

HCD-SE1

SERVICE MANUAL

Ver 1.0 2003. 08

AEP Model
UK Model



HCD-SE1 is the Amplifier, CD player and
Tuner section in CMT-SE1.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CDM80B-K6BD44S
	Base Unit Name	BU-K6BD44S
	Optical Block Name	KSM-213DCP

SPECIFICATIONS

Amplifier section

DIN power output (rated): 55 + 55 W
(4 ohms at 1 kHz, DIN)
Continuous RMS power output (reference):
80 + 80 W
(4 ohms at 1 kHz, 10%
THD)

Inputs

MD (TAPE) IN (stereo mini jack):
Sensitivity 450/250 mV,
impedance 47 kilohms

Outputs

CD OPTICAL OUT DIGITAL:

Optical Wavelength:
660 nm

PHONES:
Accepts headphones with
an impedance of 8 ohms or
more

MD (TAPE) OUT (stereo mini jack):

Impedance 1 kilohm
Accepts impedance of
4 ohms

SPEAKER:

CD player section

Laser
Semiconductor laser
(CD: $\lambda=780$ nm)
Emission duration:
continuous
Frequency response
2 Hz – 20 kHz
Wavelength
780 – 790 nm

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 ohms unbalanced
Intermediate frequency
10.7 MHz

AM tuner section

Tuning range
531 – 1,602 kHz
(9 kHz step)
Antenna
AM loop antenna, external
antenna terminal
Intermediate frequency
450 kHz

General

Power requirements
230 V AC, 50/60 Hz
Power consumption
45 W
0.3 W (in Power Saving
mode)
Dimensions (w/h/d) incl. projecting parts and controls
Amplifier/Tuner/CD section:
Approx. 155 × 119 ×
289 mm
Mass
Approx. 3.0 kg
Design and specifications are subject to change
without notice.

COMPACT DISC DECK RECEIVER

9-961-094-01
2003H1678-1
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Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

SONY®

Notes on chip component replacement

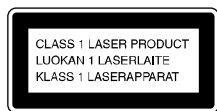
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

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.

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. This label is located on the rear exterior.

Unleaded solder

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.

(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)



: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.

Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.

Soldering irons using a temperature regulator should be set to about 350°C.

Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!

- Strong viscosity

Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.

- Usable with ordinary solder

It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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.

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.

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This section is extracted from instruction manual.

Main unit

ALPHABETICAL ORDER

A – O

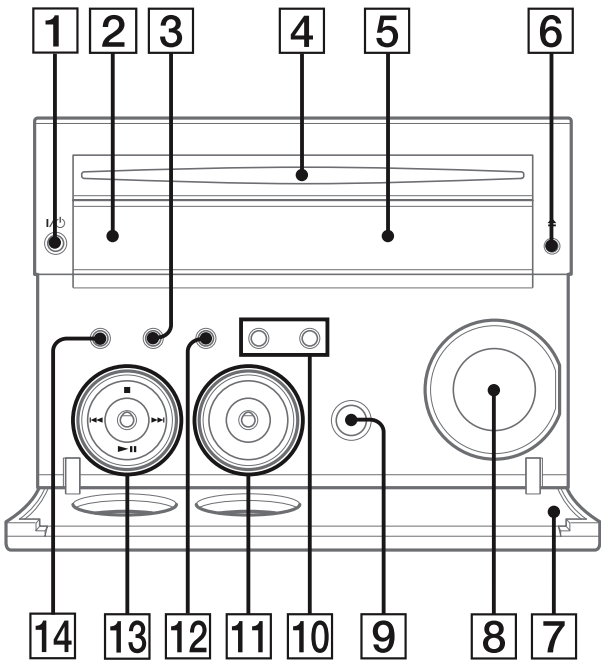
- AM 11
- BASS/TREBLE 12
- DBFB 3
- Disc slot 4
- Display window 5
- FM 11
- Front cover 7
- FUNCTION 14
- Lever 11 13

P – Z

- PHONES jack 9
- PRESET +/- 11
- Remote sensor 2
- VOLUME control 8

BUTTON DESCRIPTIONS

- I/⏻ (power) 1
- ◀◀/▶▶ (go back/go forward) 13
- ▶▶ (play pause) 13
- (stop) 13
- ▲ EJECT (eject) 6
- +/- 10



Remote control

ALPHABETICAL ORDER

A – Q

BASS +/- [20]

CD [7]

CLEAR [6]

CLOCK/TIMER SELECT [2]

CLOCK/TIMER SET [3]

DBFB [19]

DISPLAY [24]

ENTER [5]

FM MODE [9]

MD (TAPE) [23]

PLAY MODE [18]

PRESET +/- [17]

R – Z

REPEAT [16]

SLEEP [1]

TREBLE +/- [13]

TUNER/BAND [8]

TUNER MEMORY [10]

TUNING MODE [22]

TUNING +/- [14]

VOL +/- [15]

BUTTON DESCRIPTIONS

I/⏻ (power) [4]

▶ (play) [21]

■ (stop) [12]

◀◀/▶▶ (go back/go forward)

[17]

◀◀/▶▶ (rewind/fast forward)

[14]

⏸ (pause) [11]

Setting the clock

- 1** Press I/⏻ to turn on the system.
- 2** Press CLOCK/TIMER SET.
- 3** Press ◀◀ or ▶▶ repeatedly to set the hour.
- 4** Press ENTER.
- 5** Press ◀◀ or ▶▶ repeatedly to set the minute.
- 6** Press ENTER.
The clock starts working.

To adjust the clock

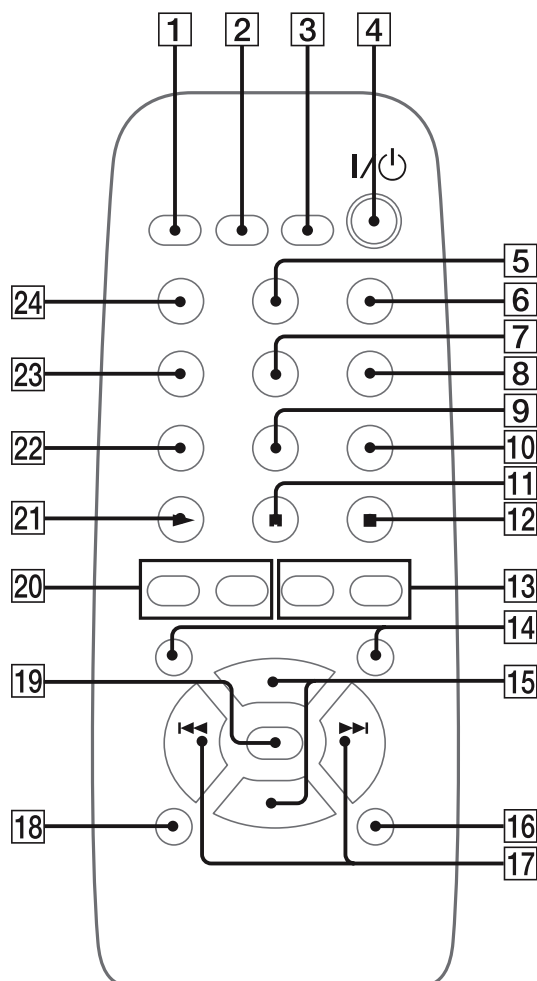
- 1** Press CLOCK/TIMER SET.
- 2** Press ◀◀ or ▶▶ until "CLOCK SET?" appears, then press ENTER.
- 3** Do the same procedures as step 3 to 6 above.

Note

The clock is not displayed in Power Saving Mode.

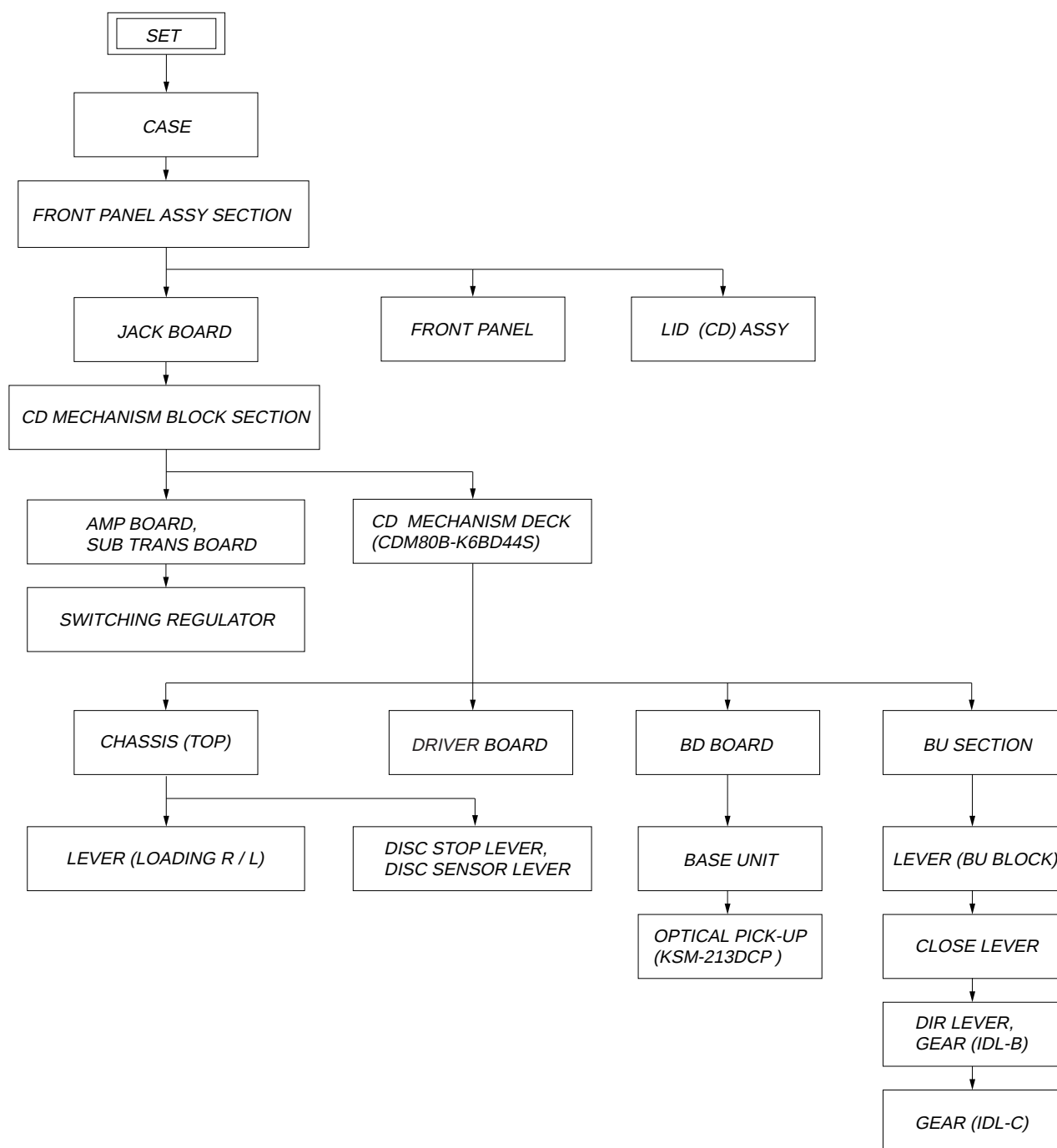
Tip

When you adjust the clock while the system is off, do the same procedures as step 2 to 6 above.



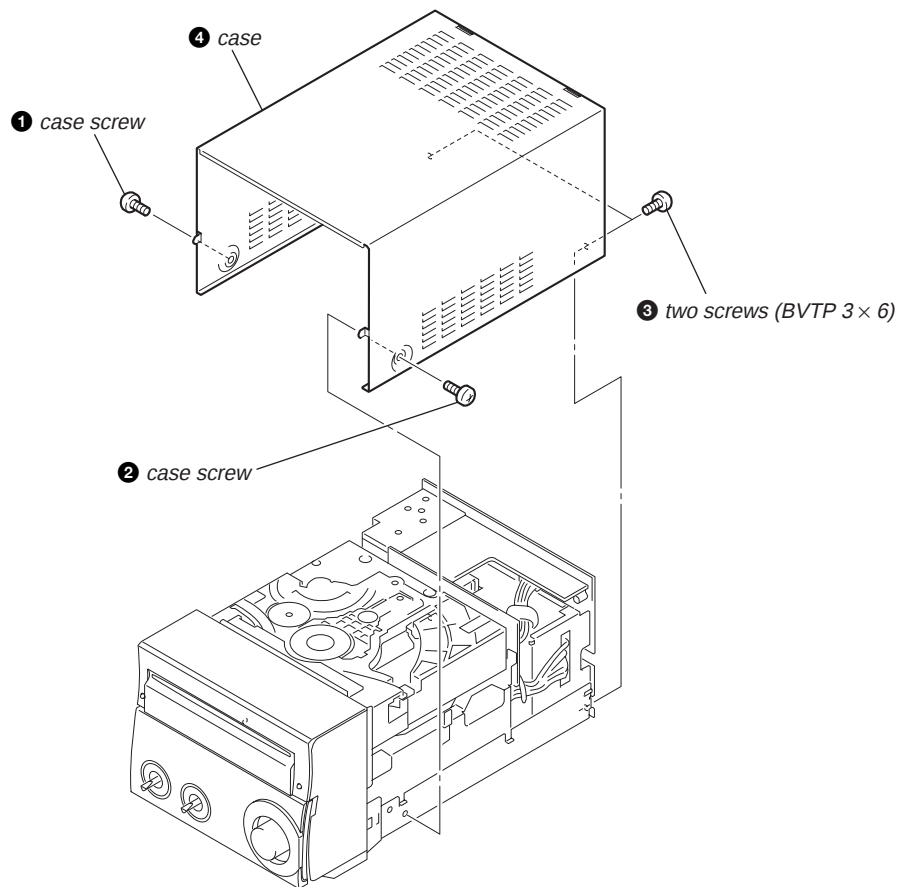
SECTION 2 DISASSEMBLY

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

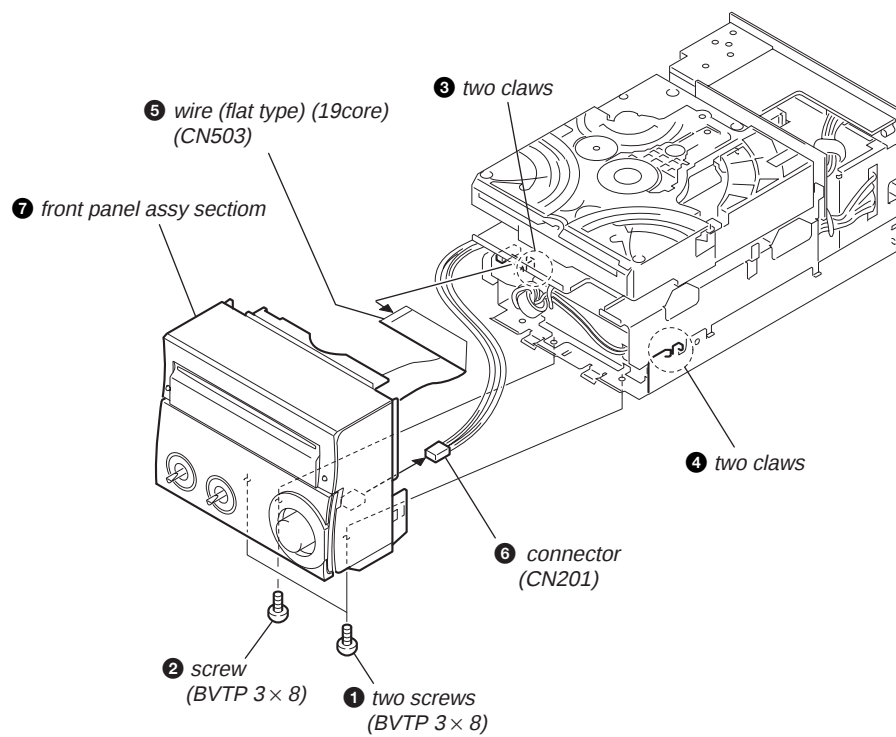


Note: Follow the disassembly procedure in the numerical order given.

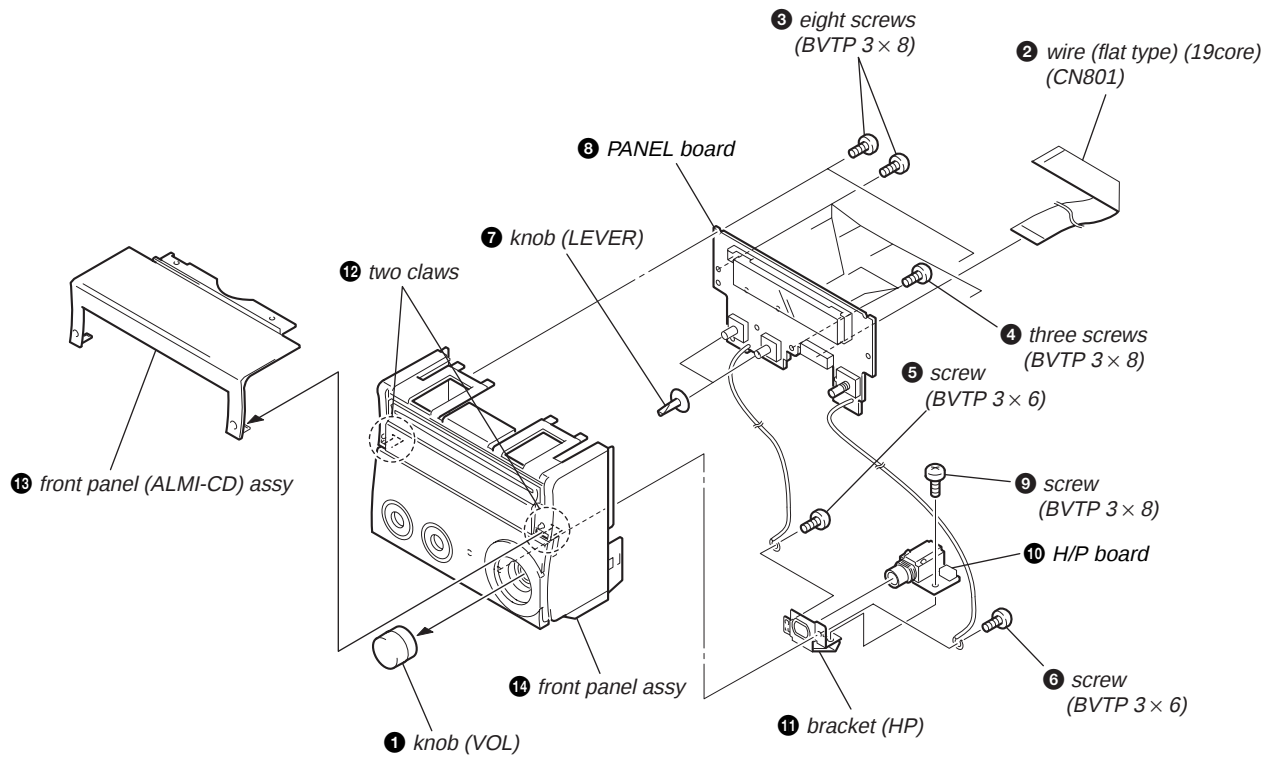
2-1. CASE



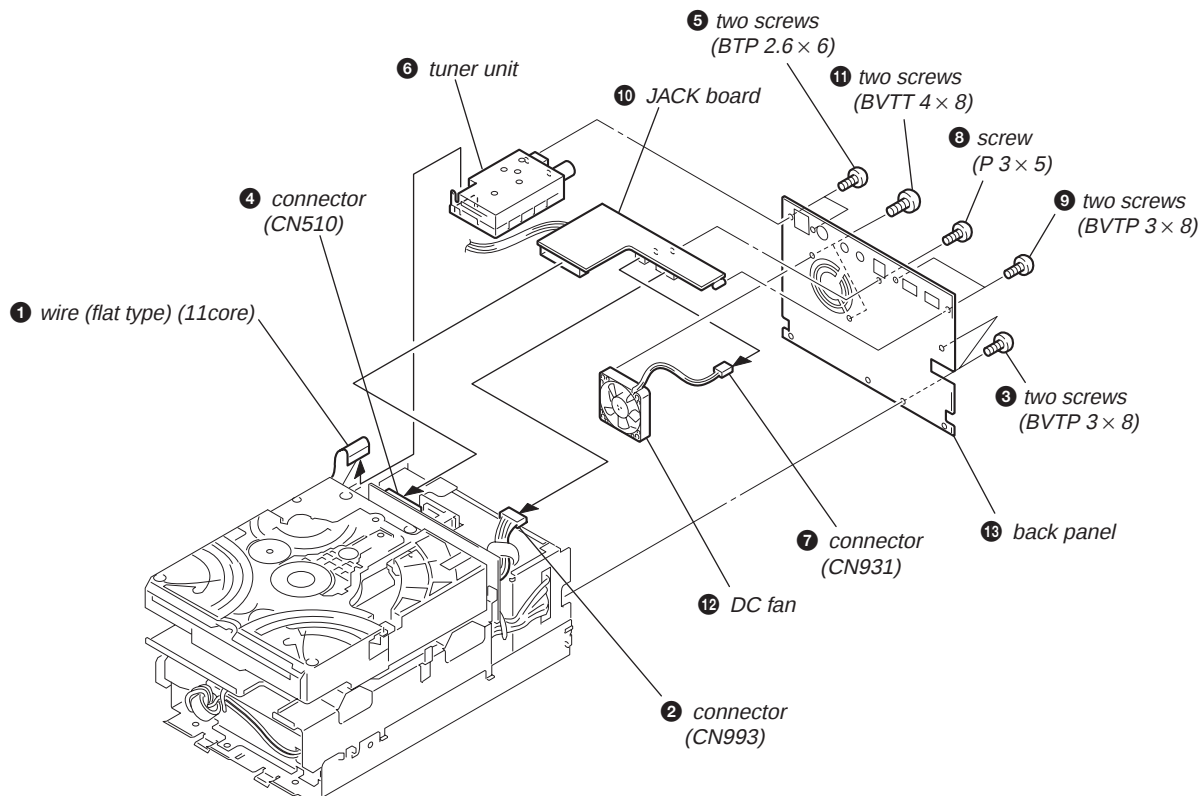
2-2. FRONT PANEL ASSY SECTION



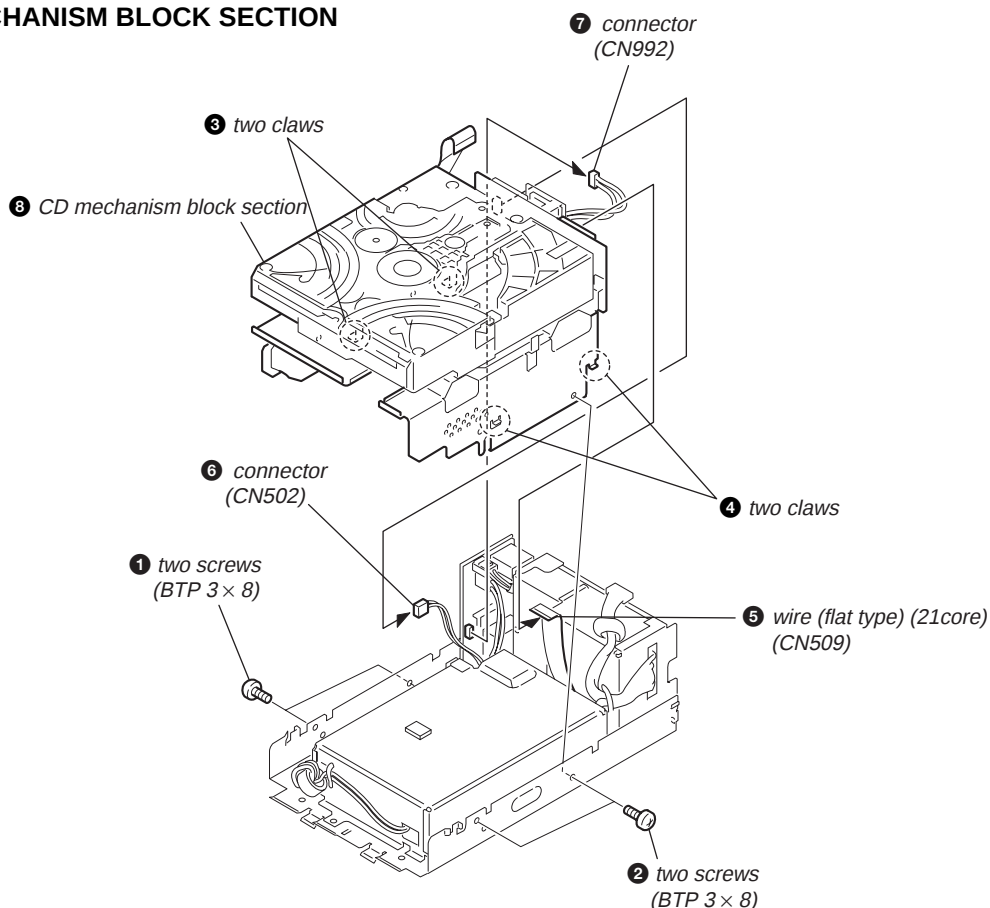
2-3. FRONT PANEL



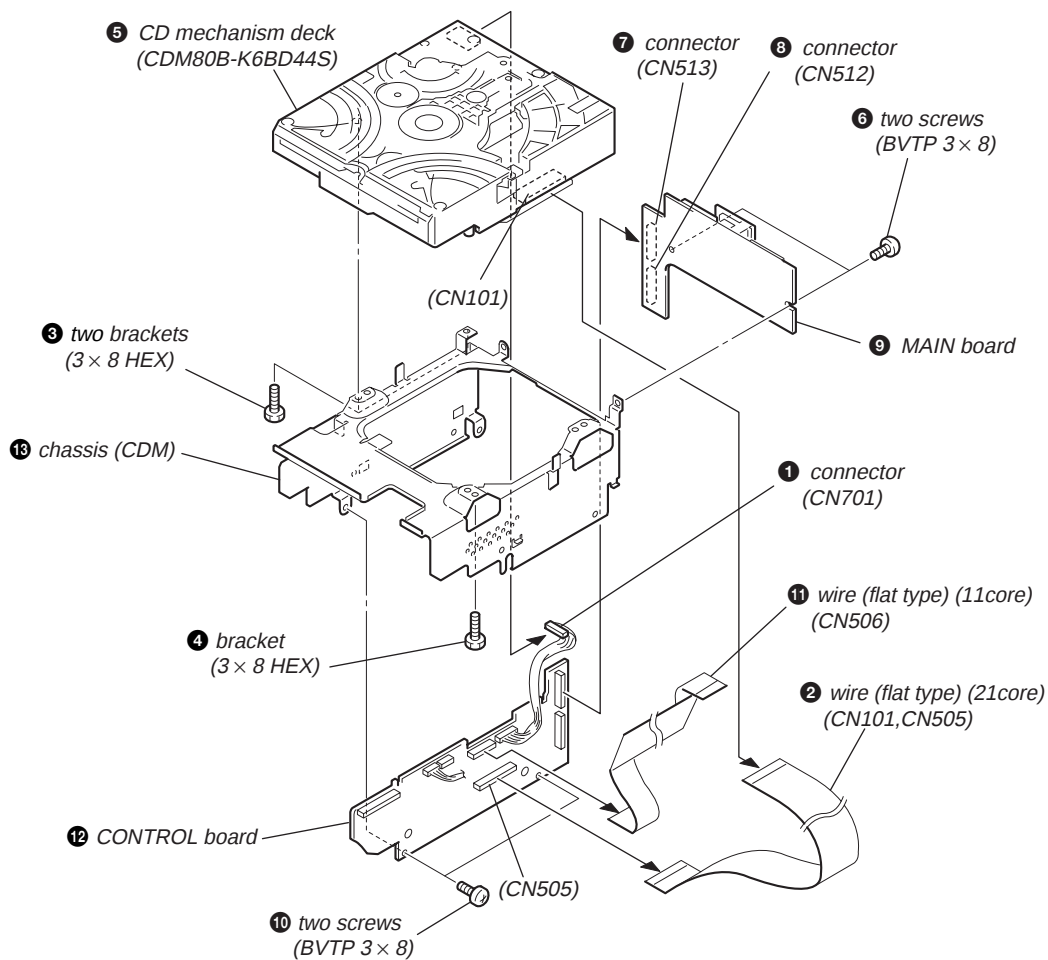
2-4. JACK BOARD



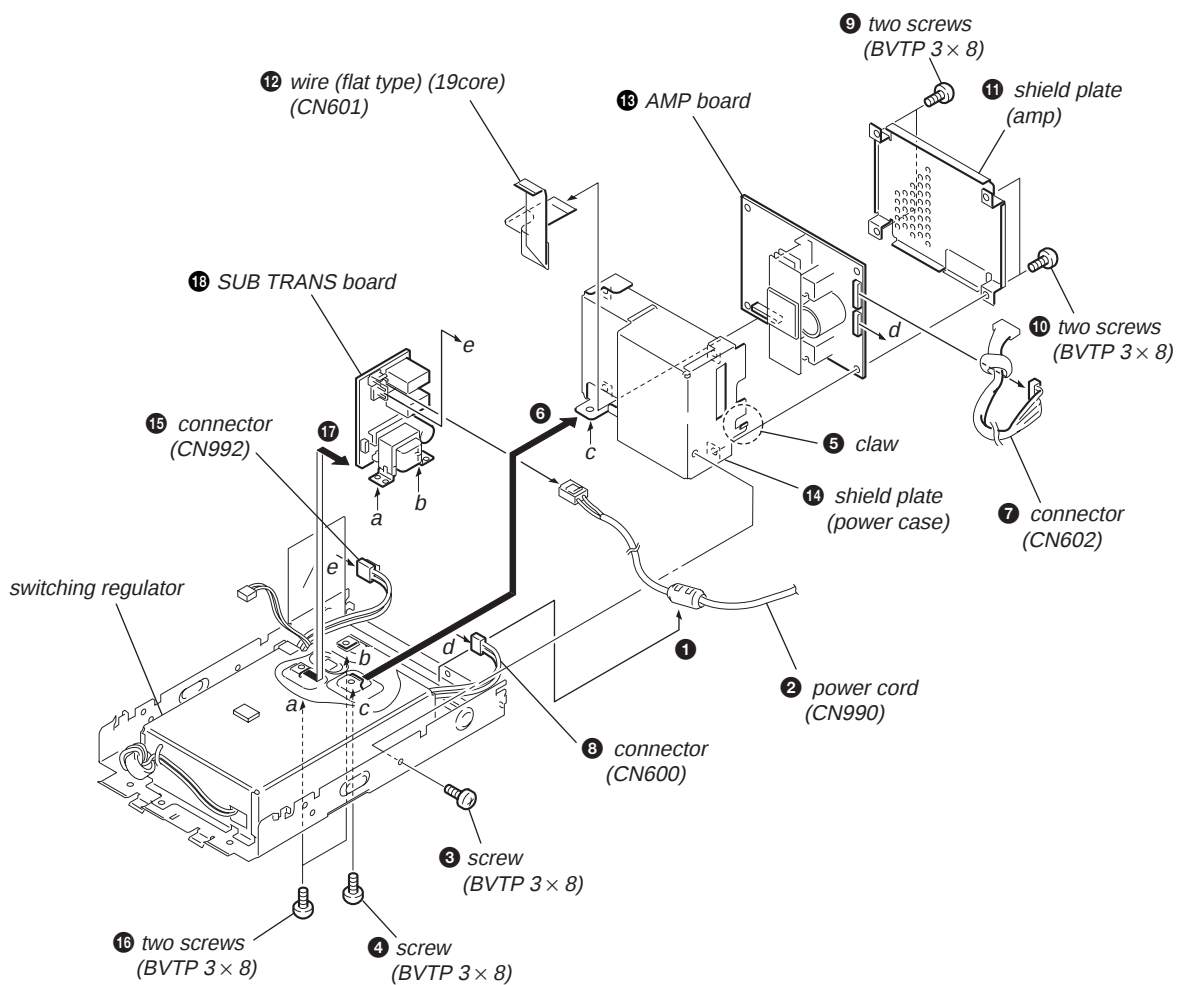
2-5. CD MECHANISM BLOCK SECTION



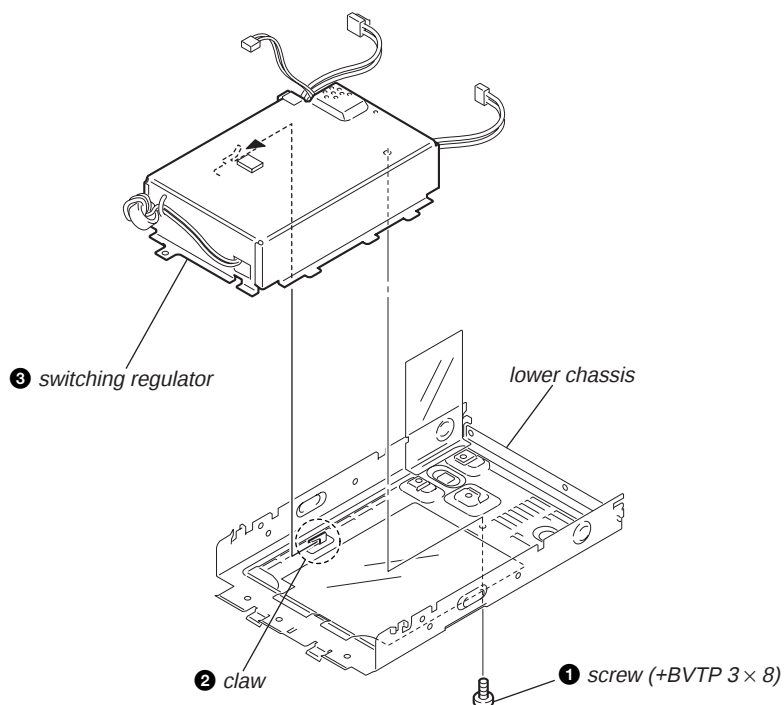
2-6. CD MECHANISM DECK (CDM80B-K6BD44S)



