

## HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

# REPAIR MANUAL

## RB2G Chassis

Segment: HM



KDL-48W590B

<i>MODEL</i>	<i>COMMANDER</i>	<i>DESTINATION</i>
<i>KDL-40W590B</i>	<i>RM-YD103</i>	<i>US/CND</i>
<i>KDL-40W600B</i>	<i>RM-YD103</i>	<i>US/CND</i>
<i>KDL-48W590B</i>	<i>RM-YD103</i>	<i>US/CND</i>
<i>KDL-48W600B</i>	<i>RM-YD103</i>	<i>US/CND</i>

<b>Version</b>	<b>Date</b>	<b>Subject</b>
1.0	02/25/2014	Original Manual Release Date.
2.0	07/01/2014	Updated Adjustments Procedure on Section 3 - Repair Information. Pages 12 -16 replaced.

LCD Digital Color TV

**SONY**<sup>®</sup>

9-883-590-02

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# CAUTIONS AND WARNINGS


## 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, in case of live chassis.

## SAFETY-RELATED COMPONENT WARNING!!

There are critical components used in LCD color TVs that are important for safety. These components are identified with shading and  mark on the schematic diagrams and the parts list. It is essential that these critical parts be replaced only with the part number specified in the 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 warranty.

## ATTENTION!!

For safety reasons, component level repair of the Power Supply Boards and/or the Inverter Boards is prohibited.


## ATTENTION!!

Ces instructions de service sont à l'usage du personnel de service qualifié 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 qualifié faire ainsi.

## ALERTE!!

Afin d'éviter tout risque d'électrocution provenant d'un châssis sous tension, un transformateur d'isolement doit être utilisé lors de tout dépannage.

## ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifiés par une trame et par une marque  sur les schémas de principe, les vues explosées et les listes de pièces sont d'une importance critique pour la sécurité du fonctionnement. Ne les remplacer que par des composants Sony dont le numéro de pièce est indiqué dans le présent manuel ou dans des suppléments publiés par Sony. Les réglages de circuit dont l'importance est critique pour la sécurité du fonctionnement sont identifiés dans le présent manuel. Suivre ces procédures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecte.

## ATTENTION!!

Pour des raisons de sécurité, Interdire de réparer ou remplacer les composants dans les blocs d'alimentation et/ou sur les modules d'inverseur.

# CAUTIONS AND WARNINGS

## 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 in “Leakage Test”.

## 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.  
Follow the manufacturers’ instructions provided with the tester.
2. A battery-operated AC milliammeter.

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. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable. (see Figure A)

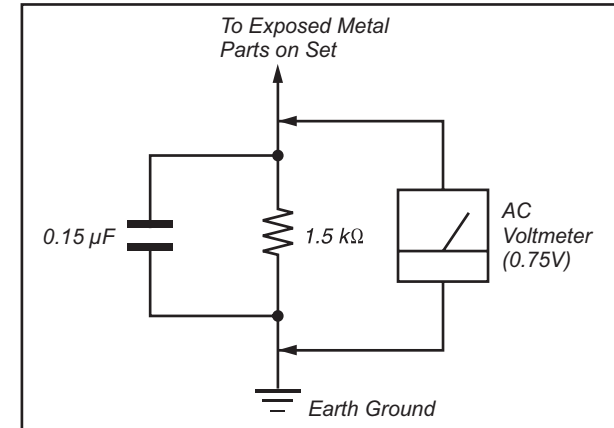


Figure A. Use an AC voltmeter to check AC leakage.

## HOW TO FIND A GOOD EARTH GROUND

The cover-plate retaining screw on most AC outlet boxes is at earth ground. Verify the AC outlet box retaining screw ground by connecting a 60W to 100W incandescent (not a neon or fluorescent 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)

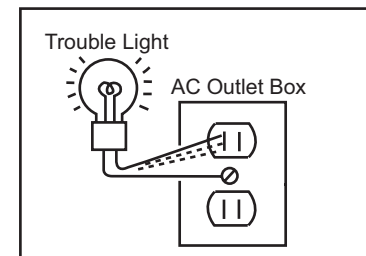


Figure B. Checking for earth ground.



# SECTION 1 - SPECIFICATIONS AND LAYOUTS

## SPECIFICATIONS

System	
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, LED Backlight
Speaker output	8 W + 8 W
Wireless technology	Protocol IEEE802.11a/b/g/n
Input/Output jacks	
CABLE/ANTENNA	75-ohm external terminal for RF inputs
VIDEO IN 1	Video / Audio input (phono jacks)
COMPONENT IN	YPbPr (Component Video): 1080p (60 Hz), 1080i (60 Hz), 720p (60 Hz), 480p, 480i Audio input (phono jacks)
VIDEO IN 2	Video input (common phono pin with Y input)
HDMI IN 1/2/3/4	Video: 1080p (30, 60 Hz), 1080/24p, 1080i (60 Hz), 720p (30, 60 Hz), 720/24p, 480p, 480i, PC Formats Audio: 5.1 channel linear PCM: 32, 44.1 and 48 kHz, 16, 20 and 24 bits, Dolby Digital ARC (Audio Return Channel) (HDMI IN 2 only)
MHL (Common with HDMI IN 1)	Video: 1080p (30 Hz), 1080/24p, 1080i (60 Hz), 720p (30, 60 Hz), 720/24p, 480p, 480i Audio: 5.1 channel linear PCM: 32, 44.1 and 48 kHz, 16, 20 and 24 bits, Dolby Digital
AUDIO OUT / Headphone jack	Audio output (stereo mini jack) Headphone jack (supports Subwoofer out)
DIGITAL AUDIO OUT (OPTICAL)	Digital optical jack (Two channel linear PCM, Dolby Digital)
LAN	10BASE-T/100BASE-TX connector (Connection speed may differ depending on the network environment. 10BASE-T/100BASE-TX communication rate and communication quality are not guaranteed for this TV)
USB/DLNA	Refer to the i-Manual for supported formats
DC IN 19.5 V	AC adapter input (DC 19.5 V)
Others	
Optional accessories	Camera and Microphone Unit: CMU-BR200/CMU-BR100 Wireless Subwoofer: SWF-BR100 MHL Cable: DLC-MB10/DLC-MB20/DLC-MC20

Model name	KDL-48W600B/48W590B	KDL-40W600B/40W590B	
Power and others			
Power requirement	19.5 V DC with AC adapter Rating: Input 110-240 V AC, 50/60 Hz (U.S.A./Canada 120 V AC, 60 Hz)		
Power consumption	in use	75 W	
	in standby	Less than 0.4 W with 120 V AC and less than 0.5 W with 240 V AC	
Screen size* (inches measured diagonally)	47.6 inches (48 class)	40 inches	
Display resolution	1,920 dots (horizontal) × 1,080 lines (vertical)		
Dimensions*	with stand (mm)	1,086 × 675 × 181	926 × 584 × 162
	(inches)	42 <sup>7</sup> / <sub>8</sub> × 26 <sup>5</sup> / <sub>8</sub> × 7 <sup>1</sup> / <sub>4</sub>	36 <sup>1</sup> / <sub>2</sub> × 23 × 6 <sup>1</sup> / <sub>2</sub>
	without stand (mm)	1,086 × 646 × 90	926 × 556 × 89
	(inches)	42 <sup>7</sup> / <sub>8</sub> × 25 <sup>1</sup> / <sub>2</sub> × 3 <sup>5</sup> / <sub>8</sub>	36 <sup>1</sup> / <sub>2</sub> × 22 × 3 <sup>5</sup> / <sub>8</sub>
wall-mount hole pattern (mm)	300 × 200	300 × 300	
wall-mount screw size (mm)	M6 (8 -10 mm)		
Mass*	with stand (kg)/(lb)	10.3 / 22.7	7.9 / 17.5
	without stand (kg)/(lb)	9.9 / 21.9	7.4 / 16.3
Operating temperature	32 °F – 104 °F (0 °C – 40 °C)		

\* Screen size, dimensions and mass are approximate values.

- Optional accessories availability depends on countries/region/TV model/stock.
- Design and specifications are subject to change without notice.
- This TV set incorporates MHL 2.

