HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL

ORIGINAL MANUAL ISSUE DATE: 12/2009

AZ1-L *CHASSIS*

Segment: 3a-2

Version	Date	Subject
1.0	12/2009	No revisions or updates are applicable at this time.
2.0	01/2010	Change Destination of General Area and replace Block Diagram.
3.0	04/2010	Add Base, Cover, Neck Information for KDL-40EX400 (Page 46)
4.0	08/2010	Add Support, Panel information (Page 38), (Page 41)
5.0	09/2010	Change Link of Disassembly Movie (Page 13)
6.0	10/2010	Add Note for Disassembly Movie download (Page 13)
7.0	11/2010	Add Troubleshooting Reference information (Page 48)
8.0	08/2011	Part Information Charge: i) Delete Power Supply Cord (Pg 39), (Pg 42). ii) Revised Old Power Supply Cord destinations ((Pg 53) (Pg 55). iii) Add New Power Supply Cord and destinations (Pg 54), (Pg 55) iv) Plug Conversion Adaptor destination correction (Pg 44), (Pg 46). v) Instruction Manual P/N Suffix Change and Destination Correction (Pg 45), (Pg 47).

LCD Digital Color TV

SONY®

Self Diagnosis
Supported model

SERVICE MANUAL

AZ1-L *CHASSIS*

Segment: 3a-2

LCD Digital Color TV

SONY®

MODEL LIST

MODEL	COLOR	COMMANDER	DEST.
KDL-32EX400	Black	RM-GD015	Hong Kong
KDL-32EX400	Blue	RM-GD015	Hong Kong
KDL-32EX400	Red	RM-GD015	Hong Kong
KDL-32EX400	Black	RM-CD009	Taiwan
KDL-32EX400	Blue	RM-CD009	Taiwan
KDL-32EX400	Red	RM-CD009	Taiwan
KDL-32EX400	Black	RM-GD015	Australia, New Zealand, Singapore , South Africa , GAA
KDL-32EX400	Blue	RM-GD015	Australia, New Zealand, Singapore , South Africa , GAA
KDL-32EX400	Red	RM-GD015	Australia, New Zealand, Singapore , South Africa , GAA
KDL-40EX400	Black	RM-GD015	Hong Kong
KDL-40EX400	Black	RM-CD009	Taiwan
KDL-40EX400	Black	RM-GD015	New Zealand , Singapore , South Africa

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

POUR TRANSPORTER LE TÉLÉVISEUR

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

• Débranchez tous les câbles avant de transporter le téléviseur.

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

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

ALERTE!!

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

ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

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

USE CAUTION WHEN HANDLING THE LCD PANEL

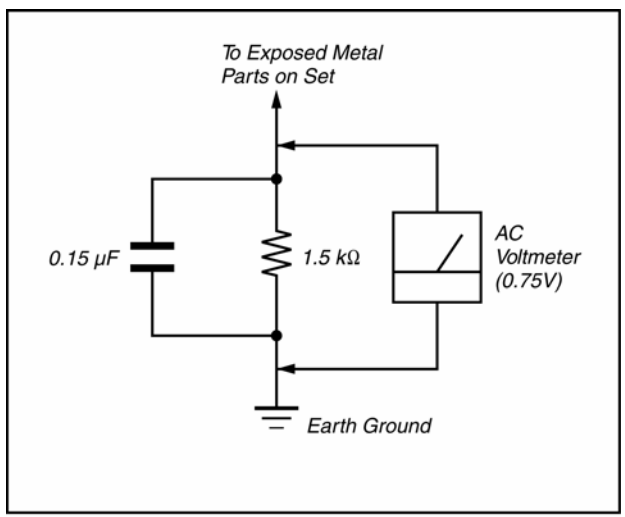
When repairing the LCD panel, be sure you are grounded by using a wrist band.
When repairing the LCD panel on the wall, the LCD panel must be secured using the 4 mounting holes on the rear cover.

1) Do not press on the panel or frame edge to avoid the risk of electric shock.
2) Do not scratch or press on the panel with any sharp objects.
3) Do not leave the module in high temperatures or in areas of high humidity for an extended period of time.
4) Do not expose the LCD panel to direct sunlight.
5) Avoid contact with water. It may cause a short circuit within the module.
6) Disconnect the AC power when replacing the backlight (CCFL) or inverter circuit. (High voltage occurs at the inverter circuit at 650Vrms.)
7) Always clean the LCD panel with a soft cloth material.
8) Use care when handling the wires or connectors of the inverter circuit. Damaging the wires may cause a short.
9) Protect the panel from ESD to avoid damaging the electronic circuit (C-MOS).

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.



FigureA. 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).

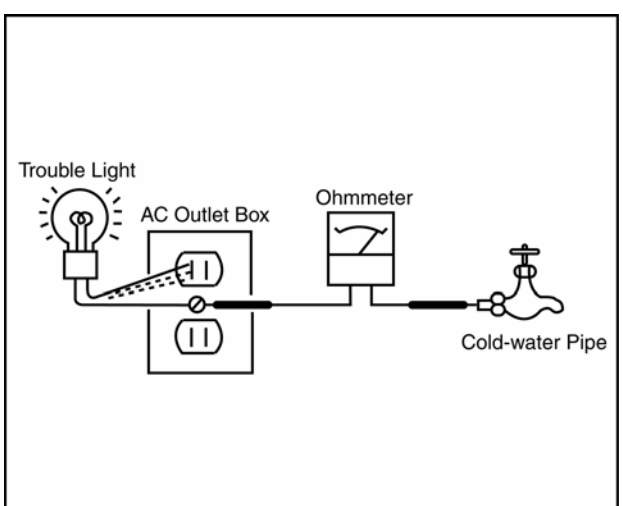


Figure B. Checking for earth ground.

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.

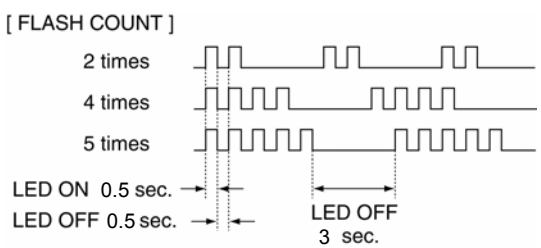
If there is more than one error, the LED will identify the first of the problem areas.

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

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

STBY LED Flash time	Service menu Item name (Screeen Dsisplay)	Diagnostic Item Description
2	MAIN_POWE	Main Power Over Voltage Protection
3	DC_ALERT	DC_ALERT
	DTT_WDT	DTT Error
	AUD_PROT	Audio Abnormal Detection
4	BALANCER_	Panel Balancer Error
5	TCON_ERR	T-CON Error
	HFR_ERR	HFR Error
	P_ID_ERR	Panel ID NVM Error
6	BACKLITE_	Back Light Error (Panel Inverter)
7	TEMP_ERR	Thermal Error
	FAN_ERR	FAN Error (Not Detected. Display Only)
8	-	Not sed u
9	-	Not sed u
10	-	Not used
11	-	Not used
12	-	Not used
-	RGB_SEN	RGB Sensor ACK Error

DISPLAY OF STANDBY LED FLASH COUNT



Note: One flash counts is not self-diagnostic.

SELF-DIAGNOSTIC SCREEN DISPLAY

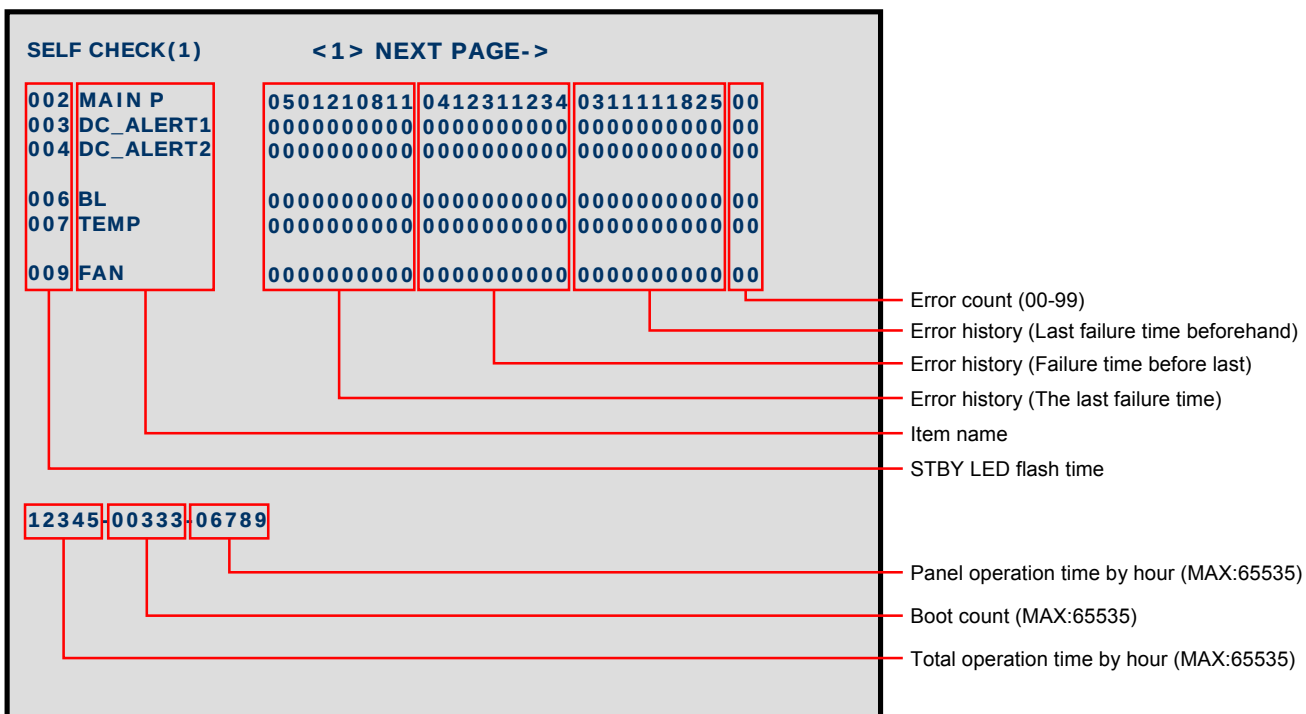
For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurrences of failure for confirmation on the screen:

[To Bring Up Screen Test]

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

* : Note that this differs from entering the service mode (volume +)

[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 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

1-1. MOVIE LIST

KDL-32EX400

KDL-40EX400

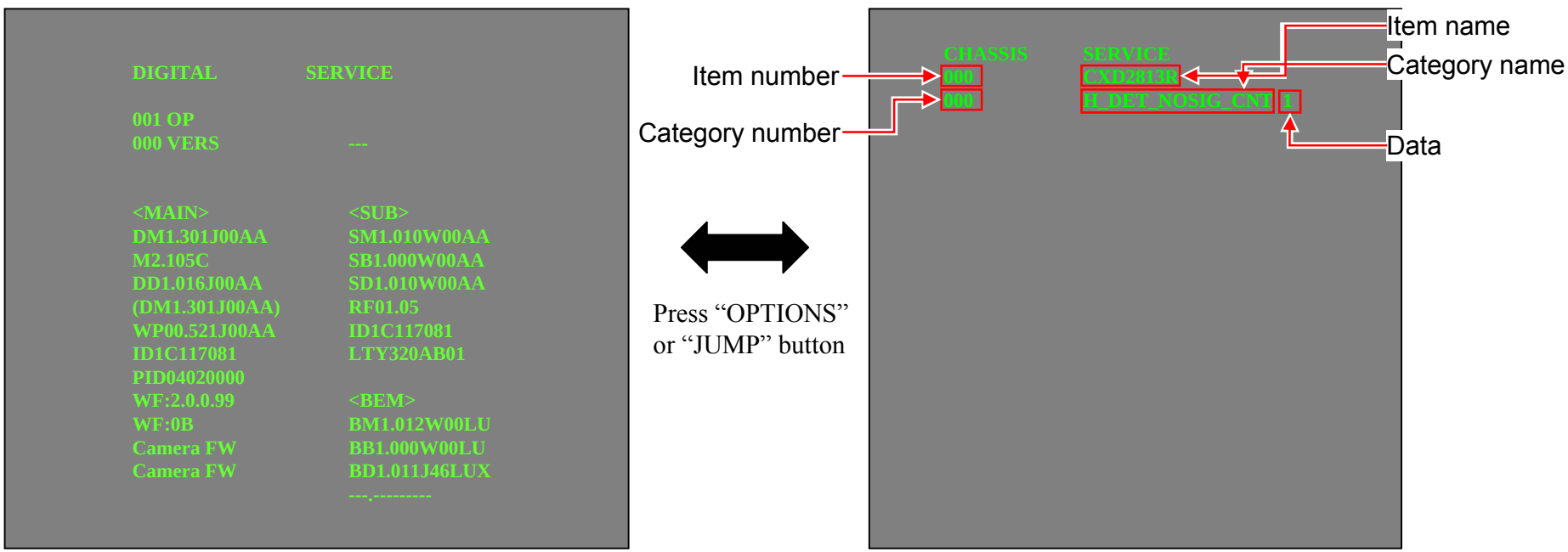
Note:
1. This link does not work from outside Sony network.
2. The Disassembly movie can be downloaded from ORISS Service Manuals site.

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" -> "Sub"



4) How to use the remote commander.

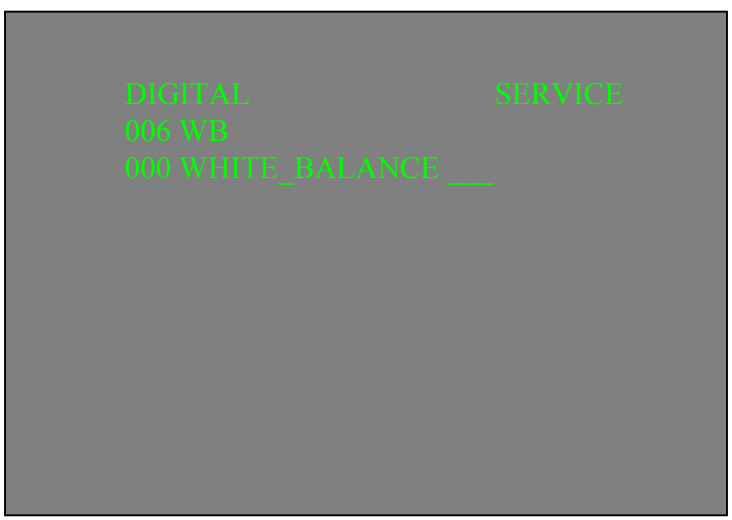
Function	The flow of control
Service mode on	<Test>+<TV>/<Display><5><Vol Up><Power>
Service mode off	<Other> / <Power off + on>
Item up / down	<1>/<4>
Category up / down	<2>/<5>
Data up / down	<3>/<6>
Test reset	<8> + <Mute> + <0>
Read data	<9> + <0>
Execute	<10 or 0>
Write data	<Mute> + <0>
Change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

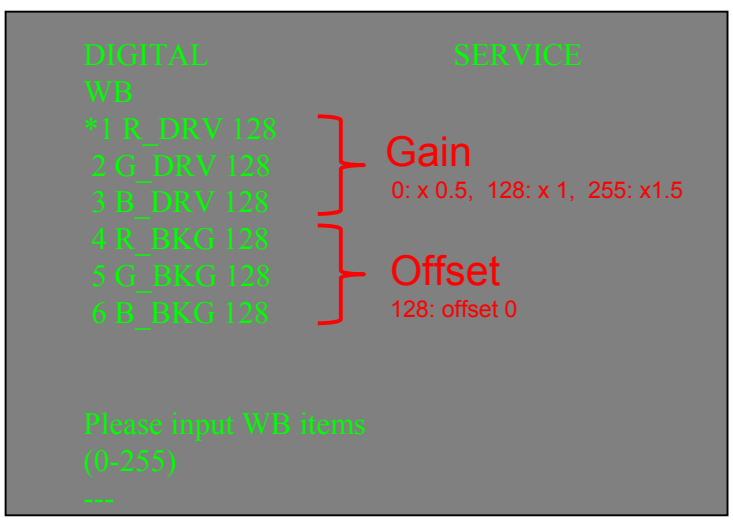
5) After entering service mode, then turn off the power switch.

WHITE BALANCE ADJUSTMENT

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

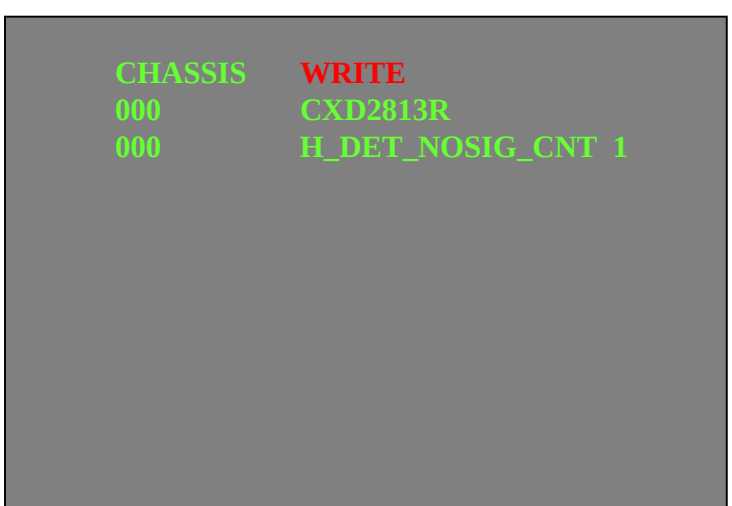
a. Press "0" or "10" on remote to enter WB adjustment mode.
b. Press number key "1"~"6" directly. "*" stamp move.
c. Press "12 / enter / select" to decide and advance next step.
When returning on the previous page, press "return".
d. Change data by number key "0"~"9" directly. (0-255)
e. Press "12 / enter / select" to save data.
It shows red "WRITE". It indicate writing is processing.
f. Writing process is done at this point.