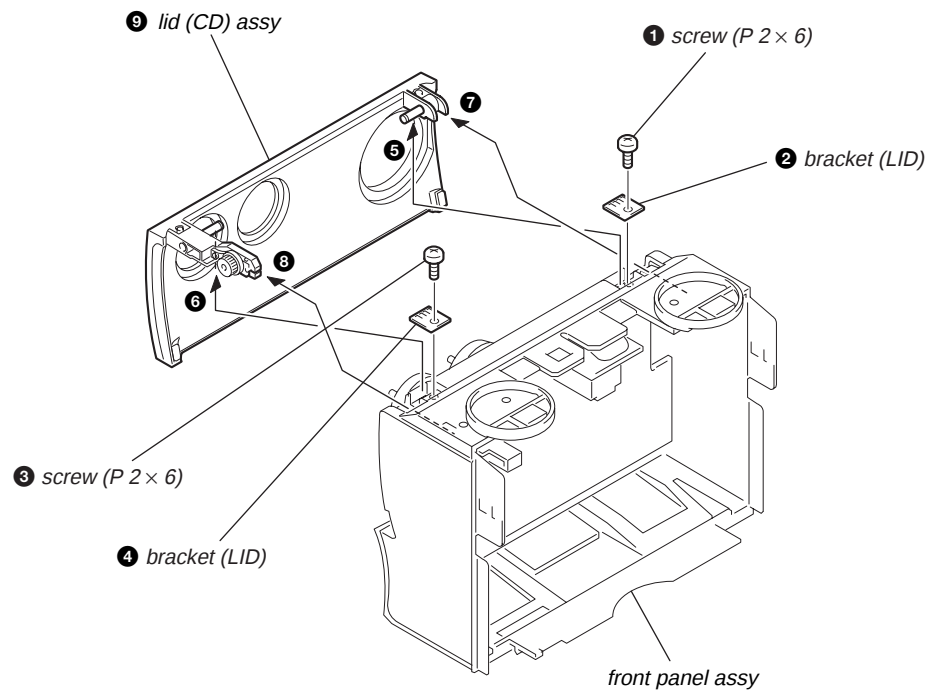
2-7. AMP BOARD, SUB TRANS BOARD



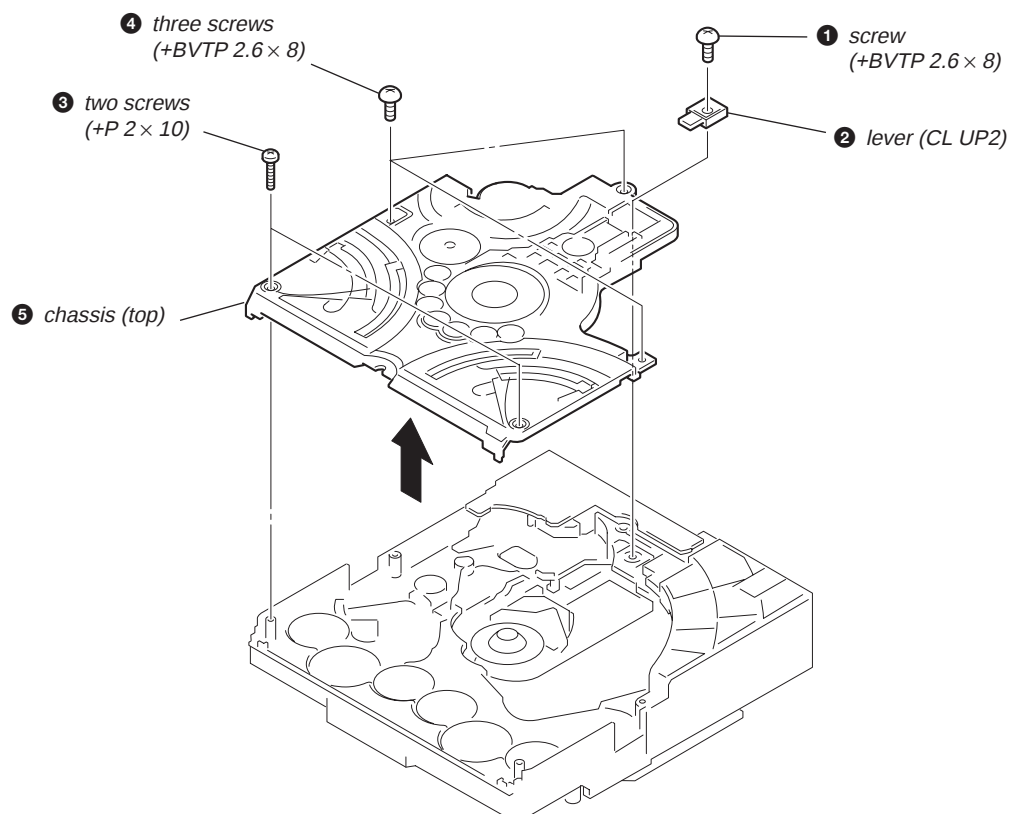
2-8. SWITCHING REGULATOR



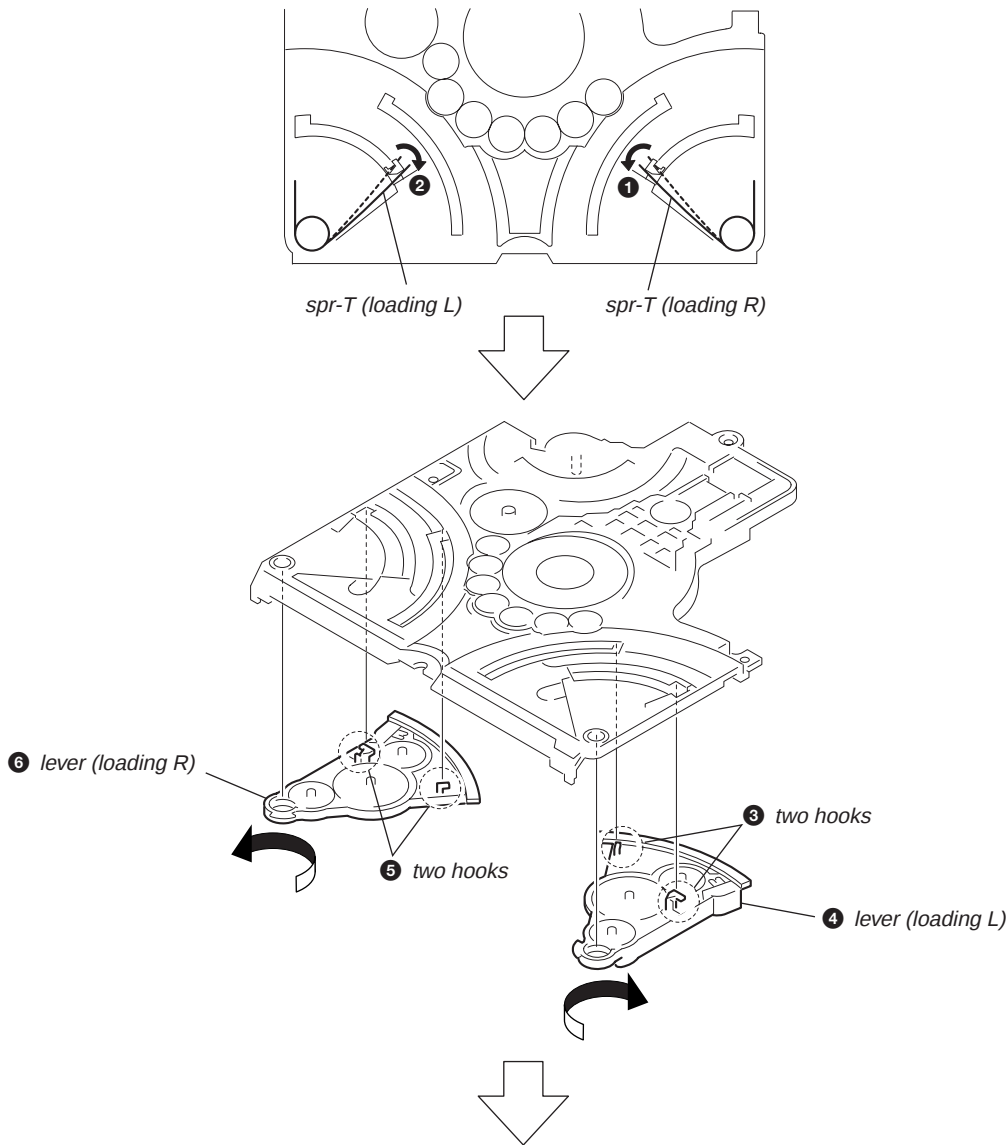
2-9. LID (CD) ASSY



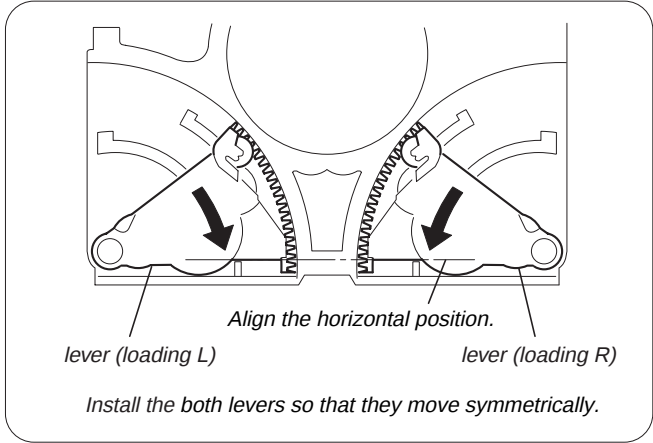
2-10. CHASSIS (TOP)



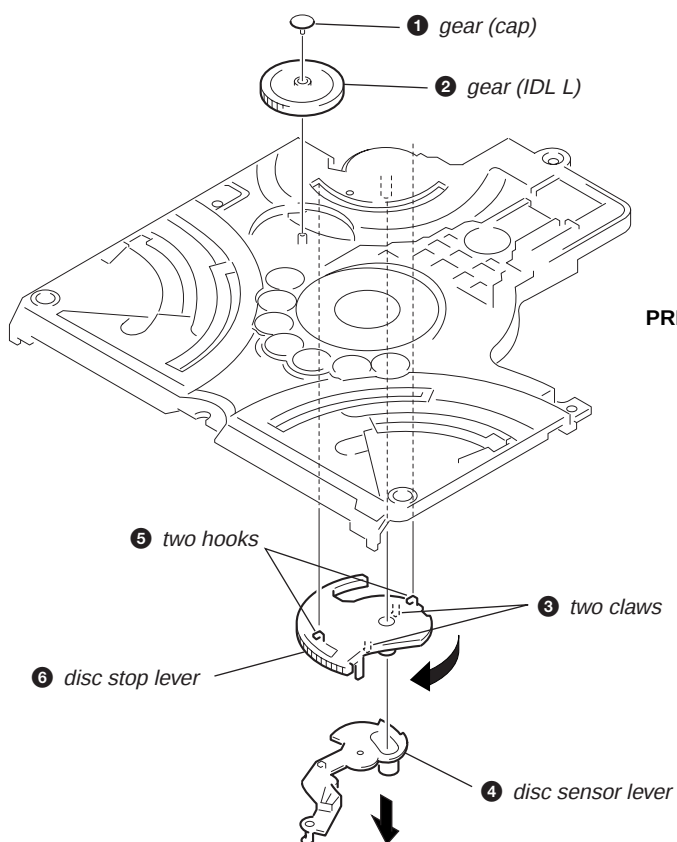
2-11. LEVER (LOADING R/L)



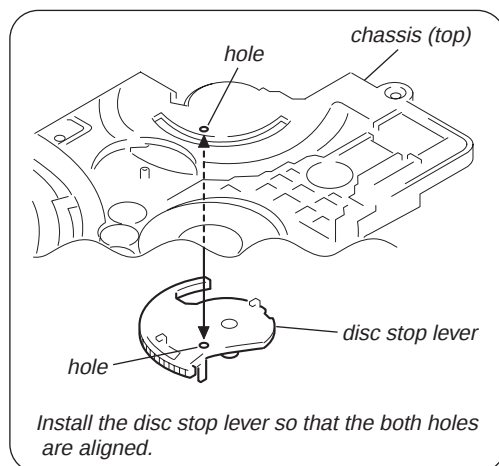
PRECAUTION DURING LEVER (LOADING R / L) INSTALLATION



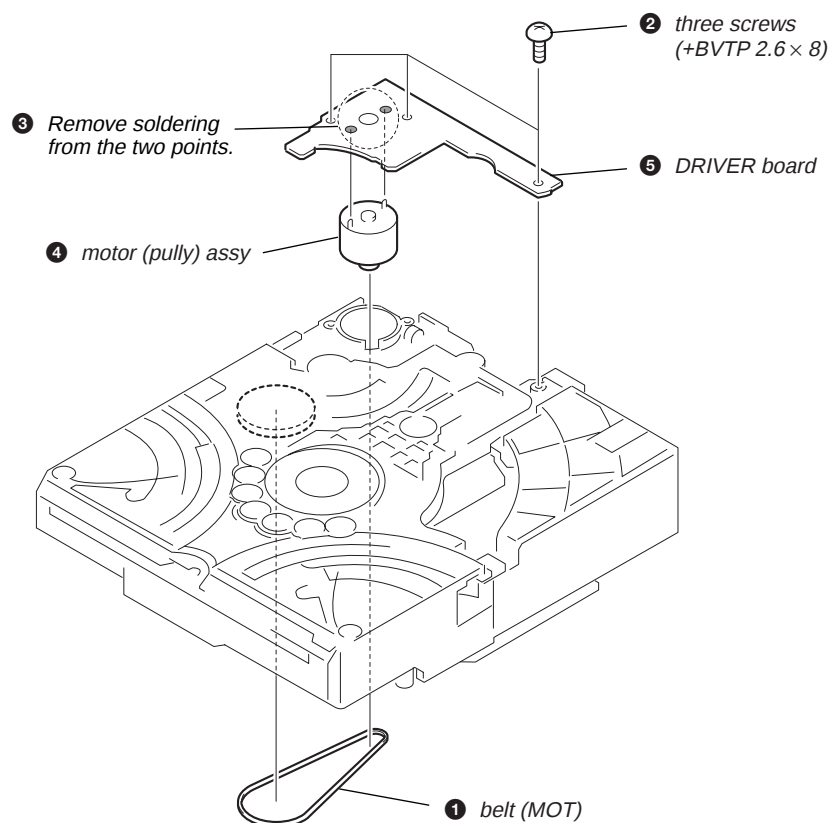
2-12. DISC STOP LEVER, DISC SENSOR LEVER



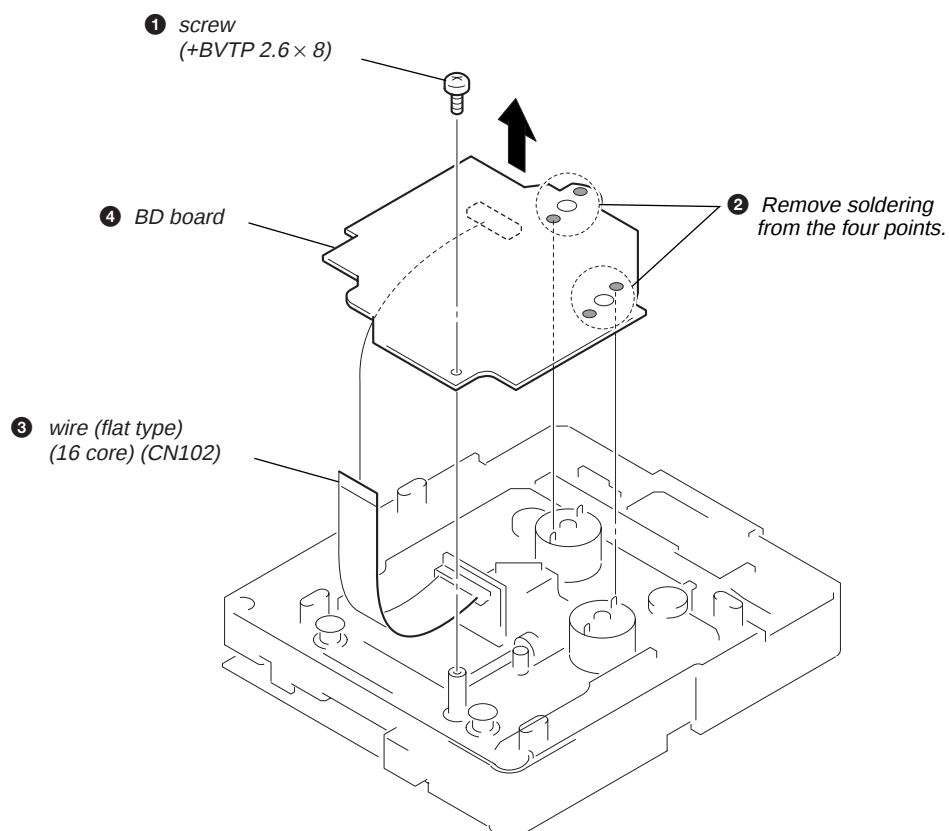
PRECAUTION DURING DISC STOP LEVER INSTALLATION



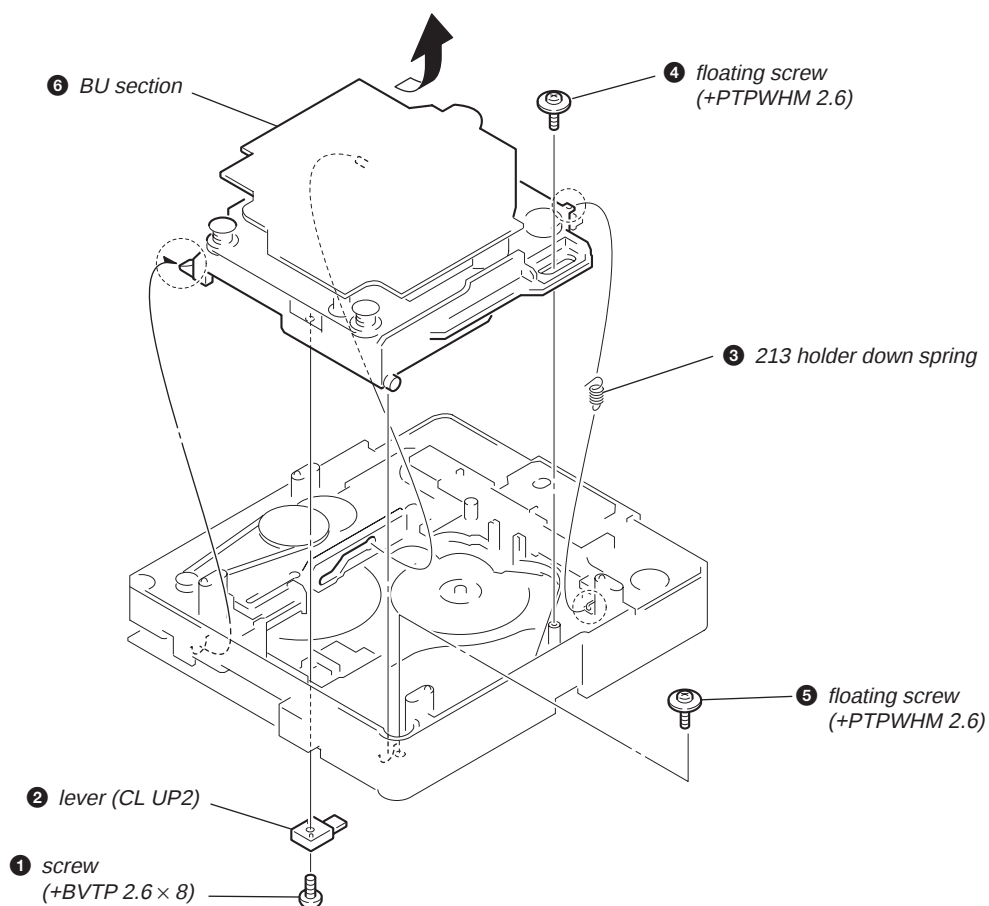
2-13. DRIVER BOARD



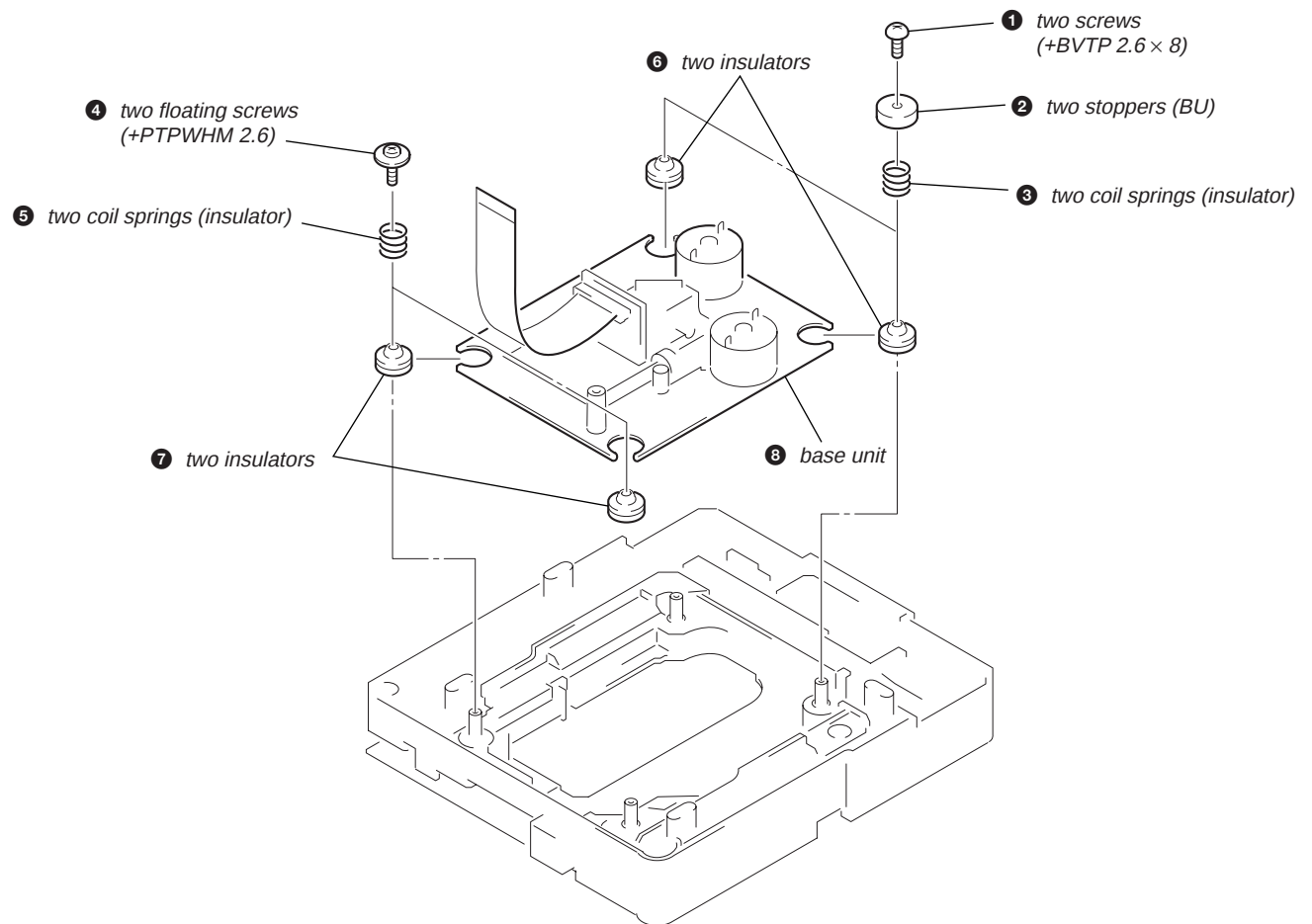
2-14. BD BOARD



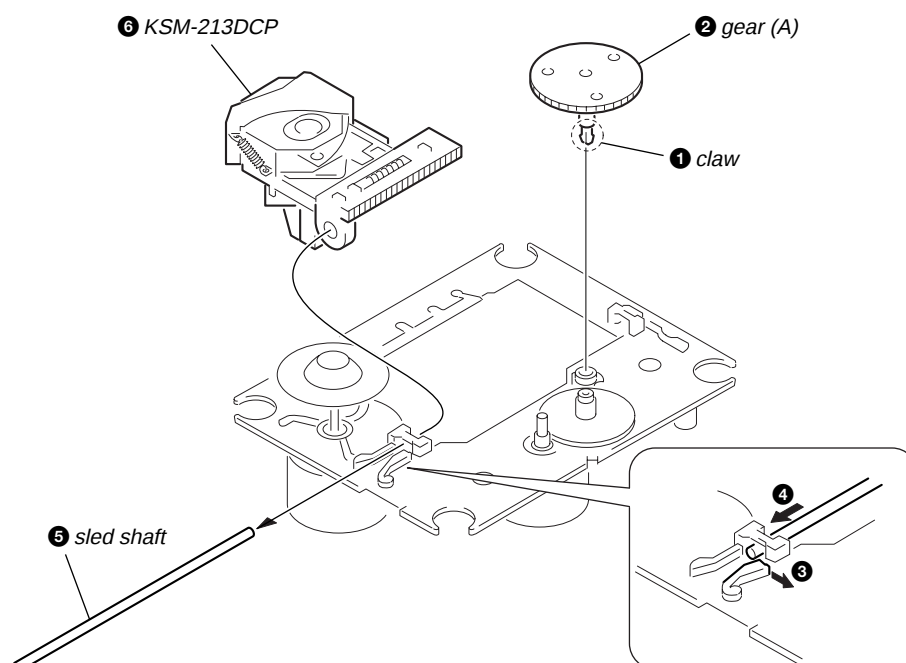
2-15. BU SECTION



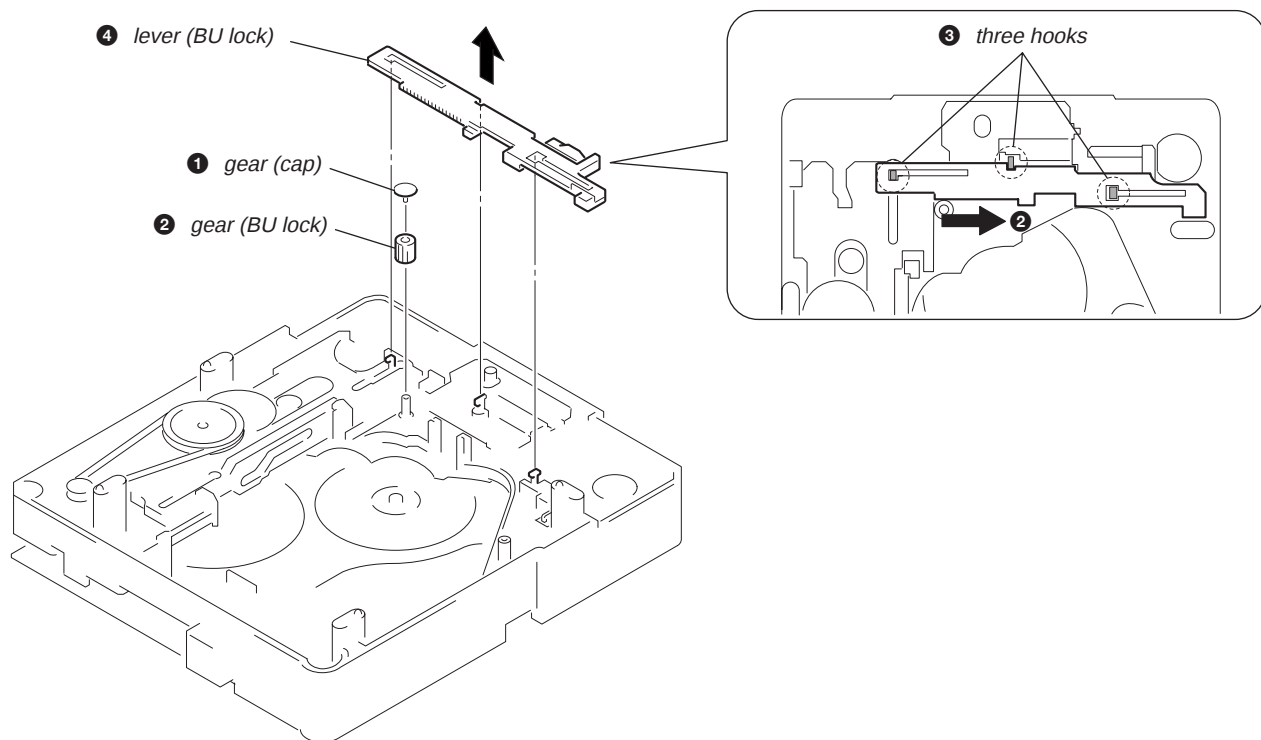
2-16. BASE UNIT



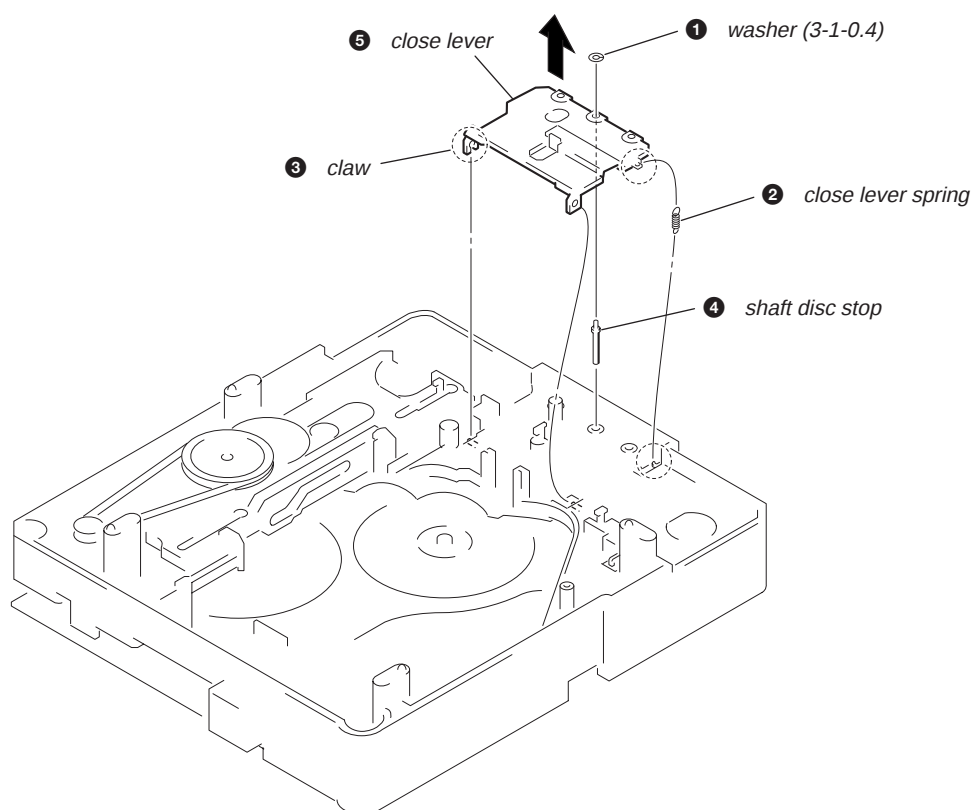
2-17. OPTICAL PICK-UP (KSM-213DCP)



