HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL

GN1T *CHASSIS*

Segment: XF

ORIGINAL MANUAL ISSUE DATE: 3/2015

Version	Date	Subject
1.0	3/2015	Original manual issue.

LCD TV

SONY®

9-888-573-01

SERVICE MANUAL

GN1T *CHASSIS*

Segment: XF

LCD TV

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MODEL LIST

MODEL	COLOR	COMMANDER	DEST.
XBR-55X850C	Black	RMF-TX100U	(LA1)
		RMT-TX100U	PUERTO RICO
			MX
			CHILE, PERU
			(UC2)
			US/CND
XBR-55X855C	Silver	RMF-TX100U	(BR6)
		RMT-TX100B	BRAZIL
	Black	RMF-TX100U	(CR1)
		RMT-TX100B	COSTA RICA
			(ECU)
			ECUADOR
			(LA8)
			CHILE
			PERU
			VENEZUELA
XBR-55X857C	Black	RMF-TX100U	(CO1)
		RMT-TX100B	COLOMBIA
XBR-65X850C	Black	RMF-TX100U	(UC2)
		RMT-TX100U	US/CND

MODEL	COLOR	COMMANDER	DEST.
XBR-65X855C	Silver	RMF-TX100U	(BR6)
		RMT-TX100B	BRAZIL
	Black	RMF-TX100U	(AR4)
		RMT-TX100B	ARGENTINA
			(CR1)
			COSTA RICA
			(LA8)
			CHILE
			PERU
			VENEZUELA
XBR-65X857C	Black	RMF-TX100B	(CO1)
		RMT-TX100B	COLOMBIA
XBR-75X850C	Black	RMF-TX100U	(LA1)
		RMT-TX100U	PUERTO RICO
			MX
			CHILE, PERU
			(UC2)
			US/CND
XBR-75X855C	Silver	RMF-TX100U	(BR6)
		RMT-TX100B	BRAZIL

WARNINGS AND CAUTIONS - ENGLISH

CAUTION

These servicing instructions are for use by qualified service personnel only.

To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis.

The chassis of this receiver is directly connected to the ac power line.

CARRYING THE TV

Be sure to follow these guidelines to protect your property and avoid causing serious injury.

• Carry the TV with an adequate number of people; larger size TVs require two or more people.

• Correct hand placement while carrying the TV is very important for safety and to avoid damages.

SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and ⚠ mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.

CAUTION ABOUT THE LITHIUM BATTERY

• Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
• Outer case broken battery should not contact to water.

WARNINGS AND CAUTIONS - FRENCH

ATTENTION!!

Ces instructions de service sont à l'usage du personnel de service qualifi é seulement.

Pour prévenir le risque de choc électrique, ne pas faire l'entretien autre que celui contenu dans le Mode d'emploi à moins que vous soyez qualifi é faire ainsi.

WARNING!!

Afi n d'eviter tout risque d'electrocution provenant d'un châssis sous tension, un transformateur d'isolement doit etre utilisé lors de tout dépannage. Le châssis de ce récepteur est directement raccordé à l'alimentation du secteur.

POUR TRANSPORTER LE TÉLÉVISEUR

Tenez compte de ce qui suit pendant l'installation du téléviseur :

• Débranchez tous les câbles avant de transporter le téléviseur.

• Transportez le téléviseur avec le nombre de personnes approprié ; un téléviseur de grande taille doit être transporté par au moins deux personnes.

• Lors du transport du téléviseur, l'emplacement des mains est très important pour votre sécurité, ainsi que pour éviter de causer des dommages.

ALERTE!!

Afi n d'eviter tout risque d'electrocution provenant d'un chassis sous tension, un transformateur d'isolement doit etre utilise lors de tout depannage. Le chassis de ce recepteur est directement raccorde a l'alimentation du secteur.

ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifi es par une trame et par une marque ⚠ sur les schemas de principe, les vues explosees et les listes de pieces sont d'une importance critique pour la securite du fonctionnement. Ne les remplacer que par des composants Sony dont le numero de piece est indique dans le present manuel ou dans des supplements publies par Sony. Les reglages de circuit dont l'importance est critique pour la securite du fonctionnement sont identifi es dans le present manuel. Suivre ces procedures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecte.

USE CAUTION WHEN HANDLING THE LCD PANEL

When repairing the LCD panel, be sure you are grounded by using a wrist band.

When repairing the LCD panel on the wall, the LCD panel must be secured using the 4 mounting holes on the rear cover.

1) Do not press on the panel or frame edge to avoid the risk of electric shock.

2) Do not scratch or press on the panel with any sharp objects.

3) Do not leave the module in high temperatures or in areas of high humidity for an extended period of time.

4) Do not expose the LCD panel to direct sunlight.

5) Avoid contact with water. It may cause a short circuit within the module.

6) Disconnect the AC power when replacing the backlight (CCFL) or inverter circuit. (High voltage occurs at the inverter circuit at 650Vrms.)

7) Always clean the LCD panel with a soft cloth material.

8) Use care when handling the wires or connectors of the inverter circuit. Damaging the wires may cause a short.

9) Protect the panel from ESD to avoid damaging the electronic circuit (C-MOS).

10) It is recommended not to exceed 1 hour of Power-On nor Burn-in period with LCD panel face down condition, in repair activity.
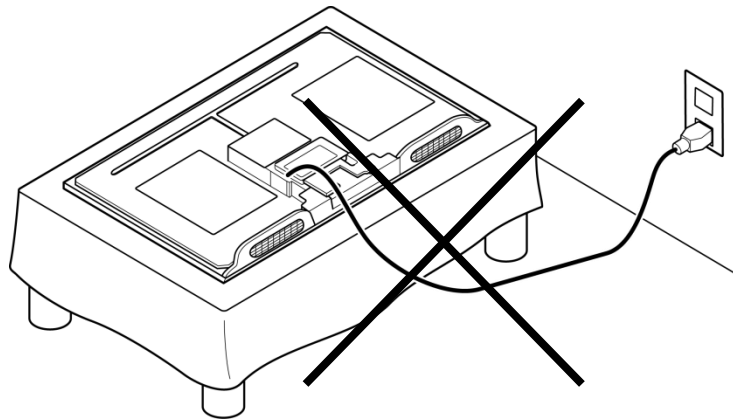
SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.

2. Check the interboard wiring to ensure that no wires are "pinched" or touching high-wattage resistors.

3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.

4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.

5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.

6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.

7. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

8. For safety reasons, repairing the Power board and/or Inverter board is prohibited.

Leakage Test

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes).
Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.

2. A battery-operated AC milliampmeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low voltage scale.
   The Simpson's 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).
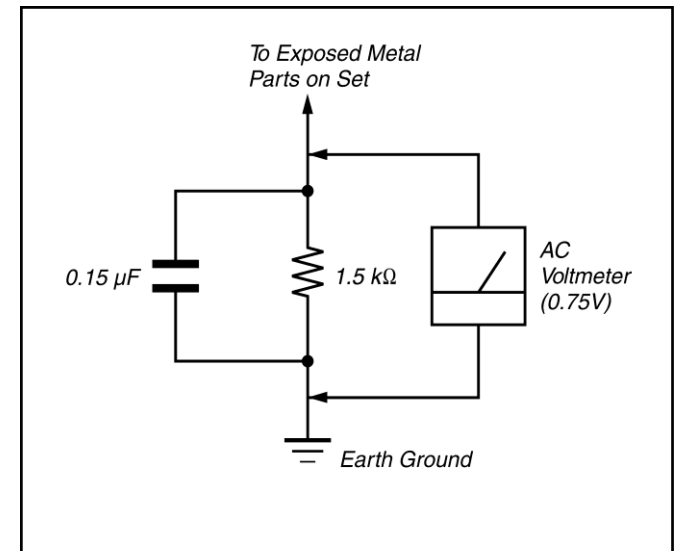

FigureA. Using an AC voltmeter to check AC leakage.

How to Find a Good Earth Ground

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground.
If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.
If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble- light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).
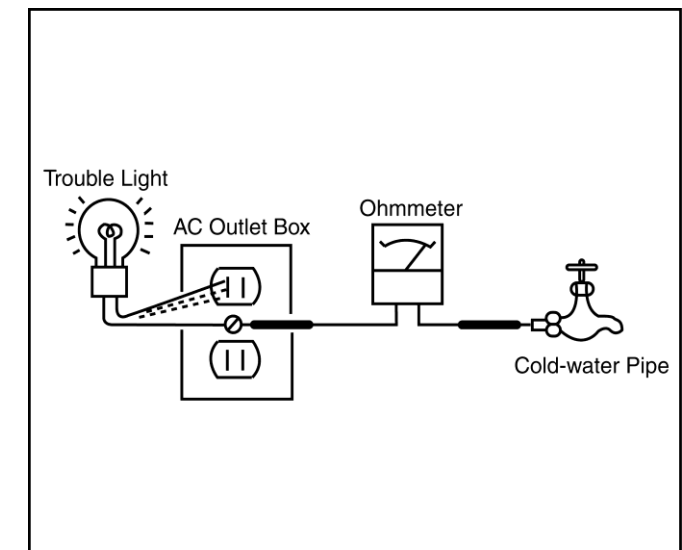

Figure B. Checking for earth ground.

SELF DIAGNOSIS FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the Smart Core Red LED will automatically begin to flash.

The number of times the LED flashes translates to a probable source of the problem.

A definition of the Smart Core Red LED flash indicators is listed in the instruction manual for the user's knowledge and reference.

If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

DIAGNOSTIC TEST INDICATORS

When an error occurs, the Smart Core Red LED will flash a set number of times to indicate the possible cause of the problem.

If there is more than one error, the LED will identify the first of the problem areas.

Result for all of the following diagnostic items are displayed on screen.

If the screen displays a "0", no error has occurred .

<G>: Power supply board, <B>: Main board, <T>: Tcon board, <P>: Panel module , <S>: Speaker , <A>: Power Adapter

RED LED blinking count	Detection Items
2x	<G/B> Main 12V over voltage [MAIN_POWER]
3x	<B> Main 5.0V failure [DC_ALERT]
	<B/S> Audio amp. protection [AUD_ERR] <B> Tuner or demodulator I2C No ACK [TU_DEMOD] <B> HDMI Switch/Equalizer I2C communication error [HDMI_EQ]
4x	None
5x	<P/T/G/B> *Panel ID EEPROM I2C No ACK (Also panel power failure is a suspect)* [P_ID_ERR]
	<T> TCon IC I2C communication error [TCON_ERR]
6x	<G/P/B> Backlight failure [BACKLIGHT]
7x	Over temperature protection [TEMP_ERR] <B> Temp. sensor I2C No ACK [TEMP_ERR] <B> V By One lock error between Main device and 4KBE device [4KBE_ERR]
8x	<B> Software error [SW_ERR]

Red italic: detect at startup sequence only.

[SELF DIAGNOSTIC SCREEN DISPLAY]

Error item Naming

Error count

Format of error timestamps
YYMMDDhhmmss (in UTC)
Example:
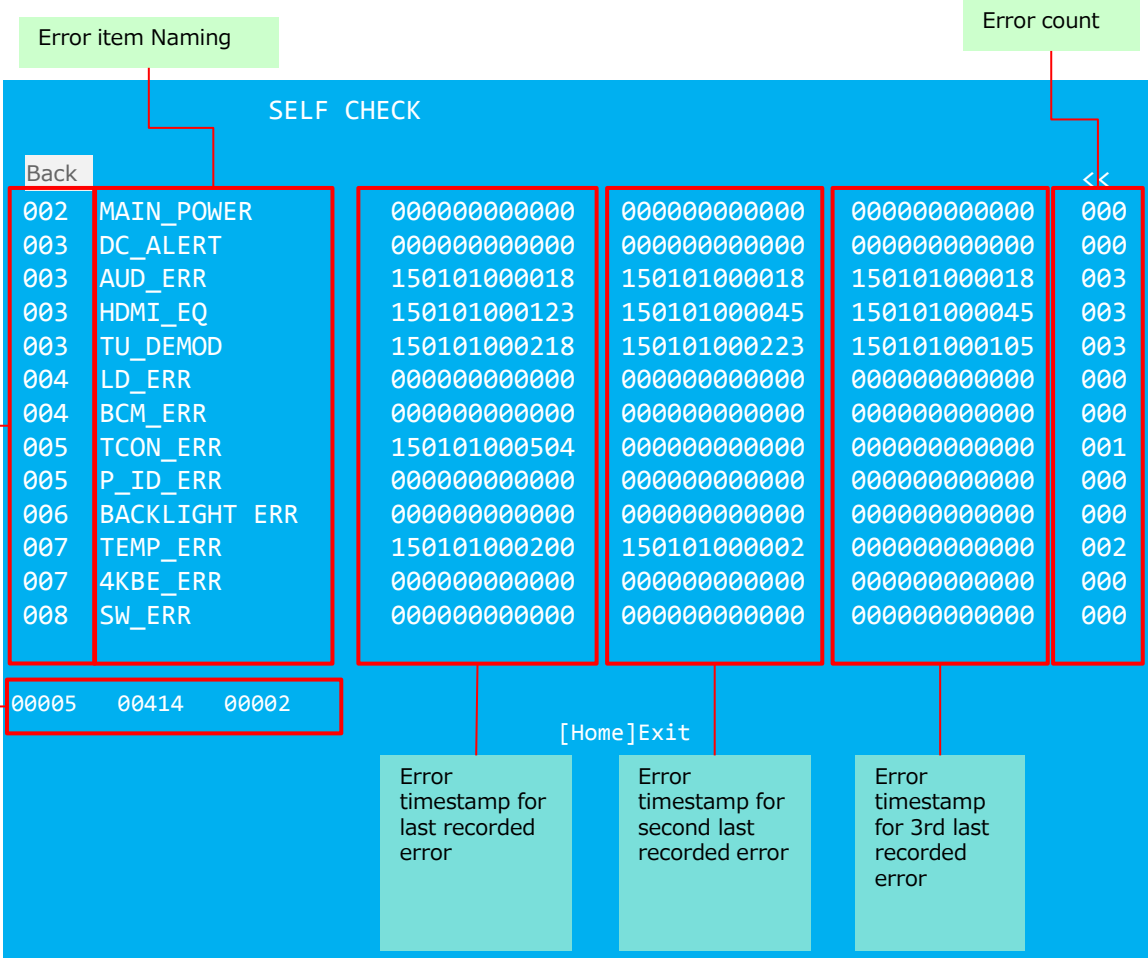 120823132523 -> Aug 23 2012 13:25:23 UTC
* Only when time is set, an error timestamp
is saved.

Smart Core Red LED
blinking count

```
                    SELF CHECK

 Back                                                              <<

 002   MAIN_POWER      000000000000   000000000000   000000000000   000
 003   DC_ALERT        000000000000   000000000000   000000000000   000
 003   AUD_ERR         150101000018   150101000018   150101000018   003
 003   HDMI_EQ         150101000123   150101000045   150101000045   003
 003   TU_DEMOD        150101000218   150101000223   150101000105   003
 004   LD_ERR          000000000000   000000000000   000000000000   000
 004   BCM_ERR         000000000000   000000000000   000000000000   000
 005   TCON_ERR        150101000504   000000000000   000000000000   001
 005   P_ID_ERR        000000000000   000000000000   000000000000   000
 006   BACKLIGHT ERR   000000000000   000000000000   000000000000   000
 007   TEMP_ERR        150101000200   150101000002   000000000000   002
 007   4KBE_ERR        000000000000   000000000000   000000000000   000
 008   SW_ERR          000000000000   000000000000   000000000000   000

 00005   00414   00002

                                              [Home]Exit
```

•Panel Operation Time is recorded every
30 min, but Total Operation Time is recorded every 1 hr.
Therefore, the panel op. time might become larger than
the total op. time.

Error timestamp for last recorded error

Error timestamp for second last recorded error

Error timestamp for 3rd last recorded error

Total Operation Time [hr] – Boot Count – Panel Operation Time [hr]

SELF-DIAGNOSTIC SCREEN DISPLAY
For errors with symptoms such as "power sometimes shuts off" or "screen sometimes goes out" that cannot be confirmed, it is possible to bring up past occurrences of failure for confirmation on the screen:

[To Bring Up Screen Test]
In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

DISPLAY ➡ Channel 5 ➡ Volume – * ➡ TV POWER
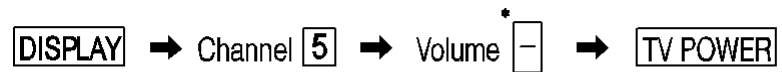
* : Note that this differs from entering the service mode (volume +)

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen.
After you have completed the repairs, clear the result display to "0".

Clearing the Self Check Diagnostic List
      Panel operation time :   Press the Channel 7 => Channel 0 .

Exiting the Self-diagnostic screen
To exit the Self Diagnostic screen, Power off & on or Push the <Home> button.

SEC 1. DISASSEMBLY

• There are clutch in the yellow frame[   ]. Therefore please be careful in the case of the disassembly or assembly of parts.
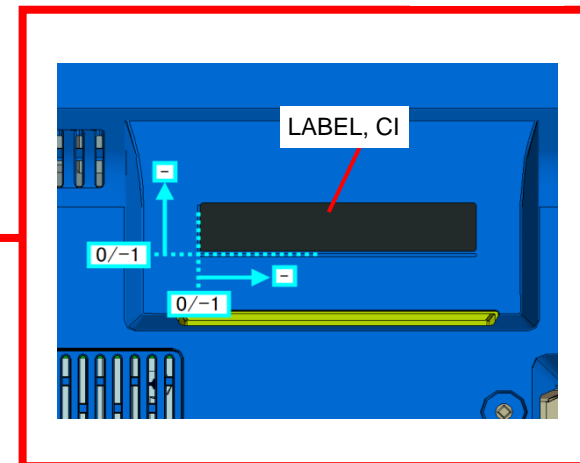
1-1. XBR-55X850C/855C/857C
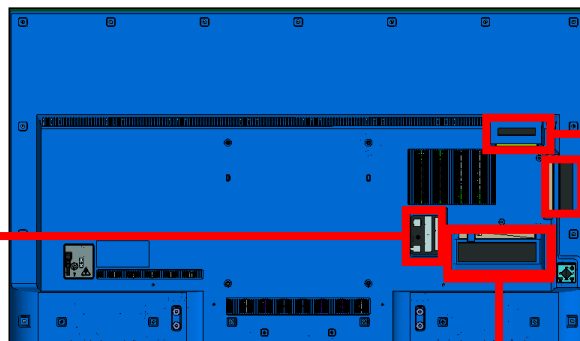
1-1-1. STAND
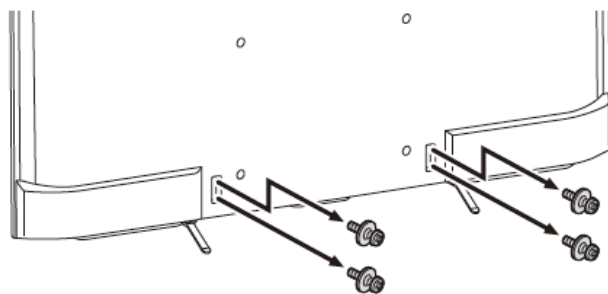
4 screws (SCREW, +PSW M5X16) P/N: 4-449-743-01

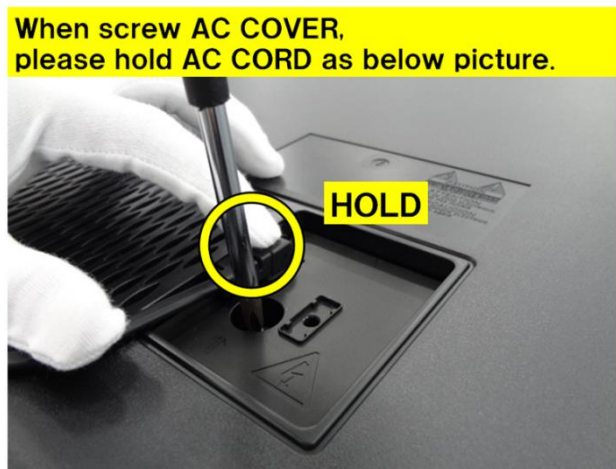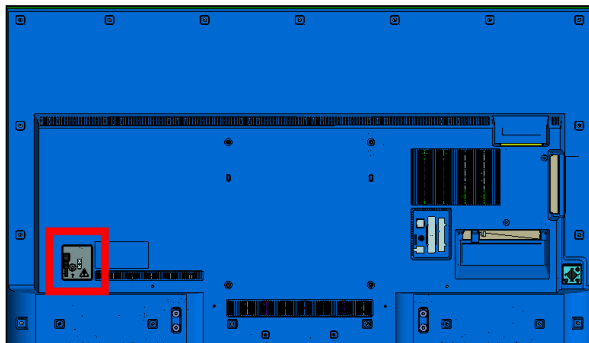STAND
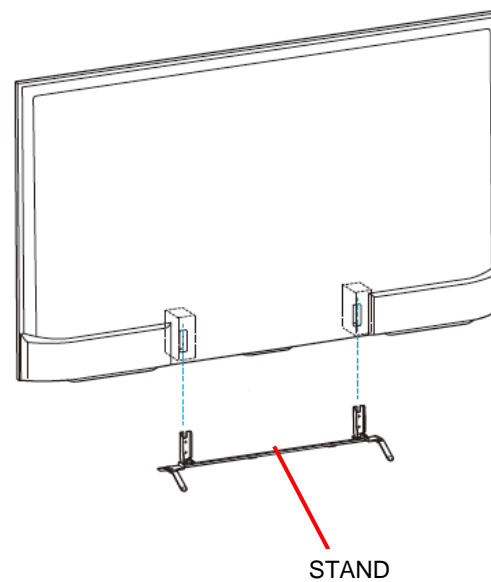
1-1. XBR-55X850C/855C/857C

1-1-2. LABEL, UNDER TERMINAL AND LABEL, REAR TERMINAL AND LABEL, SIDE TERMINAL (L) AND LABEL, CI
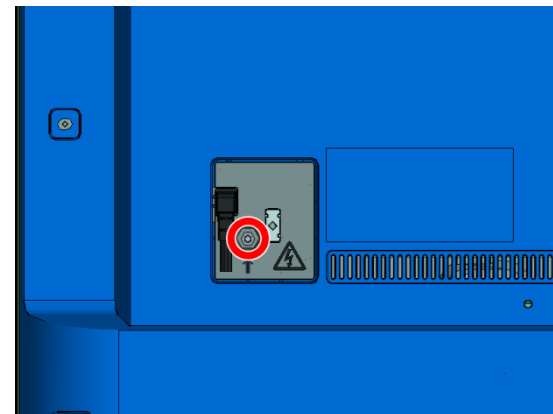
(CO1 ONLY)

LABEL, CI

0/−1

0/−1

LABEL, REAR TERMINAL

Positioning hole

0/−1

0/−1

LABEL, UNDER TERMINAL

0/−1

0/−1

LABEL, SIDE TERMINAL (L)
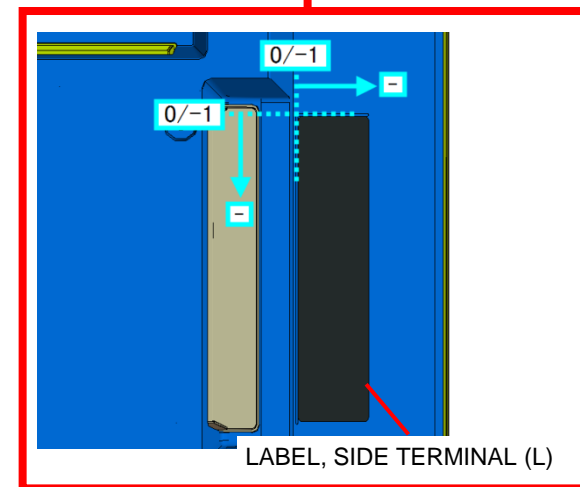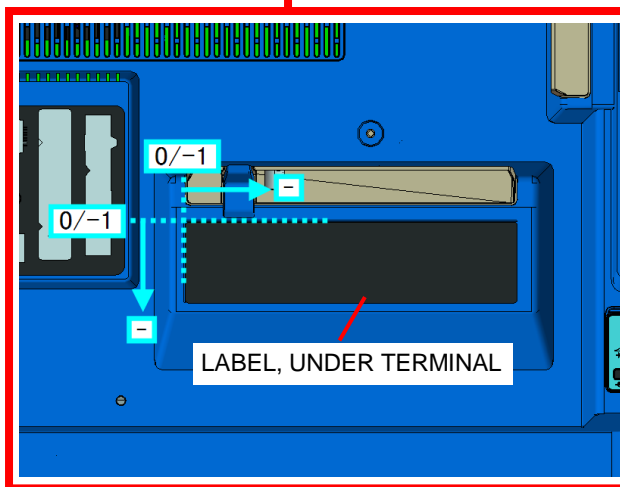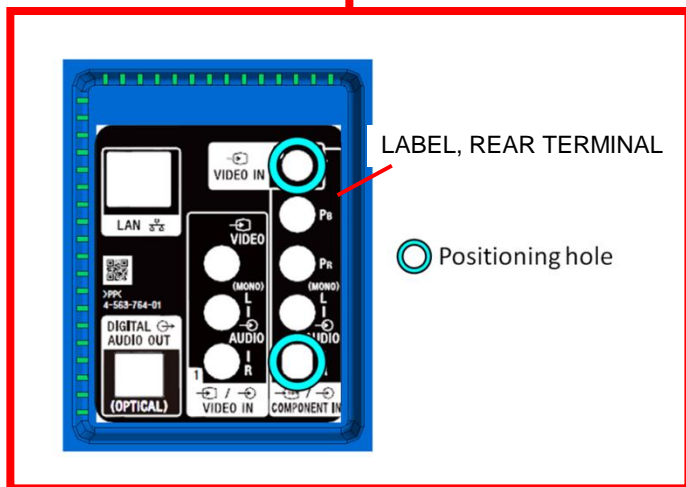
1-1. XBR-55X850C/855C/857C

1-1-3. AC COVER AND POWER SUPPLY CORD

When screw AC COVER,
please hold AC CORD as below picture.

HOLD

1

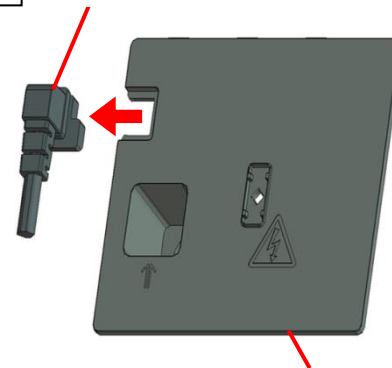Screw (SCREW +PSW M4X10) P/N: 4-159-298-01

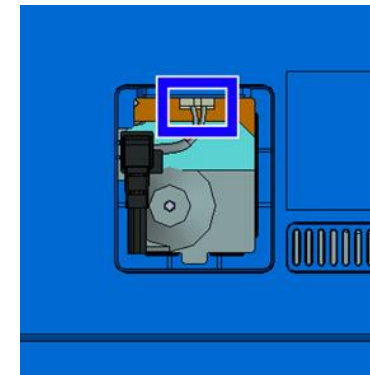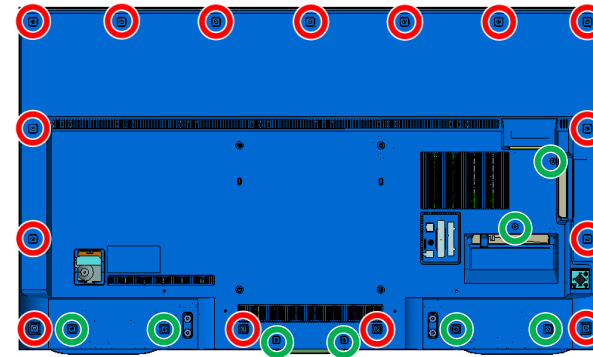**2**

3
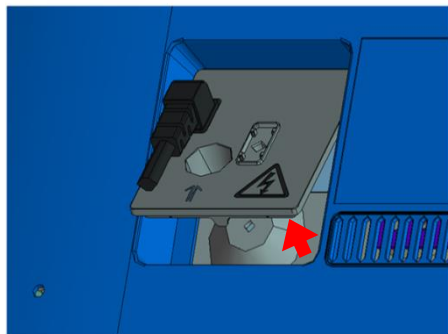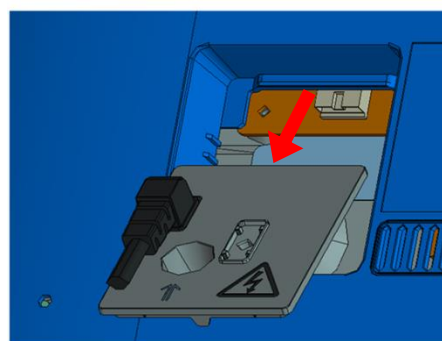
4 POWER SUPPLY CORD

AC COVER

5

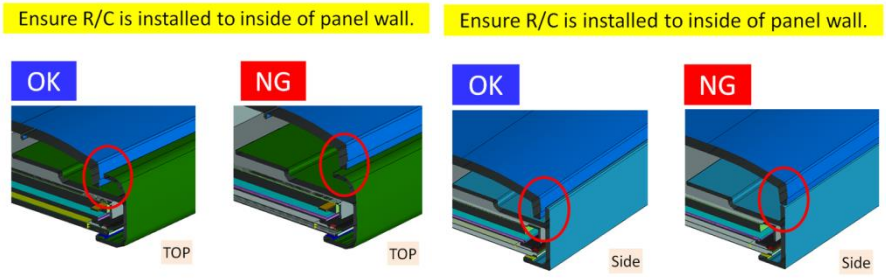## 1-1. XBR-55X850C/855C/857C

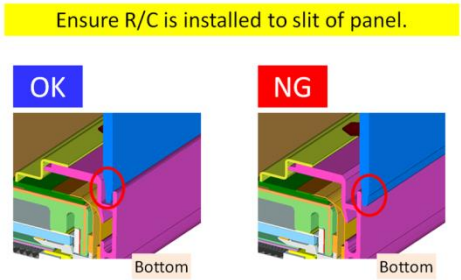### 1-1-4. REAR COVER (L HRN) A

1

○ 15 screws (SCREW , +PWH M3X6) P/N: 4-452-935-11

○ 8 screws (SCREW, +BVTP 4X12 TYPE2 IT-3) P/N: 2-580-639-01

2

Ensure R/C is installed to slit of panel.

OK | NG
Bottom | Bottom

Ensure R/C is installed to inside of panel wall. | Ensure R/C is installed to inside of panel wall.

OK | NG | OK | NG
TOP | TOP | Side | Side

3

REAR COVER (L HRN) A
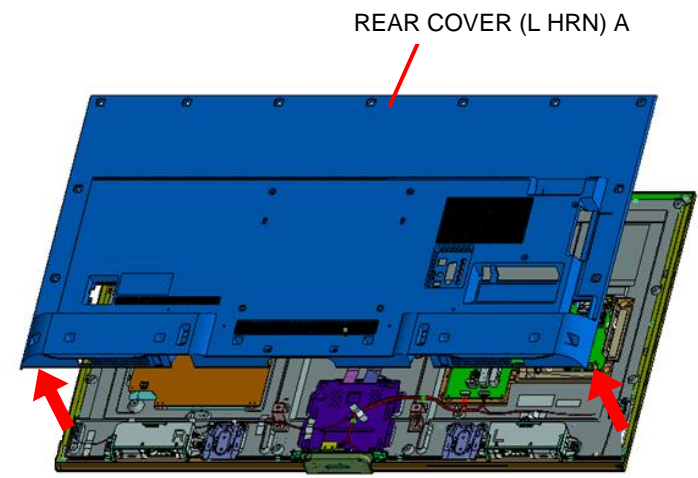
1-1. XBR-55X850C/855C/857C

1-1-5. TAPE AND WIRE DRESSING

TAPE

TAPE

Take slack

Pinching wire

Pinching wire

Pinching wire
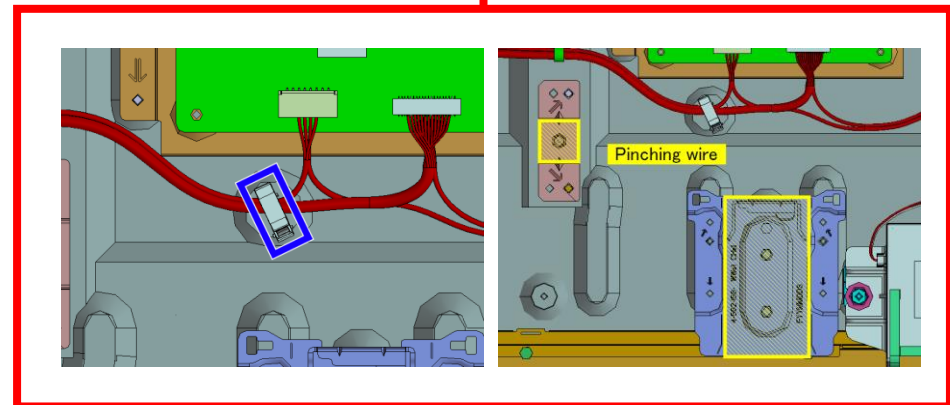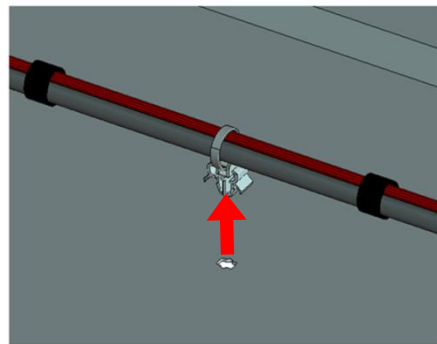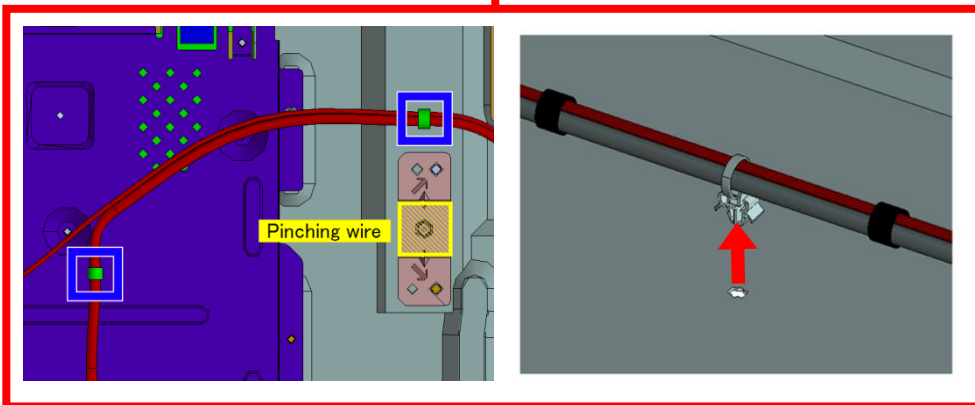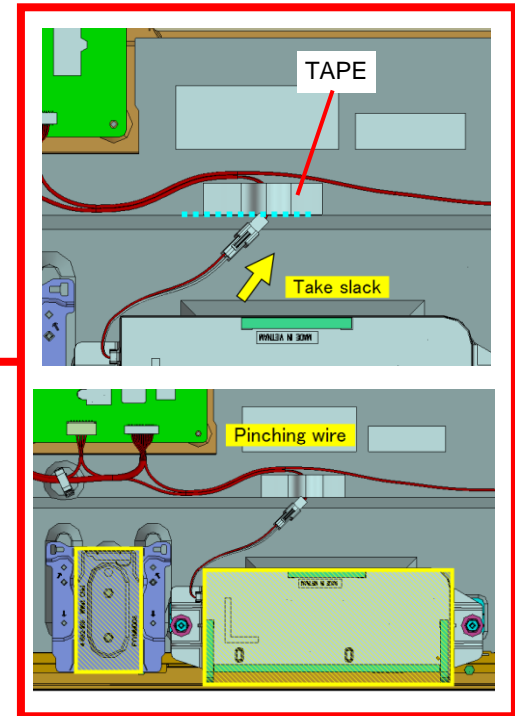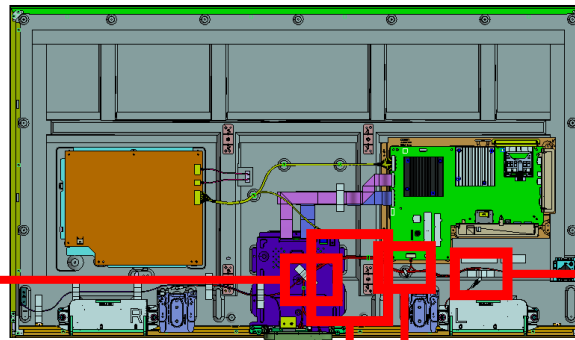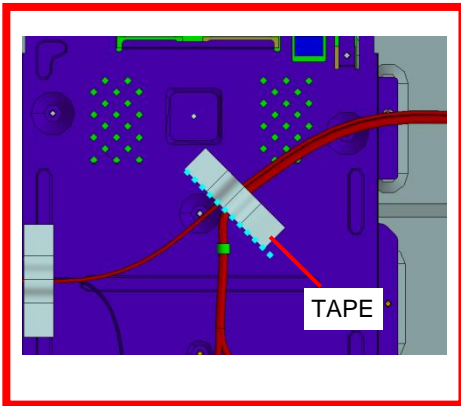
1-1. XBR-55X850C/855C/857C

1-1-6. TAPE AND WIRE DRESSING

Take slack

TAPE

Pinching wire

Take slack

TAPE

Pass the BT ANTENNA on this line.

Pinching wire
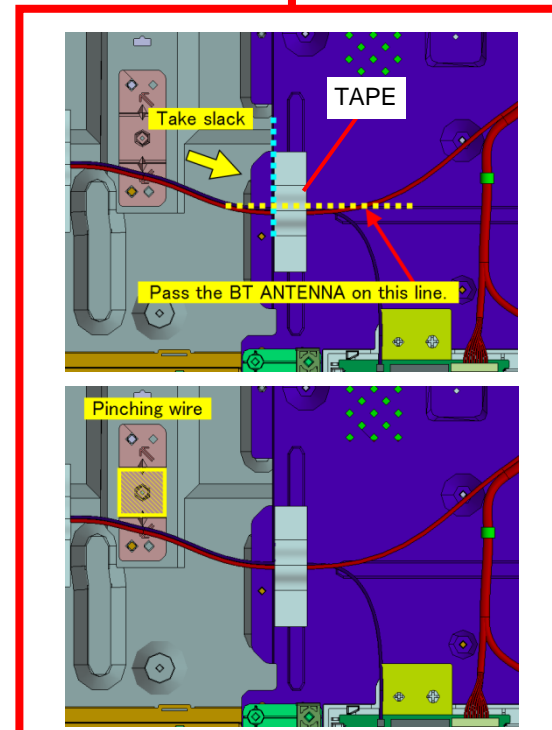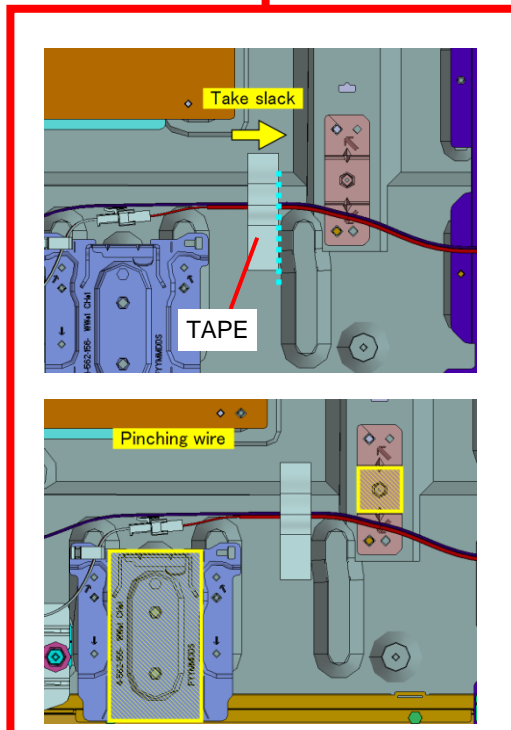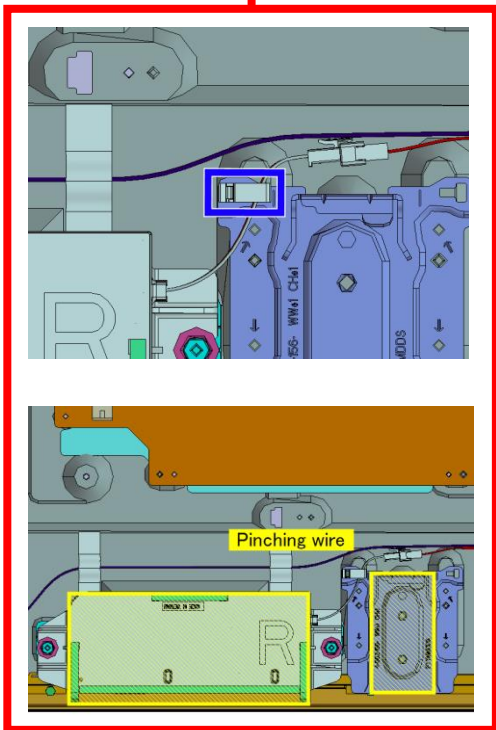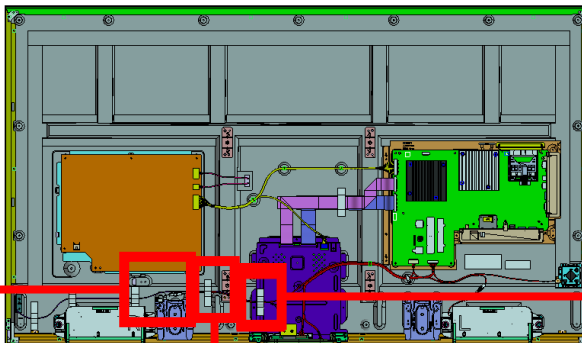
1-1. XBR-55X850C/855C/857C

1-1-7. SPEAKER BOX ASSY (L)
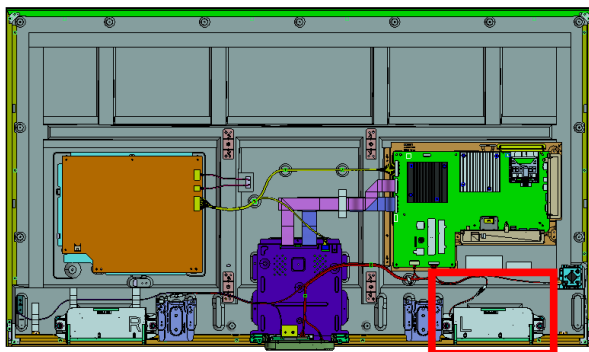
1
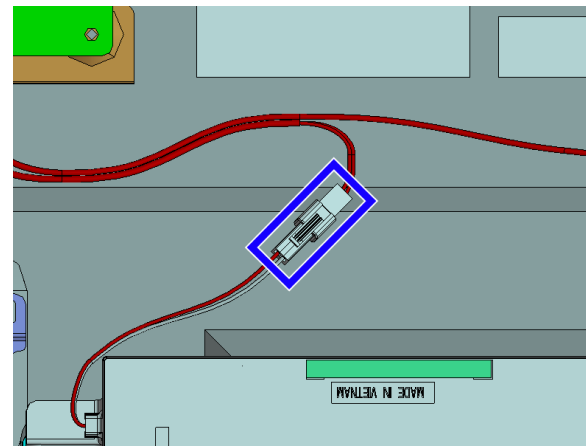
2
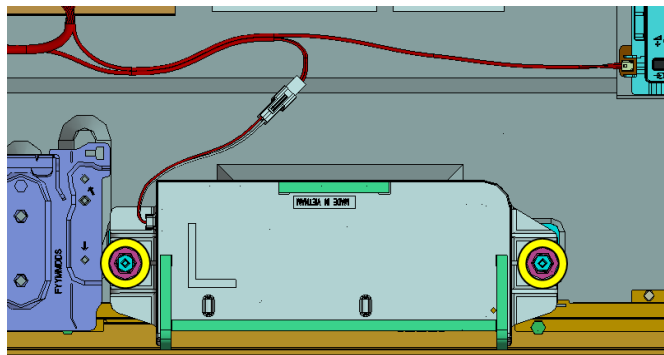
Don't pinch the wire

3
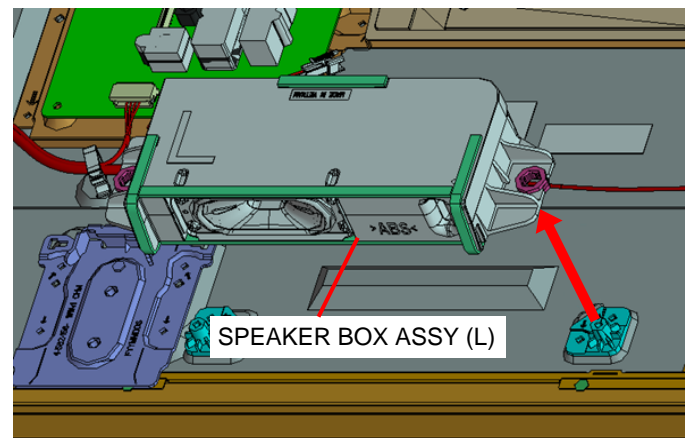
SPEAKER BOX ASSY (L)

1-1. XBR-55X850C/855C/857C

1-1-8. SPEAKER BOX ASSY (R)

1

2

3

SPEAKER BOX ASSY (R)

1-1. XBR-55X850C/855C/857C

1-1-9. TAPE

TAPE

TAPE

Pass the BT ANTENNA on this line.

Take slack

TAPE

Pinching wire

Pinching wire

BT ANTENNA should not over this line.

Pinching wire
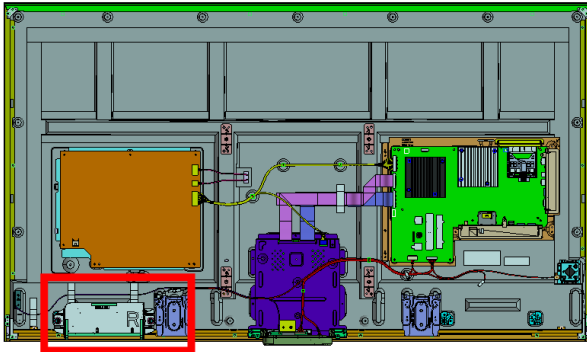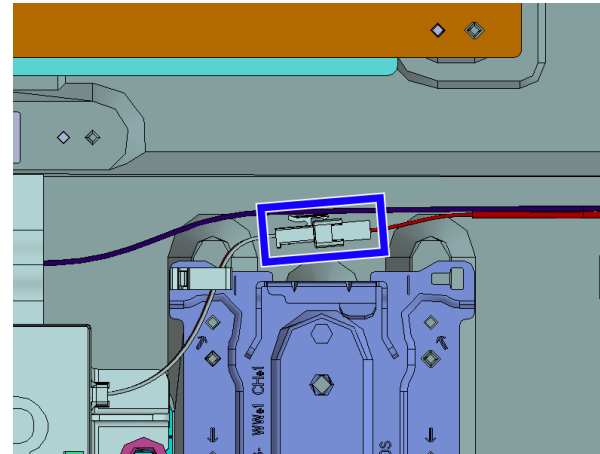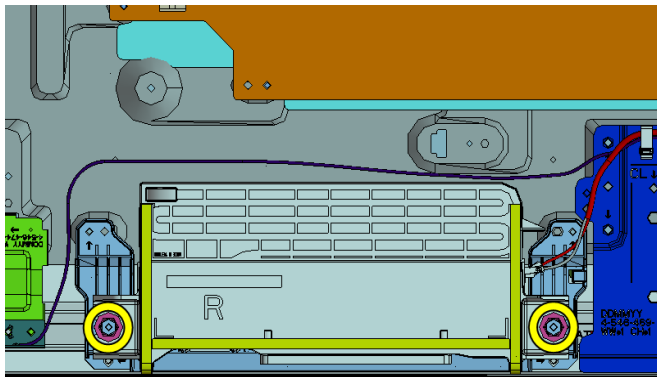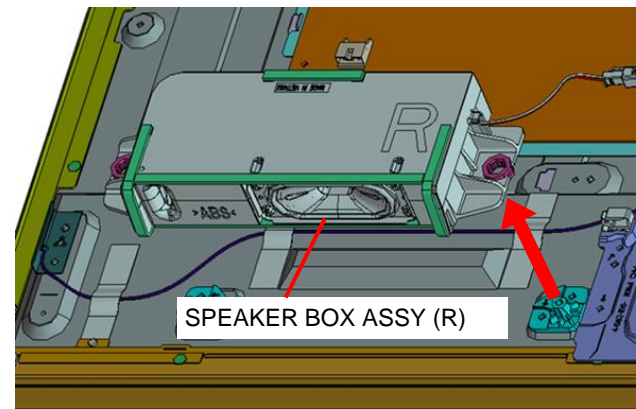
1-1. XBR-55X850C/855C/857C

1-1-10. BT ANTENNA/WIFI ANTENNA

1

2

Screw (SCREW (+PSW)(M3X6))

P/N: 2-990-421-41

3

4

BT ANTENNA
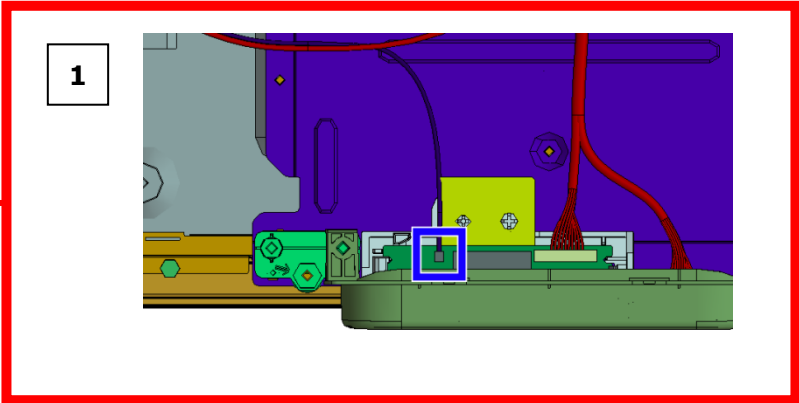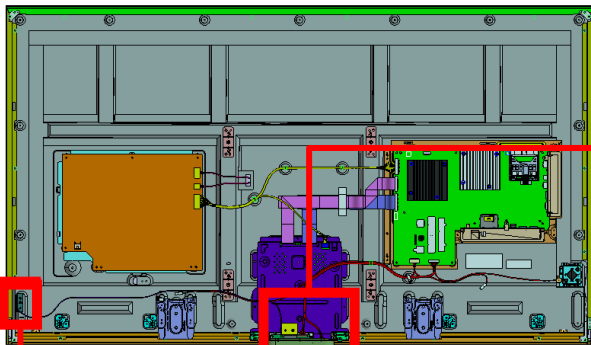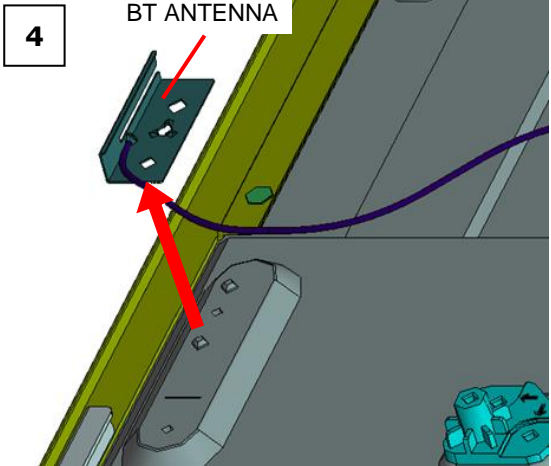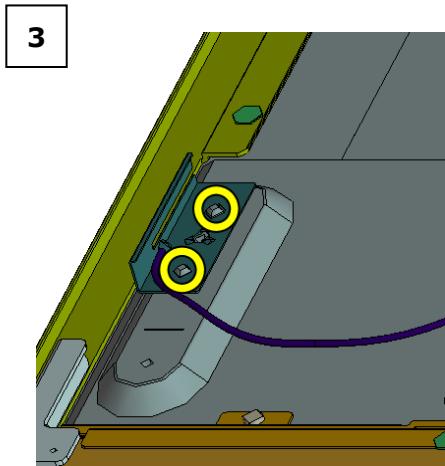
1-1. XBR-55X850C/855C/857C

1-1-11. SMART CORE
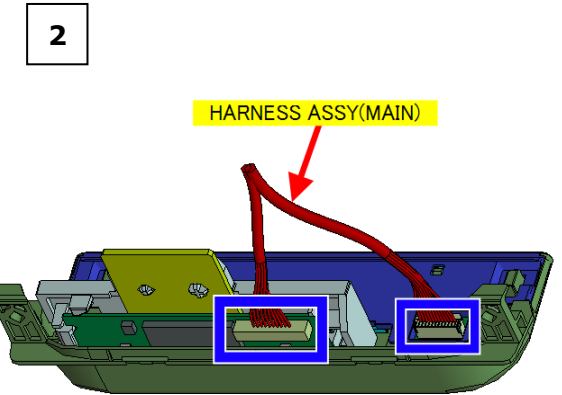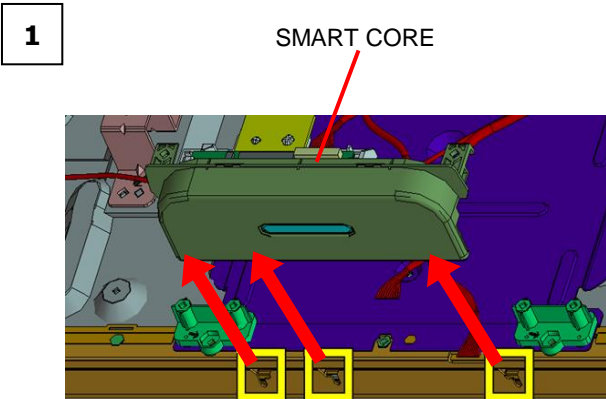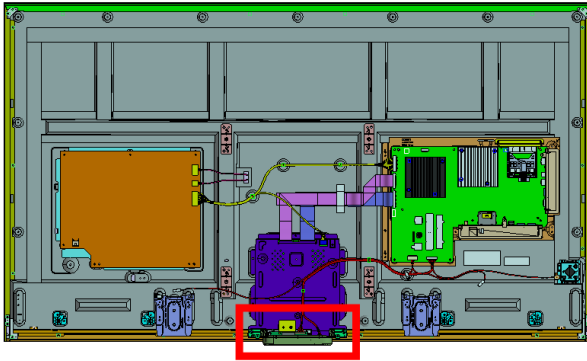
1   SMART CORE

2

HARNESS ASSY(MAIN)

Notes on assembling the Smart core

Don't scratch O/P with Bezel while installing.

Ornament Panel

Front View of the TV

No gap between Smart Core and AL Bezel.

OK

NG

Don't touch these components while installing.

Antenna Terminal   Connector
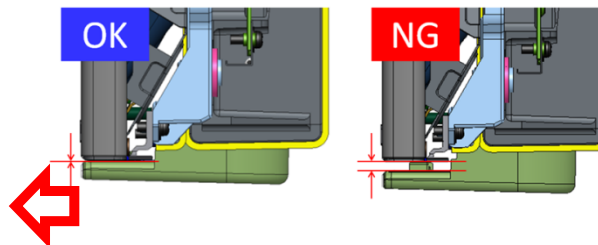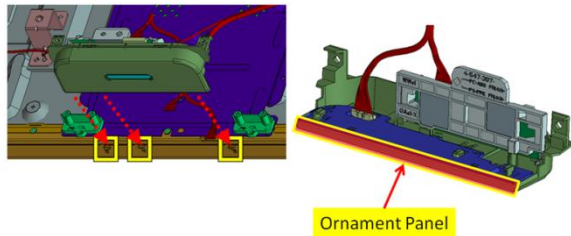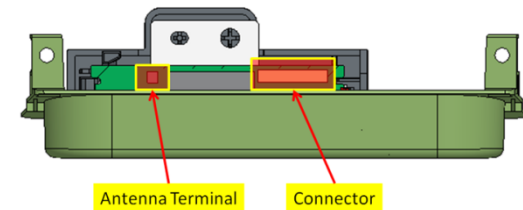
1-1. XBR-55X850C/855C/857C

1-1-12. SWITCH UNIT

1

Release the lock

2

3

HARNESS ASSY(MAIN)

SWITCH UNIT

1-1. XBR-55X850C/855C/857C

1-1-13. HARNESS ASSY (MAIN) AND CONNECTOR ASSY 28P

Pinching wire

Recommendation dressing

Harness of red circle should not cross over yellow line.

HARNESS ASSY (MAIN)
P/N: 1-910-110-24
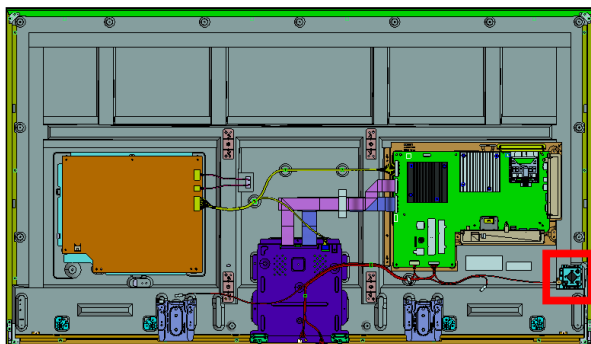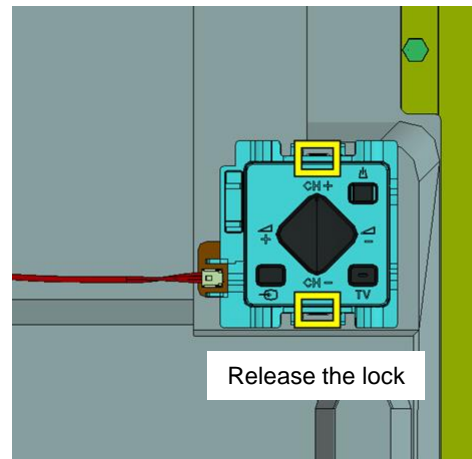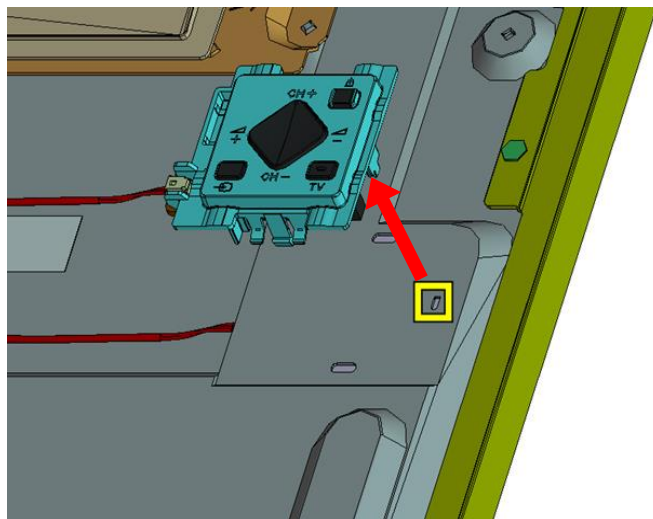
CONNECTOR ASSY 28P
P/N: 1-910-110-23
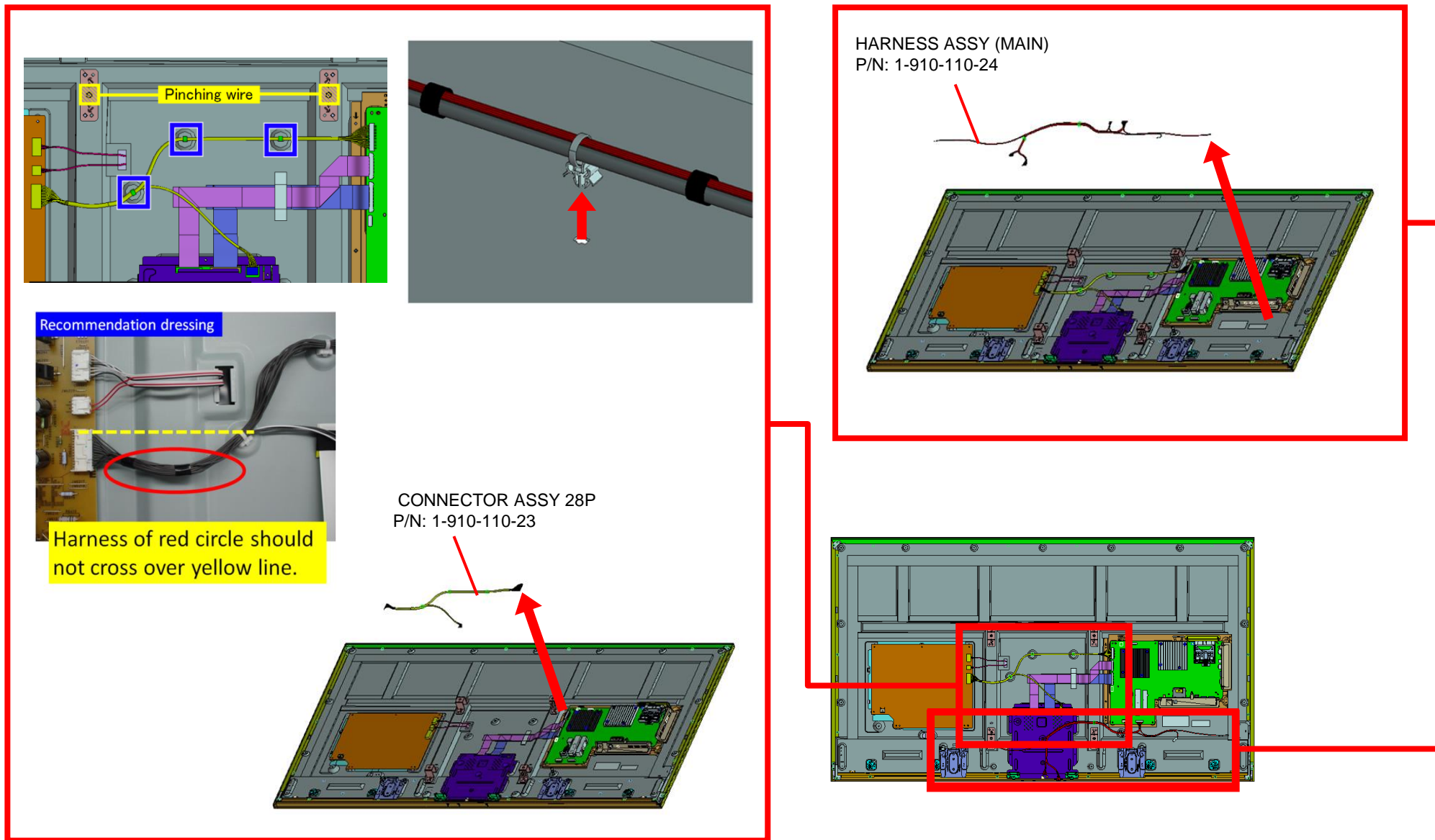
1-1. XBR-55X850C/855C/857C

1-1-14. BRACKET,VESA(HWK)

1

8 screws (SCREW, +PSW M4X8) P/N: 2-580-600-11

2

3

BRACKET,VESA(HWK)
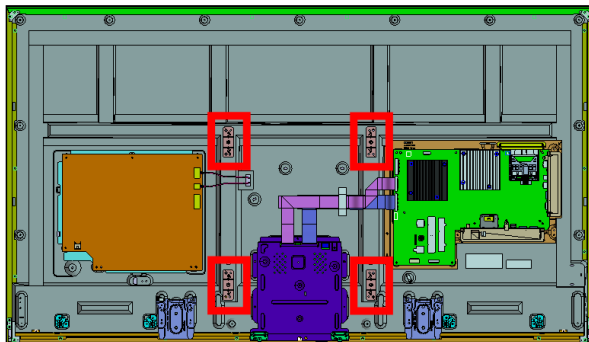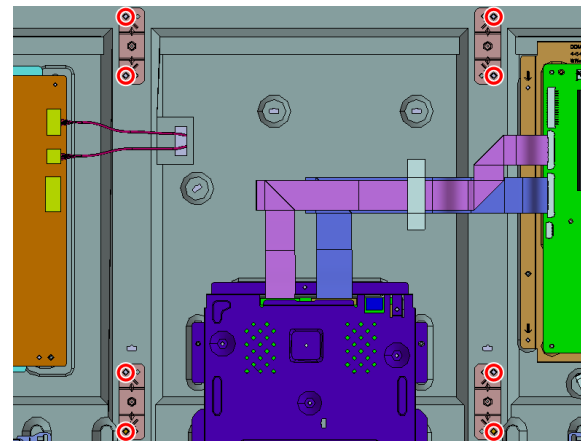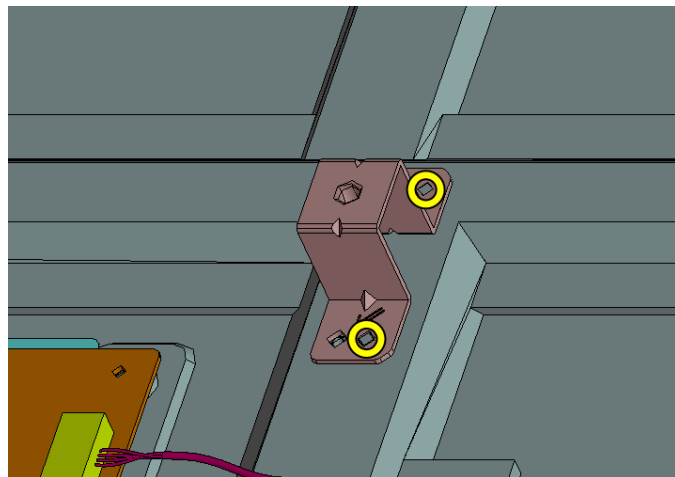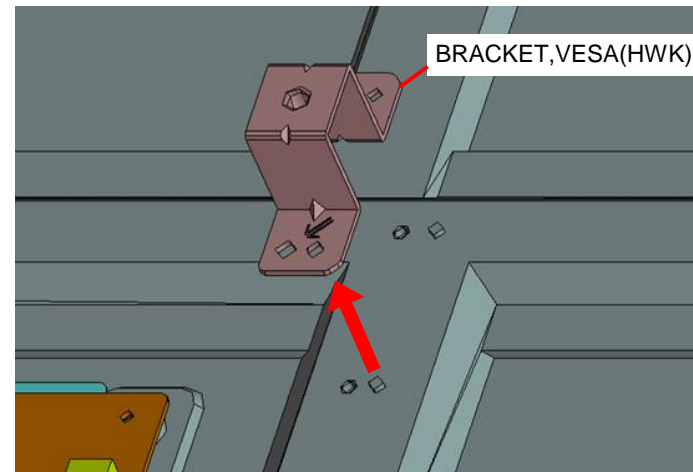
1-1. XBR-55X850C/855C/857C

1-1-15. BRACKET, SC(HWK)
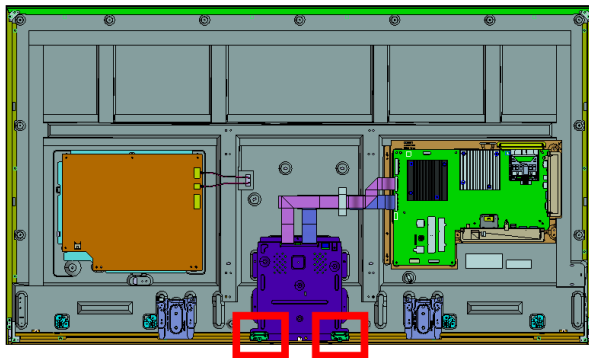
1
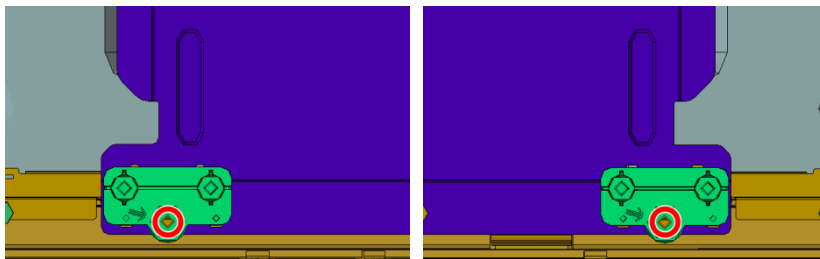
Confirm BRACKET,SC is installed to hole surely before screwing.

OK   NG

8 screws (SCREW, (+PSW)(M3X6)) P/N: 2-990-421-41

2

3

BRACKET,SC(HWK)
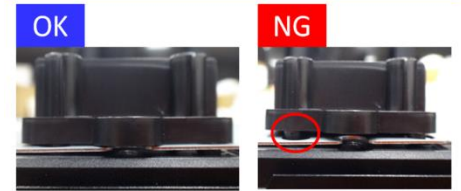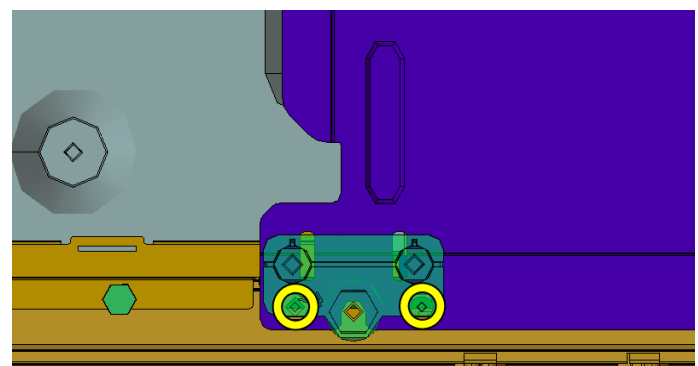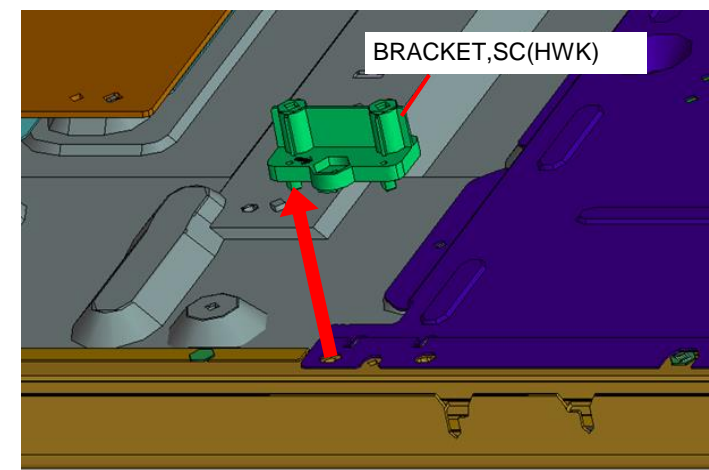
1-1. XBR-55X850C/855C/857C

1-1-16. SLIDE, CLAMP

1

2

SLIDE, CLAMP
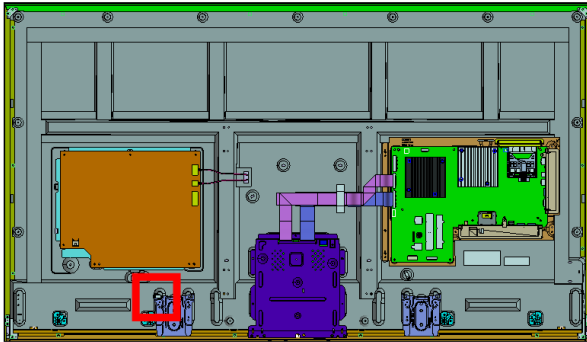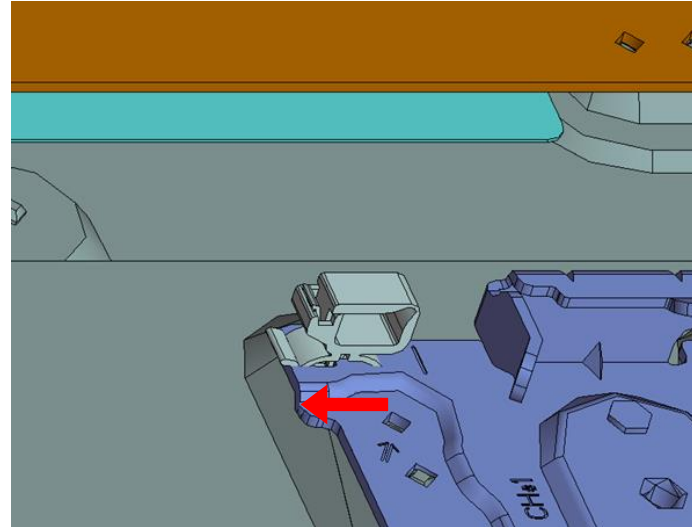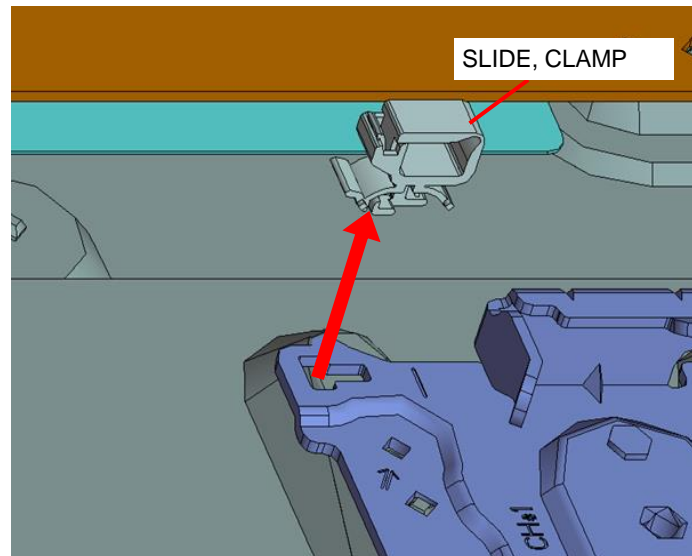
1-1. XBR-55X850C/855C/857C

1-1-17. BOTTOM, FRAME (HRN)

1
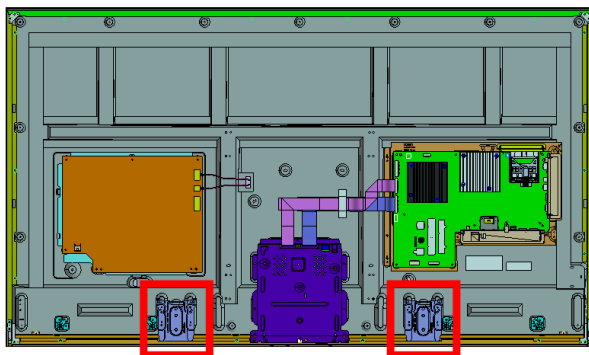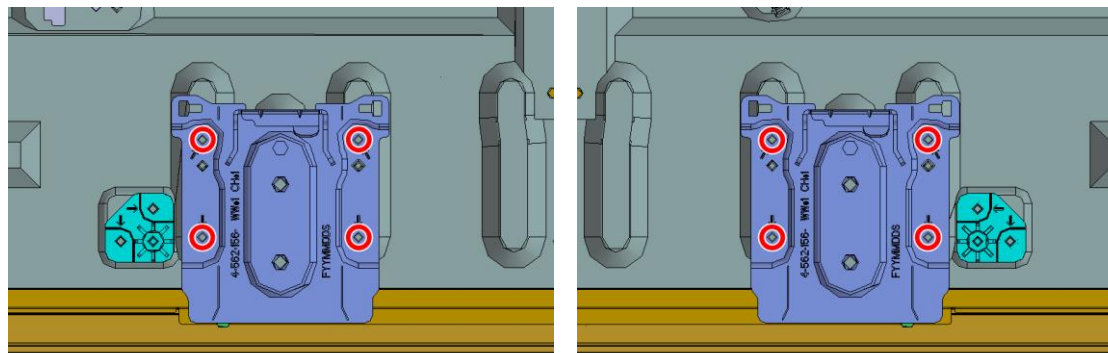
8 screws (SCREW, (+PSW)(M3X6)) P/N: 2-990-421-41

2
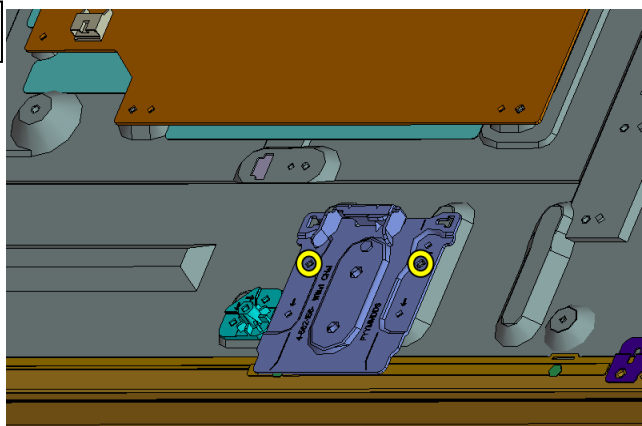
3
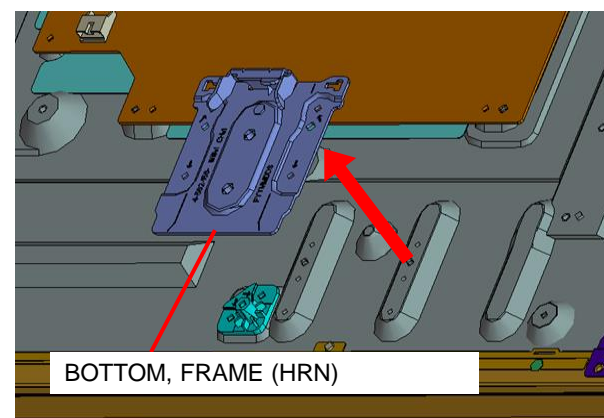
BOTTOM, FRAME (HRN)

1-1. XBR-55X850C/855C/857C

1-1-18. BRACKET, SP (LAK)

1

8 screws (SCREW, (+PSW)(M3X6)) P/N: 2-990-421-41

2

3

BRACKET, SP (LAK)
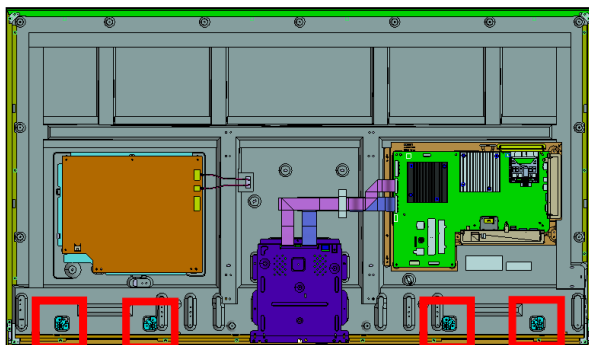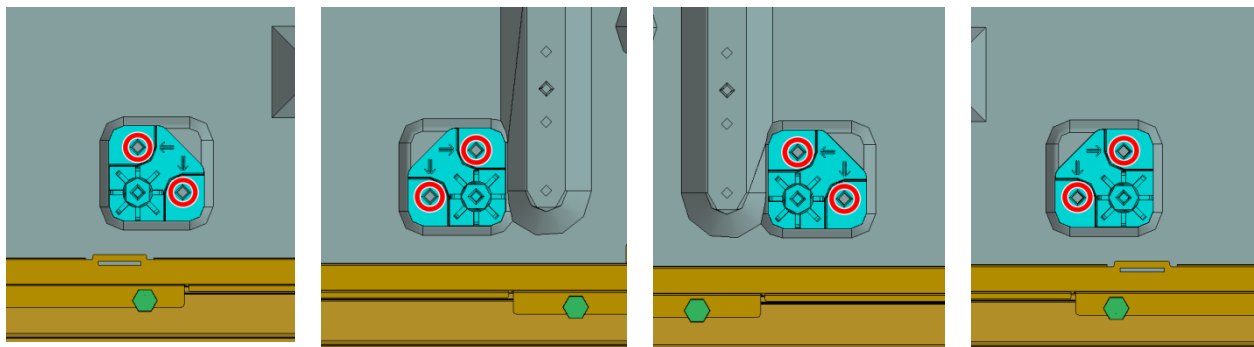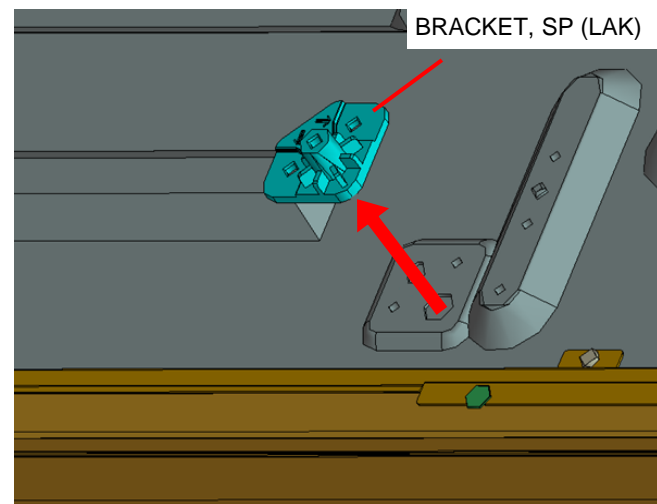
1-1. XBR-55X850C/855C/857C

1-1-19. GL3(CH)-STATIC CONVERTER(TV)

1

6 screws (SCREW, +PSW M3X6 W12) P/N: 4-256-393-11

2

3

GL3(CH)-STATIC CONVERTER(TV)
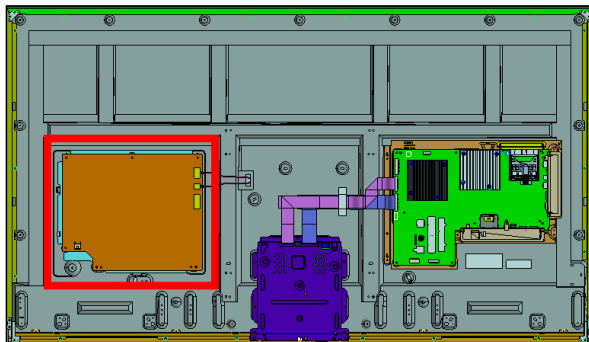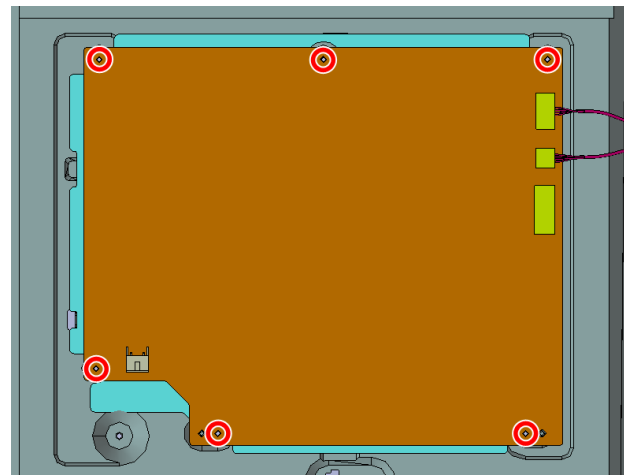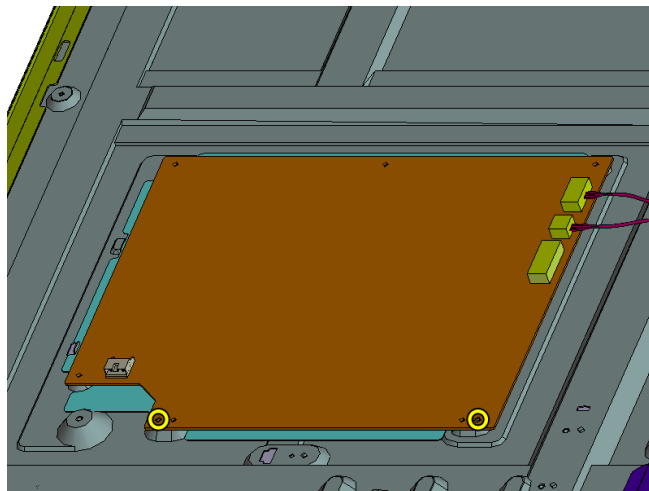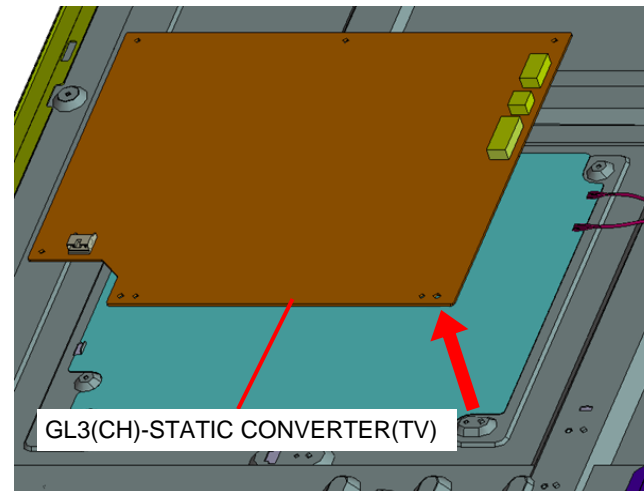
1-1. XBR-55X850C/855C/857C

1-1-20. SHEET, INSULATION(HRN L)

(An insulation sheet is under the GL3 power supply board)

1

2
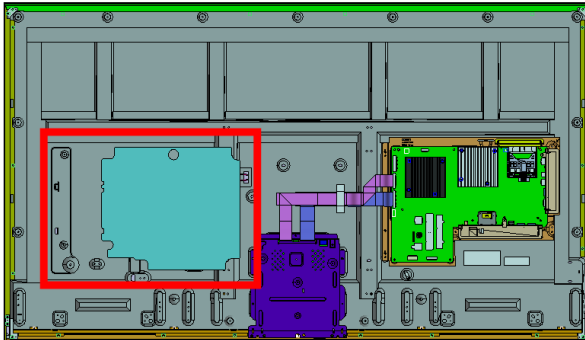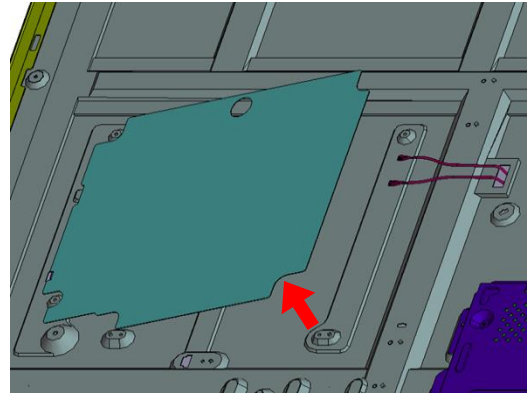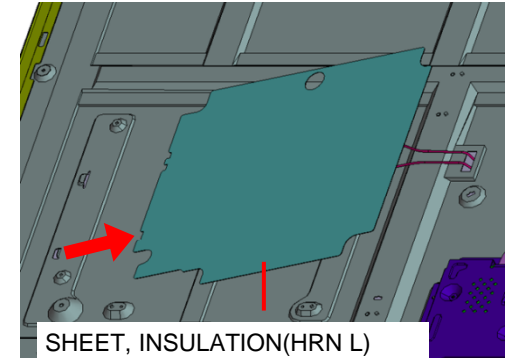
SHEET, INSULATION(HRN L)

Notes on assembling the Insulation sheet (HRN L)
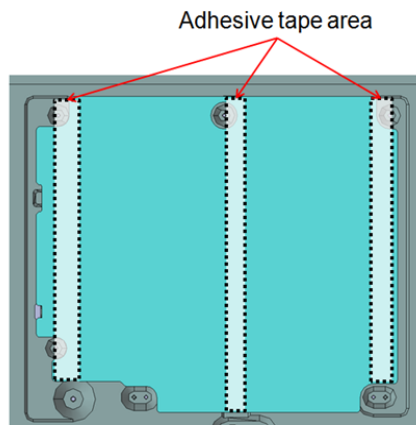
Adhesive tape area

Caution

When handling,
・Be sure not to touch adhesive tape area.

