



Service Manual

FlexScan[®] FLT

 Important notice for using this Service Manual

Important Safety Notice

General Notice

- Repair must be performed by professional service technicians in a EIZO-authorized repair center.
- Only trained service personnel who are familiar with this EIZO product should perform for it.
- Service personnel should have prior repair knowledge and experience as well as appropriate training for the product before performing service procedures.
- EIZO products contain high voltage circuit. Only experienced service personnel should perform repairs or service work on high voltage monitors. When the cabinet of product is removed and the product is operating, there is a risk of an electric shock hazard.
- Unplug the power cord before servicing.
Operation of the product with the cabinet removed involves a shock hazard or may result in a damage of the circuit. Ensure the power cord is disconnected before removing the cabinet and replacing any parts in the unit.
- Connect the earth lead of the power cord with the ground.
Securely connect the earth lead of the power cord of the products and the measuring equipment. There is a risk of the electric shock hazard or damage.
- Always use approved tools and test equipment for servicing.
- DO NOT wear any metal or accessories. There is a risk of an electric shock.
- Perform the inspection of the measuring equipment before service work.
- Before starting daily service work, perform the inspection of the measuring equipment and record its results.
- This document is a typical dis/assembly procedure. Monitor construction may slightly differ for each model.

Servicing Environmental conditions

- Working environment
The repair work must be carried out indoor where air or temperature is controlled to meet the following temperature and humidity range;
Temperature: 25+/-10 degree
Humidity: 30 - 80% RH
- Wear for Servicing
 - Wrist strap (Recommended resistance value: $5 \times 10^5 - 1 \times 10^7 \Omega$)
When using a wrist strap without resistance, there is a risk of an electric shock.
 - Conductive shoes (Recommended resistance value: $1 \times 10^5 - 1 \times 10^8 \Omega$)
 - Anti-static wear

INFECTION PREVENTION

- Adopt measures against the infection by cleaning and sterilization before starting the repair if the product returned or may be returned from the medical facilities.

Before Disassembling

- Unplug the power cord before servicing. The conductive area may become high voltage which may cause an electric shock or other hazardous danger.
- DO NOT touch the sharp edge of the chassis. It can result in injury.
- DO NOT hurt the surface of the LCD panel. It can cause a damage to the LCD panel or result in injury.
- DO NOT touch the high voltage part that exposed inside of monitor by mistake. If carelessly touched, it may result in damage to the circuit or may cause an electric shock.
- DO NOT change the original design of the product. This will cause smoke, electric shock or damage to the circuit.
- DO NOT short any portion of circuit while the product is in operation. This will cause smoke, electric shock or damage to the transistors, ICs or other parts or circuit in the unit.
- When handling harness components, handle them with care to avoid touching the metal parts at both ends with your hands. There is the possibility that the corrosion of copper parts occurs, and it might cause the disconnection or short-out.
- Handling the PCB unit with care.
 - When handling PCB unit (ASSY PCB), make sure to use the wrist strap or handle PCB unit on the area that measures against the static electricity.
 - DO NOT put much stress (not to crush or not to bend it) on if there are any components or the earth spring etc. that mounted on the back side of PCB when handling PCB.
- Handling the LCD panel, with care.
 - When replacing the LCD panel, make sure to implement the anti-static measures enough.
 - DO NOT put stress on the display surface when handling. There is the possibility that it causes a tiny bright dot and a pressure mura.
 - Handle with care without putting stress on the display surface when handling, keeping, and transporting. Especially, the frameless model, there is the possibility that it causes the line defect.
 - Handle the curved panel with the utmost of care. There is possibility that it causes the crack by putting stress on the display surface.

Safety test

The following test should be carried out;

Important Note:

If it becomes necessary to make any additional change to the monitor after safety test or the device has to be reopened, the entire safety test must be repeated.

- Earth Continuity Test (Low resistance test)

This test is performed by measuring the resistance between the third pin (ground) and outside metal body of the product under test. The maximum acceptable value is generally 0.5 ohms although certain standards may specify 0.1 ohms.

This test is generally carried out at a slightly higher current (e.g. 25–60 A) so that the ground bond circuit maintains safe voltages on the chassis of the product, even at a high current, before the circuit breaker trips.

This test is essential so that the product does not cause an electric shock resulting from insulation failure.

- Withstand Voltage Test

This test is carried out by applying a significantly higher than operating voltage to the device under test. In this test, the insulation of a product, stressed to a greater extent than under normal operating conditions, should not be breached for the product to pass.

MLD-REAR-COVER Disassembly

1. Place the monitor on a conductive mat, with the screen surface to the bottom.
2. Remove 2 screws on ASSY-REAR-COVER.



3. Unhook 8 tabs (hooks) on the top side and each 4 tabs (hooks) at left or right sides and 5 tabs (hooks) on the bottom side and to take out ASSY-REAR-COVER.



Detailed description of how to remove ASSY-REAR-COVER



Remove ASSY-REAR-COVER by pulling ASSY-REAR-COVER upward while lowering ASSY-MID-COVER downward as shown above.

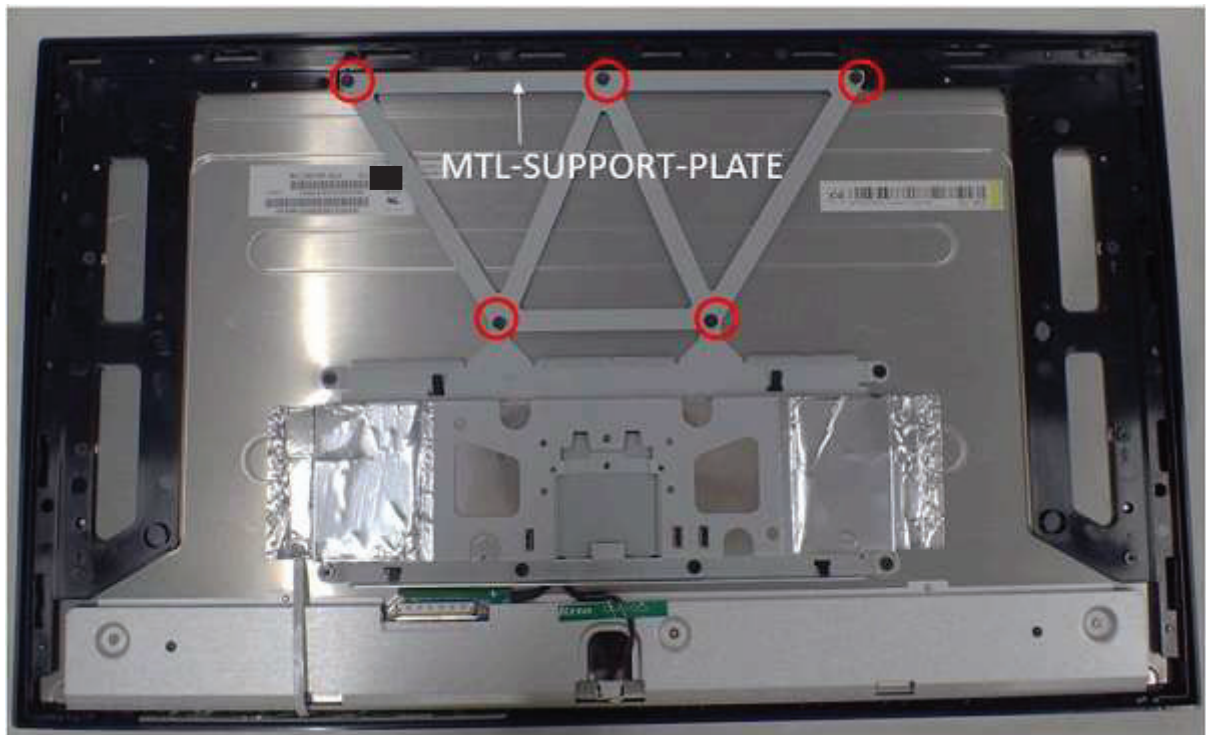
NOTE:
Please note the tabs are easily damaged.