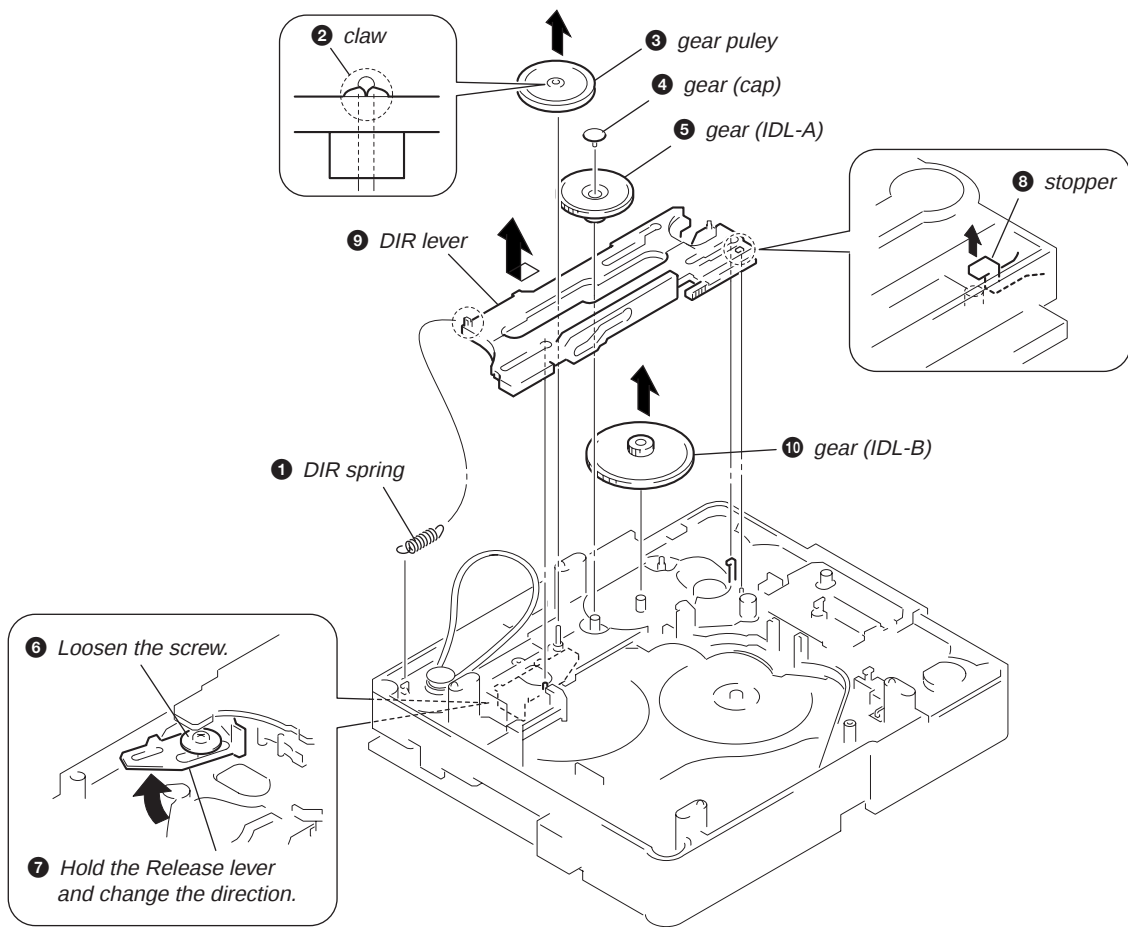
2-18. LEVER (BU BLOCK)



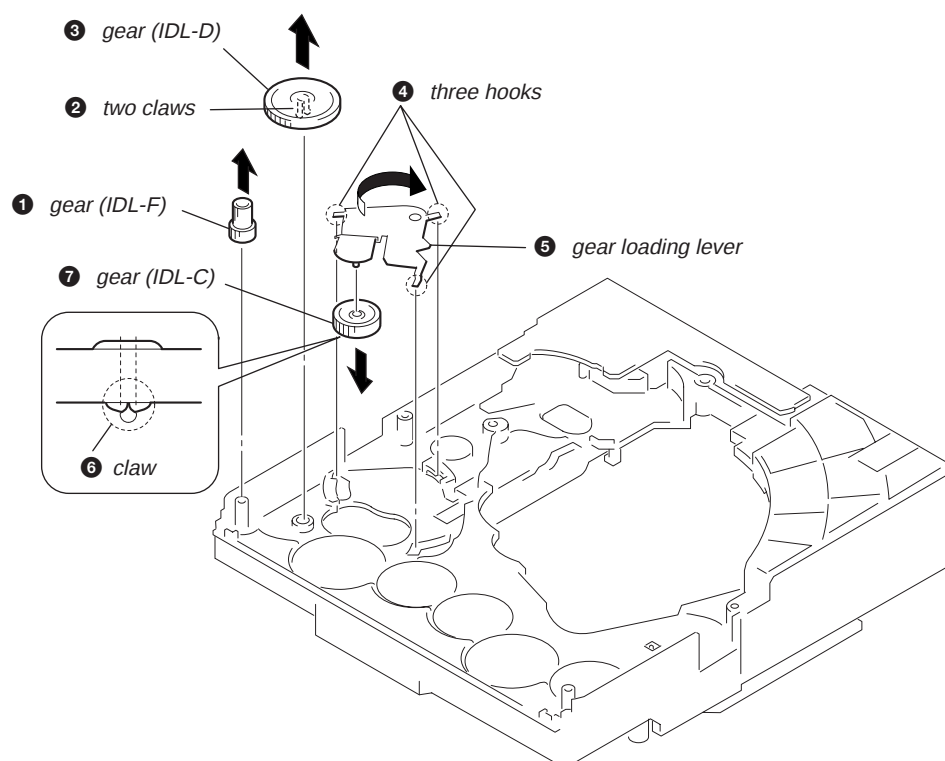
2-19. CLOSE LEVER



2-20. DIR LEVER, GEAR (IDL-B)



2-21. GEAR (IDL-C)



SECTION 3

TEST MODE

[Panel Test Mode]

- This mode is used to check the fluorescent indicator tube, LED, model name, destination and software version.

Procedure:

- Press the **I/⏻** key to turn the power on.
- To enter the test mode, press three keys **[FM]**, **[FUNCTION]** and **[■]** simultaneously.
- All segments of the fluorescent indicator tube and LED are turned on.
- To enter the version display mode, press the **[BASS/TREBLE]** key. The model and destination are displayed alternately.
- Each time the **[BASS/TREBLE]** key is pressed, the display changes starting from MC version, GC version, CD version, CDD version, CDMA version, CDMB version, BDA version, BDB version, ST version, TA version, TM version, TC version and MD version in this order, and returns to MC version.
- When **[FUNCTION]** key is pressed while the version numbers are being displayed except model and destination, year, month and day of the software creation display. When **[FUNCTION]** key is pressed again, the display returns to the software version are displayed. When **[BASS/TREBLE]** key is pressed while year, month and day of the software creation are being displayed, the year, month and day of creation of the software versions are displayed in the same order of version display.
- Press the **[DBFB]** key, the key test mode is activated.
- In the key test mode, the message "K 0" is displayed. Each time a key is pressed, "K" value increases. However, once a key is pressed, it is no longer taken into account.
- To exit from this mode, press three keys in the same manner as step 2, or disconnect the power code.

[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:

- Press the **I/⏻** key to turn the power on.
- Press three keys of **I/⏻**, **[FUNCTION]** and **[■]** simultaneously.
- The display becomes blank instantaneously, and the set is reset. The set becomes time display mode.

[Common Test Mode]

- This mode is used to check operations of amplifier.

Procedure:

- Press the **I/⏻** key to turn the set on.
- Press three keys **[AM]**, **[FUNCTION]** and **[■]** simultaneously.
- When the common test mode is activated, "MD" is displayed.
- Every time the **[BASS/TREBLE]** key is pressed, the following items changes in the order as shown below.



- When the **[VOLUME]** knob is turned clockwise, volume goes maximum and "VOLUME MAX" is displayed.
- When the **[VOLUME]** knob is turned counter-clockwise, volume goes minimum and "VOLUME MIN" is displayed.
- To exit from this mode, press the **I/⏻** key or disconnect the power cord.

[CD Ship Mode (no memory clear)]

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

Procedure:

- Press the **I/⏻** key to turn the power on.
- Press the **[FUNCTION]** key to select "CD".
- Press three keys **[+]** (TUNER), **[FUNCTION]** and **[■]** simultaneously.
- After the "STANDBY" display blinks, "LOCK" is displayed, and the CD ship mode is set.

[CD Ship Mode (memory clear)]

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

Procedure:

- Press the **I/⏻** key to turn the power on.
- Press the **[FUNCTION]** key to select "CD".
- Press three keys **[DBFB]**, **[■]** and **I/⏻** simultaneously.
- After the "STANDBY" display blinks, "LOCK" is displayed, and the CD ship mode is set.

[CD Service Mode]

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

Procedure:

- Press the **I/⏻** key to turn the power on.
- Press the **[FUNCTION]** key to select "CD".
- Press three keys **[−]** (TUNER), **[BASS/TREBLE]** and **[■]** simultaneously.
- The message "SERVICEMODE" is displayed, and the CD service mode is activated.
- With the CD in stop status, press the **[▶▶]** key to move the pickup to outside track and in the same time "SLED OUT" is displayed, or press the **[◀◀]** key to inside track and in the same time "SLED IN" is displayed.
- In the CD play mode, each time the **[REPEAT]** key on the remote commander is pressed, the sled movement is switched on or off, and the message "TRAVERSE" is displayed for a while.
- To exit from this mode, perform the cold reset.

[Disc Slot Lock]

- The disc slot lock function for the antitheft of an demonstration disc in the store is equipped.

Setting Procedure:

- Press the **I/⏻** key to turn the power on.
- Press the **[FUNCTION]** key to select "CD".
- Press two keys of **[■]** and **[▲]** simultaneously for five seconds.
- The message "LOCKED" is displayed for two seconds and the slot is locked.

Releasing Procedure:

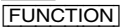
- Press two keys of **[■]** and **[▲]** simultaneously for five seconds again.
- The message "UNLOCKED" is displayed for two seconds and the slot is unlocked.

Note : When "LOCKED" is displayed, the slot lock is not released by turning the power on/off with the **I/⏻** key.

[MD/VIDEO Function Selection Mode]

- This mode is used to select the function of MD or TAPE.

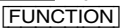
Procedure:

1. Press the  key to turn the power off.
2. Press the  and  keys simultaneously.
3. The function will change from MD to TAPE, and “TAPE” is displayed.
4. To change back to MD, repeat the same procedure.

[CD Power Manage Mode]

- In the CD power manage ON mode, CD power supply is always on to smooth the access in the CD play mode.
In the CD power manage OFF mode, CD power supply is switched off in the tuner mode to reduce the disturbance to tuner as much as possible.

Procedure:

1. Press the  key to turn the power on.
2. Press the  key to select “CD”.
3. Press the  key to turn the power off.
4. While pressing the  key, press the  key. “CD PowerOn” is displayed for two seconds and the CD power manage ON mode is set.
5. In the same way, while pressing the  key, press the  key. “CD PowerOff” is displayed for two seconds and the CD power manage OFF mode is set.

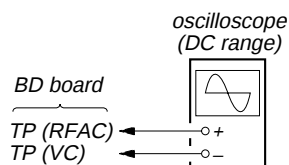
SECTION 4 ELECTRICAL ADJUSTMENTS

CD SECTION

Note:

1. CD Block is basically constructed to operate without adjustment.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10 MΩ 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.
5. Check the focus bias check when optical pick -up block is replaced.

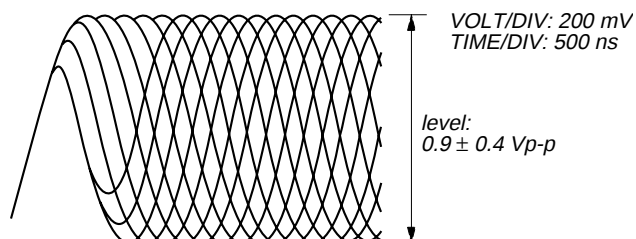
FOCUS BIAS CHECK



Procedure :

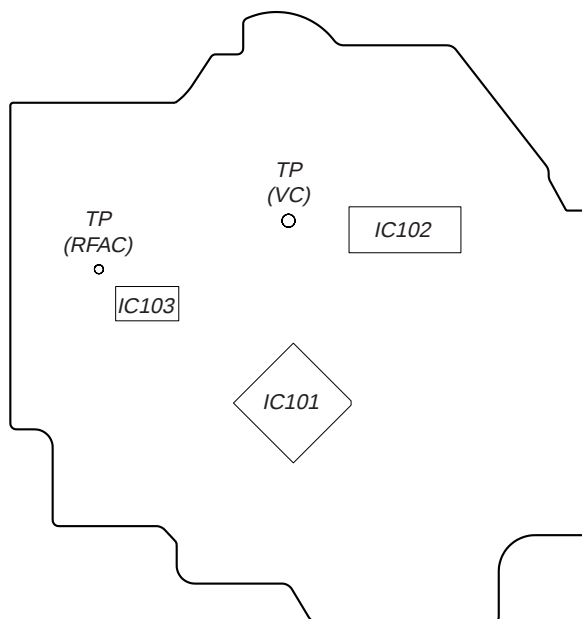
1. Connect oscilloscope to TP (RFAC) and TP (VC) on the BD board.
2. Press the button to turn the power ON, and press the button to eject the CD disc slot.
3. Set disc (YEDS-18) on the tray and press the button to playback.
4. Confirm that oscilloscope waveform is as shown in the figure below. (eye pattern)

A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.



Checking Location:

– BD BOARD (Conductor Side) –



SECTION 5
DIAGRAMS

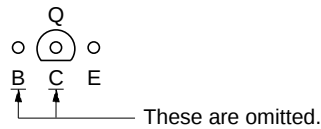
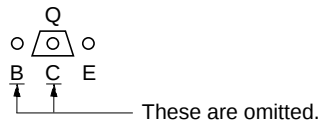
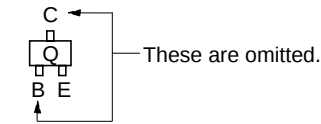
• NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Board:

- : parts extracted from the component side.
 - : parts extracted from the conductor side.
 - : Through hole.
 - △ : 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.
(Side A)
Parts face side: Parts on the parts face side seen from the parts face are indicated.
(Side B)

- Indication of transistor.



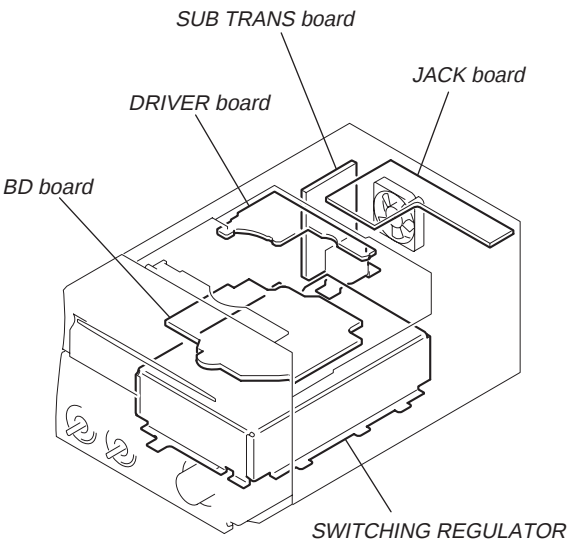
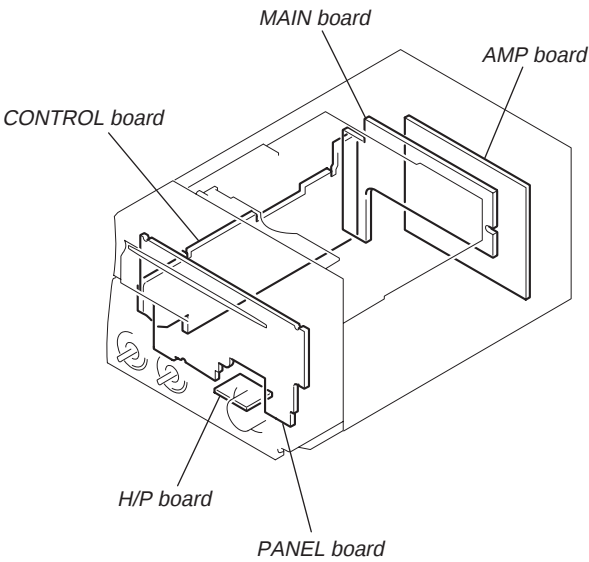
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$ 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- △ : internal component.
- ⊞ : fusible resistor.
- : panel designation.

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

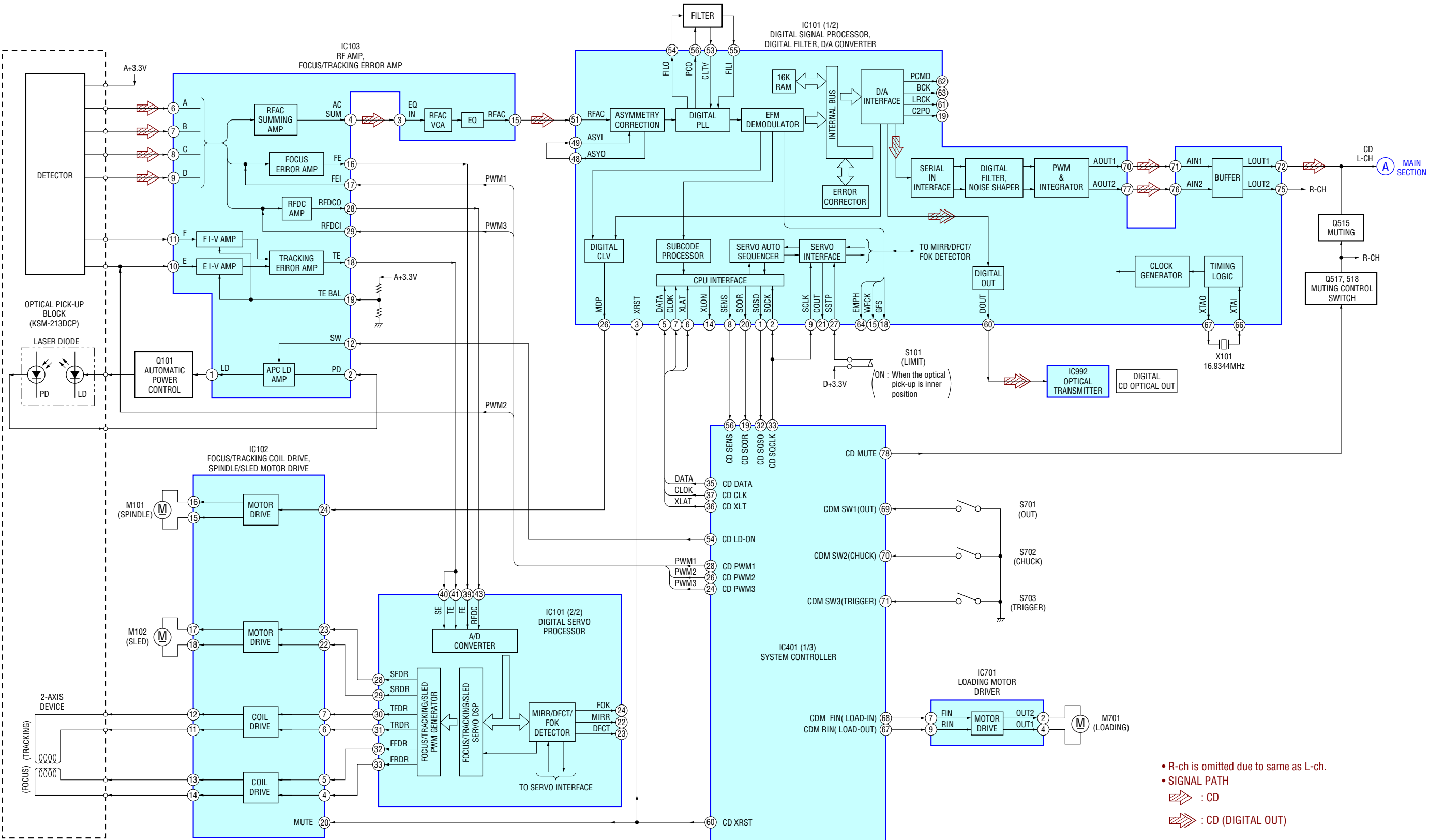
- : B+ Line.
- : B- Line.
- Voltagess are taken with a VOM (Input impedance 10 M Ω).
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 - ⇨ : TUNER (FM/AM)
 - ⇨ : CD
 - ⇨ : CD (DIGITAL OUT)
 - ⇨ : MD (TAPE) OUT
 - ⇨ : MD (TAPE) IN

