HCD-HPX9

SERVICE MANUAL

Ver. 2.0 2006.09

US Model
Canadian Model
E Model
Australian Model

HCD-HPX9 is the amplifier, CD player, tape deck and tuner section in CMT-HPX9.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CDM82A-F1BD81
	Base Unit Name	BU-F1BD81A
	Optical Pick-up Block Name	KSM-215DCP
Tape deck Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	CMAL5Z225A

SPECIFICATIONS

Main unit

Amplifier section

For the United States model

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 6-ohm loads, both channels driven, from 120 – 10,000 Hz: rated 75 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

North American model:

Continuous RMS power output (reference): 80 + 80 W (6 ohms at 1 kHz, 10% THD)

Other models:

The following measured at AC 240 V, AC 220 V or AC 120 V

DIN power output (rated): 53 + 53 W (6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference): 70 + 70 W (6 ohms at 1 kHz, 10% THD)

Inputs

MD/VIDEO: Sensitivity 450/250 mV, impedance 47 kilohms

Outputs

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

SPEAKER: Accepts impedance of 6 to 16 ohms.

CD player section

Laser: Semiconductor laser (λ=780 nm) Emission duration: continuous

Frequency response: 20 Hz – 20 kHz

Tape deck section

Recording system: 4-track 2-channel, stereo

Frequency response: 50 – 13,000 Hz (±3 dB), using Sony TYPE I cassettes

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range: 87.5 – 108.0 MHz

Antenna: FM lead antenna

Antenna terminals: 75 ohms unbalanced

Intermediate frequency: 10.7 MHz

AM tuner section

Tuning range

Pan-American model: 530 – 1,710 kHz (with the tuning interval set at 10 kHz) 531 – 1,710 kHz (with the tuning interval set at 9 kHz)

Other models: 530 – 1,710 kHz (with the tuning interval set at 10 kHz) 531 – 1,602 kHz (with the tuning interval set at 9 kHz)

Antenna: AM loop antenna, external antenna terminal

Intermediate frequency: 450 kHz

General

Power requirements

North American model: 120 V AC, 60 Hz

Australian model: 230 – 240 V AC, 50/60 Hz

Argentine model: 220 V AC, 50/60 Hz

Korea model: 220 V AC, 60 Hz

Saudi Arabian model: 120 – 127/220 or 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector

Other models: 120 V, 220 V or 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector

Power consumption

North American model: 120 W

Other models: 105 W

Design and specifications are subject to change without notice.

COMPACT DISC DECK RECEIVER

9-877-809-11
2006I16-1

Sony Corporation
Personal Audio Division
Published by Sony Techno Create Corporation

SONY

TABLE OF CONTENTS

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage.
Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

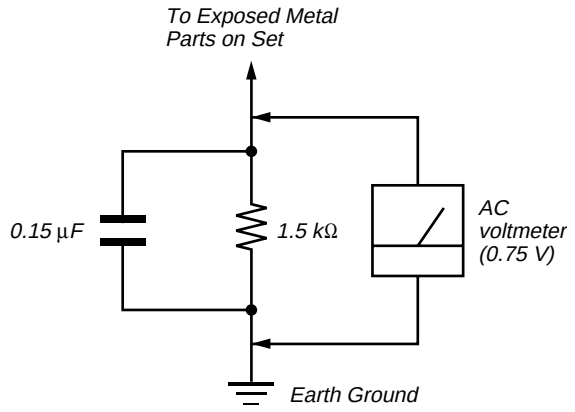


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR 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.

DANGER	DANGER
INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. AVOID DIRECT EXPOSURE TO BEAM.	RADIATION DE LESER INVISIBLE LORS D'OUVERTURE. AVEC L'ENCLENCHEMENT DE SECURITE ANNULE. EVITER L'EXPOSITION DIRECTE .AU RAYON.

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 viscou-s (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.

SECTION 1
SERVICING NOTES

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.

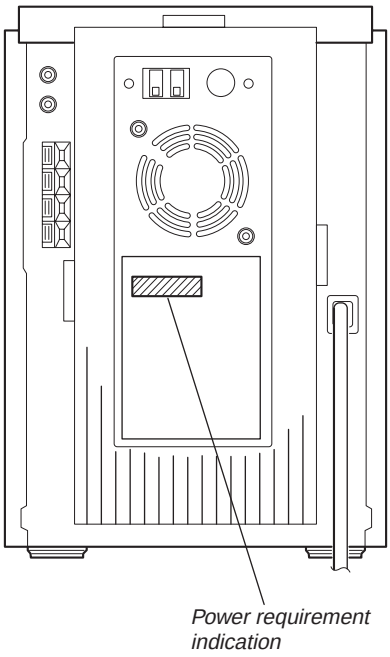
NOTES ON LASER DIODE EMISSION CHECK

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.

• MODEL IDENTIFICATION
– Rear View –



Model Name	Power Voltage Indication
US, Canadian models	AC: 120 V ∼ 60 Hz
Saudi Arabia model	AC: 120 – 127 V/220 or 230 – 240 V ∼ 50/60 Hz
Other models	AC: 120 V, 220 V, 230 – 240 V ∼ 50/60 Hz
Argentine model	AC: 220 V ∼ 50 Hz
Australian model	AC: 230 – 240 V ∼ 50/60 Hz

SECTION 2
GENRAL

This section is extracted from instruction manual.

• LOCATION OF CONTROLS

Main unit

ALPHABETICAL ORDER

A – O

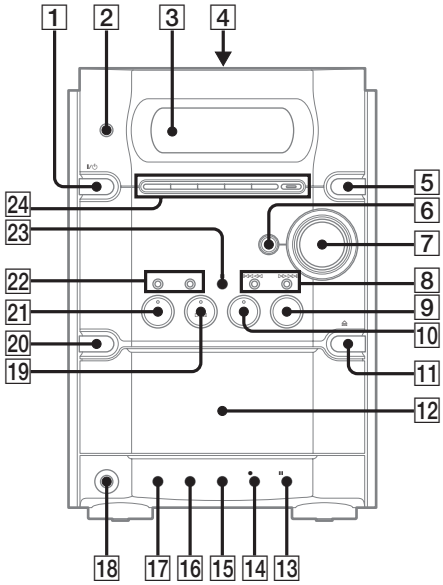
ALBUM +/– 22 (11, 13)
Cassette compartment 4
CD SYNC 15 (18)
DISC 1 – 5, +1 24 (11, 13)
DISC SKIP 5 (11, 13)
Disc tray 12 (10)
Display window 3
DSGX 6 (19)
EX-CHANGE 20 (10)
FM MODE 16 (16, 27)
FUNCTION 9 (11, 13, 15, 17, 23)

P – Z

PHONES jack 18
PLAY MODE 17 (11, 13, 18)
Remote sensor 2
REPEAT 16 (12)
TUNER/BAND 10 (14, 15)
TUNING +/– 8 (14, 15)
TUNING MODE 17 (14, 15)
VOLUME 7 (20, 26)

BUTTON DESCRIPTIONS

I/⏻ (power) 1 (8, 15, 20, 21, 28)
⏮◀◀/▶▶⏭ (skip back/skip forward, rewind/fast forward) 8 (11, 13)
■ 23 (11, 15, 28)
❚❚ TAPE (pause) 13 (17)
● REC 14 (18)
CD/►❚❚ (play/pause) 19 (11, 13, 27)
TAPE/► (play) 21 (17)
⏏ (CD eject) 11 (10, 11)



Remote control

ALPHABETICAL ORDER

A – O

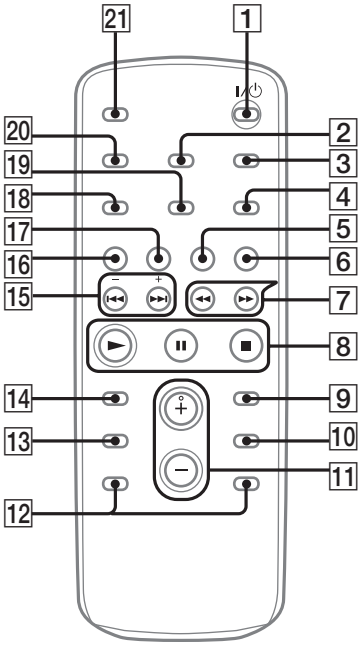
ALBUM +/– 12 (11, 13)
CD 17 (11, 13, 15)
CLEAR 14 (13)
CLOCK/TIMER SELECT 2 (20, 21, 26)
CLOCK/TIMER SET 3 (9, 20, 21)
DISC SKIP 10 (11, 13)
DISPLAY 20 (16, 22)
ENTER 9 (9, 13, 20, 21)
EQ 13 (19)
FM MODE 4 (16, 27)
FUNCTION 6 (11, 13, 15, 17, 23)

P – Z

PLAY MODE 19 (11, 13, 18)
REPEAT 4 (12)
SLEEP 21 (19)
TAPE 16 (17)
TUNER/BAND 5 (14, 15)
TUNER MEMORY 18 (14)
TUNING MODE 19 (14, 15)
VOLUME +/– 11 (20, 26)

BUTTON DESCRIPTIONS

I/⏻ (power) 1 (8, 15, 20, 21, 28)
◀◀/▶▶ (rewind/fast forward) 7 (11, 17)
I◀◀ /▶▶I (skip back/skip forward) 15 (9, 11, 13, 19, 20, 21)
■ (stop) 8 (11, 15, 17, 18, 28)
II (pause) 8 (11, 17)
► (play) 8 (11, 13, 17, 27)
+/– (tuning) 15 (14, 15)



Setting the clock

Use buttons on the remote for the operation.

1 Press I/⏻ to turn on the system.
2 Press CLOCK/TIMER SET.
3 Press I◀◀ /▶▶I repeatedly to set the hour.
4 Press ENTER.
5 Press I◀◀ /▶▶I repeatedly to set the minute.
6 Press ENTER.

The clock starts working.

To adjust the clock

1 Press CLOCK/TIMER SET.
2 Press I◀◀ /▶▶I until “CLOCK SET” appears, then press ENTER.
3 Do the same procedures as step 3 to 6 above.

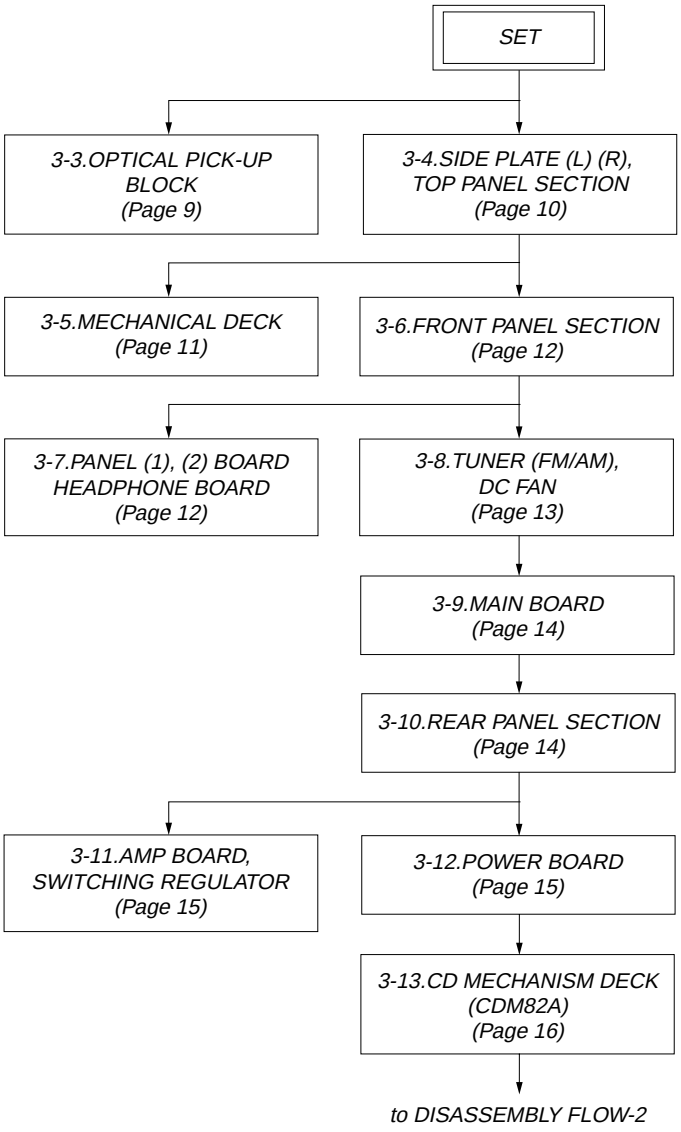
Note

The clock is not displayed in Power Saving Mode

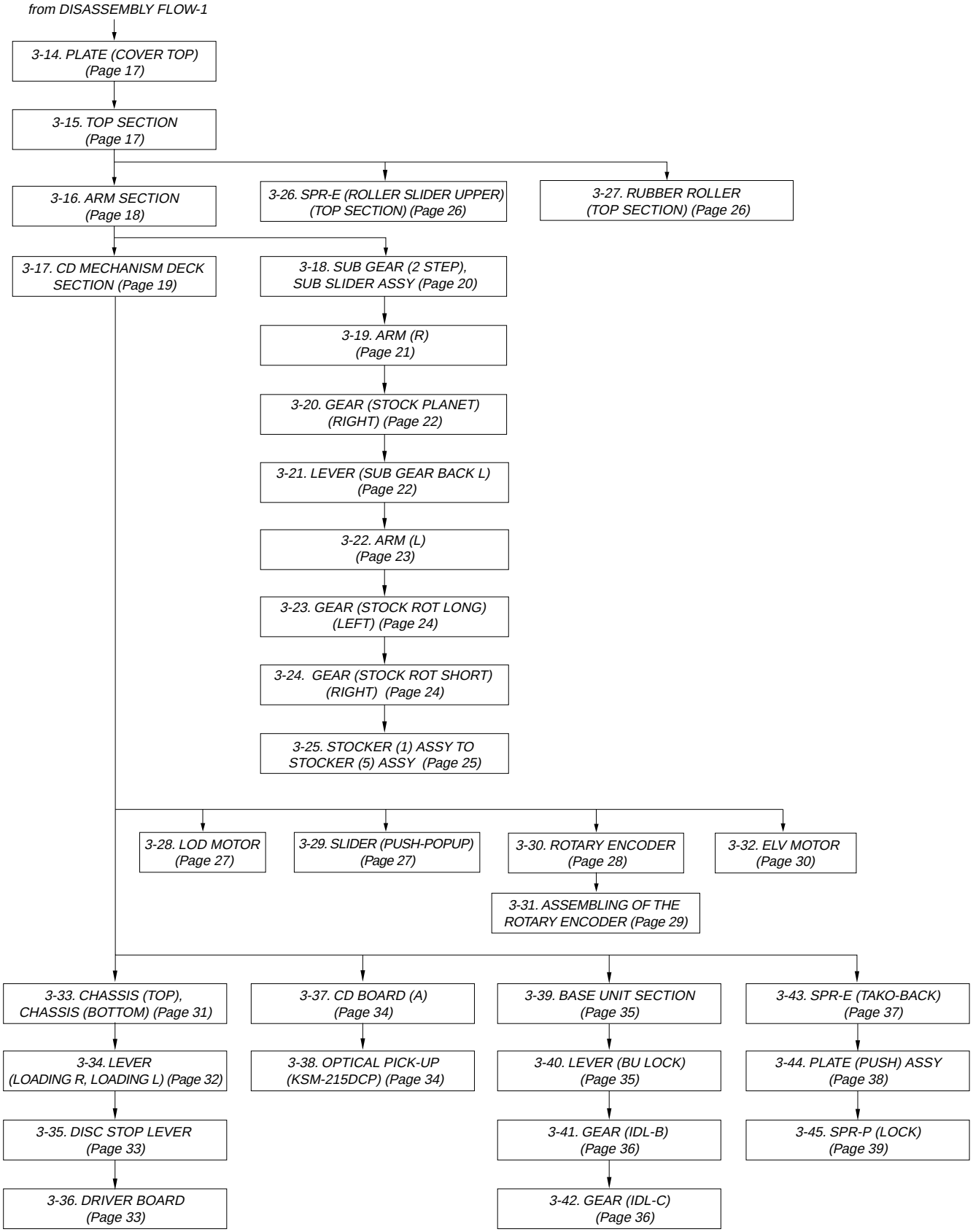
SECTION 3
DISASSEMBLY

• This is can be disassemble according to the following sequence.

3-1. DISASSEMBLY FLOW-1

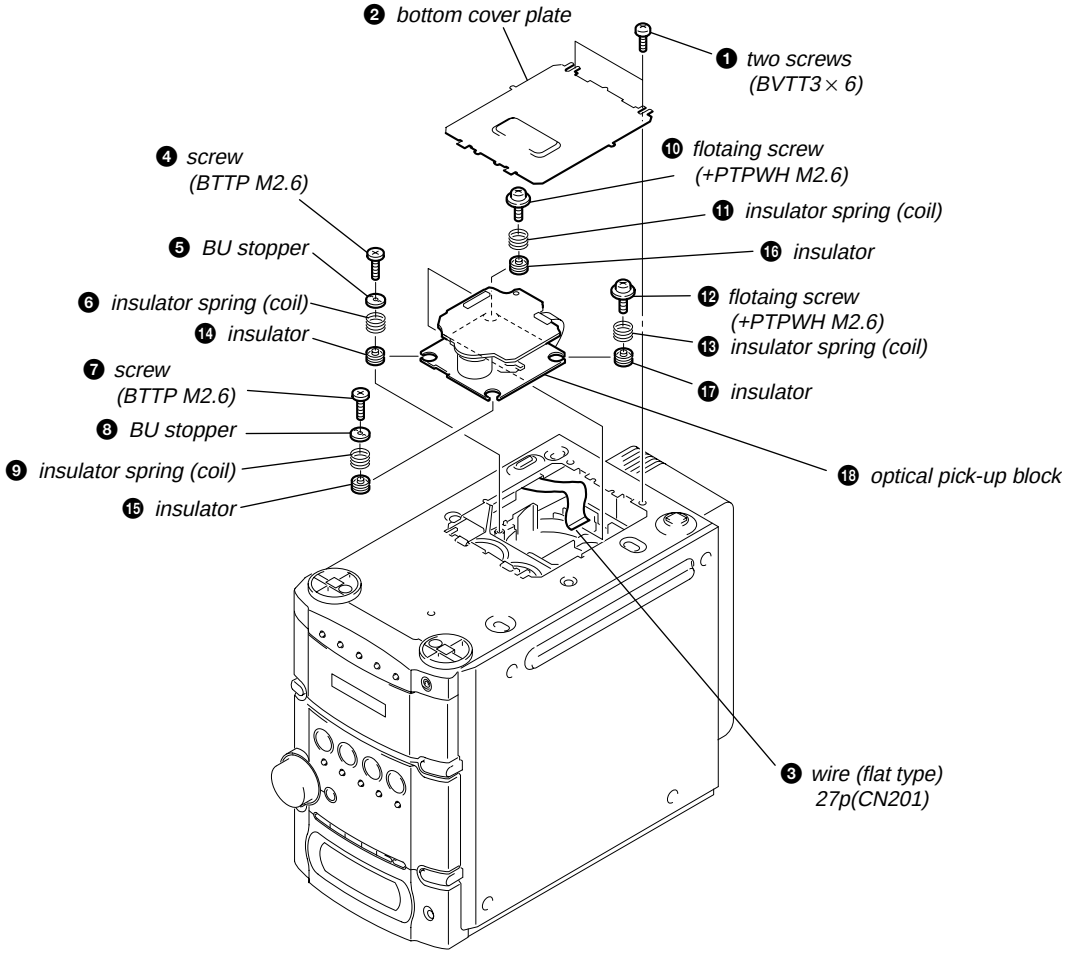


3-2. DISASSEMBLY FLOW-2

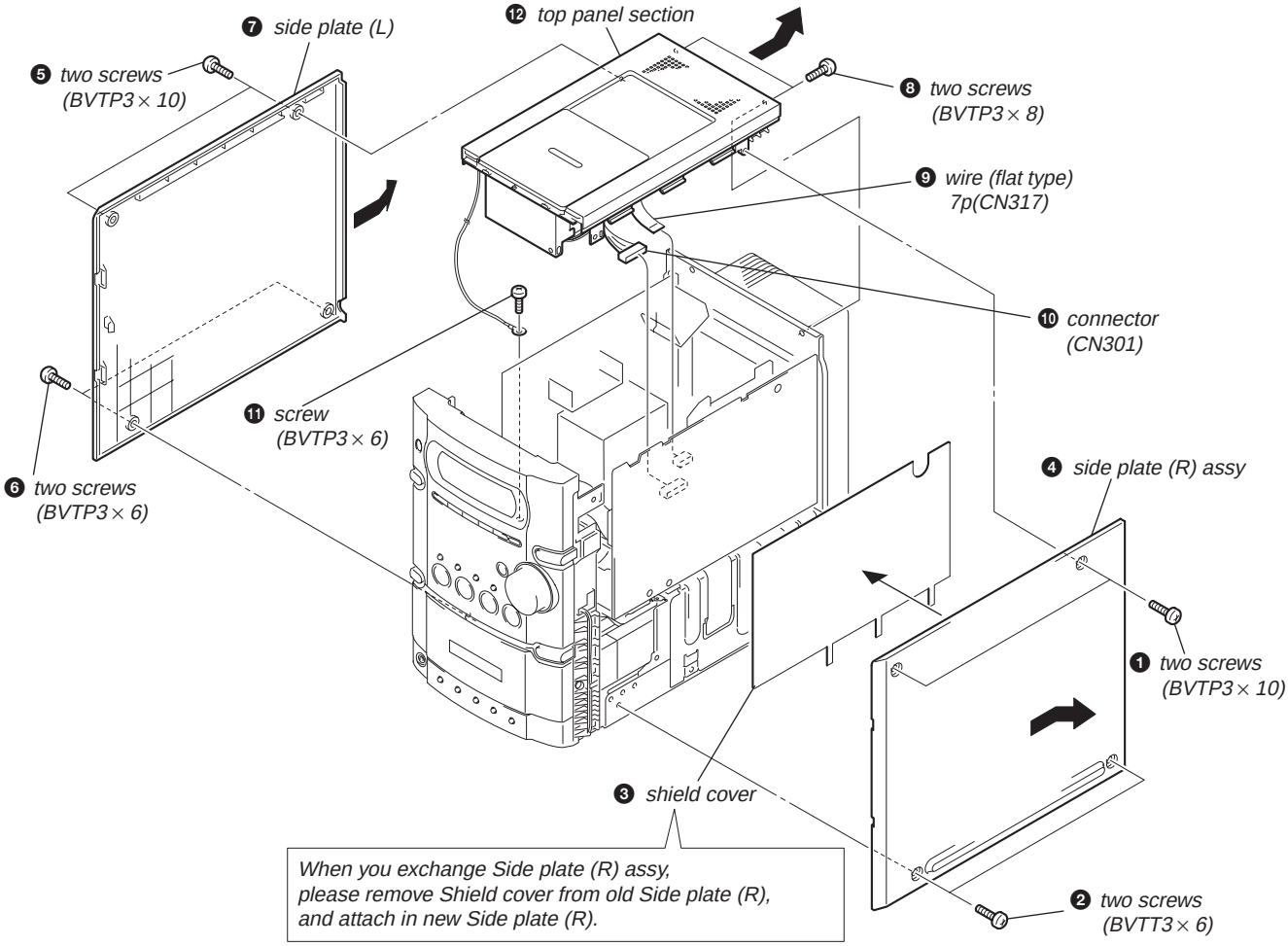


Note: Follow the disassembly procedure in the numerical order given.

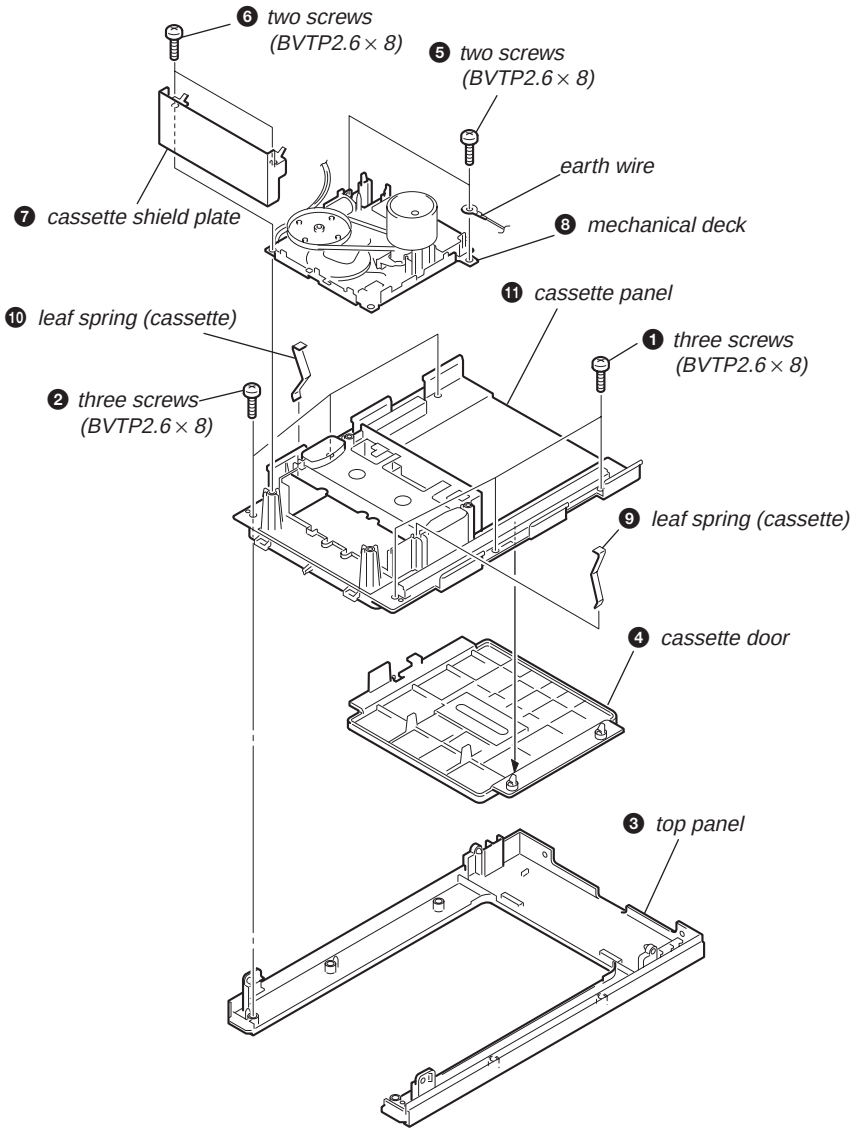
3-3. OPTICAL PICK-UP BLOCK



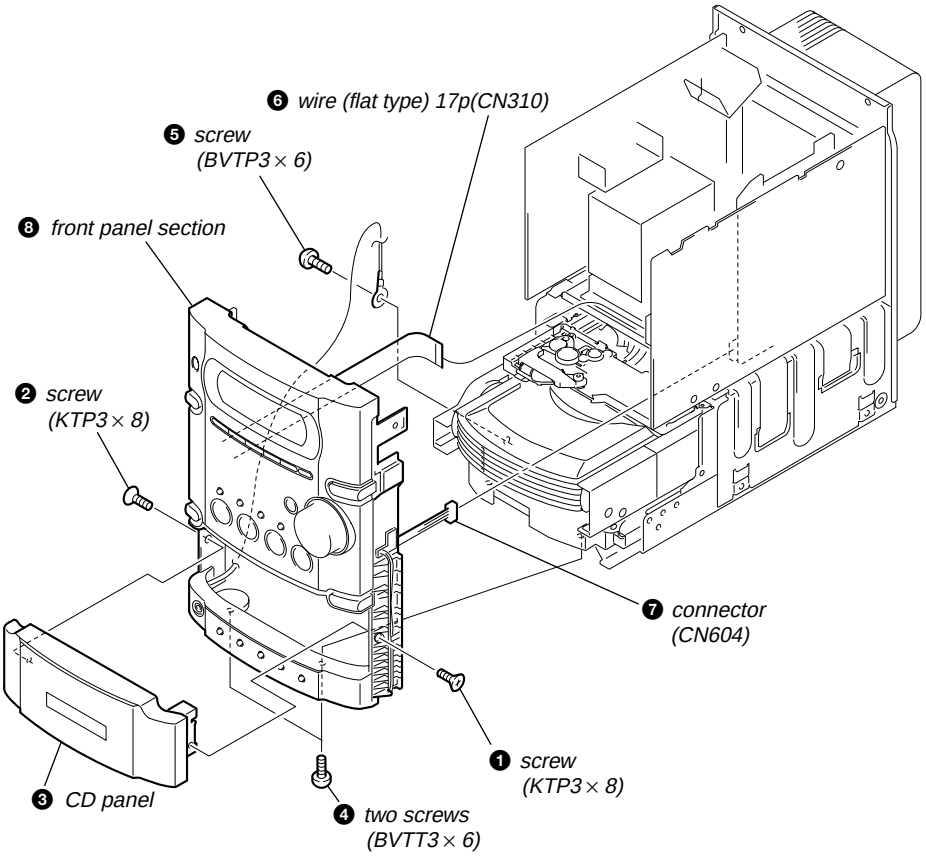
3-4. SIDE PLATE (L) (R), TOP PANEL SECTION



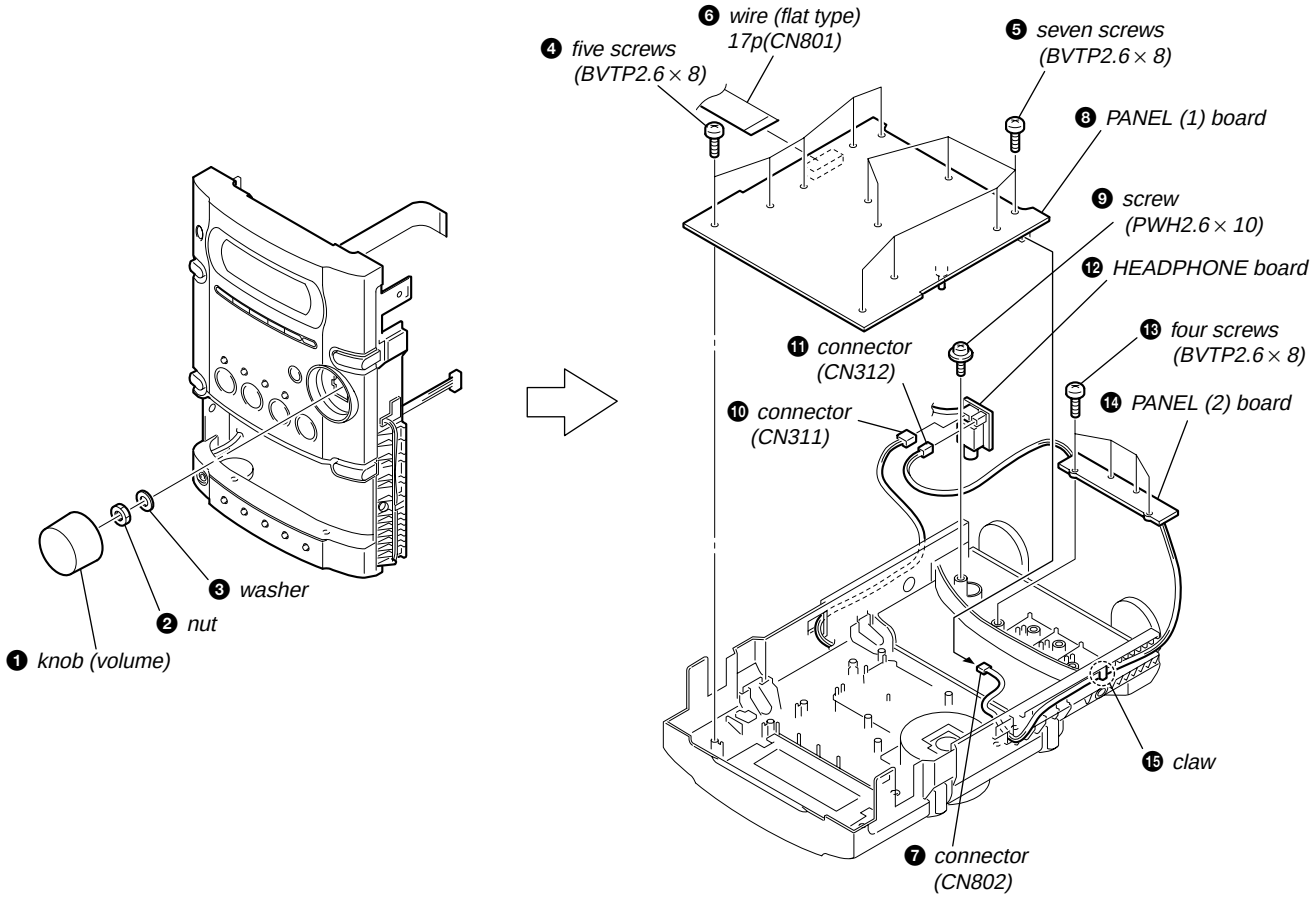
3-5. MECHANICAL DECK



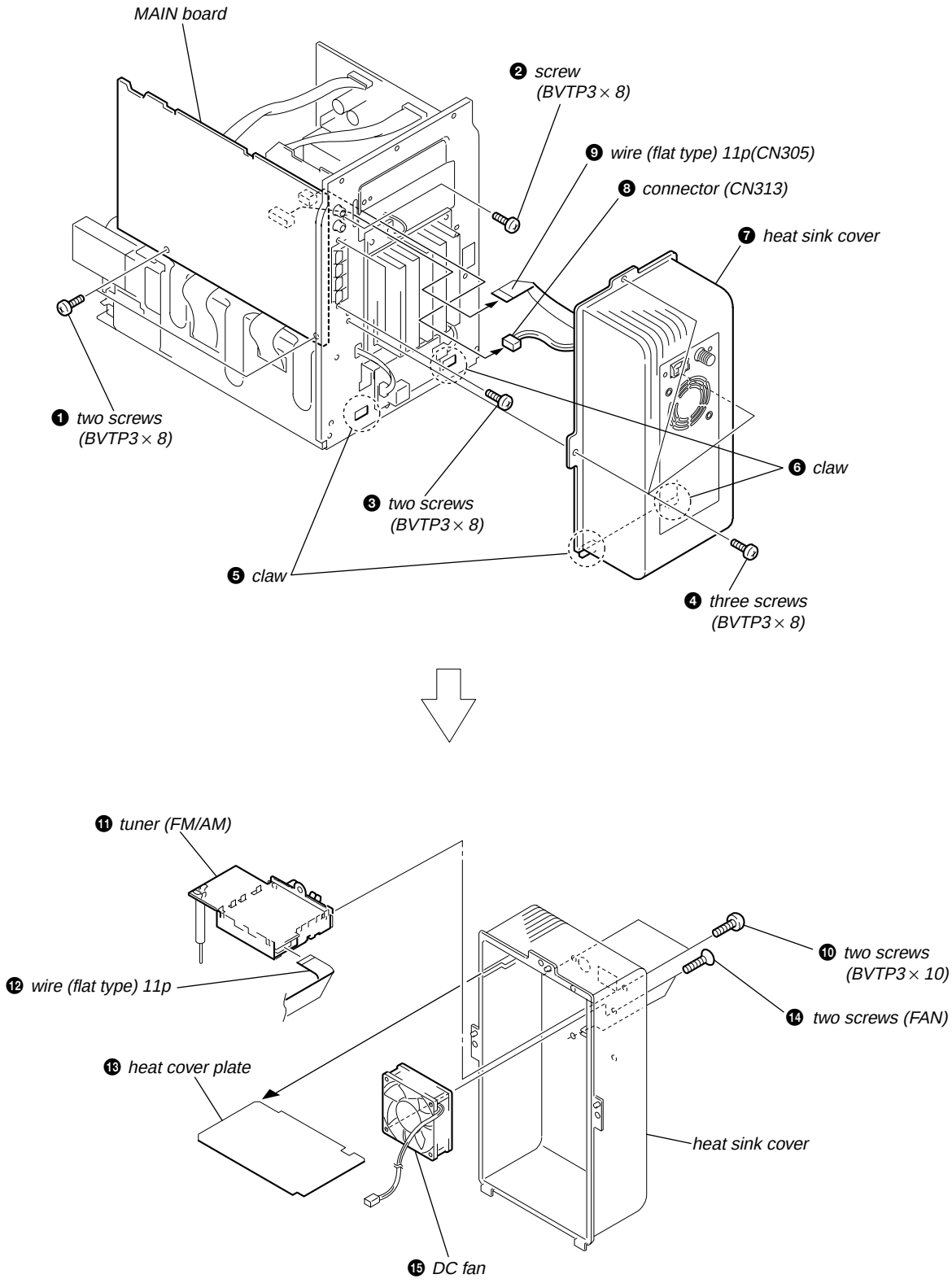
3-6. FRONT PANEL SECTION



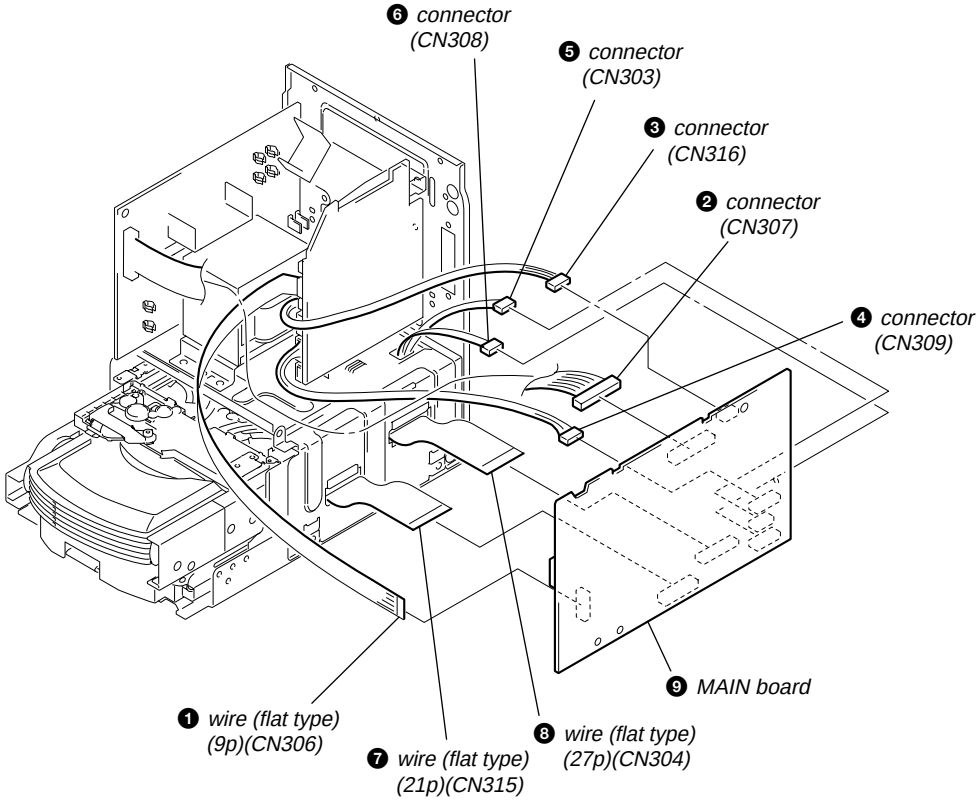
3-7. PANEL (1), (2) BOARD, HEADPHONE BOARD



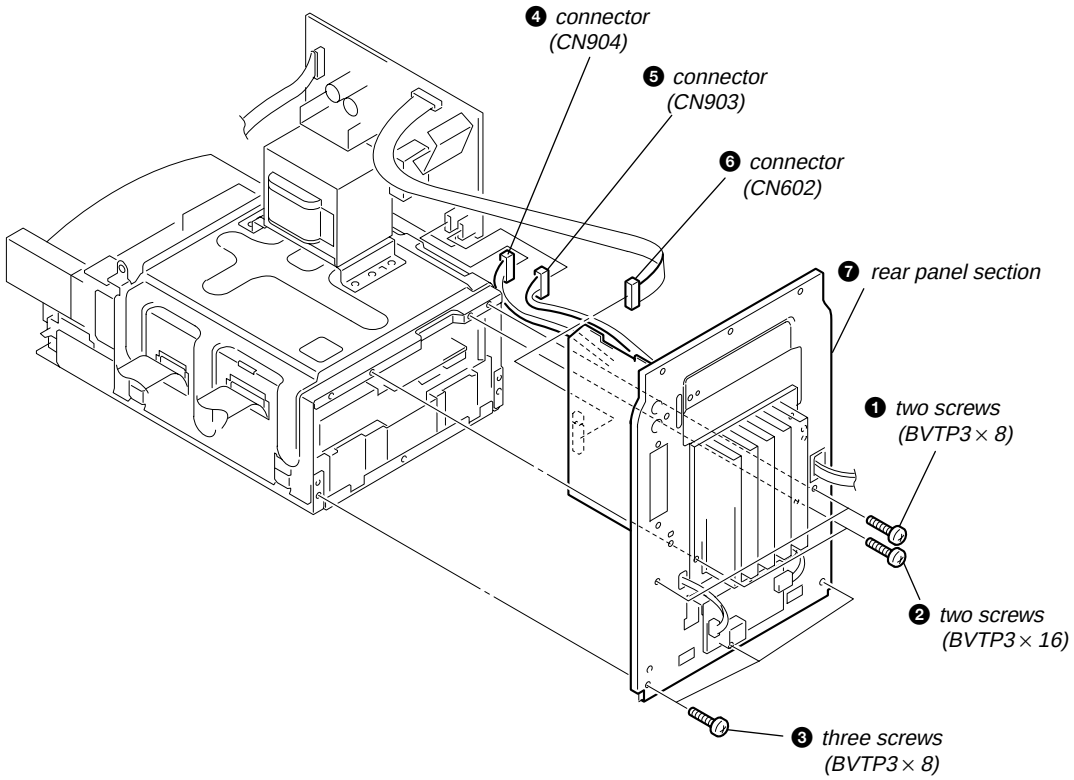
3-8. TUNER (FM/AM), DC FAN



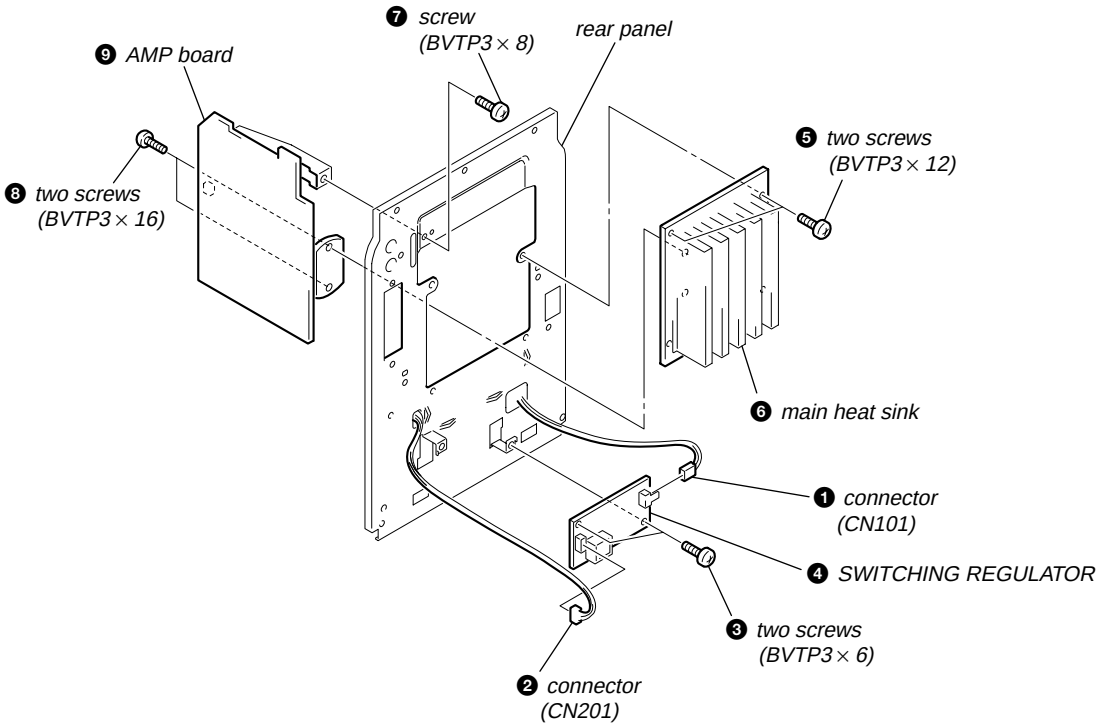
3-9. MAIN BOARD



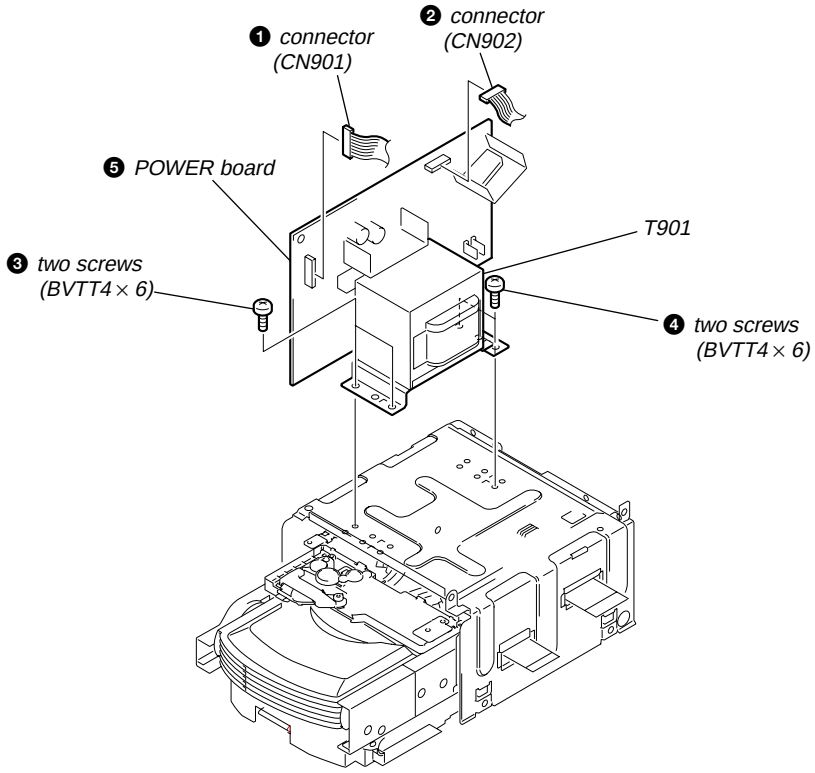
3-10. REAR PANEL SECTION



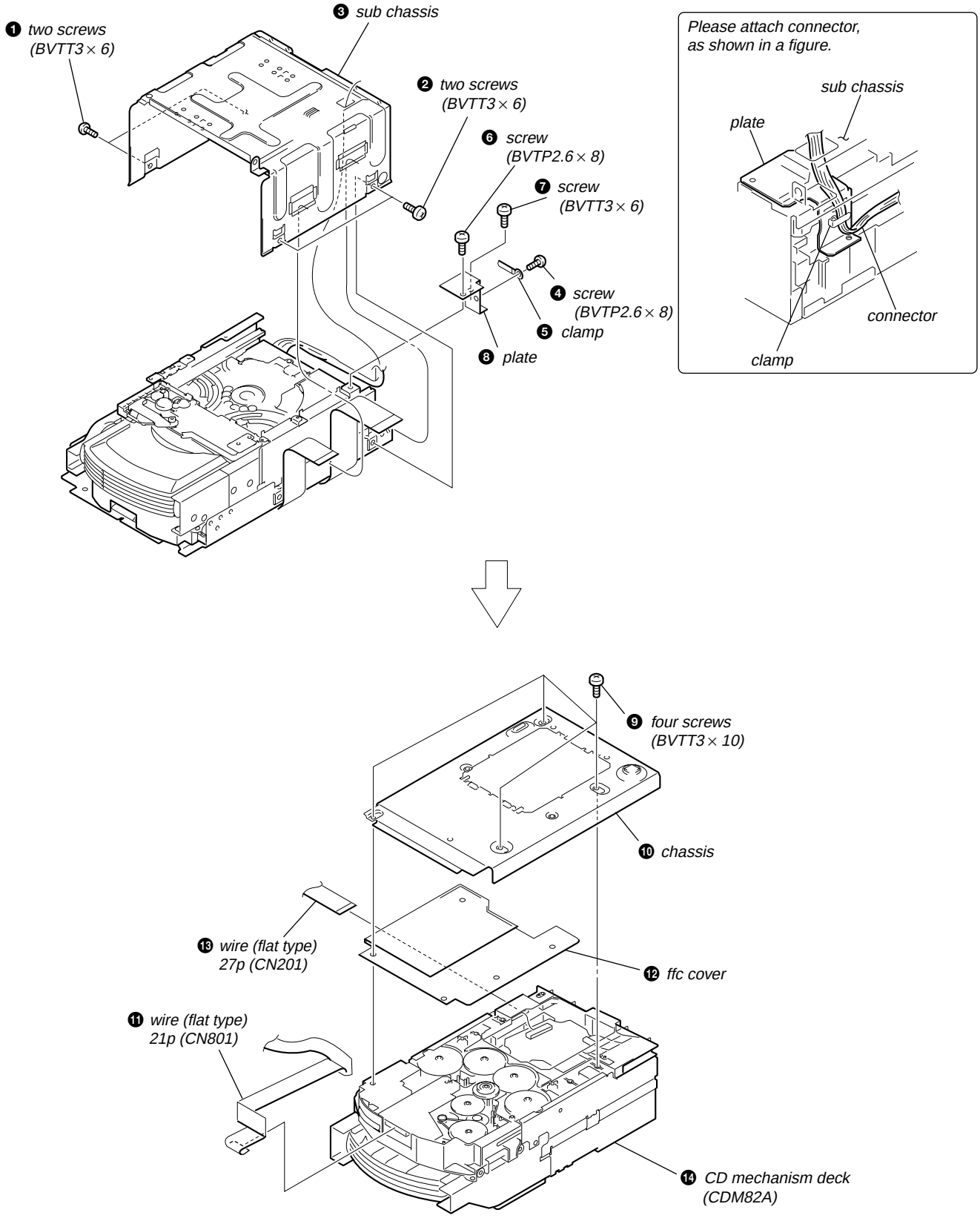
3-11. AMP BOARD, SWITCHING REGULATOR



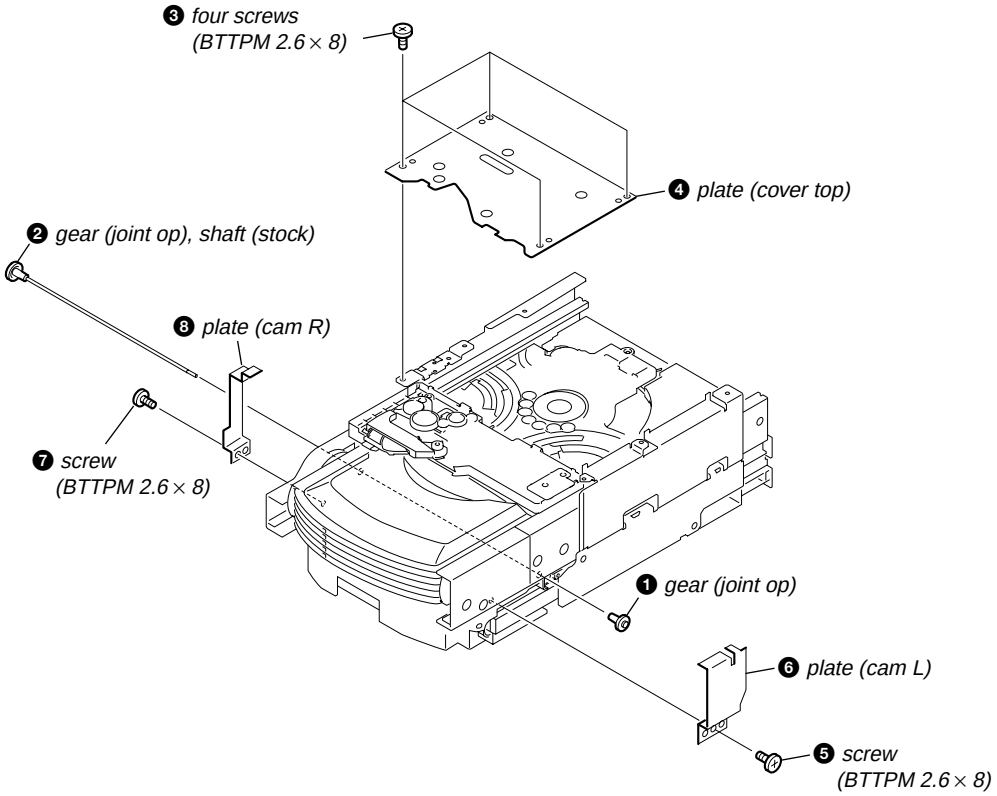
3-12. POWER BOARD



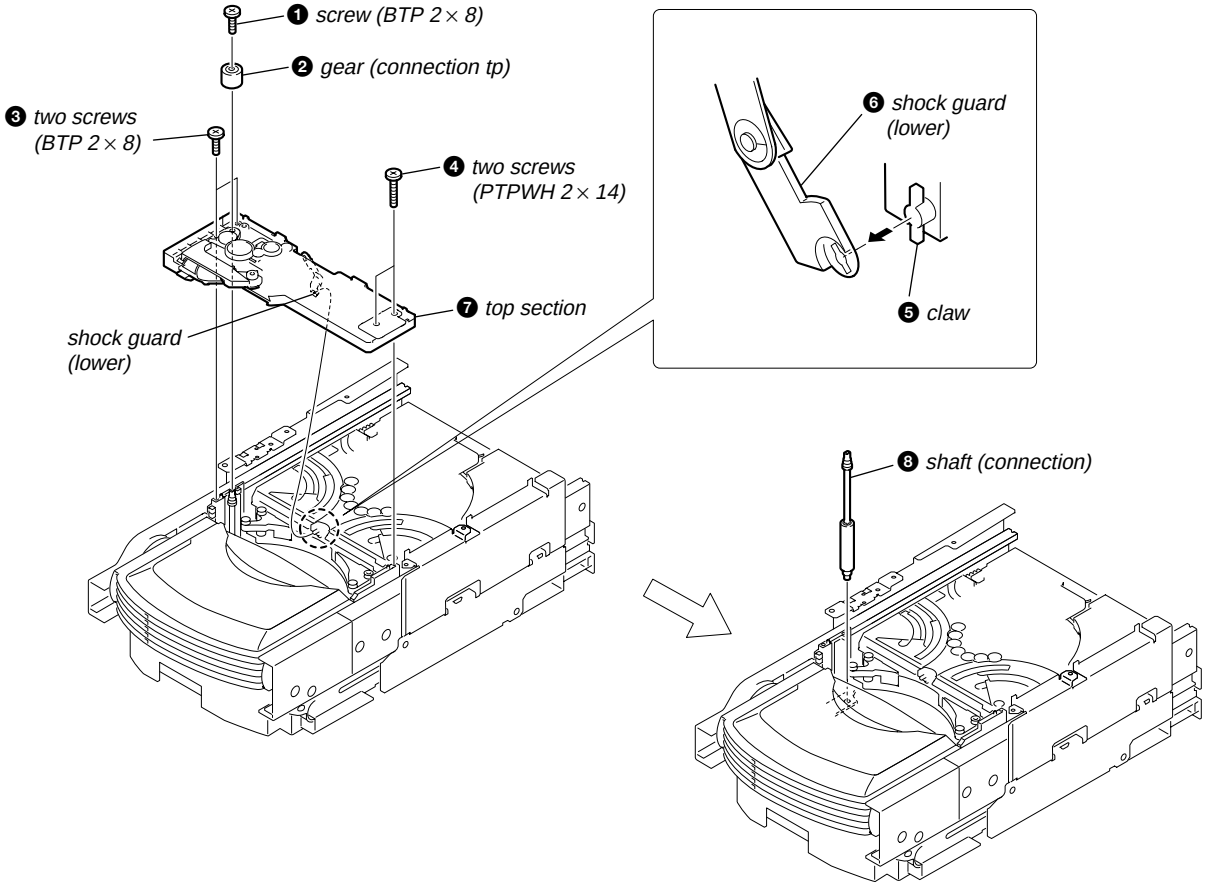
3-13. CD MECHANISM DECK (CDM82A)



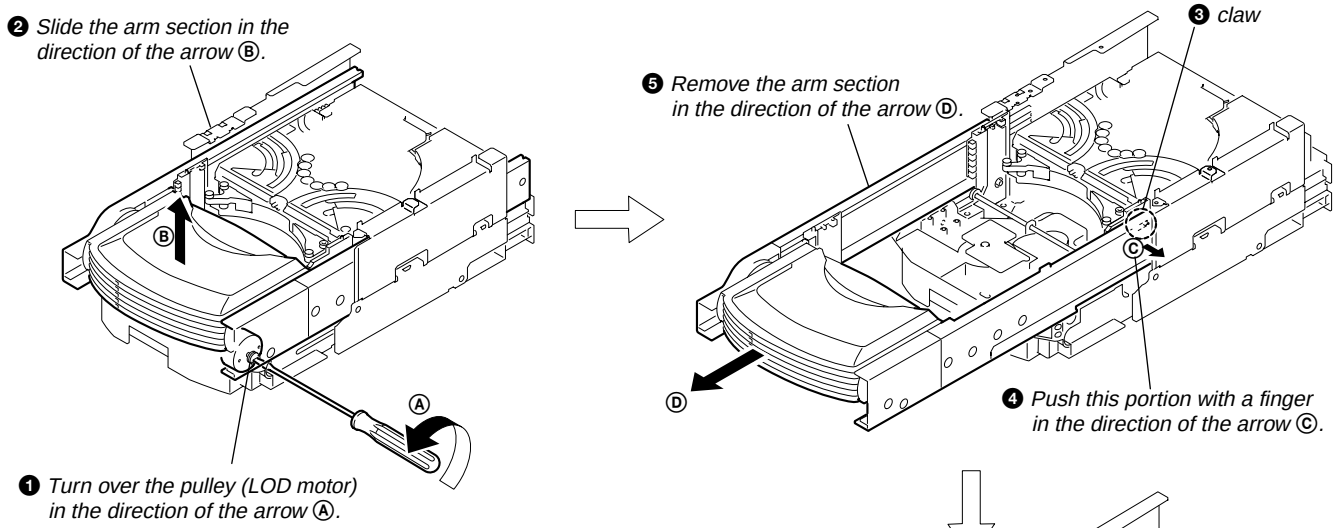
3-14. PLATE (COVER TOP)

