

CFD-V3/V7/V7L

SERVICE MANUAL

Ver 1.5 2003.12
With SUPPLEMENT-1



Photo : CFD-V7

Canadian Model
UK Model
Australian Model
CFD-V7
AEP Model
CFD-V3/V7/V7L
E Model
CFD-V3/V7

Model Name Using	CD Section	CFD-S36
Similar Mechanism	Tape Section	CFD-S36
CD Mechanism Type	KSM-213CDP	
Optical Pick-up Type	KSS-213C	
Tape Transport Mechanism Type	MF-V5-117	

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 +1/-2 dB

Wow and flutter

Below measurable limit

Radio section

Frequency range

CFD-V3/V7

FM	Italy	87.5 - 108 MHz
	European countries	87.6 - 107 MHz
	Other countries	87.6 - 108 MHz

AM	Italy	526.5 - 1 606.5 kHz
	European countries	531 - 1 602 kHz
	Other countries	530 - 1 710 kHz

CFD-V7L

FM	87.6 - 107 MHz
LW	153 - 279 kHz

IF

FM: 10.7 MHz

AM/LW: 455 kHz

Aerials

FM: Telescopic aerial

AM/LW: Built-in ferrite bar aerial

Cassette-corder section

Recording system

4-track 2 channel stereo

Fast winding time

Approx. 120 s (sec.) with Sony cassette C-60

Frequency response

TYPE I (normal): 80 - 10 000 Hz

— Continued on page 2 —

CD RADIO CASSETTE-CORDER

9-873-079-16

2003L02-1

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Sony Corporation

Personal Audio Company

Published by Sony Engineering Corporation

SONY®

General

Speaker
 Full range: 10 cm dia., 3.2 Ω, cone type (2)

Outputs
 Headphones jack (stereo minijack)
 For 16 - 68 Ω impedance headphones

Maximum power output
 3.6 W

Power requirements
 For CD radio cassette-corder:
 120 V AC, 60 Hz (Canadian, E4 model)
 230 V AC, 50 Hz (Except Canadian model)
 110-120V AC/220-240V AC
 50/60Hz changeable (E4 model)
 9 V DC, 6 R20 (size D) batteries

Power consumption
 AC 20 W

Battery life
 For CD radio cassette-corder:
 FM recording
 Sony R20P: approx. 13.5 h
 Sony alkaline LR20: approx. 20 h
 Tape playback
 Sony R20P: approx. 7.5 h
 Sony alkaline LR20: approx. 15 h
 CD playback
 Sony R20P: approx. 2.5 h
 Sony alkaline LR20: approx. 7 h

Dimensions
 Approx. 420 × 165 × 256 mm (w/h/d)
 (16 3/8 × 6 1/2 × 10 1/8 inches) (incl. projecting parts)

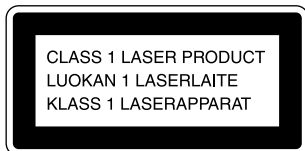
Mass
 Approx. 4.1 kg (9 lb. 1 oz) (incl. batteries)

Supplied accessory
 Mains lead (1)

Design and specifications are subject to change without notice.

Information

For customers in Europe



This Compact Disc player is classified as a CLASS 1 LASER product.
 The CLASS 1 LASER PRODUCT label is located at the bottom of the player.

CAUTION

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

SAFETY-RELATED COMPONENT WARNING!!

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

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

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SECTION 1 SERVICING NOTES

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

The laser diode in the optical pick-up block may suffer electrostatic 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.

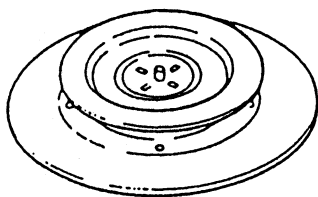
NOTES ON LASER DIODE EMISSION CHECK

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.

CHUCK PLATE JIG ON REPAIRING

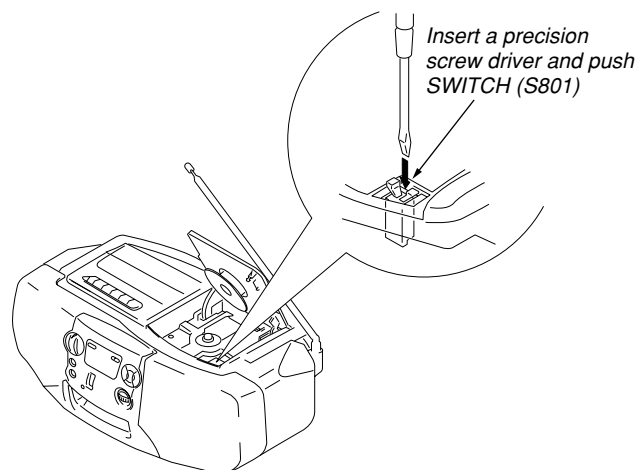
On repairing CD section, playing a disc without the CD lid, use Chuck Plate Jig.

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



LASER DIODE AND FOCUS SEARCH OPERATION CHECK

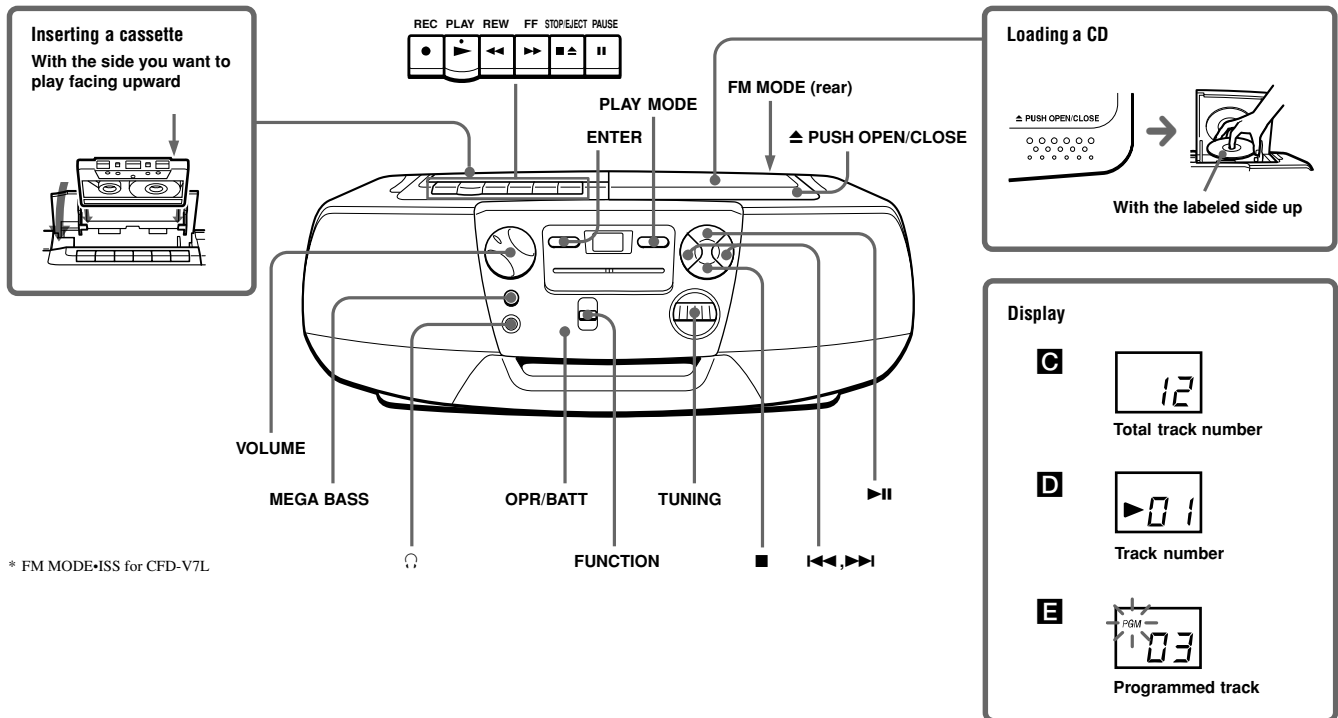
1. Press CD open knob.
2. Open the lid for CD.
3. Push on SWITCH (S801) as following figure.
4. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken. Objective lens moves up and down once for the focus search.



SECTION 2 GENERAL

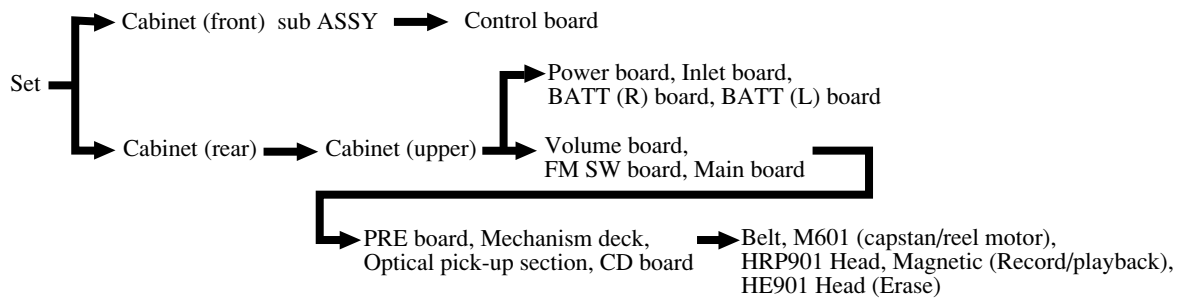
This section is extracted from instruction manual.

LOCATION AND FUNCTION OF CONTROLS



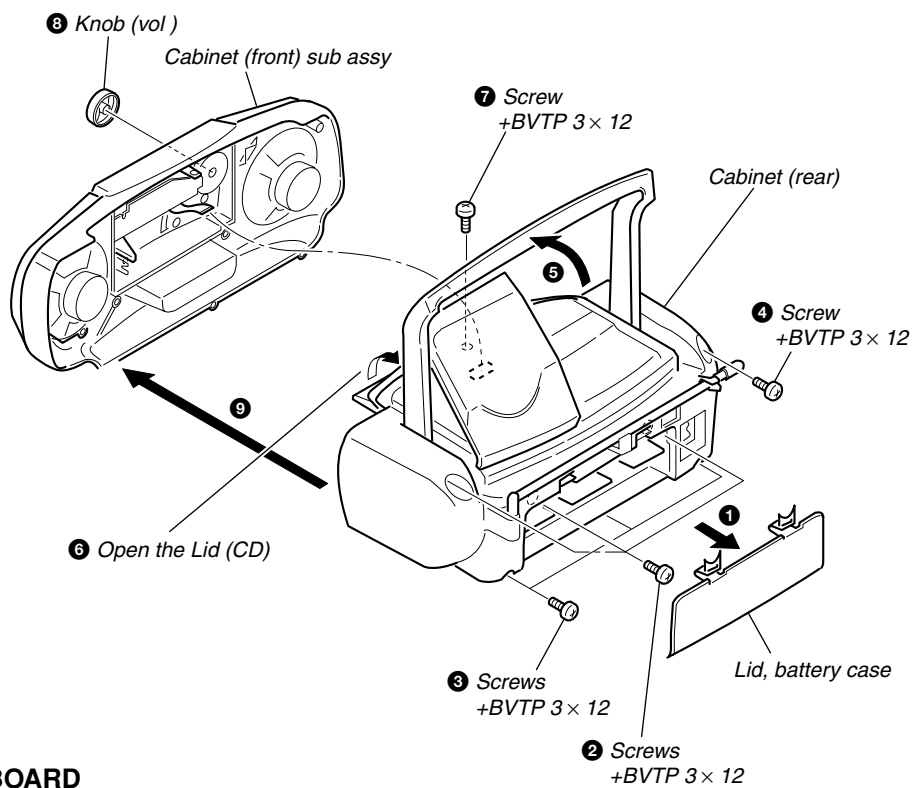
SECTION 3 DISASSEMBLY

- The equipment can be removed using the following procedure.

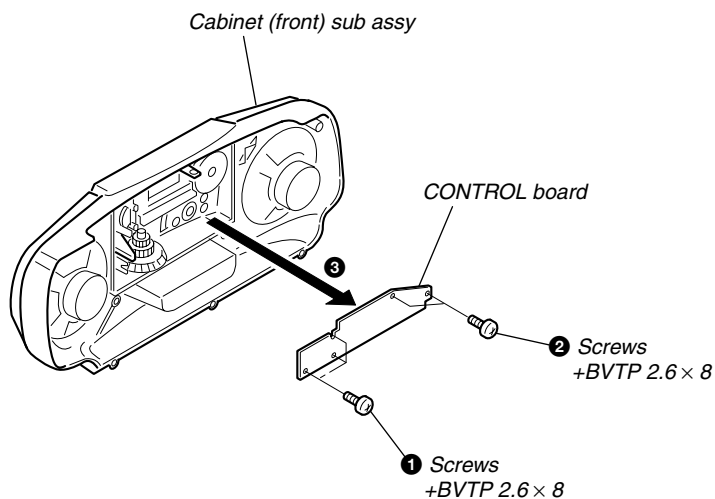


Note : Follow the disassembly procedure in the numerical order given.

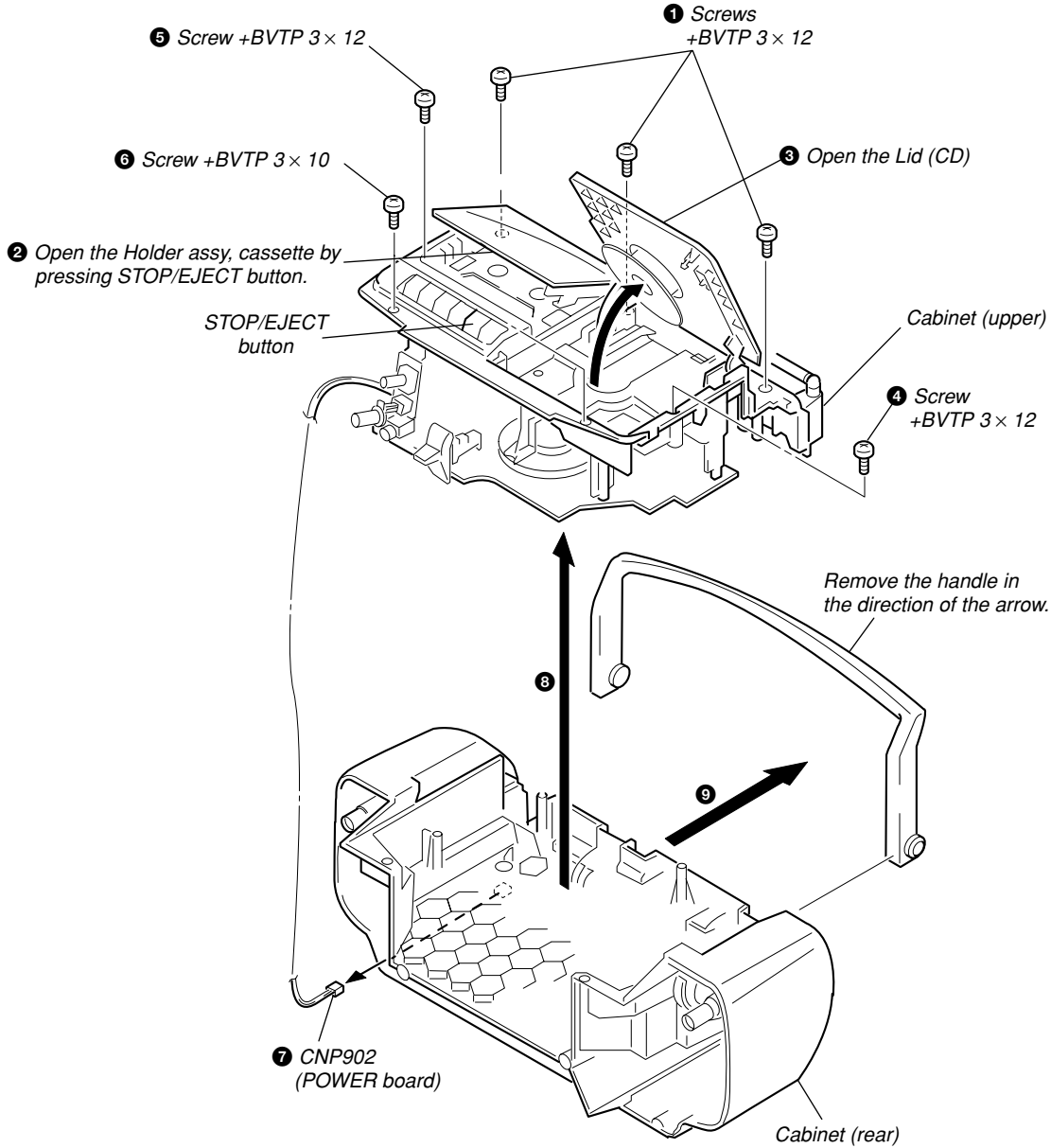
3-1. CABINET (FRONT) SUB ASSY, CABINET (REAR)



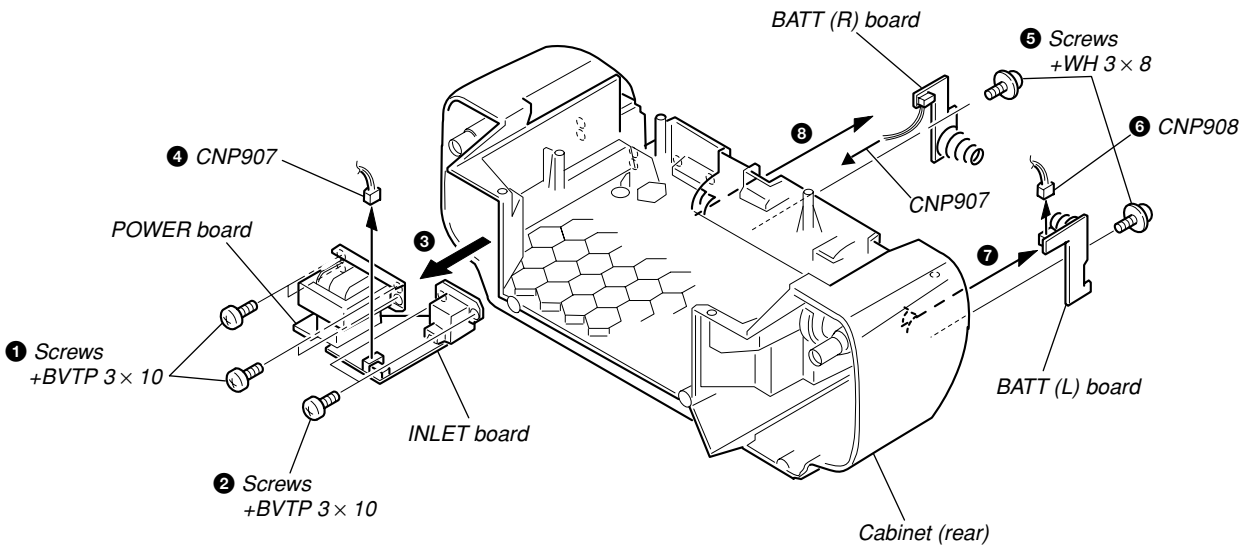
3-2. CONTROL BOARD



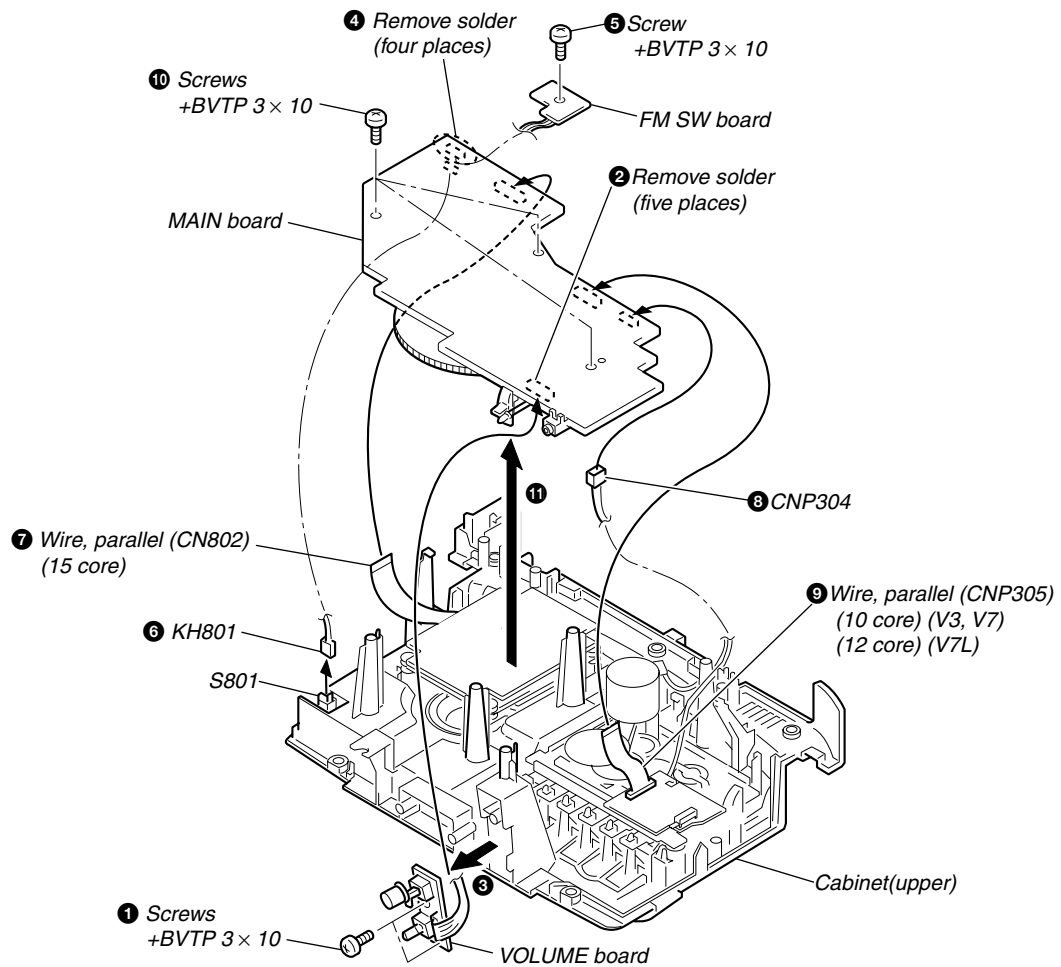
3-3. CABINET (UPPER)



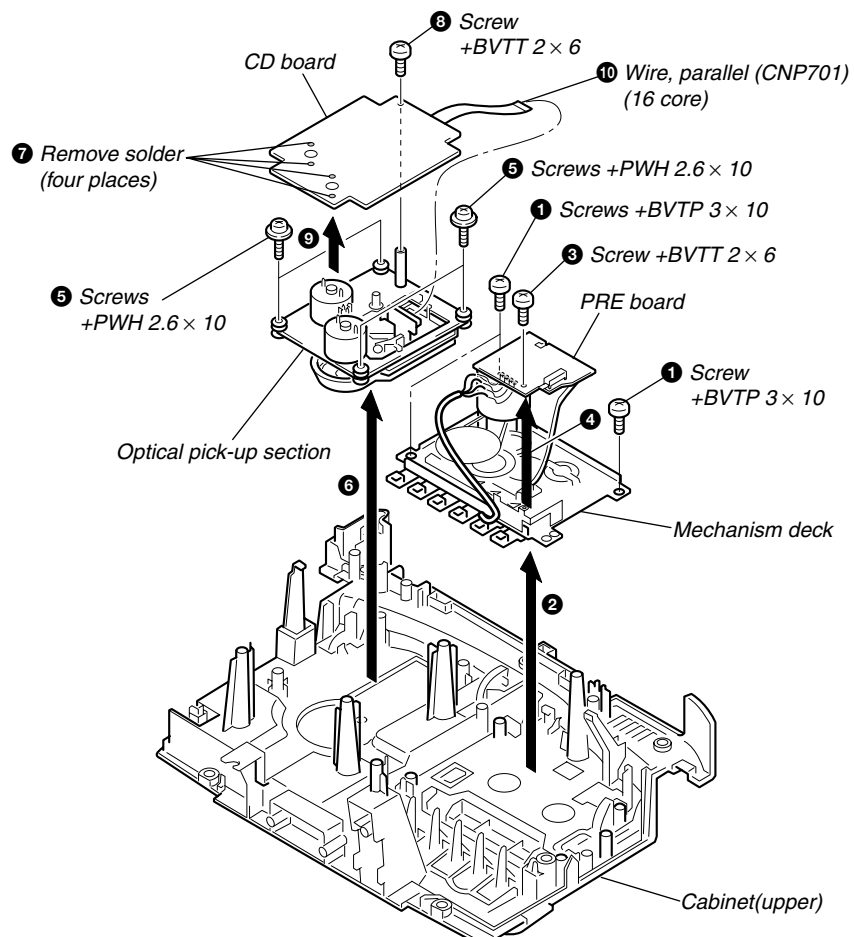
3-4. POWER BOARD, INLET BOARD, BATT (R) BOARD, BATT (L) BOARD



