

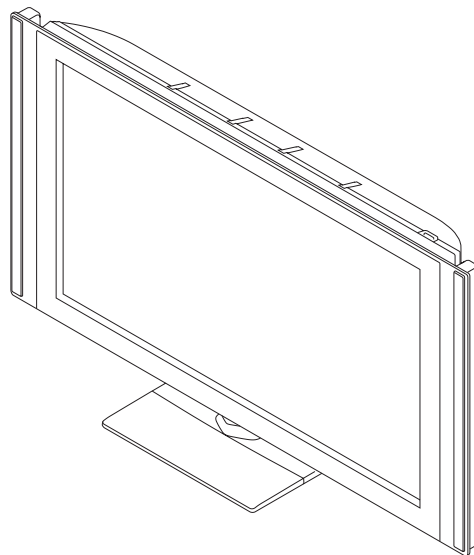
# SERVICE MANUAL

# EZ-1 CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>
<b>KDL-46X4500</b>	RM-KD009	Korea			
<b>KDL-55X4500</b>	RM-KD009	Korea			



RM-KD009



KDL-46X4500/55X4500

LCD Digital Color TV  
**SONY**®

# SPECIFICATIONS

Model	KDL-46X4500	KDL-55X4500
<b>System</b>		
Television system	NTSC: American TV standard ATSC (8VSB terrestrial): ATSC compliant 8VSB QAM on cable: ANSI/SCTE 07 2000 (Does not include CableCARD functionality)	
Channel coverage	Analog terrestrial: 2-69 / Digital terrestrial: 2-69 Analog Cable: 1-135 / Digital Cable: 1-135	
Panel system	LCD (Liquid Crystal Display) Panel	
Speaker output	10W + 10W, 12W + 12W (Woofer)	
<b>Input/Output jacks</b>		
CABLE/ANTENNA	75-ohm external terminal for RF inputs	
VIDEO IN 1/2/3	S VIDEO (4-pin mini DIN) (VIDEO 1 only): Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative / C: 0.286 Vp-p (Burst signal), 75 ohms VIDEO: 1 Vp-p, 75 ohms unbalanced, sync negative AUDIO: 500 mVrms (Typical)/ Impedance: 47 kilohms	
COMPONENT IN 1/2	YPbPr (Component Video): Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative / Pb: 0.7 Vp-p, 75 ohms / Pr: 0.7 Vp-p, 75 ohms / Signal format: 480i, 480p, 720p, 1080i, 1080p AUDIO: 500 mVrms (Typical)/ Impedance: 47 kilohms	
HDMI IN 1/2/3/4	HDMI: Video: 480i, 480p, 720p, 1080i, 1080p, 1080/24p / Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16, 20 and 24bits, Dolby Digital AUDIO (HDMI IN 1 only): 500 mVrms (Typical)/ Impedance: 47 kilohms	
AUDIO OUT	500mVrms (Typical)	
DIGITAL AUDIO OUT (OPTICAL)	Optical Digital Audio Output (PCM/Dolby Digital)	
PC IN	D-sub 15-pin, analog RGB, 0.7 Vp-p, 75 ohms, positive See the PC Input Signal Reference Chart above.	
PC AUDIO INPUT	Stereo mini jack, 500 mVrms (Typical)/ Impedance: 47 kilohms	
LAN (10/100)	10BASE-T/100 BASE-TX Connector (connection speed may vary depending on the network environment. This product does not guarantee network quality or speed of 10 BASE-T/100 BASE-TX terminals.)	
DMPORT	VIDEO: 1 Vp-p, 75 ohms unbalanced, sync negative AUDIO: 500 mVrms (Typical) / Impedance: 47 kilohms	
USB	Hi-Speed USB	
<b>Power and others</b>		
Power requirement	220 VAC, 60 Hz	
Power consumption		
in use	350W	480 W
in standby	All models less than 0.7W	
Screen size (measured diagonally)	116.8 cm (Type 46)	138.8 cm (Type 55)
Display resolution (horizontal × vertical)	1,920 dots × 1,080 lines	
Speaker	Full range: 20 × 140 mm (4) Woofer: 50 × 100 mm (2)	Full range: 33 × 100 mm (4) Tweeter: 30 mm (2) φ Woofer: 50 × 100 mm (2)
Dimensions (W × H × D)		
with stand (mm)	1,259 × 737 × 315	1,486 × 855 × 3561
without stand (mm)	1,259 × 685 × 144	1,486 × 803 × 147
wall-mount hole pattern (mm)	300 × 300	400 × 300
wall-mount screw size (mm)	M6 (length: refer to diagram)	
Mass		
with stand	38.0 kg	54.0 kg
without stand	33.0 kg	47.5 kg
Supplied accessories	Remote control RM-KD009 (1) / Size AA batteries (2) / AC power cord (1) / 75-ohm coaxial cable (1) / Cable holder (1 attached to the Table-Top Stand) / Table-Top Stand (1: KDL-46X4500) / Operating Instructions (1) / Quick Setup Guide (1) / Installing your TV for High Quality Picture (1) / Attaching the Table-Top Stand (1: KDL- 46X4500) / Screws (4: KDL-46X4500) / AC plug holder (1: KDL-70X4500)/ Warranty card (1)	
Optional accessories	Connecting cables Speaker Grill: CRU-46SG11 Wall-Mount Bracket:SU-WL500, SU-WL50B	Connecting cables Speaker Grill: CRU-55SG11 Wall-Mount Bracket:SU-WL500, SU-WL50B

- Optional accessories availability depends on its stock.
- Design and specifications are subject to change without notice.

## PC Input Signal Reference Chart

After connecting the PC to the TV, set the output signal from the PC according to the chart below.

Resolution				Horizontal frequency (kHz)	Vertical frequency (Hz)	Standard
Signals	Horizontal (Pixel)	×	Vertical (Line)			
VGA	640	×	480	31.5	60	VGA
	640	×	480	37.5	75	VESA
	720	×	400	31.5	70	VGA-T
SVGA	800	×	600	37.9	60	VESA Guidelines
	800	×	600	46.9	75	VESA
XGA	1024	×	768	48.4	60	VESA Guidelines
	1024	×	768	56.5	70	VESA
	1024	×	768	60.0	75	VESA
WXGA	1280	×	768	47.4	60	VESA
	1280	×	768	47.8	60	VESA
	1280	×	768	60.3	75	
	1360	×	768	47.7	60	VESA
SXGA	1280	×	1024	64.0	60	VESA
HDTV	1920	×	1080	67.5	60	CEA-861*

\* The 1080p timing when applied to the HDMI input will be treated as a video timing and not PC timing. This affects Picture settings, Wide Mode settings, and PIP function. To view PC content set Picture Mode to Custom, Wide Mode to Full, and Display Area to Full Pixel.

- This TV's PC input does not support Sync on Green or Composite Sync.
- This TV's PC VGA input does not support interlaced signals.
- Your PC must support one of the above PC input signals to display on the television.
- For the best picture quality, it is recommended to use the signals (boldfaced) in the above chart with a 60 Hz vertical frequency. In plug and play, signals with a 60 Hz vertical frequency will be detected automatically. (PC reboot may be necessary.)

## WARNINGS AND CAUTIONS

### 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.



### SAFETY-RELATED COMPONENT WARNING!!

Replace all components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony.

## SAFETY-RELATED COMPONENT WARNING

It is essential that all critical parts be replaced only with the part number specified in the electrical parts list to prevent electric shock, fire, or other hazard.

NOTE: Do not modify the original design without obtaining written permission from the manufacturer or you will void the original parts and labor guarantee.

### 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).

## 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.

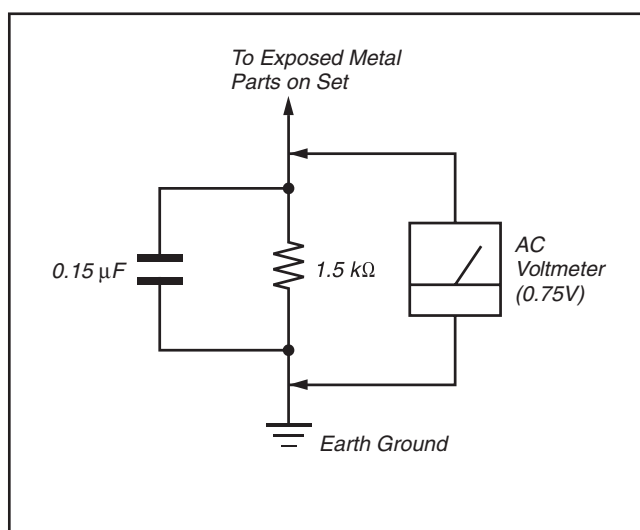


Figure A. Using an AC voltmeter to check AC leakage.

### 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).

### 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).

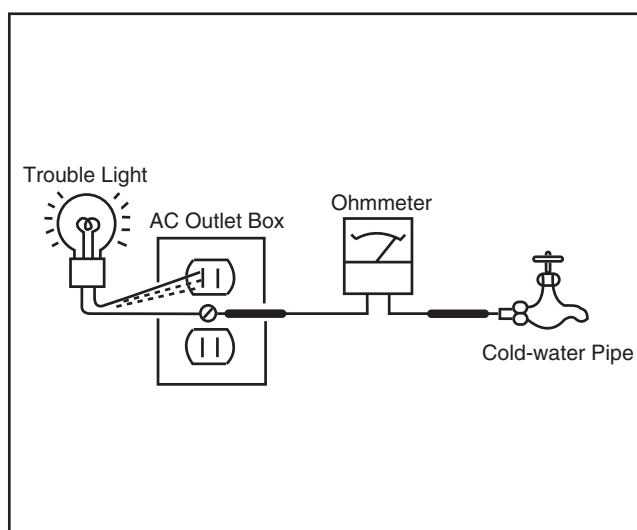


Figure B. Checking for earth ground.

## 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.

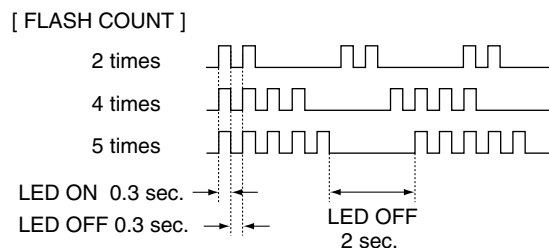
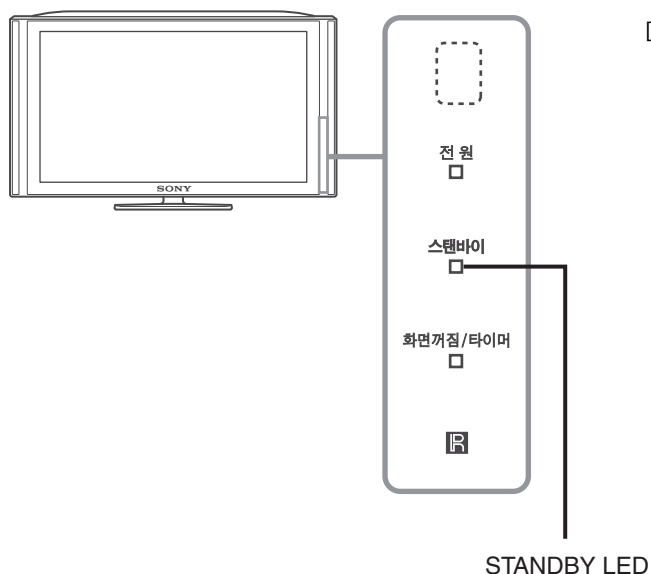
If there is more than one error, the LED will identify the first of the problem areas.

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

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

The number of standby LED (RED) blinking	Item
2 times	Main Power Error
3 times	Power Error2
5 times	Panel Error
6 times	Backlight Error (Panel Inverter)
7 times	Panel TEMP. Error
8 times	Audio Error
9 times	Fan Error
13 times	Panel Balancer Error

### DISPLAY OF STANDBY LIGHT FLASH COUNT



Note: One flash counts is not self-diagnostic.

### STOPPING THE STANDBY FLASH

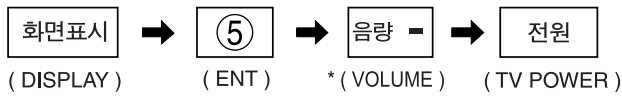
Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY LED for flashing.

## 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:

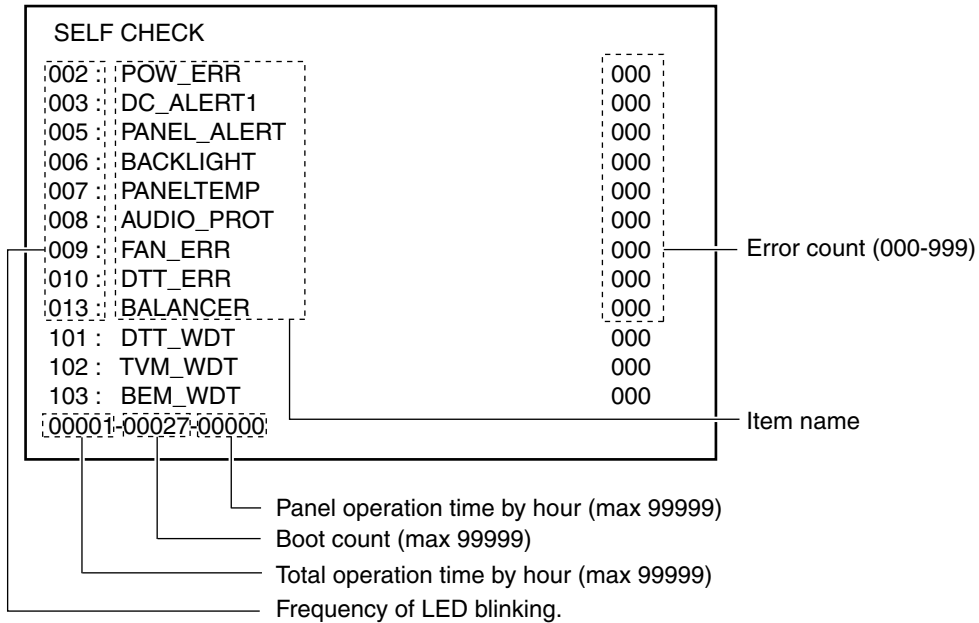
### [To Bring Up Screen Test]

In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:



\* : This differs from accessing Service Adjustments.

### [ SELF-DIAGNOSTIC SCREEN DISPLAY ]



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 result display

To clear the result display to “0”, press button on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

<Delection of Error Count and Error History>

Press “8” button ➔ Press “0” button

<Delection of Panel Operation Time>

Press “7” button ➔ Press “0” button

### Quitting Self-diagnostic screen

To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

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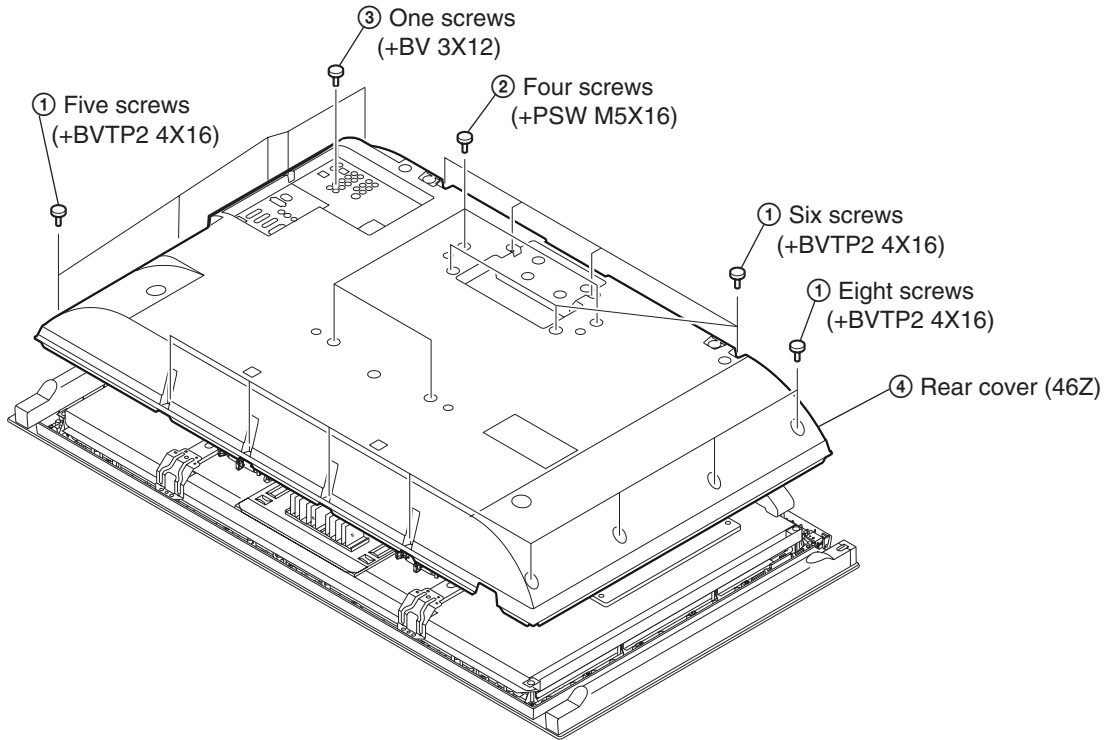
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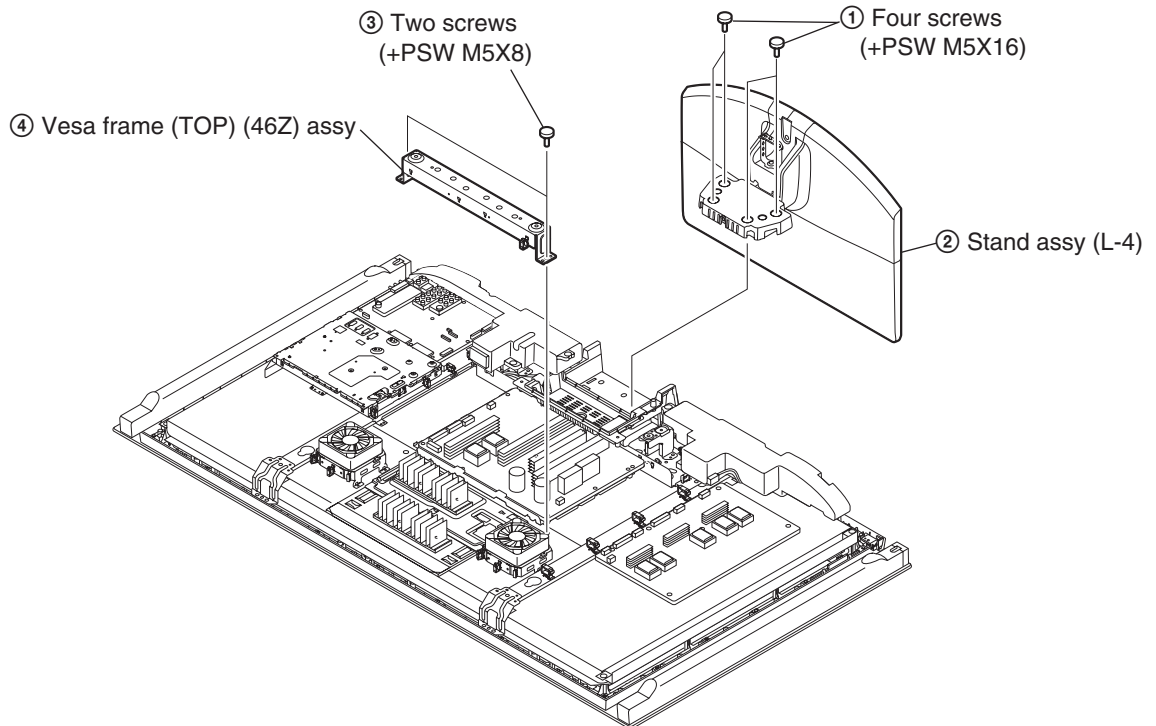
# SECTION 1 DISASSEMBLY