• Circuit Boards Location

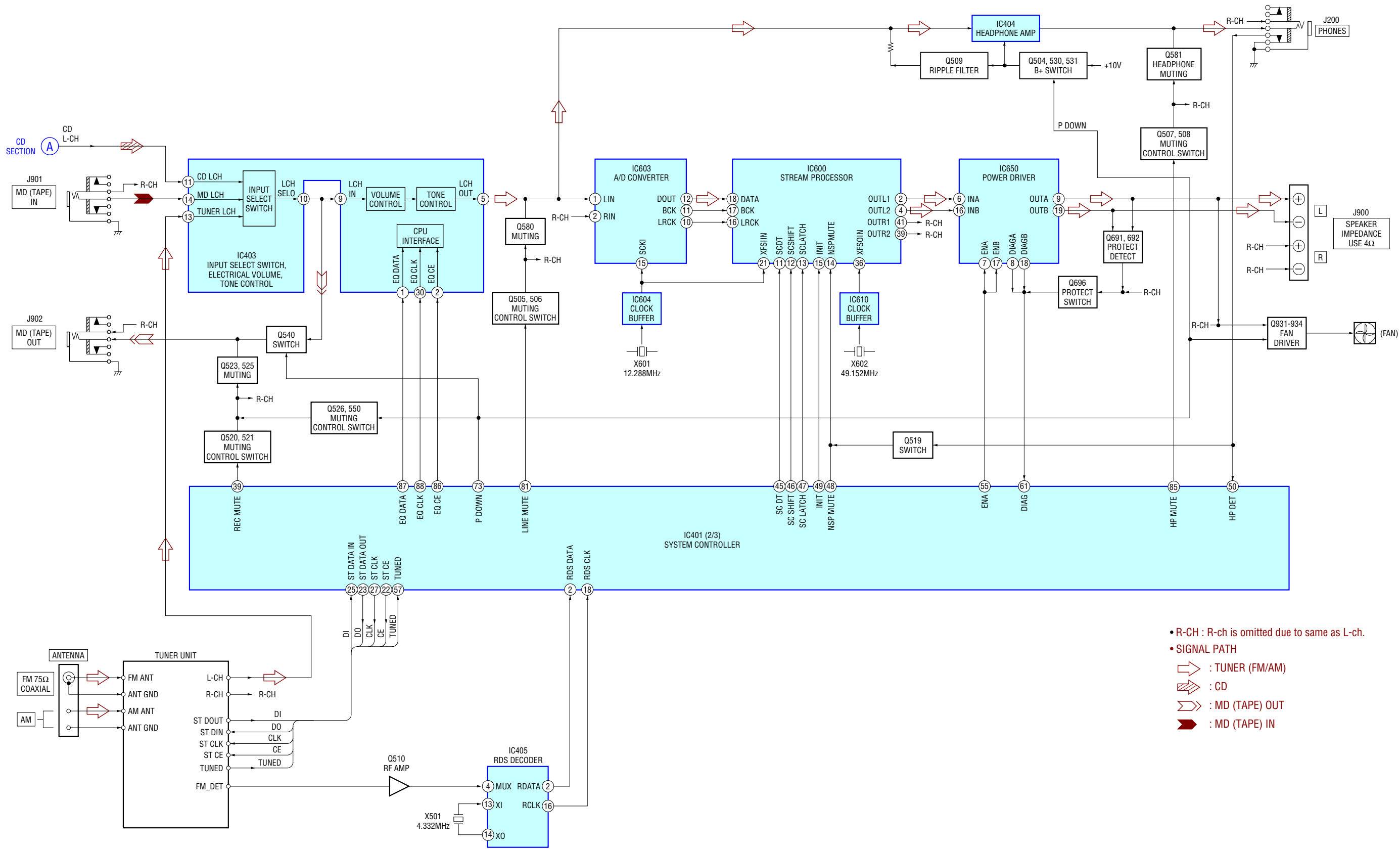


HCD-SE1

5-1. BLOCK DIAGRAMS – CD SECTION –



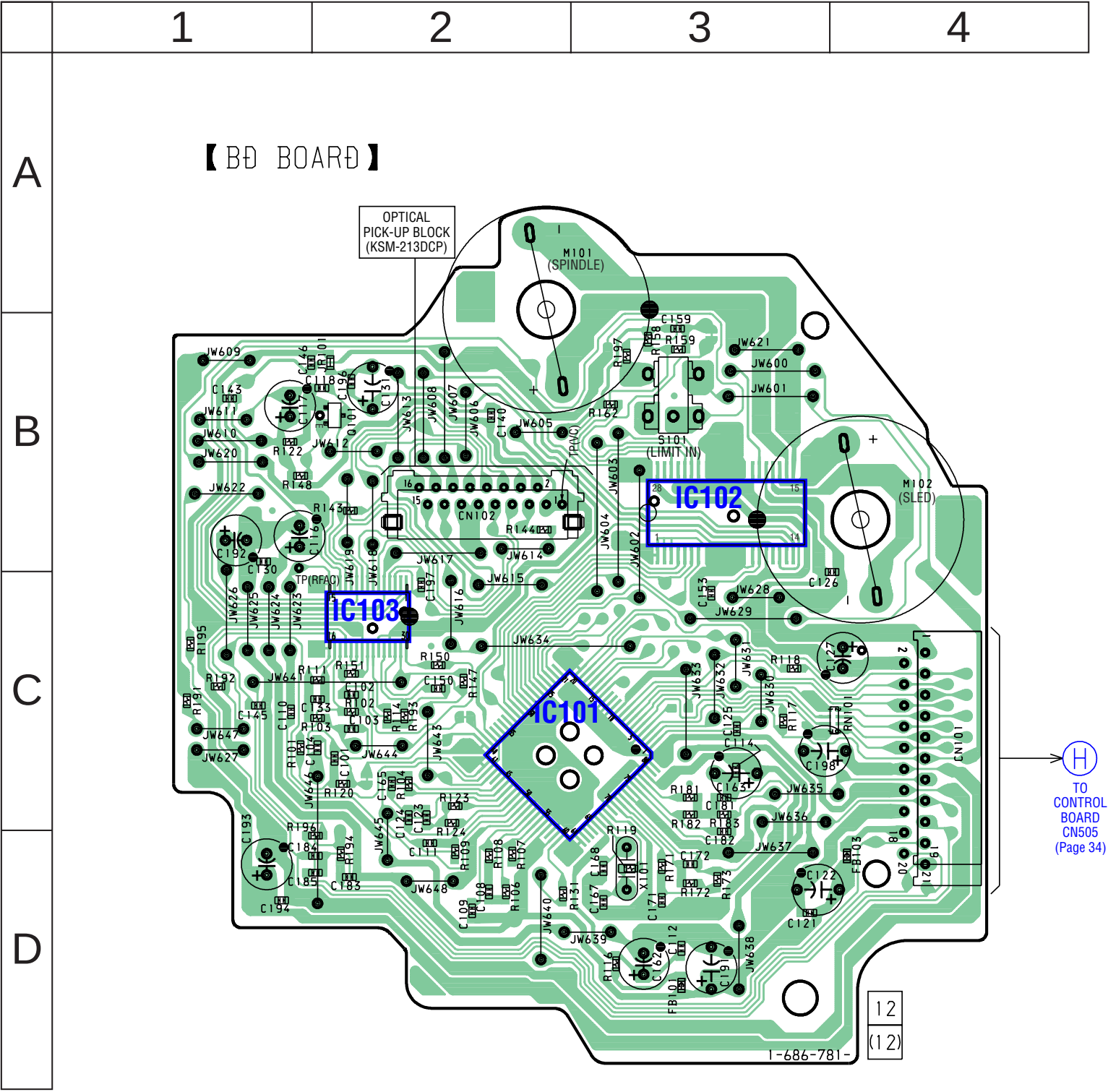
- MAIN SECTION -

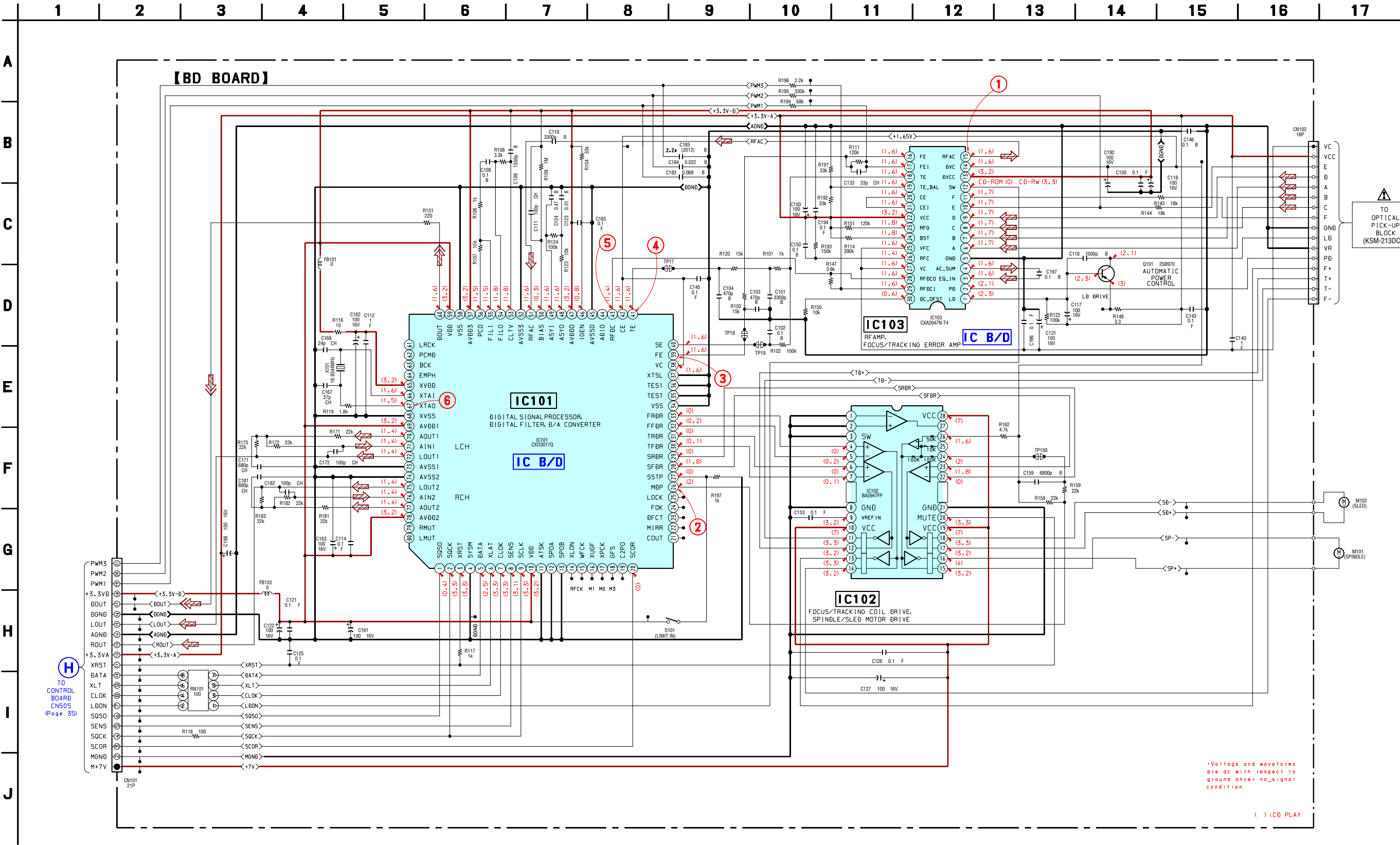


– POWER/DISPLAY SECTION –

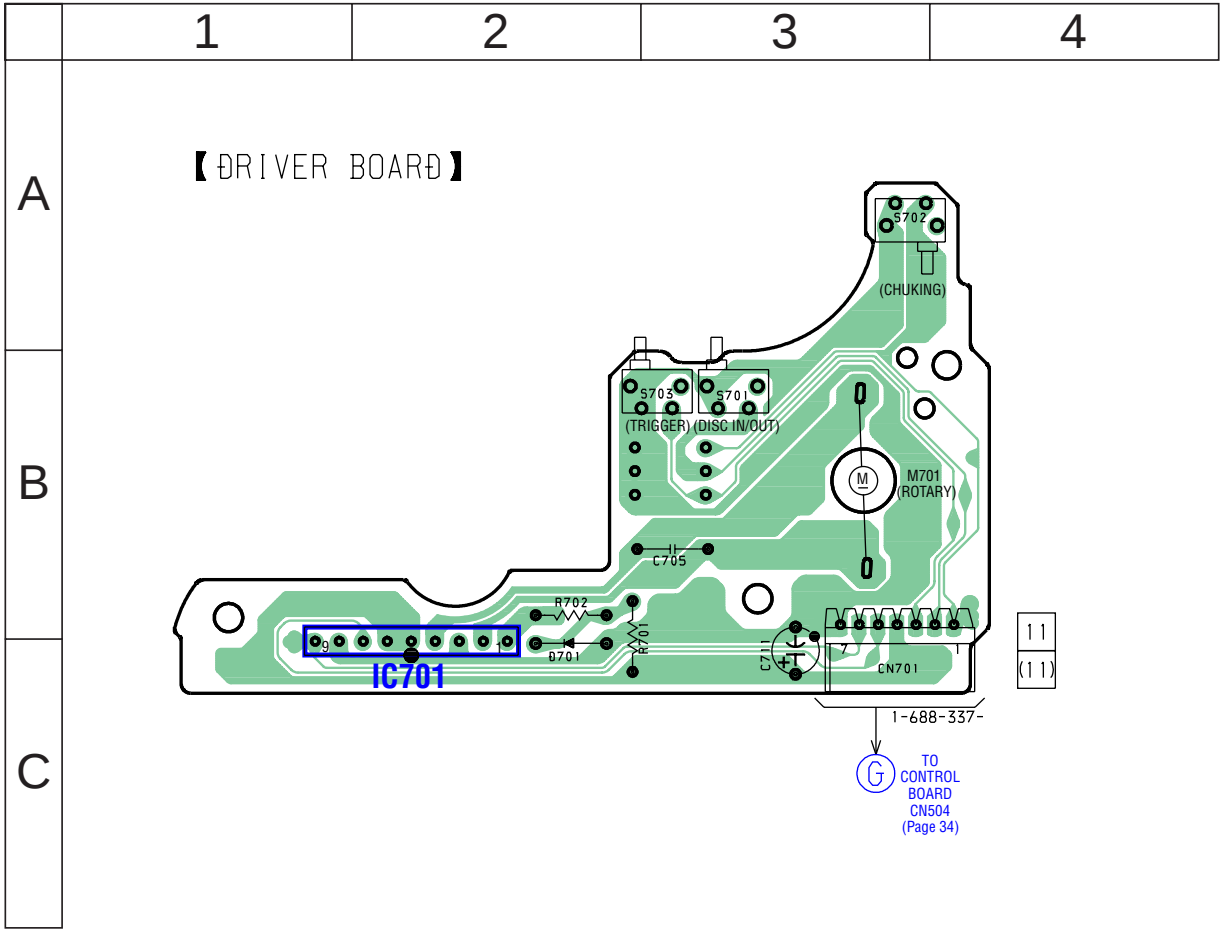


5-2. PRINTED WIRING BOARD – BD SECTION – • See page 21 for Circuit Boards Location. • : Uses unleaded solder.

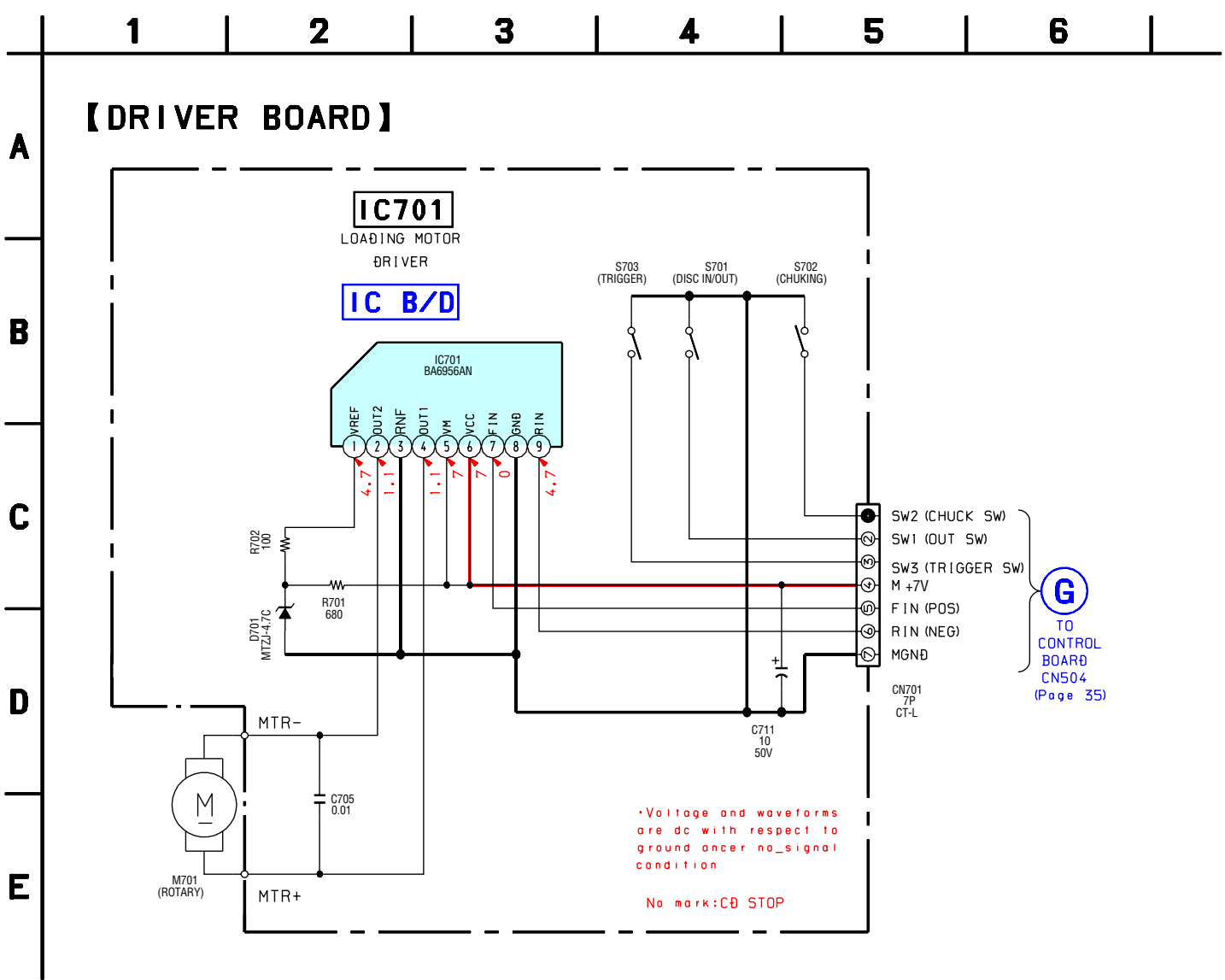


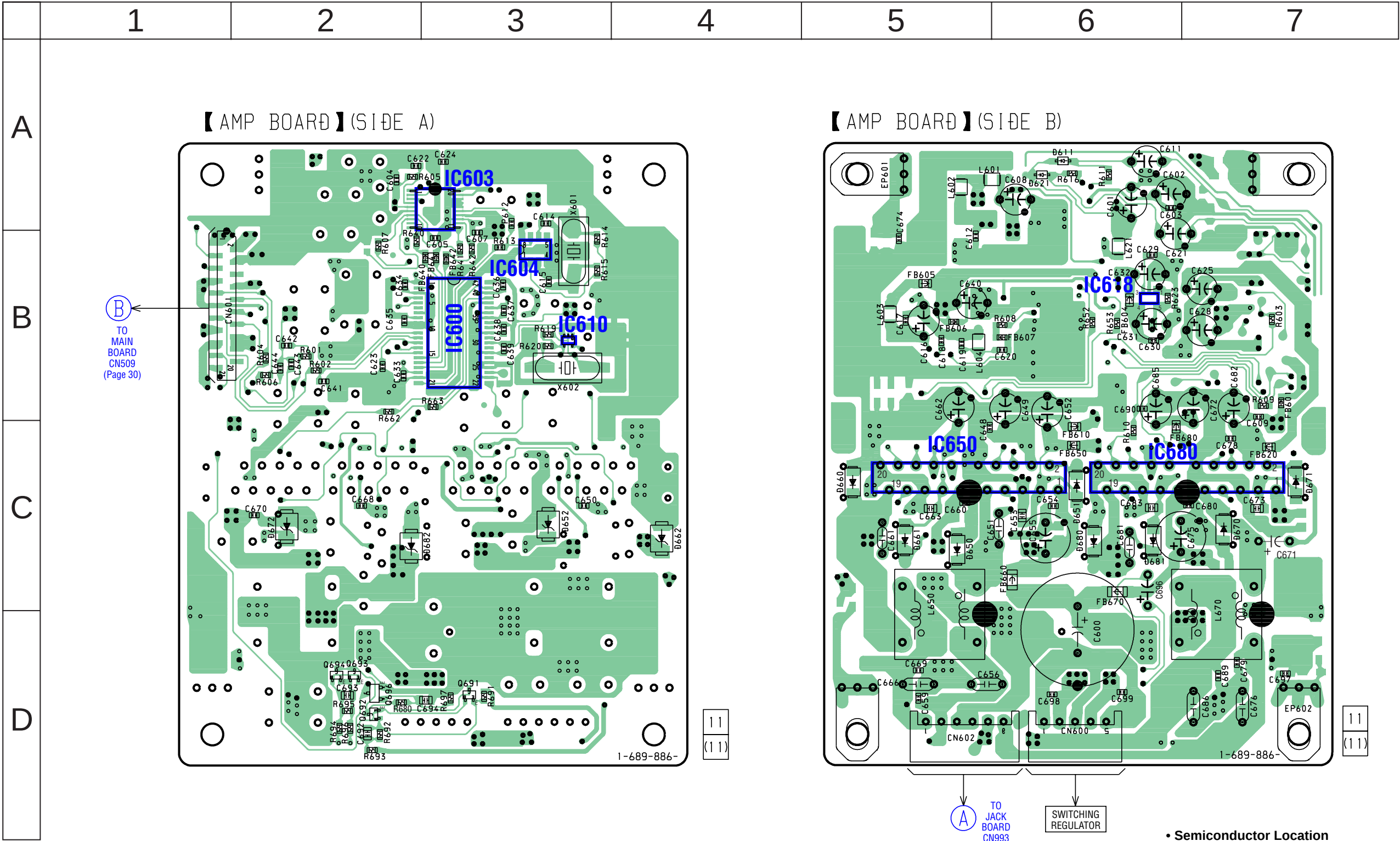


5-4. PRINTED WIRING BOARD – DRIVER SECTION – • : Uses unleaded solder.
• See page 21 for Circuit Boards Location.



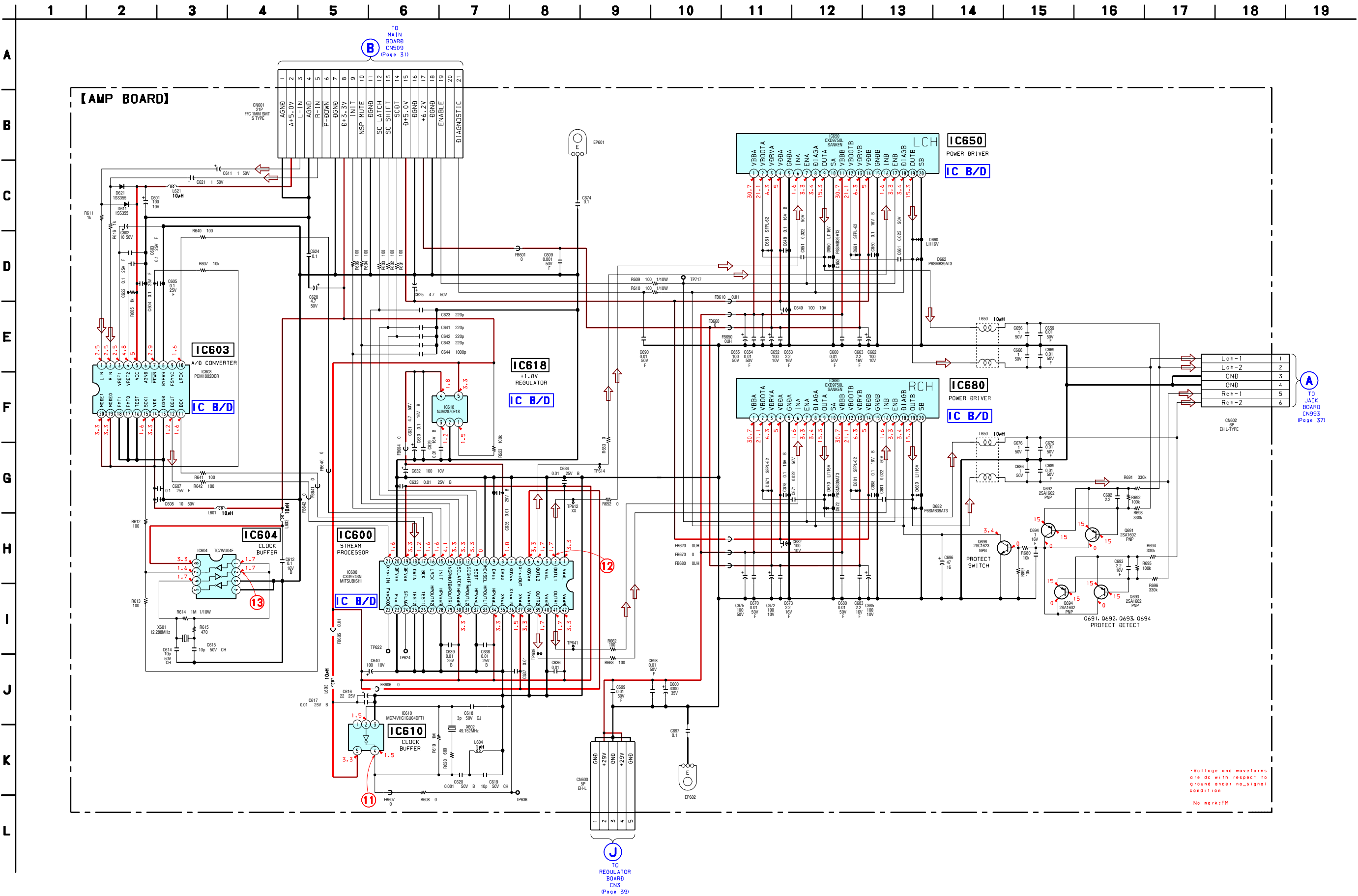
5-5. SCHEMATIC DIAGRAM – DRIVER SECTION – • See page 44 for IC Block Diagrams.

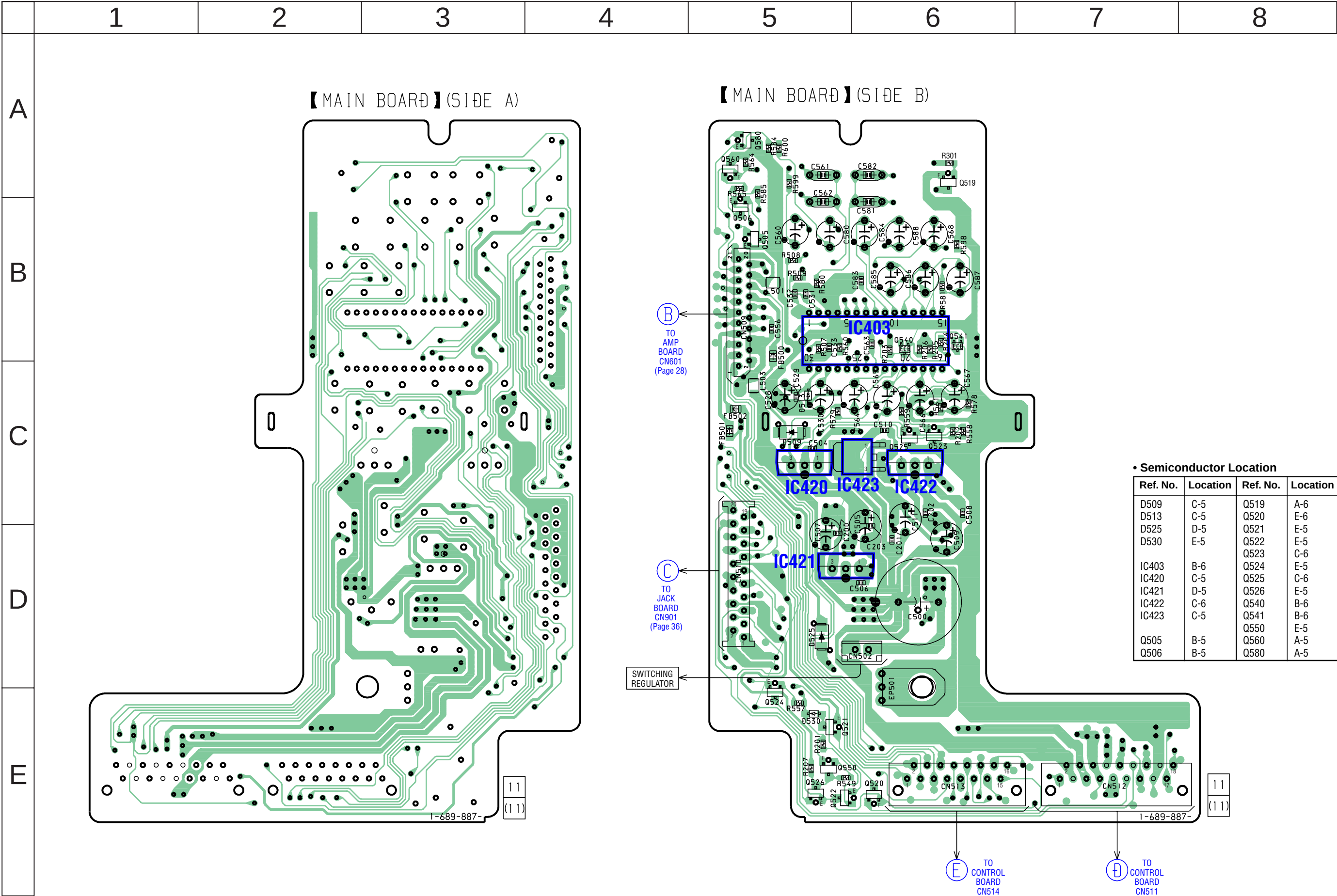




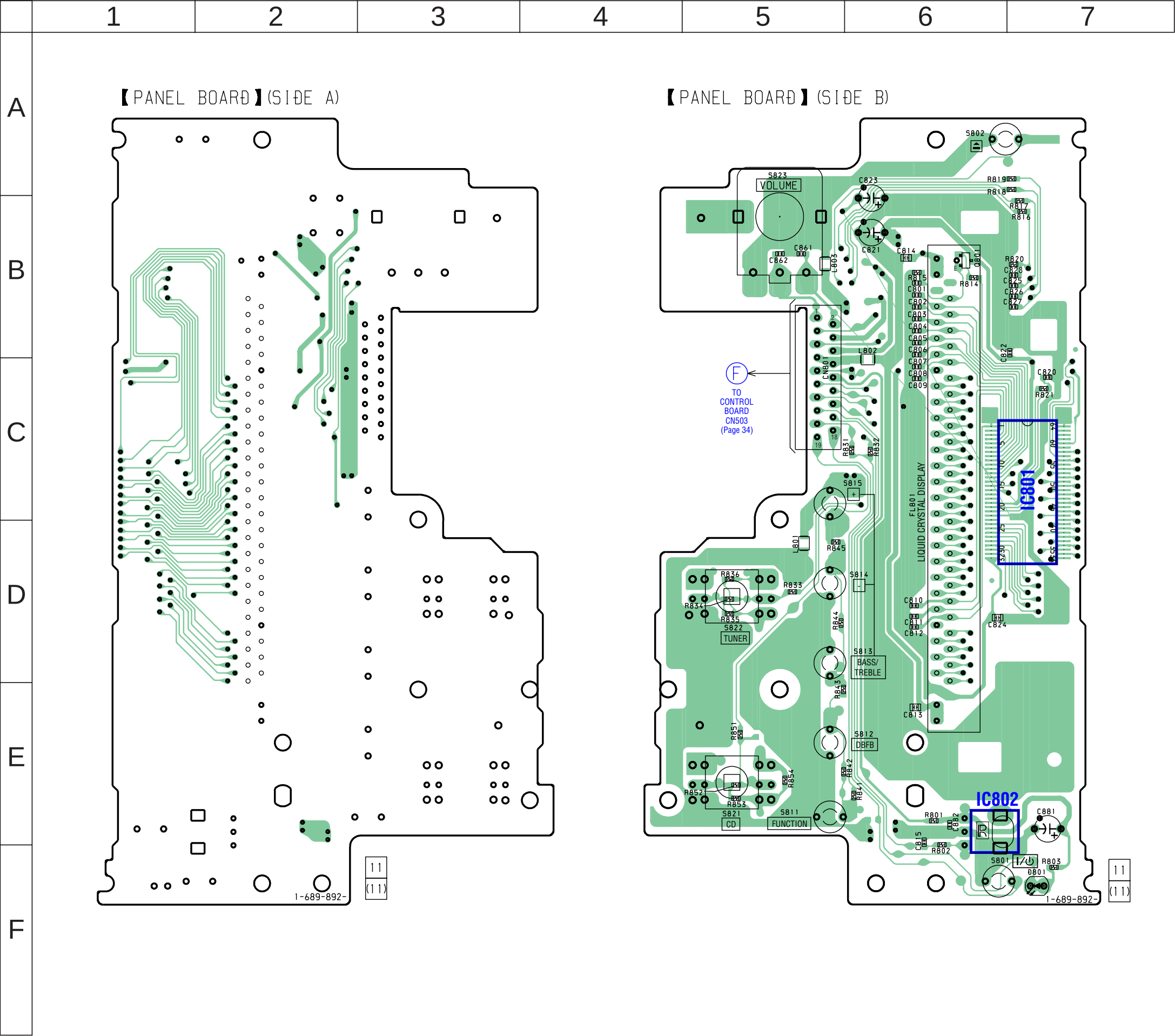
• Semiconductor Location					
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D611	A-6	D672	C-2	IC650	C-5
D621	A-6	D680	C-6	IC680	C-7
D650	C-5	D681	C-6		
D651	C-6	D682	C-2	Q691	D-3
D652	C-3			Q692	D-2
D660	C-4	IC600	B-3	Q693	D-2
D661	C-5	IC603	A-3	Q694	D-2
D662	C-4	IC604	B-3	Q696	D-2
D670	C-7	IC610	B-3		
D671	C-7	IC618	B-6		

5-7. SCHEMATIC DIAGRAM – AMP SECTION – • See page 40 for Waveforms. • See page 40 and 41 for IC Block Diagrams.

