

CDP-XE570

SERVICE MANUAL

Ver 1.0 2001. 03

AEP Model
UK Model



Photo : BLACK

Model Name Using Similar Mechanism	NEW
CD Mechanism Type	CDM66-5BD27
Base Unit Type	BU-5BD27
Optical Pick-up Type	PXR-104X

SPECIFICATIONS

Compact disc player

Laser	Semiconductor laser ($\lambda = 780 \text{ nm}$) Emission duration: continuous
Frequency response	2 Hz to 20 kHz $\pm 0.5 \text{ dB}$
Dynamic range	More than 93 dB
Harmonic distortion	0.0045%

Outputs

	Jack type	Maximum output level	Load impedance
ANALOG OUT	Phono jacks	2 V (at 50 kilohms)	Over 10 kilohms
DIGITAL OUT (OPTICAL)	Optical output connector	-18 dBm	Wave length: 660 nm
PHONES	Stereo phone jack	10 mW	32 ohms

General

Power requirements	230 V AC, 50/60 Hz
Power consumption	11 W
Dimensions (approx.) (w/h/d)	430 x 95 x 290 mm incl. projecting parts
Mass (approx.)	3.3 kg

Supplied accessories

Audio cord (2 phono plugs – 2 phono plugs) (1)
Remote commander (remote) (1)
R6 (size AA) batteries (2)

Design and specifications are subject to change without notice.

COMPACT DISC PLAYER

SONY®

The following caution label is located inside of the unit.



This appliance is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

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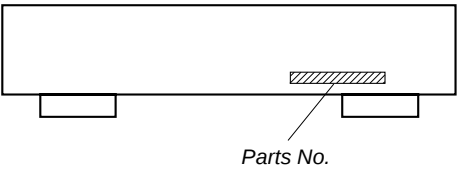
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MODEL IDENTIFICATION
— BACK PANEL —



PARTS No.	MODEL
4-232-150-0□	AEP
4-232-150-1□	UK

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

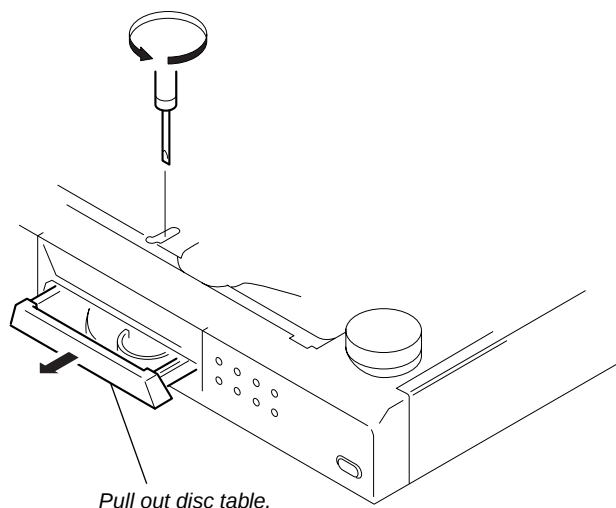
SECTION 1 SERVICING NOTE

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF

Insert a tapering driver into the aperture of the unit bottom, and turn in the direction of arrow.

Use a flat (-) head screwdriver to open the CD tray by manual operation. (Flat head screwdriver with nominal blade length of 3mm.)

** To close the disc table, turn the driver in the reverse direction.*



NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

CD-TEXT TEST DISC

This unit is able to display the TEXT data (character information) written in the CD on its fluorescent indicator tube.

The CD-TEXT TEST DISC (TGCS-313: J-2501-126-A) is used for checking the display.

To check, perform the following procedure.

Procedure:

1. Turn ON the power and set the test disc.
2. Press the  button and play back the disc.
3. The following will be displayed on the fluorescent indicator tube.

Display : 1kHz/0 dB/-----

4. Rotate the  knob to switch the track. The text data of each track will be displayed.

Restrictions in CD-TEXT Display

In this unit, some special characters will not be displayed properly. These will be displayed as a space or a character resembling it. For details, refer to “Table 2 : CD-TEXT DISC Recorded Contents and Display”.

Table 1 : CD-TEXT TEST DISC TEXT Data Contents (TRACKS No. 1 to 41:Normal Characters)

TRACK No.	Displayed Contents	TRACK No.	Displayed Contents
1	1kHz/0dB/L&R	22	1kHz/-90dB/L&R
2	20Hz/0dB/L&R	23	Infinity Zero w/o emphasis//L&R
3	40Hz/0dB/L&R	24	Infinity Zero with emphasis//L&R
4	100Hz/0dB/L&R	25	400Hz+7kHz(4:1)/0dB/L&R
5	200Hz/0dB/L&R	26	400Hz+7kHz(4:1)/-10dB/L&R
6	500Hz/0dB/L&R	27	19kHz+20kHz(1:1)/0dB/L&R
7	1kHz/0dB/L&R	28	19kHz+20kHz(1:1)/-10dB/L&R
8	5kHz/0dB/L&R	29	100Hz/0dB/L*
9	7kHz/0dB/L&R	30	1kHz/0dB/L*
10	10kHz/0dB/L&R	31	10kHz/0dB/L*
11	16kHz/0dB/L&R	32	20kHz/0dB/L*
12	18kHz/0dB/L&R	33	100Hz/0dB/R*
13	20kHz/0dB/L&R	34	1kHz/0dB/R*
14	1kHz/0dB/L&R	35	10kHz/0dB/R*
15	1kHz/-1dB/L&R	36	20kHz/0dB/R*
16	1kHz/-3dB/L&R	37	100Hz Squer Wave//L&R
17	1kHz/-6dB/L&R	38	1kHz Squer Wave//L&R
18	1kHz/-10dB/L&R	39	1kHz w/emphasis/-0.37dB/L&R
19	1kHz/-20dB/L&R	40	5kHz w/emphasis/-4.53dB/L&R
20	1kHz/-60dB/L&R	41	16kHz w/emphasis/-9.04dB/L&R
21	1kHz/-80dB/L&R		

NOTE : The contents of Track No. 1 to 41 are the same as those of the current TEST DISC-their titles are displayed.

However, only 8 digits are displayed, and the 9th digit onwards are displayed as “-----”.

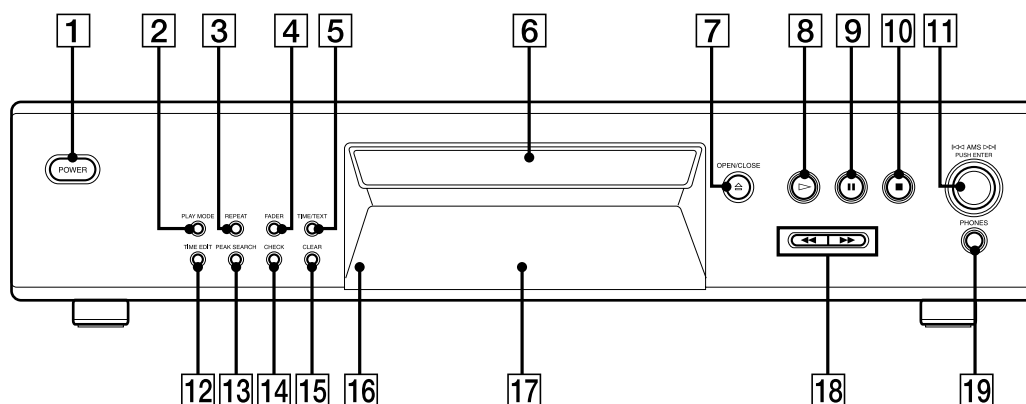
Table 2: CD-TEXT TEST DISC Recorded Contents and Display
(In this unit, some special characters cannot be displayed. This is not a fault.)

TRACK No.	Recorded contents	Display
42	! " # \$ % & ' (21h to 27h)1kHz 0dB L&R	: ... ! " # \$ % & are not displayed
43	() * + , - . / (28h to 2Fh)	() * + - / ... , . are not displayed
44	0 1 2 3 4 5 6 7 (30h to 37h)	0 1 2 3 4 5 6 7 ...
45	8 9 : ; < = > ? (38h to 3Fh)	8 9 = ? ... : ; < > are not displayed
46	@ A B C D E F G (40h to 47h)	A B C D E F G ... @ is not displayed
47	H I J K L M N O (48h to 4Fh)	H I J K L M N O ...
48	P Q R S T U V W (50h to 57h)	P Q R S T U V W ...
49	X Y Z [\] ^ _ (58h to 5Fh)	X Y Z [/] ^ _ ...
50	` a b c d e f g (60h to 57h)	` A B C D E F G ...
51	h i j k l m n o (68h to 6Fh)	H I J K L M N O ...
52	p q r s t u v w (70h to 77h)	P Q R S T U V W ...
53	x y z { } ~ ■ (78h to 7Fh)	X Y Z ... { } ■ are not displayed
54	■ i ¢ £ ¤ ¥ ¦ § (A0h to A7h) 8859-1	... ■ i ¢ £ ¤ ¥ ¦ § are not displayed
55	♪ © ª « ¬ ® ¯ (A8h to AFh)	¬ ¯ ... ♪ © ª « ® are not displayed
56	· ± ² ³ ´ µ ¶ · (B0h to B7h)	÷ ± ´ ... ² ³ µ ¶ · are not displayed
57	† † ° » ¼ ½ ¾ ¿ (B8h to BFh)	¿ ... † † ° » ¼ ½ ¾ are not displayed
58	À Á Â Ã Ä Å Æ Ç (C0h to C7h)	À Á Â Ã Ä Å ... Æ Ç are not displayed
59	È É Ê Ë Ì Í Î Ï (C8h to CFh)	È É Ê Ë Ì Í Î Ï ...
60	Ð Ñ Ò Ó Ô Õ Ö × (D0h to C7h)	Ñ Ò Ó Ô Õ Ö ... Ð × are not displayed
61	Ø Ù Ú Û Ü Ý Þ ß (D8h to DFh)	Ù Ú Û Ü Ý ... Ø Þ ß are not displayed
62	à á â ã ä å æ ç (E0h to E7h)	À Á Â Ã Ä Å ... æ ç are not displayed
63	è é ê ë ì í î ï (E8h to FFh)	È É Ê Ë Ì Í Î Ï ...
64	ƒ ñ ò ó ô õ ö ÷ (F0h to F7h)	Ñ Ò Ó Ô Õ Ö ... ƒ ÷ are not displayed
65	ø ù ú û ü ý þ ÿ (F8h to FFh)	Ù Ú Û Ü Ý ... ø þ ÿ are not displayed
66	No.66	← All the same
67	No.67	← All the same
to	to	to
99	No.99	← All the same

SECTION 2 GENERAL

This section is extracted
from instruction manual.

FRONT PANEL

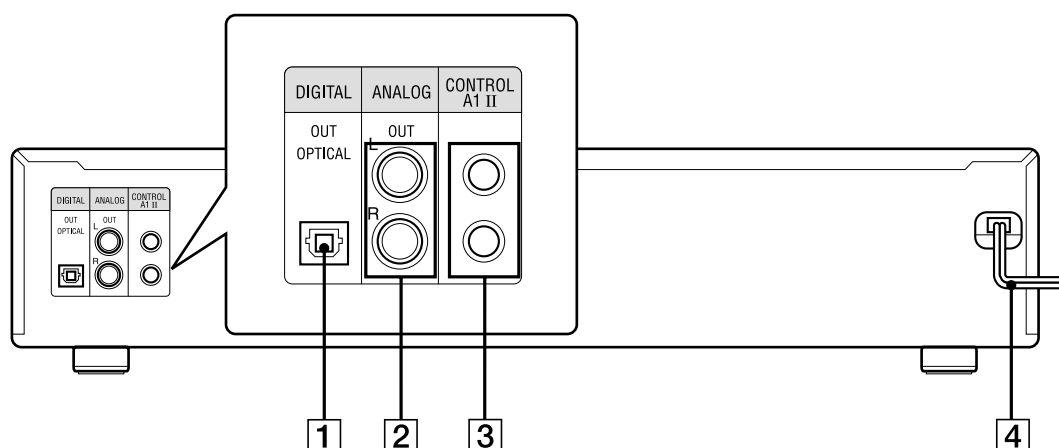


CHECK **14** (12)
CLEAR **15** (12)
Disc compartment **6** (8)
Display **17** (10)
FADER **4** (13)
PEAK SEARCH **13** (14)
PHONES jack **19** (9)
PLAY MODE **2** (9, 12, 14)
POWER **1** (8)
Remote sensor **16** (7)
REPEAT **3** (9, 11)
TIME EDIT **12** (13, 14)
TIME/TEXT **5** (10)

BUTTON DESCRIPTIONS

OPEN/CLOSE **7** (8, 10, 12)
PAUSE **8** (9, 11, 12, 14)
PAUSE **9** (9, 14)
PAUSE **10** (9, 14)
PAUSE **11** (9, 12, 14)
PAUSE **18** (9, 13)