## CHECKING THE ACCESSORIES

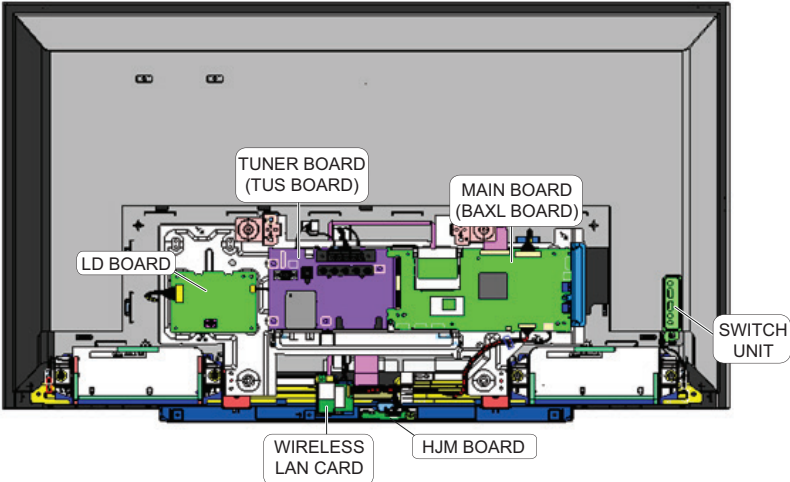
- Remote Control\*
- Size AAA batteries (2)
- AC Power Cord (1)
- AC Adapter (1)
- Fixing Screws for Table-Top Stand (M5 × 20) (2)
- Wall-mount Adapter accessories
- Operating Instructions and other documents

\* Refer to the model name printed on the remote control.

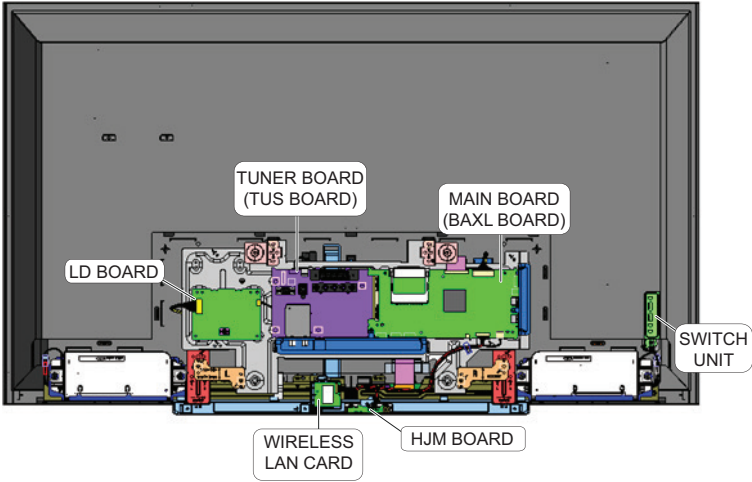
# SECTION 1 - SPECIFICATIONS AND LAYOUTS

## BOARD LAYOUT

KDL-40W590B/48W600B



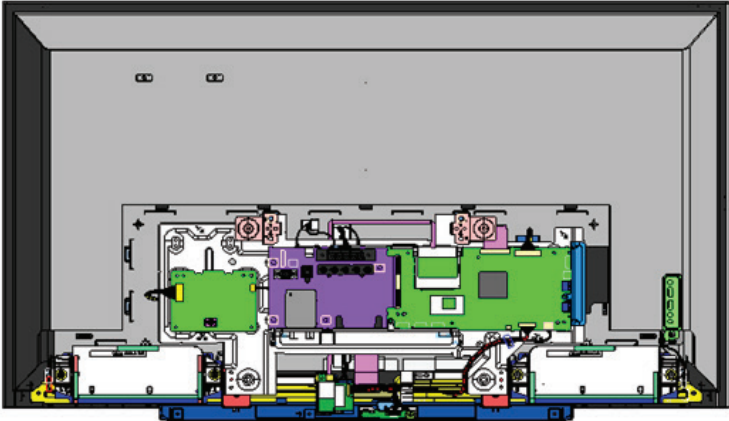
KDL-48W590B/48W600B



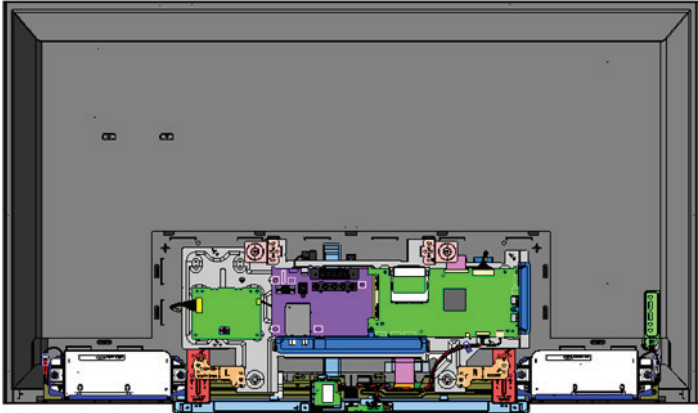
# SECTION 1 - SPECIFICATIONS AND LAYOUTS

## WIRE DRESSING

KDL-40W590B/40W600B



KDL-48W590B/48W600B



# SECTION 2 - TROUBLESHOOTING

## DIAGNOSING THE ERROR

Before servicing the Television:

1. Verify the TV has the symptom the customer indicated.
2. Check to see if the latest Software is installed.
  - a. If not, install the latest version.
3. Determine the replacement part required.

## VIEWING THE SELF CHECK DIAGNOSIS HISTORY

When an error is detected, the Self Check screen records the number of times the error occurred. This is helpful in confirming past occurrences of an error and for determining if an error is intermittent when the customer is not sure what is causing the television to shut down. If the screen displays a "0", no error has occurred.

1. Press **POWER** to turn on the TV and then turn it off again.
2. Press the following buttons on the **Remote Commander** within 1 second of each other:



**NOTE:** This differs from accessing Service Adjustments Mode (Volume +).

Diagnosis Item	StandBy LED Blink Count	Date and Time Display*	Error Count (00-99)
SELF CHECK			
000 RESERVED	00345	120123132522	00
000 RESERVED	000333	120123113645	00
002 MAIN_POWE	06789		00
003 DC_ALERT			00
003 AUD_PROT			00
003 HDMI_EQ			00
003 TU_DEMOD			00
004 VLED			00
004 LD_ERR			00
005 HFR_ERR			00
005 TCON_ERR			02
005 P_ID-ERR			00
006 BACKLITE			00
007 TEMP_ERR			00
007 FAN_ERR			00
010 EMITTER			00
101 VPC_WDT			00
102 MEPS_WDT			00
103 HOST_WDT			00
104 STBY_WDT			00

\*Format of Error History = YYMMDDhhmmss example 120123132522= Jan 23, 2012 13:25:22 (1:25:22PM)  
NOTE: date and time must be set for this to work

SAMPLE SELF CHECK DIAGNOSIS PAGE

# SECTION 2 - TROUBLESHOOTING

## TRIAGE CHART

Use this general Triage Chart to determine what may possibly be causing the error before going out to the customers location.

1. Confirm the symptom from the customer.
2. Select that symptom from the chart.
3. Bring the primary component listed for that symptom.
4. Follow the associated flowcharts in the Training Manual to isolate the board.
5. Chart Color Code.

**Red Dot: (Primary) Most likely defective part.**

**Blue Triangle: (Secondary) Possible defective part.**

Board Reference	Symptoms - Shutdown. Power LED blinking red diagnostics sequences									No Power	Video			Remote	Network		Audio	Smart Core
	2X	3X	4X	5X	6X	7X	8X	9X	10X	No White Power LED	Steady lines or dots	No Video One of Inputs	No Video All Inputs	No Remote	Wireless can't connect	Bluetooth can't connect	No Audio	No LED
MAIN BOARD	▲	●		▲	▲	●	●			▲	▲	●	●	▲	▲	▲	●	▲
TUNER BOARD		▲					▲	●			▲	●	●				▲	
LCD PANEL			●	●	●	▲					●		▲					
TCON			▲	●	▲				▲		▲		▲					
LVDS FFC				▲	▲						▲		▲					
H BOARD																	●	●
SPEAKER		▲															●	
LD BOARD			●										▲					
BT BOARD																●		
WIFI							●								●			
Problem	POWER	AUDIO/POWER	LD	TCON	BACK-LIGHT	TEMP	SOFTWARE		EMITTER									