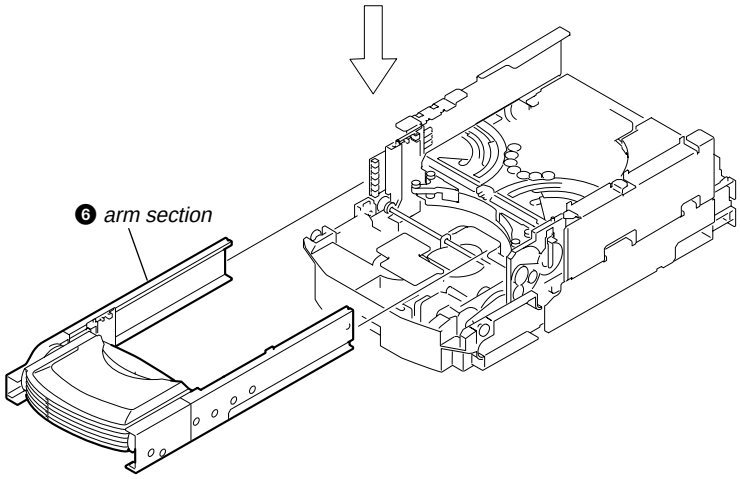


3-15. TOP SECTION

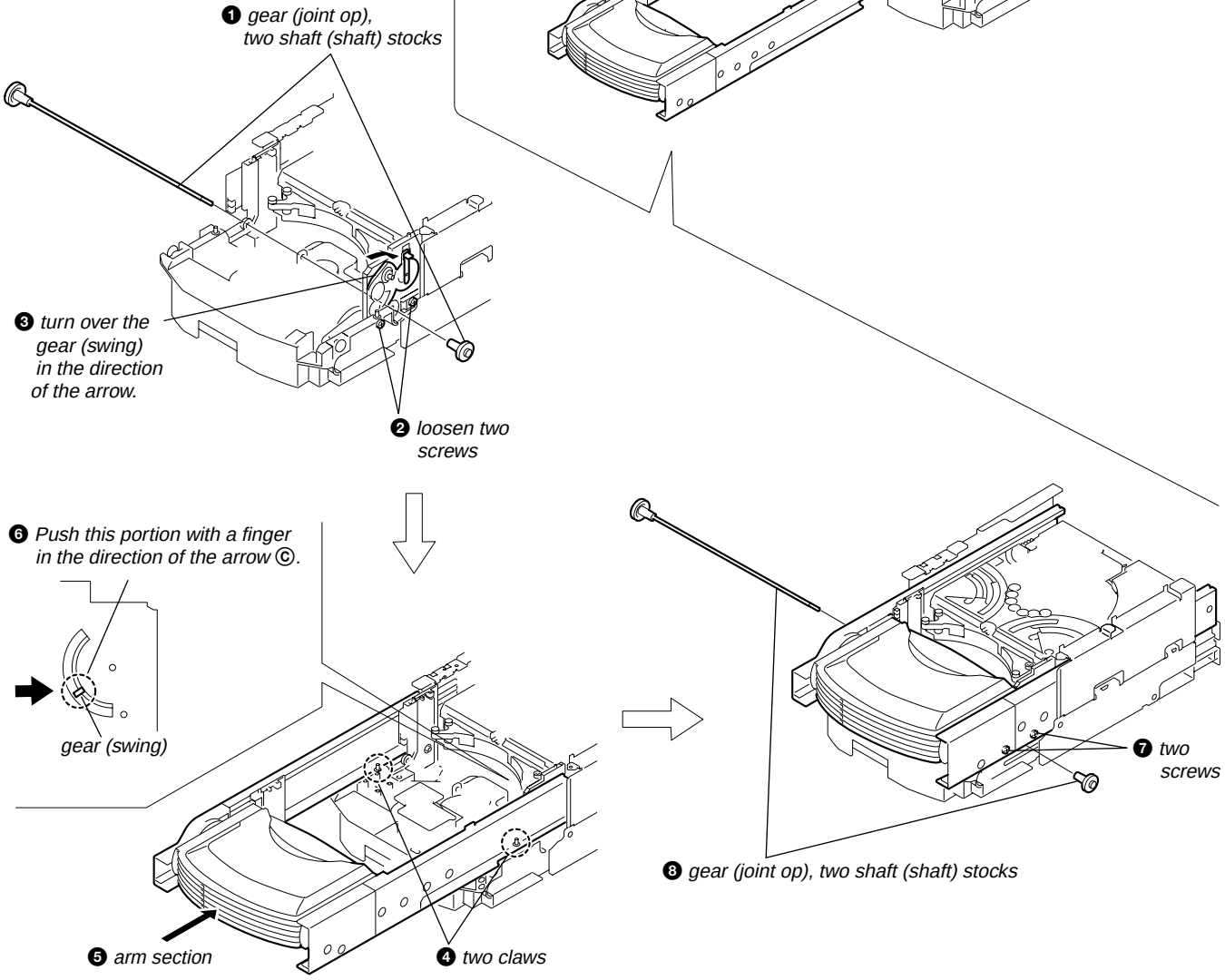


3-16. ARM SECTION

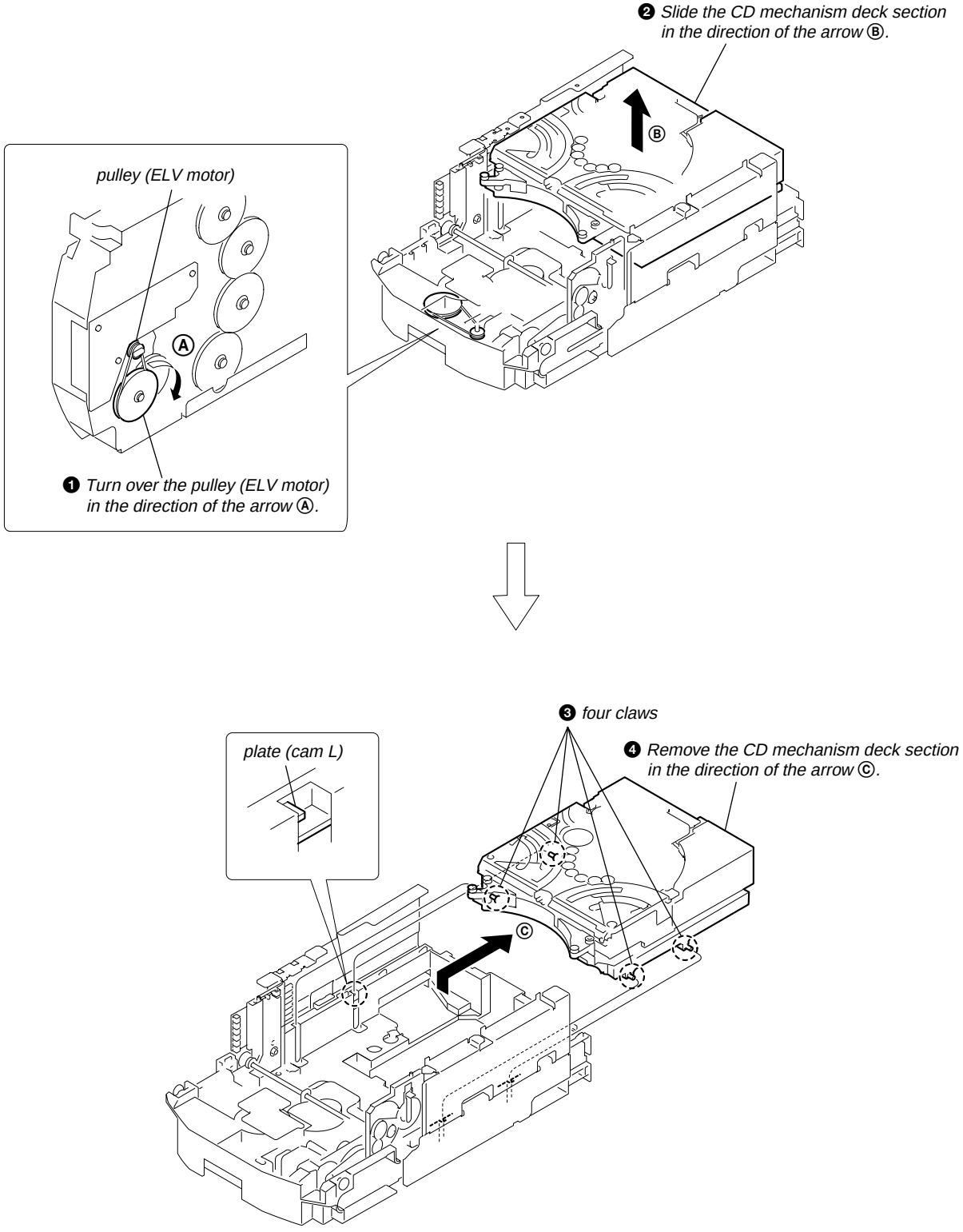




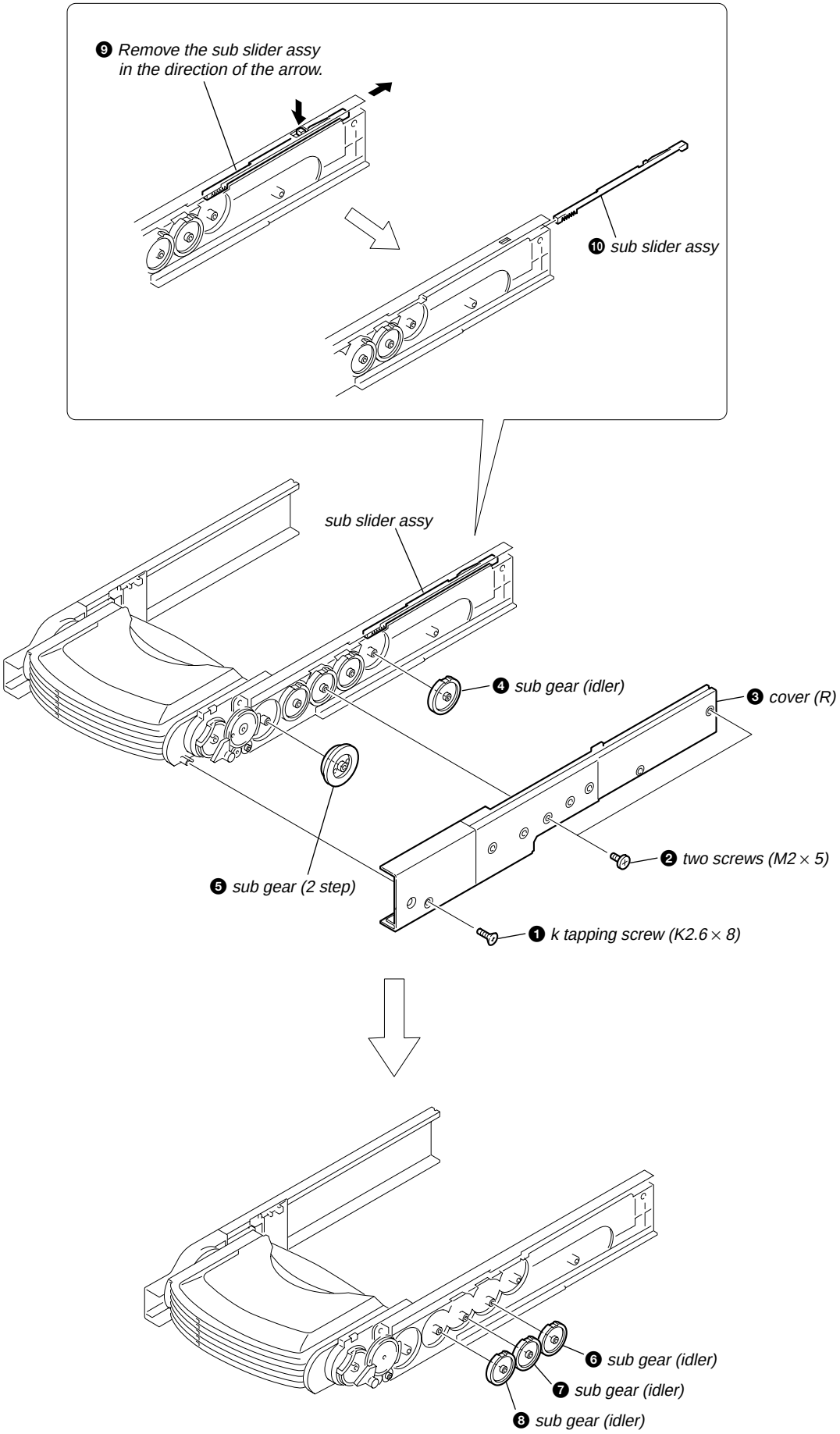
PRECAUTION DURING ARM SECTION INSTALLATION



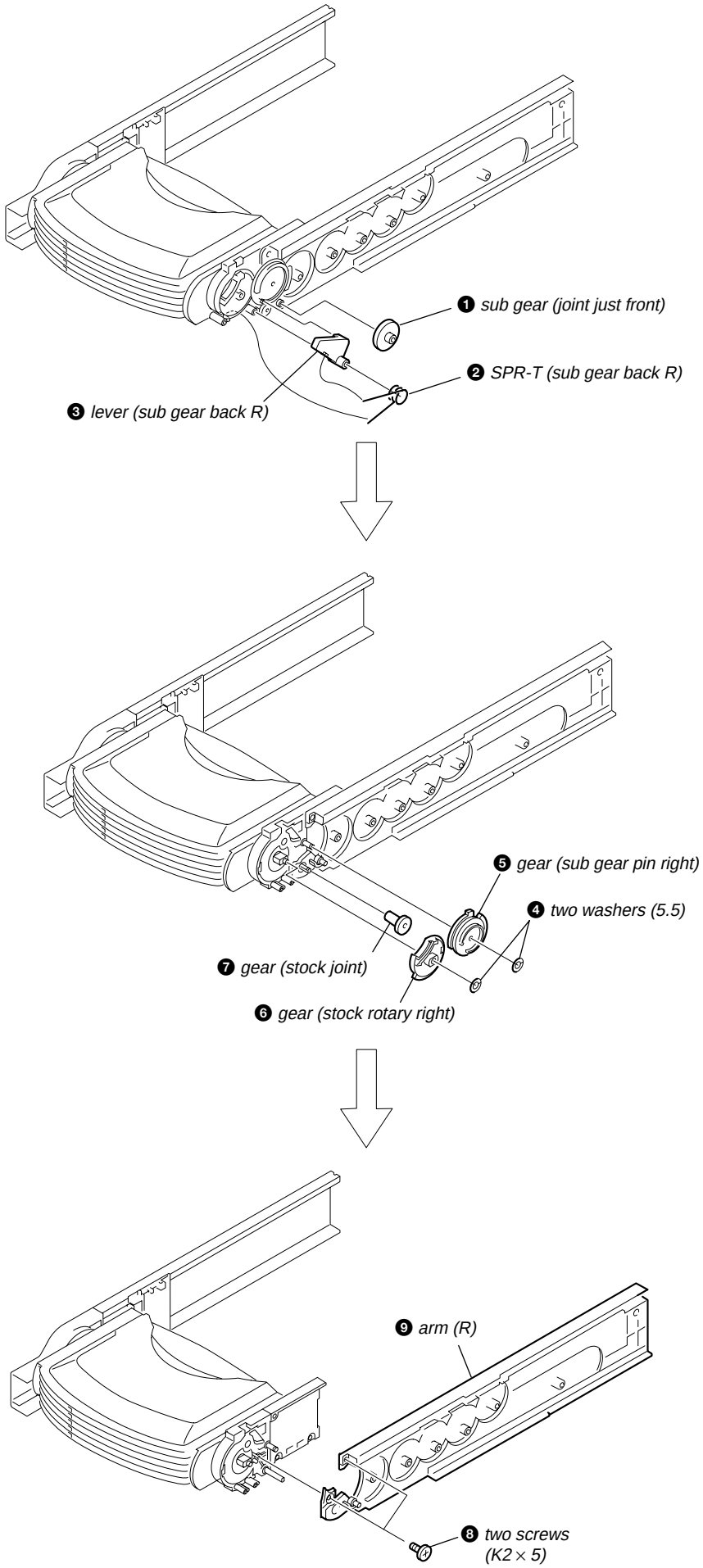
3-17. CD MECHANISM DECK SECTION



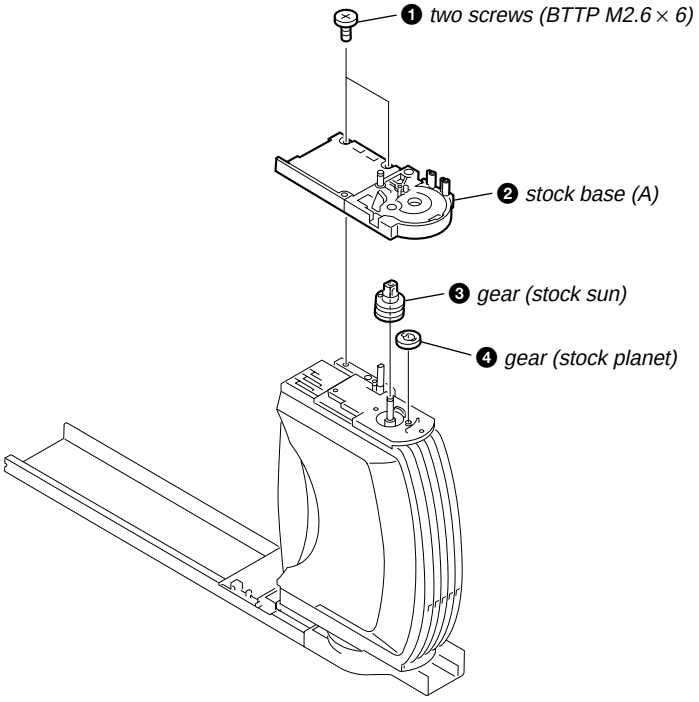
3-18. SUB GEAR (2 STEP), SUB SLIDER ASSY



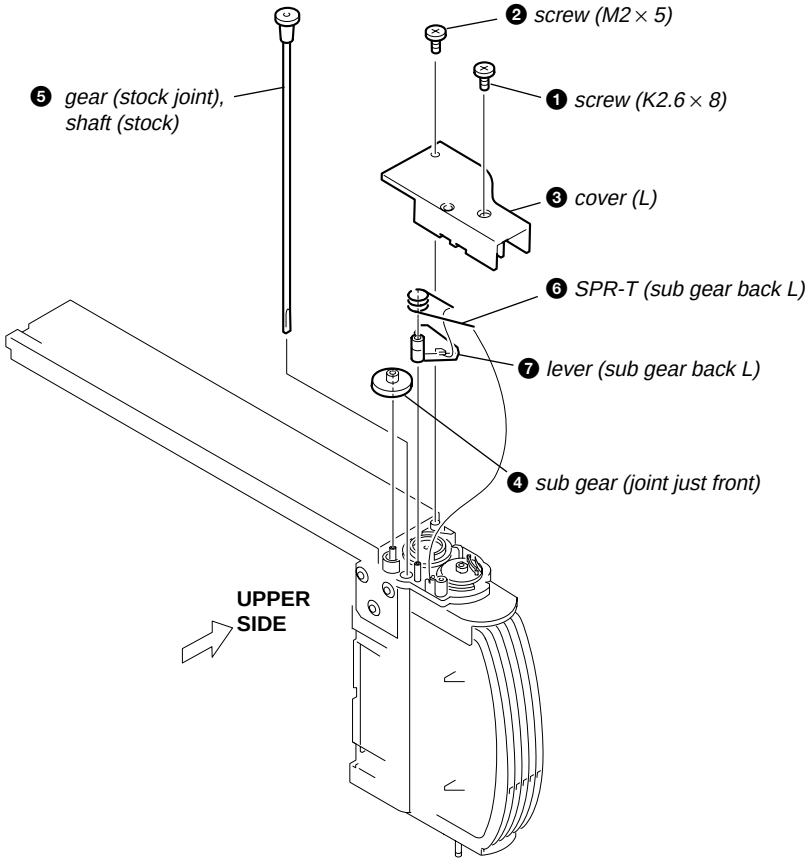
3-19. ARM (R)


❶ sub gear (joint just front)
❷ SPR-T (sub gear back R)
❸ lever (sub gear back R)
❺ gear (sub gear pin right)
❹ two washers (5.5)
❼ gear (stock joint)
❻ gear (stock rotary right)
❾ arm (R)
❽ two screws
(K2 × 5)

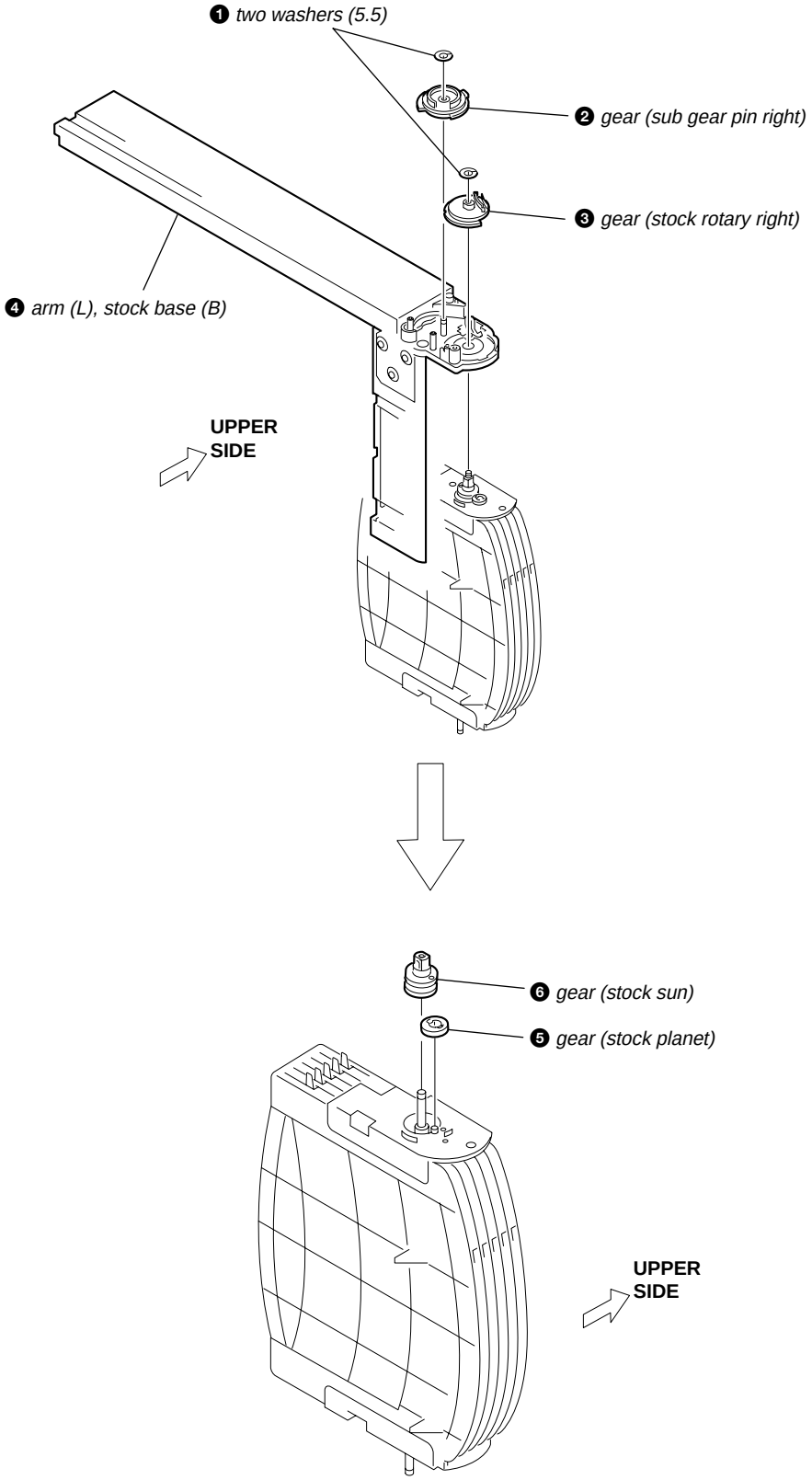
3-20. GEAR (STOCK PLANET) (RIGHT)



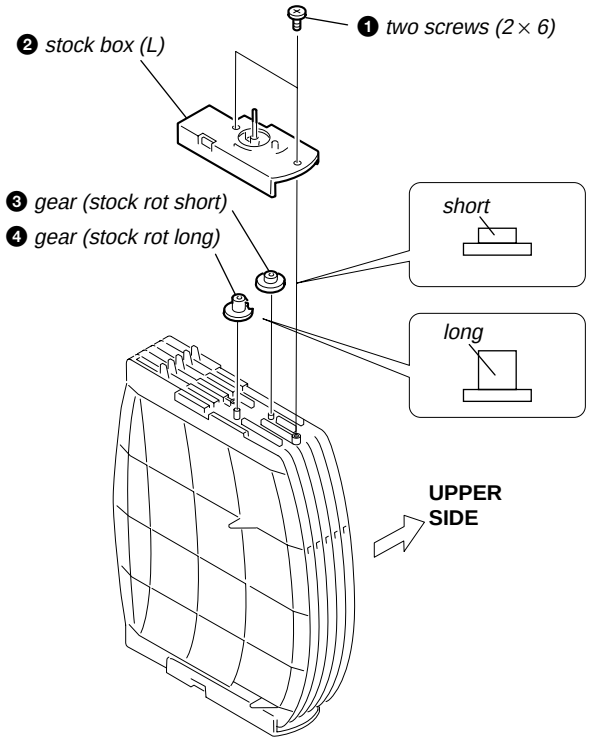
3-21. LEVER (SUB GEAR BACK L)



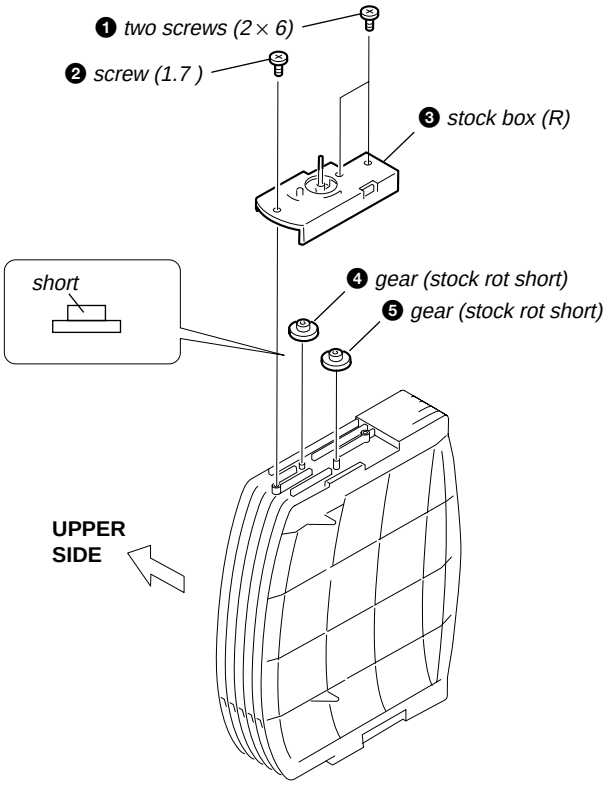
3-22. ARM (L)


❶ two washers (5.5)
❷ gear (sub gear pin right)
❸ gear (stock rotary right)
❹ arm (L), stock base (B)
UPPER SIDE
❻ gear (stock sun)
❺ gear (stock planet)
UPPER SIDE

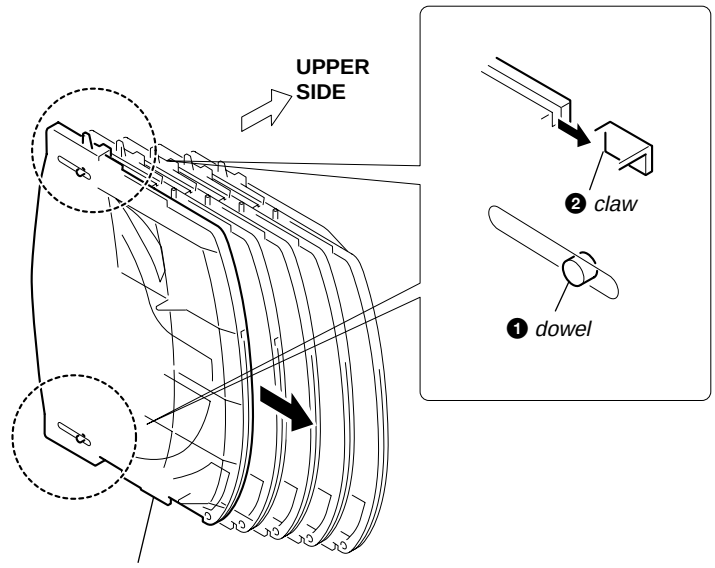
3-23. GEAR (STOCK ROT LONG) (LEFT)



3-24. GEAR (STOCK ROT SHORT) (RIGHT)

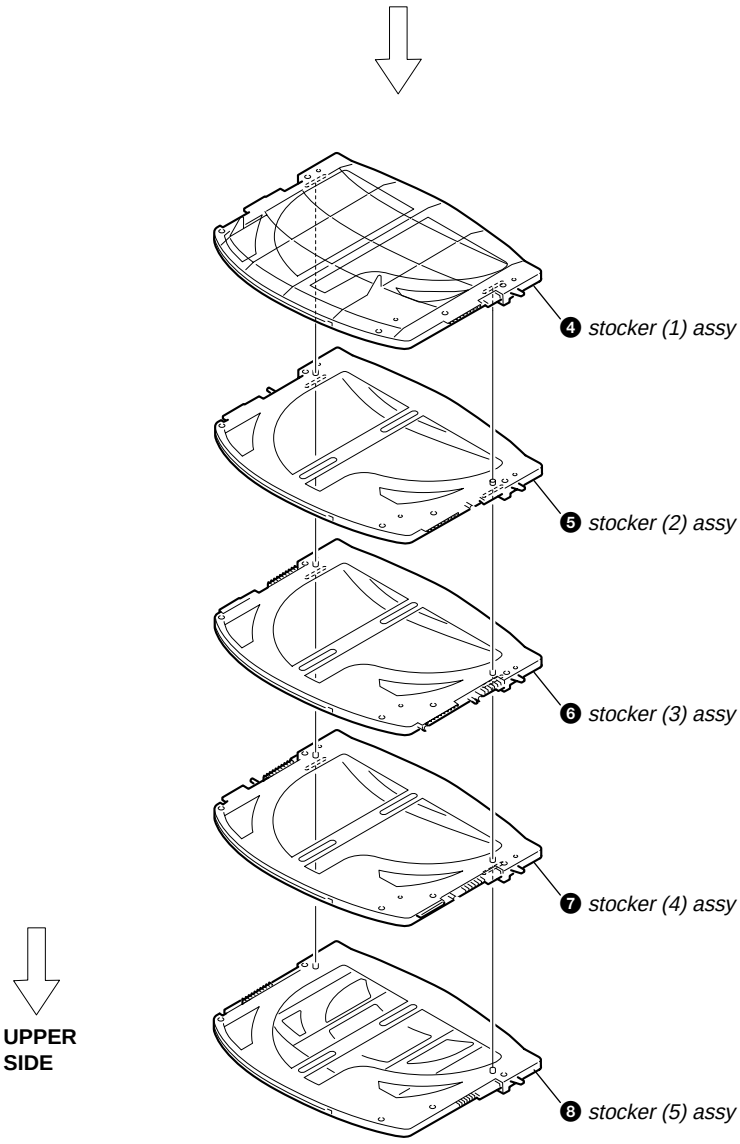


3-25. STOCKER (1) ASSY TO STOCKER (5) ASSY

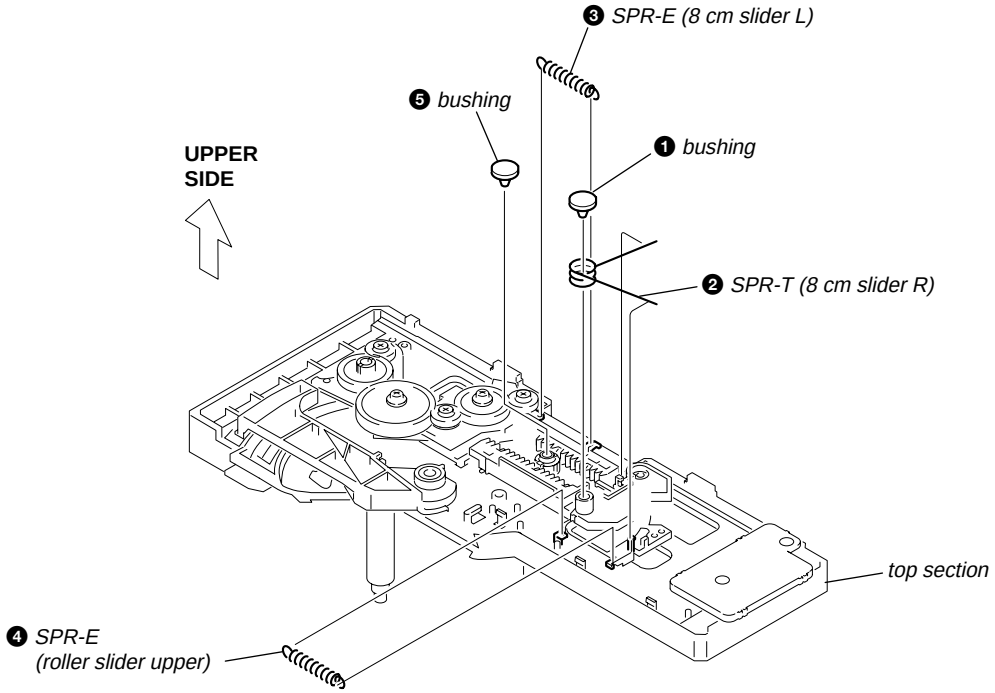


❸ *Remove the stocker (1) assy in the direction of the arrow.*

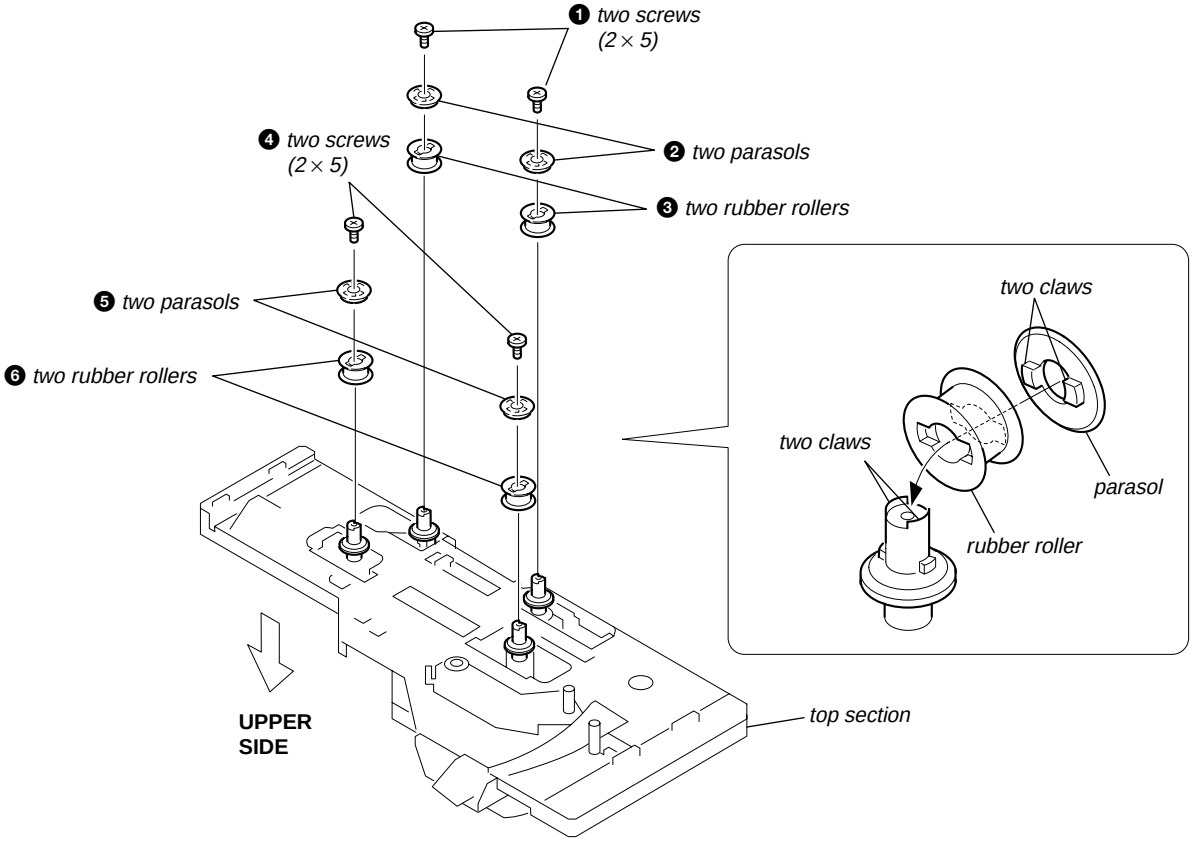
Repeat the steps ❶ *to* ❶*, when removing the part (2), (3), (4) and (5) of the stocker assy.*



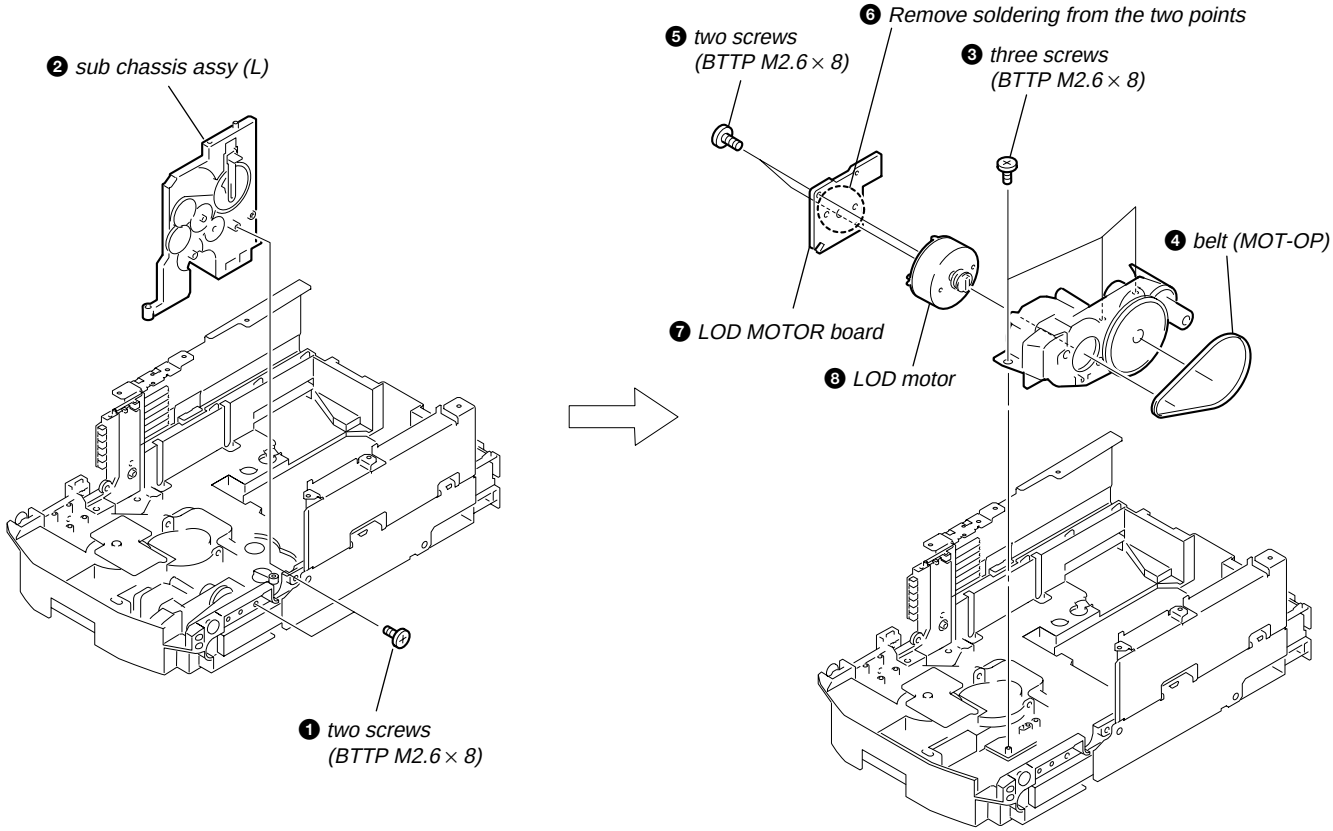
3-26. SPR-E (ROLLER SLIDER UPPER) (TOP SECTION)



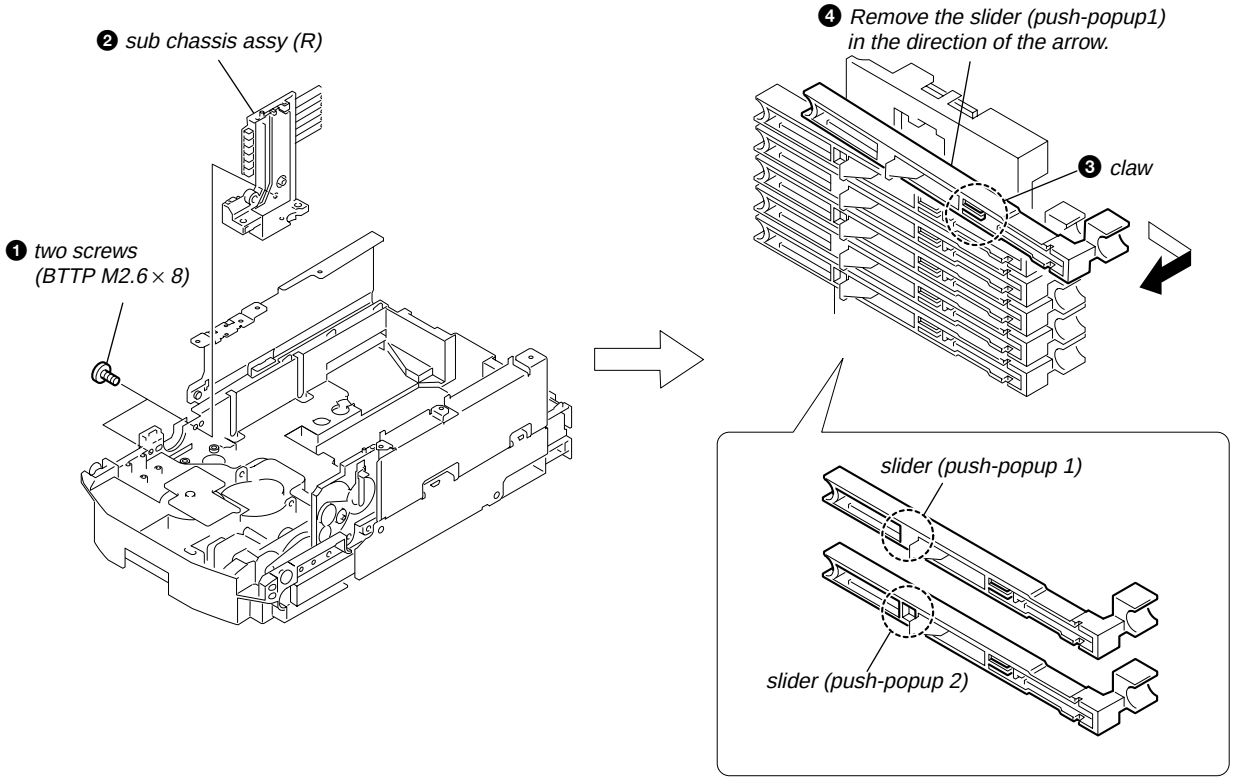
3-27. RUBBER ROLLER (TOP SECTION)



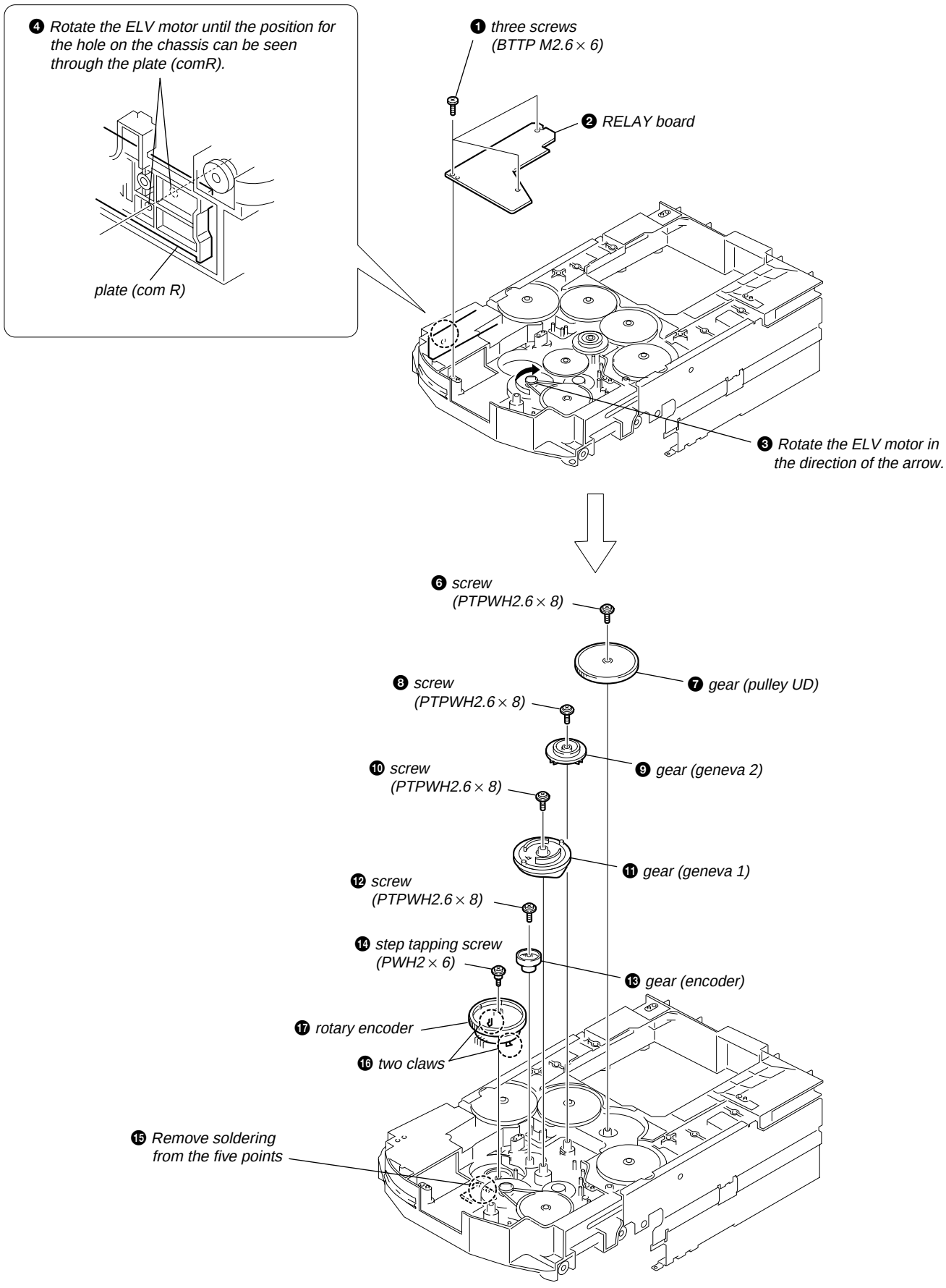
3-28. LOD MOTOR



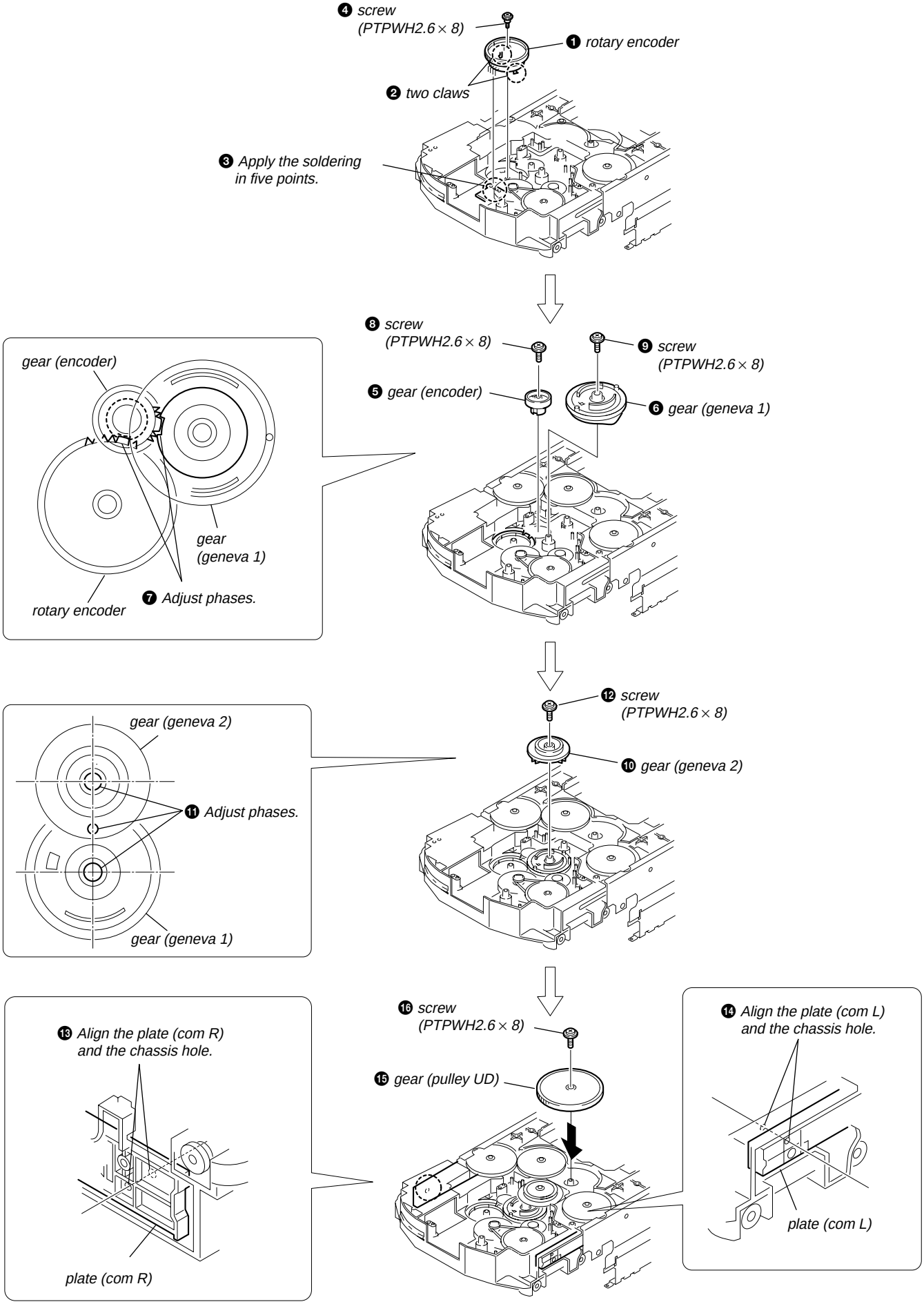
3-29. SLIDER (PUSH-POPUP)



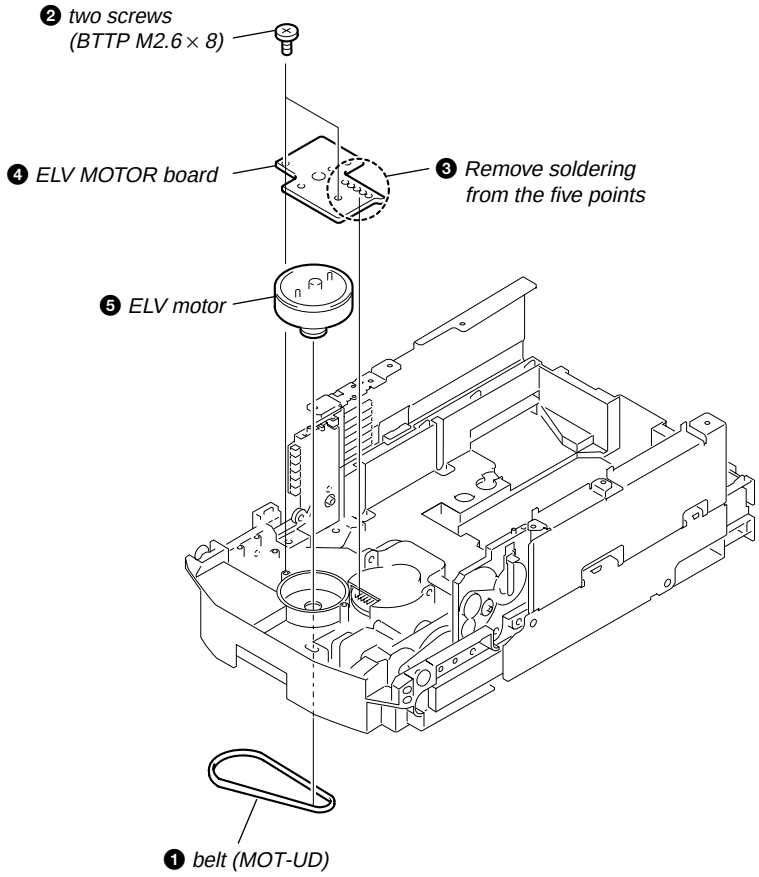
3-30. ROTARY ENCODER

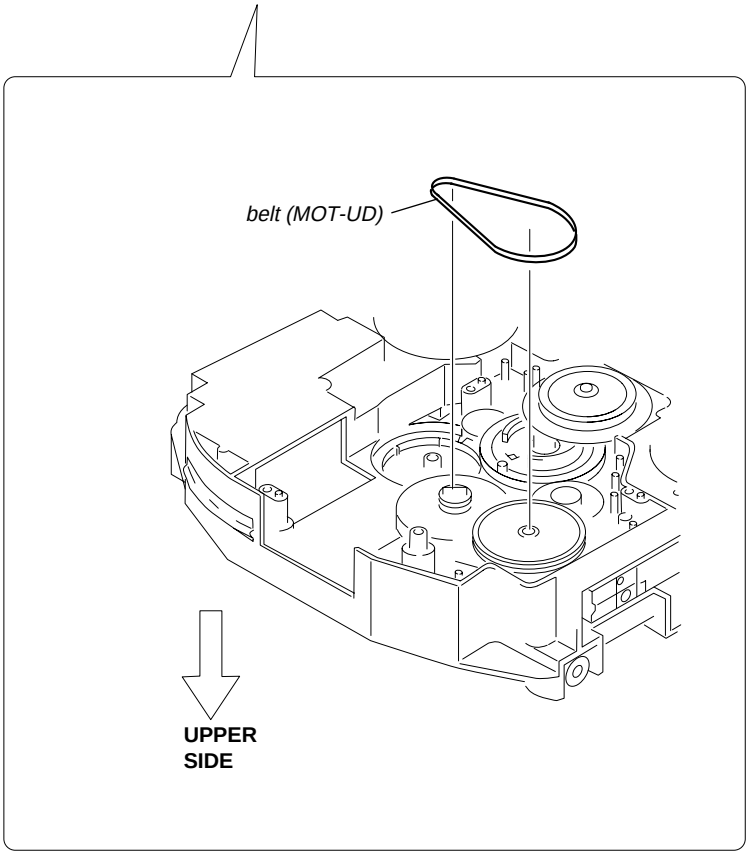


3-31. ASSEMBLING OF THE ROTARY ENCODER

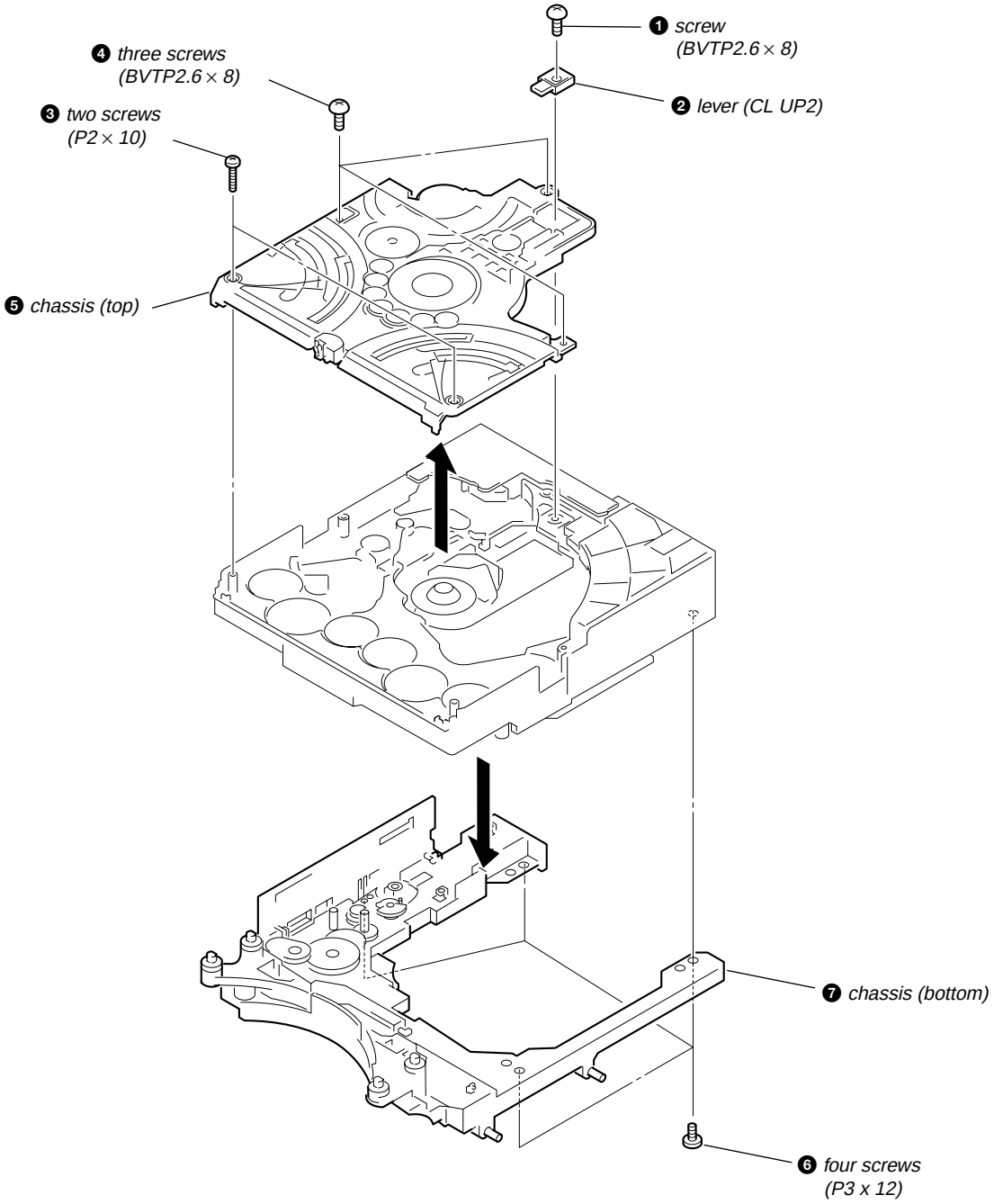


3-32. ELV MOTOR

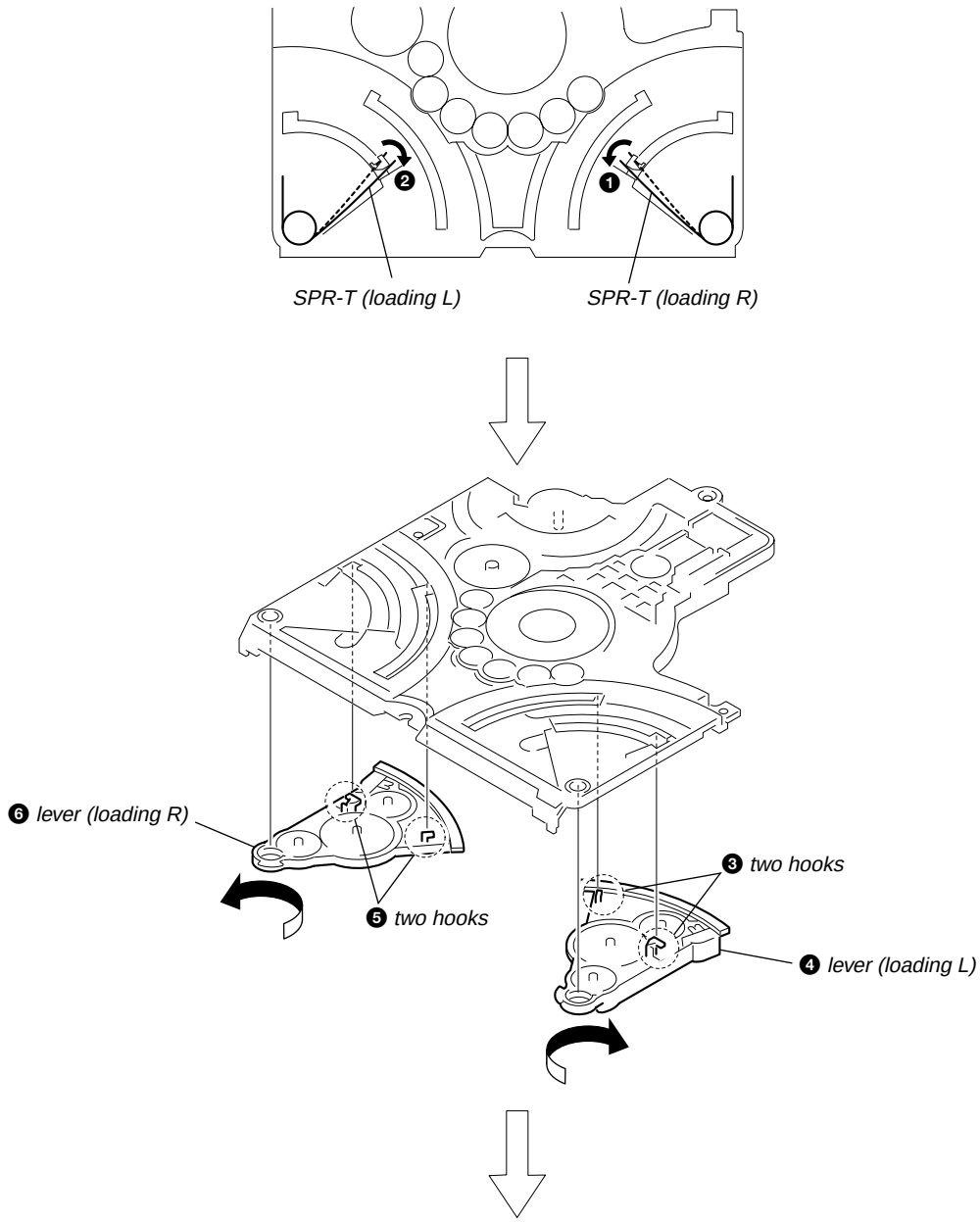




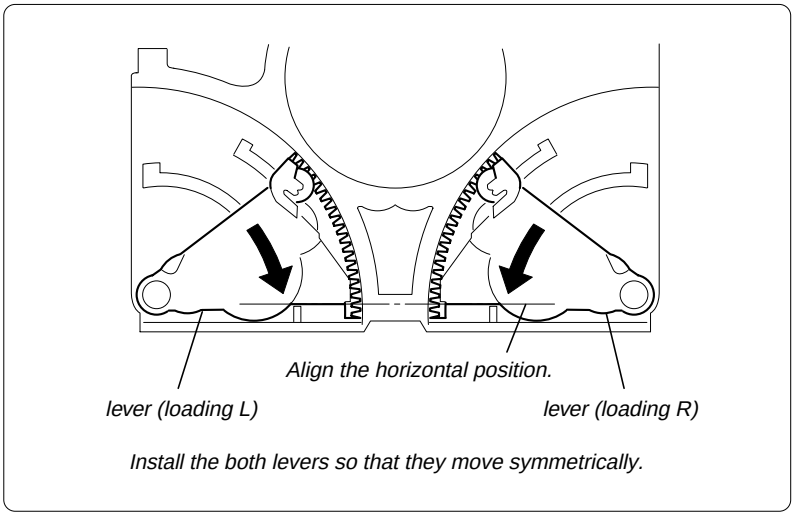
3-33. CHASSIS (TOP), CHASSIS (BOTTOM)



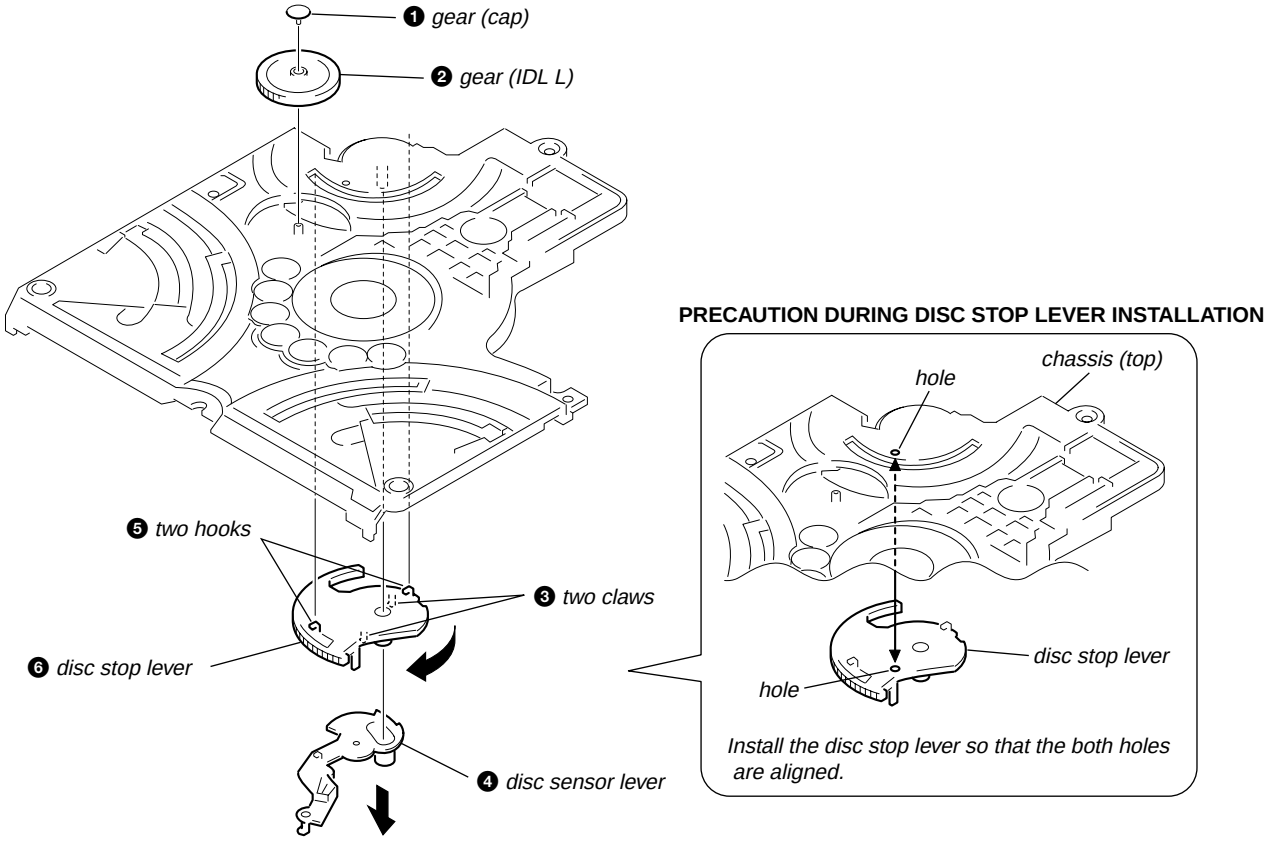
3-34. LEVER (LOADING R, LOADING L)



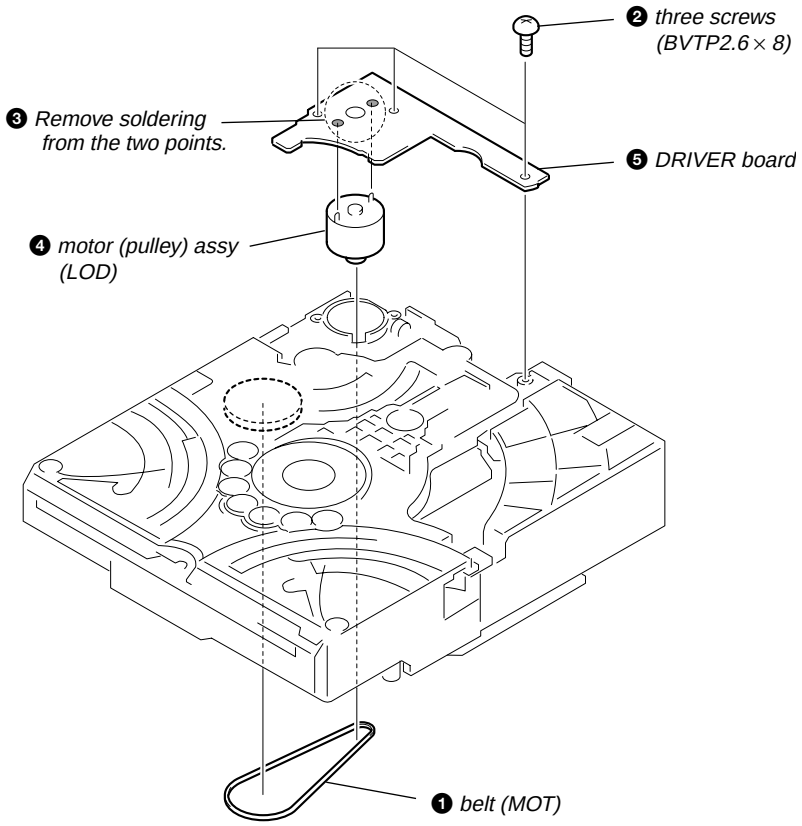
PRECAUTION DURING LEVER (LOADING R/L) INSTALLATION