BACK PANEL



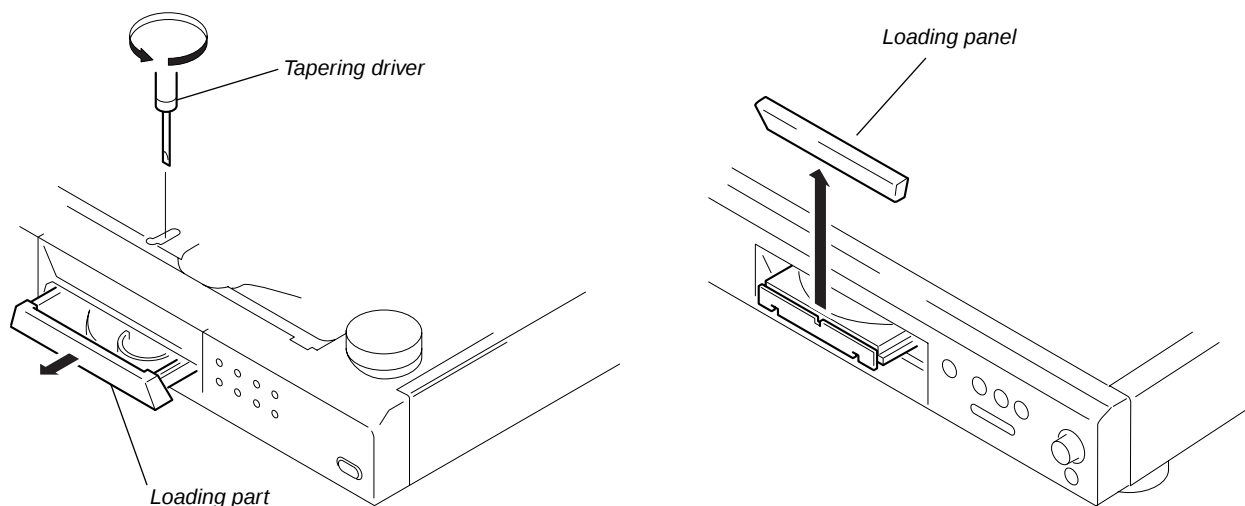
ANALOG OUT L/R jacks **2** (7)
CONTROL A1II jacks **3** (8, 15)
DIGITAL OUT OPTICAL jack **1** (8)
Mains lead **4** (7)

SECTION 3 DISASSEMBLY

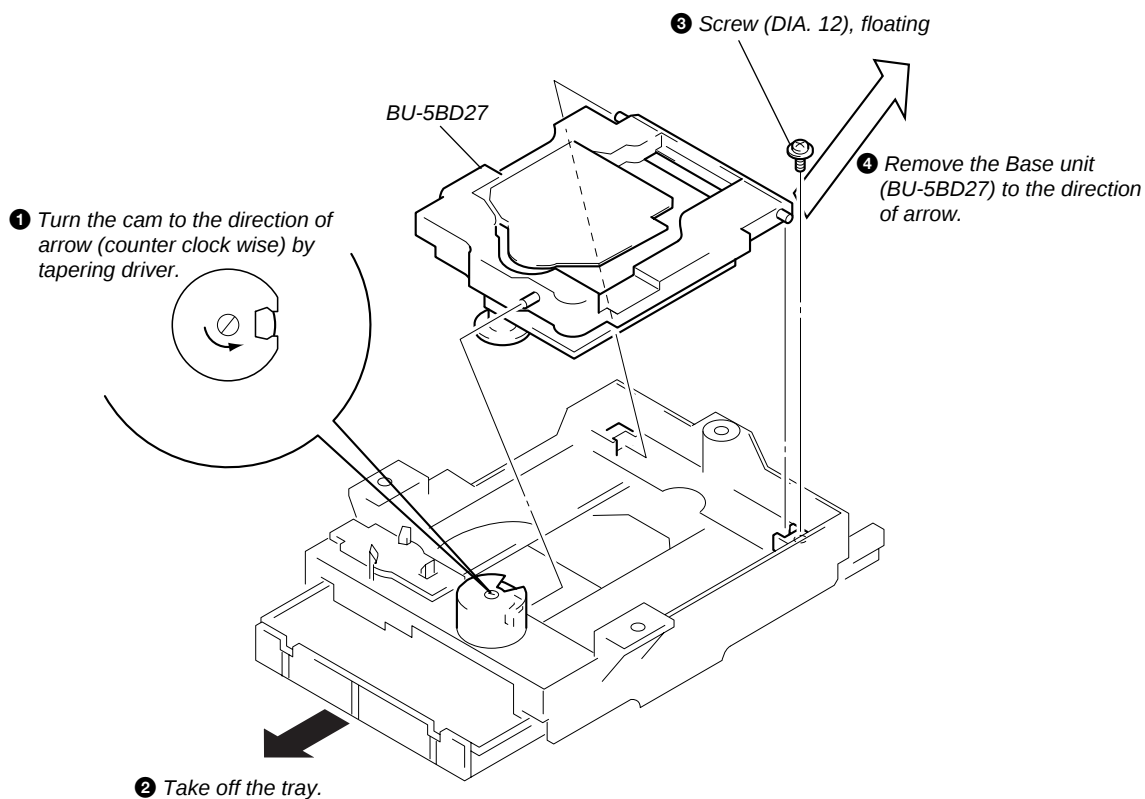
Note : Follow the disassembly procedure in the numerical order given.

3-1. LOADING PANEL

- In order to remove the front panel block when the power supply does not turn on, rotate the cam with tapering driver as the figure shows, and the loading part will be moved. Then pull out the loading part by your hand to remove the loading panel as the figure shows. After that take out the front panel block.



3-2. BASE UNIT (BU-5BD27)



SECTION 4
TEST MODE

4-1. CHECK MODE

The following checks can be performed in the CHECK Mode.

• Offset value display

- 1. Turn on the set.
- 2. Put disc in the set.
- 3. Press the **PLAY MODE**, **▷** and **▶▶** buttons simultaneously.
- 4. The Offset measured values will be displayed as “AB 02 FE” (typical values).

The display will light up as follows when the **◀◀ AMS ▶▶** knob is rotated to the right, and as follows when rotated to the left.



• RFDC value display

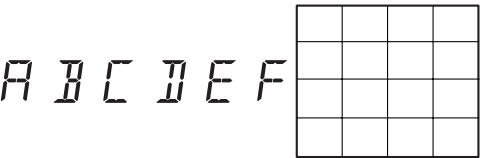
- 1. Turn on the set.
- 2. Put disc in the set.
- 3. Press the **PLAY MODE**, **▷** and **◀◀** buttons simultaneously.
- 4. The RFDC measured value will be displayed as “RFDC 65” (typical value). If there is no disc in the set, “RFDC NO” will be displayed.

4-2. AFADJ MODE

The following checks can be performed in the AFADJ mode, which is set by connecting the TP2 (AFADJ) terminal on DISPLAY BOARD to the Ground and turning on the power.

• FL tube check

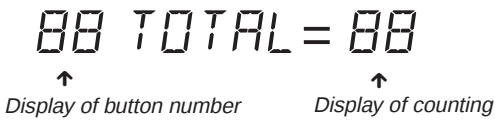
After all segments light up, when the **▷** button is pressed, the following will be displayed.



When the **OPEN/CLOSE** button is pressed, all will light up again.

• Key check

All buttons have corresponding button numbers. When a button is pressed, the counter will count up and display the button’s number. However, the counter will only count to “15”. It will not count for buttons already pressed once, but will display the button’s number.



When the **■** button is pressed, the following will be displayed.

	2		4	
6		8		10
	12		14	
16		18		20

Button	Buttton No. Displayed	Button	Button No. Displayed
 	1	PEAK SEARCH	20
▶▶	8	TIME EDIT	21
◀◀	9	PLAY MODE	22
ENTER(AMS)	10	REPEAT	23
TIME/TEXT	16	OPEN/CLOSE	All lit
FADER	17	⌂	
CLEAR	18	PLAY ▷	(ABCDEF)
CHECK	19	STOP ■	(Music Calendar)

• Remote commander check

When the “**▷**” button is pressed, the display will light up as follows.



4-3. ADJ MODE

The following operations are performed in the ADJ mode, which is set by connecting the TP1 (ADJ) terminal to the Ground and turning on the power.

Table of Button Operations in ADJ Mode

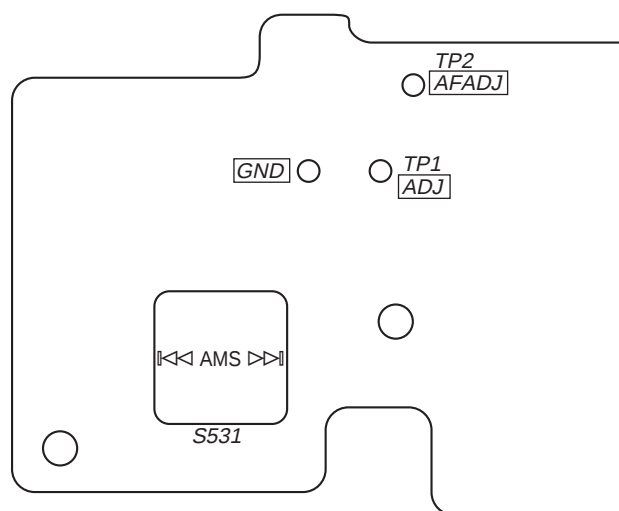
The functions of the buttons are shown in the following table.

Function of Buttons

Button	Function
TIME/TEXT	Tracking servo ON/OFF
▶▶	OFFSET(VC)/EF.BIAS display
◀◀	OFFSET(RF,FE,TRK) display
CLEAR	RFCK/GFS/ERROR RATE check mode

* **NOTE** : Other buttons are not used for servicing and should not be pressed without a reason.

[DISPLAY BOARD] – Conductor side –

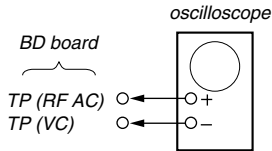


SECTION 5 ELECTRICAL BLOCK CHECKING

Note:

1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use PATD-012 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

RF Level Check

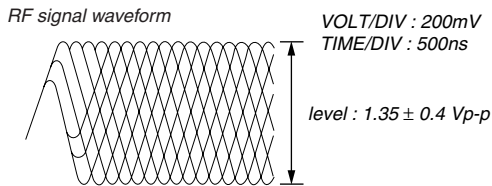


Procedure :

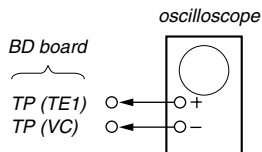
1. Connect oscilloscope to test point TP (RF AC) and TP (VC) on BD BOARD.
2. Connect the test point TP1 (ADJ) on DISPLAY BOARD to the ground with a lead wire.
3. Turn Power switch on.
4. Put disc (PATD-012) in to play the number five track.
5. Press the **CLEAR** button and select the RFCK function.
6. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note:

A clear RF signal waveform means that the shape “◇” can be clearly distinguished at the center of the waveform.



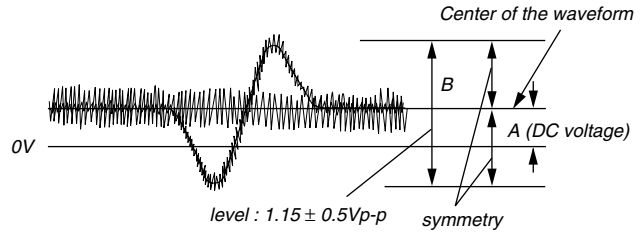
E-F Balance (1 Track Jump) Check



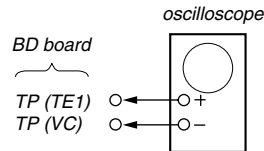
Procedure :

1. Connect oscilloscope to test point TP (TE1) and TP (VC) on BD BOARD.
2. Turn Power switch on.
3. Put disc (PATD-012) in to play the number five track.
4. Press the **||** (Pause) button. (Becomes the 1 track jump mode)
5. Check the level B of the oscilloscope's waveform and the A (DC voltage) of the center of the Traverse waveform. Confirm the following :
 $A/B \times 100 = \text{less than } \pm 22\%$

1 track jump waveform



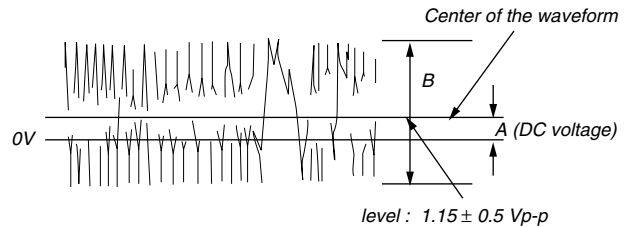
E-F Balance Check



Procedure :

