


# HCD-XB66K

## SERVICE MANUAL

E Model



Photo: XB66K

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CD Section	Model Name Using Similar Mechanism	HCD290/G330/XB3
	CD Mechanism Type	CDM37LH-5BD29AL
	Base Unit Name	BU-5BD29AL
Tape deck Section	Optical Pick-up Name	KSS-213D/Q-NP
	Model Name Using Similar Mechanism	HCD-H881
	Tape Transport Mechanism Type	TCM-220WR2

### SPECIFICATIONS

#### Amplifier section

The following measured at AC 120/240 V, 50 Hz  
DIN power output (Rated) 140 + 140 watts  
(8 ohms at 1 kHz, DIN)  
Continuous RMS power output (Reference)  
170 + 170 watts  
(8 ohms at 1 kHz, 10% THD)  
Peak music power output (Reference)  
3,000 watts

#### Inputs

PHONO IN (phono jacks): sensitivity 3 mV, impedance 47 kilohms  
MIX MIC (phone jack): sensitivity 1 mV, impedance 10 kilohms  
VIDEO/MD (AUDIO) IN (phono jacks): sensitivity 250 mV, impedance 47 kilohms

#### Outputs

PHONES (stereo phone jack): accepts headphones of 8 ohms or more  
VIDEO/MD (AUDIO) OUT (phono jacks): voltage 250 mV, impedance 1 kilohms

SPEAKER: accepts impedance of 8 to 16 ohms.

#### CD player section

System Compact disc and digital audio system  
Laser Semiconductor laser ( $\lambda = 780$  nm)  
Emission  
duration: continuous  
Max. 44.6  $\mu$ W\*  
\*This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.  
Laser output  
Wavelength 780 - 790 nm  
Frequency response 2 Hz - 20 kHz ( $\pm 0.5$  dB)  
Signal-to-noise ratio More than 90 dB  
Dynamic range More than 90 dB

#### CD DIGITAL OUT

(square optical connector jack, rear panel)  
Wave length: 600 nm  
Output level: -18 dBm

— Continued on next page —



## COMPACT DISC DECK RECEIVER

# SONY®

## Tape player section

Recording system	4-track 2-channel stereo
Frequency response (DOLBY NR OFF)	60 - 13,000 Hz ( $\pm 3$ dB), using a Sony TYPE I cassette
	60 - 14,000 Hz ( $\pm 3$ dB), using a Sony TYPE II cassette

## Tuner section

FM stereo, FM/AM superheterodyne tuner

### FM tuner section

Tuning range	87.5 - 108.0 MHz (50 kHz step)
Antenna	FM wire antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

### AM tuner section

Tuning range	531 - 1,602 kHz
(2 band model)	(with the tuning interval set at 9 kHz)
	530 - 1,710 kHz (with the tuning interval set at 10 kHz)

(3 band model )

MW:	531 - 1,602 kHz (with the tuning interval set at 9 kHz)
LW:	153 - 279 kHz (with the tuning interval set at 3 kHz)
Antenna	AM loop antenna, External antenna terminals
Intermediate frequency	450 kHz

## General

Power requirements	
Mexican model:	120 V AC, 50/60 Hz
Australian and South African models:	220 - 240 V AC, 50/60 Hz
Other models:	110 - 120 V or 220 - 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption	320 watts
Dimensions (w/h/d)	Approx. 355 × 425 × 435 mm (14 × 16 <sup>3</sup> / <sub>4</sub> × 17 <sup>1</sup> / <sub>4</sub> in) incl. projecting parts and controls
Mass	Approx. 14.5 kg (31 lb 16 oz.)
Supplied accessories	AM loop antenna (1) Remote RM-SD70S (1) Size AA (R6) batteries (2) FM wire antenna (1) Speaker cords (2)

Design and specifications are subject to change without notice.

## TABLE OF CONTENTS

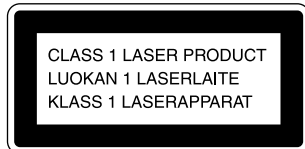
<b>1. SERVICING NOTES</b> .....	3
<b>2. GENERAL</b> .....	4
<b>3. DISASSEMBLY</b> .....	7
<b>4. TEST MODE</b> .....	15
<b>5. MECHANICAL ADJUSTMENTS</b> .....	17
TAPE DECK Section .....	17
CD Section .....	20
<b>7. DIAGRAMS</b> .....	
7-1. IC Pin Function Description .....	22
7-2. Block Diagram – CD Section – .....	27
7-3. Block Diagram – Tape Deck Section – .....	29
7-4. Block Diagram – Main Section (1/2) – .....	31
7-5. Block Diagram – Main Section (2/2) – .....	33
7-6. Block Diagram – Display/Key Control/ Power Supply Section – .....	35
7-7. Circuit Boards .....	37
7-8. Printed Wiring Board – CD Section (1/2) – .....	39
7-9. Schematic Diagram – CD Section (1/2) – .....	41
7-10. Printed Wiring Boards – CD Section (2/2) – .....	43
7-11. Schematic Diagram – CD Section (2/2) – .....	45
7-12. Printed Wiring Boards – Tape Deck Section – .....	47
7-13. Schematic Diagram – Tape Deck Section – .....	49
7-14. Printed Wiring Board – Main Section – .....	51
7-15. Schematic Diagram – Main Section (1/3) – .....	53
7-16. Schematic Diagram – Main Section (2/3) – .....	55
7-17. Schematic Diagram – Main Section (3/3) – .....	57
7-18. Printed Wiring Board – Power Amp Section – .....	59
7-19. Schematic Diagram – Power Amp Section – .....	61
7-20. Printed Wiring Board – Panel Section (1/3) – .....	63
7-21. Schematic Diagram – Panel Section (1/3) – .....	65
7-22. Printed Wiring Boards – Panel Section (2/3) – .....	67
7-23. Schematic Diagram – Panel Section (2/3) – .....	69
7-24. Printed Wiring Boards – Panel Section (3/3) – .....	71
7-25. Schematic Diagram – Panel Section (3/3) – .....	73
7-26. Printed Wiring Board – Power Supply Section – .....	75
7-27. Schematic Diagram – Power Supply Section – .....	76
7-28. Schematic Diagram – Key-Con Section – .....	77
7-29. Printed Wiring Board – Key-Con Section – .....	77
7-30. Waveforms .....	79
7-31. IC Block Diagrams .....	80
<b>8. EXPLODED VIEWS</b> .....	83
<b>9. ELECTRICAL PARTS LIST</b> .....	92

## SECTION 1 SERVICING NOTES

### CAUTION

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

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



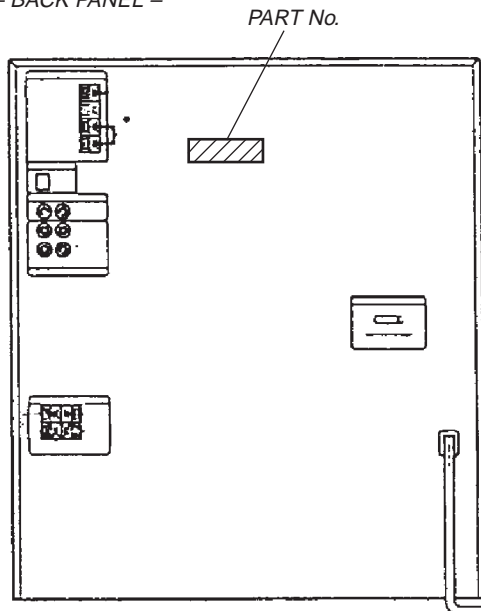
Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

The following caution label is located inside the unit.



### MODEL IDENTIFICATION

– BACK PANEL –



MODEL	PART No.
Singapore, Malaysia model	4-996-413-1□
E, Indonesian model	4-996-413-6□
Saudi Arabia model	4-996-413-7□
Thai model	4-996-413-9□

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

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

During repair, pay attention to electrostatic break-down 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.

### LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveforms is output three times.

### 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 the 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.

### SAFETY-RELATED COMPONENT WARNING!!

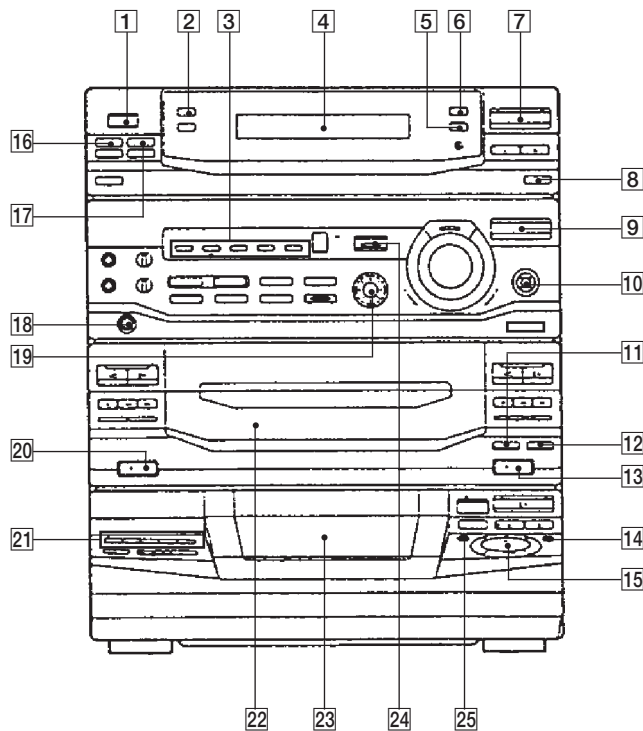
COMPONENTS IDENTIFIED BY MARK  $\triangle$  OR DOTTED LINE WITH MARK  $\triangle$  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

## SECTION 2 GENERAL

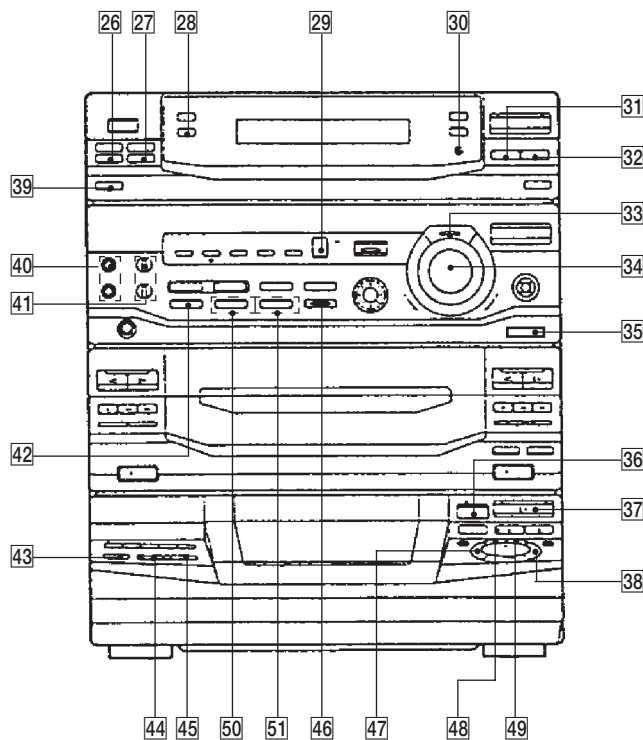
This section is extracted  
from instruction manual.

### LOCATION OF CONTROLS

– Front Panel –

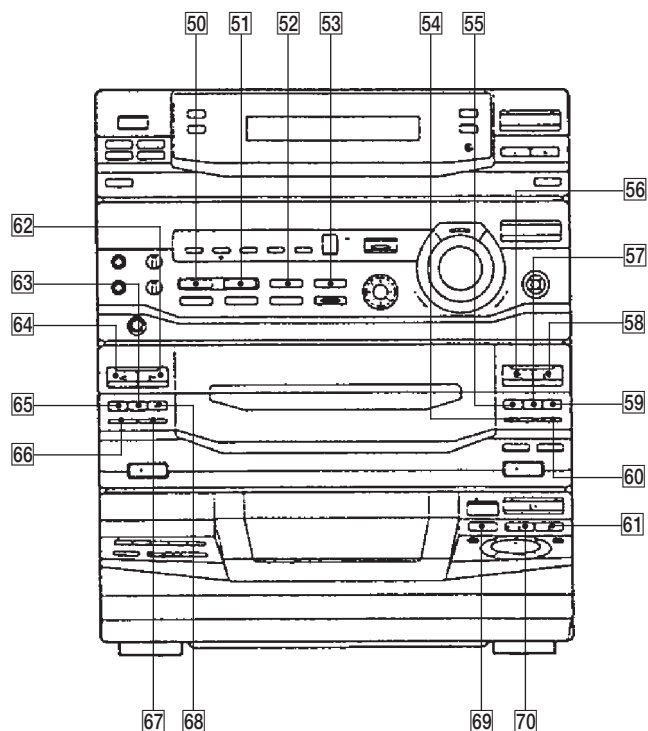


- 1 I / (Power) button
- 2 DISPLAY/DEMO button
- 3 FILE (1-5) indicator
- 4 Fluorescent indicator tube
- 5 TUNER MEMORY button
- 6 TUNING MODE button
- 7 TUNER/BAND button and indicator
- 8 STEREO/MONO button
- 9 FUNCTION button
- 10 SUPER WOOFER button and indicator
- 11 H SPEED DUB button
- 12 CD SYNC button
- 13 EJECT button (DECK B)
- 14 button (CD)
- 15 AMS jog dial
- 16 CLOCK SET button
- 17 REC button
- 18 PHONES jack
- 19 GEQ (▲/▼/◀/▶) switch
- 20 EJECT button (DECK A)
- 21 DIRECT PLAY (DISC 1 to DISC 5) button
- 22 Cassette holder
- 23 CD lid
- 24 EFFECT button and indicator
- 25 button (CD)



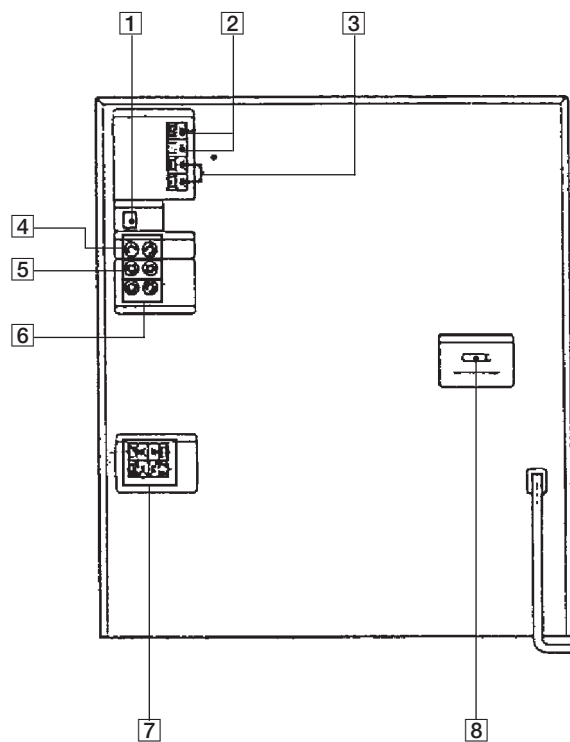
- 26 DAILY 1 button
- 27 DAILY 2 button
- 28 SPECTRUM ANALYZER button
- 29 MUSIC/OTHERS/P FILE indicator
- 30 ENTER/NEXT button and indicator
- 31 TUNING (–) button
- 32 TUNING (+) button
- 33 GROOVE button and indicator
- 34 VOLUME control knob
- 35 SUPER W MODE button
- 36 OPEN button (CD)
- 37 button and indicator (CD)
- 38 REPEAT button
- 39 SLEEP button
- 40 MIC1/MIC2 jack
- 41 MIC/ECHO LEVEL control knob
- 42 KARAOKE PON/MPX button
- 43 NON-STOP button and indicator
- 44 LOOP button
- 45 FLASH button
- 46 ENTER button and indicator
- 47 EDIT button
- 48 1/ALL DISCS button
- 49 PLAY MODE button
- 50 KEY CONTROL (b)
- 51 KEY CONTROL (#)





- 50 WAVE button
- 51 SURROUND button
- 52 P FILE MEMORY button
- 53 GEQ CONTROL button
- 54 ■ button and indicator (DECK B)
- 55 ■ button (DECK B)
- 56 ▽ button and indicator (DECK B)
- 57 ◀ button (DECK B)
- 58 ▷ button and indicator (DECK B)
- 59 ▶ button (DECK B)
- 60 ● REC button and indicator (DECK B)
- 61 ■ button (CD)
- 62 ▷ button and indicator (DECK A)
- 63 ◀ button (DECK A)
- 64 ▽ button and indicator (DECK A)
- 65 ■ button (DECK A)
- 66 DIRECTION button
- 67 DOLBY NR button
- 68 ▶ button (DECK A)
- 69 DISC SKIP button
- 70 ■ button and indicator (CD)

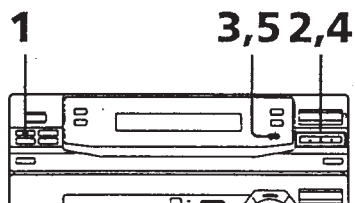
– Rear Panel –



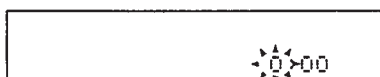
- 1 CD DIGITAL OUT OPTICAL
- 2 FM ANTENNA terminal
- 3 AM ANTENNA terminal
- 4 PHONO IN jack
- 5 VIDEO/MD (AUDIO) IN jack
- 6 VIDEO/MD (AUDIO) OUT jack
- 7 SPEAKER output terminal
- 8 VOLTAGE SELECTOR switch

## Step 2: Setting the time

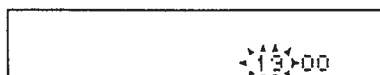
You must set the time before using the timer functions. The clock is on a 12 hour system.



1. Press /CLOCK SET.  
The hour indication flashes.



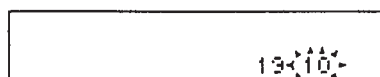
2. Press TUNING +/- to set the hour.



3. Press ENTER/NEXT.  
The minutes indication flashes.



4. Press TUNING +/- to set the minutes.



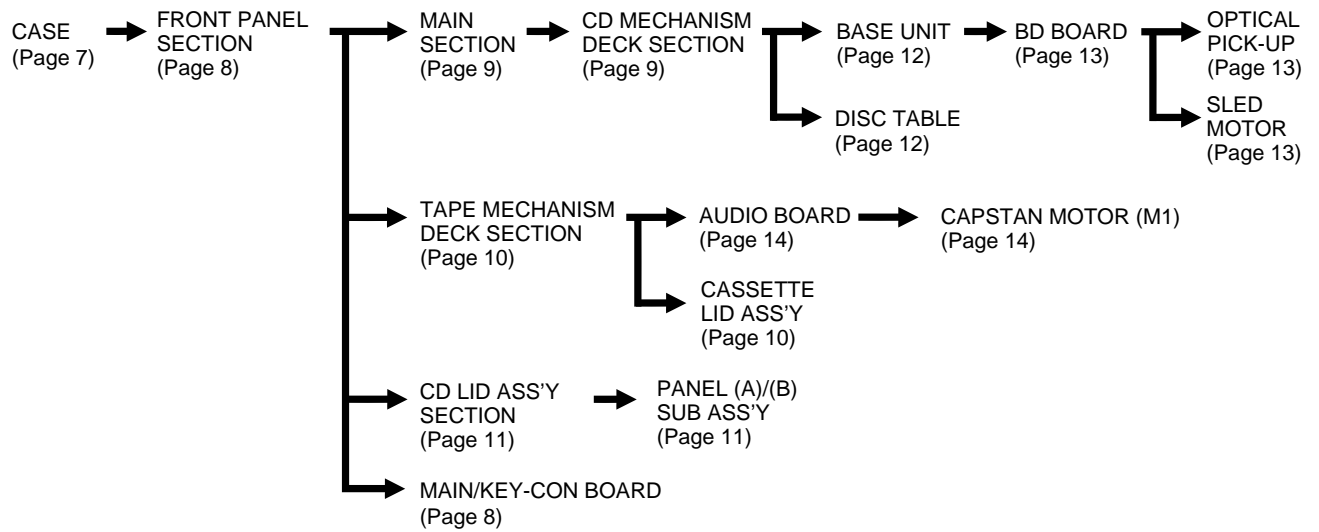
5. Press ENTER/NEXT.  
The clock starts.

### Tip

If you make a mistake, start over from step 1.

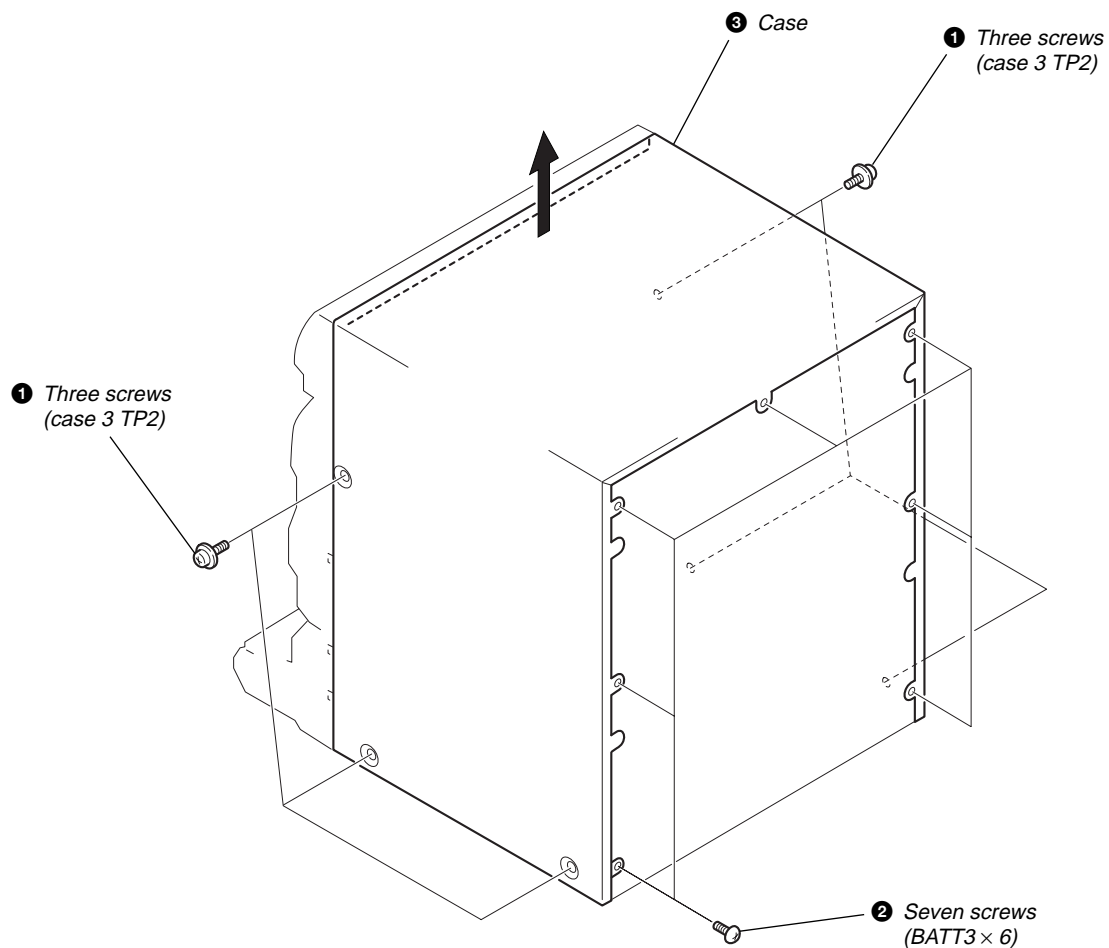
## SECTION 3 DISASSEMBLY

- This set can be disassembled in the order shown below.



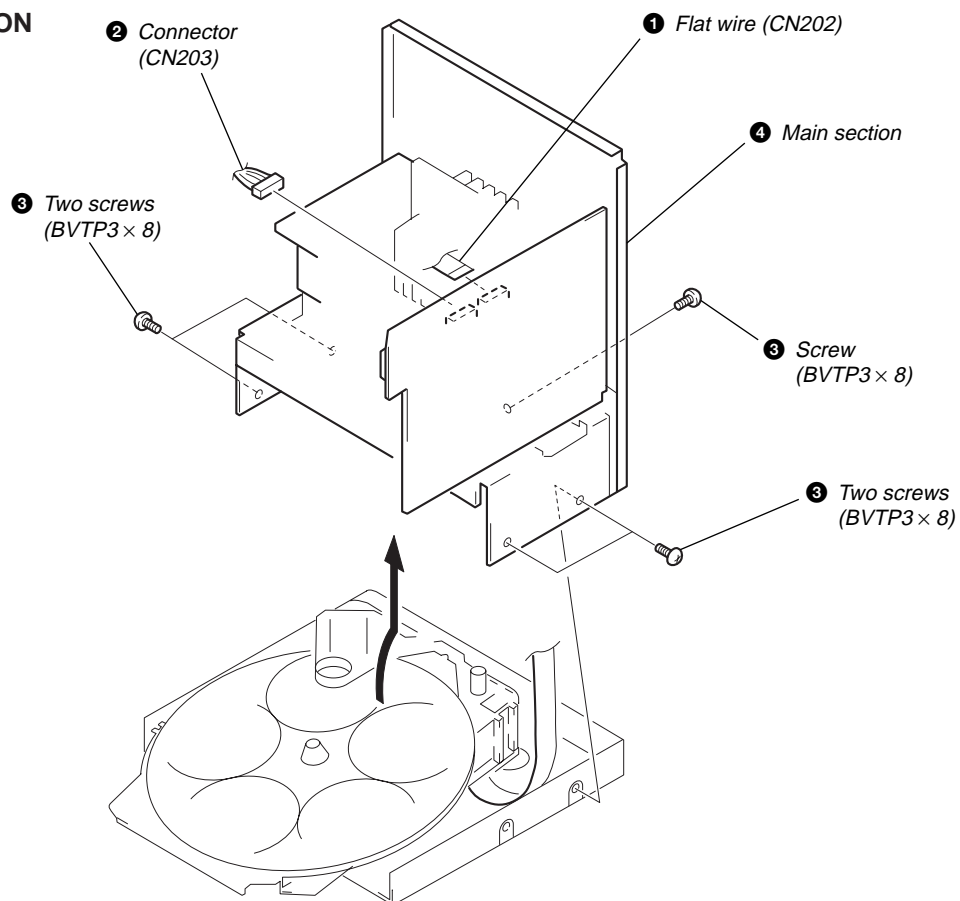
**Note:** Follow the disassembly procedure in the numerical order given.

### 3-1. CASE

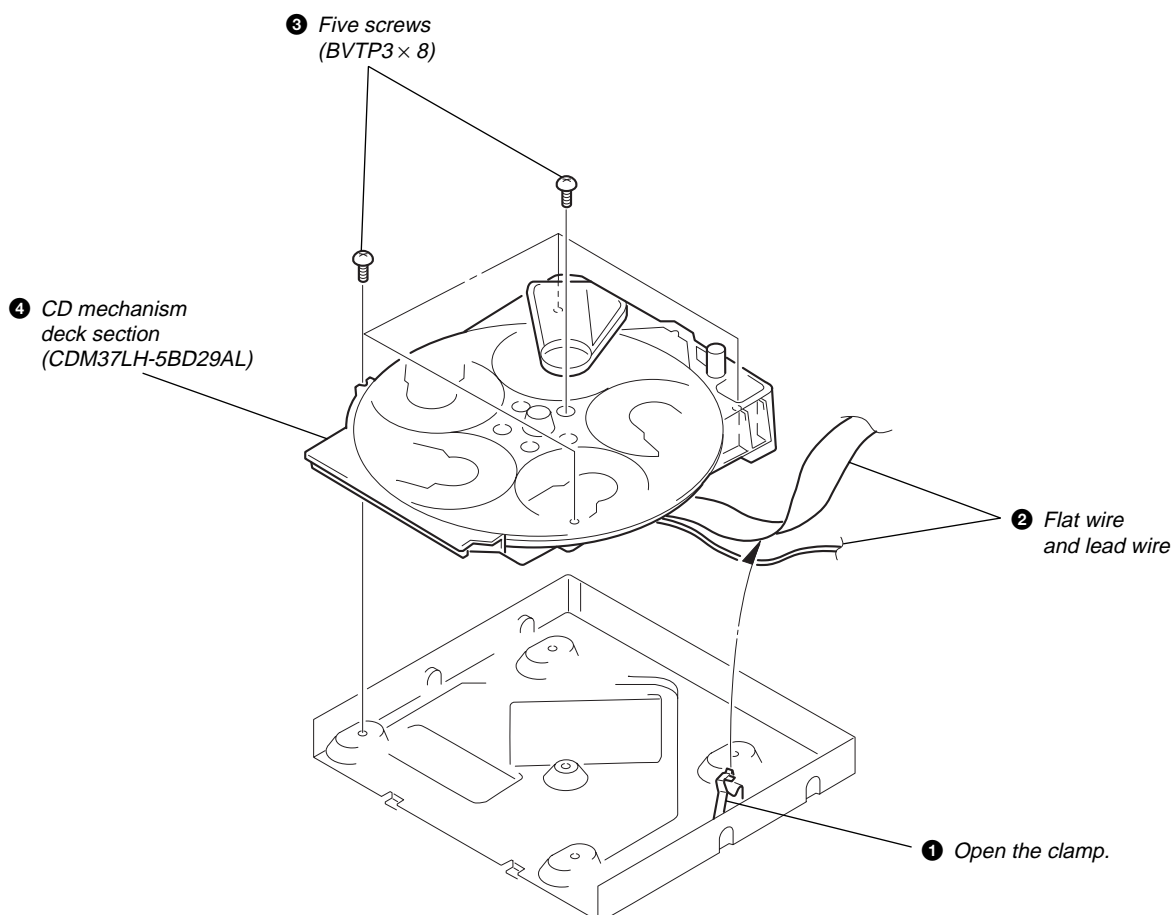




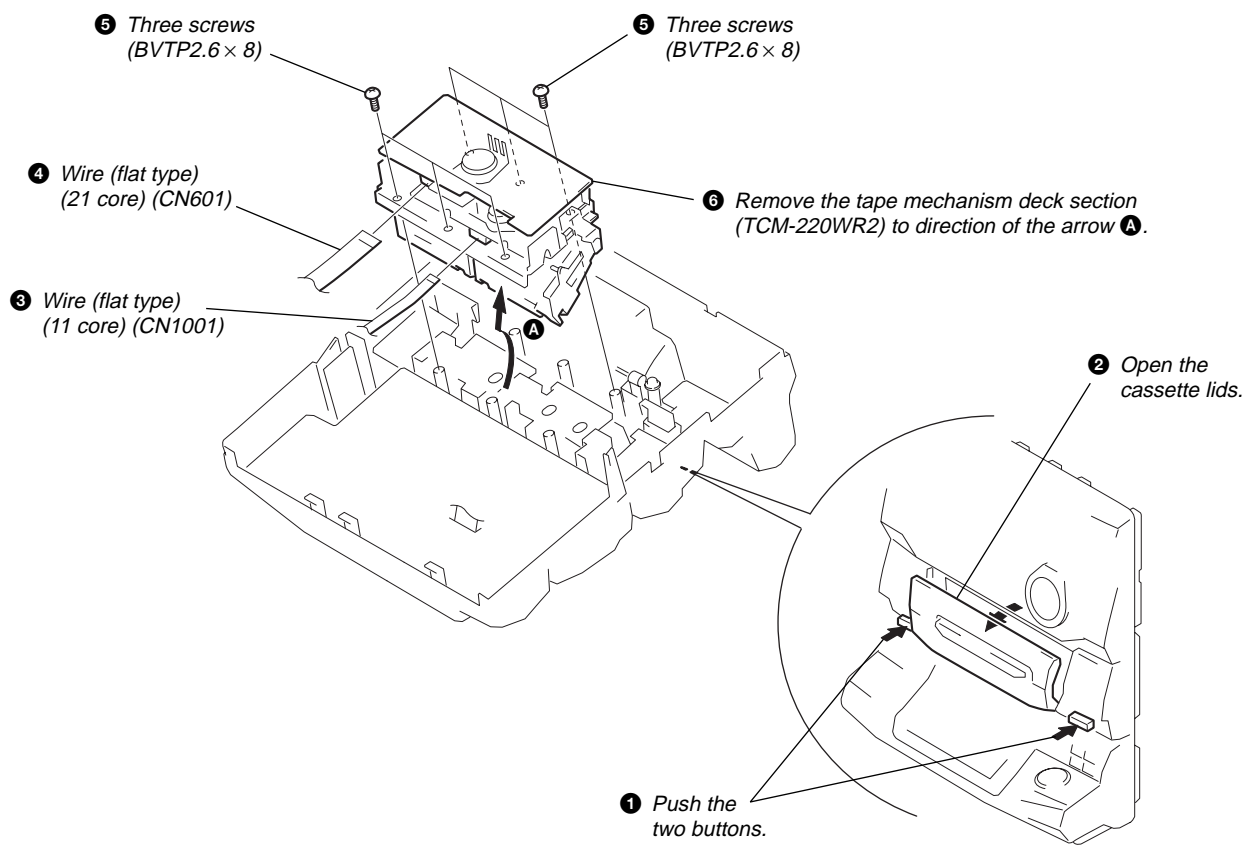
### 3-4. MAIN SECTION



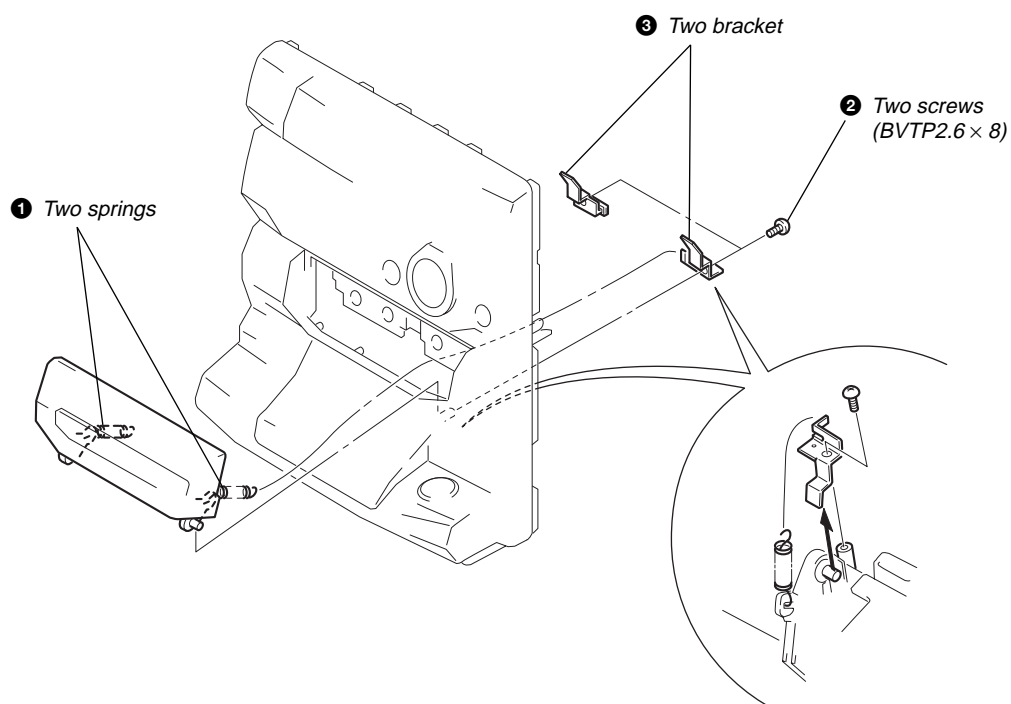
### 3-5. CD MECHANISM DECK SECTION (CDM37LH-5BD29AL)