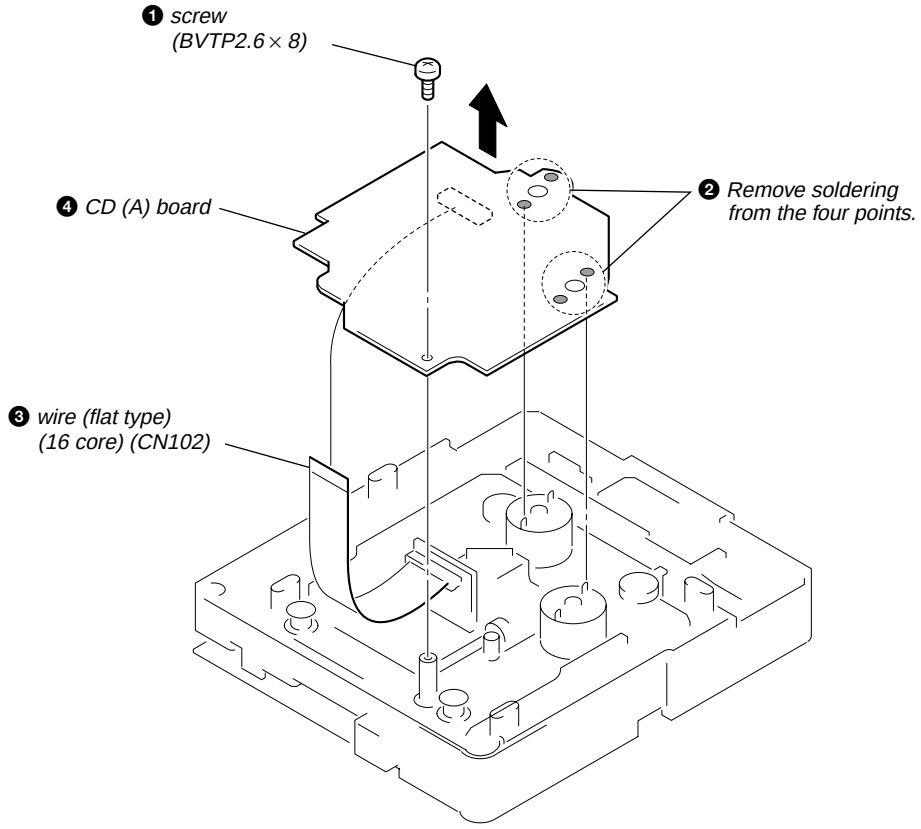
3-35. DISC STOP LEVER



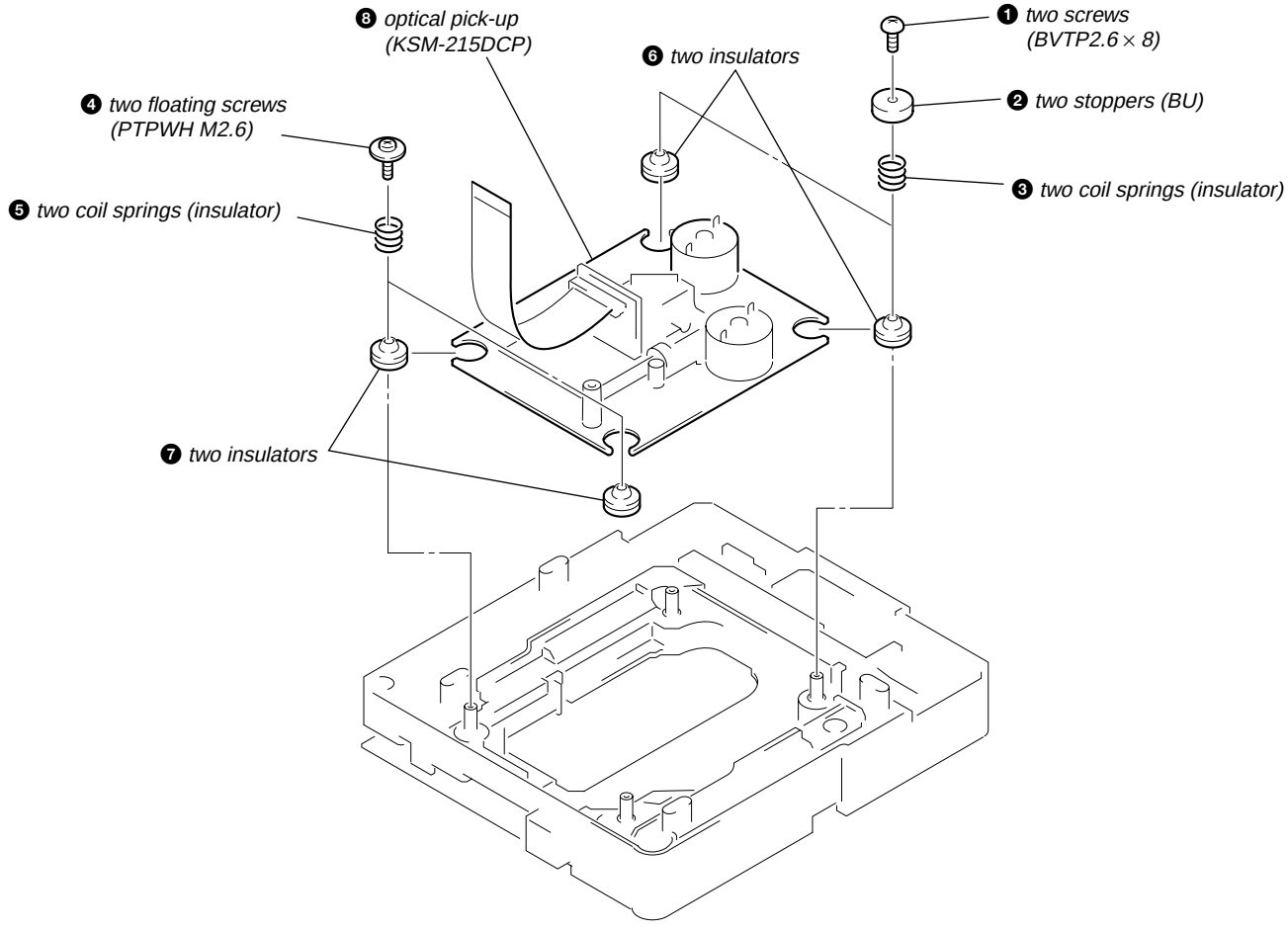
3-36. DRIVER BOARD



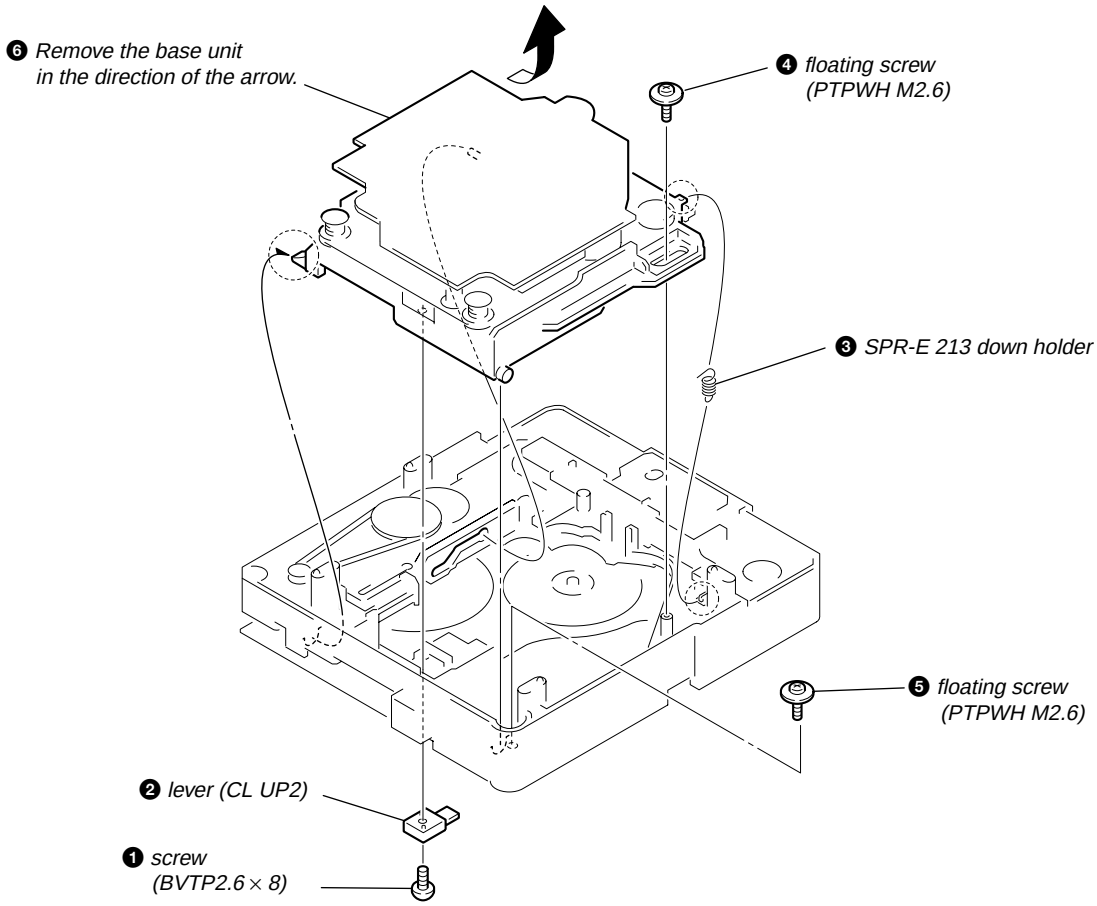
3-37. CD BOARD (A)



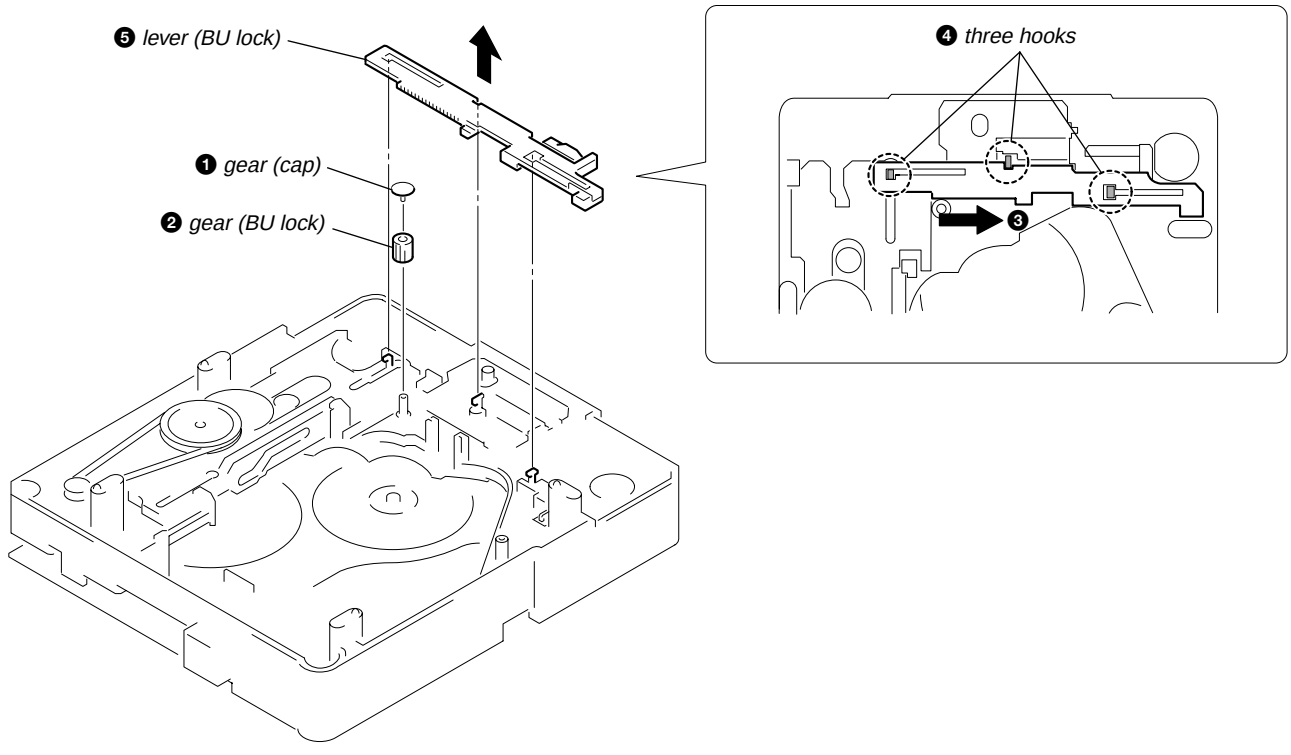
3-38. OPTICAL PICK-UP (KSM-215DCP)



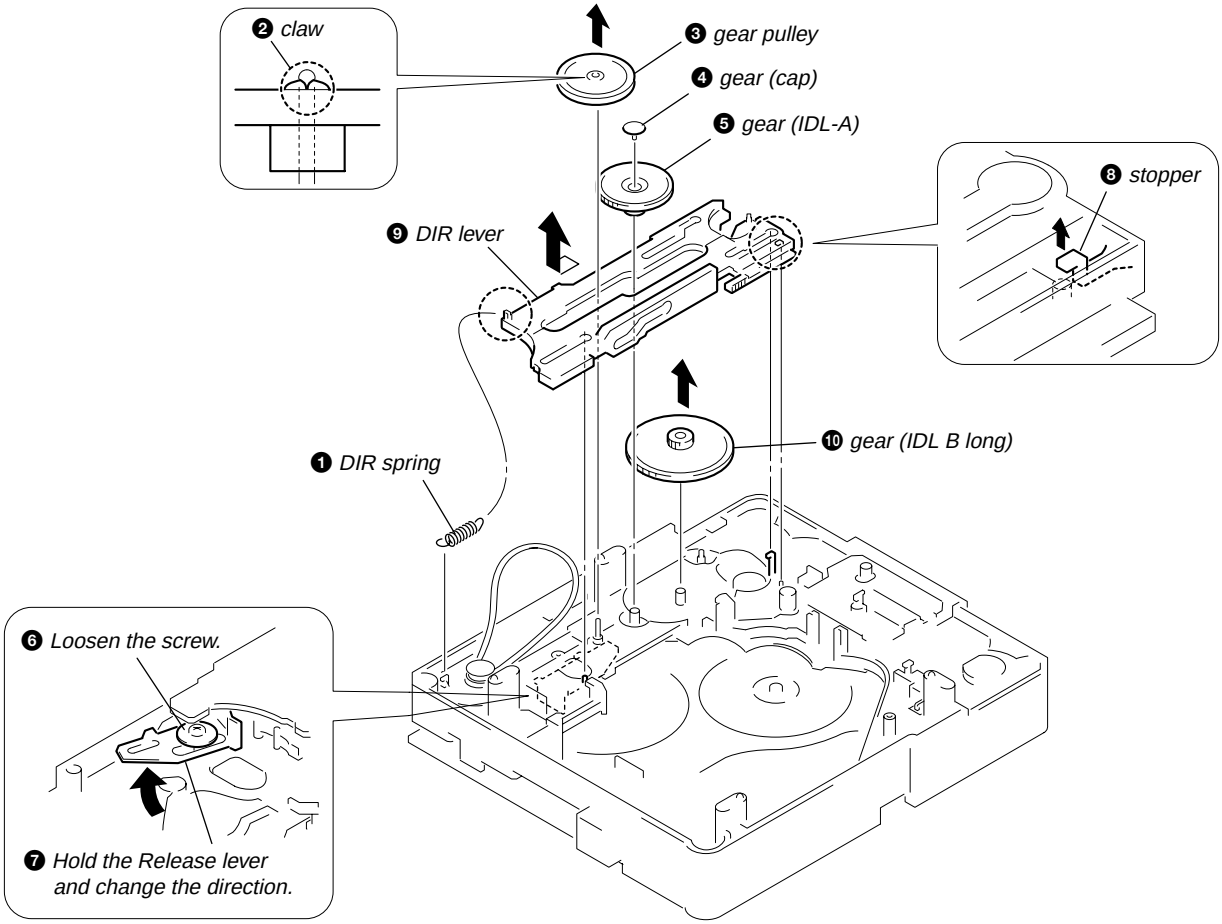
3-39. BASE UNIT SECTION



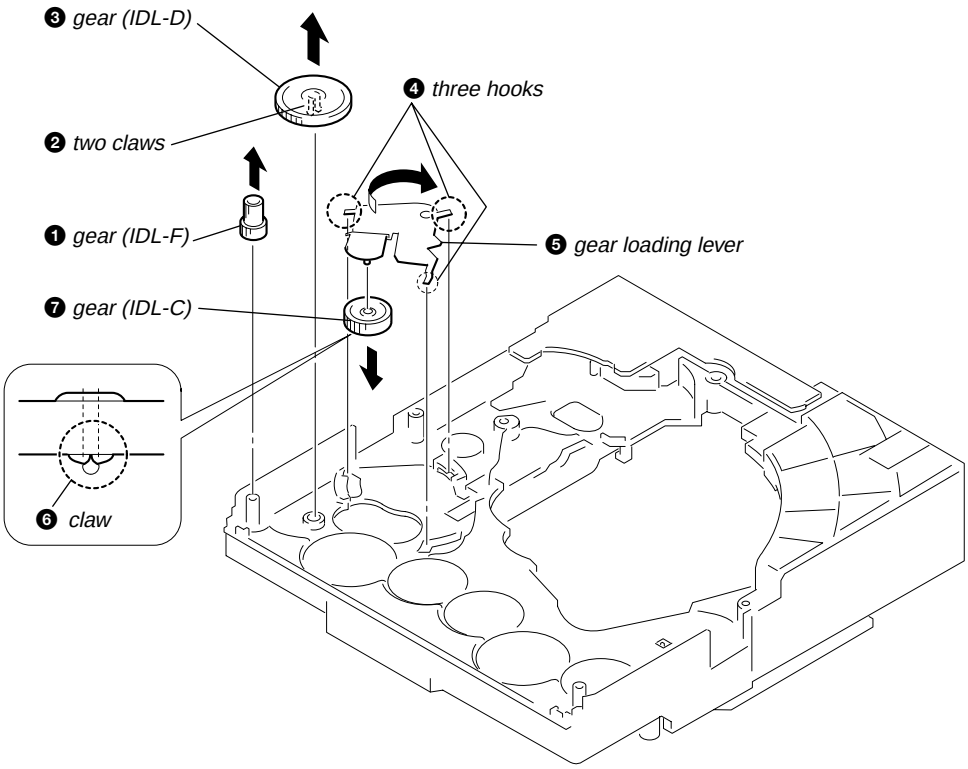
3-40. LEVER (BU LOCK)



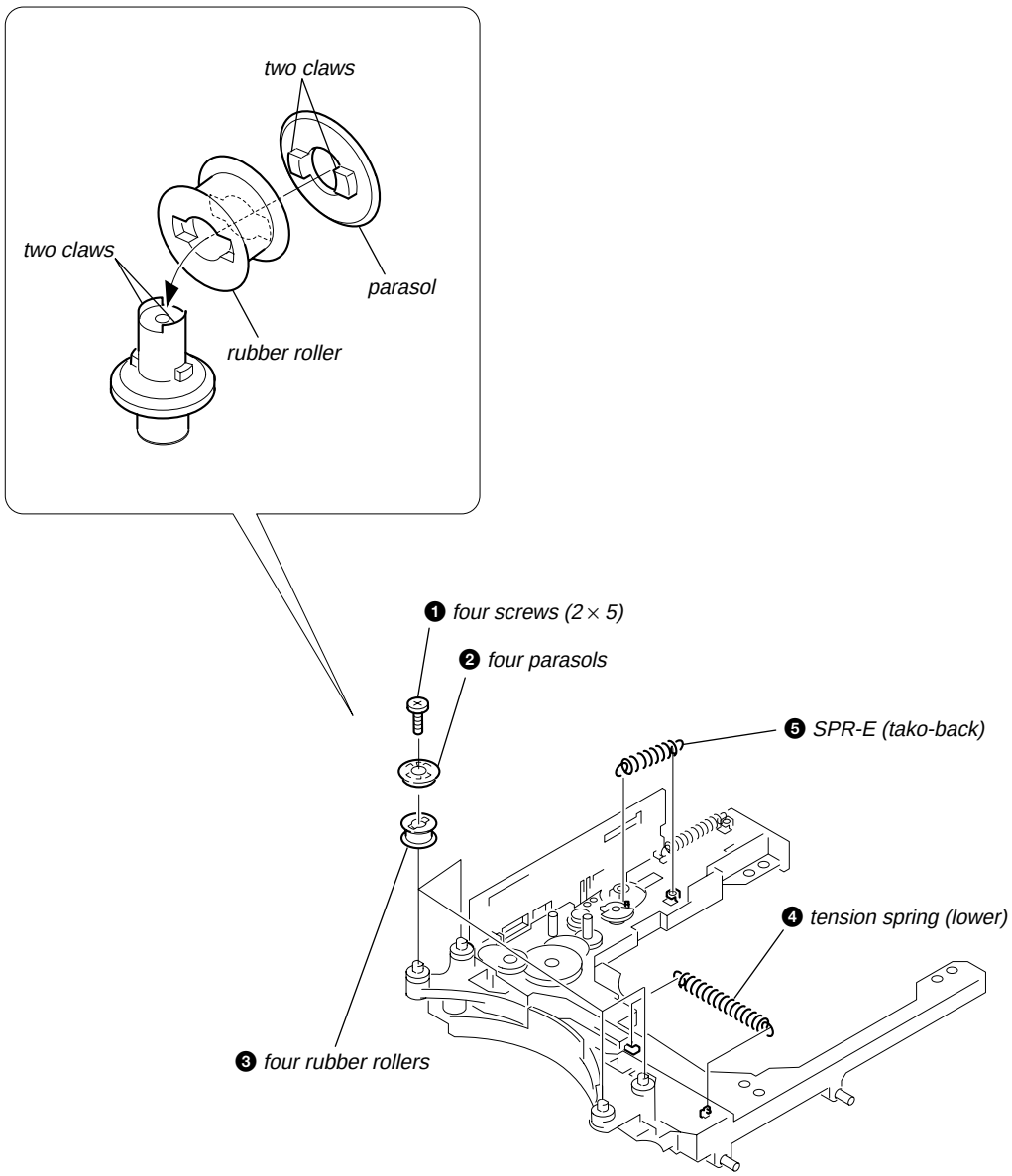
3-41. GEAR (IDL-B)



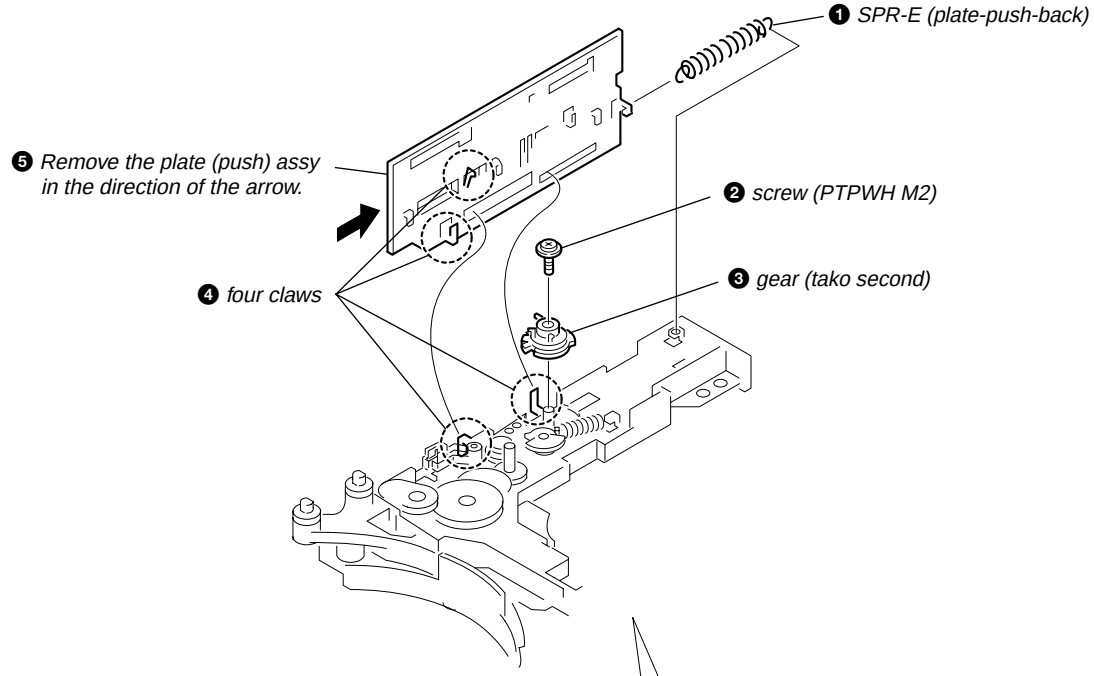
3-42. GEAR (IDL-C)



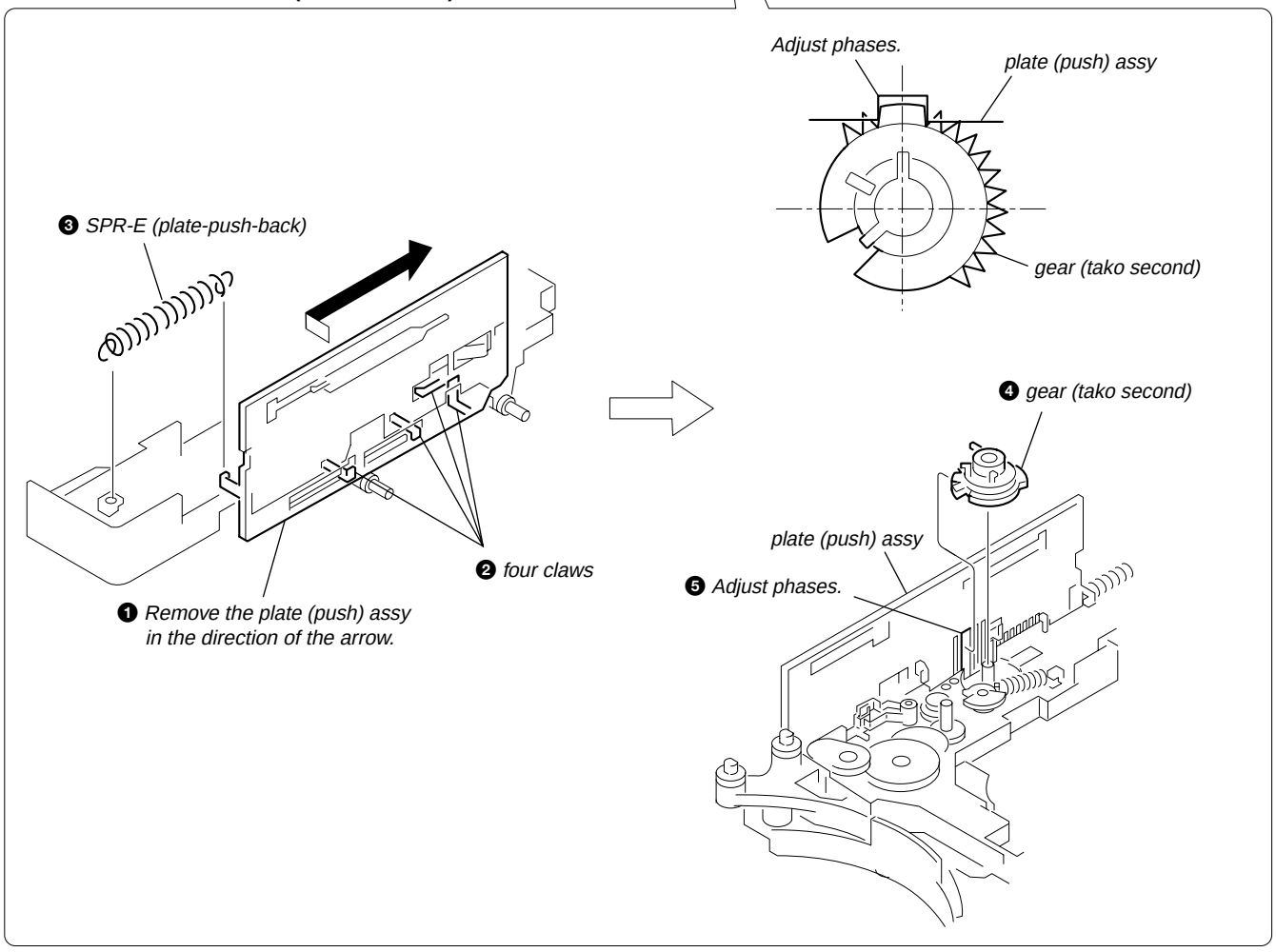
3-43. SPR-E (TAKO-BACK)



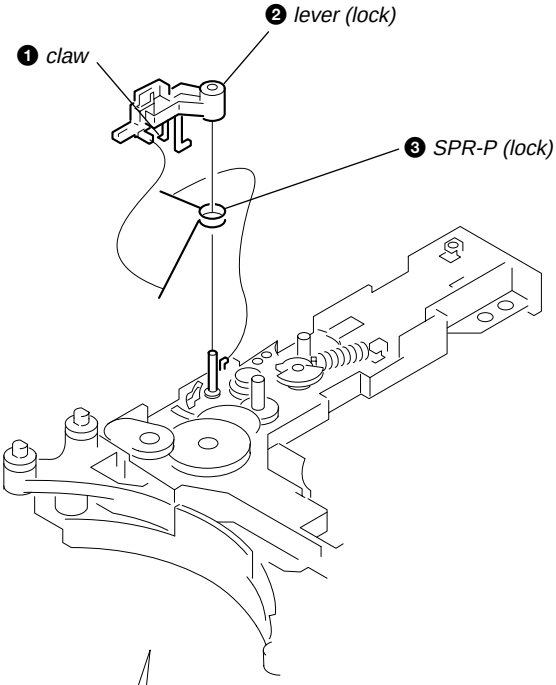
3-44. PLATE (PUSH) ASSY



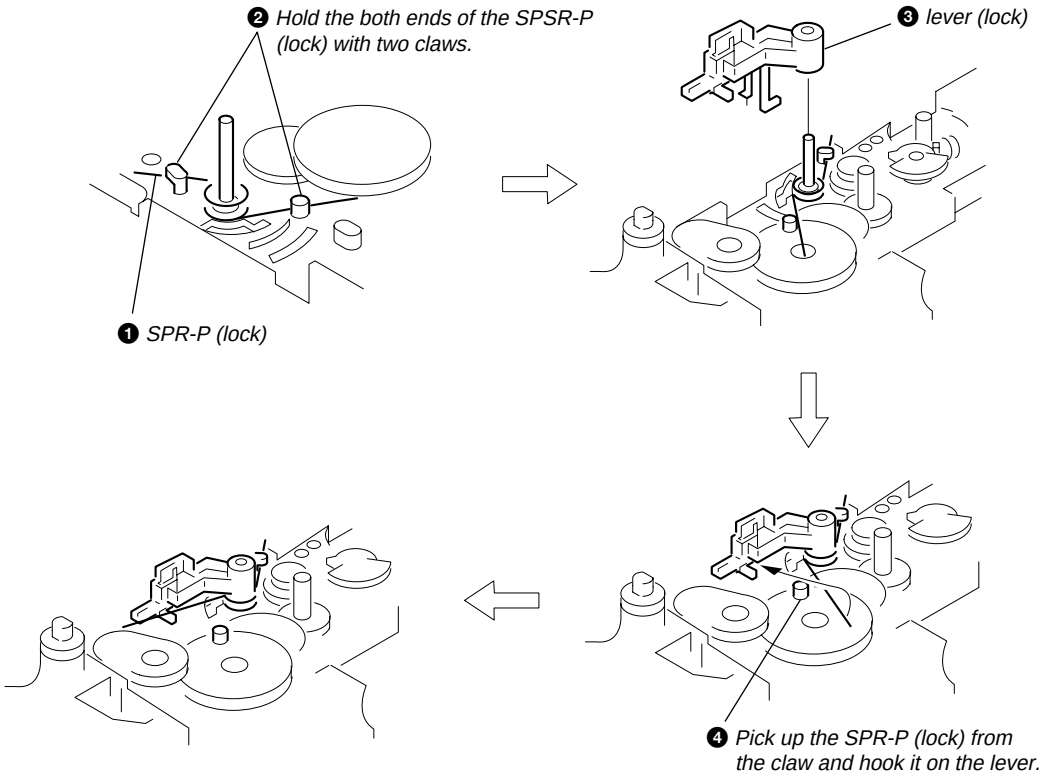
PRECAUTION DURING GEAR (TAKO SECOND) INSTALLATION



3-45. SPR-P (LOCK)



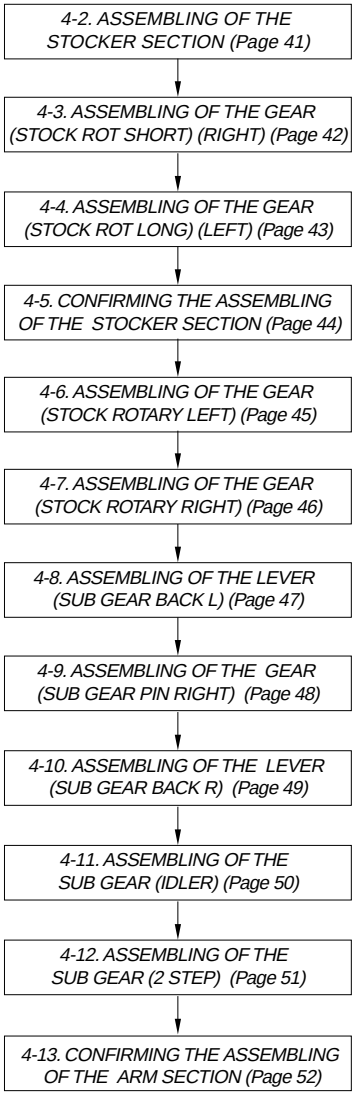
PRECAUTION DURING LEVER INSTALLATION



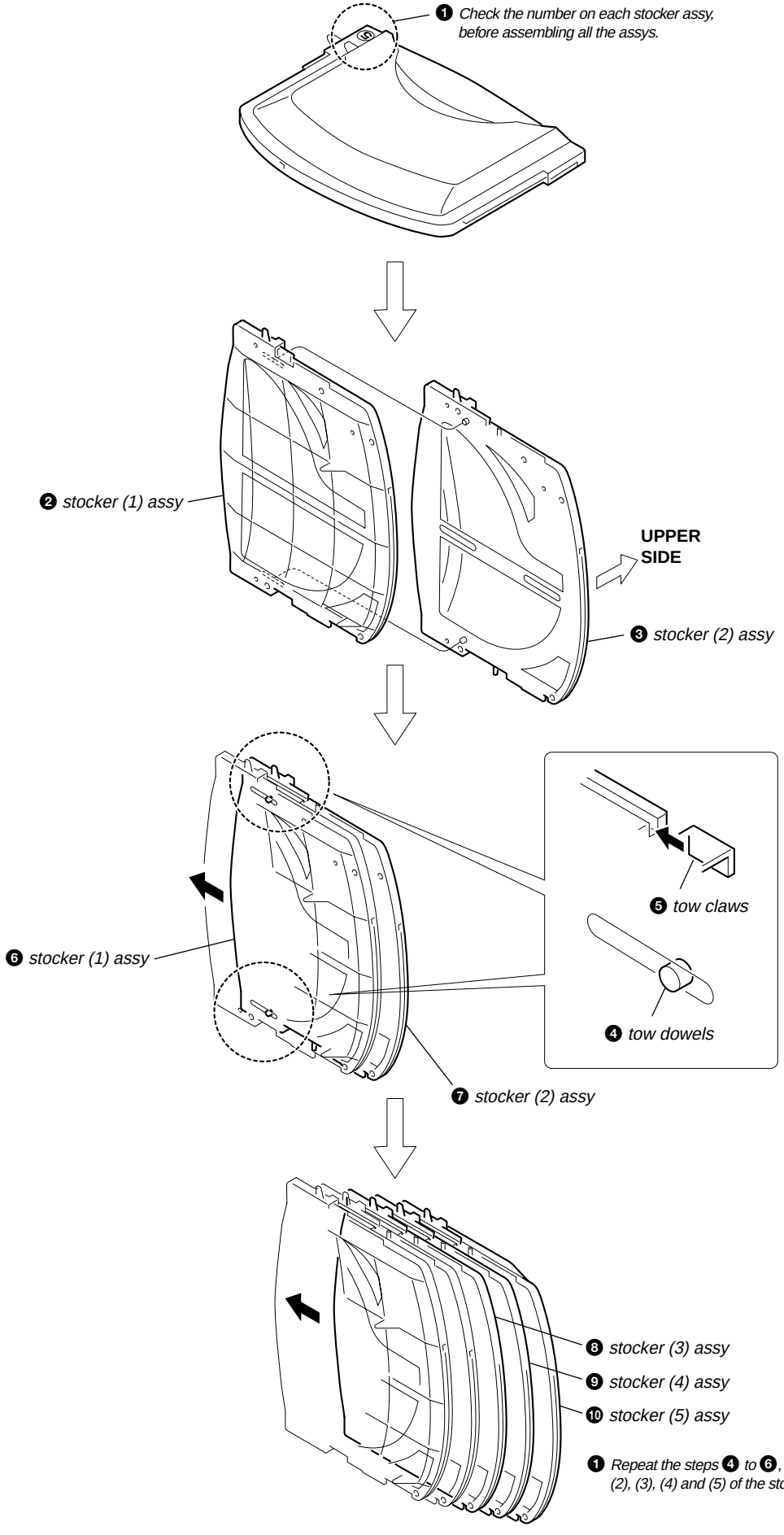
SECTION 4
ASSEMBLY

• This is can be assemble according to the following sequence.

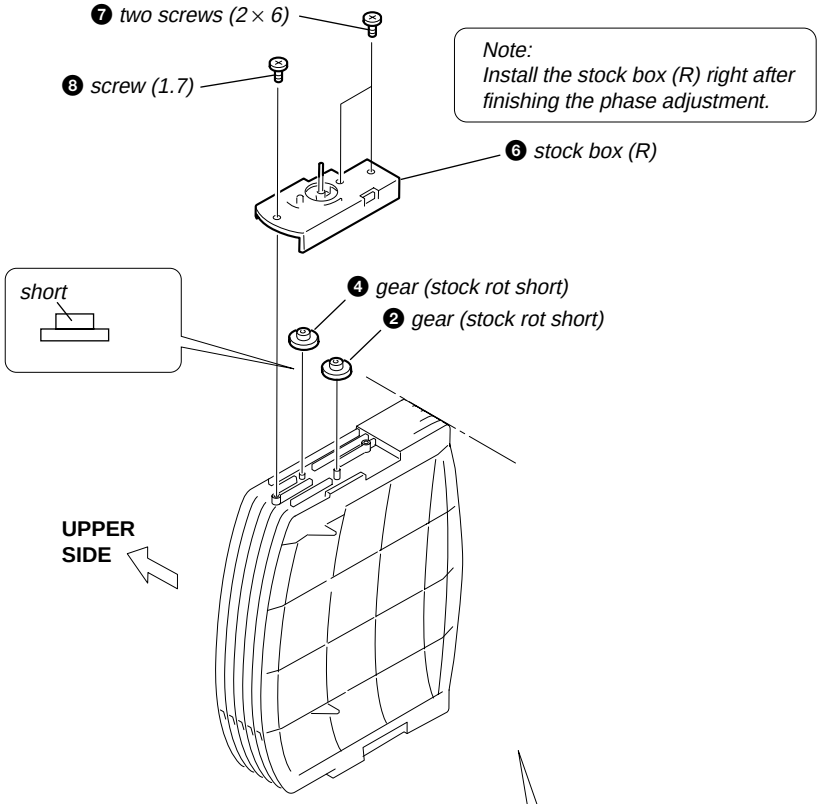
4-1. ASSEMBLY FLOW



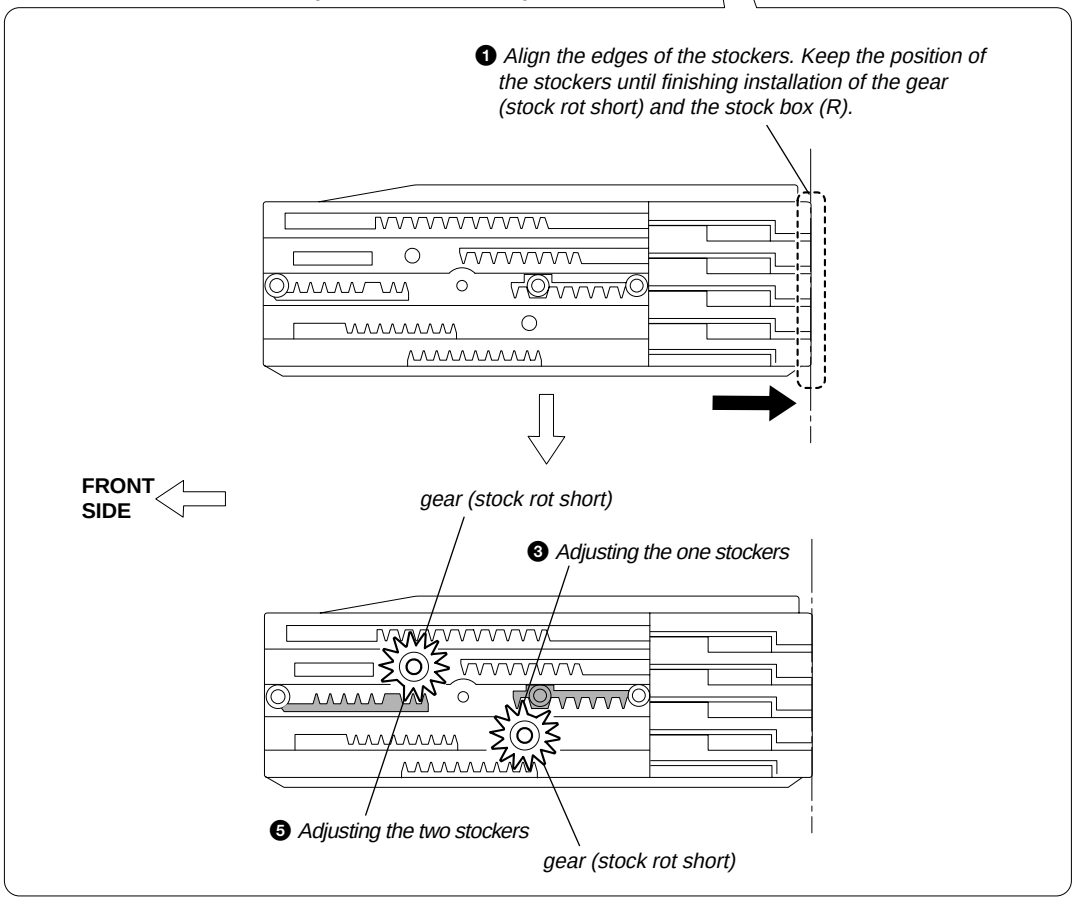
4-2. ASSEMBLING OF THE STOCKER SECTION



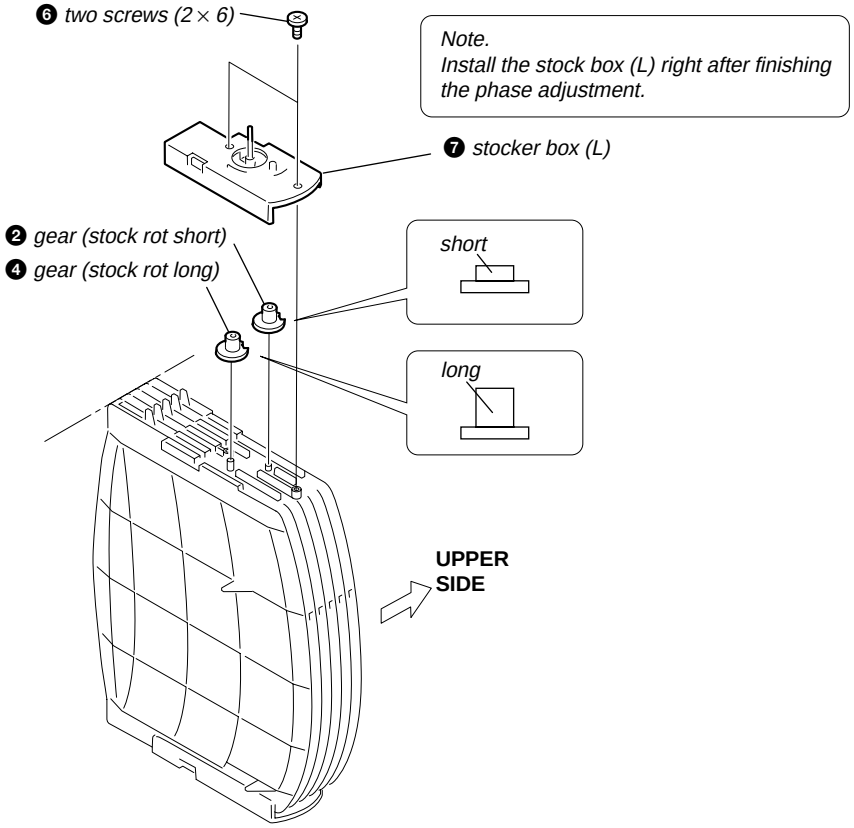
4-3. ASSEMBLING OF THE GEAR (STOCK ROT SHORT) (RIGHT)



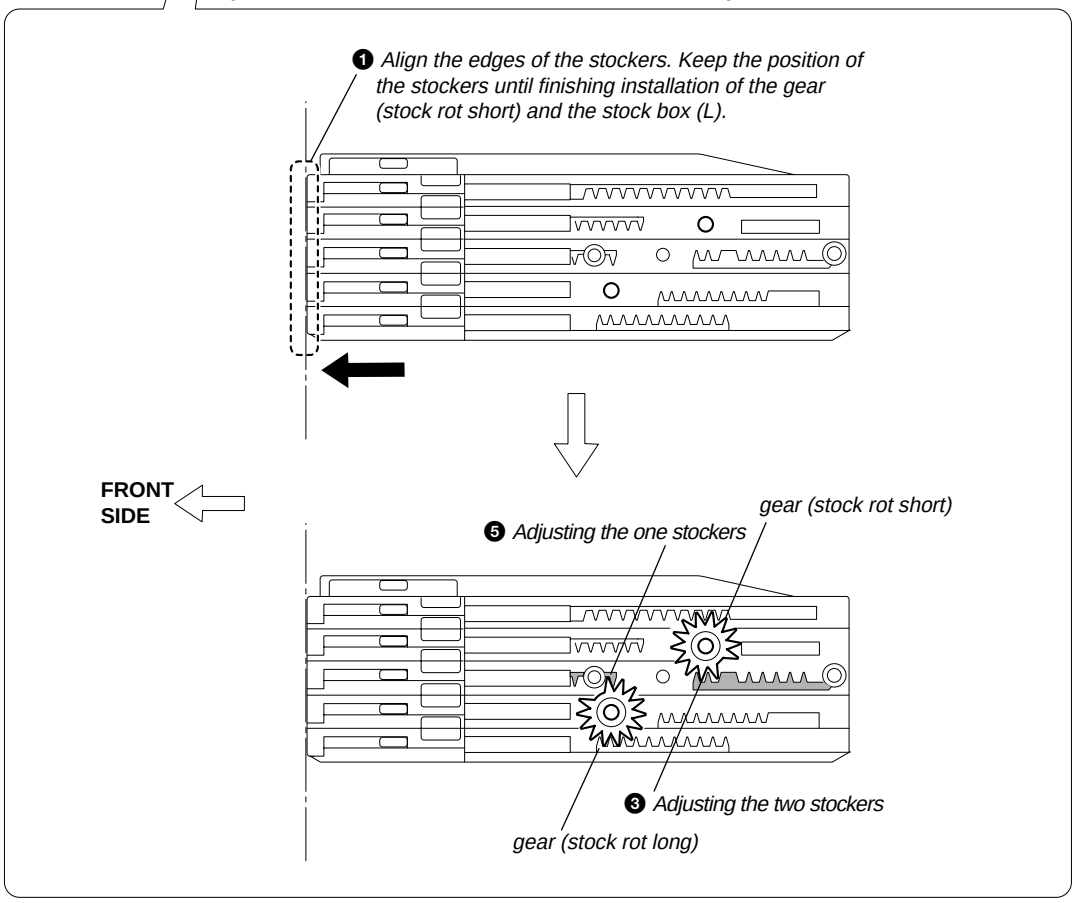
PRECAUTION DURING GEAR (STOCK ROT SHORT) INSTALLATION



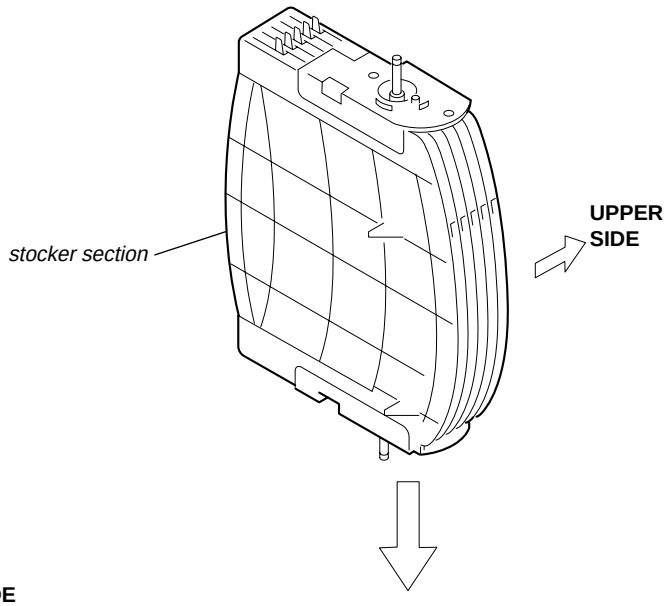
4-4. ASSEMBLING OF THE GEAR (STOCK ROT LONG) (LEFT)



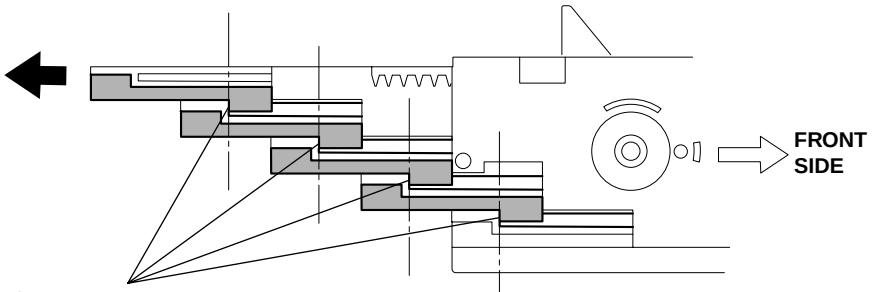
PRECAUTION DURING GEAR (STOCK ROT SHORT, STOCK ROT SHORT LONG) INSTALLATION



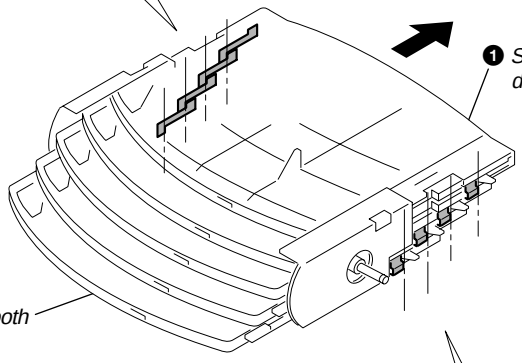
4-5. CONFIRMING THE ASSEMBLING OF THE STOCKER SECTION



STOCKER ASSY (R) SIDE



❸ *Confirm that each claw contacts uniformly at the respective stop positions of the stocker assy (1) to the stocker assy (5).*

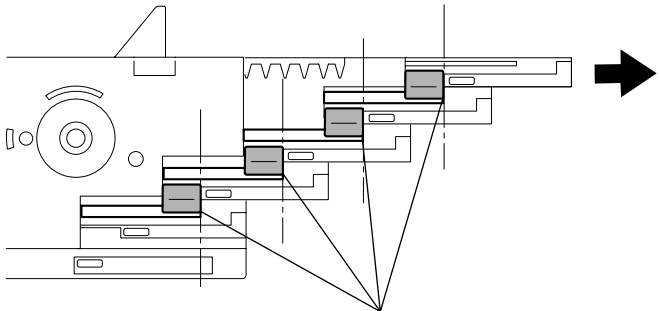


❶ *Slide the stocker assy in the direction of the arrow.*

UPPER SIDE

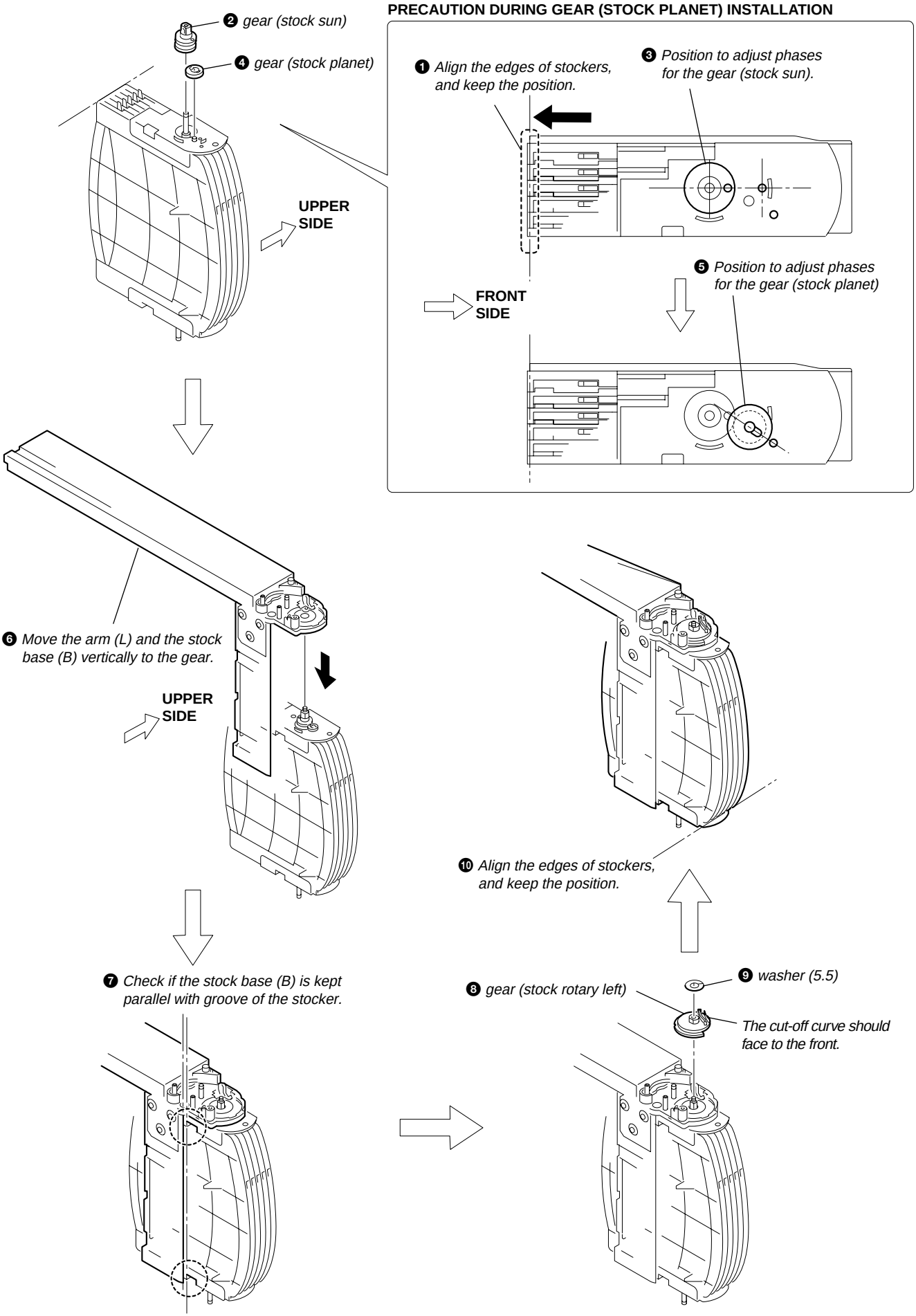
❹ *Confirm the stocker assys move smooth by sliding the stocker assys (1) to (5)*

STOCKER ASSY (L) SIDE

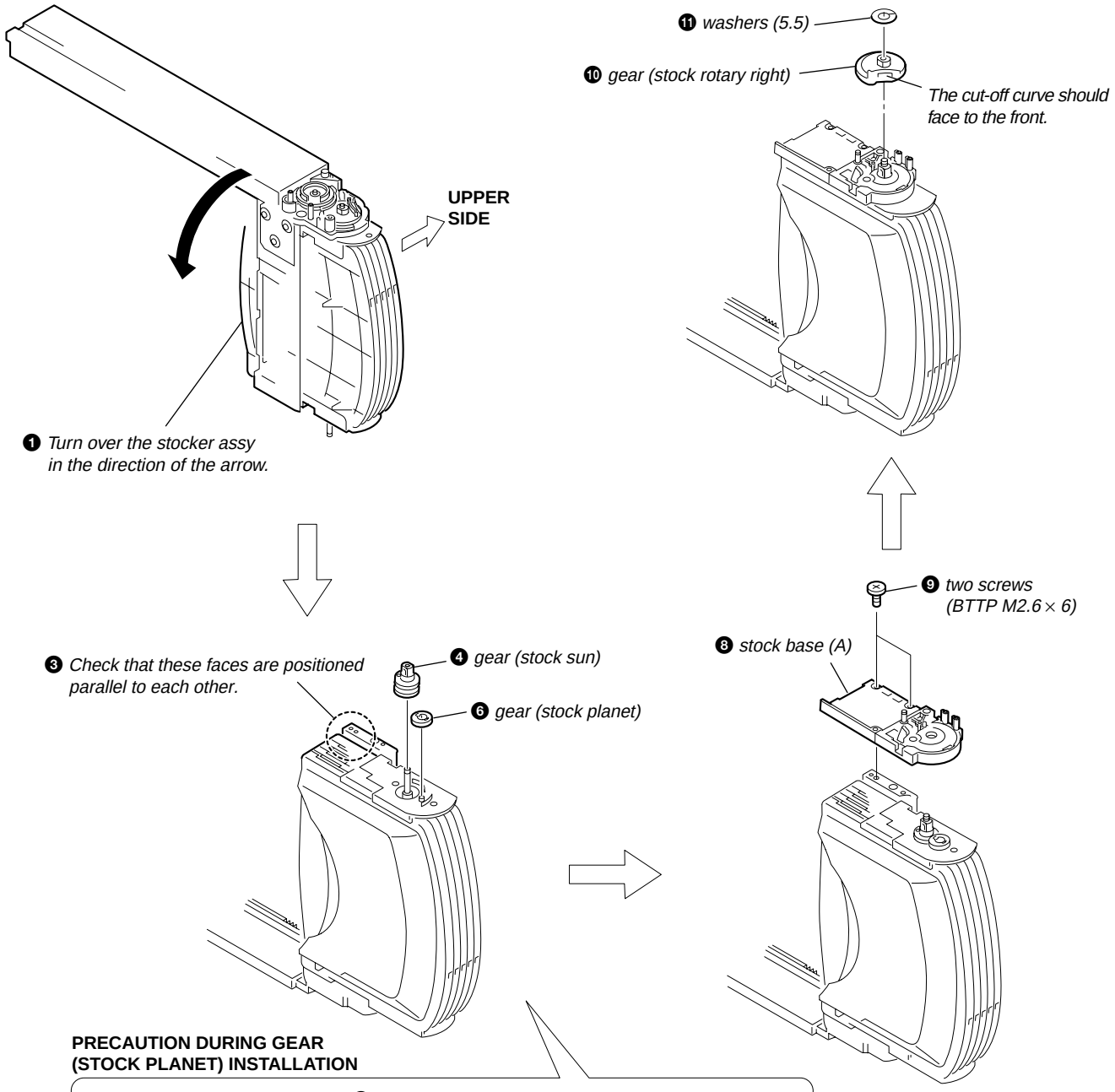


❷ *Confirm that each claw contacts uniformly at the respective stop positions of the stocker assy (1) to the stocker assy (5).*

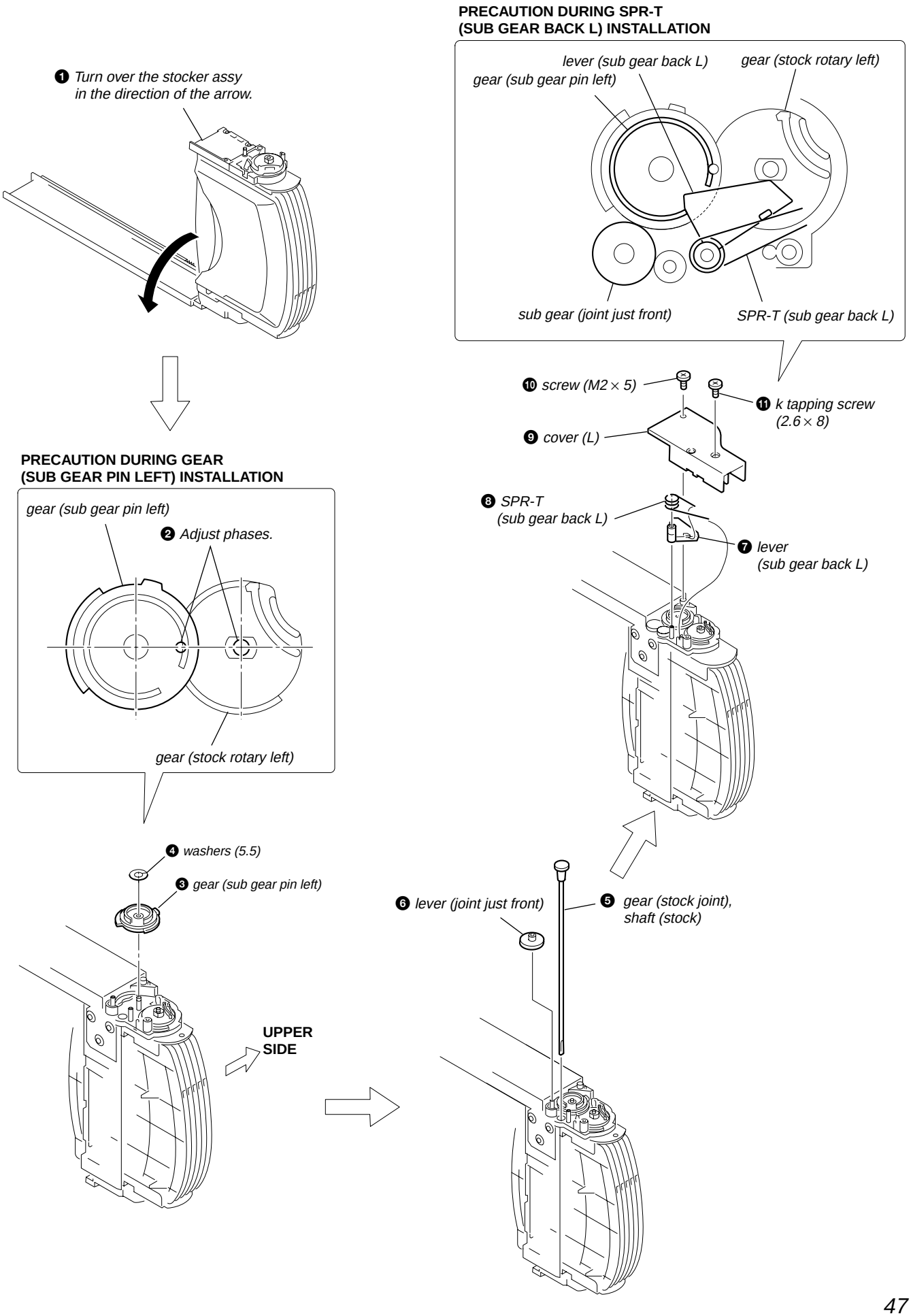
4-6. ASSEMBLING OF THE GEAR (STOCK ROTARY LEFT)



