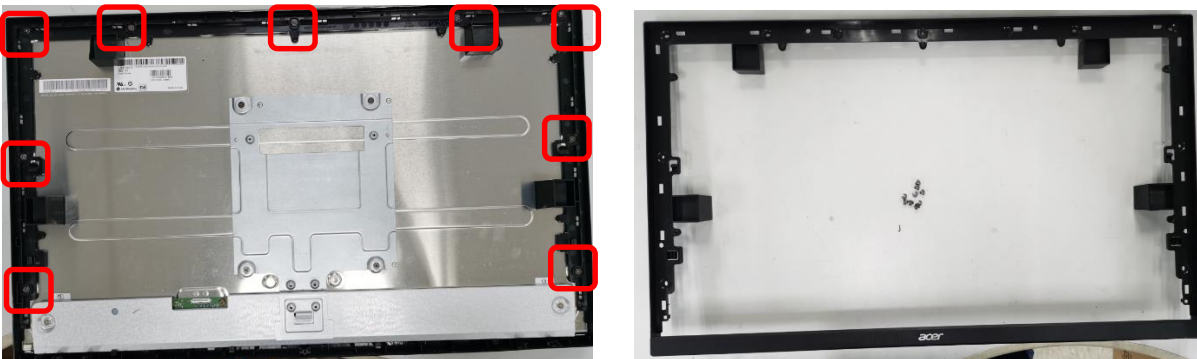
Step.9 Use screwdriver unscrew six screws and remove main board and PSU from main shielding.



Step.10 Remove connector cable and separate main board and power board



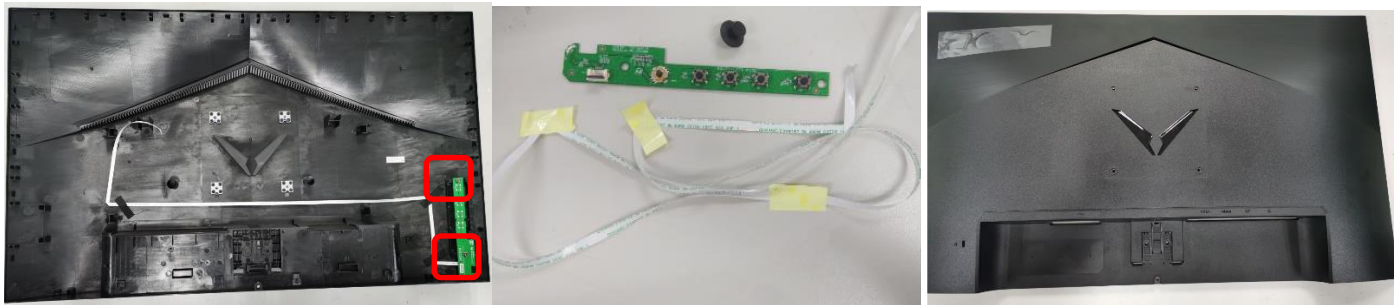
Step.11 Use screwdriver unscrew 9 pcs screws and separate MID Frame and LCM



Step.12 Use screwdriver unscrew 4pcs screws and separate shielding holder from the LCM



Step.13 Use screwdriver unscrew 2pcs screws and disassemble key board from rear cover and separate navi key& FFC

