

ZS-X7

SERVICE MANUAL

Ver 1.1 2000.02

With SUPPLEMENT 1 (9-927-185-81)

US Model
Canadian Model



Model Name Using Similar Mechanism	ZS-D50
CD Mechanism Type	CDM-2411AAA
Optical Pick-up Type	DAX-01A2

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 6-ohm loads, both channels driven from 100 - 15,000 Hz; rated 2.3 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

Other Specifications

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 \pm 0/-0.5 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

General

Speaker Full range: 8 cm (3 1/4 inches) dia.,
6 ohms, cone type (2)

Passive radiator: 12 x 6 cm (4 3/4 x 2 3/8 inches)

Outputs Headphones jack (stereo minijack)

For 16 - 68 ohms impedance headphones

Power output (excluding US model)

4.5 W + 4.5 W (at 6 ohms, 10 % harmonic distortion
in DC operation)

Power requirements

For personal audio system:

DC IN 10.6 - 12 V jack accepts:

Supplied AC power adaptor (AC-E700) for use with 120 V
AC, 60 Hz

Supplied car battery cord (DCC-EC12) for use with 12 V car
battery

9 V DC, 6 size D (R20) batteries

For memory back-up:

4.5 V DC, 3 size AA (R6) batteries

Power consumption

AC 18 W

— Continued on page 2 —

PERSONAL AUDIO SYSTEM

SONY®



Battery life

For personal audio system:

FM playing

Sony manganese SUM-1 (N): approx. 10 h

Sony alkaline AM-1 (N): approx. 24 h

CD playback

Sony manganese SUM-1 (N): approx. 1.5 h

Sony alkaline AM-1 (N) : approx. 3.5 h

Dimensions

Approx. 576 x 195 x 183 mm (w/h/d)
(22 3/4 x 7 3/4 x 7 1/4 inches) (incl. projecting parts)

Mass Approx. 3.2 kg (7 lb. 1 oz.) (incl. batteries)

Supplied accessories

AC power adaptor AC-E700 (1)

Car battery cord DCC-EC12 (1)

Spare fuse (1)

Shoulder strap (1)

Screws (2)

Design and specifications are subject to change without notice.

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SAFETY-RELATED COMPONENT WARNING!!

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE \triangle 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.

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.

SECTION 1 SERVICE NOTES

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.

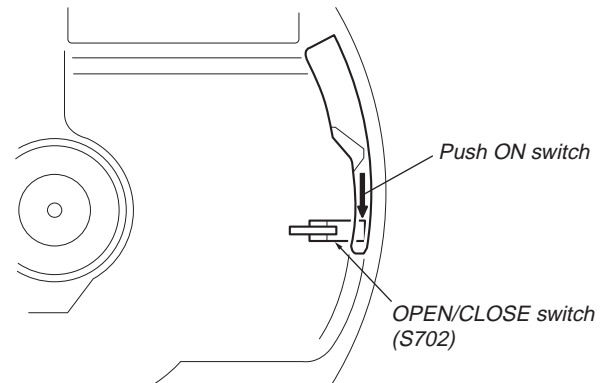
The flexible board is easily damaged and should be handled with care.

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

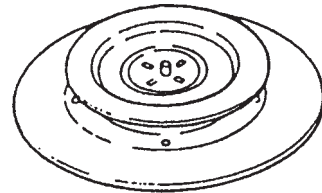
1. Open the lid for CD.
2. Push ON OPEN/CLOSE switch (S702) as following figure.
3. Press CD ►|| button.
4. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken. Objective lens moves up and down once for the focus search.



CHUCK PLATE JIG ON REPAIRING

On repairing CD section, playing a disc without the CD lid, use Chuck Plate Jig.

- Code number of Chuck Plate Jig : X-4918-255-1

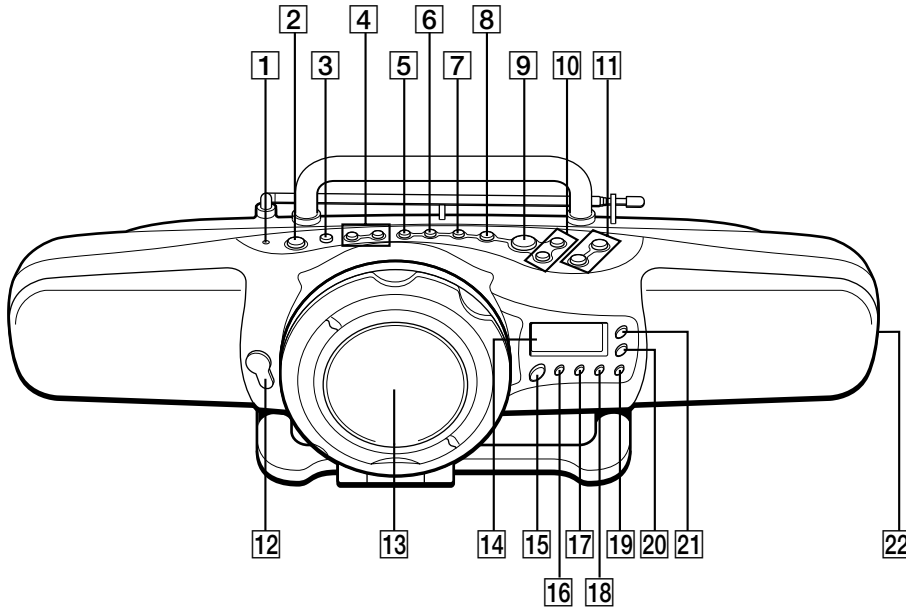


SECTION 2 GENERAL

This section is extracted from instruction manual.

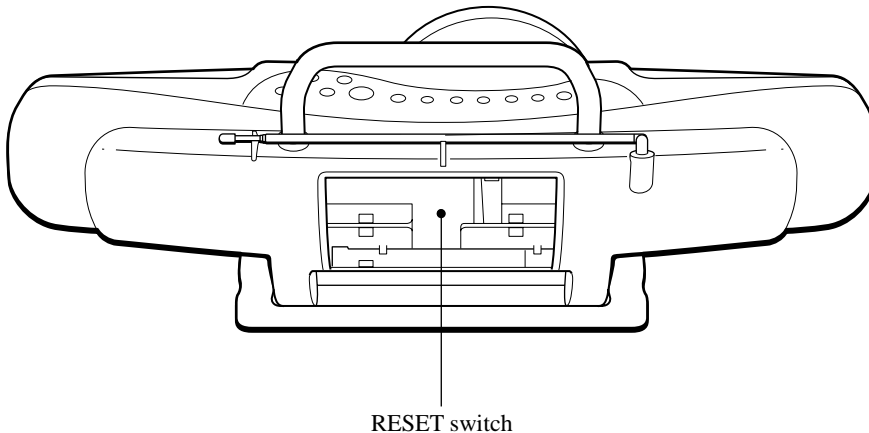
LOCATION AND FUNCTION OF CONTROLS

FRONT PANEL



- | | |
|---|----------------------------|
| 1 OPR/BATT indicator | 11 VOL +/- buttons |
| 2 POWER button | 12 Ω jack |
| 3 BAND button | 13 CD lid |
| 4 PRESET +/- buttons | 14 Display window |
| 5 DISPLAY, ENTER button | 15 CLOCK button |
| 6 MONO/ST, MODE button | 16 TIMER button |
| 7 ESP button | 17 STANDBY button |
| 8 ■ (STOP) button | 18 SLEEP button |
| 9 ► (play/pause) button | 19 ALARM button |
| 10 TIME SET, TUNING buttons
►► +
◄◄ - | 20 MEGA BASS button |
| | 21 SOUND button |
| | 22 DC IN (10.6 – 12V) jack |

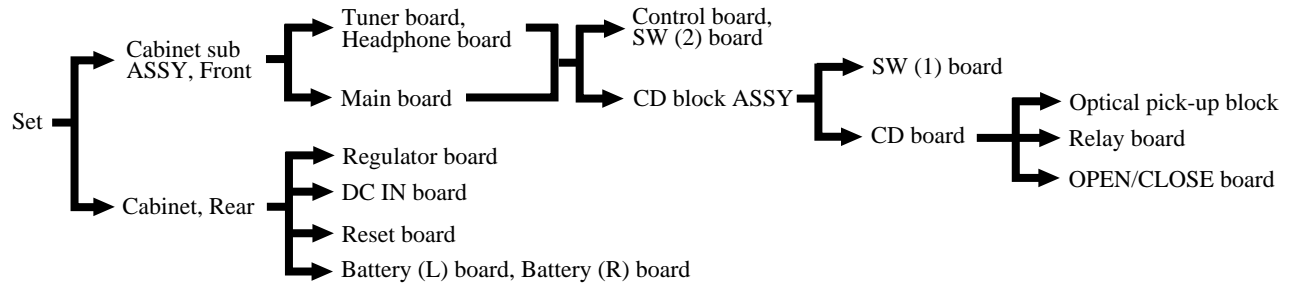
REAR PANEL



The player uses a built-in micro computer for its various operations. Due to change in power supply conditions, etc., operation may sometimes become unstable. After trying the above remedies, if the player still does not function properly, press PRESET in the battery compartment with a pointed material.

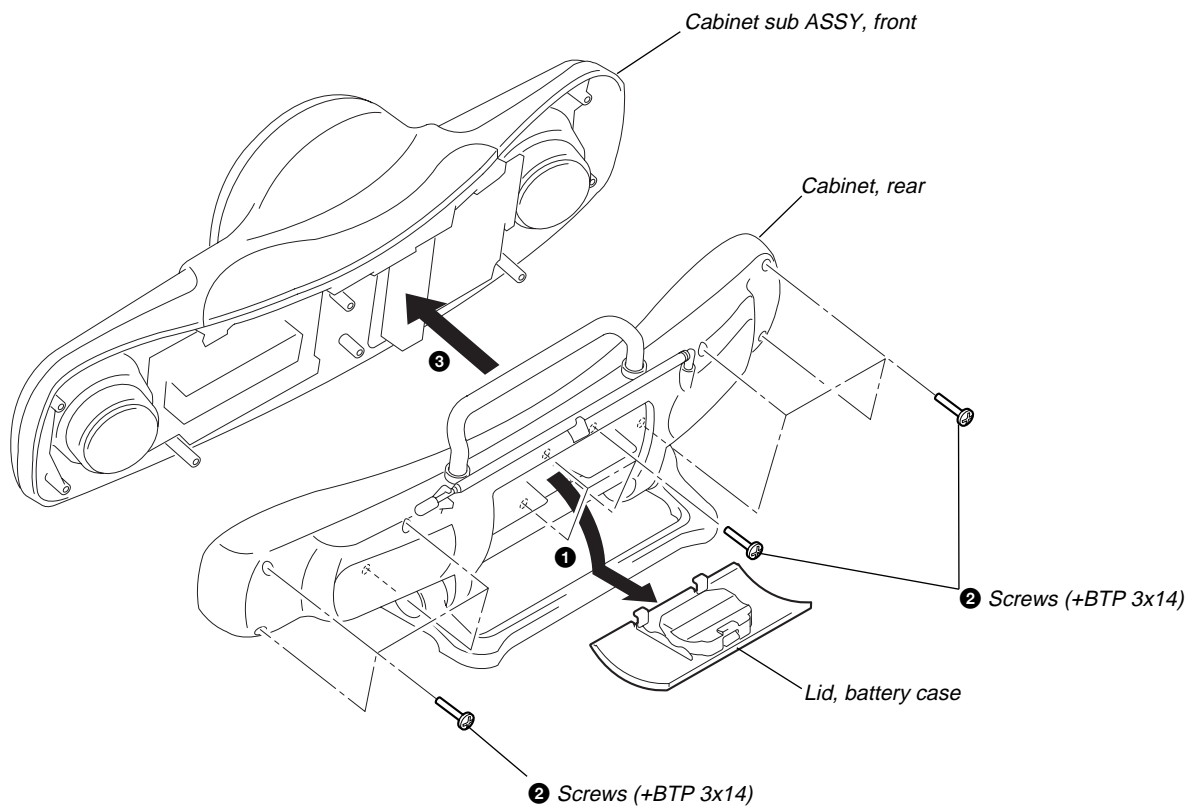
SECTION 3 DISASSEMBLY

● The equipment can be removed using the following procedure.



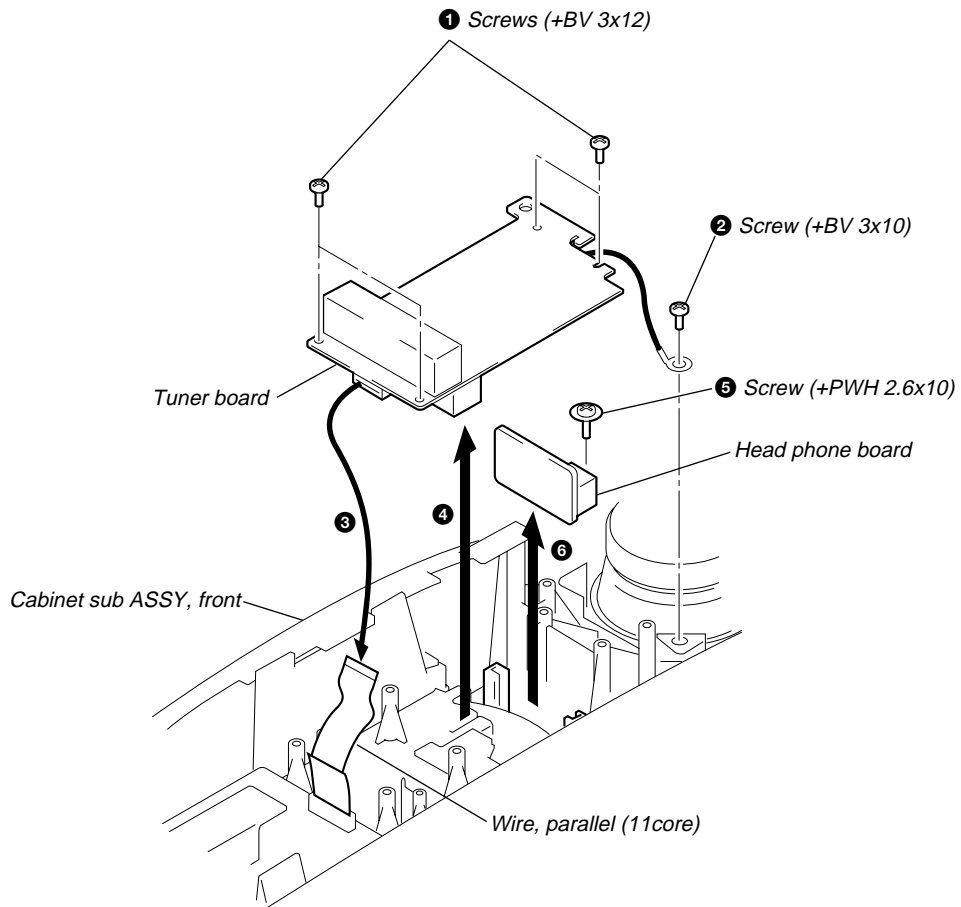
Note : Follow the disassembly procedure in the numerical order given.

