ACER Monitor RG270

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 connect 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 humility environment.

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

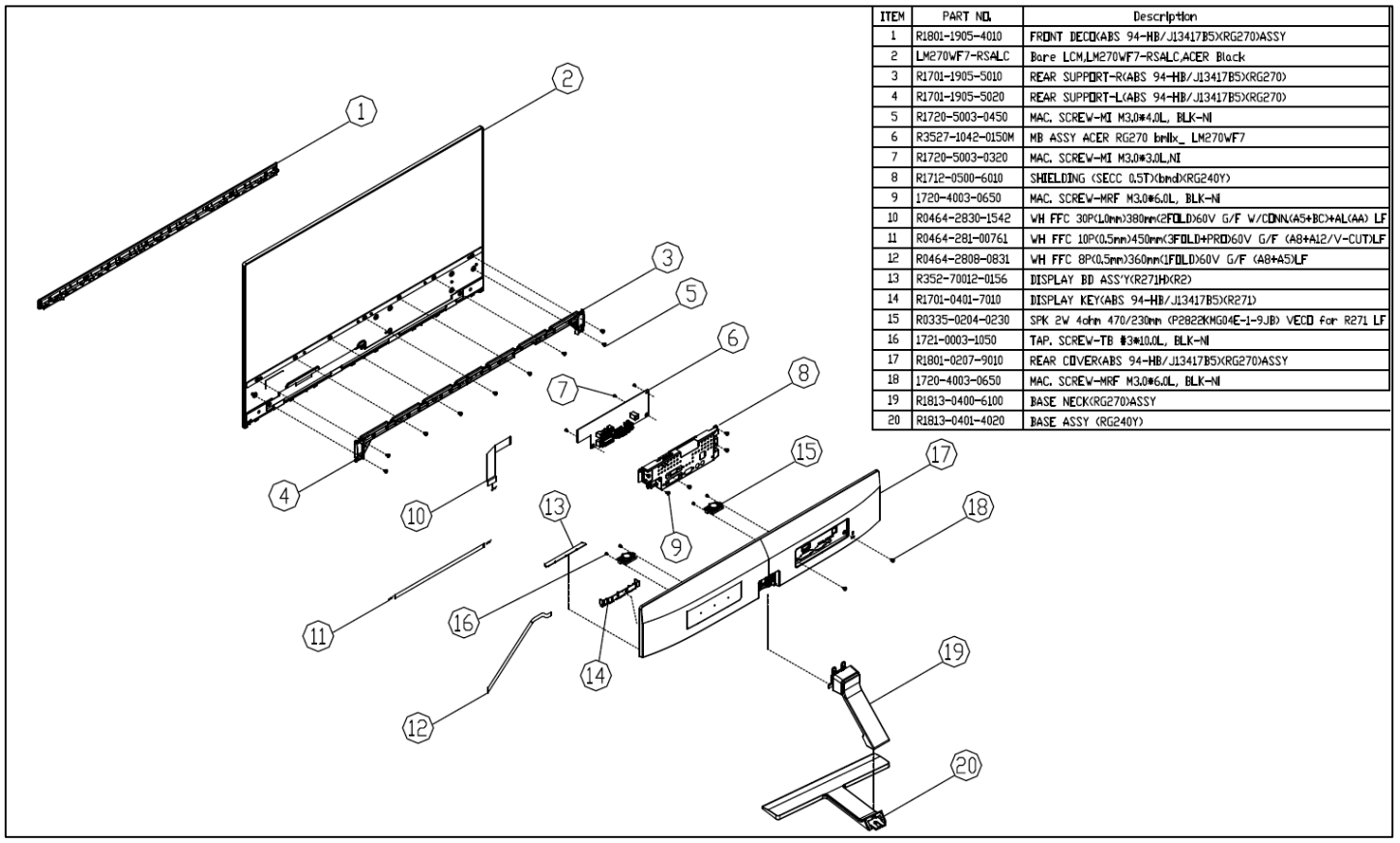
! To ensure following safety repairing behavior, put the replaced part on the components side of PWBA, not solder side.

! 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.

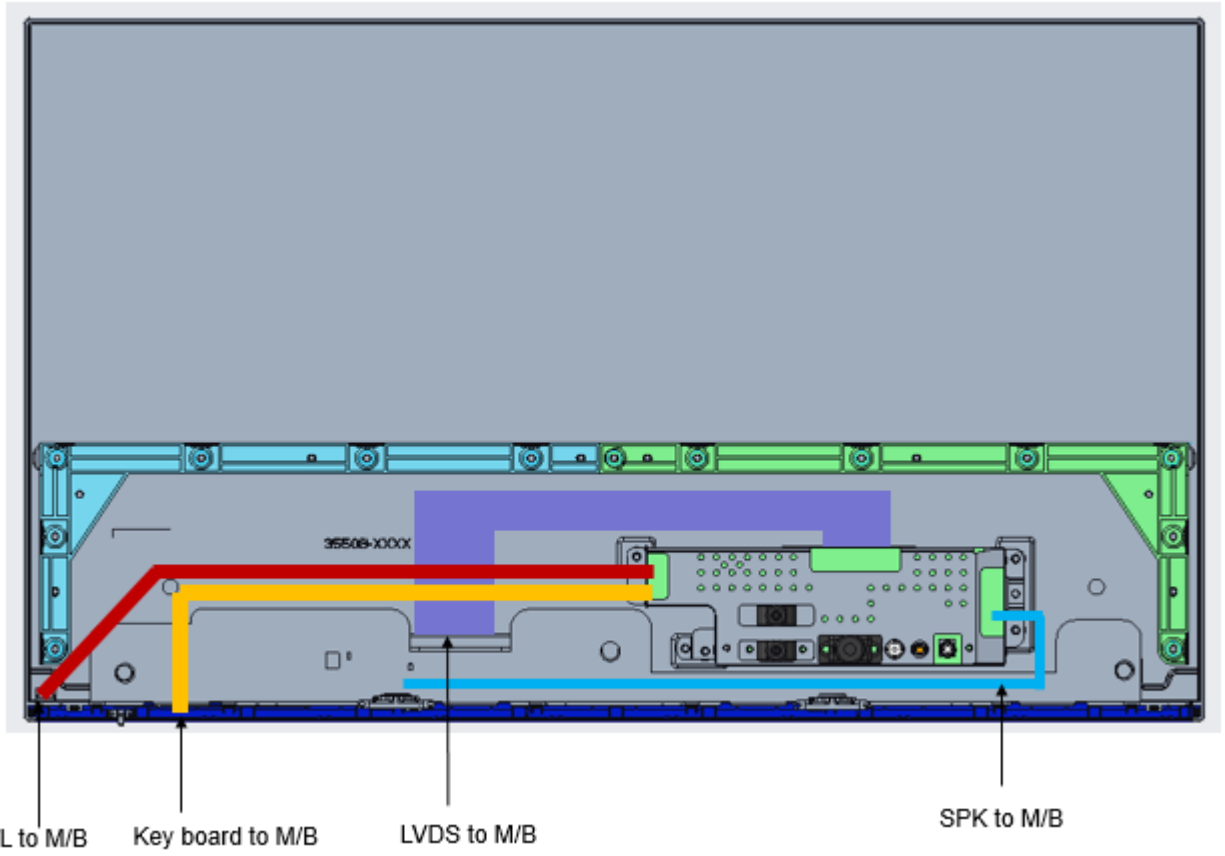
! The fusion point of Lead-Free solder requested in the degree of 220°C.

