

ZS-D50

SERVICE MANUAL

Ver 1.1 2000.08

US Model
Canadian Model



TAPE	Model Name Using Similar Mechanism	NEW
Section	Tape Transport Mechanism Type	MF-ZSD50
CD	Model Name Using Similar Mechanism	ZS-M7
Section	MD Mechanism Type	CDM-2411AAA
	Optical Pick-up Type	DAX-11A

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL
HARMONIC DISTORTION

With 3-ohm loads, both channel driven from 150 - 8,000 Hz; rated
2 W per channel minimum RMS power, with no more than 10 %
total harmonic distortion in AC operation.

CD player Section

System Compact disc digital audio system

Laser diode properties

Material: GaAlAs

Wave length: 780 nm

Emission duration : Continuous

Laser output : Less than 44.6 μ W

(This output is the value measured at a distance of about 200
mm from the objective lens surface on the optical pick-up
block with 7 mm aperture.)

Spindle speed

200 r / min (rpm) to 500 r / min (rpm) (CLV)

Number of channels

2

Frequency response

20 - 20,000 Hz +1 / -1 dB

Wow and flutter

Below measurable limit

Radio section

Frequency range

FM: 87.6 - 108 MHz

AM: 530 - 1,710 kHz

Antennas

FM: Telescopic antenna

AM: Built-in ferrite bar antenna

Cassette-corder Section

Recording System

4-track 2 channel stereo

Fast winding time

Approx. 130 s (sec.) with Sony cassette C-60

Frequency response

TYPE I (normal) : 50 - 15,000 Hz

General

Speaker

Full range : 8 cm (3 1/4 in.) dia., 3 ohms, cone type x 2

Input

LINE IN jack (stereo minijack)

Minimum input level 250 mV

Outputs

Headphones jack (stereo minijack)

For 16 - 68 ohms impedance headphones

LINE OUT jack (stereo minijack)

Rated output level 250 mV at load impedance 47 kilohms

OPTICAL DIGITAL OUT (CD) (optical output connector)

Wavelength : 630 - 690 nm

Power outputs (EXCEPT US model)

4.5 W + 4.5 W (at 3 ohm, 10% harmonic distortion)

- Continued on page 2 -

PERSONAL AUDIO SYSTEM

SONY®



Power requirements

For personal audio system :
120 V AC, 60 Hz
12 V DC, 8 size D (R20) batteries

For memory back-up :
6 V DC, 4 size AA (R6) batteries

For remote commander :
3 V DC, 2 size AA (R6) batteries

Power consumption

AC 25 W

Battery life

For personal audio system

FM recording

Sony R20P : approx. 6 h

Sony alkaline LR20 : approx. 12 h

Tape playback

Sony R20P : approx. 3 h

Sony alkaline LR20 : approx. 6 h

CD playback

Sony R20P : approx. 1.5 h

Sony alkaline LR20 : approx. 3h

Dimensions (incl. projecting parts)

Approx. 435 x 223 x 160 mm (w / h / d)
(17 1/4 x 8 7/8 x 6 1/8 inches)

Mass (incl. batteries)

approx. 4.3 kg (9 lb. 7 oz)

Supplied accessories

AC power cord (1)
Remote commander (1)

Design and specifications are subject to change without notice.

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8. ELECTRICAL PARTS LIST

SECTION 1 SERVICE NOTE

SAFETY CHECK-OUT (US Model)

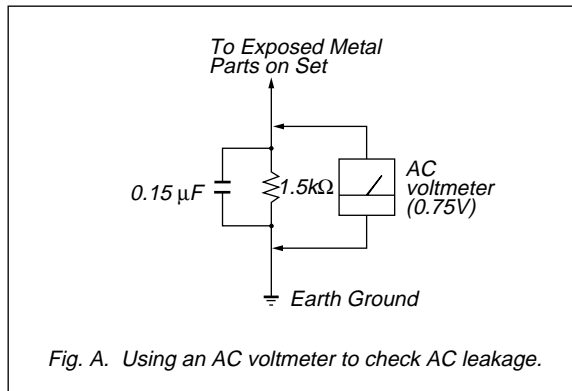
After correcting the original service problem, perform the following safety check before releasing the set to the customer :
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

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 0.5mA (500 microampers).

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 0.75V, 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 2V AC range are suitable. (See Fig. A)



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.

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.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK Δ OR DOTTED LINE WITH MARK Δ 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 Δ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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

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

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

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

NOTES ON LASER DIODE EMISSION CHECK

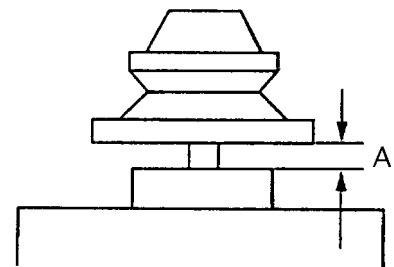
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Close the lid for CD.
2. Press CD \blacktriangleright button.
3. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken.
Objective lens moves up and down once for the focus search.

CAUTION DURING WHEN MOUNTING THE PULLEY FOR THE LOADING MOTOR

Make the following adjustment when mounting the loading motor (part number : 1-698-999-11) and motor pulley (part number : 2-627-174-01) of the CD section.

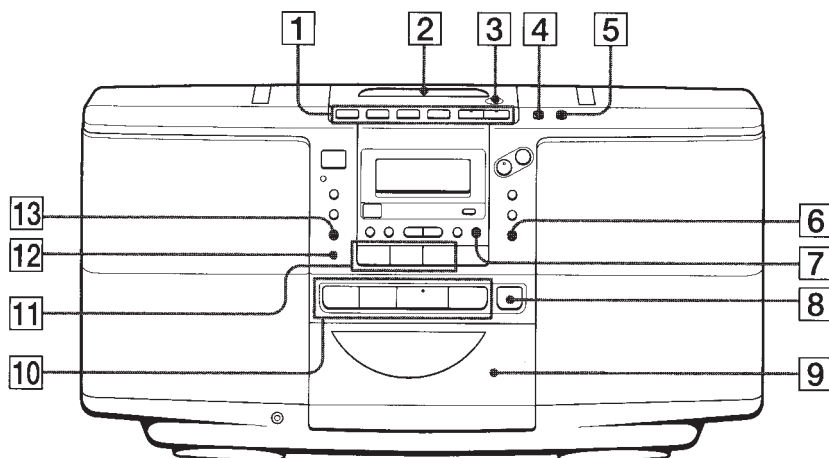


Specification : A = 0.9 to 1.1mm

SECTION 2 GENERAL

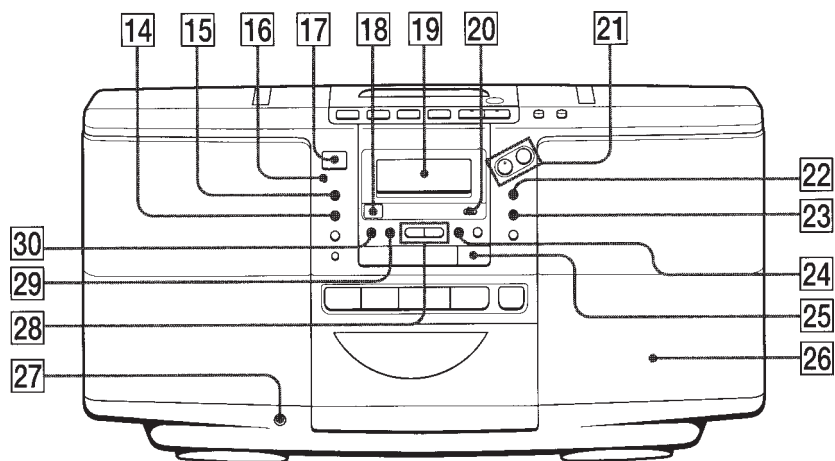
LOCATION AND FUNCTION OF CONTROLS

FRONT PANEL : CD/RADIO/TAPE section



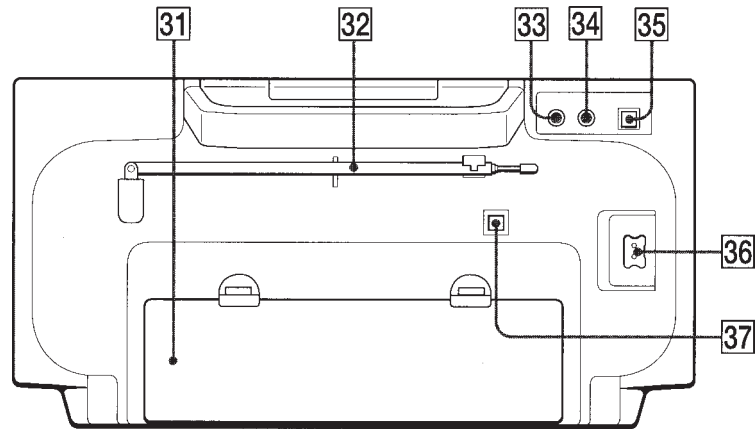
- | | | |
|---|--|--|
| <p>1 Tape operation buttons
 ●/ (REC/REC PAUSE)
 ◀◀, ▶▶ (FF/REW, AMS)
 ■ (STOP)
 ◀, ▶ (PLAY)</p> <p>2 Cassette lid</p> <p>3 ▲ PUSH OPEN/CLOSE</p> <p>4 DIR MODE button</p> <p>5 COUNTER RESET button</p> | <p>6 EDIT button</p> <p>7 CANCEL button</p> <p>8 ▲ CD OPEN/CLOSE button</p> <p>9 CD tray</p> <p>10 CD operation buttons
 ◀◀, ▶▶ (AMS/SEARCH)
 ▶ (PLAY/PAUSE)
 ■ (STOP)</p> | <p>11 Radio operation buttons
 RADIO BAND
 PRESET +, -</p> <p>12 AUTO PRESET button</p> <p>13 MODE MONO/ST ISS button</p> |
|---|--|--|

FRONT PANEL: TIMER/COM section



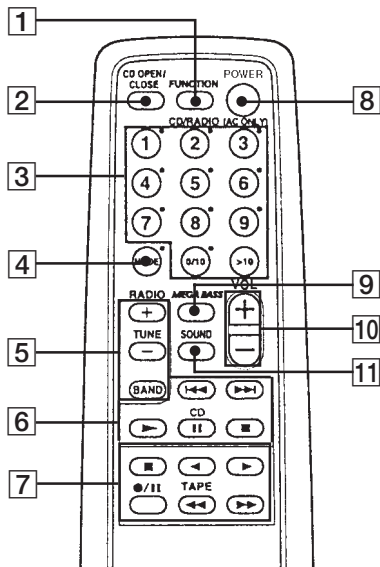
- | | |
|--|---|
| <p>14 STANDBY button</p> <p>15 SLEEP button</p> <p>16 OPR/BATT indicator</p> <p>17 POWER button</p> <p>18 Remote control receiver</p> <p>19 Display window</p> <p>20 DISPLAY button</p> <p>21 VOL +, -</p> <p>22 SOUND button</p> | <p>23 MEGA BASS button</p> <p>24 ENTER/MEMORY CHECK button</p> <p>25 MD(LINE) button</p> <p>26 Speaker</p> <p>27 ☎ (Headphones) jack (stereo mini jack)</p> <p>28 TUNING TIME SET +, - button</p> <p>29 TIMER button</p> <p>30 CLOCK button</p> |
|--|---|

REAR PANEL



- 31 Battery compartment
- 32 FM telescopic antenna
- 33 LINE IN jack
- 34 LINE OUT jack
- 35 OPTICAL DIGITAL OUT(CD) jack
- 36 AC IN ~ jack
- 37 OPTICAL DIGITAL OUT(CD) jack cover socket

Remote commander

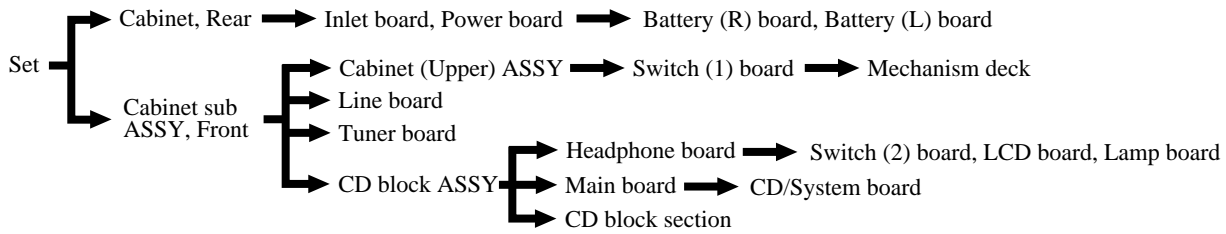


- 1 FUNCTION button
Each time you pressed, the function changes in the order
CD – Tape – Radio – Line – CD ...
- 2 ▲ CD OPEN/CLOSE button
- 3 Number buttons
- 4 MODE button
- 5 Radio operation buttons
TUNE +, – button
BAND
- 6 CD operation buttons
◀◀, ▶▶ (AMS/SEARCH)
▶ (PLAY)
|| (PAUSE)
■ (STOP)
- 7 Tape operation buttons
■ (STOP)
◀, ▶ (PLAY)
●/|| (REC/REC PAUSE)
◀◀, ▶▶ (FF/REW, AMS)
- 8 POWER button (AC only)
Active only when you use the set with AC power source.
- 9 MEGA BASS button
- 10 VOL +, – button
- 11 SOUND button

SECTION 3 DISASSEMBLY

●The equipment can be removed using the following procedure.

< MAIN BLOCK SECTION >



< MECHANISM DECK SECTION >

Mechanism deck → TC RF board, Head relay board, Belt (FR/BR), Motor (M691)

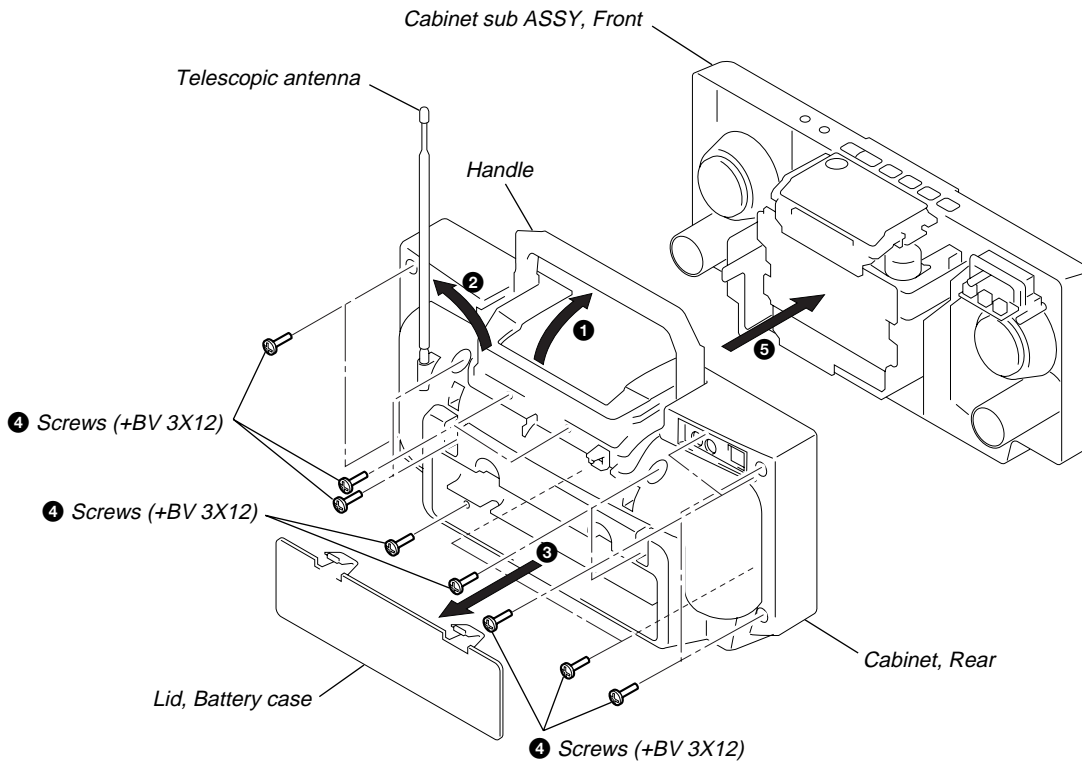
< CD BLOCK SECTION >

CD block section → Tray ASSY, CD → Optical pick-up block, Pick-up relay board
 → Loading board

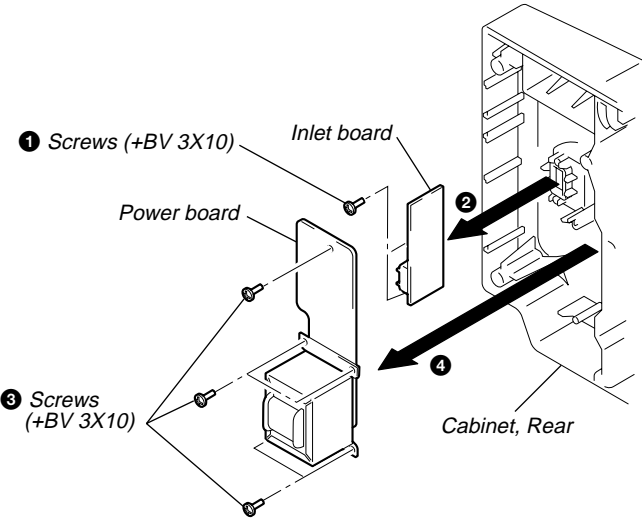
Note Follow the disassembly procedure in the numerical order given.

<MAIN BLOCK SECTION>

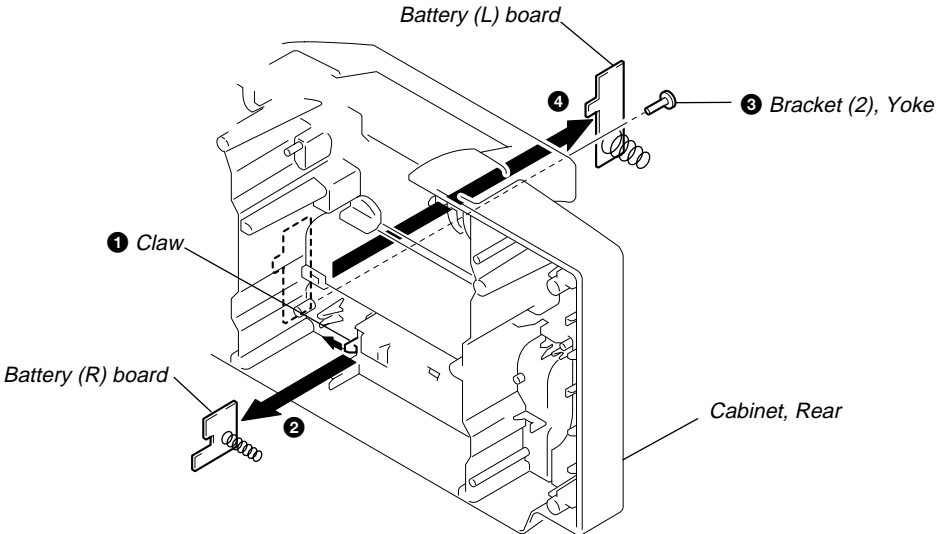
3-1. "CABINET, REAR", "CABINET SUB ASSY, FRONT"



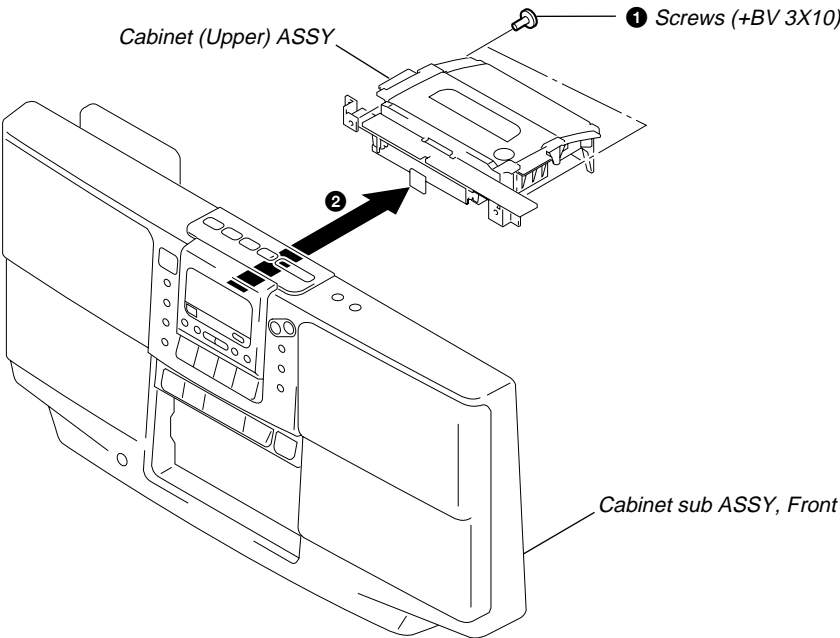
3-2. INLET BOARD, POWER BOARD



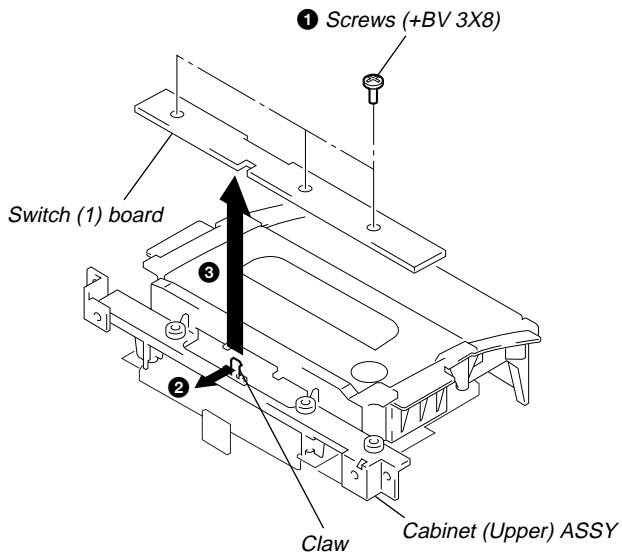
3-3. BATTERY (R) BOARD, BATTERY (L) BOARD