### 3-6. TAPE MECHANISM DECK SECTION (TCM-220WR2)

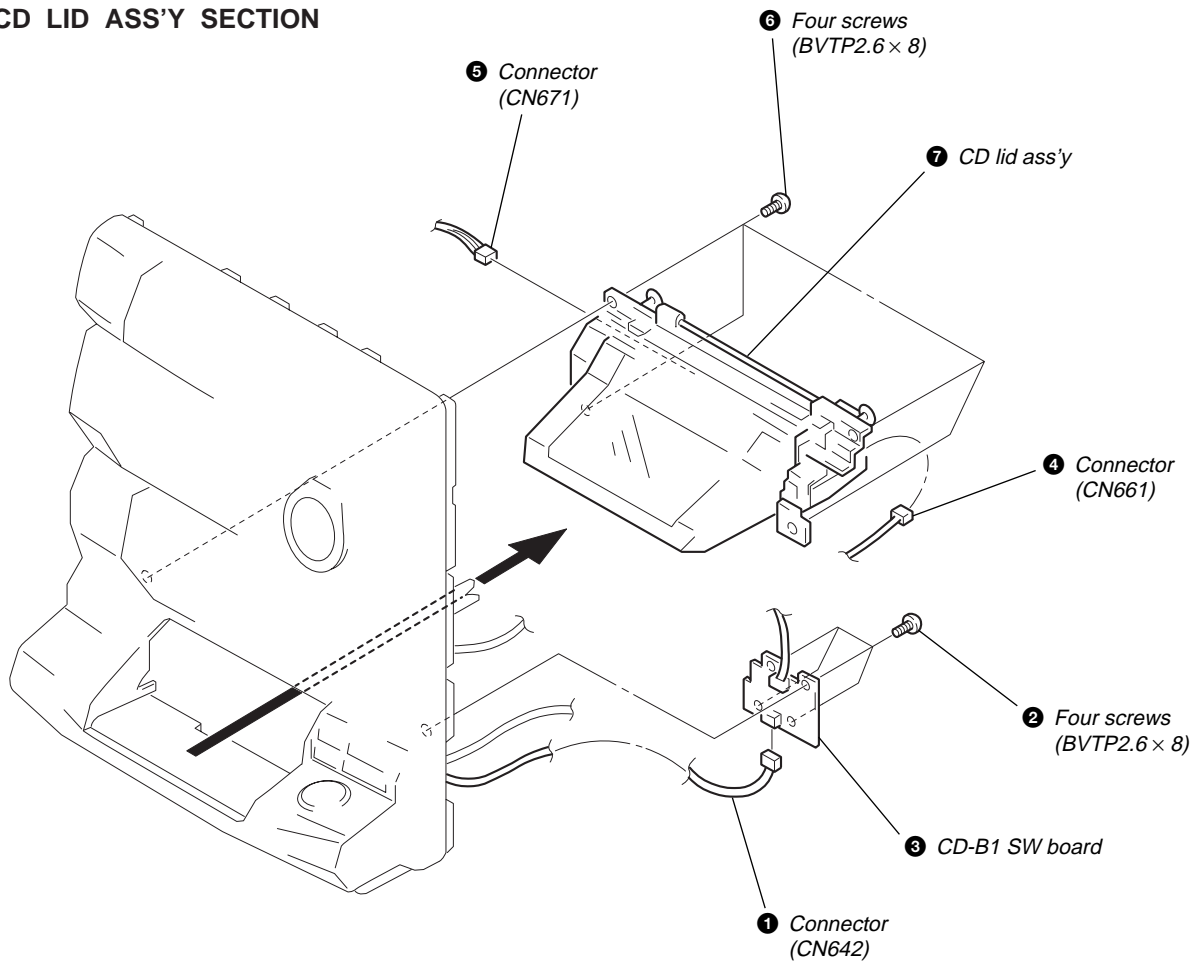


### 3-7. CASSETTE LID ASS'Y

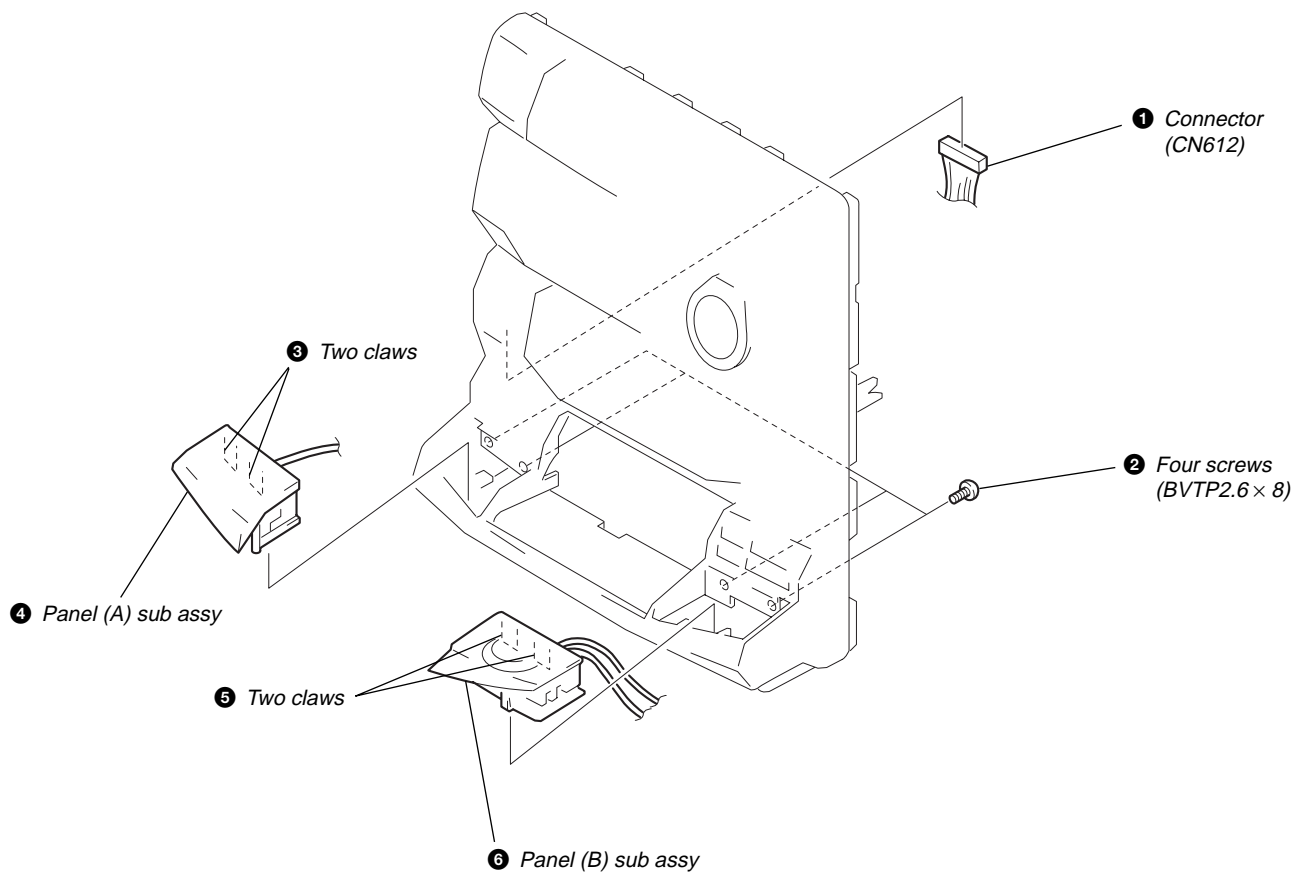




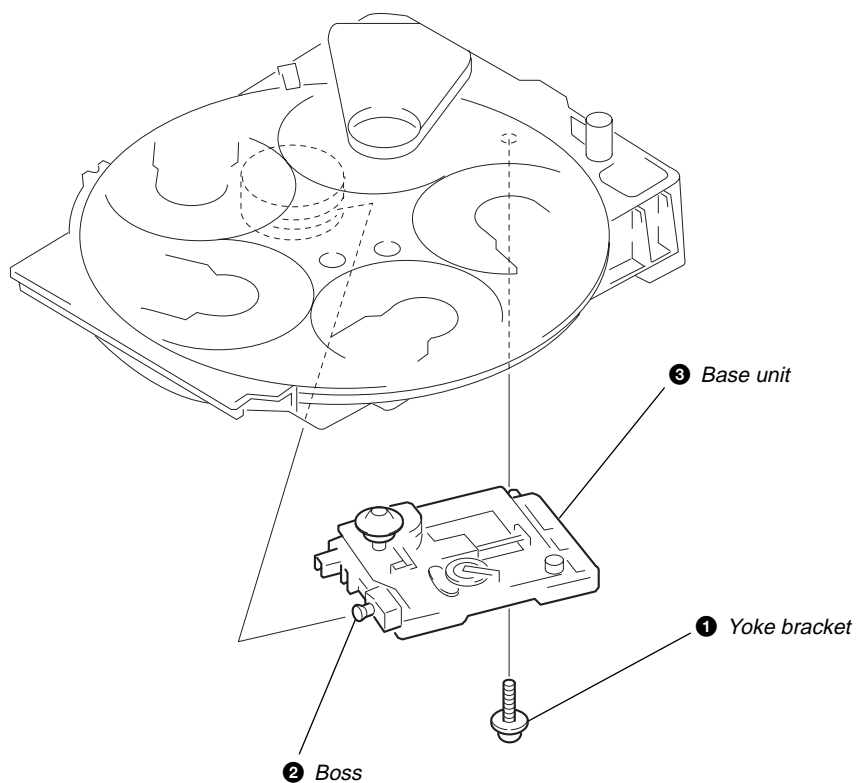
### 3-8. CD LID ASS'Y SECTION



### 3-9. PANEL (A) / (B) SUB ASS'Y



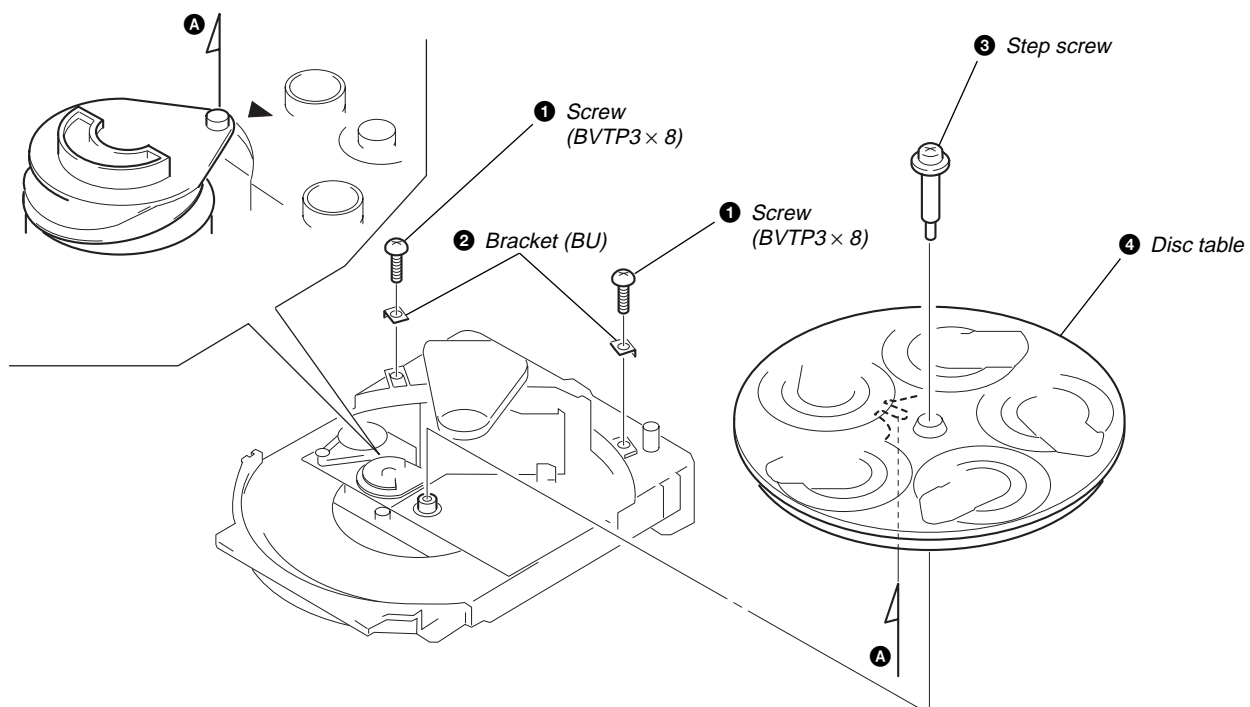
### 3-10. BASE UNIT



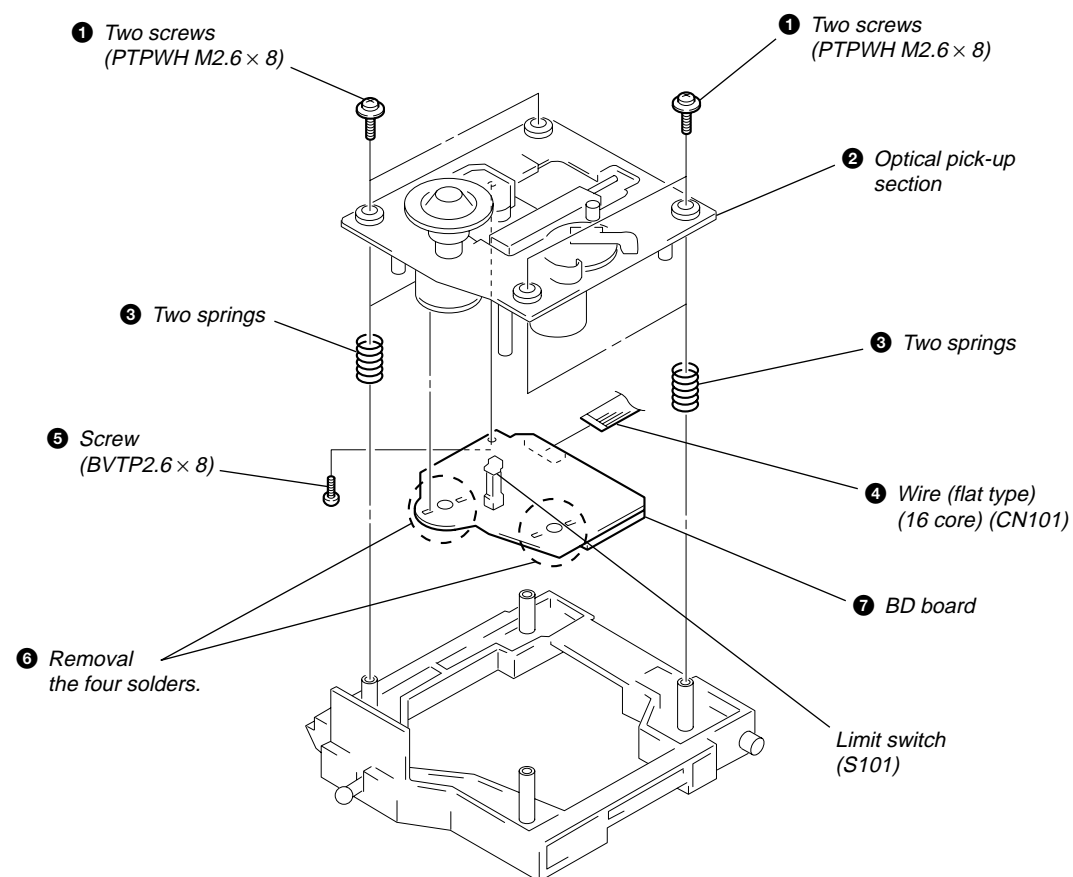
### 3-11. DISC TABLE

**Note:**

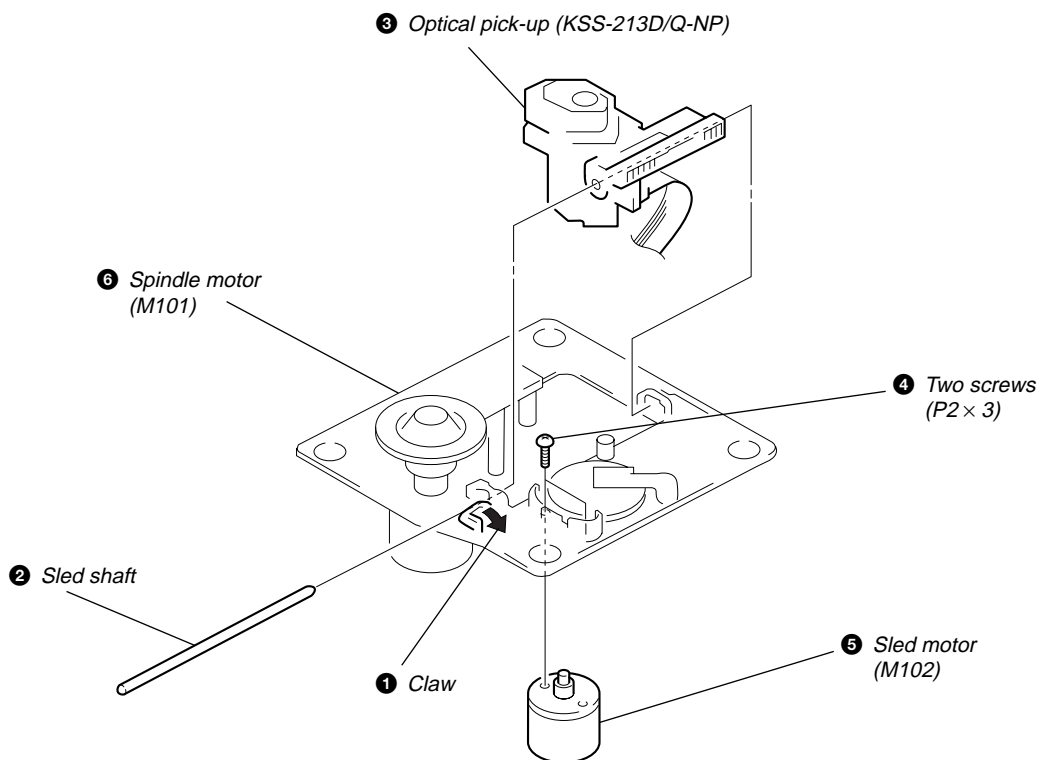
When the disc table is installed, adjust the positions of roller cam and mark ► as shown in the figure, then set to the groove of disc table.



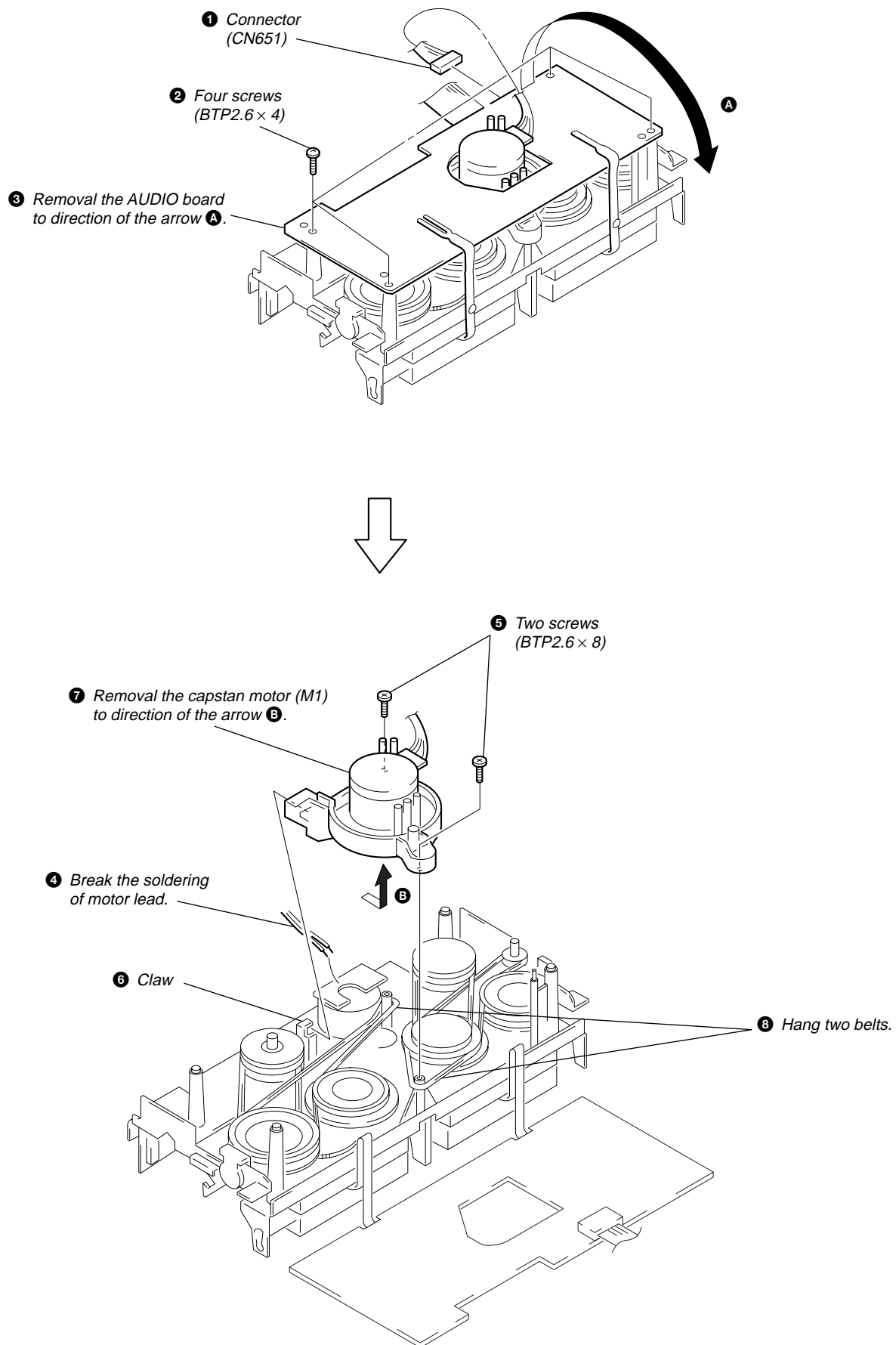
### 3-12. BD BOARD



### 3-13. OPTICAL PICK-UP (KSS-213D / Q-NP), SLED MOTOR (M102), SPINDLE MOTOR (M101)



### 3-14. AUDIO BOARD, CAPSTAN MOTOR (M1)



## SECTION 4 TEST MODE

### [MC Cold Reset]

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

#### Procedure:

1. Press three buttons **[SPECTRUM ANALYZER]**, **[ENTER]**, and **[DISC 1]** simultaneously.
2. The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

### [CD Delivery Mode]

- This mode moves the pickup to the position durable to vibration. Use this mode when returning the set to the customer after repair.

#### Procedure:

1. Press **[I/⏻]** button to turn the set ON.
2. Press **[PLAY MODE]** button and **[I/⏻]** button simultaneously.
3. A message "LOCK" is displayed on the fluorescent indicator tube, and the CD delivery mode is set.

### [MC Hot Reset]

- This mode resets the set with the preset data kept stored in the memory. The hot reset mode functions same as if the power cord is plugged in and out.

#### Procedure:

1. Press three buttons **[SPECTRUM ANALYZER]**, **[ENTER]**, and **[DISC 2]** simultaneously.
2. The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

### [Sled Servo Mode]

- This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the pickup.

#### Procedure:

1. Select the function "CD".
2. Press three buttons **[SPECTRUM ANALYZER]**, **[ENTER]**, and **[FUNCTION]** simultaneously.
3. The Sled Servo mode is selected, if "CD" is blanking on the fluorescent indicator tube.
4. With the CD in stop status, press **[▶▶]** button in CD section to move the pickup to outside track, or **[◀◀]** button to inside track.
5. To exit from this mode, perform as follows:
  - 1) Move the pickup to the most inside track.
  - 2) Press three buttons in the same manner as step 2.

#### Note:

- Always move the pickup to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
- Do not run the sled motor excessively, otherwise the gear can be chipped.

### [Change-over of AM Tuner Step between 9kHz and 10kHz]

- A step of AM channels can be changed over between 9kHz and 10kHz.

#### Procedure:

1. Press **[I/⏻]** button to turn the set ON.
2. Select the function "TUNER", and press **[TUNER/BAND]** button to select the BAND "AM".
3. Press **[I/⏻]** button to turn the set OFF.
4. Press **[ENTER]** and **[I/⏻]** buttons simultaneously, and the display of fluorescent indicator tube changes to "AM 9k STEP" or "AM 10k STEP", and thus the channel step is changed over.

### [LED and Fluorescent Indicator Tube All Lit, Key Check Mode]

#### Procedure:

1. Press three buttons **[SPECTRUM ANALYZER]**, **[ENTER]**, and **[DISC 3]** simultaneously.
2. LEDs and fluorescent indicator tube are all turned on. Press **[DISC 2]** button, and the key check mode is activated.
3. In the key check mode, the fluorescent indicator tube displays "K 1 J0 V0". Each time a button is pressed, "K" value increases. However, once a button is pressed, it is no longer taken into account.
  - "J" Value increases like 1, 2, 3 ... if rotating **[◀◀ AMS ▶▶]** knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "-" direction.
  - "V" Value increases like 1, 2, 3 ... if rotating **[VOLUME]** knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "-" direction.
4. To exit from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

## [Aging Mode]

This mode can be used for operation check of CD section and tape deck section.

- If an error occurred:  
The aging operation stops.
- If no error occurs:  
The aging operation continues repeatedly.

### 1. Aging Mode in CD Section

#### 1-1. Operating Method of Aging Mode

1. Set discs in DISC 1 and DISC 3 trays.
  2. Select the function "CD".
  3. Press three buttons **[SPECTRUM ANALYZER]**, **[ENTER]**, and **[KARAOKE PON/MPX]** simultaneously.
  4. The aging mode is activated, if a roulette mark on the fluorescent indicator tube is blinking.
  5. In the aging mode, the aging is executed in a sequence given in "1-2. Operation during Aging Mode".  
The aging continues unless an alarm occurred.
  6. To exit from the aging mode, press **[I/⏻]** button to turn the set OFF.
- If a button other than buttons In CD section is pressed during aging, the aging in the CD section is finished.
  - To execute aging to the tape deck section successively, press **[▷]** button in the deck A.  
"AGING" is displayed on the fluorescent indicator tube. (For the aging in tape deck, see "2. Aging Mode in Tape Deck Section".)

#### 1-2. Operation during aging Mode

In the aging mode, the program is executed in the following sequence.

1. The disc tray turns to select a disc. (For a disc selection sequence, see Section 1-3.)
2. TOC of disc is read.
3. The pickup accesses to the last track.
4. Steps 1 through 3 are repeated.

#### 1-3. Disc Selection Sequence

- During the aging mode, discs are selected in the following sequence:  
Disc 1 → Disc 3  
↑                      ↓  
Disc 3 ← Disc 1

### 2. Aging Mode in Tape Deck Section

#### 2-1. Operating Method of Aging Mode

1. Load a commercially available 10-minute tape into the decks A and B respectively.  
(If a 10-minute tape is not available, another tape may be used but a cycle time will be longer.)
2. Select the function "TAPE".
3. Rewind tapes in advance by pressing **[◀]** button respectively on decks A and B.
4. Press three buttons **[SPECTRUM ANALYZER]**, **[ENTER]**, and **[KARAOKE PON/MPX]** simultaneously.
5. Press **[▷]** button on deck A. (This button triggers the aging mode.)
6. The aging mode is activated if "AGING A" is displayed on the fluorescent indicator tube.
7. In the aging mode, the aging is executed in a sequence given in "2-2. Operation during Aging Mode".  
The aging continues unless an alarm occurred.
8. To exit from the aging mode, press **[I/⏻]** button to turn the set OFF.

#### 2-2. Operation during Aging Mode

In the aging mode, the program is executed in the following sequence.

1. A tape on FWD side is played for one minute.
2. PAUSE STOP is made.
3. Recording is made for 3 minutes. (For the deck not having the record function, the play is executed.)
4. FF is executed up to the end of tape.
5. A tape is reversed, and the tape on REV side is played for one minute.
6. PAUSE STOP is made.
7. Recording is made for 3 minutes. (For the deck not having the record function, the play is executed.)
8. FF is executed up to the end of tape.
9. Steps 1 through 8 are executed for the other deck.
10. Steps 1 through 9 are repeated unless an alarm occurred.

#### 2-3. Deck Selection Sequence

- During the aging mode, decks are selected in the following sequence:  
Deck A (FWD) → Deck A (REV)  
                          ↑                      ↓  
Deck B (REV) ← Deck B (FWD)



## SECTION 5 MECHANICAL ADJUSTMENTS

### PRECAUTION

- Clean the following parts with a denatured-alcohol-moistened swab:
 

record/playback heads	pinch rollers
erase head	rubber belts
capstan	idlers
  - Demagnetize the record/playback head with a head demagnetizer.
  - Do not use a magnetized screwdriver for the adjustments.
  - After the adjustments, apply suitable locking compound to the parts adjusted.
  - The adjustments should be performed with the rated power supply voltage unless otherwise noted.
- Torque Measurement
  - Tape Tension Measurement

#### • Torque Measurement

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	36 to 61g•cm (0.50 – 0.84 oz•inch)
Forward Back Tension	CQ-102C	2 to 6g•cm (0.026 – 0.082 oz•inch)
Reverse	CQ-102RC	36 to 61g•cm (0.50 – 0.84 oz•inch)
Reverse Back Tension	CQ-102RC	2 to 6g•cm (0.026 – 0.082 oz•inch)
FF, REW	CQ-201B	61 to 143g•cm (0.85 – 1.98 oz•inch)

#### • Tape Tension Measurement

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 100 g (3.52 oz)
Reverse	CQ-403R	more than 100 g (3.52 oz)

## SECTION 6 ELECTRICAL ADJUSTMENTS

### TAPE DECK SECTION

0 dB=0.775 V

- Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjust.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.
- The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
- The adjustments should be performed for both L-CH and R-ch.
- Switches and controls should be set as follows unless otherwise specified.
- Set to test mode. (Press key switch same time **SPECTRUM ANALYZER**, **ENTER** and **EFFECT** button.)

#### • Test Tape

Tape	Signal	Used for
P-4-A100	10 kHz, -10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Level Adjustment

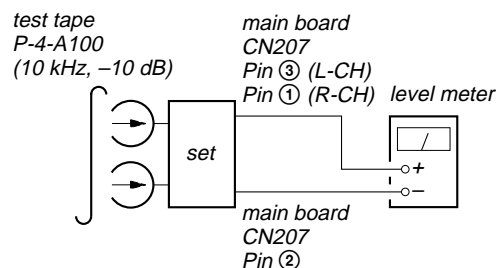
#### Record/ Playback Head Azimuth Adjustment

##### DECK A

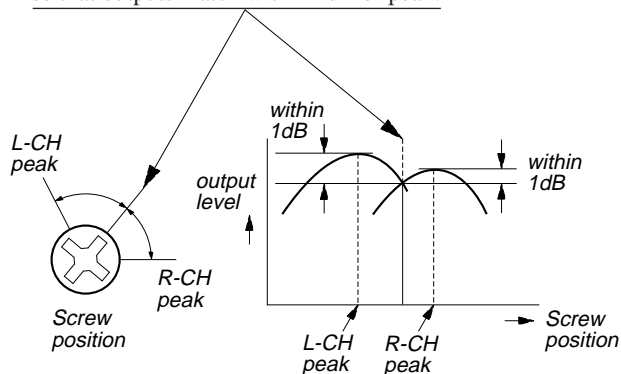
##### DECK B

**Note:** Perform this adjustments for both decks

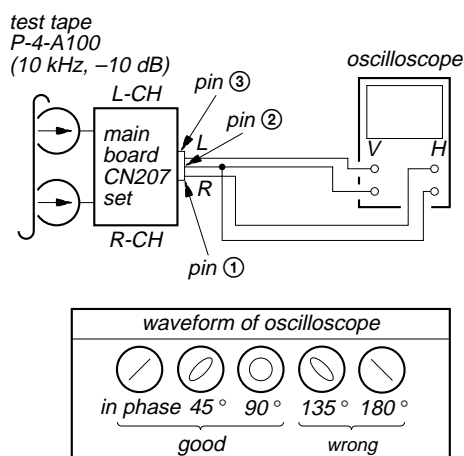
#### Procedure:



1. Mode: Playback (FWD)
2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.

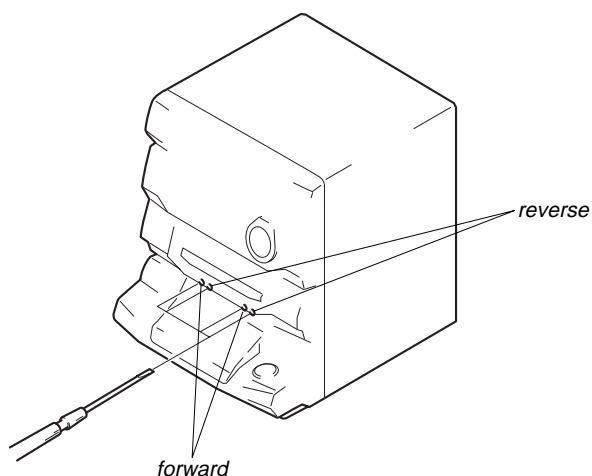


3. Mode: Playback (FWD)



4. Repeat steps 1 to 3 in playback (REV) mode.
5. After the adjustments, apply suitable locking compound to the parts adjusted.

**Adjustment Location:** Record/Playback Head (Deck A and B) and MAIN board.



## Tape Speed Adjustment **DECK A**

**Note:** Start the Tape Speed adjustment as below after setting to the test mode.

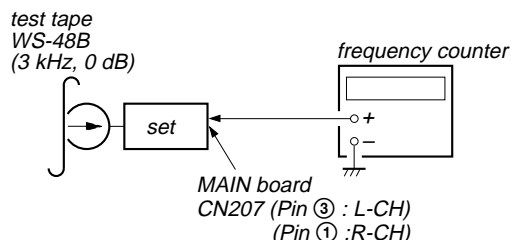
In the test mode, the tape speed is high during pressing the **[H. SPEED DUBB]** button.

### Procedure:

1. Turn the power switch on.
2. Press the **[SPECTRUM ANALYZER]** button, **[ENTER]** button and **[EFFECT]** button simultaneously.

To exit from the test mode, press the **[I/O]** button.

Mode: Playback (FWD)



1. Insert the WS-48B into the deck A and the blank tape into the deck B.
2. Press the **[REC]** button and **[▶]** button on the deck B. Then the deck B is at recording mode.
3. Set the deck A to playback mode.
4. Keep pressing the **[H. SPEED DUBB]** button in playback mode. Then at HIGH speed mode.
5. Adjust RV652 on the AUDIO board so that frequency counter reads  $6,000 \pm 180$  Hz.
6. Take off the **[H. SPEED DUBB]** button. Then at NORMAL speed mode.
7. Adjust RV651 on the AUDIO board so that frequency counter reads  $3,000 \pm 90$  Hz.
8. Frequency difference between deck A and deck B the beginning of the tape should be within  $\pm 1.5\%$ .

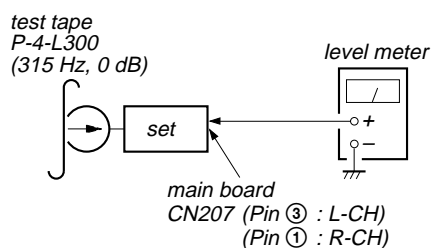
**Adjustment Location:** AUDIO and MAIN boards

**Sample Value of Wow and flutter:** 0.3% or less W. RMS (WS-48B)

## Playback level Adjustment **DECK A** **DECK B**

### Procedure:

Mode: Playback (FWD)



Deck A is RV311 (L-CH) and RV411 (R-CH), Deck B is RV301 (L-CH) and RV401 (R-CH) so that adjustment within adjustment level as follows.

### Adjustment Level:

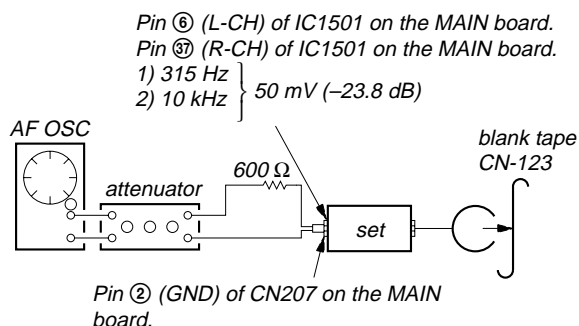
CN207 PB level: 301.5 to 338.3 mV ( $-8.2$  to  $-7.2$  dB) level difference between the channels: within  $\pm 0.5$  dB

**Adjustment Location:** AUDIO and MAIN boards

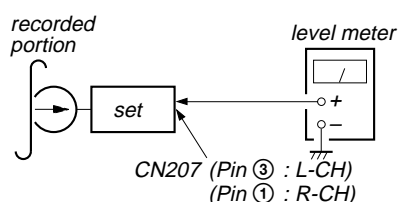
## Record bias Current Adjustment **DECK B**

### Procedure:

1. Mode: Record



2. Mode: Playback



Confirm playback the signal recorded in step 1 become adjustable limits as follows.

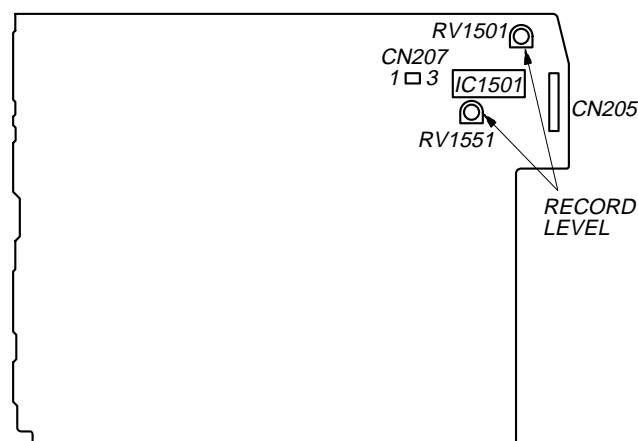
If these levels do not adjustable limits, adjustment the RV341 (L-CH) and RV441 (R-CH) on the AUDIO board to repeat steps 1 and 2.

**Adjustable limits:** Playback output of 315 Hz to playback output of 10 kHz:  $0 \pm 0.5$  dB

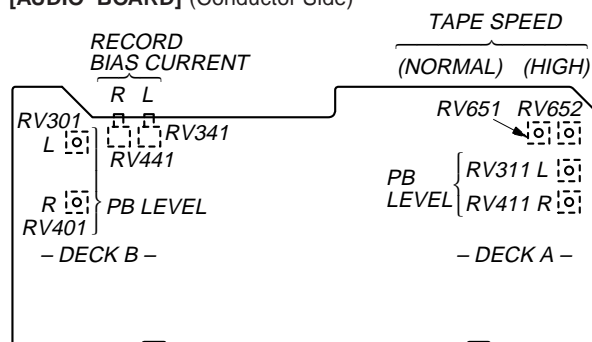
**Adjustment Location:** AUDIO and MAIN boards

### Adjustment Location:

#### [MAIN BOARD] (Component Side)



#### [AUDIO BOARD] (Conductor Side)

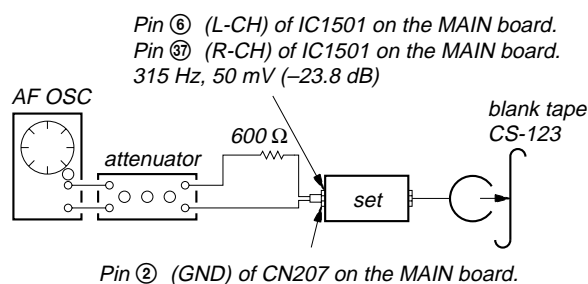


\* As the adjustment parts is mounted on the component side, adjust it through a hole in the AUDIO board form conductor side.  
(Except RV431, 441)

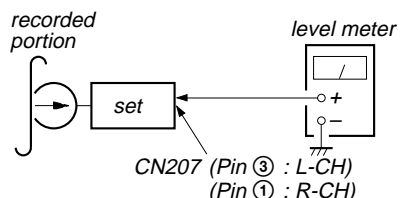
## Record Level Adjustment **DECK B**

### Procedure:

1. Mode: Record



2. Mode: Playback



Confirm playback the signal recorded in step 1 become adjustable limits as follows.

If these levels do not adjustable limits, adjustment the RV1501 (L-CH) and RV1551 (R-CH) on the MAIN board to repeat steps 1 and 2.

**Adjustable limits:**

CN207 PB level: 36.7 to 41.1 mV (−26.5 to −25.5 dB)

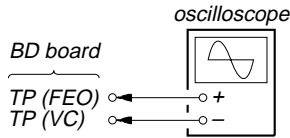
**Adjustment Location:** MAIN board

## CD SECTION

### Note:

1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10M 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.

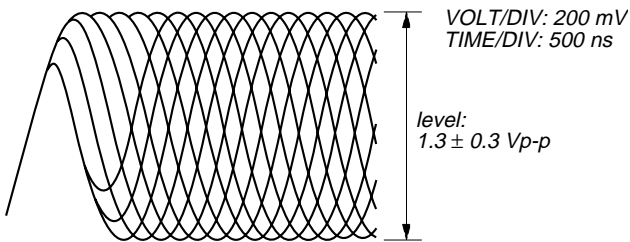
### Focus Bias check



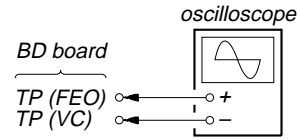
### Procedure:

1. Connect oscilloscope to test point TP (RF). (GND terminal: VC)
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that the shape “◇” can be clearly distinguished at the center of the waveform and check the RF signal level.

### • RF signal



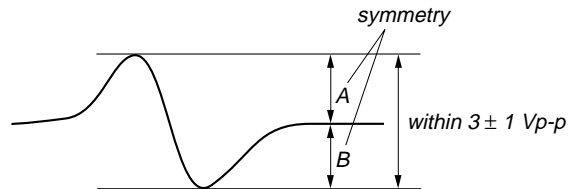
## S Curve Check



### Procedure:

1. Connect oscilloscope to test point TP (FEO).
2. Connect between test point TP (FOK) and GND by lead wire.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within  $3 \pm 1$  Vp-p.

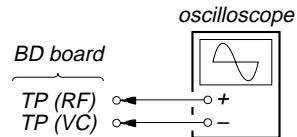
### S-curve waveform



6. After check, remove the lead wire connected in step 2.

**Note:** • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.  
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

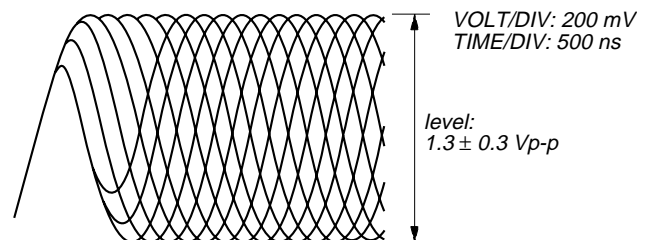
## RF Level Check



### Procedure:

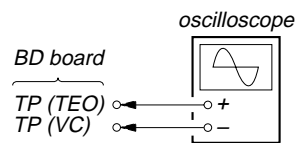
1. Connect oscilloscope to test point TP (TEO) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in to play the number five track.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

### • SF signal



**Note:** 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 (Without remote commander)



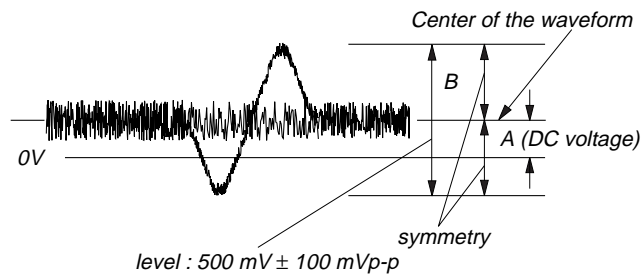
#### Procedure:

1. Connect oscilloscope to test point TP (TEO) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) 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:

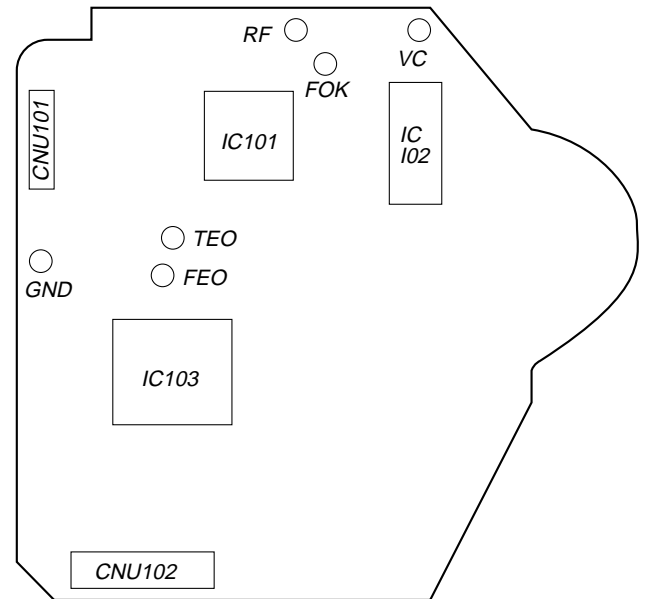
$$\frac{A - B}{2 (A + B)} \times 100 = \pm 7 (\%)$$

1 track jump waveform



### Adjustment Location:

[BD BOARD] (Conductor Side)



## SECTION 7 DIAGRAMS

### 7-1. IC PIN FUNCTION DESCRIPTION

#### • MAIN BOARD IC301 $\mu$ PD780018YGF-028-3BA (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Function
1	TA-MUTE	O	Line muting on/off control signal output terminal “L”: muting on
2	DBFB-H/L	O	DBFB normal/high selection signal output to the M62427FP (IC201) “L”: DBFB high, “H”: DBFB low
3	427-LAT	O	Serial data latch pulse output to the M62427FP (IC201)
4	K-CON-LAT	O	Serial data latch pulse output terminal Not used (open)
5	K-CON-ON	O	On/off selection signal output of the key control circuit “L”: on Not used (open)
6	F-RELAY	O	Relay drive signal output for the speaker protect “H”: on
7	R-RELAY	O	Relay drive signal output for the speaker protect “H”: on Not used (open)
8	PL-RELAY	O	Relay drive signal output for the speaker protect “H”: on Not used (open)
9	TEST	I	Test terminal Connected to ground
10	X2	O	Main system clock output terminal (5 MHz)
11	X1	I	Main system clock input terminal (5 MHz)
12	VDD	—	Power supply terminal (+5V)
13	XT2	O	Sub system clock output terminal (32.768 kHz)
14	XT1	I	Sub system clock input terminal (32.768 kHz)
15	$\overline{\text{RESET}}$	I	System reset signal input from the reset signal generator (IC302) “L”: reset For several hundreds msec. after the power supply rises, “L” is input, then it changes to “H”
16	(INT/IN)	I	Connected to ground
17	(INT/IN/OUT)	I	Connected to ground
18	SCOR	I	Subcode sync (S0+S1) detection signal input from the CXD2519Q (IC103)
19	SOFT-TEST	O	Output terminal for the software test (open)
20	$\overline{\text{AC-CUT}}$	I	AC off detection signal input from the reset signal generator (IC302)
21	RDS-INT	I	Serial data reading clock signal input for the radio data system Not used (fixed at “L”)
22	RDS-DATA	I	Serial data input for the radio data system Not used (open)
23	VDD	—	Power supply terminal (+5V)
24	AVDD	—	Power supply terminal (+5V) (for A/D conversion)
25	ADJ	I	Setting terminal for the CD test mode Normally: fixed at “H”
26	A-SHUT	I	Shut off detection signal input from the deck-A side reel pulse detector (Q1001)
27	B-SHUT	I	Shut off detection signal input from the deck-B side reel pulse detector (Q1002)
28	B-HALF	I	Detection input from the deck-B half detect switch (S1006)
29	CLK-CHECK	I	Not used (fixed at “L”)
30	SPEC-IN	I	Setting terminal for the version
31	ADJ2	I	Setting terminal for the CD test mode Normally: “L”
32	DEMO-MODE	I	Setting terminal for the demonstration H/L Fixed at “L”
33	AVSS	—	Ground terminal (for A/D conversion)
34	SQ-DATA-IN	I	Sub-code Q data input from the CXD2519Q (IC103)
35	NCO	O	Not used (open)
36	SQ-CLK	O	Sub-code Q data reading clock signal output to the CXD2519Q (IC103)
37	SW-ON/OFF	O	Super woofer speaker on/off control signal output terminal Not used (open)
38	FUNC1	I	Setting terminal for the function 1 Fixed at “L”
39	FUNC2	I	Setting terminal for the function 2 Fixed at “L”
40	VSS	—	Ground terminal
41	VOL-LAT	O	Serial data latch pulse output terminal Not used (open)
42	PL-LAT	O	Serial data latch pulse output terminal Not used (open)
43	COM-DIN	I	Serial data input terminal Not used (fixed at “L”)

