1. Exploded Diagram



ITEM	PART NO.	Description
1	R1801-1905-4010	FRONT DECO(ABS 94-HB/J13417B5)(RG270)ASSY
2	LM270WF7-RSALC	Bare LCM,LM270WF7-RSALC,ACER Black
3	R1701-1905-5010	REAR SUPPORT-R(ABS 94-HB/J13417B5)(RG270)
4	R1701-1905-5020	REAR SUPPORT-L(ABS 94-HB/J13417B5)(RG270)
5	R1720-5003-0450	MAC, SCREW-MI M3.0*4.0L, BLK-NI
6	R3527-1042-0150M	MB ASSY ACER RG270 bmlx_ LM270WF7
7	R1720-5003-0320	MAC, SCREW-MI M3.0*3.0L,NI
8	R1712-0500-6010	SHIELDING (SECC 0.5T)(bmd)(RG240Y)
9	1720-4003-0650	MAC, SCREW-MRF M3.0*6.0L, BLK-NI
10	R0464-2830-1542	WH FFC 30P(1.0mm)380mm(2FOLD)60V G/F W/CONN.(A5+BC)+AL(AA) LF
11	R0464-281-00761	WH FFC 10P(0.5mm)450mm(3FOLD+PRO)60V G/F (A8+A12/V-CUT)LF
12	R0464-2808-0831	WH FFC 8P(0.5mm)360mm(1FOLD)60V G/F (A8+A5)LF
13	R352-70012-0156	DISPLAY BD ASS'Y(R271HD(R2)
14	R1701-0401-7010	DISPLAY KEY(ABS 94-HB/J13417B5)(R271)
15	R0335-0204-0230	SPK 2W 4ohm 470/230mm (P2822KMG04E-1-9JB) VECO for R271 LF
16	1721-0003-1050	TAP, SCREW-TB #3*10.0L, BLK-NI
17	R1801-0207-9010	REAR COVER(ABS 94-HB/J13417B5)(RG270)ASSY
18	1720-4003-0650	MAC, SCREW-MRF M3.0*6.0L, BLK-NI
19	R1813-0400-6100	BASE NECK(RG270)ASSY
20	R1813-0401-4020	BASE ASSY (RG240Y)

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

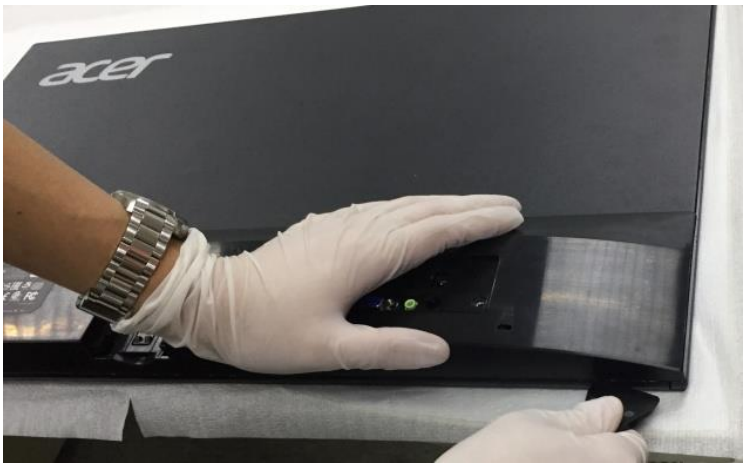
4. Assembly and Disassembly Procedures

➢ Disassembly Procedure

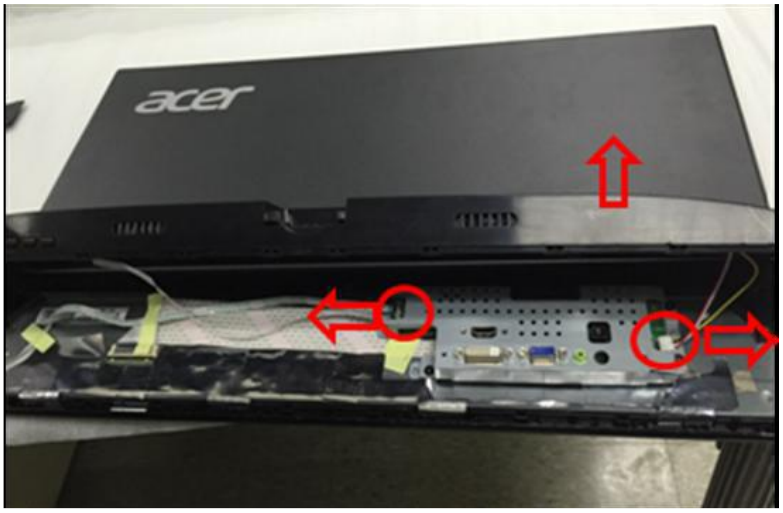
Step. 1 Pull the base & stand assembly out