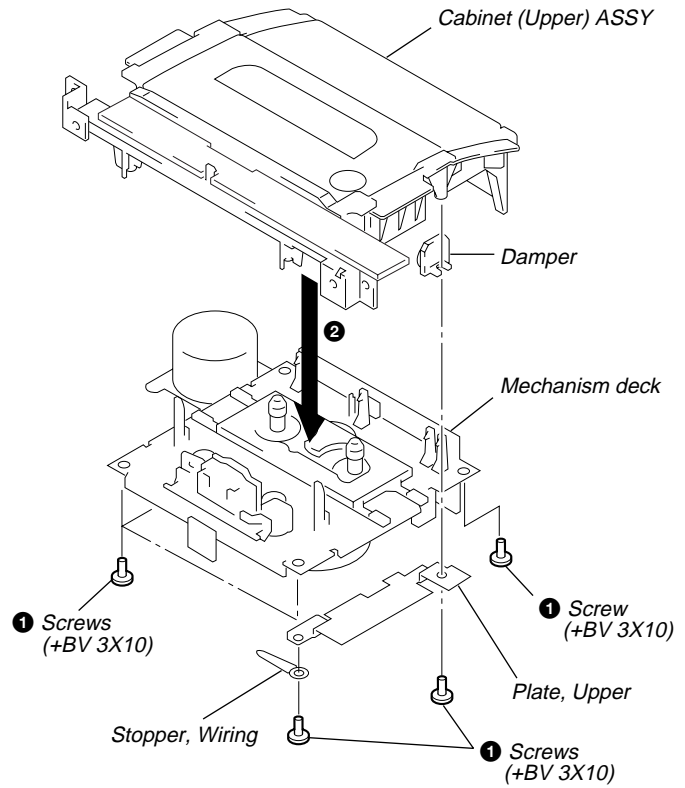
3-4. CABINET (UPPER) ASSY



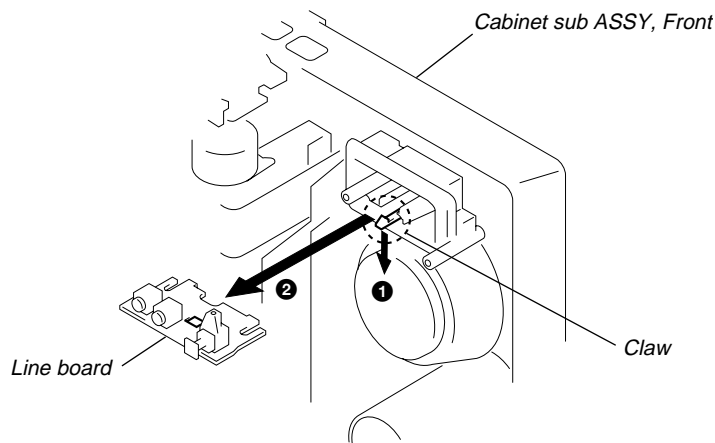
3-5. SWITCH (1) BOARD



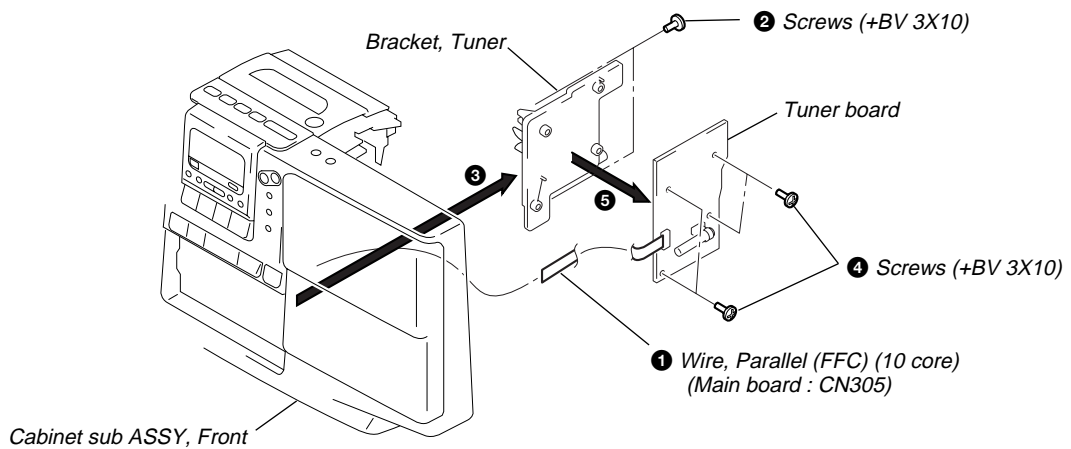
3-6. MECHANISM DECK



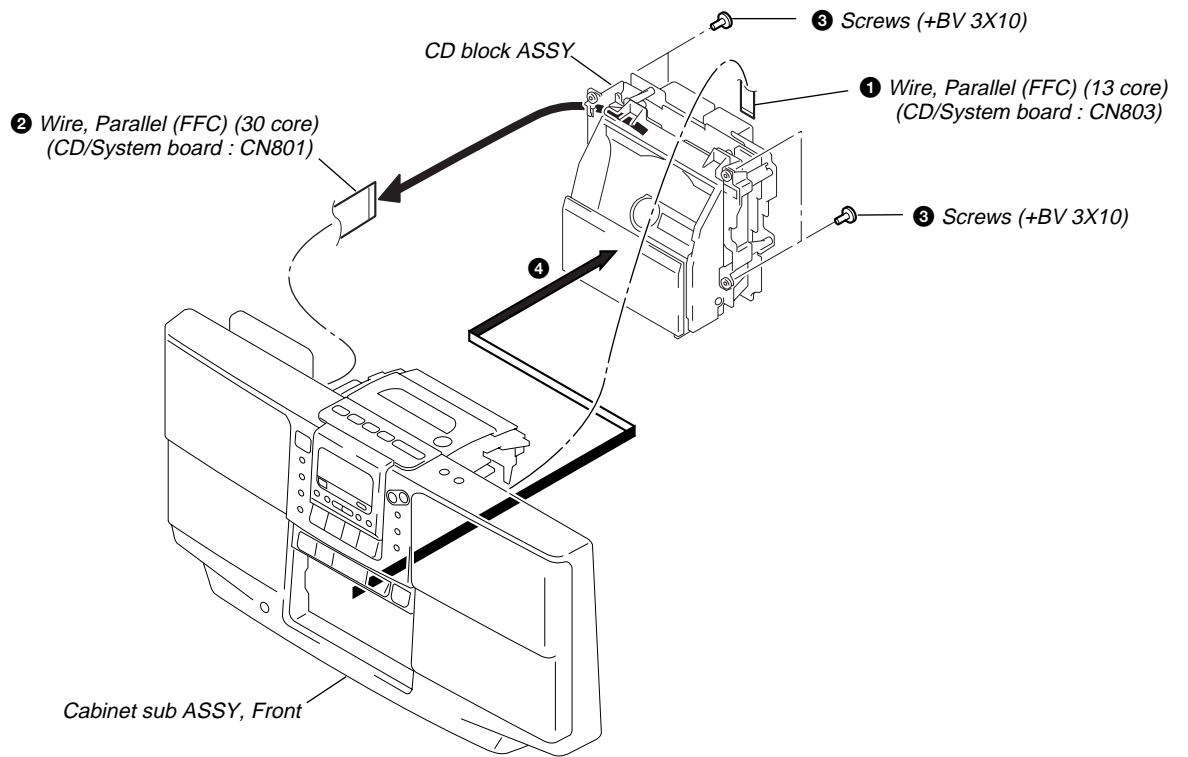
3-7. LINE BOARD



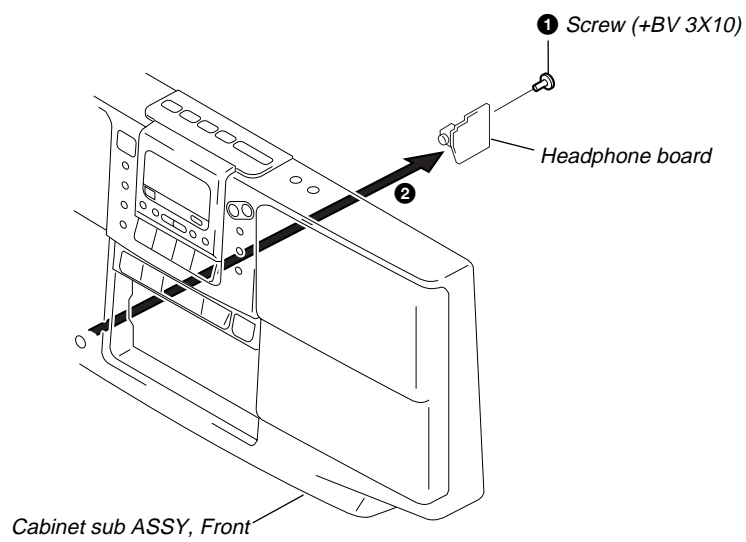
3-8. TUNER BOARD



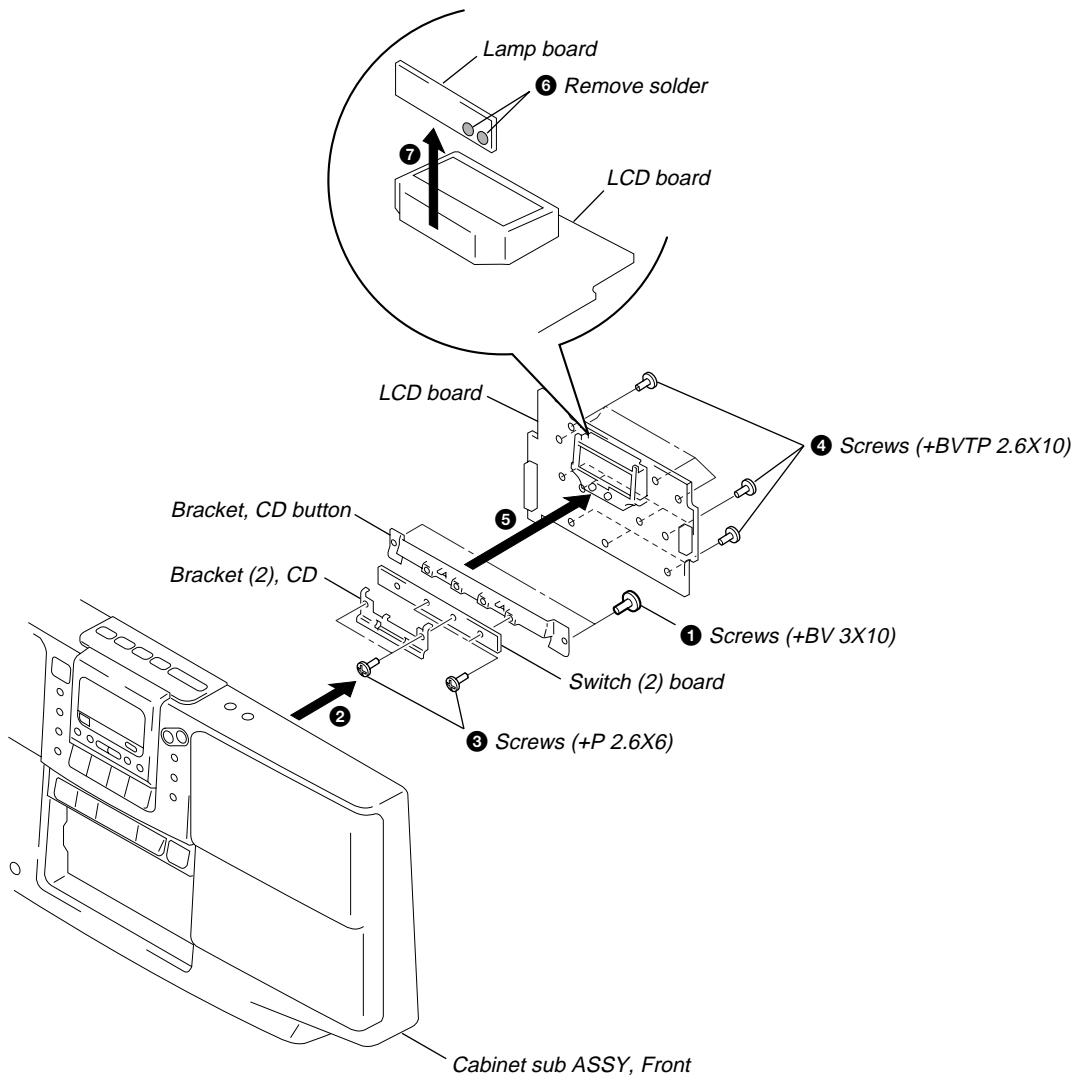
3-9. CD BLOCK ASSY



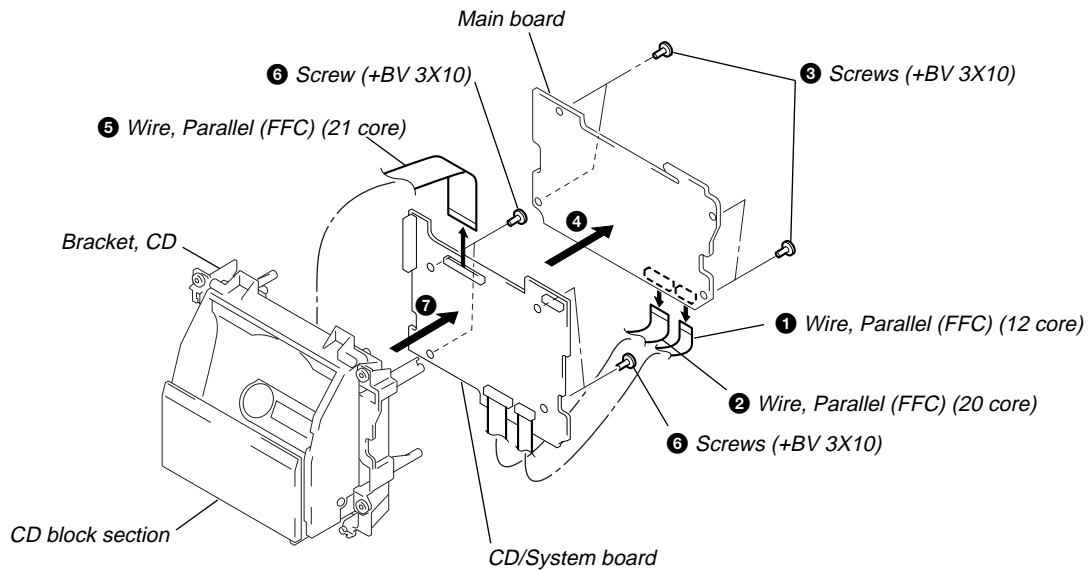
3-10. HEADPHONE BOARD



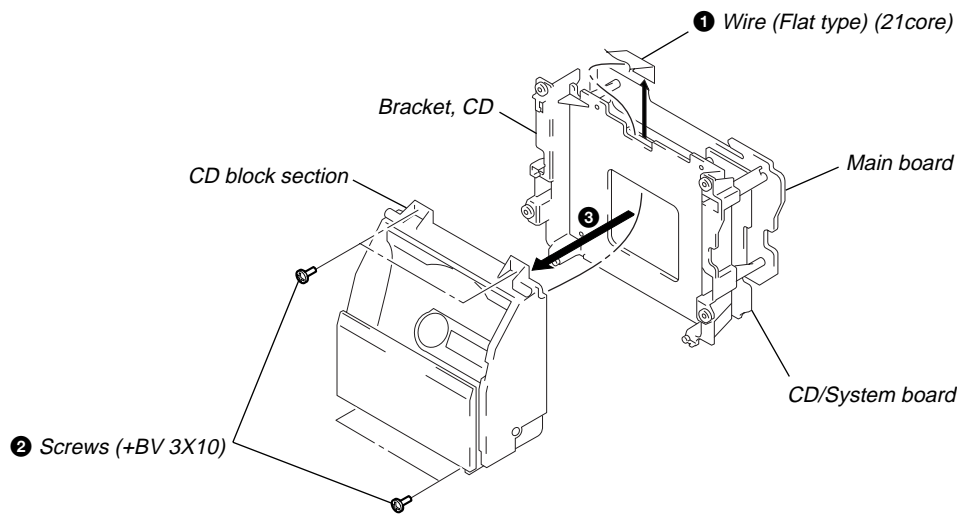
3-11. SWITCH (2) BOARD, LCD BOARD, LAMP BOARD



3-12. MAIN BOARD, CD/SYSTEM BOARD

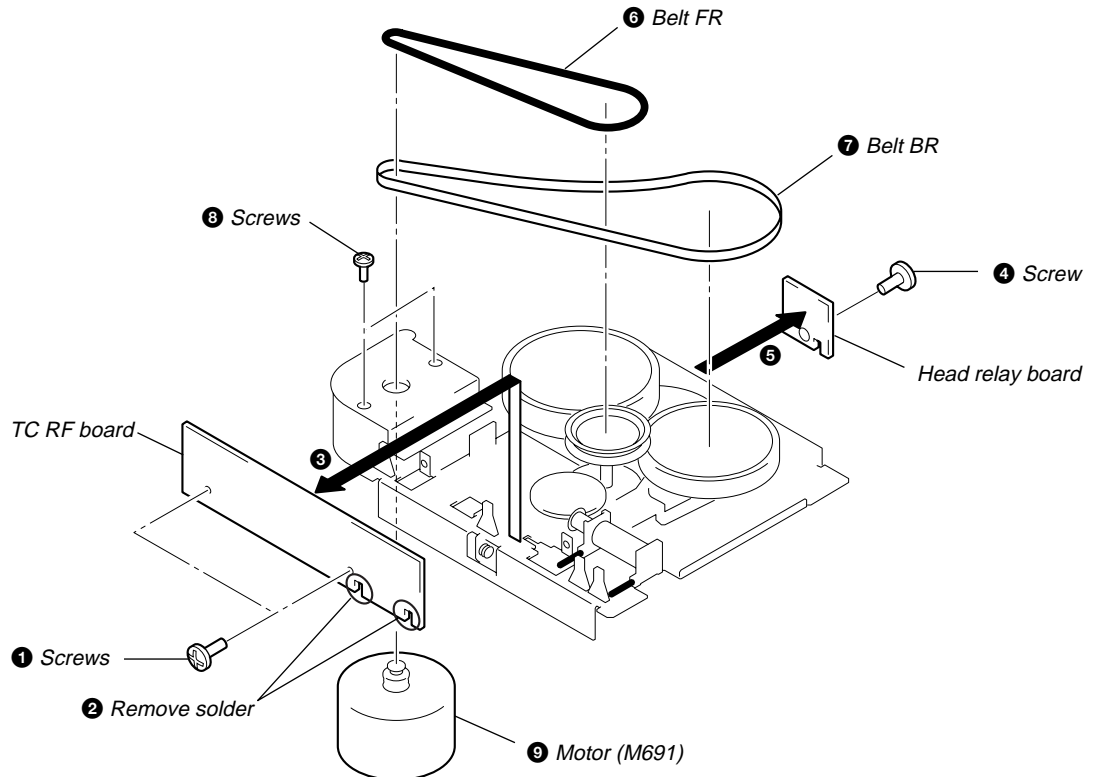


3-13. CD BLOCK SECTION



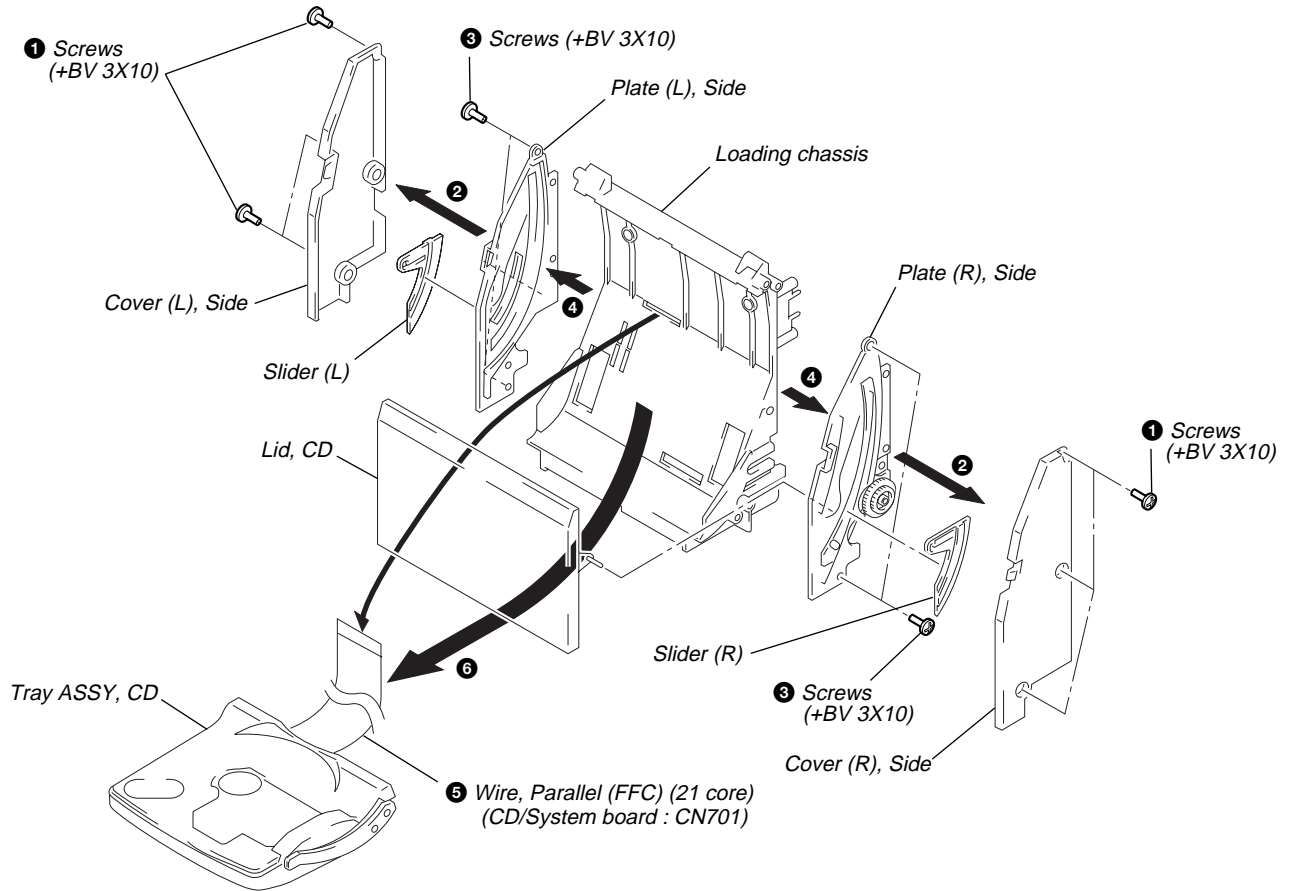
<MECHANISM DECK SECTION>

3-14. TC RF BOARD, HEAD RELAY BOARD, BELT (FR/BR), MOTOR (M691)

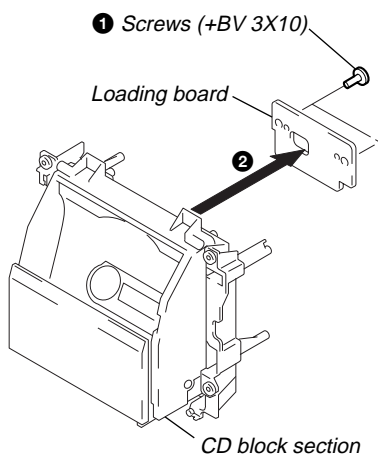


<CD BLOCK SECTION>

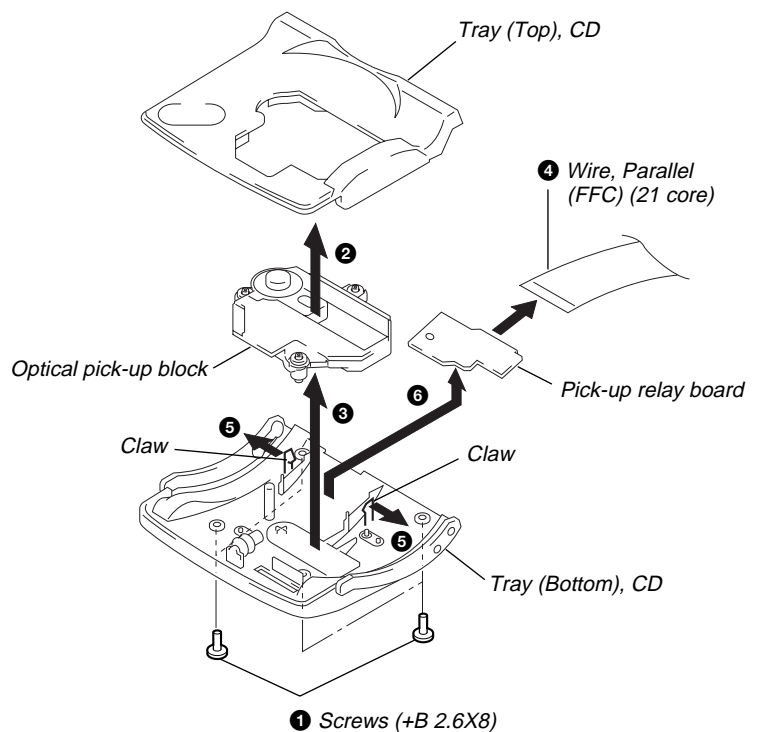
3-15. TRAY ASSY, CD



3-16. LOADING BOARD



3-17. OPTICAL PICK-UP BLOCK, PICK-UP RELAY BOARD



SECTION 4 TEST MODE

CD SECTION

1. Entering CD test mode

With the POWER button OFF, short JW801 and JW802 on the LCD board. (You need a moment for the short.)

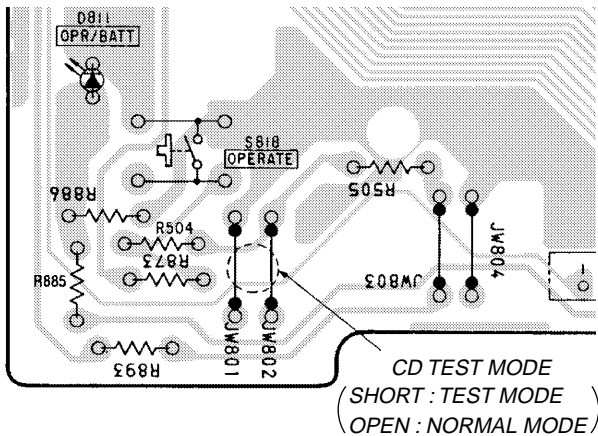
The LCD display changes as in the diagram and the unit goes into test mode.



When you press the **▶▶** key, the CD rotates and when you press the **▶▶** key again, the CD plays (the track servo comes on)(but no sound is issued).

Pressing the **▶▶** key starts automatic adjustment and the value changes, but this value is not a problem.

[LCD BOARD](Conductor side)



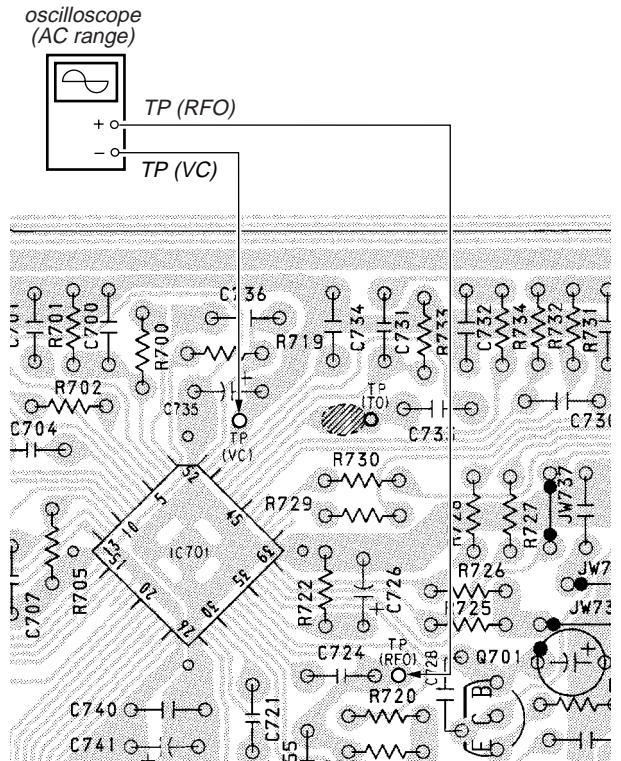
2. Exiting test mode

With the unit in test mode, when you press the POWER button to OFF, test mode ends.

3. RF LEVEL and jitter check

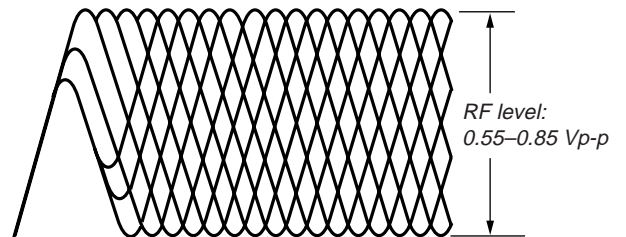
Test mode PLAY status

Connection Point : CD/System board (Conductor side)



Check to see that the jitter is less than 9.0 nsec. and RF level is between 0.55 – 0.85Vp-p.

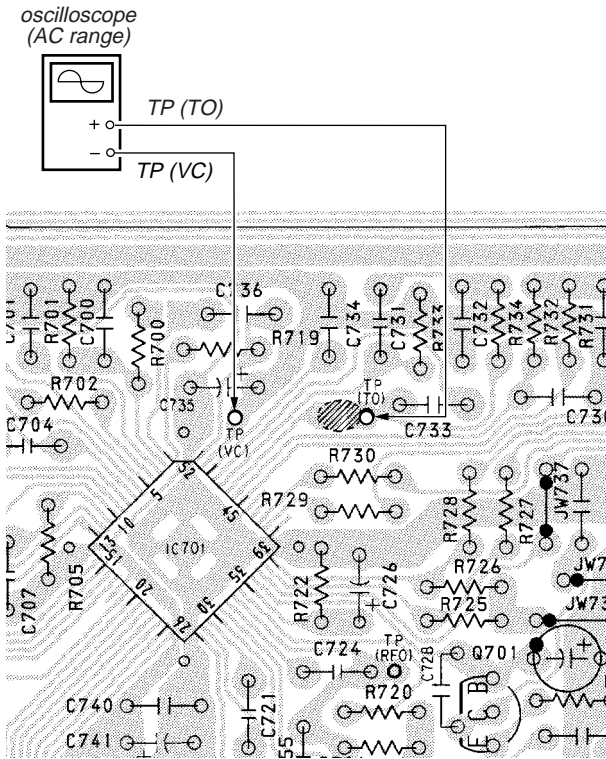
VOLT/DIV : 200mV (using 10:1 probe)
TIME/DIV : 500ns



SECTION 5 ADJUSTMENTS

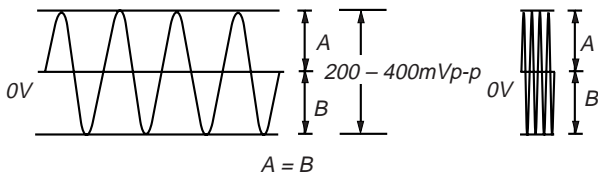
4. TRAVERSE SIGNAL check

Connection Point : CD/System board (Conductor side)



Press the FF or FR from 3.
Check to see that the traverse signal level is between 200 to 400mVp-p.