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

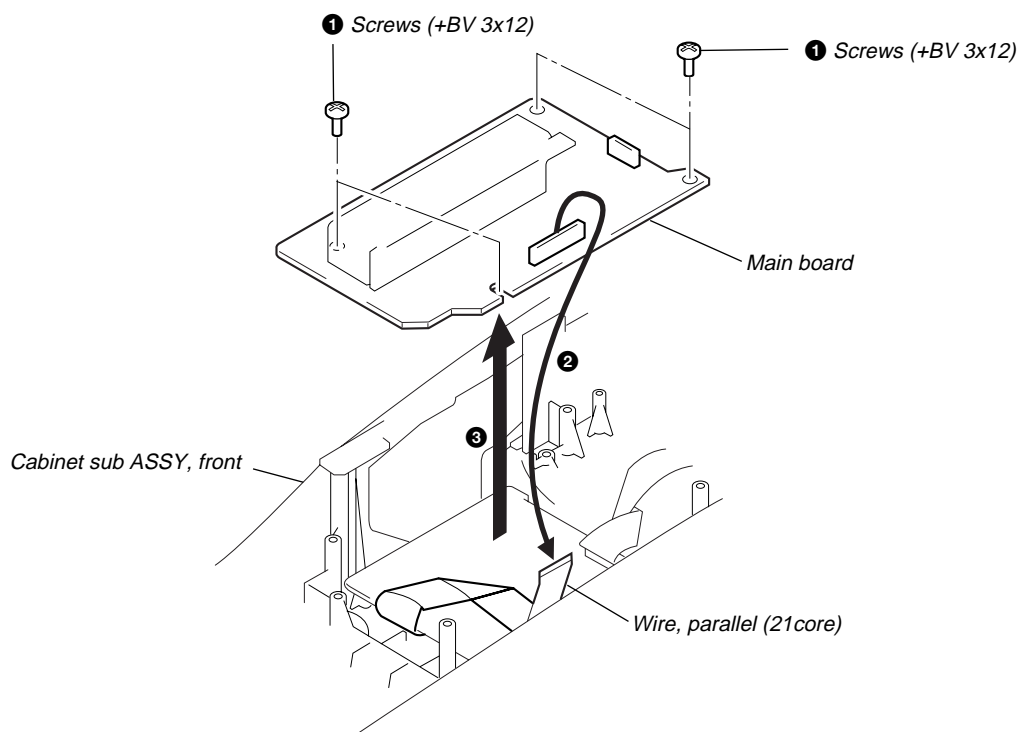


< “CABINET SUB ASSY, FRONT” SECTION >

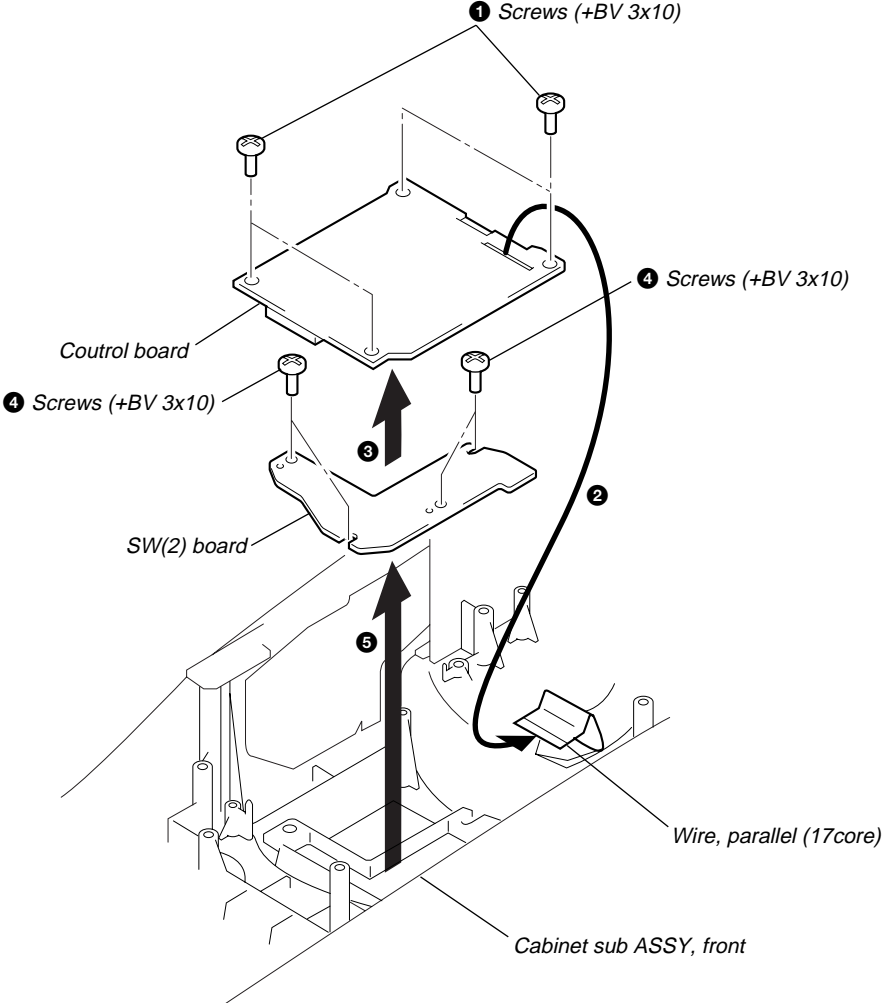
3-2. TUNER BOARD, HEADPHONE BOARD



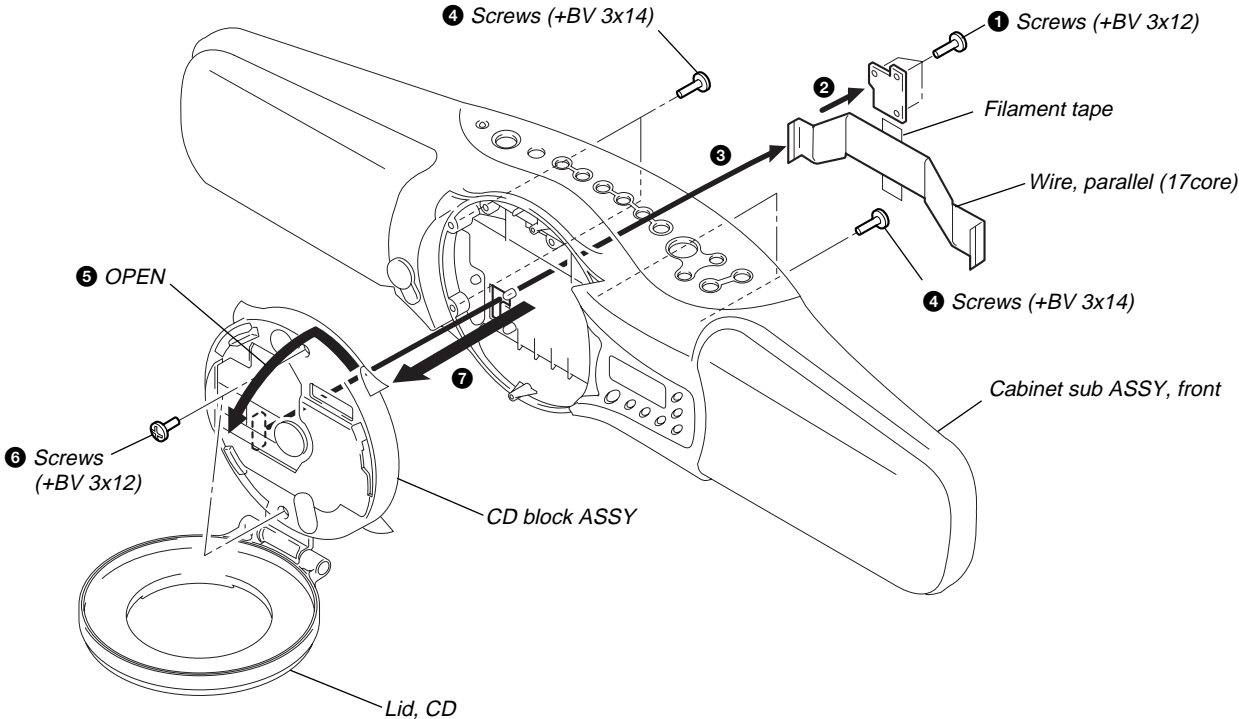
3-3. MAIN BOARD



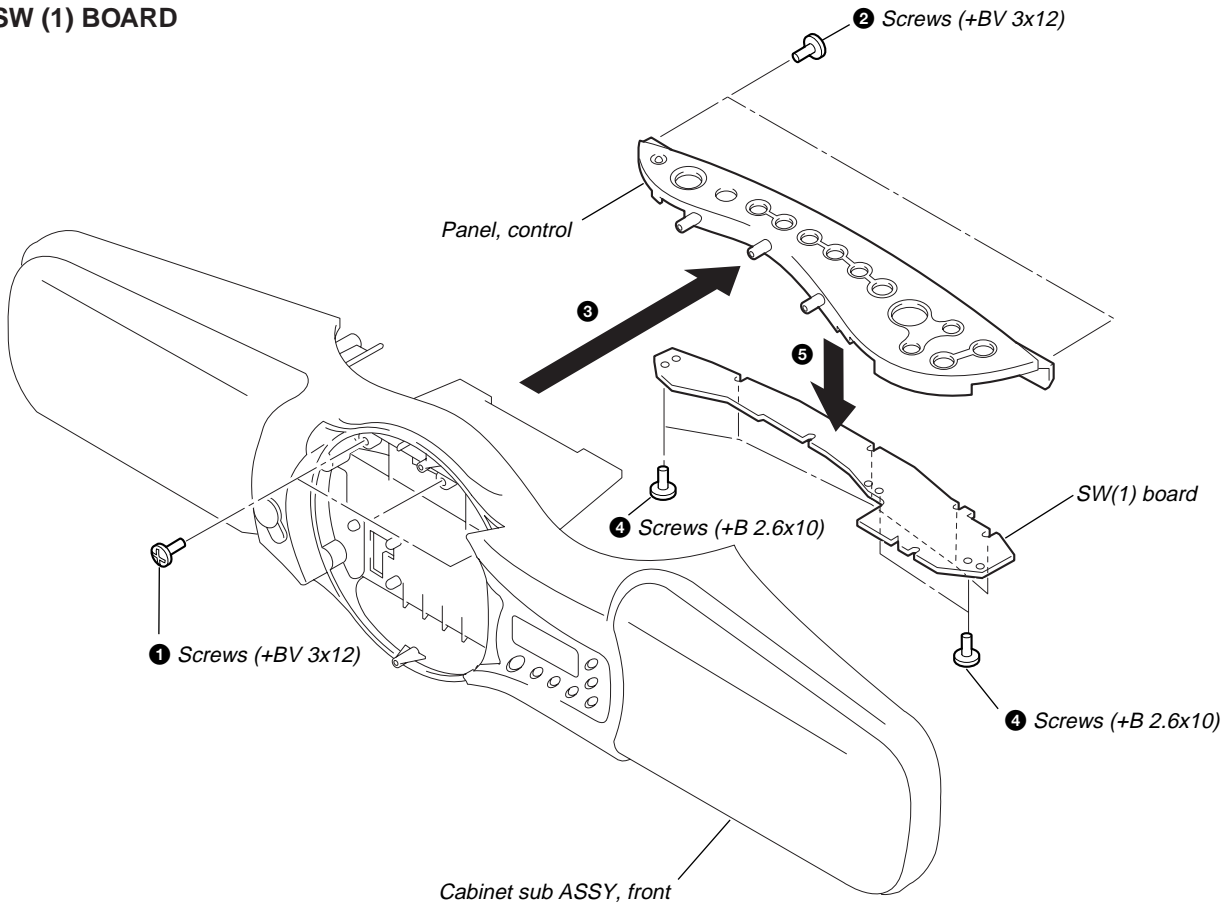
3-4. CONTROL BOARD, SW (2) BOARD



3-5. CD BLOCK ASSY

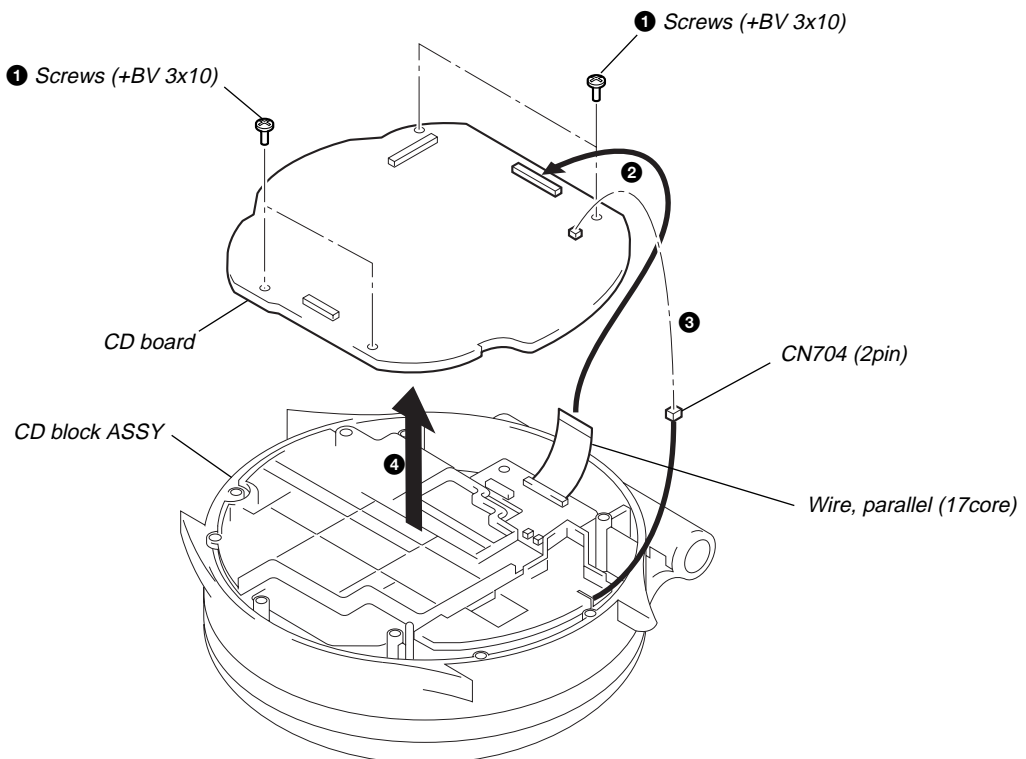


3-6. SW (1) BOARD

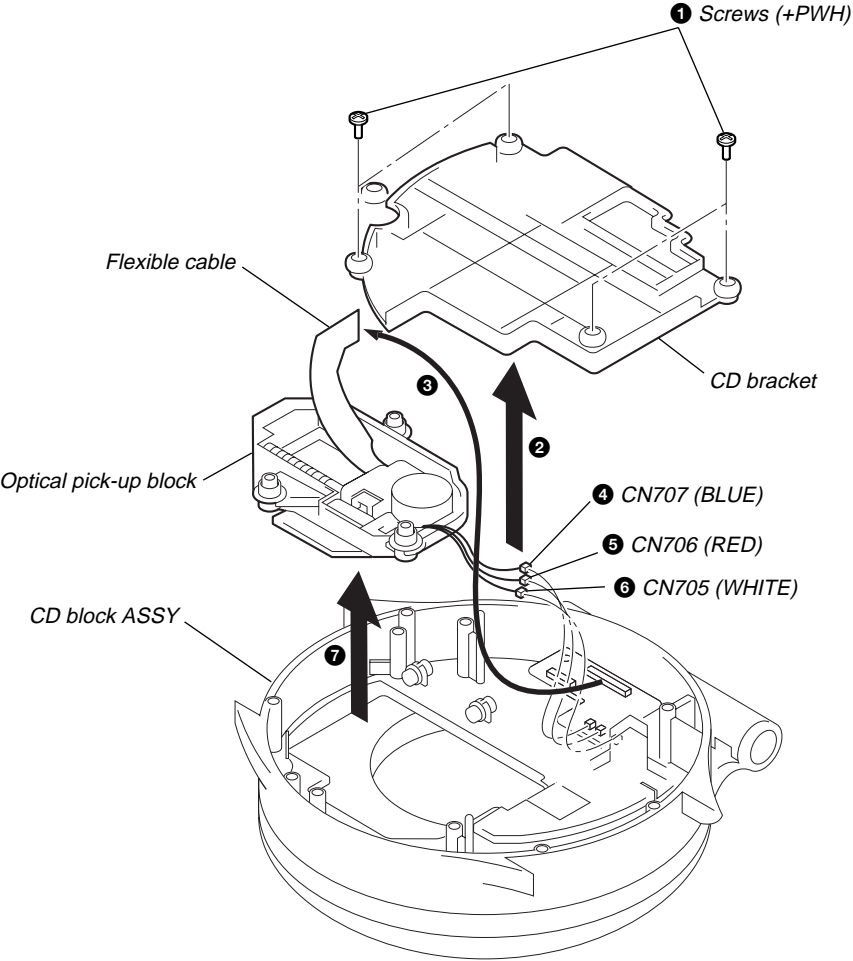


< CD BLOCK ASSY SECTION >

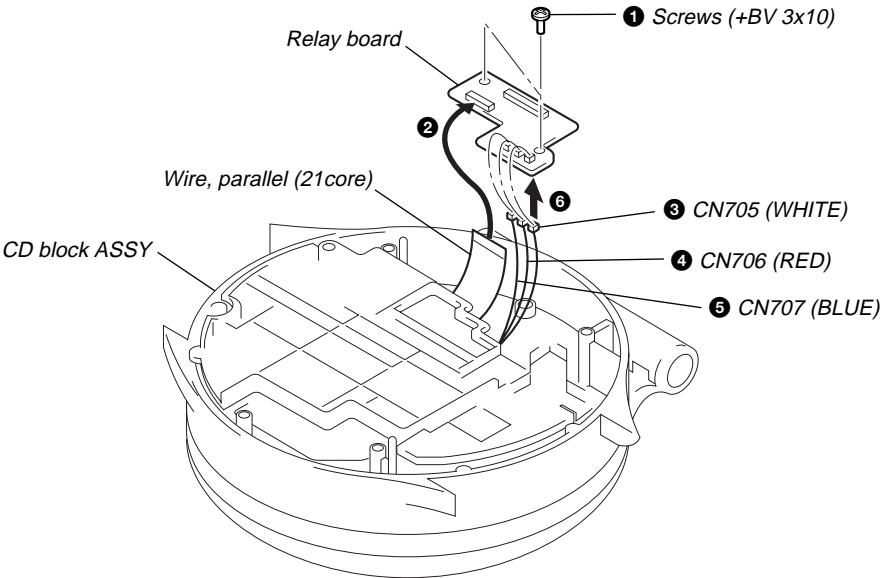
3-7. CD BOARD



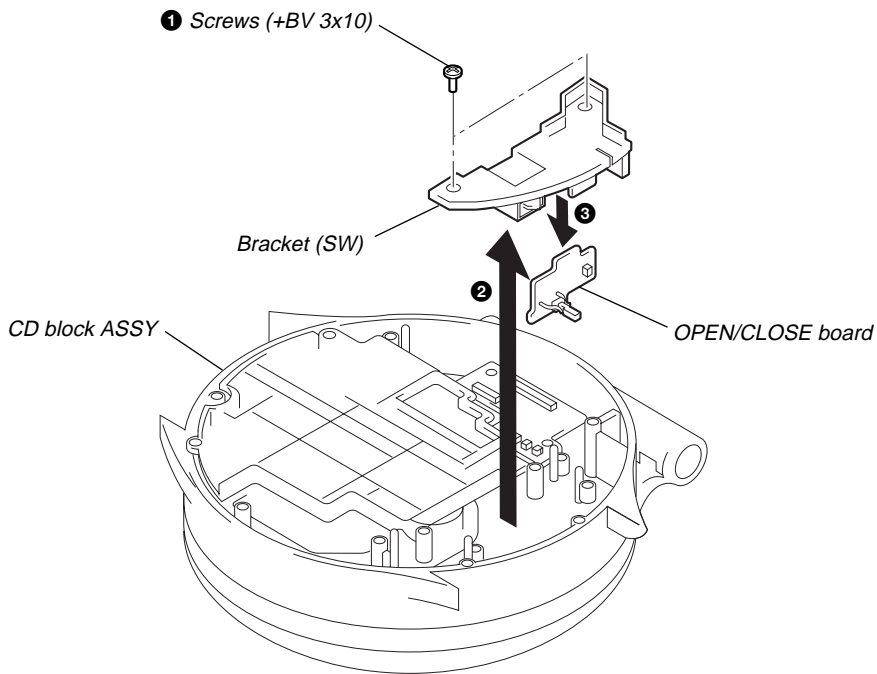
3-8. OPTICAL PICK-UP BLOCK



3-9. RELAY BOARD

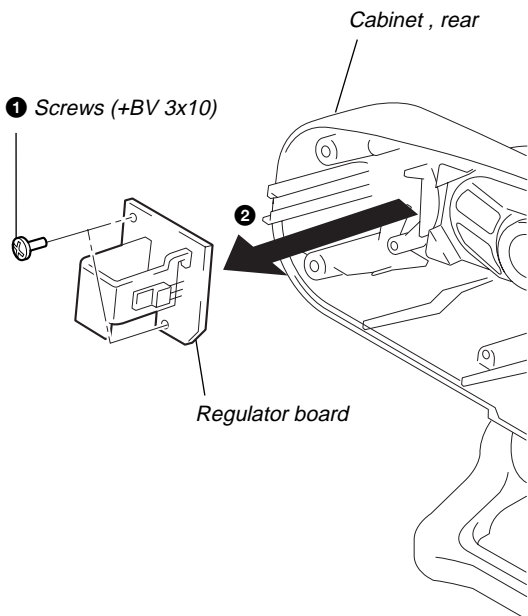


3-10. OPEN/CLOSE BOARD

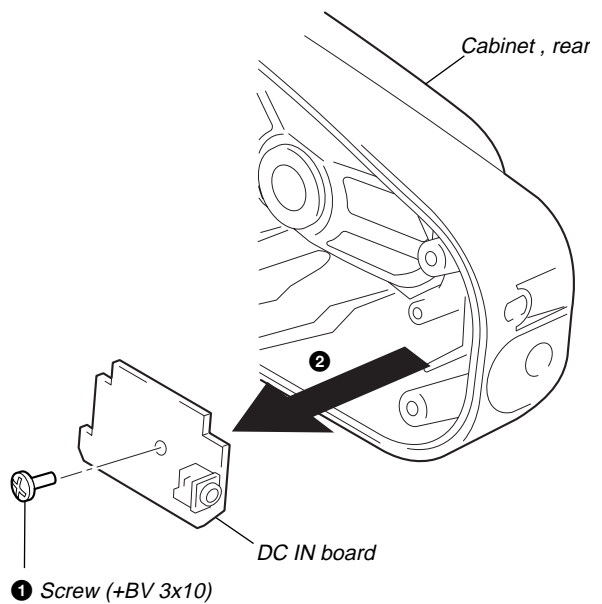


< “CABINET, REAR” SECTION >

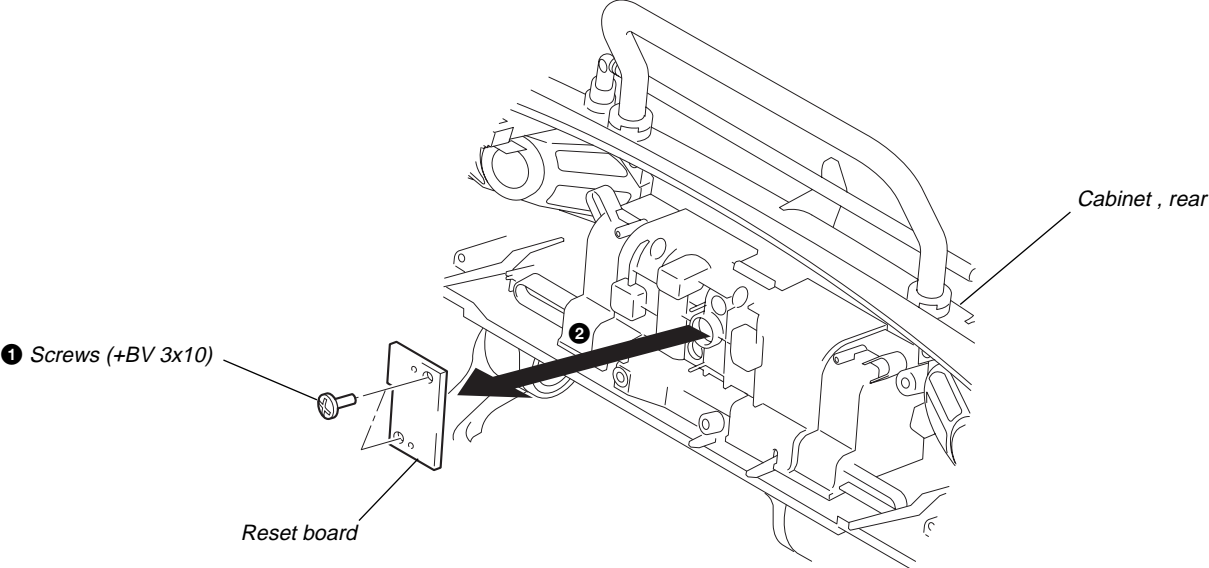
3-11. REGULATOR BOARD



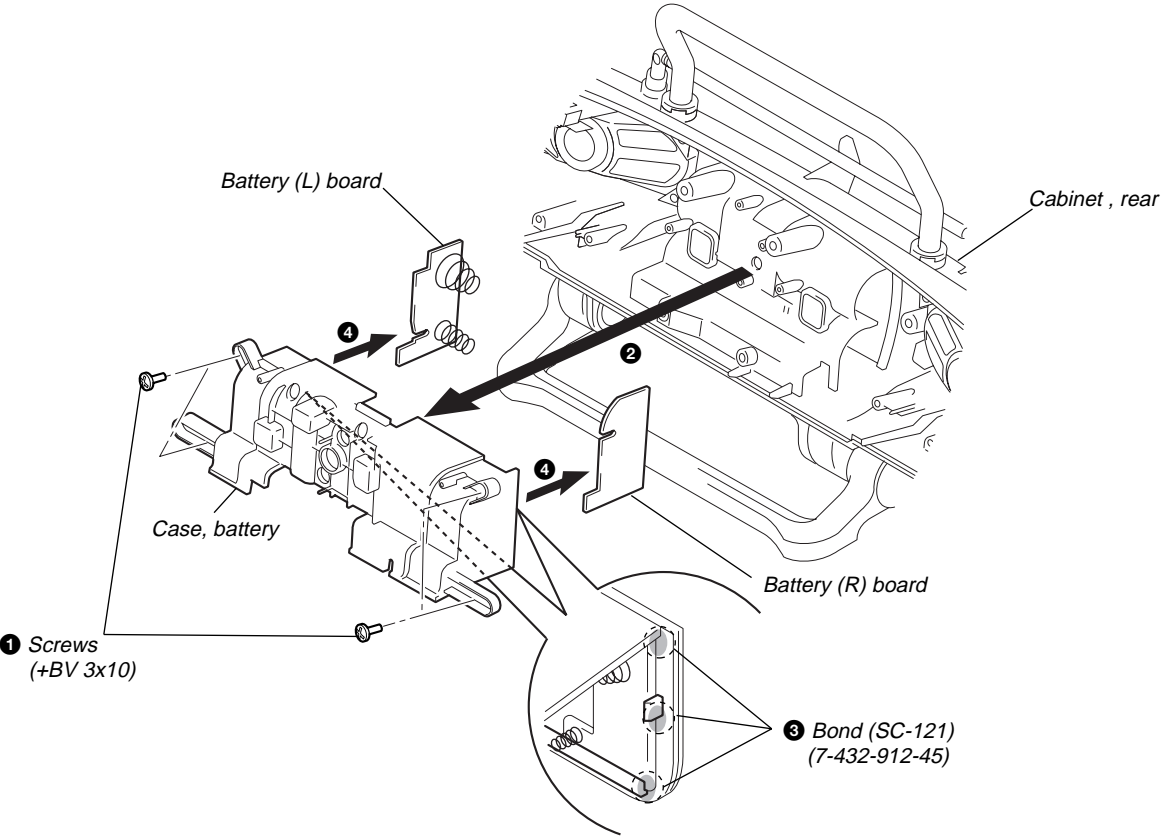
3-12. DC IN BOARD



3-13. RESET BOARD



3-14. BATTERY (L) BOARD, BATTERY (R) BOARD



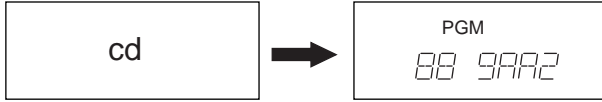
SECTION 4 TEST MODE

CD SECTION

1. Entering CD test mode

With the POWER button ON, short JW880 and JW881 on the SW (1) board. (You need a moment for the short.)

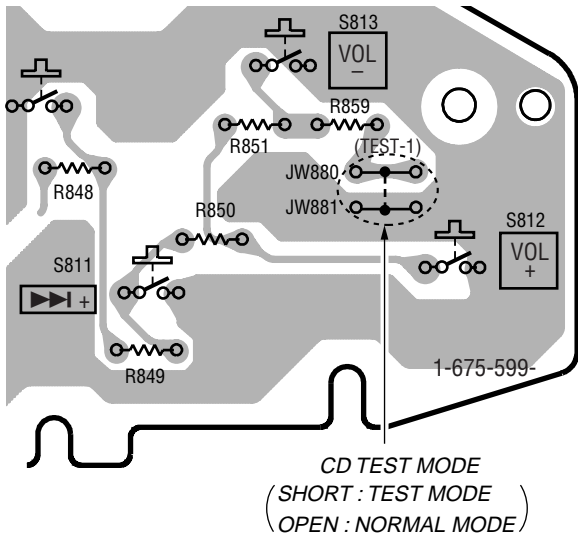
The LCD display changes as in the diagram and the unit goes into test mode.



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.

[SW (1) BOARD] (Conductor side)



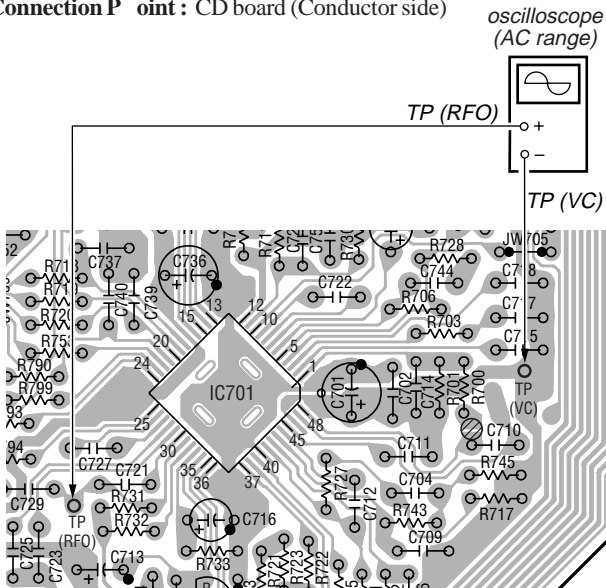
2. Exiting test mode

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

3. RF LEVEL and jitter check

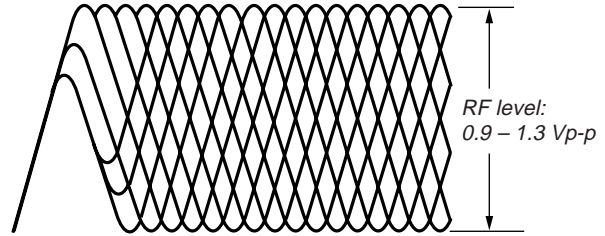
Test mode PLAY status

Connection Point : CD board (Conductor side)



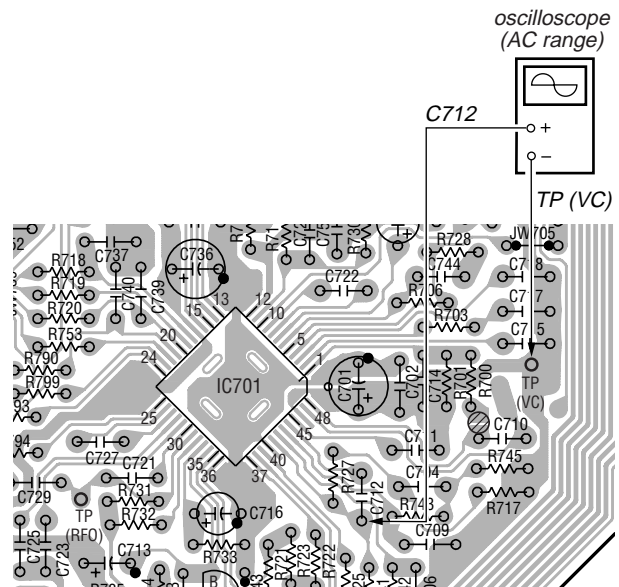
Check to see that the jitter is less than 9.0 nsec. and RF level is between 0.9 – 1.3Vp-p.

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



4. TRAVERSE SIGNAL check

Connection Point : CD board (Conductor side)

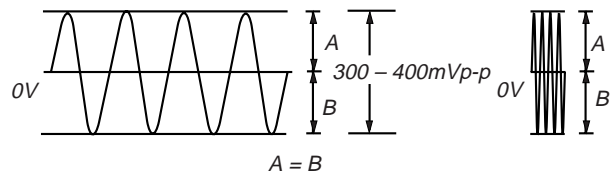


Press the FF or FR from step 3.

Check to see that the traverse signal level is between 300 to 400mVp-p.

Note:

Extend the sweep time for easier view.



5. RELEASE THE TEST MODE

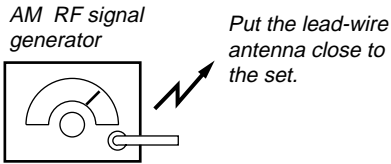
After completed with adjustment, press the POWER button to release the test mode.