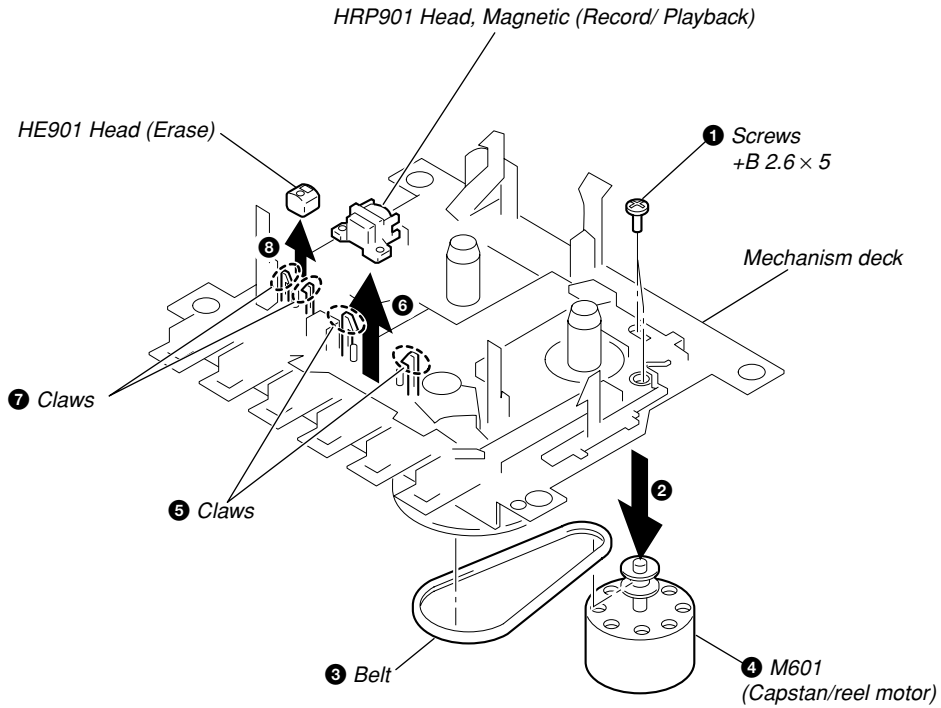
3-5. VOLUME BOARD, FM SW BOARD, MAIN BOARD



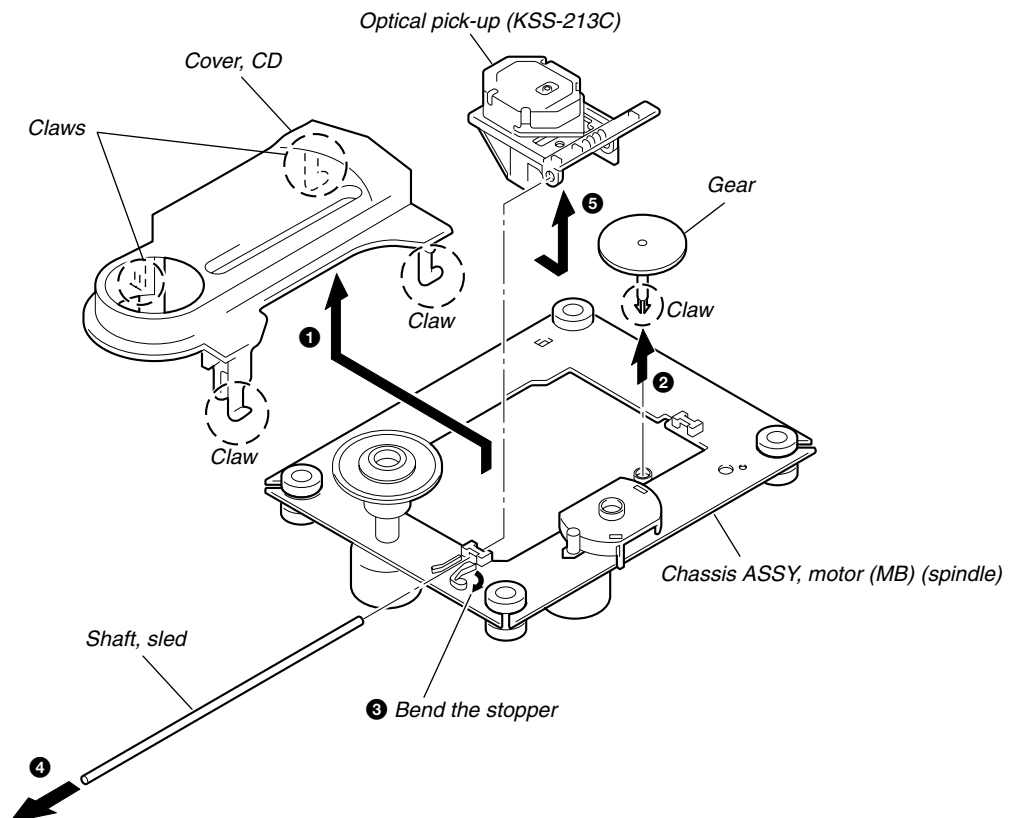
3-6. PRE BOARD, MECHANISM DECK, OPTICAL PICK-UP SECTION, CD BOARD



3-7. BELT, M601 (CAPSTAN / REEL MOTOR), " HRP901 HEAD, MAGNETIC (RECORD/PLAYBACK) ", HE901 HEAD (ERASE)



3-8. OPTICAL PICK-UP (KSS-213C)

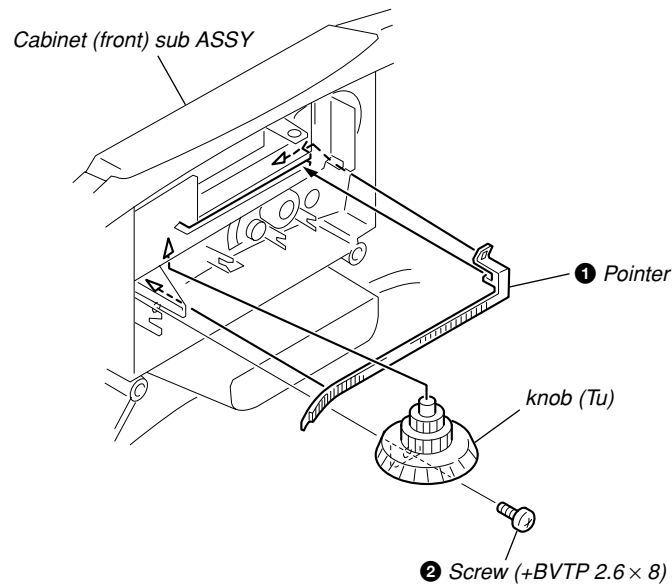


SECTION 4

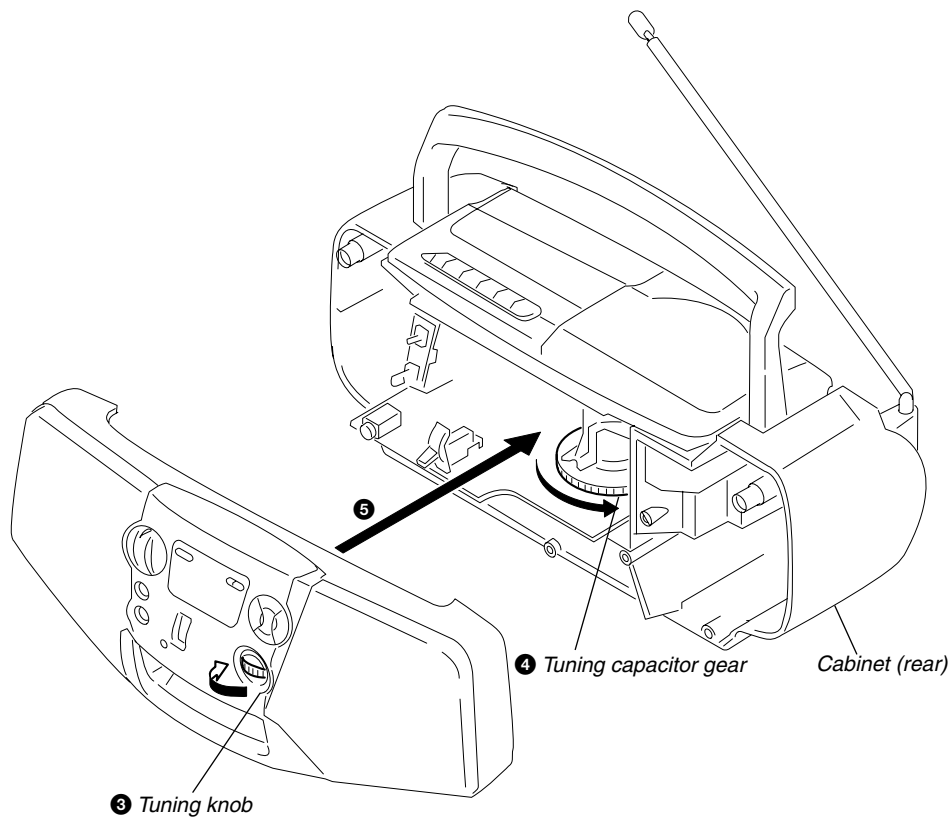
DIAL POINTER INSTALLATION

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

- ❶ Align the pointer with the groove of “cabinet (front) sub ASSY” and insert it as shown in the illustration.
- ❷ Align knob (TU) with “cabinet (front) sub ASSY” and fasten the screw.



- ❸ Turn the knob (TU) fully in the direction of the allow as shown in the illustration.
- ❹ Turn the tuning capacitor gear fully in the direction of the allow as shown in the illustration.
- ❺ Fasten the “cabinet (front) sub ASSY” and cabinet (rear) with the screws.



SECTION 5 ADJUSTMENTS

5-1. MECHANICAL ADJUSTMENTS

PRECAUTION

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

record/playback head	pinch roller
erase head	rubber belts
capstan	
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. The adjustments should be performed with the rated power supply voltage (9V) unless otherwise noted.

Torque Measurement

Torque	Torque Meter	Meter Reading
Forward	CQ-102C	1.77 – 5.88 mN•m (18 – 60 g•cm) (0.25 – 0.83 oz•inch)
Forward Back Tension	CQ-102C	0.1 – 0.49 mN•m (1.0 – 5.0 g•cm) (0.014 – 0.069 oz•inch)
Fast Forward	CQ-201B	4.42 – 9.31 mN•m (45 – 95 g•cm) (0.62 – 1.32 oz•inch)
Rewind	CQ-201B	4.42 – 9.31 mN•m (45 – 95 g•cm) (0.62 – 1.32 oz•inch)

Tape Tension Measurement

Torque Meter	Meter Reading
CQ-403A	more than 60g (more than 2.12 oz)

5-2. ELECTRICAL ADJUSTMENTS

TAPE RECORDER SECTION

0dB = 0.775V

Standard Output Level

Output terminal	HP OUT
load impedance	32 Ω
output signal level	0.25V (-10dB)

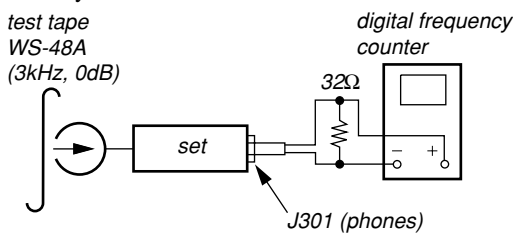
Test Tape

Type	Signal	Used for
WS-48A	3kHz, 0dB	Tape Speed Adjustment

Tape Speed Adjustment

Procedure :

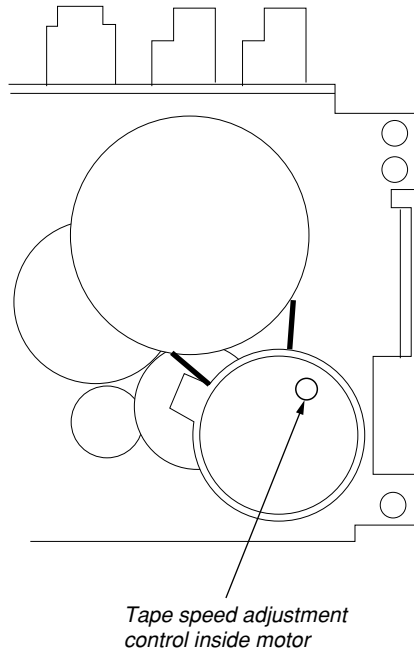
Mode : Playback



Adjustment Value : 3,000Hz
Standard Value : 2,940 - 3,060Hz

Frequency difference between the beginning and the end of the tape should be within 1.5% (45Hz).

Adjustment Location : Mechanism deck

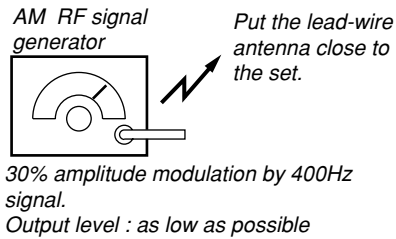


TUNER SECTION

0dB = 1 μV

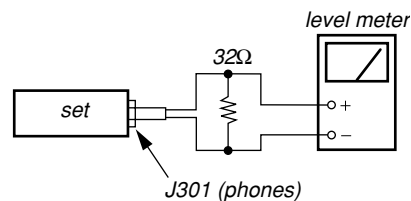
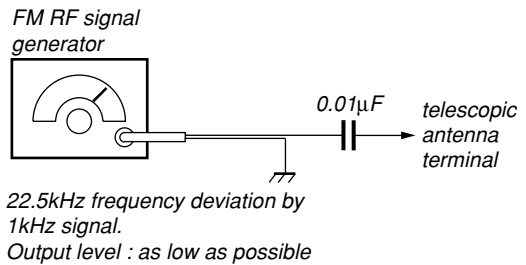
AM Section

Function switch : AM or LW
 Volume : MIN



FM Section

Function switch : FM
 Volume : MIN



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

- Abbreviation (): V3/V7: AEP, UK, CET, SP, KR
 CET : East European & Russian < > : V7: Italian
 SP : Singapore [] : V7L

AM/LW IF ADJUSTMENT	
Adjust for a maximum reading on level meter.	
T2	455kHz

EXCEPT V7L

AM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L4	520kHz (520kHz) < 516kHz>
CT4	1,780kHz (1,680kHz) <1,630kHz>

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

V7L

LW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L4	145kHz
CT4, CV2	300kHz

LW TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	160kHz
CT3, CV3	260kHz

FM IF ADJUSTMENT	
Adjust for a maximum reading on level meter.	
T1	10.7MHz

FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L2	86.5MHz (87.0MHz) < 87.35MHz> [87.0MHz]
CT2	109.5MHz (108.3MHz) <108.25MHz> [108.3MHz]

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L1	86.5MHz (87.0MHz) < 87.35MHz> [87.0MHz]
CT1	109.5MHz (108.3MHz) <108.25MHz> [108.3MHz]

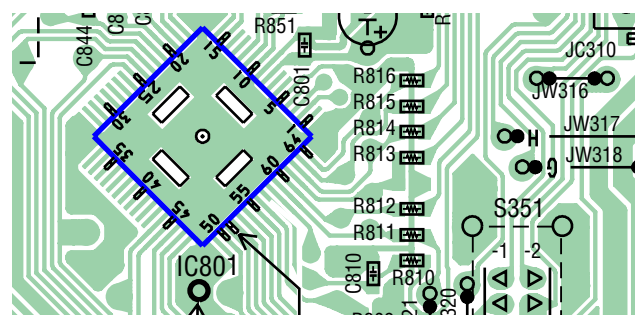
Adjustment Location : Main board (See page 12)

CD SECTION

How to put the set into CD Test Mode

- Set the function switch to power off.
- Set the function switch to CD.
- Set Test mode by momentarily shorting both of the IC801 51pin to GND. (Shorting the terminals momentarily is sufficient).
The set is into CD test mode (BB is displayed).
- Turn the power off to release test mode.

[MAIN BOARD] (Conductor side)



GND 51pin

TEST mode : momentarily short

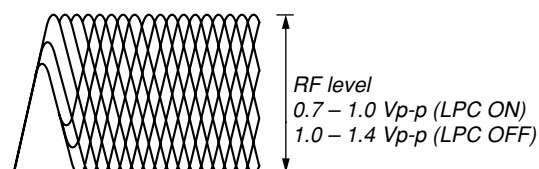
CD section adjustments are done automatically in this set.
In case of operation check, confirm that focus bias.

Focus Bias Check

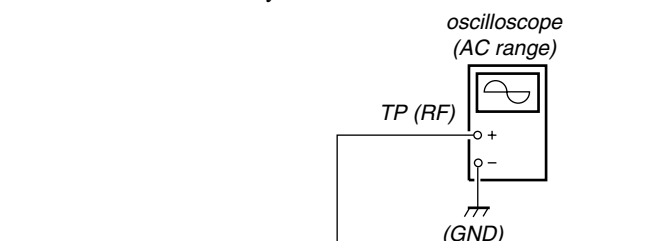
- Connect the oscilloscope between TP (RF) and GND on CD board.
- Insert the disc (YEDS-18). (Part No. : 3-702-101-01)
- Press the ▷|| button two times (LPC ON).
- Confirm that the oscilloscope waveform is as shown in the figure below. (eye pattern)
A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.

- RF Signal Reference Waveform (eye pattern)

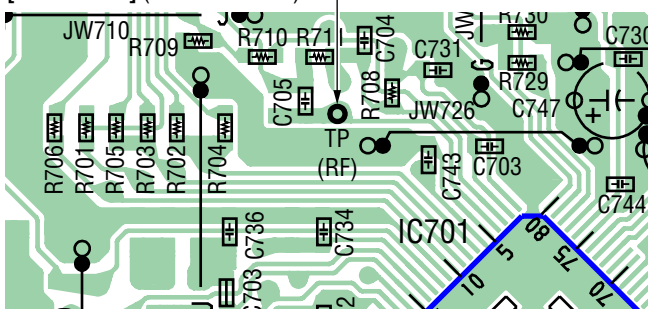
VOLT/TV : 200mV
TIME/DIV : 500 nS



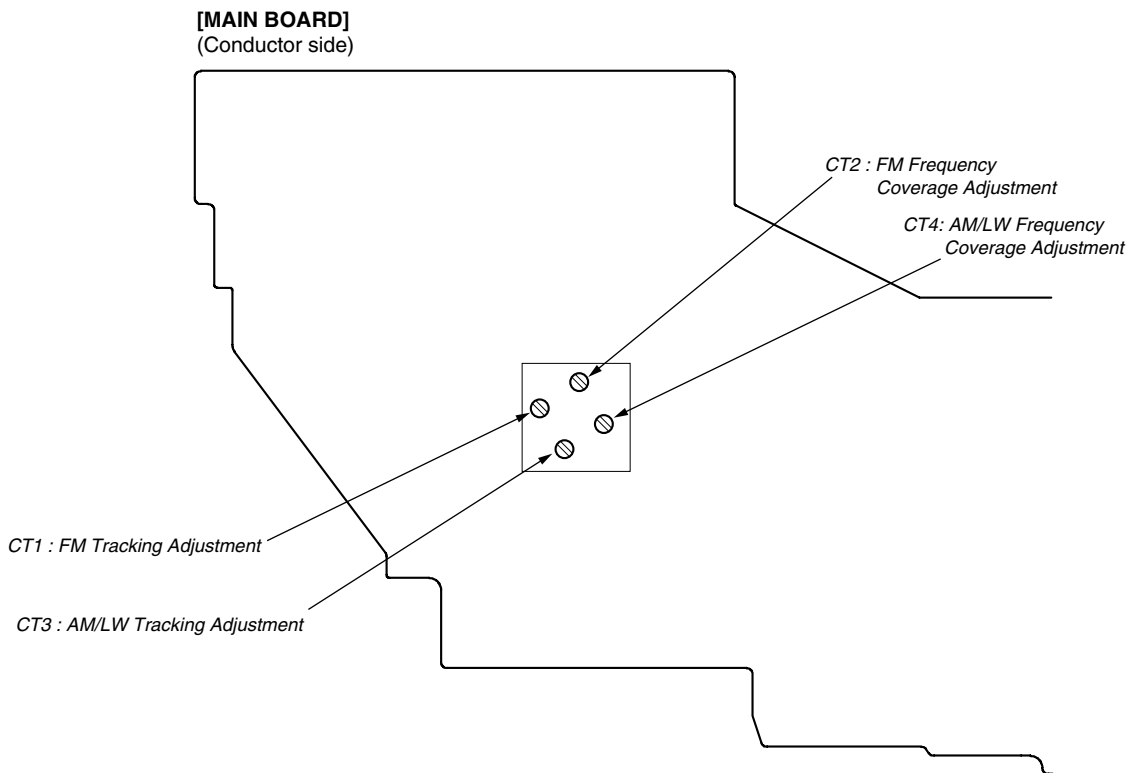
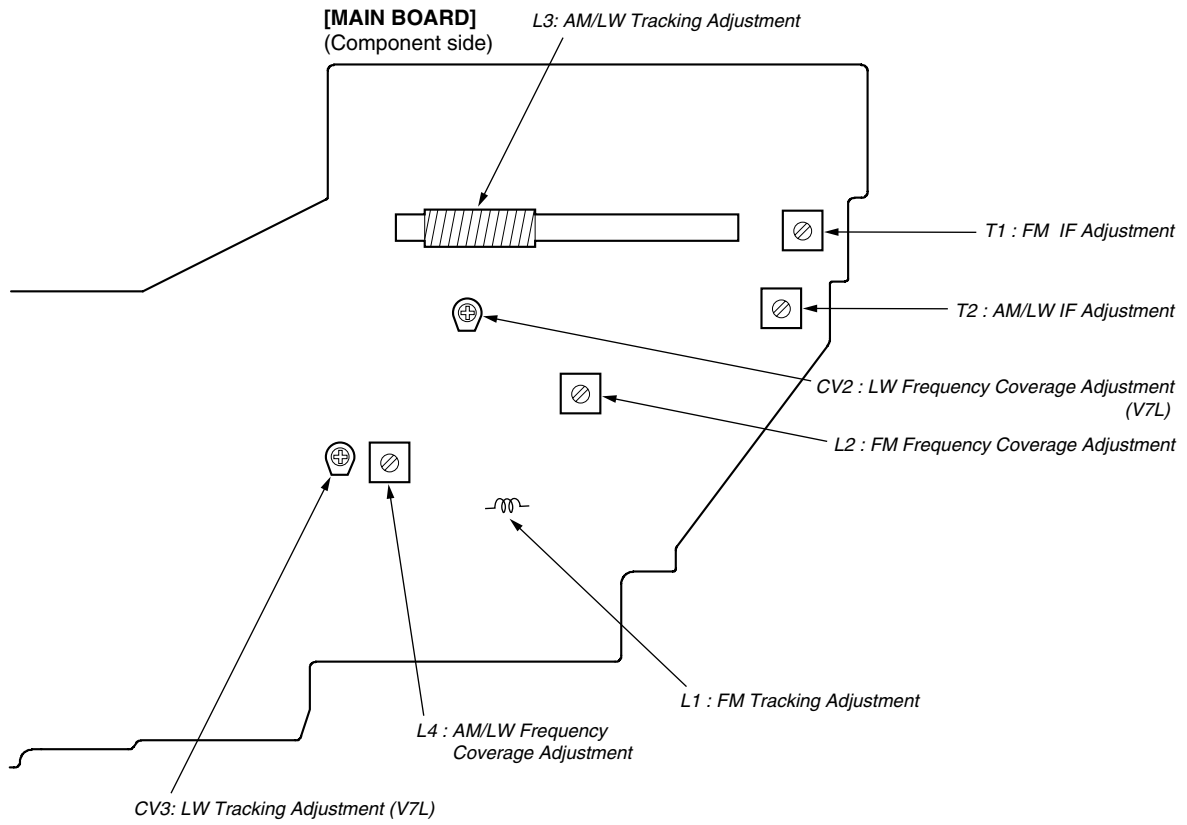
When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity



[CD BOARD] (Conductor side)



Adjustment Location :