Note:
Extend the sweep time for easier view.



5. RELEASE THE TEST MODE

After completed with adjustment, press the POWER button to release the test mode.

5-1. MECHANICAL ADJUSTMENTS

TAPE RECORDER SECTION

PRECAUTION

- Clean the following parts with a denatured-alcohol-moistened swab :
 - record/playback/erase head
 - pinch roller
 - rubber belts
 - capstan
- Demagnetize the record/playback head with a head demagnetizer.
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque Meter	Meter Reading
Forward	CQ-102C	36 to 61 g • cm (0.5 to 0.84 oz • inch)
Forward Back Tension	CQ-102C	2 to 6 g • cm (0.028 to 0.083 oz • inch)
Reverse	CQ-102RC	36 to 61 g • cm (0.5 to 0.84 oz • inch)
Reverse Back Tension	CQ-102RC	2 to 6 g • cm (0.028 to 0.083 oz • inch)
FF/REW	CQ-201B	61 to 143 g • cm (0.85 to 1.98 oz • inch)

Tape Tension Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 100g (more than 3.53 oz)
REV	CQ-403A	more than 100g (more than 3.53 oz)

5-2. ELECTRICAL ADJUSTMENTS

TAPE RECORDER SECTION

0dB = 0.775V

- The adjustments should be performed in the order in the service manual. (As a general rule playback circuit adjustment should be completed before recording circuit adjustment.)
- The adjustments should be performed for both the L-CH and R-CH unless otherwise indicated.

Standard Input Level

Input terminal	LINE IN
source impedance	10kΩ
input signal level	0.5V (-3.8dB)

Standard Output Level

Output terminal	LINE OUT
load impedance	47kΩ
output signal level	0.5V (-3.8dB)

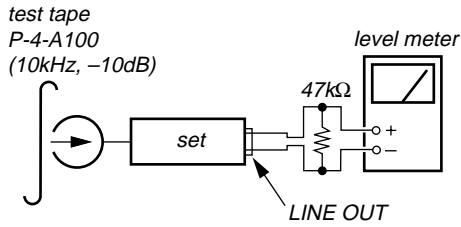
Test Tape

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

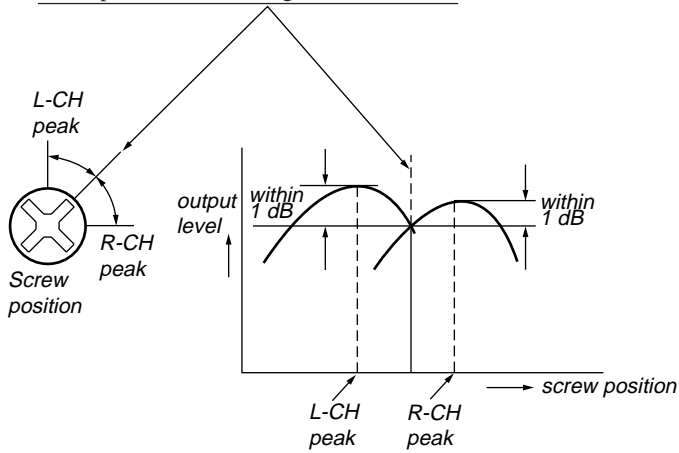
Record/Playback/Erase Head Azimuth Adjustment

Procedure:

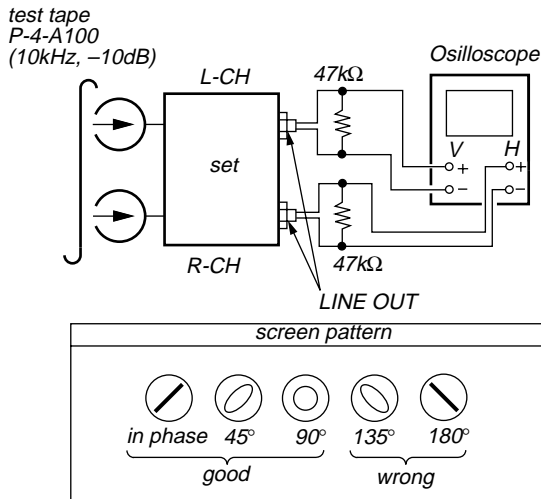
1. Mode : FWD playback



2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.

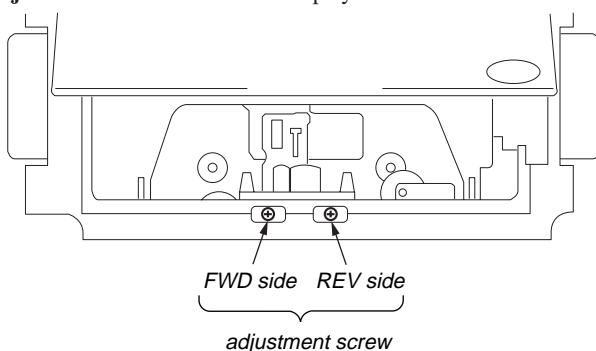


3. Phase Check
Mode : FWD playback



4. Change the reverse playback mode and repeat the step 1 to 3.
5. After the adjustment, lock the adjustment screw with suitable locking compound.

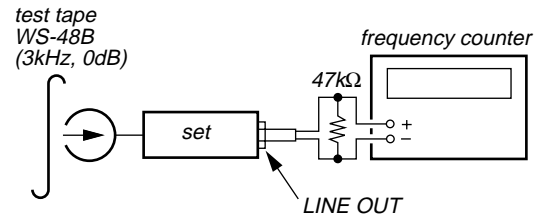
Adjustment Location : - record/playback head -



Tape Speed Adjustment

Procedure:

- FWD Playback Mode -

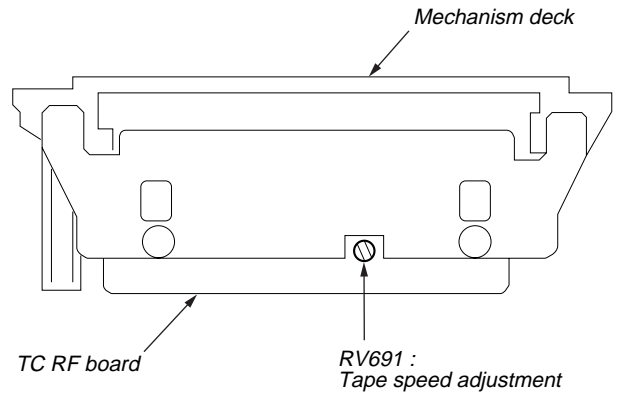


1. Set to FWD playback mode.
2. Adjust RV691 so that the frequency counter reading becomes 3,000Hz.

Standard value : 2,970 to 3,030Hz

3. Set to REV playback mode.
Confirm the frequency should be within the standard value.
4. Confirm the frequency difference between beginning and the end of tape should be within 1.5% (45Hz).

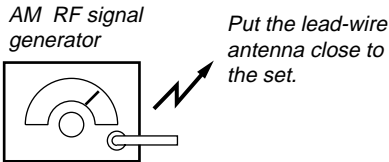
Adjustment Location : TC RF board



TUNER SECTION 0dB = 1μV

AM Section

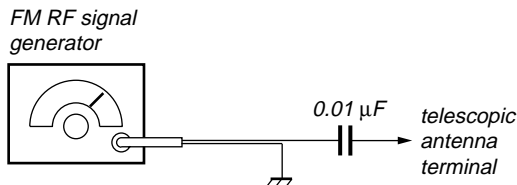
RADIO BAND button : AM
Volume : MIN



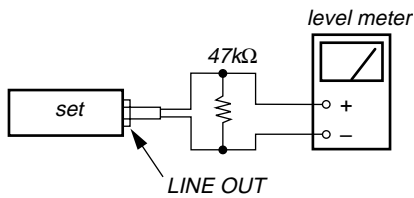
30% amplitude modulation by 400Hz signal.
Output level : as low as possible

FM Section

RADIO BAND button : FM
Volume : MIN



22.5kHz frequency deviation by 400Hz signal.
Output level : as low as possible



Adjustment Location : Tuner board (See page 17)

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

AM IF ADJUSTMENT	
Adjust for a maximum reading on level meter.	
CFT1	450kHz

AM FREQUENCY COVERAGE ADJUSTMENT		
Adjust part	Frequency display	reading on digital voltmeter.
L4	530kHz	0.8 – 1.2V
Confirmation	1,710kHz	4.4 – 5.4V

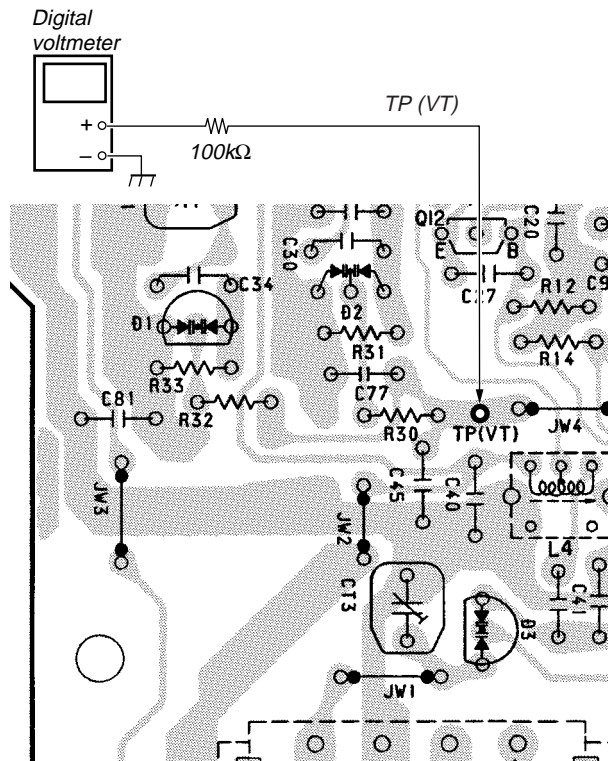
AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	620kHz
CT3	1,400kHz

FM FREQUENCY COVERAGE ADJUSTMENT		
Adjust part	Frequency display	reading on digital voltmeter
Confirmation	87.5MHz	1.5 – 1.9V
L2	108MHz	3.5 – 4.5V

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L1	87.5MHz
CT1	108MHz

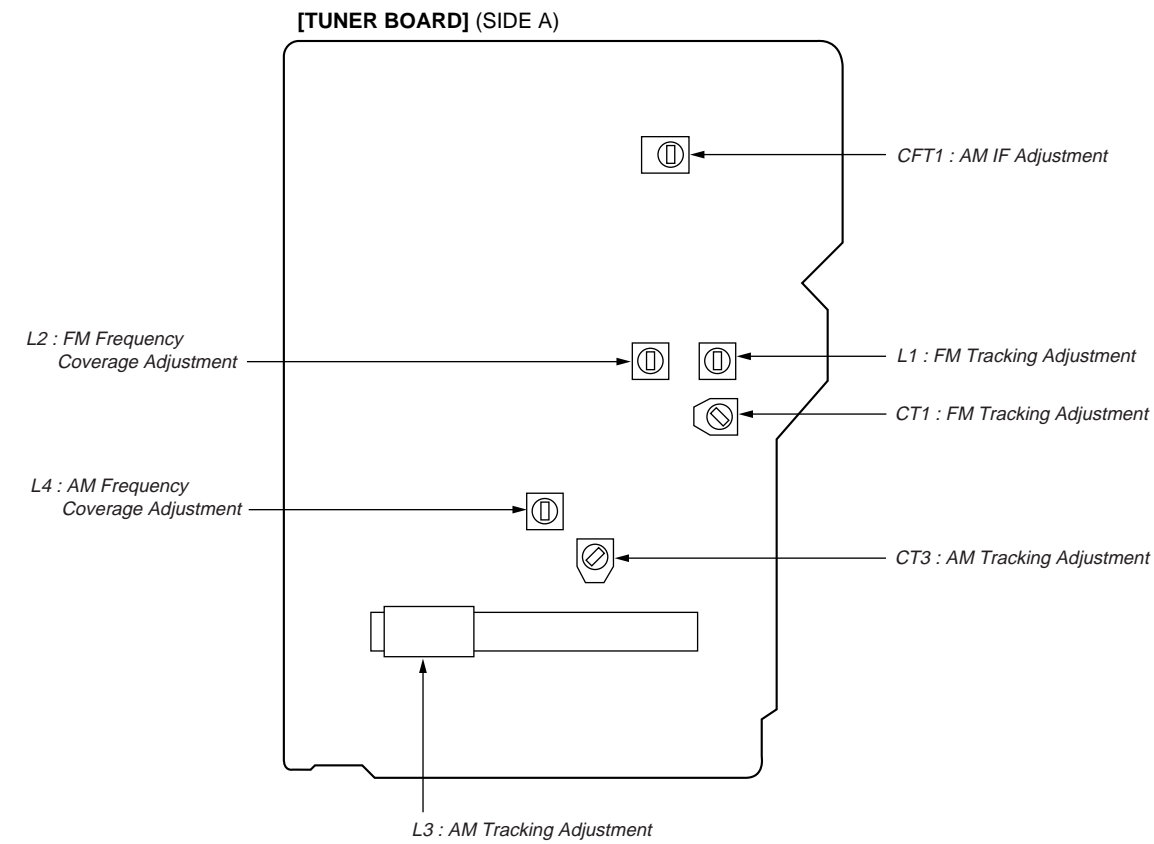
Frequency Coverage Adjustment

Connect Location :
[TUNER BOARD] (SIDE B)



SECTION 6 DIAGRAMS

Adjustment Location :



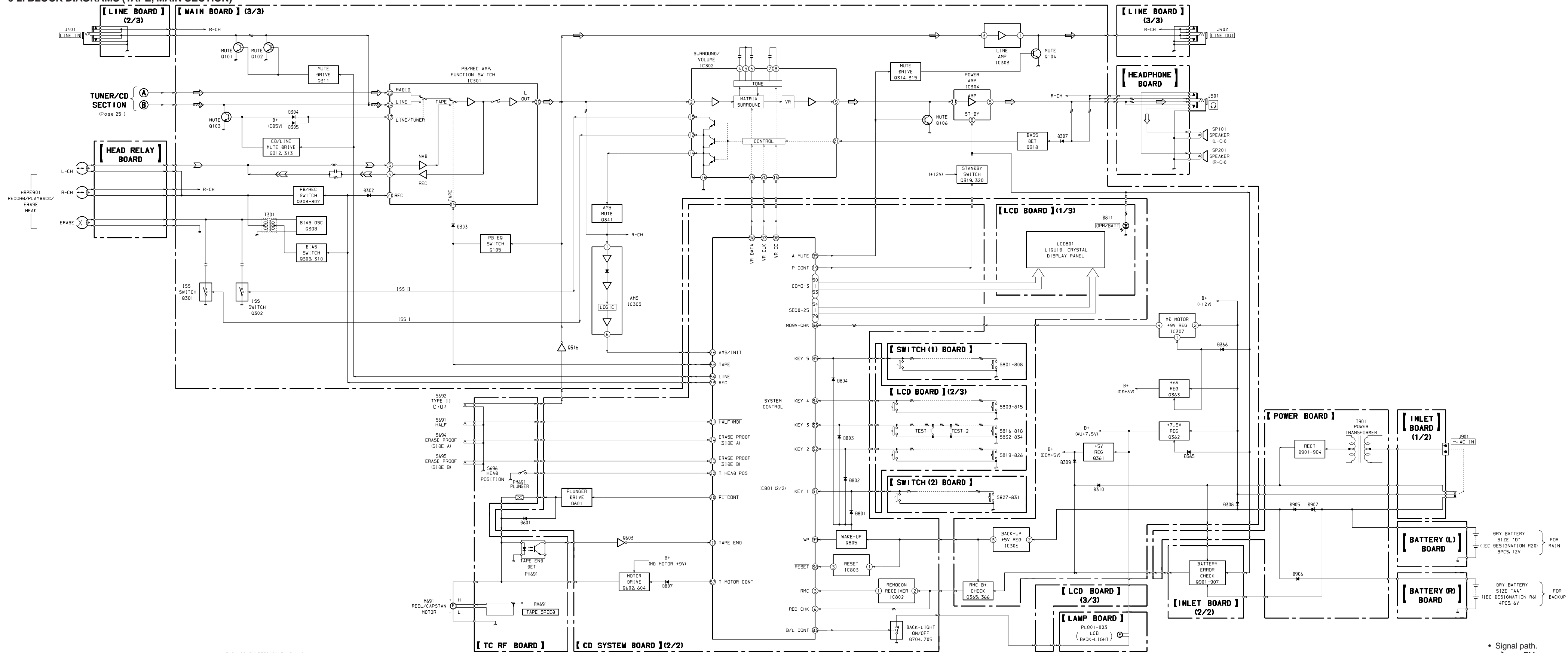
6-1. EXPLANATION OF IC TERMINALS

IC801 CXP83232A-010Q (SYSTEM CONTROL) CD/SYSTEM BOARD

Pin No.	Pin name	I/O	Description
1	C-SOR	I	CD DSP command data input.
2	NC	-	Not used ("L" level).
3	RMC	I	Remote control signal input.
4	R-MUTE	O	Tuner mute signal output.
5	C-XRST	O	CD system reset output.
6	REG-CHK	I	Regulator voltage check input.
7	C-SENSE 2	I	CD-SENSE input.
8	C-CLK	O	CD DSP command clock output.
9	C-DATA	O	CD DSP command data output.
10	C-SENSE 1	I	CD SENSE input.
11	C-SQCK	O	CD SUB-Q read out clock output.
12	C-SQSO	I	CD-SQSO data input.
13	C-MUTE	O	Mute signal output for DSP (IC702).
14	NC	-	Not used (OPEN).
15	R-DATA	O	PLL IC data output.
16	R-CLK	O	PLL IC clock output.
17	R-CE	O	PLL IC chip enable output.
18	R-COUNT	I	PLL IC data input.
19	P-CONT	O	POWER ON/OFF control output.
20	PL-CONT	O	Plunger ON/OFF control output.
21	HALF (M/D)	I	Cassette half detect input.
22	T-HEAD POS	I	Head position detect input.
23	REC	O	REC bias ON/OFF control output.
24	PROOF (A)	I	Half pawl input at A-side.
25	PROOF (B)	I	Half pawl input at B-side.
26	AMS/INIT	I	TC AMS signal input/Initial terminal.
27	R-SHIFT	O	System clock shift output.
28	INPUT 1	O	Loading motor control output.
29	INPUT 2	O	Loading motor control output.
30	CD-OP/CL	I	CD tray open/close detect input.
31	KEY 1	I	Key input terminal.
32	KEY 2	I	Key input terminal.
33	KEY 3	I	Key input terminal.
34	KEY 4	I	Key input terminal.
35	KEY 5	I	Key input terminal.
36	MO9V-CHK	I	Motor power supply voltage check.
37	MODEL ID	I	Model destination setting input.
38	RESET	I	System Reset terminal.
39	OSC-OUT	O	System clock oscillator output (4.21MHz).
40	OSC-IN	I	System clock oscillator input (4.21MHz).
41	GND	-	Ground terminal.
42	NC	-	Not used (OPEN).
43	NC	-	Not used (Ground).
44	V REF	I	Reference voltage input.
45	GND	-	Ground terminal.

Pin No.	Pin name	I/O	Description
46	VDDL	O	LCD drive bias control output.
47	VDD3	O	LCD drive bias power supply.
48	VDD2	O	LCD drive bias power supply.
49	VDD1	O	LCD drive bias power supply.
50	COM0	O	LCD common output.
51	COM1	O	LCD common output.
52	COM2	O	LCD common output.
53	COM3	O	LCD common output.
54 - 79	SEG0-SEG25	O	LCD segment output.
80	NC	-	Not used (OPEN).
81	NC	-	Not used (OPEN).
82	NC	-	Not used (OPEN).
83	B/L-CONT	O	Back-light ON/OFF control output.
84	LINE	O	Function output for LINE.
85	TAPE	O	Function output for TAPE
86	RADIO	O	Function output for RADIO
87	T-MOTOR-CONT	O	Motor control signal output.
88	X-LAT	O	CD DSP command latch output.
89	VDD	-	Power supply.
90	NC	-	Not used (connect to VDD).
91	GND	-	Ground.
92	CLK OUT	O	Sub system clock oscillator (32.768kHz).
93	CLK IN	I	Sub system clock oscillator (32.768kHz).
94	CD	O	Function output for CD.
95	A-MUTE	O	Audio mute signal output.
96	VR-DATA	O	Volume clock output.
97	VR-CLK	O	Volume clock output.
98	VR-CE	O	Volume enable output.
99	WP	I	Wake-up signal input.
100	TAPE END	I	Tape end detect input.

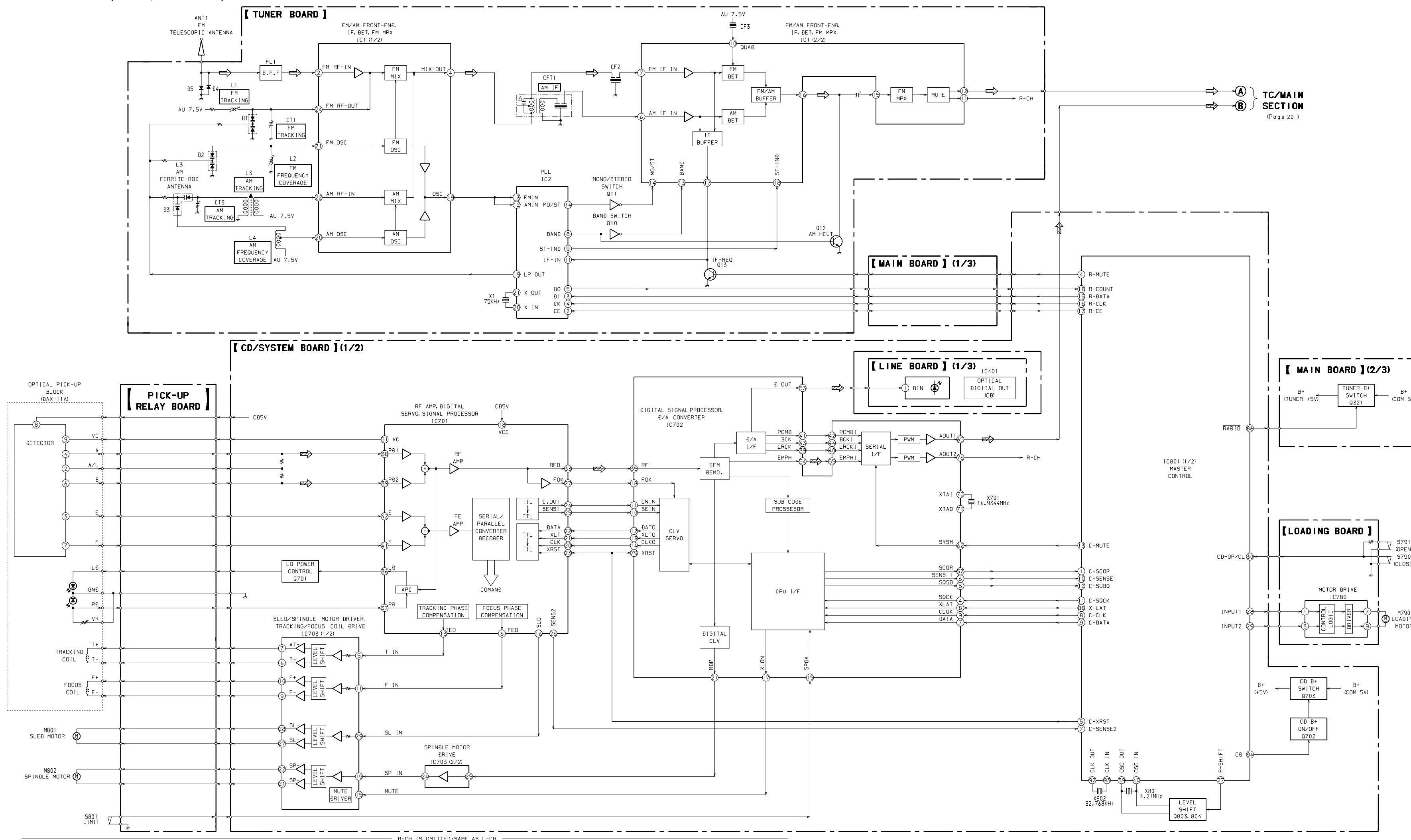
6-2. BLOCK DIAGRAMS (TAPE, MAIN SECTION)