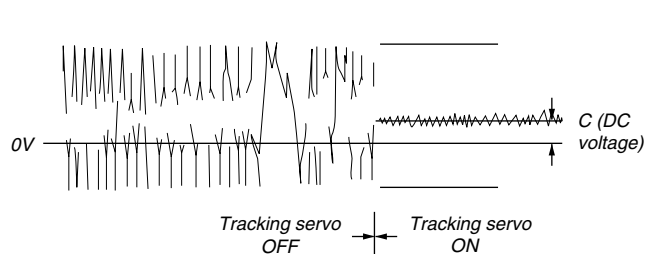
1. Connect the test point TP1 (ADJ) on DISPLAY BOARD to the ground with a lead wire on main board.
2. Connect oscilloscope to test point TP (TE1) and TP (VC) on BD BOARD.
3. Turn the Power switch on to set the ADJ mode.
4. Put disc (PATD-012) in to play the number five track.
5. Press the **TIME/TEXT** button. (The tracking servo are turned OFF.)
6. Check the level B of the oscilloscope's waveform and the A (DC voltage) of the center of the Traverse waveform. Confirm the following :
 $A/B \times 100 = \text{less than } \pm 22\%$

Traverse waveform

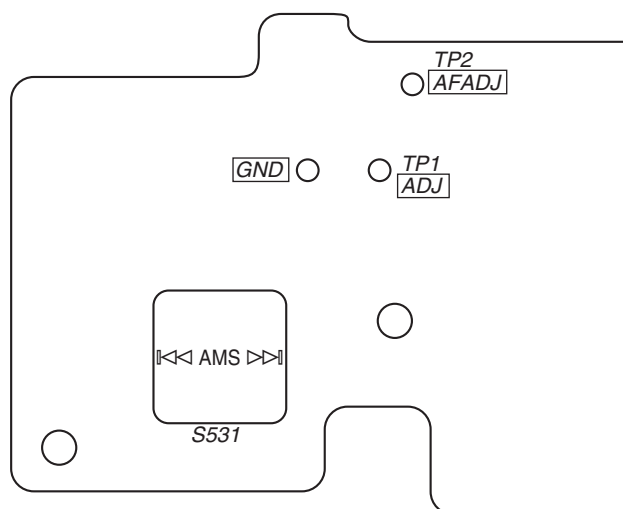
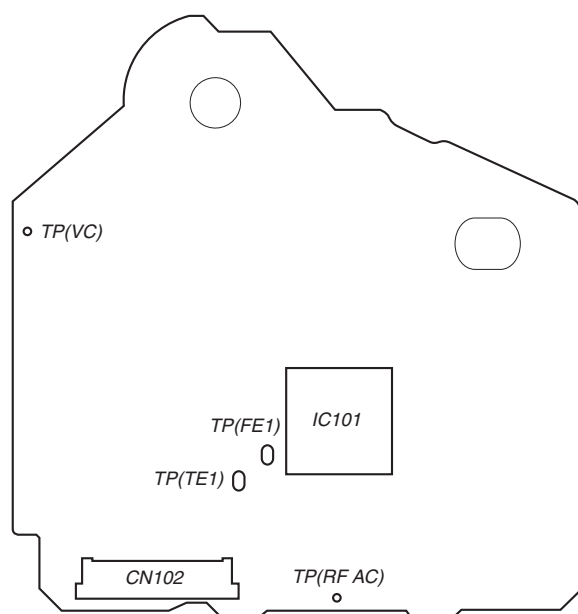


7. Press the **TIME/TEXT** button. (The tracking servo are turned ON.) Confirm the C (DC voltage) is almost equal to the A (DC voltage) is step 6.

Traverse waveform

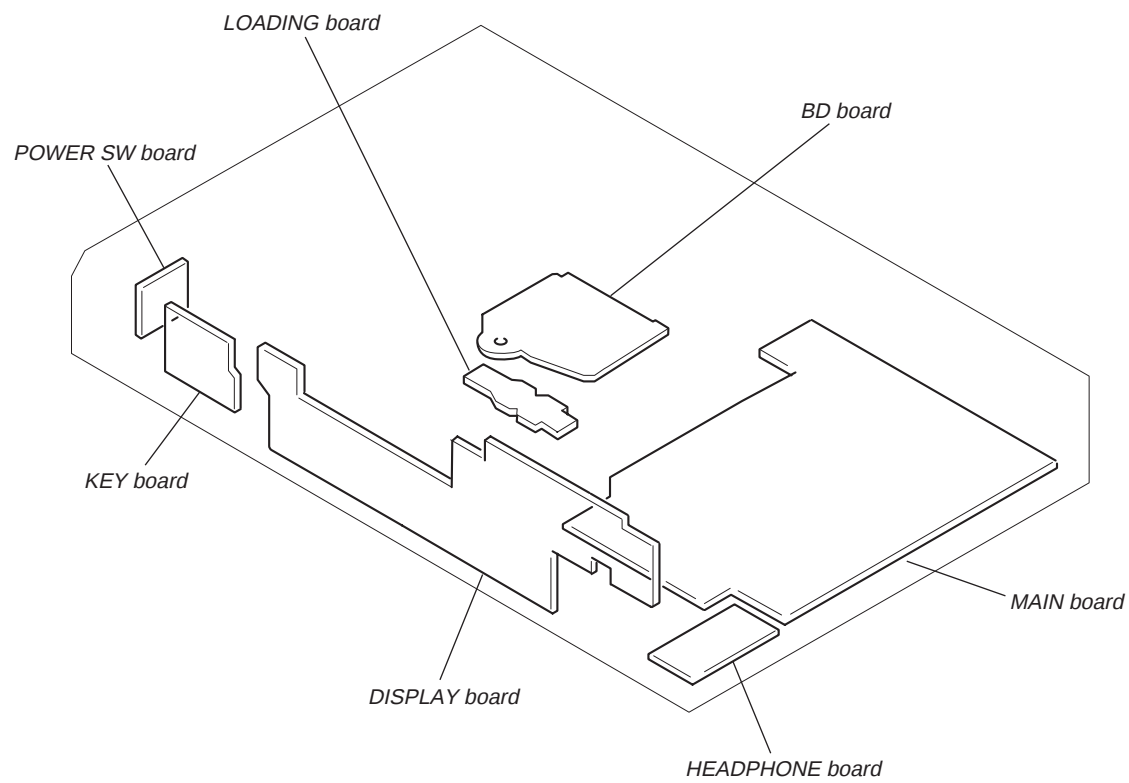


8. Disconnect the lead wire of TP1 (ADJ) connected in step 1.

Adjustment Location :**[DISPLAY BOARD]** – Conductor side –**[BD BOARD]** – Side B –

SECTION 6 DIAGRAMS

6-1. CIRCUIT BOARDS LOCATION



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

- Note:**
- All capacitors are in μF unless otherwise noted. pF: μF 50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4} \text{ W}$ or less unless otherwise specified.
 - Δ : internal component.
 - $\square$: panel designation.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

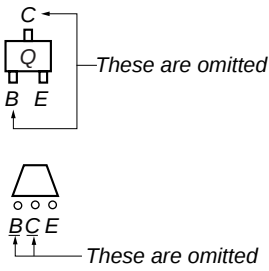
- — : B+ Line.
- - - - : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : STOP
() : PLAY
- Voltages are taken with a VOM (Input impedance 10 M Ω).
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope.
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
⇒ : CD
⇒ : digital out

For printed wiring boards.

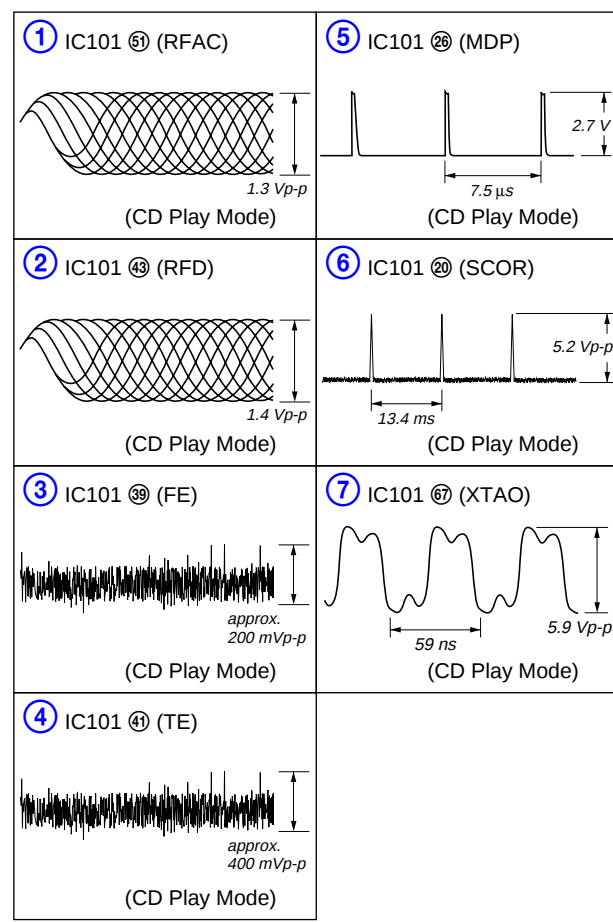
- Note:**
- $\circ$ — : parts extracted from the component side.
 - — : parts extracted from the conductor side.
 - $\blacksquare$: parts mounted on the conductor side.
 - $\circ$: Through hole.
 - ▨ : Pattern from the side which enables seeing.
(The other layers' patterns are not indicated.)

Caution:
Pattern face side: Parts on the pattern face side seen from the (Side B) pattern face are indicated.
Parts face side: Parts on the parts face side seen from the (Side A) parts face are indicated.

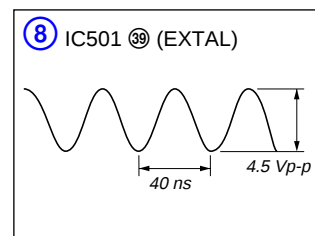
• Indication of transistor



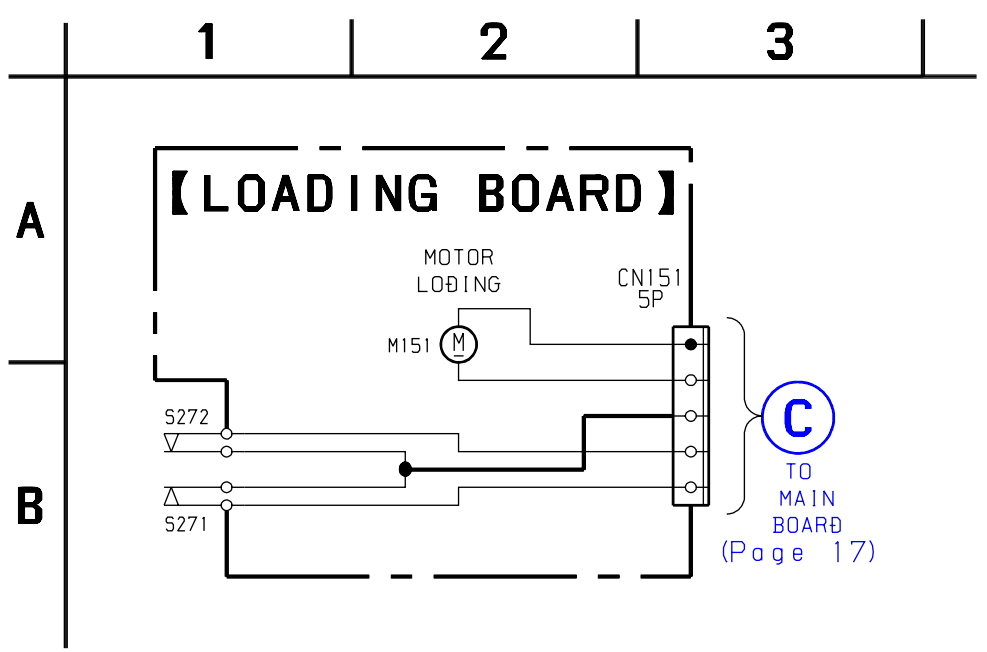
• WAVEFORMS
— BD Board —



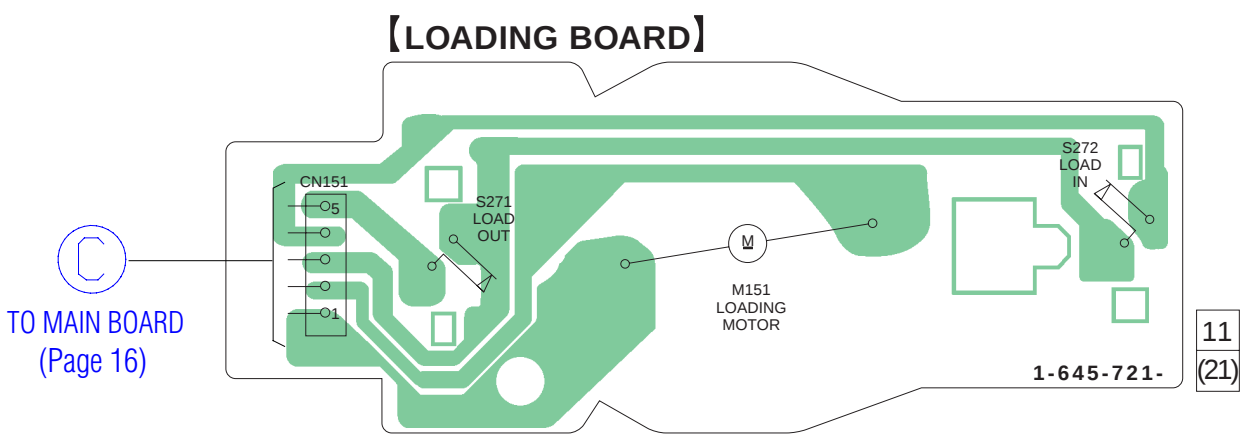
— DISPLAY Board —



6-2. SCHEMATIC DIAGRAM LOADING MOTOR SECTION



6-3. PRINTED WIRING BOARD LOADING MOTOR SECTION • See page 12 for Circuit Board Location.