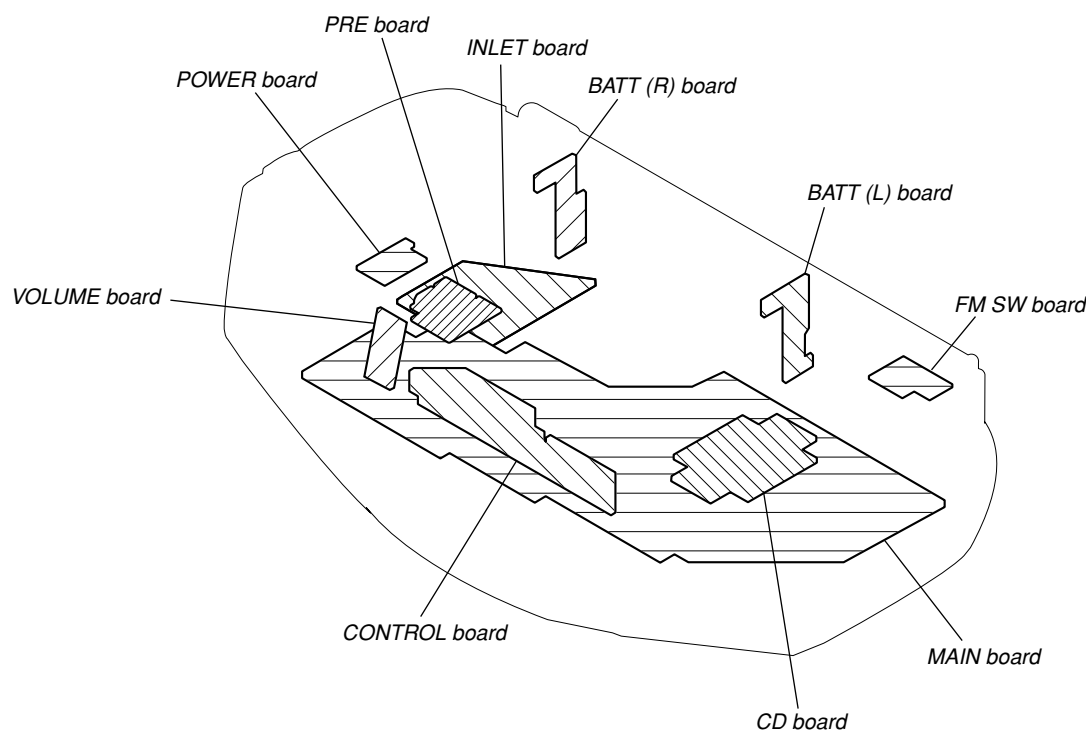
SECTION 6 DIAGRAMS

6-1. EXPLANATION OF IC TERMINALS

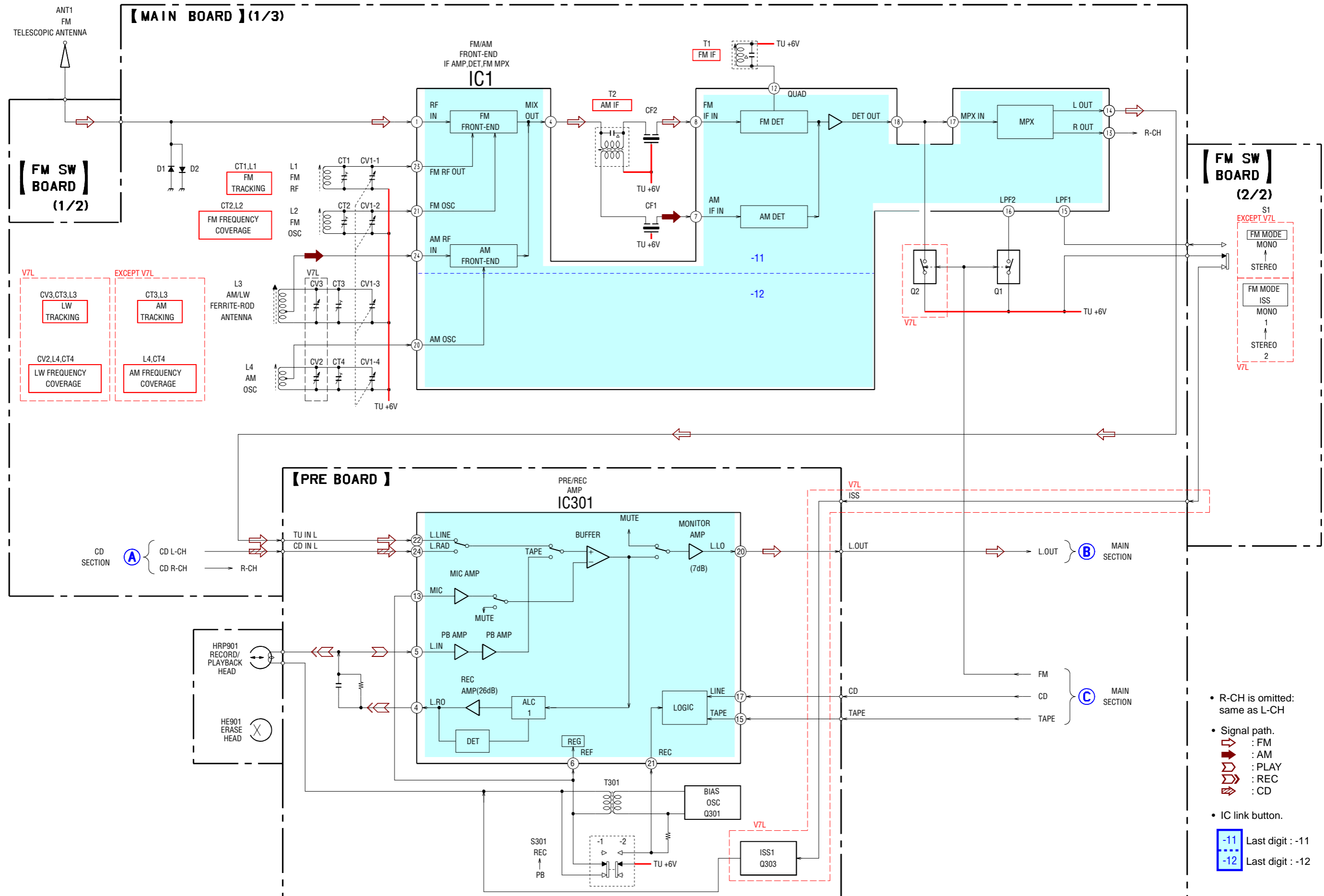
IC801 μ PD789316GK-903 SIGNAL PROCESSOR, D/A CONVERTER, LCD DRIVE, SYSTEM CONTROL

Pin No.	Pin name	I/O	Description
1 – 4	NC	—	Not used (open)
5	IC	—	Connect to ground.
6	XT1	I	Connect to ground.
7	XT2	—	Not used (open)
8	VDD	—	Power supply terminal (B+ 3.3 V)
9	VSS	—	Ground terminal
10	CL1	I	Oscillator terminal (4 MHz)
11	CL2	—	Oscillator terminal (4 MHz)
12	$\overline{\text{RESET}}$	I	Reset signal input
13	NC	—	Not used (open)
14	SYNC-R	—	Not used (open)
15	CE	O	Chip enable signal output
16	C-RST	O	Reset signal output to the LC78645E (IC701)
17	CAPH	—	Charge pump capacitor terminal
18	CAPL	—	Charge pump capacitor terminal
19 – 21	VLC0 – 2	—	Capacitor connect terminal
22 – 25	COM0 – 3	O	LCD common drive output
26 – 43	S0 – 17	—	Not used (open)
44 – 48	S18 – 22	O	LCD segment drive output
49	S23	—	Not used (open)
50	ENTER	I	Key (ENTER) input
51	MODE	I	Key (MODE) input
52	PLAY	I	Key (\blacktriangleright PLAY) input
53	FR	I	Key (\blacktriangleleft FR) input
54	FF	I	Key (\blacktriangleright FF) input
55	STOP	I	Key (\square STOP) input
56	DOOR	I	Door open/close input
57	WRQ	I	Command signal input
58	TEST	I	Test mode signal terminal input (TEST: L)
59	MUTE	O	Mute signal output
60	FSEQ	I	Frame SYNC signal input
61	DRF	I	DRF (Defect RF) input
62	DO	O	Serial data output
63	DIN	I	Serial data input
64	CLK	I	Clock signal input

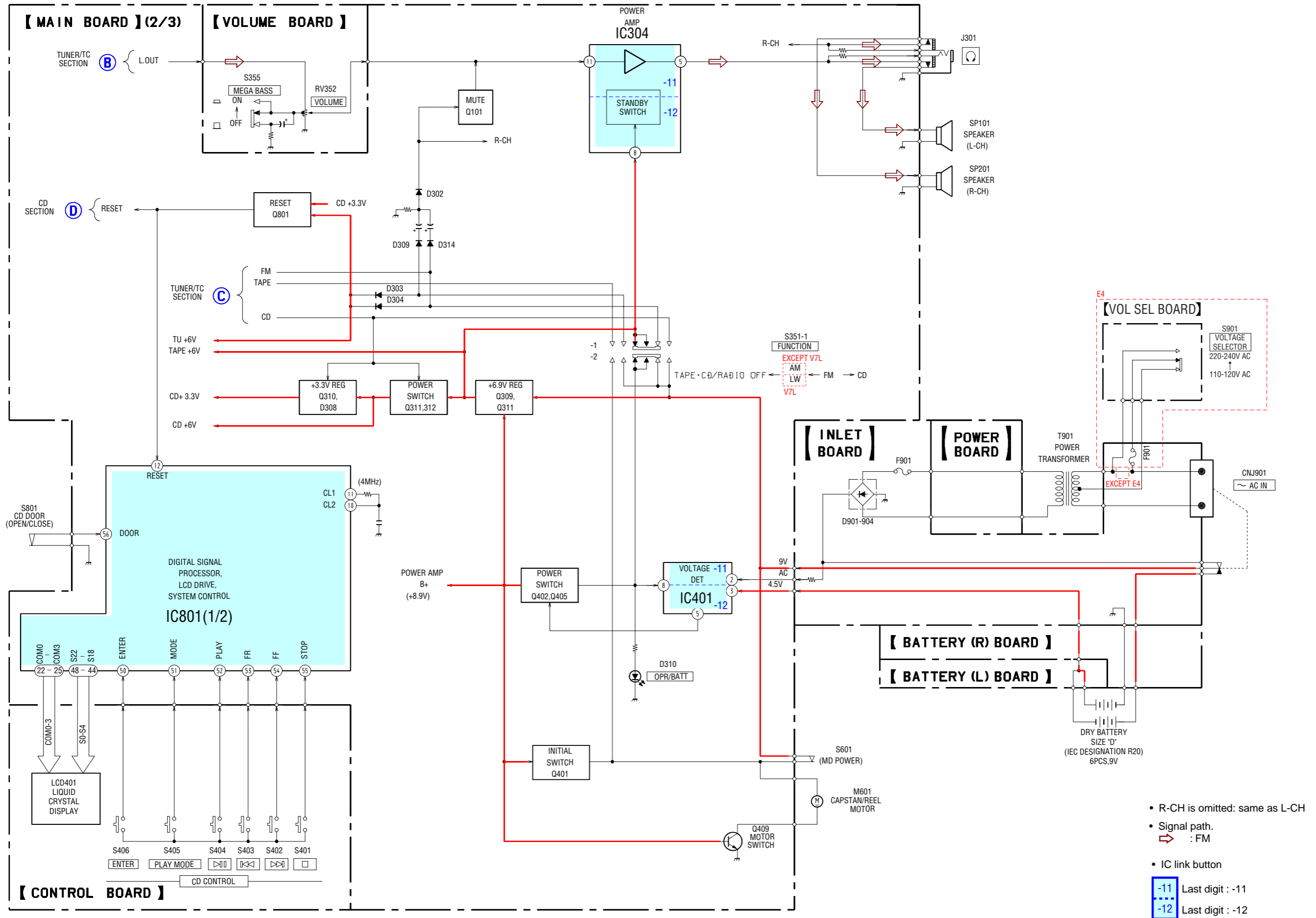
• Circuit Boards Location



6-2. BLOCK DIAGRAMS -TUNER/TC SECTION-

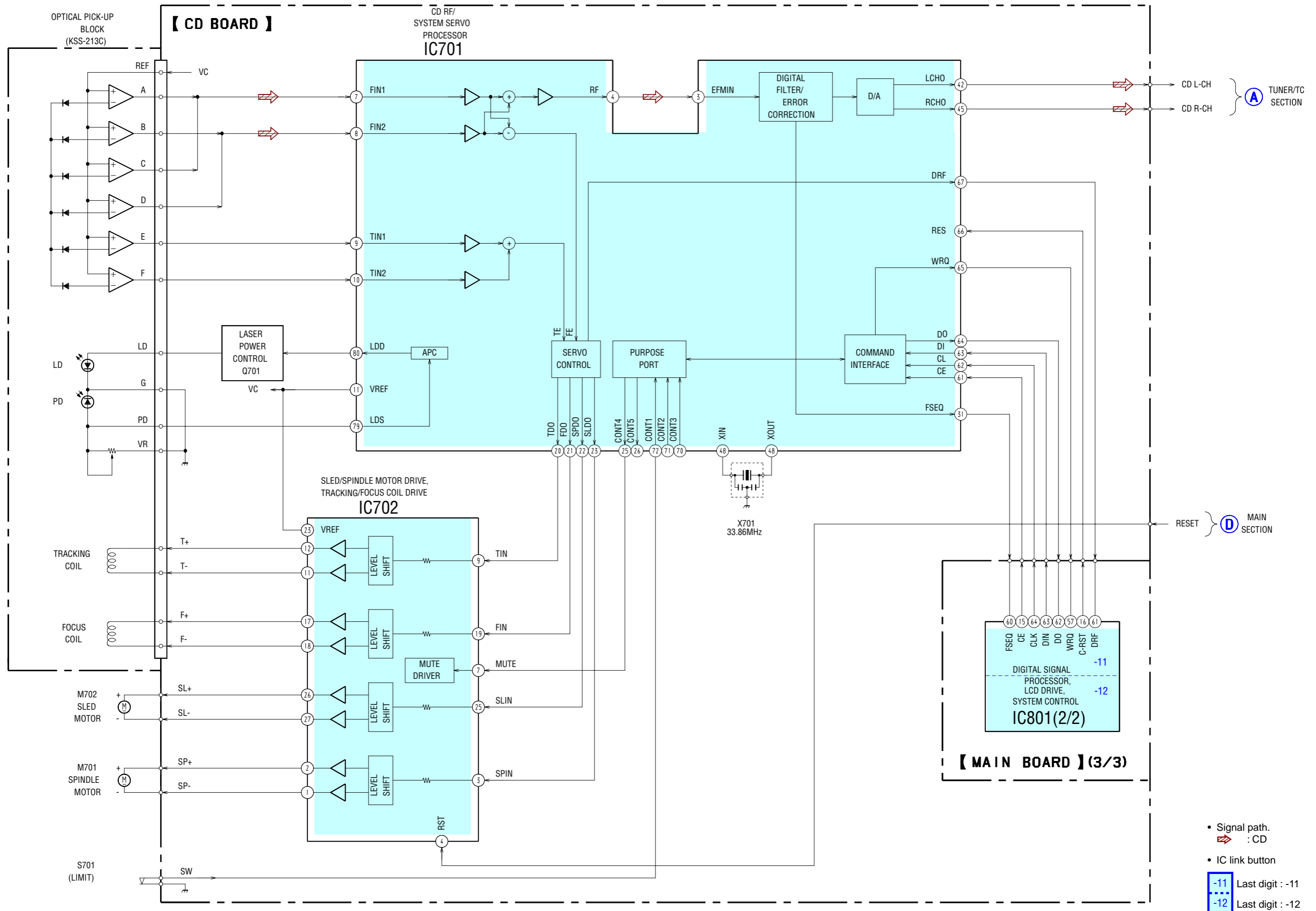


6-3. BLOCK DIAGRAMS -MAIN SECTION-

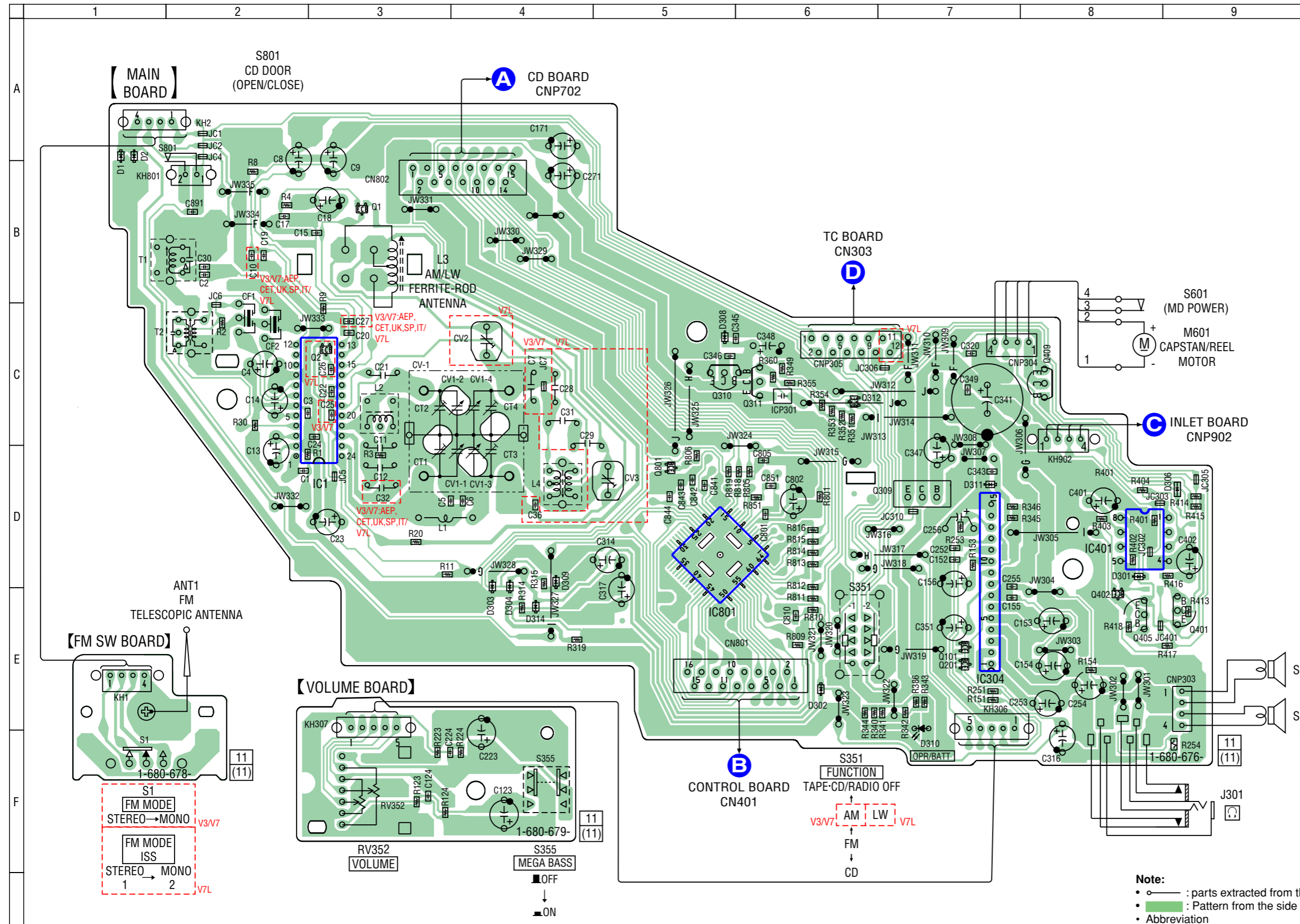


- R-CH is omitted: same as L-CH
- Signal path.
➡ : FM
- IC link button
-11 Last digit : -11
-12 Last digit : -12

6-4. BLOCK DIAGRAMS -CD SECTION-



6-5. PRINTED WIRING BOARDS – MAIN SECTION – (Last digit :-11) ● Refer to page 14 for Circuit Boards Location.



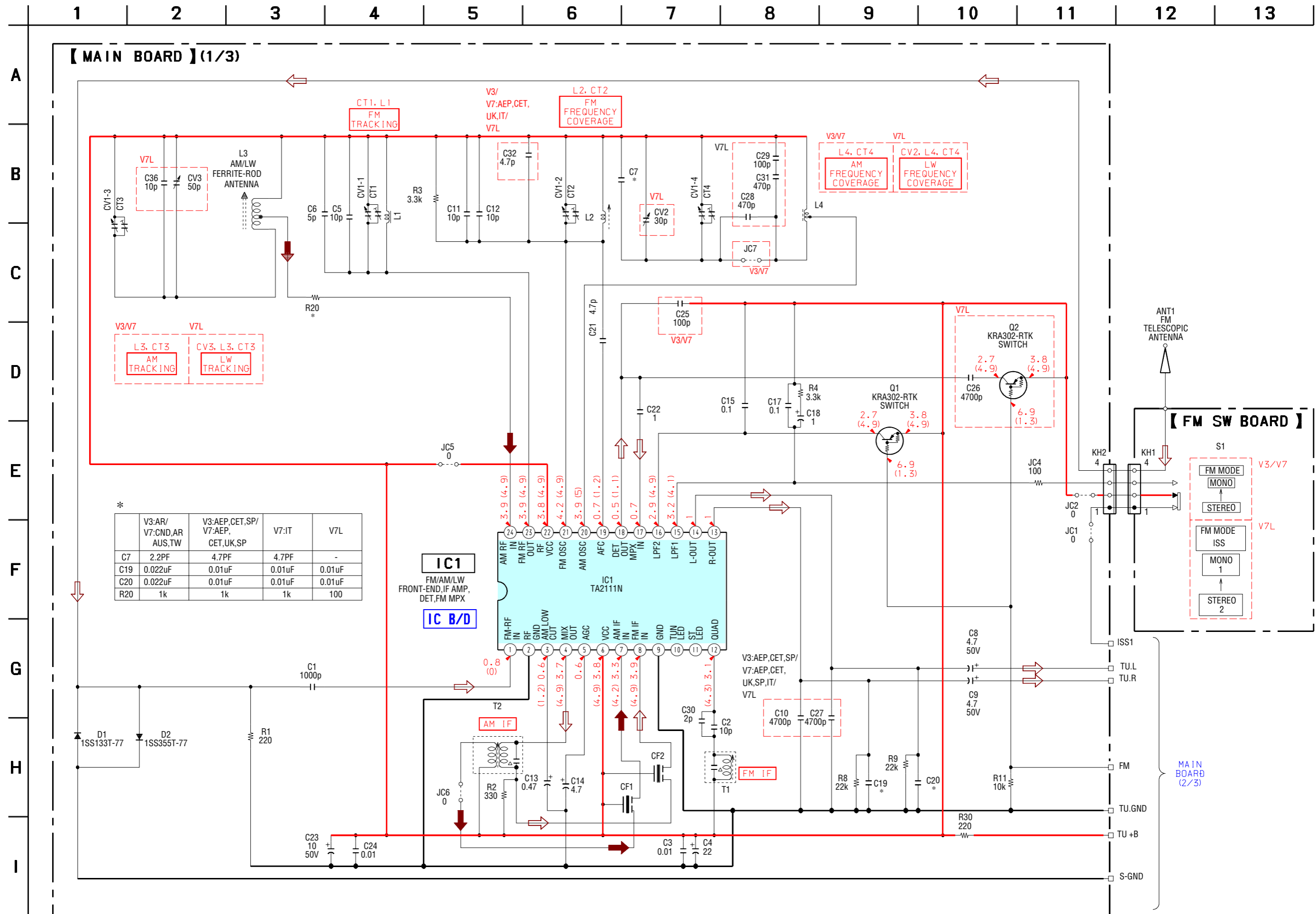
● Semiconductor

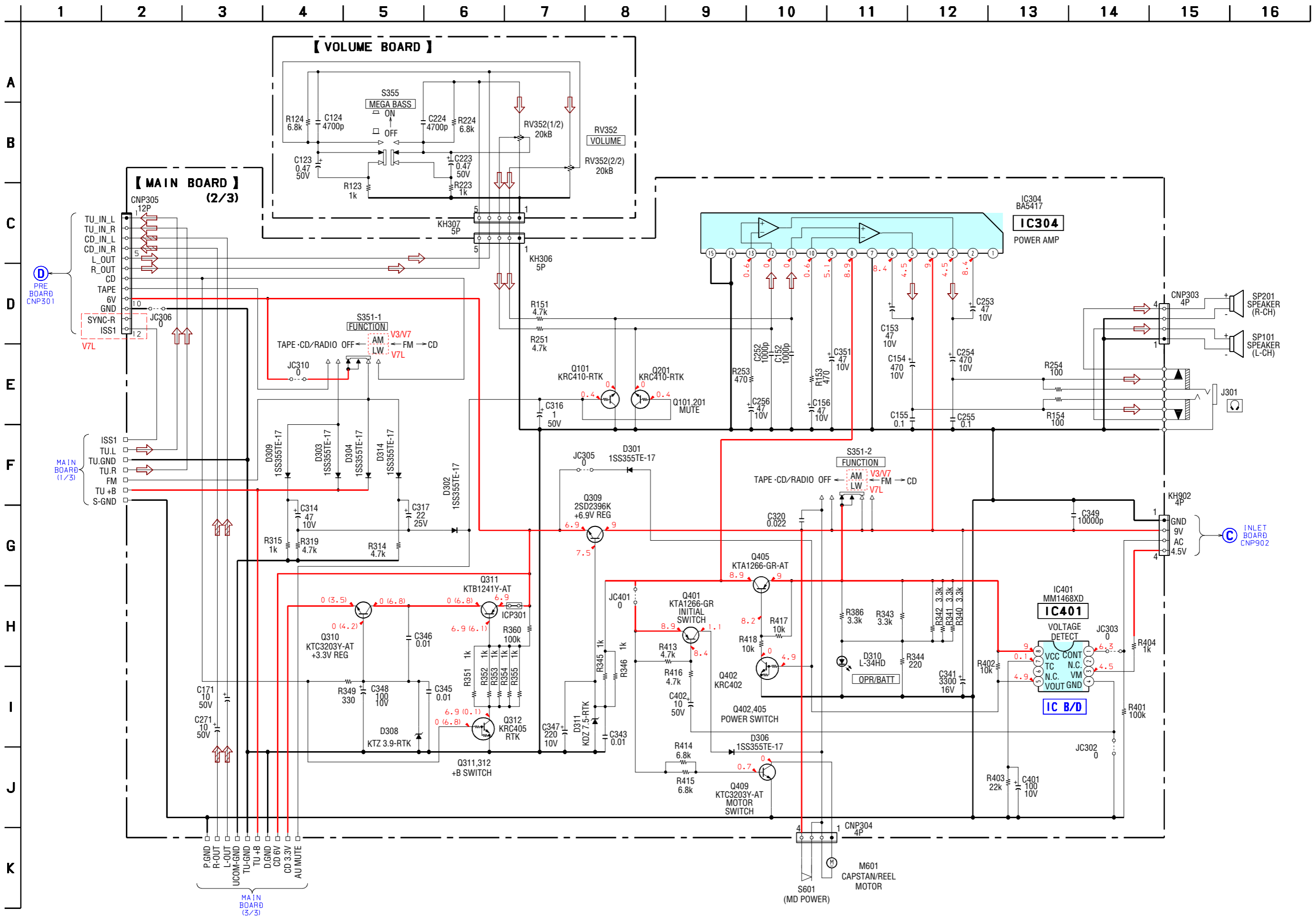
Ref. No.	Location
D1	A-1
D2	A-1
D301	D-8
D302	E-6
D303	D-4
D304	D-4
D306	D-9
D308	C-5
D309	D-4
D310	E-7
D311	D-7
D314	E-4
IC1	C-3
IC304	E-7
IC401	D-8
IC801	D-5
Q1	B-3
Q2	C-3
Q101	E-7
Q201	E-7
Q309	D-7
Q310	C-5
Q311	C-6
Q312	C-6
Q401	E-9
Q402	E-8
Q405	E-8
Q409	C-8
Q801	D-5