After installing,
・Be sure to push all of adhesive tape area to
avoid peel off of "Sheet, Insulation".

y

x

① Slide in

② Slide

① Install tabs in the half-cut emboss X: +1.5/-0

② Install cut of insulation sheet into Panel edge X: +1.5/-0
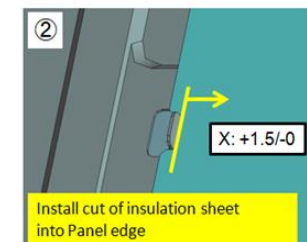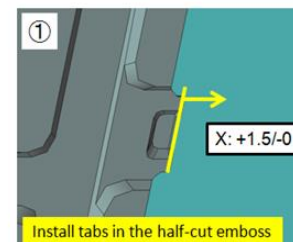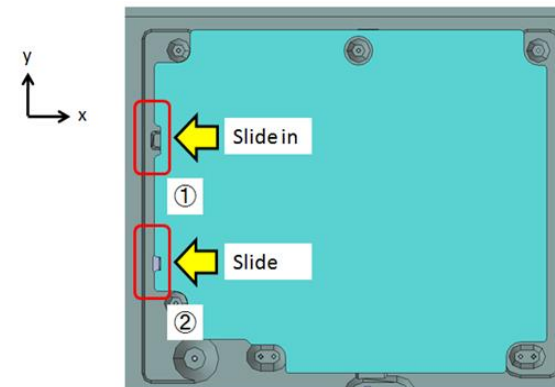
1-1. XBR-55X850C/855C/857C

1-1-21. FLEXIBLE FLAT CABLE 41P (XFS) AND FLEXIBLE FLAT CABLE 51P (XFS)

1

Center

TAPE

No stress during taping.

2
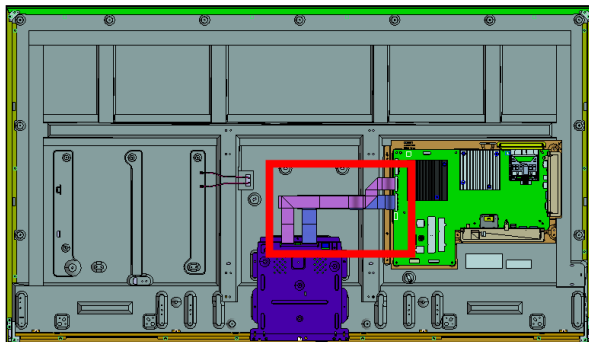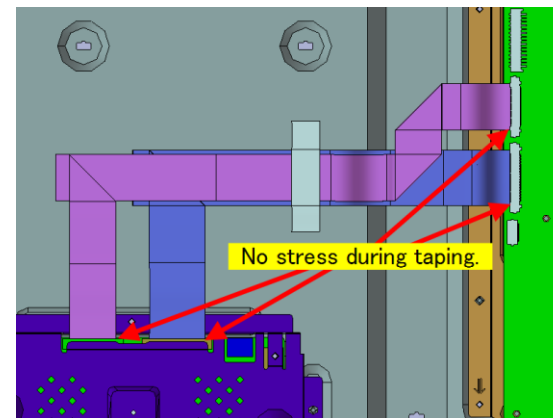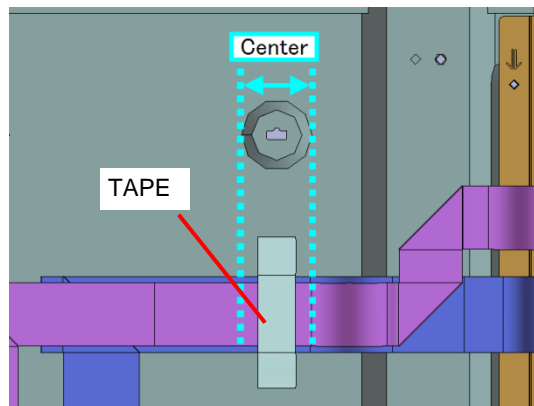
FLEXIBLE FLAT CABLE 41P (XFS)
P/N: 1-848-915-11 (Except BR6)
P/N: 1-848-927-11 (BR6)

3
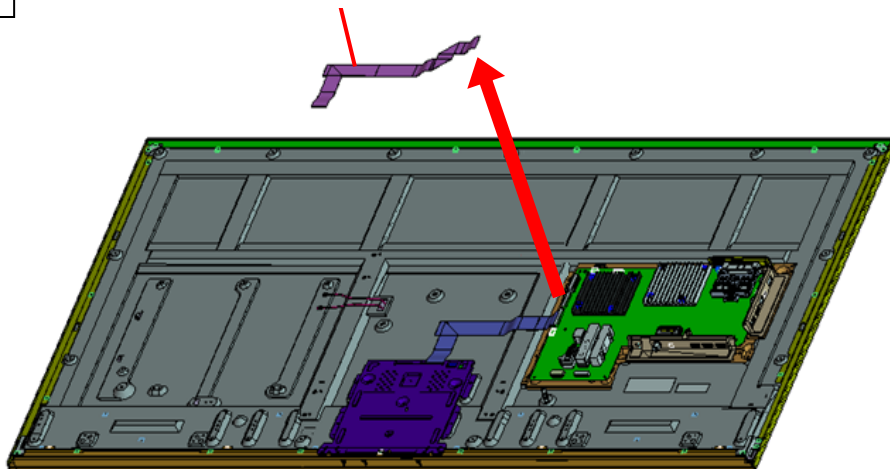
FLEXIBLE FLAT CABLE 51P (XFS)
P/N: 1-848-914-11 (Except BR6)
P/N: 1-848-922-11 (BR6)
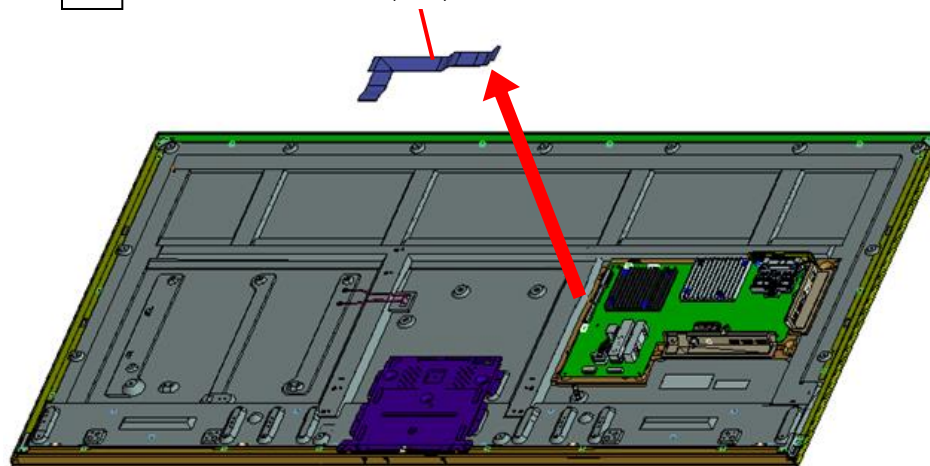
1-1. XBR-55X850C/855C/857C

1-1-22. BRACKET, UNDER FL (MOLD)
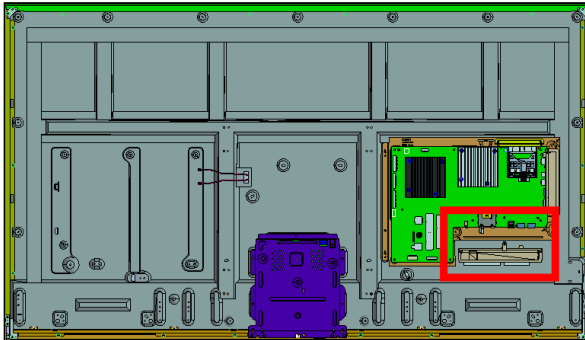
1
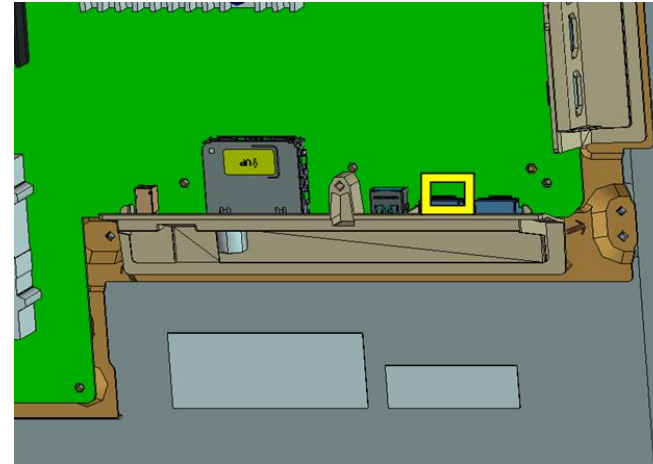
2
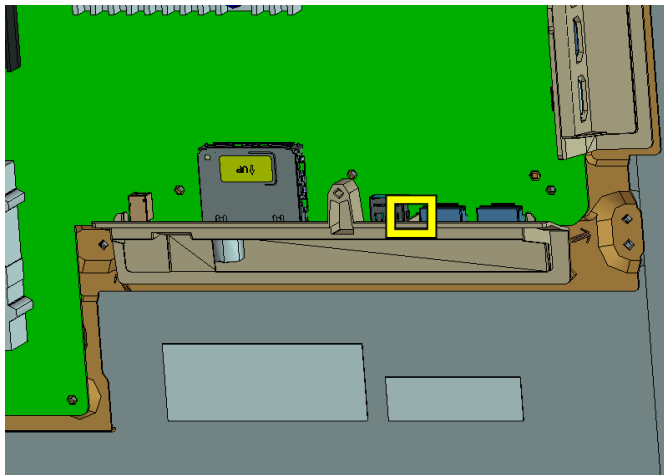
3
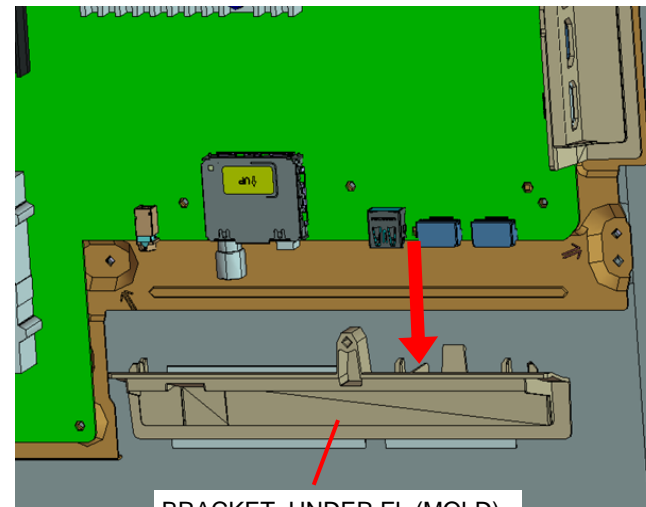
BRACKET, UNDER FL (MOLD)

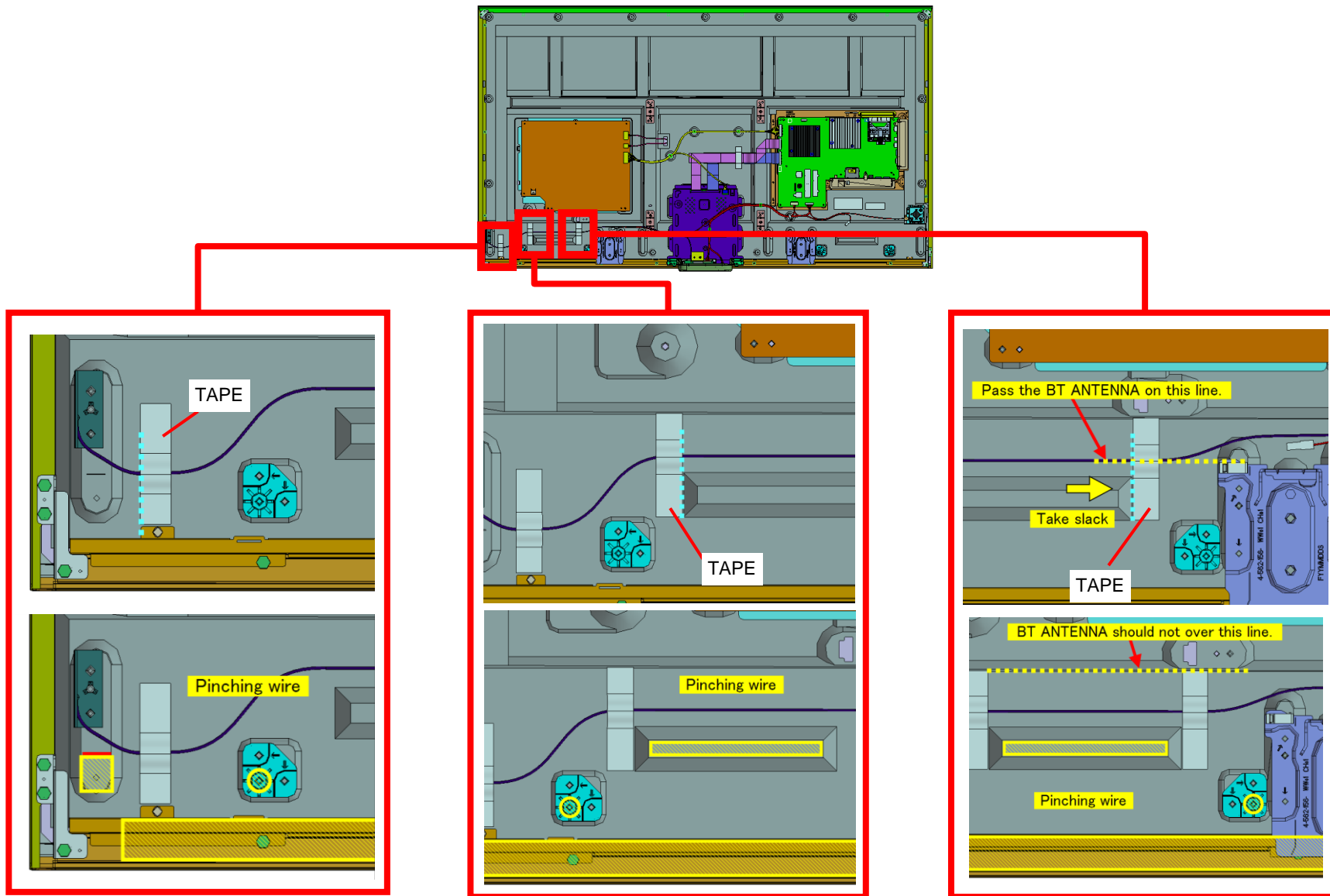## 1-1. XBR-55X850C/855C/857C

1-1-23. BRACKET, SIDE FL (MOLD)

1

2

3

BRACKET, SIDE FL (MOLD)
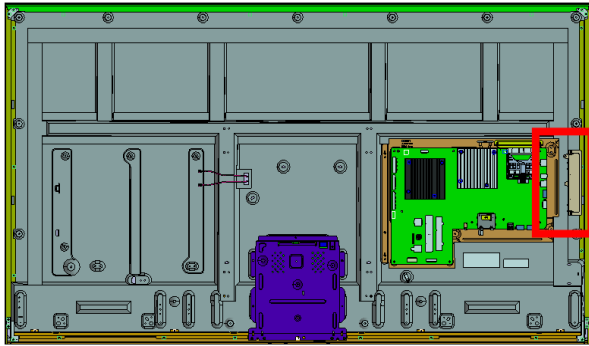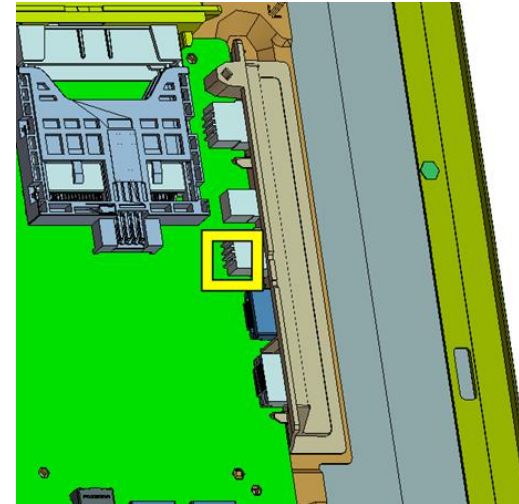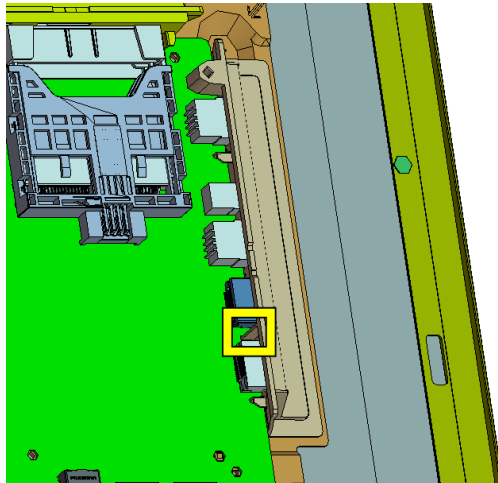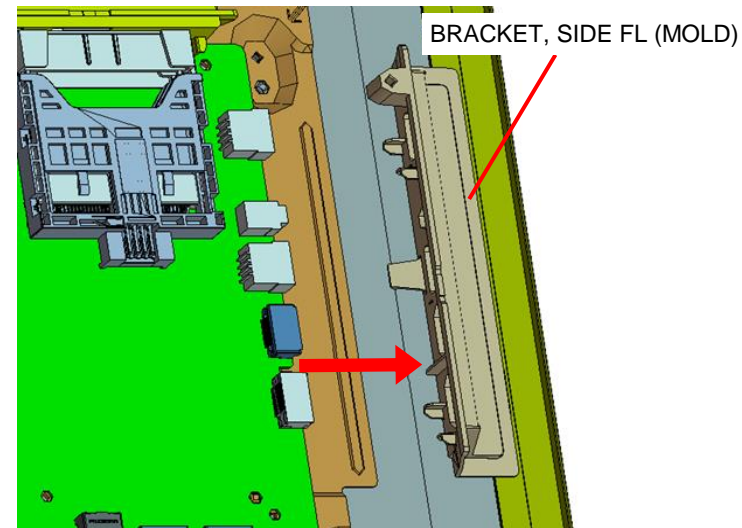
1-1. XBR-55X850C/855C/857C

1-1-24. BRACKET, TOP FL (MOLD)

1

2

3

BRACKET, TOP FL (MOLD)
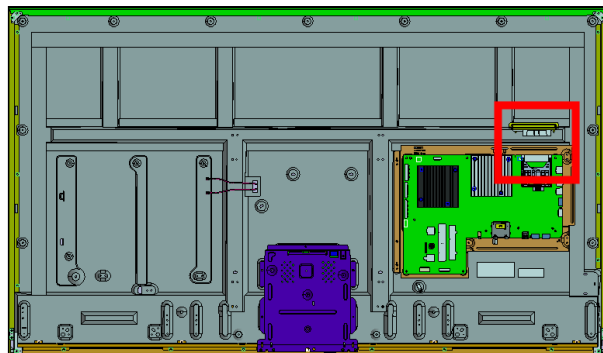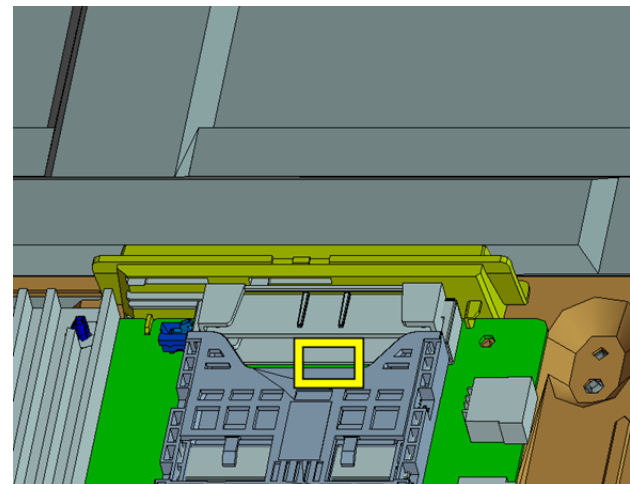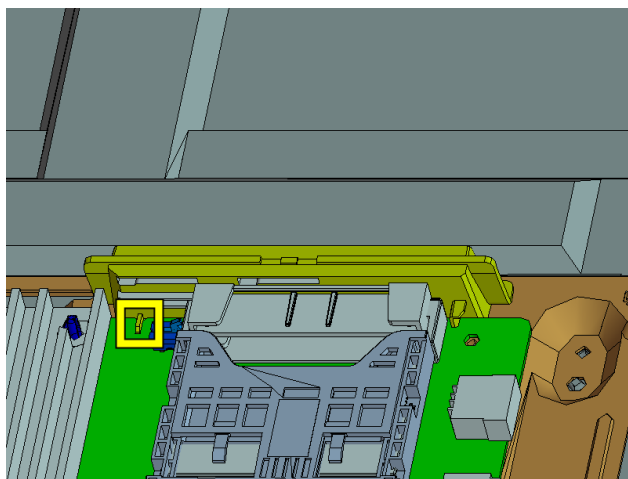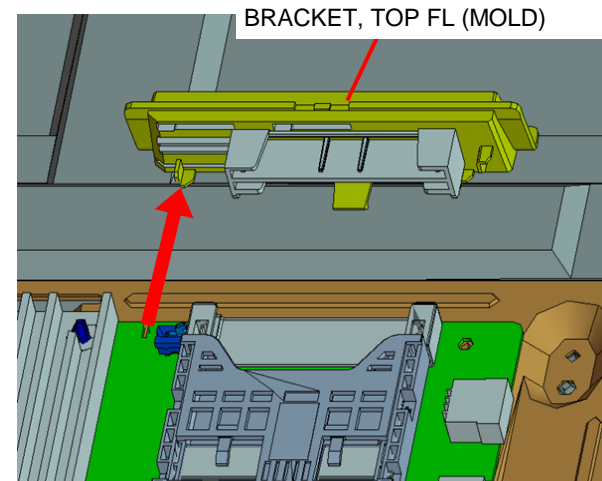
1-1. XBR-55X850C/855C/857C

1-1-25. PLATE, MAIN(HWK) ASSY

1

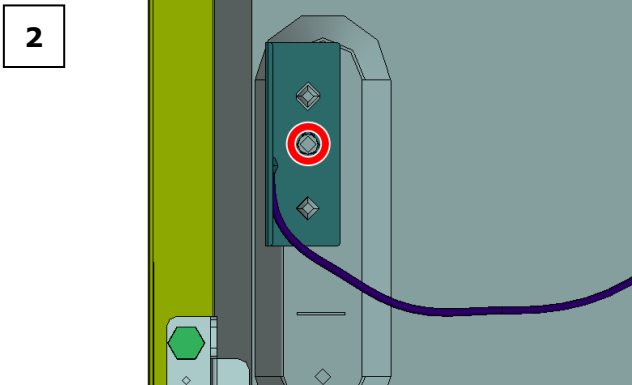5 screws (SCREW, +PSW M3X8) P/N: 2-580-593-01

2

3

PLATE, MAIN(HWK) ASSY
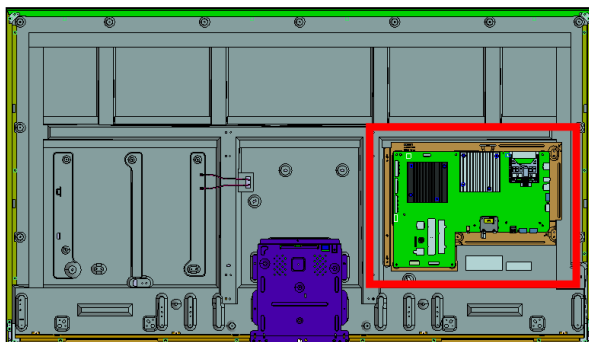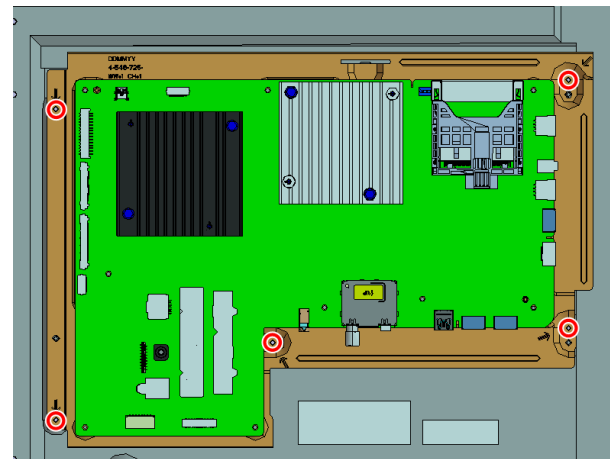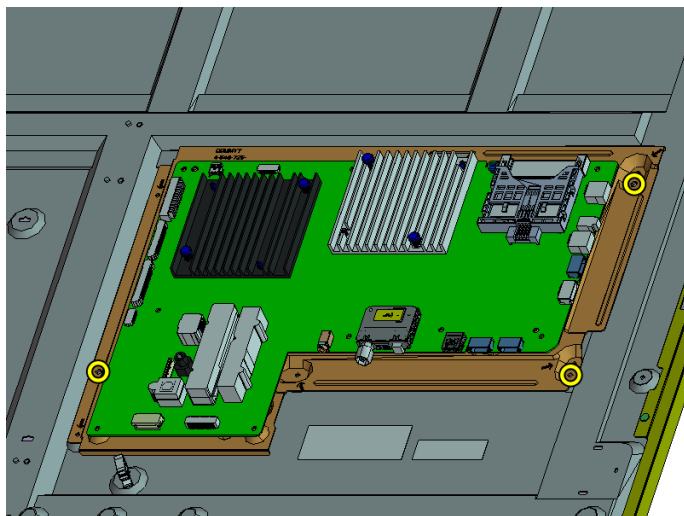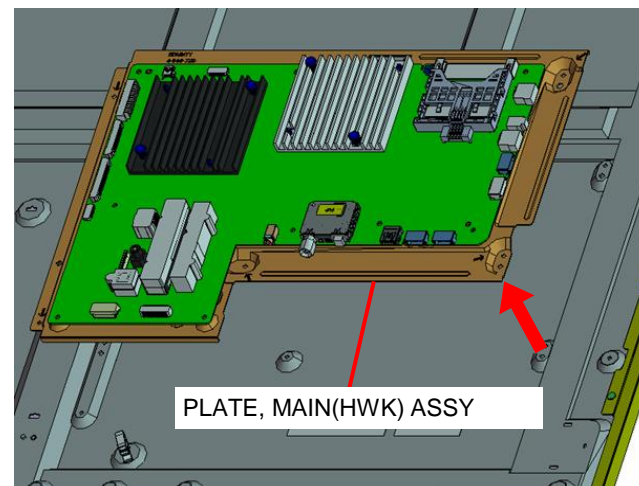
1-1. XBR-55X850C/855C/857C

1-1-26. BMFL ASSY

⟨Sequence Information⟩

1

9 screws (SCREW (+PSW)(M3X6)) P/N: 2-990-421-41

2

3

BMFL ASSY
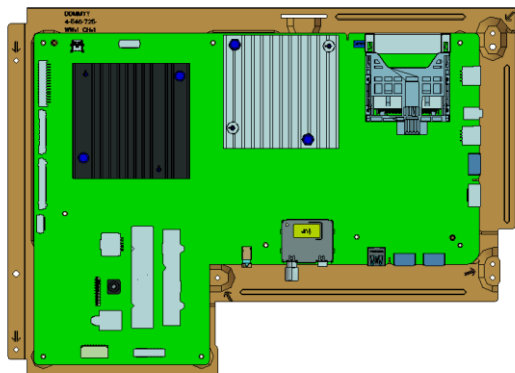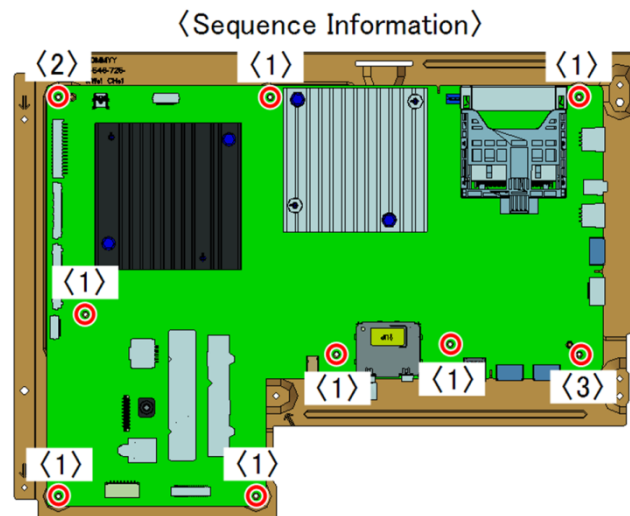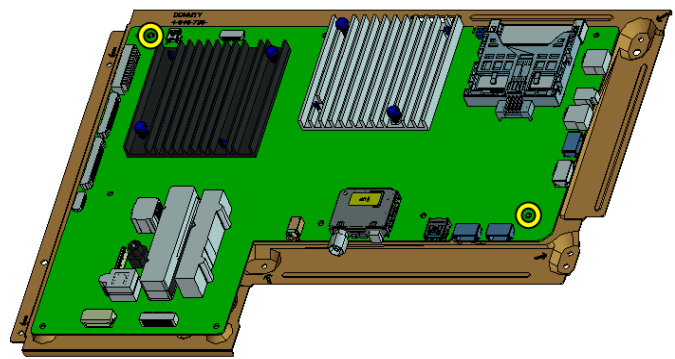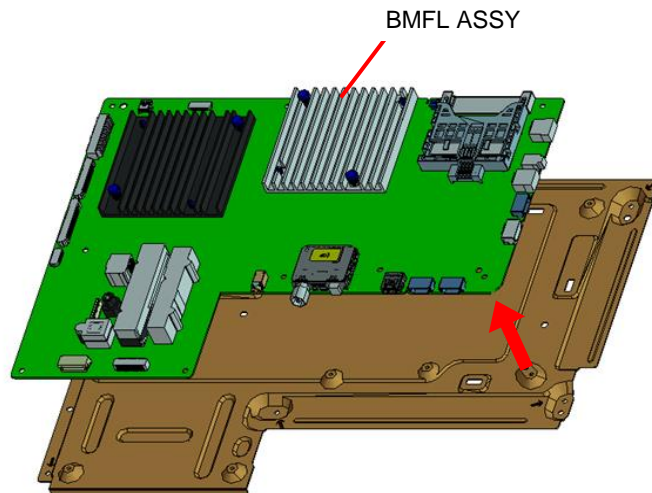
1-1. XBR-55X850C/855C/857C

1-1-27. GASKET (BMF)
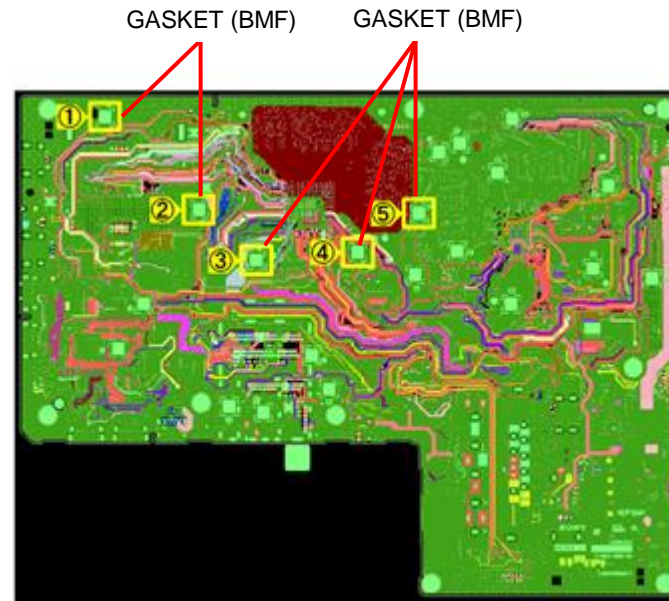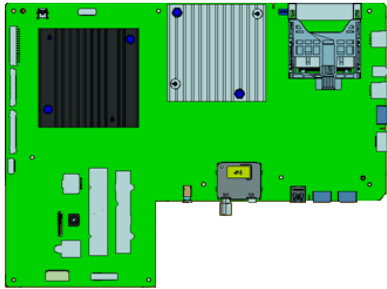
GASKET (BMF)　　GASKET (BMF)

NOTE:
When you replace a BMFL board, it is necessary to stick five new GASKET on a new BMFL board.
GASKET (BMF): 4-566-117-01

Stick GASKET inside the guide line.
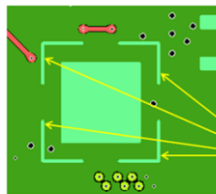
Guide line

*No indication of direction

To stick the GASKET firmly,

Press the gasket until compression completely.

(0.5-1.0kgf)

Caution:

1. Please aim at the center of square land.

2. Assy the gaskets just before B board panel installation.

1-1. XBR-55X850C/855C/857C

1-1-28. SHEET, THERMAL(BM) AND PLATE, MAIN(HWK)

1

1.5±1.5mm   1.5±1.5mm

SHEET, THERMAL(BM)

Don't overlap on align marking

Be careful the side of SHEET THERMAL.

Separator side

2

PLATE, MAIN(HWK)
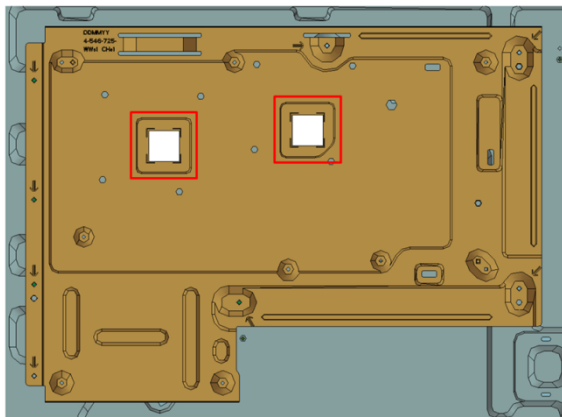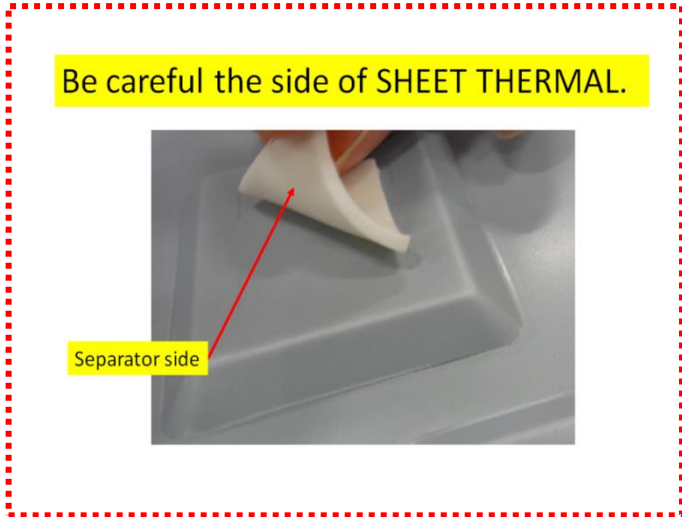
1-1. XBR-55X850C/855C/857C

1-1-29. SLIDE, CLAMP

1

2

SLIDE, CLAMP
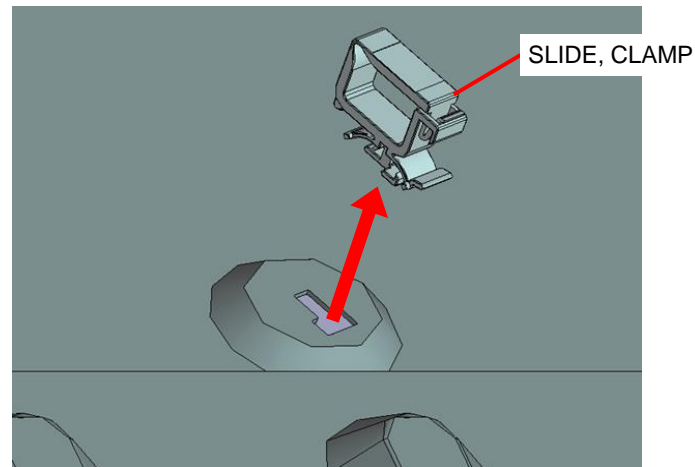
1-1. XBR-55X850C/855C/857C

1-1-30. LCD PANEL

LCD PANEL
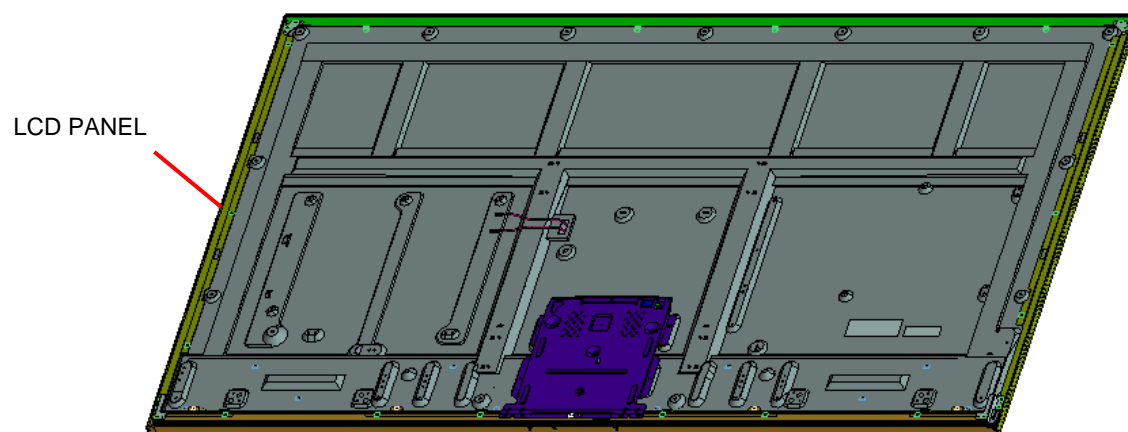
1-2. XBR-65X850C/855C/857C

1-2-1. STAND

4 screws (SCREW, +PSW M6X12) P/N: 4-567-081-01

STAND
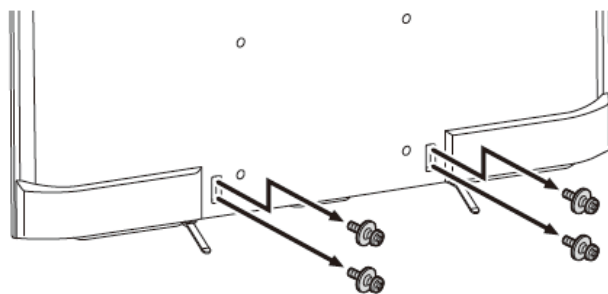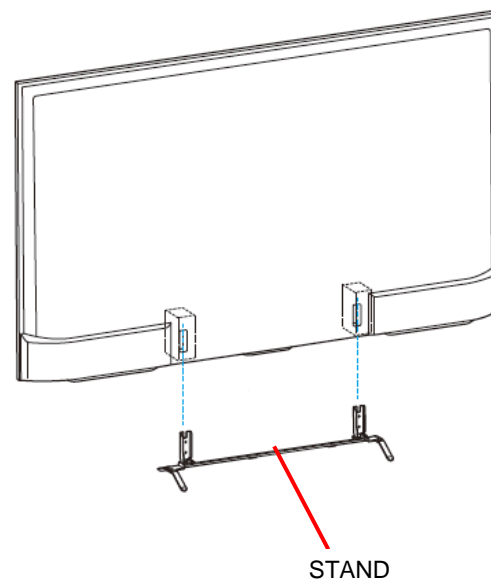
1-2. XBR-65X850C/855C/857C

1-2-2. LABEL, UNDER TERMINAL AND LABEL, REAR TERMINAL AND LABEL, SIDE TERMINAL (L) AND LABEL, CI

(CO1 ONLY)

LABEL, CI

0/-1

0/-1

LABEL, REAR TERMINAL

Positioning hole

0/-1

0/-1

LABEL, UNDER TERMINAL

0/-1

0/-1

LABEL, SIDE TERMINAL (L)
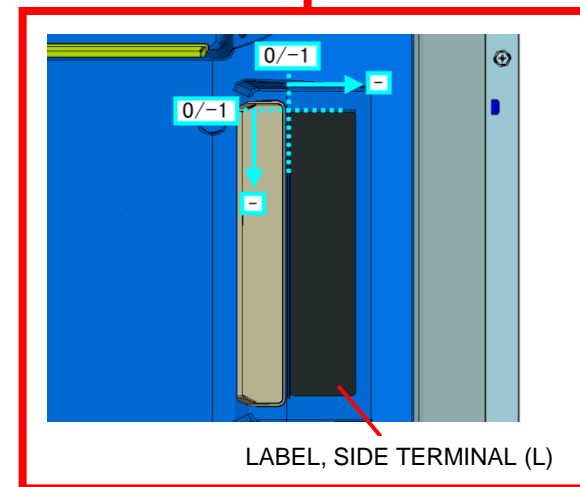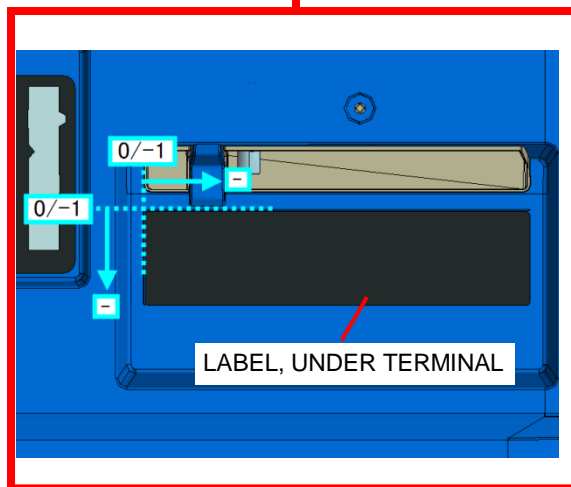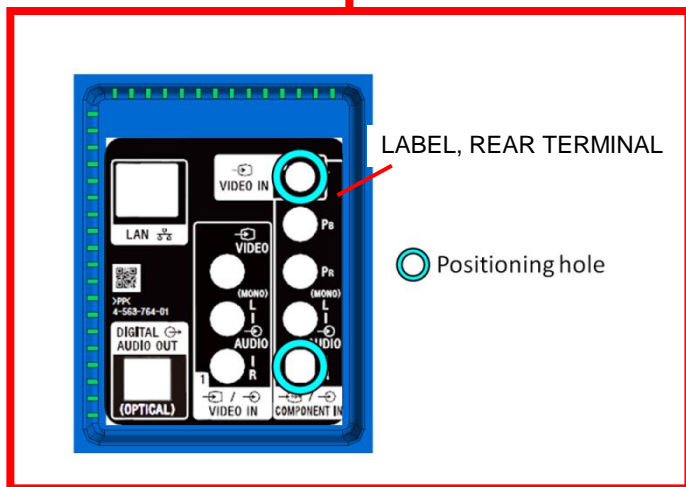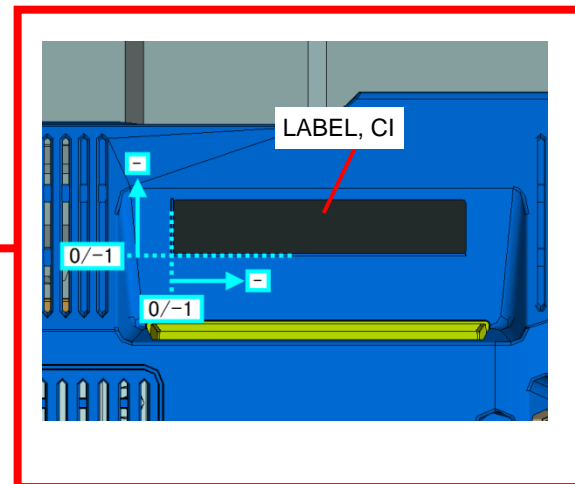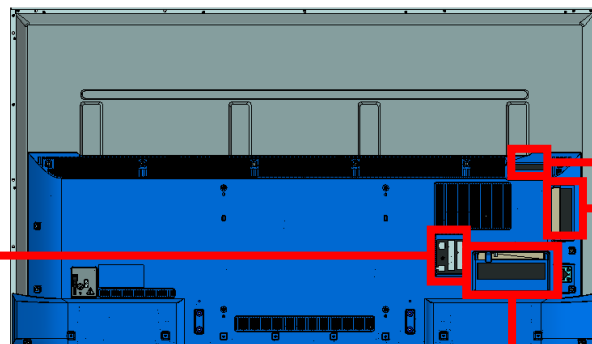
1-2. XBR-65X850C/855C/857C

1-2-3. AC COVER AND POWER SUPPLY CORD

When screw AC COVER, please hold AC CORD as below picture.
HOLD

1

Screw (SCREW +PSW M4X10) P/N: 4-159-298-01

2

3
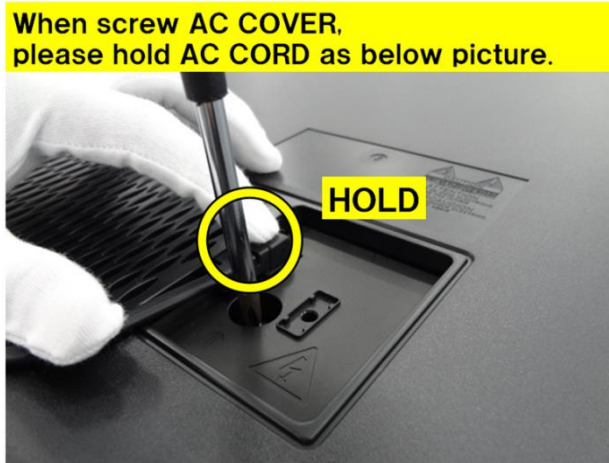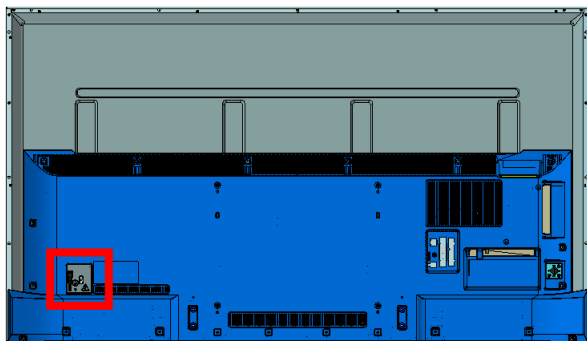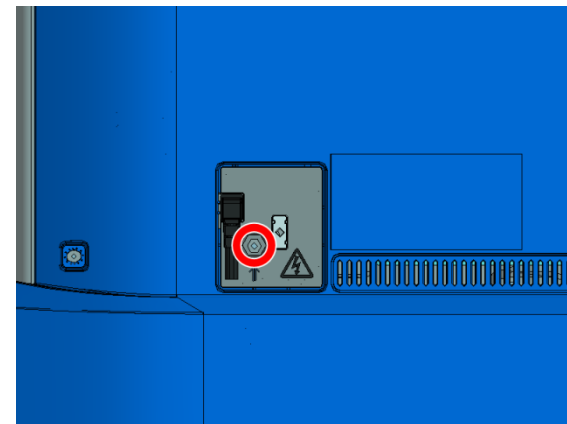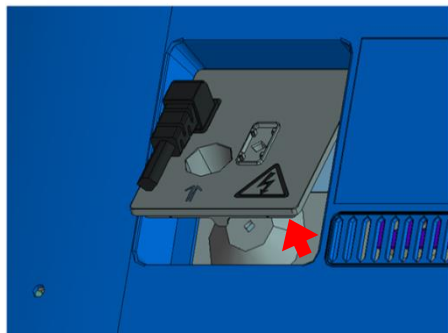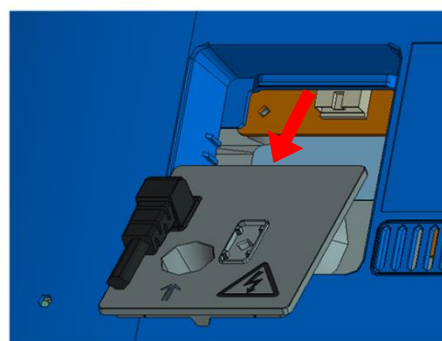
4 POWER SUPPLY CORD
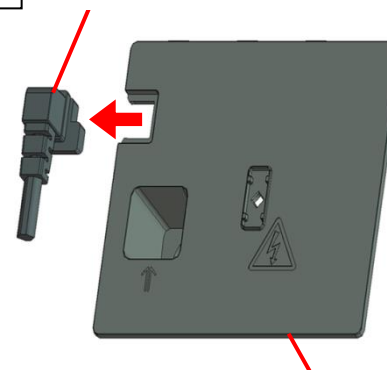
AC COVER

5
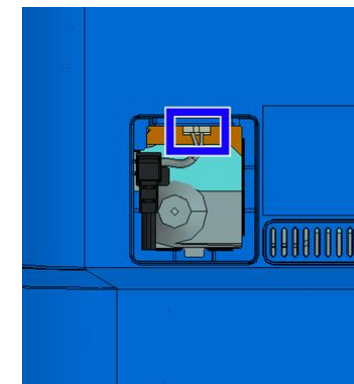
1-2. XBR-65X850C/855C/857C

1-2-4. UNDER COVER (2L_HWK) A
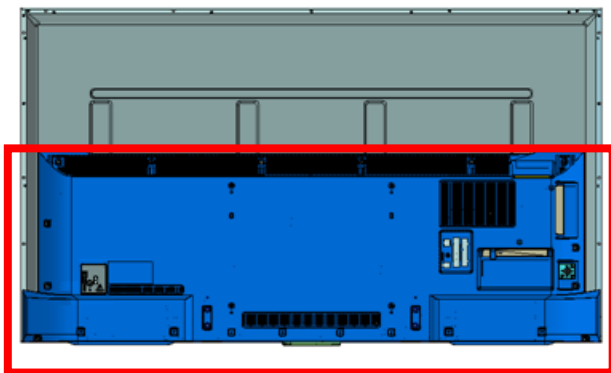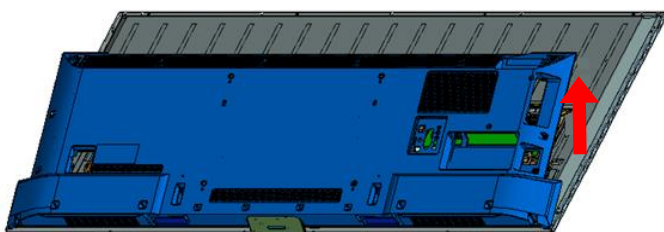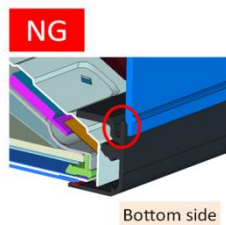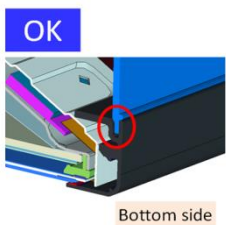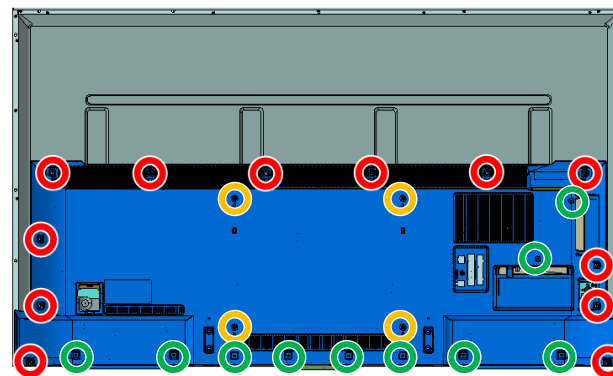
1

○ 12 screws (SCREW , +PWH M3X6) P/N: 4-452-935-11
○ 4 screws (SCREW, ORNAMENTAL M6X12) P/N: 4-268-126-02
○ 10 screws (SCREW, +BVTP 4X12 TYPE2 IT-3) P/N: 2-580-639-01

2

Ensure R/C is installed to slit of panel.

OK   NG

Bottom side   Bottom side

3

UNDER COVER (2L_HWK) A
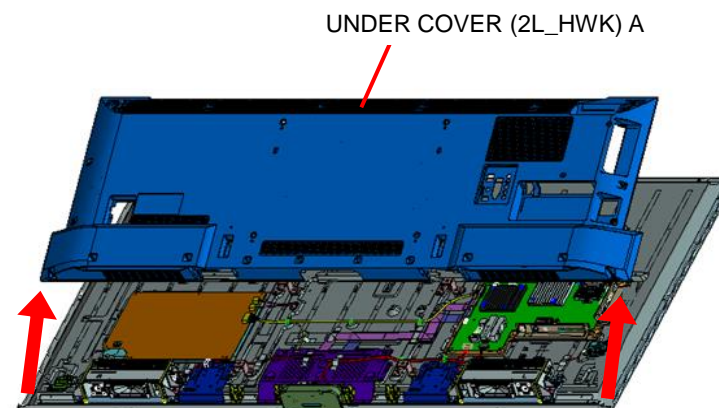
1-2. XBR-65X850C/855C/857C

1-2-5. TAPE

1-2. XBR-65X850C/855C/857C

1-2-6. TAPE

Don't stress to connection point of antenna.

Antenna route

NG

OK

Don't stress

OK

NG

TAPE

Pinching wire

TAPE

Pinching wire

TAPE

Take slack

Pinching wire
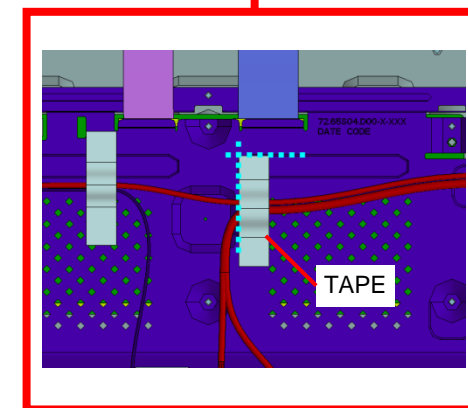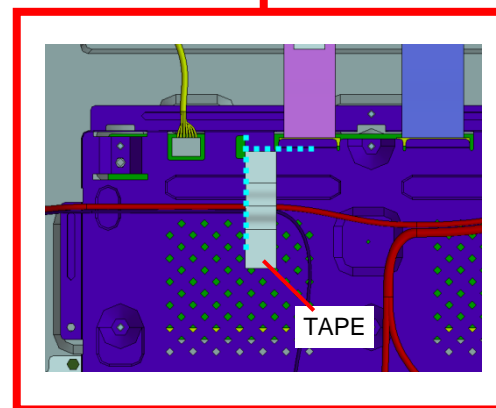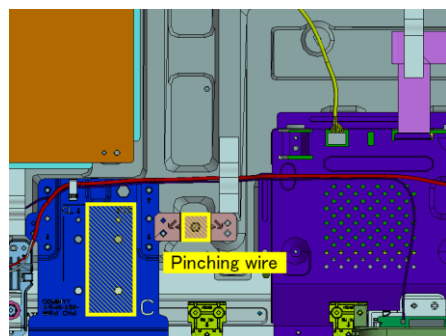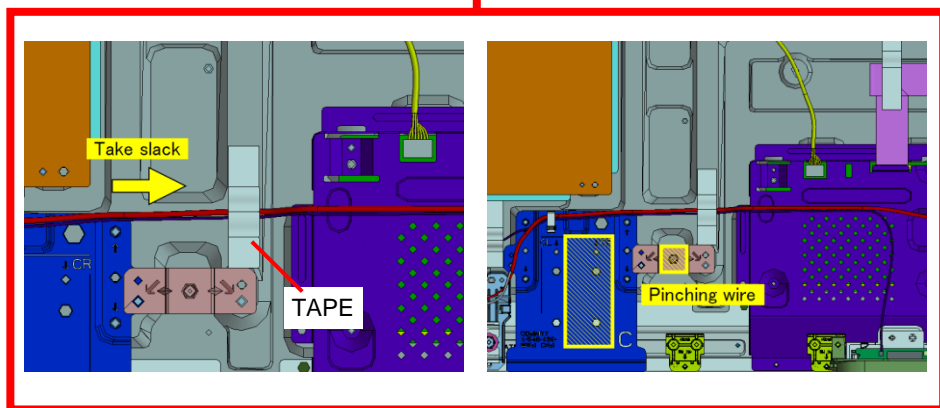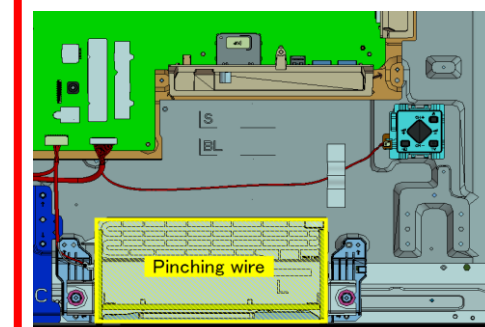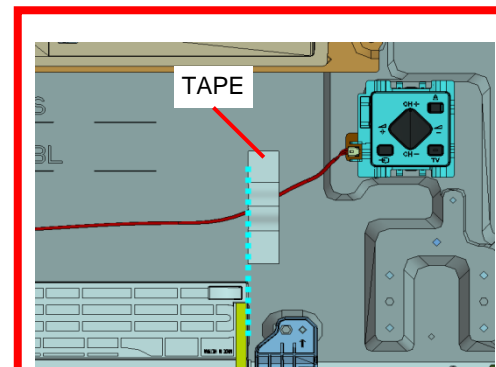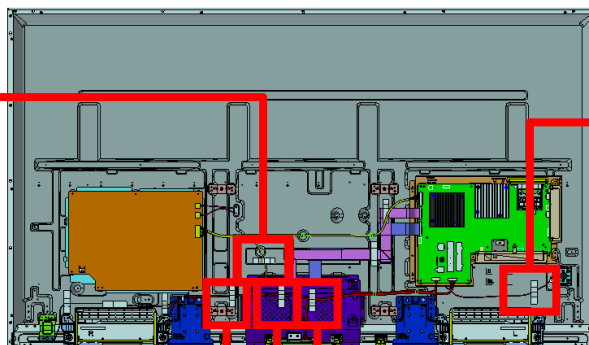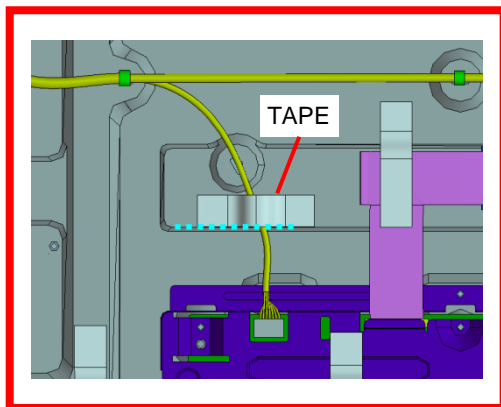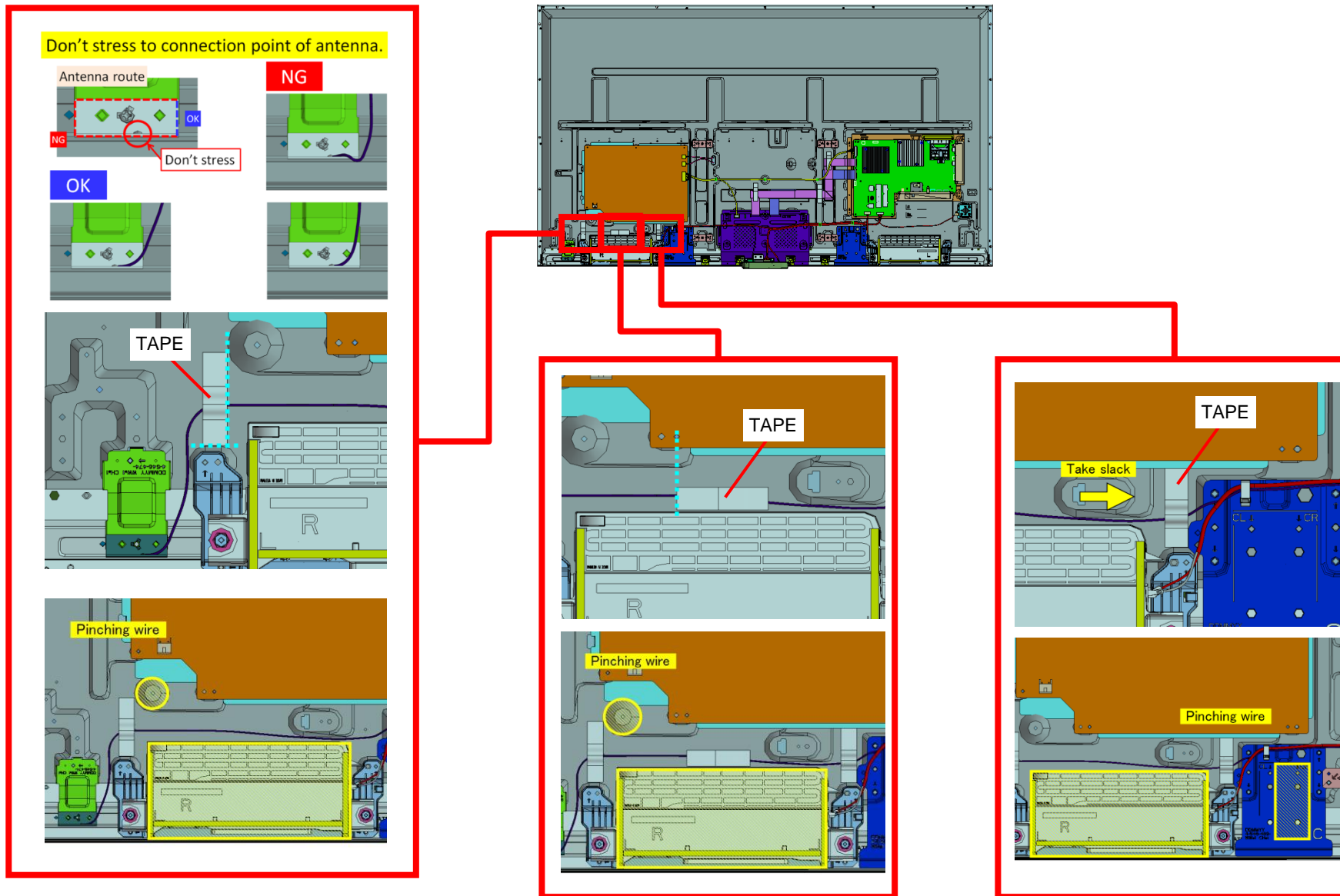
1-2. XBR-65X850C/855C/857C

1-2-7. WIRE DRESSING

Pinching wire

Pinching wire

TOP:SP harness

SC harness
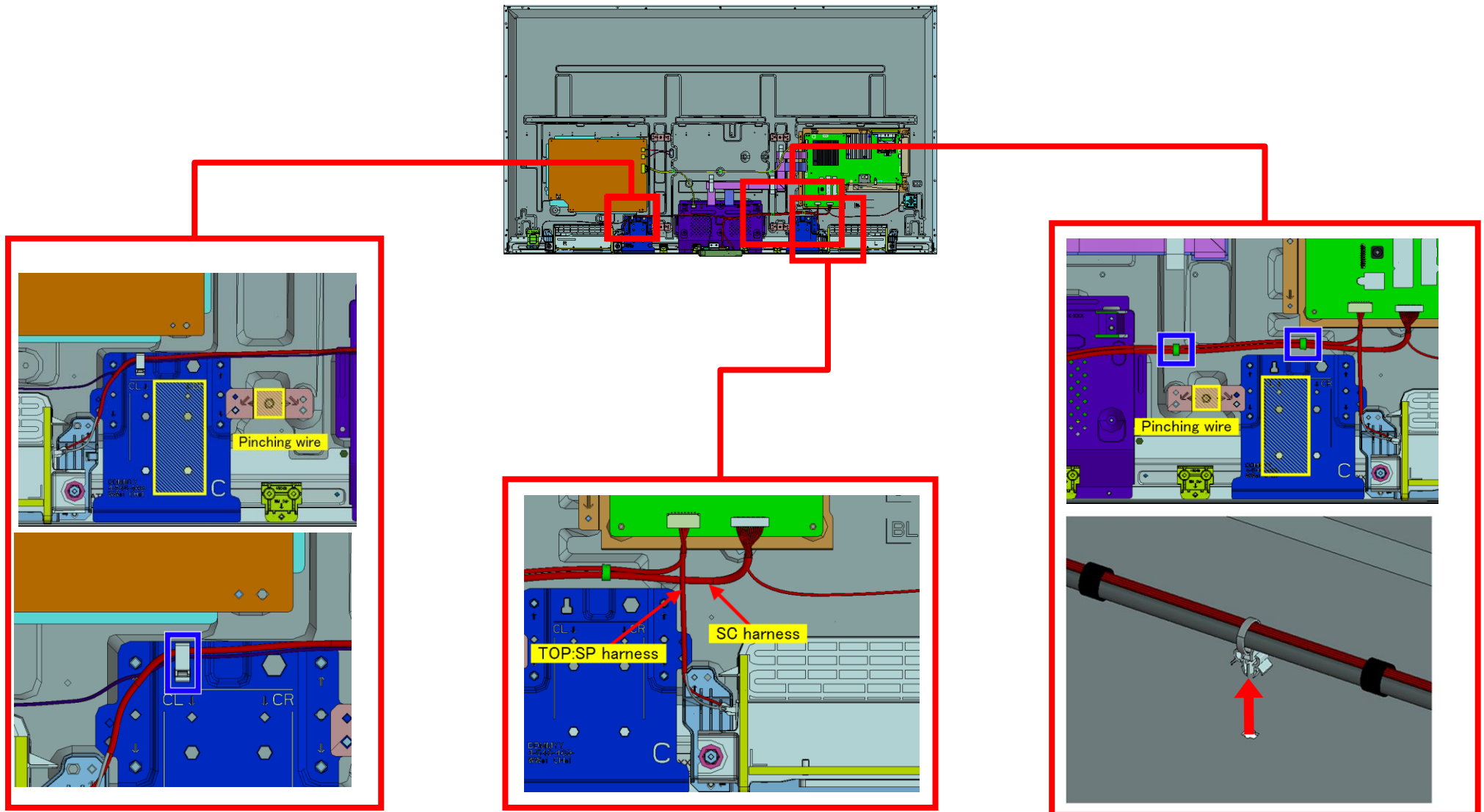
1-2. XBR-65X850C/855C/857C

1-2-8. SPEAKER BOX ASSY (L)
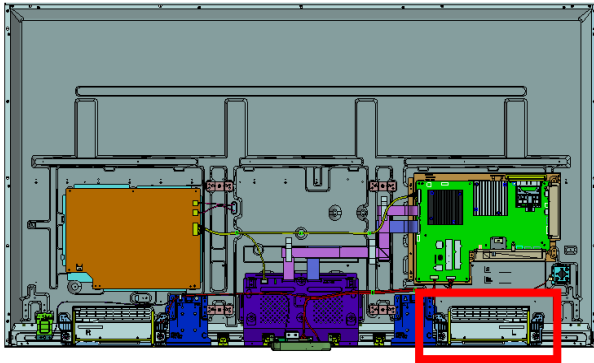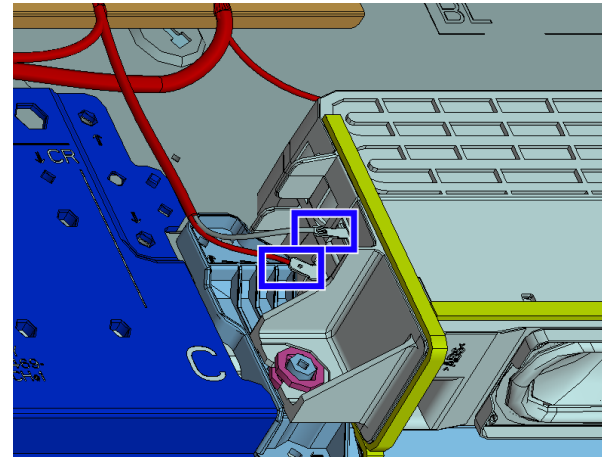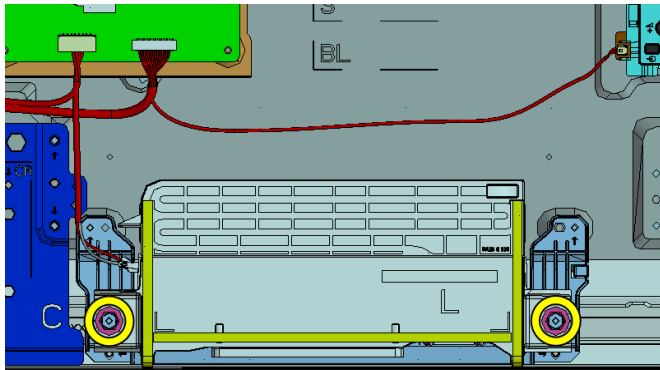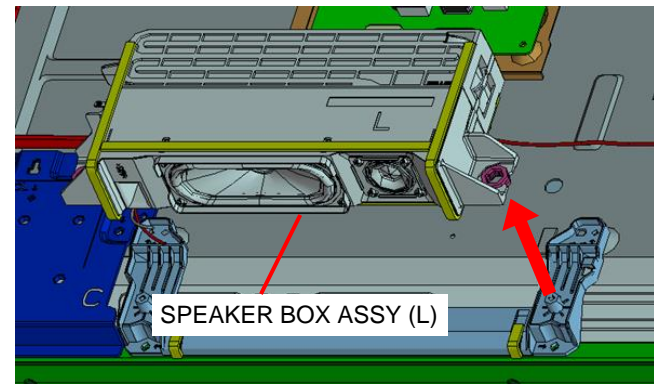
SPEAKER BOX ASSY (L)