SAVE CHANGING DATA

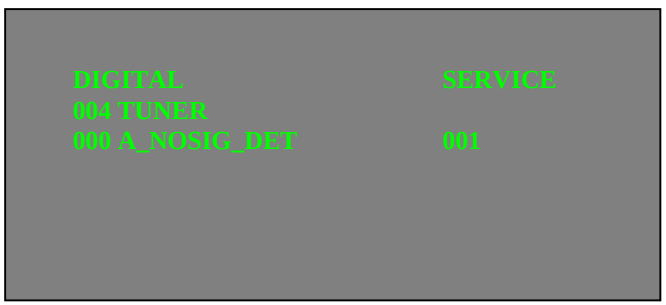
1) Change Data of **"Chassis"** or **"Sub"** service mode
2) Write data for **"Chassis"** or **"Sub"** service mode
   a. Press "Mute" on remote.
      It shows green "SERVICE" changes to green "WRITE".
   b. Press "0" or "enter" on remote. Green "WRITE" changes to red "WRITE". It indicate writing is 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.



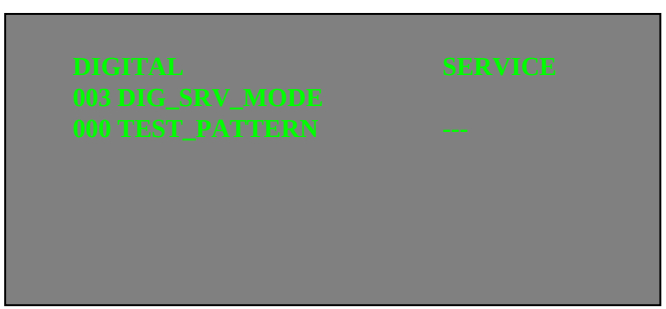
CHANGE DATA

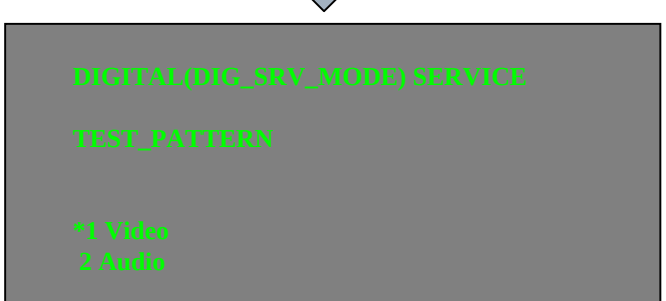
Note: “Digital” service mode don’t have to Save. (except “002 MODEL” category)

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.



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.

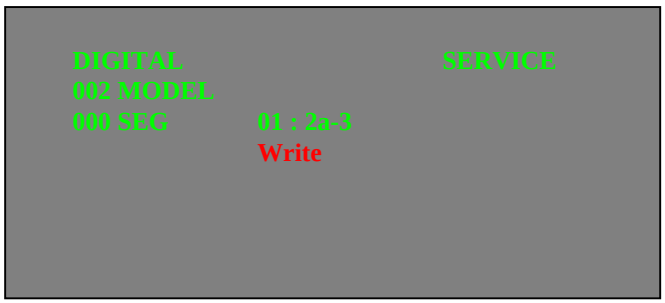




3) Write data for **"Digital"** service mode. ("002 MODEL" category)
Note: This procedure operation, when replaced the B board.
Note: Do not write a wrong segment or destination information in Product ID.
When the wrong setting is written, TV may not operate.

000 SEG・・・ Product ID - segment information
001 DEST・・・ Product ID – destination information

a. Change data for each model.
b. Press "0" or "enter" on remote.
It shows red "WRITE". It indicate writing is processing.
c. Writing process is done at this point.



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.

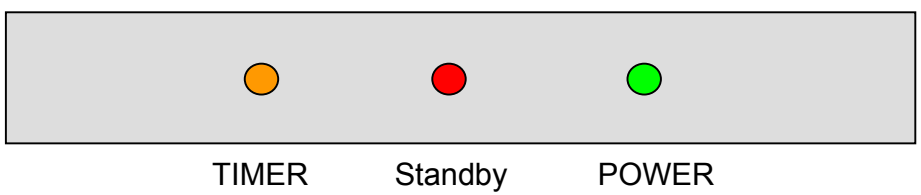
Added green "EXE" after green "RST-" .

d. Press "0" or "enter" 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.



<Another way>

You can set to shipping condition w/o entering Service Mode.

-> "Cursor Up" on remote + "Power Key" on Front panel.

SEC 3. TROUBLE SHOOTING

3-1. TRIAGE CHART

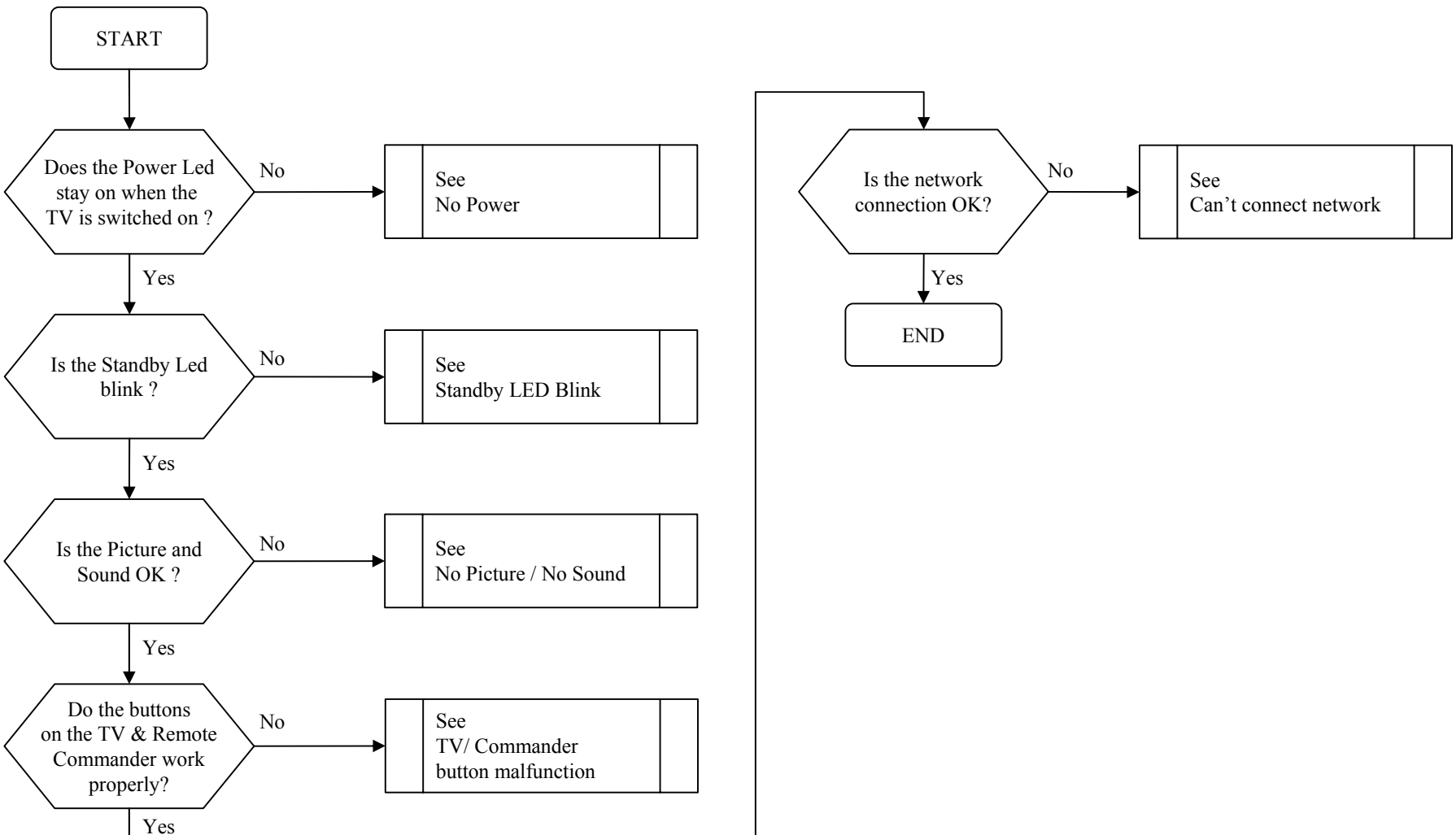
Note: Power board is different in name every inch. Therefore this section displays difference point in "*".

Reference	Symptoms - Shutdown. Power LED blinking red diagnostics sequences						No Power	Video - missing or distorted			Remote	Network	Audio
	2	3	4	5	6	7	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
BAL BOARD	▲	●	●	▲	●	●	▲	▲	●	●	▲	●	●
G* BOARD	●	▲					●						▲
HLR BOARD											●		
LVDS CABLE								▲		▲			
LCD PANEL				●				●					
Problem	POWER	POWER DTT AUDIO	POWER	PANEL (TCON)	PANEL (INVERTER)	TEMP							

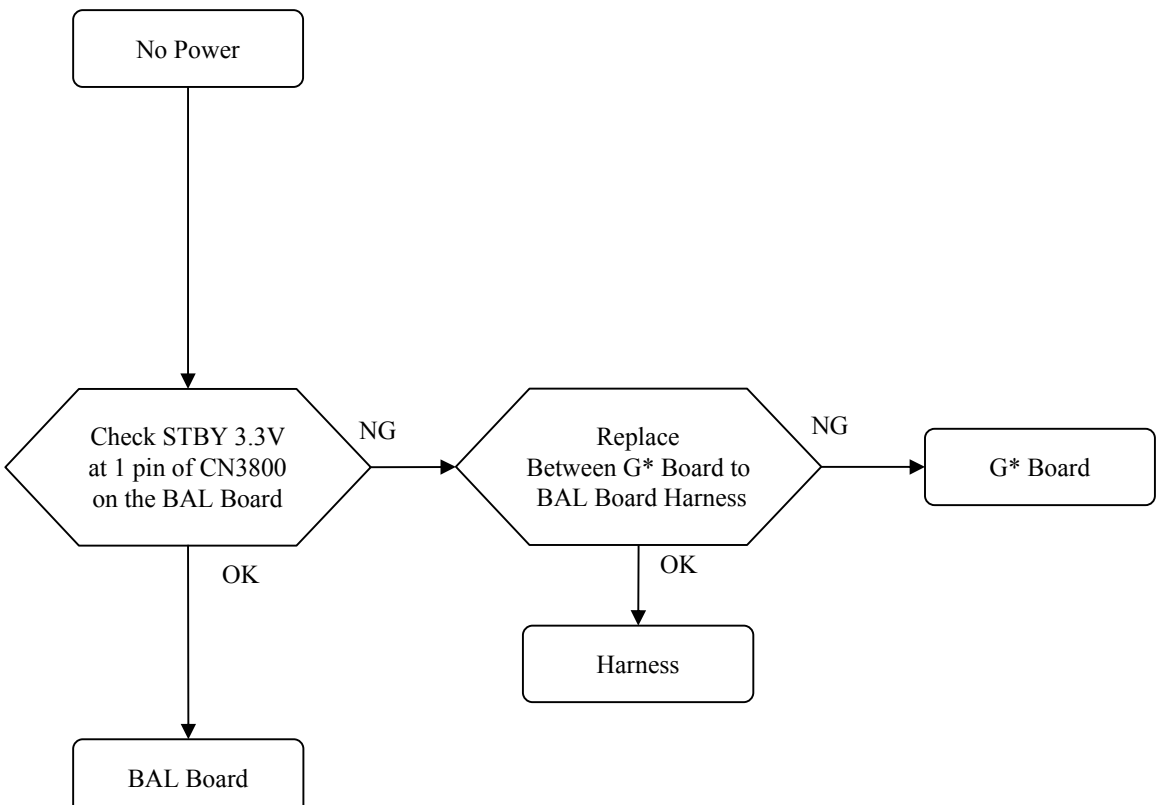
● : doubtful part

▲ : Few possibility

3-2. FLOW CHART

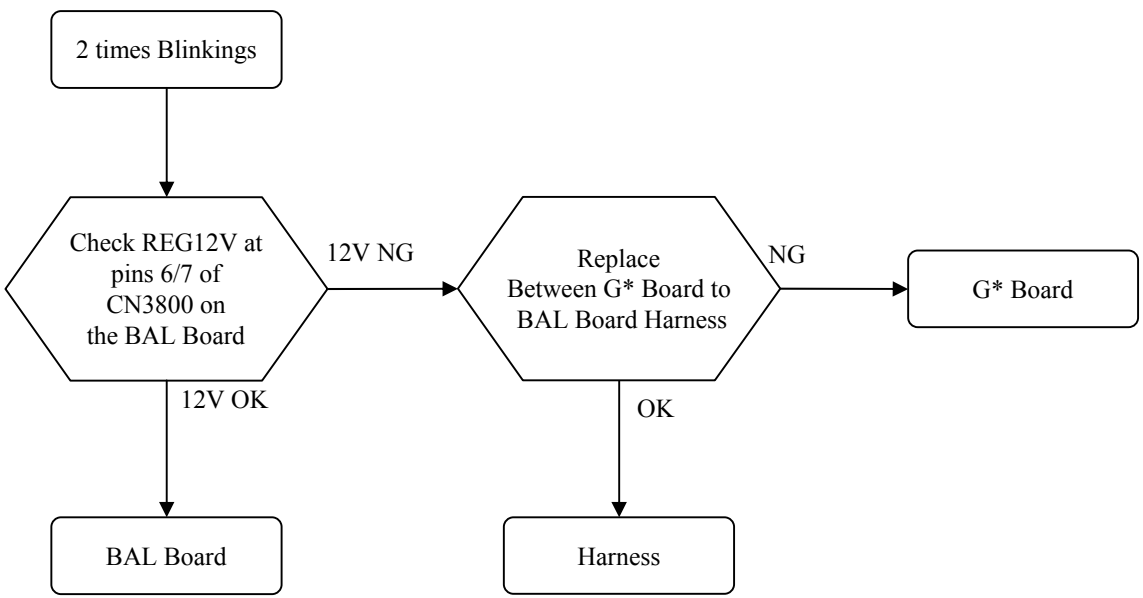


3-3. NO POWER

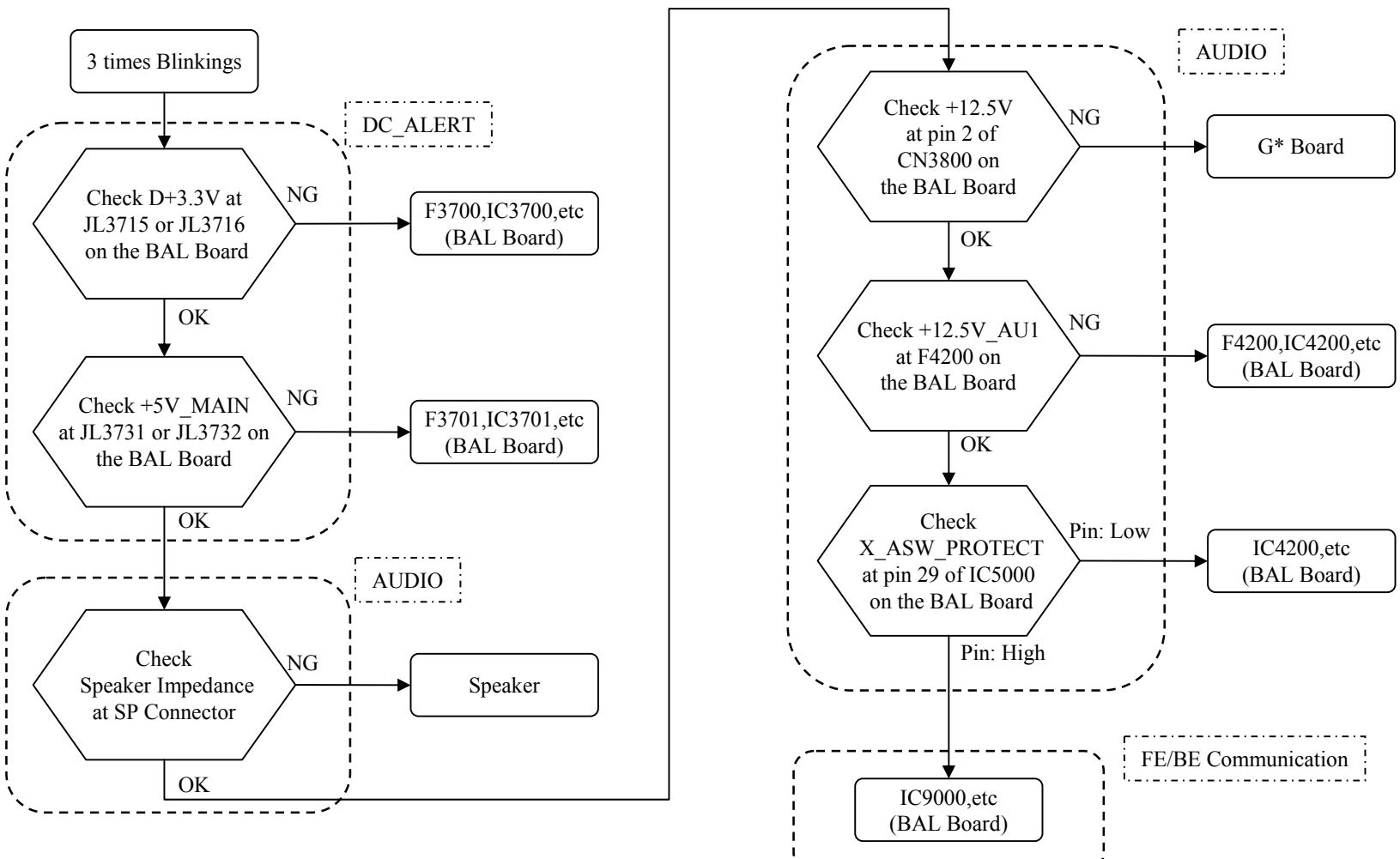

No Power
Check STBY 3.3V at 1 pin of CN3800 on the BAL Board
NG
Replace Between G* Board to BAL Board Harness
NG
G* Board
OK
OK
Harness
BAL Board