SECTION 5 ELECTRICAL ADJUSTMENTS

TUNER SECTION 0dB = 1 μ V

AM Section

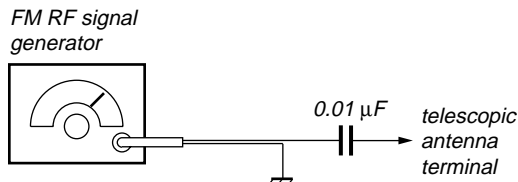
BAND button : AM
Volume : MIN



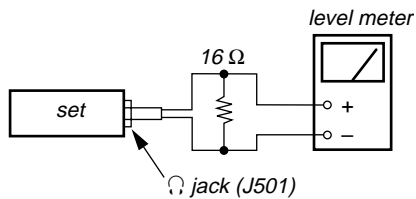
30% amplitude modulation by 400Hz signal.
Output level : as low as possible

FM Section

BAND button : FM
Volume : MIN



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



Adjustment Location : Tuner board (See page 14)

- 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

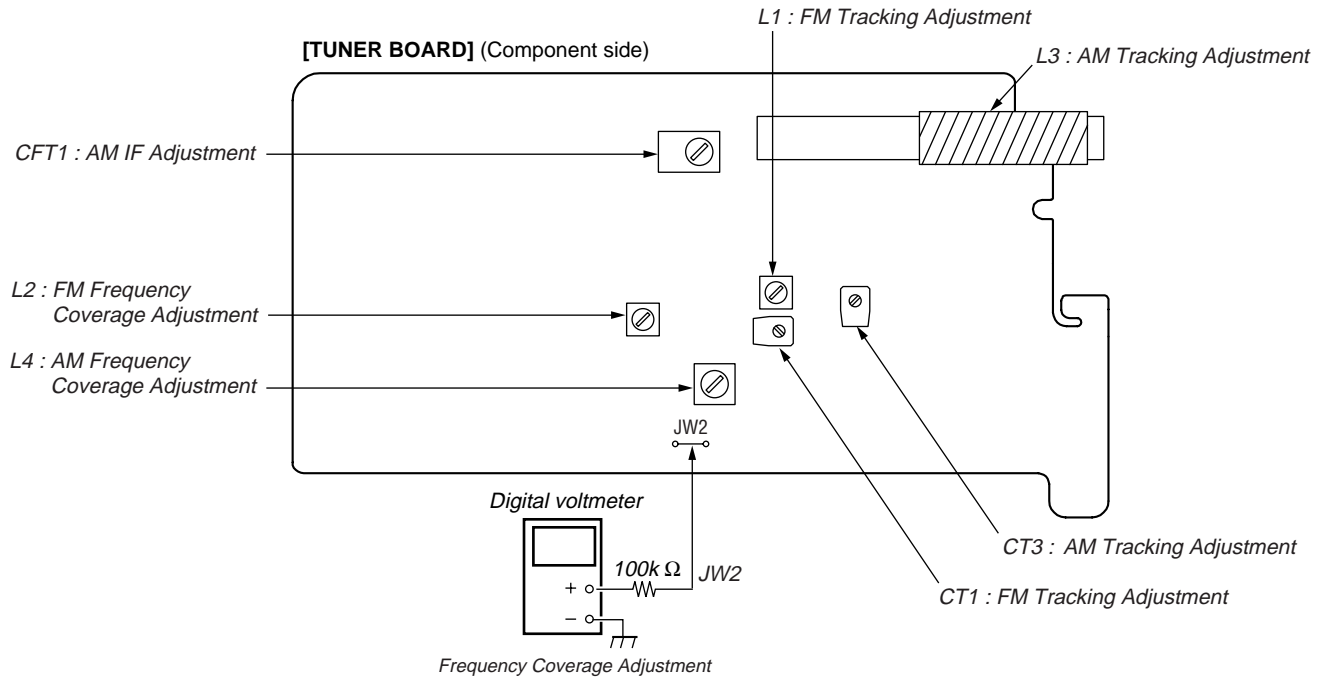
AM FREQUENCY COVERAGE ADJUSTMENT		
Adjust part	Frequency display	reading on digital voltmeter.
L4	530kHz	Adjustment Value : 0.9V Standard Value : 0.85 – 0.95V
Confirmation	1,710kHz	4.6 – 5.8V

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	1.55 – 1.85V
L2	108MHz	Adjustment Value : 4.0V Standard Value : 3.9 – 4.1V

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

Connect and Adjustment Location :



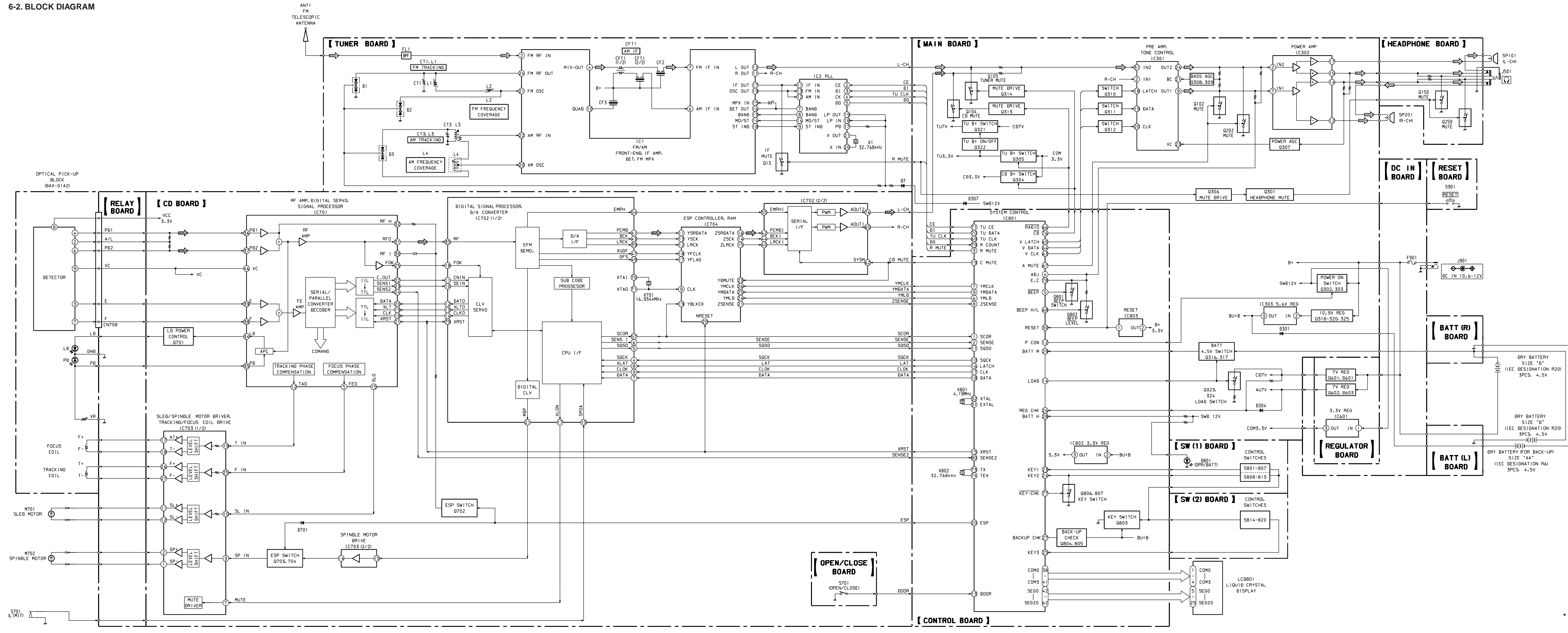
SECTION 6 DIAGRAMS

6-1. EXPLANATION OF IC TERMINALS

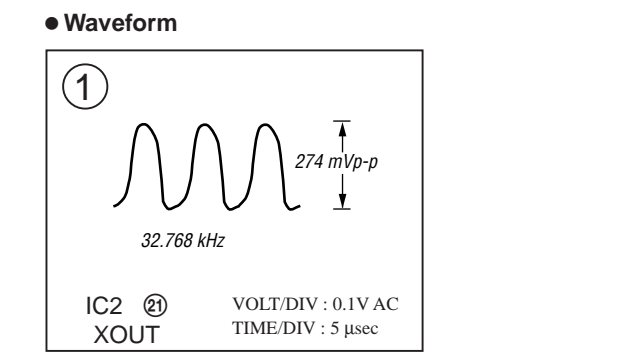
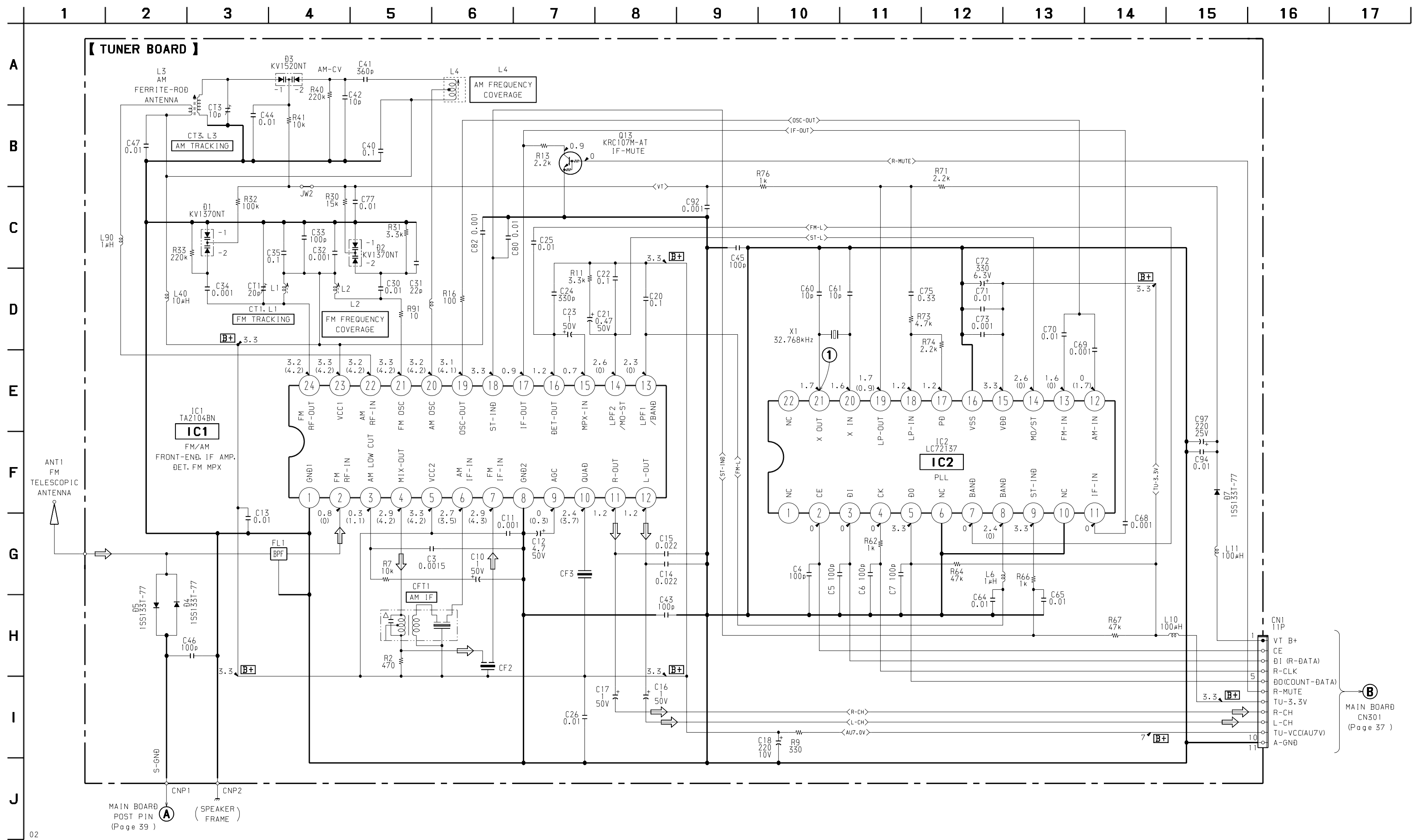
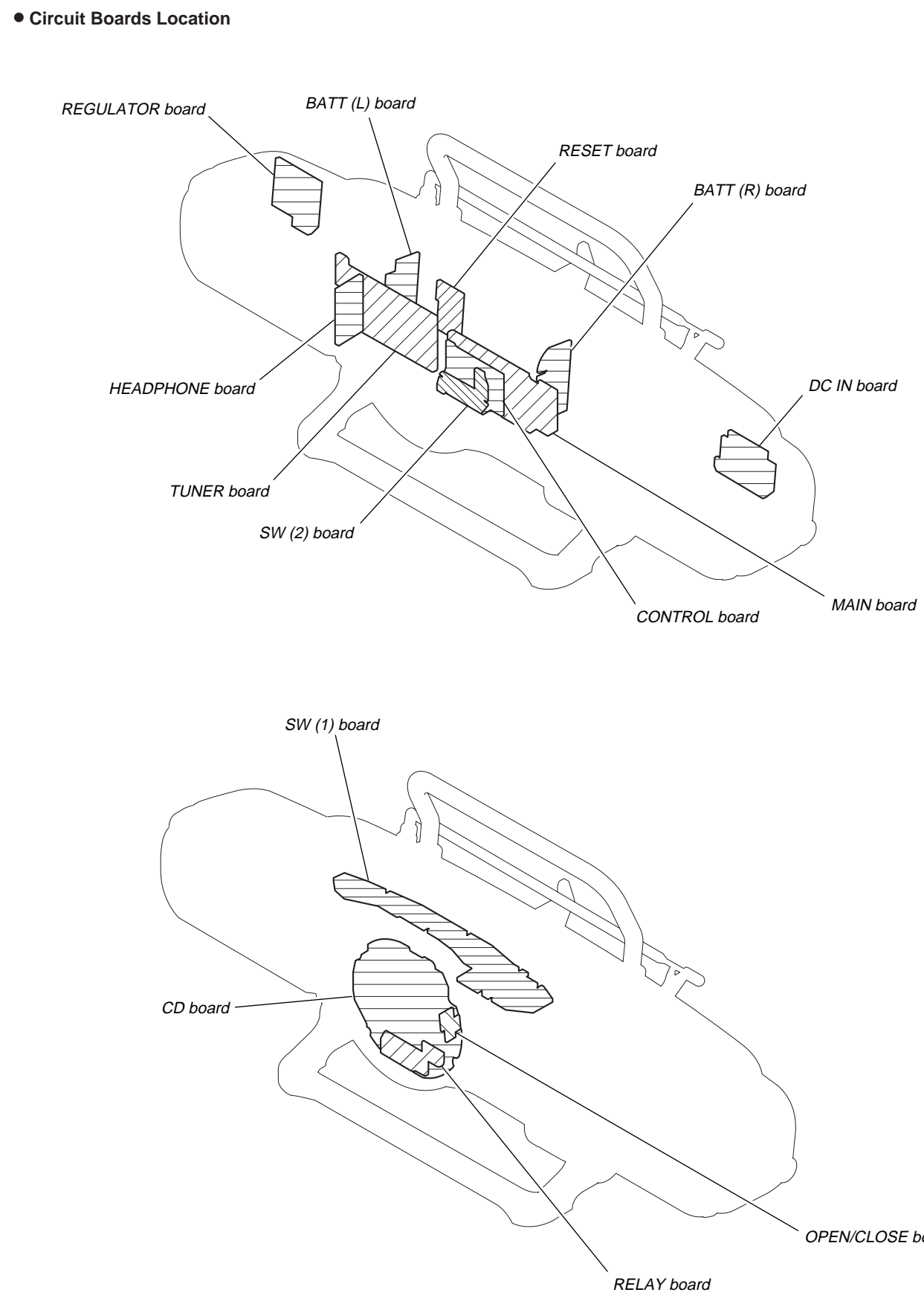
IC801 SYSTEM CONTROL (CXP83620-016Q)

Pin No.	Pin name	I/O	Description
1	SCOR	I	CD SCOR input.
2	SENSE	I	CD SENS input..
3	R-MUTE	O	Radio muting signal output.
4	ADJ	O	DC 1.7V output for beep signal.
5	BEEP	O	Beep signal output.
6	YMLD	O	LATCH signal output for ESP controller (IC704).
7	YMCLK	O	Serial clock output for ESP controller (IC704).
8	ZSENSE	I	Serial data input from ESP controller (IC704).
9	YMDATA	O	Serial data output for ESP controller (IC704).
10	SQCK	I	CD SQCK input.
11	SQSO	I	CD SUB Q data input.
12	P-CON	O	Power ON/OFF control signal output.
13	DOOR	I	CD door switch (S701) input.
14	LOAD	O	Battery check output.
15	XRST	O	System reset output.
16	LATCH	O	CD system LATCH output.
17	CLK	O	CD serial clock output.
18	DATA	O	CD serial data output.
19	C-MUTE	O	CD mute signal output.
20	ESP	O	ESP ON/OFF signal output.
21	INIT	-	Not used (OPEN).
22	SIMUKE	I	Destination detect input (Fixed at "H").
23 – 25	KEY1-3	I	Key input.
26	REG-CHK	I	DC regravator output voltage detect input.
27	BACK UP-CHK	I	Back-up battery voltage detect input.
28	BATT-H	I	Main battery high voltage detect input.
29	BATT-M	I	Main battery low voltage detect input.
30	RESET	I	System reset input.
31	EXTAL	I	System clock oscillator input terminal (4.19MHz).
32	XTAL	O	System clock oscillator output terminal (4.19MHz).
33	VSS	-	Ground.
34	VL	I	Reference voltage input.
35 – 37	VLC1-3	I	Reference voltage input.
38 – 41	COMO 0-3	O	LCD common output.
42 – 62	SEG 0-20	O	LCD segment output.
63	V-CLK	O	Volume clock output.
64	DATA	O	Volume data output.
65	V-LATCH	O	Volume LATCH output.
66	RADIO	O	Function output for radio.
67	A-MUTE	O	Audio mute signal output.
68	BEEP-H/L	O	Beep level high/low select output.
69	TU-CLK	O	PLL IC clock output.
70	TU-DATA	O	PLL IC data output.

Pin No.	Pin name	I/O	Description
71	TU-CE	O	PLL IC chip enable output.
72	VDD	–	Power supply terminal (B+ 3.3V)
73	TX	O	Sub System clock oscillator output (32.768kHz).
74	TEX	I	Sub System clock oscillator input (32.768kHz).
75	NC	–	Not used (OPEN).
76	$\overline{\text{CD}}$	O	Function output for CD.
77	$\overline{\text{KEY-CHK}}$	O	Key operation enable output.
78	E. C	–	Connect to ADJ (4 pin).
79	R-COUNT	I	PLL IC data input.
80	SENS 2	I	CD SENS 2 input.

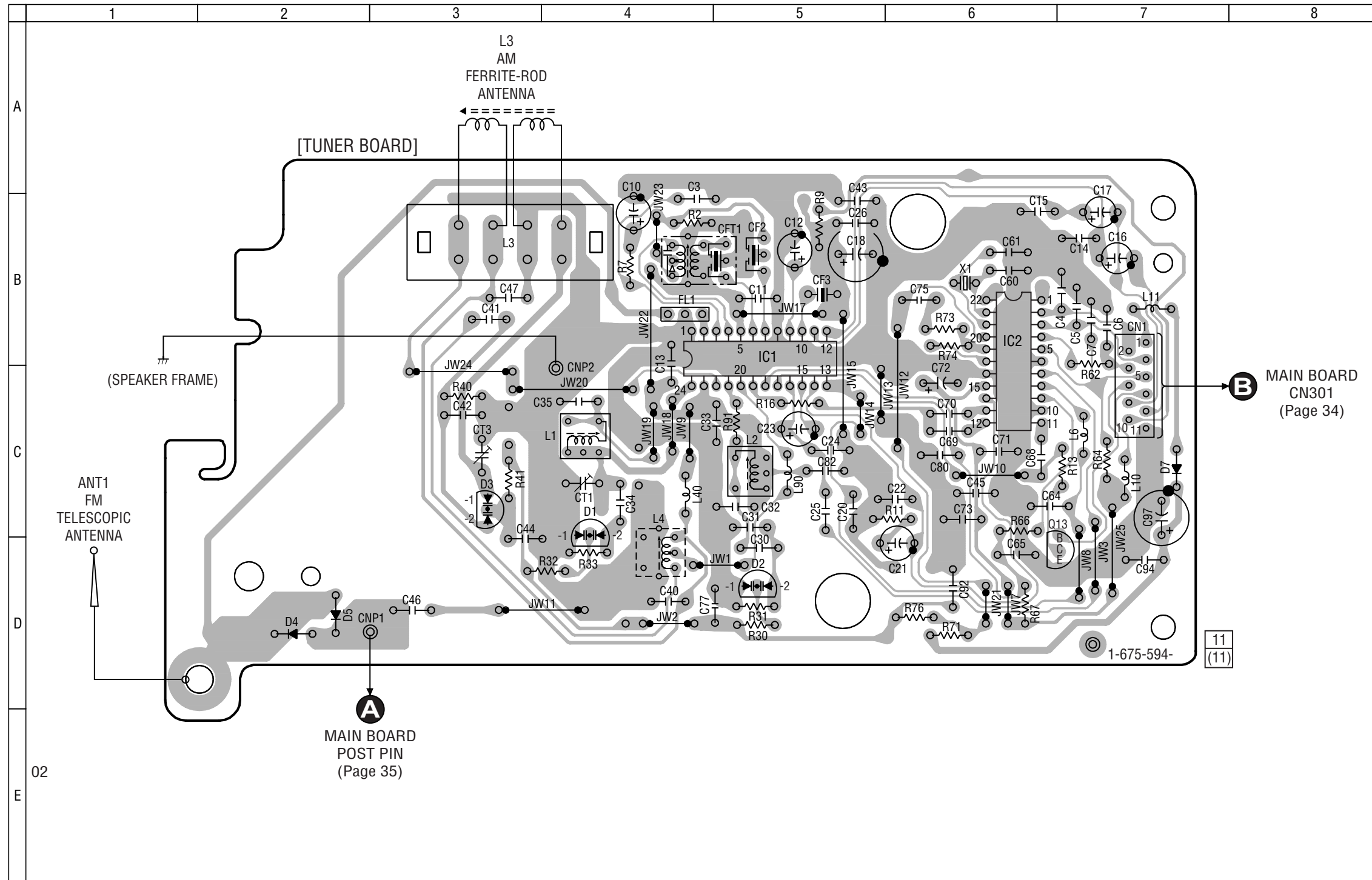


• Signal path.
 - - - - - : FM
 : CD



- 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.
 - Δ : internal component.
 - \square : B+ Line.
 - \square : adjustment for repair.
 - Power voltage is dc 12 V and fed with regulated dc power supply from external power voltage jack (J901).
 - Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
 - () : AM
 - 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.
 - \square : FM

6-4. PRINTED WIRING BOARDS (TUNER SECTION) • Refer to page 21 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location
D1	C-4
D2	D-5
D3	C-3
D4	D-2
D5	D-2
D7	C-7
IC1	B-5
IC2	B-6
Q13	D-7

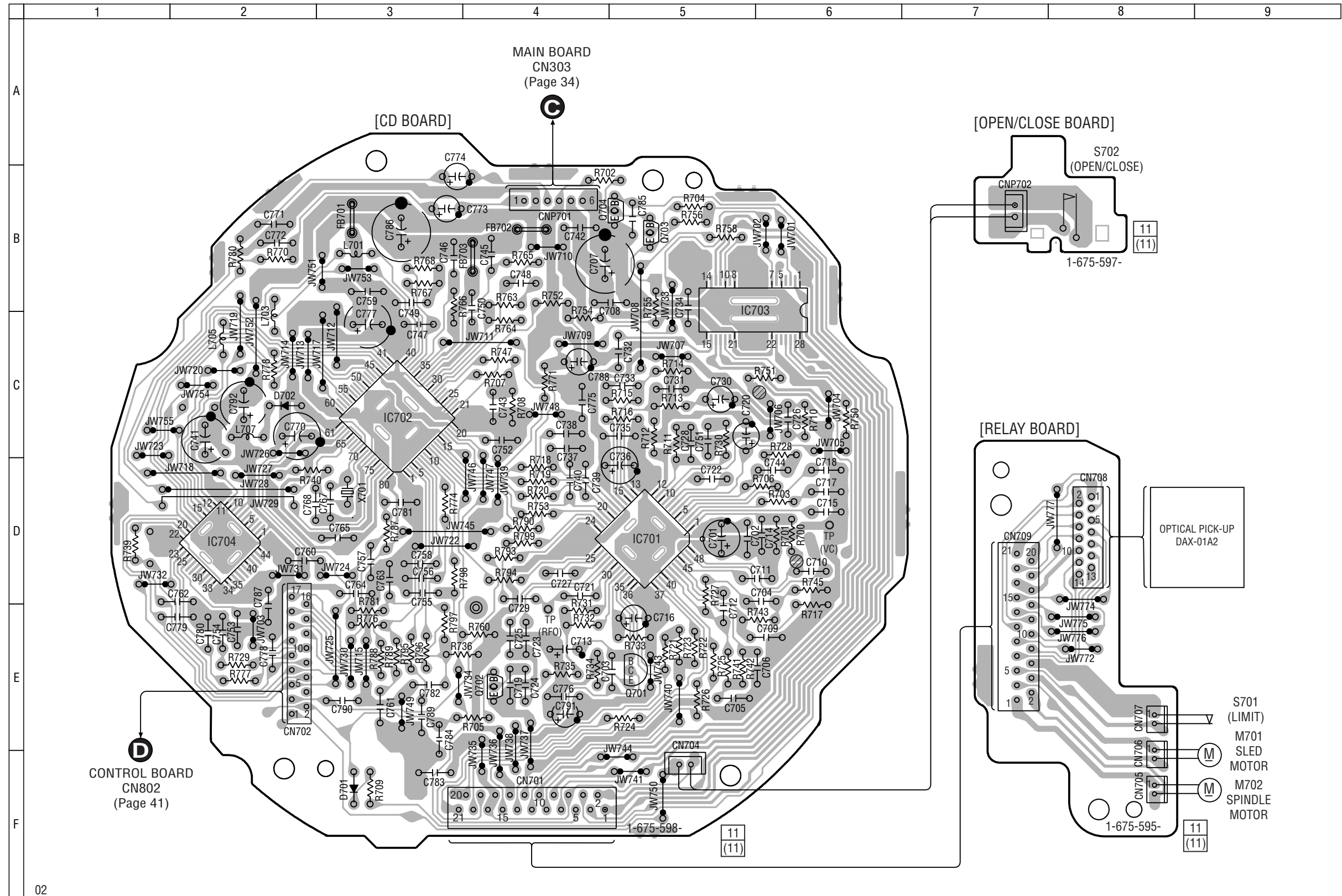
Note:

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

6-5. PRINTED WIRING BOARDS (CD SECTION) • Refer to page 21 for Circuit Boards Location.