## 1-1. KDL-46X4500

### 1-1-1. REAR COVER REMOVAL

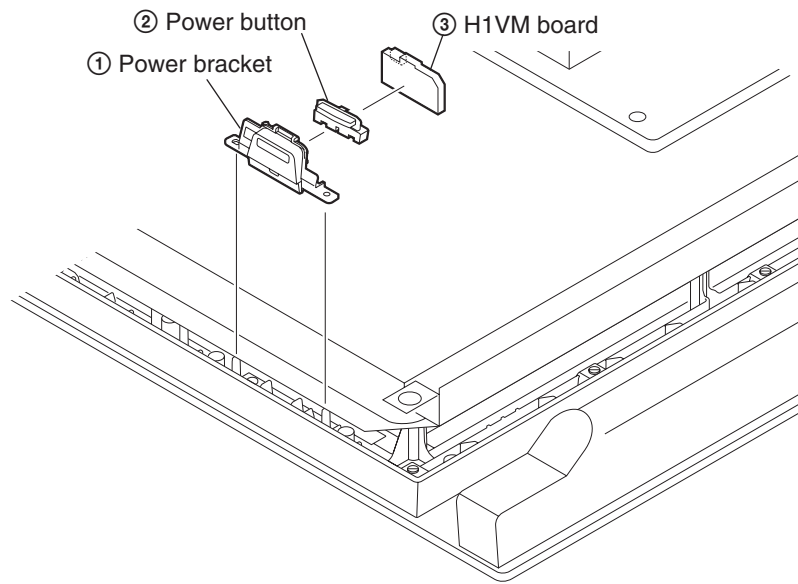


### 1-1-2. STAND ASSY REMOVAL

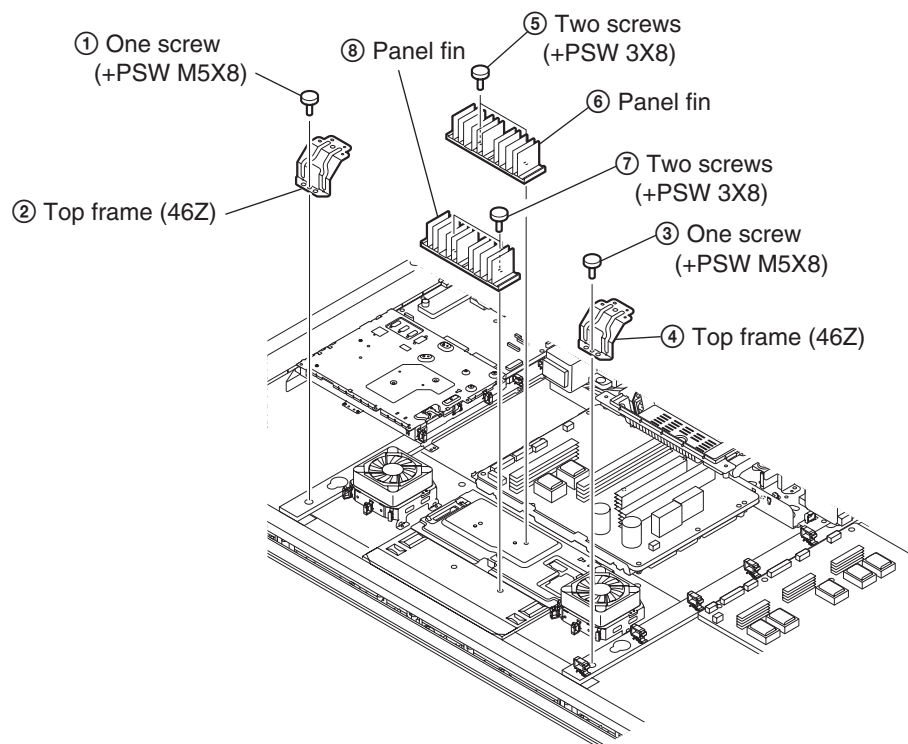


# KDL-46X4500

## 1-1-3. H1VM BOARD REMOVAL

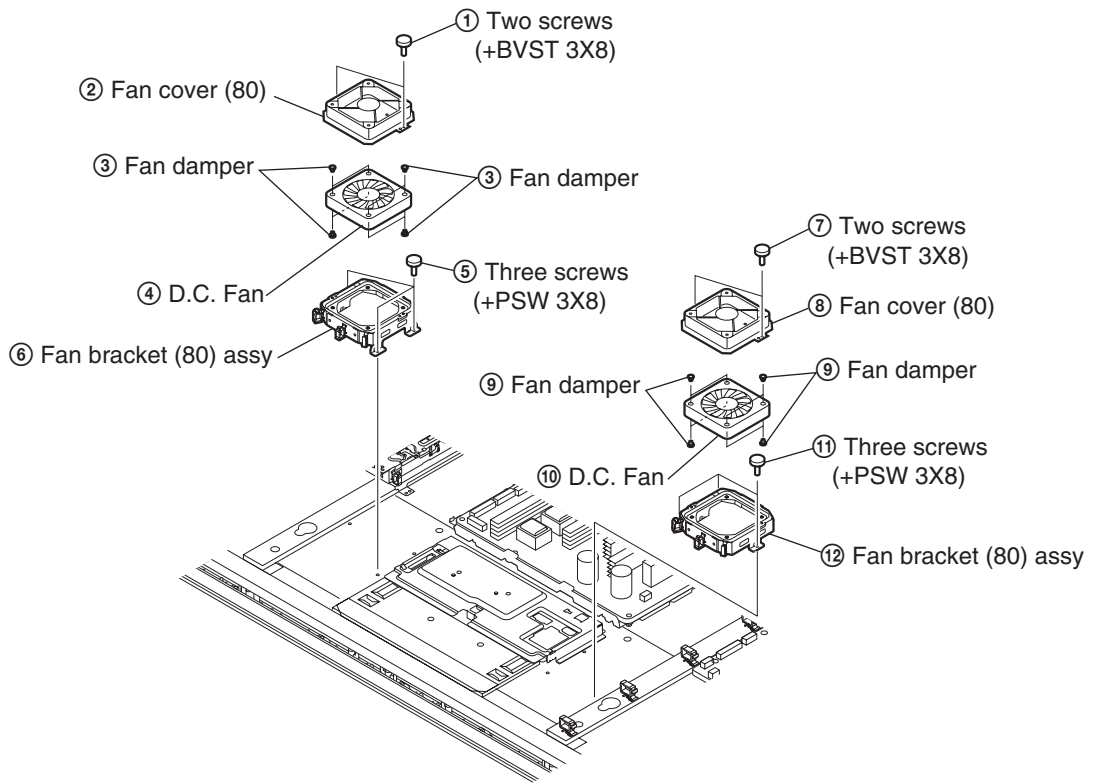


## 1-1-4. PANEL FIN REMOVAL

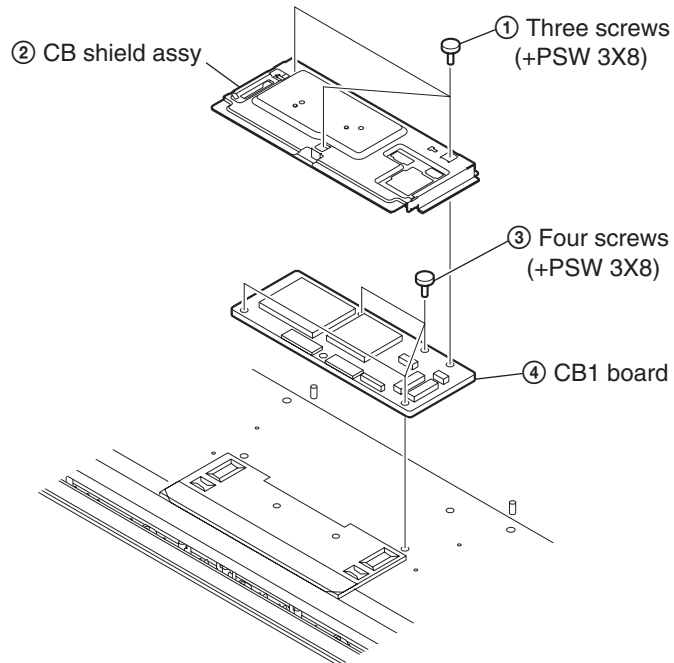


# KDL-46X4500

## 1-1-5. FAN REMOVAL

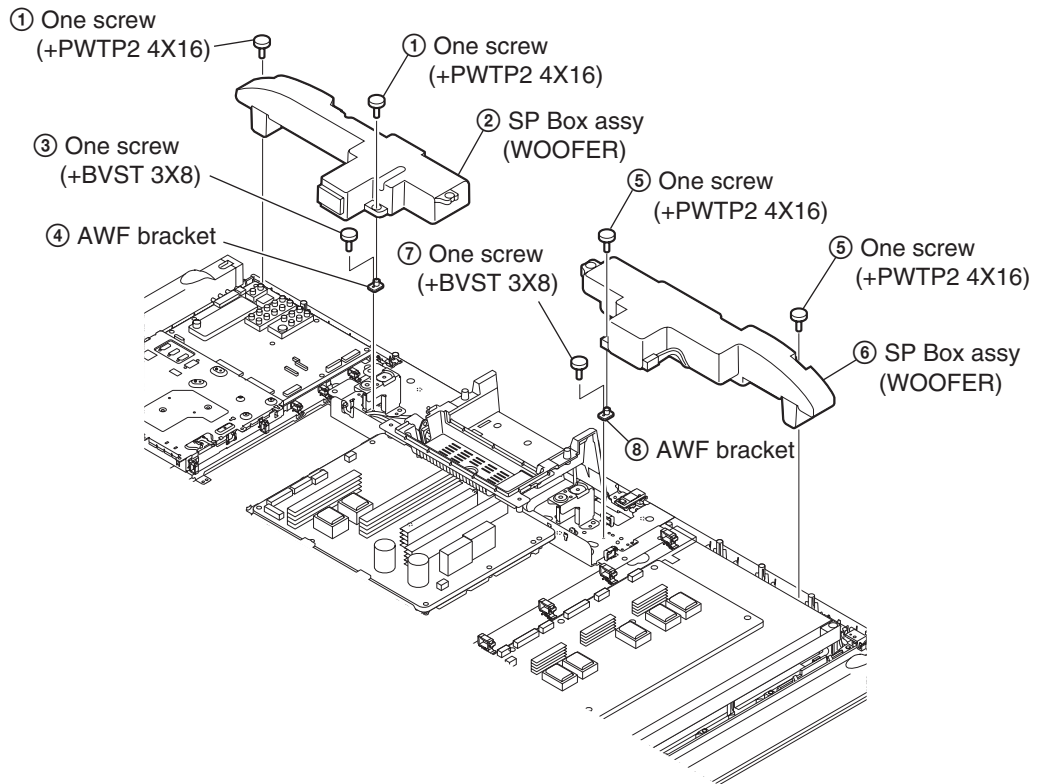


## 1-1-6. CB1 BOARD REMOVAL

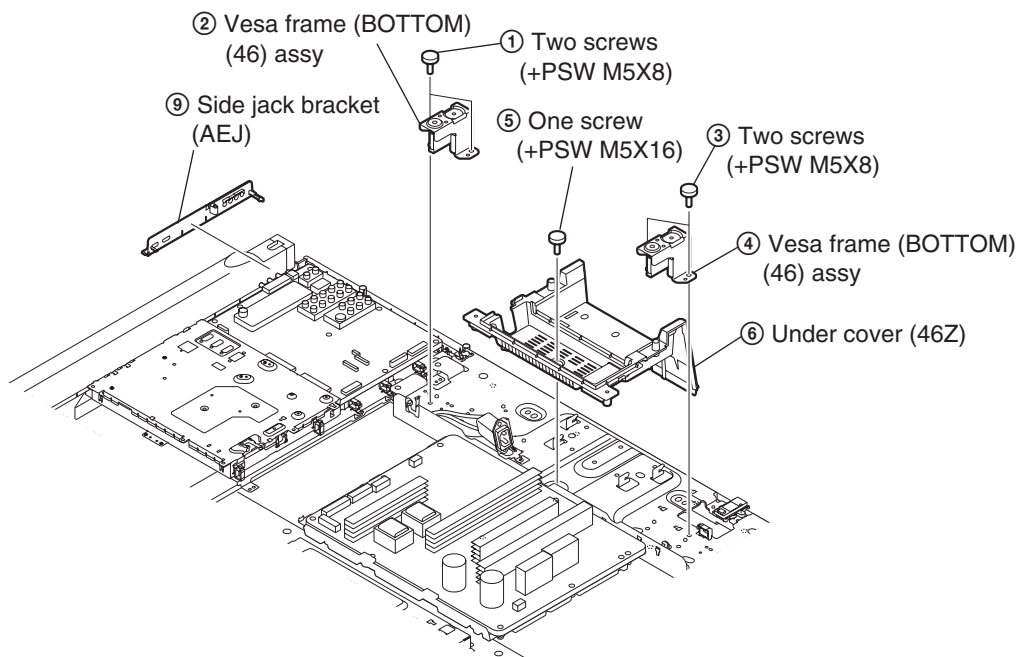


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## 1-1-7. SP BOX (WOOFER) REMOVAL