3-4. STANDBY LED BLINK

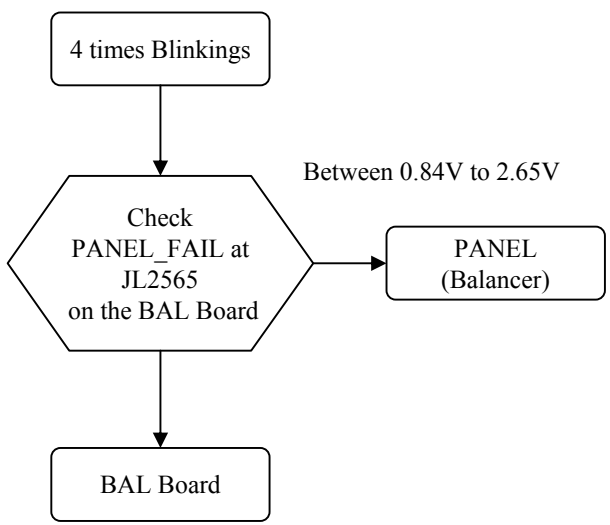
1) 2 times blinkings (Main Power Error)



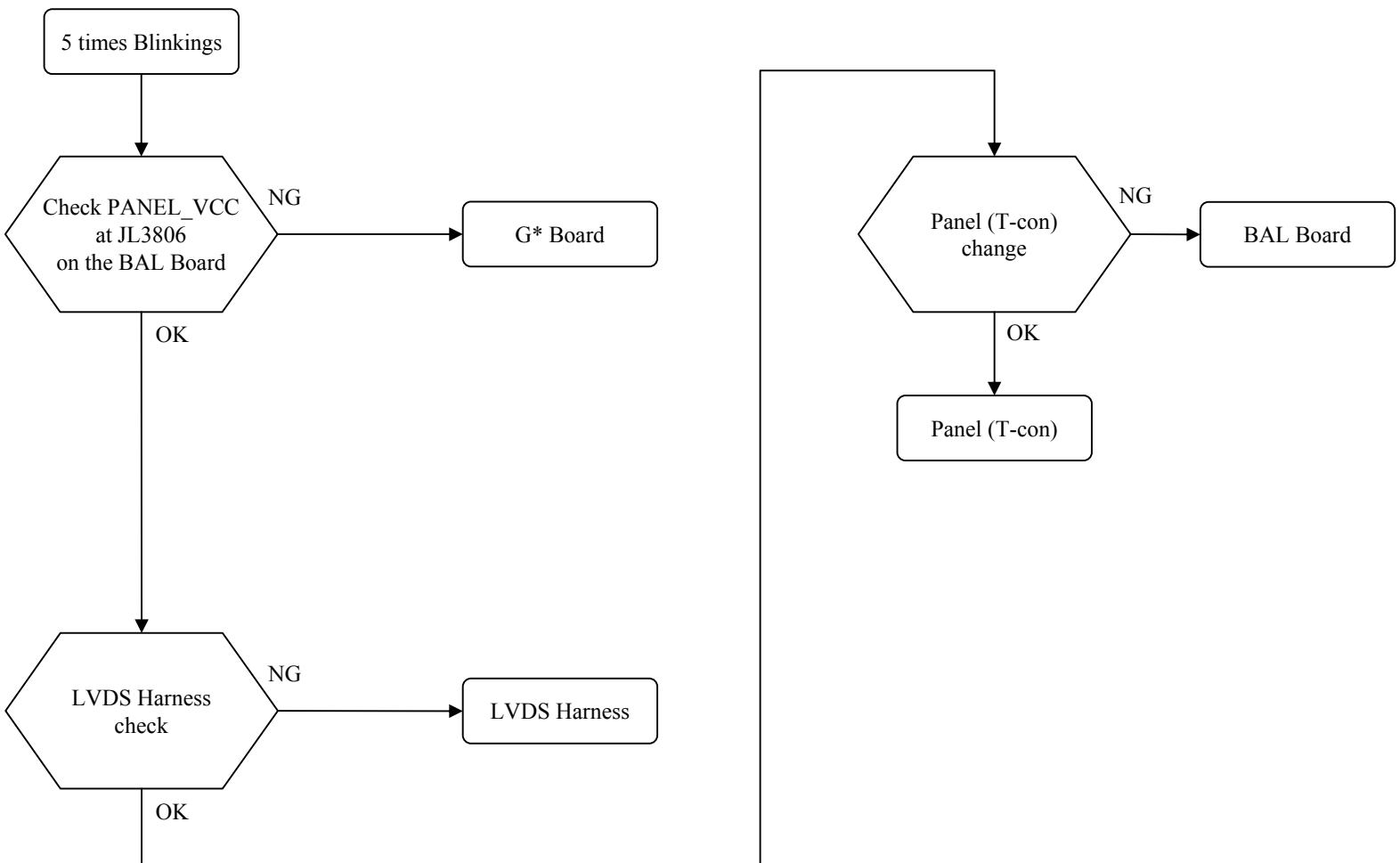
2) 3 times blinkings (DC Alert, Audio Error and Communication Error)



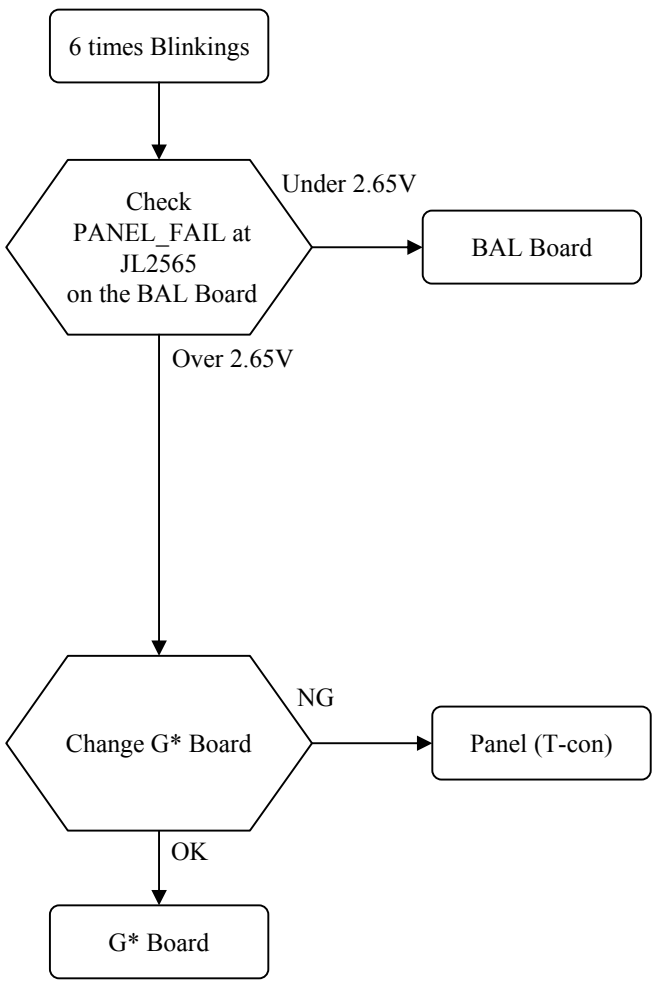
3) 4 times blinkings (Balancer Error)



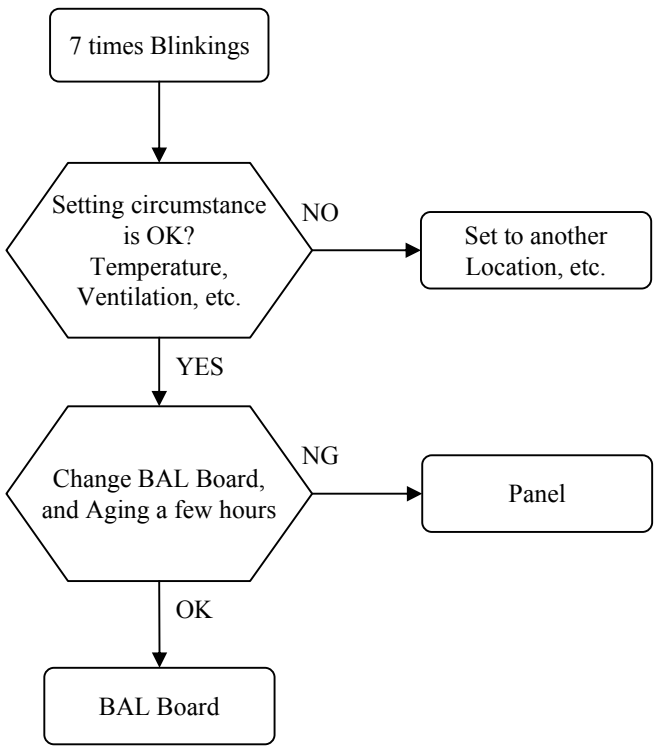
4) 5 times blinkings (T-con Error)



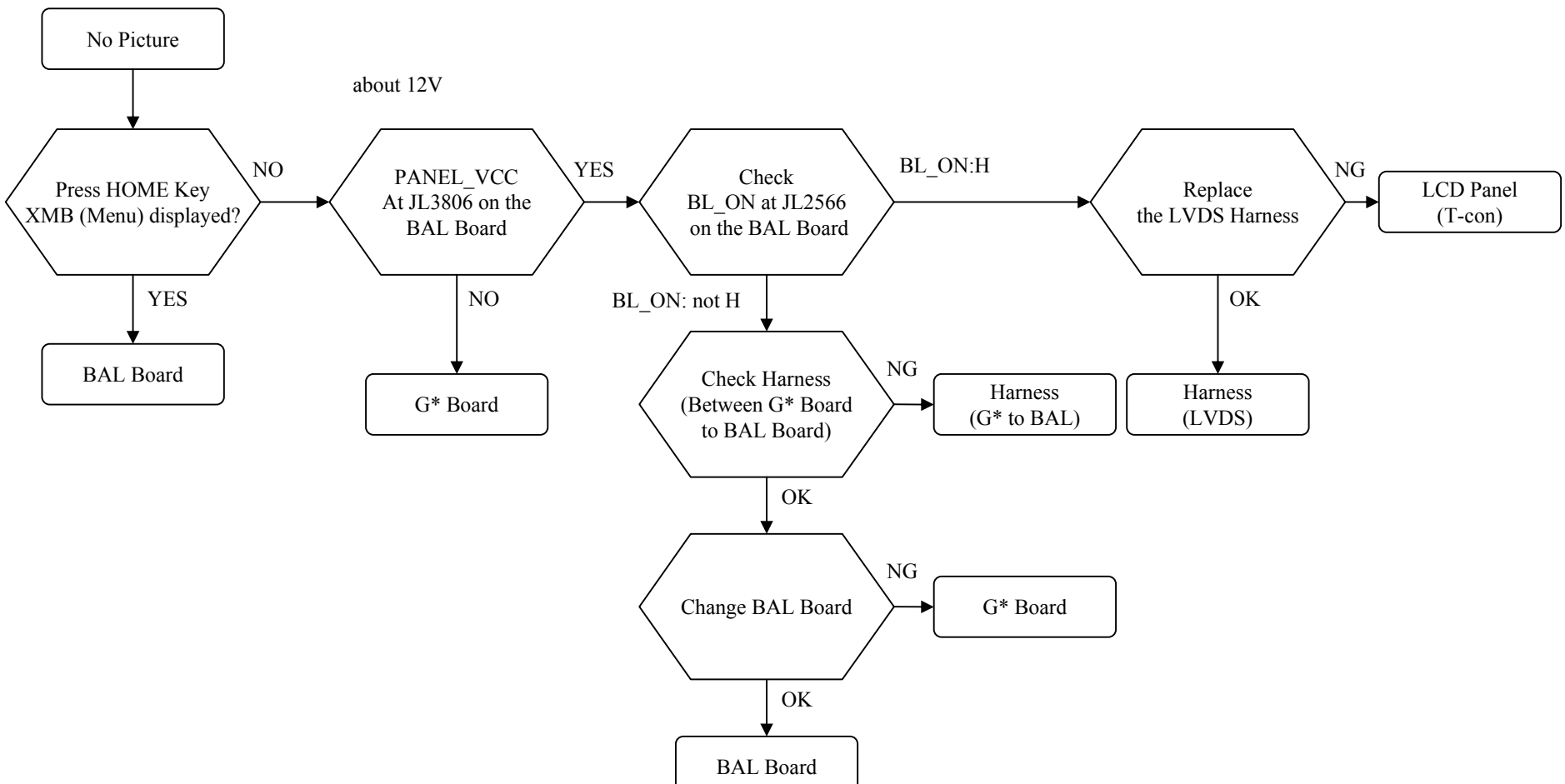
5) 6 times blinkings (Backlight Error)



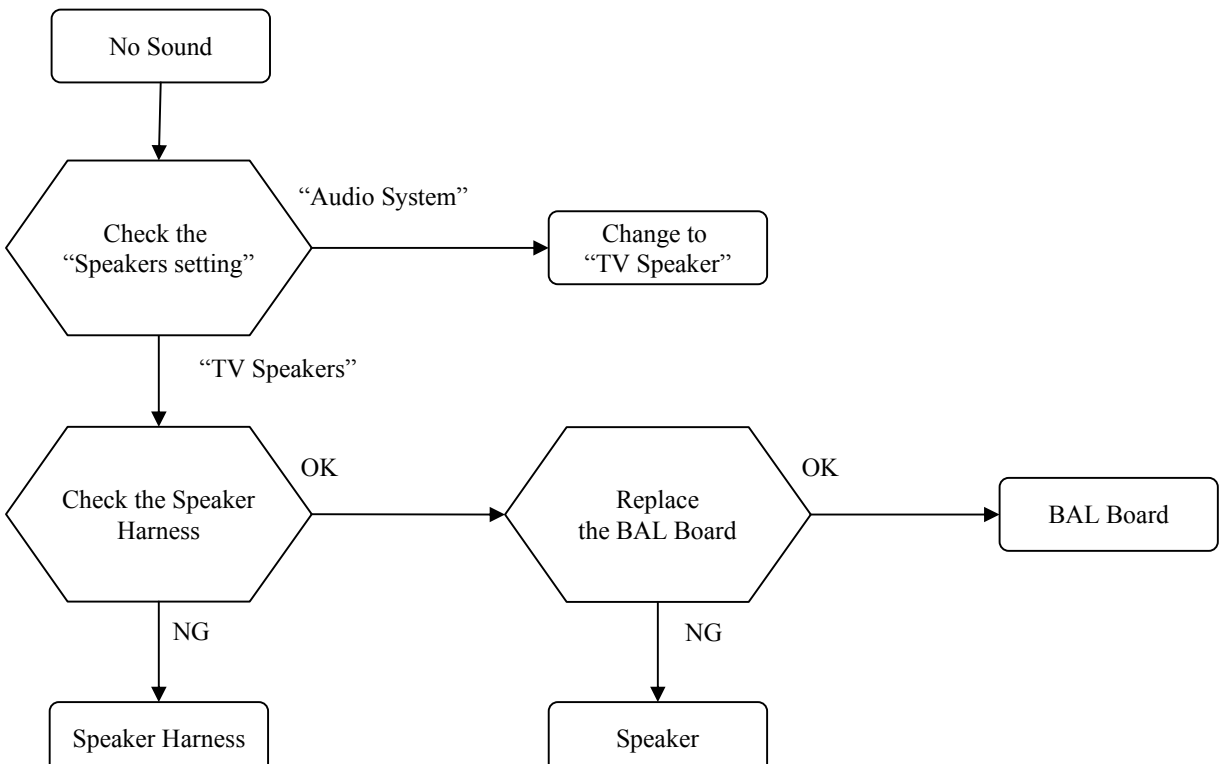
6) 7 times blinkings (Temperature Error)