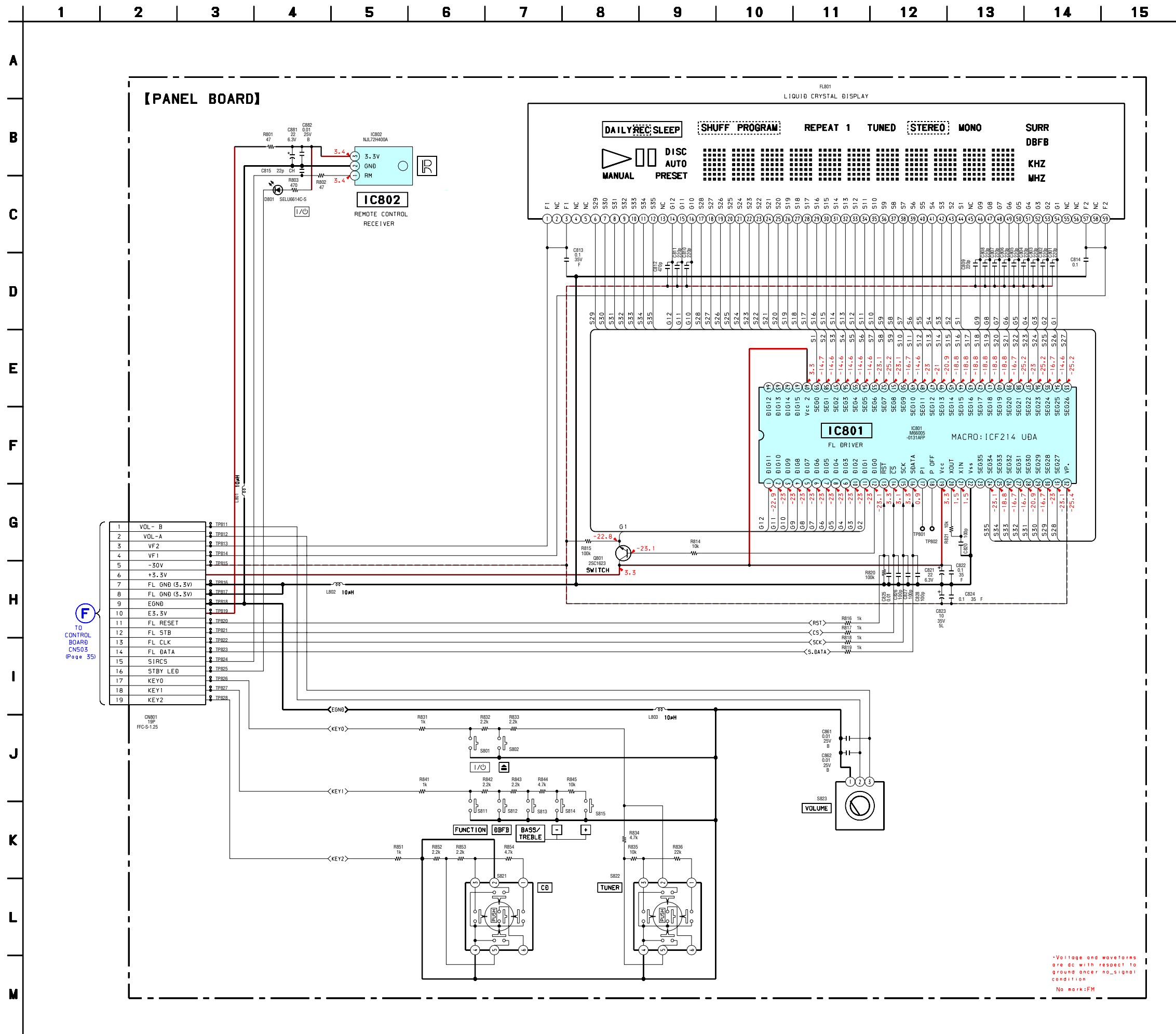




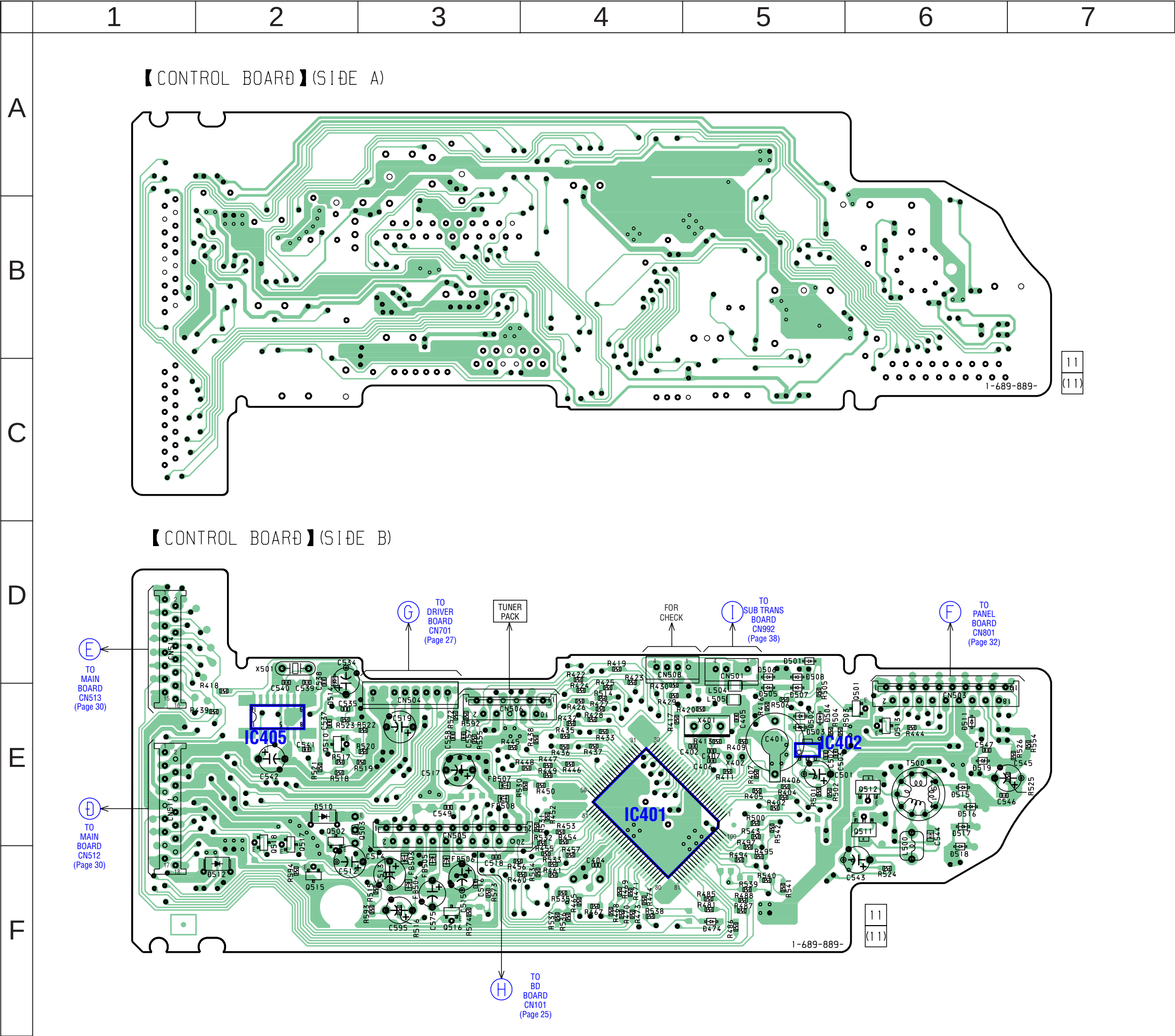




5-11. SCHEMATIC DIAGRAM – PANEL SECTION –



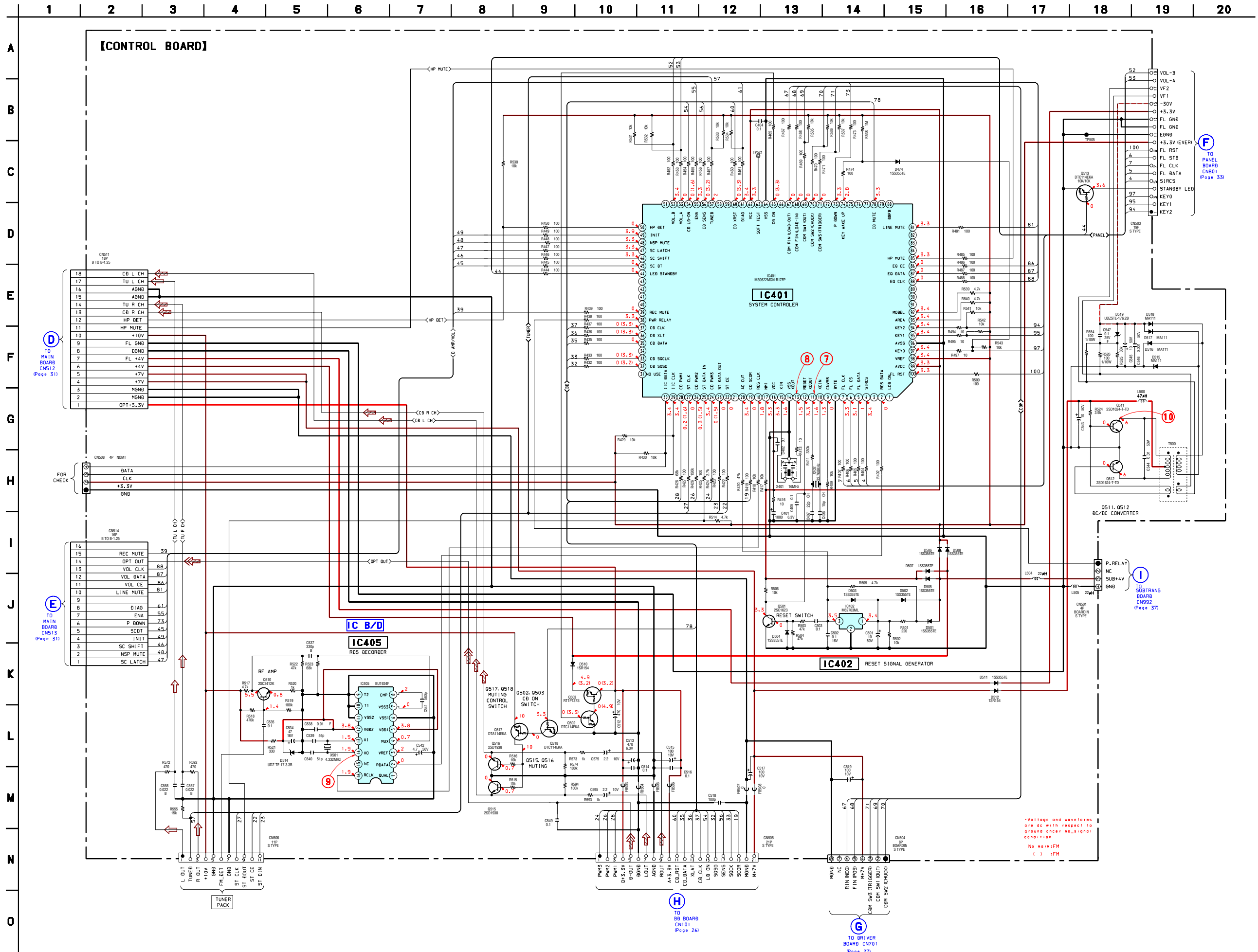
5-12. PRINTED WIRING BOARD – CONTROL SECTION – • See page 21 for Circuit Boards Location. •  : Uses unleaded solder.

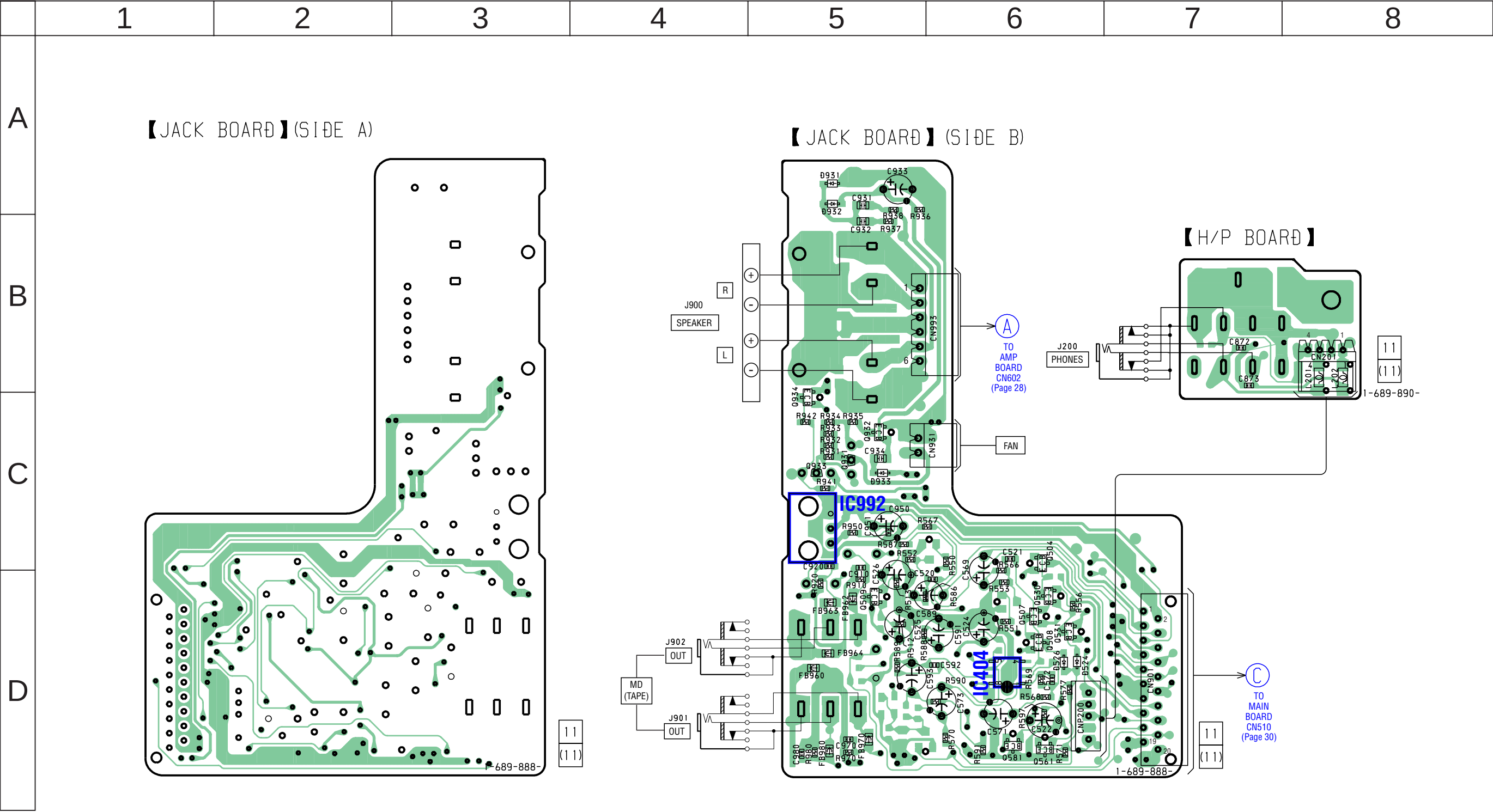


• Semiconductor Location

Ref. No.	Location
D474	F-5
D501	D-5
D502	E-5
D503	E-5
D504	E-5
D505	E-5
D506	D-5
D507	E-5
D508	D-5
D510	E-2
D511	E-6
D512	F-2
D514	D-2
D515	E-6
D516	E-6
D517	E-6
D518	E-6
D519	E-6
IC401	E-4
IC402	E-5
IC405	E-2
Q501	E-5
Q502	E-2
Q503	E-2
Q510	E-2
Q511	E-5
Q512	E-6
Q513	E-6
Q515	F-2
Q516	F-3
Q517	E-2
Q518	E-2

5-13. SCHEMATIC DIAGRAM – CONTROL SECTION – • See page 44 for IC Block Diagrams.

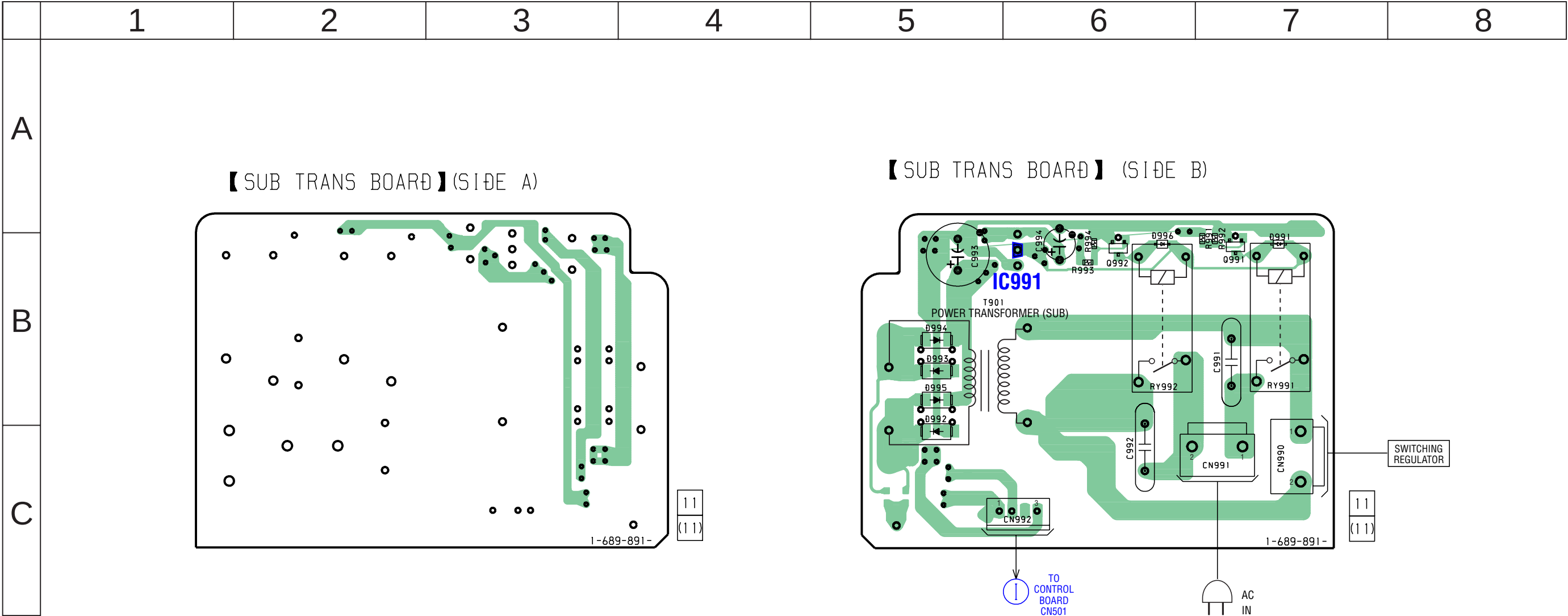




• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D524	D-6	Q509	D-5
D526	D-6	Q530	D-6
D931	A-5	Q531	D-6
D932	A-5	Q532	C-5
D933	C-5	Q533	D-6
IC404	D-6	Q561	D-6
IC992	C-5	Q581	D-6
		Q931	C-5
		Q932	C-5
Q504	C-6	Q933	C-5
Q507	D-6	Q934	B-5
Q508	D-6		

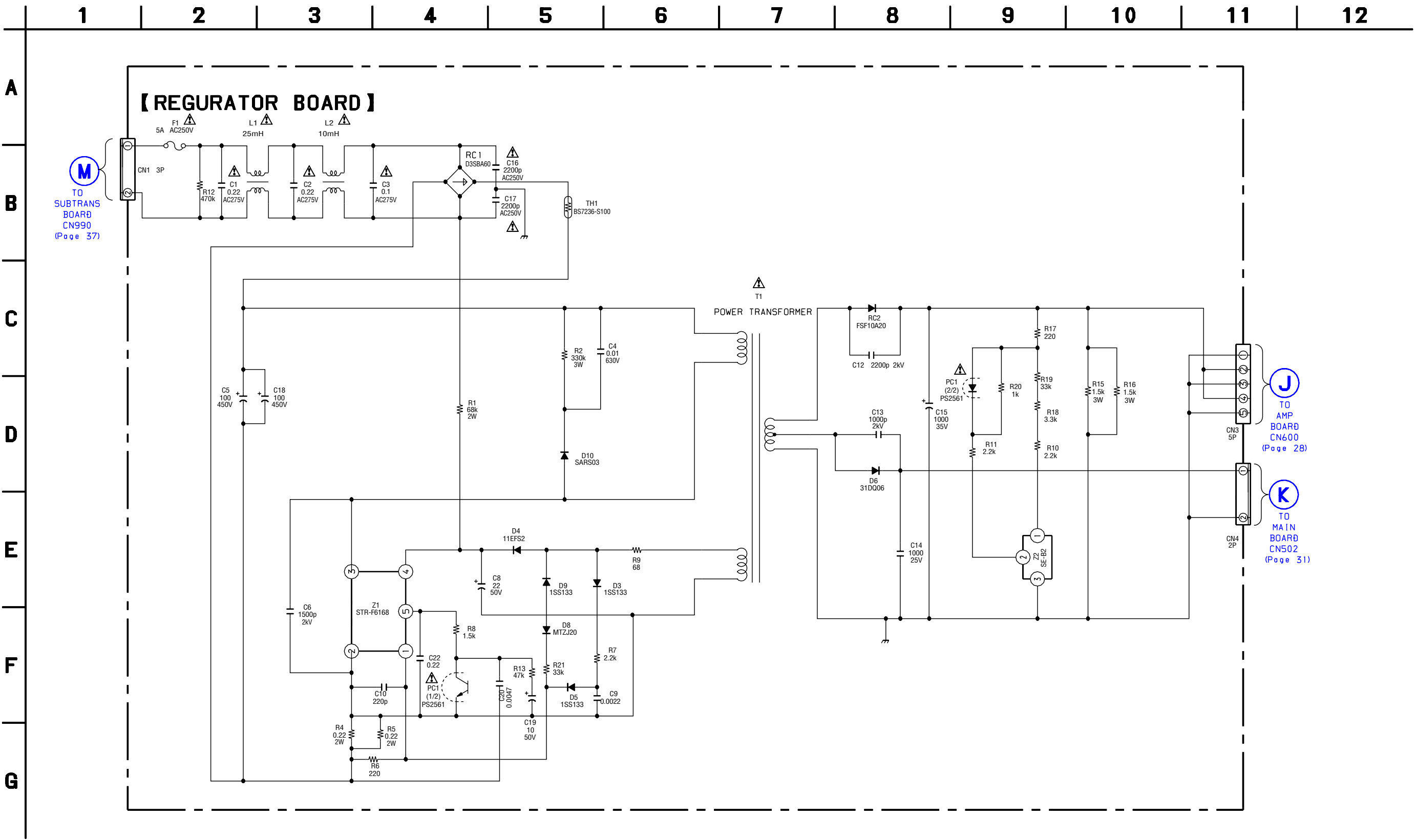




• Semiconductor Location

Ref. No.	Location
D991	B-7
D992	C-5
D993	B-5
D994	B-5
D995	B-5
D996	B-6
IC991	B-6
Q991	B-7
Q992	B-6

5-17. SCHEMATIC DIAGRAM – SWITCHING REGULATOR SECTION –



Individual parts/components are not supplied.
If repairing becomes necessary during service, replace the entire unit
SWITCHING REGULATOR (1-468-789-11 REGULATOR, SWITCHING).

- **Waveforms**

1 IC103 15 (RFAC) (CD play mode) 200 mV/DIV, 400 ns/DIV	2 IC101 28 (MDP) (CD play mode) 1 V/DIV, 4 μs/DIV	3 IC101 39 (FE) (CD play mode) 100 mV/DIV, 1 ms/DIV	4 IC101 41 (TE) (CD play mode) 100 mV/DIV, 1 ms/DIV
5 IC101 43 (RFDC) (CD play mode) 200 mV/DIV, 400 ns/DIV	6 IC101 67 (XTAO) 1 V/DIV, 20 ns/DIV		

7 IC401 (11) (XCOUT)
3.3 V_{p-p}
30.5 μs
1 V/DIV, 10 μs/DIV

8 IC401 (13) (XOUT)
3.1 V_{p-p}
62.5 ns
1 V/DIV, 40 ns/DIV

9 IC405 (14) (XO)
3.1 V_{p-p}
231 ns
1 V/DIV, 200 ns/DIV

10 Q511 Collector
23.2 V_{p-p}
20 μs
10 V/DIV, 10 μs/DIV

Figure 10 displays three waveforms of output signals:

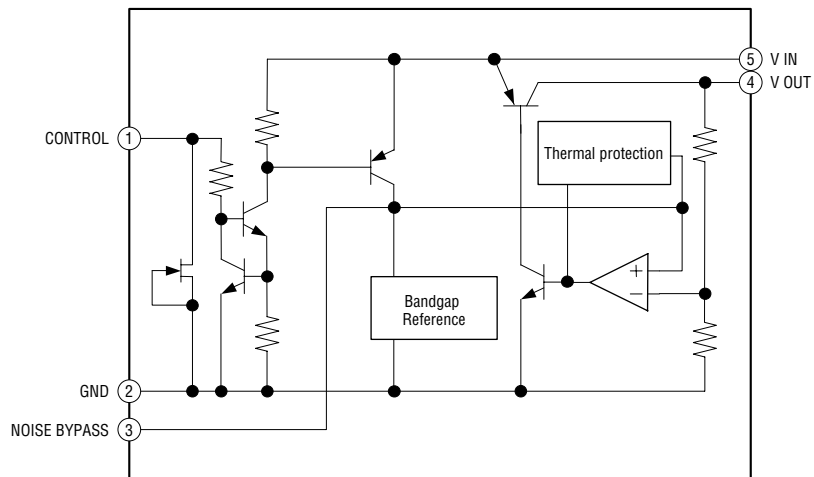
- 11 IC610 ④:** A sine wave with a peak-to-peak voltage of 3.7 V_{p-p} and a period of 20.3 ns . The scale is 1 V/DIV , 10 ns/DIV .
- 12 IC600 ② (OUTL1):** A square wave with a peak-to-peak voltage of 4.6 V_{p-p} and a period of $1.3\text{ }\mu\text{s}$. The scale is 1 V/DIV , 400 ns/DIV .
- 13 IC604 ②:** A sine wave with a peak-to-peak voltage of 4.8 V_{p-p} and a period of 81.5 ns . The scale is 1 V/DIV , 40 ns/DIV .

- IC Block Diagrams

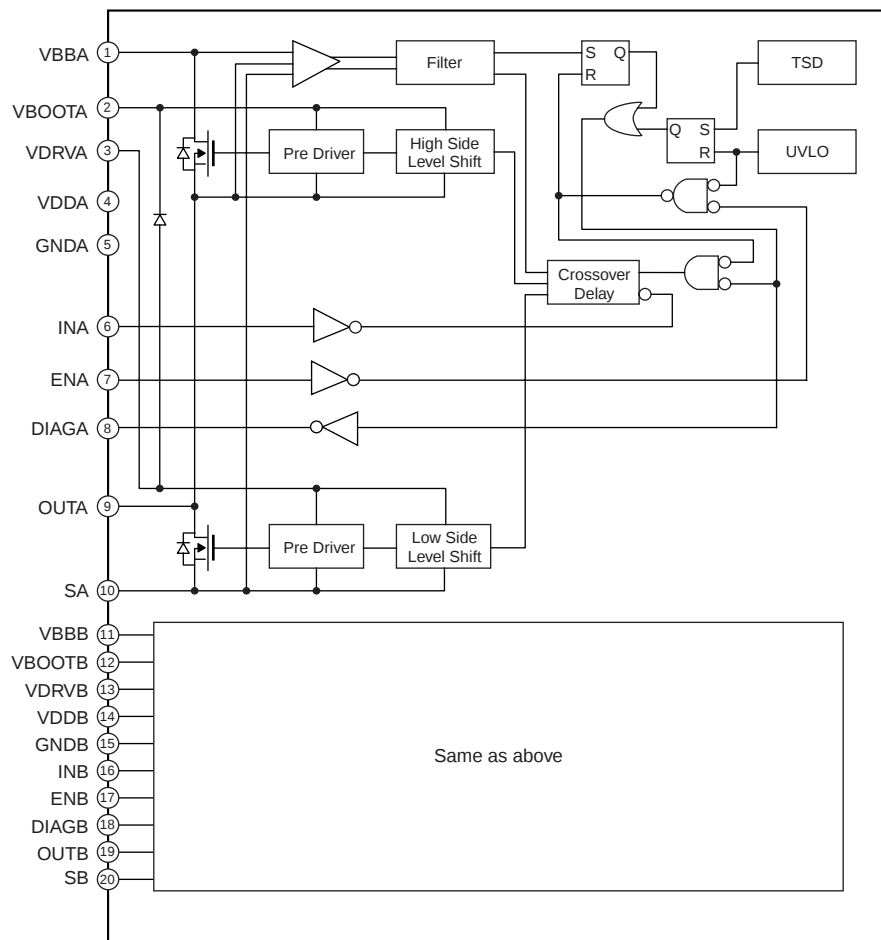
The block diagram illustrates the internal architecture of the AD9075 ADC. Key components include:

- Input Stage:** VINL (pin 1) and VINR (pin 2) feed into two Single-End/Differential Converters.
- Reference:** VERF1 (pin 3) and VERF2 (pin 4) provide reference voltages to the converters and a central Reference block.
- Modulation and Filtering:** Each converter feeds a 5th Order Delta-Sigma Modulator. The outputs of these modulators feed a central $\times 1/64 (\times 1/128)$ Decimation Filter with DC Cut Filter.
- Control and Interface:** The Decimation Filter output feeds a Mode/Format Control block and a Serial Interface block. A Clock and Timing Control block receives inputs from PDWN (pin 7) and BYPAS (pin 8) and provides clock signals to the modulators and the decimation filter.
- Power and Status:** VCC (pin 5) and AGND (pin 6) are connected to a Power Supply block. FSYNC (pin 9) and LRCK (pin 10) are output pins. The Serial Interface block has control pins MODE1 (pin 20), MODE0 (pin 19), FMT1 (pin 18), and FMT0 (pin 17). The Clock and Timing Control block has output pins OSR (pin 16), SCKI (pin 15), VDD (pin 14), DGCD (pin 13), DOUT (pin 12), and BCK (pin 11).

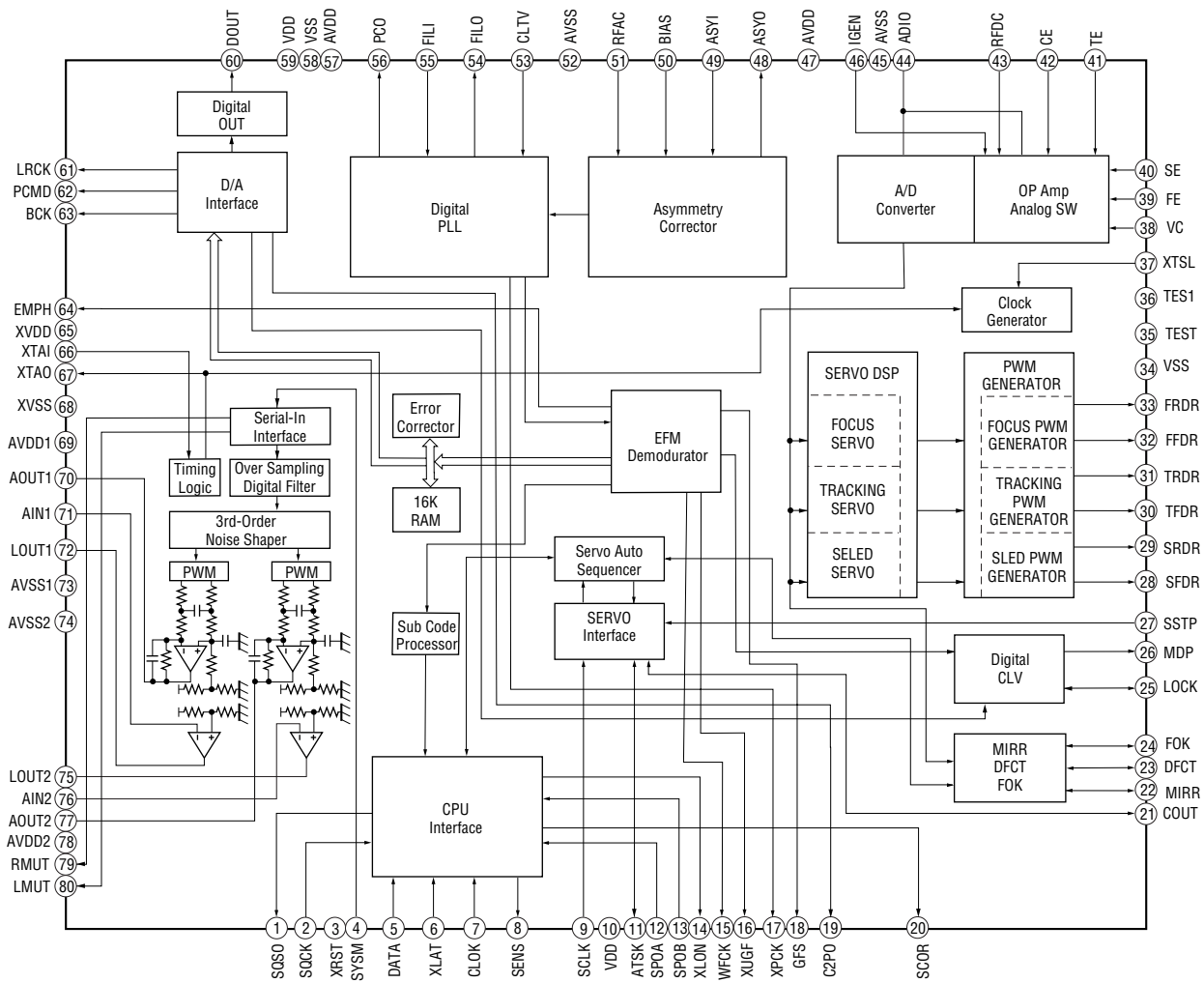
IC618 NJM2870F18(TE2)