1-2. XBR-65X850C/855C/857C

1-2-9. BRACKET, SP (2L HWK) A

1

〈Sequence Information〉

〈3〉   〈2〉

〈1〉   〈1〉

4 screws (SCREW , +PSW M3X8) P/N: 2-580-593-01

2

3
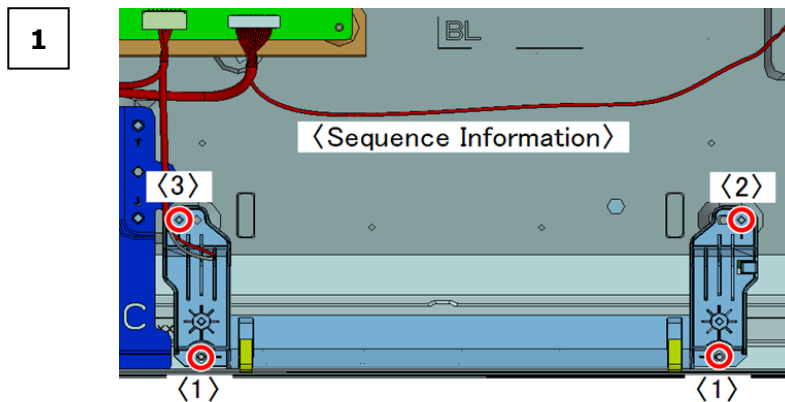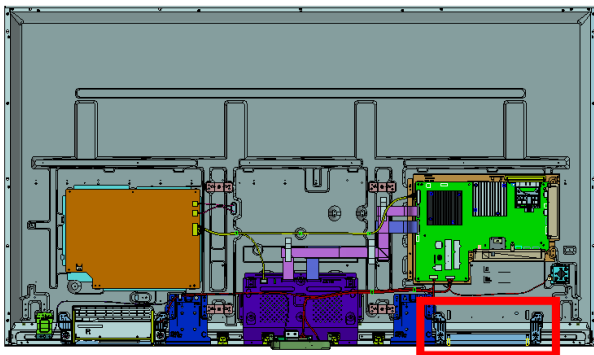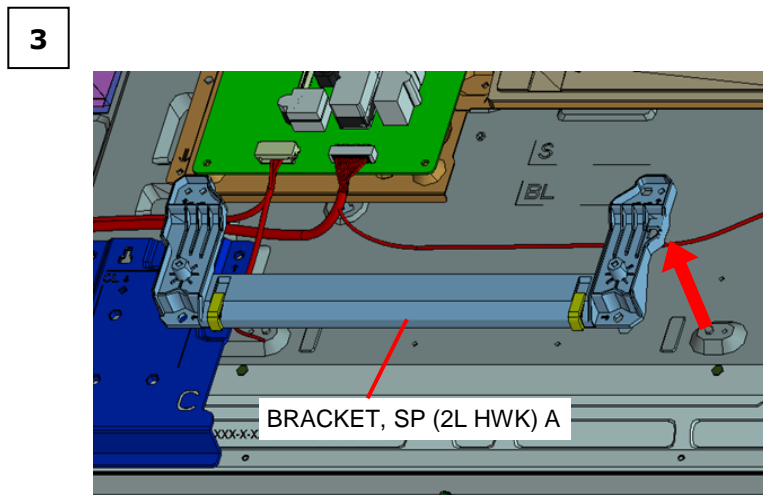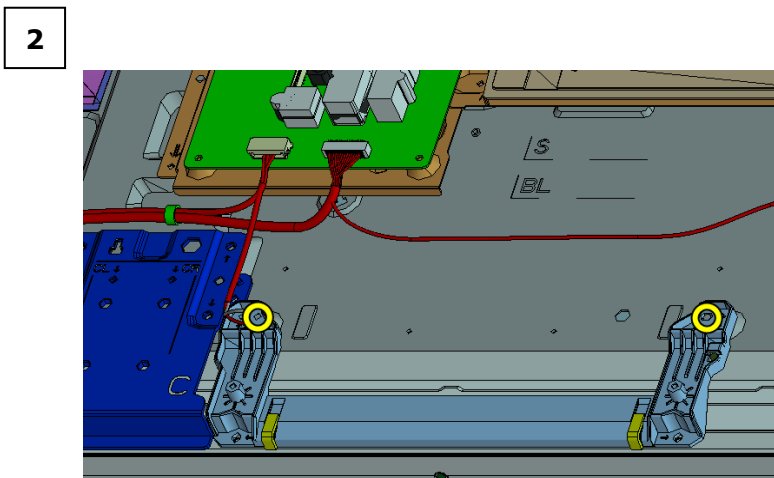
BRACKET, SP (2L HWK) A

1-2. XBR-65X850C/855C/857C

1-2-10. SPEAKER BOX ASSY (R)

1

2

3

SPEAKER BOX ASSY (R)
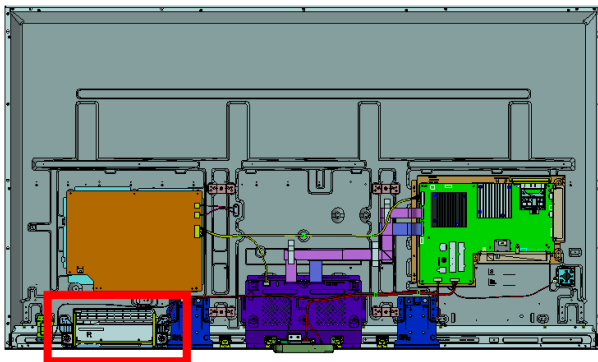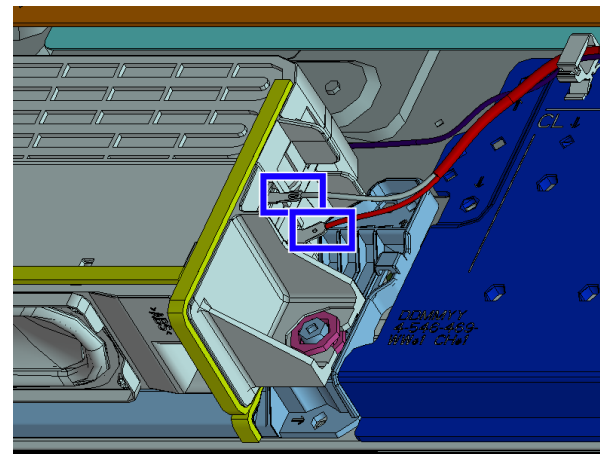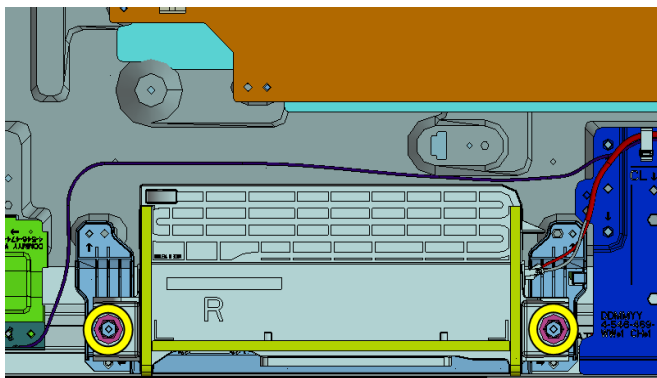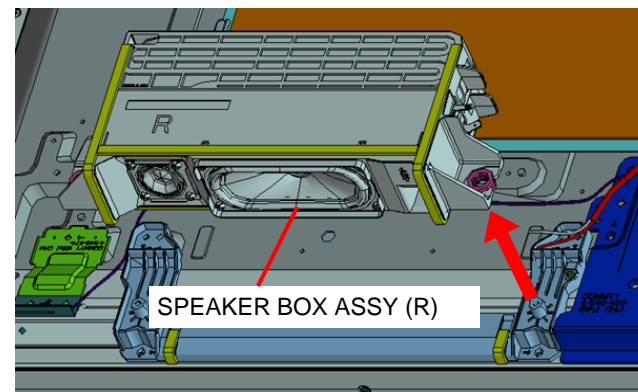
1-2. XBR-65X850C/855C/857C

1-2-11. BRACKET, SP (2L HWK) A

1

⟨Sequence Information⟩

⟨3⟩   ⟨2⟩

⟨1⟩   ⟨1⟩

4 screws (SCREW , +PSW M3X8) P/N: 2-580-593-01

2

3

BRACKET, SP (2L HWK) A
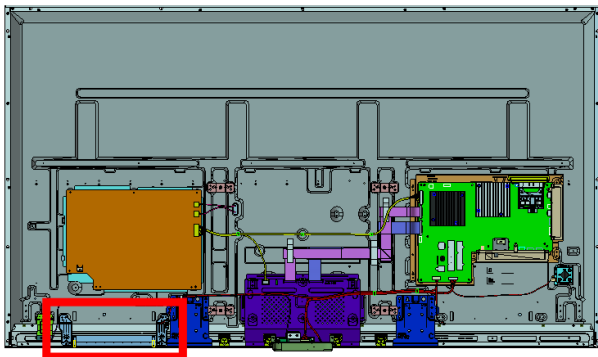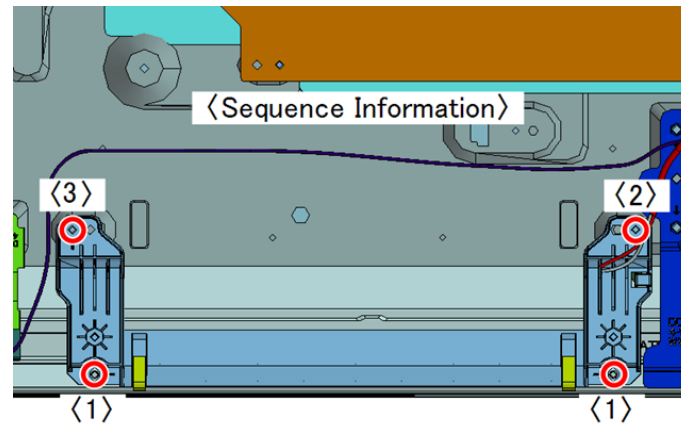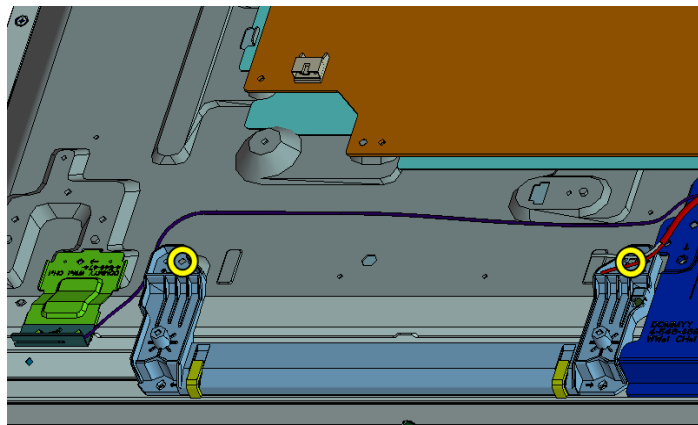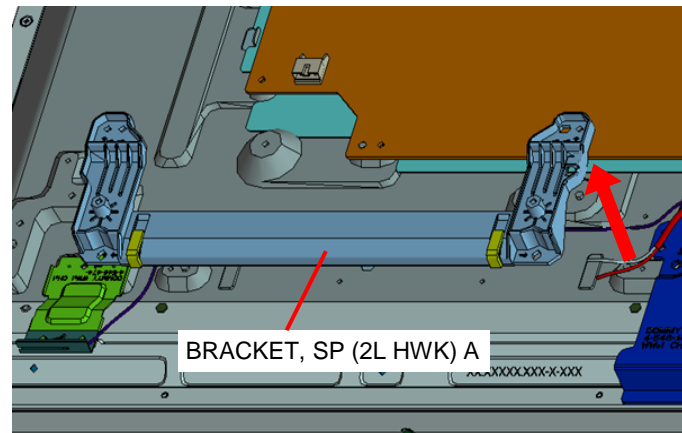
1-2. XBR-65X850C/855C/857C

1-2-12. BRACKET,BT (EGL) ASSY

2

Don't touch floating area of BRACKET, BT at this operation, for preventing deformation of BT ANTENNA and BRACKET, BT.

Screw (SCREW (+PSW)(M3X6))

P/N: 2-990-421-41

3

4

5
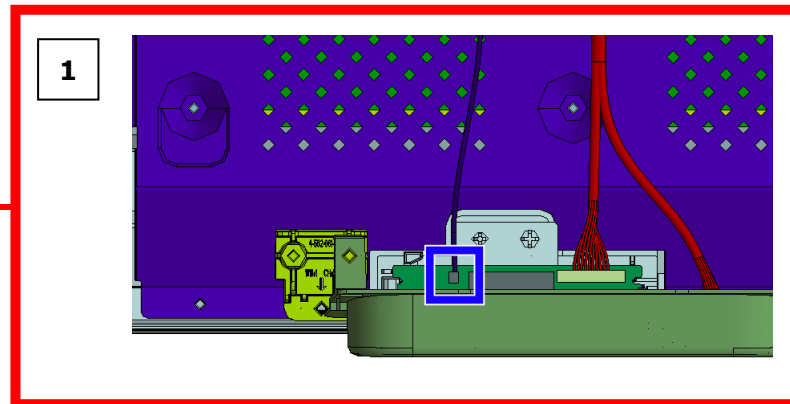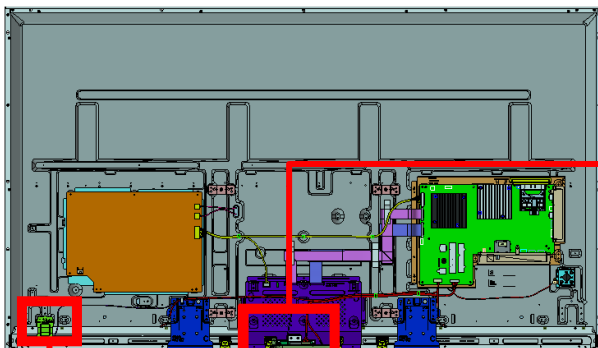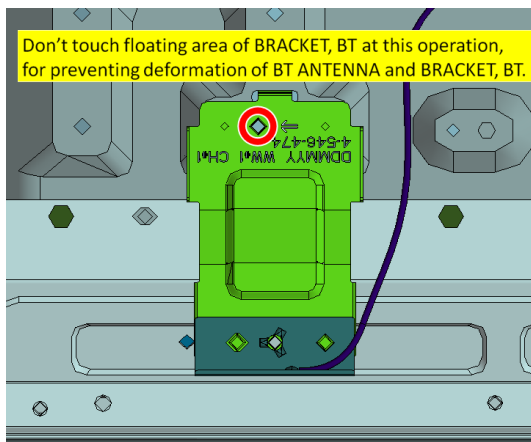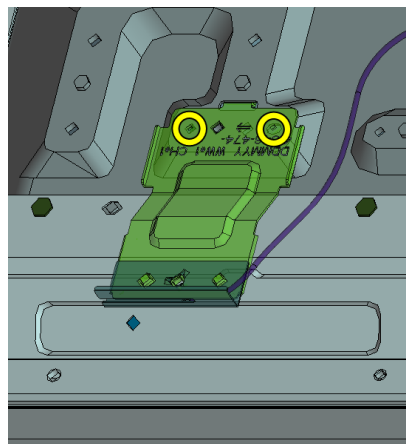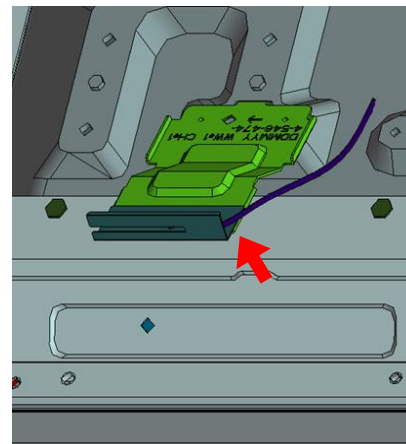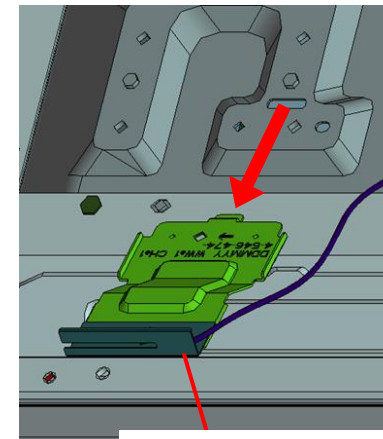
BRACKET,BT (EGL) ASSY

1-2. XBR-65X850C/855C/857C

1-2-13. BT ANTENNA/WIFI ANTENNA AND BRACKET, BT(EGL)

1

Screw (SCREW (+PSW)(M3X6))

P/N: 2-990-421-41

2

3
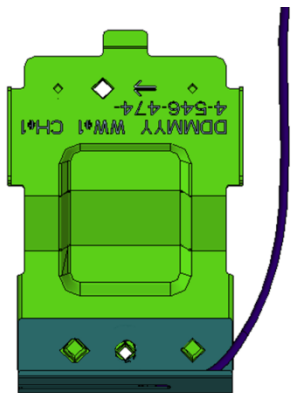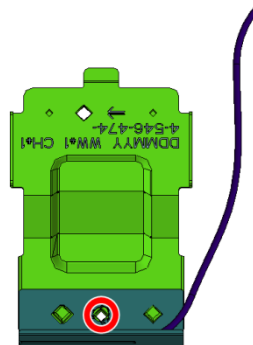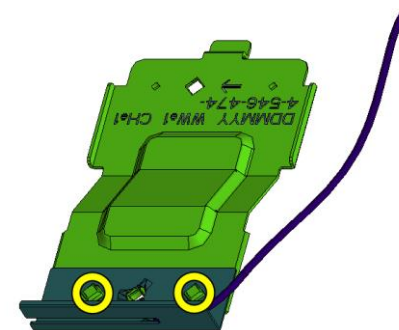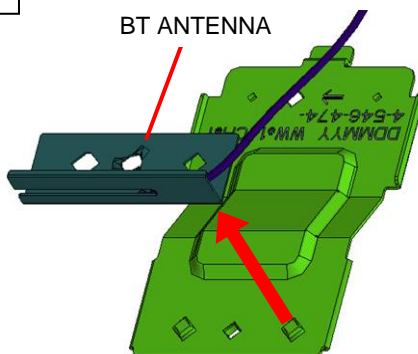
BT ANTENNA

4
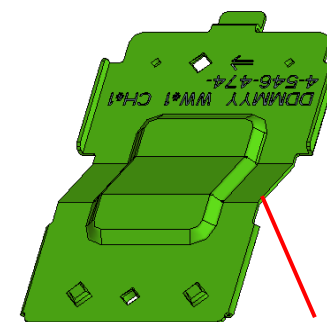
BRACKET,BT (EGL)

1-2. XBR-65X850C/855C/857C

1-2-14. SMART CORE
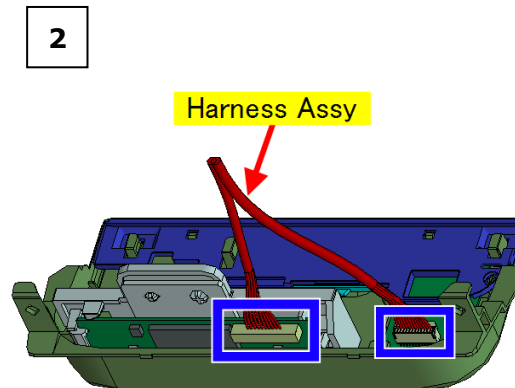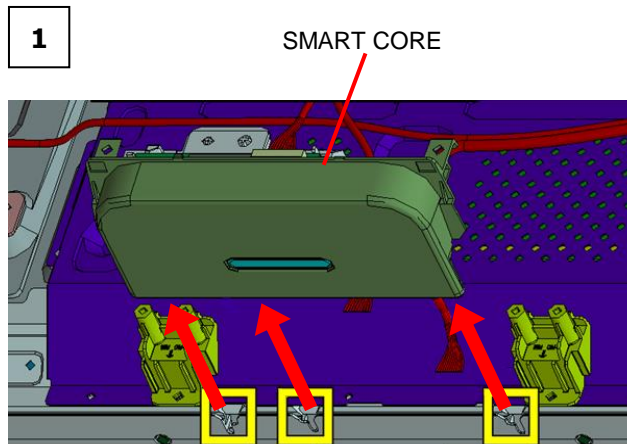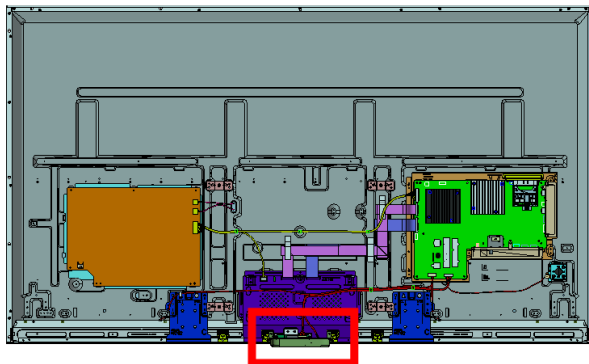
1 SMART CORE

2 Harness Assy

Notes on assembling the Smart core

Don't scratch O/P with Bezel while installing.

Ornament Panel

No gap between Smart Core and AL Bezel.

OK NG
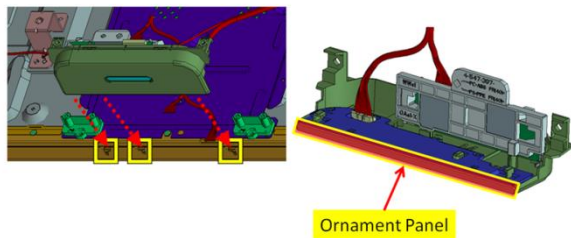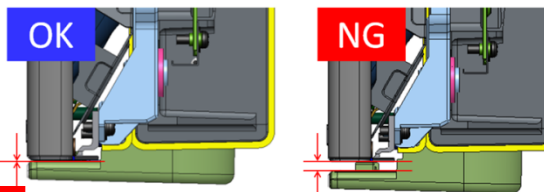
Front View of the TV

Don't touch these components while installing.

Antenna Terminal Connector
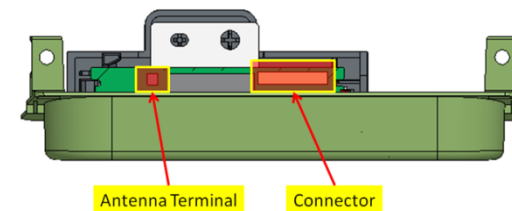
1-2. XBR-65X850C/855C/857C

1-2-15. SWITCH UNIT

1

Release the lock

2

3

Harness Assy

SWITCH UNIT
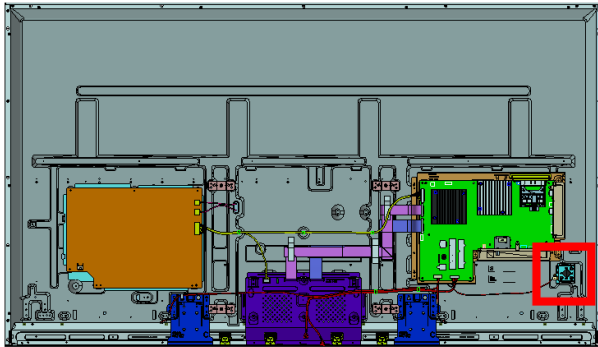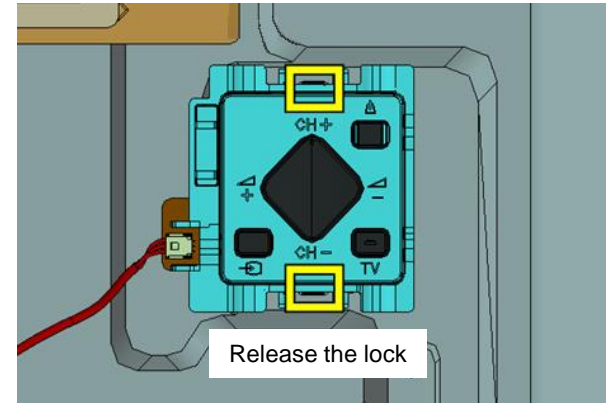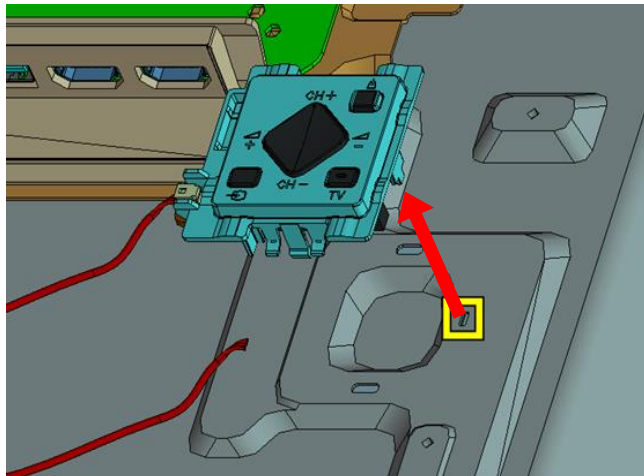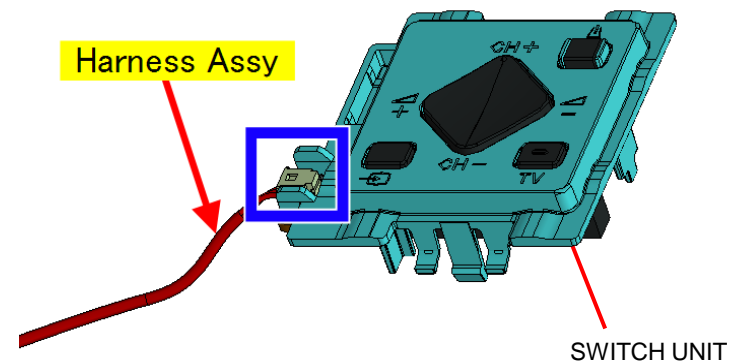
1-2. XBR-65X850C/855C/857C

1-2-16. HARNESS ASSY (MAIN) AND CONNECTOR ASSY 28P

HARNESS ASSY (MAIN)
P/N: 1-910-109-96

CONNECTOR ASSY 28P
P/N: 1-910-109-95
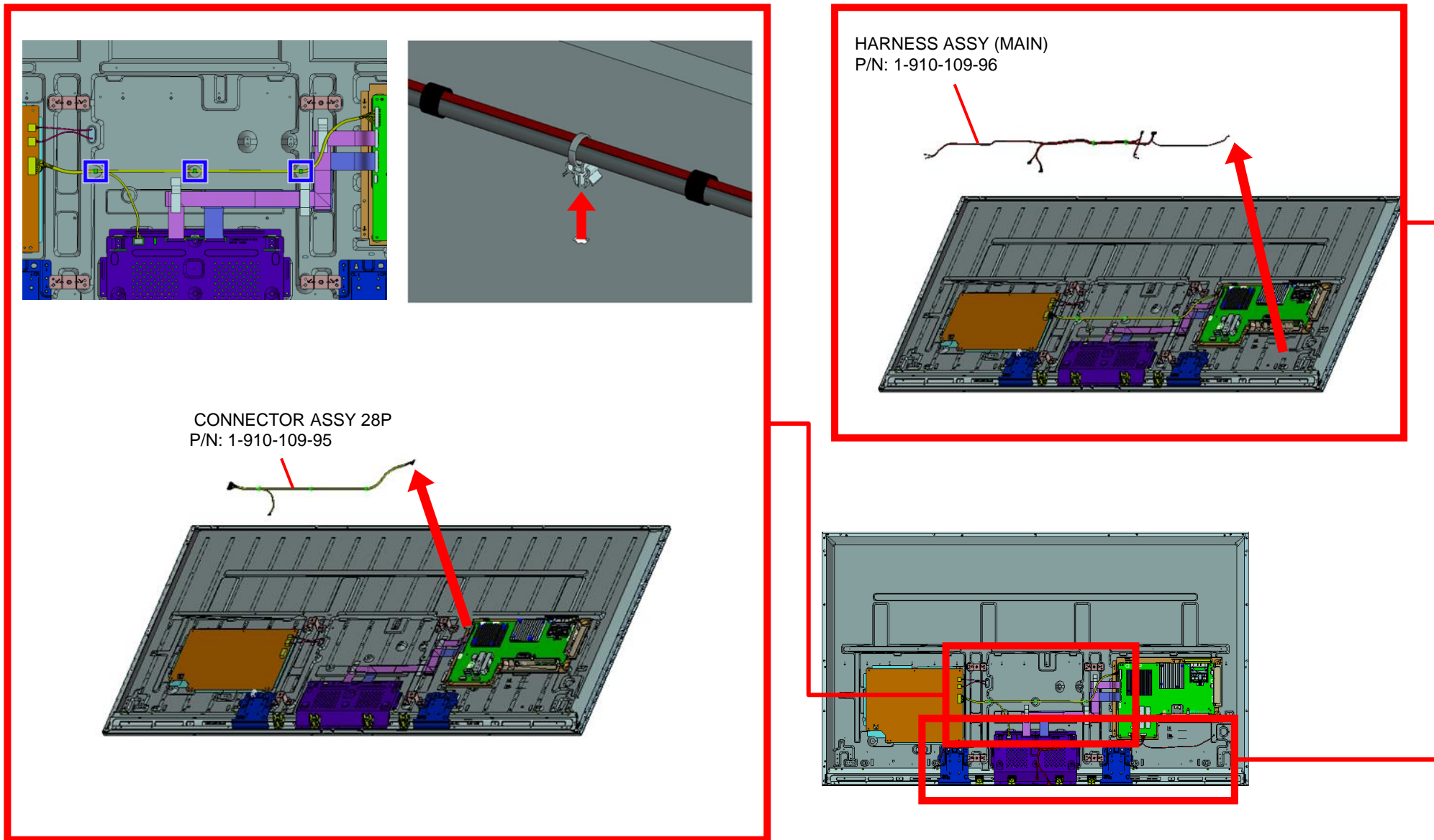
1-2. XBR-65X850C/855C/857C

1-2-17. BRACKET,VESA(HWK)

**1**

8 screws (SCREW, +PSW M4X8) P/N: 2-580-600-11

2

3

BRACKET,VESA(HWK)
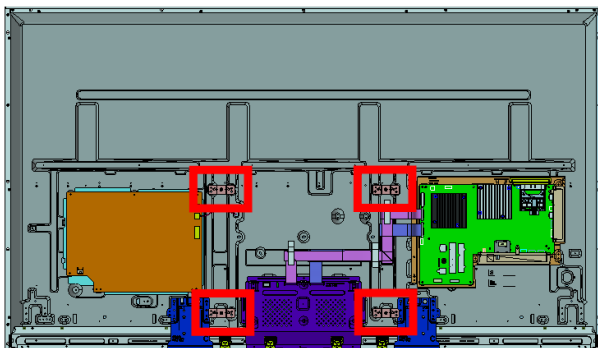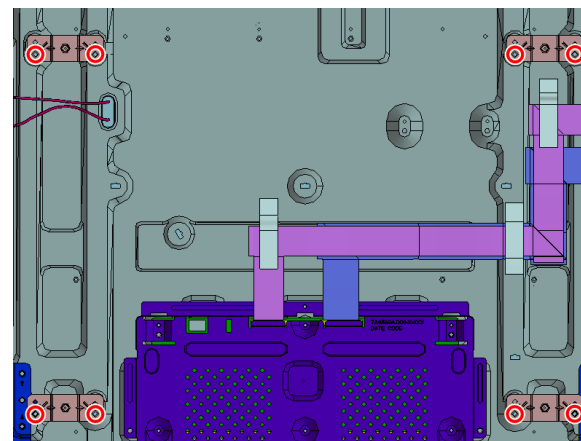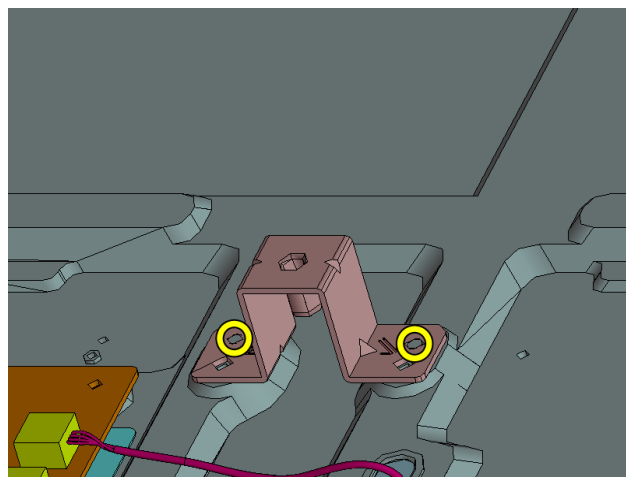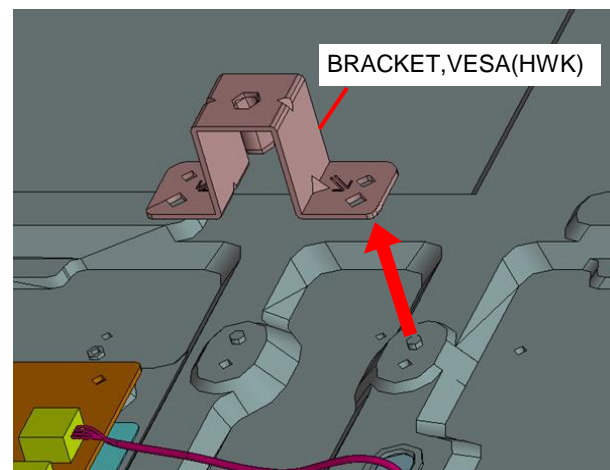
1-2. XBR-65X850C/855C/857C

1-2-18. BRACKET, SC(HWK)

1

4 screws (SCREW, +PSW M3X8) P/N: 2-580-593-01

2

3

BRACKET,SC(HWK)
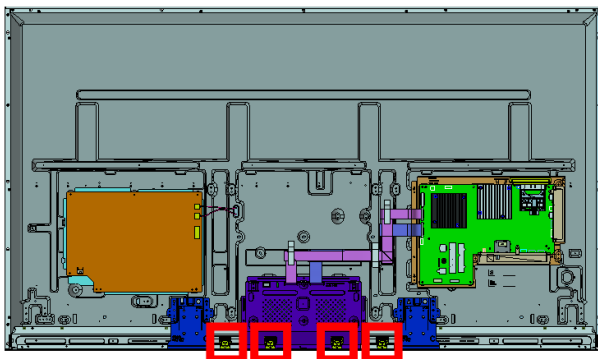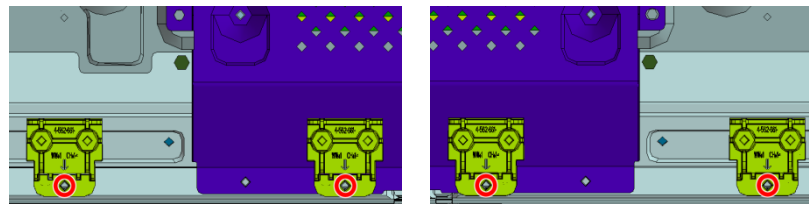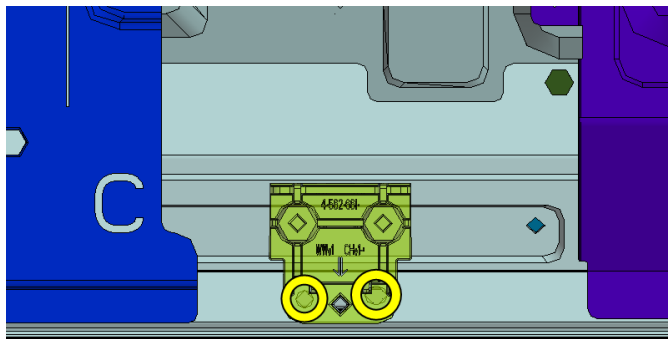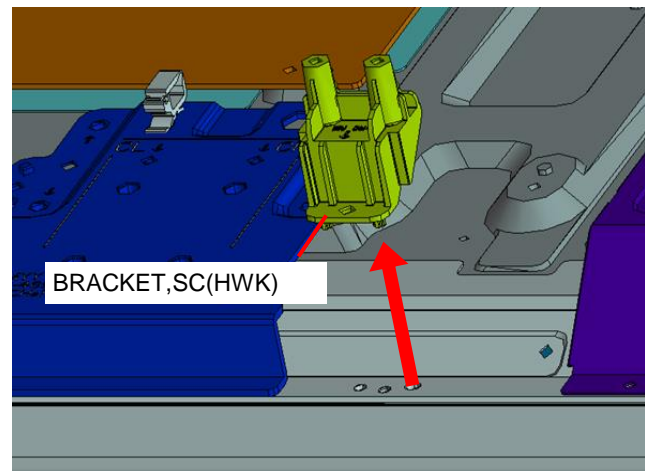
1-2. XBR-65X850C/855C/857C

1-2-19. SLIDE, CLAMP

1

2

SLIDE, CLAMP
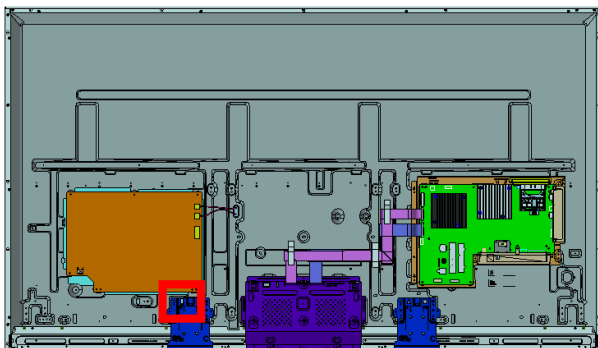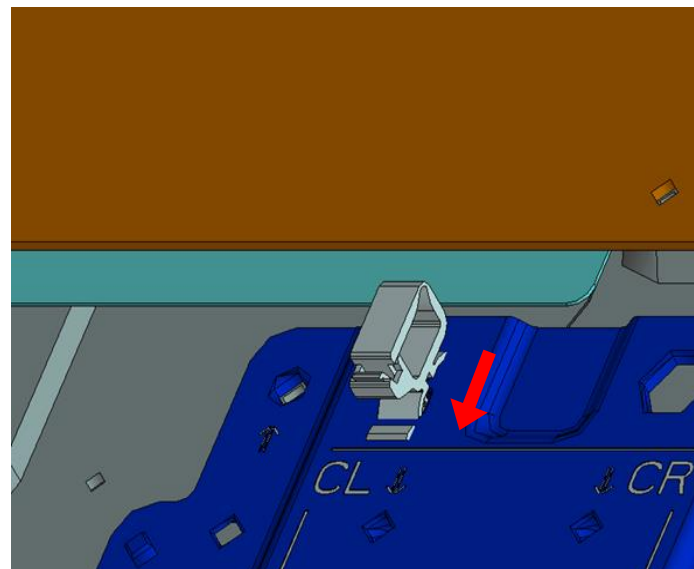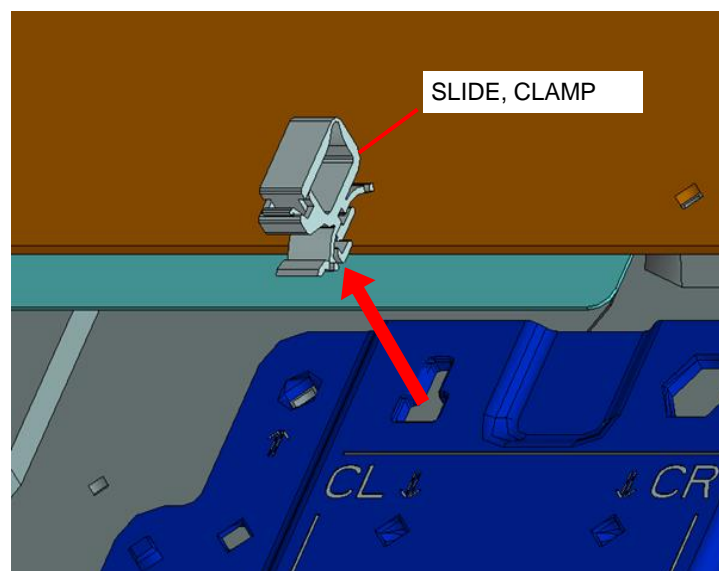
1-2. XBR-65X850C/855C/857C

1-2-20. BRACKET, STD C (2L_HWK) AND GASKET (HWK STD)
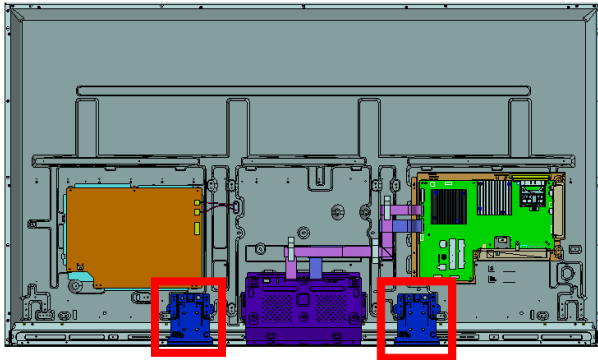
1
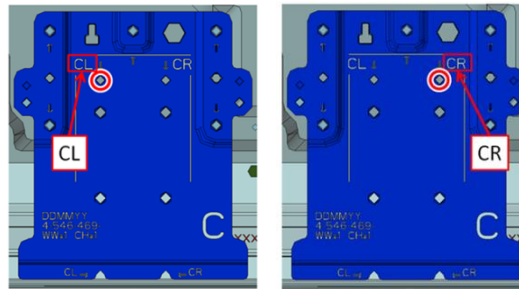
2 screws (PULLEY, STAND (HWI)) P/N: 4-534-964-01

2

8 screws (SCREW, +PSW M4X8) P/N: 2-580-600-11

3

BRACKET, STD C(2L_HWK)

4

1.5 ± 1.5

1.5 ± 1.5
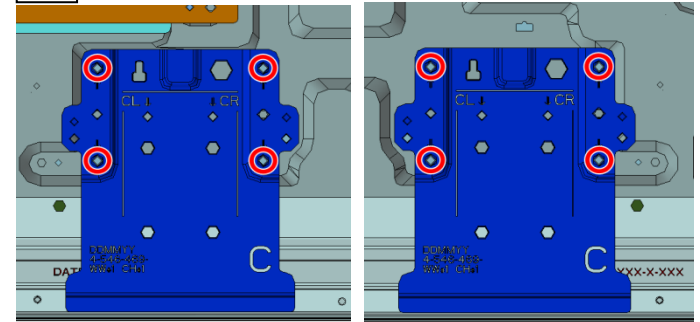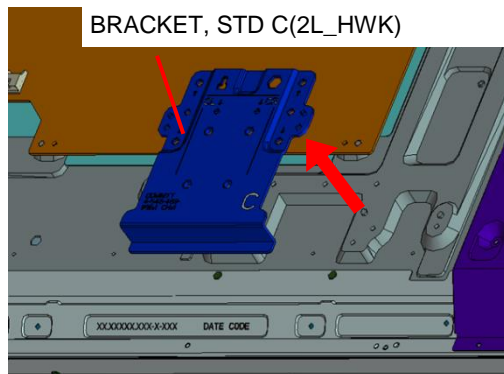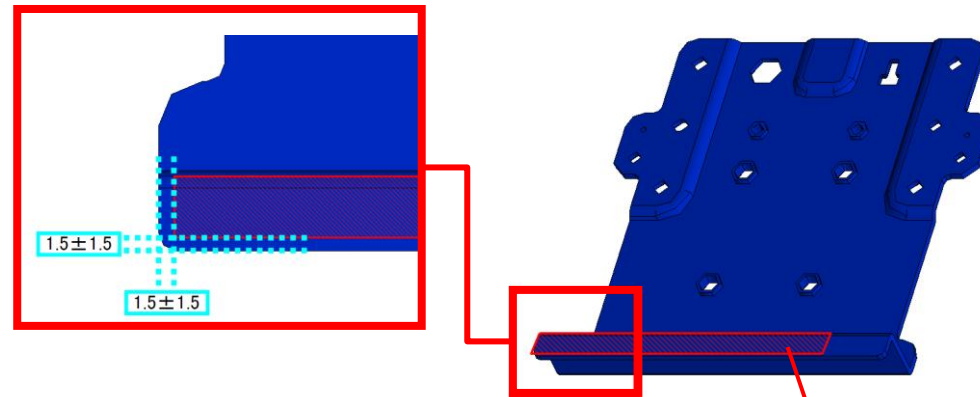
GASKET (HWK STD)

1-2. XBR-65X850C/855C/857C

1-2-21. GL1A(CH)-STATIC CONVERTER (TV)

1

6 screws (SCREW, +PSW M3X6 W12) P/N: 4-256-393-11

2

3

GL1A(CH)-STATIC CONVERTER (TV)
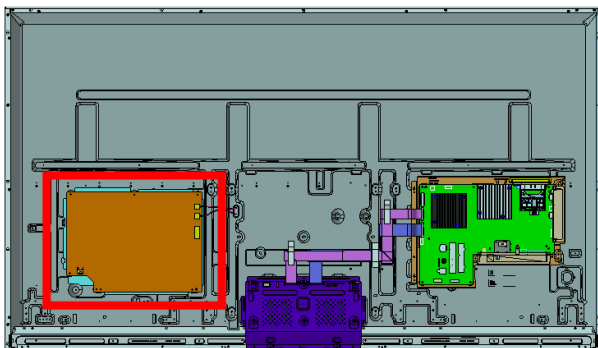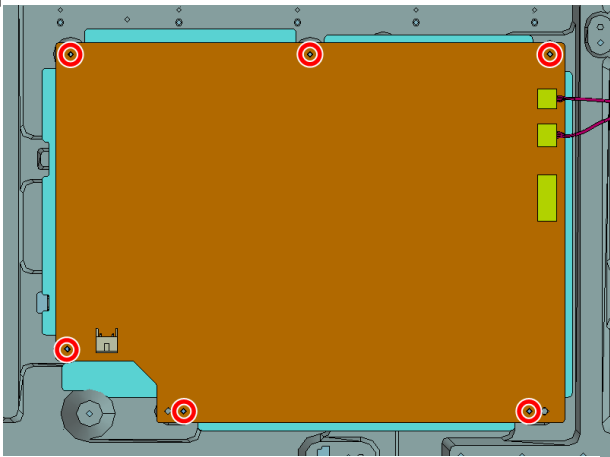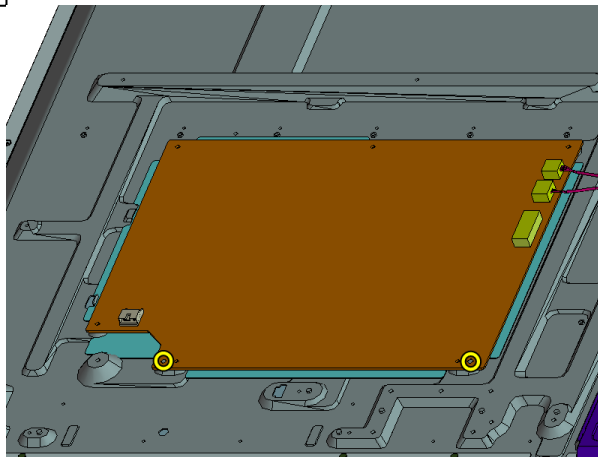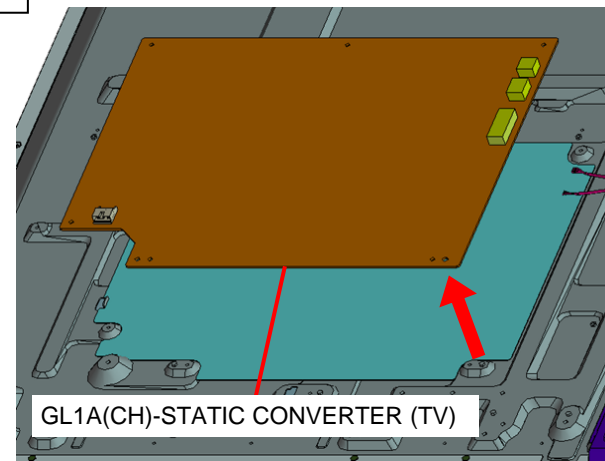
1-2. XBR-65X850C/855C/857C

1-2-22. SHEET, INSULATION(HWK 2L)

(An insulation sheet is under the GL1A power supply board)

1

2

SHEET, INSULATION(HWK 2L)
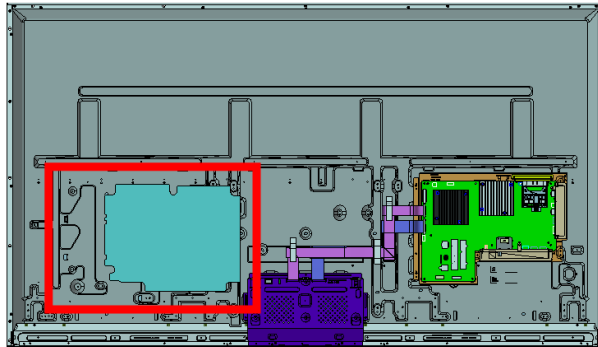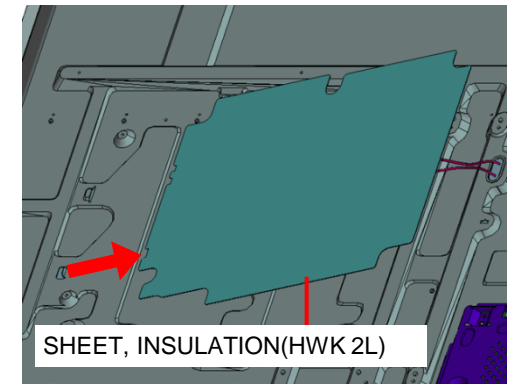
Notes on assembling the Insulation sheet (HWK 2L)

Adhesive tape area

Caution

When handling,
· Be sure not to touch adhesive tape area.

After installing,
· Be sure to push all of adhesive tape area to avoid peel off of "Sheet, Insulation".

y
x

① Slide in

② Slide

① X: +1.5/-0
Install tabs in the half-cut emboss

② X: +1.5/-0
Install cut of insulation sheet into Panel edge

1-2. XBR-65X850C/855C/857C

1-2-23. TAPE

No stress during taping.
No stress after taping.
FFC between tape and the connector is connected with extra.

TAPE

Connector

FFC

Tape

Side View

TAPE

No stress during taping.

TAPE

NG

No abnormal floating
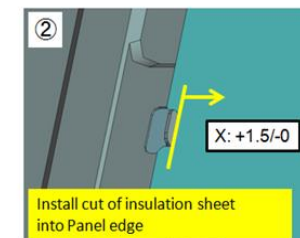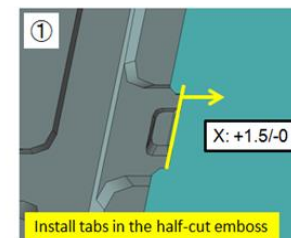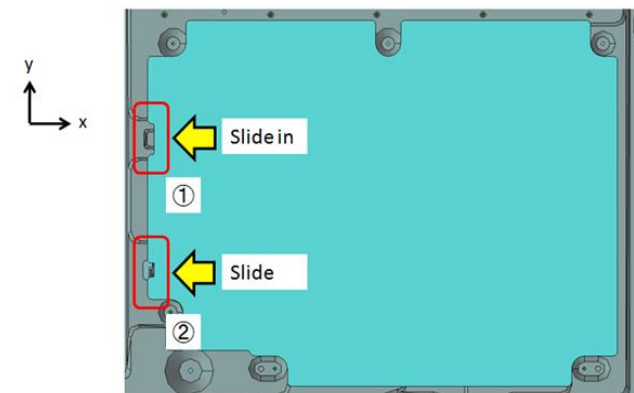
1-2. XBR-65X850C/855C/857C

1-2-24. CABLE, FLEXIBLE FLAT 41P AND CABLE, FLEXIBLE FLAT 51P
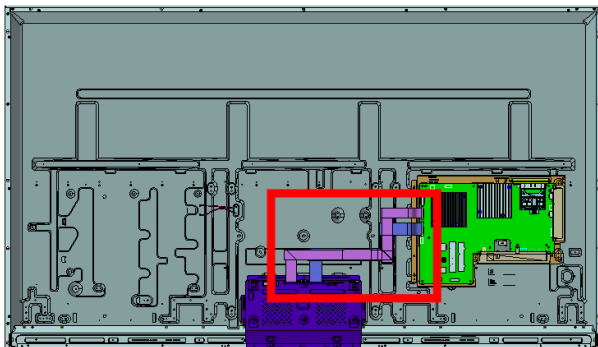
1 CABLE, FLEXIBLE FLAT 41P
P/N: 1-848-870-11 (Except BR6)
FLEXIBLE FLAT CABLE 41P
P/N: 1-848-872-11 (BR6)
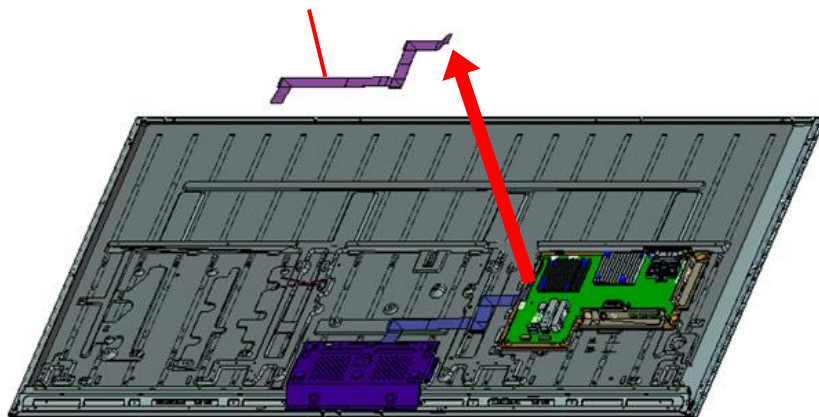
2 CABLE, FLEXIBLE FLAT 51P
P/N: 1-848-871-11 (Except BR6)
FLEXIBLE FLAT CABLE 51P
P/N: 1-848-873-11 (BR6)
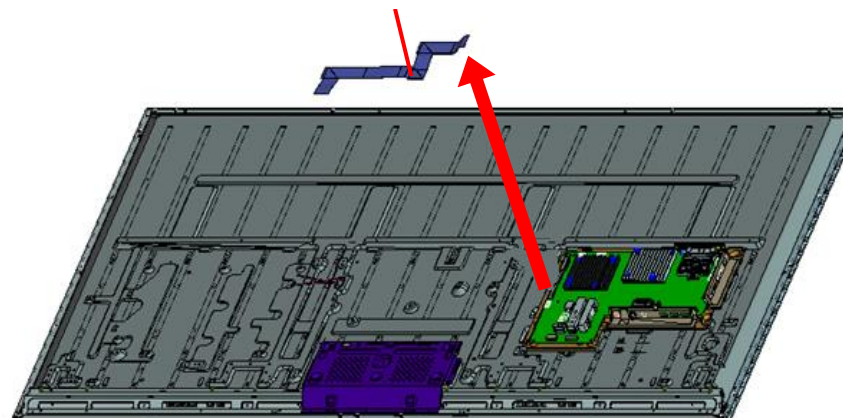
1-2. XBR-65X850C/855C/857C

1-2-25. BRACKET, UNDER FL (MOLD)

BRACKET, UNDER FL (MOLD)
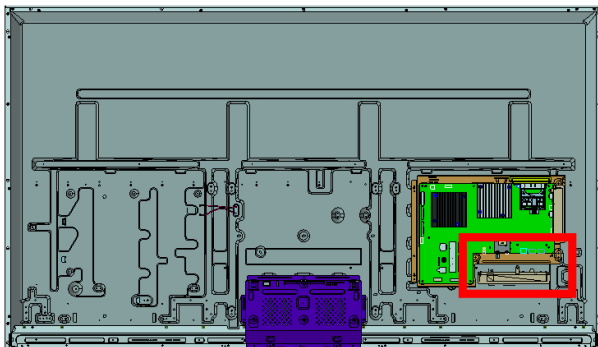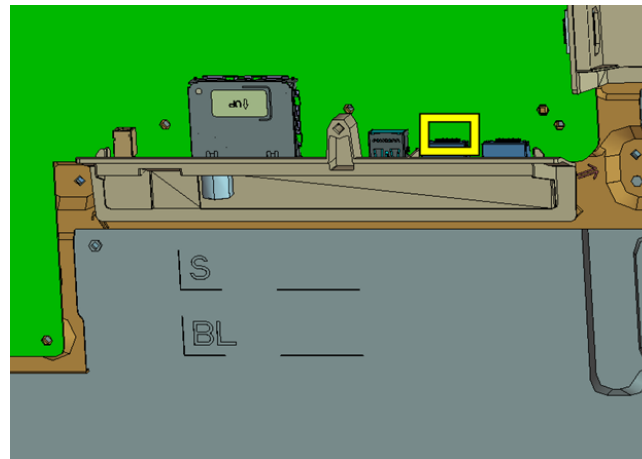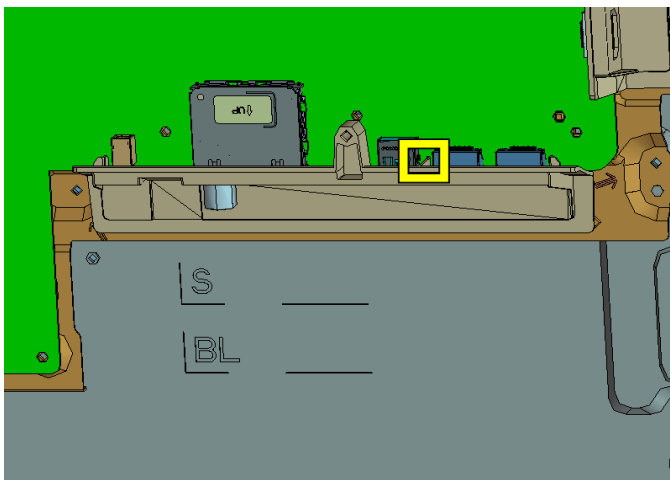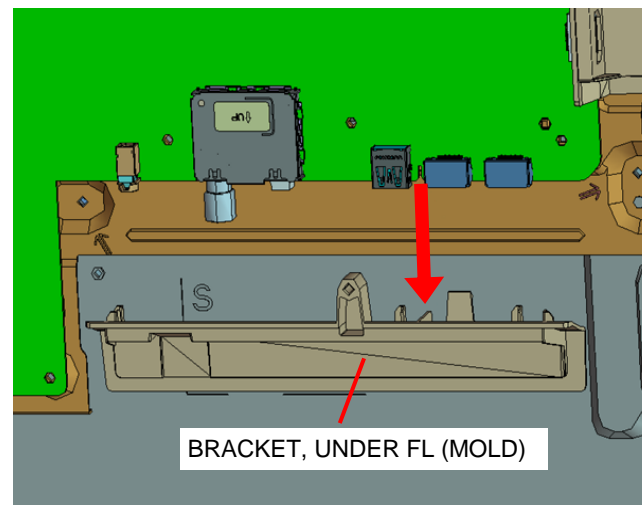
1-2. XBR-65X850C/855C/857C

1-2-26. BRACKET, SIDE FL (MOLD)

1

2

3

BRACKET, SIDE FL (MOLD)
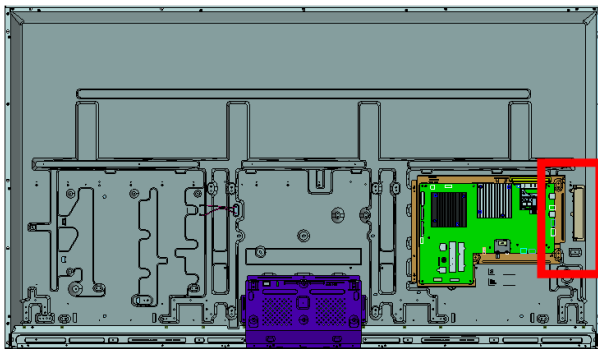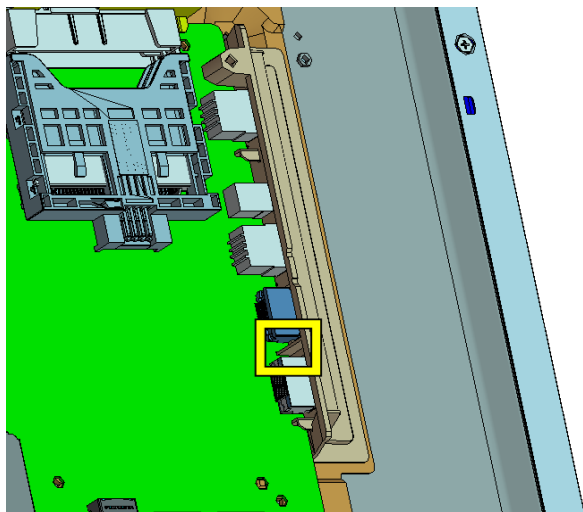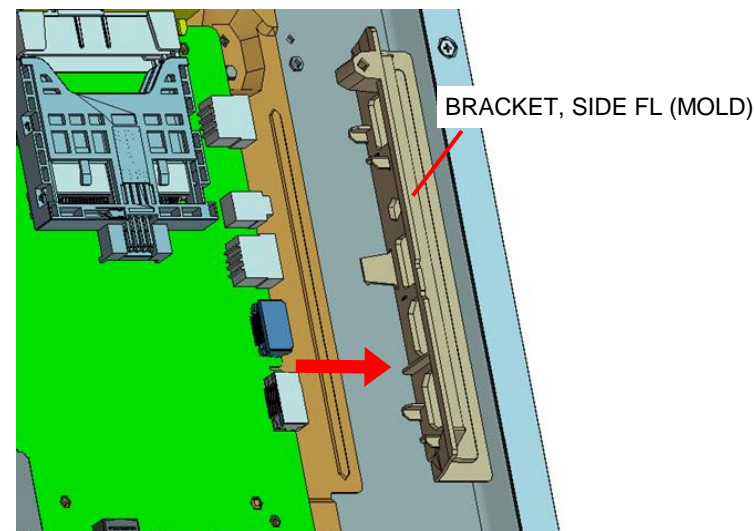
1-2. XBR-65X850C/855C/857C

1-2-27. BRACKET, TOP FL (MOLD)

1

2

3

BRACKET, TOP FL (MOLD)
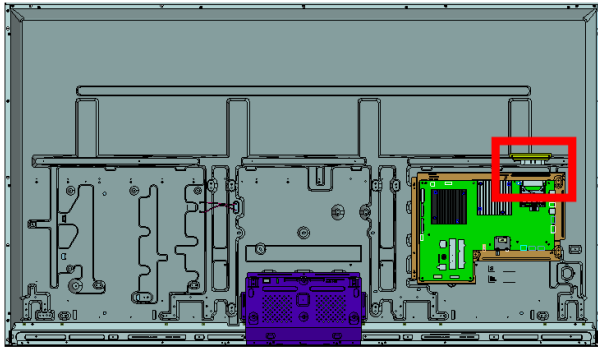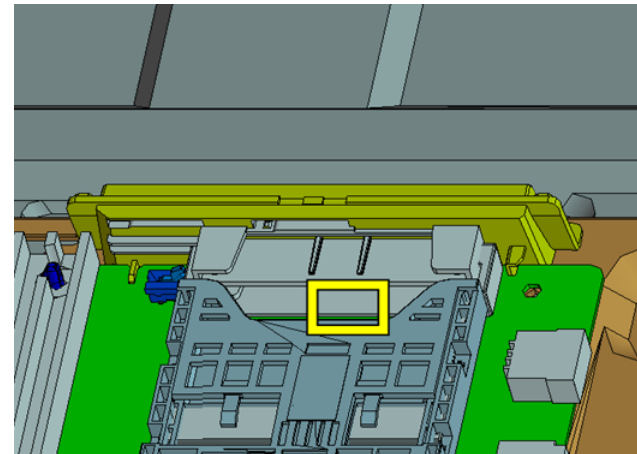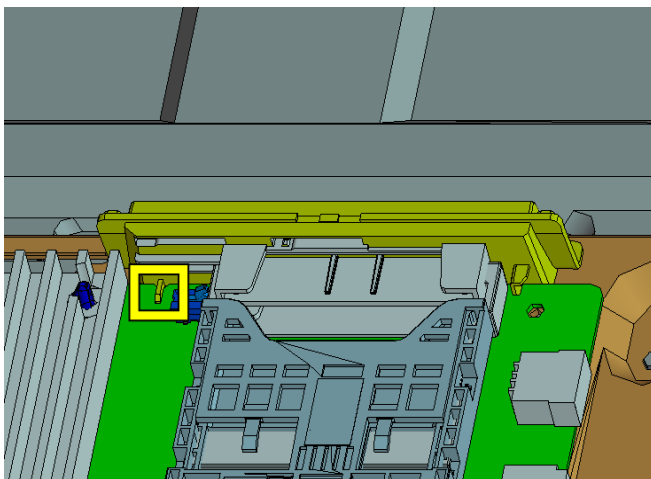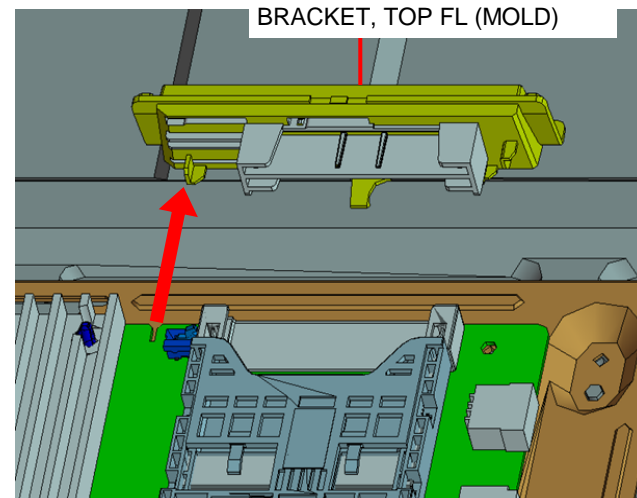
1-2. XBR-65X850C/855C/857C

1-2-28. PLATE, MAIN(HWK) ASSY

1

5 screws (SCREW, +PSW M3X8) P/N: 2-580-593-01

2

3

PLATE, MAIN(HWK) ASSY
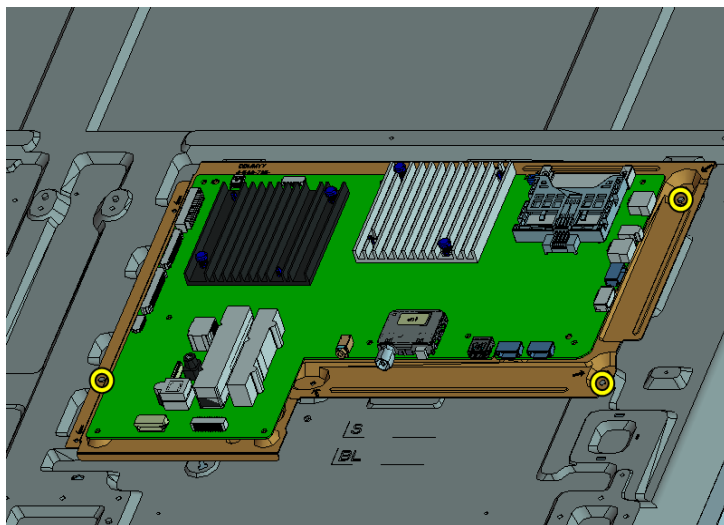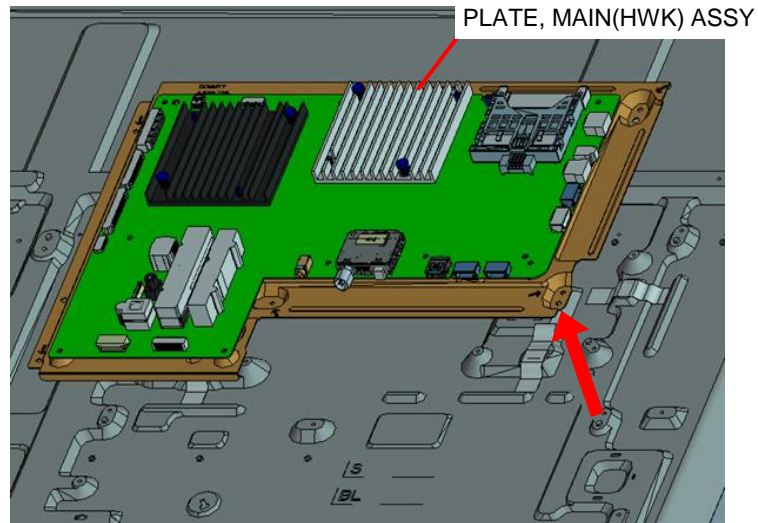
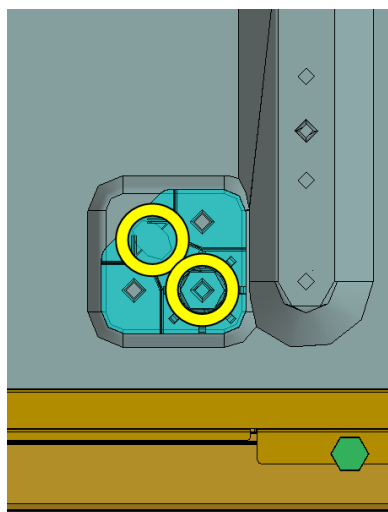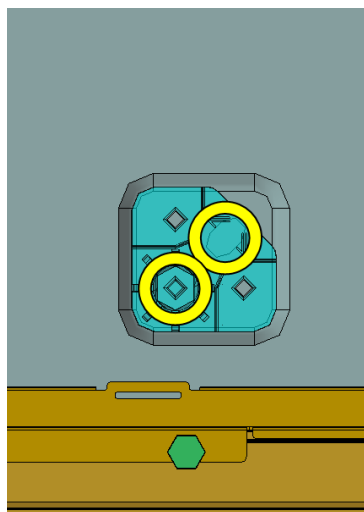## 1-2. XBR-65X850C/855C/857C

1-2-29. BMFL ASSY

⟨Sequence Information⟩

1

9 screws (SCREW (+PSW)(M3X6)) P/N: 2-990-421-41

2

3

BMFL ASSY
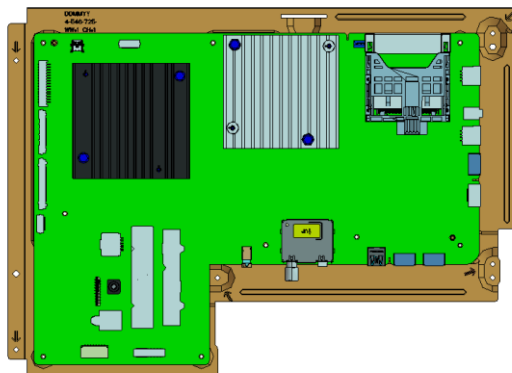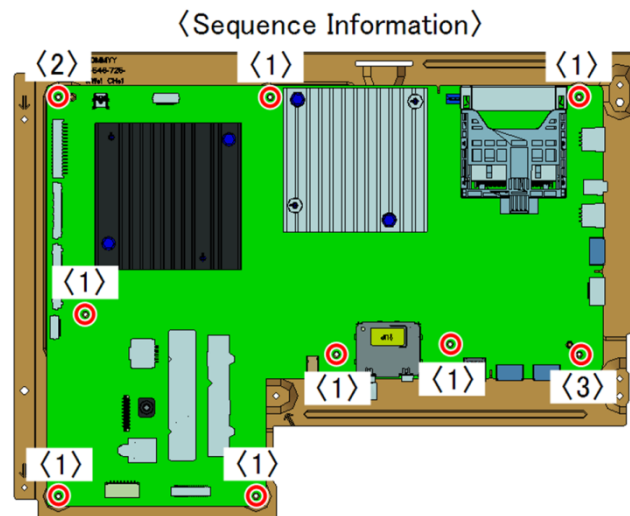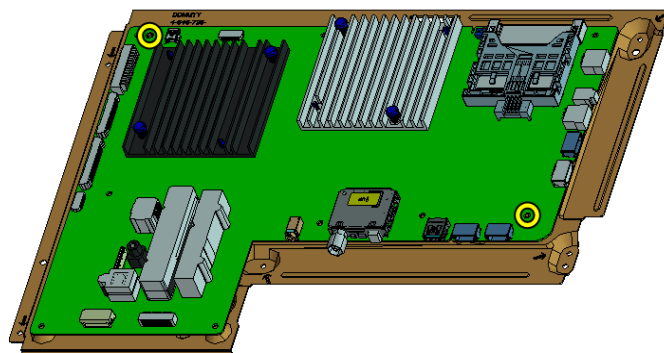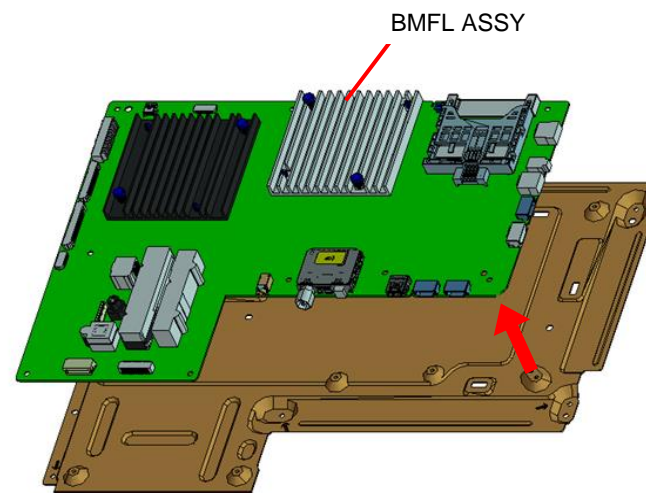
1-2. XBR-65X850C/855C/857C

1-2-30. GASKET (BMF)
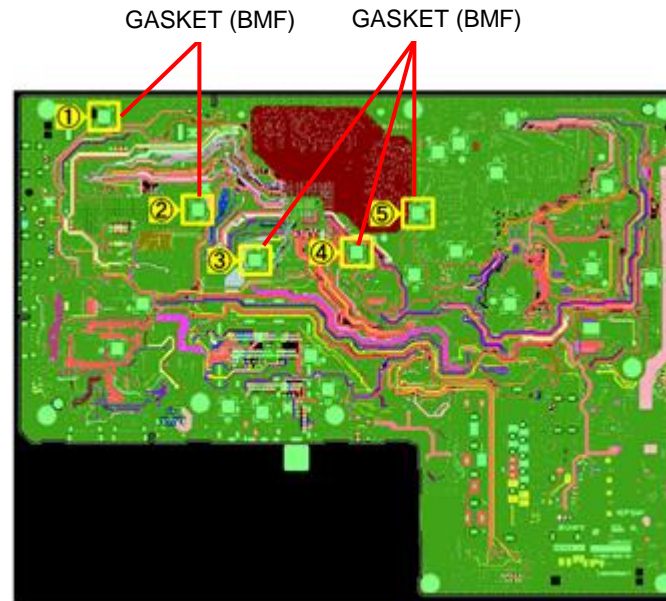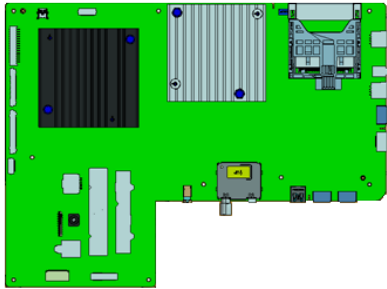
GASKET (BMF)   GASKET (BMF)

NOTE:
When you replace a BMFL board, it is necessary to stick five new GASKET on a new BMFL board.
GASKET (BMF): 4-566-117-01

Stick GASKET inside the guide line.
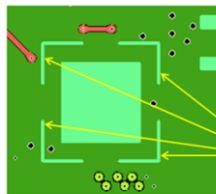
Guide line

*No indication of direction

To stick the GASKET firmly,

Press the gasket until compression completely.

(0.5-1.0kgf)

Caution:

1.   Please aim at the center of square land.

2.   Assy the gaskets just before B board panel installation.

1-2. XBR-65X850C/855C/857C

1-2-31. SHEET, THERMAL(BM) AND PLATE, MAIN(HWK)

1

1.5±1.5mm   1.5±1.5mm

SHEET, THERMAL(BM)

Don't overlap on align marking

Be careful the side of SHEET THERMAL.

Separator side

2

PLATE, MAIN(HWK)
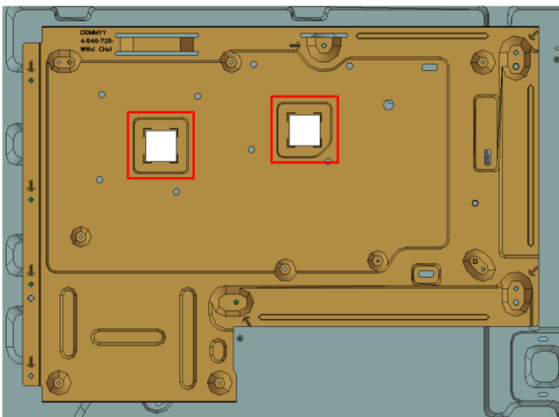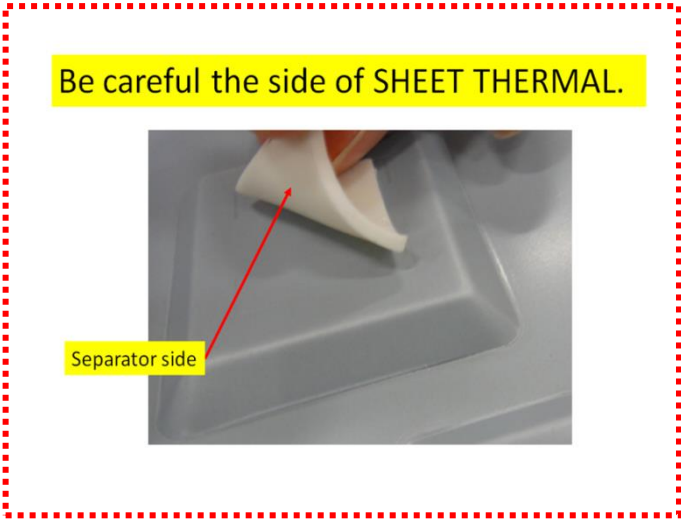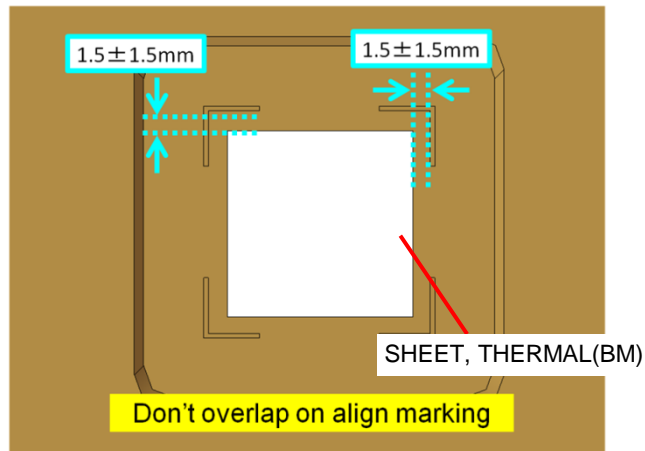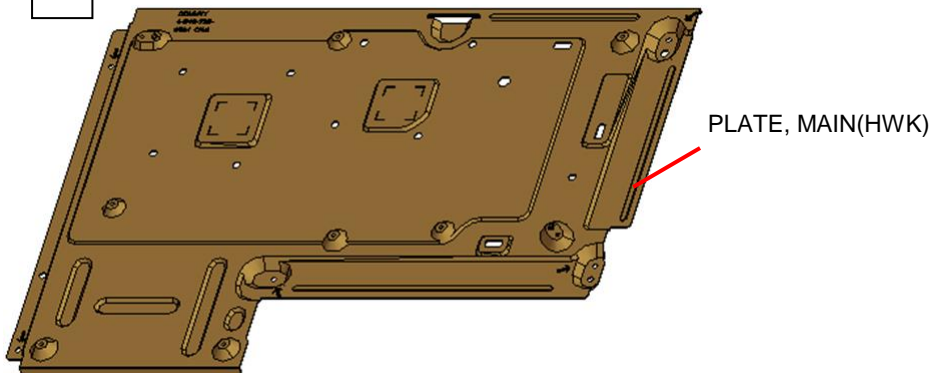
1-2. XBR-65X850C/855C/857C

1-2-32. CUSHION, CORNER(EGL) AND TAPE

Holes of BLC should be covered by TAPE.