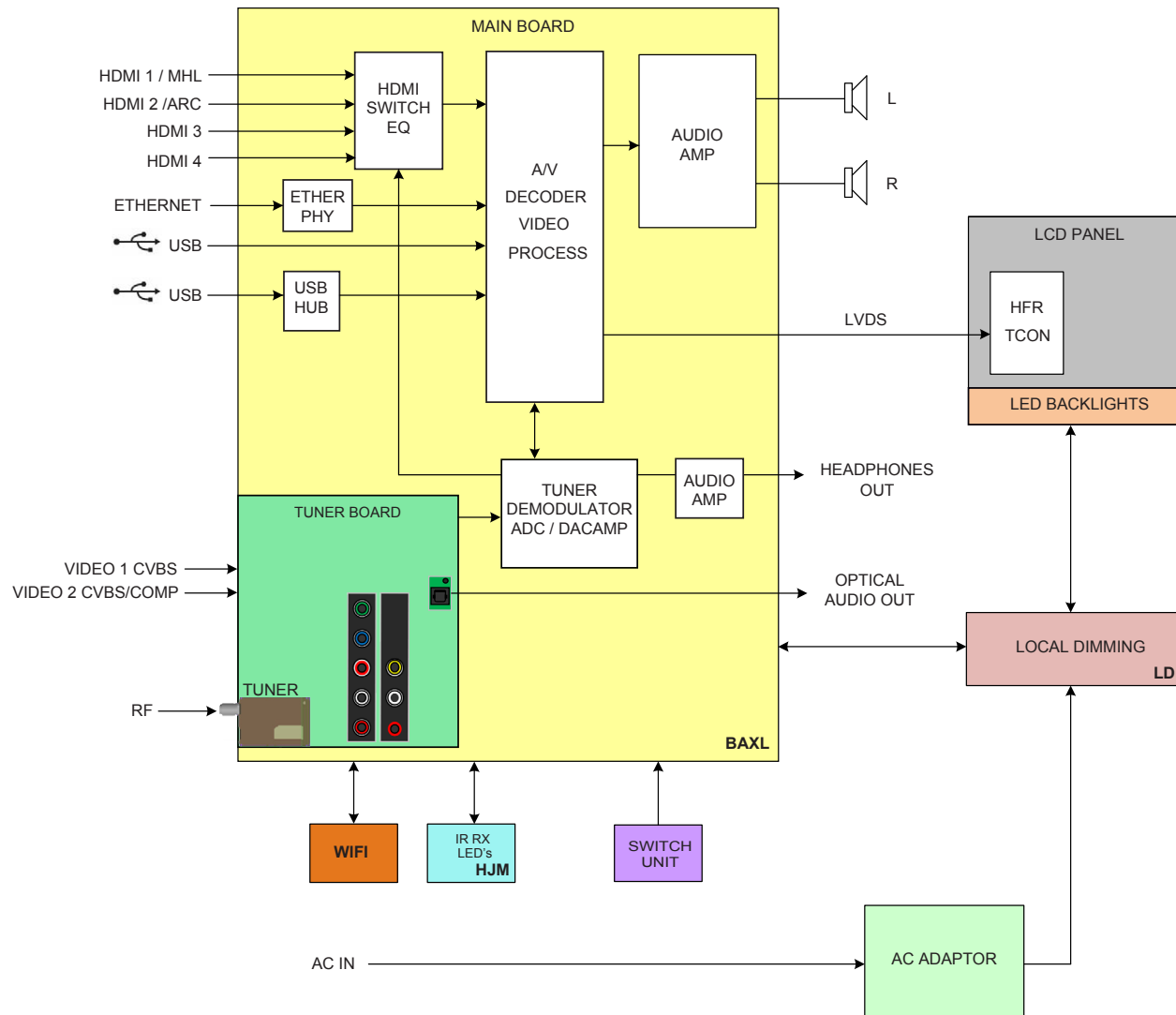
**\*NOTE:** REFER TO LCD PANELS SERVICE MANUAL IN REFERENCE LIBRARY DATABASE FOR CORRECT REPLACEMENT PARTS BASED ON SERIAL NUMBER.

To access the most recent version of the Triage documents for the models listed in this manual, login into the Sony Authorized Service Portal at <http://www.sony.com/asp>.