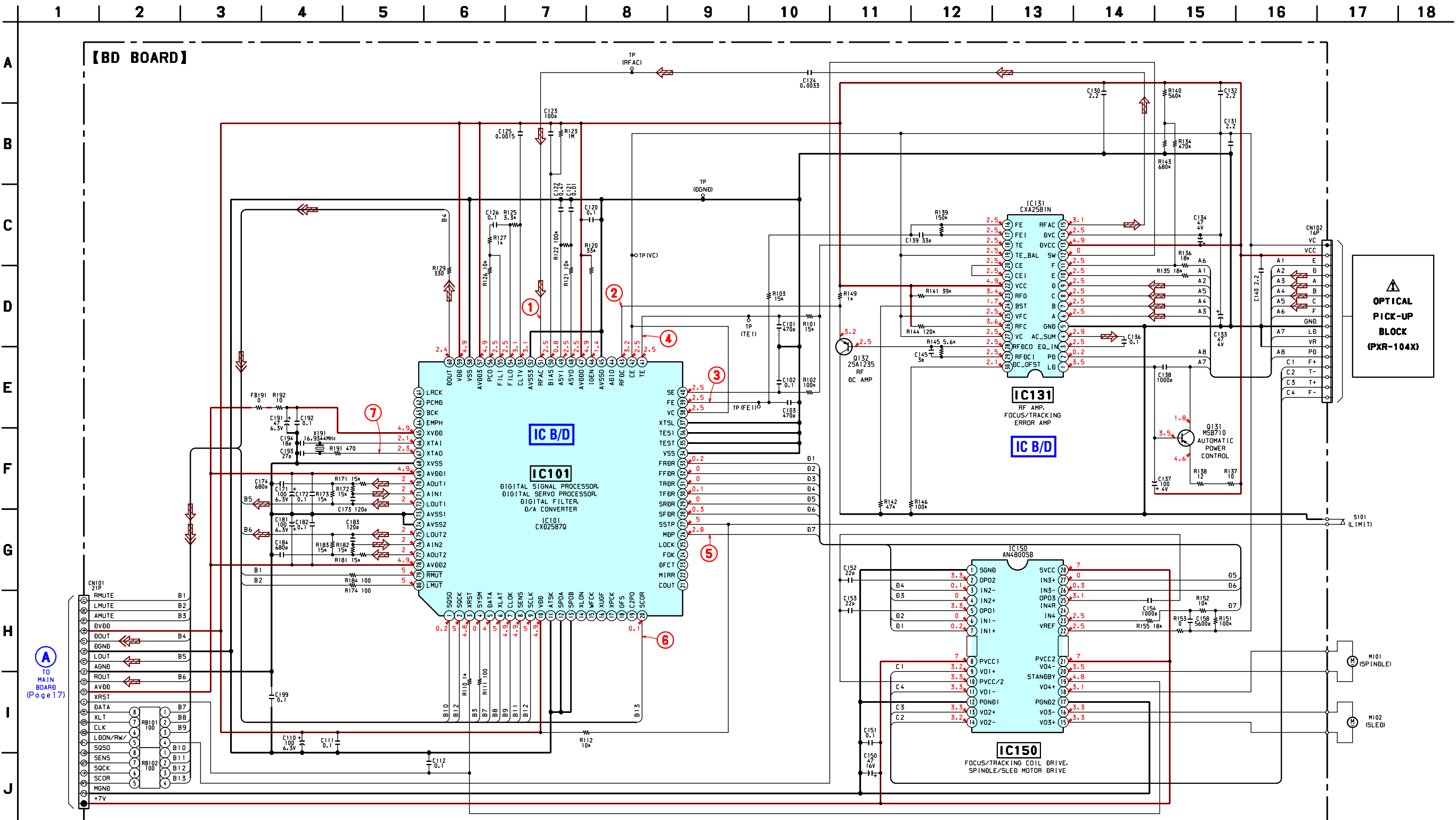
6-4. PRINTED WIRING BOARD BD SECTION • See page 12 for Circuit Board Location.

- **Semiconductor Location**

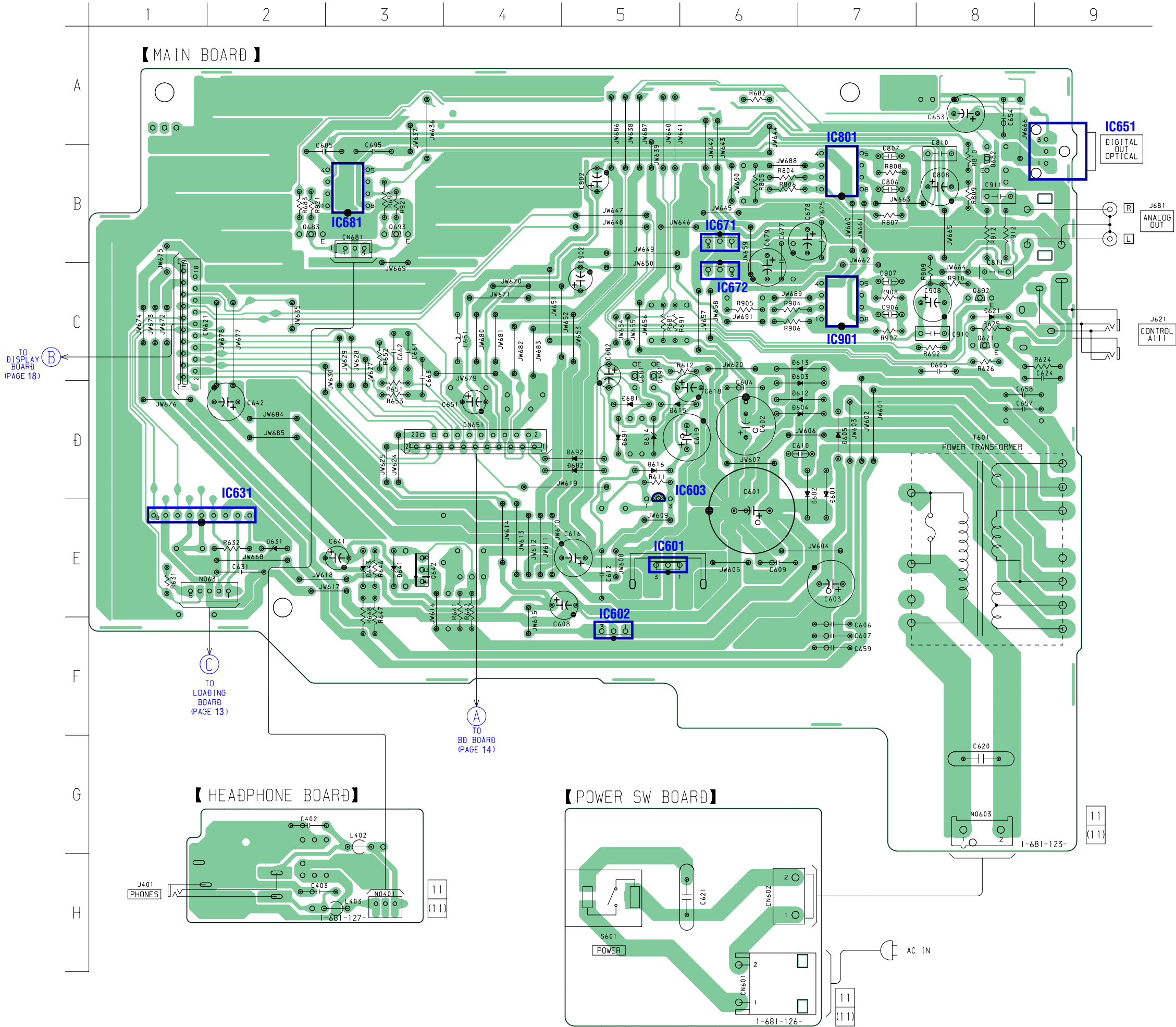
* : Side B



6-5. SCHEMATIC DIAGRAM BD SECTION • See page 21,22 for IC Block Diagrams. • See page 13 for waveforms.



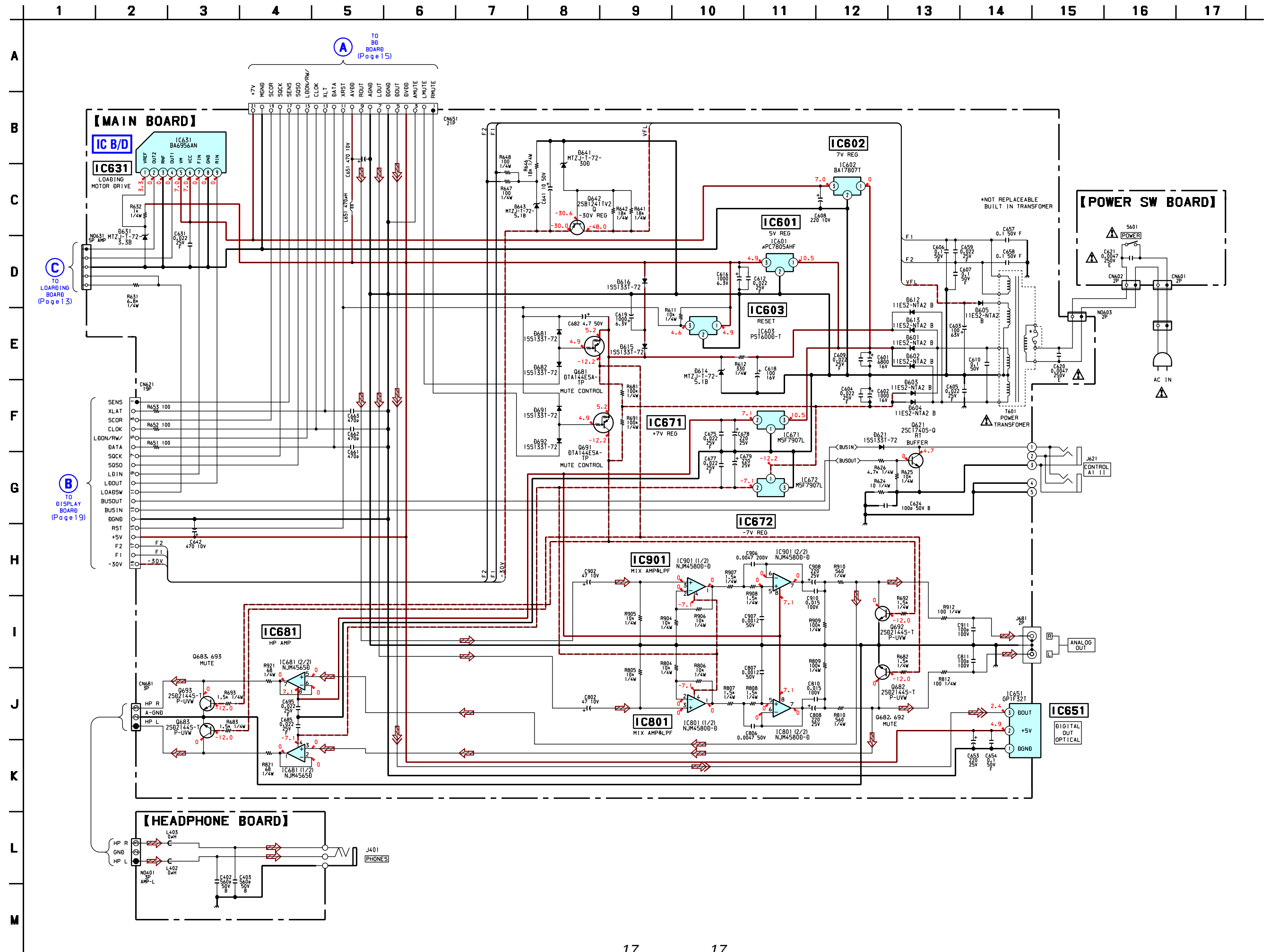
There are a few cases that the part printed on this diagram isn't mounted in this model.