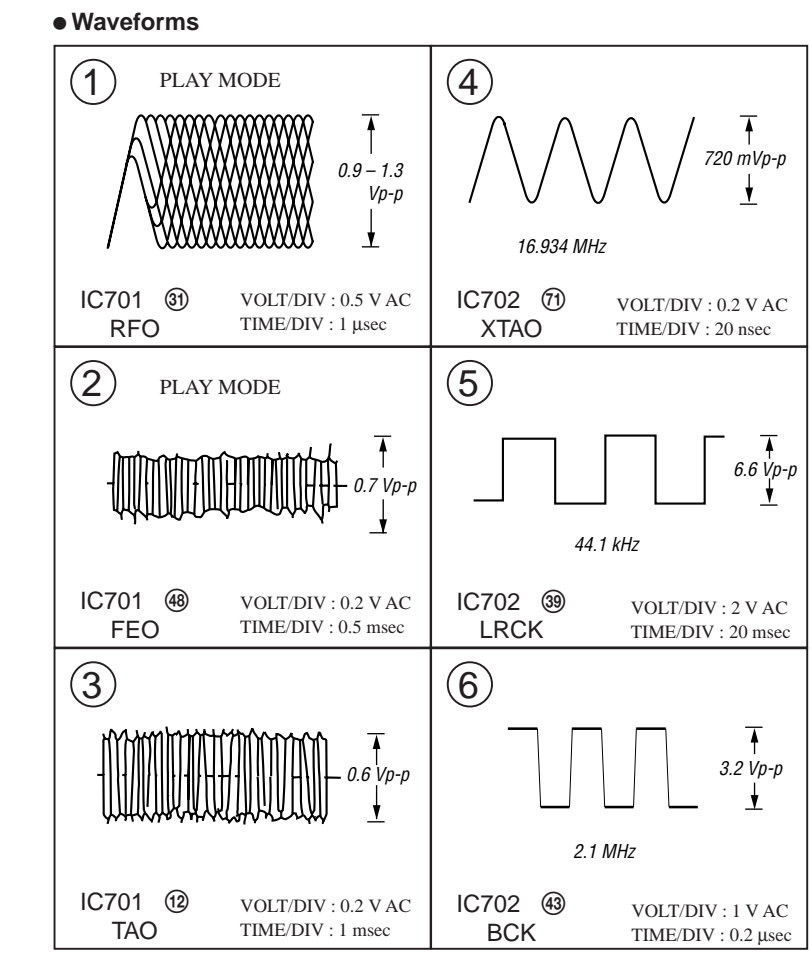
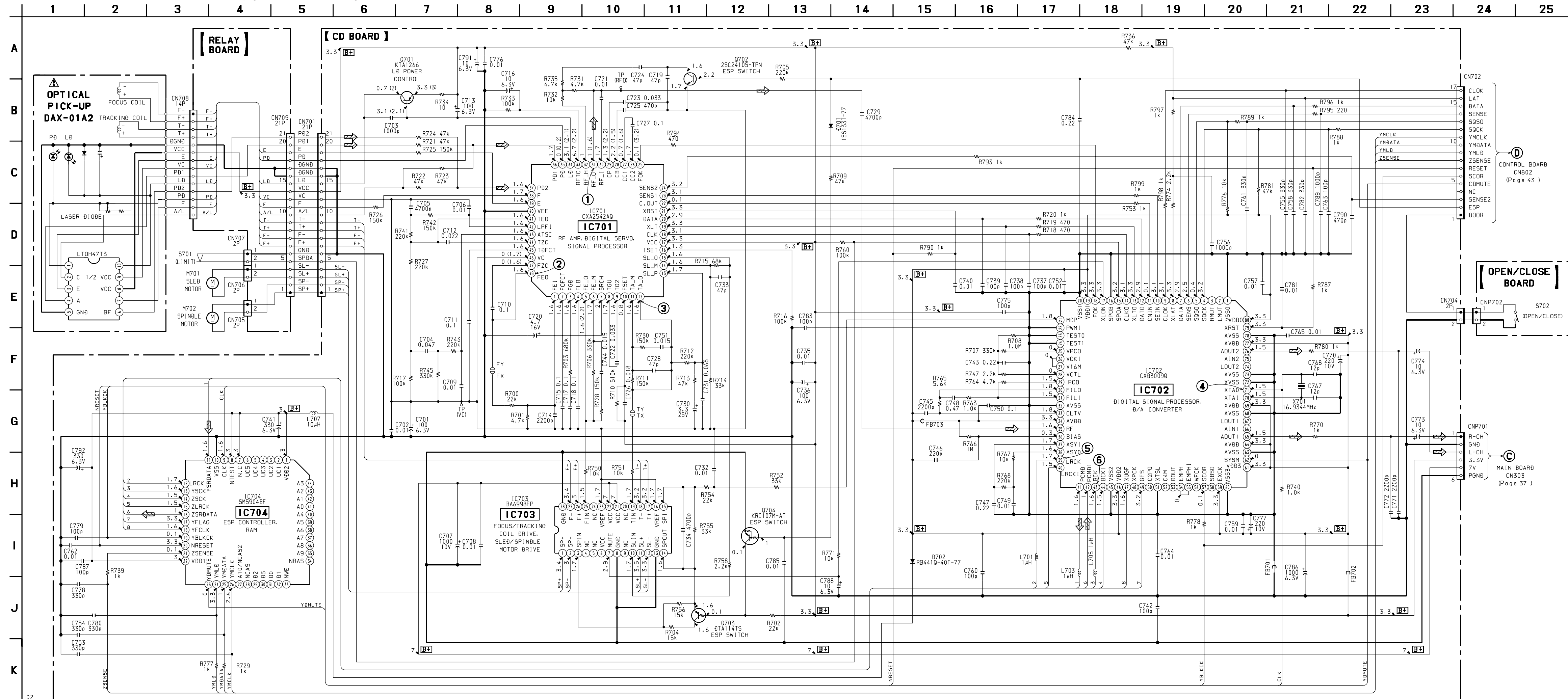
• Semiconductor Location

Ref. No.	Location
D701	F-3
D702	C-2
IC701	D-5
IC702	C-3
IC703	B-5
IC704	D-2
Q701	E-5
Q702	E-4
Q703	B-5
Q704	B-5



Note:

- — : parts extracted from the component side.
- [Pattern] : Pattern from the side which enables seeing.



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 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.

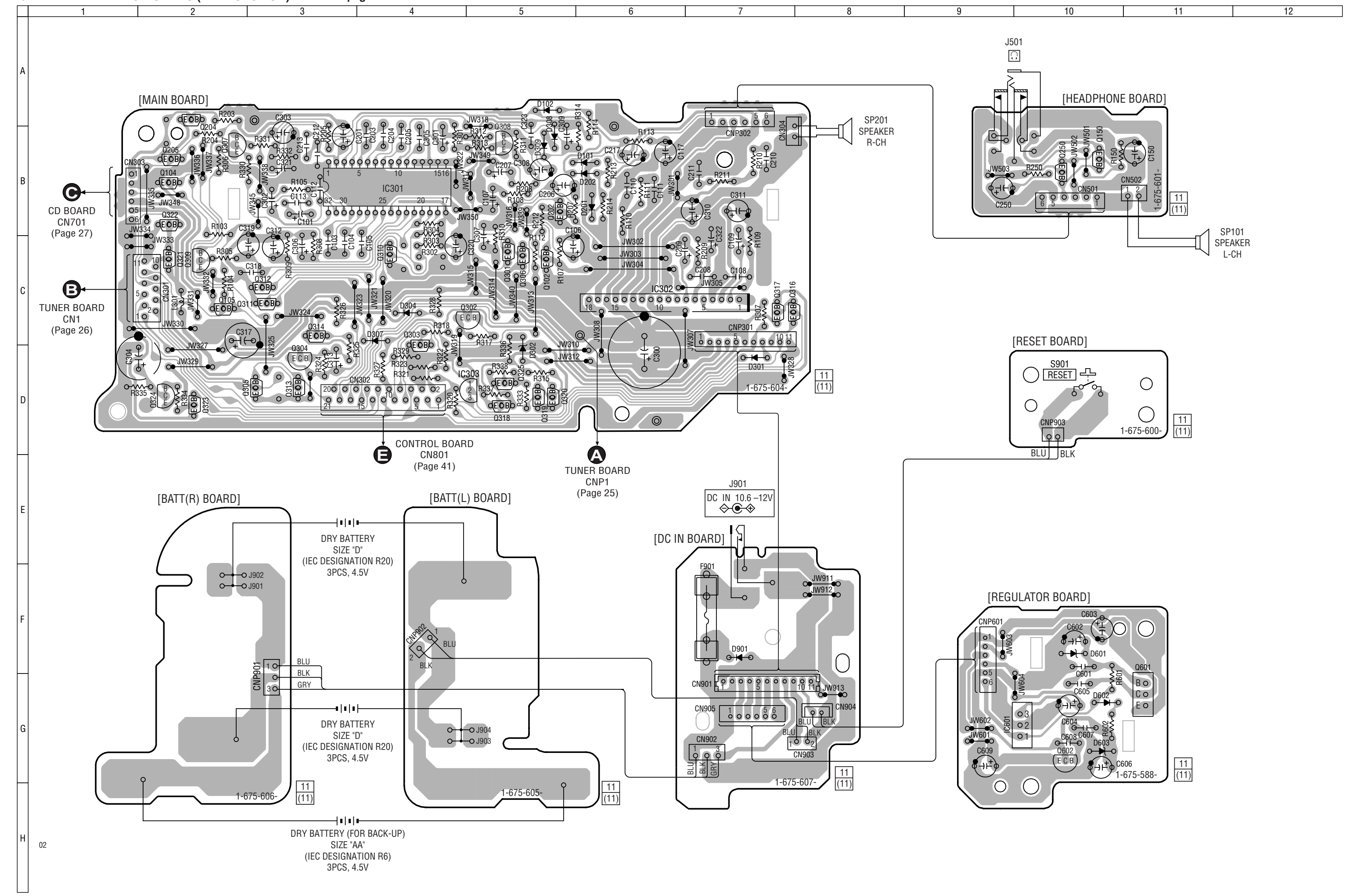
Note: Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ⊕ : B+ Line.
- Power voltage is dc 12 V and fed with regulated dc power supply from external power voltage jack (J901).
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : CD STOP
- () : 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

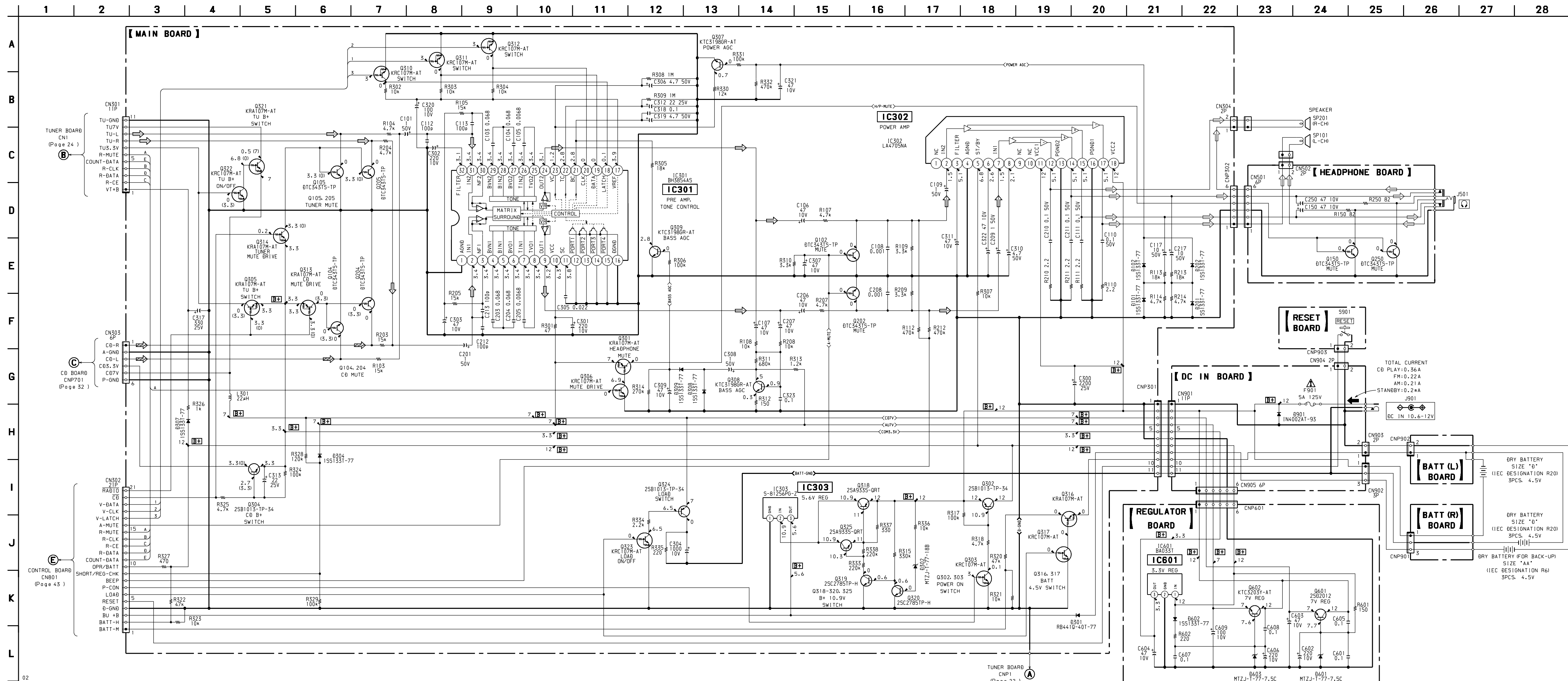
6-7. PRINTED WIRING BOARDS (MAIN SECTION) • Refer to page 21 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
D101	B-6
D102	A-5
D201	B-6
D202	B-6
D301	D-7
D302	D-5
D304	C-4
D307	C-4
D308	B-5
D309	B-5
D601	F-10
D602	F-10
D603	G-10
D901	F-7
IC301	B-4
IC302	C-6
IC303	D-5
IC601	G-10
Q102	C-5
Q104	B-2
Q105	C-2
Q150	B-10
Q202	B-5
Q204	A-2
Q205	B-2
Q250	B-10
Q301	C-5
Q302	C-5
Q303	C-4
Q304	D-3
Q305	D-3
Q306	C-5
Q307	B-2
Q308	B-5
Q309	C-2
Q310	C-4
Q311	C-3
Q312	C-3
Q313	D-3
Q314	C-3
Q316	C-7
Q317	C-7
Q318	D-5
Q319	D-5
Q320	D-5
Q321	C-2
Q322	B-2
Q323	D-2
Q324	D-2
Q325	D-2
Q601	F-10
Q602	G-10



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



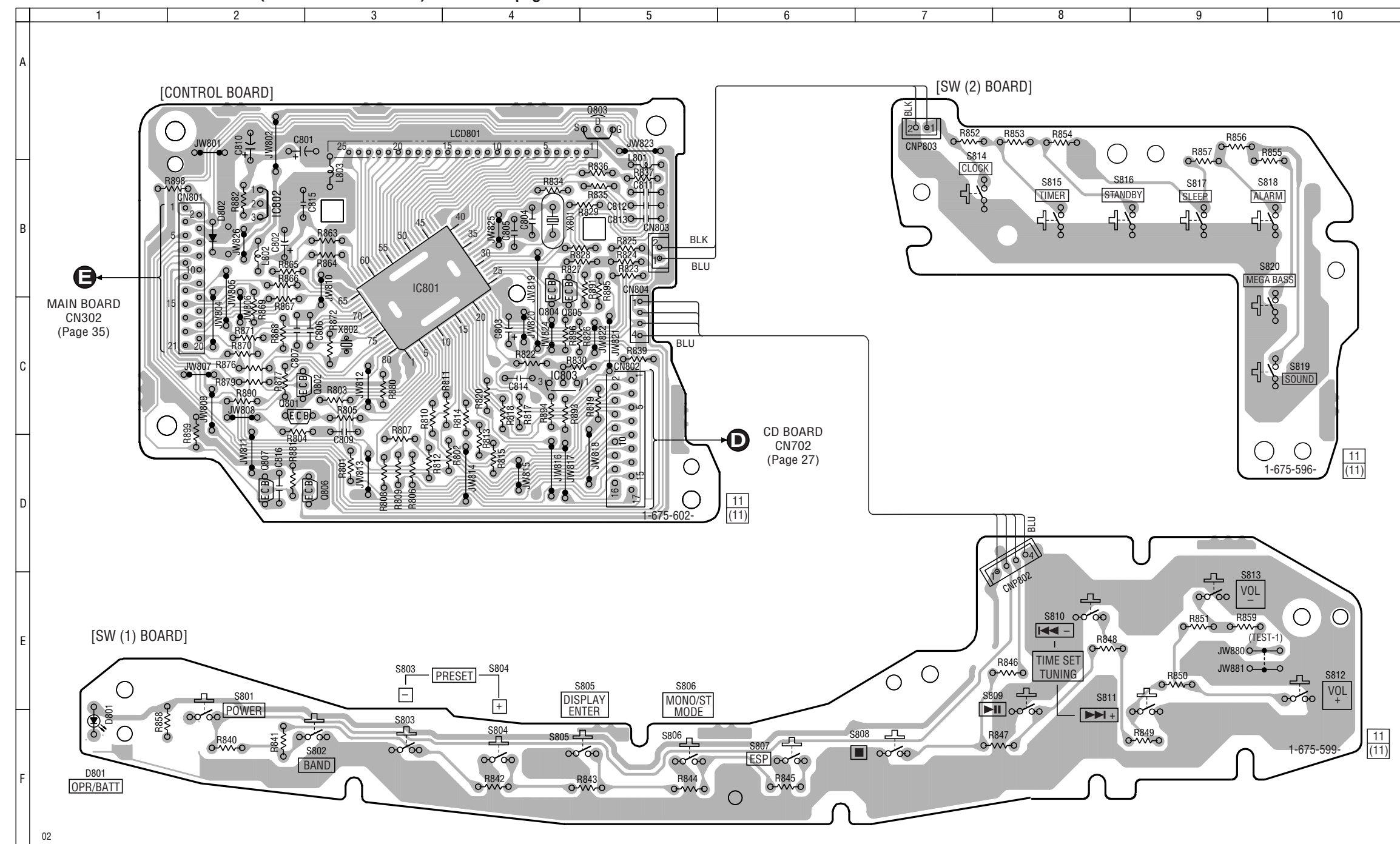
Note:
 • All capacitors are in μF unless otherwise noted. pF : μF 50 WV or less are not indicated except for electrolytics and tantalums.
 • All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.

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.

• $\text{B}+$: B+ Line.
 • Power voltage is dc 12 V and fed with regulated dc power supply from external power voltage jack (J901).
 • Voltages are dc with respect to ground under no-signal (detuned) conditions.
 no mark : CD
 () : FM
 • Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
 • Signal path.
 \rightarrow : FM
 \rightarrow : CD

6-9. PRINTED WIRING BOARDS (CONTROL SECTION) • Refer to page 21 for Circuit Boards Location.

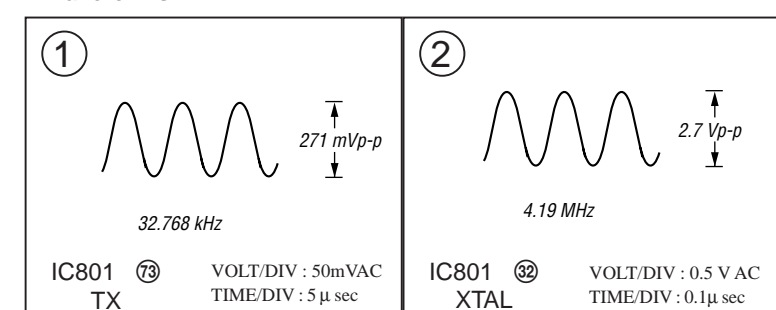


• Semiconductor Location

Ref. No.	Location
D801	F-1
D802	B-2
IC801	C-3
IC802	B-2
IC803	C-4
Q801	D-2
Q802	C-2
Q803	A-5
Q804	C-4
Q805	C-4
Q806	D-3
Q807	D-2

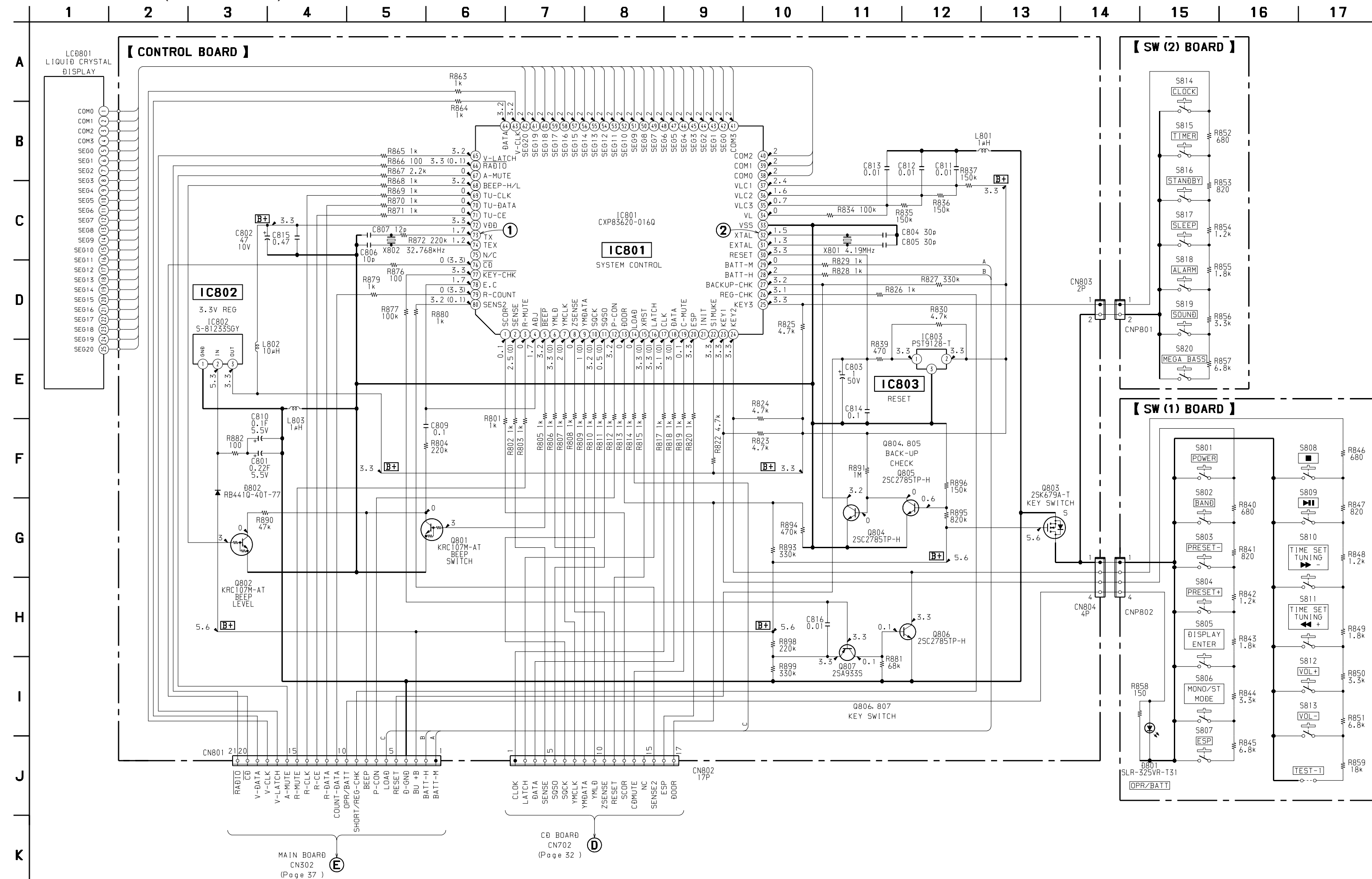
Note:
 • : parts extracted from the component side.
 • : Pattern from the side which enables seeing.