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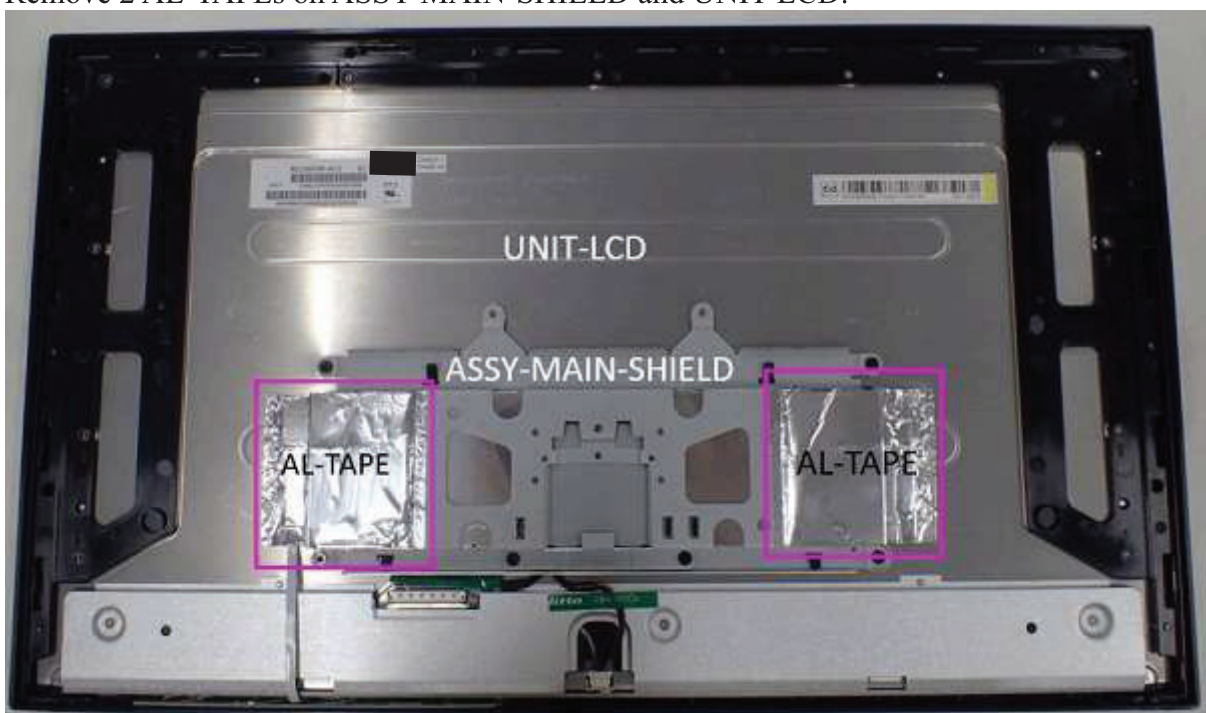
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ASSY-PCB-MAIN Disassembly

1. Take the previous steps up to [ASSY-REAR-COVER Disassembly](#).
2. Remove 5 screws on MTL-SUPPORT- PLATE to take out MTL-SUPPORT- PLATE.

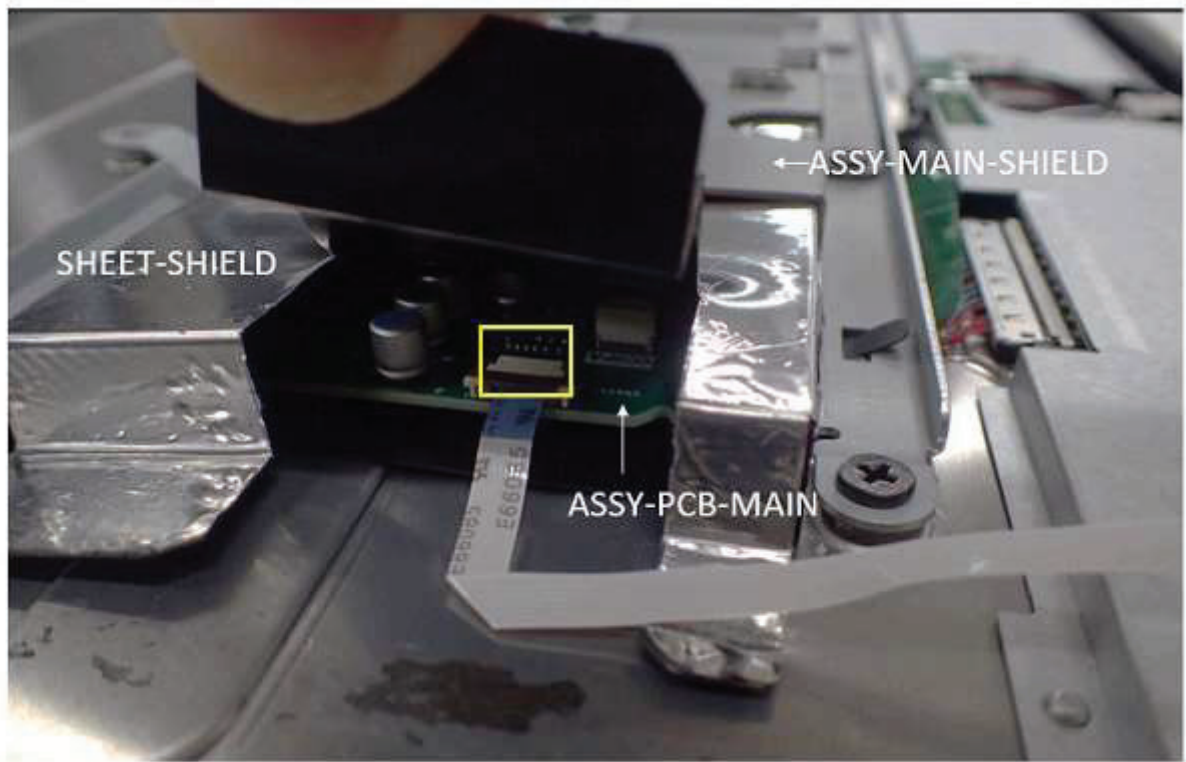


3. Remove 2 AL-TAPES on ASSY-MAIN-SHIELD and UNIT-LCD.

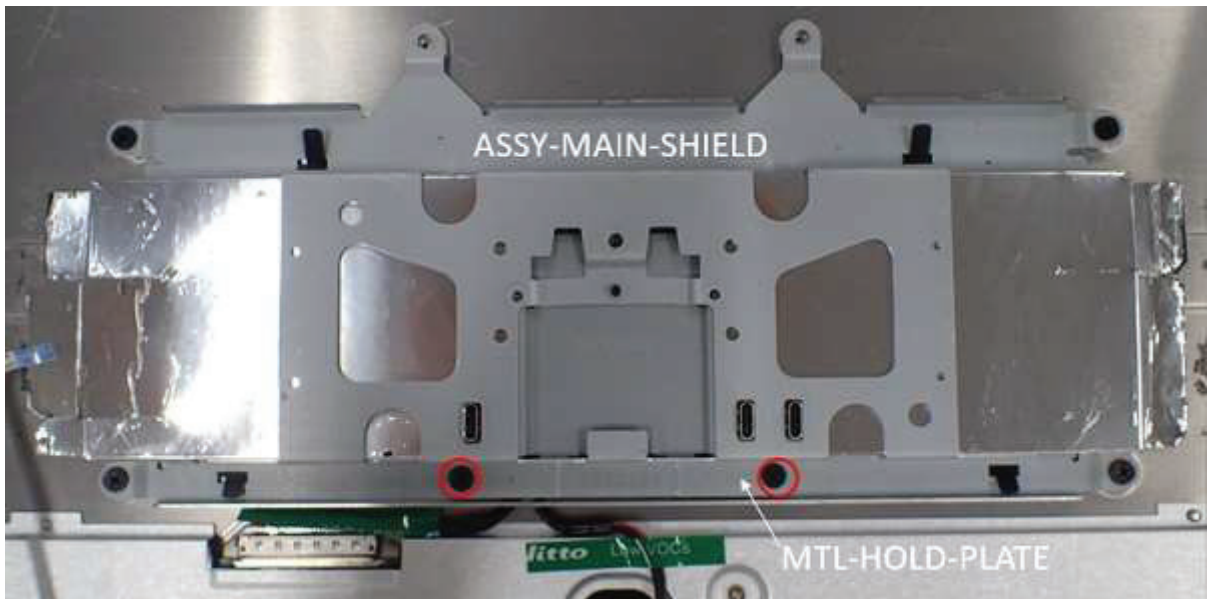


*AL-TAPES can not be reusable. Please replace them.