• Semiconductor Location

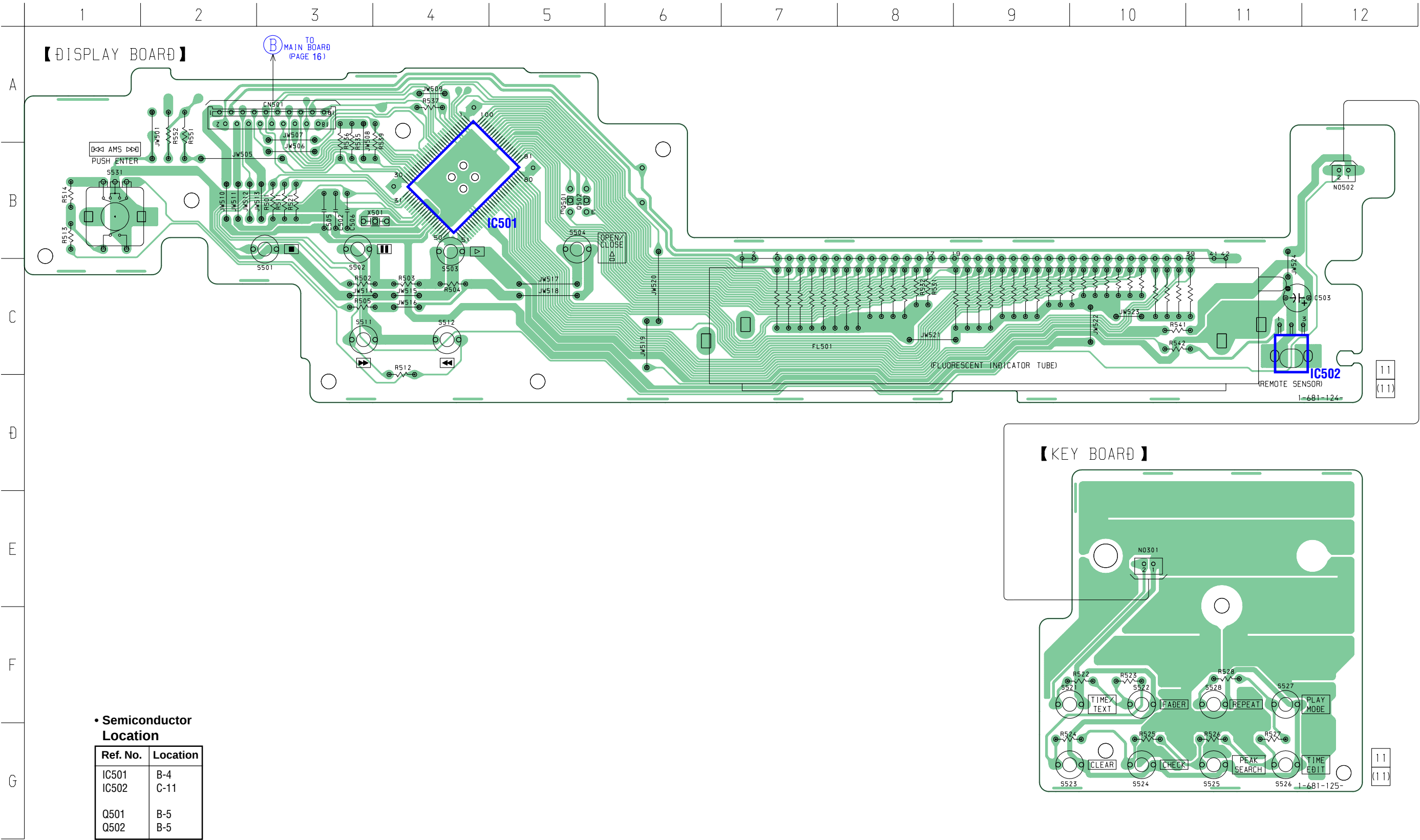
Ref. No.	Location
D601	D-7
D602	D-7
D603	C-7
D604	D-7
D605	D-7
D612	D-7
D613	C-7
D614	D-5
D615	D-5
D616	D-5
D621	C-8
D631	E-2
D641	E-3
D643	E-3
D681	D-5
D682	D-5
D691	D-5
D692	D-5
IC601	E-5
IC602	F-5
IC603	D-5
IC631	E-1
IC651	A-9
IC671	B-6
IC672	C-6
IC681	B-3
IC801	B-7
IC901	C-7
Q621	C-8
Q642	E-3
Q681	C-5
Q682	B-8
Q683	B-2
Q691	C-5
Q692	C-8
Q693	B-3

6-7. SCHEMATIC DIAGRAM MAIN SECTION • See page 22 for IC Block Diagram.

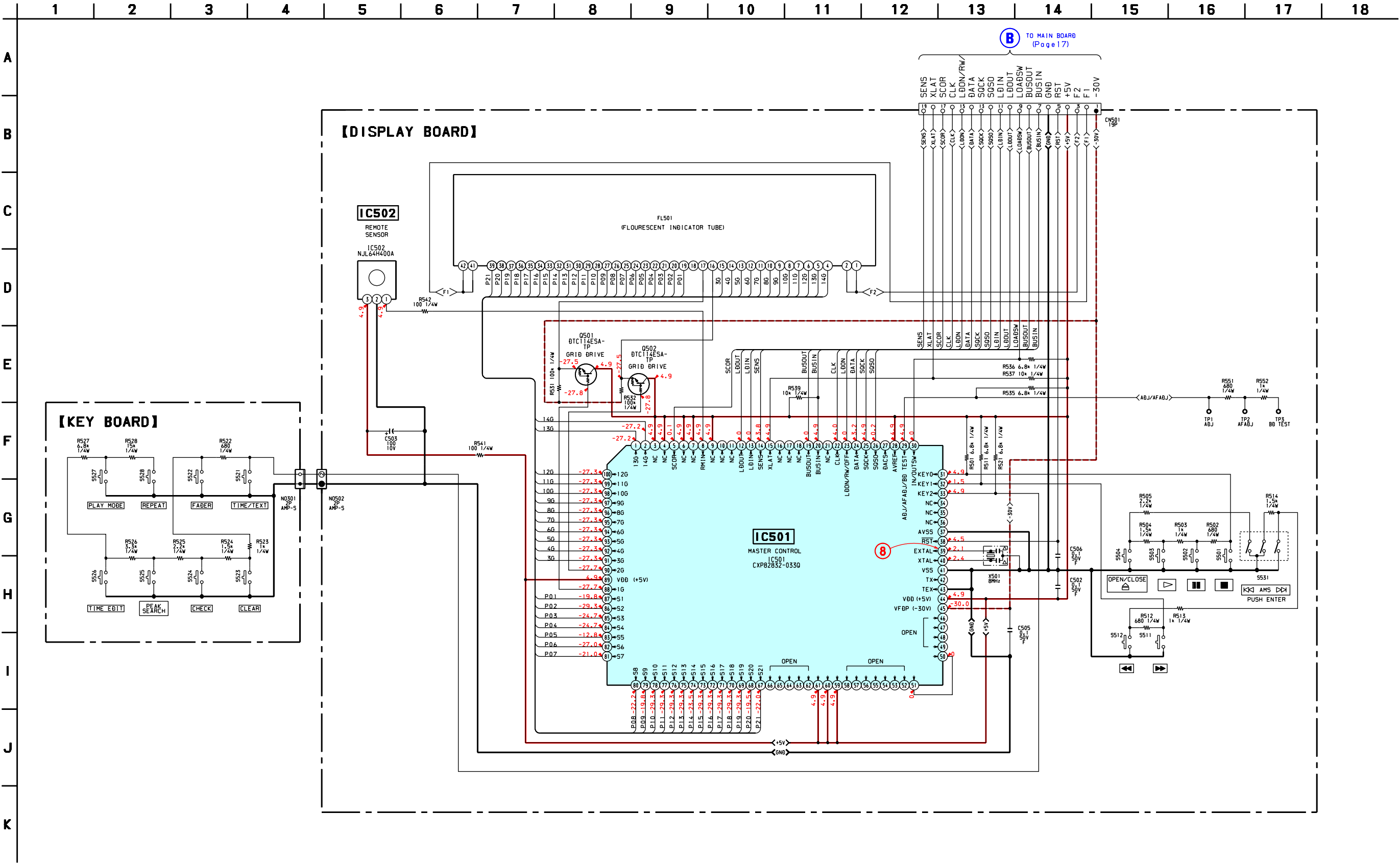


6-8. PRINTED WIRING BOARD DISPLAY SECTION • See page 12 for Circuit Board Location.

There are a few cases that the part printed on this diagram isn't mounted in this model.



6-9. SCHEMATIC DIAGRAM DISPLAY SECTION • See page 20 for IC Pin Functions. • See page 13 for waveform.



6-10. IC PINFUNCTIONS

• IC501 MASTER CONTROL (CXP82832-033Q)(DISPLAY BOARD)

Pin No.	Pin Name	I/O	Function
1	13G	O	FL grid signal output
2	14G	O	FL grid signal output
3	NC	–	Connected to VDD
4	NC	–	Connected to VDD
5	SCOR	I	Sub code sync input
6, 7	NC	I	Connected to VDD
8	RMIN	I	Remote control signal input
9	NC	–	Connected to VDD
10, 11	NC	–	Not used (Open)
12	LD OUT	O	Loading motor control
13	LD IN	I	Loading motor control
14	SENS	I	Sense signal input
15	XLT	O	Serial latch output
16	NC	O	Not used (Open)
17	NC	O	Not used (Open)
18	NC	–	Not used (Open)
19	BUSOUT	O	CONTROL-A1 transmission output
20	BUSIN	I	CONTROL-A1 receive input
21	NC	–	Not used (Open)
22	CLK	O	Serial clock output
23	LDON/RW/OFF	O	Optical pick-up laser diode control output
24	DATA	O	Serial data output
25	SQCK	O	Subcode Q data readout clock output
26	SQSO	I	Subcode Q data input
27	DACS	O	Not used (Open)
28	AVREF	I	Analog reference voltage input
29	ADJ/AFADJ/BD TEST	I	Test mode terminal
30	IN/OUT SW	I	IN SW/OUT SW
31	KEY 0	I	Key input
32	KEY 1	I	Key input
33	KEY 2	I	Key input
34	NC	O	Not used (Open)
35	NC	O	Not used (Open)
36	NC	O	Not used (Open)
37	AVSS	–	Analog ground
38	RST	I	Reset signal input
39	EXTAL	I	8 MHz clock input
40	XTAL	O	8 MHz clock output

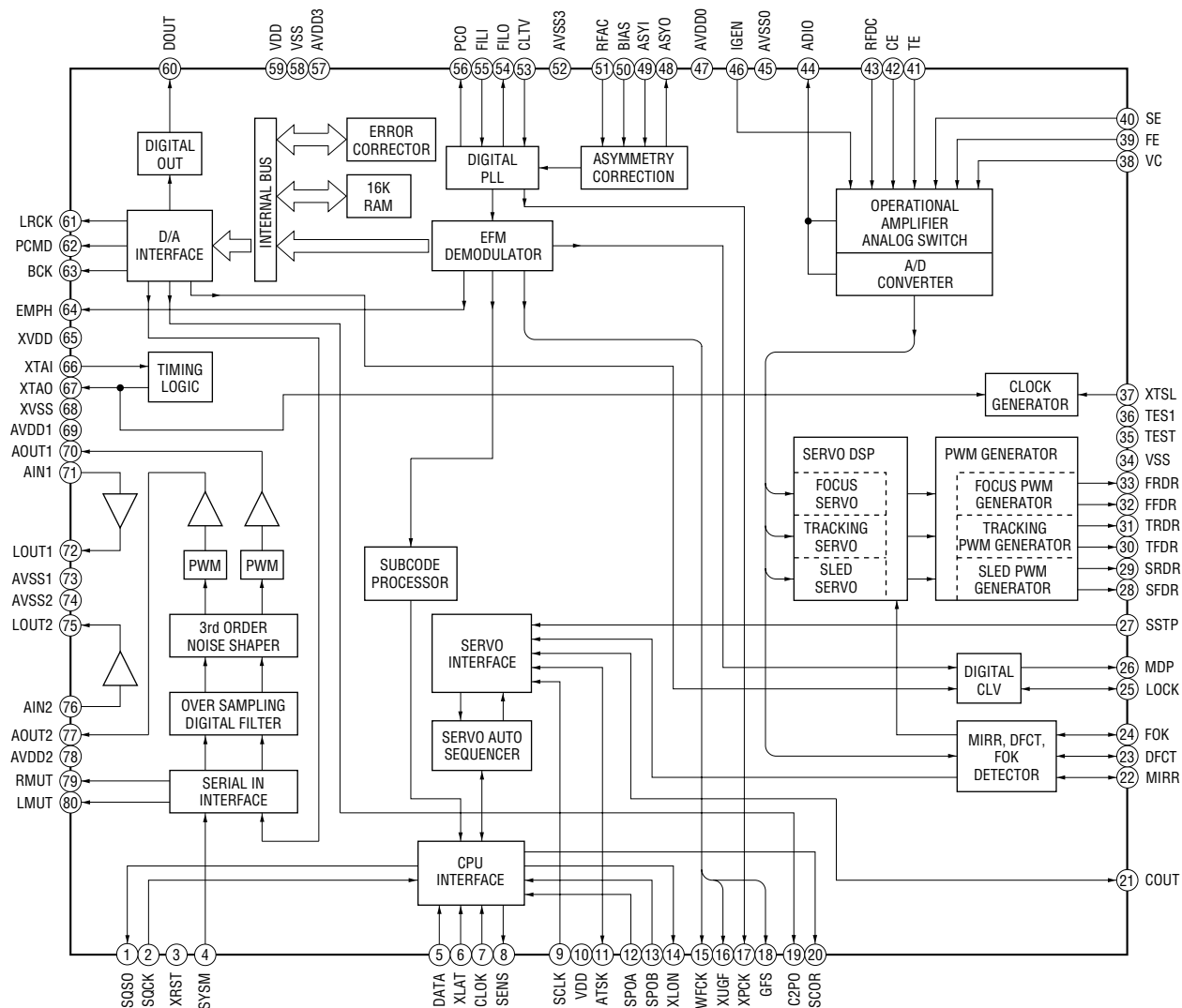
- Abbreviation
FL : Fluorescent indicator tube