Pin No.	Pin Name	I/O	Function
44	COM-DOUT	O	Serial data output to the M62427FP (IC201)
45	COM-CLK	O	Serial data transfer clock signal output to the M62427FP (IC201)
46	CD-POWER	O	Power on/off control signal output for the CD mechanism deck section “H”: power on, “L”: standby
47	CD-DATA	O	Serial data output to the CXD2519Q (IC103)
48	CD-CLK	O	Serial data transfer clock signal output to the CXD2519Q (IC103)
49	MSM-CND	O	Command data output terminal Not used (open)
50	MSM-BUSY	I	Busy signal input terminal “L”: busy status Not used (fixed at “L”)
51	MSM-LAT	O	Serial data latch pulse output terminal Not used (open)
52	MSM-NAR	O	NAR signal output terminal Not used (open)
53	MSM-CH	O	Channel select signal output terminal Not used (open)
54	INPUT-CHANGE	O	Attenuate control (–5 dB) signal output for the input gain control “L”: VIDEO, “H”: MD
55	IIC-DATA	I/O	Communication data bus with the fluorescent indicator tube driver (IC601)
56	IIC-CLK	I/O	Communication data reading clock signal input or transfer clock signal output with the fluorescent indicator tube driver (IC601)
57	$\overline{\text{X}}\text{RST}$	O	Reset signal output to the CXA1992AR (IC101), BA5941FP (IC102) and CXD2519Q (IC103) on the CD mechanism deck section “L”: reset
58	XLT	O	Serial data latch pulse output to the CXD2519Q (IC103)
59	WDCL	O	Word clock signal output terminal Not used (open)
60	TBL-L	O	Motor drive signal output to the disc tray turn motor driver (IC201) *1
61	TBL-R	O	Motor drive signal output to the disc tray turn motor driver (IC201) *1
62	TRAY-LED	O	LED drive signal output for the CD tray LED indicate “H”: LED on
63	LOAD-OUT	O	Motor drive signal output terminal Not used (open)
64	LOAD-IN	O	Motor drive signal output terminal Not used (open)
65	ST-CLK	O	PLL serial data transfer clock signal output to the FM/AM tuner unit
66	ST-DIN	I	PLL serial data input from the FM/AM tuner unit
67	ST-DOUT	O	PLL serial data output to the FM/AM tuner unit
68	ST-CE	O	PLL chip enable signal output to the FM/AM tuner unit
69	TUNED	I	Tuning detection signal input from the FM/AM tuner unit “L”: tuned
70	STEREO	I	FM stereo detection signal input from the FM/AM tuner unit “L”: stereo
71	VSS	—	Ground terminal
72	ST-MUTE	O	Tuner muting control signal output to the FM/AM tuner unit “L”: muting on
73	SENS2	I	Internal status (SENSE) signal input from the CXA1992AR (IC101)
74	SENS	I	Internal status (SENSE) signal input from the CXD2519Q (IC103)
75	DISC-SENS	I	Disc status detection signal input terminal Not used (open)
76	T-SENS	I	Disc tray status detection signal input from the disc tray sensor (IC202)
77	UP SW	I	Detection input from the UP switch (S201)
78	ENC3	I	Rotary encoder pulse input for the disc tray address detect Not used (open)
79	ENC2	I	
80	ENC1	I	
81	OUT-OPEN	I	Disc tray open/close detect switch input terminal “L”: open, “H”: close Not used (open)
82	CAP-H/N	O	High/normal speed selection signal output of the capstan motor (M1) “L”: high speed, “H”: normal speed
83	A-TRG	O	Motor drive signal output to the trigger motor driver (IC1502)
84	B-TRG	O	Motor drive signal output to the trigger motor driver (IC1502)
85	TRG-LOW	O	Motor control signal output to the trigger motor driver (IC1502)











Pin No.	Pin Name	I/O	Function
86	CAP-M-ON/OFF	O	Capstan motor (M1) on/off control signal output terminal “L”: capstan motor on
87	PB-A/B	O	Deck-A/B selection signal output to the HA12203NT (IC1501) “L”: deck-A, “H”: deck-B
88	EQ-H/N	O	Normal/high speed selection signal output to the HA12203NT (IC1501) “L”: normal speed, “H”: high speed
89	BIAS	O	Recording bias on/off selection signal output to the HA12203NT (IC1501) “L”: bias off, “H”: bias on
90	REC-MUTE	O	Recording muting on/off selection signal output to the HA12203NT (IC1501) “L”: muting on, “H”: muting off
91	NR-ON/OFF	O	Dolby NR on/off selection signal output to the HA12203NT (IC1501) “L”: dolby off, “H”: dolby on
92	R/P-PASS	O	Recording/playback/pass selection signal output to the HA12203NT (IC1501) “L”: recording mode
93	TC-MUTE	O	Line muting on/off selection signal output to the HA12203NT (IC1501) “L”: muting off, “H”: muting on
94	A-PLAY-SW	I	Detection input from the deck- A play detect switch (S1001) “H”: deck-A play
95	B-PLAY-SW	I	Detection input from the deck- B play detect switch (S1002) “H”: deck-B play
96	RELAY	O	Recording/playback select signal output to the REC/PB switch (IC602) “L”: playback, “H”: recording
97	A-HALF	I	Detection input from the deck-A cassette detect switch (S1003) “L”: cassette in, “H”: no cassette
98	POWER	O	Power on/off control signal output for the audio system (+5V) and deck, panel, audio system (+7V and -7V) “L”: power on, “H”: standby
99	SW-F-CON	O	Super woofer mode control signal output to the M62427FP (IC201) “H”: music, “L”: movie
100	STK-MUTE	O	Power amplifier on/off selection signal output terminal “L”: on, “H”: standby

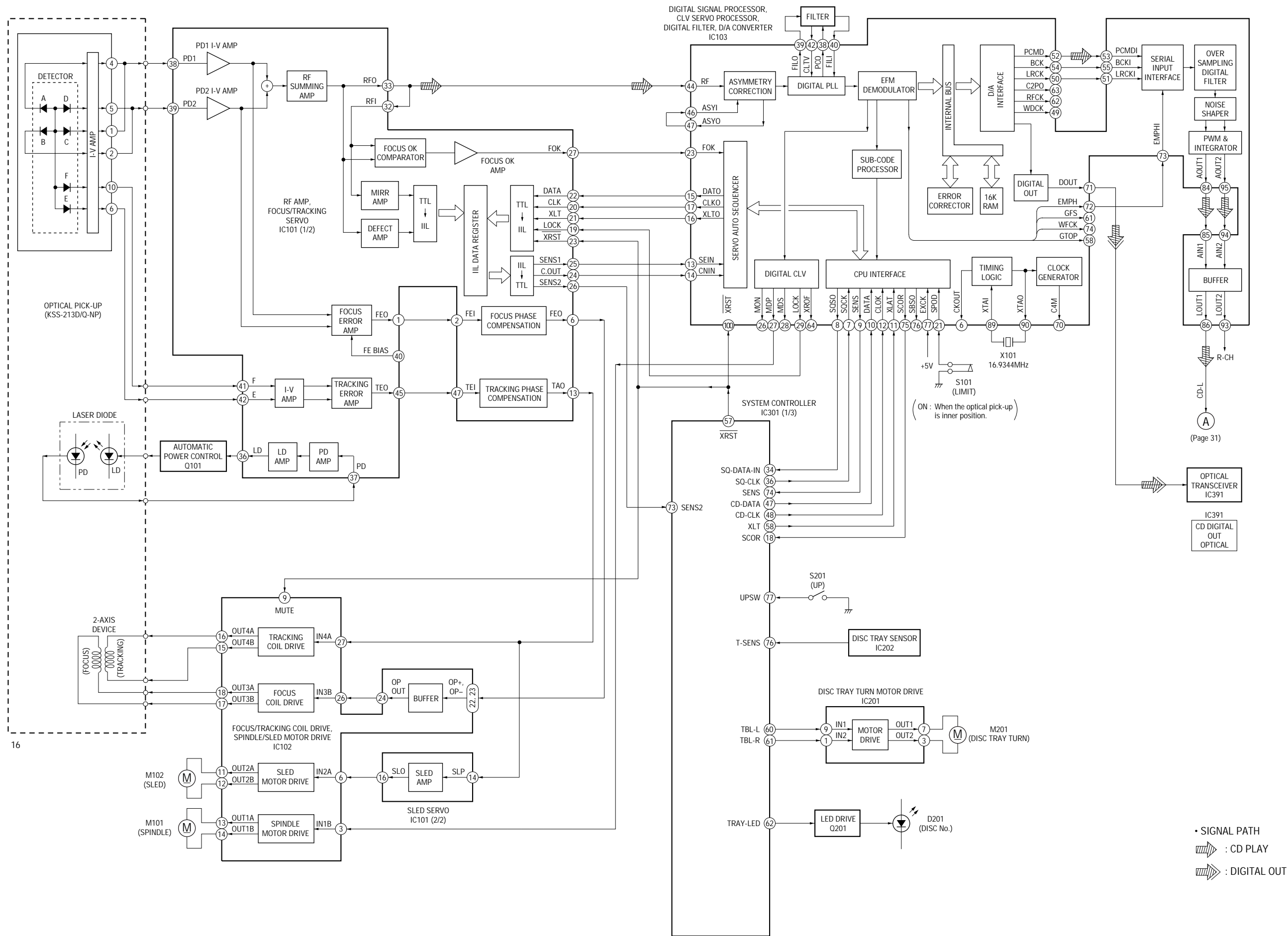
\*1 Disc tray turn motor (M201) control

Mode Terminal	STOP	COUNTER- CLOCKWISE	CLOCKWISE	BRAKE
TBL-L (pin ⑥)	“H”	“L”	“H”	“L”
TBL-R (pin ⑥)	“H”	“H”	“L”	“L”

• **PANEL BOARD IC601 TMP87CH75F-6659**  
**(FLUORESCENT INDICATOR TUBE DRIVE, LED DRIVE, KEY CONTROL)**

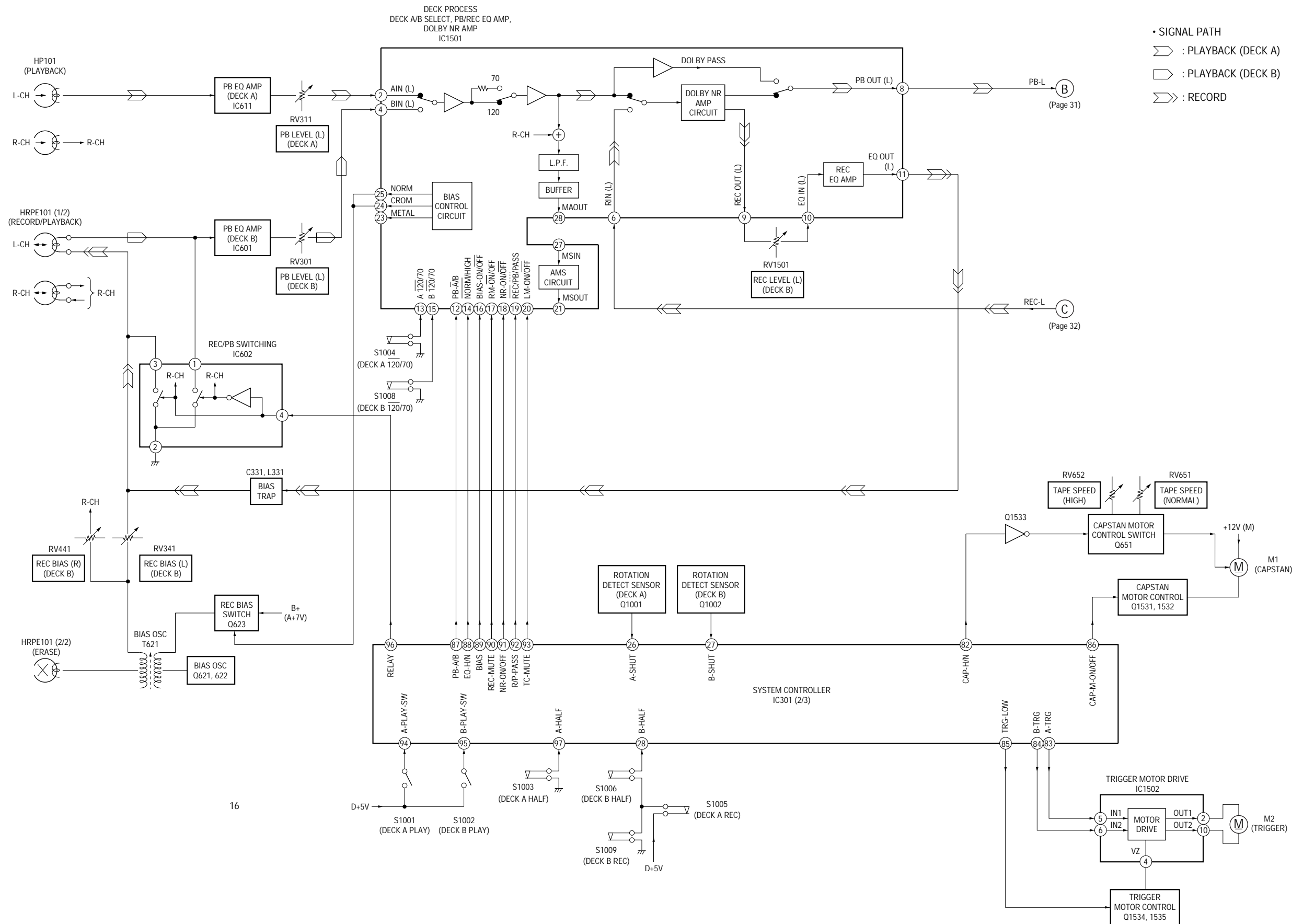
Pin No.	Pin Name	I/O	Function
1	SEG-35	O	Segment drive signal output to the fluorescent indicator tube (FL601)
2	V-LOAD	—	Power supply terminal (−30V) (for fluorescent indicator tube drive)
3	LED1	O	LED drive signal output terminal (TUNER/BAND)
4	LED2	O	LED drive signal output terminal (ENTER/NEXT, GROOVE)
5	LED3	O	LED drive signal output terminal (SUPER WOOFER, CD  )
6	LED4	O	LED drive signal output terminal (CD  )
7	LED5	O	LED drive signal output terminal (DECK B  )
8	LED6	O	LED drive signal output terminal (DECK B  )
9	LED7	O	LED drive signal output terminal (TAPE  ,  REC)
10	LED8	O	LED drive signal output terminal (EFFECT, ENTER)
11	VSS	—	Ground terminal
12	X-OUT	O	System clock output terminal (8 MHz)
13	X-IN	I	System clock input terminal (8 MHz)
14	 RESET	I	System reset signal input from the reset signal generator (IC302) “L”: reset For several hundreds msec. after the power supply rises, “L” is input, then it changes to “H”
15	LED9	O	LED drive signal output terminal (FILE 1, FILE 2)
16	LED10	O	LED drive signal output terminal (FILE 3, FILE 4)
17	TEST	I	Connected to ground
18	LED11	O	LED drive signal output terminal (FILE 5, P FILE)
19	LED12	O	LED drive signal output terminal (OTHERS, MUSIC)
20	LED13	O	LED drive signal output terminal Not used (open)
21	LED14	O	LED drive signal output terminal Not used (open)
22	LED15	O	LED drive signal output terminal (DECK A  )
23	LED16	O	LED drive signal output terminal (DECK A  )
24	VOL-A	I	Rotary encoder pulse input from the S701 (VOLUME)
25	LED17	O	LED drive signal output terminal Not used in this set
26	JOG-A	I	Jog dial pulse input from the S711 (   AMS   jog dial)
27	CLOCK	I/O	Communication data reading clock signal input or transfer clock signal output with the system controller (IC301)
28	DATA	I/O	Communication data bus with the system controller (IC301)
29	LED SELECT	O	LED selection signal output terminal
30	VDD	—	Power supply terminal (+5V)
31	VSS	—	Ground terminal
32	MODEL	I	Destination setting terminal
33	KEY-1	I	Key input terminal (A/D input) (S601 to 607, 609 to 616) ENTER/NEXT, TUNER MEMORY, TUNING MODE, TUNER/BAND, TUNING +/−, STEREO/MONO, FUNCTION, GROOVE, GEQ     , SUPER WOOFER, SUPER W MODE keys input
34	KEY-2	I	Key input terminal (A/D input) (S621 to 625, 651 to 659) EFFECT, SOUND CONTROL WAVE, KARAOKE PON/MPX, SOUND CONTROL SURROUND, P FILE MEMORY, DECK B      ,  REC, H SPEED DUB, CD SYNC keys input
35	KEY-3	I	Key input terminal (A/D input) (S619, 620, 676 to 679, 681 to 686) GEQ CONTROL, ENTER, CD   ,  , DISC SKIP, CD  , REPEAT, PLAY MODE, 1/ALL DISCS, EDIT, CD   keys input
36	KEY-4	I	Key input terminal (A/D input) (S627 to 634, 667, 668) SPECTRUM ANALYZER, DISPLAY/DEMO, POWER,  /CLOCK SET, REC, DAILY 1/2, SLEEP, NON-STOP, DJ MIX LOOP keys input

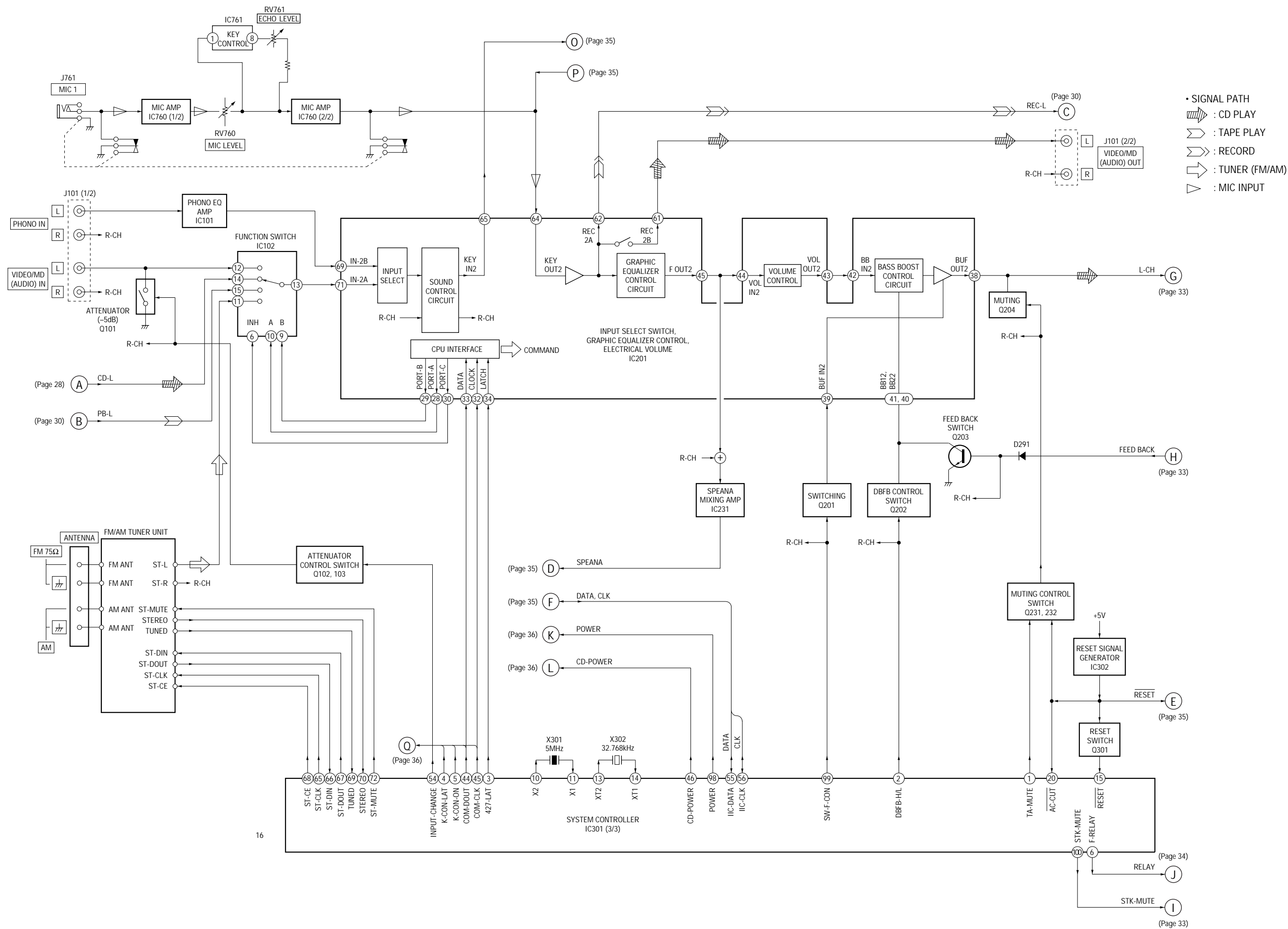
Pin No.	Pin Name	I/O	Function
37	KEY-5	I	Key input terminal (A/D input) (S641 to 647, 661 to 666) DECK A      , DOLBY NR, DIRECTION, DIRECT PLAY DISC 1/2/3/4/5, DJ MIX FLASH keys input
38	DOOR SW	I	CD door switch (S691 (  OPEN)) input terminal
39	SIRCS	I	Remote control signal input from the remote control receiver (IC602)
40	VOL-B	I	Rotary encoder pulse input from the S701 (VOLUME)
41	JOG-B	I	Jog dial pulse input from the S711 (   AMS   jog dial)
42	SPEANA-1	I	Spectrum analyzer drive (for low frequency) signal input terminal
43	SPEANA-2	I	Spectrum analyzer drive (for low and middle frequency) signal input terminal
44	SPEANA-3	I	Spectrum analyzer drive (for middle and high frequency) signal input terminal
45	SPEANA-4	I	Spectrum analyzer drive (for high frequency) signal input terminal
46	L+R	I	Spectrum analyzer drive (for VACS, non-stop signal) signal input terminal
47	LED18	O	LED drive signal output terminal (NON-STOP)
48	VASS	—	Ground terminal
49	VAREF	I	Reference voltage (+5V) input terminal (for A/D conversion)
50	VDD	—	Power supply terminal (+5V)
51 to 66	GR-1 to GR-16	O	Grid drive signal output to the fluorescent indicator tube (FL601)
67 to 100	SEG-1 to SEG-34	O	Segment drive signal output to the fluorescent indicator tube (FL601)



• SIGNAL PATH  
▨ : CD PLAY  
⋯ : DIGITAL OUT

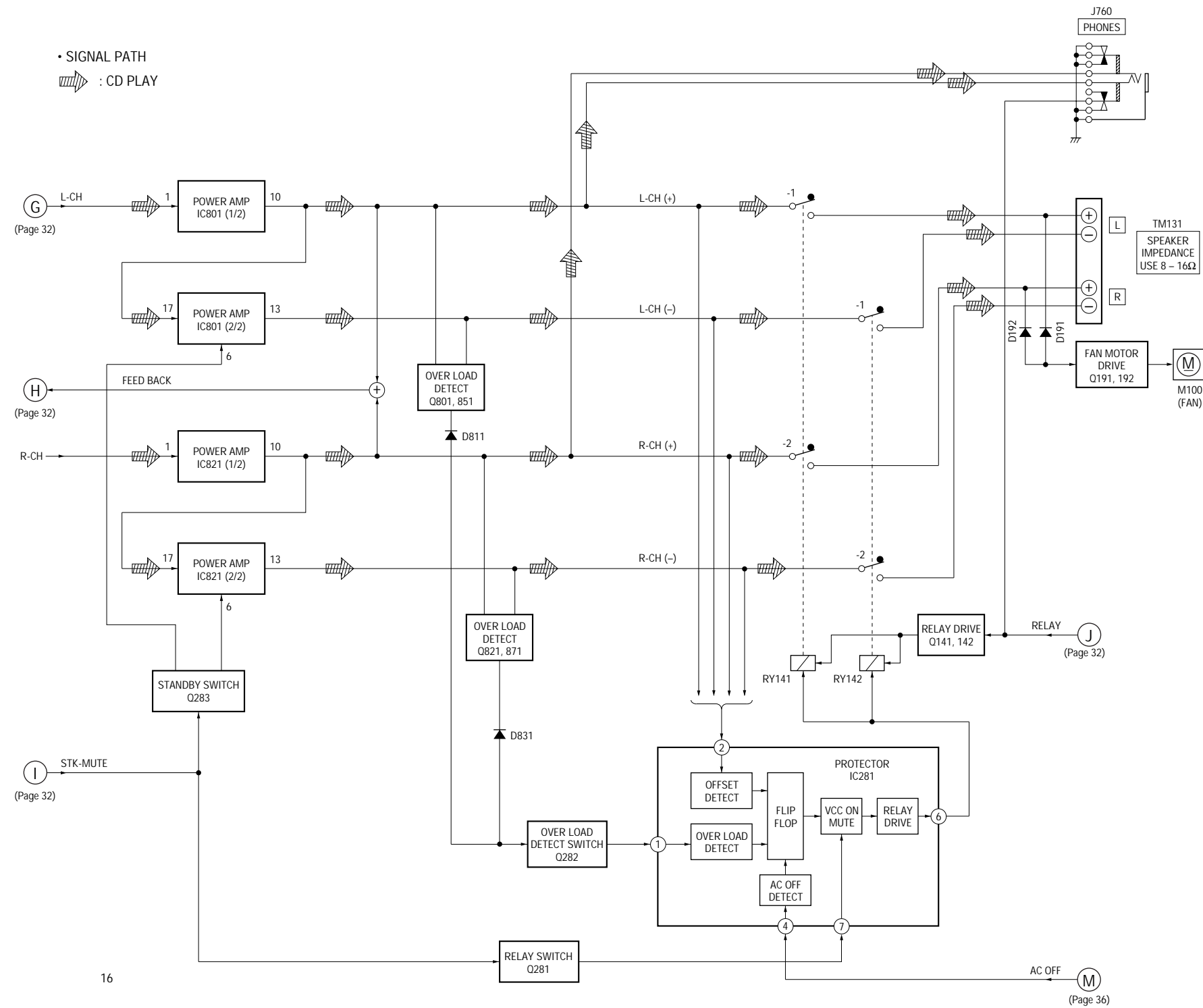
## 7-3. BLOCK DIAGRAM – TAPE DECK SECTION –

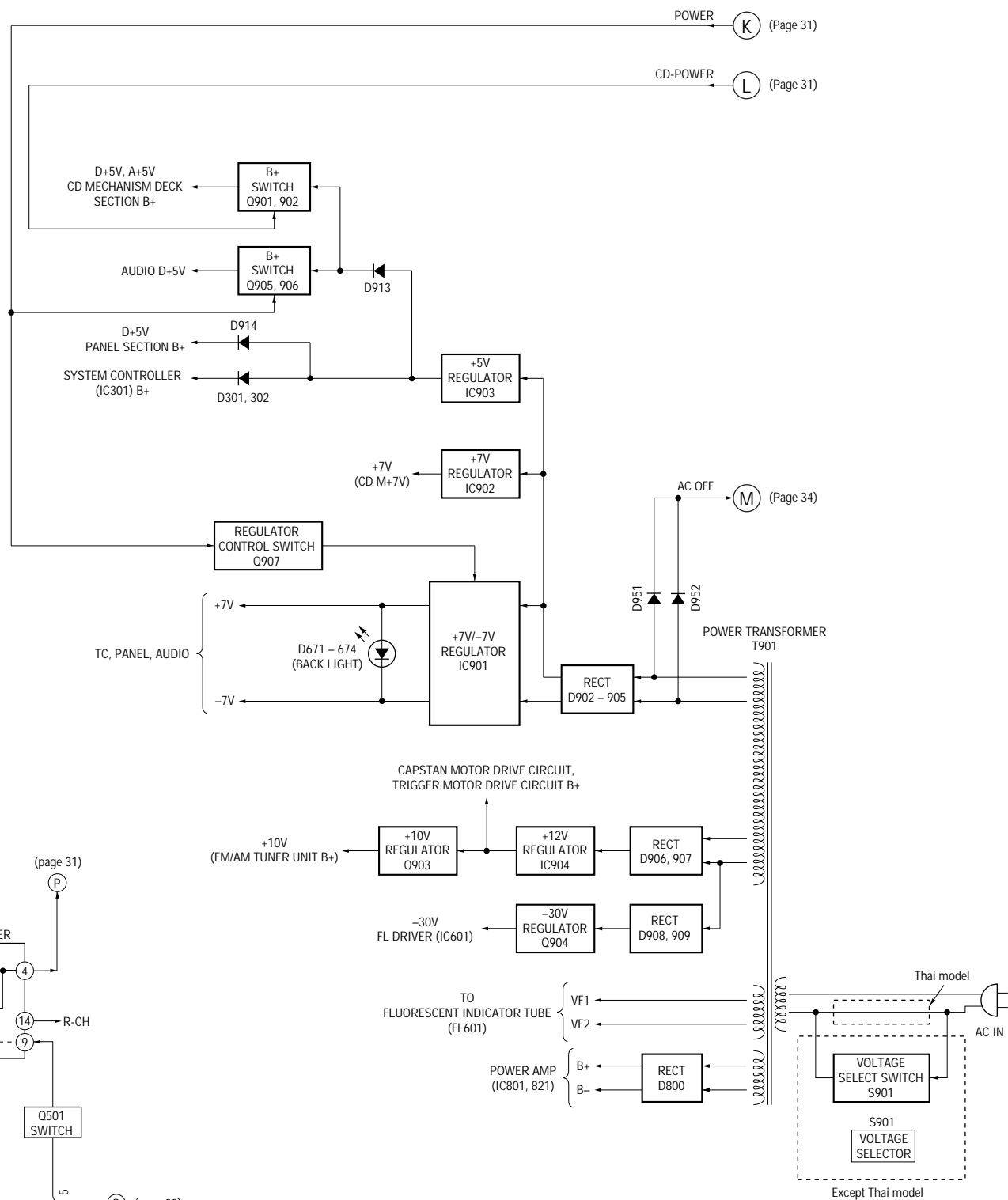




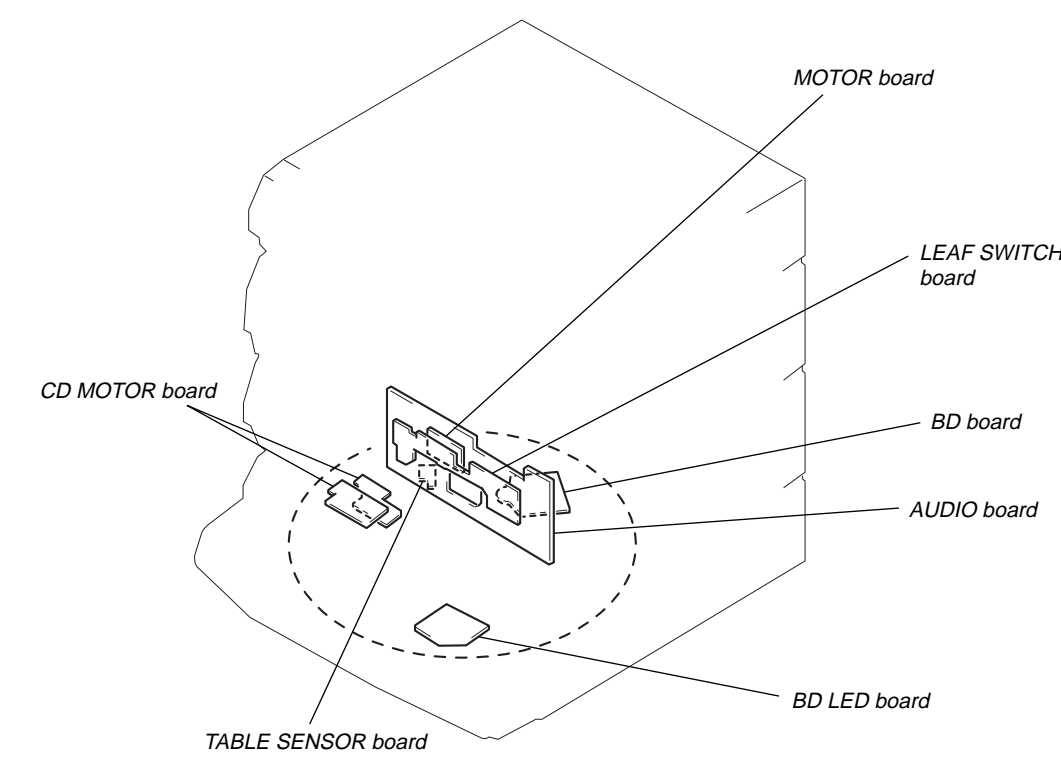
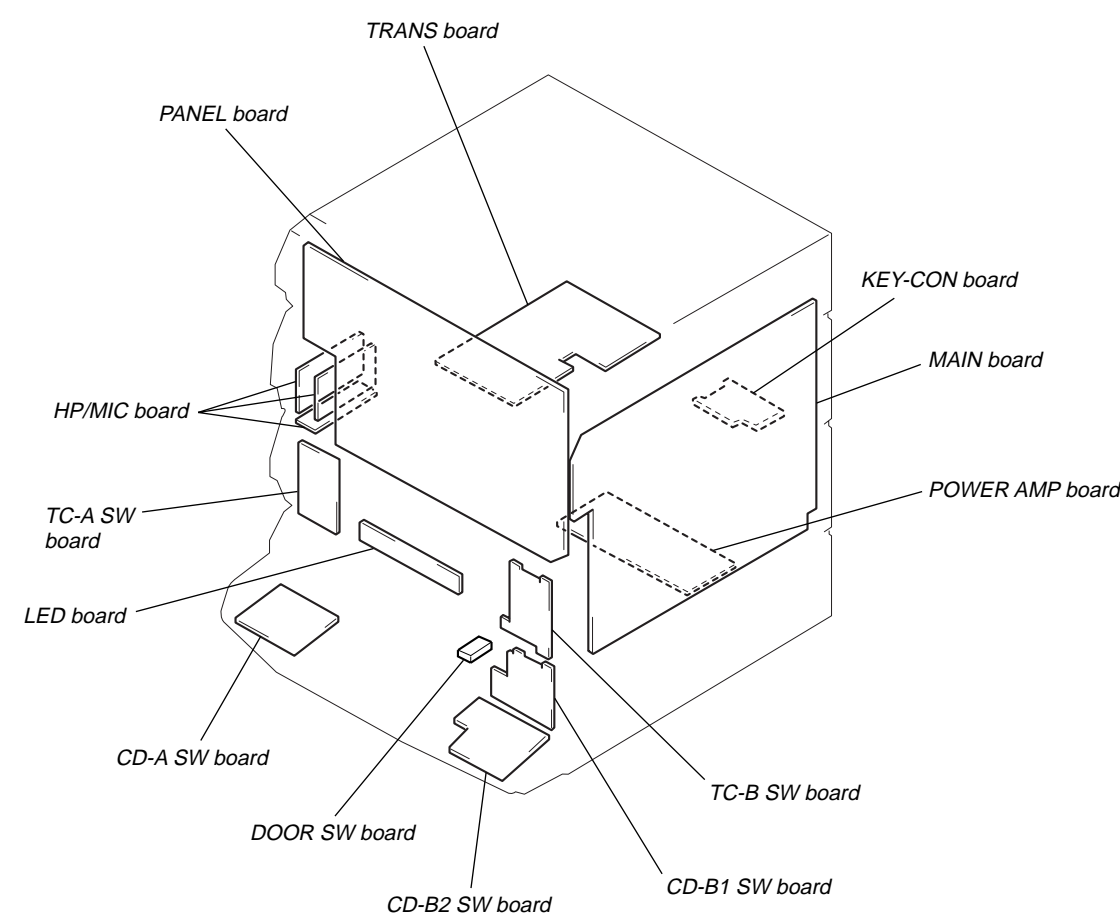


## 7-5. BLOCK DIAGRAM – MAIN SECTION (2/2) –


















7-7. 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.)

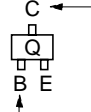
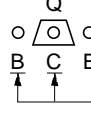
- Note on Schematic Diagram:**
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.
  - All resistors are in  $\Omega$  and  $\frac{1}{4} \text{ W}$  or less unless otherwise specified.
  - $\triangle$  : internal component.
  -  : nonflammable resistor.
  -  : fusible resistor.
  -  : panel designation.

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

-  : B+ Line.
-  : B- Line.
-  : adjustment for repair.
- Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  -  : TUNER (FM/AM)
  -  : PB (DECK A)
  -  : PB (DECK B)
  -  : REC (DECK B)
  -  : CD
  -  : digital out
  -  : MIC INPUT
- Abbreviation
  - IA : Indonesian
  - TH : Thai

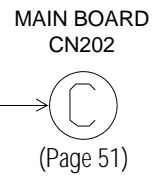
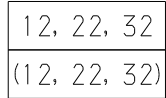
- Note on Printed Wiring Boards:**
-  : parts extracted from the component side.
  - $\triangle$  : internal component.
  -  : Pattern from the side which enables seeing. (The other layers' patterns are not indicated.)

**Caution:**  
Pattern face side: Parts on the pattern face side seen from the pattern face are indicated.  
Parts face side: Parts on the parts face side seen from the parts face are indicated.

- Indication of transistor.  
 — These are omitted.  
 — These are omitted.

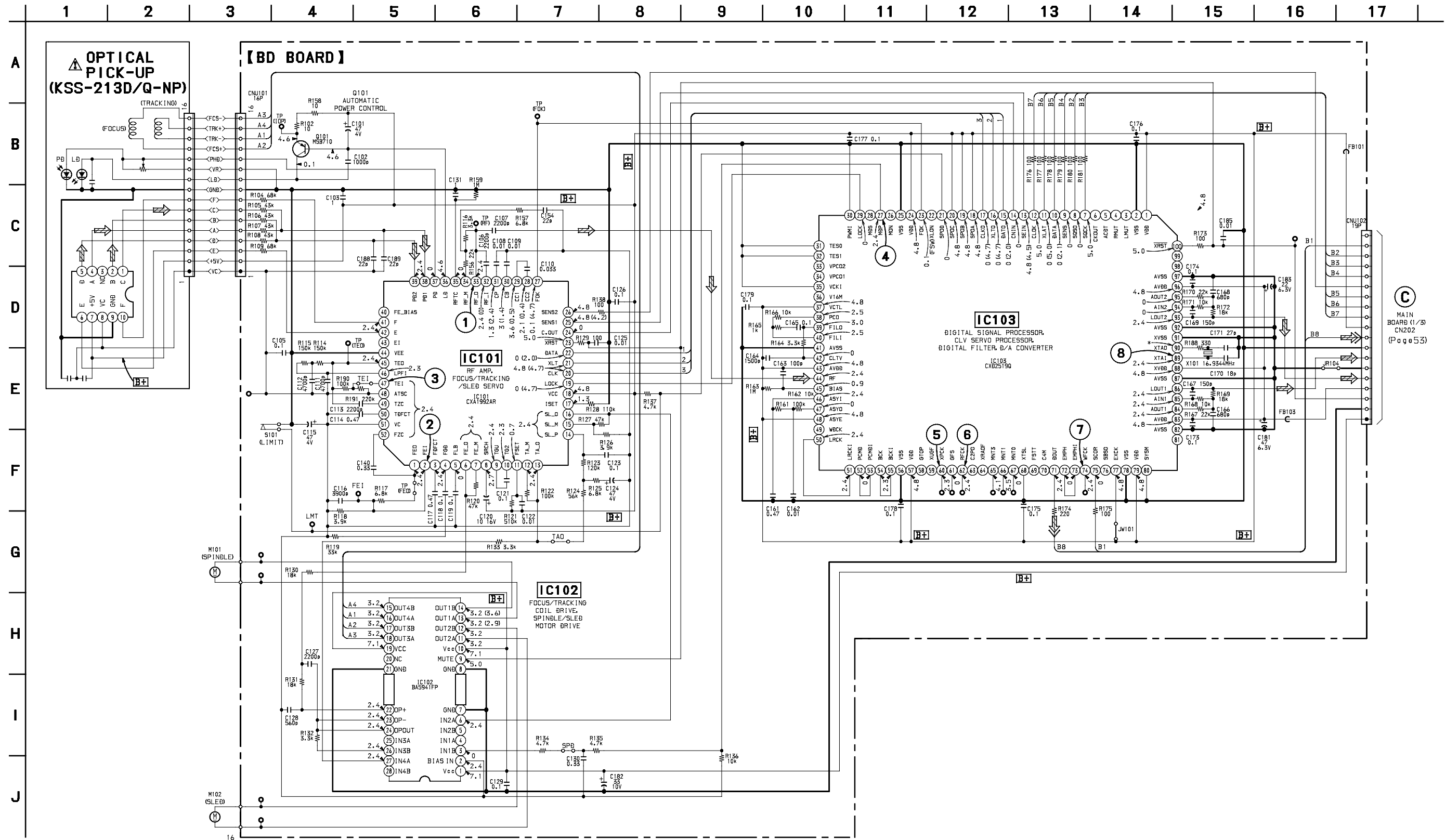
**7-8. PRINTED WIRING BOARD – CD SECTION (1/2) –**  
 • See page 37 for Circuit Boards Location. • See page 38 for Note.