TAPE

Holes of BLC should be covered by TAPE.

TAPE

Holes of BLC should be covered by TAPE.

TAPE

CUSHION, CORNER(EGL)

CUSHION, CORNER(EGL)

Stick VA tape on the conductive tape.

Datum: Emboss edge
0±2

Datum: Emboss edge
0±2

Datum: Emboss edge
0±2

Datum: Emboss edge
0±2

VA TAPE①   VA TAPE②

0±1

0±1

0±1

0±1
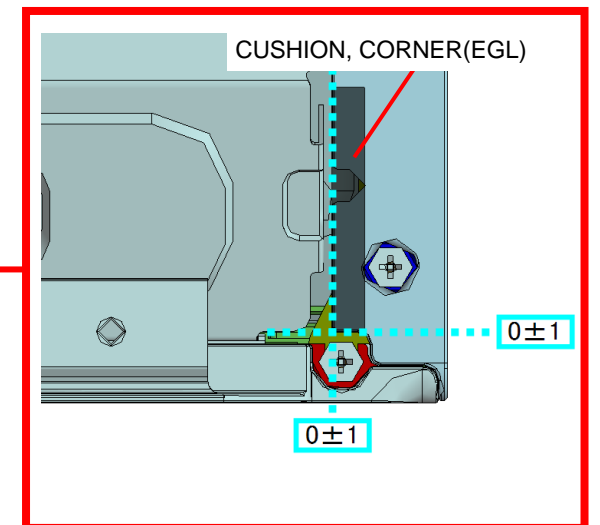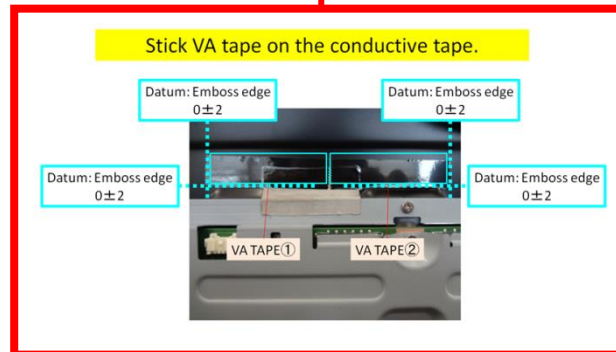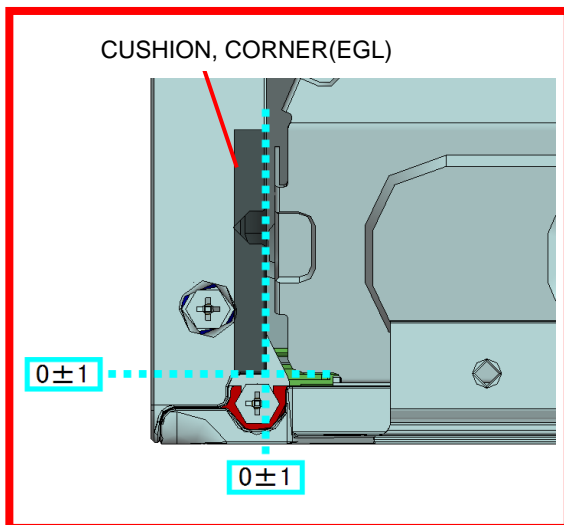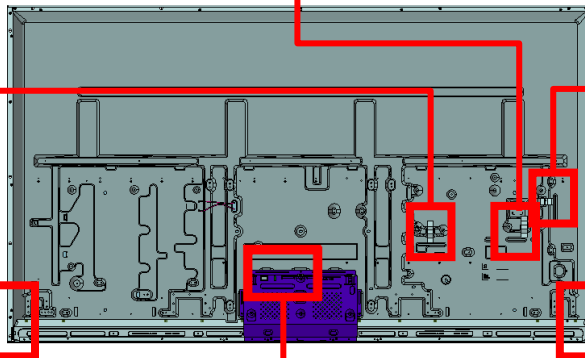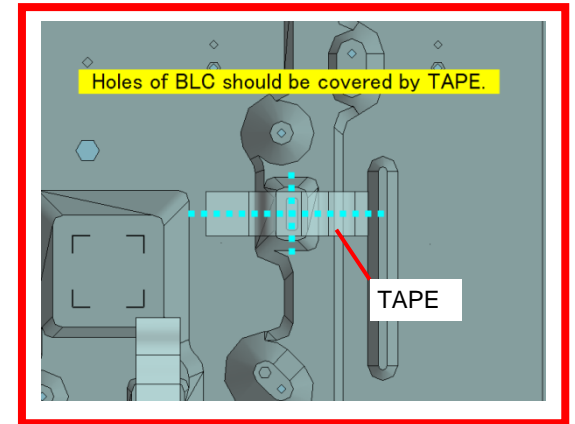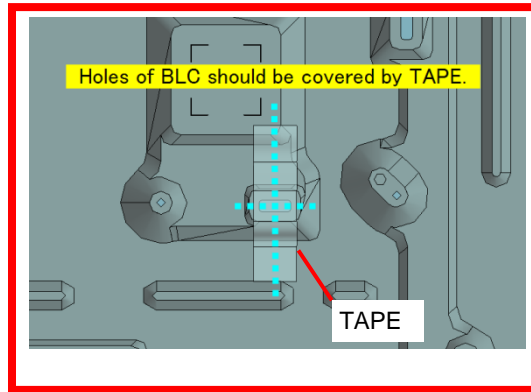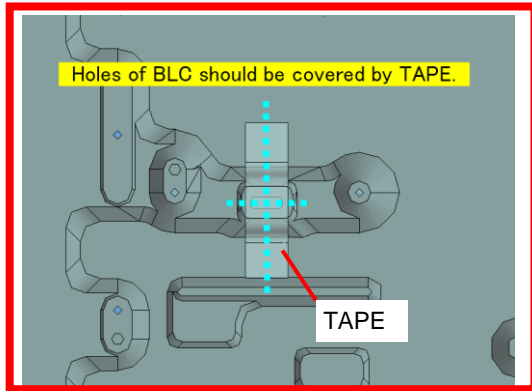
1-2. XBR-65X850C/855C/857C

1-2-33. LCD PANEL

LCD PANEL
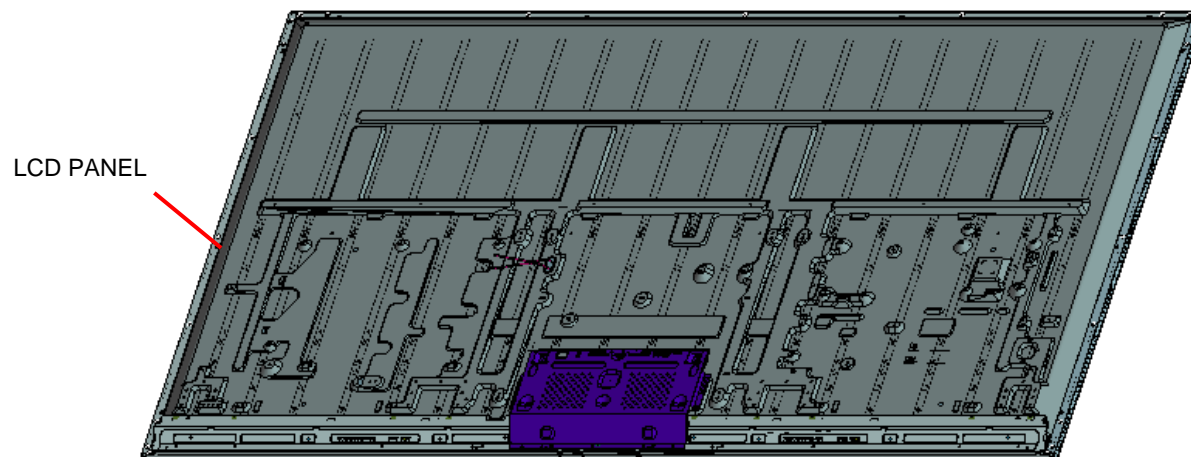
1-3. XBR-75X850C/855C

1-3-1. STAND

4 screws (SCREW, +PSW M6X12) P/N: 4-567-081-01

STAND
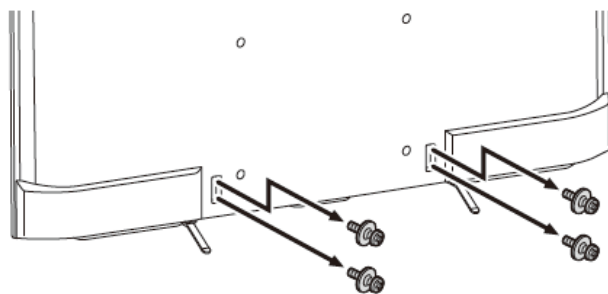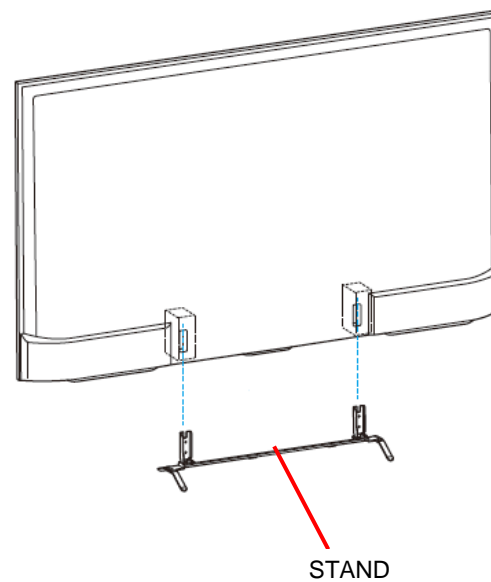
1-3. XBR-75X850C/855C

1-3-2. LABEL, UNDER TERMINAL AND LABEL, REAR TERMINAL AND LABEL, SIDE TERMINAL (L)

LABEL, REAR TERMINAL

◎ Positioning hole

LABEL, UNDER TERMINAL

LABEL, SIDE TERMINAL (L)
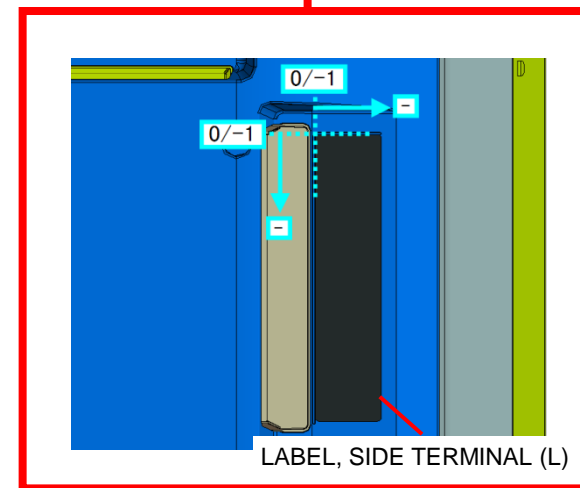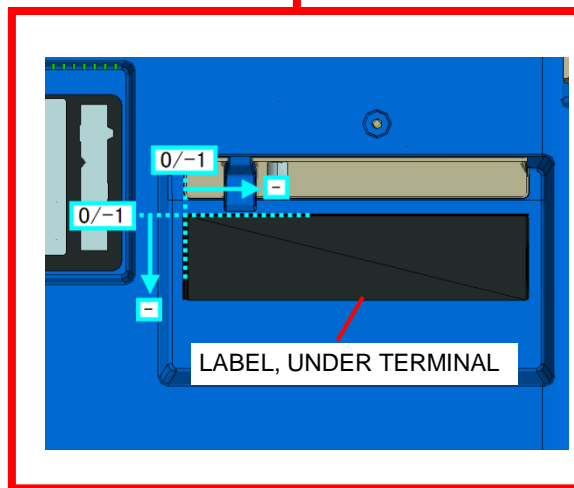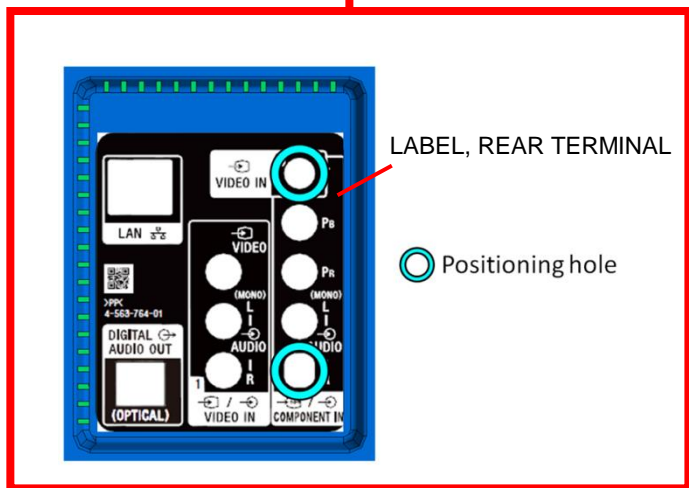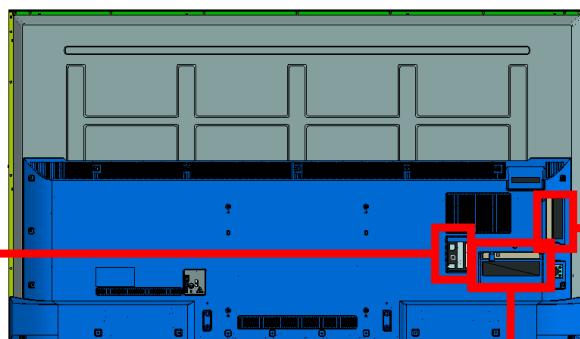
1-3. XBR-75X850C/855C

1-3-3. AC COVER AND POWER SUPPLY CORD

When screw AC COVER,
please hold AC CORD as below picture.

HOLD

1

Screw (SCREW +PSW M4X10) P/N: 4-159-298-01

2

3

4 POWER SUPPLY CORD

5
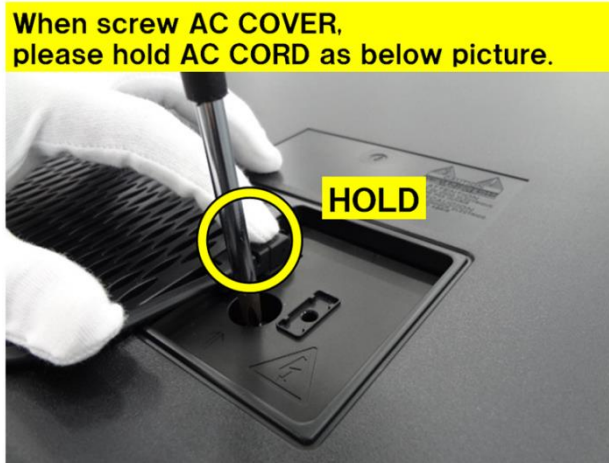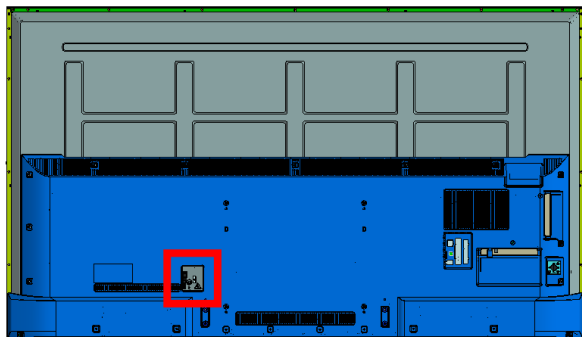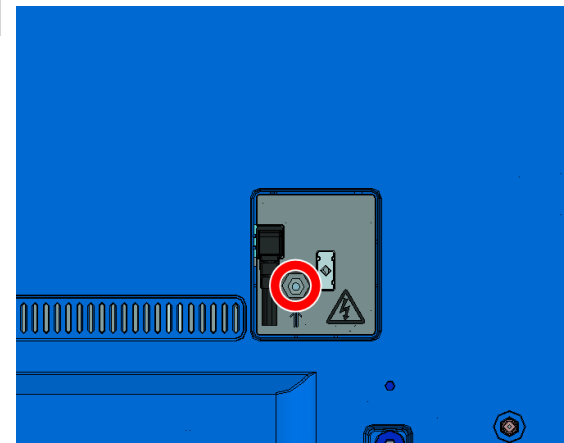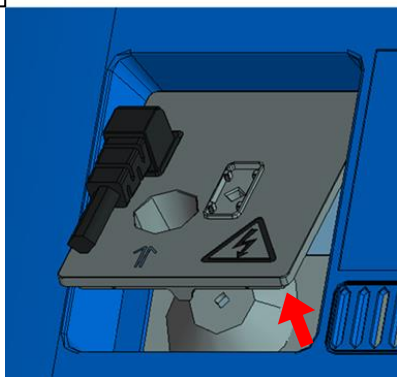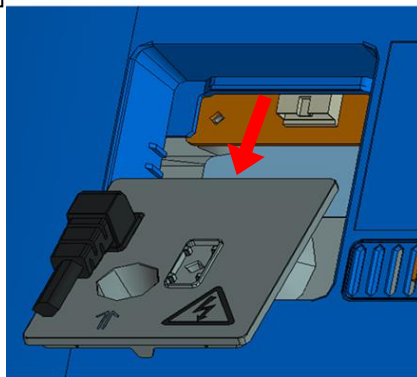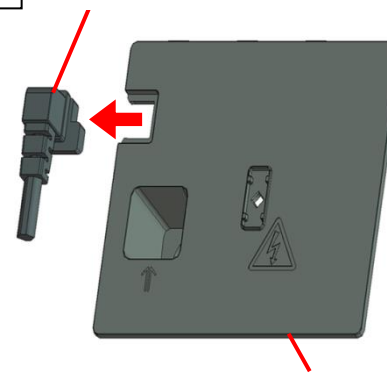
AC COVER
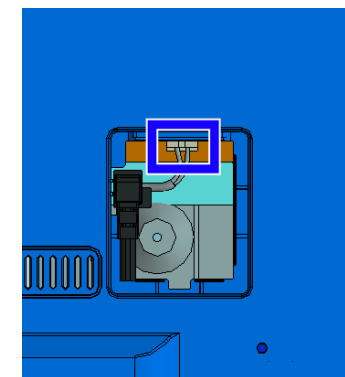
1-3. XBR-75X850C/855C

1-3-4. UNDER COVER (3L_HWK) A
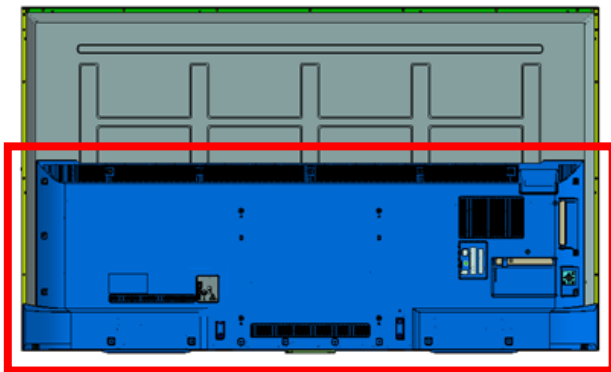
1
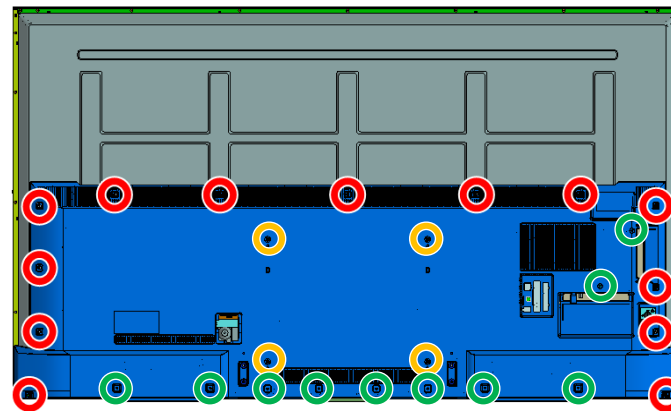
⭕ 13 screws (SCREW , +PWH M3X6) P/N: 4-452-935-11

⭕ 4 screws (SCREW, ORNAMENTAL M6X12) P/N: 4-268-126-02

⭕ 10 screws (SCREW, +BVTP 4X12 TYPE2 IT-3) P/N: 2-580-639-01

2

Ensure R/C is installed to slit of panel.

OK

NG
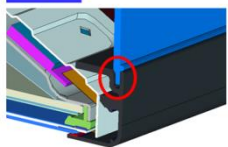
Bottom side

Bottom side

3

UNDER COVER (3L_HWK) A

1-3. XBR-75X850C/855C

1-3-5. TAPE

TAPE

Take slack

Pinching wire

Pass the G-B_Tcon harness on this line.

TAPE

TAPE

TAPE

Pinching wire

Don't cover hole.

DATE CODE

TAPE

BL

S

TAPE

BL

S

Pinching wire

1-3. XBR-75X850C/855C

1-3-6. TAPE

TAPE

Take slack

Pass the G-G harness along extension-line of convex shape of panel.

Pinching wire

TAPE

No stress during taping.

Take slack

Put UL tape here.

Pinching wire

Pass the G-G harness along extension-line of convex shape of panel.

Don't stress to connection point of antenna.

Antenna route

NG

NG

Don't stress

OK

OK

TAPE

Take slack

71.XXXXX.XXX-XX

DATE CODE

DATE CODE

R

XXXXXXX.XXX-X XX

DATE CODE

DATE CODE

Pinching wire

R

TAPE

Pinching wire

Take slack

R

1-3. XBR-75X850C/855C

1-3-7. WIRE DRESSING
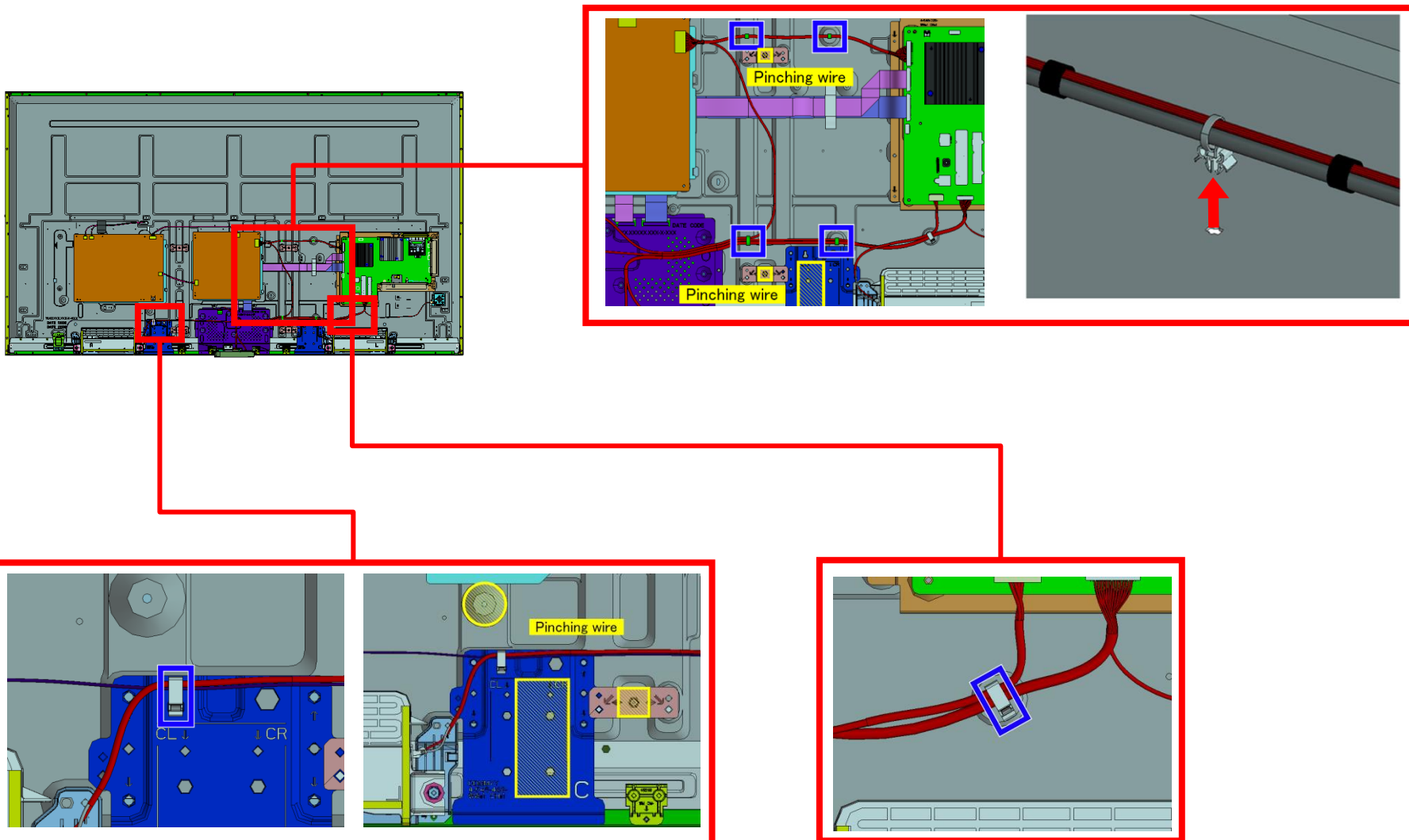
1-3. XBR-75X850C/855C

1-3-8. SPEAKER BOX ASSY (L)

1

2

3
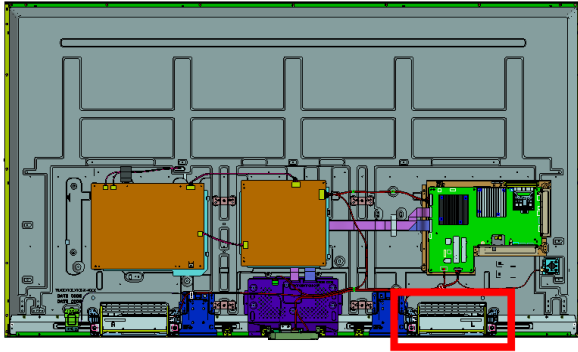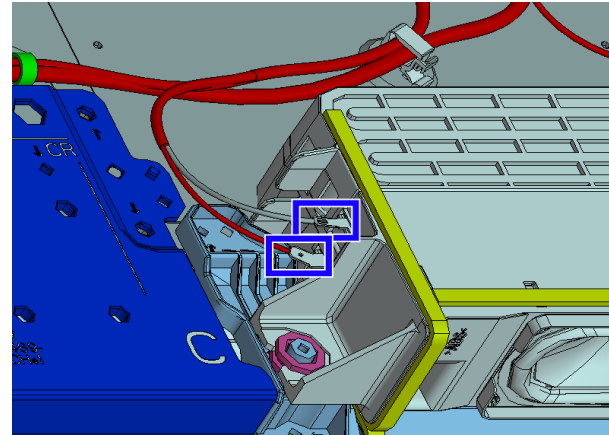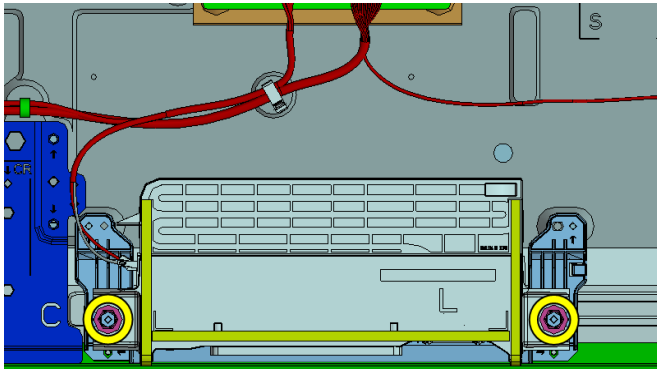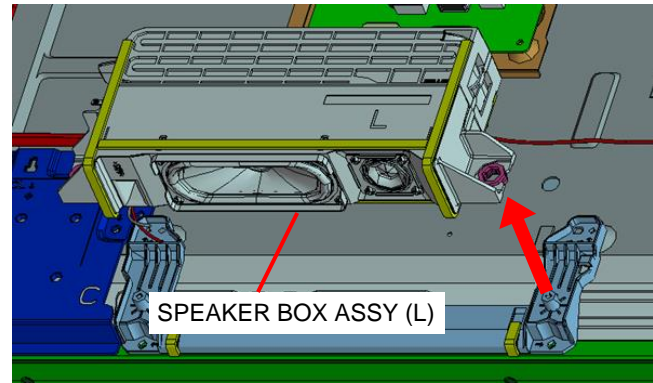
SPEAKER BOX ASSY (L)

1-3. XBR-75X850C/855C

1-3-9. BRACKET, SP (2L HWK) A

1

〈Sequence Information〉

〈3〉   〈2〉

〈1〉   〈1〉

4 screws (SCREW , +PSW M3X8) P/N: 2-580-593-01

2

3
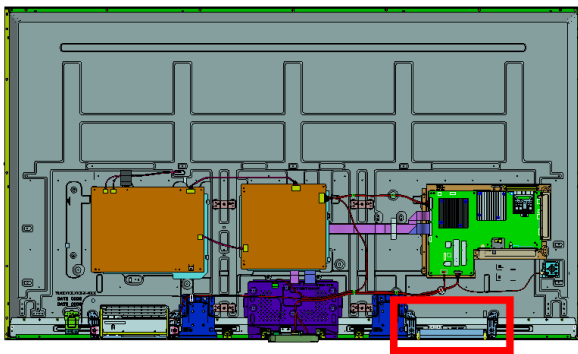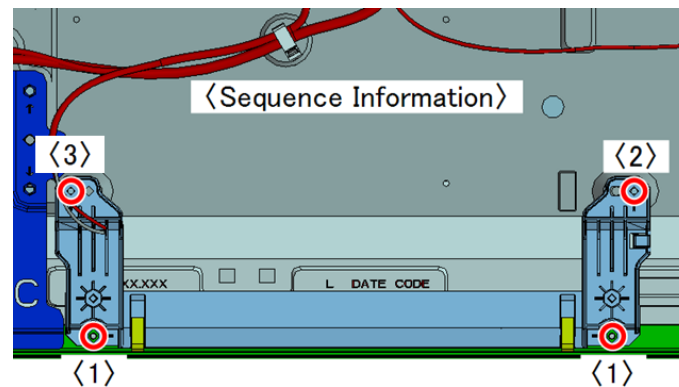
BRACKET, SP (2L HWK) A

1-3. XBR-75X850C/855C

1-3-10. SPEAKER BOX ASSY (R)

1

2

3

SPEAKER BOX ASSY (R)
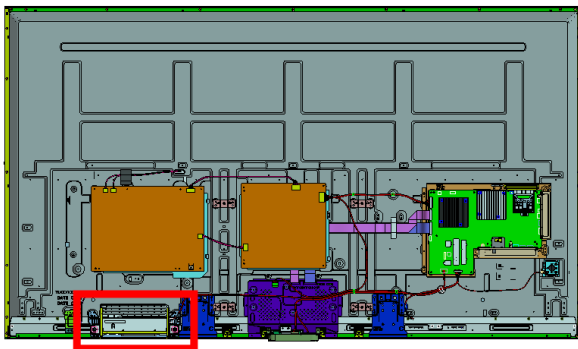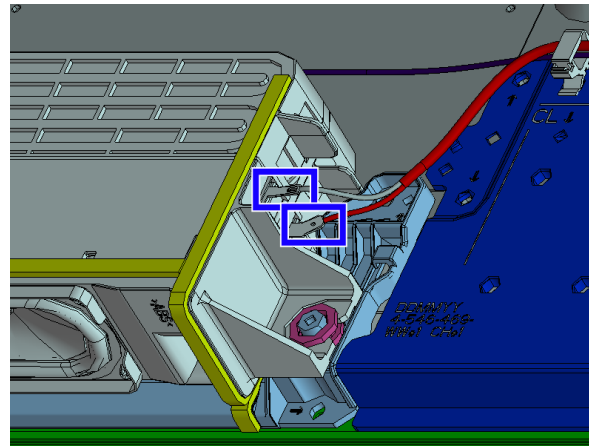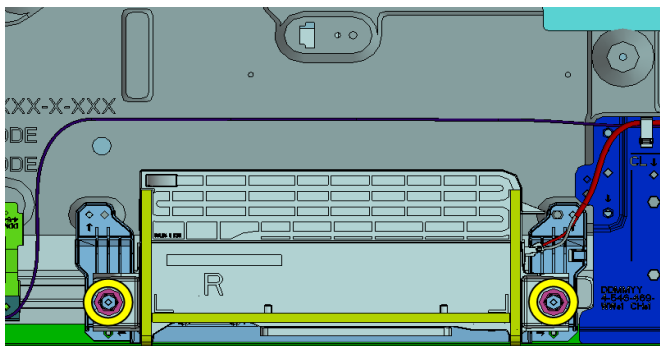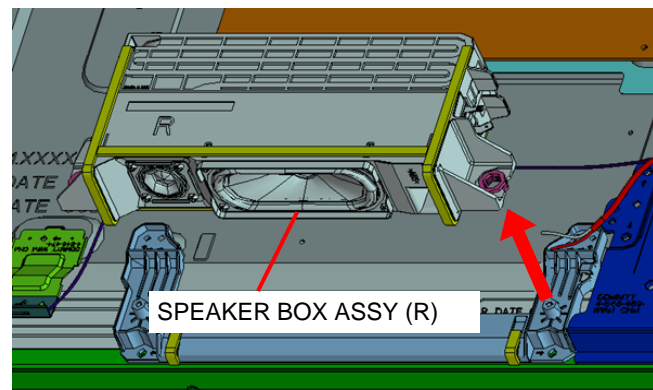
1-3. XBR-75X850C/855C

1-3-11. BRACKET, SP (2L HWK) A

1

4 screws (SCREW , +PSW M3X8) P/N: 2-580-593-01

2

3

BRACKET, SP (2L HWK) A
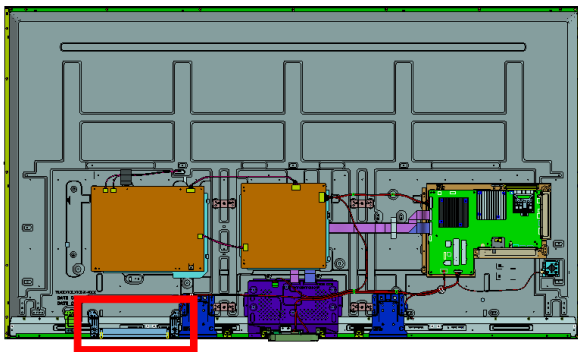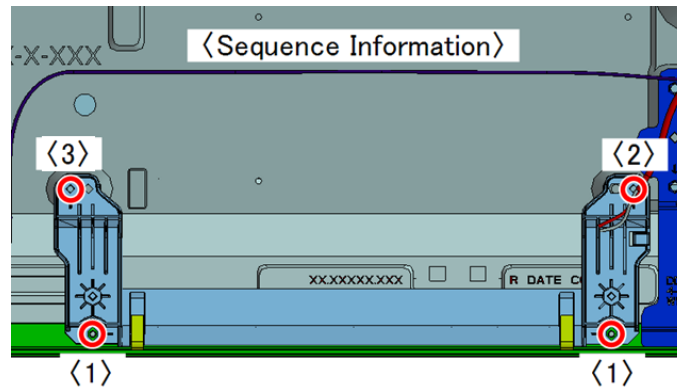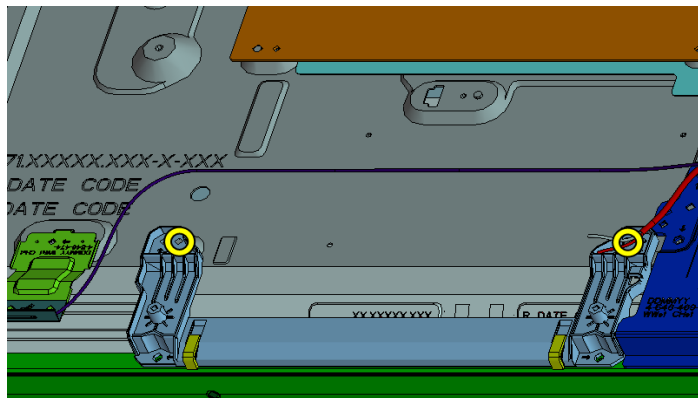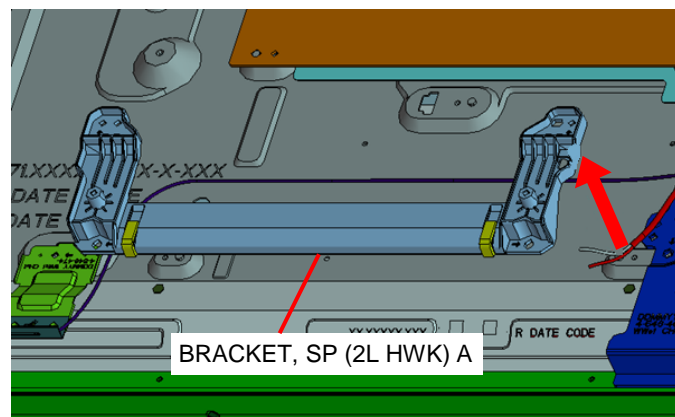
1-3. XBR-75X850C/855C

1-3-12. BRACKET,BT (EGL) ASSY

2

Don't touch floating area of BRACKET, BT at this operation, for preventing deformation of BT ANTENNA and BRACKET, BT.

Screw (SCREW (+PSW)(M3X6))

P/N: 2-990-421-41

3

4

5
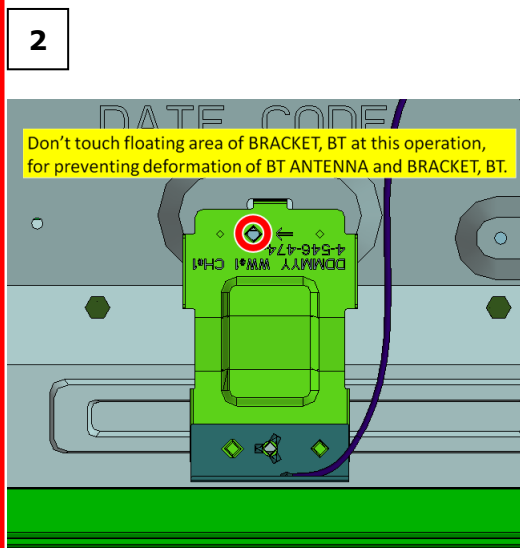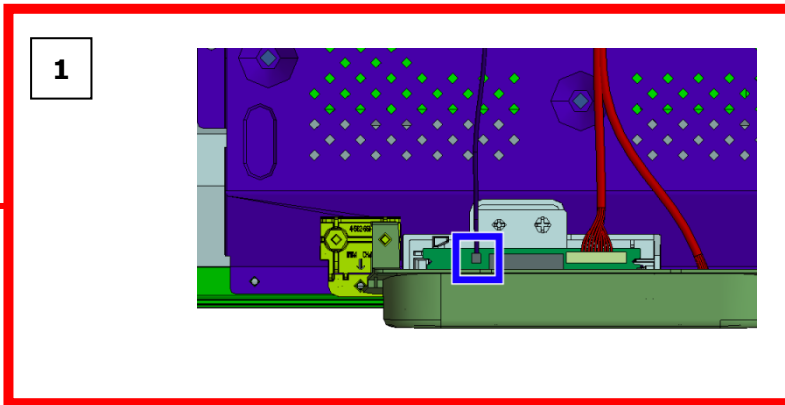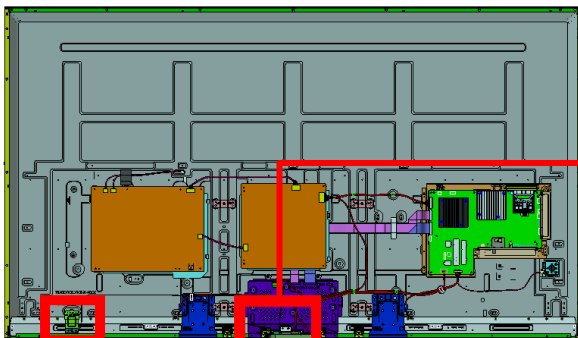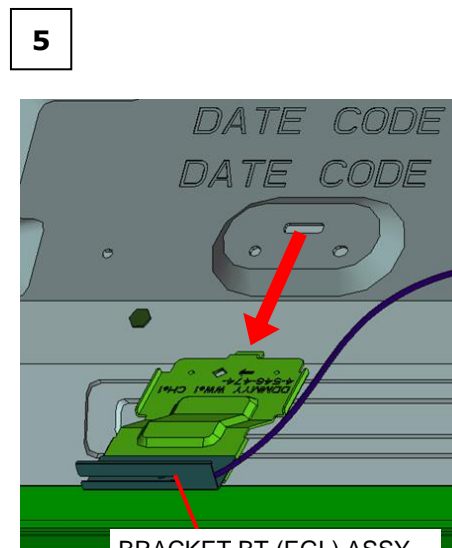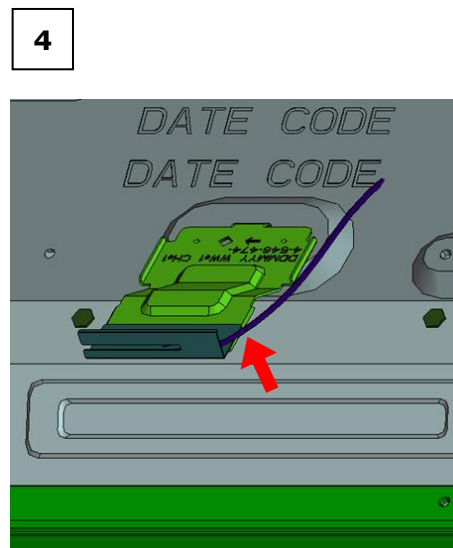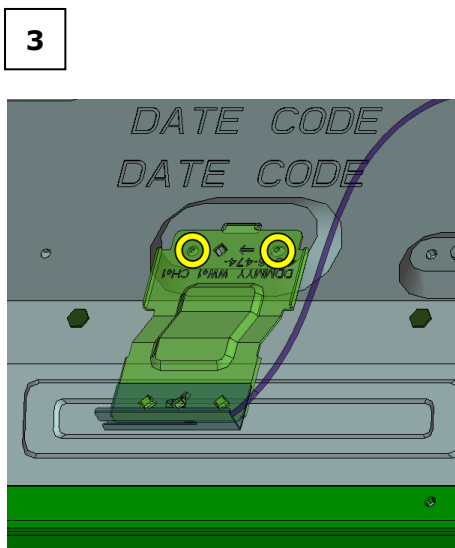
BRACKET,BT (EGL) ASSY

1-3. XBR-75X850C/855C

1-3-13. BT ANTENNA/WIFI ANTENNA AND BRACKET, BT(EGL)

1

Screw (SCREW (+PSW)(M3X6))

P/N: 2-990-421-41

2

3

BT ANTENNA
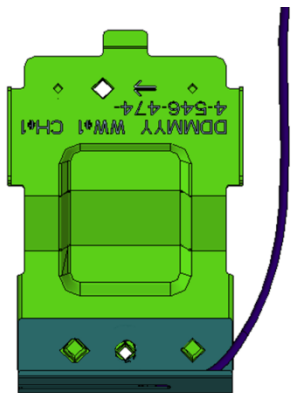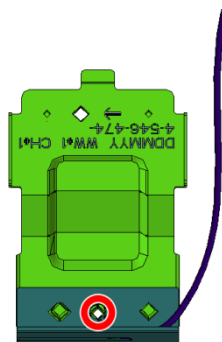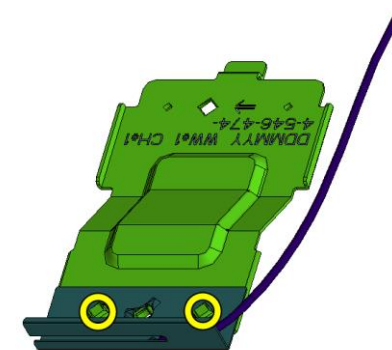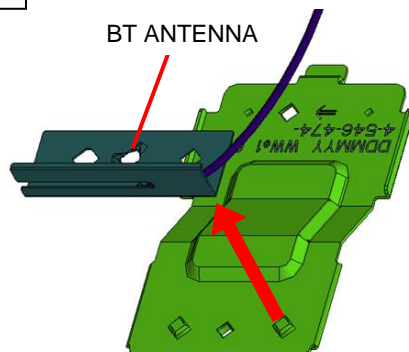
4
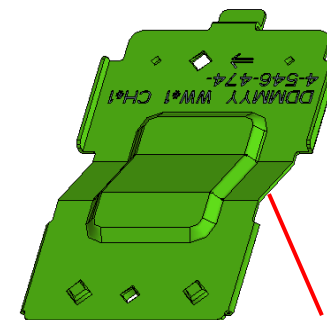
BRACKET,BT (EGL)

1-3. XBR-75X850C/855C

1-3-14. SMART CORE
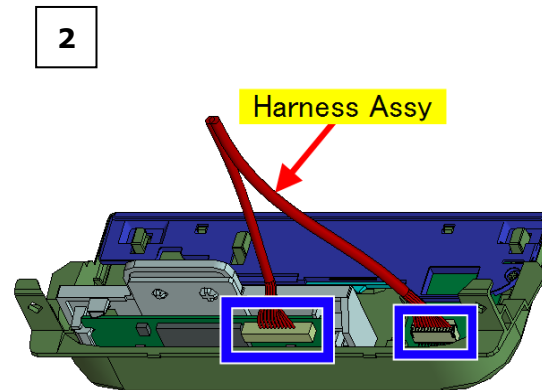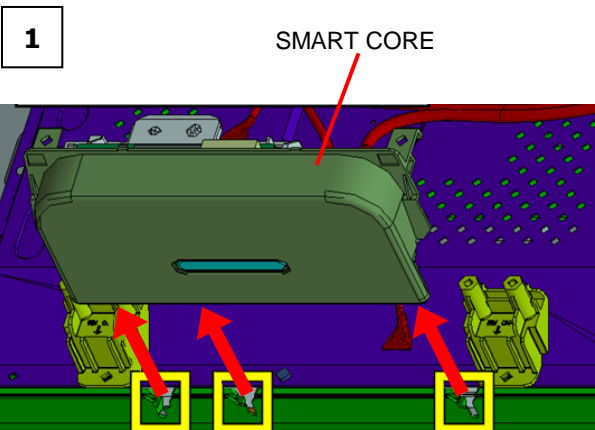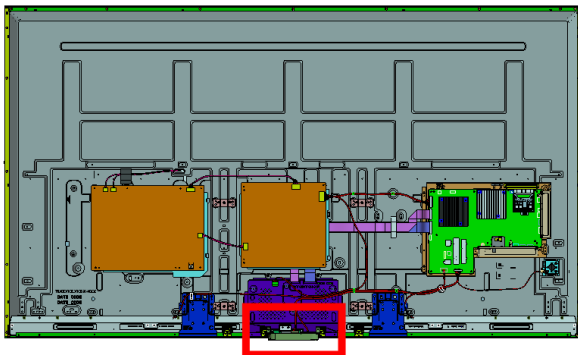
1 SMART CORE

2 Harness Assy

Notes on assembling the Smart core

Don't scratch O/P with Bezel while installing.

Ornament Panel

Front View of the TV

No gap between Smart Core and AL Bezel.

OK   NG

Don't touch these components while installing.

Antenna Terminal   Connector
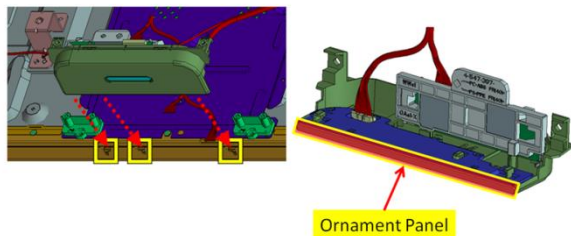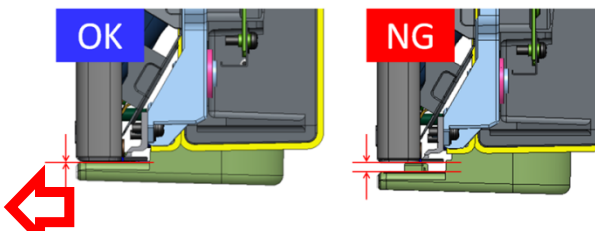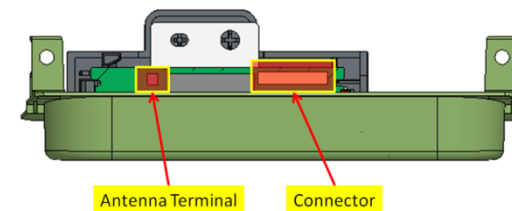
1-3. XBR-75X850C/855C

1-3-15. SWITCH UNIT

1

Release the lock

2

3

Harness Assy

SWITCH UNIT
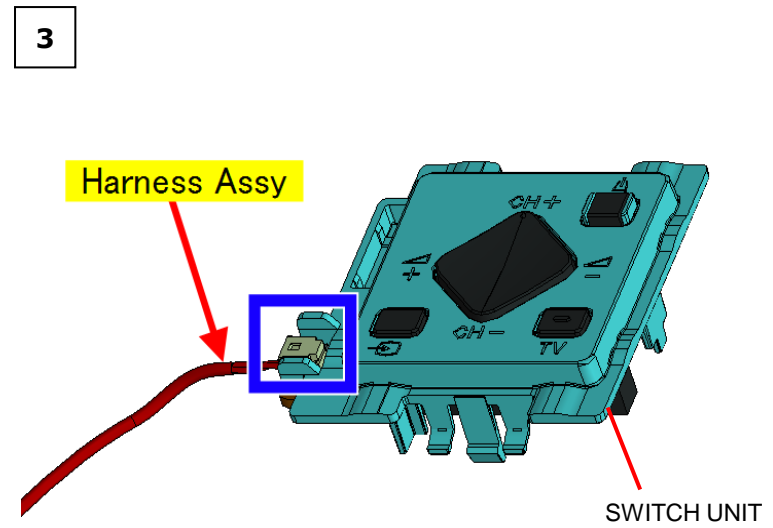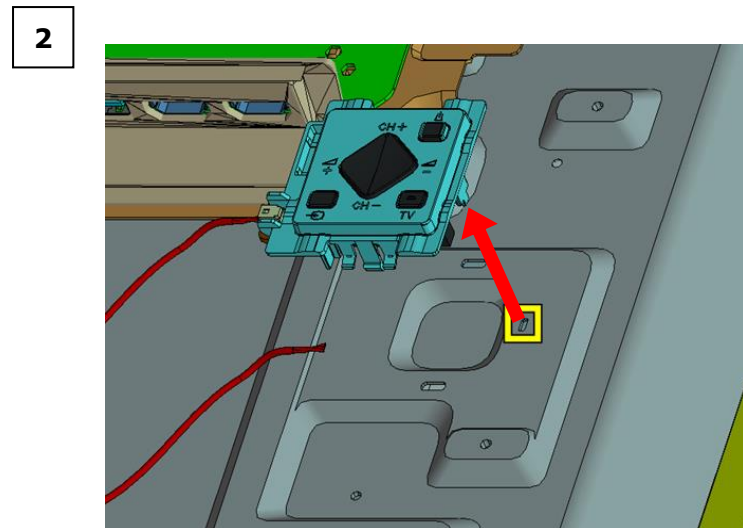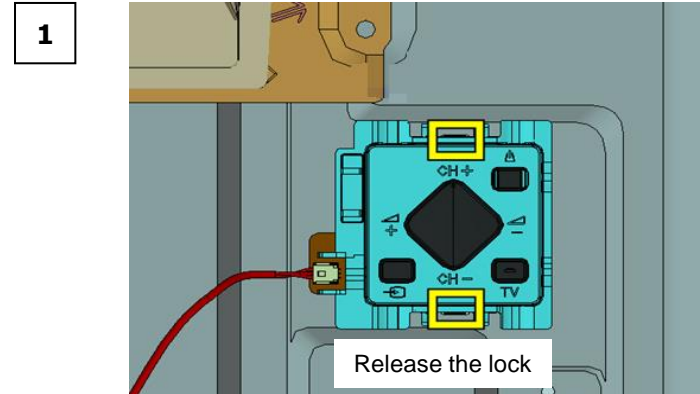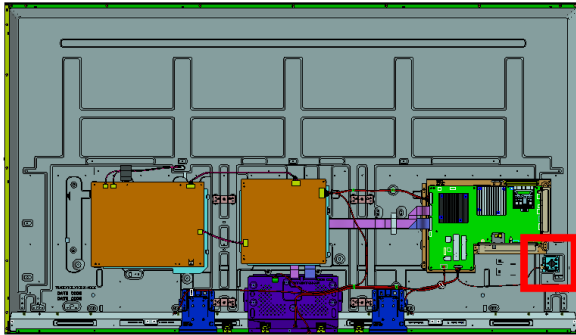
1-3. XBR-75X850C/855C

1-3-16. HARNESS ASSY (GBT / MAIN) AND CONNECTOR ASSY, 3P AND CONNECTOR ASSY 9P

CONNECTOR ASSY 9P
P/N: 1-910-109-98

HARNESS ASSY (GBT / MAIN)
P/N: 1-910-109-97

CONNECTOR ASSY, 3P
P/N: 1-848-869-11
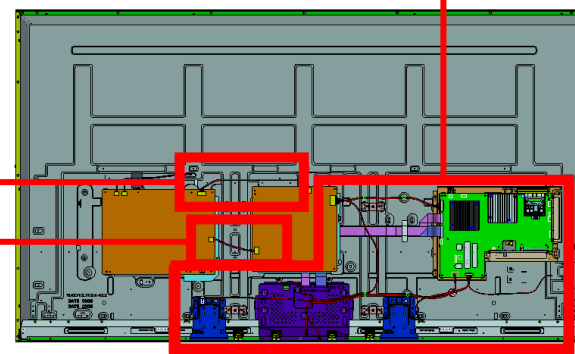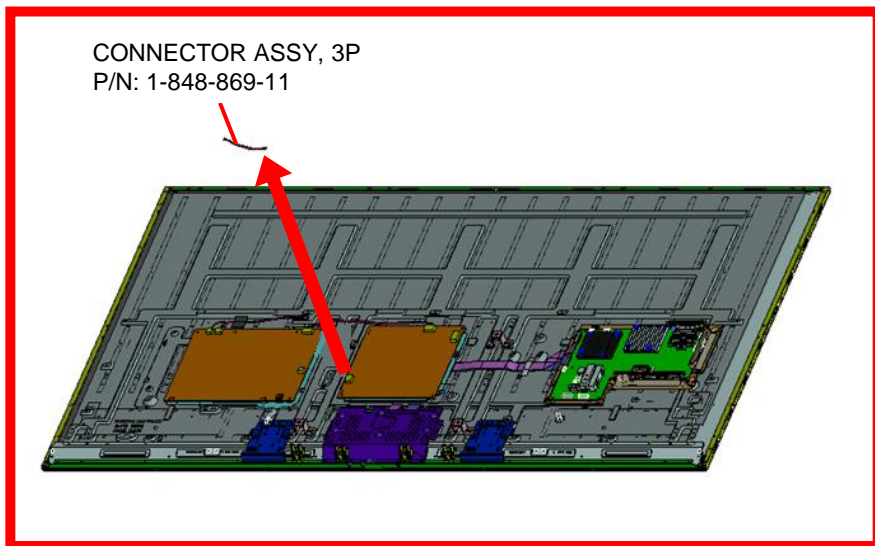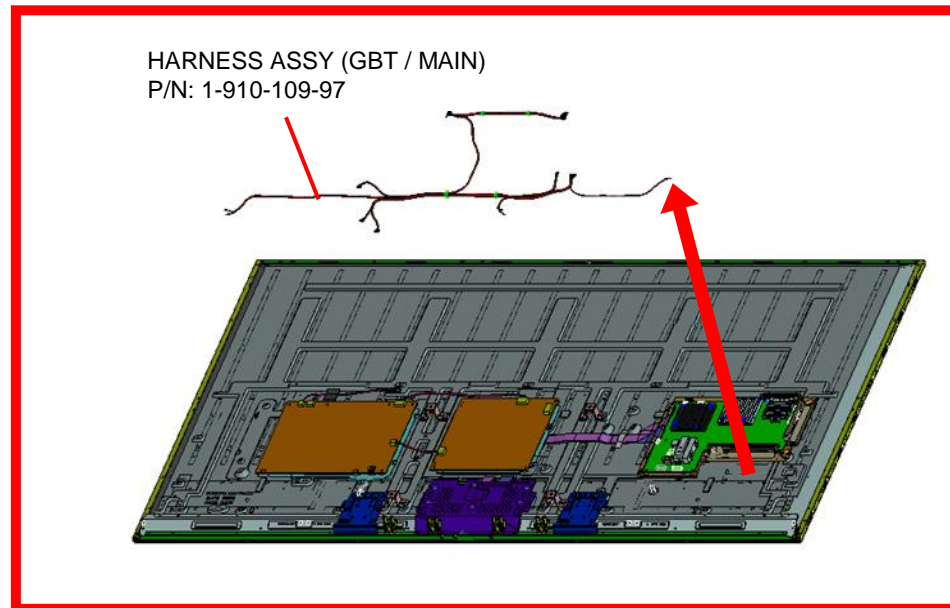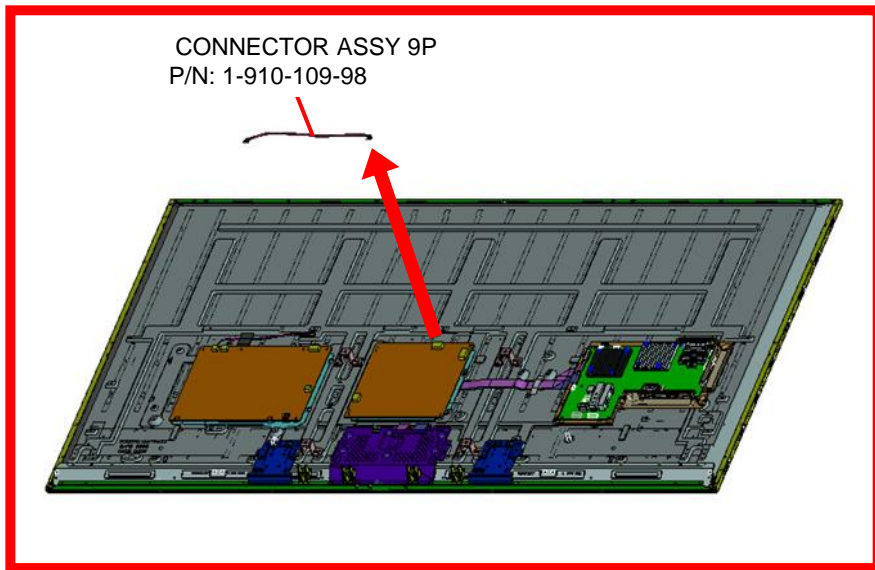
1-3. XBR-75X850C/855C

1-3-17. BRACKET,VESA(HWK)

1

8 screws (SCREW, +PSW M4X8) P/N: 2-580-600-11

2

3

BRACKET,VESA(HWK)
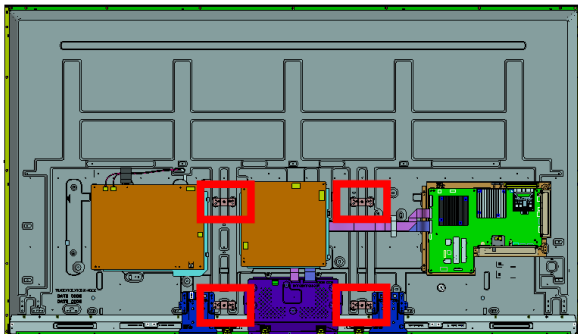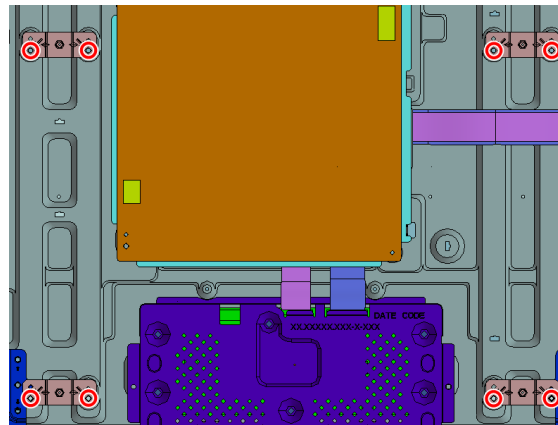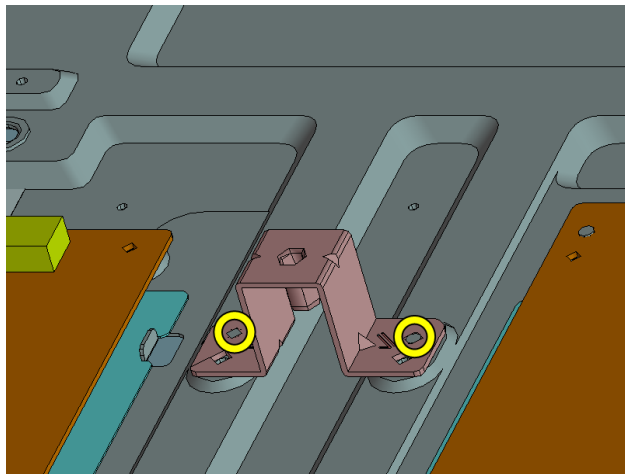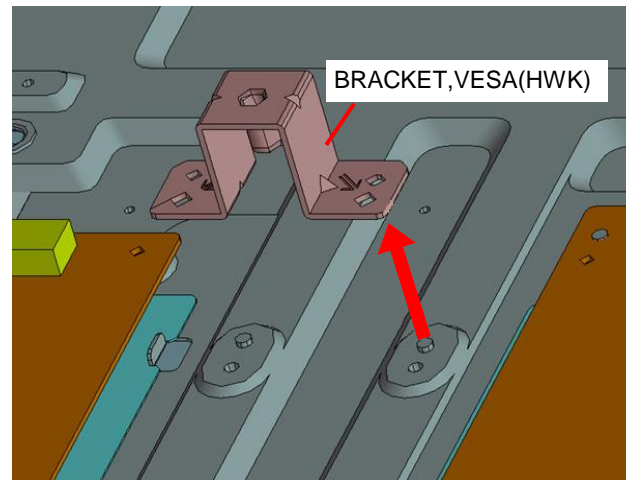
1-3. XBR-75X850C/855C

1-3-18. BRACKET, SC(HWK)

1

4 screws (SCREW, +PSW M3X8) P/N: 2-580-593-01

2

3

BRACKET,SC(HWK)
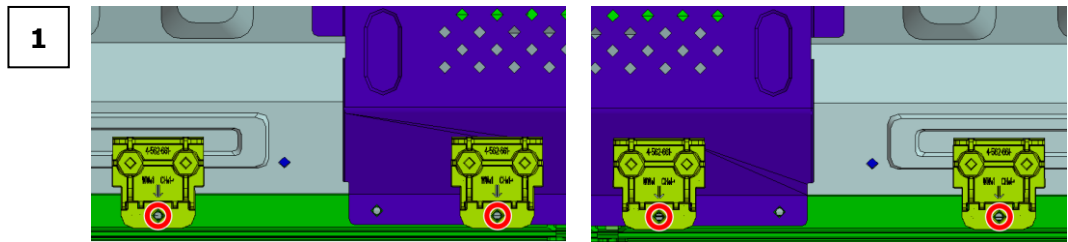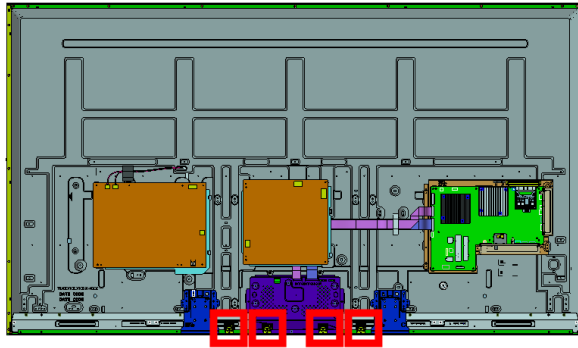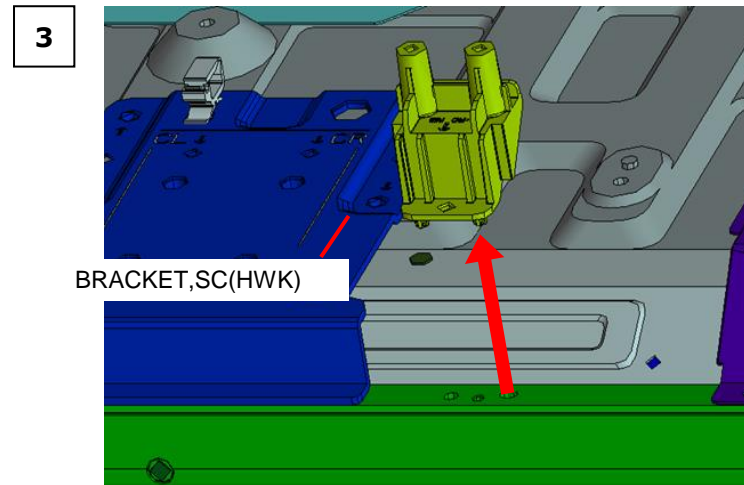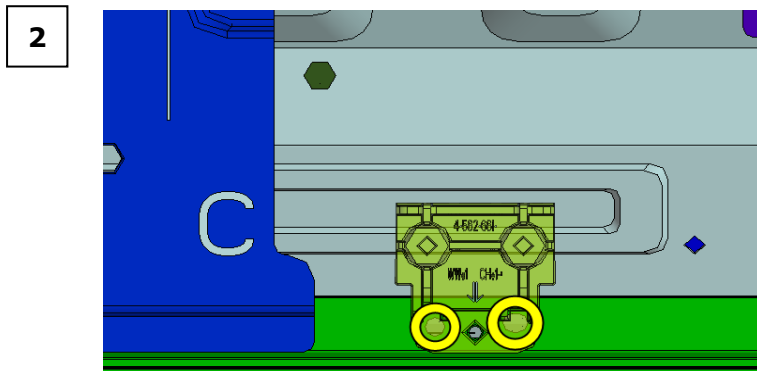
1-3. XBR-75X850C/855C

1-3-19. SLIDE, CLAMP

1

2 SLIDE, CLAMP

1

2 SLIDE, CLAMP
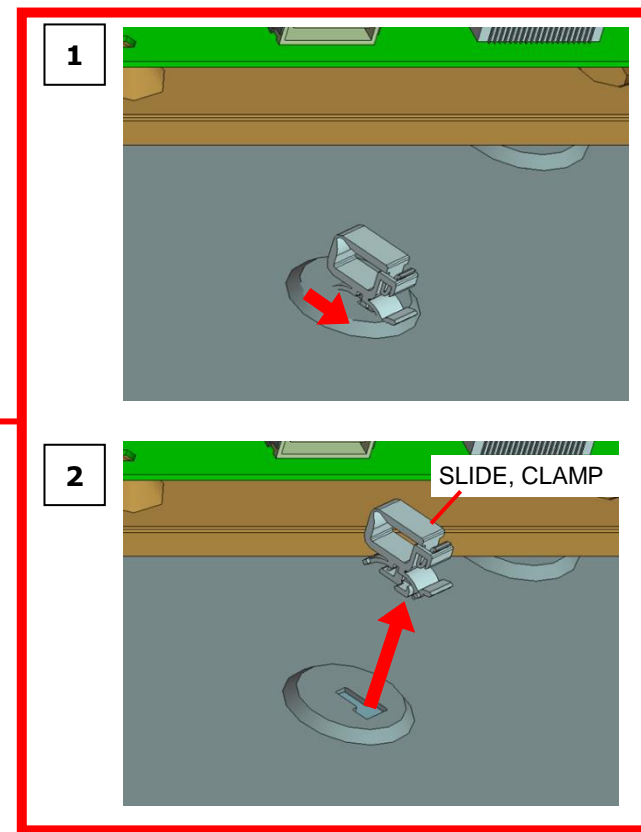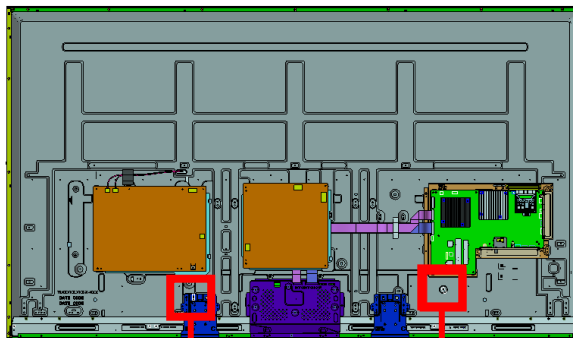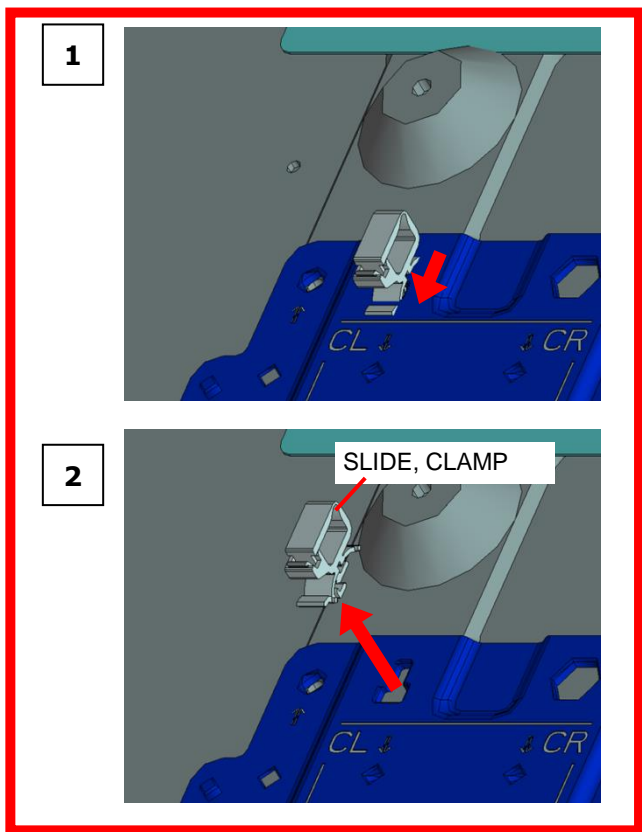
1-3. XBR-75X850C/855C

1-3-20. BRACKET, STD C (2L_HWK)
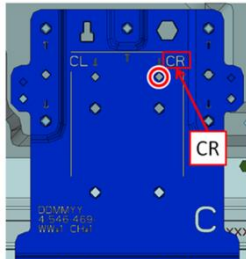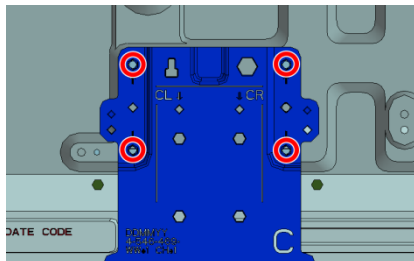
1

Screw (PULLEY, STAND (HWI)) P/N: 4-534-964-01

2

4 screws (SCREW, +PSW M4X8) P/N: 2-580-600-11

3 BRACKET, STD C(2L_HWK)

1

Screw (PULLEY, STAND (HWI)) P/N: 4-534-964-01

2
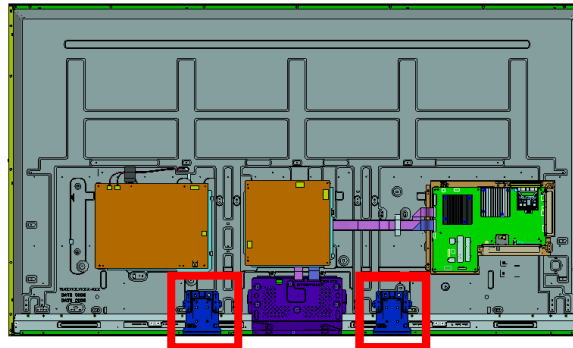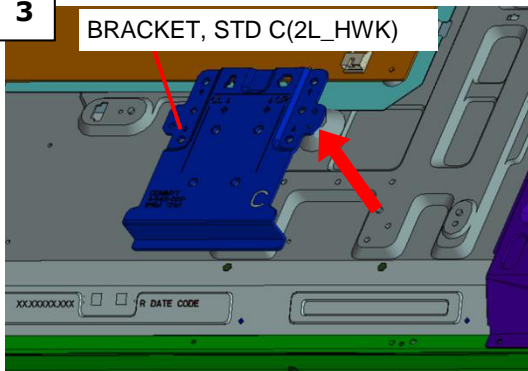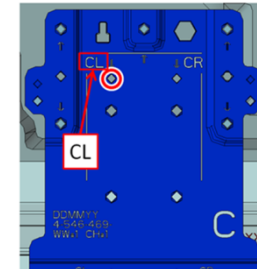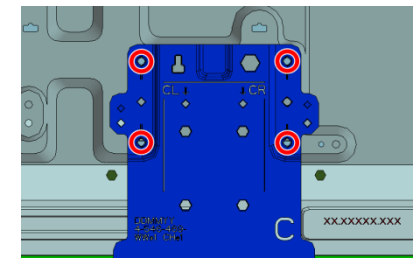
4 screws (SCREW, +PSW M4X8) P/N: 2-580-600-11

3 BRACKET, STD C(2L_HWK)
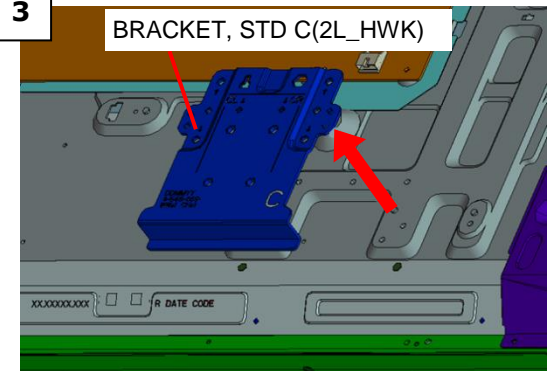
1-3. XBR-75X850C/855C

1-3-21. G4-STATIC CONVERTER(TV)

1

4 screws (SCREW, +PSW M3X6 W12) P/N: 4-256-393-11

2

3

G4-STATIC CONVERTER(TV)
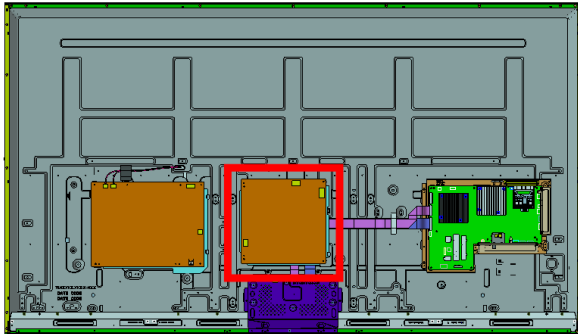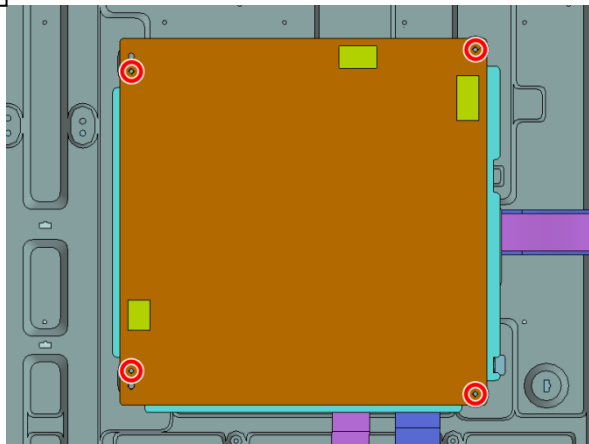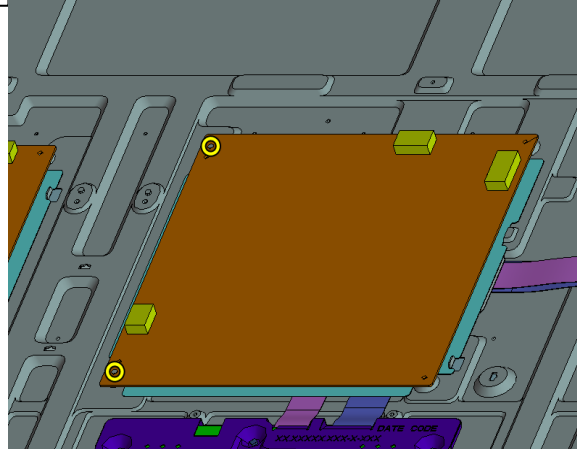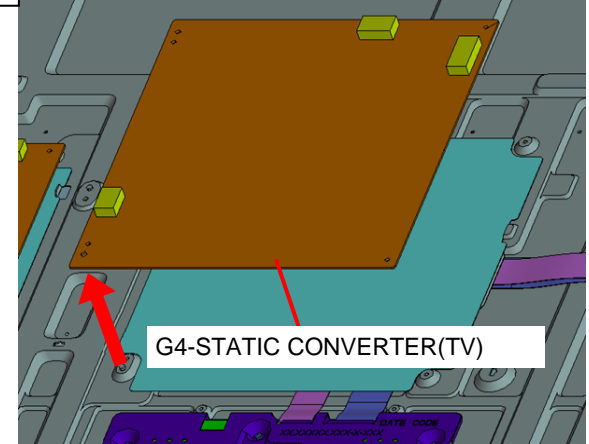
1-3. XBR-75X850C/855C

1-3-22. SHEET, INSULATION(HWK 3L SYS)

(An insulation sheet is under the G4 power supply board)

SHEET, INSULATION(HWK 3L SYS)

1

2
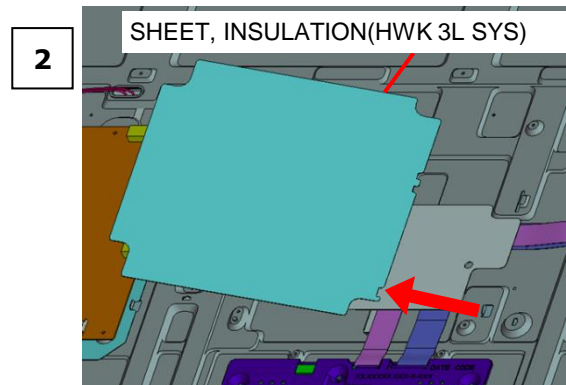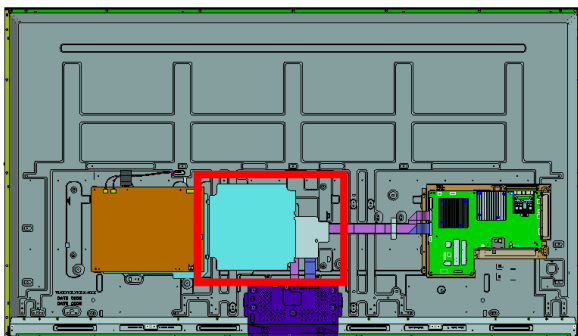
Notes on assembling the Insulation sheet (HWK 3L SYS)

Adhesive tape area

Caution

When handling,
・Be sure not to touch adhesive tape area.