Pin No.	Pin Name	I/O	Function
41	VSS	–	Ground
42	TX	–	Not used
43	TEX	–	Connected to ground
44	VDD (+5V)	–	Power supply (+5V)
45	VFDP (–30V)	–	Pull down voltage (–30V)
46	XSEL	O	Not used
47	—	–	Not used
48 to 58	OPEN	–	Not used
59 to 61	VDD (+5V)	–	Power supply (+5V)
62 to 66	OPEN	–	Not used
67 to 87	S21 to S1	O	FL segment signal output
88	1G	O	FL grid signal output
89	VDD (+5V)	–	Power supply (+5V)
90 to 100	2G to 12G	O	FL grid signal output

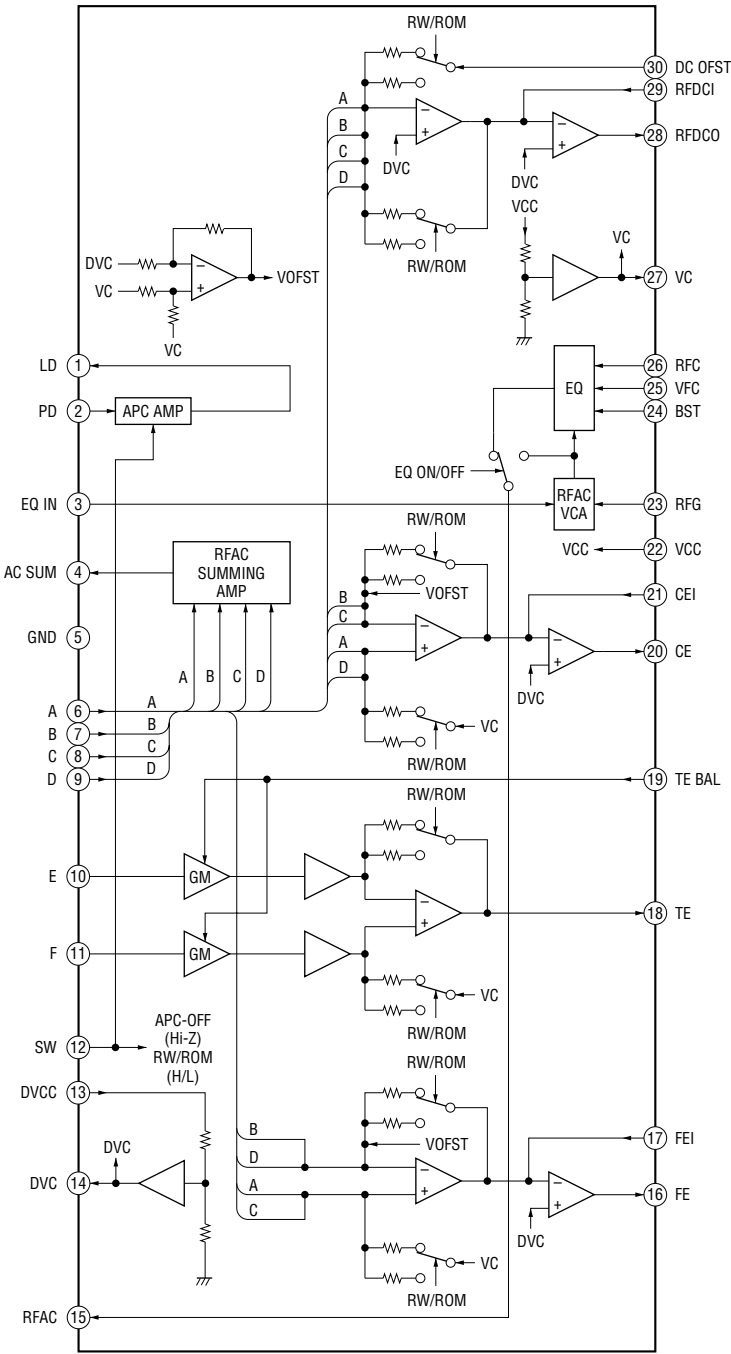
- Abbreviation
FL : Fluorescent indicator tube

6-11. IC BLOCK DIAGRAMS

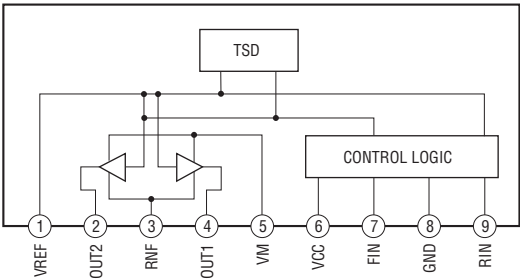
IC101 CXD2587Q (BD BOARD)



IC131 CXA2518N-T4 (BD BOARD)



IC631 BA6956AN (MAIN BOARD)



SECTION 7

EXPLODED VIEWS

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

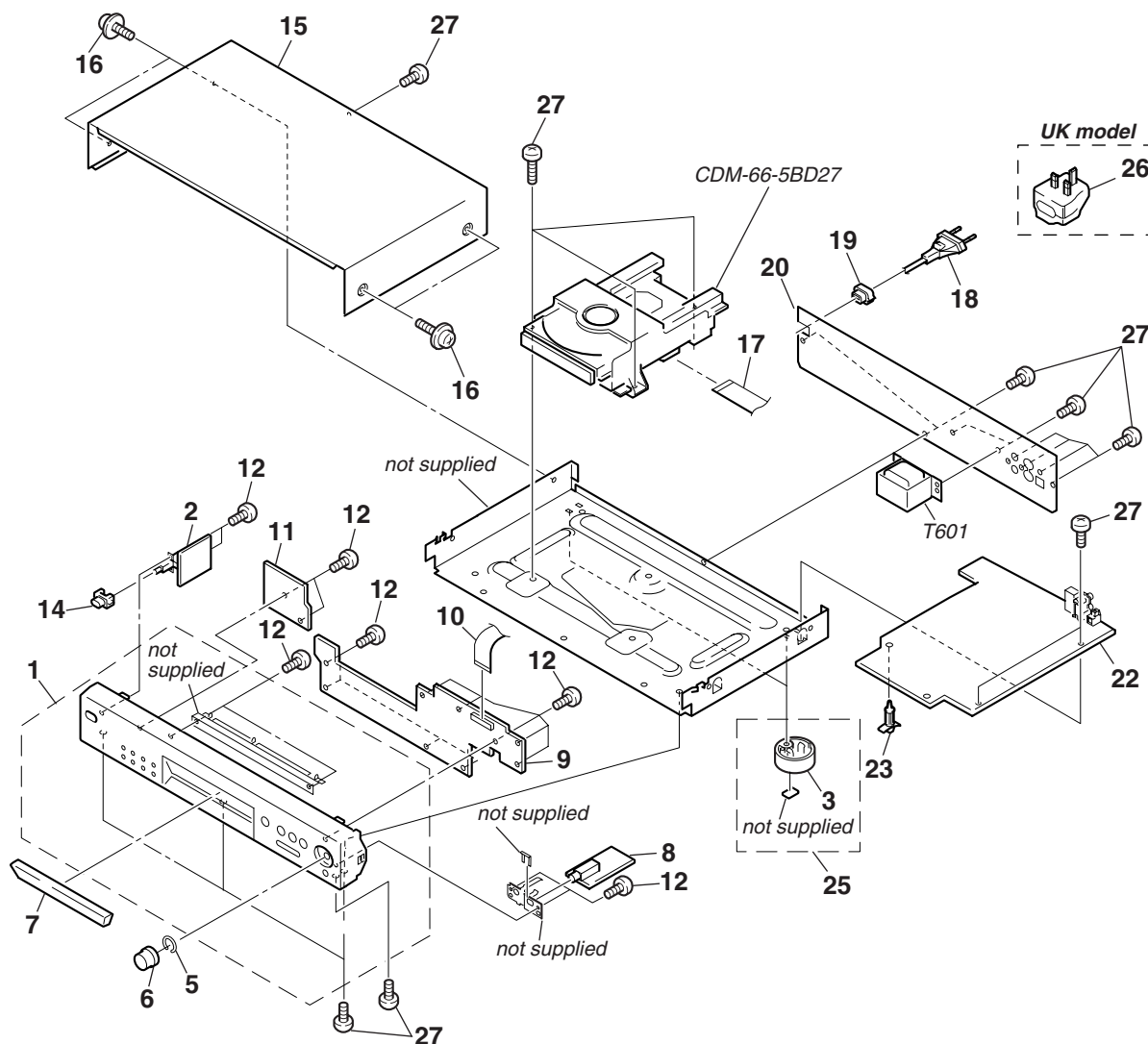
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- Color Indication of Appearance Parts Example:
KNOB, BALANCE (WHITE) . . . (RED)

Parts of Color	Cabinet's Color
----------------	-----------------

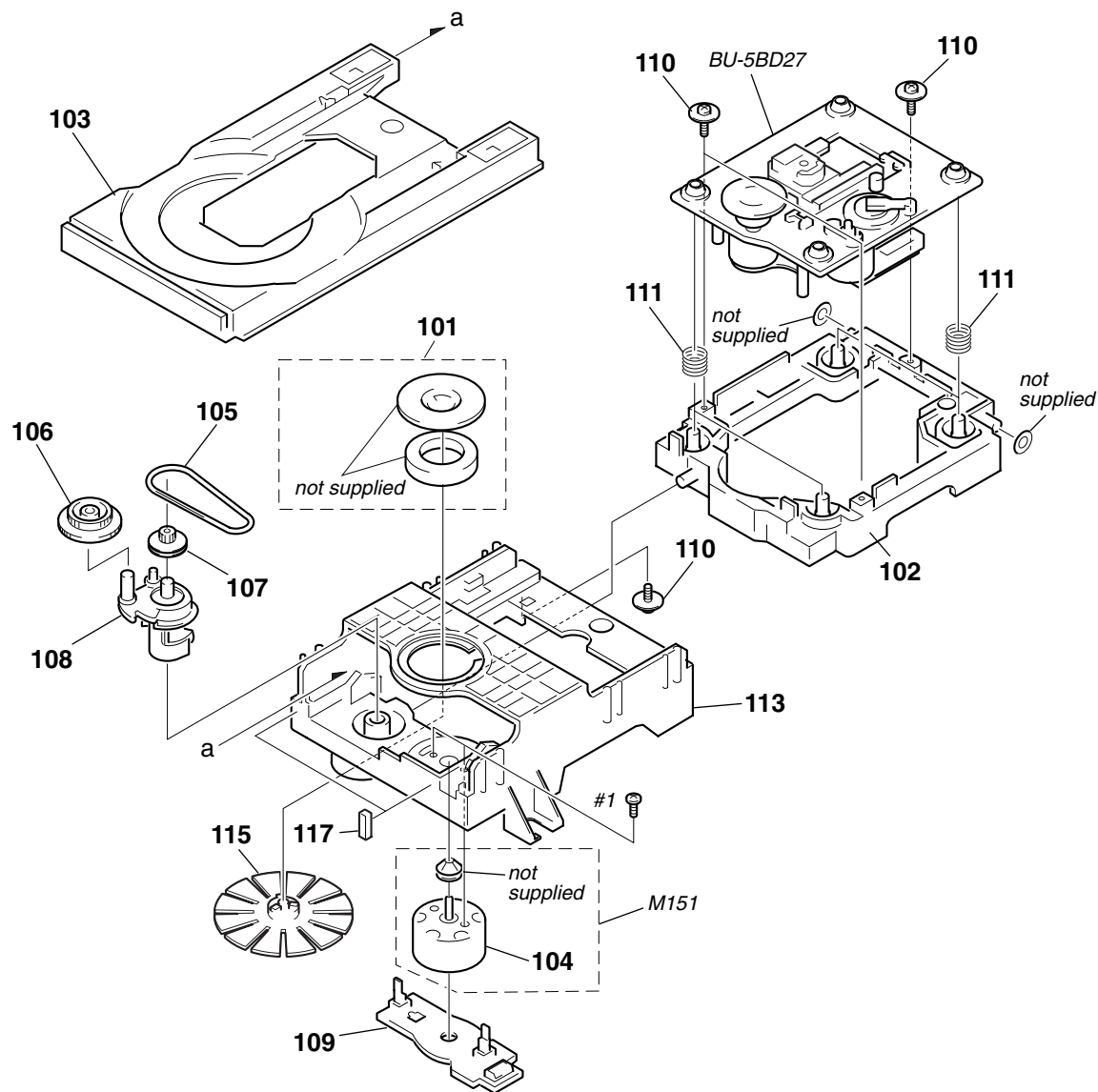
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