Ref. No.	Location
IC101	C-5
IC201	B-5
IC501	C-6
Q101	C-3



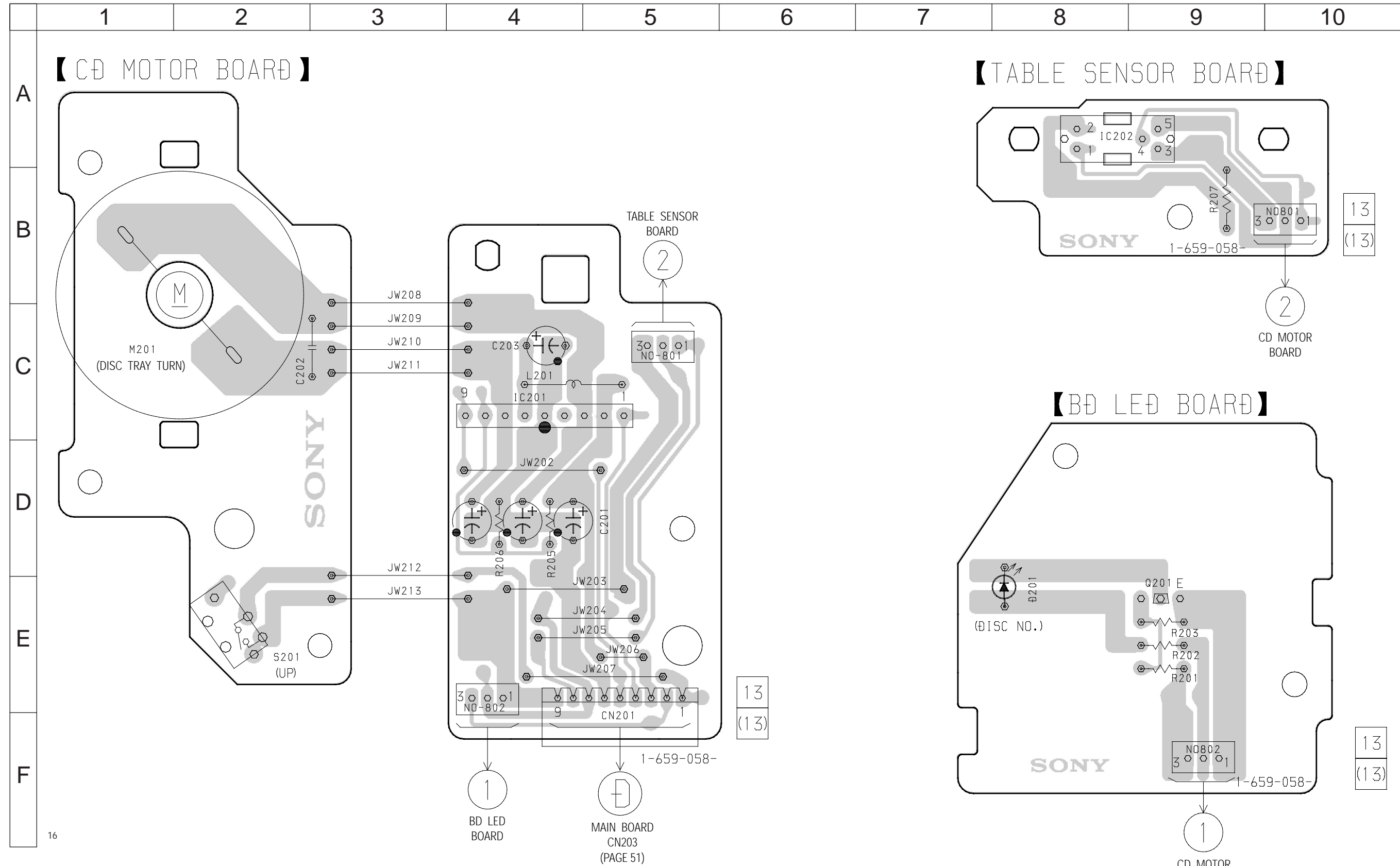
## 7-9. SCHEMATIC DIAGRAM – CD SECTION (1/2) –

• See page 38 for Note. • See page 77 for Waveforms. • See page 78 for IC Block Diagrams.

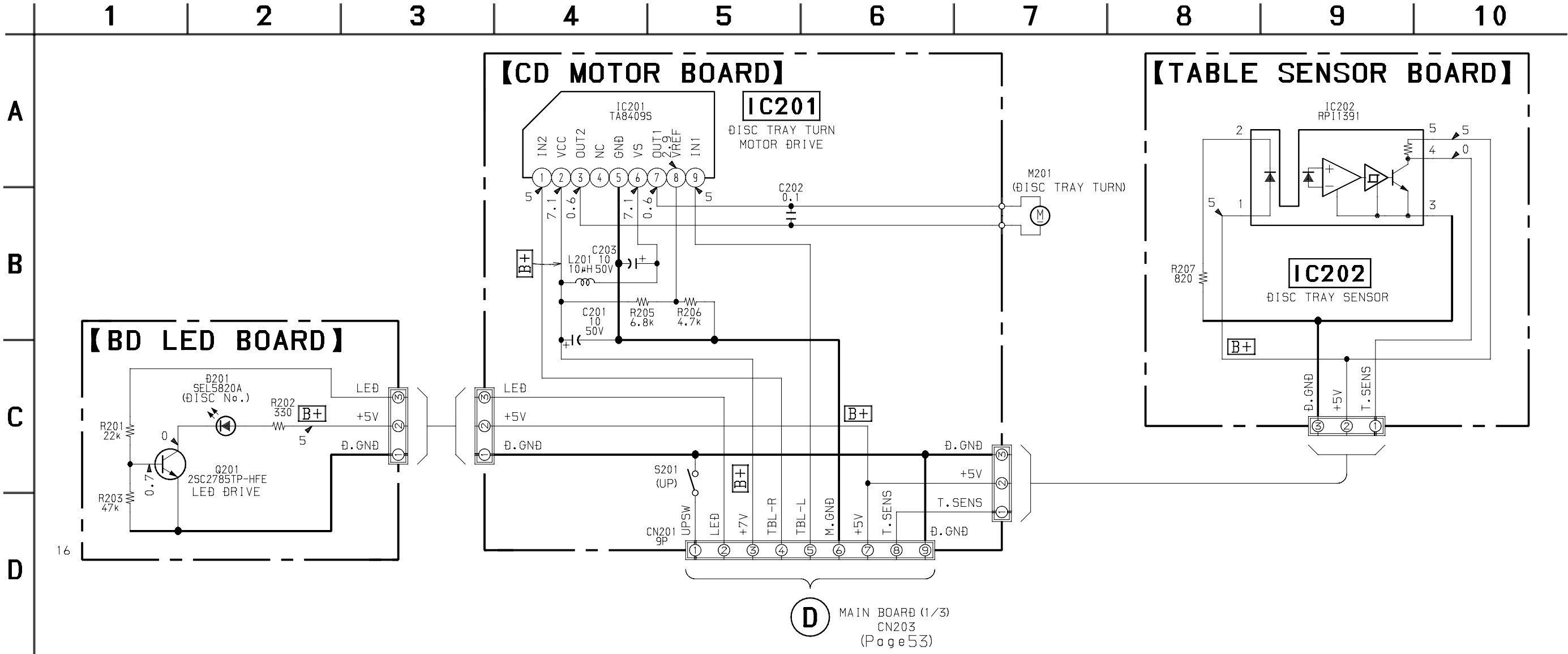


The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
- no mark : STOP
- ( ) : PLAY



7-11. SCHEMATIC DIAGRAM – CD SECTION (2/2) –  
• See page 38 for Note. • See page 80 for IC Block Diagrams.

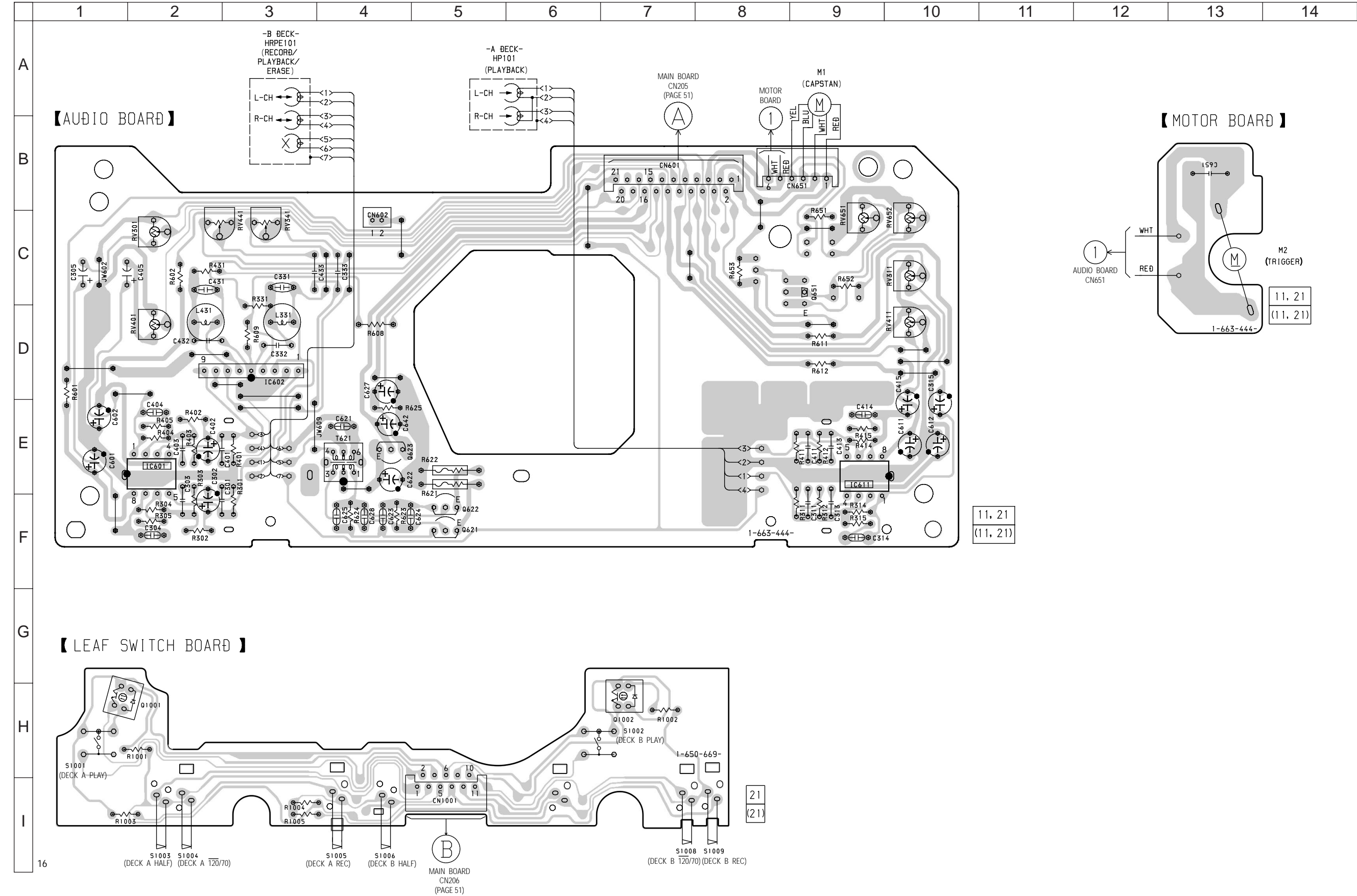


• Voltages and waveforms are dc with respect to ground under no-signal conditions.  
no mark : STOP



7-12. PRINTED WIRING BOARDS –TAPE DECK SECTION –

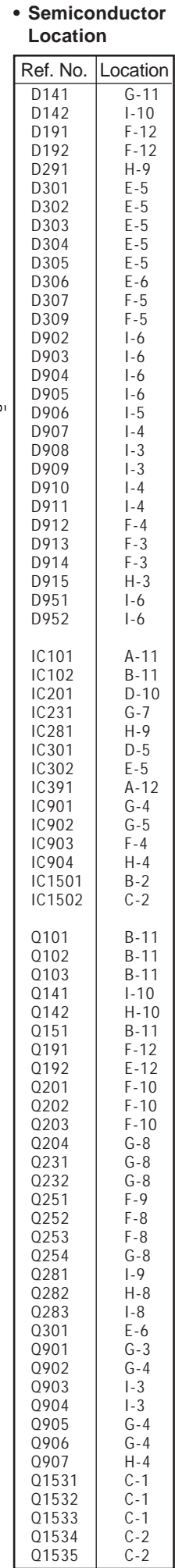
• See page 37 for Circuit Boards Location. • See page 38 for Note.





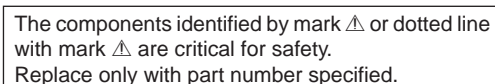


**7-14. PRINTED WIRING BOARD – MAIN SECTION –**  
 • See page 37 for Circuit Boards Location. • See page 38 for Note.







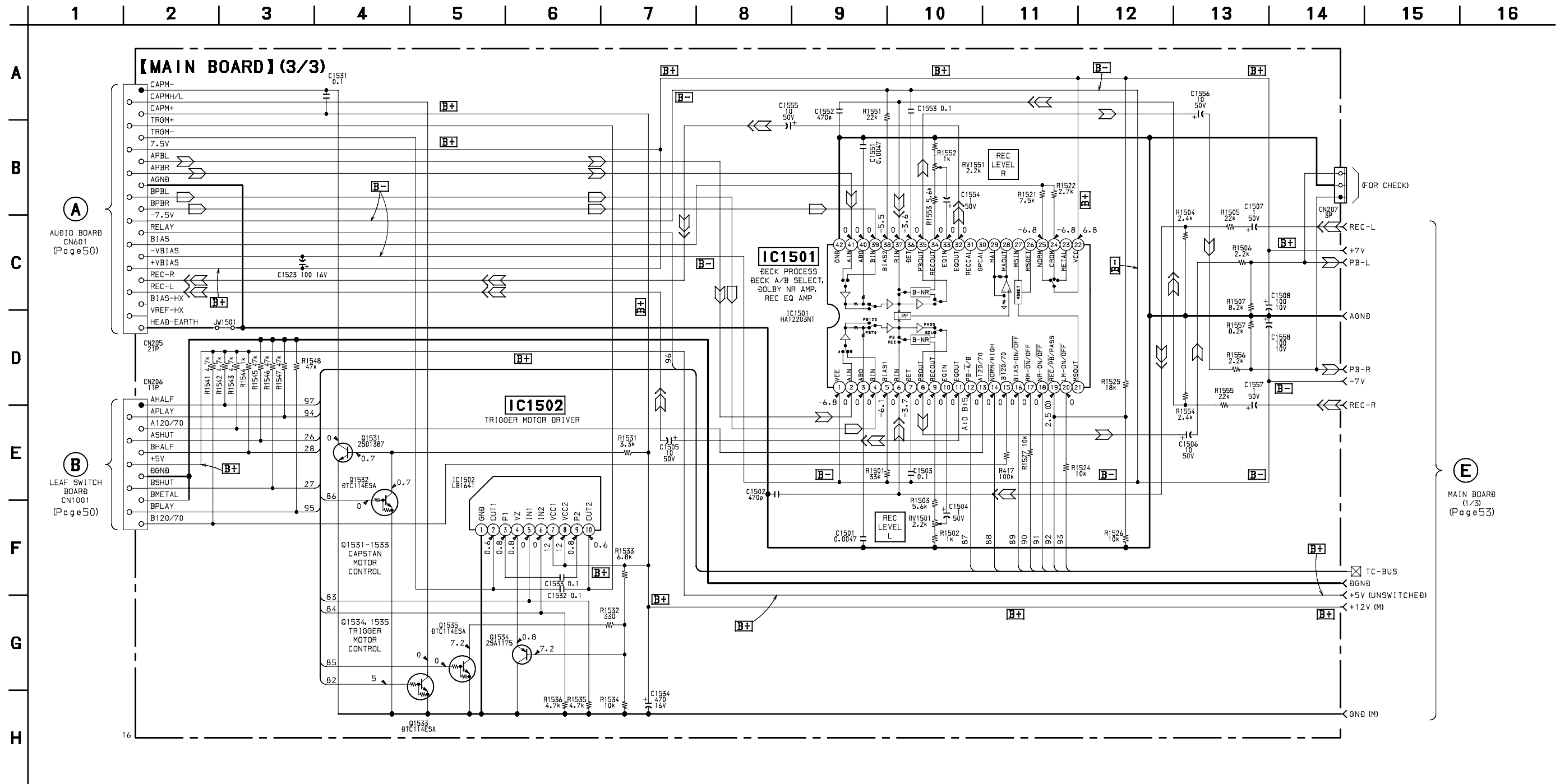


- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.

no mark : FM  
 [        ] : CD  
 (        ) : VIDEO/MD (AUDIO)  
 (        ) : PLAYBACK

**7-17. SCHEMATIC DIAGRAM – MAIN SECTION (3/3) –**

• See page 38 for Note. • See page 80 for IC Block Diagrams.



- Voltages and waveforms are dc with respect to ground under no-signal conditions.

no mark : PLAYBACK  
(        ) : RECORD

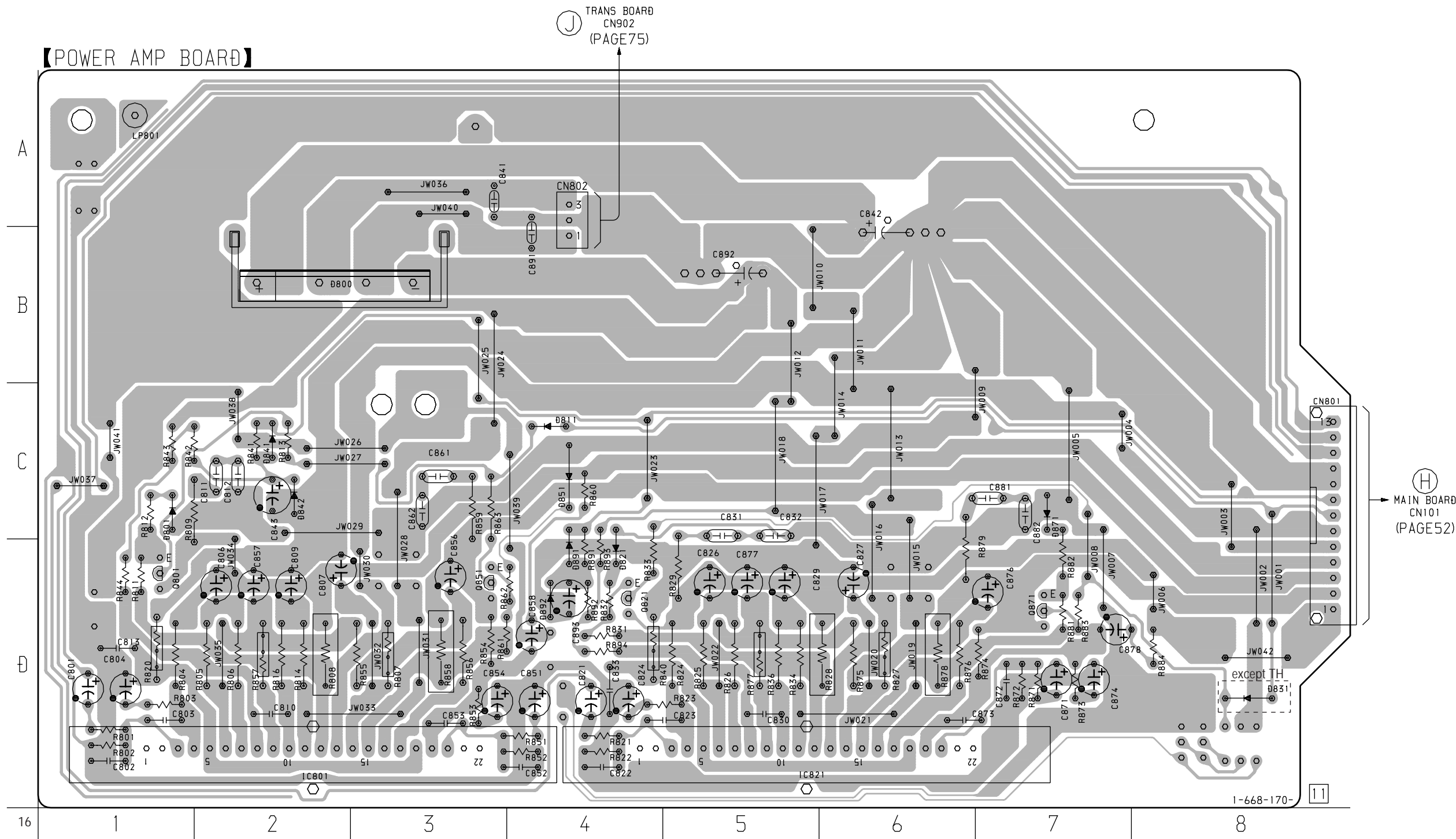
HCD-XB66K

7-18. PRINTED WIRING BOARD – POWER AMP SECTION –

• See page 37 for Circuit Boards Location. • See page 38 for Note.

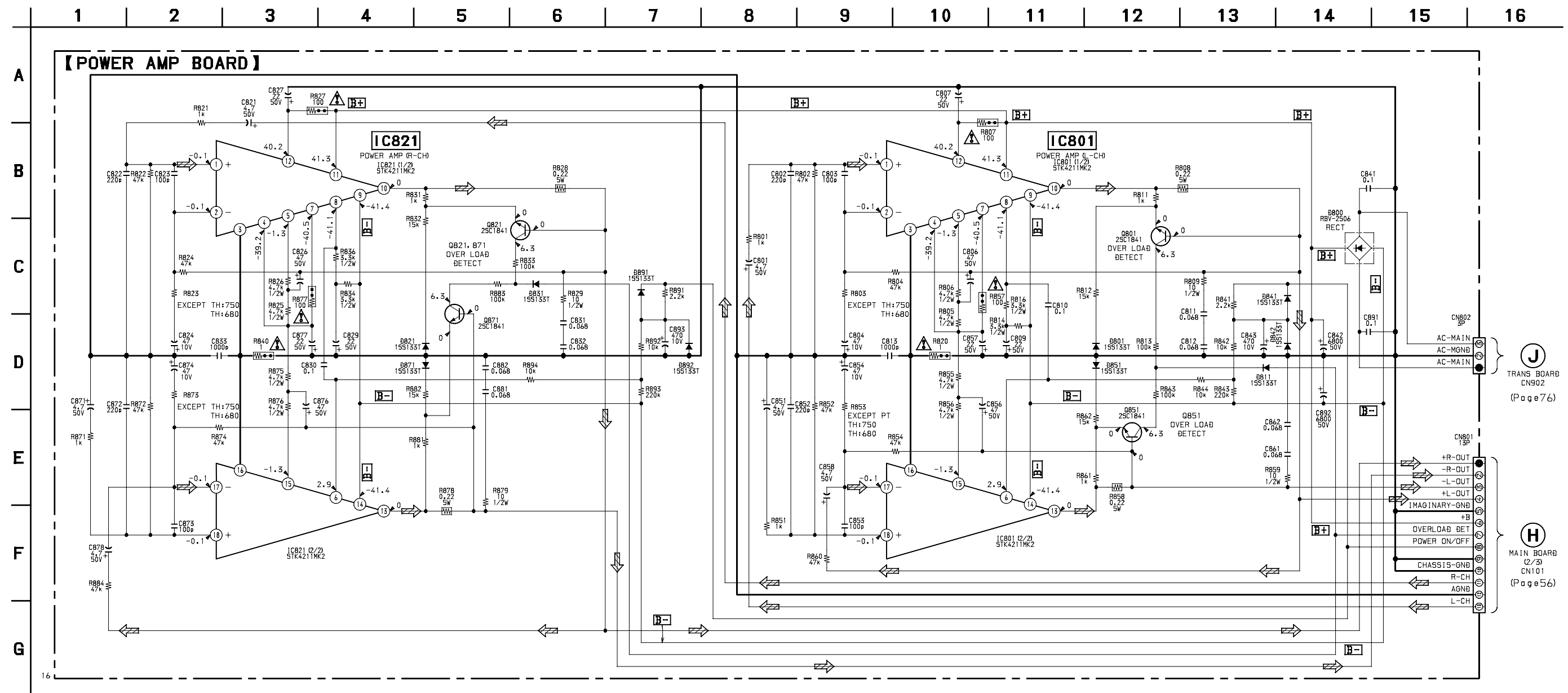
• Semiconductor Location

Ref. No.	Location
D800	B-2
D801	C-1
D811	C-4
D821	D-4
D831	D-8
D841	C-2
D842	C-2
D851	C-4
D871	C-7
D891	D-4
D892	D-4
IC801	D-2
IC821	D-5
Q801	D-1
Q821	D-4
Q851	D-3
Q871	D-7



## 7-19. SCHEMATIC DIAGRAM – POWER AMP SECTION –

• See page 38 for Note.



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

- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
no mark : FM



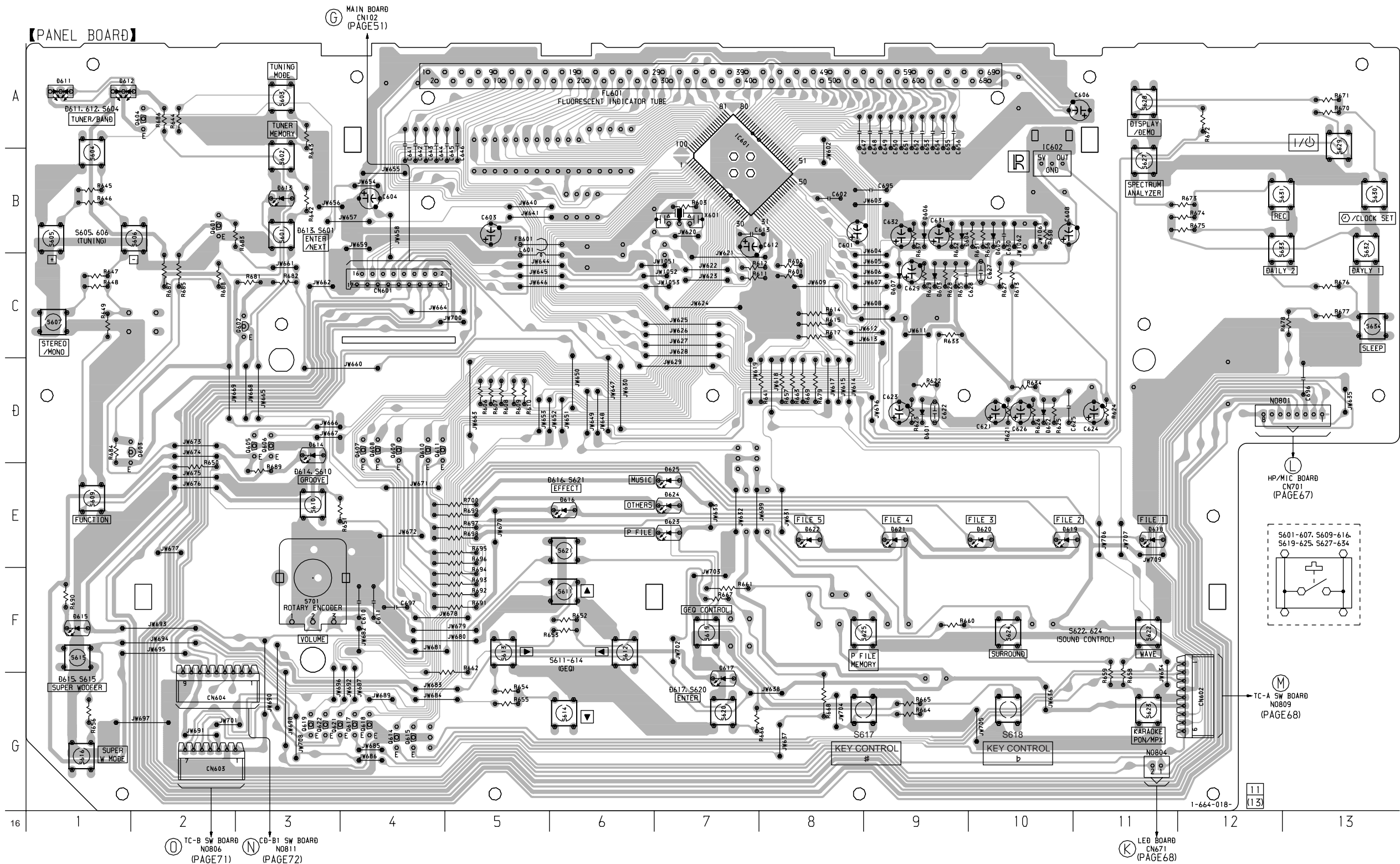
HCD-XB66K

7-20. PRINTED WIRING BOARD – PANEL SECTION (1/3) –

• See page 37 for Circuit Boards Location. • See page 38 for Note.

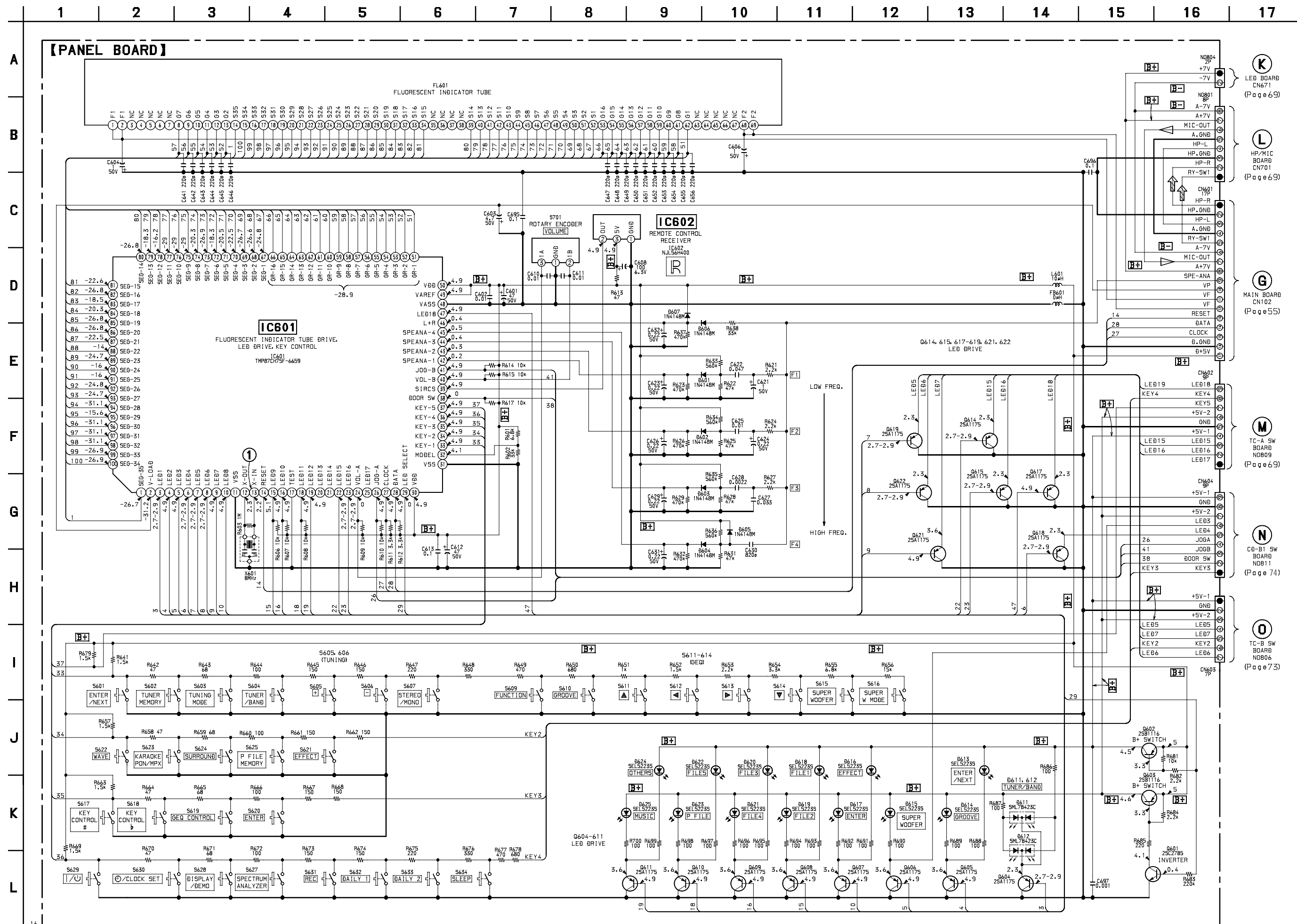
• Semiconductor Location

Ref. No.	Location
D601	D-9
D602	D-10
D603	C-9
D604	B-9
D605	B-10
D606	B-9
D607	C-9
D611	A-1
D612	A-1
D613	B-3
D614	D-3
D615	F-1
D616	E-6
D617	G-7
D618	E-11
D619	E-10
D620	E-10
D621	E-9
D622	E-8
D623	E-7
D624	E-7
D625	E-7
IC601	B-7
IC602	B-10
Q601	B-2
Q602	C-3
Q603	D-2
Q604	A-2
Q605	D-3
Q606	D-3
Q607	D-4
Q608	D-4
Q609	D-4
Q610	D-4
Q611	D-4
Q614	G-4
Q615	G-4
Q617	G-4
Q618	G-4
Q619	G-3
Q621	G-3
Q622	G-3

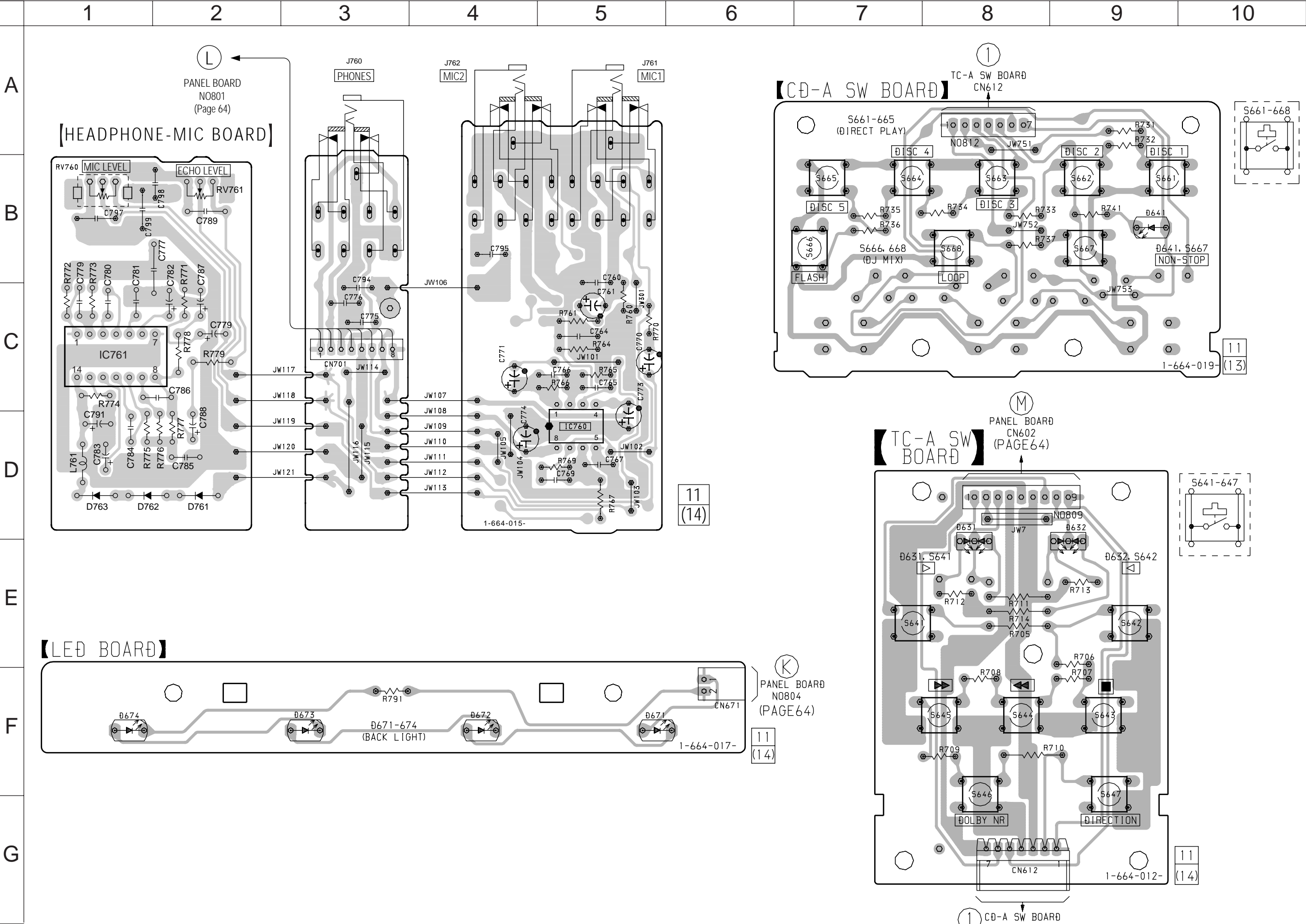




- See page 38 for Note.

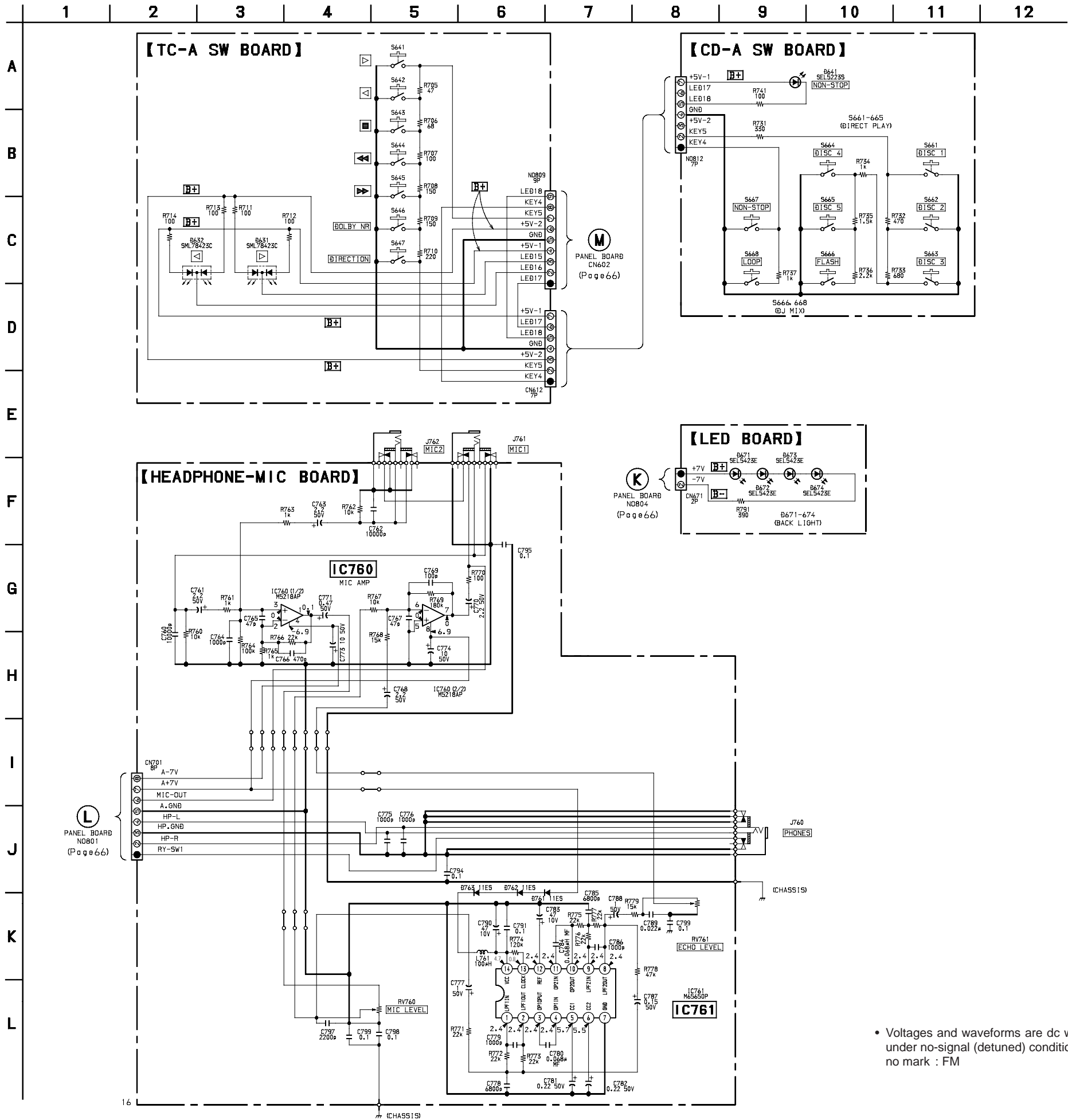


7-22. PRINTED WIRING BOARDS – PANEL SECTION (2/3) –  
• See page 37 for Circuit Boards Location. • See page 38 for Note.



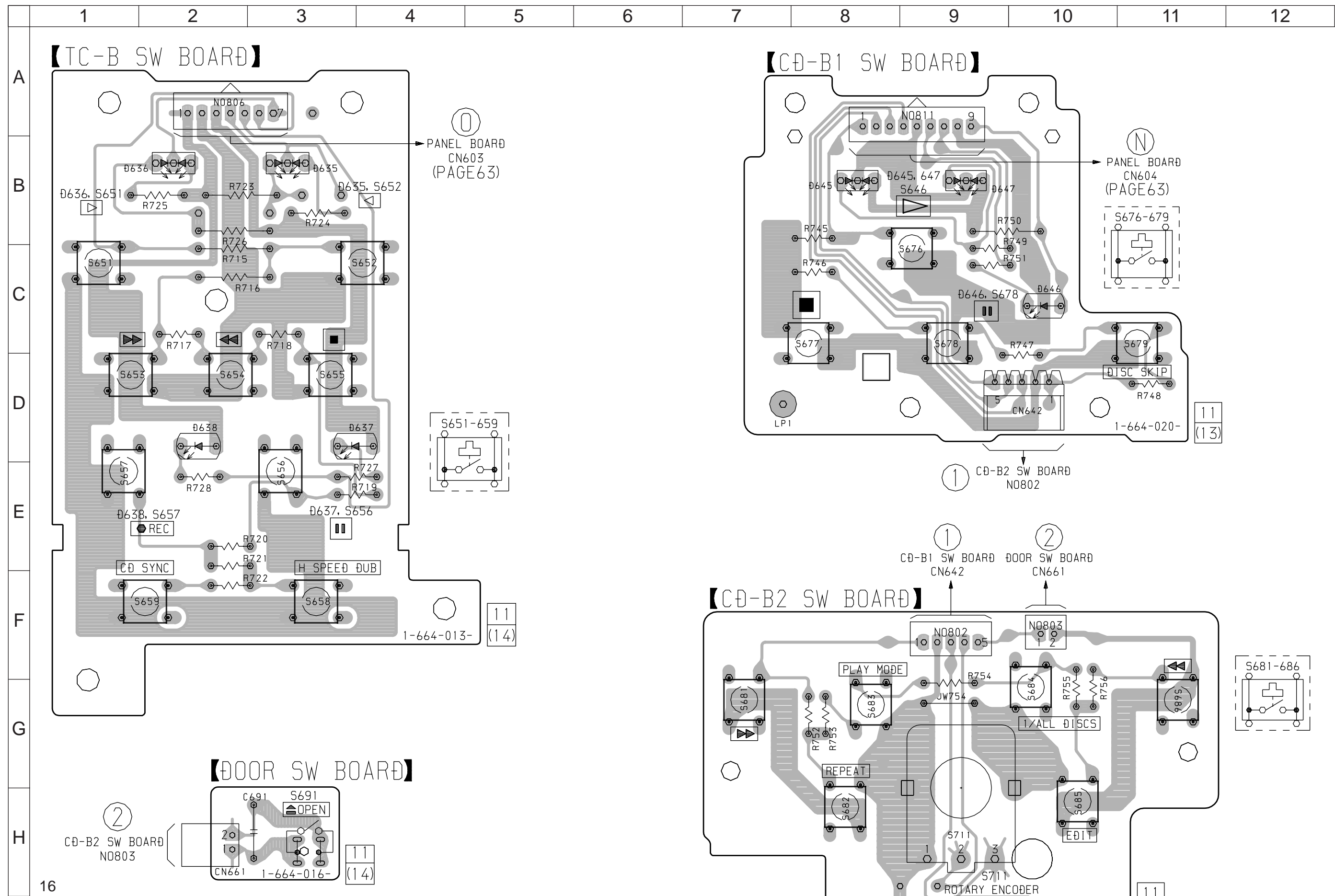
7-23. SCHEMATIC DIAGRAM – PANEL SECTION (2/3) –

• See page 38 for Note.