• Waveforms



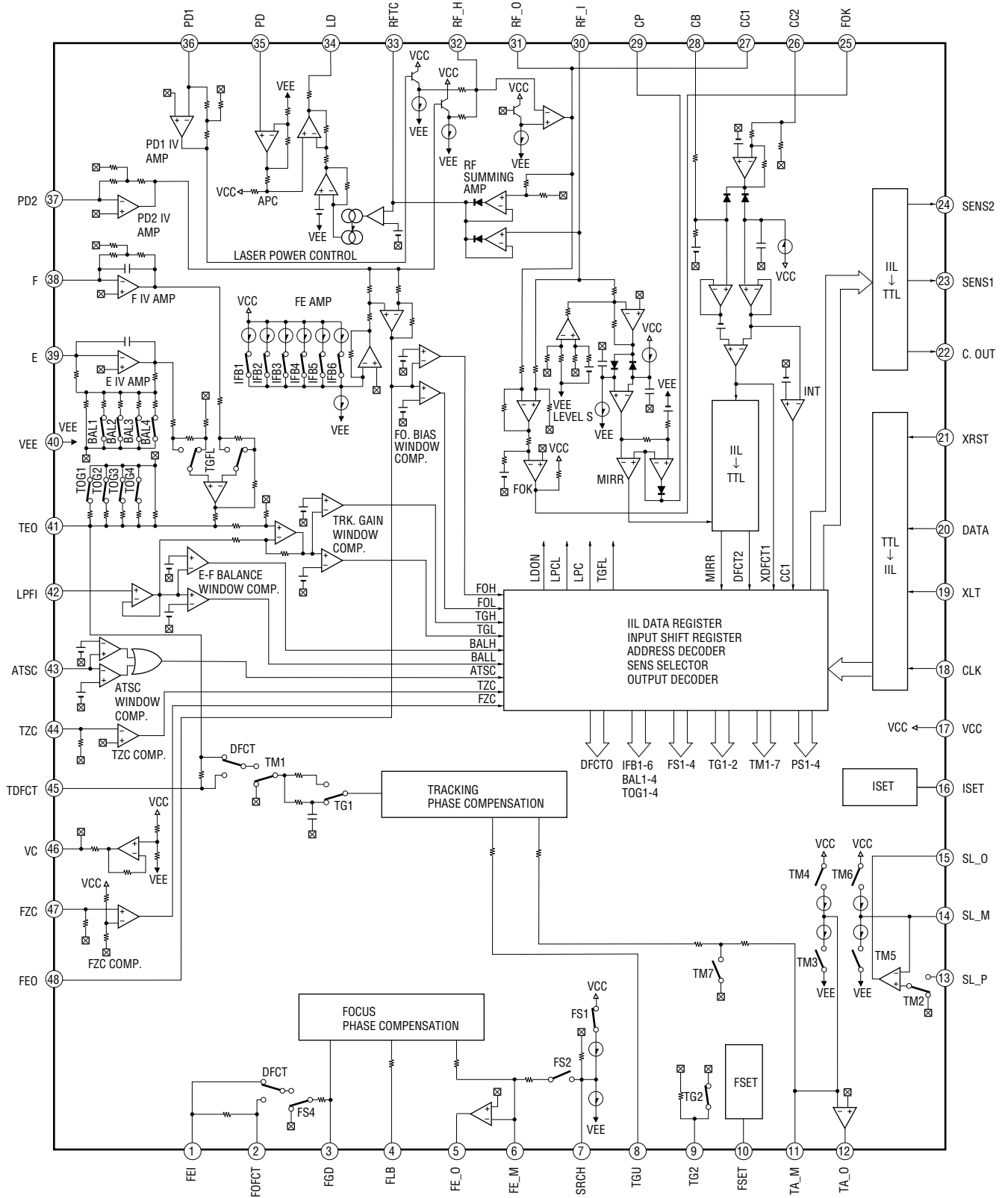
Note:
 • All capacitors are in μF unless otherwise noted. pF: μF 50 WV or less are not indicated except for electrolytics and tantalums.
 • All resistors are in Ω and $\frac{1}{4}W$ or less unless otherwise specified.
 • [B+] : B+ Line.
 • Power voltage is dc 12V and fed with regulated dc power supply from external power voltage jack (J901).
 • Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
 • no mark : CD
 • () : FM
 • 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.

6-10. SCHEMATIC DIAGRAM (CONTROL SECTION)

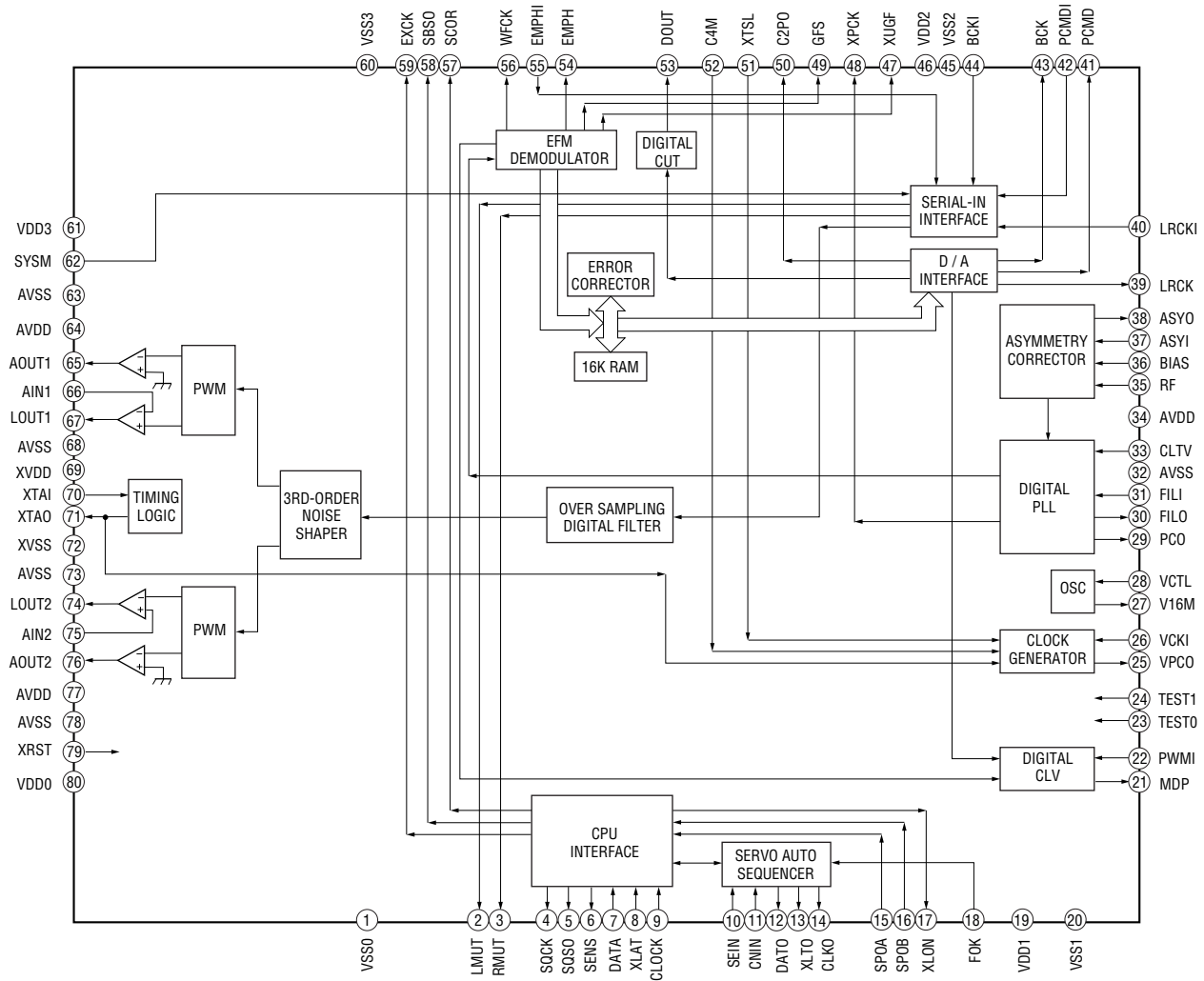


● IC Block Diagrams (CD Section)

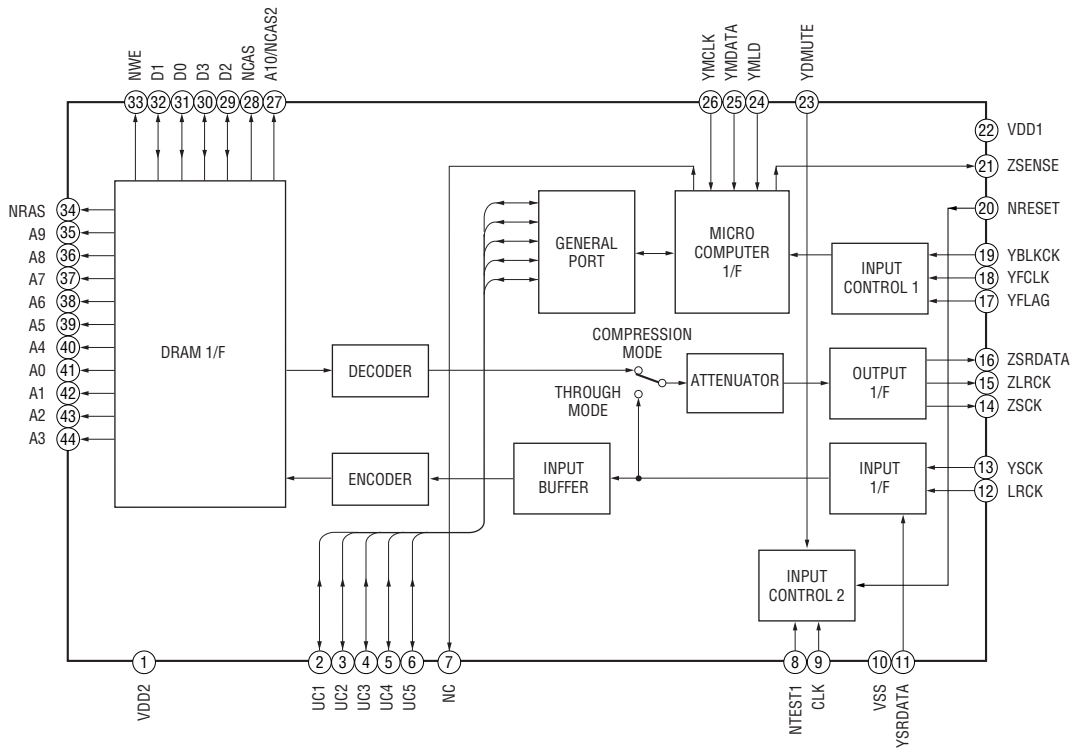
IC701 CXA2542AQ



IC702 CXD3009Q

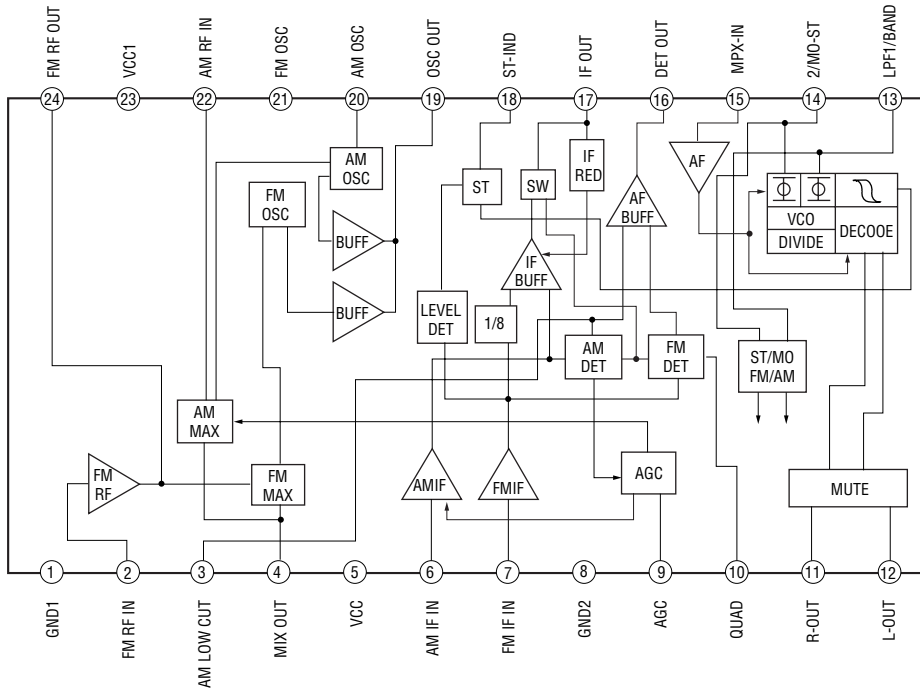


IC704 SM5904BF

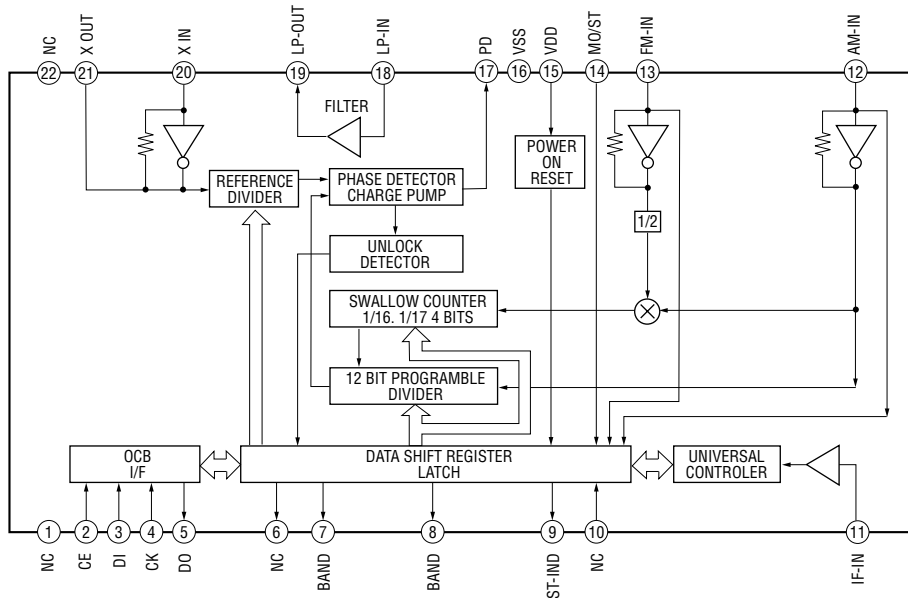


• IC Block Diagrams (Tuner Section)

IC1 TA2104BN



IC2 LC72137-D



SECTION 7 EXPLODED VIEWS

NOTE :

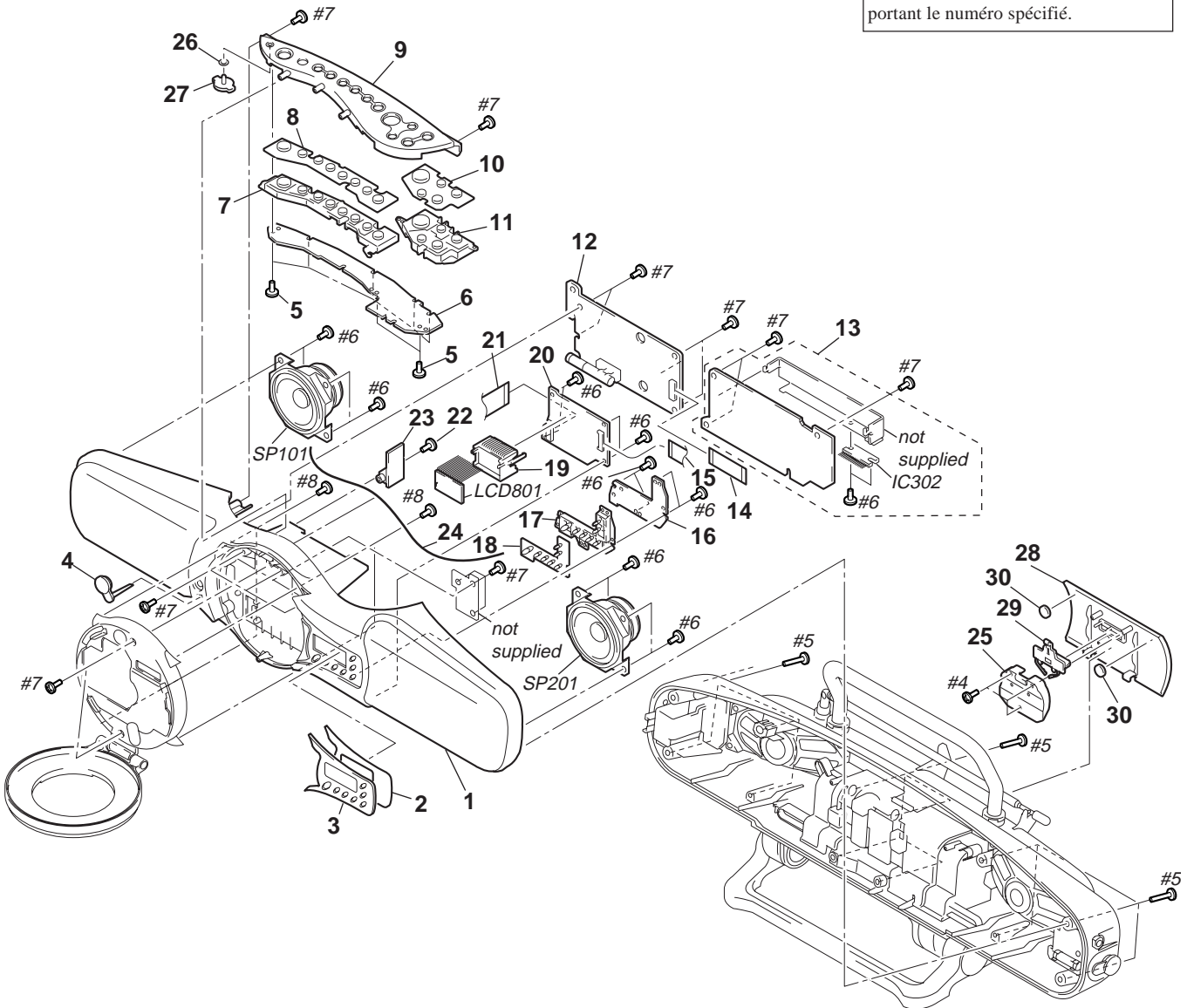
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked “ * ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- 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.

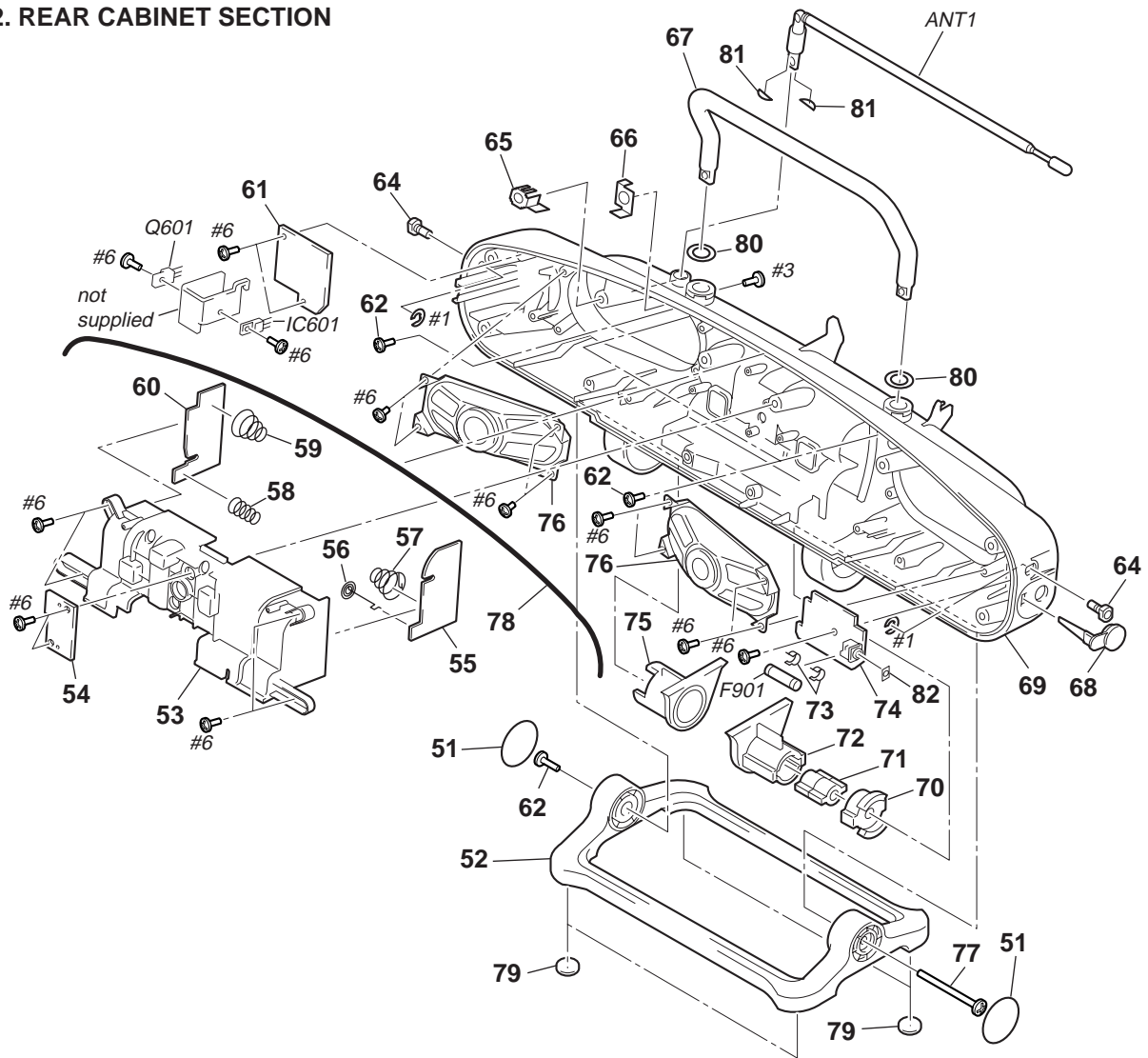
Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. FRONT CABINET SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-3378-024-1	CABINET SUB ASSY, FRONT		18	3-040-387-01	RUBBER (SOUND)	
2	3-040-393-01	SHEET(LCD), ADHESIVE		19	3-040-511-01	HOLDER, LCD	
3	3-040-392-01	WINDOW, LCD		* 20	A-3322-282-A	CONTROL BOARD, COMPLETE	
4	3-028-872-11	PACKING (JACK)		21	1-791-613-11	WIRE, PARALLEL (FFC) (17 CORE)	
5	4-931-757-41	SCREW(DIA.2.6X10) (IT3B)		22	3-911-135-01	SCREW (2.6X10), (+PWH) TAPPING	
* 6	A-3322-289-A	SW (1) BOARD, COMPLETE		* 23	1-675-601-11	HEADPHONE BOARD	
7	3-040-382-01	BUTTON (POWER)		24	3-017-930-01	PACKING (F/R)	
8	3-040-383-01	RUBBER (POWER)		25	3-040-346-01	BRACKET (S), BATTERY	
9	3-040-384-01	PANEL, CONTROL		26	3-040-386-01	SHEET (POWER), ADHESIVE	
10	3-040-381-01	RUBBER (VOL)		27	3-040-385-01	INDICATOR (POWER)	
11	3-040-380-01	BUTTON (VOL)		28	3-040-344-01	LID, BATTERY CASE	
* 12	A-3322-284-A	TUNER BOARD, COMPLETE		29	3-040-345-01	LOCK(BATT)	
* 13	A-3322-285-A	MAIN BOARD, COMPLETE		30	3-042-819-01	CUSHION (2), SPEAKER	
14	1-791-611-11	WIRE, PARALLEL (FFC) (11 CORE)		IC302	8-759-333-16	IC LA4705NA	
15	1-791-612-11	WIRE, PARALLEL (FFC) (21 CORE)		LCD801	1-803-794-11	DISPLAY PANEL, LIQUID CRYSTAL	
* 16	1-675-596-11	SW (2) BOARD		SP101	1-529-504-11	SPEAKER (8cm) (L-CH)	
17	3-040-388-01	BUTTON (SOUND)		SP201	1-529-504-11	SPEAKER (8cm) (R-CH)	