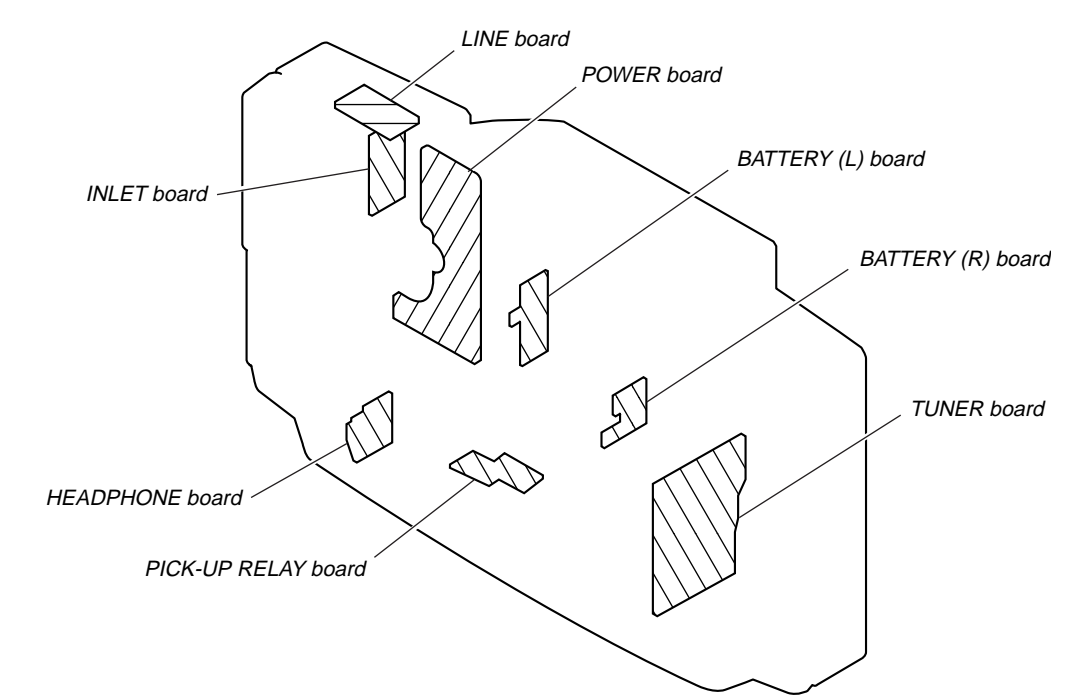
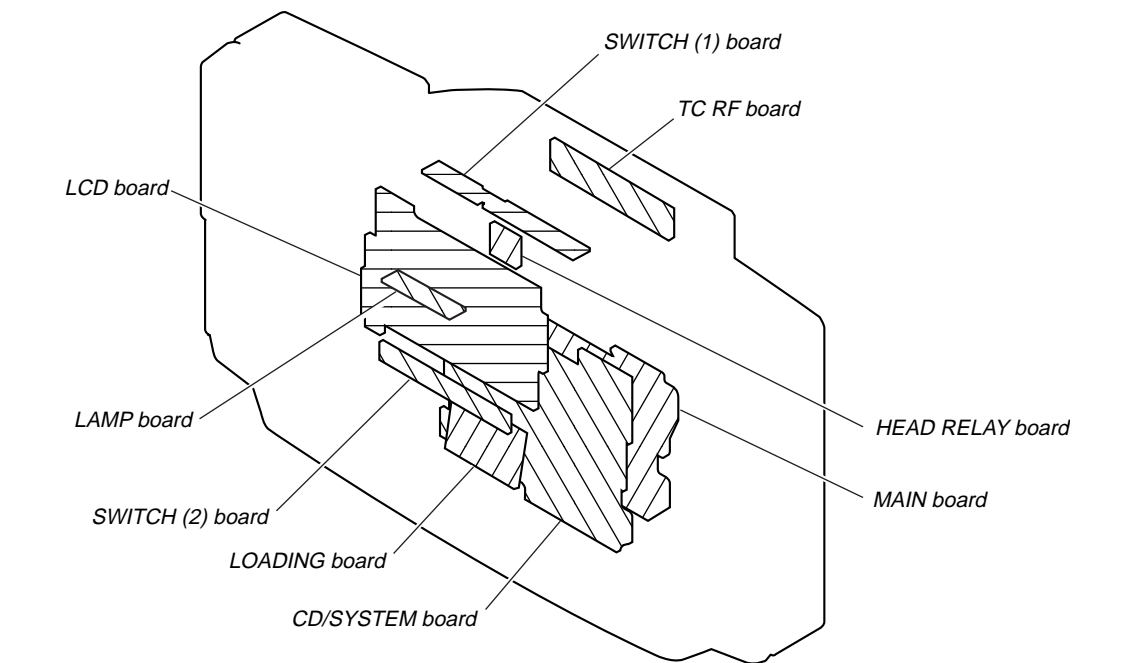
R-CH IS OMITTED; SAME AS L-CH

02

- Signal path.
- : FM
- △— : PB (L-CH)
- : REC (L-CH)
- : CD



● Circuit Boards Location

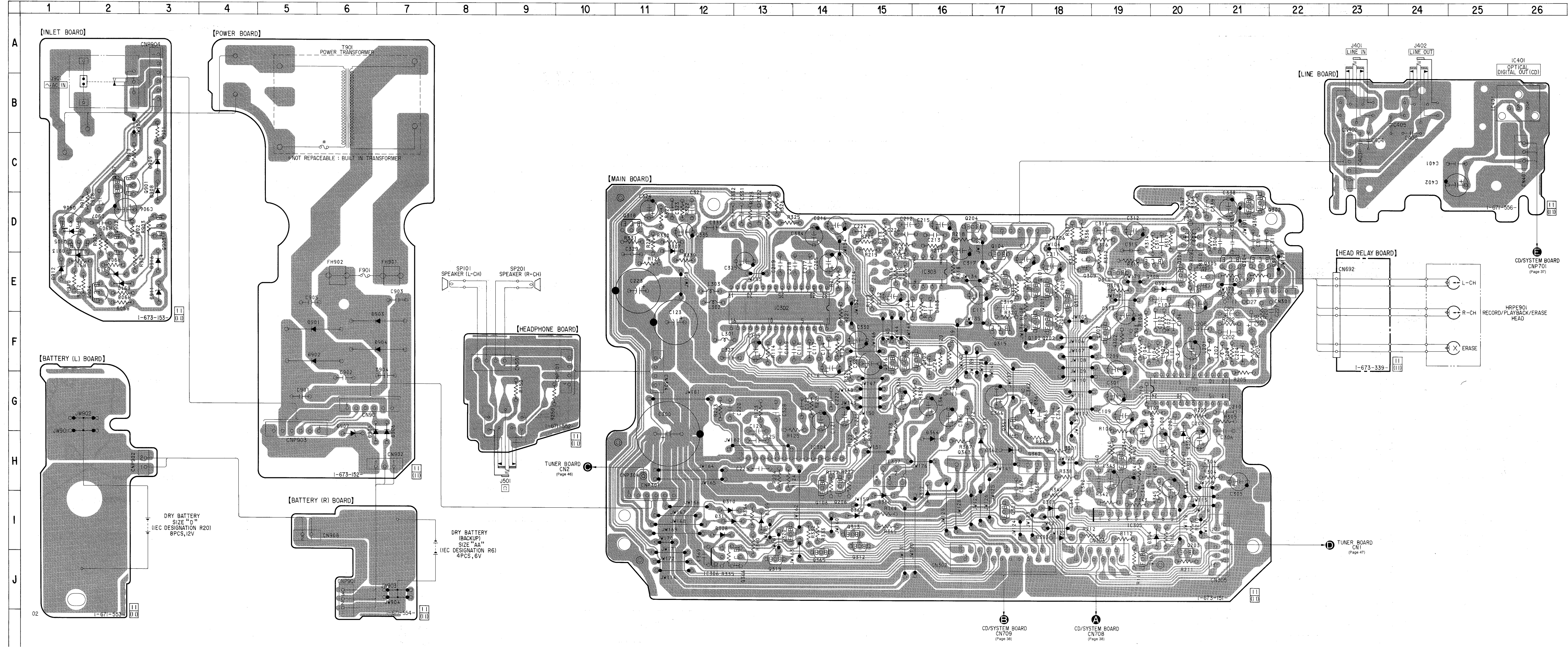


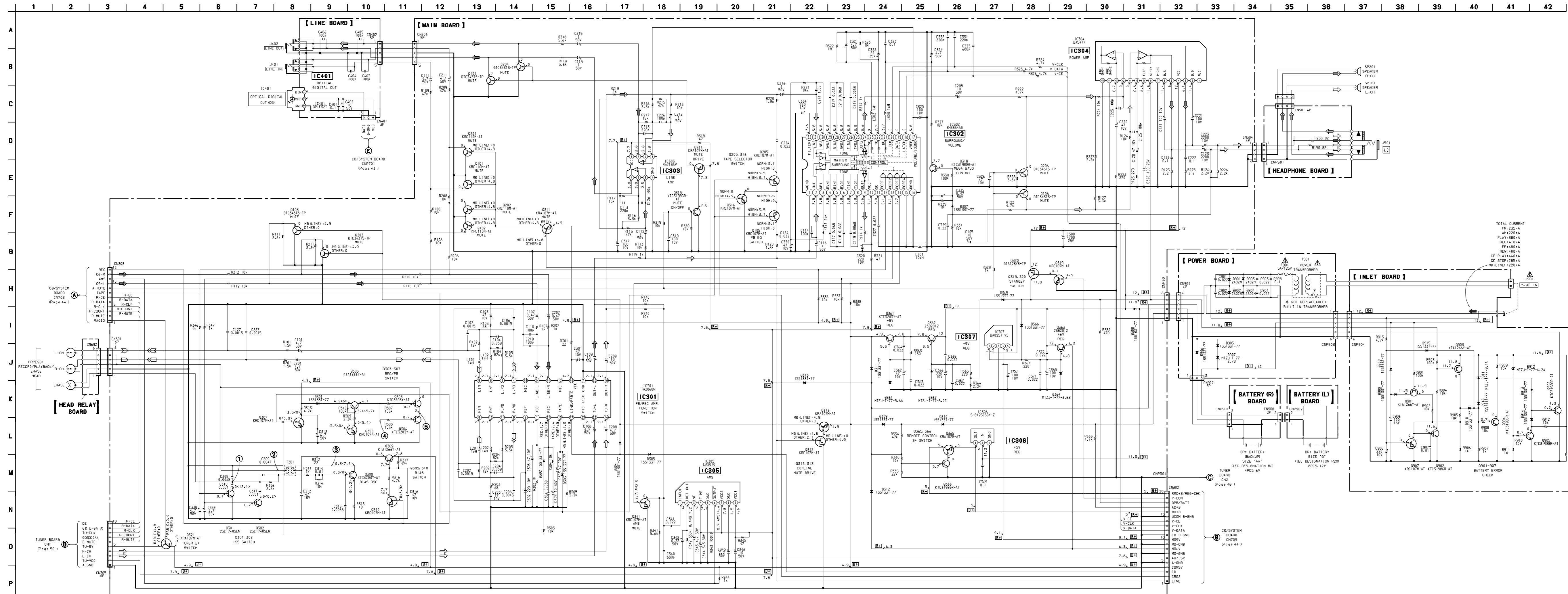
• Signal path.
 □ : FM
 ▽ : CD

• Semiconductor Location

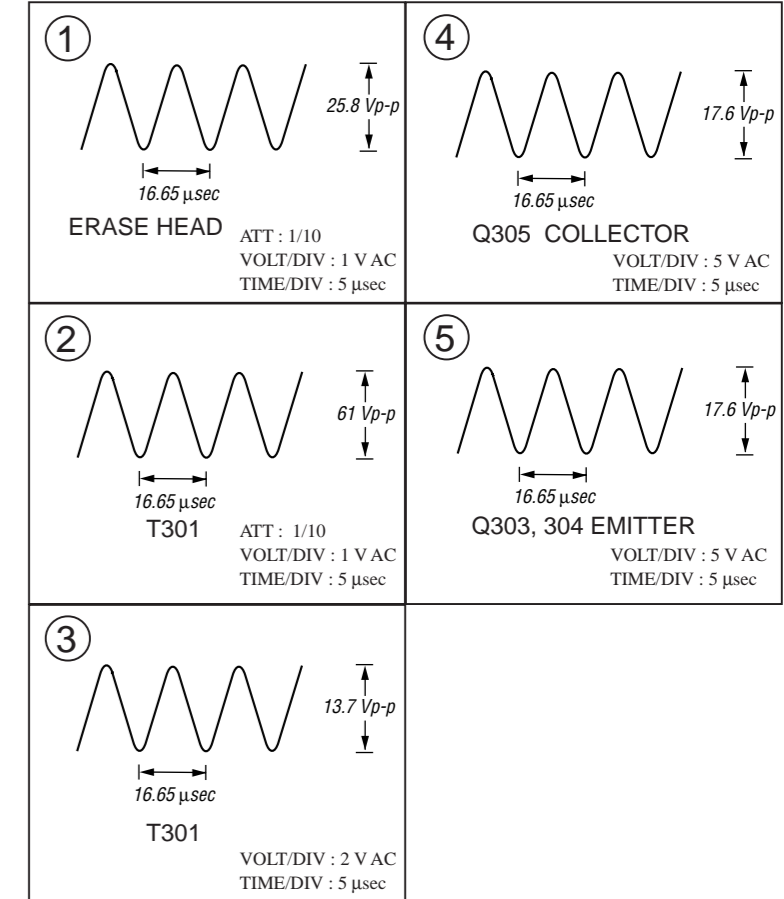
Ref. No.	Location	Ref. No.	Location
D301	E-20	Q106	H-14
D302	H-20	Q201	E-18
D303	I-18	Q202	F-18
D304	I-20	Q203	I-20
D305	I-18	Q204	D-16
D307	D-11	Q205	F-15
D308	I-12	Q206	H-14
D309	I-13	Q301	D-21
D310	I-12	Q302	D-21
D311	I-12	Q303	E-21
D312	H-16	Q304	E-21
D313	H-17	Q305	E-20
D361	G-17	Q306	E-20
D362	H-17	Q307	F-19
D364	H-16	Q308	E-20
D365	I-15	Q309	E-18
D366	I-15	Q310	E-19
D901	F-5	Q311	E-18
D902	F-5	Q312	I-15
D903	F-6	Q313	I-14
D904	F-6	Q314	E-17
D905	H-6	Q315	F-17
D906	H-7	Q316	F-15
D907	H-6	Q318	D-11
D908	C-3	Q319	J-13
D909	C-3	Q320	I-13
D910	E-2	Q321	I-17
D911	E-3	Q341	H-19
D912	E-1	Q361	G-17
D913	E-1	Q362	H-18
D914	D-1	Q363	H-16
D915	E-2	Q365	J-14
D916	E-3	Q366	J-13
IC301	G-20	Q903	D-3
IC302	E-13	Q904	E-2
IC303	E-16	Q905	D-1
IC304	H-14	Q906	D-1
IC305	I-19	Q907	C-2
IC306	J-12		
IC307	H-15		
IC401	B-26		
Q101	E-18		
Q102	F-18		
Q103	J-19		
Q104	D-17		
Q105	F-16		

Note:
 • : parts extracted from the component side.
 • : Pattern from the side which enables seeing.





Waveforms (Main Section)



Note:
 • All capacitors are in μF unless otherwise noted. pF : μF
 50 WV or less are not indicated except for electrolytics and tantalums.
 • All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.

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

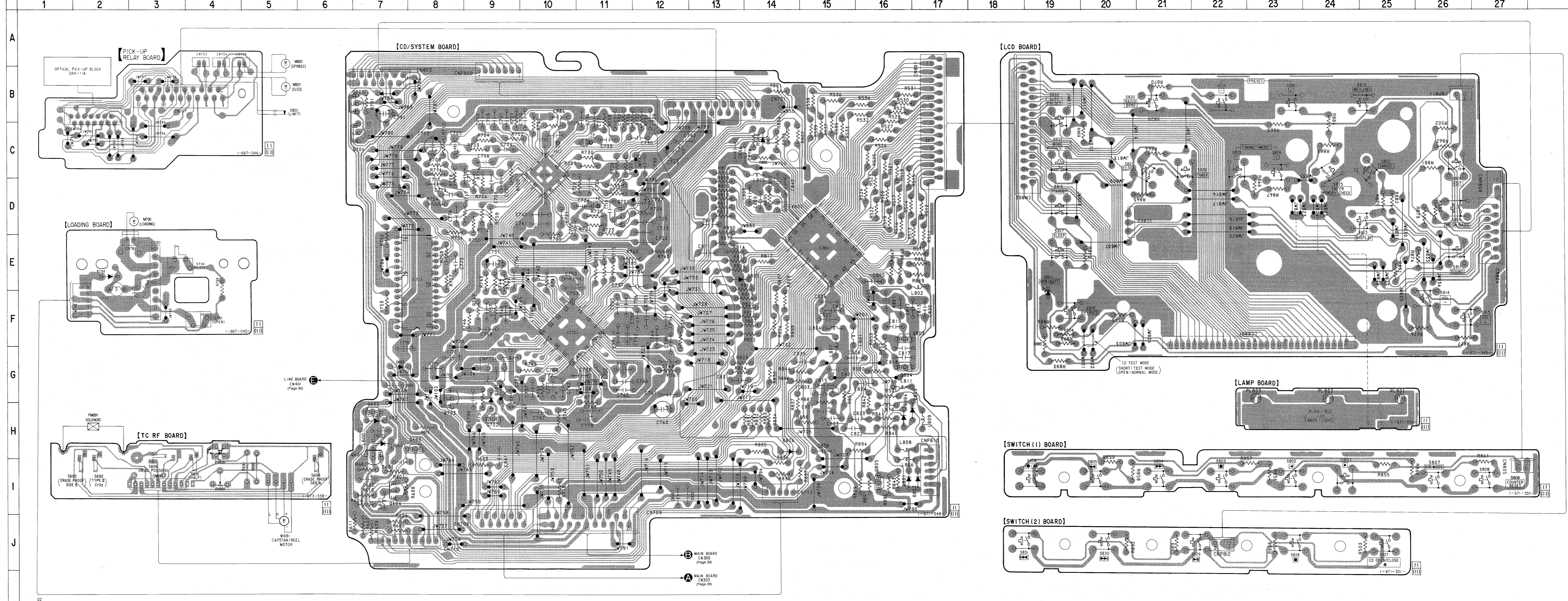
Note:
 Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- Δ : B+ Line.
- Power voltage is dc 12V and fed with regulated dc power supply from external power voltage jack.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions. no mark : FM < > : REC
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 - Δ : FM
 - Δ : PB (L-CH)
 - Δ : REC (L-CH)
 - Δ : PB (R-CH)
 - Δ : REC (R-CH)
 - Δ : CD

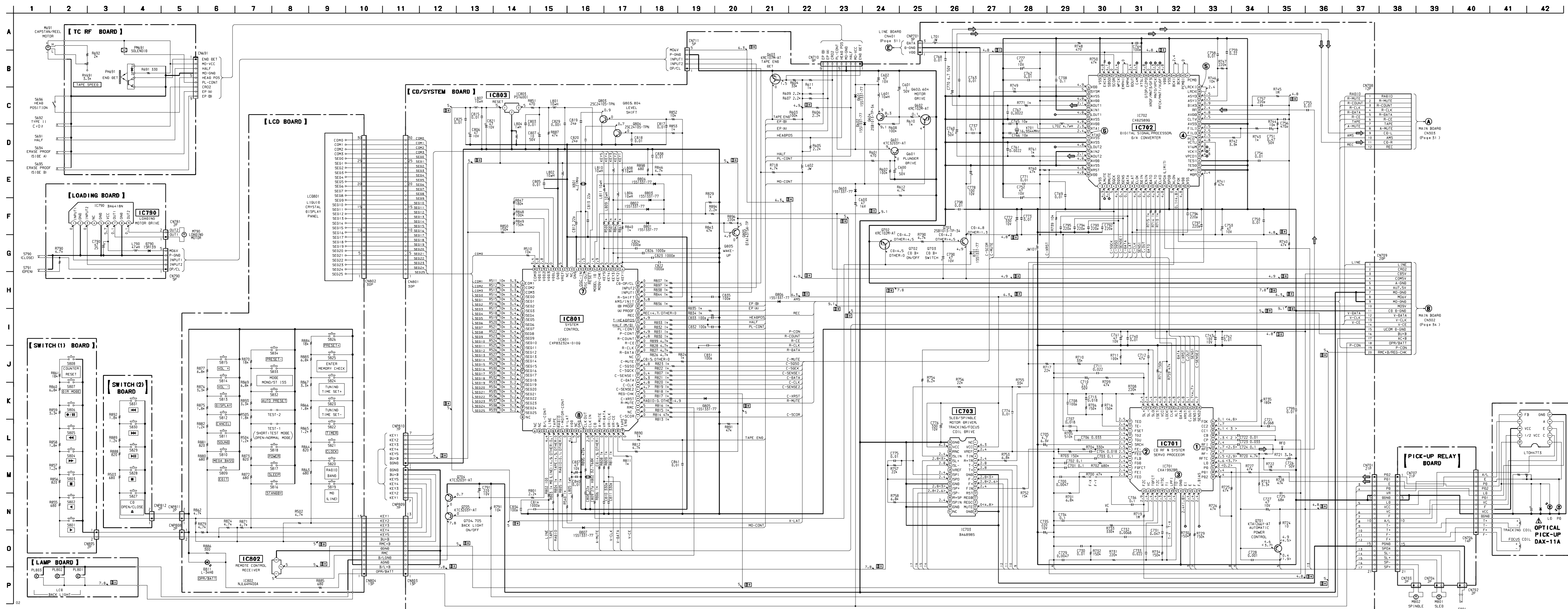
6-6. PRINTED WIRING BOARDS (CD/SYSTEM SECTION) • Refer to page 26 for Circuit Boards Location.

• Semiconductor Location

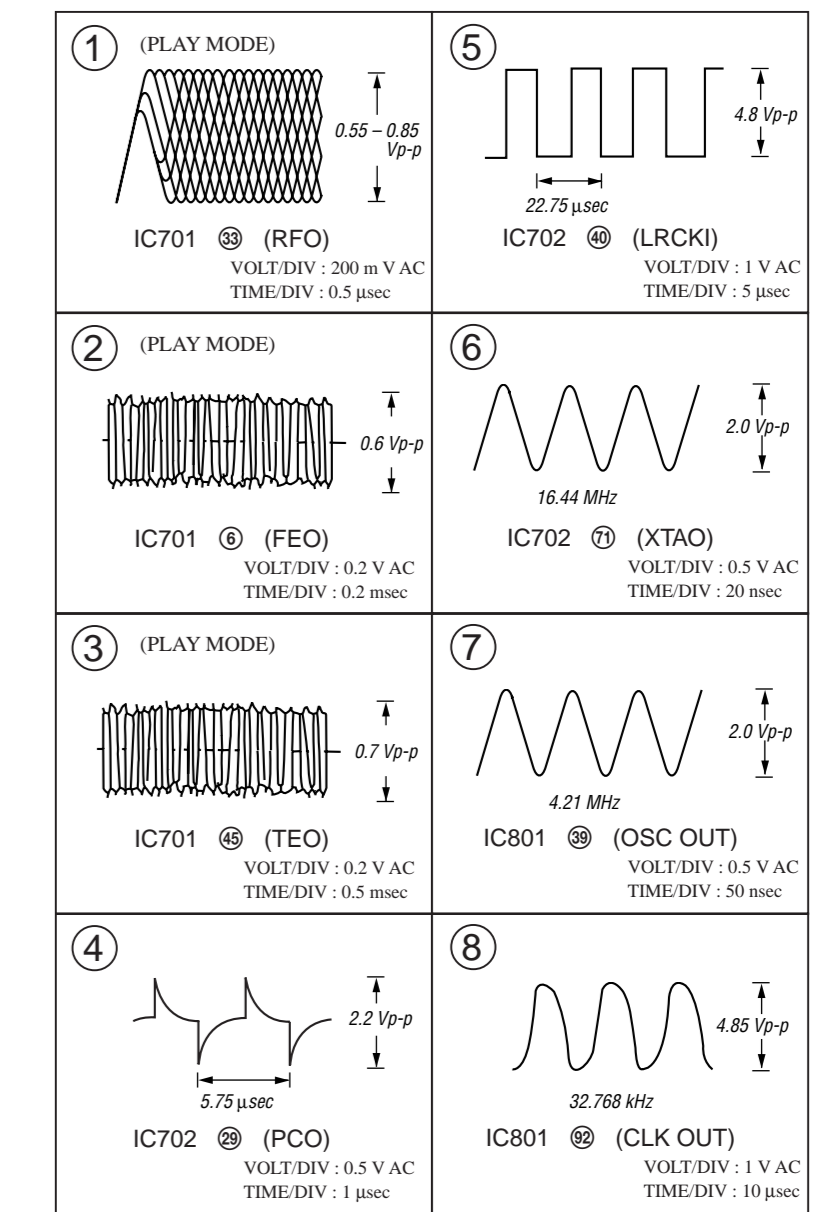
Ref. No.	Location
D601	H-7
D602	H-7
D603	G-7
D701	G-9
D790	E-2
D801	I-16
D802	I-17
D803	H-16
D804	H-16
D805	E-13
D806	H-14
D807	C-14
D811	F-19
IC701	C-10
IC702	F-10
IC703	E-8
IC790	E-3
IC801	E-15
IC802	D-20
IC803	G-15
Q601	H-7
Q602	H-7
Q603	H-8
Q604	I-7
Q701	D-11
Q702	H-9
Q703	G-8
Q704	C-7
Q705	B-7
Q803	F-16
Q804	G-16
Q805	I-16



Note:
 • : parts extracted from the component side.
 • : Pattern from the side which enables seeing.



Waveforms (CD/System Section)



Note:
 • All capacitors are in μF unless otherwise noted. pF: pF
 • All resistors are in Ω and 1/4 W or less unless otherwise specified.