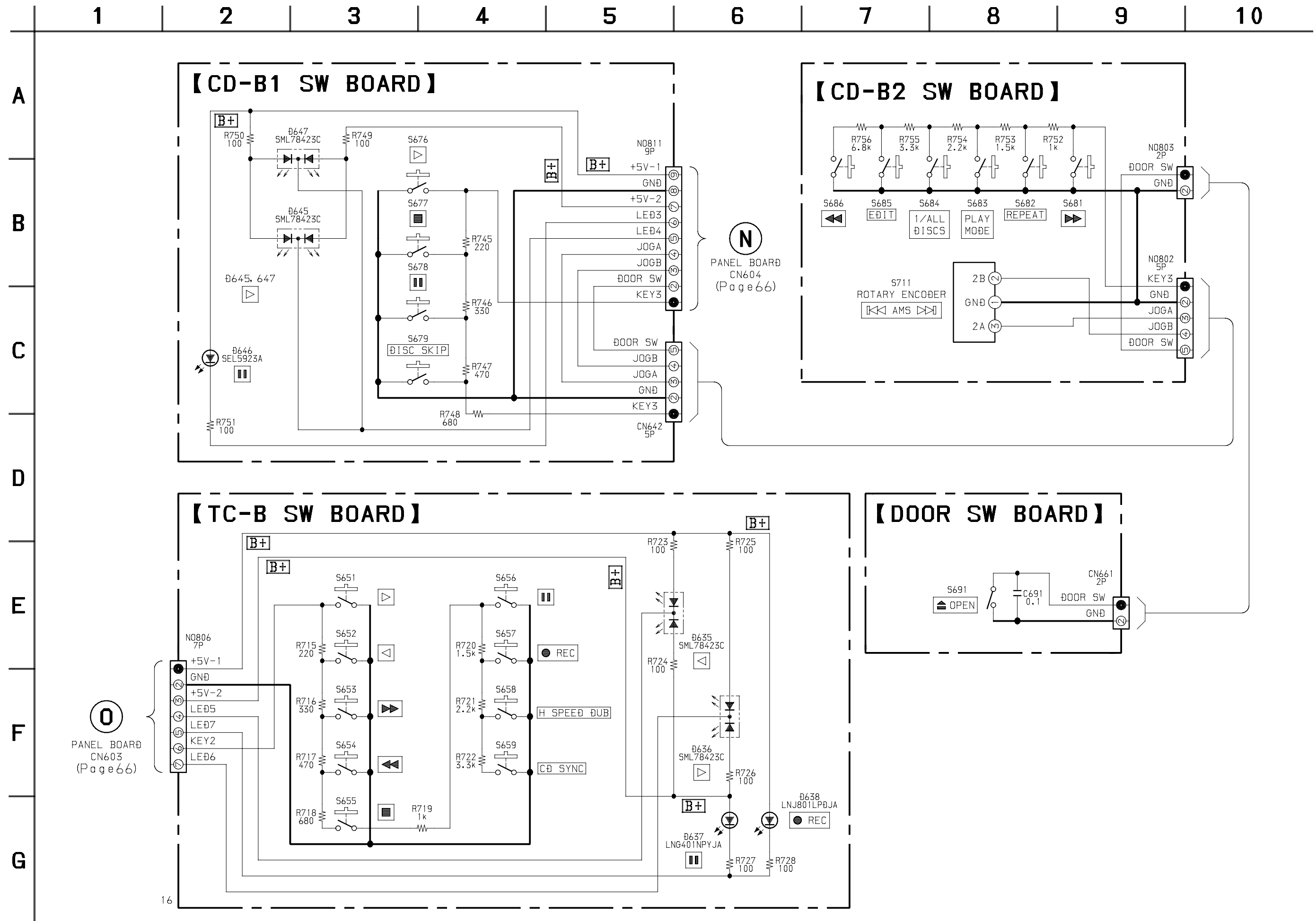
• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
no mark : FM

7-24. PRINTED WIRING BOARDS – PANEL SECTION (3/3) –  
• See page 37 for Circuit Boards Location. • See page 38 for Note.

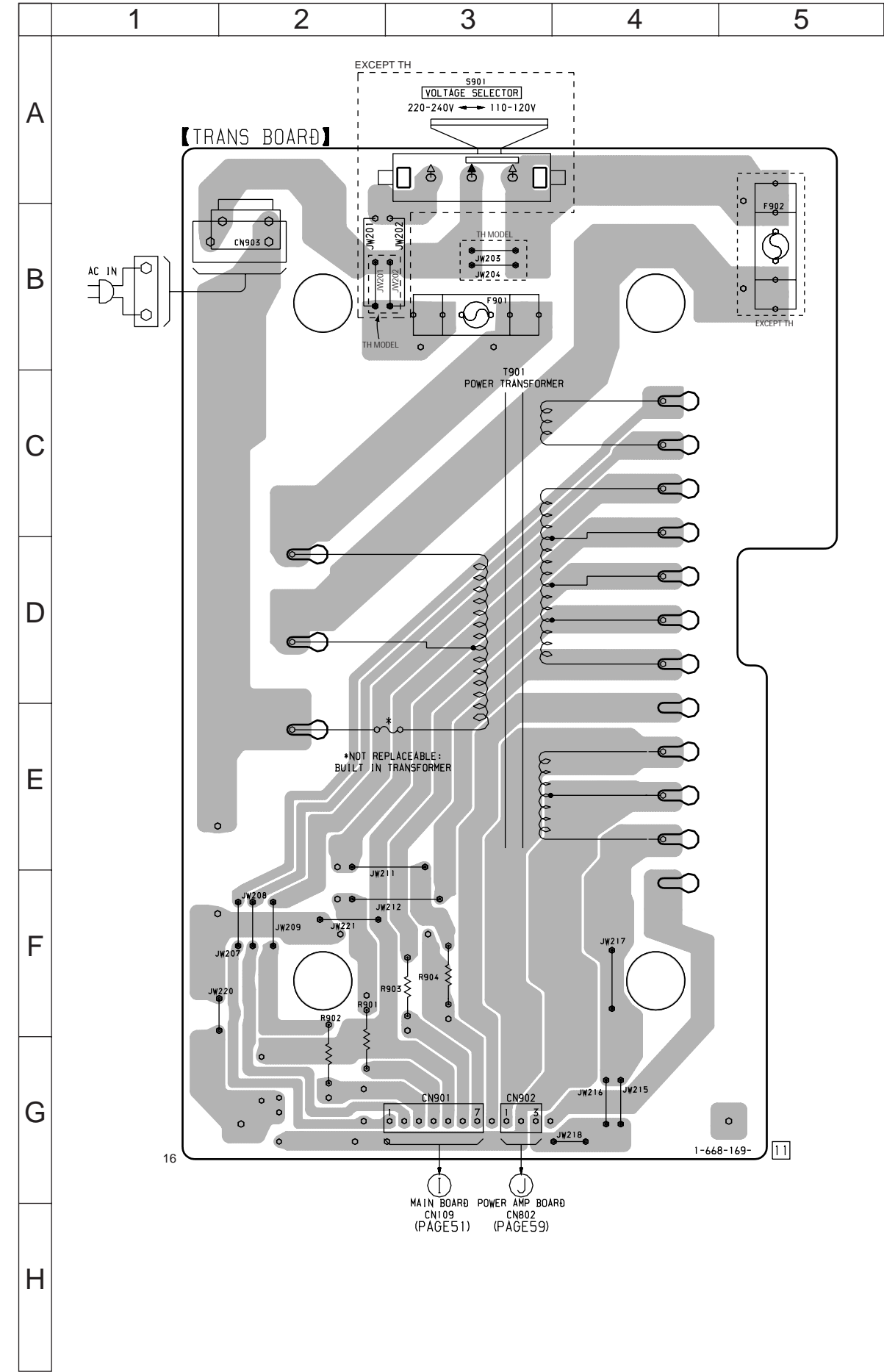


## 7-25. SCHEMATIC DIAGRAM – PANEL SECTION (3/3) –

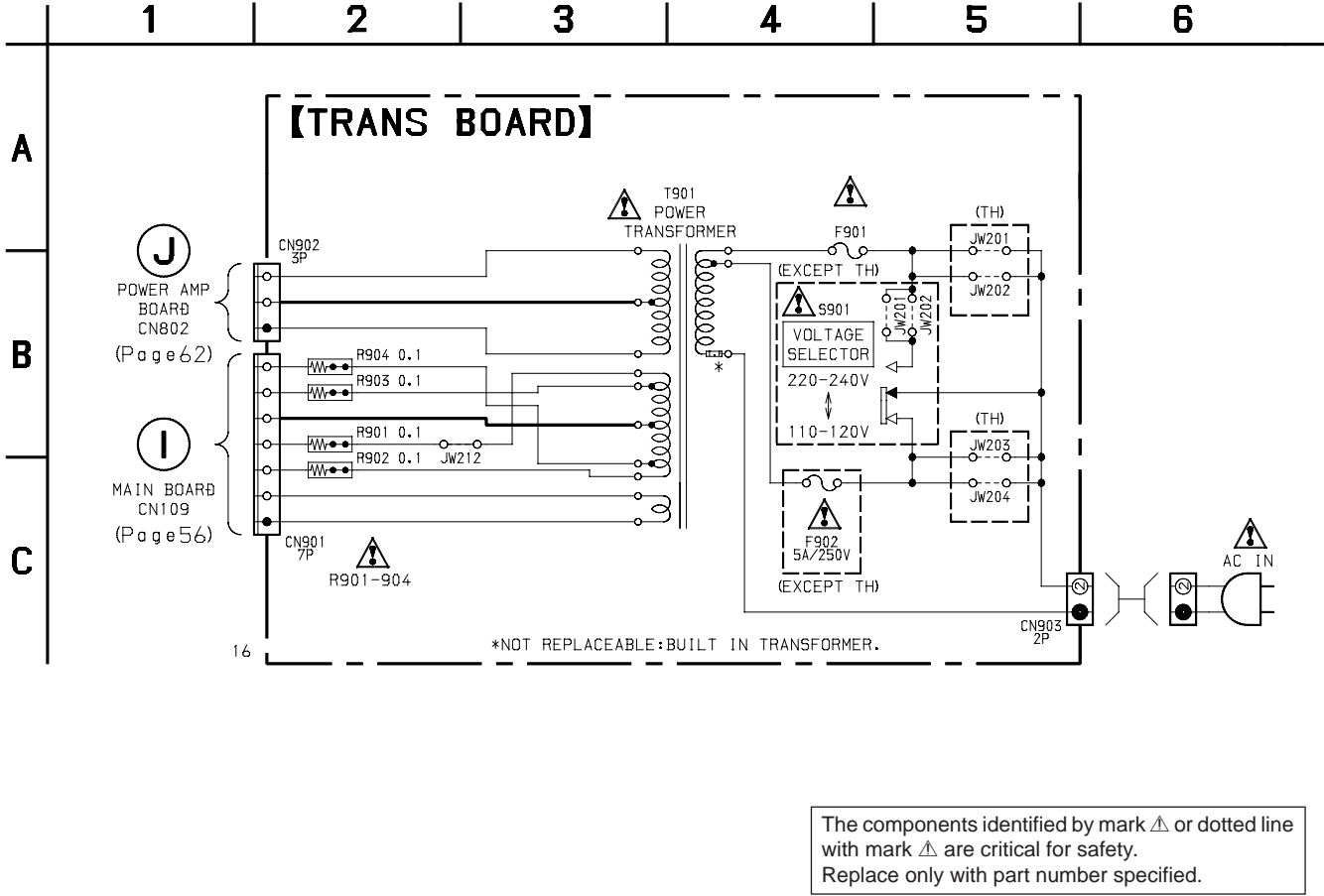
• See page 38 for Note.



7-26. PRINTED WIRING BOARD – POWER SUPPLY Section –  
• See page 37 for Circuit Boards Location. • See page 38 for Note.



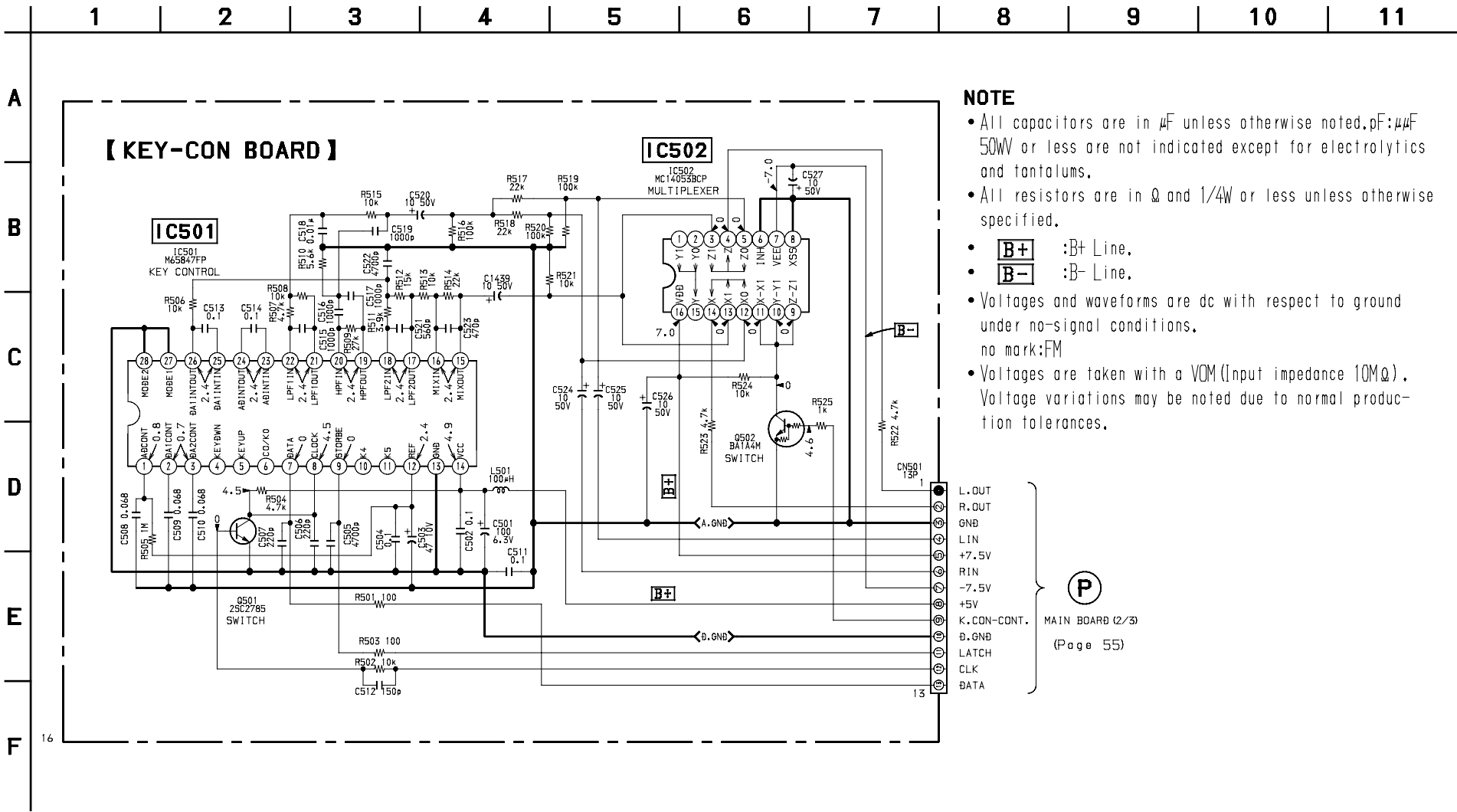
7-27. SCHEMATIC DIAGRAM – POWER SUPPLY SECTION –  
• See page 38 for Note.





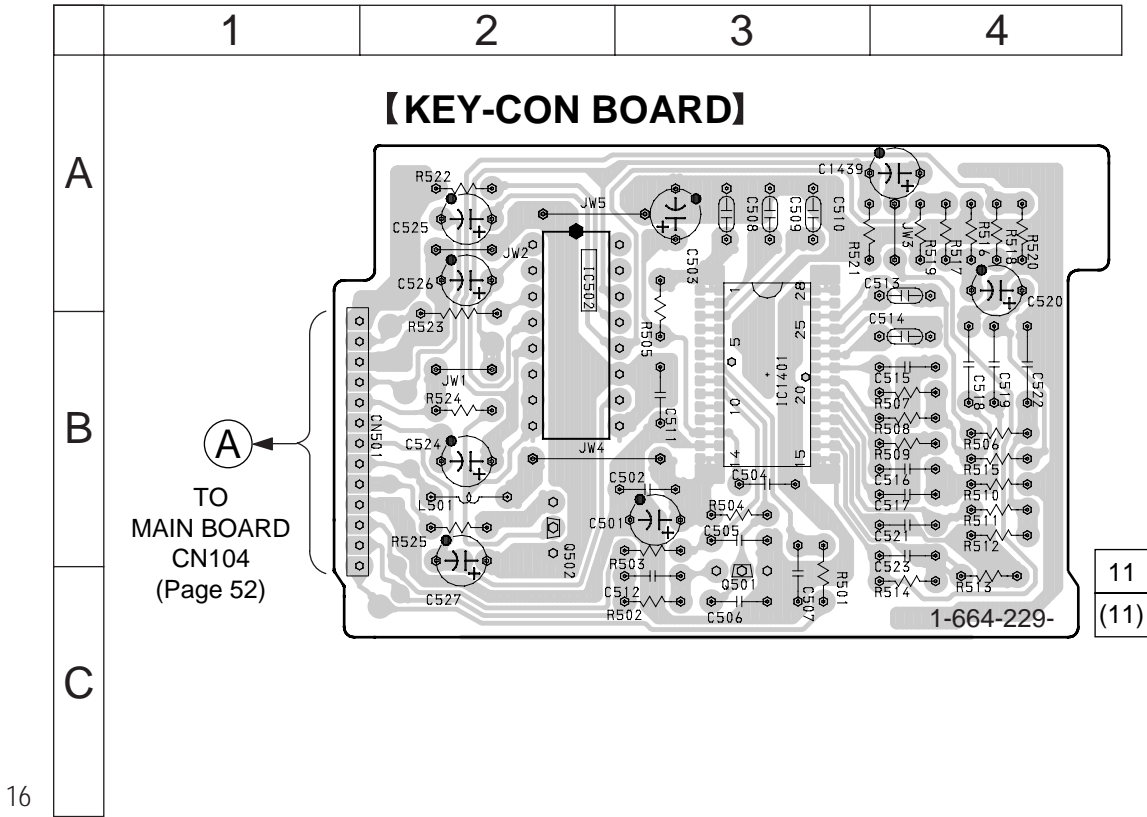
7-28. SCHEMATIC DIAGRAM – KEY CONTROL SECTION –

• See page 38 for Note.

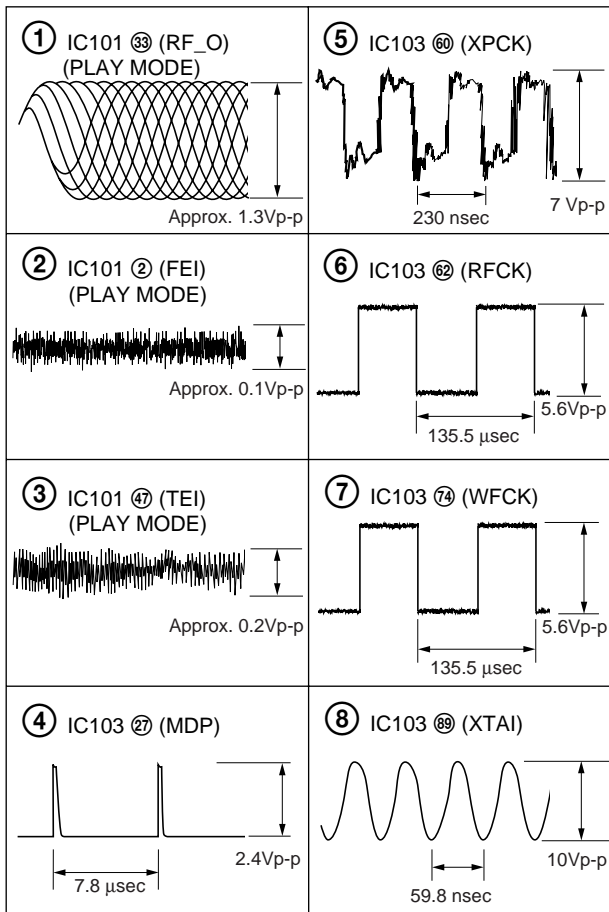


7-29. PRINTED WIRING BOARD – KEY CONTROL SECTION –

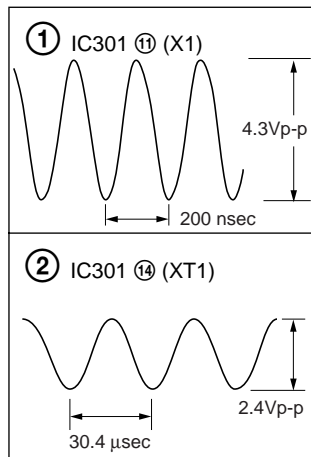
• See page 37 for Circuit Boards Location. • See page 38 for Note.



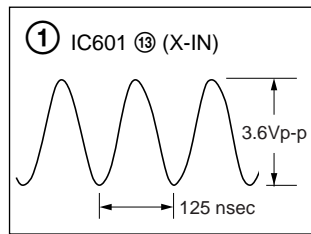
**7-30. WAVEFORMS**  
**– CD SECTION (1/2) –**



– MAIN SECTION (1/3) –



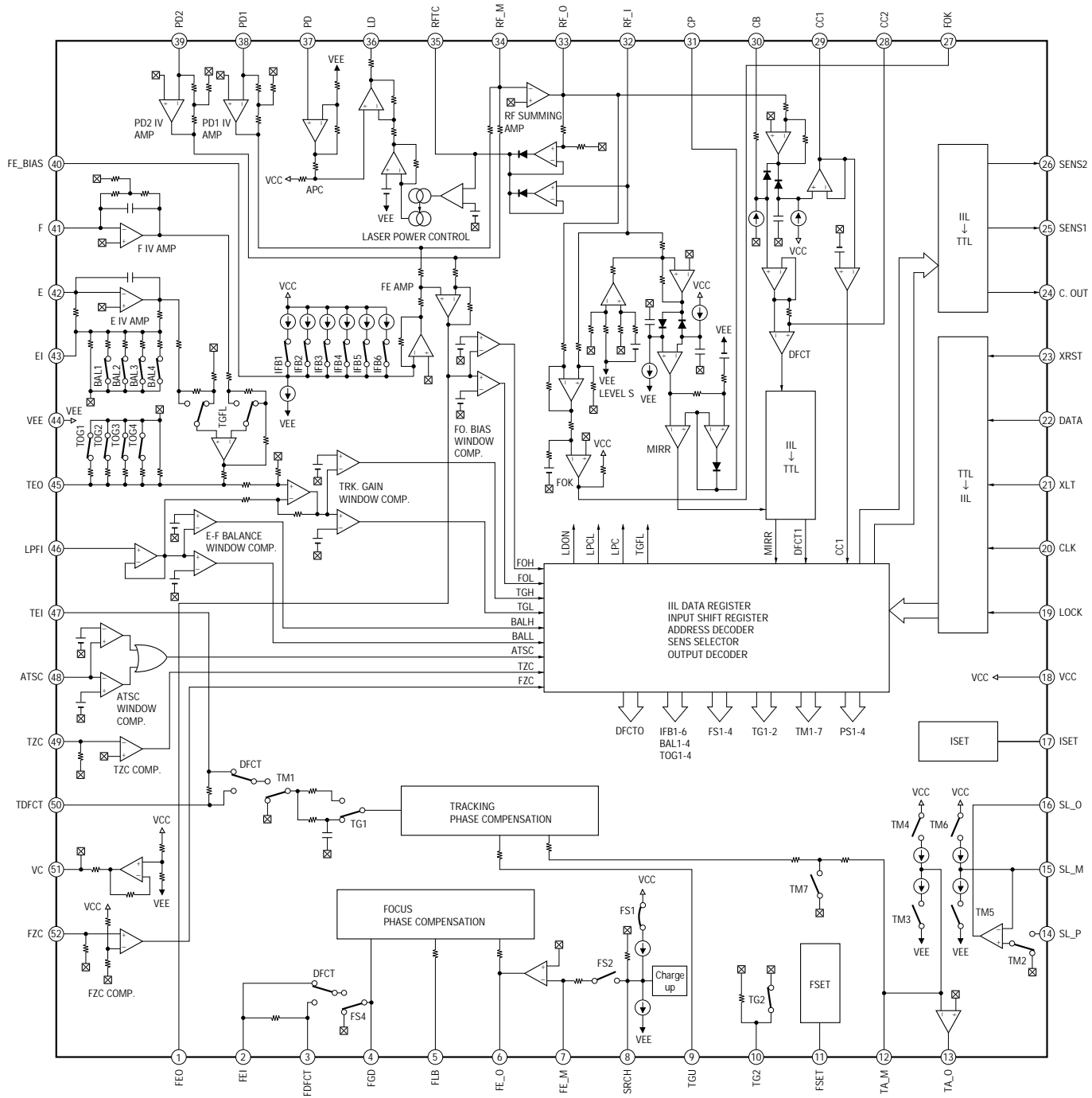
**– PANEL SECTION (1/3)**



## 7-31. IC BLOCK DIAGRAMS

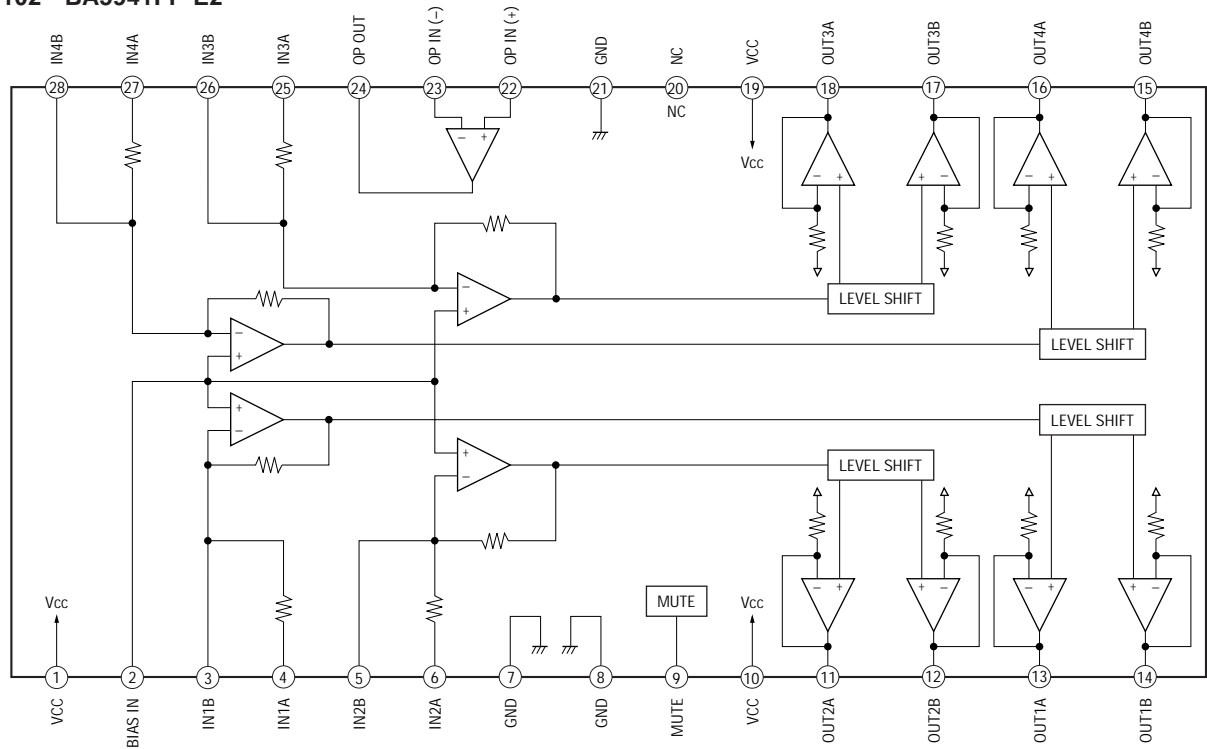
**– BD SECTION –**

IC101 CXA1992AR

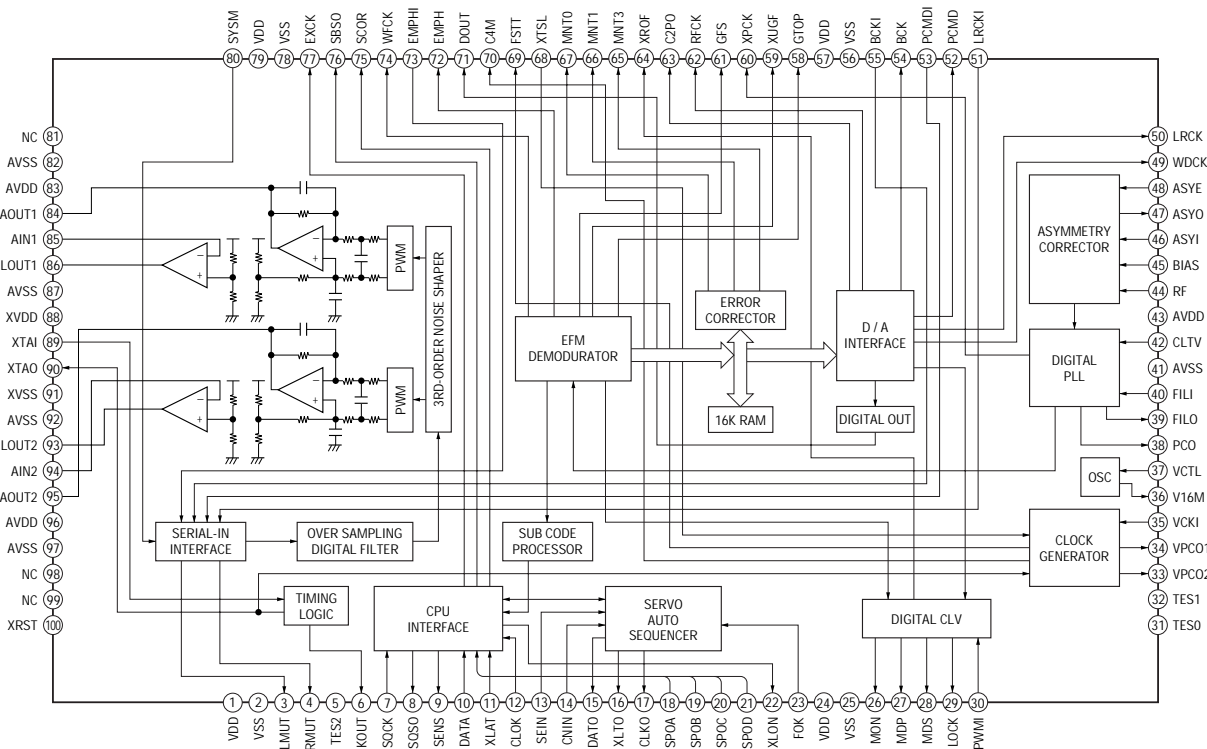




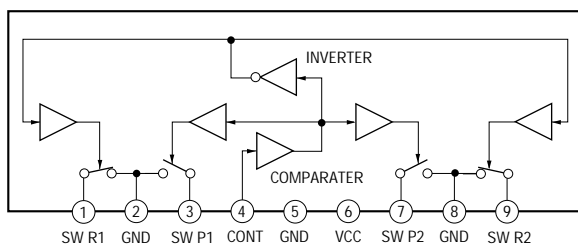
## IC102 BA5941FP-E2



## IC103 CXD2591Q

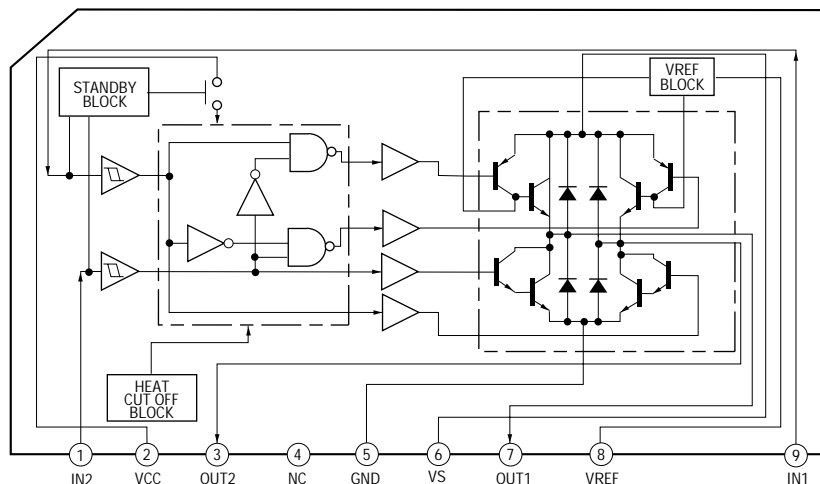


## – AUDIO SECTION – IC602 μPC1330HA



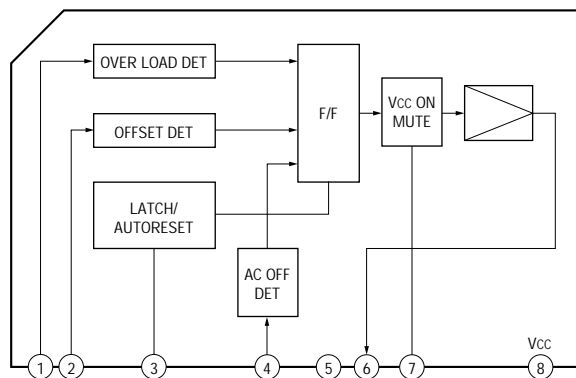
## – CD MOTOR SECTION –

IC201 TA8409S

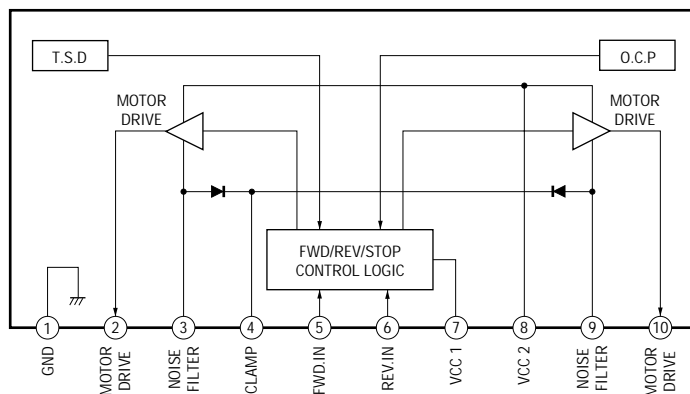


## – MAIN SECTION –

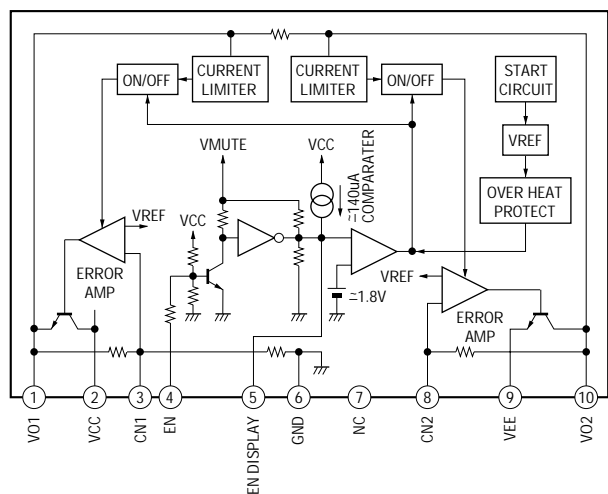
IC281  $\mu$ PC1237HA



IC1502 LB1641

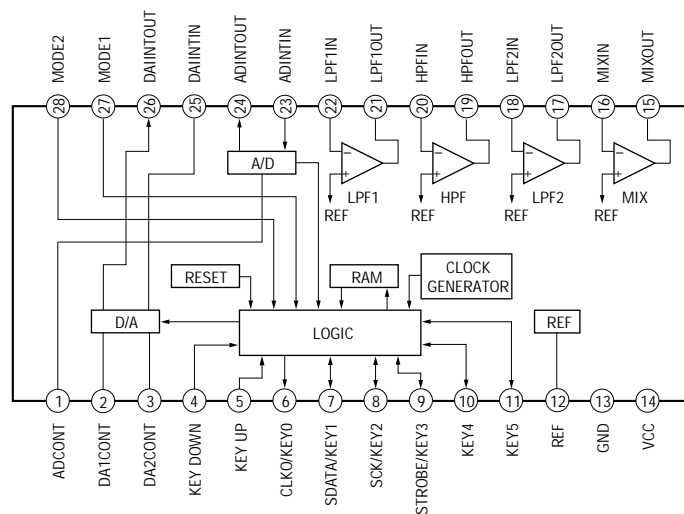


IC901 LA5617



## – KEY-CON SECTION –

IC501 M65847FP-TP





## SECTION 8 EXPLODED VIEWS

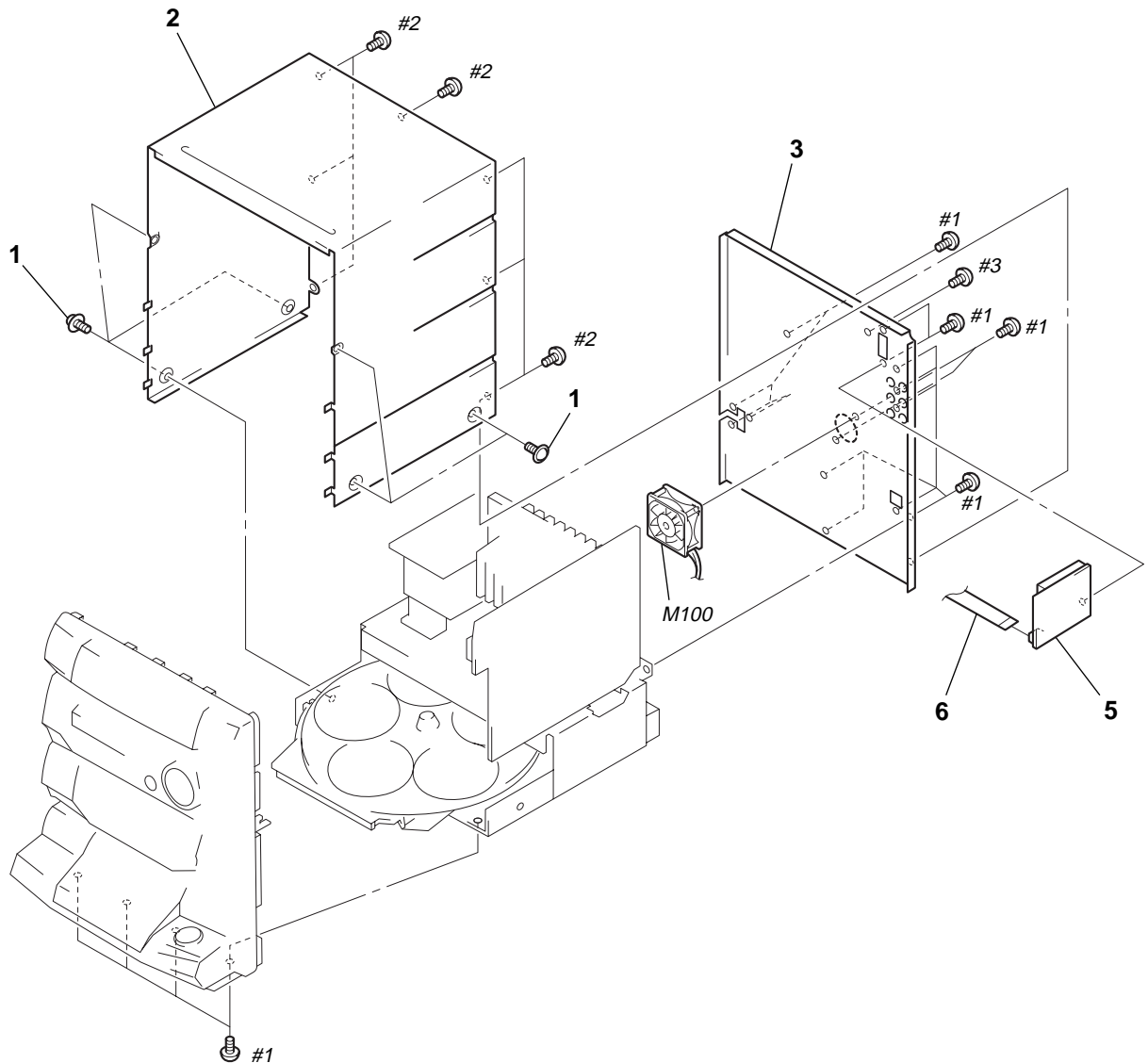
NOTE:

- -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.
- Abbreviation  
IA : Indonesian  
TH : Thai

- 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.