After installing,
・Be sure to push all of adhesive tape area to avoid peel off of "Sheet, Insulation".

To avoid coming off from panel
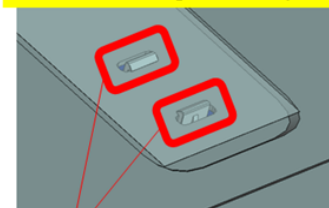
Don't push here.
There is support pin.

Support pin

y

x

Slide in

①

①

Install tabs in the half-cut emboss

X: +0/-1.5

②

②

Slide

X: +0/-1.5

Install cut of insulation sheet into Panel edge
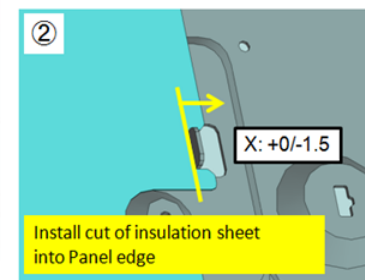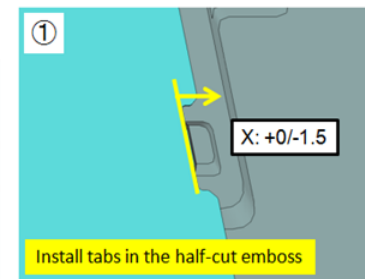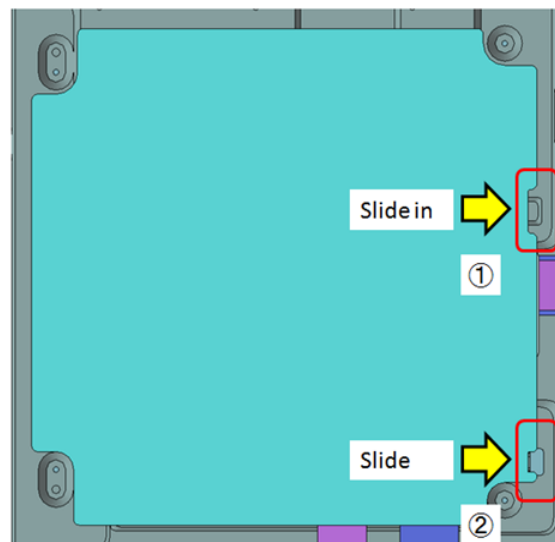
1-3. XBR-75X850C/855C

1-3-23. GL2-STATIC CONVERTER(TV)
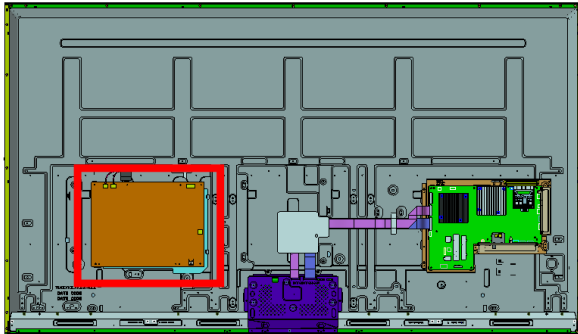
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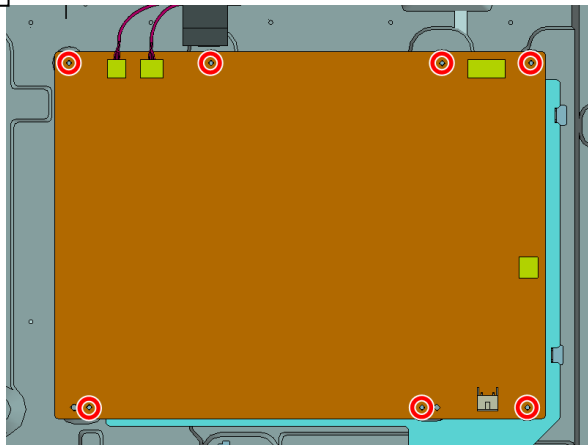
7 screws (SCREW, +PSW M3X6 W12) P/N: 4-256-393-11

2

3

GL2-STATIC CONVERTER(TV)
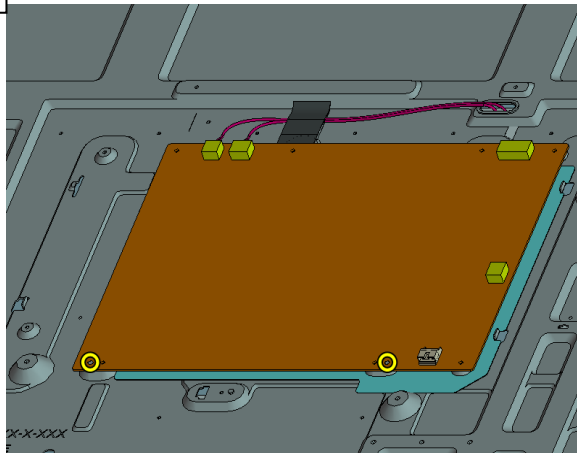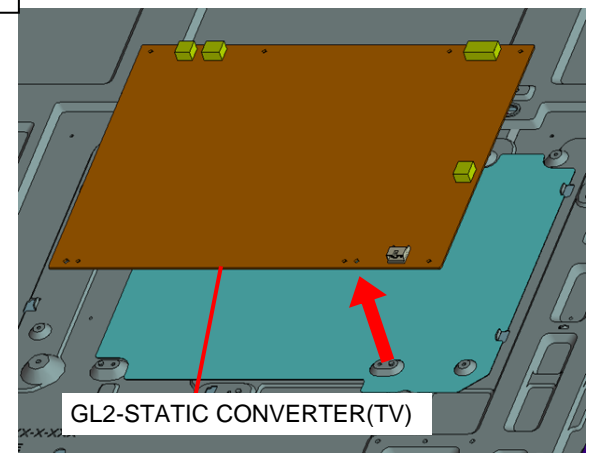
1-3. XBR-75X850C/855C

1-3-24. SHEET, INSULATION(HWK 3L)

(An insulation sheet is under the GL2 power supply board)
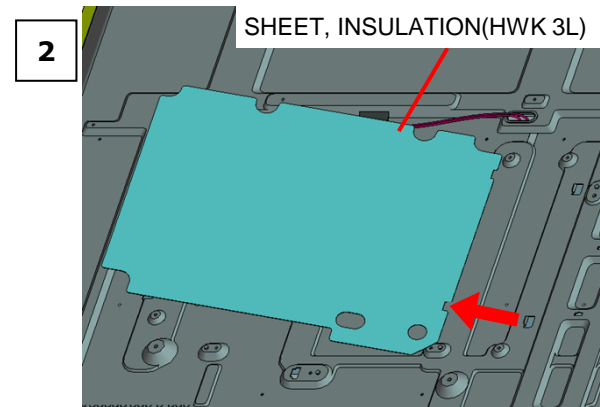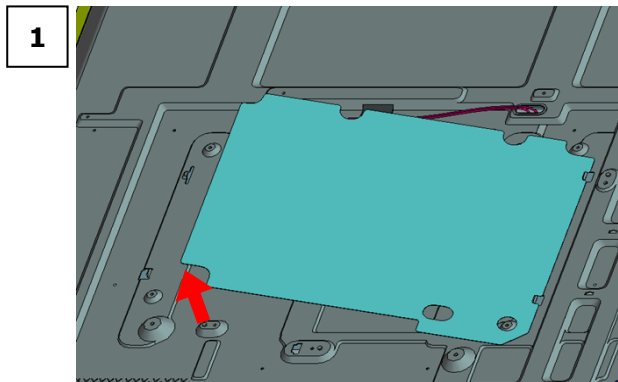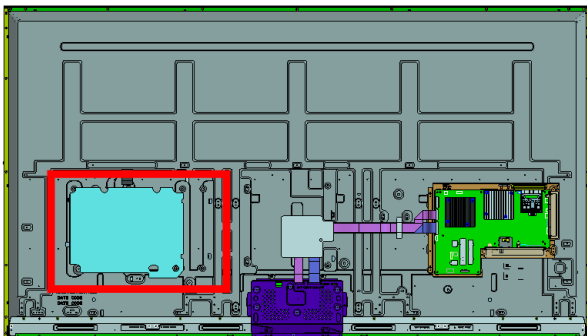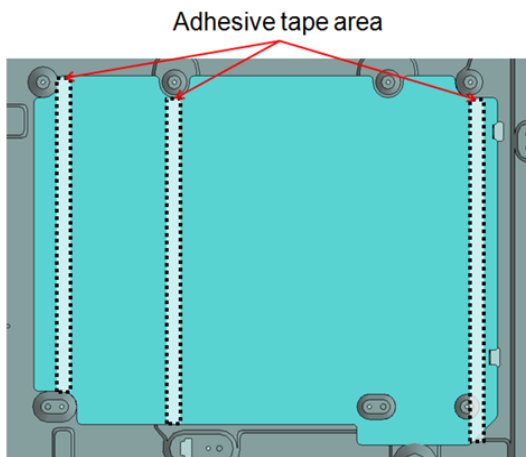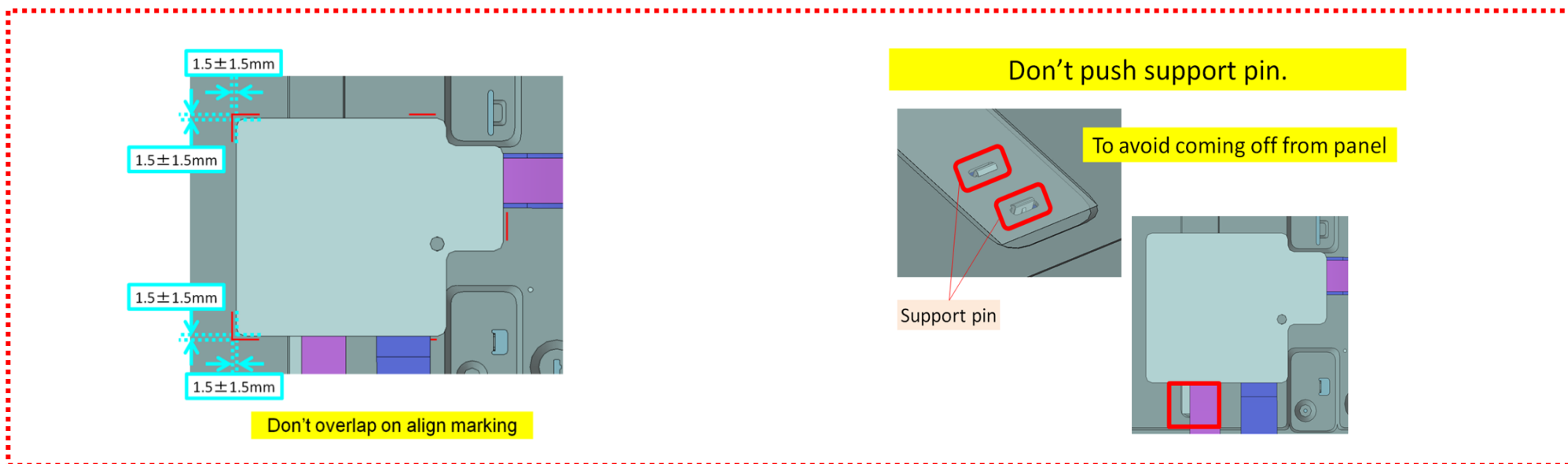
1

2

SHEET, INSULATION(HWK 3L)

Notes on assembling the Insulation sheet (HWK 3L)

Adhesive tape area

Slide

①

Slide

②

y

x

Caution

When handling,
・Be sure not to touch adhesive tape area.

After installing,
・Be sure to push all of adhesive tape area to avoid peel off of "Sheet, Insulation".

① X: +0/-1.5

Install cut of insulation sheet into Panel edge

② X: +0/-1.5

Install cut of insulation sheet into Panel edge
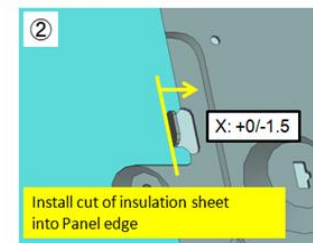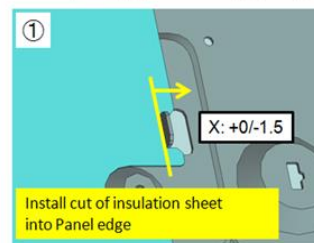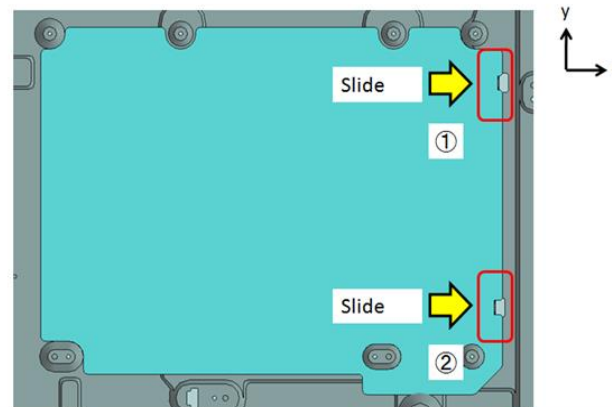
1-3. XBR-75X850C/855C

1-3-25. TAPE, FFC (HWK 3L)

TAPE, FFC (HWK 3L)
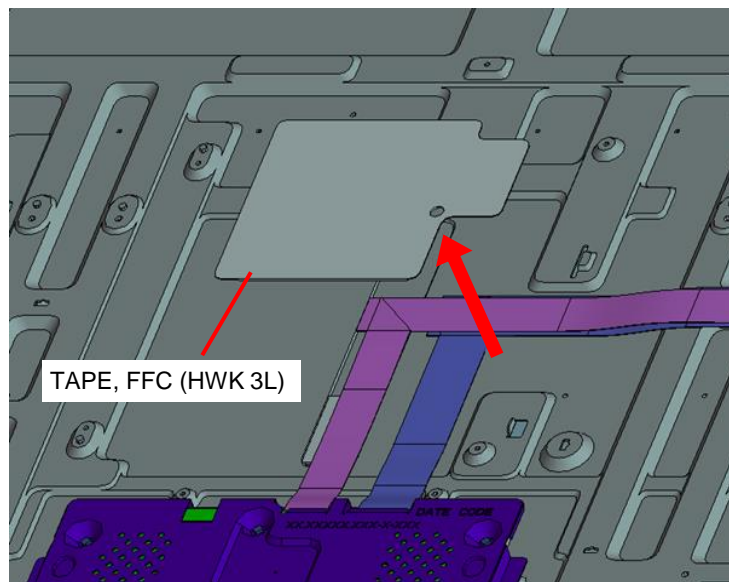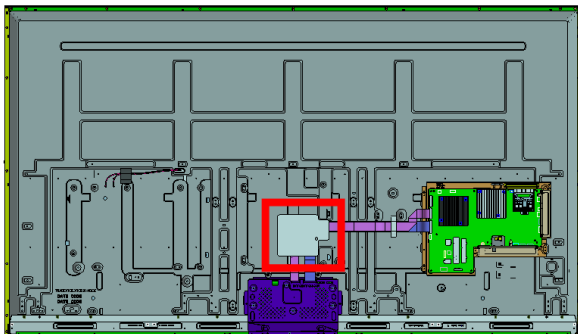
1.5±1.5mm

1.5±1.5mm

1.5±1.5mm

1.5±1.5mm

Don't overlap on align marking

Don't push support pin.

To avoid coming off from panel

Support pin

1-3. XBR-75X850C/855C

1-3-26. FLEXIBLE FLAT CABLE 41P AND FLEXIBLE FLAT CABLE 51P

1

No stress during taping.
No stress after taping.
FFC between tape and the connector is connected with extra.

TAPE

Connector

FFC

Tape

Side View

Don't push support pin.

To avoid coming off from panel

Support pin
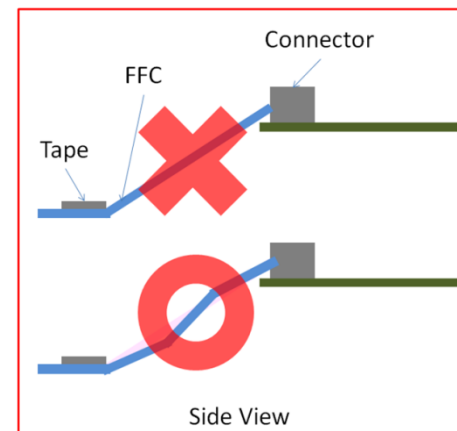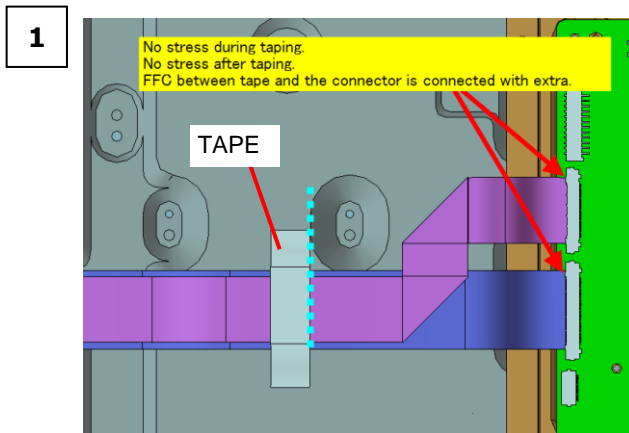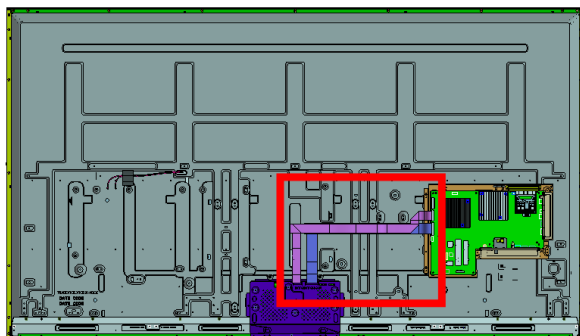
2 FLEXIBLE FLAT CABLE 41P
P/N: 1-848-890-11
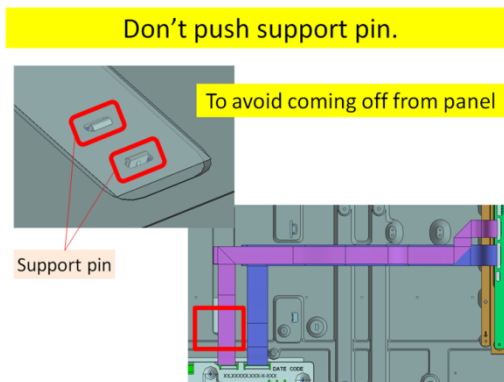
3 FLEXIBLE FLAT CABLE 51P
P/N: 1-848-891-11
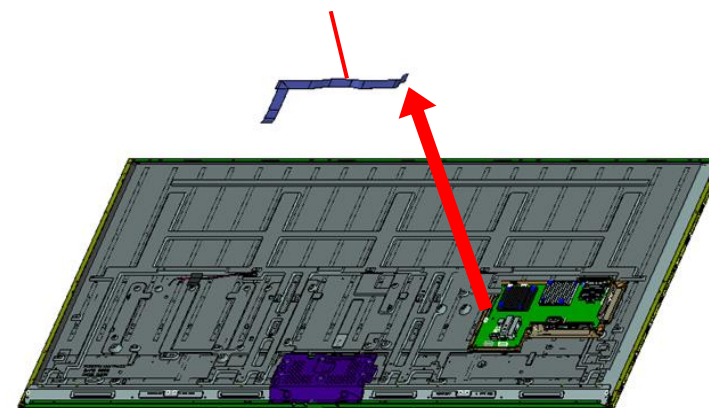
1-3. XBR-75X850C/855C

1-3-27. BRACKET, UNDER FL (MOLD)

BRACKET, UNDER FL (MOLD)
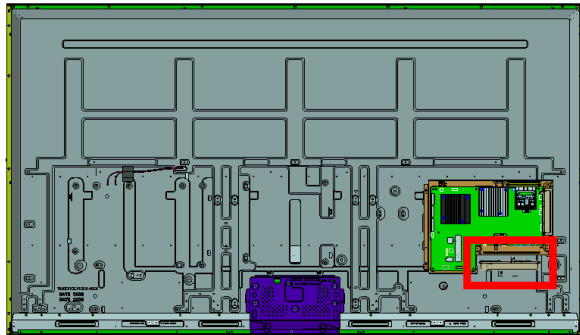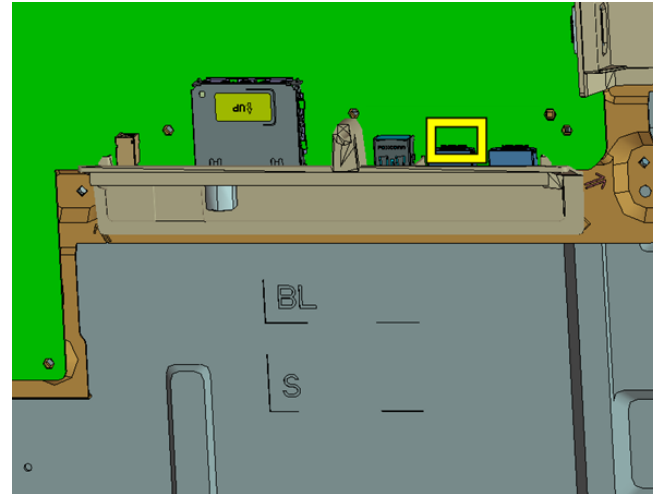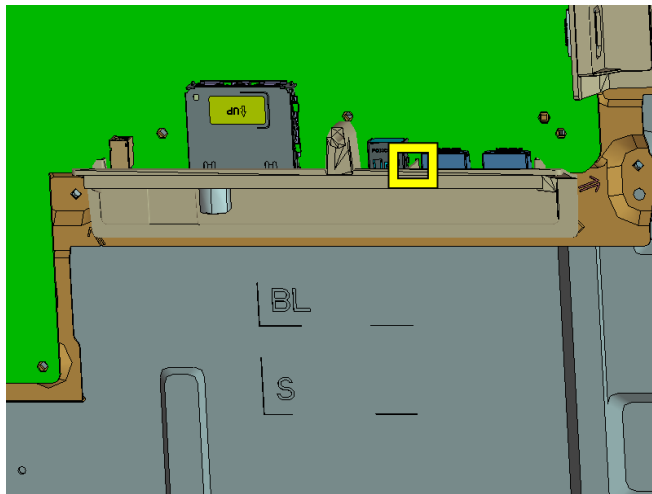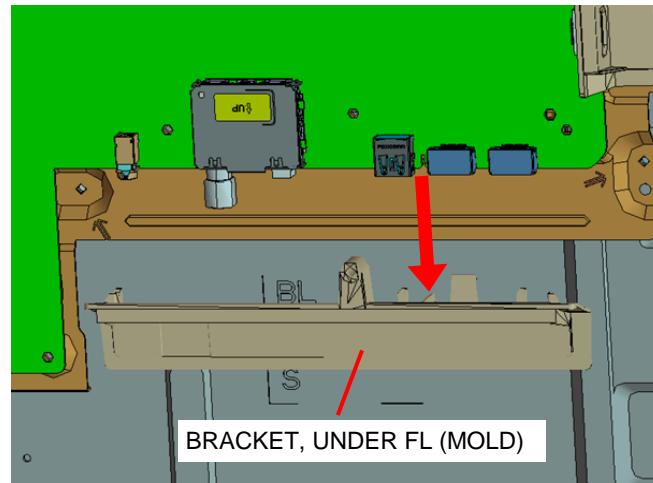
1-3. XBR-75X850C/855C

1-3-28. BRACKET, SIDE FL (MOLD)

BRACKET, SIDE FL (MOLD)
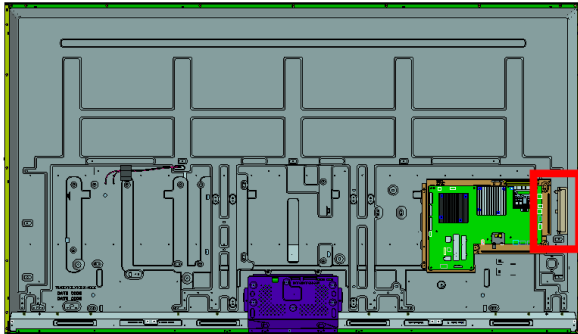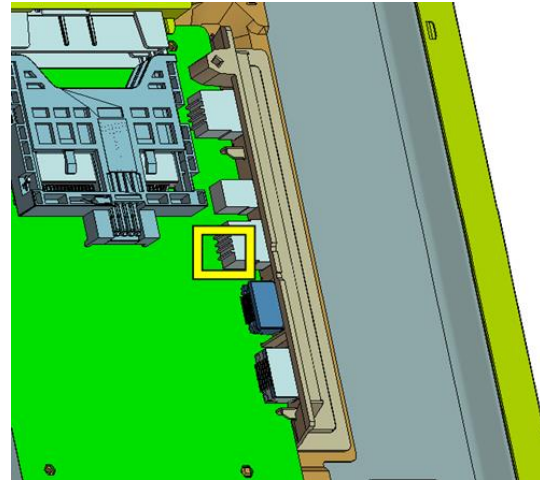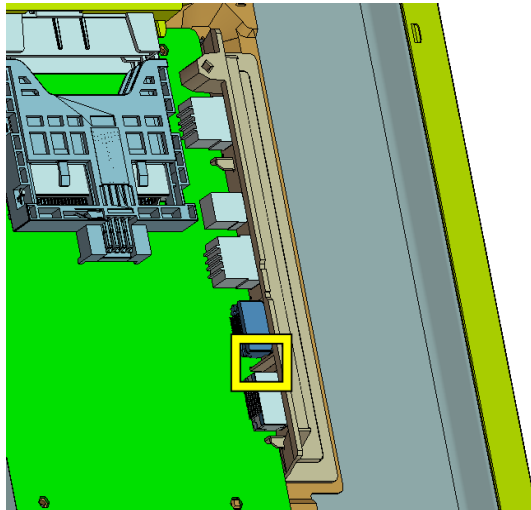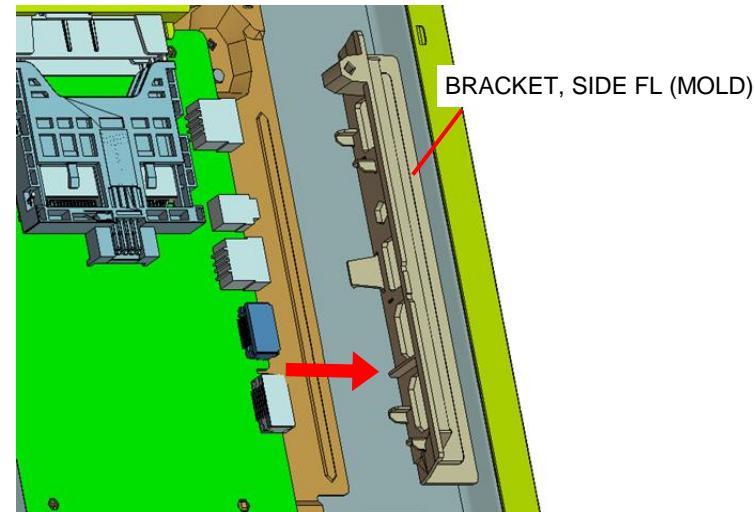
1-3. XBR-75X850C/855C

1-3-29. PLATE, MAIN(HWK) ASSY

5 screws (SCREW, +PSW M3X8) P/N: 2-580-593-01

PLATE, MAIN(HWK) ASSY
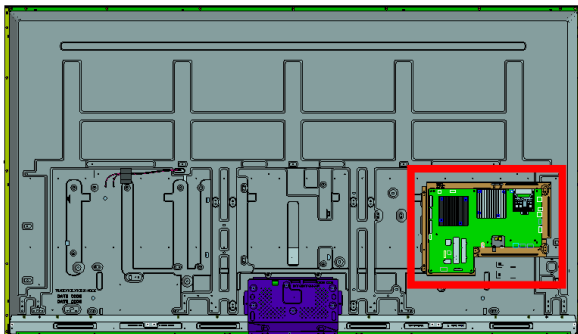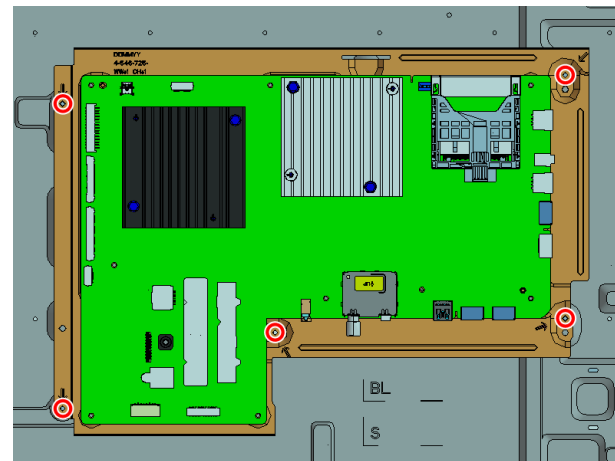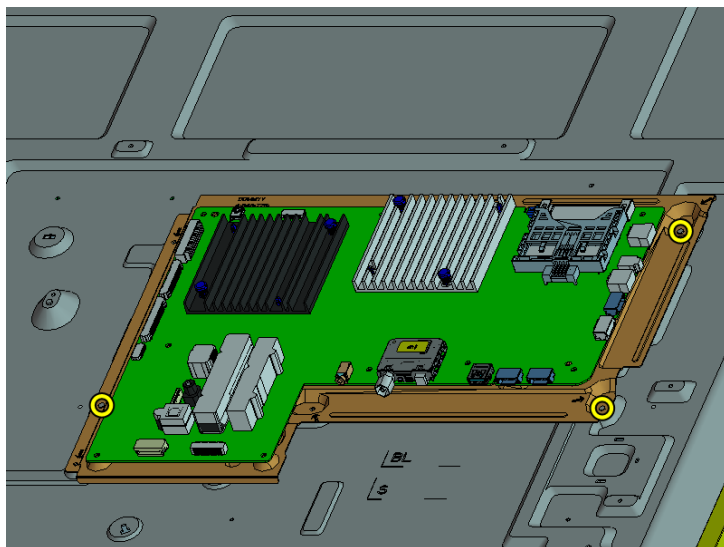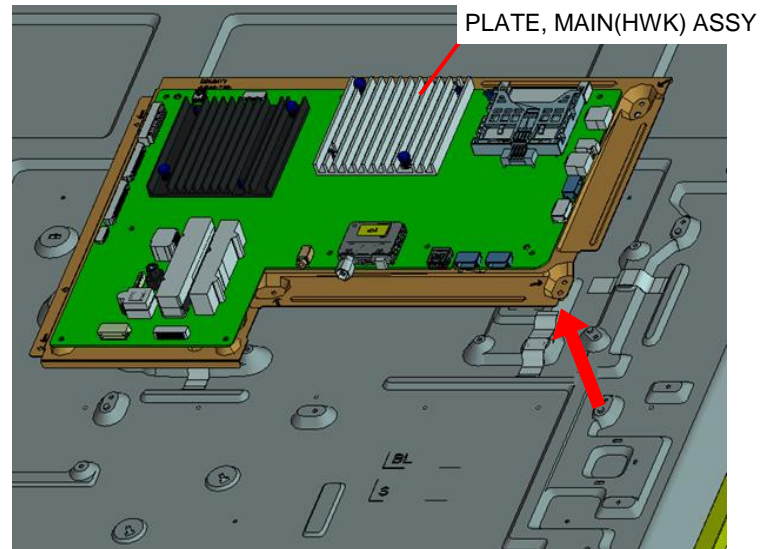
1-3. XBR-75X850C/855C

1-3-30. BMFL ASSY

〈Sequence Information〉

1

9 screws (SCREW (+PSW)(M3X6)) P/N: 2-990-421-41

2

3

BMFL ASSY
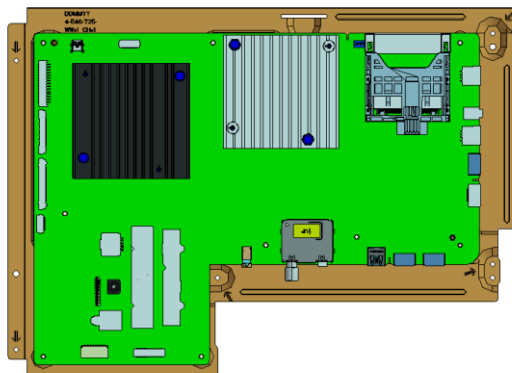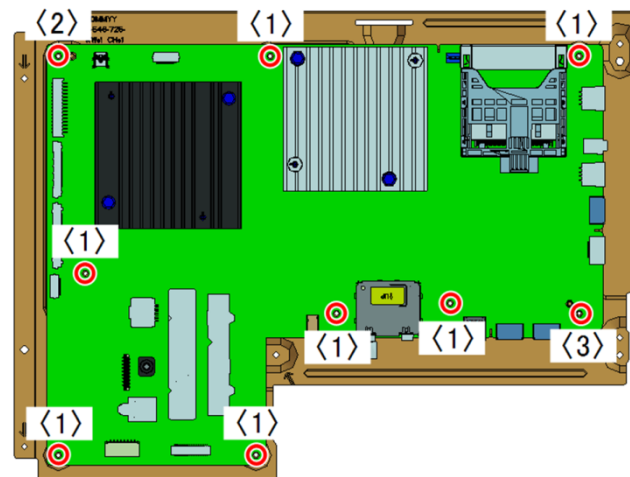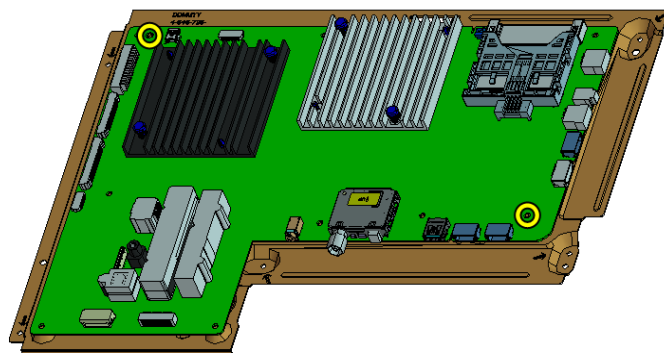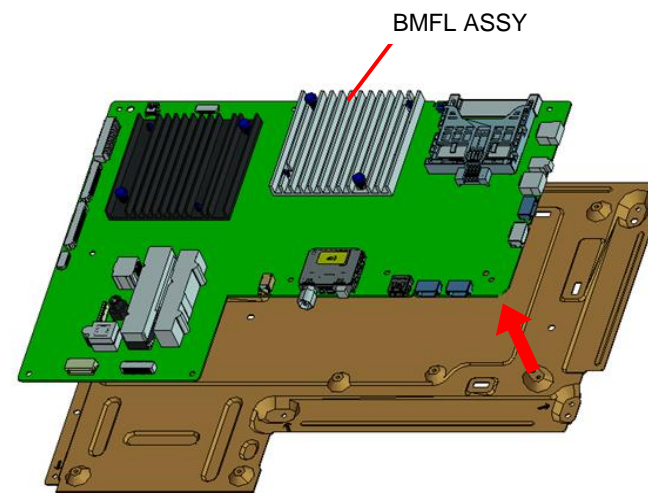
1-3. XBR-75X850C/855C

1-3-31. GASKET (BMF)
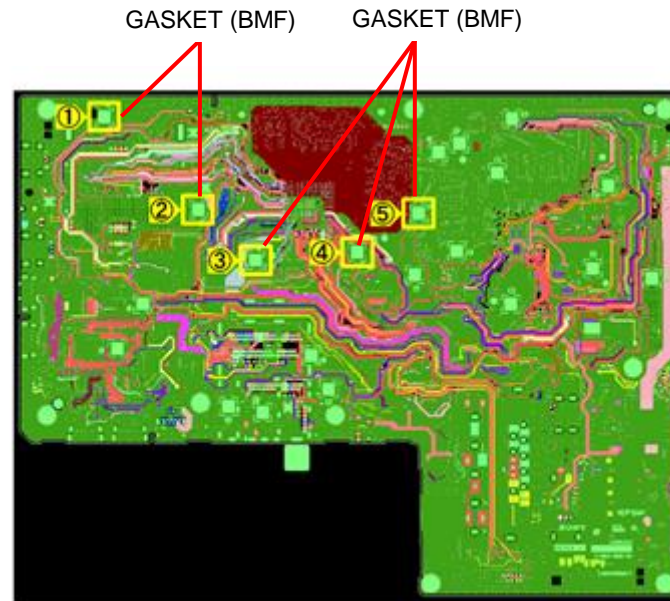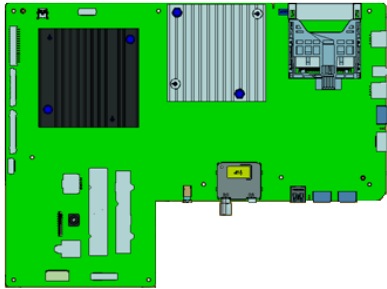
GASKET (BMF)   GASKET (BMF)

NOTE:
When you replace a BMFL board, it is necessary to stick five new GASKET on a new BMFL board.
GASKET (BMF): 4-566-117-01

Stick GASKET inside the guide line.

To stick the GASKET firmly,
Press the gasket until compression completely.
(0.5-1.0kgf)
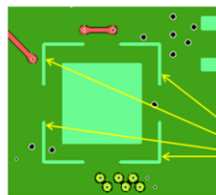
Guide line
*No indication of direction

Caution:
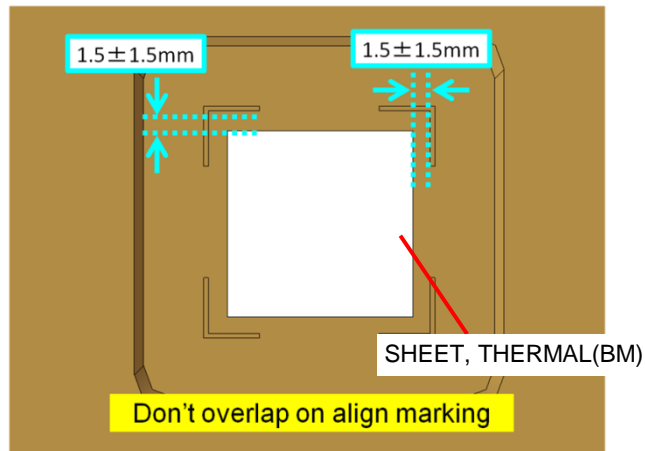1. Please aim at the center of square land.
2. Assy the gaskets just before B board panel installation.

1-3. XBR-75X850C/855C

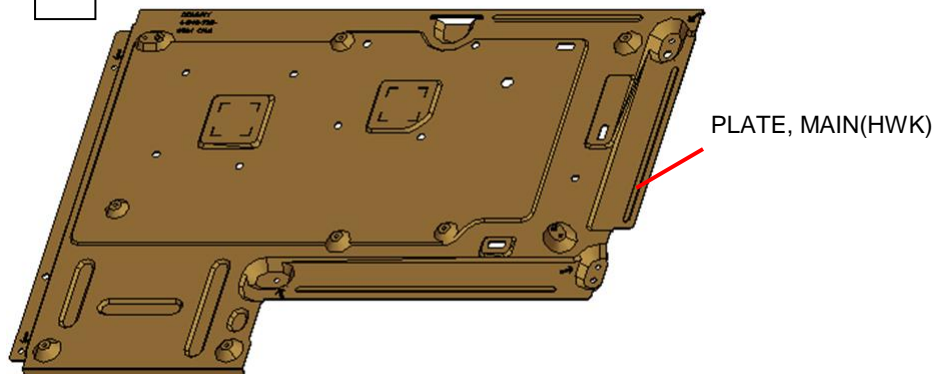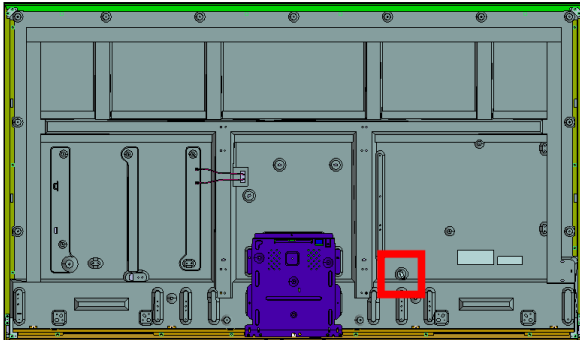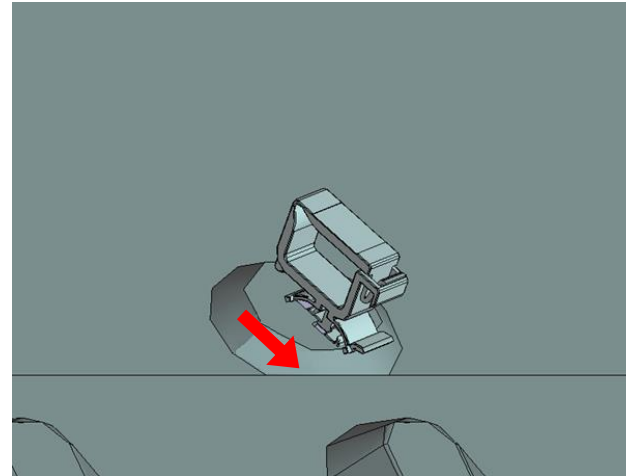### 1-3-32. SHEET, THERMAL(BM) AND PLATE, MAIN(HWK)

1

1.5±1.5mm   1.5±1.5mm

SHEET, THERMAL(BM)

Don't overlap on align marking

Be careful the side of SHEET THERMAL.

Separator side

2

PLATE, MAIN(HWK)
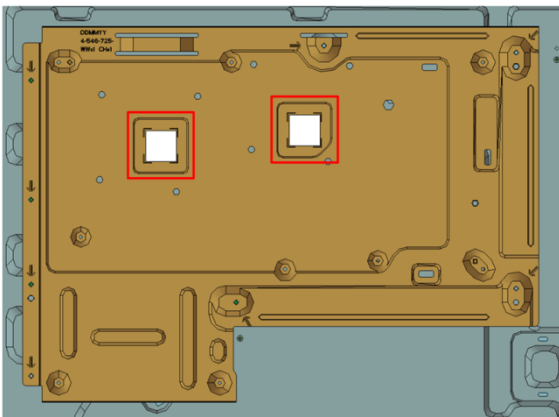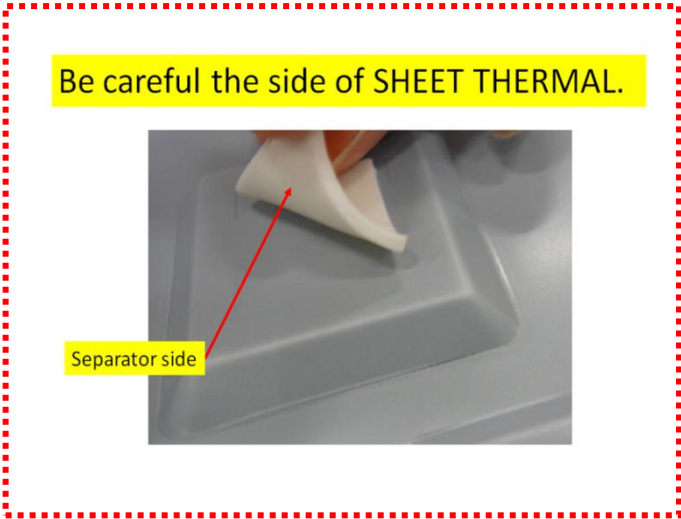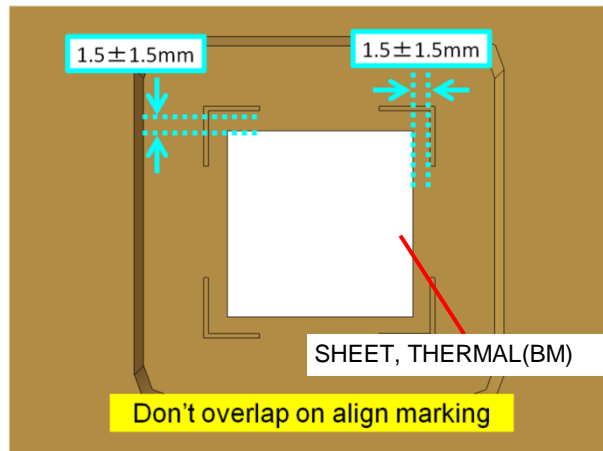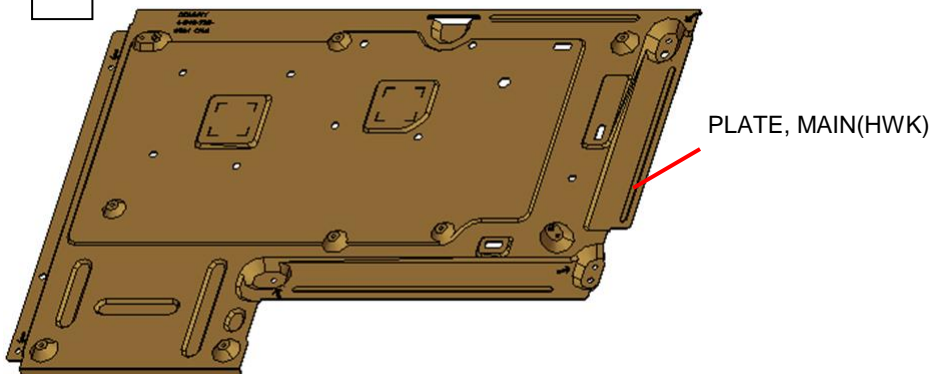
1-3. XBR-75X850C/855C

1-3-33. CUSHION, CORNER(EGL) AND TAPE

Holes of BLC should be covered by TAPE.

TAPE

Holes of BLC should be covered by TAPE.

TAPE

Holes of BLC should be covered by TAPE.

TAPE

CUSHION, CORNER(EGL)

0±1

0±1

CUSHION, CORNER(EGL)

0±1

0±1
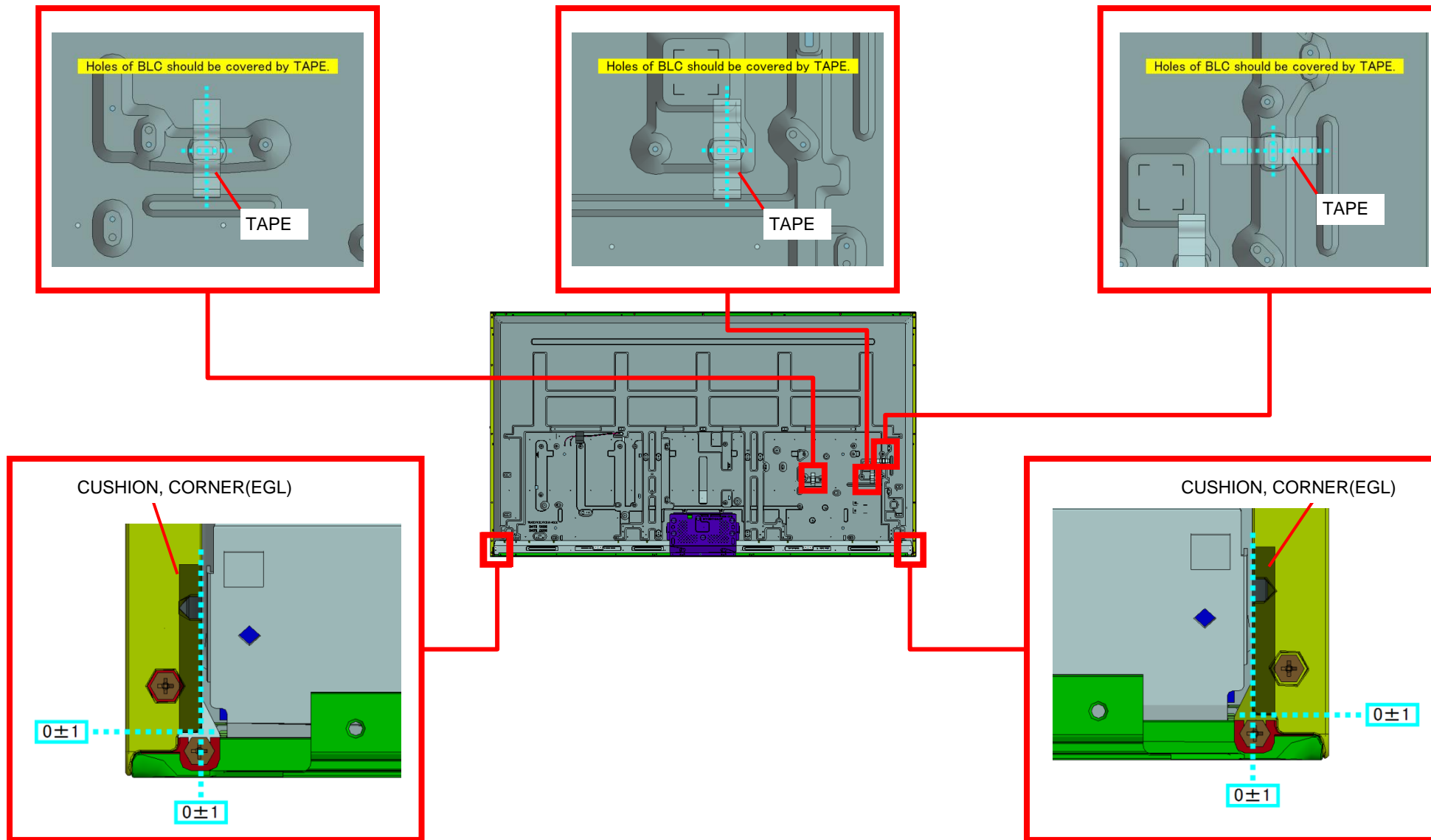
1-3. XBR-75X850C/855C

1-3-34. LCD PANEL

Don't remove this tape.

LCD PANEL
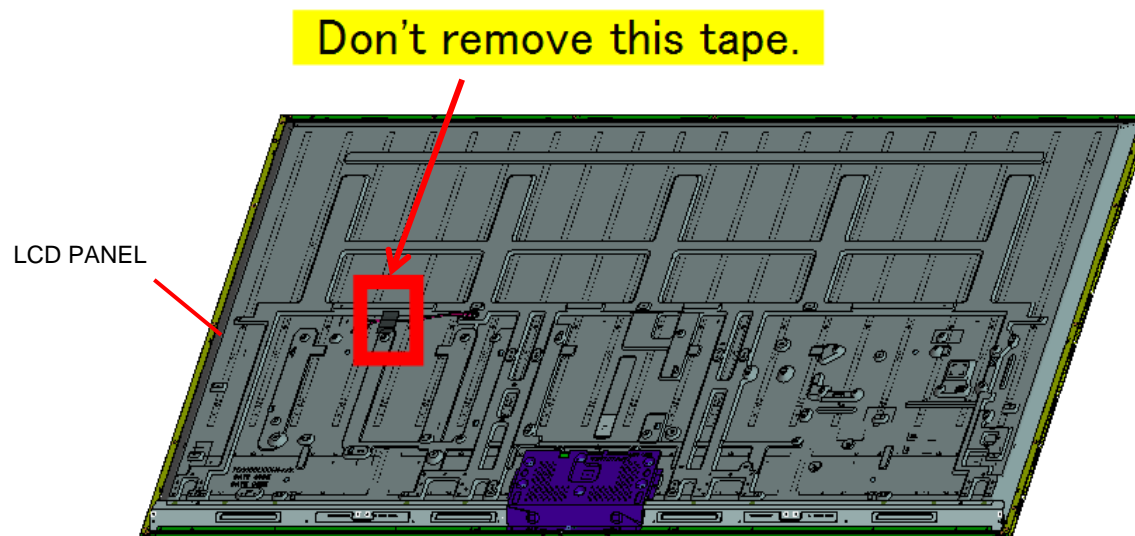
1-4. SMART CORE (M,L)

1-4-1. WLAN / BT MODULE(11AC) ASSY

1

LOCK   HOOK

GUIDE &
STOPPER

2

WLAN / BT MODULE(11AC) ASSY
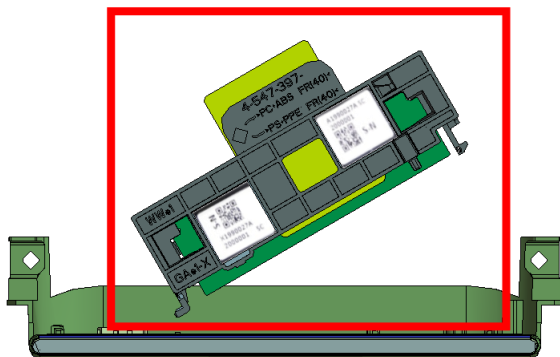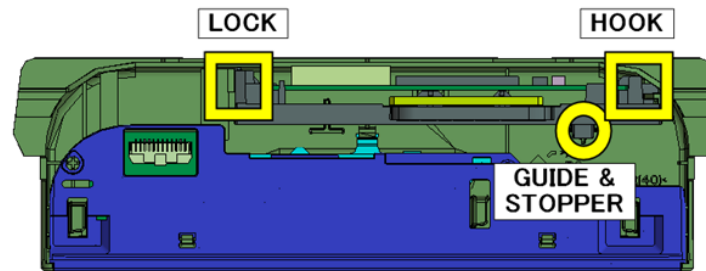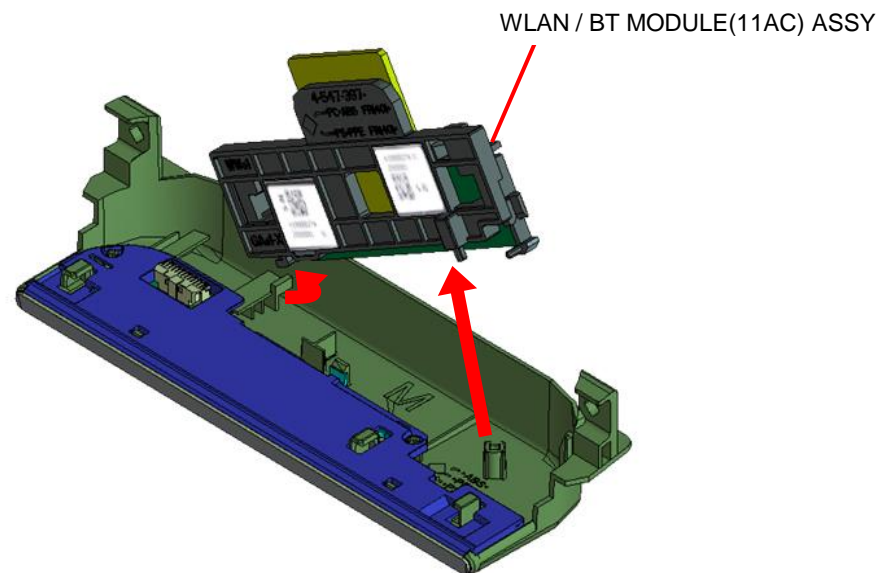
1-4. SMART CORE (M,L)

1-4-2. WLAN / BT MODULE(11AC)

1

2

Hook

3

Please confirm connector is facing up while installing

②

①

WLAN / BT MODULE(11AC)

Caution!
Avoid touching on this components
and connector
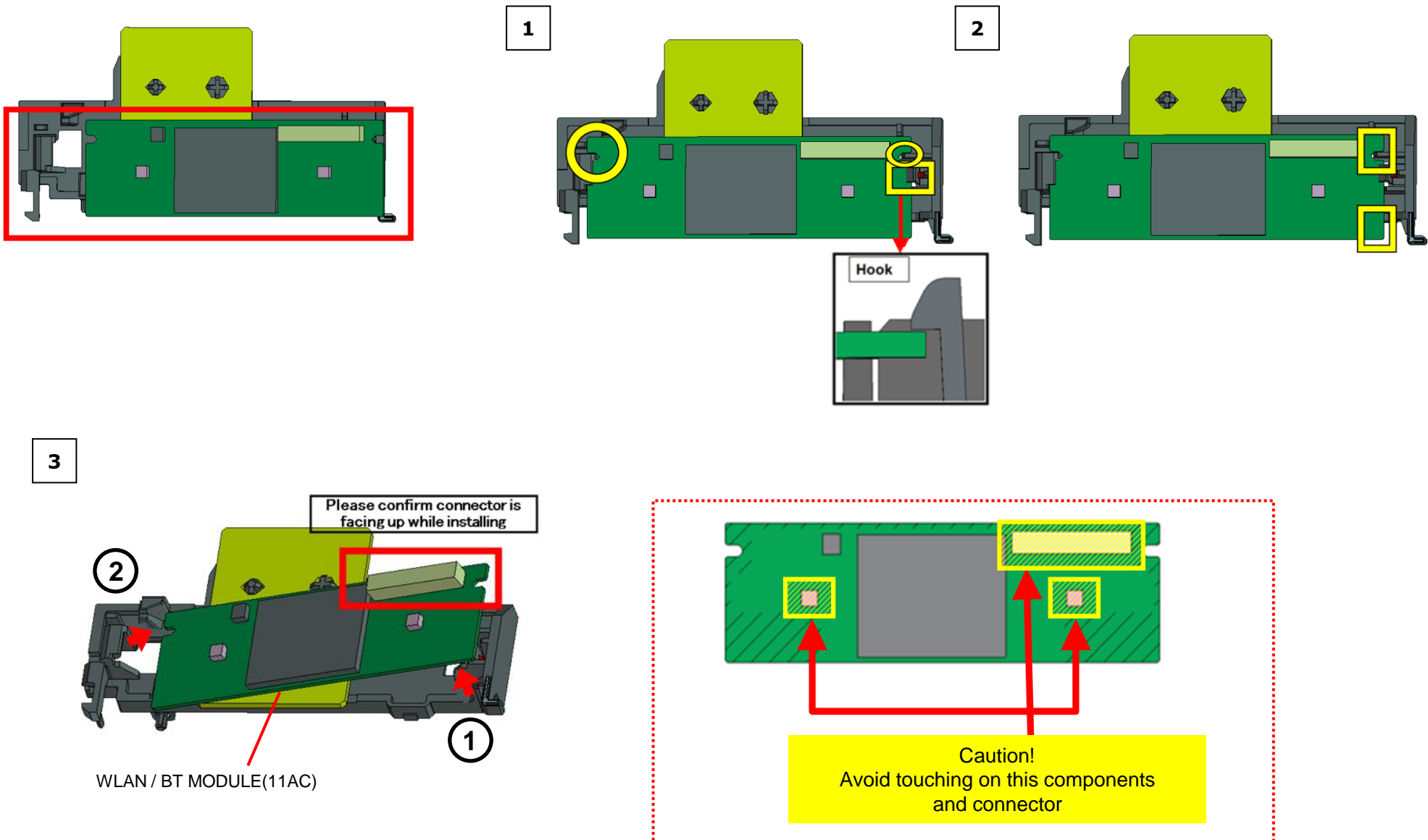
1-4. SMART CORE (M,L)

1-4-3. SHEET, THERMAL (SC)

1

2

SHEET, THERMAL (SC)

1-4-4. HEAT SINK L (SC)

1

2

HEAT SINK L (SC)

Confirm Position
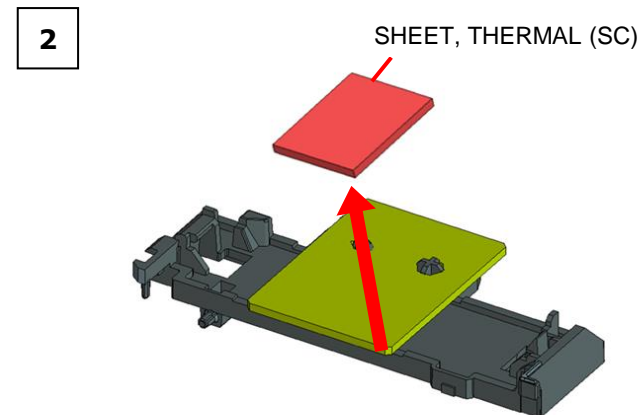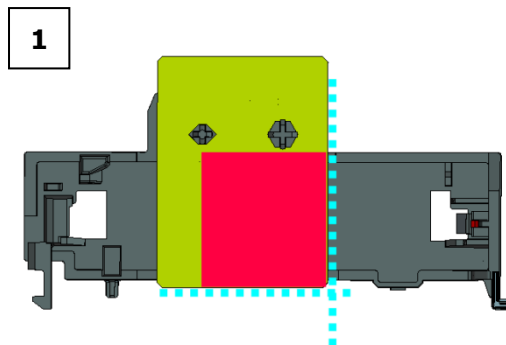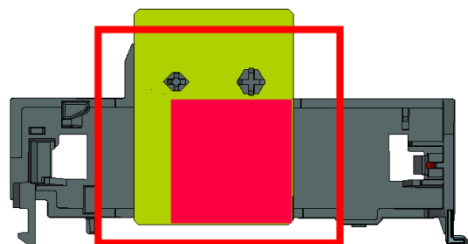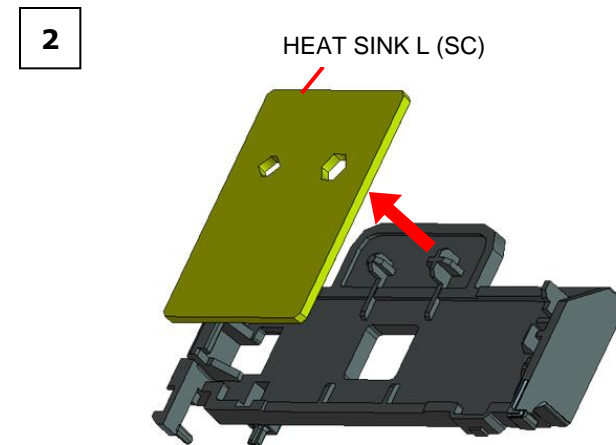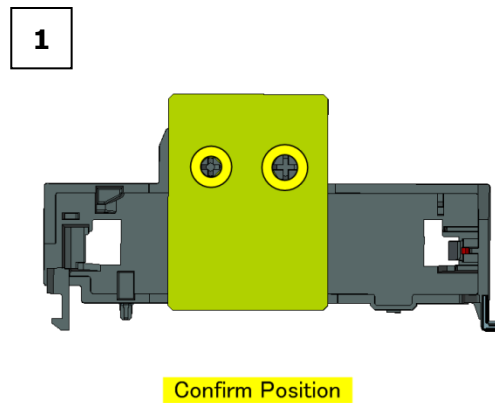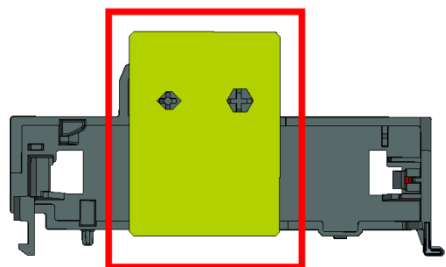
1-4. SMART CORE (M,L)

1-4-5. COVER, TOP

1

2

COVER, TOP
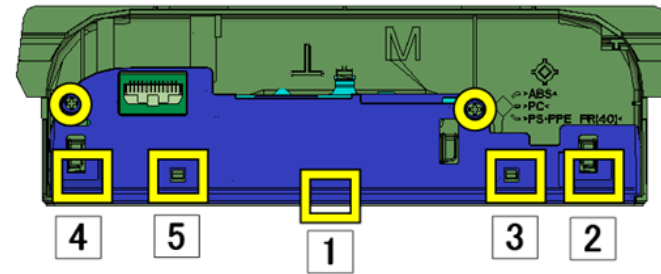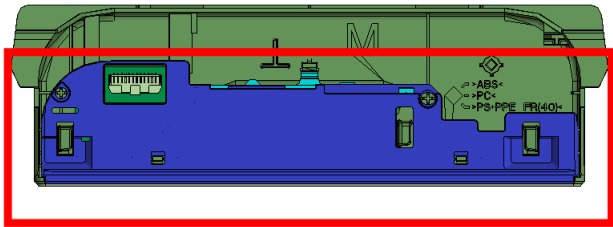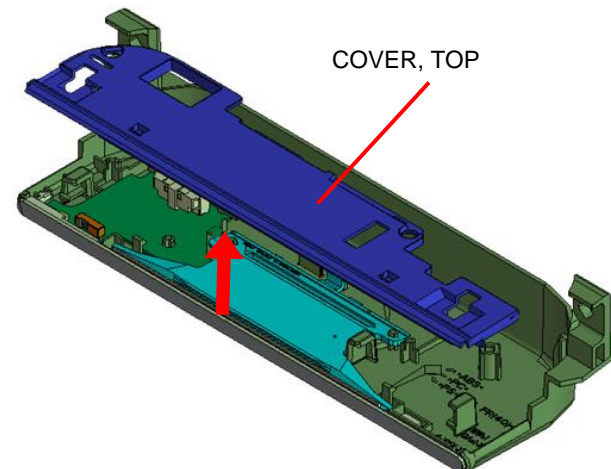
1-4. SMART CORE (M,L)

1-4-6. PANEL, ORNAMENT

1

Guide Pin   Hook

2

Hook

3

PANEL, ORNAMENT
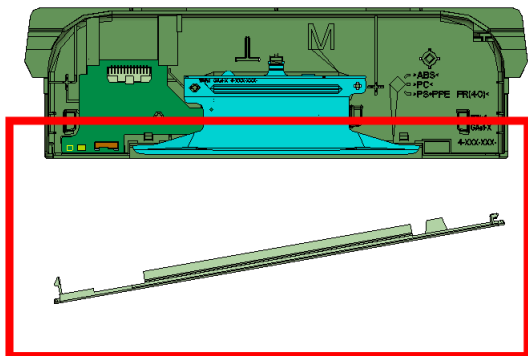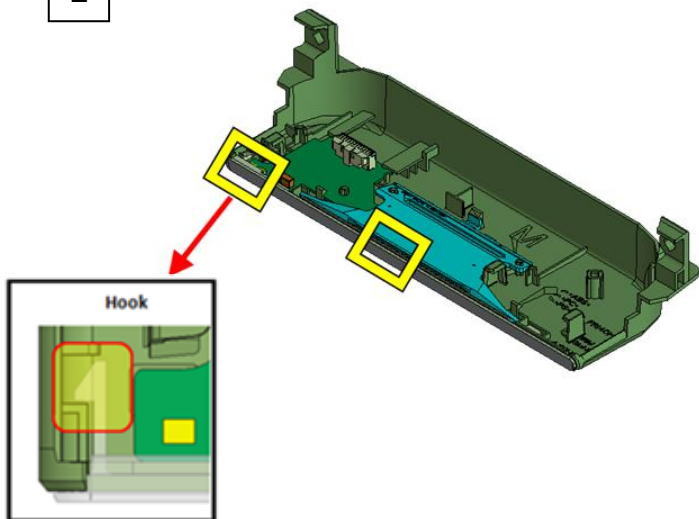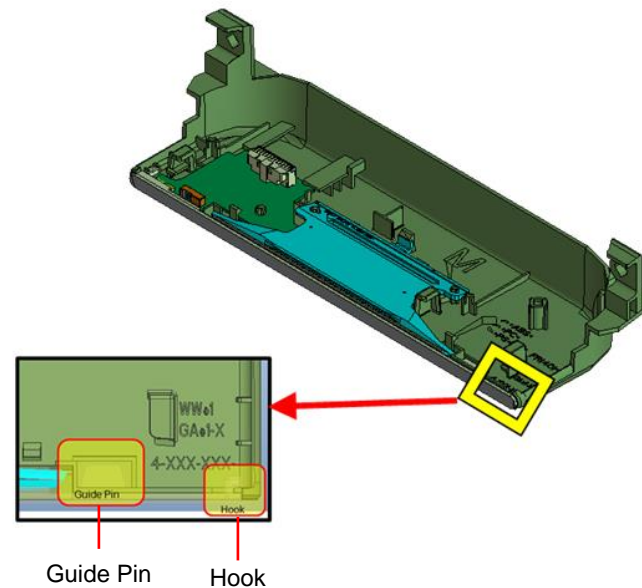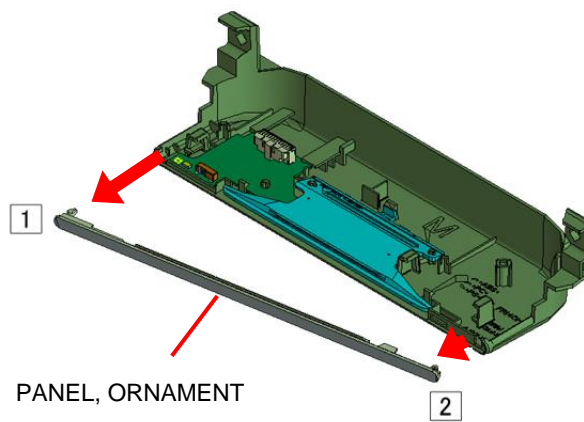
1-4. SMART CORE (M,L)

1-4-7. LIGHT, GUIDE

1

Hook

2

3

LIGHT, GUIDE
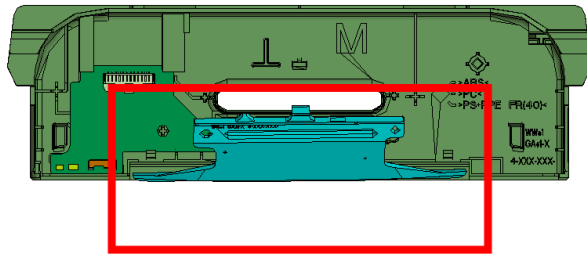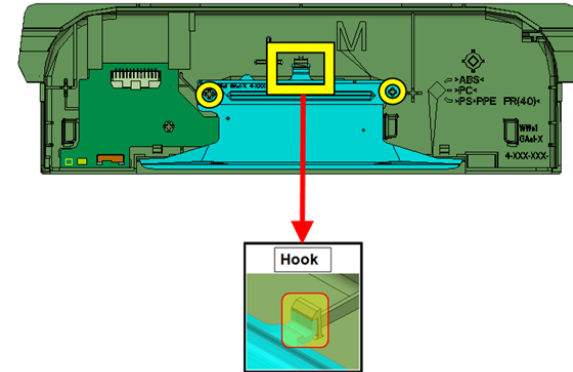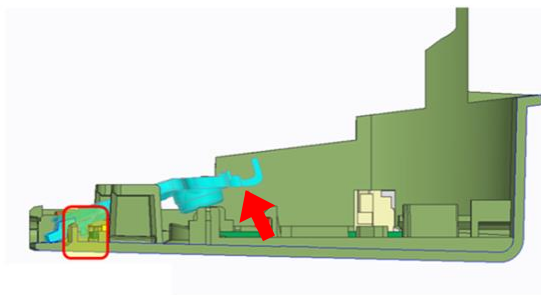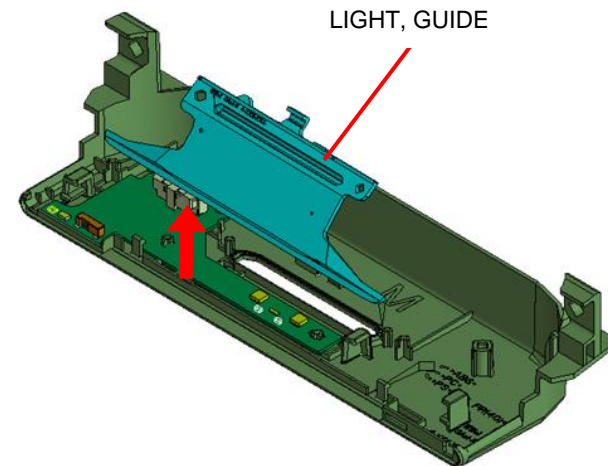
1-4. SMART CORE (M,L)

1-4-8. HSC3_S_M MOUNT

1

2

Guide Rib

Guide Pins

3

Slot

HSC3_S_M MOUNT

Hold on this section when installing H-Board

Avoid holding or push on these components.
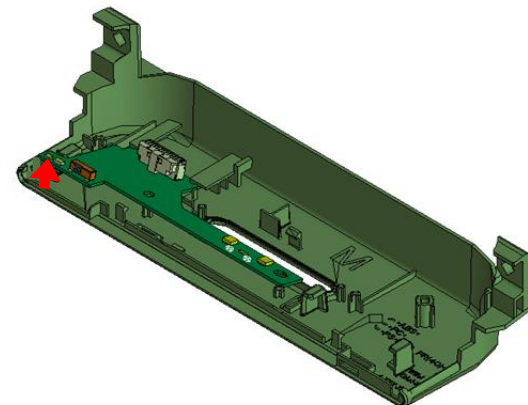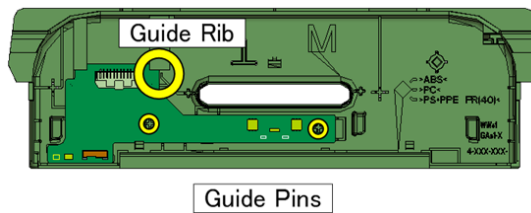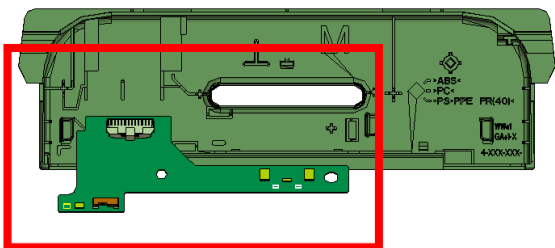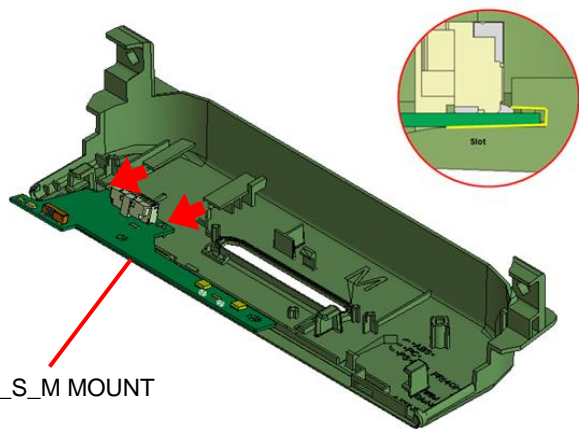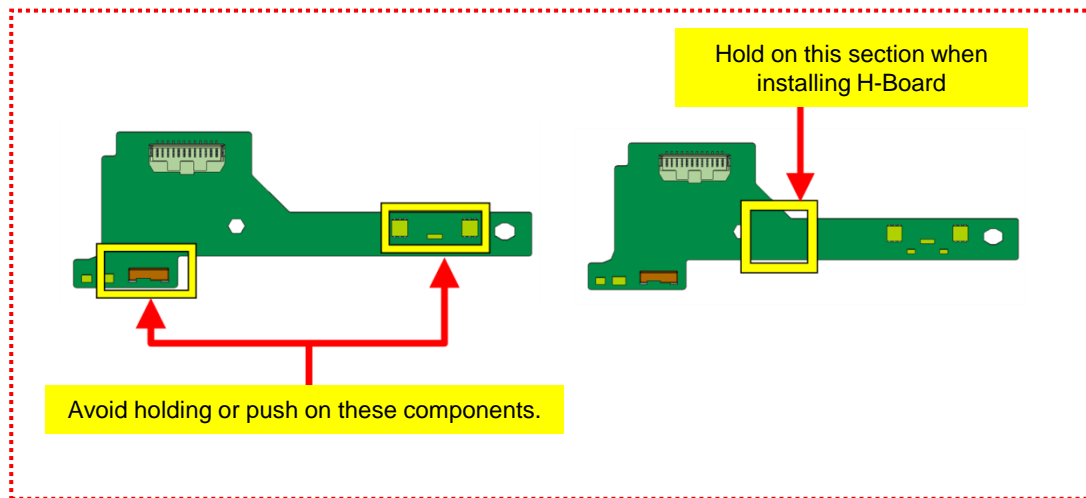
1-4. SMART CORE (M,L)

1-4-9. CASE, BOTTOM (M)

CASE, BOTTOM (M)
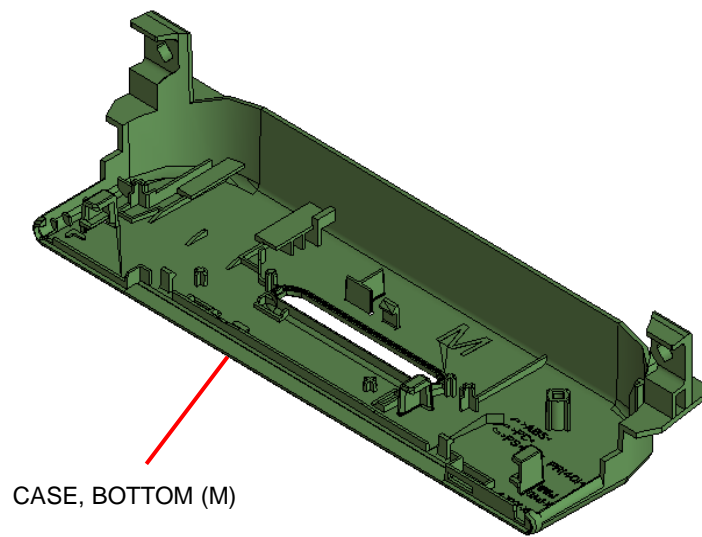
1-5. SMART CORE (L,C)