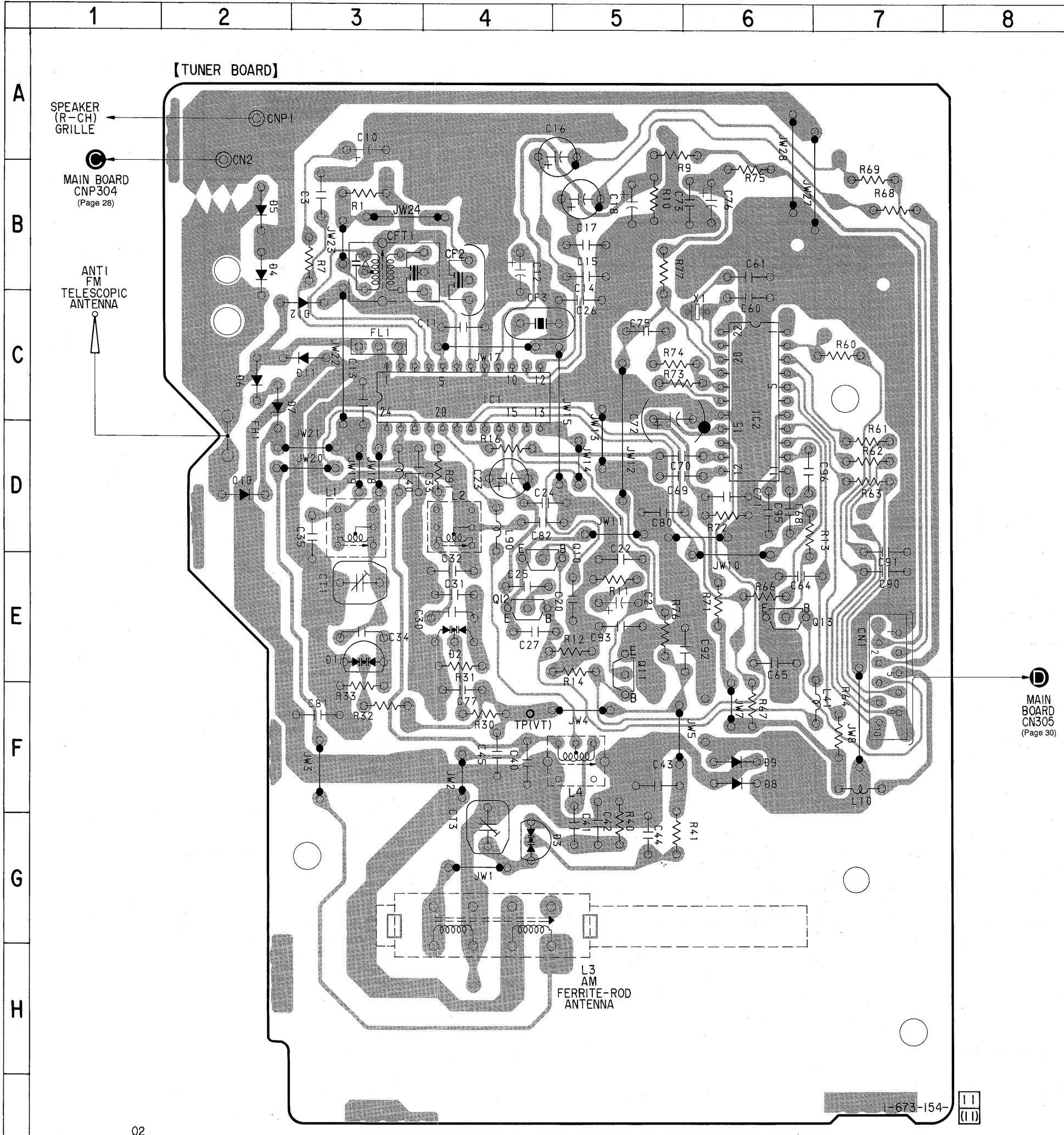
Note:
 The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

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

- [B+]: B+ Line.
- []: adjustment for repair.
- Power voltage is dc 12V and fed with regulated dc power supply from external power voltage jack.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : FM (RADIO SECTION), CD STOP (CD SECTION)
- < > : CD PLAY
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- CD

• Semiconductor Location

Ref. No.	Location
D1	E-1
D2	E-2
D3	G-4
D4	B-2
D5	B-2
D6	C-2
D7	C-2
D8	F-6
D9	F-6
D10	D-1
D11	C-3
D12	C-3
IC1	C-4
IC2	C-6
Q10	E-4
Q11	E-5
Q12	E-4
Q13	E-6



A
B
C
D
E
F
G
H

1 2 3 4 5 6 7 8

[TUNER BOARD]

SPEAKER (R-CH) GRILLE

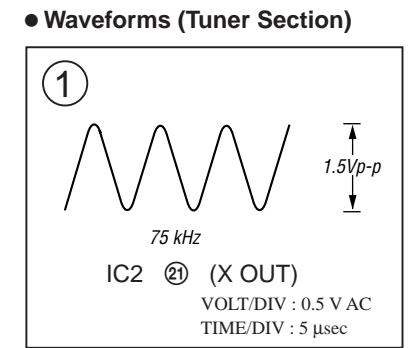
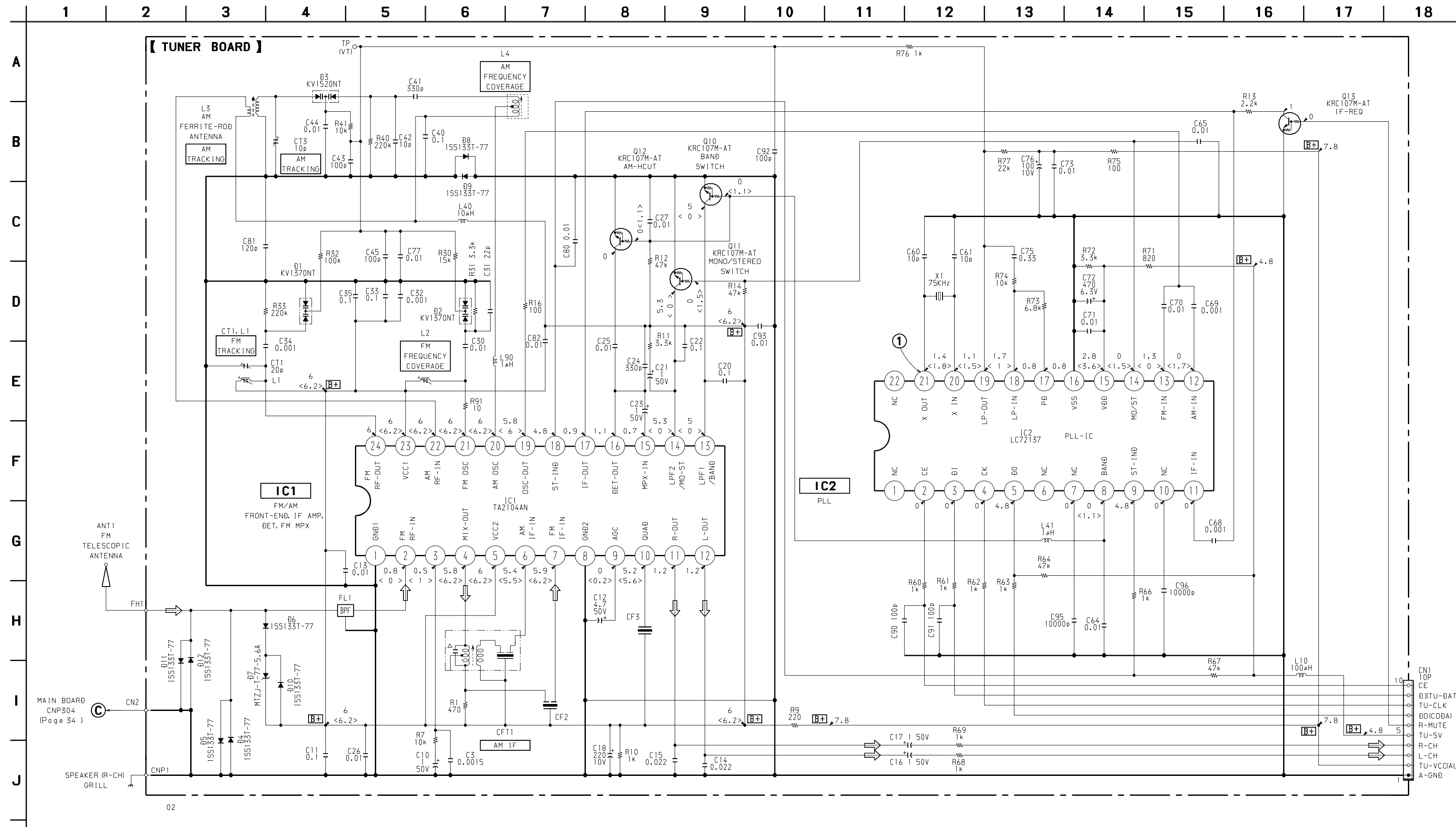
MAIN BOARD CNP304 (Page 28)

ANTI FM TELESCOPIC ANTENNA

MAIN BOARD CN305 (Page 30)

L3 AM FERRITE-ROD ANTENNA

1-673-154-11 (11)



- Note:**
- All capacitors are in μF unless otherwise noted. pF: μF
 - 50 W or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and 1/4 W or less unless otherwise specified.
 - Δ : internal component.
 - B+ : B+ Line.
 - [] : adjustment for repair.
 - Power voltage is dc 12V and fed with regulated dc power supply from external power voltage jack.
 - Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
 - no mark : FM
 - < > : MW
 - [] : LW
 - Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
 - Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
 - Circled numbers refer to waveforms.
 - Signal path.
 - ⇨ : FM

Note:

- ○ : parts extracted from the component side.
- ▨ : Pattern from the side which enables seeing.

SECTION 7 EXPLODED VIEWS

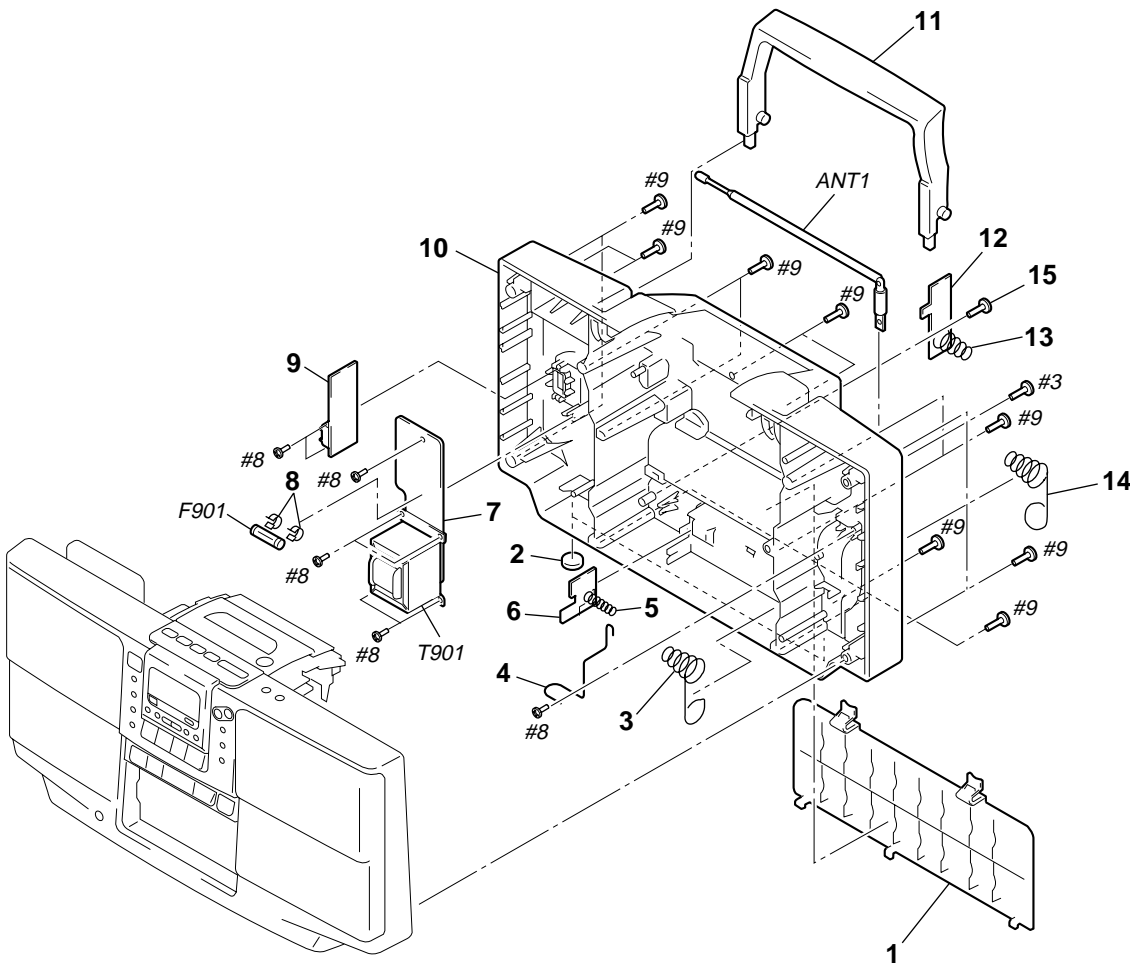
NOTE :

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked “ * ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
CND : Canadian

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

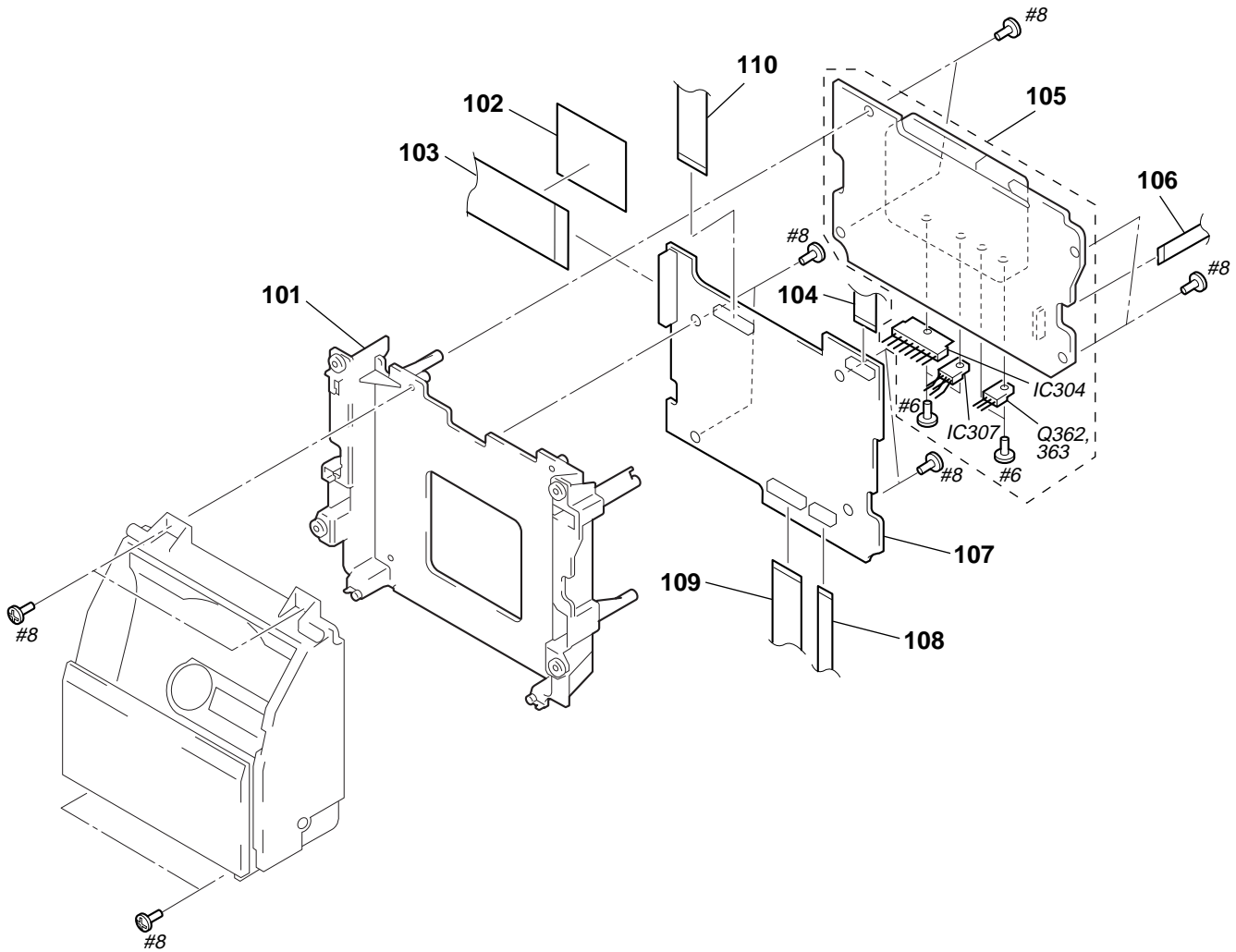
Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. REAR CABINET SECTION



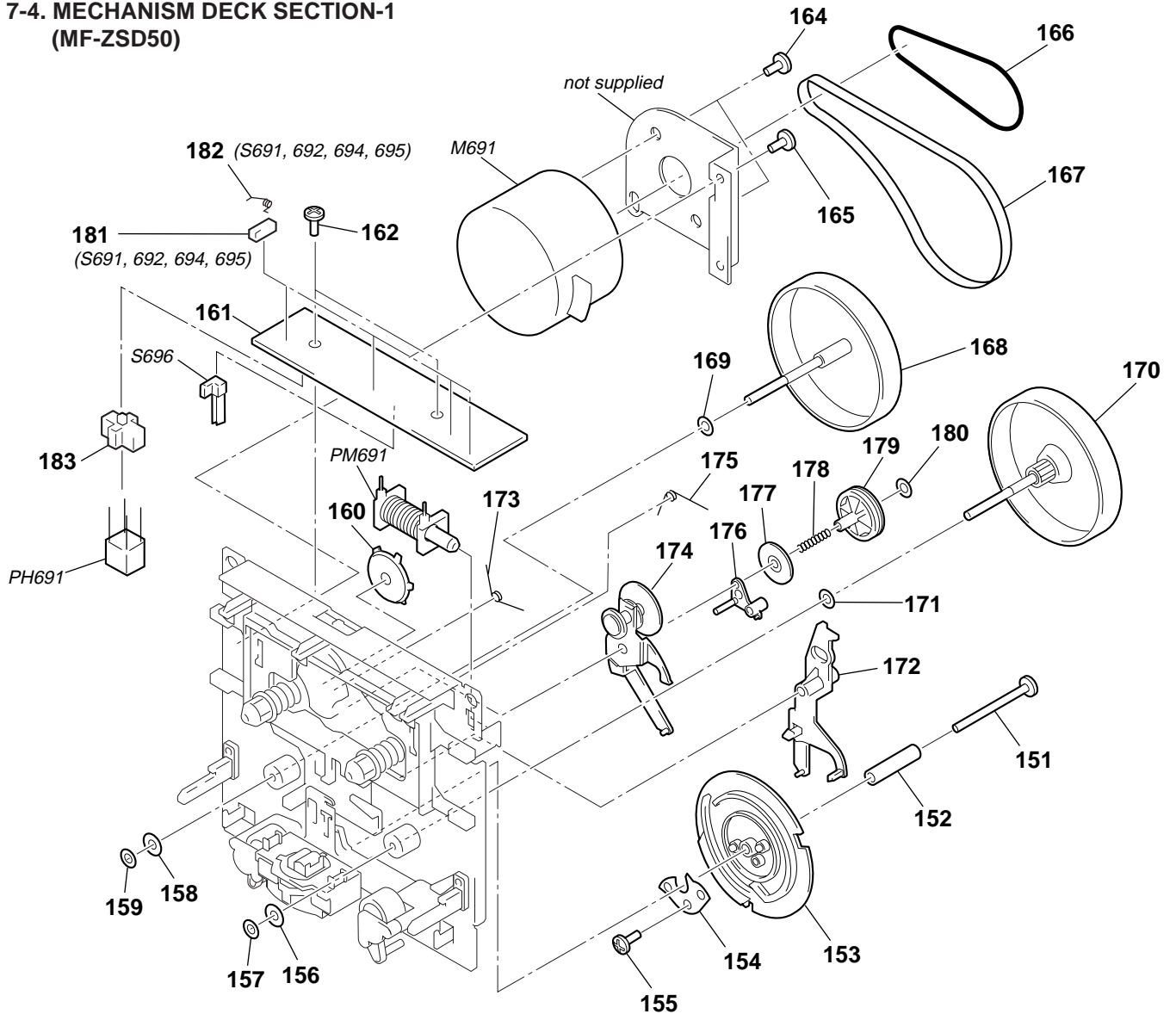
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	3-389-436-32	LID, BATTERY CASE		10	3-028-594-21	CABINET, REAR (CND)	
2	3-908-999-01	FOOT		11	3-028-600-01	HANDLE	
3	3-028-598-01	SPRING (+-) (S), BATTERY		* 12	1-671-553-11	BATTERY (L) BOARD	
4	3-028-599-01	TERMINAL, ANTENNA		13	3-028-595-02	SPRING (-) (L), BATTERY	
5	3-028-596-01	SPRING (-) (S), BATTERY		14	3-028-597-01	SPRING (+-) (L), BATTERY	
* 6	1-671-554-11	BATTERY (R) BOARD		15	4-981-789-01	BRACKET (2), YOKE	
* 7	1-673-152-11	POWER BOARD		ANT1	1-754-055-11	ANTENNA, TELESCOPIC	
8	1-533-233-31	HOLDER, FUSE		Δ F901	1-533-420-11	FUSE, GLASS CYLINDRICAL(DIA.5) (5A/125V)	
* 9	1-673-153-11	INLET BOARD		Δ T901	1-433-455-11	TRANSFORMER, POWER	
10	3-028-594-11	CABINET, REAR (US)					

7-3. CD BLOCK SECTION



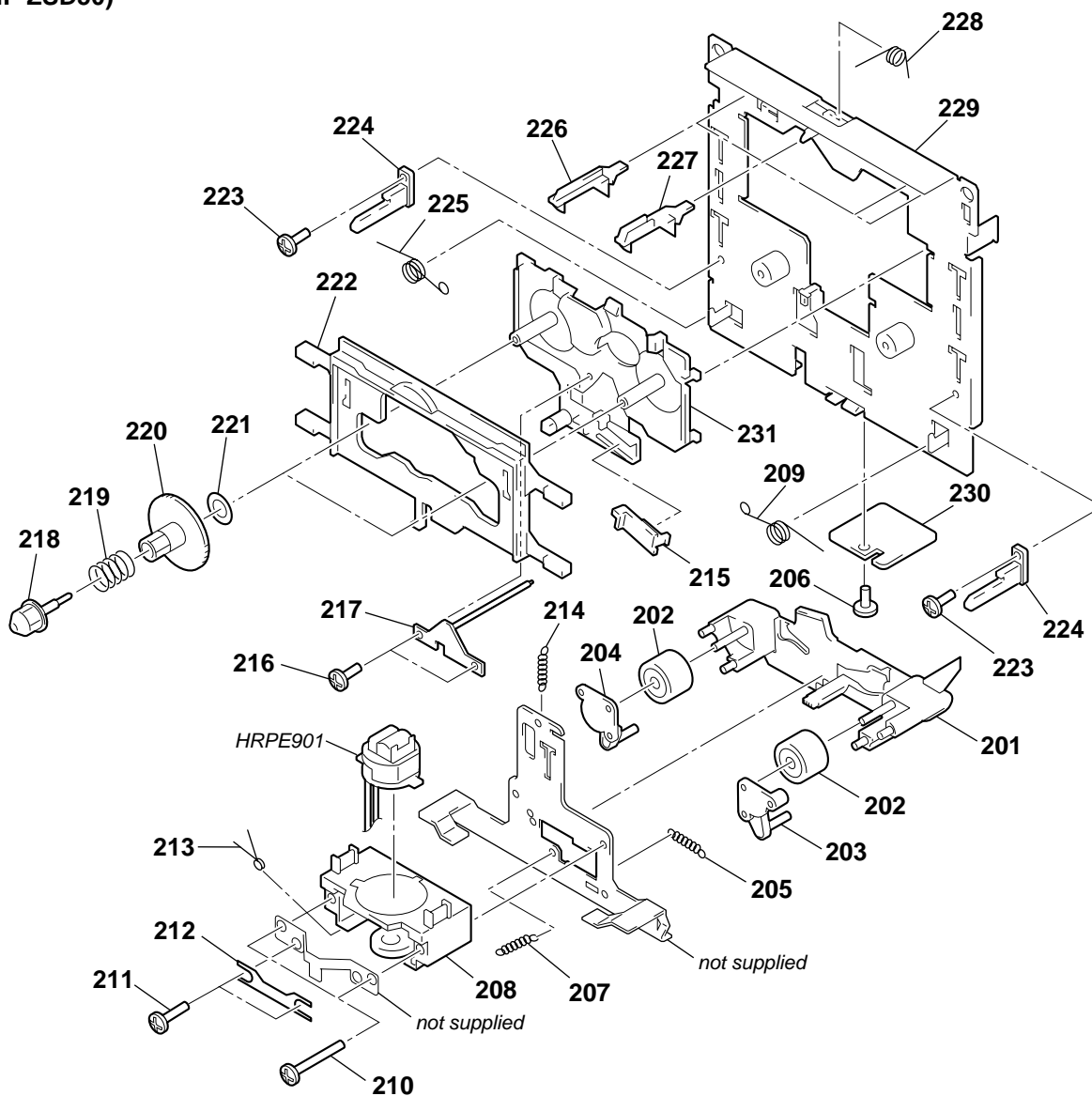
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-028-619-01	BRACKET, CD		108	1-783-991-11	WIRE, PARALLEL (FFC) (12 CORE)	
102	3-028-649-01	PAPER, SHIELD		109	1-783-992-11	WIRE, PARALLEL (FFC) (20 CORE)	
103	1-783-993-11	WIRE, PARALLEL (FFC) (30 CORE)		110	1-782-663-11	WIRE (FLAT TYPE) (21 CORE)	
104	1-783-994-11	WIRE, PARALLEL (FFC) (13 CORE)		IC304	8-759-426-51	IC BA5417	
* 105	A-3321-895-A	MAIN BOARD, COMPLETE		IC307	8-759-564-82	IC BA09ST-V5	
106	1-783-990-11	WIRE, PARALLEL (FFC) (10 CORE)		Q362	8-729-209-15	TRANSISTOR 2SD2012	
* 107	A-3321-894-A	CD/SYSTEM BOARD, COMPLETE		Q363	8-729-209-15	TRANSISTOR 2SD2012	