Note:

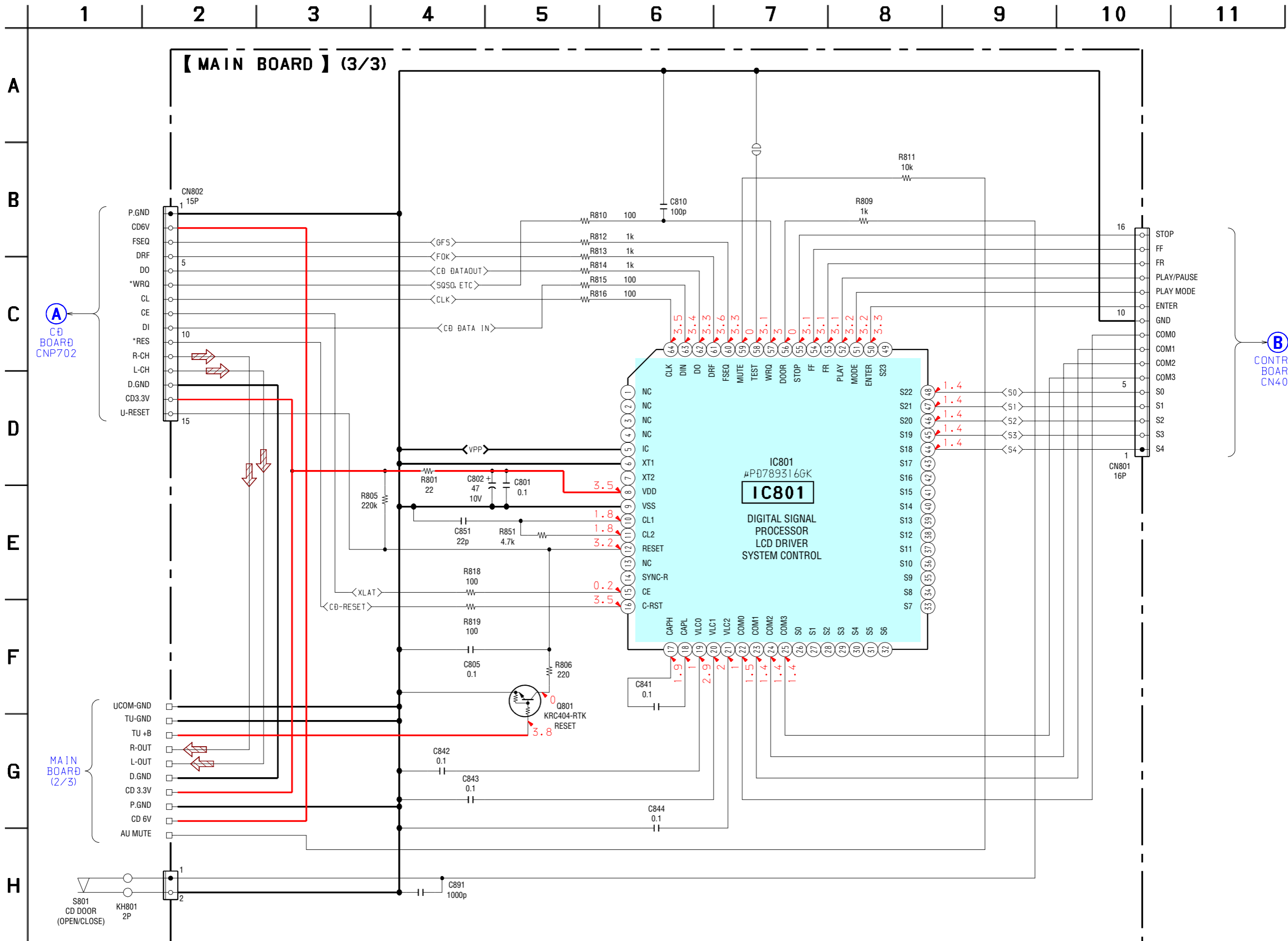
- : parts extracted from the component side.
- : Pattern from the side which enables seeing.
- Abbreviation
 - CND : Canadian
 - IT : Italian
 - CET : East European & Russian
 - SP : Singapore
 - AR : Argentina
 - AUS : Australian
 - TW : Taiwan
 - KR : Korean

6-6. SCHEMATIC DIAGRAMS – MAIN SECTION (1/3) – (Last digit : -11) ● Refer to page 30 for Notes. ● Refer to page 31 for IC Block

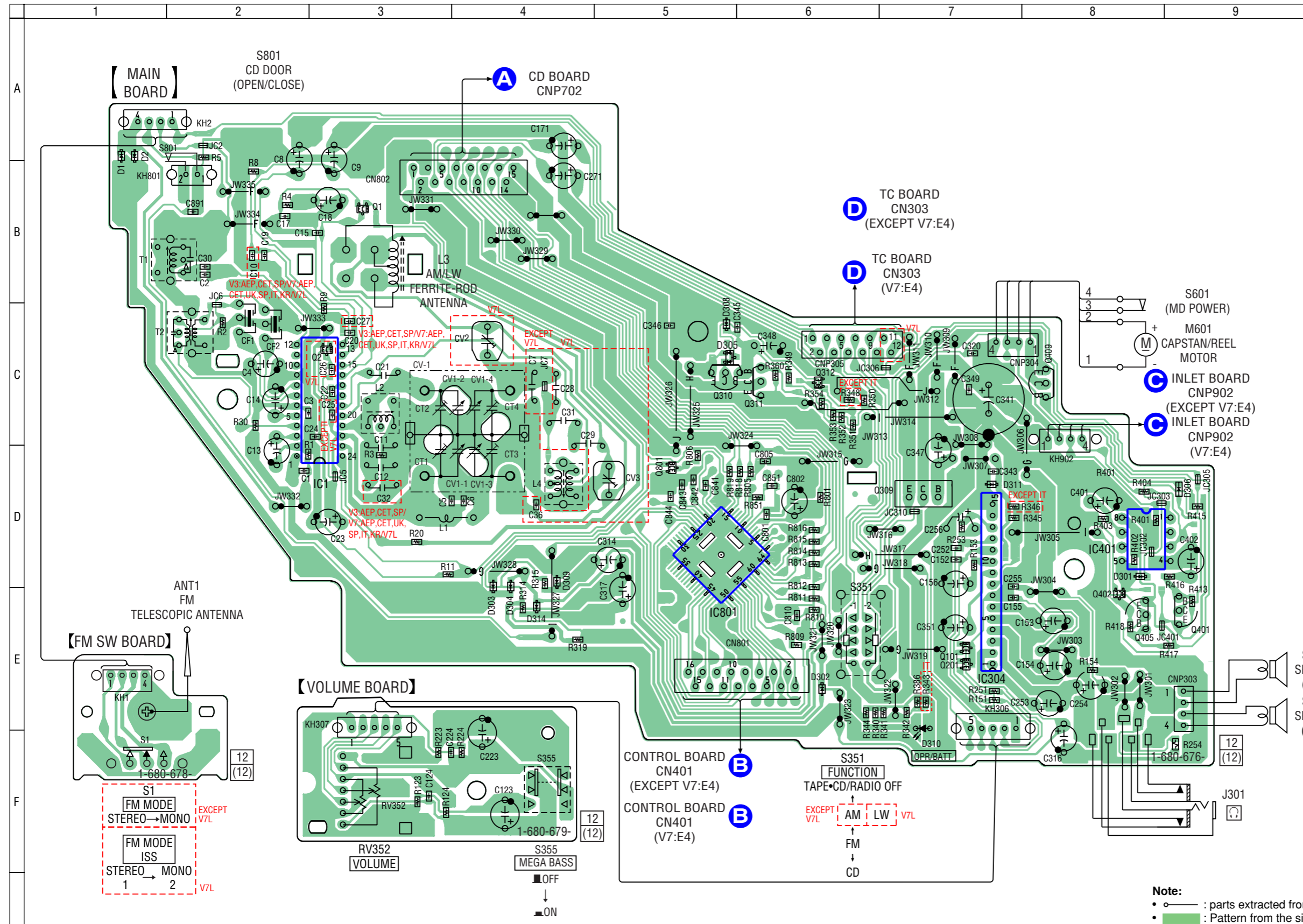




6-8. SCHEMATIC DIAGRAMS – MAIN SECTION (3/3) – (Last digit : -11) ● Refer to page 30 for Notes. ● Refer to page 13 for Explanation of IC Terminals.



6-9. PRINTED WIRING BOARDS – MAIN SECTION – (Last digit : -12) (Added V7: E4, KR model) ● Refer to page 14 for Circuit Boards Location.



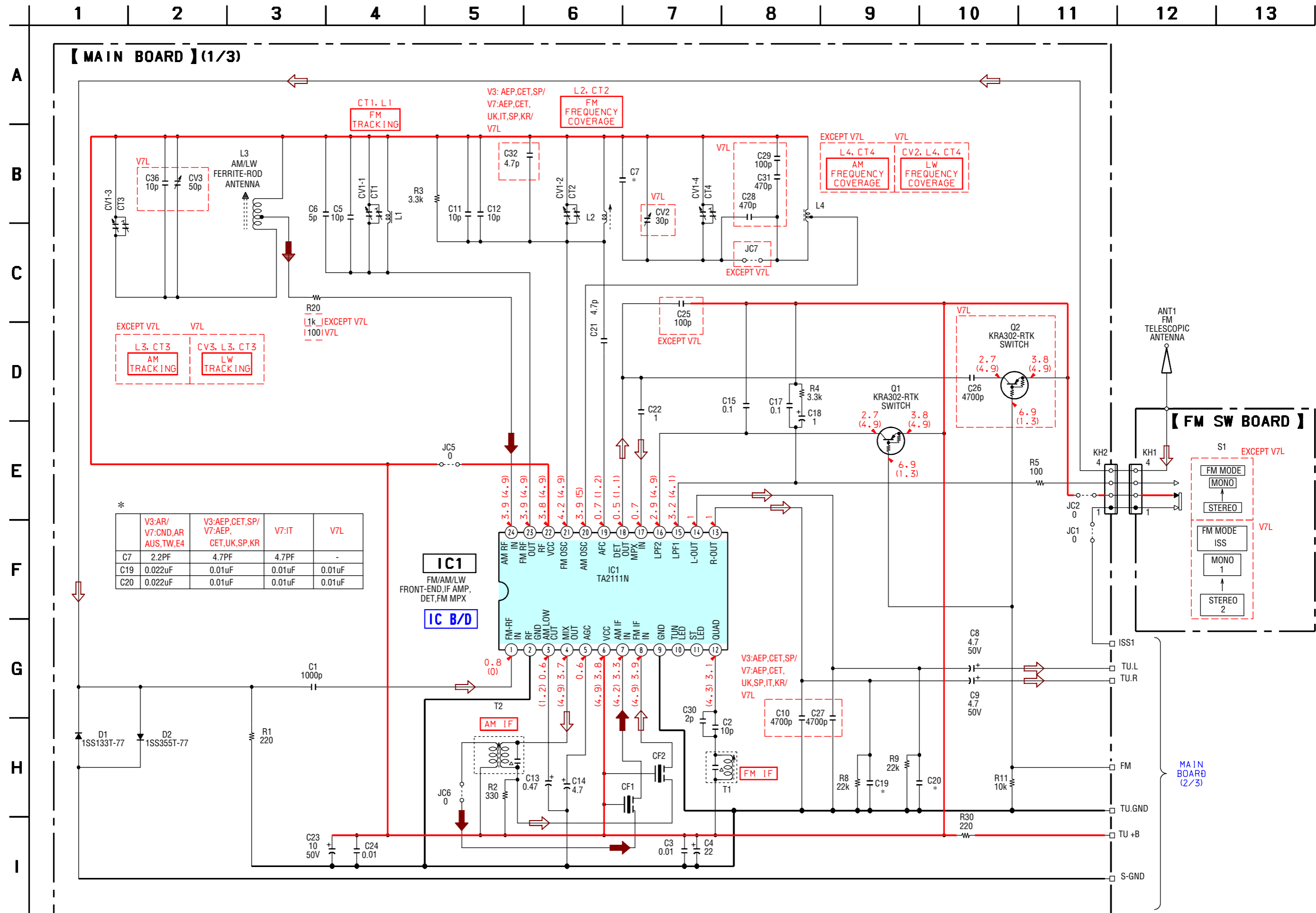
● Semiconductor

Ref. No.	Location
D1	A-1
D2	A-1
D301	D-8
D302	E-6
D303	D-4
D304	D-4
D305	C-5
D306	D-9
D308	C-5
D309	D-4
D310	E-7
D311	D-7
D314	E-4
IC1	C-3
IC304	E-7
IC401	D-8
IC801	D-5
Q1	B-3
Q2	C-3
Q101	E-7
Q201	E-7
Q309	D-7
Q310	C-5
Q311	C-6
Q312	C-6
Q401	E-9
Q402	E-8
Q405	E-8
Q409	C-8
Q801	D-5

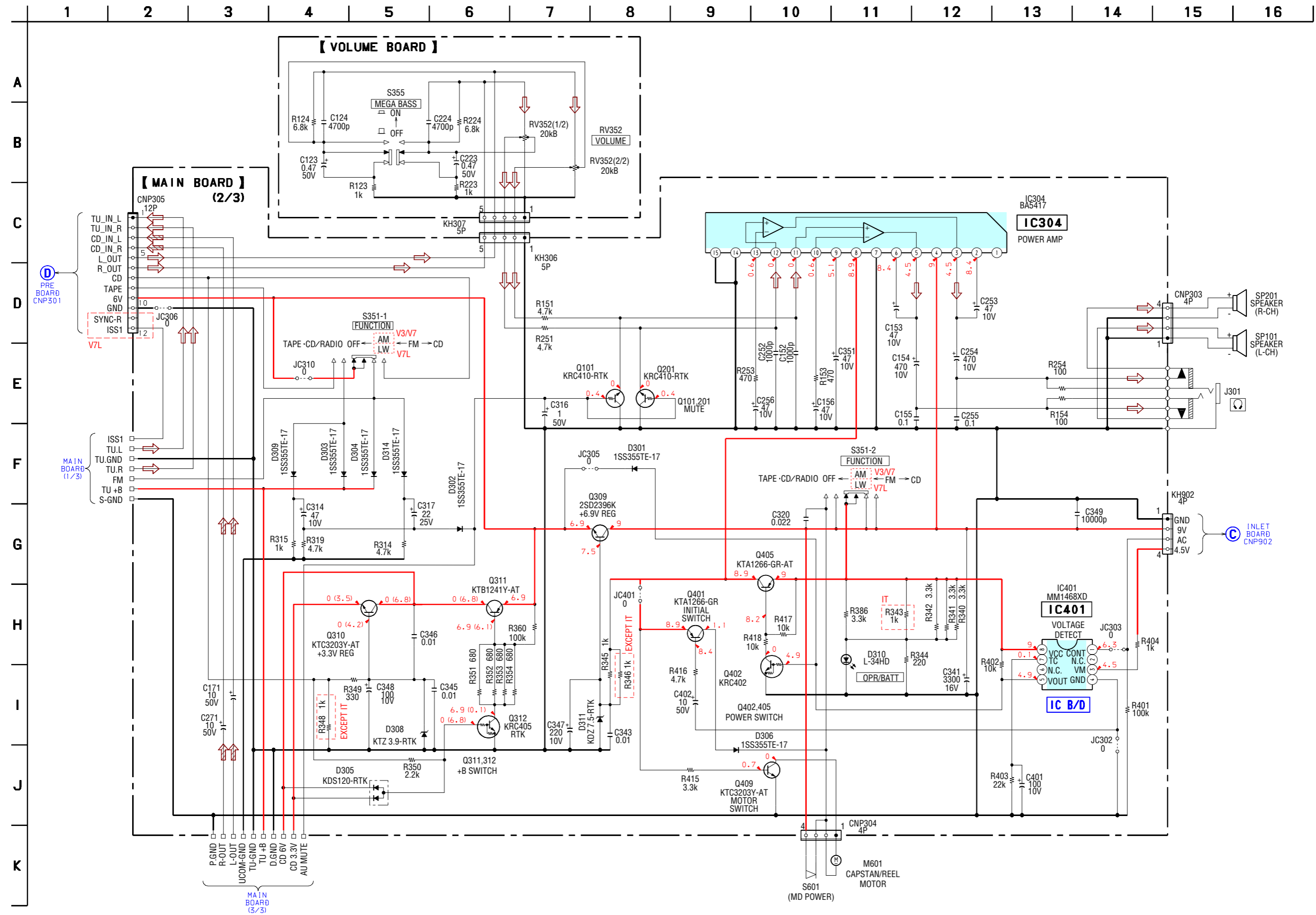
Note:

- : parts extracted from the component side.
- : Pattern from the side which enables seeing.
- Abbreviation
 - CND : Canadian
 - IT : Italian
 - CET : East European & Russian
 - SP : Singapore
 - AR : Argentina
 - AUS : Australian
 - TW : Taiwan
 - KR : Korean

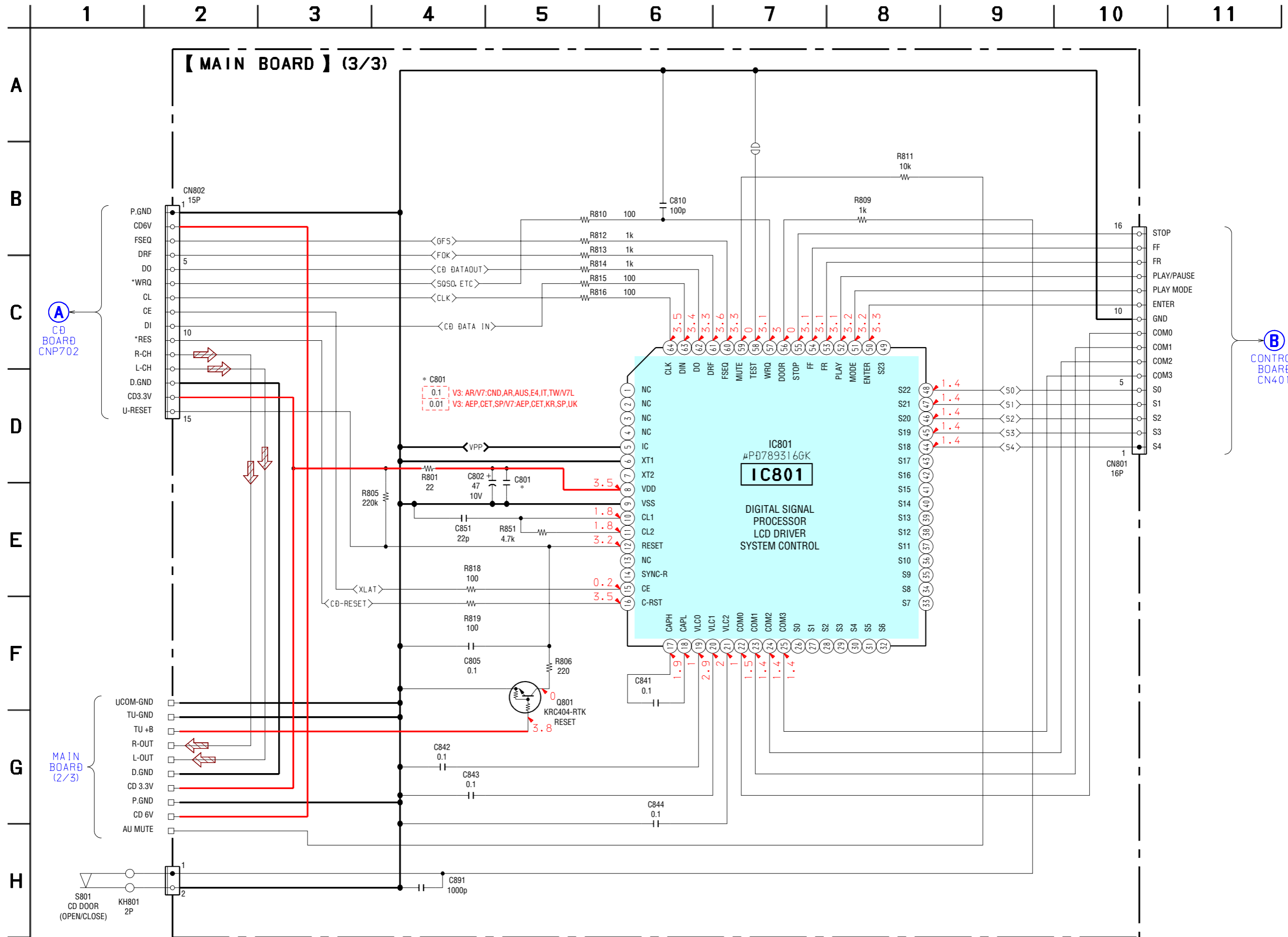
6-10. SCHEMATIC DIAGRAMS – MAIN SECTION (1/3) – (Last digit : -12) ● Refer to page 30 for Notes. ● Refer to page 31 for IC Block



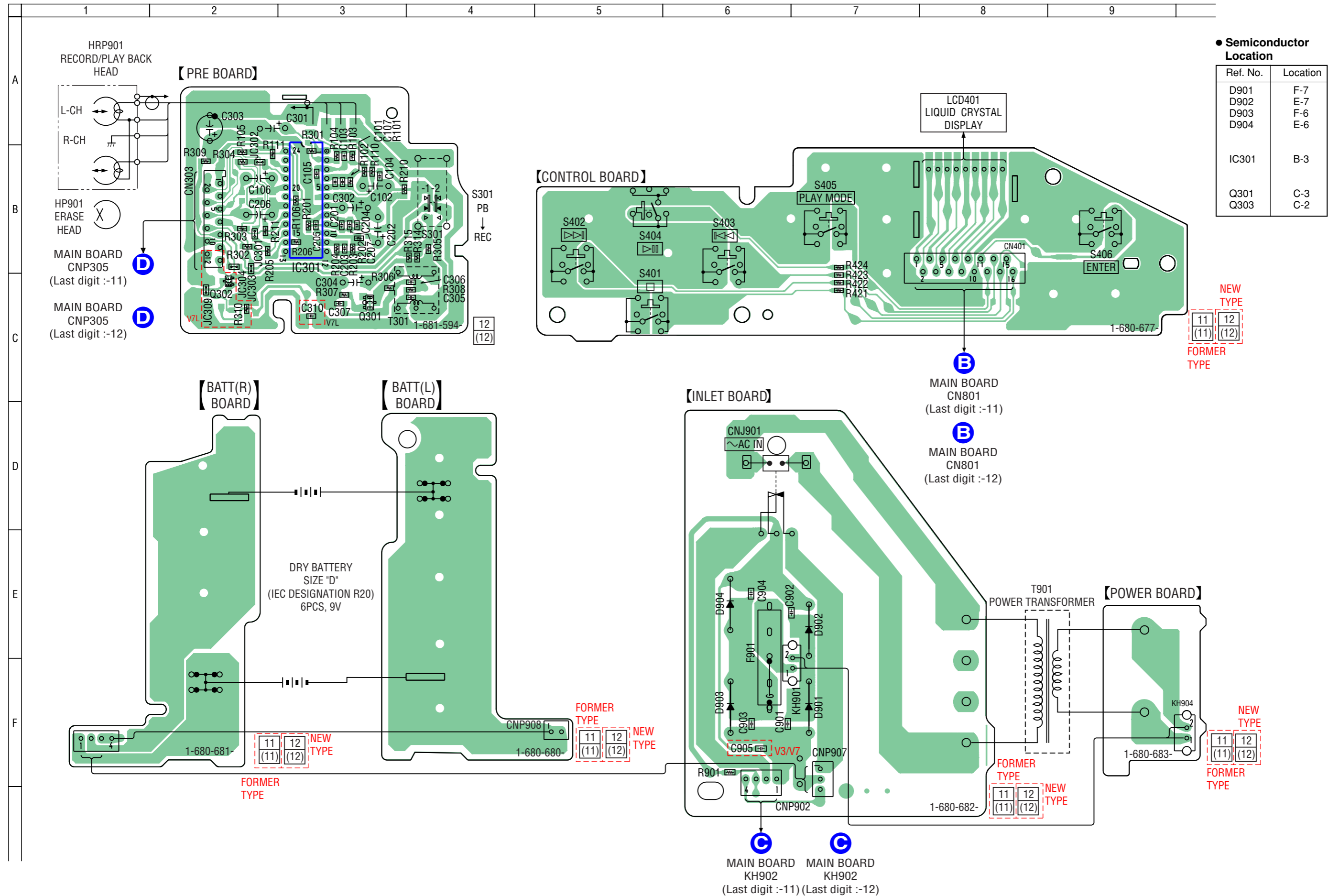
6-11. SCHEMATIC DIAGRAMS – MAIN SECTION (2/3) – (Last digit : -12) • Refer to page 30 for Notes. • Refer to page 33 for IC Block Diagram.