# SECTION 2 - TROUBLESHOOTING

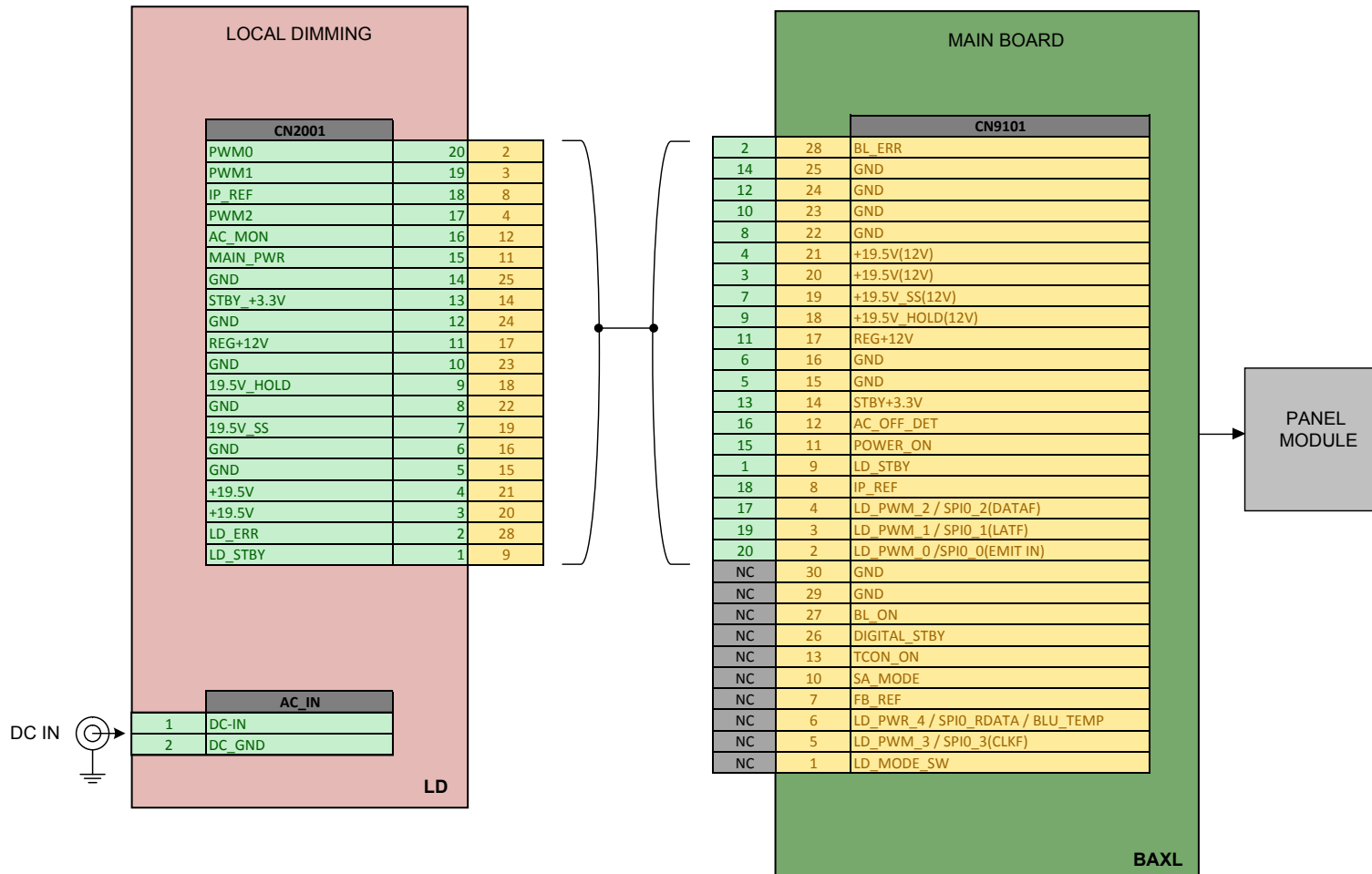
## FLOWCHARTS AND DIAGRAMS

### OVERALL BLOCK DIAGRAM



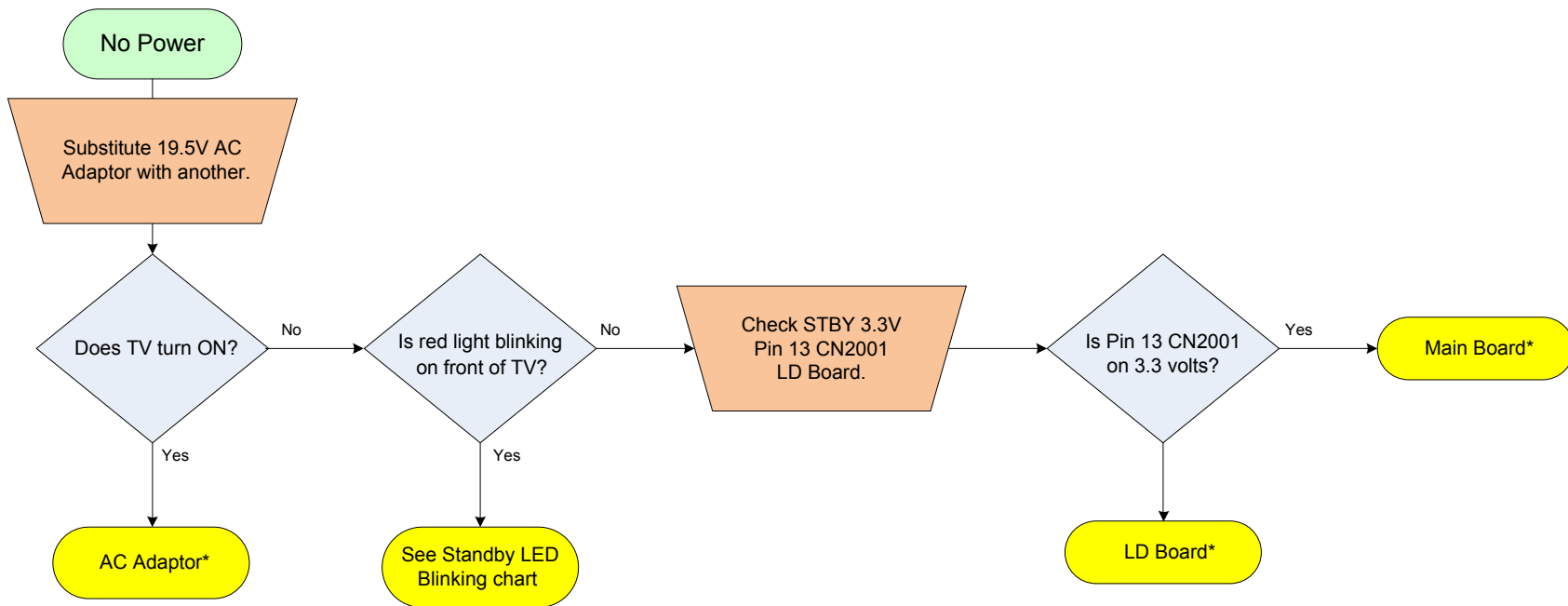
# SECTION 2 - TROUBLESHOOTING

## POWER AND CONTROL BLOCK DIAGRAM



# SECTION 2 - TROUBLESHOOTING

## NO POWER FLOWCHART

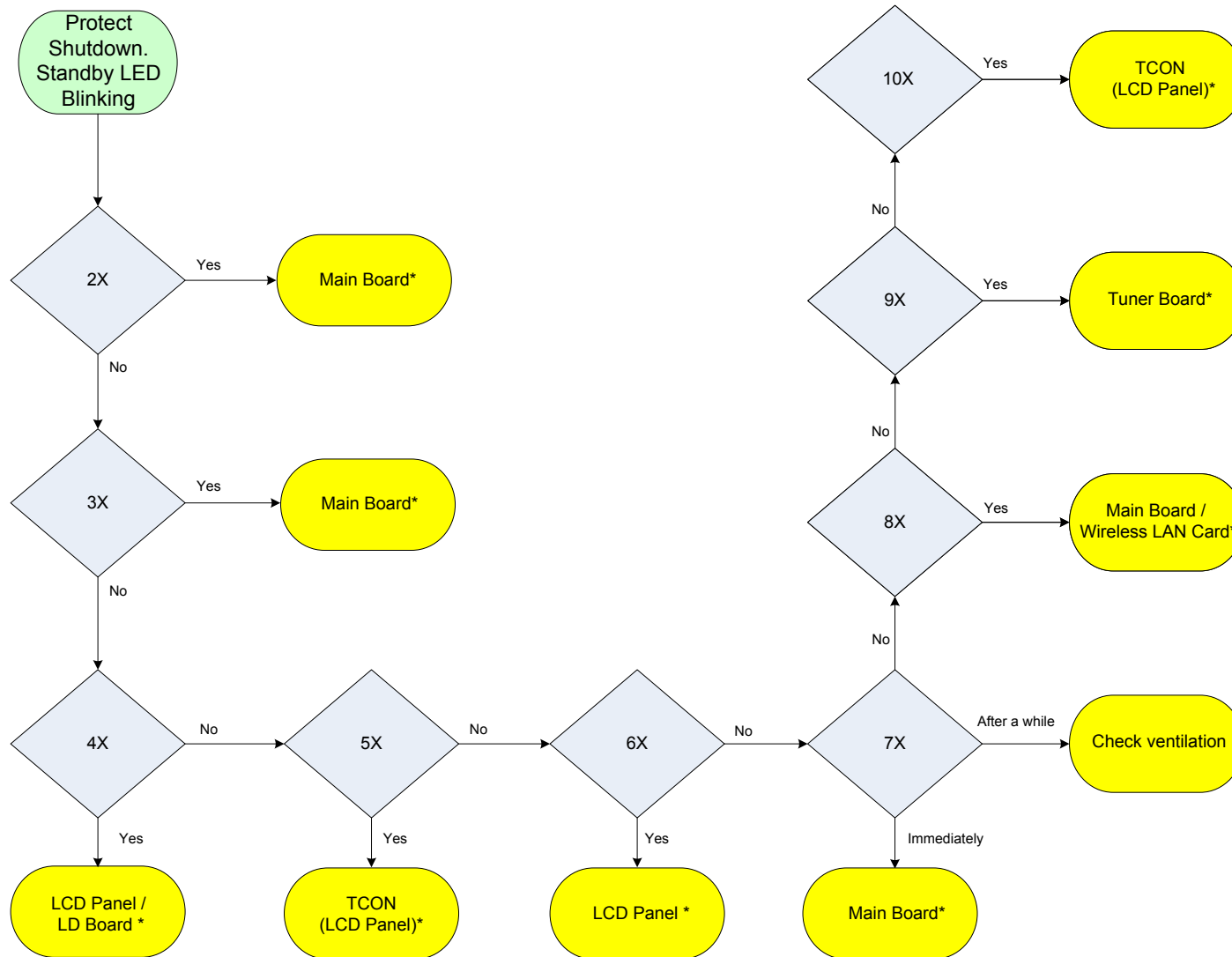


\*For Part Number information, refer to ["Section 4 - Exploded View/Part Number Information" on page 17.](#)



# SECTION 2 - TROUBLESHOOTING

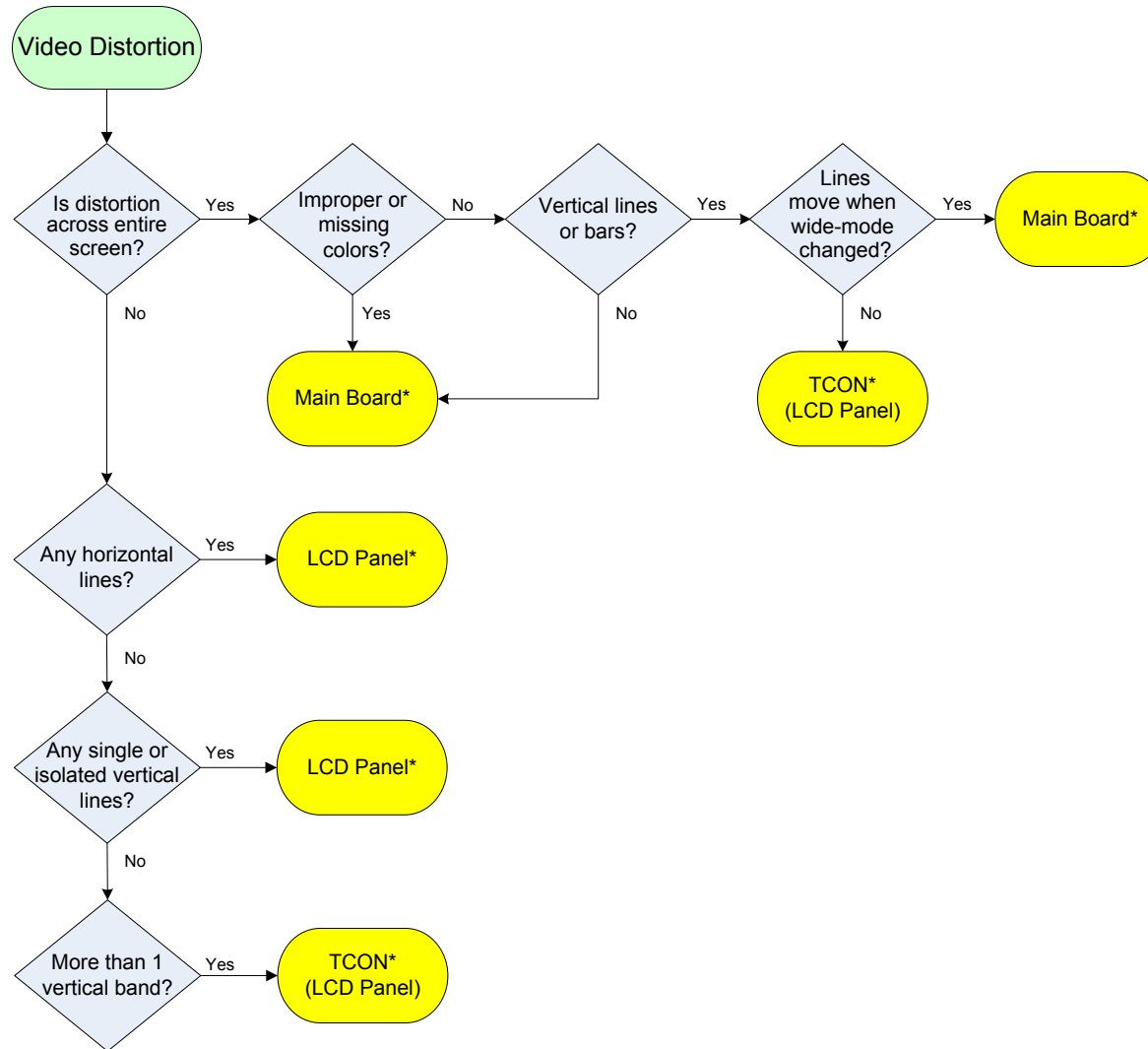
## STANDBY LED BLINKING FLOWCHART



\*For Part Number information, refer to ["Section 4 - Exploded View/Part Number Information"](#) on page 17.