Step.2 Unscrew two screws at the I/O area

Step.3 Disassemble rear cover by a thin plastic tool from a slot at the bottom of rear cover



Step 4. Pull up the rear cover and puul out all connectors

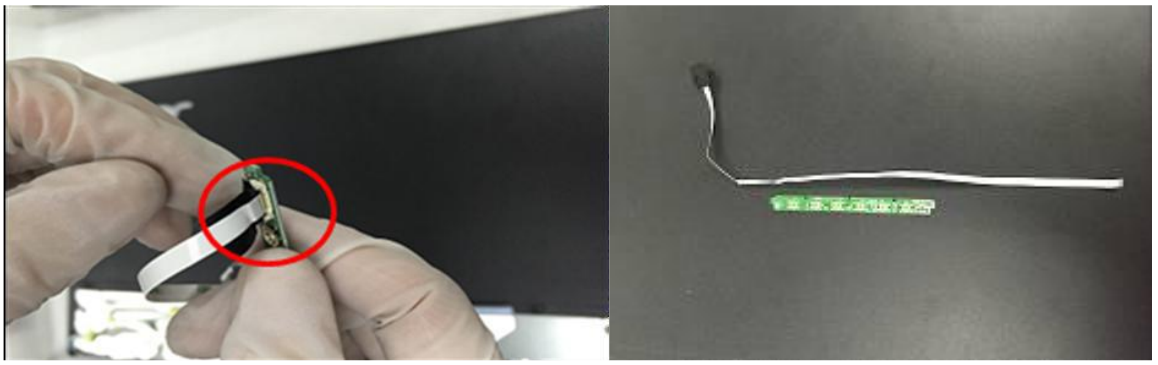


Step.5 Disassemble deco cover.

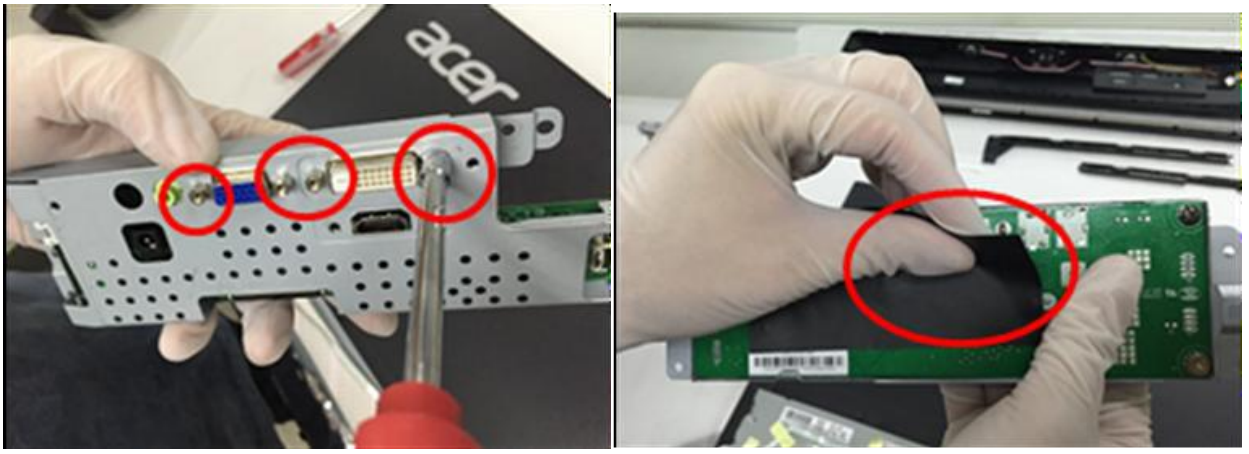
Step.6 Unscrew PCBA’s screws and disassemble frame L&R.

Step.7 Remove F/B and take out the LCM, then separate Key board from F/B and LVDS cable from LCM

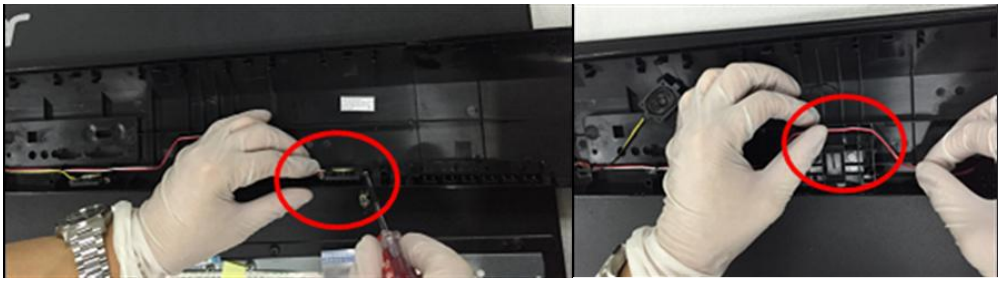
Step.8 Remove FFC from display board

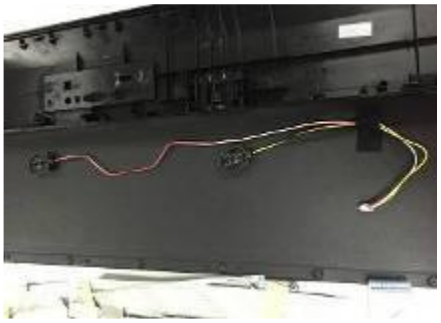


Step.9 Unscrew hex nuts and six screws and remove main board PCBA from main shielding.