3-5. NO PICTURE

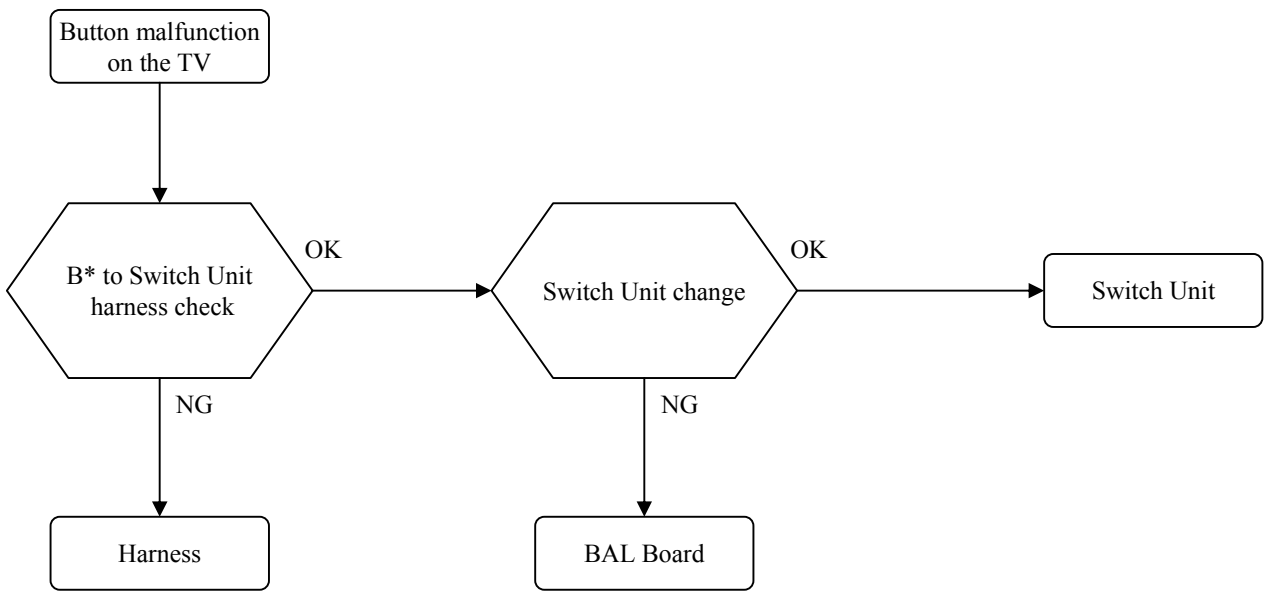


3-6. NO SOUND

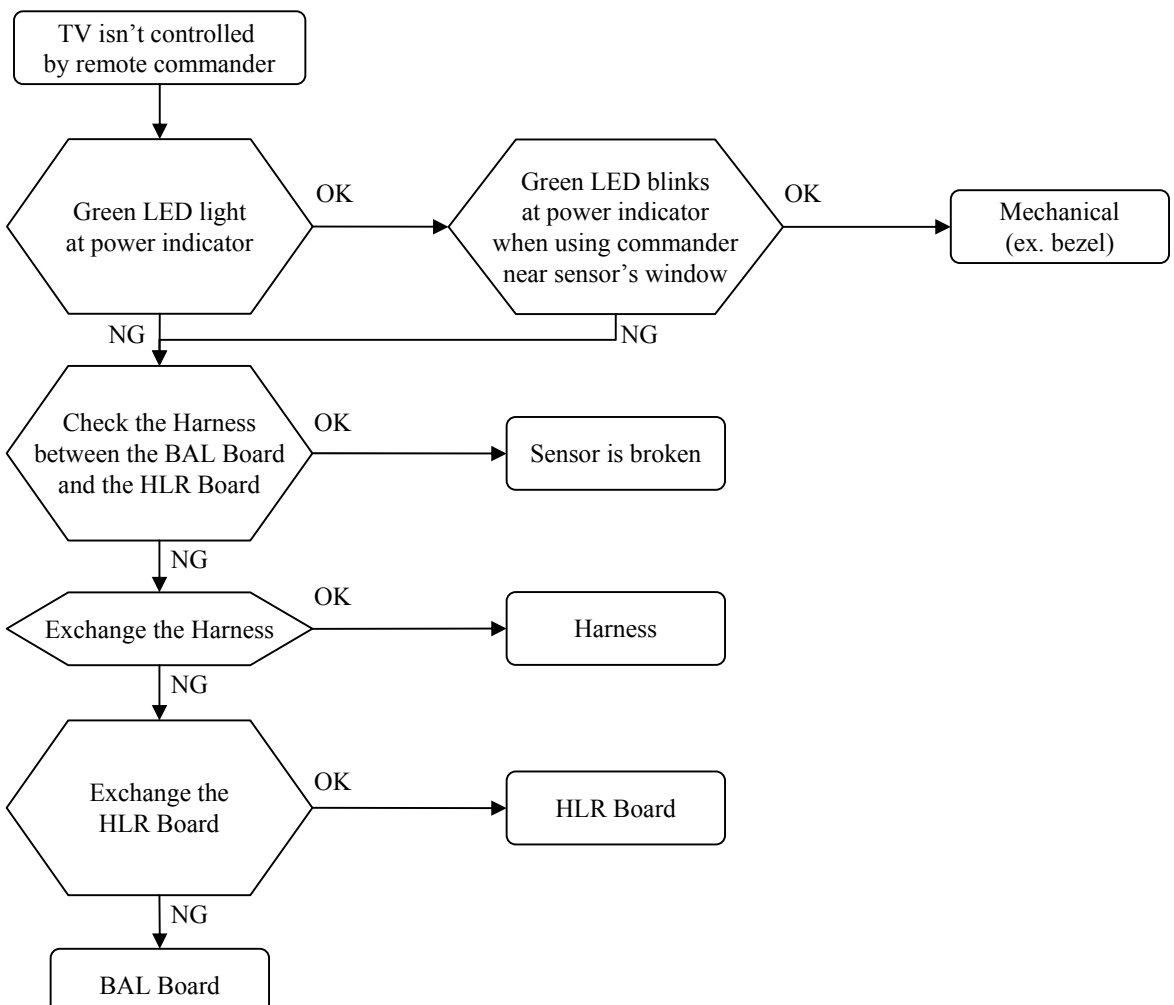

No Sound
Check the
“Speakers setting”
“Audio System”
Change to
“TV Speaker”
“TV Speakers”
Check the Speaker
Harness
OK
Replace
the BAL Board
OK
BAL Board
NG
NG
Speaker Harness
Speaker