# SECTION 2 - TROUBLESHOOTING

## VIDEO DISTORTION FLOWCHART



\*For Part Number information, refer to ["Section 4 - Exploded View/Part Number Information"](#) on page 17.

# SECTION 3 - REPAIR INFORMATION

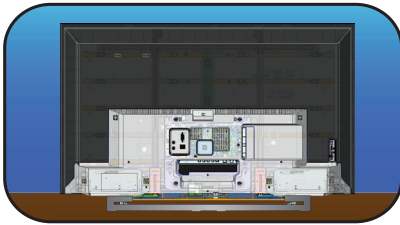
## REPAIRING THE TV

If the latest Software does not correct the issue, complete the following:

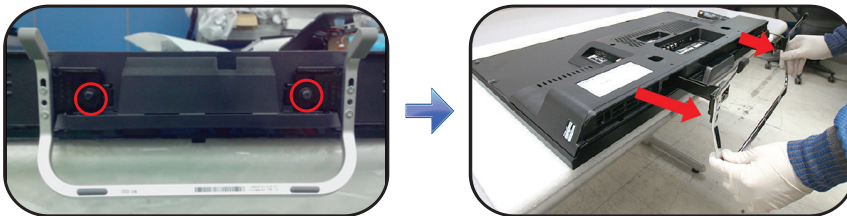
1. Verify the television has the symptom the customer indicated.
2. Replace part causing the symptom.
3. Install the latest version of Software (Required for ALL repairs).
4. Perform the required service adjustments and checks.
5. Verify the repair resolved the issue.

## REMOVING THE TABLE TOP STAND

1. Place TV face down on a soft and flat surface.

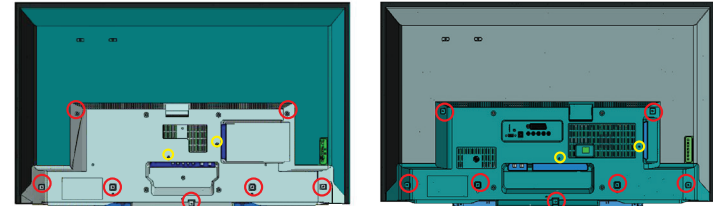


2. Remove 2 screws from Stand Shaft and carefully detach as shown.



## REMOVING THE LOWER COVER

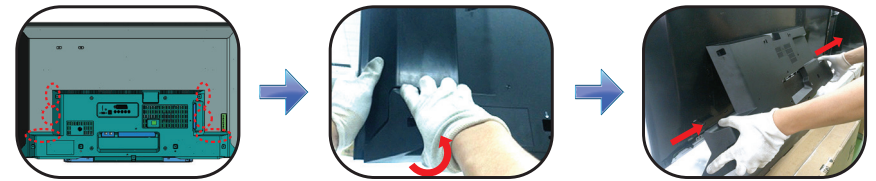
1. Locate and remove all screws from Lower Cover.



KDL-40W590B/KDL-40W600B

KDL-48W590B/KDL-48W600B

2. Firmly detach from areas shown to remove Lower Cover from the TV.

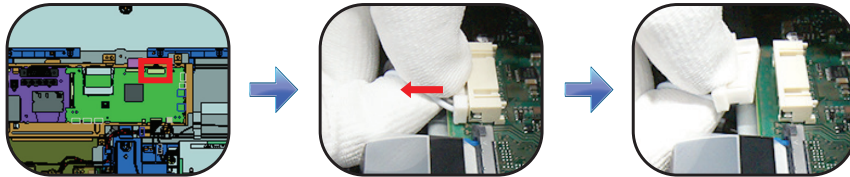


# SECTION 3 - REPAIR INFORMATION

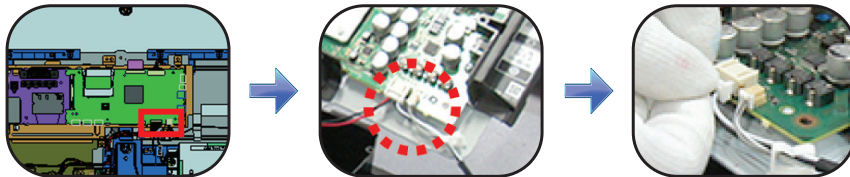
## REPLACING THE MAIN BOARD / TUNER BOARD

The Main Board used in these models is available for repair. For Part Number information refer to [Section 4 - Exploded View/Part Number Information on page 17](#).

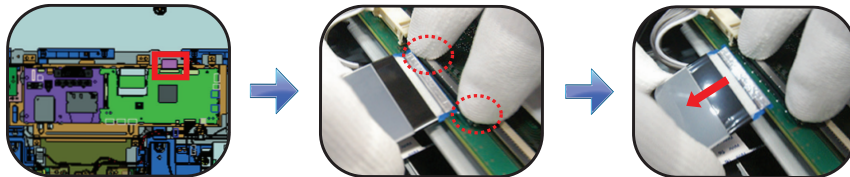
1. Disconnect Harness from the Main Board.



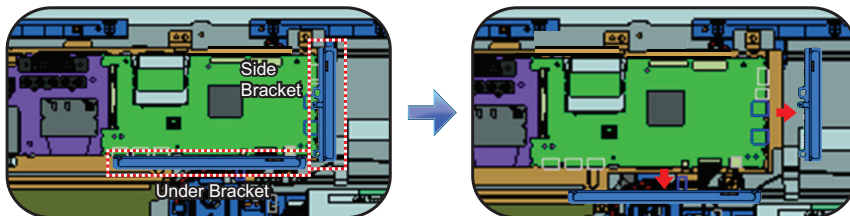
2. Locate and disconnect all remaining connectors.



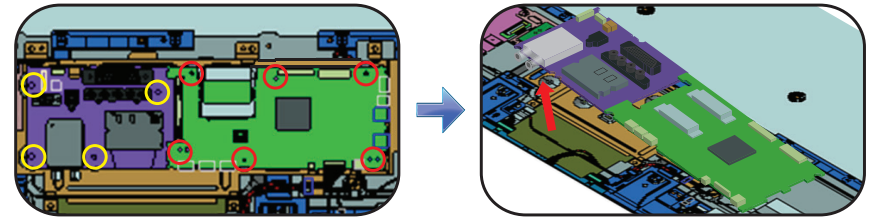
3. Press down the 2 locking clips and pull LVDS cable to release.



4. Slide brackets to detach from Main Board.

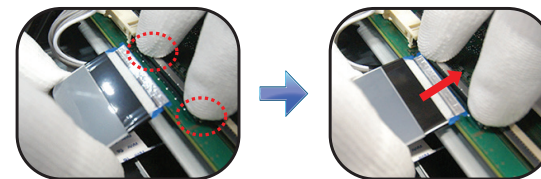


5. Locate and remove screws from the Tuner Board and Main Board, then lift to detach.




6. Install the new Main Board and/or Tuner Board and screws.

7. Reconnect the LVDS Cable and all other connectors.



8. Update the Software.

After ALL repairs **UPDATE** the SOFTWARE to the latest version. Instructions are included with the Software package on the [Sony Authorized Service Portal](#) website.

- a. Insert the USB device with the latest Software into one of the TVs' USB ports.
- b. Connect TV to AC power.
- c. Wait at least 20 seconds.
- d. Press the Power button  on the TV to turn it ON.
- e. Wait until the Software update is completed.

# SECTION 3 - REPAIR INFORMATION

9. To access **Service Mode**, turn TV ON and OFF again then press the following buttons within 1 second of each other:



10. When the **DIGITAL** Menu appears, press 2 until **002 MODEL** category displays.



11. Press 1 until **002 DEST** item displays.



**CAUTION:** If the incorrect Destination Data Value is selected, it may corrupt the Software requiring a Main Board replacement.

12. Press 3 until the correct destination of the TV displays. (Use the table below for reference).

Model Name	Destination	Data Value
KDL-40W590B	US/CND	ATSC_UC_BASE
KDL-48W600B	US/CND	ATSC_UC_BASE
KDL-40W590B	US/CND	ATSC_UC_BASE
KDL-48W600B	US/CND	ATSC UC BASE

13. Press MUTE then 0 to save the changes.



14. Press 1 until **003 MODELNAME** displays.



15. Press 3 until the model displayed matches the model of the TV.  
**CAUTION:** The Model Name can only be selected once. Be sure to verify the information is correct before saving the changes.