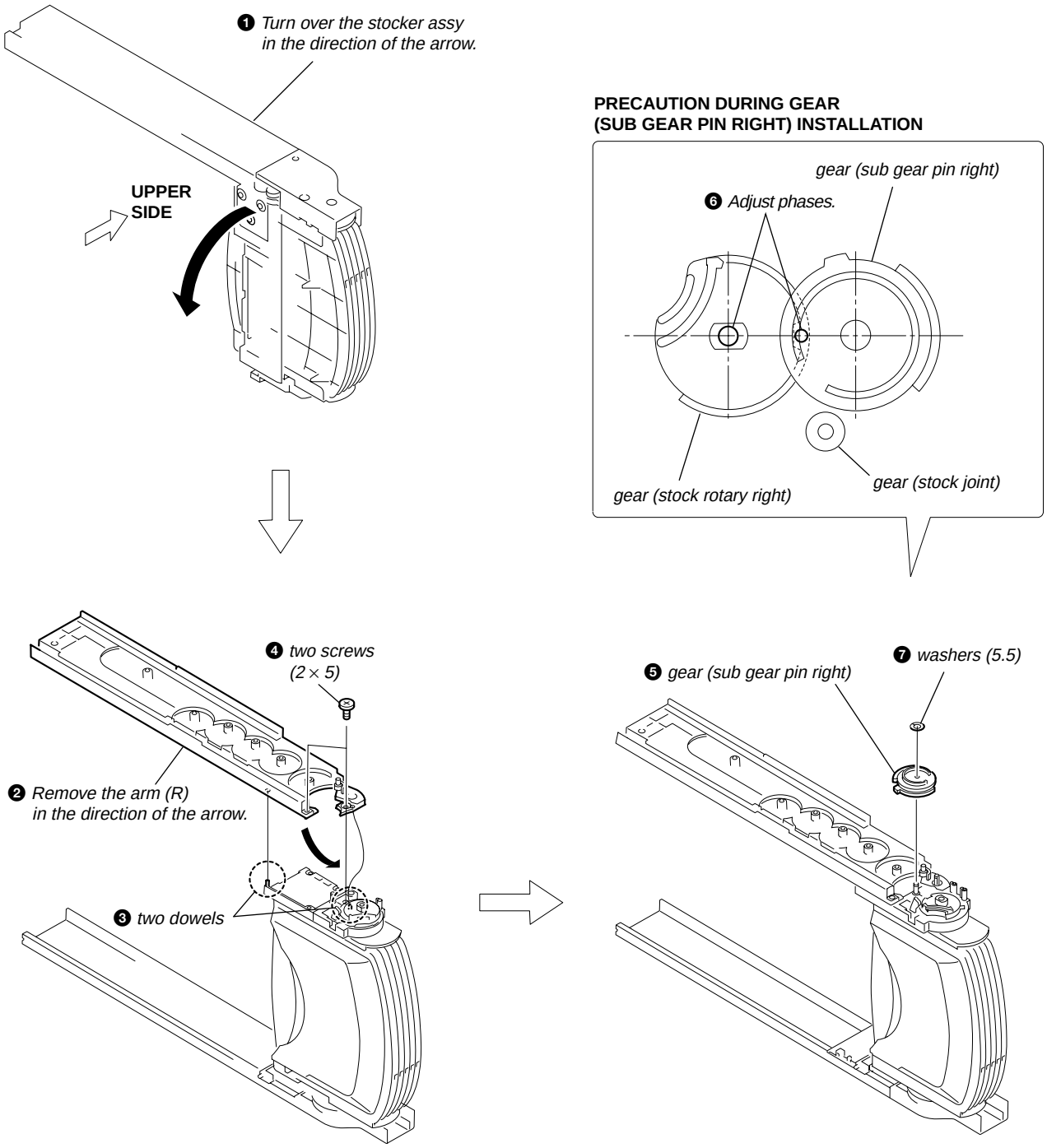
4-7. ASSEMBLING OF THE GEAR (STOCK ROTARY RIGHT)



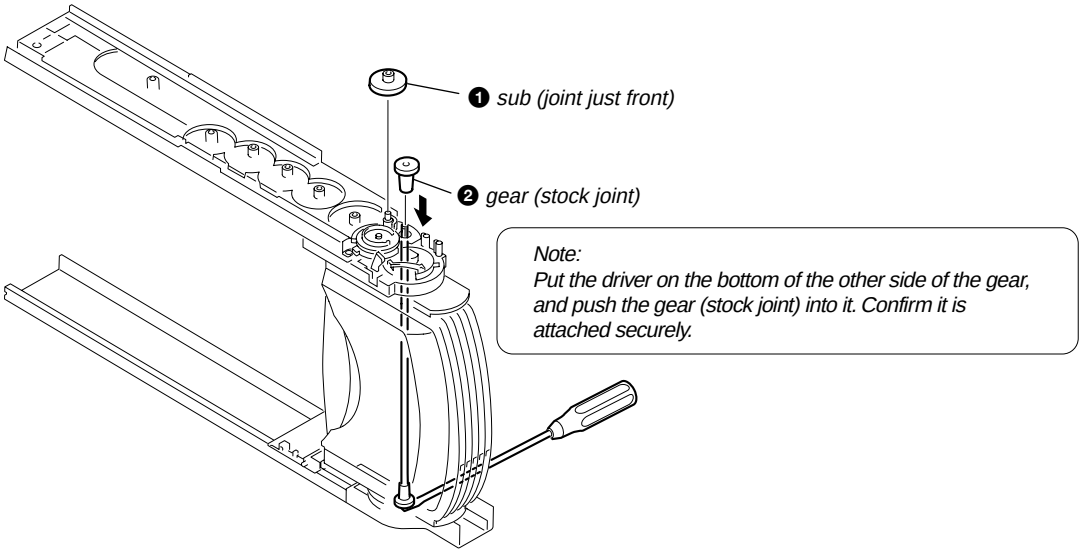
4-8. ASSEMBLING OF THE LEVER (SUB GEAR BACK L)

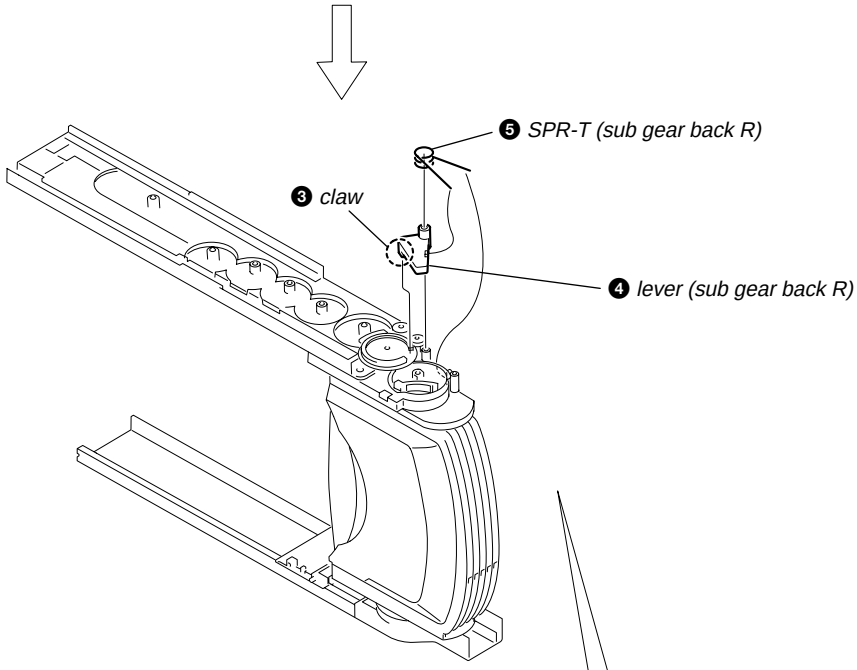


4-9. ASSEMBLING OF THE GEAR (SUB GEAR PIN RIGHT)

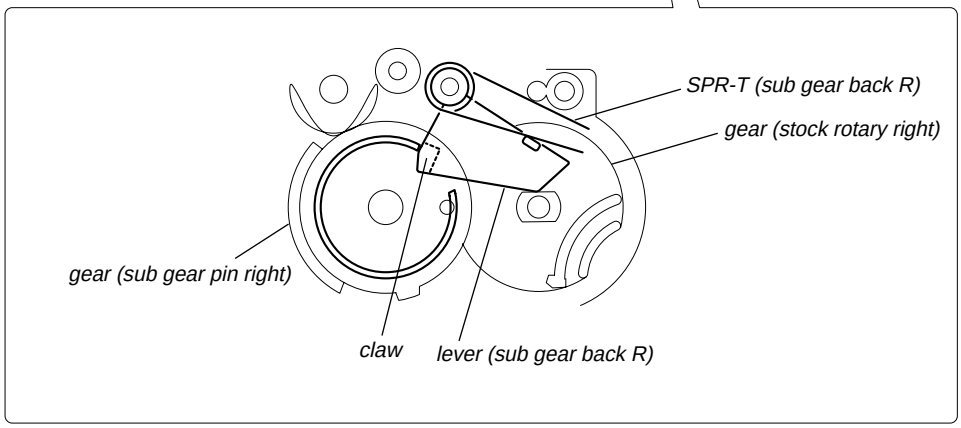


4-10. ASSEMBLING OF THE LEVER (SUB GEAR BACK R)

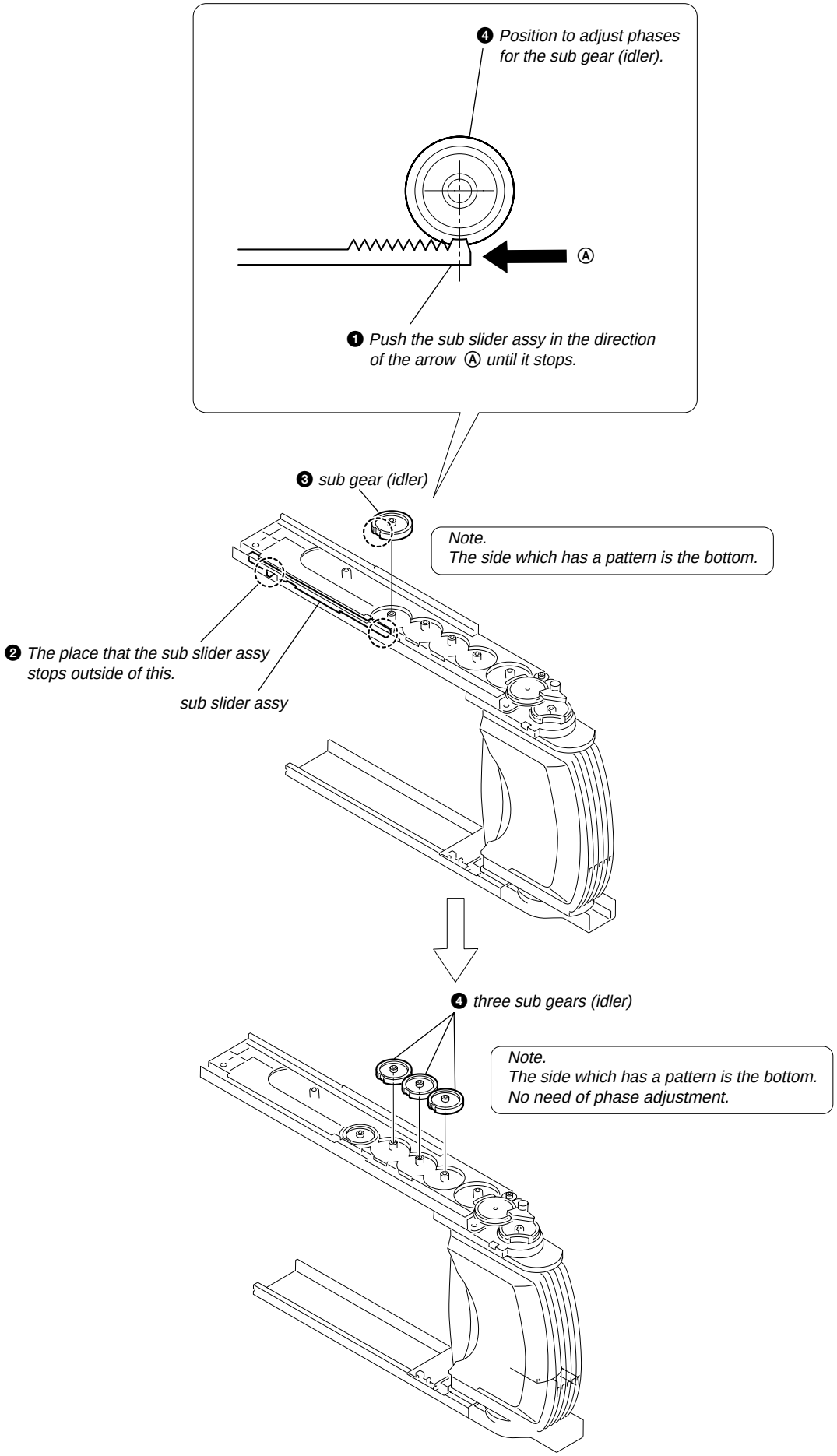




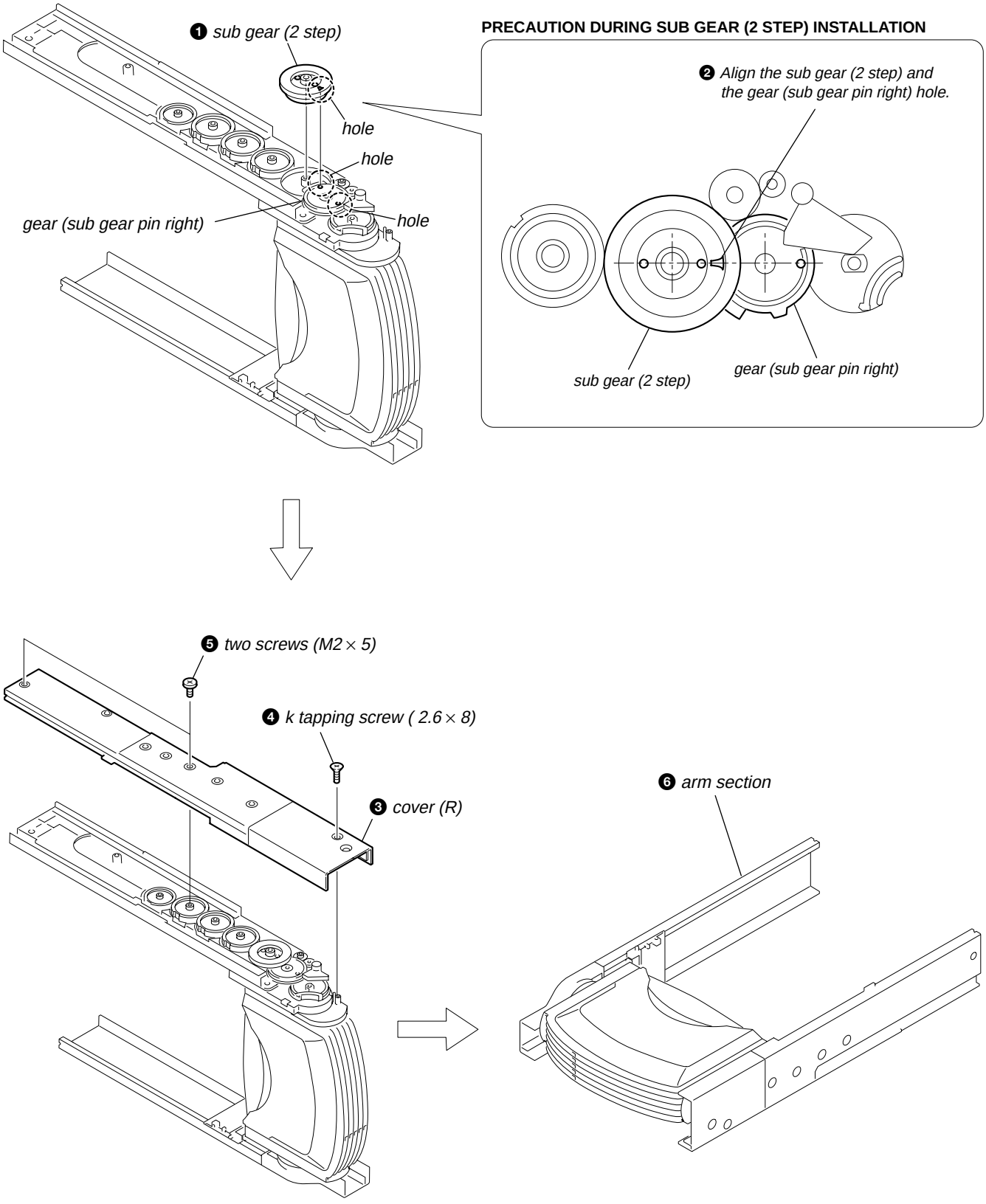
PRECAUTION DURING SPR-T (SUB GEAR BACK R) INSTALLATION



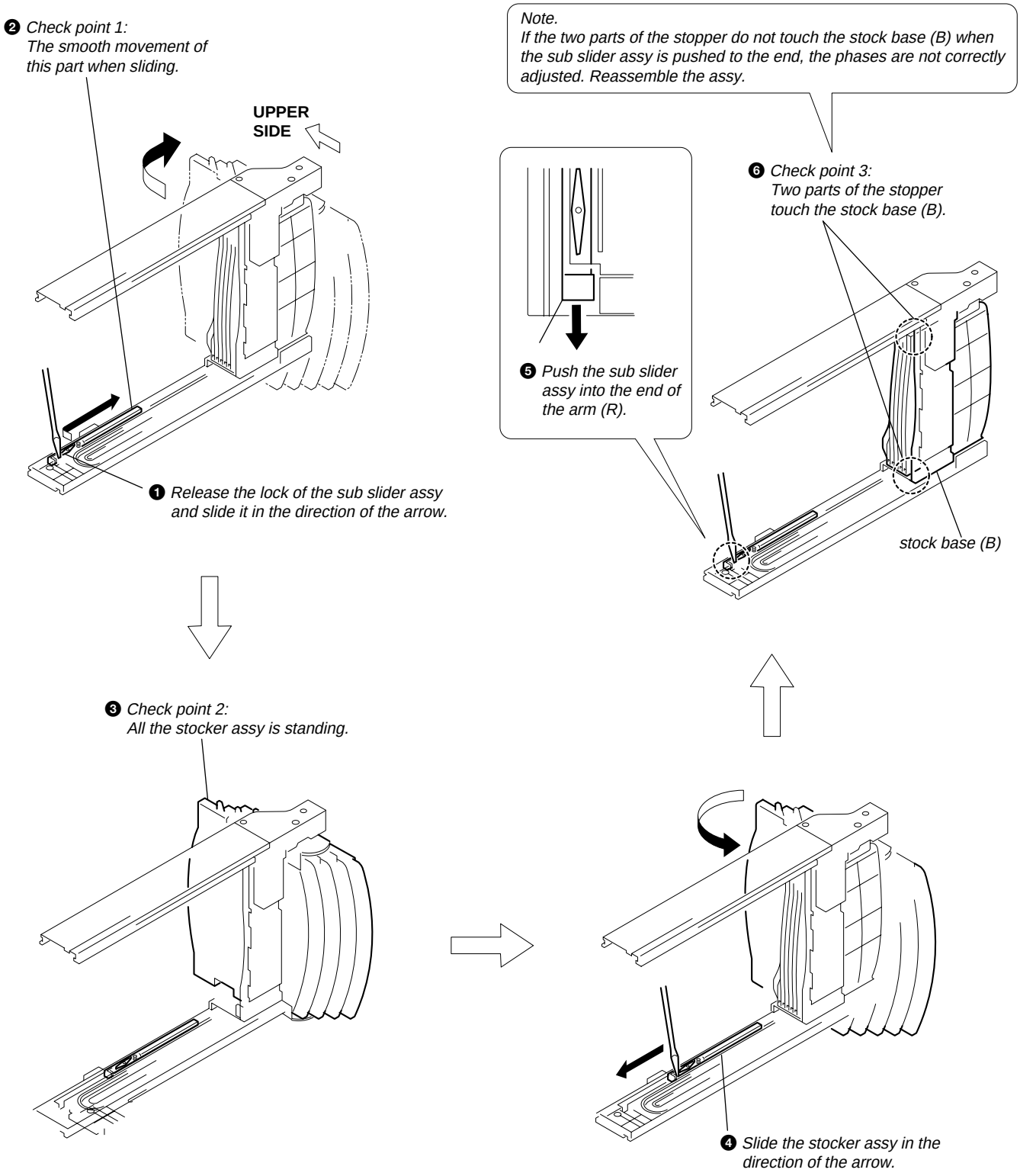
4-11. ASSEMBLING OF THE SUB GEAR (IDLER)



4-12. ASSEMBLING OF THE SUB GEAR (2 STEP)



4-13. CONFIRMING THE ASSEMBLING OF THE ARM SECTION



SECTION 5
TEST MODE

[MC COLD RESET]

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

Procedure:

1. In the standby status, press the I/⏻ button to turn the power on.
2. Press three buttons of I/⏻, ■, and PLAY MODE/TUNING MODE simultaneously.
3. The set is reset, and become standby status.

[COMMON TEST MODE]

Enter The Common Test Mode

Procedure:

1. In the standby status, press the I/⏻ button to turn the power on.
2. Press three buttons of PLAY MODE/TUNING MODE, ■, and DSGX simultaneously.
3. When the common test mode is activated, “SLEEP” and “PLAY” icons are blink and “MD” display on the fluorescent indicator tube.

AMP Test

Procedure:

1. In the common test mode, if turn the VOLUME knob clockwise, it displays “VOL MAX”, and if turn the knob counterclockwise, it displays “VOL MIN”.
   The same operations as described above can also be performed by pressing the VOLUME + and VOLUME – buttons of the remote control.
2. If the EQ button of the remote control is pressed, “TONE MAX” is displayed for several seconds.
   Pressing the EQ button once more displays the “TONE MIN”, and another pressing displays “TONE FLAT".
3. “TONE MAX”, “TONE MIN”, and “TONE FLAT” are displayed repeatedly in this order each time the EQ button is pressed.
4. To release from this mode, press the I/⏻ button to turn the power off.

Tape Test

Procedure:

1. In the common test mode, insert a tape.
2. Input any audio signal from the MD/VIDEO jack (J301) on the MAIN board.
3. Press the ● REC button, and press the ► TAPE button to select the tape direction.
4. Press the ● REC button again to start recording.
5. If press the ⏮◀◀ TUNING– or TUNING+ ▶▶⏭ button, the tape is returned to recording start point by cue or review operation, and starts playback.
6. To release from this mode, press the I/⏻ button to turn the power off.

[PANEL TEST MODE]

Enter The Panel Test Mode

Procedure:

1. In the standby status, press the I/1 button to turn the power on.
2. Press three buttons of REPEAT/FM MODE, ■, and DSGX simultaneously.
3. When the panel test mode is activated, LEDs and segments of fluorescent indicator tube are all turned on.

Version Check

Procedure:

1. In the panel test mode (all LEDs and segments of fluorescent indicator tube are turned on), press the REPEAT/FM MODE button.
2. Destination indication and model type indication are displayed on the fluorescent indicator tube alternately.
3. From this status, each time the PLAY MODE/TUNING MODE button is pressed, it changes the version display of module as follows.
4. To date of module, press the DSGX or FUNCTION button.
5. To release from this mode, press three buttons of REPEAT/FM MODE, ■, and DSGX simultaneously.

Key Check

Procedure:

1. In the panel test mode (all LEDs and segments of fluorescent indicator tube are turned on), press the PLAY MODE/TUNING MODE button.
2. It displays “K 0 V0” on the fluorescent indicator tube.
3. Each time a button is pressed, “K” value increases. However, once a button is pressed, it is no longer taken into account.
   All keys are pressed, display becomes “K25”.
4. “V” value increases like 1, 2, 3 ... if turn the VOLUME knob clockwise, or it decreases like 0, 9, 8 ... if turn the knob counterclockwise.
5. To release from this mode, press three buttons of REPEAT/FM MODE, ■, and DSGX simultaneously.

[CD REPEAT 5 LIMIT CANCEL MODE]

Number of repeat for CD playback is 5 times when the repeat mode is “REPEAT”. This mode enables CD to repeat playback for limitless times.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the FUNCTION button to select CD function.
3. Press three buttons of TUNING+ ▶▶⏭, PLAY MODE/TUNING MODE, and DSGX simultaneously.
4. It enters the CD repeat 5 limit cancel mode and display “LIMIT OFF”
5. To release this mode, press the I/⏻ button to turn the power off.

[CD SHIP MODE]

This mode can run the CD sled motor optionally. Use this mode, for instance, when cleaning the optical pick-up.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the FUNCTION button to select CD function.
3. Press two buttons of EX-CHANGE and I/⏻ simultaneously. *1
4. Set to the CD ship mode. (chucking on)
5. After blink “STANDBY”, “LOCK” is displayed, disconnect the AC plug.

*1) If press three buttons of DISC SKIP, EX-CHANGE and PLAY MODE/TUNING MODE simultaneously, Activate the CD ship mode and MC cold reset.

[CD SLOT LOCK]

This mode is for the antitheft of CD disc in shop. (not for transport)

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the FUNCTION button to select CD function.
3. Insert a disc.
4. While pressing the ■ button, press the ⏏ button for more 5 seconds.
5. The message “LOCKED” is displayed and the disc slot is locked. (Even if exiting from this mode, the disc slot is still locked)
6. If press the ⏏ button to eject the disc, the message “LOCKED” is displayed and can not eject the disc.
7. To release this lock, while pressing the ■ button, press the ⏏ button for 5 seconds again.
8. The message “UNLOCKED” is displayed and the disc slot is unlocked.

[CD ERROR CODE DISPLAY MODE]

This mode can be used for error code display of CD section.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the FUNCTION button to select CD functuion.
3. Press three keys of ■, DSGX and ❚❚ TAPE simultaneously.
4. When this mode is activated, mechanism deck error code is displayed on the fluorescent indicator tube.
5. Press the ◀◀ (remote commander) or ▶▶ (remote commander) button to changed over between optical pick-up error code display mode and mechanism deck error code mode.
6. Press the I◀◀ (remote commander) or ▶▶I (remote commander) button to change over display of error history.

[CD SERVO TEST MODE]

This mode used to check operation of optical pick-up.

Procedure:

1. Press the I/⏻ button to turn the power ON.
2. Press the FUNCTION button to select CD functuion.
3. Press three keys of ❚❚ TAPE, ■ and DISC 1 simultaneously.
4. When the CD servo test mode is activated. In this state each time DISPLAY button of remote commander is pressed, tracking ON/OFF switch is performed.
5. To release this mode, press the I/⏻ button.

[CD POWER MANAGE]

This mode is for switch the CD power supply on/off. Even if this state pulls out AC plug, it is held.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the FUNCTION button to select CD function.
3. Press the I/⏻ button again to turn the power off (standby).
4. While pressing the ■ button, press the I/⏻ button.
5. It turns power on and display “CD POWER”, then display “ON” or “OFF”.

[CHANGE-OVER THE AM TUNING INTERVAL]

The AM tuning interval can be changed over 9 kHz or 10 kHz.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the TUNER/BAND button to select TUNER (AM) function.
3. Press the I/⏻ button again to turn the power off (standby).
4. While pressing the TUNING+ ▶▶▷▷❚ button, press the I/⏻ button.
5. It turns power on and display “STEP 9kHz” or “STEP 10kHz”, and thus the tuning interval is changed over.

[MD/VIDEO FUNCTION CHANGE]

Select either VIDEO or MD of the external input.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the FUNCTION button to select MD or VIDEO function.
3. Press the I/⏻ button again to turn the power off (standby).
4. While pressing the FUNCTION button, press the I/⏻ button.
5. The another function of the previous function is selected and display “MD” or “VIDEO”.

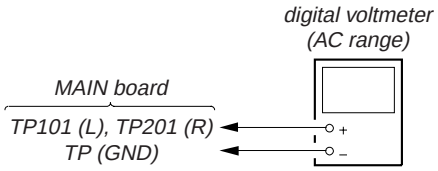
SECTION 6
ELECTICAL ADJUSTMENTS

DECK SECTION

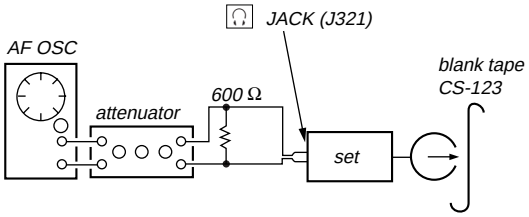
1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjust.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed for both L-CH and R-CH.
6. Switches and controls should be set as follows unless otherwise specified.

REC BIAS ADJUSTMENT

Setting:



Mode: REC

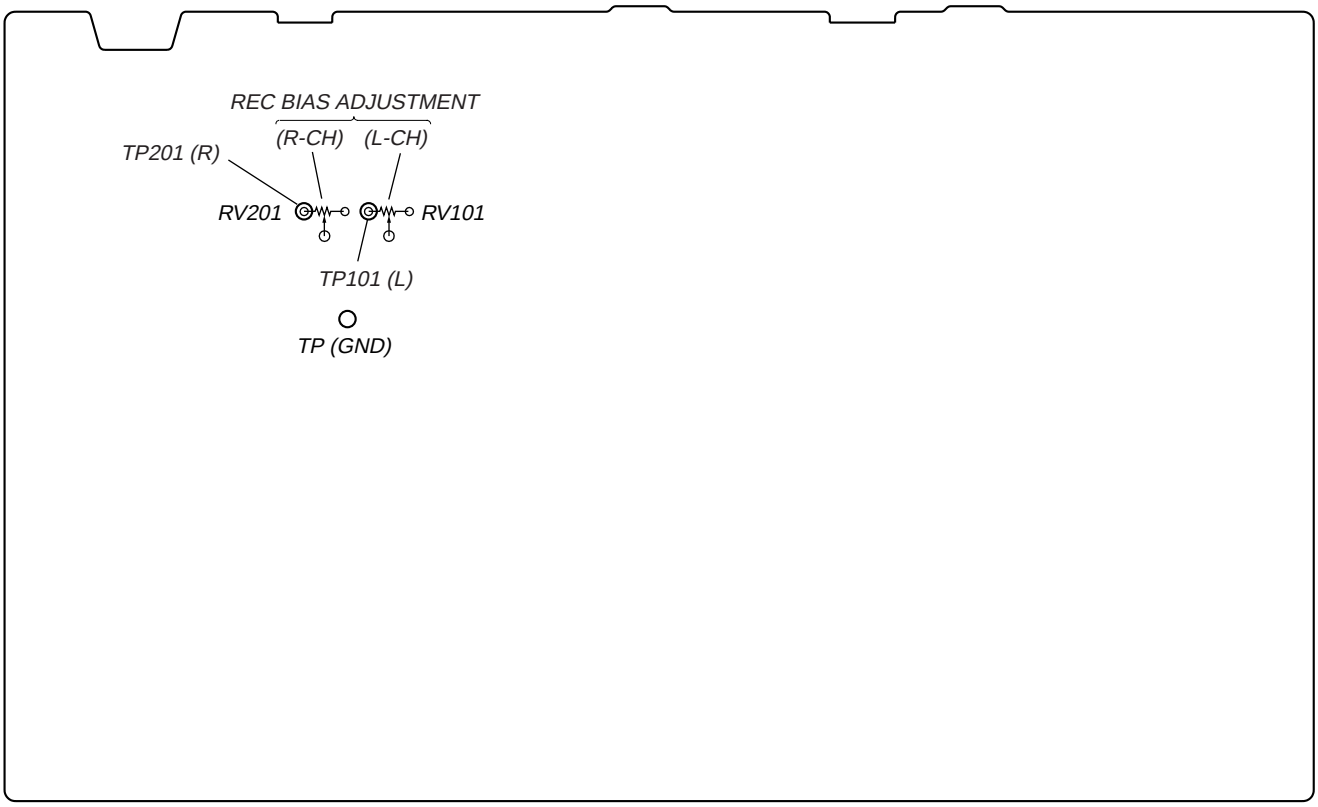


Procedure:

1. Connect a digital voltmeter (AC range) to TP101 (L), TP201 (R) and TP (GND) on the MAIN board.
2. Insert a blank tape (CS-123).
3. Press the I/⏻ button to turn the power on, and press the FUNCTION button to select TAPE function.
4. Press the ● REC button twice to start recording.
5. Adjust RV101 (L-ch), RV201 (R-ch) on the MAIN board so that the digital voltmeter reads AC 6.15 V.
6. Connect an oscilloscope or frequency counter to TP101 (L), TP201 (R) and TP (GND) on the MAIN board.
7. Confirm that the frequency is 82 kHz ±3 kHz.

Adjustment Location:

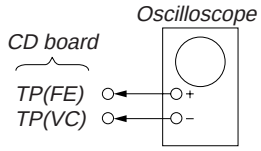
– MAIN BOARD (Conductor Side) –



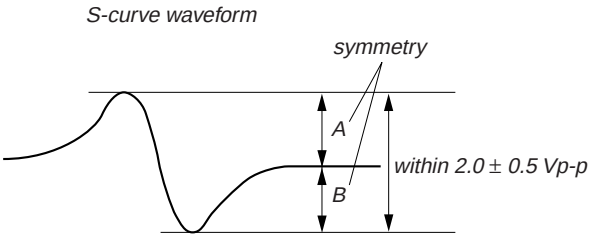
CD SECTION

Note:
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S-CURVE CHECK



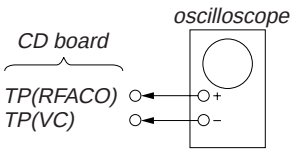
Procedure :
1. Connect an oscilloscope to TP (FE) and TP (VC) on the CD board.
2. Press the I/⏻ button to turn the power ON.
3. Load a disc (YEDS-18) and actuate the focus search. (In consequence of open and close the disc tray, actuate the focus search)
4. Confirm that the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 2.0 ± 0.5 Vp-p.



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.

Connecting Location: CD board

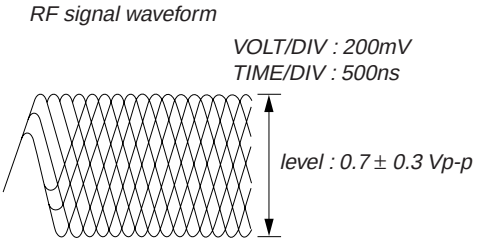
RFAC LEVEL CHECK



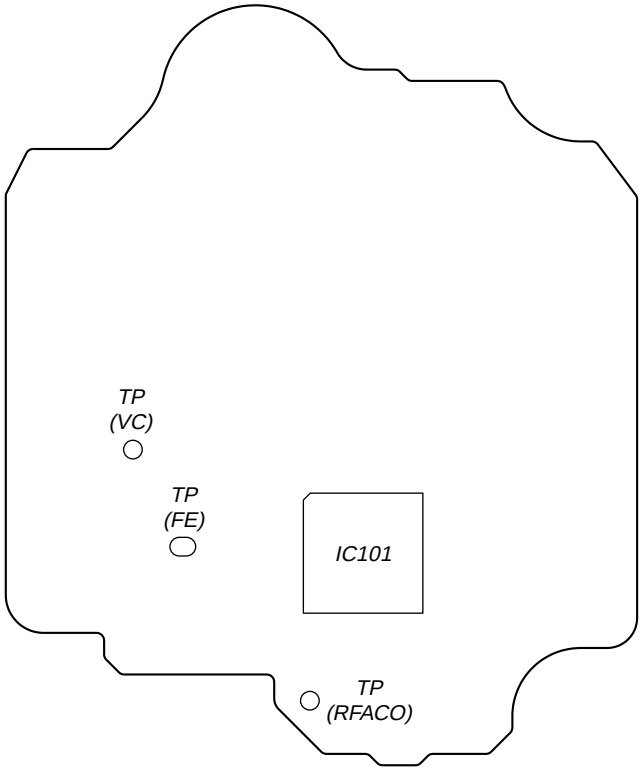
Procedure :
1. Connect an oscilloscope to TP (RFACO) and TP (VC) on the CD board.
2. Press the I/⏻ button to turn the power ON.
3. Load a disc (YEDS-18) and playback.
4. Confirm that oscilloscope waveform is clear and check if RFAC signal level is correct or not.

Note: Clear RFAC signal waveform means that the shape " ◊ " can be clearly distinguished at the center of the waveform.

Connecting Location: CD board

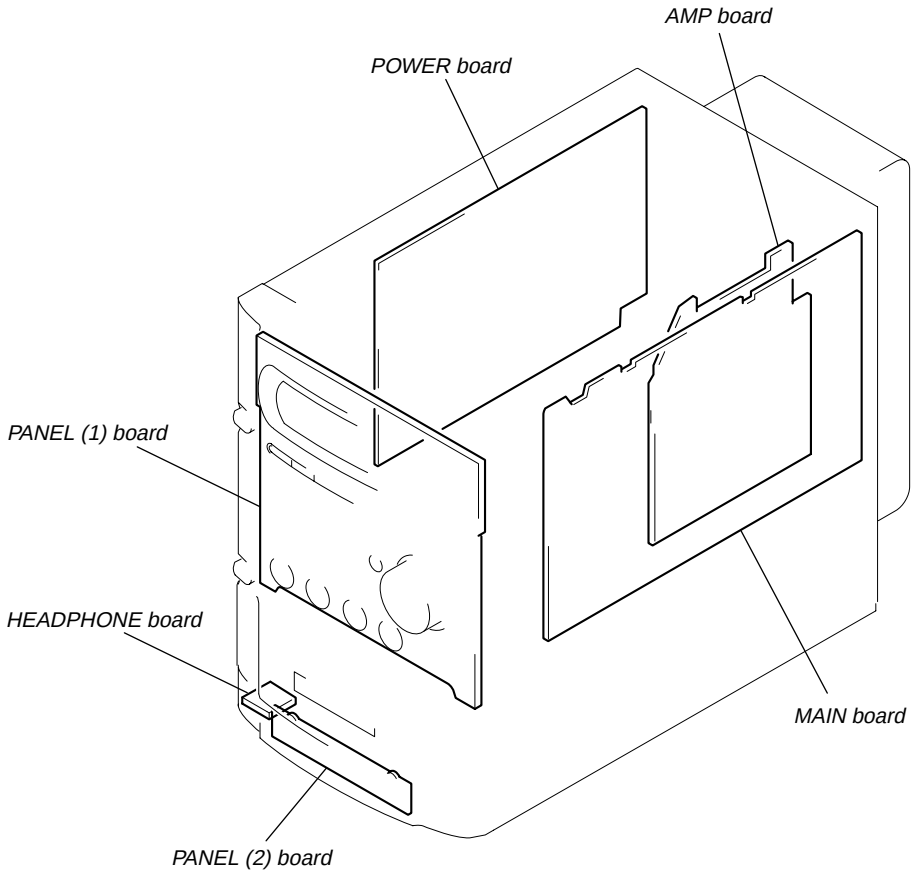


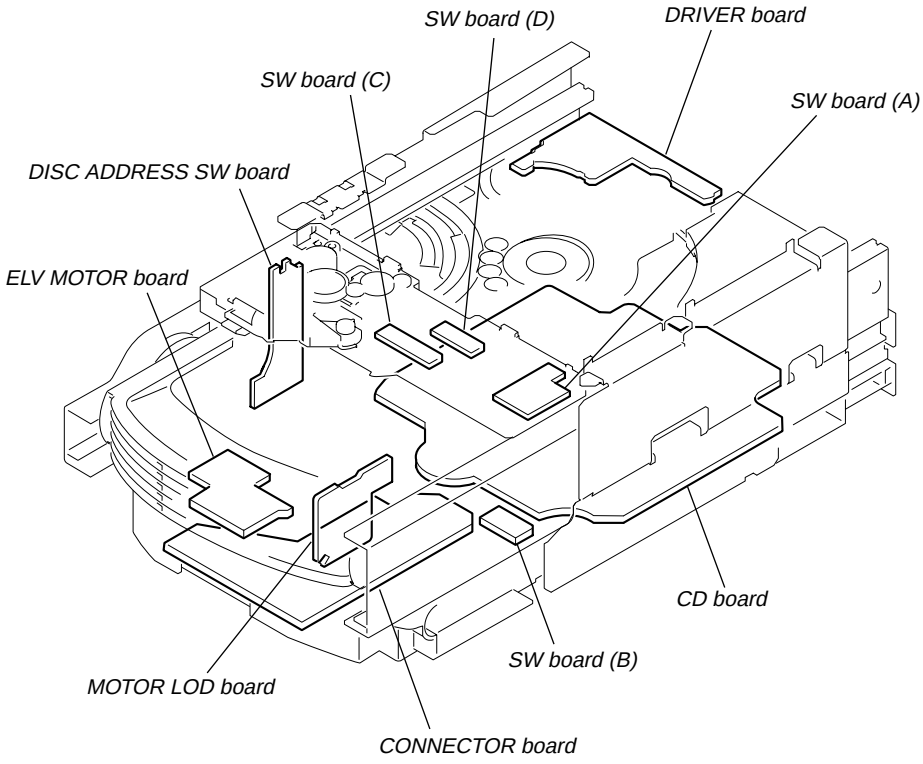
– CD BOARD (Conductor Side) –



SECTION 7
DIAGRAMS

- **Circuit Boards Location**





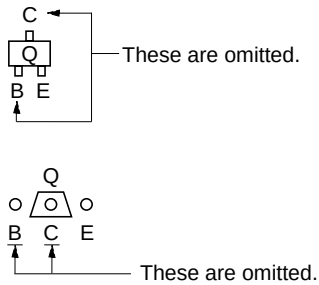
NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Boards:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- : indicates side identified with part number.
- △ : internal component.
- : Pattern from the side which enables seeing. (The other layers' patterns are not indicated.)

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

- Indication of transistor.



Note on Schematic Diagram:

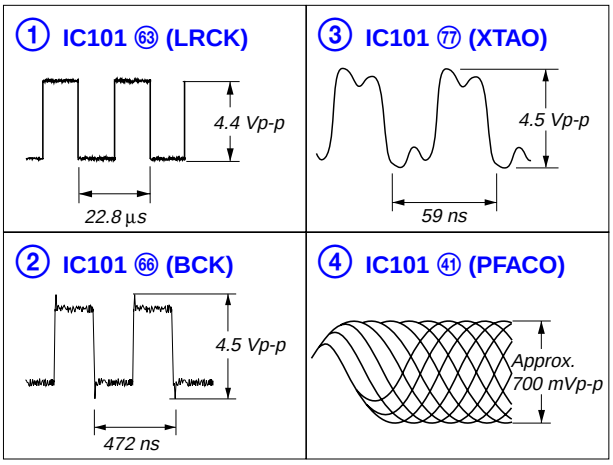
- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

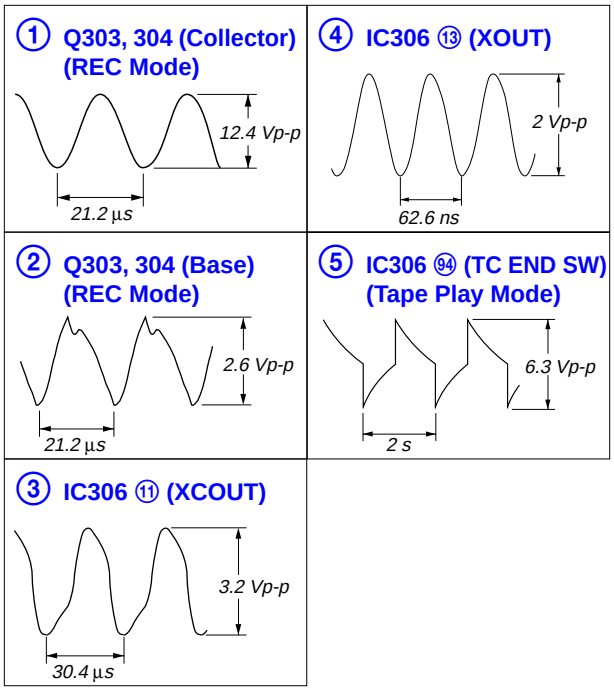
- : B+ Line.
- : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : TUNER (FM/AM)
  - : TAPE PLAY
  - : TAPE REC
  - : CD PLAY
  - : AUX IN
- Abbreviation
  - AR : Argentine model.
  - AUS : Australian model.
  - CND : Canadian model.
  - EA : Saudi Arabia model.

- **Waveforms**

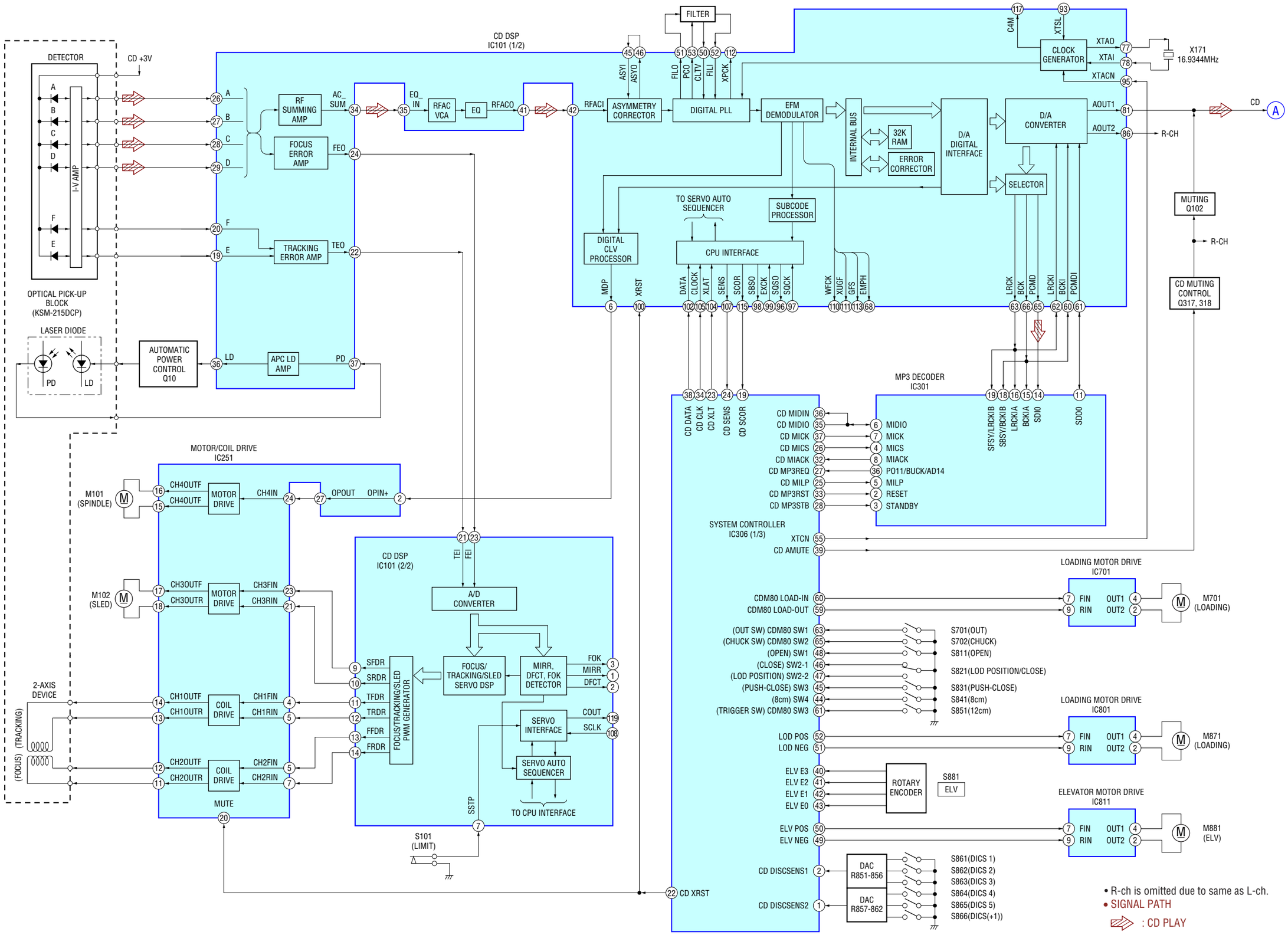
– CD Board –



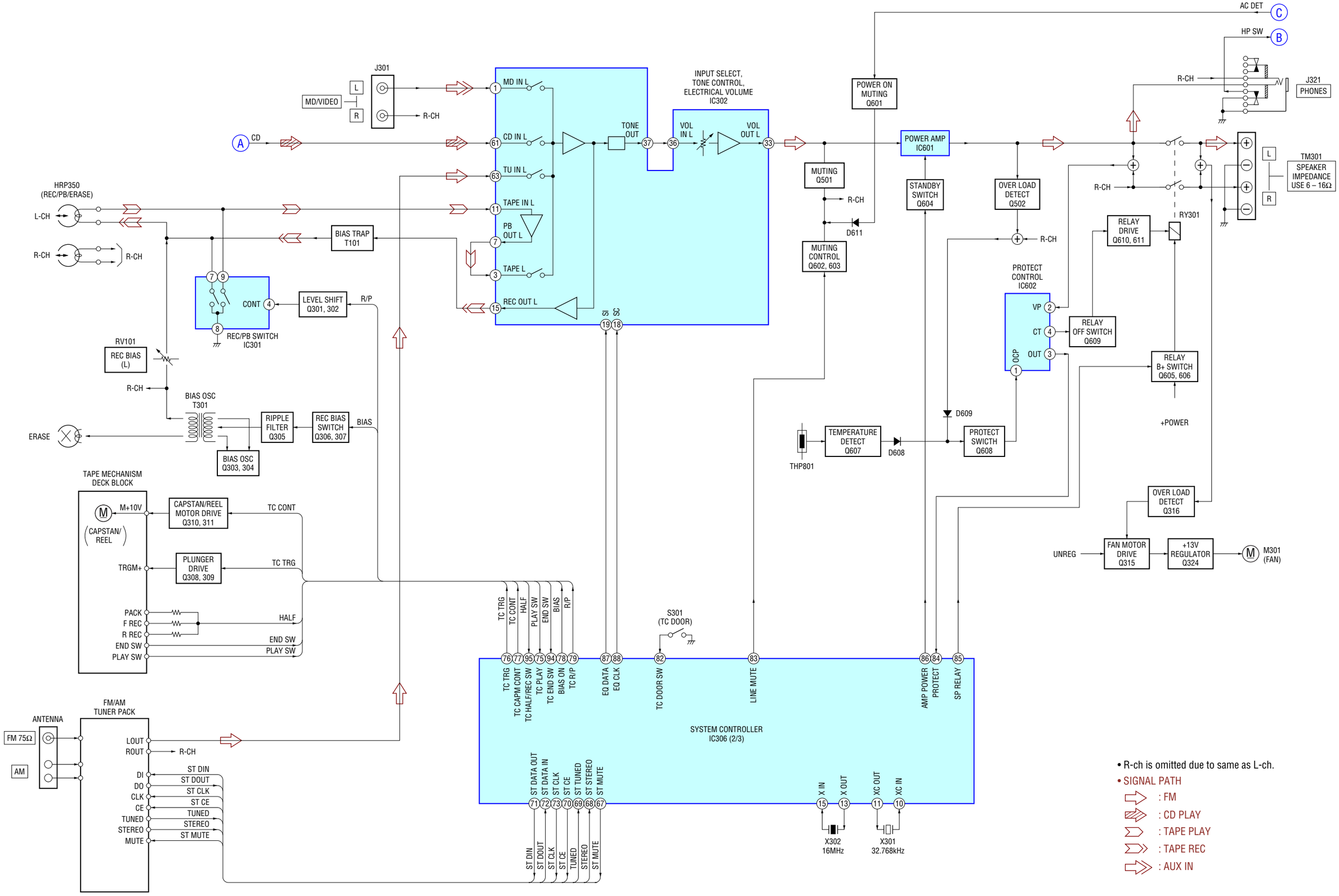
– MAIN Board –



7-1. BLOCK DIAGRAMS — CD SERVO SECTION —

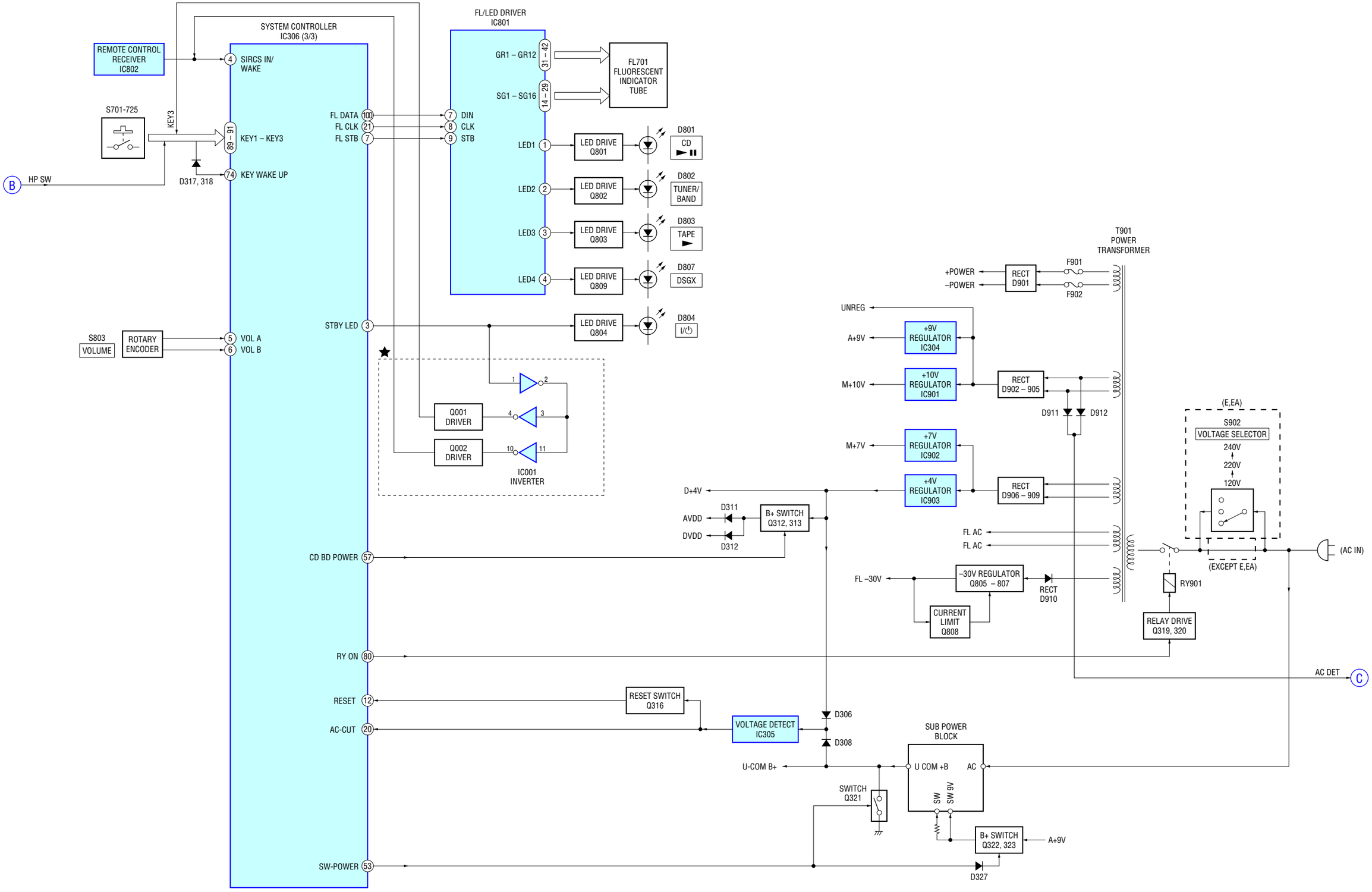


7-2. BLOCK DIAGRAMS — MAIN SECTION —



- R-ch is omitted due to same as L-ch.
- SIGNAL PATH
  - : FM
  - : CD PLAY
  - : TAPE PLAY
  - : TAPE REC
  - : AUX IN

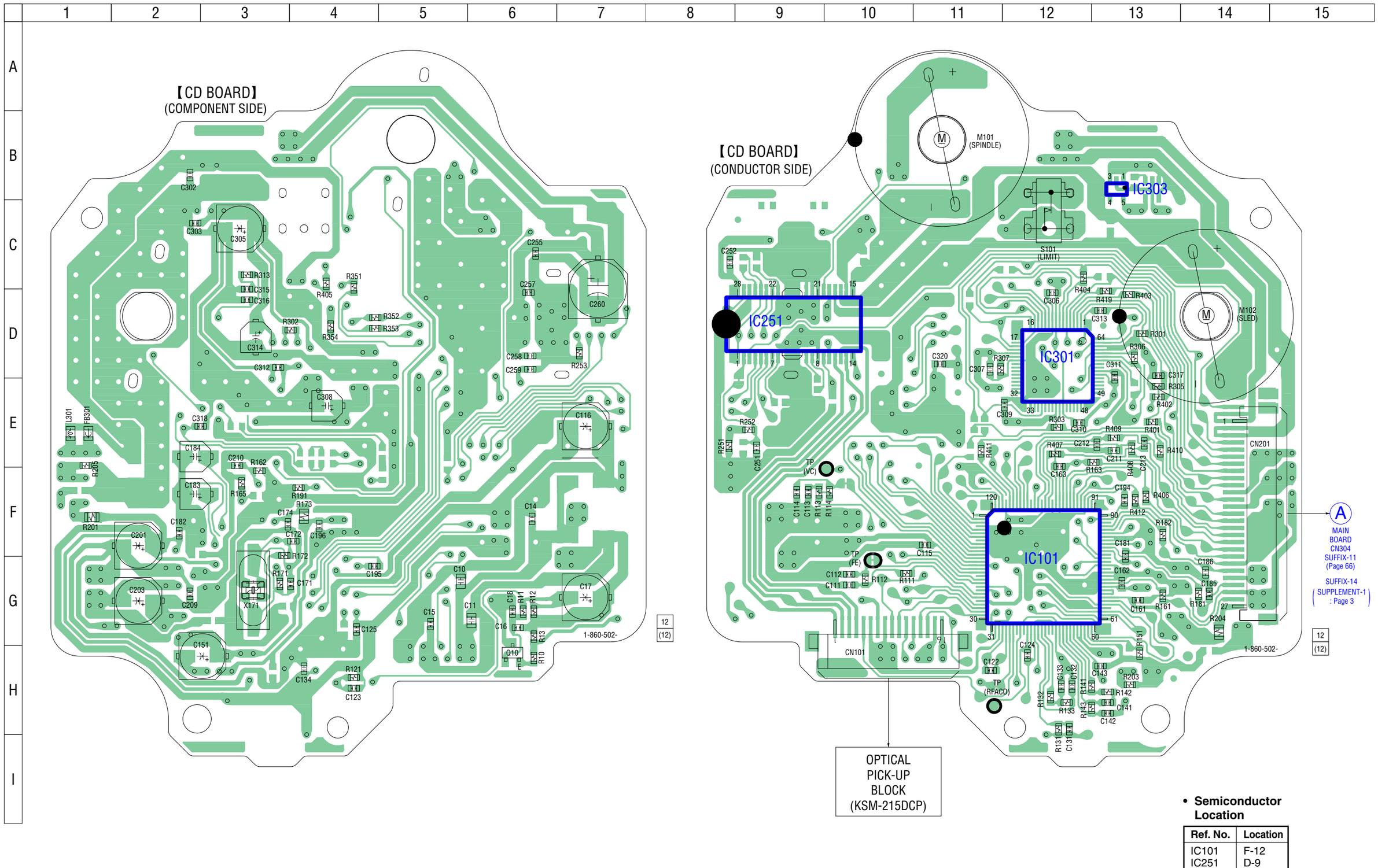
7-3. BLOCK DIAGRAMS — PANEL/POWER SUPPLY SECTION —



The parts with the letter "★" are the parts used for the countermeasure circuit.
For the description of the countermeasure circuit, refer to the SUPPLEMENT-1

7-4. PRINTED WIRING BOARD — CD BOARD —

• See page 57 for Circuit Boards Location. :Uses unleaded solder.

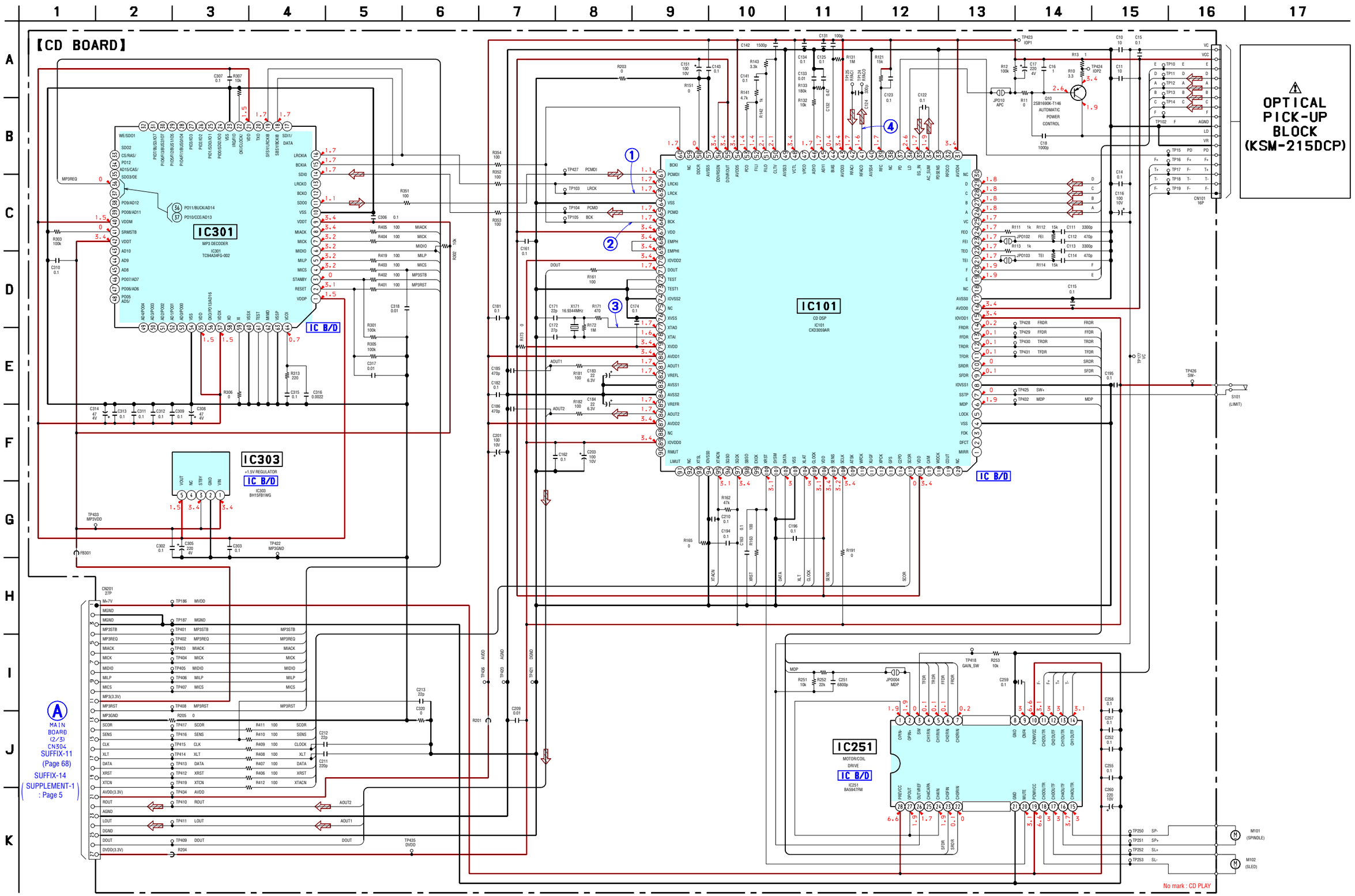


- **Semiconductor Location**

Ref. No.	Location
IC101	F-12
IC251	D-9
IC301	D-12
IC303	B-13
Q10	H-6

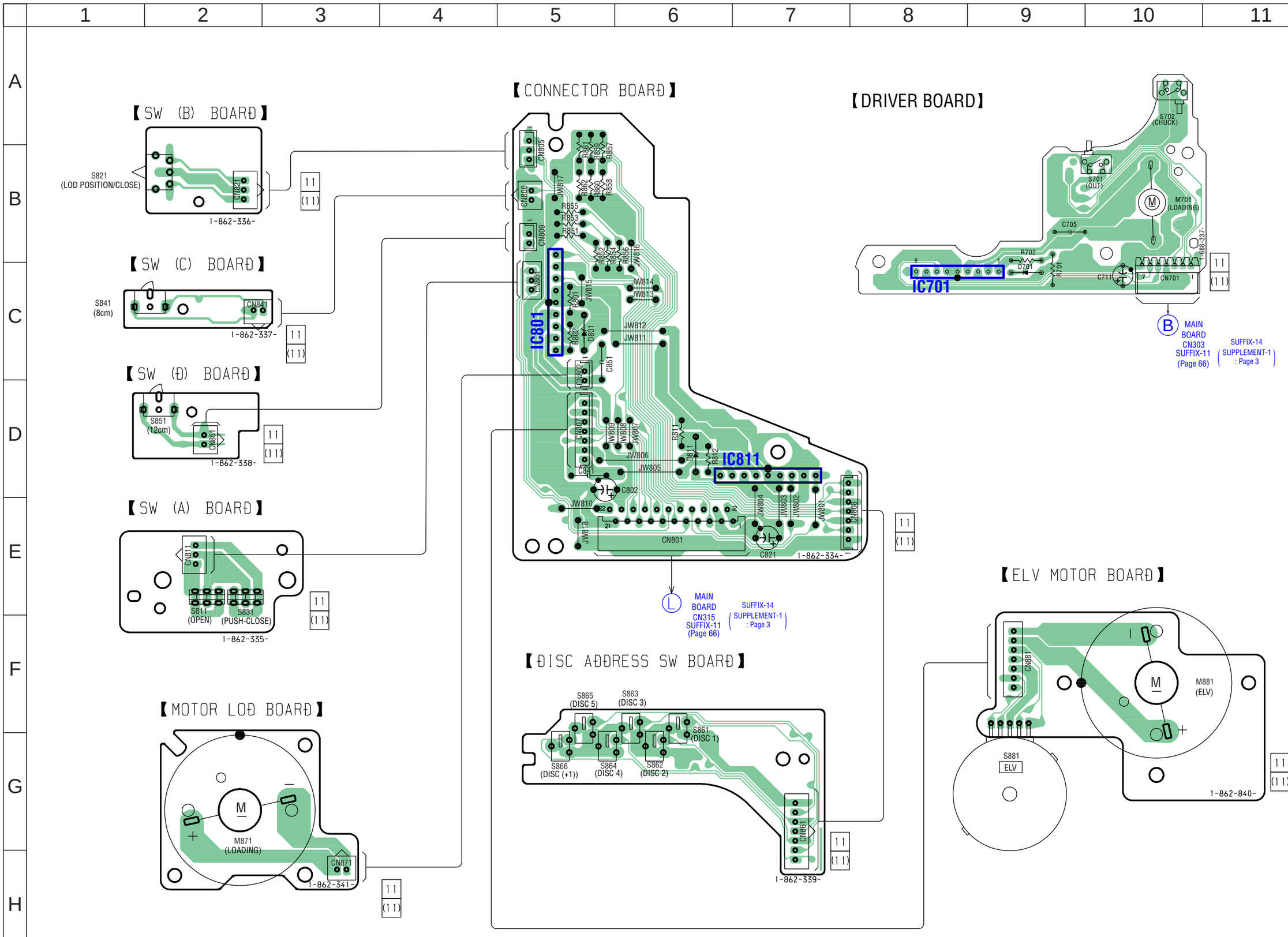
7-5. SCHEMATIC DIAGRAM — CD BOARD —

• See page 58 for Waveforms. • See page 76, 77 for IC Block Diagrams.