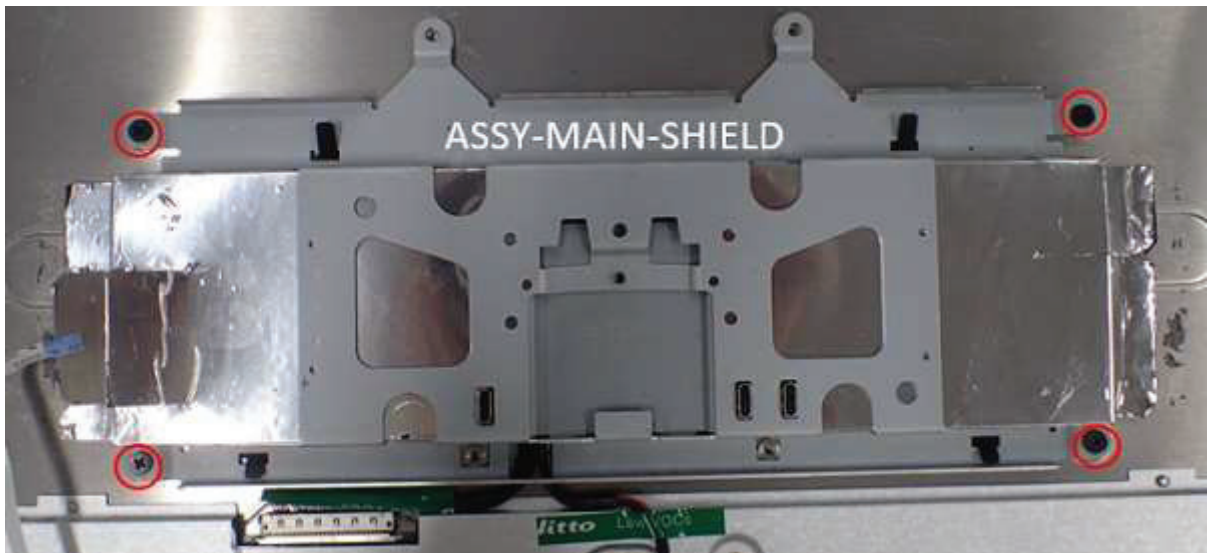
4. Disconnect a harness from a connector on ASSY-PCB-MAIN after rolled up SHEET-SHIELD.



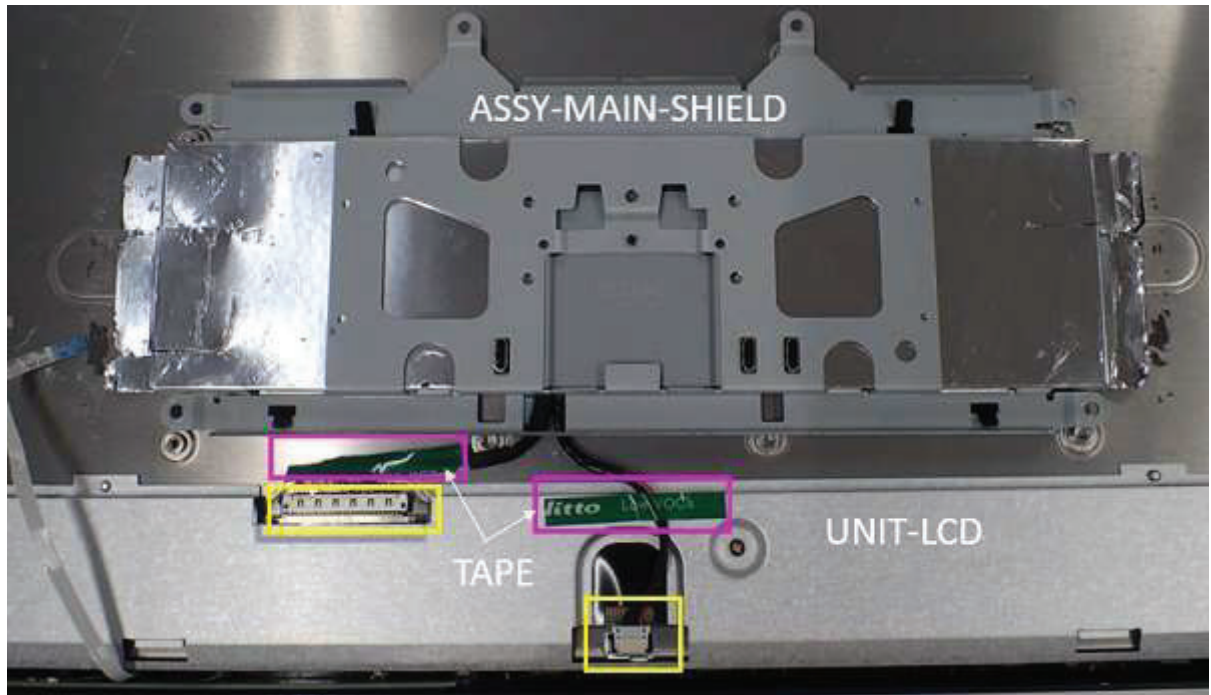
5. Remove 2 screws on MTL-HOLD-PLATE to take out MTL-HOLD-PLATE from ASSY-MAIN-SHIELD.



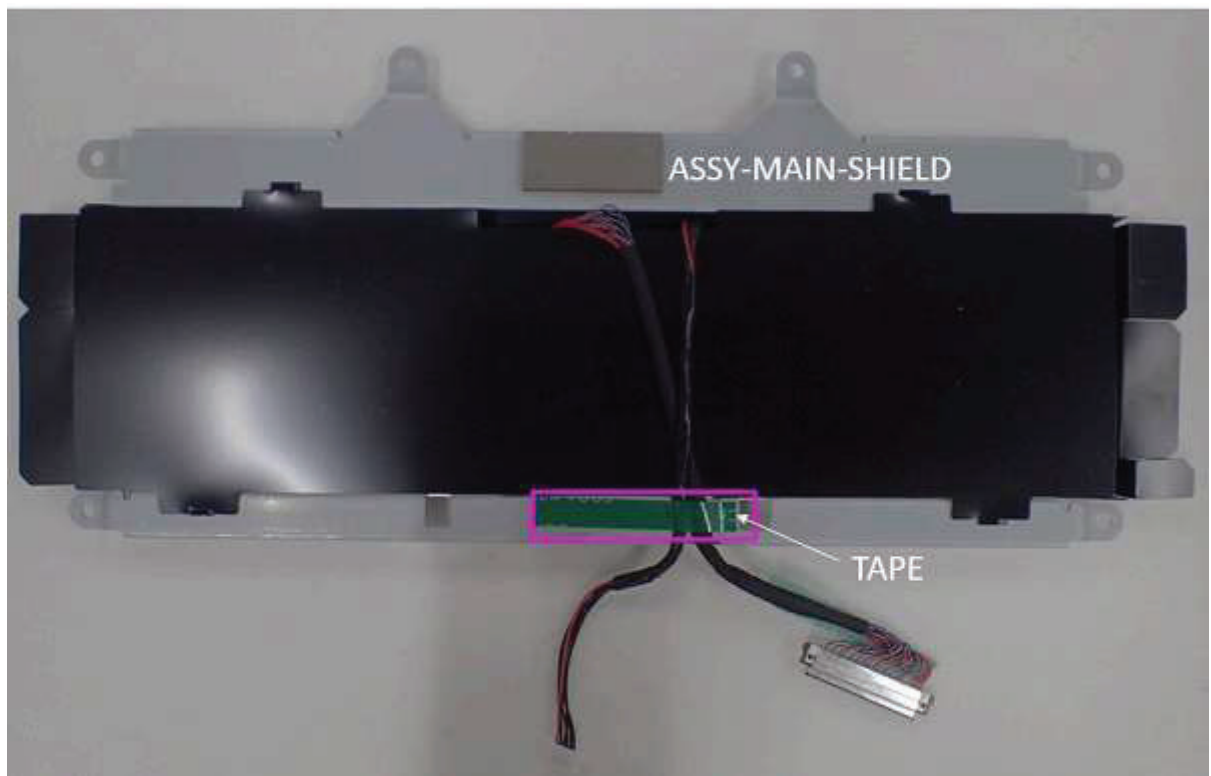
6. Remove 4 screws on ASSY-MAIN-SHIELD.