1-5-1. WLAN / BT MODULE(11AC) ASSY

1

LOCK   HOOK

GUIDE & STOPPER

2

WLAN / BT MODULE(11AC) ASSY
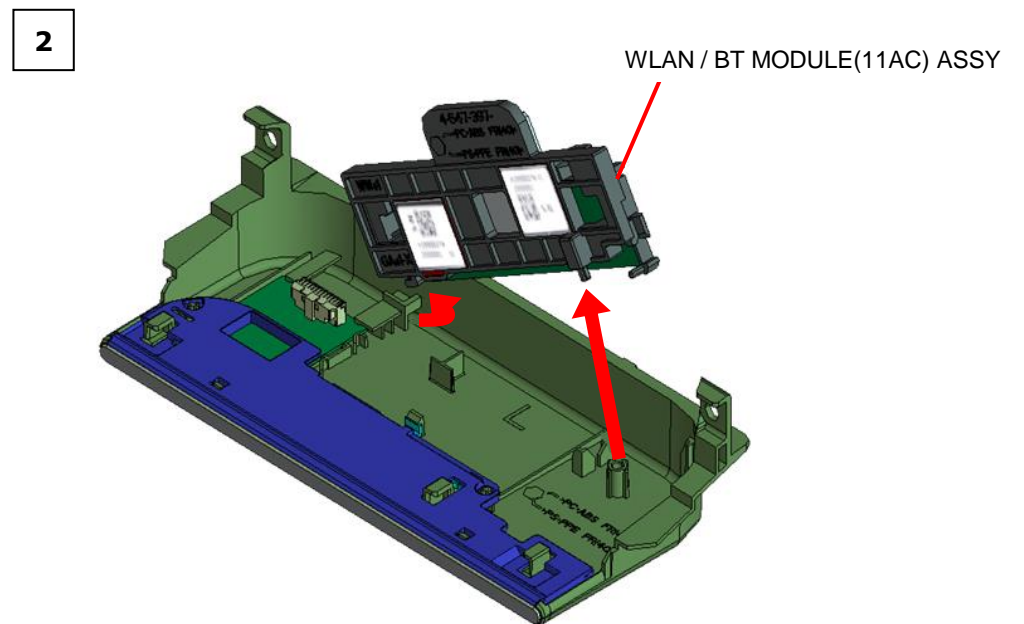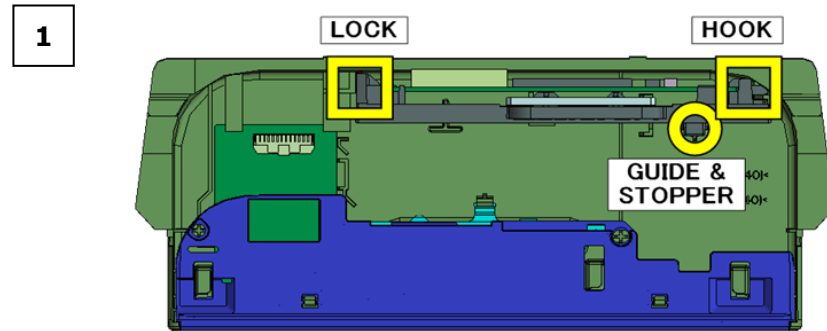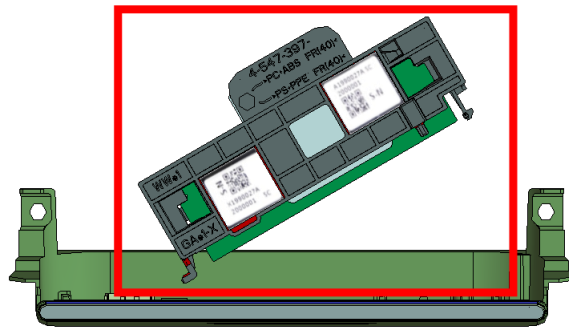
1-5. SMART CORE (L,C)

1-5-2. WLAN / BT MODULE(11AC)

1

2

Hook

3

Please confirm connector is facing up while installing

② ①

WLAN / BT MODULE(11AC)

Caution!
Avoid touching on this components
and connector
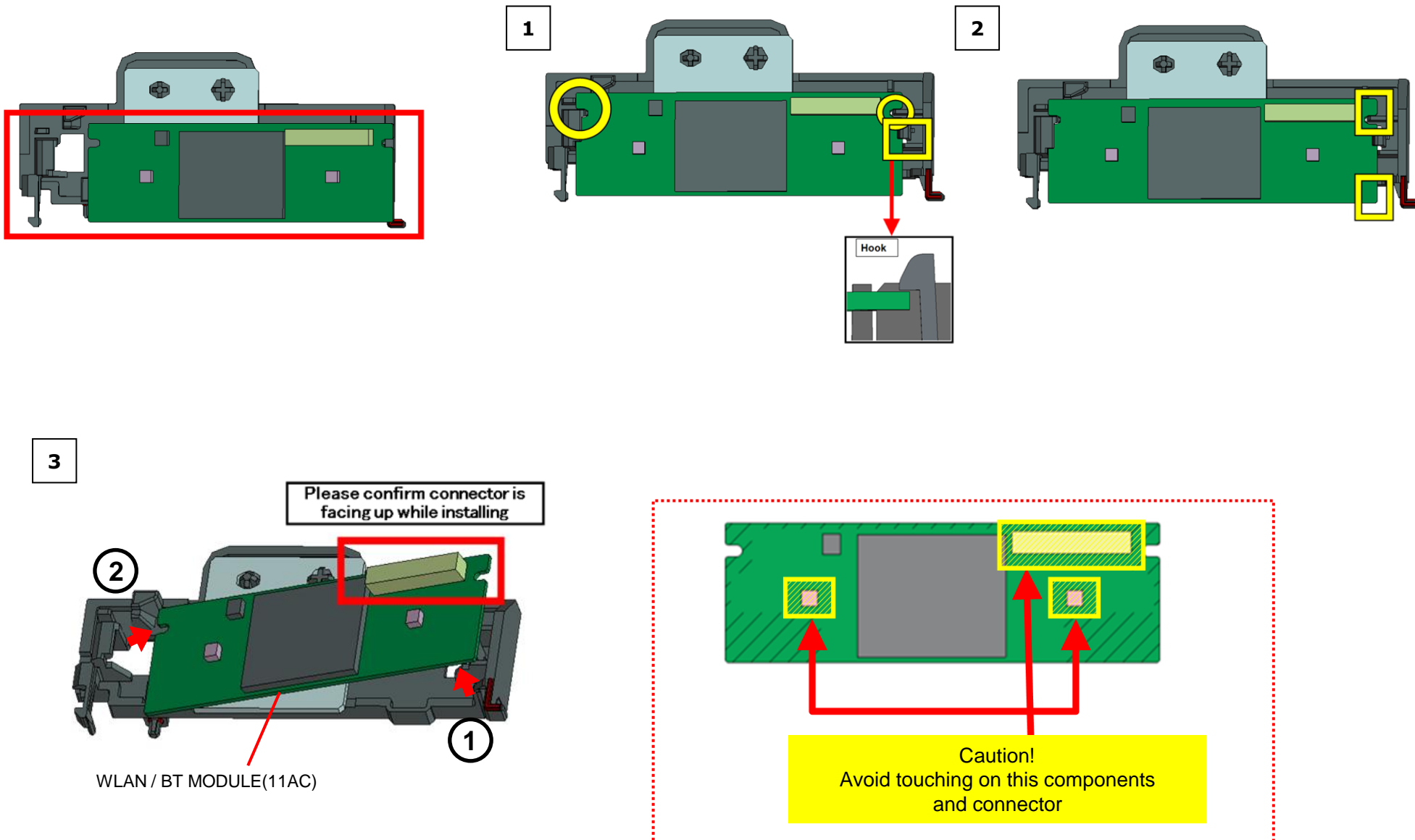
1-5. SMART CORE (L,C)

1-5-3. SHEET, THERMAL (SC)

1

2

SHEET, THERMAL (SC)

1-5-4. HEAT SINK (SC)

1

Confirm Position

2
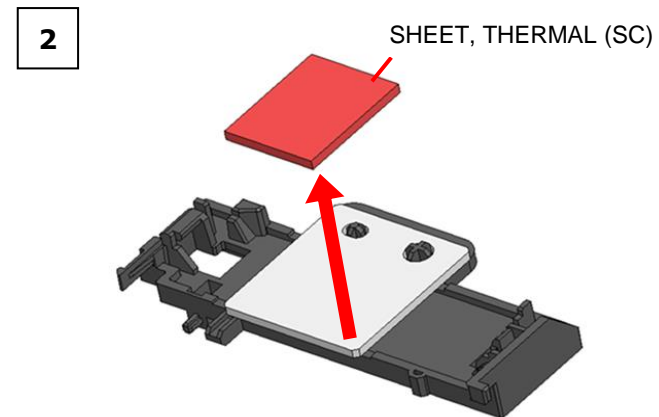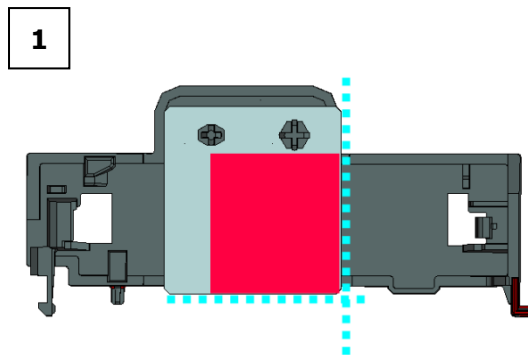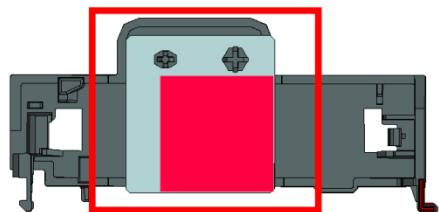
HEAT SINK (SC)
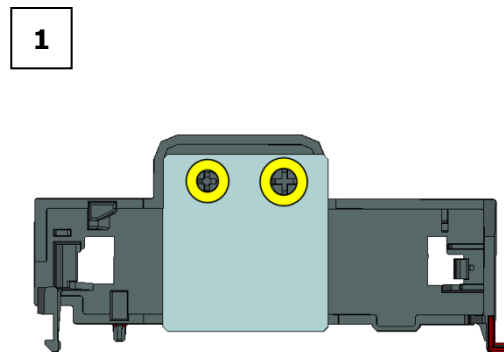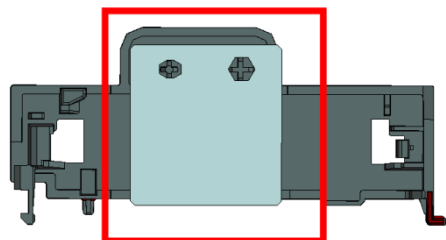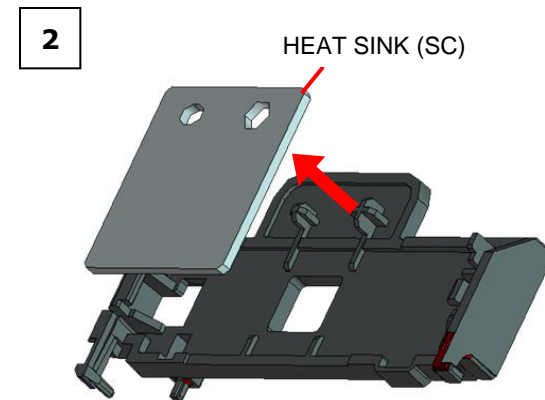
1-5. SMART CORE (L,C)

1-5-5. COVER, TOP

1

2

COVER, TOP

1-5. SMART CORE (L,C)

1-5-6. PANEL, ORNAMENT

1

Guide Pin   Hook

2

Hook

3

1
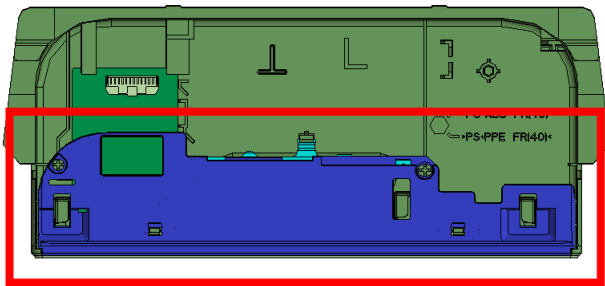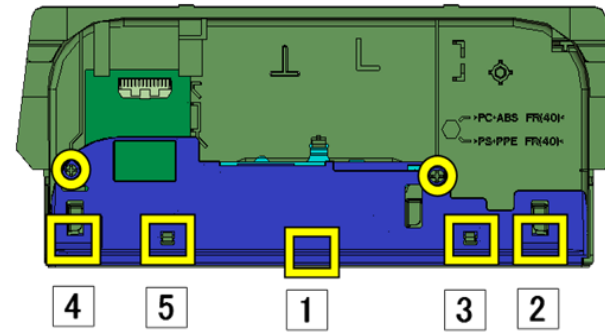
PANEL, ORNAMENT
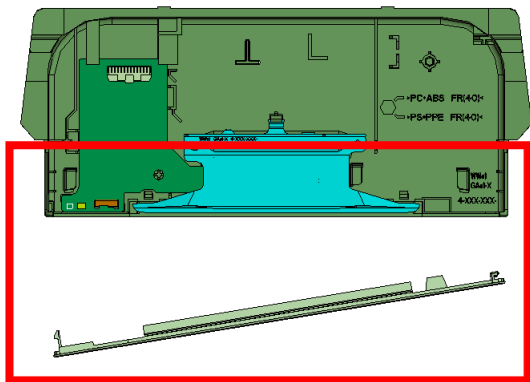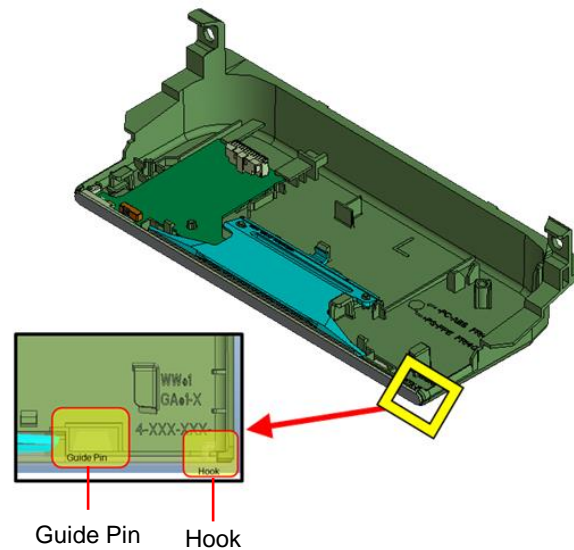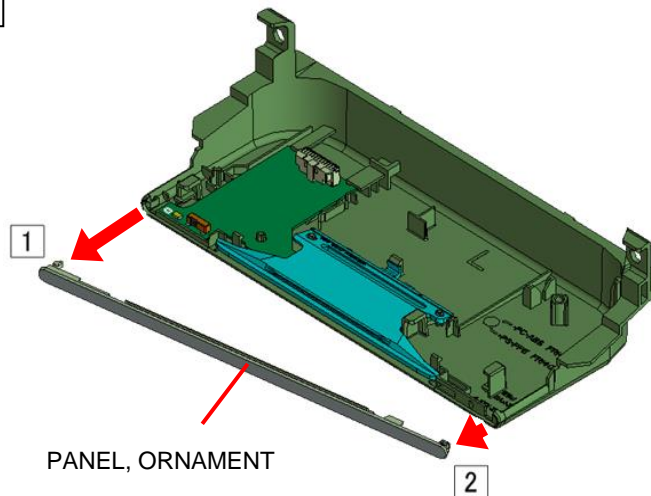
2
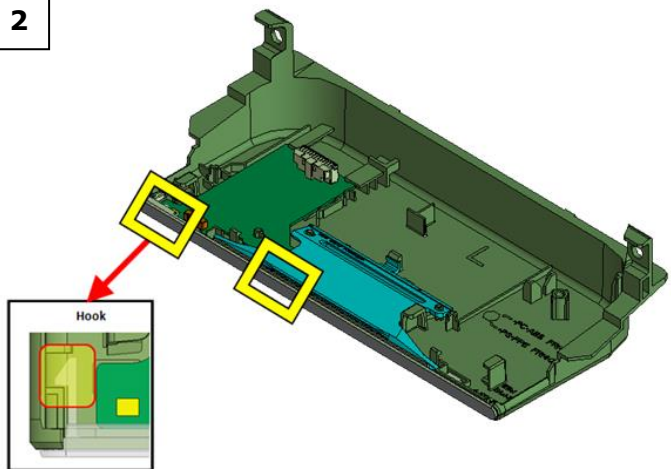
1-5. SMART CORE (L,C)

1-5-7. LIGHT, GUIDE

1

2

3

LIGHT, GUIDE

Hook
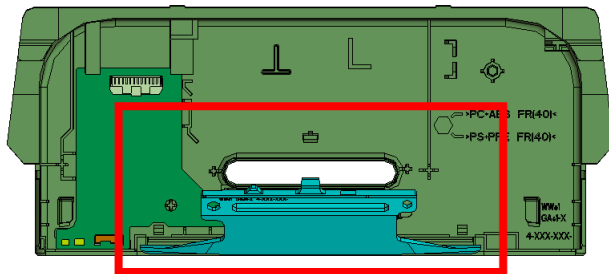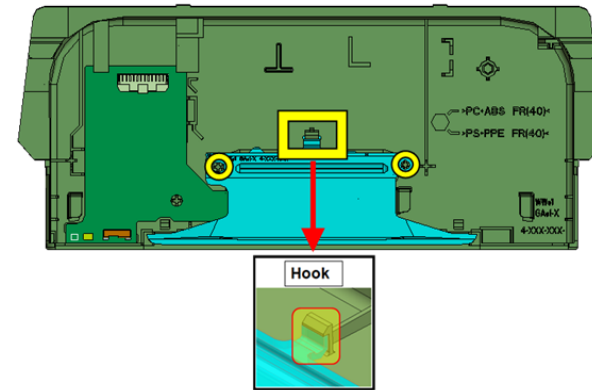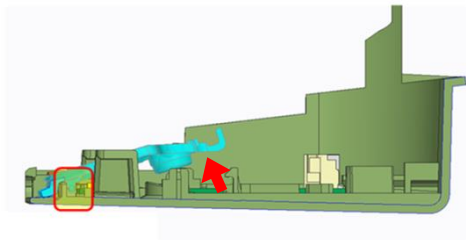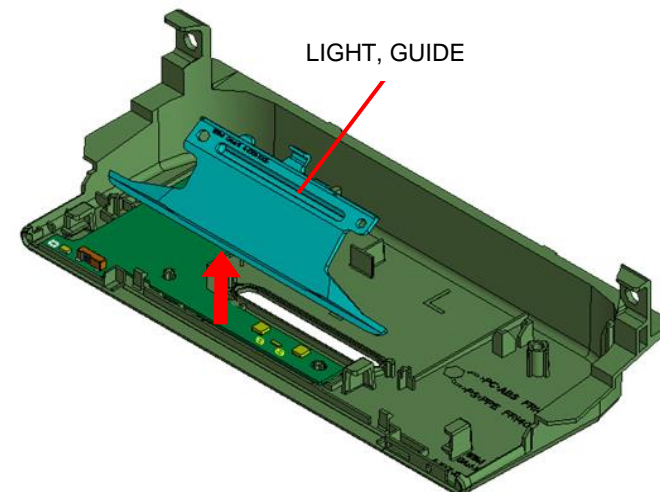
1-5. SMART CORE (L,C)

1-5-8. HSC3_L MOUNT

1

2

Guide Rib

›PC·ABS FR(40)‹
›PS·PPE FR(40)‹

Guide Pins

3

Slot

HSC3_L MOUNT

Hold on this section when installing H-Board

Avoid holding or push on these components.
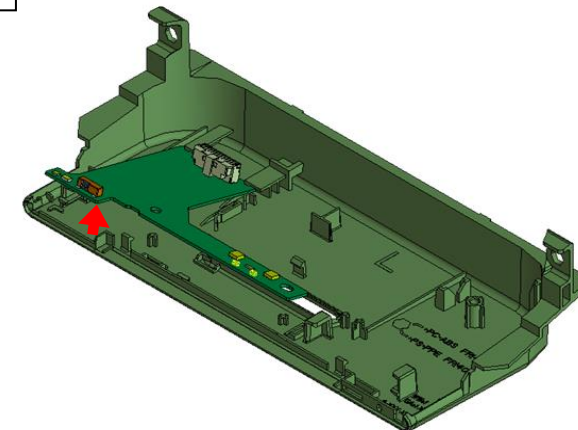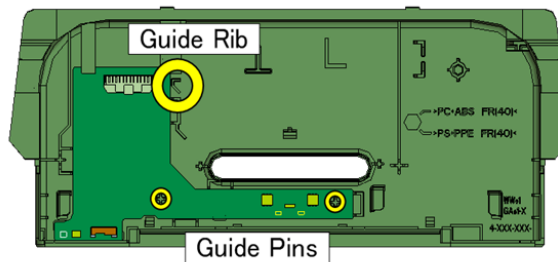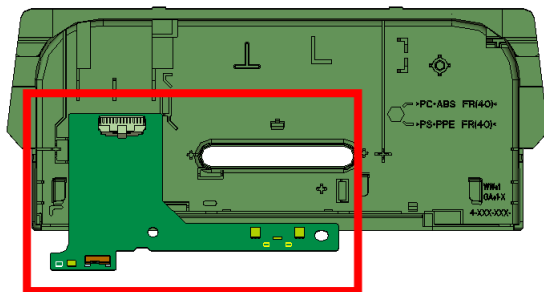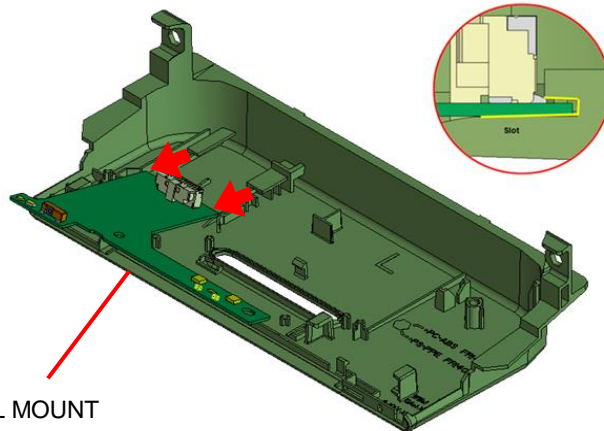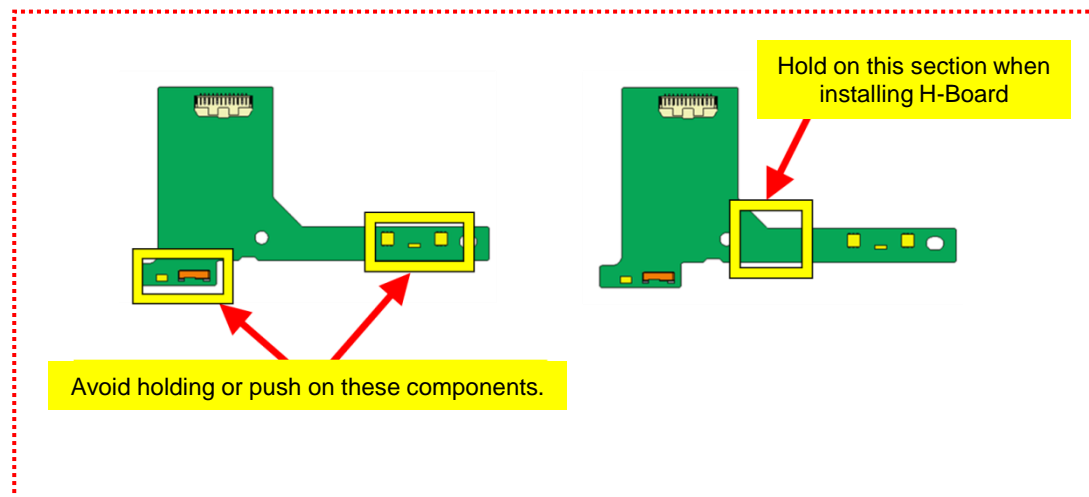
1-5. SMART CORE (L,C)

1-5-9. CASE, BOTTOM (L)
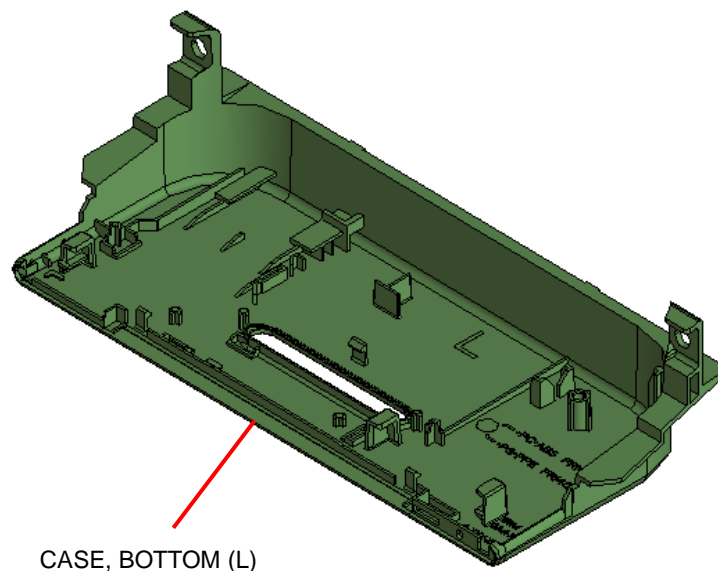
CASE, BOTTOM (L)

SEC 2. ADJUSTMENT

HOW TO ENTER THE SERVICE MODE

1) Turn on the main power switch to set in standby mode.

2) Press the buttons on the remote commander in the following sequence

with each interval within 1 sec, then the service mode will be set.

DISPLAY ➡ Channel 5 ➡ Volume + ➡ TV POWER

3) Service mode display.

```
                    Service Mode
Model Information              >>
Self diagnosis History         >>
Video / Audio                  >>
Panel / PQ                     >>
General Setting                >>
Tuner                          >>
Wifi                           >>



              [</>] Set [Home]Exit
```
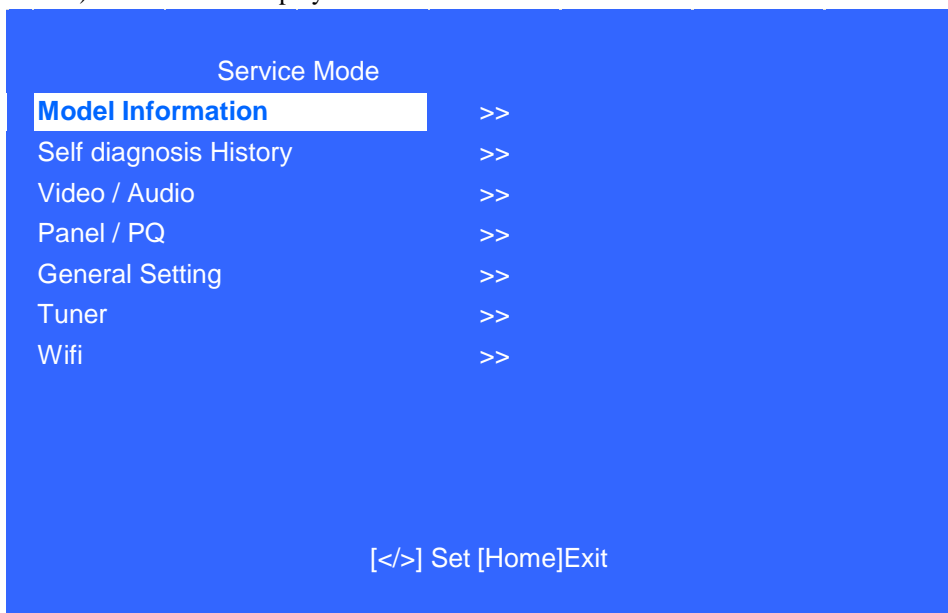
4) How to use the remote commander.

Function	The flow of control
Service mode on	<Display><5><Vol Up><Power>
Service mode off	<MENU>/<HOME>
Item up / down	< ↑ >/ < ↓ >
Item select left/right	<←>/<→>
Execute	<OK>

5) After entering service mode, then turn off the power switch.

Summary of key behavior

Key	Behavior
Menu	Close service menu
Cursor/Enter	Return Previous page, Change potion of focus item, Enter next page of focus item, etc..
Return	Return to previous page, close service menu etc..

SOFTWARE VERSION

1) In Service Mode, select "Model   Information", press "Enter" or "→ " button to enter Status Information.

Service Mode	
Model Information	>>
Self diagnosis History	>>
Video / Audio	>>
Panel / PQ	>>
General Setting	>>
Tuner	>>
Wifi	>>
[</>] Set [Home]Exit	

Model	
Status Information	>>
Model Information	>>
Model Number Setting	>>
SERIAL NUMBER EDIT	>>
[</>] Set [Home]Exit	

Main Micro
SW Version:	PKG2.011.0010NAB
NVM Version:	0001 UC2
Boot Version:	V1.000
PQ Version:	102100006
AQ Version:	AQ1.100

<Ext>
exFRC:	00.00.00.00
CameraVID:	0
CameraPIC:	0
CameraFW:	0

4k BE
MLFW:	SF1.002
MAFW:	SF0.360
ADSP	SF0.501
NDAT	SD0.370
PDAT	SD0.370
BDAT	SD1.011
BCM	SD-------
FDAT	SD0.002
UDAT	SD0.000
BDIX	SD0.370

2) Press "Enter" or "Return" button to return to Service Mode.

Service Mode	
Model Information	>>
Self diagnosis History	>>
Video / Audio	>>
Panel / PQ	>>
General Setting	>>
Tuner	>>
Wifi	>>
[</>] Set [Home]Exit	
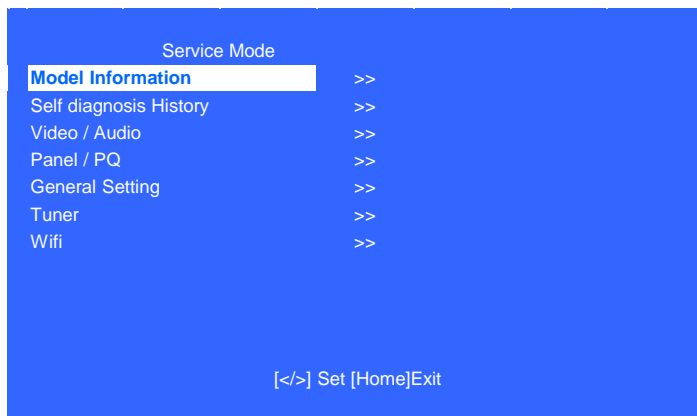
SERIAL NUMBER EDIT (1)

1) In "Service Mode", select "Model Information" by pressing "↑" or "↓" then pressing "Enter" or "→" button to enter inside.

2) Select "Serial Number Edit" by pressing "↑" or "↓" button then pressing "Enter" or "→" button

3) Press "↑" or "↓" to input numbers.

4) After user input data , press <Enter> .

   • Pop-up dialog appear to confirm input data correct

   • **Serial Number can be set ONLY ONCE**

5) Press "→" or "←" button to select YES or NO. Select YES if input data is correct. Select NO if input data is incorrect. Press <Enter> to save answer.

Service Mode

Model Information	>>
Self diagnosis History	>>
Video / Audio	>>
Panel / PQ	>>
General Setting	>>
Tuner	>>
Wifi	>>

[</>] Set [Home]Exit

Mode

Status Information	>>
Model Information	>>
Model Number Setting	>>
Serial Number Edit	_ _ _ _ _ _ _

Service Mode

Status Information	>>
Model Information	>>
Model Number Setting	>>
Serial Number Edit	9 9 9 9 9 9 9

Input Data correct?

Yes   **No**
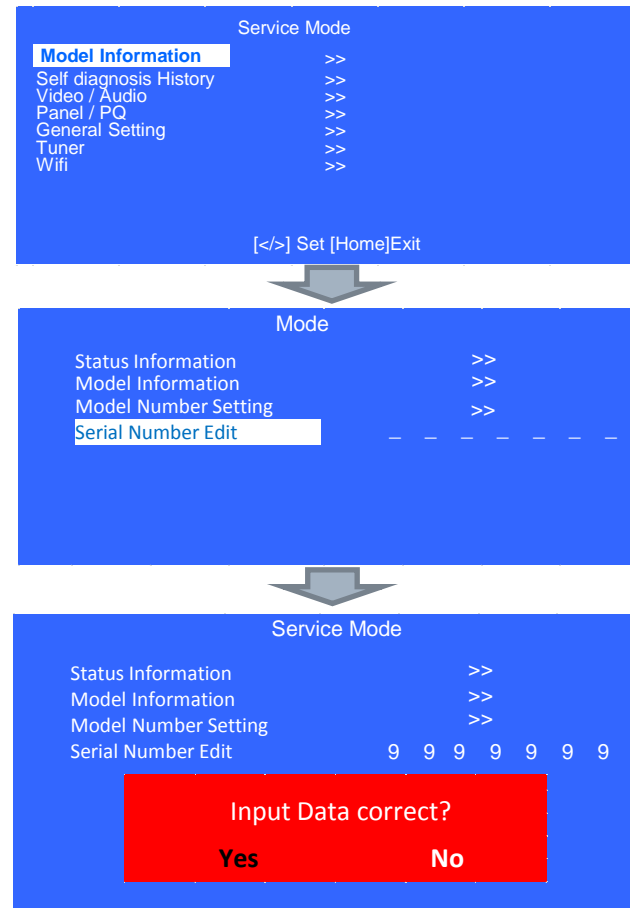
SERIAL NUMBER EDIT (2)

If YES is selected, the input data is saved into EEPROM.

SERIAL NUMBER EDIT is greyed out and the serial number that has been input is displayed.

User will not able to edit anymore.

Service Mode		
Status Information		>>
Model Information		>>
Model Number Setting	<[	KDL-40X500B]>
Serial Number Edit		9 9 9 9 9 9
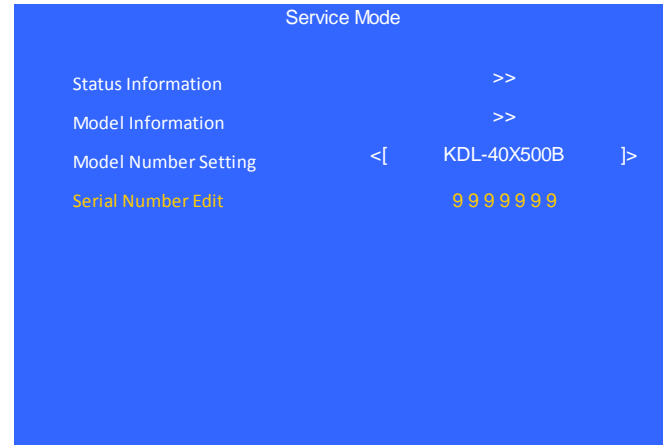
If NO is selected, the input data is not saved into EEPROM.

The serial number that has been input is displayed.

User can still edit the Serial Number.

Service Mode		
Status Information		>>
Model Information		>>
Model Number Setting	<[	KDL-40X500B]>
Serial Number Edit		9 9 9 9 9 9 9

Input Data correct?

Yes   No
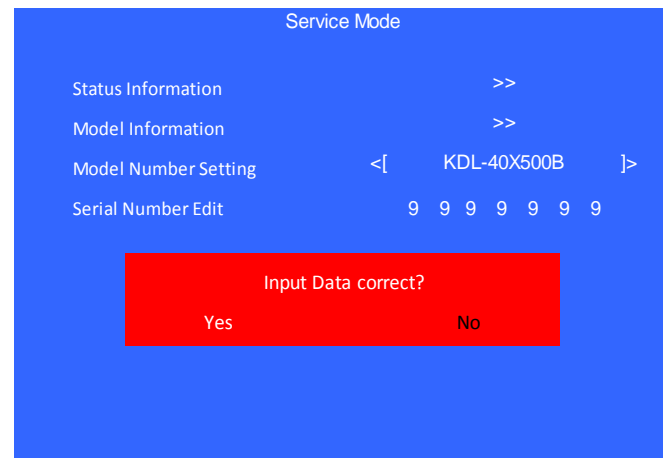
MODEL NUMBER SETTING

1) In "Service Mode", select "Model Information" by pressing "↑" or "↓"   then pressing "Enter" or "→" button to enter inside.

2) Select "Model Number Setting" by pressing "↑" or "↓" button then   pressing "Enter" or "→" button.

3) Press "↑" or "↓" arrow key to scroll Product Name Candidate.

> ➢ (e.g. KDL-40X500B CO1,KDL-40X500C BR6)

4) Select one Product Name from the list, press <Enter> will pop dialog to   inform user to confirm data. Model dependent settings will be overwritten into EEPROM.

<table>
<tr><td>

Service Mode

Model Information   >>
Self diagnosis History   >>
Video / Audio   >>
Panel / PQ   >>
General Setting   >>
Tuner   >>
Wifi   >>

[</>] Set [Home]Exit

</td><td>

Service Mode

Status Information   >>
Model Information   >>
Model Number Setting   >>
Serial Number Edit   >>

</td><td>

[MODEL_NUMBER_SETTING]

▲

_ _ _ _ _ _ _ _ _ _ _

▼

OK

</td></tr>
</table>
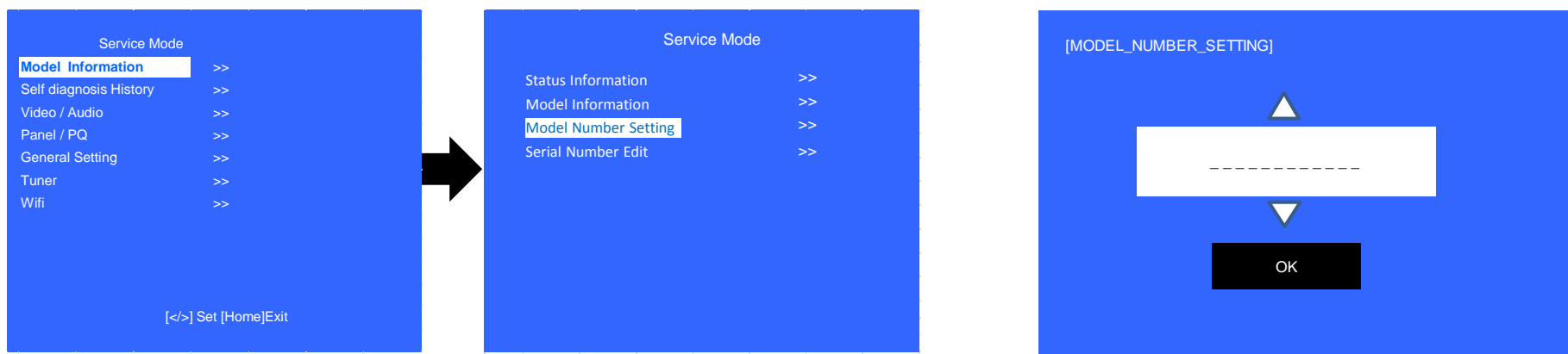
WB ADJUSTMENT

(Please apply when main board or panel is replaced.)

In "Panel/PQ" service mode.

 a. Go to "WB Adjustment" category by "↑" or "↓".

```
                Service Mode
Model Information               >>
Self diagnosis History          >>
Video / Audio                   >>
Panel / PQ                      >>
General Setting                 >>
Tuner                           >>
Wifi / BT                       >>
```
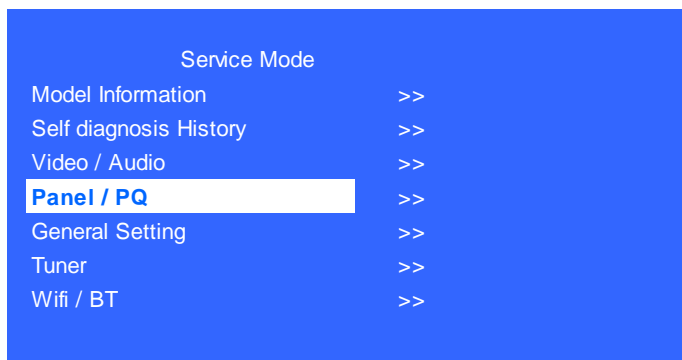
 b. To select "WB Adjustment", press "→" button.

```
             Panel / PQ

Back                            <<
WB Adjustment                   >>
WB/Mura/CUC data transfer       >>
```

c. To change data , press "←" or "→" on remote commander.

```
Back                    <<
R WB Gain           <[       0       ]>
G WB Gain           <[       0       ]>
B WB Gain           <[       0       ]>
R WB Offset         <[       0       ]>
G WB Offset         <[       0       ]>
B WB Offset         <[       0       ]>


              [</>] Set [Home]Exit
```
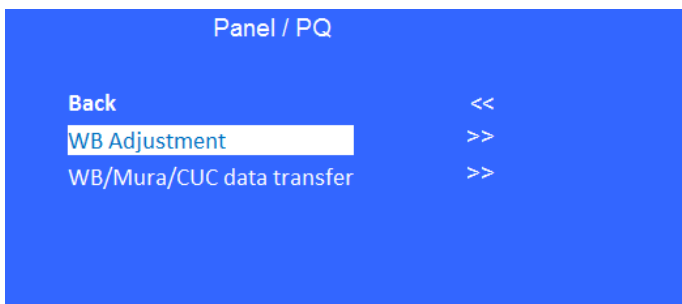
WB/MURA/CUC DATA TRANSFER

(Please apply when main board or panel is replaced.)

1. In "Panel/PQ" service mode.

    a. Go to "WB/Mura/CUC data transfer" category by "↑" or "↓".

    <div style="background:blue">
    Service Mode

Model Information	>>
Self diagnosis History	>>
Video / Audio	>>
Panel / PQ	>>
General Setting	>>
Tuner	>>
Wifi / BT	>>
    </div>
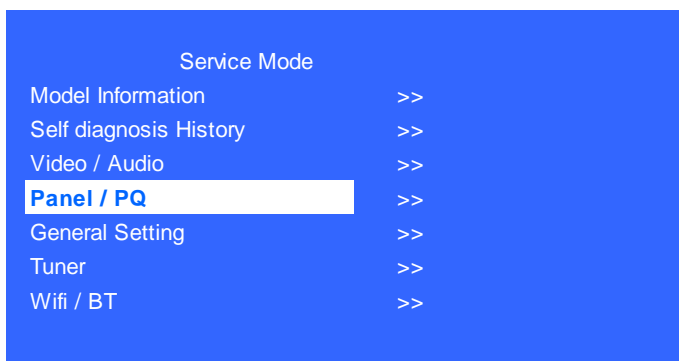
    b. To select "WB/Mura/CUC data transfer", press "→" button.

    c. To change data , press "←" or "→" on remote commander.

    <div style="background:blue">
    Panel / PQ

Back	<<
WB Adjustment	>>
WB/Mura/CUC data transfer	>>
    </div>
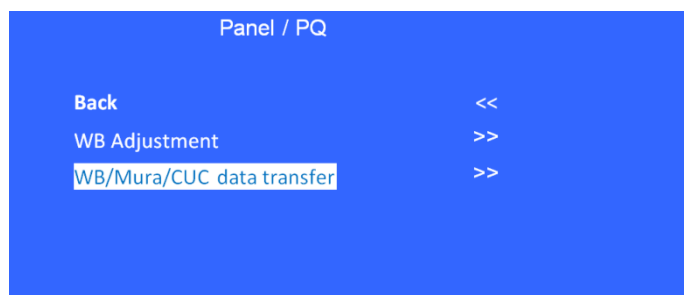
2. In "WB/Mura/CUC data transfer".

    a. Select "WB/Gamma data transfer" by pressing "↑" or "↓" on remote commander.

    b. To change the items, press "←" or "→" on remote commander and press "Enter" button.

    Selectable items are:

       0. SoC to T-con

       1. T-con to SoC

       2. Not action

    c. Select "[start]" and press "Enter" button to start transfer.

    <div style="background:blue">

Back	<<
WB/Gamma data transfer	<[0. SoC to T-con]>
Mura data transfer	<[0. SoC to T-con]>
CUC data transfer	<[0. SoC to T-con]>
[Start]	
	[</>] Set [Home]Exit
    </div>
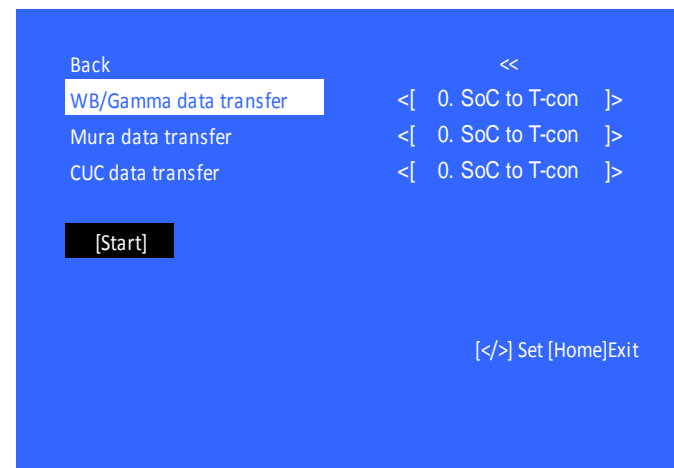
HDD PERFORMANCE CHECK

1. In "Service Mode", select "General Setting" by pressing "↑" or "↓" then pressing "Enter" or "→" button to enter inside.

Service Mode	
Model Information	>>
Self diagnosis History	>>
Video / Audio	>>
Panel / PQ	>>
General Setting	>>
Tuner	>>
Wifi / BT	>>
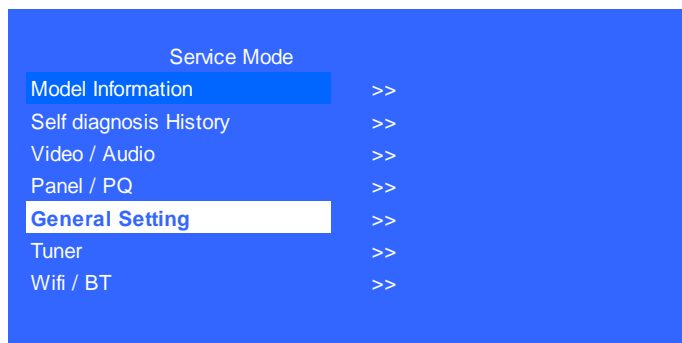
2. Select "HDD Performance check " by pressing "↑" or "↓" then pressing "Enter" or "→" button to enter inside.

General Setting	
Back	<<
Aging mode	<[On/Off]>
HDD Performance Check	>>
AAA	>>
Update CI+ Credentials	>>
Boot count reset	>>
ECS Enable	<[On/Off]>

[</>] Set [Home]Exit
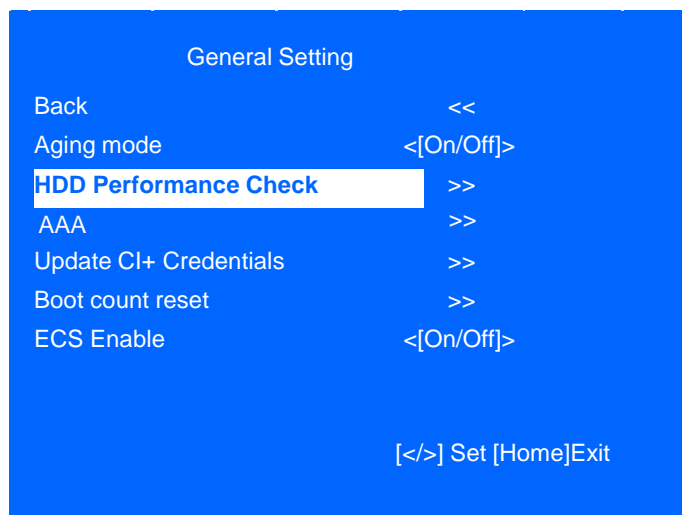
3. A message "Please wait ..." is displayed during performance check processing.

Service Mode

Please wait...
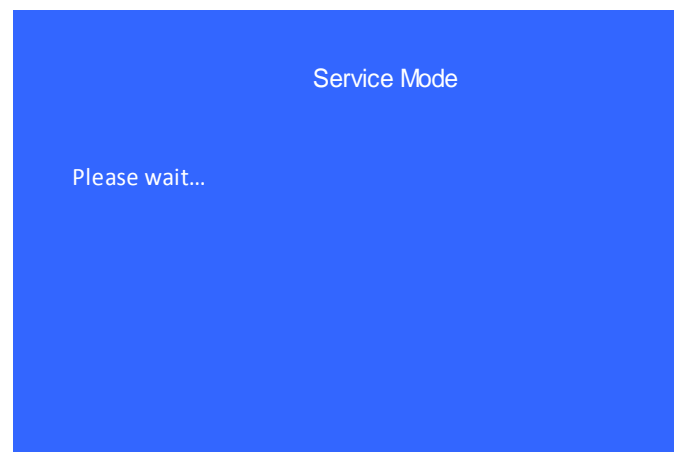
4. Result **OK** or **NG** will be displayed after performance of HDD is checked

HDD Performace Check
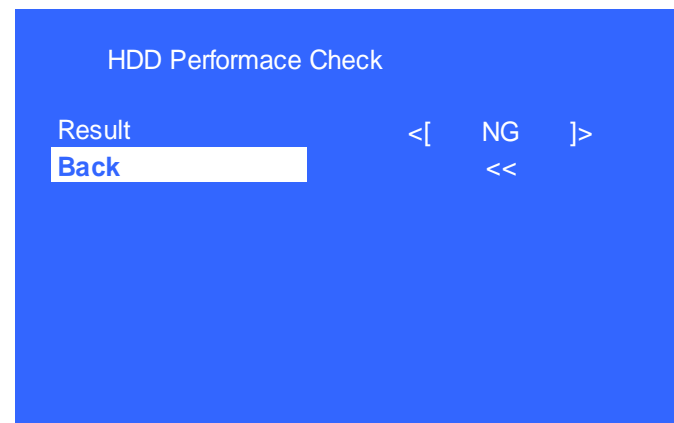
Result	<[NG]>
Back	<<

HDD RE-REGISTRATION

1) In "Service Mode", select "General Setting" by pressing "↑" or "↓" then pressing "Enter" or "→" button to enter inside.

2) Select "AAA" by pressing "↑" or "↓" then pressing "Enter" or "→" button to enter inside.

Service Mode	
Model Information	>>
Self diagnosis History	>>
Video / Audio	>>
Panel / PQ	>>
General Setting	>>
Tuner	>>
Wifi / BT	>>

[</>] Set [Home]Exit

General Setting	
Back	<<
Aging mode	<[On/Off]>
HDD Performance Check	>>
AAA	>>
Update CI+ Credentials	>>
Boot count reset	>>
ECS Enable	<[On/Off]>

[</>] Set [Home]Exit
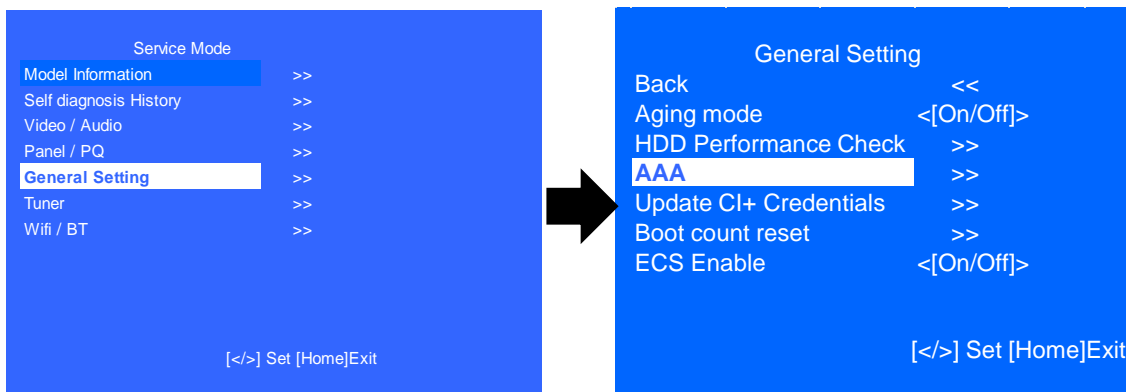
3) Result **OK** or **NG** will be displayed after HDD re-registration is succeed/failed.

HDD Performace Check

Result	<[NG]>
Back	<<
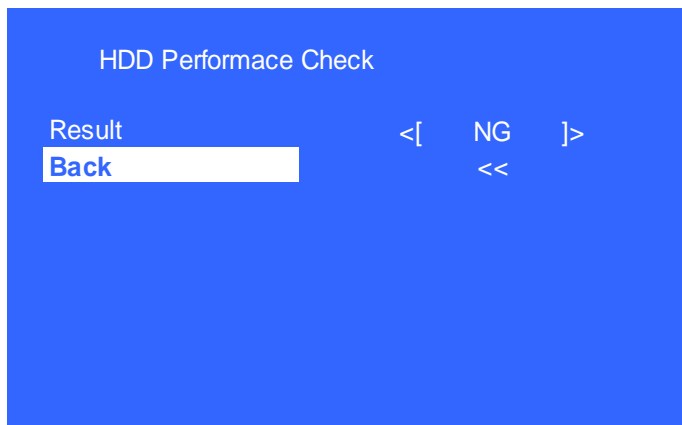
SEC 3. TROUBLE SHOOTING

3-1. TRIAGE

Chart of triage information
1. Confirm the claimed symptom.
2. Select that symptom from the chart.
3. Bring all the boards and cables listed for that symptom.
4. Follow the troubleshooting charts in the technical guides to isolate the board.
5. Chart Color Code.

RED DOT: Most likely defective part
BLUE TRIANGLE: Secondary possible defective part
BLACK TEXT: Board that may correct the symptom

Reference	Symptoms - Shutdown. Power LED blinking red diagnostics sequences									No Power	Video - missing or distorted			Remote	Network	Audio	Skype	Smart Core	Bluetooth (BT)
	2	3	4	5	6	7	8	9	10	No White Power LED & does not reponse to remote (Dead Set)	Stationary colored lines or dots	No video One of Inputs	No video all Inputs	No Remote	Wireless can't connect	No Audio	Skype Can't Work	Smart Core no LED (Set is still alive)	Bluetooth / One Step Remote (OSR) can't connect
B* Board	▲	●	▲	▲	▲	●	●			▲	▲	●	●	▲	▲	●	▲	▲	▲
G* Board	●	▲	▲	▲	●					●						▲			
H* Board										▲				●				●	
K* Board		▲														●			
Speaker		▲														●			
Wifi & BT Module							●								●		▲		●
LD* Board		●											▲						
V By One FFC				▲							▲		▲						
Tcon				●					▲		▲		▲						
LCD Panel			▲	●	●	▲					●		▲						
Problem	Power	Power / Audio / Local I2C	LD	Panel (Communication)	Panel (Backlight)	TEMP / Local UART	Software		Emitter										

3-2. NO POWER

3-2-1. NO POWER-PCU

```
┌─────────────┐
│  No Power   │
└─────────────┘
       │
       ▼
  ╱─────────────╲           ╱─────────────╲
 ╱ Check STBY 3.3V ╲  NG   ╱   Replace      ╲  NG   ┌──────────┐
│     C9030        │────▶ │ Between G* Board to │────▶│ G* Board │
 ╲  On B* board   ╱       ╲ B* Board Harness ╱       └──────────┘
  ╲─────────────╱           ╲─────────────╱
       │ OK                      │ OK
       │                         ▼
       │                   ┌──────────┐
       │                   │ Harness  │
       │                   └──────────┘
       ▼
┌─────────────┐
│  B* Board   │
└─────────────┘
       │
       ├──────────▶ ┌──────────────────┐
       │            │  u-Com Failure   │
       │            └──────────────────┘
       ├──────────▶ ┌──────────────────┐
       │            │   DDCON/LDO      │
       │            └──────────────────┘
       └──────────▶ ┌──────────────────┐
                    │ Main Device Failure │
                    └──────────────────┘
```

3-2-2. NO POWER-U-Com Failure (1/2)

START

Check C9117 Voltage. Is the voltage >3.0V? — No → Check +3.3V_STBY R9144, CN9000 #26pin

Yes

Check R9186 Voltage. Is the voltage >3.0V? — No → Check DC_OFF_DET IC9018

Yes

Check OPWRSB R9179 Voltage. Is the voltage 0V? — No → Check STBY_MHL R9176 Voltage. Is the voltage >3.0V? — No → SOC Muffin problem

Yes (STBY_MHL) → No problem TV set stays in STBY MHL charge mode.

Yes

Check POWER_ON P-on ucom #pin19 Is the voltage >3.0V? — No → Try AC Off and On after few minutes. If #pin19 keep Low, change IC9017. If #pin19 goes High few seconds and downs to Low, Check G board and harness.

Check P_ON_LNB P-on ucom #pin15 Is the voltage >3.0V? — No → Change IC9017

Yes

Check MAIN_VCC R9175 Voltage. Is the voltage >1.6V? — No → G-Board

Yes

Check P_ON_VBUS P-on ucom #pin11 is >3.0V? — No → Change IC9017

Yes

Check P_ON_#1 P-on ucom #pin13 is >3.0V? — No → Change IC9017

Yes

Check PGOOD_1 R9173 Voltage. Is the voltage >3.0V? — No → No POWER - DDCON/LDO Check 1.0V DDCON (IC9008)

A

To the next page

3-2-2. NO POWER-U-Com Failure (2/2)

A

Yes

Check P_ON_#2
P-on ucom #pin14
Is the voltage >3.0V? — No → Change IC9017

Yes

Check ORESETB
P-on ucom #pin12
Is the voltage >3.0V? — No → Change IC9017

Yes

Check X_SYSTEM_RST
P-on ucom #pin16
Is the voltage >3.0V? — No → Change IC9017

Yes

If PANEL_PWER_ON (R9172) is 0V
Check XRST
P-on ucom #pin17
Is the voltage >3.0V? — No → Change IC9017

Yes

If BL_MUTE (R9174) is 0V
Check BL_ON
P-on ucom #pin18
Is the voltage >3.0V? — No → Change IC9017

Yes

END
Ucom IC9017 is working OK

3-2-3. NO POWER: DC_OFF_DET check

```
          ┌─────────┐
          │  START  │
          └─────────┘
               │
               ▼
         ╱───────────╲
        ╱  Check Vdd  ╲      No      ┌──────────────────────────┐
        ╲   C9118     ╱──────────────▶│      Change IC9018        │
         ╲Is voltage >5V?╱            └──────────────────────────┘
               │
              Yes
               ▼
          ┌─────────┐
          │   END   │
          └─────────┘
```

3-2-4. NO POWER: DDCONs check

```
          ┌─────────┐
          │  START  │
          └─────────┘
               │
               ▼
         ╱───────────╲
        ╱ Check fuse  ╲     No       ┌──────────────────────────┐
        ╲   F9xxx     ╱──────────────▶│       Change Fuse         │
         ╲ Is fuse OK? ╱              └──────────────────────────┘
               │
              Yes
               ▼
         ╱────────────────╲
        ╱ Check Vcc voltage╲  No      ┌───────────────────────────────────────┐
        ╲     C9xxx        ╱──────────▶│ Check POWER_ON P-on ucom #pin19        │
         ╲Is voltage >12.0V?╱          │ (Refer to No Power U-Com Failure)      │
               │                       └───────────────────────────────────────┘
              Yes
               ▼
         ╱────────────────╲
        ╱ Check Enable pin ╲  No       ┌──────────────────────────┐
        ╲    voltage       ╱───────────▶│   No Power U-Com Failure  │
         ╲Is voltage >2.5V?╱            └──────────────────────────┘
               │
              Yes
               ▼
       ┌──────────────────┐
       │  Change DDCON IC │
       └──────────────────┘
```

3-2-5. NO POWER: DDCON check

```
┌──────────────┐
│    START     │
└──────────────┘
         │
         ▼
  Check IC9403 Vcc voltage        Check Vcc voltage        Check
        C9428          No              C9061        No     D9000        No    ┌──────────────────────────┐
    Is voltage >12V?  ────▶        Is voltage >3V?  ────▶  Is diode ?  ────▶  │      Change D9000        │
         │                              │                     │               └──────────────────────────┘
         │ Yes                          │ Yes                 │ Yes
         ▼                              ▼                     ▼          ┌──────────────────────────┐
  Check Vcc voltage        No     Check                              │ Check G board and harness │
        C9061          ────▶      D9001        No    ┌──────────────────────────┐
    Is voltage >4V?             Is diode ?  ────▶    │      Change D9001        │
         │                         │                 └──────────────────────────┘
         │ Yes                     │ Yes
         ▼                         ▼          ┌──────────────────────────────────┐
  Check Enable        No                 │ Check +5V_MAIN DDCON (IC9001)    │
  IC9010 #pin1    ────▶    ┌──────────────────────────┐
  Is voltage >2.5V?        │      Change IC9010       │
         │                 └──────────────────────────┘
         │ Yes
         ▼
┌──────────────┐
│ Change DDCON │
│    IC9009    │
└──────────────┘
```

3-2-6. NO POWER: LDOs check check

```
          ┌─────────────┐
          │    START     │
          └──────┬──────┘
                 │ Yes
                 ▼
        ╱───────────────╲                    ┌─────────────────────────────────┐
       ╱  Check Vcc voltage ╲      No         │                                 │
      ╱       C9xxx          ╲──────────────▶ │  Check +3.3V_MAIN DDCON (IC9003) │
       ╲  Is voltage >3V?    ╱                │                                 │
        ╲───────────────╱                    └─────────────────────────────────┘
                 │ Yes
                 ▼
        ╱───────────────╲                    ┌─────────────────────────────────┐
       ╱  Check Enable pin  ╲     No          │                                 │
      ╱      voltage         ╲──────────────▶ │      No Power U-Com Failure      │
       ╲  Is voltage >3V?    ╱                │                                 │
        ╲───────────────╱                    └─────────────────────────────────┘
                 │ Yes
                 ▼
          ┌─────────────┐
          │ Change LDO IC │
          └─────────────┘
```
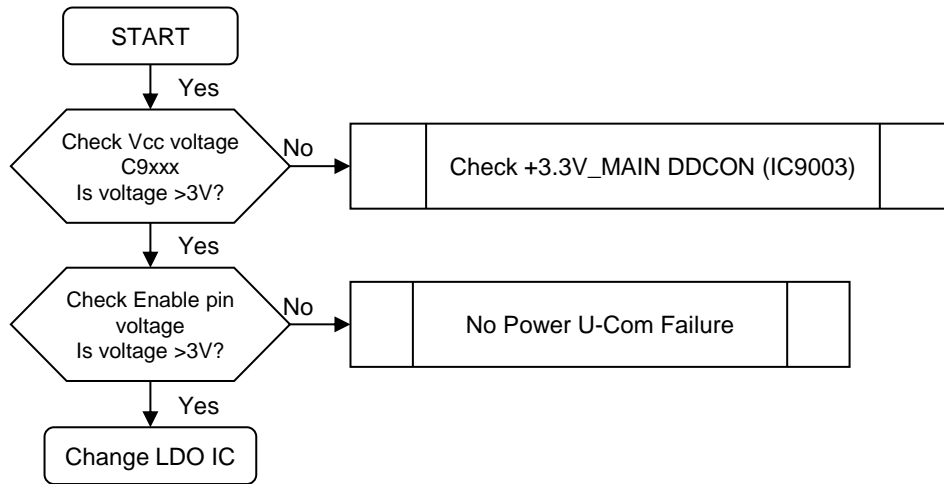
3-3. STANDBY LED BLINKING

3-3-1. 2 Times Blinking (Main power Error)

```
┌─────────────────────┐
│   2-time blinking   │
└─────────────────────┘
           │
           ▼
    ╱─────────────────╲
   ╱ Check +12V_REG    ╲        Yes    ┌──────────────┐
  ╱ at pin 13/15/17 of  ╲──────────────│   G* Board   │
   ╲ CN9000 on B* Board,╱              └──────────────┘
    ╲ Voltage > 13.2V ? ╱
     ╲─────────────────╱
           │ No
           ▼
    ┌──────────────┐
    │   B* Board   │
    └──────────────┘
```
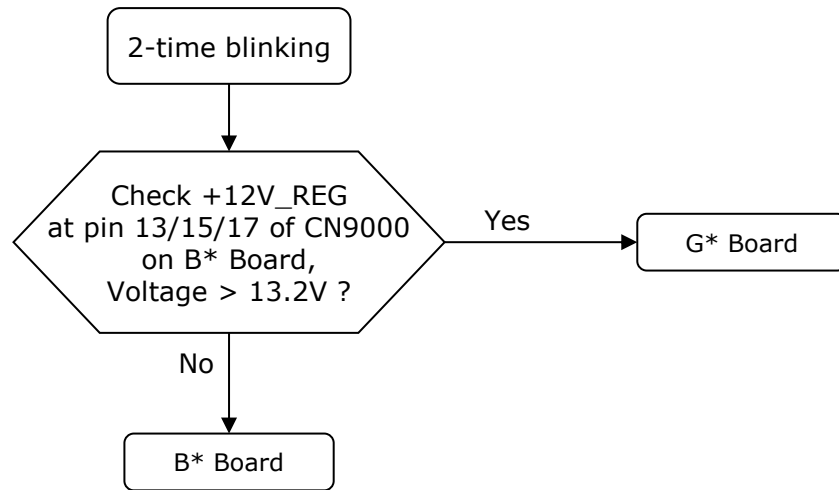
3-3-2. 3 Times Blinking (DC Alert)

BMFL/BMFW board

```
┌─────────────────────┐
│   3-time blinking   │
└─────────────────────┘
           │                        DC_ALERT
           ▼
    ╱─────────────────╲
   ╱ Check +5.0V_MAIN  ╲   NG    ┌──────────────┐
  ╱ at pin1 in IC8001,  ╲────────│  IC9014,etc  │
   ╲ 4.959V             ╱        │  (B* Board)  │
    ╲<Voltage<5.285V?  ╱         └──────────────┘
     ╲─────────────────╱
           │ OK
           ▼
                                 ┌──────────────────────┐
                                 │              AUDIO   │
                                 │ Go to Audio check point│
                                 └──────────────────────┘
                                            │
    ┌──────────────────────┐                ▼
    │            TUNER      │      ┌──────────────────────┐
    │ Go to Tuner check point│     │              HDMI    │
    └──────────────────────┘       │ Go to HDMI check point│
                                   └──────────────────────┘
```
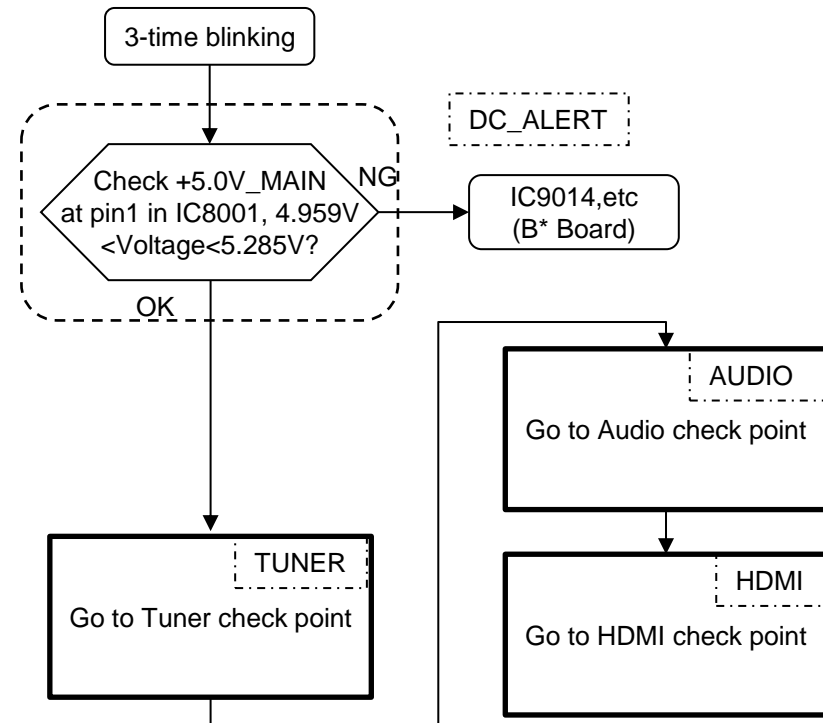
3-3-3. 3 Times Blinking (Tuner Error)

BMF* board

```
                        ┌──────────────────┐
                        │  3-time blinking │
                        └──────────────────┘
                                  │
                                  ▼
                           ╱──────────╲              No    ┌──────────────────┐
                          ⟨ Tuner Error ? ⟩─────────────────│  See other flows │
                           ╲──────────╱                    └──────────────────┘
                                  │ Yes
                                  ▼
     ╱──────────────────────────────────────────────╲  NG
    ⟨ Check the voltage of Main Tuner I2C / JL6010, JL6011 ⟩──────
    ⟨ Check the voltage of Sub Tuner I2C (EU,JP only) / JL6021,  ⟩
     ╲ JL6022                                        ╱
                                  │ OK
```

[except JP:R6001,R6002,C6004,C6005,R1468,R1469]
[JP,EU:R6003,R6004,C6006,C6007,R1466,R1467]
[JP only:R6005,R6006]
[If these parts are OK, check Muffin]

Check TU_3.3V / JL6005
Check TU_1.8V (except UC) / JL6006
Check TU_DEM_3.3V (except UC) / JL6019
Check TU_1.1V(JP/FB6800 tuner-side)

NG

[FB6001,C6002,C6003]
[FB6004,C6014,C6015]
[FB6006,C6020,C6021]
[FB6800,C6800]
[If these parts are OK, go to DDCON troubleshooting]

OK

Check TU_12V(EU,JP only)/JL 6027

NG

[go to "NO PICTURE@Tuner"]

OK

[Change Tuner Module](UC:TU6000,PAD/LA-ISDB/CH/HK:TU6001,EU:TU6003,JP:TU6802)

3-3-4. 3 Times Blinking (Audio Error)

```
┌──────────────────┐                                              ╱────────────╲
│  LED 3x blinking │                                             ╱ Segment "XS"? ╲───── Yes ──┐
└──────────────────┘                                             ╲                ╱           │
         │                                                        ╲──────┬───────╱            │
         ▼                                                               │                    │
   ╱──────────╲        No      ┌────────────────┐                       No                    ▼
  ╱ Audio Error?╲─────────────▶│ See other flow │                        │        ╱──────────────────╲    Yes   ┌────────────────┐
  ╲             ╱               └────────────────┘                        │       ╱ Replace B-K Harness╲───────▶│ B-K harness NG │
   ╲──────────╱                                                           │       ╲      OK ?          ╱         └────────────────┘
         │                                                                │        ╲──────────────────╱
        Yes                                                               │               │
         ▼                                                                │              No
┌────────────────────┐                                                    │               ▼
│   Go to page       │                                                    │        ╱──────────────────╲    Yes   ┌────────────────┐
│ Power Off Checking*1│                                                   │       ╱   Replace K-PWB    ╲───────▶│   K-PWB NG     │
└────────────────────┘                                                    │       ╲      OK ?          ╱         └────────────────┘
         │                                                                │        ╲──────────────────╱
         ▼                                                                │               │
┌────────────────────┐                                                    │              No
│   Go to page       │                                                    │               ▼
│ Power off Checking*2│                                                   │        ╱──────────────────╲    Yes   ┌────────────────┐
└────────────────────┘                                                    └──────▶╱   Replace B-PWB    ╲───────▶│   B-PWB NG     │
         │                                                                        ╲      OK ?          ╱         └────────────────┘
         └────────────────────────────────────────────────────────────────────────╲──────────────────╱
```
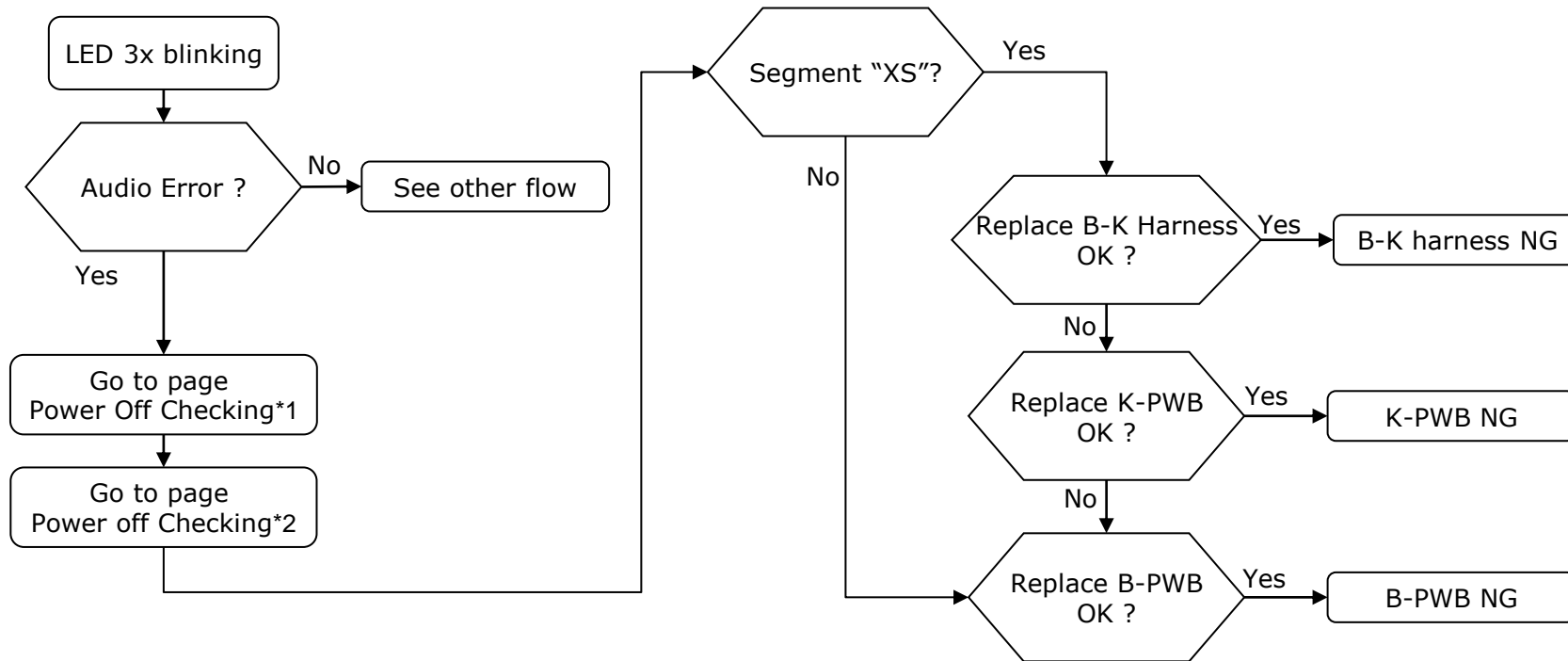
1) Power Off Checking*1

Note 1:

(1) PVDD-GND short check
Measure impedance between PVDD and GND at C7706, C7707.
If impedance is <100Ω → NG

(2) LDO out short check
Measure impedance between +3.3V and GND at C9130.
If impedance is <100Ω → NG

(3) Fuse open check
Measure impedance of fuse F7700, F7702 5A (12.5V)
If fuse open → NG

Note 2:

(1) PVDD-GND short check
Measure impedance between PVDD and GND at C7722, C7762, C7782, C7834.
If impedance is <100Ω → NG

(2) LDO out short check
Measure impedance between +3.3V and GND at C7909.
If impedance is <100Ω → NG

(3) Fuse open check
Measure impedance of fuse
F7702, F7704, F7705, F7701 5A (12.5V)
F7700 3.15A (DDC5V)
If fuse open → NG

Power Off Check*1

Segment "XS"?
Yes
No

(1) B-PWB PVDD-GND short ? (See Note 1)
Yes
No

(2) B-PWB LDO out short ? (See Note 1)
Yes
No

(3) B-PWB Fuse broken ? (See Note 1)
Yes
No

Replace B-PWB

(1) K-PWB PVDD-GND short ? (See Note 2)
Yes
No

(2) K-PWB LDO out short ? (See Note 2)
Yes
No

(3) K-PWB Fuse broken ? (See Note 2)
Yes
No

Replace K-PWB

Power Off Check*3

Measure the Speaker impedance by multi-meter Less than 3Ω ?
Yes
No

Replace Speaker

Confirm the speaker harness Cut or shorted to the chassis ?
Yes
No

Replace Speaker Harness

Return to LED 3x blinking or Power Off Checking*3

2) Power Off Checking*2

(4) 12.5V check BMFL / BMFW
Measure voltage between PVDD and GND at
capacitor C7706 or C7707.(See 3.3)
Voltage rise more than 0V for a moment at
power on
→ Yes

(5) 12.5V check KS-PWB (XS)
Measure voltage between PVDD and GND at
capacitor C7722, C7762, C7782 or C7834. (See
3.3)
Voltage rise more than 0V for a moment at
power on
→ Yes

```
        ┌─────────────────────┐
        │  Power Off Check*2  │
        └─────────────────────┘
                   │
              ╱───────────╲       Yes
             ╱ Segment "XS"?╲──────────────────────────────┐
             ╲             ╱                                │
              ╲───────────╱                                 │
                   │ No                                     │
        ╱──────────────────────╲              ╱──────────────────────╲   Yes
       ╱   (4) 12.5V check       ╲   Yes     ╱   (5) 12.5V check        ╲──────┐
      ╱   12.5V is supplied to    ╲─────┐   ╱   12.5V is supplied to     ╲     │
      ╲   B-PWB for a moment      ╱     │   ╲   K-PWB for a moment       ╱     │
       ╲ before LED 3x brinking ?╱      │    ╲ before LED 3x brinking ? ╱      │
        ╲──────────────────────╱        │     ╲──────────────────────╱        │
                   │ No                  │                │ No                 │
        ╱──────────────────────╲  Yes    │    ╱──────────────────────╲  Yes    │
       ╱  Replace B-K Harness    ╲───────┤   ╱  Replace G-K Harness    ╲───────┤
       ╲        OK ?            ╱         │   ╲        OK ?            ╱         │
        ╲──────────────────────╱         │    ╲──────────────────────╱         │
                   │ No                   │               │ No                 │
        ╱──────────────────────╲  Yes     │   ╱──────────────────────╲  Yes     │
       ╱    Replace G-PWB        ╲────────┤  ╱    Replace G-PWB        ╲────────┤
       ╲        OK ?            ╱          │  ╲        OK ?            ╱          │
        ╲──────────────────────╱          │   ╲──────────────────────╱          │
                   │ No                    │              │ No                   │
        ┌──────────────────┐       ┌────────────┐  ┌──────────────────┐  ┌────────────┐
        │    Return to     │◄──────│   Finish   │  │    Return to     │◄─│   Finish   │
        │ LED 3x blinking  │       └────────────┘  │ LED 3x blinking  │  └────────────┘
        └──────────────────┘                       └──────────────────┘
```

3) Power Off Checking*3

```
┌─────────────────┐
│   No Sound      │
│  Without LED 3x │
└─────────────────┘
         │
         ▼
   ╱─────────────────╲                    ┌──────────────────────────┐
  ╱ AV receiver is     ╲      Yes          │ Select [External Inputs]→│
 ╱  connected to HDMI in?╲───────────────→ │ [BRAVIA Sync Settings]→  │
  ╲                     ╱                   │ [BRAVIA Sync Control]→[off]│
   ╲───────────────────╱                   └──────────────────────────┘
         │ No
         ▼
   ╱─────────────────╲       Yes           ┌──────────────────────┐
  ╱ [Speakers] setting ╲──────────────────→│ Change the setting to│
 ╱  is [Audio System]? ╲                    │   [TV Speakers]      │
  ╲───────────────────╱                     └──────────────────────┘
         │ No
         ▼
   ╱─────────────────╲       Yes           ┌──────────────────────────┐
  ╱ Headphone is       ╲──────────────────→│ Disconnect the Headphone │
 ╱  connected to       ╲                    └──────────────────────────┘
  ╲ HP/Audio Out terminal?╱
   ╲───────────────────╱
         │ No
         ▼
   ╱─────────────────╲                     ╱─────────────────╲      Yes
  ╱ [Sound]→          ╲      Yes          ╱ Change [Sound]→   ╲───────────→
 ╱ [Headphone Speaker  ╲────────────────→╱ [Headphone Speaker  ╲
  ╲ Link] setting is [On]?╱               ╲ Link] to [Off], OK? ╱
   ╲───────────────────╱                   ╲───────────────────╱
         │ No                                     │ No
         ▼                                        ▼
┌──────────────────┐                      ┌──────────────────┐
│    Go to         │                      │  Replace B-PWB   │
│ Power Off Checking*1│                   └──────────────────┘
└──────────────────┘            HP/Audio out terminal or Headphone detect
                                GPIO may be broken
```

```
   ╱─────────────────────╲       Yes        ┌──────────────────┐
  ╱ No sound only          ╲────────────────→│    Go to         │
 ╱ Analog RF and Digital RF?╲                │ No Sound Tuner   │
  ╲─────────────────────────╱                └──────────────────┘
         │ No
         ▼
   ╱─────────────────╲       Yes            ┌──────────────────┐
  ╱ No sound only      ╲──────────────────→ │    Go to         │
 ╱  HDMI?             ╲                      │ No Sound HDMI    │
  ╲───────────────────╱                     └──────────────────┘
         │ No
         ▼
┌──────────────────┐
│    Go to         │
│ No Sound Audio   │
└──────────────────┘
```

3-3-5. 3 Times Blinking (HDMI EQ Error)

BMFL/BMFW board

```
┌──────────────────┐
│  3-time blinking │
└──────────────────┘
          │
   ╱──────────────╲
  ╱     Check      ╲       NG   ┌─────────┐
 ╱ VS GND impedance ╲──────────▶│ IC5212  │
 ╲   of +1.0V_HDMI  ╱           └─────────┘
  ╲ at HDMI EQ side╱
   ╲  (ex.C5335)  ╱
    ╲────────────╱
          │ OK
   ╱──────────────╲
  ╱     Check      ╲       NG   ┌─────────┐
 ╱ VS GND impedance ╲──────────▶│ IC5212  │
 ╲ of EQ_+3.3V_MAIN ╱           └─────────┘
  ╲ at HDMI EQ side ╱
   ╲  (ex.C5317)   ╱
    ╲─────────────╱
          │ OK
   ╱──────────────╲
  ╱     Check      ╲       NG   ┌─────────┐
 ╱ VS GND impedance ╲──────────▶│ IC5212  │
 ╲  of +5V_BOSTON   ╱           └─────────┘
  ╲ at HDMI EQ side ╱
   ╲  (ex.C5351)   ╱
    ╲─────────────╱
          │ OK
```

```
   ╱──────────────╲
  ╱     Check      ╲       NG   ┌───────────┐
 ╱  I2C_C bus signal╲─────────▶│  IC5212   │
 ╲   at CL5259 and  ╱          │ Or IC1000 │
  ╲    CL5261.      ╱          └───────────┘
   ╲──────────────╱
          │ OK
   ╱──────────────╲
  ╱     Check      ╲
 ╱    Voltage       ╲
 │  of +1.0V_HDMI,  │     NG   ┌──────────┐
 │ EQ_+3.3V_MAIN,   ├────────▶│  Power,  │
 │  +5V_BOSTON      │          │  DDCON   │
 │ at HDMI EQ side  │          └──────────┘
 │ (ex.C5335, C5317,│
 ╲  and C5351, )    ╱
   ╲──────────────╱
          │ OK
   ╱──────────────╲          ┌──────────────────┐
  ╱     Check      ╲         │    X'tal or      │
 ╱   Frequency of X'tal╲  NG │  around parts.   │
 │    (X5202)       ├───────▶│    X5202,        │
 ╲    27MHz?        ╱        │ R5478(100ohm),   │
   ╲──────────────╱          │ R5368(1Mohm)     │
          │ OK               │ C5298(10pF)      │
   ┌──────────┐              │ C5297(12pF)      │
   │  IC1000  │              └──────────────────┘
   └──────────┘
```

3-3-6. 4 Times Blinking (LED Voltage Error)

```
┌──────────────────┐
│  4-time blinking │
└──────────────────┘
         │                    Between 0.898V to 2.997V
         ▼
    ╱──────────╲                  ┌────────────────────────────────┐
   ╱   Check    ╲                 │   LED driver or G* board       │
  ╱    R9027     ╲───────────────▶│                                │
   ╲ on the B* Board╱              │  ➢ Change LD board or G* board.│
    ╲──────────╱                   └────────────────────────────────┘
         │
 0.897V or less
         │
         ▼
┌──────────────────┐
│     B* Board     │
└──────────────────┘
```

3-3-7. 5 Times Blinking (Panel Communication Error)

```
┌─────────────────┐
│ 5-times blinking │
└─────────────────┘
         │
         ▼
  ⬡ Check
    "+12.5V_TCON" at ──NG──▶ ⬡ Replace G-Board ──OK──▶ ┌─ G-Board is ─┐
    CN9000                                              │ suspicious   │
    on the B-Board                          │NG         └──────────────┘
         │OK    ◀─────────────────────────────┘
         ▼
  ⬡ Replace the Harness ──Symptom improve──▶ ┌─ Harness is ─┐
    Between G-Board                           │ suspicious   │
    and B-Board                               └──────────────┘
         │NG
         ▼
  ⬡ Replace ──Symptom improve──▶ ┌─ V-By-One FFC ─┐
    the V-By-One FFC              │ is suspicious  │
         │NG                      └────────────────┘
```

⬡ Change B-Board ──NG──▶ ┌─ Change Panel (T-con) ─┐

Change B-Board — Symptom improvement — B-Board is suspicious

Change Panel (T-con) — Symptom improvement — Panel (T-Con) is suspicious

3-3-8. 6 Times Blinking (Backlight Error)

6-times blinking

Check a voltage of BL_ERR_DET. Check point is JL9007 or 23pin of CN9000 on B*Board

Voltage ≥ 1.9 V

Voltage < 1.8 V

Check harness/connection G*board to B*Board or LD board to B*Board

Harness / Connection broken

Harness / Connection OK

Change harness

Symptom Improvement

Harness

No improvement

LED driver or G* board
➢ Change LD board or G* board.

