HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL

AZ2F *CHASSIS*

Segment: 3a-1

ORIGINAL MANUAL ISSUE DATE: 3/2011

Version	Date	Subject
1.0	3/2011	Original manual issue.

LCD Digital Color TV

SONY ®

9-888-398-01

KDL-40/46/55/60NX720,723,725 (AEP/UK/RUSSIA)

S/N range 3,000,001-4,500,000 (FX)

SERVICE MANUAL

AZ2F *CHASSIS*

Segment: 3a-1

LCD Digital Color TV

SONY ®

9-888-398-01

MODEL LIST

MODEL	COLOR	COMMANDER	DEST.
KDL-40NX720	*Black*	*RM-ED044*	AEP/RUSSIA
KDL-40NX723	*Black*	*RM-ED044*	AEP/UK
KDL-40NX725	*Black*	*RM-ED044*	AEP
KDL-46NX720	*Black*	*RM-ED044*	AEP/RUSSIA
KDL-46NX723	*Black*	*RM-ED044*	AEP/UK
KDL-46NX725	*Black*	*RM-ED044*	AEP
KDL-55NX720	*Black*	*RM-ED044*	AEP/RUSSIA
KDL-55NX723	*Black*	*RM-ED044*	AEP/UK
KDL-55NX725	*Black*	*RM-ED044*	AEP
KDL-60NX720	*Black*	*RM-ED044*	AEP
KDL-60NX723	*Black*	*RM-ED044*	AEP/UK
KDL-60NX725	*Black*	*RM-ED044*	AEP

MODEL	COLOR	COMMANDER	DEST.

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.

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 chássis sous tension, un transformateur d'isolement doit etre utilisé lors de tout dépannage. Le chássis 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!!
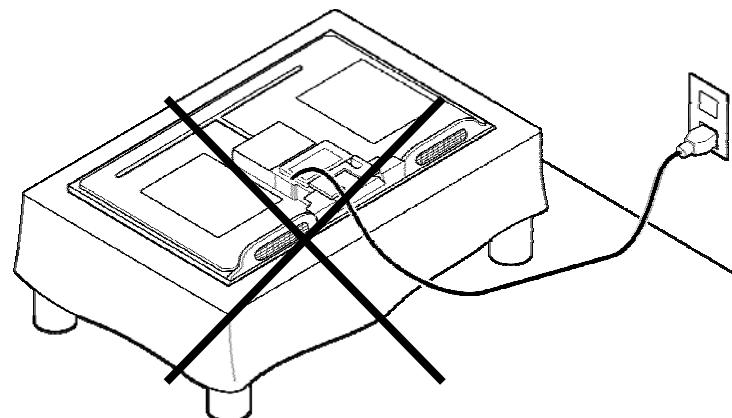
Les composants identifi es par une trame et par une marque ! sur les schemas de principe, les vues explosees et les listes de pieces sont d'une importance critique pour la securite du fonctionnement. Ne les remplacer que par des composants Sony dont le numero de piece est indique dans le present manuel 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.
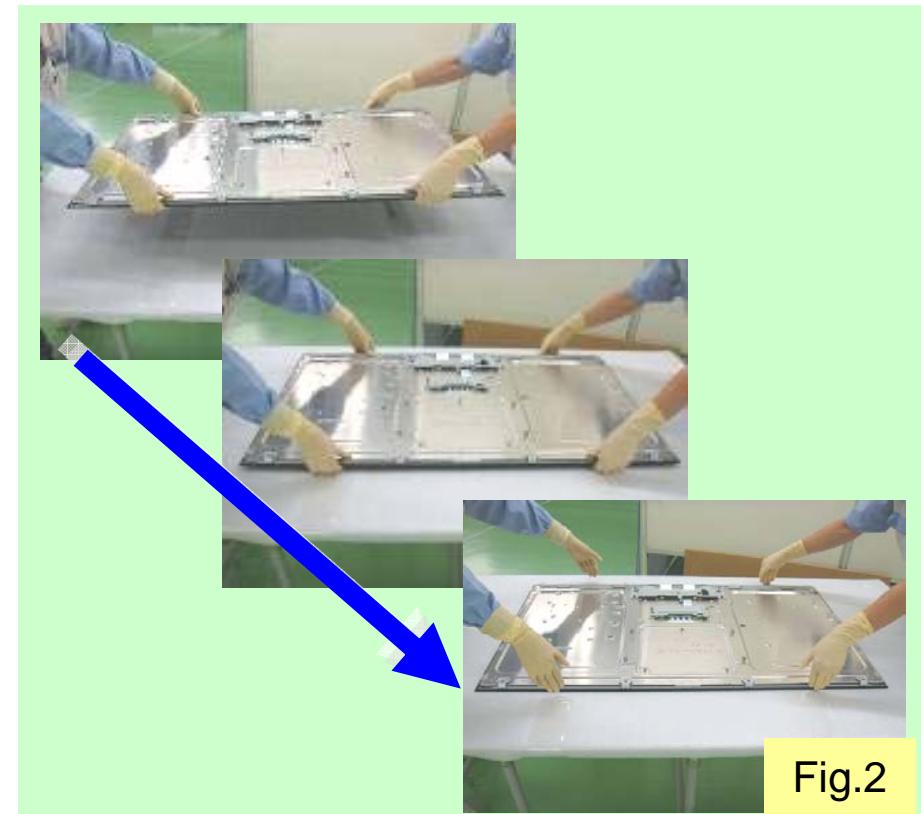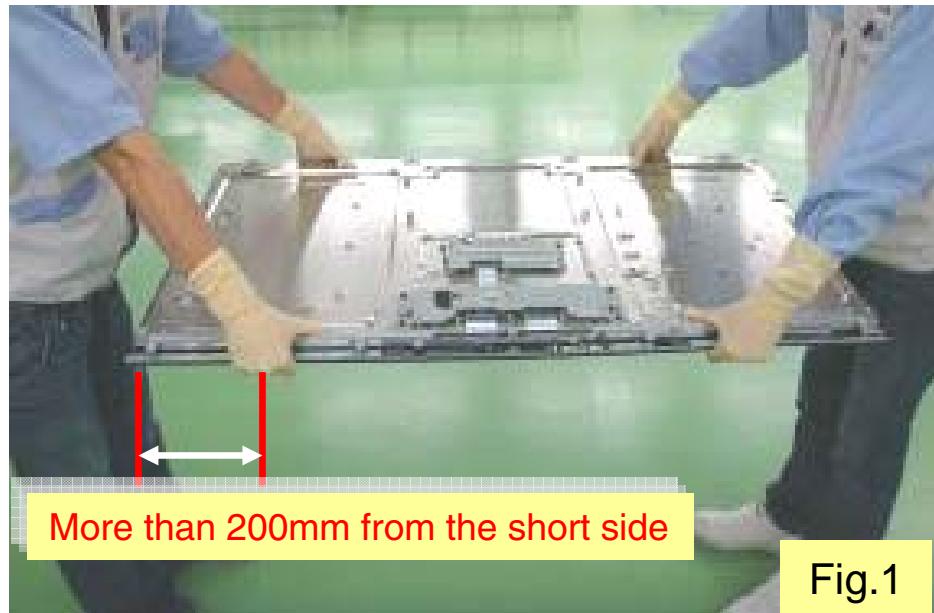
1) Do not press on the panel or frame edge to avoid the risk of electric shock.
2) Do not scratch or press on the panel with any sharp objects.
3) Do not leave the module in high temperatures or in areas of high humidity for an extended period of time.
4) Do not expose the LCD panel to direct sunlight.
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.

# HANDLING THE TENGO PANEL
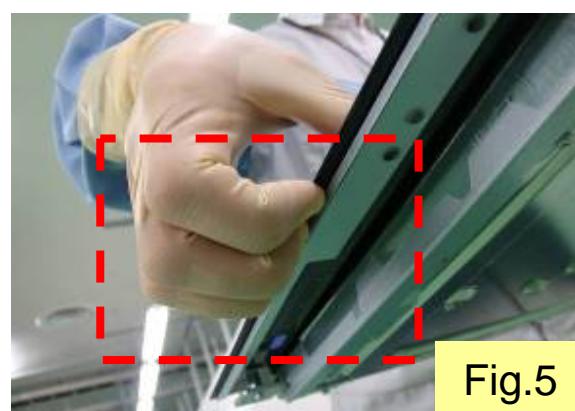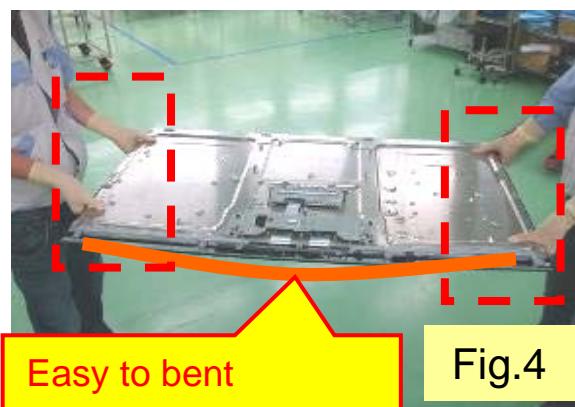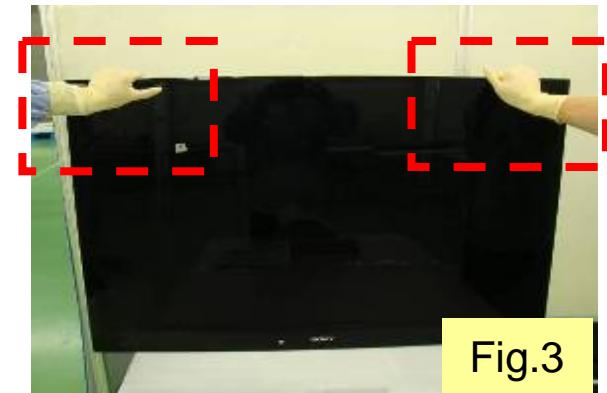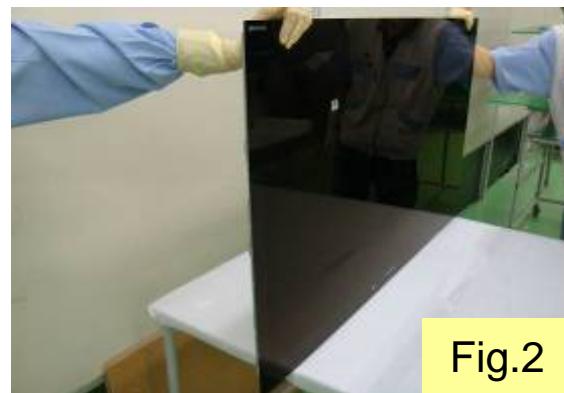
When handling the TENGO panel, please obey the following instructions.

- Please hold the long side more than 200mm from the short side. (Fig.1)

- When you ground Tengo panels beneath, ground it on the level slowly. (Fig.2)

More than 200mm from the short side

Fig.1

Fig.2

By following handling, resin separation/cracking of glass may be occurred, "restrict" the following items.

    1. Temporarily putting on lower cushion with bottom of glass. (Fig.1)

    2. Ground with the bottom of glass. (Fig.2)

    3. Grip as palm touches glass side. (Fig.3)

    4. Hold the short side. (Fig.4)

    5.Hold glass only when glass side up. (Fig.5)

Fig.1

Fig.2

Fig.3

Easy to bent

Fig.4

Fig.5
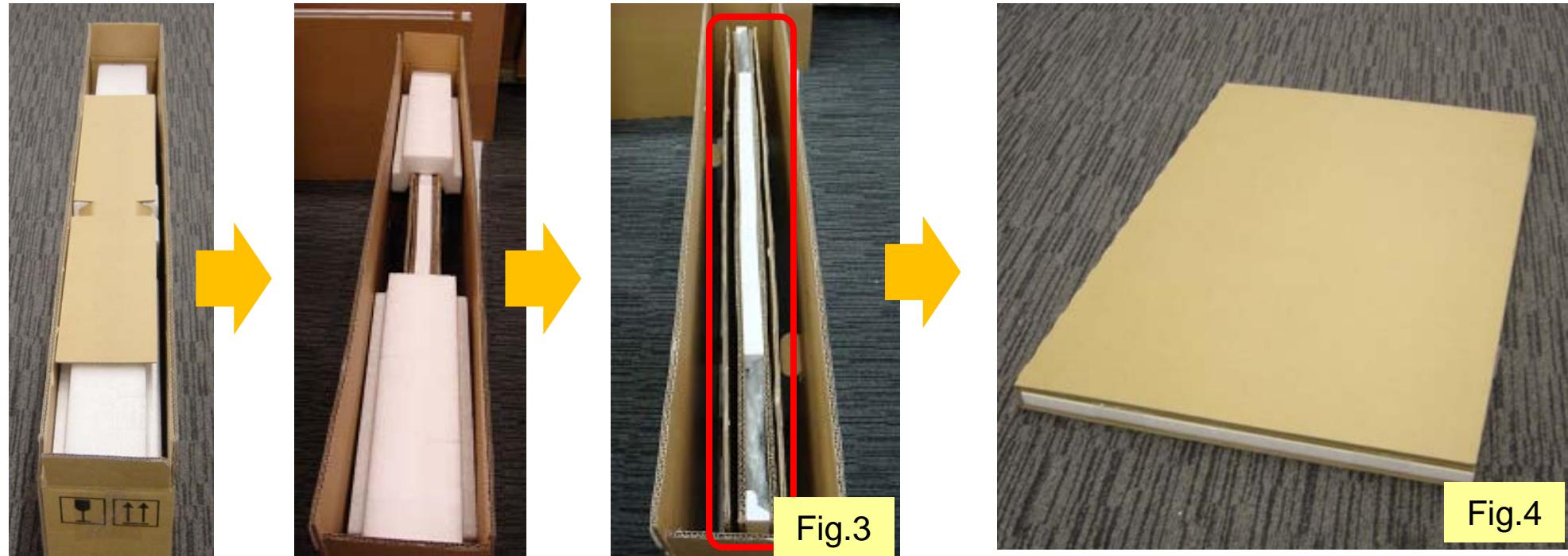
NOTES ON REPLACING THE TENGO PANEL

When replacing the Tengo panel at service, please note the followings.

- Unpack the carton box, pull out the panel with reinforcing plates. (Fig.3)

-Together with reinforcing plates, place the panel with face down slowly. (Fig.4)

* Please use the reinforcing plates as operating table.

Fig.3

Fig.4

When replacing the Tengo panel at service, please note the followings.

- Unpack the package of Tengo panel. (Fig.5)

- Cut protection bag at the center of the back of panel. (Fig.6)

* Please cut the protection bag carefully, the bag will be used for re-packing.
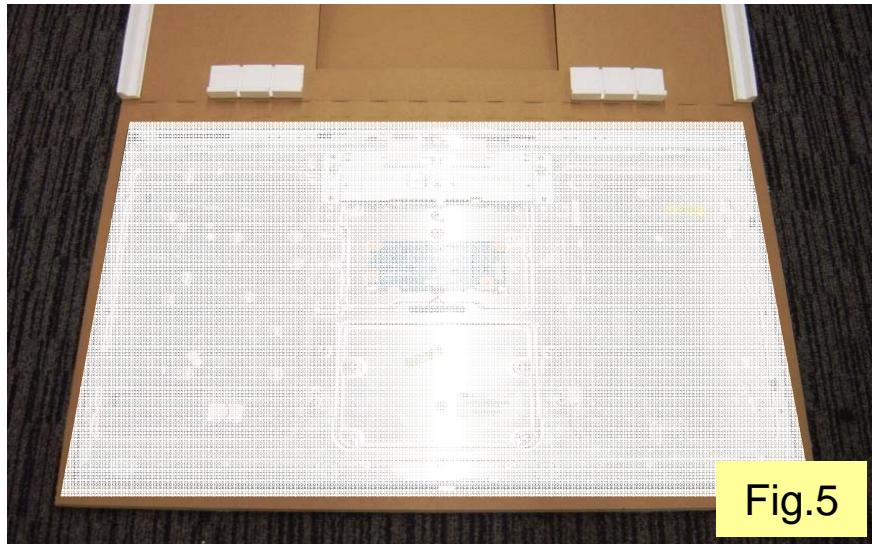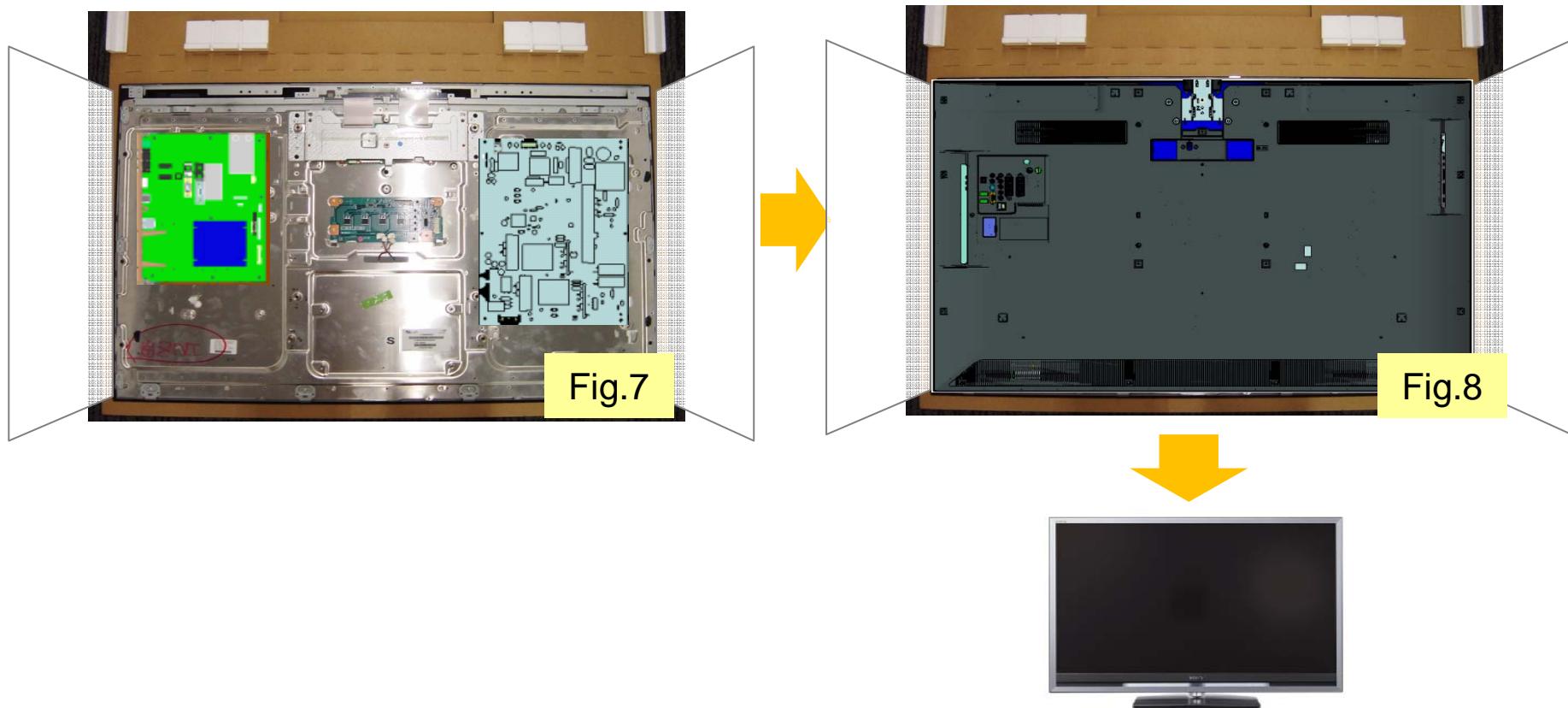
Fig.5

Fig.6
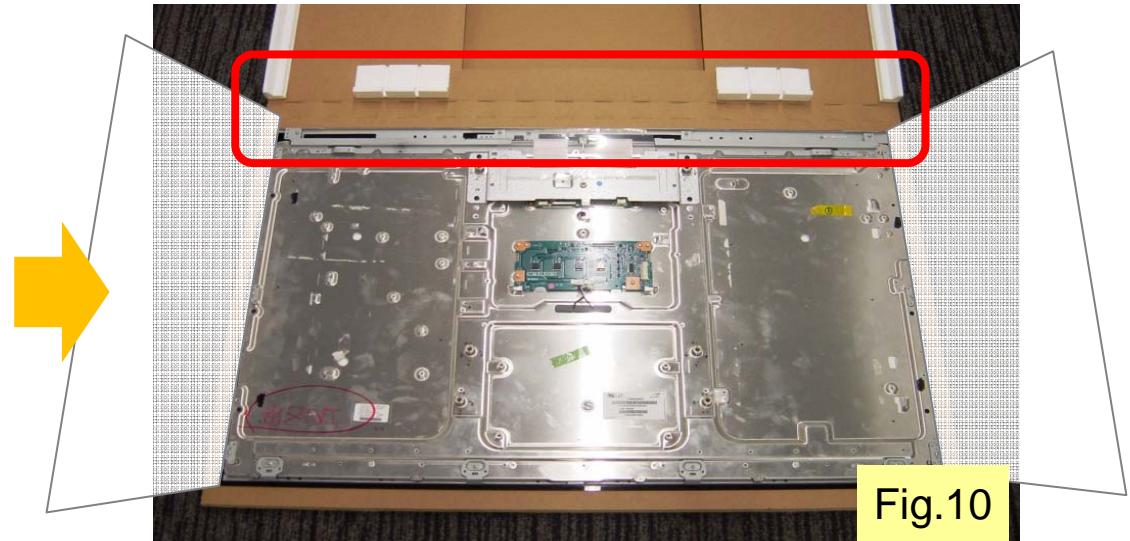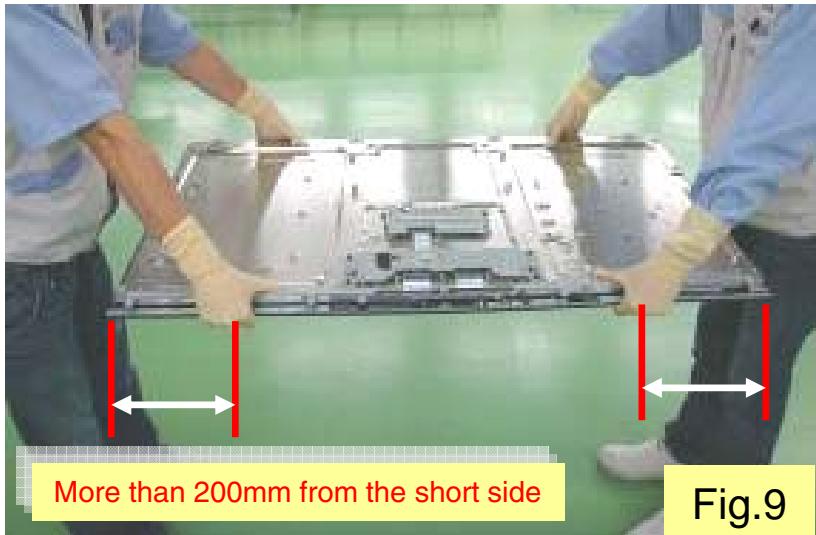
When replacing the Tengo panel at service, please note the followings.

    - Assemble TV set with the new panel. (Fig.7)

    - After assembly, attach Stand Unit and stand the TV up. (Fig.8)

Fig.7

Fig.8
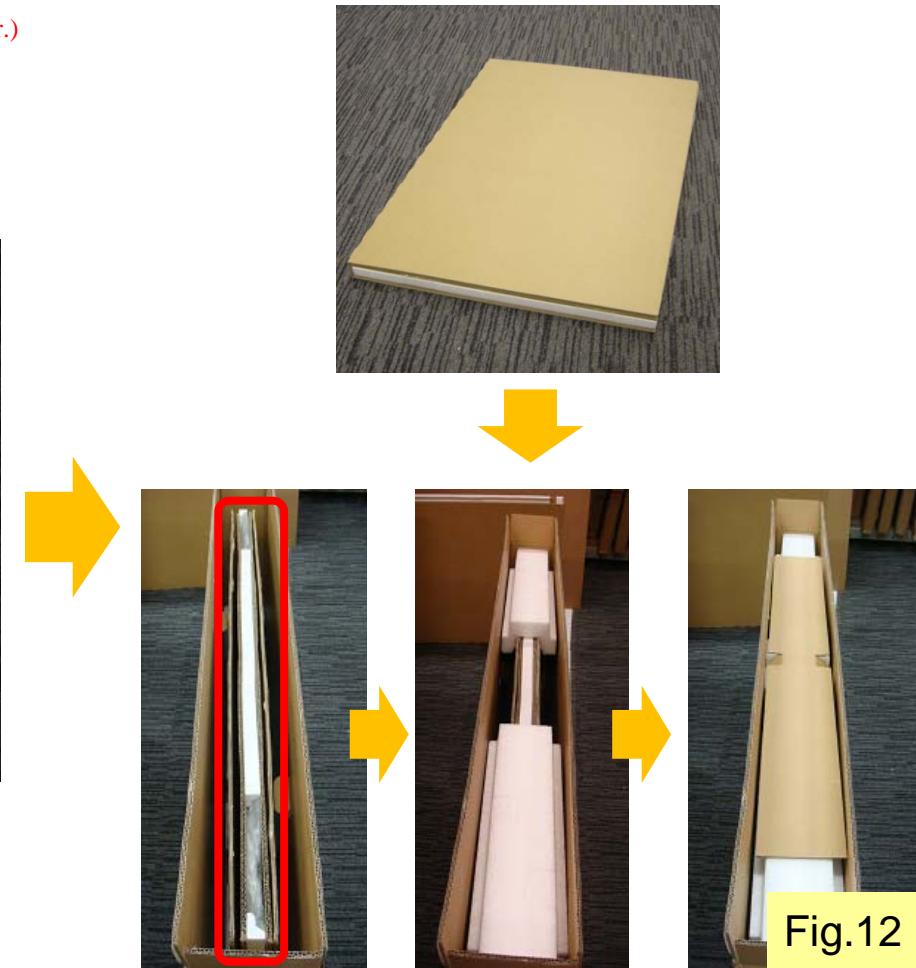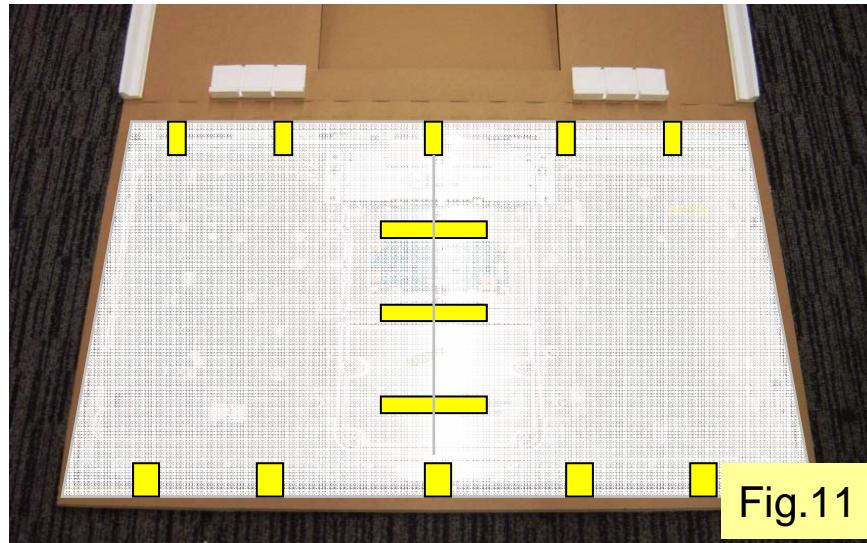
When replacing the Tengo panel at service, please note the followings.

- Set the plastic bag on correct position of package and place the replaced panel on it. (Fig.9)

* Handle the panel carefully as the instruction below.

- Align the bottom side of panel with cushions on the package. (Fig.10)

* Please note that it may damage to the glass surface if you pack panel in the wrong orientation.

* Please handle with care to prevent hitting the glass of panel to package materials.

More than 200mm from the short side

Fig.9

Fig.10

When replacing the Tengo panel at service, please note the followings.

    - Tape the plastic bag on the back of panel to protect panel surface. (Fig.11)

    * Please make sure the orientation of the panel again. (T-CON board side is lower.)

    - Repack the panel in the original carton box.

Fig.11

Fig.12

HANDLING THE FFC

When you insert / pull out FFC, please grasp a reinforcement board and main body of FFC.

<div align="center"><GOOD>   <NG></div>

FFC can reverse insertion to connector of B board.
If reverse insertion FFC, all pins short-circuit, and board is broken.

Upper side is GND shield

Upper side is terminal

<div align="center"><GOOD>   <NG></div>
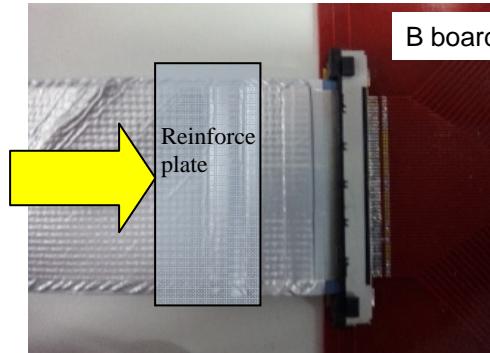
< Insertion >

Please hold reinforcement board and plunge it to the depths.

B board

Reinforce plate

<Pull out>
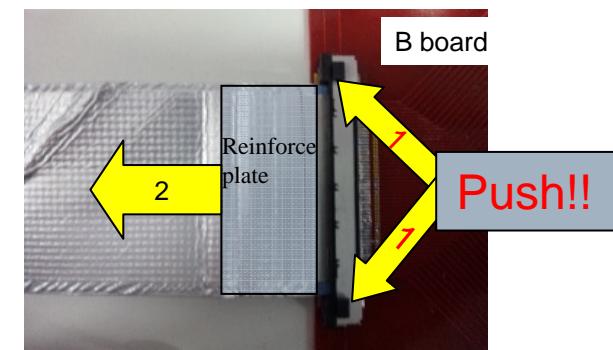
Please pull out FFC **while** pushing the button of both ends at the same time.

B board

Reinforce plate

2

Push!!

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).
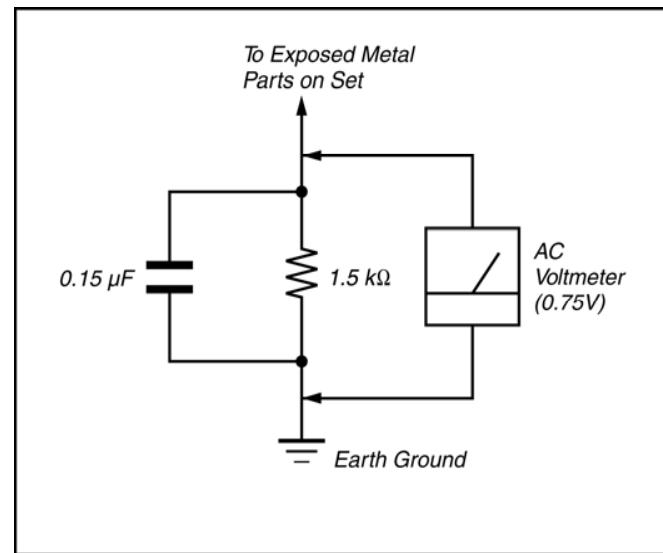
FigureA. Using an AC voltmeter to check AC leakage.

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).
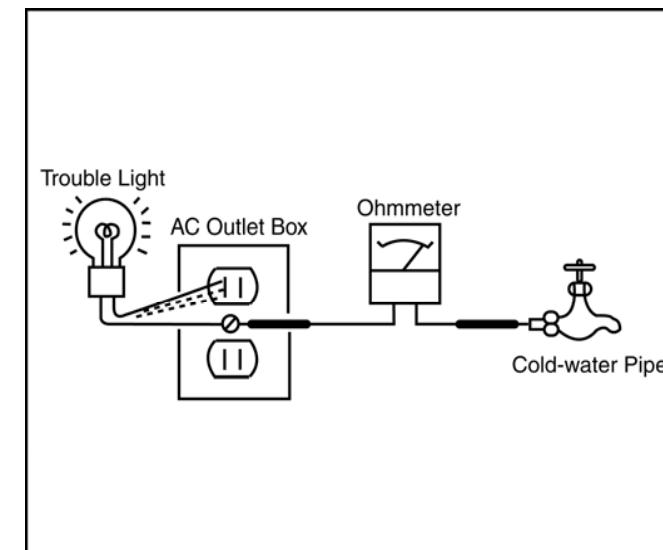

Figure B. Checking for earth ground.

SELF DIAGNOSIS FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY 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 STANDBY 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 STANDBY LED will flash a set number of times to indicate the possible cause of the problem.
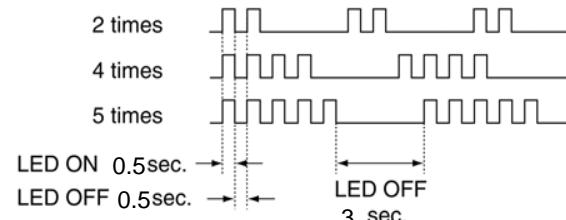
If there is more than one error, the LED will identify the first of the problem areas.

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

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

DISPLAY OF STANDBY LED FLASH COUNT

[FLASH COUNT]

2 times
4 times
5 times

LED ON 0.5sec.
LED OFF 0.5sec.
LED OFF 3 sec.

Note: One flash counts is not self-diagnostic.

STBY LED Flash time	Service menu Item name (Screen Display)	Diagnostic Item Description
2	MAIN_POWE	Main Power Over Voltage Protection
3	DC_ALERT	DC_ALERT
	AUD_PROT	Audio Abnormal Detection
4	BALANCER	Panel Balancer Error
5	TCON_ERR	Not used
	HFR_ERR	HFR Error
	P_ID_ERR	Panel ID NVM Error
6	BACKLITE	Back Light Error (Panel Inverter)
7	TMP_ERR	Thermal Error
8	-	Software Error
9	-	Not used
10	EMIT_ERR	Emitter Error
11	-	Not used
12	-	Not used

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:
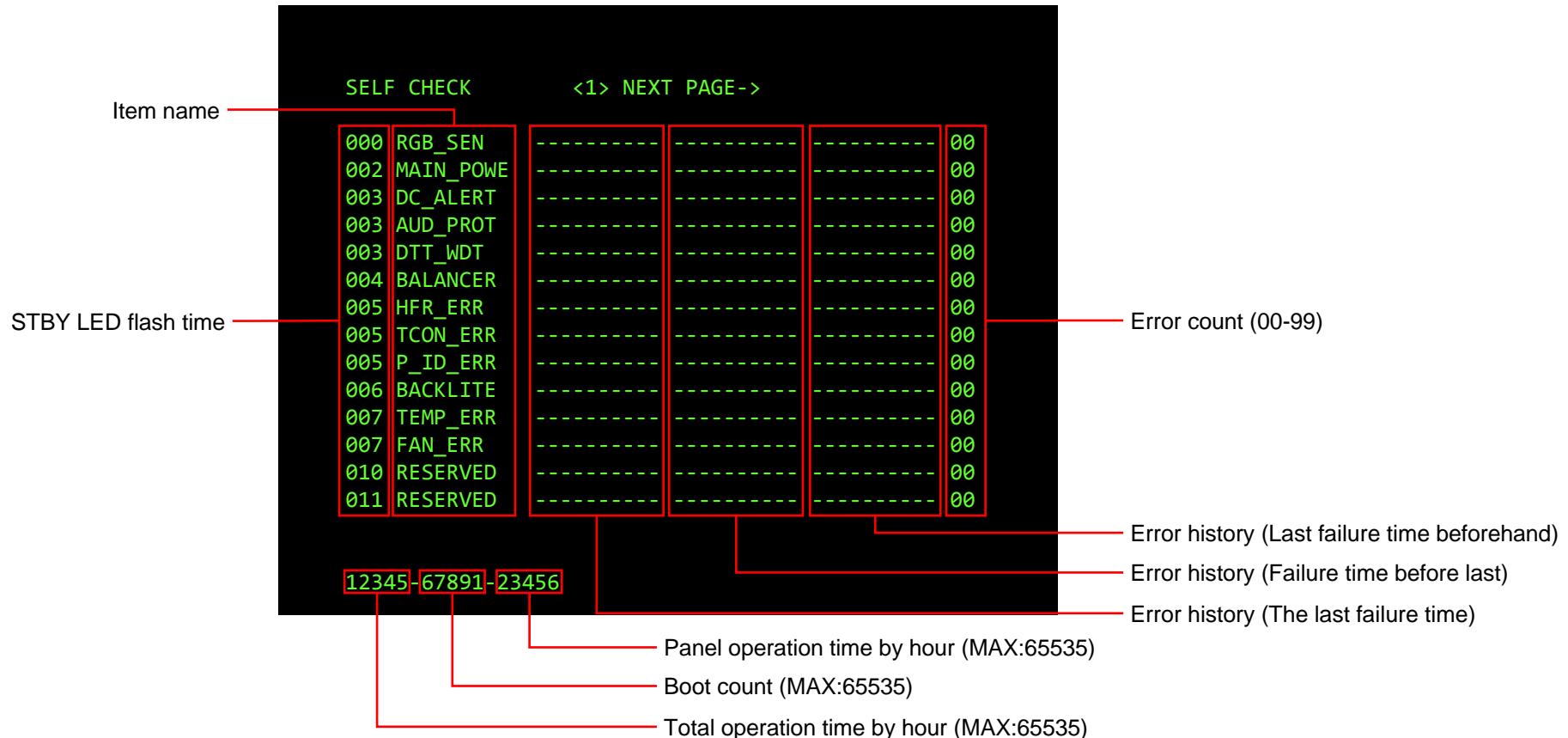
[To Bring Up Screen Test]

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 +)

[SELF DIAGNOSTIC SAMPLE SCREEN DISPLAY]

```
SELF CHECK      <1> NEXT PAGE->

000 RGB_SEN    ----------  ----------  ----------  00
002 MAIN_POWE  ----------  ----------  ----------  00
003 DC_ALERT   ----------  ----------  ----------  00
003 AUD_PROT   ----------  ----------  ----------  00
003 DTT_WDT    ----------  ----------  ----------  00
004 BALANCER   ----------  ----------  ----------  00
005 HFR_ERR    ----------  ----------  ----------  00
005 TCON_ERR   ----------  ----------  ----------  00
005 P_ID_ERR   ----------  ----------  ----------  00
006 BACKLITE   ----------  ----------  ----------  00
007 TEMP_ERR   ----------  ----------  ----------  00
007 FAN_ERR    ----------  ----------  ----------  00
010 RESERVED   ----------  ----------  ----------  00
011 RESERVED   ----------  ----------  ----------  00


12345-67891-23456
```

Item name
STBY LED flash time
Error count (00-99)
Error history (Last failure time beforehand)
Error history (Failure time before last)
Error history (The last failure time)
Panel operation time by hour (MAX:65535)
Boot count (MAX:65535)
Total operation time by hour (MAX:65535)

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
      1. Error history and Error count :   Press the Channel 8 => Channel 0 .
      2. Panel operation time :   Press the Channel 7 => Channel 0 .

Exiting the Self-diagnostic screen
To exit the Self Diagnostic screen, turn off the power to the TV by pressing the POWER button on the remote or the POWER button on the TV.

SEC 1. DISASSEMBLY

• There are clutch in the yellow frame[   ]. Therefore please be careful in the case of the disassembly or assembly of parts.

Note: When removal rear cover, damaged with rear cover and power supply cord.
    Removal the rear cover and power supply cord, please refer to **"APPENDIX-1"**.

Note: Metal type Rear Cover is used in these models.
    When handle the Rear Cover, please pay special attention to the sharp edges due to no curing finish.
    When working, wearing gloves is recommended.
    Location of the sharp edges, please refer to "**APPENDIX-2**".
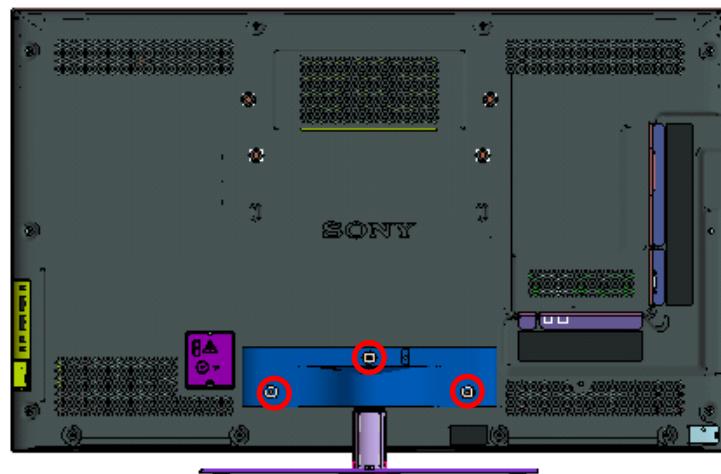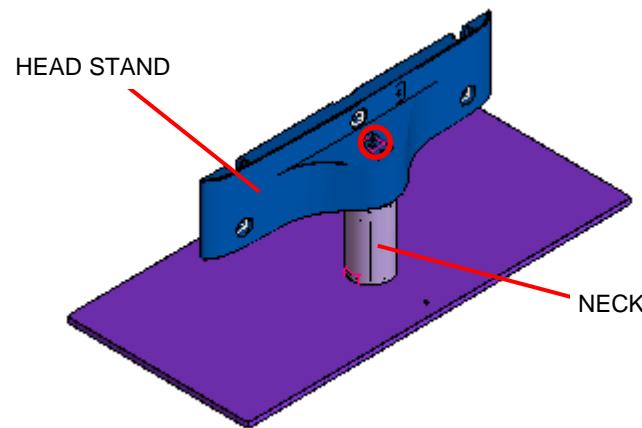
1-1. KDL-40NX720/723/725
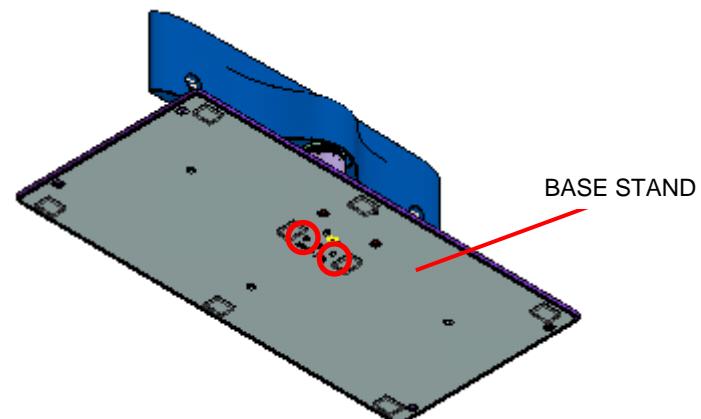
1-1-1. STAND BLOCK, HEAD STAND, NECK AND BASE STAND

3 Screws (SCREW, +PSW M5X16) – Inside bag, screw assy
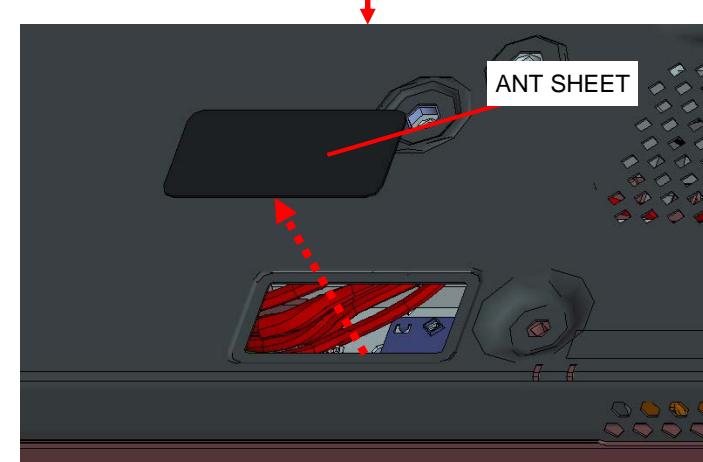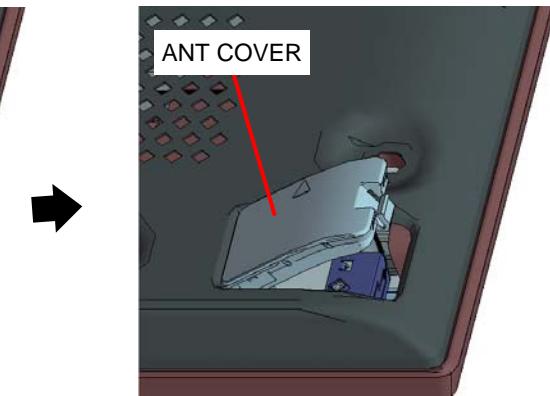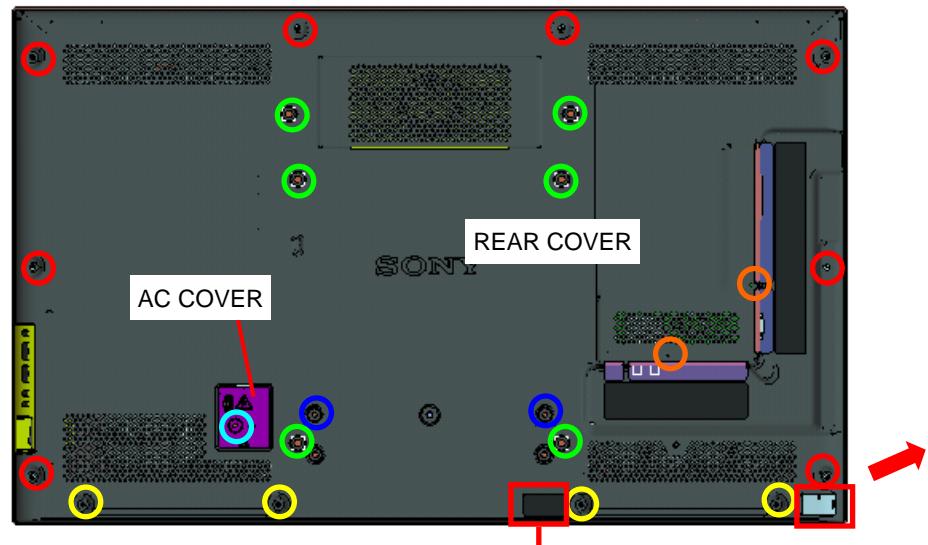
1 Screw (USER SCREW ST) – Inside bag, screw assy
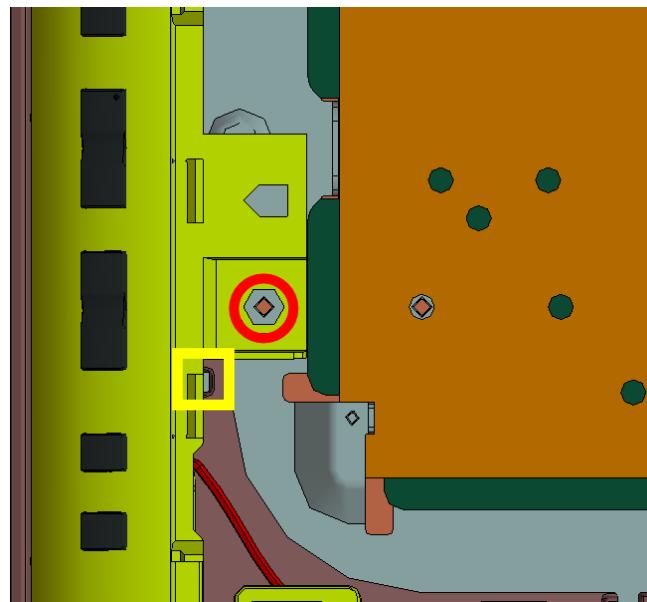
2 Screws (USER SCREW ST) – Inside bag, screw assy
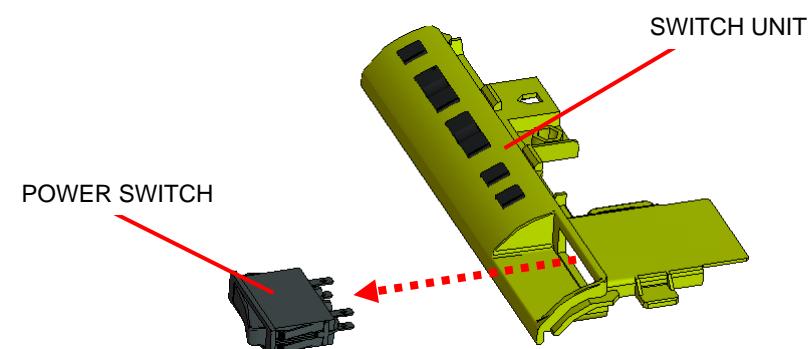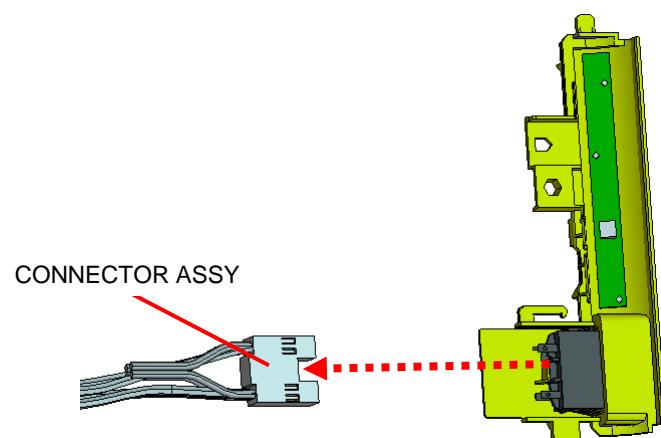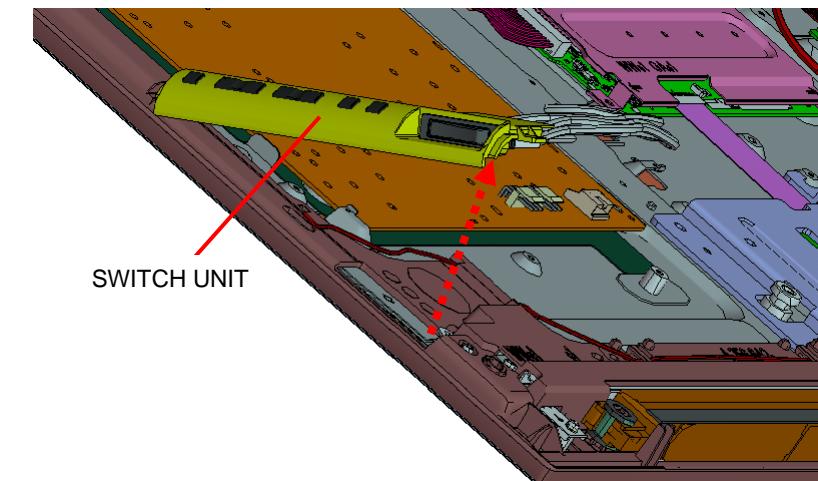
1-1. KDL-40NX720/723/725

1-1-2. REAR COVER, AC COVER, ANT COVER AND ANT SHEET

REAR COVER

AC COVER

ANT COVER

ANT COVER

ANT SHEET

⭕ (red) 8 Screws (SCREW, +PWH M3X8) P/N: FX0020801

⭕ (yellow) 4 Screws (SCREW, +BVTP 4X12 TYPE2 IT-3) P/N: FX0005801

⭕ (green) 6 Screws (SCREW, ORNAMENTAL M6X12) P/N: FX0006302

⭕ (orange) 2 Screws (SCREW +BVTP 3X8 TYPE2 IT-3) P/N: FX0012779

⭕ (blue) 2 Screws (JOINT, STAND) P/N: FX0002101

⭕ (cyan) 1 Screw (SCREW, +PSW M3X6 W12) P/N: FX0001901
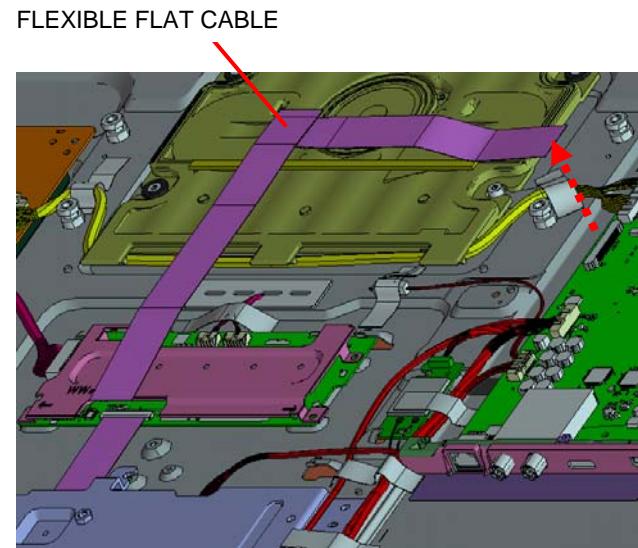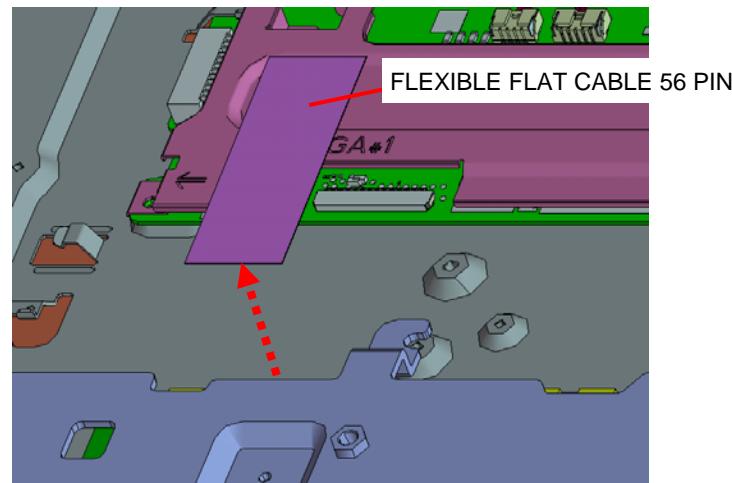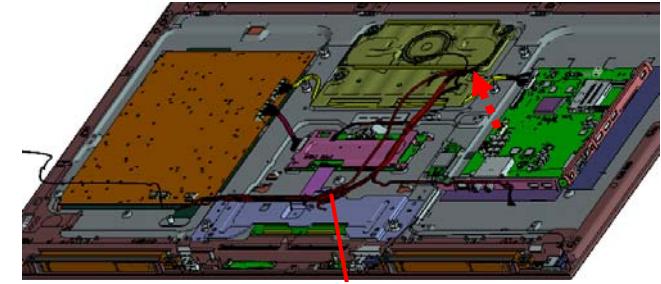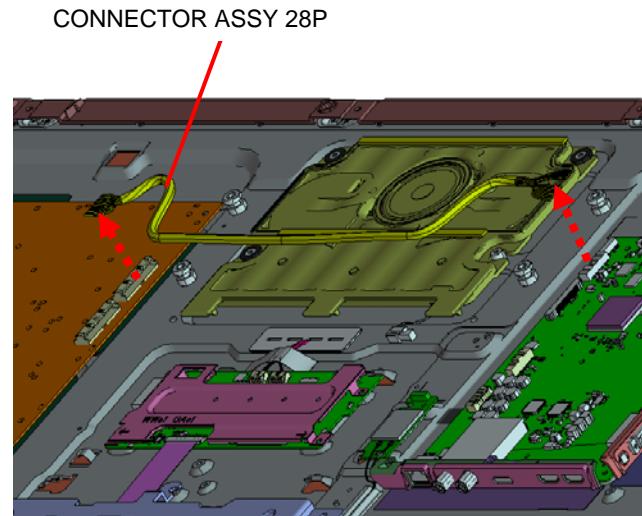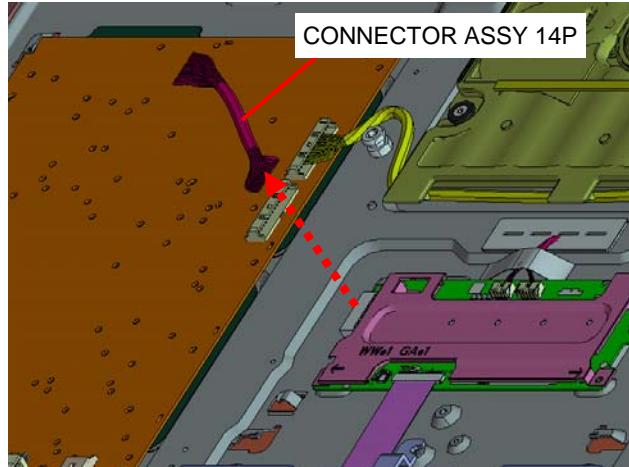
1-1. KDL-40NX720/723/725