6-12. SCHEMATIC DIAGRAMS – MAIN SECTION (3/3) – (Last digit : -12) ● Refer to page 30 for Notes. ● Refer to page 13 for Explanation of IC Terminals.

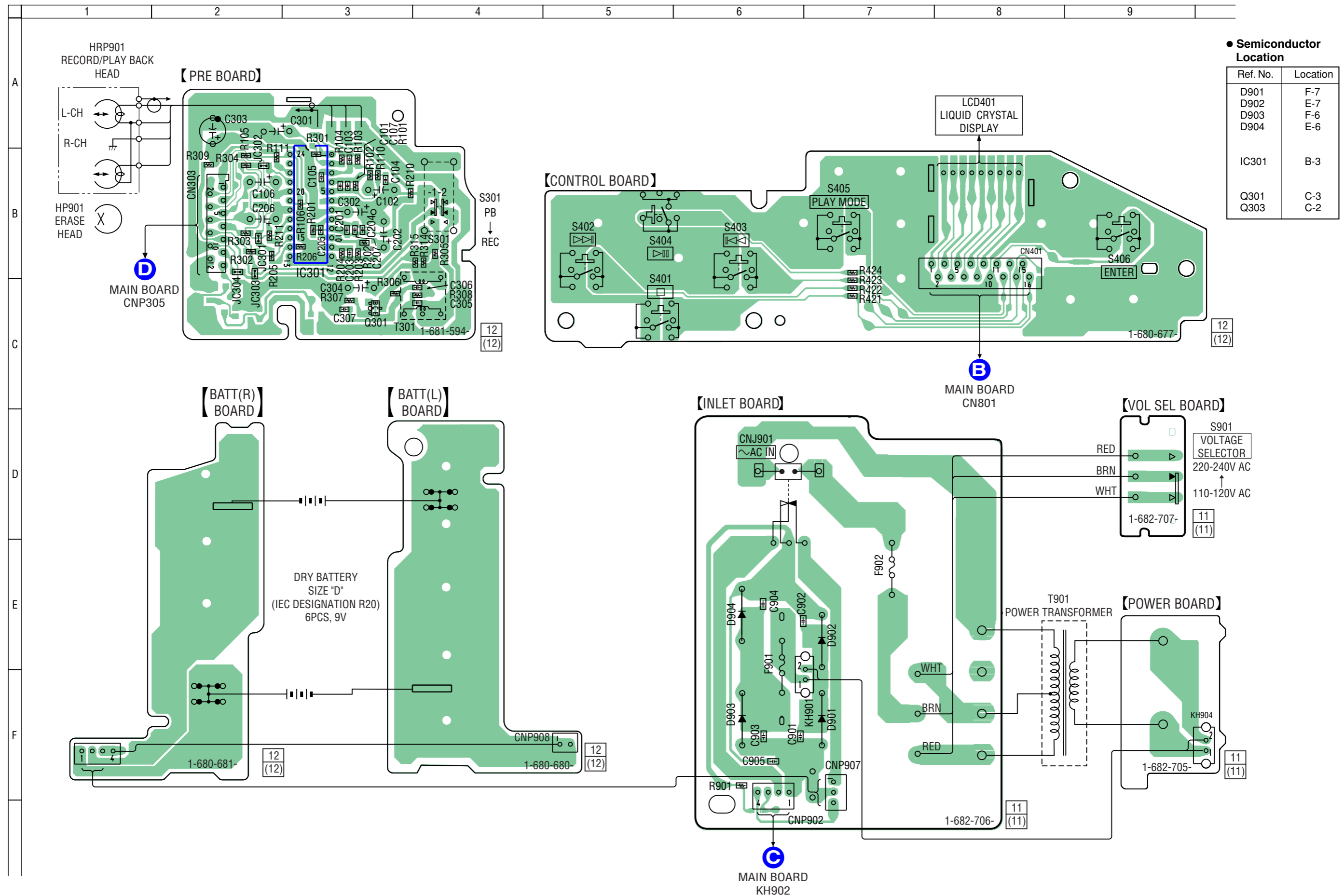


6-13. PRINTED WIRING BOARDS – CONTROL/POWER SECTION – (Exsept V7: E4 model) ● Refer to page 14 for Circuit Boards Location.



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

6-14. PRINTED WIRING BOARDS – CONTROL/POWER SECTION – (V7: E4 model) ● Refer to page 14 for Circuit Boards Location.

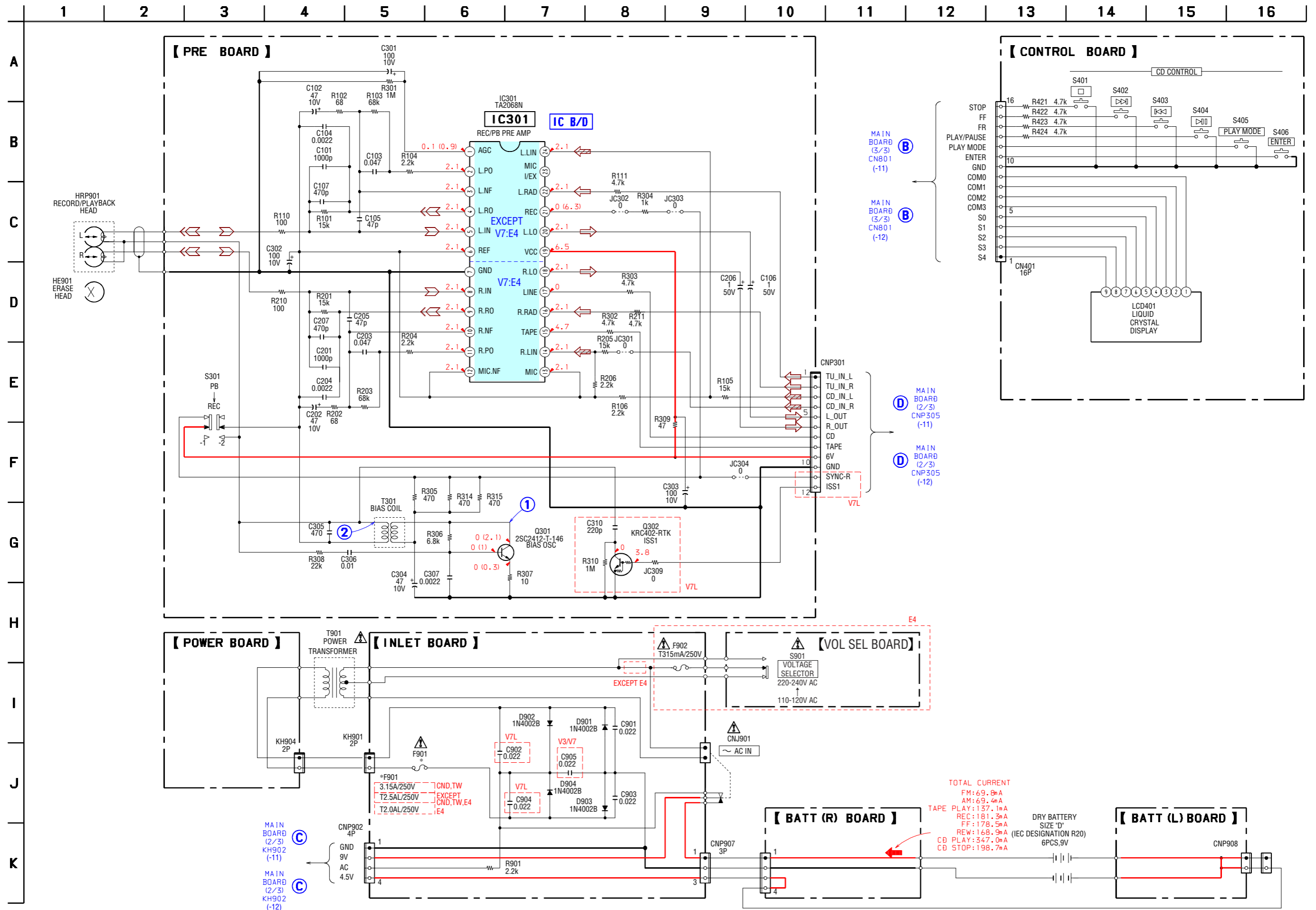


● Semiconductor Location

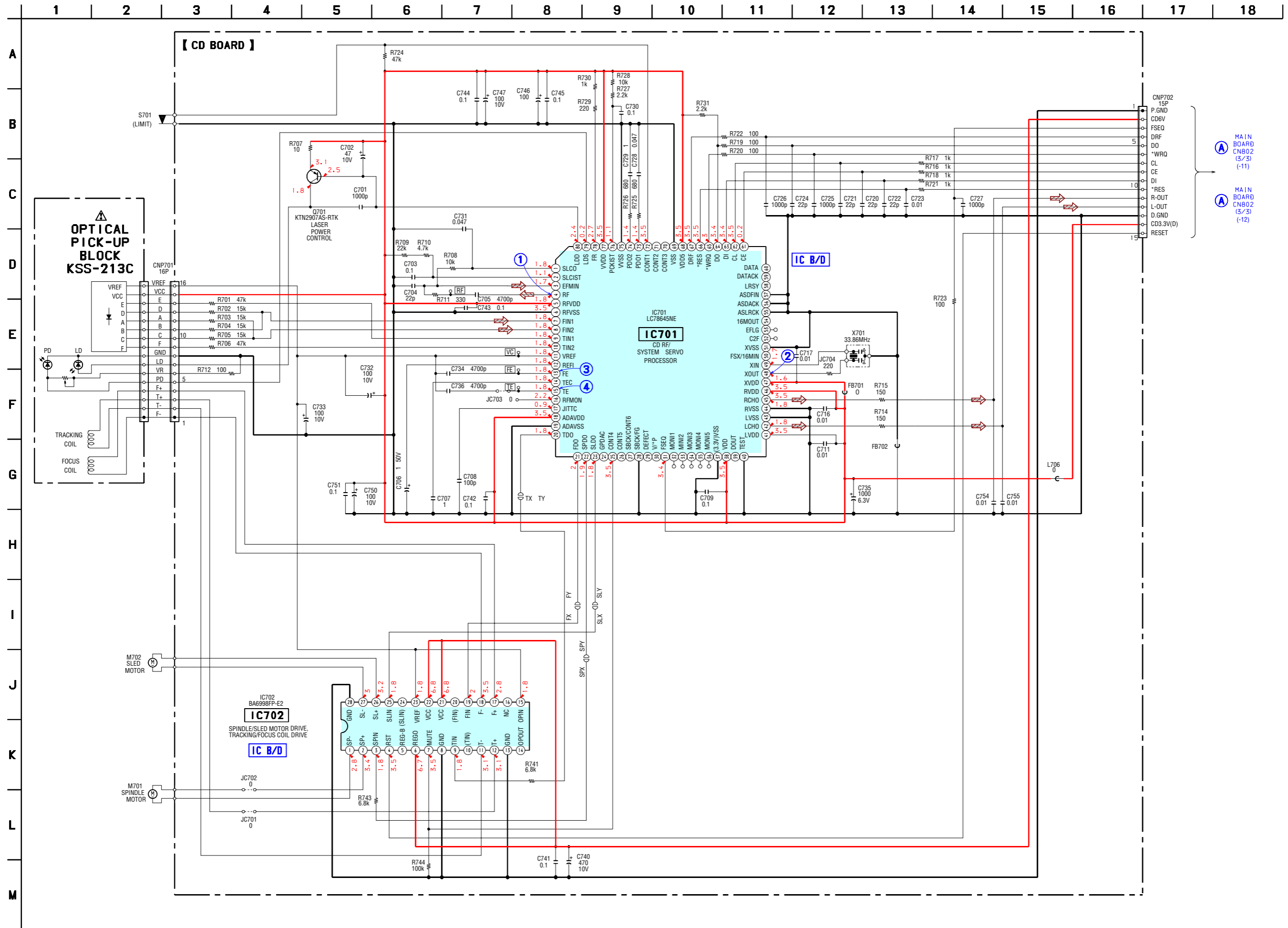
Ref. No.	Location
D901	F-7
D902	E-7
D903	F-6
D904	E-6
IC301	B-3
Q301	C-3
Q303	C-2

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

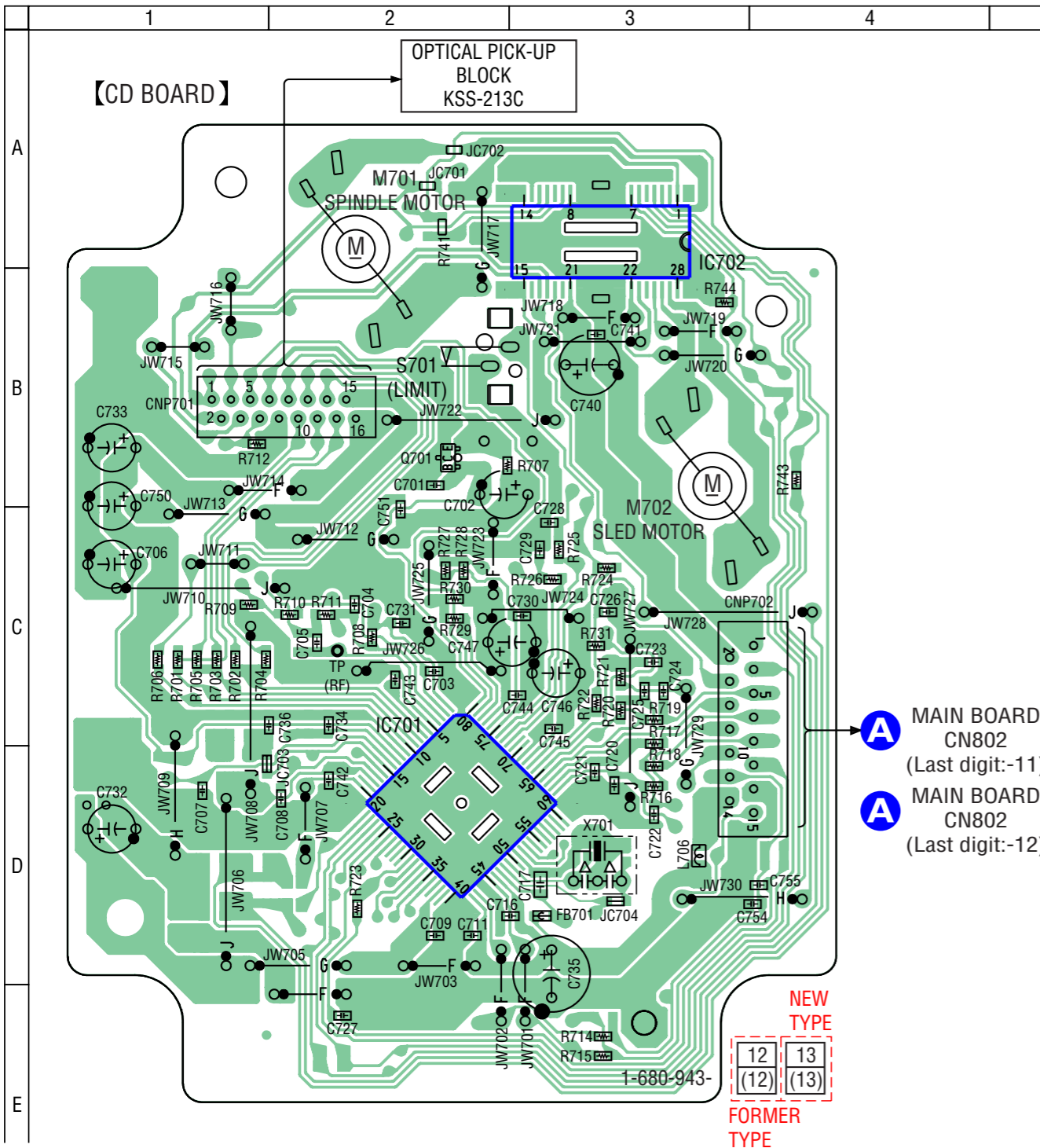
6-15. SCHEMATIC DIAGRAMS – CONTROL/POWER SECTION – ● Refer to page 30 for Notes. ● Refer to page 30 for Waveforms. ● Refer to page 31 for IC Block Diagram.



6-16. SCHEMATIC DIAGRAMS – CD SECTION – ● Refer to page 30 for Notes. ● Refer to page 30 for Waveforms. ● Refer to page 32, 33 for IC Block Diagram.



6-17. PRINTED WIRING BOARD – CD SECTION – ● Refer to page 14 for Circuit Boards Location.



● Semiconductor Location

Ref. No.	Location
IC701	D-2
IC702	A-3
Q701	B-2

Note:

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

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μF F 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4$ W or less unless otherwise specified.
- △ : internal component.

Note:

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

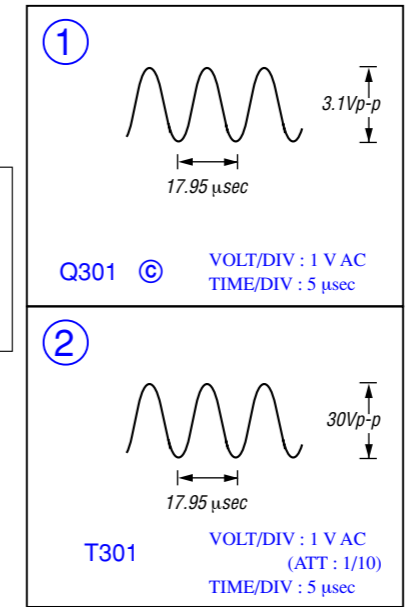
Note:

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

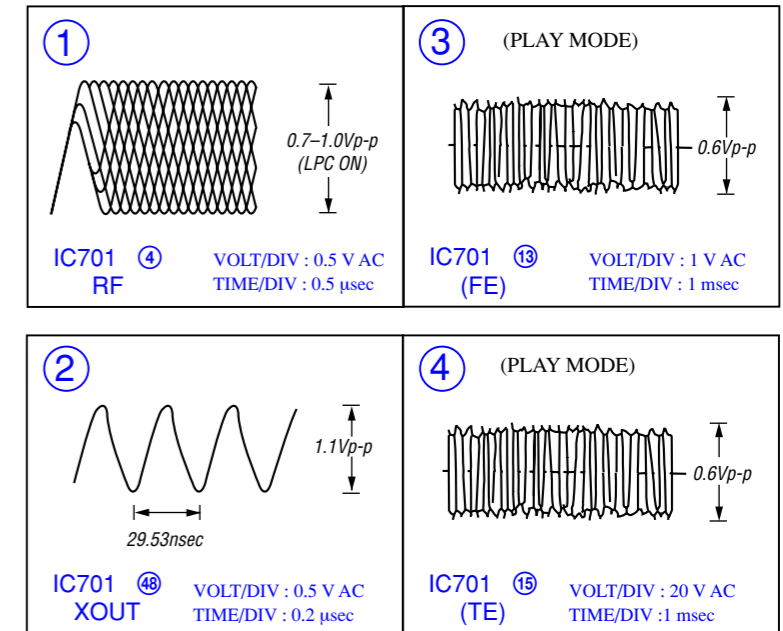
- : B+ Line.
- : adjustment for repair.
- Power voltage is dc 9 V and fed with regulated dc power supply from battery terminal.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : FM (RADIO SECTION), TAPE PLAY (TAPE SECTION)
- () : AM (RADIO SECTION), REC (TAPE SECTION)
- 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.
- : FM
- : AM
- : PB
- : REC
- : CD
- Abbreviation
- CND : Canadian
- IT : Italian
- CET : East European & Russian
- SP : Singapore
- AR : Argentina
- AUS : Australian
- TW : Taiwan
- KR : Korean
- E4 : 110-120V AC/220-240V AC Changeable