Symptom Improvement

LD board/G board

No improvement

Change Panel

Symptom Improvement

Panel

No Improvement

Change B* board

Symptom Improvement

B* Board

3-3-9. 7 Times Blinking (Temperature Error)

```
┌──────────────────┐
│  7-time blinking │
└──────────────────┘
         │
         ▼
   ╱──────────────╲
  ╱   Setting      ╲        No      ┌──────────────────┐
 ╱ circumstance is  ╲──────────────▶│  Set to another  │
 ╲ OK? Temperature, ╱               │  location, etc.  │
  ╲ Ventilation,etc╱                └──────────────────┘
   ╲──────────────╱
      Yes │
          ▼
   ╱──────────────╲
  ╱ Change B* Board,╲       NG      ┌──────────────────┐
  ╲ and Aging a few ╱──────────────▶│       Panel      │
   ╲    hours      ╱                └──────────────────┘
    ╲────────────╱
         │ Symptom
         │ improvement
         ▼
┌──────────────┐        ╱──────────────╲
│              │       ╱ Check I2C_C bus ╲    Yes   ┌──────────────┐
│ B* Board NG  │──────▶╲ communication OK?╱────────▶│ Temp sensor  │
│              │        ╲(check next page)╱         │   IC1400     │
└──────────────┘         ╲──────────────╱           └──────────────┘
                              │ No
                              ▼
                     ┌──────────────────┐
                     │ I2C_C bus dumping│
                     │  or Muffin check │
                     └──────────────────┘
```

3-4. NO SOUND

3-4-1. No Sound Audio

```
        ┌──────────────┐
        │   No Sound   │
        │    Audio     │
        └──────┬───────┘
               │
          ╱────┴────╲
         ╱           ╲  Yes
        ⟨ Segment "XS"? ⟩──────────┐
         ╲           ╱             │
          ╲────┬────╱             │
               │ No               │
               │             ╱────┴──────╲
               │            ╱             ╲  Yes
               │           ⟨ Replace B-K Harness ⟩──────┐
               │            ╲    OK ?     ╱             │
               │             ╲───┬───────╱             │
               │                 │ No                  │
               │            ╱────┴──────╲              │
               │           ╱             ╲  Yes         │
               │          ⟨ Replace K-PWB ⟩────────────┤
               │           ╲    OK ?     ╱             │
               │            ╲───┬───────╱              │
               │                │ No                   │
               │           ╱────┴──────╲               │
               └──────────╱             ╲  Yes          │
                         ⟨ Replace B-PWB ⟩─────────────┤
                          ╲    OK ?     ╱              │
                           ╲───────────╱               │
                                                       │
                          ┌──────────┐                 │
                          │  Finish  │◄────────────────┘
                          └──────────┘
```

3-4-2. No Sound : TUNER

```
        ┌──────────────────────────┐
        │ No Sound with normal picture │
        └──────────┬───────────────┘
                   │
              ╱────┴────╲           NO
             ╱           ╲ ──────────────────┐
            ⟨ Only RF tuner input? ⟩          │
             ╲           ╱                    │
              ╲────┬────╱                     │
                   │ YES                      │
        ┌──────────┴───────┐      ┌──────────┴────────┐
        │ Check IC1000 (SOC) │      │ Please refer Audio │
        └──────────────────┘      │  troubleshooting   │
                                  └───────────────────┘
```

3-4-3. No Sound : MHL

```
                    ┌─────────────────────┐
                    │      No Sound        │
                    └─────────────────────┘
                              │
                              ▼
                                        NG
                    ◇ Check the picture ──────────►  ┌──────────────────────────┐
                                                     │  Refer to MHL NO PICTURE  │
                              │                      └──────────────────────────┘
                             OK
                              │
                              ▼
                                              OK
           ◇ Check Sound by other TV set ──────────► ┌──────────────────────────┐
             which is same model                     │  Refer to No Sound Audio  │
                              │                       └──────────────────────────┘
                             NG
                              │
                              ▼
           ◇ Check Source equipment
             by Reference TV set                OK
             (For example, Samsung TV(UN46ES7000), ──────► ┌──────────────────────┐
             Toshiba TV(42WL863), RB1 or RB2)              │   Change B-Board.     │
                              │                            └──────────────────────┘
                             NG
                              │
                              ▼
                    ┌─────────────────────┐
                    │ Check the settings of│
                    │  Source equipment    │
                    └─────────────────────┘
```

3-4-4. No Sound : HDMI1/2/3/4

```
                    ┌─────────────────┐
                    │    No Sound     │
                    └─────────────────┘
                             │
                             ▼
              ╱──────────────────────────╲      NG      ┌──────────────────────────────────┐
              ╲    Check the picture      ╱ ──────────► │ Refer to HDMI (1/2/3/4) NO PICTURE│
               ╲────────────────────────╱              └──────────────────────────────────┘
                        │
                        │ OK
                        ▼
              ╱──────────────────────╲   DVI    ╱──────────────────────╲  YES   ┌──────────────────────────────────────────────────────────┐
              ╲   Check the mode       ╱───────►╲  Does this model have  ╱──────►│ Connect Stereo minijack cable between Source and the TV, and│
               ╲ of Source equipment  ╱          ╲  Analog Audio In      ╱       │ Change "HDMI/DVI Audio Source" to Auto or Analog Audio In.  │
                ╲────────────────────╱            ╲ (Stereo minijack)?  ╱        └──────────────────────────────────────────────────────────┘
                        │                          ╲──────────────────╱  No     ┌──────────────────────────────────────────────────┐
                        │ HDMI                             │           ────────►│ Change the mode of Source equipment to HDMI       │
                        ▼                                                        └──────────────────────────────────────────────────┘
              ╱──────────────────────╲  YES    ╱──────────────────────╲  Analog Audio In  ┌──────────────────────────────────────────────────────┐
              ╲  Does this model have  ╱───────►╲ "HDMI/DVI Audio Source"╱─────────────────►│ Change "HDMI/DVI Audio Source" to Auto or HDMI Audio In│
               ╲ Analog Audio In       ╱         ╲    setting is?        ╱                   └──────────────────────────────────────────────────────┘
                ╲(Stereo minijack)?   ╱           ╲────────────────────╱
                 ╲──────────────────╱         Auto or HDMI Audio
                        │ NO
                        ▼
              ╱──────────────────────────╲  OK                          ┌─────────────────────────┐
              ╲ Check Sound by other TV set ╱──────────────────────────►│  Refer to No Sound Audio │
               ╲ which is same model        ╱                            └─────────────────────────┘
                ╲──────────────────────────╱
                        │ NG
                        ▼
              ╱──────────────────╲  NO       ╱──────────────────────────╲  OK   ┌──────────────────┐
              ╲ Is Distributor used ? ╱──────►╲ Check Source equipment    ╱─────►│ Change B-Board.  │
               ╲──────────────────╱            ╲ by Reference TV set       ╱      └──────────────────┘
                        │ YES                   ╲(For example, RB2, RB1)  ╱
                        ▼                         ╲──────────────────────╱
              ┌─────────────────┐                        │ NG
              │ Connect Source   │                        ▼
              │ equipment directly│              ┌─────────────────────┐
              └─────────────────┘               │ Check the settings of│
                                                 │ Source equipment     │
                                                 └─────────────────────┘
```

3-5. NO PICUTURE

```
No Picture
```

```
Got Any Normal Display?
```
No →
```
Check Smart Core Behavior (5x Blinking)
```
No →
```
Check BL_ON on the main board
```

BL_ON (L or H): **IC9017 #18pin (for 4K BMFW/BMFL board)**

BL_ON：H
```
Replace the V by One FFC Harness
```
NG →
```
Replace the main Board
```
NG →
```
LCD Panel (T-CON)
```

Yes ↓
```
Check Other Portion:
```

Yes ↓
```
5x Blinking
```

BL_ON：L ↓
```
Backlight
```

Symptom improvement ↓
```
V by One FFC Harness
```

Symptom improvement ↓
```
Main board NG
```

→ **Ext. Video Input - No Picture**

→ **HDMI - No Picture**

↓ **Tuner - No Picture**

3-5-1. No Picture AEP Destination (BMFL/BMFW) SCART

```
                                No Picture AEP
```

SCART RGB No Picture path:

- Check SCART_FB IC1000 L37 [SOY0] at R7514
  - NG [LOW: 0V] → * Check CN7501 Connection
    - OK → ** Detailed check all parts at SCART_FB signal Path [VD7504/R7513]
      - NG → **Parts Broken**
      - OK → ** Detailed check all parts at CN7501 along signal path at Pin No:
        - 7 : [VD7503/R7503/C7501/R7504]
        - 11 : [VD7502/R7506/C7503/R7507]
        - 15 : [VD7501/R7510/C7506/R7511]
          - NG → **Parts Broken**
          - OK → **CN7501 Connector Problem**
    - NG → **CN7501 Connectivity Problem**
  - OK [HIGH: 0.4V → Composite]
    OK [HIGH: 3V → RGB]
    - Check wave between C7502/C7505/C7507 and IC1000
      - NG (Vpp: 0 V) → (to CN7501 signal path check)
      - OK (Vpp: 1 V) → **Muffin [IC1000] Problem**

SCART CVBS No Picture path:

- Check SCART_FB IC1000 L37 [SOY0] at R7514
  - NG [LOW: 0V] → * Check CN7501 Connection
    - NG → (to CN7501 along signal path)
    - OK → ** Detailed check all parts at SCART_FB signal Path [VD7504/R7513]
      - NG → (to CN7501 along signal path)
      - OK → Detailed check all parts at CN7501 along signal path at Pin No:
        - 20 : [D7505/R7518/C7510/R7599/R7519]
          - NG → **Parts Broken**
          - OK → **CN7501 Connectivity Problem**
  - OK [HIGH: 0.4V → Composite]
    OK [HIGH: 3V → RGB]
    - Check wave between C7511 and IC1000
      - NG (Vpp: 0 V) → (to CN7501 signal path check)
      - OK (Vpp: 1 V) → **Muffin [IC1000] Problem**
    - → **CN7501 Connector Problem**

[All voltage measurement using Oscilloscope]

* → OK Condition : No solder splash can be seen
  → NG Condition : Solder splash can be seen

** → OK Condition : No part short-circuited
  → NG Condition : Part short-circuited

3-5-2. No Picture AEP Destination (BMFL/BMFW) VIDEO

No Picture AEP

Video 2 No Picture

Check if input OSD is GREY OUT OK if it is highlighted

— NG → * Check J7504 Connection, VIDEO_DET At R7539

NG (Vpp: 0 V) →

OK (Vpp: 3.3 V) → ** Detailed check all parts at VIDEO_DET signal Path [R7535]

NG (Vpp: 0 V) →

OK (Vpp: 3.3 V) →

Check wave between C7512 and IC1000

NG (Vpp: 0 V) → ** Detailed check all parts at CVBS3P signal path [D7530/R7524/R7525]

NG →

OK →

OK (Vpp: 1 V) →

Muffin [IC1000] Problem

J7504 Connector Problem

J7504 Connectivity Problem

Component No Picture

Check if input OSD is GREY OUT OK if it is highlighted

— NG → * Check J7504 Con VIDEO_DET at R7539, CR_DET at R7538

NG (Vpp: 0 V) →

OK (Vpp: 3.3 V) → ** Detailed check all parts at VIDEO_DET signal Path [R7535] and CR_DET signal path [R7534]

NG (Vpp: 0 V) →

OK (Vpp: 3.3 V) →

Check wave Between C7515/C7518/C7520 and IC1000

NG (Vpp: 0 V) → ** Detailed check all parts at signal path of:
Y1P : [D7530/R7524/C7516/R7527]
PB1P : [VD7508/R7529/C7517/R7530]
PR1P : [VD7509/R7532/C7519/R7553]

NG →

OK →

OK (Vpp: 1 V) →

Parts Broken

Muffin [IC1000] Problem

J7504 Connector Problem

J7504 Connectivity Problem

Parts Broken

[All voltage measurement using Oscilloscope]

* → OK Condition : No solder splash can be seen
→ NG Condition : Solder splash can be seen

** → OK Condition : No part short-circuited
→ NG Condition : Part short-circuited

3-5-3. No Picture CH/MX/PA/COL/LA (BMFL/BMFW)

```
                              ┌─────────────────┐
                              │ No Picture Video │
                              └─────────────────┘
```

Video 1 No Picture

- Check if input OSD is GREY OUT — OK if it is highlighted
  - NG → * Check J7505 Connection, VIDEO2_DET At R7562
    - NG (Vpp: 0 V) → J7505 Connector Problem
    - OK (Vpp: 3.3 V) → ** Detailed check all parts at VIDEO2_DET Signal Path [R7561]
      - NG (Vpp: 0 V) → ** Detailed check all parts at CVBS2P signal path [D7514/R721/C7521/R7519/C7534]
        - NG → Parts Broken
        - OK → J7505 Connectivity Problem
      - OK (Vpp: 3.3 V) → J7505 Connector Problem
  - OK → Check wave between C7511 and IC1000
    - NG (Vpp: 0 V) → ** Detailed check all parts at CVBS2P signal path [D7514/R721/C7521/R7519/C7534]
    - OK (Vpp: 1 V) → Muffin [IC1000] Problem

Video 2 No Picture

- Check if input OSD is GREY OUT — OK if it is highlighted
  - NG → * Check J7504 Connection, VIDEO_DET At R7539
    - NG (Vpp: 0 V) → J7504 Connector Problem
    - OK (Vpp: 3.3 V) → ** Detailed check all parts at VIDEO_DET Signal Path [R7535]
      - NG (Vpp: 0 V) → ** Detailed check all parts at CVBS3P signal path [D7530/R7524/R7525]
        - NG → Parts Broken
        - OK → J7504 Connectivity Problem
      - OK (Vpp: 3.3 V) → J7504 Connector Problem
  - OK → Check wave between C7512 and IC1000
    - NG (Vpp: 0 V) → ** Detailed check all parts at CVBS3P signal path [D7530/R7524/R7525]
    - OK (Vpp: 1 V) → Muffin [IC1000] Problem

[All voltage measurement using Oscilloscope]

* → OK Condition : No solder splash can be seen
→ NG Condition : Solder splash can be seen

** → OK Condition : No part short-circuited
→ NG Condition : Part short-circuited

3-5-4. No Picture CH/MX/PA2/NZ/AUS/BR/COL/BR/UC/HK/TW (BMX)

```
                    ┌─────────────────────────┐
                    │    No Picture Video      │
                    └─────────────────────────┘
                                │
                    ┌─────────────────────────┐
                    │      Component           │
                    │      No Picture          │
                    └─────────────────────────┘
                                │
        Check if input OSD          NG      * Check J7504 Con          NG (Vpp: 0 V)
        is GREY OUT          ──────────►    VIDEO_DET at R7539,        ──────────────┐
        OK if it is highlighted            CR_DET at R7538                            │
                │                                    │                                │
               OK                           OK (Vpp: 3.3 V)                           │
                                                     │                                │
                                      ** Detailed check all parts     NG (Vpp: 0 V)   │
                                      at VIDEO_DET signal       ──────────────────────┤
                                      Path [R7535] and CR_DET                         │
                                      signal path [R7534]                             │
                                                │                                     │
                                         OK (Vpp: 3.3 V)                              │
                                                                                      │
                                                        ** Detailed check all parts   │
                                                        at signal path of:            │
        Check wave           NG (Vpp: 0 V)              Y1P : [D7530/R7524/C7514/   NG │
        Between          ─────────────────────────►    R7527]                         ●
        C7515/C7518/C7520                               PB1P : [VD7508/R7529/C7517/   │
        and IC1000                                      R7530]                        │
                │                                       PR1P : [VD7509/R7532/C7519/   │
          OK (Vpp: 1 V)                                 R7553]                        │
                                                                      OK              │
                │                 │                     │                             │
        ┌───────────────┐  ┌───────────────┐  ┌───────────────┐       ┌───────────────┐
        │ Muffin[IC1000]│  │ J7504 Connector│  │J7504 Connectivity│    │  Parts Broken │
        │   Problem     │  │   Problem      │  │   Problem      │       │               │
        └───────────────┘  └───────────────┘  └───────────────┘       └───────────────┘
```

* → OK Condition : No solder splash can be seen
  → NG Condition : Solder splash can be seen

** → OK Condition : No part short-circuited
   → NG Condition : Part short-circuited

3-5-5. No Picture J/UC/HK/TW Destination (BMFL/BMFW)

```
                                   ┌─────────────┐
                                   │  No Picture │
                                   └─────────────┘
```

Video1 No Picture

Check if input OSD is GREY OUT — OK if it is highlighted
- NG → * Check J7501 Connection, VIDEO2_DET At R7537
  - NG (Vpp: 0 V) →
  - OK (Vpp: 3.3 V) → ** Detailed check all parts at VIDEO2_DET Signal Path [R7556]
    - NG (Vpp: 0 V) →
    - OK (Vpp: 3.3 V) → J7501 Connector Problem
- OK → Check wave between C7511 and IC1000
  - NG (Vpp: 0 V) → ** Detailed check all parts at CVBS2P signal path [D7505/R7559/C7511etc]
    - NG → Parts Broken
    - OK → J7501 Connectivity Problem
  - OK (Vpp: 1 V) → Muffin [IC1000] Problem

Video2 No Picture

Check if input OSD is GREY OUT — OK if it is highlighted
- NG → * Check J7504 Connection, VIDEO_DET At R7539
  - NG (Vpp: 0 V) →
  - OK (Vpp: 3.3 V) → ** Detailed check all parts at VIDEO_DET Signal Path [R7535]
    - NG (Vpp: 0 V) →
    - OK (Vpp: 3.3 V) → J7504 Connector Problem
- OK → Check wave between C7512 and IC1000
  - NG (Vpp: 0 V) → ** Detailed check all parts at CVBS3P signal path [D7530/R7524/R7525]
    - NG → Parts Broken
    - OK → J7504 Connectivity Problem
  - OK (Vpp: 1 V) → Muffin [IC1000] Problem

[All voltage measurement using Oscilloscope]

* → OK Condition : No solder splash can be seen
  → NG Condition : Solder splash can be seen

** → OK Condition : No part short-circuited
   → NG Condition : Part short-circuited

3-5-6. No Picture J/UC/HK/TW Destination (BMFL/BMFW)

```
                    ┌─────────────────┐
                    │   No Picture    │
                    └─────────────────┘
                             │
                    ┌─────────────────┐
                    │    Component    │
                    │   No Picture    │
                    └─────────────────┘
                             │
```

Check if input OSD is GREY OUT OK if it is highlighted

— NG → * Check J7504 Con VIDEO_DET at R7539, CR_DET at R7538

— NG (Vpp: 0 V) →

OK (Vpp: 3.3 V) → ** Detailed check all parts at VIDEO_DET signal Path [R7535] and CR_DET signal path [R7534]

— NG (Vpp: 0 V) →

OK (Vpp: 3.3 V) → ** Detailed check all parts at signal path of:
Y1P : [D7530/R7524/C7514/R7527]
PB1P : [VD7508/R7529/C7517/R7530]
PR1P : [VD7509/R7532/C7519/R7553]

— NG →

OK →

OK → Check wave Between C7515/C7518/C7520 and IC1000

NG (Vpp: 0 V) →

OK (Vpp: 1 V) →

| Muffin [IC1000] Problem | J7504 Connector Problem | J7504 Connectivity Problem | Parts Broken |

3-5-7. No Picture : @ Tuner
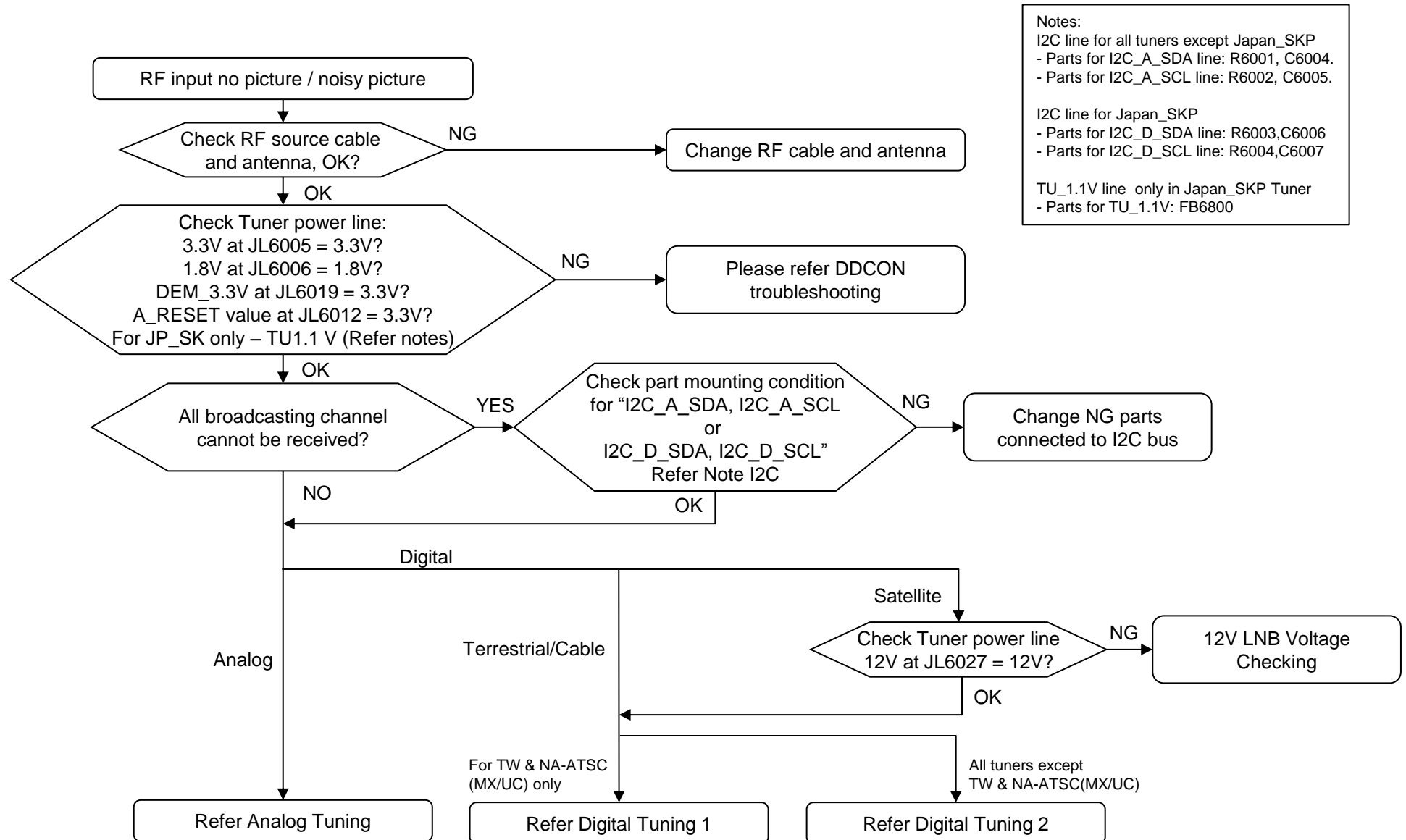
Notes:
I2C line for all tuners except Japan_SKP
- Parts for I2C_A_SDA line: R6001, C6004.
- Parts for I2C_A_SCL line: R6002, C6005.

I2C line for Japan_SKP
- Parts for I2C_D_SDA line: R6003,C6006
- Parts for I2C_D_SCL line: R6004,C6007

TU_1.1V line only in Japan_SKP Tuner
- Parts for TU_1.1V: FB6800

RF input no picture / noisy picture

Check RF source cable and antenna, OK? — NG → Change RF cable and antenna

OK

Check Tuner power line:
3.3V at JL6005 = 3.3V?
1.8V at JL6006 = 1.8V?
DEM_3.3V at JL6019 = 3.3V?
A_RESET value at JL6012 = 3.3V?
For JP_SK only – TU1.1 V (Refer notes) — NG → Please refer DDCON troubleshooting

OK

All broadcasting channel cannot be received? — YES → Check part mounting condition for "I2C_A_SDA, I2C_A_SCL or I2C_D_SDA, I2C_D_SCL" Refer Note I2C — NG → Change NG parts connected to I2C bus

OK

NO

Digital

Satellite

Analog

Terrestrial/Cable

Check Tuner power line 12V at JL6027 = 12V? — NG → 12V LNB Voltage Checking

OK

For TW & NA-ATSC (MX/UC) only

All tuners except TW & NA-ATSC(MX/UC)

Refer Analog Tuning

Refer Digital Tuning 1

Refer Digital Tuning 2

3-5-8. FOR 12V LNB Voltage Checking: @ AEP_W and JP_SKP

```
┌─────────────────────────────┐
│  12V LNB Voltage Checking   │
└─────────────────────────────┘
              │
              ▼
      ╱───────────────╲                    ╱───────────────────╲                    ╱────────────────────────╲                ┌──────────────────┐
     ╱  Check fuse F6000 ╲    OK          ╱  Check Tuner power line ╲    OK          ╱ Check P_ON_LNB signal line ╲    OK      │  MOSFET Q9019    │
     ╲                   ╱───────────────▶╲   12V at JL9012 = 12V?  ╱───────────────▶╲     at R9167 = 3.3V?        ╱───────────▶│     broken       │
      ╲───────────────╱                    ╲───────────────────╱                    ╲────────────────────────╱                └──────────────────┘
              │ NG                                  │ NG                                       │ NG
              ▼                                     │                                          ▼
    ┌──────────────────┐                            │                              ┌──────────────────────┐
    │  Change the fuse │                            │                              │ Please refer DDCON   │
    └──────────────────┘                            │                              │   troubleshooting    │
                                                    │                              └──────────────────────┘
                                                    ▼
                                         ╱───────────────────╲      NG          ┌──────────────────┐
                                        ╱  Check harness between ╲──────────────▶│  Harness broken  │
                                        ╲   B-Board and G-board  ╱                └──────────────────┘
                                         ╲───────────────────╱
                                                    │ OK
                                                    ▼
                                         ┌──────────────────────┐
                                         │  Please refer G-board │
                                         │    troubleshooting    │
                                         └──────────────────────┘
```
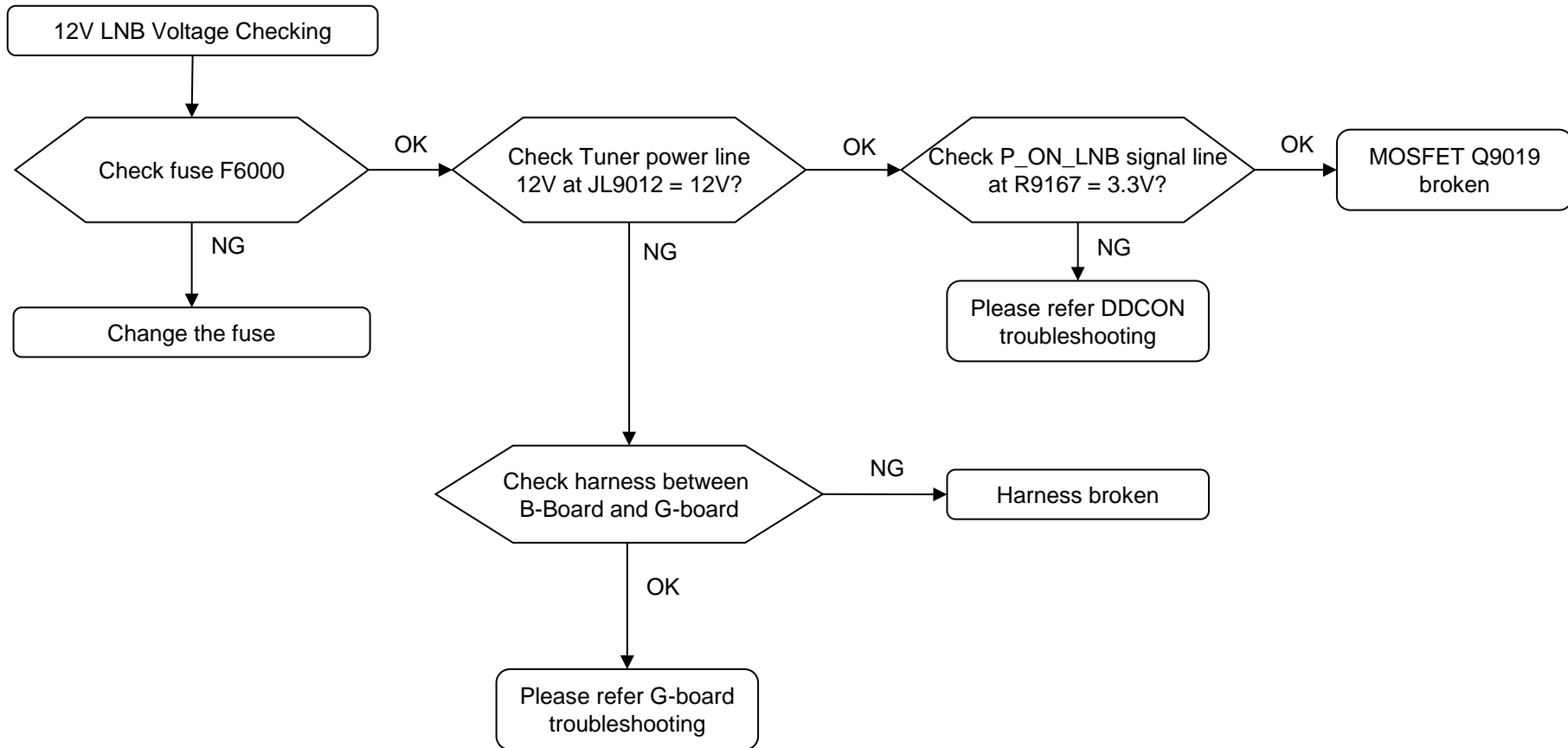
3-5-9. FOR ANALOG TUNING: @ All destination except JP

Notes:
- Parts for IFOUT_N line: R6007, FB6002, C6008, R6327, C6301, R6301.
- Parts for IFOUT_P line: R6008, FB6003, C6009, R6326, C6300, R6300.
- Parts for IFAGC line: R6072, R6009, R6010, R6069, C6302, R6303.

A : Insert correct signal in correct terminal.

Analog Tuning

For LA-ISDB(BR/AR), LA-T2(COL) and TW only

For Other destination

Confirm ANT or Cable connection — NG → A

OK

Check part mounting condition for analog control line "IFOUT_N, IFOUT_P, IFAGC" — NG → Change NG parts

OK

Check IC1000(SOC)

3-5-10. FOR DIGITAL TUNING 1: @ TW, NA-ATSC(MX/UC), JP_SKP and LA-T2(COL)

Notes:
- Parts for IFOUT_N line: R6007, FB6002, C6008, R6327, C6301, R6301.
- Parts for IFOUT_P line: R6008, FB6003, C6009, R6326, C6300, R6300.
- Parts for IFAGC line: R6072, R6009, R6010, R6069, C6302, R6303.

A : Insert correct signal in correct terminal.

Digital Tuning 1

For TW only

For all tuners except TW

Confirm ANT or Cable connection —— NG —→ A

Sound is normal? —— OK —→ Check IC1000 (SoC)

No sound

Check part mounting condition for digital data line "IFOUT_N, IFOUT_P, IFAGC" —— OK —→ Check SOC(IC1000) and Tuner module

NG

Change NG parts

3-5-11. FOR DIGITAL TUNING 2: @ AEP_W, JP_SKP, PA_T2, CH/HK, LA-ISDB(BR/AR) and LA-T2(COL)

Digital Tuning 2

For LA-ISDB(BR) and LA-T2(COL) only

Confirm ANT or Cable connection — NG → A

OK

Digital cable/ Terrestrial — Terrestrial

Cable

Refer to Digital Tuning 1

For PA_T2 and CH/HK only

Sound is normal? — OK → Check IC1000 (SoC)

No sound

On Service mode display TS_LOCK ? UEC ? — CASE B → Change Tuner module (Refer to Note tuner)

CASE A

Check part mounting condition for digital data line "TU1_TS_DATA0, TU1_TS_CLK, TU1_TS_VALID, TU1_TS_SYNC" — OK → Check IC1000 (SoC)

NG

Change NG parts

For AEP-W

Confirm ANT or Satellite connection — NG → A

OK

All except SKP_Opticast

For JP_SKP

Confirm ANT or Satellite connection — NG → A

OK

BS/CS or SKP_Opticast/ SKP_Premium or terrestrial

SKP_Opticast

Refer to Digital Tuning 1

Notes:
- Parts for TU1_TS_DATA0 line: R6015, R6321.
- Parts for TU1_TS_CLK line: R6016, R6322.
- Parts for TU1_TS_VALID line: R6017, R6323.
- Parts for TU1_TS_SYNC line: R6018, R6324.
- CASE A : TS _LOCK = LOCK and UEC constant
- CASE B : TS _LOCK = UNLOCK or UEC is increasing

Note Tuner –
(IC reference -- destination)
TU6001 - PA-T2
TU6001 - LA-T2/LA-ISDB
TU6001 - CH, HK
TU6003 - AEP_W
TU6802 - JP_SKP

A : Insert correct signal in correct terminal.

3-5-12. NO PICTURE: HDMI1

```
┌─────────────────┐
│   No Picture    │
└─────────────────┘
         │
         ▼
    ╱Check other╲  Other Input is OK    ┌──────────────┐  If you can do
   ╱ HDMI input  ╲───────────────────►  │Change B-Board│  component repair
    ╲           ╱                        └──────────────┘
         │
    All Inputs are NG
         │
         ▼
   ╱Check Picture by other TV set╲  Other TV set   ┌──────────────┐
  ╱   which is same model         ╲  OK            │Change B-Board│
   ╲                             ╱─────────────►   └──────────────┘
         │
Target board & other TV set
      both NG
         │
         ▼
   ╱Is Distributor used ?╲  Yes      ┌──────────────────┐
  ╱                       ╲───────►  │ Connect Source   │
   ╲                     ╱           │equipment directly│
         │                           └──────────────────┘
         No
         │
         ▼
   ╱Check Source equipment╲  Reference TV Set OK  ┌──────────────┐
  ╱ by Reference TV set    ╲────────────────────► │Change B-Board│
   ╲(For example, RB1)     ╱                      └──────────────┘
         │
Reference TV set
      NG
         │
         ▼
┌─────────────────────┐
│Check the settings of│
│  Source equipment   │
└─────────────────────┘
```

Check the below point at Connector side
· Check +5V line
· Check HPD line
· Check DDC lines
· Check TMDS lines

Only +5V line is NG Spec:4.7~5.3V → Replace R5515

+5V line is OK and HPD line is NG Spec:2.4~5.3V → Replace IC5212 (HDMI EQ).

Only DDC lines are NG → Replace IC5212 (HDMI EQ).

All lines are NG → Replace CN5202 → NG

Only TMDS lines are NG → Replace JC5216, JC5217 RB5209, RB5210 → NG

Replace
IC1000
JC5227, JC5228, JC5235, JC5236
JC5241, JC5242, JC5243, JC5244

If you can do component repair

3-5-13. NO PICTURE: HDMI2

```
                    ┌─────────────────┐
                    │   No Picture    │
                    └─────────────────┘
                             │
                             ▼
        ┌────────────────────────┐   Other Input is OK    ┌──────────────────┐
        │    Check other         │──────────────────────▶│  Change B-Board. │
        │    HDMI input          │                        └──────────────────┘
        └────────────────────────┘
          All Inputs are NG │
                             ▼
        ┌────────────────────────┐   Other TV set OK      ┌──────────────────┐
        │ Check Picture by other │──────────────────────▶│  Change B-Board. │
        │ TV set which is same   │                        └──────────────────┘
        │        model           │
        └────────────────────────┘
   Target board & other TV set │
          both NG              ▼
        ┌────────────────────────┐   Yes                  ┌──────────────────┐
        │  Is Distributor used ? │──────────────────────▶│ Connect Source   │
        └────────────────────────┘                        │ equipment directly│
                No │                                       └──────────────────┘
                   ▼
        ┌────────────────────────┐   Reference TV Set OK  ┌──────────────────┐
        │ Check Source equipment │──────────────────────▶│  Change B-Board. │
        │ by Reference TV set    │                        └──────────────────┘
        │ (For example, RB1)     │
        └────────────────────────┘
     Reference TV set NG │
                         ▼
        ┌────────────────────────┐
        │ Check the settings of  │
        │   Source equipment     │
        └────────────────────────┘
```

If you can do component repair → Check the below point at Connector side
・Check +5V line
・Check HPD line
・Check DDC lines
・Check TMDS lines

- Only +5V line is NG Spec:4.7~5.3V → Replace R5517, R5518
- +5V line is OK and HPD line is NG Spec:2.4~5.3V → Replace IC5212 (HDMI EQ).
- Only DDC lines are NG → Replace IC5212 (HDMI EQ).
- All lines are NG → Replace CN5202 — NG
- Only TMDS lines are NG → Replace JC5208, JC5209 RB5211, RB5212 — NG → Replace IC5212 (HDMI EQ).

If you can do component repair → Replace IC1000 JC5227, JC5228, JC5235, JC5236 JC5241, JC5242, JC5243, JC5244

3-5-14. NO PICTURE: HDMI3

3-5-15. NO PICTURE: HDMI4

```
┌──────────────┐
│  No Picture  │
└──────┬───────┘
       │
       ▼
  ┌─────────────┐   Other Input is OK    ┌──────────────────┐   If you can do
  │ Check other ├──────────────────────▶ │ Change B-Board.  ├── component repair ──▶
  │ HDMI input  │                        └──────────────────┘
  └──────┬──────┘
         │ All Inputs are NG
         ▼
  ┌──────────────────────┐   Other TV     ┌──────────────────┐
  │ Check Picture by     │   set OK       │ Change B-Board.  │
  │ other TV set         ├──────────────▶ └──────────────────┘
  │ which is same model  │
  └──────┬───────────────┘
         │ Target board & other TV set both NG
         ▼
  ┌──────────────────────┐   Yes          ┌──────────────────┐
  │ Is Distributor used? ├──────────────▶ │ Connect Source   │
  └──────┬───────────────┘                │ equipment directly│
         │ No                             └──────────────────┘
         ▼
  ┌──────────────────────┐   Reference TV Set OK    ┌──────────────────┐
  │ Check Source         ├───────────────────────▶  │ Change B-Board.  │
  │ equipment by         │                          └──────────────────┘
  │ Reference TV set     │
  │ (For example, RB1)   │
  └──────┬───────────────┘
         │ Reference TV set NG
         ▼
  ┌──────────────────────┐
  │ Check the settings of│
  │ Source equipment     │
  └──────────────────────┘
```

Check the below point at Connector side
・Check +5V line
・Check HPD line
・Check DDC lines
・Check TMDS lines

All lines are NG → Replace CN5208 → NG

Only +5V line is NG Spec:4.7~5.3V → Replace R5467

+5V line is OK and HPD line is NG Spec:2.4~5.3 V → Replace IC5212 (HDMI EQ).

Only DDC lines are NG → Replace IC5212 (HDMI EQ).

Only TMDS lines are NG → Replace JC5239, JC5240 RB5215, RB5216 → NG → Replace IC5212 (HDMI EQ).

Replace IC1000
JC5227, JC5228, JC5235, JC5236
JC5241, JC5242, JC5243, JC5244

3-5-16. NO PICTURE: MHL (BMX)

```
┌──────────────┐
│  No Picture  │
└──────┬───────┘
       │
       ▼
  Check voltage at
  CD_SENSE_0,
  R5509                 High        Check HDMI_0_HPD_CBUS    NG (No communications)    ┌──────────────────────────┐
  Spec:High:2.0~5.3V ───────────►   at connector side     ─────────────────────────► │  Replace IC5212(HDMI EQ). │
  Low:0.8~2.0V                                                                        └──────────────────────────┘
       │                                     │ OK
       │ Low                                 ▼
       │                           Check TMDS(D0+/D0-) lines   NG (No communications)   ┌──────────┐
       │                           at connector side        ────────────────────────►  │ Replace  │
       │                                     │ OK                                       │ RB5211   │
       │                                     │                                          └──────────┘
       ▼
  Low (< 2V)
  Check DDCCLK,      Check RB5219 (47k )    NG (Open)     ┌──────────┐
  at CL5256      ──►                     ─────────────►   │ Replace  │
       │              │ OK                                │ RB5219   │
       │ High         │                                   └──────────┘
       │              ▼
       │         Check D5205, D5206    NG (Open)    ┌────────────────┐
       ▼              │ OK          ──────────────► │ Replace        │
  ┌──────────┐        │                             │ D5205, D5206   │
  │ Change   │        ▼                             └────────────────┘
  │ MHL cable│   ┌──────────────────────┐
  └──────────┘   │ Replace IC1000 (SoC).│
                 └──────────────────────┘
```

Check Source equipment
by Reference TV set
(For example, Samsung TV(UN46ES7000),
Toshiba TV(42WL863), RB1, RB2)

OK → Check HDMI picture in this input

NG → Check the settings of Source equipment

NG → Check "NO PICTURE – HDMI" flow

3-5-17. NO CHARGE: MHL (BMX)

```
┌─────────────────┐
│    No Charge    │
└─────────────────┘
         │
         ▼
  ╱─────────────────╲   STBY    ╱──────────────────────╲   Off    ┌──────────────────────────────────────────────┐
 ╱ The TV Power Status? ╲──────▶ "MHL Charge During STBY" ╲───────▶ Change "MHL Charge During STBY" (UI) to "On"  │
 ╲                      ╱        ╲    (UI) Status?        ╱         └──────────────────────────────────────────────┘
  ╲─────────────────╱             ╲──────────────────────╱
         │ TV On
         ▼
  ╱──────────────────╲   5V     ┌─────────────────────┐
 ╱   CN5202 #18 pin    ╲───────▶│  Change MHL Cable   │
 ╲                    ╱         └─────────────────────┘
  ╲──────────────────╱
         │ 0V
         ▼
  ╱──────────────────╲   High                        ╱──────────────────╲   0V    ╱──────────────────╲   0V    ┌─────────────────────────┐
 ╱  Check voltage at   ╲──────────────────────────────  Check IC5208 #6   ╲──────  Check IC5208 #3    ╲───────▶│   Replace IC1000 (SoC). │
 ╲   CD_SENSE_0,       ╱                              ╲  (VBUS IC, Out)    ╱        ╲  (VBUS IC, EN)    ╱         └─────────────────────────┘
  ╲     R5509         ╱                                ╲──────────────────╱          ╲────────────────╱
   ╲────────────────╱                                                                      │ 5V
         │ Low (< 2V)                                                                      ▼
         ▼                                                                          ┌─────────────────────────┐
  ╱──────────────────╲   Low (< 2V)   ╱──────────────────╲   NG (Open)              │ Replace IC5208 (VBUS IC)│
 ╱   Check DDCCLK,     ╲─────────────  Check RB5219 (47k ) ╲──────────┐             └─────────────────────────┘
 ╲    at CL5256        ╱              ╲                    ╱           ▼
  ╲──────────────────╱                ╲──────────────────╱       ┌──────────┐
         │ High                            │ OK                  │ Replace  │
         ▼                                 ▼                     │ RB5219   │
  ┌──────────────┐                 ╱──────────────────╲   NG (Open)  └──────────┘
  │   Change     │                ╱ Check D5205, D5206  ╲──────────┐
  │  MHL cable   │                ╲                    ╱           ▼
  └──────────────┘                 ╲──────────────────╱       ┌──────────┐
                                        │ OK                  │ Replace  │
                                        ▼                     │D5205,D5206│
                              ┌─────────────────────┐         └──────────┘
                              │ Replace IC1000 (SoC). │
                              └─────────────────────┘
```

3-6. SIDE BUTTONS MALFUNCTION

```
┌─────────────────┐       ╱────────────────╲      OK    ┌─────────────────┐
│ Side Key button │──────▶│  Change Switch  │─────────▶│ Switch unit issue│
│   malfunction   │       │      Unit       │          │                  │
└─────────────────┘       ╲────────────────╱          └─────────────────┘
                                   │ NG
                                   ▼
                          ╱────────────────────╲   OK    ┌─────────────┐
                          │  Harness on Switch  │───────▶│   Harness   │
                          │  Unit and B* Board  │        │ connection  │
                          │ properly connected  │        │    issue    │
                          ╲────────────────────╱         └─────────────┘
                                   │ NG
                                   ▼
                          ╱────────────────────╲   OK    ┌─────────────┐
                          │       Change        │───────▶│Harness issue│
                          │ Switch unit-B* board│        │             │
                          │      Harness        │        └─────────────┘
                          ╲────────────────────╱
                                   │ NG
```

Power Key (B*Board)
Check parts value :
0 ohm < R1089 < 2 ohm
4.4k ohm < R1432 < 5k ohm

NG → Parts Broken issue

Key AD(B*Board)
Check parts value :
0 ohm < R1091 < 2 ohm
0 ohm < R1042 < 2 ohm

NG → Parts Broken issue

OK

Power Key Muffin Pin (B*Board)
Check voltage(Power ON condition) :
3.13V < Voltage < 3.47V

OK → Muffin IC1000 problem

Key AD muffin pin (B*Board)
Check voltage (Power ON condition):
1.62V < voltage < 1.84V

OK → Muffin IC1000 problem

NG → Change B*Board ◀ **NG**

3-7. IR REMOTE COMMANDER MALFUNCTION

IR do not response to Remote Commander → Center white LED lit up when remote control is pressed —OK→ Check whether center white LED blink ,when using commander near the sensor windows —OK→ Remote control battery could be weak. Change battery.

Center white LED lit up when remote control is pressed —NG→ Harness on H-board and B* Board properly connected —OK→ Harness connection issue

Harness on H-board and B* Board properly connected —NG→ Change H-B* board Harness —OK→ H-B* board harness issue

Change H-B* board Harness —NG→ Change Smart Core —OK→ Smart core issue

Change Smart Core —NG→ B*Board Check parts value : R1080 = zero ohm —NG→ Parts Broken issue

B*Board Check parts value : R1080 = zero ohm —OK→ SIRCS (IC1000 Pin Y35 , B*Board) Check voltage (Power ON condition): 3.287V < Voltage < 3.55V? —OK→ Muffin IC1000 problem

SIRCS (IC1000 Pin Y35 , B*Board) Check voltage (Power ON condition): 3.287V < Voltage < 3.55V? —NG→ Change B*Board

3-8. LIGHT SENSOR ERROR

Backlight doesn't change when ambient lighting level changed

→ Check UI setting for light Sensor. Make sure it is "on"

→ Change the UI setting to "ON"
— OK → User did not activate light sensor function

NG ↓

Harness on H-board and B* Board properly connected
— OK → Harness connection issue

NG ↓

Change H-B* board Harness
— OK → H-B* board harness issue

NG ↓

Change Smart Core
— OK → Smart Core issue

NG ↓

B*Board Check LIGTH_SENSOR signal path : R1079 = zero ohm
— NG → Part broken issue

OK ↓

LIGTH_SENSOR (Muffin Pin L35) Check voltage variation from room light to dark condition
— OK → Muffin IC1000 problem

NG ↓

Change B*Board

3-9. NETWORK MALFUNCTION

1) Ethernet (Wired)

```
┌─────────────────┐
│ [Network Set-up]│
│ >[Wired Set-up] │
│   on the TV     │
└─────────────────┘
         │
         ▼
    ╱─────────────╲         OK      ╱─────────────╲         OK      ╱─────────────╲        OK    ┌─────────┐
   ╱ Connection     ╲ ──────────────▶ Connection     ╲ ──────────────▶ Connection     ╲ ─────────▶│ B board │
   ╲ Results          ╱              ╲ Results          ╱              ╲ Results          ╱         └─────────┘
    ╲ Cable Connection╱               ╲ Local Access   ╱                ╲ Internet Access╱
     ╲───────────────╱                 ╲─────────────╱                   ╲─────────────╱
         │                                 │                                 │
      Failed                            Failed                            Failed
         │                                 │                                 │
         ▼                                 ▼                                 ▼
    ╱───────────╲    OK    ┌─────────┐   ╱───────────╲     Auto   ┌─────────────┐    ┌──────────────┐
   ╱ Check cable ╲ ───────▶│ B board │  ╱ Wired Set-up╲ ─────────▶│ Check        │    │ Proxy setting│
   ╲             ╱         └─────────┘  ╲ IP address   ╱          │ Local router │    └──────────────┘
    ╲───────────╱                        ╲ setting    ╱           │ DHCP server  │
         │                                ╲─────────╱             └──────────────┘
        NG                                    │
         │                                 Manual
         ▼                                    │
  ┌───────────────┐                           ▼
  │ Ethernet Cable│                   ┌──────────────────┐
  └───────────────┘                   │ Check IP address │
                                      │        &         │
                                      │ Local router     │
                                      │ setting          │
                                      └──────────────────┘
```

2) Internal Wireless Network malfunction

```
┌─────────────────────┐
│  Wireless Network   │
│    on the TV        │
└─────────────────────┘
          │
          ▼
    ⬡ Error Message appear      No      ⬡ Is the radio field       No    ┌──────────────┐
      when the Wireless      ────────▶    Strength too weak     ──────▶ │  Bxx Board   │
      Network is selected?              or even No signal?              └──────────────┘
          │                                    │
         Yes                                  Yes
          │                                    │
          ▼                                    ▼
  ┌─────────────────────┐            ⬡ Change WiFi module    NG    ┌──────────────┐
  │ From previous page  │                                  ──────▶ │ Access Point │
  └─────────────────────┘                     │                    └──────────────┘
          │                                   OK
          ▼                                    ▼
  ⬡ Check harness          NG    ⬡ Connect properly   OK   ┌──────────────┐    ┌──────────────┐
    connection is OK     ──────▶                    ────▶  │ Loose harness│    │  WiFi module │
    between WiFi and Bxx                                   └──────────────┘    └──────────────┘
          │                  ▲NG
         OK                   │
          ▼                   │
    ⬡ Change          NG      ⬡ Change harness        NG    ┌──────────────────┐
      Wi-Fi module  ──────▶     between Bxx board   ──────▶ │ Change Bxx board │
          │                     and WiFi                    └──────────────────┘
         OK                          │
          ▼                         OK
  ┌──────────────┐                   ▼
  │ Wi-Fi module │            ┌──────────────┐
  └──────────────┘            │ Main Harness │
                              └──────────────┘
```

If Wi-Fi malfunction happens,
- Wi-Fi module
- Harness between WiFi and Bxx
- Bxx board

are suspected.

3) Bluetooth malfunction

Touch pad Remote doesn't work
Or
3D-glasses (Active) doesn't work
Or
Bluetooth Speaker/Headphone/Headset doesn't work

Home > Settings > Bluetooth Settings

OK
Can read
Near discoverable
Bluetooth Device

Check BT antenna Connection is OK

OK

Please refer
Touch pad Remote manual
3D-glasses (Active) manual
Or
Bluetooth Speaker/Headphone/Headset operation manual

NG
else

NG

NG

Connect properly

OK

Loose BT antenna connection

Check harness connection is OK between BT and Bxx

NG

Connect properly

OK

Loose harness

OK

NG

Change BT module

NG

Change harness Between Bxx board and BT

NG

Change Bxx board

OK

OK

BT module

Main Harness

SEC 4. DIAGRAMS

4-1. BLOCK DIAGRAM
4-1-1. UC

4-1-2. LA(BR/AR)

4-1-3. LA(COL)

4-2. CONNECTOR DIAGRAM

XBR-55X850C/855C/857C
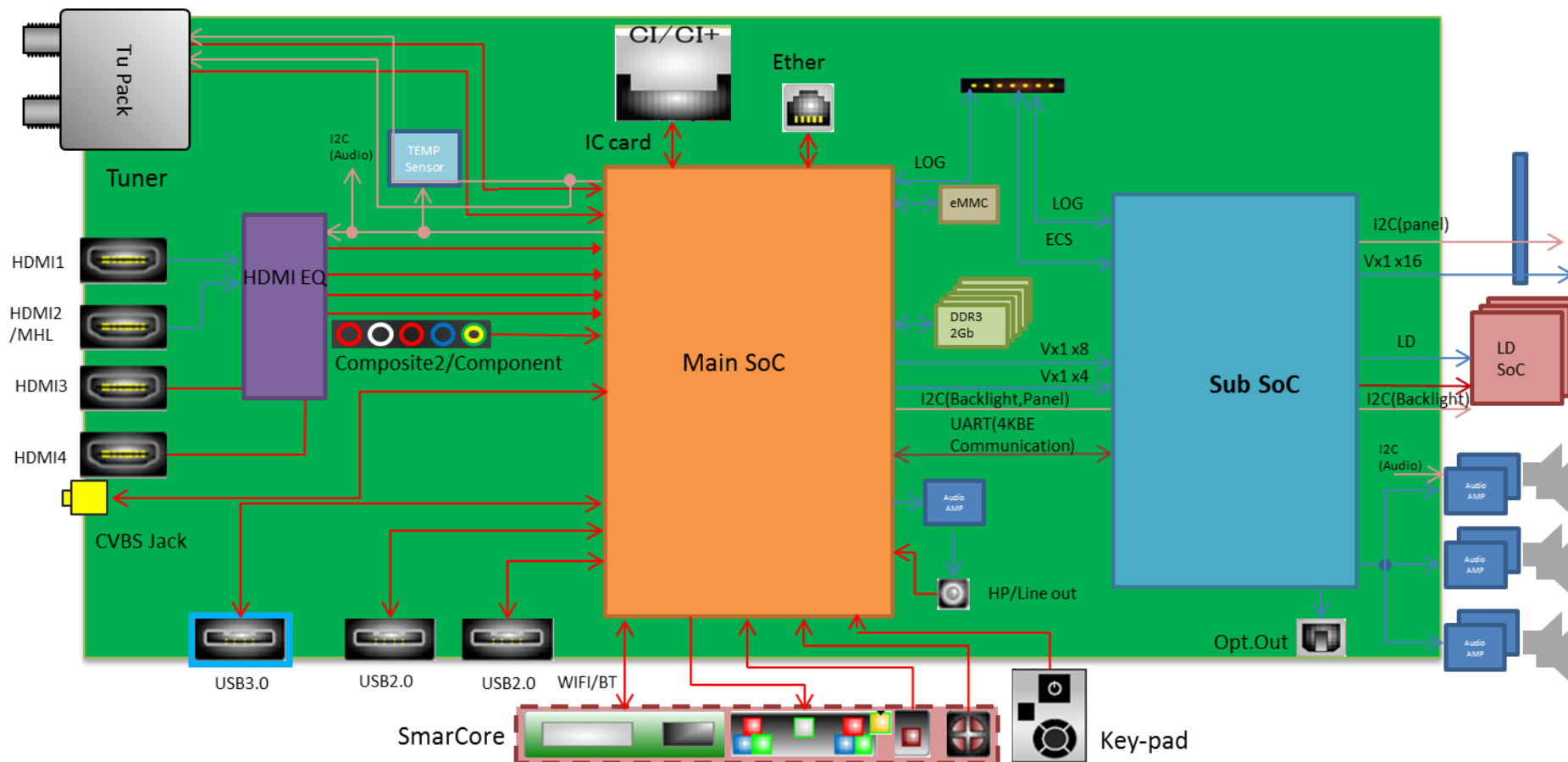
XBR-65X850C/855C/857C
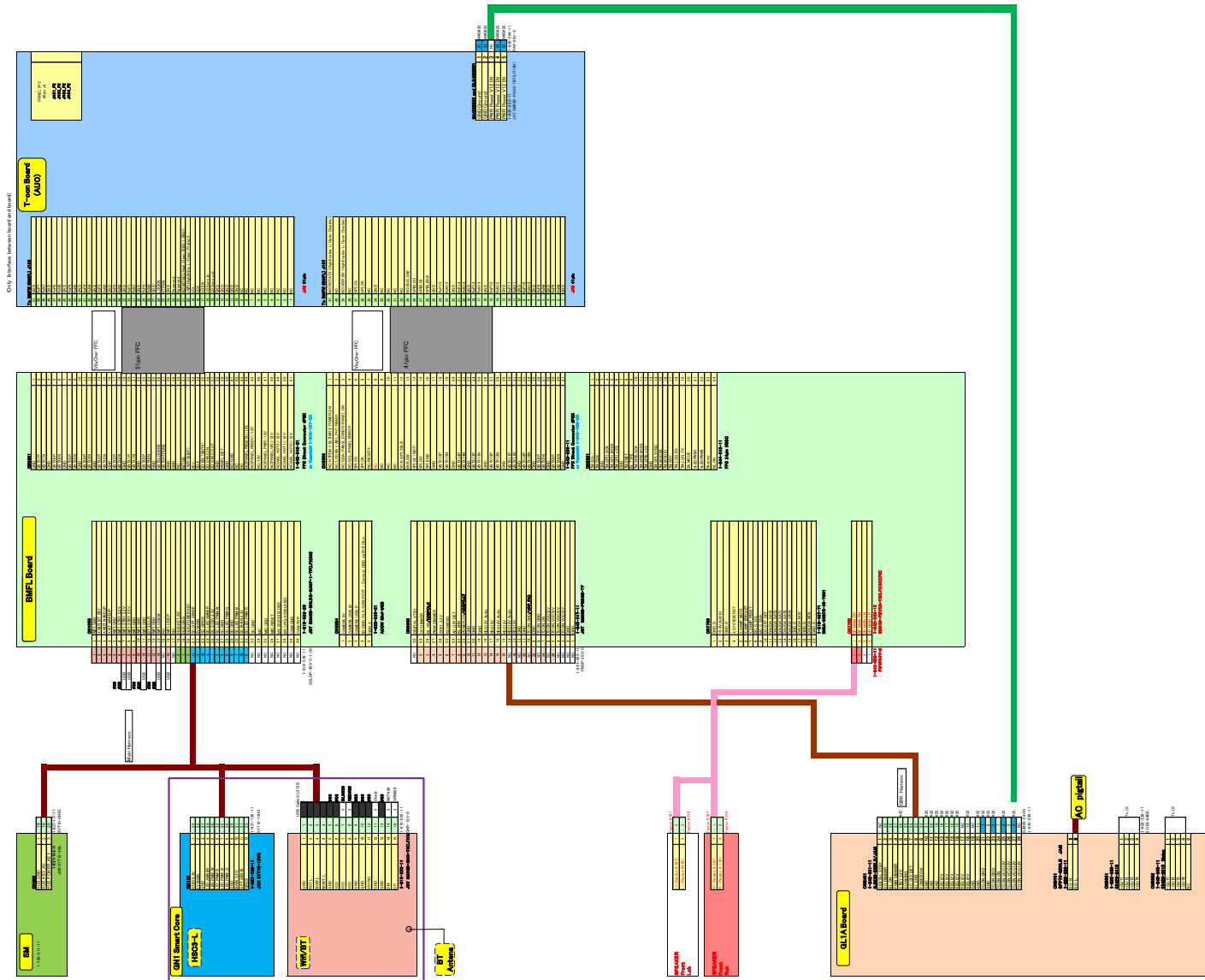
XBR-75X850C/855C
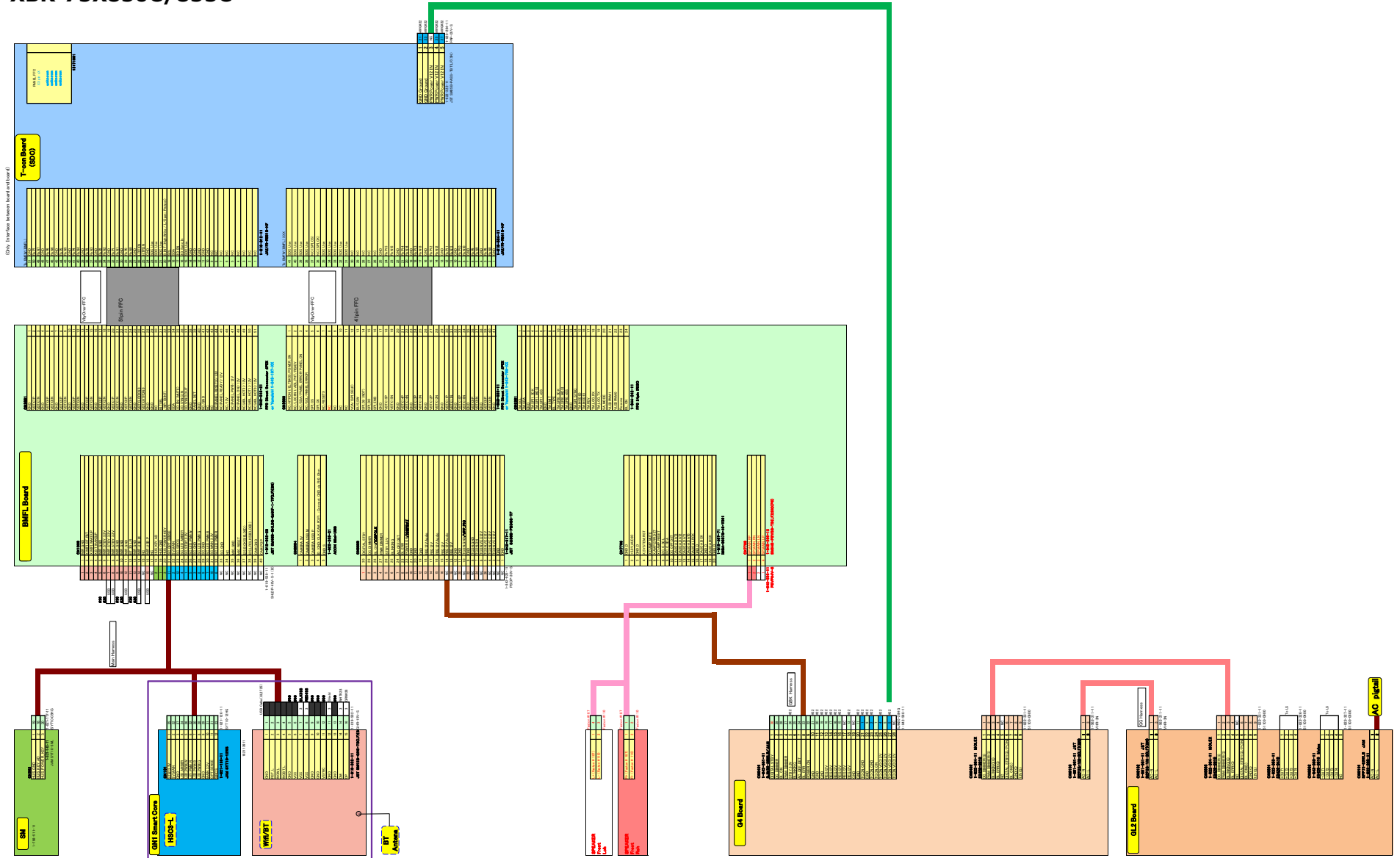
4-3. PC BOARD DIAGRAM

BMFL (A SIDE)
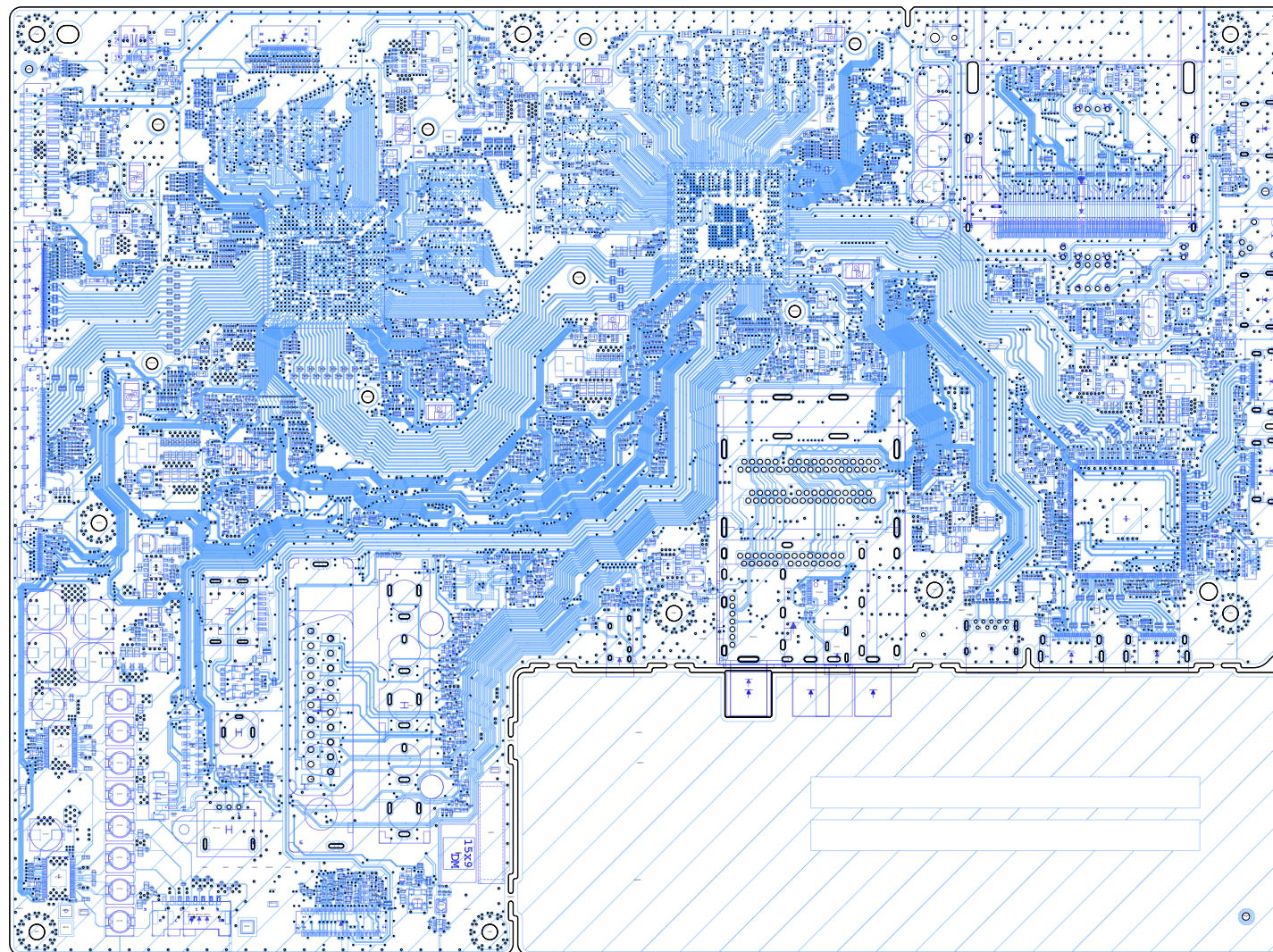
BMFL (B SIDE)
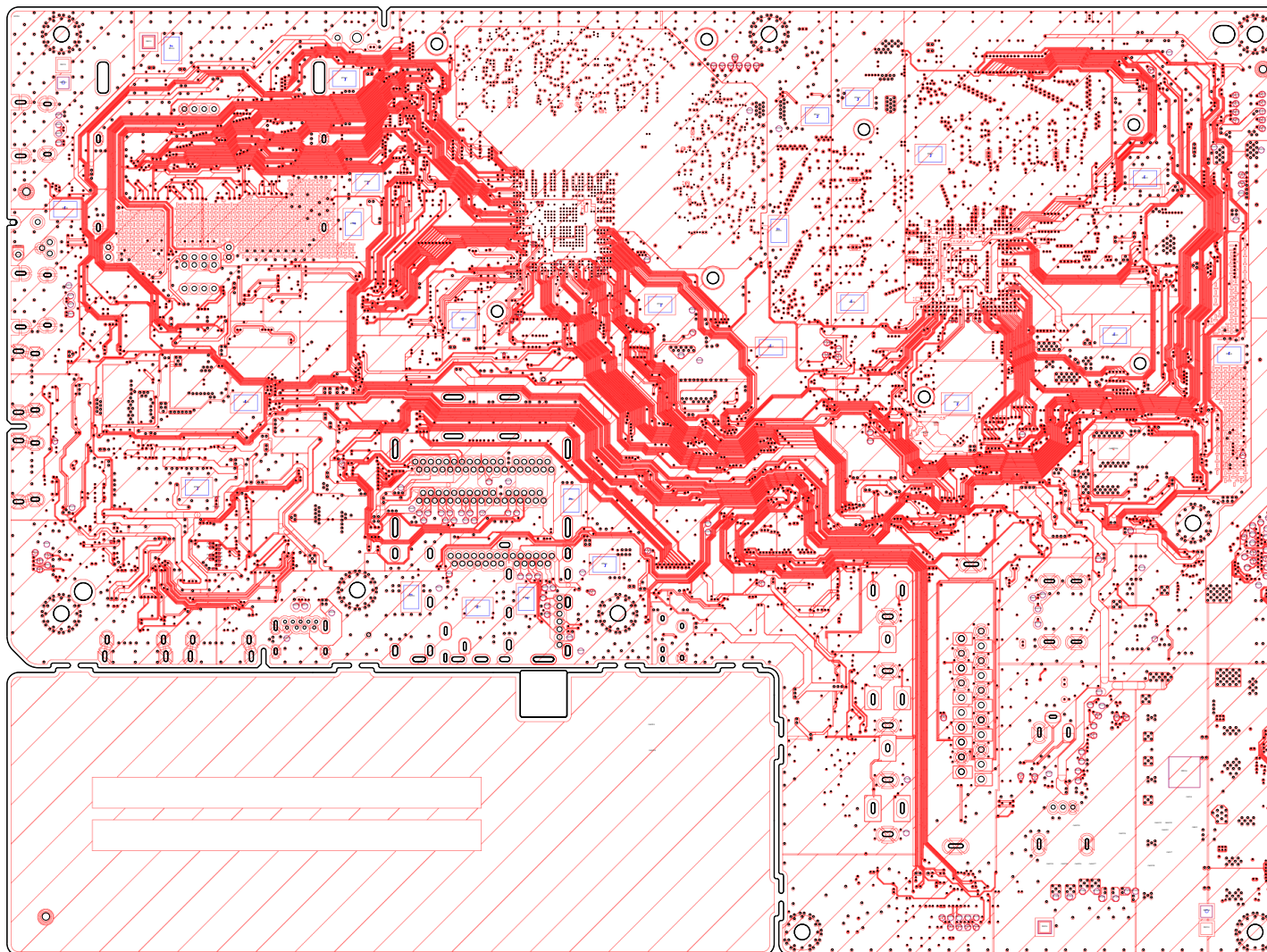
4-4. CIRCUIT BOARDS LOCATION

XBR-55X850C/855C/857C

BMFL

SWITCH UNIT

GL3

SMART CORE (M,L)

XBR-65X850C/855C/857C

BMFL

SWITCH UNIT

GL1A

SMART CORE (L,C)

XBR-75X850C/855C

BMFL

SWITCH UNIT

GL2

G4

SMART CORE (L,C)

SMART CORE (L,C)

HSC3_L

WLAN/BT MODULE

SMART CORE (M,L)

HSC3_S_M

WLAN/BT MODULE
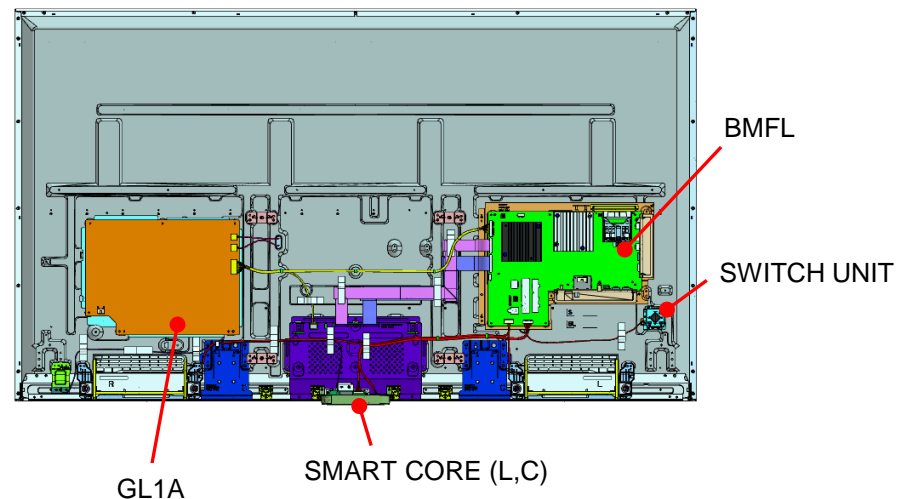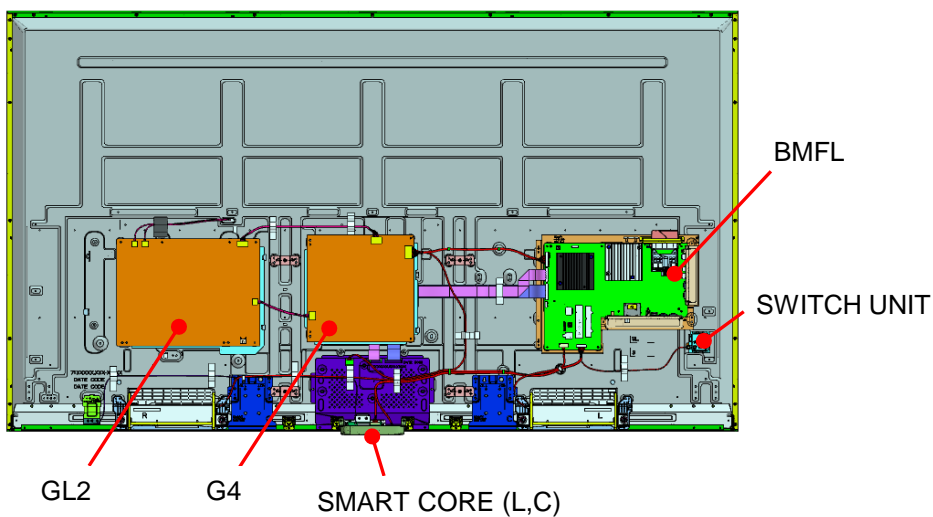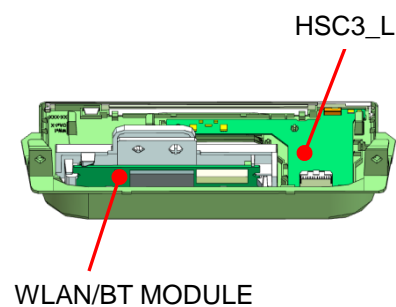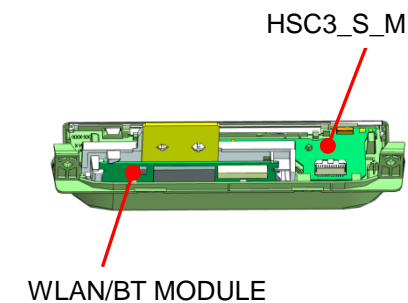
SEC 5. EXPLODED VIEWS

• Items with no part number and no description are not stocked because they are seldom required for routine service.
• The construction parts of an assembled part are indicated with a collation number in the remark column.
• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

The components identified by mark 🔒 contain confidential information. Strictly follow the instructions whenever the components are repaired and/or replaced.