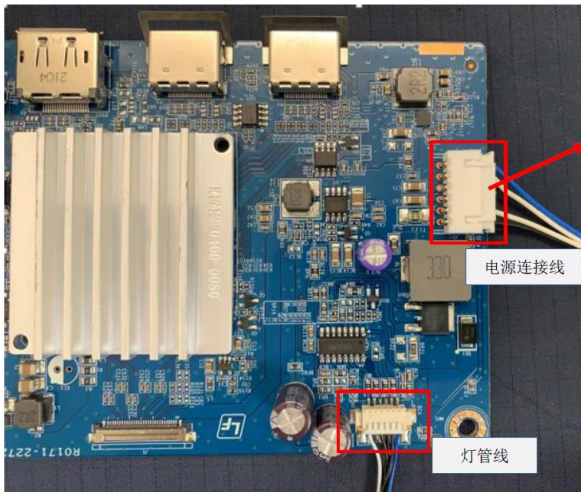


Step.14 Use screwdriver unscrew the screw and separate base & neck assembly

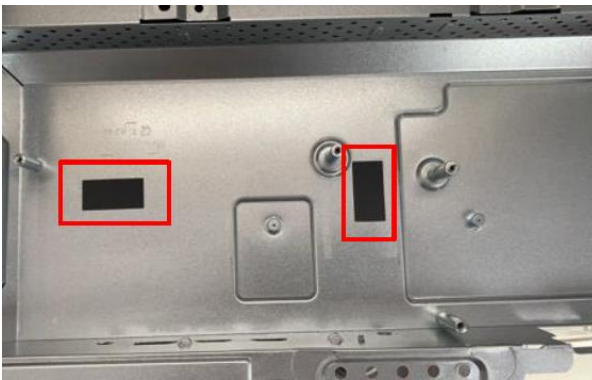


➤ Assembly Procedure

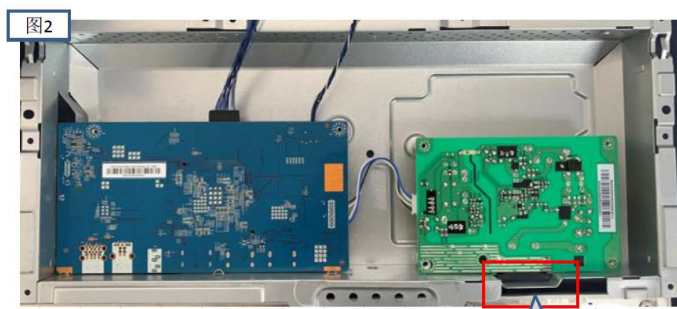
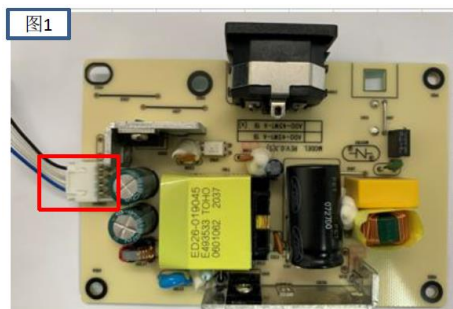
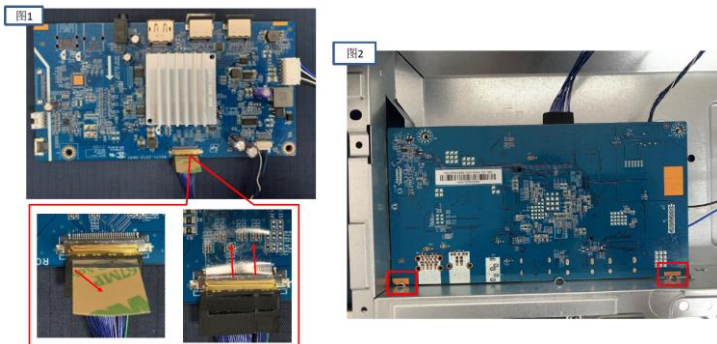
Step1. Insert 6pin backlight LVDS and 4pin PSU LVDS on main board.

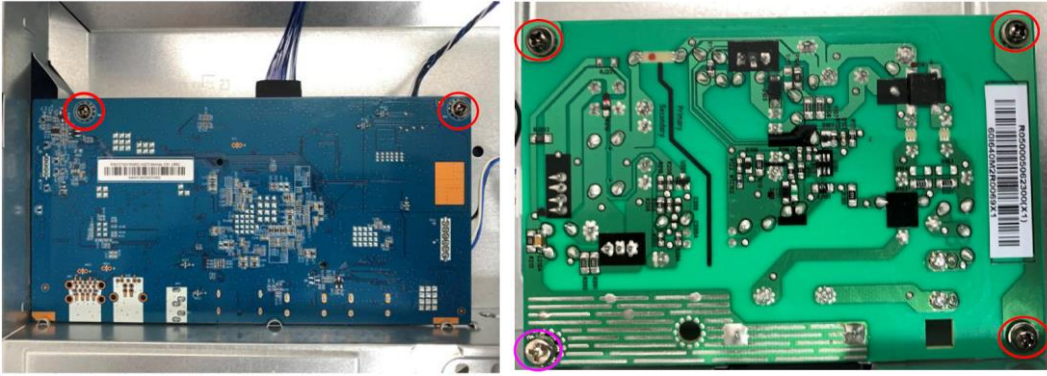


Step2. Tape mylar on shielding (as red mark)

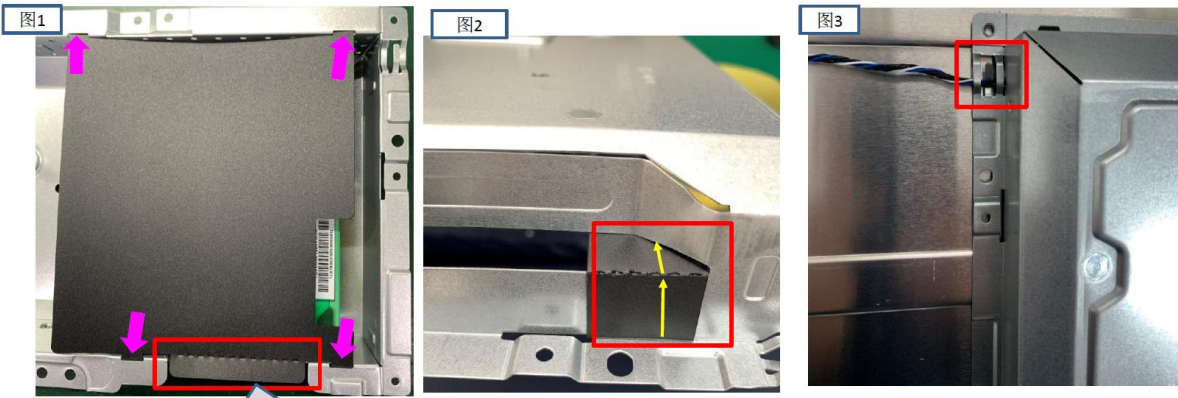


Step3. Insert 30pin FFC to main board and 4pin LVDS to PSU, then assembly main board and PSU into shielding, fix six screws.