1-1-3. SWITCH UNIT AND POWER SWITCH

1 Screw (SCREW, +PWH M3X8) P/N: FX0020801

SWITCH UNIT

CONNECTOR ASSY

SWITCH UNIT

POWER SWITCH
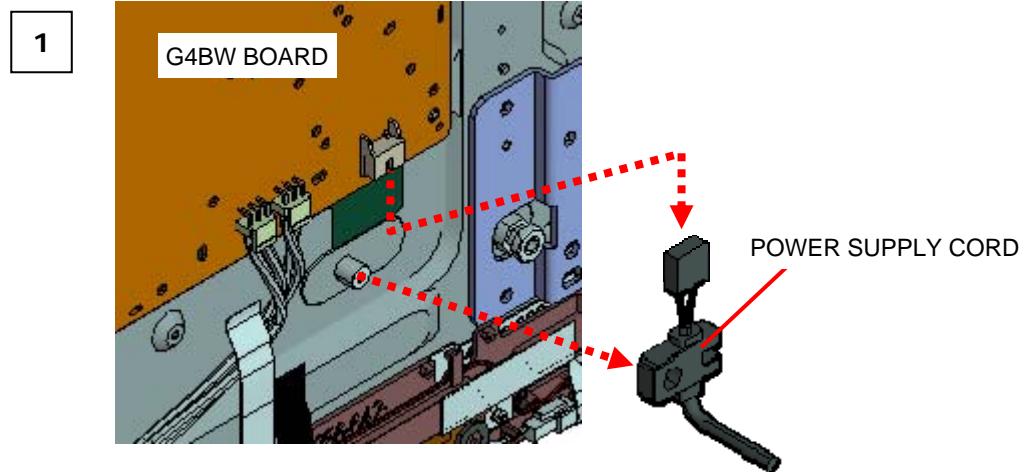
1-1. KDL-40NX720/723/725

1-1-4. HARNESS

CONNECTOR ASSY 28P

CONNECTOR ASSY 14P

HARNESS ASSY

FLEXIBLE FLAT CABLE

FLEXIBLE FLAT CABLE 56 PIN
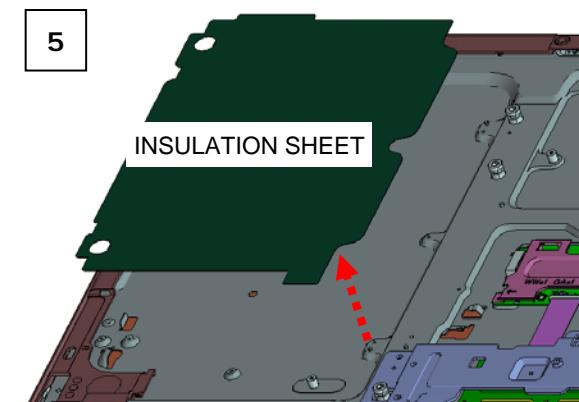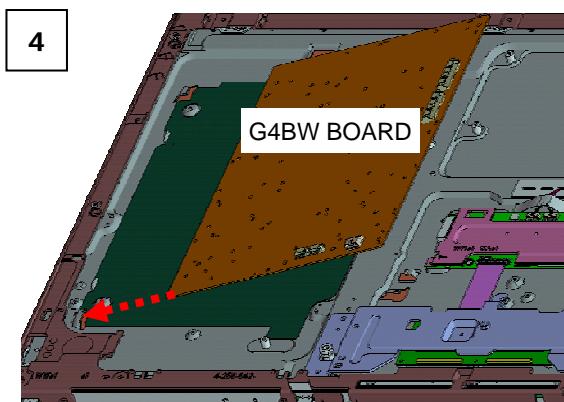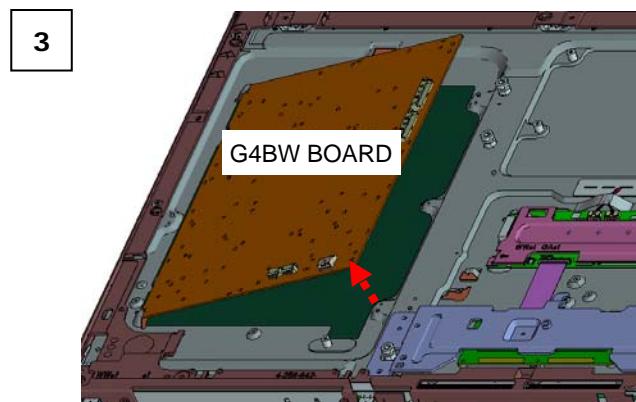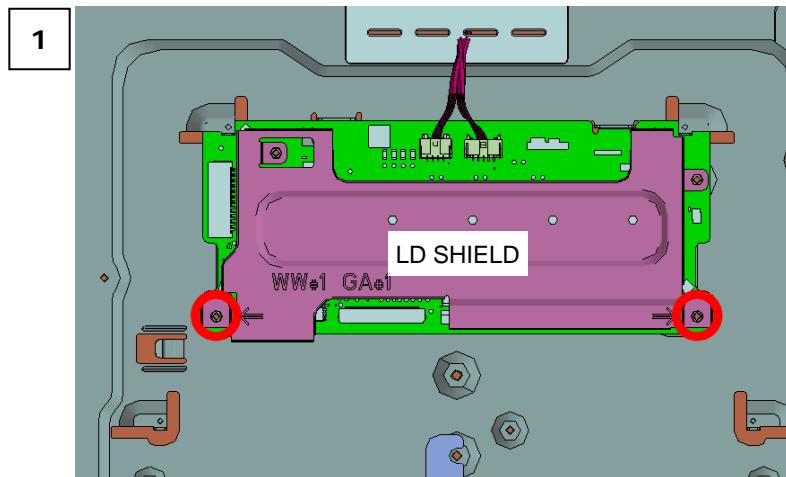
1-1. KDL-40NX720/723/725

1-1-5. POWER SUPPLY CORD AND G4BW BOARD

1

G4BW BOARD

POWER SUPPLY CORD

2

G4BW BOARD

3 Screws (SCREW (+PSW) (M3X6)) P/N: FX0001341

3

G4BW BOARD

4

G4BW BOARD

5

INSULATION SHEET
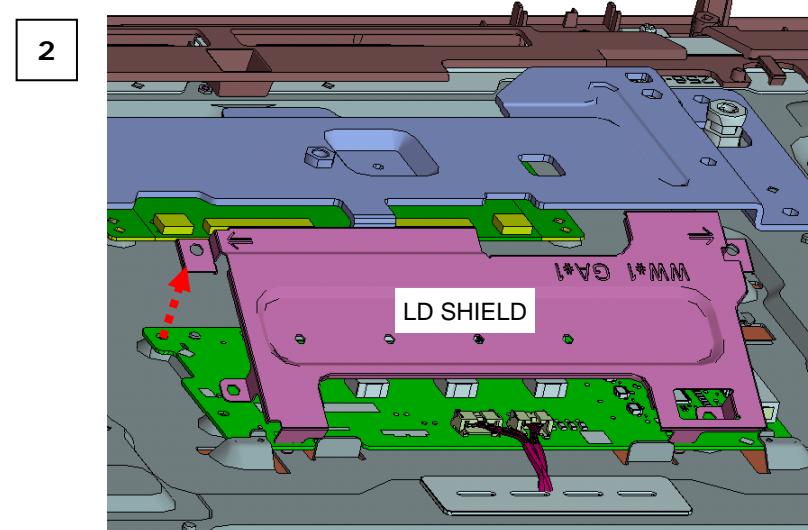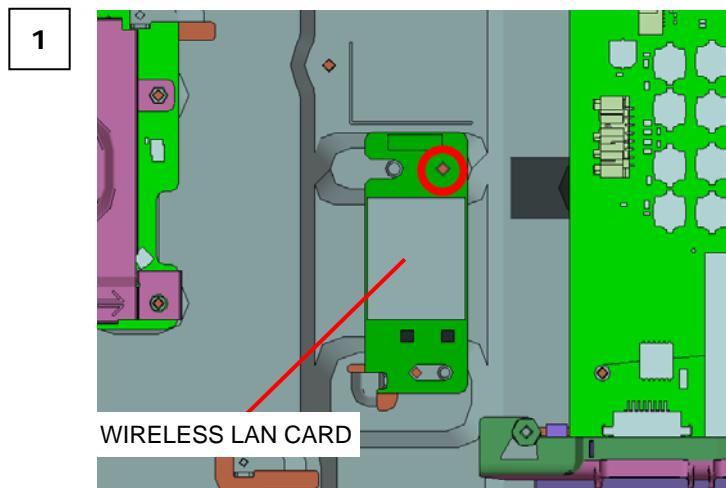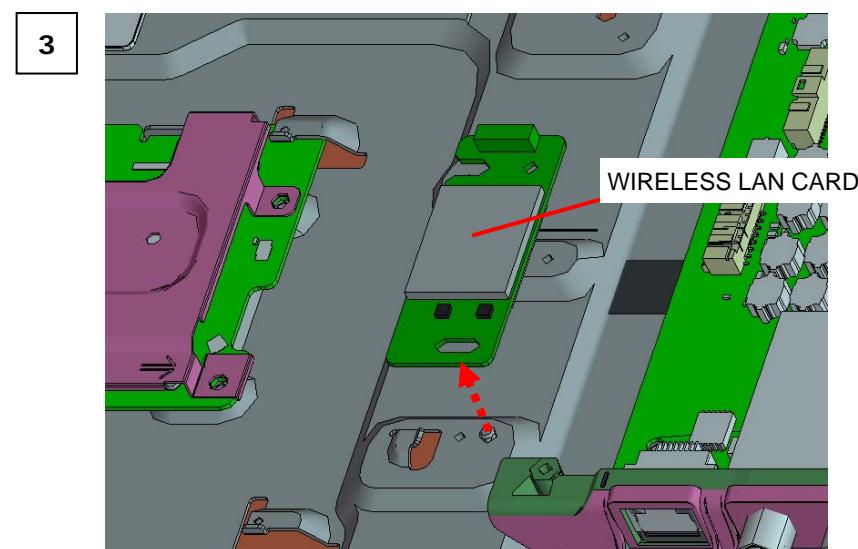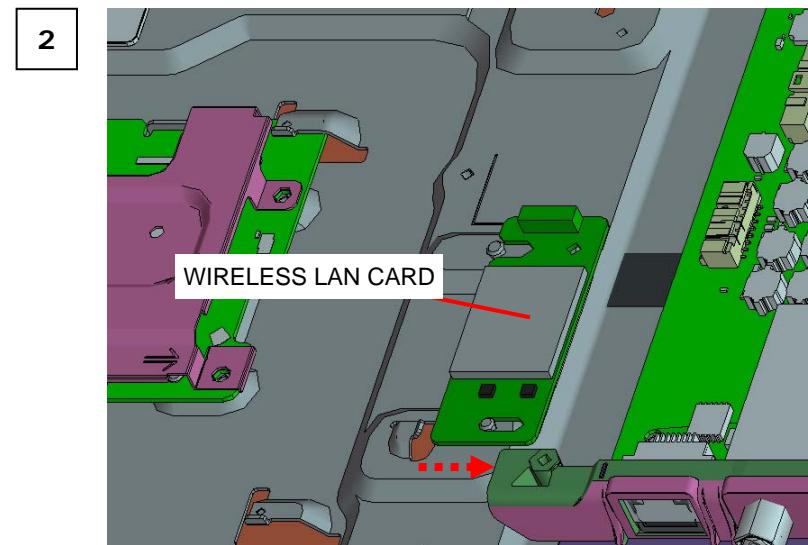
1-1. KDL-40NX720/723/725

1-1-6. LD BOARD

1

LD SHIELD

WW∗1 GA∗1

2 Screws (SCREW (+PSW) (M3X6)) P/N: FX0001341

2

LD SHIELD

WW∗1 GA∗1

4

3

LD BOARD
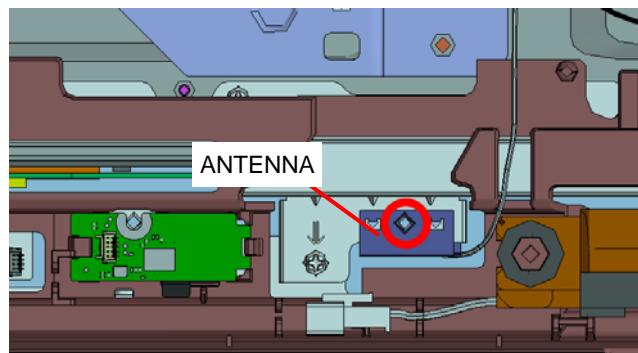
1-1. KDL-40NX720/723/725

1-1-7. WIRELESS LAN CARD

1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341
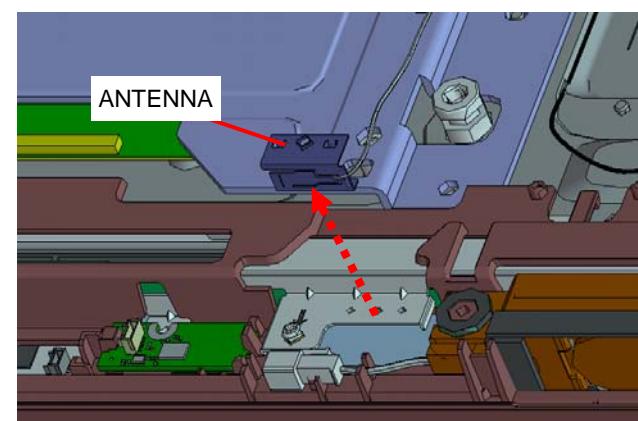
1-1. KDL-40NX720/723/725

1-1-8. ANTENNA

1

1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341

2

1
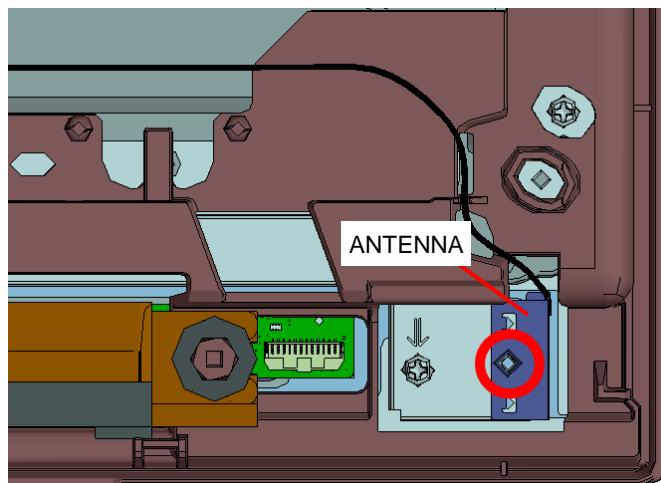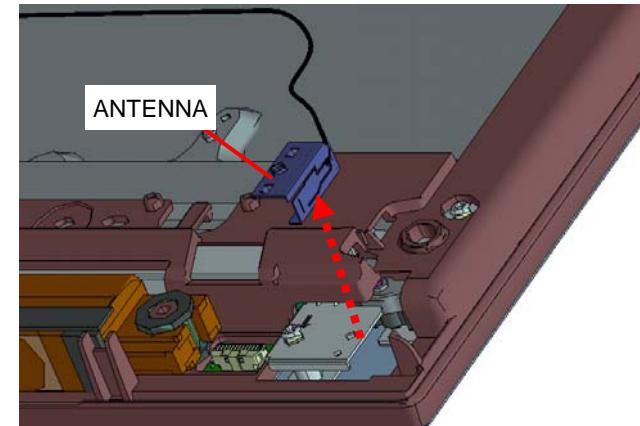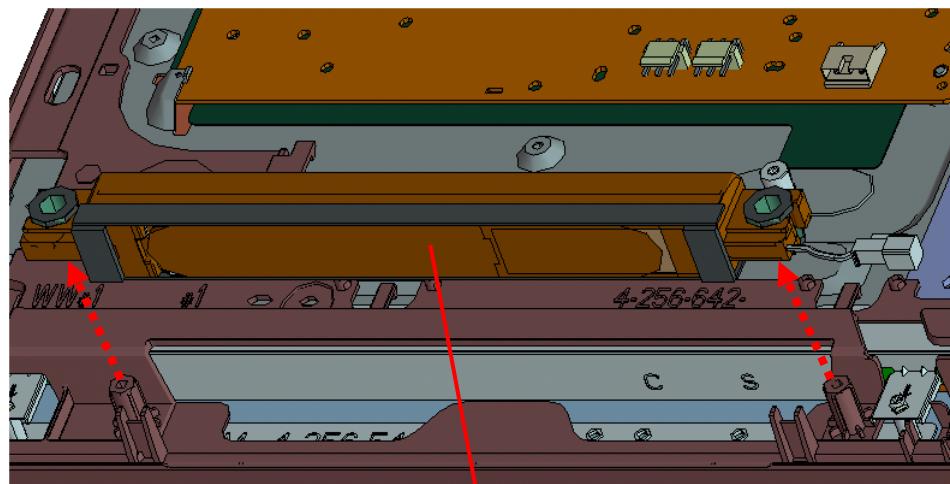
1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341

2

1-1. KDL-40NX720/723/725

1-1-9. SPEAKER BOX ASSY
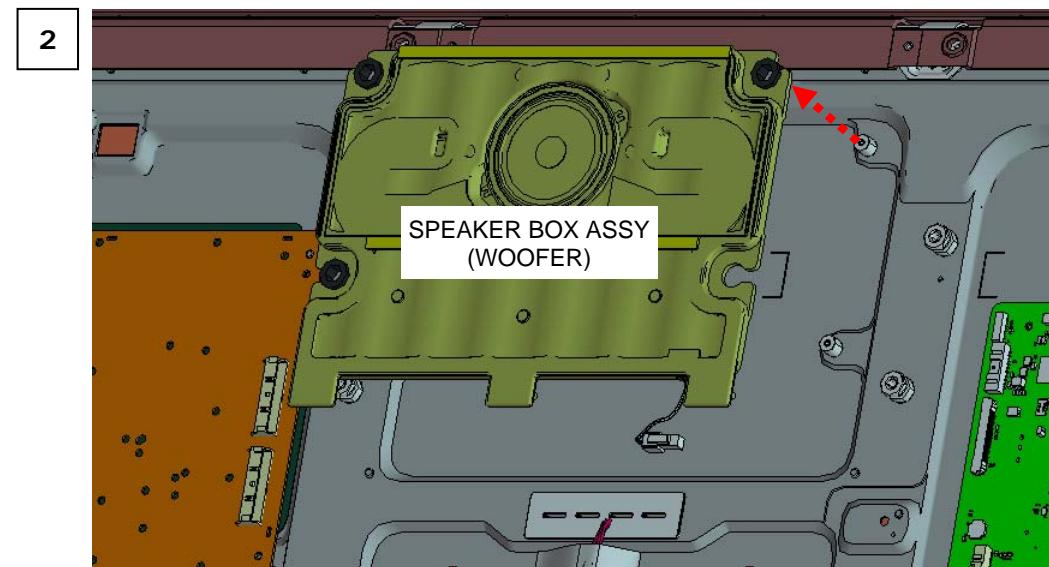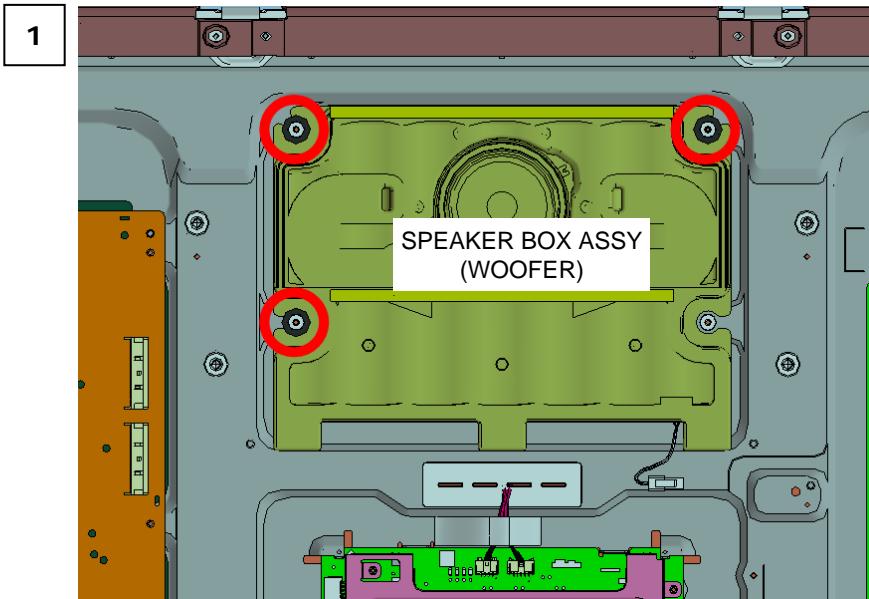
SPEAKER BOX ASSY

1-1. KDL-40NX720/723/725
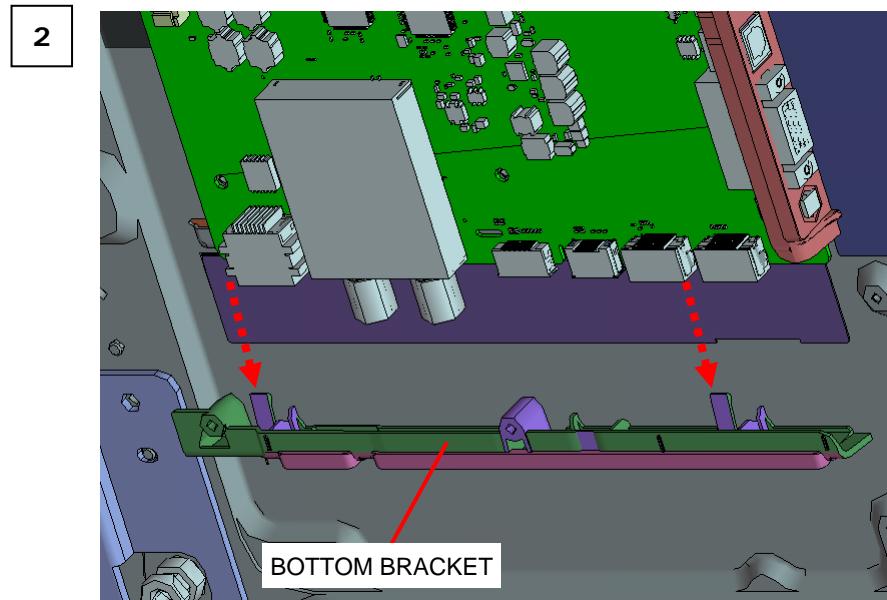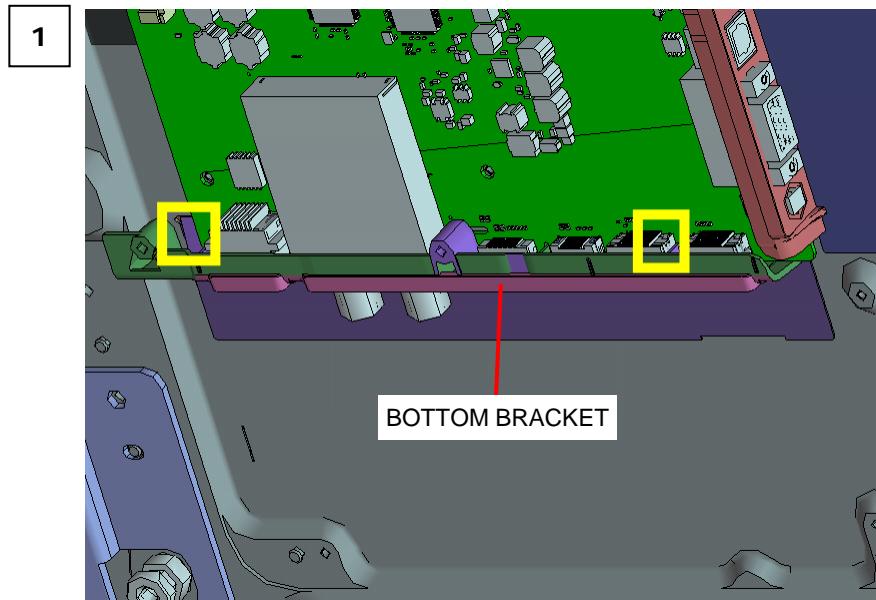
1-1-10. SPEAKER BOX ASSY (WOOFER)
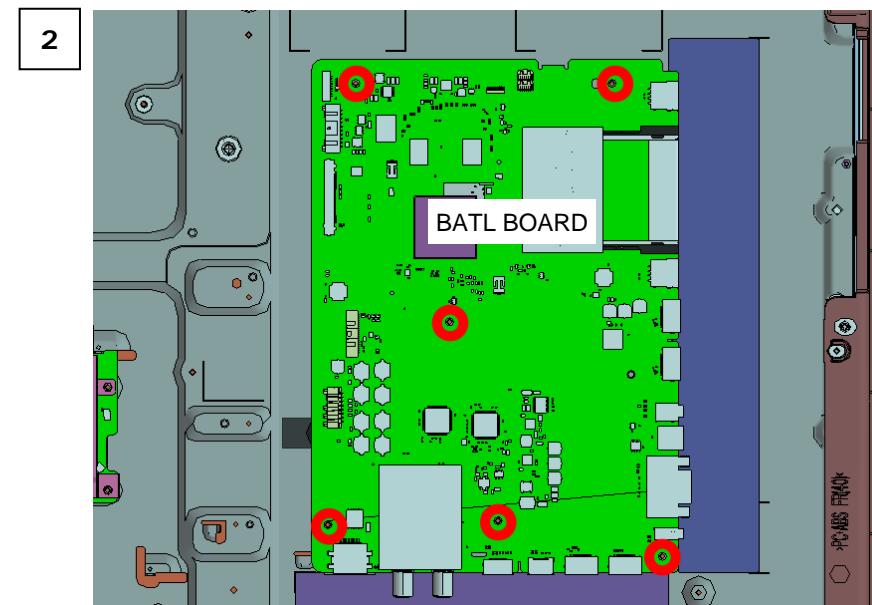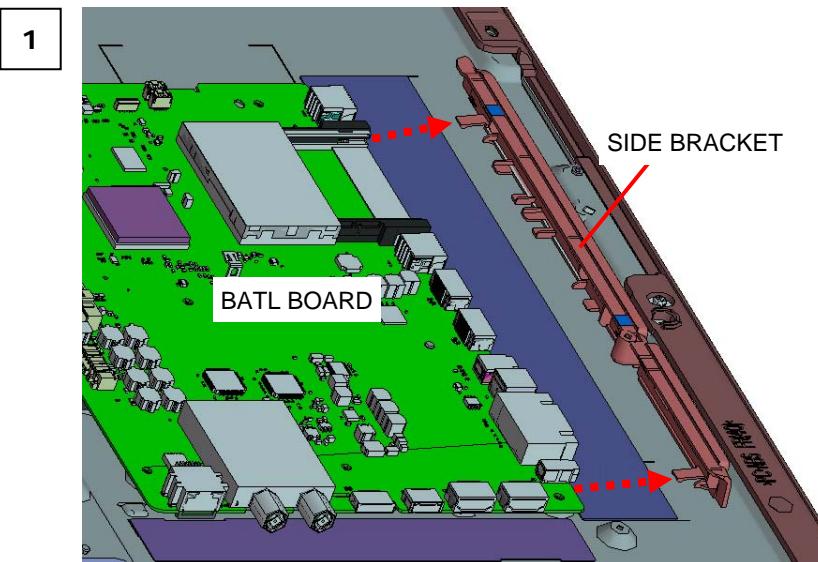
3 Screws (SCREW, +PSW M3X6 W12) P/N: FX0001901
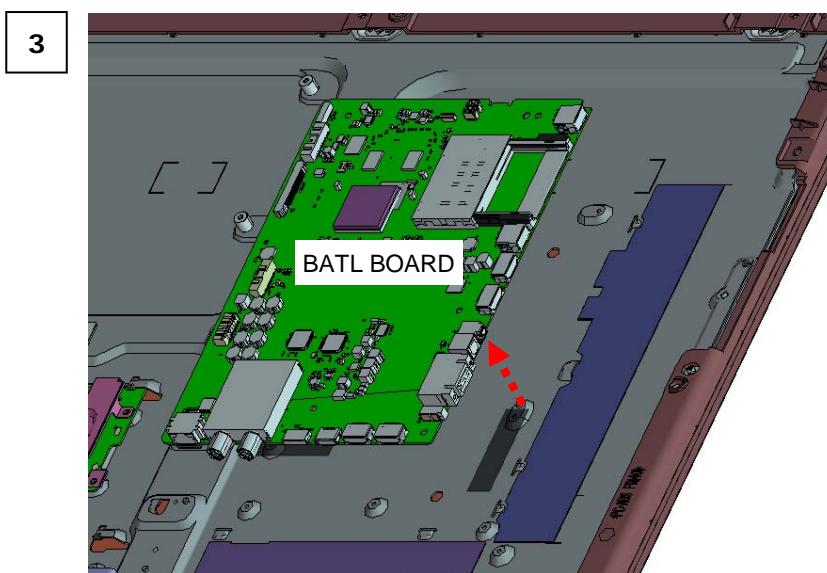
1-1. KDL-40NX720/723/725

1-1-11. BOTTOM BRACKET

BOTTOM BRACKET

BOTTOM BRACKET
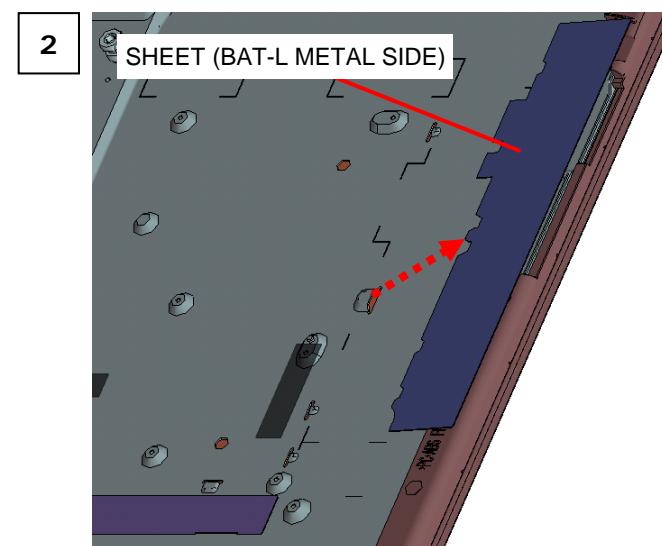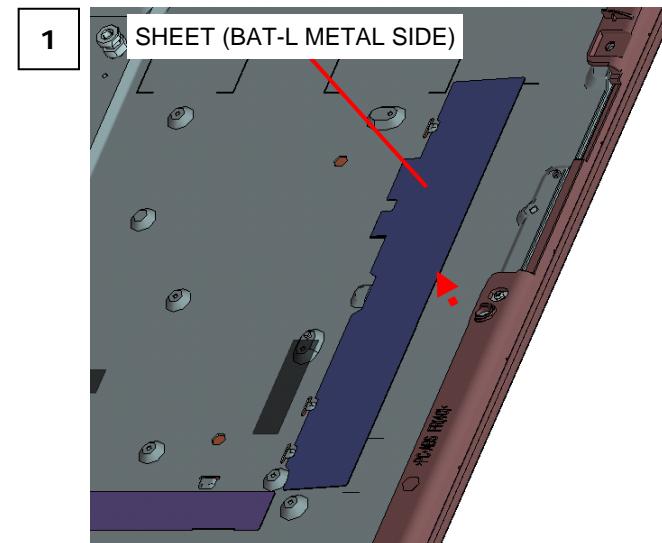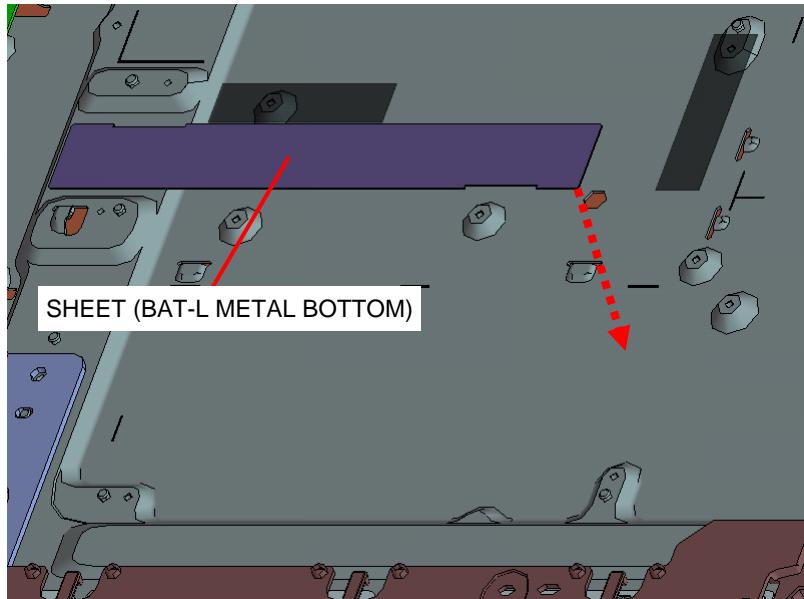
1-1. KDL-40NX720/723/725

1-1-12. SIDE BRACKET AND BATL BOARD

1

SIDE BRACKET

BATL BOARD

2

BATL BOARD

6 Screws (SCREW (+PSW) (M3X6)) P/N: FX0001341

3

BATL BOARD
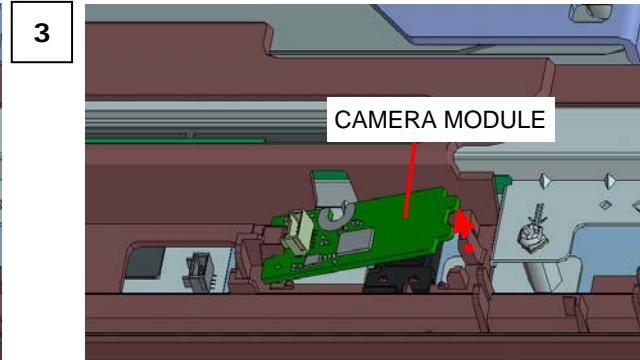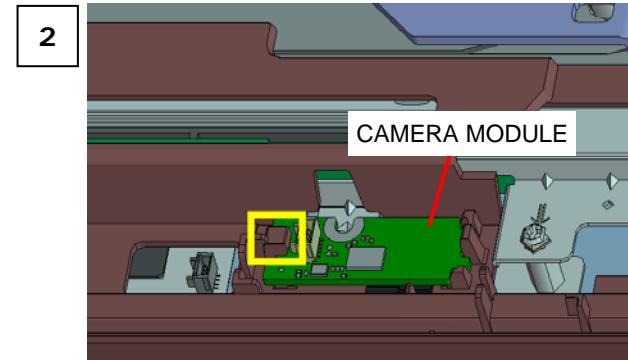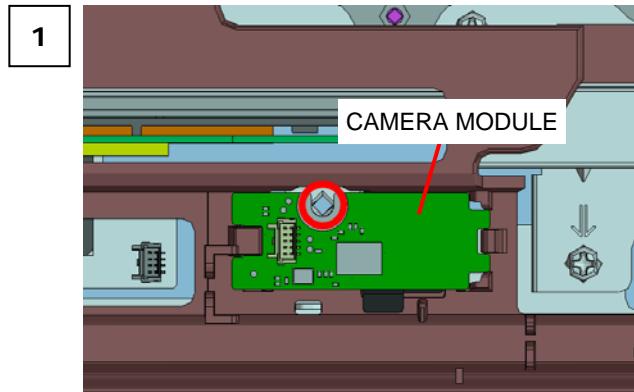
1-1. KDL-40NX720/723/725

1-1-13. SHEET

SHEET (BAT-L METAL BOTTOM)

1 SHEET (BAT-L METAL SIDE)

2 SHEET (BAT-L METAL SIDE)
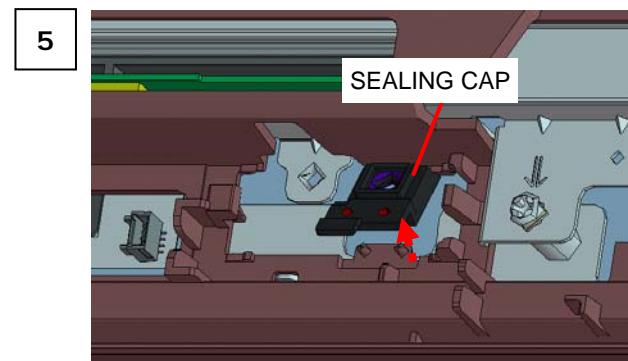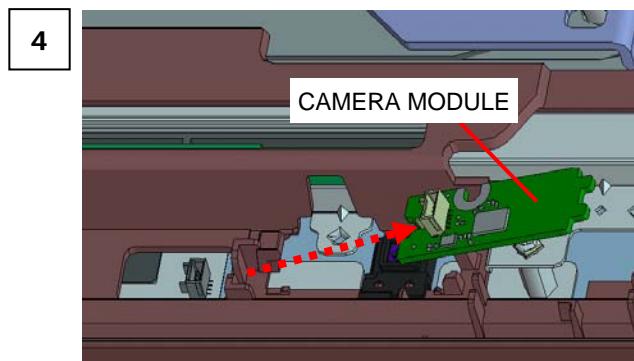
1-1. KDL-40NX720/723/725

1-1-14. CAMERA MODULE AND SEALING CAP(CAMERA)
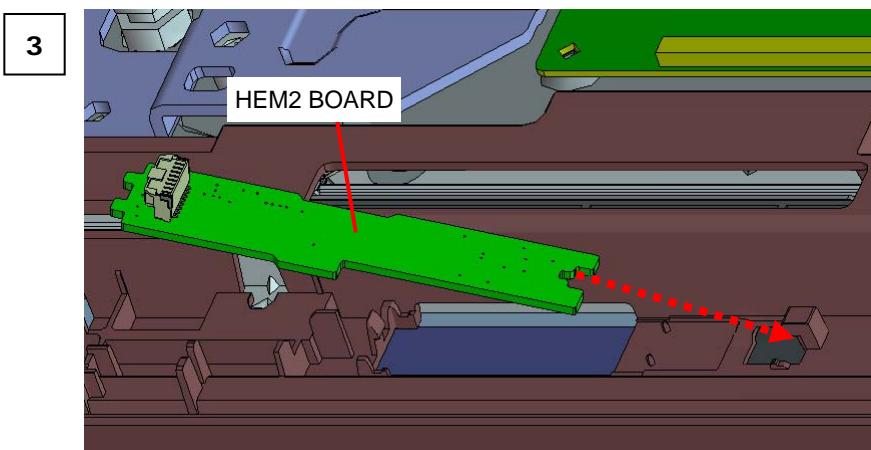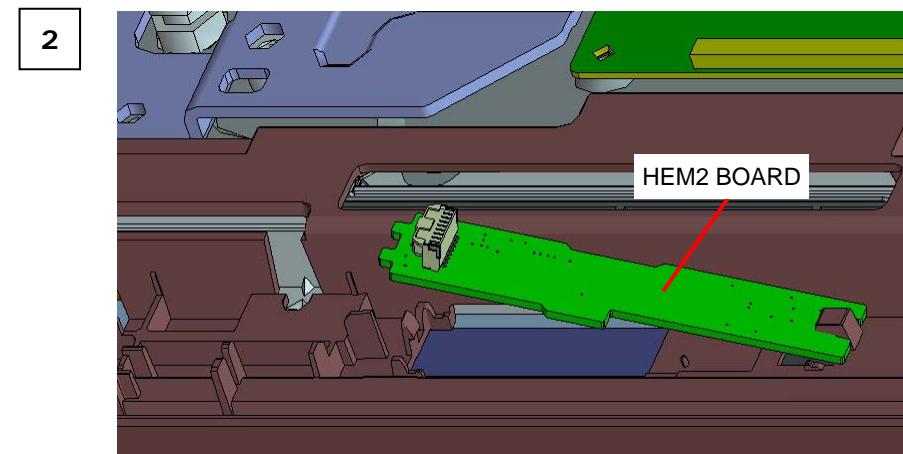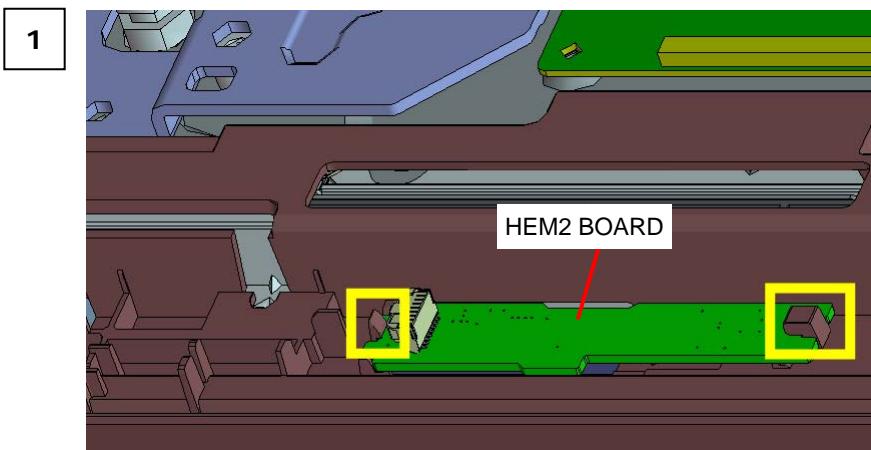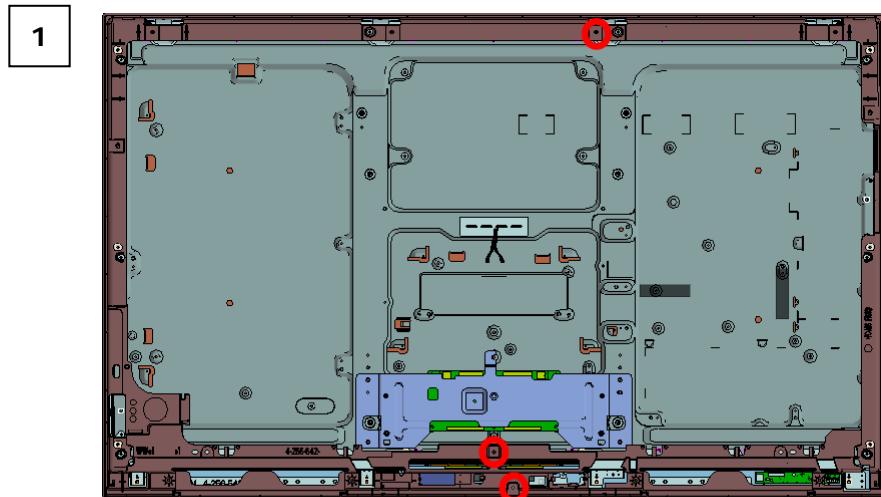
1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341
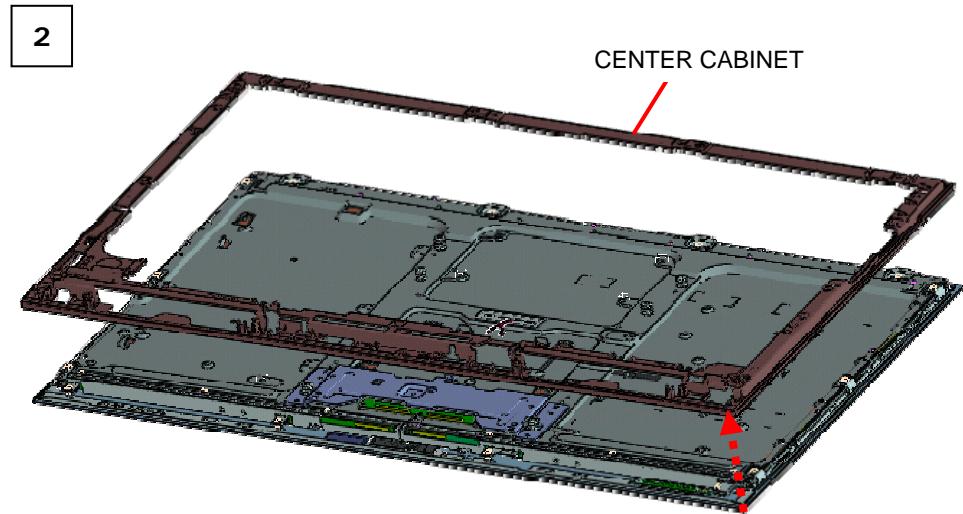
1-1. KDL-40NX720/723/725
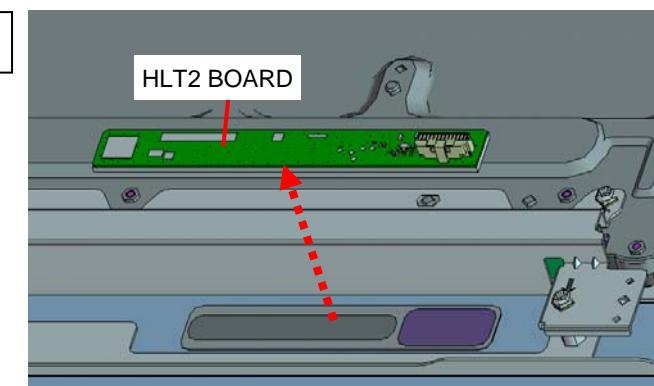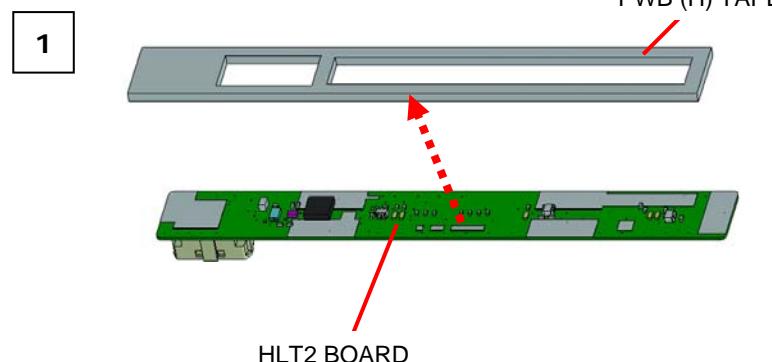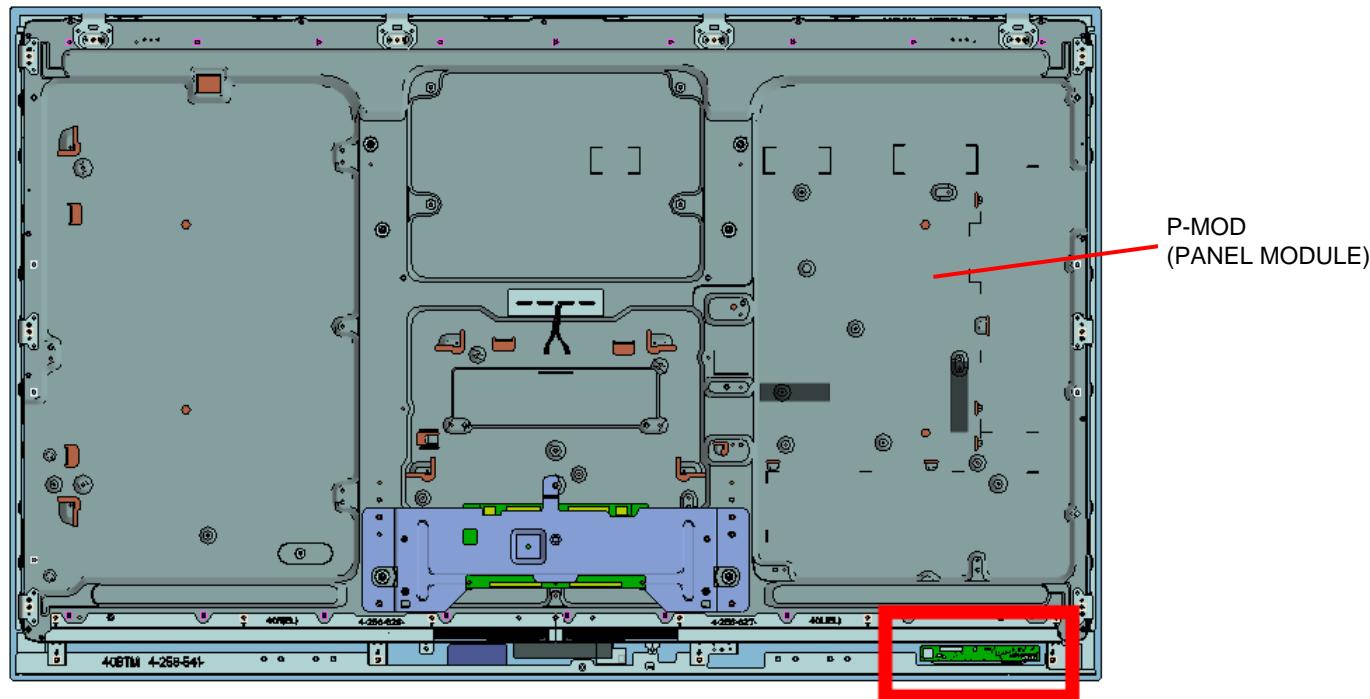
1-1-15. HEM2 BOARD

1-1. KDL-40NX720/723/725

1-1-16. CENTER CABINET

3 Screws (SCREW, +PSW M3X6 W12) P/N: FX0001901

CENTER CABINET
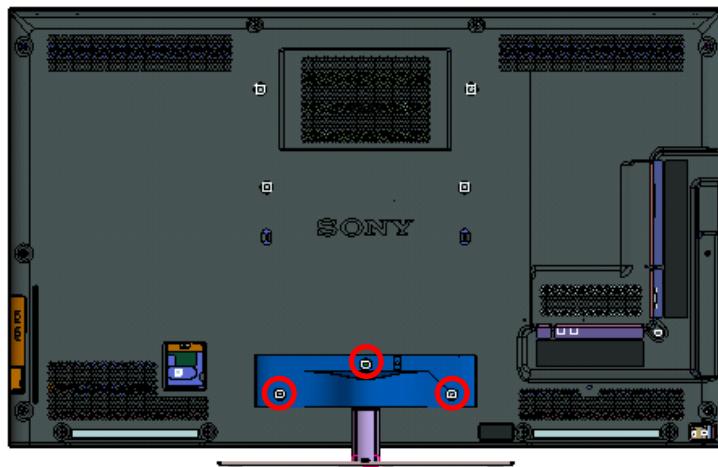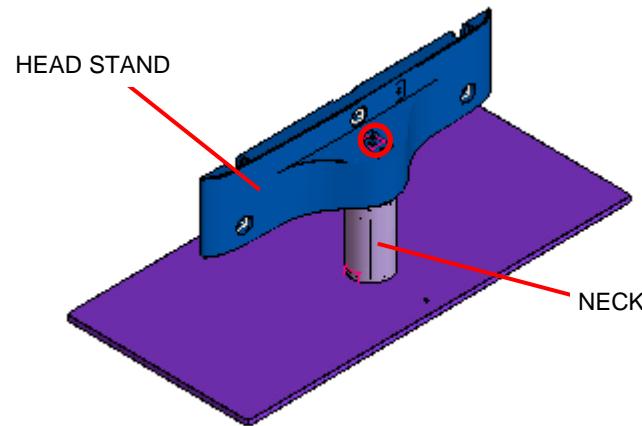
1-1. KDL-40NX720/723/725