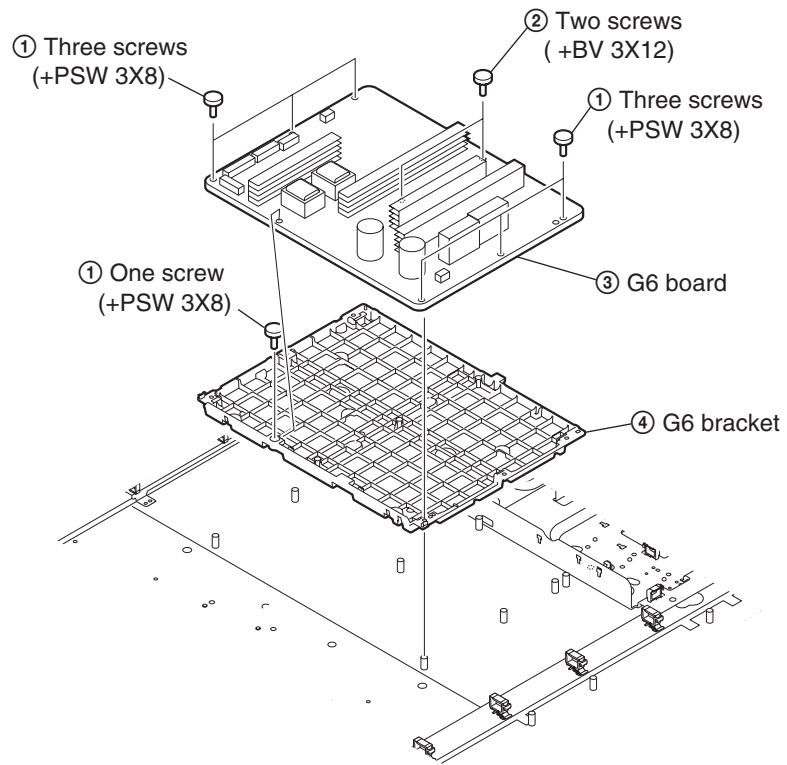


## 1-1-8. UNDER COVER, SIDE JACK BRACKET REMOVAL

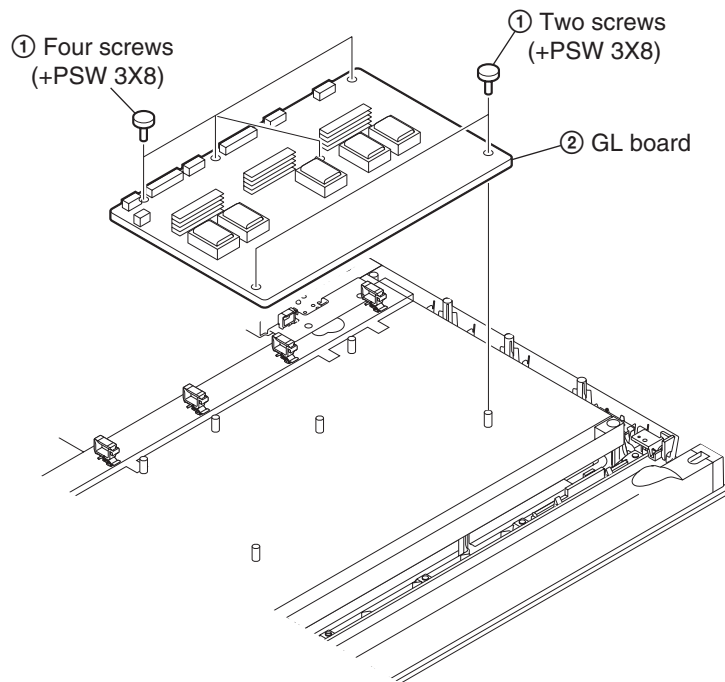


## KDL-46X4500

### 1-1-9. G6 BOARD REMOVAL

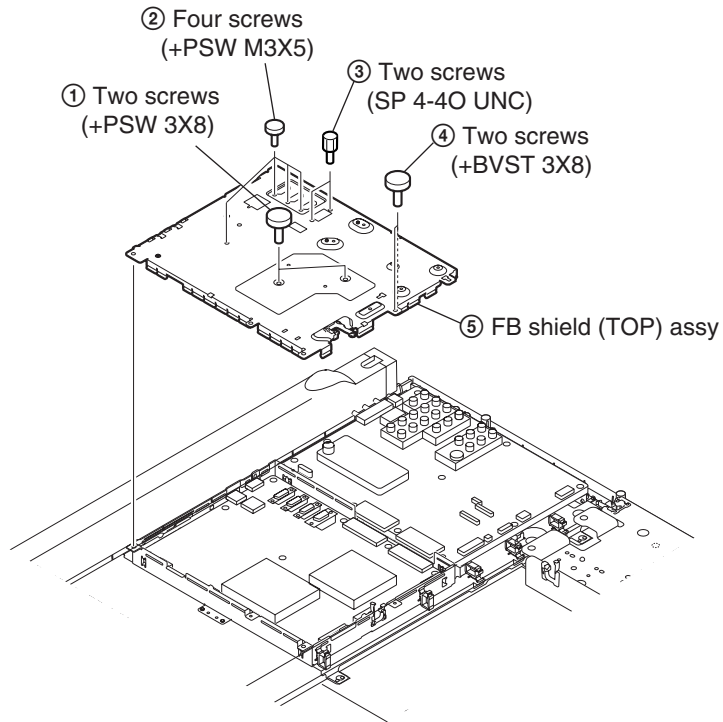


### 1-1-10. GL BOARD REMOVAL

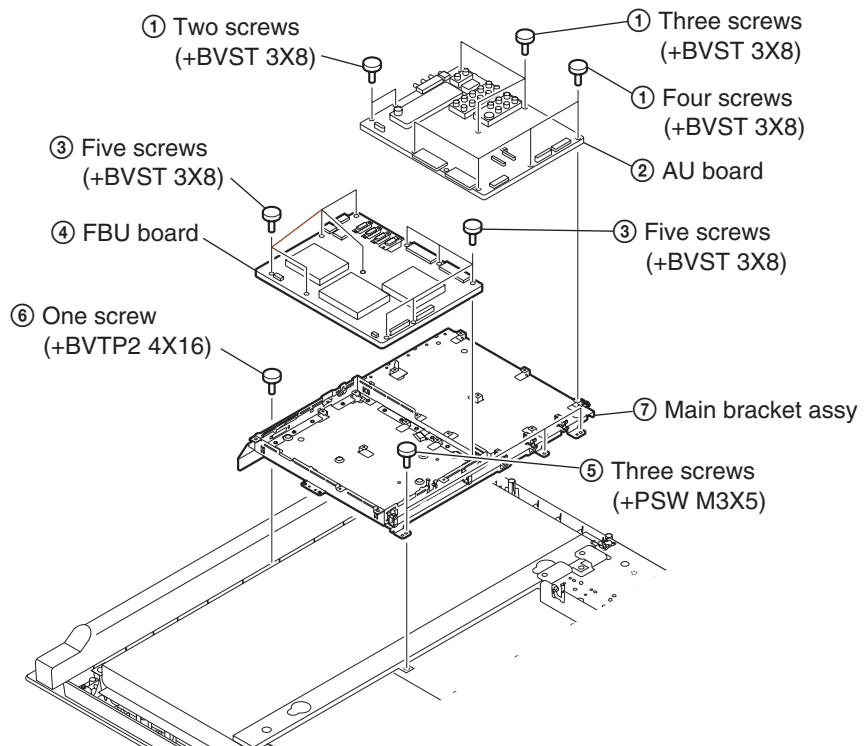


# KDL-46X4500

## 1-1-11. FB SHIELD ASSY REMOVAL

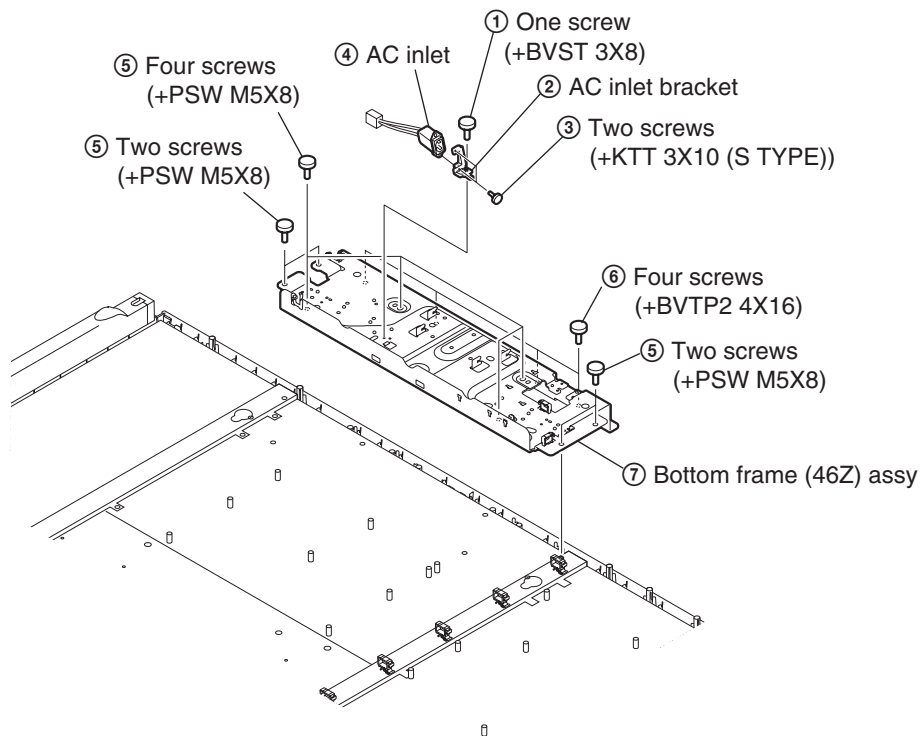


## 1-1-12. AU AND FBU BOARDS REMOVAL

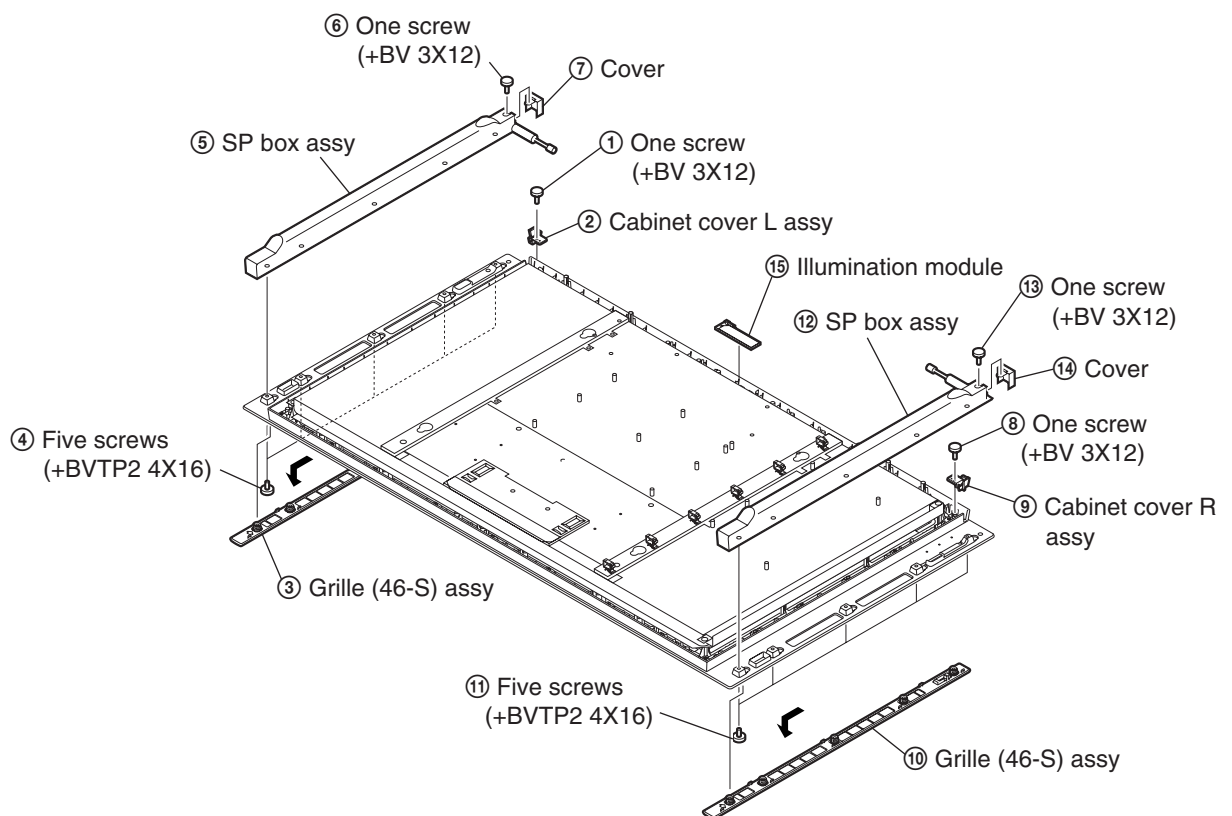


# KDL-46X4500

## 1-1-13. AC INLET REMOVAL

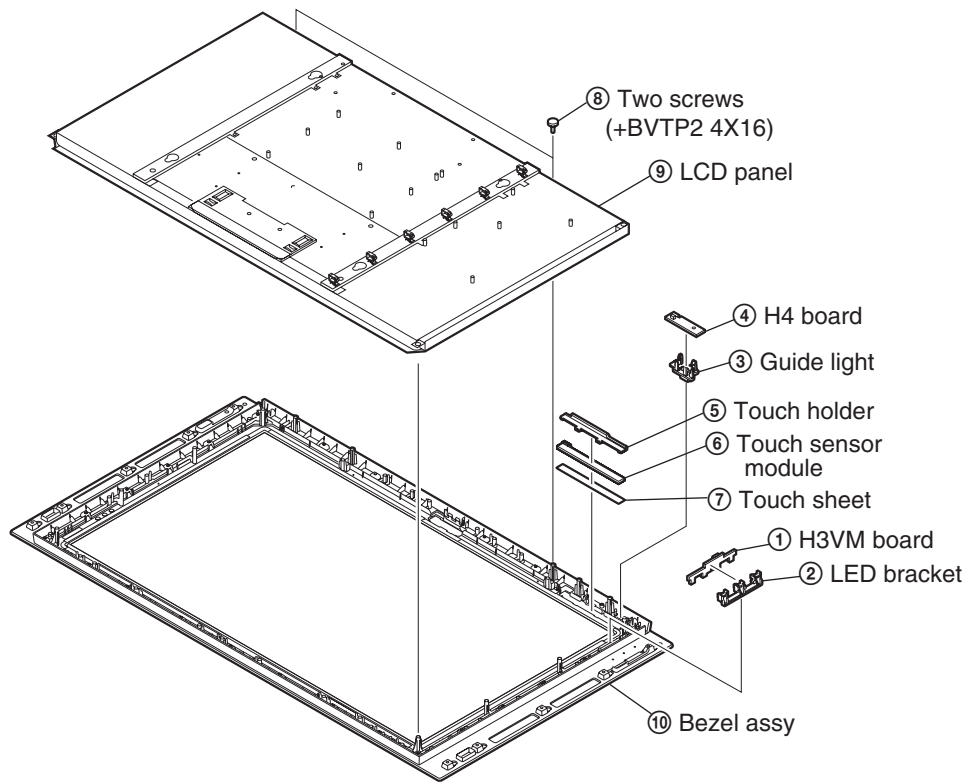


## 1-1-14. SPEAKER BOX ASSY AND GRILLE ASSY REMOVAL



# KDL-46X4500

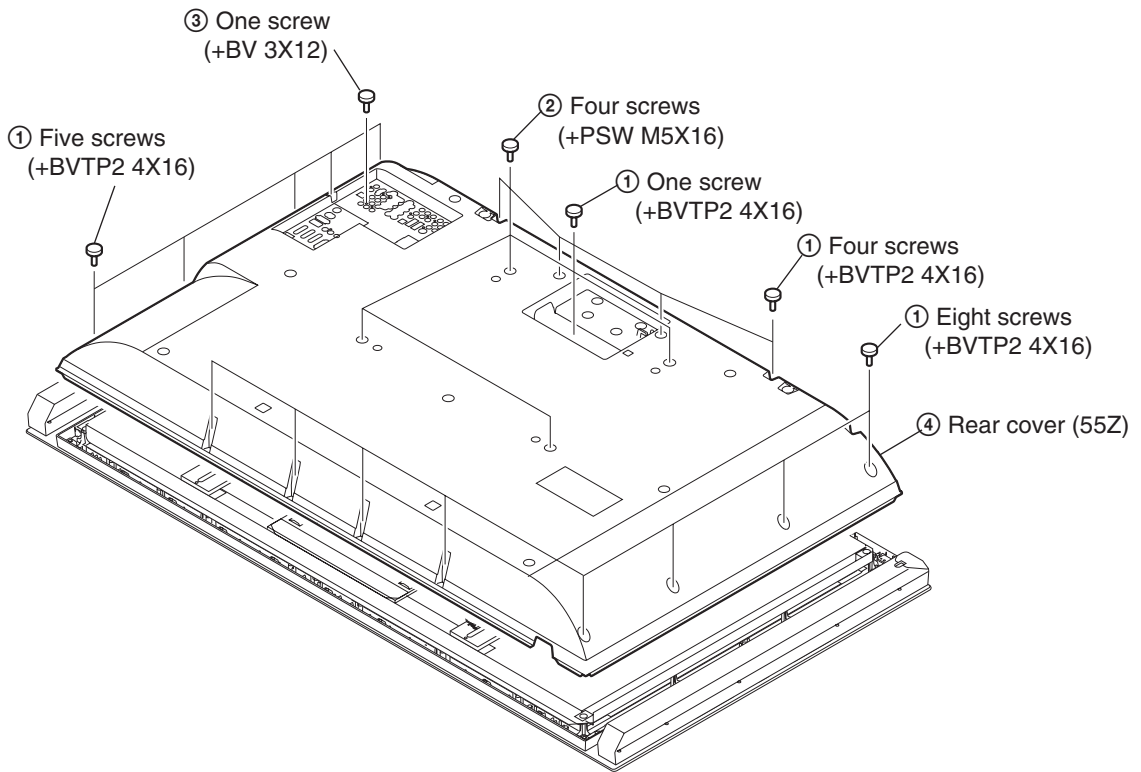
## 1-1-15. LCD PANEL, H3VM BOARD, H4 BOARD AND TOUCH SENSOR MODULE REMOVAL



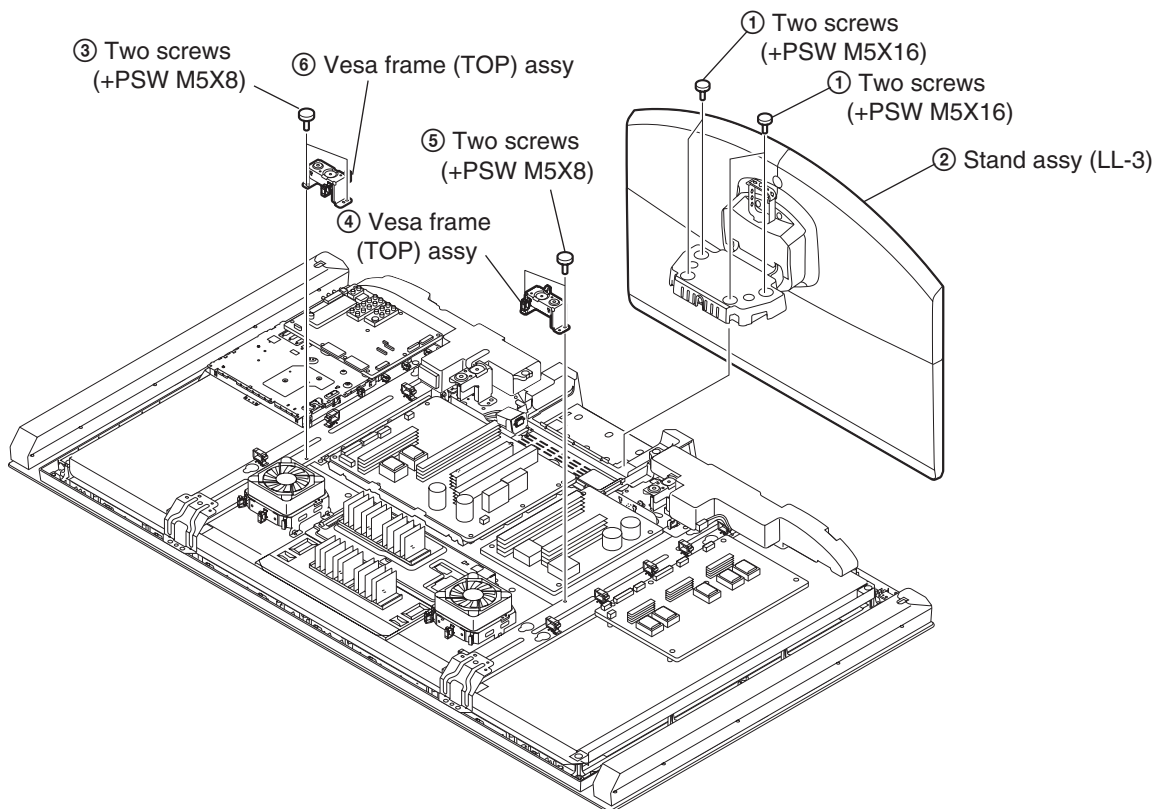


## 1-2. KDL-55X4500

### 1-2-1. REAR COVER REMOVAL

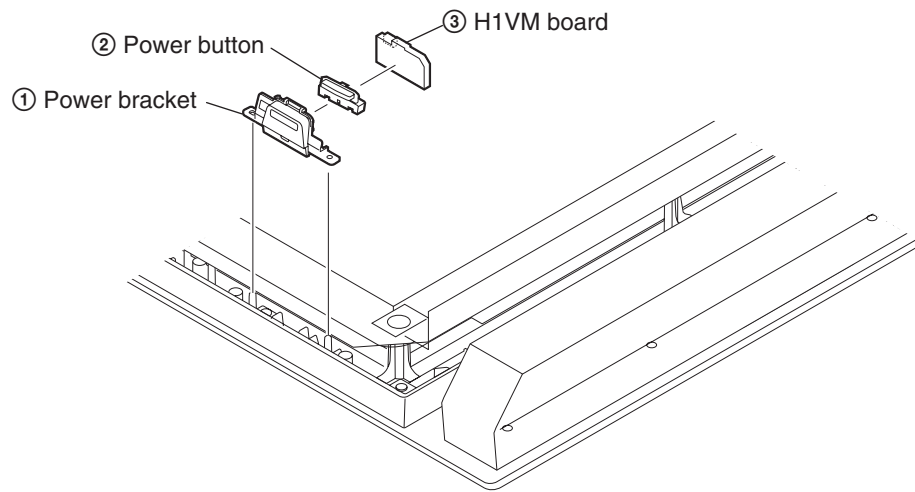


### 1-2-2. STAND ASSY REMOVAL

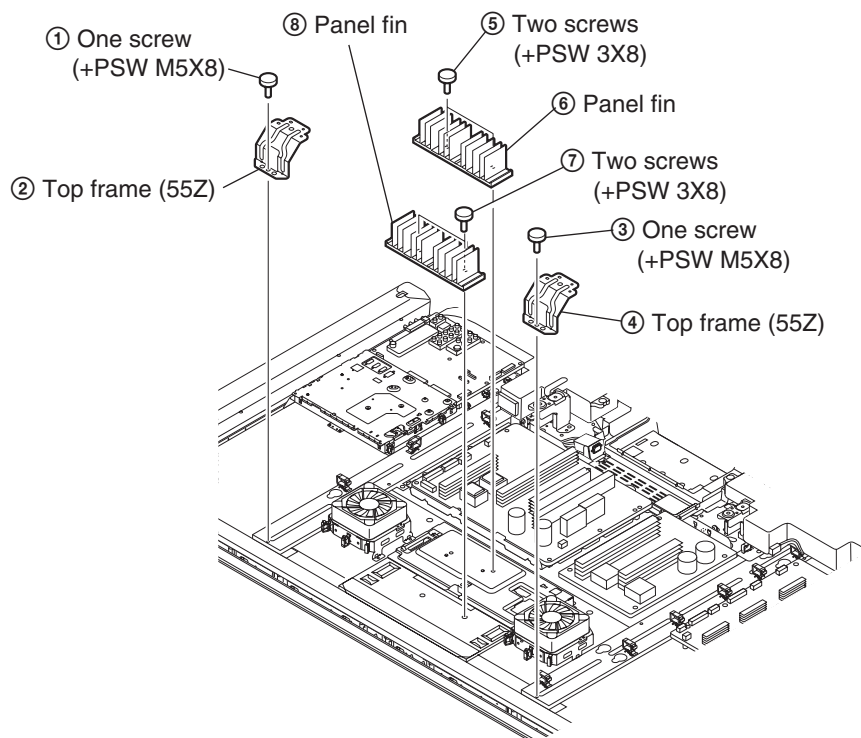


# KDL-55X4500

## 1-2-3. H1VM BOARD REMOVAL

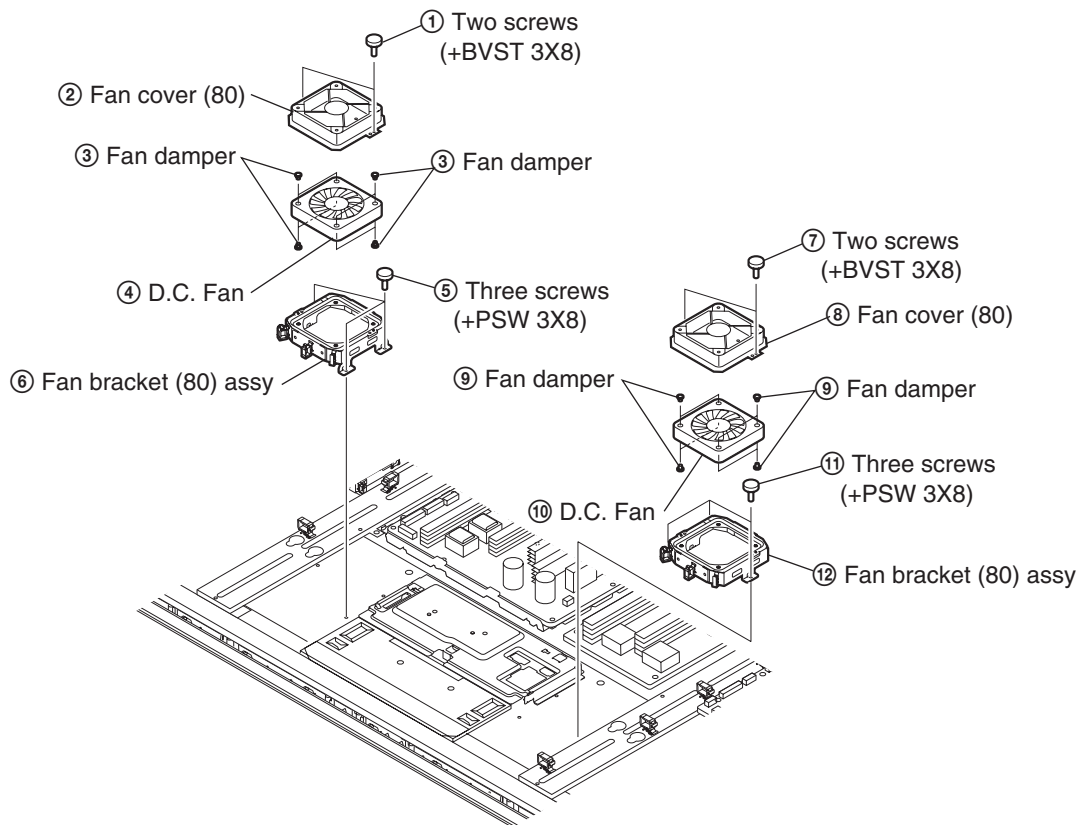


## 1-2-4. PANEL FIN REMOVAL

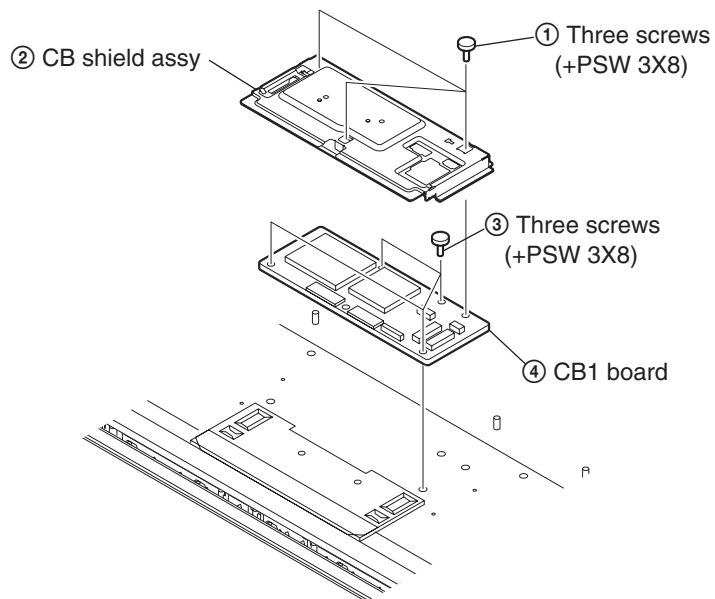


# KDL-55X4500

## 1-2-5. FAN REMOVAL

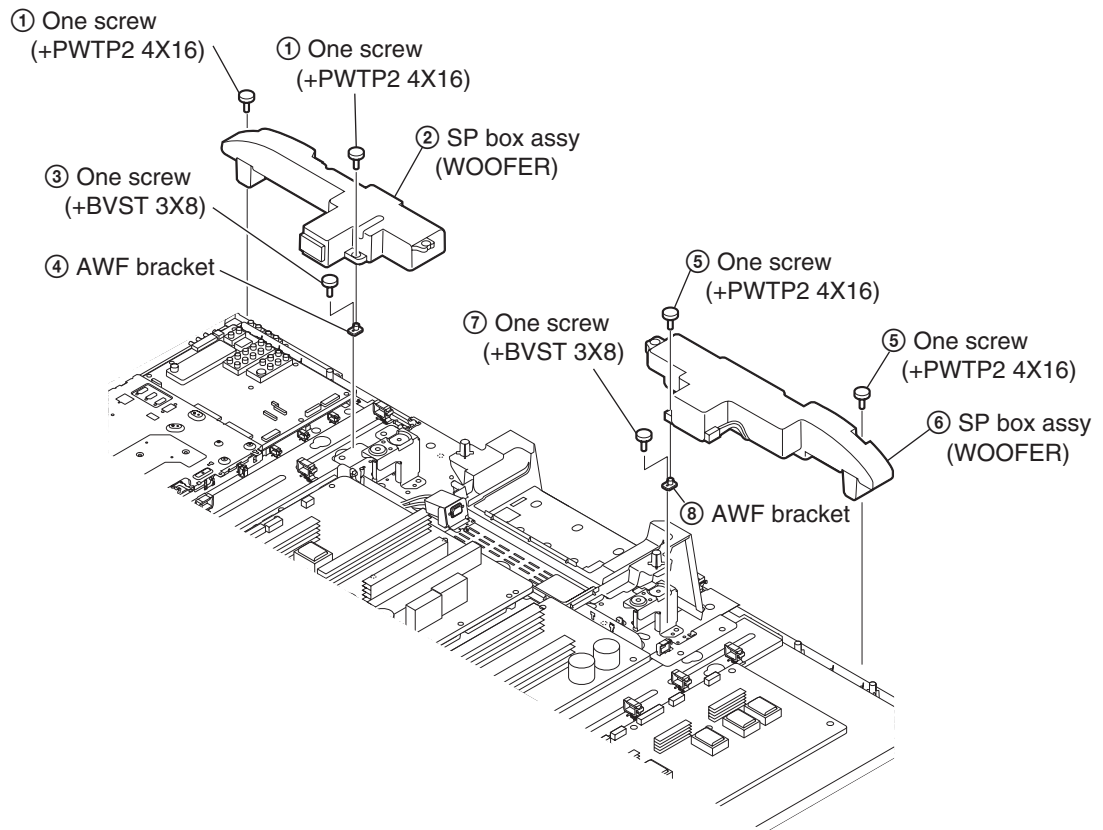


## 1-2-6. CB1 BOARD REMOVAL

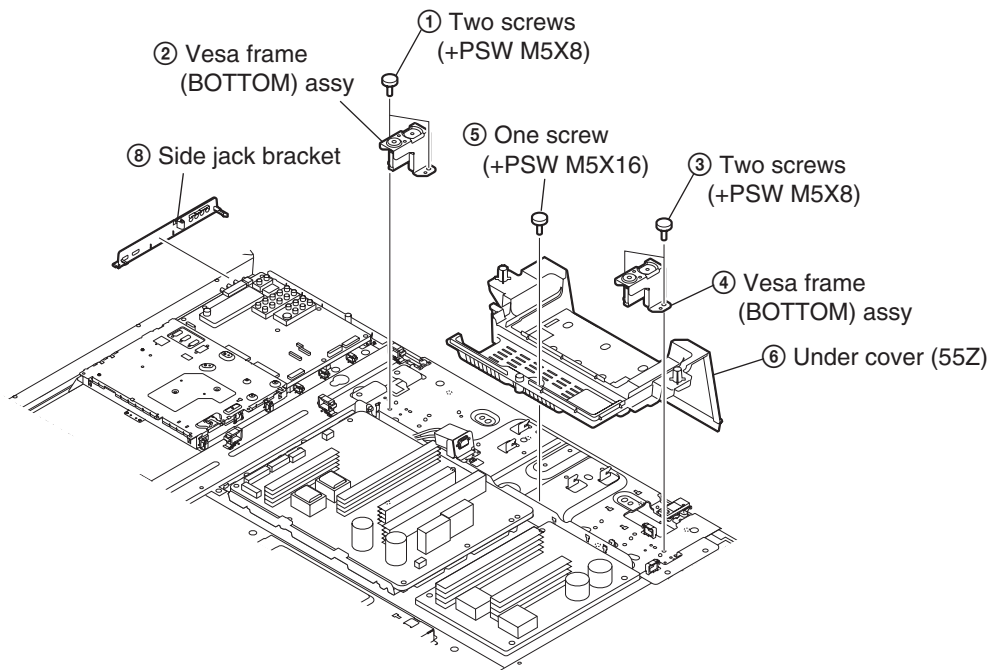


# KDL-55X4500

## 1-2-7. SP BOX (WOOFER) ASSY REMOVAL

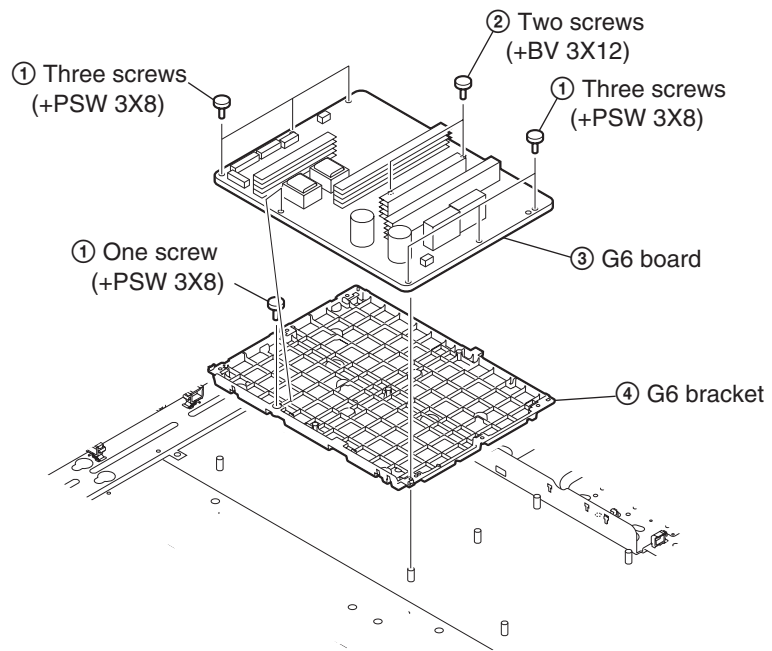


## 1-2-8. UNDER COVER, SIDE JACK BRACKET REMOVAL

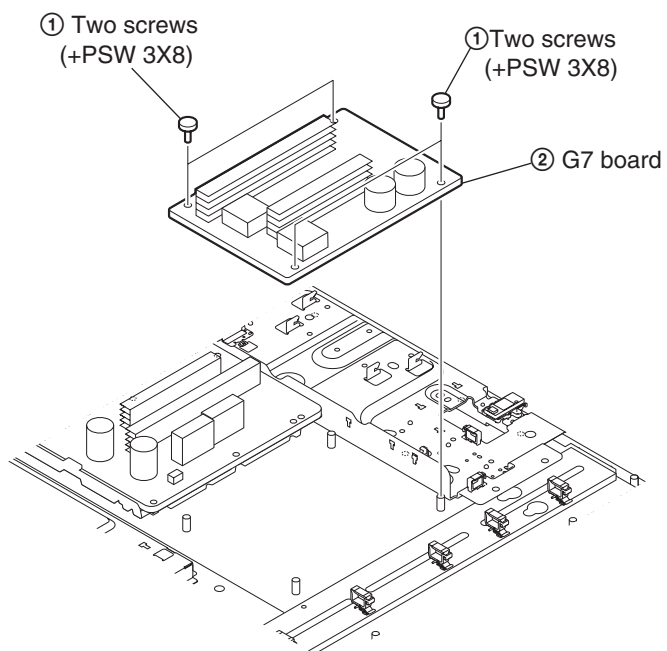


# KDL-55X4500

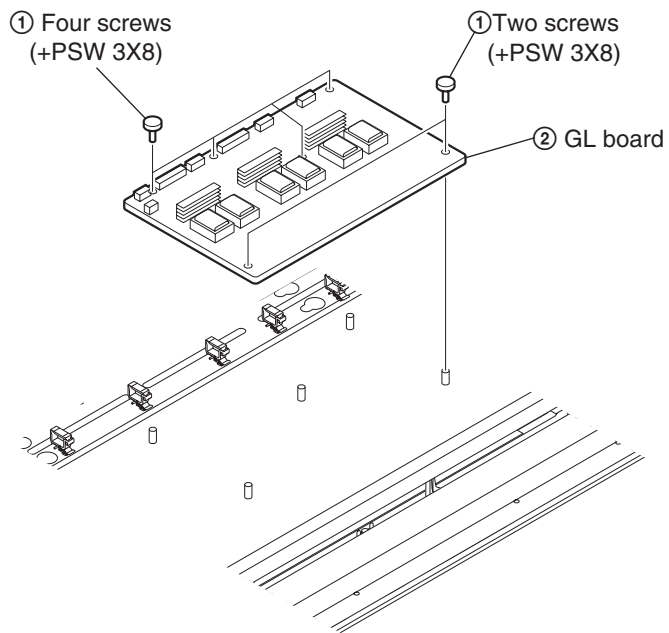
## 1-2-9. G6 BOARD REMOVAL



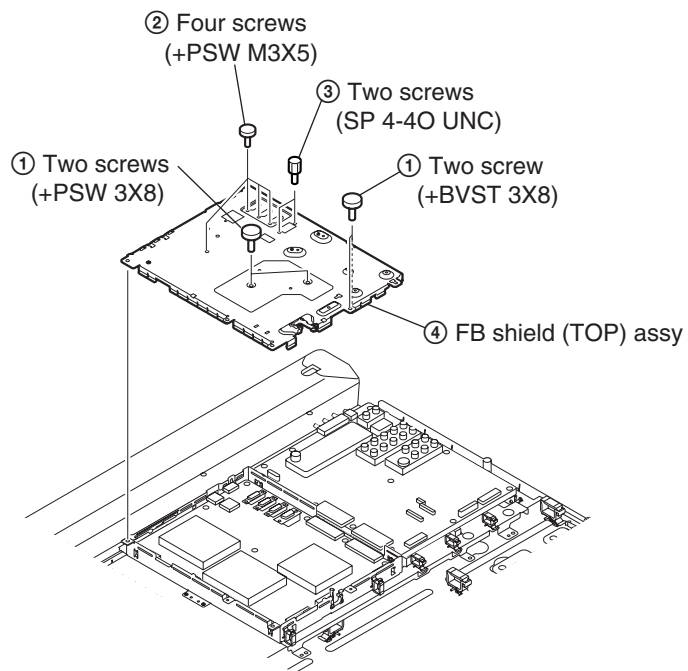
## 1-2-10. G7 BOARD REMOVAL



**KDL-55X4500**  
**1-2-11. GL BOARD REMOVAL**

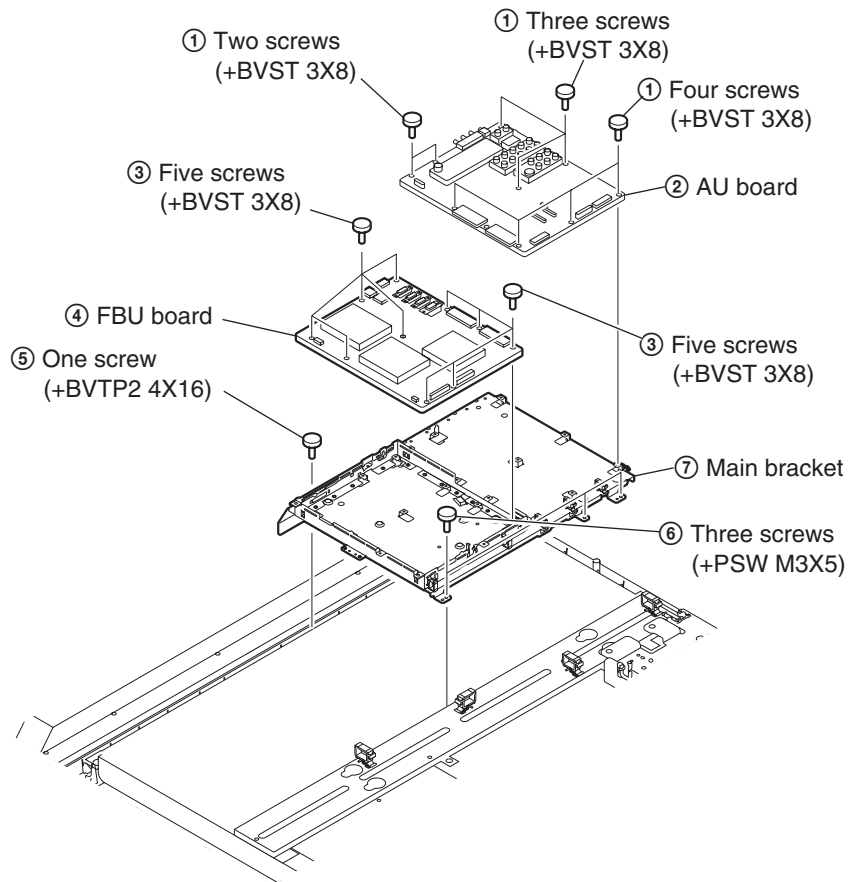


**1-2-12. FB SHIELD ASSY REMOVAL**

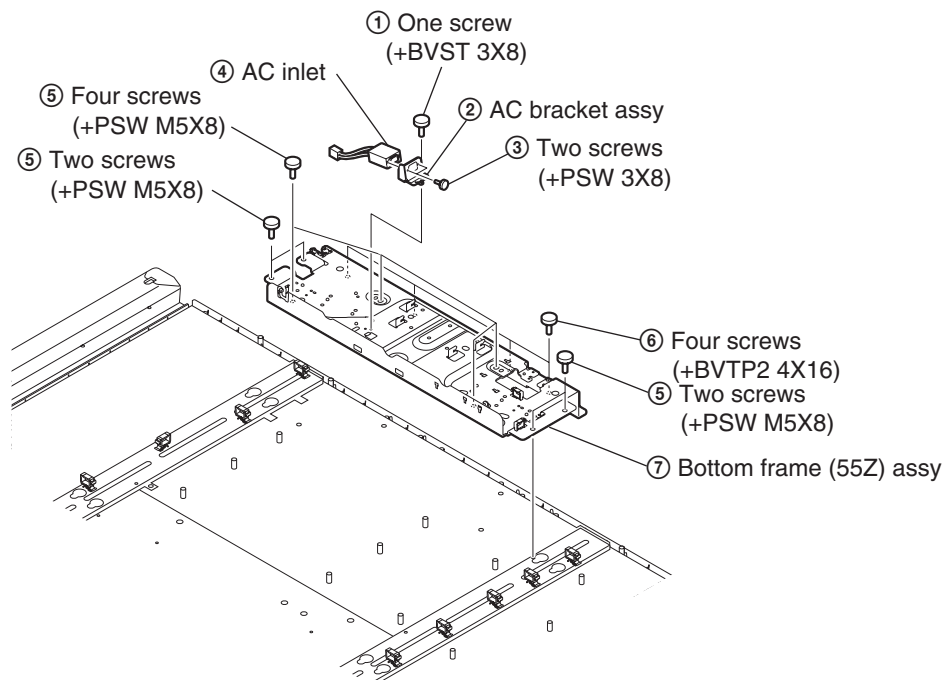


# KDL-55X4500

## 1-2-13. AU AND FBU BOARDS REMOVAL

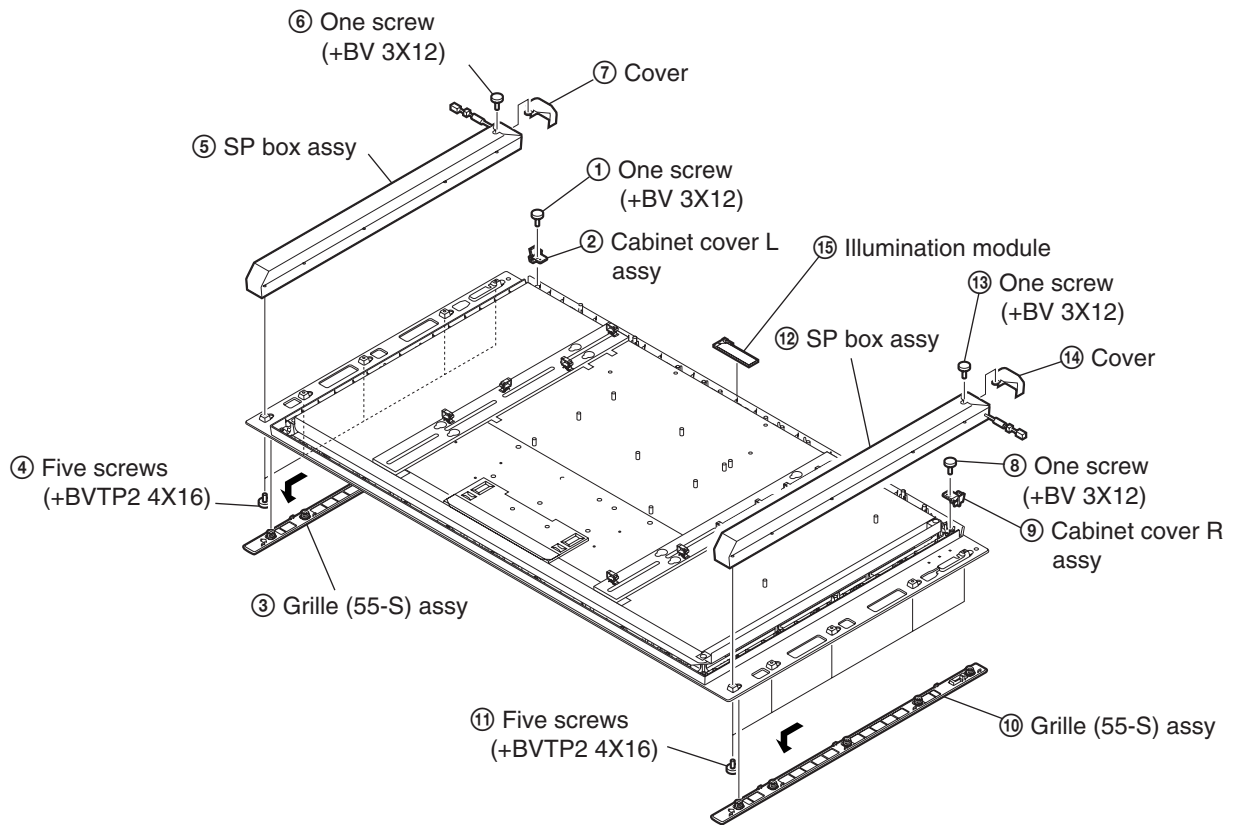


## 1-2-14. AC INLET REMOVAL

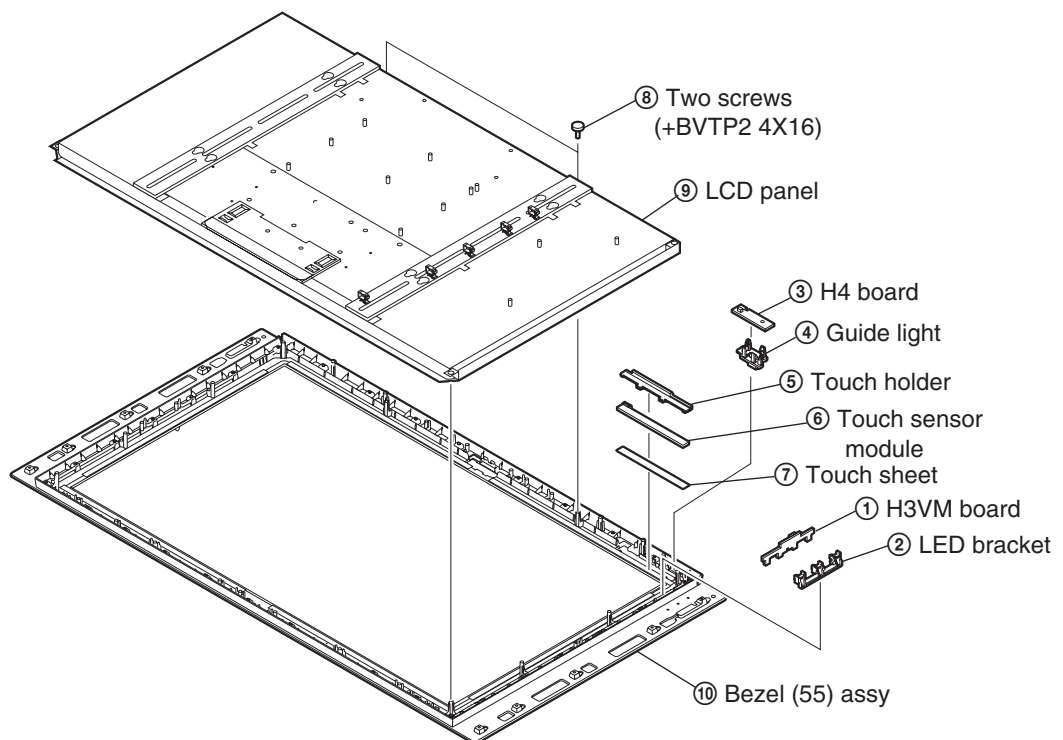


# KDL-55X4500

## 1-2-15. SPEAKER BOX ASSY REMOVAL



## 1-2-16. LC PANEL, H3VM BOARD, H4 BOARD AND TOUCH SENSOR MODULE REMOVAL





## SECTION 2 TROUBLESHOOTING

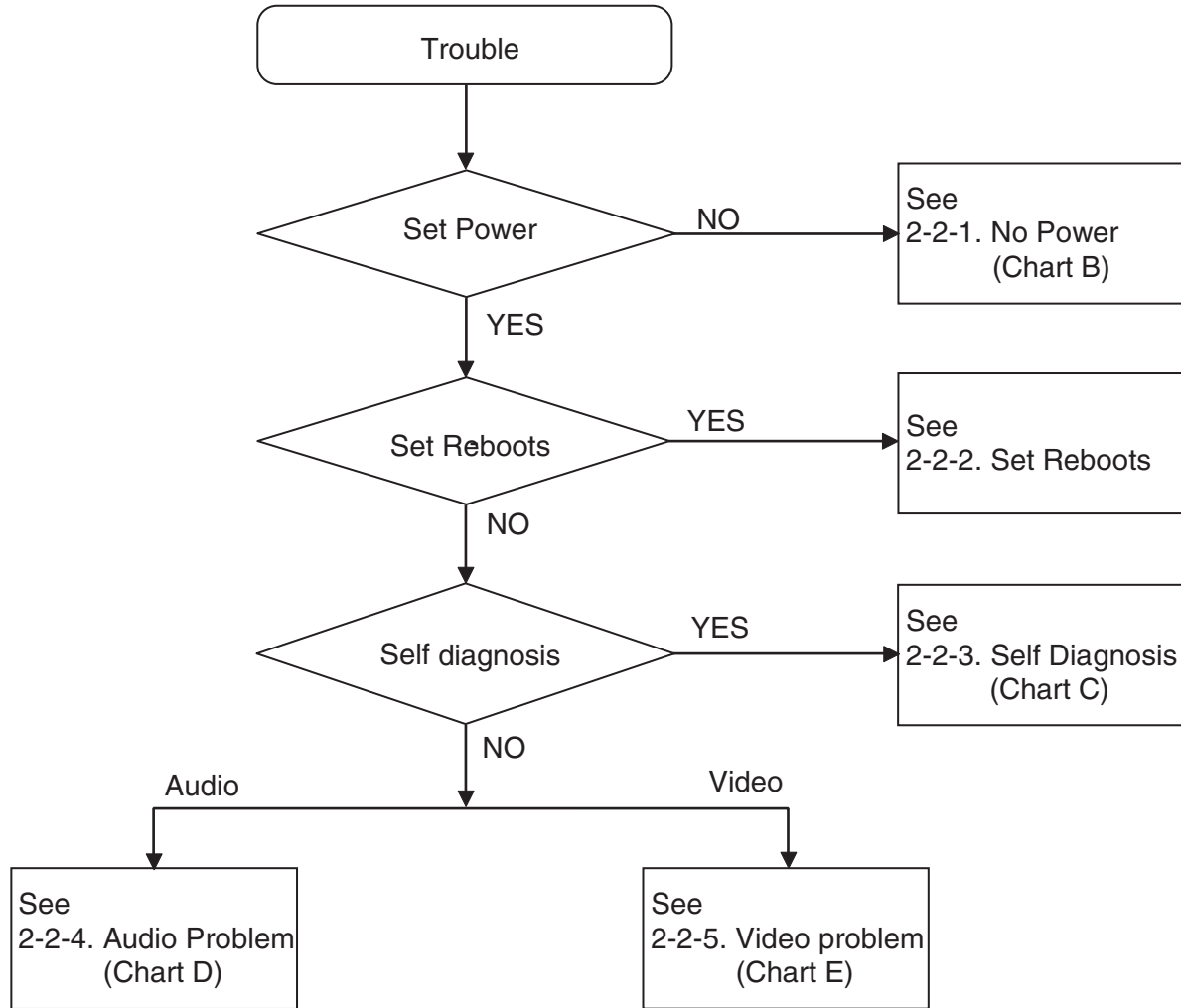
### 2-1. TRIAGE CHART

Reference	Symptoms - (dead set)									Video - distorted or missing					
	2 Blinks	3 Blinks	5 Blinks	6 Blinks	7 Blinks	8 Blinks	9 Blinks	13 Blinks	No Power	No Video BL OK OSD OK	No Video No BL	No Video BL OK No OSD	No Tuner Video OK	No HDMI	No Audio
AU Board	●	●			●	●	●		▲	●			●	▲	●
FBU Board	▲	●	▲	●	▲		▲	●		●	●	●	●	●	
CB1 Board (46"/55")			●	●				●			●	●			
G6/G7 Board (55")	●	▲		●					●		●				
GL Board (46"/55")		▲		●					●		●				
Panel Module			●	●				●			●				
LVDS cable between FBU Board and CB1 Board			▲					▲			●	●			
Joint connector of AU Board and FBU Board	●						▲		●	●			▲	▲	
Flowchart Reference	C	C	C	C	C	C	C	C	B	E	E	E	E	E	D
Problem	Low B+	DC_ALERTI	T-CON	BL	Temp	Audio	FAN	Balancer							

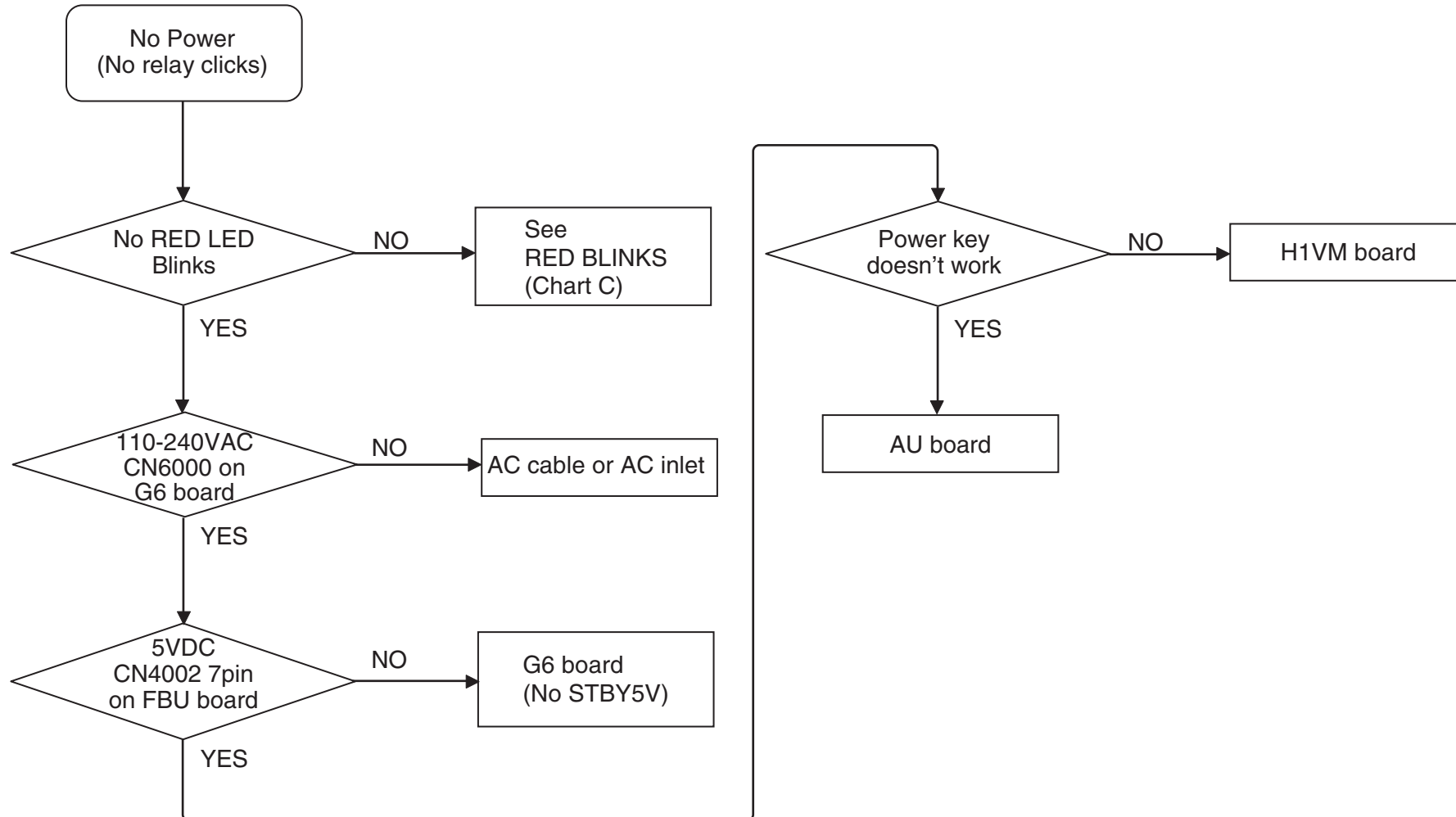
● : Doubtful part

▲ : just a few possibility

## 2-2. FLOW CHART



## 2-2-1. NO POWER (Chart B)



## 2-2-2. SET REBOOTS

TV micro (on AU board) is monitoring if BE Micro & EMMA (on FBU board) are alive or on abnormal status by watch dog timer. When BEM or EMMA has not boot up, TVM try to re-start. We can see chassis reboot at this case. Check whether FBU board is supplied with correct power or not.