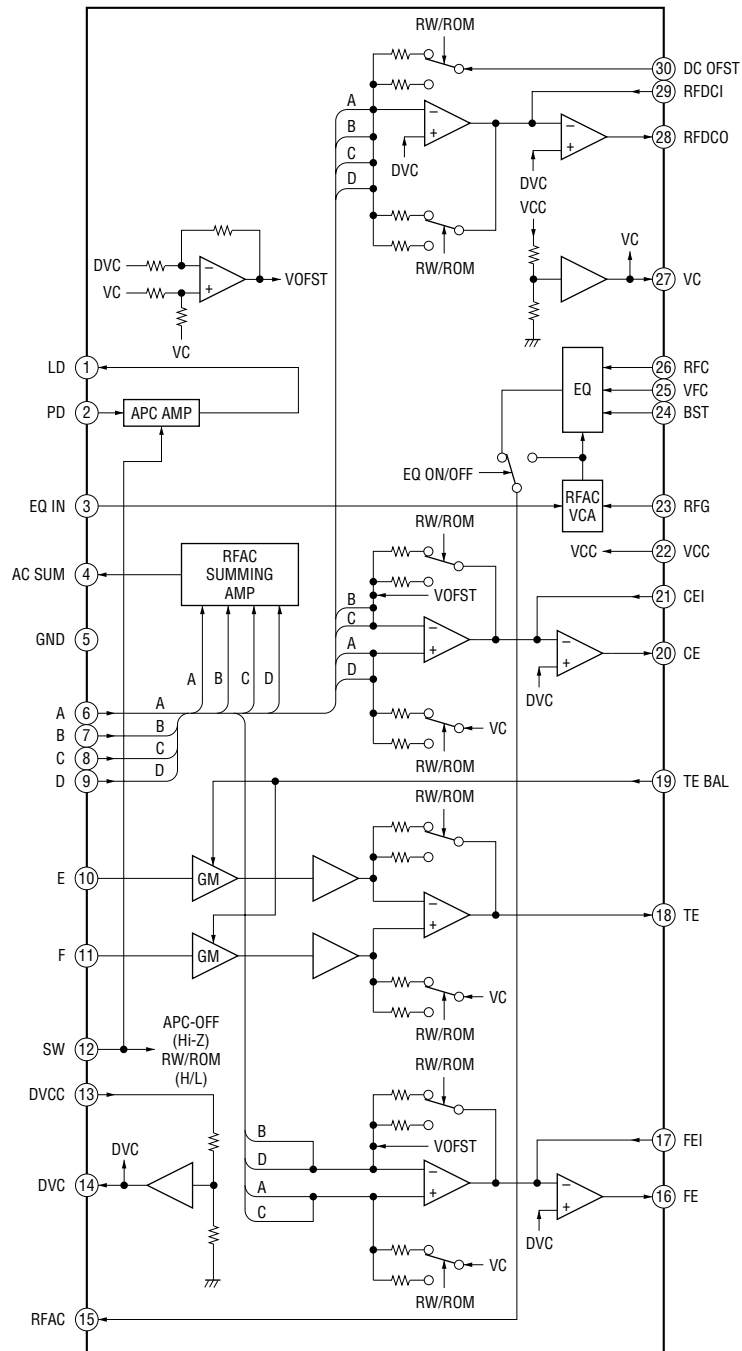
IC650, 680 CXD9750L



IC101 CXD3017Q

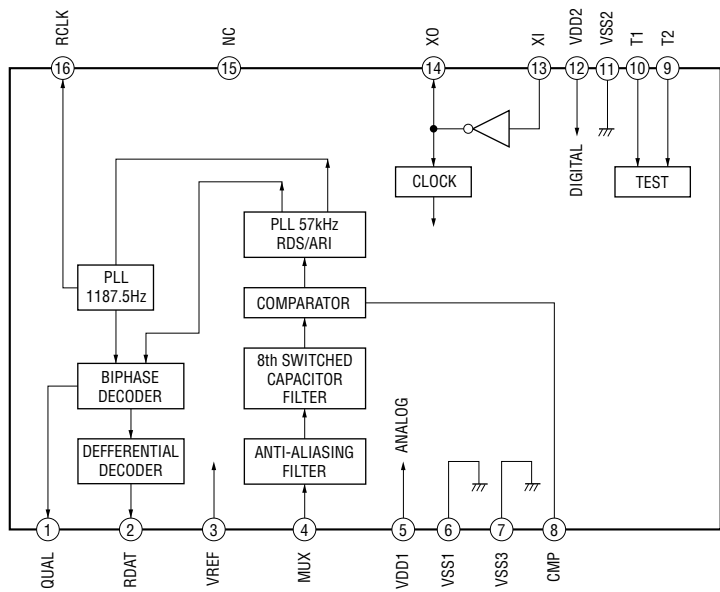


IC103 CXA2647N-T4



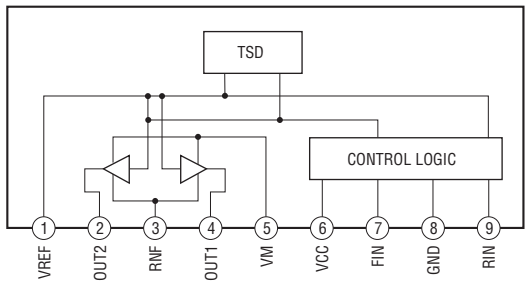
– CONTROL Board –

IC405 BU1924F-E2



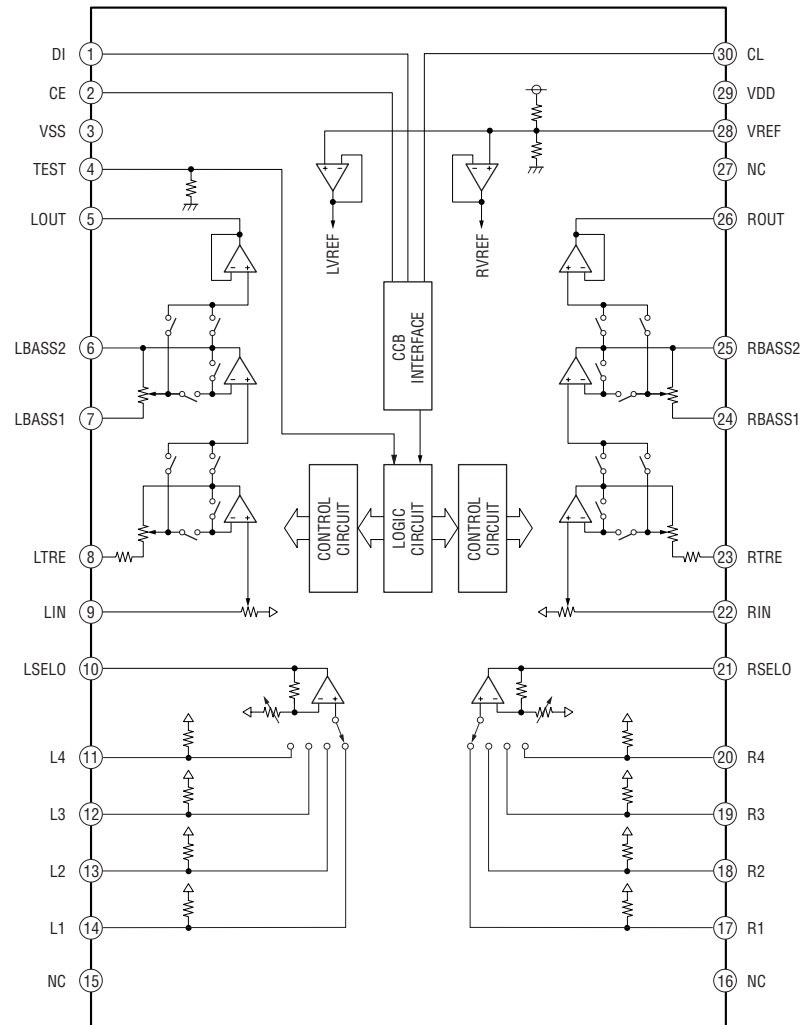
– DRIVER Board –

IC701 BA6956AN



– MAIN Board –

IC403 LC75342



5-18. IC PIN FUNCTION DESCRIPTION

• IC401 M30622MGN-B17FP (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	LCD ON	—	Not used (open)
2	RDS DATA	I	Serial data input from the RDS decoder (IC405)
3	NC	—	Not used (open)
4	SIRCS	I	Remote control signal input terminal
5	FL DATA	O	Serial data output to the FL driver
6	FL CS	O	Chip select signal output to the FL driver “L” active
7	FL CLK	O	Serial data transfer clock signal output to the FL driver
8	BYTE	—	Not used
9	CNVSS	—	Ground terminal
10	XCIN	I	Sub system clock input terminal (32.768 kHz)
11	XCOUT	O	Sub system clock output terminal (32.768 kHz)
12	RESET	I	System reset signal input from the reset signal generator “L”: reset For several hundreds msec. after the power supply rises, “L” is input, then it changes to “H”
13	XOUT	O	Main system clock output terminal (16 MHz)
14	VSS	—	Ground terminal
15	XIN	I	Main system clock input terminal (16 MHz)
16	VCC	—	Power supply terminal (+3.3V)
17	NMI	I	Non-maskable interrupt input terminal Not used
18	RDS CLK	I	Serial data transfer clock signal input from the RDS decoder (IC405)
19	CD SCOR	I	Subcode sync (S0+S1) detection signal input from the digital signal processor
20	AC CUT	I	AC off detection signal input from the reset signal generator “L”: AC cut checked
21	NC	—	Not used (open)
22	ST CE	O	PLL chip enable signal output to the tuner unit
23	ST DATA OUT	O	PLL serial data output to the tuner unit
24	CD PWM3	O	RFDC PWM signal output to the RF amplifier
25	ST DATA IN	I	PLL serial data input from the tuner unit
26	CD PWM2	O	PWM signal output to the RF amplifier
27	ST CLK	O	PLL serial data transfer clock signal output to the tuner unit
28	CD PWM1	O	Focus servo drive PWM signal output to the RF amplifier
29	IIC CLK	I/O	Communication data transfer clock signal input/output terminal Not used
30	IIC DATA	I/O	Communication data bus terminal Not used
31	NO USE	—	Not used
32	CD SQSO	I	Subcode Q data input from the digital signal processor
33	CD SQCLK	O	Subcode Q data reading clock signal output to the digital signal processor
34	NC	—	Not used (open)
35	CD DATA	O	Serial data output to the digital signal processor
36	CD XLT	O	Serial data latch pulse signal output to the digital signal processor
37	CD CLK	O	Serial data transfer clock signal output to the digital signal processor
38	PWR RELAY	O	Main system power supply on/off control signal output
39	REC MUTE	O	Recording muting on/off control signal output
40 to 43	NC	—	Not used (open)
44	LED STANDBY	O	LED drive signal output of the standby indicator “H”: LED on
45	SC DT	O	Serial data output to the processor
46	SC SHIFT	O	Serial data shift clock signal output to the stream processor
47	SC LATCH	O	Serial data latch pulse signal output to the stream processor
48	NSP MUTE	O	Muting on/off control signal output to the stream processor “L”: muting on

Pin No.	Pin Name	I/O	Description
49	INIT	O	Reset signal output to the stream processor “L”: reset
50	HP DET	I	Headphone jack connection detection signal input terminal “L”: no connected, “H”: headphone connected
51	NC	—	Not used (open)
52	VOL B	I	Jog dial pulse input from the rotary encoder (VOLUME) (B phase input)
53	VOL A	I	Jog dial pulse input from the rotary encoder (VOLUME) (A phase input)
54	CD LD-ON	O	CD-ROM/RW selection signal output to the RF amplifier “L”: CD-ROM, “H”: CD-RW
55	ENA	O	Output enable control signal output to the power driver
56	CD SENS	I	Internal status detection monitor input from the digital signal processor
57	TUNED	I	Tuning detection signal input from the tuner unit “L”: tuned
58, 59	NC	—	Not used (open)
60	CD XRST	O	Reset signal output to the digital signal processor and motor/coil driver “L”: reset
61	DIAG	I	Protect signal input from the power driver and protect detect circuit
62	VCC	—	Power supply terminal (+3.3V)
63	SOFT TEST	O	Output terminal for the software test Not used
64	VSS	—	Ground terminal
65	CD ON	O	Power supply on/off control signal output for the CD section “H”: power on
66	NC	—	Not used (open)
67	CDM RIN (LOAD-OUT)	O	Motor drive signal (open direction) output terminal
68	CDM FIN (LOAD-IN)	O	Motor drive signal (close direction) output terminal
69	CDM SW1 (OUT)	I	Loading out detect switch input terminal “L”: loading out
70	CDM SW2 (CHUCK)	I	Chucking detect switch input terminal
71	CDM SW3 (TRIGGER)	I	Trigger detect switch input terminal
72	NC	—	Not used (open)
73	P DOWN	O	Power down control signal output “L”: power down
74	KEY WAKE UP	I	System wake up signal input by pressing any key
75 to 77	NC	—	Not used (open)
78	CD MUTE	O	CD analog signal muting on/off control signal output terminal “H”: muting on
79	NC	—	Not used (open)
80	DBFB	—	Not used (open)
81	LINE MUTE	O	Audio line muting on/off control signal output terminal “H”: muting on
82 to 84	NC	—	Not used (open)
85	HP MUTE	O	Headphone muting on/off control signal output terminal “H”: muting on
86	EQ CE	O	Chip enable signal output to the electrical volume
87	EQ DATA	O	Serial data output to the electrical volume
88	EQ CLK	O	Serial data transfer clock signal output to the electrical volume
89 to 91	NC	—	Not used (open)
92	MODEL	I	Model setting terminal
93	AREA	I	Destination setting terminal
94, 95	KEY2, KEY1	I	Front panel key input terminal (A/D input)
96	AVSS	—	Ground terminal (for analog system)
97	KEY0	I	Front panel key input terminal (A/D input)
98	VREF	I	Reference voltage (+3.3V) input terminal
99	AVCC	—	Power supply terminal (+3.3V) (for analog system)
100	FL RESET	O	Reset signal output to the FL driver “L”: reset

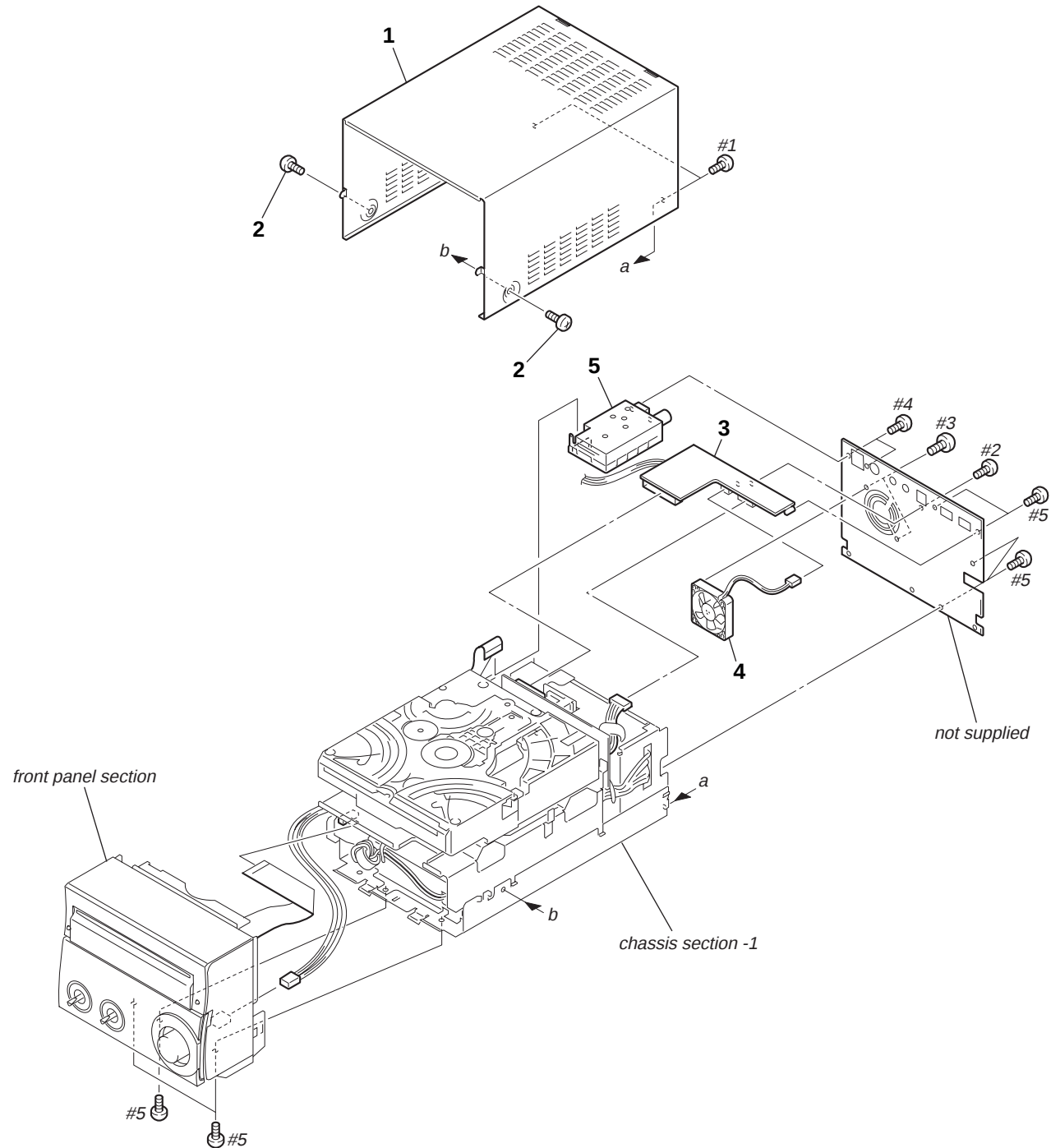
SECTION 6
EXPLODED VIEWS

NOTE:

- -XX and -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.
- The mechanical parts with no reference number in the exploded views are not supplied.

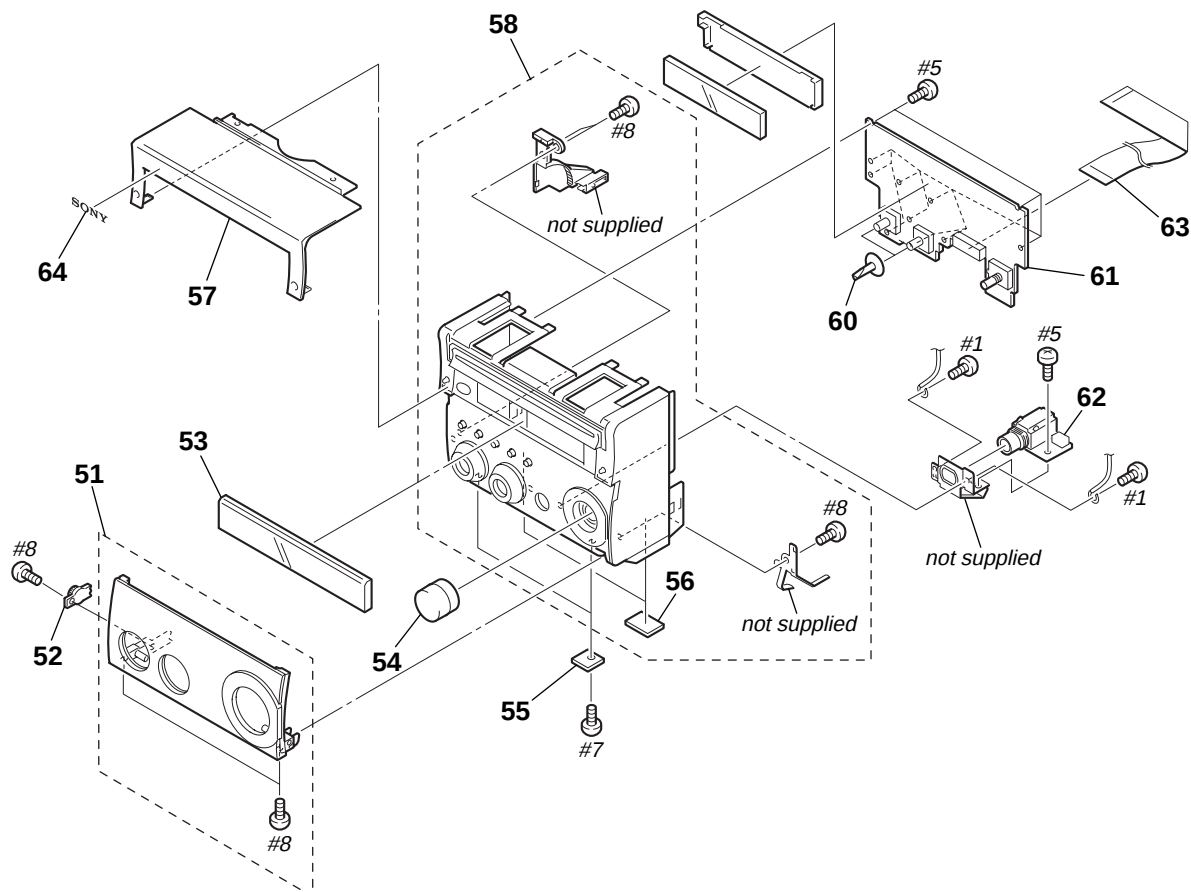
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

6-1. CASE SECTION



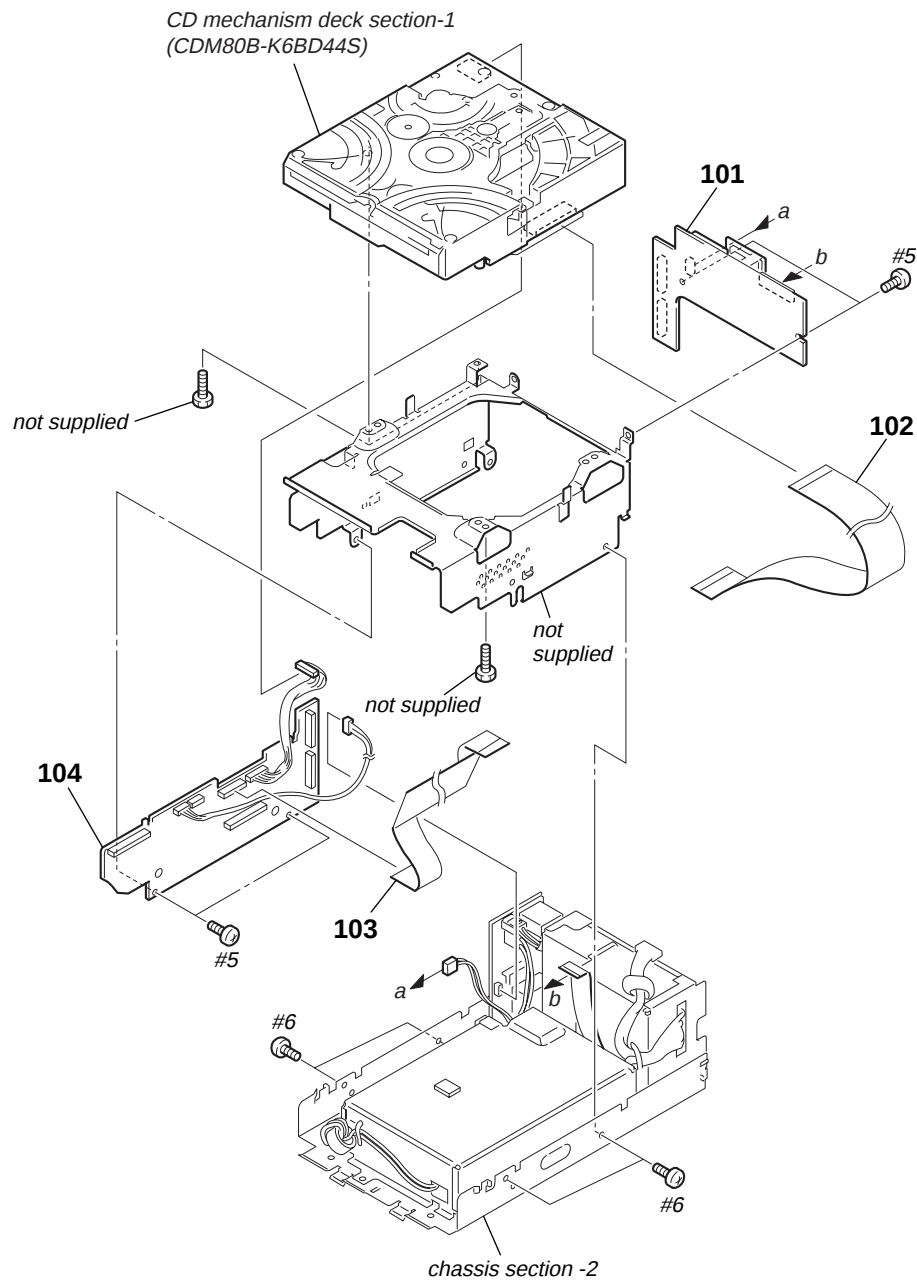
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-248-807-01	CASE		#1	7-685-645-79	SCREW +BVTP 3X6 TYPE2 IT-3	
2	4-221-580-01	SCREW, CASE		#2	7-682-546-04	SCREW +P 3X5	
3	A-4747-833-A	JACK BOARD, COMPLETE		#3	7-685-881-09	SCREW +BVTT 4X8 (S)	
4	1-763-861-12	FAN, DC		#4	7-685-533-14	SCREW +BTP 2.6X6 TYPE2 N-S	
5	A-4734-407-A	TUNER UNIT (DTP-002)		#5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

6-2. FRONT PANEL SECTION



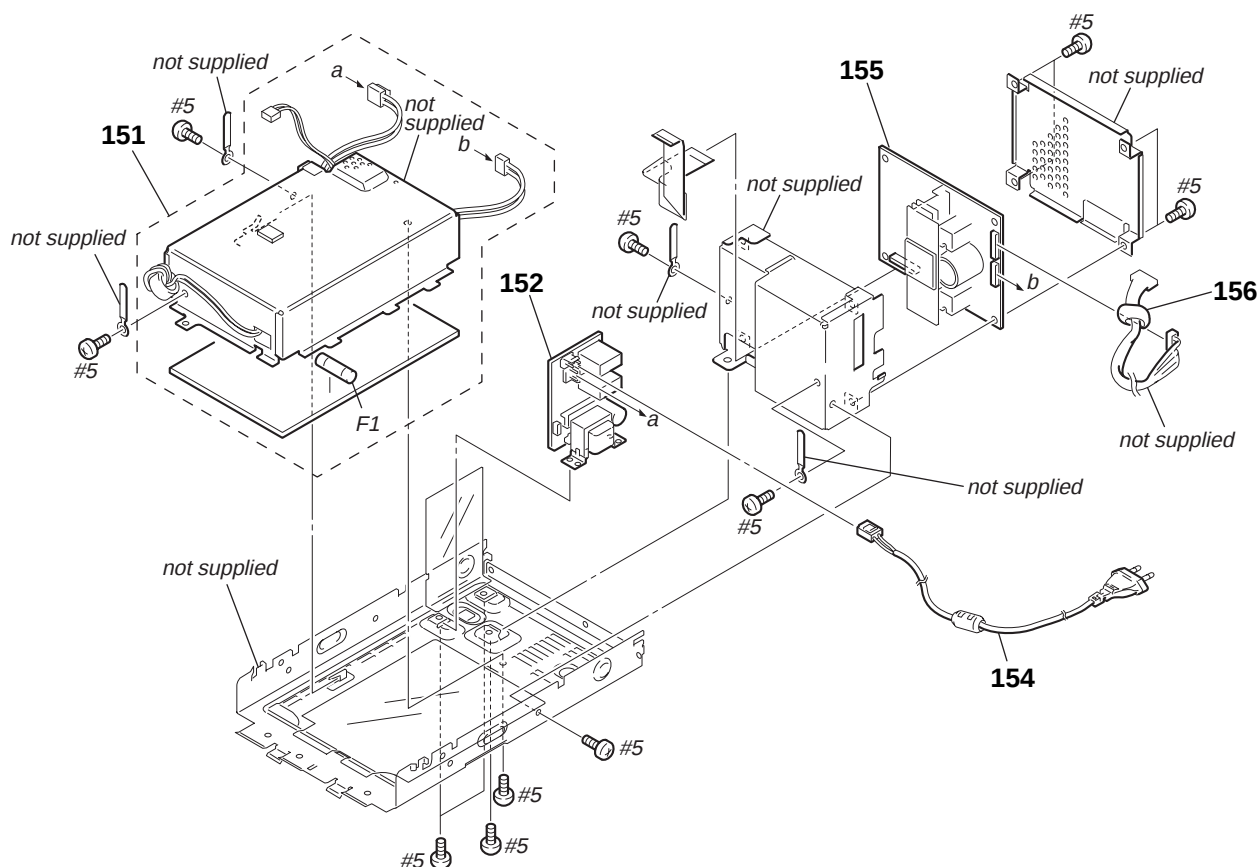
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	X-4955-837-1	LID (CD) ASSY		61	A-4747-832-A	PANEL BOARD, COMPLETE	
52	4-245-464-01	DAMPER		62	1-689-890-11	H/P BOARD	
53	4-245-354-11	WINDOW (FL)		63	1-773-119-11	WIRE (FLAT TYPE)(19 CORE)	
54	4-245-357-01	KNOB (VOL)		64	4-969-961-11	EMBLEM (NO.4), SONY	
55	4-245-372-01	BRACKET (LID)		#1	7-685-645-79	SCREW +BVTP 3X6 TYPE2 IT-3	
56	4-232-478-21	FOOT		#5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
57	X-4955-836-1	PANEL (ALMI-CD) ASSY, FRONT		#7	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT	
58	X-4955-835-1	PANEL ASSY, FRONT		#8	7-685-102-19	SCREW +P 2X4 NON-SLIT TYPE 2	
60	4-245-356-01	KNOB (LEVER)					

6-3. CHASSIS SECTION-1



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	A-4747-830-A	MAIN BOARD, COMPLETE		104	A-4747-831-A	CONTROL BOARD, COMPLETE	
102	1-775-200-11	WIRE (FLAT TYPE)(21 CORE)		#5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
103	1-769-946-11	WIRE (FLAT TYPE)(11 CORE)		#6	7-685-546-19	SCREW +BTP 3X8 TYPE2 N-S	

6-4. CHASSIS SECTION-2



Ref. No.	Part No.	Description
△ 151	1-468-789-11	REGULATOR, SWITCHING
152	1-689-891-11	SUB TRANS BOARD
△ 154	1-696-169-12	CORD, POWER
155	A-4747-837-A	AMP BOARD, COMPLETE

Remark

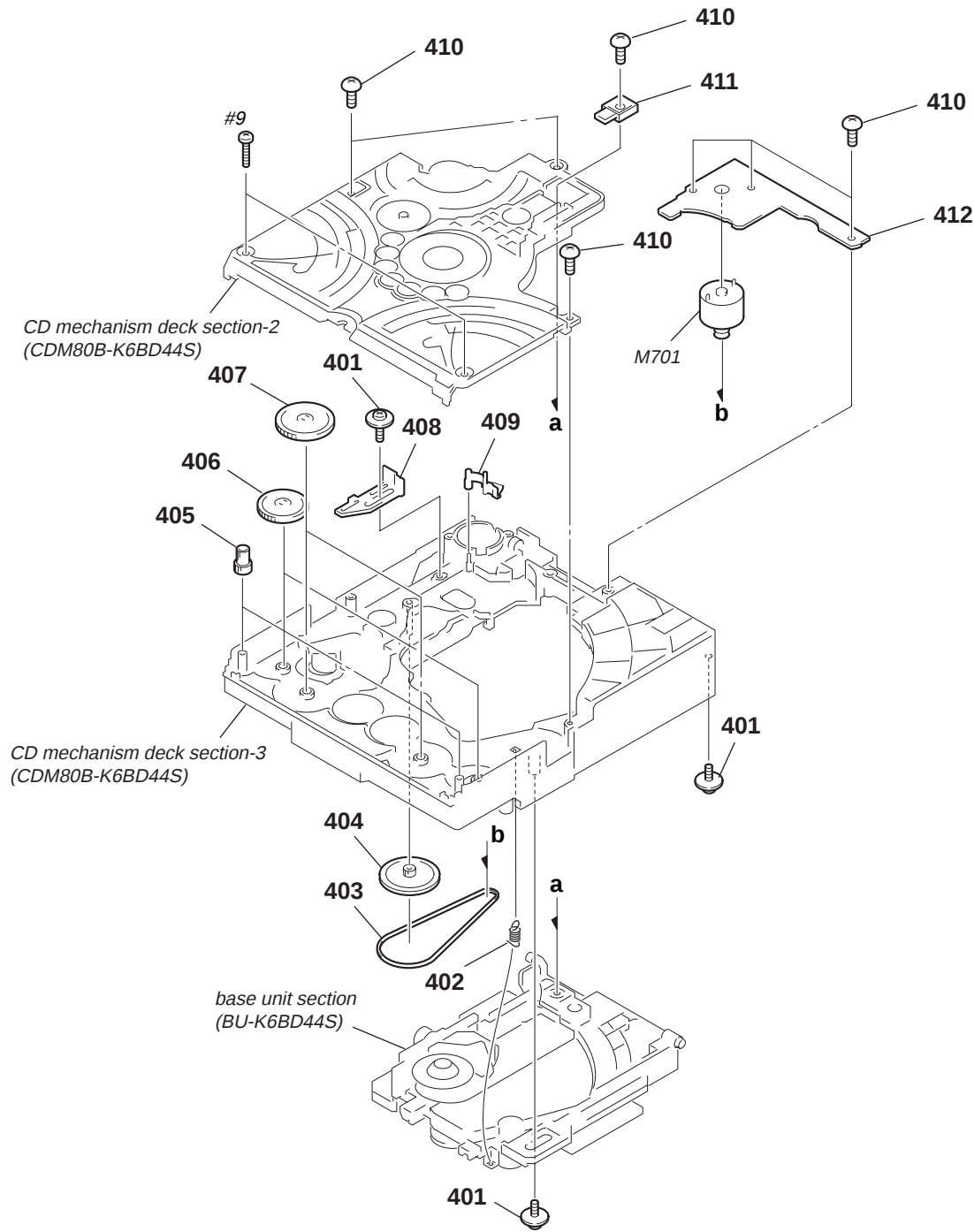
Ref. No.	Part No.	Description
156	4-217-350-01	STOPPER, CORD
#5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3
F1	1-576-232-12	FUSE (H.B.C)(T5AL/250V)

Remark

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

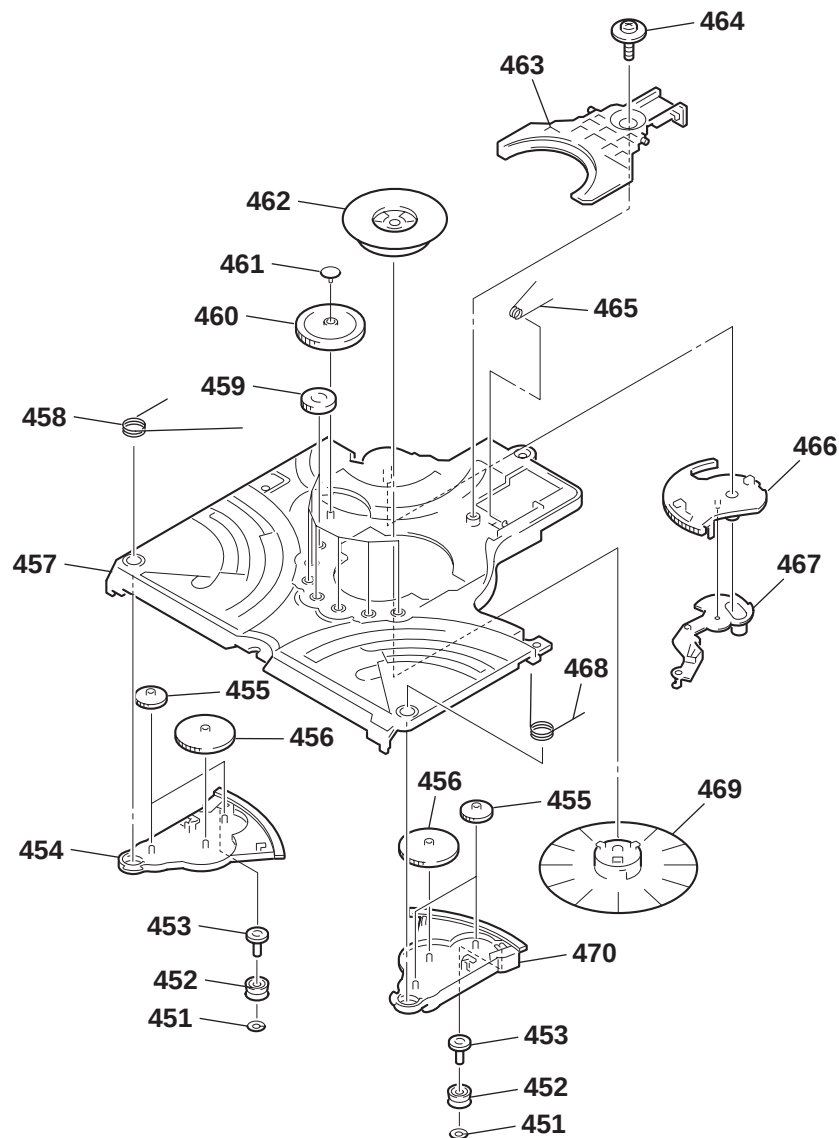
Individual parts/components are not supplied.
If repairing becomes necessary during service, replace the entire unit SWITCHING REGULATOR (1-468-789-11 REGULATOR, SWITCHING).