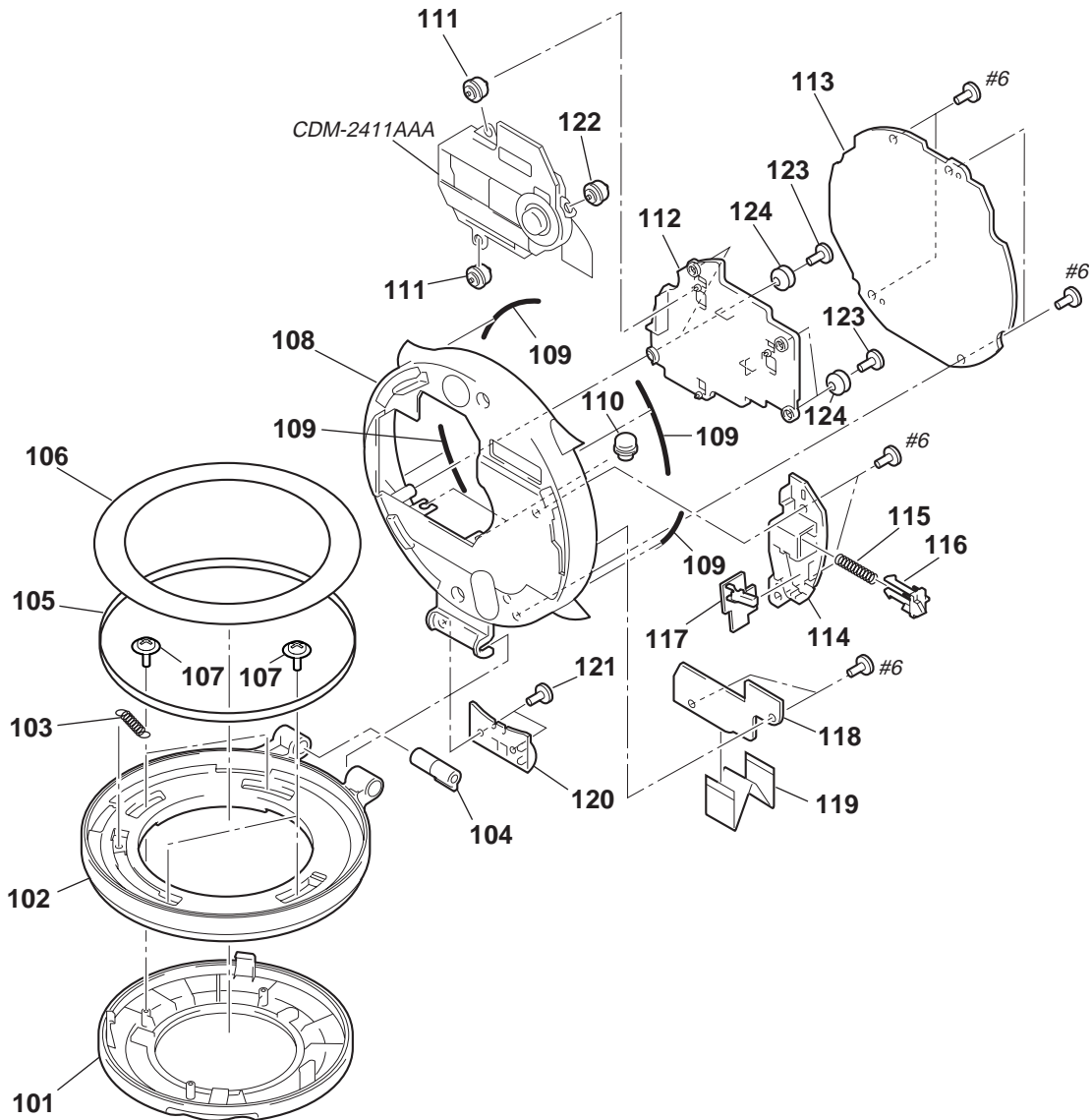
7-2. REAR CABINET SECTION



<p>The components identified by mark ▲ or dotted line with mark ▲ are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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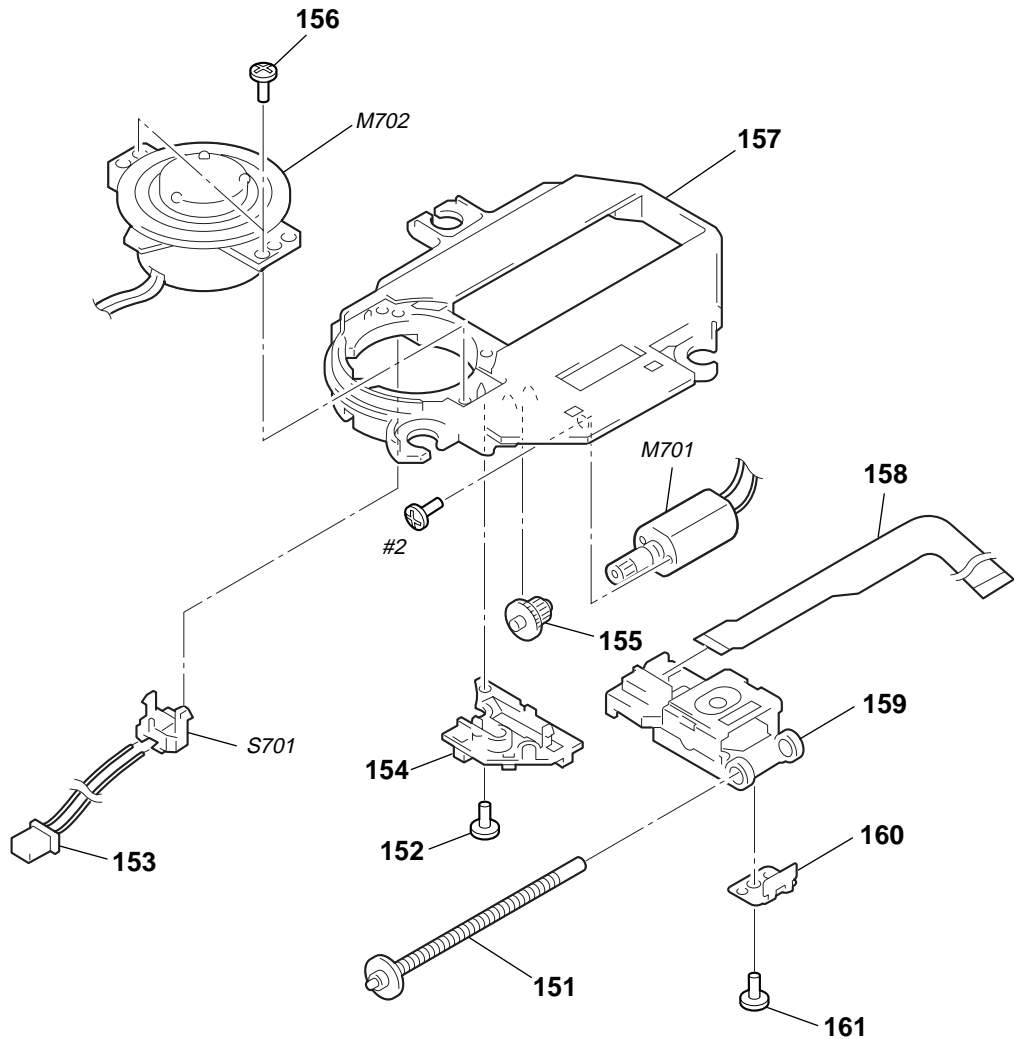
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-040-363-01	COVER, FOOT		70	3-040-352-01	PIN,BRACKET (L)	
52	3-040-359-01	FOOT(TURN)		71	X-3378-021-1	PIN ASSY (L)	
53	3-040-367-01	CASE, BATTERY		72	3-040-361-01	CAP(R), FOOT	
* 54	1-675-600-11	RESET BOARD		73	1-533-233-31	HOLDER, FUSE	
* 55	1-675-606-11	BATT (R) BOARD		* 74	1-675-607-11	DC IN BOARD	
				75	3-040-360-01	CAP(L), FOOT	
56	3-040-369-01	SPRING (+) (S), BATTERY		76	1-529-505-11	SPEAKER (12X6cm)	
57	3-040-342-01	SPRING (-) (L), BATTERY		77	3-040-362-01	SCREW (IPWII 3X33)	
58	3-040-343-01	SPRING (-) (S), BATTERY		78	3-017-930-01	PACKING (F/R)	
59	3-040-342-01	SPRING (-) (L), BATTERY		79	3-042-304-01	CUSHION (LEG)	
* 60	1-675-605-11	BATT (L) BOARD		80	3-042-305-01	CUSHION, HANDLE	
* 61	1-675-588-11	REGULATOR BOARD		81	3-043-146-01	CUSHION (ANTENNA)	
62	3-040-358-01	SCREW (+BVWP11 3X14)		82	3-042-831-01	CUSHION (JACK)	
64	3-040-364-01	NUT(BELT)		ANT1	1-754-090-11	ANTENNA, TELESCOPIC	
65	3-040-356-01	TERMINAL, ANTENNA		▲F901	1-533-420-11	FUSE, GLASS CYLINDRICAL(DIA.5) (5A/125V)	
66	3-042-815-01	TERMINAL (B), ANTENNA		IC601	8-759-445-59	IC BA033T	
67	3-040-357-01	HANDLE		Q601	8-729-209-15	TRANSISTOR 2SD2012	
68	3-028-872-11	PACKING (JACK)					
69	3-040-353-01	CABINET, REAR (US)					
69	3-040-353-11	CABINET, REAR (CND)					

7-3. CD BLOCK SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	X-3378-025-1	LID ASSY, CD		* 113	A-3322-287-A	CD BOARD, COMPLETE	
102	3-040-373-01	HOLDER, CD		114	3-040-370-01	BRACKET (SW)	
103	3-040-375-01	SPRING (CD), TENSION COIL		115	3-040-371-01	SPRING (CD), COMPRESSION	
104	X-3378-019-1	PINASSY (S)		116	3-040-372-01	SLIDER (CD), PUSH	
105	3-040-377-01	PACKING (CD)		* 117	1-675-597-11	OPEN/CLOSE BOARD	
106	3-040-376-01	PLATE, CD ORNAMENTAL		* 118	1-675-595-11	RELAY BOARD	
107	3-040-731-01	SCREW (+PTPWH 2.6X8)		119	1-791-614-11	WIRE, PARALLEL (FFC) (21 CORE)	
108	3-040-394-01	CHASSIS, CD		120	3-040-396-01	BRACKET, PIN (S)	
109	3-017-930-01	PACKING (F/R)		121	3-040-730-01	SCREW (PTPWH 3X8)	
110	3-042-826-01	INSURATOR, CD		122	3-043-515-11	INSURATOR	
111	4-975-762-01	INSULATOR		123	3-044-315-01	SCREW, TAPPING +PWH	
112	3-043-515-01	BRACKET (CD)		124	3-044-314-01	RUBBER (VIBRATION)	

**7-4. 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
151	A-3303-970-A	SCREW ASSY, FEED		158	1-660-965-11	SLIDE FLEXIBLE BOARD	
152	3-318-203-11	SCREW (B1.7), TAPPING		\triangle 159	X-4950-060-1	OPTICAL PICK-UP DAX-01A2	
153	1-690-530-81	LEAD (WITH CONNECTOR)		160	4-972-165-01	RACK	
154	4-972-163-04	SPRING, SLED		161	4-973-631-01	SCREW	
155	4-974-003-01	GEAR (B)		M701	A-3303-403-A	MOTOR ASSY (SLED) (INCLUDING GEAR)	
156	3-719-401-11	SCREW (B1.7), TAPPING		M702	A-3303-971-A	MOTOR ASSY, TURN TABLE (SPINDLE)	
157	4-972-162-01	CHASSIS		S701	1-571-099-21	SWITCH (1 KEY) (LIMIT)	

SECTION 8

BATT (L)

BATT (R)

CD

ELECTRICAL PARTS LIST

NOTE :

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- 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
*	1-675-605-11	BATT (L) BOARD *****		C728	1-162-215-31	CERAMIC 47PF 5% 50V	
	3-040-342-01	SPRING (-) (L), BATTERY		C729	1-162-600-11	CERAMIC 0.0047uF 30% 16V	
	3-040-343-01	SPRING (-) (S), BATTERY		C730	1-126-162-11	ELECT 3.3uF 20% 50V	
*****				C731	1-136-495-11	MYLAR 0.068uF 5% 50V	
*	1-675-606-11	BATT (R) BOARD *****		C732	1-162-306-11	CERAMIC 0.01uF 20% 16V	
	3-040-342-01	SPRING (-) (L), BATTERY		C733	1-162-215-31	CERAMIC 47PF 5% 50V	
	3-040-369-01	SPRING (+) (S), BATTERY		C734	1-162-600-11	CERAMIC 0.0047uF 30% 16V	
*****				C735	1-162-306-11	CERAMIC 0.01uF 20% 16V	
*	A-3322-287-A	CD BOARD, COMPLETE *****		C736	1-124-584-00	ELECT 100uF 20% 10V	
	< CAPACITOR >			C737	1-162-282-31	CERAMIC 100PF 10% 50V	
C701	1-124-584-00	ELECT 100uF 20% 10V		C738	1-162-282-31	CERAMIC 100PF 10% 50V	
C702	1-162-306-11	CERAMIC 0.01uF 20% 16V		C739	1-162-282-31	CERAMIC 100PF 10% 50V	
C703	1-162-294-31	CERAMIC 0.001uF 10% 50V		C740	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C704	1-136-161-00	MYLAR 0.047uF 5% 50V		C741	1-128-057-11	ELECT 330uF 20% 6.3V	
C705	1-162-600-11	CERAMIC 0.0047uF 20% 16V		C742	1-162-282-31	CERAMIC 100PF 10% 50V	
C706	1-162-306-11	CERAMIC 0.01uF 20% 16V		C743	1-136-169-00	MYLAR 0.22uF 5% 50V	
C707	1-126-926-11	ELECT 1000uF 20% 10V		C744	1-136-155-00	FILM 0.015uF 5% 50V	
C708	1-162-306-11	CERAMIC 0.01uF 20% 16V		C745	1-162-302-11	CERAMIC 0.0022uF 20% 16V	
C709	1-162-306-11	CERAMIC 0.01uF 20% 16V		C746	1-162-286-21	CERAMIC 220PF 10% 50V	
C710	1-136-165-00	MYLAR 0.1uF 5% 50V		C747	1-136-169-00	MYLAR 0.22uF 5% 50V	
C711	1-136-165-00	MYLAR 0.1uF 5% 50V		C748	1-137-194-91	MYLAR 0.47uF 5% 50V	
C712	1-136-157-00	MYLAR 0.022uF 5% 50V		C749	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C713	1-124-584-00	ELECT 100uF 20% 10V		C750	1-136-165-00	MYLAR 0.1uF 5% 50V	
C714	1-162-302-11	CERAMIC 0.0022uF 20% 16V		C751	1-136-155-00	FILM 0.015uF 5% 50V	
C715	1-136-165-00	MYLAR 0.1uF 5% 50V		C752	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C716	1-126-157-11	ELECT 10uF 20% 16V		C753	1-162-288-31	CERAMIC 330PF 10% 50V	
C717	1-136-165-00	MYLAR 0.1uF 5% 50V		C754	1-162-288-31	CERAMIC 330PF 10% 50V	
C718	1-136-165-00	MYLAR 0.1uF 5% 50V		C755	1-162-288-31	CERAMIC 330PF 10% 50V	
C719	1-162-215-31	CERAMIC 47PF 5% 50V		C756	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C720	1-124-259-11	ELECT 4.7uF 20% 16V		C757	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C721	1-162-306-11	CERAMIC 0.01uF 20% 16V		C758	1-162-288-31	CERAMIC 330PF 10% 50V	
C722	1-136-159-00	MYLAR 0.033uF 5% 50V		C759	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C723	1-136-159-00	MYLAR 0.033uF 5% 50V		C760	1-162-282-31	CERAMIC 100PF 10% 50V	
C724	1-162-215-31	CERAMIC 47PF 5% 50V		C761	1-162-288-31	CERAMIC 330PF 10% 50V	
C725	1-162-290-31	CERAMIC 470PF 10% 50V		C762	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C726	1-136-156-00	MYLAR 0.018uF 5% 50V		C763	1-162-282-31	CERAMIC 100PF 10% 50V	
C727	1-136-165-00	MYLAR 0.1uF 5% 50V		C764	1-162-306-11	CERAMIC 0.01uF 20% 16V	
				C765	1-162-306-11	CERAMIC 0.01uF 20% 16V	
				C767	1-162-201-31	CERAMIC 12PF 5% 50V	
				C768	1-162-201-31	CERAMIC 12PF 5% 50V	
				C770	1-126-176-11	ELECT 220uF 20% 10V	
				C771	1-162-302-11	CERAMIC 0.0022uF 30% 16V	
				C772	1-162-302-11	CERAMIC 0.0022uF 30% 16V	

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C773	1-126-157-11	ELECT	10uF	20%	16V	R705	1-247-887-00	CARBON	220K	5%	1/4W
C774	1-126-157-11	ELECT	10uF	20%	16V	R706	1-247-891-00	CARBON	330K	5%	1/4W
C775	1-162-282-31	CERAMIC	100PF	10%	50V	R707	1-247-891-00	CARBON	330K	5%	1/4W
C776	1-162-306-11	CERAMIC	0.01uF	20%	16V	R708	1-247-903-00	CARBON	1M	5%	1/4W
C777	1-126-176-11	ELECT	220uF	20%	10V	R709	1-249-437-11	CARBON	47K	5%	1/4W
C778	1-162-288-31	CERAMIC	330PF	10%	50V	R710	1-247-896-11	CARBON	510K	5%	1/4W
C779	1-162-282-31	CERAMIC	100PF	10%	50V	R711	1-247-883-00	CARBON	150K	5%	1/4W
C780	1-162-288-31	CERAMIC	330PF	10%	50V	R712	1-247-887-00	CARBON	220K	5%	1/4W
C781	1-162-306-11	CERAMIC	0.01uF	20%	16V	R713	1-249-437-11	CARBON	47K	5%	1/4W
C782	1-162-288-31	CERAMIC	330PF	10%	50V	R714	1-249-435-11	CARBON	33K	5%	1/4W
C783	1-162-282-31	CERAMIC	100PF	10%	50V	R715	1-249-439-11	CARBON	68K	5%	1/4W
C784	1-136-169-00	MYLAR	0.22uF	5%	50V	R716	1-249-441-11	CARBON	100K	5%	1/4W
C785	1-162-306-11	CERAMIC	0.01uF	20%	16V	R717	1-249-441-11	CARBON	100K	5%	1/4W
C786	1-126-916-11	ELECT	1000uF	20%	6.3V	R718	1-249-413-11	CARBON	470	5%	1/4W
C787	1-162-282-31	CERAMIC	100PF	10%	50V	R719	1-249-413-11	CARBON	470	5%	1/4W
C788	1-126-157-11	ELECT	10uF	20%	16V	R720	1-247-831-91	CARBON	1K	5%	1/4W
C789	1-162-294-31	CERAMIC	0.001uF	10%	50V	R721	1-249-437-11	CARBON	47K	5%	1/4W
C790	1-162-290-31	CERAMIC	470PF	10%	50V	R722	1-249-437-11	CARBON	47K	5%	1/4W
C791	1-126-157-11	ELECT	10uF	20%	16V	R723	1-249-437-11	CARBON	47K	5%	1/4W
C792	1-128-057-11	ELECT	330uF	20%	6.3V	R724	1-249-437-11	CARBON	47K	5%	1/4W
< CONNECTOR >						R725	1-247-883-00	CARBON	150K	5%	1/4W
CN701	1-563-624-11	HOUSING, CONNECTOR 21P				R726	1-247-883-00	CARBON	150K	5%	1/4W
CN702	1-691-049-21	HOUSING, CONNECTOR 17P				R727	1-247-887-00	CARBON	220K	5%	1/4W
* CN704	1-580-154-11	PIN, CONNECTOR (PC BOARD) 2P				R728	1-247-883-00	CARBON	150K	5%	1/4W
< DIODE >						R729	1-247-831-91	CARBON	1K	5%	1/4W
D701	8-719-991-33	DIODE 1SS133T-77				R730	1-247-883-00	CARBON	150K	5%	1/4W
D702	8-719-050-84	DIODE RB441Q-40T-77				R731	1-249-425-11	CARBON	4.7K	5%	1/4W
< FERRITE BEAD >						R732	1-249-429-11	CARBON	10K	5%	1/4W
FB701	1-410-397-21	FERRITE BEAD INDUCTOR				R733	1-249-441-11	CARBON	100K	5%	1/4W
FB702	1-410-397-21	FERRITE BEAD INDUCTOR				R734	1-249-393-11	CARBON	10	5%	1/4W
FB703	1-410-397-21	FERRITE BEAD INDUCTOR				R735	1-249-425-11	CARBON	4.7K	5%	1/4W
< IC >						R736	1-249-437-11	CARBON	47K	5%	1/4W
IC701	8-752-083-24	IC CXA2542AQ				R739	1-247-831-91	CARBON	1K	5%	1/4W
IC702	8-752-387-78	IC CXD3009Q				R740	1-247-831-91	CARBON	1K	5%	1/4W
IC703	8-759-591-62	IC BA6998FP-E2				R741	1-247-887-00	CARBON	220K	5%	1/4W
IC704	8-759-581-78	IC SM5904BF				R742	1-247-883-00	CARBON	150K	5%	1/4W
< COIL >						R743	1-247-887-00	CARBON	220K	5%	1/4W
L701	1-414-142-11	INDUCTOR	1uH			R745	1-247-891-00	CARBON	330K	5%	1/4W
L703	1-414-142-11	INDUCTOR	1uH			R747	1-249-421-11	CARBON	2.2K	5%	1/4W
L705	1-414-142-11	INDUCTOR	1uH			R750	1-249-429-11	CARBON	10K	5%	1/4W
L707	1-410-509-11	INDUCTOR	10uH			R751	1-249-429-11	CARBON	10K	5%	1/4W
< TRANSISTOR >						R752	1-249-435-11	CARBON	33K	5%	1/4W
Q701	8-729-037-03	TRANSISTOR KTA1266GR-AT				R753	1-247-831-91	CARBON	1K	5%	1/4W
Q702	8-729-922-66	TRANSISTOR 2SC2410SN				R754	1-247-863-91	CARBON	22K	5%	1/4W
Q703	8-729-904-34	TRANSISTOR DTA114TS				R755	1-249-435-11	CARBON	33K	5%	1/4W
Q704	8-729-036-77	TRANSISTOR KRC107M				R756	1-249-431-11	CARBON	15K	5%	1/4W
< RESISTOR >						R758	1-249-421-11	CARBON	2.2K	5%	1/4W
R700	1-247-863-91	CARBON	22K	5%	1/4W	R760	1-249-441-11	CARBON	100K	5%	1/4W
R701	1-249-425-11	CARBON	4.7K	5%	1/4W	R763	1-247-831-91	CARBON	1K	5%	1/4W
R702	1-247-863-91	CARBON	22K	5%	1/4W	R764	1-249-425-11	CARBON	4.7K	5%	1/4W
R703	1-247-899-11	CARBON	680K	5%	1/4W	R765	1-249-426-11	CARBON	5.6K	5%	1/4W
R704	1-249-431-11	CARBON	15K	5%	1/4W	R766	1-247-903-00	CARBON	1M	5%	1/4W
						R767	1-249-429-11	CARBON	10K	5%	1/4W
						R768	1-247-887-00	CARBON	220K	5%	1/4W
						R770	1-247-831-91	CARBON	1K	5%	1/4W
						R771	1-249-429-11	CARBON	10K	5%	1/4W
						R774	1-249-421-11	CARBON	2.2K	5%	1/4W
						R776	1-249-429-11	CARBON	10K	5%	1/4W

CD CONTROL

Ref. No.	Part No.	Description	Remark
R777	1-247-831-91	CARBON 1K 5%	1/4W
R778	1-247-831-91	CARBON 1K 5%	1/4W
R780	1-247-831-91	CARBON 1K 5%	1/4W
R781	1-249-437-11	CARBON 47K 5%	1/4W
R787	1-247-831-91	CARBON 1K 5%	1/4W
R788	1-247-831-91	CARBON 1K 5%	1/4W
R789	1-247-831-91	CARBON 1K 5%	1/4W
R790	1-247-831-91	CARBON 1K 5%	1/4W
R793	1-247-831-91	CARBON 1K 5%	1/4W
R794	1-249-413-11	CARBON 470 5%	1/4W
R795	1-247-815-91	CARBON 220 5%	1/4W
R796	1-247-831-91	CARBON 1K 5%	1/4W
R797	1-247-831-91	CARBON 1K 5%	1/4W
R798	1-247-831-91	CARBON 1K 5%	1/4W
R799	1-247-831-91	CARBON 1K 5%	1/4W

< VIBRATOR >

X701	1-579-345-11	VIBRATOR, CERAMIC (16.9344MHz)	
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* A-3322-282-A CONTROL BOARD, COMPLETE

< CAPACITOR >

C801	1-125-507-11	CAPACITOR 0.22F	5.5V
C802	1-124-589-11	ELECT 47uF 20%	16V
C803	1-126-160-11	ELECT 1uF 20%	50V
C804	1-102-962-00	CERAMIC 30PF 5%	50V
C805	1-102-962-00	CERAMIC 30PF 5%	50V
C806	1-162-199-31	CERAMIC 10PF 5%	50V
C807	1-162-201-31	CERAMIC 12PF 5%	50V
C809	1-162-851-11	CERAMIC 0.1uF 10%	16V
C810	1-128-647-11	CAPACITOR 0.1F	5.5V
C811	1-162-306-11	CERAMIC 0.01uF 30%	16V
C812	1-162-306-11	CERAMIC 0.01uF 30%	16V
C813	1-162-306-11	CERAMIC 0.01uF 30%	16V
C814	1-136-165-00	MYLAR 0.1uF 5%	50V
C815	1-137-194-91	MYLAR 0.47uF 5%	50V
C816	1-162-306-11	CERAMIC 0.01uF 30%	16V