7-1. FRONT PANEL AND CASE SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	X-4953-456-2	PANEL ASSY, FRONT (BLACK)(AEP,UK)		15	4-232-580-31	CASE (408226)(SILVER)(AEP)	
1	X-4953-457-2	PANEL ASSY, FRONT (SILVER)(AEP)		16	4-210-291-01	SCREW (CASE 3 TP2)(BLACK)(AEP)	
2	1-681-120-11	POWER SW BOARD		16	4-210-291-11	SCREW (CASE 3 TP2)(SILVER)(AEP)	
3	4-232-237-01	FOOT (DIA. 30)		16	4-999-877-01	SCREW (CASE)(BLACK)(UK)	
5	3-354-981-11	SPRING (SUS), RING		17	1-773-149-11	WIRE (FLAT TYPE) (21 CORE)	
6	4-231-928-01	KNOB (AMS)(BLACK)(AEP,UK)		△ 18	1-575-651-21	CORD, POWER	
6	4-231-928-11	KNOB (AMS)(SILVER)(AEP)		* 19	3-703-244-00	BUSHING (2104), CORD	
7	4-232-141-01	PANEL, LOADING (BLACK)(AEP,UK)		20	4-232-150-02	PANEL, BACK (AEP)	
7	4-232-141-21	PANEL, LOADING (SILVER)(AEP)		20	4-232-150-12	PANEL, BACK (UK)	
8	1-681-126-11	HEADPHONE BOARD		22	A-4725-622-A	MAIN BOARD,COMPLETE	
9	A-4725-621-A	DISPLAY BOARD,COMPLETE		* 23	4-954-051-51	HOLDER, PC BOARD	
10	1-773-114-11	WIRE (FLAT TYPE) (19 CORE)		25	X-4953-448-1	FOOT ASSY	
11	1-681-125-11	KEY BOARD		△ 26	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)	
12	4-951-620-01	SCREW (2.6X8), +BVTP		27	4-974-510-01	SCREW (+BV 3X8 CU)(UK)	
14	4-231-973-01	BUTTON (POWER)(BLACK)(AEP,UK)		27	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S (AEP)	
14	4-231-973-11	BUTTON (POWER)(SILVER)(AEP)		△ T601	1-437-258-11	TRANSFORMER, POWER	
15	4-232-149-31	CASE (408226)(BLACK)(AEP,UK)					

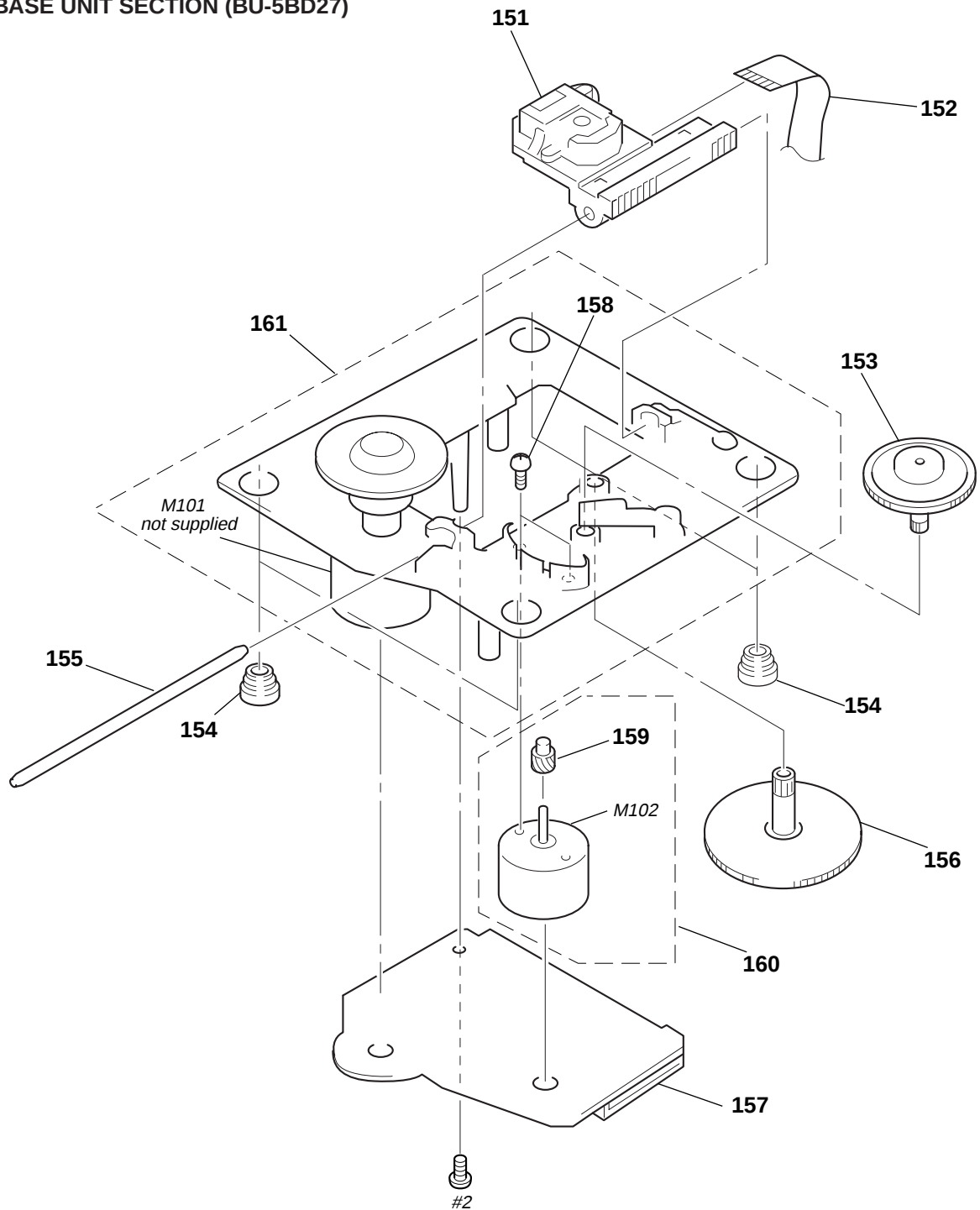
7-2. CD MECHANISM SECTION (CDM66-5BD27)



Ref. No.	Part No.	Description	Remarks
101	1-452-925-21	MAGNET ASSY	
102	4-231-531-01	HOLDER (66)	
103	4-231-530-01	TRAY (66)	
104	1-541-632-11	MOTOR, DC (LOADING)	
105	4-232-713-01	BELT (LD)	
106	4-232-711-01	GEAR (LD)	
107	4-232-710-01	PULLEY (LD)	
108	4-232-712-01	CAM (66)	

Ref. No.	Part No.	Description	Remarks
109	1-645-721-11	LOADING BOARD	
110	4-227-899-01	SCREW (DIA. 12), FROATING	
111	4-959-996-01	SPRING (932), COMPRESSION	
113	4-231-529-01	CHASSIS (66)	
115	4-993-142-03	PULLEY (L), PRESS	
117	4-232-682-01	CUSHION (66)	
M151	A-4604-363-A	MOTOR (L) ASSY (LOADING)	

7-3. BASE UNIT SECTION (BU-5BD27)



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
△ 151	1-796-033-11	OPTICAL PICK UP		157	A-4725-568-A	BD BOARD,COMPLETE	
152	1-782-817-11	WIRE (FLAT TYPE) (16 CORE)		158	3-713-786-51	SCREW +P 2X3	
153	4-917-567-01	GEAR (M)		159	4-917-566-01	GEAR (S)	
154	4-951-940-01	INSULATOR (BU)		160	X-4917-504-1	MOTOR ASSY	
155	4-917-565-01	SHAFT, SLED		161	X-4917-523-3	BASE (OUTSET) ASSY	
156	4-917-564-01	GEAR (P), FLATNESS		M102	1-541-353-11	MOTOR (SLED)	

The components identified by mark  or dotted line with mark  are critical for safety.
Replace only with part number specified.

SECTION 8
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
 - -XX, -X mean standardized parts, so they may have some difference from the original one.
 - Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
uF: μ F
 - RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
 - COILS
uH: μ H
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA..., μ PA...,
uPB..., μ PB..., uPC..., μ PC...,
uPD..., μ PD...
- When indicating parts by reference number, please include the board name.

The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remarks				Ref. No.	Part No.	Description	Remarks			
	A-4725-568-A	BD BOARD,COMPLETE *****							< CONNECTOR >				
		< CAPACITOR >					CN101	1-784-360-11	CONNECTOR,FFC(LIF(NON-ZIF))21P				
							CN102	1-777-937-11	CONNECTOR, FFC/FPC 16P				
									< FERRITE BEAD >				
C101	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V		FB191	1-216-864-11	METAL CHIP	0	5%	1/16W	
C102	1-164-156-11	CERAMIC CHIP	0.1uF		25V				< IC >				
C103	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V		IC101	8-752-386-85	IC CXD2587Q				
C110	1-126-206-11	ELECT CHIP	100uF	20%	6.3V		IC131	8-752-089-74	IC CXA2581N-T4				
C111	1-164-156-11	CERAMIC CHIP	0.1uF		25V		IC150	8-759-829-14	IC AN4800SB				
									< TRANSISTOR >				
C112	1-164-156-11	CERAMIC CHIP	0.1uF		25V		Q131	8-729-010-08	TRANSISTOR	MSB710-RT1			
C120	1-164-156-11	CERAMIC CHIP	0.1uF		25V		Q132	8-729-600-22	TRANSISTOR	2SA1235TP-1EF			
C121	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V				< RESISTOR >				
C122	1-117-863-11	CERAMIC CHIP	0.47uF	10.00%	6.3V		R101	1-216-835-11	METAL CHIP	15K	5%	1/16W	
C123	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R102	1-216-845-11	METAL CHIP	100K	5%	1/16W	
							R103	1-216-835-11	METAL CHIP	15K	5%	1/16W	
C124	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V		R110	1-216-821-11	METAL CHIP	1K	5%	1/16W	
C125	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V		R111	1-216-809-11	METAL CHIP	100	5%	1/16W	
C126	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V								
C130	1-164-505-11	CERAMIC CHIP	2.2uF		16V		R112	1-216-833-11	METAL CHIP	10K	5%	1/16W	
C131	1-164-505-11	CERAMIC CHIP	2.2uF		16V		R120	1-216-839-11	METAL CHIP	33K	5%	1/16W	
							R121	1-216-833-11	METAL CHIP	10K	5%	1/16W	
C132	1-164-505-11	CERAMIC CHIP	2.2uF		16V		R122	1-216-845-11	METAL CHIP	100K	5%	1/16W	
C133	1-126-607-11	ELECT CHIP	47uF	20%	4V		R123	1-216-857-11	METAL CHIP	1M	5%	1/16W	
C134	1-126-607-11	ELECT CHIP	47uF	20%	4V								
C136	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V		R125	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	
C137	1-126-209-11	ELECT CHIP	100uF	20.00%	4V		R126	1-216-833-11	METAL CHIP	10K	5%	1/16W	
							R127	1-216-821-11	METAL CHIP	1K	5%	1/16W	
C138	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		R129	1-216-815-11	METAL CHIP	330	5%	1/16W	
C139	1-162-921-11	CERAMIC CHIP	33PF	5%	50V		R134	1-216-853-11	METAL CHIP	470K	5%	1/16W	
C140	1-164-505-11	CERAMIC CHIP	2.2uF		16V								
C145	1-162-908-11	CERAMIC CHIP	3PF	0.25PF	50V		R135	1-216-836-11	METAL CHIP	18K	5%	1/16W	
C150	1-126-204-11	ELECT CHIP	47uF	20%	16V		R136	1-216-836-11	METAL CHIP	18K	5%	1/16W	
							R137	1-216-797-11	METAL CHIP	10	5%	1/16W	
C151	1-164-156-11	CERAMIC CHIP	0.1uF		25V		R138	1-216-798-11	RES-CHIP	12	5%	1/16W	
C152	1-162-919-11	CERAMIC CHIP	22PF	5%	50V		R139	1-216-847-11	METAL CHIP	150K	5%	1/16W	
C153	1-162-919-11	CERAMIC CHIP	22PF	5%	50V								
C154	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		R140	1-216-854-11	METAL CHIP	560K	5%	1/16W	
C158	1-164-172-11	CERAMIC CHIP	0.0056uF	10.00%	25V		R141	1-216-840-11	METAL CHIP	39K	5%	1/16W	
							R142	1-216-841-11	METAL CHIP	47K	5%	1/16W	
C171	1-126-206-11	ELECT CHIP	100uF	20%	6.3V		R143	1-216-855-11	METAL CHIP	680K	5%	1/16W	
C172	1-164-156-11	CERAMIC CHIP	0.1uF		25V		R144	1-216-846-11	METAL CHIP	120K	5%	1/16W	
C173	1-162-928-11	CERAMIC CHIP	120PF	5%	50V								
C174	1-115-412-11	CERAMIC CHIP	680PF	5.00%	25V		R145	1-216-830-11	METAL CHIP	5.6K	5%	1/16W	
C181	1-126-206-11	ELECT CHIP	100uF	20%	6.3V		R146	1-216-845-11	METAL CHIP	100K	5%	1/16W	
							R149	1-216-821-11	METAL CHIP	1K	5%	1/16W	
C182	1-164-156-11	CERAMIC CHIP	0.1uF		25V		R151	1-216-845-11	METAL CHIP	100K	5%	1/16W	
C183	1-162-928-11	CERAMIC CHIP	120PF	5%	50V		R152	1-216-833-11	METAL CHIP	10K	5%	1/16W	
C184	1-115-412-11	CERAMIC CHIP	680PF	5.00%	25V								
C191	1-126-205-11	ELECT CHIP	47uF	20%	6.3V								
C192	1-164-156-11	CERAMIC CHIP	0.1uF		25V								
C193	1-162-920-11	CERAMIC CHIP	27PF	5%	50V								
C194	1-162-918-11	CERAMIC CHIP	18PF	5.00%	50V								
C199	1-164-156-11	CERAMIC CHIP	0.1uF		25V								