3-7. TV COMMANDER BOTTONS MALFUNCTION

1) TV button malfunction

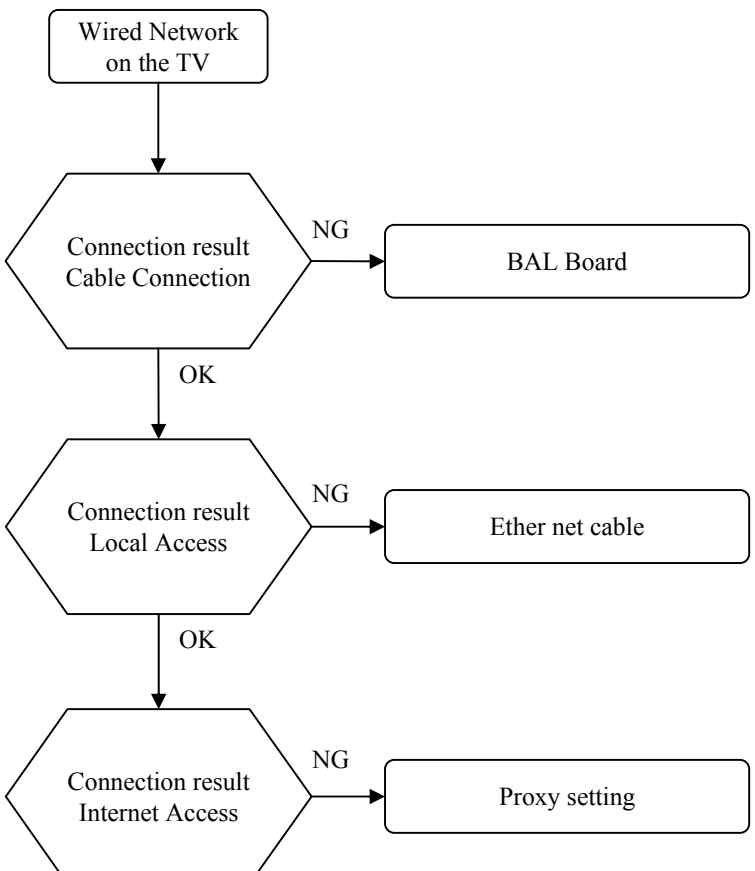


2) IR remote commander malfunction

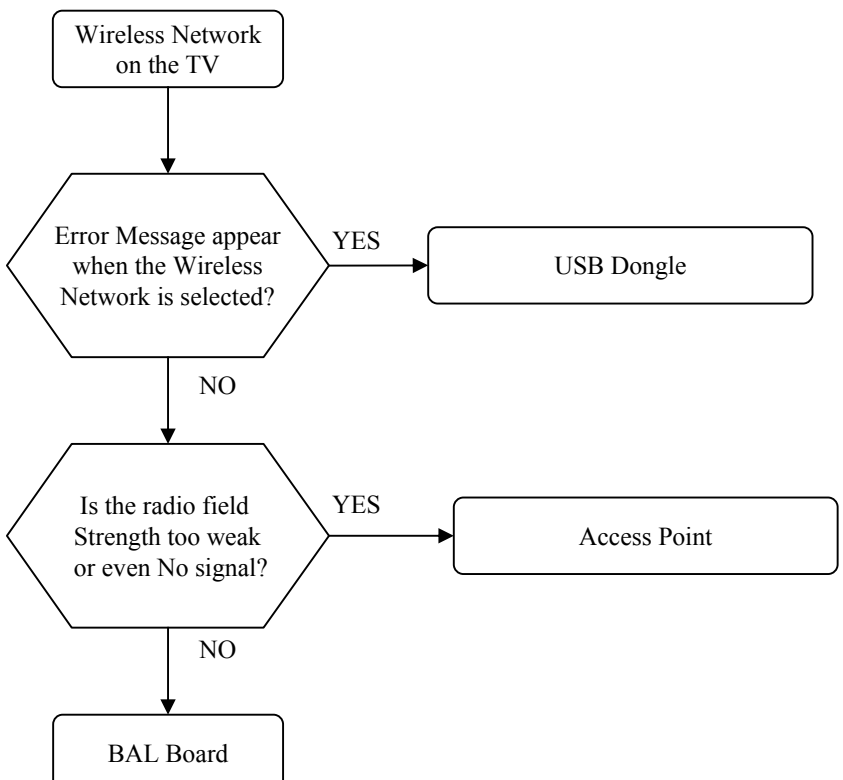


3-8. NETWORK MALFUNCTION

1) Wired Network malfunction

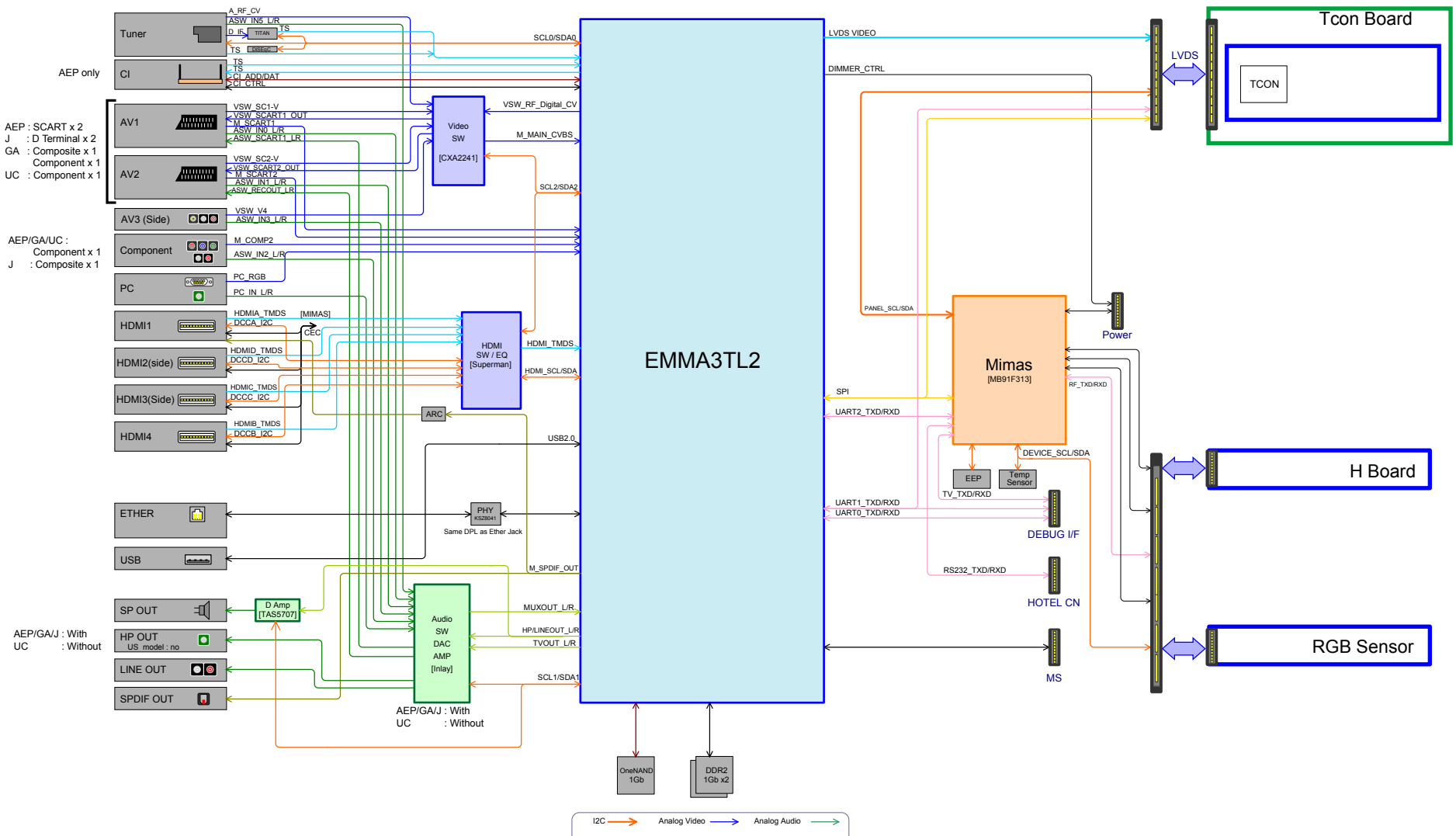


2) USB Wireless Network malfunction



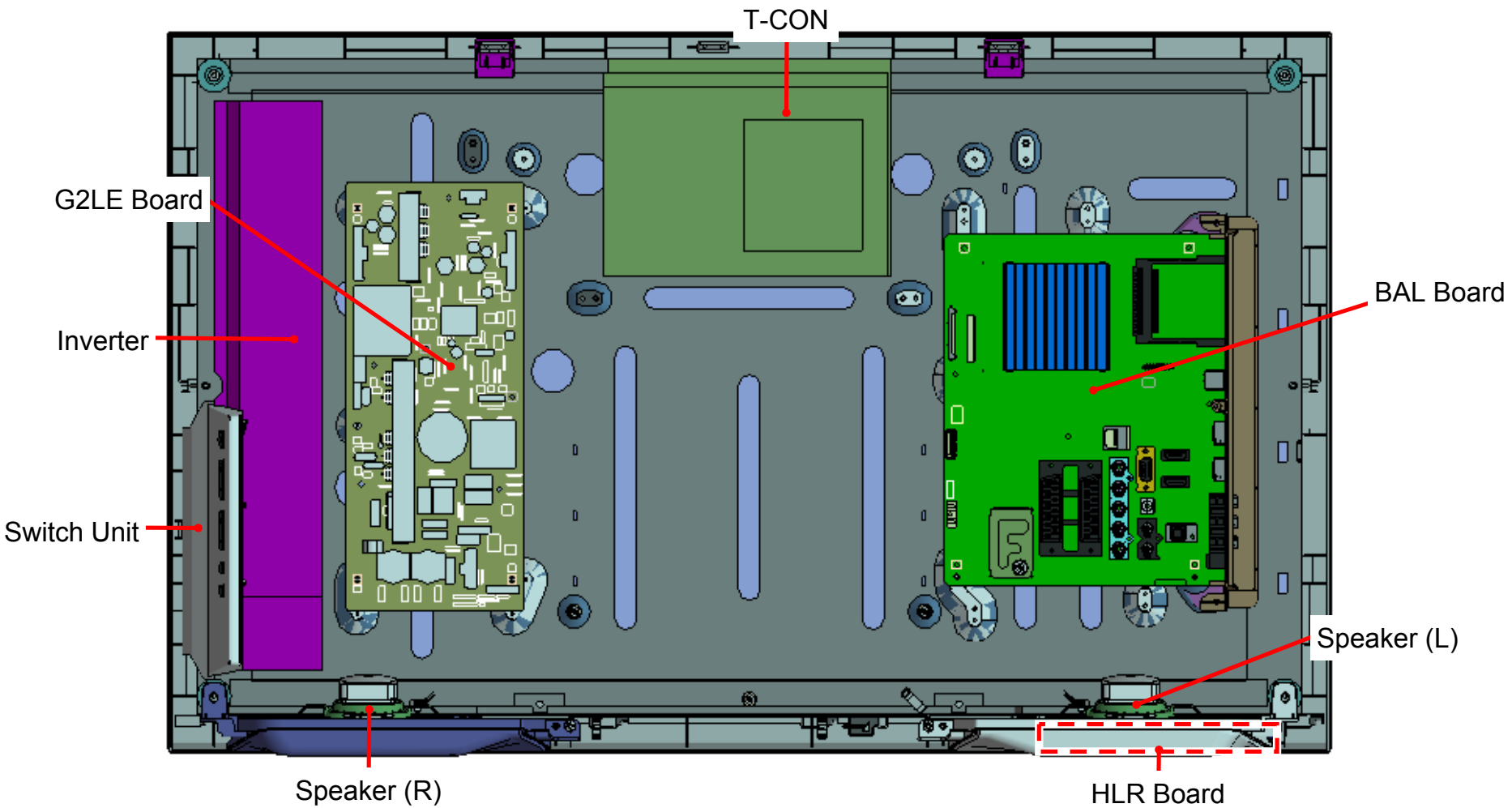
SEC 4. DIAGRAMS

4-1. BLOCK DIAGRAM

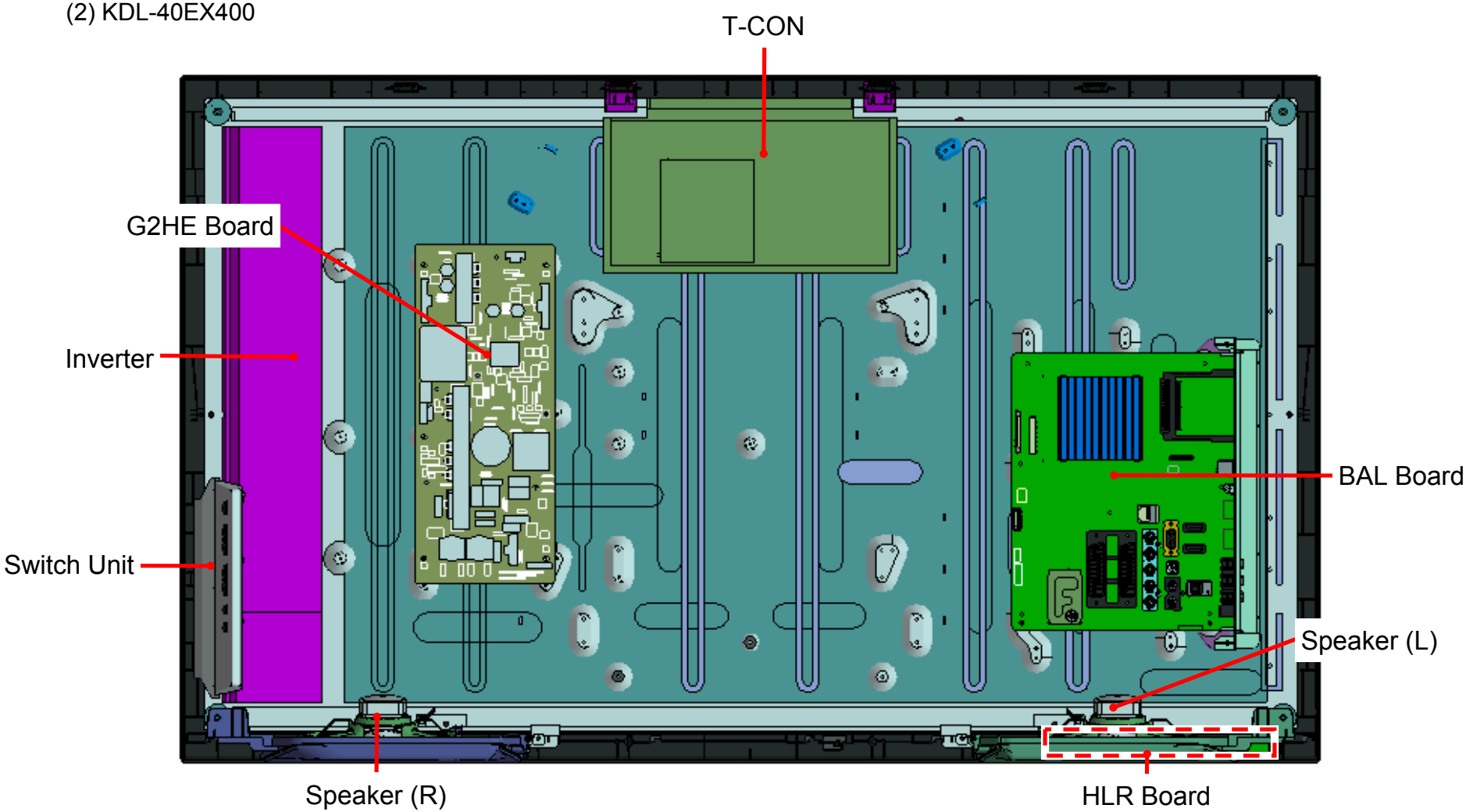


4-2. CIRCUIT BOARDS LOCATION

(1) KDL-32EX400



(2) KDL-40EX400



SEC 5. EXPLODED VIEWS

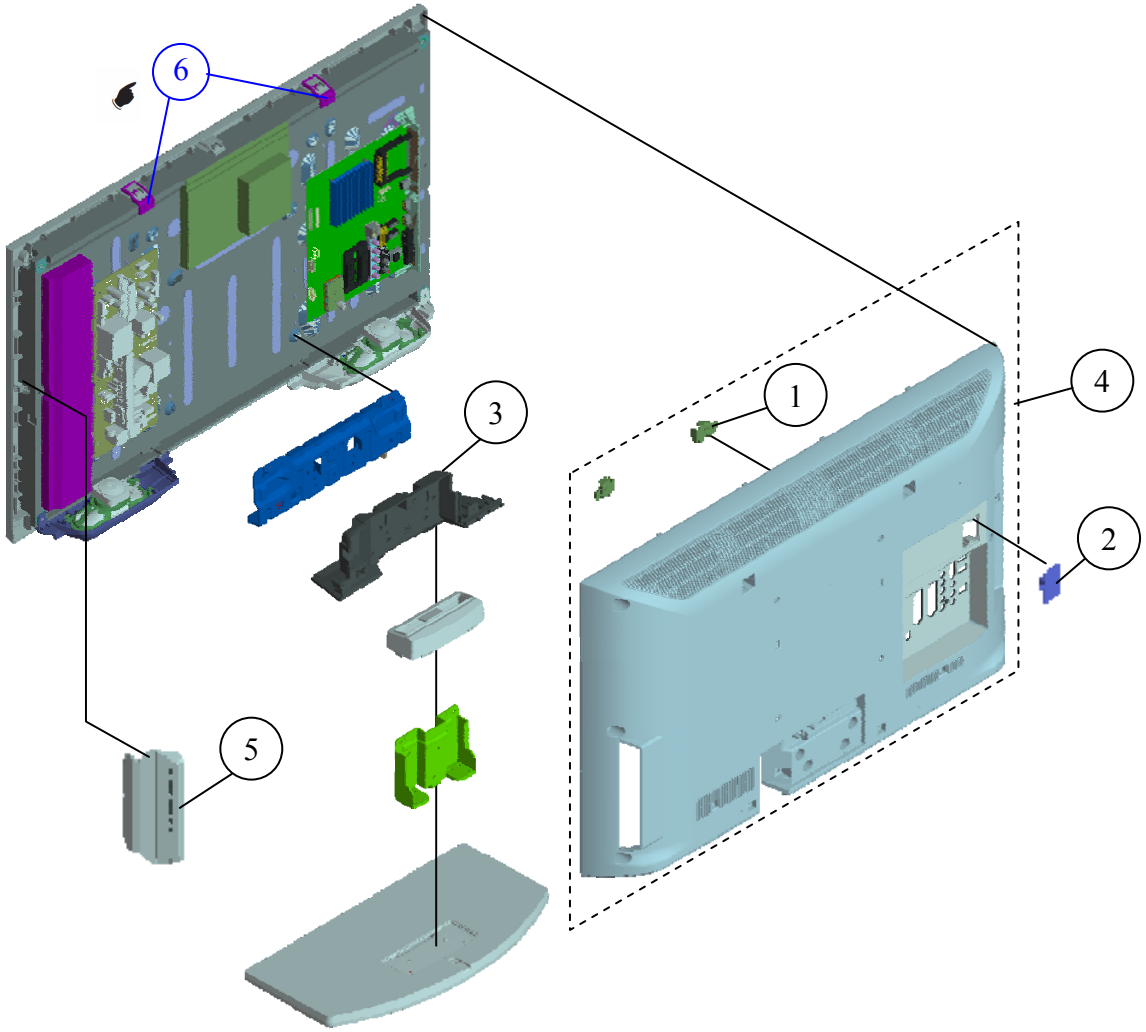
• Items with no part number and no description are not stocked because they are seldom required for roution service.
• The construction parts of an assembled part are indicated with a collation number in the remark colum.
• Items marked " * " are not stocked since they are seldom required for routine 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.

5-1. KDL-32EX400

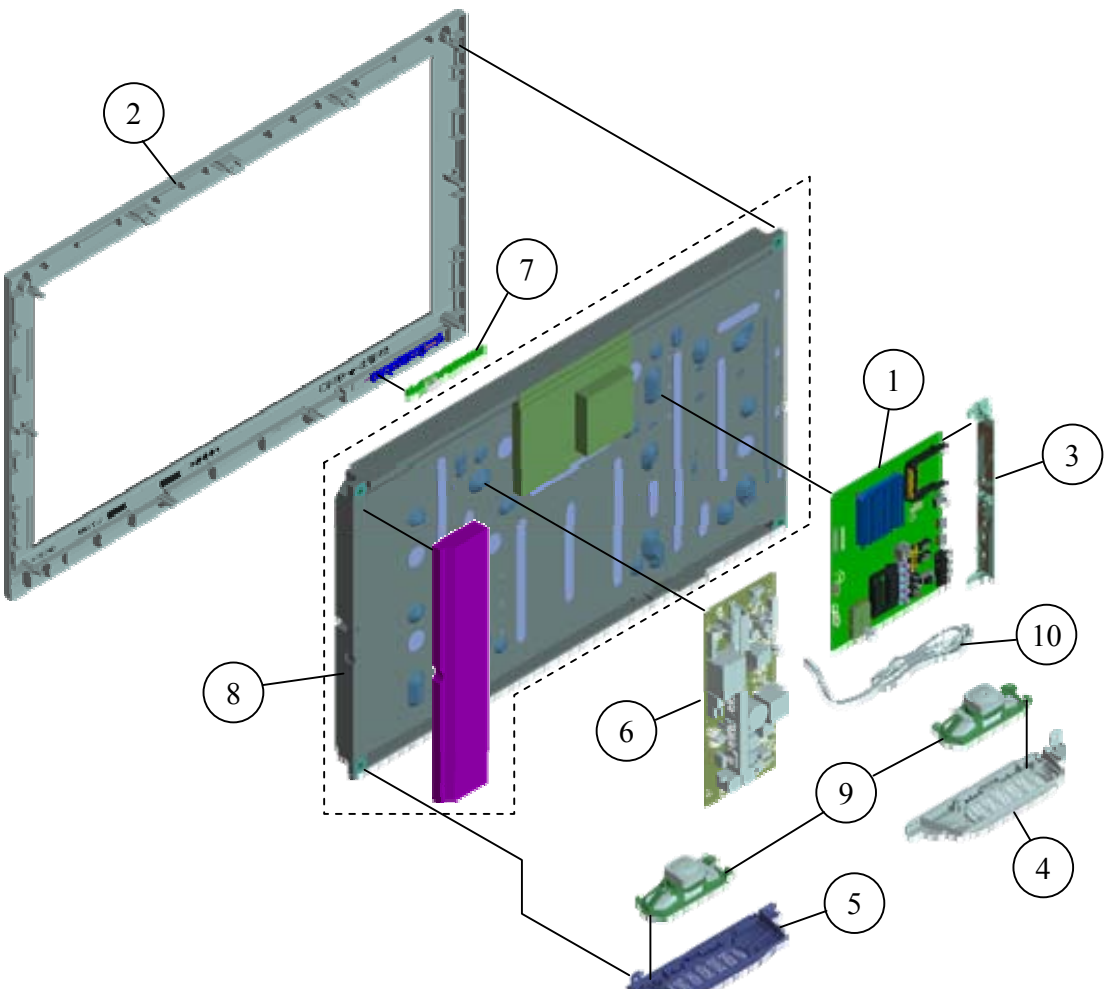
5-1-1. CHASSIS-1



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-167-326-01	BRACKET, VESA(S)	
2	4-115-101-41	COVER, ECS	
3	4-157-976-01	COVER, UNDER(32)	
	4-169-309-01	COVER, UNDER(32)	
4	X-2546-977-1	REAR COVER (32) ASSY (BLACK , BLUE , RED (AUSTRALIA, NEW ZEALAND, SINGAPORE , SOUTH AFRICA, GAA))	1
	X-2546-558-1	REAR COVER (32) ASSY (BLACK(TAIWAN),BLUE(TAIWAN),RED (TAIWAN),BLACK(HONG KONG),BLUE(HONG KONG),RED(HONG KONG))	1
5	1-487-729-11	SWITCH UNIT (BLACK , BLUE , RED (AUSTRALIA, NEW ZEALAND SINGAPORE, SOUTH AFRICA, GAA), BLACK(HONG KONG),BLUE(HONG KONG),RED(HONG KONG))	
	1-487-733-11	SWITCH UNIT (BLACK(TAIWAN),BLUE(TAIWAN),RED (TAIWAN))	
6	4-157-992-11	SUPPORT, PANEL	

5-1. KDL-32EX400

5-1-2. CHASSIS-2



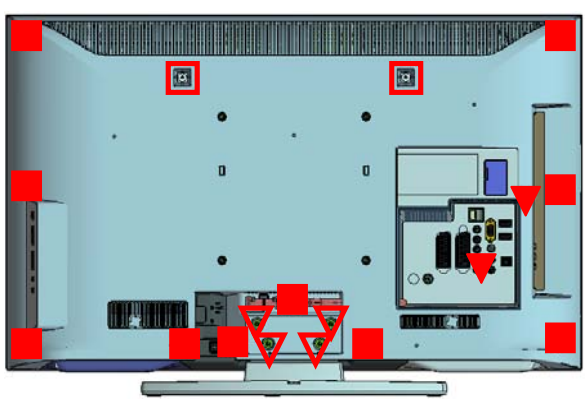
REF.NO.	PART NO.	DESCRIPTION	REMARK
1	A-1761-894-A	BAL COMPL (SERVICE) (BLACK ,BLUE , RED (AUSTRALIA, N ZEALAND, SINGAPORE, S AFRICA,GAA))	
	A-1761-436-A	BAL COMPL (SERVICE) (BLACK(TAIWAN),BLUE(TAIWAN),RED(TAI WAN))	
	A-1760-283-A	BAL COMPL (SERVICE) (BLACK(HONG KONG),BLUE(HONG KONG),RED(HONG KONG))	
2	X-2546-554-1	BEZEL (CY32_B) ASSY (BLACK(AUSTRALIA, N. ZEALAND, SINGAPORE S. AFRICA, GAA),BLACK(TAIWAN),BLACK(HONG KONG))	
	X-2546-555-1	BEZEL (CY32_L) ASSY (BLUE(AUSTRALIA, N.ZEALAND, SINGAPORE S.AFRICA,GAA),BLUE(TAIWAN),BLUE (HONG KONG))	
	X-2546-556-1	BEZEL (CY32_R) ASSY (RED(AUSTRALIA, N.ZEALAND, SINGAPORE S. AFRICA, GAA),RED(TAIWAN),RED(HONG KONG))	
3	4-156-944-31	BRACKET, SIDE JACK	
	X-2546-247-1	BRACKET ASSY, SIDE JACK (BLACK(TAIWAN),BLUE(TAIWAN),RED(TAI WAN))	
4	4-157-969-01	BRACKET,SP(32L)	
	4-172-843-01	BRACKET,SP(32L)	
5	4-157-970-01	BRACKET,SP(32R)	
	4-172-844-01	BRACKET,SP(32R)	
6	A-1752-778-A	G2LE UNIT	
7	A-1753-637-A	HLR MOUNT	
8	1-811-073-11	LCD PANEL(A32V0)	
	1-811-059-11	LCD PANEL(S32TSP)	
9	1-858-364-22	LOUDSPEAKER(12.5X4.5CM)	
10	1-837-454-11	POWER-SUPPLY CORD (BLACK , BLUE , RED (AUSTRALIA N.ZEALAND, SINGAPORE, S. AFRICA, GAA))	
	1-837-486-11	POWER-SUPPLY CORD (BLACK , BLUE , RED (AUSTRALIA N.ZEALAND, SINGAPORE, S. AFRICA, GAA))	
	1-837-458-11	POWER-SUPPLY CORD (BLACK(TAIWAN),BLUE(TAIWAN),RED(TAI WAN))	
	1-837-455-11	POWER-SUPPLY CORD (UK PLUG) (BLACK(HONG KONG),BLUE(HONG KONG),RED(HONG KONG))	
	1-837-459-11	POWERSUPPLYCORD(WITHCONNECTOR) (BLACK , BLUE , RED (AUSTRALIA N.ZEALAND, SINGAPORE, S. AFRICA, GAA))	

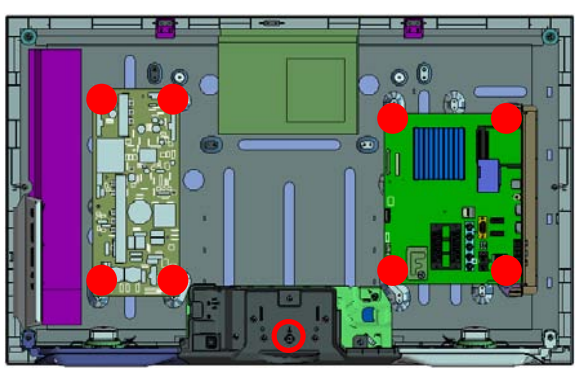
(No 10 (Power Supply Cord) please refer to :
(Pg 53) for old part no. and revised destination details.
(Pg 54) for the new part no. and destination details.