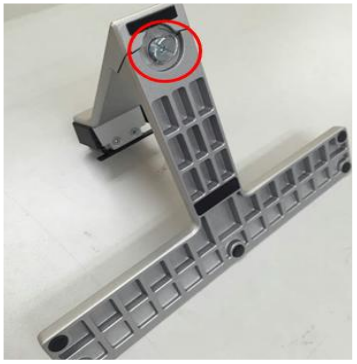


Step.10 Disassemble rear cover assembly





Step11. Unscrew the screw and separate base &neck assembly

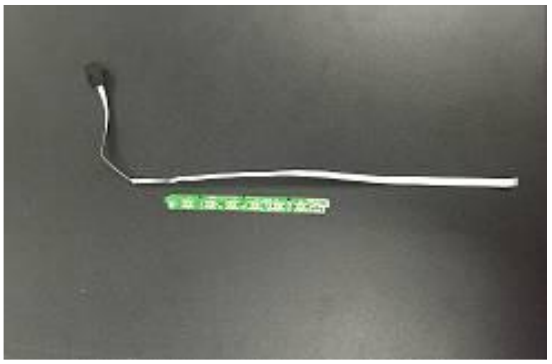


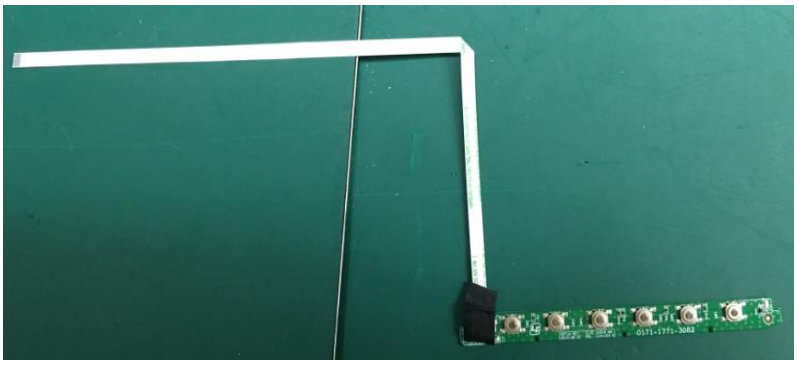
Step12. Remove six silicon rubbers

Step.13 Unscrew two screws and separate all small parts

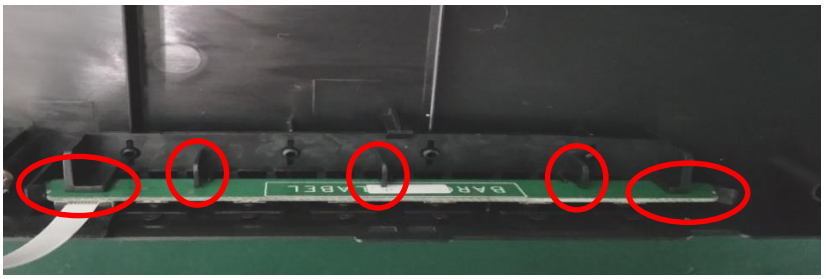
➢ Assembly Procedure

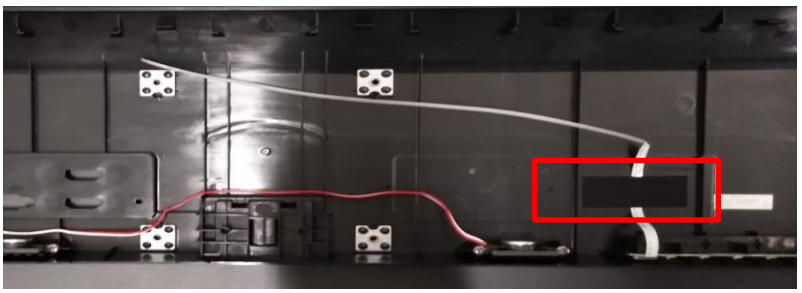
Step1. Assembly 8 FFC to key board



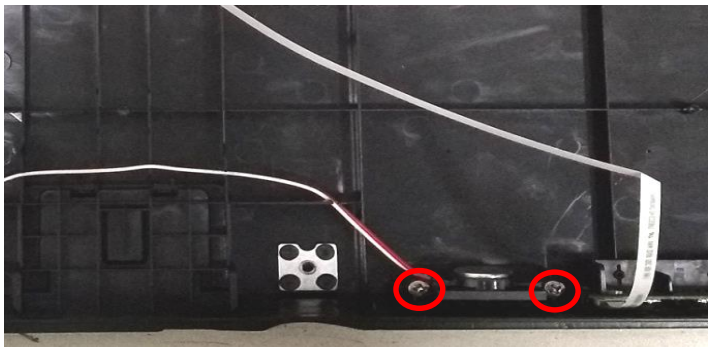


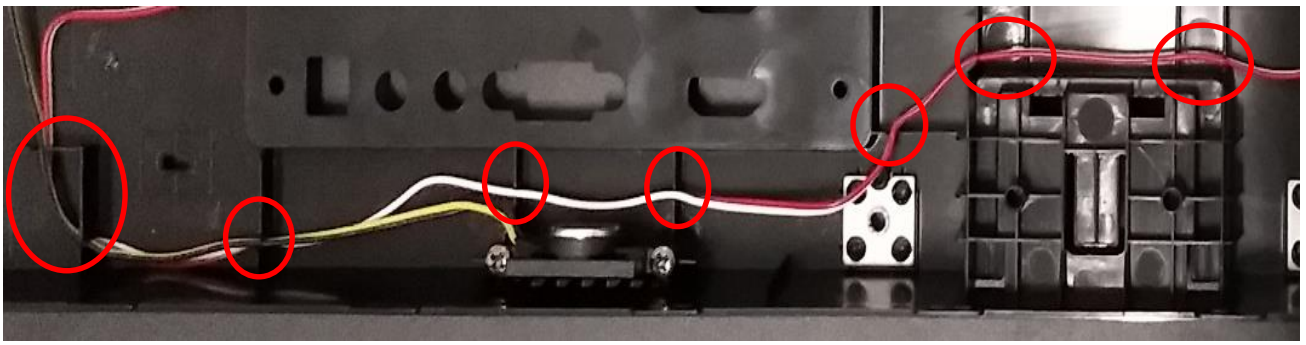
Step2. Assembly key board to rear cover and use cloth tape to fix cable.