- FBU board
  - CN4002 12V power and harness to G6 board.
  - F2800, F4100, F4101, F4102, F5400, F7800, F7801 conduction.

If power rail has no problem, replace FBU board.

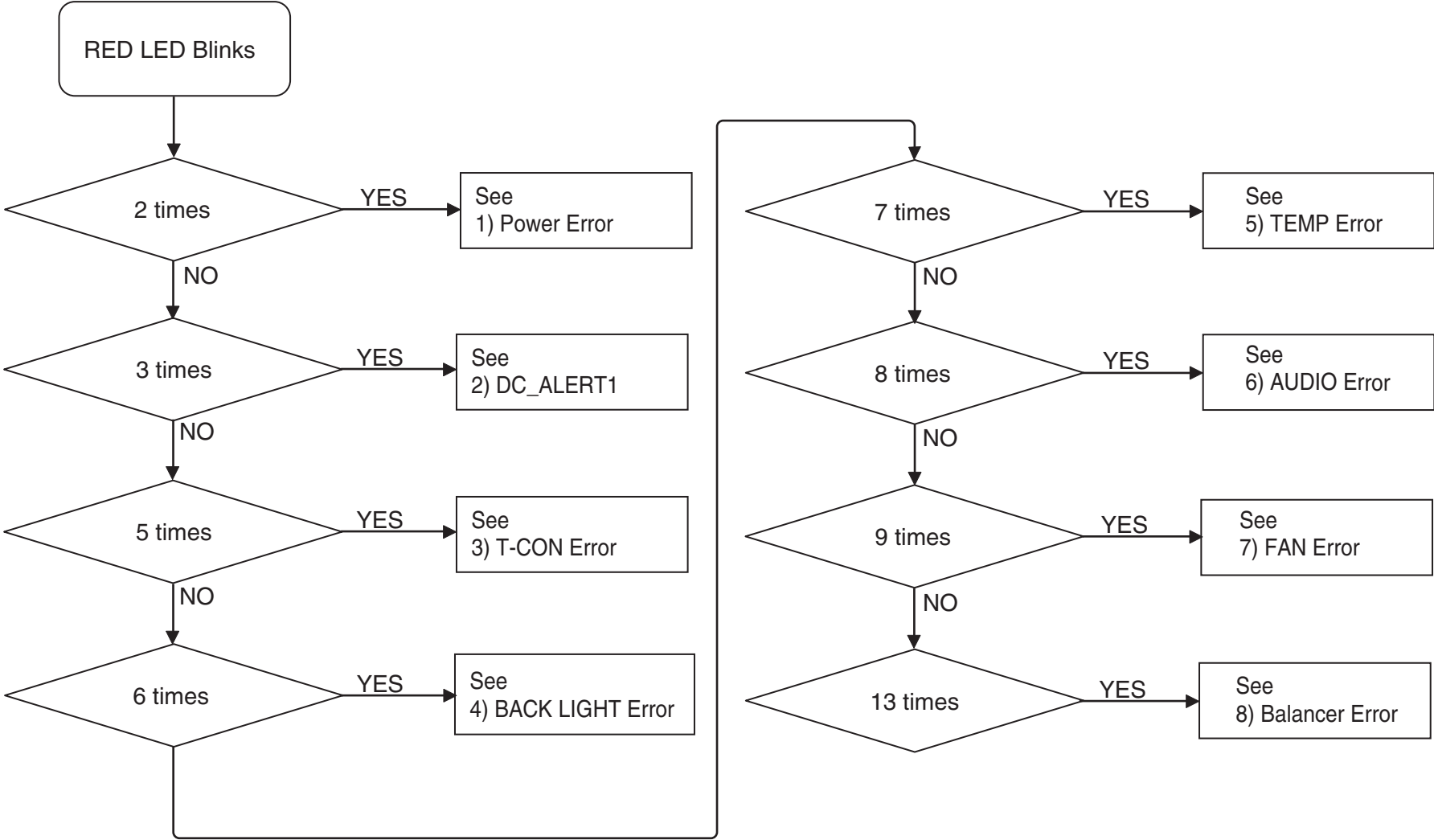
## 2-2-3. SELF DIAGNOSIS

### 2-2-3-1. RED LED BLINKS TABLE

The number of standby LED (RED) blinking	Item
2 times	Main Power Error
3 times	Power Error2
5 times	Panel Error
6 times	Backlight Error (Panel Inverter)
7 times	Panel TEMP. Error
8 times	Audio Error
9 times	Fan Error
13 times	Panel Balancer Error

When self diagnosis happens, STBY (RED) LED blinks and the history can be seen on display by self diagnosis mode.

2-2-3-2. RED LED BLINKS (Chart C)



### 1) Power Error (RED 2 times blink)

This indicates POWER Error, Low B error of 12V from G6 board. TV Micro (on AU board) monitors pin79 and pin138 to detect POWER\_ERR and shuts down chassis power to Standby status.

TV Micro pin138 Normal condition : Low / Error case : High  
TV Micro pin79 i\_lb\_err < 0.7V(PW\_ERR\_LEV)

- Check 12V at CN 1000 on AU board. And F1001 on AU has 12V or not.
- Check G6 board.

### 2) DC\_ALERT1 (RED 3 times blink)

This indicates Power Error, DC\_ALERT1 of REG5V from FBU board.  
TV Micro (on FBU board) Pin26 detects DC\_ALERT1 and shuts down chassis power to standby status.

TV Micro Pin26 Normal condition: High / Error case: Low

- Check 12V at CN1411 Pin11, Pin12 and Pn13 on FBU board.  
And F7005 on FBU board has 12V or not.
- Check G6 Board.
- Check IC7132 (on FBU Board).

### 3) T-CON Error (RED 5 times blink)

This indicates T-CON RDY signal error from timing controller of Panel module.  
BE micro pin128 on FBU board detects it.

BE Micro pin128 Normal condition : High / Error case : Low

Replace Panel module.

#### 4) Back Light Error (RED 6 times blink)

This indicates panel power circuit error such as inverter.  
BE micro pin 78 on FBU board detects it.

BE Micro pin 78 Normal condition : High / Error case : Low

#### 5) Temp Error (RED 7 times blink)

This indicates high temperature inside chassis. IC1000 on AU board Side is monitoring temperature. IC1000 is controlled by BEM I2C.

When it happens;

- Check chassis environment.
- Check around IC1000 and replace AU board if temperature monitoring circuit has problem.

#### 6) Audio Error (RED 8 times blink)

This indicates Audio Error. (Protection)

It happens;

- Error of Speakers and Harness.

Check Voltage at CN1002 20pin on AU board. ( Low = Normal , High= Error)

- Low Voltage at IC1800 [ Audio\_Vcc(=12V) , A9V , D3.3V ]
- Error of IC1800

Replace AU board.

### 7) FAN Error (RED 9 times blink)

This indicates FAN error. (except 40 inch model)  
BE micro pin154 on FBU board detects it.

BE Micro pin154 Normal condition : Low / Error case : High

- Check the harnessconnection of FAN.
- Check the Voltage at CN1301 on AU board. ( Low = Error , High = Normal)

Replace the FAN.

### 8) Balancer Error (RED 13 times blink)

This indicates Inverter board error of panel module.  
BE micro pin163 on FBU board detects it.

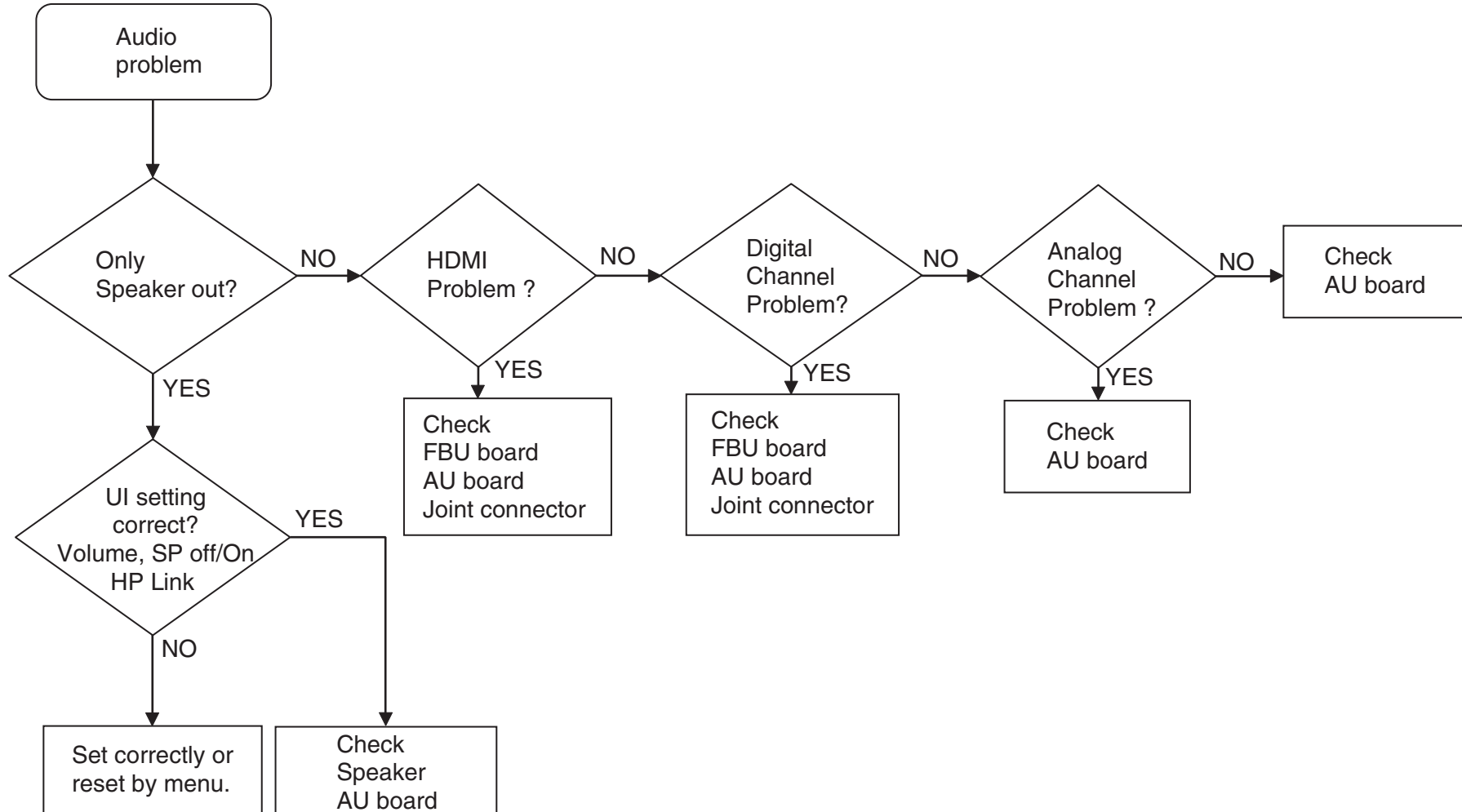
BE Micro pin163 Normal condition : High / Error case : Low

46", 55": Check harness connection between CN 9700, 9701 on CB1 board and panel module.