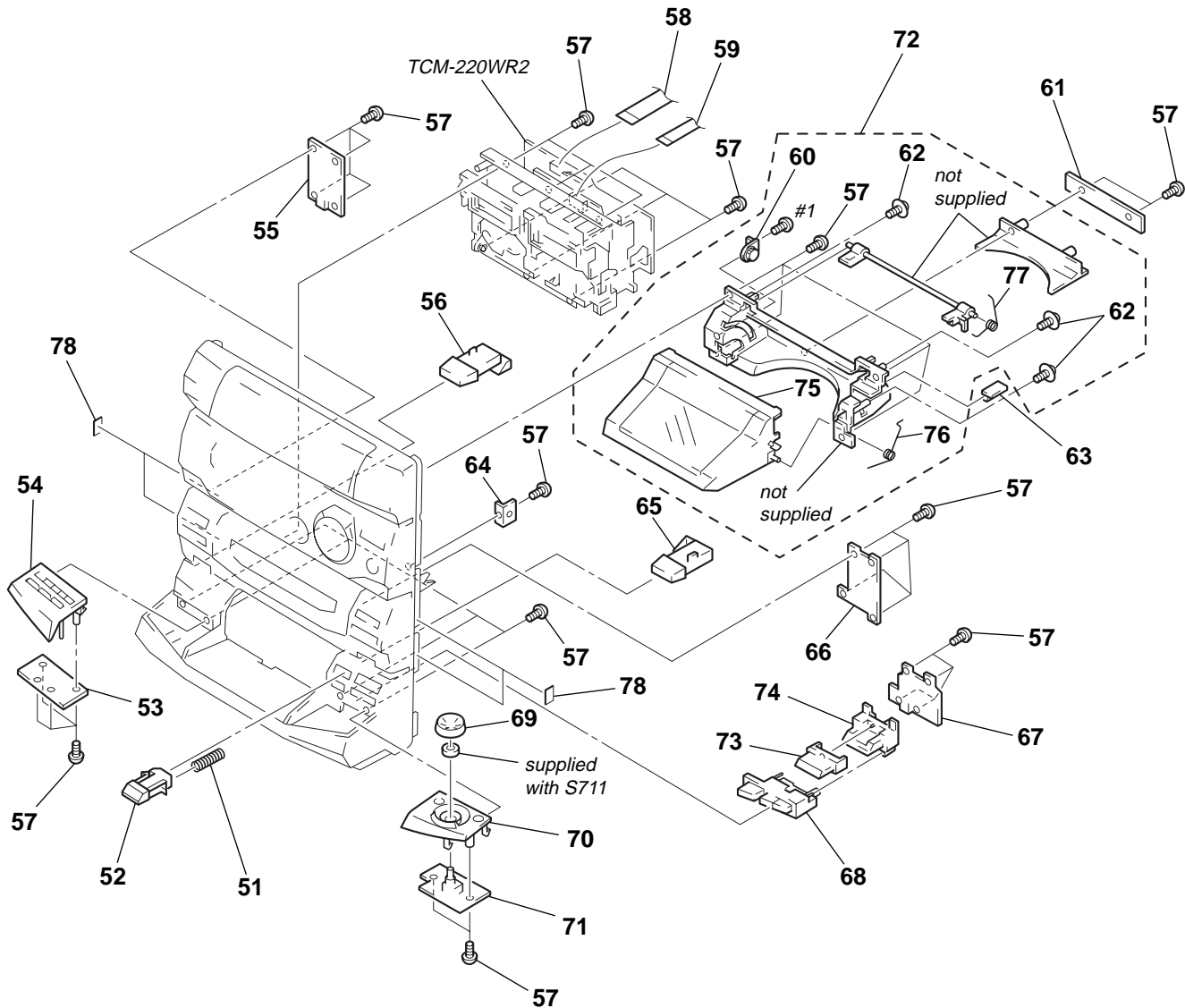
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

### 8-1. CASE, REAR PANEL SECTION



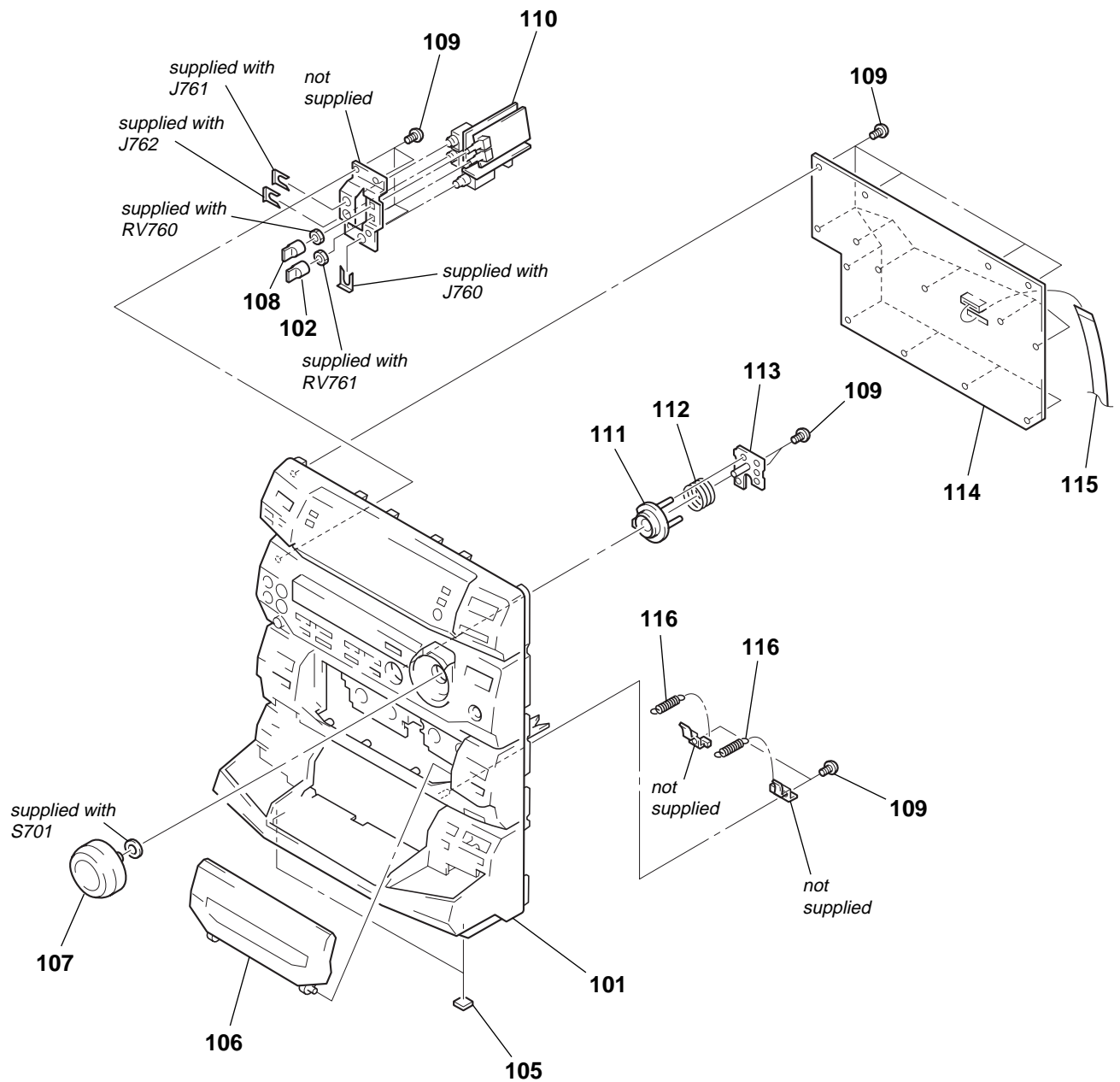
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>
1	3-363-099-01	SCREW (CASE 3 TP2)		* 3	4-996-413-91	PANEL, BACK (TH)	
* 2	4-987-052-91	CASE		5	1-233-545-11	ENCAPSULATED COMPONENT	
* 3	4-996-413-11	PANEL, BACK (SP, MY)				(FM/AM TUNER UNIT)	
* 3	4-996-413-61	PANEL, BACK (E, IA)		6	1-769-974-11	WIRE (FLAT TYPE) (13 CORE)	
* 3	4-996-413-71	PANEL, BACK (EA)		M100	1-763-072-11	FAN, D.C.	

## 8-2. FRONT PANEL SECTION-1



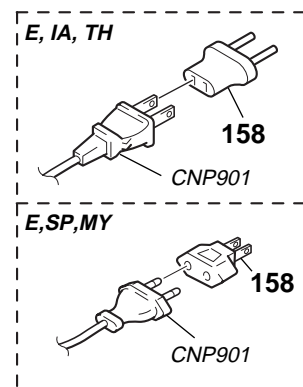
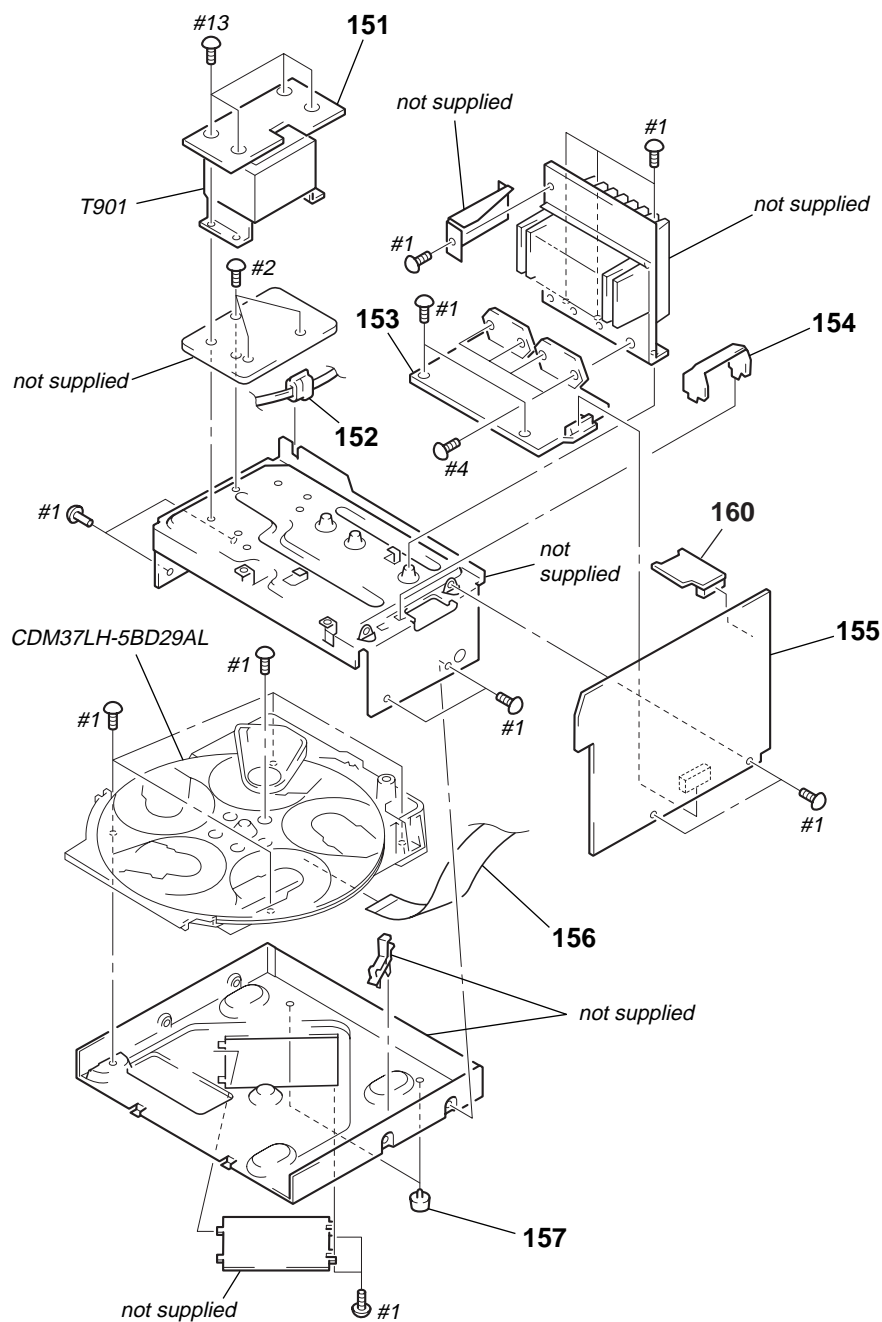
Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
51	4-987-995-01	SPRING (CD EJECT), COMPRESSION		65	4-987-000-11	BUTTON (EJECT B)	
52	4-987-001-11	BUTTON (EJECT CD)		* 66	1-664-013-11	TC-B SW BOARD	
* 53	1-664-019-11	CD-A SW BOARD		* 67	1-664-020-11	CD-B1 SW BOARD	
54	X-4949-282-1	PANEL (A) SUB ASSY		68	X-4949-279-1	BUTTON (CD STOP) ASSY	
* 55	1-664-012-11	TC-A SW BOARD		69	4-987-037-11	KNOB (JOG)	
56	4-986-999-12	BUTTON (EJECT A)		70	X-4949-274-1	PANEL (B) SUB ASSY	
57	4-951-620-01	SCREW (2.6 × 8), +BVTP		* 71	1-664-021-11	CD-B2 SW BOARD	
58	1-773-161-11	WIRE (FLAT TYPE) (21 CORE)		72	A-4384-916-A	LID ASSY, CD	
59	1-769-949-11	WIRE (FLAT TYPE) (11 CORE)		72	A-4411-134-A	LID ASSY, CD	
60	3-354-963-01	DAMPER		73	4-987-014-01	INDICATOR (CD)	
* 61	1-664-017-11	LED BOARD		74	4-987-002-11	BUTTON (CD.PLAY)	
62	4-957-577-01	SCREW PTP WH (2.6 × 8) (DIA. 10)		75	X-4949-685-1	LID ASSY, DISC	
* 63	1-664-016-11	DOOR SW BOARD		76	4-987-997-01	SPRING (CD. LID), TORSION	
* 64	4-987-933-01	BRACKET (TA)		77	4-987-998-01	SPRING (LOCK SHAFT), TORSION	
				78	3-568-749-00	CUSHION, ECM	

### 8-3. FRONT PANEL SECTION-2



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
101	X-4949-293-1	PANEL ASSY		* 110	A-4403-916-A	HEADPHONE/MIC BOARD, COMPLETE	
102	4-973-644-71	KNOB (ECHO)		111	4-986-990-11	BUTTON (CURSOR)	
105	4-948-236-21	CUSHION (107)		112	4-978-683-01	SPRING, COMPRESSION	
106	X-4949-271-1	LID ASSY, CASSETTE		* 113	4-987-041-01	COVER, CURSOR	
107	4-987-036-11	KNOB (VOL)		* 114	A-4403-858-A	PANEL BOARD, COMPLETE	
108	4-973-644-71	KNOB (MIC)		115	1-773-051-11	WIRE (FLAT TYPE) (17 CORE)	
109	4-951-620-01	SCREW (2.6 × 8), +BVTP		116	4-987-996-01	SPRING (TC LID), TENSION	

## 8-4. CHASSIS SECTION

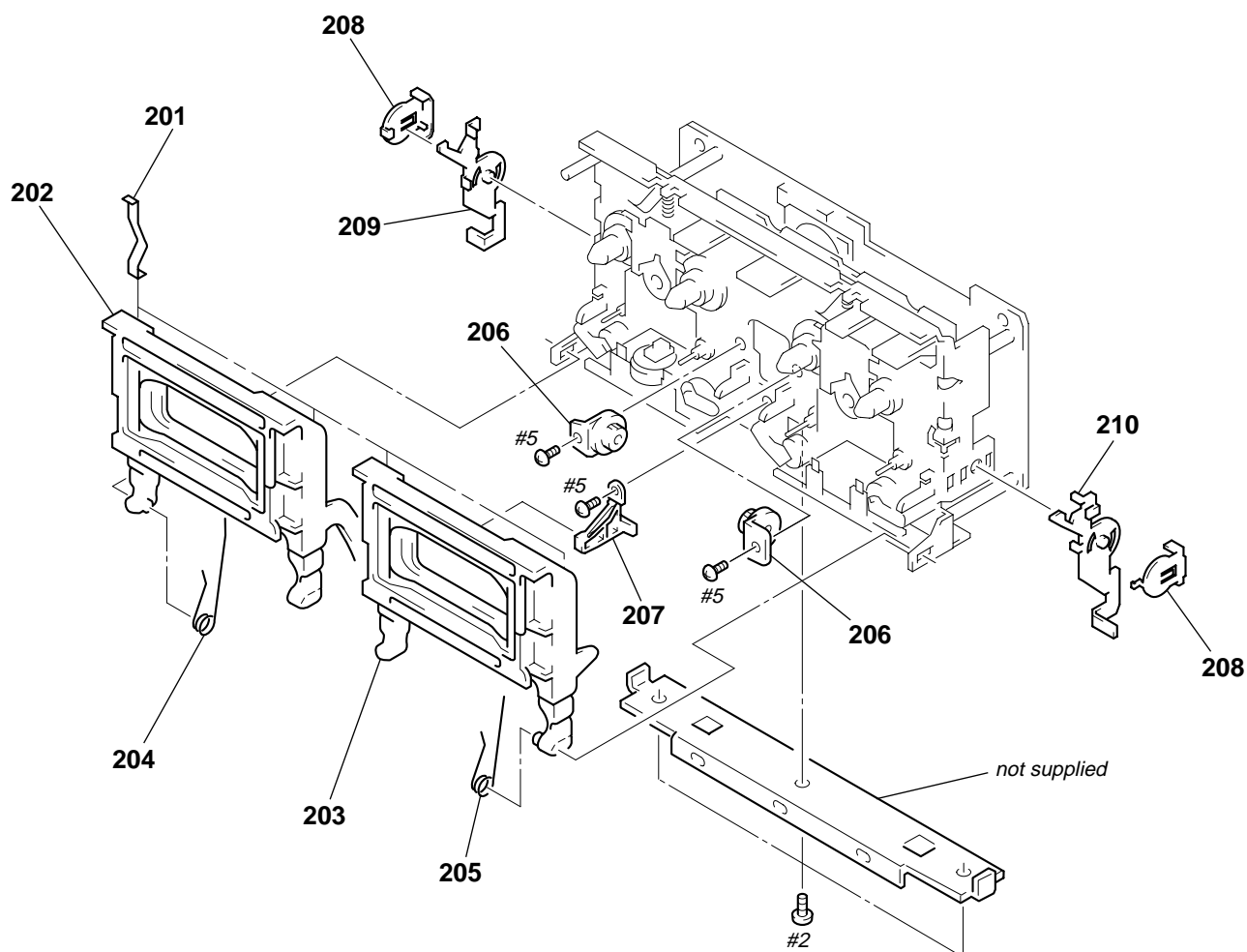


Ref. No.	Part No.	Description	Remarks
151	1-668-169-11	TRANS BOARD	
152	3-703-244-00	BUSHING (FBS001), CORD (EA, SP, MY)	
152	3-703-571-11	BUSHING (S) (4516), CORD (TH)	
152	4-966-266-01	BUSHING (S) (FBS002), CORD (E, IA)	
* 153	A-4403-848-A	POWER AMP BOARD, COMPLETE (EXCEPT TH)	
* 153	A-4414-461-A	POWER AMP BOARD, COMPLETE (TH)	
* 154	4-988-533-01	HOLDER, PWB	
* 155	A-4403-855-A	MAIN BOARD, COMPLETE	

Ref. No.	Part No.	Description	Remarks
△ 156	1-777-868-11	WIRE (FLAT TYPE) (19 CORE)	
157	X-4941-228-1	FOOT (F22125H-M)	
△ 158	1-569-007-11	ADAPTOR, CONVERSION 2P (E, IA, TH)	
△ 158	1-569-008-11	ADAPTOR, CONVERSION 2P (EA, SP, MY)	
* 160	A-4403-922-A	KEY-CON BOARD, COMPLETE	
△ CNP901	1-558-943-41	CORD, POWER (TH)	
△ CNP901	1-558-943-51	CORD, POWER (E, IA)	
△ CNP901	1-575-651-21	CORD, POWER (EA, SP, MY)	
△ T901	1-431-638-11	TRANSFORMER, POWER	

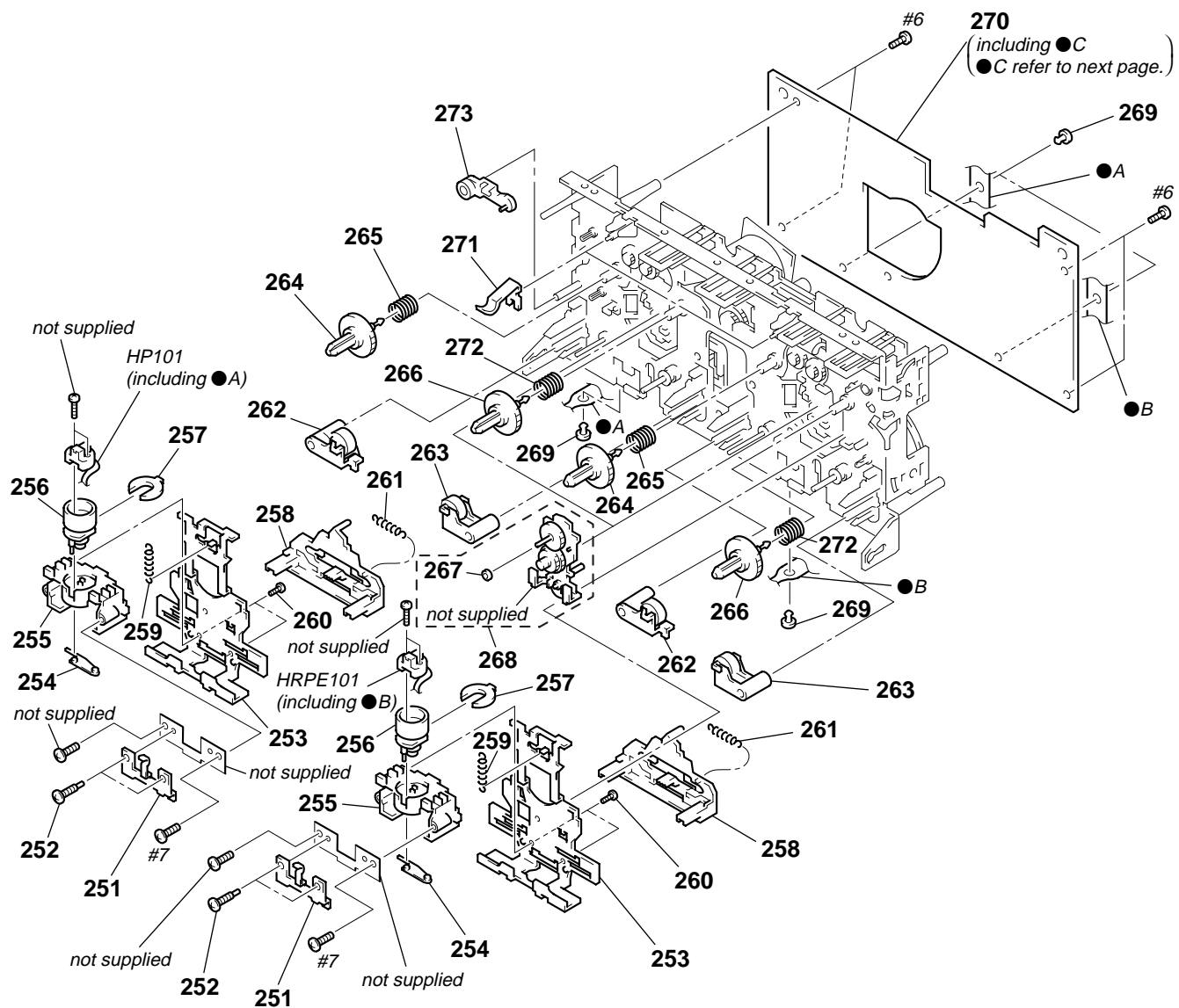
The components identified by mark △ or dotted line with mark △ are critical for safety.  
Replace only with part number specified.

## 8-5. TAPE MECHANISM DECK SECTION-1 (TCM-220WR2)



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
201	4-959-229-11	DETENT, CASSETTE		206	3-354-963-01	DAMPER	
202	X-4947-943-1	HOLDER (L) ASSY, CASSETTE		* 207	4-980-439-01	FULCRUM, HOLDER	
203	X-4947-944-1	HOLDER (R) ASSY, CASSETTE		208	3-354-957-01	JOINT (LOCK LEVER)	
204	4-959-231-11	SPRING (L), TORSION		209	3-354-953-01	LEVER (LOCK LEVER L)	
205	4-959-232-11	SPRING (R), TORSION		210	3-354-954-01	LEVER (LOCK LEVER R)	

## 8-6. TAPE MECHANISM DECK SECTION-2 (TCM-220WR2)

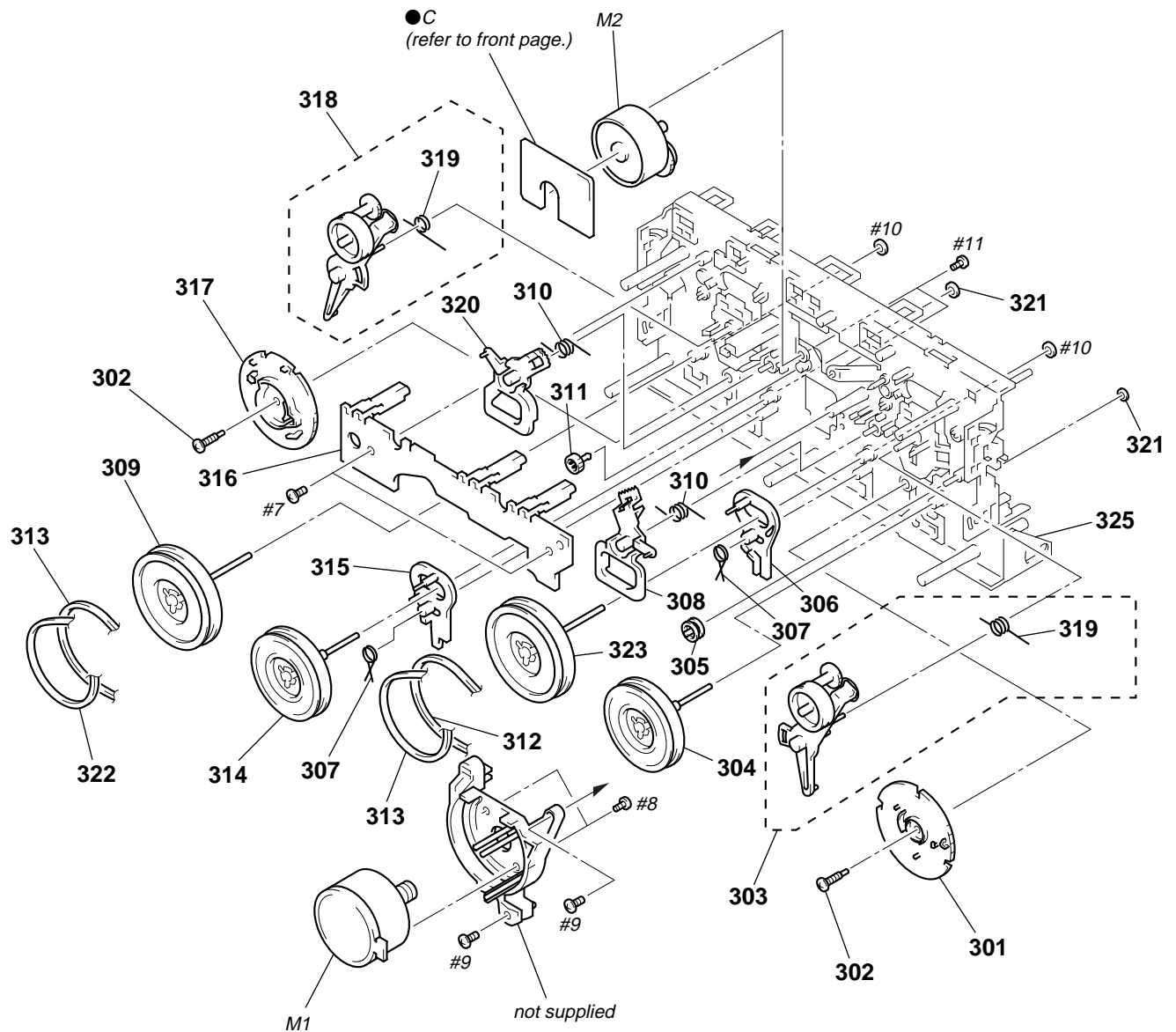


Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
251	3-908-560-01	SPRING, AZIMUTH ADJUSTMENT		263	X-3369-908-1	PINCH LEVER (FWD) ASSY	
252	3-919-684-01	SCREW, AZIMUTH ADJUSTMENT		264	3-908-613-01	GEAR (S), REEL	
253	X-3373-113-1	SLIDER (HEAD) ASSY		265	3-917-141-01	SPRING, COMPRESSION	
254	3-908-556-01	SPRING, HEAD TOGGLE		266	X-3371-305-1	REEL (T) ASSY	
255	3-908-558-02	FITTING BLOCK, HEAD		267	3-669-465-01	WASHER (1.5), STOPPER	
256	3-908-557-02	ROTARY BLOCK, HEAD		268	X-3370-173-1	TU ASSY	
* 257	3-908-559-01	STOPPER, AZIMUTH		269	3-939-862-01	CLIP	
258	3-908-555-01	SLIDER (REV SLIDER)		* 270	A-2007-131-A	AUDIO BOARD, COMPLETE	
259	3-917-143-11	SPRING, TENSION		271	3-930-972-01	DETENT, HALF	
260	3-388-848-01	SCREW (P2X6) (B TIGHT)		272	3-917-142-01	SPRING, COMPRESSION	
261	3-939-371-01	SPRING (1), TENSION		273	3-938-863-01	STOPPER	
262	X-3369-909-1	PINCH LEVER (REV) ASSY		HP101	1-500-093-11	HEAD, MAGNETIC (PLAYBACK)	
				HRPE101	1-500-094-11	HEAD, MAGNETIC (REC/PB/ERASE)	



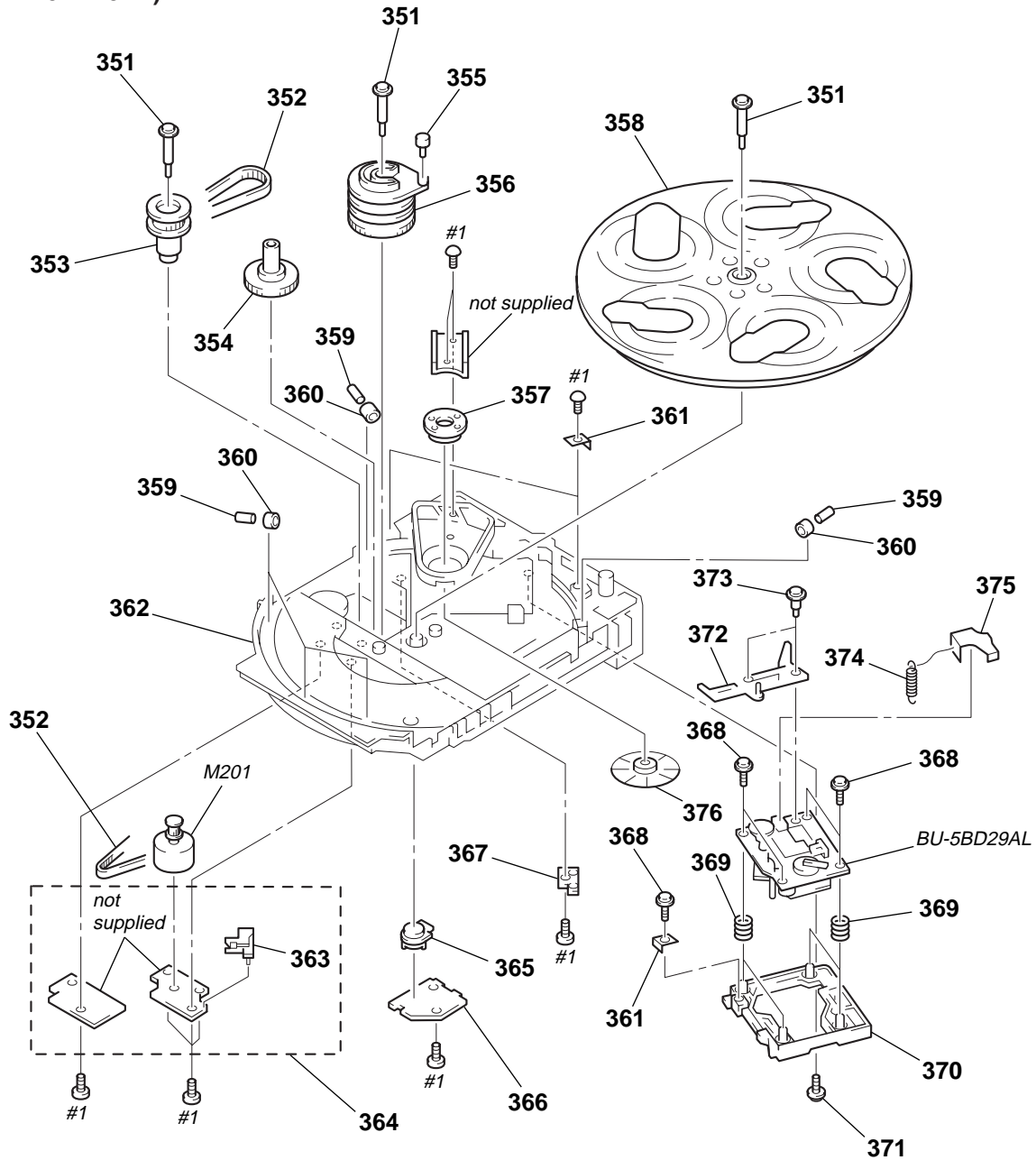
## 8-7. TAPE MECHANISM DECK SECTION-3 (TCM-220WR2)

●C: MOTOR board (supplied with AUDIO board)



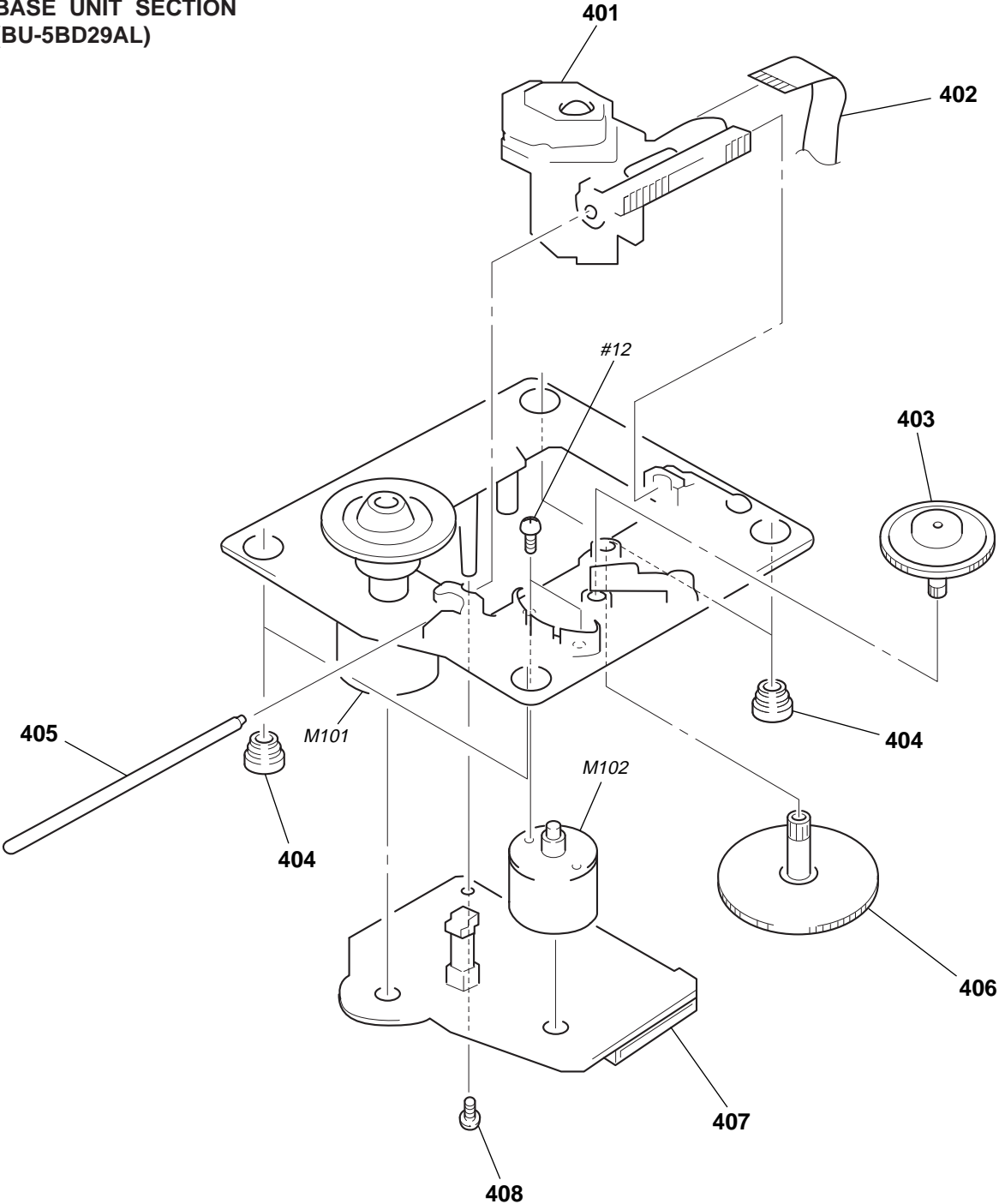
Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
301	3-908-597-01	CAM (A)		314	X-3370-171-1	FLYWHEEL (BR) ASSY	
302	3-908-608-11	SCREW, STEP		315	3-908-600-01	LEVER (REV-B)	
303	X-3372-930-1	ARM (A) ASSY, FR		* 316	1-650-669-11	LEAF SWITCH BOARD	
304	X-3370-882-1	FLYWHEEL (AR) ASSY		317	3-908-598-01	CAM (B)	
305	3-928-047-01	PULLEY, TENSION		318	X-3372-931-1	ARM (B) ASSY, FR	
306	3-908-599-01	LEVER (REV-A)		319	3-914-111-01	SPRING (FR), TORSION	
307	3-908-601-01	SPRING (REV LEVER), TORSION		320	3-908-604-01	LEVER (TRIGGER B)	
308	3-908-603-01	LEVER (TRIGGER A)		321	3-911-115-01	WASHER, STOPPER	
309	X-3367-108-1	FLYWHEEL (BF) ASSY		322	3-917-176-11	BELT (B)	
310	3-908-605-01	SPRING (TRIGGER), TORSION		323	X-3370-172-1	FLYWHEEL (AF) ASSY	
311	3-908-609-01	GEAR, TRIGGER		325	X-3371-441-1	CHASSIS ASSY, MECHANICAL	
312	3-913-845-11	BELT (A)		M1	X-3371-223-1	MOTOR ASSY, CAPSTAN	
313	3-913-846-11	BELT (FR)		M2	A-2004-410-A	MOTOR ASSY, DC (TRIGGER)	

# 8-8. CD MECHANISM DECK SECTION (CDM37LH-5BD29AL)



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
351	4-987-976-01	SCREW, STEP		365	4-978-426-01	INDICATOR (NO.)	
352	4-944-490-01	BELT (TIMING)		* 366	1-659-059-13	BD LED BOARD	
353	A-4660-978-A	GEAR (PULLEY) ASSY		* 367	1-659-058-13	TABLE SENSOR BOARD	
354	4-978-421-01	GEAR (MID)		368	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
355	4-978-425-01	ROLLER (CAM)		369	4-958-593-01	SPRING (BU), COMPRESSION	
356	4-978-420-01	CAM (HOLDER)		* 370	4-978-419-01	HOLDER (BU-5)	
357	1-452-925-21	MAGNET ASSY		371	4-998-716-01	SCREW, BU FITTING	
358	4-978-417-01	TABLE, DISC		372	4-989-493-01	SLIDER (37)	
359	4-934-376-01	SHAFT (ROLLER)		373	4-989-494-01	SCREW (SLIDER), STEP	
360	X-4947-960-1	ROLLER ASSY		374	4-989-819-02	SPRING, TENSION	
* 361	4-978-583-01	BRACKET (BU)		375	4-989-491-21	COVER, LENS	
* 362	4-978-418-01	CHASSIS		376	4-993-142-11	PULLEY (L), PRESS	
* 363	4-980-385-01	HOLDER (SW)		M201	A-4660-977-A	MOTOR ASSY (TABLE)	
* 364	A-4673-765-A	CD MOTOR BOARD, COMPLETE					

8-9. BASE UNIT SECTION  
(BU-5BD29AL)



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
△ 401	8-820-020-01	OPTICAL PICK-UP KSS-213D/Q-NP		406	4-917-564-01	GEAR (P), FLATNESS	
402	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)		* 407	A-4699-522-A	BD BOARD, COMPLETE	
403	4-917-567-21	GEAR (M)		408	4-951-620-01	SCREW (2.6X8), +BVTP	
404	4-951-940-01	INSULATOR (BU)		M101	X-4917-504-1	MOTOR ASSY (SPINDLE)	
405	4-917-565-01	SHAFT, SLED		M102	X-4917-523-4	MOTOR ASSY (SLED)	

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

## SECTION 9 ELECTRICAL PARTS LIST

## NOTE:

When indicating parts by reference number, please include the board name.

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

- Abbreviation  
IA : Indonesian  
TH : Thai

- 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:  $\mu$ F
- RESISTORS  
All resistors are in ohms.  
METAL: metal-film resistor  
METAL OXIDE: Metal Oxide-film resistor  
F: nonflammable
- COILS  
uH:  $\mu$ H
- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA...:  $\mu$ A..., uPA...,  $\mu$ PA...,  
uPB...,  $\mu$ PB..., uPC...,  $\mu$ PC...,  
uPD...,  $\mu$ PD...