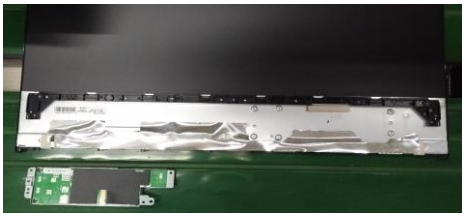
Step3. Put speaker in rear cover and lock screw to fix



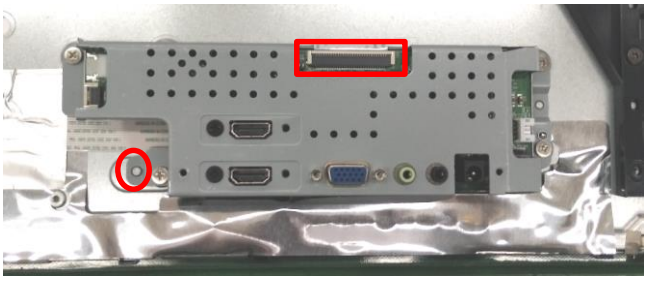


Step4. Assemble frame L&R and lock crews to fix

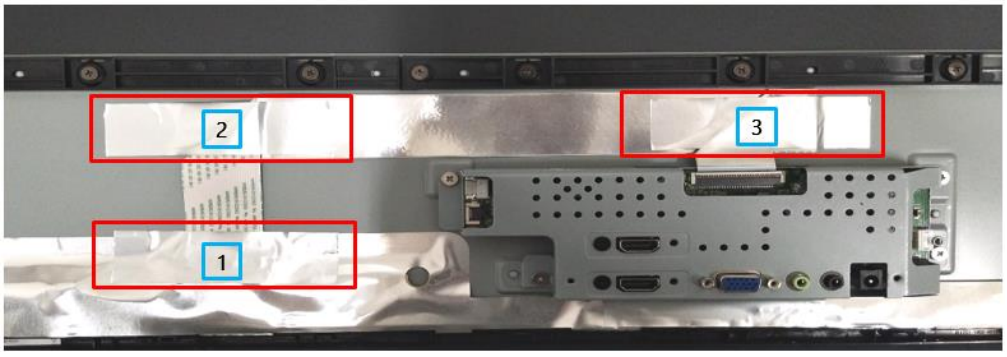
Step5. Assemble main board into shielding and put MB on panel side



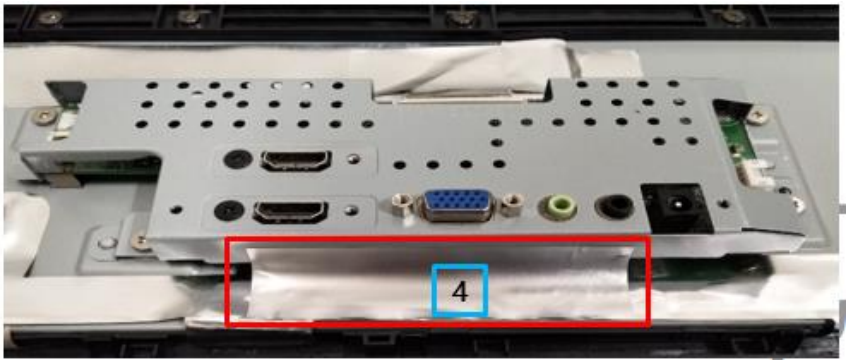
Step5. Insert 30pin LVDS to panel and MB



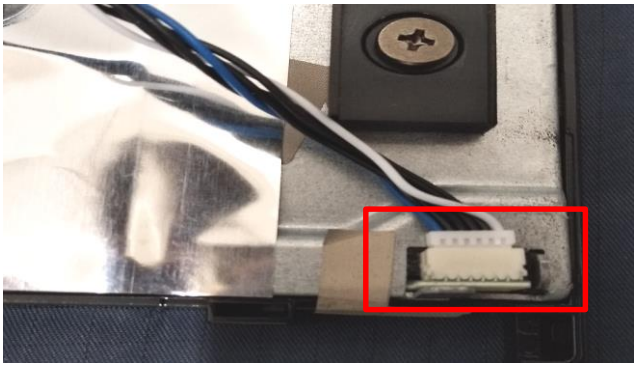
Step6. Lock crews to fix MB and use tape to tape cables