6-5. CD MECHANISM DECK SECTION-1 (CDM80B-K6BD44S)



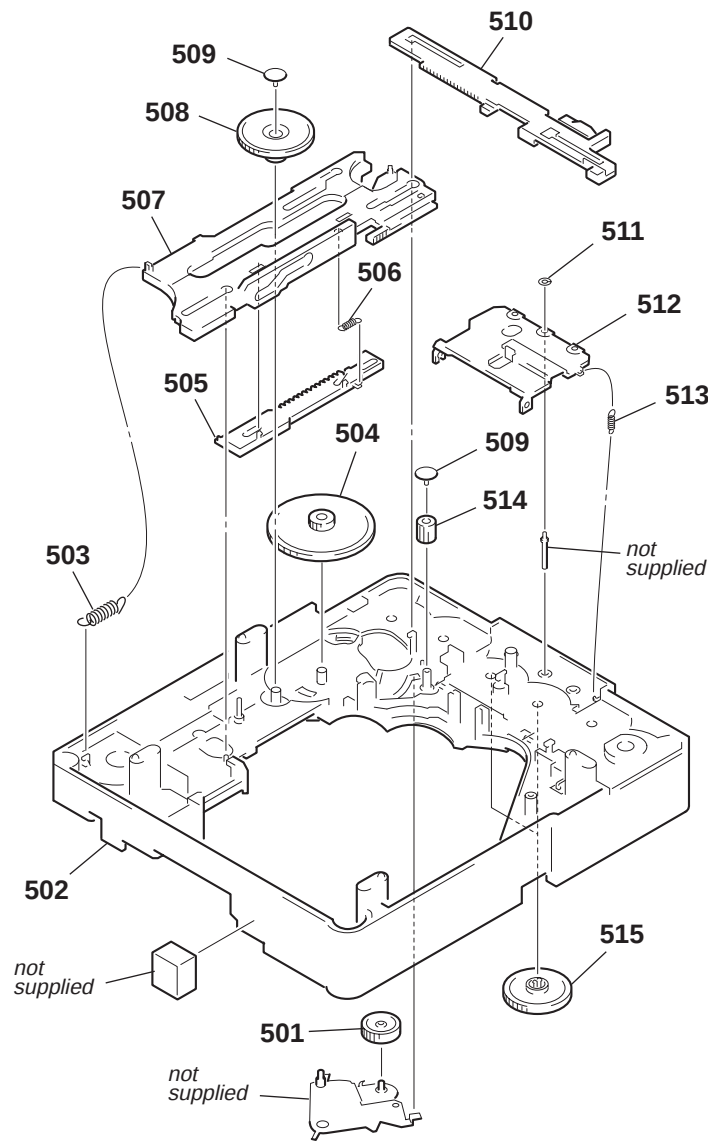
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
401	4-985-672-01	SCREW (+PTPHM2.6), FLOATING		408	4-246-203-01	LEVER (RELEASE)	
402	4-248-723-01	SPR-E, HOLDER DOWN		409	4-245-630-01	LEVER (SW)	
403	4-245-653-01	BELT (MOT)		410	4-951-620-01	SCREW (2.6X8), +BVTP	
404	4-245-662-01	PULLEY (GEAR)		411	4-245-639-01	LEVER (CL UP2)	
405	4-245-646-01	GEAR (IDL-F)		412	1-688-337-11	DRIVER BOARD	
406	4-245-644-01	GEAR (IDL-D)		M701	X-4955-496-1	MOTOR (PULLEY) ASSY (LOADING)	
407	4-245-645-01	GEAR (IDL-E)		#9	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	

6-6. CD MECHANISM DECK SECTION-2 (CDM80B-K6BD44S)



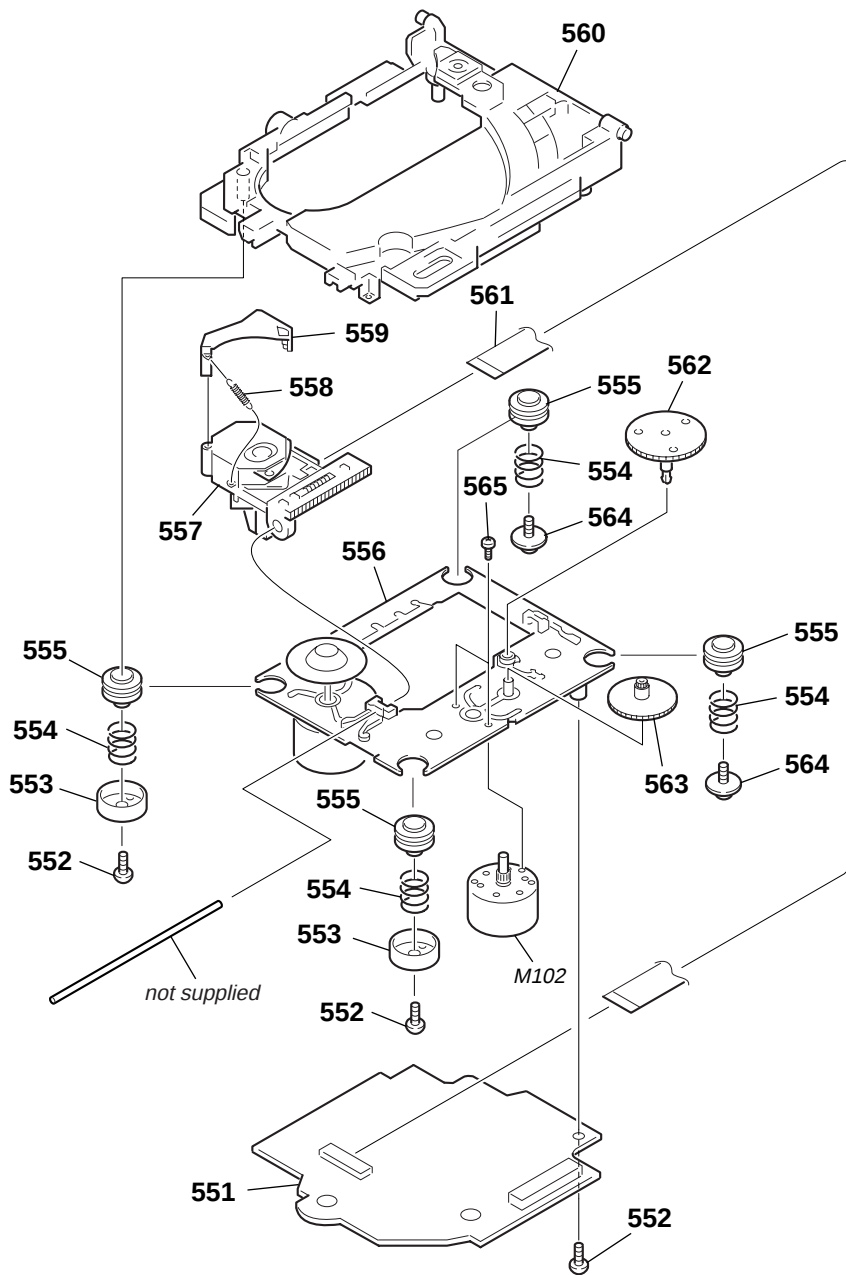
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
451	4-245-627-01	WASHER (6-2.7-0.4)		461	4-245-640-01	GEAR (CAP)	
452	4-245-637-01	ROLLER, RUBBER		462	1-452-925-21	MAGNET ASSY	
453	4-245-649-01	GEAR (IDL-L)		463	4-245-638-01	LEVER (CL UP1)	
454	4-245-657-01	LEVER (LOADING-R)		464	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
455	4-245-647-01	GEAR (IDL-G)		465	4-245-636-01	SPR-T CL DOWN	
456	4-245-648-01	GEAR (IDL-H)		466	4-245-658-01	LEVER (DISC STOP)	
457	4-245-655-01	CHASSIS (TOP)		467	4-245-659-01	LEVER (DISC SENSOR)	
458	4-245-631-01	SPR-T (LOADING-R)		468	4-245-632-01	SPR-T (LOADING-L)	
459	4-245-650-01	GEAR (IDL-J)		469	X-4955-701-1	CLAMPER 213 ASSY	
460	4-245-651-01	GEAR (IDL-L)		470	4-245-656-01	LEVER (LOADING-L)	

6-7. CD MECHANISM DECK SECTION-3 (CDM80B-K6BD44S)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
501	4-245-643-01	GEAR (IDL-C)		509	4-245-640-01	GEAR (CAP)	
502	X-4955-497-1	CHASSIS (BOTTOM) ASSY		510	4-245-628-01	LEVER (BU LOCK)	
503	4-248-722-01	SPR-E, DIR		511	4-248-206-01	WASHER (3-1-0.4)	
504	4-245-642-01	GEAR (IDL-B)		512	4-245-624-01	LEVER, CLOSE	
505	4-245-814-01	LEVER (DIR FIRST)		513	4-245-635-01	SPR-E LEVER CLOSE	
506	4-245-633-01	SPR-E DIR BACK		514	4-245-629-01	GEAR (BU LOCK)	
507	4-245-660-01	LEVER (DIR)		515	4-245-644-01	GEAR (IDL-D)	
508	4-245-641-01	GEAR (IDL-A)					

6-8. BASE UNIT SECTION (BU-K6BD44S)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
551	A-4748-550-A	BD BOARD, COMPLETE		559	2-626-697-03	SHUTTER (F), LENS	
552	4-951-620-01	SCREW (2.6X8), +BVTP		560	X-4955-700-1	HOLDER (BU213) ASSY	
553	4-231-151-01	STOPPER (BU)		561	1-792-024-11	WIRE (FLAT TYPE)(16 CORE)	
554	4-227-045-11	SPRING (INSULATOR), COIL		562	2-626-907-02	GEAR (A)	
555	4-227-549-01	INSULATOR		563	2-626-003-01	GEAR (B)(RP)	
556	X-2161-802-1	CHASSIS ASSY (DCP), TT		564	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
△557	8-820-116-02	OPTICAL PICK-UP KSM-213DCP		565	3-713-786-51	SCREW +P2X3	
558	2-626-702-02	SPRING, EXTENSION		M102	X-2625-769-1	GEAR ASSY (MB)(RP), MOTOR (SLED)	

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

SECTION 7 ELECTRICAL PARTS LIST

AMP

NOTE:

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

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

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	A-4747-837-A	AMP BOARD, COMPLETE *****		C648	1-107-826-11	CERAMIC CHIP 0.1uF	10.00% 16V
	7-685-645-79	SCREW +BVTP 3X6 TYPE2 IT-3		C649	1-104-665-11	ELECT 100uF	20.00% 10V
		< CAPACITOR >		C650	1-107-826-11	CERAMIC CHIP 0.1uF	10.00% 16V
C600	1-128-549-11	ELECT 3300uF	20.00% 35V	C651	1-137-372-11	MYLAR 0.022uF	5.00% 50V
C601	1-104-665-11	ELECT 100uF	20.00% 10V	C652	1-104-665-11	ELECT 100uF	20.00% 10V
C602	1-126-964-11	ELECT 10uF	20.00% 50V				
C603	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C653	1-164-505-11	CERAMIC CHIP 2.2uF	16V
C604	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C654	1-162-974-11	CERAMIC CHIP 0.01uF	50V
				C655	1-137-807-31	ELECT 100uF	20% 50V
C605	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C656	1-131-704-11	FILM 1uF	5% 50V
C607	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C659	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C608	1-126-964-11	ELECT 10uF	20.00% 50V				
C609	1-162-971-11	CERAMIC CHIP 0.001uF	10.00% 50V	C660	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C611	1-126-960-11	ELECT 1uF	20.00% 50V	C661	1-137-372-11	MYLAR 0.022uF	5.00% 50V
				C662	1-104-665-11	ELECT 100uF	20.00% 10V
C612	1-107-826-11	CERAMIC CHIP 0.1uF	10.00% 16V	C663	1-164-505-11	CERAMIC CHIP 2.2uF	16V
C614	1-162-915-11	CERAMIC CHIP 10PF	0.5PF 50V	C666	1-131-704-11	FILM 1uF	5% 50V
C615	1-162-915-11	CERAMIC CHIP 10PF	0.5PF 50V				
C616	1-128-551-11	ELECT 22uF	20.00% 25V	C668	1-107-826-11	CERAMIC CHIP 0.1uF	10.00% 16V
C617	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C669	1-162-974-11	CERAMIC CHIP 0.01uF	50V
				C670	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C618	1-162-908-11	CERAMIC CHIP 3PF	0.25PF 50V	C671	1-137-372-11	MYLAR 0.022uF	5.00% 50V
C619	1-162-915-11	CERAMIC CHIP 10PF	0.5PF 50V	C672	1-104-665-11	ELECT 100uF	20.00% 10V
C620	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V				
C621	1-126-960-11	ELECT 1uF	20.00% 50V	C673	1-164-505-11	CERAMIC CHIP 2.2uF	16V
C622	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C674	1-131-992-91	CERAMIC CHIP 100000PF	35V
				C675	1-137-807-31	ELECT 100uF	20% 50V
C623	1-164-230-11	CERAMIC CHIP 220PF	5.00% 50V	C676	1-131-704-11	FILM 1uF	5% 50V
C624	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C678	1-107-826-11	CERAMIC CHIP 0.1uF	10.00% 16V
C625	1-126-963-11	ELECT 4.7uF	20.00% 50V				
C628	1-126-963-11	ELECT 4.7uF	20.00% 50V	C679	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C629	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C680	1-162-974-11	CERAMIC CHIP 0.01uF	50V
				C681	1-137-372-11	MYLAR 0.022uF	5.00% 50V
C630	1-107-826-11	CERAMIC CHIP 0.1uF	10.00% 16V	C682	1-104-665-11	ELECT 100uF	20.00% 10V
C631	1-126-963-11	ELECT 4.7uF	20.00% 50V	C683	1-164-505-11	CERAMIC CHIP 2.2uF	16V
C632	1-104-665-11	ELECT 100uF	20.00% 10V				
C633	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C685	1-104-665-11	ELECT 100uF	20.00% 10V
C634	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C686	1-131-704-11	FILM 1uF	5% 50V
				C689	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C635	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C690	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C636	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C692	1-164-505-11	CERAMIC CHIP 2.2uF	16V
C637	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V				
C638	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C693	1-164-505-11	CERAMIC CHIP 2.2uF	16V
C639	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C694	1-164-346-11	CERAMIC CHIP 1uF	16V
				C696	1-104-660-91	ELECT 47uF	20.00% 16V
C640	1-104-665-11	ELECT 100uF	20.00% 10V	C697	1-131-992-91	CERAMIC CHIP 100000PF	35V
C641	1-164-230-11	CERAMIC CHIP 220PF	5.00% 50V	C698	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C642	1-164-230-11	CERAMIC CHIP 220PF	5.00% 50V				
C643	1-164-230-11	CERAMIC CHIP 220PF	5.00% 50V	C699	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C644	1-164-230-11	CERAMIC CHIP 1000P	5.00% 50V				
						< CONNECTOR >	
				* CN600	1-564-520-11	PLUG, CONNECTOR 5P	
				CN601	1-778-692-11	CONNECTOR, FFC/FPC 21P	

AMP

BD

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< DIODE >				Q693	8-729-602-36	TRANSISTOR	2SA1602TP-1EF
D611	8-719-988-61	DIODE 1SS355TE-17		Q694	8-729-602-36	TRANSISTOR	2SA1602TP-1EF
D621	8-719-988-61	DIODE 1SS355TE-17		Q696	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6
D650	6-500-131-01	DIODE LI116		< RESISTOR >			
D651	6-500-248-01	DIODE SFPL-62V		R601	1-216-809-11	METAL CHIP	100 5% 1/16W
D652	6-500-260-01	DIODE P6SMB39AT3		R602	1-216-809-11	METAL CHIP	100 5% 1/16W
D660	6-500-131-01	DIODE LI116		R603	1-216-809-11	METAL CHIP	100 5% 1/16W
D661	6-500-248-01	DIODE SFPL-62V		R604	1-216-809-11	METAL CHIP	100 5% 1/16W
D662	6-500-260-01	DIODE P6SMB39AT3		R605	1-216-821-11	METAL CHIP	1K 5% 1/16W
D670	6-500-131-01	DIODE LI116		R606	1-216-809-11	METAL CHIP	100 5% 1/16W
D671	6-500-248-01	DIODE SFPL-62V		R607	1-216-833-11	METAL CHIP	10K 5% 1/16W
D672	6-500-260-01	DIODE P6SMB39AT3		R608	1-216-864-11	METAL CHIP	0 5% 1/16W
D680	6-500-131-01	DIODE LI116		R609	1-216-809-11	METAL CHIP	100 5% 1/16W
D681	6-500-248-01	DIODE SFPL-62V		R610	1-216-809-11	METAL CHIP	100 5% 1/16W
D682	6-500-260-01	DIODE P6SMB39AT3		R611	1-216-821-11	METAL CHIP	1K 5% 1/16W
< GROUND TERMINAL BOARD >				R612	1-216-809-11	METAL CHIP	100 5% 1/16W
EP601	1-537-770-21	TERMINAL BOARD, GROUND		R613	1-216-809-11	METAL CHIP	100 5% 1/16W
EP602	1-537-770-21	TERMINAL BOARD, GROUND		R614	1-216-857-11	METAL CHIP	1M 5% 1/16W
< FERRITE BEAD >				R615	1-216-817-11	METAL CHIP	470 5% 1/16W
FB601	1-216-864-11	METAL CHIP	0 5% 1/16W	R616	1-216-821-11	METAL CHIP	1K 5% 1/16W
FB604	1-216-864-11	METAL CHIP	0 5% 1/16W	R619	1-216-857-11	METAL CHIP	1M 5% 1/16W
FB605	1-469-324-21	FERRITE	0uH	R620	1-216-819-11	METAL CHIP	680 5% 1/16W
FB606	1-216-864-11	METAL CHIP	0 5% 1/16W	R623	1-216-845-11	METAL CHIP	100K 5% 1/16W
FB607	1-216-864-11	METAL CHIP	0 5% 1/16W	R640	1-216-809-11	METAL CHIP	100 5% 1/16W
FB610	1-469-324-21	FERRITE	0uH	R641	1-216-809-11	METAL CHIP	100 5% 1/16W
FB620	1-469-324-21	FERRITE	0uH	R642	1-216-809-11	METAL CHIP	100 5% 1/16W
FB640	1-216-864-11	METAL CHIP	0 5% 1/16W	R652	1-216-809-11	METAL CHIP	0 5% 1/16W
FB641	1-216-864-11	METAL CHIP	0 5% 1/16W	R653	1-216-809-11	METAL CHIP	0 5% 1/16W
FB642	1-216-864-11	METAL CHIP	0 5% 1/16W	R662	1-216-809-11	METAL CHIP	100 5% 1/16W
FB650	1-469-324-21	FERRITE	0uH	R663	1-216-809-11	METAL CHIP	100 5% 1/16W
FB660	1-216-296-11	SHORT CHIP	0	R680	1-216-833-11	METAL CHIP	10K 5% 1/16W
FB670	1-216-296-11	SHORT CHIP	0	R691	1-216-845-11	METAL CHIP	330K 5% 1/16W
FB680	1-469-324-21	FERRITE	0uH	R692	1-216-845-11	METAL CHIP	100K 5% 1/16W
< IC >				R693	1-216-845-11	METAL CHIP	330K 5% 1/16W
IC600	6-703-287-01	IC CXD9743N		R694	1-216-845-11	METAL CHIP	330K 5% 1/16W
IC603	6-701-834-01	IC PCM1802DBR		R695	1-216-845-11	METAL CHIP	100K 5% 1/16W
IC604	8-759-387-77	IC TC7WU04F-TE12L		R696	1-216-845-11	METAL CHIP	330K 5% 1/16W
IC610	6-701-189-01	IC MC74VHC1GU04DFT1		R697	1-216-845-11	METAL CHIP	100K 5% 1/16W
IC618	6-700-263-01	IC NJM2870F18 (TE2)		< VIBRATOR >			
IC650	6-703-288-01	IC CXD9750L		X601	1-781-465-21	VIBRATOR, CRYSTAL (12.288MHz)	
IC680	6-703-288-01	IC CXD9750L		X602	1-795-286-21	VIBRATOR, CRYSTAL (49.152MHz)	
< COIL >				*****			
L601	1-469-525-91	INDUCTOR	10uH	A-4748-550-A BD BOARD, COMPLETE			
L602	1-469-525-91	INDUCTOR	10uH	*****			
L603	1-469-525-91	INDUCTOR	10uH	< CAPACITOR >			
L604	1-412-939-11	INDUCTOR	1uH	C101	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V
L621	1-469-525-91	INDUCTOR	10uH	C102	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V
L650	1-456-035-11	INDUCTOR	10uH	C103	1-162-962-11	CERAMIC CHIP	470PF 10% 50V
L670	1-456-035-11	INDUCTOR	10uH	C104	1-162-962-11	CERAMIC CHIP	470PF 10% 50V
< TRANSISTOR >				C108	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V
Q691	8-729-602-36	TRANSISTOR	2SA1602TP-1EF	C109	1-162-965-11	CERAMIC CHIP	0.0015uF 10% 50V
Q692	8-729-602-36	TRANSISTOR	2SA1602TP-1EF	C110	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V
				C111	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
				C112	1-115-156-11	CERAMIC CHIP	1uF 10V
				C114	1-164-360-11	CERAMIC CHIP	0.1uF 16V



Ref. No.	Part No.	Description	Remark		
C116	1-126-382-11	ELECT	100uF	20.00%	16V
C117	1-126-382-11	ELECT	100uF	20.00%	16V
C118	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C121	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C122	1-104-665-11	ELECT	100uF	20.00%	16V
C123	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C124	1-125-891-11	CERAMIC CHIP	0.47uF	10.00%	10V
C125	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C126	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C127	1-126-382-11	ELECT	100uF	20.00%	16V
C130	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C131	1-104-665-11	ELECT	100uF	20.00%	16V
C133	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C140	1-115-156-11	CERAMIC CHIP	1uF		10V
C143	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C145	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C146	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C150	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C153	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C159	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C162	1-126-382-11	ELECT	100uF	20.00%	16V
C163	1-104-665-11	ELECT	100uF	20.00%	16V
C165	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C167	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C168	1-162-975-11	CERAMIC CHIP	24PF	5.00%	50V
C171	1-115-412-11	CERAMIC CHIP	680PF	5.00%	25V
C172	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C181	1-115-412-11	CERAMIC CHIP	680PF	5.00%	25V
C182	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C183	1-110-563-11	CERAMIC CHIP	0.068uF	10.00%	16V
C184	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C185	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C191	1-104-665-11	ELECT	100uF	20.00%	16V
C192	1-126-382-11	ELECT	100uF	20.00%	16V
C193	1-126-382-11	ELECT	100uF	20.00%	16V
C194	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C196	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C197	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C198	1-104-665-11	ELECT	100uF	20.00%	16V
< CONNECTOR >					
CN101	1-569-914-11	SOCKET, CONNECTOR 21P			
CN102	1-793-907-11	CONNECTOR, FFC/FPC 16P			
< FERRITE BEAD >					
FB101	1-216-864-11	METAL CHIP	0	5%	1/16W
FB103	1-216-864-11	METAL CHIP	0	5%	1/16W
< IC >					
IC101	8-752-402-31	IC CXD3017Q			
IC102	8-759-677-90	IC BA5947FP-E2			
IC103	8-752-106-21	IC CXA2647N-T4			
< TRANSISTOR >					
Q101	8-729-046-90	TRANSISTOR	2SB970- (TX) .S0		

Ref. No.	Part No.	Description	Remark		
< RESISTOR >					
R101	1-216-821-11	METAL CHIP	1K	5%	1/16W
R102	1-216-845-11	METAL CHIP	100K	5%	1/16W
R103	1-216-835-11	METAL CHIP	15K	5%	1/16W
R104	1-216-839-11	METAL CHIP	33K	5%	1/16W
R106	1-216-821-11	METAL CHIP	1K	5%	1/16W
R107	1-216-833-11	METAL CHIP	10K	5%	1/16W
R108	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R109	1-216-857-11	METAL CHIP	1M	5%	1/16W
R111	1-216-846-11	METAL CHIP	120K	5%	1/16W
R114	1-216-852-11	METAL CHIP	390K	5%	1/16W
R116	1-216-797-11	METAL CHIP	10	5%	1/16W
R117	1-216-821-11	METAL CHIP	1K	5%	1/16W
R118	1-216-809-11	METAL CHIP	100	5%	1/16W
R119	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R120	1-216-835-11	METAL CHIP	15K	5%	1/16W
R122	1-216-845-11	METAL CHIP	100K	5%	1/16W
R123	1-216-833-11	METAL CHIP	10K	5%	1/16W
R124	1-216-845-11	METAL CHIP	100K	5%	1/16W
R131	1-216-813-11	METAL CHIP	220	5%	1/16W
R143	1-216-836-11	METAL CHIP	18K	5%	1/16W
R144	1-216-836-11	METAL CHIP	18K	5%	1/16W
R147	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R148	1-216-791-11	METAL CHIP	3.3	5%	1/16W
R150	1-216-833-11	METAL CHIP	10K	5%	1/16W
R151	1-216-846-11	METAL CHIP	120K	5%	1/16W
R158	1-216-837-11	METAL CHIP	22K	5%	1/16W
R159	1-216-837-11	METAL CHIP	22K	5%	1/16W
R162	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R171	1-216-837-11	METAL CHIP	22K	5%	1/16W
R172	1-216-837-11	METAL CHIP	22K	5%	1/16W
R173	1-216-837-11	METAL CHIP	22K	5%	1/16W
R181	1-216-837-11	METAL CHIP	22K	5%	1/16W
R182	1-216-837-11	METAL CHIP	22K	5%	1/16W
R183	1-216-837-11	METAL CHIP	22K	5%	1/16W
R191	1-216-839-11	METAL CHIP	33K	5%	1/16W
R192	1-216-839-11	METAL CHIP	33K	5%	1/16W
R193	1-216-847-11	METAL CHIP	150K	5%	1/16W
R194	1-216-843-11	METAL CHIP	68K	5%	1/16W
R195	1-216-851-11	METAL CHIP	330K	5%	1/16W
R196	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R197	1-216-821-11	METAL CHIP	1K	5%	1/16W
< NETWORK RESISTOR >					
RN101	1-233-576-11	RES, CHIP NETWORK 100			
< SWITCH >					
S101	1-771-853-11	SWITCH, DETECTION (LIMIT IN)			
< VIBRATOR >					
X101	1-579-280-11	VIBRATOR, CRYSTAL (16.9344MHz)			