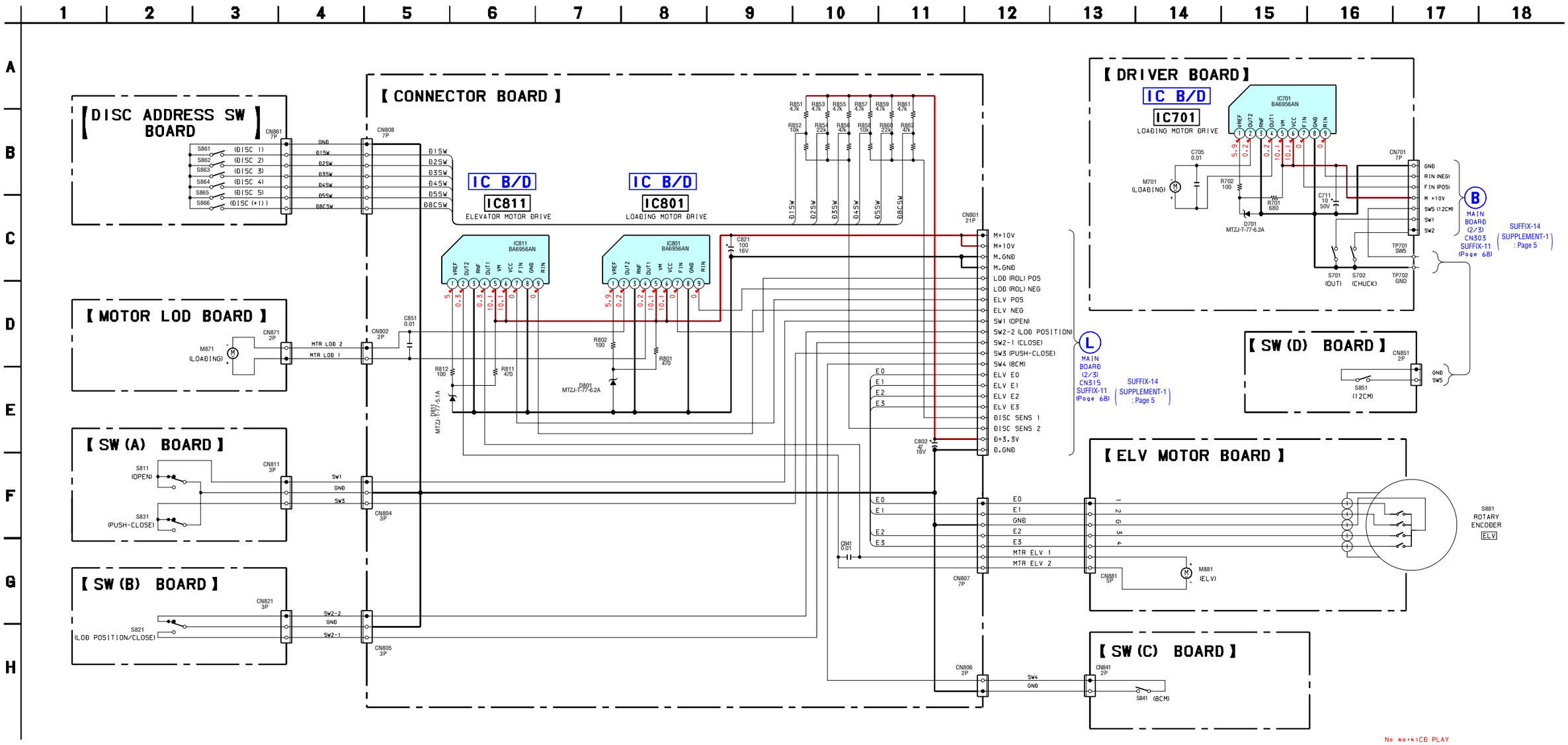
7-6. PRINTED WIRING BOARD — CD MECHANISM SECTION —

• See page 57 for Circuit Boards Location. :Uses unleaded solder.



7-7. SCHEMATIC DIAGRAM — CD MECHANISM SECTION —

• See page 78 for IC Block Diagram.



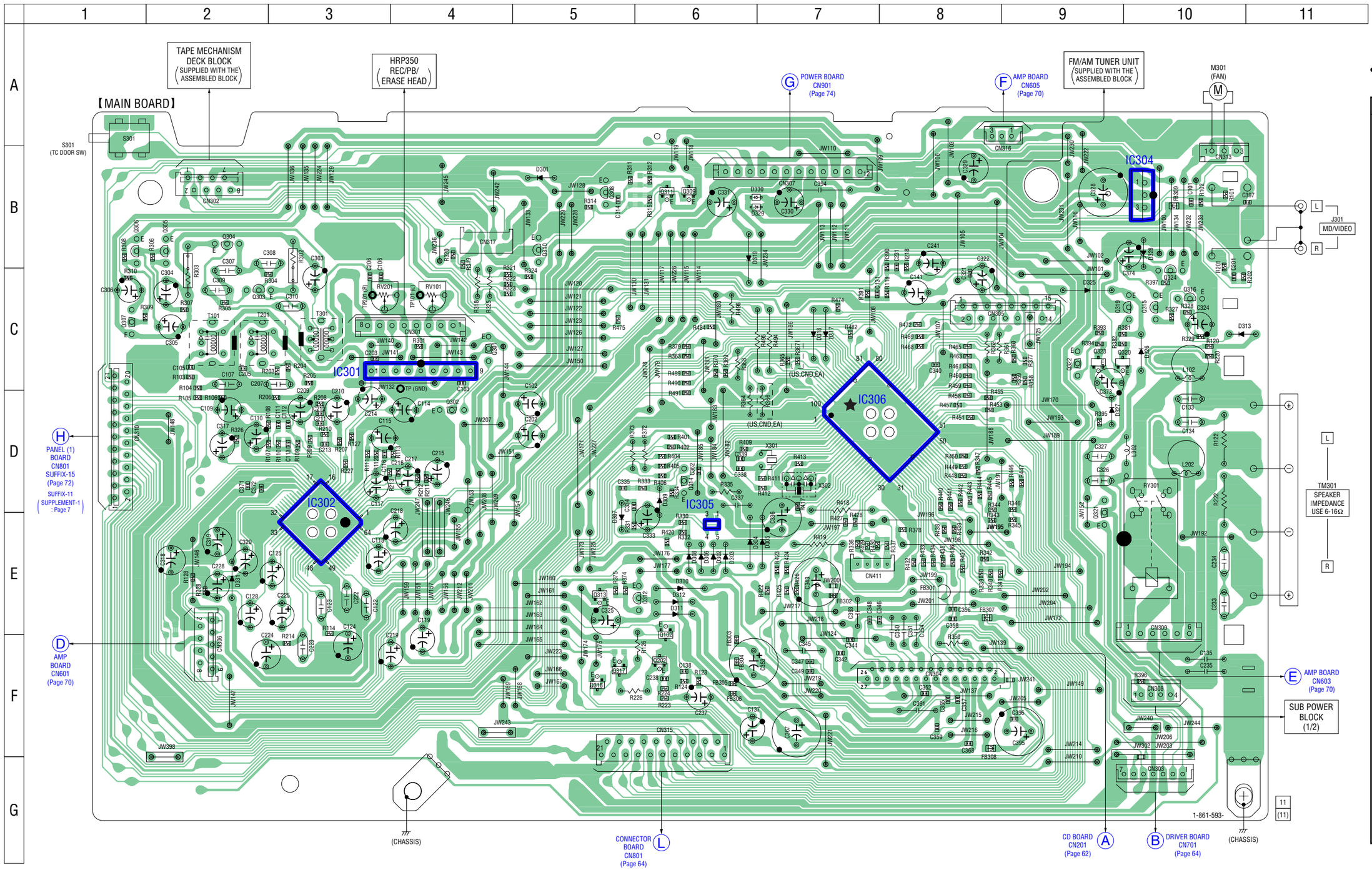
HCD-HPX9

Ver. 1.9

7-8. PRINTED WIRING BOARD — MAIN BOARD —

• See page 57 for Circuit Boards Location.

:Uses unleaded solder.



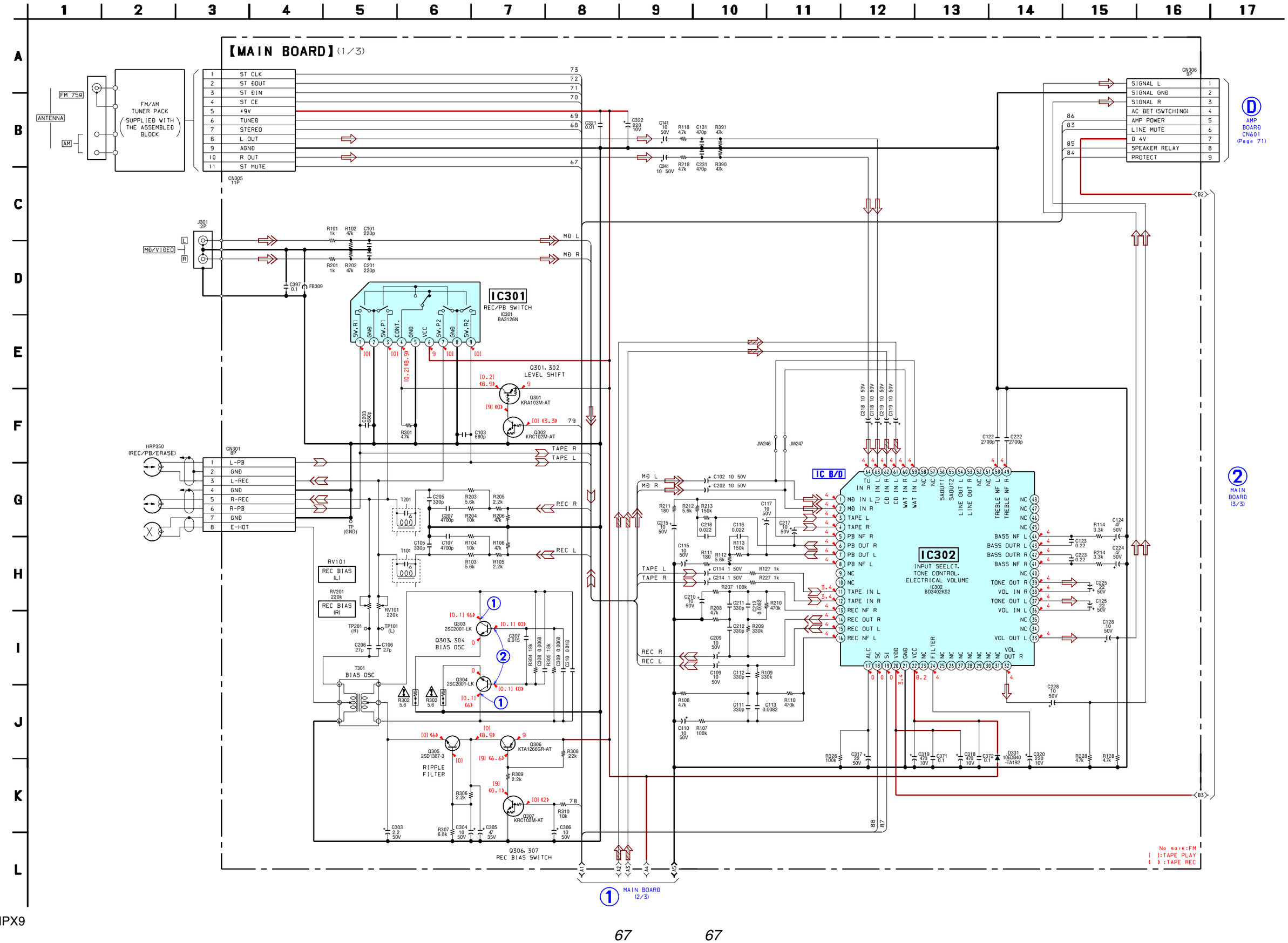
- **Semiconductor Location**

Ref. No.	Location
D301	B-5
D302	E-6
D303	E-6
D304	E-6
D305	E-7
D306	E-6
D307	D-5
D308	E-6
D309	D-6
D310	E-6
D311	E-6
D312	E-6
D313	C-10
D317	C-7
D318	C-7
D319	B-6
D325	C-9
D326	C-10
D327	D-9
D328	B-10
D329	B-6
D330	B-6
D331	E-2
IC301	C-4
IC302	E-3
IC304	B-10
IC305	E-6
IC306	D-8
Q102	F-6
Q202	F-6
Q301	C-4
Q302	D-4
Q303	C-2
Q304	B-2
Q305	B-2
Q306	B-1
Q307	C-1
Q308	B-5
Q309	B-6
Q310	B-5
Q311	B-6
Q312	E-5
Q313	E-5
Q314	D-6
Q315	C-10
Q316	C-10
Q317	F-5
Q318	F-5
Q319	C-10
Q320	C-9
Q321	E-9
Q322	C-9
Q323	C-9
Q324	C-10

The parts with the letter "★" are the parts used for the countermeasure circuit.
For the description of the countermeasure circuit, refer to the SUPPLEMENT-1

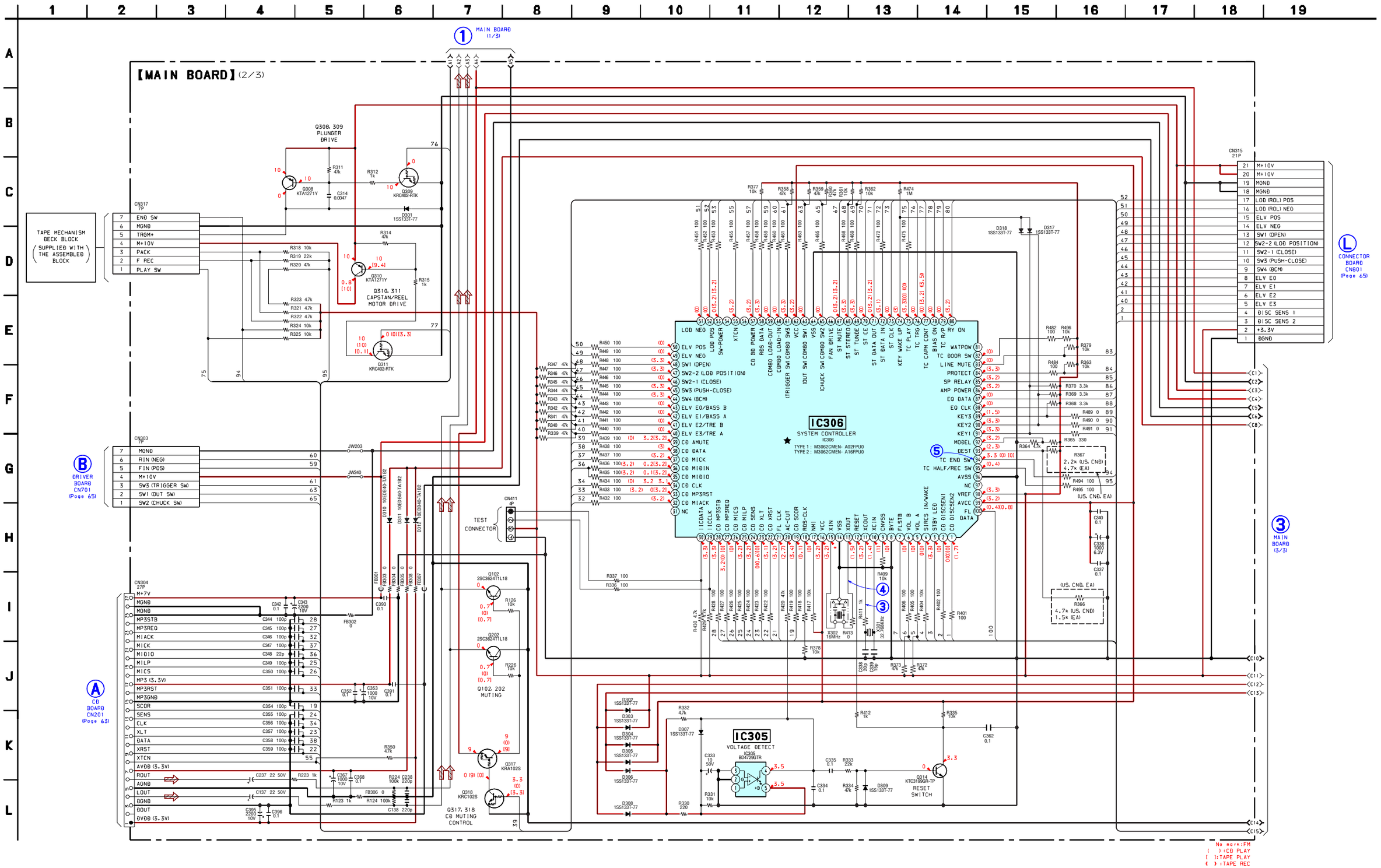
7-9. SCHEMATIC DIAGRAM — MAIN BOARD (1/3) —

• See page 58 for Waveforms. • See page 78 for IC Block Diagram.



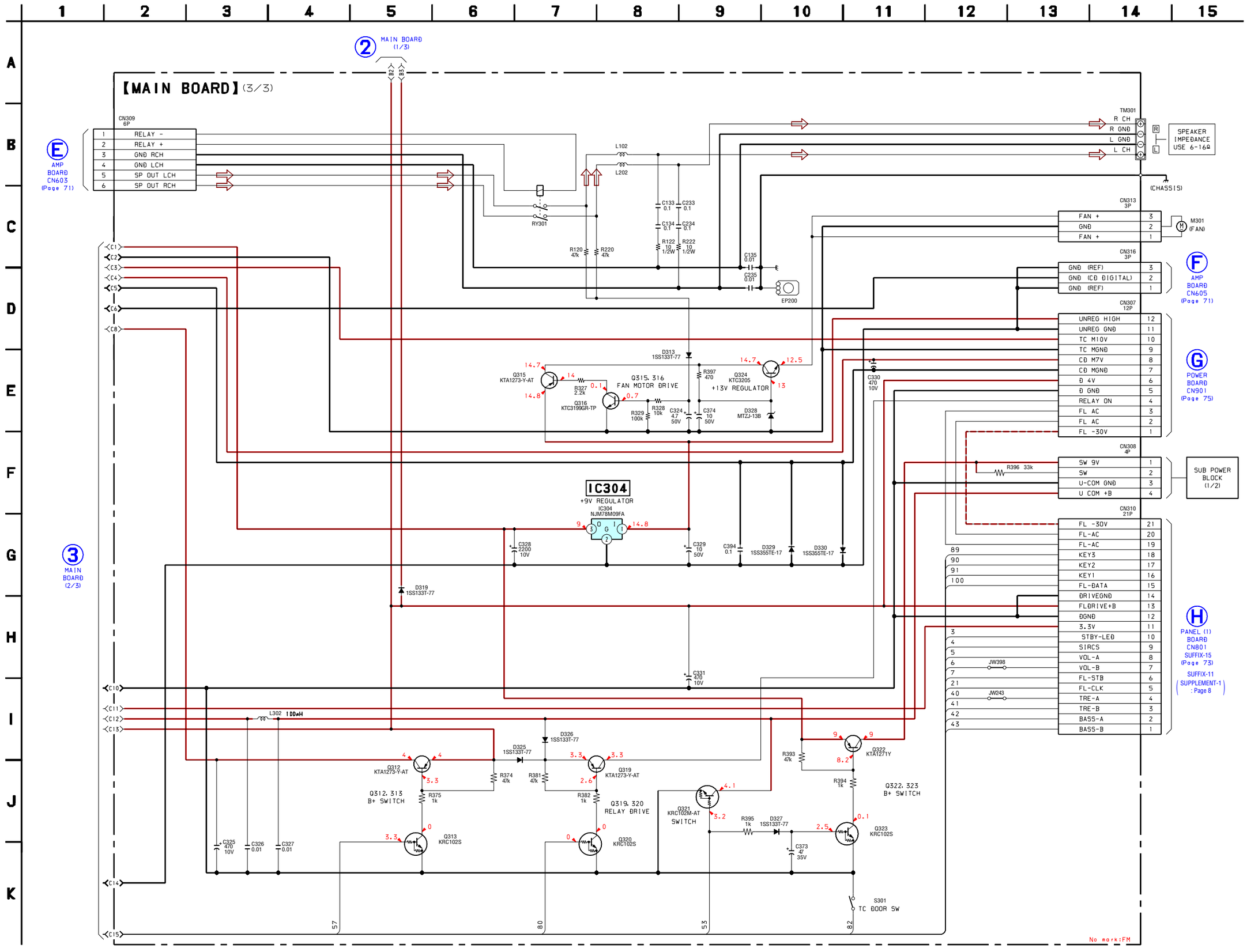
7-10. SCHEMATIC DIAGRAM — MAIN BOARD (2/3) —

• See page 58 for Waveforms. • See page 80 for IC Pin Function Description.



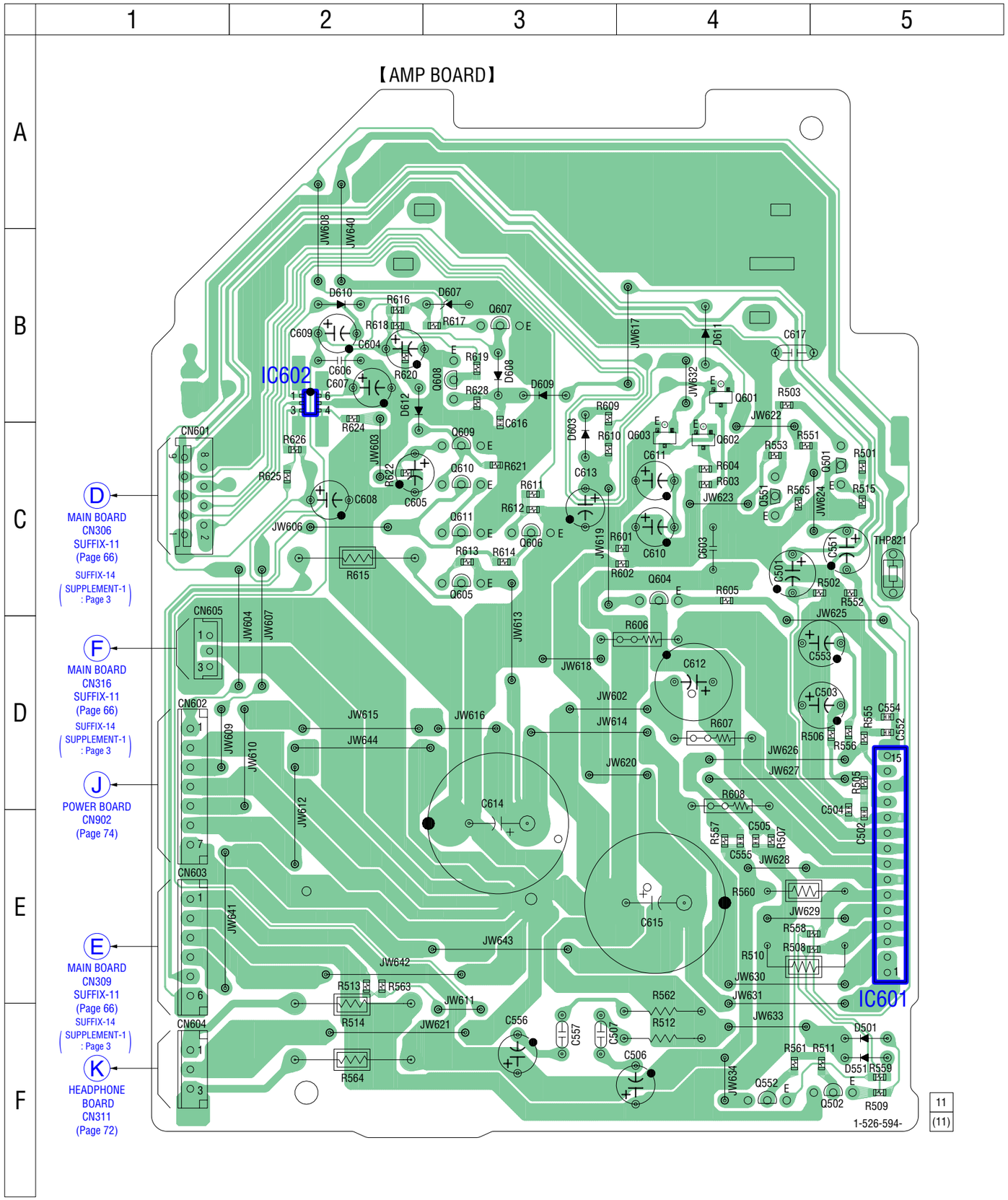
The parts with the letter "★" are the parts used for the countermeasure circuit.
For the description of the countermeasure circuit, refer to the SUPPLEMENT-1

7-11. SCHEMATIC DIAGRAM — MAIN BOARD (3/3) —



7-12. PRINTED WIRING BOARD — AMP BOARD —

• See page 57 for Circuit Boards Location. :Uses unleaded solder.

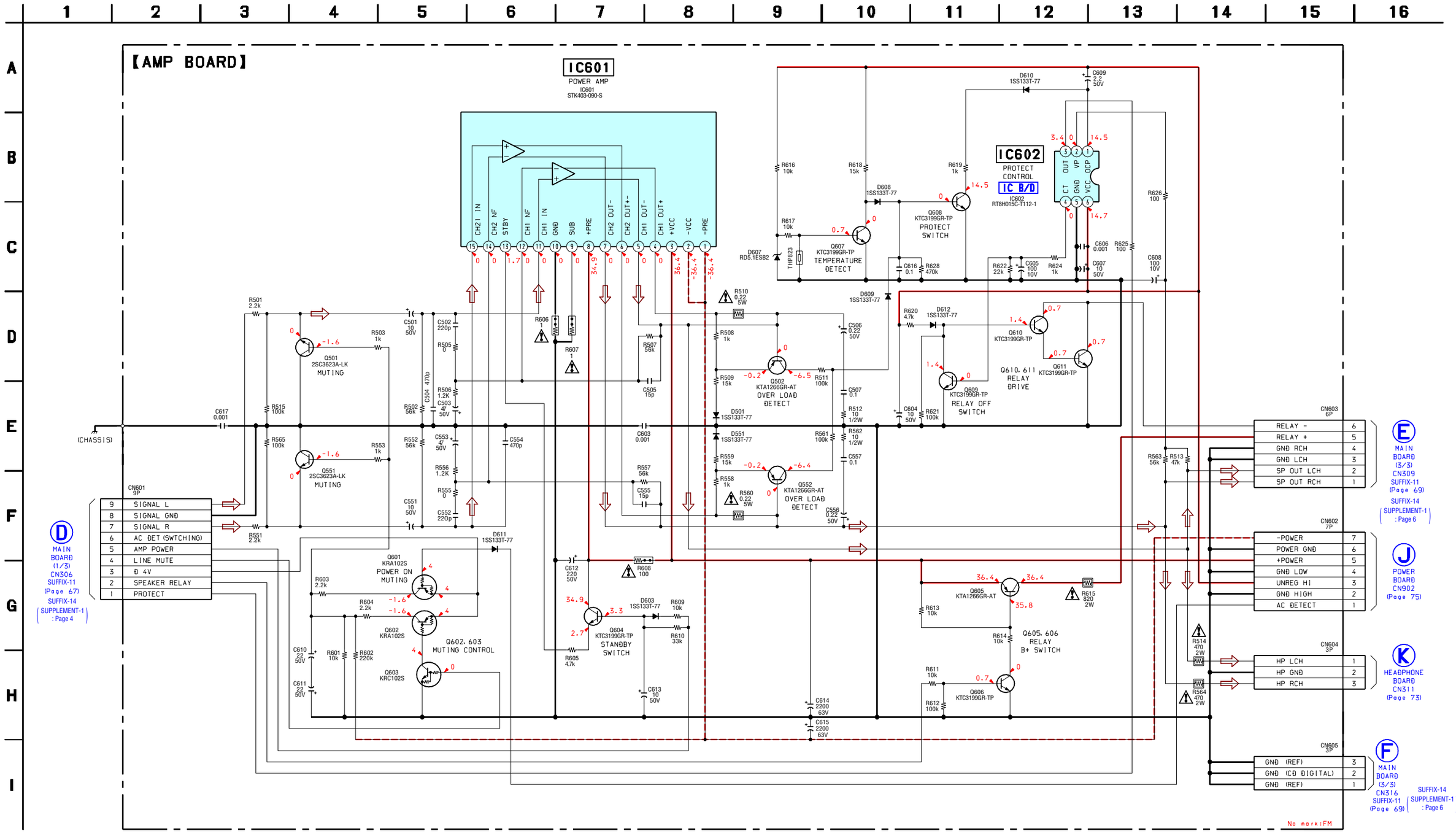


- **Semiconductor Location**

Ref. No.	Location
D501	F-5
D551	F-5
D603	C-3
D607	B-3
D608	B-3
D609	B-3
D610	B-2
D611	B-4
D612	B-2
IC601	E-5
IC602	B-2
Q501	C-5
Q502	F-5
Q551	C-4
Q552	F-4
Q601	B-4
Q602	C-4
Q603	C-4
Q604	C-4
Q605	C-3
Q606	C-3
Q607	B-3
Q608	B-3
Q609	C-3
Q610	C-3
Q611	C-3

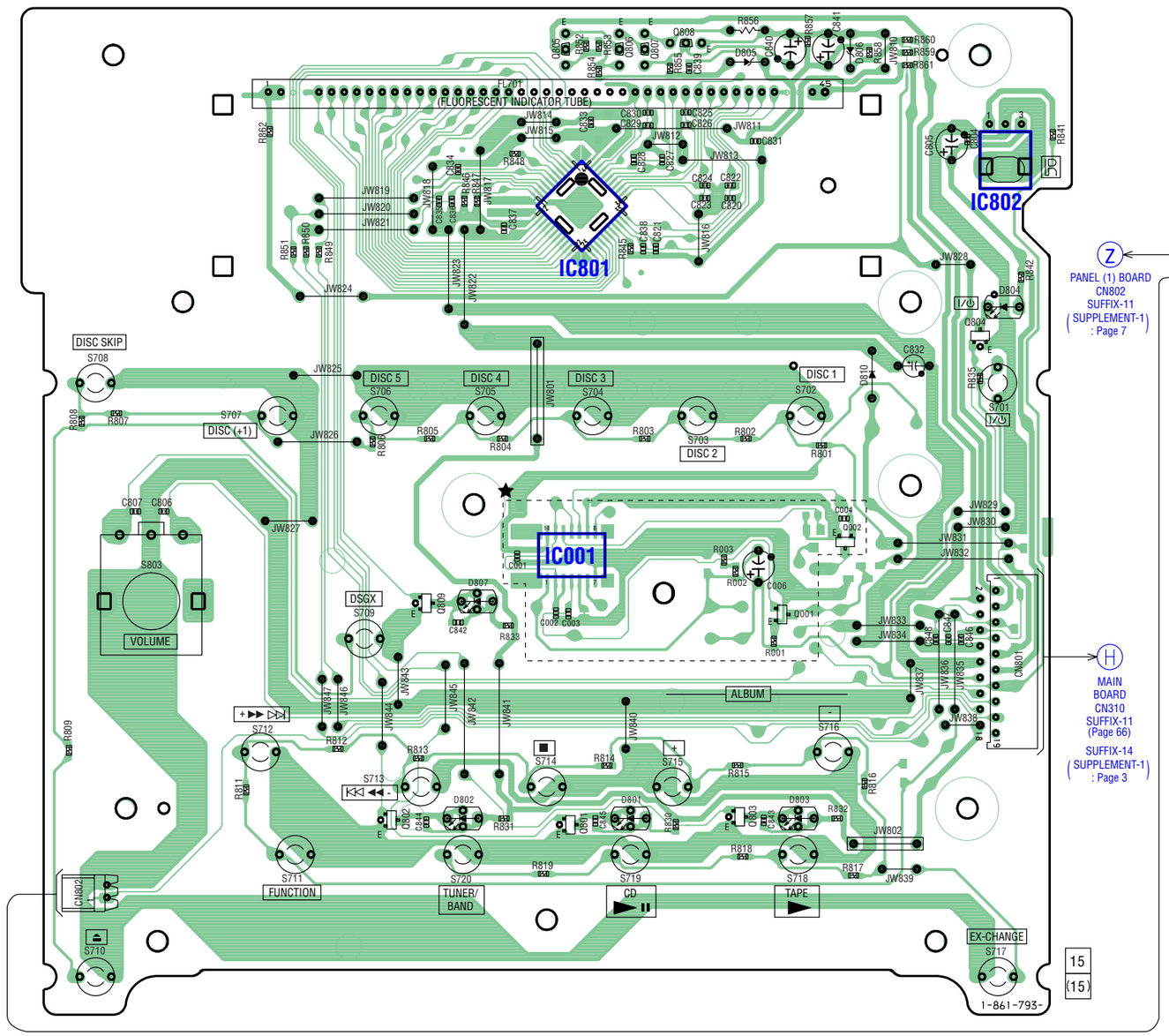
7-13. SCHEMATIC DIAGRAM — AMP BOARD —

• See page 79 for IC Block Diagram.

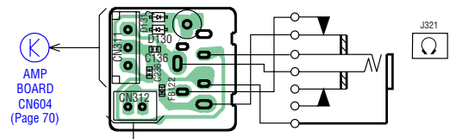


7-14. PRINTED WIRING BOARD — PANEL SECTION — • See page 57 for Circuit Boards Location. :Uses unleaded solder.

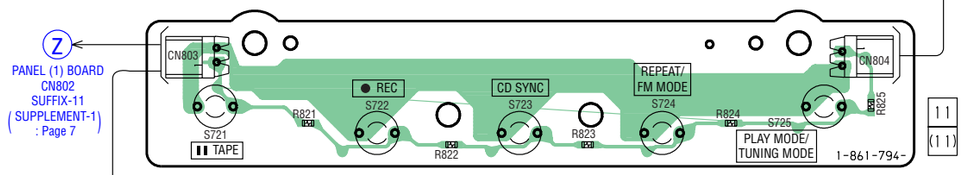
【PANEL (1) BOARD】



【HEADPHONE BOARD】



【PANEL (2) BOARD】



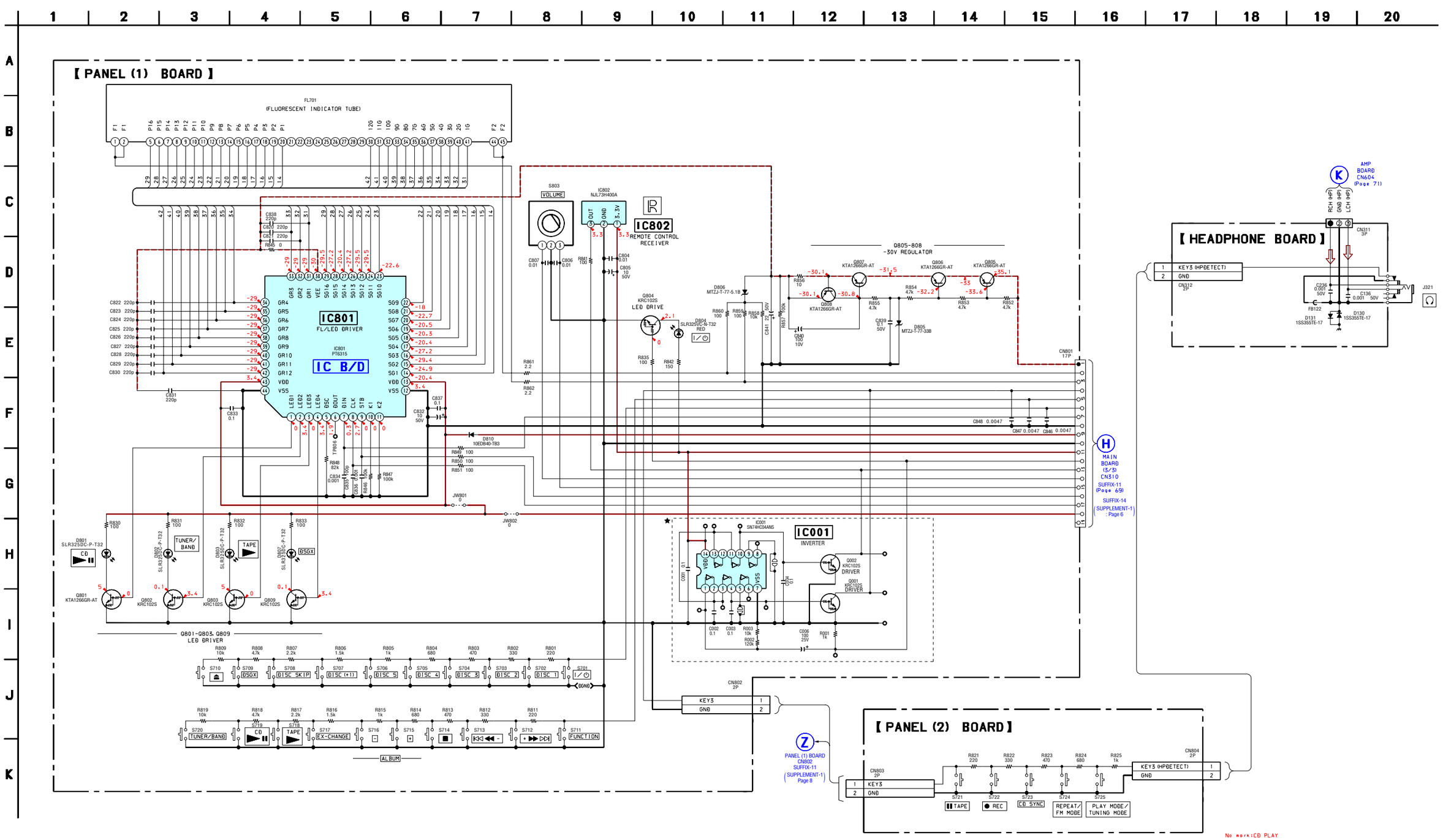
- **Semiconductor Location**

Ref. No.	Location
D801	F-5
D802	F-4
D803	F-6
D804	C-7
D805	A-6
D806	A-6
D807	E-4
D810	C-6
IC001	E-4
IC801	B-5
IC802	B-7
Q001	E-4
Q002	D-6
Q801	F-5
Q802	F-4
Q803	F-6
Q804	C-7
Q805	A-5
Q806	A-5
Q807	A-5
Q808	A-5
Q809	E-4

The parts with the letter "★" are the parts used for the countermeasure circuit.
For the description of the countermeasure circuit, refer to the SUPPLEMENT-1

7-15. SCHEMATIC DIAGRAM — PANEL SECTION —

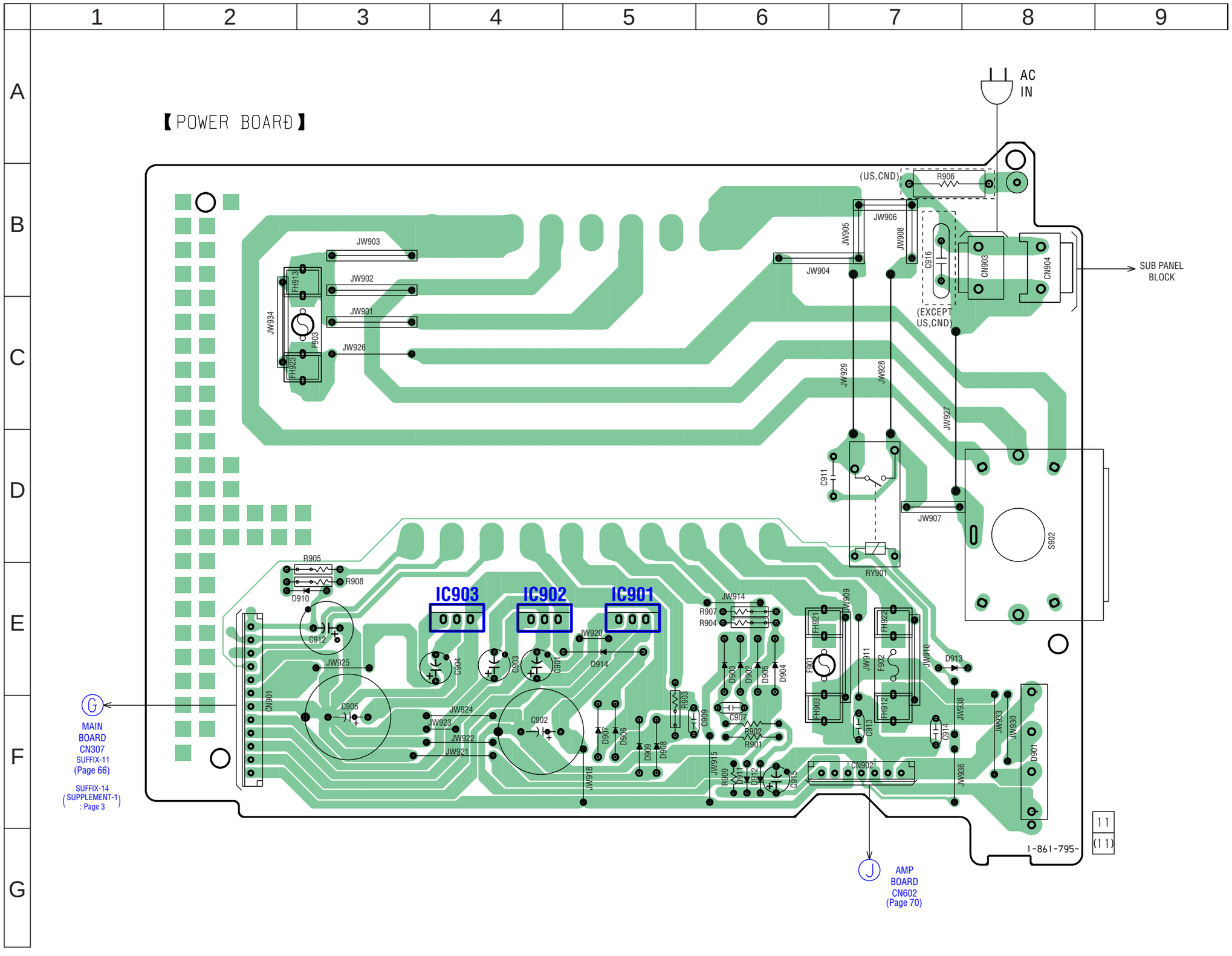
• See page 79 for IC Block Diagram.



The parts with the letter "★" are the parts used for the countermeasure circuit.
For the description of the countermeasure circuit, refer to the SUPPLEMENT-1

7-16. PRINTED WIRING BOARD — POWER BOARD —

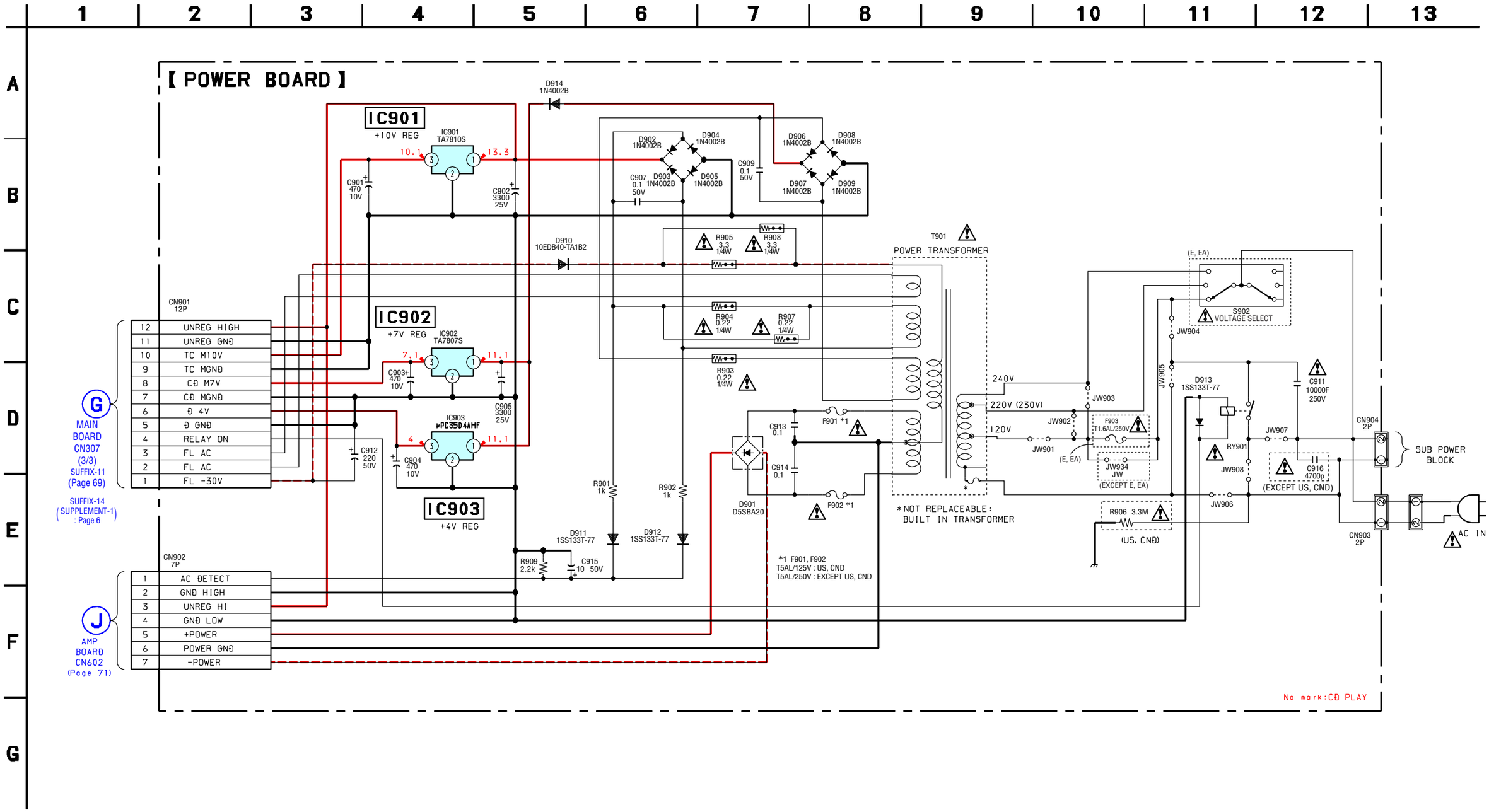
• See page 57 for Circuit Boards Location. :Uses unleaded solder.



- **Semiconductor Location**

Ref. No.	Location
D901	F-8
D902	E-6
D903	E-6
D904	E-6
D905	E-6
D906	F-5
D907	F-5
D908	F-5
D909	F-5
D910	E-3
D911	F-6
D912	F-6
D913	E-7
D914	E-5
IC901	E-5
IC902	E-4
IC903	E-4

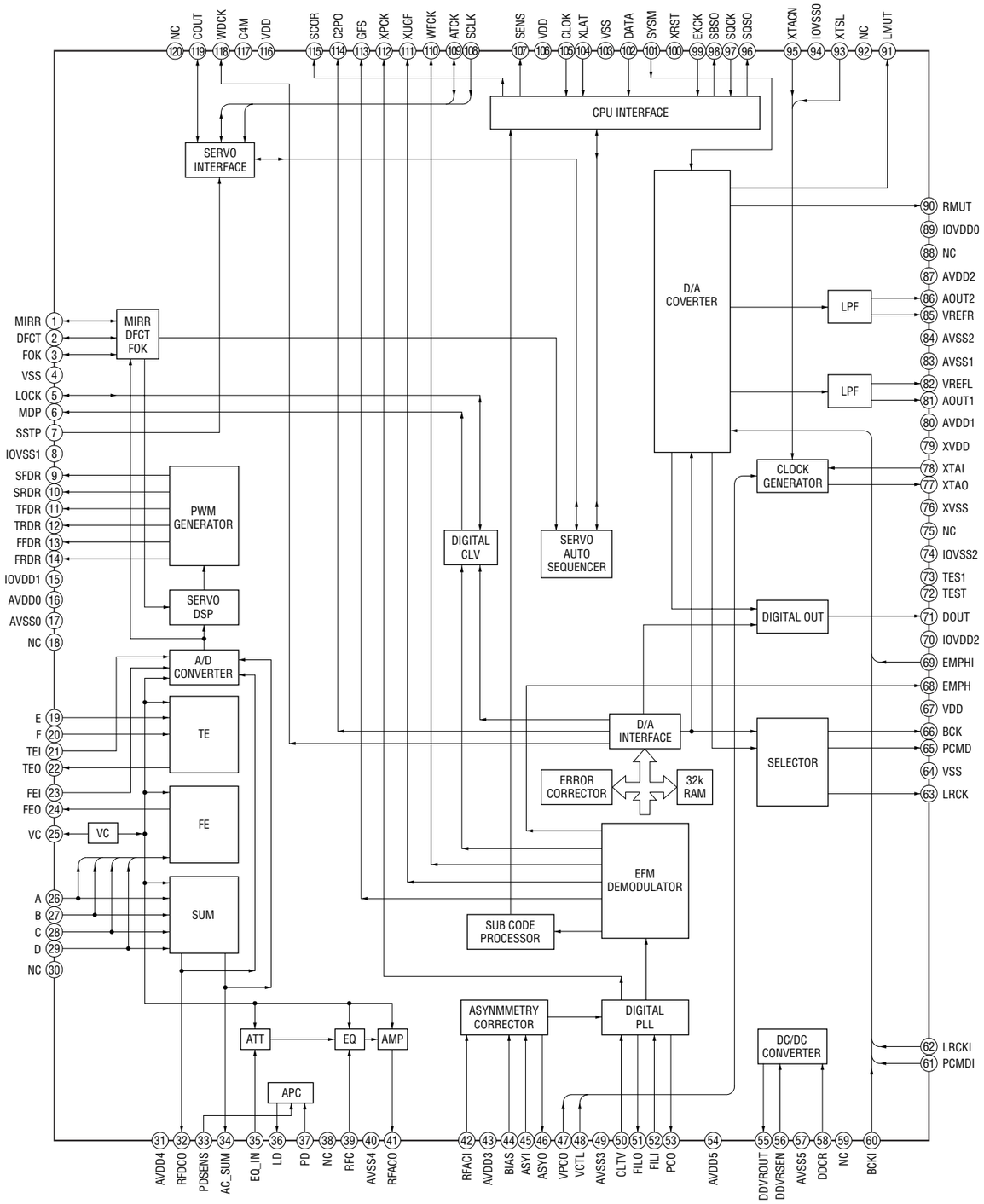
7-17. SCHEMATIC DIAGRAM — POWER BOARD —



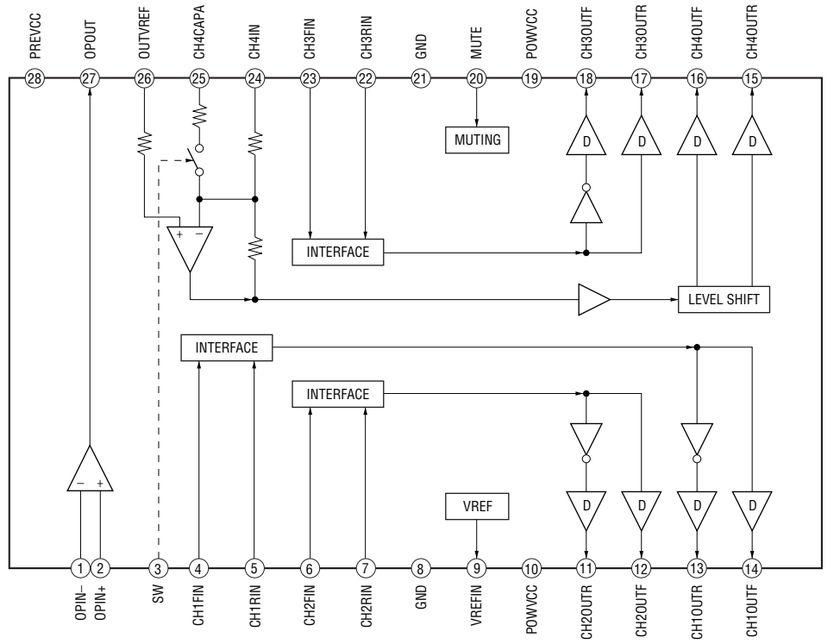
- **IC Block Diagrams**

– CD BOARD –

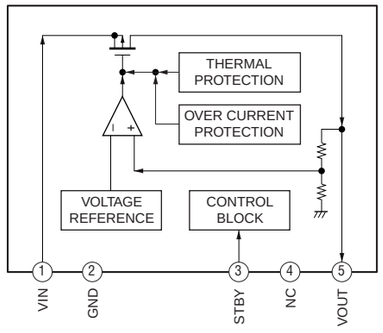
IC101 CXD3059AR



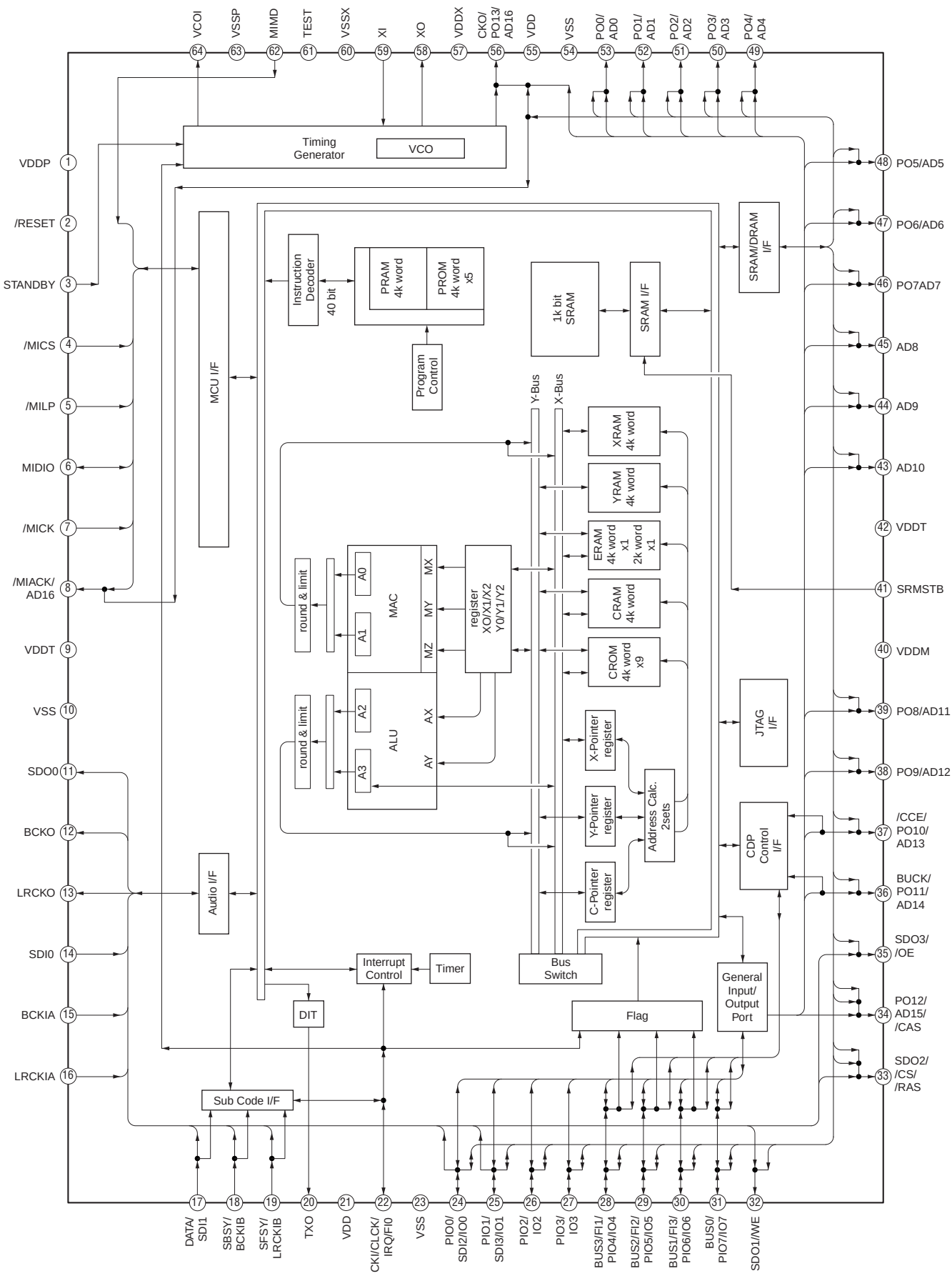
IC251 BA5947FM



IC303 BH15FB1WG



IC301 TC94A34FG-002

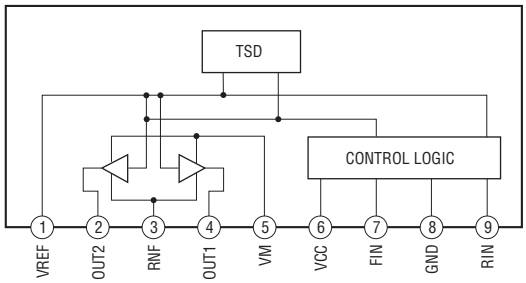


– CONNECTOR BOARD –

IC801, 811 BA6956AN

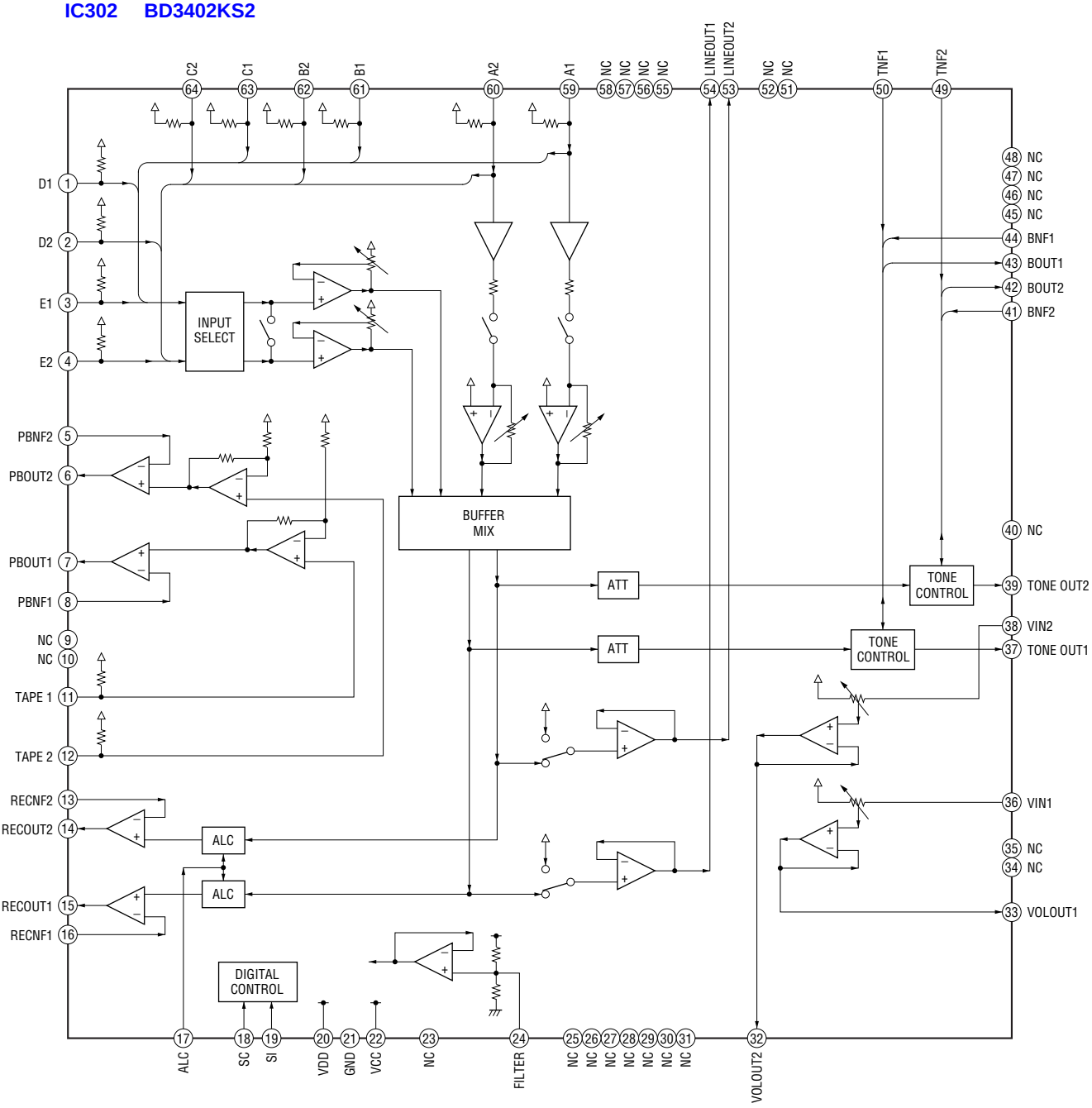
– DRIVER BOARD –

IC701 BA6956AN



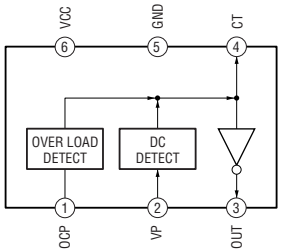
– MAIN BOARD –

IC302 BD3402KS2



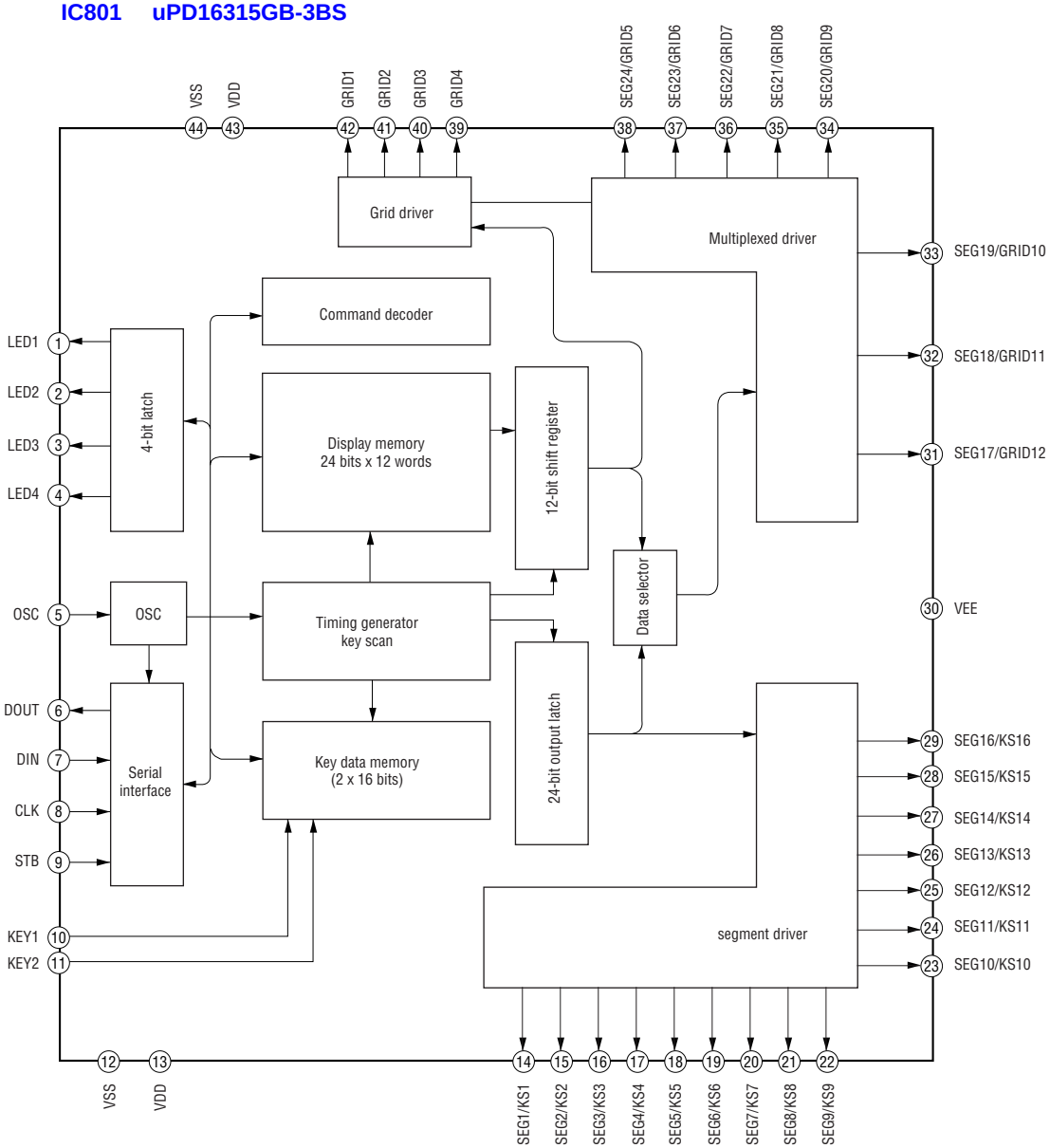
– AMP BOARD –

IC602 RT8H015C-T112-1



– PANEL (1) BOARD –

IC801 uPD16315GB-3BS



• **IC Pin Function Description**
MAIN BOARD IC306 M3062CMEN-A02FPU0 (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	CD DISCSENS 2	I	DISC 4, 5 and DISC (+1) detect signal input
2	CD DISCSENS 1	I	DISC 1 to 3 detect signal input
3	STBY LED	O	LED drive signal output terminal (power)
4	SIRCS IN/WAKE	I	SIRCS signal input terminal
5, 6	VOL A, VOL B	I	Jog dial pulse input terminal (volume)
7	FLSTB	O	Serial data read strobe signal output to the FL/LED driver
8	BYTE	I	External data bus width select signal input terminal (fixed “L”)
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 terminal “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 signal input terminal Not used
18	RDS-CLK	I	RDS serial data transfer clock signal input terminal (AEP only)
19	CD SCOR	I	Subcode Q data request signal input terminal
20	AC-CUT	I	Power down detection signal input terminal “L”: power down
21	FL CLK	O	Serial data transfer clock signal output to the FL/LED driver
22	CD XRST	O	System reset signal output to the CD servo block
23	CD XLT	O	Latch pulse signal output to the CD servo block
24	CD SENS	I	Internal status (SENSE) input from the CD DSP
25	CD MILP	O	Serial data latch pulse output to the MP3 decoder
26	CD MICS	O	Chip select signal output to the MP3 decoder
27	CD MP3REQ	I	Data transfer request signal input from the MP3 decoder
28	CD MP3STB	O	Standby signal output to the MP3 decoder
29	IICCLK	I/O	IIC data transfer clock signal input and output Not used
30	IICDATA	I/O	IIC two-way data bus Not used
31	NC	O	Not used
32	CD MIACK	I	Acknowledge signal input from the MP3 decoder
33	CD MP3RST	O	Reset signal output to the MP3 decoder
34	CD CLK	O	Serial data transfer clock signal output to the CD DSP
35	CD MIDIO	O	Serial data output to the MP3 decoder
36	CD MIDIN	I	Serial data input from the MP3 decoder
37	CD MICK	O	Serial data transfer clock signal output to the MP3 decoder
38	CD DATA	O	Serial data output to the CD DSP
39	CD AMUTE	O	CD muting on/off control signal output terminal
40	ELV E3/TRE A	I	ELV pulse input from the rotary encoder
41	ELV E2/TRE B	I	ELV dial pulse input from the rotary encoder
42	ELV E1/BASS A	I	ELV dial pulse input from the rotary encoder
43	ELV E0/BASS B	I	ELV dial pulse input from the rotary encoder
44	SW4 (8CM)	I	CD disc size detection (8cm) signal input terminal
45	SW3 (PUSH-CLOSE)	I	CD push-close switch input terminal
46	SW2-1 (CLOSE)	I	CD close switch input terminal