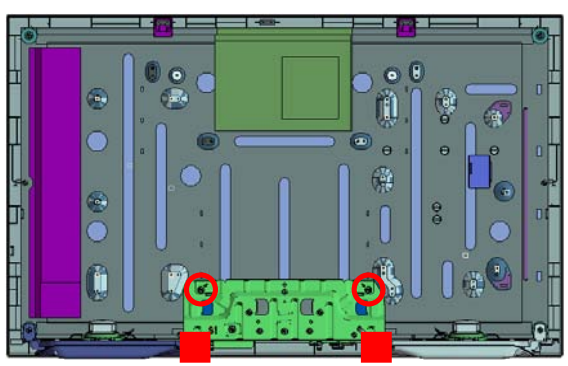
5-1. KDL-32EX400

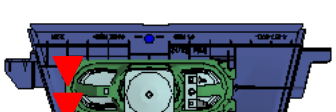
5-1-3. SCREWS

	PART No.	DESCRIPTION
■	2-580-640-01	SCREW, +BVTP 4X16 TYPE2 IT-3
□	2-580-595-01	SCREW, +PSW M3X12
▼	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3
▽	2-580-608-01	SCREW, +PSW M5X16
●	2-580-592-01	SCREW, +PSW M3X8
○	4-159-298-01	SCREW, +PSW M4X10



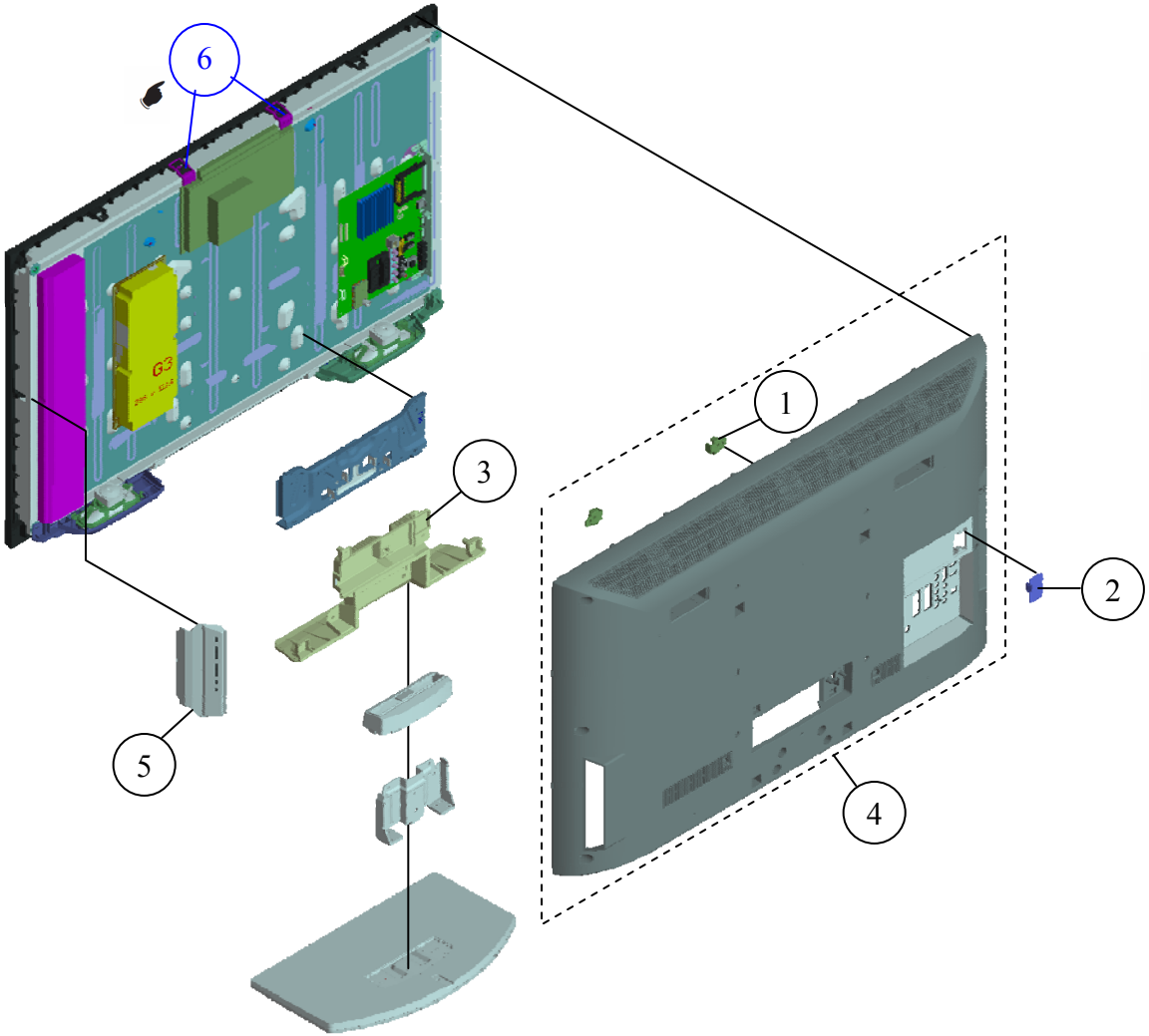






5-2. KDL-40EX400

5-2-1. CHASSIS-1

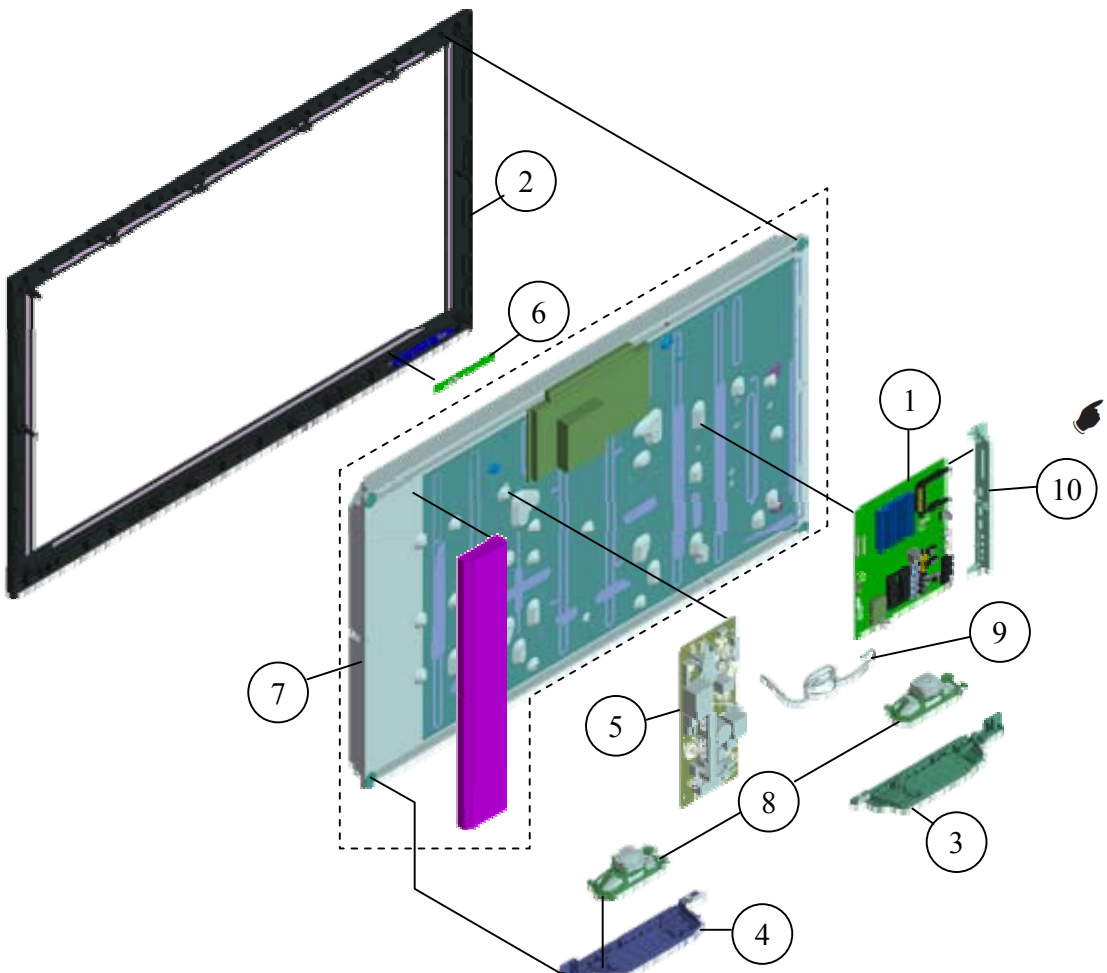


REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-167-326-01	BRACKET, VESA (S)	
2	4-115-101-41	COVER, ECS	
3	4-157-977-01	COVER, UNDER (37)	
	4-169-308-01	COVER, UNDER (37)	
4	X-2546-557-1	REAR COVER (40) ASSY (TAIWAN,HONG KONG)	1
	X-2546-981-1	REAR COVER (40) ASSY (N. ZEALAND, SINGAPORE, S. AFRICA)	1
5	1-487-733-11	SWITCH UNIT (TAIWAN)	
	1-487-729-11	SWITCH UNIT (HONG KONG, N. ZEALAND, SINGAPORE, S. AFRICA)	
6	4-157-992-01	SUPPORT, PANEL	

5-2. KDL-40EX400

5-2-2. CHASSIS-2

(No 9(Power Supply Cord) please refer to :
(Pg 55) for old part no. and revised destination details.
(Pg 55) for the new part no. and destination details.

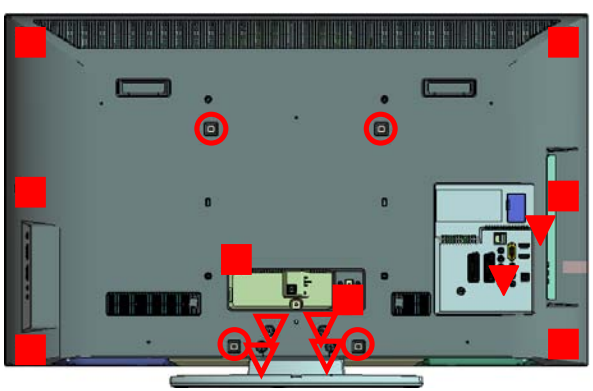


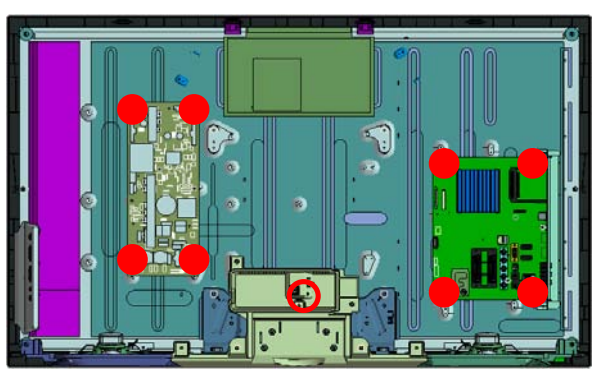
REF.NO.	PART NO.	DESCRIPTION	REMARK
1	A-1761-436-A	BAL COMPL (SERVICE) (TAIWAN)	
	A-1760-283-A	BAL COMPL (SERVICE) (HONG KONG)	
	A-1761-894-A	BAL COMPL (SERVICE) (N.ZEALAND, SINGAPORE, S. AFRICA)	
2	X-2546-553-1	BEZEL (CY40_B) ASSY	
3	4-157-971-01	BRACKET, SP (40L)	
	4-172-394-01	BRACKET, SP (40L)	
4	4-157-972-01	BRACKET, SP (40R)	
	4-172-395-01	BRACKET, SP (40R)	
5	A-1752-780-A	G2HE UNIT	
6	A-1753-637-A	HLR MOUNT	
7	1-811-075-11	LCD PANEL (A40V0)	
	1-811-060-11	LCD PANEL (S40TSP)	
8	1-858-364-22	LOUDSPEAKER(12.5X4.5CM)	
9	1-837-458-11	POWER-SUPPLY CORD (TAIWAN)	
	1-837-454-11	POWER-SUPPLY CORD (N.ZEALAND, SINGAPORE, S. AFRICA)	
	1-837-486-11	POWER-SUPPLY CORD (N.ZEALAND, SINGAPORE, S. AFRICA)	
	1-837-455-11	POWER-SUPPLY CORD (UK PLUG) (HONG KONG)	
	1-837-459-11	POWERSUPPLYCORD(WITHCONNECTOR) (N.ZEALAND, SINGAPORE, S. AFRICA)	
10	X-2546-247-1	BRACKET ASSY, SIDE JACK (TAIWAN)	
	4-156-944-31	BRACKET, SIDE JACK	

5-2. KDL-40EX400

5-2-3. SCREWS

	PART No.	DESCRIPTION
■	2-580-640-01	SCREW, +BVTP 4X16 TYPE2 IT-3
□	2-580-595-01	SCREW, +PSW M3X12
▼	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3
▽	2-580-608-01	SCREW, +PSW M5X16
●	2-580-592-01	SCREW, +PSW M3X8
○	4-159-298-01	SCREW, +PSW M4X10





5-3. OTHER PART (KDL-32EX400)

5-3-1. MISCELLANEOUS

PART NO.	DESCRIPTION	REMARK
	CONNECTOR	
* 1-910-060-08	CONNECTOR ASSY 14P (CN6402-BALANCER(1))	
* 1-910-060-07	CONNECTOR ASSY 15P (CN6401-CN2561 CN3800(1))	
* 1-837-516-11	FLEXIBLE FLAT CABLE (CN2600-TCON(1))	
* 1-910-060-06	HARNESS ASSY (CN2602 CN4300-CN001 SW SP(1))	
	HEATSINK	
6-552-205-11	TR TK15A50D	
6-552-461-11	TR TK5A50D(S4SONY,Q)	
6-503-050-01	DI SBT80-06LS	
8-719-510-53	DIODE D4SB60L	
	OTHERS	
1-821-926-11	PLUG CONVERSION ADAPTOR (BLACK , BLUE , RED ~~AUSTRALIA, N. ZEALAND, SINGAPORE,~~ SOUTH AFRICA~~, GAA~~))	
4-100-136-01	SHEET(CORE), C	
4-164-926-01	LABEL, REAR TERMINAL (BLACK(TAIWAN),BLUE(TAIWAN), RED(TAIWAN))	

5-3-2. PACKING

PART NO.	DESCRIPTION	REMARK
X-2342-530-2	BAG ASSY, FALL LOCK BELT (BLACK , BLUE, RED (AUSTRALIA , N. ZEALAND, SINGAPORE, SOUTH AFRICA, GAA)),BLACK(HONG KONG),BLUE(HONG KONG),RED(HONG KONG))	
X-2342-530-3	BAG ASSY, FALL LOCK BELT (BLACK(TAIWAN),BLUE(TAIWAN),RED(TAIWAN))	
X-2546-140-1	BASE (M3B) ASSY	
* 4-182-278-01	CARTON, INDIVIDUAL(CY32) (BLACK, BLUE, RED (AUSTRALIA, N. ZEALAND , SINGAPORE, SOUTH AFRICA, GAA)),BLACK(HONG KONG),BLUE(HONG KONG),RED(HONGKONG))	
* 4-182-318-01	CARTON, INDIVIDUAL(CY32) (BLACK(TAIWAN),BLUE(TAIWAN),RED(TAIWAN))	
4-171-689-01	COVER, NECK (M3B)	
* 4-170-958-01	CUSHION, LOWER (CYM32)	
* 4-170-957-01	CUSHION, UPPER (CYM32)	
4-171-685-01	NECK (M3B)	

5-3-3. ACCESSORIES

PART NO.	DESCRIPTION	REMARK
4-174-286-22	MANUAL, INSTRUCTION (BLACK, BLUE, RED ~~(AUSTRALIA, NEW ZEALAND~~, SINGAPORE, ~~SOUTH AFRICA, GAA))~~	
4-174-286-12	MANUAL, INSTRUCTION (BLACK, BLUE, RED (AUSTRALIA, NEW ZEALAND, SINGAPORE, SOUTH AFRICA~~, GAA))~~	
4-175-658-14	MANUAL, INSTRUCTION (BLACK(TAIWAN),BLUE(TAIWAN),RED (TAIWAN))	
4-174-669-12	MANUAL, INSTRUCTION (BLACK(HONG KONG),BLUE(HONG KONG),RED(HONG KONG))	
2-580-604-01	SCREW, +PSW M4X20	
2-580-663-02	SCREW, WOOD 3.8X20	

5-3-4. REMOTE COMMANDER

PART NO.	DESCRIPTION	REMARK
1-487-706-11	REMOTE COMMANDER (RM-GD015) (HONG KONG, AUSTRALIA, N. ZEALAND SINGAPORE, S. AFRICA, GAA)	
1-487-708-11	REMOTE COMMANDER (RM-CD009) (TAIWAN)	

(KDL-40EX400)

5-3-5. MISCELLANEOUS

PART NO.	DESCRIPTION	REMARK
	CONNECTORS	
* 1-910-060-16	CONNECTOR ASSY 14P (CN6402-BALANCER(1))	
* 1-910-060-15	CONNECTOR ASSY 15P (CN6401-CN2561 CN3800(1))	
* 1-837-520-11	FLEXIBLE FLAT CABLE (CN2600-TCON(1))	
* 1-910-060-14	HARNESS ASSY (CN2602 CN4300-CN001 SW SP(1))	
	HEAT SINK	
6-503-066-01	DI SF5K60M	
6-503-052-01	DI SG30SC4M	
6-503-053-01	DI STTH5L06FP	
8--71-9-5-53	DIODE D4SB60L	
6-552-205-11	TR TK15A50D	
6-552-204-11	TR TK8A50D	
	OTHERS	
1-821-926-11	PLUG CONVERSION ADAPTOR ~~(N. ZEALAND, SINGAPORE~~, S. AFRICA)	
4-100-136-01	SHEET(CORE), C	
4-164-926-01	LABEL, REAR TERMINAL (TAIWAN)	

5-3-6. PACKING

PART NO.	DESCRIPTION	REMARK
X-2342-530-3	BAG ASSY, FALL LOCK BELT (TAIWAN)	
X-2342-530-2	BAG ASSY, FALL LOCK BELT (HONG KONG, N.ZEALAND, SINGAPORE, SOUTH AFRICA)	
* 4-182-319-01	CARTON, INDIVIDUAL(CY40) (TAIWAN)	
* 4-182-279-01	CARTON, INDIVIDUAL(CY40) (HONG KONG, N.ZEALAND, SINGAPORE, SOUTH AFRICA)	
* 4-170-962-01	CUSHION, LOWER (CYM40)	
* 4-170-961-01	CUSHION, UPPER (CYM40)	
X-2546-141-2	BASE (ML3B) ASSY	
•4-167-483-01	COVER, NECK (ML3B)	
•4-171-686-01	NECK (ML3B)	

5-3-7. ACCESSORIES

PART NO.	DESCRIPTION	REMARK
4-175-658-14	MANUAL, INSTRUCTION (TAIWAN)	
4-174-669-12	MANUAL, INSTRUCTION (HONG KONG)	
4-174-286-22	MANUAL, INSTRUCTION ~~(AUSTRALIA, N. ZEALAND, SINGAPORE, S. AFRICA, GAA)~~	
4-174-286-12	MANUAL, INSTRUCTION (AUSTRALIA, N. ZEALAND, SINGAPORE, S. AFRICA, ~~GAA)~~	
4-159-298-01	SCREW, +PSW M4X10	
2-580-604-01	SCREW, +PSW M4X20	
2-580-608-01	SCREW, +PSW M5X16	
2-580-663-02	SCREW, WOOD 3.8X20	