**7-4. MECHANISM DECK SECTION-1
(MF-ZSD50)**



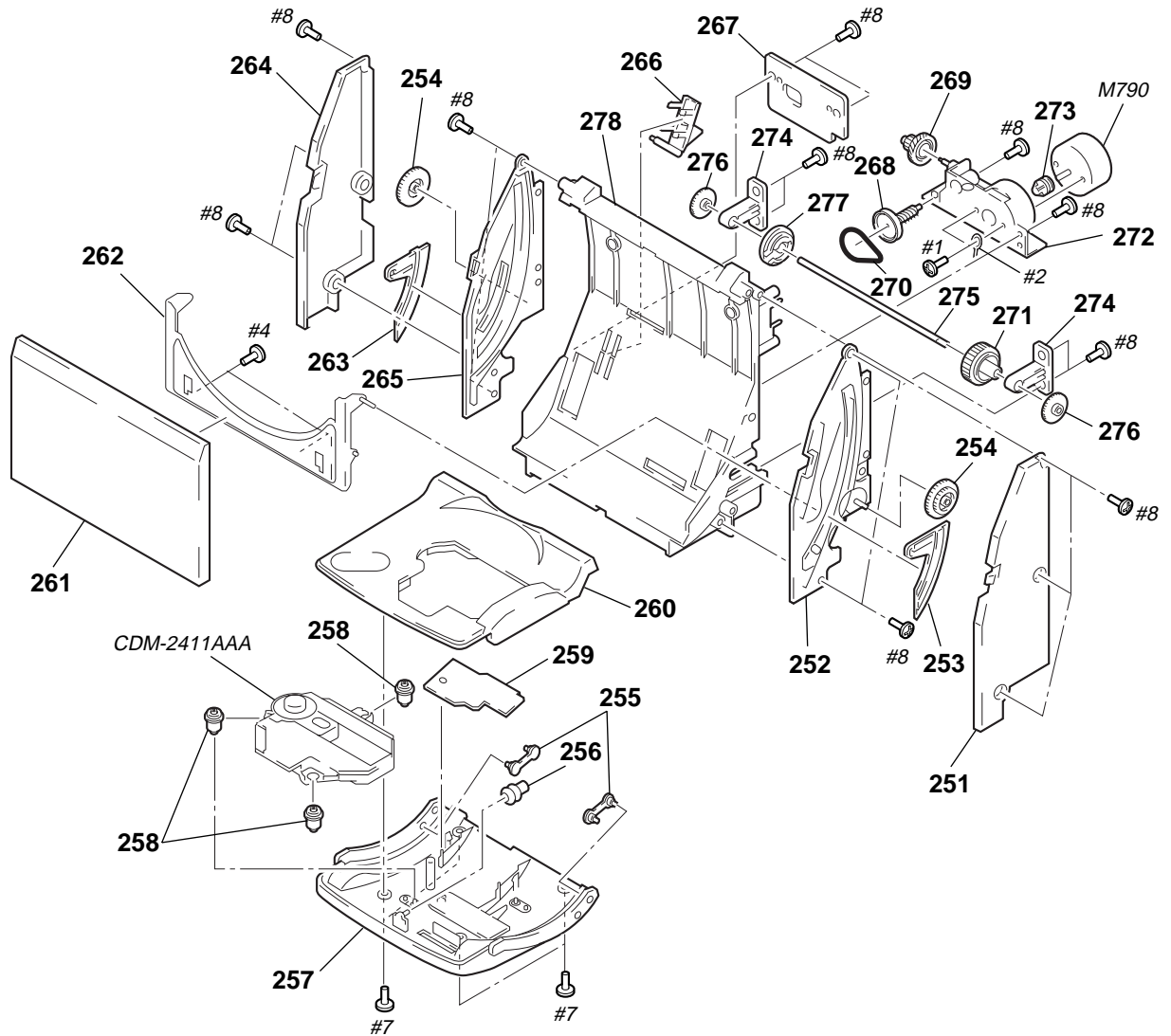
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	3-029-619-01	SCREW		171	3-029-626-01	WASHER	
152	3-029-591-01	COLLAR		172	3-029-589-01	TRIGGER, ARM	
153	3-029-590-01	CAM, GEAR		173	3-029-611-01	SPRING	
154	3-034-597-01	CAM, ARM		174	3-029-593-01	CLUTCH	
155	3-704-418-14	SCREW (M1.7X4), TAPPING		175	3-029-612-01	SPRING	
156	3-029-623-01	WASHER		176	3-029-594-01	ARM (UD B)	
157	3-029-622-01	WASHER		177	3-029-595-01	GEAR (UD)	
158	3-029-621-01	WASHER		178	3-029-613-01	SPRING	
159	3-029-620-01	WASHER		179	3-029-596-01	PULLEY (D)	
160	3-029-587-01	COVER		180	3-029-627-01	WASHER	
* 161	1-673-338-11	TC RF BOARD		181	3-034-694-01	BOX (SW) (S691, 692, 694, 695)	
162	3-938-944-01	SCREW (D)		182	3-034-693-01	SPRING (SW) (S691, 692, 694, 695)	
164	3-029-618-01	SCREW		183	3-029-600-01	SPACER	
165	3-029-614-01	SCREW		M691	3-034-599-01	MOTOR ASSY (CAPSTAN/REEL) (INCLUDING PULLEY)	
166	3-029-599-01	BELT (FR)		PH691	8-729-021-62	PHOTO INTERRUPTOR SG-211	
167	3-029-598-01	BELT (BR)		PM691	1-454-896-11	SOLENOID, PLUNGER	
168	3-029-588-01	FLYWHEEL (L)		S696	1-771-661-11	SWITCH, LEAF (HEAD POSITION)	
169	3-029-625-01	WASHER					
170	3-029-592-01	FLYWHEEL (R)					

7-5. MECHANISM DECK SECTION-2
(MF-ZSD50)



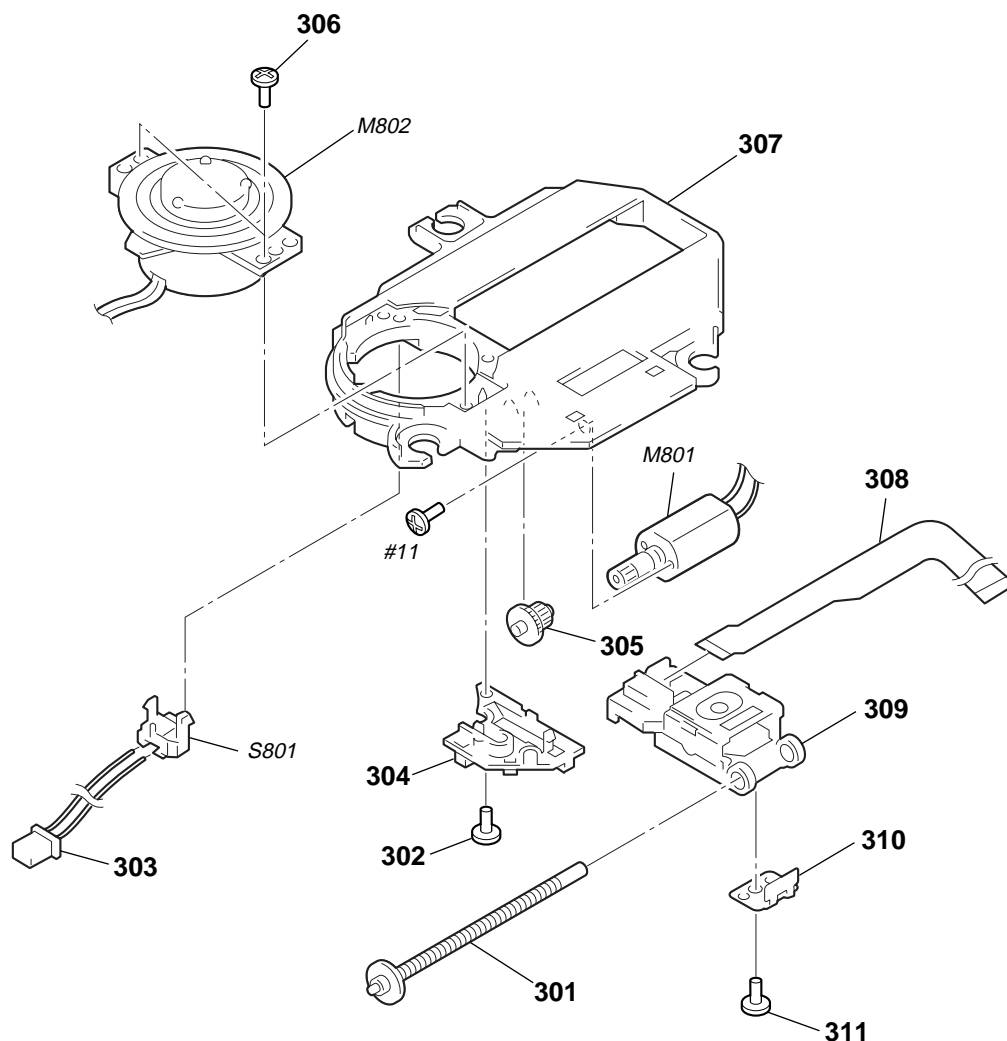
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-029-573-01	LEVER (HD)		217	3-029-577-01	PLATE (D)	
202	3-029-576-01	PINCH, ROLLER		218	3-029-578-01	REEL, CAP	
203	3-029-574-01	PINCH (R), CAP		219	3-029-602-01	SPRING	
204	3-029-575-01	PINCH (L), CAP		220	3-029-579-01	REEL, GEAR	
205	3-029-608-01	SPRING		221	3-029-624-01	WASHER	
206	3-029-617-01	SCREW		222	3-029-582-01	BRAKE, LEVER	
207	3-029-607-01	SPRING		223	3-029-615-01	SCREW	
208	3-029-570-01	FRAME (HD)		224	3-029-581-01	GUIDE (C)	
209	3-029-604-01	SPRING		225	3-029-603-01	SPRING	
210	3-029-616-01	SCREW		226	3-029-585-01	ARM (SW)	
211	3-938-941-01	SCREW (A)		227	3-029-584-01	ARM (CS)	
212	3-034-598-01	SPRING, AZIMUTH		228	3-029-610-01	SPRING	
213	3-029-606-01	SPRING		* 229	3-029-586-01	CHASSIS, MECHANISM	
214	3-029-609-01	SPRING		* 230	1-673-339-11	HEAD RELAY BOARD	
215	3-029-580-01	LEVER (ST)		231	3-029-583-01	FRAME (A)	
216	3-029-614-01	SCREW		HRPE9011-418-847-11		HEAD ASSY, HOLDER (RECORD/PLAYBACK/ ERASE)	

**7-6. CD SECTION
(VLM-ZSD50-142)**



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	3-017-025-11	COVER (R), SIDE		266	3-017-017-11	LEVER, DETECTION	
252	3-017-012-11	PLATE (R), SIDE		* 267	1-667-045-11	LOADING BOARD	
253	3-017-014-11	SLIDER (R)		268	3-017-031-11	GEAR (A)	
254	3-017-027-11	GEAR (C)		269	3-017-032-11	GEAR (B)	
255	3-017-016-11	SHAFT, TRAY		270	3-017-030-01	BELT	
256	4-975-811-01	INSULATOR		271	3-017-008-11	GEAR (R), TIMING	
257	3-017-022-21	TRAY (BOTTOM), CD		272	3-017-036-11	CHASSIS, GEAR	
258	4-975-762-11	INSULATOR		273	2-627-174-01	PULLEY (M)	
* 259	1-667-046-11	PICKUP RELAY BOARD		274	3-017-009-11	BEARING	
260	3-020-624-21	TRAY (TOP), CD		275	3-017-010-11	SHAFT	
261	3-028-620-01	LID, CD		276	3-017-028-11	GEAR (D)	
262	X-3374-204-1	WINDOW ASSY, CD		277	3-017-029-11	GEAR (L), TIMING	
263	3-017-013-11	SLIDER (L)		278	3-017-024-21	CHASSIS, LOADING	
264	3-017-035-11	COVER (L), SIDE		M790	1-698-999-11	MOTOR, DC (LOADING)	
265	3-017-011-11	PLATE (L), SIDE					

**7-7. OPTICAL PICK-UP SECTION
(CDM-2411AAA)**



<p>The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	A-3303-970-A	SCREW ASSY, FEED		308	1-660-965-11	PC BOARD, SLIDE FLEXIBLE	
302	3-318-203-11	SCREW (B1.7), TAPPING		\triangle 309	X-4950-060-1	OPTICAL PICK-UP (DAX01A2 RP)	
303	1-690-530-81	LEAD (WITH CONNECTOR)		310	4-972-165-01	RACK	
304	4-972-163-04	SPRING, SLED					
305	4-974-003-01	GEAR (B)		311	4-973-631-01	SCREW	
				M801	A-3303-403-A	MOTOR ASSY (SLED) (INCLUDING GEAR)	
306	3-719-401-11	SCREW (B1.7), TAPPING		M802	A-3303-971-A	MOTOR ASSY, TURNTABLE (SPINDLE)	
307	4-972-162-01	CHASSIS		S801	1-571-099-21	SWITCH (1 KEY) (LIMIT)	

SECTION 8 ELECTRICAL PARTS LIST

BATTERY (L)

BATTERY (R)

CD/SYSTEM

NOTE :

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms
METAL : Metal-film resistor
METAL OXIDE :Metal oxide-film resistor
F : nonflammable
- Items marked “ * ”are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- SEMICONDUCTORS
In each case, u : μ , for example :
uA..... : μ A..... , uPA..... : μ PA.....
uPB..... : μ PB..... , uPC..... : μ PC.....
uPD..... : μ PD.....
- CAPACITORS
uF : μ F
- COILS
uH : μ H
- Abbreviation
CND : Canadian

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

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

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-671-553-11	BATTERY (L) BOARD *****		C727	1-104-664-11	ELECT	47uF 20% 10V
	3-028-595-01	SPRING (-) (L), BATTERY *****		C728	1-162-294-31	CERAMIC	0.001uF 10% 50V
	1-671-554-11	BATTERY (R) BOARD *****		C729	1-162-600-11	CERAMIC	0.0047uF 30% 16V
	3-028-596-01	SPRING (-) (S), BATTERY < CONNECTOR >		C730	1-162-306-11	CERAMIC	0.01uF 30% 16V
				C731	1-130-491-00	MYLAR	0.047uF 5% 50V
				C732	1-162-305-11	CERAMIC	0.0068uF 30% 16V
				C733	1-101-005-00	CERAMIC	22000PF 50V
* CN908	1-564-505-11	PLUG, CONNECTOR 2P *****		C734	1-162-851-11	CERAMIC	0.1uF 10% 16V
				C735	1-104-666-11	ELECT	220uF 20% 10V
				C736	1-162-851-11	CERAMIC	0.1uF 10% 16V
				C737	1-162-851-11	CERAMIC	0.1uF 10% 16V
				C738	1-162-851-11	CERAMIC	0.1uF 10% 16V
*	A-3321-894-A	CD/SYSTEM BOARD, COMPLETE *****		C740	1-162-306-11	CERAMIC	0.01uF 30% 16V
	1-783-991-11	WIRE, PARALLEL (FFC) (12 CORE)		C741	1-104-664-11	ELECT	47uF 20% 10V
	1-783-992-11	WIRE, PARALLEL (FFC) (20 CORE) < CAPACITOR >		C742	1-162-306-11	CERAMIC	0.01uF 30% 16V
				C743	1-124-443-00	ELECT	100uF 20% 10V
				C750	1-162-306-11	CERAMIC	0.01uF 30% 16V
				C751	1-124-902-00	ELECT	0.47uF 20% 50V
				C752	1-104-664-11	ELECT	47uF 20% 10V
				C753	1-104-664-11	ELECT	47uF 20% 10V
				C754	1-162-306-11	CERAMIC	0.01uF 30% 16V
				C755	1-130-483-00	MYLAR	0.01uF 5% 50V
C600	1-124-903-11	ELECT	1uF 20% 50V	C756	1-162-290-31	CERAMIC	470PF 10% 50V
C601	1-124-903-11	ELECT	1uF 20% 50V	C757	1-162-286-21	CERAMIC	220PF 10% 50V
C602	1-104-664-11	ELECT	47uF 20% 10V	C758	1-162-306-11	CERAMIC	0.01uF 30% 16V
C603	1-104-664-11	ELECT	47uF 20% 16V	C759	1-130-499-00	MYLAR	0.22uF 5% 50V
C700	1-162-600-11	CERAMIC	0.0047uF 30% 16V	C760	1-126-963-11	ELECT	4.7uF 20% 50V
C701	1-162-851-11	CERAMIC	0.1uF 10% 16V	C761	1-162-302-11	CERAMIC	0.0022uF 30% 16V
C702	1-162-851-11	CERAMIC	0.1uF 10% 16V	C762	1-162-306-11	CERAMIC	0.01uF 30% 16V
C703	1-162-851-11	CERAMIC	0.1uF 10% 16V	C763	1-162-306-11	CERAMIC	0.01uF 30% 16V
C704	1-130-486-00	MYLAR	0.018uF 10% 50V	C764	1-162-282-31	CERAMIC	100PF 10% 50V
C705	1-131-375-00	TANTALUM	4.7uF 10% 10V	C765	1-162-199-31	CERAMIC	10PF 5% 50V
C706	1-130-489-00	MYLAR	0.033uF 5% 50V	C766	1-162-199-31	CERAMIC	10PF 5% 50V
C707	1-130-486-00	MYLAR	0.018uF 10% 50V	C767	1-162-302-11	CERAMIC	0.0022uF 30% 16V
C708	1-162-282-31	CERAMIC	100PF 10% 50V	C768	1-162-306-11	CERAMIC	0.01uF 30% 16V
C710	1-126-961-11	ELECT	2.2uF 20% 50V	C769	1-162-306-11	CERAMIC	0.01uF 30% 16V
C711	1-130-487-00	MYLAR	0.022uF 5% 50V	C770	1-126-963-11	ELECT	4.7uF 20% 50V
C712	1-162-215-31	CERAMIC	47PF 5% 50V	C771	1-162-306-11	CERAMIC	0.01uF 30% 16V
C713	1-130-486-00	MYLAR	0.018uF 10% 50V	C772	1-126-940-11	ELECT	330uF 20% 10V
C721	1-130-493-00	MYLAR	0.068uF 5% 50V	C773	1-162-306-11	CERAMIC	0.01uF 30% 16V
C722	1-162-306-11	CERAMIC	0.01uF 30% 16V	C774	1-162-306-11	CERAMIC	0.01uF 30% 16V
C723	1-130-489-00	MYLAR	0.033uF 5% 50V	C775	1-162-306-11	CERAMIC	0.01uF 30% 16V
C724	1-130-495-00	MYLAR	0.1uF 5% 50V				
C725	1-162-219-31	CERAMIC	68PF 5% 50V				
C726	1-124-903-11	ELECT	1uF 20% 50V				

CD/SYSTEM

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C776	1-126-940-11	ELECT	330uF	20%	10V	D602	8-719-991-33	DIODE	1SS133T-77		
C777	1-104-664-11	ELECT	47uF	20%	10V	D603	8-719-991-33	DIODE	1SS133T-77		
C778	1-124-443-00	ELECT	100uF	20%	10V	D701	8-719-991-33	DIODE	1SS133T-77		
C790	1-104-664-11	ELECT	47uF	20%	10V	D801	8-719-991-33	DIODE	1SS133T-77		
					(CND)						
C791	1-104-666-11	ELECT	220uF	20%	10V	D802	8-719-991-33	DIODE	1SS133T-77		
C792	1-162-286-21	CERAMIC	220PF	10%	50V	D803	8-719-991-33	DIODE	1SS133T-77		
C793	1-162-286-21	CERAMIC	220PF	10%	50V	D804	8-719-991-33	DIODE	1SS133T-77		
C794	1-162-286-21	CERAMIC	220PF	10%	50V	D805	8-719-991-33	DIODE	1SS133T-77		
C795	1-162-286-21	CERAMIC	220PF	10%	50V	D806	8-719-991-33	DIODE	1SS133T-77		
C796	1-162-286-21	CERAMIC	220PF	10%	50V	D807	8-719-991-33	DIODE	1SS133T-77		
C797	1-162-286-21	CERAMIC	220PF	10%	50V				< IC >		
C798	1-162-306-11	CERAMIC	0.01uF	30%	16V						
C799	1-162-306-11	CERAMIC	0.01uF	30%	16V	IC701	8-752-082-14	IC	CXA1992BR		
C803	1-162-306-11	CERAMIC	0.01uF	30%	16V	IC702	8-752-384-13	IC	CXD2589Q		
C805	1-162-306-11	CERAMIC	0.01uF	30%	16V	IC703	8-759-478-60	IC	BA6898S		
						IC801	8-752-901-80	IC	CXP83232A-010Q		
C806	1-104-664-11	ELECT	47uF	20%	10V	IC803	8-759-430-16	IC	PST600I		
C807	1-124-907-11	ELECT	10uF	20%	50V				< COIL >		
C808	1-102-514-11	CERAMIC	22PF	5%	50V						
C809	1-102-516-11	CERAMIC	27PF	5%	50V						
C810	1-162-288-31	CERAMIC	330PF	10%	50V	L601	1-408-117-00	INDUCTOR	10uH		
C811	1-162-288-31	CERAMIC	330PF	10%	50V	L702	1-410-324-11	INDUCTOR	4.7uH		
C812	1-102-514-11	CERAMIC	22PF	5%	50V	L801	1-410-509-11	INDUCTOR	10uH		
C813	1-102-514-11	CERAMIC	22PF	5%	50V	L802	1-410-509-11	INDUCTOR	10uH		
C814	1-162-294-31	CERAMIC	0.001uF	10%	50V	L804	1-414-142-11	INDUCTOR	1uH		
C815	1-162-306-11	CERAMIC	0.01uF	30%	16V	L805	1-414-142-11	INDUCTOR	1uH		
C817	1-162-306-11	CERAMIC	0.01uF	30%	16V	L806	1-410-509-11	INDUCTOR	10uH		
C818	1-162-306-11	CERAMIC	0.01uF	30%	16V	L807	1-410-509-11	INDUCTOR	10uH		
C819	1-102-960-00	CERAMIC	24PF	5%	50V	L808	1-410-509-11	INDUCTOR	10uH		
C820	1-102-960-00	CERAMIC	24PF	5%	50V	L809	1-410-509-11	INDUCTOR	10uH		
C821	1-104-664-11	ELECT	47uF	20%	10V	L810	1-410-509-11	INDUCTOR	10uH		
C822	1-162-294-31	CERAMIC	0.001uF	10%	50V	L811	1-410-509-11	INDUCTOR	10uH		
C823	1-162-294-31	CERAMIC	0.001uF	10%	50V				< TRANSISTOR >		
C824	1-162-294-31	CERAMIC	0.001uF	10%	50V						
C825	1-162-306-11	CERAMIC	0.01uF	30%	16V	Q601	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
C826	1-162-294-31	CERAMIC	0.001uF	10%	50V	Q602	8-729-036-58	TRANSISTOR	KRC102M-AT		
C829	1-162-294-31	CERAMIC	0.001uF	10%	50V	Q603	8-729-036-77	TRANSISTOR	KRC107M		
C831	1-162-282-31	CERAMIC	100PF	10%	50V	Q604	8-729-801-84	TRANSISTOR	2SB1013-4		
C832	1-162-282-31	CERAMIC	100PF	10%	50V	Q701	8-729-037-02	TRANSISTOR	KTA1266Y-AT		
C833	1-162-282-31	CERAMIC	100PF	10%	50V						
C835	1-162-282-31	CERAMIC	100PF	10%	50V	Q702	8-729-036-58	TRANSISTOR	KRC102M-AT		
C836	1-162-282-31	CERAMIC	100PF	10%	50V	Q703	8-729-801-84	TRANSISTOR	2SB1013-4		
C837	1-104-664-11	ELECT	47uF	20%	10V	Q704	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
C838	1-162-306-11	CERAMIC	0.01uF	30%	16V	Q705	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
C840	1-162-306-11	CERAMIC	0.01uF	30%	16V	Q803	8-729-922-66	TRANSISTOR	2SC2410SN		
C841	1-162-306-11	CERAMIC	0.01uF	30%	16V						
									< RESISTOR >		
						R500	1-249-417-11	CARBON	1K	5%	1/4W
						R501	1-249-417-11	CARBON	1K	5%	1/4W
						R510	1-249-429-11	CARBON	10K	5%	1/4W
						R511	1-249-429-11	CARBON	10K	5%	1/4W
						R512	1-249-429-11	CARBON	10K	5%	1/4W
						R513	1-249-429-11	CARBON	10K	5%	1/4W
						R514	1-249-429-11	CARBON	10K	5%	1/4W
						R515	1-249-429-11	CARBON	10K	5%	1/4W
						R516	1-249-429-11	CARBON	10K	5%	1/4W
						R517	1-249-429-11	CARBON	10K	5%	1/4W
									< DIODE >		
D601	8-719-991-33	DIODE	1SS133T-77								

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R518	1-249-429-11	CARBON	10K	5%	1/4W	R724	1-249-393-11	CARBON	10	5%	1/4W
R519	1-249-429-11	CARBON	10K	5%	1/4W	R725	1-249-437-11	CARBON	47K	5%	1/4W
R520	1-249-429-11	CARBON	10K	5%	1/4W						
R521	1-249-429-11	CARBON	10K	5%	1/4W	R726	1-249-437-11	CARBON	47K	5%	1/4W
R522	1-249-429-11	CARBON	10K	5%	1/4W	R727	1-249-437-11	CARBON	47K	5%	1/4W
						R728	1-249-437-11	CARBON	47K	5%	1/4W
R523	1-249-429-11	CARBON	10K	5%	1/4W	R729	1-247-883-00	CARBON	150K	5%	1/4W
R524	1-249-429-11	CARBON	10K	5%	1/4W	R730	1-247-883-00	CARBON	150K	5%	1/4W
R525	1-249-429-11	CARBON	10K	5%	1/4W						
R526	1-249-429-11	CARBON	10K	5%	1/4W	R731	1-247-887-00	CARBON	220K	5%	1/4W
R527	1-249-429-11	CARBON	10K	5%	1/4W	R732	1-247-883-00	CARBON	150K	5%	1/4W
						R733	1-247-891-00	CARBON	330K	5%	1/4W
R528	1-249-429-11	CARBON	10K	5%	1/4W	R734	1-247-883-00	CARBON	150K	5%	1/4W
R529	1-249-429-11	CARBON	10K	5%	1/4W	R735	1-247-885-00	CARBON	180K	5%	1/4W
R530	1-249-429-11	CARBON	10K	5%	1/4W						
R531	1-249-429-11	CARBON	10K	5%	1/4W	R739	1-249-429-11	CARBON	10K	5%	1/4W
R532	1-249-429-11	CARBON	10K	5%	1/4W	R740	1-249-437-11	CARBON	47K	5%	1/4W
						R741	1-249-437-11	CARBON	47K	5%	1/4W
R533	1-249-429-11	CARBON	10K	5%	1/4W	R742	1-247-843-11	CARBON	3.3K	5%	1/4W
R534	1-249-429-11	CARBON	10K	5%	1/4W	R743	1-249-417-11	CARBON	1K	5%	1/4W
R535	1-249-429-11	CARBON	10K	5%	1/4W						
R536	1-249-429-11	CARBON	10K	5%	1/4W	R744	1-249-429-11	CARBON	10K	5%	1/4W
R537	1-249-429-11	CARBON	10K	5%	1/4W	R745	1-247-903-00	CARBON	1M	5%	1/4W
						R746	1-249-429-11	CARBON	10K	5%	1/4W
R538	1-249-429-11	CARBON	10K	5%	1/4W	R747	1-247-887-00	CARBON	220K	5%	1/4W
R539	1-249-429-11	CARBON	10K	5%	1/4W	R748	1-249-413-11	CARBON	470	5%	1/4W
R540	1-249-417-11	CARBON	1K	5%	1/4W						
R601	1-249-413-11	CARBON	470	5%	1/4W	R749	1-249-417-11	CARBON	1K	5%	1/4W
R602	1-249-441-11	CARBON	100K	5%	1/4W	R750	1-249-437-11	CARBON	47K	5%	1/4W
						R752	1-249-431-11	CARBON	15K	5%	1/4W
R603	1-249-441-11	CARBON	100K	5%	1/4W	R753	1-249-427-11	CARBON	6.8K	5%	1/4W
R604	1-249-435-11	CARBON	33K	5%	1/4W	R754	1-249-428-11	CARBON	8.2K	5%	1/4W
R605	1-249-421-11	CARBON	2.2K	5%	1/4W						
R606	1-249-421-11	CARBON	2.2K	5%	1/4W	R755	1-249-435-11	CARBON	33K	5%	1/4W
R607	1-249-421-11	CARBON	2.2K	5%	1/4W	R756	1-247-863-91	CARBON	22K	5%	1/4W
						R757	1-247-863-91	CARBON	22K	5%	1/4W
R608	1-249-441-11	CARBON	100K	5%	1/4W	R758	1-249-427-11	CARBON	6.8K	5%	1/4W
R609	1-249-421-11	CARBON	2.2K	5%	1/4W	R759	1-249-437-11	CARBON	47K	5%	1/4W
R610	1-249-417-11	CARBON	1K	5%	1/4W						
R611	1-249-417-11	CARBON	1K	5%	1/4W	R760	1-249-437-11	CARBON	47K	5%	1/4W
R612	1-249-425-11	CARBON	4.7K	5%	1/4W	R761	1-249-417-11	CARBON	1K	5%	1/4W
						R771	1-249-417-11	CARBON	1K	5%	1/4W
R700	1-249-437-11	CARBON	47K	5%	1/4W	R790	1-249-425-11	CARBON	4.7K	5%	1/4W
R701	1-249-427-11	CARBON	6.8K	5%	1/4W	R791	1-249-429-11	CARBON	10K	5%	1/4W
R702	1-247-899-11	CARBON	680K	5%	1/4W						
R703	1-247-883-00	CARBON	150K	5%	1/4W	R801	1-249-421-11	CARBON	2.2K	5%	1/4W
R704	1-247-891-00	CARBON	330K	5%	1/4W	R802	1-247-807-31	CARBON	100	5%	1/4W
						R803	1-249-417-11	CARBON	1K	5%	1/4W
R705	1-247-896-11	CARBON	510K	5%	1/4W	R804	1-249-417-11	CARBON	1K	5%	1/4W
R706	1-247-883-00	CARBON	150K	5%	1/4W	R805	1-249-417-11	CARBON	1K	5%	1/4W
R708	1-247-887-00	CARBON	220K	5%	1/4W						
R709	1-249-437-11	CARBON	47K	5%	1/4W	R806	1-249-417-11	CARBON	1K	5%	1/4W
R710	1-249-435-11	CARBON	33K	5%	1/4W	R807	1-249-417-11	CARBON	1K	5%	1/4W
						R808	1-249-417-11	CARBON	1K	5%	1/4W
R711	1-249-441-11	CARBON	100K	5%	1/4W	R809	1-249-417-11	CARBON	1K	5%	1/4W
R712	1-247-883-00	CARBON	150K	5%	1/4W	R810	1-249-417-11	CARBON	1K	5%	1/4W
R713	1-249-417-11	CARBON	1K	5%	1/4W						
R714	1-249-417-11	CARBON	1K	5%	1/4W	R811	1-249-417-11	CARBON	1K	5%	1/4W
R715	1-249-417-11	CARBON	1K	5%	1/4W	R812	1-249-425-11	CARBON	4.7K	5%	1/4W
						R813	1-249-417-11	CARBON	1K	5%	1/4W
R716	1-247-883-00	CARBON	150K	5%	1/4W	R814	1-249-437-11	CARBON	47K	5%	1/4W
R717	1-247-863-91	CARBON	22K	5%	1/4W	R815	1-249-417-11	CARBON	1K	5%	1/4W
R718	1-249-425-11	CARBON	4.7K	5%	1/4W						
R719	1-247-903-00	CARBON	1M	5%	1/4W	R816	1-249-417-11	CARBON	1K	5%	1/4W
R720	1-249-425-11	CARBON	4.7K	5%	1/4W	R817	1-249-417-11	CARBON	1K	5%	1/4W
						R818	1-249-417-11	CARBON	1K	5%	1/4W
R721	1-247-843-11	CARBON	3.3K	5%	1/4W	R819	1-249-417-11	CARBON	1K	5%	1/4W
R722	1-247-903-00	CARBON	1M	5%	1/4W	R820	1-249-417-11	CARBON	1K	5%	1/4W
R723	1-247-843-11	CARBON	3.3K	5%	1/4W						