1-1-17. HLT2 BOARD, PWB (H) TAPE AND PANEL MODULE
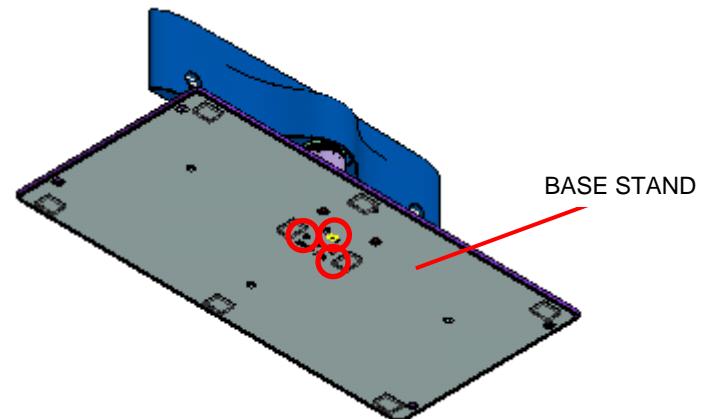
P-MOD
(PANEL MODULE)

PWB (H) TAPE

1

HLT2 BOARD

2

HLT2 BOARD

HLT2 BOARD

1-2. KDL-46NX720/723/725

1-2-1. STAND BLOCK, HEAD STAND, NECK AND BASE STAND

3 Screws (SCREW, +PSW M5X16) – Inside bag, screw assy

HEAD STAND

NECK

1 Screw (USER SCREW ST) – Inside bag, screw assy

BASE STAND
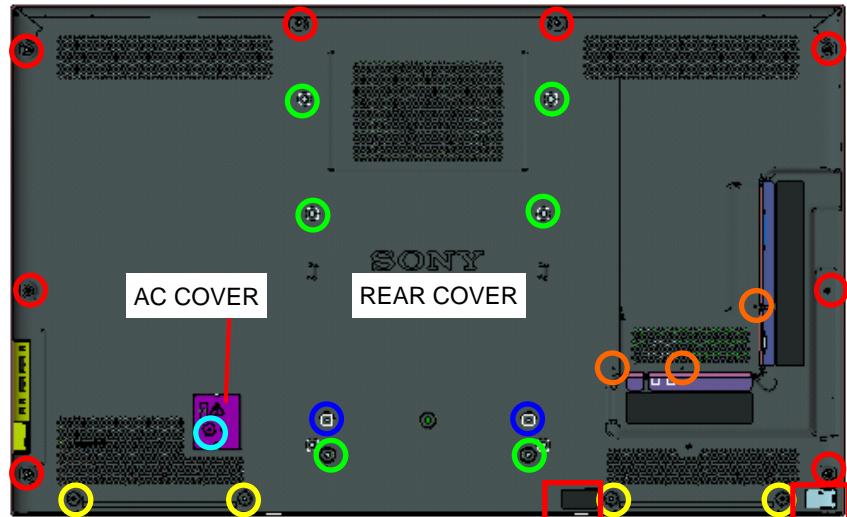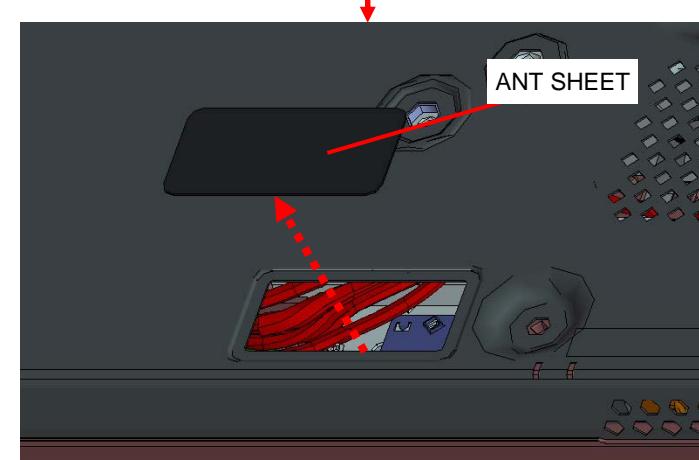
3 Screws (USER SCREW ST) – Inside bag, screw assy
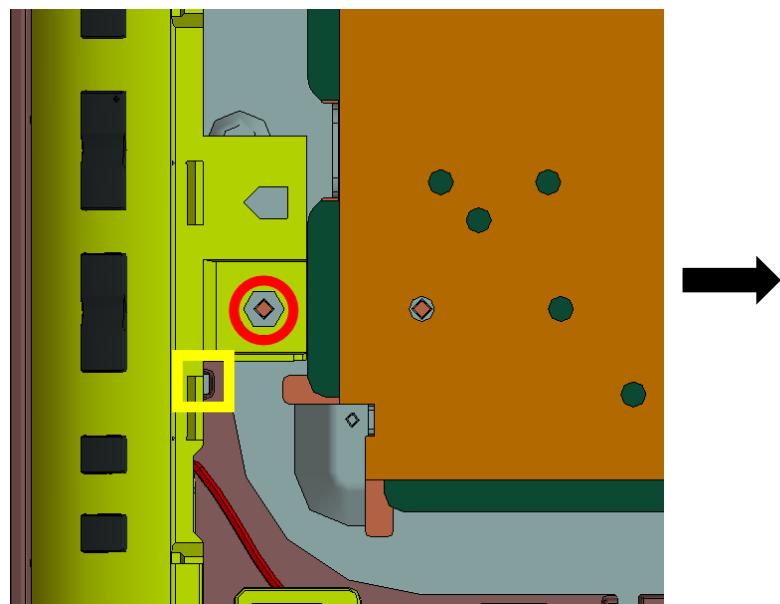
1-2. KDL-46NX720/723/725

1-2-2. REAR COVER, AC COVER, ANT COVER AND ANT SHEET
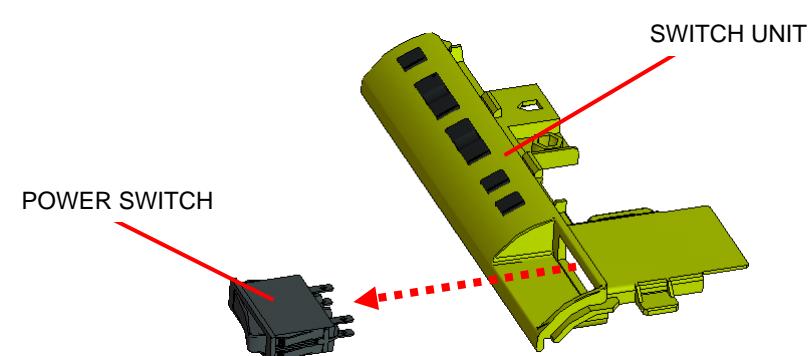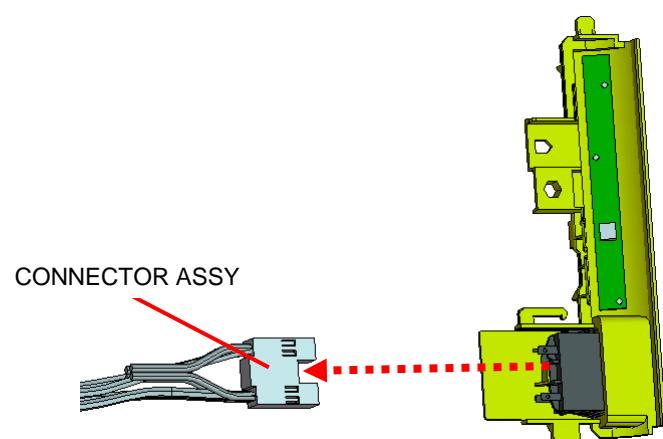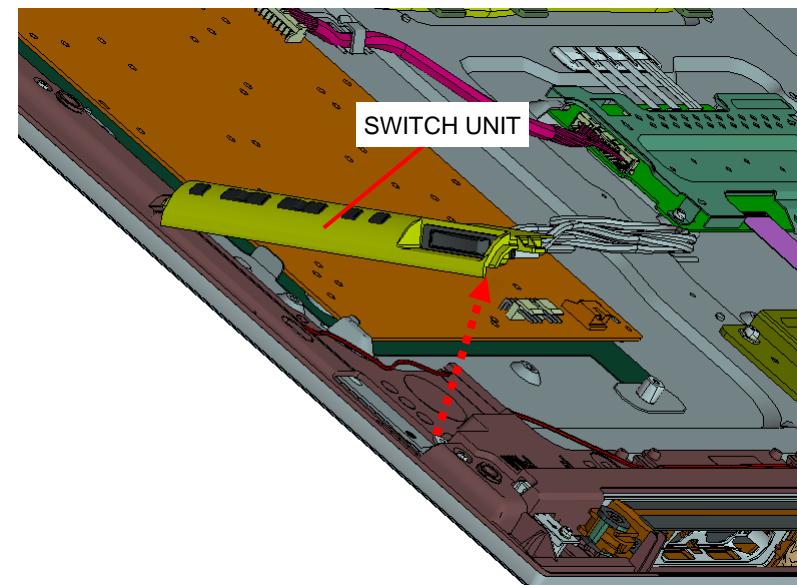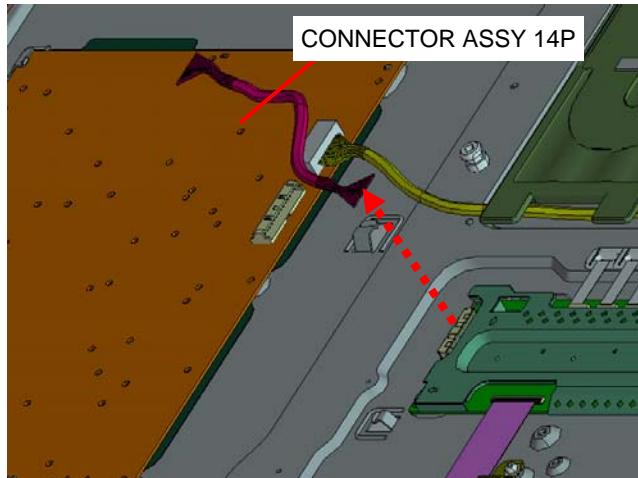
ANT COVER

ANT COVER

AC COVER

REAR COVER

ANT SHEET

⭕ 8 Screws (SCREW, +PWH M3X8) P/N: FX0020801

⭕ 4 Screws (SCREW, +BVTP 4X12 TYPE2 IT-3) P/N: FX0005801

⭕ 6 Screws (SCREW, ORNAMENTAL M6X12) P/N: FX0006302

⭕ 3 Screws (SCREW +BVTP 3X8 TYPE2 IT-3) P/N: FX0012779

⭕ 2 Screws (JOINT, STAND) P/N: FX0002101

⭕ 1 Screw (SCREW, +PSW M3X6 W12) P/N: FX0001901

1-2. KDL-46NX720/723/725

1-2-3. SWITCH UNIT AND POWER SWITCH

1 Screw (SCREW, +PWH M3X8) P/N: FX0020801

CONNECTOR ASSY

POWER SWITCH

SWITCH UNIT
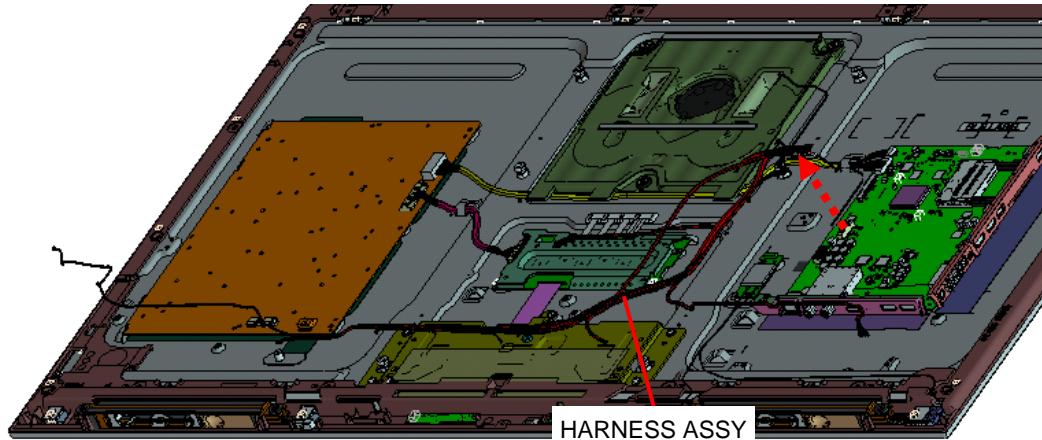
1-2. KDL-46NX720/723/725

1-2-4. HARNESS
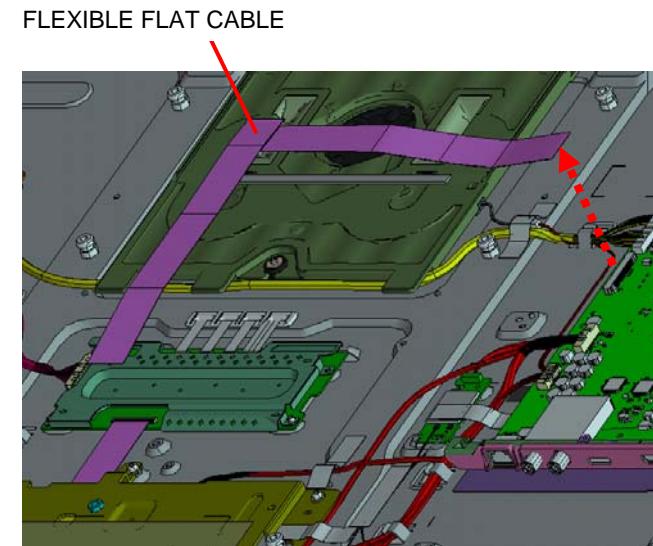
CONNECTOR ASSY 28P
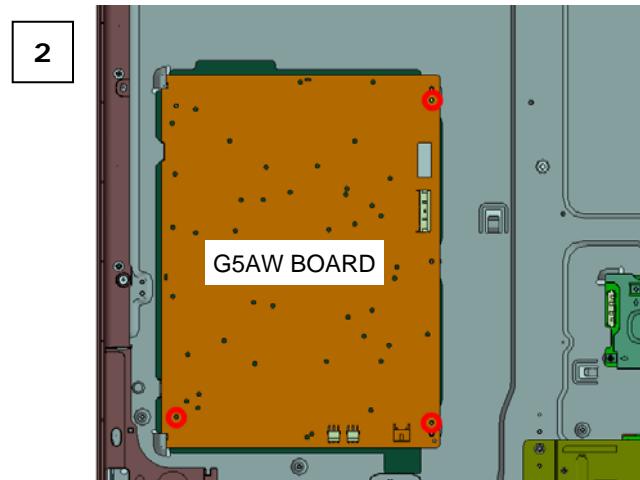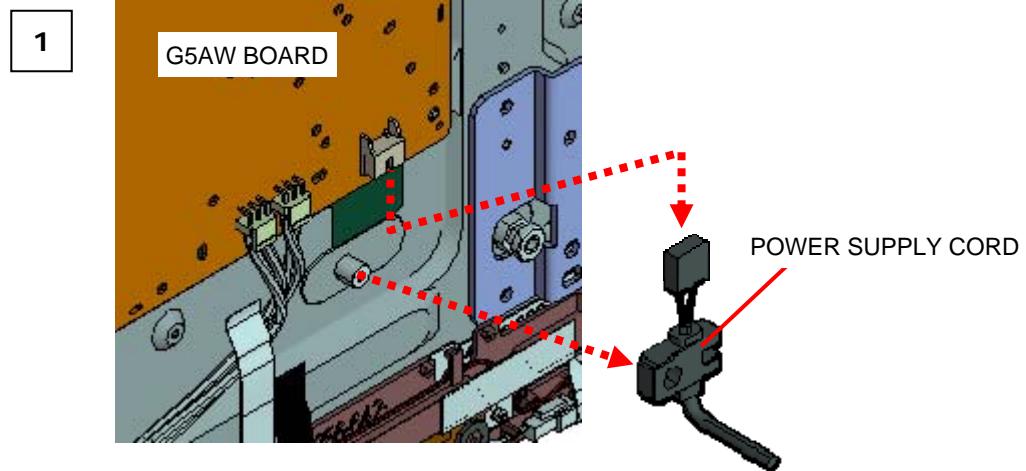
CONNECTOR ASSY 14P
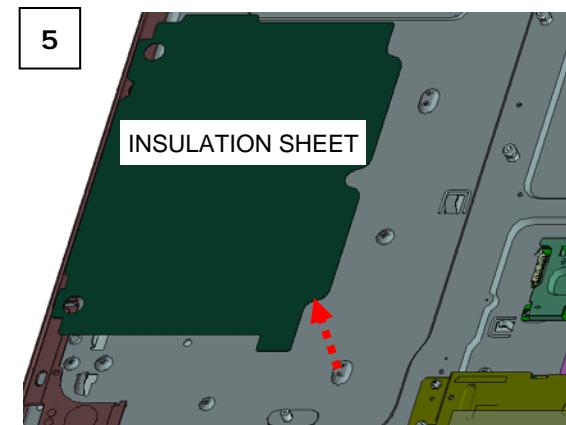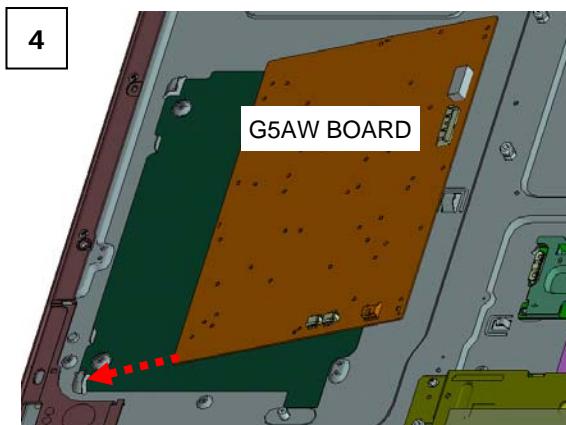
FLEXIBLE FLAT CABLE

HARNESS ASSY
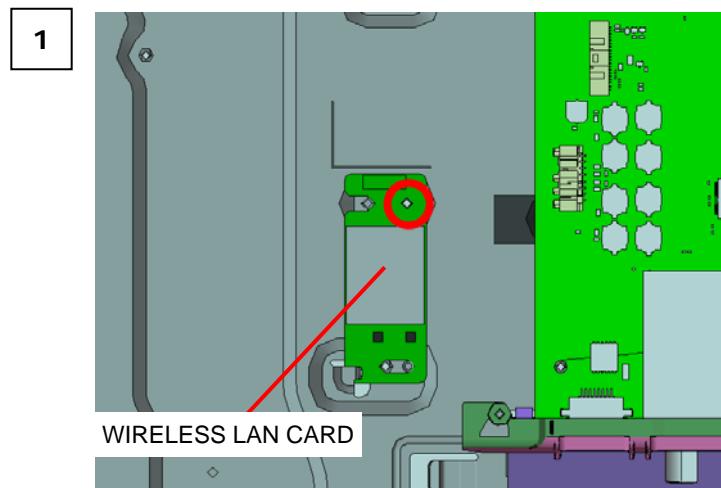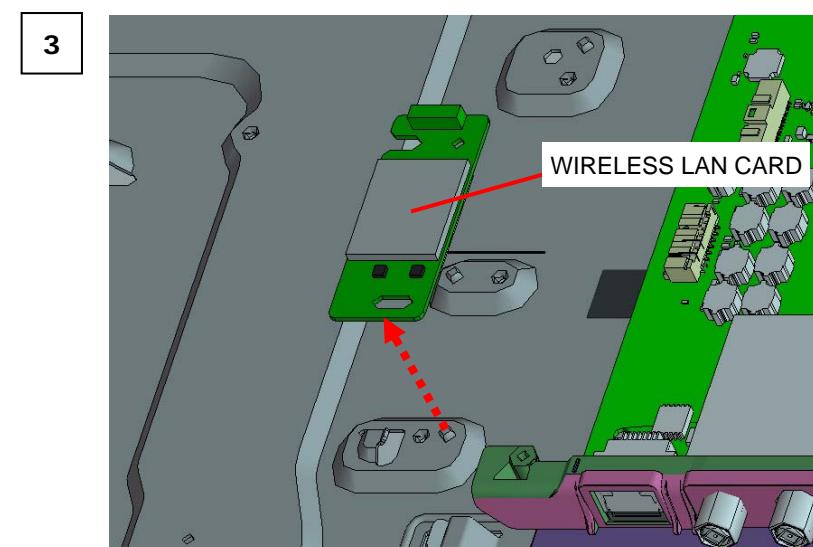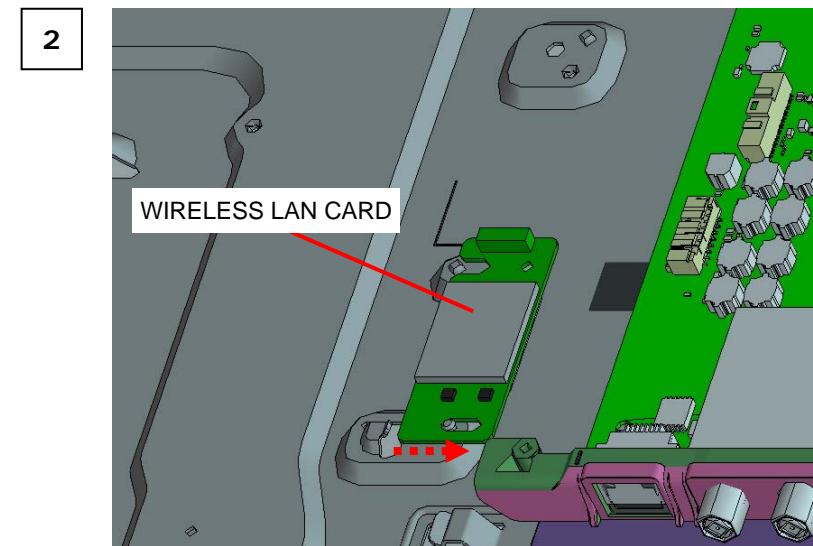
1-2. KDL-46NX720/723/725

1-2-5. POWER SUPPLY CORD AND G5AW BOARD

1

G5AW BOARD

POWER SUPPLY CORD

2

G5AW BOARD

3 Screws (SCREW (+PSW) (M3X6)) P/N: FX0001341

3

G5AW BOARD

4

G5AW BOARD

5

INSULATION SHEET
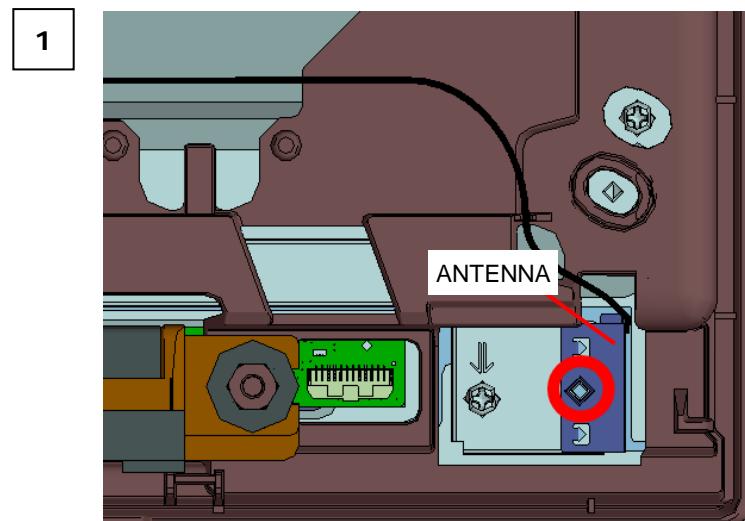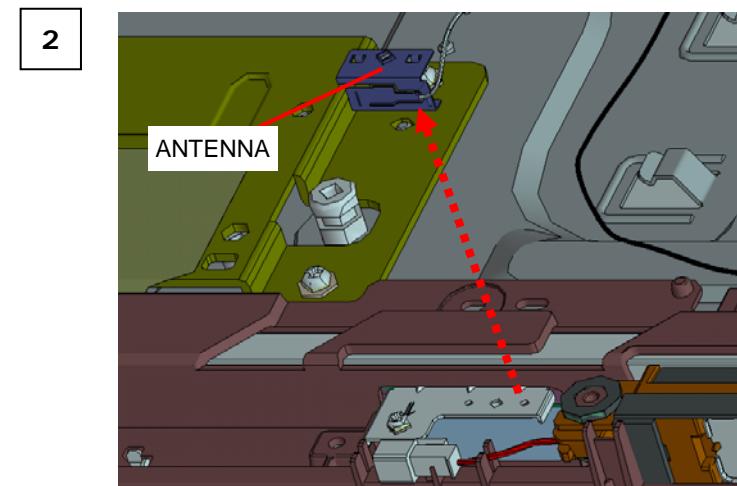
1-2. KDL-46NX720/723/725

1-2-6. WIRELESS LAN CARD

1

WIRELESS LAN CARD

1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341

2

WIRELESS LAN CARD

3

WIRELESS LAN CARD
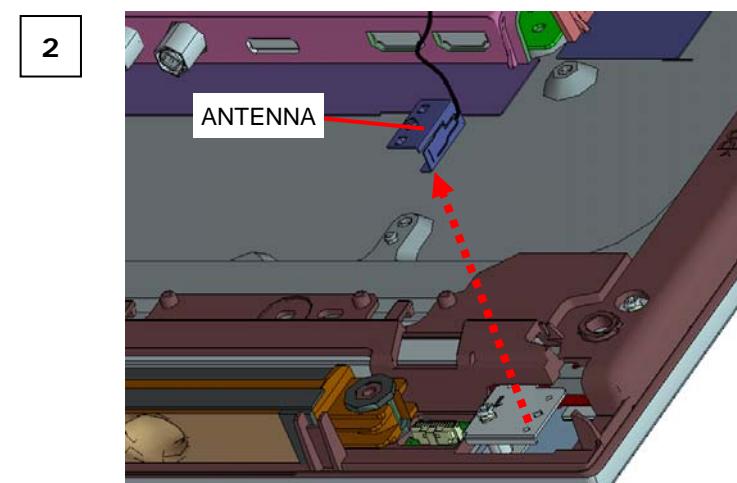
1-2. KDL-46NX720/723/725

1-2-7. ANTENNA

1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341
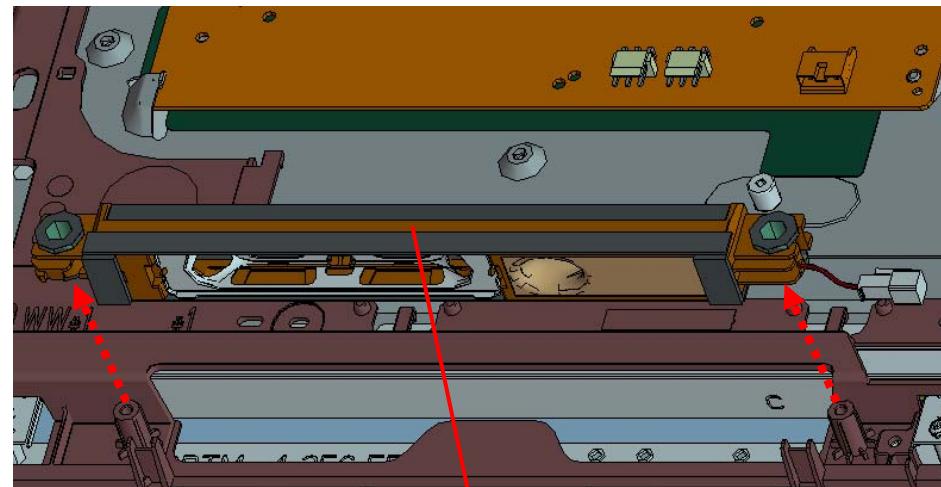
1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341
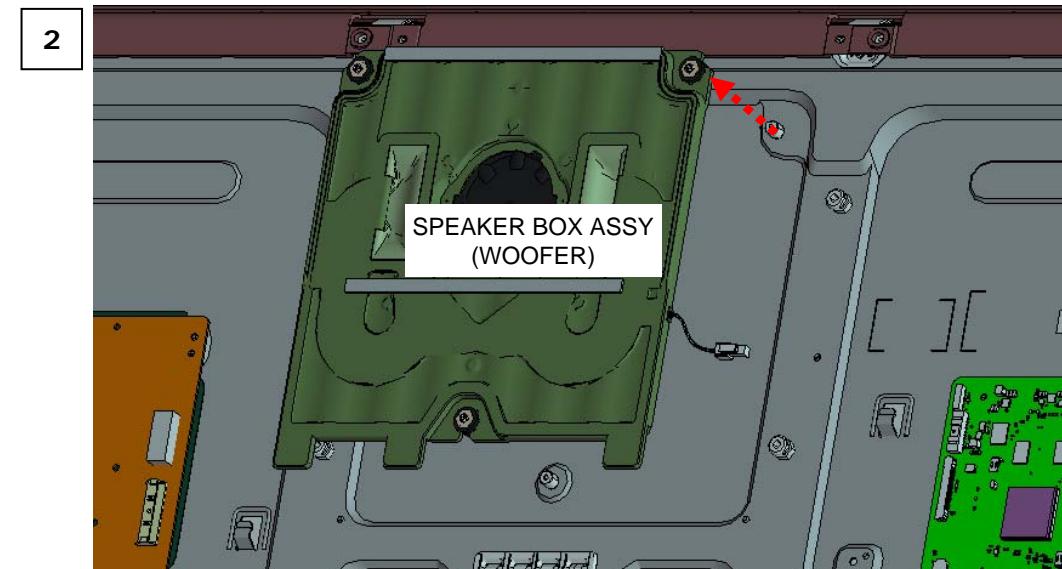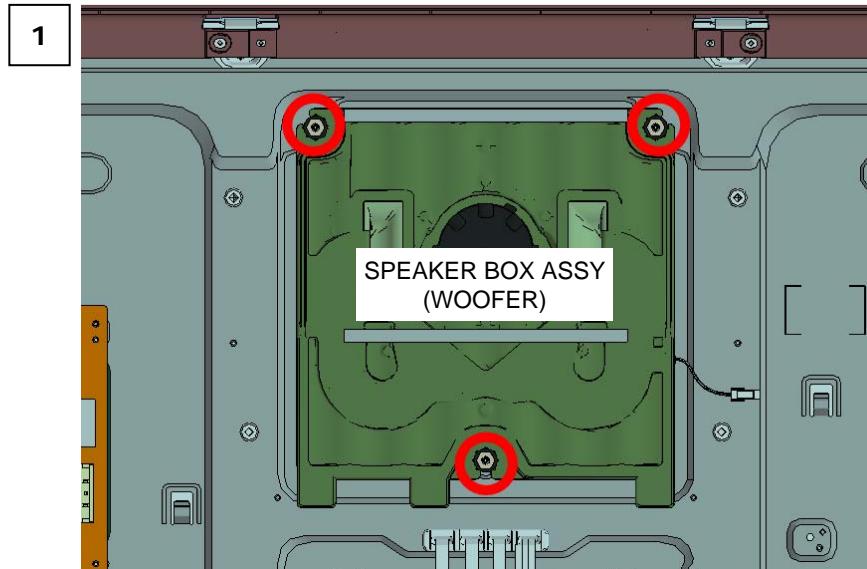
1-2. KDL-46NX720/723/725

1-2-8. SPEAKER BOX ASSY

SPEAKER BOX ASSY
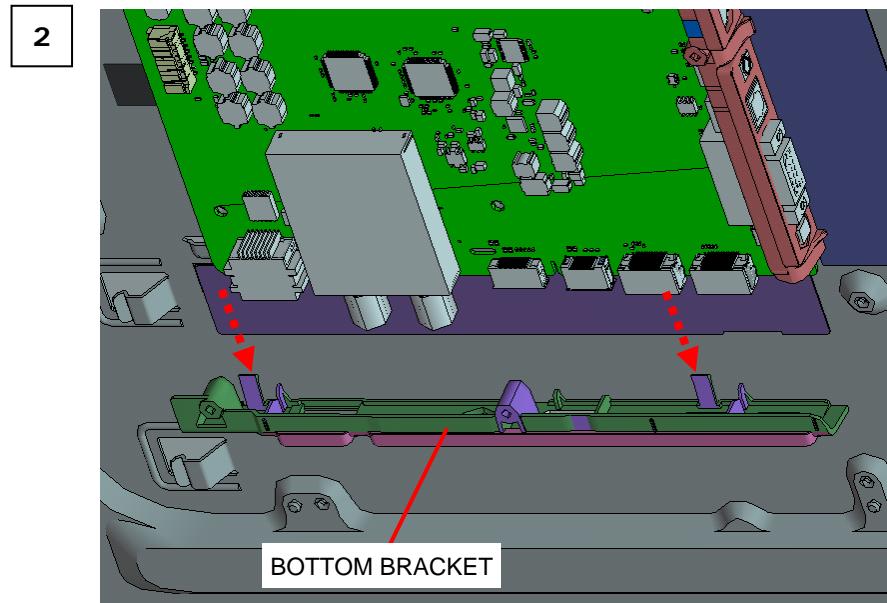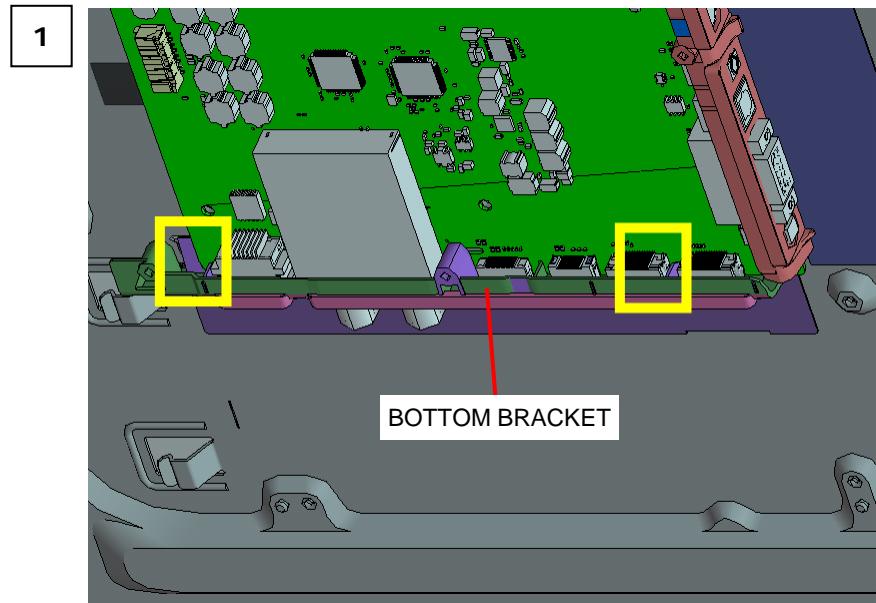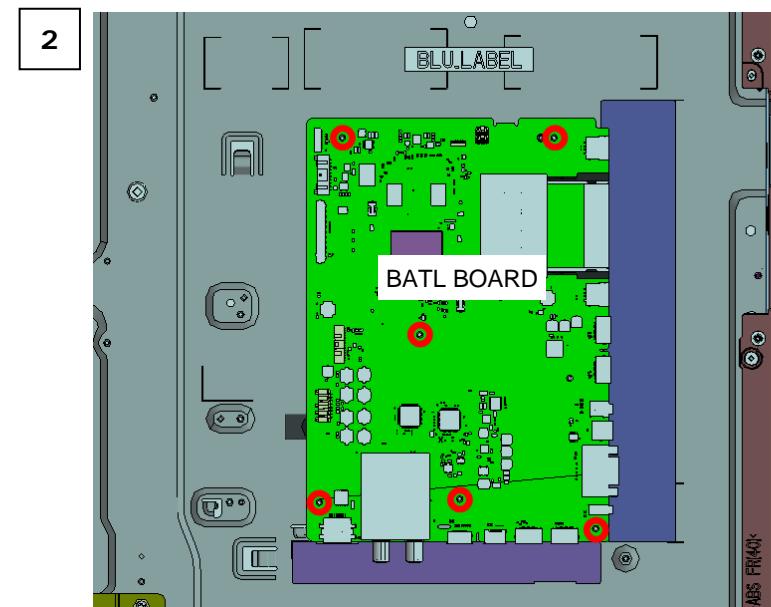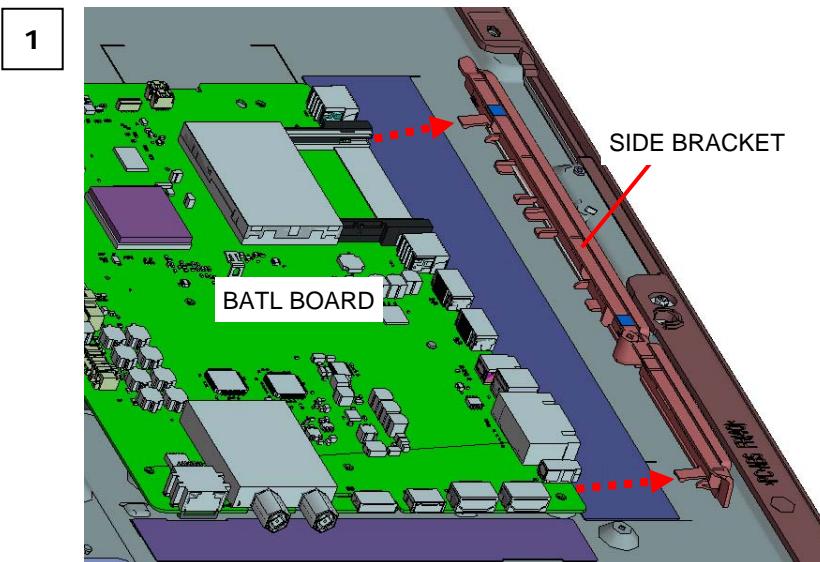
1-2. KDL-46NX720/723/725

1-2-9. SPEAKER BOX ASSY (WOOFER)

3 Screws (SCREW, +PSW M3X6 W12) P/N: FX0001901
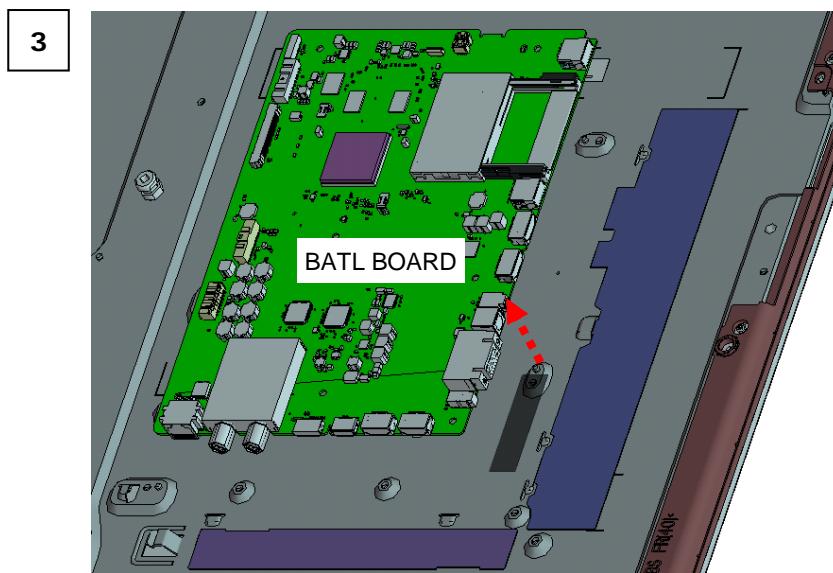
1-2. KDL-46NX720/723/725

1-2-10. BOTTOM BRACKET

1

BOTTOM BRACKET

2

BOTTOM BRACKET
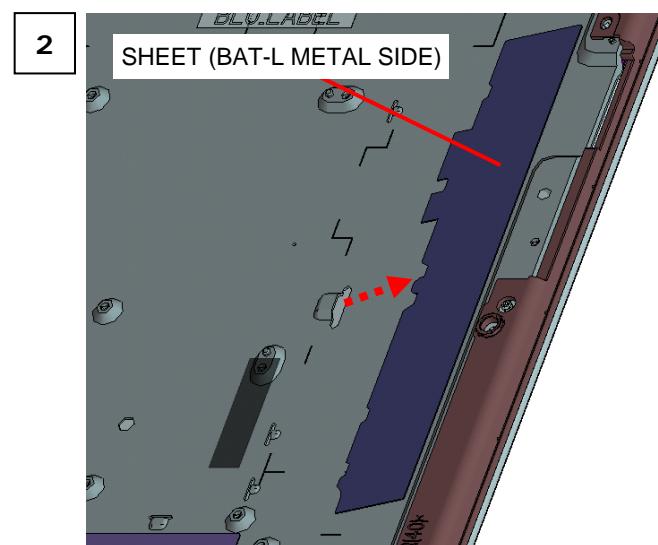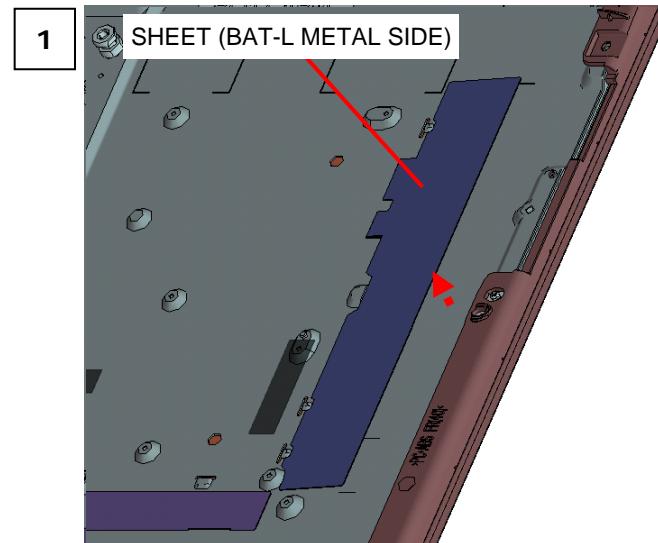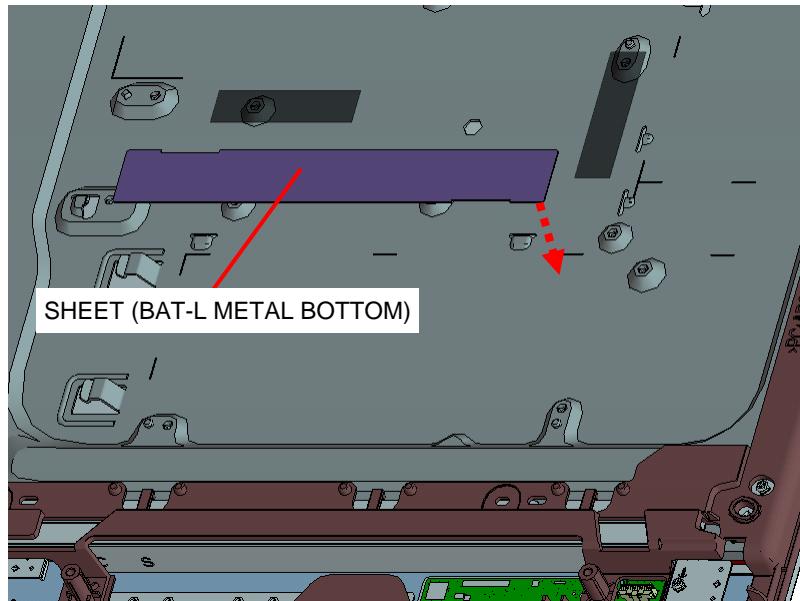
1-2. KDL-46NX720/723/725

1-2-11. SIDE BRACKET AND BATL BOARD

6 Screws (SCREW (+PSW) (M3X6)) P/N: FX0001341
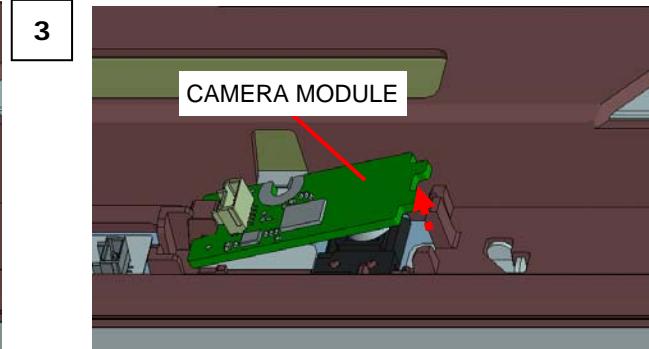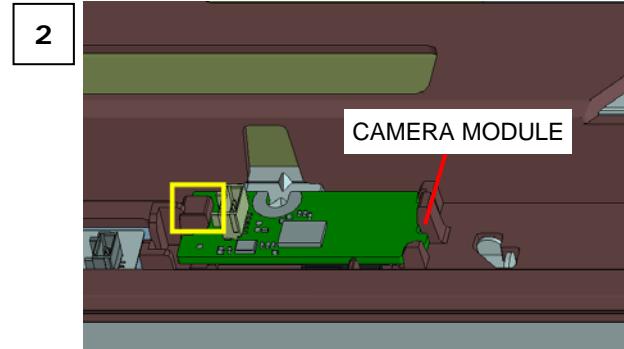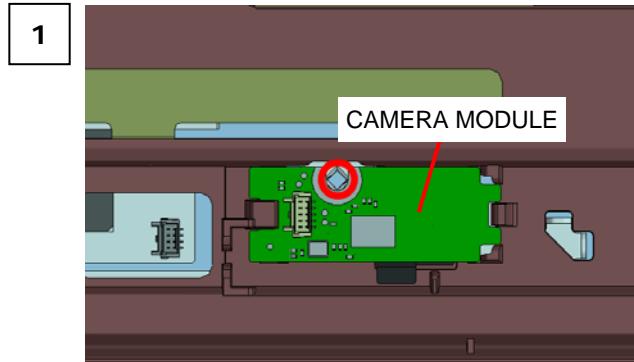
1-2. KDL-46NX720/723/725

1-2-12. SHEET

SHEET (BAT-L METAL BOTTOM)

1 SHEET (BAT-L METAL SIDE)

2 SHEET (BAT-L METAL SIDE)
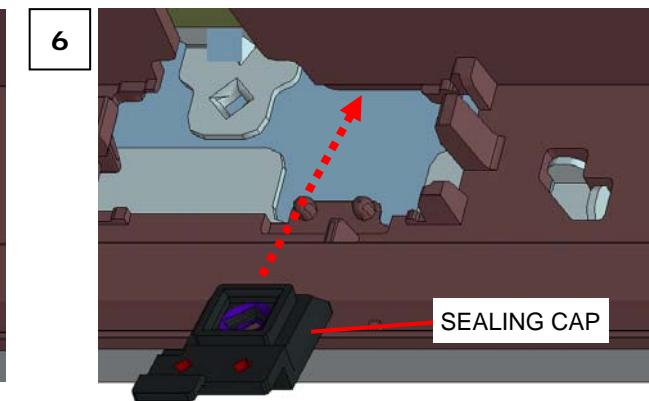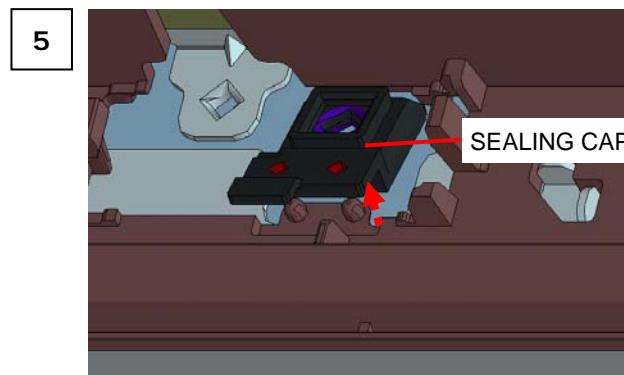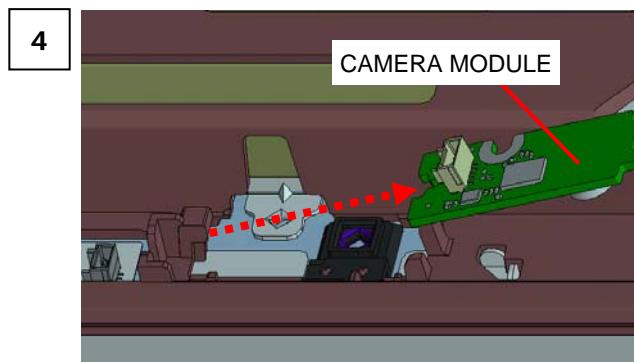
## 1-2. KDL-46NX720/723/725