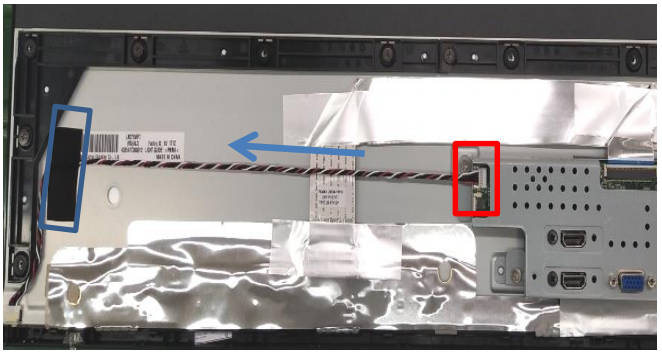


Step7. Use Al tape to tape main board and panel

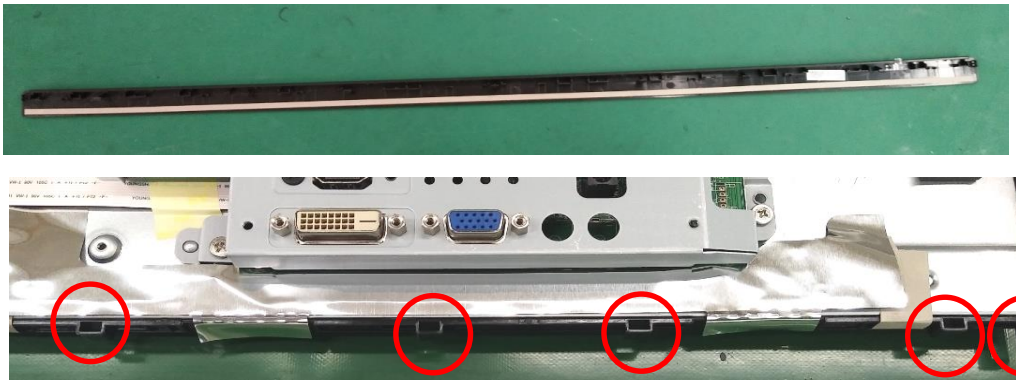


Step8. Insert 6pin cable to panel and main board

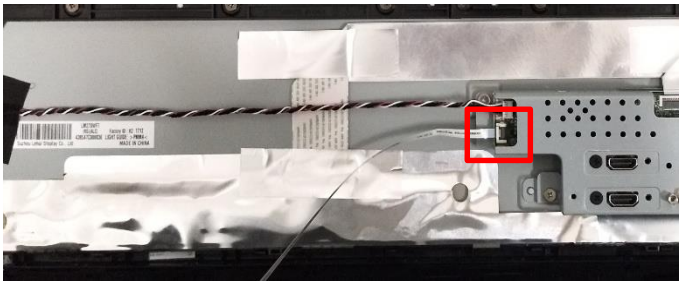




Step8. Assemble deco cover to panel



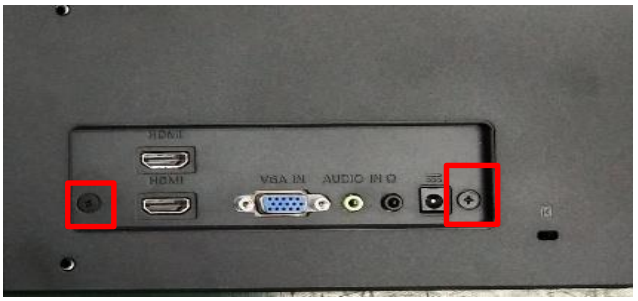
Step9. Insert 8pin FFC to MB and assembly rear cover with LCM .



Step10. Insert speaker cable to main board.

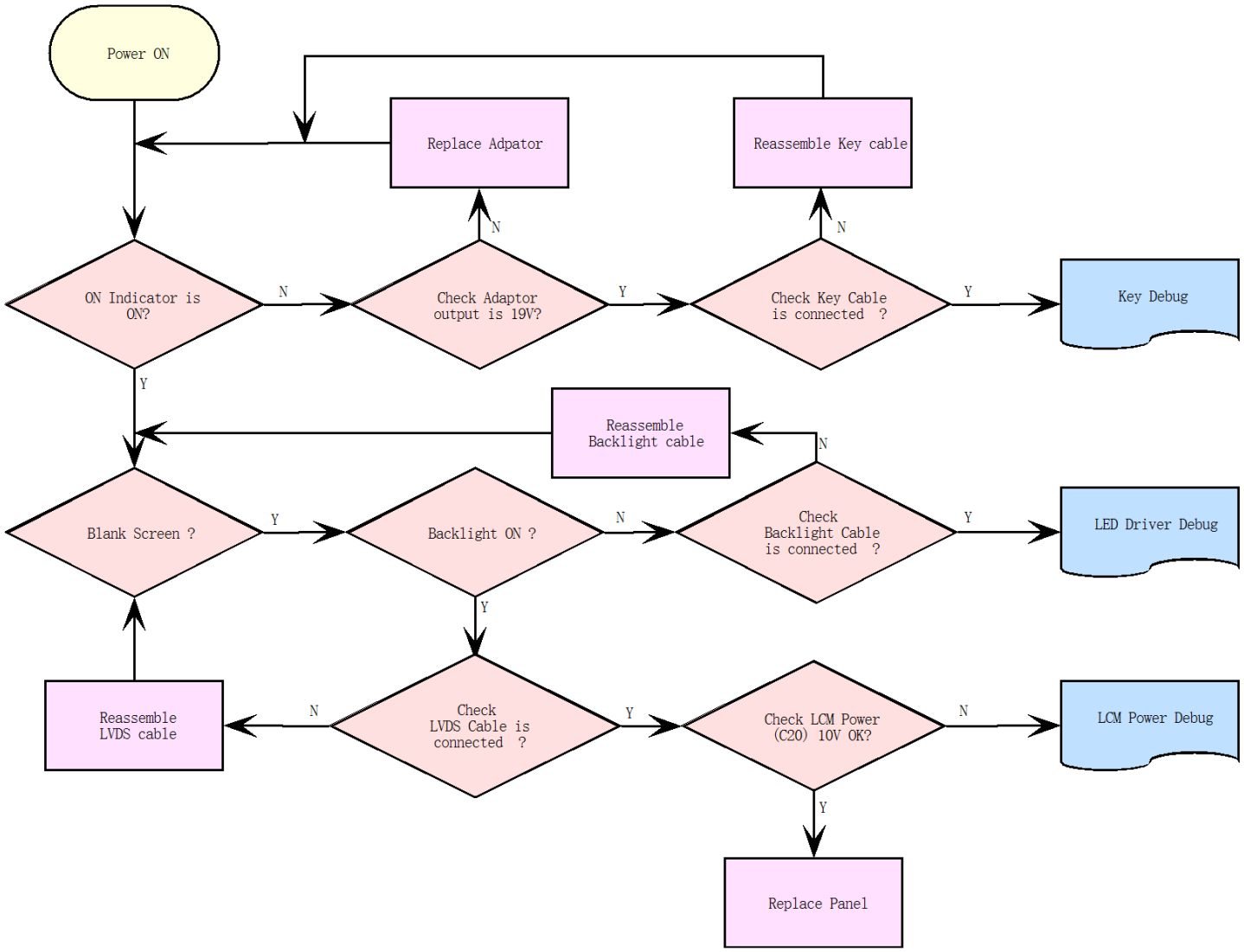
Step11. Assemble rear cover to LCM..