Ref. No.	Part No.	Description	Remarks			Ref. No.	Part No.	Description	Remarks		
*	A-2007-131-A	AUDIO BOARD, COMPLETE ***** (including MOTOR BOARD)						< IC >			
		< CAPACITOR >				IC601	8-759-111-44	IC uPC4570C-1			
						IC602	8-759-143-54	IC uPC1330HA			
						IC611	8-759-111-44	IC uPC4570C-1			
								< COIL >			
C301	1-162-289-31	CERAMIC	390PF	10%	50V	L331	1-410-780-11	INDUCTOR	27mH		
C302	1-126-968-11	ELECT	100uF	20%	6.3V	L431	1-410-780-11	INDUCTOR	27mH		
C303	1-162-282-31	CERAMIC	100PF	10%	50V			< TRANSISTOR >			
C304	1-130-483-00	MYLAR	0.01uF	5%	50V	Q621	8-729-142-46	TRANSISTOR	2SC2001-LK		
C305	1-107-715-11	ELECT	22uF	20%	16V	Q622	8-729-142-46	TRANSISTOR	2SC2001-LK		
						Q623	8-729-801-93	TRANSISTOR	2SD1387		
C311	1-162-289-31	CERAMIC	390PF	10%	50V	Q651	8-729-900-65	TRANSISTOR	DTA144ES		
C313	1-162-282-31	CERAMIC	100PF	10%	50V			< RESISTOR >			
C314	1-130-487-00	MYLAR	0.022uF	5%	50V	R301	1-247-881-00	CARBON	120K	5%	1/4W
C315	1-126-233-11	ELECT	22uF	20%	50V	R302	1-249-409-11	CARBON	220	5%	1/4W
C331	1-137-427-11	FILM	120PF	5%	50V	R303	1-249-433-11	CARBON	22K	5%	1/4W
						R304	1-247-889-00	CARBON	270K	5%	1/4W
C332	1-162-288-31	CERAMIC	330PF	10%	50V	R305	1-247-858-11	CARBON	13K	5%	1/4W
C333	1-162-209-31	CERAMIC	27PF	5%	50V						
C401	1-162-289-31	CERAMIC	390PF	10%	50V	R311	1-247-881-00	CARBON	120K	5%	1/4W
C402	1-126-968-11	ELECT	100uF	20%	6.3V	R312	1-247-807-31	CARBON	100	5%	1/4W
C403	1-162-282-31	CERAMIC	100PF	10%	50V	R314	1-247-882-11	CARBON	130K	5%	1/4W
						R315	1-247-850-11	CARBON	6.2K	5%	1/4W
C404	1-130-483-00	MYLAR	0.01uF	5%	50V	R331	1-249-430-11	CARBON	12K	5%	1/4W
C405	1-107-715-11	ELECT	22uF	20%	16V						
C411	1-162-289-31	CERAMIC	390PF	10%	50V	R401	1-247-881-00	CARBON	120K	5%	1/4W
C413	1-162-282-31	CERAMIC	100PF	10%	50V	R402	1-249-409-11	CARBON	220	5%	1/4W
C414	1-130-487-00	MYLAR	0.022uF	5%	50V	R403	1-249-433-11	CARBON	22K	5%	1/4W
						R404	1-247-889-00	CARBON	270K	5%	1/4W
C415	1-126-233-11	ELECT	22uF	20%	50V	R405	1-247-858-11	CARBON	13K	5%	1/4W
C431	1-137-427-11	FILM	120PF	5%	50V						
C432	1-162-288-31	CERAMIC	330PF	10%	50V	R411	1-247-881-00	CARBON	120K	5%	1/4W
C433	1-162-209-31	CERAMIC	27PF	5%	50V	R412	1-247-807-31	CARBON	100	5%	1/4W
C601	1-104-396-11	ELECT	10uF	20%	16V	R414	1-247-882-11	CARBON	130K	5%	1/4W
						R415	1-247-850-11	CARBON	6.2K	5%	1/4W
C602	1-104-396-11	ELECT	10uF	20%	16V	R431	1-249-430-11	CARBON	12K	5%	1/4W
C611	1-124-907-11	ELECT	10uF	20%	50V						
C612	1-124-907-11	ELECT	10uF	20%	50V	R601	1-249-409-11	CARBON	220	5%	1/4W
C621	1-137-150-11	FILM	0.01uF	5%	100V	R602	1-249-409-11	CARBON	220	5%	1/4W
C622	1-126-961-11	ELECT	2.2uF	20%	50V	R608	1-249-409-11	CARBON	220	5%	1/4W
						R609	1-249-433-11	CARBON	22K	5%	1/4W
C623	1-136-155-00	FILM	0.015uF	5%	50V	R611	1-249-409-11	CARBON	220	5%	1/4W
C624	1-130-481-00	MYLAR	0.0068uF	5%	50V						
C625	1-130-481-00	MYLAR	0.0068uF	5%	50V	R612	1-249-409-11	CARBON	220	5%	1/4W
C627	1-124-903-11	ELECT	1uF	20%	50V	$\Delta$ R621	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
C628	1-136-153-00	FILM	0.01uF	5%	50V	$\Delta$ R622	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
						R623	1-249-432-11	CARBON	18K	5%	1/4W
C642	1-104-664-11	ELECT	47uF	20%	16V	R624	1-249-432-11	CARBON	18K	5%	1/4W
C651	1-161-494-00	CERAMIC	0.022uF		25V						
		< CONNECTOR >									
CN601	1-695-382-31	PIN, CONNECTOR (PC BOARD) 21P									
CN602	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P									
* CN651	1-564-521-11	PLUG, CONNECTOR 6P									

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R625	1-249-429-11	CARBON 10K 5%	1/4W	C164	1-163-145-00	CERAMIC CHIP 0.0015uF 5%	50V
R651	1-247-856-00	CARBON 11K 5%	1/4W	C165	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
R652	1-247-856-00	CARBON 11K 5%	1/4W	C166	1-163-137-00	CERAMIC CHIP 680PF 5%	50V
R653	1-249-441-11	CARBON 100K 5%	1/4W	C167	1-163-121-00	CERAMIC CHIP 150PF 5%	50V
		< VARIABLE RESISTOR >		C168	1-163-137-00	CERAMIC CHIP 680PF 5%	50V
RV301	1-238-598-11	RES, ADJ, CARBON 2.2K		C169	1-163-121-00	CERAMIC CHIP 150PF 5%	50V
RV311	1-238-598-11	RES, ADJ, CARBON 2.2K		C170	1-163-099-00	CERAMIC CHIP 18PF 5%	50V
RV341	1-238-551-11	RES, ADJ, CARBON 220K		C171	1-163-237-11	CERAMIC CHIP 27PF 5%	50V
RV401	1-238-598-11	RES, ADJ, CARBON 2.2K		C173	1-163-038-91	CERAMIC CHIP 0.1uF	25V
RV411	1-238-598-11	RES, ADJ, CARBON 2.2K		C174	1-163-038-91	CERAMIC CHIP 0.1uF	25V
RV441	1-238-551-11	RES, ADJ, CARBON 220K		C175	1-163-038-91	CERAMIC CHIP 0.1uF	25V
RV651	1-238-599-11	RES, ADJ, CARBON 4.7K		C176	1-163-038-91	CERAMIC CHIP 0.1uF	25V
RV652	1-238-599-11	RES, ADJ, CARBON 4.7K		C177	1-163-038-91	CERAMIC CHIP 0.1uF	25V
		< TRANSFORMER >		C178	1-163-038-91	CERAMIC CHIP 0.1uF	25V
T621	1-423-980-11	TRANSFORMER, BIAS OSCILLATION		C179	1-163-038-91	CERAMIC CHIP 0.1uF	25V
*****				C181	1-126-205-11	ELECT CHIP 47uF 20%	6.3V
* A-4699-522-A BD BOARD, COMPLETE				C182	1-126-393-11	ELECT 33uF 20%	10V
*****				C183	1-124-778-00	ELECT CHIP 22uF 20%	6.3V
				C185	1-164-232-11	CERAMIC CHIP 0.01uF	50V
				C188	1-163-235-11	CERAMIC CHIP 22PF 5%	50V
				C189	1-163-235-11	CERAMIC CHIP 22PF 5%	50V
< CAPACITOR >				< CONNECTOR >			
C101	1-126-607-11	ELECT CHIP 47uF 20%	4V	CNU101	1-770-014-11	CONNECTOR, FFC/FPC 16P	
C102	1-163-141-00	CERAMIC CHIP 0.001uF 5%	50V	CNU102	1-778-874-11	CONNECTOR, FFC(LIF(NON-ZIF))19P	
C103	1-164-346-11	CERAMIC CHIP 1uF	16V	< FERRITE BEAD >			
C105	1-163-038-91	CERAMIC CHIP 0.1uF	25V	FB101	1-414-234-11	INDUCTOR, FERRITE BEAD	
C106	1-164-161-11	CERAMIC CHIP 0.0022uF 10%	100V	FB103	1-414-234-11	INDUCTOR, FERRITE BEAD	
C107	1-164-161-11	CERAMIC CHIP 0.0022uF 10%	100V	< IC >			
C108	1-164-232-11	CERAMIC CHIP 0.01uF	50V	IC101	8-752-080-62	IC CXA1992AR	
C109	1-164-232-11	CERAMIC CHIP 0.01uF	50V	IC102	8-759-429-32	IC BA5941FP-E2	
C110	1-163-989-11	CERAMIC CHIP 0.033uF 10%	25V	IC103	8-752-378-66	IC CXD2519Q	
C111	1-163-017-00	CERAMIC CHIP 0.0047uF 5%	50V	< CHIP CONDUCTOR >			
C112	1-163-017-00	CERAMIC CHIP 0.0047uF 5%	50V	JW101	1-216-295-91	CONDUCTOR, CHIP (2012)	
C113	1-164-161-11	CERAMIC CHIP 0.0022uF 10%	100V	JW104	1-216-295-91	CONDUCTOR, CHIP (2012)	
C114	1-164-005-11	CERAMIC CHIP 0.47uF	25V	< TRANSISTOR >			
C115	1-126-607-11	ELECT CHIP 47uF 20%	4V	Q101	8-729-010-08	TRANSISTOR MSB710-R	
C116	1-163-016-00	CERAMIC CHIP 0.0039uF 10%	50V	< RESISTOR >			
C117	1-164-005-11	CERAMIC CHIP 0.47uF	25V	R102	1-216-001-00	METAL CHIP 10 5%	1/10W
C118	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V	R104	1-216-093-00	METAL CHIP 68K 5%	1/10W
C119	1-163-038-91	CERAMIC CHIP 0.1uF	25V	R105	1-216-088-00	METAL CHIP 43K 5%	1/10W
C120	1-124-779-00	ELECT CHIP 10uF 20%	16V	R106	1-216-088-00	METAL CHIP 43K 5%	1/10W
C121	1-163-038-91	CERAMIC CHIP 0.1uF	25V	R107	1-216-088-00	METAL CHIP 43K 5%	1/10W
C122	1-164-232-11	CERAMIC CHIP 0.01uF	50V	R108	1-216-088-00	METAL CHIP 43K 5%	1/10W
C123	1-163-038-91	CERAMIC CHIP 0.1uF	25V	R109	1-216-093-00	METAL CHIP 68K 5%	1/10W
C124	1-126-607-11	ELECT CHIP 47uF 20%	4V	R114	1-216-101-00	METAL CHIP 150K 5%	1/10W
C125	1-164-232-11	CERAMIC CHIP 0.01uF	50V	R115	1-216-101-00	METAL CHIP 150K 5%	1/10W
C126	1-163-038-91	CERAMIC CHIP 0.1uF	25V	R116	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
C127	1-164-161-11	CERAMIC CHIP 0.0022uF 10%	100V	R117	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
C128	1-163-135-00	CERAMIC CHIP 560PF 5%	50V	R118	1-216-063-91	METAL GLAZE 3.9K 5%	1/10W
C129	1-163-038-91	CERAMIC CHIP 0.1uF	25V	R119	1-216-085-00	METAL CHIP 33K 5%	1/10W
C130	1-164-336-11	CERAMIC CHIP 0.33uF	25V	R120	1-216-089-91	METAL GLAZE 47K 5%	1/10W
C131	1-164-346-11	CERAMIC CHIP 1uF	16V	R121	1-216-114-00	METAL GLAZE 510K 5%	1/10W
C140	1-110-501-11	CERAMIC CHIP 0.33uF 10%	16V				
C154	1-163-235-11	CERAMIC CHIP 22PF 5%	50V				
C161	1-164-005-11	CERAMIC CHIP 0.47uF	25V				
C162	1-164-232-11	CERAMIC CHIP 0.01uF	50V				
C163	1-163-117-00	CERAMIC CHIP 100PF 5%	50V				

<b>BD</b>	<b>BD LED</b>	<b>CD MOTOR</b>	<b>CD-A SW</b>
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Ref. No.	Part No.	Description	Remarks
R122	1-216-097-91	METAL GLAZE 100K 5%	1/10W
R123	1-216-099-00	METAL CHIP 120K 5%	1/10W
R124	1-216-091-00	METAL CHIP 56K 5%	1/10W
R125	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R126	1-216-063-91	METAL GLAZE 3.9K 5%	1/10W
R127	1-216-089-91	METAL GLAZE 47K 5%	1/10W
R128	1-216-098-00	METAL CHIP 110K 5%	1/10W
R129	1-216-025-91	METAL GLAZE 100 5%	1/10W
R130	1-216-079-00	METAL CHIP 18K 5%	1/10W
R131	1-216-079-00	METAL CHIP 18K 5%	1/10W
R132	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R133	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R134	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R135	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R136	1-216-073-00	METAL CHIP 10K 5%	1/10W
R137	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R138	1-216-025-91	METAL GLAZE 100 5%	1/10W
R156	1-216-081-00	METAL CHIP 22K 5%	1/10W
R157	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R158	1-216-001-00	METAL CHIP 10 5%	1/10W
R159	1-216-121-91	METAL GLAZE 1M 5%	1/10W
R161	1-216-097-91	METAL GLAZE 100K 5%	1/10W
R162	1-216-073-00	METAL CHIP 10K 5%	1/10W
R163	1-216-121-91	METAL GLAZE 1M 5%	1/10W
R164	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R165	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R166	1-216-073-00	METAL CHIP 10K 5%	1/10W
R167	1-216-081-00	METAL CHIP 22K 5%	1/10W
R168	1-216-073-00	METAL CHIP 10K 5%	1/10W
R169	1-216-079-00	METAL CHIP 18K 5%	1/10W
R170	1-216-081-00	METAL CHIP 22K 5%	1/10W
R171	1-216-073-00	METAL CHIP 10K 5%	1/10W
R172	1-216-079-00	METAL CHIP 18K 5%	1/10W
R173	1-216-025-91	METAL GLAZE 100 5%	1/10W
R174	1-216-033-00	METAL CHIP 220 5%	1/10W
R175	1-216-025-91	METAL GLAZE 100 5%	1/10W
R176	1-216-025-91	METAL GLAZE 100 5%	1/10W
R177	1-216-025-91	METAL GLAZE 100 5%	1/10W
R178	1-216-025-91	METAL GLAZE 100 5%	1/10W
R179	1-216-025-91	METAL GLAZE 100 5%	1/10W
R180	1-216-025-91	METAL GLAZE 100 5%	1/10W
R181	1-216-025-91	METAL GLAZE 100 5%	1/10W
R188	1-216-037-00	METAL CHIP 330 5%	1/10W
R190	1-216-097-91	METAL GLAZE 100K 5%	1/10W
R191	1-216-105-91	METAL GLAZE 220K 5%	1/10W
< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
< VIBRATOR >			
X101	1-767-408-21	VIBRATOR, CRYSTAL (16.9344MHz)	
*****			

Ref. No.	Part No.	Description	Remarks
*	1-659-059-13	BD LED BOARD *****	
*	4-980-385-01	HOLDER (SW)  < DIODE >	
D201	8-719-032-98	DIODE SEL5820A (DISC No.)  < TRANSISTOR >	
Q201	8-729-119-78	TRANSISTOR 2SC403SP-51  < RESISTOR >	
R201	1-247-863-91	CARBON 22K 5%	1/4W
R202	1-249-411-11	CARBON 330 5%	1/4W
R203	1-249-437-11	CARBON 47K 5%	1/4W
*****			
*	A-4673-765-A	CD MOTOR BOARD, COMPLETE *****	
< CAPACITOR >			
C201	1-124-907-11	ELECT 10uF 20%	50V
C202	1-164-159-21	CERAMIC 0.1uF	50V
C203	1-124-907-11	ELECT 10uF 20%	50V
< CONNECTOR >			
* CN201	1-568-947-11	PIN, CONNECTOR 9P	
< IC >			
IC201	8-759-365-94	IC TA8409S	
< COIL >			
L201	1-408-117-00	INDUCTOR 10uH	
< RESISTOR >			
R205	1-249-427-11	CARBON 6.8K 5%	1/4W
R206	1-249-425-11	CARBON 4.7K 5%	1/4W
< SWITCH >			
S201	1-762-587-11	SWITCH, PUSH (1 KEY) (UP)	
*****			
*	1-664-019-11	CD-A SW BOARD *****	
< DIODE >			
D641	8-719-058-04	DIODE SEL5223S-TP15 (NON-STOP)	
< RESISTOR >			
R731	1-249-411-11	CARBON 330 5%	1/4W
R732	1-249-413-11	CARBON 470 5%	1/4W
R733	1-249-415-11	CARBON 680 5%	1/4W
R734	1-249-417-11	CARBON 1K 5%	1/4W
R735	1-249-419-11	CARBON 1.5K 5%	1/4W
R736	1-249-421-11	CARBON 2.2K 5%	1/4W
R737	1-249-417-11	CARBON 1K 5%	1/4W
R741	1-247-807-31	CARBON 100 5%	1/4W



## CD-A SW

## CD-B1 SW

## CD-B2 SW

## DOOR SW

## HEADPHONE-MIC

Ref. No.	Part No.	Description	Remarks
		< SWITCH >	
S661	1-554-303-21	SWITCH, TACTILE (DISC 1)	
S662	1-554-303-21	SWITCH, TACTILE (DISC 2)	
S663	1-554-303-21	SWITCH, TACTILE (DISC 3)	
S664	1-554-303-21	SWITCH, TACTILE (DISC 4)	
S665	1-554-303-21	SWITCH, TACTILE (DISC 5)	
S666	1-554-303-21	SWITCH, TACTILE (FLASH)	
S667	1-554-303-21	SWITCH, TACTILE (NON-STOP)	
S668	1-554-303-21	SWITCH, TACTILE (LOOP)	
*****			
*	1-664-020-11	CD-B1 SW BOARD	
		*****	
		< CONNECTOR >	
* CN642	1-568-943-11	PIN, CONNECTOR 5P	
		< DIODE >	
D645	8-719-057-29	DIODE SML78423C-TP15 (▷)	
D646	8-719-057-97	DIODE SEL5923A-TP15 (■)	
D647	8-719-057-29	DIODE SML78423C-TP15 (▷)	
		< RESISTOR >	
R745	1-247-815-91	CARBON 220 5% 1/4W	
R746	1-249-411-11	CARBON 330 5% 1/4W	
R747	1-249-413-11	CARBON 470 5% 1/4W	
R748	1-249-415-11	CARBON 680 5% 1/4W	
R749	1-247-807-31	CARBON 100 5% 1/4W	
R750	1-247-807-31	CARBON 100 5% 1/4W	
R751	1-247-807-31	CARBON 100 5% 1/4W	
		< SWITCH >	
S676	1-554-303-21	SWITCH, TACTILE (▷)	
S677	1-554-303-21	SWITCH, TACTILE (■)	
S678	1-554-303-21	SWITCH, TACTILE (■)	
S679	1-554-303-21	SWITCH, TACTILE (DISC SKIP)	
*****			
*	1-664-021-11	CD-B2 SW BOARD	
		*****	
		< RESISTOR >	
R752	1-249-417-11	CARBON 1K 5% 1/4W	
R753	1-249-419-11	CARBON 1.5K 5% 1/4W	
R754	1-249-421-11	CARBON 2.2K 5% 1/4W	
R755	1-247-843-11	CARBON 3.3K 5% 1/4W	
R756	1-249-427-11	CARBON 6.8K 5% 1/4W	
		< SWITCH >	
S681	1-554-303-21	SWITCH, TACTILE (▶▶)	
S682	1-554-303-21	SWITCH, TACTILE (REPEAT)	
S683	1-554-303-21	SWITCH, TACTILE (PLAY MODE)	
S684	1-554-303-21	SWITCH, TACTILE (1/ALL DISCS)	
S685	1-554-303-21	SWITCH, TACTILE (EDIT)	
S686	1-554-303-21	SWITCH, TACTILE (◀◀)	
S711	1-467-968-11	ENCODER, ROTARY (◀◀ AMS ▶▶)	
*****			

Ref. No.	Part No.	Description	Remarks
*	1-664-016-11	DOOR SW BOARD	
		*****	
		< CAPACITOR >	
C691	1-164-159-21	CERAMIC 0.1uF 50V	
		< CONNECTOR >	
CN661	1-506-481-11	PIN, CONNECTOR 2P	
		< SWITCH >	
S691	1-771-057-11	SWITCH, PUSH (1 KEY)(▲ OPEN)	
*****			
*	A-4403-916-A	HEADPHONE-MIC BOARD, COMPLETE	
		*****	
		< CAPACITOR >	
C760	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C761	1-126-961-11	ELECT 2.2uF 20% 50V	
C762	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C763	1-126-961-11	ELECT 2.2uF 20% 50V	
C764	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C765	1-162-215-31	CERAMIC 47PF 5% 50V	
C766	1-162-290-31	CERAMIC 470PF 10% 50V	
C767	1-162-215-31	CERAMIC 47PF 5% 50V	
C768	1-126-961-11	ELECT 2.2uF 20% 50V	
C769	1-162-282-31	CERAMIC 100PF 10% 50V	
C770	1-126-961-11	ELECT 2.2uF 20% 50V	
C771	1-126-959-11	ELECT 0.47uF 20% 50V	
C773	1-126-964-11	ELECT 10uF 20% 50V	
C774	1-126-964-11	ELECT 10uF 20% 50V	
C775	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C776	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C777	1-126-960-11	ELECT 1uF 20% 50V	
C778	1-162-305-11	CERAMIC 0.0068uF 30% 16V	
C779	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C780	1-136-495-11	FILM 0.068uF 5% 50V	
C781	1-126-957-11	ELECT 0.22uF 20% 50V	
C782	1-126-957-11	ELECT 0.22uF 20% 50V	
C783	1-126-967-11	ELECT 47uF 20% 10V	
C784	1-136-495-11	FILM 0.068uF 5% 50V	
C785	1-162-305-11	CERAMIC 0.0068uF 30% 16V	
C786	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C787	1-124-250-11	ELECT 0.15uF 20% 50V	
C788	1-126-960-11	ELECT 1uF 20% 50V	
C789	1-161-494-00	CERAMIC 0.022uF 25V	
C790	1-126-967-11	ELECT 47uF 20% 10V	
C791	1-164-159-21	CERAMIC 0.1uF 50V	
C794	1-164-159-21	CERAMIC 0.1uF 50V	
C795	1-164-159-21	CERAMIC 0.1uF 50V	
C797	1-162-302-11	CERAMIC 0.0022uF 20% 16V	
C798	1-164-159-21	CERAMIC 0.1uF 50V	
C799	1-164-159-21	CERAMIC 0.1uF 50V	

## HEADPHONE-MIC

## KEY-CON

Ref. No.	Part No.	Description	Remarks
< CONNECTOR >			
* CN701	1-568-935-11	PIN, CONNECTOR 8P	
< DIODE >			
D761	8-719-200-82	DIODE 11ES2	
D762	8-719-200-82	DIODE 11ES2	
D763	8-719-200-82	DIODE 11ES2	
< IC >			
IC760	8-759-634-51	IC M5218AP	
IC761	8-759-450-96	IC M65850P	
< JACK >			
J760	1-770-226-41	JACK (LARGE TYPE) (PHONES)	
J761	1-770-226-41	JACK (LARGE TYPE) (MIC 1)	
J762	1-770-226-41	JACK (LARGE TYPE) (MIC 2)	
< COIL >			
L761	1-410-521-11	INDUCTOR 100uH	
< RESISTOR >			
R760	1-249-429-11	CARBON 10K 5% 1/4W	
R761	1-249-417-11	CARBON 1K 5% 1/4W	F
R762	1-249-429-11	CARBON 10K 5% 1/4W	
R763	1-249-417-11	CARBON 1K 5% 1/4W	F
R764	1-249-441-11	CARBON 100K 5% 1/4W	
R765	1-249-417-11	CARBON 1K 5% 1/4W	F
R766	1-249-437-11	CARBON 47K 5% 1/4W	
R767	1-249-429-11	CARBON 10K 5% 1/4W	
R768	1-249-431-11	CARBON 15K 5% 1/4W	
R769	1-247-885-00	CARBON 180K 5% 1/4W	
R770	1-247-807-31	CARBON 100 5% 1/4W	
R771	1-247-863-91	CARBON 22K 5% 1/4W	
R772	1-247-863-91	CARBON 22K 5% 1/4W	
R773	1-247-863-91	CARBON 22K 5% 1/4W	
R774	1-247-881-00	CARBON 120K 5% 1/4W	
R775	1-247-863-91	CARBON 22K 5% 1/4W	
R776	1-247-863-91	CARBON 22K 5% 1/4W	
R777	1-247-863-91	CARBON 22K 5% 1/4W	
R778	1-249-437-11	CARBON 47K 5% 1/4W	
R779	1-249-431-11	CARBON 15K 5% 1/4W	
R782	1-249-429-11	CARBON 10K 5% 1/4W	
< VARIABLE RESISTOR >			
RV760	1-225-366-11	RES, VAR, CARBON 50K (MIC LEVEL)	
RV761	1-225-366-11	RES, VAR, CARBON 50K (ECHO LEVEL)	
*****			
* A-4403-922-A	KEY-CON BOARD, COMPLETE		
*****			
< CAPACITOR >			
C501	1-126-382-11	ELECT 100uF 20% 6.3V	
C502	1-164-159-21	CERAMIC 0.1uF 50V	
C503	1-126-967-11	ELECT 47uF 20% 10V	
C504	1-164-159-21	CERAMIC 0.1uF 50V	
C505	1-162-600-11	CERAMIC 0.0047uF 30% 16V	

Ref. No.	Part No.	Description	Remarks
C506	1-162-286-21	CERAMIC 220PF 10% 50V	
C507	1-162-286-21	CERAMIC 220PF 10% 50V	
C508	1-136-495-11	FILM 0.068uF 5% 50V	
C509	1-136-495-11	FILM 0.068uF 5% 50V	
C510	1-136-495-11	FILM 0.068uF 5% 50V	
C511	1-164-159-21	CERAMIC 0.1uF 50V	
C512	1-162-284-31	CERAMIC 150PF 10% 50V	
C513	1-136-165-00	FILM 0.1uF 5% 50V	
C514	1-136-165-00	FILM 0.1uF 5% 50V	
C515	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C516	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C517	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C518	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C519	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C520	1-126-964-11	ELECT 10uF 20% 50V	
C521	1-162-291-31	CERAMIC 560PF 10% 50V	
C522	1-162-600-11	CERAMIC 0.0047uF 30% 16V	
C523	1-162-290-31	CERAMIC 470PF 10% 50V	
C524	1-126-964-11	ELECT 10uF 20% 50V	
C525	1-126-964-11	ELECT 10uF 20% 50V	
C526	1-126-964-11	ELECT 10uF 20% 50V	
C527	1-126-964-11	ELECT 10uF 20% 50V	
C1439	1-126-964-11	ELECT 10uF 20% 50V	
< CONNECTOR >			
CN501	1-566-999-11	PIN, CONNECTOR 13P	
< IC >			
IC501	8-759-370-84	IC M65847FP-TP	
IC502	8-759-140-53	IC UPD4053BC	
< COIL >			
L501	1-410-521-11	INDUCTOR 100uH	
< TRANSISTOR >			
Q501	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q501	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q502	8-729-029-66	TRANSISTOR DTC114ESA	
Q502	8-729-900-80	TRANSISTOR DTC114ES	
< RESISTOR >			
R501	1-247-807-31	CARBON 100 5% 1/4W	
R502	1-249-429-11	CARBON 10K 5% 1/4W	
R503	1-247-807-31	CARBON 100 5% 1/4W	
R504	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R505	1-247-903-00	CARBON 1M 5% 1/4W	
R506	1-249-429-11	CARBON 10K 5% 1/4W	
R507	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R508	1-249-429-11	CARBON 10K 5% 1/4W	
R509	1-249-434-11	CARBON 27K 5% 1/4W	
R510	1-249-426-11	CARBON 5.6K 5% 1/4W	
R511	1-249-424-11	CARBON 3.9K 5% 1/4W	F
R512	1-249-431-11	CARBON 15K 5% 1/4W	
R513	1-249-429-11	CARBON 10K 5% 1/4W	
R514	1-247-863-91	CARBON 22K 5% 1/4W	
R515	1-249-429-11	CARBON 10K 5% 1/4W	
R516	1-249-441-11	CARBON 100K 5% 1/4W	



## MAIN

— 97 —

# MAIN

Ref. No.	Part No.	Description	Remarks
C258	1-130-479-00	MYLAR	0.0047uF 5% 50V
C259	1-130-474-00	MYLAR	0.0018uF 5% 50V
C260	1-126-964-11	ELECT	10uF 20% 50V
C261	1-126-964-11	ELECT	10uF 20% 50V
C262	1-130-483-00	MYLAR	0.01uF 5% 50V
C263	1-136-169-00	FILM	0.22uF 5% 50V
C264	1-136-169-00	FILM	0.22uF 5% 50V
C276	1-126-964-11	ELECT	10uF 20% 50V
C281	1-104-665-11	ELECT	100uF 20% 10V
C282	1-126-961-11	ELECT	2.2uF 20% 50V
C283	1-104-665-11	ELECT	100uF 20% 10V
C284	1-126-934-11	ELECT	220uF 20% 10V
C291	1-126-959-11	ELECT	0.47uF 20% 50V
C301	1-126-967-11	ELECT	47uF 20% 10V
C302	1-164-159-21	CERAMIC	0.1uF 50V
C303	1-136-173-00	FILM	0.47uF 5% 50V
C304	1-126-926-11	ELECT	1000uF 20% 10V
C305	1-162-306-11	CERAMIC	0.01uF 20% 16V
C309	1-102-514-11	CERAMIC	22PF 5% 50V
C310	1-102-514-11	CERAMIC	22PF 5% 50V
C311	1-164-159-21	CERAMIC	0.1uF 50V
C315	1-104-665-11	ELECT	100uF 20% 10V
C316	1-136-165-00	FILM	0.1uF 5% 50V
C390	1-104-665-11	ELECT	100uF 20% 10V
C391	1-162-306-11	CERAMIC	0.01uF 20% 16V
C392	1-104-665-11	ELECT	100uF 20% 10V
C393	1-126-925-11	ELECT	470uF 20% 10V
C394	1-164-159-21	CERAMIC	0.1uF 50V
C396	1-126-961-11	ELECT	2.2uF 20% 50V
C398	1-126-961-11	ELECT	2.2uF 20% 50V
C903	1-136-165-00	FILM	0.1uF 5% 50V
C904	1-126-937-11	ELECT	4700uF 20% 16V
C906	1-104-665-11	ELECT	100uF 20% 10V
C909	1-126-964-11	ELECT	10uF 20% 50V
C910	1-104-665-11	ELECT	100uF 20% 10V
C911	1-126-964-11	ELECT	10uF 20% 50V
C912	1-126-916-11	ELECT	1000uF 20% 6.3V
C913	1-126-943-11	ELECT	2200uF 20% 25V
C914	1-126-767-11	ELECT	1000uF 20% 16V
C915	1-126-967-11	ELECT	47uF 20% 16V
C916	1-164-159-21	CERAMIC	0.1uF 50V
C917	1-126-968-11	ELECT	100uF 20% 50V
C918	1-126-968-11	ELECT	100uF 20% 50V
C919	1-126-964-11	ELECT	10uF 20% 50V
C920	1-126-947-11	ELECT	47uF 20% 35V
C953	1-136-165-00	FILM	0.1uF 5% 50V
C954	1-126-768-11	ELECT	2200uF 20% 16V
C956	1-104-665-11	ELECT	100uF 20% 10V
C1501	1-130-479-00	MYLAR	0.0047uF 5% 50V
C1502	1-162-290-31	CERAMIC	470PF 10% 50V
C1503	1-164-159-21	CERAMIC	0.1uF 50V
C1504	1-126-960-11	ELECT	1uF 20% 50V
C1505	1-126-964-11	ELECT	10uF 20% 50V
C1506	1-126-964-11	ELECT	10uF 20% 50V
C1507	1-126-960-11	ELECT	1uF 20% 50V
C1508	1-104-665-11	ELECT	100uF 20% 10V
C1523	1-126-933-11	ELECT	100uF 20% 16V
C1531	1-164-159-21	CERAMIC	0.1uF 50V
C1532	1-164-159-21	CERAMIC	0.1uF 50V
C1533	1-164-159-21	CERAMIC	0.1uF 50V

Ref. No.	Part No.	Description	Remarks
C1534	1-126-935-11	ELECT	470uF 20% 16V
C1551	1-130-479-00	MYLAR	0.0047uF 5% 50V
C1552	1-162-290-31	CERAMIC	470PF 10% 50V
C1553	1-164-159-21	CERAMIC	0.1uF 50V
C1554	1-126-960-11	ELECT	1uF 20% 50V
C1555	1-126-964-11	ELECT	10uF 20% 50V
C1556	1-126-964-11	ELECT	10uF 20% 50V
C1557	1-126-960-11	ELECT	1uF 20% 50V
C1558	1-104-665-11	ELECT	100uF 20% 10V
< CONNECTOR >			
CN101	1-778-982-11	CONNECTOR, BOARD TO BOARD 13P	
* CN102	1-568-836-11	SOCKET, CONNECTOR 17P	
* CN105	1-564-518-11	PLUG, CONNECTOR 3P	
* CN201	1-568-832-11	SOCKET, CONNECTOR 13P	
CN202	1-568-802-11	SOCKET, CONNECTOR 19P	
* CN203	1-568-936-11	PIN, CONNECTOR 9P	
CN205	1-568-838-11	SOCKET, CONNECTOR 21P	
* CN206	1-568-830-11	SOCKET, CONNECTOR 11P	
* CN207	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P	
< DIODE >			
D141	8-719-991-33	DIODE 1SS133T-77	
D142	8-719-991-33	DIODE 1SS133T-77	
D191	8-719-991-33	DIODE 1SS133T-77	
D192	8-719-991-33	DIODE 1SS133T-77	
D291	8-719-991-33	DIODE 1SS133T-77	
D301	8-719-200-82	DIODE 11ES2	
D302	8-719-200-82	DIODE 11ES2	
D303	8-719-991-33	DIODE 1SS133T-77	
D304	8-719-991-33	DIODE 1SS133T-77	
D305	8-719-991-33	DIODE 1SS133T-77	
D306	8-719-991-33	DIODE 1SS133T-77	
D307	8-719-991-33	DIODE 1SS133T-77	
D309	8-719-991-33	DIODE 1SS133T-77	
D902	8-719-200-82	DIODE 11ES2	
D903	8-719-200-82	DIODE 11ES2	
D904	8-719-200-82	DIODE 11ES2	
D905	8-719-200-82	DIODE 11ES2	
D906	8-719-200-82	DIODE 11ES2	
D907	8-719-200-82	DIODE 11ES2	
D908	8-719-200-82	DIODE 11ES2	
D909	8-719-200-82	DIODE 11ES2	
D910	8-719-982-27	DIODE MTZJ-33C	
D911	8-719-109-89	DIODE RD5.6ESB2	
D912	8-719-991-33	DIODE 1SS133T-77	
D913	8-719-200-82	DIODE 11ES2	
D914	8-719-200-82	DIODE 11ES2	
D915	8-719-935-69	DIODE UZL-11M1-TA	
D951	8-719-991-33	DIODE 1SS133T-77	
D952	8-719-991-33	DIODE 1SS133T-77	

## < FERRITE BEAD >

FB302 1-412-473-21 INDUCTOR 0uH

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
< IC >				< RESISTOR >			
IC101	8-759-634-50	IC M5218AL		R102	1-249-417-11	CARBON 1K 5%	1/4W
IC102	8-759-000-48	IC MC14052BCP		R103	1-249-437-11	CARBON 47K 5%	1/4W
IC201	8-759-460-02	IC M62427FP-A		R104	1-249-417-11	CARBON 1K 5%	1/4W
IC231	8-759-634-50	IC M5218AL		R105	1-247-897-11	CARBON 560K 5%	1/4W
IC281	8-759-111-68	IC UPC1237HA		R106	1-249-437-11	CARBON 47K 5%	1/4W
IC301	8-759-531-31	IC uPD780018YGF-028-3BA		R107	1-249-417-11	CARBON 1K 5%	1/4W
IC302	8-759-635-63	IC M51943BSL		R108	1-249-441-11	CARBON 100K 5%	1/4W
IC391	8-749-923-04	IC TOTX178 (CD DIGITAL OUT)		R121	1-249-424-11	CARBON 3.9K 5%	1/4W
IC901	8-759-288-53	IC LA5617		R122	1-247-887-00	CARBON 220K 5%	1/4W
IC902	8-759-604-86	IC M5F7807L		R123	1-249-426-11	CARBON 5.6K 5%	1/4W
IC903	8-759-231-53	IC TA7805S		R124	1-249-429-11	CARBON 10K 5%	1/4W
IC904	8-759-231-58	IC TA7812S		R125	1-249-441-11	CARBON 100K 5%	1/4W
IC1501	8-759-363-21	IC HA12203NT		R126	1-249-417-11	CARBON 1K 5%	1/4W
IC1502	8-759-822-09	IC LB1641		R127	1-249-441-11	CARBON 100K 5%	1/4W
				R133	1-260-091-11	CARBON 220 5%	1/2W
< JACK >				R134	1-260-091-11	CARBON 220 5%	1/2W
J101	1-784-275-11	JACK, PIN 6P (PHONO, VIDEO/MD (AUDIO))		R140	1-249-429-11	CARBON 10K 5%	1/4W
				R141	1-249-437-11	CARBON 47K 5%	1/4W
< COIL >				R142	1-249-429-11	CARBON 10K 5%	1/4W
L301	1-410-509-11	INDUCTOR 10uH		△ R147	1-216-456-00	METAL OXIDE 820 5%	2W F
L393	1-410-515-11	INDUCTOR 33uH		△ R148	1-216-456-00	METAL OXIDE 820 5%	2W F
				R152	1-249-417-11	CARBON 1K 5%	1/4W
< TRANSISTOR >				R153	1-249-437-11	CARBON 47K 5%	1/4W
Q101	8-729-141-30	TRANSISTOR 2SC3623A-LK		R154	1-249-417-11	CARBON 1K 5%	1/4W
Q102	8-729-029-40	TRANSISTOR DTA124ESA		R155	1-247-897-11	CARBON 560K 5%	1/4W
Q103	8-729-029-86	TRANSISTOR DTC124ESA		R156	1-249-437-11	CARBON 47K 5%	1/4W
Q141	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R157	1-249-417-11	CARBON 1K 5%	1/4W
Q142	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA		R158	1-249-441-11	CARBON 100K 5%	1/4W
Q151	8-729-141-30	TRANSISTOR 2SC3623A-LK		R171	1-249-424-11	CARBON 3.9K 5%	1/4W
Q191	8-729-119-76	TRANSISTOR 2SA1175-HFE		R172	1-247-887-00	CARBON 220K 5%	1/4W
Q192	8-729-111-29	TRANSISTOR 2SD1616A-K		R173	1-249-426-11	CARBON 5.6K 5%	1/4W
Q201	8-729-029-86	TRANSISTOR DTC124ESA		R174	1-249-429-11	CARBON 10K 5%	1/4W
Q202	8-729-620-05	TRANSISTOR 2SC2603-EF		R176	1-249-417-11	CARBON 1K 5%	1/4W
Q203	8-729-620-05	TRANSISTOR 2SC2603-EF		R177	1-249-441-11	CARBON 100K 5%	1/4W
Q204	8-729-141-30	TRANSISTOR 2SC3623A-LK		R183	1-260-091-11	CARBON 220 5%	1/2W
Q231	8-729-029-40	TRANSISTOR DTA124ESA		R184	1-260-091-11	CARBON 220 5%	1/2W
Q232	8-729-029-40	TRANSISTOR DTA124ESA		R191	1-249-425-11	CARBON 4.7K 5%	1/4W
Q251	8-729-029-86	TRANSISTOR DTC124ESA		R192	1-249-441-11	CARBON 100K 5%	1/4W
Q252	8-729-620-05	TRANSISTOR 2SC2603-EF		R193	1-249-421-11	CARBON 2.2K 5%	1/4W
Q253	8-729-620-05	TRANSISTOR 2SC2603-EF		R194	1-249-437-11	CARBON 47K 5%	1/4W
Q254	8-729-141-30	TRANSISTOR 2SC3623A-LK		R195	1-249-437-11	CARBON 47K 5%	1/4W
Q281	8-729-029-86	TRANSISTOR DTC124ESA		R201	1-249-429-11	CARBON 10K 5%	1/4W
Q282	8-729-029-40	TRANSISTOR DTA124ESA		R202	1-247-863-91	CARBON 22K 5%	1/4W
Q283	8-729-029-86	TRANSISTOR DTC124ESA		R203	1-249-441-11	CARBON 100K 5%	1/4W
Q301	8-729-620-05	TRANSISTOR 2SC2603-EF		R205	1-247-863-91	CARBON 22K 5%	1/4W
Q901	8-729-040-20	TRANSISTOR RT1P137L-TP		R206	1-249-421-11	CARBON 2.2K 5%	1/4W
Q902	8-729-029-86	TRANSISTOR DTC124ESA		R207	1-249-431-11	CARBON 15K 5%	1/4W
Q903	8-729-026-68	TRANSISTOR 2SD2525(TP)		R209	1-249-441-11	CARBON 100K 5%	1/4W
Q904	8-729-030-19	TRANSISTOR 2SB1640		R210	1-247-896-11	CARBON 510K 5%	1/4W
Q905	8-729-040-20	TRANSISTOR RT1P137L-TP		R211	1-247-891-00	CARBON 330K 5%	1/4W
Q906	8-729-029-40	TRANSISTOR DTA124ESA		R212	1-247-826-00	CARBON 620 5%	1/4W
Q907	8-729-620-05	TRANSISTOR 2SC2603-EF		R213	1-249-429-11	CARBON 10K 5%	1/4W
Q1531	8-729-801-93	TRANSISTOR 2SD1387		R214	1-249-437-11	CARBON 47K 5%	1/4W
Q1532	8-729-029-66	TRANSISTOR DTC114ESA		R215	1-247-903-00	CARBON 1M 5%	1/4W
Q1533	8-729-029-66	TRANSISTOR DTC114ESA		R216	1-249-429-11	CARBON 10K 5%	1/4W
Q1534	8-729-119-77	TRANSISTOR 2SA1175-FEK					
Q1535	8-729-029-66	TRANSISTOR DTC114ESA					