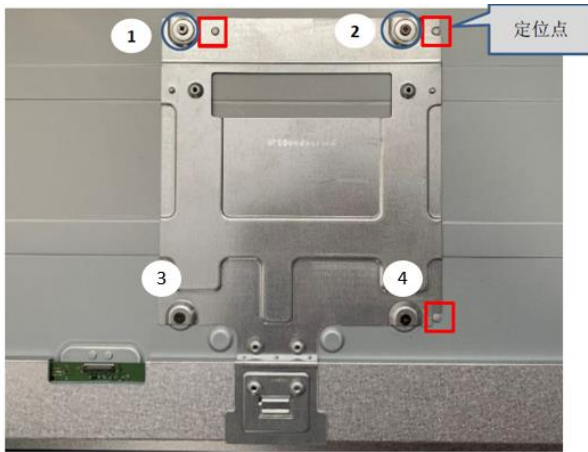




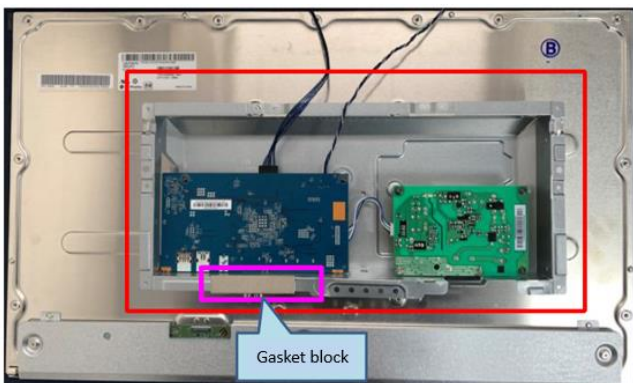
Step4. Cover the big mylar on power board, and tape small mylar at the side as pic 2. Fix the backlight cable on the hook of shielding.



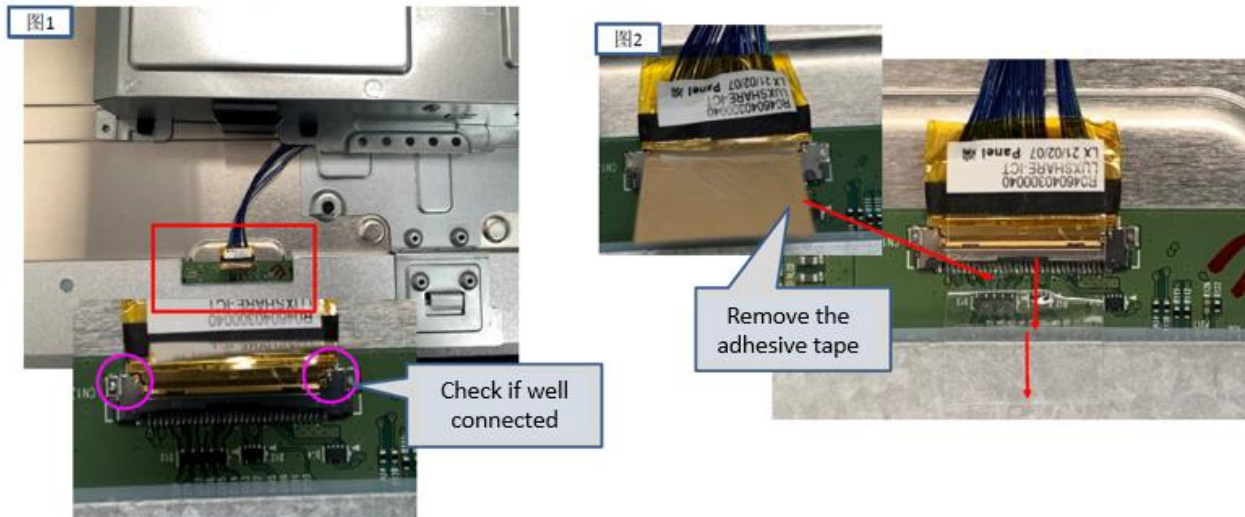
Step5. Fix the bracket on panel by 4 screws.