CD/SYSTEM

HEADPHONE

HEAD RELAY

INLET

Ref. No.	Part No.	Description			Remark
R821	1-249-417-11	CARBON	1K	5%	1/4W
R822	1-249-417-11	CARBON	1K	5%	1/4W
R823	1-249-417-11	CARBON	1K	5%	1/4W
R824	1-249-417-11	CARBON	1K	5%	1/4W
R826	1-249-425-11	CARBON	4.7K	5%	1/4W
R827	1-249-425-11	CARBON	4.7K	5%	1/4W
R828	1-249-425-11	CARBON	4.7K	5%	1/4W
R829	1-249-417-11	CARBON	1K	5%	1/4W
R830	1-249-417-11	CARBON	1K	5%	1/4W
R831	1-249-417-11	CARBON	1K	5%	1/4W
R832	1-249-417-11	CARBON	1K	5%	1/4W
R833	1-249-417-11	CARBON	1K	5%	1/4W
R834	1-249-417-11	CARBON	1K	5%	1/4W
R835	1-249-417-11	CARBON	1K	5%	1/4W
R836	1-249-417-11	CARBON	1K	5%	1/4W
R837	1-249-417-11	CARBON	1K	5%	1/4W
R838	1-249-417-11	CARBON	1K	5%	1/4W
R840	1-249-417-11	CARBON	1K	5%	1/4W
R841	1-249-417-11	CARBON	1K	5%	1/4W
R842	1-249-417-11	CARBON	1K	5%	1/4W
R843	1-249-437-11	CARBON	47K	5%	1/4W
R844	1-249-417-11	CARBON	1K	5%	1/4W
R846	1-249-425-11	CARBON	4.7K	5%	1/4W
R847	1-247-885-00	CARBON	180K	5%	1/4W
R848	1-249-441-11	CARBON	100K	5%	1/4W
R849	1-247-883-00	CARBON	150K	5%	1/4W
R850	1-247-883-00	CARBON	150K	5%	1/4W
R851	1-249-413-11	CARBON	470	5%	1/4W
R852	1-249-429-11	CARBON	10K	5%	1/4W
R853	1-249-417-11	CARBON	1K	5%	1/4W
R887	1-249-437-11	CARBON	47K	5%	1/4W
R890	1-249-417-11	CARBON	1K	5%	1/4W
R891	1-249-437-11	CARBON	47K	5%	1/4W
R894	1-249-421-11	CARBON	2.2K	5%	1/4W
R895	1-247-895-91	CARBON	470K	5%	1/4W
R896	1-247-887-00	CARBON	220K	5%	1/4W
R897	1-249-417-11	CARBON	1K	5%	1/4W
R898	1-249-415-11	CARBON	680	5%	1/4W
R899	1-249-425-11	CARBON	4.7K	5%	1/4W

< VIBRATOR >

X701	1-767-226-11	VIBRATOR, CRYSTAL (16.9344MHz)
X801	1-767-184-11	VIBRATOR, CERAMIC (4.21MHz)
X802	1-767-697-11	VIBRATOR, CRYSTAL (32.768kHz)

*	1-671-552-11	HEADPHONE BOARD

< CONNECTOR >

* CN501	1-564-519-11	PLUG, CONNECTOR 4P
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< JACK >

J501	1-566-891-11	JACK (♁)
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< RESISTOR >

R150	1-249-404-00	CARBON	82	5%	1/4W
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Ref. No.	Part No.	Description			Remark
R250	1-249-404-00	CARBON	82	5%	1/4W

	1-673-339-11	HEAD RELAY BOARD			

< CONNECTOR >					
CN692	1-580-167-11	PIN, CONNECTOR (PC BOARD) 6P			

*	1-673-153-11	INLET BOARD			

< CAPACITOR >					
C906	1-104-665-11	ELECT	100uF	20%	16V
C907	1-162-839-11	CERAMIC	0.01uF	10%	16V
C908	1-104-666-11	ELECT	220uF	20%	10V
< DIODE >					
D908	8-719-991-33	DIODE	1SS133T-77		
D909	8-719-991-33	DIODE	1SS133T-77		
D910	8-719-991-33	DIODE	1SS133T-77		
D911	8-719-923-60	DIODE	MTZJ-T-77-9.1A		
D912	8-719-109-92	DIODE	RD6.2ES-B1		
D913	8-719-991-33	DIODE	1SS133T-77		
D914	8-719-991-33	DIODE	1SS133T-77		
D915	8-719-991-33	DIODE	1SS133T-77		
D916	8-719-991-33	DIODE	1SS133T-77		
< JACK >					
△J901	1-540-009-11	INLET, AC (～AC IN)			
< TRANSISTOR >					
Q901	8-729-037-02	TRANSISTOR	KTA1266Y-AT		
Q902	8-729-036-89	TRANSISTOR	KTC3198GR-AT		
Q903	8-729-037-02	TRANSISTOR	KTA1266Y-AT		
Q904	8-729-036-89	TRANSISTOR	KTC3198GR-AT		
Q905	8-729-036-89	TRANSISTOR	KTC3198GR-AT		
Q906	8-729-036-89	TRANSISTOR	KTC3198GR-AT		
Q907	8-729-036-77	TRANSISTOR	KRC107M		
< RESISTOR >					
R901	1-249-441-11	CARBON	100K	5%	1/4W
R902	1-249-429-11	CARBON	10K	5%	1/4W
R903	1-249-441-11	CARBON	100K	5%	1/4W
R904	1-249-429-11	CARBON	10K	5%	1/4W
R905	1-249-429-11	CARBON	10K	5%	1/4W
R906	1-249-417-11	CARBON	1K	5%	1/4W
R907	1-249-417-11	CARBON	1K	5%	1/4W
R908	1-249-429-11	CARBON	10K	5%	1/4W
R909	1-249-429-11	CARBON	10K	5%	1/4W
R910	1-249-429-11	CARBON	10K	5%	1/4W
R911	1-249-417-11	CARBON	1K	5%	1/4W
R912	1-249-429-11	CARBON	10K	5%	1/4W
R913	1-249-425-11	CARBON	4.7K	5%	1/4W
R914	1-249-417-11	CARBON	1K	5%	1/4W

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.

LAMP

LCD

LINE

LOADING

Ref. No.	Part No.	Description	Remark
*	1-671-555-11	LAMP BOARD *****	
		< PILOT LAMP >	
PL801	1-517-487-41	LAMP, PILOT (BACK-LIGHT)	
PL802	1-517-487-41	LAMP, PILOT (BACK-LIGHT)	
PL803	1-517-487-41	LAMP, PILOT (BACK-LIGHT)	

*	A-3321-899-A	LCD BOARD, COMPLETE *****	
	1-783-993-12	WIRE, PARALLEL (FFC) (30 CORE)	
	1-783-994-11	WIRE, PARALLEL (FFC) (13 CORE)	
	3-028-617-01	HOLDER, LCD	
	3-028-618-02	ILLUMINATOR	
	3-028-649-01	PAPER, SHIELD	
		< CONNECTOR >	
CN802	1-563-633-11	HOUSING, CONNECTOR 30P	
CN804	1-691-072-11	HOUSING, CONNECTOR 13P	
		< DIODE >	
D811	8-719-059-97	LED L-34HD (OPR-BATT)	
		< IC >	
IC802	8-749-014-66	IC NJL64H400A	
		< LIQUID CRYSTAL DISPLAY >	
LCD801	1-803-232-11	DISPLAY PANEL, LIQUID CRYSTAL	
		< RESISTOR >	
R502	1-249-425-11	CARBON 4.7K 5% 1/4W	
R504	1-249-418-11	CARBON 1.2K 5% 1/4W	
R505	1-249-420-11	CARBON 1.8K 5% 1/4W	
R862	1-249-425-11	CARBON 4.7K 5% 1/4W	
R863	1-249-415-11	CARBON 680 5% 1/4W	
R864	1-249-416-11	CARBON 820 5% 1/4W	
R865	1-249-418-11	CARBON 1.2K 5% 1/4W	
R866	1-249-420-11	CARBON 1.8K 5% 1/4W	
R867	1-247-843-11	CARBON 3.3K 5% 1/4W	
R869	1-249-427-11	CARBON 6.8K 5% 1/4W	
R870	1-249-432-11	CARBON 18K 5% 1/4W	
R871	1-249-425-11	CARBON 4.7K 5% 1/4W	
R872	1-249-415-11	CARBON 680 5% 1/4W	
R873	1-249-416-11	CARBON 820 5% 1/4W	
R874	1-249-425-11	CARBON 4.7K 5% 1/4W	
R875	1-249-420-11	CARBON 1.8K 5% 1/4W	
R876	1-247-843-11	CARBON 3.3K 5% 1/4W	
R877	1-249-427-11	CARBON 6.8K 5% 1/4W	
R879	1-249-425-11	CARBON 4.7K 5% 1/4W	
R880	1-249-415-11	CARBON 680 5% 1/4W	
R881	1-249-416-11	CARBON 820 5% 1/4W	
R882	1-249-418-11	CARBON 1.2K 5% 1/4W	
R883	1-249-427-11	CARBON 6.8K 5% 1/4W	
R884	1-249-432-11	CARBON 18K 5% 1/4W	
R885	1-249-415-11	CARBON 680 5% 1/4W	
R886	1-247-818-91	CARBON 300 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R893	1-247-843-11	CARBON 3.3K 5% 1/4W	
		< SWITCH >	
S809	1-762-798-11	SWITCH, KEYBOARD (EDIT)	
S810	1-762-798-11	SWITCH, KEYBOARD (MEGA BASS)	
S811	1-762-798-11	SWITCH, KEYBOARD (SOUND)	
S812	1-762-798-11	SWITCH, KEYBOARD (CANCEL)	
S813	1-762-798-11	SWITCH, KEYBOARD (DISPLAY)	
S814	1-762-798-11	SWITCH, KEYBOARD (VOL -)	
S815	1-762-798-11	SWITCH, KEYBOARD (VOL +)	
S816	1-762-798-11	SWITCH, KEYBOARD (STANDBY)	
S817	1-762-798-11	SWITCH, KEYBOARD (SLEEP)	
S818	1-762-798-11	SWITCH, KEYBOARD (POWER)	
S819	1-762-798-11	SWITCH, KEYBOARD (MD (LINE))	
S820	1-762-798-11	SWITCH, KEYBOARD (RADIO BAND)	
S821	1-762-798-11	SWITCH, KEYBOARD (CLOCK)	
S822	1-762-798-11	SWITCH, KEYBOARD (TIMER)	
S823	1-762-798-11	SWITCH, KEYBOARD (TUNING TIME SET -)	
S824	1-762-798-11	SWITCH, KEYBOARD (TUNING TIME SET +)	
S825	1-762-798-11	SWITCH, KEYBOARD (ENTER MEMORY CHECK)	
S826	1-762-798-11	SWITCH, KEYBOARD (PRESET +)	
S832	1-762-798-11	SWITCH, KEYBOARD (AUTO PRESET)	
S833	1-762-798-11	SWITCH, KEYBOARD (MODE MONO/ST ISS)	
S834	1-762-798-11	SWITCH, KEYBOARD (PRESET -)	

*	1-671-556-11	LINE BOARD *****	
		< CAPACITOR >	
C401	1-162-851-11	CERAMIC 0.1uF 10% 16V	
C402	1-124-907-11	ELECT 10uF 20% 50V	
C403	1-162-282-31	CERAMIC 100PF 10% 50V	
C404	1-162-282-31	CERAMIC 100PF 10% 50V	
C405	1-162-282-31	CERAMIC 100PF 10% 50V	
C406	1-162-282-31	CERAMIC 100PF 10% 50V	
		< CONNECTOR >	
* CN401	1-564-506-11	PLUG, CONNECTOR 3P	
* CN402	1-564-508-11	PLUG, CONNECTOR 5P	
		< IC >	
IC401	8-749-921-12	IC GP1F32T (OPTICAL DIGITAL OUT (CD))	
		< JACK >	
J401	1-566-891-21	JACK (LINE IN)	
J402	1-566-891-21	JACK (LINE OUT)	

*	1-667-045-11	LOADING BOARD *****	
	7-623-510-01	LUG, 4	
		< CAPACITOR >	
C790	1-104-664-11	ELECT 47uF 20% 25V	

LOADING

MAIN

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
* CN781	1-580-923-11	HOUSING, CONNECTOR 2P	
* CN790	1-580-926-11	HOUSING, CONNECTOR 5P	
< DIODE >			
D790	8-719-970-02	DIODE 1SR139-400	
< IC >			
IC790	8-759-501-73	IC BA6418N	
< COIL >			
L790	1-412-852-11	INDUCTOR 47uH	
< RESISTOR >			
R790	1-247-847-31	CARBON 4.7K 5% 1/4W	
< SWITCH >			
S790	1-762-951-11	SWITCH, PUSH (CLOSE)	
S791	1-762-951-11	SWITCH, PUSH (OPEN)	

* A-3321-895-A	MAIN BOARD, COMPLETE		*****
7-685-646-79	SCREW +BVTP	3X8 TYPE2 N-S	
< CAPACITOR >			
C101	1-126-963-11	ELECT 4.7uF 20% 50V	
C102	1-162-301-11	CERAMIC 0.0015uF 20% 16V	
C103	1-104-664-11	ELECT 47uF 20% 10V	
C104	1-161-020-11	CERAMIC 0.039uF 10% 16V	
C105	1-124-907-11	ELECT 10uF 20% 50V	
C106	1-162-301-11	CERAMIC 0.0015uF 30% 16V	
C107	1-124-902-00	ELECT 0.47uF 20% 50V	
C108	1-126-963-11	ELECT 4.7uF 20% 50V	
C109	1-124-907-11	ELECT 10uF 20% 50V	
C110	1-162-282-31	CERAMIC 100PF 10% 50V	
C111	1-126-963-11	ELECT 4.7uF 20% 50V	
C112	1-124-903-11	ELECT 1uF 20% 50V	
C113	1-162-286-21	CERAMIC 220PF 10% 50V	
C114	1-162-282-31	CERAMIC 100PF 10% 50V	
C115	1-124-903-11	ELECT 1uF 20% 50V	
C116	1-124-903-11	ELECT 1uF 20% 50V	
C117	1-162-849-11	CERAMIC 0.068uF 10% 16V	
C118	1-162-849-11	CERAMIC 0.068uF 10% 16V	
C119	1-162-837-11	CERAMIC 0.0068uF 10% 16V	
C120	1-104-664-11	ELECT 47uF 20% 10V	
C121	1-124-443-00	ELECT 100uF 20% 10V	
C122	1-136-165-00	FILM 0.1uF 5% 50V	
C123	1-126-927-11	ELECT 2200uF 20% 10V	
C124	1-162-843-11	CERAMIC 0.022uF 10% 16V	
C125	1-162-282-31	CERAMIC 100PF 10% 50V	
C126	1-162-282-31	CERAMIC 100PF 10% 50V	
C127	1-162-301-11	CERAMIC 0.0015uF 30% 16V	
C201	1-126-963-11	ELECT 4.7uF 20% 50V	
C202	1-162-301-11	CERAMIC 0.0015uF 20% 16V	
C203	1-104-664-11	ELECT 47uF 20% 10V	

Ref. No.	Part No.	Description	Remark
C204	1-161-020-11	CERAMIC 0.039uF 10% 16V	
C205	1-124-907-11	ELECT 10uF 20% 50V	
C206	1-162-301-11	CERAMIC 0.0015uF 30% 16V	
C207	1-124-902-00	ELECT 0.47uF 20% 50V	
C208	1-126-963-11	ELECT 4.7uF 20% 50V	
C209	1-124-907-11	ELECT 10uF 20% 50V	
C210	1-162-282-31	CERAMIC 100PF 10% 50V	
C211	1-126-963-11	ELECT 4.7uF 20% 50V	
C212	1-124-903-11	ELECT 1uF 20% 50V	
C213	1-162-286-21	CERAMIC 220PF 10% 50V	
C214	1-162-282-31	CERAMIC 100PF 10% 50V	
C215	1-124-903-11	ELECT 1uF 20% 50V	
C216	1-124-903-11	ELECT 1uF 20% 50V	
C217	1-162-849-11	CERAMIC 0.068uF 10% 16V	
C218	1-162-849-11	CERAMIC 0.068uF 10% 16V	
C219	1-162-837-11	CERAMIC 0.0068uF 10% 16V	
C220	1-104-664-11	ELECT 47uF 20% 10V	
C221	1-124-443-00	ELECT 100uF 20% 10V	
C222	1-136-165-00	FILM 0.1uF 5% 50V	
C223	1-126-927-11	ELECT 2200uF 20% 10V	
C224	1-162-843-11	CERAMIC 0.022uF 10% 16V	
C225	1-162-282-31	CERAMIC 100PF 10% 50V	
C226	1-162-282-31	CERAMIC 100PF 10% 50V	
C227	1-162-301-11	CERAMIC 0.0015uF 30% 16V	
C300	1-128-548-11	ELECT 4700uF 20% 25V	
C301	1-104-664-11	ELECT 47uF 20% 10V	
C302	1-104-666-11	ELECT 220uF 20% 10V	
C303	1-104-664-11	ELECT 47uF 20% 10V	
C304	1-161-020-11	CERAMIC 0.039uF 10% 16V	
C305	1-124-907-11	ELECT 10uF 20% 50V	
C306	1-104-664-11	ELECT 47uF 20% 10V	
C308	1-130-481-00	MYLAR 0.0068uF 5% 50V	
C309	1-130-479-00	MYLAR 0.0047uF 5% 50V	
C310	1-130-471-00	MYLAR 0.001uF 5% 50V	
C311	1-130-471-00	MYLAR 0.001uF 5% 50V	
C312	1-104-664-11	ELECT 47uF 20% 10V	
C313	1-126-963-11	ELECT 4.7uF 20% 50V	
C314	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C315	1-130-481-00	MYLAR 0.0068uF 5% 50V	
C316	1-104-664-11	ELECT 47uF 20% 10V	
C317	1-124-443-00	ELECT 100uF 20% 10V	
C319	1-124-443-00	ELECT 100uF 20% 10V	
C320	1-104-666-11	ELECT 220uF 20% 10V	
C321	1-126-963-11	ELECT 4.7uF 20% 50V	
C322	1-126-233-11	ELECT 22uF 20% 50V	
C323	1-162-851-11	CERAMIC 0.1uF 10% 16V	
C324	1-126-963-11	ELECT 4.7uF 20% 50V	
C325	1-124-443-00	ELECT 100uF 20% 10V	
C326	1-104-664-11	ELECT 47uF 20% 10V	
C327	1-162-843-11	CERAMIC 0.022uF 10% 16V	
C328	1-124-478-11	ELECT 100uF 20% 25V	
C329	1-130-499-00	MYLAR 0.22uF 5% 50V	
C330	1-104-664-11	ELECT 47uF 20% 10V	
C331	1-162-286-21	CERAMIC 220PF 10% 50V	
C332	1-162-286-21	CERAMIC 220PF 10% 50V	
C333	1-162-292-31	CERAMIC 680PF 10% 50V	
C334	1-104-666-11	ELECT 220uF 20% 10V	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C335	1-124-902-00	ELECT	0.47uF 20% 50V				
C338	1-126-963-11	ELECT	4.7uF 20% 50V			< COIL >	
C339	1-126-963-11	ELECT	4.7uF 20% 50V				
C340	1-162-292-31	CERAMIC	680PF 10% 50V	L101	1-414-142-11	INDUCTOR 1uH	
C341	1-162-843-11	CERAMIC	0.022uF 10% 16V	L102	1-414-142-11	INDUCTOR 1uH	
C342	1-124-252-00	ELECT	0.33uF 20% 50V	L201	1-414-142-11	INDUCTOR 1uH	
C343	1-126-963-11	ELECT	4.7uF 20% 50V	L202	1-414-142-11	INDUCTOR 1uH	
C344	1-126-962-11	ELECT	3.3uF 20% 50V	L301	1-410-509-11	INDUCTOR 10uH	
C345	1-126-961-11	ELECT	2.2uF 20% 50V	L302	1-414-142-11	INDUCTOR 1uH	
C346	1-124-907-11	ELECT	10uF 20% 50V	L303	1-414-142-11	INDUCTOR 1uH	
C361	1-124-443-00	ELECT	100uF 20% 10V			< TRANSISTOR >	
C362	1-104-664-11	ELECT	47uF 20% 10V	Q101	8-729-036-80	TRANSISTOR KRC110M	
C363	1-162-843-11	CERAMIC	0.022uF 10% 16V	Q102	8-729-036-80	TRANSISTOR KRC110M	
C364	1-162-843-11	CERAMIC	0.022uF 10% 16V	Q103	8-729-905-50	TRANSISTOR DTC343TS	
C365	1-124-443-00	ELECT	100uF 20% 10V	Q104	8-729-905-50	TRANSISTOR DTC343TS	
C366	1-104-666-11	ELECT	220uF 20% 10V	Q105	8-729-036-77	TRANSISTOR KRC107M	
C367	1-162-843-11	CERAMIC	0.022uF 10% 16V	Q106	8-729-905-50	TRANSISTOR DTC343TS	
C368	1-162-843-11	CERAMIC	0.022uF 10% 16V	Q201	8-729-036-80	TRANSISTOR KRC110M	
C369	1-162-851-11	CERAMIC	0.1uF 10% 16V	Q202	8-729-036-80	TRANSISTOR KRC110M	
C371	1-162-843-11	CERAMIC	0.022uF 10% 16V	Q203	8-729-905-50	TRANSISTOR DTC343TS	
C372	1-162-843-11	CERAMIC	0.022uF 10% 16V	Q204	8-729-905-50	TRANSISTOR DTC343TS	
		< CONNECTOR >		Q205	8-729-036-77	TRANSISTOR KRC107M	
* CN301	1-580-158-11	PIN, CONNECTOR (PC BOARD) 6P		Q206	8-729-905-50	TRANSISTOR DTC343TS	
CN302	1-691-079-31	HOUSING, CONNECTOR 20P		Q301	8-729-119-78	TRANSISTOR 2SC403SP-51	
CN303	1-691-071-31	HOUSING, CONNECTOR 12P		Q302	8-729-119-78	TRANSISTOR 2SC403SP-51	
* CN304	1-564-507-11	PLUG, CONNECTOR 4P		Q303	8-729-036-86	TRANSISTOR KTC3203Y-AT	
CN305	1-691-042-31	HOUSING, CONNECTOR 10P		Q304	8-729-036-86	TRANSISTOR KTC3203Y-AT	
* CN306	1-564-508-11	PLUG, CONNECTOR 5P		Q305	8-729-037-02	TRANSISTOR KTA1266Y-AT	
		< DIODE >		Q306	8-729-036-77	TRANSISTOR KRC107M	
D301	8-719-991-33	DIODE 1SS133T-77		Q307	8-729-036-77	TRANSISTOR KRC107M	
D302	8-719-991-33	DIODE 1SS133T-77		Q308	8-729-036-86	TRANSISTOR KTC3203Y-AT	
D303	8-719-991-33	DIODE 1SS133T-77		Q309	8-729-037-02	TRANSISTOR KTA1266Y-AT	
D304	8-719-991-33	DIODE 1SS133T-77		Q310	8-729-036-77	TRANSISTOR KRC107M	
D305	8-719-991-33	DIODE 1SS133T-77		Q311	8-729-037-34	TRANSISTOR KRA107M	
D307	8-719-991-33	DIODE 1SS133T-77		Q312	8-729-036-77	TRANSISTOR KRC107M	
D308	8-719-991-33	DIODE 1SS133T-77		Q313	8-729-037-34	TRANSISTOR KRA107M	
D309	8-719-991-33	DIODE 1SS133T-77		Q314	8-729-037-34	TRANSISTOR KRA107M	
D310	8-719-991-33	DIODE 1SS133T-77		Q315	8-729-036-89	TRANSISTOR KTC3198GR-AT	
D311	8-719-991-33	DIODE 1SS133T-77		Q316	8-729-036-77	TRANSISTOR KRC107M	
D312	8-719-991-33	DIODE 1SS133T-77		Q318	8-729-036-89	TRANSISTOR KTC3198GR-AT	
D313	8-719-991-33	DIODE 1SS133T-77		Q319	8-729-036-77	TRANSISTOR KRC107M	
D361	8-719-109-88	DIODE RD5.6ES-B1		Q320	8-729-920-94	TRANSISTOR DTA123YS	
D362	8-719-110-09	DIODE RD8.2ES-B3		Q321	8-729-037-34	TRANSISTOR KRA107M	
D364	8-719-109-97	DIODE RD6.8ES-B2		Q341	8-729-036-77	TRANSISTOR KRC107M	
D365	8-719-991-33	DIODE 1SS133T-77		Q361	8-729-036-86	TRANSISTOR KTC3203Y-AT	
D366	8-719-991-33	DIODE 1SS133T-77		Q362	8-729-209-15	TRANSISTOR 2SD2012	
		< IC >		Q363	8-729-209-15	TRANSISTOR 2SD2012	
IC301	8-759-264-71	IC TA2068N		Q365	8-729-037-29	TRANSISTOR KRA102M	
IC302	8-759-432-41	IC BH3854AS		Q366	8-729-036-89	TRANSISTOR KTC3198GR-AT	
IC303	8-759-634-51	IC M5218AP				< RESISTOR >	
IC304	8-759-426-51	IC BA5417		R101	1-249-419-11	CARBON 1.5K 5% 1/4W	
IC305	8-759-800-71	IC LA2010		R102	1-249-430-11	CARBON 12K 5% 1/4W	
IC306	8-759-095-60	IC S-81250PG		R103	1-249-403-11	CARBON 68 5% 1/4W	
IC307	8-759-564-82	IC BA09ST-V5		R104	1-249-440-11	CARBON 82K 5% 1/4W	
				R105	1-247-843-11	CARBON 3.3K 5% 1/4W	
				R106	1-249-429-11	CARBON 10K 5% 1/4W	