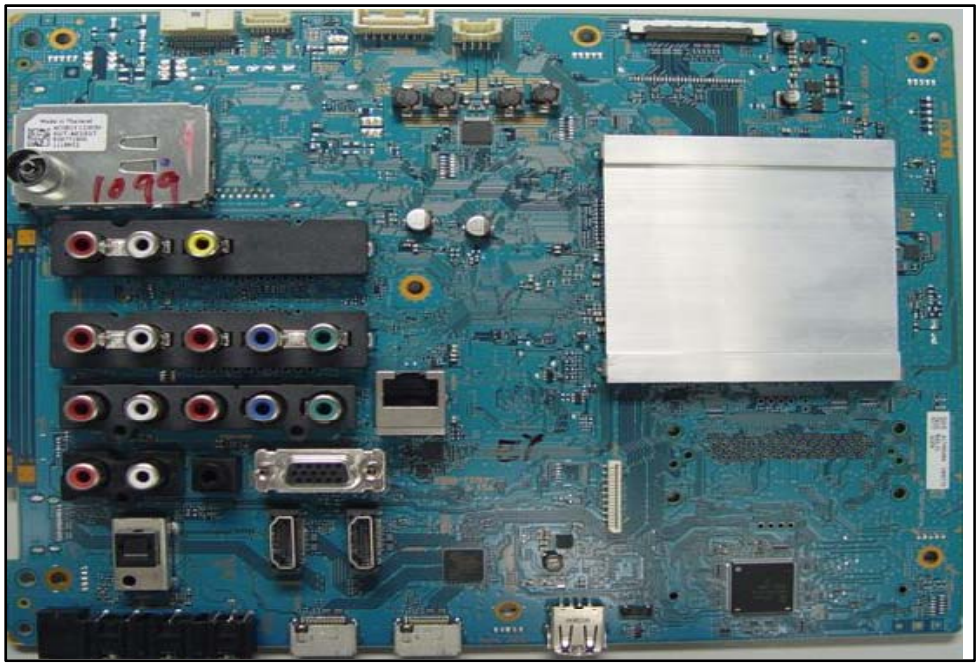
5-3-8. REMOTE COMMANDER

PART NO.	DESCRIPTION	REMARK
1-487-708-11	REMOTE COMMANDER (RM-CD009) (TAIWAN)	
1-487-706-11	REMOTE COMMANDER (RM-GD015) (HONG KONG, AUSTRALIA, N. ZEALAND, SINGAPORE, S. AFRICA, GAA)	