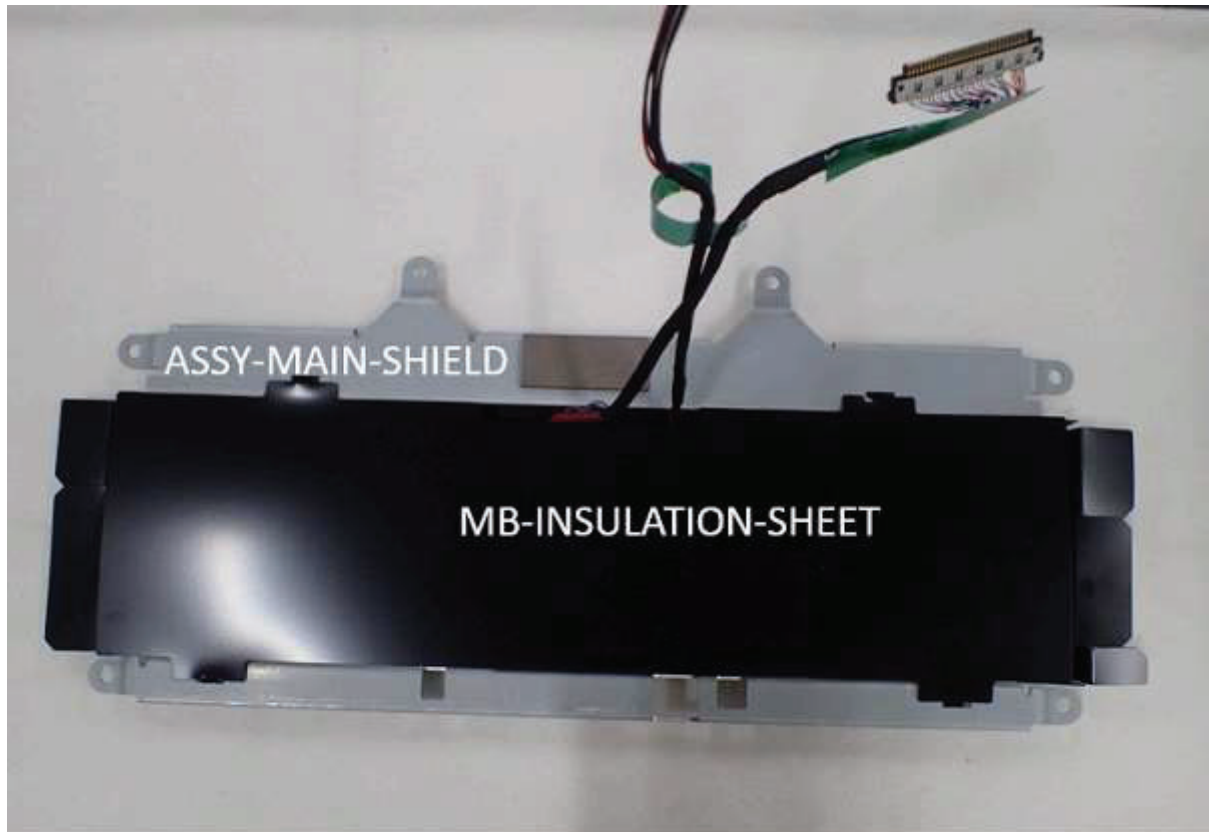
7. Shift ASSY-MAIN-SHIELD up a little.
8. Remove 2 TAPES and disconnect 2 harnesses from connectors on UNIT-LCD to take out ASSY-MAIN-SHIELD from UNIT-LCD.



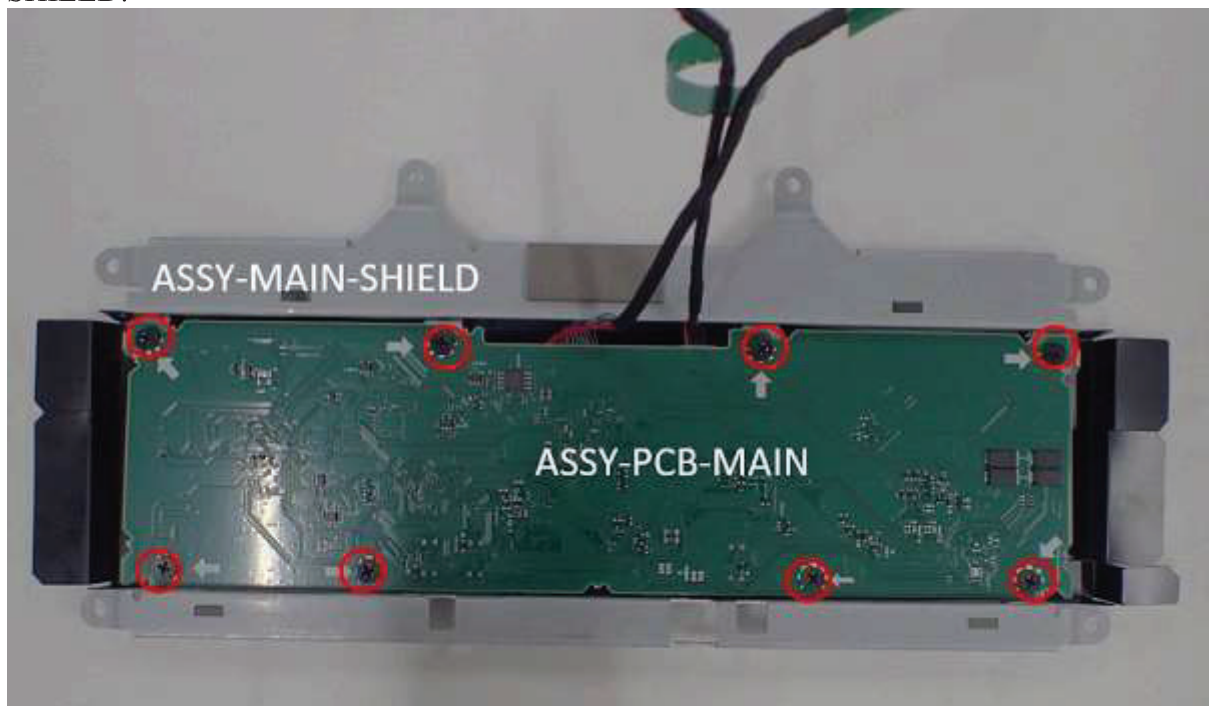
9. Remove a TAPE on ASSY-MAIN-SHIELD.



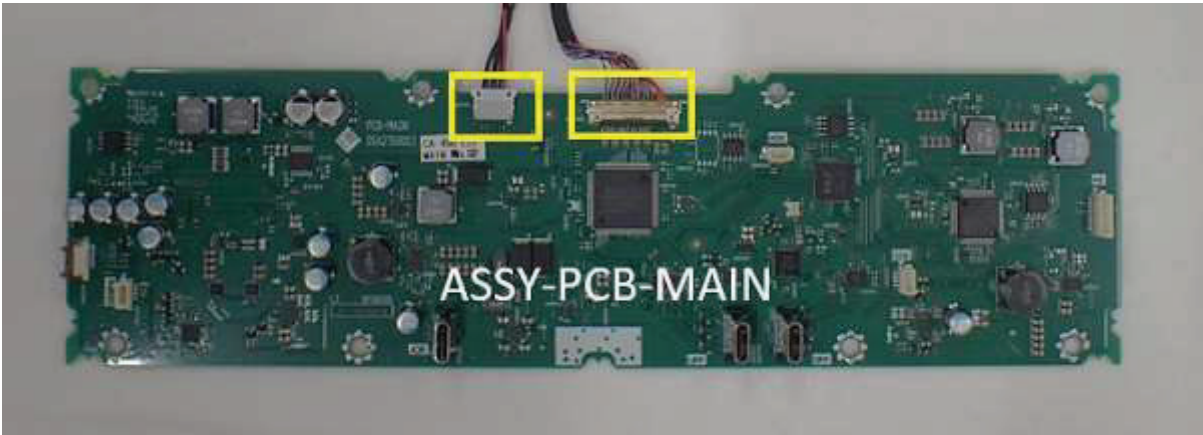
10. Take out MB-INSULATION-SHEET from ASSY-MAIN-SHIELD.