5-1. XBR-55X850C/855C/857C

5-1-1. REAR COVER

REF. No.	PART No.	DESCRIPTION	MARK
1	4-567-609-01	LABEL, CI	CO1
2	4-563-756-01	LABEL, SIDE TERMINAL (L)	
3	4-563-760-01	LABEL, UNDER TERMINAL	UC2
3	4-563-760-11	LABEL, UNDER TERMINAL	LA1
3	4-563-760-21	LABEL, UNDER TERMINAL	CR1/ECU/LA8/ CO1/BR6
4	4-563-764-01	LABEL, REAR TERMINAL	UC2
4	4-563-765-01	LABEL, REAR TERMINAL	except UC2
5 ⚠	1-839-695-12	POWER-SUPPLY CORD (WITH CONN.)	CR1/ECU/LA8/BR6
5 ⚠	1-839-696-12	POWER-SUPPLY CORD (WITH CONN.)	CO1/UC2/LA1
6	4-297-989-01	AC COVER	BR6
6	4-299-531-01	AC COVER	except BR
7	1-754-952-11	BT ANTENNA	except BR
7	1-754-954-11	BT ANTENNA	BR6
8	1-859-100-11	SPEAKER BOX ASSY（L）	
9	1-859-100-21	SPEAKER BOX ASSY (R)	
10	1-798-510-31	SWITCH UNIT (SM-G-WW)	except BR
10	1-798-510-41	SWITCH UNIT (SM-G-KIT)	BR6
11	4-559-710-01	REAR COVER (L HRN) A	CO1
11	4-559-710-11	REAR COVER (L HRN) A	CR1/ECU/LA8/ UC2/LA1
11	A-2073-677-A	REAR COVER (L HRN) A	BR6

SMART CORE
(M, L)
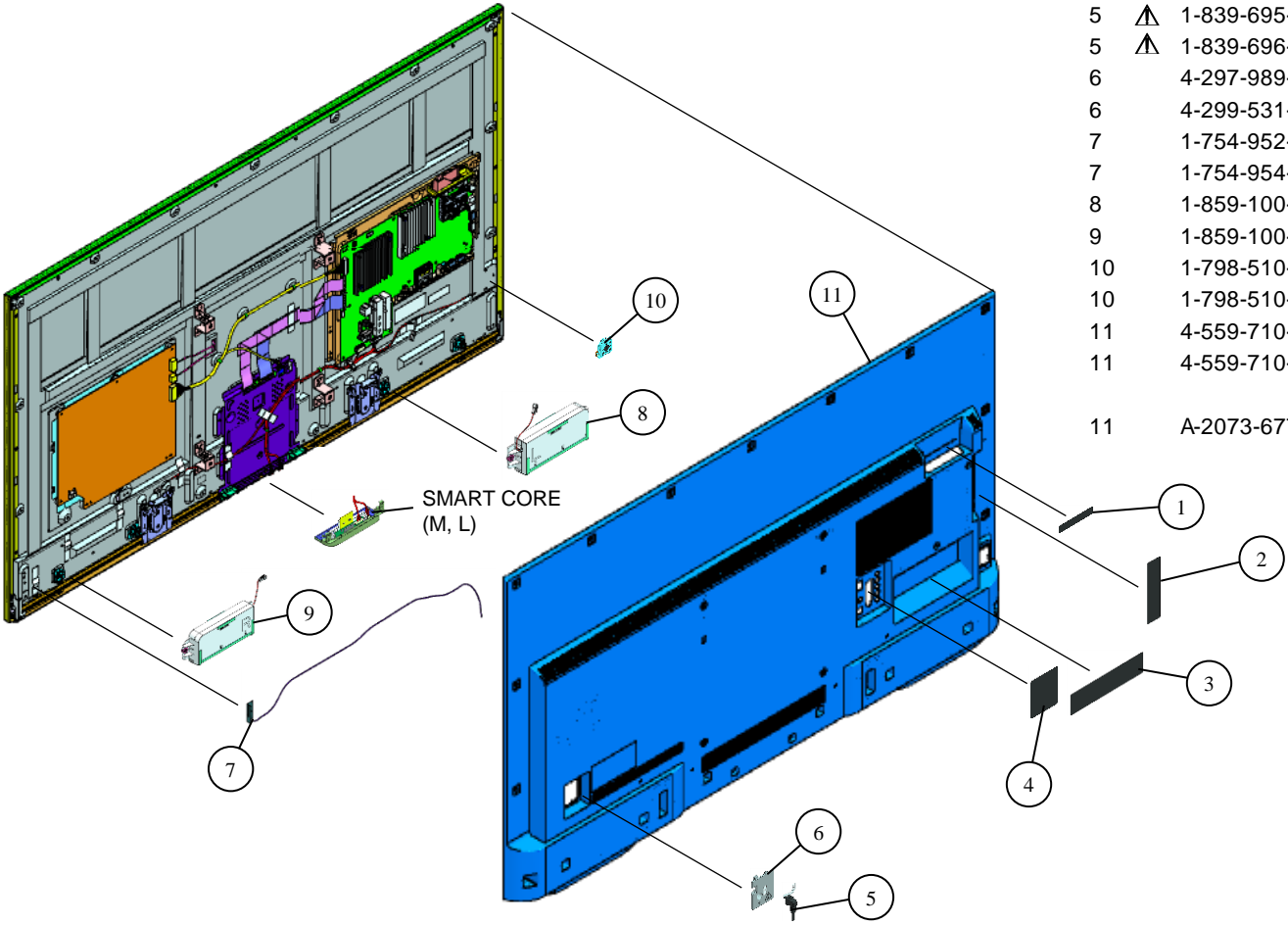
5-1-2. LCD PANEL
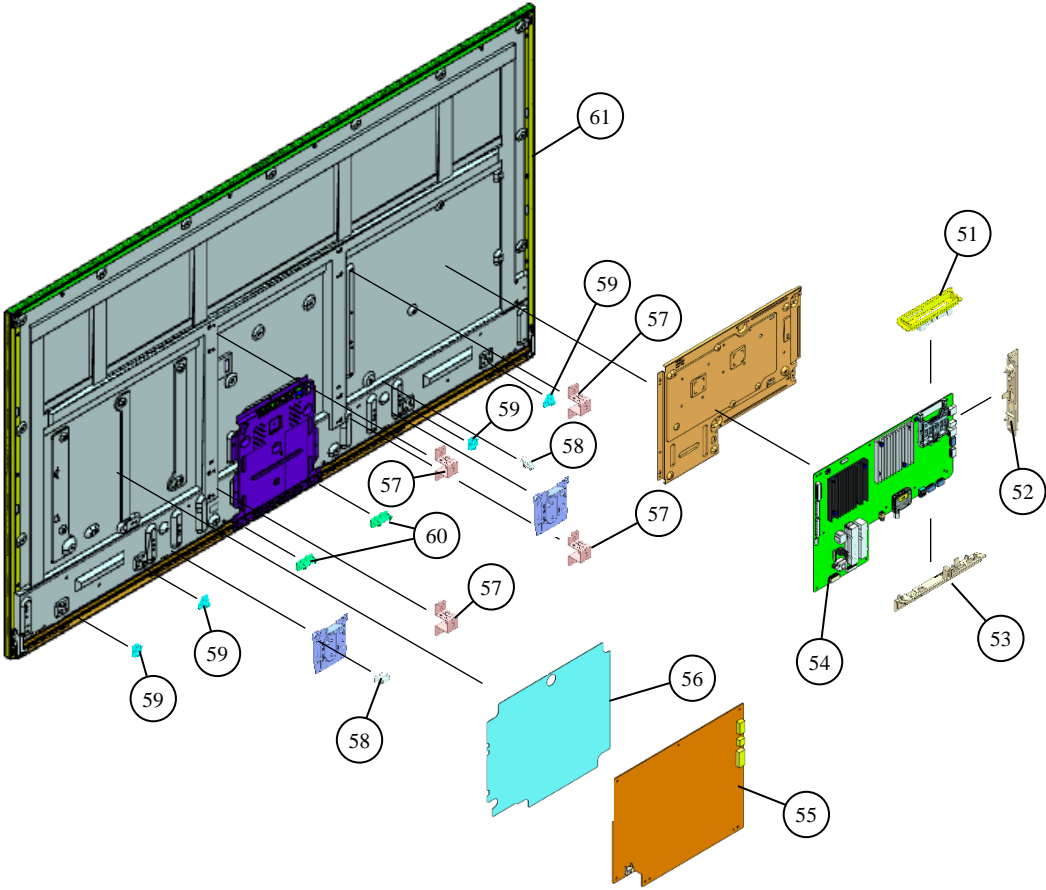
REF. No.	PART No.	DESCRIPTION	MARK
51	4-546-441-11	BRACKET, TOP FL (MOLD)	CO1
52	4-546-442-01	BRACKET, SIDE FL (MOLD)	except BR6
52	4-546-442-11	BRACKET, SIDE FL (MOLD)	BR6
53	4-546-443-11	BRACKET, UNDER FL (MOLD)	LA1
53	4-546-443-21	BRACKET, UNDER FL (MOLD)	UC2
53	4-546-443-41	BRACKET, UNDER FL (MOLD)	CR1/ECU/ LA8/CO1
53	4-546-443-61	BRACKET, UNDER FL (MOLD)	BR6
54	A-2072-562-A	COMPLE SVC (XF) BMFL BR6	CR1/ECU/ LA8/BR6
54	A-2072-563-A	COMPLE SVC (XF) BMFL CO1	CO1
54	A-2072-564-A	COMPLE SVC (XF) BMFL UC2	UC2
54	A-2072-565-A	COMPLE SVC (XF) BMFL LA1	LA1
55	1-474-620-11	GL3(CH)-STATIC CONVERTER(TV)	
56	4-565-059-11	SHEET, INSULATION(HRN L)	
* 57	4-546-473-01	BRACET, VESA(HWK)	
58	2-650-770-21	SLIDE, CLAMP	
59	4-547-988-01	BRACKET, SP (LAK)	
60	4-562-155-01	BRACKET, SC (HRN)	
61	1-812-102-11	LCD PANEL (Y55QHNDS)	BR6
61	1-812-103-11	LCD PANEL (Y55QHNDB)	except BR6

5-1-3. CONNECTORS
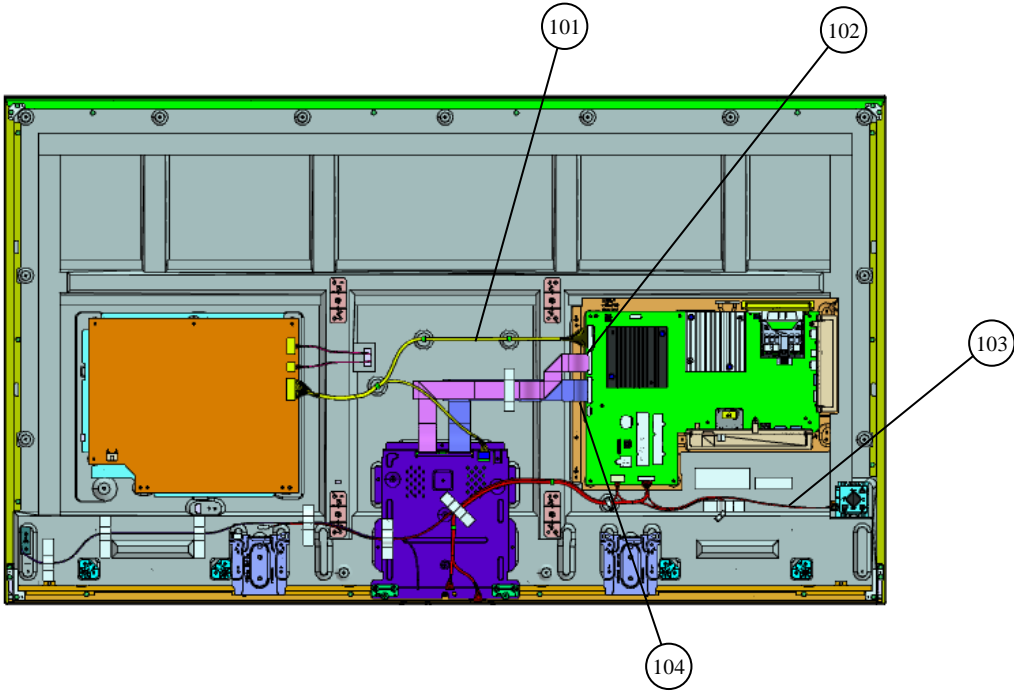
REF.NO.	PART No.	DESCRIPTION	MARK
101	1-910-110-23	CONNECTOR ASSY 28P	CN6401(GL3)-CN9000(BMFL)-TCON (1)
102	1-848-915-11	FLEXIBLE FLAT CABLE 41P (XFS)	CN3600(BMFL)-TCON (1) (except BR6)
102	1-848-927-11	FLEXIBLE FLAT CABLE 41P (XFS)	CN3600(BMFL)-TCON (1) (BR6)
103	1-910-110-24	HARNESS ASSY (MAIN)	CN1000(BMFL)-CN101(HSC3)-WIFI-SM/CN7700(BMFL)-SP (1)
104	1-848-914-11	FLEXIBLE FLAT CABLE 51P (XFS)	CN3601(BMFL)-TCON (1) (except BR6)
104	1-848-922-11	FLEXIBLE FLAT CABLE 51P (XFS)	CN3601(BMFL)-TCON (1) (BR6)

5-1-4. SCREWS

REF.	DESCRIPTION	PART No.
■	SCREW +PSW M4X10	4-159-298-01
□	SCREW , +PWH M3X6	4-452-935-11
●	SCREW, +BVTP 4X12 TYPE2 IT-3	2-580-639-01
☆	SCREW (+PSW)(M3X6)	2-990-421-41
△	SCREW, +PSW M4X8	2-580-600-11
○	SCREW, +PSW M3X8	2-580-593-01
◆	SCREW, +PSW M3X6 W12	4-256-393-11
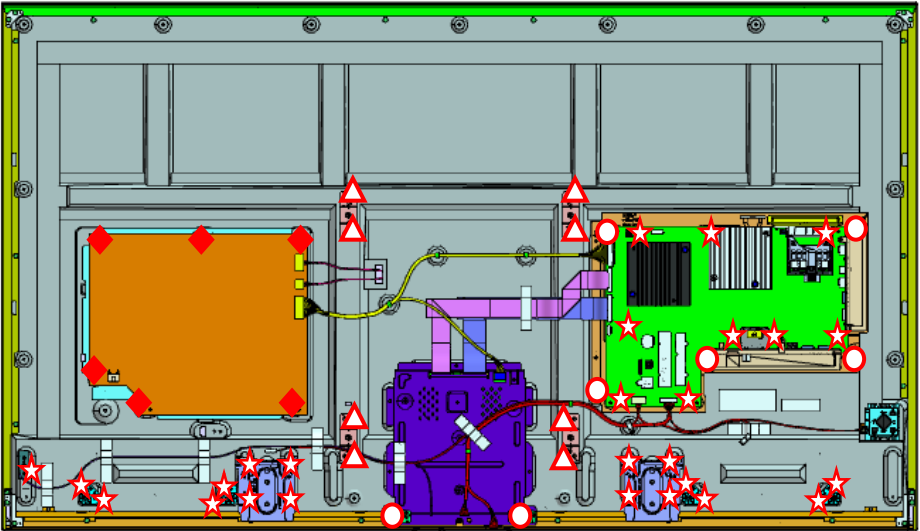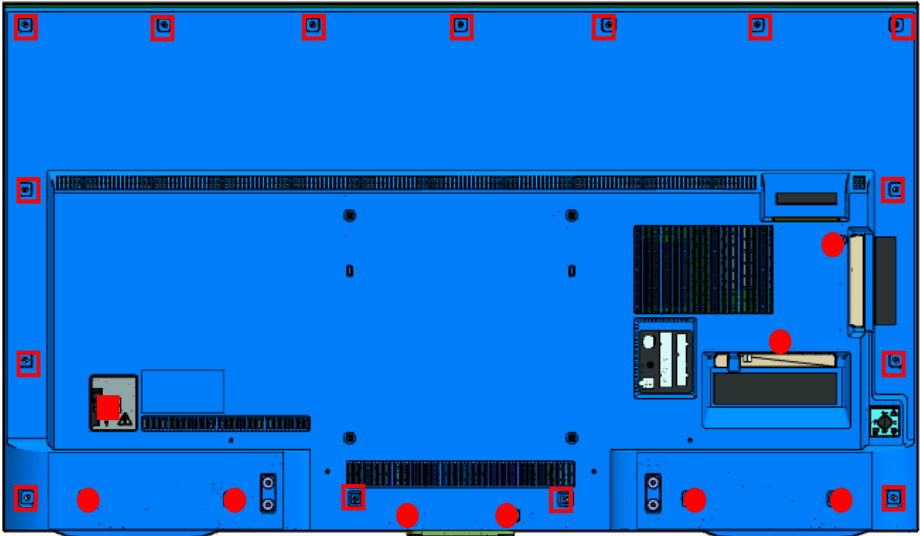
5-2. XBR-65X850C/855C/857C

5-2-1. REAR COVER

SMART CORE
(L, C)
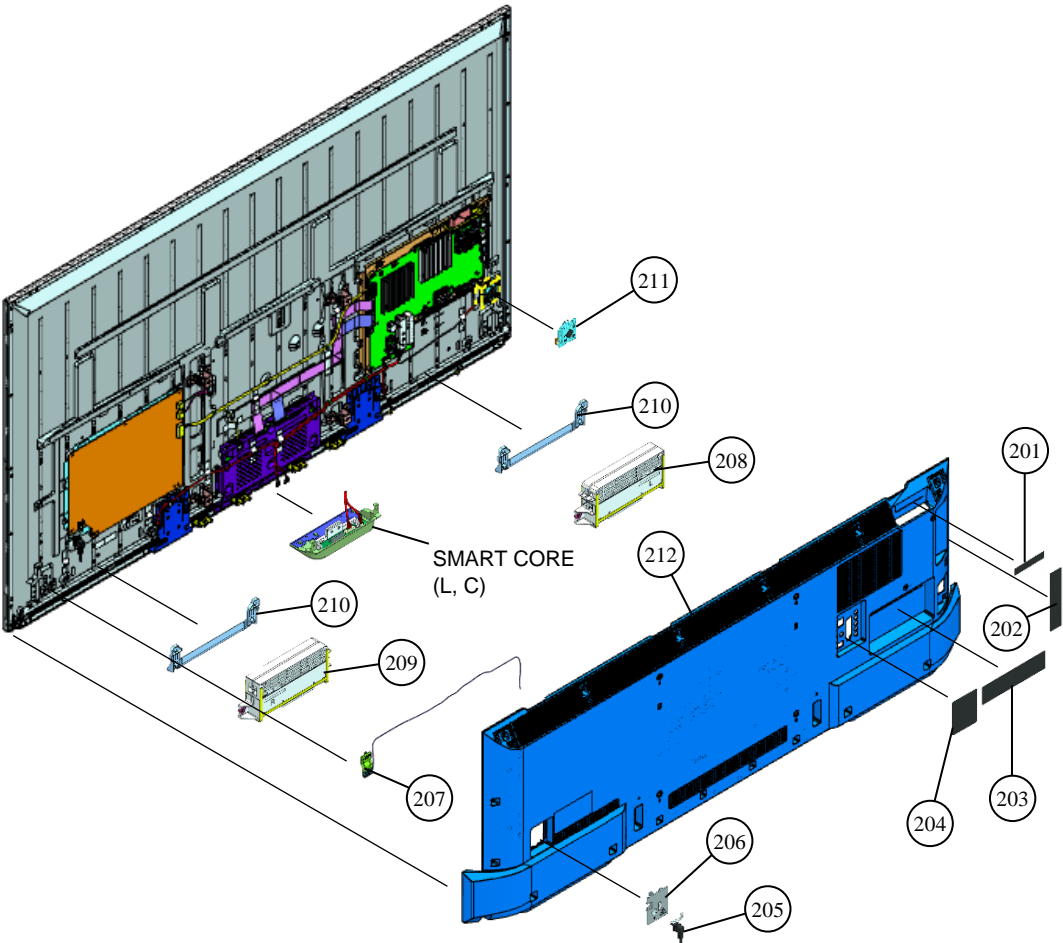
REF. No.	PART No.	DESCRIPTION	MARK
201	4-567-609-01	LABEL, CI	CO1
202	4-563-756-01	LABEL, SIDE TERMINAL (L)	
203	4-563-760-01	LABEL, UNDER TERMINAL	UC2
203	4-563-760-11	LABEL, UNDER TERMINAL	LA1
203	4-563-760-21	LABEL, UNDER TERMINAL	CO1/CR1/AR4/LA8 /BR6
* 204	4-563-764-01	LABEL, REAR TERMINAL	UC2
204	4-563-765-01	LABEL, REAR TERMINAL	LA1/CO1/CR1 /AR4/LA8/BR6
205 ⚠	1-839-692-12	POWER-SUPPLY CORD (WITH CONN.)	AR4
205 ⚠	1-839-695-12	POWER-SUPPLY CORD (WITH CONN.)	CR1/LA8/BR6
205 ⚠	1-839-696-12	POWER-SUPPLY CORD (WITH CONN.)	UC2/LA1/CO1
206	4-297-989-01	AC COVER	BR6
206	4-299-531-01	AC COVER	UC2/LA1/CO1/CR1 /AR4/LA8
207	1-754-948-11	BT ANTENNA	UC2/LA1/BR6
207	1-754-949-11	BT ANTENNA	CO1/CR1/AR4/LA8
208	1-859-007-11	SPEAKER BOX ASSY (L)	
209	1-859-007-21	SPEAKER BOX ASSY (R)	
210	4-546-824-01	BRACKET, SP (2L HWK) A	UC2/LA1/CO1/CR1 /AR4/LA8
210	4-546-466-01	BRACKET, SP BARE (2L HWK)	BR6
211	1-798-510-31	SWITCH UNIT (SM-G-WW)	UC2/LA1/CO1/CR1 /AR4/LA8
211	1-798-510-41	SWITCH UNIT (SM-G-KIT)	BR6
212	4-546-825-11	UNDER COVER (2L_HWK) A	UC2/LA1/CO1/CR1 /AR4/LA8
212	A-2068-960-A	UNDER COVER (2L_HWK) A	BR6

5-2-2. LCD PANEL

REF. No.	PART No.	DESCRIPTION	MARK
251	4-546-441-11	BRACKET, TOP FL (MOLD)	CO1
252	4-546-442-01	BRACKET, SIDE FL (MOLD)	UC2/LA1/CO1/CR1/AR4/LA8
252	4-546-442-11	BRACKET, SIDE FL (MOLD)	BR6
253	4-546-443-11	BRACKET, UNDER FL (MOLD)	LA1
253	4-546-443-21	BRACKET, UNDER FL (MOLD)	UC2
253	4-546-443-41	BRACKET, UNDER FL (MOLD)	CO1/CR1/AR4/LA8
253	4-546-443-61	BRACKET, UNDER FL (MOLD)	BR6
254	A-2072-562-A	COMPLE SVC (XF) BMFL BR6	CR1/AR4/LA8/BR6
254	A-2072-563-A	COMPLE SVC (XF) BMFL CO1	CO1
254	A-2072-564-A	COMPLE SVC (XF) BMFL UC2	UC2
254	A-2072-565-A	COMPLE SVC (XF) BMFL LA1	LA1
255	1-474-617-11	GL1A (CH)-STATIC CONVERTER (TV)	
256	4-549-182-01	SHEET, INSULATION(HWK 2L)	
257	4-546-473-01	BRACET,VESA(HWK)	
258	2-650-770-21	SLIDE, CLAMP	
259	4-562-661-01	BRACKET, SC(HWK)	
260	1-812-104-11	LCD PANEL(A65QVF6S)	BR6
260	1-812-105-11	LCD PANEL(A65QVF6B)	UC2/LA1/CO1/CR1/AR4/LA8
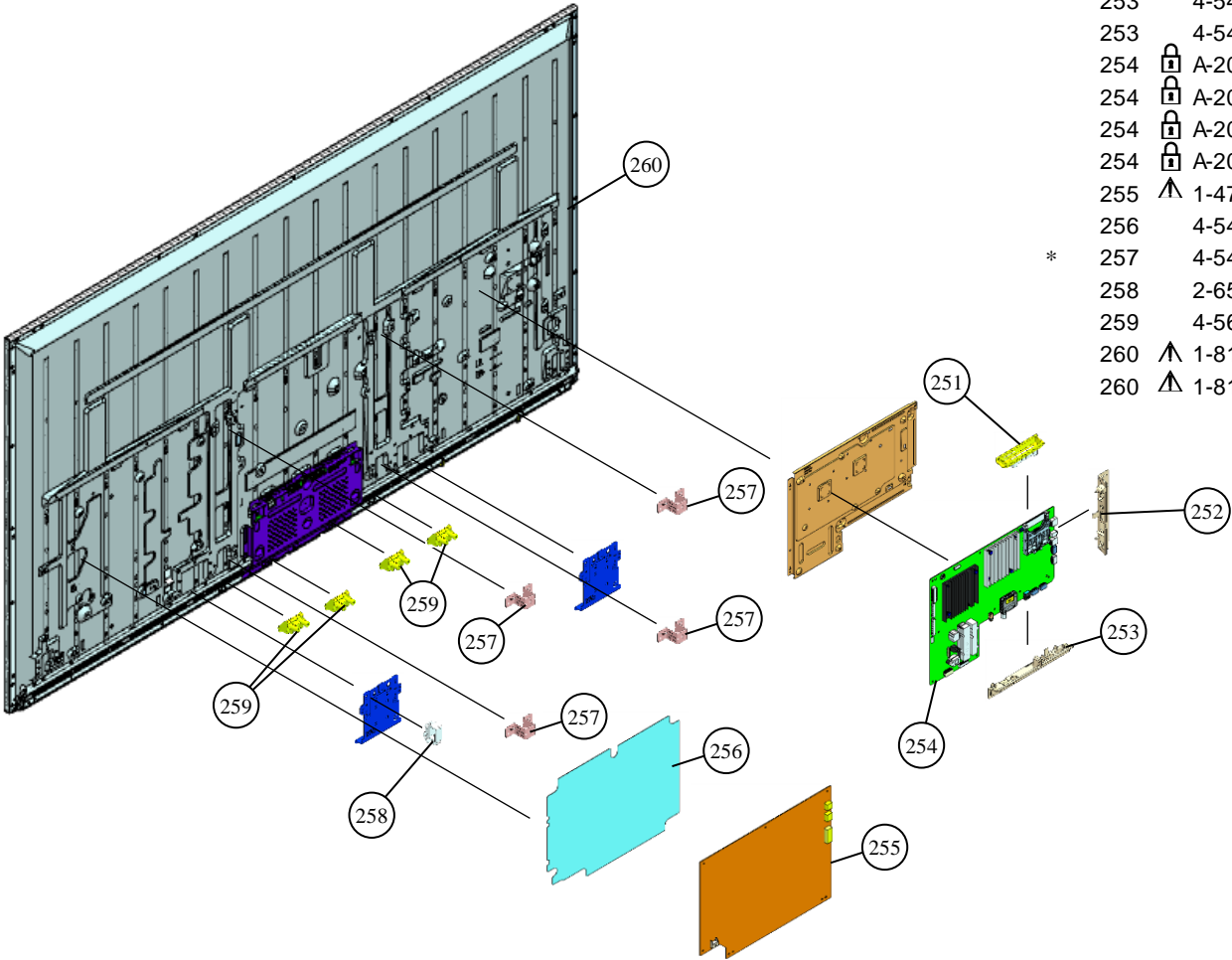
5-2-3. CONNECTORS
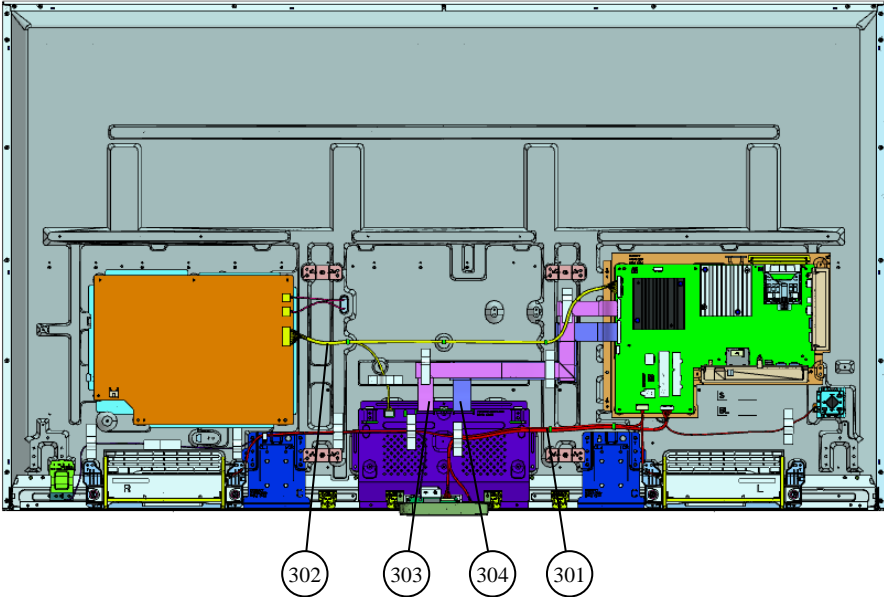
REF.NO.	PART No.	DESCRIPTION	MARK
301	1-910-109-96	HARNESS ASSY (MAIN)	CN1000(BMFL)-CN101(HSC3)-WIFI-SM/CN7700(BMFL)-SP (1)
302	1-910-109-95	CONNECTOR ASSY 28P	CN6401(GL1)-CN9000(BMFL)-TCON (1)
303	1-848-870-11	CABLE, FLEXIBLE FLAT 41P	CN3600(BMFL)-TCON (1) (except BR6)
303	1-848-872-11	FLEXIBLE FLAT CABLE 41P	CN3600(BMFL)-TCON (1) (BR6)
304	1-848-871-11	CABLE, FLEXIBLE FLAT 51P	CN3601(BMFL)-TCON (1) (except BR6)
304	1-848-873-11	FLEXIBLE FLAT CABLE 51P	CN3601(BMFL)-TCON (1) (BR6)

5-2-4. SCREWS

REF.	DESCRIPTION	PART No.
■	SCREW +PSW M4X10	4-159-298-01
☐	SCREW , +PWH M3X6	4-452-935-11
●	SCREW, +BVTP 4X12 TYPE2 IT-3	2-580-639-01
☆	SCREW (+PSW)(M3X6)	2-990-421-41
△	SCREW, +PSW M4X8	2-580-600-11
○	SCREW, +PSW M3X8	2-580-593-01
◆	SCREW, +PSW M3X6 W12	4-256-393-11
▲	SCREW, ORNAMENTAL M6X12	4-268-126-02
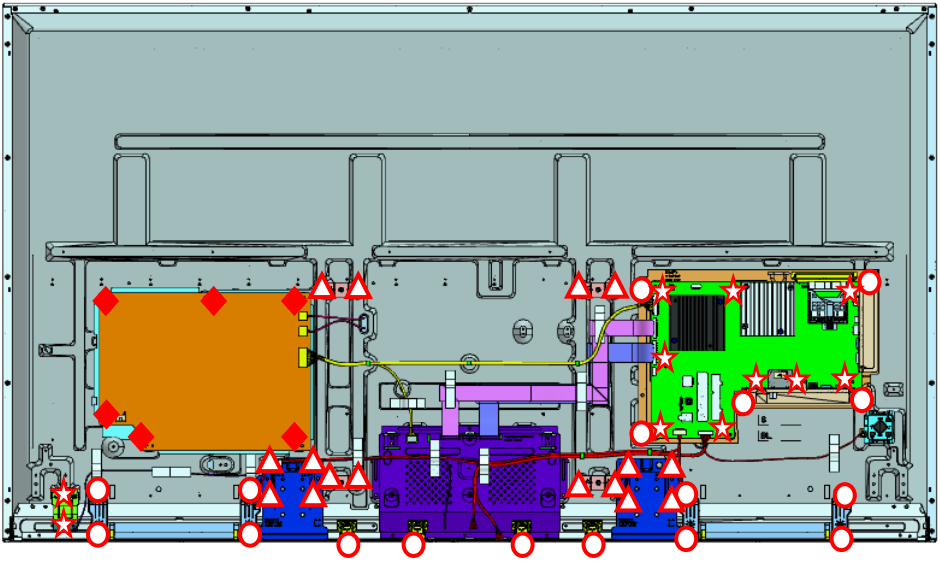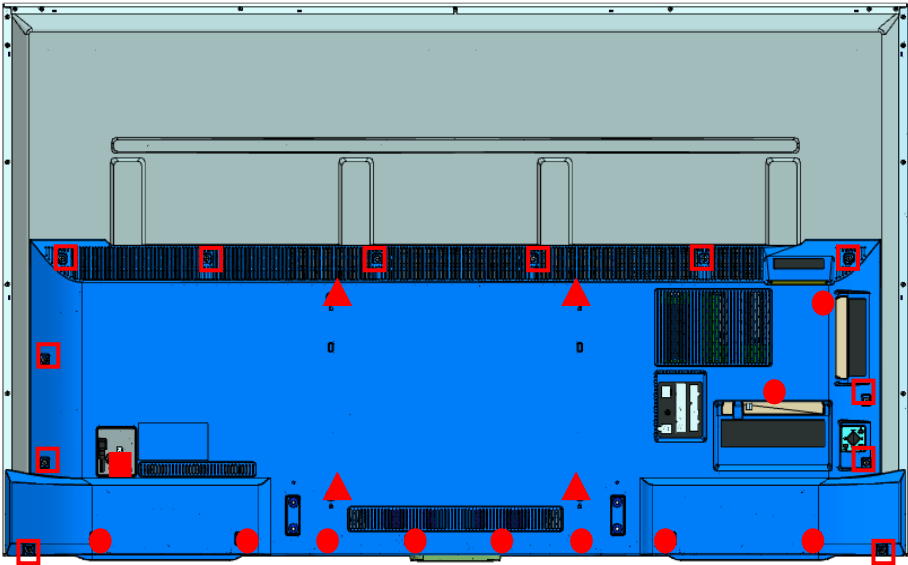
5-3. XBR-75X850C/855C

5-3-1. REAR COVER

SMART CORE
(L, C)

REF. No.	PART No.	DESCRIPTION	MARK
401	4-563-756-01	LABEL, SIDE TERMINAL (L)	
402	4-563-760-01	LABEL, UNDER TERMINAL	UC2
402	4-563-760-11	LABEL, UNDER TERMINAL	LA1
402	4-563-760-21	LABEL, UNDER TERMINAL	BR6
403	4-563-764-01	LABEL, REAR TERMINAL	UC2
403	4-563-765-01	LABEL, REAR TERMINAL	BR6/LA1
404 ⚠	1-839-695-12	POWER-SUPPLY CORD (WITH CONN.)	BR6
404 ⚠	1-839-696-12	POWER-SUPPLY CORD (WITH CONN.)	UC2/LA1
405	4-297-989-01	AC COVER	BR6
405	4-299-531-01	AC COVER	UC2/LA1
406	1-754-949-11	BT ANTENNA	
407	1-859-007-11	SPEAKER BOX ASSY (L)	
408	1-859-007-21	SPEAKER BOX ASSY (R)	
409	4-546-824-01	BRACKET, SP (2L HWK) A	UC2/LA1
409	4-546-466-01	BRACKET, SP BARE (2L HWK)	BR6
410	1-798-510-31	SWITCH UNIT (SM-G-WW)	UC2/LA1
410	1-798-510-41	SWITCH UNIT (SM-G-KIT)	BR6
411	4-546-826-11	UNDER COVER (3L_HWK) A	UC2/LA1
411	A-2068-961-A	UNDER COVER (3L_HWK) A	BR6
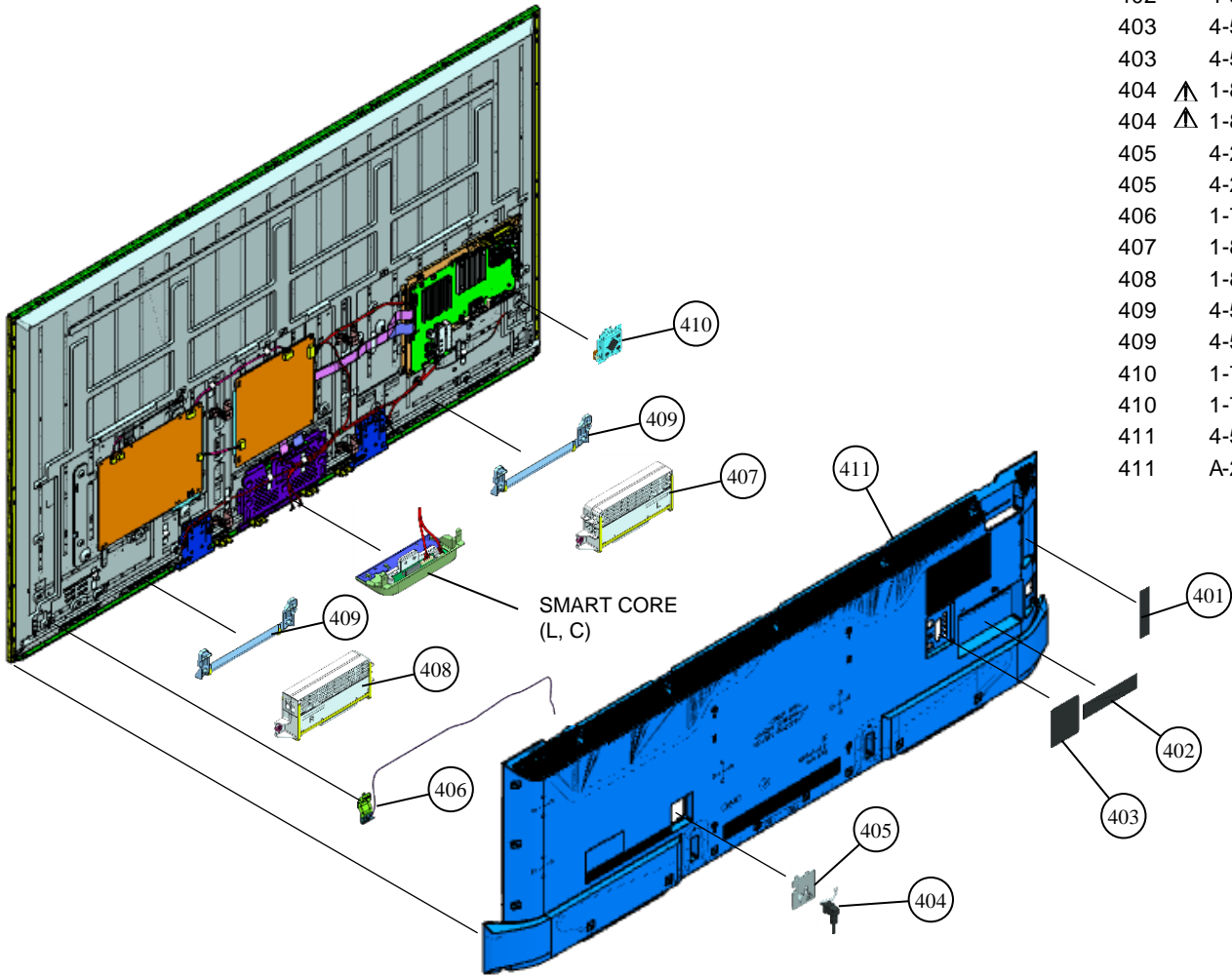
5-3-2. LCD PANEL
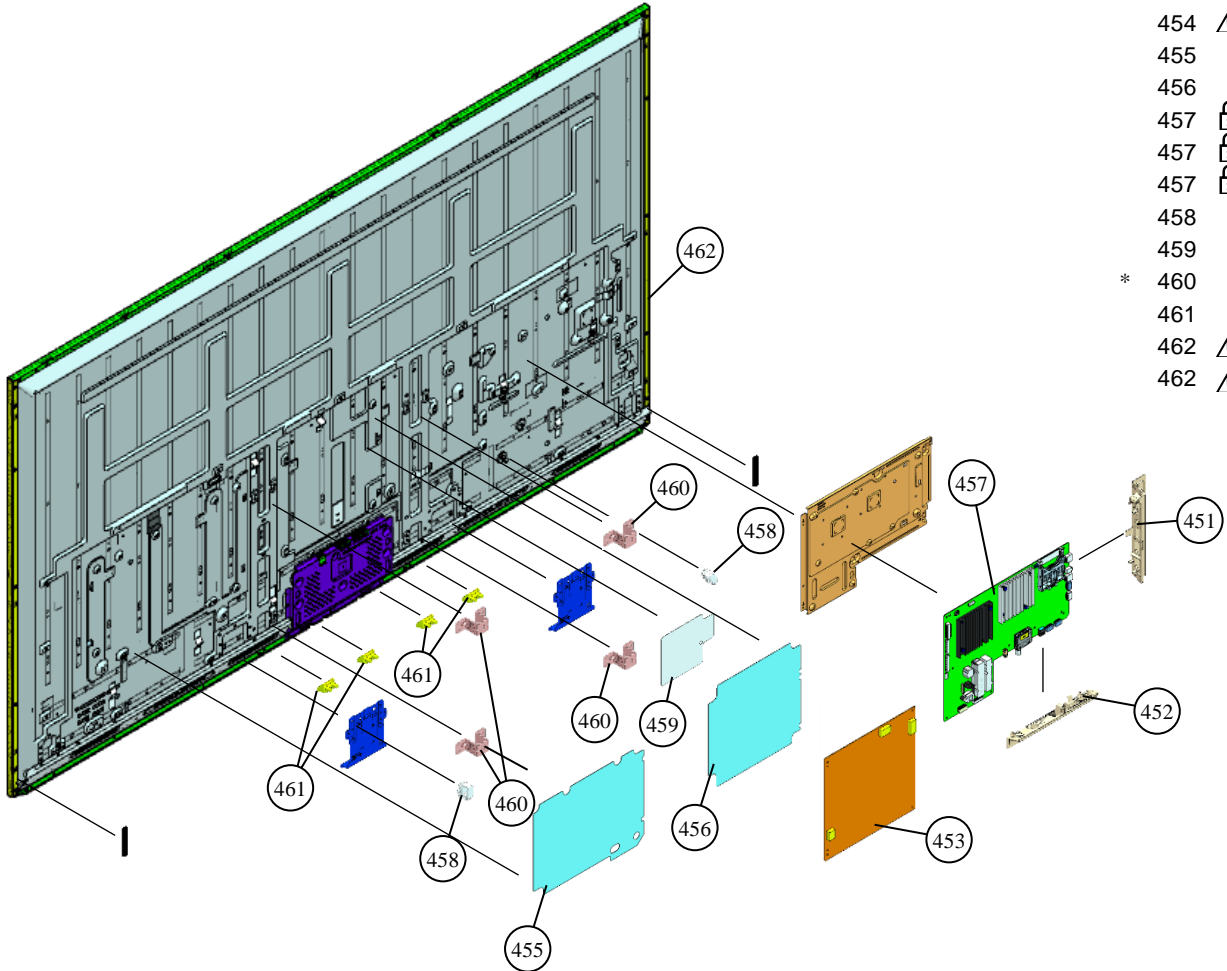
REF. No.	PART No.	DESCRIPTION	MARK
451	4-546-442-01	BRACKET, SIDE FL (MOLD)	UC2/LA1
451	4-546-442-11	BRACKET, SIDE FL (MOLD)	BR6
452	4-546-443-11	BRACKET, UNDER FL (MOLD)	LA1
452	4-546-443-21	BRACKET, UNDER FL (MOLD)	UC2
452	4-546-443-61	BRACKET, UNDER FL (MOLD)	BR6
453 ⚠	1-474-616-11	G4-STATIC CONVERTER (TV)	
454 ⚠	1-474-615-11	GL2-STATIC CONVERTER (TV)	
455	4-549-183-01	SHEET, INSULATION (HWK 3L)	
456	4-549-184-02	SHEET, INSULATION (HWK 3L SYS)	
457 🔒	A-2072-562-A	COMPLE SVC (XF) BMFL BR6	BR6
457 🔒	A-2072-564-A	COMPLE SVC (XF) BMFL UC2	UC2
457 🔒	A-2072-565-A	COMPLE SVC (XF) BMFL LA1	LA1
458	2-650-770-21	SLIDE, CLAMP	
459	4-567-636-01	TAPE, FFC (HWK 3L)	
* 460	4-546-473-01	BRACET, VESA(HWK)	
461	4-562-661-01	BRACKET, SC(HWK)	
462 ⚠	1-812-106-11	LCD PANEL (B75QF59S)	BR6
462 ⚠	1-812-107-11	LCD PANEL (B75QF59B)	UC2/LA1

5-3-3. CONNECTORS
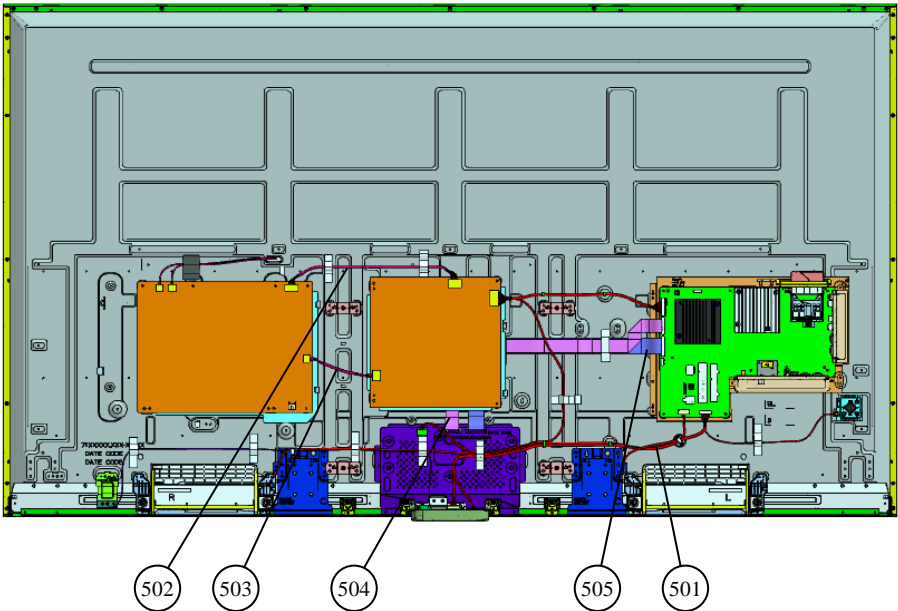
REF.NO.	PART No.	DESCRIPTION	MARK
501	1-910-109-97	HARNESS ASSY (GBT/MAIN)	CN6401(G4)-CN9000(BMFL)-TCON/CN1000(BMFL)-CN101(HSC3)-WIFI-SM/CN7700(BMFL)-SP (1)
502	1-910-109-98	CONNECTOR ASSY 9P	CN6803(GL2)-CN6402(G4) (1)
503	1-848-869-11	CONNECTOR ASSY, 3P	CN6102(GL2)-CN6103(G4) (1)
504	1-848-890-11	FLEXIBLE FLAT CABLE 41P	CN3600(BMFL)-TCON (1)
505	1-848-891-11	FLEXIBLE FLAT CABLE 51P	CN3601(BMFL)-TCON (1)

5-3-4. SCREWS

REF.	DESCRIPTION	PART No.
■	SCREW +PSW M4X10	4-159-298-01
▫	SCREW , +PWH M3X6	4-452-935-11
●	SCREW, +BVTP 4X12 TYPE2 IT-3	2-580-639-01
☆	SCREW (+PSW)(M3X6)	2-990-421-41
△	SCREW, +PSW M4X8	2-580-600-11
○	SCREW, +PSW M3X8	2-580-593-01
◆	SCREW, +PSW M3X6 W12	4-256-393-11
▲	SCREW, ORNAMENTAL M6X12	4-268-126-02
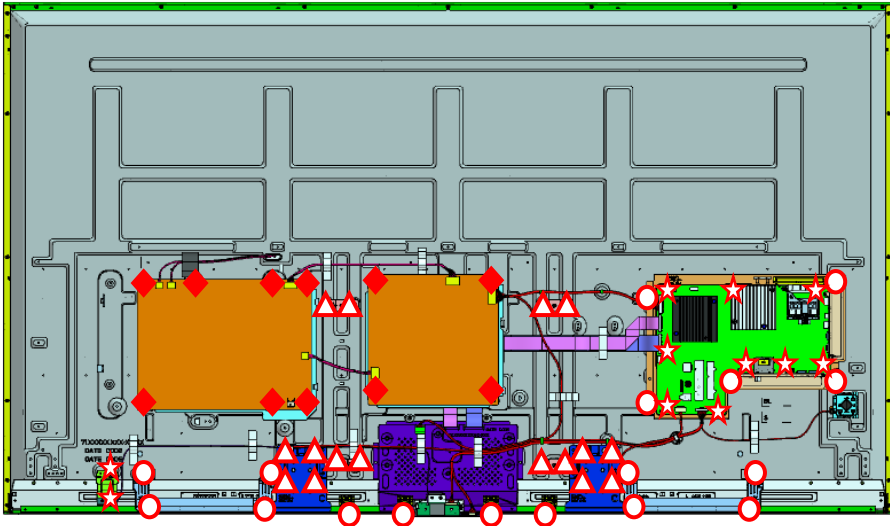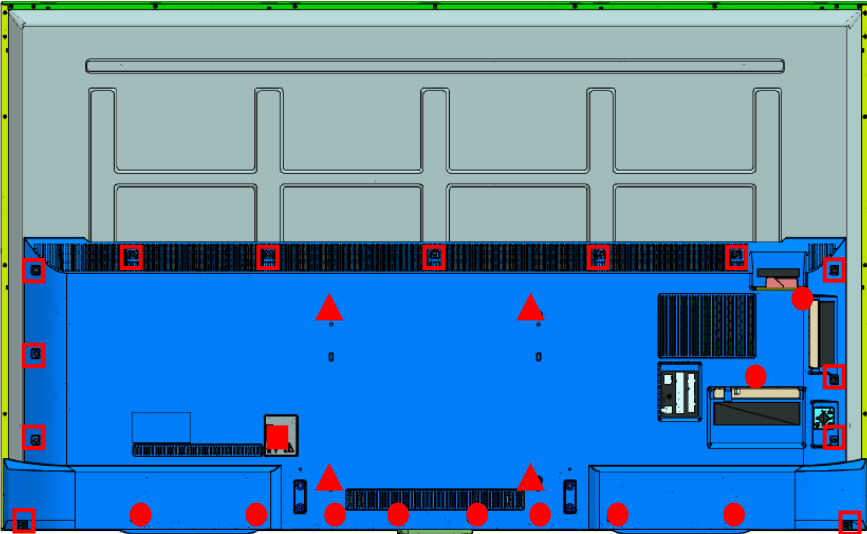
5-4. XBR-55X850C/855C/857C

5-4-1. SMART CORE (M,L)
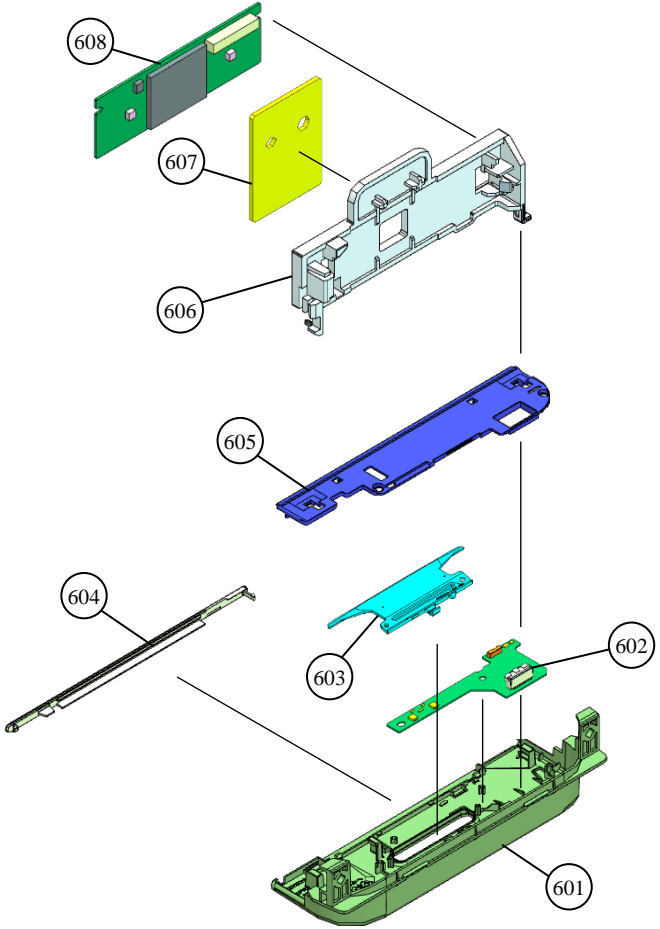
REF. No.	PART No.	DESCRIPTION	MARK
601	4-547-392-01	CASE, BOTTOM (M)	BR6
601	4-564-315-01	CASE, BOTTOM (M)	except BR6
602	A-2066-088-A	HSC3_S_M MOUNT	
603	4-547-390-01	LIGHT, GUIDE	BR6
603	4-564-313-01	LIGHT, GUIDE	except BR6
604	4-547-389-01	PANEL, ORNAMENT	BR6
604	4-564-312-01	PANEL, ORNAMENT	except BR6
605	4-547-395-01	COVER, TOP	BR6
605	4-564-317-01	COVER, TOP	except BR6
606	4-547-397-01	BRACKET, WIFI	BR6
606	4-564-318-01	BRACKET, WIFI	except BR6
607	4-566-841-01	HEAT SINK L(SC)	
608	1-458-853-11	WLAN/BT MODULE(11AC)	except BR6
608	1-458-853-21	WLAN/BT MODULE(11AC) BRZ	BR6

5-5. XBR-65X850C/855C/857C, 75X850C/855C

5-5-1. SMART CORE (L,C)
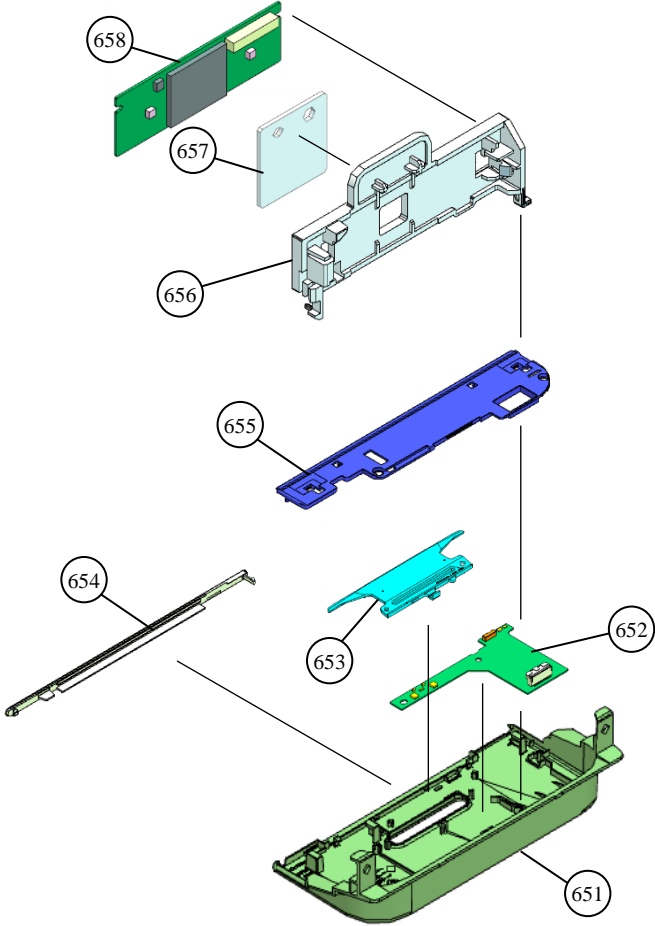
REF. No.	PART No.	DESCRIPTION	MARK
651	4-547-393-01	CASE, BOTTOM (L)	BR6
651	4-564-316-01	CASE, BOTTOM (L)	except BR6
652	A-2066-086-A	HSC3_L MOUNT	
653	4-547-390-01	LIGHT, GUIDE	BR6
653	4-564-313-01	LIGHT, GUIDE	except BR6
654	4-547-389-01	PANEL, ORNAMENT	BR6
654	4-564-312-01	PANEL, ORNAMENT	except BR6
655	4-547-395-01	COVER, TOP	BR6
655	4-564-317-01	COVER, TOP	except BR6
656	4-547-397-01	BRACKET, WIFI	BR6
656	4-564-318-01	BRACKET, WIFI	except BR6
657	4-547-207-01	HEAT SINK(SC)	
658	1-458-853-11	WLAN/BT MODULE(11AC)	except BR6
658	1-458-853-21	WLAN/BT MODULE(11AC) BRZ	BR6

5-6. OTHER PART

5-6-1. MISCELLANEOUS

	PART No.	DESCRIPTION	MARK
	3-876-036-71	UNI-LABEL, BLANK	
	4-262-708-04	CLAMPER, CABLE	
	4-449-743-01	SCREW, +PSW M5X16	
	4-534-964-01	PULLEY, STAND (HWI)	65" /75"
	4-535-586-01	BADGE, XBR LOGO(H3.7)	
*	4-547-493-01	HEAT, SINK (MUFF)	
*	4-548-743-01	HOLDER, HS WS (MUF)	
	4-549-186-01	SHEET, THERMAL(BM)	
*	4-549-188-01	HOLDER(HS MUF)	
*	4-549-395-01	HEAT SINK (MUFF C)	
	4-549-528-11	SHEET, THERMAL (SC)	
	4-566-117-01	GASKET (BMF)	
	4-567-123-01	GASKET (HWK STD)	
	4-570-857-01	BADGE, XBR LOGO (H3.1)	
	7-600-031-97	TAPE (3M 1350FB-1)15MMX66M BLK	
*	7-600-040-44	ADHESIVE (SV380C) 333CC GRY	

5-6-2. ACCESSORIES

	PART No.	DESCRIPTION	MARK
	3-876-036-71	UNI-LABEL, BLANK	
	4-262-708-04	CLAMPER, CABLE	
	1-458-628-21	3D EYEWEARTDG-BT500A(SVC)GA+LA	55" BR6/75" BR6
	1-492-949-11	REMOTE COMMANDER (RMF-TX100U)	75" UC2/LA1
			65" except BR6
			55" except BR6
	1-492-949-21	REMOTE COMMANDER (RMF-TX100U)	BR6
	1-492-978-21	REMOTE COMMANDER (RMT-TX100U)	UC2/LA1
	1-492-975-21	REMOTE COMMANDER (RMT-TX100B)	65" CO1/CR1/AR4/LA8
			55" CR1/ECU/LA8/CO1
	1-492-975-31	REMOTE COMMANDER (RMT-TX100B)	BR6
	1-785-504-21	ADAPTOR, CONVERSION	CR1/ECU/LA8
*	1-848-803-11	RCA CONVERSION CABLE	
	4-546-910-01	STAND NECK ASSY	65" except BR6
			75" UC2/LA1
	A-2069-466-A	STAND NECK ASSY	65" BR6/75" BR6
	4-559-310-01	STAND NECK ASSY (LAK)	55" except BR6
	A-2073-679-A	STAND, NECK ASSY (LAK)	55" BR6
	4-549-374-01	STAND, SHAFT (3L HWK) A	75" UC2/LA1
	A-2068-967-A	STAND, SHAFT (3L HWK) A	75" BR6
	4-549-373-01	STAND, SHAFT (2L HWK) A	65" except BR6
	A-2068-966-A	STAND,SHAFT (2L HWK) A	65" BR6
	4-562-159-01	STAND (L HRN) A	55" except BR6
	A-2073-680-A	STAND (L HRN) A	55" BR6
*	4-562-216-11	REFERENCE GUIDE	UC2
*	4-562-217-31	REFERENCE GUIDE	LA1
*	4-562-220-31	REFERENCE GUIDE	AR4
	4-562-222-11	STARTUP GUIDE	BR6
	1-845-283-14	IR BLASTER	UC2/LA1
	4-562-758-01	BAG, SCREW A (EGL)	65"/75" except BR6
*	4-567-081-01	SCREW, +PSW M6X12	
*	4-567-082-01	SCREW, +PSW M5X20	
	4-449-743-01	SCREW, +PSW M5X16	55"

END

APPENDIX-1

How to USB update

1:Download USB image and unzip file.

2: copy unzip file to USB memory root folder.

3: USB memory insert TV.

4:USB image is newer soft version.
Automatically show message and start update.
Please follow directions.

4:USB image is not newer soft version.
Automatically show message and start update.
Please follow directions.

Copying update file from USB. Please wait...

Preparing for system software update. During the system software update, the TV will automatically restart. Please do not remove the USB device until an update complete message is displayed. The update may take up to 30 minutes to complete.

No newer version of the system software was found. Please remove the USB device and select "OK" to exit.

5: finished

The system software update is complete.
Some user settings may have changed during the update.
Please remove the USB device and select "OK" to exit.

5: finished

Software update for B board replacement

B board replacement

After AC Plug-in, wait for 30sec then turn on TV by power key on TV or remote commander.

Check condition.
Is it the Case 1,2 or 3?

<Case1>
Panel : No Picture
SMART CORE LED : Red LED 3x blinking

<Case3>
Panel : Picture appear
SMART CORE LED : White Lit

<Case2>
Panel : No Picture
SMART CORE LED : Amber & Green blinking

Update to the latest software version
*Remove all signal connection.
(antenna, external input, ether cable, etc)
*Insert the USB memory.
SMART CORE LED will change to white blinking. *
After completes, TV will reboot by itself and turns on.
*Disconnect the USB memory.

Check Model name by Service mode.
Is it the same or different?

Different

Same

Check NVM version affix by Service mode to confirm the country.
Is it the same or different?

Different

Same

In case of BRA&COL, TV will enter STDBY status. Then press "Power" key of remote commander to turn on TV.

Check the leftmost bit of NVM version by Service mode to confirm RCD version.
Is it except 0 or 0?

"0"

Except "0"

Check the software version by Service mode.
Is it latest version?

No

Yes

Model Number setting

Update to the latest software version
*Remove all signal connection.
(antenna, external input, ether cable, etc)
*Insert the USB memory.
SMART CORE LED will change to white blinking.
*After completes, TV will reboot by itself and turns on.
*Disconnect the USB memory.

Serial Number input and WB/Gamma, MURA, CUC data transfer by Service mode

Reconfirm Software version and Model name by Service mode

Turn off the TV by remote power key then reboot the set (AC OFF wait 10sec then AC plug-in), turn on the TV by remote power key.

Note1:
For a success of software writing, it will take 20~30 min/time.

Note2:
Do not turn off TV while updating software.
If older software package version is used, software cannot be update.
TV will reboot and turn on again.

Software update for Panel/T-CON replacement

Panel/T-CON replacement

↓

After AC Plug-in, wait for 30sec then turn on TV by power key on TV or remote commander.

↓

Check condition
Is it the Case 1 or 2?

<Case2>
Panel : Picture appear
SMART CORE LED : White Lit

<Case1>
Panel : No Picture
SMART CORE LED : Amber & Green blinking

Update to the latest software version
*Remove all signal connection.
(antenna, external input, ether cable, etc)
*Insert the USB memory. SMART CORE LED will change to white blinking.
*After completes, TV will reboot by itself and turns on.
*Disconnect the USB memory.

In case of BRA&COL, TV will enter STDBY status. Then press "Power" key of remote commander to turn on TV.

Note1:
For a success of software writing, it will take 20~30 min/time.

Note2:
Do not turn off TV while updating software.
If older software package version is used, software cannot be update.
TV will reboot and turn on again.

Check the software version by Service mode.
Is it latest version?

No → Model Number setting

Yes

Update to the latest software version
*Remove all signal connection.
(antenna, external input, ether cable, etc)
*Insert the USB memory. SMART CORE LED will change to white blinking.
*After completes, TV will reboot by itself and turns on.
*Disconnect the USB memory.

↓

WB/Gamma, MURA, CUC data transfer by Service mode

↓

Reconfirm Software version and Model name by Service mode

↓

Turn off the TV by remote power key then reboot the set (AC OFF wait 10sec then AC plug-in), turn on the TV by remote power key.

APPENDIX-2

Wire Dressing (XBR-55)

Wire Dressing (XBR-65)

VA Tape   x11
• Fix wire

Harness Tie   x5
• Fix wire

Slide Clamp x1
• Hold wires

Wire Dressing (XBR-75)

APPENDIX-3

HANDLING GUIDANCE

Unpacking(1/2)

1.<u>Take out panel from carton box with proper number of operator.</u>

≧43"

MINIMUM NUMBER OF OPERATOR
XBR-55
2

2.<u>Take out panel straight out from carton box.</u>
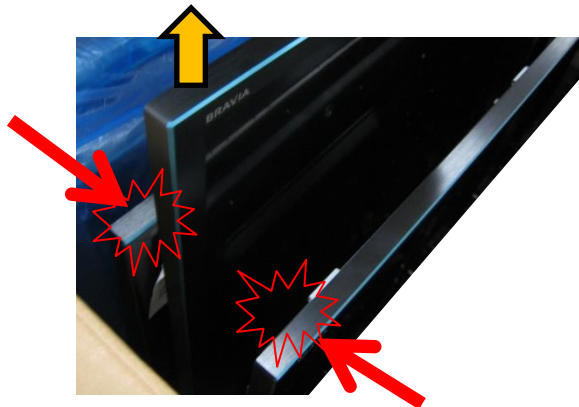
When taking out a panel,
be careful not to hit front panel and back panel.
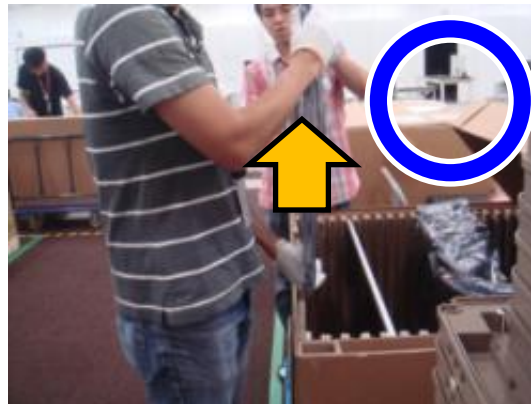
HANDLING GUIDANCE

Unpacking(2/2)

3. <u>Do not hold or press glass (TFT cell).</u>

Glass area

Glass area
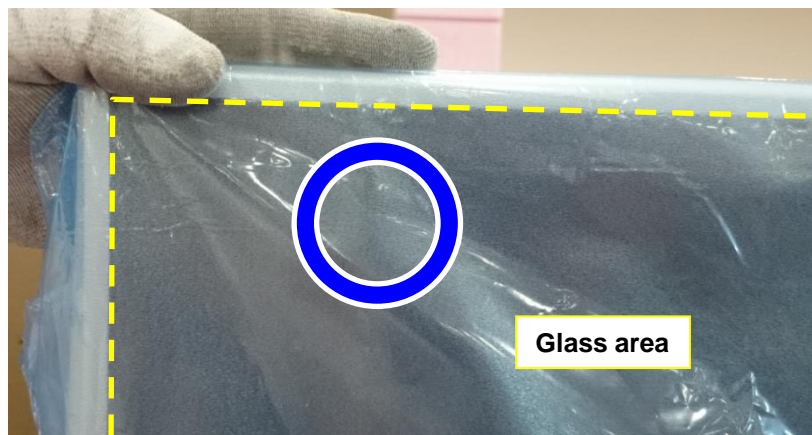
4. <u>Put in "separator board" between panel and panel.</u>

When "vacuum handling jig" is used.

When taking out a panel,
be careful not to hit   next panel module.
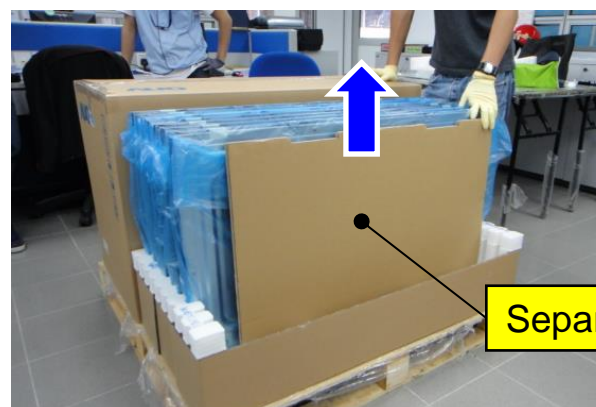
Separator board

*Please prepare "Separator board" by yourself.

HANDLING GUIDANCE

Carrying (1/2)

DO NOT HOLD PANEL HORIZONTALLY AT ALL TIMES.

MINIMUM NUMBER OF OPERATOR
XBR-55
2

1. Carry panel vertically.

PANEL WILL WARP IF HANDLED LIKE THIS PICTURE
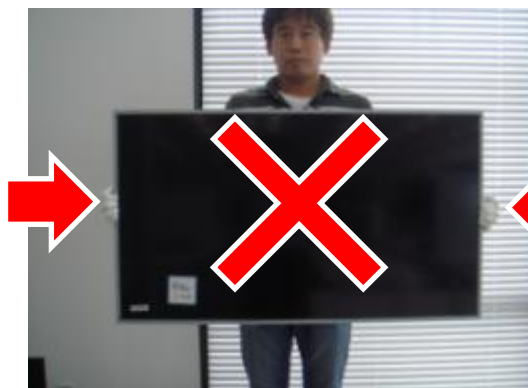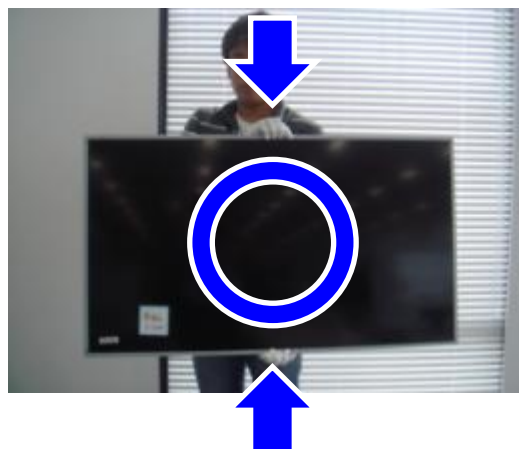
2. Do not hold glass area(TFT Cell area).

Glass area

Glass area

Glass area

AL BEZEL

AL BEZEL
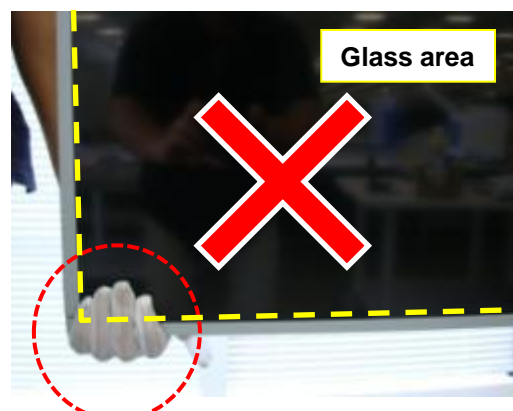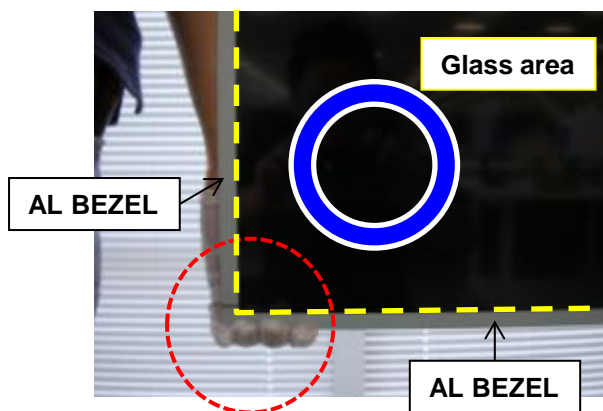
HANDLING GUIDANCE

Carrying (2/2)

MINIMUM NUMBER OF OPERATOR
XBR-55
2

3. <u>When carrying by only 1 person, hold panel at top and bottom center position.</u>
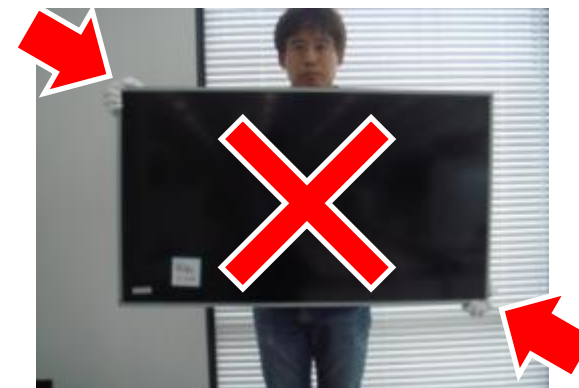
4. <u>For large panels, sizes 49" or larger, hold panel by 2 people.</u>

≧49"

HANDLING GUIDANCE

Placing to table

Follow guidelines below.

MINIMUM NUMBER OF OPERATOR
XBR-55
2

1. Steps to place panel to table.

(1) Place vertically.   (2) Change hold position.   (3) Place to table.
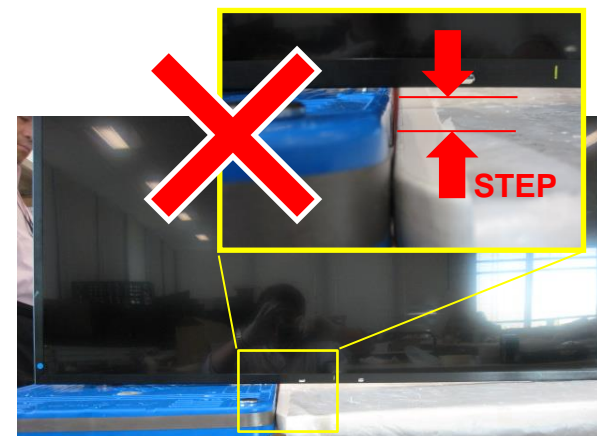
2. Place panel by 2 people.
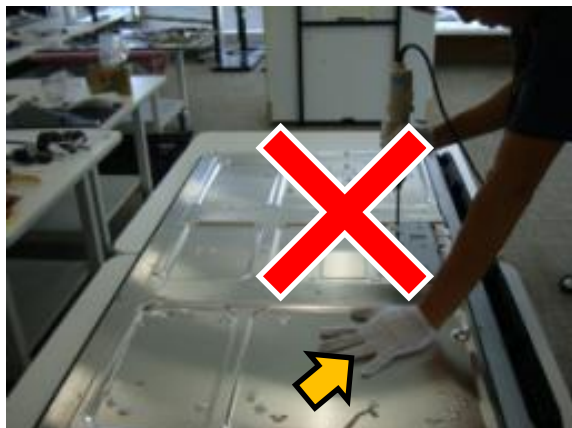

3. Place panel within table surface.

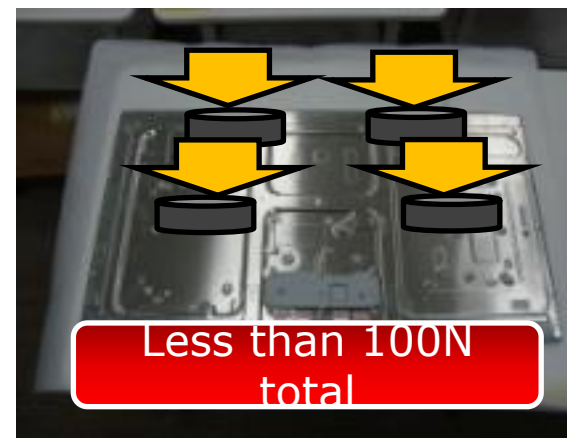4. Table must not have any step.

STEP

HANDLING GUIDANCE

Others

1. Do not press panel during fixing screw.

2. Do not hold or touch glass (TFT cell) at all times.

Glass area

3. When attaching or detaching vacuum handling jig to panel, maximum force on panel shall be less than 100N total.

Less than 100N total

4. Operator must wear gloves.
Do not touch Panel module without gloves.

BRAVIA