16. Press MUTE then 0 to save the changes.



17. Locate the Serial Number for the TV on the side of the Rear Cover.

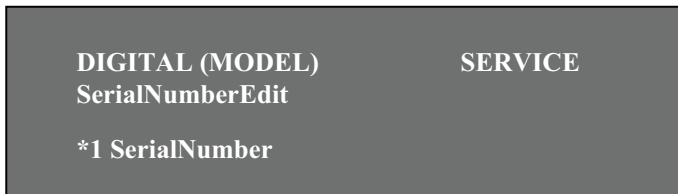


# SECTION 3 - REPAIR INFORMATION

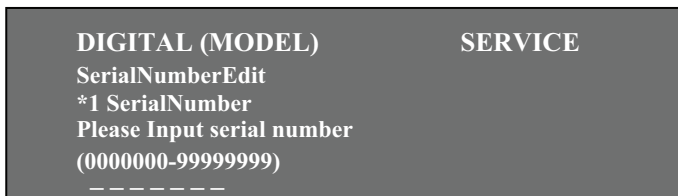
18. Press **1** until **004 SERIAL** item displays.



19. Press **0** to display the **Serial Number Edit** option.



20. Press **+** to display the **Serial Number** input screen.

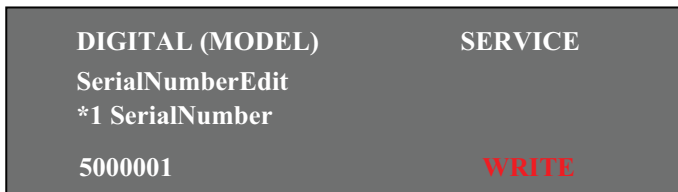


**CAUTION:** The Serial Number can only be selected once. Be sure to verify the information is correct before saving the changes.

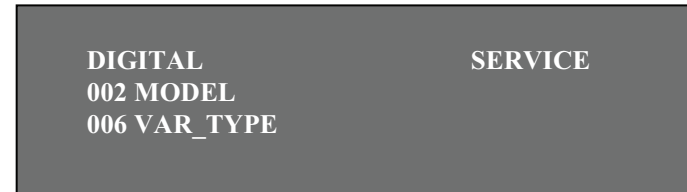
21. Enter the Serial Number of the TV.

**NOTE:** If the incorrect Serial Number is entered, press **RETURN** to go back to the Serial Number input screen and re-enter the correct number.

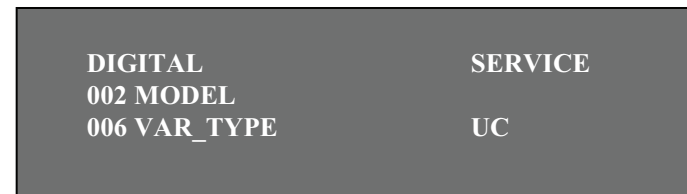
22. Press **+** to save the Serial Number.



23. Press **1** until **006 VAR\_TYPE** item displays.



24. Press **3** until **UC** option displays.



25. Press **MUTE** then **0** to save the changes.



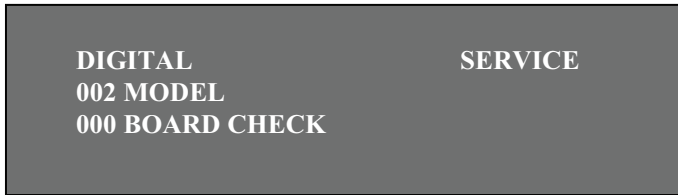
26. Cycle AC Power (Unplug and plug AC Cord from the outlet).

27. Access **Service Mode**, by pressing the following buttons within 1 second of each other:

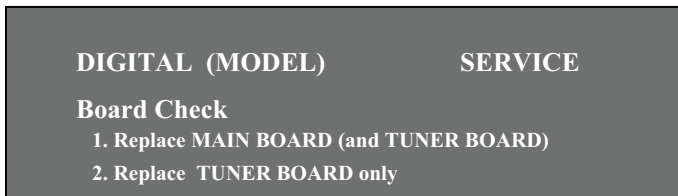


# SECTION 3 - REPAIR INFORMATION

28. When the **DIGITAL** Menu appears, press **2** until **002 MODEL** category displays.



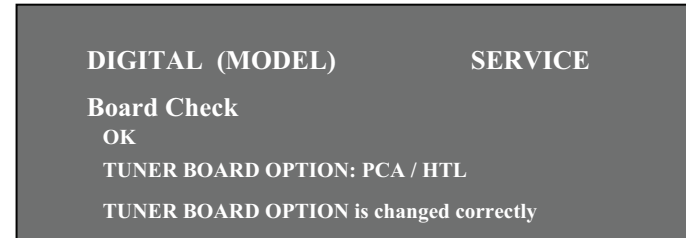
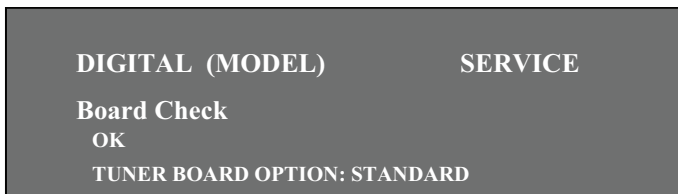
29. Press **0** to select the **000 BOARD CHECK** item.



### When replacing the Main Board and/or Tuner Board:

30. Press **1** to verify the Main Board replacement results.

**NOTE:** Either one of the following messages indicates a correct process.

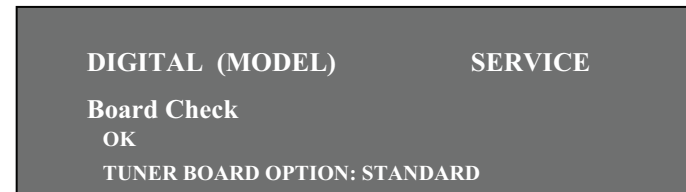


**CAUTION:** If the Main Board is a mismatch to the Tuner Board, a "NG: WRONG COMBINATION OF MAIN BOARD AND TUNER BOARD" message will display.

31. Press **RETURN** on the Remote Commander.

### When replacing the Tuner Board only:

32. Press **2** to verify the Tuner Board replacement results.



**CAUTION:** If the Tuner Board is a mismatch to the Main Board, a "NG: DIFFERENT KIND OF TUNER BOARD HAS BEEN CONNECTED" message will display.

33. Press **RETURN** on the Remote Commander.  
34. Turn the TV OFF.  
35. Press **↑** on the Remote Commander and Power button **I/O** on TV to set unit to Shipping Condition.



# SECTION 3 - REPAIR INFORMATION

36. Clear the **Self Check** screen.

- a. Press **POWER** to exit **Service Mode**.
- b. Press the following buttons on the **Remote Commander** within 1 second of each other:

**DISPLAY** → Channel **5** → Volume **—** → Power **I/O**

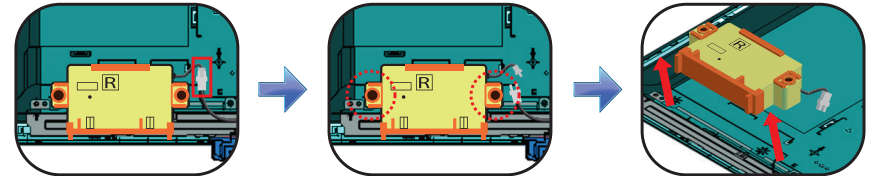
SELF CHECK		
000 RESERVED	-----	00
000 RESERVED	-----	00
002 MAIN_POWE	-----	00
003 DC_ALERT	-----	00
003 AUD_PROT	-----	00
003 HDMI_EQ	-----	00
003 TU_DEMOD	-----	00
004 VLED	-----	00
004 LD_ERR	-----	00
005 HFR_ERR	-----	00
005 TCON_ERR	120123132522 120123113645	02
005 P_ID-ERR	-----	00
006 BACKLITE	-----	00
007 TEMP_ERR	-----	00
007 FAN_ERR	-----	00
010 EMITTER	-----	00
101 VPC_WDT	-----	00
102 MEPS_WDT	-----	00
103 HOST_WDT	-----	00
104 STBY_WDT	-----	00
00345 000333 06789		

- c. To clear the error history and error count press **8** → **0**.
- d. Press Power **I/O** to exit **Self Check Mode**.