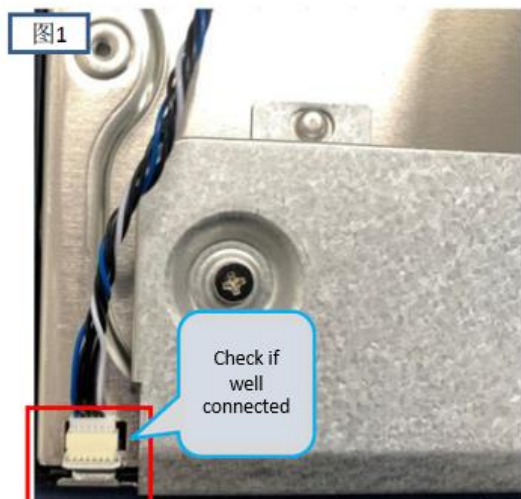
Step6. Tape gasket block on shielding



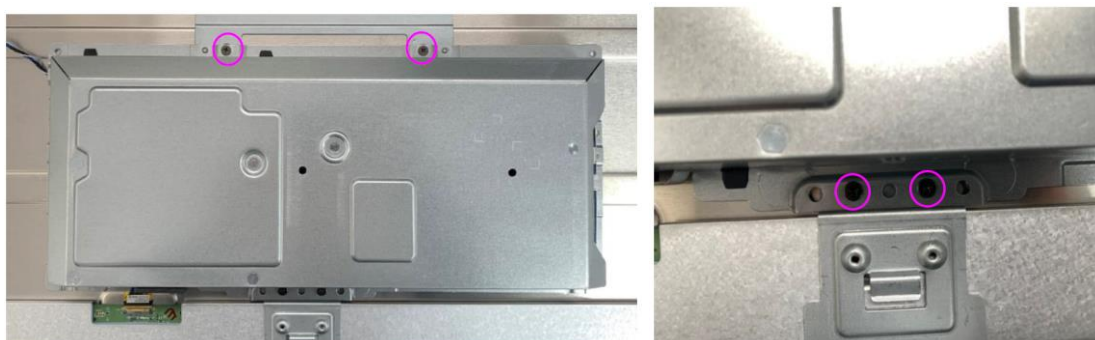
Step7. Insert 30pin FFC to panel



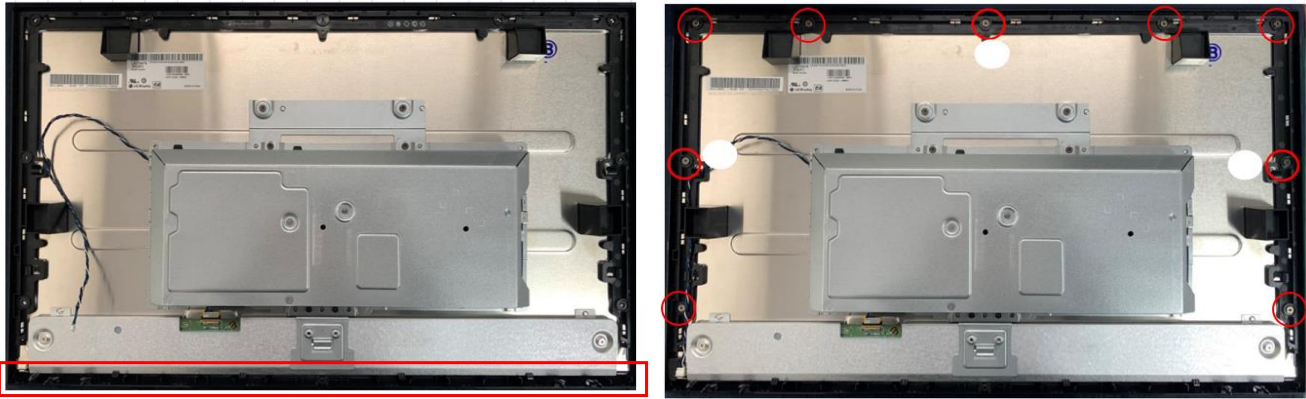
Step8. Insert 6P backlight cable to panel



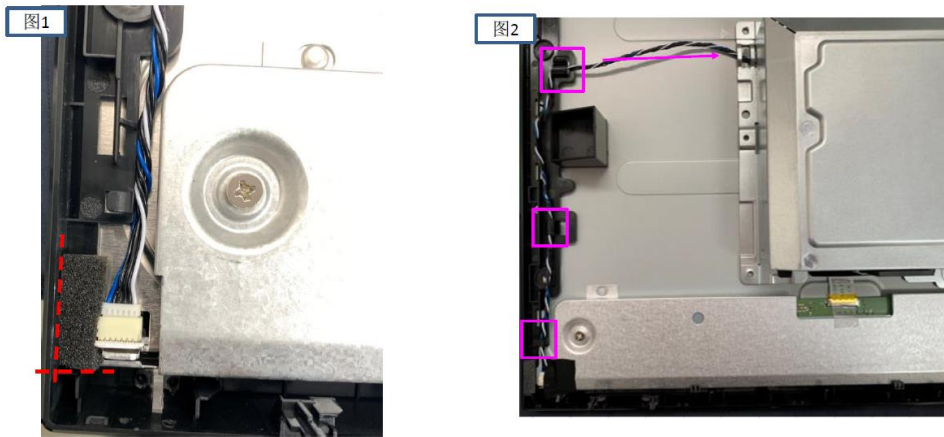
Step9. Fix the shielding on panel by screws



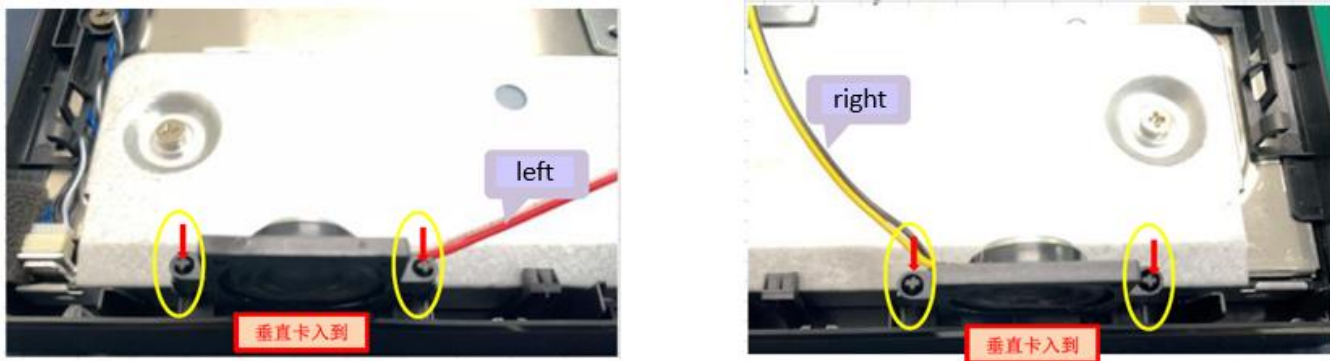
Step10. Assembly middle frame with panel and fix by screws (in red circle).