● Waveforms

– CONTROL/POWER SECTION –

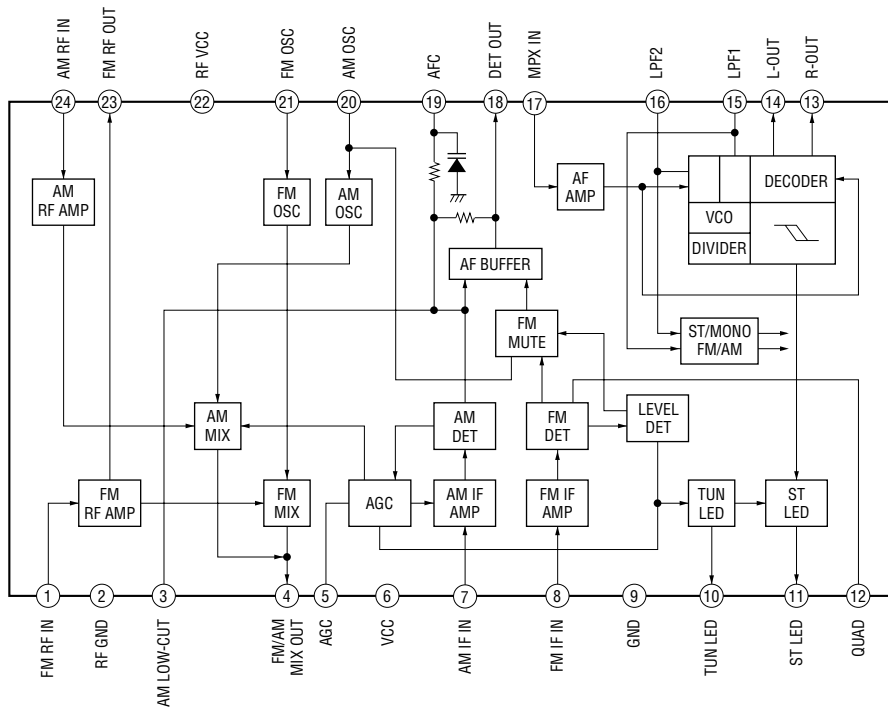


– CD SECTION –



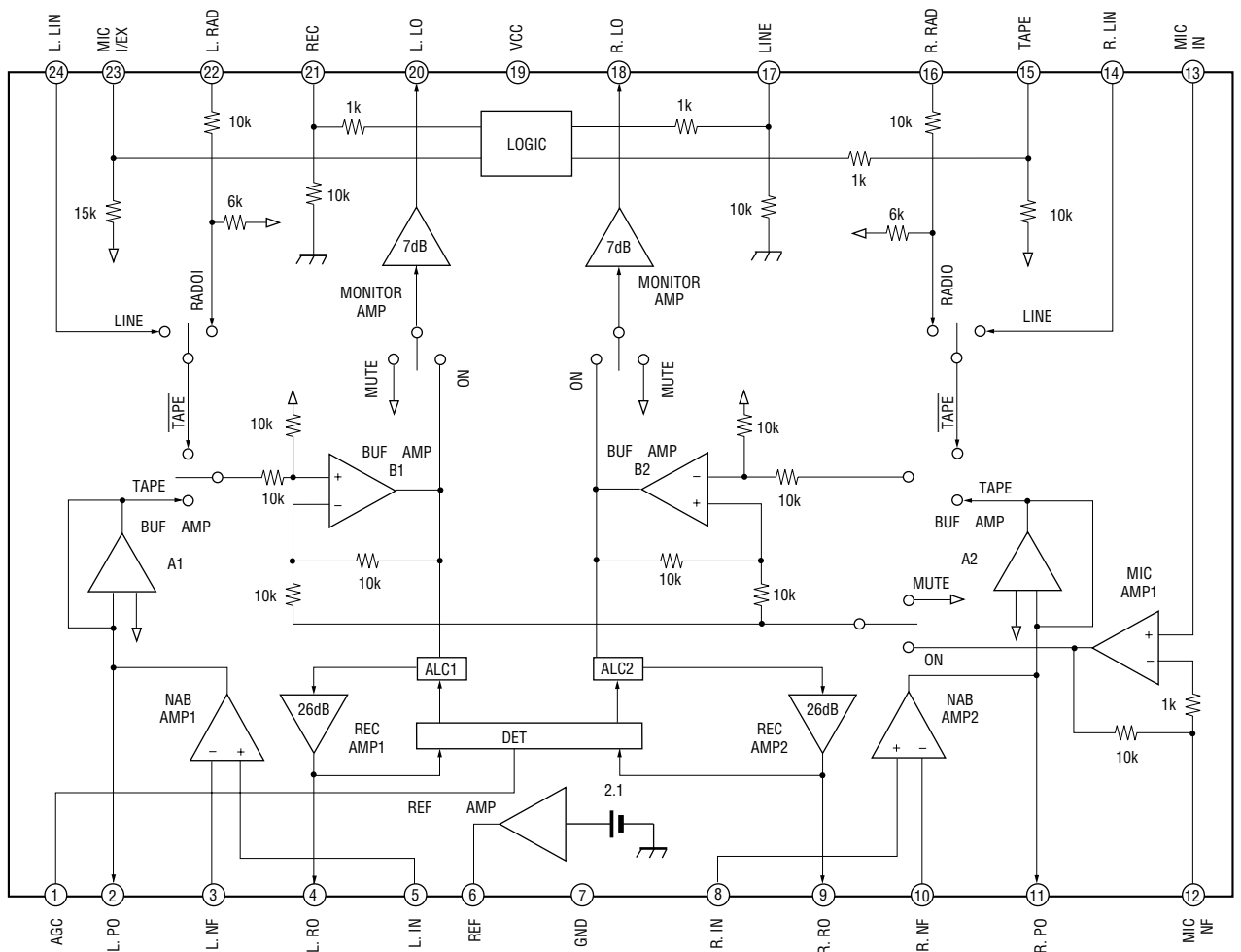
• IC BLOCK DIAGRAMS –MAIN SECTION–

IC1 TA2111N



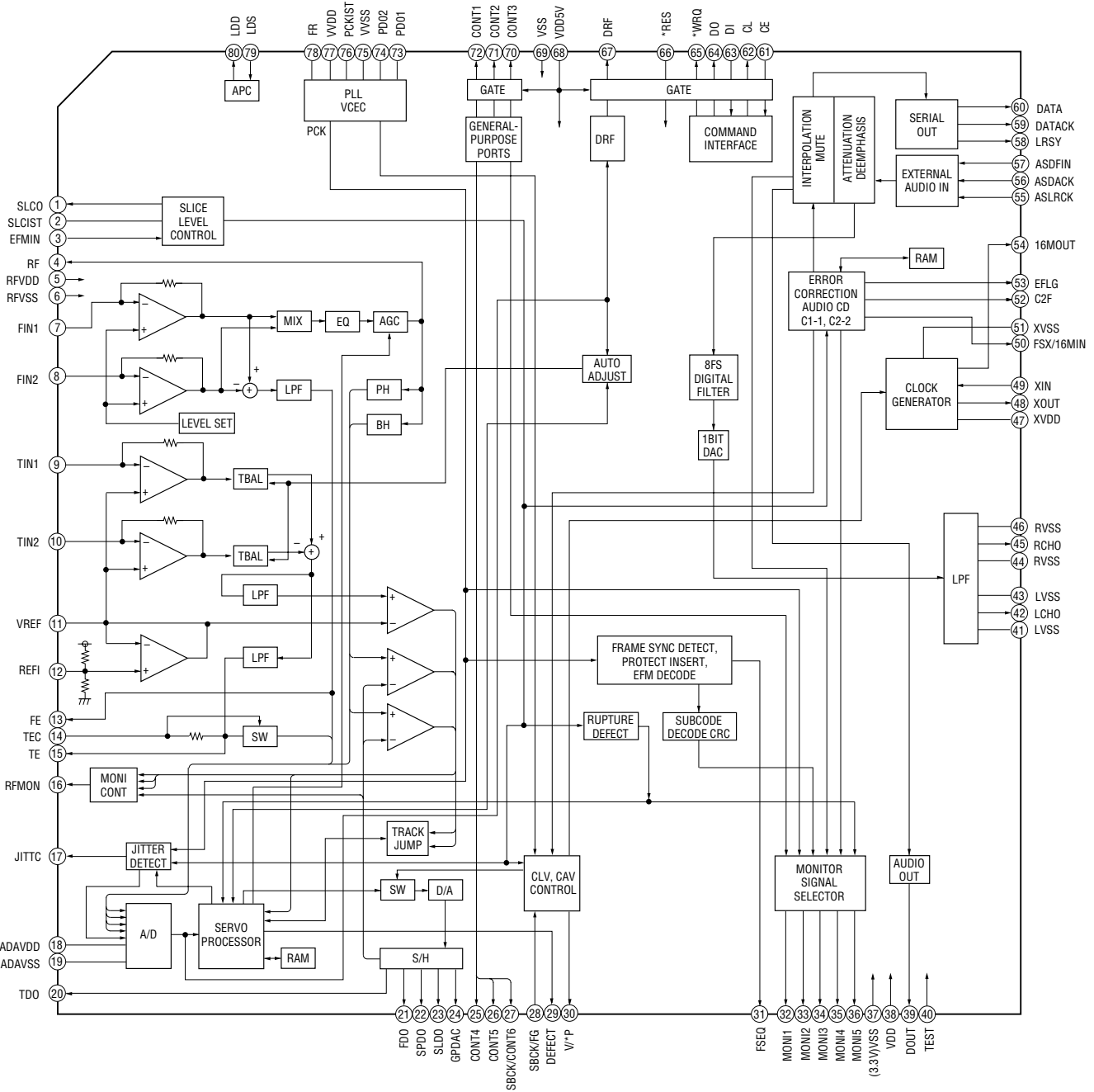
• IC BLOCK DIAGRAMS –CONTROL/POWER SECTION–

IC301 TA2068N

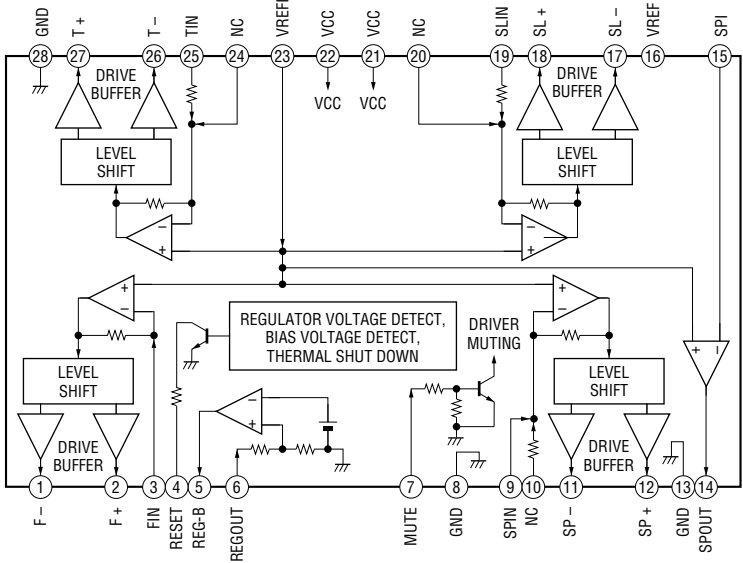


• IC BLOCK DIAGRAMS –CD SECTION–

IC701 LC78645E

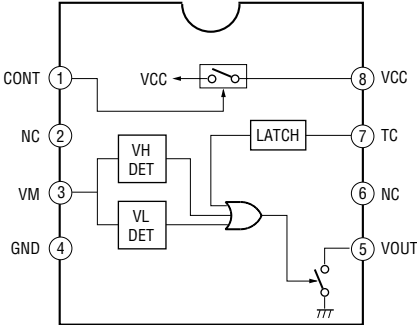


IC702 BA6998FP



• IC BLOCK DIAGRAMS –MAIN SECTION–

IC401 MM1468XD



SECTION 7 EXPLODED VIEWS

NOTE :

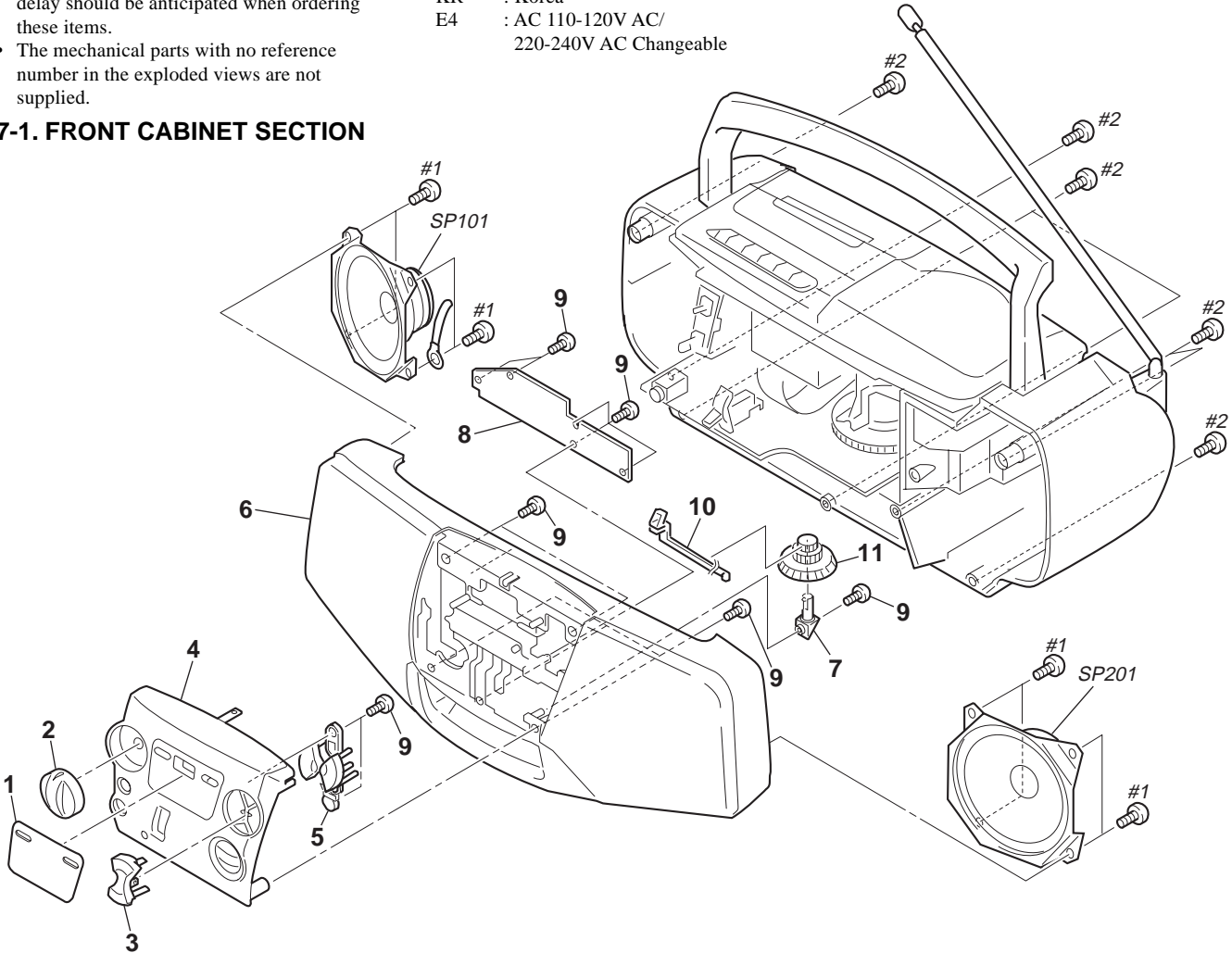
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Color indication of Appearance Parts
Example :
KNOB, BALANCE (WHITE)... (RED)
 ↑ ↑
 Parts color Cabinet's color
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay 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
IT : Italian
CET : East European & Russian
SP : Singapore
AR : Argentina
AUS : Australian
TW : Taiwan
KR : Korea
E4 : AC 110-120V AC/
220-240V AC Changeable

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.

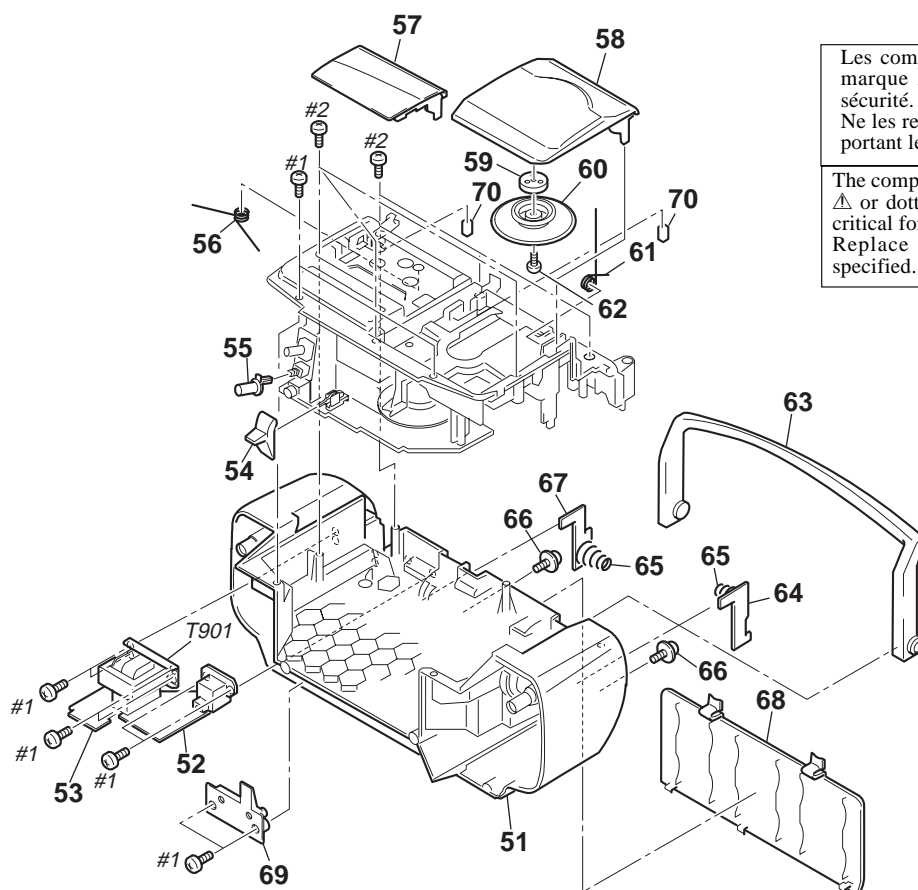
7-1. FRONT CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	3-226-979-01	WINDOW (TU) (V7:CND,AUS,TW(SILVER))	
1	3-226-979-11	WINDOW (TU) (V7:AUS,AR,E4,TW(BLUE))	
1	3-226-979-21	WINDOW (TU) (V3:AR)	
1	3-229-933-01	WINDOW (TU) (V7:AEP,CET,UK,SP,KR)	
1	3-229-933-11	WINDOW (TU) (V7:IT)	
1	3-229-949-01	WINDOW (TU) (V3:AEP,CET,SP)	
1	3-231-903-01	WINDOW (TU LW) (V7L)	
2	3-031-549-21	KNOB (VOL) (V7:CND,AUS,TW(SILVER))	
2	3-031-549-31	KNOB (VOL) (V7:AEP,IT,CET,UK,AUS,AR,SP,E4,KR, TW(BLUE)/V7L)	
2	3-229-950-01	KNOB (VOLUME) (V3)	
3	3-033-527-01	BUTTON CD (PLAY/STOP)...(SILVER) (V7:CND,AUS,TW)	
3	3-226-986-01	BUTTON CD (PLAY/STOP)...(BLUE) (V7:AEP,IT,CET,UK,AUS,AR,SP,E4,KR,TW/V7L)	
3	3-229-951-01	BUTTON CD (PLAY/STOP) (V3)	
4	X-3380-207-1	PANEL SUB ASSY (V7)	
4	X-3380-519-1	PANEL SUB ASSY (V3)	
4	X-3380-521-1	PANEL SUB ASSY (V7L)	
5	3-033-528-01	BUTTON CD (AMS) (V7:CND,AUS,TW(SILVER))	

Ref. No.	Part No.	Description	Remark
5	3-226-987-01	BUTTON CD (AMS) (V7:AEP,IT,CET,UK,AUS,AR,SP,E4,KR, TW(BLUE)/V7L)	
5	3-229-952-01	BUTTON CD (AMS) (V3)	
6	X-3380-206-1	CABINET (FRONT) SUB ASSY...(SILVER) (V7:CND,AUS,TW)	
6	X-3380-518-1	CABINET (FRONT) SUB ASSY...(SILVER) (V7:AEP,IT,CET,UK,AR,SP,E4,KR/V7L)	
6	X-3380-520-1	CABINET (FRONT) SUB ASSY (V3)	
6	X-3380-796-1	CABINET (FRONT) SUB ASSY...(BLUE) (V7:AEP,IT,CET,UK,AUS,TW/V7L)	
7	3-031-558-01	SHAFT (TU)	
* 8	1-681-677-12	CONTROL BOARD	
9	4-951-620-01	SCREW (2.6X8), +BVTP	
10	3-031-551-01	POINTER	
11	3-031-552-41	KNOB (TU) (V7/V7L)	
11	3-229-954-01	KNOB (TUNE) (V3)	
SP101	1-529-723-11	SPEAKER (10cm) (L-CH) (V3)	
SP101	1-529-723-21	SPEAKER (10cm) (L-CH) (V7/V7L)	
SP201	1-529-723-11	SPEAKER (10cm) (R-CH) (V3)	
SP201	1-529-723-21	SPEAKER (10cm) (R-CH) (V7/V7L)	

7-2. REAR CABINET SECTION

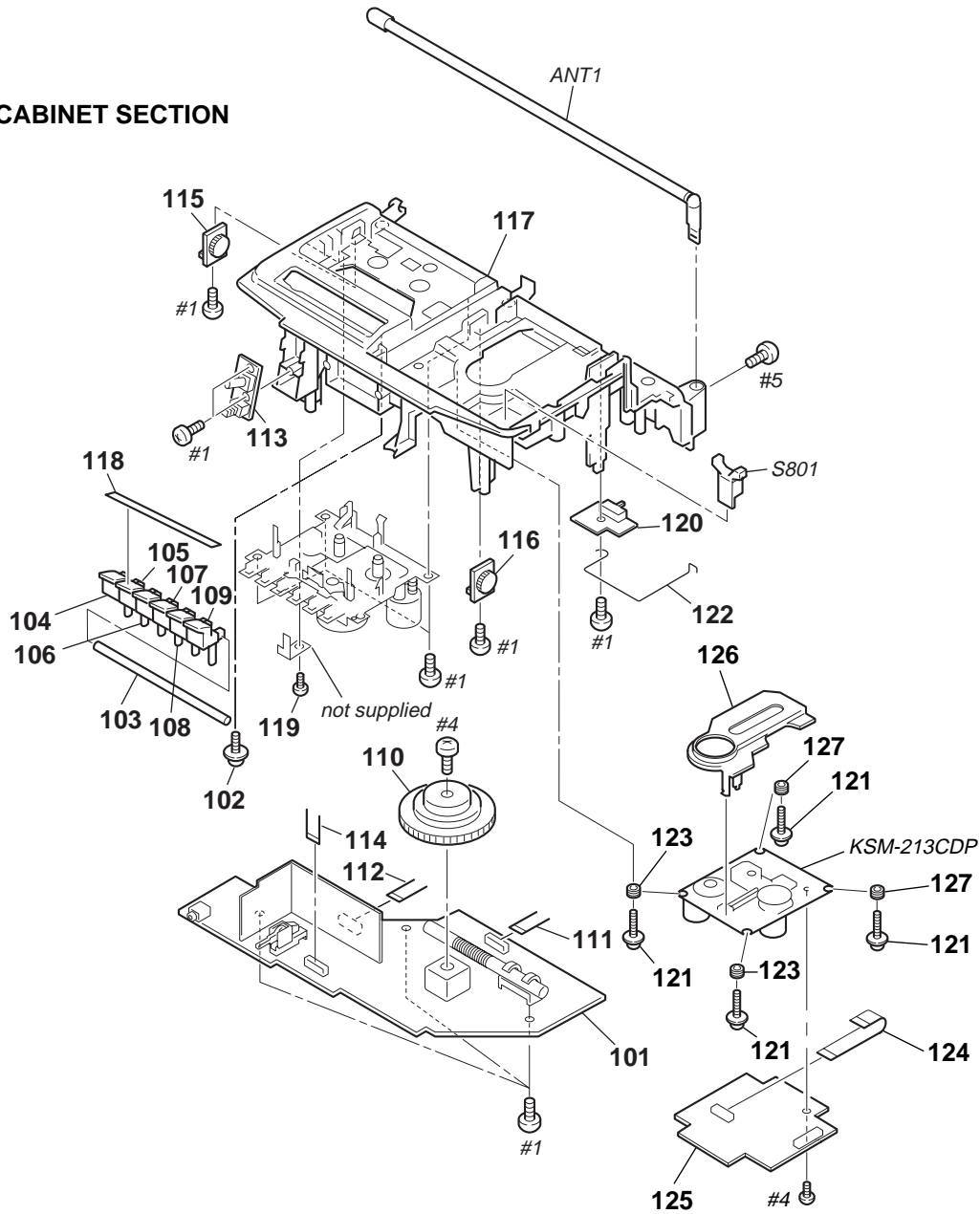


Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-226-989-01	CABINET (REAR)...(SILVER) (V7:CND,TW)		58	3-031-538-91	LID (CD) (V3)	
51	3-226-989-11	CABINET (REAR)...(SILVER) (V7:AUS)		58	3-226-993-01	LID CD...(SILVER) (V7:CND,AUS,TW)	
51	3-229-939-11	CABINET (REAR)...(SILVER) (V7L)		58	3-229-945-01	LID CD...(SILVER)	
51	3-229-939-21	CABINET (REAR)...(SILVER) (V7:IT)				(V7:AEP,IT,CET,UK,AR,SP,E4,KR/V7L)	
51	3-229-939-31	CABINET (REAR)...(SILVER)		58	3-229-946-01	LID CD ... (BLUE)	
		(V7:AEP,UK,CET,AR,SP,KR)				(V7:AEP,IT,CET,UK,AUS,TW/V7L)	
51	3-229-939-41	CABINET (REAR)...(SILVER)(V7:E4)		59	1-452-899-11	MAGNET	
51	3-229-940-11	CABINET (REAR)...(BLUE) (V7L)		60	3-019-395-01	PLATE, CHUCKING	
51	3-229-940-21	CABINET (REAR)...(BLUE) (V7:IT)		61	3-031-562-01	SPRING (CD)	
51	3-229-940-31	CABINET (REAR)...(BLUE)		62	4-951-620-11	SCREW (2.6X10), +BVTP	
		(V7:AEP,UK,CET,AR,SP)		63	3-031-540-11	HANDLE (V7:CND,AUS)	
51	3-229-940-41	CABINET (REAR)...(BLUE) (V7:AUS)		63	3-031-540-81	HANDLE (V3)	
51	3-229-958-01	CABINET (REAR) (V3:AEP,CET)		63	3-226-976-01	HANDLE...(SILVER) (V7:TW)	
51	3-229-958-11	CABINET (REAR) (V3:SP,AR)		63	3-229-931-01	HANDLE...(SILVER)	
* 52	1-680-682-12	INLET BOARD (EXCEPT E4)				(V7:AEP,IT,CET,UK,AR,SP,E4,KR/V7L)	
* 52	1-682-706-11	INLET BOARD (E4)		63	3-229-935-01	HANDLE...(BLUE)(V7:AEP,IT,CET,UK,AUS,	
* 53	1-680-683-12	POWER BOARD				TW/V7L)	
54	3-031-570-41	KNOB (FUNCTION) (V7/V7L)		* 64	1-680-680-12	BATT (L) BOARD	
54	3-229-947-01	KNOB (FUNCTION) (V3)		65	3-028-154-01	TERMINAL (-), BATT	
55	3-226-978-01	BUTTON (MEGA BASS)		66	4-960-167-01	SCREW (3X8) (DIA. 10), +WH	
		(V7:CND,AUS,TW(SILVER))		* 67	1-680-681-12	BATT (R) BOARD	
55	3-229-932-01	BUTTON (MEGA BASS)		68	3-036-134-81	LID, BATTERY CASE (V3)	
		(V7:AEP,IT,CET,UK,AUS,AR,SP,E4,KR,		68	3-226-980-01	LID BATTERY...(SILVER) (V7:TW)	
		TW(BLUE) /V7L)		68	3-229-934-01	LID BATTERY...(SILVER)	
55	3-229-948-01	BUTTON (MEGA BASS) (V3)				(V7:AEP,IT,CET,UK,AR,SP,E4,KR/V7L)	
56	3-031-561-01	SPRING (CASSETTE)		68	3-229-936-01	LID BATTERY...(BLUE)	
57	3-043-830-01	HOLDER, CASSETE (V3)				(V7:AEP,IT,CET,UK,AUS,TW/V7L)	
57	3-226-991-01	HOLDER, CASSETE...(SILVER)		68	3-926-244-71	LID BATTERY...(SILVER) (V7:CND,AUS)	
		(V7:CND,AUS,TW)		69	3-034-633-01	COVER (VOL SEL)	
57	3-229-943-01	HOLDER, CASSETTE...(SILVER)		70	3-015-345-21	CUSHION	
		(V7:AEP,IT,CET,UK,AR,SP,E4,KR/V7L)		Δ T901	1-433-576-11	TRANSFORMER, POWER (CND,TW)	
57	3-229-944-01	HOLDER, CASSETTE...(BLUE)		Δ T901	1-435-921-11	TRANSFORMER, POWER (EXCEPT CND,TW,E4)	
		(V7:AEP,IT,CET,UK,AUS,TW/V7L)		Δ T901	1-435-922-11	TRANSFORMER, POWER (E4)	