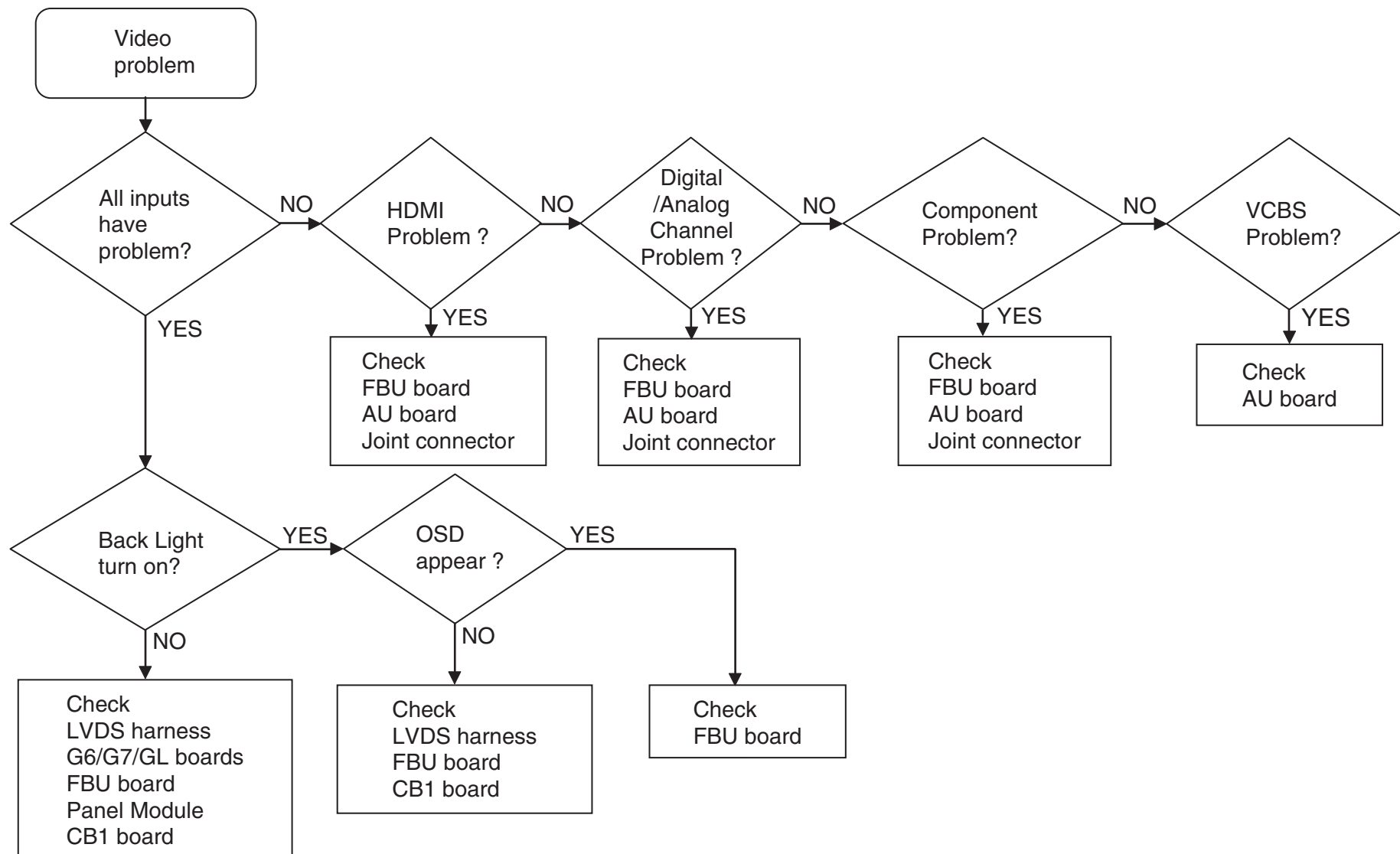
## 2-2-4. AUDIO PROBLEM (Chart D)

Here is trouble shooting flow related audio

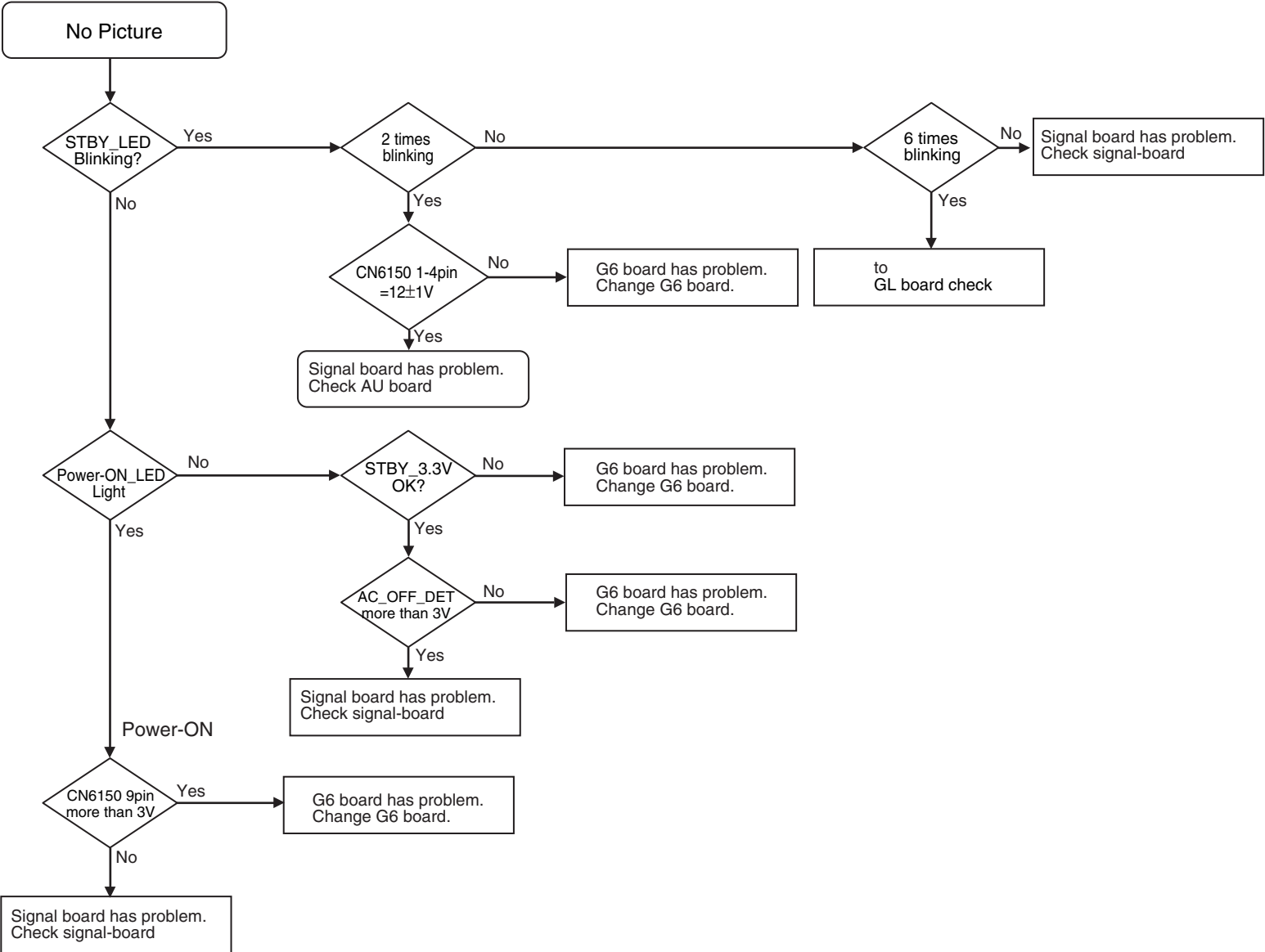


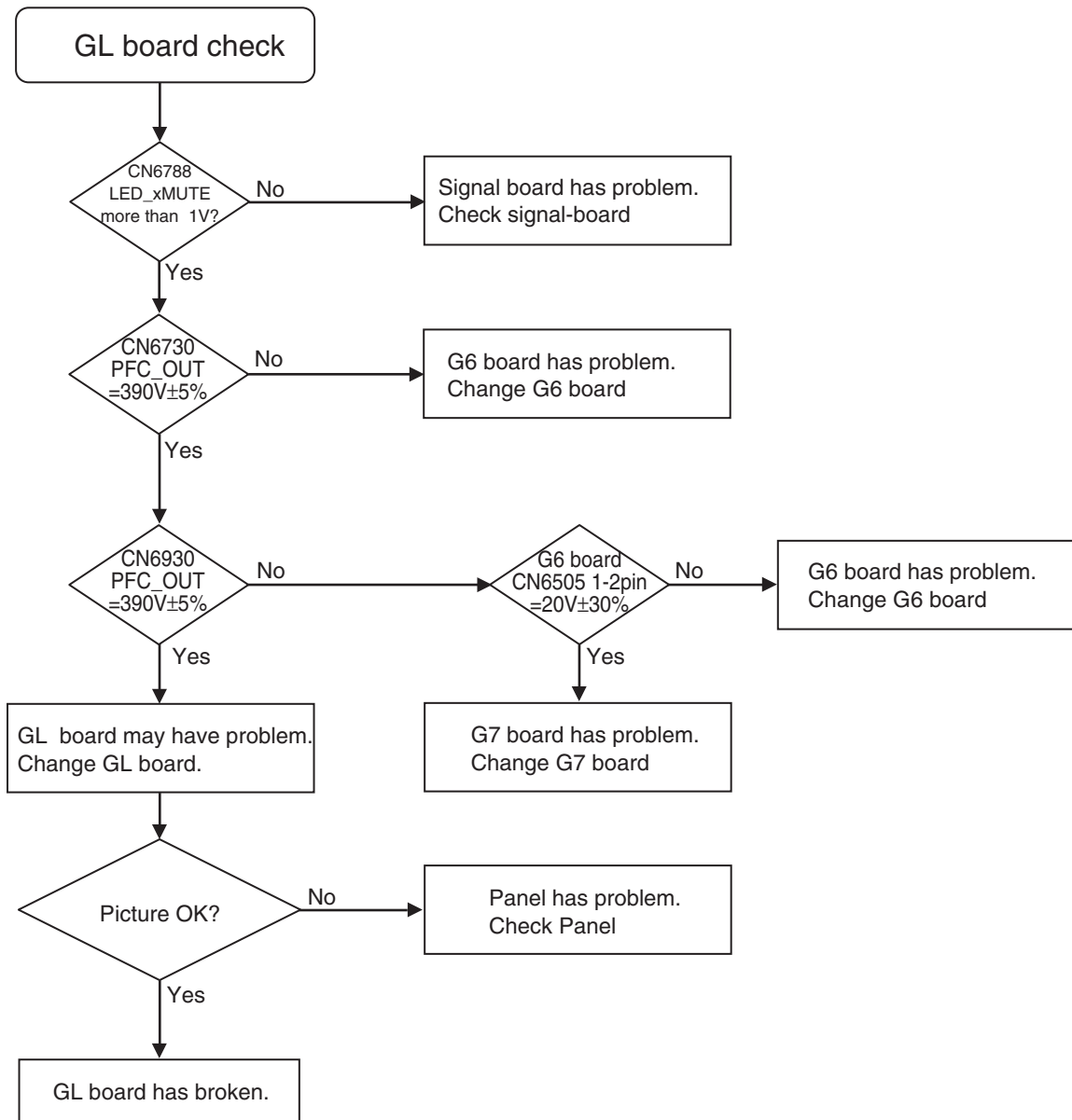
## 2-2-5. VIDEO PROBLEM (Chart E)

Here is trouble shooting flow related Video



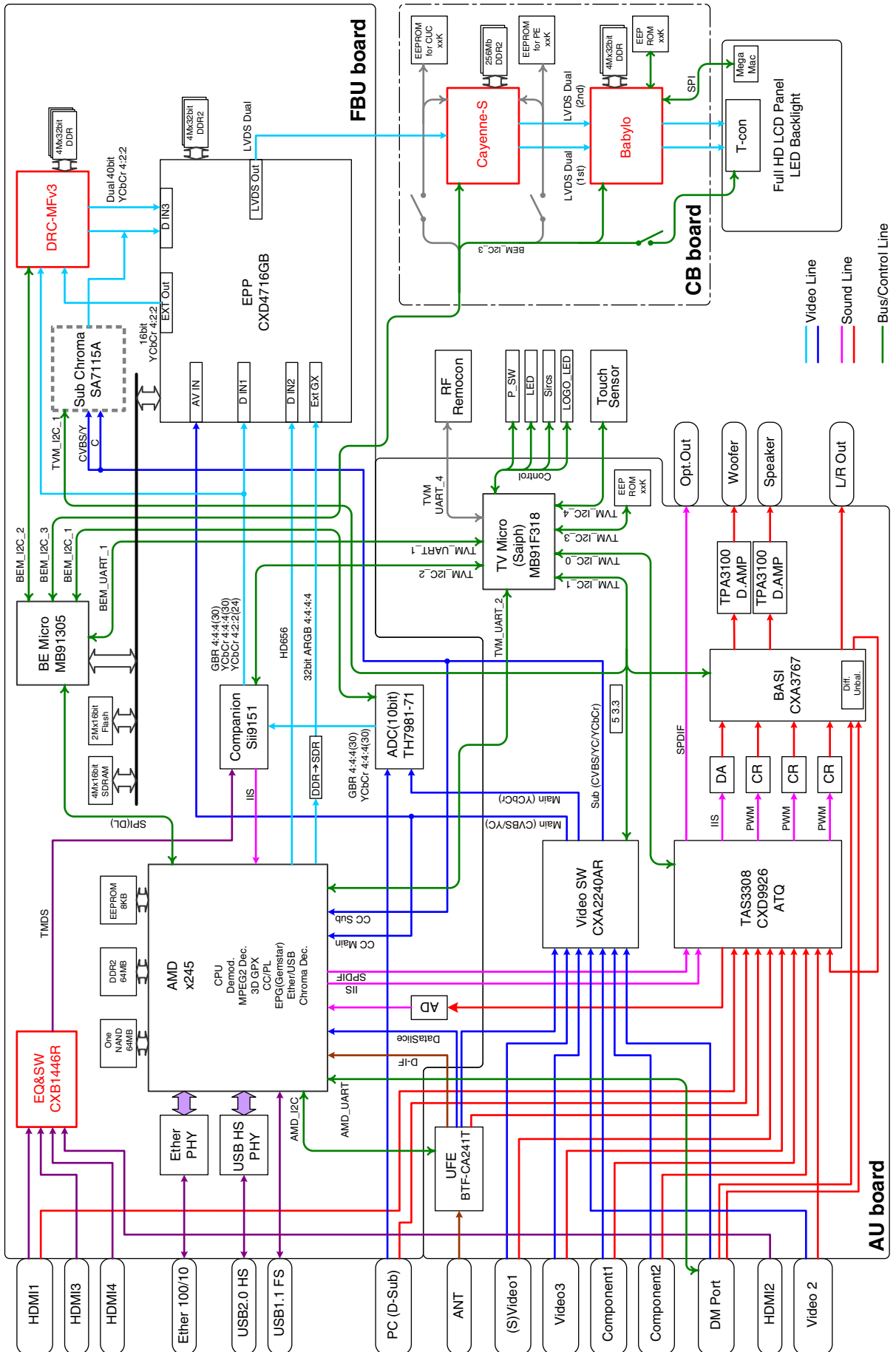
### 2-2-6. NO PICTURE





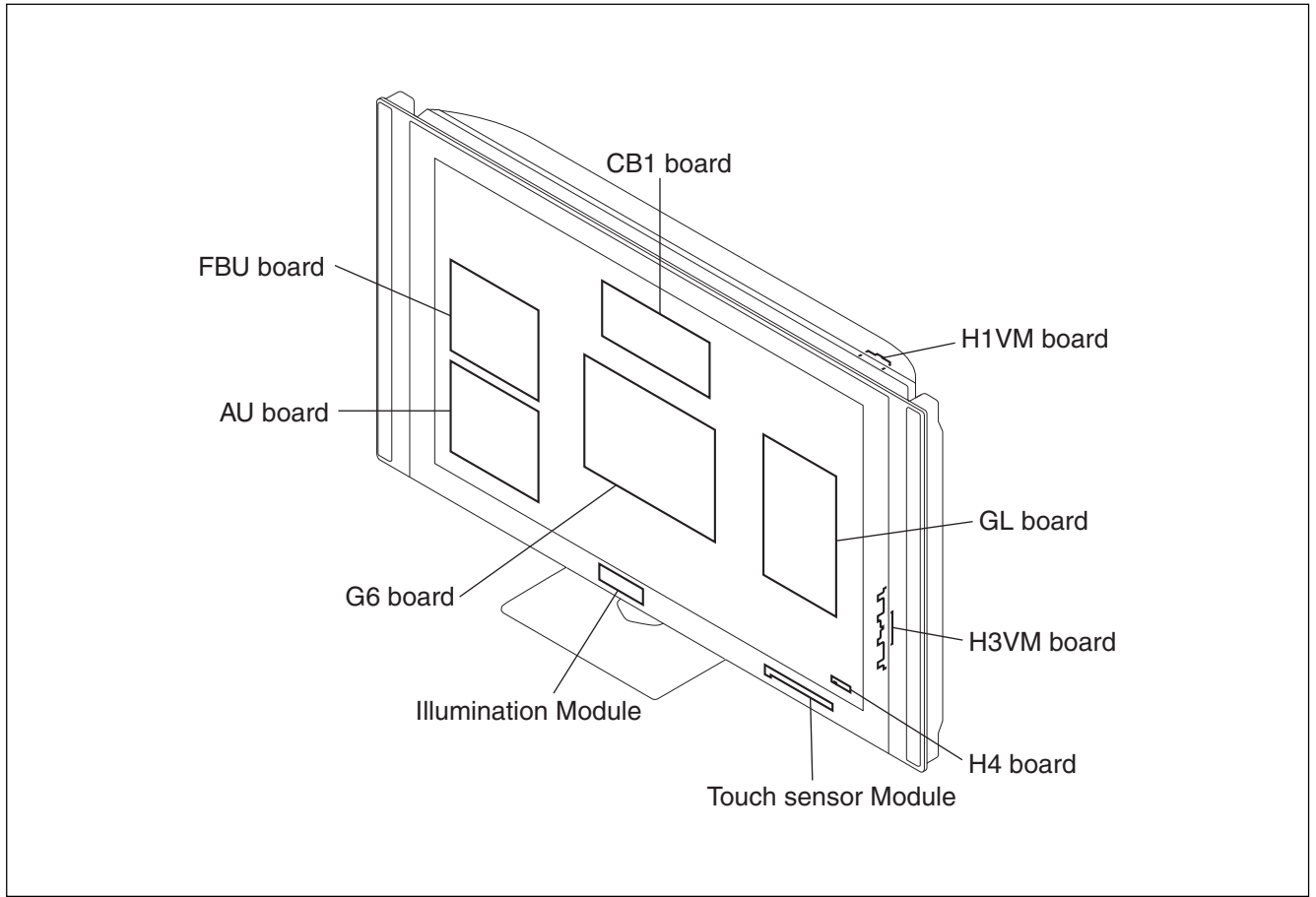
# SECTION 3 DIAGRAMS

## 3-1. BLOCK DIAGRAM

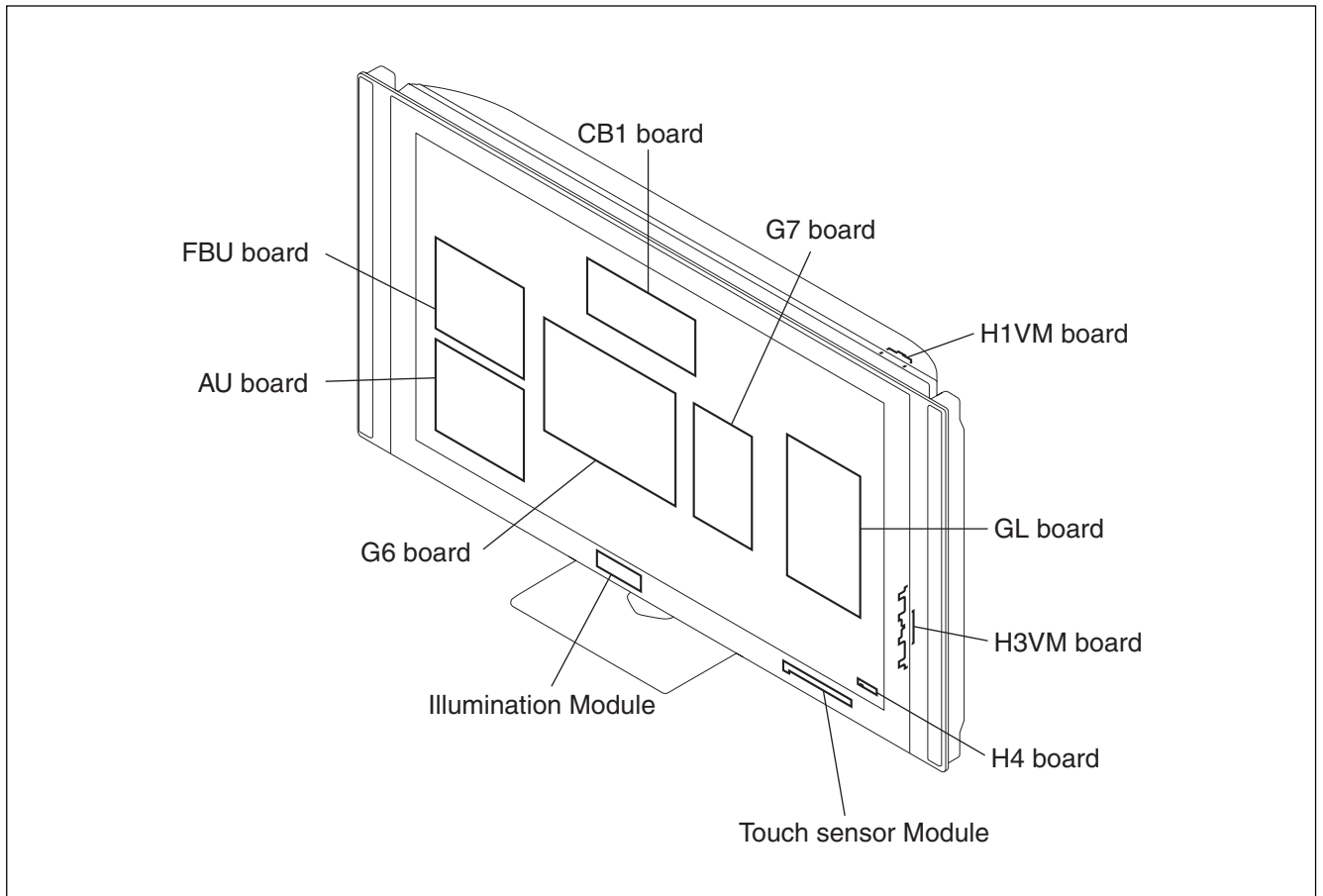


### 3-2. CIRCUIT BOARDS LOCATION

(1) KDL-46X4500





(2) KDL-55X4500



## SECTION 4 EXPLODED VIEWS

### NOTE:

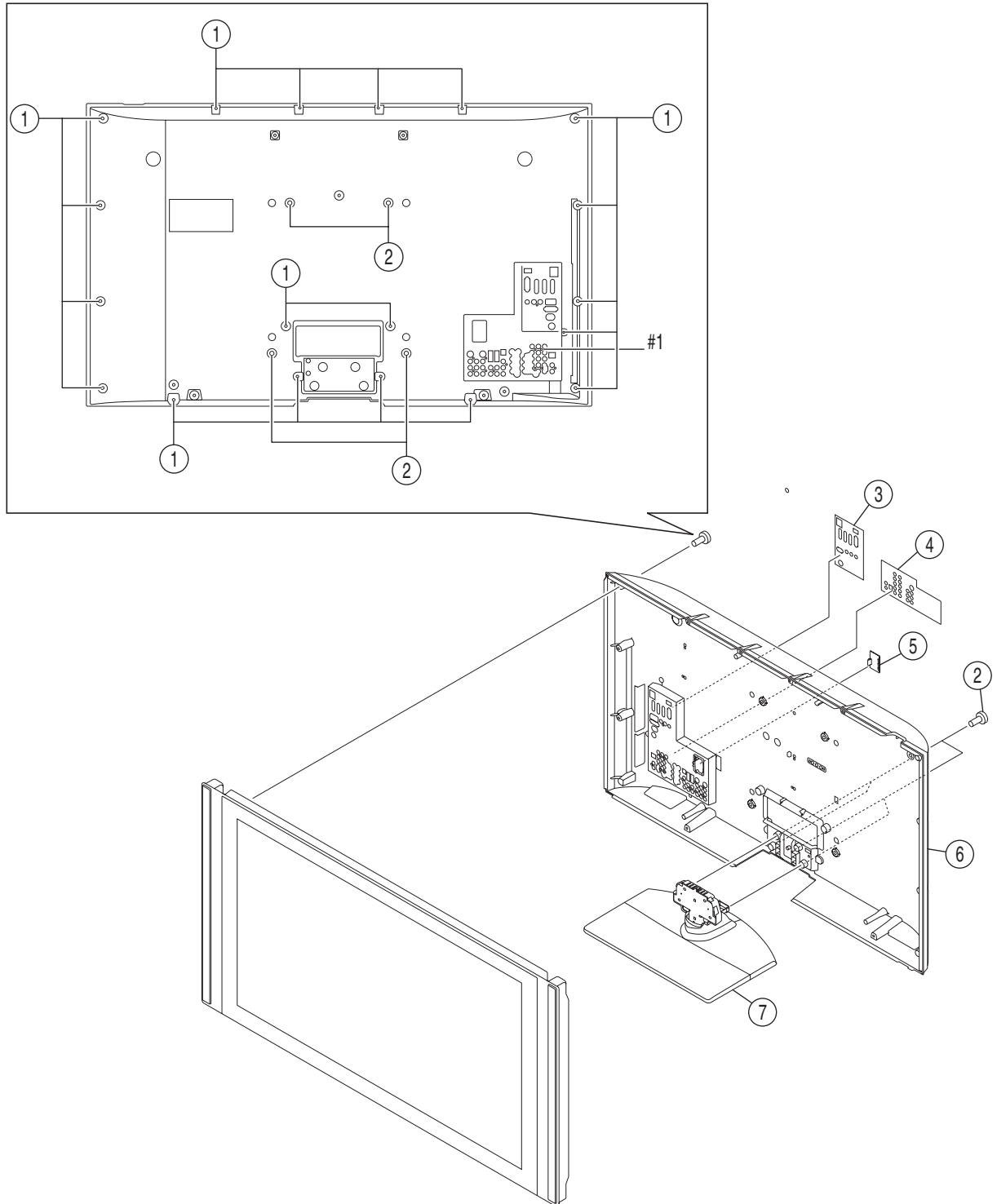
The components identified by shading and mark  are critical for safety. Replace only with part number specified.