BD

DISPLAY

HEADPHONE

KEY

Ref. No.	Part No.	Description			Remarks
R153	1-216-864-11	METAL CHIP	0	5%	1/16W
R155	1-216-836-11	METAL CHIP	18K	5%	1/16W
R171	1-218-720-11	METAL CHIP	15K	0.5%	1/16W
R172	1-218-720-11	METAL CHIP	15K	0.5%	1/16W
R173	1-218-720-11	METAL CHIP	15K	0.5%	1/16W
R174	1-216-809-11	METAL CHIP	100	5%	1/16W
R181	1-218-720-11	METAL CHIP	15K	0.5%	1/16W
R182	1-218-720-11	METAL CHIP	15K	0.5%	1/16W
R183	1-218-720-11	METAL CHIP	15K	0.5%	1/16W
R184	1-216-809-11	METAL CHIP	100	5%	1/16W
R191	1-216-817-11	METAL CHIP	470	5%	1/16W
R192	1-216-797-11	METAL CHIP	10	5%	1/16W
< COMPOSITION CIRCUIT BLOCK >					
RB101	1-233-576-11	RES, CHIP NETWORK 100			
RB102	1-233-576-11	RES, CHIP NETWORK 100			
< SWITCH >					
S101	1-572-085-11	SWITCH, LEAF(LIMIT)			
< VIBRATOR >					
X191	1-767-408-21	VIBRATOR, CRYSTAL 16.9344MHz			

	A-4725-621-A	DISPLAY BOARD,COMPLETE			

*	4-929-709-31	GUIDE (FL TUBE)			
< CAPACITOR >					
C502	1-164-159-11	CERAMIC	0.1uF		50V
C503	1-126-382-11	ELECT	100uF	20.00%	10V
C505	1-164-159-11	CERAMIC	0.1uF		50V
C506	1-164-159-11	CERAMIC	0.1uF		50V
< CONNECTOR >					
CN501	1-784-780-11	CONNECTOR, FFC 19P			
< FILTER >					
FL501	1-517-740-11	INDICATOR TUBE, FLUORESCENT			
< IC >					
IC501	8-752-921-33	IC CXP82832-033Q			
IC502	8-759-459-86	IC NJL64H400A(REMOTE SENSOR)			
< TRANSISTOR >					
Q501	8-729-029-66	TRANSISTOR	DTC114ESA-TP		
Q502	8-729-029-66	TRANSISTOR	DTC114ESA-TP		
< RESISTOR >					
R501	1-249-427-11	CARBON	6.8K	5%	1/4W F
R502	1-249-415-11	CARBON	680	5%	1/4W F
R503	1-249-417-11	CARBON	1K	5%	1/4W F
R504	1-249-419-11	CARBON	1.5K	5%	1/4W F
R505	1-249-421-11	CARBON	2.2K	5%	1/4W F

Ref. No.	Part No.	Description			Remarks
R511	1-249-427-11	CARBON	6.8K	5%	1/4W F
R512	1-249-415-11	CARBON	680	5%	1/4W F
R513	1-249-417-11	CARBON	1K	5%	1/4W F
R514	1-249-419-11	CARBON	1.5K	5%	1/4W F
R521	1-249-427-11	CARBON	6.8K	5%	1/4W F
R531	1-249-441-11	CARBON	100K	5%	1/4W
R532	1-249-441-11	CARBON	100K	5%	1/4W
R535	1-249-427-11	CARBON	6.8K	5%	1/4W F
R536	1-249-427-11	CARBON	6.8K	5%	1/4W F
R537	1-249-429-11	CARBON	10K	5%	1/4W
R539	1-249-429-11	CARBON	10K	5%	1/4W
R541	1-247-807-31	CARBON	100	5%	1/4W
R542	1-247-807-31	CARBON	100	5%	1/4W
R551	1-249-415-11	CARBON	680	5%	1/4W F
R552	1-249-417-11	CARBON	1K	5%	1/4W F
< SWITCH >					
S501	1-771-349-21	SWITCH, KEYBOARD(■)			
S502	1-771-349-21	SWITCH, KEYBOARD(■)			
S503	1-771-349-21	SWITCH, KEYBOARD(▷)			
S504	1-771-349-21	SWITCH, KEYBOARD(OPEN/CLOSE ≡)			
S511	1-771-349-21	SWITCH, KEYBOARD(▶▶)			
S512	1-771-349-21	SWITCH, KEYBOARD(◀◀)			
S531	1-475-543-11	ENCODER, ROTARY(⏏◀◀ AMS ▷▶⏏)			
< VIBRATOR >					
X501	1-579-125-11	VIBRATOR, CERAMIC 8MHz			

	1-681-127-11	HEADPHONE BOARD			

< CAPACITOR >					
C402	1-162-291-31	CERAMIC	560PF	10.00%	50V
C403	1-162-291-31	CERAMIC	560PF	10.00%	50V
< JACK >					
J401	1-770-307-11	JACK (LARGE TYPE)(PHONES)			
< COIL >					
L402	1-412-911-11	FERRITE	0uH		
L403	1-412-911-11	FERRITE	0uH		

	1-681-125-11	KEY BOARD			

< RESISTOR >					
R522	1-249-415-11	CARBON	680	5%	1/4W F
R523	1-249-417-11	CARBON	1K	5%	1/4W F
R524	1-249-419-11	CARBON	1.5K	5%	1/4W F
R525	1-249-421-11	CARBON	2.2K	5%	1/4W F
R526	1-247-843-11	CARBON	3.3K	5%	1/4W
R527	1-249-427-11	CARBON	6.8K	5%	1/4W F
R528	1-249-431-11	CARBON	15K	5%	1/4W

CDP-XE570

KEY

LOADING

MAIN

Ref. No.	Part No.	Description	Remarks
< SWITCH >			
S521	1-771-349-21	SWITCH, KEYBOARD(TIME/TEXT)	
S522	1-771-349-21	SWITCH, KEYBOARD(FADER)	
S523	1-771-349-21	SWITCH, KEYBOARD(CLEAR)	
S524	1-771-349-21	SWITCH, KEYBOARD(CHECK)	
S525	1-771-349-21	SWITCH, KEYBOARD(PEAK SEARCH)	
S526	1-771-349-21	SWITCH, KEYBOARD(TIME EDIT)	
S527	1-771-349-21	SWITCH, KEYBOARD(PLAY MODE)	
S528	1-771-349-21	SWITCH, KEYBOARD(REPEART)	

	1-645-721-21	LOADING BOARD	

< CONNECTOR >			
CN151	1-568-943-11	PIN, CONNECTOR 5P	
< SWITCH >			
S271	1-572-086-11	SWITCH, LEAF(LOAD OUT)	
S272	1-572-086-11	SWITCH, LEAF(LOAD IN)	

	A-4725-622-A	MAIN BOARD,COMPLETE	

	7-685-871-01	SCREW +BVTT 3X6 (S)	
< CAPACITOR >			
C601	1-128-547-11	ELECT 6800uF	20.00% 16V
C602	1-126-767-11	ELECT 1000uF	20.00% 16V
C603	1-128-576-11	ELECT 100uF	20.00% 63V
C604	1-161-494-00	CERAMIC 0.022uF	25V
C605	1-161-494-00	CERAMIC 0.022uF	25V
C606	1-164-159-11	CERAMIC 0.1uF	50V
C607	1-164-159-11	CERAMIC 0.1uF	50V
C608	1-126-934-11	ELECT 220uF	20.00% 10V
C609	1-161-494-00	CERAMIC 0.022uF	25V
C610	1-136-165-00	MYLAR 0.1uF	5.00% 50V
C612	1-161-494-00	CERAMIC 0.022uF	25V
C616	1-126-916-11	ELECT 1000uF	20.00% 6.3V
C618	1-126-933-11	ELECT 100uF	20.00% 16V
C619	1-126-767-11	ELECT 1000uF	20.00% 16V
△ C620	1-113-924-11	CERAMIC 0.0047uF	20.00% 250V
C624	1-162-282-31	CERAMIC 100PF	10% 50V
C631	1-161-494-00	CERAMIC 0.022uF	25V
C641	1-126-964-11	ELECT 10uF	20.00% 50V
C642	1-126-935-11	ELECT 470uF	20.00% 10V
C651	1-126-935-11	ELECT 470uF	20.00% 10V
C653	1-104-666-11	ELECT 220uF	20.00% 25V
C654	1-164-159-11	CERAMIC 0.1uF	50V
C657	1-164-159-11	CERAMIC 0.1uF	50V
C658	1-164-159-11	CERAMIC 0.1uF	50V
C659	1-161-494-00	CERAMIC 0.022uF	25V
C661	1-162-290-31	CERAMIC 470PF	10% 50V
C662	1-162-290-31	CERAMIC 470PF	10% 50V
C663	1-162-290-31	CERAMIC 470PF	10% 50V
C675	1-161-494-00	CERAMIC 0.022uF	25V
C677	1-161-494-00	CERAMIC 0.022uF	25V

Ref. No.	Part No.	Description	Remarks
C678	1-126-024-11	ELECT 220uF	20.00% 25V
C679	1-126-024-11	ELECT 220uF	20.00% 25V
C682	1-126-963-11	ELECT 4.7uF	20.00% 50V
C685	1-161-494-00	CERAMIC 0.022uF	25V
C695	1-161-494-00	CERAMIC 0.022uF	25V
C802	1-104-664-11	ELECT 47uF	20.00% 10V
C806	1-106-359-00	MYLAR 4700PF	5% 200V
C807	1-130-472-00	MYLAR 0.0012uF	5% 50V
C808	1-126-024-11	ELECT 220uF	20.00% 25V
C810	1-136-802-11	MYLAR 0.015uF	5.00% 100V
C811	1-136-808-11	FILM 100PF	5.00% 100V
C902	1-104-664-11	ELECT 47uF	20.00% 10V
C906	1-106-359-00	MYLAR 4700PF	5% 200V
C907	1-130-472-00	MYLAR 0.0012uF	5% 50V
C908	1-126-024-11	ELECT 220uF	20.00% 25V
C910	1-136-802-11	MYLAR 0.015uF	5.00% 100V
C911	1-136-808-11	FILM 100PF	5.00% 100V
< CONNECTOR >			
CN621	1-784-780-11	CONNECTOR, FFC 19P	
CN651	1-568-838-11	CONNECTOR, FFC 21P	
CN681	1-506-468-11	PIN, CONNECTOR 3P	
< DIODE >			
D601	8-719-024-99	DIODE 11ES2-NTA2B	
D602	8-719-024-99	DIODE 11ES2-NTA2B	
D603	8-719-024-99	DIODE 11ES2-NTA2B	
D604	8-719-024-99	DIODE 11ES2-NTA2B	
D605	8-719-024-99	DIODE 11ES2-NTA2B	
D612	8-719-024-99	DIODE 11ES2-NTA2B	
D613	8-719-024-99	DIODE 11ES2-NTA2B	
D614	8-719-109-85	DIODE MTZJ-T-72-5.1B	
D615	8-719-911-19	DIODE 1SS133T-72	
D616	8-719-911-19	DIODE 1SS133T-72	
D621	8-719-911-19	DIODE 1SS133T-72	
D631	8-719-983-63	DIODE MTZJ-T-72-3.3B	
D641	8-719-983-84	DIODE MTZJ-T-72-30D	
D643	8-719-109-85	DIODE MTZJ-T-72-5.1B	
D681	8-719-911-19	DIODE 1SS133T-72	
D682	8-719-911-19	DIODE 1SS133T-72	
D691	8-719-911-19	DIODE 1SS133T-72	
D692	8-719-911-19	DIODE 1SS133T-72	
< IC >			
IC601	8-759-039-69	IC uPC7805AHF	
IC602	8-749-011-78	IC BA17807T	
IC603	8-759-165-81	IC PST600D-T	
IC631	8-759-598-69	IC BA6956AN	
IC651	8-749-921-12	IC GP1F32T(DIGITAL OUT OPTICAL)	
IC671	8-759-604-86	IC M5F7807L	
IC672	8-759-604-90	IC M5F7907L	
IC681	8-759-167-88	IC NJM4565D	
IC801	8-759-710-59	IC NJM4580D-D	
IC901	8-759-710-59	IC NJM4580D-D	

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

REVISION HISTORY

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