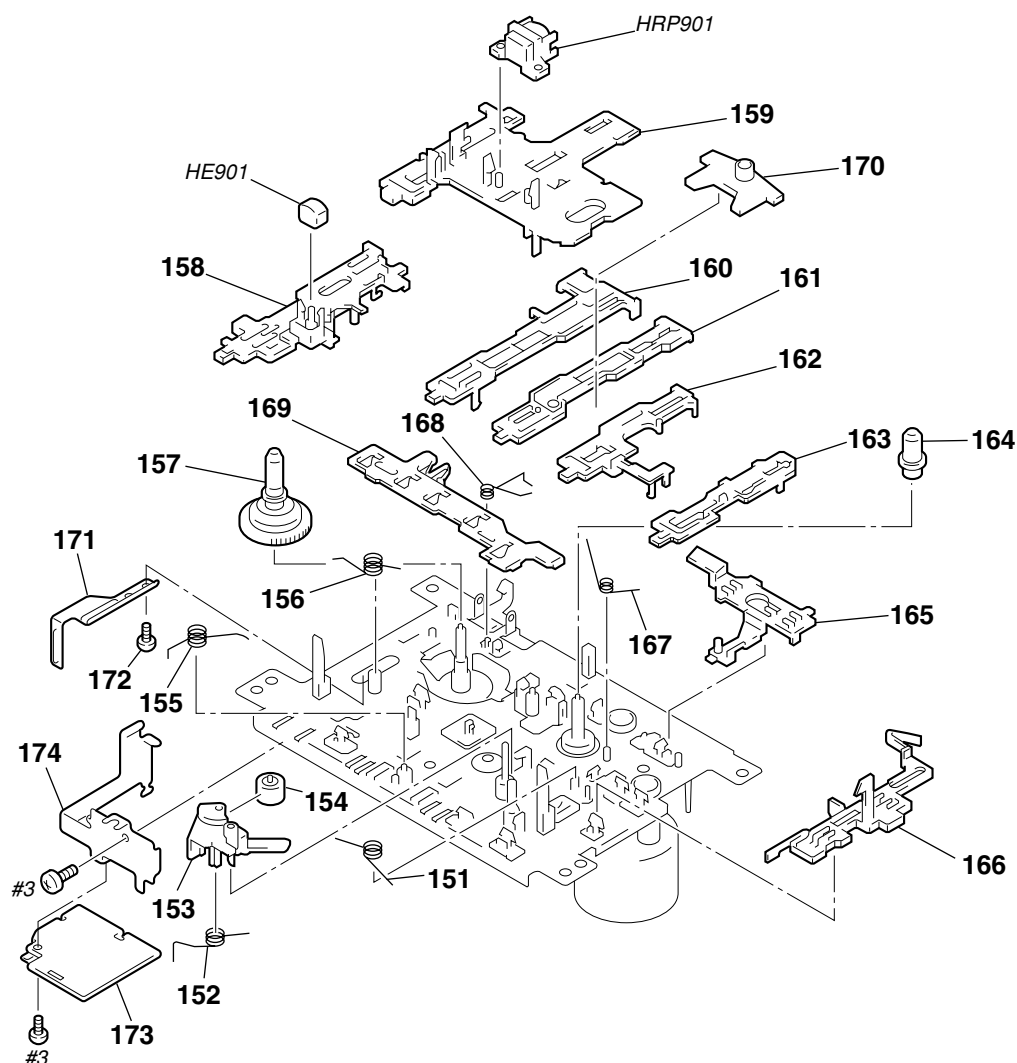
7-3. UPPER CABINET SECTION



Ref. No.	Part No.	Description	Remark
* 101	A-3062-295-A	MAIN BOARD, COMPLETE (V7L)	
* 101	A-3062-411-A	MAIN BOARD, COMPLETE (V7:IT)	
* 101	A-3062-472-A	MAIN BOARD, COMPLETE (V3:AEP,CET,SP/V7:AEP,CET,UK,SP,KR)	
* 101	A-3347-106-A	MAIN BOARD, COMPLETE (V3:AR/V7:CND,AR,AUS,TW,E4)	
102	4-960-167-01	SCREW (3X8) (DIA. 10), +WH	
103	3-031-560-01	SHAFT (MD)	
104	3-031-541-51	BUTTON (REC) (V7/V7L)	
104	3-031-541-61	BUTTON (REC) (V3)	
105	3-031-542-51	BUTTON (PLAY) (V7/V7L)	
105	3-031-542-61	BUTTON (PLAY) (V3)	
106	3-031-543-51	BUTTON (REW) (V7/V7L)	
106	3-031-543-61	BUTTON (REW) (V3)	
107	3-031-544-51	BUTTON (FF) (V7/V7L)	
107	3-031-544-61	BUTTON (FF) (V3)	
108	3-031-545-51	BUTTON (STOP) (V7/V7L)	
108	3-031-545-61	BUTTON (STOP) (V3)	
109	3-031-546-51	BUTTON (PAUSE) (V7/V7L)	
109	3-031-546-61	BUTTON (PAUSE) (V3)	
110	3-031-559-01	GEAR (PVC 2 BAND)	
* 111	1-757-584-11	CABLE FLEXIBLE FLAT 15P	
* 112	1-757-688-11	CABLE FLEXIBLE FLAT 10P (V3/V7)	
* 112	1-757-845-11	FFC 12P (V7L)	

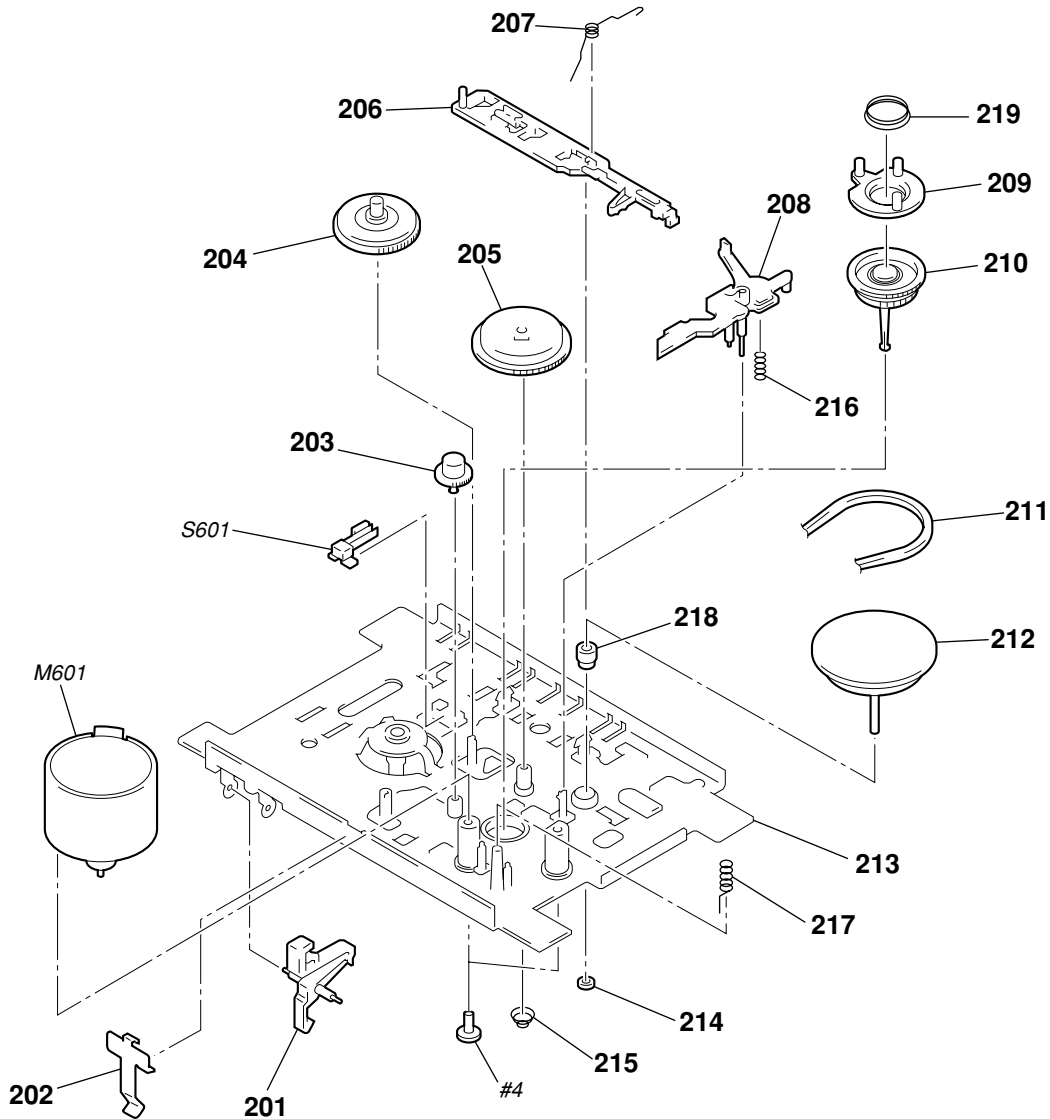
Ref. No.	Part No.	Description	Remark
* 113	1-680-679-12	VOLUME BOARD	
* 114	1-757-583-11	CABLE FLEXIBLE FLAT 16P	
115	3-922-112-41	DAMPER	
116	3-922-112-21	DAMPER	
117	3-226-990-01	CABINET (UPPER)...(SILVER)	
117	3-229-941-01	CABINET (UPPER)...(SILVER)	(V7:CND,AUS,TW)
117	3-229-942-01	CABINET (UPPER)...(BLUE)	(V7:AEP,IT,CET,UK,AR,SP,E4,KR/V7L)
117	3-229-959-01	CABINET (UPPER) (V3)	(V7:AEP,IT,CET,UK,AUS,TW/V7L)
118	3-225-866-01	CUSHION (MD BUTTON)	
119	4-951-620-01	SCREW (2.6X8), +BVTP	
* 120	1-680-678-12	FM SW BOARD	
121	3-921-725-11	SCREW (2.6X10), +PWH	
122	3-226-992-01	TERMINAL (ANTENNA)	
123	3-038-948-01	RUBBER, VIBRATION PROOF (PINK)	
124	1-757-689-11	CABLE FLEXIBLE FLAT 16P	
* 125	A-3347-105-A	CD BOARD, COMPLETE	
126	3-923-736-01	COVER, CD	
127	3-038-948-11	RUBBER, VIBRATION PROOF (BLUE)	
ANT1	1-501-883-21	ANTENNA, TELESCOPIC	
S801	1-692-960-11	SWITCH, PUSH (1 KEY)	(CD DOOR OPEN/CLOSE)

7-4. MECHANISM DECK SECTION (1)
(MF-V5-117)



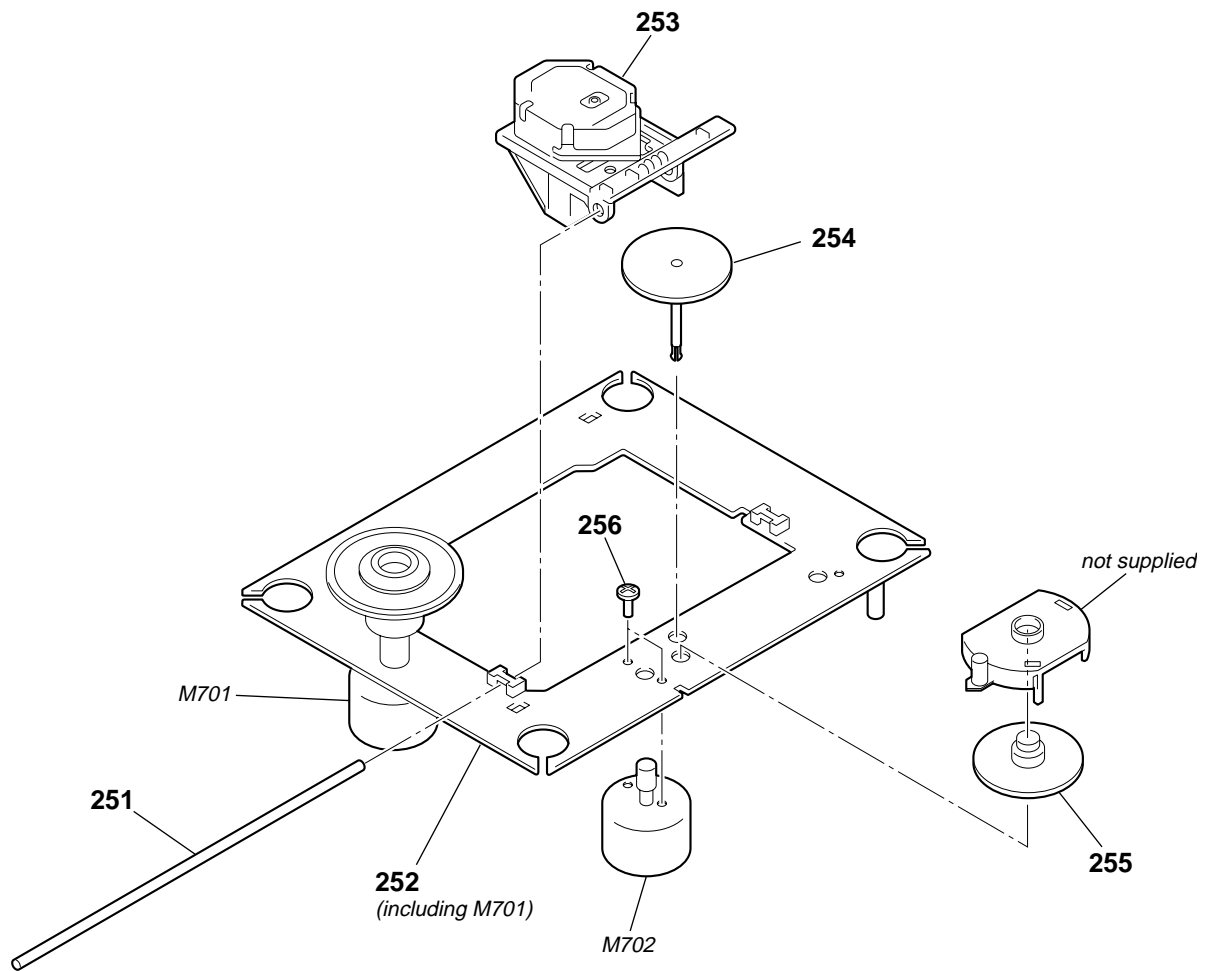
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	3-933-010-01	SPRING (S/P), TORSION		* 165	3-933-021-01	SLIDER (FRP)	
152	3-933-025-01	SPRING (P), TORSION		* 166	3-933-006-01	SLIDER (EJECT)	
153	3-040-857-01	LEVER (P)		167	3-934-833-01	SPRING (FRP)	
154	3-933-024-01	ROLLER, PINCH		168	3-022-794-02	SPRING (BT)	
155	3-933-019-01	SPRING (F/R), TORSION		169	3-933-007-01	PLATE, LOCK	
156	3-933-028-01	SPRING (FWD), TORSION		* 170	3-012-114-01	LEVER (FR)	
157	3-933-016-01	GEAR (S REEL)		171	3-222-727-01	LEVER (REC)	
158	3-008-590-01	SLIDER (REC)		172	4-951-620-01	SCREW (2.6X8), +BVTP	
159	3-008-592-01	BASE (H), HEAD		* 173	A-3062-296-A	PRE BOARD, COMPLETE (V7L)	
* 160	3-008-588-01	SLIDER (REW)		* 173	A-3347-104-A	PRE BOARD, COMPLETE (EXCEPT V7L)	
* 161	3-008-589-13	SLIDER (FF)		174	3-222-726-01	CHASSIS (TC)	
* 162	3-008-587-01	SLIDER (STOP)		HE901	1-543-876-11	HEAD (ERASE)	
* 163	3-008-591-01	SLIDER (PAUSE)		HRP901	1-500-668-11	HEAD, MAGNETIC (RECORD/PLAYBACK)	
164	3-933-004-01	CLAW, REEL					

7-5. MECHANISM DECK SECTION (2)
(MF-V5-117)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-933-029-01	LEVER, ERASING PREVENTION		212	X-3377-877-2	FLYWHEEL ASSY	
202	3-933-182-01	SPRING, CASSETTE		213	3-932-993-01	CHASSIS, OUTSERT	
203	3-932-995-01	GEAR (MID)		214	3-343-358-01	RING, RETAINING	
204	X-3371-667-1	CLUTCH ASSY		215	3-223-156-01	SPRING (CAM), COMPRESSION	
205	3-932-997-01	GEAR (CAM)		216	3-939-383-02	SPRING, COMPRESSION	
* 206	3-932-999-01	SLIDER (SW)		217	3-937-760-01	SPRING (GROUND), COMPRESSION	
207	3-932-998-01	SPRING (GROUND), TORSION		218	3-934-336-01	BEARING	
208	3-009-648-01	LEVER (S.OFF)		219	3-009-650-02	SPRING (K), COMPRESSION	
209	3-936-438-01	LEVER (K)		M601	A-3320-446-A	MOTOR ASSY (CAPSTAN/REEL)	
210	X-3373-572-1	REEL ASSY (N), T				(INCLUDING PULLEY)	
211	3-933-020-01	BELT		S601	1-762-679-11	SWITCH, LEAF (MD POWER)	

7-6. CD BLOCK SECTION (KSM-213CDP)



<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
251	2-626-908-01	SHAFT, SLED		255	2-627-003-01	GEAR B (BP)	
252	X-2162-709-1	CHASSIS ASSY (CDP), MOTOR (SPINDLE) (INCLUDING M701)		256	3-713-786-51	SCREW +P 2X3	
\triangle 253	8-848-483-05	OPTICAL PICK-UP KSS-213C		M702	X-2625-769-1	GEAR ASSY (MB), MOTOR (SLED) (INCLUDING GEAR)	
254	2-624-188-02	GEAR (A)					

BATT (L) **BATT (R)**

CD

**SECTION 8
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 and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable
- 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
IT : Italian
CET : East European & Russian
SP : Singapore
AR : Argentina
AUS : Australian
TW : Taiwan
E4 : 110-120V AC/220-240V AC changeable
KR : Korean
- (-11) (-12) : Last digit

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
*	1-680-680-12	BATT (L) BOARD *****	
	3-028-154-01	TERMINAL (-), BATT <CONNECTOR>	
* CNP908	1-815-550-11	PIN, CONNECTOR (PC BOARD) 2P *****	
*	1-680-681-12	BATT (R) BOARD *****	
	3-028-154-01	TERMINAL (-), BATT *****	
*	A-3347-105-A	CD BOARD, COMPLETE ***** <CAPACITOR>	
C701	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C702	1-104-657-11	ELECT 47uF 20% 10V	
C703	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C704	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
C705	1-162-968-11	CERAMIC CHIP 0.0047uF 10% 50V	
C706	1-126-960-11	ELECT 1uF 20% 50V	
C707	1-115-156-11	CERAMIC CHIP 1uF 10V	
C708	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
C709	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C711	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
C716	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
C717	1-163-021-11	CERAMIC CHIP 0.01uF 10% 50V	
C720	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
C721	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
C722	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
C723	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
C724	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
C725	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C726	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C727	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C728	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V	
C729	1-125-837-11	CERAMIC CHIP 1uF 10% 6.3V	
C730	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C731	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V	

Ref. No.	Part No.	Description	Remark
C732	1-104-658-11	ELECT 100uF 20% 10V	
C733	1-104-658-11	ELECT 100uF 20% 10V	
C734	1-162-968-11	CERAMIC CHIP 0.0047uF 10% 50V	
C735	1-126-916-11	ELECT 1000uF 20% 6.3V	
C736	1-162-968-11	CERAMIC CHIP 0.0047uF 10% 50V	
C740	1-126-725-11	ELECT 470uF 20% 10V	
C741	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C742	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C743	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C744	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C745	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C746	1-126-925-11	ELECT 100uF 20% 10V	
C747	1-126-925-11	ELECT 100uF 20% 10V	
C750	1-126-925-11	ELECT 100uF 20% 10V	
C751	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C754	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C755	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
		<CONNECTOR>	
* CNP701	1-779-553-21	CONNECTOR, FFC/FPC 16P	
CNP702	1-784-737-11	CONNECTOR, FFC 15P	
		<FERRITE BEAD>	
FB701	1-469-701-11	FERRITE BEAD 0uH	
		<IC>	
IC701	6-700-455-01	IC LC78645NE	
IC702	8-759-591-62	IC BA6998FP	
		<JUMPER RESISTOR>	
JC701	1-216-864-11	SHORT 0	
JC702	1-216-864-11	SHORT 0	
JC703	1-216-864-11	SHORT 0	
JC704	1-216-813-11	METAL CHIP 220 5% 1/16W	
		<COIL>	
L706	1-414-445-11	FERRITE BEAD	
		<TRANSISTOR>	
Q701	8-729-054-57	TRANSISTOR KTN2907AS-RTK	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		<RESISTOR>				<SWITCH>	
R701	1-216-841-11	METAL CHIP	47K 5% 1/16W	S401	1-771-550-31	SWITCH, KEYBOARD (□)	
R702	1-216-835-11	METAL CHIP	15K 5% 1/16W	S402	1-762-875-21	SWITCH, KEYBOARD (▷▷)	
R703	1-216-835-11	METAL CHIP	15K 5% 1/16W	S403	1-762-875-21	SWITCH, KEYBOARD (◁◁)	
R704	1-216-835-11	METAL CHIP	15K 5% 1/16W	S404	1-771-550-31	SWITCH, KEYBOARD (▷)	
R705	1-216-835-11	METAL CHIP	15K 5% 1/16W	S405	1-762-875-21	SWITCH, KEYBOARD (PLAY MODE)	
R706	1-216-841-11	METAL CHIP	47K 5% 1/16W	S406	1-762-875-21	SWITCH, KEYBOARD (ENTER)	
R707	1-216-797-11	METAL CHIP	10 5% 1/16W	*****			
R708	1-216-833-11	METAL CHIP	10K 5% 1/16W	*	1-680-678-12	FM SW BOARD	
R709	1-216-837-11	METAL CHIP	22K 5% 1/16W			*****	
R710	1-216-829-11	METAL CHIP	4.7K 5% 1/16W			<CABLE HOLDER>	
R711	1-216-815-11	METAL CHIP	330 5% 1/16W				
R712	1-216-809-11	METAL CHIP	100 5% 1/16W	* KH1	1-565-385-11	HOLDER, CABLE 4P	
R714	1-216-811-11	METAL CHIP	150 5% 1/16W			<SWITCH>	
R715	1-216-811-11	METAL CHIP	150 5% 1/16W				
R716	1-216-821-11	METAL CHIP	1K 5% 1/16W	S1	1-786-114-11	FM (ST/MO) SW (V3/V7:FM MODE, MONO/STEREO, V7L:FM MODE/ISS, MONO, 1/STEREO 2)	
R717	1-216-821-11	METAL CHIP	1K 5% 1/16W	*****			
R718	1-216-821-11	METAL CHIP	1K 5% 1/16W	*	1-680-682-12	INLET BOARD (EXCEPT E4)	
R719	1-216-809-11	METAL CHIP	100 5% 1/16W	*	1-682-706-11	INLET BOARD (E4)	
R720	1-216-809-11	METAL CHIP	100 5% 1/16W			*****	
R721	1-216-821-11	METAL CHIP	1K 5% 1/16W			1-533-233-31	HOLDER, FUSE
R722	1-216-809-11	METAL CHIP	100 5% 1/16W			<CAPACITOR>	
R723	1-216-809-11	METAL CHIP	100 5% 1/16W	C901	1-162-995-11	CERAMIC CHIP	0.022uF 50V
R724	1-216-841-11	METAL CHIP	47K 5% 1/16W	C902	1-162-995-11	CERAMIC CHIP	0.022uF 50(V7L)
R725	1-216-819-11	METAL CHIP	680 5% 1/16W	C903	1-162-995-11	CERAMIC CHIP	0.022uF 50V
R726	1-216-819-11	METAL CHIP	680 5% 1/16W	C904	1-162-995-11	CERAMIC CHIP	0.022uF 50(V7L)
R727	1-216-825-11	METAL CHIP	2.2K 5% 1/16W	C905	1-162-995-11	CERAMIC CHIP	0.022uF 50V (V3/V7)
R728	1-216-833-11	METAL CHIP	10K 5% 1/16W			<JACK>	
R729	1-216-813-11	METAL CHIP	220 5% 1/16W	△ CNJ901	1-526-838-11	INLET, AC 2P (∼AC IN) (V3/V7:AEP,IT,CET,UK,AR,AUS,SP,E4,KR/V7L)	
R730	1-216-821-11	METAL CHIP	1K 5% 1/16W	△ CNJ901	1-540-009-11	INLET, AC (∼AC IN)(CND)	
R731	1-216-825-11	METAL CHIP	2.2K 5% 1/16W			<CONNECTOR>	
R741	1-216-831-11	METAL CHIP	6.8K 5% 1/16W	* CNP902	1-815-552-11	PIN, CONNECTOR (PC BOARD) 4P	
R743	1-216-831-11	METAL CHIP	6.8K 5% 1/16W	* CNP907	1-815-444-11	PIN, CONNECTOR 3P	
R744	1-216-845-11	METAL CHIP	100K 5% 1/16W			<DIODE>	
		<SWITCH>		D901	8-719-063-79	DIODE	1N4002B
S701	1-762-812-11	SWITCH, LEAF (LIMIT)		D902	8-719-063-79	DIODE	1N4002B
		<VIBRATOR>		D903	8-719-063-79	DIODE	1N4002B
X701	1-795-173-11	VIBRATOR, CERAMIC (33.86MHz)		D904	8-719-063-79	DIODE	1N4002B
*****						<FUSE>	
*	1-680-677-12	CONTROL BOARD		△ F901	1-533-468-11	FUSE, GLASS TUBE (DIA. 5) (TIME LAG 2.0AL/250V) (E4)	
		*****		△ F901	1-533-469-11	FUSE, GLASS TUBE (DIA. 5) (TIME LAG 2.5AL/250V) (V3/V7:AEP,IT,CET,UK,AR,AUS,SP,KR/V7L)	
		<CONNECTOR>		△ F901	1-533-470-11	FUSE, GLASS TUBE (DIA. 5)(3.15A/250V) (V7:CND,TW)	
* CN401	1-784-738-11	CONNECTOR, FFC 16P		△ F902	1-533-460-11	FUSE, GLASS TUBE (DIA. 5)(315mA/250V)(E4)	
		<LIQUID CRYSTAL DISPLAY>					
LCD401	1-804-219-11	DISPLAY PANEL, LIQUID CRYSTAL					
		<RESISTOR>					
R421	1-216-829-11	METAL CHIP	4.7K 5% 1/16W				
R422	1-216-829-11	METAL CHIP	4.7K 5% 1/16W				
R423	1-216-829-11	METAL CHIP	4.7K 5% 1/16W				
R424	1-216-829-11	METAL CHIP	4.7K 5% 1/16W				