1-2-13. CAMERA MODULE AND SEALING CAP(CAMERA)
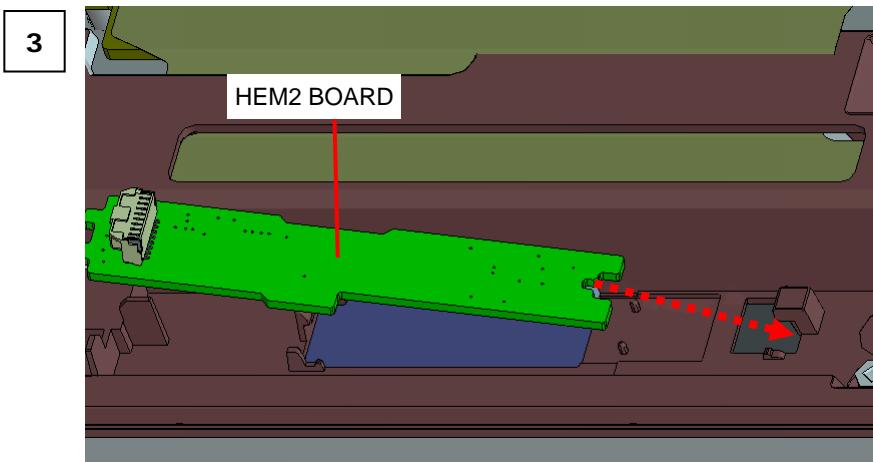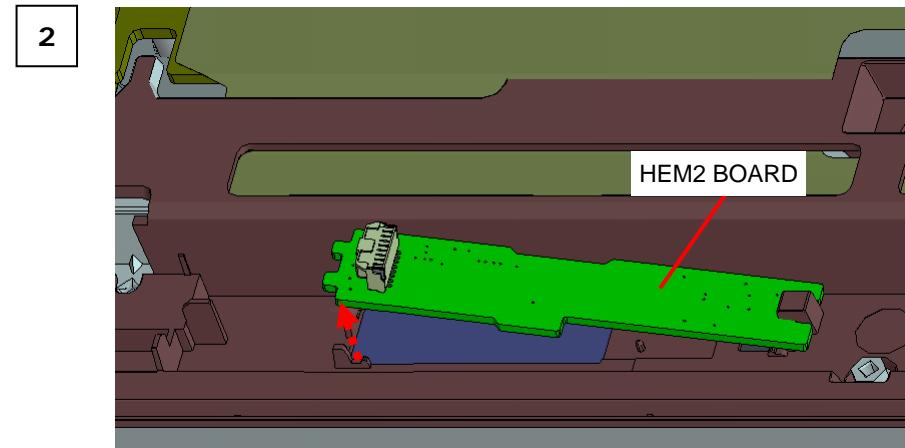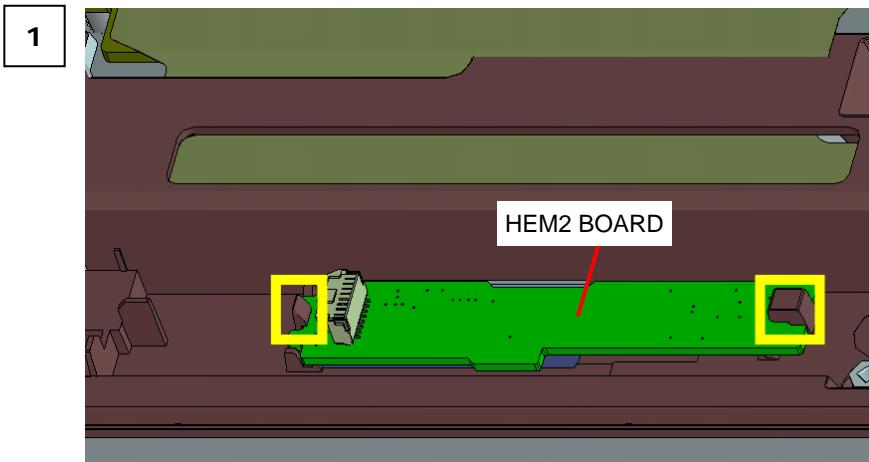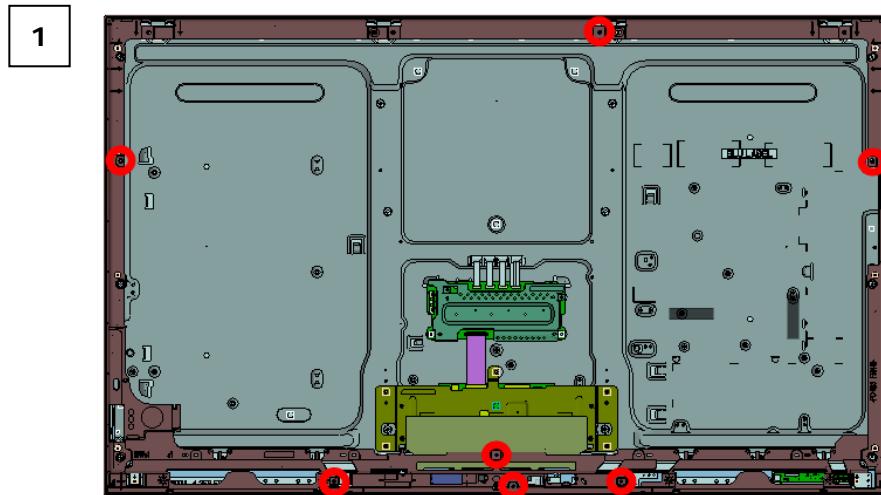
1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341
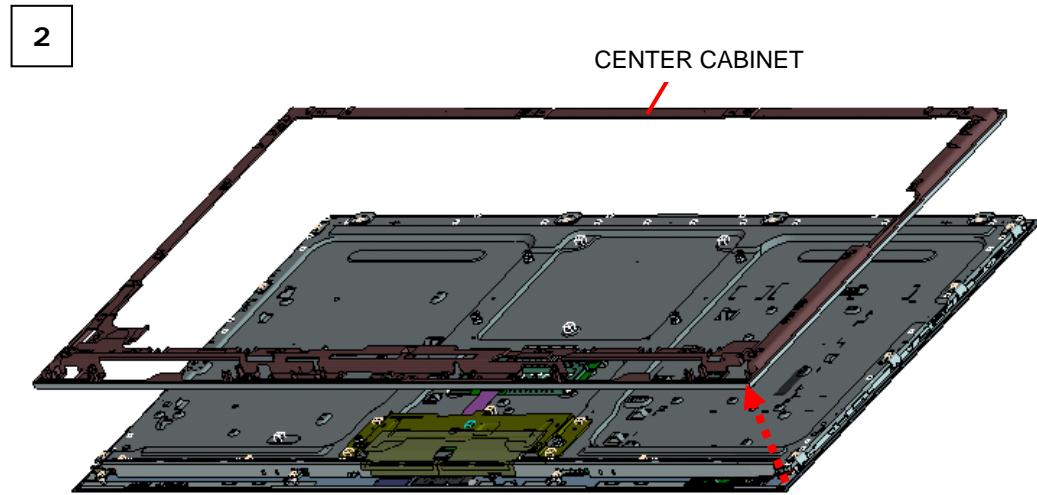
1-2. KDL-46NX720/723/725
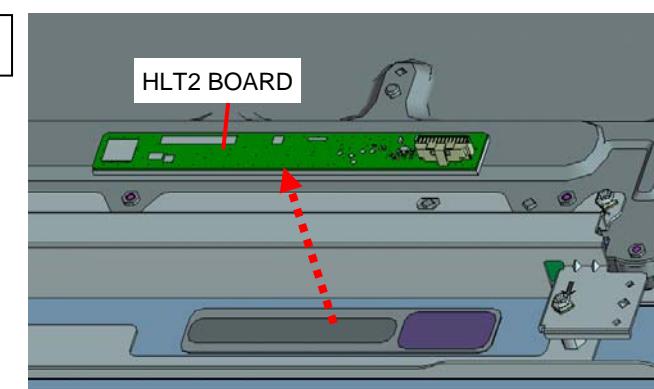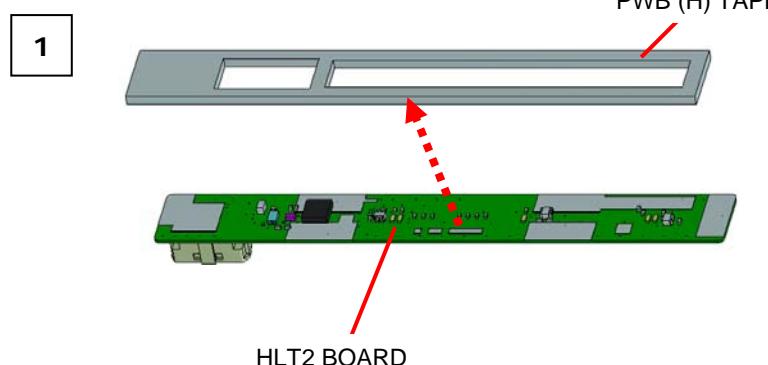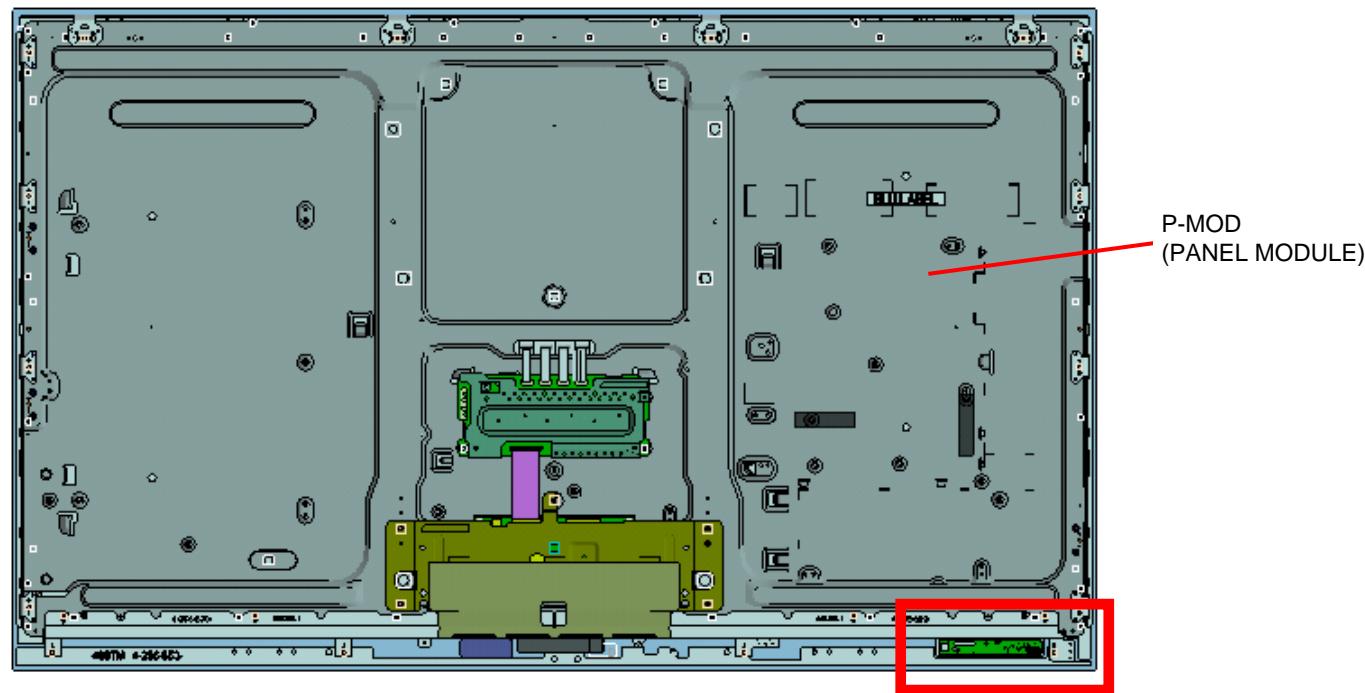
1-2-14. HEM2 BOARD

1-2. KDL-46NX720/723/725

1-2-15. CENTER CABINET
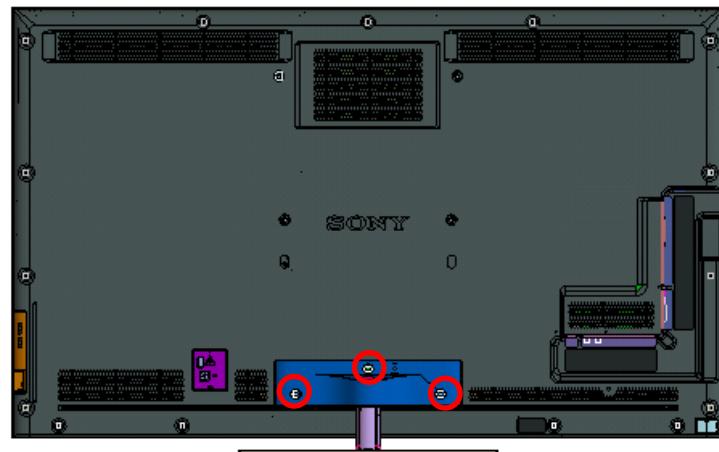
7 Screws (SCREW, +PSW M3X6 W12) P/N: FX0001901

CENTER CABINET
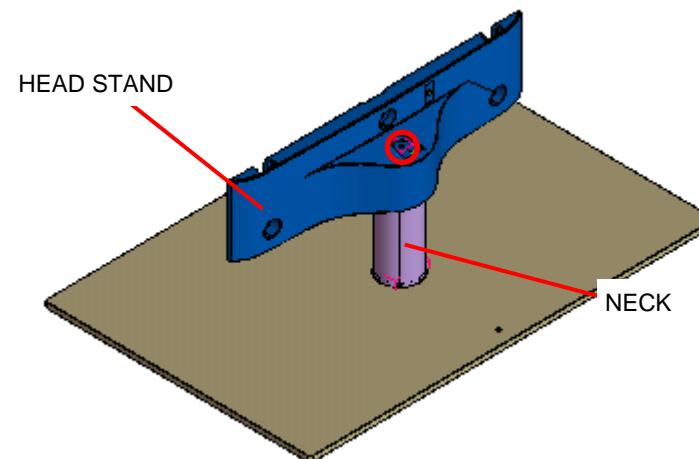
1-2. KDL-46NX720/723/725

1-2-16. HLT2 BOARD, PWB (H) TAPE AND PANEL MODULE
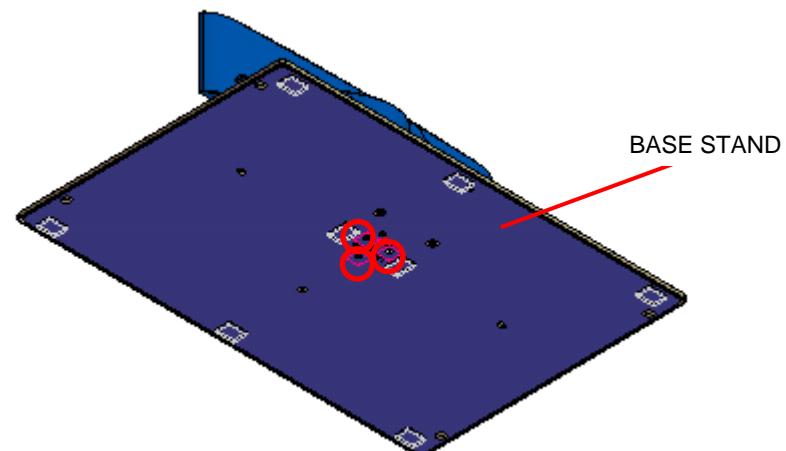
P-MOD
(PANEL MODULE)

PWB (H) TAPE

1

HLT2 BOARD

2

HLT2 BOARD

1-3. KDL-55NX720/723/725

1-3-1. STAND BLOCK, HEAD STAND, NECK AND BASE STAND

3 Screws (SCREW, +PSW M5X16) – Inside bag, screw assy

HEAD STAND

NECK

1 Screw (USER SCREW ST) – Inside bag, screw assy

BASE STAND
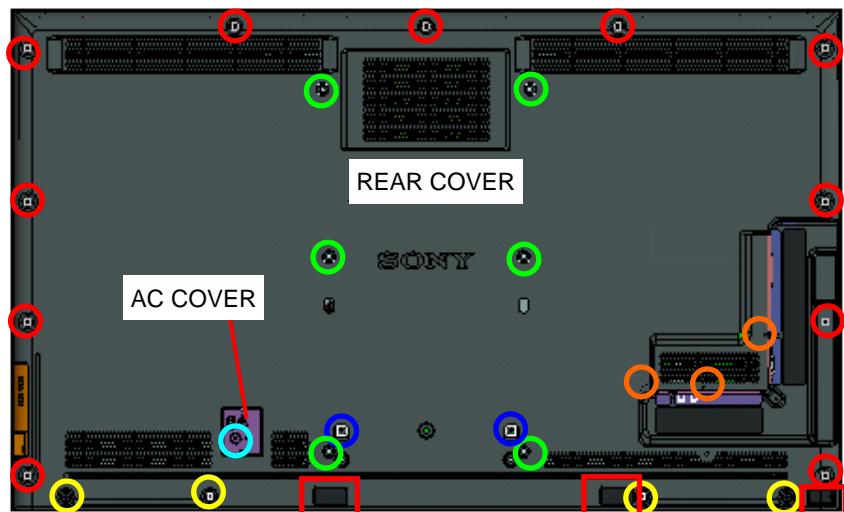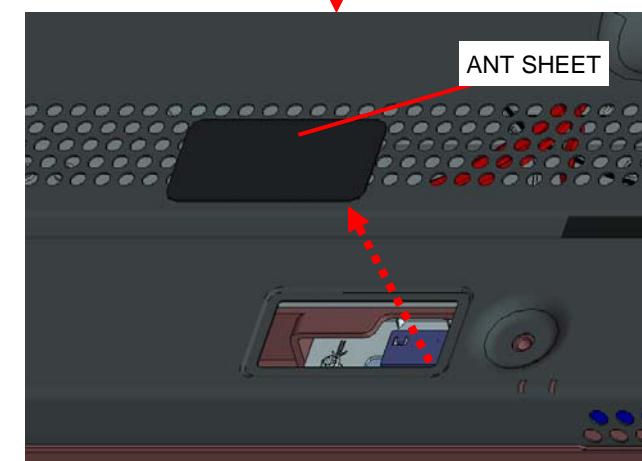
3 Screws (USER SCREW ST) – Inside bag, screw assy
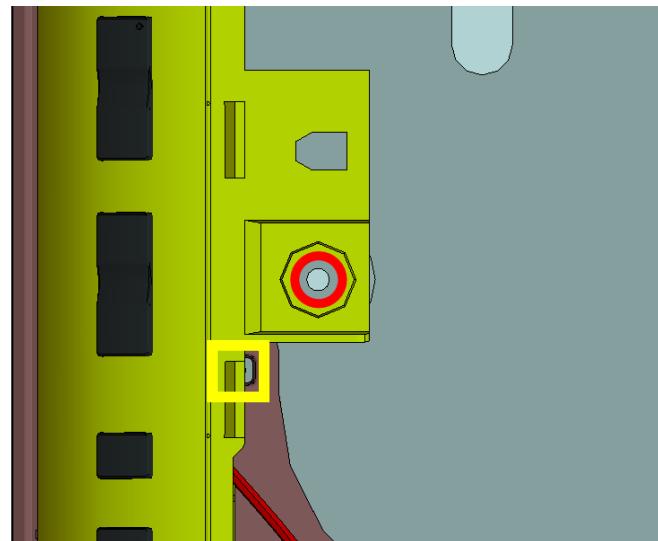
1-3. KDL-55NX720/723/725

1-3-2. REAR COVER, AC COVER, ANT COVER AND ANT SHEET

REAR COVER

AC COVER

ANT COVER

ANT COVER

ANT SHEET
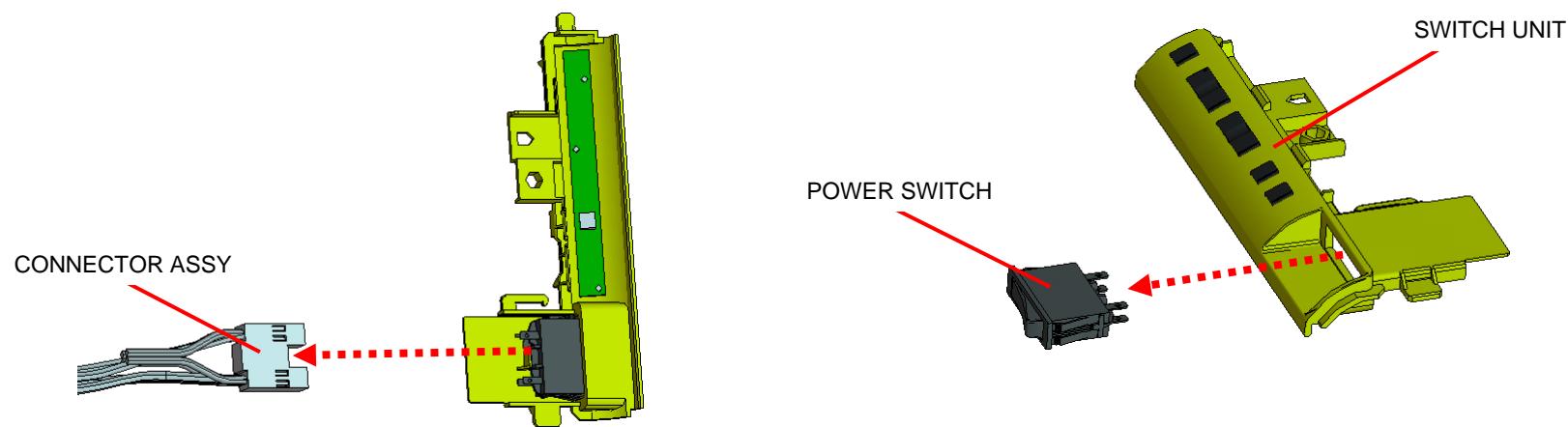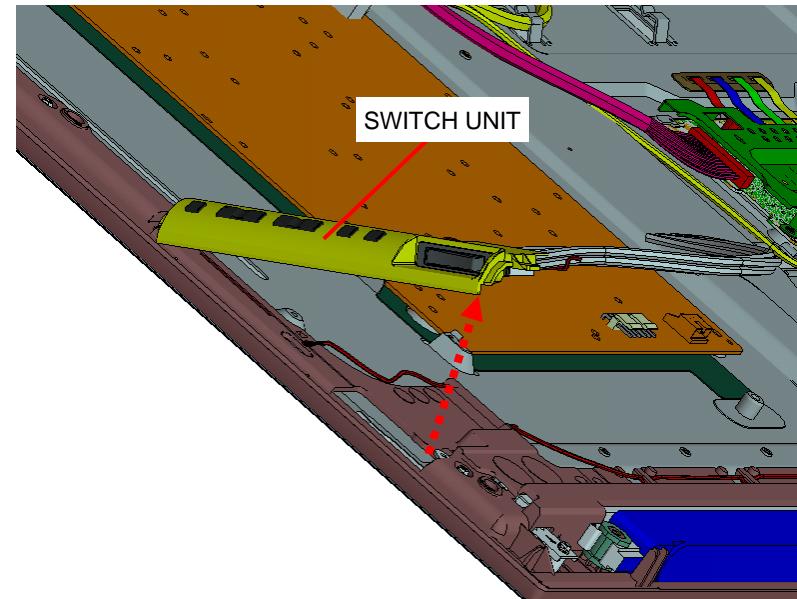
○ 11 Screws (SCREW, +PWH M3X8) P/N: FX0020801

○ 4 Screws (SCREW, +BVTP 4X12 TYPE2 IT-3) P/N: FX0005801

○ 6 Screws (SCREW, ORNAMENTAL M6X12) P/N: FX0006302

○ 3 Screws (SCREW +BVTP 3X8 TYPE2 IT-3) P/N: FX0012779

○ 2 Screws (JOINT, STAND) P/N: FX0002101

○ 1 Screw (SCREW, +PSW M3X6 W12) P/N: FX0001901
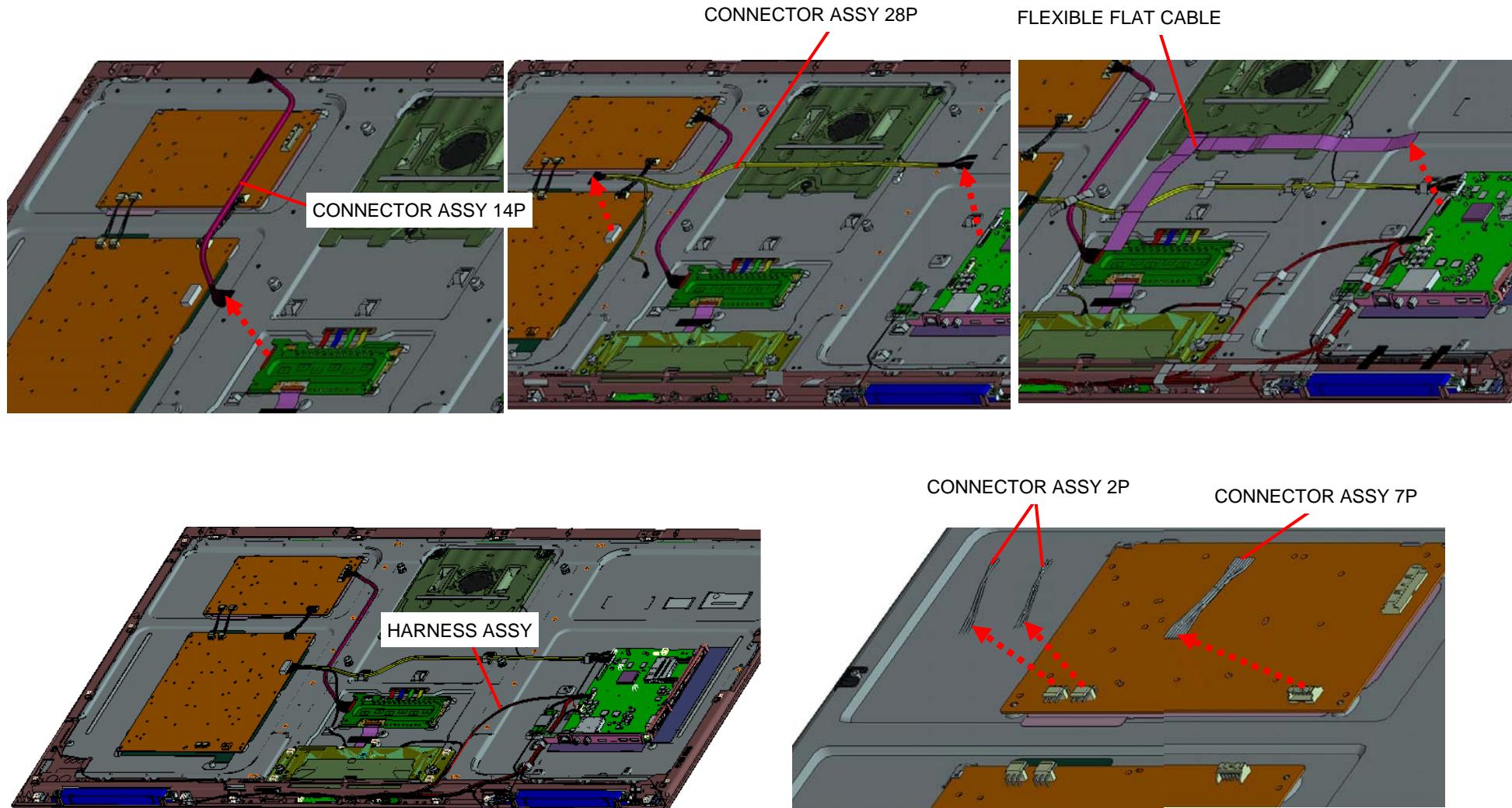
1-3. KDL-55NX720/723/725

1-3-3. SWITCH UNIT AND POWER SWITCH

1 Screw (SCREW, +PWH M3X8) P/N: FX0020801

SWITCH UNIT

CONNECTOR ASSY

SWITCH UNIT

POWER SWITCH
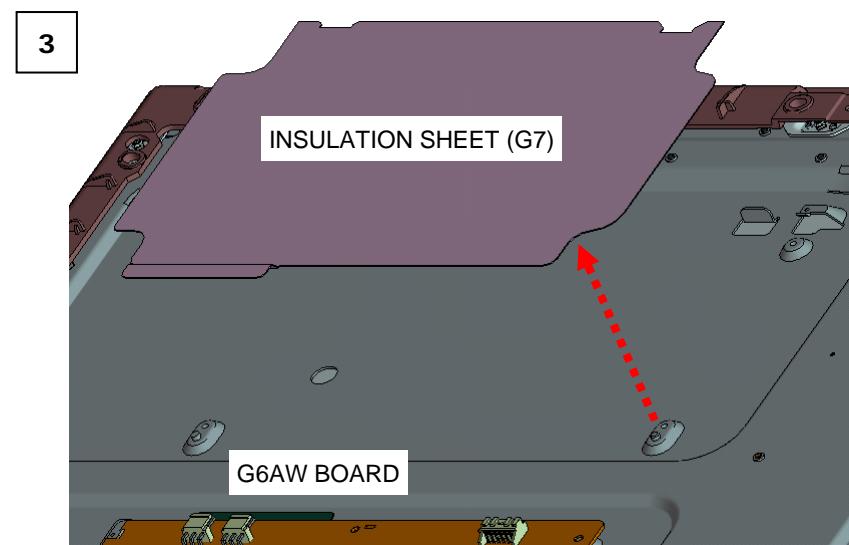
1-3. KDL-55NX720/723/725

1-3-4. HARNESS

CONNECTOR ASSY 28P

FLEXIBLE FLAT CABLE

CONNECTOR ASSY 14P

CONNECTOR ASSY 2P

CONNECTOR ASSY 7P

HARNESS ASSY
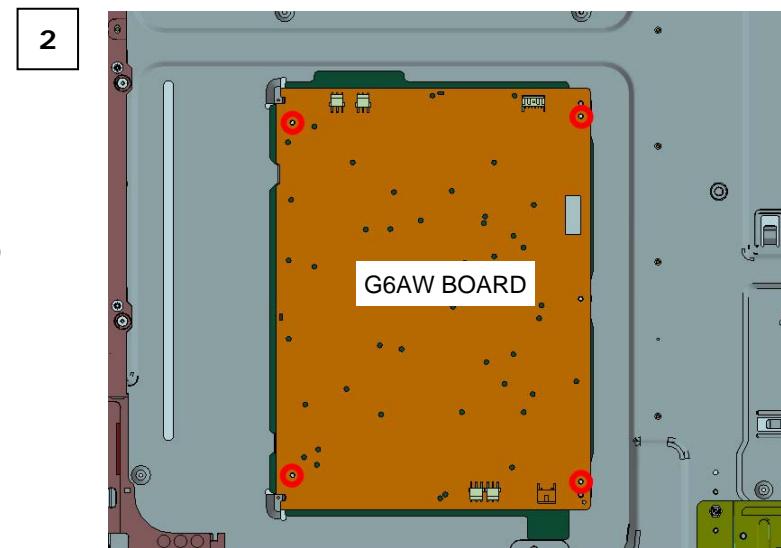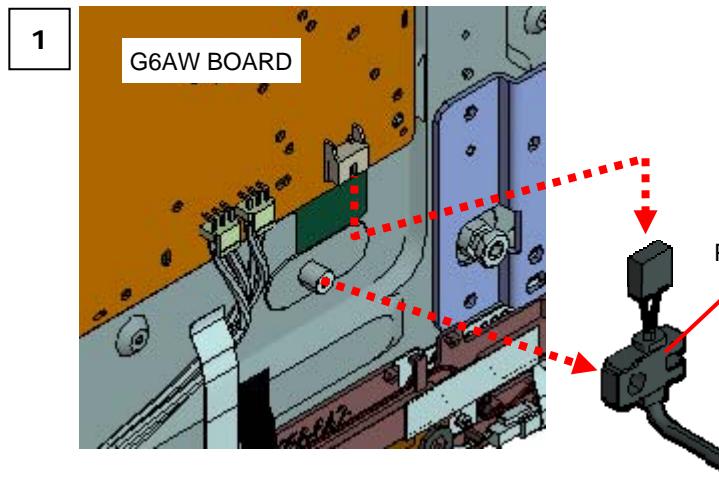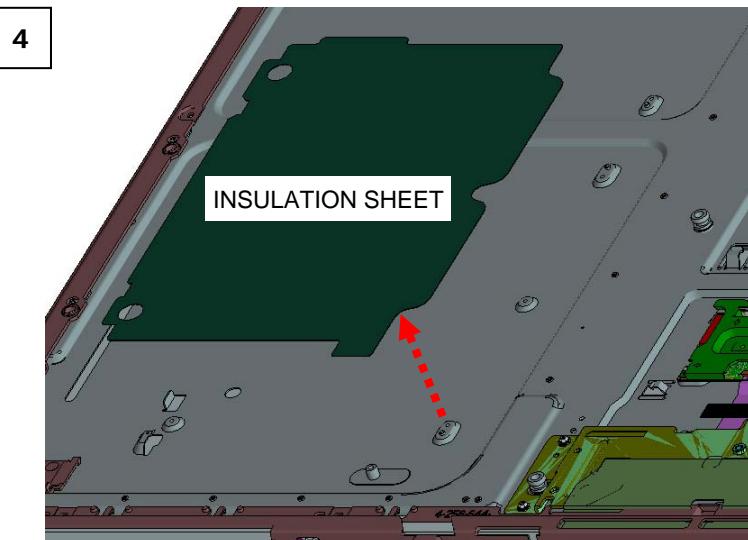
1-3. KDL-55NX720/723/725

1-3-5. G7A BOARD

1

G7A BOARD

G6AW BOARD

2 Screws (SCREW (+PSW) (M3X6)) P/N: FX0001341

2

G7A BOARD

G6A WBOARD

3

INSULATION SHEET (G7)
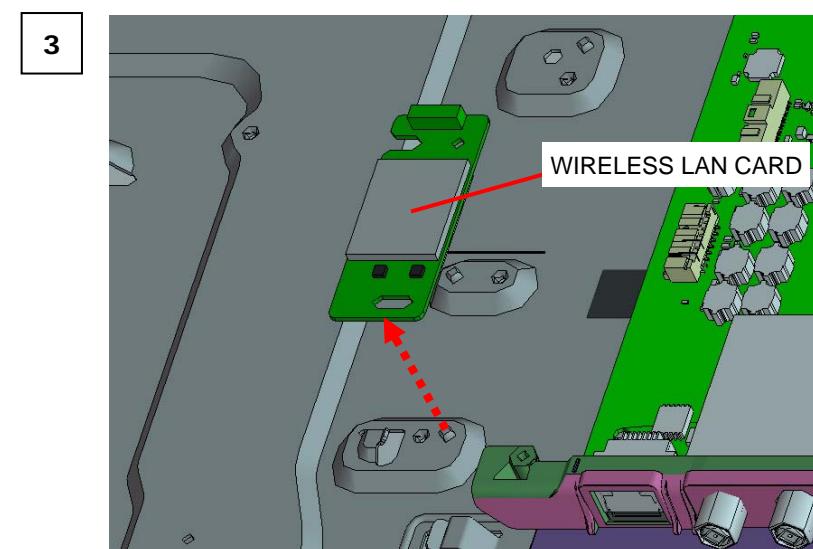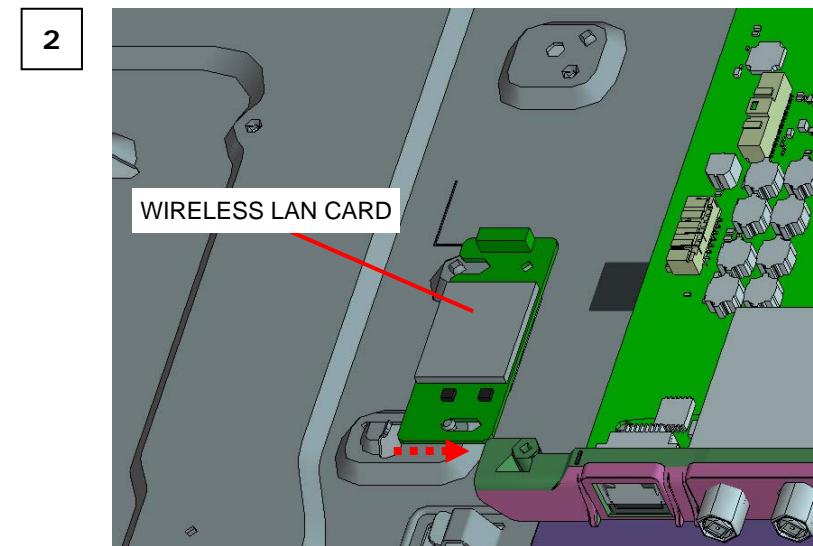
G6AW BOARD

1-3. KDL-55NX720/723/725

1-3-6. POWER SUPPLY CORD AND G6AW BOARD

1

G6AW BOARD

POWER SUPPLY CORD

2

G6AW BOARD

4 Screws (SCREW (+PSW) (M3X6)) P/N: FX0001341

3

G6AW BOARD

4

INSULATION SHEET
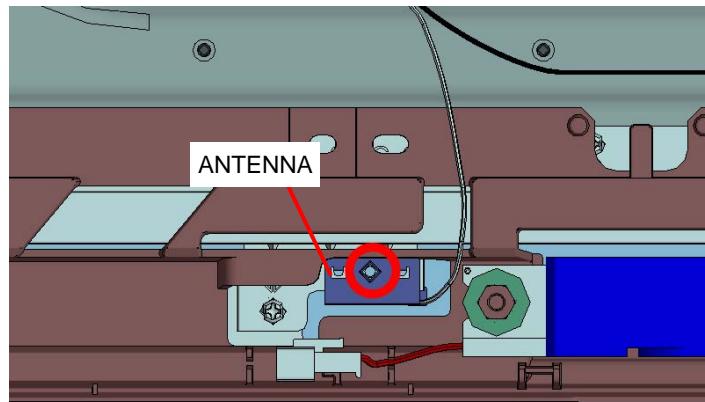
1-3. KDL-55NX720/723/725

1-3-7. WIRELESS LAN CARD

1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341
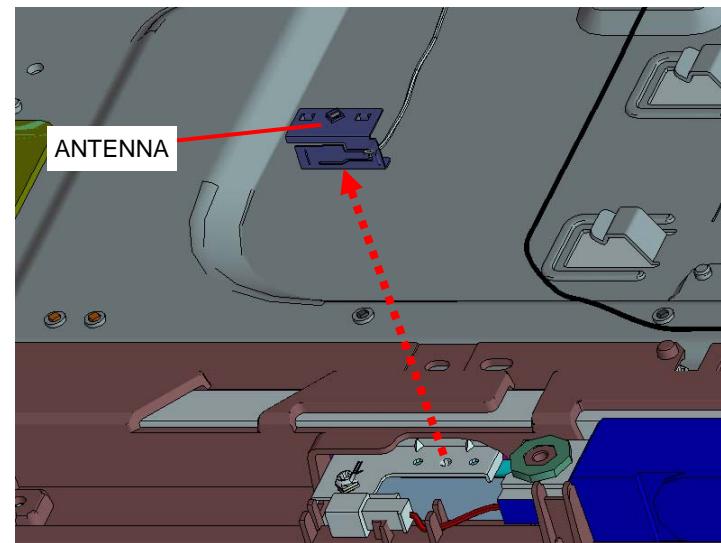
1-3. KDL-55NX720/723/725

1-3-8. ANTENNA

1

1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341

2

1
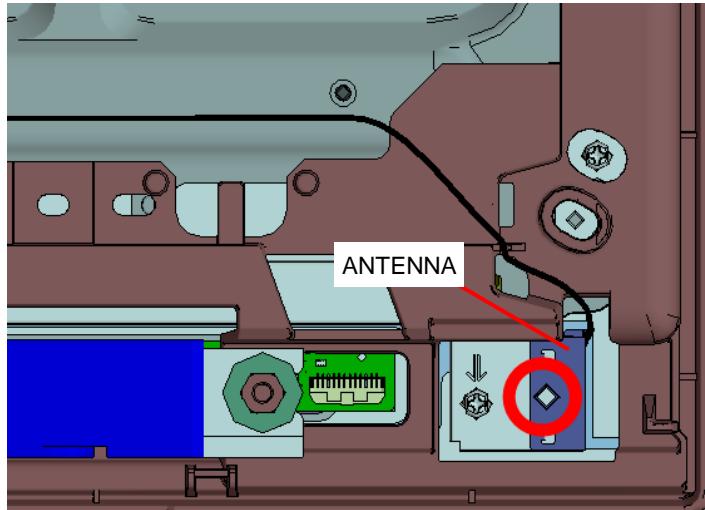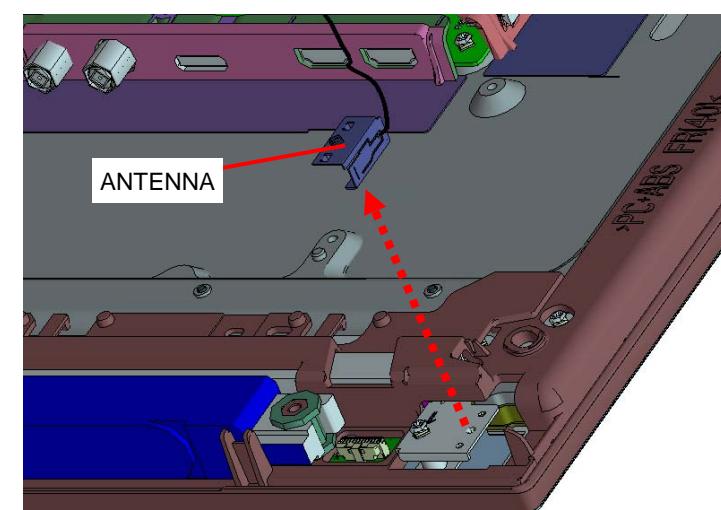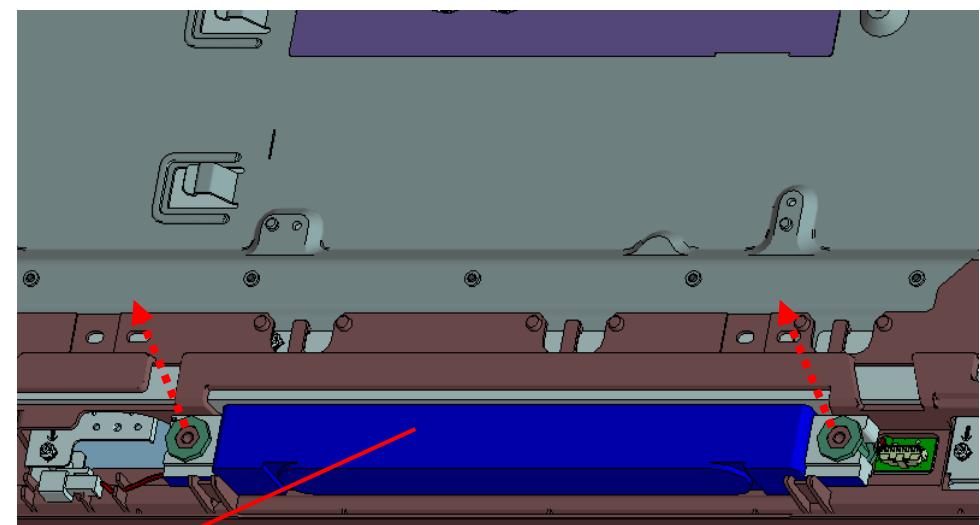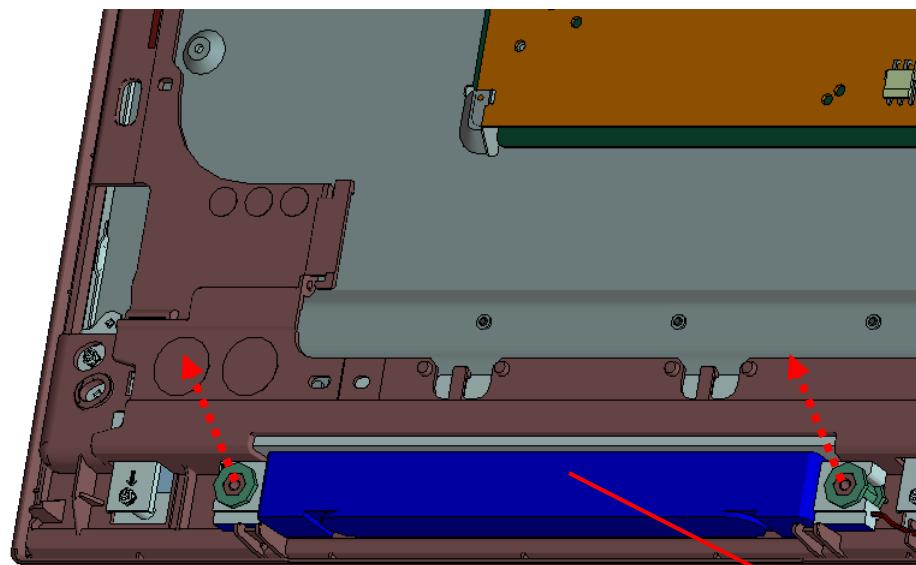
1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341

2
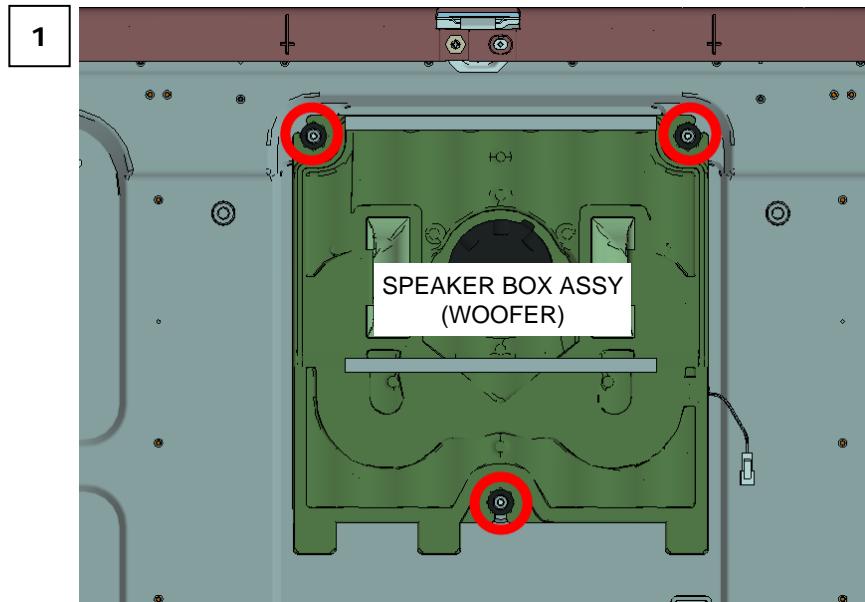
1-3. KDL-55NX720/723/725

1-3-9. SPEAKER BOX ASSY
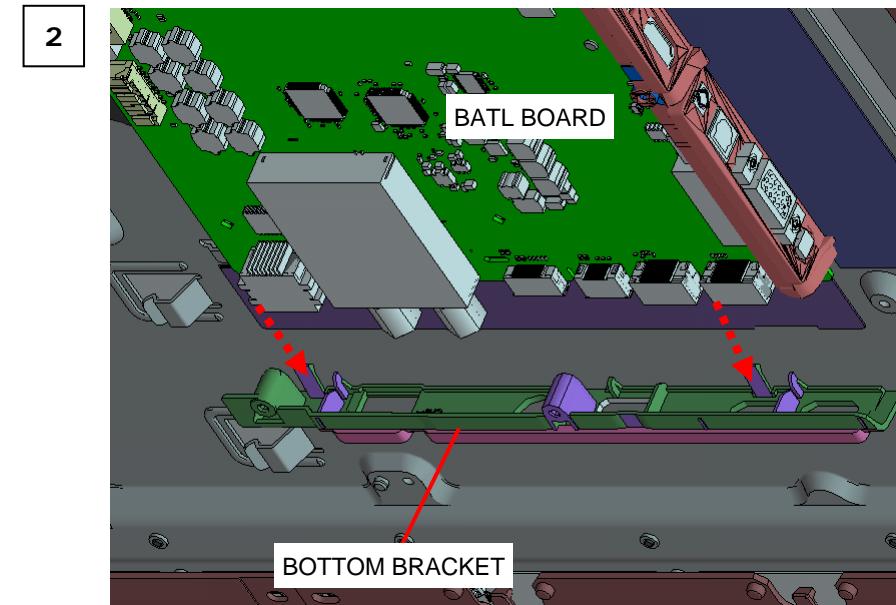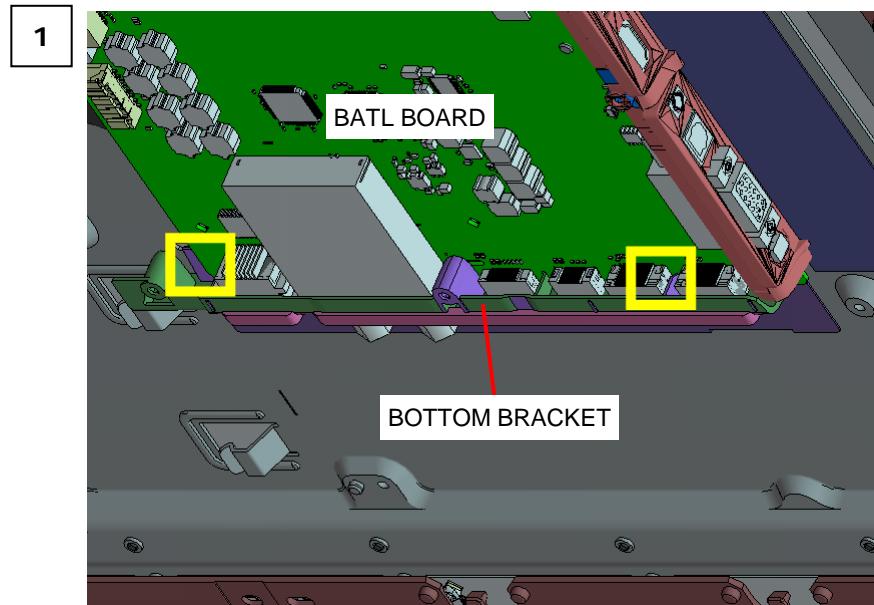
SPEAKER BOX ASSY

1-3. KDL-55NX720/723/725

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

3 Screws (SCREW, +PSW M3X6 W12) P/N: FX0001901
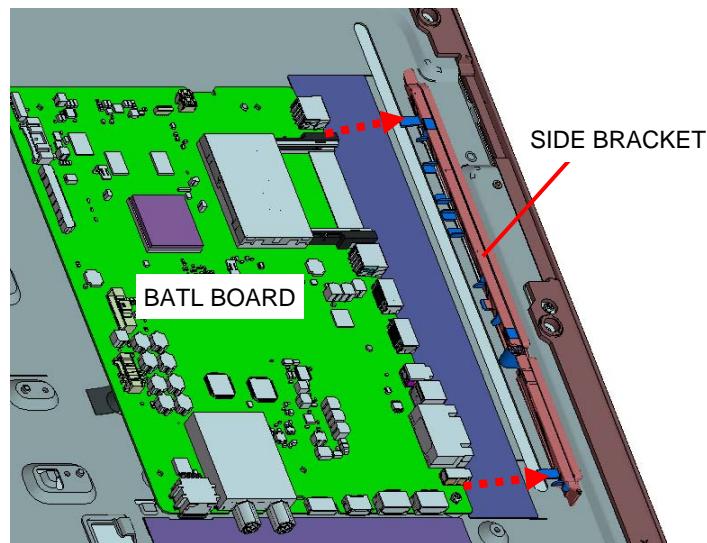
1-3. KDL-55NX720/723/725

1-3-11. BOTTOM BRACKET
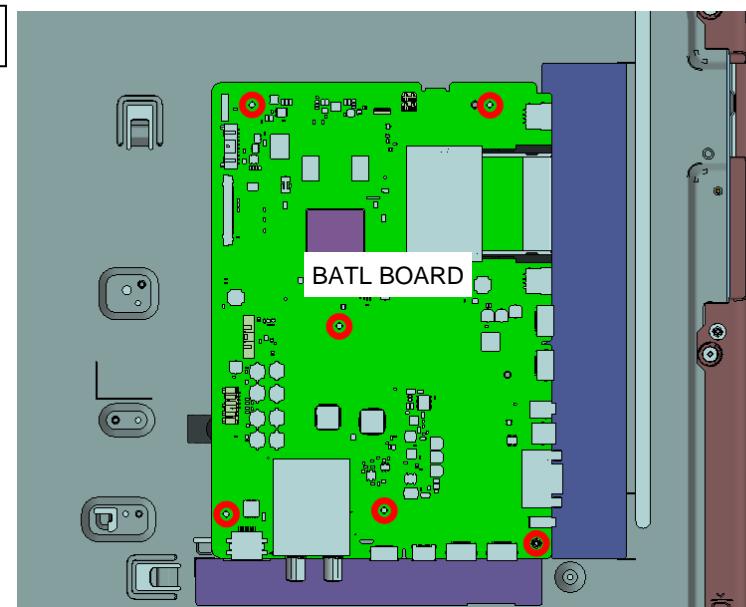
1-3. KDL-55NX720/723/725

1-3-12. SIDE BRACKET AND BATL BOARD

SIDE BRACKET

BATL BOARD

BATL BOARD

6 Screws (SCREW (+PSW) (M3X6)) P/N: FX0001341

BATL BOARD
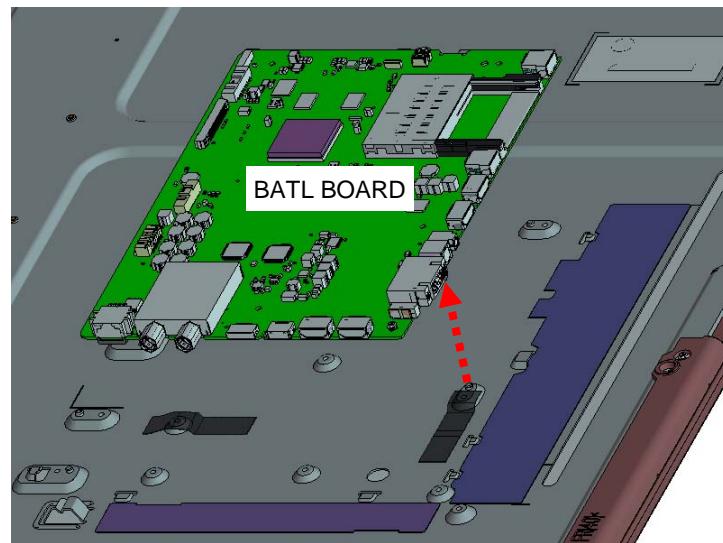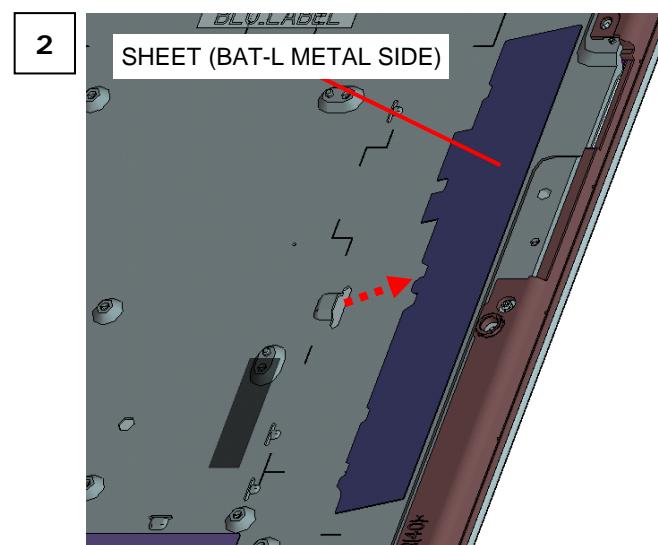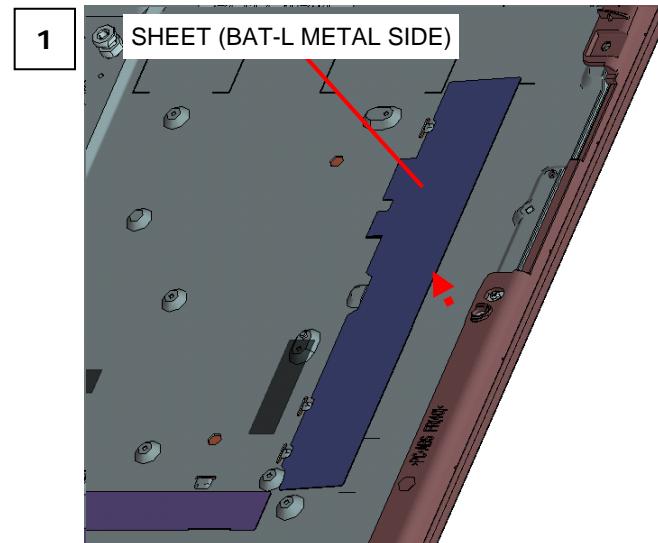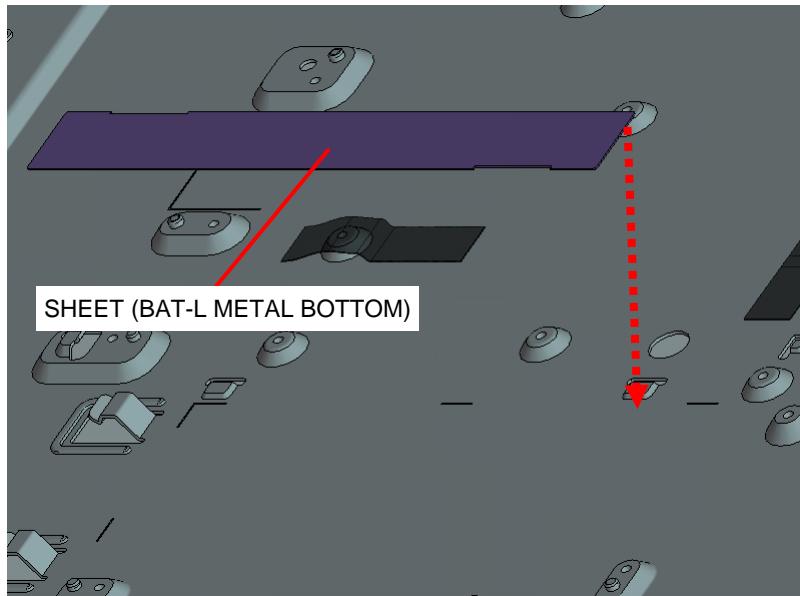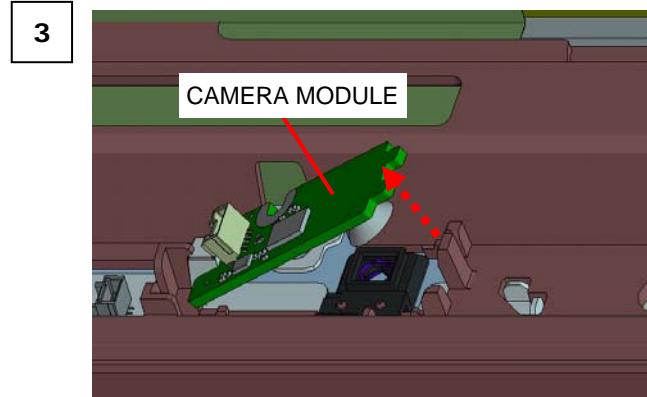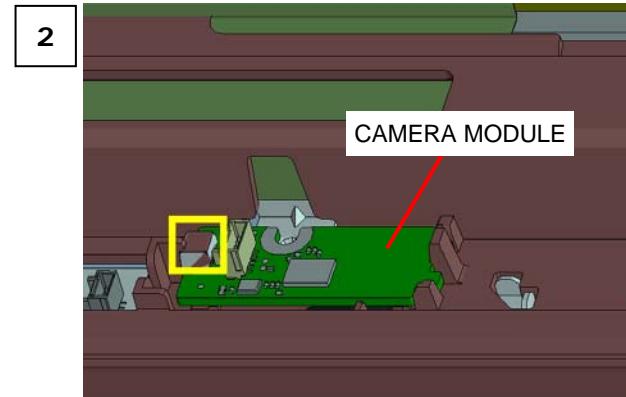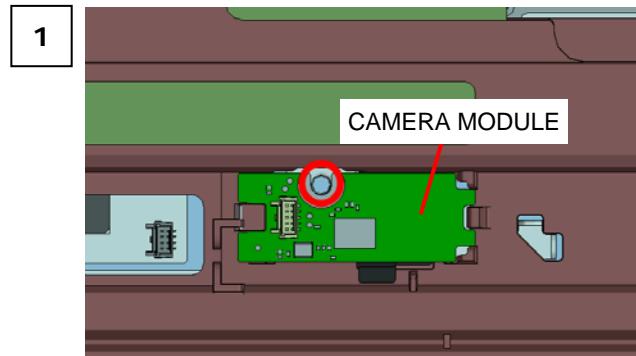
1-3. KDL-55NX720/723/725