37. Cycle AC Power (Unplug and plug AC Cord from the outlet).

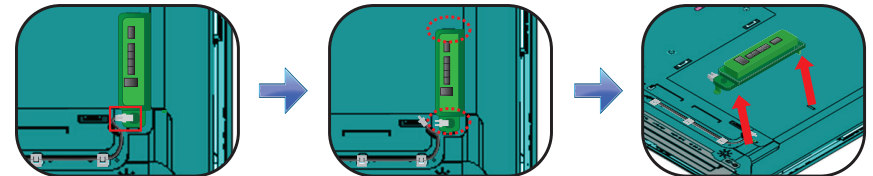
## REMOVING THE SPEAKERS

1. Disconnect connectors from each Speaker, then lift to detach.



## REPLACING THE SWITCH UNIT

1. Disconnect connector from Switch Unit, then lift to detach.



2. Install the new Switch Unit and connector.





# SECTION 4 - EXPLODED VIEW/PART NUMBER INFORMATION

## TABLE TOP STAND

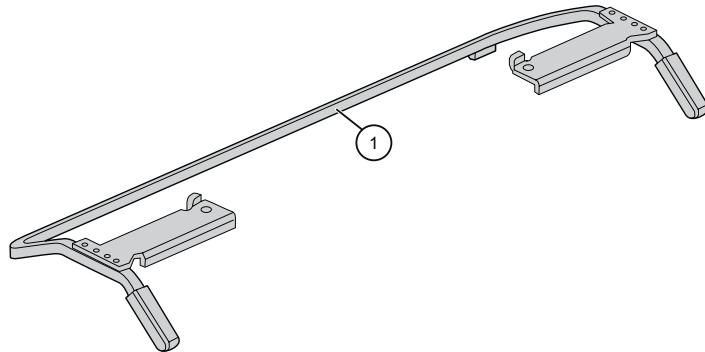
Components not identified by a part number or description are not stocked because they are seldom required for routine service.

The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

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


NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. (See Appendix A)


REF. NO.	PART NO.	DESCRIPTION
1	4-484-942-01	STAND SHAFT (M) (KDL-40W590B/40W600B ONLY)
1	4-484-943-01	STAND SHAFT (ML) (KDL-48W590B/48W600B ONLY)

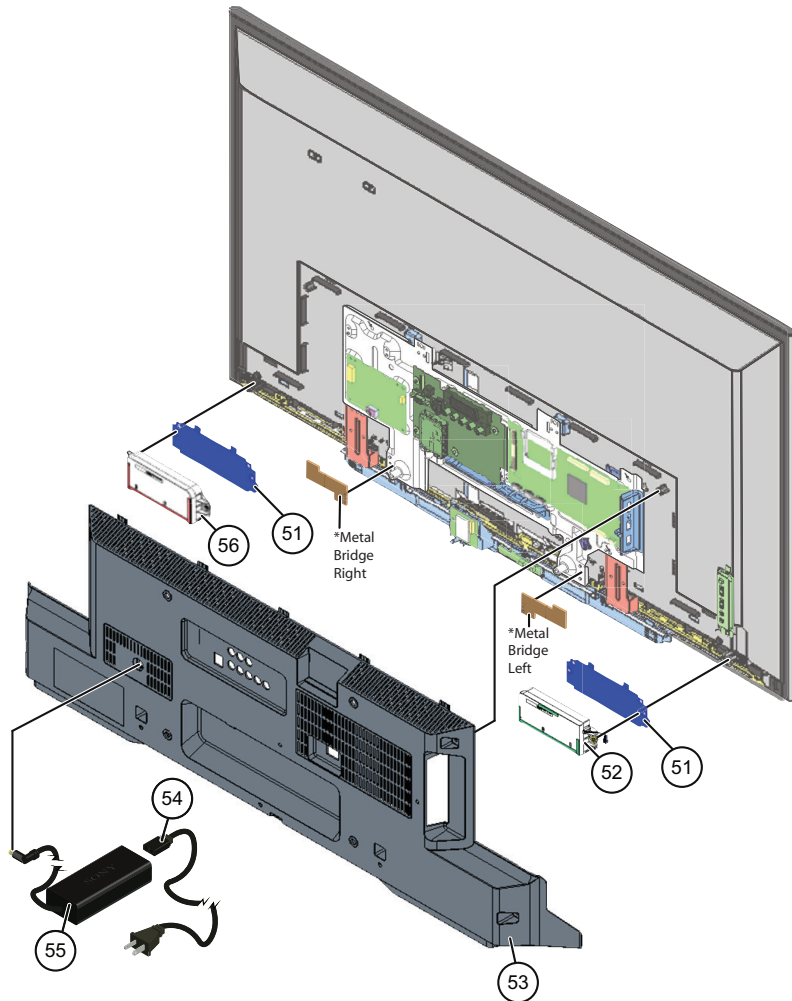




# SECTION 4 - EXPLODED VIEW/PART NUMBER INFORMATION

## KDL-40W590B/48W600B

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

NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. (See Appendix A)





REF. NO.	PART NO.	DESCRIPTION
51	4-476-162-01	BRACKET, SP
52	1-858-963-11	SPEAKER BOX (LEFT)
53	4-532-487-01	LOWER COVER (UNDER COVER 40) (KDL-40W590B/40W600B ONLY)
53	4-532-488-01	LOWER COVER (UNDER COVER 48) (KDL-48W590B/48W600B ONLY)
 54	1-838-955-41	POWER SUPPLY CORD
 55	1-492-734-11	AC ADAPTOR (85W)
56	1-858-963-21	SPEAKER BOX (RIGHT)

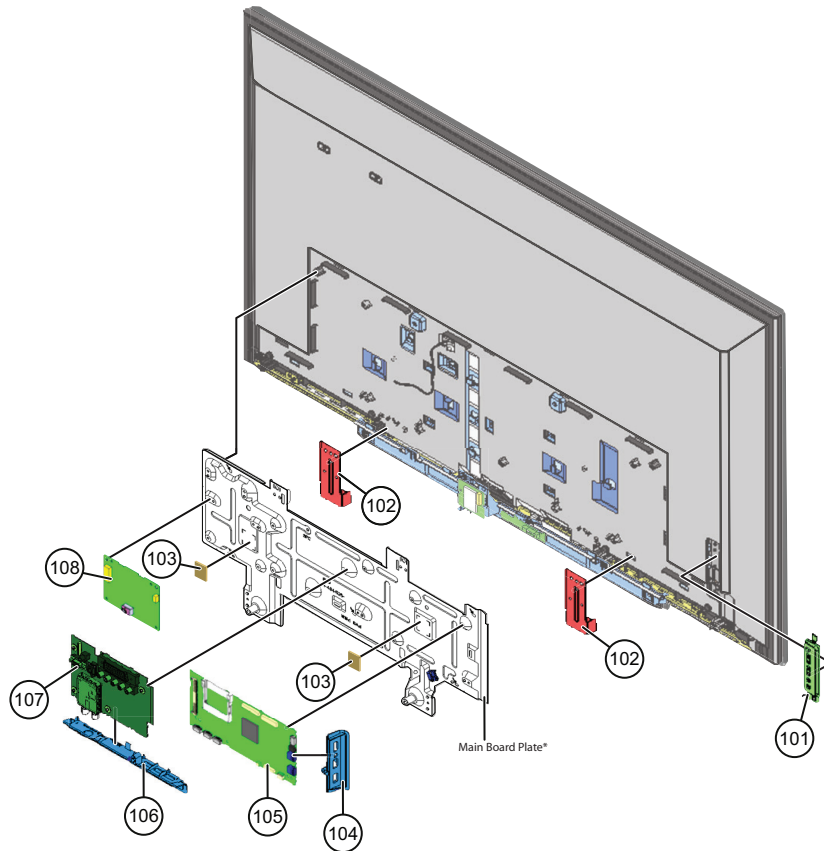
\* Reinstall Metal Bridge Right and Metal Bridge Left when replacing the LCD Panel.  
(KDL-48W590B/48W600B ONLY)


# SECTION 4 - EXPLODED VIEW/PART NUMBER INFORMATION

## KDL-40W590B/48W600B

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

NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. (See Appendix A)





REF. NO.	PART NO.	DESCRIPTION
101	1-474-560-11	SWITCH UNIT
102	4-476-164-01	STAND BRACKET
103	4-440-057-01	SHEET, THERMAL (AYU2) ORDER THIS PART WHEN REPLACING THE MAIN BOARD AND/OR LD BOARD.
104	4-528-972-01	BRACKET, SIDE
 105	A-2037-764-A	BAXL BOARD, COMPLETE AFTER REPLACING THE MAIN BOARD, YOU MUST UPDATE THE SOFTWARE TO THE LATEST VERSION.
106	4-528-973-01	BRACKET, UNDER
107	A-1998-231-A	TUNER BOARD, COMPLETE AFTER REPLACING THE TUNER BOARD, YOU MUST UPDATE THE SOFTWARE TO THE LATEST VERSION.
108	A-1983-521-A	LD BOARD, MOUNTED (KDL-40W590B/40W600B ONLY)
108	A-1983-522-A	LD BOARD, MOUNTED (KDL-48W590B/48W600B ONLY)

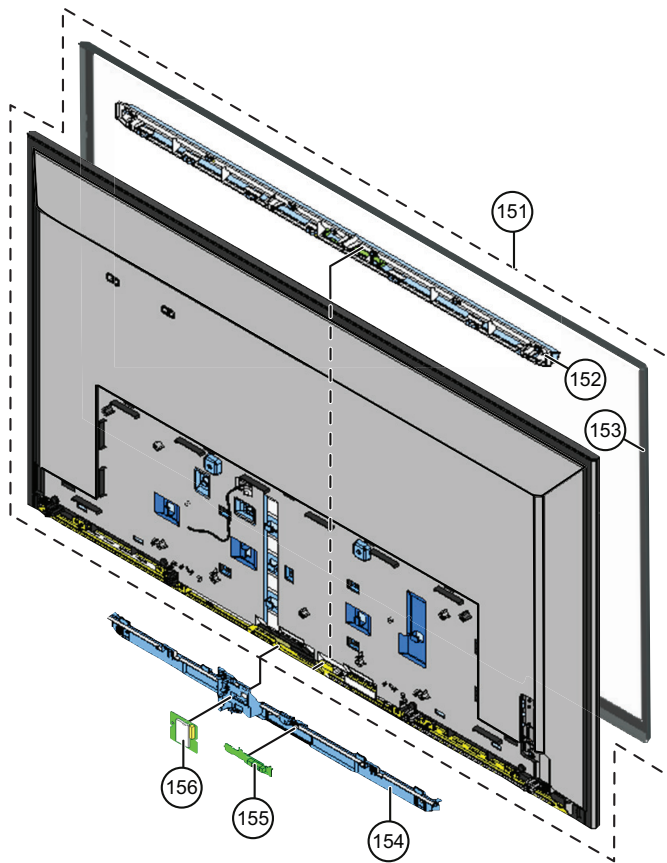
\* Reinstall Main Board Plate when replacing the LCD Panel.