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

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

## 4-1. KDL-46X4500

### 4-1-1. REAR COVER AND STAND ASSY

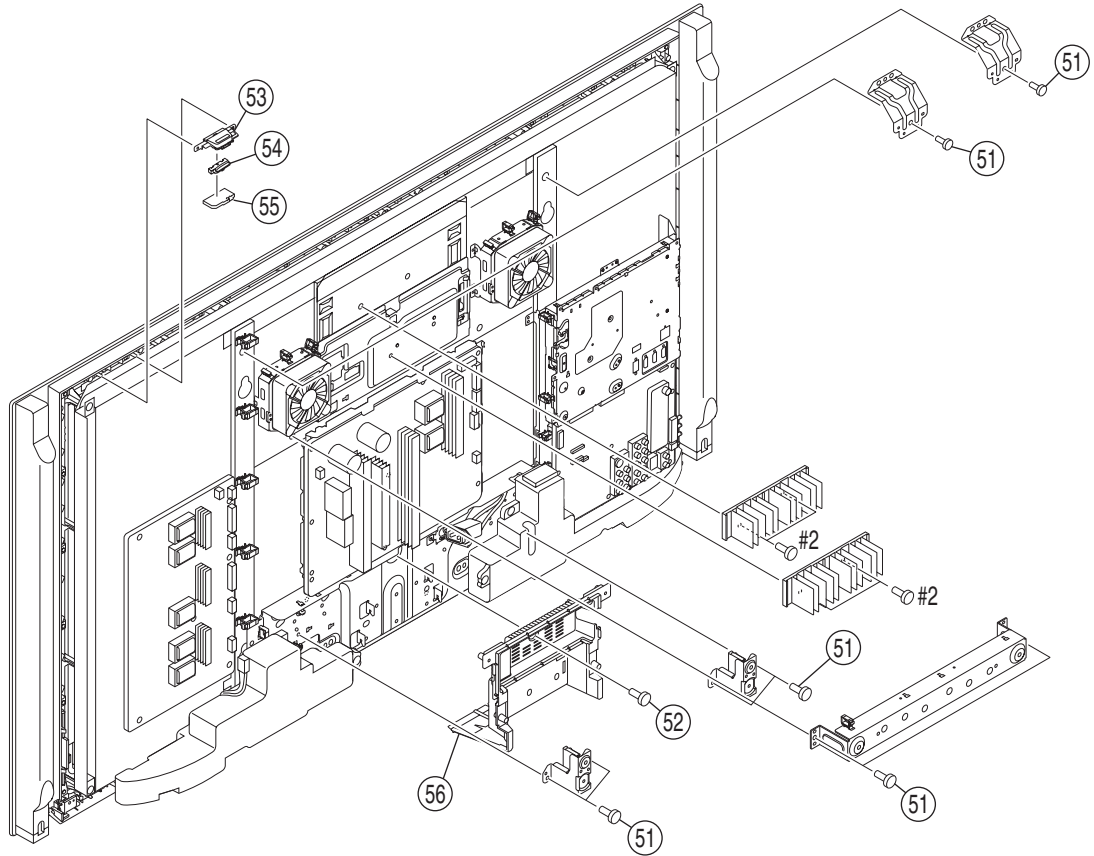


REF. No.	PART No.	DESCRIPTION	MARK	REF. No.	PART No.	DESCRIPTION	MARK
1	2-580-640-01	SCREW, +BVTP2 4X16		6	△ 3-299-083-02	REAR COVER (46Z)	
2	2-580-608-01	SCREW, +PSW M5X16		7	X-2319-236-1	STAND ASSY (L-4)	
3	3-300-711-71	LABEL, HDMI		#1	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	
4	3-300-710-61	LABEL, REAR TERMINAL					
5	3-094-483-11	COVER, ECS					



# KDL-46X4500

## 4-1-2. H1VM BOARD AND UNDER COVER

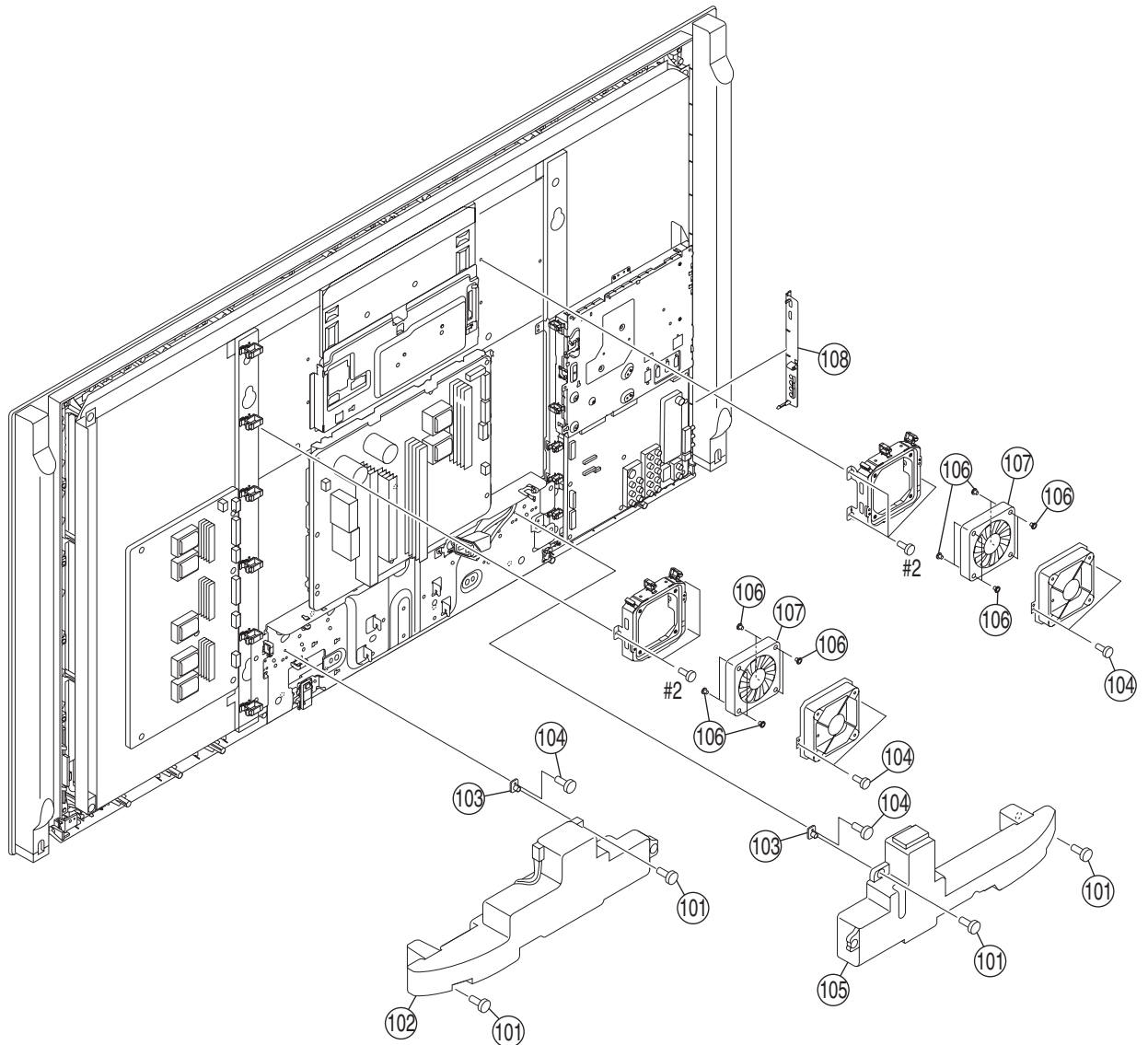


REF. No.	PART No.	DESCRIPTION	MARK
51	2-580-606-01	SCREW, +PSW M5X8	
52	2-580-608-01	SCREW, +PSW M5X16	
53	3-293-095-41	BRACKET, POWER	
54	3-293-094-01	BUTTON, POWER	
55	A-1510-339-A	H1VM MOUNT	

REF. No.	PART No.	DESCRIPTION	MARK
56	△ 3-299-095-02	COVER, UNDER (46Z)	
#2	7-682-948-01	SCREW +PSW 3X8	

# KDL-46X4500

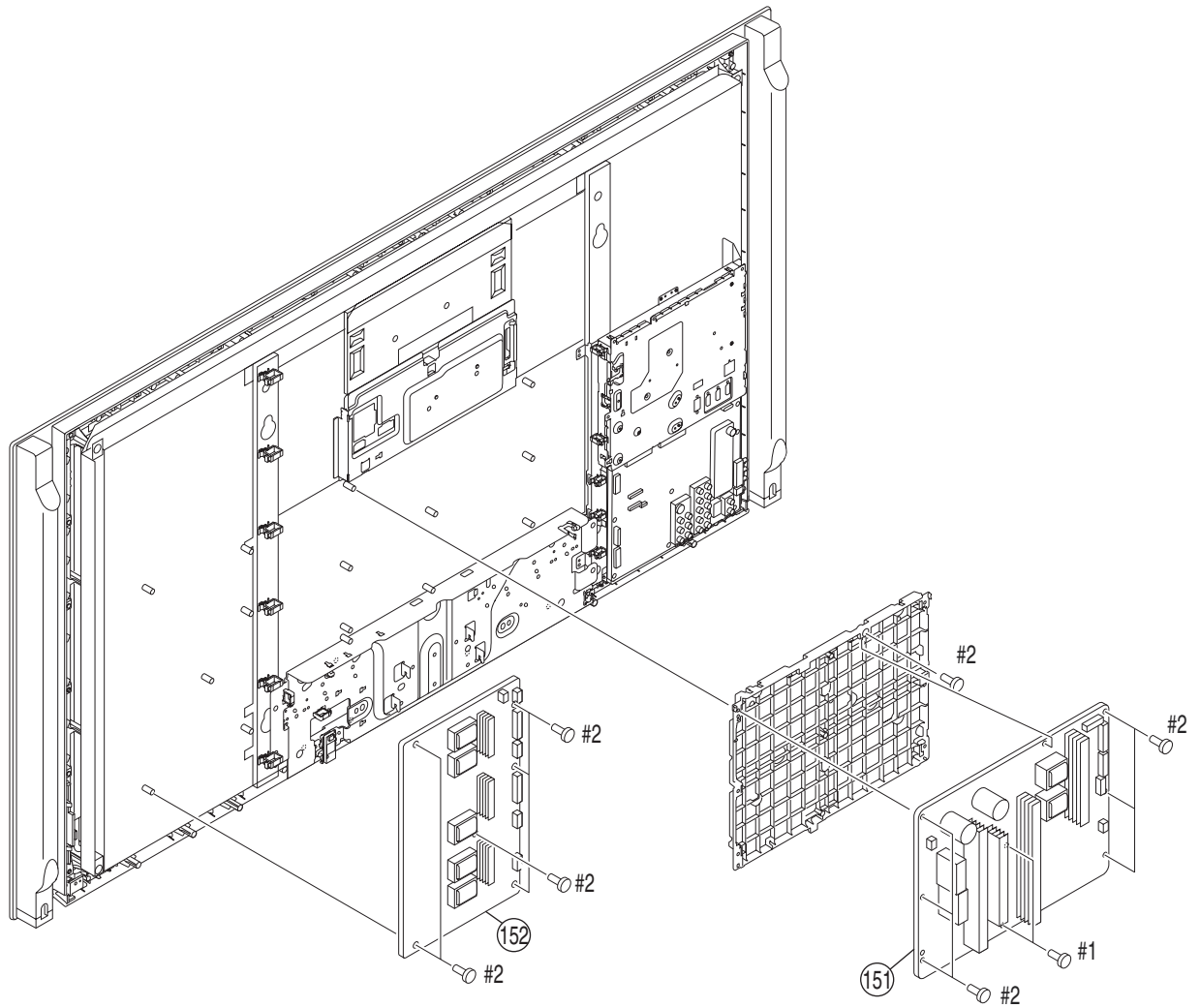
## 4-1-3. FAN AND WOOFER SPEAKER



REF. No.	PART No.	DESCRIPTION	MARK
101	2-580-654-01	SCREW, +PWTP2 4X16	
102	1-826-964-21	SP BOX ASSY (WOOFER)	
103	3-299-098-01	BRACKET, AWF (S)	
104	2-580-629-01	SCREW, +BVST 3X8	
105	1-826-964-11	SP BOX ASSY (WOOFER)	

REF. No.	PART No.	DESCRIPTION	MARK
106	2-059-414-21	DAMPER, FAN	
107	1-787-333-11	D.C. FAN	
108	3-299-090-31	BRACKET, SIDE JACK	
#2	7-682-948-01	SCREW +PSW 3X8	

**KDL-46X4500**  
**4-1-4. G6, GL AND K2 BOARDS**

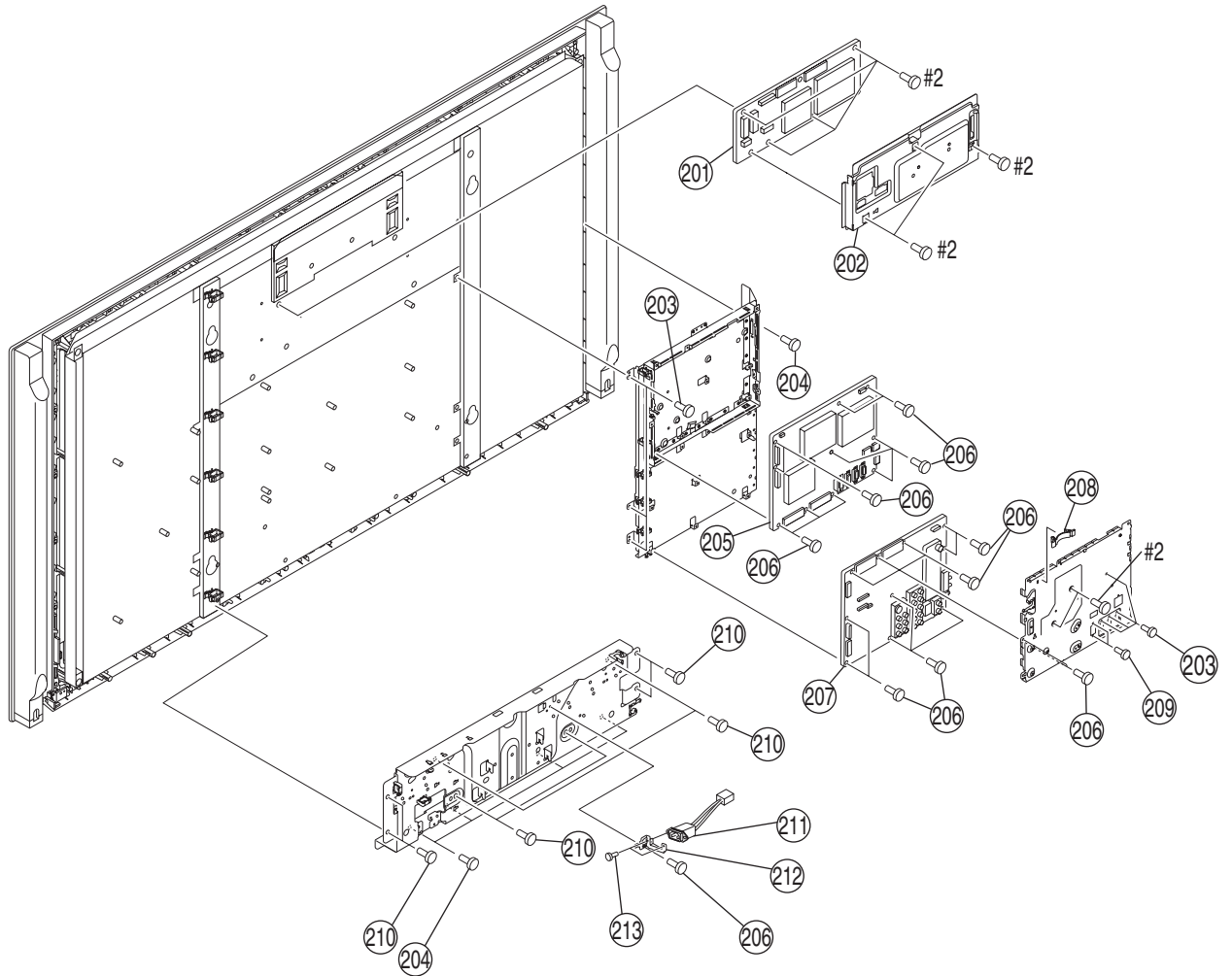


REF. No.	PART No.	DESCRIPTION	MARK
151	△ A-1552-101-B	G6 COMPL	
152	△ A-1553-199-A	GL COMPL	
#1	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	
#2	7-682-948-01	SCREW +PSW 3X8	

REF. No.	PART No.	DESCRIPTION	MARK

# KDL-46X4500

## 4-1-5. ACW, CB1 AND FBA BOARDS AND AC INLET



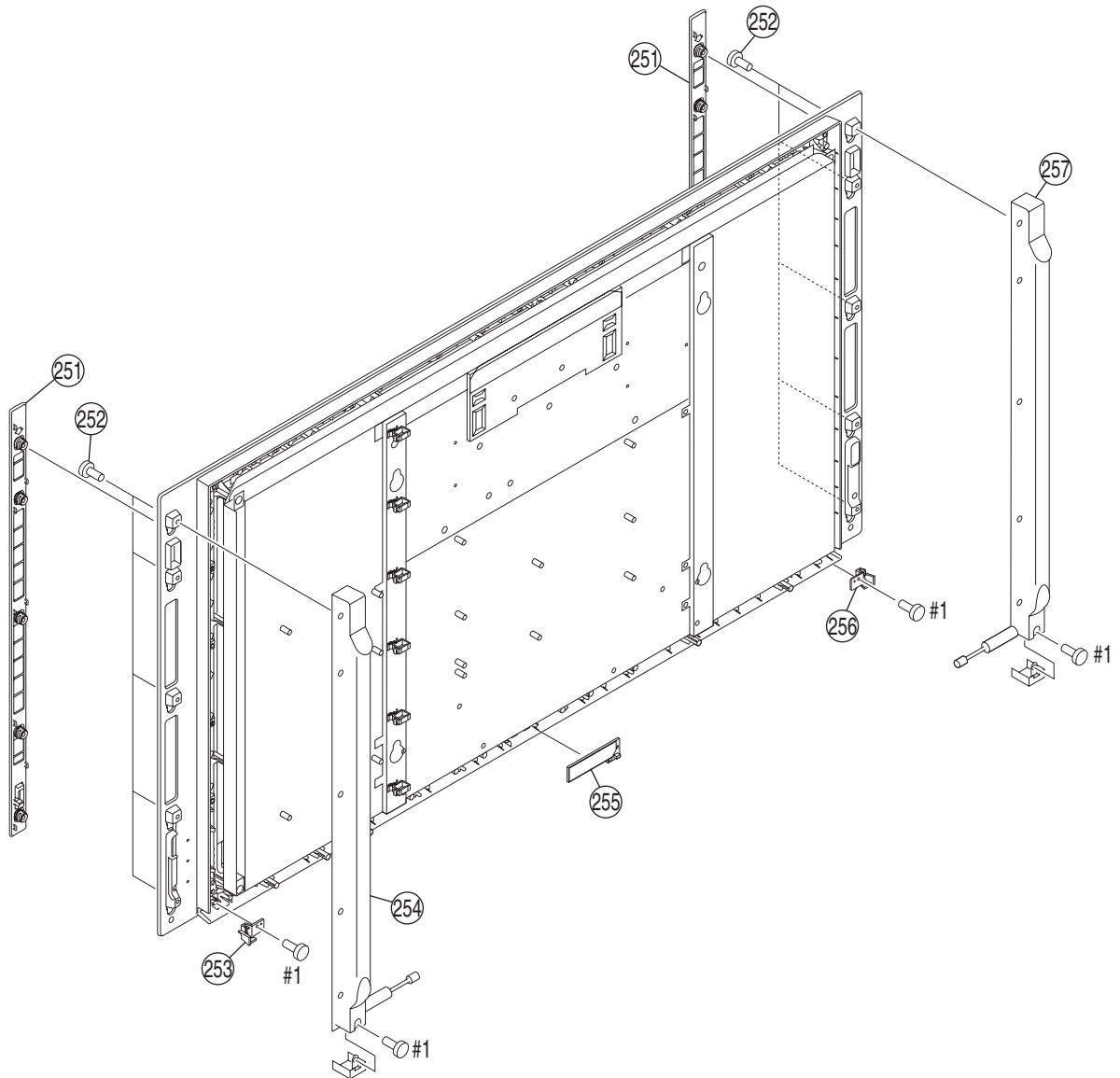
The components identified by mark contain confidential information. Strictly follow the instructions whenever the components are repaired and/or replaced.