1-3-13. SHEET

SHEET (BAT-L METAL BOTTOM)

1 SHEET (BAT-L METAL SIDE)

2 SHEET (BAT-L METAL SIDE)
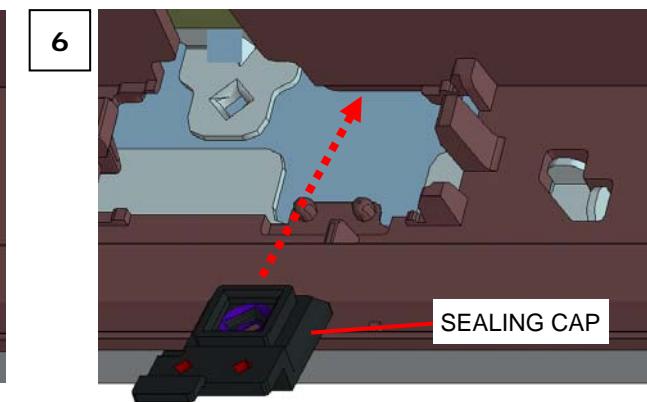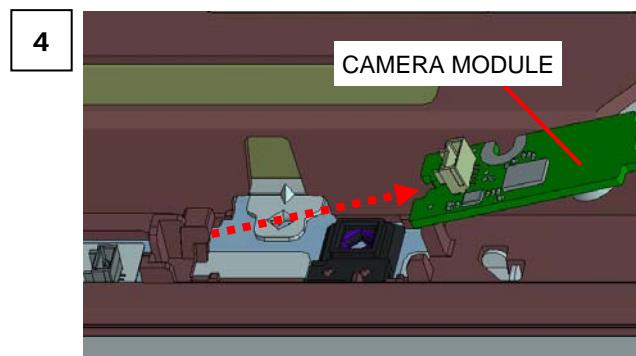
1-3. KDL-55NX720/723/725

1-3-14. CAMERA MODULE AND SEALING CAP(CAMERA)

1

CAMERA MODULE

2

CAMERA MODULE

3

CAMERA MODULE

1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341

4

CAMERA MODULE

5

SEALING CAP

6

SEALING CAP
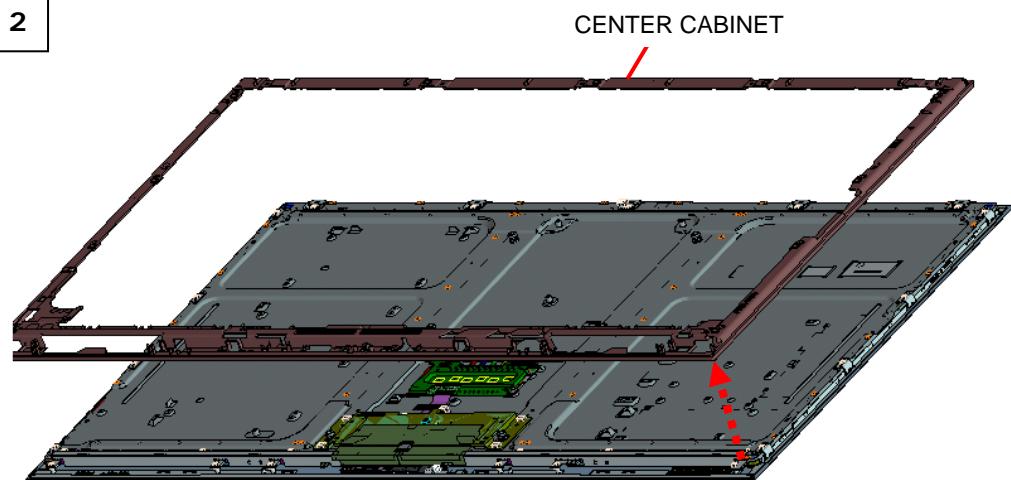
1-3. KDL-55NX720/723/725

1-3-15. HEM2 BOARD

1-3. KDL-55NX720/723/725

1-3-16. CENTER CABINET
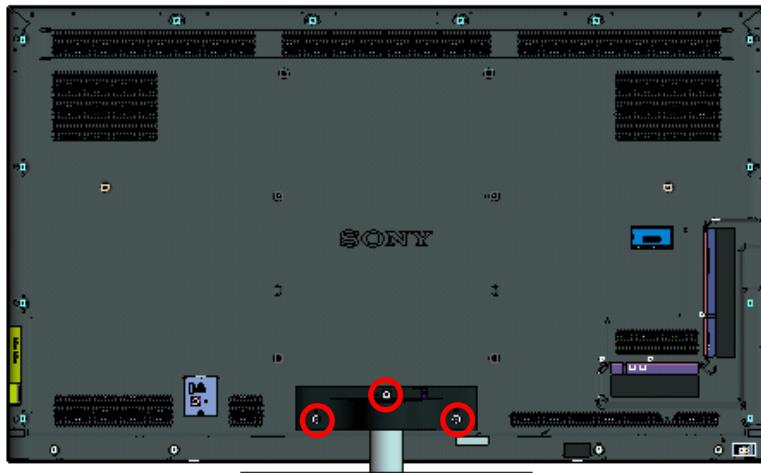
5 Screws (SCREW, +PSW M3X6 W12) P/N: FX0001901

CENTER CABINET
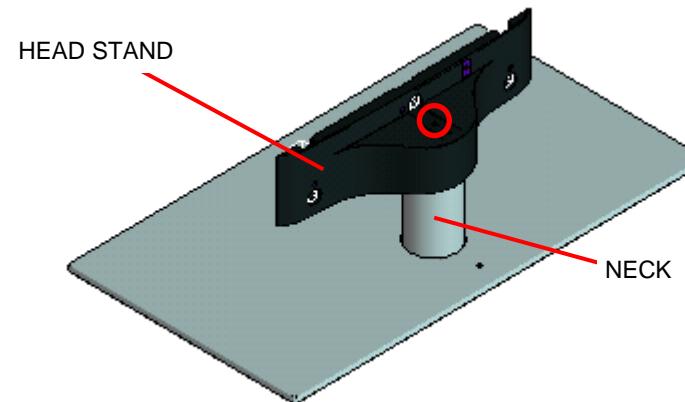
1-3. KDL-55NX720/723/725

1-3-17. HLT2 BOARD, PWB (H) TAPE AND PANEL MODULE
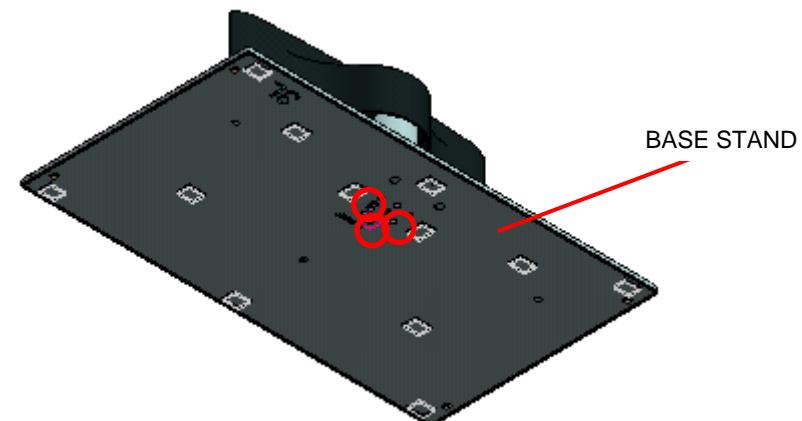
P-MOD
(PANEL MODULE)

PWB (H) TAPE

1

HLT2 BOARD

2

HLT2 BOARD

HLT2 BOARD

1-4. KDL-60NX720/723/725

1-4-1. STAND BLOCK, HEAD STAND, NECK AND BASE STAND

3 Screws (SCREW, +PSW M5X16) – Inside bag, screw assy

HEAD STAND

NECK

1 Screw (USER SCREW ST) – Inside bag, screw assy

BASE STAND
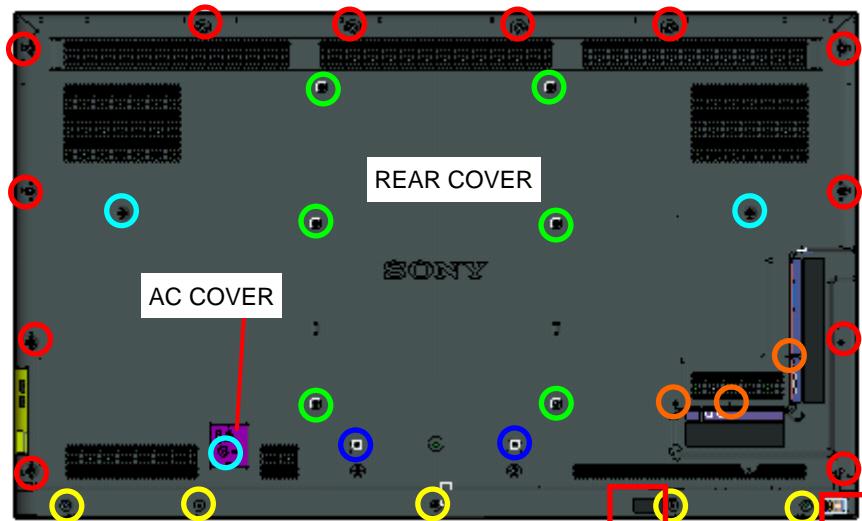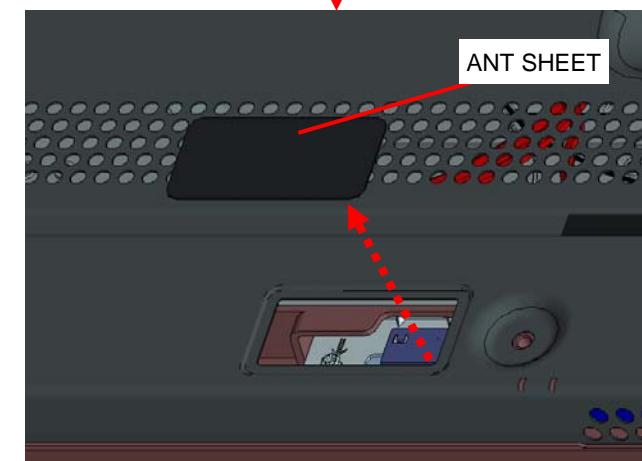
3 Screws (USER SCREW ST) – Inside bag, screw assy
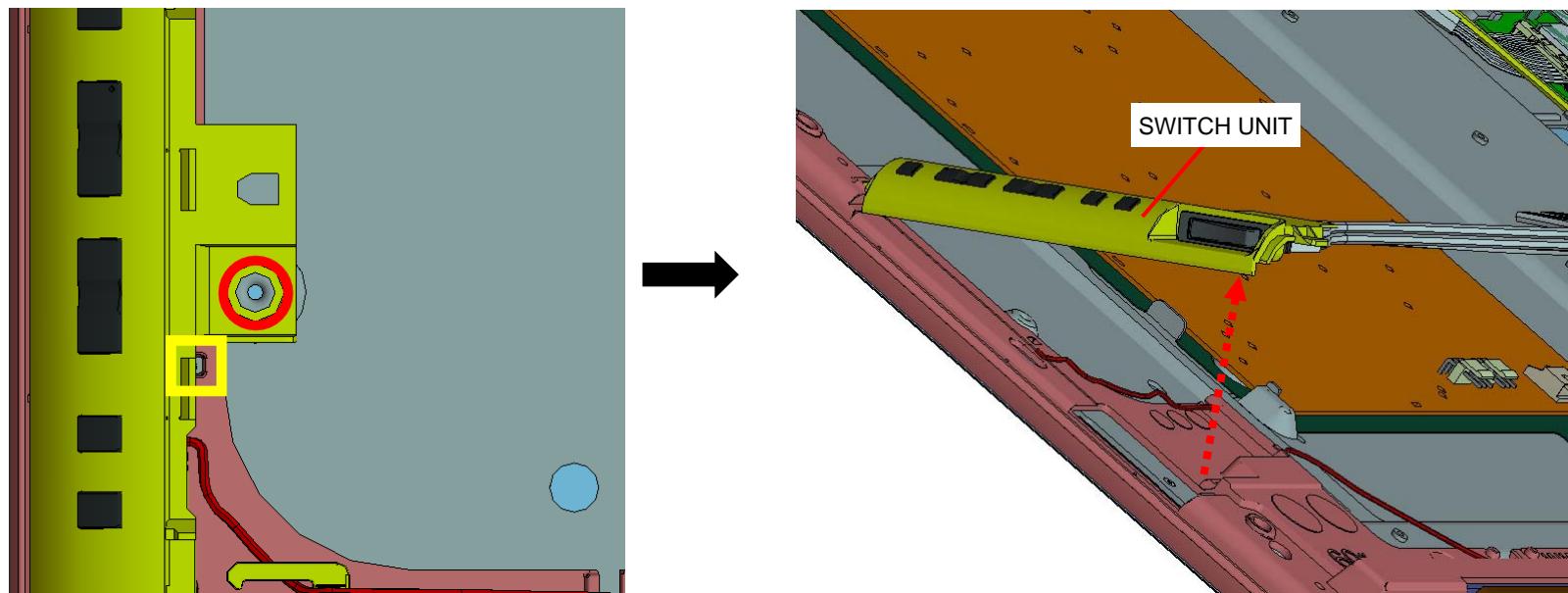
1-4. KDL-60NX720/723/725

1-4-2. REAR COVER, AC COVER, ANT COVER AND ANT SHEET

REAR COVER

AC COVER

ANT COVER

ANT COVER

ANT SHEET
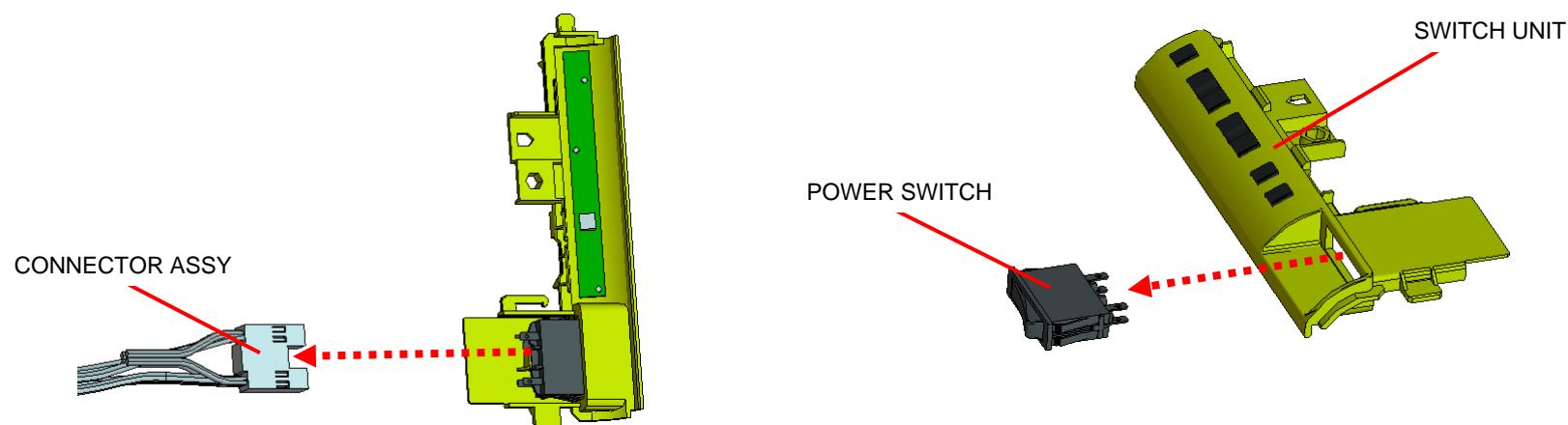
○ 12 Screws (SCREW, +PWH M3X8) P/N: FX0020801

○ 5 Screws (SCREW, +BVTP 4X12 TYPE2 IT-3) P/N: FX0005801

○ 6 Screws (SCREW, ORNAMENTAL M6X12) P/N: FX0006302

○ 3 Screws (SCREW +BVTP 3X8 TYPE2 IT-3) P/N: FX0012779

○ 2 Screws (JOINT, STAND) P/N: FX0002101

○ 3 Screw (SCREW, +PSW M3X6 W12) P/N: FX0001901
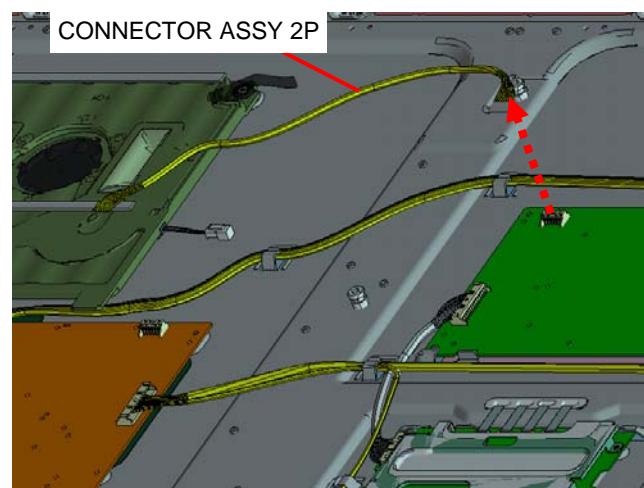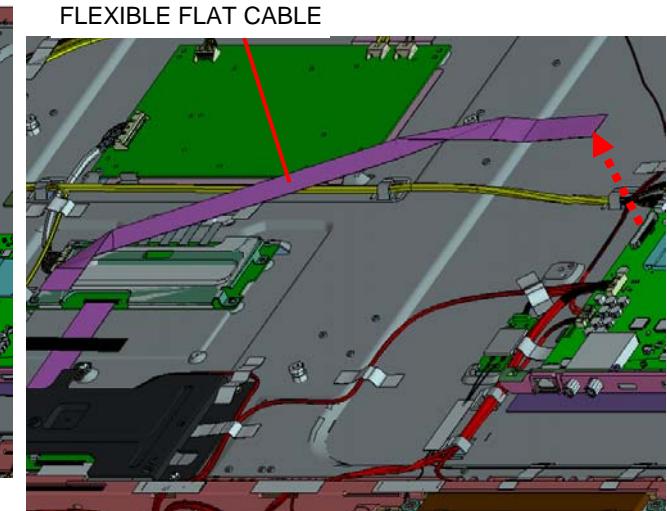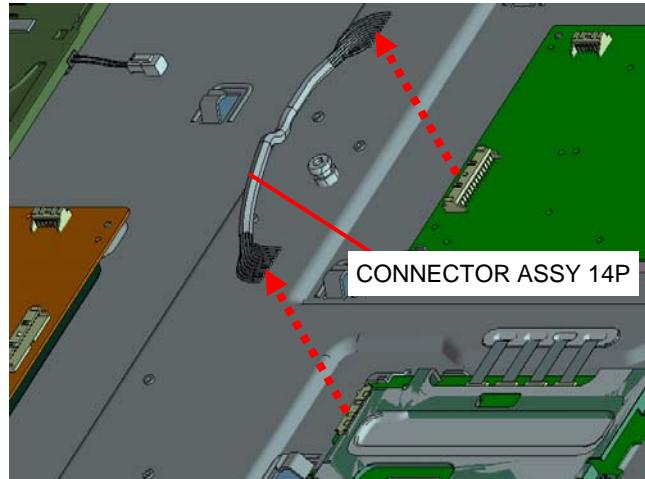
1-4. KDL-60NX720/723/725

1-4-3. SWITCH UNIT AND POWER SWITCH

1 Screw (SCREW, +PWH M3X8) P/N: FX0020801

SWITCH UNIT

SWITCH UNIT

POWER SWITCH

CONNECTOR ASSY
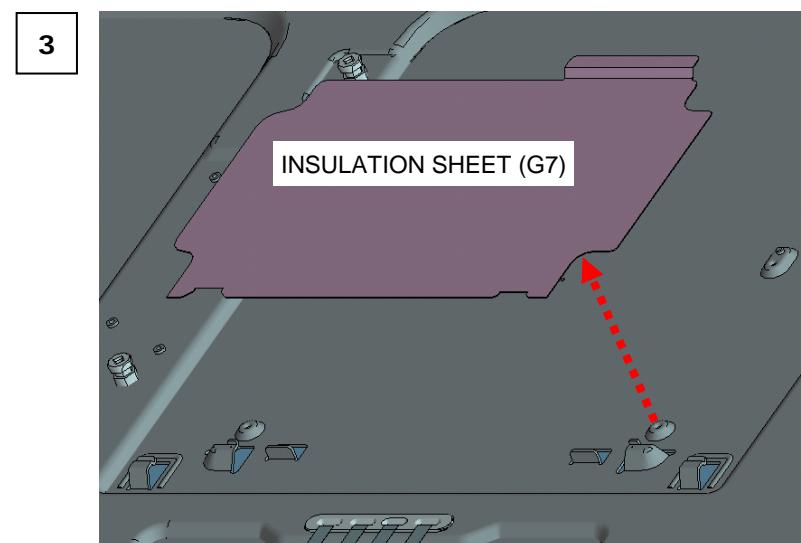
1-4. KDL-60NX720/723/725

1-4-4. HARNESS

CONNECTOR ASSY 28P

FLEXIBLE FLAT CABLE

CONNECTOR ASSY 14P

CONNECTOR ASSY 2P

CONNECTOR ASSY 2P

HARNESS ASSY
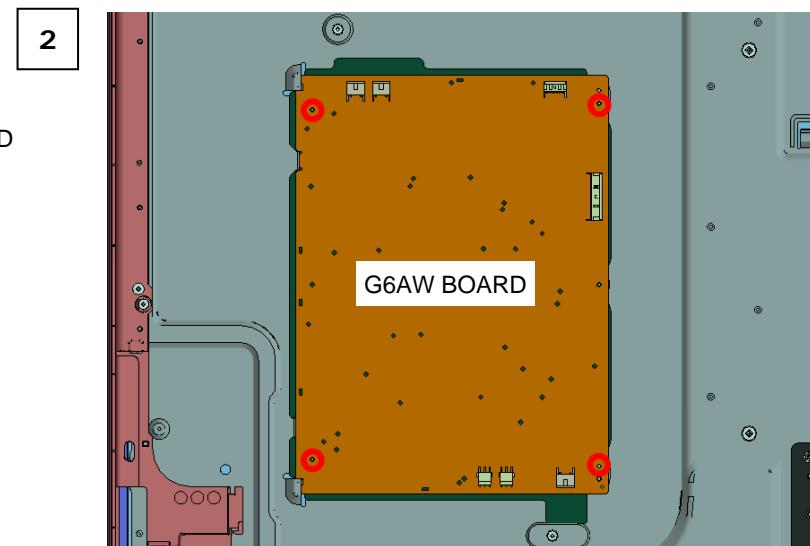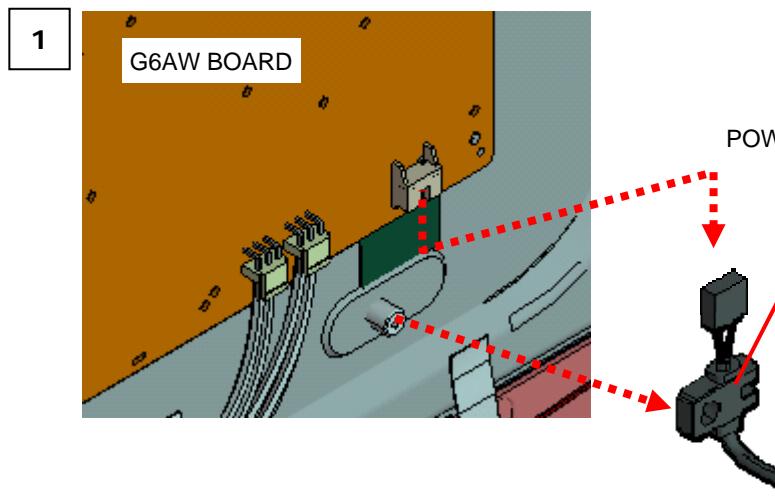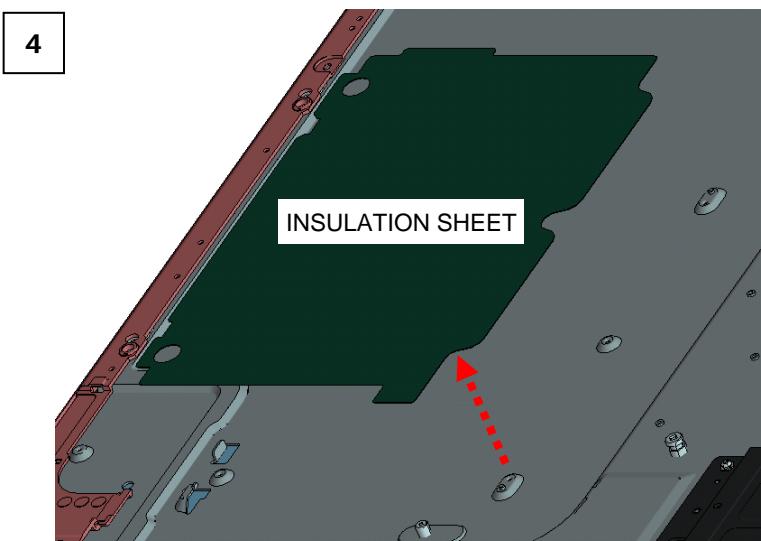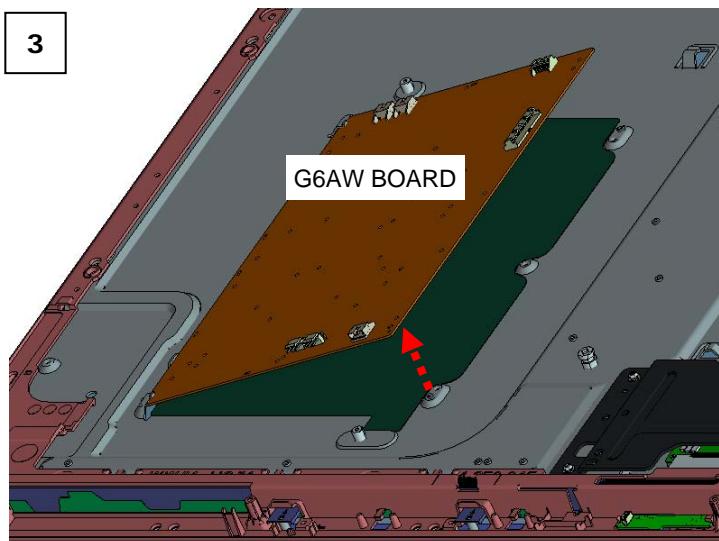
1-4. KDL-60NX720/723/725

1-4-5. G7A BOARD

2 Screws (SCREW (+PSW) (M3X6)) P/N: FX0001341
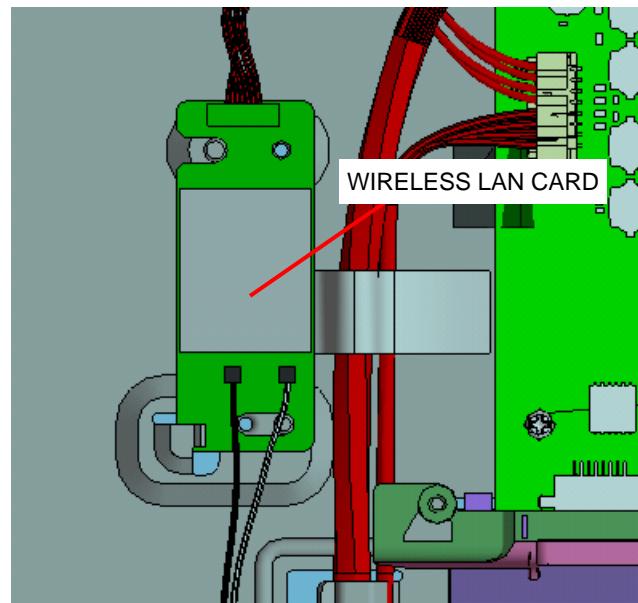
1-4. KDL-60NX720/723/725

1-4-6. POWER SUPPLY CORD AND G6AW BOARD

1

G6AW BOARD

POWER SUPPLY CORD

2

G6AW BOARD

4 Screws (SCREW (+PSW) (M3X6)) P/N: FX0001341

3

G6AW BOARD

4

INSULATION SHEET
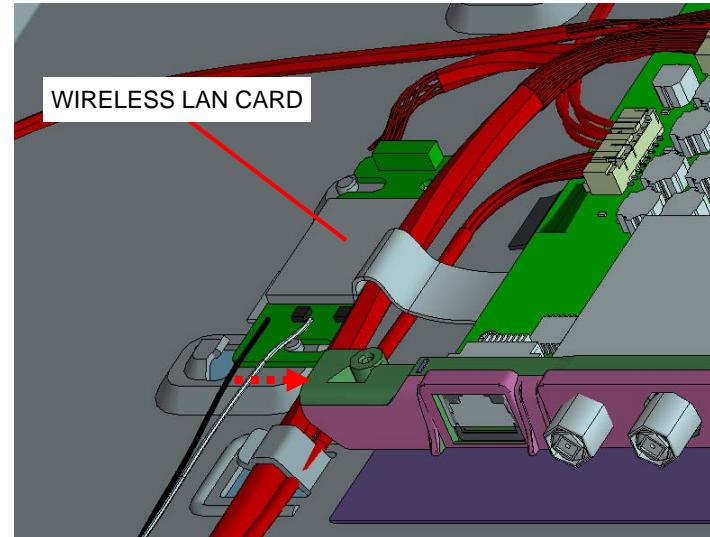
1-4. KDL-60NX720/723/725

1-4-7. WIRELESS LAN CARD

1

WIRELESS LAN CARD

1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341

2

WIRELESS LAN CARD

3

WIRELESS LAN CARD
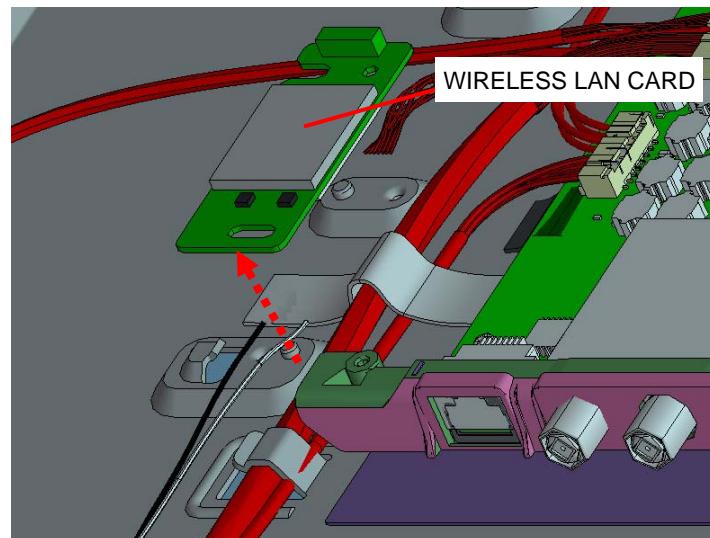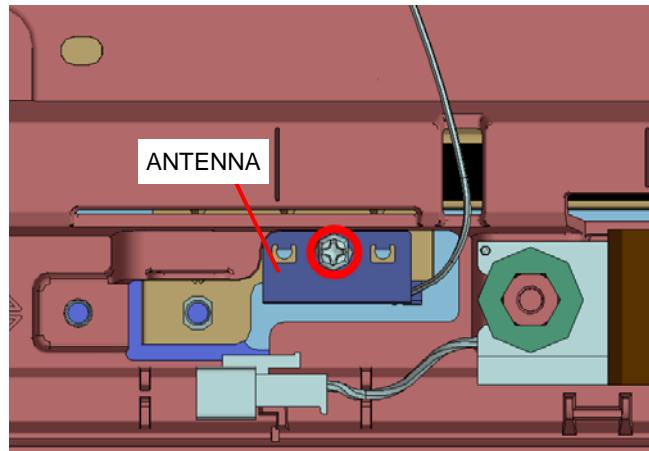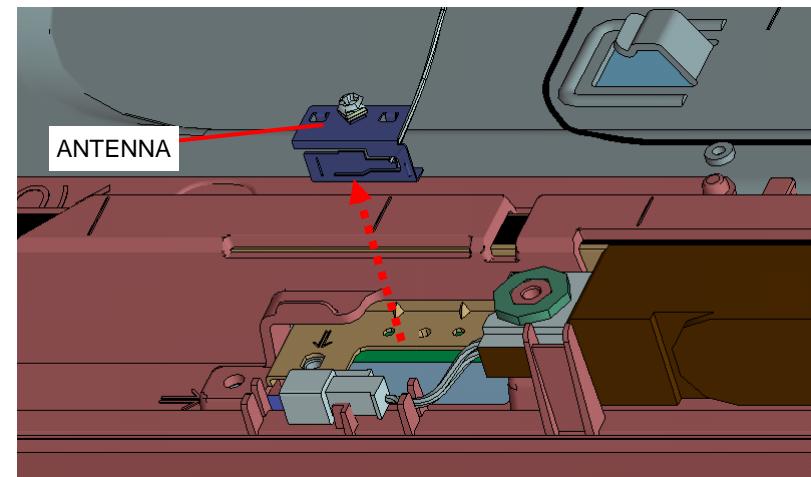
1-4. KDL-60NX720/723/725

1-4-8. ANTENNA

1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341
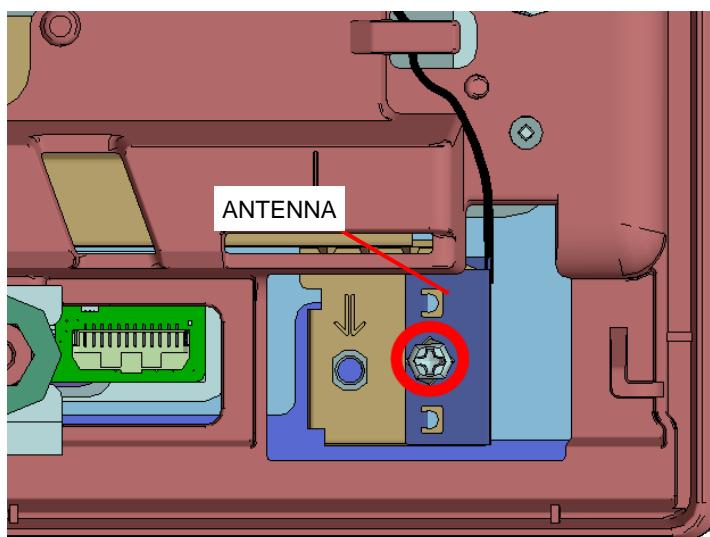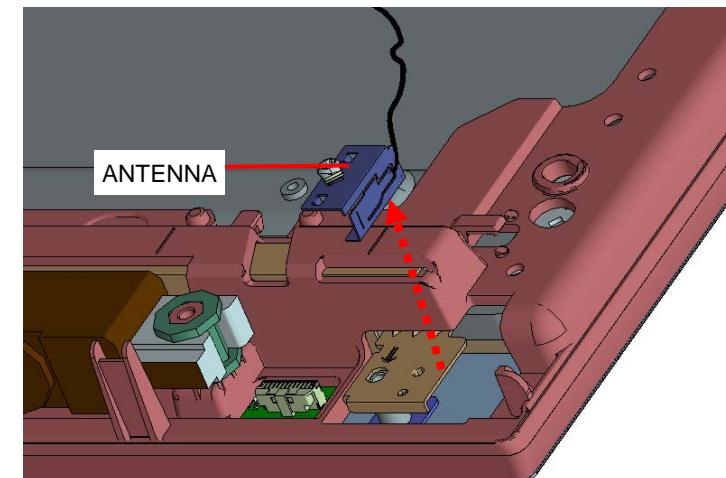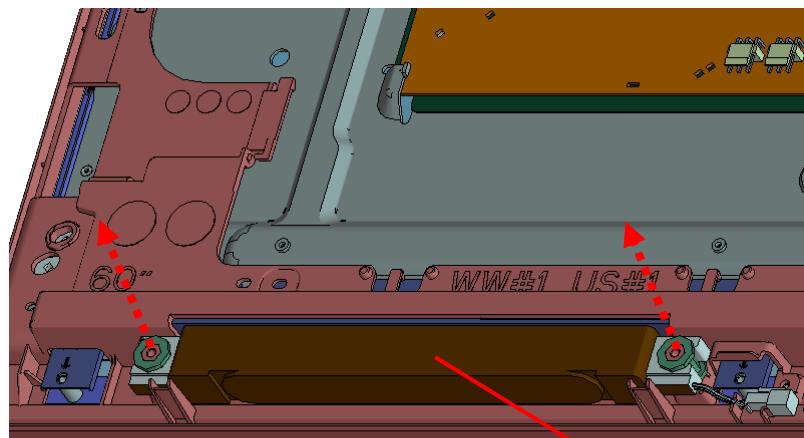
1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341
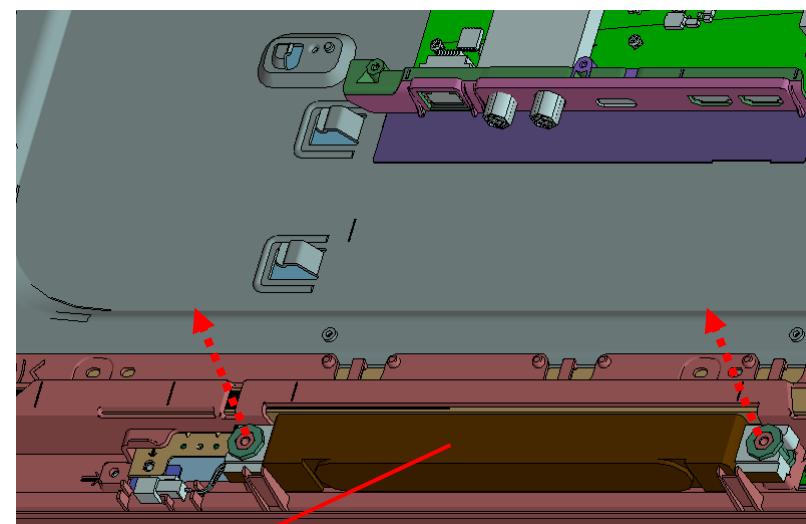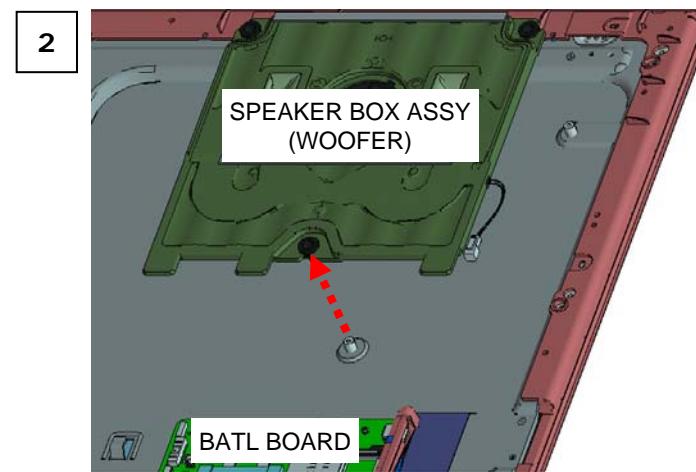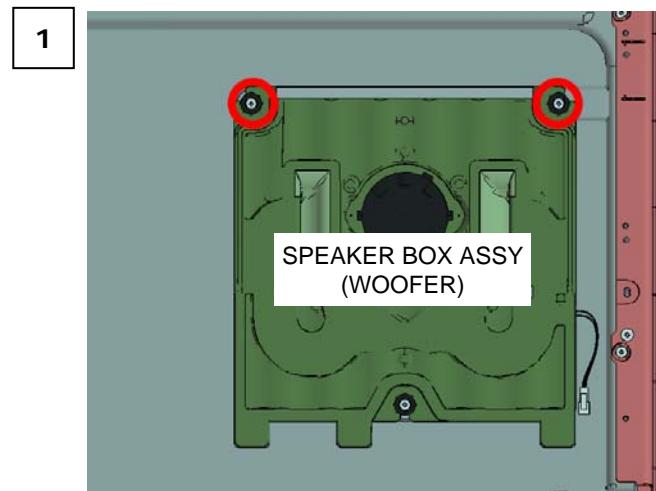
1-4. KDL-60NX720/723/725

1-4-9. SPEAKER BOX ASSY
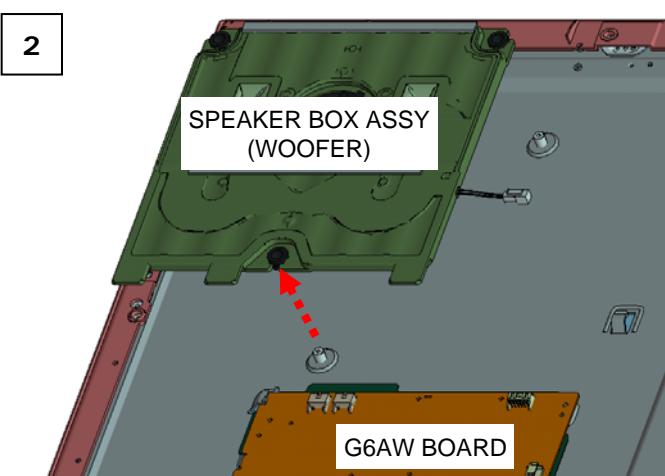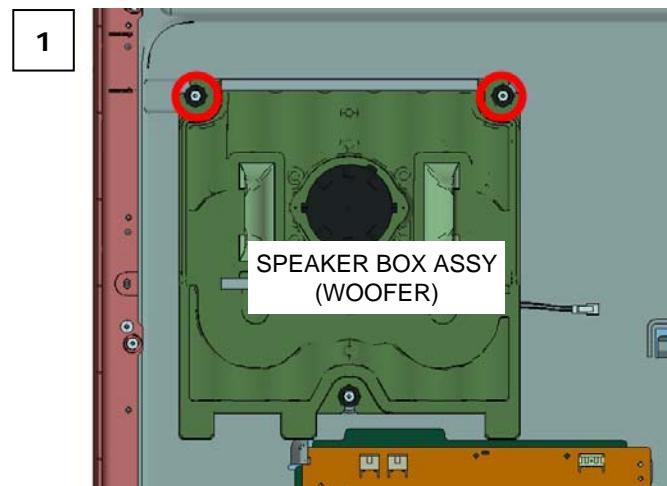
SPEAKER BOX ASSY

1-4. KDL-60NX720/723/725

1-4-10. SPEAKER BOX ASSY (WOOFER)
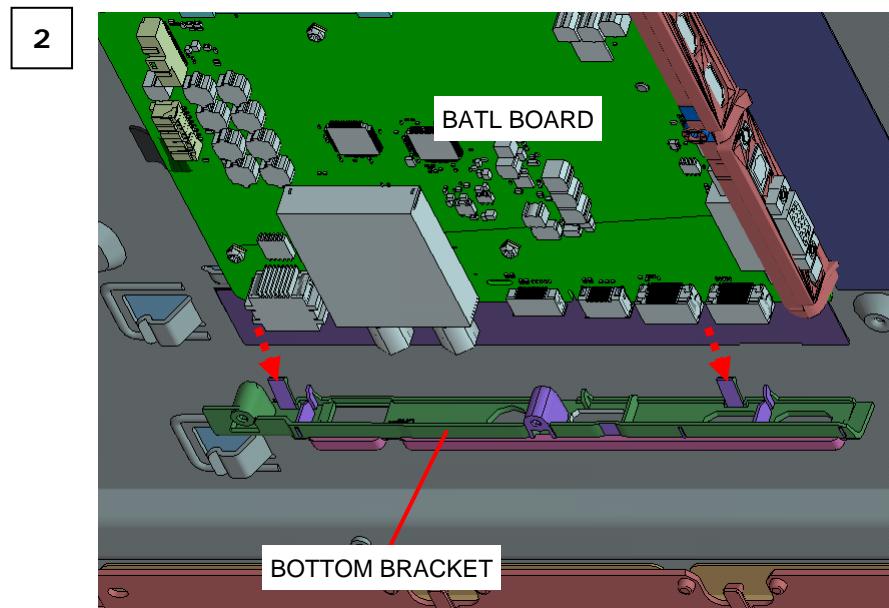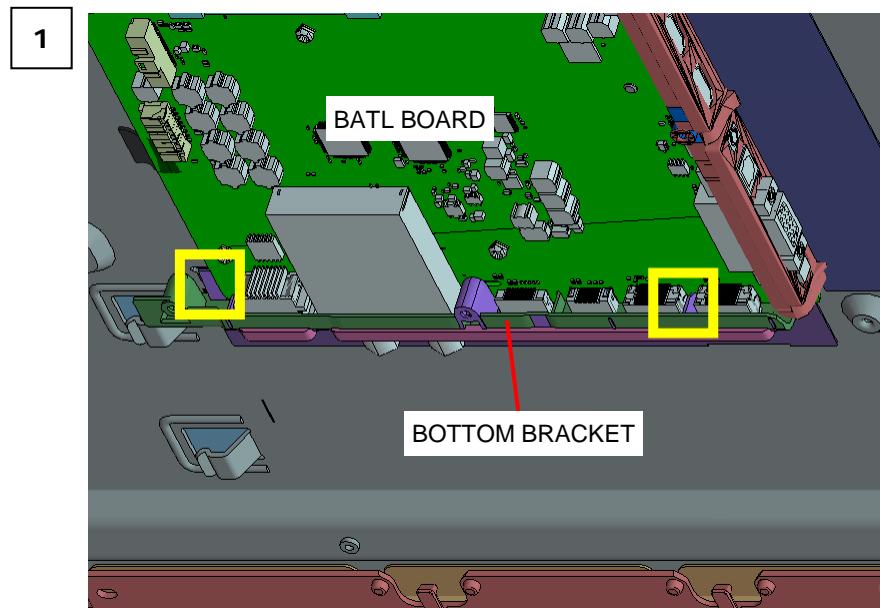
2 Screws (SCREW, +PSW M3X6 W12) P/N: FX0001901
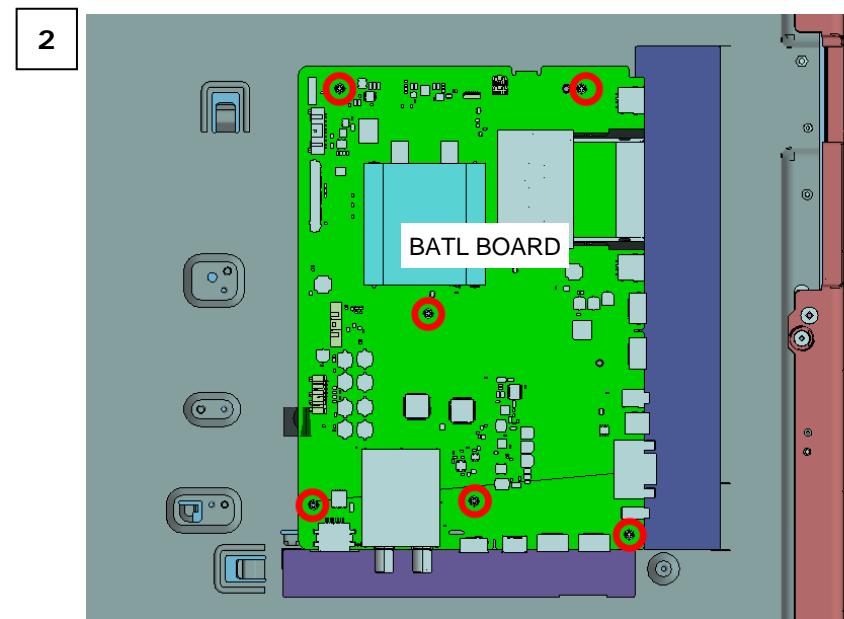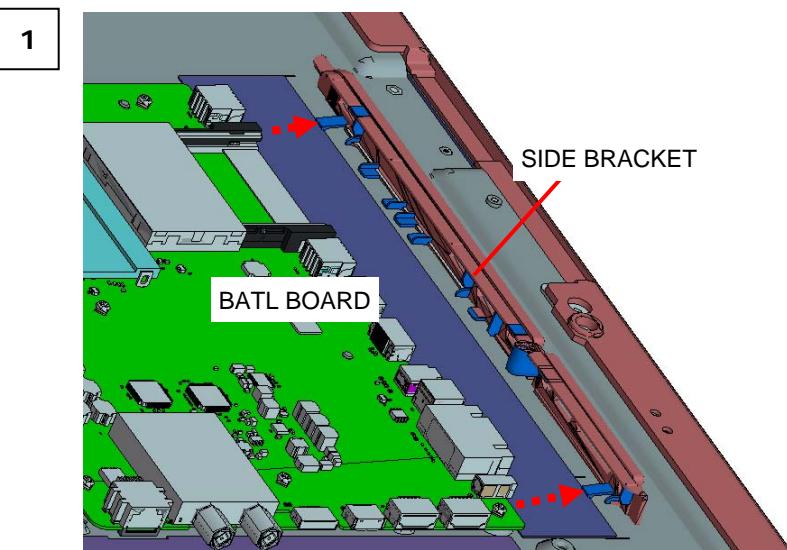
2 Screws (SCREW, +PSW M3X6 W12) P/N: FX0001901
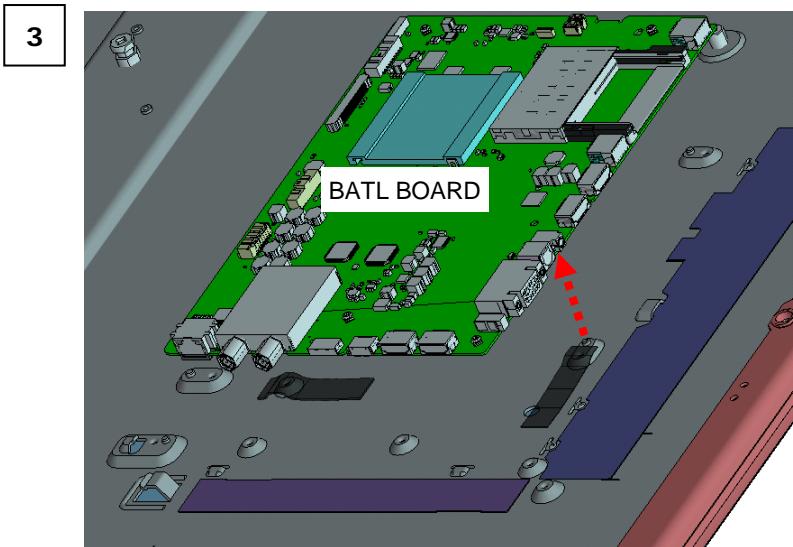
1-4. KDL-60NX720/723/725