11. Remove 8 screws on ASSY-PCB-MAIN to take out ASSY-PCB-MAIN from ASSY-MAIN-SHIELD.



12. Disconnect 2 harnesses from connectors on ASSY-PCB-MAIN.

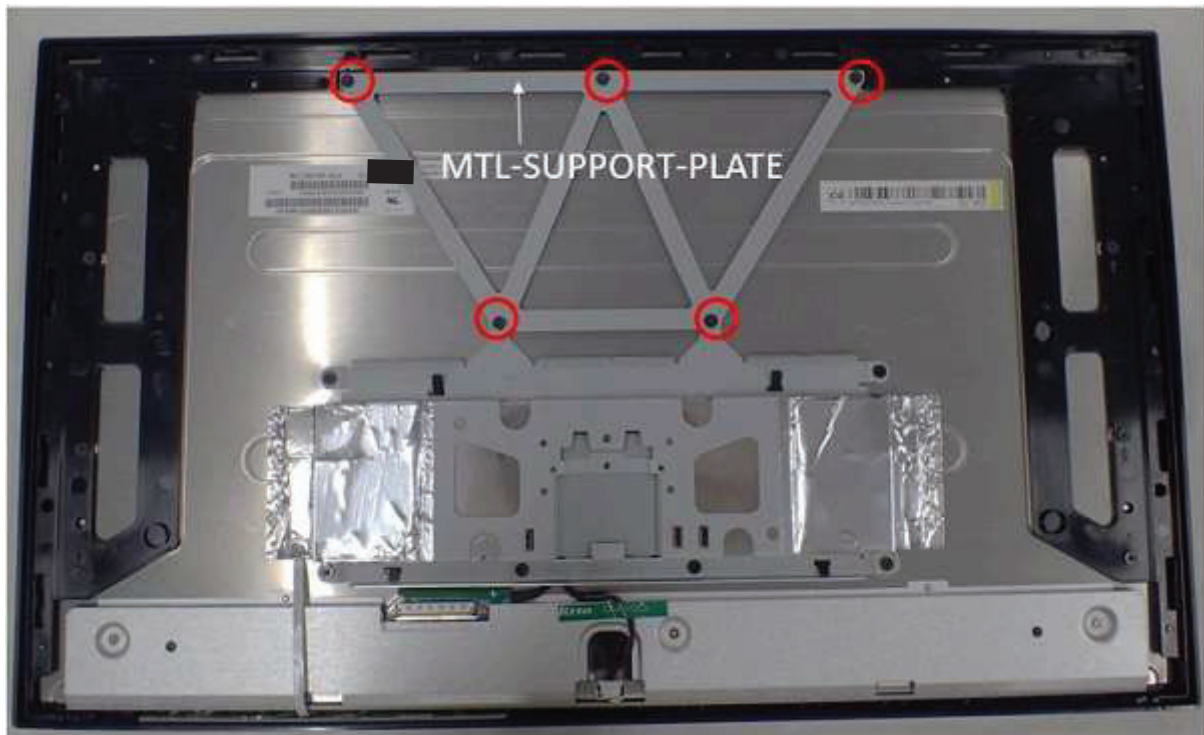


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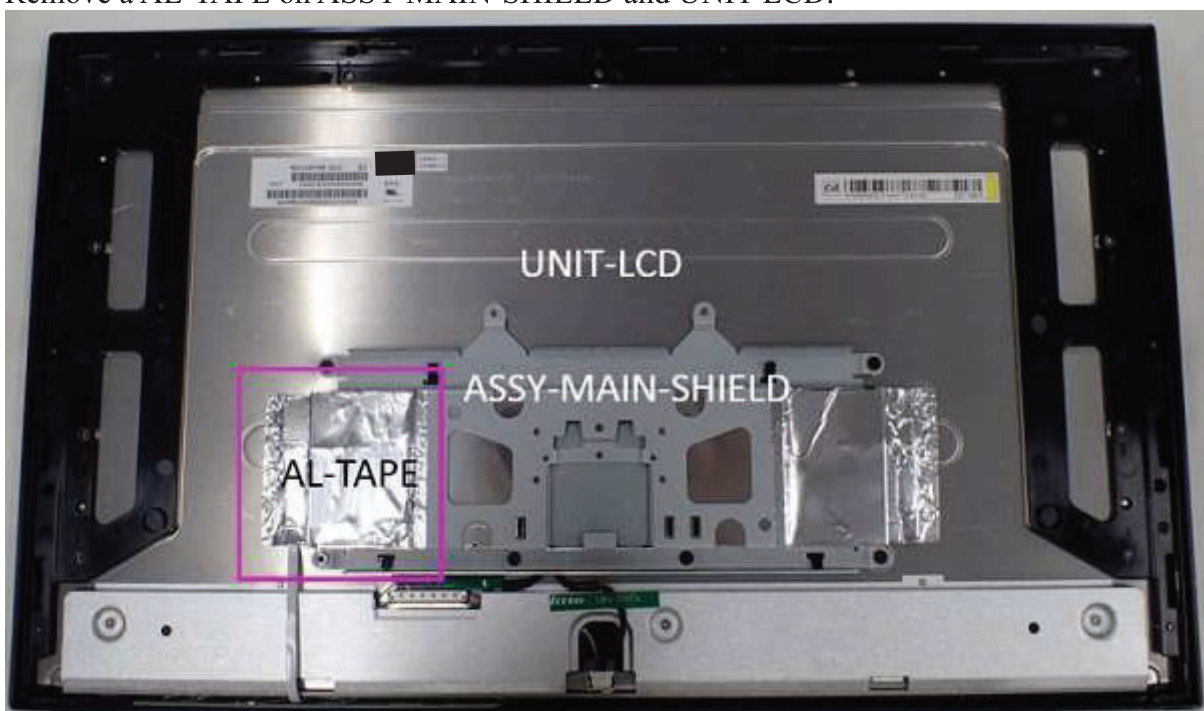
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ASSY-PCB-SW Disassembly

1. Take the previous steps up to [ASSY-REAR-COVER](#).
2. Remove 5 screws on MTL-SUPPORT-PLATE to take out MTL-SUPPORT-PLATE.