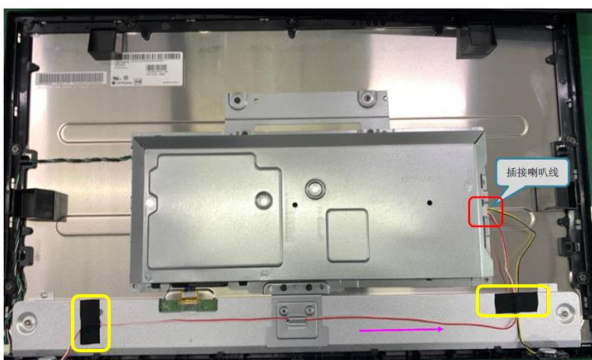
Step11. Tape 1pcs CR sponge on the left side, and fix the backlight LVDS into the hook of mid frame.



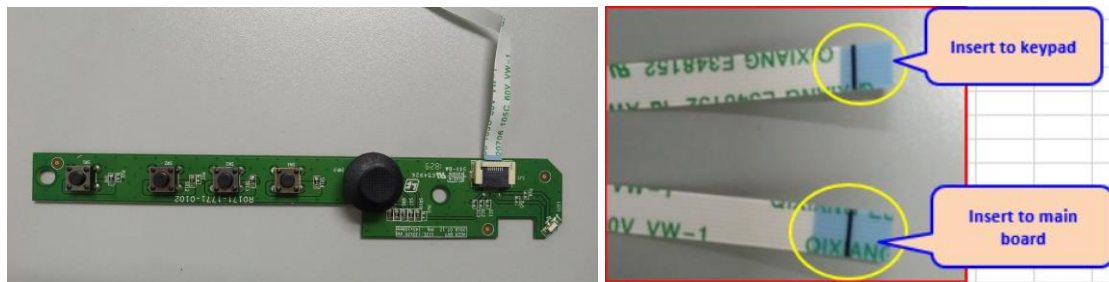
Step12. Assembly speaker on middle frame, and assembly speaker cable on main board. (red and white cable is on left side, yellow and black is on right side.)



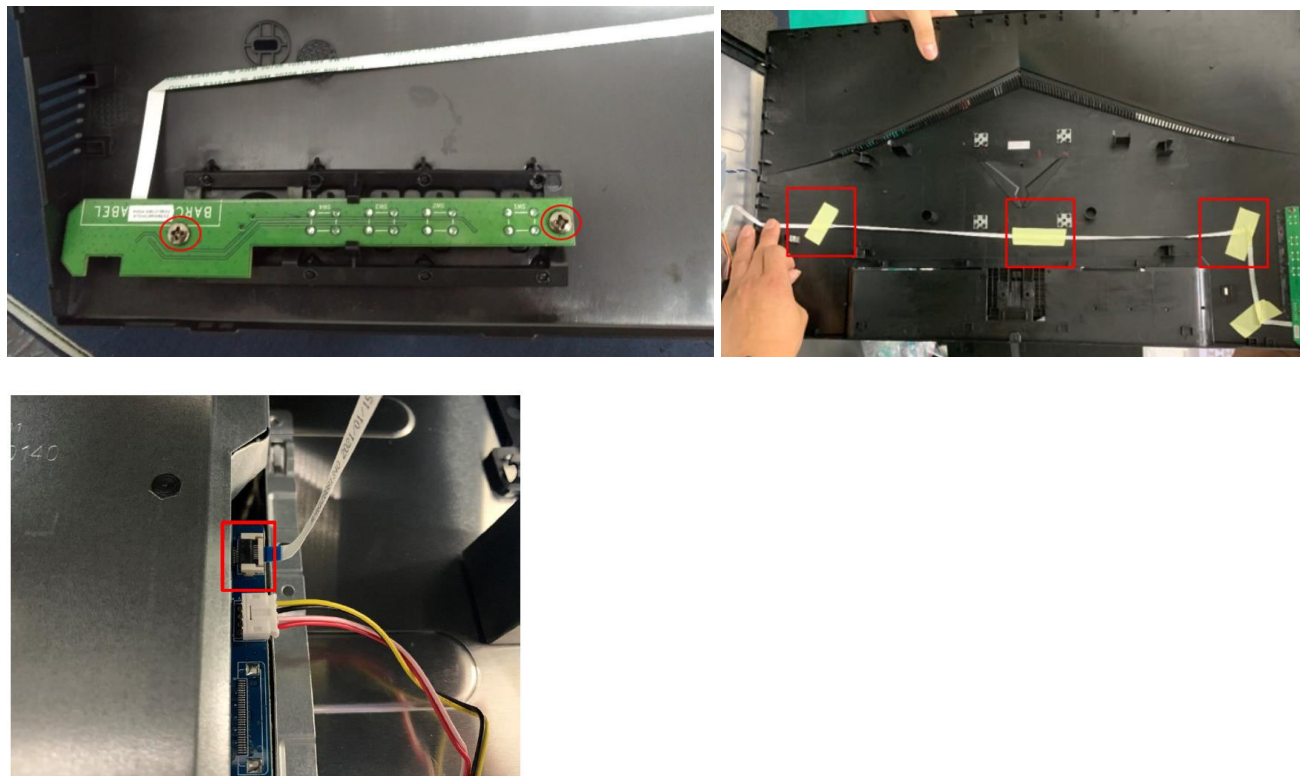
Step13. Tape speaker cable with acetate cloth tape (in yellow circle).