1-4-11. BOTTOM BRACKET
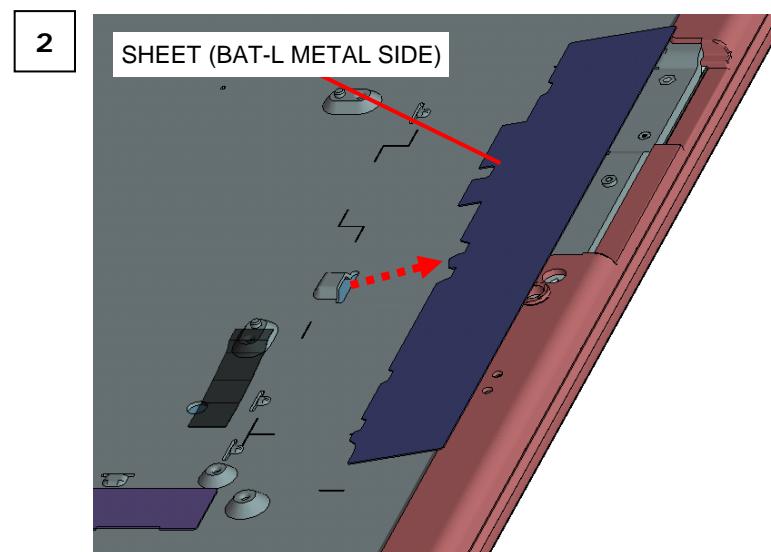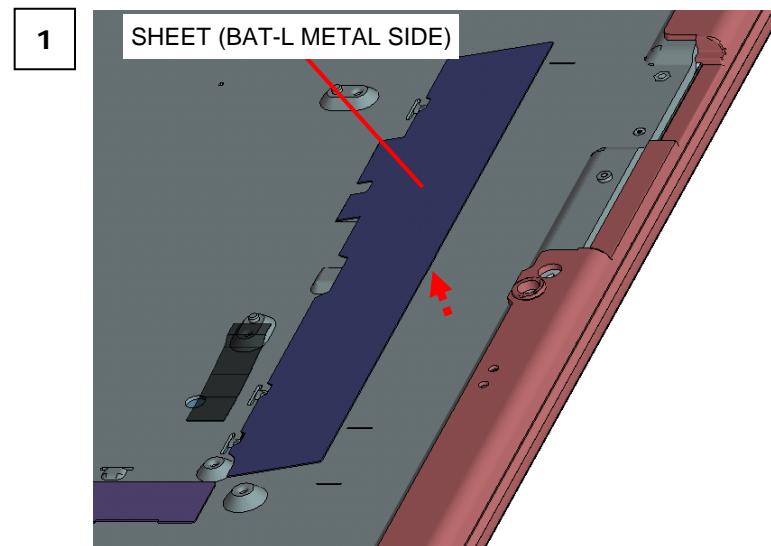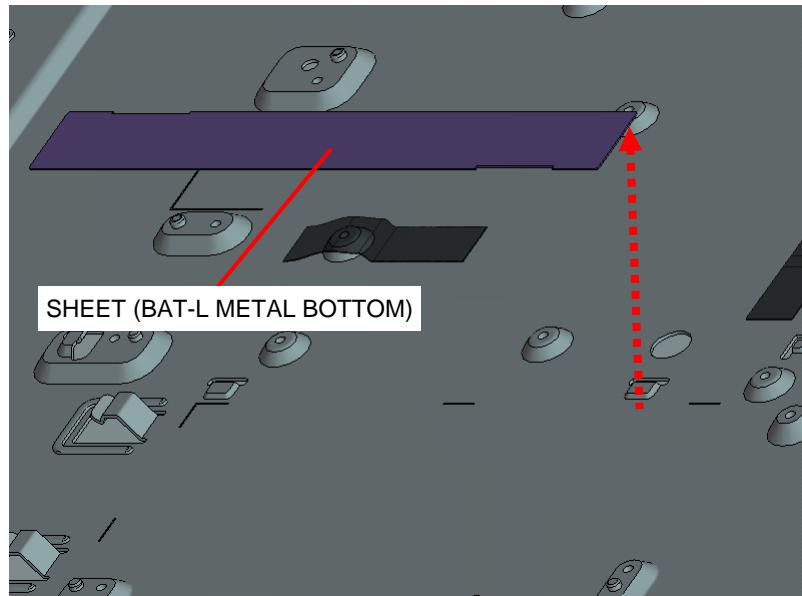
1-4. KDL-60NX720/723/725

1-4-12. SIDE BRACKET AND BATL BOARD

6 Screws (SCREW (+PSW) (M3X6)) P/N: FX0001341
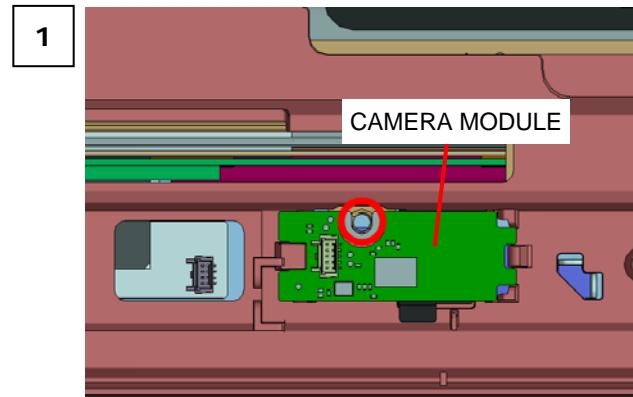
1-4. KDL-60NX720/723/725

1-4-13. SHEET

SHEET (BAT-L METAL BOTTOM)

1

SHEET (BAT-L METAL SIDE)

2

SHEET (BAT-L METAL SIDE)
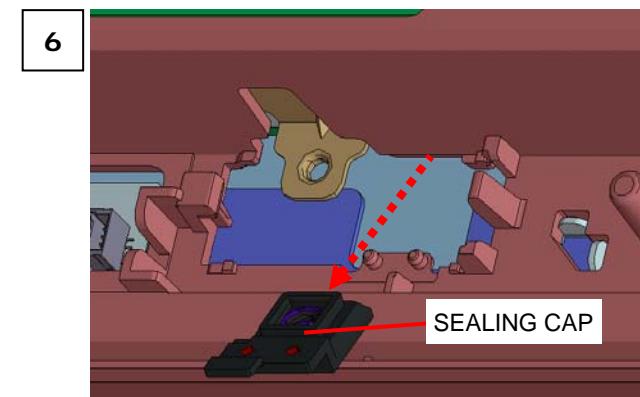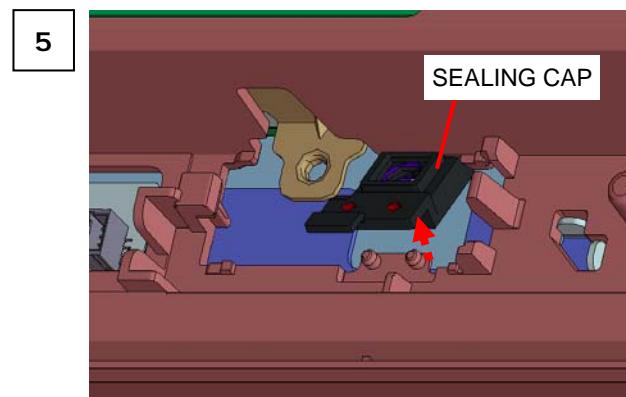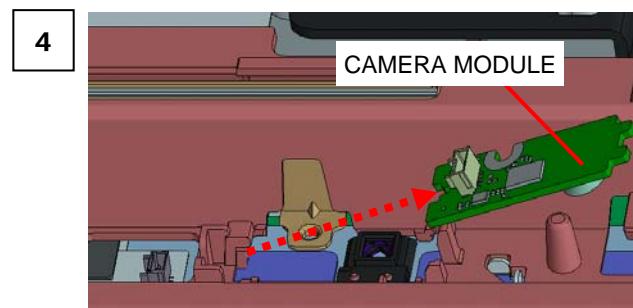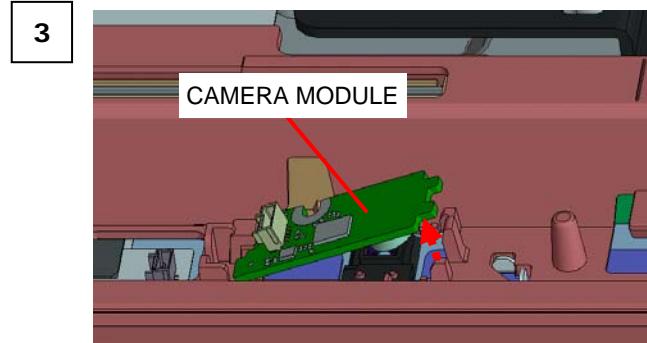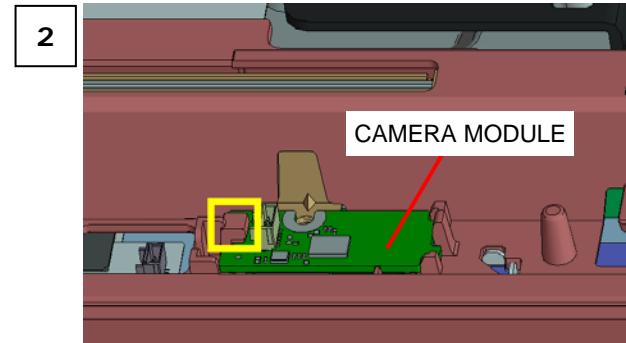
1-4. KDL-60NX720/723/725

1-4-14. CAMERA MODULE AND SEALING CAP(CAMERA)
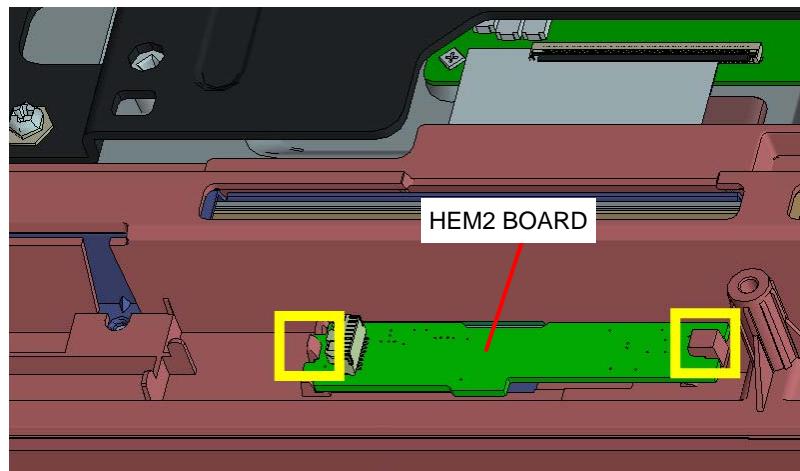

1 Screw (SCREW (+PSW) (M3X6)) P/N: FX0001341
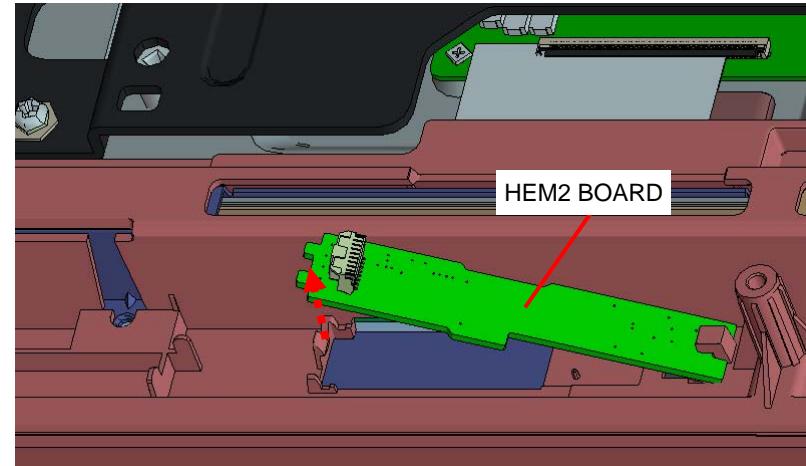
## 1-4. KDL-60NX720/723/725

1-4-15. HEM2 BOARD
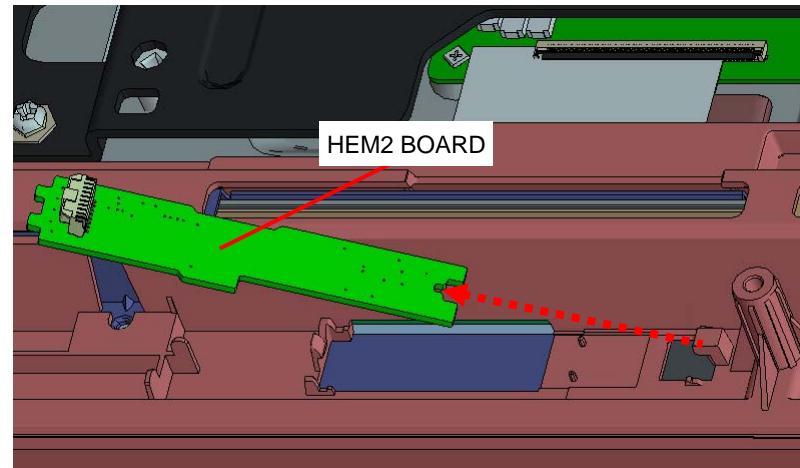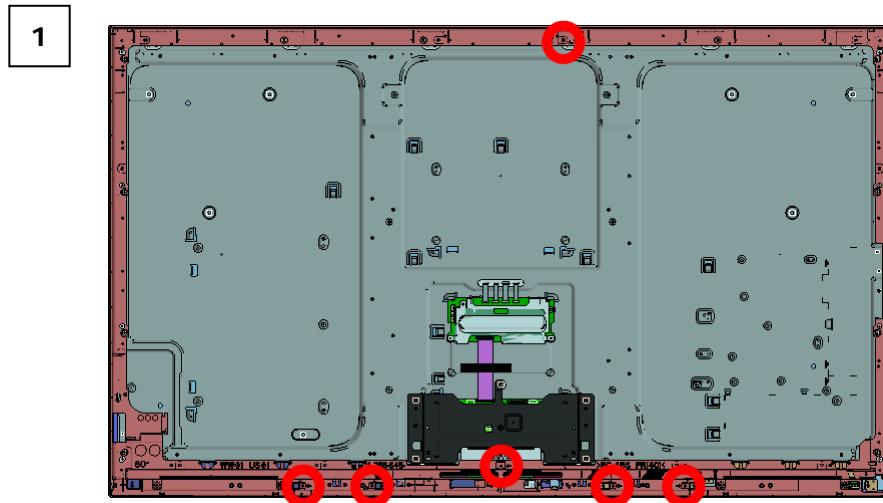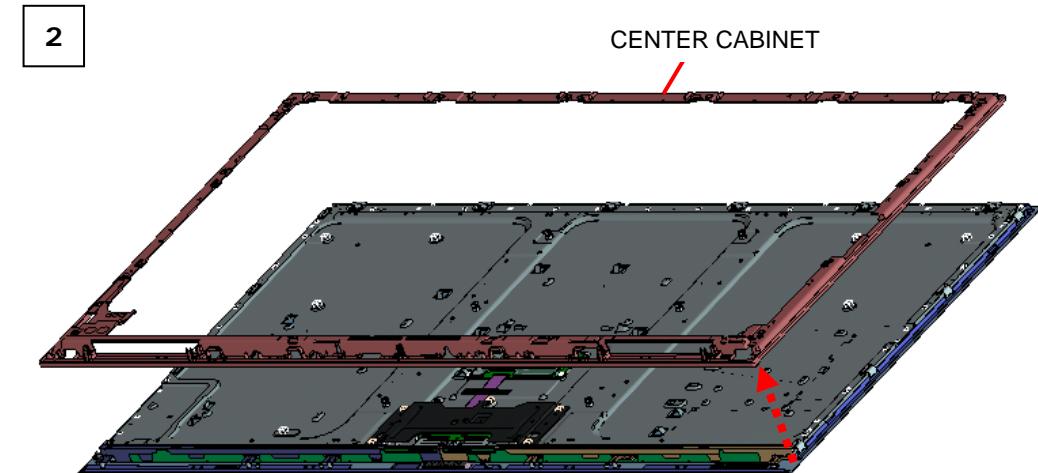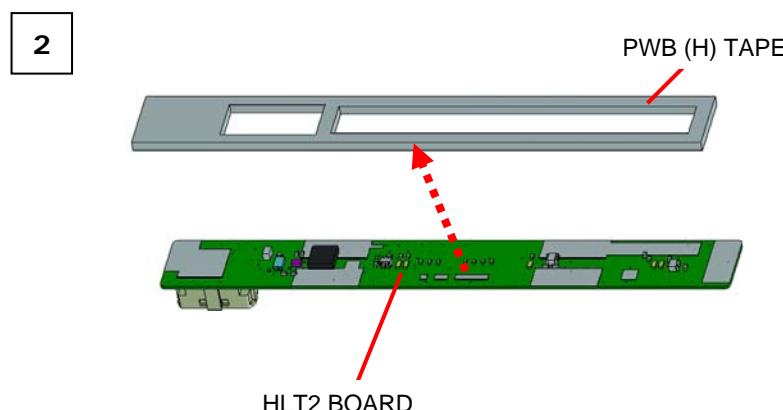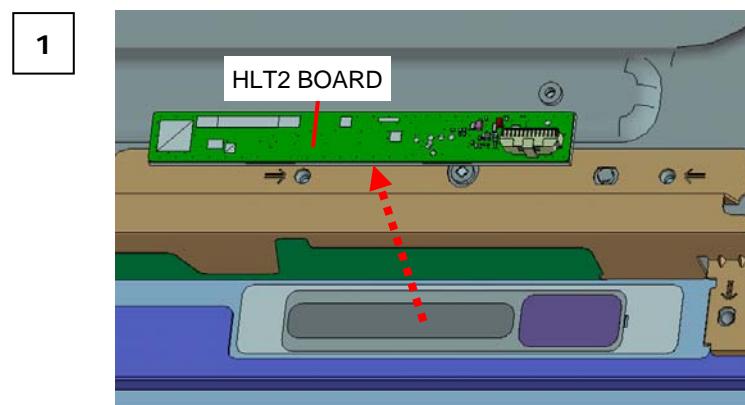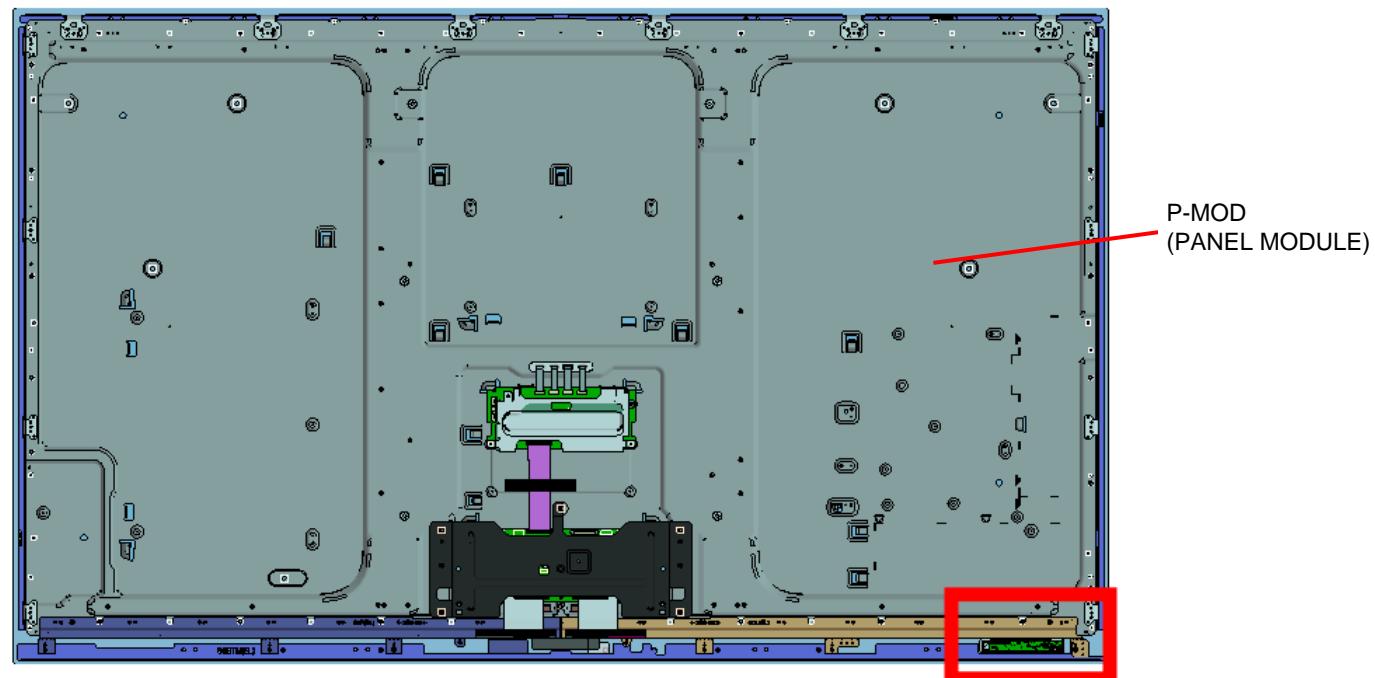
1-4. KDL-60NX720/723/725

### 1-4-16. CENTER CABINET

6 Screws (SCREW, +PSW M3X6 W12) P/N: FX0001901

CENTER CABINET

1-4. KDL-60NX720/723/725

1-4-17. HLT2 BOARD, PWB (H) TAPE AND PANEL MODULE

P-MOD
(PANEL MODULE)

1

HLT2 BOARD

2

PWB (H) TAPE

HLT2 BOARD

SEC 2. ADJUSTMENT

HOW TO ENTERING SERVICE MODE
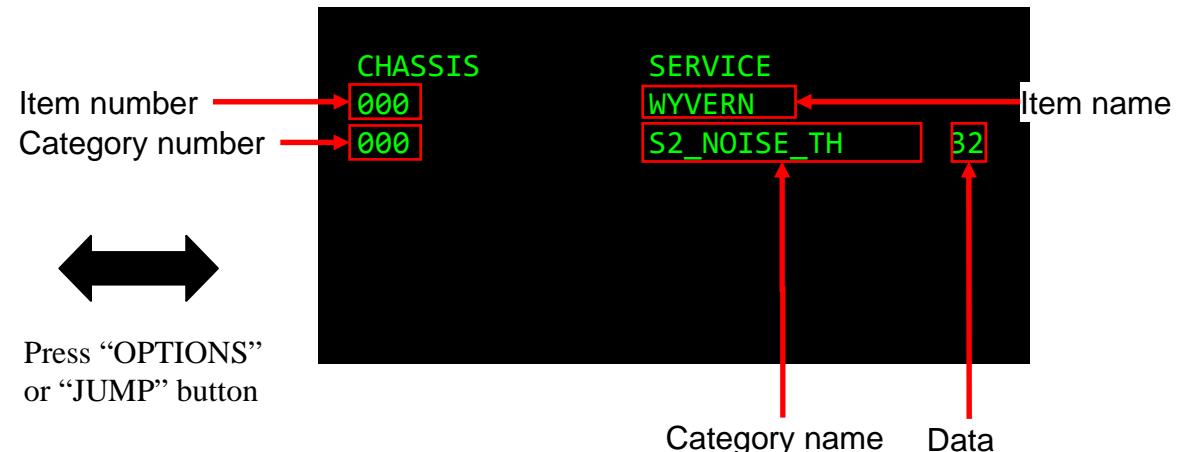
1) Turn on the main power switch to place this set in standby mode.

2) Press the buttons on the remote commander as follows, and entering service mode.

DISPLAY ➡ Channel 5 ➡ Volume + ➡ TV POWER

3) Service mode display.

Note: First of all, when you enter Service Mode, you can see "Digital" service mode.
Whenever you press "OPTIONS" or "JUMP" on remote, each service mode is changed.
"Digital" -> "Chassis" -> "VPC"

```
DIGITAL              SERVICE


001 OP
000 VERS             ---



<MAIN>          <EXT>
DM1.301W00AA    RF:01.05
WF1.003W00AA    WF:2.0.0.99
DF1.001W00AA    WF:0B
YM1.010W00AA    CAM:X.XXX
DB2.105W00AA    FD:XXXX
(DM1.301W00AA)
DD1.016W00AA
WP0.521W00AA    <PEM>
MID:1C117081    PM1.012W00LU
PID:04020000    PB1.000W00LU
PNL:LTY320AB01  PL1.011J46LUX
POP:X.XXX       PD1.011J46LUX
```

Press "OPTIONS" or "JUMP" button

```
CHASSIS         SERVICE
000             WYVERN
000             S2_NOISE_TH    32
```

Item number → 000
Category number → 000
Item name ← WYVERN
Category name ↑ S2_NOISE_TH
Data ↑ 32

4) How to use the remote commander.

Function	The flow of control
Service mode on	<Test>+<TV>/<Display><5><Vol Up><Power>
Service mode off	<Other> / <Power off + on>
Item up / down	<1>/<4>
Category up / down	<2>/<5>
Data up / down	<3>/<6>
Test reset	<8> + <Mute> + <0>
Read data	<9> + <0>
Execute	<10 or 0>
Write data	<Mute> + <0>
Change module	<Jump> / <Option>

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

WHITE BALANCE ADJUSTMENT

Note: Please execute this adjustment if necessary.

Change Data of **"VPC"** service mode. ("006 WB" category)

        a. Press "1" or "4" on remote to select WB adjustment menu.

        b. Change data by pressing "3" or "6". Each range of these items is 0~255.

        c. Press "mute" ＋"0" on remote to save the data.

          "SERVICE" comment is changed to "WRITE", indicating writing process.

        d. After a while, "WRITE" comment returns to "SERVICE", which means writing process is done.

```
VPC        SERVICE
006        WB
000        R_DRV     128
```

```
VPC        SERVICE
006        WB
003        R_BKG     128
```

```
VPC        SERVICE
006        WB
001        G_DRV     128
```

```
VPC        SERVICE
006        WB
004        G_BKG     128
```

```
VPC        SERVICE
006        WB
002        B_DRV     128
```
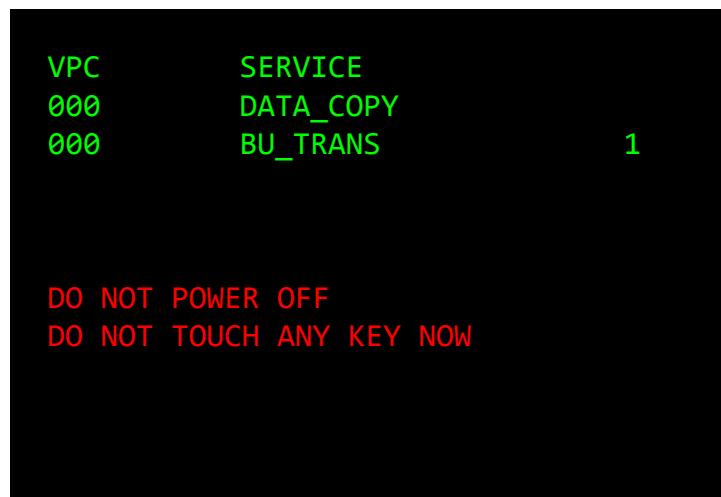
```
VPC        SERVICE
006        WB
005        B_BKG     128
```

RESTORE WHITE BALANCE / GAMMA ADJ-DATA TO B BOARD
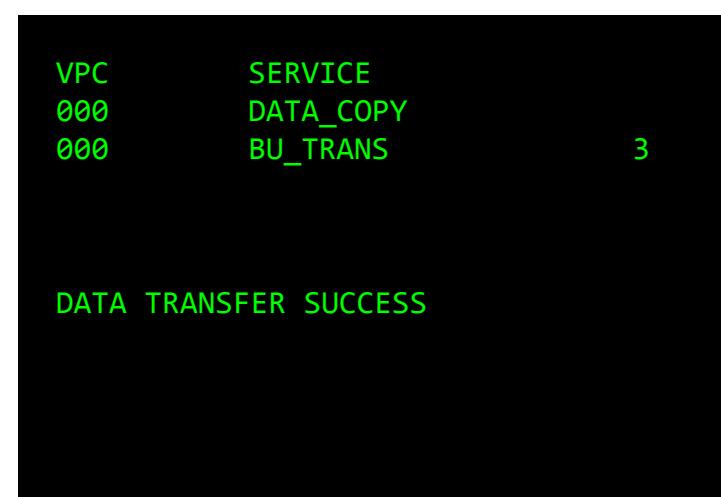
Note: Please apply after USB-DL when B board is replaced.

Change Data of **"VPC"** service mode.

        a. Select "010 DATA_COPY" category by pressing "2 / 5" on remote.

        b. Change data from "0" to "1" by pressing "1 / 4" on remote.

        c. Wait until data is changed from 1 to 3.

        d. When data is changed from 1 to 3, restoring process is finished.

        e. In case data is changed from 1 to 2, keep default setting. (No more process is needed)

```
VPC        SERVICE
000        DATA_COPY
000        BU_TRANS              1



DO NOT POWER OFF
DO NOT TOUCH ANY KEY NOW
```

```
VPC        SERVICE
000        DATA_COPY
000        BU_TRANS              3



DATA TRANSFER SUCCESS
```

<Restore process>   <End restore process>
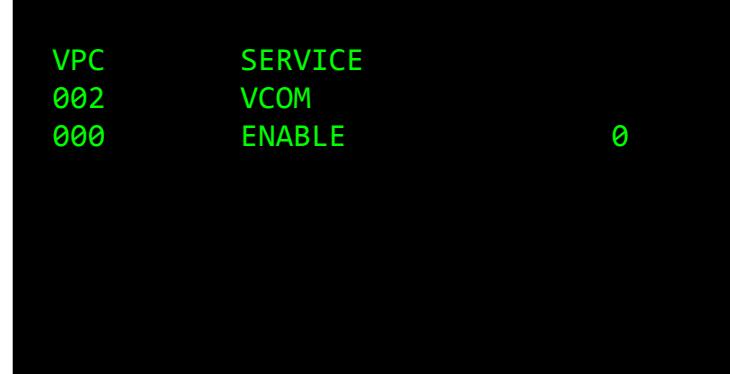
VCOM ADJUSTMENT (IMPORTANT – Only for S-LCD 60Hz Panels)
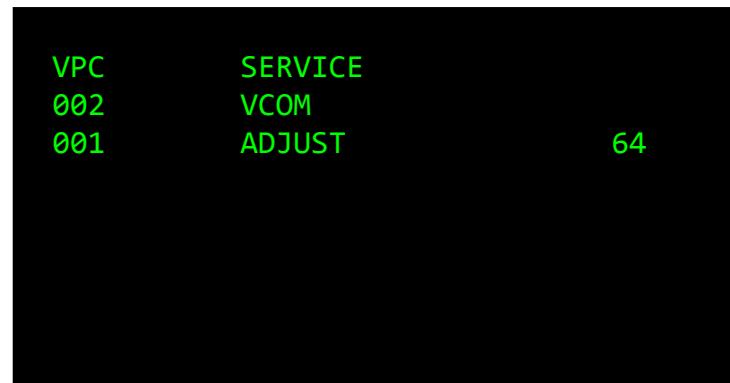
Note: Please execute this adjustment if necessary.

1) Change Data of **"VPC"** service mode.

        a. Select "002 VCOM" category by pressing "2 / 5" on remote.

        b. Select "000 ENABLE" item by pressing "1 / 4" on remote.

        c. Change ENABLE from "0" to "1" to enable VCOM adjustment.

```
VPC        SERVICE
002        VCOM
000        ENABLE              0
```

        d. Select "002 VCOM" category by pressing "2 / 5" on remote.

        e. Select "001 ADJUST" item by pressing "1 / 4" on remote.

        f. Change data by pressing "3 / 6" on remote controller.

        g. Finish the adjustment when the picture seems OK.

```
VPC        SERVICE
002        VCOM
001        ADJUST             64
```
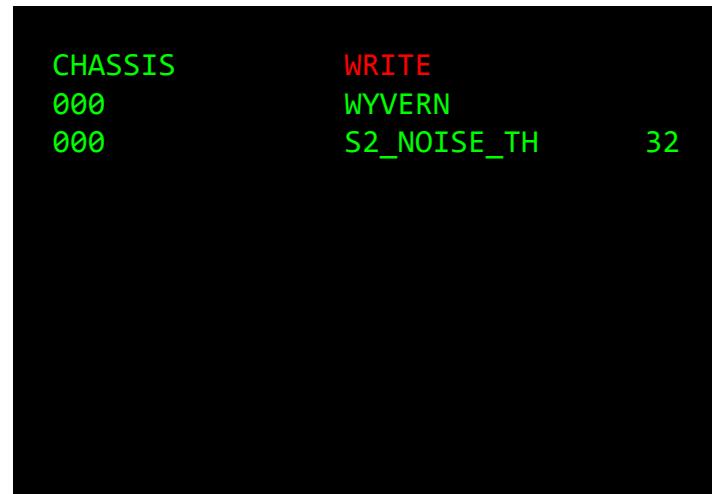
Attention:
-Every time the data changed by pressing "3 / 6" Key, the VCOM pattern will display for 5s and in the mean time OSD will disappear,   After the 5s period, VCOM pattern
  will disappear and OSD will display again.
  The 5s time can be adjust by data change.
-If pressing the "3/6" key again during the 5s period, the VCOM pattern display time will be extended to another 5s.

SAVE CHANGING DATA

1) Change Data of **"Chassis"** or **"VPC"** service mode

2) Write data for **"Chassis"** or **"VPC"** service mode

    a. Press "Mute" on remote.

     It shows green "SERVICE" changes to green "WRITE".

    b. Press "0" or "enter" on remote. Green "WRITE" changes to red "WRITE". It indicate writing is processing.

    c. After a while, red "WRITE" changes to green "SERVICE". Writing process is done at this point.

3) TV reboot is necessary for applying data change.

```
CHASSIS          WRITE
000              WYVERN
000              S2_NOISE_TH      32
```
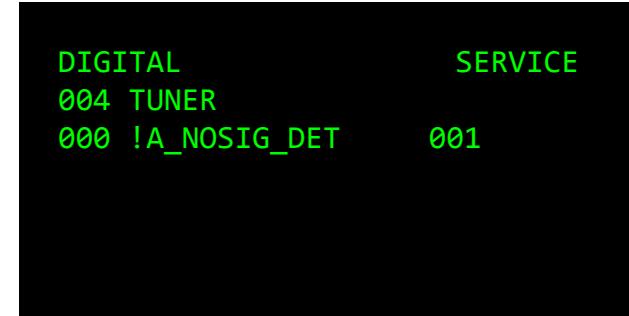
CHANGE DATA

Note: "Digital" service mode don't have to Save. (except "002 MODEL" and "005 CHAPRESET" category)

  1) Change Data of **"Digital"** service mode. (except "003 DIG_SRV_MODE" category)

    a. Press "2 / 5" on remote to select (up / down) category.

    b. Press "1 / 4" on remote to select (up / down) Item.

    c. Press "0 / 10" on remote to select item.

```
DIGITAL              SERVICE
004 TUNER
000 !A_NOSIG_DET     001
```
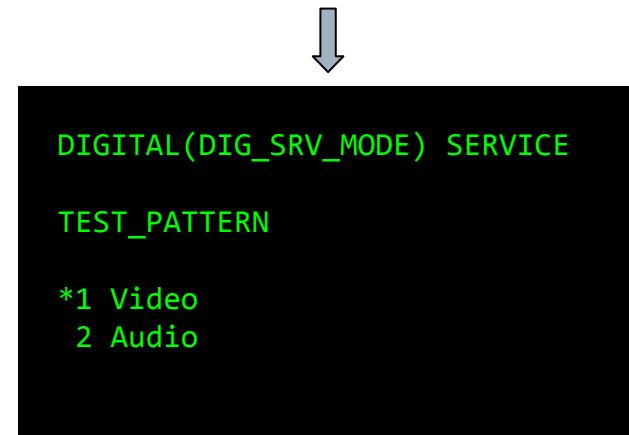
  2) Change Data of **"Digital"** service mode. ("003 DIG_SRV_MODE" category)

  "003 DIG_SRV_MODE" is one category of "Digital" service mode.

  Please note because this operation is special.

    a. Press "2 / 5" on remote to select "003 DIG_SRV_MODE".

    b. Press "1 / 4" on remote to select (up / down) Item.

    c. Press "0 / 10" on remote to select item.

    d. Press number key "1"~"9" directly. "*" stamp move.

    e. Press "12 / enter / select" to decide and advance next step. Press "return", when returning on the

      previous page.

```
DIGITAL              SERVICE
003 DIG_SRV_MODE
000 TEST_PATTERN     ---
```

⇩

```
DIGITAL(DIG_SRV_MODE) SERVICE

TEST_PATTERN

*1 Video
 2 Audio
```

3) Write data for **"Digital"** service mode. ("002 MODEL" category)

Note: This procedure operation, when replaced the B board.

Note: Do not write a wrong segment or destination information in Product ID.

     When the wrong setting is written, TV may not operate.

  000 SEG -----------------Select JDM code information

  001 DEST ---------------Select destination information

  002 MODELNAME ---Select model name
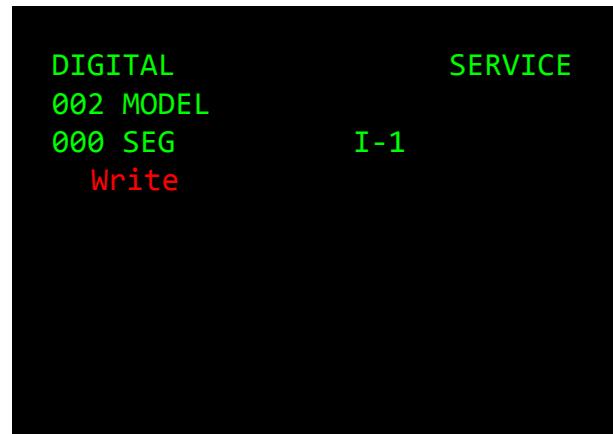
  004 SERIAL ------------ Can be set only once for the new board

    a. Change data for each model.

    b. Press "Mute", "0" on remote sequentially.

      It shows red "WRITE". It indicate writing is processing.

    c. After a while. Red "WRITE" disappears. Writing process is done after a while.

```
DIGITAL                SERVICE
002 MODEL
000 SEG          I-1
   Write
```

SET TO SHIPPING CONDITION

How to do shipping condition.

a. Move to **"Digital"** service mode.

Press "8" on remote.

It shows green "SERVICE" changes to green "RST-".

Press "mute" on remote.
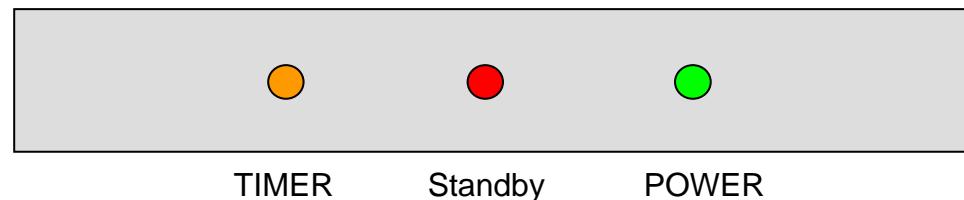
Added green "EXE" after green "RST-" .

d. Press "0" on remote. Green "EXE-RST" changes to red "EXE-RST". It indicate writing is processing.

After a while, red "EXE-RST" changes to green "SERVICE".

And all LED lights.

Writing process is done at this point.

TIMER   Standby   POWER

<Another way>

You can set to shipping condition w/o entering Service Mode.
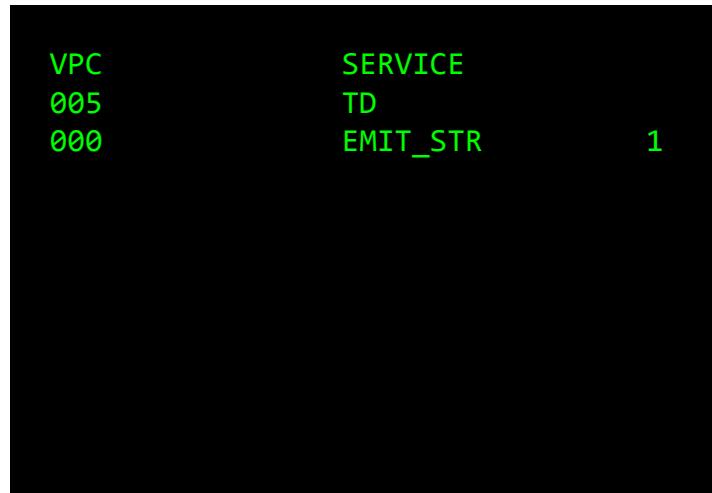
-> "Cursor Up" on remote + "Power Key" on Front panel.

CHANGE THE EMITTER OUTPUT LEVEL

Note: To reduce the emitter LED output power strength.

Change Data of **"VPC"** service mode

      a. Select "005 TD" category by pressing "2 / 5" on remote.

      b. Select "000 EMIT_STR" item by pressing "1 / 4" on remote.

      c. Change data from "0" to "1" by pressing "3 / 6" on remote.

        0: Strong (Default)

        1: Weak

      d. Save by pressing "Mute" + "0" or "10" & Reboot.

```
VPC             SERVICE
005             TD
000             EMIT_STR        1
```

HDD REC SETTING
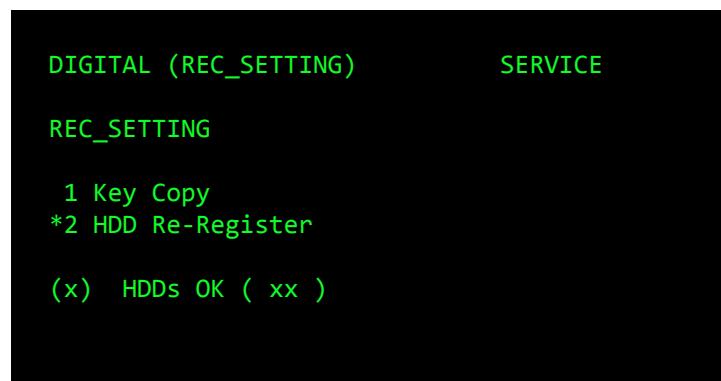
1) Key Copy

Change Data of **"Digital"** service mode

      a. Select "003 DIG_SRV_MODE" category by pressing "2 / 5" on remote.

      b. Select "006 REC SETTING" item by pressing "1 / 4" on remote.

      c. Press "0" or "10" to go to detailed REC Setting screen.

      d. Press "1" to select "Key Copy" item.

      e. Press "Enter" or "12" twice to execute the command.

      f. If OK, show the message "Key Copy OK"
        If NG,   show the message "Key Copy NG (= xx)"

```
DIGITAL (REC_SETTING)          SERVICE

REC_SETTING

*1 Key Copy
  2 HDD Re-Register

Key Copy OK
```

```
DIGITAL (REC_SETTING)          SERVICE

REC_SETTING

*1 Key Copy
  2 HDD Re-Register

Key Copy NG (= xx )
```

2) HDD Re-Register

      a. Press "2" to select "HDD Re-Register" Item.

      b. Press "Enter" or "12" twice to execute the command.

      c. If OK, xx= x+1
        If NG, xx=x

```
DIGITAL (REC_SETTING)          SERVICE

REC_SETTING

 1 Key Copy
*2 HDD Re-Register

(x)  HDDs OK ( xx )
```

SEC 3. TROUBLE SHOOTING

3-1. TRIAGE CHART
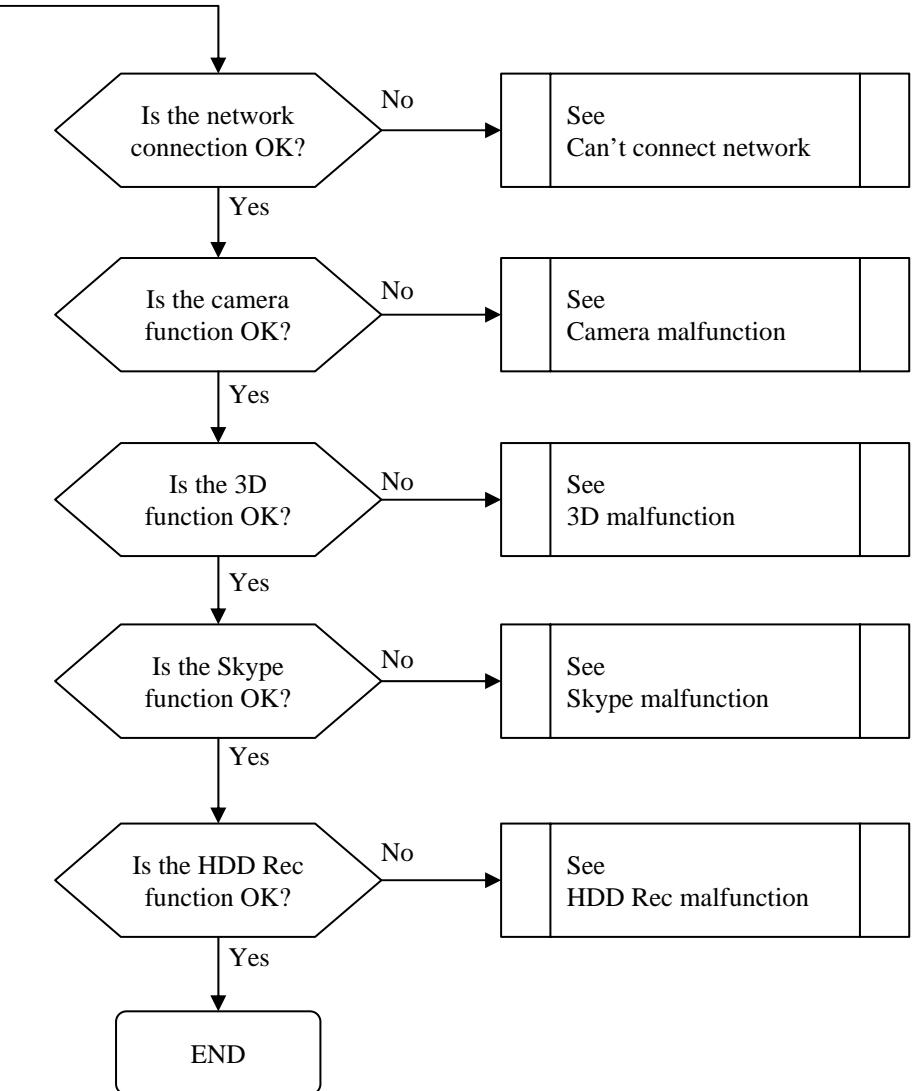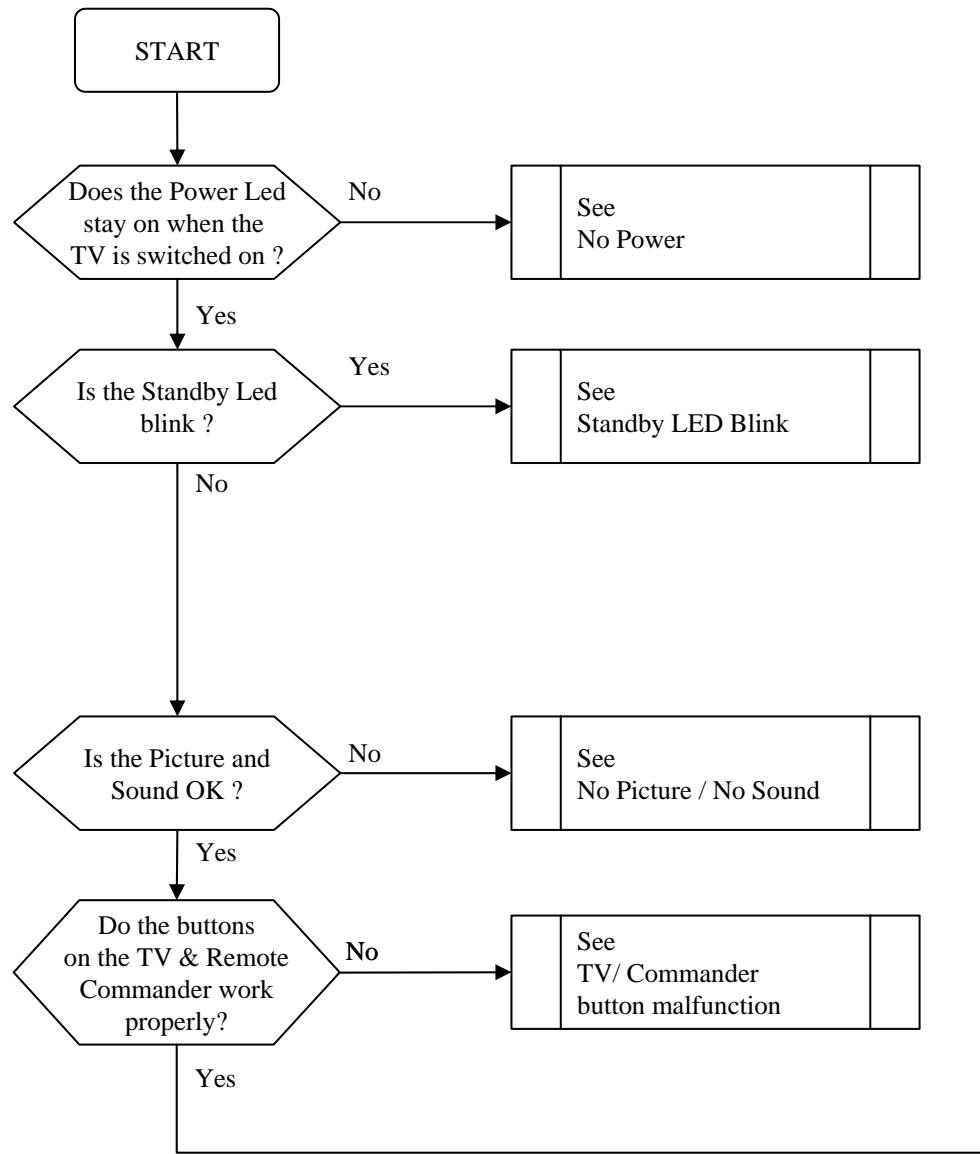
Note: Power board is different in name every inch. Therefore this section displays difference point in "*".