< CONNECTOR >

CN801	1-563-624-11	HOUSING, CONNECTOR 21P	
CN802	1-691-649-11	SOCKET, CONNECTOR 17P	
* CN803	1-580-154-11	PIN, CONNECTOR (PC BOARD) 2P	
* CN804	1-566-779-11	PIN, CONNECTOR (PC BOARD) 4P	

< DIODE >

D802	8-719-050-84	DIODE RB441Q-40T-77	
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< IC >

IC801	8-752-912-10	IC CXP83620-016Q	
IC802	8-759-658-46	IC S81233SGY-Z	
IC803	8-759-645-87	IC PST9128-T	

< COIL >

L801	1-414-142-11	INDUCTOR 1uH	
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Ref. No.	Part No.	Description	Remark
L802	1-410-509-11	INDUCTOR 10uH	
L803	1-414-142-11	INDUCTOR 1uH	
< LIQUID CRYSTAL DISPLAY >			
LCD801	1-803-794-11	DISPLAY PANEL, LIQUID CRYSTAL	
< TRANSISTOR >			
Q801	8-729-036-77	TRANSISTOR KRC107M	
Q802	8-729-036-77	TRANSISTOR KRC107M	
Q803	8-729-012-83	TRANSISTOR 2SK679A	
Q804	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q805	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q806	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q807	8-729-119-76	TRANSISTOR 2SA1175-HFE	
< RESISTOR >			

R801	1-247-831-91	CARBON 1K 5%	1/4W
R802	1-247-831-91	CARBON 1K 5%	1/4W
R803	1-247-831-91	CARBON 1K 5%	1/4W
R804	1-247-887-00	CARBON 220K 5%	1/4W
R805	1-247-831-91	CARBON 1K 5%	1/4W
R806	1-247-831-91	CARBON 1K 5%	1/4W
R807	1-247-831-91	CARBON 1K 5%	1/4W
R808	1-247-831-91	CARBON 1K 5%	1/4W
R809	1-247-831-91	CARBON 1K 5%	1/4W
R810	1-247-831-91	CARBON 1K 5%	1/4W
R811	1-247-831-91	CARBON 1K 5%	1/4W
R812	1-247-831-91	CARBON 1K 5%	1/4W
R813	1-247-831-91	CARBON 1K 5%	1/4W
R814	1-247-831-91	CARBON 1K 5%	1/4W
R815	1-247-831-91	CARBON 1K 5%	1/4W
R817	1-247-831-91	CARBON 1K 5%	1/4W
R818	1-247-831-91	CARBON 1K 5%	1/4W
R819	1-247-831-91	CARBON 1K 5%	1/4W
R820	1-247-831-91	CARBON 1K 5%	1/4W
R822	1-249-425-11	CARBON 4.7K 5%	1/4W
R823	1-249-425-11	CARBON 4.7K 5%	1/4W
R824	1-249-425-11	CARBON 4.7K 5%	1/4W
R825	1-249-425-11	CARBON 4.7K 5%	1/4W
R826	1-247-831-91	CARBON 1K 5%	1/4W
R827	1-247-891-00	CARBON 330K 5%	1/4W
R828	1-247-831-91	CARBON 1K 5%	1/4W
R829	1-247-831-91	CARBON 1K 5%	1/4W
R830	1-249-425-11	CARBON 4.7K 5%	1/4W
R834	1-249-441-11	CARBON 100K 5%	1/4W
R835	1-247-883-00	CARBON 150K 5%	1/4W
R836	1-247-883-00	CARBON 150K 5%	1/4W
R837	1-247-883-00	CARBON 150K 5%	1/4W
R839	1-249-413-11	CARBON 470 5%	1/4W
R863	1-247-831-91	CARBON 1K 5%	1/4W
R864	1-247-831-91	CARBON 1K 5%	1/4W
R865	1-247-831-91	CARBON 1K 5%	1/4W
R866	1-247-807-31	CARBON 100 5%	1/4W
R867	1-249-421-11	CARBON 2.2K 5%	1/4W
R868	1-247-831-91	CARBON 1K 5%	1/4W
R869	1-247-831-91	CARBON 1K 5%	1/4W
R870	1-247-831-91	CARBON 1K 5%	1/4W

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R871	1-247-831-91	CARBON	1K 5% 1/4W			< TRANSISTOR >	
R872	1-247-887-00	CARBON	220K 5% 1/4W				
R876	1-247-807-31	CARBON	100 5% 1/4W	Q150	8-729-905-50	TRANSISTOR DTC343TS	
R877	1-249-441-11	CARBON	100K 5% 1/4W	Q250	8-729-905-50	TRANSISTOR DTC343TS	
R879	1-247-831-91	CARBON	1K 5% 1/4W			< RESISTOR >	
R880	1-247-831-91	CARBON	1K 5% 1/4W				
R881	1-249-439-11	CARBON	68K 5% 1/4W	R150	1-249-404-00	CARBON 82 5% 1/4W	
R882	1-247-807-31	CARBON	100 5% 1/4W	R250	1-249-404-00	CARBON 82 5% 1/4W	
R890	1-249-437-11	CARBON	47K 5% 1/4W			*****	
R891	1-247-903-00	CARBON	1M 5% 1/4W	*	A-3322-285-A	MAIN BOARD, COMPLETE	
R893	1-247-891-00	CARBON	330K 5% 1/4W			*****	
R894	1-247-895-91	CARBON	470K 5% 1/4W				
R895	1-247-901-11	CARBON	820K 5% 1/4W			7-685-647-79	SCREW, TAPPING +BV 3X10
R896	1-247-883-00	CARBON	150K 5% 1/4W			< CAPACITOR >	
R898	1-247-887-00	CARBON	220K 5% 1/4W	C101	1-126-960-11	ELECT 1uF 20% 50V	
R899	1-247-891-00	CARBON	330K 5% 1/4W	C103	1-162-849-11	CERAMIC 0.068uF 10% 16V	
		< VIBRATOR >		C104	1-162-849-11	CERAMIC 0.068uF 10% 16V	
X801	1-767-184-11	VIBRATOR, CERAMIC (4.19MHz)		C105	1-162-837-11	CERAMIC 0.0068uF 10% 16V	
X802	1-781-592-11	VIBRATOR, CRYSTAL (32.768kHz)		C106	1-104-664-11	ELECT 47uF 20% 10V	
		*****		C107	1-104-664-11	ELECT 47uF 20% 10V	
*	1-675-607-11	DC IN BOARD	*****	C108	1-162-294-31	CERAMIC 0.001uF 10% 50V	
				C109	1-126-960-11	ELECT 1uF 20% 50V	
	1-533-233-31	HOLDER, FUSE		C110	1-136-165-00	MYLAR 0.1uF 5% 50V	
		< CONNECTOR >		C111	1-136-165-00	MYLAR 0.1uF 5% 50V	
* CN901	1-774-957-11	PIN, CONNECTOR (PC BOARD) 11P		C112	1-162-282-31	CERAMIC 100PF 10% 50V	
* CN902	1-564-506-11	PLUG, CONNECTOR 3P		C113	1-162-282-31	CERAMIC 100PF 10% 50V	
* CN903	1-564-505-11	PLUG, CONNECTOR 2P		C117	1-126-964-11	ELECT 10uF 20% 50V	
* CN904	1-580-154-11	PIN, CONNECTOR (PC BOARD) 2P		C201	1-126-960-11	ELECT 1uF 20% 50V	
* CN905	1-580-158-11	PIN, CONNECTOR (PC BOARD) 6P		C203	1-162-849-11	CERAMIC 0.068uF 10% 16V	
		< DIODE >		C204	1-162-849-11	CERAMIC 0.068uF 10% 16V	
D901	8-719-200-02	DIODE 10E2		C205	1-162-837-11	CERAMIC 0.0068uF 10% 16V	
		< FUSE >		C206	1-104-664-11	ELECT 47uF 20% 10V	
△ F901	1-533-420-11	FUSE, GLASS CYLINDRICAL(DIA.5) (5A/125V)		C207	1-104-664-11	ELECT 47uF 20% 10V	
		< JACK >		C208	1-162-294-31	CERAMIC 0.001uF 10% 50V	
J901	1-774-741-11	JACK, DC (DC IN 10.6-12V)		C209	1-126-960-11	ELECT 1uF 20% 50V	
		*****		C210	1-136-165-00	MYLAR 0.1uF 5% 50V	
*	1-675-601-11	HEADPHONE BOARD	*****	C211	1-136-165-00	MYLAR 0.1uF 5% 50V	
		< CAPACITOR >		C212	1-162-282-31	CERAMIC 100PF 10% 50V	
C150	1-124-589-11	ELECT 47uF 20% 16V		C213	1-162-282-31	CERAMIC 100PF 10% 50V	
C250	1-124-589-11	ELECT 47uF 20% 16V		C217	1-126-964-11	ELECT 10uF 20% 50V	
		< CONNECTOR >		C300	1-126-943-11	ELECT 2200uF 20% 25V	
* CN501	1-564-521-11	PLUG, CONNECTOR 6P		C301	1-126-934-11	ELECT 220uF 20% 10V	
* CN502	1-564-517-11	PLUG, CONNECTOR 2P		C302	1-126-934-11	ELECT 220uF 20% 10V	
		< JACK >		C303	1-104-664-11	ELECT 47uF 20% 10V	
J501	1-566-891-11	JACK (♫)		C304	1-126-926-11	ELECT 1000uF 20% 10V	
				C305	1-162-843-11	CERAMIC 0.022uF 10% 16V	
				C306	1-126-963-11	ELECT 4.7uF 20% 50V	
				C307	1-104-664-11	ELECT 47uF 20% 10V	
				C308	1-126-960-11	ELECT 1uF 20% 50V	
				C309	1-104-664-11	ELECT 47uF 20% 10V	
				C310	1-126-963-11	ELECT 4.7uF 20% 50V	
				C311	1-104-664-11	ELECT 47uF 20% 10V	
				C312	1-128-551-11	ELECT 22uF 20% 25V	
				C313	1-128-551-11	ELECT 22uF 20% 25V	
				C317	1-126-940-11	ELECT 330uF 20% 25V	
				C318	1-162-851-11	CERAMIC 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.

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C319	1-126-963-11	ELECT	4.7uF 20% 50V	Q321	8-729-037-34	TRANSISTOR KRA107M	
C320	1-104-665-11	ELECT	100uF 20% 10V	Q322	8-729-036-77	TRANSISTOR KRC107M	
C321	1-104-664-11	ELECT	47uF 20% 10V	Q323	8-729-036-77	TRANSISTOR KRC107M	
C322	1-104-664-11	ELECT	47uF 20% 10V	Q324	8-729-801-84	TRANSISTOR 2SB1013-4	
C323	1-162-851-11	CERAMIC	0.1uF 10% 16V	Q325	8-729-119-76	TRANSISTOR 2SA1175-HFE	
< CONNECTOR >				< RESISTOR >			
CN301	1-691-043-21	HOUSING, CONNECTOR 11P		R103	1-249-431-11	CARBON 15K 5% 1/4W	
* CN302	1-691-053-21	HOUSING, CONNECTOR 21P		R104	1-249-425-11	CARBON 4.7K 5% 1/4W	
* CN303	1-580-158-11	PIN, CONNECTOR (PC BOARD) 6P		R105	1-249-431-11	CARBON 15K 5% 1/4W	
* CN304	1-564-505-11	PLUG, CONNECTOR 2P		R107	1-249-425-11	CARBON 4.7K 5% 1/4W	
< DIODE >				R108	1-249-429-11	CARBON 10K 5% 1/4W	
D101	8-719-991-33	DIODE 1SS133T-77		R109	1-247-843-11	CARBON 3.3K 5% 1/4W	
D102	8-719-991-33	DIODE 1SS133T-77		R110	1-249-385-11	CARBON 2.2 5% 1/6W	
D201	8-719-991-33	DIODE 1SS133T-77		R111	1-249-385-11	CARBON 2.2 5% 1/6W	
D202	8-719-991-33	DIODE 1SS133T-77		R112	1-247-895-91	CARBON 470K 5% 1/4W	
D301	8-719-050-84	DIODE RB441Q-40T-77		R113	1-249-432-11	CARBON 18K 5% 1/4W	
D302	8-719-110-49	DIODE RD18ES-B2		R114	1-249-425-11	CARBON 4.7K 5% 1/4W	
D304	8-719-991-33	DIODE 1SS133T-77		R203	1-249-431-11	CARBON 15K 5% 1/4W	
D307	8-719-991-33	DIODE 1SS133T-77		R204	1-249-425-11	CARBON 4.7K 5% 1/4W	
D308	8-719-991-33	DIODE 1SS133T-77		R205	1-249-431-11	CARBON 15K 5% 1/4W	
D309	8-719-991-33	DIODE 1SS133T-77		R207	1-249-425-11	CARBON 4.7K 5% 1/4W	
< IC >				R208	1-249-429-11	CARBON 10K 5% 1/4W	
IC301	8-759-432-41	IC BH3854AS		R209	1-247-843-11	CARBON 3.3K 5% 1/4W	
IC302	8-759-333-16	IC LA4705NA		R210	1-249-385-11	CARBON 2.2 5% 1/6W	
IC303	8-759-553-50	IC S-81256PG-Z		R211	1-249-385-11	CARBON 2.2 5% 1/6W	
< COIL >				R212	1-247-895-91	CARBON 470K 5% 1/4W	
L301	1-412-848-11	INDUCTOR 22uH		R213	1-249-432-11	CARBON 18K 5% 1/4W	
< TRANSISTOR >				R214	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q102	8-729-905-50	TRANSISTOR DTC343TS		R301	1-249-401-11	CARBON 47 5% 1/4W	
Q104	8-729-905-50	TRANSISTOR DTC343TS		R302	1-249-429-11	CARBON 10K 5% 1/4W	
Q105	8-729-905-50	TRANSISTOR DTC343TS		R303	1-249-429-11	CARBON 10K 5% 1/4W	
Q202	8-729-905-50	TRANSISTOR DTC343TS		R304	1-249-429-11	CARBON 10K 5% 1/4W	
Q204	8-729-905-50	TRANSISTOR DTC343TS		R305	1-249-432-11	CARBON 18K 5% 1/4W	
Q205	8-729-905-50	TRANSISTOR DTC343TS		R306	1-249-441-11	CARBON 100K 5% 1/4W	
Q301	8-729-037-34	TRANSISTOR KRA107M		R307	1-249-429-11	CARBON 10K 5% 1/4W	
Q302	8-729-801-84	TRANSISTOR 2SB1013-4		R308	1-247-903-00	CARBON 1M 5% 1/4W	
Q303	8-729-036-77	TRANSISTOR KRC107M		R309	1-247-903-00	CARBON 1M 5% 1/4W	
Q304	8-729-801-84	TRANSISTOR 2SB1013-4		R310	1-247-843-11	CARBON 3.3K 5% 1/4W	
Q305	8-729-037-34	TRANSISTOR KRA107M		R311	1-247-899-11	CARBON 680K 5% 1/4W	
Q306	8-729-036-77	TRANSISTOR KRC107M		R312	1-249-407-11	CARBON 150 5% 1/4W	
Q307	8-729-036-89	TRANSISTOR KTC3198GR-AT		R313	1-249-418-11	CARBON 1.2K 5% 1/4W	
Q308	8-729-036-89	TRANSISTOR KTC3198GR-AT		R314	1-247-889-00	CARBON 270K 5% 1/4W	
Q309	8-729-036-89	TRANSISTOR KTC3198GR-AT		R315	1-247-891-00	CARBON 330K 5% 1/4W	
Q310	8-729-036-77	TRANSISTOR KRC107M		R317	1-249-441-11	CARBON 100K 5% 1/4W	
Q311	8-729-036-77	TRANSISTOR KRC107M		R318	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q312	8-729-036-77	TRANSISTOR KRC107M		R320	1-249-437-11	CARBON 47K 5% 1/4W	
Q313	8-729-037-34	TRANSISTOR KRA107M		R321	1-249-429-11	CARBON 10K 5% 1/4W	
Q314	8-729-037-34	TRANSISTOR KRA107M		R322	1-249-437-11	CARBON 47K 5% 1/4W	
Q316	8-729-037-34	TRANSISTOR KRA107M		R323	1-249-429-11	CARBON 10K 5% 1/4W	
Q317	8-729-036-77	TRANSISTOR KRC107M		R324	1-249-441-11	CARBON 100K 5% 1/4W	
Q318	8-729-119-76	TRANSISTOR 2SA1175-HFE		R325	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q319	8-729-119-78	TRANSISTOR 2SC403SP-51		R326	1-247-831-91	CARBON 1K 5% 1/4W	
Q320	8-729-119-78	TRANSISTOR 2SC403SP-51		R327	1-249-413-11	CARBON 470 5% 1/4W	
				R328	1-247-881-00	CARBON 120K 5% 1/4W	
				R329	1-249-441-11	CARBON 100K 5% 1/4W	
				R330	1-249-430-11	CARBON 12K 5% 1/4W	
				R331	1-249-441-11	CARBON 100K 5% 1/4W	

MAIN	OPEN/CLOSE	REGULATOR	RELAY	RESET	SW (1)	SW (2)
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Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
R332	1-247-895-91	CARBON	470K	5%	1/4W		*	1-675-600-11	RESET BOARD				
R333	1-247-887-00	CARBON	220K	5%	1/4W				*****				
R334	1-249-421-11	CARBON	2.2K	5%	1/4W				< SWITCH >				
R335	1-247-815-91	CARBON	220	5%	1/4W								
R336	1-249-429-11	CARBON	10K	5%	1/4W		S901	1-692-014-11	SWITCH, KEY BOARD (RESET)				
R337	1-249-411-11	CARBON	330	5%	1/4W				*****				
R338	1-247-887-00	CARBON	220K	5%	1/4W		*	A-3322-289-A	SW (1) BOARD, COMPLETE				
*****									*****				
*	1-675-597-11	OPEN/CLOSE BOARD							< DIODE >				

		< SWITCH >					D801	8-719-074-42	LED SLR325VR-T31 (OPR/BATT)				
S702	1-572-085-11	SWITCH, LEAF (OPEN/CLOSE)							< RESISTOR >				

*	1-675-588-11	REGULATOR BOARD					R840	1-249-415-11	CARBON	680	5%	1/4W	
		*****					R841	1-249-416-11	CARBON	820	5%	1/4W	
		< CAPACITOR >					R842	1-249-418-11	CARBON	1.2K	5%	1/4W	
							R843	1-247-837-91	CARBON	1.8K	5%	1/4W	
							R844	1-247-843-11	CARBON	3.3K	5%	1/4W	
C601	1-162-851-11	CERAMIC	0.1uF	10%	16V		R845	1-249-427-11	CARBON	6.8K	5%	1/4W	
C602	1-126-934-11	ELECT	220uF	20%	10V		R846	1-249-415-11	CARBON	680	5%	1/4W	
C603	1-104-664-11	ELECT	47uF	20%	10V		R847	1-249-416-11	CARBON	820	5%	1/4W	
C604	1-104-664-11	ELECT	47uF	20%	10V		R848	1-249-418-11	CARBON	1.2K	5%	1/4W	
C605	1-162-851-11	CERAMIC	0.1uF	10%	16V		R849	1-247-837-91	CARBON	1.8K	5%	1/4W	
C606	1-126-934-11	ELECT	220uF	20%	10V		R850	1-247-843-11	CARBON	3.3K	5%	1/4W	
C607	1-162-851-11	CERAMIC	0.1uF	10%	16V		R851	1-249-427-11	CARBON	6.8K	5%	1/4W	
C608	1-162-851-11	CERAMIC	0.1uF	10%	16V		R858	1-249-407-11	CARBON	150	5%	1/4W	
C609	1-104-665-11	ELECT	100uF	20%	10V		R859	1-249-432-11	CARBON	18K	5%	1/4W	
		< DIODE >							< SWITCH >				
D601	8-719-110-03	DIODE RD7.5ESB2					S801	1-692-014-11	SWITCH, KEY BOARD (POWER)				
D602	8-719-991-33	DIODE 1SS133T-77					S802	1-692-014-11	SWITCH, KEY BOARD (BAND)				
D603	8-719-110-03	DIODE RD7.5ESB2					S803	1-692-014-11	SWITCH, KEY BOARD (PRESET -)				
		< IC >					S804	1-692-014-11	SWITCH, KEY BOARD (PRESET +)				
							S805	1-692-014-11	SWITCH, KEY BOARD (DISPLAY ENTER)				
IC601	8-759-445-59	IC BA033T					S806	1-692-014-11	SWITCH, KEY BOARD (MONO/ST MODE)				
		< TRANSISTOR >					S807	1-692-014-11	SWITCH, KEY BOARD (ESP)				
							S808	1-692-014-11	SWITCH, KEY BOARD (■)				
Q601	8-729-209-15	TRANSISTOR 2SD2012					S809	1-692-014-11	SWITCH, KEY BOARD (▶)				
Q602	8-729-036-86	TRANSISTOR KTC3203Y-AT					S810	1-692-014-11	SWITCH, KEY BOARD (TIME SET TUNING -)				
		< RESISTOR >					S811	1-692-014-11	SWITCH, KEY BOARD (TIME SET TUNING +)				
							S812	1-692-014-11	SWITCH, KEY BOARD (VOL +)				
R601	1-249-407-11	CARBON	150	5%	1/4W		S813	1-692-014-11	SWITCH, KEY BOARD (VOL -)				
R602	1-247-815-91	CARBON	220	5%	1/4W				*****				
*****						*	1-675-596-11	SW (2) BOARD					
		*****							*****				
*	1-675-595-11	RELAY BOARD							< RESISTOR >				

		< CONNECTOR >					R852	1-249-415-11	CARBON	680	5%	1/4W	
							R853	1-249-416-11	CARBON	820	5%	1/4W	
CN705	1-566-757-11	PIN, CONNECTOR (PC BOARD) 2P					R854	1-249-418-11	CARBON	1.2K	5%	1/4W	
CN706	1-566-757-11	PIN, CONNECTOR (PC BOARD) 2P					R855	1-247-837-91	CARBON	1.8K	5%	1/4W	
CN707	1-566-757-11	PIN, CONNECTOR (PC BOARD) 2P					R856	1-247-843-11	CARBON	3.3K	5%	1/4W	
CN708	1-779-551-11	CONNECTOR,FFC(LIF(NON-ZIF))14P											
CN709	1-770-528-31	CONNECTOR, FFC/FPC 21P					R857	1-249-427-11	CARBON	6.8K	5%	1/4W	
*****								< SWITCH >					
							S814	1-692-014-11	SWITCH, KEY BOARD (CLOCK)				

SW (2)

TUNER

Ref. No.	Part No.	Description	Remark
S815	1-692-014-11	SWITCH, KEY BOARD (TIMER)	
S816	1-692-014-11	SWITCH, KEY BOARD (STANDBY)	
S817	1-692-014-11	SWITCH, KEY BOARD (SLEEP)	
S818	1-692-014-11	SWITCH, KEY BOARD (ALARM)	
S819	1-692-014-11	SWITCH, KEY BOARD (SOUND)	
S820	1-692-014-11	SWITCH, KEY BOARD (MEGA BASS)	

*	A-3322-284-A	TUNER BOARD, COMPLETE	

< CAPACITOR >			
C3	1-162-301-11	CERAMIC	0.0015uF 30% 16V
C4	1-162-282-31	CERAMIC	100PF 10% 50V
C5	1-162-282-31	CERAMIC	100PF 10% 50V
C6	1-162-282-31	CERAMIC	100PF 10% 50V
C7	1-162-282-31	CERAMIC	100PF 10% 50V
C10	1-126-160-11	ELECT	1uF 20% 50V
C11	1-162-294-31	CERAMIC	0.001uF 10% 50V
C12	1-126-163-11	ELECT	4.7uF 20% 50V
C13	1-162-306-11	CERAMIC	0.01uF 30% 16V
C14	1-161-055-00	CERAMIC	0.022uF 10% 50V
C15	1-161-055-00	CERAMIC	0.022uF 10% 50V
C16	1-126-160-11	ELECT	1uF 20% 50V
C17	1-126-160-11	ELECT	1uF 20% 50V
C18	1-126-176-11	ELECT	220uF 20% 10V
C20	1-162-851-11	CERAMIC	0.1uF 16V
C21	1-124-465-00	ELECT	0.47uF 20% 50V
C22	1-162-851-11	CERAMIC	0.1uF 16V
C23	1-126-160-11	ELECT	1uF 20% 50V
C24	1-162-288-31	CERAMIC	330PF 10% 50V
C25	1-162-306-11	CERAMIC	0.01uF 30% 16V
C26	1-162-306-11	CERAMIC	0.01uF 30% 16V
C30	1-162-306-11	CERAMIC	0.01uF 30% 16V
C31	1-102-514-11	CERAMIC	22PF 5% 50V
C32	1-162-294-31	CERAMIC	0.001uF 10% 50V
C33	1-162-282-31	CERAMIC	100PF 10% 50V
C34	1-162-294-31	CERAMIC	0.001uF 10% 50V
C35	1-164-159-21	CERAMIC	0.1uF 50V
C40	1-162-851-11	CERAMIC	0.1uF 16V
C41	1-102-821-00	CERAMIC	360PF 5% 50V
C42	1-162-199-31	CERAMIC	10PF 5% 50V
C43	1-162-282-31	CERAMIC	100PF 10% 50V
C44	1-162-839-11	CERAMIC	0.01uF 10% 16V
C45	1-162-282-31	CERAMIC	100PF 10% 50V
C46	1-162-282-31	CERAMIC	100PF 10% 50V
C47	1-162-306-11	CERAMIC	0.01uF 30% 16V
C60	1-162-199-31	CERAMIC	10PF 5% 50V
C61	1-162-199-31	CERAMIC	10PF 5% 50V
C64	1-162-306-11	CERAMIC	0.01uF 30% 16V
C65	1-162-306-11	CERAMIC	0.01uF 30% 16V
C68	1-162-294-31	CERAMIC	0.001uF 10% 50V
C69	1-162-294-31	CERAMIC	0.001uF 10% 50V
C70	1-162-306-11	CERAMIC	0.01uF 30% 16V
C71	1-162-306-11	CERAMIC	0.01uF 30% 16V
C72	1-128-057-11	ELECT	330uF 20% 6.3V
C73	1-162-294-31	CERAMIC	0.001uF 10% 50V
C75	1-136-171-00	MYLAR	0.33uF 5% 50V