Pin No.	Pin Name	I/O	Description
47	SW2-2 (LOD POSITION)	I	CD loading position switch input terminal
48	SW1 (OPEN)	I	CD open switch input terminal
49	ELV NEG	O	Elevator up/down motor control signal output
50	ELV POS	O	Elevator up/down motor control signal output
51	LOD NEG	O	Loading motor control signal output
52	LOD POS	O	Loading motor control signal output
53	SW-POWER	O	Sub power block on/off control signal output terminal
54	—	O	Not used
55	XTCN	O	Oscillator control signal output to the CD DSP
56	—	O	Not used
57	CD BD POWER	O	Power on/off control signal output for CD block
58	RDS DATA	I	RDS serial data input terminal (AEP only)
59	CDM80 LOAD-OUT	O	Loading motor control signal output (loading out direction)
60	CDM80 LOAD-IN	O	Loading motor control signal output (loading in direction)
61	(TRIGGER SW) CDM80 SW3	I	12cm DISC switch “L”: switch on
62	VCC	—	Power supply terminal (+3.3V)
63	(OUT SW) CDM80 SW1	I	Out switch input terminal “L”: switch on
64	VSS	—	Ground terminal
65	(CHUCK SW) CDM80 SW2	I	Chuck switch input terminal “L”: switch on
66	FAN DRIVE	O	Fan motor drive signal output terminal Not used
67	ST MUTE	O	Tuner muting on/off control signal output terminal
68	ST STEREO	I	FM stereo detection signal input from the tuner unit “L”: stereo
69	ST TUNED	I	Tuning detection signal input from the tuner unit “L”: tuned
70	ST CE	O	Chip enable signal output to the FM/AM tuner unit
71	ST DATA OUT	O	Serial data output to the FM/AM tuner unit
72	ST DATA IN	I	Serial data input from the FM/AM tuner unit
73	ST CLK	O	Serial data transfer clock signal output to the FM/AM tuner unit
74	KEY WAKE UP	I	System wake up signal input terminal in the standby status
75	TC PLAY	I	Tape play switch input terminal
76	TC TRG	O	Plunger driver signal output terminal “L”: plunger on
77	TC CAPM CONT	O	Capstan/reel motor drive signal output terminal “L”: forward, “H”: reverse
78	BIAS ON	O	REC bias on/off control signal output terminal “H”: REC bias on
79	TC R/P	O	PB/REC switching control signal output terminal “L”: PB
80	RY ON	O	Relay drive signal output for main power supply “H”: power on
81	WATPOW	O	Not used
82	TC DOOR SW	I	Tape deck lid open/close detection signal input terminal
83	LINE MUTE	O	Line muting on/off control signal output terminal “H”: muting on
84	PROTECT	I	Protect signal input from the amplifier circuit “L”: protect
85	SP RELAY	O	Speaker on/off relay drive signal output terminal “L”: speaker off
86	AMP POWER	O	AMP muting on/off control signal output terminal “H”: AMP on
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	KEY3 to KEY1	I	Front panel key or headphone detection input terminal (A/D input)

Pin No.	Pin Name	I/O	Description
92	MODEL	I	Setting terminal for the model type
93	DEST	I	Setting terminal for the destination
94	TC END SW	I	End switch detection from tape deck block
95	TC HALF/REC SW	I	Half/REC switch detection from tape deck block
96	AVSS	—	Ground terminal
97	NC	O	Not used
98	VREF	I	Reference voltage (+3.3V) input terminal
99	AVCC	—	Power supply terminal (+3.3V)
100	FL DATA	O	Serial data output to the FL/LED driver

SECTION 8
EXPLODED VIEWS

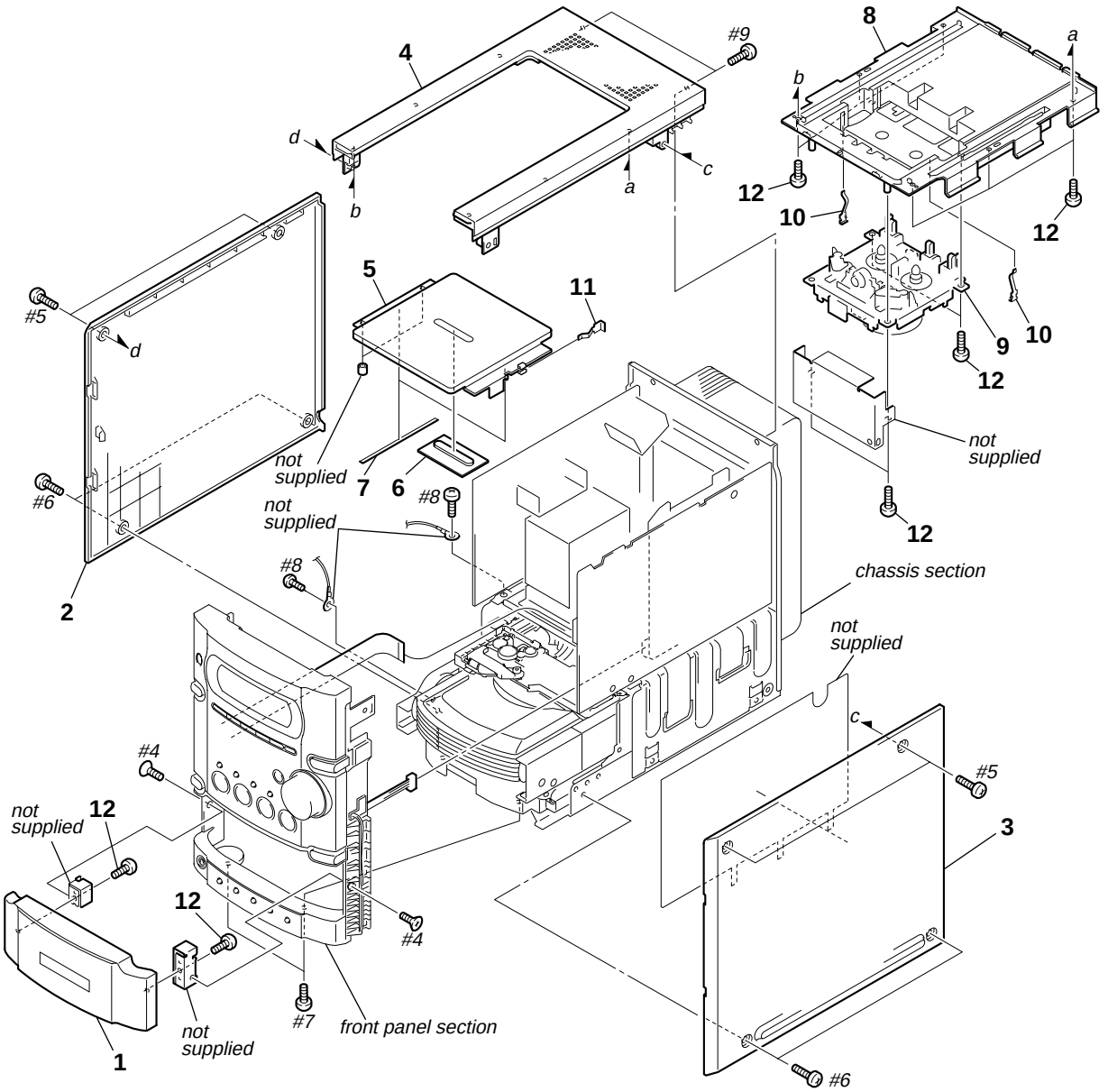
NOTE:

- -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.
- Abbreviation
  AR : Argentine model
  AUS : Australian model
  CND : Canadian model
  EA : Sandi Arabia model
  KR : Korea model

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

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

8-1. SIDE PLATE, TOP PANEL SECTION

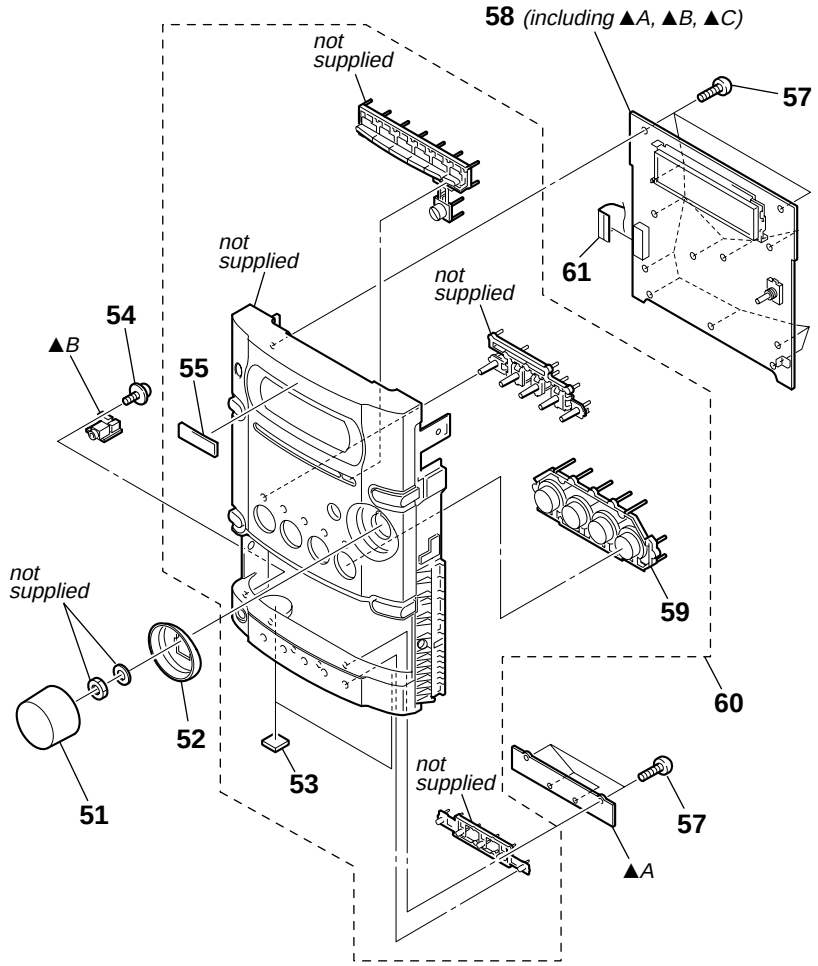


Ref. No.	Part No.	Description	Remark
1	4-253-148-01	PANEL, CD (US, CND)	
1	4-253-148-11	PANEL, CD (E, EA, AR, AUS, KR)	
2	4-253-151-02	PLATE (L), SIDE (US, CND)	
2	4-253-151-11	PLATE (L), SIDE (E, EA, AR, AUS, KR)	
3	4-253-152-01	PLATE (R), SIDE (US, CND)	
3	4-253-152-11	PLATE (R), SIDE (E, EA, AR, AUS, KR)	
4	4-253-114-01	PANEL, TOP (US, CND)	
4	4-253-114-11	PANEL, TOP (E, EA, AR, AUS, KR)	
5	X-2055-969-1	DOOR ASSY, CASSETTE	
7	2-025-481-01	SLIDE PAD	
8	4-253-112-01	PANEL, CASSETTE (US, CND)	

Ref. No.	Part No.	Description	Remark
8	4-253-112-11	PANEL, CASSETTE (E, EA, AR, AUS, KR)	
9	1-796-352-51	DECK, MECHANICAL (CMAL5Z225A)	
10	4-253-116-01	SPRING (CASSETTE), LEAF	
11	4-253-117-01	SPRING (SLIDE), LEAF	
12	4-951-620-01	SCREW (2.6X8), +BVTP	
#4	7-685-246-19	SCREW +KTP 3X8 TYPE2 NON-SLIT	
#5	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#6	7-685-645-14	SCREW +BVTP 3X6 TYPE2 N-S	
#7	7-685-871-01	SCREW +BVTT 3X6 (S)	
#8	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#9	7-685-646-14	SCREW +BVTP 3X8 TYPE2 N-S	

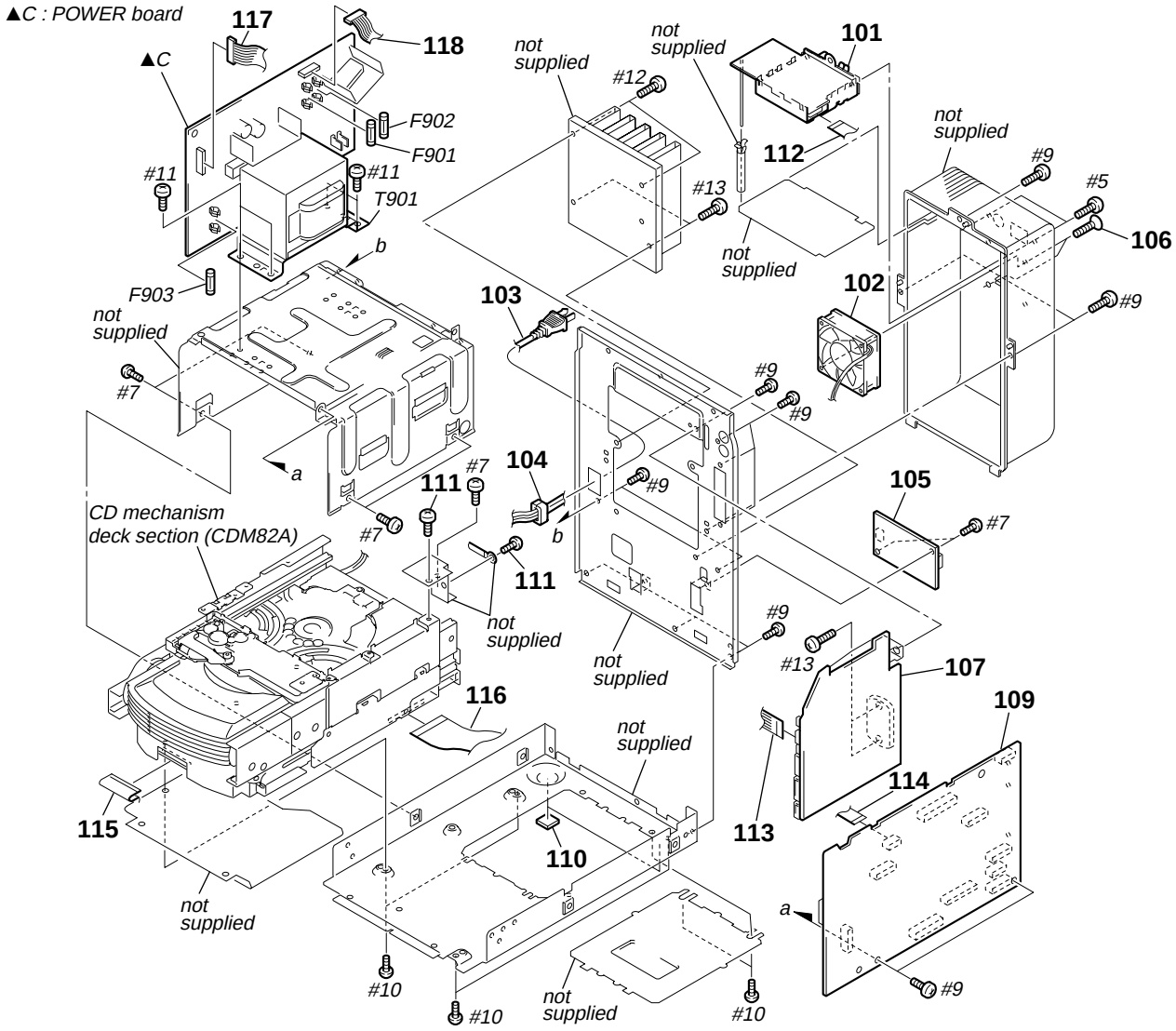
8-2. FRONT PANEL SECTION

▲A : PANEL (2) board
▲B : HEADPHONE board



Ref. No.	Part No.	Description	Remark
51	4-253-142-01	KNOB (VOLUME)	
52	4-253-141-01	RING (VOLUME)	
53	4-247-752-01	RUBBER, FOOT	
54	3-921-725-01	SCREW +PWH 2.6X10	
55	3-038-018-01	EMBLEM, SONY	
57	4-951-620-01	SCREW (2.6X8), +BVTP	
58	A-1062-192-A	PANEL (1) BOARD, COMPLETE (EA) (including PANEL (2), HEADPHONE and POWER board)	
58	A-1062-226-A	PANEL (1) BOARD, COMPLETE (E) (including PANEL (2), HEADPHONE and POWER board)	
58	A-1062-231-A	PANEL (1) BOARD, COMPLETE (AUS) (including PANEL (2), HEADPHONE and POWER board)	
58	A-1062-233-A	PANEL (1) BOARD, COMPLETE (AR) (including PANEL (2), HEADPHONE and POWER board)	
58	A-1076-938-A	PANEL (1) BOARD, COMPLETE (KR) (including PANEL (2), HEADPHONE and POWER board)	
58	A-4751-221-A	PANEL (1) BOARD, COMPLETE (US, CND) (including PANEL (2), HEADPHONE and POWER board)	
59	X-4956-241-1	BUTTON ASSY, FUNCTION	
60	X-2021-173-1	PANEL ASSY, FRONT (E, EA, AR, AUS, KR)	
60	X-4956-252-1	PANEL ASSY, FRONT (US, CND)	
61	1-773-052-11	WIRE (FLAT TYPE)(17 CORE)	

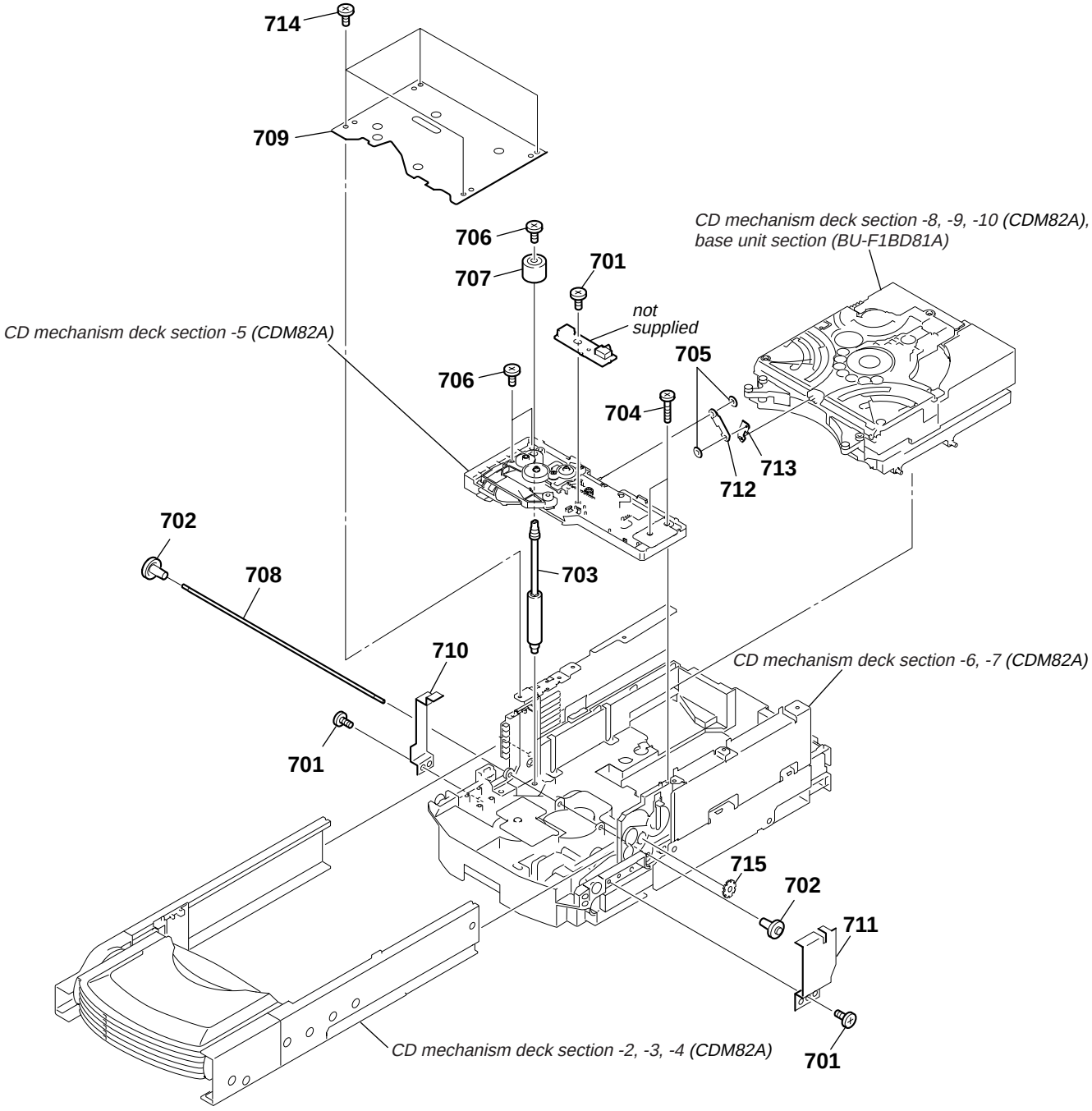
8-3. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
101	1-693-625-11	TUNER (FM/AM) (US, CND)	
101	1-693-628-11	TUNER (FM/AM) (E, EA, AR, AUS)	
101	1-693-629-11	TUNER (FM/AM) (KR)	
102	1-787-103-11	FAN, DC	
⚠103	1-696-585-21	CORD, POWER (EA)	
⚠103	1-769-079-41	CORD, POWER (KR)	
⚠103	1-775-790-12	CORD, POWER (AUS)	
⚠103	1-783-531-12	CORD, POWER (US, CND)	
⚠103	1-783-941-21	CORD, POWER (AR)	
⚠103	1-827-226-11	CORD, POWER (E)	
104	3-703-244-00	BUSHING (2104), CORD (EXCEPT E)	
* 104	3-703-571-11	BUSHING (S) (4516), CORD (E)	
105	1-468-738-11	REGULATOR, SWITCHING	
106	4-671-016-01	SCREW (FAN)	
107	A-4751-219-A	AMP BOARD, COMPLETE	
109	A-1062-202-A	MAIN BOARD, COMPLETE (EA)	
109	A-1062-229-A	MAIN BOARD, COMPLETE (E, AUS)	
109	A-1068-563-A	MAIN BOARD, COMPLETE (AR)	
109	A-1076-937-A	MAIN BOARD, COMPLETE (KR)	
109	A-4751-220-A	MAIN BOARD, COMPLETE (US, CND)	
110	2-050-617-01	FOOT	
111	4-951-620-01	SCREW (2.6X8), +BVTP	
112	1-769-944-11	WIRE (FLAT TYPE)(11 CORE)	
113	1-769-916-11	WIRE (FLAT TYPE)(9 CORE)	
114	1-769-879-11	WIRE (FLAT TYPE)(7 CORE)	

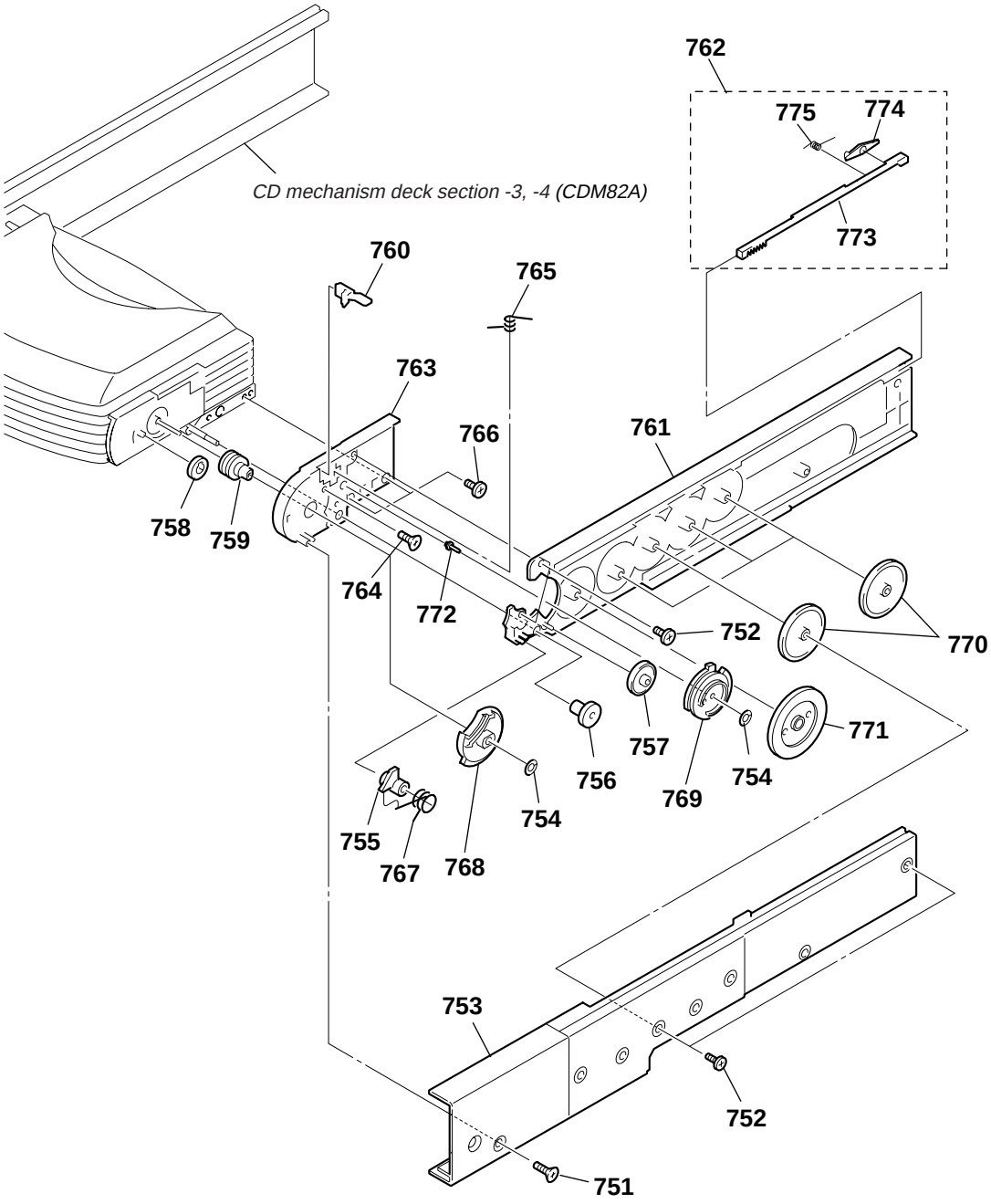
Ref. No.	Part No.	Description	Remark
115	1-831-593-11	WIRE (FLAT TYPE)(21 CORE)	
116	1-831-594-11	WIRE (FLAT TYPE)(27 CORE)	
117	1-564-515-11	PLUG, CONNECTOR 12P	
118	1-564-510-11	PLUG, CONNECTOR 7P	
⚠F901	1-533-453-11	FUSE, GLASS TUBE (DIA. 5) (T5AL/125V) (US, CND)	
⚠F901	1-533-472-11	FUSE, GLASS TUBE (DIA. 5) (T5AL/250V) (E, EA, AR, AUS, KR)	
⚠F902	1-533-453-11	FUSE, GLASS TUBE (DIA. 5) (T5AL/125V) (US, CND)	
⚠F902	1-533-472-11	FUSE, GLASS TUBE (DIA. 5) (T5AL/250V) (E, EA, AR, AUS, KR)	
⚠F903	1-533-467-11	FUSE, GLASS TUBE (DIA. 5) (T1.6AL/250V) (E, EA)	
⚠T901	1-443-330-11	TRANSFORMER, POWER (US, CND)	
⚠T901	1-443-333-11	TRANSFORMER, POWER (E, AR, AUS, KR)	
⚠T901	1-443-418-11	TRANSFORMER, POWER (EA)	
#5	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#7	7-685-871-01	SCREW +BVTT 3X6 (S)	
#9	7-685-646-14	SCREW +BVTP 3X8 TYPE2 N-S	
#10	7-685-645-79	SCREW +BVTT 3X6 TYPE2 N-S	
#11	7-685-880-09	SCREW +BVTT 4X6 (S)	
#12	7-685-648-01	SCREW +BVTP 3X12 TYPE1	
#13	7-685-650-79	SCREW +BVTP 3X16 TYPE3 IT-3	

8-4. CD MECHANISM DECK SECTION-1 (CDM82A)



Ref. No.	Part No.	Description	Remark
701	4-218-253-01	SCREW (M2.6), +BTTP	
702	4-252-881-01	GEAR (JOINT OP)	
703	4-252-918-01	SHAFT (CONNECTION)	
704	4-253-811-01	+PTPWH 2X14	
705	4-255-299-01	WASHER (DIA. 3.5)	
706	4-908-618-42	SCREW (+BTP) (2X8)	
707	4-252-853-01	GEAR (CONNECTION TP)	
708	4-252-807-02	SHAFT (STOCK)	
709	4-253-516-02	PLATE (COVER TOP)	
710	2-021-899-01	PLATE (TOP CAM L)	
711	2-021-900-01	PLATE (TOP CAM R)	
712	4-252-858-01	GUARD (LOWER), SHOCK	
713	4-252-857-01	GUARD (UPPER), SHOCK	
714	4-218-253-62	SCREW (M2.6), +BTTP	
715	4-252-834-01	GEAR (SWING)	

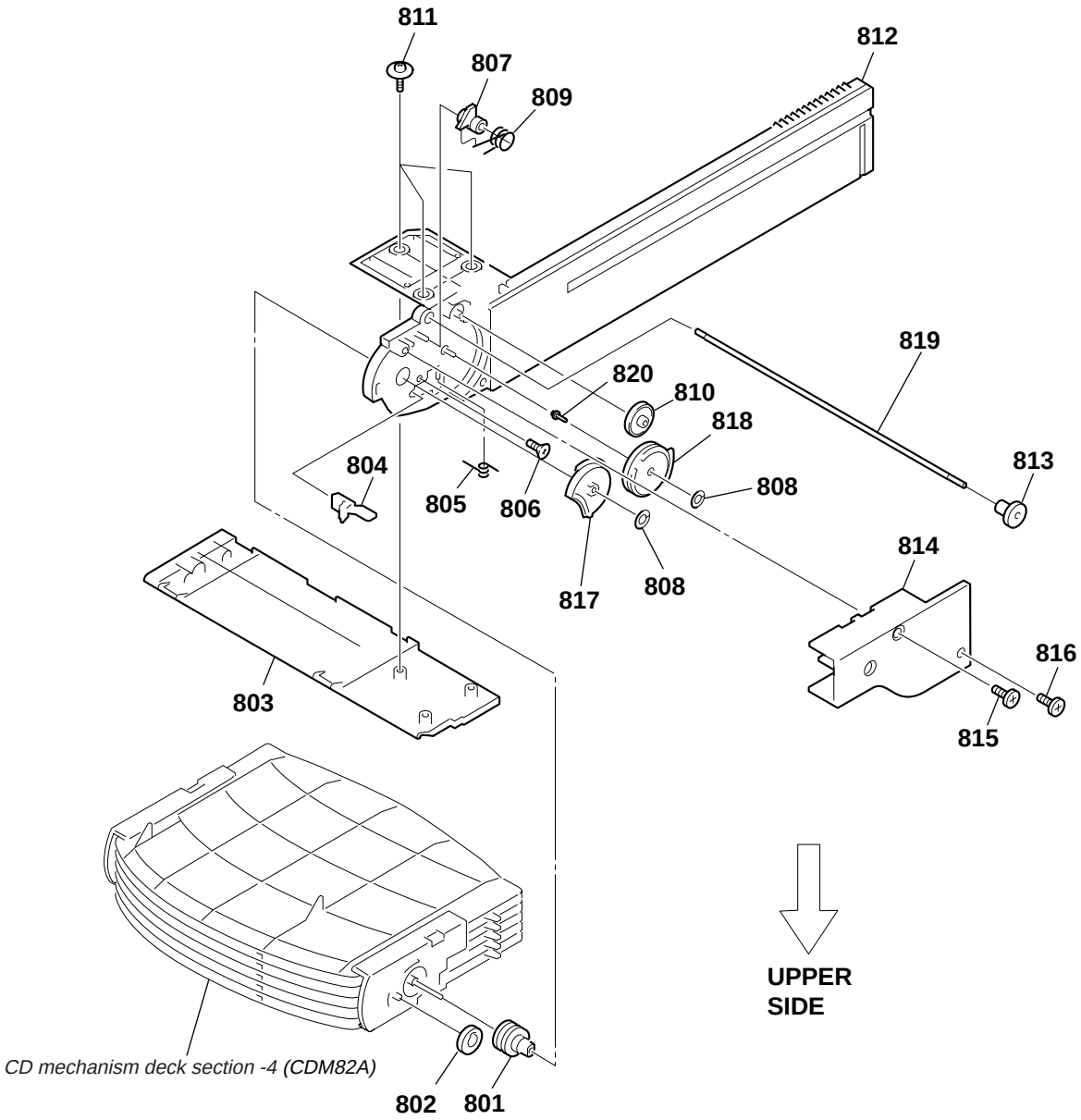
8-5. CD MECHANISM DECK SECTION-2 (CDM82A)



Ref. No.	Part No.	Description	Remark
751	2-641-430-31	SCREW (2.6), (+) K TAPPING	
752	4-253-344-01	SCREW (2)	
753	4-252-827-05	COVER (R)	
754	2-021-250-01	WASHER (5.5)	
755	4-255-344-01	LEVER (SUB GEAR BACK R)	
756	4-252-806-01	GEAR (STOCK JOINT)	
757	4-252-819-01	GEAR (JOINT JUST FRONT), SUB	
758	4-252-804-01	GEAR (STOCK PLANET)	
759	4-252-802-01	GEAR (STOCK SUN)	
760	4-252-816-01	LEVER (LOCK R)	
761	4-252-810-01	ARM (R)	
762	A-1060-629-A	SLIDER ASSY, SUB	
763	4-252-808-01	BASE (A), STOCK	

Ref. No.	Part No.	Description	Remark
764	4-253-564-01	SCREW (1.7)	
765	4-252-818-01	SPRING (STOCK LOCK R)	
766	4-218-253-62	SCREW (M2.6), +BTTP	
767	2-021-898-02	SPR-T (SUB GEAR BACK R)	
768	4-252-812-01	GEAR (STOCK ROTARY RIGHT)	
769	4-252-814-01	GEAR (SUB GEAR PIN RIGHT)	
770	4-252-821-02	GEAR (IDLER), SUB	
771	4-252-822-02	GEAR (2 STEP), SUB	
772	4-253-742-01	SHAFT (STOCK ROTARY)	
773	4-252-823-01	SLIDER (R), SUB	
774	4-252-824-01	LOCK (R), SUB	
775	4-252-825-01	SPRING (SUB LOCK R)	

8-6. CD MECHANISM DECK SECTION-3 (CDM82A)

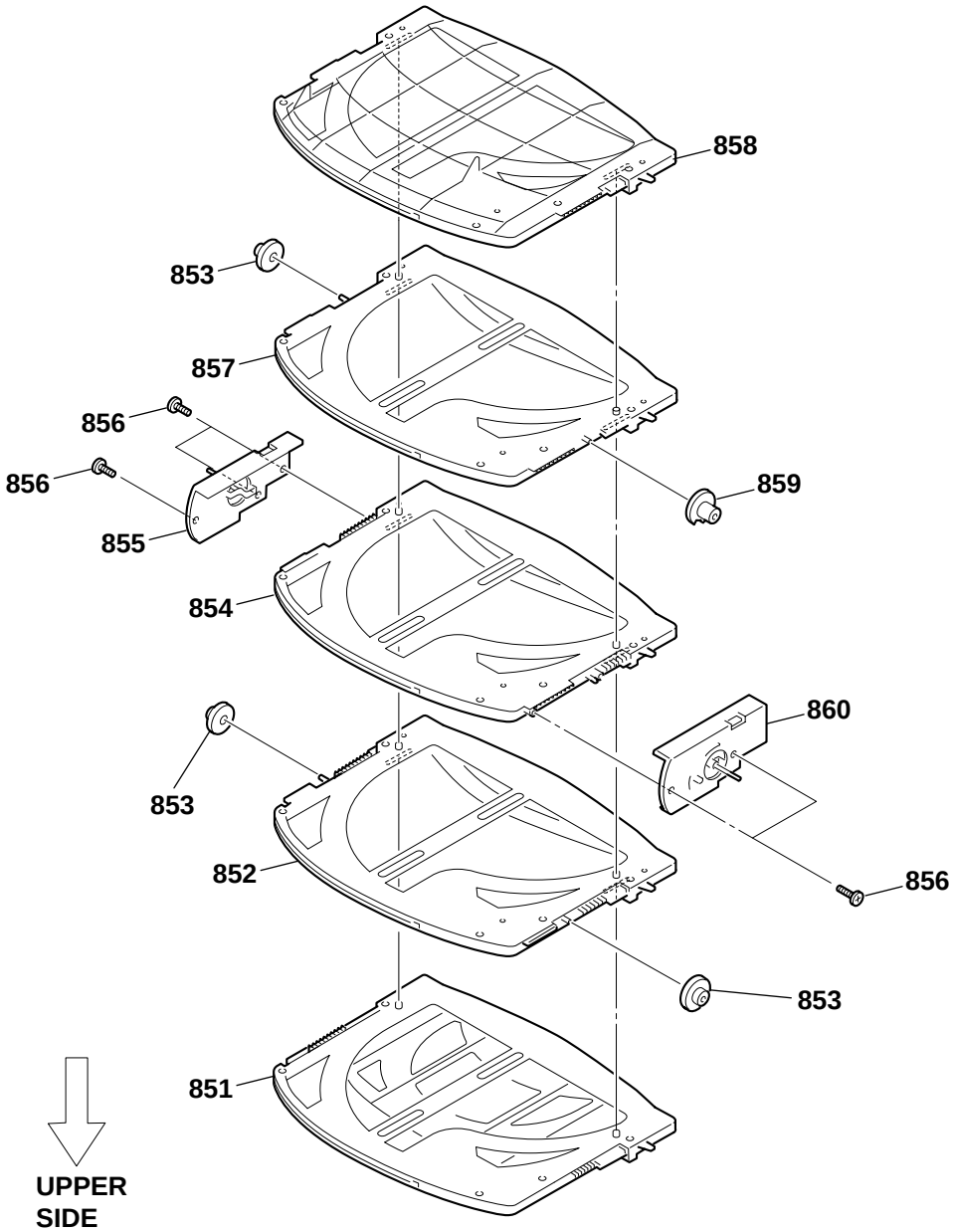


CD mechanism deck section -4 (CDM82A)

Ref. No.	Part No.	Description	Remark
801	4-252-802-01	GEAR (STOCK SUN)	
802	4-252-804-01	GEAR (STOCK PLANET)	
803	4-253-802-02	BASE (B), STOCK	
804	4-252-815-01	LEVER (LOCK L)	
805	4-252-817-01	SPRING (STOCK LOCK L)	
806	4-253-564-01	SCREW (1.7)	
807	4-255-345-01	LEVER (SUB GEAR BACK L)	
808	2-021-250-01	WASHER (5.5)	
809	4-255-340-01	SPR-T (SUB GEAR BACK L)	
810	4-252-819-01	GEAR (JOINT JUST FRONT), SUB	

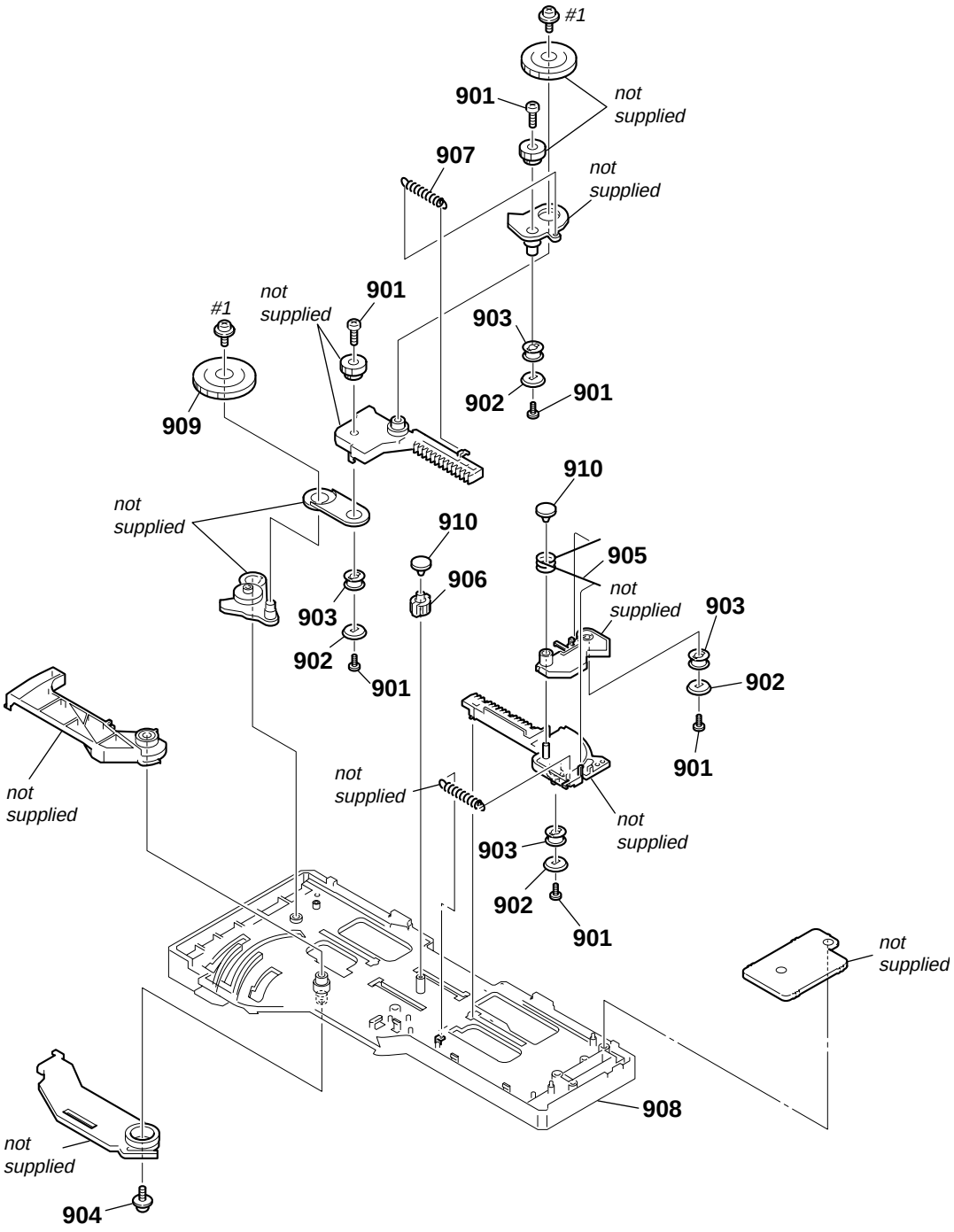
Ref. No.	Part No.	Description	Remark
811	4-218-252-01	SCREW (+PTPWH M2.6), FLOATING	
812	4-252-809-03	ARM (L)	
813	4-252-806-01	GEAR (STOCK JOINT)	
814	4-252-826-01	COVER (L)	
815	2-641-430-31	SCREW (2.6), (+) K TAPPING	
816	4-253-344-01	SCREW (2)	
817	4-252-811-01	GEAR (STOCK ROTARY LEFT)	
818	4-252-813-02	GEAR (SUB GEAR PIN LEFT)	
819	4-252-807-02	SHAFT (STOCK)	
820	4-253-742-01	SHAFT (STOCK ROTARY)	

8-7. CD MECHANISM DECK SECTION-4 (CDM82A)



Ref. No.	Part No.	Description	Remark
851	A-1060-624-A	STOCKER (5) ASSY	
852	A-1060-625-A	STOCKER (4) ASSY	
853	4-252-800-01	GEAR (STOCK LOT SHORT)	
854	A-1060-626-A	STOCKER (3) ASSY	
855	4-252-798-01	BOX (L), STOCK	
856	4-253-344-01	SCREW (2)	
857	A-1060-627-A	STOCKER (2) ASSY	
858	A-1060-628-A	STOCKER (1) ASSY	
859	4-252-801-01	GEAR (STOCK LOT LONG)	
860	4-252-799-04	BOX (R), STOCK	

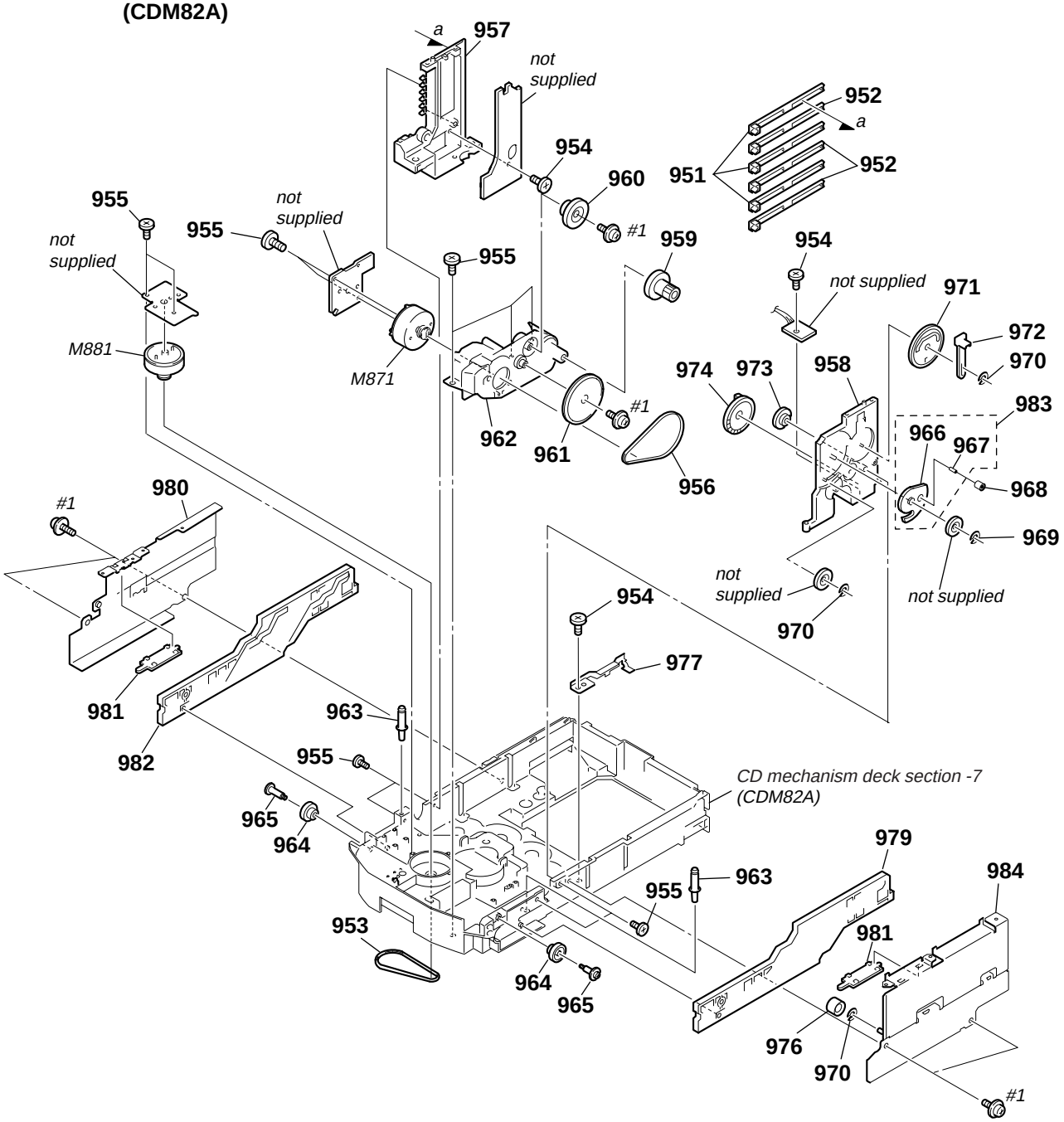
8-8. CD MECHANISM DECK SECTION-5 (CDM82A)



Ref. No.	Part No.	Description	Remark
901	4-253-344-01	SCREW (2)	
902	4-252-904-01	PARASOL	
903	4-252-908-01	ROLLER, RUBBER	
904	4-992-069-01	SCREW (+PTPWH) (M2) (DIA. 7)	
905	4-255-341-01	SPR-T (8CM SLIDER R)	

Ref. No.	Part No.	Description	Remark
906	4-252-909-01	PINION	
907	4-255-342-01	SPR-E (8CM SLIDER L)	
908	4-252-843-02	TOP	
909	4-252-821-02	GEAR (IDLER), SUB	
910	4-245-640-01	GEAR (CAP)	
#1	7-685-902-21	SCREW +PTPWH 2.6X8 (TYPE2)	

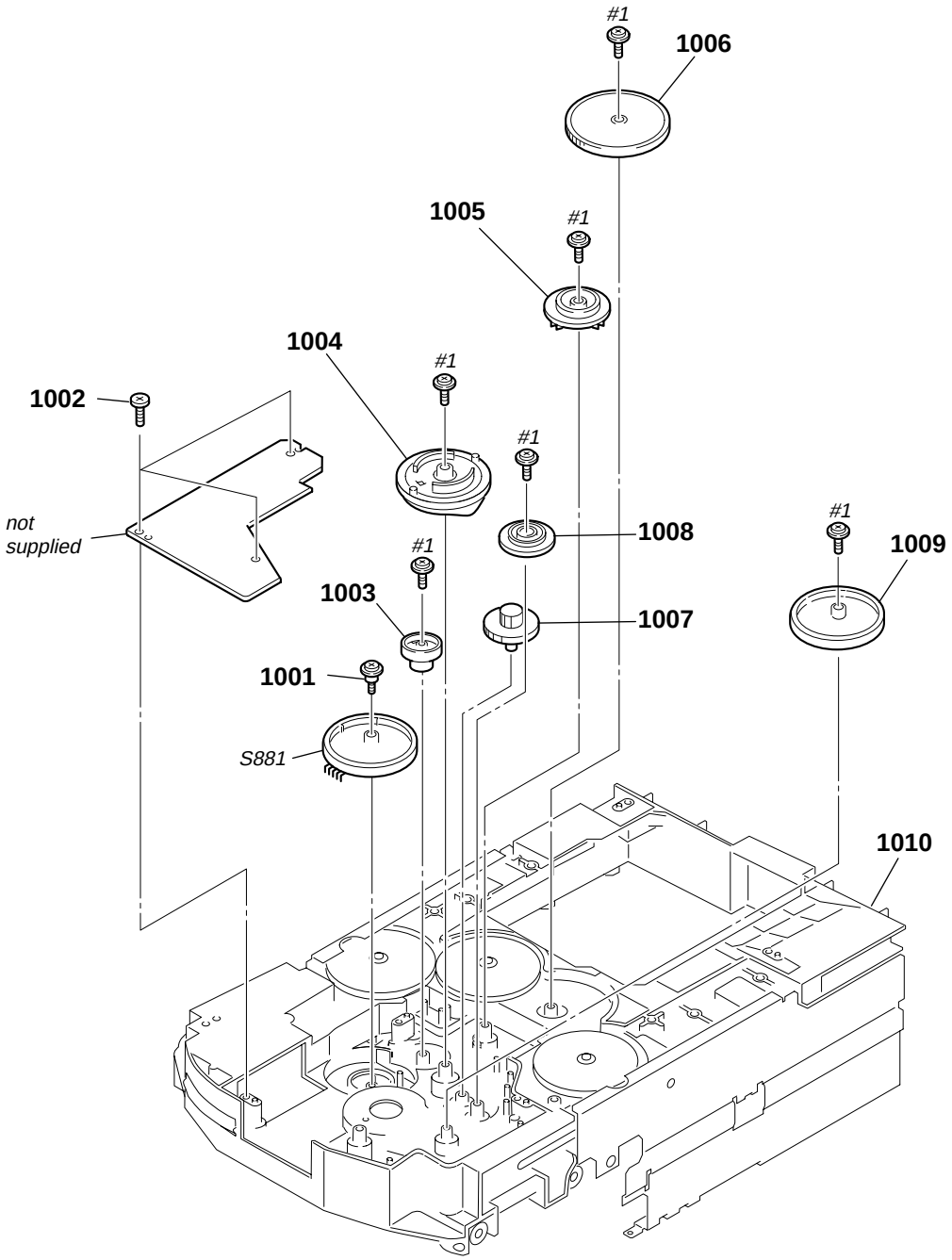
8-9. CD MECHANISM DECK SECTION-6 (CDM82A)



Ref. No.	Part No.	Description	Remark
951	4-252-829-01	SLIDER (PUSH POPUP1)	
952	4-252-830-01	SLIDER (PUSH POPUP2)	
953	4-252-883-01	BELT (MOT UD)	
954	4-218-253-62	SCREW (M2.6), +BTTP	
955	4-218-253-01	SCREW (M2.6), +BTTP	
956	4-252-866-01	BELT (MOT OP)	
957	4-252-828-04	CHASSIS (L), SUB	
958	4-252-832-04	CHASSIS (R), SUB	
959	4-252-864-01	GEAR (DECELERATION 2OP)	
960	4-252-863-01	GEAR (DECELERATION 1OP)	
961	4-252-862-01	GEAR (PULLEY OP)	
962	4-252-861-02	BASE (OPEN GEAR)	
963	2-021-023-01	SHAFT (ARM GUIDE)	
964	4-252-884-01	ROLLER	
965	4-239-618-01	SCREW (+PWH, 2X6), STEP TAPPING	
966	4-252-833-01	BASE, SWING	
967	4-253-848-01	SHAFT (SWING GEAR)	
968	4-252-835-01	ROLLER (SWING)	

Ref. No.	Part No.	Description	Remark
969	2-021-250-01	WASHER (5.5)	
970	4-255-299-01	WASHER (DIA. 3.5)	
971	4-252-839-01	CAM (SWING)	
972	4-252-840-01	LEVER (SWING)	
973	4-252-842-01	GEAR (IDLER SW-OP)	
974	4-252-841-01	GEAR (SW-OP)	
976	4-253-515-01	ROLLER (R), SUBMARINE	
977	2-048-741-01	LEVER (BASE SUPPORT)	
979	4-252-879-01	PLATE (CAM R)	
980	X-4956-303-2	PLATE (COVER CAM L) ASSY	
981	4-253-517-01	LEVER (GUIDE)	
982	4-252-878-01	PLATE (CAM L)	
983	X-2021-827-1	BASE ASSY, SWING	
984	X-4956-304-2	PLATE (COVER CAM R) ASSY	
M871	A-1060-630-A	MOTOR ASSY (LOD)	
M881	A-1060-630-A	MOTOR ASSY (ELV)	
#1	7-685-902-21	SCREW +PTPWH 2.6X8 (TYPE2)	

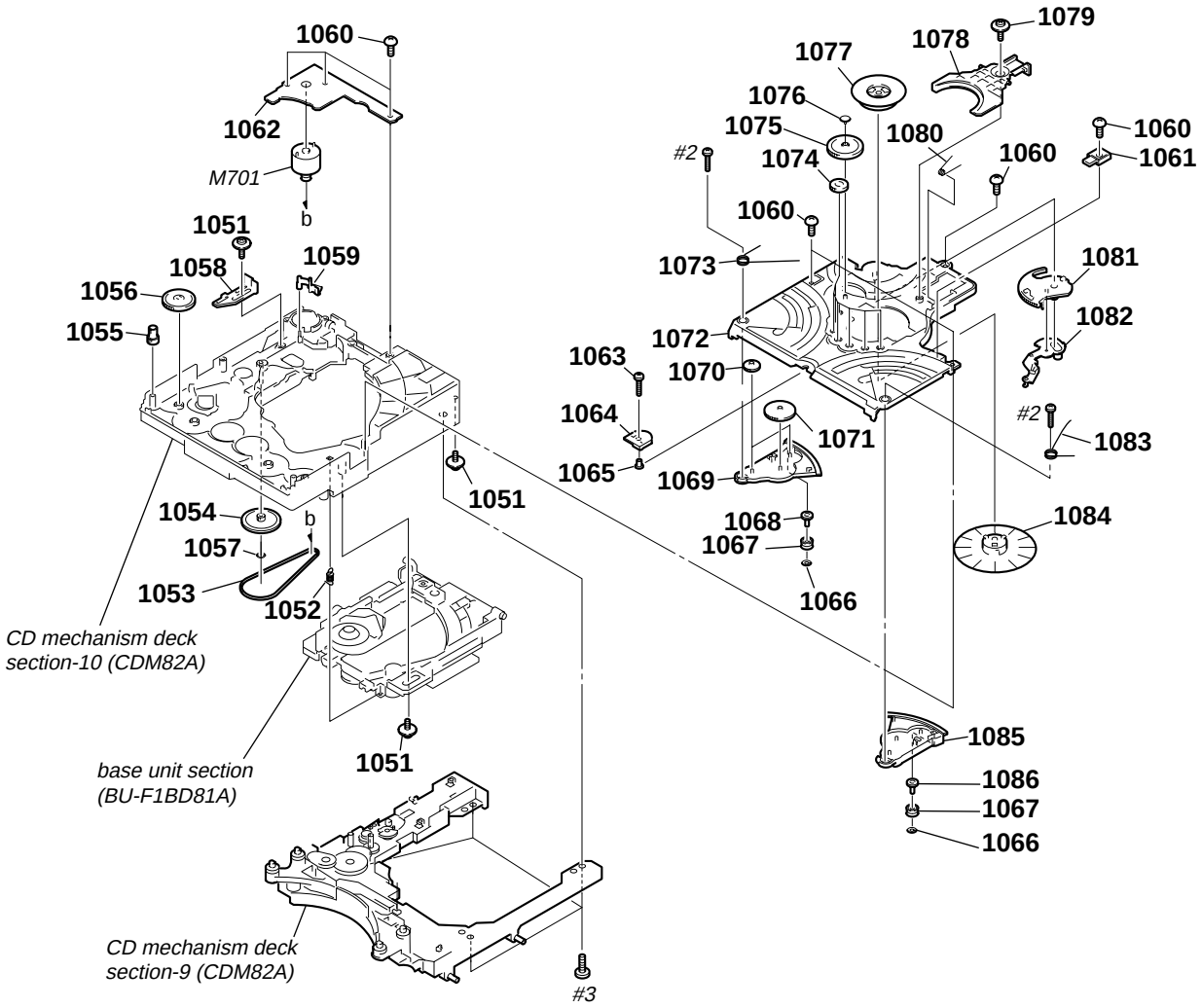
8-10. CD MECHANISM DECK SECTION-7 (CDM82A)



Ref. No.	Part No.	Description	Remark
1001	4-239-618-01	SCREW (+PWH, 2X6), STEP TAPPING	
1002	4-218-253-01	SCREW (M2.6), +BTTP	
1003	4-252-877-01	GEAR (ENCODER)	
1004	4-252-872-01	GEAR (GENEVA 1)	
1005	4-252-873-01	GEAR (GENEVA 2)	
1006	4-252-880-01	GEAR (CAM IDLER)	

Ref. No.	Part No.	Description	Remark
1007	4-252-876-01	GEAR (DECELERATION 2UD)	
1008	4-252-875-01	GEAR (DECELERATION 1UD)	
1009	4-252-874-01	GEAR (PULLEY UD)	
1010	4-252-867-02	CHASSIS	
S881	1-478-706-11	ENCODER, ROTARY	
#1	7-685-902-21	SCREW +PTPWH 2.6X8 (TYPE2)	

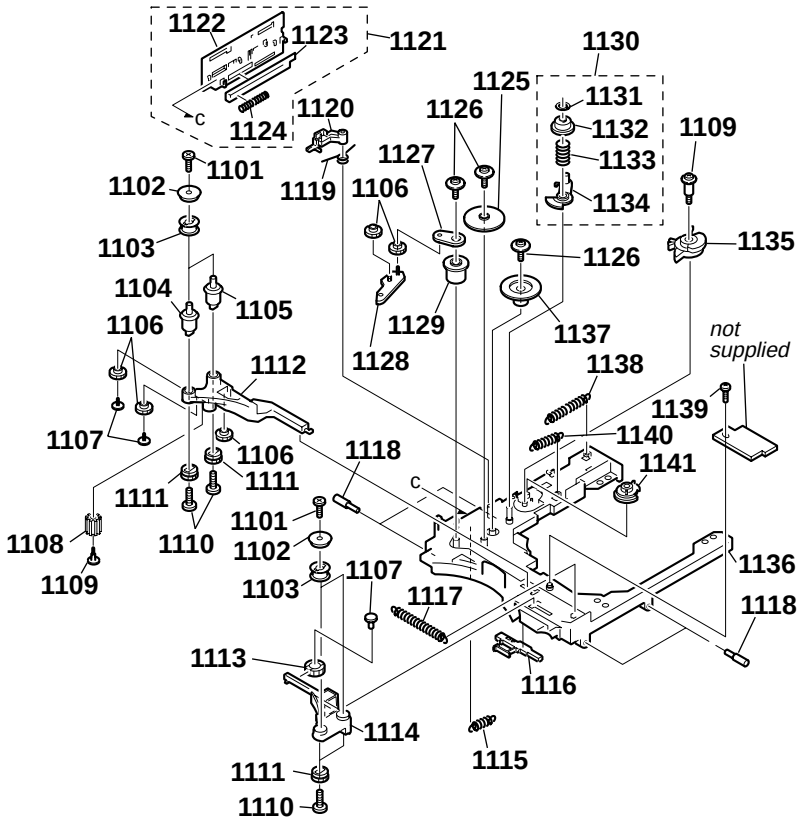
8-11. CD MECHANISM DECK SECTION-8 (CDM82A)