MAIN

PICK-UP RELAY

Ref. No.	Part No.	Description	Remark
R107	1-249-417-11	CARBON 1K 5%	1/4W
R108	1-249-429-11	CARBON 10K 5%	1/4W
R109	1-249-437-11	CARBON 47K 5%	1/4W
R110	1-249-429-11	CARBON 10K 5%	1/4W
R111	1-247-843-11	CARBON 3.3K 5%	1/4W
R112	1-249-429-11	CARBON 10K 5%	1/4W
R113	1-249-429-11	CARBON 10K 5%	1/4W
R114	1-249-417-11	CARBON 1K 5%	1/4W
R115	1-249-437-11	CARBON 47K 5%	1/4W
R116	1-247-843-11	CARBON 3.3K 5%	1/4W
R117	1-249-431-11	CARBON 15K 5%	1/4W
R118	1-249-426-11	CARBON 5.6K 5%	1/4W
R119	1-249-417-11	CARBON 1K 5%	1/4W
R120	1-249-420-11	CARBON 1.8K 5%	1/4W
R121	1-249-431-11	CARBON 15K 5%	1/4W
R122	1-249-425-11	CARBON 4.7K 5%	1/4W
R123	1-249-410-11	CARBON 270 5%	1/4W
R124	1-249-429-11	CARBON 10K 5%	1/4W
R125	1-249-385-11	CARBON 2.2 5%	1/6W
R126	1-249-421-11	CARBON 2.2K 5%	1/4W
R127	1-247-843-11	CARBON 3.3K 5%	1/4W
R140	1-249-429-11	CARBON 10K 5%	1/4W
R201	1-249-419-11	CARBON 1.5K 5%	1/4W
R202	1-249-430-11	CARBON 12K 5%	1/4W
R203	1-249-403-11	CARBON 68 5%	1/4W
R204	1-249-440-11	CARBON 82K 5%	1/4W
R205	1-247-843-11	CARBON 3.3K 5%	1/4W
R206	1-249-429-11	CARBON 10K 5%	1/4W
R207	1-249-417-11	CARBON 1K 5%	1/4W
R208	1-249-429-11	CARBON 10K 5%	1/4W
R209	1-249-437-11	CARBON 47K 5%	1/4W
R210	1-249-429-11	CARBON 10K 5%	1/4W
R211	1-247-843-11	CARBON 3.3K 5%	1/4W
R212	1-249-429-11	CARBON 10K 5%	1/4W
R213	1-249-429-11	CARBON 10K 5%	1/4W
R214	1-249-417-11	CARBON 1K 5%	1/4W
R215	1-249-437-11	CARBON 47K 5%	1/4W
R216	1-247-843-11	CARBON 3.3K 5%	1/4W
R217	1-249-431-11	CARBON 15K 5%	1/4W
R218	1-249-426-11	CARBON 5.6K 5%	1/4W
R219	1-249-417-11	CARBON 1K 5%	1/4W
R220	1-249-420-11	CARBON 1.8K 5%	1/4W
R221	1-249-431-11	CARBON 15K 5%	1/4W
R222	1-249-425-11	CARBON 4.7K 5%	1/4W
R223	1-249-410-11	CARBON 270 5%	1/4W
R224	1-249-429-11	CARBON 10K 5%	1/4W
R225	1-249-385-11	CARBON 2.2 5%	1/6W
R226	1-249-421-11	CARBON 2.2K 5%	1/4W
R227	1-247-843-11	CARBON 3.3K 5%	1/4W
R240	1-249-429-11	CARBON 10K 5%	1/4W
R301	1-247-791-91	CARBON 22 5%	1/4W
R302	1-247-903-00	CARBON 1M 5%	1/4W
R303	1-249-429-11	CARBON 10K 5%	1/4W
R304	1-249-429-11	CARBON 10K 5%	1/4W
R305	1-247-843-11	CARBON 3.3K 5%	1/4W
R306	1-247-843-11	CARBON 3.3K 5%	1/4W
R307	1-249-419-11	CARBON 1.5K 5%	1/4W
R308	1-249-419-11	CARBON 1.5K 5%	1/4W

Ref. No.	Part No.	Description	Remark
R309	1-247-843-11	CARBON 3.3K 5%	1/4W
R310	1-249-441-11	CARBON 100K 5%	1/4W
R311	1-249-401-11	CARBON 47 5%	1/4W
R312	1-247-791-91	CARBON 22 5%	1/4W
R313	1-249-425-11	CARBON 4.7K 5%	1/4W
R314	1-249-429-11	CARBON 10K 5%	1/4W
R315	1-249-393-11	CARBON 10 5%	1/4W
R316	1-249-425-11	CARBON 4.7K 5%	1/4W
R317	1-249-437-11	CARBON 47K 5%	1/4W
R318	1-249-401-11	CARBON 47 5%	1/4W
R319	1-249-429-11	CARBON 10K 5%	1/4W
R320	1-249-429-11	CARBON 10K 5%	1/4W
R321	1-249-401-11	CARBON 47 5%	1/4W
R322	1-247-903-00	CARBON 1M 5%	1/4W
R323	1-247-903-00	CARBON 1M 5%	1/4W
R324	1-249-425-11	CARBON 4.7K 5%	1/4W
R325	1-249-425-11	CARBON 4.7K 5%	1/4W
R326	1-249-425-11	CARBON 4.7K 5%	1/4W
R327	1-249-432-11	CARBON 18K 5%	1/4W
R328	1-247-843-11	CARBON 3.3K 5%	1/4W
R329	1-249-417-11	CARBON 1K 5%	1/4W
R330	1-249-441-11	CARBON 100K 5%	1/4W
R331	1-249-429-11	CARBON 10K 5%	1/4W
R332	1-249-413-11	CARBON 470 5%	1/4W
R333	1-249-425-11	CARBON 4.7K 5%	1/4W
R334	1-249-437-11	CARBON 47K 5%	1/4W
R335	1-247-863-91	CARBON 22K 5%	1/4W
R336	1-249-429-11	CARBON 10K 5%	1/4W
R337	1-249-429-11	CARBON 10K 5%	1/4W
R338	1-249-429-11	CARBON 10K 5%	1/4W
R339	1-247-903-00	CARBON 1M 5%	1/4W
R340	1-249-429-11	CARBON 10K 5%	1/4W
R341	1-249-426-11	CARBON 5.6K 5%	1/4W
R342	1-247-891-00	CARBON 330K 5%	1/4W
R343	1-249-441-11	CARBON 100K 5%	1/4W
R344	1-249-417-11	CARBON 1K 5%	1/4W
R345	1-249-401-11	CARBON 47 5%	1/4W
R346	1-249-417-11	CARBON 1K 5%	1/4W
R347	1-249-417-11	CARBON 1K 5%	1/4W
R363	1-249-407-11	CARBON 150 5%	1/4W
R364	1-249-421-11	CARBON 2.2K 5%	1/4W
R365	1-247-815-91	CARBON 220 5%	1/4W
R367	1-247-815-91	CARBON 220 5%	1/4W
< TRANSFORMER >			
T301	1-433-372-11	TRANSFORMER, BIAS OSCILLATION	

*	1-667-046-11	PICK-UP RELAY BOARD	

< CONNECTOR >			
CN702	1-565-874-31	PIN, CONNECTOR (PC BOARD) 2P	
CN703	1-565-874-11	PIN, CONNECTOR (PC BOARD) 2P	
CN704	1-565-874-11	PIN, CONNECTOR (PC BOARD) 2P	
CN706	1-784-213-11	CONNECTOR, FFC/FPC 14P	
CN707	1-569-309-11	SOCKET, CONNECTOR (L TYRE) 21P	

POWER**SWITCH (1)****SWITCH (2)****TC RF****TUNER**

Ref. No.	Part No.	Description	Remark
*	1-673-152-11	POWER BOARD *****	
	1-533-233-31	HOLDER, FUSE < CAPACITOR >	
C901	1-101-005-00	CERAMIC 22000PF	50V
C902	1-101-005-00	CERAMIC 22000PF	50V
C903	1-101-005-00	CERAMIC 22000PF	50V
C904	1-101-005-00	CERAMIC 22000PF	50V
C905	1-136-165-00	FILM 0.1uF 5%	50V
		< CONNECTOR >	
* CN901	1-564-509-11	PLUG, CONNECTOR 6P	
* CN902	1-564-506-11	PLUG, CONNECTOR 3P < DIODE >	
D901	8-719-046-07	DIODE 2A02M	
D902	8-719-046-07	DIODE 2A02M	
D903	8-719-046-07	DIODE 2A02M	
D904	8-719-046-07	DIODE 2A02M	
D905	8-719-991-33	DIODE 1SS133T-77	
D906	8-719-991-33	DIODE 1SS133T-77	
D907	8-719-981-95	DIODE MTZJ-2.7B < FUSE >	
△ F901	1-533-420-11	FUSE, GLASS CYLINDRICAL(DIA.5) (5A/125V) < TRANSFORMER >	
△ T901	1-433-455-11	TRANSFORMER, POWER *****	
*	1-671-550-11	SWITCH (1) BOARD ***** < CONNECTOR >	
* CN805	1-564-517-11	PLUG, CONNECTOR 2P < RESISTOR >	
R855	1-249-415-11	CARBON 680 5%	1/4W
R856	1-249-416-11	CARBON 820 5%	1/4W
R857	1-249-418-11	CARBON 1.2K 5%	1/4W
R858	1-249-420-11	CARBON 1.8K 5%	1/4W
R859	1-247-843-11	CARBON 3.3K 5%	1/4W
R860	1-249-427-11	CARBON 6.8K 5%	1/4W
R861	1-249-432-11	CARBON 18K 5%	1/4W
		< SWITCH >	
S801	1-762-798-11	SWITCH, KEYBOARD (▶)	
S802	1-762-798-11	SWITCH, KEYBOARD (◀)	
S803	1-762-798-11	SWITCH, KEYBOARD (■)	
S804	1-762-798-11	SWITCH, KEYBOARD (▶▶)	
S805	1-762-798-11	SWITCH, KEYBOARD (◀◀)	
S806	1-762-798-11	SWITCH, KEYBOARD (●/■)	
S807	1-762-798-11	SWITCH, KEYBOARD (DIR MODE)	
S808	1-762-798-11	SWITCH, KEYBOARD (COUNTER RESET)	

Ref. No.	Part No.	Description	Remark
*	1-671-551-11	SWITCH (2) BOARD *****	
	3-028-615-01	BRACKET, CD BUTTON	
	3-031-094-03	BRACKET (2), CD	
	7-685-133-19	SCREW +P 2.6X6 TYPE2 NON-SLIT < RESISTOR >	
R503	1-249-415-11	CARBON 680 5%	1/4W
R888	1-249-416-11	CARBON 820 5%	1/4W
R889	1-249-418-11	CARBON 1.2K 5%	1/4W
R892	1-249-420-11	CARBON 1.8K 5%	1/4W
		< SWITCH >	
S827	1-762-798-11	SWITCH, KEYBOARD (CD OPEN/CLOSE ▲)	
S828	1-762-798-11	SWITCH, KEYBOARD (■)	
S829	1-762-798-11	SWITCH, KEYBOARD (▶▶)	
S830	1-762-798-11	SWITCH, KEYBOARD (▶▶▶)	
S831	1-762-798-11	SWITCH, KEYBOARD (◀◀◀)	

	1-673-338-11	TC RF BOARD ***** < CONNECTOR >	
CN691	1-580-170-11	PIN, CONNECTOR (PC BOARD) 9P < PHOTO INTERRUPTER >	
PH691	8-729-021-62	PHOTO INTERRUPTER SG-211 < RESISTOR >	
R691	1-249-411-11	CARBON 330 5%	1/4W
R692	1-247-838-00	CARBON 2K 5%	1/4W
		< VARIABLE RESISTOR >	
RV691	1-228-992-11	VARIABLE RESISTOR (TAPE SPEED) < SWITCH >	
S696	1-771-661-11	SWITCH, LEAF (HEAD POSITION) *****	
*	A-3321-893-A	TUNER BOARD, COMPLETE *****	
	1-533-233-31	HOLDER, FUSE	
	1-783-990-11	WIRE, PARALLEL (FFC) (10 CORE) < CAPACITOR >	
C3	1-162-301-11	CERAMIC 0.0015uF 30%	16V
C10	1-124-903-11	ELECT 1uF 20%	50V
C11	1-164-159-21	CERAMIC 0.1uF	50V
C12	1-126-963-11	ELECT 4.7uF 20%	50V
C13	1-162-306-11	CERAMIC 0.01uF 30%	16V
C14	1-162-843-11	CERAMIC 0.022uF 10%	16V
C15	1-162-843-11	CERAMIC 0.022uF 10%	16V
C16	1-124-903-11	ELECT 1uF 20%	50V
C17	1-124-903-11	ELECT 1uF 20%	50V
C18	1-104-666-11	ELECT 220uF 20%	10V

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.

TUNER

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description	Remark
C20	1-164-159-21	CERAMIC	0.1uF	50V			< DIODE >	
C21	1-124-903-11	ELECT	1uF	20% 50V				
C22	1-164-159-21	CERAMIC	0.1uF	50V	D1	8-719-050-72	DIODE KV1370NT	
C23	1-124-903-11	ELECT	1uF	20% 50V	D2	8-719-050-72	DIODE KV1370NT	
C24	1-162-288-31	CERAMIC	330PF	10% 50V	D3	8-719-050-69	DIODE KV1520N	
C25	1-162-306-11	CERAMIC	0.01uF	30% 16V	D4	8-719-991-33	DIODE 1SS133T-77	
C26	1-162-306-11	CERAMIC	0.01uF	30% 16V	D5	8-719-991-33	DIODE 1SS133T-77	
C27	1-162-306-11	CERAMIC	0.01uF	30% 16V	D6	8-719-991-33	DIODE 1SS133T-77	
C30	1-162-306-11	CERAMIC	0.01uF	30% 16V	D7	8-719-109-88	DIODE RD5.6ES-B1	
C31	1-102-514-11	CERAMIC	22PF	5% 50V	D8	8-719-991-33	DIODE 1SS133T-77	
C32	1-162-294-31	CERAMIC	0.001uF	10% 50V	D9	8-719-991-33	DIODE 1SS133T-77	
C33	1-164-159-21	CERAMIC	0.1uF	50V	D10	8-719-991-33	DIODE 1SS133T-77	
C34	1-162-294-31	CERAMIC	0.001uF	10% 50V	D11	8-719-991-33	DIODE 1SS133T-77	
C35	1-164-159-21	CERAMIC	0.1uF	50V	D12	8-719-991-33	DIODE 1SS133T-77	
C40	1-164-159-21	CERAMIC	0.1uF	50V			< FILTER >	
C41	1-102-820-00	CERAMIC	330PF	5% 50V	FL1	1-236-711-21	FILTER, BAND PASS	
C42	1-162-199-31	CERAMIC	10PF	5% 50V			< IC >	
C43	1-162-282-31	CERAMIC	100PF	10% 50V	IC1	8-759-549-84	IC TA2104AN	
C44	1-162-839-11	CERAMIC	0.01uF	10% 16V	IC2	8-759-549-57	IC LC72137-D	
C45	1-162-282-31	CERAMIC	100PF	10% 50V			< COIL >	
C60	1-162-199-31	CERAMIC	10PF	5% 50V	L1	1-409-905-11	COIL, FM RF (FM TRACKING)	
C61	1-162-199-31	CERAMIC	10PF	5% 50V	L2	1-409-904-11	COIL, FM OSC (FM FREQUENCY COVERAGE)	
C64	1-162-306-11	CERAMIC	0.01uF	30% 16V	L3	1-501-762-21	ANTENNA, FERRITE-ROD (AM)(AM TRACKING)	
C65	1-162-306-11	CERAMIC	0.01uF	30% 16V	L4	1-411-234-21	COIL, AM OSC (AM FREQUENCY COVERAGE)	
C68	1-162-294-31	CERAMIC	0.001uF	10% 50V	L10	1-410-521-11	INDUCTOR 100uH	
C69	1-162-294-31	CERAMIC	0.001uF	10% 50V	L40	1-410-509-11	INDUCTOR 10uH	
C70	1-162-306-11	CERAMIC	0.01uF	30% 16V	L41	1-414-142-11	INDUCTOR 1uH	
C71	1-162-306-11	CERAMIC	0.01uF	30% 16V	L90	1-414-142-11	INDUCTOR 1uH	
C72	1-126-941-11	ELECT	470uF	20% 6.3V			< TRANSISTOR >	
C73	1-162-306-11	CERAMIC	0.01uF	30% 16V	Q10	8-729-036-77	TRANSISTOR KRC107M	
C75	1-136-171-00	FILM	0.33uF	5% 50V	Q11	8-729-036-77	TRANSISTOR KRC107M	
C76	1-124-443-00	ELECT	100uF	20% 10V	Q12	8-729-036-77	TRANSISTOR KRC107M	
C77	1-130-483-00	MYLAR	0.01uF	5% 50V	Q13	8-729-036-77	TRANSISTOR KRC107M	
C80	1-162-306-11	CERAMIC	0.01uF	30% 16V			< RESISTOR >	
C81	1-162-283-31	CERAMIC	120PF	10% 50V	R1	1-249-413-11	CARBON 470 5% 1/4W	
C82	1-162-306-11	CERAMIC	0.01uF	30% 16V	R7	1-249-429-11	CARBON 10K 5% 1/4W	
C90	1-162-282-31	CERAMIC	100PF	10% 50V	R9	1-247-815-91	CARBON 220 5% 1/4W	
C91	1-162-282-31	CERAMIC	100PF	10% 50V	R10	1-249-417-11	CARBON 1K 5% 1/4W	
C92	1-162-282-31	CERAMIC	100PF	10% 50V	R11	1-247-843-11	CARBON 3.3K 5% 1/4W	
C93	1-162-306-11	CERAMIC	0.01uF	30% 16V	R12	1-249-437-11	CARBON 47K 5% 1/4W	
C95	1-162-306-11	CERAMIC	0.01uF	30% 16V	R13	1-249-421-11	CARBON 2.2K 5% 1/4W	
C96	1-162-306-11	CERAMIC	0.01uF	30% 16V	R14	1-249-437-11	CARBON 47K 5% 1/4W	
		< FILTER >			R16	1-247-807-31	CARBON 100 5% 1/4W	
CF2	1-760-738-61	FILTER, CERAMIC			R30	1-249-431-11	CARBON 15K 5% 1/4W	
CF3	1-781-171-11	DISCRIMINATOR, CERAMIC			R31	1-247-843-11	CARBON 3.3K 5% 1/4W	
		< COMPOSITION CIRCUIT BLOCK >			R32	1-249-441-11	CARBON 100K 5% 1/4W	
CFT1	1-233-885-11	ENCAPSULATED COMPONENT (AM IF)			R33	1-247-887-00	CARBON 220K 5% 1/4W	
		< CONNECTOR >			R40	1-247-887-00	CARBON 220K 5% 1/4W	
CN1	1-695-371-31	CONNECTOR, FFC/FPC 10P			R41	1-249-429-11	CARBON 10K 5% 1/4W	
		< TRIMMER >			R60	1-249-417-11	CARBON 1K 5% 1/4W	
CT1	1-141-603-11	CAP, ADJ 20PF (FM TRACKING)			R61	1-249-417-11	CARBON 1K 5% 1/4W	
CT3	1-141-601-11	CAP, ADJ 10PF (AM TRACKING)			R62	1-249-417-11	CARBON 1K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R63	1-249-417-11	CARBON	1K 5% 1/4W
R64	1-249-437-11	CARBON	47K 5% 1/4W
R66	1-249-417-11	CARBON	1K 5% 1/4W
R67	1-249-437-11	CARBON	47K 5% 1/4W
R68	1-249-417-11	CARBON	1K 5% 1/4W
R69	1-249-417-11	CARBON	1K 5% 1/4W
R71	1-249-416-11	CARBON	820 5% 1/4W
R72	1-247-843-11	CARBON	3.3K 5% 1/4W
R73	1-249-427-11	CARBON	6.8K 5% 1/4W
R74	1-249-429-11	CARBON	10K 5% 1/4W
R75	1-247-807-31	CARBON	100 5% 1/4W
R76	1-249-417-11	CARBON	1K 5% 1/4W
R77	1-247-863-91	CARBON	22K 5% 1/4W
R91	1-249-393-11	CARBON	10 5% 1/4W
< VIBRATOR >			
X1	1-760-130-11	VIBRATOR, CRYSTAL (75KHZ)	

MISCELLANEOUS			

8	1-533-233-31	HOLDER, FUSE	
103	1-783-993-11	WIRE, PARALLEL (FFC) (30 CORE)	
104	1-783-994-11	WIRE, PARALLEL (FFC) (13 CORE)	
106	1-783-990-11	WIRE, PARALLEL (FFC) (10 CORE)	
108	1-783-991-11	WIRE, PARALLEL (FFC) (12 CORE)	
109	1-783-992-11	WIRE, PARALLEL (FFC) (20 CORE)	
110	1-782-663-11	WIRE (FLAT TYPE) (21 CORE)	
303	1-690-530-81	LEAD (WITH CONNECTOR)	
308	1-660-965-11	PC BOARD, SLIDE FLEXIBLE	
△309	X-4950-060-1	OPTICAL PICK-UP (DAX01A2 RP)	
ANT1	1-754-055-11	ANTENNA, TELESCOPIC	
△F901	1-533-420-11	FUSE, GLASS CYLINDRICAL(DIA.5) (5A/125V)	
HRPE9011	1-418-847-11	HEAD ASSY, HOLDER (RECORD/PLAYBACK/ ERASE)	
LCD801	1-803-232-11	DISPLAY PANEL, LIQUID CRYSTAL	
M691	3-034-599-01	MOTOR ASSY (CAPSTAN/REEL) (INCLUDING PULLEY)	
M790	1-698-999-11	MOTOR, DC (LOADING)	
M801	A-3303-403-A	MOTOR ASSY (SLED) (INCLUDING GEAR)	
M802	A-3303-971-A	MOTOR ASSY, TURNTABLE (SPINDLE)	
PH691	8-729-021-62	PHOTO INTERRUPTOR SG-211	
PM691	1-454-896-11	SOLENOID, PLUNGER	
S696	1-771-661-11	SWITCH, LEAF (HEAD POSITION)	
S801	1-571-099-21	SWITCH (1 KEY) (LIMIT)	
SP101	1-505-742-11	SPEAKER (8cm) (L-CH)	
SP201	1-505-742-11	SPEAKER (8cm) (R-CH)	
△T901	1-433-455-11	TRANSFORMER, POWER	

Ref. No.	Part No.	Description	Remark
ACCESSORIES & PACKING MATERIALS			

△	1-783-878-11	CORD, POWER	
	3-027-153-01	LID, BATTERY CASE (FOR RMT-CD50A)	
*	3-703-044-26	LABEL, CAUTION	
	3-864-496-71	MANUAL, INSTRUCTION (ENGLISH)	
	3-864-496-81	MANUAL, INSTRUCTION (FRENCH) (CND)	
A-3250-873-A REMOTE COMMANDER (RMT-CD50A)			

HARDWARE LIST			

#1	7-621-773-86	SCREW +B 2.6X4	
#2	7-623-510-01	LUG, 4	
#3	7-682-549-04	SCREW +B 3X10	
#4	7-685-103-19	SCREW +P 2X5 TYPE2 NON-SLIT	
#5	7-685-133-19	SCREW +P 2.6X6 TYPE2 NON-SLIT	
#6	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#7	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#8	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#9	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S	
#11	7-627-850-17	SCREW,PRECISION +P 1.4X2.5	
#13	7-682-546-09	SCREW +B 3X5	

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.
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