Step11. Lock rear cover screw (in red circle),

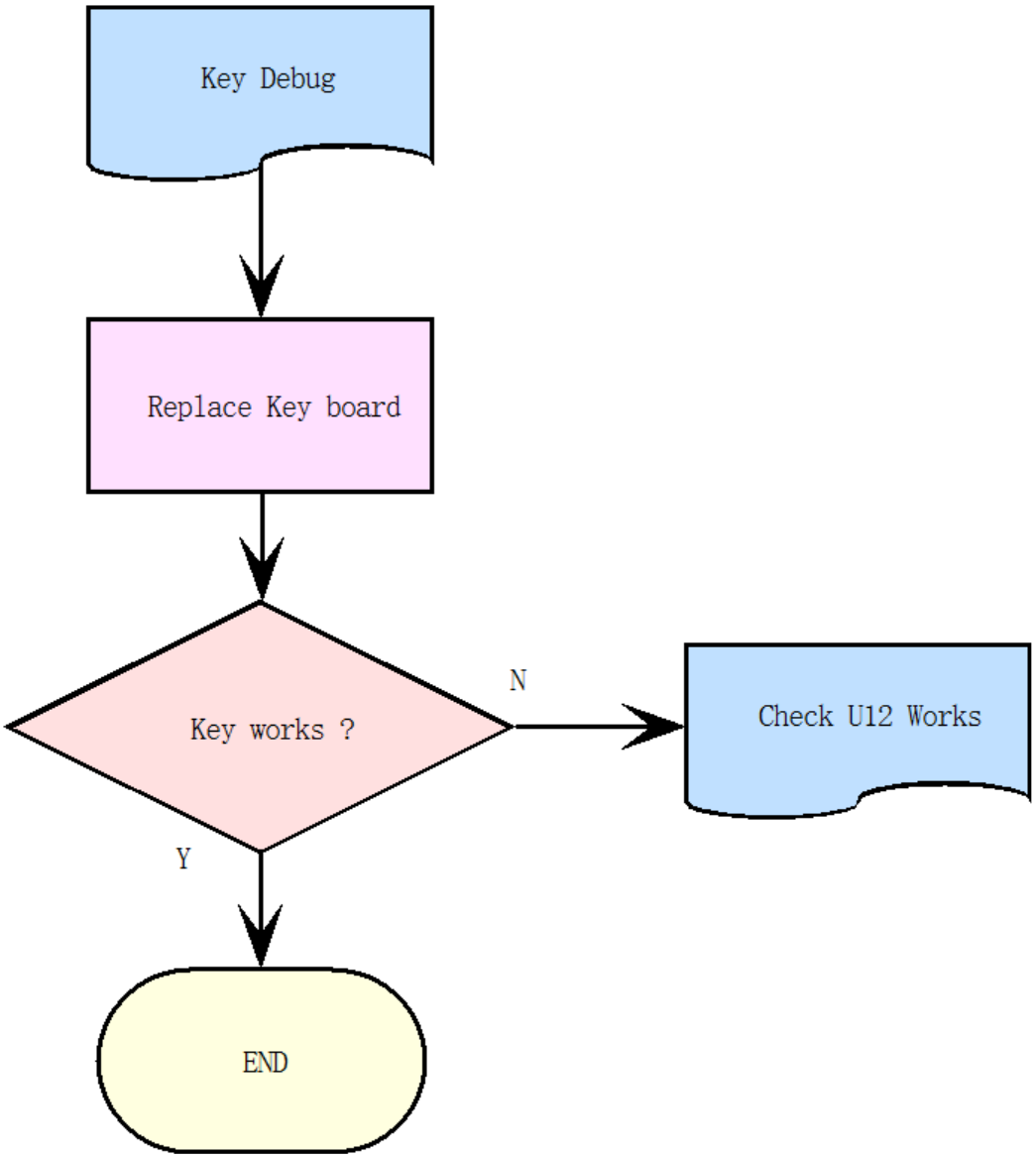


5. Troubleshooting

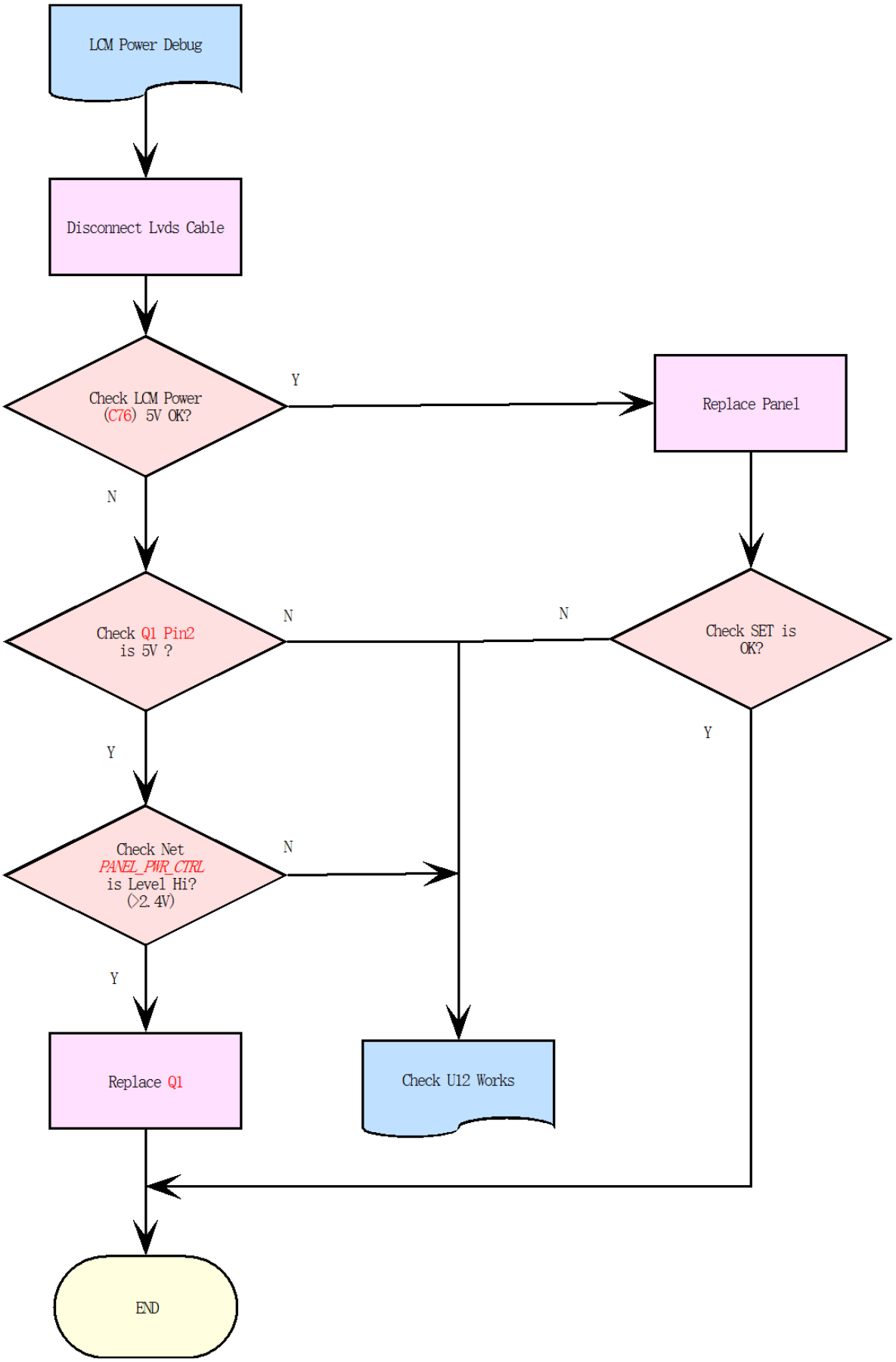
5.1 Test flow for abnormal machine:



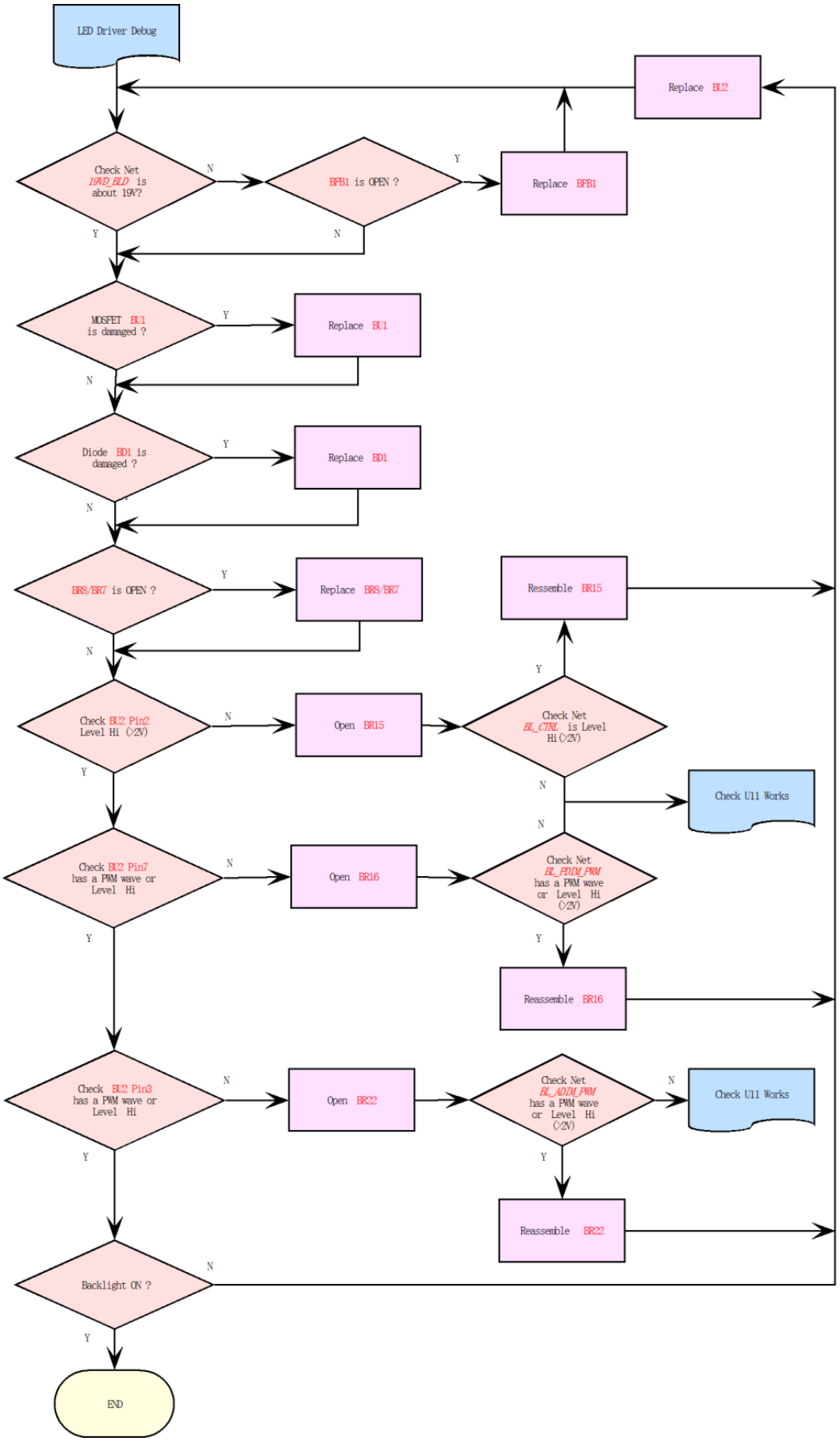
5.2 Key debug flow:



5.3 Power debug flow:



5.4 Panel debug flow:



6. FRU (Field Replaceable Unit) List

Parts Photo	SPL_Category	Acer PN	Raken PN	ODM Description
	ADAPTER	25.T1XM5.001	R030070132485	A-D adapter 2.1 A 19V ADS-40SI-19-3 19040E(VI) _ ACER G257HU
	BOARD	55.TDYM5.001	352701420156	DISPLAY BD ASSY ACER RG270 bmiix
	BOARD	55.TDYM5.003	352710420150	MB ASSY ACER RG270 bmiix_ LM270WF7-RSALC _RTD2523T-CG (HDCP)
	CABLE	50.T7AM5.001	R046428080821	WH FFC 8P(0.5mm)320mm(1FOLD)60V G/F (A8+A5)LF
	CABLE	50.TDYM5.001	R046428301810	WH FFC 30P(1.0mm)380mm(3FOLD)60V G/F W/CONN.(A5+BC)+AL(AA) LF ip
	CABLE	50.TDYM5.003	R046730060350	WH A1251-H06/A1007H00-6P-2L #28 350mm W/B LF
	CABLE	50.TDYM5.002	R046030060350	WH A1251Y-06/SHJP-06V #28 350mm W/B LF
	LCD	KL.27002.013	R352702420395	LCM ASS'Y ACER RG270 (ES8.0 LM270WF7-RSALC-001)