SUBJECT : Troubleshooting Reference for BAL board

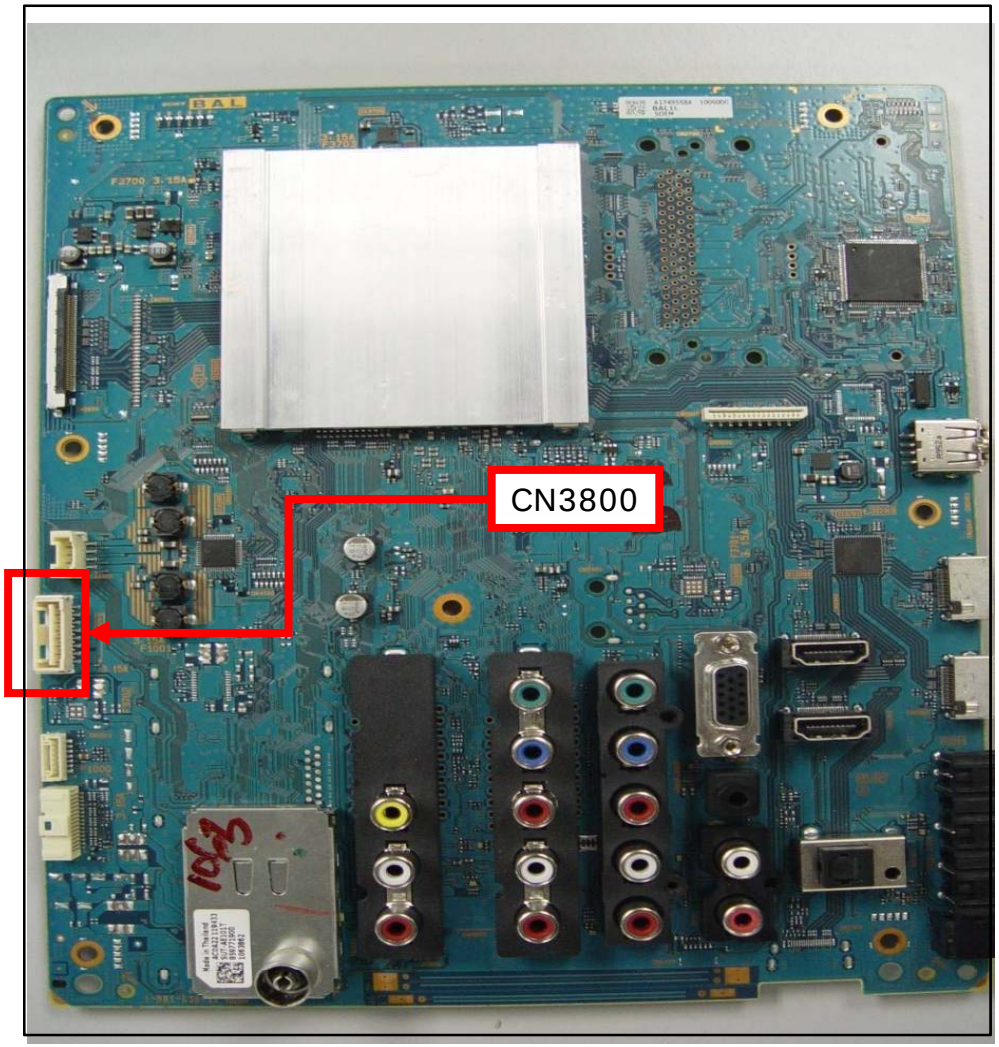
Sec 3 : Troubleshooting

3-9 Parts Location Reference



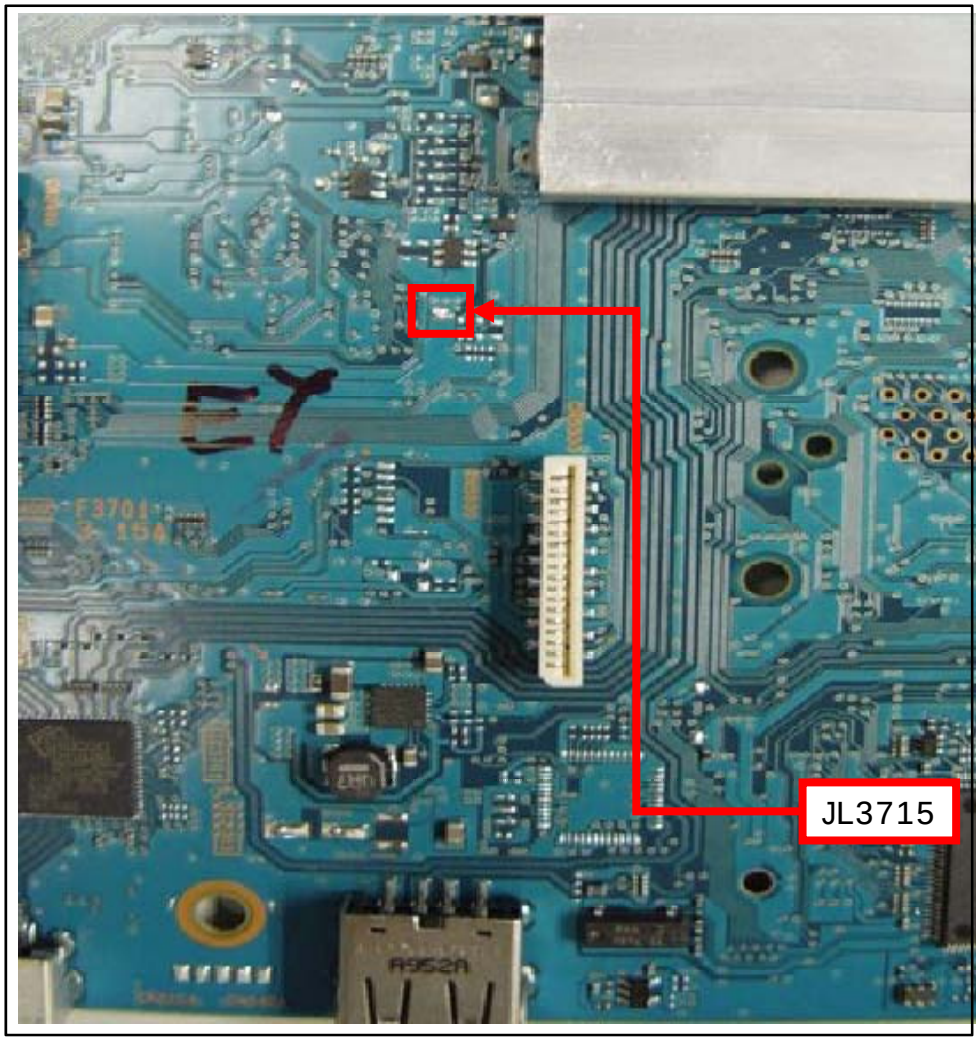
CN3800

Location CN3800 on board – at A side



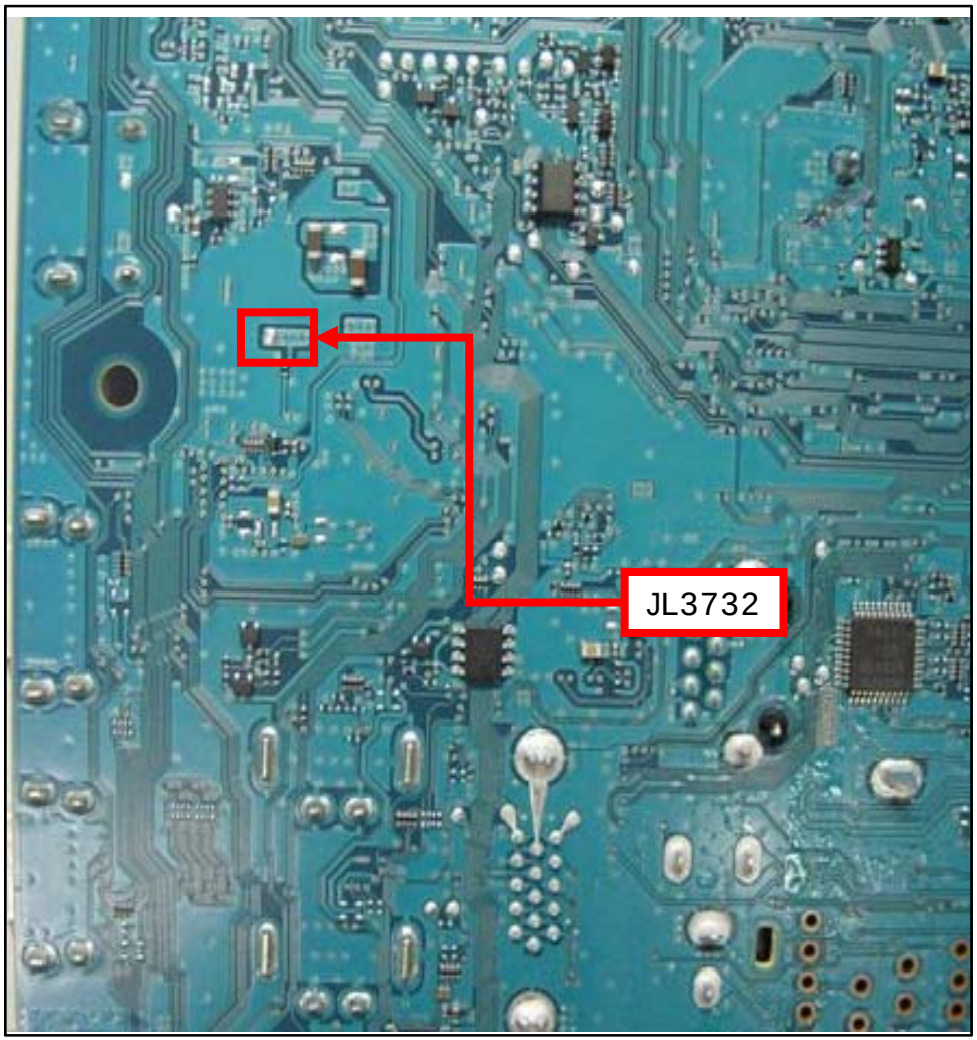
JL3715 & JL3716

Location JL3715 on board – at A side
Location JL3716 on board – at B side



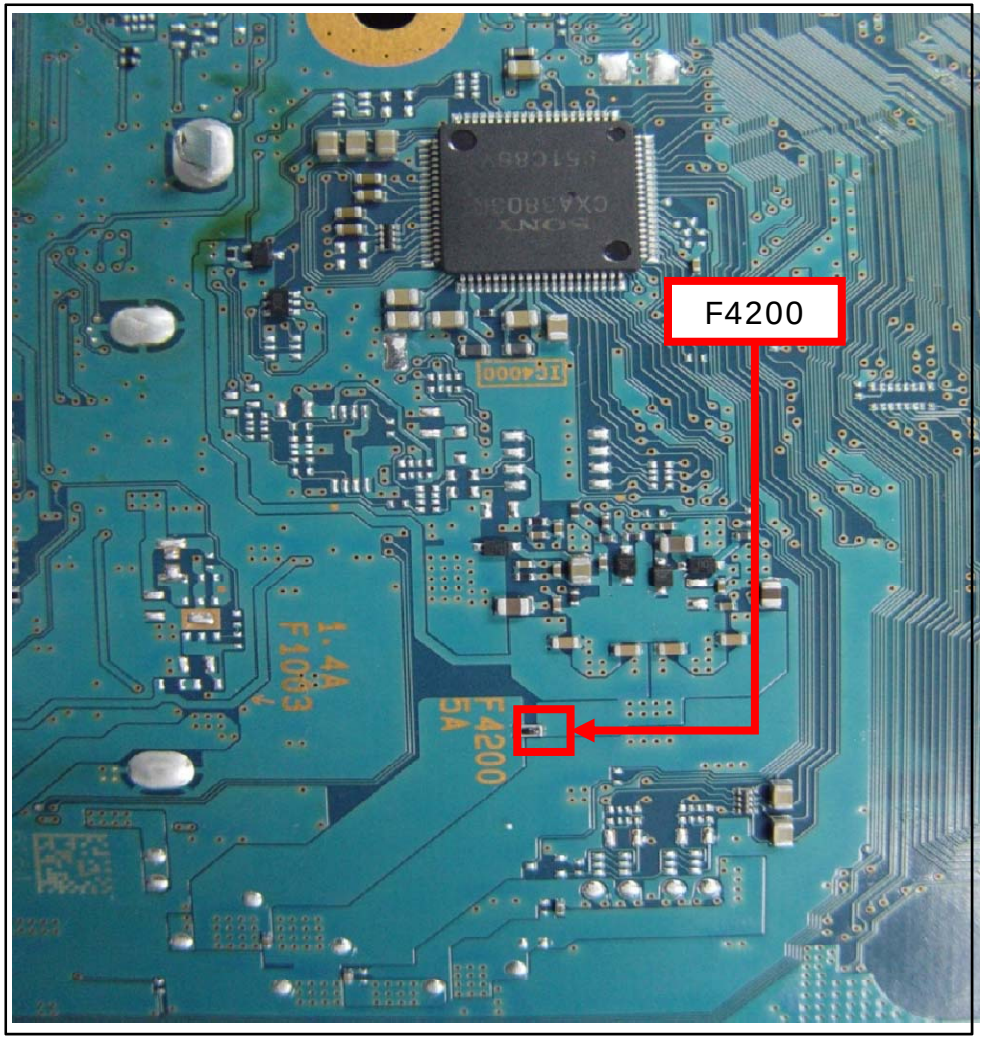
JL3731 & JL3732

Location JL3731 on board – at A side
Location JL3732 on board – at B side



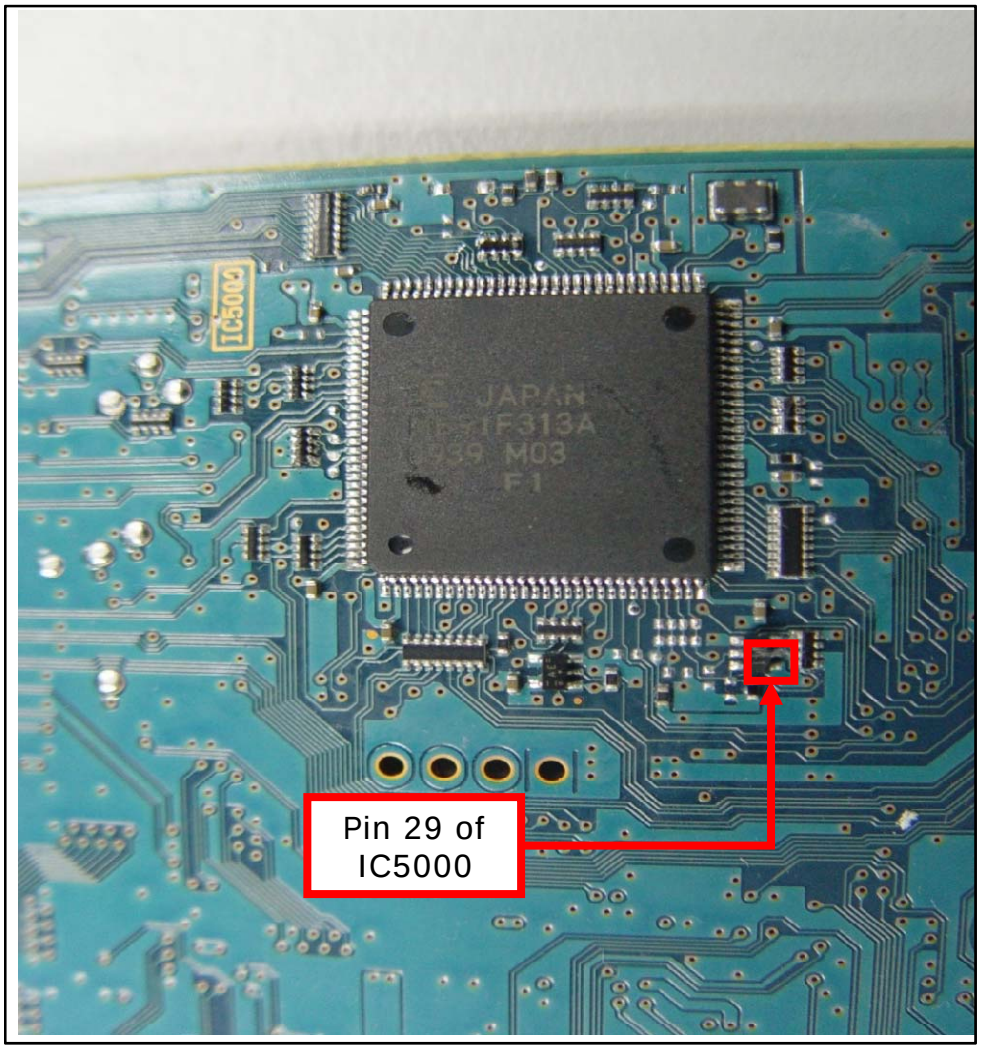
F4200

Location F4200 on board – at B side



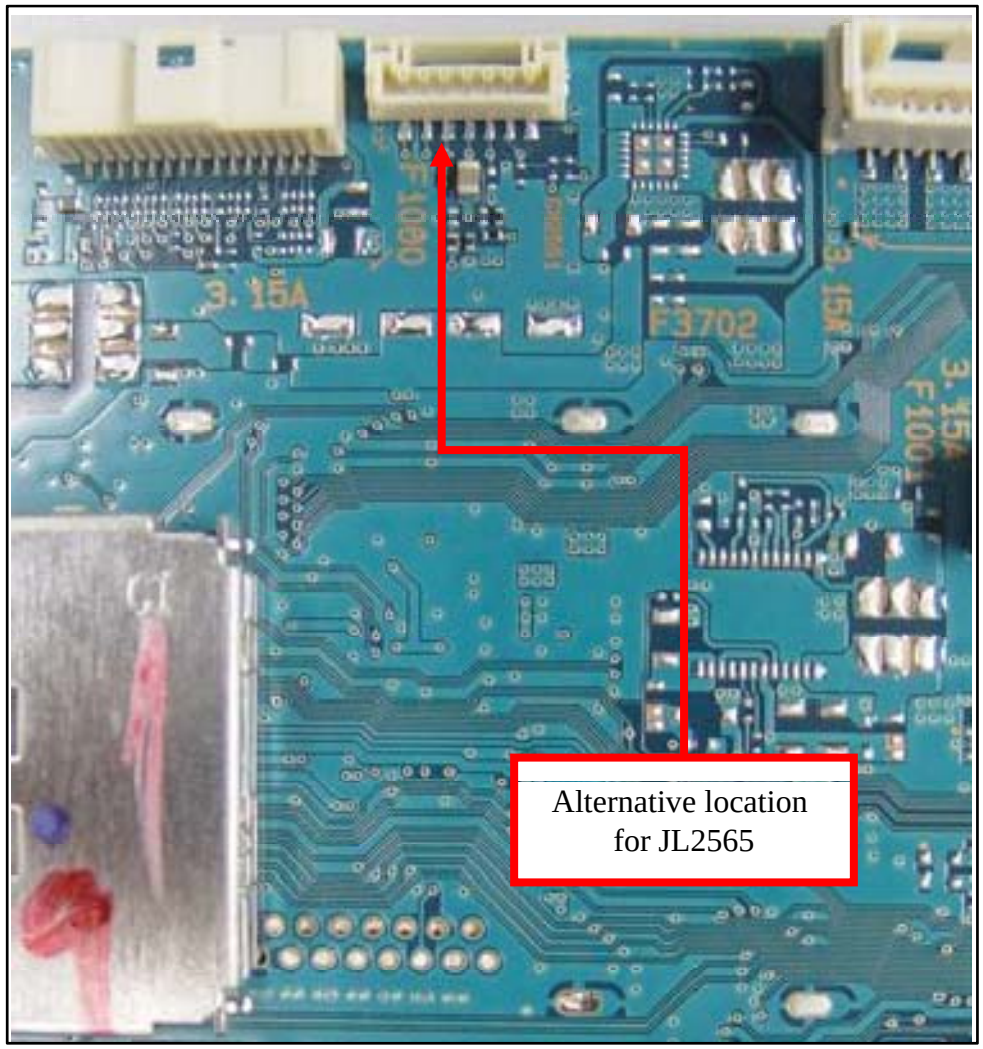
IC5000

Location IC5000 on board – at A side



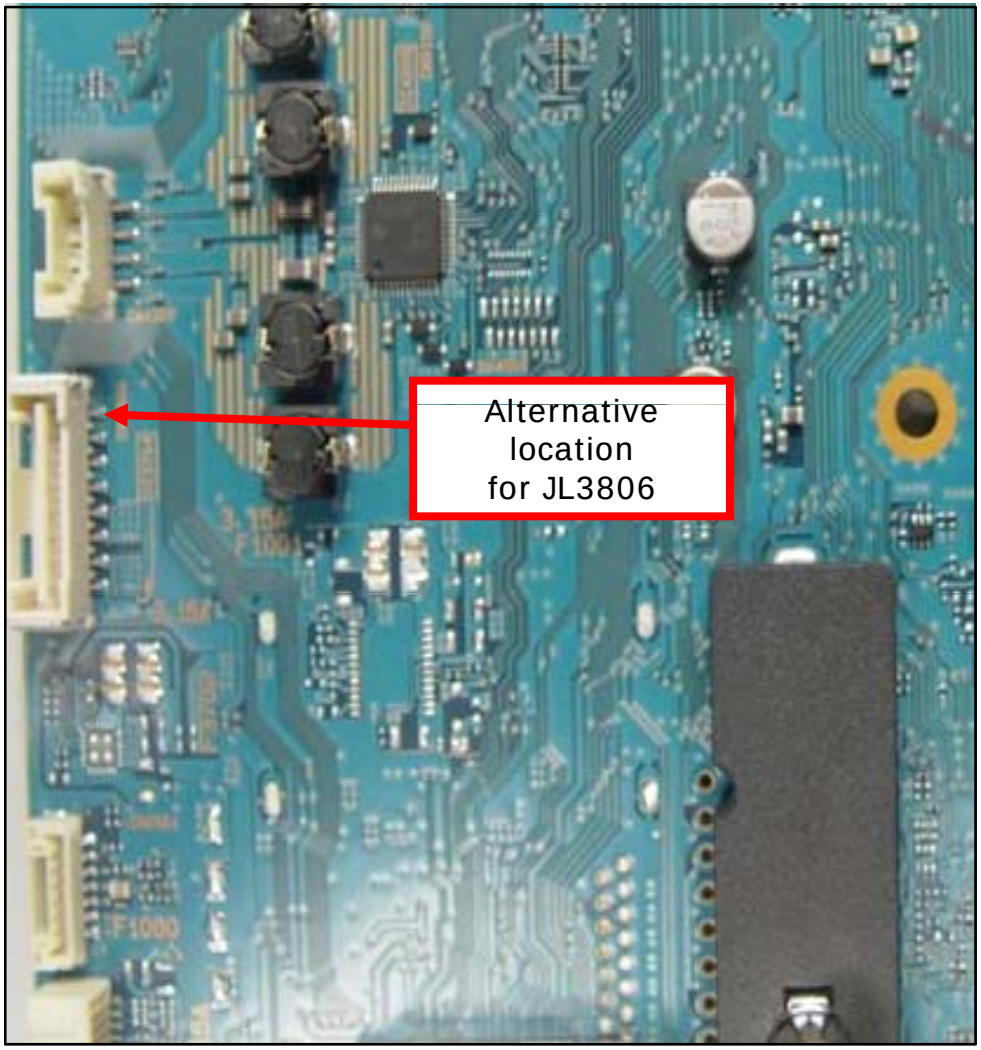
JL2565

Location on board – at B side
Alternative location on CN2561 pin 3 : BL_ERR



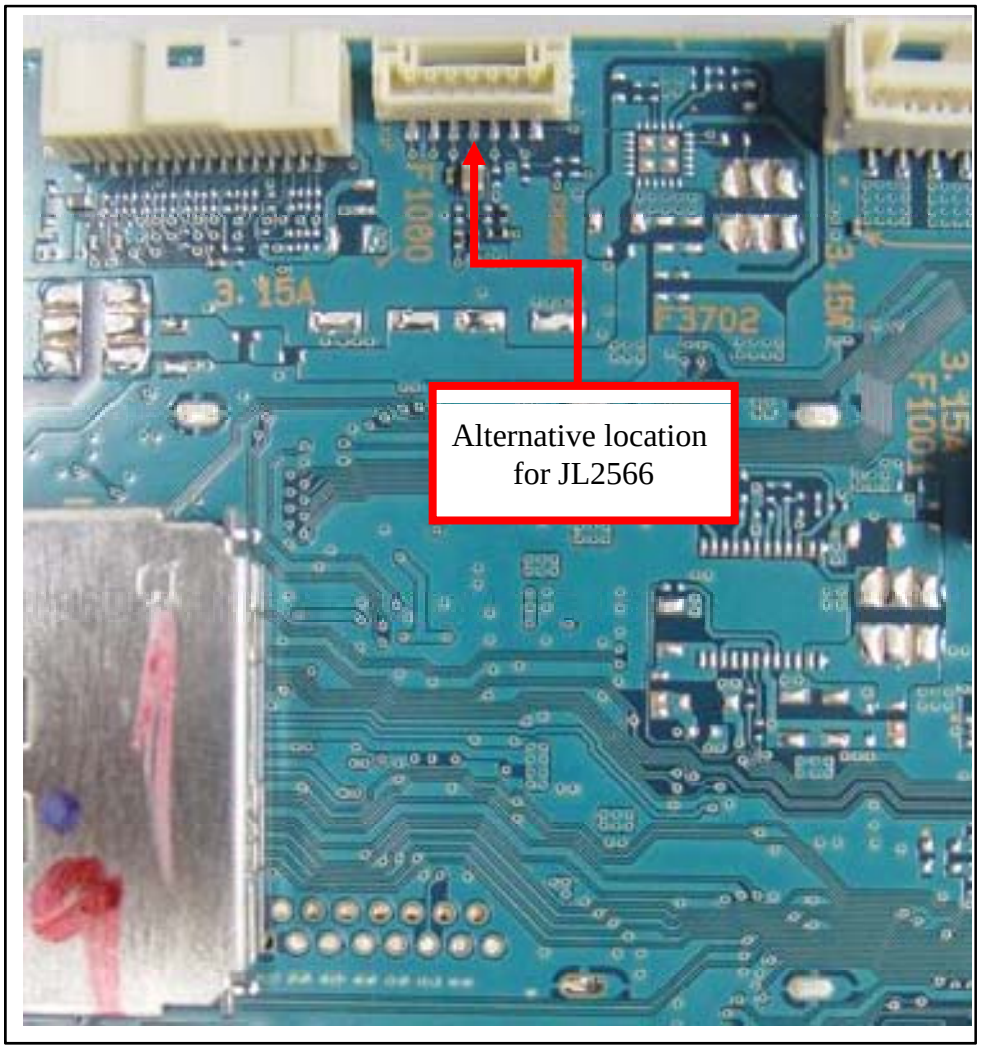
JL3806

Location on board – at B side
Alternative location on CN3800 pin 8 : T-Con VCC



JL2566

Location on board – at B side
Alternative location on CN2561 pin 4 : BL_ON



* Old part no and revised destinations details for Power Supply Cord

5-1. KDL-32EX400

5-1-2. CHASSIS-2 (See Pg 39)

		Model	32EX400/B	32EX400/L	32EX400/R	32EX400/B	32EX400/L	32EX400/R
		Colour	Black	Blue	Red	Black	Blue	Red
		Destination	Hong Kong			Taiwan		
		Spec Code.	HK5	HK5	HK5	TW6	TW6	TW6
		Destination Area	Hong Kong	Hong Kong	Hong Kong	Taiwan	Taiwan	Taiwan
REF. NO.	PART NO.	DESCRIPTION						
From Exploded View (No 10) (Pg 39)	1-837-455-11	POWER-SUPPLY CORD (UK PLUG)	●	●	●	n/a	n/a	n/a
	1-837-458-11	POWER-SUPPLY CORD	n/a	n/a	n/a	●	●	●

		Model	32EX400/B				32EX400/L				32EX400/R			
		Colour	Black				Blue				Red			
		Destination	E				E				E			
		Spec Code.	AU5	NZ2	SPI	SA	AU5	NZ2	SPI	SA	AU5	NZ2	SPI	SA
		Destination Area	Australia	New Zealand	Singapore	South Africa	Australia	New Zealand	Singapore	South Africa	Australia	New Zealand	Singapore	South Africa
REF. NO.	PART NO.	DESCRIPTION												
From Exploded View (No 10) (Pg 39)	1-837-454-11 (BM11)	POWER-SUPPLY CORD	n/a	n/a	●	●	n/a	n/a	●	●	n/a	n/a	●	●
	1-837-486-11 (BM10)	POWER-SUPPLY CORD	n/a	n/a	●	●	n/a	n/a	●	●	n/a	n/a	●	●
	1-837-459-11	POWER-SUPPLY CORD	●	●	n/a	n/a	●	●	n/a	n/a	●	●	n/a	n/a

*** New part no and destinations details for Power Supply Cord**

5-1. KDL-32EX400

5-1-2. CHASSIS-2 (See Pg 39)

		Model	32EX400/B	32EX400/L	32EX400/R	32EX400/B	32EX400/L	32EX400/R
		Colour	Black	Blue	Red	Black	Blue	Red
		Destination	Hong Kong			Taiwan		
		Spec Code.	HK5	HK5	HK5	TW6	TW6	TW6
		Destination Area	Hong Kong	Hong Kong	Hong Kong	Taiwan	Taiwan	Taiwan
REF. NO.	PART NO.	DESCRIPTION						
Exploded View (No 10) (Pg 39)	* 1-838-530-11	POWER-SUPPLY CORD (UK PLUG)	●	●	●	n/a	n/a	n/a
	1-838-533-11	POWER-SUPPLY CORD	n/a	n/a	n/a	●	●	●

		Model	32EX400/B				32EX400/L				32EX400/R			
		Colour	Black				Blue				Red			
		Destination	E				E				E			
		Spec Code.	AU5	NZ2	SPI	SA	AU5	NZ2	SPI	SA	AU5	NZ2	SPI	SA
		Destination Area	Australia	New Zealand	Singapore	South Africa	Australia	New Zealand	Singapore	South Africa	Australia	New Zealand	Singapore	South Africa
REF. NO.	PART NO.	DESCRIPTION												
From Exploded View (No 10) (Pg 39)	1-838-534-11	POWERSUPPLYCORD (WITH CONNECTOR)	●	●	n/a	n/a	●	●	n/a	n/a	●	●	n/a	n/a
	*1-838-528-11	POWER-SUPPLY CORD	n/a	n/a	●	●	n/a	n/a	●	●	n/a	n/a	●	●

* Old part no and revised destinations details for Power Supply Cord

5-2. KDL-40EX400

5-2-2. CHASSIS-2 (See Pg 42)

		Model	40EX400	40EX400	40EX400		
		Colour	Black	Black	Black	Black	Black
		Destination	HK	TW6	E		
		Spec Code.	HK5	TW6	NZ2	SPI	SA
		Destination Area	Hong Kong	Taiwan	New Zealand	Singapore	South Africa
REF. NO.	PART NO.	DESCRIPTION					
From Exploded View (No 9) (Pg 42)	1-837-455-11	POWER-SUPPLY CORD (UK PLUG)	●	n/a	n/a	n/a	n/a
	1-837-458-11	POWER-SUPPLY CORD	n/a	●	n/a	n/a	n/a
	1-837-454-11 (BM11)	POWER-SUPPLY CORD	n/a	n/a	n/a	●	●
	1-837-486-11 (BM10)	POWER-SUPPLY CORD	n/a	n/a	n/a	●	●
	1-837-459-11	POWER-SUPPLY CORD	n/a	n/a	●	n/a	n/a

* New part no and destinations details for Power Supply Cord

5-2. KDL-40EX400

5-2-2. CHASSIS-2 (See Pg 42)

		Model	40EX400	40EX400	40EX400		
		Colour	Black	Black	Black	Black	Black
		Destination	HK	TW6	E		
		Spec Code.	HK5	TW6	NZ2	SPI	SA
		Destination Area	Hong Kong	Taiwan	New Zealand	Singapore	South Africa
REF. NO.	PART NO.	DESCRIPTION					
From Exploded View (No 9) (Pg 42)	* 1-838-530-11	POWER-SUPPLY CORD (UK PLUG)	●	n/a	n/a	n/a	n/a
	1-838-533-11	POWER-SUPPLY CORD	n/a	●	n/a	n/a	n/a
	1-838-534-11	POWERSUPPLYCORD (WITH CONNECTOR)	n/a	n/a	●	n/a	n/a
	* 1-838-528-11	POWER-SUPPLY CORD	n/a	n/a	n/a	●	●

END

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