Reference	Symptoms - Shutdown. Power LED blinking red diagnostics sequences								No Power	Video - missing or distorted				Remote	Network	Audio	Skype
	2	3	4	5	6	7	8	10	No Green Power LED (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
BATL BOARD	▲	●	▲	▲	▲	●	●		▲	▲	●	●	▲	▲	●	▲
G* BOARD	●	▲	▲	▲	●				●						▲	
HLT2 BOARD				▲			●							●		
SPEAKER		▲													●	
Skype MODULE																●
WIFI MODULE							●							●		▲
LD BOARD			●		▲											
LVDS CABLE			▲	▲						▲		▲				
T-CON				●				▲								
LCD PANEL			●		●	▲				●						
Problem	POWER	POWER AUDIO	POWER	PANEL (TCON)	PANEL (INVERTER)	TEMP	Software	EMITTER								

● : doubtful part

▲ : Few possibility

3-2. FLOW CHART

```
                    ┌──────────┐
                    │  START   │
                    └──────────┘
                         │
              ┌──────────────────┐   No    ┌──────────────────────┐
              │ Does the Power Led│─────────▶│ See                  │
              │ stay on when the  │         │ No Power             │
              │ TV is switched on?│         └──────────────────────┘
              └──────────────────┘
                     │ Yes
              ┌──────────────────┐   Yes   ┌──────────────────────┐
              │ Is the Standby Led│─────────▶│ See                  │
              │ blink ?          │         │ Standby LED Blink    │
              └──────────────────┘         └──────────────────────┘
                     │ No
              ┌──────────────────┐   No    ┌──────────────────────┐
              │ Is the Picture and│─────────▶│ See                  │
              │ Sound OK ?       │         │ No Picture / No Sound │
              └──────────────────┘         └──────────────────────┘
                     │ Yes
              ┌──────────────────┐   No    ┌──────────────────────┐
              │ Do the buttons   │─────────▶│ See                  │
              │ on the TV & Remote│        │ TV/ Commander        │
              │ Commander work   │         │ button malfunction   │
              │ properly?        │         └──────────────────────┘
              └──────────────────┘
                     │ Yes
```

```
              ┌──────────────────┐   No    ┌──────────────────────┐
              │ Is the network   │─────────▶│ See                  │
              │ connection OK?   │         │ Can't connect network │
              └──────────────────┘         └──────────────────────┘
                     │ Yes
              ┌──────────────────┐   No    ┌──────────────────────┐
              │ Is the camera    │─────────▶│ See                  │
              │ function OK?     │         │ Camera malfunction   │
              └──────────────────┘         └──────────────────────┘
                     │ Yes
              ┌──────────────────┐   No    ┌──────────────────────┐
              │ Is the 3D        │─────────▶│ See                  │
              │ function OK?     │         │ 3D malfunction       │
              └──────────────────┘         └──────────────────────┘
                     │ Yes
              ┌──────────────────┐   No    ┌──────────────────────┐
              │ Is the Skype     │─────────▶│ See                  │
              │ function OK?     │         │ Skype malfunction    │
              └──────────────────┘         └──────────────────────┘
                     │ Yes
              ┌──────────────────┐   No    ┌──────────────────────┐
              │ Is the HDD Rec   │─────────▶│ See                  │
              │ function OK?     │         │ HDD Rec malfunction  │
              └──────────────────┘         └──────────────────────┘
                     │ Yes
                ┌──────────┐
                │   END    │
                └──────────┘
```

3-3. NO POWER

```
                        ┌──────────────────┐
                        │    No Power      │
                        └──────────────────┘
                                 │
                                 ▼
                          ╱─────────────╲         SW OFF     ┌──────────────────────┐
                         ╱     Check      ╲──────────────────▶│  Turn on the Switch  │
                         ╲ Power Saving   ╱                   └──────────────────────┘
                          ╲   Switch    ╱
                                 │
                              SW ON
                                 │
                                 ▼
          ╱────────────────╲       NG        ╱──────────────────╲      NG      ┌──────────────┐
         ╱  Check STBY 3.3V  ╲───────────────╱     Replace        ╲────────────▶│   G* Board   │
         ╲  at pin 10 of     ╱               ╲ Between G* Board to ╱             └──────────────┘
          ╲ CN6001 on the B* ╱                ╲ B* Board Harness  ╱
           ╲   Board       ╱                   ╲────────────────╱
                 │                                      │
                OK                                     OK
                 │                                      │
                 ▼                                      ▼
          ┌──────────────┐                      ┌──────────────┐
          │   B* Board   │                      │   Harness    │
          └──────────────┘                      └──────────────┘
```

3-4. STANDBY LED BLINK

1) 2 times blinking (Main Power Error)

```
                    ┌─────────────────────┐
                    │   2 times blinking   │
                    └─────────────────────┘
                               │
                               ▼
              ╱───────────────────╲
             ╱  Check REG12V at    ╲        12V NG        ╱────────────────╲       NG      ┌──────────────┐
            │    pins 2/3 of         │────────────────▶ │    Replace        │────────────▶ │   G* Board   │
            │    CN6001 on           │                   │ Between G* Board  │              └──────────────┘
             ╲   the B* Board       ╱                     │ to B* Board Harness│
              ╲───────────────────╱                       ╲────────────────╱
                       │                                          │
                    12V OK                                       OK
                       ▼                                          ▼
              ┌──────────────┐                          ┌──────────────┐
              │   B* Board   │                          │   Harness    │
              └──────────────┘                          └──────────────┘
```

2) 3 times blinking (DC Alert, Audio Error and Communication Error)

```
                3 times blinking
                       │
    ┌──────────────────│──────────────┐   DC_ALERT
    │                  ▼               │
    │          Check D+1.2V at   NG    │      F6001,IC6005,etc
    │          pin 14 of IC6005 ──────────►    (B* Board)
    │          on the B* Board         │
    │                  │ OK            │
    │                  ▼               │
    │          Check +3.3V_MAIN  NG    │      F6003,IC6003,etc
    │          at pins 9/10 of ───────────►    (B* Board)
    │          CN9003 on the B* Board  │
    │                  │ OK            │
    └──────────────────│──────────────┘
    ┌──────────────────│──────────────┐   AUDIO
    │                  ▼               │
    │          Check              NG   │
    │          Speaker Impedance ─────────►    Speaker
    │          at SP Connector         │
    │                  │ OK            │
    └──────────────────│──────────────┘


    ┌──────────────────────────────────┐   AUDIO
    │          Check AUDIO+12.5V  NG   │
    │          at pins 8/9 of ────────────►    G* Board
    │          CN6001 on               │
    │          the B* Board            │
    │                  │ OK            │
    │                  ▼               │
    │          Check +12.5V       NG   │      F4601,IC4601,etc
    │          at F4601 on ───────────────►    (B* Board)
    │          the B* Board            │
    │                  │ OK            │
    └──────────────────│──────────────┘
    ┌──────────────────│──────────────┐   FE/BE Communication
    │                  ▼               │
    │             IC4601,etc           │
    │             (B* Board)           │
    │                                  │
    └──────────────────────────────────┘
```

3) 4 times blinking (Balancer Error)

```
                    ┌─────────────────┐
                    │ 4-time blinking │
                    └─────────────────┘
                             │
                             ▼
                    ╱─────────────────╲           Below 0.84V
                   ╱      Check         ╲      ┌──────────────┐
                  │   PANEL_FAIL at      │────▶│   B* Board   │
                  │  pin 7 of CN6002     │     └──────────────┘
                   ╲  on the B* Board   ╱
                    ╲─────────────────╱
  Between 0.84V to 2.65V     │
                             ▼
                    ╱─────────────────╲      Symptom
                   ╱                   ╲     improvement
                  │   Change G* Board   │────────────▶ ┌──────────────┐
                   ╲                   ╱               │   G* Board   │
                    ╲─────────────────╱               └──────────────┘
                             │ NG
                             ▼
                    ╱─────────────────╲      Symptom
                   ╱                   ╲     improvement
                  │ Change LED Driver   │──────────▶ ┌──────────────────┐
                  │      Board          │            │ LED Driver Board │
                   ╲                   ╱             └──────────────────┘
                    ╲─────────────────╱
                             │
                             ▼
                    ┌─────────────────┐
                    │      Panel       │
                    └─────────────────┘
```

4) 5 times blinking (T-con Error)

```
┌─────────────────┐
│ 5-time blinking │
└────────┬────────┘
         │
         ▼
   ╱─────────────╲
  ╱ Check PANEL_VCC╲   12V NG    ┌──────────┐
 ⟨   at pin 1 of    ⟩─────────▶ │ G* Board │
  ╲  CN6001 on     ╱            └──────────┘
   ╲ on the B* Board╱
    ╲──────┬──────╱
           │ 12V OK
           ▼
   ╱─────────────╲  Symptom
  ╱ Replace the   ╲ improvement  ┌──────────┐
 ⟨  Harness        ⟩───────────▶ │ Harness  │
  ╲ Between G* and ╱             └──────────┘
   ╲ Panel        ╱
    ╲──────┬─────╱
           │ NG
           ▼
   ╱─────────────╲  Symptom
  ╱              ╲ improvement  ┌──────────────┐
 ⟨   Replace      ⟩───────────▶ │ LVDS Harness │
  ╲ the LVDS Harness╱           └──────────────┘
    ╲──────┬─────╱
           │ NG
```

```
   ╱─────────────╲   NG       ┌──────────┐
  ╱  Panel (T-con)╲──────────▶│ B* Board │
 ⟨     change      ⟩          └──────────┘
  ╲               ╱
   ╲──────┬──────╱
          │ Symptom
          │ improvement
          ▼
   ┌──────────────┐
   │ Panel (T-con)│
   └──────────────┘
```

5) 6 times blinking (Backlight Error)

```
              ┌──────────────────┐
              │ 6-time blinking  │
              └──────────────────┘
                       │
                       ▼
          ╱───────────────────────╲       NG
         ╱        Check             ╲────────────►  ┌──────────────┐
        │  the harness between       │              │   Harness    │
         ╲  the T-con board and the ╱               └──────────────┘
          ╲  LED driver board.     ╱
           ╲─────────────────────╱
                    │ OK
                    ▼
          ╱──────────────────╲    Symptom
         ╱                    ╲   improvement   ┌──────────────┐
        │   Change G* board    │───────────────►│   G* Board   │
         ╲                    ╱                  └──────────────┘
          ╲──────────────────╱
                    │ NG
                    ▼
        ╱────────────────────────────╲   NG
       ╱ Check FFC connection between  ╲─────────► ┌────────────────┐
      │   the LED driver board and      │          │ FFC Connection │
       ╲  the light source             ╱           └────────────────┘
        ╲ (inside the panel module)   ╱
         ╲──────────────────────────╱
                    │ OK
                    └──────────────►
```

```
          ╱──────────────────╲    Symptom
         ╱                    ╲   improvement   ┌──────────────────┐
        │ Change LED driver    │───────────────►│ LED Driver Board │
         ╲      board         ╱                 └──────────────────┘
          ╲──────────────────╱
                    │ NG
                    ▼
          ╱──────────────────╲    Symptom
         ╱                    ╲   improvement   ┌──────────────┐
        │    Change B*          │──────────────►│   B* Board   │
         ╲     board           ╱                └──────────────┘
          ╲──────────────────╱
                    │
                    ▼
          ┌──────────────────────┐
          │    Light Source      │
          │ (Inside Panel Module)│
          └──────────────────────┘
```

6) 7 times blinking (Temperature Error)

```
┌─────────────────┐
│ 7 times blinking │
└─────────────────┘
          │
          ▼
    ╱─────────────╲           NO    ┌──────────────────┐
   ╱ Setting        ╲──────────────▶│ Set to another   │
  ╱ circumstance      ╲             │ Location, etc.   │
  ╲ is OK?            ╱             └──────────────────┘
   ╲ Temperature,    ╱
    ╲ Ventilation, etc.╱
     ╲───────────────╱
          │ YES
          ▼
    ╱─────────────╲                 ┌──────────────────┐
   ╱ Change B* Board,╲─────────────▶│     Panel        │
   ╲ and Aging a few  ╱             └──────────────────┘
    ╲ hours          ╱
     ╲─────────────╱
          │ OK
          ▼
   ┌──────────────┐
   │   B* Board   │
   └──────────────┘
```

7) 8 times blinking (Software Error)

```
┌─────────────────┐
│ 8 times blinking │
└─────────────────┘
          │
          ▼
    ╱─────────────╲           NO    ┌──────────────────┐
   ╱ If the Symptom  ╲─────────────▶│    B* Board      │
  ╱ Improved by       ╲             └──────────────────┘
  ╲ changing the      ╱
   ╲ WIFI module     ╱
     ╲─────────────╱
          │ YES
          ▼
   ┌──────────────┐
   │  WIFI Module │
   └──────────────┘
```

8) 10 times blinking (Emitter Error)

```
┌─────────────────────┐
│  10 times blinking  │
└─────────────────────┘
          │
          ▼
     ╱──────────╲          NG   ┌──────────────┐
    ╱   Check     ╲──────────────▶│   Harness    │
   ╱ the harness between╲         └──────────────┘
   ╲ the T-con Board and╱
    ╲ the HEM2 Board   ╱
     ╲──────────╱
          │ OK
          ▼
     ╱──────────╲          NG   ┌──────────────┐
    ╱            ╲──────────────▶│ T-CON Board  │
   ╱ Change HEM2 Board ╲         └──────────────┘
    ╲            ╱
     ╲──────────╱
          │ OK
          ▼
┌─────────────────────┐
│     HEM2 Board      │
└─────────────────────┘
```

3-5. NO PICTURE

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

Press HOME Key OSD displayed? —No→ Check the G*-LD* Harness —OK→ Replace the B-T-con, T-con-LD* FFC —NG→ Change B* Board —NG→

Yes ↓   NG ↓   OK ↓   OK ↓

```
┌─────────────┐  ┌─────────────┐  ┌──────────────────┐  ┌─────────────┐
│  B* Board   │  │  Harness    │  │   B-T-con,       │  │  B* Board   │
└─────────────┘  └─────────────┘  │  T-con-LD* FFC   │  └─────────────┘
                                   └──────────────────┘
```

Change G* Board —NG→ LCD Panel (T-con, LD*)

OK ↓

```
┌─────────────┐
│  G* Board   │
└─────────────┘
```

3-6. NO SOUND

```
                    ┌──────────────┐
                    │   No Sound   │
                    └──────┬───────┘
                           │
                           ▼
                    ╱────────────╲        "Audio System"      ┌──────────────┐
                   ╱   Check the  ╲──────────────────────────▶│  Change to   │
                   ╲ "Speakers     ╱                          │ "TV Speaker" │
                    ╲  setting"   ╱                           └──────────────┘
                     ╲──────┬────╱
                      "TV Speakers"
                           │
                           ▼
           ╱────────────╲    NG        ╱────────────╲   OK      ┌──────────────┐
          ╱ Check the    ╲────────────╱  Replace     ╲─────────▶│   B* Board   │
          ╲  Speaker      ╱           ╲  the B* Board ╱         └──────────────┘
           ╲  Harness    ╱             ╲─────┬───────╱
            ╲─────┬─────╱                    │ NG
               OK │                          ▼
                  ▼                    ┌──────────────┐
           ┌──────────────┐           │   Speaker    │
           │Speaker Harness│          └──────────────┘
           └──────────────┘
```

3-7. TV COMMANDER BUTTONS MALFUNCTION

1) TV button malfunction

```
┌─────────────────┐
│ Button malfunction │
│   on the TV     │
└─────────────────┘
        │
        ▼
     ╱────────╲          OK      ╱────────╲         OK    ┌──────────────┐
    ╱ Replace the╲  ──────────▶ ╱          ╲ ──────────▶ │  Switch Unit  │
   ╱  Harness      ╲           │ Switch Unit │            └──────────────┘
   ╲  between B* to ╱          │   change    │
    ╲ Switch Unit  ╱           ╲            ╱
     ╲────────╱                 ╲────────╱
        │ NG                        │ NG
        ▼                           ▼
  ┌──────────┐               ┌──────────┐
  │ Harness  │               │ B* Board │
  └──────────┘               └──────────┘
```

2) IR remote commander malfunction

```
┌─────────────────────┐
│ TV isn't controlled │
│ by remote commander │
└─────────────────────┘
           │
           ▼
      ╱─────────╲                  ╱──────────────────╲
     ╱  Green LED ╲      OK        ╱   Green LED blinks  ╲      OK      ┌──────────────┐
    ╱   light      ╲─────────────▶╱  at power indicator   ╲───────────▶│  Mechanical  │
    ╲ at power      ╱             ╲ when using commander  ╱            │  (ex. bezel) │
     ╲ indicator  ╱               ╲ near sensor's window ╱             └──────────────┘
      ╲─────────╱                  ╲──────────────────╱
         NG │                          NG │
           ▼                             │
      ╱─────────╲                        │
     ╱  Check the  ╲      OK             │              ┌──────────────┐
    ╱  Harness      ╲────────────────────┼─────────────▶│ Sensor is broken │
    ╲ between the B* ╱                                   └──────────────┘
     ╲ Board and the╱
      ╲ HLR Board  ╱
       ╲─────────╱
         NG │
           ▼
      ╱─────────╲        OK             ┌──────────────┐
     ╱ Exchange   ╲────────────────────▶│   Harness    │
      ╲ the Harness╱                     └──────────────┘
       ╲─────────╱
         NG │
           ▼
      ╱─────────╲        OK             ┌──────────────┐
     ╱ Exchange   ╲────────────────────▶│  HLR Board   │
    ╱  the         ╲                     └──────────────┘
    ╲ HLR Board    ╱
     ╲───────────╱
         NG │
           ▼
   ┌──────────────┐
   │   B* Board   │
   └──────────────┘
```

3-8. NETWORK MALFUNCTION

1) Wired Network malfunction

2) USB Wireless Network malfunction

3) Internal Wireless Network malfunction

```
                2) USB Wireless Network malfunction

                ┌──────────────────┐
                │ Wireless Network │
                │    on the TV     │
                └──────────────────┘
                         │
                         ▼
              ╱────────────────────╲       YES    ┌──────────────────┐
             ╱  Error Message appear ╲─────────────│   USB Dongle     │
             ╲  when the Wireless    ╱             └──────────────────┘
              ╲ Network is selected? ╱
                ╲──────────────────╱
                         │ NO
                         ▼
              ╱────────────────────╲       YES    ┌──────────────────┐
             ╱   Is the radio field  ╲────────────│   Access Point   │
             ╲   Strength too weak    ╱           └──────────────────┘
              ╲  or even No signal?  ╱
                ╲──────────────────╱
                         │ NO
                         ▼
                ┌──────────────────┐
                │     B* Board     │
                └──────────────────┘
```

```
                3) Internal Wireless Network malfunction

                ┌──────────────────┐
                │ Wireless Network │
                │    on the TV     │
                └──────────────────┘
                         │
                         ▼
              ╱────────────────────╲       YES    ┌─────────────────────────┐
             ╱  Error Message appear ╲─────────────│ Wireless Module, Harness│
             ╲  when the Wireless    ╱             └─────────────────────────┘
              ╲ Network is selected? ╱
                ╲──────────────────╱
                         │ NO
                         ▼
              ╱────────────────────╲       YES    ┌──────────────────┐
             ╱   Is the radio field  ╲────────────│   Access Point   │
             ╲   Strength too weak    ╱           └──────────────────┘
              ╲  or even No signal?  ╱
                ╲──────────────────╱
                         │ NO
                         ▼
                ┌──────────────────┐
                │     B* Board     │
                └──────────────────┘
```

3-9. CAMERA MALFUNCTION

```
┌─────────────────────┐
│  Enter Presence     │
│  sensor settings    │
└─────────────────────┘
           │
           ▼
     ╱───────────╲          Yes      ┌──────────────────┐
    ╱ Error Message╲──────────────────│ Module, Harness  │
   ╱ appear when the ╲                └──────────────────┘
   ╲ Presences       ╱
    ╲ Sensor setting?╱
     ╲───────────╱
           │ No
           ▼
     ╱───────────╲          Yes      ┌──────────────────┐
    ╱ Is image is  ╲─────────────────│   Mechanical     │
   ╱ clear on        ╲               │   Problem        │
   ╲ setting menu    ╱               └──────────────────┘
    ╲ at module unit ╱
     ╲ only?      ╱
       ╲─────╱
           │ No
           ▼
┌─────────────────────────┐
│ Module optical problem  │
│ (change module)         │
└─────────────────────────┘
```

Error message

Setting Menu

image
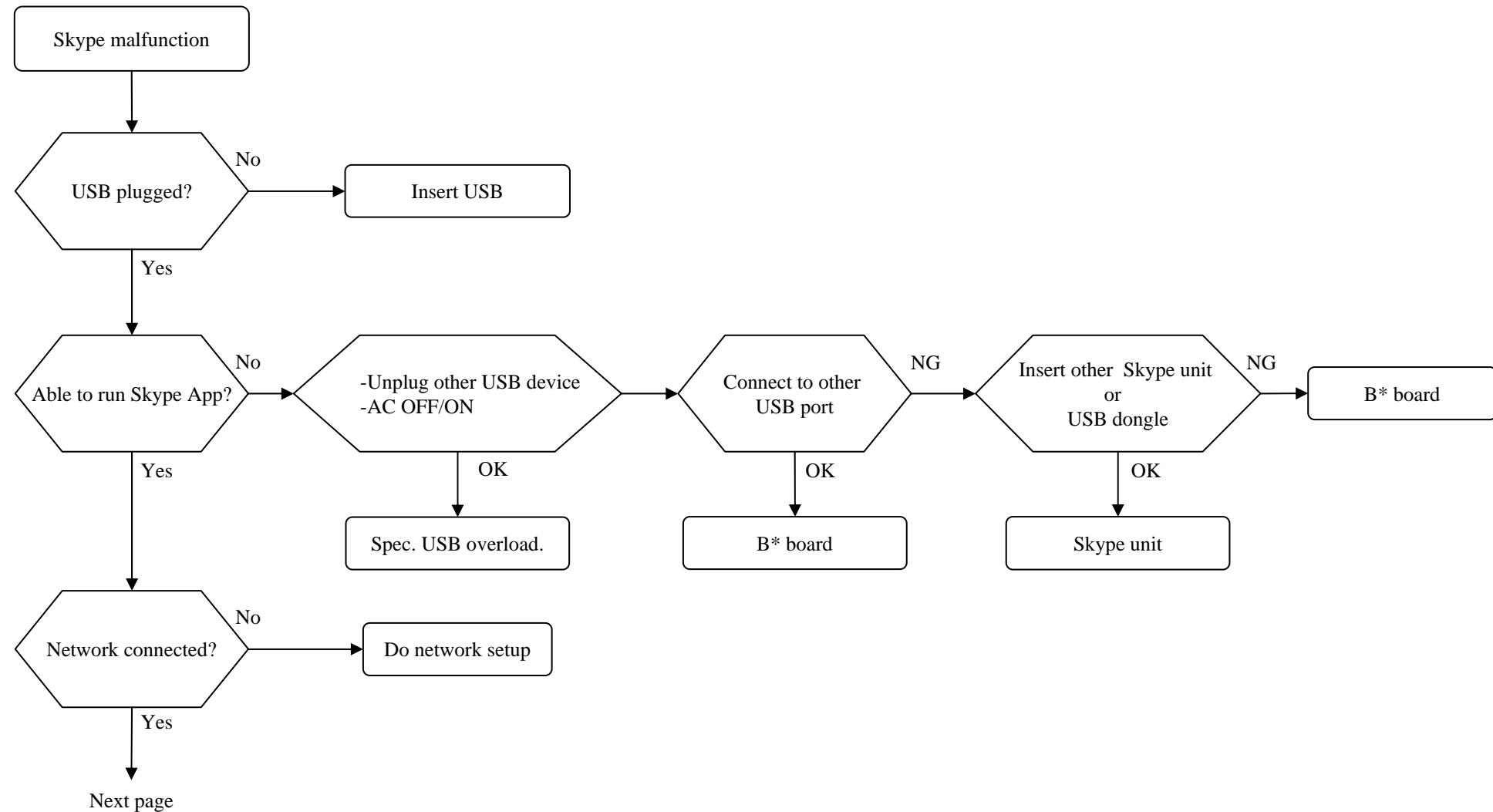
Presence Sensor Setting:
Press HOME, then select > System Settings > Eco >   Presence
Sensor

3-10. 3D MALFUNCTION

```
┌─────────────────┐
│ 3D malfunction  │
└─────────────────┘
         │
         ▼
   ╱────────────╲                              ╱────────────╲                          ╱────────────╲
  ╱ IR has been   ╲          Yes             ╱    Check      ╲        No            ╱   Is 3D glasses ╲      Yes      ┌────────────┐
 ╱  output on HEM   ╲──────────────────────▶╱  whether there  ╲────────────────────▶╲   power on?     ╱────────────▶│ 3D glasses │
 ╲  board, during   ╱                       ╲  is interception ╱                      ╲               ╱              └────────────┘
  ╲ 3D displaying. ╱                         ╲ thing between   ╱                       ╲─────────────╱
   ╲────────────╱                            ╲ Emitter and    ╱                              │ No
         │ No                                 ╲ glasses.     ╱                               │
         ▼                                     ╲───────────╱                                 ▼
   ╱────────────╲          NG                        │ Yes                            ┌────────────┐
  ╱              ╲──────────────┐                    ▼                                │ Power on   │
 ╱ Replace HEM2   ╲             │              ┌────────────┐                         │    or      │
 ╲    board       ╱             │              │  Change    │                         │ Charge     │
  ╲              ╱              │              │ Watching   │                         │ battery    │
   ╲────────────╱               │              │environment │                         └────────────┘
         │                      │              └────────────┘
  Symptom │                     │
improvement                     │
         ▼                      ▼
┌────────────┐          ┌────────────┐
│ HEM2 Board │          │Panel (T-con)│
└────────────┘          └────────────┘
```

[How to confirm IR-output.]
  ex) Look IR-LED through CCD/CMOS camera.

3-11. Skype MALFUNCTION 1/2

Skype malfunction

USB plugged? — No → Insert USB

Yes

Able to run Skype App? — No → -Unplug other USB device / -AC OFF/ON — → Connect to other USB port — NG → Insert other Skype unit or USB dongle — NG → B* board

OK → Spec. USB overload.

OK → B* board

OK → Skype unit

Yes

Network connected? — No → Do network setup

Yes

Next page

3-11. Skype MALFUNCTION 2/2

Previous page

Far end
Video/Audio quality?

Yes

Auto-Focus work?

Yes

Sound quality?
No video?

Audio problem

Call Skype sound test

NG

Move unit away
from speaker

No

Network speed
or
far end system issue

No

Video problem

OK

Far end setting/system

NG

Skype unit

Enough network speed?

Manual Focus work?

No

Skype unit

Yes

Skype unit

Yes

Check Auto-Focus area

3-12. HDD-Rec MALFUNCTION

```
┌──────────────┐
│   HDD Rec    │
│ Malfunction  │
└──────────────┘
        │
        ▼
   ╱────────────╲
  ╱ HDD is       ╲        No      ┌─────────────────┐
 ⟨  connected to   ⟩ ──────────→  │ Connect to the   │
  ╲ the appropriate╱               │ appropriate port │
   ╲ USB port?    ╱                └─────────────────┘
    ╲────────────╱
        │ Yes
        ▼
   ╱────────────╲            ╱────────────╲
  ╱ USB Hub is   ╲    No    ╱ Is the drive  ╲     No    ┌──────────────┐
 ⟨ inserted in     ⟩ ────→ ⟨ size larger than ⟩ ─────→ │ Only 32GB~2TB │
  ╲ between the    ╱        ╲ 32GB and Smaller╱          │ is supported  │
   ╲ USB port and ╱          ╲ than 2TB?     ╱           └──────────────┘
    ╲ HDD?       ╱            ╲────────────╱
        │ Yes                      │ Yes
        ▼                          ▼
┌──────────────┐            ╱────────────╲
│ USB Hub is   │           ╱ All the setups╲    No     ┌──────────────────┐
│ not supported│          ⟨ and restrictions ⟩ ─────→ │ Check the iManual │
└──────────────┘           ╲ listed in iManual╱        └──────────────────┘
                            ╲ are cleared?  ╱
                             ╲────────────╱
                                  │ Yes
                                  ▼
                            ┌──────────┐
                            │ B board  │
                            └──────────┘
```

SEC 4. DIAGRAMS

4-1. BLOCK DIAGRAM

4-2. CONNECTOR DIAGRAM

4-2-1. KDL-40NX720/723/725 (1/2)

(Only Interface between board and board)

[3a-1 32,40 1/2]

4-2-1. KDL-40NX720/723/725 (2/2)

[3a-1 32,40 2/2]

4-2-2. KDL-46NX720/723/725 (1/2)

[3a-1 46 1/2]

4-2-2. KDL-46NX720/723/725 (2/2)

(Only Interface between board and board)

T-con Board (PEL3)

NC	1	12V
NC	2	12V
NC	3	GND
NC	4	GND

SM04B-PASS-TBT(LF)(SN)
1-819-460-11

LD Board

	1	VLED_VCC
	2	VLED_VCC
	3	VLED_VCC
	4	VLED_VCC
※NC	5	NC
	6	VLED_GND
	7	VLED_GND
	8	VLED_GND
	9	VLED_GND
※Connect	10	VLED_GND
	11	LD_ERR
※NC	12	NC
※Connect	13	GL_CTRL
	14	LED_ON

HEM2 Board

3D Emitter
3a-V

12V	1	1
12V	2	2
GND	3	3
GND	4	4
GLS_CTRL	5	5
GLS_CTRL2	6	6
EMI_FAIL	7	7
NC	8	8

1-821-135-11

TC-EM Harness
PEL3-HEM2

1	12V
2	12V
3	GND
4	GND
5	GLS_CTRL
6	GLS_CTRL2
7	EMI_FAIL
8	NC

JST SM08B-GHS-TB
1－819－468－11

BAT-L board

10	10	STBY_+3.3V
12	9	AUDIO+12.5V
14	8	AUDIO+12.5V
11	7	AUDIO+12.5V_GND
13	6	AUDIO+12.5V_GND
15	5	REG+12.5V_GND
17	4	REG+12.5V_GND
16	3	REG+12.5V
18	2	REG+12.5V
24	1	T-CON_VCC

CN6001
1-821-620-11
HEADER ASSEMBLY FOR PWB 10P

	GND	1
	UARTD_TX	2
	UARTD_RX	3
	RESET	4
	STBY_+3.3V	5
	MODE_TVM	6
	UARTA_RX	7
	NC (M2)	8
	UARTC_RX	9
	UARTC_TX	10
	GND	11
	UARTA_TX	12
	ECS_MATRIX	13
	STBY_+3.3V	14
	MODE_PEM	15
	PEM_LOG_RX	16
	PEM_LOG_TX	17
	GND	18

CN9004
1-774-667-51
TL-EX1 Connector,FFC/FPC 18P

TL-EX1JIG board

7	9	AC_OFF_DET
1	8	POWERON
6	7	BL_ERR
NC	6	NC
NC	5	NC
NC	4	NC
8	3	TCON_ON
3	2	PFC_PWR
9	1	GND

CN6002
1-842-559-11

G5AW

CN6151   SJM20-28WLB
To B board (100106)

T-CON_Vcc12V	28	NC
GND	27	NC
T-CON_VCC12V	26	NC
GND	25	NC
T-CON_VCC_12V To B	24	1
GND	23	NC
BDR_ASU_12V	22	NC
GND	21	NC
BDR_ASU_12V	20	NC
GND	19	NC
REG12V	18	2
GND	17	4
REG12V	16	3
GND	15	5
AU_12V	14	8
AU_GND	13	6
AU_12V	12	9
AU_GND	11	7
STBY3.3V	10	10
GND	9	1
T-CON_ON	8	3
AC_OFF_DET	7	7
BL_ERR	6	6
NC	5	NC
NC	4	NC
PFC_ON	3	2
NC	2	NC
POWER_ON	1	8

VLED_VCC	1	1
VLED_VCC	2	2
VLED_VCC	3	3
VLED_VCC	4	4
NC	5	5
VLED_GND	6	6
VLED_GND	7	7
VLED_GND	8	8
VLED_GND	9	9
VLED_GND	10	10
LD_ERR	11	11
NC	12	12
GL_CTRL	13	13
LED_ON	14	14

CN6801   1-822-339-11
JST XA 14P

AC_IN

AC-N	1	1
AC-L	2	2

CN6001
SFP79-02WLB JAM
1-822-908-11

Energy_Saving_SW

AC(N)-IN	1	1
AC(L)-IN	2	2

CN6002
SFP79-02WLB JAM
1-822-908-11

Energy_Saving_SW

AC(L)-OUT	1	1
AC(N)-OUT	2	2

CN6003
SFP79-02WLB JAM
1-822-908-11

T-con

Option

B board

T-con

B board

AC pigtail

ES SW

LD board

[3a-1 46 2/2]

4-2-3. KDL-55/60NX720/723/725 (1/2)

(Only Interface between board and board)

LOGO module
SONY LOGO illumination module
1a/2b-1/2b-2/3a-1/ASURA
1-820-181-11

GND	1	40
LOGO	2	38
—	3	
THRU5V	4	39

SW module
SW module
ALL
1-822-693-11

GND	1	36
POWER_INT	2	33
KEY1	3	35

HLT2 board
LED/IR/RGB Sensor/OPT_Sensor
2b-1
2b-2
3a-1
1-821-139-11

STBY+3.3V	1	29
GND	2	27
LED_REC	3	25
LED_STBY	4	21
LED_TIMER	5	19
LED_POWER	6	23
LED_PIC_MUTE	7	26
OPT_SENS	8	28
VD+3.3V	9	30
SIRCS	10	20
DEVICE_SDA	11	NC
DEVICE_SCL	12	NC

RFRC module
RFRC module
2b-1/2b-2/2b-3/3a-1/3a-2/P-1
only Japan
JAM SYT10-06-WL-ET
1-821-146-11

SYNC	1	18
RESET	2	15
GND	3	13
RX	4	16
TX	5	14
VDD	6	17

Wifi module (WW)
SM05B-GHS-TB
1-819-334-11

GND	1	4
WIFI VCC	2	2
WIFI USB_P	3	3
WIFI USB_M	4	5
WIFI GND	5	1

or

Wifi module (JP)
SM08B-GHS-TB
1-819468-11

GND	1	4
GND	2	NC
WIFI VCC	3	NC
WIFI VCC	4	2
GND	5	6
WIFI USB_P	6	3
WIFI USB_M	7	5
GND	8	1

CAMERA module
RFRC module
3a-x/2
only Japan
MOLEX 501940-0507
1-820-182-11

CAMERA VBUS	1	8
CAMERA USB_N	2	11
CAMERA USB_P	3	9
CAMERA GND	4	10
CAMERA GND	5	12

R3 or RU board
CN101
182110311

STBY3.3V	1	1
RS232_RXD	2	2
RS232_TXD	3	3
SIRCS_IN	4	4
SIRCS_OUT	5	5
GND	6	6

SPEAKER Front Lch

| L+ | 1 | 1 |
| L- | 2 | 2 |

SPEAKER Front Rch

| R- | 2 | 3 |
| R+ | 1 | 4 |

SPEAKER ASSIST Lch

L+	1	5
NC	2	
L-	3	6

SPEAKER ASSIST Rch (60"Only)

R-	3	7
NC	2	
R+	1	8

(60"Only)

Housing   Speaker Connector
55"=2.1ch 6pin 0-844-427-01 JST PBVP-06V
60"=2.2ch 8pin 0-844-428-01 JST PBVP-08V
55"2.1ch :CN4602 6pin 0-844-174-01 JST SM06B-PBVSS-TB(LF)(SN)
60"=2.2ch :CN4603 8pin 0-844-175-01 JST SM08B-PBVSS-TB(LF)(SN)

Refer to Sheet [Appendix SP Connector]
60"=2.2ch , 55"=2.1ch

BL- H Harness
H - B

G-B Harness

BAT-L board

WW JP

8	1	WIFI GND
4	2	WIFI VBUS
6	3	WIFI USB_P
1	4	GND
7	5	WIFI USB_N
5	6	WIFI GND
	7	WIFI RST
1	8	CAMERA VBUS
3	9	CAMERA USB_P
4	10	CAMERA GND
2	11	CAMERA USB_N
5	12	CAMERA GND
3	13	RF GND
5	14	RF Rx
2	15	RF RST
4	16	RF Tx
6	17	RF STBY3.3V
1	18	RF UART_SEL
5	19	HLR LED_ON_TIMER
10	20	HLR SIRCS
4	21	HLR LED_STBY
NC	22	HLR DEVICE_SDA
6	23	HLR LED_POWER
NC	24	HLR DEVICE_SCL
7	25	HLR LED_REC
7	26	HLR LED_PIC_MUTE
2	27	HLR GND
8	28	HLR OPT_SENS
1	29	HLR STBY_3.3V
9	30	HLR 3.3V
	31	SW STBY 3.3V
	32	SW_KEY_DET
2	33	SW_POWER_KEY
	34	SW_KEY_RST
3	35	SW_KEY
1	36	SW GND
	37	SW VD_5.0V
2	38	SONY LOGO
4	39	LOGO 5V
1	40	LOGO GND

CN9006
1-818-692-21 (JST)
HEADER ASSENBLY 40P

1	STBY3.3V
2	RS232_RXD
3	RS232_TXD
4	SIRCS_OUT
5	SIRCS_IN
6	GND

CN9005
6pin connector 182113311
I-PEX

T-con Board(PEL3)

Panel_Ctrl1 / NC	1
Panel_Ctrl2 / TCON_RDY	2
Panel_Ctrl3 / T_TD_HSYNC	3
Panel_Ctrl4 / X_FRC_RST	4
Panel_Ctrl5 / LR_FLAG(For Asura)	5
Panel_Ctrl6 / SA_MODE	6
Panel_Ctrl7 / SETON2(NC)	7
Panel_Ctrl8 / PANEL_SEL	8
Panel_Ctrl9 / BINT	9
Panel_Ctrl10 / T_TD_VSYNC	10
Panel_Ctrl11 / SDA	11
Panel_Ctrl12 / SCL	12
GND	13
PANEL_EVEN4_P	14
PANEL_EVEN4_N	15
PANEL_EVEN3_P	16
PANEL_EVEN3_N	17
GND	18
PANEL_EVEN_CLK_P	19
PANEL_EVEN_CLK_N	20
GND	21
PANEL_EVEN2_P	22
PANEL_EVEN2_N	23
PANEL_EVEN1P	24
PANEL_EVEN1_N	25
PANEL_EVEN0_P	26
PANEL_EVEN0_N	27
GND	28
PANEL_ODD4_P	29
PANEL_ODD4_N	30
PANEL_ODD3_P	31
PANEL_ODD3_N	32
GND	33
PANEL_ODD_CLK_P	34
PANEL_ODD_CLK_N	35
GND	36
PANEL_ODD2_P	37
PANEL_ODD2_N	38
PANEL_ODD1P	39
PANEL_ODD1_N	40
PANEL_ODD0_P	41
PANEL_ODD0_N	42
GND	43
GND	44
Panel_Ctrl13	45
GND	46
PANEL_VCC_SW	47
PANEL_VCC_SW	48
PANEL_VCC_SW	49
PANEL_VCC_SW	50
PANEL_VCC_SW	51

CN2601
1-842-546-11
FFC Direct in Connector

To BAT

Panel_Ctrl1 / NC	51
Panel_Ctrl2 / TCON_RDY	50
Panel_Ctrl3 / T_TD_HSYNC	49
NC	48
Panel_Ctrl5 / LR_FLAG(For Asura)	47
Panel_Ctrl6 / SA_MODE	46
NC	45
NC	44
Panel_Ctrl9 / BINT	43
Panel_Ctrl10 / T_TD_VSYNC	42
Panel_Ctrl11 / SDA	41
Panel_Ctrl12 / SCL	40
GND	39
PANEL_EVEN4_P	38
PANEL_EVEN4_N	37
PANEL_EVEN3_P	36
PANEL_EVEN3_N	35
GND	34
PANEL_EVEN_CLK_P	33
PANEL_EVEN_CLK_N	32
GND	31
PANEL_EVEN2_P	30
PANEL_EVEN2_N	29
PANEL_EVEN1P	28
PANEL_EVEN1_N	27
PANEL_EVEN0_P	26
PANEL_EVEN0_N	25
GND	24
PANEL_ODD4_P	23
PANEL_ODD4_N	22
PANEL_ODD3_P	21
PANEL_ODD3_N	20
GND	19
PANEL_ODD_CLK_P	18
PANEL_ODD_CLK_N	17
GND	16
PANEL_ODD2_P	15
PANEL_ODD2_N	14
PANEL_ODD1P	13
PANEL_ODD1_N	12
PANEL_ODD0_P	11
PANEL_ODD0_N	10
GND	9
GND	8
GND	7
NC	6
PANEL_VCC_SW	5
PANEL_VCC_SW	4
PANEL_VCC_SW	3
PANEL_VCC_SW	2
PANEL_VCC_SW	1

PANEL FFC
SLCD : 96pin
SHARP : 80pin
AUO : 77pin
CMI :
32"~37" 60 pin
40"~55" 80pin

LVDS-FFC
B-PEL3

51pin FFC

CN11 FFC 56pin
1-822-905-11

GND	1
1-PWM1	2
1-PWM2	3
1-PWM3	4
1-PWM4	5
1-PWM5	6
1-PWM6	7
1-PWM7	8
1-PWM8	9
GND	10
VLED_MPC	11
2-PWM1	12
2-PWM2	13
2-PWM3	14
2-PWM4	15
2-PWM5	16
2-PWM6	17
2-PWM7	18
2-PWM8	19
GND	20
LD_TYPE	21
3-PWM1	22
3-PWM2	23
3-PWM3	24
3-PWM4	25
3-PWM5	26
3-PWM6	27
3-PWM7	28
3-PWM8	29
GND	30
4-PWM1	31
4-PWM2	32
4-PWM3	33
4-PWM4	34
4-PWM5	35
4-PWM6	36
4-PWM7	37
4-PWM8	38
GND	39
GND	40
NC	41
NC	42
TCON_VCC	43
NC	44
NC	45
GND	46
NC	47
12V	48
NC	49
LD_STDBY	50
LED_ON	51
FAIL	52
REF	53
BL_TYPE1	54
BL_TYPE2	55
BL_TYPE3	56

LD - TC - Harness
TCON - LD

56pin FFC

LD Board

CN11 FFC 56pin
1-822-905-11

GND	1
1-PWM1	2
1-PWM2	3
1-PWM3	4
1-PWM4	5
1-PWM5	6
1-PWM6	7
1-PWM7	8
1-PWM8	9
GND	10
VLED_MPC	11
2-PWM1	12
2-PWM2	13
2-PWM3	14
2-PWM4	15
2-PWM5	16
2-PWM6	17
2-PWM7	18
2-PWM8	19
GND	20
LD_TYPE	21
3-PWM1	22
3-PWM2	23
3-PWM3	24
3-PWM4	25
3-PWM5	26
3-PWM6	27
3-PWM7	28
3-PWM8	29
GND	30
4-PWM1	31
4-PWM2	32
4-PWM3	33
4-PWM4	34
4-PWM5	35
4-PWM6	36
4-PWM7	37
4-PWM8	38
GND	39
GND	40

14pin connector
YEONHO 20022WR-14AML

CN03
LED FFC 15pin

CN04
LED FFC 15pin

CN05
LED FFC 15pin

CN06
LED FFC 15pin

BL_TYPE3	1
BL_TYPE2	2
BL_TYPE1	3
REF	4
FAIL	5
LED_ON	6
LD_STDBY	7
NC	8
12V	9
NC	10
GND	11
NC	12
TCON_VCC	13
NC	14
NC	15
GND	16
NC	17
4-PWM8	18
4-PWM7	19
4-PWM6	20
4-PWM5	21
4-PWM4	22
4-PWM3	23
4-PWM2	24
4-PWM1	25
GND	26
3-PWM8	27
3-PWM7	28
3-PWM6	29
3-PWM5	30
3-PWM4	31
3-PWM3	32
3-PWM2	33
3-PWM1	34
GND	35
LD_TYPE	36
GND	37
2-PWM8	38
2-PWM7	39
2-PWM6	40
2-PWM5	41
2-PWM4	42
2-PWM3	43
2-PWM2	44
2-PWM1	45
VLED_MPC	46
GND	47
1-PWM8	48
1-PWM7	49
1-PWM6	50
1-PWM5	51
1-PWM4	52
1-PWM3	53
1-PWM2	54
1-PWM1	55
GND	56

[3a-1 55,60 1/2]

4-2-3. KDL-55/60NX720/723/725 (2/2)

(Only Interface between board and board)

T-con Board(PEL3)

28	1	12V
26	2	12V
27	3	GND
25	4	GND

JST(VA)
1-842-566-11

1	1	12V
2	2	12V
3	3	GND
4	4	GND
5	5	GLS_CTRL
6	6	GLS_CTRL2
7	7	EMI_FAIL
8	8	NC

Molex
1-842-558-11

HEM2 Board

3D Emitter
3a-V

12V	1	1
12V	2	2
GND	3	3
GND	4	4
GLS_CTRL	5	5
GLS_CTRL2	6	6
EMI_FAIL	7	7
NC	8	8

1-821-135-11

TC-EM Harness
PEL3-HEM2

BAT-L board

GND	1
UARTD_TX	2
UARTD_RX	3
RESET	4
STBY_+3.3V	5
MODE_TVM	6
UARTA_RX	7
NC (MD2)	8
UARTC_RX	9
UARTC_TX	10
GND	11
UARTA_TX	12
ECS_MATRIX	13
STBY_+3.3V	14
MODE_PEM	15
PEM_LOG_RX	16
PEM_LOG_TX	17
GND	18

CN9004
1-774-667-51
TL-EX1 Connector,FFC/FPC 18P

LD Board

1	1	VLED_VCC
2	2	VLED_VCC
3	3	VLED_VCC
4	4	VLED_VCC
※NC	5	5	NC
6	6	VLED_GND
7	7	VLED_GND
8	8	VLED_GND
9	9	VLED_GND
※Connect	10	10	VLED_GND
11	11	LD_ERR
※NC	12	12	NC
※Connect	13	13	GL_CTRL
14	14	LED_ON

TL-EX1JIG board

CN6101 SJM20-28WLB
To B board (100106)

T-CON_Vcc12V	28	1
GND	27	3
T-CON_VCC12V	26	2
GND	25	4
T-CON_VCC_12V To B	24	NC
GND	23	NC
BDR_ASU_12V	22	NC
GND	21	NC
BDR_ASU_12V	20	NC
GND	19	NC
REG12V	18	2
GND	17	4
REG12V	16	3
GND	15	5
AU_12V	14	8
AU_GND	13	6
AU_12V	12	9
AU_GND	11	7
STBY3.3V	10	10
GND	9	1
T-CON_ON	8	3
AC_OFF_DET	7	9
BL_ERR	6	7
NC	5	NC
NC	4	NC
PFC_ON	3	2
NC	2	NC
POWERON	1	8

T-con, **Option**, **B board**

10	10	STBY_+3.3V
12	9	AUDIO+12.5V
14	8	AUDIO+12.5V
11	7	AUDIO+12.5V_GND
13	6	AUDIO+12.5V_GND
15	5	REG+12.5V_GND
17	4	REG+12.5V_GND
16	3	REG+12.5V
18	2	REG+12.5V
NC	1	T-CON_VCC

CN6001
1-821-620-11
HEADER ASSEMBLY FOR PWB 10P

7	9	AC_OFF_DET
1	8	POWERON
6	7	BL_ERR
NC	6	NC
NC	5	NC
NC	4	NC
8	3	TCON_ON
3	2	PFC_PWR
9	1	GND

CN6002
1-842-559-11

REG_12V	1	1
GND	2	2
NC	3	3
BL_ERR	4	4
NC	5	5
NC	6	6
AC_OFF_DET	7	7

CN6102 1-821-888-11
JST L 7p

1	1	REG_12V
2	2	GND
3	3	NC
4	4	BL_ERR
5	5	NC
6	6	NC
7	7	AC_OFF_DET

1-821-888-11
JST L 7p CN6701

VLED_VCC	1	1
VLED_VCC	2	2
VLED_VCC	3	3
VLED_VCC	4	4
NC	5	5
VLED_GND	6	6
VLED_GND	7	7
VLED_GND	8	8
VLED_GND	9	9
VLED_GND	10	10
LD_ERR	11	11
NC	12	12
GL_CTRL	13	13
LED_ON	14	14

1-822-339-11
JST XA 14P CN6700

| PRI_VCC | 1 | 1 |
| PRI_GND | 2 | 2 |

CN6502 1-817-207-11
JST

| 1 | 1 | PRI_VCC |
| 2 | 2 | PRI_GND |

1-817-207-11 CN6501
JST

| PFC_GND | 1 | 1 |
| PFC_OUT | 2 | 2 |

CN6501
SFP79-02WLB JAM 1-822-908-11

| 1 | 1 | PFC_GND |
| 2 | 2 | PFC_OUT |

SFP79-02WLB JAM CN6600
1-822-908-11

AC pigtail

AC_IN

| AC-N | 1 | 1 |
| AC-L | 2 | 2 |

CN6001
SFP79-02WLB JAM
1-822-908-11

Energy_Saving_SW

| AC(N)-IN | 1 | 1 |
| AC(L)-IN | 2 | 2 |

CN6003
SFP79-02WLB JAM
1-822-908-11

ES SW

Energy_Saving_SW

| AC(L)-OUT | 1 | 1 |
| AC(N)-OUT | 2 | 2 |

CN6002
SFP79-02WLB JAM
1-822-908-11

[3a-1 55,60 2/2]

4-3. CIRCUIT BOARDS LOCATION

KDL-40NX720/723/725

Wireless LAN Card
LD Board
G4BW Board
BATL Board
Switch Unit
T-CON
HEM2 Board   Camera Module   HLT2 Board

KDL-46NX720/723/725

Wireless LAN Card
LD Board
G5AW Board
BATL Board
Switch Unit
T-CON
HEM2 Board   Camera Module   HLT2 Board

KDL-55NX720/723/725

G7A Board
Wireless LAN Card
G6AW Board
BATL Board
LD Board
Switch Unit
T-CON
HEM2 Board   Camera Module   HLT2 Board

KDL-60NX720/723/725

Wireless LAN Card
G7B Board
G6AW Board
BATL Board
LD Board
Switch Unit
T-CON
HEM2 Board   Camera Module   HLT2 Board

SEC 5. EXPLODED VIEWS

• Items with no part number and no description are not stocked because they are seldom required for roution service.

• The construction parts of an assembled part are indicated with a collation number in the remark colum.

• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items
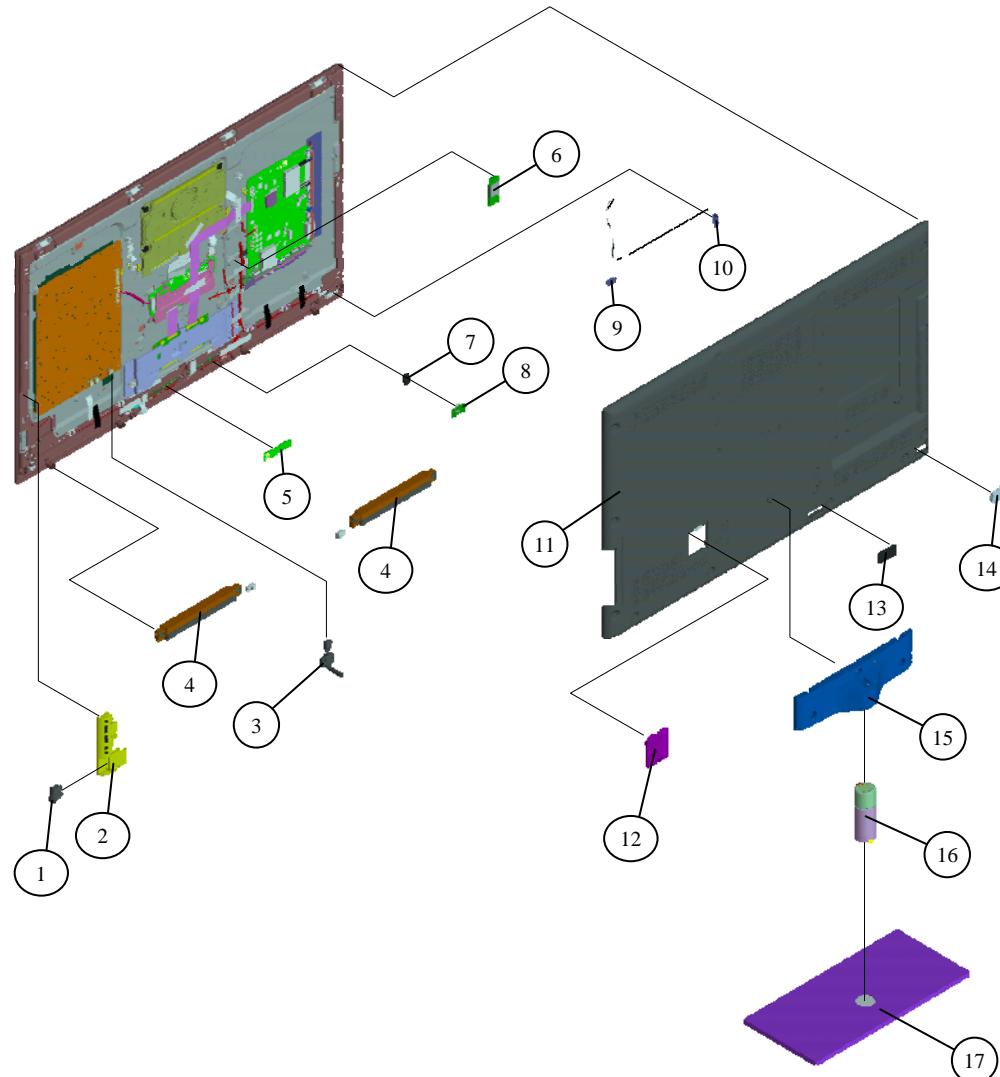
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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

IMPORTANT: When replacing LCD Panel or Circuit Boards ensure that all Radiation Sheets and Insulation Sheets are in their correct positions in the TV set.