Ref. No.	Part No.	Description	Remark
1051	4-218-252-01	SCREW (+PTPWH M2.6), FLOATING	
1052	2-515-538-01	SPRING (HOLDER DOWN B), COIL	
1053	4-245-653-01	BELT (MOT)	
1054	4-245-662-02	PULLEY (GEAR)	
1055	4-245-646-01	GEAR (IDL-F)	
1056	4-245-644-01	GEAR (IDL-D)	
1057	3-362-267-01	RING, RETAINING, CAPSTAN	
1058	4-246-203-01	LEVER (RELEASE)	
1059	4-245-630-01	LEVER (SW)	
1060	3-087-053-01	+BVTP2.6 (3CR)	
1061	4-245-639-01	LEVER (CL UP2)	
1062	1-688-337-11	DRIVER BOARD	
1063	4-253-344-01	SCREW (2)	
1064	4-252-859-01	LEVER (CDM80 MOUNT)	
1065	4-252-860-01	BUSHING	
1066	4-245-627-01	WASHER (6-2.7-0.4)	
1067	4-245-637-11	ROLLER, RUBBER	
1068	4-245-649-01	GEAR (IDL-I)	
1069	4-245-657-11	LEVER (LOADING-R)	
1070	4-245-647-01	GEAR (IDL-G)	

Ref. No.	Part No.	Description	Remark
1071	4-245-648-01	GEAR (IDL-H)	
1072	4-245-655-11	CHASSIS (TOP)	
1073	4-245-631-11	SPT-T (LOADING-R)	
1074	4-245-650-01	GEAR (IDL-J)	
1075	4-245-651-11	GEAR (IDL-L)	
1076	4-245-640-01	GEAR (CAP)	
1077	1-452-925-41	MAGNET ASSY	
1078	4-245-638-01	LEVER (CL UP1)	
1079	4-218-252-01	SCREW (+PTPWH M2.6), FLOATING	
1080	4-245-636-01	SPR-T CL DOWN	
1081	4-245-658-11	LEVER (DISC STOP)	
1082	4-245-659-11	LEVER (DISC SENSOR)	
1083	4-245-632-11	SPR-T (LOADING-L)	
1084	X-2021-532-1	CLAMPER 213 ASSY	
1085	4-245-656-11	LEVER (LOADING-L)	
1086	4-253-747-01	STOPPER (IDL-I)	
M701	A-1148-845-A	MOTOR ASSY (LOD)	
#2	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	
#3	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	

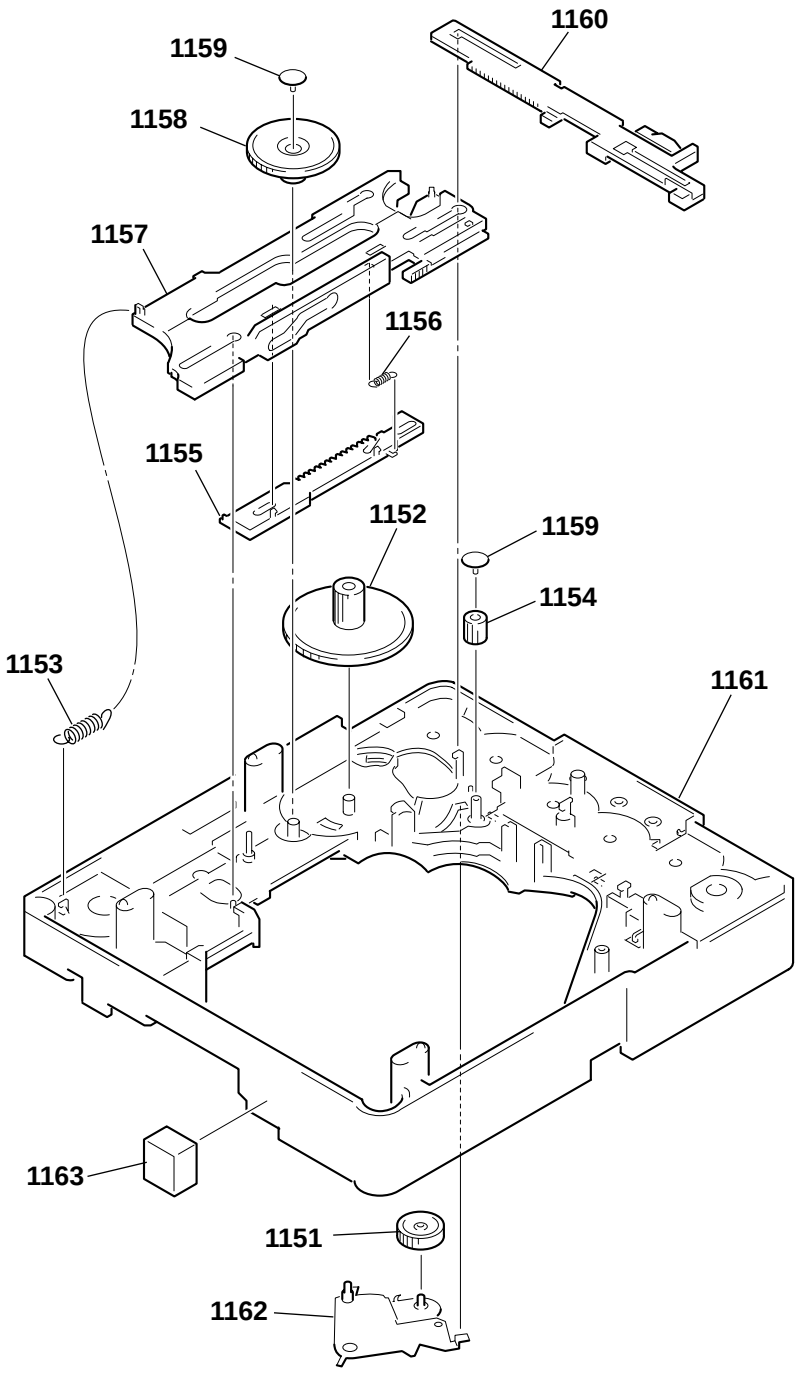
8-12. CD MECHANISM DECK SECTION-9 (CDM82A)



Ref. No.	Part No.	Description	Remark
1101	4-253-344-01	SCREW (2)	
1102	4-252-904-01	PARASOL	
1103	4-252-908-01	ROLLER, RUBBER	
1104	4-252-906-02	SHAFT (PARASOL SHORT)	
1105	4-252-905-02	SHAFT (PARASOL LONG)	
1106	4-252-913-01	GEAR (GOOSENECK GENERAL SMALL)	
1107	4-245-640-01	GEAR (CAP)	
1108	4-252-912-01	GEAR (GOOSENECK LOWER LONG)	
1109	4-239-618-01	SCREW (+PWH, 2X6), STEP TAPPING	
1110	4-253-344-01	SCREW (2)	
1111	4-252-907-02	GEAR (PARASOL 12)	
1112	4-252-901-02	SLIDER (L), ROLLER	
1113	4-252-909-01	PINION	
1114	4-252-902-03	SLIDER (R), ROLLER	
1115	4-252-897-01	SPR-E (LOCK-OUT)	
1116	4-252-890-01	LEVER (LOCK-OUT)	
1117	4-252-903-01	SPRING (LOWER), TENSION	
1118	4-253-605-01	SHAFT (80)	
1119	4-252-895-01	SPR-T (LOCK)	
1120	4-252-891-01	LEVER (LOCK)	

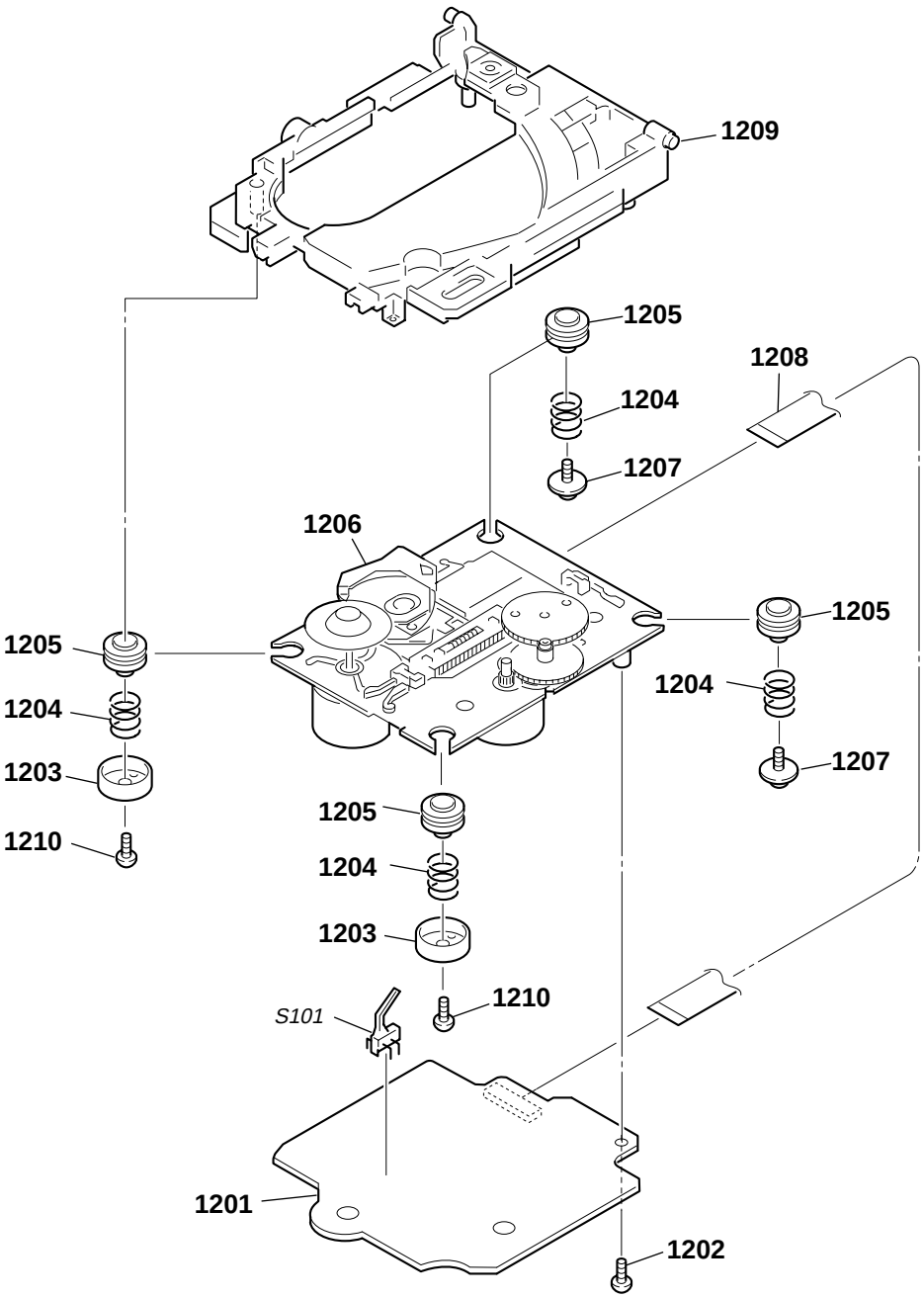
Ref. No.	Part No.	Description	Remark
1121	A-1060-631-A	PLATE (PUSH) ASSY	
1122	4-252-893-01	PLATE (PUSH)	
1123	4-252-894-01	SLIDER (PUSH)	
1124	4-252-865-02	SPR-C (SLIDER PUSH)	
1125	4-252-915-01	GEAR (BASE 80B)	
1126	4-992-069-01	SCREW (+PTPWH) (M2) (DIA. 7)	
1127	4-252-910-01	LEVER (GOOSENECK LOWER JOINT)	
1128	4-252-911-02	LEVER (GOOSENECK LOWER FULCRUM)	
1129	4-252-916-01	GEAR (BASE 80C)	
1130	A-1060-632-A	CLUTCH ASSY	
1131	2-021-250-01	WASHER (5.5)	
1132	4-252-888-01	GEAR (CLUTCH)	
1133	4-252-900-01	SPR-C (CLUTCH)	
1134	4-252-889-01	LEVER (CLUTCH)	
1135	4-252-886-01	GEAR (TACO FIRST)	
1136	4-252-885-02	BASE (80)	
1137	4-252-914-01	GEAR (BASE 80A)	
1138	4-252-899-01	SPR-E (PLATE PUSH BACK)	
1139	4-218-253-62	SCREW (M2.6), +BTTP	
1140	4-252-898-01	SPR-E (TAKO BACK)	
1141	4-252-887-01	GEAR (TACO SECOND)	

8-13. CD MECHANISM DECK SECTION-10 (CDM82A)



Ref. No.	Part No.	Description	Remark
1151	4-245-643-01	GEAR (IDL-C)	
1152	4-252-892-01	GEAR (IDL B LONG)	
1153	2-515-536-01	SPRING (DIR), TENSION COIL	
1154	4-245-629-01	GEAR (BU LOCK)	
1155	4-245-814-01	LEVER (DIR FIRST)	
1156	2-515-534-01	SPRING (DIR BACK), TENSION COIL	
1157	4-245-660-11	LEVER (DIR)	
1158	4-245-641-01	GEAR (IDL-A)	
1159	4-245-640-01	GEAR (CAP)	
1160	4-245-628-01	LEVER (BU LOCK)	
1161	X-2102-675-1	CHASSIS (BOTTOM) ASSY	
1162	X-4955-483-1	LEVER (GEAR LOADING) ASSY	
1163	3-221-179-11	SPONGE, BUTTON	

8-14. BASE UNIT SECTION (BU-F1BD81A)



Ref. No.	Part No.	Description	Remark
1201	A-4751-431-A	CD BOARD, COMPLETE	
1202	3-087-053-01	+BVTP2.6 (3CR)	
1203	4-231-151-01	STOPPER (BU)	
1204	4-227-045-11	SPRING (INSULATOR), COIL	
1205	4-227-549-11	INSULATOR	

Ref. No.	Part No.	Description	Remark
⚠1206	8-820-244-01	OPTICAL PICK-UP (KSM-215DCP)	
1207	4-218-252-01	SCREW (+PTPWH M2.6), FLOATING	
1208	1-827-992-11	WIRE (FLAT TYPE) (16 CORE)	
1209	X-4956-146-1	HOLDER (BU215) ASSY	
1210	4-218-253-01	SCREW (M2.6), +BTTP	
S101	1-771-853-11	SWITCH, DETECTION (LIMT)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SECTION 9
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: µF
- COILS
  uH: µH
- 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. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- Abbreviation
  AR : Argentine model
  AUS : Australian model
  CND : Canadian model
  EA : Saudi Arabia model
  KR : Korea model

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

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

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
	A-4751-219-A	AMP BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C501	1-126-964-11	ELECT	10uF	20%	50V
C502	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C503	1-126-967-11	ELECT	47uF	20%	50V
C504	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C505	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C506	1-126-957-11	ELECT	0.22uF	20%	50V
C507	1-130-495-00	MYLAR	0.1uF	5%	50V
C551	1-126-964-11	ELECT	10uF	20%	50V
C552	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C553	1-126-967-11	ELECT	47uF	20%	50V
C554	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C555	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C556	1-126-957-11	ELECT	0.22uF	20%	50V
C557	1-130-495-00	MYLAR	0.1uF	5%	50V
C603	1-162-294-31	CERAMIC	0.001uF	10%	50V
C604	1-126-964-11	ELECT	10uF	20%	50V
C605	1-104-658-91	ELECT	100uF	20%	10V
C606	1-162-294-31	CERAMIC	0.001uF	10%	50V
C607	1-126-964-11	ELECT	10uF	20%	50V
C608	1-104-658-91	ELECT	100uF	20%	10V
C609	1-126-961-11	ELECT	2.2uF	20%	50V
C610	1-126-965-91	ELECT	22uF	20%	50V
C611	1-126-965-91	ELECT	22uF	20%	50V
C612	1-126-969-11	ELECT	220uF	20%	50V
C613	1-126-964-11	ELECT	10uF	20%	50V
C614	1-135-928-21	ELECT	2200uF	20%	63V
C615	1-135-928-21	ELECT	2200uF	20%	63V
C616	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C617	1-130-471-00	MYLAR	0.001uF	5%	50V
		< CONNECTOR >			
CN601	1-568-828-11	CONNECTOR, FFC 9P			
CN604	1-564-506-11	PLUG, CONNECTOR 3P			
		< DIODE >			
D501	8-719-991-33	DIODE 1SS133T-77			
D551	8-719-991-33	DIODE 1SS133T-77			
D603	8-719-991-33	DIODE 1SS133T-77			
D607	8-719-109-85	DIODE RD5.1ESB2			
D608	8-719-991-33	DIODE 1SS133T-77			
D609	8-719-991-33	DIODE 1SS133T-77			
D610	8-719-991-33	DIODE 1SS133T-77			
D611	8-719-991-33	DIODE 1SS133T-77			
D612	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC601	6-706-406-01	IC STK403-090-S			
IC602	6-703-610-01	IC RT8H015C-T112-1			
		< TRANSISTOR >			
Q501	8-729-141-30	TRANSISTOR	2SC3623A-LK		
Q502	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q551	8-729-141-30	TRANSISTOR	2SC3623A-LK		
Q552	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q601	8-729-038-54	TRANSISTOR	KRA102S		
Q602	8-729-038-54	TRANSISTOR	KRA102S		
Q603	8-729-038-67	TRANSISTOR	KRC102S		
Q604	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q605	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q606	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q607	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q608	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q609	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q610	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q611	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
		< RESISTOR >			
R501	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R502	1-216-842-11	METAL CHIP	56K	5%	1/10W
R503	1-216-821-11	METAL CHIP	1K	5%	1/10W
R505	1-216-864-11	SHORT CHIP	0		
R506	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R507	1-216-842-11	METAL CHIP	56K	5%	1/10W
R508	1-216-821-11	METAL CHIP	1K	5%	1/10W
R509	1-216-835-11	METAL CHIP	15K	5%	1/10W
R510	1-217-156-00	METAL	0.22	10%	5W
R511	1-216-845-11	METAL CHIP	100K	5%	1/10W
R512	1-260-076-11	CARBON	10	5%	1/2W
R513	1-216-841-11	METAL CHIP	47K	5%	1/10W
⚠R514	1-215-890-11	METAL OXIDE	470	5%	2W
R515	1-216-845-11	METAL CHIP	100K	5%	1/10W
R551	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R552	1-216-842-11	METAL CHIP	56K	5%	1/10W
R553	1-216-821-11	METAL CHIP	1K	5%	1/10W

AMP **CD**

Ref. No.	Part No.	Description			Remark
R555	1-216-864-11	SHORT CHIP	0		
R556	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R557	1-216-842-11	METAL CHIP	56K	5%	1/10W
R558	1-216-821-11	METAL CHIP	1K	5%	1/10W
R559	1-216-835-11	METAL CHIP	15K	5%	1/10W
R560	1-217-156-00	METAL	0.22	10%	5W
R561	1-216-845-11	METAL CHIP	100K	5%	1/10W
R562	1-260-076-11	CARBON	10	5%	1/2W
R563	1-216-842-11	METAL CHIP	56K	5%	1/10W
⚠R564	1-215-890-11	METAL OXIDE	470	5%	2W
R565	1-216-845-11	METAL CHIP	100K	5%	1/10W
R601	1-216-833-11	METAL CHIP	10K	5%	1/10W
R602	1-216-849-11	METAL CHIP	220K	5%	1/10W
R603	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R604	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R605	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
⚠R606	1-202-972-61	FUSIBLE	1	5%	1/4W
⚠R607	1-202-972-61	FUSIBLE	1	5%	1/4W
⚠R608	1-212-881-11	FUSIBLE	100	5%	1/4W
R609	1-216-833-11	METAL CHIP	10K	5%	1/10W
R610	1-216-839-11	METAL CHIP	33K	5%	1/10W
R611	1-216-833-11	METAL CHIP	10K	5%	1/10W
R612	1-216-845-11	METAL CHIP	100K	5%	1/10W
R613	1-216-833-11	METAL CHIP	10K	5%	1/10W
R614	1-216-833-11	METAL CHIP	10K	5%	1/10W
⚠R615	1-216-456-00	METAL OXIDE	820	5%	2W
R616	1-216-833-11	METAL CHIP	10K	5%	1/10W
R617	1-216-833-11	METAL CHIP	10K	5%	1/10W
R618	1-216-835-11	METAL CHIP	15K	5%	1/10W
R619	1-216-821-11	METAL CHIP	1K	5%	1/10W
R620	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R621	1-216-845-11	METAL CHIP	100K	5%	1/10W
R622	1-216-837-11	METAL CHIP	22K	5%	1/10W
R624	1-216-821-11	METAL CHIP	1K	5%	1/10W
R625	1-216-809-11	METAL CHIP	100	5%	1/10W
R626	1-216-809-11	METAL CHIP	100	5%	1/10W
R628	1-216-853-11	METAL CHIP	470K	5%	1/10W
		< THERMISTOR (POSITIVE) >			
THP823	1-807-796-11	THERMISTOR			

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	A-4751-431-A	CD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C10	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C11	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C14	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C15	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C16	1-115-156-11	CERAMIC CHIP	1uF		10V
C17	1-126-246-11	ELECT CHIP	220uF	20%	4V
C18	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C111	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C112	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C113	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C114	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C115	1-164-360-11	CERAMIC CHIP	0.1uF		16V

Ref. No.	Part No.	Description			Remark
C116	1-128-995-21	ELECT CHIP	100uF	20%	10V
C122	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C123	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C124	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C125	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C131	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C132	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C133	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C134	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C141	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C142	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C143	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C151	1-128-995-21	ELECT CHIP	100uF	20%	10V
C161	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C162	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C163	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C171	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C172	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C174	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C181	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C182	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C183	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C184	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C185	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C186	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C194	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C195	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C196	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C201	1-128-995-21	ELECT CHIP	100uF	20%	10V
C203	1-128-995-21	ELECT CHIP	100uF	20%	10V
C209	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C210	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C211	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C212	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C213	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C251	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C252	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C255	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C257	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C258	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C259	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C260	1-128-394-11	ELECT CHIP	220uF	20%	10V
C302	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C303	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C305	1-126-246-11	ELECT CHIP	220uF	20%	4V
C306	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C307	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C308	1-126-208-21	ELECT CHIP	47uF	20%	4V
C309	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C310	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C311	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C312	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C313	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C314	1-126-208-21	ELECT CHIP	47uF	20%	4V
C315	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

CD CONNECTOR

Ref. No.	Part No.	Description			Remark
C316	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C317	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C318	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C320	1-216-864-11	SHORT CHIP	0		
		< CONNECTOR >			
CN101	1-770-425-11	CONNECTOR, FFC/FPC 16P			
CN201	1-818-350-11	CONNECTOR (FFC) 27P			
		< FERRITE BEAD >			
FB301	1-500-445-21	FERRITE, EMI (SMD) (2012)			
		< IC >			
IC101	8-752-425-12	IC CXD3059AR			
IC251	6-705-808-01	IC BA5947FM			
IC301	6-705-365-01	IC TC94A34FG-002			
IC303	6-705-807-01	IC BH15FB1WG			
		< TRANSISTOR >			
Q10	6-550-363-01	TRANSISTOR	2SB1690KT146		
		< RESISTOR >			
R10	1-216-791-11	METAL CHIP	3.3	5%	1/10W
R11	1-216-864-11	SHORT CHIP	0		
R12	1-216-845-11	METAL CHIP	100K	5%	1/10W
R13	1-218-446-11	METAL CHIP	1	5%	1/10W
R111	1-216-821-11	METAL CHIP	1K	5%	1/10W
R112	1-216-835-11	METAL CHIP	15K	5%	1/10W
R113	1-216-821-11	METAL CHIP	1K	5%	1/10W
R114	1-216-835-11	METAL CHIP	15K	5%	1/10W
R121	1-216-835-11	METAL CHIP	15K	5%	1/10W
R131	1-216-857-11	METAL CHIP	1M	5%	1/10W
R132	1-216-833-11	METAL CHIP	10K	5%	1/10W
R133	1-216-848-11	METAL CHIP	180K	5%	1/10W
R141	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R142	1-216-821-11	METAL CHIP	1K	5%	1/10W
R143	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R151	1-216-864-11	SHORT CHIP	0		
R161	1-216-809-11	METAL CHIP	100	5%	1/10W
R162	1-216-841-11	METAL CHIP	47K	5%	1/10W
R163	1-216-809-11	METAL CHIP	100	5%	1/10W
R165	1-216-864-11	SHORT CHIP	0		
R171	1-216-817-11	METAL CHIP	470	5%	1/10W
R172	1-216-857-11	METAL CHIP	1M	5%	1/10W
R173	1-216-295-91	SHORT CHIP	0		
R181	1-216-809-11	METAL CHIP	100	5%	1/10W
R182	1-216-809-11	METAL CHIP	100	5%	1/10W
R191	1-216-864-11	SHORT CHIP	0		
R201	1-500-445-21	FERRITE, EMI (SMD) (2012)			
R203	1-216-864-11	SHORT CHIP	0		
R204	1-500-445-21	FERRITE, EMI (SMD) (2012)			
R205	1-216-864-11	SHORT CHIP	0		
R251	1-216-833-11	METAL CHIP	10K	5%	1/10W
R252	1-216-837-11	METAL CHIP	22K	5%	1/10W
R253	1-216-833-11	METAL CHIP	10K	5%	1/10W
R301	1-216-845-11	METAL CHIP	100K	5%	1/10W
R302	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R303	1-216-845-11	METAL CHIP	100K	5%	1/10W
R305	1-216-845-11	METAL CHIP	100K	5%	1/10W
R306	1-216-864-11	SHORT CHIP	0		
R307	1-216-833-11	METAL CHIP	10K	5%	1/10W
R313	1-216-813-11	METAL CHIP	220	5%	1/10W
R351	1-216-809-11	METAL CHIP	100	5%	1/10W
R352	1-216-809-11	METAL CHIP	100	5%	1/10W
R353	1-216-809-11	METAL CHIP	100	5%	1/10W
R354	1-216-809-11	METAL CHIP	100	5%	1/10W
R401	1-216-809-11	METAL CHIP	100	5%	1/10W
R402	1-216-809-11	METAL CHIP	100	5%	1/10W
R403	1-216-809-11	METAL CHIP	100	5%	1/10W
R404	1-216-809-11	METAL CHIP	100	5%	1/10W
R405	1-216-809-11	METAL CHIP	100	5%	1/10W
R406	1-216-809-11	METAL CHIP	100	5%	1/10W
R407	1-216-809-11	METAL CHIP	100	5%	1/10W
R408	1-216-809-11	METAL CHIP	100	5%	1/10W
R409	1-216-809-11	METAL CHIP	100	5%	1/10W
R410	1-216-809-11	METAL CHIP	100	5%	1/10W
R411	1-216-809-11	METAL CHIP	100	5%	1/10W
R412	1-216-809-11	METAL CHIP	100	5%	1/10W
R419	1-216-809-11	METAL CHIP	100	5%	1/10W
		< VIBRATOR >			
X171	1-767-408-21	VIBRATOR, CRYSTAL 16.9344 MHz			
**********					
		CONNECTOR BOARD			
		**********			
		< CAPACITOR >			
C802	1-126-786-11	ELECT	47uF	20%	16V
C821	1-126-933-11	ELECT	100uF	20%	16V
C841	1-162-306-11	CERAMIC	0.01uF	20%	16V
C851	1-162-306-11	CERAMIC	0.01uF	20%	16V
		< CONNECTOR >			
CN801	1-568-864-11	CONNECTOR, FFC 21P			
CN802	1-568-951-11	PIN, CONNECTOR 2P			
CN805	1-506-468-11	PIN, CONNECTOR 3P			
* CN807	1-568-934-11	PIN, CONNECTOR 7P			
* CN808	1-568-934-11	PIN, CONNECTOR 7P			
		< DIODE >			
D801	8-719-109-92	DIODE RD6.2ESB1			
D811	8-719-921-42	DIODE MTZJ-5.1A			
		< IC >			
IC801	8-759-598-69	IC BA6956AN			
IC811	8-759-598-69	IC BA6956AN			
		< RESISTOR >			
R801	1-249-413-11	CARBON	470	5%	1/4W
R802	1-247-807-31	CARBON	100	5%	1/4W
R811	1-249-413-11	CARBON	470	5%	1/4W
R812	1-247-807-31	CARBON	100	5%	1/4W
R851	1-249-425-11	CARBON	4.7K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R852	1-249-429-11	CARBON	10K	5%	1/4W
R853	1-249-425-11	CARBON	4.7K	5%	1/4W
R854	1-249-433-11	CARBON	22K	5%	1/4W
R855	1-249-425-11	CARBON	4.7K	5%	1/4W
R856	1-249-437-11	CARBON	47K	5%	1/4W
R857	1-249-425-11	CARBON	4.7K	5%	1/4W
R858	1-249-429-11	CARBON	10K	5%	1/4W
R859	1-249-425-11	CARBON	4.7K	5%	1/4W
R860	1-249-433-11	CARBON	22K	5%	1/4W
R861	1-249-425-11	CARBON	4.7K	5%	1/4W
R862	1-249-437-11	CARBON	47K	5%	1/4W
**********					
		DISC ADDRESS SW BOARD			
		**********			
		< SWITCH >			
S861	1-771-495-11	SWITCH, PUSH			
S862	1-771-495-11	SWITCH, PUSH			
S863	1-771-495-11	SWITCH, PUSH			
S864	1-771-495-11	SWITCH, PUSH			
S865	1-771-495-11	SWITCH, PUSH			
S866	1-771-495-11	SWITCH, PUSH			
**********					
	1-688-337-11	DRIVER BOARD			
		**********			
		< CAPACITOR >			
C705	1-162-306-11	CERAMIC	0.01uF	20%	16V
C711	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
CN701	1-785-333-11	PIN, CONNECTOR (LIGHT ANGLE) 7P			
		< DIODE >			
D701	8-719-109-92	DIODE RD6.2ESB1			
		< IC >			
IC701	8-759-598-69	IC BA6956AN			
		< RESISTOR >			
R701	1-249-415-11	CARBON	680	5%	1/4W
R702	1-247-807-31	CARBON	100	5%	1/4W
		< SWITCH >			
S701	1-762-951-11	SWITCH, PUSH			
S702	1-762-951-11	SWITCH, PUSH			
**********					
		ELV MOTOR BOARD			
		**********			
**********					

Ref. No.	Part No.	Description			Remark
		HEADPHONE BOARD			
		(included in PANEL (1) board)			
		**********			
		< CAPACITOR >			
C136	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
C236	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
CN312	1-568-951-11	PIN, CONNECTOR 2P			
		< DIODE >			
D130	8-719-988-61	DIODE 1SS355TE-17			
D131	8-719-988-61	DIODE 1SS355TE-17			
		< FERRITE BEAD >			
FB122	1-500-445-21	FERRITE, EMI (SMD) (2012)			
		< JACK >			
J321	1-815-629-11	JACK (🎧)			
**********					
	A-1062-202-A	MAIN BOARD, COMPLETE (EA)			
	A-1062-229-A	MAIN BOARD, COMPLETE (E, AUS)			
	A-1068-563-A	MAIN BOARD, COMPLETE (AR)			
	A-1076-937-A	MAIN BOARD, COMPLETE (KR)			
	A-4751-220-A	MAIN BOARD, COMPLETE (US, CND)			
		**********			
		< CAPACITOR >			
C101	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C102	1-126-964-11	ELECT	10uF	20%	50V
C103	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C105	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C106	1-162-946-11	CERAMIC CHIP	27PF	5%	50V
C107	1-130-479-00	MYLAR	0.0047uF	5%	50V
C109	1-126-964-11	ELECT	10uF	20%	50V
C110	1-126-964-11	ELECT	10uF	20%	50V
C111	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C112	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C113	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C114	1-126-960-11	ELECT	1uF	20%	50V
C115	1-126-964-11	ELECT	10uF	20%	50V
C116	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C117	1-126-964-11	ELECT	10uF	20%	50V
C118	1-126-964-11	ELECT	10uF	20%	50V
C119	1-126-964-11	ELECT	10uF	20%	50V
C122	1-130-476-00	MYLAR	0.0027uF	5%	50V
C123	1-130-499-00	MYLAR	0.22uF	5%	50V
C124	1-126-967-11	ELECT	47uF	20%	50V
C125	1-126-965-91	ELECT	22uF	20%	50V
C128	1-126-964-11	ELECT	10uF	20%	50V
C131	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C133	1-127-888-21	CERAMIC	0.1uF	10%	50V
C133	1-130-495-00	MYLAR	0.1uF	5%	50V (US, CND)
C134	1-127-888-21	CERAMIC	0.1uF	10%	50V
C134	1-130-495-00	MYLAR	0.1uF	5%	50V (US, CND)
C135	1-162-306-11	CERAMIC	0.01uF	20%	16V

MAIN

Ref. No.	Part No.	Description			Remark
C137	1-126-965-91	ELECT	22uF	20%	50V
C138	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C141	1-126-964-11	ELECT	10uF	20%	50V
C201	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C202	1-126-964-11	ELECT	10uF	20%	50V
C203	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C205	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C206	1-162-946-11	CERAMIC CHIP	27PF	5%	50V
C207	1-130-479-00	MYLAR	0.0047uF	5%	50V
C209	1-126-964-11	ELECT	10uF	20%	50V
C210	1-126-964-11	ELECT	10uF	20%	50V
C211	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C212	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C213	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C214	1-126-960-11	ELECT	1uF	20%	50V
C215	1-126-964-11	ELECT	10uF	20%	50V
C216	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C217	1-126-964-11	ELECT	10uF	20%	50V
C218	1-126-964-11	ELECT	10uF	20%	50V
C219	1-126-964-11	ELECT	10uF	20%	50V
C222	1-130-476-00	MYLAR	0.0027uF	5%	50V
C223	1-130-499-00	MYLAR	0.22uF	5%	50V
C224	1-126-967-11	ELECT	47uF	20%	50V
C225	1-126-965-91	ELECT	22uF	20%	50V
C228	1-126-964-11	ELECT	10uF	20%	50V
C231	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C233	1-127-888-21	CERAMIC	0.1uF	10%	50V
C233	1-130-495-00	MYLAR	0.1uF	5%	50V (US, CND)
C234	1-127-888-21	CERAMIC	0.1uF	10%	50V
C234	1-130-495-00	MYLAR	0.1uF	5%	50V (US, CND)
C235	1-162-306-11	CERAMIC	0.01uF	20%	16V
C237	1-126-965-91	ELECT	22uF	20%	50V
C238	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C241	1-126-964-11	ELECT	10uF	20%	50V
C303	1-126-961-11	ELECT	2.2uF	20%	50V
C304	1-126-964-11	ELECT	10uF	20%	50V
C305	1-126-947-11	ELECT	47uF	20%	35V
C306	1-126-964-11	ELECT	10uF	20%	50V
C307	1-104-994-91	MYLAR	0.015uF	5%	200V
C308	1-130-481-00	MYLAR	0.0068uF	5%	50V
C309	1-130-481-00	MYLAR	0.0068uF	5%	50V
C310	1-137-440-11	MYLAR	0.018uF	5%	50V
C314	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C317	1-126-965-91	ELECT	22uF	20%	50V
C318	1-126-925-91	ELECT	470uF	20%	10V
C319	1-126-925-91	ELECT	470uF	20%	10V
C320	1-126-923-91	ELECT	220uF	20%	10V
C321	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C322	1-126-923-91	ELECT	220uF	20%	10V
C324	1-126-963-11	ELECT	4.7uF	20%	50V
C325	1-126-925-91	ELECT	470uF	20%	10V
C326	1-130-483-00	MYLAR	0.01uF	5%	50V
C327	1-130-483-00	MYLAR	0.01uF	5%	50V
C328	1-126-927-11	ELECT	2200uF	20%	10V
C329	1-126-964-11	ELECT	10uF	20%	50V
C330	1-126-925-91	ELECT	470uF	20%	10V
C331	1-126-925-91	ELECT	470uF	20%	10V
C333	1-126-964-11	ELECT	10uF	20%	50V
C334	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C335	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C336	1-126-916-11	ELECT	1000uF	20%	6.3V
C337	1-127-888-21	CERAMIC	0.1uF	10%	50V
C338	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C339	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C340	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C342	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C343	1-126-927-11	ELECT	2200uF	20%	10V
C344	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C345	1-128-809-11	CERAMIC	100PF	5%	50V
C346	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C347	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C348	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C349	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C350	1-128-809-11	CERAMIC	100PF	5%	50V
C351	1-128-809-11	CERAMIC	100PF	5%	50V
C352	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C353	1-126-926-11	ELECT	1000uF	20%	10V
C354	1-128-809-11	CERAMIC	100PF	5%	50V
C355	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C356	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C357	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C358	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C359	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C362	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C367	1-126-926-11	ELECT	1000uF	20%	10V
C368	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C371	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C372	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C373	1-126-947-11	ELECT	47uF	20%	35V
C374	1-126-964-11	ELECT	10uF	20%	50V
C391	1-127-888-21	CERAMIC	0.1uF	10%	50V
C393	1-127-888-21	CERAMIC	0.1uF	10%	50V
C394	1-127-888-21	CERAMIC	0.1uF	10%	50V
C395	1-126-927-11	ELECT	2200uF	20%	10V
C396	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C397	1-164-156-11	CERAMIC CHIP	0.1uF		25V

< CONNECTOR >

*	CN301	1-564-511-11	PLUG, CONNECTOR 8P
*	CN303	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P
	CN304	1-779-295-11	CONNECTOR, FFC (LIF (NON-ZIF)) 27P
	CN305	1-568-830-11	CONNECTOR, FFC 11P
	CN306	1-568-828-11	CONNECTOR, FFC 9P
*	CN307	1-564-515-11	PLUG, CONNECTOR 12P
*	CN308	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P
	CN309	1-564-509-11	PLUG, CONNECTOR 6P
	CN310	1-784-778-11	CONNECTOR, FFC 17P
	CN313	1-564-506-11	PLUG, CONNECTOR 3P
	CN315	1-568-838-11	CONNECTOR, FFC 21P
	CN317	1-568-826-11	CONNECTOR, FFC 7P

MAIN

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D301	8-719-991-33	DIODE 1SS133T-77	
D302	8-719-991-33	DIODE 1SS133T-77	
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	
D308	8-719-991-33	DIODE 1SS133T-77	
D309	8-719-991-33	DIODE 1SS133T-77	
D310	6-500-522-01	DIODE 10EDB40-TA1B2	
D311	6-500-522-01	DIODE 10EDB40-TA1B2	
D312	6-500-522-01	DIODE 10EDB40-TA1B2	
D313	8-719-991-33	DIODE 1SS133T-77	
D316	8-719-991-33	DIODE 1SS133T-77	
D317	8-719-991-33	DIODE 1SS133T-77	
D318	8-719-991-33	DIODE 1SS133T-77	
D319	8-719-991-33	DIODE 1SS133T-77	
D325	8-719-991-33	DIODE 1SS133T-77	
D326	8-719-991-33	DIODE 1SS133T-77	
D327	8-719-991-33	DIODE 1SS133T-77	
D328	8-719-921-88	DIODE MTZJ-13B	
D329	8-719-988-61	DIODE 1SS355TE-17	
D330	8-719-988-61	DIODE 1SS355TE-17	
D331	6-500-522-01	DIODE 10EDB40-TA1B2	
		< EARTH TERMINAL >	
EP200	1-537-770-21	TERMINAL BOARD, GROUND	
EP201	1-537-770-21	TERMINAL BOARD, GROUND	
		< FERRITE BEAD >	
FB301	1-412-473-21	INDUCTOR (SMALL TYPE)	
FB302	1-216-864-11	SHORT CHIP 0	
FB303	1-216-864-11	SHORT CHIP 0	
FB304	1-216-864-11	SHORT CHIP 0	
FB305	1-216-864-11	SHORT CHIP 0	
FB306	1-216-864-11	SHORT CHIP 0	
FB307	1-500-445-21	FERRITE, EMI (SMD) (2012)	
FB308	1-500-445-21	FERRITE, EMI (SMD) (2012)	
FB309	1-500-445-21	FERRITE, EMI (SMD) (2012)	
		< IC >	
IC301	8-759-508-69	IC BA3126N	
IC302	6-705-622-01	IC BD3402KS2	
IC304	8-759-701-59	IC NJM78M09FA	
IC305	6-801-402-01	IC BD4729GTR	
★ IC306	6-804-180-01	IC M3062CMEN-A02FPU0 (TYPE 1)	
★ IC306	6-804-685-01	IC M3062CMEN-A16FPU0 (TYPE 2)	
		< JACK >	
J301	1-764-593-21	JACK 2P (MD/VIDEO)	
		< JUMPER RESISTOR >	
JW200	1-216-864-11	SHORT CHIP 0	
JW241	1-216-864-11	SHORT CHIP 0	
JW302	1-216-864-11	SHORT CHIP 0	

Ref. No.	Part No.	Description			Remark
		< COIL >			
L102	1-422-009-13	COIL, AIR-CORE			
L202	1-422-009-13	COIL, AIR-CORE			
L302	1-410-521-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q102	8-729-107-43	TRANSISTOR	2SC3624-L18		
Q202	8-729-107-43	TRANSISTOR	2SC3624-L18		
Q301	8-729-037-16	TRANSISTOR	KRA103M-AT		
Q302	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q303	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q304	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q305	8-729-801-93	TRANSISTOR	2SD1387-3		
Q306	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q307	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q308	8-729-037-13	TRANSISTOR	KTA1271Y		
Q309	8-729-054-16	TRANSISTOR	KRC402-RTK		
Q310	8-729-037-13	TRANSISTOR	KTA1271Y		
Q311	8-729-054-16	TRANSISTOR	KRC402-RTK		
Q312	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q313	8-729-038-67	TRANSISTOR	KRC102S		
Q314	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q315	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q316	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q317	8-729-038-54	TRANSISTOR	KRA102S		
Q318	8-729-038-67	TRANSISTOR	KRC102S		
Q319	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q320	8-729-038-67	TRANSISTOR	KRC102S		
Q321	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q322	8-729-037-13	TRANSISTOR	KTA1271Y		
Q323	8-729-038-67	TRANSISTOR	KRC102S		
Q324	8-729-028-54	TRANSISTOR	KTC3205		
		< RESISTOR >			
R101	1-216-821-11	METAL CHIP	1K	5%	1/10W
R102	1-216-841-11	METAL CHIP	47K	5%	1/10W
R103	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R104	1-216-833-11	METAL CHIP	10K	5%	1/10W
R105	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R106	1-216-841-11	METAL CHIP	47K	5%	1/10W
R107	1-216-845-11	METAL CHIP	100K	5%	1/10W
R108	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R109	1-216-851-11	METAL CHIP	330K	5%	1/10W
R110	1-216-853-11	METAL CHIP	470K	5%	1/10W
R111	1-216-812-11	METAL CHIP	180	5%	1/10W
R112	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R113	1-216-847-11	METAL CHIP	150K	5%	1/10W
R114	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R118	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R120	1-216-841-11	METAL CHIP	47K	5%	1/10W
R122	1-260-076-11	CARBON	10	5%	1/2W
R123	1-216-821-11	METAL CHIP	1K	5%	1/10W
R124	1-216-845-11	METAL CHIP	100K	5%	1/10W
R126	1-249-429-11	CARBON	10K	5%	1/4W
R127	1-216-821-11	METAL CHIP	1K	5%	1/10W
R128	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

The parts with the letter "★" are the parts used for the countermeasure circuit.
For the description of the countermeasure circuit, refer to the SUPPLEMENT-1

MAIN

Ref. No.	Part No.	Description			Remark
R201	1-216-821-11	METAL CHIP	1K	5%	1/10W
R202	1-216-841-11	METAL CHIP	47K	5%	1/10W
R203	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R204	1-216-833-11	METAL CHIP	10K	5%	1/10W
R205	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R206	1-216-841-11	METAL CHIP	47K	5%	1/10W
R207	1-216-845-11	METAL CHIP	100K	5%	1/10W
R208	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R209	1-216-851-11	METAL CHIP	330K	5%	1/10W
R210	1-216-853-11	METAL CHIP	470K	5%	1/10W
R211	1-216-812-11	METAL CHIP	180	5%	1/10W
R212	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R213	1-216-847-11	METAL CHIP	150K	5%	1/10W
R214	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R218	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R220	1-216-841-11	METAL CHIP	47K	5%	1/10W
R222	1-260-076-11	CARBON	10	5%	1/2W
R223	1-216-821-11	METAL CHIP	1K	5%	1/10W
R224	1-216-845-11	METAL CHIP	100K	5%	1/10W
R226	1-249-429-11	CARBON	10K	5%	1/4W
R227	1-216-821-11	METAL CHIP	1K	5%	1/10W
R228	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R301	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
⚠R302	1-212-851-00	FUSIBLE	5.6	5%	1/4W
⚠R303	1-212-851-00	FUSIBLE	5.6	5%	1/4W
R304	1-216-836-11	METAL CHIP	18K	5%	1/10W
R305	1-216-836-11	METAL CHIP	18K	5%	1/10W
R306	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R307	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R308	1-216-837-11	METAL CHIP	22K	5%	1/10W
R309	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R310	1-216-833-11	METAL CHIP	10K	5%	1/10W
R311	1-216-841-11	METAL CHIP	47K	5%	1/10W
R312	1-216-821-11	METAL CHIP	1K	5%	1/10W
R314	1-216-841-11	METAL CHIP	47K	5%	1/10W
R315	1-216-821-11	METAL CHIP	1K	5%	1/10W
R318	1-249-429-11	CARBON	10K	5%	1/4W
R319	1-216-837-11	METAL CHIP	22K	5%	1/10W
R320	1-216-841-11	METAL CHIP	47K	5%	1/10W
R321	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R322	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R323	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R324	1-216-833-11	METAL CHIP	10K	5%	1/10W
R325	1-249-429-11	CARBON	10K	5%	1/4W
R326	1-216-845-11	METAL CHIP	100K	5%	1/10W
R327	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R328	1-216-833-11	METAL CHIP	10K	5%	1/10W
R329	1-216-845-11	METAL CHIP	100K	5%	1/10W
R330	1-216-813-11	METAL CHIP	220	5%	1/10W
R331	1-216-833-11	METAL CHIP	10K	5%	1/10W
R332	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R333	1-216-837-11	METAL CHIP	22K	5%	1/10W
R334	1-216-841-11	METAL CHIP	47K	5%	1/10W
R335	1-249-429-11	CARBON	10K	5%	1/4W
R336	1-216-809-11	METAL CHIP	100	5%	1/10W
R337	1-216-809-11	METAL CHIP	100	5%	1/10W
R339	1-216-841-11	METAL CHIP	47K	5%	1/10W
R340	1-216-841-11	METAL CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R341	1-216-841-11	METAL CHIP	47K	5%	1/10W
R342	1-216-841-11	METAL CHIP	47K	5%	1/10W
R343	1-216-841-11	METAL CHIP	47K	5%	1/10W
R344	1-216-841-11	METAL CHIP	47K	5%	1/10W
R345	1-216-841-11	METAL CHIP	47K	5%	1/10W
R346	1-216-841-11	METAL CHIP	47K	5%	1/10W
R347	1-216-841-11	METAL CHIP	47K	5%	1/10W
R348	1-216-841-11	METAL CHIP	47K	5%	1/10W
R350	1-249-425-11	CARBON	4.7K	5%	1/4W
R358	1-216-841-11	METAL CHIP	47K	5%	1/10W
R359	1-216-841-11	METAL CHIP	47K	5%	1/10W
R360	1-216-841-11	METAL CHIP	47K	5%	1/10W
R361	1-249-429-11	CARBON	10K	5%	1/4W
R362	1-249-429-11	CARBON	10K	5%	1/4W
R363	1-216-833-11	METAL CHIP	10K	5%	1/10W
R364	1-216-833-11	METAL CHIP	10K	5%	1/10W (E, EA, AR, AUS)
R364	1-249-425-11	CARBON	4.7K	5%	1/4W
R365	1-216-815-11	METAL CHIP	330	5%	1/10W
R366	1-247-831-91	CARBON	1K	5%	1/4W (EA)
R366	1-249-425-11	CARBON	4.7K	5%	1/4W (US, CND)
R367	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (US, CND)
R367	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (EA)
R368	1-247-843-11	CARBON	3.3K	5%	1/4W
R369	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R370	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R372	1-249-437-11	CARBON	47K	5%	1/4W
R373	1-249-437-11	CARBON	47K	5%	1/4W
R374	1-216-841-11	METAL CHIP	47K	5%	1/10W
R375	1-216-821-11	METAL CHIP	1K	5%	1/10W
R377	1-216-833-11	METAL CHIP	10K	5%	1/10W
R378	1-216-833-11	METAL CHIP	10K	5%	1/10W
R379	1-216-833-11	METAL CHIP	10K	5%	1/10W
R381	1-216-841-11	METAL CHIP	47K	5%	1/10W
R382	1-216-821-11	METAL CHIP	1K	5%	1/10W
R390	1-216-841-11	METAL CHIP	47K	5%	1/10W
R391	1-216-841-11	METAL CHIP	47K	5%	1/10W
R393	1-216-841-11	METAL CHIP	47K	5%	1/10W
R394	1-216-821-11	METAL CHIP	1K	5%	1/10W
R395	1-216-821-11	METAL CHIP	1K	5%	1/10W
R396	1-216-839-11	METAL CHIP	33K	5%	1/10W
R397	1-216-817-11	METAL CHIP	470	5%	1/10W
R401	1-216-809-11	METAL CHIP	100	5%	1/10W
R402	1-216-809-11	METAL CHIP	100	5%	1/10W
R404	1-216-833-11	METAL CHIP	10K	5%	1/10W
R405	1-216-809-11	METAL CHIP	100	5%	1/10W
R406	1-216-809-11	METAL CHIP	100	5%	1/10W
R409	1-216-833-11	METAL CHIP	10K	5%	1/10W
R411	1-216-821-11	METAL CHIP	1K	5%	1/10W
R412	1-216-821-11	METAL CHIP	1K	5%	1/10W
R413	1-216-864-11	SHORT CHIP	0		

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MAIN | MOTOR LOD | PANEL (1)

Ref. No.	Part No.	Description			Remark
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-247-807-31	CARBON	100	5%	1/4W
R419	1-247-807-31	CARBON	100	5%	1/4W
R420	1-216-841-11	METAL CHIP	47K	5%	1/10W
R422	1-216-809-11	METAL CHIP	100	5%	1/10W
R423	1-216-809-11	METAL CHIP	100	5%	1/10W
R424	1-216-809-11	METAL CHIP	100	5%	1/10W
R425	1-216-809-11	METAL CHIP	100	5%	1/10W
R426	1-216-809-11	METAL CHIP	100	5%	1/10W
R427	1-216-809-11	METAL CHIP	100	5%	1/10W
R428	1-216-809-11	METAL CHIP	100	5%	1/10W
R429	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R430	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R432	1-216-809-11	METAL CHIP	100	5%	1/10W
R433	1-216-809-11	METAL CHIP	100	5%	1/10W
R434	1-216-809-11	METAL CHIP	100	5%	1/10W
R435	1-216-809-11	METAL CHIP	100	5%	1/10W
R436	1-216-809-11	METAL CHIP	100	5%	1/10W
R437	1-216-809-11	METAL CHIP	100	5%	1/10W
R438	1-216-809-11	METAL CHIP	100	5%	1/10W
R439	1-216-809-11	METAL CHIP	100	5%	1/10W
R440	1-216-809-11	METAL CHIP	100	5%	1/10W
R441	1-216-809-11	METAL CHIP	100	5%	1/10W
R442	1-216-809-11	METAL CHIP	100	5%	1/10W
R443	1-216-809-11	METAL CHIP	100	5%	1/10W
R444	1-216-809-11	METAL CHIP	100	5%	1/10W
R445	1-216-809-11	METAL CHIP	100	5%	1/10W
R446	1-216-809-11	METAL CHIP	100	5%	1/10W
R447	1-216-809-11	METAL CHIP	100	5%	1/10W
R448	1-216-809-11	METAL CHIP	100	5%	1/10W
R449	1-216-809-11	METAL CHIP	100	5%	1/10W
R450	1-216-809-11	METAL CHIP	100	5%	1/10W
R451	1-216-809-11	METAL CHIP	100	5%	1/10W
R452	1-216-809-11	METAL CHIP	100	5%	1/10W
R453	1-216-809-11	METAL CHIP	100	5%	1/10W
R455	1-216-809-11	METAL CHIP	100	5%	1/10W
R457	1-216-809-11	METAL CHIP	100	5%	1/10W
R458	1-216-809-11	METAL CHIP	100	5%	1/10W
R459	1-216-809-11	METAL CHIP	100	5%	1/10W
R460	1-216-809-11	METAL CHIP	100	5%	1/10W
R461	1-216-809-11	METAL CHIP	100	5%	1/10W
R463	1-216-809-11	METAL CHIP	100	5%	1/10W
R465	1-216-809-11	METAL CHIP	100	5%	1/10W
R468	1-216-809-11	METAL CHIP	100	5%	1/10W
R469	1-216-809-11	METAL CHIP	100	5%	1/10W
R472	1-216-809-11	METAL CHIP	100	5%	1/10W
R474	1-216-857-11	METAL CHIP	1M	5%	1/10W
R475	1-216-809-11	METAL CHIP	100	5%	1/10W
R482	1-216-809-11	METAL CHIP	100	5%	1/10W
R484	1-216-809-11	METAL CHIP	100	5%	1/10W
R489	1-216-864-11	SHORT CHIP	0		
R490	1-216-864-11	SHORT CHIP	0		
R491	1-216-864-11	SHORT CHIP	0		
R494	1-247-807-31	CARBON	100	5%	1/4W
R495	1-247-807-31	CARBON	100	5%	1/4W
R496	1-249-429-11	CARBON	10K	5%	1/4W
		< VARIABLE RESISTOR >			
RV101	1-241-768-11	RES, ADJ CERMET		220K	
RV201	1-241-768-11	RES, ADJ CERMET		220K	

Ref. No.	Part No.	Description			Remark
		< RELAY >			
RY301	1-515-920-11	RELAY (24V)			
		< SWITCH >			
S301	1-771-264-11	SWITCH, PUSH (DETECTION) (1 KEY)			
		< TRANSFORMER >			
T101	1-419-080-21	COIL			
T201	1-419-080-21	COIL			
T301	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			
		< TERMINAL >			
TM301	1-536-708-81	TERMINAL BOARD, PUSH (4P) (SPEAKER IMPEDANCE USE 6-16 Ω)			
		< VIBRATOR >			
X301	1-760-252-12	VIBRATOR, CRYSTAL 32.768 kHz			
X302	1-781-107-21	VIBRATOR, CERAMIC 16 MHz			
**********					
		MOTOR LOD BOARD			
		**********			
**********					
	A-1062-192-A	PANEL (1) BOARD, COMPLETE (EA) (including PANEL (2), HEADPHONE and POWER board)			
	A-1062-226-A	PANEL (1) BOARD, COMPLETE (E) (including PANEL (2), HEADPHONE and POWER board)			
	A-1062-231-A	PANEL (1) BOARD, COMPLETE (AUS) (including PANEL (2), HEADPHONE and POWER board)			
	A-1062-233-A	PANEL (1) BOARD, COMPLETE (AR) (including PANEL (2), HEADPHONE and POWER board)			
	A-1076-938-A	PANEL (1) BOARD, COMPLETE (KR) (including PANEL (2), HEADPHONE and POWER board)			
	A-4751-221-A	PANEL (1) BOARD, COMPLETE (US, CND) (including PANEL (2), HEADPHONE and POWER board)			
		**********			
	4-249-151-01	HOLDER, FL TUBE			
		< CAPACITOR >			
★ C001	1-164-156-11	CERAMIC CHIP	0.1uF		25V
★ C002	1-164-156-11	CERAMIC CHIP	0.1uF		25V
★ C003	1-164-156-11	CERAMIC CHIP	0.1uF		25V
★ C004	1-164-156-11	CERAMIC CHIP	0.1uF		25V
★ C006	1-104-665-11	ELECT	100MF	20%	250V
C804	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C805	1-126-964-11	ELECT	10uF	20%	50V
C806	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C807	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C820	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C821	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C822	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C823	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C824	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C825	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C826	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C827	1-162-960-11	CERAMIC CHIP	220PF	10%	50V

The parts with the letter "★" are the parts used for the countermeasure circuit.
For the description of the countermeasure circuit, refer to the SUPPLEMENT-1

Ref. No.	Part No.	Description			Remark
C828	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C829	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C830	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C831	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C832	1-126-964-11	ELECT	10uF	20%	50V
C833	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C834	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
C835	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C836	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
C837	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C838	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C839	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C840	1-104-658-91	ELECT	100uF	20%	10V
C841	1-126-965-91	ELECT	22uF	20%	50V
C842	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C843	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C844	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C845	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C846	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C847	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C848	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
		< CONNECTOR >			
CN801	1-784-741-11	CONNECTOR, FFC 19P			
CN802	1-506-481-11	PIN, CONNECTOR 2P			
		< DIODE >			
D801	6-500-940-01	DIODE SEL6E14C-STP5 (CD ►II)			
D802	6-500-940-01	DIODE SEL6E14C-STP5 (TUNER/BAND)			
D803	6-500-940-01	DIODE SEL6E14C-STP5 (TAPE ►)			
D804	8-719-063-93	DIODE SLR325VC-N-T32 (I/⏻)			
D805	8-719-983-33	DIODE MTZJ-33B			
D806	8-719-109-85	DIODE RD5.1ESB2			
D807	6-500-940-01	DIODE SEL6E14C-STP5 (DSGX)			
D810	6-500-522-21	DIODE 10EDB40-TB3			
		< FLUORESCENT INDICATOR TUBE >			
FL701	1-518-965-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
★ IC001	8-759-925-74	IC SN74HC04ANS			
IC801	8-759-643-83	IC uPD16315GB-3BS			
IC802	8-759-826-33	IC NJL73H400A (R)			
		< TRANSISTOR >			
★ Q001	8-729-038-67	TRANSISTOR	KRC102S		
★ Q002	8-729-038-67	TRANSISTOR	KRC102S		
Q801	8-729-038-67	TRANSISTOR	KRC102S		
Q802	8-729-038-67	TRANSISTOR	KRC102S		
Q803	8-729-038-67	TRANSISTOR	KRC102S		
Q804	8-729-038-67	TRANSISTOR	KRC102S		
Q805	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q806	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q807	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q808	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q809	8-729-038-67	TRANSISTOR	KRC102S		

The parts with the letter "★" are the parts used for the countermeasure circuit.
For the description of the countermeasure circuit, refer to the SUPPLEMENT-1

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
★ R001	1-216-821-11	METAL CHIP	1K	5%	1/10W
★ R002	1-216-846-11	METAL CHIP	120K	5%	1/10W
★ R003	1-216-833-11	METAL CHIP	10K	5%	1/10W
R801	1-216-813-11	METAL CHIP	220	5%	1/10W
R802	1-216-815-11	METAL CHIP	330	5%	1/10W
R803	1-216-817-11	METAL CHIP	470	5%	1/10W
R804	1-216-819-11	METAL CHIP	680	5%	1/10W
R805	1-216-821-11	METAL CHIP	1K	5%	1/10W
R806	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R807	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R808	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R809	1-216-833-11	METAL CHIP	10K	5%	1/10W
R811	1-216-813-11	METAL CHIP	220	5%	1/10W
R812	1-216-815-11	METAL CHIP	330	5%	1/10W
R813	1-216-817-11	METAL CHIP	470	5%	1/10W
R814	1-216-819-11	METAL CHIP	680	5%	1/10W
R815	1-216-821-11	METAL CHIP	1K	5%	1/10W
R816	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R817	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R818	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R819	1-216-833-11	METAL CHIP	10K	5%	1/10W
R830	1-216-813-11	METAL CHIP	220	5%	1/10W
R831	1-216-813-11	METAL CHIP	220	5%	1/10W
R832	1-216-813-11	METAL CHIP	220	5%	1/10W
R833	1-216-813-11	METAL CHIP	220	5%	1/10W
R835	1-216-809-11	METAL CHIP	100	5%	1/10W
R841	1-216-809-11	METAL CHIP	100	5%	1/10W
R842	1-216-811-11	METAL CHIP	150	5%	1/10W
R845	1-216-864-11	SHORT CHIP	0		
R846	1-216-845-11	METAL CHIP	100K	5%	1/10W
R847	1-216-845-11	METAL CHIP	100K	5%	1/10W
R848	1-216-844-11	METAL CHIP	82K	5%	1/10W
R849	1-216-809-11	METAL CHIP	100	5%	1/10W
R850	1-216-809-11	METAL CHIP	100	5%	1/10W
R851	1-216-809-11	METAL CHIP	100	5%	1/10W
R852	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R853	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R854	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R855	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R856	1-249-393-11	CARBON	10	5%	1/4W
R857	1-216-845-11	METAL CHIP	100K	5%	1/10W
R858	1-216-833-11	METAL CHIP	10K	5%	1/10W
R859	1-216-809-11	METAL CHIP	100	5%	1/10W
R860	1-216-809-11	METAL CHIP	100	5%	1/10W
R861	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R862	1-216-789-11	METAL CHIP	2.2	5%	1/10W
		< SWITCH >			
S701	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			
S702	1-762-875-21	SWITCH, KEYBOARD (DISC 1)			
S703	1-762-875-21	SWITCH, KEYBOARD (DISC 2)			
S704	1-762-875-21	SWITCH, KEYBOARD (DISC 3)			
S705	1-762-875-21	SWITCH, KEYBOARD (DISC 4)			
S706	1-762-875-21	SWITCH, KEYBOARD (DISC 5)			
S707	1-762-875-21	SWITCH, KEYBOARD (DISC (+1))			
S708	1-762-875-21	SWITCH, KEYBOARD (DISC SKIP)			
S709	1-762-875-21	SWITCH, KEYBOARD (DSGX)			
S710	1-762-875-21	SWITCH, KEYBOARD (⏏)			

PANEL (1) PANEL (2) POWER SW (A)

Ref. No.	Part No.	Description			Remark
S711	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)			
S712	1-762-875-21	SWITCH, KEYBOARD (+ ▶▶ ▷▷Ⅱ)			
S713	1-762-875-21	SWITCH, KEYBOARD (Ⅰ◁◁ ◀◀ -)			
S714	1-762-875-21	SWITCH, KEYBOARD (■)			
S715	1-762-875-21	SWITCH, KEYBOARD (ALBUM +)			
S716	1-762-875-21	SWITCH, KEYBOARD (ALBUM -)			
S717	1-762-875-21	SWITCH, KEYBOARD (EX-CHANGE)			
S718	1-762-875-21	SWITCH, KEYBOARD (TAPE ►)			
S719	1-762-875-21	SWITCH, KEYBOARD (CD ►Ⅱ)			
S720	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)			
S803	1-473-392-11	ENCODER, ROTARY (VOLUME)			
**********					
		PANEL (2) BOARD			
		(included in PANEL (1) board)			
		**********			
		< CONNECTOR >			
CN803	1-506-481-11	PIN, CONNECTOR 2P			
CN804	1-506-481-11	PIN, CONNECTOR 2P			
		< RESISTOR >			
R821	1-216-813-11	METAL CHIP	220	5%	1/10W
R822	1-216-815-11	METAL CHIP	330	5%	1/10W
R823	1-216-817-11	METAL CHIP	470	5%	1/10W
R824	1-216-819-11	METAL CHIP	680	5%	1/10W
R825	1-216-821-11	METAL CHIP	1K	5%	1/10W
		< SWITCH >			
S721	1-762-875-21	SWITCH, KEYBOARD (Ⅱ TAPE)			
S722	1-762-875-21	SWITCH, KEYBOARD (● REC)			
S723	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)			
S724	1-762-875-21	SWITCH, KEYBOARD (REPEAT/FM MODE)			
S725	1-762-875-21	SWITCH, KEYBOARD			
		(PLAY MODE TUNING MODE)			
**********					
		POWER BOARD, COMPLETE			
		(included in PANEL (1) board)			
		**********			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
C901	1-126-925-91	ELECT	470uF	20%	10V
C902	1-126-944-11	ELECT	3300uF	20%	25V
C903	1-126-925-91	ELECT	470uF	20%	10V
C904	1-126-925-91	ELECT	470uF	20%	10V
C905	1-126-944-11	ELECT	3300uF	20%	25V
C907	1-130-495-00	MYLAR	0.1uF	5%	50V
C909	1-130-495-00	MYLAR	0.1uF	5%	50V
⚠C911	1-113-925-11	CERAMIC CHIP	10000PF	20%	250V
C912	1-126-969-11	ELECT	220uF	20%	50V
C913	1-130-495-00	MYLAR	0.1uF	5%	50V
C914	1-130-495-00	MYLAR	0.1uF	5%	50V
C915	1-126-964-11	ELECT	10uF	20%	50V
⚠C916	1-113-924-11	CERAMIC	0.0047uF	20%	250V
					(E, EA, AR, AUS, KR)
		< CONNECTOR >			
* CN902	1-564-510-11	PLUG, CONNECTOR 7P			

Ref. No.	Part No.	Description			Remark
CN903	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
CN904	1-774-108-11	PIN, CONNECTOR (PC BOARD)			
		< DIODE >			
D901	8-719-500-60	DIODE D5SBA20			
D902	8-719-063-79	DIODE 1N4002B			
D903	8-719-063-79	DIODE 1N4002B			
D904	8-719-063-79	DIODE 1N4002B			
D905	8-719-063-79	DIODE 1N4002B			
D906	8-719-063-79	DIODE 1N4002B			
D907	8-719-063-79	DIODE 1N4002B			
D908	8-719-063-79	DIODE 1N4002B			
D909	8-719-063-79	DIODE 1N4002B			
D910	6-500-522-01	DIODE 10EDB40-TA1B2			
D911	8-719-991-33	DIODE 1SS133T-77			
D912	8-719-991-33	DIODE 1SS133T-77			
D913	8-719-991-33	DIODE 1SS133T-77			
D914	8-719-063-79	DIODE 1N4002B			
		< FUSE HOLDER >			
FH903	1-533-233-31	FUSE HOLDER			
FH912	1-533-233-31	FUSE HOLDER			
FH921	1-533-233-31	FUSE HOLDER			
FH922	1-533-233-31	FUSE HOLDER			
		< IC >			
IC901	8-759-231-57	IC TA7810S			
IC902	8-759-071-48	IC TA7807S			
IC903	6-701-760-01	IC uPC3504AHF			
		< RESISTOR >			
R901	1-249-417-11	CARBON	1K	5%	1/4W
R902	1-249-417-11	CARBON	1K	5%	1/4W
⚠R903	1-219-121-11	FUSIBLE	0.22	5%	1/4W
⚠R904	1-219-121-11	FUSIBLE	0.22	5%	1/4W
⚠R905	1-202-973-61	FUSIBLE	3.3	5%	1/4W
⚠R906	1-219-237-51	CARBON	3.3M	5%	1/2W
					(US, CND)
⚠R907	1-219-121-11	FUSIBLE	0.22	5%	1/4W
⚠R908	1-202-973-61	FUSIBLE	3.3	5%	1/4W
R909	1-249-421-11	CARBON	2.2K	5%	1/4W
		< RELAY >			
⚠RY901	1-755-324-11	RELAY			
		< SWITCH >			
⚠S901	1-786-055-11	SELECTOR, VOLTAGE (VOLTAGE SELECTOR)			
					(E, EA)
**********					
		SW (A) BOARD			
		**********			
		< SWITCH >			
S811	1-786-289-21	SWITCH, DETECTION			
S831	1-786-289-21	SWITCH, DETECTION			
**********					

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
		SW (B) BOARD	
		**********	
		< SWITCH >	
S821	1-786-084-21	SWITCH, DETECTION	
**********			
		SW (C) BOARD	
		**********	
		< SWITCH >	
S841	1-786-382-11	SWITCH, PUSH (1 KEY)	
**********			
		SW (D) BOARD	
		**********	
		< SWITCH >	
S851	1-786-382-11	SWITCH, PUSH (1 KEY)	
**********			
		MISCELLANEOUS	
		**********	
9	1-796-352-51	DECK, MECHANICAL (CMAL5Z225A)	
61	1-773-052-11	WIRE (FLAT TYPE)(17CORE)	
101	1-693-625-11	TUNER (FM/AM) (US, CND)	
101	1-693-628-11	TUNER (FM/AM) (E, EA, AR, AUS)	
101	1-693-629-11	TUNER (FM/AM) (KR)	
102	1-787-103-11	FAN, DC	
⚠103	1-696-585-21	CORD, POWER (EA)	
⚠103	1-769-079-41	CORD, POWER (KR)	
⚠103	1-775-790-12	CORD, POWER (AUS)	
⚠103	1-783-531-12	CORD, POWER (US, CND)	
⚠103	1-783-941-21	CORD, POWER (AR)	
⚠103	1-827-226-11	CORD, POWER (E)	
105	1-468-738-11	REGULATOR, SWITCHING	
112	1-769-944-11	WIRE (FLAT TYPE)(11 CORE)	
113	1-769-916-11	WIRE (FLAT TYPE)(9 CORE)	
114	1-769-879-11	WIRE (FLAT TYPE)(7 CORE)	
115	1-831-593-11	WIRE (FLAT TYPE)(21 CORE)	
116	1-831-594-11	WIRE (FLAT TYPE)(27 CORE)	
117	1-564-515-11	PLUG, CONNECTOR 12P	
118	1-564-510-11	PLUG, CONNECTOR 7P	
⚠1206	8-820-244-01	OPTICAL PICK-UP (KSM-215DCP)	
1208	1-827-992-11	WIRE (FLAT TYPE) (16 CORE)	
⚠F901	1-533-453-11	FUSE, GLASS TUBE (DIA. 5) (T5AL/125V)	(US, CND)
⚠F901	1-533-472-11	FUSE, GLASS TUBE (DIA. 5) (T5AL/250V)	(E, EA, AR, AUS, KR)
⚠F902	1-533-453-11	FUSE, GLASS TUBE (DIA. 5) (T5AL/125V)	(US, CND)
⚠F902	1-533-472-11	FUSE, GLASS TUBE (DIA. 5) (T5AL/250V)	(E, EA, AR, AUS, KR)
⚠F903	1-533-467-11	FUSE, GLASS TUBE (DIA. 5) (T1.6AL/250V)	(E, EA)
M701	A-1148-845-A	MOTOR ASSY (LOD)	
M881	A-1060-630-A	MOTOR ASSY (ELV)	
M871	A-1060-630-A	MOTOR ASSY (LOD)	
S101	1-771-853-11	SWITCH, DETECTION (LIMIT)	
S881	1-478-706-11	ENCODER, ROTARY	
⚠T901	1-443-330-11	TRANSFORMER, POWER (US, CND)	
⚠T901	1-443-333-11	TRANSFORMER, POWER (E, AR, AUS, KR)	
⚠T901	1-443-418-11	TRANSFORMER, POWER (EA)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MEMO

HCD-HPX9

SONY

SERVICE MANUAL

US Model
Canadian Model
E Model
Australian Model

Ver. 1.9 2006.05

SUPPLEMENT-1

Subject: Explanation of IC306 (System controller), MAIN board and PANEL (1) board

The four different types of IC are used for IC306.
The MAIN board and the PANEL board are different depending on the type of IC used for IC306.
Refer to the table below.