Ref. No.	Part No.	Description	Remark
C77	1-130-483-00	MYLAR	0.01uF 5% 50V
C80	1-162-306-11	CERAMIC	0.01uF 30% 16V
C82	1-162-294-31	CERAMIC	0.001uF 10% 50V
C92	1-162-294-31	CERAMIC	0.001uF 10% 50V
C94	1-162-306-11	CERAMIC	0.01uF 30% 16V
C97	1-104-666-11	ELECT	220uF 20% 25V
< FILTER >			
CF2	1-760-738-61	FILTER, CERAMIC	
CF3	1-781-171-11	DISCRIMINATOR, CERAMIC	
< COMPOSITION CIRCUIT BLOCK >			
CFT1	1-233-885-11	ENCAPSULATED COMPONENT (AM IF)	
< CONNECTOR >			
CN1	1-770-519-31	CONNECTOR, FFC/FPC 11P	
< TRIMMER >			
CT1	1-141-603-21	CAP, ADJ (FM TRACKING)	
CT3	1-141-601-21	CAP, ADJ (AM TRACKING)	
< DIODE >			
D1	8-719-050-72	DIODE KV1370NT	
D2	8-719-050-72	DIODE KV1370NT	
D3	8-719-050-69	DIODE KV1520N	
D4	8-719-991-33	DIODE 1SS133T-77	
D5	8-719-991-33	DIODE 1SS133T-77	
D7	8-719-991-33	DIODE 1SS133T-77	
< FILTER >			
FL1	1-236-711-21	FILTER, BAND PASS	
< IC >			
IC1	8-759-644-86	IC TA2104BN	
IC2	8-759-549-57	IC LC72137-D	
< COIL >			
L1	1-409-904-31	COIL, FM OSC (FM TRACKING)	
L2	1-409-905-31	COIL, FM RF (FM FREQUENCY COVERAGE)	
L3	1-754-100-11	ANTENNA, FERRITE-ROD (MW)	
(AM TRACKING)			
L4	1-411-234-21	COIL, AM OSC (AM FREQUENCY COVERAGE)	
L6	1-414-142-11	INDUCTOR 1uH	
L10	1-410-521-11	INDUCTOR 100uH	
L11	1-410-521-11	INDUCTOR 100uH	
L40	1-410-509-11	INDUCTOR 10uH	
L90	1-414-142-11	INDUCTOR 1uH	
< TRANSISTOR >			
Q13	8-729-036-77	TRANSISTOR KRC107M	
< RESISTOR >			
R2	1-249-413-11	CARBON 470 5% 1/4W	
R7	1-249-429-11	CARBON 10K 5% 1/4W	
R9	1-249-411-11	CARBON 330 5% 1/4W	
R11	1-247-843-11	CARBON 3.3K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R13	1-249-421-11	CARBON 2.2K 5%	1/4W
R16	1-247-807-31	CARBON 100 5%	1/4W
R30	1-249-431-11	CARBON 15K 5%	1/4W
R31	1-247-843-11	CARBON 3.3K 5%	1/4W
R32	1-249-441-11	CARBON 100K 5%	1/4W
R33	1-247-887-00	CARBON 220K 5%	1/4W
R40	1-247-887-00	CARBON 220K 5%	1/4W
R41	1-249-429-11	CARBON 10K 5%	1/4W
R62	1-247-831-91	CARBON 1K 5%	1/4W
R64	1-249-437-11	CARBON 47K 5%	1/4W
R66	1-247-831-91	CARBON 1K 5%	1/4W
R67	1-249-437-11	CARBON 47K 5%	1/4W
R71	1-249-421-11	CARBON 2.2K 5%	1/4W
R73	1-249-425-11	CARBON 4.7K 5%	1/4W
R74	1-249-421-11	CARBON 2.2K 5%	1/4W
R76	1-247-831-91	CARBON 1K 5%	1/4W
R91	1-249-393-11	CARBON 10 5%	1/4W

< VIBRATOR >

X1 1-781-592-11 VIBRATOR, CRYSTAL (32.768kHz)

MISCELLANEOUS

14	1-791-611-11	WIRE, PARALLEL (FFC) (11 CORE)
15	1-791-612-11	WIRE, PARALLEL (FFC) (21 CORE)
21	1-791-613-11	WIRE, PARALLEL (FFC) (17 CORE)
73	1-533-233-31	HOLDER, FUSE
76	1-529-505-11	SPEAKER (12X6cm)
119	1-791-614-11	WIRE, PARALLEL (FFC) (21 CORE)
153	1-690-530-81	LEAD (WITH CONNECTOR)
158	1-660-965-11	SLIDE FLEXIBLE BOARD
△ 159	X-4950-060-1	OPTICAL PICK-UP DAX-01A2
ANT1	1-754-090-11	ANTENNA, TELESCOPIC
△ F901	1-533-420-11	FUSE, GLASS CYLINDRICAL(DIA.5) (5A/125V)
IC302	8-759-333-16	IC LA4705NA
IC601	8-759-445-59	IC BA033T
LCD801	1-803-794-11	DISPLAY PANEL, LIQUID CRYSTAL
M701	A-3303-403-A	MOTOR ASSY (SLED) (INCLUDING GEAR)
M702	A-3303-971-A	MOTOR ASSY, TURN TABLE (SPINDLE)
Q601	8-729-209-15	TRANSISTOR 2SD2012
S701	1-571-099-21	SWITCH (1 KEY) (LIMIT)
SP101	1-529-504-11	SPEAKER (8cm) (L-CH)
SP201	1-529-504-11	SPEAKER (8cm) (R-CH)

ACCESSORIES & PACKING MATERIALS

△	1-418-655-11	ADAPTOR, AC (AC-E700)
	1-791-680-11	CORD, CAR BATTERY
	3-040-349-01	WASHER (BELT)
	3-040-350-01	SCREW, BELT STOPPER
	3-040-351-01	BELT
*	3-703-044-26	LABEL, CAUTION
	3-867-834-11	MANUAL, INSTRUCTION (ENGLISH)
	3-867-834-21	MANUAL, INSTRUCTION (FRENCH) (CND)

Ref. No.	Part No.	Description	Remark

		HARDWARE LIST	

#1	7-624-106-04	STOPRING 3.0, TYPE -E	
#2	7-627-850-17	SCREW,PRECISION +P 1.4X2.5	
#3	7-682-549-04	SCREW +B 3X10	
#4	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#5	7-685-549-19	SCREW +BTP 3X14 TYPE2 N-S	
#6	7-685-647-79	SCREW, TAPPING +BV 3X10	
#7	7-685-648-79	SCREW, TAPPING +BV 3X12	
#8	7-685-649-79	SCREW, TAPPING +BV 3X14	

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.

ZS-X7

SONY[®]

US Model

SERVICE MANUAL

2000. 2

SUPPLEMENT-1

Fill this Supplement with the Service Manual.

Subject :

- **A MODEL IN BLACK COLOR HAS BEEN ADDED**

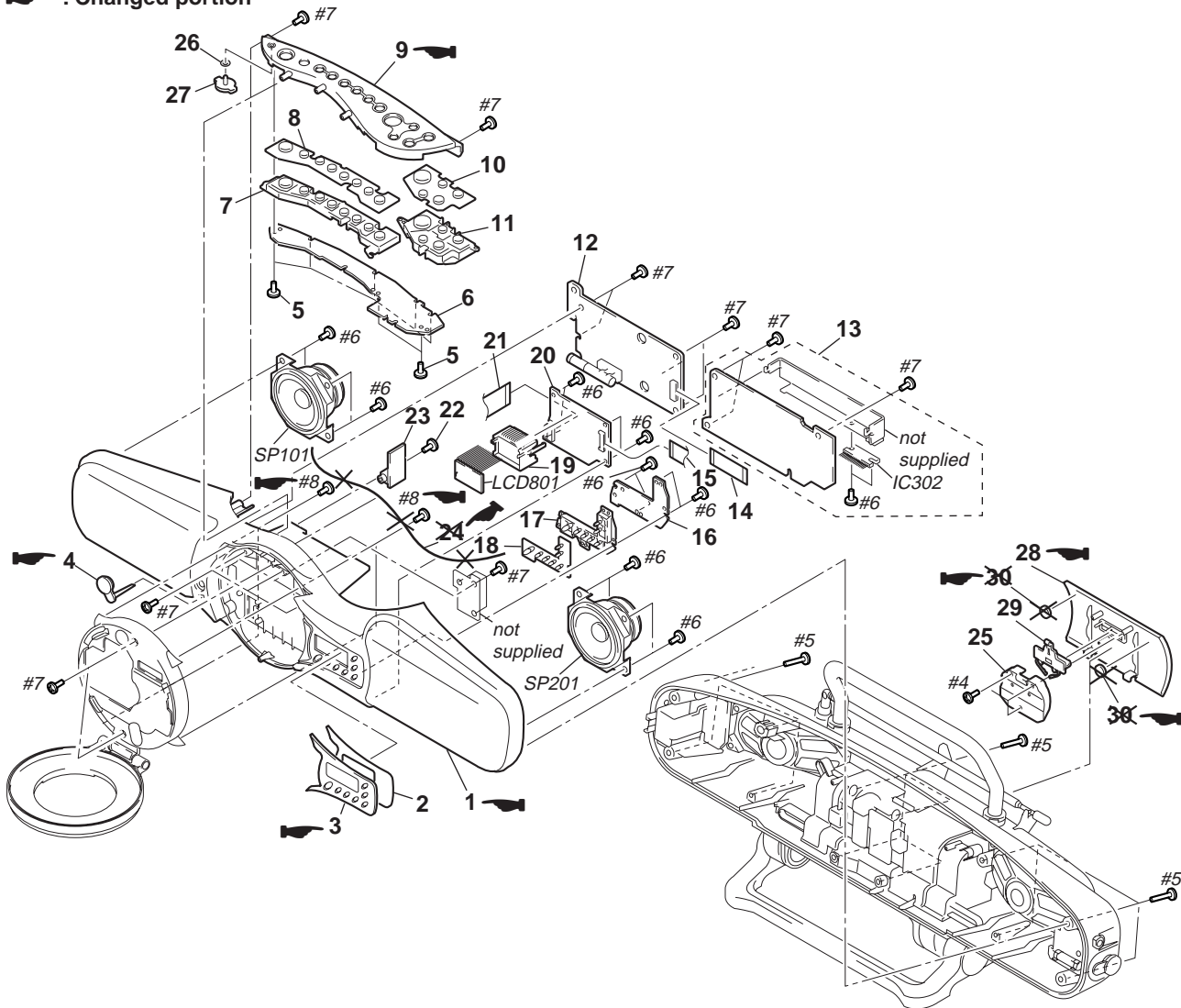
● CHANGED PARTS LIST

EXPLODED VIEWS

7-1. FRONT CABINET SECTION (Service Manual See page 48)

Ref. No.	Before Change		After Change	
	Part No.	Description	Part No.	Description
1	X-3378-024-1	CABINET SUB ASSY, FRONT	X-3378-024-1	CABINET SUB ASSY, FRONT (YELLOW)
			X-3378-806-1	CABINET SUB ASSY, FRONT (BLACK)
3	3-040-392-01	WINDOW, LCD	3-040-392-01	WINDOW, LCD (YELLOW)
			3-040-392-11	WINDOW, LCD (BLACK)
4	3-028-872-11	PACKING (JACK)	3-028-872-01	PACKING (JACK) (BLACK)
			3-028-872-11	PACKING (JACK) (YELLOW)
9	3-040-384-01	PANEL, CONTROL	3-040-384-01	PANEL, CONTROL (YELLOW)
			3-040-384-11	PANEL, CONTROL (BLACK)
24	3-017-930-01	PACKING (F/R)		
28	3-040-344-01	LID, BATTERY CASE	3-040-344-01	LID, BATTERY CASE (YELLOW)
			3-040-344-11	LID, BATTERY CASE (BLACK)
30	3-042-819-01	CUSHION (2), SPEAKER		
#8	7-685-649-79	SCREW, TAPPING +BV 3X14	7-685-651-79	SCREW +BTP 3X20 TYPE2 N-S

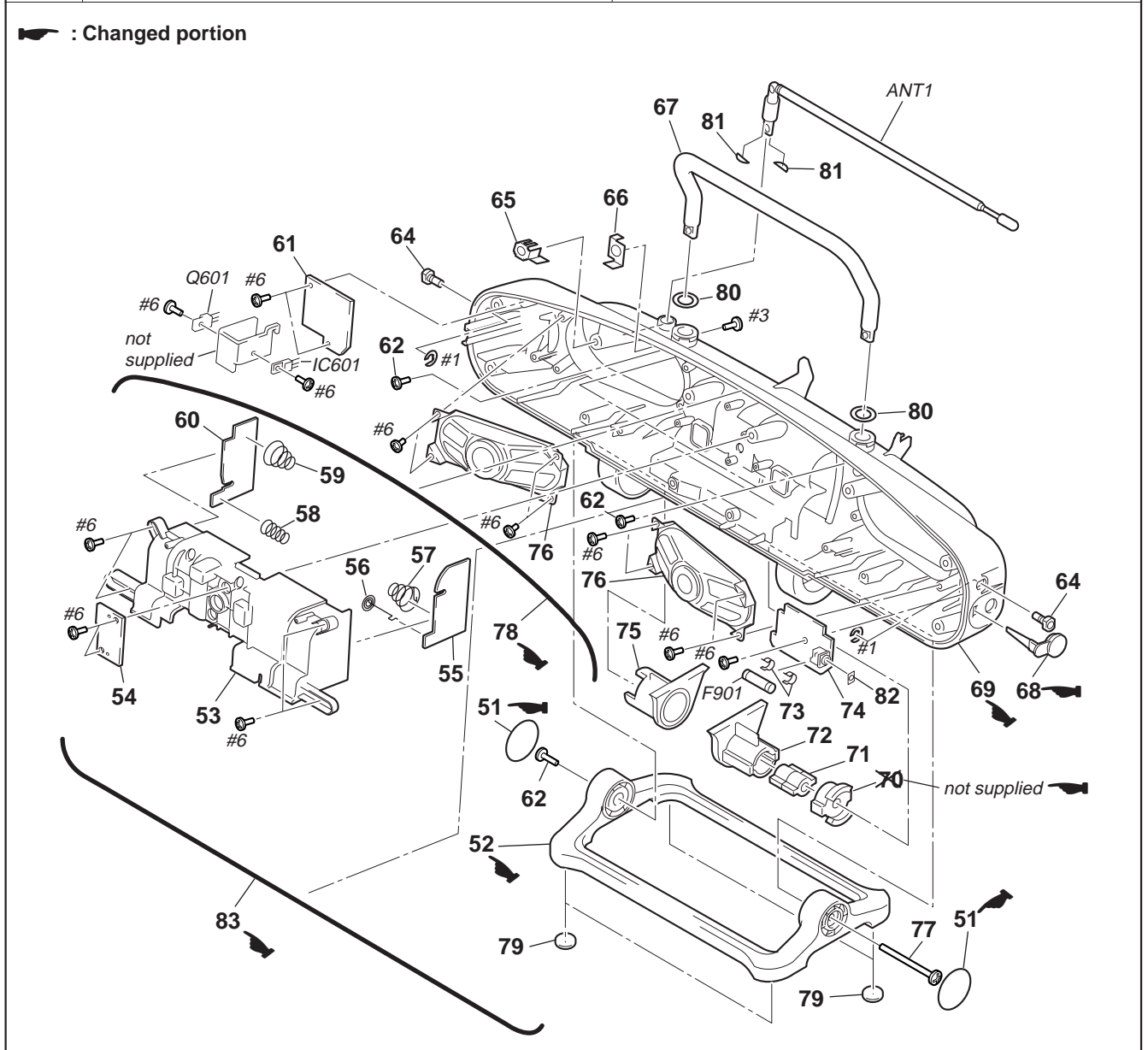
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7-2. REAR CABINET SECTION (Service Manual See page 49)

Ref. No.	Before Change		After Change	
	Part No.	Description	Part No.	Description
51	3-040-363-01	COVER, FOOT	3-040-363-01	COVER, FOOT (YELLOW)
			3-040-363-11	COVER, FOOT (BLACK)
52	3-040-359-01	FOOT(TURN)	3-040-359-01	FOOT(TURN) (YELLOW)
			3-040-359-11	FOOT(TURN) (BLACK)
68	3-028-872-11	PACKING (JACK)	3-028-872-01	PACKING (JACK) (BLACK)
			3-028-872-11	PACKING (JACK) (YELLOW)
69	3-040-353-01	CABINET, REAR (US)	3-040-353-01	CABINET, REAR (YELLOW)
	3-040-353-11	CABINET, REAR (CND)		
			3-040-353-21	CABINET, REAR (BLACK)
70	3-040-352-01	PIN,BRACKET (L)		(not supplied)
78	3-017-930-01	PACKING (F/R)	3-043-252-01	PACKING (F/R)
83			3-043-493-01	PACKING (CD) (673mm) (YELLOW)
			3-043-493-51	PACKING (CD) (673mm) (BLACK)

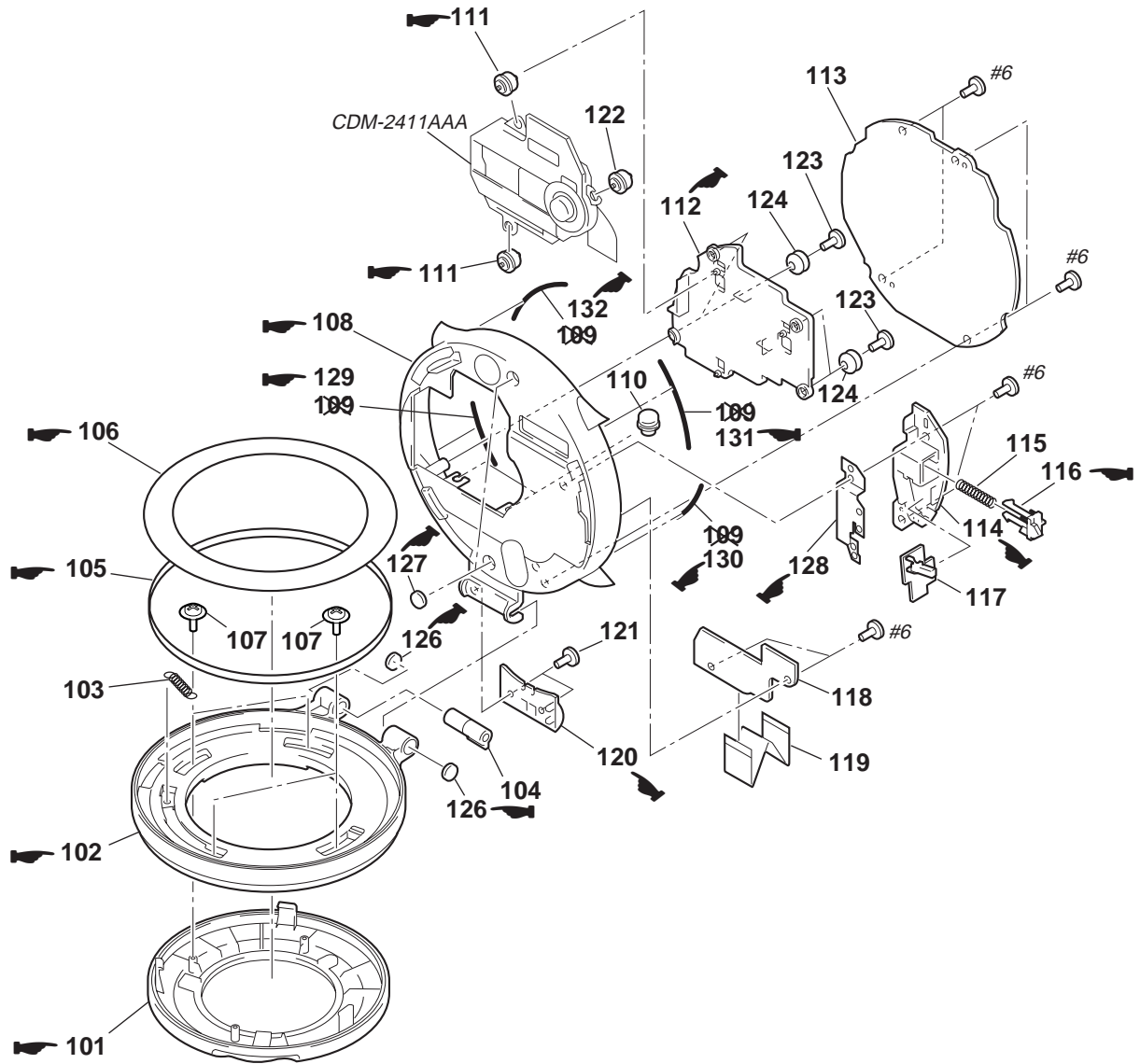
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7-3. CD BLOCK SECTION (Service Manual See page 50)

Ref. No.	Before Change		After Change	
	Part No.	Description	Part No.	Description
101	X-3378-025-1	LID ASSY, CD	X-3378-025-1 X-3378-807-1	LID ASSY, CD (YELLOW) LID ASSY, CD (BLACK)
102	3-040-373-01	HOLDER, CD	3-040-373-01 3-040-373-11	HOLDER, CD (YELLOW) HOLDER, CD (BLACK)
105	3-040-377-01	PACKING (CD)	3-040-377-01 3-040-377-11	PACKING (CD) (YELLOW) PACKING (CD) (BLACK)
106	3-040-376-01	PLATE, CD ORNAMENTAL	3-040-376-01 3-040-376-11	PLATE, CD ORNAMENTAL (YELLOW) PLATE, CD ORNAMENTAL (BLACK)
108	3-040-394-01	CHASSIS, CD	3-040-394-01 3-040-394-11	CHASSIS, CD (YELLOW) CHASSIS, CD (BLACK)
109	3-017-930-01	PACKING (F/R)		
111	4-975-762-01	INSULATOR	3-043-515-01	INSURATOR
112	3-043-515-01	BRACKET (CD)	3-040-395-01 3-040-395-11	BRACKET (CD) (YELLOW) BRACKET (CD) (BLACK)
114	3-040-370-01	BRACKET (SW)	3-040-370-01 3-040-370-11	BRACKET (SW) (YELLOW) BRACKET (SW) (BLACK)
116	3-040-372-01	SLIDER (CD), PUSH	3-040-372-01 3-040-372-11	SLIDER (CD), PUSH (YELLOW) SLIDER (CD), PUSH (BLACK)
120	3-040-396-01	BRACKET, PIN (S)	3-040-396-01 3-040-396-11	BRACKET, PIN (S) (YELLOW) BRACKET, PIN (S) (BLACK)
126		_____	3-042-827-01 3-042-827-11	COVER (CD) (YELLOW) COVER (CD) (BLACK)
127		_____	3-043-994-01 3-043-994-11	LUMINER (CD) (YELLOW) LUMINER (CD) (BLACK)
128		_____	3-043-999-01	BRACKET (CHASSIS)
129		_____	3-043-493-11 3-043-493-61	PACKING (CD) (58mm) (YELLOW) PACKING (CD) (58mm) (BLACK)
130		_____	3-043-493-21 3-043-493-71	PACKING (CD) (132mm) (YELLOW) PACKING (CD) (132mm) (BLACK)
131		_____	3-043-493-31 3-043-493-81	PACKING (CD) (148mm) (YELLOW) PACKING (CD) (148mm) (BLACK)
132		_____	3-043-493-41 3-043-493-91	PACKING (CD) (50mm) (YELLOW) PACKING (CD) (50mm) (BLACK)

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ACCESSORIES & PACKING MATERIALS (Service Manual See page 59)

Ref. No.	Before Change		After Change	
	Part No.	Description	Part No.	Description
	3-867-834-21	MANUAL, INSTRUCTION (FRENCH)		_____