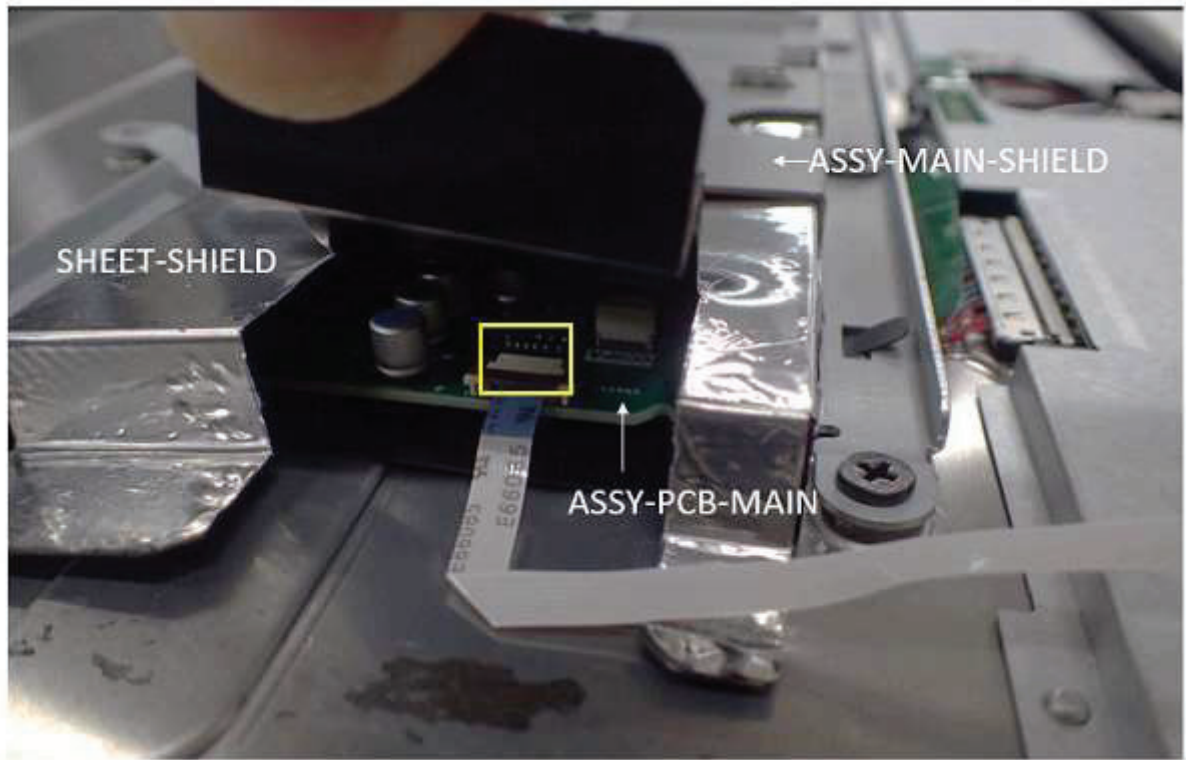


3. Remove a AL-TAPE on ASSY-MAIN-SHIELD and UNIT-LCD.

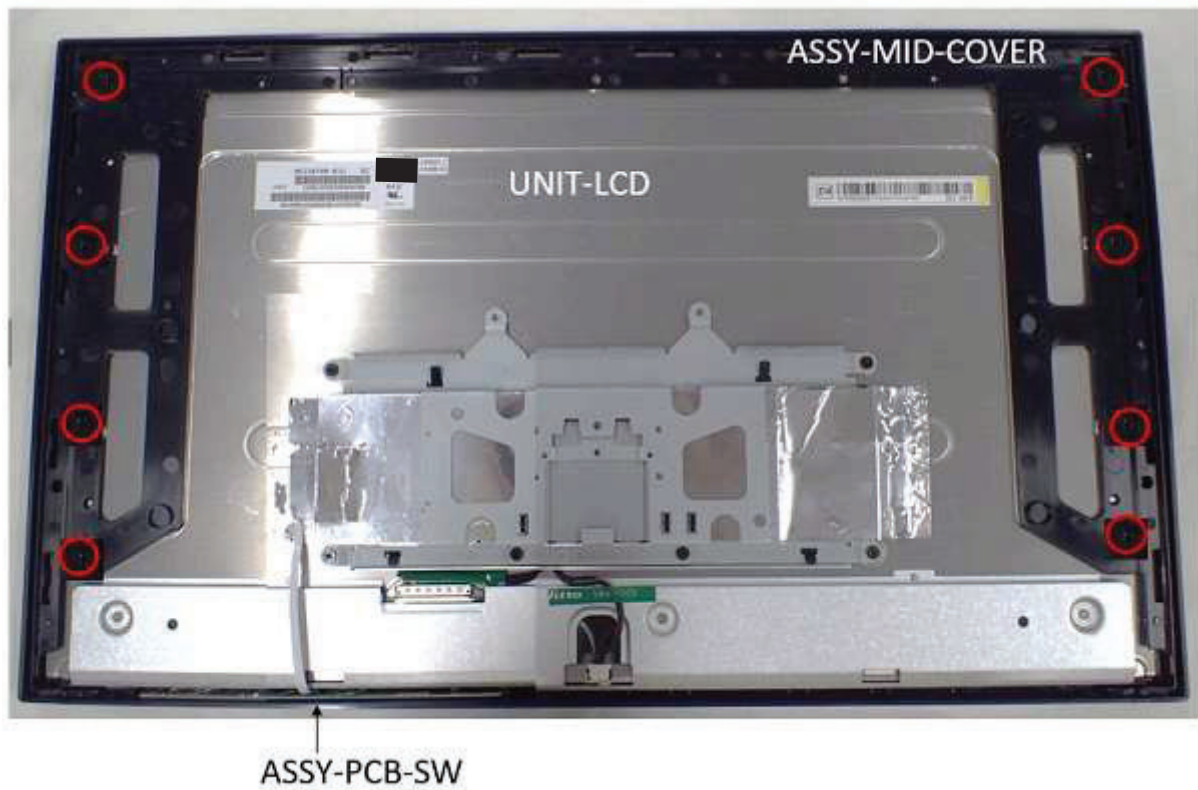


*AL-TAPE can not be reusable. Please replace it.