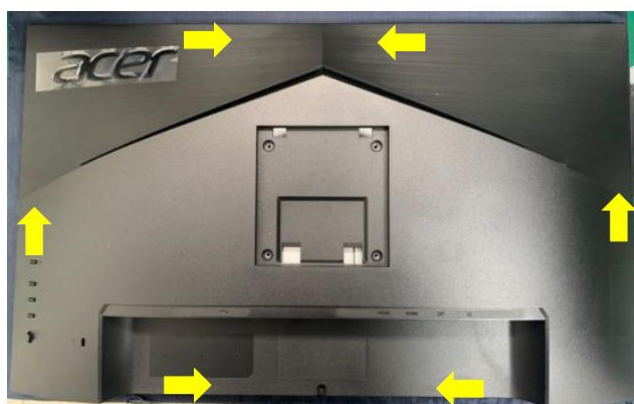
Step14. Fix navi key on keypad, and insert 8pin FFC to connector.



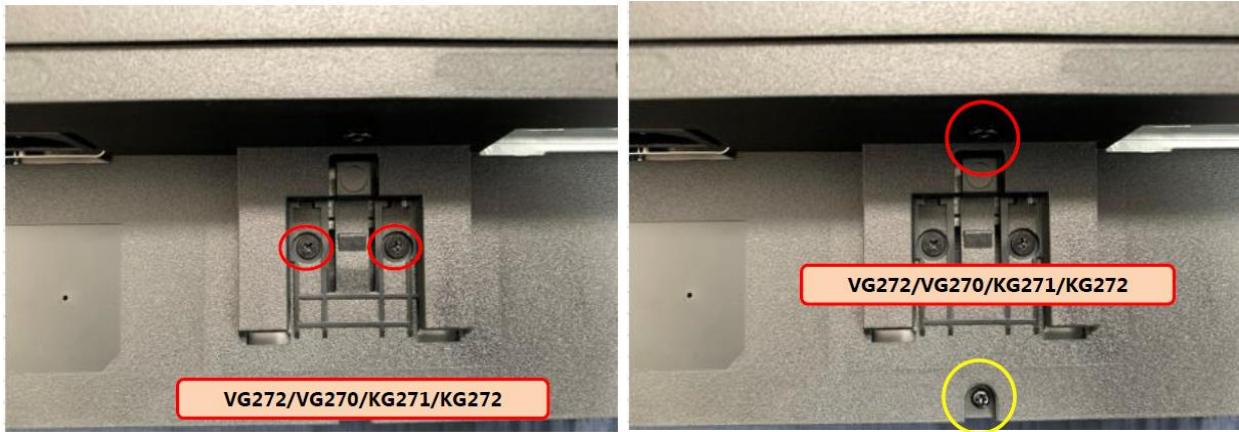
Step15. Fix keypad on rear cover by screws, then use yellow tape to tape FFC. Insert FFC to main board.



Step14. Assembly rear cover, and push around the surrounding to assembly well.