REF. No.	PART No.	DESCRIPTION	MARK
201	A-1553-117-A	CB1 MOUNT	
202	X-2319-533-1	SHIELD, CB ASSY	
203	2-580-590-01	SCREW, +PSW M3X5	
204	2-580-640-01	SCREW, +BVTP2 4X16	
205	A-1616-674-A	FBU MOUNT	
206	2-580-629-01	SCREW, +BVST 3X8	
207	A-1616-673-A	AU MOUNT	
208	3-080-039-01	CLAMP (FCR-15), FLAT	
209	2-580-626-01	SCREW, SP 4-40 UNC	
210	2-580-606-01	SCREW, +PSW M5X8	

REF. No.	PART No.	DESCRIPTION	MARK
211	1-822-467-11	AC INLET	
212	3-284-411-01	AC INLET BRACKET	
213	2-596-649-01	+KTT 3X10 (S TYPE)	
#2	7-682-948-01	SCREW +PSW 3X8	

# KDL-46X4500

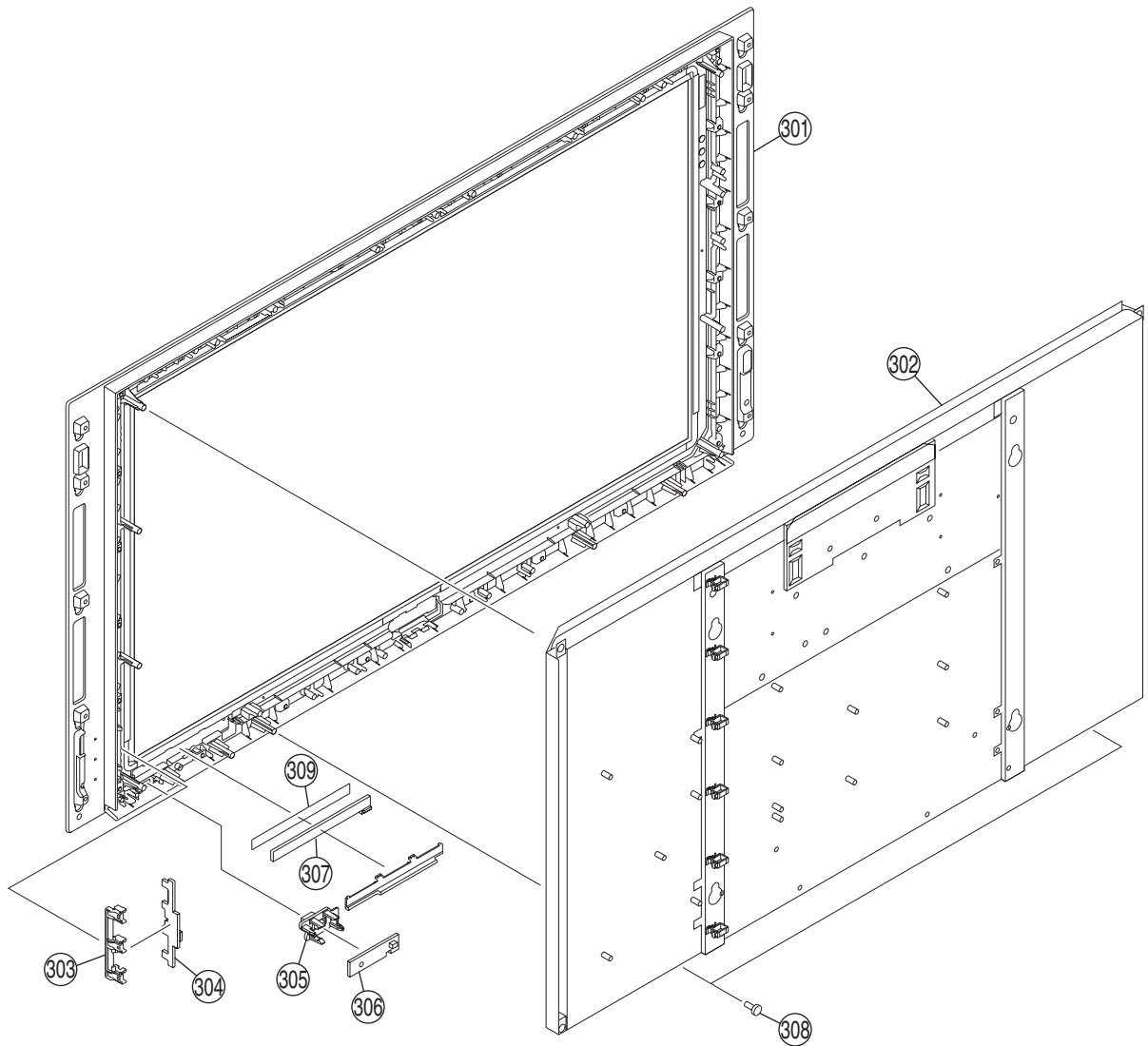
## 4-1-6. SPEAKER BOX ASSY AND GRILLE ASSY



REF. No.	PART No.	DESCRIPTION	MARK	REF. No.	PART No.	DESCRIPTION	MARK
251	X-2190-485-2	GRILLE (46 S) ASSY (Silver)		256	X-2319-159-1	COVER CABINET L ASSY	
	X-2190-486-2	GRILLE (46 N) ASSY (Gold)		257	1-826-968-11	SP BOX ASSY	
	X-2190-487-2	GRILLE (46 T) ASSY (Brown)		#1	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	
	X-2190-488-2	GRILLE (46 B) ASSY (Black)					
	X-2190-489-2	GRILLE (46 R) ASSY (Red)					
252	2-580-640-01	SCREW, +BVTP2 4X16					
253	X-2319-158-1	COVER CABINET R ASSY					
254	1-826-968-21	SP BOX ASSY					
255	1-480-680-11	ILLUMINATION MODULE					

# KDL-46X4500

## 4-1-7. LCD PANEL, H3VM BOARD AND H4 BOARD

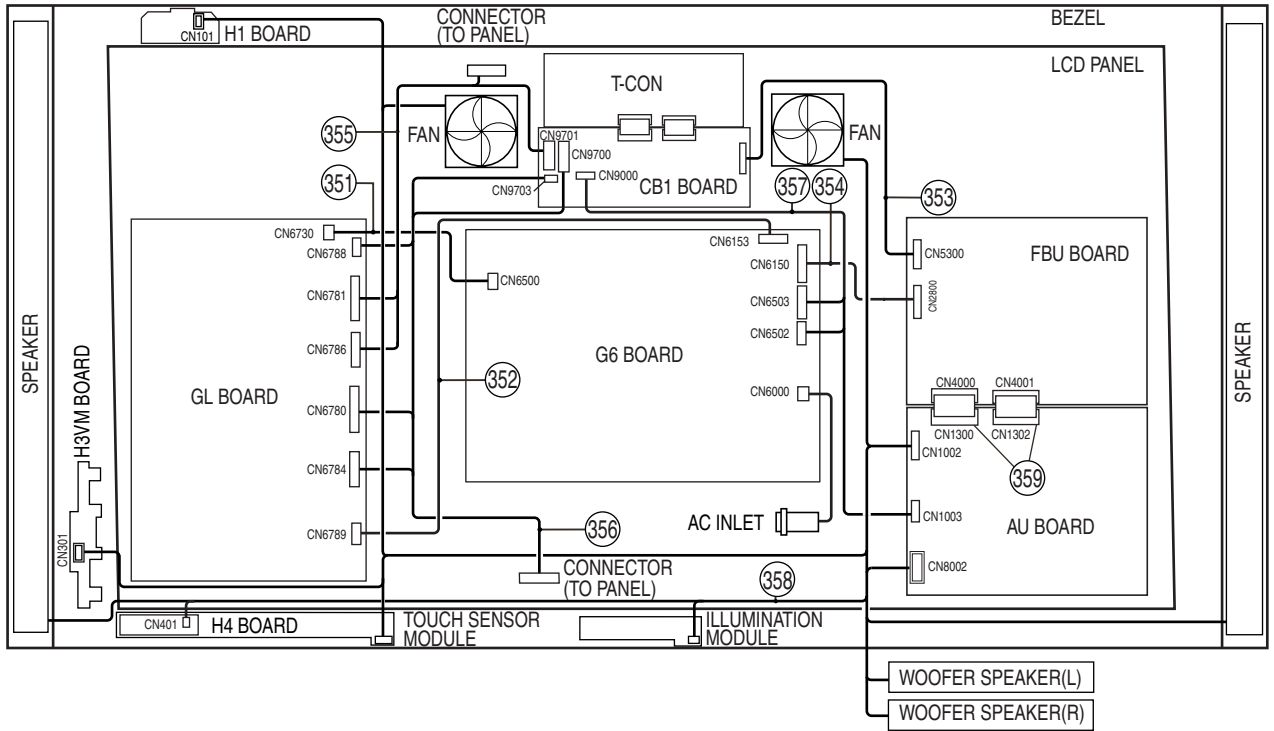


REF. No.	PART No.	DESCRIPTION	MARK
301	△ A-1675-091-A	BEZEL (46) ASSY	
302	△ A-1568-135-A	LCD PANEL (46 FHD TFT)	
303	3-876-205-01	BRACKET, LED	
304	A-1510-340-A	H3VM MOUNT	
305	3-299-103-01	GUIDE LIGHT	

REF. No.	PART No.	DESCRIPTION	MARK
306	A-1510-341-A	H4 MOUNT	
307	1-798-150-12	TOUCH SENSOR MODULE	
308	2-580-640-01	SCREW, +BVTP2 4X16	
309	3-300-709-51	SHEET, TOUCH	

**KDL-46X4500**

**4-1-8. CONNECTOR ASSY**

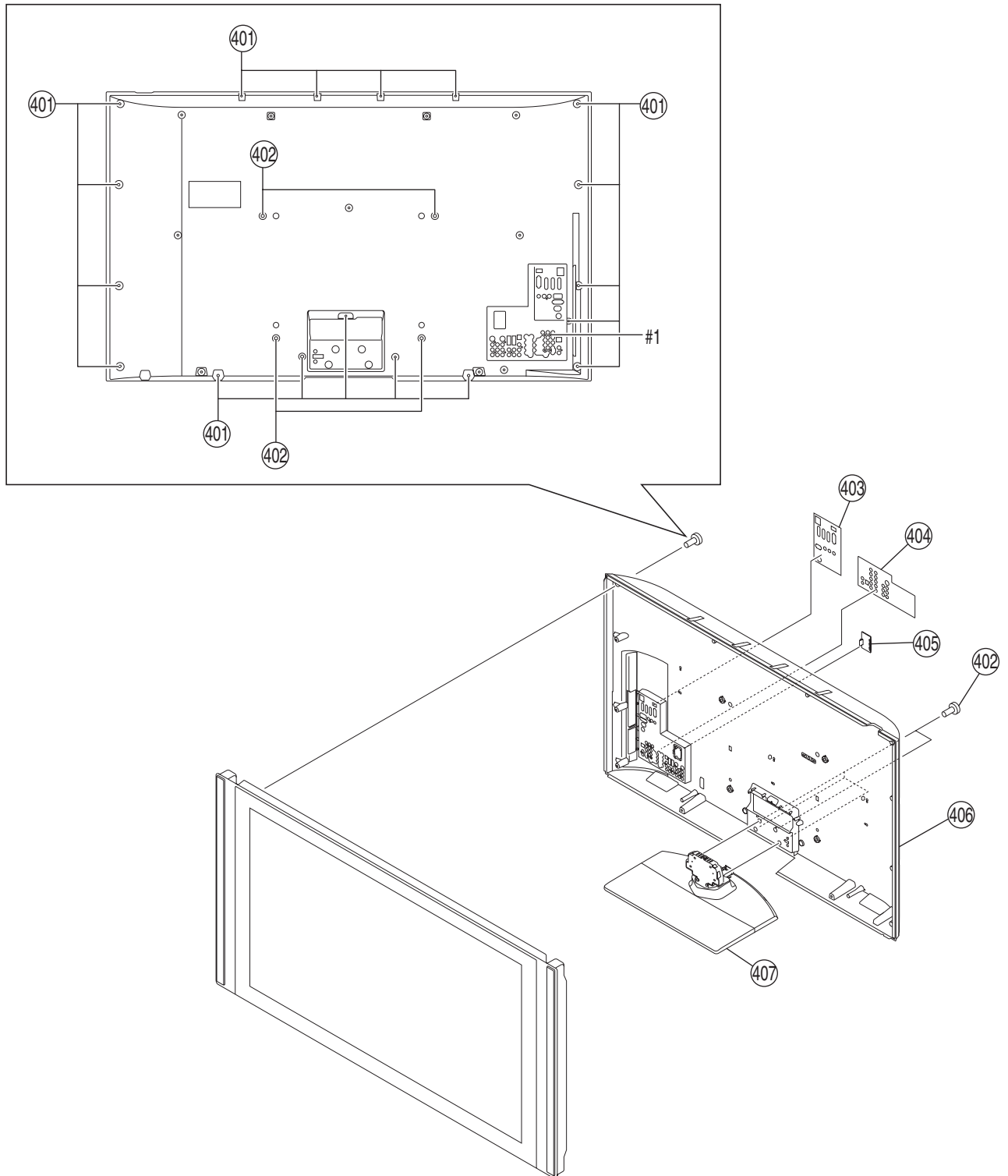


REF. No.	PART No.	DESCRIPTION	MARK
351	1-835-569-11	CONNECTOR ASSY	
352	1-910-053-38	CONNECTOR ASSY 10P	
353	1-835-784-11	LEAD WIRE WITH CONNECTOR (LVDS)	
354	1-910-048-60	CONNECTOR ASSY 15P	
355	1-910-048-63	XADRP CONNECTOR ASSY 40P	

REF. No.	PART No.	DESCRIPTION	MARK
356	1-910-048-64	XADRP CONNECTOR ASSY 36P	
357	1-910-048-59	CONNECTOR ASSY 12P	
358	1-910-053-39	HARNESS ASSY	
359	1-822-065-11	BOARD TO BOARD CONNECTOR 80P	

## 4-2. KDL-55X4500

### 4-2-1. REAR COVER AND STAND ASSY



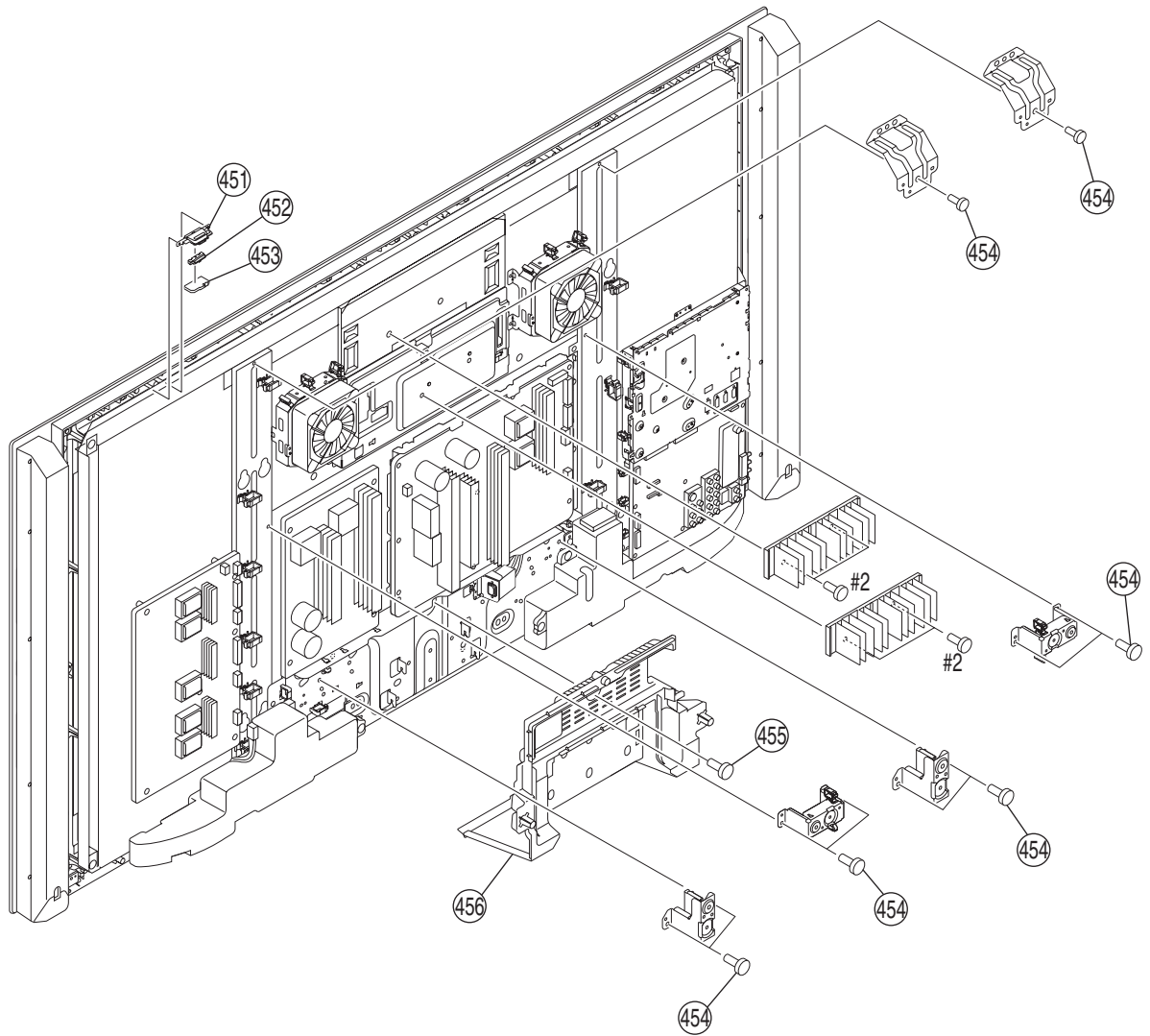
REF. No.	PART No.	DESCRIPTION	MARK
401	2-580-640-01	SCREW, +BVTP2 4X16	
402	2-580-608-01	SCREW, +PSW M5X16	
403	3-300-711-71	LABEL, HDMI	
404	3-300-710-61	LABEL, REAR TERMINAL	
405	3-094-483-11	COVER, ECS	

REF. No.	PART No.	DESCRIPTION	MARK
406	△ 3-296-672-02	REAR COVER (55Z)	
407	X-2319-237-1	STAND ASSY (LL-3)	
#1	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	



# KDL-55X4500

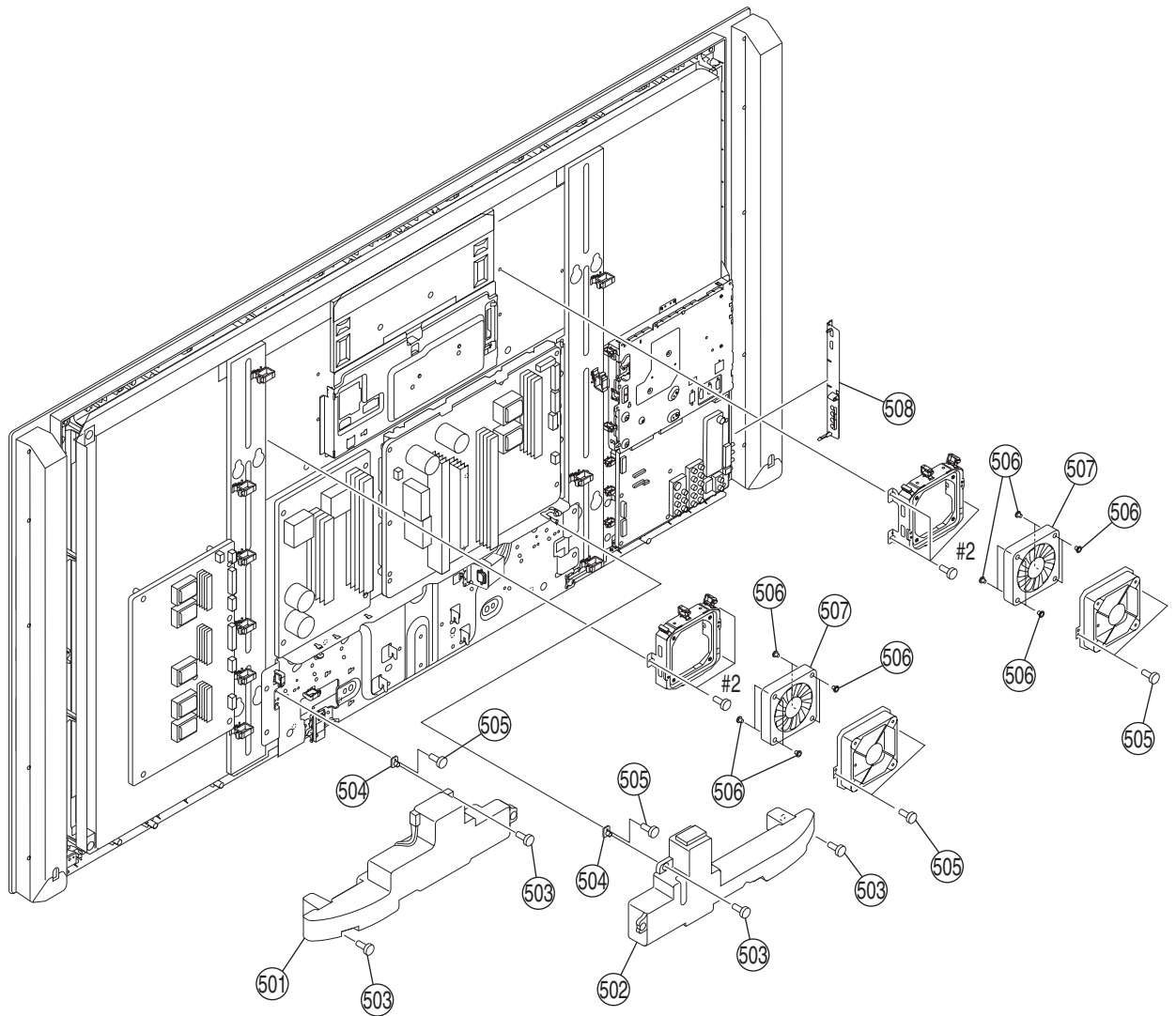
## 4-2-2. H1VM BOARD AND UNDER COVER



REF. No.	PART No.	DESCRIPTION	MARK
451	* 3-293-095-41	BRACKET, POWER	
452	3-293-094-01	BUTTON, POWER	
453	A-1510-339-A	H1VM MOUNT	
454	2-580-606-01	SCREW, +PSW M5X8	
455	2-580-608-01	SCREW, +PSW M5X16	

REF. No.	PART No.	DESCRIPTION	MARK
456	△ 3-299-096-02	COVER, UNDER (55Z)	
#2	7-682-948-01	SCREW +PSW 3X8	

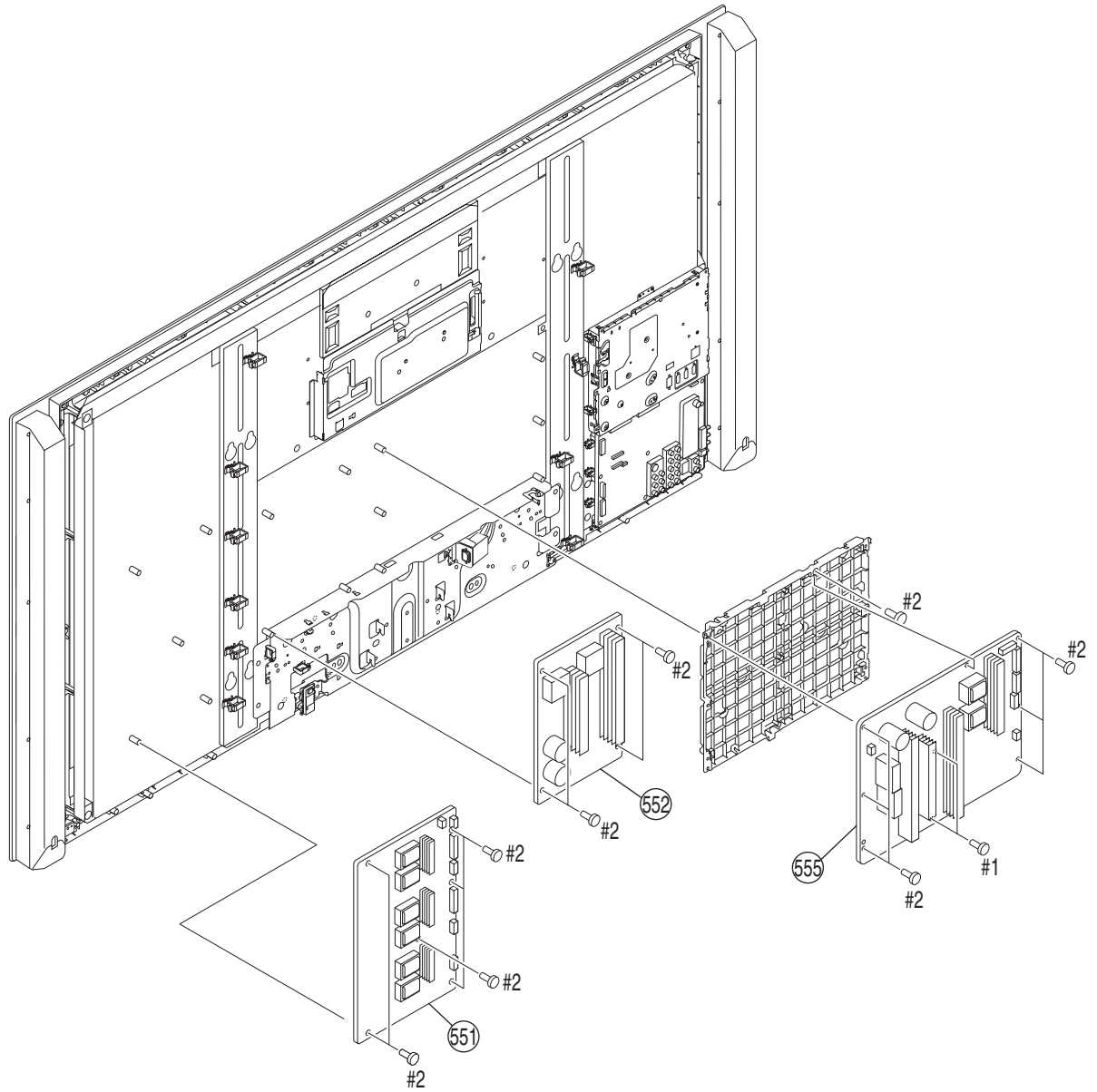
**KDL-55X4500**  
**4-2-3. FAN AND WOOFER SPEAKER**



REF. No.	PART No.	DESCRIPTION	MARK
501	1-826-964-21	SP BOX ASSY (WOOFER)	
502	1-826-964-11	SP BOX ASSY (WOOFER)	
503	2-580-654-01	SCREW, +PWTP2 4X16	
504	3-299-098-01	BRACKET, AWF (S)	
505	2-580-629-01	SCREW, +BVST 3X8	

REF. No.	PART No.	DESCRIPTION	MARK
506	2-059-414-21	DAMPER, FAN	
507	△ 1-787-333-11	D.C. FAN	
508	3-299-090-31	BRACKET, SIDE JACK	
#2	7-682-948-01	SCREW +PSW 3X8	