## 5-1. KDL-40NX720/723/725
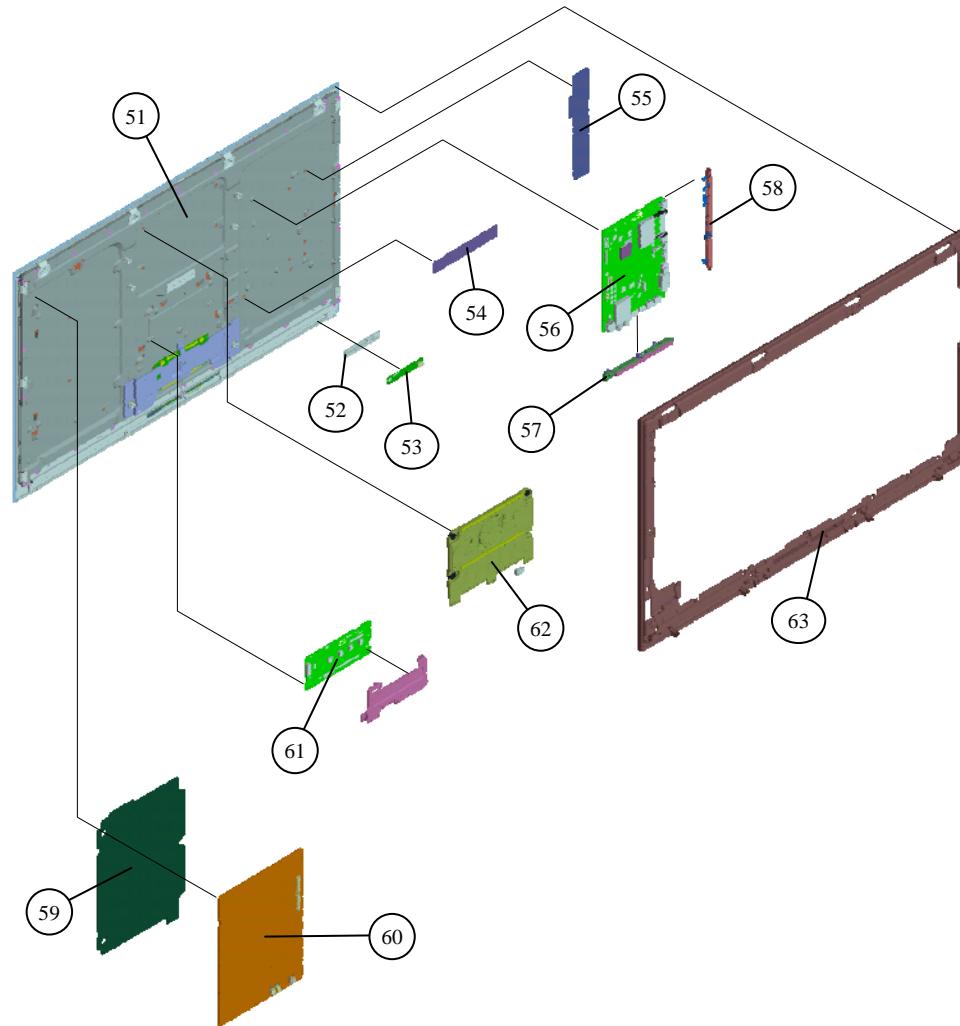
5-1-1. CHASSIS-1

REF. No.	PART No.	DESCRIPTION	REMARK
1 ⚠	FX0019811	POWER SWITCH	
2 ⚠	FX0019621	SWITCH UNIT	
3 ⚠	FX0000511	POWER-SUPPLY CORD (WITH CONN.)	
⚠	FX0004012	POWER-SUPPLY CORD (WITH CONN.)	NX723(UK)
4	FX0020311	SPEAKER BOX ASSY (2X9CM)	
5	FX0093501	HEM2 MOUNT	
6	FX0012011	WIRELESS LAN CARD	
	FX0023711	WIRELESS LAN CARD	NX720(RU)
7	FX0020701	CAP, SEALING (CAMERA)	
8	FX0019511	CAMERA MODULE	
9	FX0012211	ANTENNA	
10	FX0019711	ANTENNA	
11	FX0021201	REAR COVER (40 EL) A	
12 ⚠	FX0002711	COVER, AC(M)	
13	FX0018001	SHEET, ANT(C EL)	
14	FX0020901	COVER, ANT(L EL)	
15	FX0007801	STAND HEAD (ML9)	
16	FX0015911	NECK (ML9)	
17	FX0013411	STAND, BASE A(ML1)	

5-1. KDL-40NX720/723/725
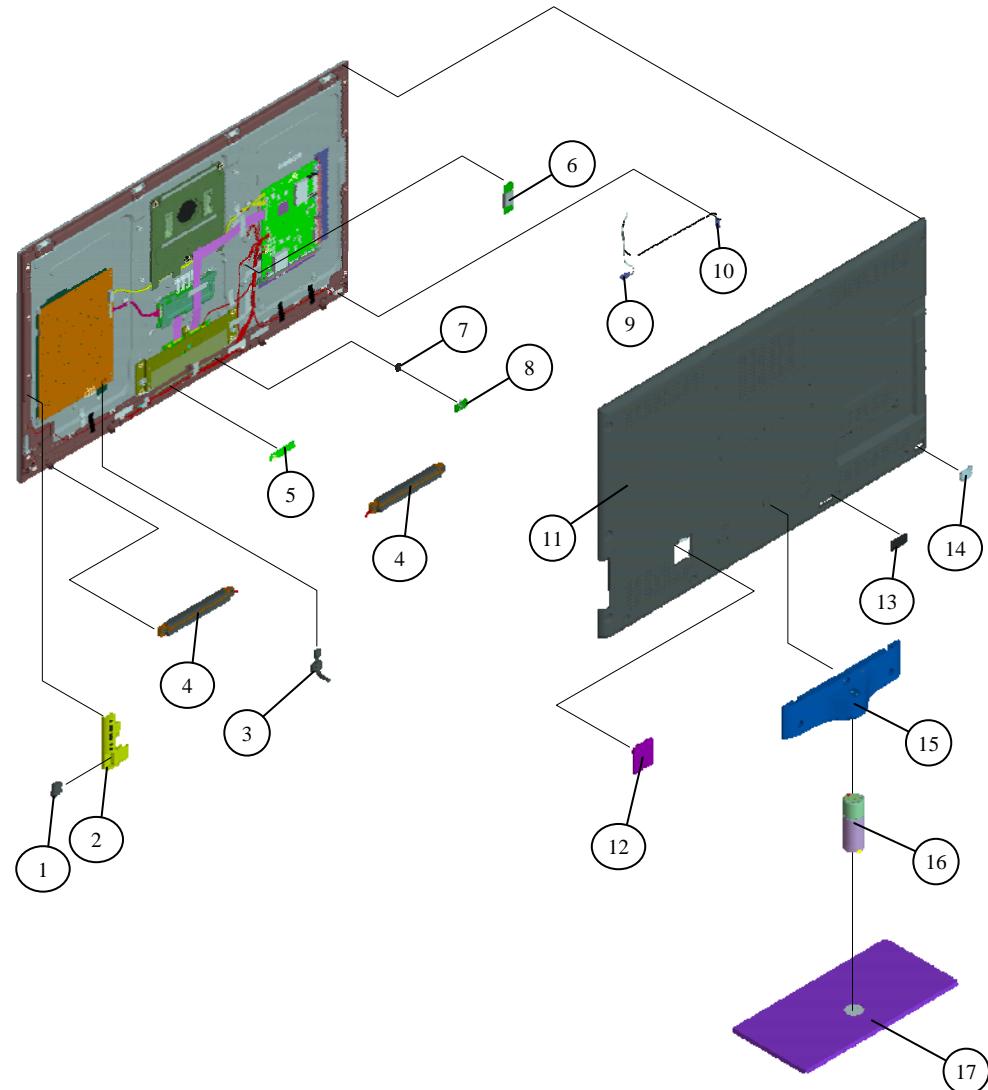
5-1-2. CHASSIS-2

REF. No.	PART No.	DESCRIPTION	REMARK
51	A-1816-612-A	P-MOD (FDLL400NT01)(SERVICE)	
52	* FX0020631	TAPE, PWB (H)	
53	FX0093601	HLT2 MOUNT (B-O-AEP)	
54	FX0020401	SHEET (BAT-L METAL BOTTOM)	
55	FX0020501	SHEET (BAT-L METAL SIDE)	
56 🔒	FX0094701	BATL COMPL (SERVICE)	NX720(AEP)(RU)
🔒	FX0096001	BATL COMPL (SERVICE)	NX720(I)
🔒	FX0093401	BATL COMPL (SERVICE)	NX725
🔒	FX0095701	BATL COMPL (SERVICE)	NX723
57	FX0021321	BRACKET BOTTOM (BAT-L METAL)	
	FX0019231	BRACKET BOTTOM (BAT-L METAL)	NX725
58	FX0019121	BRACKET SIDE (BAT-L METAL)	
59	FX0008301	SHEET, INSULATION (G4)	
60 ⚠	FX0019411	STATIC CONVERTER (TV)-G4BW	
61	FX0093701	LD_BLK A MOUNT	
62	FX0021411	SPEAKER BOX ASSY	
63	FX0032001	CENTER CABINET(40SIR)	

5-2. KDL-46NX720/723/725
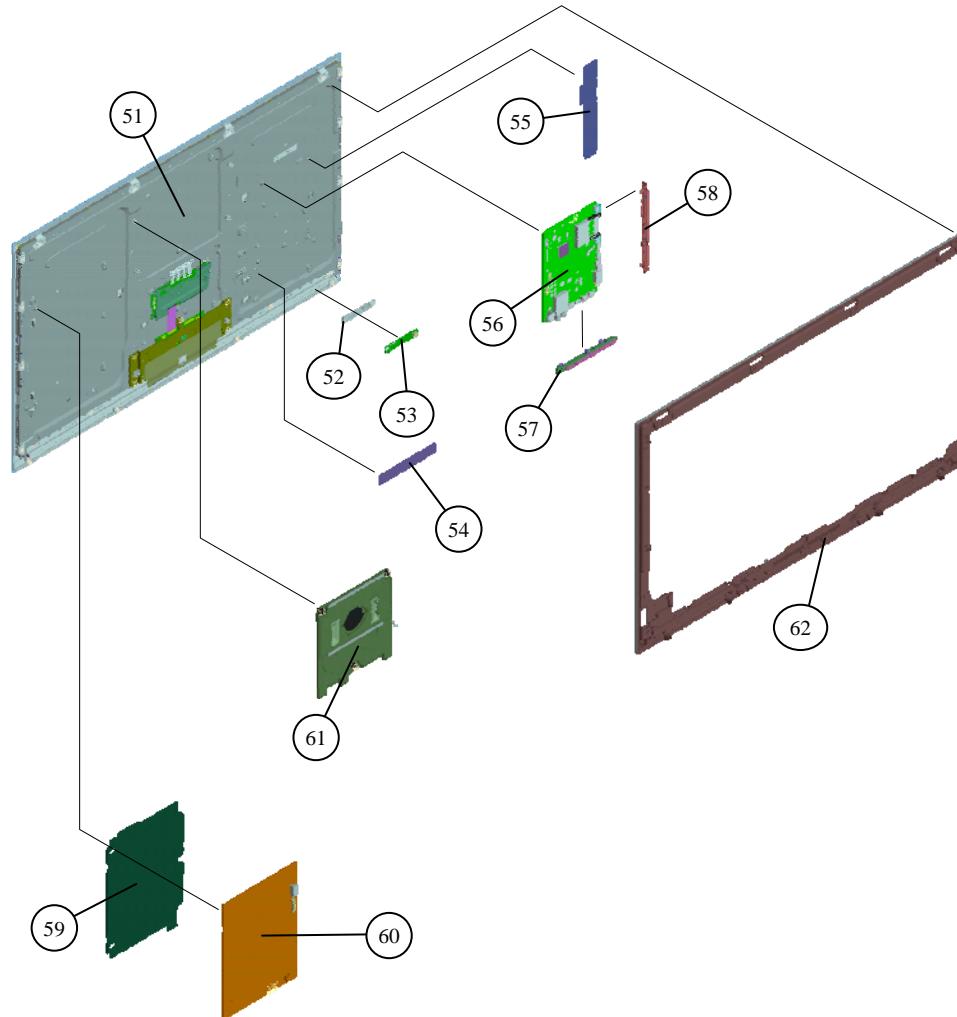
5-2-1. CHASSIS-1

REF. No.	PART No.	DESCRIPTION	REMARK
1 ⚠	FX0019811	POWER SWITCH	
2 ⚠	FX0019621	SWITCH UNIT	
3 ⚠	FX0000511	POWER-SUPPLY CORD (WITH CONN.)	
⚠	FX0004012	POWER-SUPPLY CORD (WITH CONN.)	NX723(UK)
4	FX0020311	SPEAKER BOX ASSY (2X9CM)	
5	FX0093501	HEM2 MOUNT	
6	FX0012011	WIRELESS LAN CARD	
	FX0023711	WIRELESS LAN CARD	NX720(RU)
7	FX0020701	CAP, SEALING (CAMERA)	
8	FX0019511	CAMERA MODULE	
9	FX0012211	ANTENNA	
10	FX0019711	ANTENNA	
11	FX0029201	REAR COVER (46 EL) A	
12 ⚠	FX0002711	COVER, AC(M)	
13	FX0018001	SHEET, ANT(C EL)	
14	FX0020901	COVER, ANT(L EL)	
15	FX0007801	STAND HEAD (ML9)	
16	FX0030211	NECK (L9)	
17	FX0009811	STAND, BASE A(L1)	

5-2. KDL-46NX720/723/725
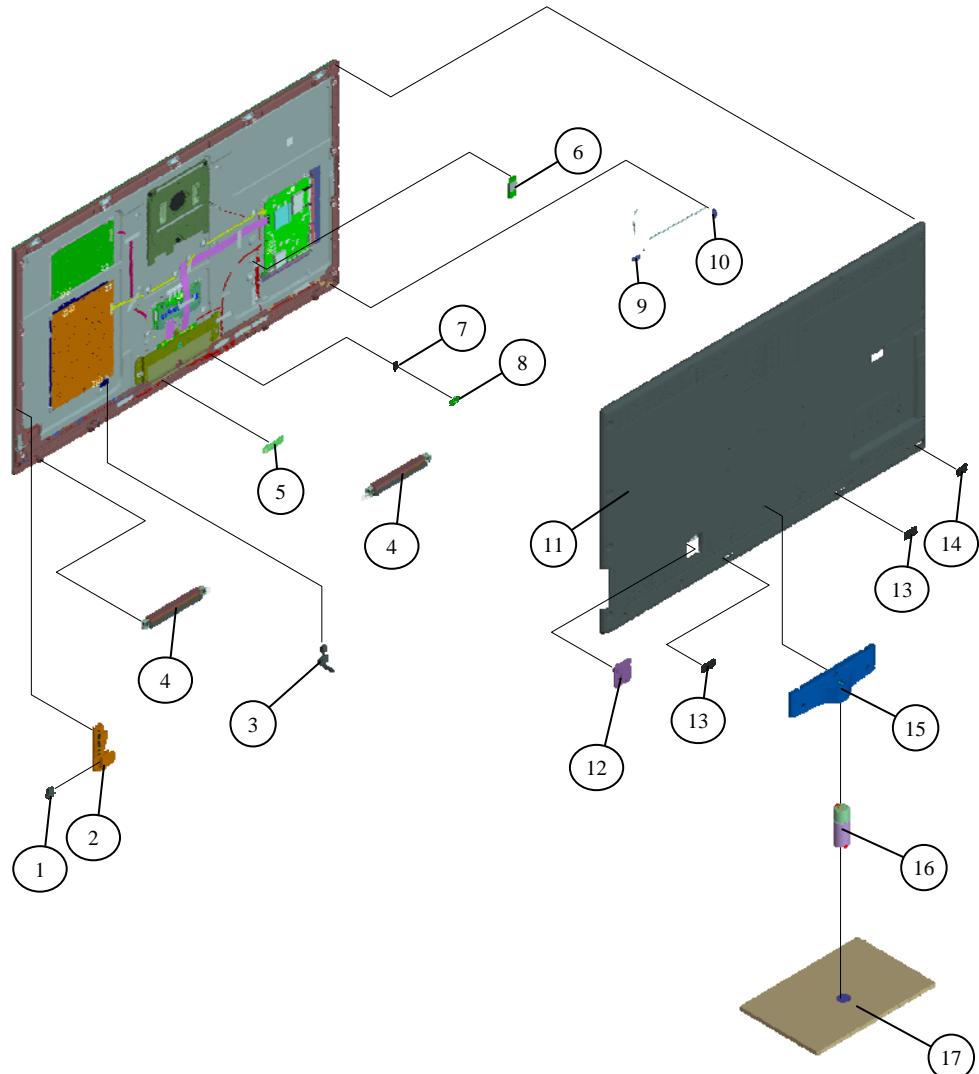
5-2-2. CHASSIS-2

REF. No.	PART No.	DESCRIPTION	REMARK
51	A-1818-308-A	P-MOD (FDMY460LT01)(SERVICE)	
52	* FX0020631	TAPE, PWB (H)	
53	FX0093601	HLT2 MOUNT (B-O-AEP)	
54	FX0020401	SHEET (BAT-L METAL BOTTOM)	
55	FX0020501	SHEET (BAT-L METAL SIDE)	
56	FX0094701	BATL COMPL (SERVICE)	NX720(AEP)(RU)
	FX0096001	BATL COMPL (SERVICE)	NX720(I)
	FX0093401	BATL COMPL (SERVICE)	NX725
	FX0095701	BATL COMPL (SERVICE)	NX723
57	FX0021321	BRACKET BOTTOM (BAT-L METAL)	
	FX0019231	BRACKET BOTTOM (BAT-L METAL)	NX725
58	FX0019121	BRACKET SIDE (BAT-L METAL)	
59	FX0008301	SHEET, INSULATION (G4)	
60	⚠ FX0028511	STATIC CONVERTER (TV)-5GAW	
61	FX0024211	SPEAKER BOX ASSY	
62	FX0030301	CENTER CABINET(46SIR)	

5-3. KDL-55NX720/723/725
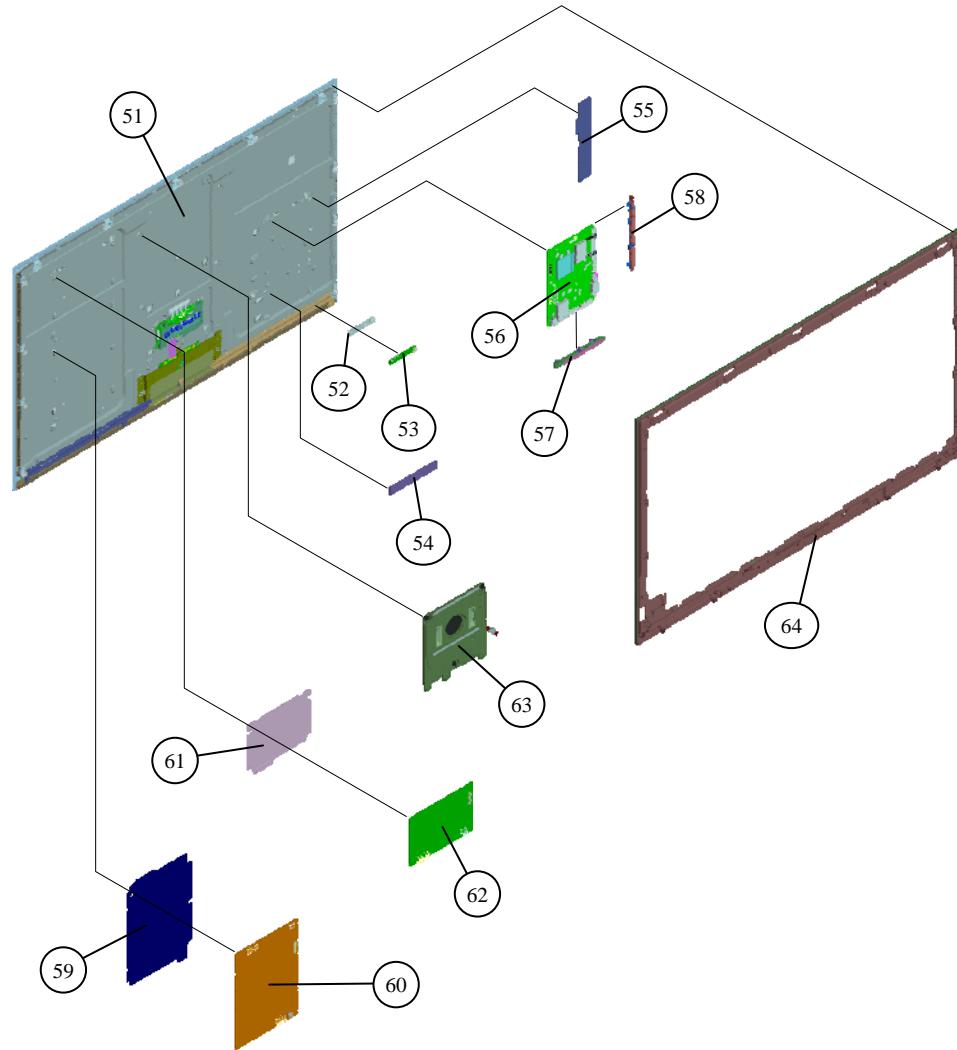
5-3-1. CHASSIS-1

REF. No.	PART No.	DESCRIPTION	REMARK
1 ⚠	FX0019811	POWER SWITCH	
2 ⚠	FX0019621	SWITCH UNIT	
3 ⚠	FX0000511	POWER-SUPPLY CORD (WITH CONN.)	
⚠	FX0004012	POWER-SUPPLY CORD (WITH CONN.)	NX723(UK)
4	FX0020311	SPEAKER BOX ASSY (2X9CM)	
5	FX0093501	HEM2 MOUNT	
6	FX0012011	WIRELESS LAN CARD	
	FX0023711	WIRELESS LAN CARD	NX720(RU)
7	FX0020701	CAP, SEALING (CAMERA)	
8	FX0019511	CAMERA MODULE	
9	FX0012211	ANTENNA	
10	FX0019711	ANTENNA	
11	FX0023501	REAR COVER (55 EL) A	
12 ⚠	FX0002711	COVER, AC(M)	
13	FX0018001	SHEET, ANT(C EL)	
14	FX0020901	COVER, ANT(L EL)	
15	FX0007801	STAND HEAD (ML9)	
16	FX0023211	NECK (LL9)	
17	FX0023311	STAND, BASE A(LL1)	

5-3. KDL-55NX720/723/725
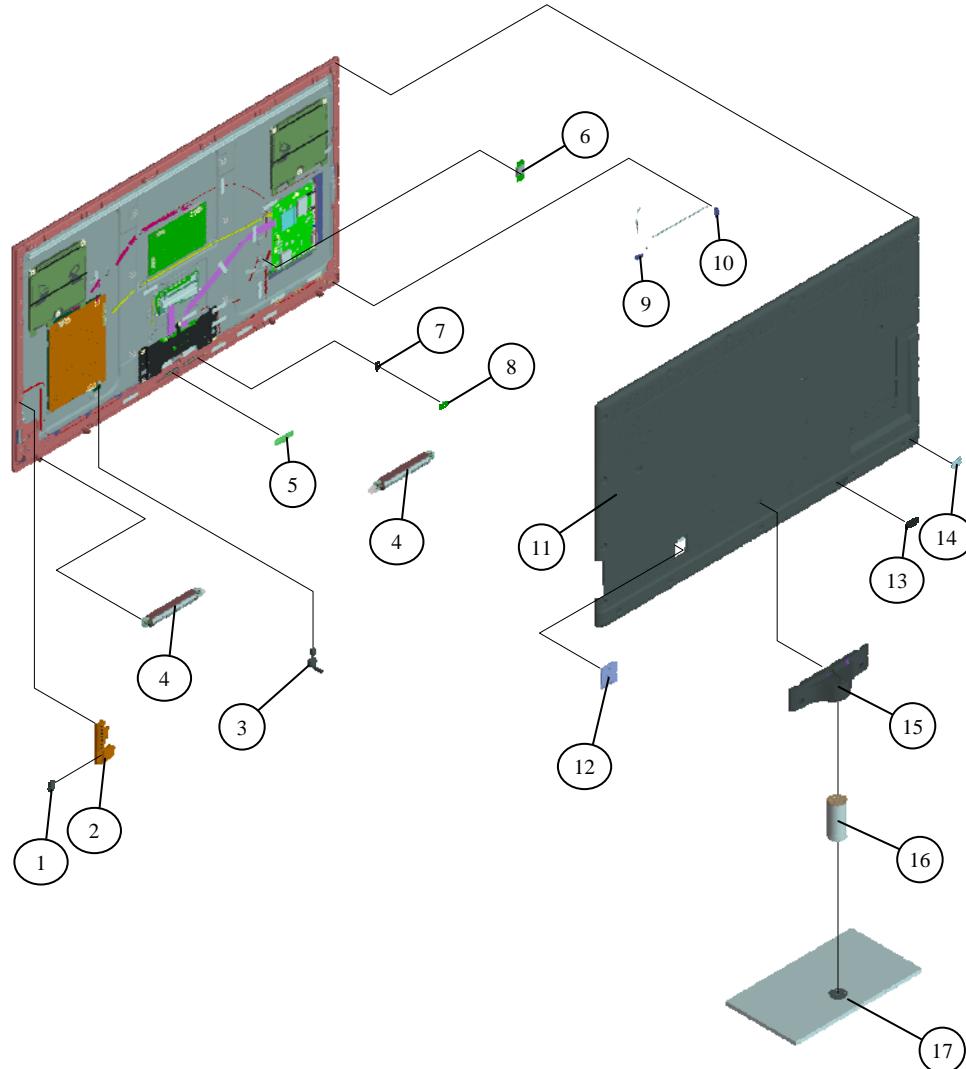
5-3-2. CHASSIS-2

REF. No.	PART No.	DESCRIPTION	REMARK
51	A-1816-613-A	P-MOD (FDLL550LT01)(SERVICE)	
52	* FX0020631	TAPE, PWB (H)	
53	FX0093601	HLT2 MOUNT (B-O-AEP)	
54	FX0020401	SHEET (BAT-L METAL BOTTOM)	
55	FX0020501	SHEET (BAT-L METAL SIDE)	
56 🔒	FX0094701	BATL COMPL (SERVICE)	NX720(AEP)(RU)
🔒	FX0096001	BATL COMPL (SERVICE)	NX720(I)
🔒	FX0093401	BATL COMPL (SERVICE)	NX725
🔒	FX0095701	BATL COMPL (SERVICE)	NX723
57	FX0021321	BRACKET BOTTOM (BAT-L METAL)	
	FX0019231	BRACKET BOTTOM (BAT-L METAL)	NX725
58	FX0019121	BRACKET SIDE (BAT-L METAL)	
59	FX0008301	SHEET, INSULATION (G4)	
60 ⚠	FX0023811	STATIC CONVERTER (TV)-G6AW	
61	FX0010501	SHEET, INSULATION (G7)	
62 ⚠	FX0023911	STATIC CONVERTER (TV)-G7A	
63	FX0024211	SPEAKER BOX ASSY	
64	FX0023401	CENTER CABINET(55 SIR)	

5-4. KDL-60NX720/723/725
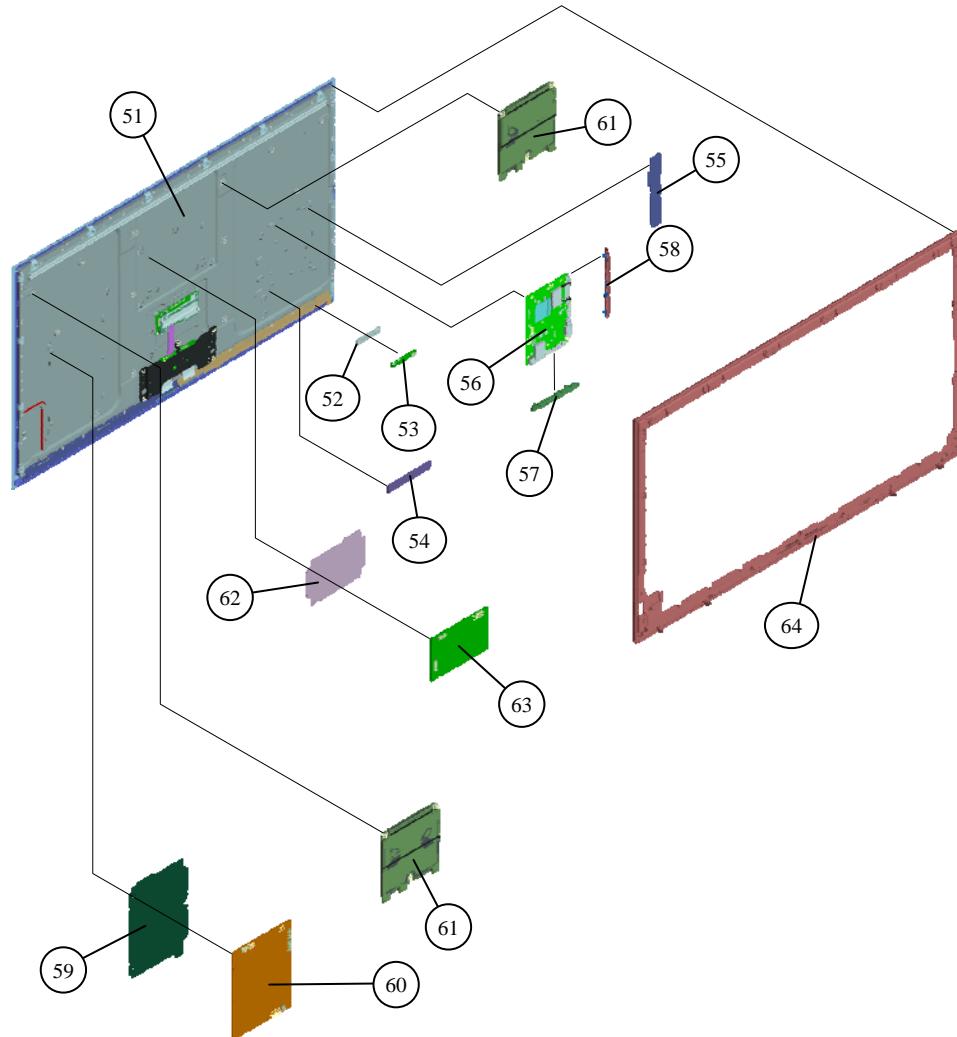
5-4-1. CHASSIS-1

REF. No.	PART No.	DESCRIPTION	REMARK
1 ⚠	FX0019811	POWER SWITCH	
2 ⚠	FX0019621	SWITCH UNIT	
3 ⚠	FX0000511	POWER-SUPPLY CORD (WITH CONN.)	
⚠	FX0004012	POWER-SUPPLY CORD (WITH CONN.)	NX723(UK)
4	FX0020311	SPEAKER BOX ASSY (2X9CM)	
5	FX0093501	HEM2 MOUNT	
6	FX0012011	WIRELESS LAN CARD	
7	FX0020701	CAP, SEALING (CAMERA)	
8	FX0019511	CAMERA MODULE	
9	FX0012211	ANTENNA	
10	FX0019711	ANTENNA	
11	FX0029801	REAR COVER (60 EL) A	
12 ⚠	FX0002711	COVER, AC(M)	
13	FX0018001	SHEET, ANT(C EL)	
14	FX0020901	COVER, ANT(L EL)	
15	FX0029411	STAND HEAD (3L9)	
16	FX0022611	NECK (3L9)	
17	FX0029511	STAND, BASE A(3L1)	

5-4. KDL-60NX720/723/725

5-4-2. CHASSIS-2

REF. No.	PART No.	DESCRIPTION	REMARK
51	A-1810-303-A	P-MOD (FDHY600LT01)(SERVICE)	
52	* FX0020631	TAPE, PWB (H)	
53	FX0093601	HLT2 MOUNT (B-O-AEP)	
54	FX0020401	SHEET (BAT-L METAL BOTTOM)	
55	FX0020501	SHEET (BAT-L METAL SIDE)	
56	FX0097001	BATL COMPL (SERVICE)	NX720(AEP)
	FX0097402	BATL COMPL (SERVICE)	NX720(I)
	FX0097101	BATL COMPL (SERVICE)	NX725
	FX0097202	BATL COMPL (SERVICE)	NX723
57	FX0021321	BRACKET BOTTOM (BAT-L METAL)	
	FX0019231	BRACKET BOTTOM (BAT-L METAL)	NX725
58	FX0019121	BRACKET SIDE (BAT-L METAL)	
59	FX0008301	SHEET, INSULATION (G4)	
60	FX0023811	STATIC CONVERTER (TV)-G6AW	
61	FX0024211	SPEAKER BOX ASSY	
62	FX0010501	SHEET, INSULATION (G7)	
63	FX0023911	STATIC CONVERTER (TV)-G7A	
64	FX0029701	CENTER CABINET(60 SIR)	

5-5. OTHER PARTS

5-5-1. MISCELLANEOUS

40 Inches

FX0003991	BAG, SCREW ASSY (M) - (See note on page 140)
FX0019911	CABLE CONVERSION - (Not shown)
FX0020011	CABLE CONVERSION - (Not shown)
FX0005901	CLAMPER CABLE - (Not shown)
FX0020221	CONNECTOR ASSY - (CN6002(G4B)CN6003(G4B)ECOSW(1))
* FX0008510	CONNECTOR ASSY 14P - (CN6801(G4B)CN1002(BLK)(1))
FX0021511	CONNECTOR ASSY 28P - (CN6001(BATL)CN6002(BATL)CN6151(G4B)(1))
* FX0008941	FLEXIBLE FLAT CABLE 56 PIN - (CN11(TCON)CN11(LD)(1))
FX0020111	FLEXIBLE FLAT CABLE N1 40S - (CN2001(BATL)PANEL(1)
* FX0019311	GASKET (TU) - (Not shown)
FX0021659	HARNESS ASSY - (CN9006(BATL)CN001(HLT2)HEM2-LOGO-WIFI-CAMERA-SW/CN4601(BATL)SP(1))
FX0021101	LABEL (BATL METAL BOTTOM) - (Not shown)
FX0021811	LABEL (BATL METAL BOTTOM) - (Not shown) - (NX725)
FX0021001	LABEL (BATL METAL SIDE) - (Not shown)
FX0001401	SHEET (CORE) C - (Not shown)
FX0002001	SHEET RADIATION (BAT-L/V) - (Not shown)
FX0010301	SPACER (GA) - (Not shown)
FX0002402	SPACER (GB) - (Not shown)

46 Inches

FX0001191	BAG, SCREW ASSY (L) - (See note on page 140)
FX0019911	CABLE CONVERSION - (Not shown)
FX0020011	CABLE CONVERSION - (Not shown)
FX0005901	CLAMPER CABLE - (Not shown)
FX0020221	CONNECTOR ASSY - (CN6002(G5)CN6003(G5)ECOSW(1))
FX0028918	CONNECTOR ASSY 14P - (CN6801(G5A)CN2001(LD)(1))
FX0030121	CONNECTOR ASSY 28P - (CN6001(BATL)CN6002(BATL)CN6151(G5A)(1))
FX0030011	FLEXIBLE FLAT CABLE N1 46S - (CN2001(BATL)PANEL(1)
* FX0023601	GASKET (TU) - (Not shown)
FX0030469	HARNESS ASSY - (CN9006(BATL)CN001(HLT2)HEM2-LOGO-WIFI-CAMERA-SW/CN4601(BATL)SP(1))
FX0021101	LABEL (BATL METAL BOTTOM) - (Not shown)
FX0021811	LABEL (BATL METAL BOTTOM) - (Not shown) - (NX725)
FX0021001	LABEL (BATL METAL SIDE) - (Not shown)
FX0001401	SHEET (CORE) C - (Not shown)
FX0002001	SHEET RADIATION (BAT-L/V) - (Not shown)
FX0010301	SPACER (GA) - (Not shown)
FX0002402	SPACER (GB) - (Not shown)

55 Inches

	FX0001191	BAG, SCREW ASSY (L) - (See note on page 140)
	FX0019911	CABLE CONVERSION - (Not shown)
	FX0020011	CABLE CONVERSION - (Not shown)
	FX0005901	CLAMPER CABLE - (Not shown)
	FX0024121	CONNECTOR ASSY - (CN6003(G6)CN6002(G6)ECOSW(1))
*	FX0024329	CONNECTOR ASSY 14P - (CN6700(G7)CN2001(LD)(1))
	FX0022132	CONNECTOR ASSY 28P - (CN6101(G6)-CN6001(BATL)-CN6002(BATL)CN8003(T-CON)(1))
	FX0010921	CONNECTOR ASSY 2P - (CN6502(G6)-CN6601(G7/G8)(1))
	FX0011021	CONNECTOR ASSY 2P - (CN6501(G6)-CN6600(G7/G8)(1))
*	FX0011545	CONNECTOR ASSY 7P - (CN6102(G6)-CN6701(G7/G8)(1)
	FX0024011	FLEXIBLE FLAT CABLE N1 55S - (CN2001(BATL)PANEL(1)
*	FX0023601	GASKET (TU) - (Not shown)
	FX0022277	HARNESS ASSY - (CN9006(BATL)CN001(HLT2)HEM2-LOGO-WIFI-CAMERA-SW/CN4601(BATL)SP(1))
	FX0021101	LABEL (BATL METAL BOTTOM) - (Not shown)
	FX0021811	LABEL (BATL METAL BOTTOM) - (Not shown) - (NX725)
	FX0021001	LABEL (BATL METAL SIDE) - (Not shown)
	FX0001401	SHEET (CORE) C - (Not shown)
	FX0002001	SHEET RADIATION (BAT-L/V) - (Not shown)
	FX0010301	SPACER (GA) - (Not shown)

60 Inches

FX0031031	BAG, SCREW ASSY (3L) - (See note on page 140)
FX0019911	CABLE CONVERSION - (Not shown)
FX0020011	CABLE CONVERSION - (Not shown)
FX0005901	CLAMPER CABLE - (Not shown)
FX0024121	CONNECTOR ASSY - (CN6003(G6)CN6002(G6)ECOSW(1))
* FX0030781	CONNECTOR ASSY 14P - (CN6700(G7)CN2001(LD)(1))
* FX0030882	CONNECTOR ASSY 28P - (CN6001(BATL)-CN6002(BATL)CN6101(G6)(T-CON)(1))
FX0030521	CONNECTOR ASSY 2P - (CN6502(G6)CN6501(G6)CN6601(G7/G8)CN6600(GT/G8)(1))
* FX0030646	CONNECTOR ASSY 7P - (CN6102(G6)-CN6701(G7/G8)(1)
* FX0029911	FLEXIBLE FLAT CABLE N1 60S - (CN2001(BATL)PANEL(1)
* FX0023601	GASKET (TU) - (Not shown)
* FX0030983	HARNESS ASSY - (CN9006(BATL)CN001(HLT2)HEM2-LOGO-WIFI-CAMERA-SW/CN4601(BATL)SP(1))
FX0021101	LABEL (BATL METAL BOTTOM) - (Not shown)
FX0021811	LABEL (BATL METAL BOTTOM) - (Not shown) - (NX725)
FX0021001	LABEL (BATL METAL SIDE) - (Not shown)
FX0002001	SHEET RADIATION (BAT-L/V) - (Not shown)
FX0010301	SPACER (GA) - (Not shown)

5-5-2. ACCESSORIES

*	FX0021721	MANUAL, INSTRUCTION (NX720AEP)
*	FX0021722	MANUAL, INSTRUCTION (NX720AEP)
*	FX0021723	MANUAL, INSTRUCTION (NX720AEP)
*	FX0021971	MANUAL, INSTRUCTION (NX725AEP)
*	FX0021972	MANUAL, INSTRUCTION (NX725AEP)
*	FX0021973	MANUAL, INSTRUCTION (NX725AEP)
*	FX0022031	MANUAL, INSTRUCTION (NX720AEP)
*	FX0022032	MANUAL, INSTRUCTION (NX720AEP)
*	FX0022033	MANUAL, INSTRUCTION (NX723AEP)
*	FX0022352	MANUAL, INSTRUCTION (NX720IT)
*	FX0022353	MANUAL, INSTRUCTION (NX720IT)
*	FX0022413	MANUAL, INSTRUCTION (NX723UK)
*	FX0024442	MANUAL, INSTRUCTION (NX720RU)
	FX0006611	REMOTE COMMANDER (RM-ED044)

Note

The "Bag , Screw Assy" contains the following:-

Screw, +PSW M5x16

Hex Wrench

User Screw ST

END

APPENDIX-1

PROCEDURE TO REMOVE THE REAR COVER

1. Remove the screws from the REAR COVER and the COVER AC.

2. Open the REAR COVER with the "COVER AC" and AC cable attached.

   Note: Make sure to hold the cable not to give any tension to the connector and scratch damage for the cable.
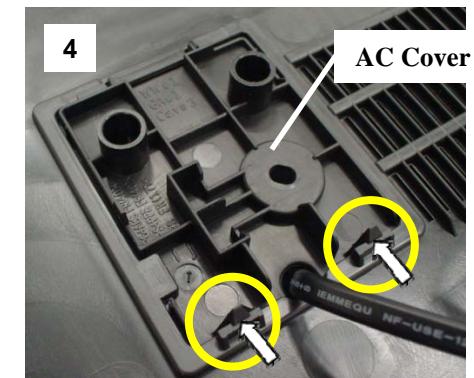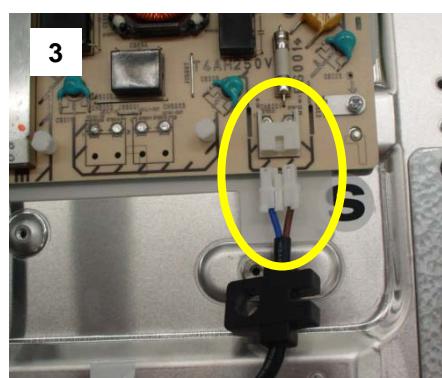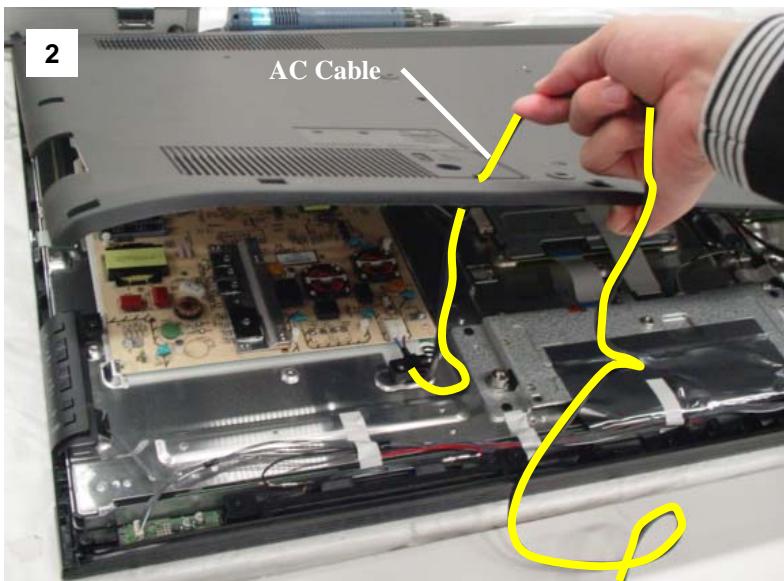
3. Release the AC cable connector.

4. Release the hooks of the COVER AC and remove it.

   Note:
   Take care not to cut your hands when releasing the hooks, especially on the metal RC.
   Confirm the hooks are not broken before re-using the COVER AC.
   If the hooks are broken please replace with a new one.
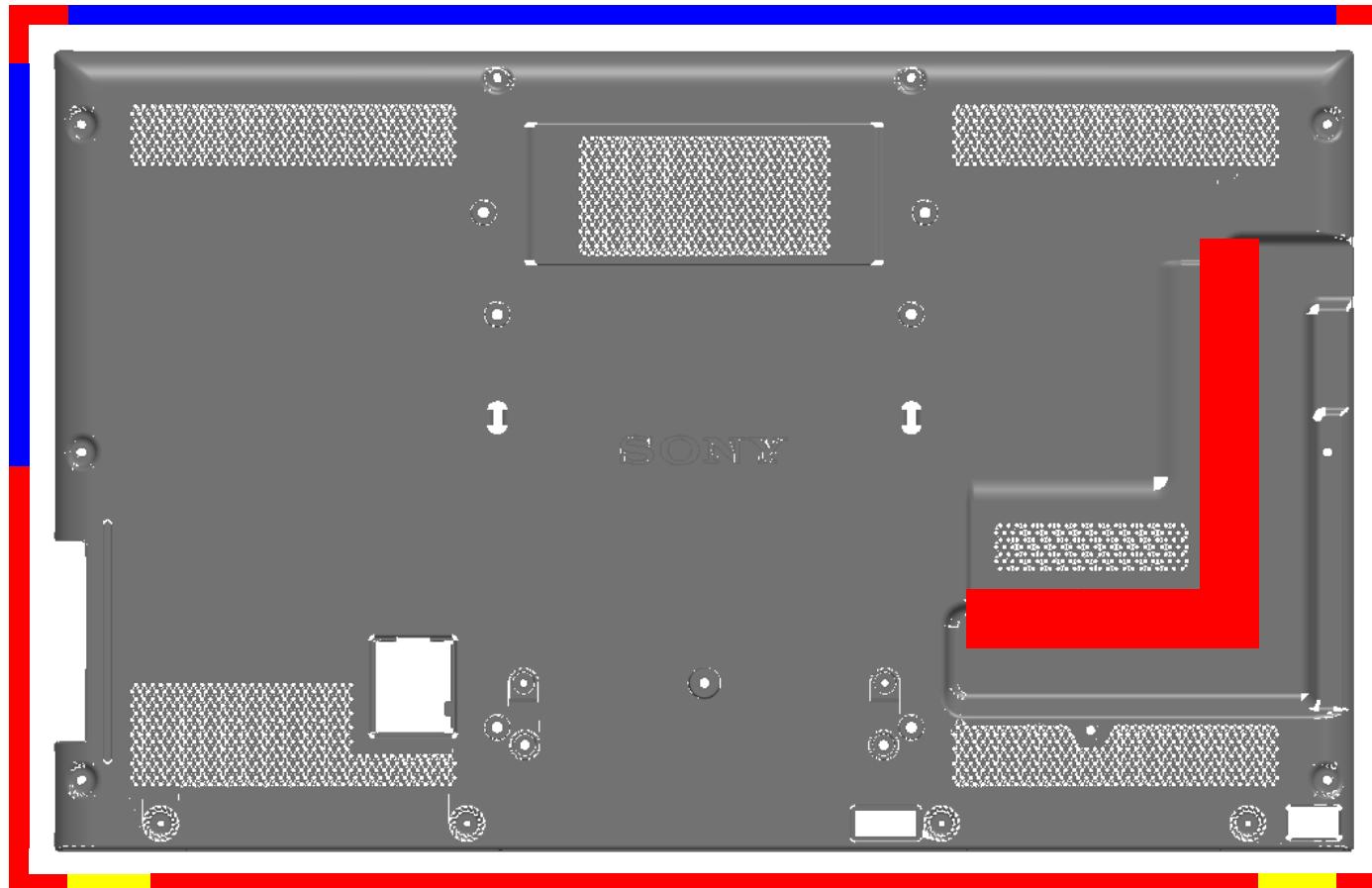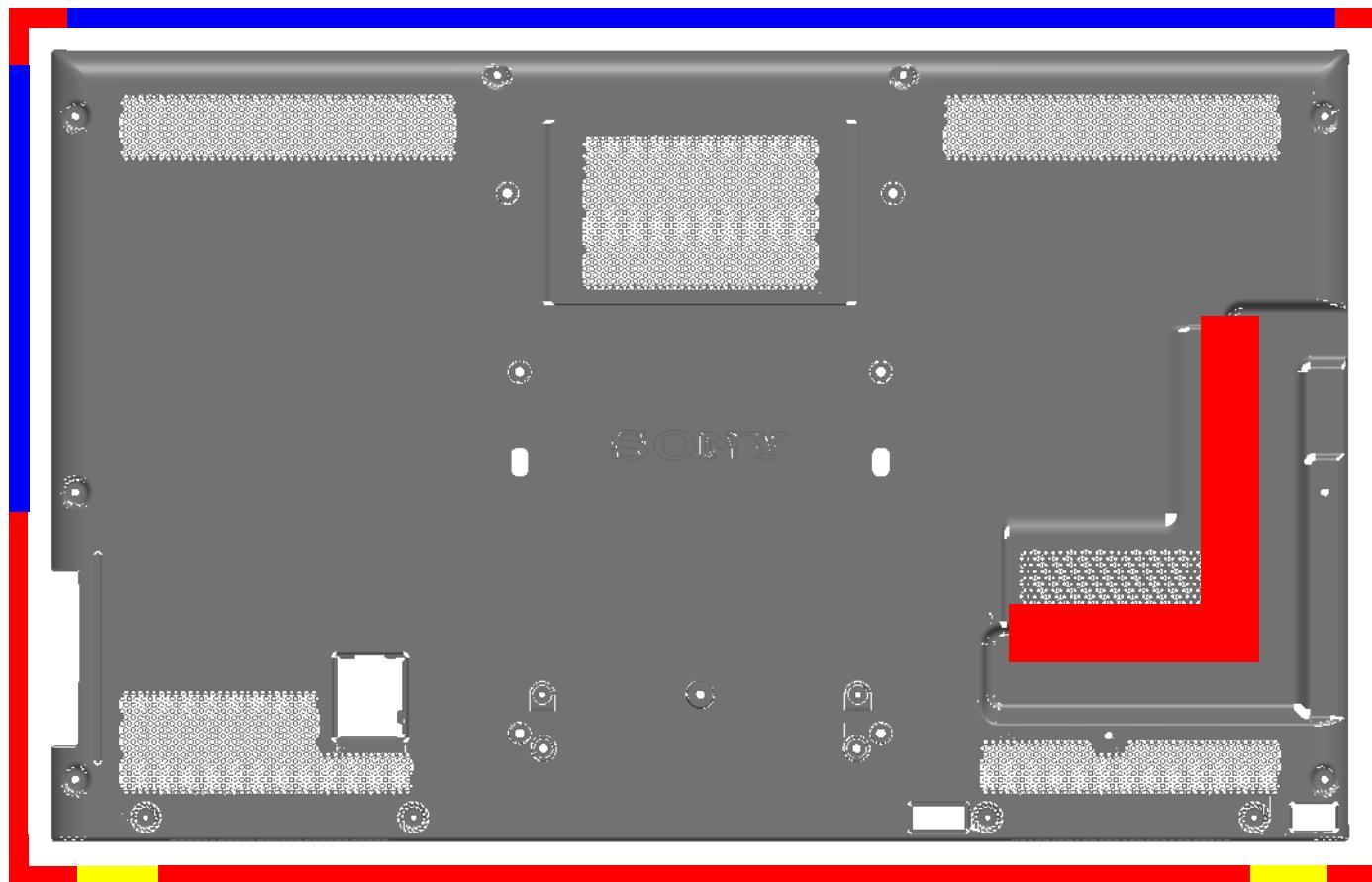
APPENDIX-2

CAUTION FOR THE SHARP EDGES OF THE REAR COVER(40)

OK to grab
(curling area)

OK to grab with care
(sharp edge area)

NG to grab
(sharp edge and
easy to deform.)
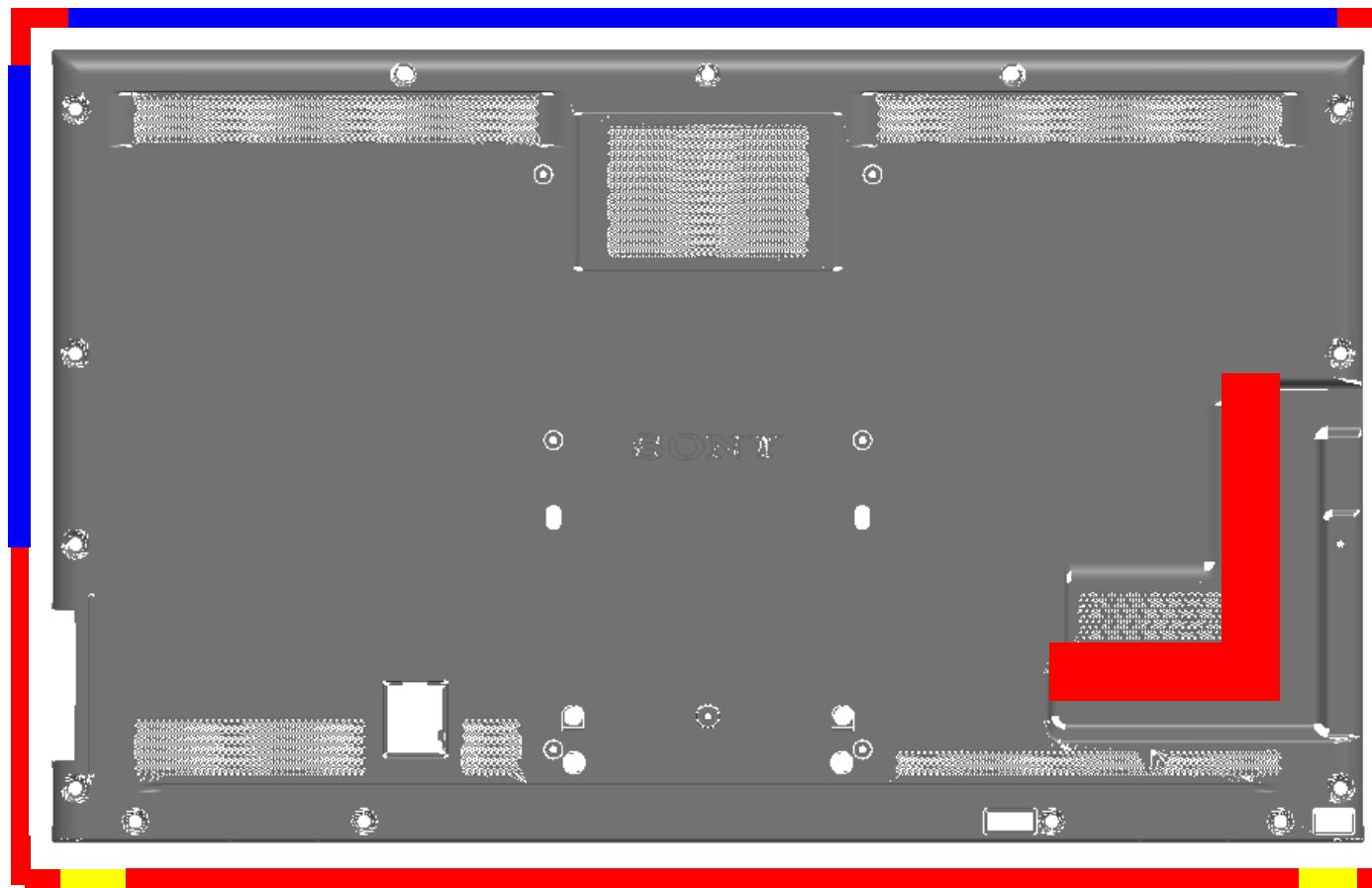
CAUTION FOR THE SHARP EDGES OF THE REAR COVER(46)

OK to grab
(curling area)

OK to grab with care
 (sharp edge area)

NG to grab
(sharp edge and
easy to deform.)

CAUTION FOR THE SHARP EDGES OF THE REAR COVER(55)
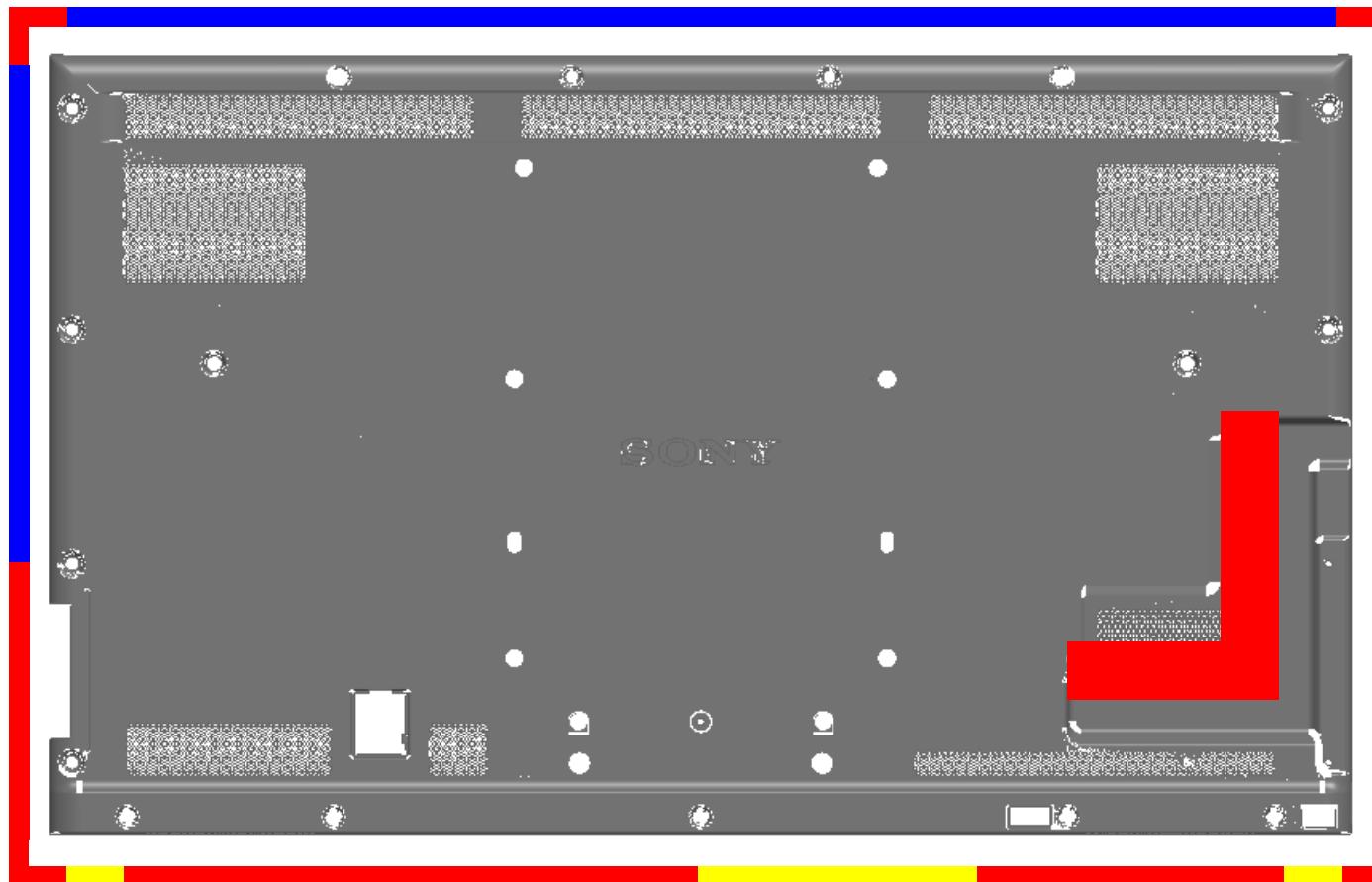
OK to grab
(curling area)

OK to grab with care
 (sharp edge area)

NG to grab
(sharp edge and
easy to deform.)

CAUTION FOR THE SHARP EDGES OF THE REAR COVER(60)

OK to grab
(curling area)

OK to grab with care
(sharp edge area)

NG to grab
(sharp edge and
easy to deform.)