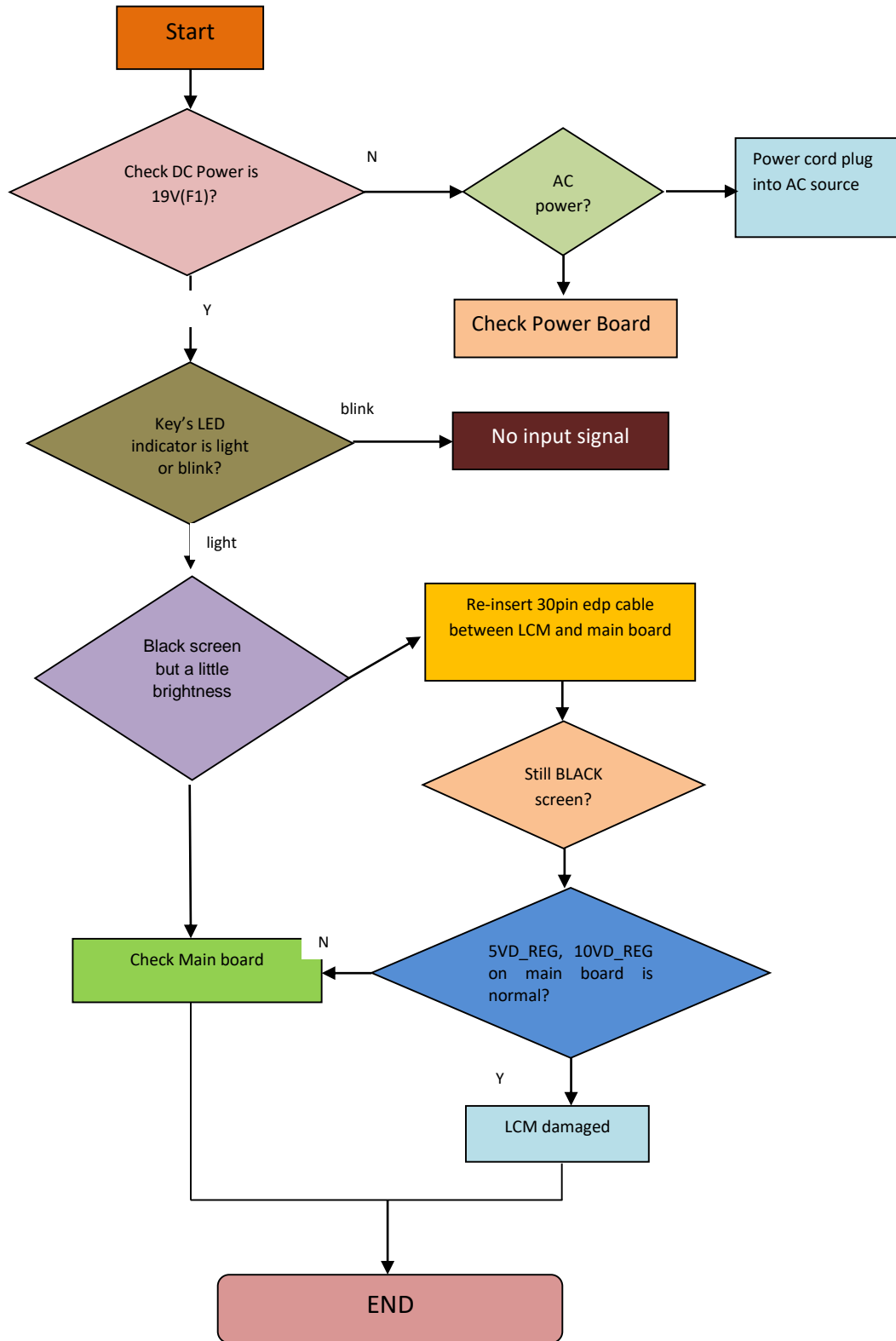


Step15. Lock the screw on rear cover (in red circle).