**KDL-55X4500**  
**4-2-4. G6, G7, GL AND K2 BOARDS**

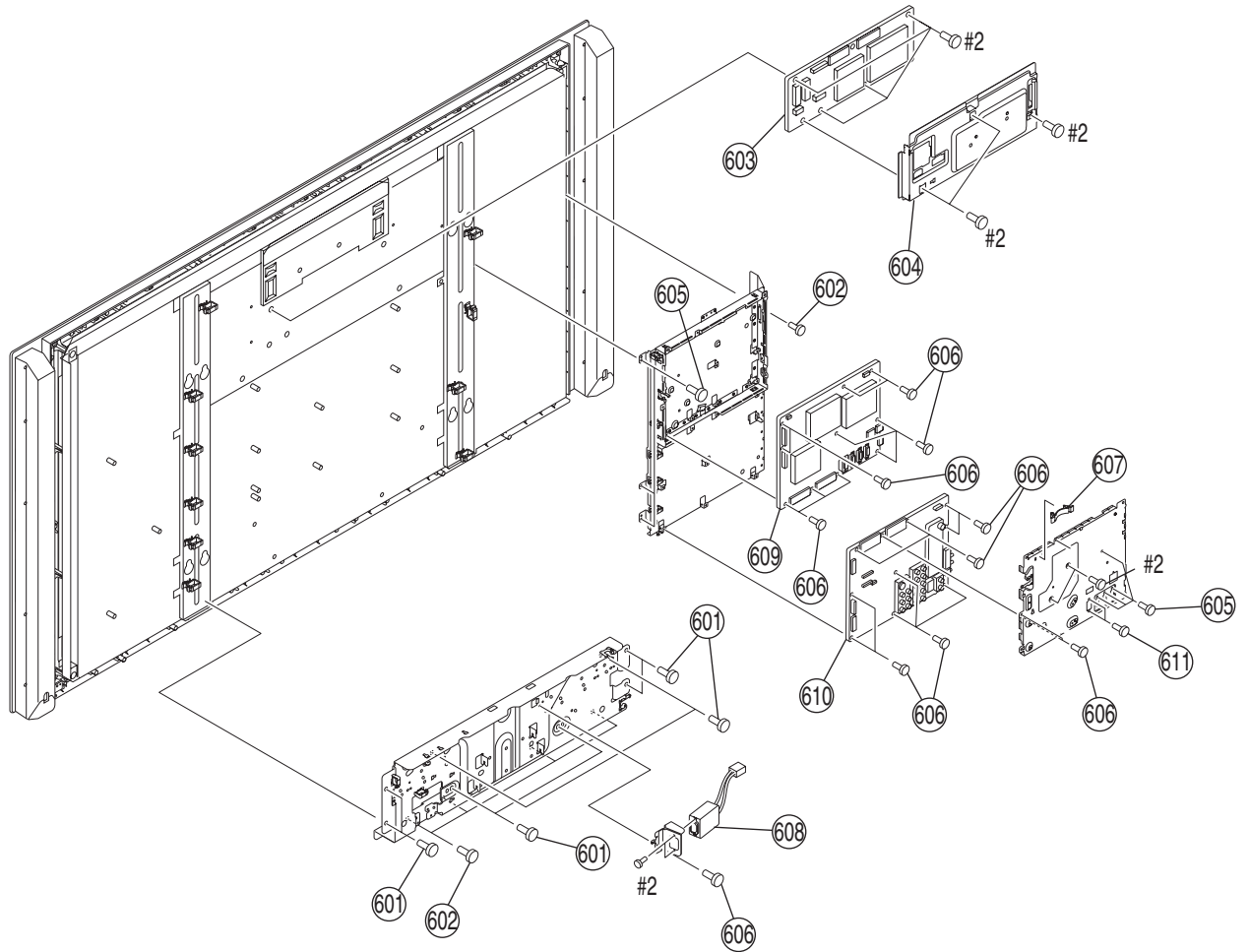



REF. No.	PART No.	DESCRIPTION	MARK
551	△ A-1553-201-A	GL COMPL	
552	△ A-1552-105-A	G7 COMPL	
553	△ A-1552-103-B	G6 COMPL	
#1	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	
#2	7-682-948-01	SCREW +PSW 3X8	

REF. No.	PART No.	DESCRIPTION	MARK
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

# KDL-55X4500

## 4-2-5. ACW, CB1 AND FBA BOARDS AND AC INLET



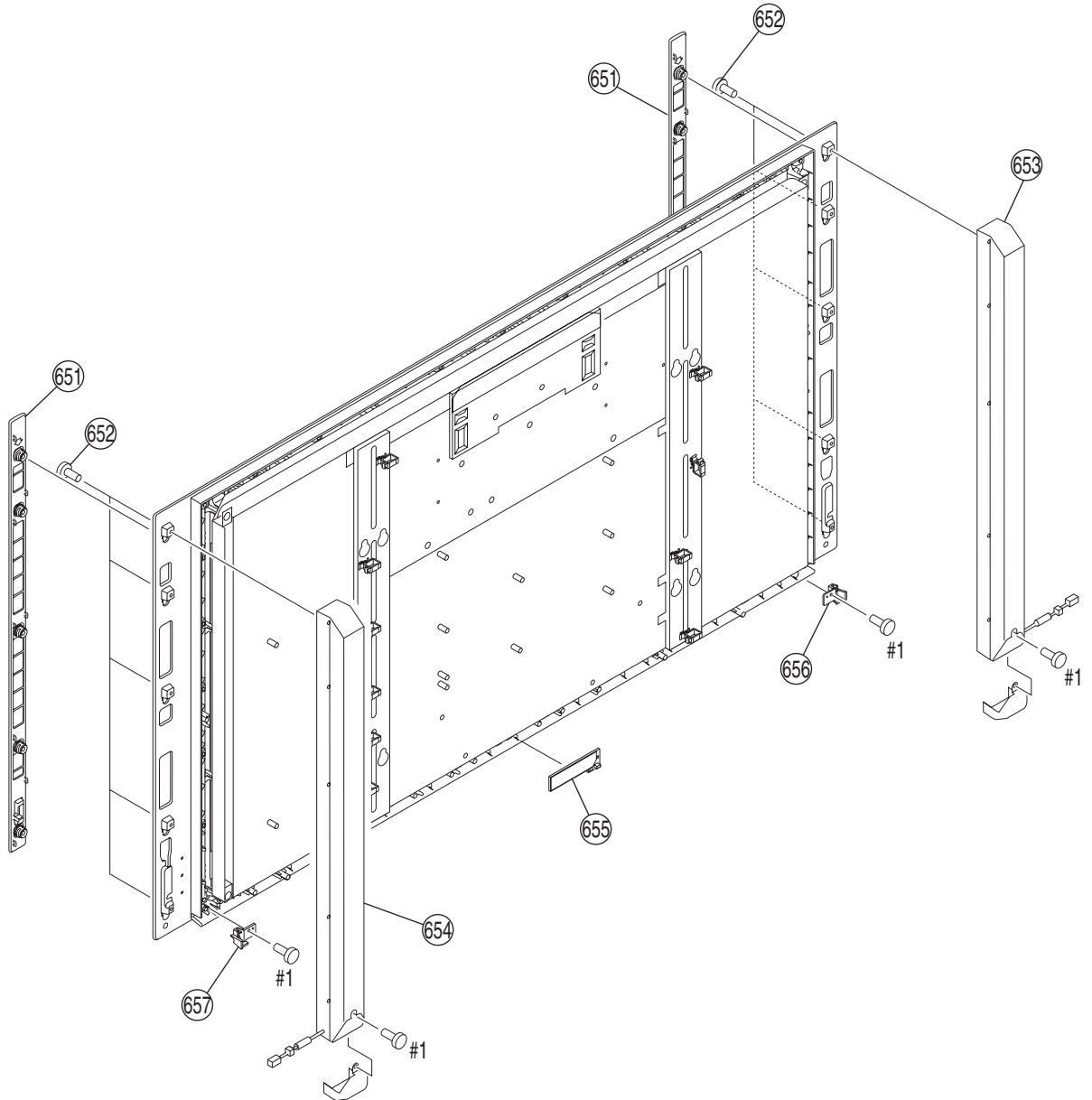
The components identified by mark  contain confidential information. Strictly follow the instructions whenever the components are repaired and/or replaced.

REF. No.	PART No.	DESCRIPTION	MARK
601	2-580-606-01	SCREW, +PSW M5X8	
602	2-580-640-01	SCREW, +BVTP2 4X16	
603	A-1545-326-A	CB1 MOUNT	
604	X-2319-533-1	SHIELD, CB ASSY	
605	2-580-590-01	SCREW, +PSW M3X5	

REF. No.	PART No.	DESCRIPTION	MARK
606	2-580-629-01	SCREW, +BVST 3X8	
607	3-080-039-01	CLAMP (FCR-15), FLAT	
608	 1-822-096-11	AC INLET (WITH NOISE FILTER)	
609	 A-1616-674-A	FBU MOUNT	
610	 A-1616-673-A	AU MOUNT	
611	2-580-626-01	SCREW, SP 4-40 UNC	
#2	7-682-948-01	SCREW +PSW 3X8	

# KDL-55X4500

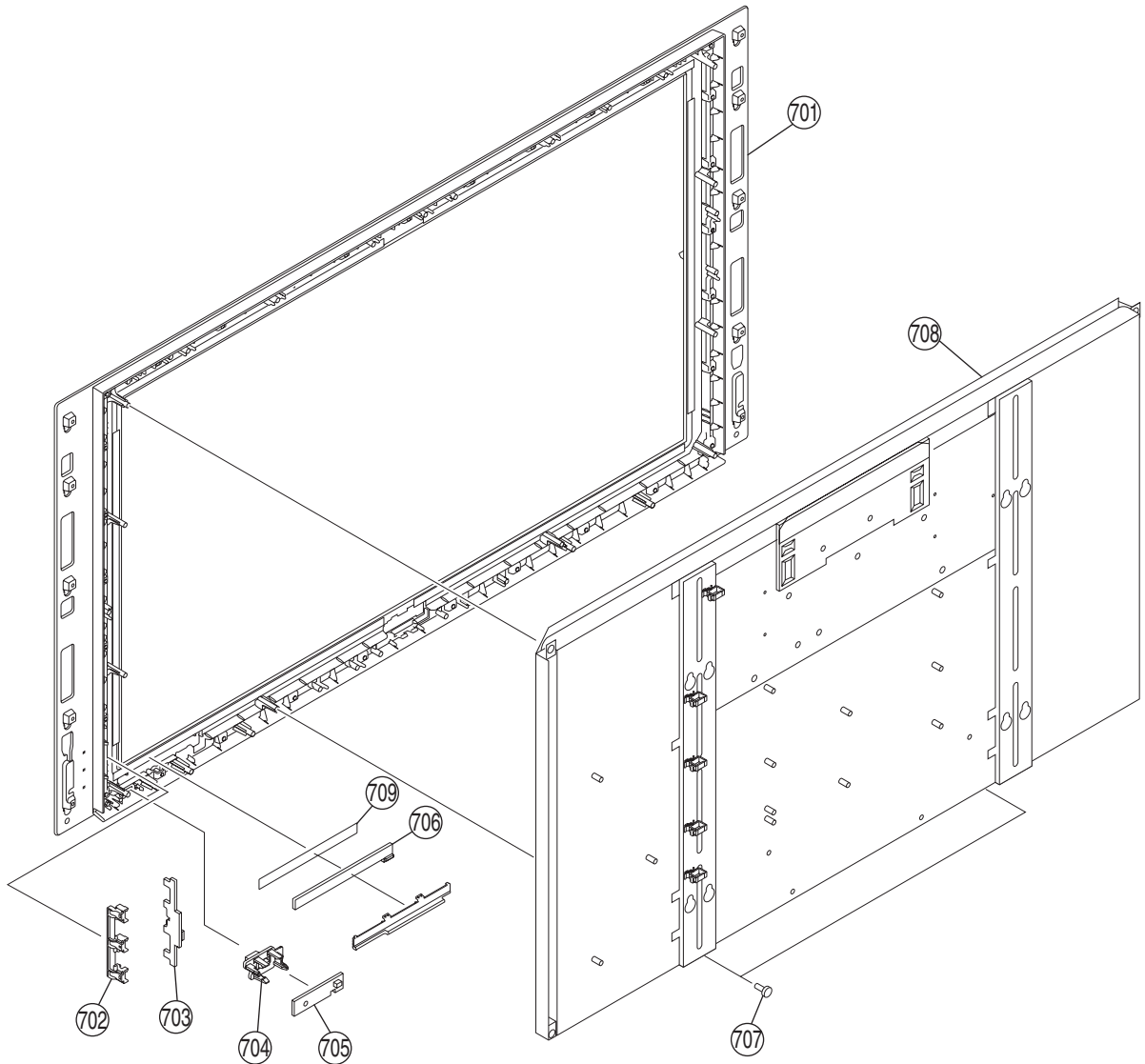
## 4-2-6. SPEAKER BOX ASSY, GRILLE ASSY AND ILLUMINATION MODULE



REF. No.	PART No.	DESCRIPTION	MARK	REF. No.	PART No.	DESCRIPTION	MARK
651	X-2190-490-2	GRILLE (55 S) ASSY (Silver)		656	X-2319-159-1	COVER CABINET L ASSY	
	X-2190-491-2	GRILLE (55 N) ASSY (Gold)		657	X-2319-158-1	COVER CABINET R ASSY	
	X-2190-492-2	GRILLE (55 T) ASSY (Brown)					
	X-2190-493-2	GRILLE (55 B) ASSY (Black)		#1	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	
	X-2190-494-2	GRILLE (55 R) ASSY (Red)					
652	2-580-640-01	SCREW, +BVTP2 4X16					
653	1-826-966-11	SP BOX ASSY					
654	1-826-966-21	SP BOX ASSY					
655	1-480-680-11	ILLUMINATION MODULE					

# KDL-55X4500

## 4-2-7. LCD PANEL, H3VM BOARD AND H4 BOARD

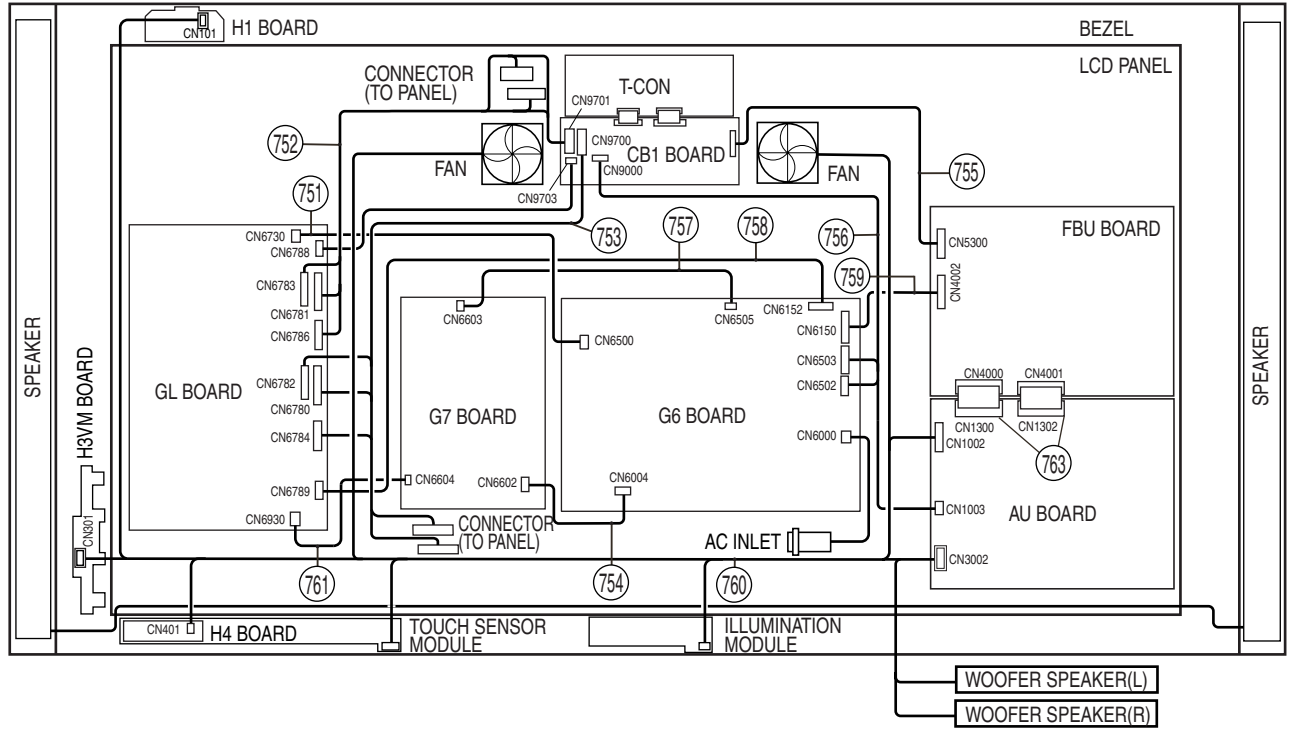


REF. No.	PART No.	DESCRIPTION	MARK
701	△ A-1675-092-A	BEZEL (55) ASSY	
702	3-876-205-01	BRACKET, LED	
703	A-1510-340-A	H3VM MOUNT	
704	3-299-103-01	GUIDE LIGHT	
705	A-1510-341-A	H4 MOUNT	

REF. No.	PART No.	DESCRIPTION	MARK
706	1-798-150-12	TOUCH SENSOR MODULE	
707	2-580-640-01	SCREW, +BVTP2 4X16	
708	△ A-1568-136-A	LCD PANEL (55 FHD TFT)	
709	3-300-709-51	SHEET, TOUCH	

**KDL-55X4500**

**4-2-8. CONNECTOR ASSY**

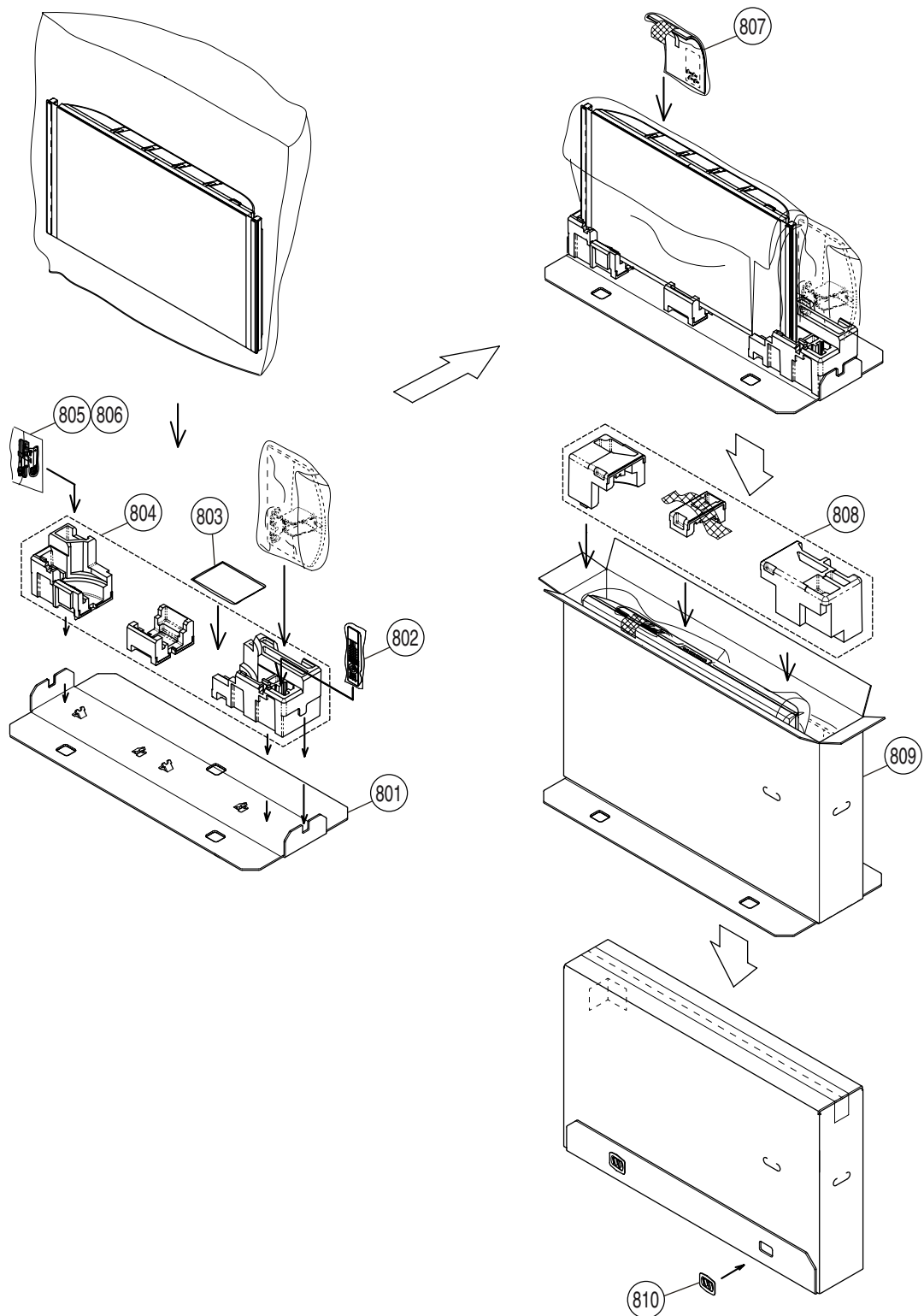


REF. No.	PART No.	DESCRIPTION	MARK
751	1-835-187-11	CONNECTOR ASSY	
752	* 1-910-050-44	CONNECTOR ASSY (XADRP40P)	
753	* 1-910-050-45	CONNECTOR ASSY (XADRP36P)	
754	1-835-568-11	CONNECTOR ASSY	
755	1-835-786-11	LEAD WIRE WITH CONNECTOR (LVDS)	

REF. No.	PART No.	DESCRIPTION	MARK
756	1-910-048-65	CONNECTOR ASSY 12P	
757	1-910-048-68	CONNECTOR ASSY 3P	
758	1-910-048-67	CONNECTOR ASSY 8P	
759	1-910-048-60	CONNECTOR ASSY 15P	
760	1-910-053-40	HARNESS ASSY	
761	1-835-569-11	CONNECTOR ASSY	
762	182206511	CN1300-CN4000 (1), CN1302-CN4001 (1)	

### 4-3. PACKING MATERIALS

#### 4-3-1. KDL-46X4500

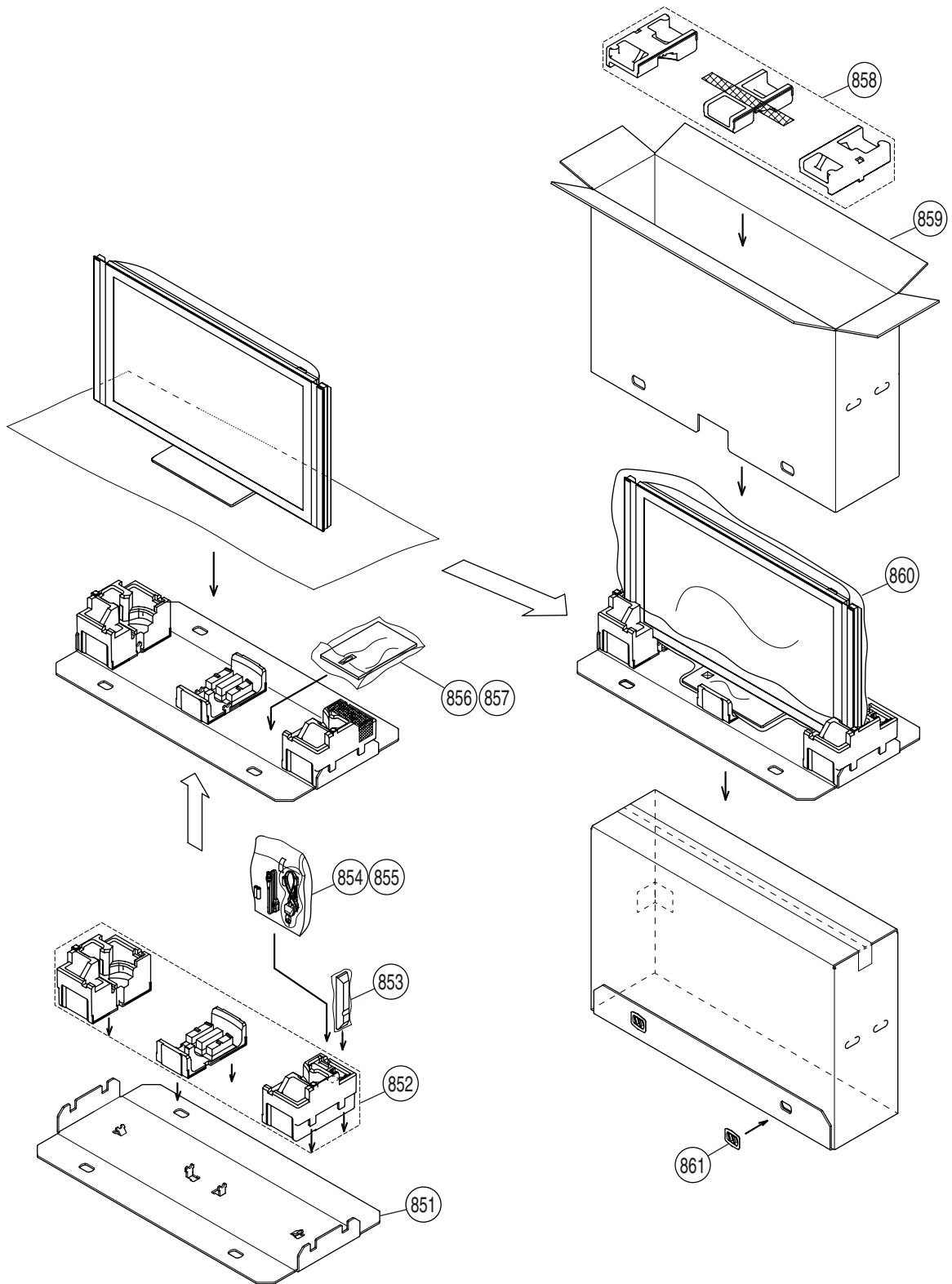


REF. No.	PART No.	DESCRIPTION	MARK
801	* 4-110-171-01	TRAY	
802	1-480-971-11	REMOTE COMMANDER (RM-KD009)	
803	△ 4-124-503-11	MANUAL, INSTRUCTION	
804	4-104-564-13	CUSHION LOWER	
805	△ 1-834-117-11	CORD, POWER	

REF. No.	PART No.	DESCRIPTION	MARK
806	1-757-319-42	CABLE, COAXIAL (WITH (F) PLUG)	
807	4-124-504-11	GUIDE, QUICK SETUP	
808	* 4-104-563-11	CUSHION UPPER	
809	* 4-124-505-01	INDIVIDUAL CARTON	
810	* 3-674-673-01	STOPPER (A)	



4-3-2. KDL-55X4500



REF. No.	PART No.	DESCRIPTION	MARK
851	* 3-874-544-01	TRAY	
852	* 4-125-292-12	CUSHION LOWER	
853	1-480-971-11	REMOTE COMMANDER (RM-KD009)	
854	1-757-319-42	CABLE, COAXIAL (WITH (F) PLUG)	
855	△ 1-834-117-11	CORD, POWER	

REF. No.	PART No.	DESCRIPTION	MARK
856	△ 4-124-503-11	MANUAL, INSTRUCTION	
857	4-124-504-11	GUIDE, QUICK SETUP	
858	* 4-125-291-11	CUSHION UPPER	
859	* 4-124-506-01	INDIVIDUAL CARTON	
860	* 4-091-526-11	BAG, PROTECTION	
861	* 4-030-895-01	JOINT	