4. Disconnect a harness from a connector on ASSY-PCB-MAIN after rolled up SHEET-SHIELD

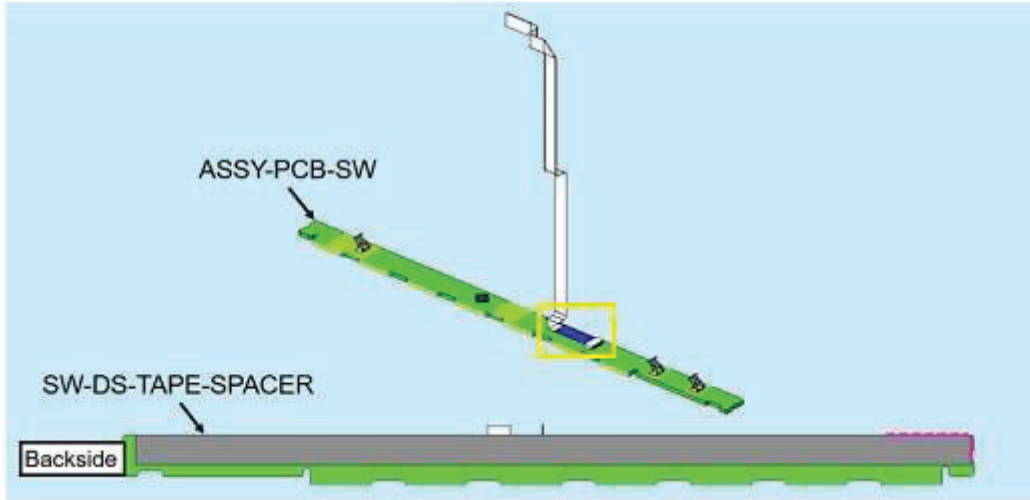


5. Remove 8 screws on ASSY-MID-COVER to take out ASSY-MID-COVER together with ASSY-PCB-SW.



6. Remove a TAPE on ASSY-PCB-SW and disconnect a harness from a connector on ASSY-PCB-SW.

7. Take out ASSY-PCB-SW from ASSY-MID-COVER.



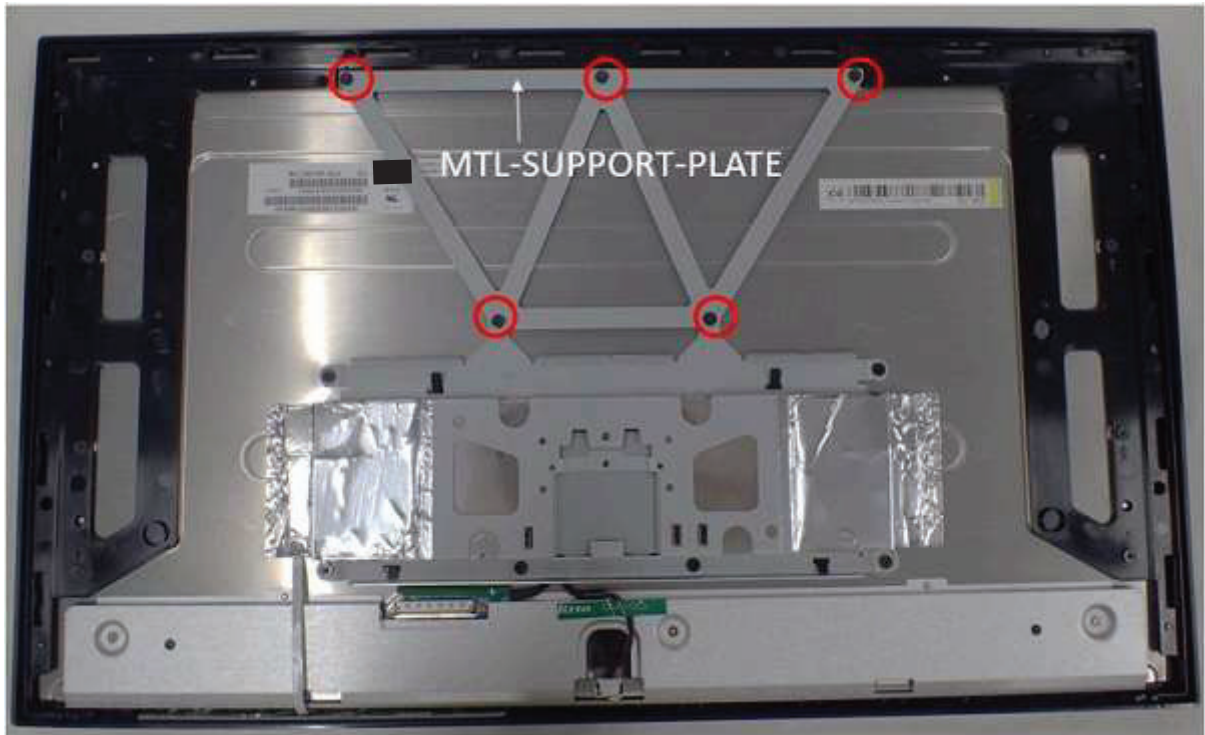
*Back side of ASSY-PCB-SW has attached SW-DS-TAPE-SPACER (double-sided tape) .

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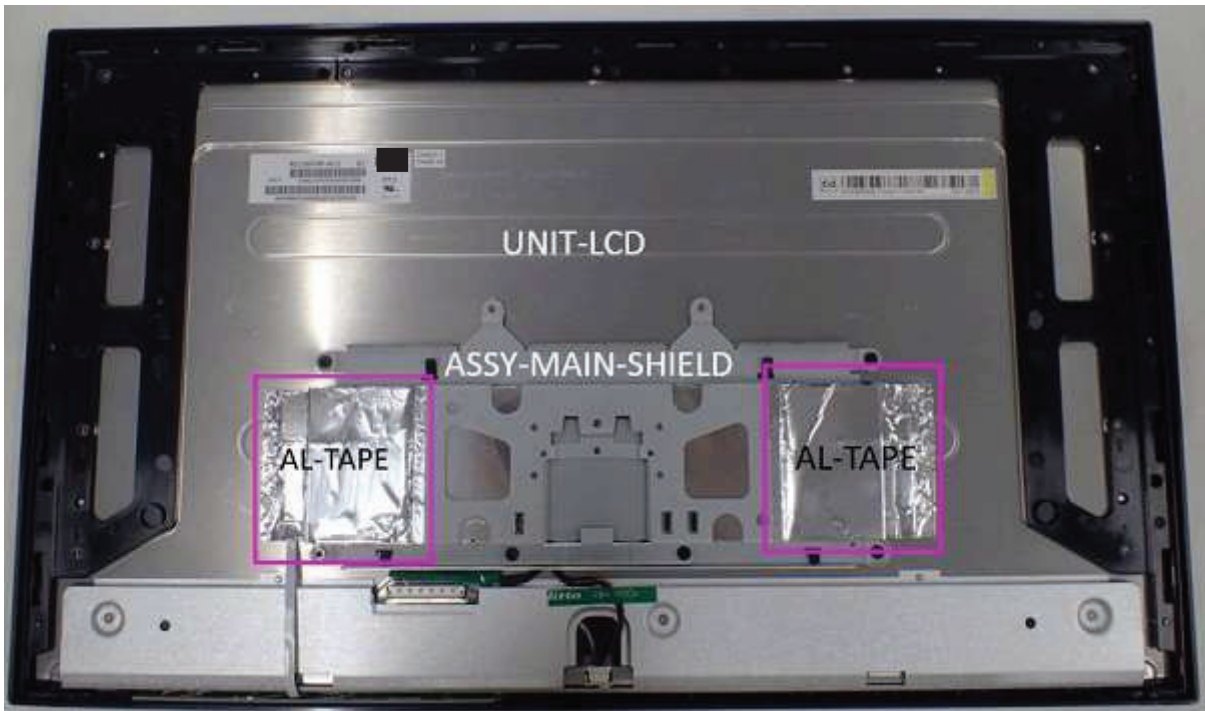
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UNIT-LCD Disassembly

1. Take the previous steps up to [ASSY-REAR-COVER Disassembly](#).
2. Remove 5 screws on MTL-SUPPORT-PLATE to take out MTL-SUPPORT-PLATE.