CONTROL

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	A-4747-831-A	CONTROL BOARD, COMPLETE *****		D511	8-719-988-61	DIODE 1SS355TE-17	
		< CAPACITOR >		D512	8-719-053-18	DIODE 1SR154-400TE-25	
C401	1-126-916-11	ELECT	1000uF 20.00% 6.3V	D514	8-719-978-04	DIODE UDZ-TE-17-3.3B	
C402	1-164-156-11	CERAMIC CHIP	0.1uF 25V	D515	8-719-404-50	DIODE MA111-TX	
C404	1-164-156-11	CERAMIC CHIP	0.1uF 25V	D516	8-719-404-50	DIODE MA111-TX	
C405	1-164-156-11	CERAMIC CHIP	0.1uF 25V				
C406	1-162-917-11	CERAMIC CHIP	15PF 5% 50V	D517	8-719-404-50	DIODE MA111-TX	
				D518	8-719-404-50	DIODE MA111-TX	
C407	1-162-919-11	CERAMIC CHIP	22PF 5% 50V	D519	8-719-069-56	DIODE UDZSTE-176.2B	
C501	1-126-964-11	ELECT	10uF 20.00% 50V			< FERRITE BEAD >	
C502	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V	FB503	1-469-324-21	FERRITE	0uH
C503	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V	FB504	1-469-324-21	FERRITE	0uH
C512	1-126-935-11	ELECT	470uF 20.00% 10V	FB505	1-469-324-21	FERRITE	0uH
				FB506	1-469-324-21	FERRITE	0uH
C513	1-126-935-11	ELECT	470uF 20.00% 6.3V	FB507	1-216-864-11	METAL CHIP	0 5% 1/16W
C514	1-164-156-11	CERAMIC CHIP	0.1uF 25V				
C515	1-104-665-11	ELECT	100uF 20.00% 10V	FB508	1-216-864-11	METAL CHIP	0 5% 1/16W
C516	1-164-156-11	CERAMIC CHIP	0.1uF 25V			< IC >	
C517	1-104-665-11	ELECT	100uF 20.00% 10V	IC401	6-803-045-01	IC M30622MGN-B17FP	
				IC402	8-759-533-04	IC M62703ML-E1	
C518	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	IC405	8-759-557-36	IC BU1924F-E2	
C519	1-104-665-11	ELECT	100uF 20.00% 10V			< COIL >	
C534	1-126-947-11	ELECT	47uF 20.00% 16V	L500	1-410-671-31	INDUCTOR	47uH
C535	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V	L504	1-469-526-91	INDUCTOR	22uH
C537	1-162-961-11	CERAMIC CHIP	330PF 10% 50V	L505	1-469-526-91	INDUCTOR	22uH
						< TRANSISTOR >	
C538	1-162-974-11	CERAMIC CHIP	0.01uF 50V	Q501	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6
C539	1-162-924-11	CERAMIC CHIP	56PF 5.00% 50V	Q502	8-729-900-53	TRANSISTOR	DTC114EKA-T146
C540	1-164-380-11	CERAMIC CHIP	51PF 5.00% 50V	Q503	8-729-049-79	TRANSISTOR	RT1P137S-TP
C541	1-164-739-11	CERAMIC CHIP	560PF 5.00% 50V	Q510	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R
C542	1-126-963-11	ELECT	4.7uF 20.00% 50V	Q511	8-729-808-42	TRANSISTOR	2SD1624-T-TD
C543	1-126-964-11	ELECT	10uF 20.00% 50V	Q512	8-729-808-42	TRANSISTOR	2SD1624-T-TD
C544	1-162-974-11	CERAMIC CHIP	0.01uF 50V	Q513	8-729-900-53	TRANSISTOR	DTC114EKA-T146
C545	1-126-964-11	ELECT	10uF 20.00% 50V	Q515	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO
C546	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	Q516	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO
C547	1-164-156-11	CERAMIC CHIP	0.1uF 25V	Q517	8-729-027-23	TRANSISTOR	DTA114EKA-T146
C549	1-115-339-11	CERAMIC CHIP	0.1uF 10.00% 50V	Q518	8-729-900-53	TRANSISTOR	DTC114EKA-T146
C557	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V			< RESISTOR >	
C558	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V	R402	1-216-809-11	METAL CHIP	100 5% 1/16W
C575	1-125-889-91	CERAMIC CHIP	2.2uF 10% 10V	R404	1-216-809-11	METAL CHIP	100 5% 1/16W
C595	1-125-889-91	CERAMIC CHIP	2.2uF 10% 10V	R405	1-216-809-11	METAL CHIP	100 5% 1/16W
				R406	1-216-809-11	METAL CHIP	100 5% 1/16W
		< CONNECTOR >		R407	1-216-809-11	METAL CHIP	100 5% 1/16W
CN503	1-784-780-11	CONNECTOR, FFC 19P					
CN505	1-568-838-11	CONNECTOR, FFC 21P		R409	1-216-833-11	METAL CHIP	10K 5% 1/16W
CN506	1-568-830-11	CONNECTOR, FFC 11P		R411	1-216-851-11	METAL CHIP	330K 5% 1/16W
CN511	1-770-385-11	CONNECTOR, BOARD TO BOARD 18P		R413	1-216-864-11	METAL CHIP	0 5% 1/16W
CN514	1-770-384-21	CONNECTOR, BOARD TO BOARD 16P		R416	1-216-797-11	METAL CHIP	10 5% 1/16W
				R417	1-216-833-11	METAL CHIP	10K 5% 1/16W
		< DIODE >					
D474	8-719-988-61	DIODE 1SS355TE-17		R418	1-216-833-11	METAL CHIP	10K 5% 1/16W
D501	8-719-988-61	DIODE 1SS355TE-17		R419	1-216-809-11	METAL CHIP	100 5% 1/16W
D502	8-719-988-61	DIODE 1SS355TE-17		R420	1-216-841-11	METAL CHIP	47K 5% 1/16W
D503	8-719-988-61	DIODE 1SS355TE-17		R422	1-216-809-11	METAL CHIP	100 5% 1/16W
D504	8-719-988-61	DIODE 1SS355TE-17		R423	1-216-809-11	METAL CHIP	100 5% 1/16W
D505	8-719-988-61	DIODE 1SS355TE-17		R424	1-216-826-11	METAL CHIP	2.7K 5% 1/16W
D506	8-719-988-61	DIODE 1SS355TE-17					
D507	8-719-988-61	DIODE 1SS355TE-17					
D508	8-719-988-61	DIODE 1SS355TE-17					
D510	8-719-053-18	DIODE 1SR154-400TE-25					

HCD-SE1

CONTROL	DRIVER
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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R425	1-216-809-11	METAL CHIP	100 5% 1/16W	R521	1-216-815-11	METAL CHIP	330 5% 1/16W
R426	1-216-847-11	METAL CHIP	150K 5% 1/16W	R522	1-216-841-11	METAL CHIP	47K 5% 1/16W
R427	1-216-809-11	METAL CHIP	100 5% 1/16W	R523	1-216-843-11	METAL CHIP	68K 5% 1/16W
R428	1-216-843-11	METAL CHIP	68K 5% 1/16W	R524	1-216-828-11	METAL CHIP	3.9K 5% 1/16W
R429	1-216-833-11	METAL CHIP	10K 5% 1/16W	R525	1-216-839-11	METAL CHIP	33K 5% 1/16W
R430	1-216-833-11	METAL CHIP	10K 5% 1/16W	R526	1-216-809-11	METAL CHIP	100 5% 1/16W
R432	1-216-809-11	METAL CHIP	100 5% 1/16W	R530	1-216-833-11	METAL CHIP	10K 5% 1/16W
R433	1-216-809-11	METAL CHIP	100 5% 1/16W	R531	1-216-833-11	METAL CHIP	10K 5% 1/16W
R435	1-216-809-11	METAL CHIP	100 5% 1/16W	R532	1-216-833-11	METAL CHIP	10K 5% 1/16W
R436	1-216-809-11	METAL CHIP	100 5% 1/16W	R533	1-216-833-11	METAL CHIP	10K 5% 1/16W
R437	1-216-809-11	METAL CHIP	100 5% 1/16W	R534	1-216-833-11	METAL CHIP	10K 5% 1/16W
R438	1-216-809-11	METAL CHIP	100 5% 1/16W	R535	1-216-833-11	METAL CHIP	10K 5% 1/16W
R439	1-216-809-11	METAL CHIP	100 5% 1/16W	R536	1-216-833-11	METAL CHIP	10K 5% 1/16W
R444	1-216-809-11	METAL CHIP	100 5% 1/16W	R537	1-216-833-11	METAL CHIP	10K 5% 1/16W
R445	1-216-809-11	METAL CHIP	100 5% 1/16W	R538	1-216-857-11	METAL CHIP	1M 5% 1/16W
R446	1-216-809-11	METAL CHIP	100 5% 1/16W	R539	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R447	1-216-809-11	METAL CHIP	100 5% 1/16W	R540	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R448	1-216-809-11	METAL CHIP	100 5% 1/16W	R541	1-216-833-11	METAL CHIP	10K 5% 1/16W
R449	1-216-809-11	METAL CHIP	100 5% 1/16W	R542	1-216-833-11	METAL CHIP	10K 5% 1/16W
R450	1-216-809-11	METAL CHIP	100 5% 1/16W	R543	1-216-833-11	METAL CHIP	10K 5% 1/16W
R452	1-216-809-11	METAL CHIP	100 5% 1/16W	R554	1-216-809-11	METAL CHIP	100 5% 1/16W
R453	1-216-809-11	METAL CHIP	100 5% 1/16W	R555	1-216-835-11	METAL CHIP	15K 5% 1/16W
R454	1-216-809-11	METAL CHIP	100 5% 1/16W	R572	1-216-817-11	METAL CHIP	470 5% 1/16W
R455	1-216-809-11	METAL CHIP	100 5% 1/16W	R573	1-216-821-11	METAL CHIP	1K 5% 1/16W
R456	1-216-809-11	METAL CHIP	100 5% 1/16W	R574	1-216-845-11	METAL CHIP	100K 5% 1/16W
R457	1-216-809-11	METAL CHIP	100 5% 1/16W	R592	1-216-817-11	METAL CHIP	470 5% 1/16W
R460	1-216-809-11	METAL CHIP	100 5% 1/16W	R593	1-216-821-11	METAL CHIP	1K 5% 1/16W
R461	1-216-809-11	METAL CHIP	100 5% 1/16W	R594	1-216-845-11	METAL CHIP	100K 5% 1/16W
R465	1-216-809-11	METAL CHIP	100 5% 1/16W	< TRANSFORMER >			
R467	1-216-809-11	METAL CHIP	100 5% 1/16W	T500	1-437-416-11	TRANSFORMER, DC-DC CONVERTER	
R468	1-216-809-11	METAL CHIP	100 5% 1/16W	< VIBRATOR >			
R469	1-216-809-11	METAL CHIP	100 5% 1/16W	X401	1-781-107-21	VIBRATOR, SERAMIC (16MHz)	
R470	1-216-809-11	METAL CHIP	100 5% 1/16W	X402	1-567-098-41	VIBRATOR, CRYSTAL (32.768KHz)	
R471	1-216-809-11	METAL CHIP	100 5% 1/16W	X501	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz)	
R473	1-216-809-11	METAL CHIP	100 5% 1/16W	*****			
R474	1-216-809-11	METAL CHIP	100 5% 1/16W	1-688-337-11	DRIVER BOARD		
R481	1-216-809-11	METAL CHIP	100 5% 1/16W	*****			
R485	1-216-809-11	METAL CHIP	100 5% 1/16W	< CAPACITOR >			
R486	1-216-809-11	METAL CHIP	100 5% 1/16W	C705	1-162-306-11	CERAMIC	0.01uF 30.00% 16V
R487	1-216-809-11	METAL CHIP	100 5% 1/16W	C711	1-126-964-11	ELECT	10uF 20.00% 50V
R488	1-216-809-11	METAL CHIP	100 5% 1/16W	< CONNECTOR >			
R494	1-216-797-11	METAL CHIP	10 5% 1/16W	CN701	1-785-333-11	PIN, CONNECTOR (LIGHT ANGLE) 7P	
R495	1-216-797-11	METAL CHIP	10 5% 1/16W	< DIODE >			
R497	1-216-797-11	METAL CHIP	10 5% 1/16W	D701	8-719-921-40	DIODE MTZJ-T-77-4.7C	
R500	1-216-809-11	METAL CHIP	100 5% 1/16W	< IC >			
R501	1-216-813-11	METAL CHIP	220 5% 1/16W	IC701	8-759-598-69	IC BA6956AN	
R502	1-216-833-11	METAL CHIP	10K 5% 1/16W	< RESISTOR >			
R503	1-216-841-11	METAL CHIP	47K 5% 1/16W	R701	1-249-415-11	CARBON	680 5% 1/4W F
R504	1-216-841-11	METAL CHIP	47K 5% 1/16W				
R505	1-216-829-11	METAL CHIP	4.7K 5% 1/16W				
R506	1-216-833-11	METAL CHIP	10K 5% 1/16W				
R514	1-216-829-11	METAL CHIP	4.7K 5% 1/16W				
R515	1-216-833-11	METAL CHIP	10K 5% 1/16W				
R516	1-216-833-11	METAL CHIP	10K 5% 1/16W				
R517	1-216-829-11	METAL CHIP	4.7K 5% 1/16W				
R518	1-216-853-11	METAL CHIP	470K 5% 1/16W				
R519	1-216-845-11	METAL CHIP	100K 5% 1/16W				
R520	1-216-821-11	METAL CHIP	1K 5% 1/16W				

DRIVER

H/P

JACK

Ref. No.	Part No.	Description	Remark		
R702	1-247-807-31	CARBON	100	5%	1/4W
< SWITCH >					
S701	1-762-951-13	SWITCH, PUSH (DISC IN/OUT)			
S702	1-762-951-13	SWITCH, PUSH (CHUCKING)			
S703	1-762-951-13	SWITCH, PUSH (TRIGGER)			

	1-689-890-11	H/P BOARD			

< CAPACITOR >					
C872	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C873	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
< CONNECTOR >					
CN201	1-785-330-11	PIN, CONNECTOR (LIGHT ANGLE) 4P			
< JACK >					
J200	1-770-225-11	JACK (LARGE TYPE)(PHONES)			
< COIL >					
L201	1-410-393-11	INDUCTOR CHIP	100uH		
L202	1-410-393-11	INDUCTOR CHIP	100uH		

	A-4747-833-A	JACK BOARD, COMPLETE			

< CAPACITOR >					
C520	1-126-960-11	ELECT	1uF	20.00%	50V
C521	1-126-933-11	ELECT	100uF	20.00%	16V
C522	1-126-934-11	ELECT	220uF	20.00%	16V
C524	1-126-933-11	ELECT	100uF	20.00%	16V
C525	1-126-960-11	ELECT	1uF	20.00%	50V
C526	1-126-933-11	ELECT	100uF	20.00%	16V
C569	1-126-960-11	ELECT	1uF	20.00%	50V
C571	1-126-964-11	ELECT	10uF	20.00%	50V
C572	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C573	1-126-934-11	ELECT	220uF	20.00%	10V
C589	1-126-960-11	ELECT	1uF	20.00%	50V
C591	1-126-964-11	ELECT	10uF	20.00%	50V
C592	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C593	1-126-934-11	ELECT	220uF	20.00%	10V
C910	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C920	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C931	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C932	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C933	1-126-193-11	ELECT	1uF	20%	50V
C934	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C950	1-104-665-11	ELECT	100uF	20.00%	10V
C951	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C970	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C980	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
< CONNECTOR >					
CN901	1-770-411-11	CONNECTOR, BOARD TO BOARD 20P			

Ref. No.	Part No.	Description	Remark		
* CN931	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CN993	1-564-521-11	PLUG, CONNECTOR 6P			
< DIODE >					
D524	8-719-988-61	DIODE 1SS355TE-17			
D526	8-719-988-61	DIODE 1SS355TE-17			
D931	8-719-404-50	DIODE MA111-TX			
D932	8-719-404-50	DIODE MA111-TX			
D933	8-719-404-50	DIODE MA111-TX			
< FERRITE BEAD >					
FB960	1-216-864-11	METAL CHIP	0	5%	1/16W
FB962	1-414-229-11	METAL CHIP	0		
FB963	1-414-229-11	METAL CHIP	0		
FB964	1-414-229-11	METAL CHIP	0		
FB970	1-216-864-11	METAL CHIP	0	5%	1/16W
FB980	1-216-864-11	METAL CHIP	0	5%	1/16W
< IC >					
IC404	8-759-385-17	IC NJM4580E (TE2)			
IC992	6-600-012-01	IC TOTX141L			
< JACK >					
J900	1-537-114-11	TERMINAL BOARD (SPEAKER)			
J901	1-573-798-11	JACK, MINIATURE (DIA. 3.5)(MD (TAPE) IN)			
J902	1-573-798-11	JACK, MINIATURE (DIA. 3.5)(MD (TAPE) OUT)			
< TRANSISTOR >					
Q504	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO		
Q507	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q508	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q509	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO		
Q530	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q531	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q561	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO		
Q581	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO		
Q931	8-729-801-84	TRANSISTOR	2SB1013-TP-34		
Q932	8-729-901-00	TRANSISTOR	DTC124EKA-T146		
Q933	8-729-801-84	TRANSISTOR	2SB1013-TP-34		
Q934	8-729-901-00	TRANSISTOR	DTC124EKA-T146		
< RESISTOR >					
R512	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R513	1-216-833-11	METAL CHIP	10K	5%	1/16W
R550	1-216-855-11	METAL CHIP	680K	5%	1/16W
R551	1-216-855-11	METAL CHIP	680K	5%	1/16W
R552	1-216-833-11	METAL CHIP	10K	5%	1/16W
R553	1-216-833-11	METAL CHIP	10K	5%	1/16W
R556	1-216-837-11	METAL CHIP	22K	5%	1/16W
R566	1-216-821-11	METAL CHIP	1K	5%	1/16W
R567	1-216-845-11	METAL CHIP	100K	5%	1/16W
R568	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R569	1-216-837-11	METAL CHIP	22K	5%	1/16W
R570	1-216-805-11	METAL CHIP	47	5%	1/16W
R571	1-216-845-11	METAL CHIP	100K	5%	1/16W
R577	1-216-833-11	METAL CHIP	10K	5%	1/16W
R586	1-216-821-11	METAL CHIP	1K	5%	1/16W

HCD-SE1

JACK

MAIN

Ref. No.	Part No.	Description	Remark		
R587	1-216-845-11	METAL CHIP	100K	5%	1/16W
R588	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R589	1-216-837-11	METAL CHIP	22K	5%	1/16W
R590	1-216-805-11	METAL CHIP	47	5%	1/16W
R591	1-216-845-11	METAL CHIP	100K	5%	1/16W
R597	1-216-833-11	METAL CHIP	10K	5%	1/16W
R910	1-216-841-11	METAL CHIP	47K	5%	1/16W
R920	1-216-841-11	METAL CHIP	47K	5%	1/16W
R931	1-216-031-00	METAL CHIP	180	5%	1/10W
R932	1-216-031-00	METAL CHIP	180	5%	1/10W
R933	1-216-031-00	METAL CHIP	180	5%	1/10W
R934	1-216-841-11	METAL CHIP	47K	5%	1/16W
R935	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R936	1-216-845-11	METAL CHIP	100K	5%	1/16W
R937	1-216-841-11	METAL CHIP	47K	5%	1/16W
R938	1-216-841-11	METAL CHIP	47K	5%	1/16W
R941	1-216-841-11	METAL CHIP	47K	5%	1/16W
R942	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R950	1-216-809-11	METAL CHIP	100	5%	1/16W
R970	1-216-845-11	METAL CHIP	100K	5%	1/16W
R980	1-216-845-11	METAL CHIP	100K	5%	1/16W

A-4747-830-A MAIN BOARD, COMPLETE					

< CAPACITOR >					
C200	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C201	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C202	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C203	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C500	1-126-937-11	ELECT	4700uF	20.00%	16V
C504	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C505	1-126-935-11	ELECT	470uF	20.00%	10V
C506	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C507	1-104-665-11	ELECT	100uF	20.00%	10V
C508	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C509	1-126-935-11	ELECT	470uF	20.00%	10V
C510	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C511	1-126-935-11	ELECT	470uF	20.00%	16V
C528	1-126-933-11	ELECT	100uF	20.00%	16V
C529	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C530	1-104-665-11	ELECT	100uF	20.00%	10V
C531	1-164-230-11	CERAMIC CHIP	220PF	5.00%	50V
C532	1-164-230-11	CERAMIC CHIP	220PF	5.00%	50V
C533	1-164-230-11	CERAMIC CHIP	220PF	5.00%	50V
C556	1-126-933-11	ELECT	100uF	20.00%	16V
C560	1-125-889-91	CERAMIC CHIP	2.2uF	10%	10V
C561	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C562	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C563	1-162-979-11	CERAMIC CHIP	0.0027uF	10.00%	50V
C564	1-126-960-11	ELECT	1uF	20.00%	50V
C565	1-126-960-11	ELECT	1uF	20.00%	50V
C566	1-126-960-11	ELECT	1uF	20.00%	50V
C567	1-126-960-11	ELECT	1uF	20.00%	50V
C568	1-125-889-91	CERAMIC CHIP	2.2uF	10%	10V
C580	1-125-889-91	CERAMIC CHIP	2.2uF	10%	10V
C581	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V

Ref. No.	Part No.	Description	Remark		
C582	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C583	1-162-979-11	CERAMIC CHIP	0.0027uF	10.00%	50V
C584	1-126-960-11	ELECT	1uF	20.00%	50V
C585	1-126-960-11	ELECT	1uF	20.00%	50V
C586	1-126-960-11	ELECT	1uF	20.00%	50V
C587	1-126-960-11	ELECT	1uF	20.00%	50V
C588	1-125-889-91	CERAMIC CHIP	2.2uF	10%	10V
< CONNECTOR >					
CN502	1-564-505-11	PLUG, CONNECTOR 2P			
CN509	1-779-289-11	CONNECTOR, FFC (LIF (NON-ZIF)) 21P			
CN510	1-770-386-11	CONNECTOR, BOARD TO BOARD 20P			
CN512	1-770-410-11	CONNECTOR, BOARD TO BOARD 18P			
CN513	1-770-409-11	CONNECTOR, BOARD TO BOARD 16P			
< DIODE >					
D509	8-719-053-18	DIODE 1SR154-400TE-25			
D513	8-719-988-61	DIODE 1SS355TE-17			
D525	8-719-053-18	DIODE 1SR154-400TE-25			
D530	8-719-988-61	DIODE 1SS355TE-17			
< GROUND TERMINAL BOARD >					
EP501	1-537-770-21	TERMINAL BOARD, GROUND			
< FERRITE BEAD >					
FB500	1-469-324-21	FERRITE	0uH		
FB501	1-469-324-21	FERRITE	0uH		
FB502	1-469-324-21	FERRITE	0uH		
< IC >					
IC403	8-759-669-03	IC LC75342			
IC420	6-701-760-01	IC uPC3504AHF			
IC421	8-759-646-52	IC KIA7805API			
IC422	8-759-071-48	IC TA7807S			
IC423	6-701-011-01	IC uPC2910T-E1			
< COIL >					
L501	1-469-525-91	INDUCTOR	10uH		
L503	1-469-525-91	INDUCTOR	10uH		
< TRANSISTOR >					
Q505	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q506	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q519	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO		
Q520	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q521	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q522	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO		
Q523	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO		
Q524	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO		
Q525	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO		
Q526	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q540	8-729-044-37	TRANSISTOR	2SK3019TL		
Q541	8-729-044-37	TRANSISTOR	2SK3019TL		
Q550	8-729-044-37	TRANSISTOR	2SK3019TL		
Q560	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO		
Q580	8-729-046-97	TRANSISTOR	2SD1938 (F) -T (TX) .SO		

MAIN

PANEL

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
< RESISTOR >						C825	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
R201	1-216-833-11	METAL CHIP	10K	5%	1/16W	C826	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
R202	1-216-833-11	METAL CHIP	10K	5%	1/16W	C827	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
R203	1-216-821-11	METAL CHIP	1K	5%	1/16W	C828	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
R204	1-216-821-11	METAL CHIP	1K	5%	1/16W	C861	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
R205	1-216-833-11	METAL CHIP	10K	5%	1/16W	C862	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
R206	1-216-833-11	METAL CHIP	10K	5%	1/16W	C881	1-126-153-11	ELECT	22uF	20%	6.3V
R207	1-216-837-11	METAL CHIP	22K	5%	1/16W	C882	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
R301	1-216-837-11	METAL CHIP	22K	5%	1/16W	< CONNECTOR >					
R507	1-216-809-11	METAL CHIP	100	5%	1/16W	CN801	1-691-650-11	SOCKET, CONNECTOR 19P			
R508	1-216-809-11	METAL CHIP	100	5%	1/16W	< DIODE >					
R509	1-216-809-11	METAL CHIP	100	5%	1/16W	D801	6-500-665-01	DIODE SELU6614C-STP5 (1/1)			
R549	1-216-833-11	METAL CHIP	10K	5%	1/16W	< FLUORESCENT INDICATOR TUBE >					
R557	1-216-833-11	METAL CHIP	10K	5%	1/16W	FL801	1-517-805-13	INDICATOR TUBE, FLUORESCENT			
R558	1-216-833-11	METAL CHIP	10K	5%	1/16W	< IC >					
R559	1-216-821-11	METAL CHIP	1K	5%	1/16W	IC801	6-703-709-01	IC M66005-0131AFP280D			
R560	1-216-828-11	METAL CHIP	3.9K	5%	1/16W	IC802	8-759-826-32	IC NJL72H400A			
R561	1-216-821-11	METAL CHIP	1K	5%	1/16W	< COIL >					
R564	1-216-833-11	METAL CHIP	10K	5%	1/16W	L801	1-469-525-91	INDUCTOR	10uH		
R565	1-216-833-11	METAL CHIP	10K	5%	1/16W	L802	1-469-525-91	INDUCTOR	10uH		
R578	1-216-837-11	METAL CHIP	22K	5%	1/16W	L803	1-469-525-91	INDUCTOR	10uH		
R579	1-216-821-11	METAL CHIP	1K	5%	1/16W	< TRANSISTOR >					
R580	1-216-828-11	METAL CHIP	3.9K	5%	1/16W	Q801	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6		
R581	1-216-821-11	METAL CHIP	1K	5%	1/16W	< RESISTOR >					
R584	1-216-833-11	METAL CHIP	10K	5%	1/16W	R801	1-216-805-11	METAL CHIP	47	5%	1/16W
R585	1-216-833-11	METAL CHIP	10K	5%	1/16W	R802	1-216-805-11	METAL CHIP	47	5%	1/16W
R598	1-216-837-11	METAL CHIP	22K	5%	1/16W	R803	1-216-817-11	METAL CHIP	470	5%	1/16W
R599	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R814	1-216-833-11	METAL CHIP	10K	5%	1/16W
R6009	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R815	1-216-845-11	METAL CHIP	100K	5%	1/16W
*****						R816	1-216-821-11	METAL CHIP	1K	5%	1/16W
A-4747-832-A PANEL BOARD, COMPLETE						R817	1-216-821-11	METAL CHIP	1K	5%	1/16W
*****						R818	1-216-821-11	METAL CHIP	1K	5%	1/16W
4-248-818-01 HOLDER, LCD						R819	1-216-821-11	METAL CHIP	1K	5%	1/16W
7-685-645-79 SCREW +BVTP 3X6 TYPE2 IT-3						R820	1-216-845-11	METAL CHIP	100K	5%	1/16W
< CAPACITOR >						R821	1-216-833-11	METAL CHIP	10K	5%	1/16W
C801	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	R831	1-216-821-11	METAL CHIP	1K	5%	1/16W
C802	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	R832	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
C803	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	R833	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
C804	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	R834	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
C805	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	R835	1-216-833-11	METAL CHIP	10K	5%	1/16W
C806	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	R836	1-216-837-11	METAL CHIP	22K	5%	1/16W
C807	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	R841	1-216-821-11	METAL CHIP	1K	5%	1/16W
C808	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	R842	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
C809	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	R843	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
C810	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	R844	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
C811	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	R845	1-216-833-11	METAL CHIP	10K	5%	1/16W
C812	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	R851	1-216-821-11	METAL CHIP	1K	5%	1/16W
C813	1-131-992-91	CERAMIC CHIP	100000PF		35V	R852	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
C814	1-131-992-91	CERAMIC CHIP	100000PF		35V	R853	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
C815	1-162-919-11	CERAMIC CHIP	22PF	5%	50V						
C820	1-162-927-11	CERAMIC CHIP	100PF	5%	50V						
C821	1-126-153-11	ELECT	22uF	20%	6.3V						
C822	1-131-992-91	CERAMIC CHIP	100000PF		35V						
C823	1-124-247-91	ELECT	10uF	20.00%	35V						
C824	1-131-992-91	CERAMIC CHIP	100000PF		35V						

HCD-SE1

PANEL

SUB TRANS

Ref. No.	Part No.	Description	Remark		
R854	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
< SWITCH >					
S801	1-762-875-21	SWITCH, KEYBOARD (I/⏏)			
S802	1-762-875-21	SWITCH, KEYBOARD (▲)			
S811	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)			
S812	1-762-875-21	SWITCH, KEYBOARD (DBFB)			
S813	1-762-875-21	SWITCH, KEYBOARD (BASS/TREBLE)			
S814	1-762-875-21	SWITCH, KEYBOARD (−)			
S815	1-762-875-21	SWITCH, KEYBOARD (+)			
S821	1-786-155-11	SWITCH, TACTILE (CD)			
S822	1-786-155-11	SWITCH, TACTILE (TUNER)			
S823	1-475-347-11	ENCODER, ROTARY (VOLUME)			

	1-689-891-11	SUB TRANS BOARD			

< CAPACITOR >					
△ C991	1-113-925-11	CERAMIC	0.01uF	20.00%	250V
△ C992	1-113-925-11	CERAMIC	0.01uF	20.00%	250V
C993	1-126-768-11	ELECT	2200uF	20.00%	16V
C994	1-104-665-11	ELECT	100uF	20.00%	10V
< CONNECTOR >					
CN990	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
CN991	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
* CN992	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P			
< DIODE >					
D991	8-719-988-61	DIODE 1SS355TE-17			
D992	8-719-053-18	DIODE 1SR154-400TE-25			
D993	8-719-053-18	DIODE 1SR154-400TE-25			
D994	8-719-053-18	DIODE 1SR154-400TE-25			
D995	8-719-053-18	DIODE 1SR154-400TE-25			
D996	8-719-988-61	DIODE 1SS355TE-17			
< IC >					
IC991	6-703-627-01	IC NJU7201L40 (T3)			
< TRANSISTOR >					
Q991	8-729-141-73	TRANSISTOR	2SC3624A-T1L15L16		
Q992	8-729-141-73	TRANSISTOR	2SC3624A-T1L15L16		
< RESISTOR >					
R991	1-216-833-11	METAL CHIP	10K	5%	1/16W
R992	1-216-845-11	METAL CHIP	100K	5%	1/16W
R993	1-216-833-11	METAL CHIP	10K	5%	1/16W
R994	1-216-845-11	METAL CHIP	100K	5%	1/16W
< RELAY >					
△ RY991	1-755-467-11	RELAY (POWER)			
△ RY992	1-755-467-11	RELAY (POWER)			
< TRANSFORMER >					
△ T901	1-439-668-11	TRANSFORMER, POWER			

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	

4	1-763-861-12	FAN, DC	
63	1-773-119-11	WIRE (FLAT TYPE)(19 CORE)	
102	1-775-200-11	WIRE (FLAT TYPE)(21 CORE)	
103	1-769-946-11	WIRE (FLAT TYPE)(11 CORE)	
△ 151	1-468-789-11	REGULATOR, SWITCHING	
△ 154	1-696-169-12	CORD, POWER	
462	1-452-925-21	MAGNET ASSY	
△ 557	8-820-116-02	OPTICAL PICK-UP KSM-213DCP	
561	1-792-024-11	WIRE (FLAT TYPE)(16 CORE)	
F1	1-576-232-12	FUSE (H.B.C)(T5AL/250V)	

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

MEMO

REVISION HISTORY

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