# SECTION 4 - EXPLODED VIEW/PART NUMBER INFORMATION

## KDL-40W580B/48W580B

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


NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. (See Appendix A)




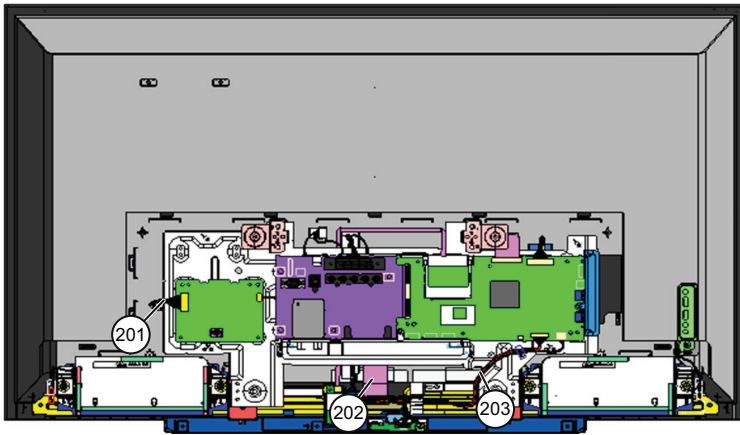
REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
 151	NA	PANEL MODULE FOR LCD PANEL AND TCON BOARD PART NUMBER INFORMATION REFER TO THE LCD PANELS SERVICE MANUAL.	[152, 153]
152	4-476-157-11	PANEL, ORNAMENTAL L (KDL-40W590B ONLY)	
152	4-476-157-61	PANEL, ORNAMENTAL L (KDL-40W600B ONLY)	
152	4-476-156-11	PANEL, ORNAMENTAL LL (KDL-48W590B ONLY)	
152	4-476-156-61	PANEL, ORNAMENTAL LL (KDL-48W600B ONLY)	
153	4-527-493-01	BEZEL (40) (KDL-40W590B/40W600B ONLY)	
153	4-527-494-01	BEZEL (48) (KDL-48W590B/48W600B ONLY)	
154	4-476-160-01	COVER, OP L (KDL-40W590B/40W600B ONLY)	
154	4-476-159-01	COVER, OP LL (KDL-48W590B/48W600B ONLY)	
155	A-1979-006-A	HJM BOARD, MOUNTED	
156	1-458-723-11	WIRELESS LAN CARD	

# SECTION 4 - EXPLODED VIEW/PART NUMBER INFORMATION

## CONNECTORS

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


NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. (See Appendix A)




REF. NO.	PART NO.	DESCRIPTION
201	1-910-804-48	CONNECTOR ASSEMBLY 20P
202	1-848-217-11	(LVDS) FLEXIBLE FLAT CABLE 51P (KDL-40W590B/40W600B ONLY)
202	1-848-218-11	(LVDS) FLEXIBLE FLAT CABLE 51P (KDL-48W590B/48W600B ONLY)
203	1-910-804-49	HARNESS ASSEMBLY (KDL-40W590B/40W600B ONLY)
203	1-910-804-52	HARNESS ASSEMBLY (KDL-48W590B/48W600B ONLY)

# SECTION 4 - EXPLODED VIEW/PART NUMBER INFORMATION

## SCREWS

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

NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. (See Appendix A)

P/N		DESCRIPTION	KDL-40W590B/40W600B	KDL-48W590B/48W600B
	2-580-639-01	SCREW, +BVTP 4X12 TYPE2 IT-3	Bracket Under to Lower Cover (1) Bracket Side to Lower Cover (1)	Bracket Under to Lower Cover (1) Bracket Side to Lower Cover (1)
	2-990-421-41	SCREW (+PSW) (M3X6)	Main Board (6), LD Board (4)	Main Board (6), LD Board (4)
	4-256-393-01	SCREW, +PSW M3X6 W12	Tuner Board (4)	Tuner Board (4) Metal Bridge Right (2), Metal Bridge Left (2)
NA	7-685-647-79	SCREW, +BVTP 3X10 TYPE IT-3	Lower Cover (6), Main Board Plate (5), OP Cover a Bezel (3), Stand Brackets (2)	Wireless Lan Card (2), Lower Cover (7), OP Cover a Bezel (2), Stand Brackets (2), Main Board Plate (5)
	4-159-298-21	SCREW, +PSW M4X10	Brackets Vesa (2) , Stand Brackets (2)	Brackets Vesa (2) , Stand Brackets (2)
NA	3-452-815-21	SCREW, +PSW M5X20	Stand to TV (2)	Stand to TV (2)
NA	2-580-611-01	SCREW, +PSW M6X16	Wall Mount Adapter (3)	Arm Left to Stand Shaft (2), Arm Right to Stand Shaft (2)

# SECTION 5 - ACCESSORIES/PART NUMBER INFORMATION

## ACCESSORIES AND PACKAGING

PART NO.	DESCRIPTION
3-452-815-21	SCREW, +PSW M5X20 (SCREWS TO ATTACH TABLE TOP STAND TO LCD TV) <i>For product protection and safety reasons, Sony strongly recommends that you use the screws provided with the TV.</i> <i>CAUTION: These screws cannot be used to secure the TV to the Wall Mount Brackets.</i>
4-535-392-01	SCREW, +PSW M6X16 (SCREWS TO ATTACH TV TO WALL MOUNT)
4-531-135-01	WALL HUNG BRACKET ASSEMBLY L
4-484-526-01	BRACKET, VESA
4-428-537-01	CLAMPER, AC ADAPTER
3-299-071-08	FLYER, SAFETY
4-489-955-11	MANUAL, INSTRUCTION (ENGLISH VERSION)
4-489-956-31	MANUAL, INSTRUCTION (SPANISH VERSION) (KDL-40W600B/48W600B ONLY)

## MISCELLANEOUS

PART NO.	DESCRIPTION
4-100-136-01	SHEET (CORE), C
4-256-454-02	SPACER (G A)
7-600-031-97	TAPE (3M 1350FB-1) 15MMX66M BLK
7-600-031-96	TAPE (3M 1350FW-1) 15MMX66M WHT
3-876-036-71	UNI-LABEL, BLANK

## OPTIONAL ACCESSORIES

PART NO.	DESCRIPTION
4-414-470-01	SUPPORT BELT KIT

## REMOTE COMMANDER




PART NO.	DESCRIPTION
1-492-767-11	REMOTE COMMANDER (RM-YD103)

# APPENDIX A: ENCRYPTION KEY COMPONENTS

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Encryption key components developed by Sony Corporation contain confidential information and shall be handled under the non-disclosure obligations provided in the applicable agreement with Sony Corporation (and/or its subsidiary).

As part of this agreement specific instructions must be adhered to whenever a Circuit Board containing encryption key components is repaired and/or replaced pursuant to the following:

1. In the service manual the Circuit Board(s) containing encryption key components shall be identified with a red outline and a .
2. Only repair boards or components listed in the service manual shall be utilized for replacement and/or repair.
3. Disassembly, decryption or reverse-engineering component(s) is strictly prohibited.
4. Any board in which the Servicer replaces an encryption key component must be placed back into the set it originally came from and the replaced defective component MUST BE DESTROYED. Boards cannot be swapped.
5. If a Circuit Board identified with a red outline and a  in the service manual is deemed to be defective:
  - a. and if a core charge is imposed and is covered under the product warranty, the defective un-repaired or modified board MUST BE RETURNED to Sony.
  - b. and if the core charge is NOT covered under the product warranty, the defective un-repaired or modified board MUST BE DESTROYED.
6. If a unit is destroyed (such as field scrap), the Circuit Board identified with a red outline and a  in the service manual MUST BE DESTROYED.

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