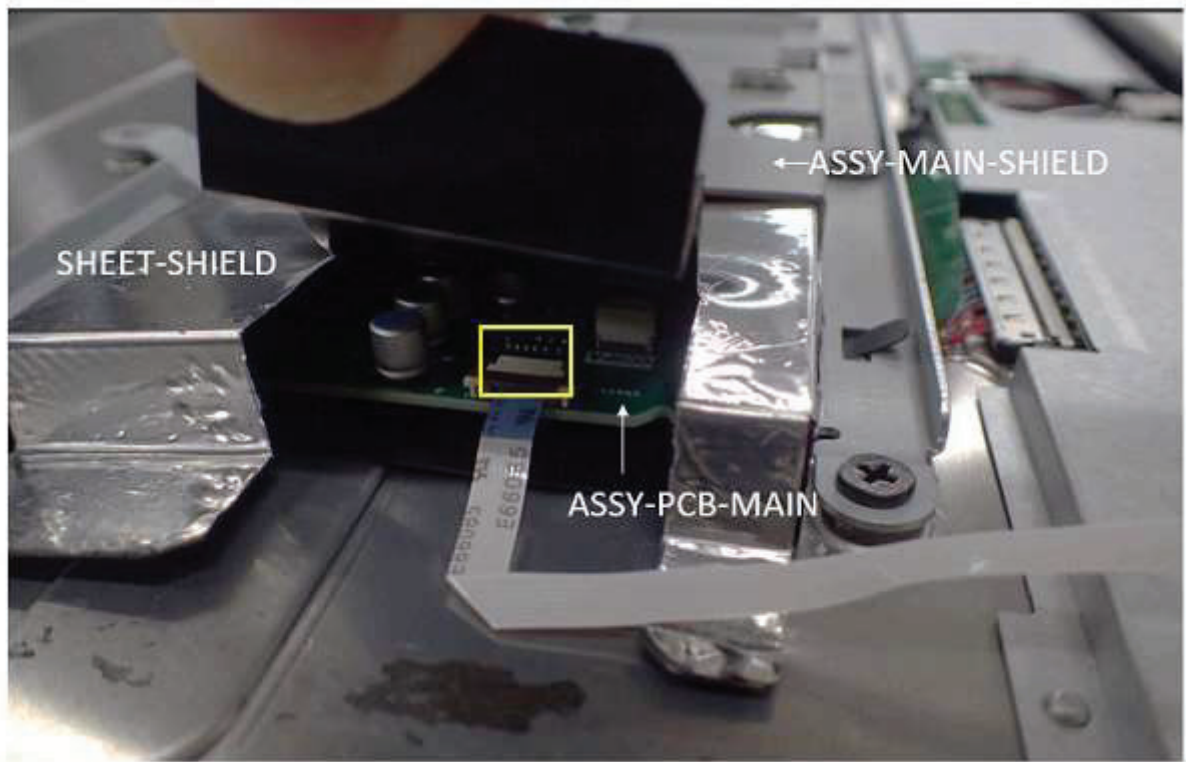


3. Remove 2 TAPES on ASSY-MAIN-SHIELD and UNIT-LCD.

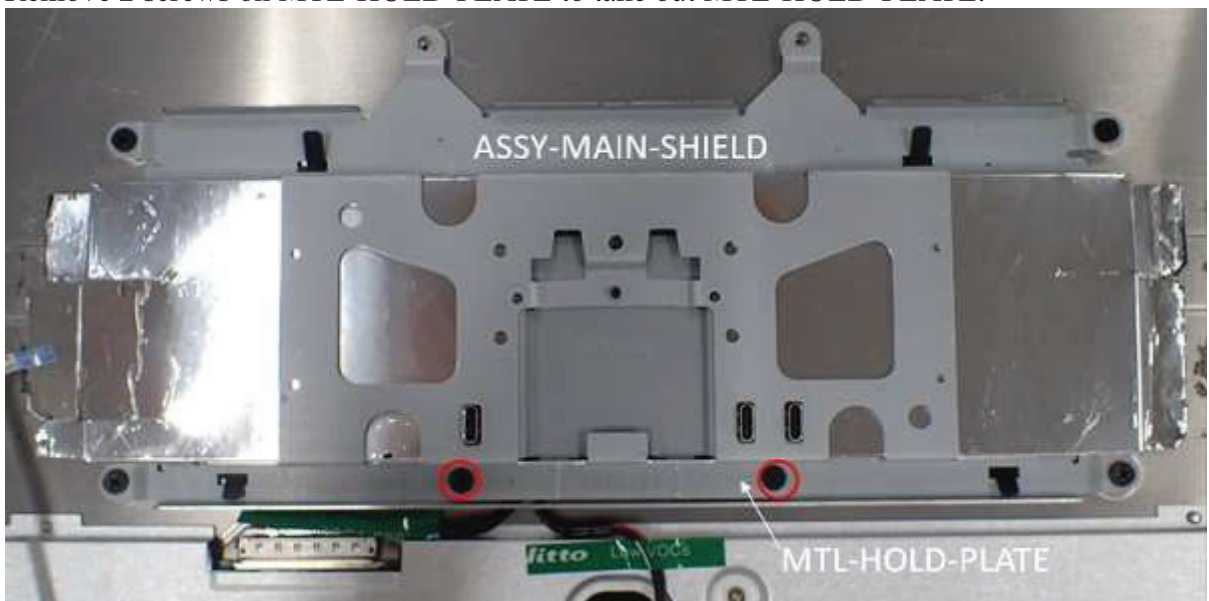


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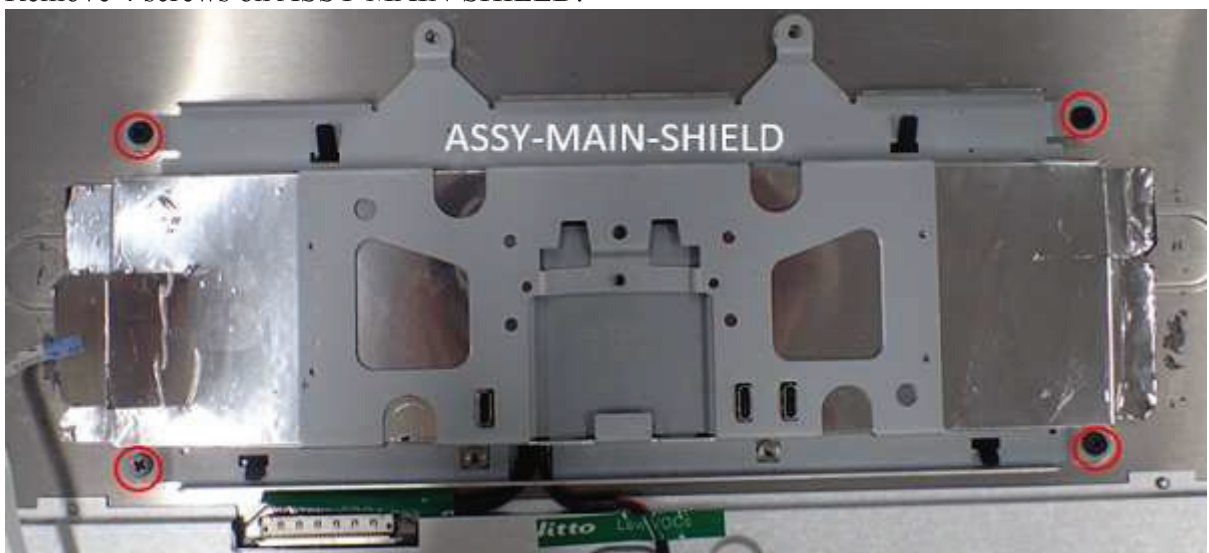
4. Disconnect a harness from a connector on ASSY-PCB-MAIN after rolled up SHEET-SHIELD.



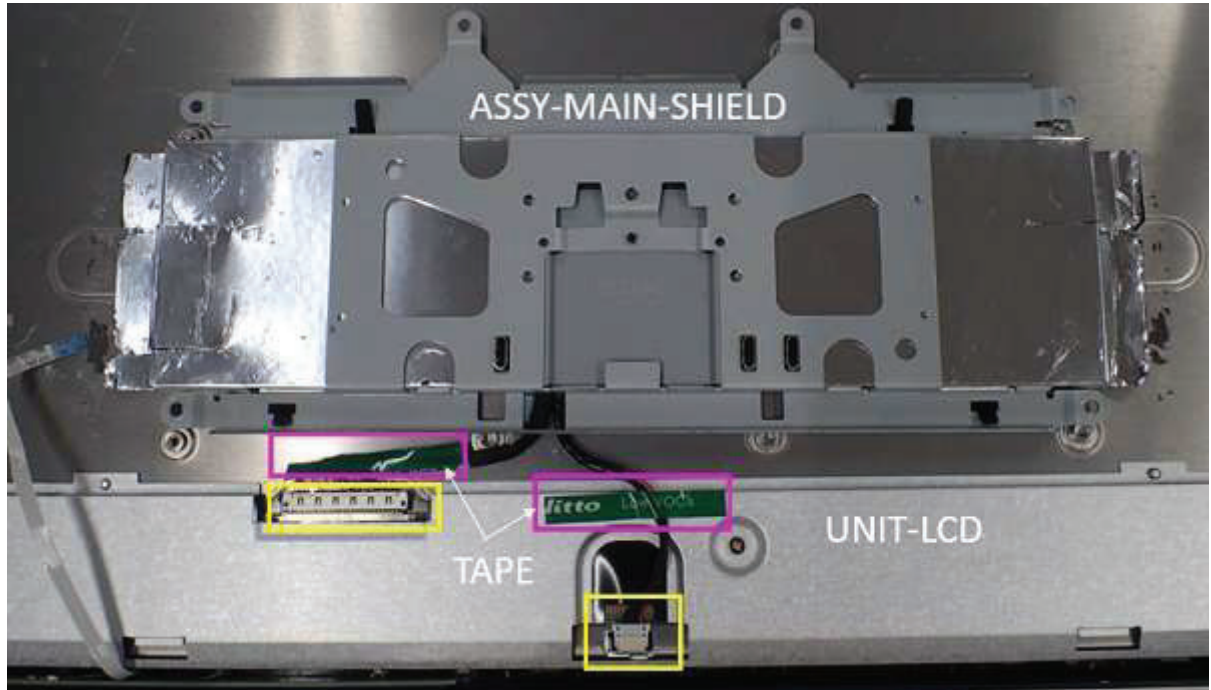
5. Remove 2 screws on MTL-HOLD-PLATE to take out MTL-HOLD-PLATE.



6. Remove 4 screws on ASSY-MAIN-SHIELD.



7. Shift ASSY-MAIN-SHIELD up a little.
8. Remove 2 TAPES and disconnect 2 harnesses from connectors on UNIT-LCD to take out ASSY-MAIN-SHIELD from UNIT-LCD.



9. Remove 8 screws on ASSY-MID-COVER to take out ASSY-MID-COVER together with ASSY-PCB-SW.





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