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

# MAIN

Ref. No.	Part No.	Description				Remarks	Ref. No.	Part No.	Description				Remarks
R217	1-249-437-11	CARBON	47K	5%	1/4W		R330	1-247-807-31	CARBON	100	5%	1/4W	
R221	1-249-425-11	CARBON	4.7K	5%	1/4W		R331	1-247-807-31	CARBON	100	5%	1/4W	
R222	1-249-425-11	CARBON	4.7K	5%	1/4W		R332	1-247-807-31	CARBON	100	5%	1/4W	
R226	1-249-421-11	CARBON	2.2K	5%	1/4W		R333	1-247-807-31	CARBON	100	5%	1/4W	
R227	1-249-441-11	CARBON	100K	5%	1/4W		R339	1-247-807-31	CARBON	100	5%	1/4W	
R228	1-249-429-11	CARBON	10K	5%	1/4W		R340	1-247-807-31	CARBON	100	5%	1/4W	
R231	1-249-437-11	CARBON	47K	5%	1/4W		R341	1-247-807-31	CARBON	100	5%	1/4W	
R232	1-249-437-11	CARBON	47K	5%	1/4W		R342	1-247-807-31	CARBON	100	5%	1/4W	
R234	1-247-886-11	CARBON	200K	5%	1/4W		R344	1-247-807-31	CARBON	100	5%	1/4W	
R235	1-249-421-11	CARBON	2.2K	5%	1/4W		R345	1-247-807-31	CARBON	100	5%	1/4W	
R236	1-249-441-11	CARBON	100K	5%	1/4W		R346	1-247-807-31	CARBON	100	5%	1/4W	
R238	1-249-438-11	CARBON	56K	5%	1/4W		R349	1-247-807-31	CARBON	100	5%	1/4W	
R239	1-249-437-11	CARBON	47K	5%	1/4W		R350	1-247-807-31	CARBON	100	5%	1/4W	
R253	1-249-441-11	CARBON	100K	5%	1/4W		R351	1-247-807-31	CARBON	100	5%	1/4W	
R257	1-249-431-11	CARBON	15K	5%	1/4W		R352	1-247-807-31	CARBON	100	5%	1/4W	
R259	1-249-441-11	CARBON	100K	5%	1/4W		R353	1-247-807-31	CARBON	100	5%	1/4W	
R260	1-247-896-11	CARBON	510K	5%	1/4W		R354	1-247-807-31	CARBON	100	5%	1/4W	
R261	1-247-891-00	CARBON	330K	5%	1/4W		R355	1-247-807-31	CARBON	100	5%	1/4W	
R262	1-247-826-00	CARBON	620	5%	1/4W		R356	1-247-807-31	CARBON	100	5%	1/4W	
R263	1-249-429-11	CARBON	10K	5%	1/4W		R357	1-247-807-31	CARBON	100	5%	1/4W	
R264	1-249-437-11	CARBON	47K	5%	1/4W		R359	1-247-807-31	CARBON	100	5%	1/4W	
R265	1-247-903-00	CARBON	1M	5%	1/4W		R360	1-247-807-31	CARBON	100	5%	1/4W	
R266	1-249-429-11	CARBON	10K	5%	1/4W		R366	1-247-807-31	CARBON	100	5%	1/4W	
R267	1-249-437-11	CARBON	47K	5%	1/4W		R367	1-249-429-11	CARBON	10K	5%	1/4W	
R271	1-249-425-11	CARBON	4.7K	5%	1/4W		R368	1-247-843-11	CARBON	3.3K	5%	1/4W	
R272	1-249-425-11	CARBON	4.7K	5%	1/4W		R369	1-249-429-11	CARBON	10K	5%	1/4W	
R276	1-249-421-11	CARBON	2.2K	5%	1/4W		R384	1-249-429-11	CARBON	10K	5%	1/4W	
R277	1-249-441-11	CARBON	100K	5%	1/4W		R395	1-247-807-31	CARBON	100	5%	1/4W	
R278	1-249-429-11	CARBON	10K	5%	1/4W		R396	1-249-435-11	CARBON	33K	5%	1/4W	
R281	1-249-426-11	CARBON	5.6K	5%	1/4W		R397	1-247-807-31	CARBON	100	5%	1/4W	
R282	1-249-426-11	CARBON	5.6K	5%	1/4W		R398	1-249-435-11	CARBON	33K	5%	1/4W	
R283	1-249-435-11	CARBON	33K	5%	1/4W		R417	1-249-441-11	CARBON	100K	5%	1/4W	
R284	1-247-791-91	CARBON	22	5%	1/4W		R913	1-247-815-91	CARBON	220	5%	1/4W	
R285	1-249-441-11	CARBON	100K	5%	1/4W		R914	1-249-417-11	CARBON	1K	5%	1/4W	
R286	1-249-429-11	CARBON	10K	5%	1/4W		R915	1-249-425-11	CARBON	4.7K	5%	1/4W	
R287	1-249-425-11	CARBON	4.7K	5%	1/4W		R916	1-247-815-91	CARBON	220	5%	1/4W	
R288	1-249-439-11	CARBON	68K	5%	1/4W		R917	1-247-815-91	CARBON	220	5%	1/4W	
R289	1-249-440-11	CARBON	82K	5%	1/4W		R918	1-249-425-11	CARBON	4.7K	5%	1/4W	
R291	1-247-863-91	CARBON	22K	5%	1/4W		R920	1-249-417-11	CARBON	1K	5%	1/4W	
R292	1-247-863-91	CARBON	22K	5%	1/4W		R921	1-247-895-91	CARBON	470K	5%	1/4W	
R293	1-249-421-11	CARBON	2.2K	5%	1/4W		R951	1-249-425-11	CARBON	4.7K	5%	1/4W	
R294	1-249-441-11	CARBON	100K	5%	1/4W		R952	1-249-425-11	CARBON	4.7K	5%	1/4W	
R295	1-247-903-00	CARBON	1M	5%	1/4W		R1501	1-249-435-11	CARBON	33K	5%	1/4W	
R301	1-249-413-11	CARBON	470	5%	1/4W		R1502	1-249-417-11	CARBON	1K	5%	1/4W	
R302	1-249-425-11	CARBON	4.7K	5%	1/4W		R1503	1-249-426-11	CARBON	5.6K	5%	1/4W	
R303	1-249-437-11	CARBON	47K	5%	1/4W		R1504	1-247-840-00	CARBON	2.4K	5%	1/4W	
R304	1-249-437-11	CARBON	47K	5%	1/4W		R1505	1-247-863-91	CARBON	22K	5%	1/4W	
R305	1-249-429-11	CARBON	10K	5%	1/4W		R1506	1-249-421-11	CARBON	2.2K	5%	1/4W	
R313	1-247-807-31	CARBON	100	5%	1/4W		R1507	1-249-428-11	CARBON	8.2K	5%	1/4W	
R316	1-249-429-11	CARBON	10K	5%	1/4W		R1521	1-247-852-11	CARBON	7.5K	5%	1/4W	
R318	1-249-429-11	CARBON	10K	5%	1/4W		R1522	1-249-422-11	CARBON	2.7K	5%	1/4W	
R319	1-249-429-11	CARBON	10K	5%	1/4W		R1524	1-249-429-11	CARBON	10K	5%	1/4W	
R320	1-249-429-11	CARBON	10K	5%	1/4W		R1525	1-249-432-11	CARBON	18K	5%	1/4W	
R322	1-249-425-11	CARBON	4.7K	5%	1/4W		R1526	1-249-429-11	CARBON	10K	5%	1/4W	
R323	1-247-807-31	CARBON	100	5%	1/4W		R1527	1-249-429-11	CARBON	10K	5%	1/4W	
R324	1-247-891-00	CARBON	330K	5%	1/4W		R1531	1-247-843-11	CARBON	3.3K	5%	1/4W	
R325	1-249-431-11	CARBON	15K	5%	1/4W		R1532	1-249-411-11	CARBON	330	5%	1/4W	
R326	1-249-415-11	CARBON	680	5%	1/4W		R1533	1-249-427-11	CARBON	6.8K	5%	1/4W	
R327	1-247-807-31	CARBON	100	5%	1/4W		R1534	1-249-429-11	CARBON	10K	5%	1/4W	
R328	1-247-807-31	CARBON	100	5%	1/4W		R1535	1-249-425-11	CARBON	4.7K	5%	1/4W	

Ref. No.	Part No.	Description				Remarks	Ref. No.	Part No.	Description				Remarks
R1536	1-249-425-11	CARBON	4.7K	5%	1/4W		C626	1-126-957-11	ELECT	0.22uF	20%	50V	
R1541	1-249-425-11	CARBON	4.7K	5%	1/4W		C627	1-136-159-00	FILM	0.033uF	5%	50V	
R1542	1-249-425-11	CARBON	4.7K	5%	1/4W		C628	1-162-302-11	CERAMIC	0.0022uF	30%	16V	
R1543	1-249-425-11	CARBON	4.7K	5%	1/4W		C629	1-126-957-11	ELECT	0.22uF	20%	50V	
R1544	1-249-417-11	CARBON	1K	5%	1/4W		C630	1-162-293-31	CERAMIC	820PF	10%	50V	
R1545	1-249-437-11	CARBON	47K	5%	1/4W		C631	1-126-957-11	ELECT	0.22uF	20%	50V	
R1546	1-249-437-11	CARBON	47K	5%	1/4W		C632	1-126-957-11	ELECT	0.22uF	20%	50V	
R1547	1-249-437-11	CARBON	47K	5%	1/4W		C641	1-162-286-21	CERAMIC	220PF	10%	50V	
R1548	1-249-437-11	CARBON	47K	5%	1/4W		C642	1-162-286-21	CERAMIC	220PF	10%	50V	
R1551	1-247-863-91	CARBON	22K	5%	1/4W		C643	1-162-286-21	CERAMIC	220PF	10%	50V	
R1552	1-249-417-11	CARBON	1K	5%	1/4W		C644	1-162-286-21	CERAMIC	220PF	10%	50V	
R1553	1-249-426-11	CARBON	5.6K	5%	1/4W		C645	1-162-286-21	CERAMIC	220PF	10%	50V	
R1554	1-247-840-00	CARBON	2.4K	5%	1/4W		C646	1-162-286-21	CERAMIC	220PF	10%	50V	
R1555	1-247-863-91	CARBON	22K	5%	1/4W		C647	1-162-286-21	CERAMIC	220PF	10%	50V	
R1556	1-249-421-11	CARBON	2.2K	5%	1/4W		C648	1-162-286-21	CERAMIC	220PF	10%	50V	
R1557	1-249-428-11	CARBON	8.2K	5%	1/4W		C649	1-162-286-21	CERAMIC	220PF	10%	50V	
		< VARIABLE RESISTOR >					C650	1-162-286-21	CERAMIC	220PF	10%	50V	
RV1501	1-238-598-11	RES, ADJ, CARBON 2.2K					C651	1-162-286-21	CERAMIC	220PF	10%	50V	
RV1551	1-238-598-11	RES, ADJ, CARBON 2.2K					C652	1-162-286-21	CERAMIC	220PF	10%	50V	
		< RELAY >					C653	1-162-286-21	CERAMIC	220PF	10%	50V	
RY141	1-755-141-11	RELAY					C654	1-162-286-21	CERAMIC	220PF	10%	50V	
RY142	1-755-141-11	RELAY					C655	1-162-286-21	CERAMIC	220PF	10%	50V	
		< TERMINAL >					C656	1-162-286-21	CERAMIC	220PF	10%	50V	
							C695	1-164-159-21	CERAMIC	0.1uF		50V	
							C696	1-164-159-21	CERAMIC	0.1uF		50V	
TM131	1-537-925-41	TERMINAL BOARD (SPEAKER)					C697	1-162-294-31	CERAMIC	0.001uF	10%	50V	
		< VIBRATOR >							< CONNECTOR >				
X301	1-760-489-11	VIBRATOR, CERAMIC (5MHz)					* CN601	1-568-836-11	SOCKET, CONNECTOR 17P				
X302	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)					* CN602	1-568-947-11	PIN, CONNECTOR 9P				
*****							CN603	1-506-486-11	PIN, CONNECTOR 7P				
							* CN604	1-568-947-11	PIN, CONNECTOR 9P				
		< DIODE >											
*	A-4403-858-A	PANEL BOARD, COMPLETE					D601	8-719-991-33	DIODE	1SS133T-77			
		*****					D602	8-719-991-33	DIODE	1SS133T-77			
*	4-949-935-81	CUSHION (FL)					D603	8-719-991-33	DIODE	1SS133T-77			
*	4-986-870-01	HOLDER, FL TUBE					D604	8-719-991-33	DIODE	1SS133T-77			
		< CAPACITOR >					D605	8-719-991-33	DIODE	1SS133T-77			
C601	1-126-967-11	ELECT	47uF	20%	50V		D606	8-719-991-33	DIODE	1SS133T-77			
C602	1-162-306-11	CERAMIC	0.01uF	20%	16V		D607	8-719-991-33	DIODE	1SS133T-77			
C603	1-126-963-11	ELECT	4.7uF	20%	50V		D611	8-719-057-29	DIODE	SML78423C-TP15 (TUNER/BAND)			
C604	1-126-960-11	ELECT	1uF	20%	50V		D612	8-719-057-29	DIODE	SML78423C-TP15 (TUNER/BAND)			
C606	1-126-960-11	ELECT	1uF	20%	50V		D613	8-719-058-04	DIODE	SEL5223S-TP15 (ENTER/NEXT)			
C608	1-126-382-11	ELECT	100uF	20%	6.3V		D614	8-719-058-04	DIODE	SEL5223S-TP15 (GROOVE)			
C610	1-162-306-11	CERAMIC	0.01uF	20%	16V		D615	8-719-058-04	DIODE	SEL5223S-TP15 (SUPER WOOFER)			
C611	1-162-306-11	CERAMIC	0.01uF	20%	16V		D616	8-719-058-04	DIODE	SEL5223S-TP15 (EFFECT)			
C612	1-126-967-11	ELECT	47uF	20%	50V		D617	8-719-058-04	DIODE	SEL5223S-TP15 (ENTER)			
C613	1-164-159-21	CERAMIC	0.1uF		50V		D618	8-719-058-04	DIODE	SEL5223S-TP15 (FILE 1)			
C621	1-126-960-11	ELECT	1uF	20%	50V		D619	8-719-058-04	DIODE	SEL5223S-TP15 (FILE 2)			
C622	1-136-161-00	FILM	0.047uF	5%	50V		D620	8-719-058-04	DIODE	SEL5223S-TP15 (FILE 3)			
C623	1-126-957-11	ELECT	0.22uF	20%	50V		D621	8-719-058-04	DIODE	SEL5223S-TP15 (FILE 4)			
C624	1-126-957-11	ELECT	0.22uF	20%	50V		D622	8-719-058-04	DIODE	SEL5223S-TP15 (FILE 5)			
C625	1-162-306-11	CERAMIC	0.01uF	20%	16V		D623	8-719-058-04	DIODE	SEL5223S-TP15 (P FILE)			
							D624	8-719-058-04	DIODE	SEL5223S-TP15 (OTHERS)			
							D625	8-719-058-04	DIODE	SEL5223S-TP15 (MUSIC)			



# PANEL

Ref. No.	Part No.	Description				Remarks	Ref. No.	Part No.	Description				Remarks				
FB601	1-412-473-21	< FERRITE BEAD >					R633	1-247-897-11	CARBON	560K	5%	1/4W					
		INDUCTOR 0uH	R634	1-247-897-11	CARBON	560K	5%	1/4W									
			R635	1-247-897-11	CARBON	560K	5%	1/4W									
			R636	1-247-897-11	CARBON	560K	5%	1/4W									
			< FLUORESCENT INDICATOR TUBE >					R637	1-247-895-91	CARBON	470K	5%	1/4W				
FL601	1-517-617-11	INDICATOR TUBE, FLUORESCENT					R638	1-249-435-11	CARBON	33K	5%	1/4W					
		R641	1-249-419-11	CARBON	1.5K	5%	1/4W										
		< IC >					R642	1-249-401-11	CARBON	47	5%	1/4W					
		R643	1-249-403-11	CARBON	68	5%	1/4W										
IC601	8-759-526-36	IC TMP87CH75F-6659					R644	1-247-807-31	CARBON	100	5%	1/4W					
IC602	8-759-459-84	IC NJL56H400					R645	1-249-407-11	CARBON	150	5%	1/4W					
< COIL >					R646	1-249-407-11							CARBON	150	5%	1/4W	
L601	1-410-509-11	INDUCTOR 10uH	R647	1-247-815-91	CARBON	220							5%	1/4W			
			R648	1-249-411-11	CARBON	330							5%	1/4W			
			R649	1-249-413-11	CARBON	470							5%	1/4W			
			< TRANSISTOR >					R650	1-249-415-11	CARBON	680	5%	1/4W				
			Q601	8-729-178-59	TRANSISTOR	2SC2785		R651	1-249-417-11	CARBON	1K	5%	1/4W				
Q602	8-729-118-00	TRANSISTOR	2SB1116-L		R652	1-249-419-11	CARBON	1.5K	5%	1/4W							
Q603	8-729-118-00	TRANSISTOR	2SB1116-L		R653	1-249-421-11	CARBON	2.2K	5%	1/4W							
Q604	8-729-119-77	TRANSISTOR	2SA1175-FEK		R654	1-247-843-11	CARBON	3.3K	5%	1/4W							
Q605	8-729-119-77	TRANSISTOR	2SA1175-FEK		R655	1-249-427-11	CARBON	6.8K	5%	1/4W							
Q606	8-729-119-77	TRANSISTOR	2SA1175-FEK								R656	1-249-431-11	CARBON	15K	5%	1/4W	
Q607	8-729-119-77	TRANSISTOR	2SA1175-FEK								R657	1-249-419-11	CARBON	1.5K	5%	1/4W	
Q608	8-729-119-77	TRANSISTOR	2SA1175-FEK								R658	1-249-401-11	CARBON	47	5%	1/4W	
Q609	8-729-119-77	TRANSISTOR	2SA1175-FEK								R659	1-249-403-11	CARBON	68	5%	1/4W	
Q610	8-729-119-77	TRANSISTOR	2SA1175-FEK		R660	1-247-807-31	CARBON	100	5%	1/4W							
Q611	8-729-119-77	TRANSISTOR	2SA1175-FEK								R661	1-249-407-11	CARBON	150	5%	1/4W	
Q614	8-729-119-77	TRANSISTOR	2SA1175-FEK								R662	1-249-407-11	CARBON	150	5%	1/4W	
Q615	8-729-119-77	TRANSISTOR	2SA1175-FEK								R663	1-249-419-11	CARBON	1.5K	5%	1/4W	
Q617	8-729-119-77	TRANSISTOR	2SA1175-FEK								R664	1-249-401-11	CARBON	47	5%	1/4W	
Q618	8-729-119-77	TRANSISTOR	2SA1175-FEK		R665	1-249-403-11	CARBON	68	5%	1/4W							
Q619	8-729-119-77	TRANSISTOR	2SA1175-FEK								R666	1-247-807-31	CARBON	100	5%	1/4W	
Q621	8-729-119-77	TRANSISTOR	2SA1175-FEK								R667	1-249-407-11	CARBON	150	5%	1/4W	
Q622	8-729-119-77	TRANSISTOR	2SA1175-FEK								R668	1-249-407-11	CARBON	150	5%	1/4W	
< RESISTOR >											R669	1-249-419-11	CARBON	1.5K	5%	1/4W	
R601	1-249-427-11	CARBON	6.8K	5%	1/4W	R670	1-249-401-11	CARBON	47	5%	1/4W						
						R671	1-249-403-11	CARBON	68	5%	1/4W						
						R672	1-247-807-31	CARBON	100	5%	1/4W						
						R673	1-249-407-11	CARBON	150	5%	1/4W						
						R674	1-249-407-11	CARBON	150	5%	1/4W						
						R608	1-249-429-11	CARBON	10K	5%	1/4W	R675	1-247-815-91	CARBON	220	5%	1/4W
												R676	1-249-411-11	CARBON	330	5%	1/4W
R677	1-249-413-11	CARBON	470	5%	1/4W												
R678	1-249-415-11	CARBON	680	5%	1/4W												
R679	1-249-419-11	CARBON	1.5K	5%	1/4W												
R613	1-249-401-11	CARBON	47	5%	1/4W							R681	1-249-429-11	CARBON	10K	5%	1/4W
												R682	1-249-421-11	CARBON	2.2K	5%	1/4W
						R683	1-247-887-00	CARBON	220K	5%	1/4W						
						R684	1-249-421-11	CARBON	2.2K	5%	1/4W						
						R685	1-247-815-91	CARBON	220	5%	1/4W						
						R622	1-249-437-11	CARBON	47K	5%	1/4W	R686	1-247-807-31	CARBON	100	5%	1/4W
												R687	1-247-807-31	CARBON	100	5%	1/4W
R688	1-247-807-31	CARBON	100	5%	1/4W												
R689	1-247-807-31	CARBON	100	5%	1/4W												
R690	1-247-807-31	CARBON	100	5%	1/4W												
R627	1-249-421-11	CARBON	2.2K	5%	1/4W							R691	1-247-807-31	CARBON	100	5%	1/4W
												R692	1-247-807-31	CARBON	100	5%	1/4W
						R693	1-247-807-31	CARBON	100	5%	1/4W						
						R694	1-247-807-31	CARBON	100	5%	1/4W						
						R695	1-247-807-31	CARBON	100	5%	1/4W						
						R623	1-247-895-91	CARBON	470K	5%	1/4W						
						R624	1-249-421-11	CARBON	2.2K	5%	1/4W						
R625	1-249-437-11	CARBON	47K	5%	1/4W												
R626	1-247-895-91	CARBON	470K	5%	1/4W												
R628	1-249-437-11	CARBON	47K	5%	1/4W												
R629	1-247-895-91	CARBON	470K	5%	1/4W												
R631	1-249-437-11	CARBON	47K	5%	1/4W												
R632	1-247-895-91	CARBON	470K	5%	1/4W												

Ref. No.	Part No.	Description				Remarks	Ref. No.	Part No.	Description				Remarks
R696	1-247-807-31	CARBON	100	5%	1/4W		C813	1-162-294-31	CERAMIC	0.001uF	10%	50V	
R697	1-247-807-31	CARBON	100	5%	1/4W		C821	1-126-963-11	ELECT	4.7uF	20%	50V	
R698	1-247-807-31	CARBON	100	5%	1/4W		C822	1-162-286-21	CERAMIC	220PF	10%	50V	
R699	1-247-807-31	CARBON	100	5%	1/4W		C823	1-162-282-31	CERAMIC	100PF	10%	50V	
R700	1-247-807-31	CARBON	100	5%	1/4W		C824	1-126-967-11	ELECT	47uF	20%	10V	
< SWITCH >							C826	1-126-967-11	ELECT	47uF	20%	50V	
S601	1-554-303-21	SWITCH, TACTILE (ENTER/NEXT)					C827	1-126-965-11	ELECT	22uF	20%	50V	
S602	1-554-303-21	SWITCH, TACTILE (TUNER MEMORY)					C829	1-126-965-11	ELECT	22uF	20%	50V	
S603	1-554-303-21	SWITCH, TACTILE (TUNING MODE)					C830	1-164-159-21	CERAMIC	0.1uF		50V	
S604	1-554-303-21	SWITCH, TACTILE (TUNER/BAND)					C831	1-130-493-00	MYLAR	0.068uF	5%	50V	
S605	1-554-303-21	SWITCH, TACTILE (TUNING +)					C832	1-130-493-00	MYLAR	0.068uF	5%	50V	
S606	1-554-303-21	SWITCH, TACTILE (TUNING -)					C833	1-162-294-31	CERAMIC	0.001uF	10%	50V	
S607	1-554-303-21	SWITCH, TACTILE (STEREO/MONO)					C841	1-136-165-00	FILM	0.1uF	5%	50V	
S609	1-554-303-21	SWITCH, TACTILE (FUNCTION)					C842	1-126-307-11	ELECT	6800uF	20%	50V	
S610	1-554-303-21	SWITCH, TACTILE (GROOVE)					C843	1-126-925-11	ELECT	470uF	20%	10V	
S611	1-554-303-21	SWITCH, TACTILE (GEQ ▲)					C851	1-126-963-11	ELECT	4.7uF	20%	50V	
S612	1-554-303-21	SWITCH, TACTILE (GEQ ◀)					C852	1-162-286-21	CERAMIC	220PF	10%	50V	
S613	1-554-303-21	SWITCH, TACTILE (GEQ ▶)					C853	1-162-282-31	CERAMIC	100PF	10%	50V	
S614	1-554-303-21	SWITCH, TACTILE (GEQ ▼)					C854	1-126-967-11	ELECT	47uF	20%	10V	
S615	1-554-303-21	SWITCH, TACTILE (SUPER WOOFER)					C856	1-126-967-11	ELECT	47uF	20%	50V	
S616	1-554-303-21	SWITCH, TACTILE (SUPER W MODE)					C857	1-126-965-11	ELECT	22uF	20%	50V	
S619	1-554-303-21	SWITCH, TACTILE (GEQ CONTROL)					C858	1-126-963-11	ELECT	4.7uF	20%	50V	
S620	1-554-303-21	SWITCH, TACTILE (ENTER)					C861	1-130-493-00	MYLAR	0.068uF	5%	50V	
S621	1-554-303-21	SWITCH, TACTILE (EFFECT)					C862	1-130-493-00	MYLAR	0.068uF	5%	50V	
S622	1-554-303-21	SWITCH, TACTILE (WAVE)					C871	1-126-963-11	ELECT	4.7uF	20%	50V	
S623	1-554-303-21	SWITCH, TACTILE (KARAOKE PON/MPX)					C872	1-162-286-21	CERAMIC	220PF	10%	50V	
S624	1-554-303-21	SWITCH, TACTILE (SURROUND)					C873	1-162-282-31	CERAMIC	100PF	10%	50V	
S625	1-554-303-21	SWITCH, TACTILE (P FILE MEMORY)					C874	1-126-967-11	ELECT	47uF	20%	10V	
S627	1-554-303-21	SWITCH, TACTILE (SPECTRUM ANALYZER)					C876	1-126-967-11	ELECT	47uF	20%	50V	
S628	1-554-303-21	SWITCH, TACTILE (DISPLAY/DEMO)					C877	1-126-965-11	ELECT	22uF	20%	50V	
S629	1-554-303-21	SWITCH, TACTILE (I/⏮)					C878	1-126-963-11	ELECT	4.7uF	20%	50V	
S630	1-554-303-21	SWITCH, TACTILE (⌚/CLOCK SET)					C881	1-130-493-00	MYLAR	0.068uF	5%	50V	
S631	1-554-303-21	SWITCH, TACTILE (REC)					C882	1-130-493-00	MYLAR	0.068uF	5%	50V	
S632	1-554-303-21	SWITCH, TACTILE (DAILY 1)					C891	1-136-165-00	FILM	0.1uF	5%	50V	
S633	1-554-303-21	SWITCH, TACTILE (DAILY 2)					C892	1-126-307-11	ELECT	6800uF	20%	50V	
S634	1-554-303-21	SWITCH, TACTILE (SLEEP)					C893	1-126-925-11	ELECT	470uF	20%	10V	
S701	1-473-392-11	ENCODER, ROTARY (VOLUME)					< CONNECTOR >						
< VIBRATOR >							CN801	1-778-981-11	CONNECTOR, BOARD TO BOARD 13P				
X601	1-579-125-11	VIBRATOR, CERAMIC (8MHz)					< DIODE >						
*****							D800	8-719-060-53	DIODE	RBV-2506			
*	A-4403-848-A	POWER AMP BOARD, COMPLETE (EXCEPT TH)					D801	8-719-991-33	DIODE	1SS133T-77			
		*****					D811	8-719-991-33	DIODE	1SS133T-77			
*	A-4414-461-A	POWER AMP BOARD, COMPLETE (TH)					D821	8-719-991-33	DIODE	1SS133T-77			
		*****					D831	8-719-991-33	DIODE	1SS133T-77			
	7-685-646-79	SCREW +BVTP 3 × 8 TYPE2 N-S					D841	8-719-991-33	DIODE	1SS133T-77			
		< CAPACITOR >					D842	8-719-991-33	DIODE	1SS133T-77			
C801	1-126-963-11	ELECT	4.7uF	20%	50V		D851	8-719-991-33	DIODE	1SS133T-77			
C802	1-162-286-21	CERAMIC	220PF	10%	50V		D871	8-719-991-33	DIODE	1SS133T-77			
C803	1-162-282-31	CERAMIC	100PF	10%	50V		D891	8-719-991-33	DIODE	1SS133T-77			
C804	1-126-967-11	ELECT	47uF	20%	10V		D892	8-719-991-33	DIODE	1SS133T-77			
C806	1-126-967-11	ELECT	47uF	20%	50V		< IC >						
C807	1-126-965-11	ELECT	22uF	20%	50V		IC801	8-749-921-04	IC	STK-4211MK-2			
C809	1-126-965-11	ELECT	22uF	20%	50V		IC821	8-749-921-04	IC	STK-4211MK-2			
C810	1-164-159-21	CERAMIC	0.1uF		50V								
C811	1-130-493-00	MYLAR	0.068uF	5%	50V								
C812	1-130-493-00	MYLAR	0.068uF	5%	50V								



<b>POWER AMP</b>	<b>TABLE SENSOR</b>	<b>TC-A SW</b>
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Ref. No.	Part No.	Description				Remarks
< TRANSISTOR >						
Q801	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q821	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q851	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q871	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
< RESISTOR >						
R801	1-249-417-11	CARBON	1K	5%	1/4W	
R802	1-249-437-11	CARBON	47K	5%	1/4W	
R803	1-247-828-11	CARBON	750	5%	1/4W	
R803	1-249-415-11	CARBON	680	5%	1/4W	(EXCEPT TH)
R804	1-249-437-11	CARBON	47K	5%	1/4W	(TH)
R805	1-260-107-11	CARBON	4.7K	5%	1/2W	
R806	1-260-107-11	CARBON	4.7K	5%	1/2W	
△ R807	1-212-881-11	FUSIBLE	100	5%	1/4W	F
R808	1-217-156-00	METAL	0.22	10%	5W	
R809	1-260-076-11	CARBON	10	5%	1/2W	
R811	1-249-417-11	CARBON	1K	5%	1/4W	
R812	1-249-431-11	CARBON	15K	5%	1/4W	
R813	1-249-441-11	CARBON	100K	5%	1/4W	
R814	1-260-105-11	CARBON	3.3K	5%	1/2W	
R816	1-260-105-11	CARBON	3.3K	5%	1/2W	
△ R820	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R821	1-249-417-11	CARBON	1K	5%	1/4W	
R822	1-249-437-11	CARBON	47K	5%	1/4W	
R823	1-247-828-11	CARBON	750	5%	1/4W	
R823	1-249-415-11	CARBON	680	5%	1/4W	(EXCEPT TH)
R824	1-249-437-11	CARBON	47K	5%	1/4W	(TH)
R825	1-260-107-11	CARBON	4.7K	5%	1/2W	
R826	1-260-107-11	CARBON	4.7K	5%	1/2W	
△ R827	1-212-881-11	FUSIBLE	100	5%	1/4W	F
R828	1-217-156-00	METAL	0.22	10%	5W	
R829	1-260-076-11	CARBON	10	5%	1/2W	
R831	1-249-417-11	CARBON	1K	5%	1/4W	
R832	1-249-431-11	CARBON	15K	5%	1/4W	
R833	1-249-441-11	CARBON	100K	5%	1/4W	
R834	1-260-105-11	CARBON	3.3K	5%	1/2W	
R836	1-260-105-11	CARBON	3.3K	5%	1/2W	
△ R840	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R841	1-249-421-11	CARBON	2.2K	5%	1/4W	
R842	1-249-429-11	CARBON	10K	5%	1/4W	
R843	1-247-887-00	CARBON	220K	5%	1/4W	
R844	1-249-429-11	CARBON	10K	5%	1/4W	
R851	1-249-417-11	CARBON	1K	5%	1/4W	
R852	1-249-437-11	CARBON	47K	5%	1/4W	
R853	1-247-828-11	CARBON	750	5%	1/4W	
R853	1-249-415-11	CARBON	680	5%	1/4W	(EXCEPT TH)
R854	1-249-437-11	CARBON	47K	5%	1/4W	(TH)
R855	1-260-107-11	CARBON	4.7K	5%	1/2W	
R856	1-260-107-11	CARBON	4.7K	5%	1/2W	
△ R857	1-212-881-11	FUSIBLE	100	5%	1/4W	F
R858	1-217-156-00	METAL	0.22	10%	5W	

Ref. No.	Part No.	Description			Remarks
R859	1-260-076-11	CARBON	10	5%	1/2W
R860	1-249-437-11	CARBON	47K	5%	1/4W
R861	1-249-417-11	CARBON	1K	5%	1/4W
R862	1-249-431-11	CARBON	15K	5%	1/4W
R863	1-249-441-11	CARBON	100K	5%	1/4W
R871	1-249-417-11	CARBON	1K	5%	1/4W
R872	1-249-437-11	CARBON	47K	5%	1/4W
R873	1-247-828-11	CARBON	750	5%	1/4W
R873	1-249-415-11	CARBON	680	5%	1/4W (EXCEPT TH)
R874	1-249-437-11	CARBON	47K	5%	1/4W (TH)
R875	1-260-107-11	CARBON	4.7K	5%	1/2W
R876	1-260-107-11	CARBON	4.7K	5%	1/2W
△ R877	1-212-881-11	FUSIBLE	100	5%	1/4W F
R878	1-217-156-00	METAL	0.22	10%	5W
R879	1-260-076-11	CARBON	10	5%	1/2W
R881	1-249-417-11	CARBON	1K	5%	1/4W
R882	1-249-431-11	CARBON	15K	5%	1/4W
R883	1-249-441-11	CARBON	100K	5%	1/4W
R884	1-249-437-11	CARBON	47K	5%	1/4W
R891	1-249-421-11	CARBON	2.2K	5%	1/4W
R892	1-249-429-11	CARBON	10K	5%	1/4W
R893	1-247-887-00	CARBON	220K	5%	1/4W
R894	1-249-429-11	CARBON	10K	5%	1/4W
*****					
*	1-659-058-13	TABLE SENSOR BOARD	*****		
		< IC >			
IC202	8-749-924-18	IC PHOTO INTERRUPTER RPI-1391			
		< RESISTOR >			
R207	1-249-416-11	CARBON	820	5%	1/4W
*****					
*	1-664-012-11	TC-A SW BOARD	*****		
		< CONNECTOR >			
CN612	1-506-486-11	PIN, CONNECTOR 7P			
		< DIODE >			
D631	8-719-057-29	DIODE SML78423C-TP15 (▷)			
D632	8-719-057-29	DIODE SML78423C-TP15 (◁)			
		< RESISTOR >			
R705	1-249-401-11	CARBON	47	5%	1/4W
R706	1-249-403-11	CARBON	68	5%	1/4W
R707	1-247-807-31	CARBON	100	5%	1/4W
R708	1-249-407-11	CARBON	150	5%	1/4W
R709	1-249-407-11	CARBON	150	5%	1/4W
R710	1-247-815-91	CARBON	220	5%	1/4W
R711	1-247-807-31	CARBON	100	5%	1/4W
R712	1-247-807-31	CARBON	100	5%	1/4W
R713	1-247-807-31	CARBON	100	5%	1/4W
R714	1-247-807-31	CARBON	100	5%	1/4W

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

# TC-A SW

# TC-B SW

# TRANS

Ref. No.	Part No.	Description	Remarks
		< SWITCH >	
S641	1-554-303-21	SWITCH, TACTILE (▷)	
S642	1-554-303-21	SWITCH, TACTILE (◁)	
S643	1-554-303-21	SWITCH, TACTILE (■)	
S644	1-554-303-21	SWITCH, TACTILE (◀◀)	
S645	1-554-303-21	SWITCH, TACTILE (▶▶)	
S646	1-554-303-21	SWITCH, TACTILE (DOLBY NR)	
S647	1-554-303-21	SWITCH, TACTILE (DIRECTION)	
*****			
*	1-664-013-11	TC-B SW BOARD	
		*****	
		< DIODE >	
D635	8-719-057-29	DIODE SML78423C-TP15 (◁)	
D636	8-719-057-29	DIODE SML78423C-TP15 (▷)	
D637	8-719-058-17	DIODE LNG401NPYJA (■)	
D638	8-719-057-09	DIODE LNJ801LPDJA (● REC)	
		< RESISTOR >	
R715	1-247-815-91	CARBON 220 5% 1/4W	
R716	1-249-411-11	CARBON 330 5% 1/4W	
R717	1-249-413-11	CARBON 470 5% 1/4W	
R718	1-249-415-11	CARBON 680 5% 1/4W	
R719	1-249-417-11	CARBON 1K 5% 1/4W	
R720	1-249-419-11	CARBON 1.5K 5% 1/4W	
R721	1-249-421-11	CARBON 2.2K 5% 1/4W	
R722	1-247-843-11	CARBON 3.3K 5% 1/4W	
R723	1-247-807-31	CARBON 100 5% 1/4W	
R724	1-247-807-31	CARBON 100 5% 1/4W	
R725	1-247-807-31	CARBON 100 5% 1/4W	
R726	1-247-807-31	CARBON 100 5% 1/4W	
R727	1-247-807-31	CARBON 100 5% 1/4W	
R728	1-247-807-31	CARBON 100 5% 1/4W	
		< SWITCH >	
S651	1-554-303-21	SWITCH, TACTILE (▷)	
S652	1-554-303-21	SWITCH, TACTILE (◁)	
S653	1-554-303-21	SWITCH, TACTILE (▶▶)	
S654	1-554-303-21	SWITCH, TACTILE (◀◀)	
S655	1-554-303-21	SWITCH, TACTILE (■)	
S656	1-554-303-21	SWITCH, TACTILE (■)	
S657	1-554-303-21	SWITCH, TACTILE (● REC)	
S658	1-554-303-21	SWITCH, TACTILE (H SPEED DUB)	
S659	1-554-303-21	SWITCH, TACTILE (CD SYNC)	
*****			
*	1-668-169-11	TRANS BOARD	
		*****	
		< CONNECTOR >	
* CN901	1-564-522-11	PLUG, CONNECTOR 7P	
* CN902	1-564-518-11	PLUG, CONNECTOR 3P	
CN903	1-535-139-00	BASE POST 14MM (10MM PITCH) 2P (E, IA)	
CN903	1-774-108-11	PIN, CONNECTOR (PC BOARD) (EXCEPT E, IA)	
		< FUSE >	
△ F901	1-532-465-31	FUSE, TIME-LAG (3.15A/250V)	
△ F902	1-532-505-31	FUSE, TIME-LAG (5A/250V) (EXCEPT TH)	

Ref. No.	Part No.	Description	Remarks
		< FUSE HOLDER >	
FH901	1-533-399-11	HOLDER, FUSE	
FH902	1-533-399-11	HOLDER, FUSE	
FH951	1-533-399-11	HOLDER, FUSE	
FH952	1-533-399-11	HOLDER, FUSE	
		< RESISTOR >	
△ R901	1-219-119-81	FUSIBLE 0.1 5% 1/4W F	
△ R902	1-219-119-81	FUSIBLE 0.1 5% 1/4W F	
△ R903	1-219-119-81	FUSIBLE 0.1 5% 1/4W F	
△ R904	1-219-119-81	FUSIBLE 0.1 5% 1/4W F	
		< SWITCH >	
△ S901	1-762-753-11	SWITCH, VOLTAGE SELECTION (VOLTAGE SELECTOR)(EXCEPT TH)	
		< TRANSFORMER >	
△ T901	1-431-638-11	TRANSFORMER, POWER	
*****			
		MISCELLANEOUS	
		*****	
5	1-233-545-11	ENCAPSULATED COMPONENT (FM/AM TUNER UNIT)	
6	1-769-974-11	WIRE (FLAT TYPE) (13 CORE)	
58	1-773-161-11	WIRE (FLAT TYPE) (21 CORE)	
59	1-769-949-11	WIRE (FLAT TYPE) (11 CORE)	
115	1-773-051-11	WIRE (FLAT TYPE) (17 CORE)	
156	1-777-868-11	WIRE (FLAT TYPE) (19 CORE)	
△ 158	1-569-008-11	ADAPTOR, CONVERSION 2P (XB66: AR)	
△ 159	1-558-943-51	CORD, POWER (XB66: E, MX/XB660)	
△ 159	1-575-651-21	CORD, POWER (XB66: SAF, AR)	
△ 159	1-696-845-11	CORD, POWER (XB66: AUS)	
357	1-452-925-21	MAGNET ASSY	
△ 401	8-820-020-01	OPTICAL PICK-UP KSS-213D/Q-NP	
402	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
HP101	1-500-093-11	HEAD, MAGNETIC (PLAYBACK)	
HRPE1011	500-094-11	HEAD, MAGNETIC (REC/PB/ERASE)	
M1	X-3371-223-1	MOTOR ASSY, CAPSTAN	
M2	A-2004-410-A	MOTOR ASSY, DC (TRIGGER)	
M100	1-763-072-11	FAN, D.C.	
M101	X-4917-504-1	MOTOR ASSY (SPINDLE)	
M102	X-4917-523-4	MOTOR ASSY (SLED)	
M201	A-4660-977-A	MOTOR ASSY (TABLE)	
△ T901	1-431-638-11	TRANSFORMER, POWER	
*****			

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

HCD-XB66K

Ref. No.	Part No.	Description	Remarks
*****			
HARDWARE LIST			
*****			
#1	7-685-646-79	SCREW +BVTP 3 × 8 TYPE2 N-S	
#2	7-685-871-01	SCREW +BVTT 3 × 6 (S)	
#3	7-685-872-09	SCREW +BVTT 3 × 8 (S)	
#4	7-685-650-79	SCREW +BVTP 3 × 16 TYPE2 IT-3	
#5	7-685-862-09	SCREW +BVTT 2.6 × 6 (S)	
#6	7-685-131-19	SCREW +BTP 2.6 × 4 TYPE2 N-S	
#7	7-685-533-19	SCREW +BTP 2.6 × 6 TYPE2 N-S	
#8	7-621-775-10	SCREW +B 2.6 × 4	
#9	7-685-534-19	SCREW +BTP 2.6 × 8 TYPE2 N-S	
#10	7-623-921-01	RING, RETAINING, CAPSTAN	
#11	7-621-775-00	SCREW +B 2.6 × 3	
#12	7-621-255-15	SCREW +P 2 × 3	
#13	7-685-881-09	SCREW +BVTT 4 × 8 (S)	

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ACCESSORIES & PACKING MATERIALS

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1-475-115-31	REMOTE COMMANDER (RM-SD70)
1-501-374-11	ANTENNA, LOOP
1-501-659-41	ANTENNA (FM)
3-862-180-11	MANUAL, INSTRUCTION (ENGLISH)
	(EXCEPT TH)
3-862-180-31	MANUAL, INSTRUCTION (FRENCH, SPANISH)
	(EXCEPT IA, TH)
3-862-180-41	MANUAL, INSTRUCTION (CHINESE)
	(EXCEPT TH)
3-862-180-91	MANUAL, INSTRUCTION (ARABIC) (EA)
3-862-960-11	MANUAL, INSTRUCTION (ENGLISH) (TH)
4-891-151-01	COVER, BATTERY (for RM-SD70)