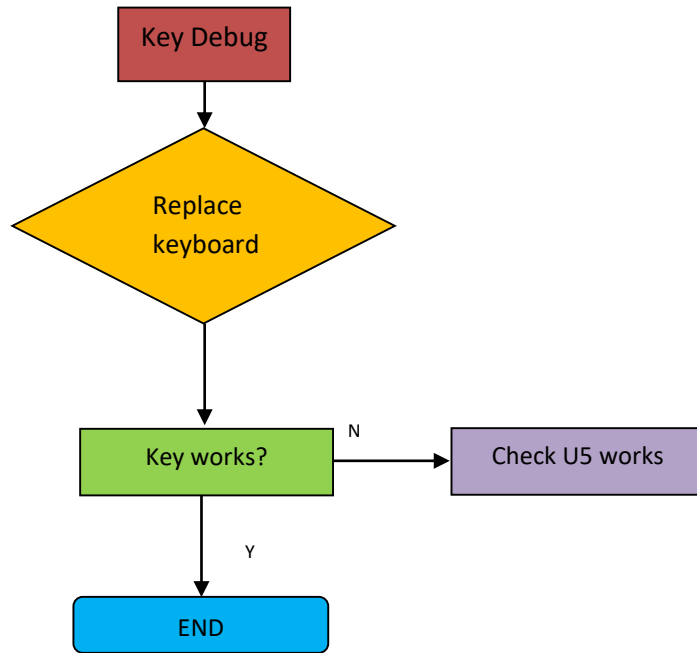


5. Troubleshooting

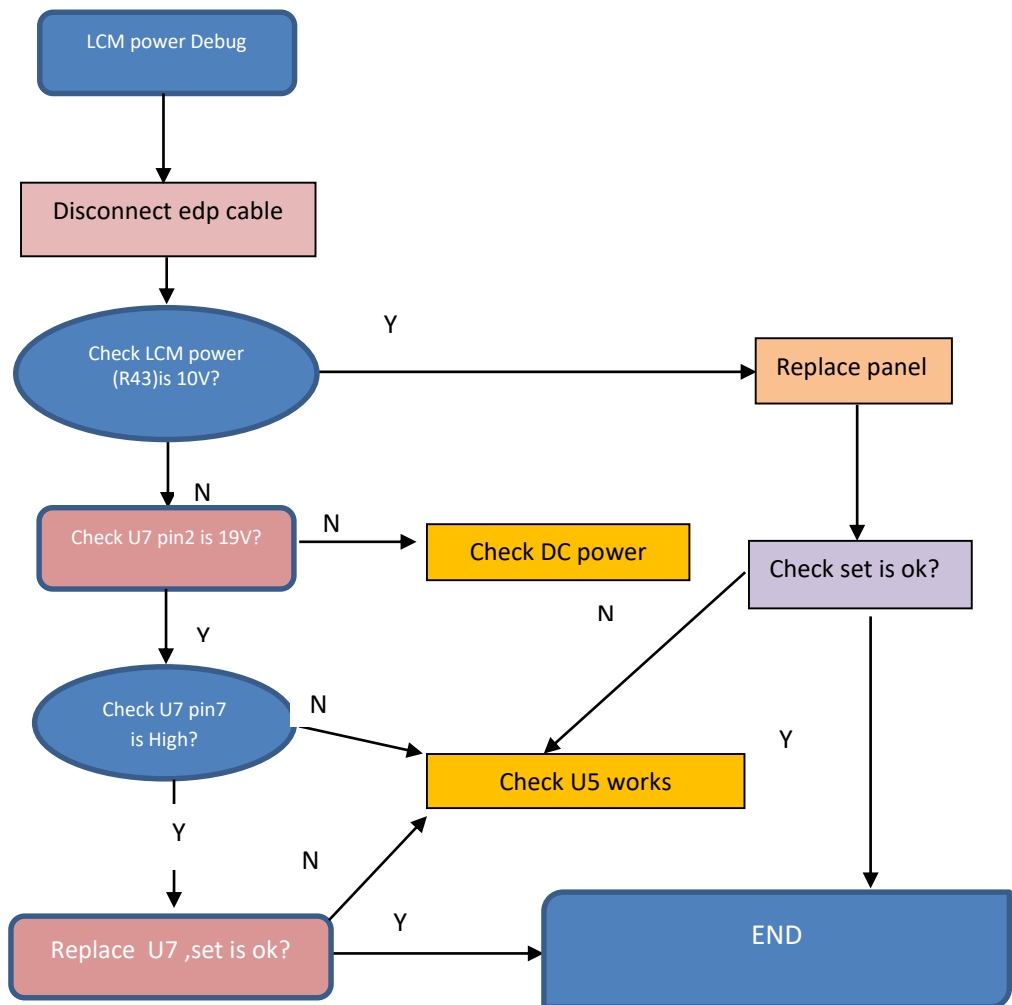
5.1 Test flow for abnormal machine:



5.2 key debug flow:



5.3 Panel debug flow:











5.4 LED backlight debug flow:



6. FRU (Field Replaceable Unit) List

Parts Photo	SPL_Category	Acer PN	ODM PN	ODM Description
	BOARD		R050005062300	A-D PSU 2.37A 19V (ADO-45W1-A 19(X) (w/o SW)_120x80mmx1.6t_DC4P)_IEC62368
	BOARD		R352727220150	MAIN BD ASS'Y VG272 Xbmiiipx (LM270WF9-SSA1)
	BOARD	55.TFKM5.004	R352400620156	KEY BD ASS'Y (B247Y&V247Y)
	CABLE		R046040300040	WH EDP 30P(0.5mm)#40 300mm(Acetate+KAPTON+3M) Blue LF
	CABLE		R046540300060	WH EDP 30P(0.5mm)#40 300mm(Acetate KAPTON 3M) Blue LF
	CABLE		R046640300040	WH EDP 30P(0.5mm)#40 300mm(Acetate KAPTON 3M) Blue LF
	CABLE		R046710060610	WH A1251-H06/A1007H00-6P #28 550mm W/B LF
	CABLE		R046610060610	WH A1251Y-06/CH13100V06 #28 550mm W/B LF
	CABLE		R046711040070	WH A2501-H04/A2501-H06 #24 80mm W/B LF
	CABLE		R046511040070	WH A2501-H04/A2501-H06 #24 80mm W/B LF
	CABLE		R046728081340	WH FFC 8P(0.5mm)740mm(3FOLD)60V(A8+A5)LF
	CABLE		R046128081340	WH FFC 8P(0.5mm)740mm(3FOLD)90V(A8 A5)LF
	CASE/COVER/BRACKET ASSEMBLY		R194724000870	PSU MYLAR BLACK(158*129*T0.4)(KG271)
	CASE/COVER/BRACKET ASSEMBLY		R170105680460	NECK ASSY(VG272X)(Red F)

	CASE/COVER/BRACKET ASSEMBLY		R180105680090	BASE (ABS 94-HB)(VG0)ASSY
	CASE/COVER/BRACKET ASSEMBLY		R171305008210	Shielding_holder_brk(SGCC 0.8T)(KG271)
	CASE/COVER/BRACKET ASSEMBLY	60.TJ4M5.003	R180102139010	REAR COVER(ABS 94-HB/GA35AA00)(VG272UP bmiipx) Assy
	CASE/COVER/BRACKET ASSEMBLY	60.TFKM5.006	R170104261010	NAVI KEY(ABS 94-HB/J15919GGA)(BV247Y)
	CASE/COVER/BRACKET ASSEMBLY		R171305010140	MAIN SHIELDING (SGCC 0.5T)(KG271 bmiipx)
	CASE/COVER/BRACKET ASSEMBLY		R180101141020	MID FRAME(ABS 94-HB/GA35AA00)(VG272X)ASSY
	FAN SINK/SPEAK/EARPHON E/RTC	23.TFQM5.001	R033502041130	SPK 2W 4ohm 28.5*22*8mm(R600mm*L200mm) VECO for BV277 LF
	LCD	KL.27008.011	R021102700561	LM270WF9-SSA1 FHD 240Hz (ACER)