	IC306 (SYSTEM CONTROLLER)	MAIN board Part number	PANEL (1) board Part number
TYPE1	6-804-180-01 M3062CMEN-A02FPU0	1-861-593-11	1-861-793-15 (Countermeasure cricuit is necessary.)
TYPE2	6-804-685-01 M3062CMEN-A16FPU0	1-861-593-11	1-861-793-11 1-861-793-15
TYPE3	6-804-721-01 M3062CMEN-A19FPU0	1-861-593-14	1-861-793-11 1-861-793-15
TYPE4	6-805-172-01 M3062CMEN-A28FPU0	1-861-593-14	1-861-793-11 1-861-793-15

When the IC of TYPE 1 is used, the countermeasure circuit must be added to the PANEL board.
For the schematic diagram, the printed wiring board and the electrical parts list of the countermeasure circuit, refer to the original SERVICE MANUAL.

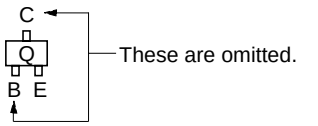
This SUPPLEMENT-1 shows the schematic diagram, the printed wiring board and the electrical parts list of the MAIN printed circuit board, part number 1-861-593-14 and the PANEL printed circuit board, part number 1-861-793-11.
For the schematic diagram, the printed wiring board and the electrical parts list of the MAIN printed circuit board, part number 1-861-593-11 and the PANEL printed circuit board, part number 1-861-793-15, refer to the original SERVICE MANUAL.

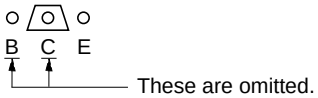
9-877-809-81

NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Boards:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ⬚← : indicates side identified with part number.
- △ : internal component.
- ▬ : Pattern from the side which enables seeing. (The other layers' patterns are not indicated.)
- Indication of transistor.





Note on Schematic Diagram:

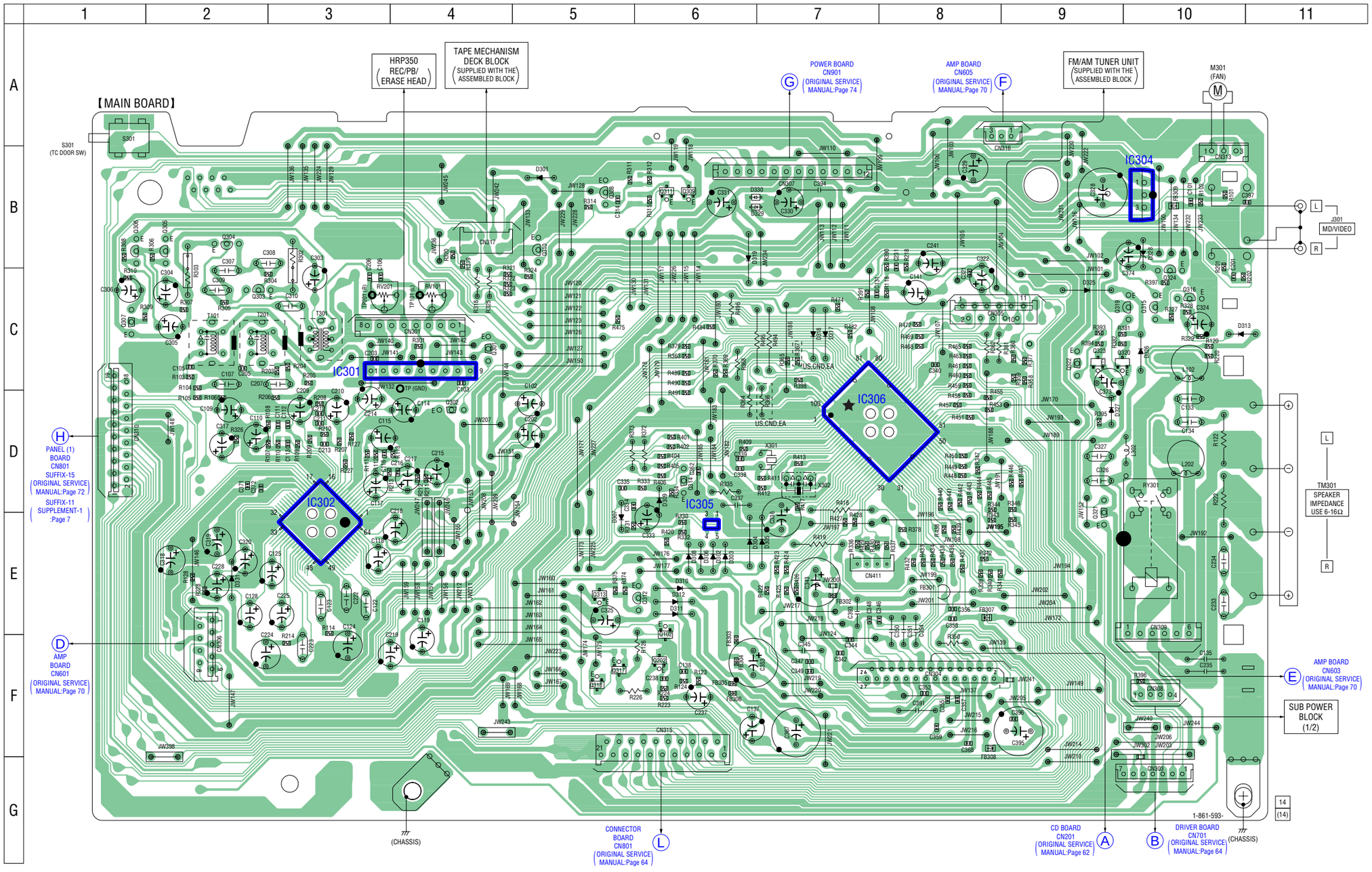
- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). 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)
  - : TAPE PLAY
  - : TAPE REC
  - : CD PLAY
  - : AUX IN
- Abbreviation
  - CND : Canadian model
  - EA : Saudi Arabia model

PRINTED WIRING BOARD — MAIN BOARD (SUFFIX-14) —

• :Uses unleaded solder.

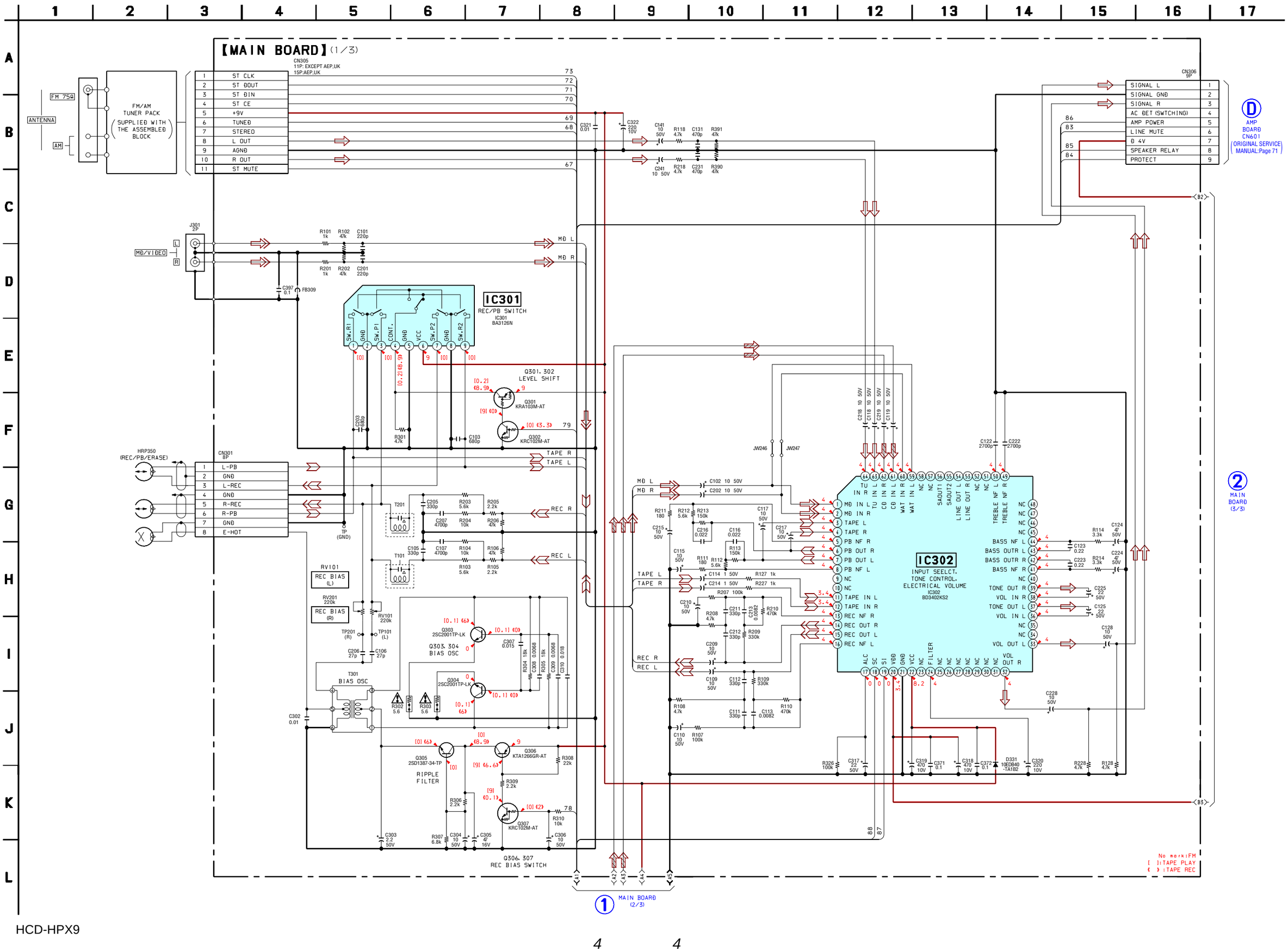


• **Semiconductor Location**

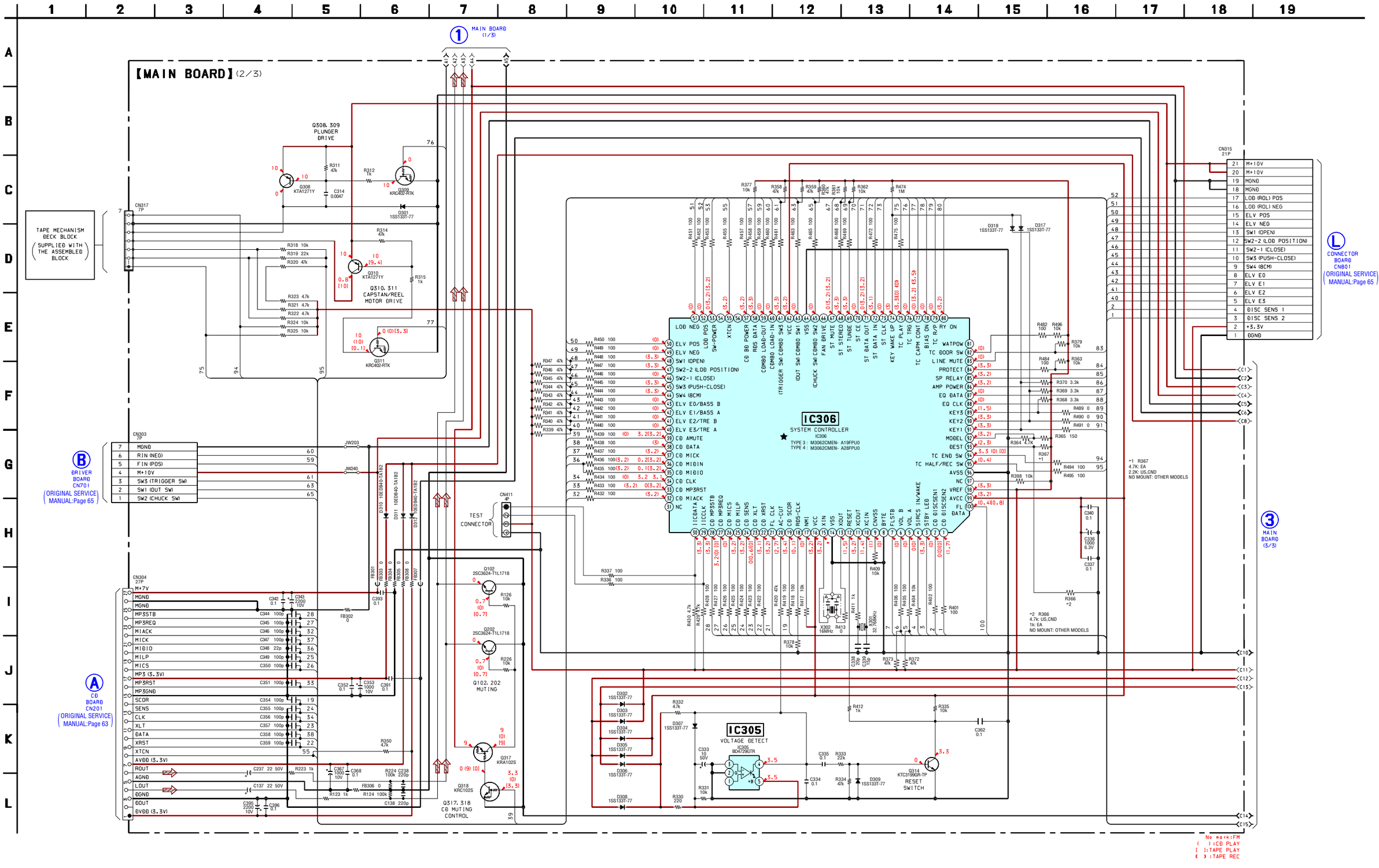
Ref. No.	Location
D301	B-5
D302	E-6
D303	E-6
D304	E-6
D305	E-7
D306	E-6
D307	D-5
D308	E-6
D309	D-6
D310	E-6
D311	E-6
D312	E-6
D313	C-10
D316	C-9
D317	C-7
D318	C-7
D319	B-6
D325	C-9
D326	C-10
D327	D-9
D328	B-10
D329	B-6
D330	B-6
D331	E-2
IC301	C-4
IC302	E-3
IC304	B-10
IC305	E-6
IC306	D-8
Q102	F-6
Q202	F-6
Q301	C-4
Q302	D-4
Q303	C-2
Q304	B-2
Q305	B-2
Q306	B-1
Q307	C-1
Q308	B-5
Q309	B-6
Q310	B-5
Q311	B-6
Q312	E-5
Q313	E-5
Q314	D-6
Q315	C-10
Q316	C-10
Q317	F-5
Q318	F-5
Q319	C-10
Q320	C-9
Q321	E-9
Q322	C-9
Q323	C-9
Q324	C-10

The parts with the letter "★" are the parts used for the countermeasure circuit.

SCHEMATIC DIAGRAM — MAIN BOARD (1/3)(SUFFIX-14) —

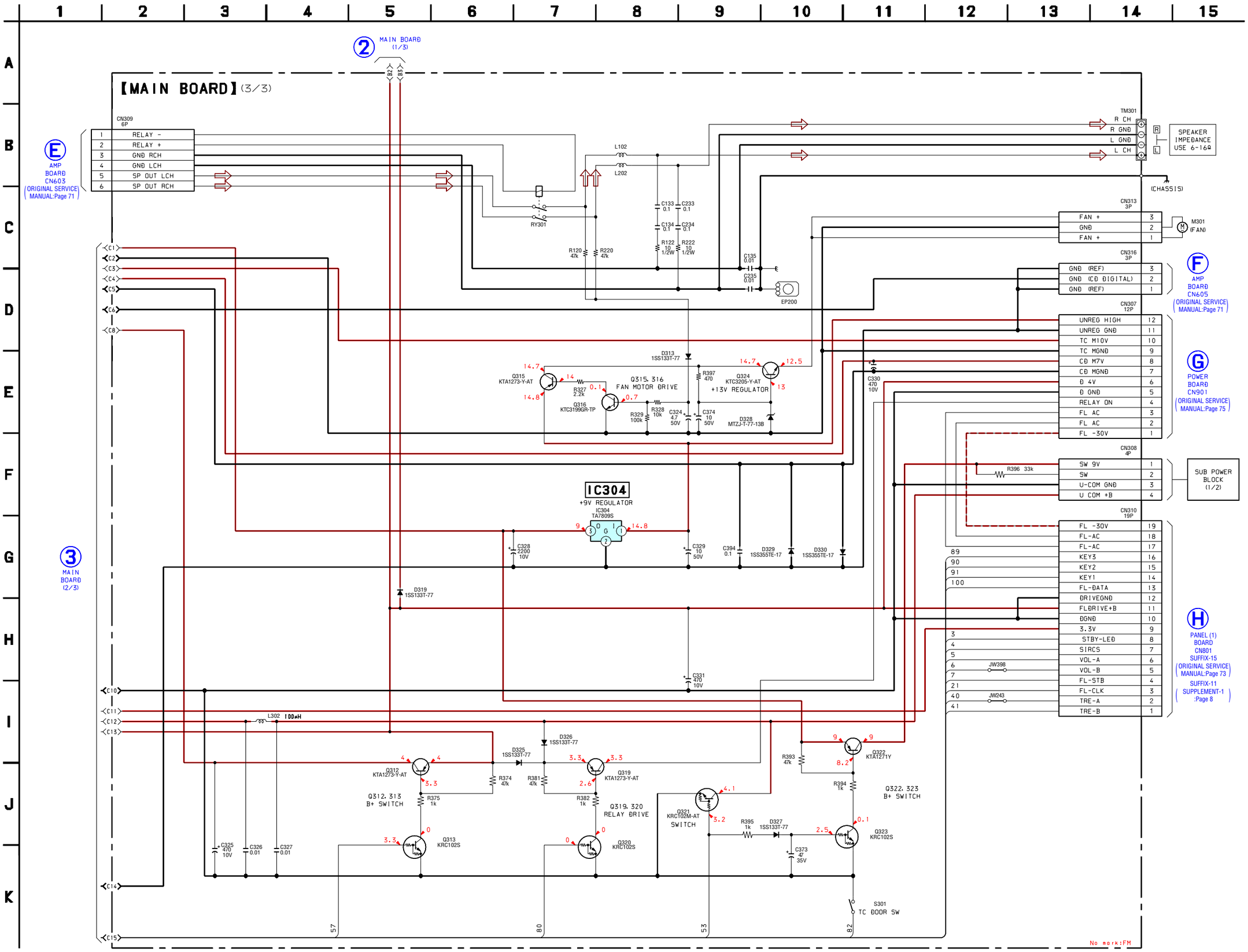


SCHEMATIC DIAGRAM — MAIN BOARD (2/3)(SUFFIX-14) —



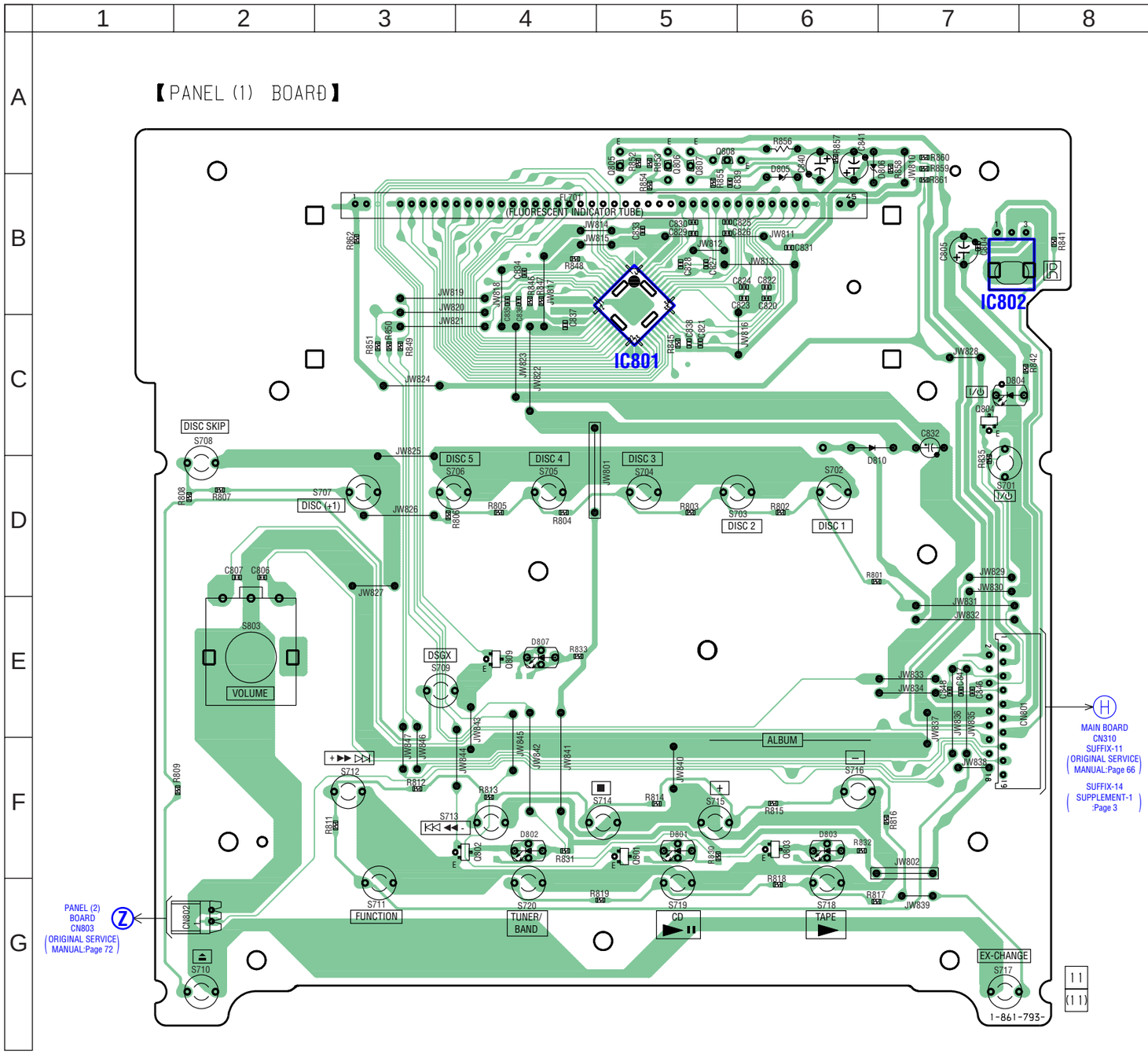
The parts with the letter "★" are the parts used for the countermeasure circuit.

SCHEMATIC DIAGRAM — MAIN BOARD (3/3)(SUFFIX-14) —



PRINTED WIRING BOARD — PANEL (1) BOARD (SUFFIX-11) — • : **Uses unleaded solder.**

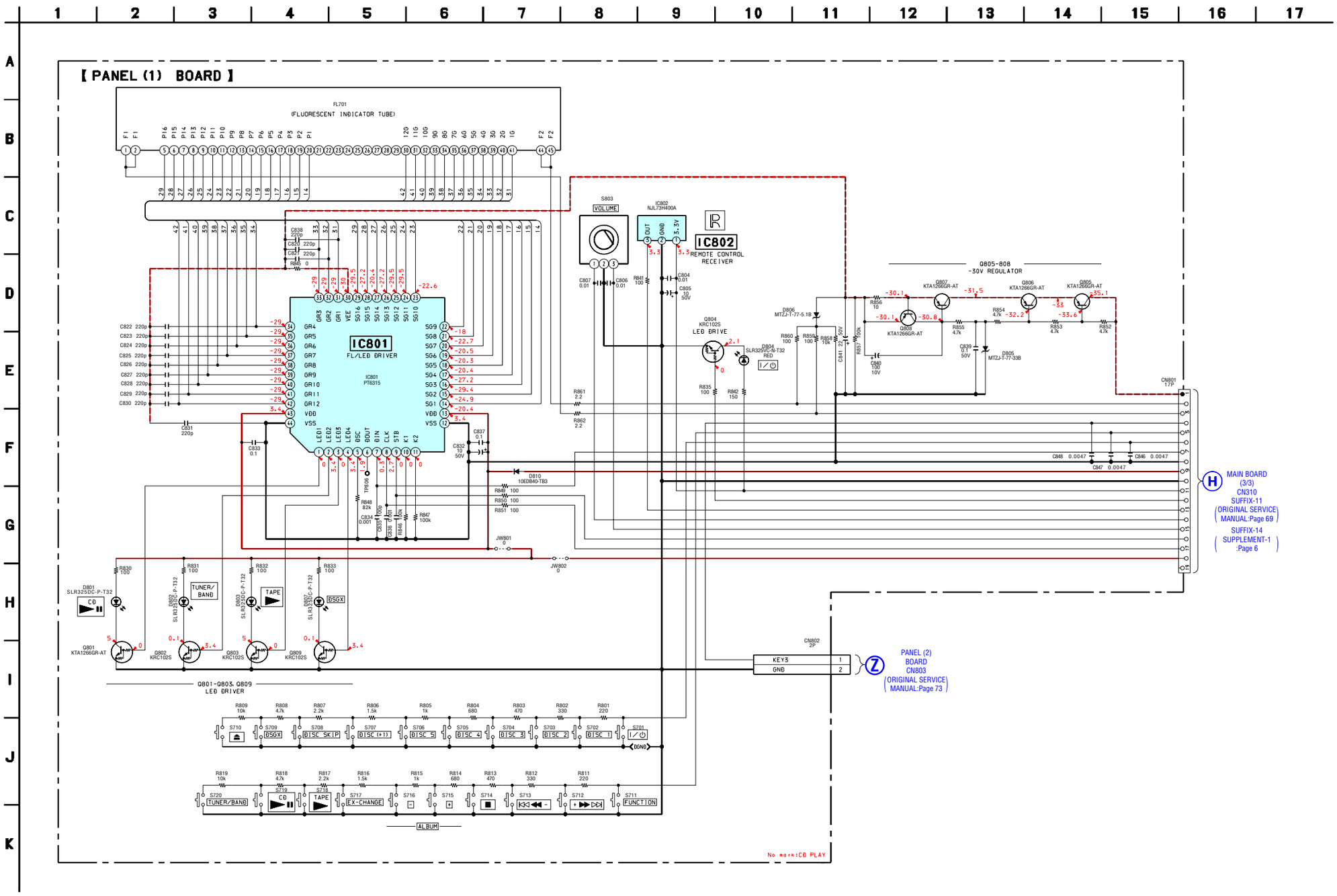
【PANEL (1) BOARD】



- **Semiconductor Location**

Ref. No.	Location
D801	F-5
D802	F-4
D803	F-6
D804	C-7
D805	A-6
D806	A-6
D807	E-4
D810	C-6
IC801	B-5
IC802	B-7
Q801	F-5
Q802	F-4
Q803	F-6
Q804	C-7
Q805	A-5
Q806	A-5
Q807	A-5
Q808	A-5
Q809	E-4

SCHEMATIC DIAGRAM — PANEL (1) BOARD (SUFFIX-11) —



ELECTRICAL PARTS LIST

MAIN

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: μF
- COILS
  uH: μH
- 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. . : μA. . uPA. . : μPA. .
  uPB. . : μPB. . uPC. . : μPC. .
  uPD. . : μPD. .
- Abbreviation
  CND : Canadian model
  EA : Saudi Arabia model

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

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

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
		MAIN BOARD			
		(BOARD PART NUMBER SUFFIX-14)			
		**********			
		< CAPACITOR >			
C101	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C102	1-126-964-11	ELECT	10uF	20%	50V
C103	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C105	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C106	1-162-946-11	CERAMIC CHIP	27PF	5%	50V
C107	1-130-479-00	MYLAR	0.0047uF	5%	50V
C109	1-126-964-11	ELECT	10uF	20%	50V
C110	1-126-964-11	ELECT	10uF	20%	50V
C111	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C112	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C113	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C114	1-126-960-11	ELECT	1uF	20%	50V
C115	1-126-964-11	ELECT	10uF	20%	50V
C116	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C117	1-126-964-11	ELECT	10uF	20%	50V
C118	1-126-964-11	ELECT	10uF	20%	50V
C119	1-126-964-11	ELECT	10uF	20%	50V
C122	1-130-476-00	MYLAR	0.0027uF	5%	50V
C123	1-130-499-00	MYLAR	0.22uF	5%	50V
C124	1-126-967-11	ELECT	47uF	20%	50V
C125	1-126-965-91	ELECT	22uF	20%	50V
C128	1-126-964-11	ELECT	10uF	20%	50V
C131	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C133	1-130-495-00	MYLAR	0.1uF	5%	50V
C134	1-130-495-00	MYLAR	0.1uF	5%	50V
C135	1-162-306-11	CERAMIC	0.01uF	30%	16V
C137	1-126-965-91	ELECT	22uF	20%	50V
C138	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C141	1-126-964-11	ELECT	10uF	20%	50V
C201	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C202	1-126-964-11	ELECT	10uF	20%	50V
C203	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C205	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C206	1-162-946-11	CERAMIC CHIP	27PF	5%	50V
C207	1-130-479-00	MYLAR	0.0047uF	5%	50V
C209	1-126-964-11	ELECT	10uF	20%	50V
C210	1-126-964-11	ELECT	10uF	20%	50V
C211	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C212	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C213	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C214	1-126-960-11	ELECT	1uF	20%	50V
C215	1-126-964-11	ELECT	10uF	20%	50V
C216	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C217	1-126-964-11	ELECT	10uF	20%	50V
C218	1-126-964-11	ELECT	10uF	20%	50V
C219	1-126-964-11	ELECT	10uF	20%	50V
C222	1-130-476-00	MYLAR	0.0027uF	5%	50V
C223	1-130-499-00	MYLAR	0.22uF	5%	50V
C224	1-126-967-11	ELECT	47uF	20%	50V
C225	1-126-965-91	ELECT	22uF	20%	50V
C228	1-126-964-11	ELECT	10uF	20%	50V
C231	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C233	1-130-495-00	MYLAR	0.1uF	5%	50V
C234	1-130-495-00	MYLAR	0.1uF	5%	50V
C235	1-162-306-11	CERAMIC	0.01uF	30%	16V
C237	1-126-965-91	ELECT	22uF	20%	50V
C238	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C241	1-126-964-11	ELECT	10uF	20%	50V
C302	1-137-150-11	FILM	0.01uF	5%	100V
C303	1-126-961-11	ELECT	2.2uF	20%	50V
C304	1-126-964-11	ELECT	10uF	20%	50V
C305	1-126-947-11	ELECT	47uF	20%	16V
C306	1-126-964-11	ELECT	10uF	20%	50V
C307	1-130-485-00	MYLAR	0.015uF	5%	50V
C308	1-130-481-00	MYLAR	0.0068uF	5%	50V
C309	1-130-481-00	MYLAR	0.0068uF	5%	50V
C310	1-137-440-11	MYLAR	0.018uF	5%	50V
C314	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C317	1-126-965-91	ELECT	22uF	20%	50V
C318	1-126-925-91	ELECT	470uF	20%	10V
C319	1-126-925-91	ELECT	470uF	20%	10V
C320	1-126-923-91	ELECT	220uF	20%	10V
C321	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C322	1-126-923-91	ELECT	220uF	20%	10V
C324	1-126-963-11	ELECT	4.7uF	20%	50V
C325	1-126-925-91	ELECT	470uF	20%	10V
C326	1-130-483-00	MYLAR	0.01uF	5%	50V
C327	1-130-483-00	MYLAR	0.01uF	5%	50V
C328	1-126-927-11	ELECT	2200uF	20%	10V
C329	1-126-964-11	ELECT	10uF	20%	50V
C330	1-126-925-91	ELECT	470uF	20%	10V
C331	1-126-925-91	ELECT	470uF	20%	10V

MAIN

Ref. No.	Part No.	Description			Remark
C333	1-126-964-11	ELECT	10uF	20%	50V
C334	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C335	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C336	1-126-916-11	ELECT	1000uF	20%	6.3V
C337	1-127-888-21	CERAMIC	0.1uF	10%	50V
C338	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C339	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C340	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C342	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C343	1-126-927-11	ELECT	2200uF	20%	10V
C344	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C345	1-128-809-11	CERAMIC	100PF	5%	50V
C346	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C347	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C348	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C349	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C350	1-128-809-11	CERAMIC	100PF	5%	50V
C351	1-128-809-11	CERAMIC	100PF	5%	50V
C352	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C353	1-126-926-11	ELECT	1000uF	20%	10V
C354	1-128-809-11	CERAMIC	100PF	5%	50V
C355	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C356	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C357	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C358	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C359	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C362	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C367	1-126-926-11	ELECT	1000uF	20%	10V
C368	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C371	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C372	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C373	1-126-947-11	ELECT	47uF	20%	16V
C374	1-126-964-11	ELECT	10uF	20%	50V
C391	1-127-888-21	CERAMIC	0.1uF	10%	50V
C393	1-127-888-21	CERAMIC	0.1uF	10%	50V
C394	1-127-888-21	CERAMIC	0.1uF	10%	50V
C395	1-126-927-11	ELECT	2200uF	20%	10V
C396	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C397	1-164-156-11	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
* CN301	1-564-511-11	PLUG, CONNECTOR 8P			
* CN303	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P			
CN304	1-779-295-11	CONNECTOR, FFC (LIF (NON-ZIF)) 27P			
CN305	1-568-830-11	CONNECTOR, FFC 11P			
CN306	1-568-828-11	CONNECTOR, FFC 9P			
* CN307	1-564-515-11	PLUG, CONNECTOR 12P			
* CN308	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P			
CN309	1-564-509-11	PLUG, CONNECTOR 6P			
CN310	1-784-778-11	CONNECTOR, FFC 19P			
CN313	1-564-506-11	PLUG, CONNECTOR 3P			
CN315	1-568-838-11	CONNECTOR, FFC 21P			
* CN316	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P			
CN317	1-568-826-11	CONNECTOR, FFC 7P			

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D301	8-719-991-33	DIODE 1SS133T-77	
D302	8-719-991-33	DIODE 1SS133T-77	
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	
D308	8-719-991-33	DIODE 1SS133T-77	
D309	8-719-991-33	DIODE 1SS133T-77	
D310	6-500-522-01	DIODE 10EDB40-TA1B2	
D311	6-500-522-01	DIODE 10EDB40-TA1B2	
D312	6-500-522-01	DIODE 10EDB40-TA1B2	
D313	8-719-991-33	DIODE 1SS133T-77	
D317	8-719-991-33	DIODE 1SS133T-77	
D318	8-719-991-33	DIODE 1SS133T-77	
D319	8-719-991-33	DIODE 1SS133T-77	
D325	8-719-991-33	DIODE 1SS133T-77	
D326	8-719-991-33	DIODE 1SS133T-77	
D327	8-719-991-33	DIODE 1SS133T-77	
D328	8-719-921-88	DIODE MTZJ-T-77-13B	
D329	8-719-988-61	DIODE 1SS355TE-17	
D330	8-719-988-61	DIODE 1SS355TE-17	
D331	6-500-522-01	DIODE 10EDB40-TA1B2	
		< EARTH TERMINAL >	
EP200	1-537-770-21	TERMINAL BOARD, GROUND	
		< FERRITE BEAD >	
FB301	1-412-473-21	INDUCTOR (SMALL TYPE)	
FB302	1-216-864-11	SHORT CHIP 0	
FB303	1-216-864-11	SHORT CHIP 0	
FB304	1-216-864-11	SHORT CHIP 0	
FB305	1-216-864-11	SHORT CHIP 0	
FB306	1-216-864-11	SHORT CHIP 0	
FB307	1-500-445-21	FERRITE, EMI (SMD) (2012)	
FB308	1-500-445-21	FERRITE, EMI (SMD) (2012)	
FB309	1-500-445-21	FERRITE, EMI (SMD) (2012)	
		< IC >	
IC301	8-759-508-69	IC BA3126N	
IC302	6-705-622-01	IC BD3402KS2	
IC304	8-759-231-56	IC TA7809S	
IC305	6-801-402-01	IC BD4729GTR	
★ IC306	6-804-721-01	IC M3062CMEN-A19FPU0 (TYPE 3)	
★ IC306	6-805-172-01	IC M3062CMEN-A28FPU0 (TYPE 4)	
		< JACK >	
J301	1-764-593-21	JACK 2P (MD/VIDEO)	
		< JUMPER RESISTOR >	
JW200	1-216-864-11	SHORT CHIP 0	
JW241	1-216-864-11	SHORT CHIP 0	
JW302	1-216-864-11	SHORT CHIP 0	

The parts with the letter "★" are the parts used for the countermeasure circuit.

MAIN

Ref. No.	Part No.	Description			Remark
		< COIL >			
L102	1-416-615-11	COIL, AIR-CORE			
L202	1-416-615-11	COIL, AIR-CORE			
L302	1-410-521-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q102	8-729-141-71	TRANSISTOR	2SC3624-T1L1718		
Q202	8-729-141-71	TRANSISTOR	2SC3624-T1L1718		
Q301	8-729-037-16	TRANSISTOR	KRA103M-AT		
Q302	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q303	8-729-142-46	TRANSISTOR	2SC2001TP-LK		
Q304	8-729-142-46	TRANSISTOR	2SC2001TP-LK		
Q305	8-729-801-93	TRANSISTOR	2SD1387-34-TP		
Q306	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q307	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q308	8-729-037-13	TRANSISTOR	KTA1271Y		
Q309	8-729-054-16	TRANSISTOR	KRC402-RTK		
Q310	8-729-037-13	TRANSISTOR	KTA1271Y		
Q311	8-729-054-16	TRANSISTOR	KRC402-RTK		
Q312	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q313	8-729-038-67	TRANSISTOR	KRC102S		
Q314	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q315	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q316	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q317	8-729-038-54	TRANSISTOR	KRA102S		
Q318	8-729-038-67	TRANSISTOR	KRC102S		
Q319	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q320	8-729-038-67	TRANSISTOR	KRC102S		
Q321	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q322	8-729-037-13	TRANSISTOR	KTA1271Y		
Q323	8-729-038-67	TRANSISTOR	KRC102S		
Q324	8-729-048-54	TRANSISTOR	KTC3205-Y-AT		
		< RESISTOR >			
R101	1-216-821-11	METAL CHIP	1K	5%	1/10W
R102	1-216-841-11	METAL CHIP	47K	5%	1/10W
R103	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R104	1-216-833-11	METAL CHIP	10K	5%	1/10W
R105	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R106	1-216-841-11	METAL CHIP	47K	5%	1/10W
R107	1-216-845-11	METAL CHIP	100K	5%	1/10W
R108	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R109	1-216-851-11	METAL CHIP	330K	5%	1/10W
R110	1-216-853-11	METAL CHIP	470K	5%	1/10W
R111	1-216-812-11	METAL CHIP	180	5%	1/10W
R112	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R113	1-216-847-11	METAL CHIP	150K	5%	1/10W
R114	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R118	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R120	1-216-841-11	METAL CHIP	47K	5%	1/10W
R122	1-260-076-11	CARBON	10	5%	1/2W
R123	1-216-821-11	METAL CHIP	1K	5%	1/10W
R124	1-216-845-11	METAL CHIP	100K	5%	1/10W
R126	1-249-429-11	CARBON	10K	5%	1/4W
R127	1-216-821-11	METAL CHIP	1K	5%	1/10W
R128	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R201	1-216-821-11	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R202	1-216-841-11	METAL CHIP	47K	5%	1/10W
R203	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R204	1-216-833-11	METAL CHIP	10K	5%	1/10W
R205	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R206	1-216-841-11	METAL CHIP	47K	5%	1/10W
R207	1-216-845-11	METAL CHIP	100K	5%	1/10W
R208	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R209	1-216-851-11	METAL CHIP	330K	5%	1/10W
R210	1-216-853-11	METAL CHIP	470K	5%	1/10W
R211	1-216-812-11	METAL CHIP	180	5%	1/10W
R212	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R213	1-216-847-11	METAL CHIP	150K	5%	1/10W
R214	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R218	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R220	1-216-841-11	METAL CHIP	47K	5%	1/10W
R222	1-260-076-11	CARBON	10	5%	1/2W
R223	1-216-821-11	METAL CHIP	1K	5%	1/10W
R224	1-216-845-11	METAL CHIP	100K	5%	1/10W
R226	1-249-429-11	CARBON	10K	5%	1/4W
R227	1-216-821-11	METAL CHIP	1K	5%	1/10W
R228	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R301	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
⚠R302	1-212-851-00	FUSIBLE	5.6	5%	1/4W
⚠R303	1-212-851-00	FUSIBLE	5.6	5%	1/4W
R304	1-216-836-11	METAL CHIP	18K	5%	1/10W
R305	1-216-836-11	METAL CHIP	18K	5%	1/10W
R306	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R307	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R308	1-216-837-11	METAL CHIP	22K	5%	1/10W
R309	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R310	1-216-833-11	METAL CHIP	10K	5%	1/10W
R311	1-216-841-11	METAL CHIP	47K	5%	1/10W
R312	1-216-821-11	METAL CHIP	1K	5%	1/10W
R314	1-216-841-11	METAL CHIP	47K	5%	1/10W
R315	1-216-821-11	METAL CHIP	1K	5%	1/10W
R318	1-249-429-11	CARBON	10K	5%	1/4W
R319	1-216-837-11	METAL CHIP	22K	5%	1/10W
R320	1-216-841-11	METAL CHIP	47K	5%	1/10W
R321	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R322	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R323	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R324	1-216-833-11	METAL CHIP	10K	5%	1/10W
R325	1-249-429-11	CARBON	10K	5%	1/4W
R326	1-216-845-11	METAL CHIP	100K	5%	1/10W
R327	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R328	1-216-833-11	METAL CHIP	10K	5%	1/10W
R329	1-216-845-11	METAL CHIP	100K	5%	1/10W
R330	1-216-813-11	METAL CHIP	220	5%	1/10W
R331	1-216-833-11	METAL CHIP	10K	5%	1/10W
R332	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R333	1-216-837-11	METAL CHIP	22K	5%	1/10W
R334	1-216-841-11	METAL CHIP	47K	5%	1/10W
R335	1-249-429-11	CARBON	10K	5%	1/4W
R336	1-216-809-11	METAL CHIP	100	5%	1/10W
R337	1-216-809-11	METAL CHIP	100	5%	1/10W
R339	1-216-841-11	METAL CHIP	47K	5%	1/10W
R340	1-216-841-11	METAL CHIP	47K	5%	1/10W

MAIN

Ref. No.	Part No.	Description			Remark
R341	1-216-841-11	METAL CHIP	47K	5%	1/10W
R342	1-216-841-11	METAL CHIP	47K	5%	1/10W
R343	1-216-841-11	METAL CHIP	47K	5%	1/10W
R344	1-216-841-11	METAL CHIP	47K	5%	1/10W
R345	1-216-841-11	METAL CHIP	47K	5%	1/10W
R346	1-216-841-11	METAL CHIP	47K	5%	1/10W
R347	1-216-841-11	METAL CHIP	47K	5%	1/10W
R350	1-249-425-11	CARBON	4.7K	5%	1/4W
R358	1-216-841-11	METAL CHIP	47K	5%	1/10W
R359	1-216-841-11	METAL CHIP	47K	5%	1/10W
R360	1-216-841-11	METAL CHIP	47K	5%	1/10W
R361	1-249-429-11	CARBON	10K	5%	1/4W
R362	1-249-429-11	CARBON	10K	5%	1/4W
R363	1-216-833-11	METAL CHIP	10K	5%	1/10W
R364	1-249-425-11	CARBON	4.7K	5%	1/4W
R365	1-216-811-11	METAL CHIP	150	5%	1/10W
R366	1-247-831-11	CARBON	1K	5%	1/4W (EA)
R366	1-249-425-11	CARBON	4.7K	5%	1/4W (US, CND)
R367	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (US, CND)
R367	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (EA)
R368	1-247-843-11	CARBON	3.3K	5%	1/4W
R369	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R370	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R372	1-249-437-11	CARBON	47K	5%	1/4W
R373	1-249-437-11	CARBON	47K	5%	1/4W
R374	1-216-841-11	METAL CHIP	47K	5%	1/10W
R375	1-216-821-11	METAL CHIP	1K	5%	1/10W
R377	1-216-833-11	METAL CHIP	10K	5%	1/10W (EXCEPT AEP, UK)
R378	1-216-833-11	METAL CHIP	10K	5%	1/10W (EXCEPT AEP, UK)
R379	1-216-833-11	METAL CHIP	10K	5%	1/10W
R381	1-216-841-11	METAL CHIP	47K	5%	1/10W
R382	1-216-821-11	METAL CHIP	1K	5%	1/10W
R390	1-216-841-11	METAL CHIP	47K	5%	1/10W
R391	1-216-841-11	METAL CHIP	47K	5%	1/10W
R393	1-216-841-11	METAL CHIP	47K	5%	1/10W
R394	1-216-821-11	METAL CHIP	1K	5%	1/10W
R395	1-216-821-11	METAL CHIP	1K	5%	1/10W
R396	1-216-839-11	METAL CHIP	33K	5%	1/10W
R397	1-216-817-11	METAL CHIP	470	5%	1/10W
R398	1-216-833-11	METAL HICP	10K	5%	1/10W
R401	1-216-809-11	METAL CHIP	100	5%	1/10W
R402	1-216-809-11	METAL CHIP	100	5%	1/10W
R404	1-216-833-11	METAL CHIP	10K	5%	1/10W
R405	1-216-809-11	METAL CHIP	100	5%	1/10W
R406	1-216-809-11	METAL CHIP	100	5%	1/10W
R409	1-216-833-11	METAL CHIP	10K	5%	1/10W
R411	1-216-821-11	METAL CHIP	1K	5%	1/10W
R412	1-216-821-11	METAL CHIP	1K	5%	1/10W
R413	1-216-864-11	SHORT CHIP	0		
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-247-807-31	CARBON	100	5%	1/4W
R419	1-247-807-31	CARBON	100	5%	1/4W
R420	1-216-841-11	METAL CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R422	1-216-809-11	METAL CHIP	100	5%	1/10W
R423	1-216-809-11	METAL CHIP	100	5%	1/10W
R424	1-216-809-11	METAL CHIP	100	5%	1/10W
R425	1-216-809-11	METAL CHIP	100	5%	1/10W
R426	1-216-809-11	METAL CHIP	100	5%	1/10W
R427	1-216-809-11	METAL CHIP	100	5%	1/10W
R428	1-216-809-11	METAL CHIP	100	5%	1/10W
R429	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R430	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R432	1-216-809-11	METAL CHIP	100	5%	1/10W
R433	1-216-809-11	METAL CHIP	100	5%	1/10W
R434	1-216-809-11	METAL CHIP	100	5%	1/10W
R435	1-216-809-11	METAL CHIP	100	5%	1/10W
R436	1-216-809-11	METAL CHIP	100	5%	1/10W
R437	1-216-809-11	METAL CHIP	100	5%	1/10W
R438	1-216-809-11	METAL CHIP	100	5%	1/10W
R439	1-216-809-11	METAL CHIP	100	5%	1/10W
R440	1-216-809-11	METAL CHIP	100	5%	1/10W
R441	1-216-809-11	METAL CHIP	100	5%	1/10W
R442	1-216-809-11	METAL CHIP	100	5%	1/10W
R443	1-216-809-11	METAL CHIP	100	5%	1/10W
R444	1-216-809-11	METAL CHIP	100	5%	1/10W
R445	1-216-809-11	METAL CHIP	100	5%	1/10W
R446	1-216-809-11	METAL CHIP	100	5%	1/10W
R447	1-216-809-11	METAL CHIP	100	5%	1/10W
R448	1-216-809-11	METAL CHIP	100	5%	1/10W
R449	1-216-809-11	METAL CHIP	100	5%	1/10W
R450	1-216-809-11	METAL CHIP	100	5%	1/10W
R451	1-216-809-11	METAL CHIP	100	5%	1/10W
R452	1-216-809-11	METAL CHIP	100	5%	1/10W
R453	1-216-809-11	METAL CHIP	100	5%	1/10W
R455	1-216-809-11	METAL CHIP	100	5%	1/10W
R457	1-216-809-11	METAL CHIP	100	5%	1/10W
R458	1-216-809-11	METAL CHIP	100	5%	1/10W
R459	1-216-809-11	METAL CHIP	100	5%	1/10W
R460	1-216-809-11	METAL CHIP	100	5%	1/10W
R461	1-216-809-11	METAL CHIP	100	5%	1/10W
R463	1-216-809-11	METAL CHIP	100	5%	1/10W
R465	1-216-809-11	METAL CHIP	100	5%	1/10W
R468	1-216-809-11	METAL CHIP	100	5%	1/10W
R469	1-216-809-11	METAL CHIP	100	5%	1/10W
R472	1-216-809-11	METAL CHIP	100	5%	1/10W
R474	1-216-857-11	METAL CHIP	1M	5%	1/10W
R475	1-216-809-11	METAL CHIP	100	5%	1/10W
R482	1-216-809-11	METAL CHIP	100	5%	1/10W
R484	1-216-809-11	METAL CHIP	100	5%	1/10W
R489	1-216-864-11	SHORT CHIP	0		
R490	1-216-864-11	SHORT CHIP	0		
R491	1-216-864-11	SHORT CHIP	0		
R494	1-247-807-31	CARBON	100	5%	1/4W
R495	1-247-807-31	CARBON	100	5%	1/4W
R496	1-249-429-11	CARBON	10K	5%	1/4W
		< VARIABLE RESISTOR >			
RV101	1-241-768-11	RES, ADJ, CARBON	220K		
RV201	1-241-768-11	RES, ADJ, CARBON	220K		

Ref. No.	Part No.	Description			Remark
		< RELAY >			
RY301	1-515-920-11	RELAY (24V)			
		< SWITCH >			
S301	1-771-264-11	SWITCH, PUSH (DETECTION) (1 KEY)			
		< COIL >			
T101	1-419-080-21	COIL			
T201	1-419-080-21	COIL			
T301	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			
		< TERMINAL >			
TM301	1-536-708-81	TERMINAL BOARD, PUSH (4P) (SPEAKER IMPEDANCE USE 6-16Ω)			
		< VIBRATOR >			
X301	1-760-252-12	VIBRATOR, CRYSTAL 32.768KHz			
X302	1-781-107-21	VIBRATOR, CERAMIC 16MHz			
**********					
		PANEL (1) BOARD (BOARD PART NUMBER SUFFIX-11) **********			
		< CAPACITOR >			
C804	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C805	1-126-964-11	ELECT	10uF	20%	50V
C806	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C807	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C820	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C821	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C822	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C823	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C824	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C825	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C826	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C827	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C828	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C829	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C830	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C831	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C832	1-126-964-11	ELECT	10uF	20%	50V
C833	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C834	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
C835	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C836	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
C837	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C838	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C839	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C840	1-104-658-91	ELECT	100uF	20%	10V
C841	1-126-965-91	ELECT	22uF	20%	50V
C846	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C847	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C848	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
		< CONNECTOR >			
CN801	1-784-741-11	CONNECTOR, FFC 19P			
CN802	1-815-550-11	PIN, CONNECTOR (PWB) 2P			
		< DIODE >			
D801	8-719-063-91	DIODE SLR325DC-P-T32 (CD ►II)			
D802	8-719-063-91	DIODE SLR325DC-P-T32 (TUNER/BAND)			
D803	8-719-063-91	DIODE SLR325DC-P-T32 (TAPE ►)			
D804	8-719-063-93	DIODE SLR325VC-N-T32 (I/⏻)			
D805	8-719-982-26	DIODE MTZJ-T-77-33B			
D806	8-719-109-85	DIODE MTZJ-T-77-5.1B			
D807	8-719-063-91	DIODE SLR325DC-P-T32 (DSGX)			
D810	6-500-522-21	DIODE 10EDB40-TB3			
		< FLUORESCENT INDICATOR >			
FL701	1-518-965-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC801	8-759-643-83	IC PT6315			
IC802	8-759-826-33	IC NJL73H400A (IR)			
		< TRANSISTOR >			
Q801	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q802	8-729-038-67	TRANSISTOR	KRC102S		
Q803	8-729-038-67	TRANSISTOR	KRC102S		
Q804	8-729-038-67	TRANSISTOR	KRC102S		
Q805	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q806	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q807	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q808	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q809	8-729-038-67	TRANSISTOR	KRC102S		
		< RESISTOR >			
R801	1-216-813-11	METAL CHIP	220	5%	1/10W
R802	1-216-815-11	METAL CHIP	330	5%	1/10W
R803	1-216-817-11	METAL CHIP	470	5%	1/10W
R804	1-216-819-11	METAL CHIP	680	5%	1/10W
R805	1-216-821-11	METAL CHIP	1K	5%	1/10W
R806	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R807	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R808	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R809	1-216-833-11	METAL CHIP	10K	5%	1/10W
R811	1-216-813-11	METAL CHIP	220	5%	1/10W
R812	1-216-815-11	METAL CHIP	330	5%	1/10W
R813	1-216-817-11	METAL CHIP	470	5%	1/10W
R814	1-216-819-11	METAL CHIP	680	5%	1/10W
R815	1-216-821-11	METAL CHIP	1K	5%	1/10W
R816	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R817	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R818	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R819	1-216-833-11	METAL CHIP	10K	5%	1/10W
R830	1-216-809-11	METAL CHIP	100	5%	1/10W
R831	1-216-809-11	METAL CHIP	100	5%	1/10W
R832	1-216-809-11	METAL CHIP	100	5%	1/10W
R833	1-216-809-11	METAL CHIP	100	5%	1/10W
R835	1-216-809-11	METAL CHIP	100	5%	1/10W
R841	1-216-809-11	METAL CHIP	100	5%	1/10W
R842	1-216-811-11	METAL CHIP	150	5%	1/10W
R845	1-216-864-11	SHORT CHIP	0		

PANEL (1)

Ref. No.	Part No.	Description			Remark
R846	1-216-845-11	METAL CHIP	100K	5%	1/10W
R847	1-216-845-11	METAL CHIP	100K	5%	1/10W
R848	1-216-844-11	METAL CHIP	82K	5%	1/10W
R849	1-216-809-11	METAL CHIP	100	5%	1/10W
R850	1-216-809-11	METAL CHIP	100	5%	1/10W
R851	1-216-809-11	METAL CHIP	100	5%	1/10W
R852	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R853	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R854	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R855	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R856	1-249-393-11	CARBON	10	5%	1/4W
R857	1-216-845-11	METAL CHIP	100K	5%	1/10W
R858	1-216-833-11	METAL CHIP	10K	5%	1/10W
R859	1-216-809-11	METAL CHIP	100	5%	1/10W
R860	1-216-809-11	METAL CHIP	100	5%	1/10W
R861	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R862	1-216-789-11	METAL CHIP	2.2	5%	1/10W
		< SWITCH >			
S701	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			
S702	1-762-875-21	SWITCH, KEYBOARD (DISC 1)			
S703	1-762-875-21	SWITCH, KEYBOARD (DISC 2)			
S704	1-762-875-21	SWITCH, KEYBOARD (DISC 3)			
S705	1-762-875-21	SWITCH, KEYBOARD (DISC 4)			
S706	1-762-875-21	SWITCH, KEYBOARD (DISC 5)			
S707	1-762-875-21	SWITCH, KEYBOARD (DISC (+1))			
S708	1-762-875-21	SWITCH, KEYBOARD (DISC SKIP)			
S709	1-762-875-21	SWITCH, KEYBOARD (DSGX)			
S710	1-762-875-21	SWITCH, KEYBOARD (⏏)			
S711	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)			
S712	1-762-875-21	SWITCH, KEYBOARD (+ ▶▶ ▷▷⏯)			
S713	1-762-875-21	SWITCH, KEYBOARD (⏮◁◁ ◀◀ –)			
S714	1-762-875-21	SWITCH, KEYBOARD (■)			
S715	1-762-875-21	SWITCH, KEYBOARD (ALBUM +)			
S716	1-762-875-21	SWITCH, KEYBOARD (ALBUM –)			
S717	1-762-875-21	SWITCH, KEYBOARD (EX-CHANGE)			
S718	1-762-875-21	SWITCH, KEYBOARD (TAPE ►)			
S719	1-762-875-21	SWITCH, KEYBOARD (CD ►❚❚)			
S720	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)			
S803	1-473-392-11	ENCODER, ROTARY (VOLUME)			

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REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2004.05	New
1.1	2004.08	Addition of Korea model
1.2	2004.09	Addition of Ref. No. 957 on Exploded Views (SPM-04094)
1.3	2004.11	Change of supply form of PANEL (1), PANEL (2), HEADPHONE and POWER board (SPM-04124)
1.4	2005.01	Deletion of Ref. No. 13, 56, 112, 113, 114 and 115 (SPM-05003) Addition of Ref. No. 958 on CDM82A (SPM-05008)
1.5	2005.02	Change of Part No. for Ref. No. 5 (DOOR ASSY, CASSETTE) Correction of Part No. for Ref. No. 957 (SPM-05015)
1.6	2005.06	Correction of TEST MODE (SPM-05083)
1.7	2005.09	Addition of Parts number of Ref. No. 61, 112, 113 and 114 (ECN-ECB24576)
		Addition of Parts number of Ref. No. 115 and 116 (ECN-ECB26695)
1.8	2006.01	Addition of Parts number of SHOCK GUARD (LOWER) and SHOCK GUARD (UPPER) (SPM-05205)
		Change of parts list of CD MECHANISM DECK SECTION (SPM-05214)
1.9	2006.05	Addition of C911 on POWER board (ECN-ECA28816)
		Addition of R907 and R908 on POWER board (ECN-ECA38353)
		SUPPLEMENT-1: Explanation of IC306 (system controller), MAIN board and PANEL (1) board (SPM-06054, ECN-ECA36457, ECN-ECA58509)
2.0	2006.09	Correction of Parts number of Ref. No. S861 to S866 (SPM-06104)