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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CFD-V3/V7/V7L

Ver 1.5

INLET **MAIN**

Ref. No.	Part No.	Description	Remark
		<CABLE HOLDER>	
* KH901	1-573-287-11	HOLDER, CABLE 2P <RESISTOR>	
R901	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	

*	A-3062-295-A	MAIN BOARD, COMPLETE (V7L)	
*	A-3062-411-A	MAIN BOARD, COMPLETE (V7:IT)	
*	A-3062-472-A	MAIN BOARD, COMPLETE (V3:AEP,CET,SP/V7:AEP,CET,UK,SP,KR)	
*	A-3347-106-A	MAIN BOARD, COMPLETE (V3:AR/V7:CND,AR,AUS,TW,E4)	

	3-031-559-01	GEAR (PVC 2 BAND)	
	7-621-775-20	SCREW +B 2.6X5	
	7-685-675-19	SCREW +BVTP 5X20 TYPE2 N-S (V3/V7)	
	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S (V7L)	
		<CAPACITOR>	
C1	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C2	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
C3	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
C4	1-104-662-11	ELECT 22uF 20% 25V	
C5	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
C6	1-162-910-11	CERAMIC CHIP 5PF 0.25PF 50V	
C7	1-162-191-31	CERAMIC 2.2PF 10% 50V (V3:AR/V7:CND,AR,AUS,TW,E4)	
C7	1-162-195-31	CERAMIC 4.7PF 10% 50V (V3:AEP,CET,SP/V7:AEP,CET,UK,SP,IT,KR)	
C8	1-126-963-11	ELECT 4.7uF 20% 50V	
C9	1-126-963-11	ELECT 4.7uF 20% 50V	
C10	1-162-968-11	CERAMIC CHIP 0.0047uF 10% 50V (V3:AEP,CET,SP/V7:AEP,CET,UK,SP,IT,KR/V7L)	
C11	1-162-199-31	CERAMIC 10PF 5% 50V	
C12	1-162-199-31	CERAMIC 10PF 5% 50V	
C13	1-126-959-11	ELECT 0.47uF 20% 50V	
C14	1-126-963-11	ELECT 4.7uF 20% 50V	
C15	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C17	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C18	1-126-960-11	ELECT 1uF 20% 50V	
C19	1-162-995-11	CERAMIC CHIP 0.022uF 50V (V3:AR/V7:CND,AR,AUS,TW,E4)	
C19	1-162-974-11	CERAMIC CHIP 0.01uF 50V (V3:AEP,CET,SP/V7:AEP,CET,UK,SP,IT,KR/V7L)	
C20	1-162-995-11	CERAMIC CHIP 0.022uF 50V (V3:AR/V7:CND,AR,AUS,TW,E4)	
C20	1-162-974-11	CERAMIC CHIP 0.01uF 50V (V3:AEP,CET,SP/V7:AEP,CET,UK,SP,IT,KR/V7L)	
C21	1-162-228-31	CERAMIC 4.7PF 10% 50V	
C22	1-115-156-11	CERAMIC CHIP 1uF 10V	
C23	1-126-964-11	ELECT 10uF 20% 50V	
C24	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
C25	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V (EXCEPT V7L)	
C26	1-162-968-11	CERAMIC CHIP 0.0047uF 10% 50V (V7L)	
C27	1-162-968-11	CERAMIC CHIP 0.0047uF 10% 50V (V3:AEP,CET,SP/V7:AEP,CET,UK,SP,IT,KR/V7L)	
C28	1-130-014-00	FILM 470PF 5.00% 50V (V7L)	

Ref. No.	Part No.	Description	Remark
C29	1-130-044-00	FILM 100PF 5.00% 50V (V7L)	
C30	1-162-907-11	CERAMIC CHIP 2PF 0.25PF 50V	
C31	1-130-014-00	FILM 470PF 5.00% 50V (V7L)	
C32	1-162-195-31	CERAMIC 4.7PF 10% 50V (V3:AEP,CET,SP/V7:AEP,CET,UK,SP,IT,KR/V7L)	
C36	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V (V7L)	
C152	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C153	1-104-657-11	ELECT 47uF 20% 10V	
C154	1-126-925-11	ELECT 470uF 20% 10V	
C155	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C156	1-104-657-11	ELECT 47uF 20% 10V	
C171	1-126-964-11	ELECT 10uF 20% 50V	
C252	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C253	1-104-664-11	ELECT 47uF 20% 10V	
C254	1-126-935-11	ELECT 470uF 20% 10V	
C255	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C256	1-104-657-11	ELECT 47uF 20% 10V	
C271	1-126-964-11	ELECT 10uF 20% 50V	
C314	1-104-657-11	ELECT 47uF 20% 10V	
C316	1-126-960-11	ELECT 1uF 20% 50V	
C317	1-104-662-11	ELECT 22uF 20% 25V	
C320	1-162-995-11	CERAMIC CHIP 0.022uF 50V	
C341	1-126-936-11	ELECT 3300uF 20% 16V	
C343	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
C345	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
C346	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
C347	1-126-923-11	ELECT 220uF 20% 10V	
C348	1-104-658-11	ELECT 100uF 20% 10V	
C349	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
C351	1-104-657-11	ELECT 47uF 20% 10V	
C401	1-104-658-11	ELECT 100uF 20% 10V	
C402	1-126-964-11	ELECT 10uF 20% 50V	
C801	1-162-974-11	CERAMIC CHIP 0.01uF 50V (-12)(V3:AEP,CET,SP/V7:AEP,CET,KR,SP,UK)	
C801	1-164-156-11	CERAMIC CHIP 0.1uF 25V(-11) (-12:V3:AR/V7:CND,AR,AUS,IT,TW/V7L)	
C802	1-104-657-11	ELECT 47uF 20% 10V	
C805	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C810	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
C841	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C842	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C843	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C844	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
C851	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
C891	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
		<FILTER>	
CF1	1-781-962-11	FILTER, CERAMIC (V3/V7)	
CF1	1-577-072-11	FILTER, CERAMIC (V7L)	
CF2	1-795-277-11	CERAMIC FILTER (V7L)	
CF2	1-760-738-61	FILTER, CERAMIC (V3/V7)	
		<CONNECTOR>	
CN801	1-784-777-11	CONNECTOR, FFC 16P	
CN802	1-784-737-11	CONNECTOR, FFC 15P	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		<CONNECTOR>		JC401	1-216-864-11	SHORT 0	
* CNP303	1-815-445-11	PIN, CONNECTOR 4P				<CABLE HOLDER>	
* CNP304	1-815-552-11	PIN, CONNECTOR (PC BOARD) 4P		* KH2	1-565-385-11	HOLDER, CABLE 4P	
* CNP305	1-784-732-11	CONNECTOR, FFC 10P (V3/V7)		* KH306	1-565-386-11	HOLDER, CABLE 5P	
CNP305	1-784-734-11	CONNECTOR, FFC 12P (V7L)		* KH801	1-573-287-11	HOLDER, CABLE 2P	
		<VARIABLE CAPACITOR>		* KH902	1-565-385-11	HOLDER, CABLE 4P <COIL>	
CV1	1-141-637-11	CAP, VAR (TUNING)		L1	1-406-998-11	COIL, AIR-CORE (FM TRACKING)	
CV2	1-141-604-11	CAP, ADJ (LW FREQUENCY COVERAGE)(V7L)		L2	1-411-949-11	COIL, AIR-CORE (FM FREQUENCY COVERAGE) (V3/V7:CND,AR,AUS,TW,E4,AEP,GET,UK,SP/V7L)	
CV3	1-141-622-21	CAP, ADJ 50PF (LW TRACKING) (V7L)		L2	1-406-957-21	COIL (WITH CORE) (FM FREQUENCY COVERAGE) (V7:IT)	
		<TRIMMER>		L3	1-754-175-11	ANTENNA, FERR ROD (AM TRACKING) (EXCEPT V7L)	
CT1	1-141-637-11	CAP, VAR (FM TRACKING)		L3	1-754-189-11	ANTENNA, FERR ROD (LW TRACKING) (V7L)	
CT2	1-141-637-11	CAP, VAR (FM FREQUENCY COVERAGE)		L4	1-406-040-00	COIL (OSC) (AM FREQUENCY COVERAGE) (EXCEPT V7L)	
CT3	1-141-637-11	CAP, VAR (AM/LW TRACKING)		L4	1-424-771-11	COIL (OSC) (LW FREQUENCY COVERAGE) (V7L)	
CT4	1-141-637-11	CAP, VAR (AM/LW FREQUENCY COVERAGE)				<TRANSISTOR>	
		<DIODE>		Q1	8-729-054-02	TRANSISTOR KRA302-RTK	
D1	8-719-988-61	DIODE 1SS355TE-17		Q2	8-729-054-02	TRANSISTOR KRA302-RTK (V7L)	
D2	8-719-988-61	DIODE 1SS355TE-17		Q101	8-729-054-24	TRANSISTOR KRC410-RTK	
D301	8-719-988-61	DIODE 1SS355TE-17		Q201	8-729-054-24	TRANSISTOR KRC410-RTK	
D302	8-719-988-61	DIODE 1SS355TE-17		Q309	8-729-021-82	TRANSISTOR 2SD2396K	
D303	8-719-988-61	DIODE 1SS355TE-17		Q310	8-729-036-86	TRANSISTOR KTC3203Y-AT	
D304	8-719-988-61	DIODE 1SS355TE-17		Q311	8-729-055-41	TRANSISTOR KTB1241Y-AT	
D305	8-719-083-93	DIODE KDS120-RTK		Q312	8-729-054-19	TRANSISTOR KRC405-RTK	
D306	8-719-988-61	DIODE 1SS355TE-17		Q401	8-729-037-03	TRANSISTOR KTA1266GR-AT	
D308	8-719-082-09	DIODE KDZ3.9V-RTK		Q402	8-729-054-16	TRANSISTOR KRC402-RTK	
D309	8-719-988-61	DIODE 1SS355TE-17		Q405	8-729-037-03	TRANSISTOR KTA1266GR-AT	
D310	8-719-059-97	LED L-34HD (OPR/BATT)		Q409	8-729-212-02	TRANSISTOR 2SC2120-Y	
D311	8-719-084-00	DIODE KDZ7.5V-RTK		Q801	8-729-054-18	TRANSISTOR KRC404-RTK	
D314	8-719-988-61	DIODE 1SS355TE-17				<RESISTOR>	
		<IC>		R1	1-216-813-11	METAL CHIP 220 5% 1/16W	
IC1	8-759-829-93	IC TA2111N		R2	1-216-815-11	METAL CHIP 330 5% 1/16W	
IC304	8-759-426-51	IC BA5417		R3	1-216-827-11	METAL CHIP 3.3K 5% 1/16W	
IC401	8-759-646-86	IC MM1468XD		R4	1-216-827-11	METAL CHIP 3.3K 5% 1/16W	
IC801	8-759-696-92	IC uPD789316GK-903		R5	1-216-809-11	METAL CHIP 100 5% 1/16W (-12)	
		<IC LINK>		R8	1-216-837-11	METAL CHIP 22K 5% 1/16W	
ICP301	1-533-674-21	IC LINK(-11)		R9	1-216-837-11	METAL CHIP 22K 5% 1/16W	
		<JACK>		R11	1-216-833-11	METAL CHIP 10K 5% 1/16W	
J301	1-815-325-11	JACK (♁)		R20	1-216-821-11	METAL CHIP 1K 5% 1/16W (EXCEPT V7L)	
		<JUMPER RESISTOR>		R20	1-216-809-11	METAL CHIP 100 5% 1/16W (V7L)	
JC1	1-216-864-11	SHORT 0		R30	1-216-813-11	METAL CHIP 220 5% 1/16W	
JC2	1-216-864-11	SHORT 0		R151	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
JC4	1-216-809-11	METAL CHIP 100 5% 1/16W (-11)		R153	1-216-817-11	METAL CHIP 470 5% 1/16W	
JC5	1-216-864-11	SHORT 0		R154	1-216-025-11	RES-CHIP 100 5% 1/10W	
JC6	1-216-864-11	SHORT 0		R251	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
JC7	1-216-864-11	SHORT 0 (EXCEPT E4/V7L)		R253	1-216-817-11	METAL CHIP 470 5% 1/16W	
JC302	1-216-864-11	SHORT 0		R254	1-216-025-11	RES-CHIP 100 5% 1/10W	
JC303	1-216-864-11	SHORT 0		R314	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
JC305	1-216-864-11	SHORT 0					
JC306	1-216-864-11	SHORT 0					
JC310	1-216-864-11	SHORT 0					

CFD-V3/V7/V7L

Ver 1.5

MAIN

PRE

Ref. No.	Part No.	Description	Remark
R315	1-216-821-11	METAL CHIP	1K 5% 1/16W
R319	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R340	1-216-827-11	METAL CHIP	3.3K 5% 1/16W
R341	1-216-827-11	METAL CHIP	3.3K 5% 1/16W
R342	1-216-827-11	METAL CHIP	3.3K 5% 1/16W
R343	1-216-827-11	METAL CHIP	3.3K 5% 1/16W
R343	1-216-821-11	METAL CHIP	1K 5% 1/16W (-11) (V7:IT)
R344	1-216-813-11	METAL CHIP	220 5% 1/16W
R345	1-216-821-11	METAL CHIP	1K 5% 1/16W
R346	1-216-821-11	METAL CHIP	1K 5% 1/16W (EXCEPT IT)(-12)
R348	1-216-821-11	METAL CHIP	1K 5% 1/16W (EXCEPT IT)(-12)
R349	1-216-815-11	METAL CHIP	330 5% 1/16W
R350	1-216-825-11	METAL CHIP	2.2K 5% 1/16W
R351	1-216-821-11	METAL CHIP	1K 5% 1/16W (-11)
R351	1-216-819-11	METAL CHIP	680 5% 1/16W (-12)
R352	1-216-821-11	METAL CHIP	1K 5% 1/16W (-11)
R352	1-216-819-11	METAL CHIP	680 5% 1/16W (-12)
R353	1-216-821-11	METAL CHIP	1K 5% 1/16W (-11)
R353	1-216-819-11	METAL CHIP	680 5% 1/16W (-12)
R354	1-216-819-11	METAL CHIP	1K 5% 1/16W (-11)
R354	1-216-819-11	METAL CHIP	680 5% 1/16W (-12)
R355	1-216-821-11	METAL CHIP	1K 5% 1/16W (-11)
R360	1-216-845-11	METAL CHIP	100K 5% 1/16W
R386	1-216-827-11	METAL CHIP	3.3K 5% 1/16W
R401	1-216-845-11	METAL CHIP	100K 5% 1/16W
R402	1-216-833-11	METAL CHIP	10K 5% 1/16W
R403	1-216-837-11	METAL CHIP	22K 5% 1/16W
R404	1-216-821-11	METAL CHIP	1K 5% 1/16W
R413	1-216-829-11	METAL CHIP	4.7K 5% 1/16W (-11)
R414	1-216-831-11	METAL CHIP	6.8K 5% 1/16W (-11)
R415	1-216-831-11	METAL CHIP	6.8K 5% 1/16W (-11)
R415	1-216-827-11	METAL CHIP	3.3K 5% 1/16W (-12)
R416	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R417	1-216-833-11	METAL CHIP	10K 5% 1/16W
R418	1-216-833-11	METAL CHIP	10K 5% 1/16W
R801	1-216-801-11	METAL CHIP	22 5% 1/16W
R805	1-216-849-11	METAL CHIP	220K 5% 1/16W
R806	1-216-813-11	METAL CHIP	220 5% 1/16W
R809	1-216-821-11	METAL CHIP	1K 5% 1/16W
R810	1-216-809-11	METAL CHIP	100 5% 1/16W
R811	1-216-833-11	METAL CHIP	10K 5% 1/16W
R812	1-216-821-11	METAL CHIP	1K 5% 1/16W
R813	1-216-821-11	METAL CHIP	1K 5% 1/16W

Ref. No.	Part No.	Description	Remark
R814	1-216-821-11	METAL CHIP	1K 5% 1/16W
R815	1-216-809-11	METAL CHIP	100 5% 1/16W
R816	1-216-809-11	METAL CHIP	100 5% 1/16W
R818	1-216-809-11	METAL CHIP	100 5% 1/16W
R819	1-216-809-11	METAL CHIP	100 5% 1/16W
R851	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
S351	1-572-300-11	SWITCH, LEVER SLIDE (FUNCTION)	<SWITCH>
T1	1-424-702-11	COIL, FM DET (FM IF)	<TRANSFORMER>
T2	1-424-703-11	COIL, AM IFT (AM/LW IF)	

*	A-3062-296-A	PRE BOARD, COMPLETE (V7L)	
*	A-3347-104-A	PRE BOARD, COMPLETE (V3/V7)	

<CAPACITOR>			
C101	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C102	1-104-664-11	ELECT	47uF 20% 10V
C103	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C104	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V
C105	1-162-923-11	CERAMIC CHIP	47PF 5% 50V
C106	1-126-960-11	ELECT	1uF 20% 50V
C107	1-162-962-11	CERAMIC CHIP	470PF 10% 50V
C201	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C202	1-104-664-11	ELECT	47uF 20% 10V
C203	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C204	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V
C205	1-162-923-11	CERAMIC CHIP	47PF 5% 50V
C206	1-126-960-11	ELECT	1uF 20% 50V
C207	1-162-962-11	CERAMIC CHIP	470PF 10% 50V
C301	1-104-665-11	ELECT	100uF 20% 10V
C302	1-104-665-11	ELECT	100uF 20% 10V
C303	1-104-665-11	ELECT	100uF 20% 10V
C304	1-104-664-11	ELECT	47uF 20% 10V
C305	1-162-962-11	CERAMIC CHIP	470PF 10% 50V
C306	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C307	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V
C310	1-164-230-11	CERAMIC CHIP	220PF 5% 50V (V7L)
<CONNECTOR>			
CN303	1-695-371-31	CONNECTOR, FFC 10P (V3/V7)	
CN302	1-784-773-11	CONNECTOR, FFC 12P (V7L)	
<IC>			
IC301	8-759-264-71	IC TA2068N	
<JUMPER RESISTOR>			
JC301	1-216-864-11	SHORT	0
JC302	1-216-864-11	SHORT	0
JC303	1-216-864-11	SHORT	0
JC304	1-216-864-11	SHORT	0
JC309	1-216-864-11	SHORT	0 (V7L)

PRE

POWER

VOL SEL

VOLUME

Ref. No.	Part No.	Description	Remark
		<TRANSISTOR>	
Q301	8-729-920-75	TRANSISTOR 2SC2412-T146	
Q302	8-729-054-16	TRANSISTOR KRC402-RTK (V7L)	
		<RESISTOR>	
R101	1-216-835-11	METAL CHIP 15K 5% 1/16W	
R102	1-216-807-11	METAL CHIP 68 5% 1/16W	
R103	1-216-843-11	METAL CHIP 68K 5% 1/16W	
R104	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
R105	1-216-835-11	METAL CHIP 15K 5% 1/16W	
R106	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
R110	1-216-809-11	METAL CHIP 100 5% 1/16W	
R111	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
R201	1-216-835-11	METAL CHIP 15K 5% 1/16W	
R202	1-216-807-11	METAL CHIP 68 5% 1/16W	
R203	1-216-843-11	METAL CHIP 68K 5% 1/16W	
R204	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
R205	1-216-835-11	METAL CHIP 15K 5% 1/16W	
R206	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
R210	1-216-025-11	RES-CHIP 100 5% 1/10W	
R211	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
R301	1-216-857-11	METAL CHIP 1M 5% 1/16W	
R302	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
R303	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
R304	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R305	1-216-817-11	METAL CHIP 470 5% 1/16W	
R306	1-216-831-11	METAL CHIP 6.8K 5% 1/16W	
R307	1-216-797-11	METAL CHIP 10 5% 1/16W	
R308	1-216-837-11	METAL CHIP 22K 5% 1/16W	
R309	1-216-805-11	METAL CHIP 47 5% 1/16W	
R310	1-216-857-11	METAL CHIP 1M 5% 1/16W	(V7L)
R314	1-216-817-11	METAL CHIP 470 5% 1/16W	
R315	1-216-817-11	METAL CHIP 470 5% 1/16W	
		<SWITCH>	
S301	1-786-126-11	SWITCH, SLIDE (REC/PB)	
		<TRANSFORMER>	
T301	1-416-041-11	TRANSFORMER, BIAS OSCILLATION	

*	1-680-683-12	POWER BOARD	*****
		<CABLE HOLDER>	
* KH904	1-573-287-11	HOLDER, CABLE 2P	*****
*	1-682-707-11	VOL SEL BOARD(E4)	*****
		<SWITCH>	
△ S901	1-552-921-00	SWITCH,POWER(VOLTAGE SELECTOR)	*****

Ref. No.	Part No.	Description	Remark
*	1-680-679-12	VOLUME BOARD	*****
		<CAPACITOR>	
C123	1-115-870-11	ELECT 0.47uF 20% 50V	
C124	1-162-968-11	CERAMIC CHIP 0.0047uF 10% 50V	
C223	1-115-870-11	ELECT 0.47uF 20% 50V	
C224	1-162-968-11	CERAMIC CHIP 0.0047uF 10% 50V	
		<CABLE HOLDER>	
* KH307	1-565-386-11	HOLDER, CABLE 5P	
		<RESISTOR>	
R123	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R124	1-216-831-11	METAL CHIP 6.8K 5% 1/16W	
R223	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R224	1-216-831-11	METAL CHIP 6.8K 5% 1/16W	
		<VARIABLE RESISTOR>	
RV352	1-227-188-11	RES, VAR, CARBON 20K/20K (VOLUME)	
		<SWITCH>	
S355	1-786-141-11	SWITCH PUSH (MEGA BASS)	*****

		MISCELLANEOUS	*****
59	1-452-899-11	MAGNET	
* 111	1-757-584-11	CABLE FLEXIBLE FLAT 15P	
* 112	1-757-688-11	CABLE FLEXIBLE FLAT 10P (V3/V7)	
* 112	1-757-845-11	FFC 12P (V7L)	
* 114	1-757-583-11	CABLE FLEXIBLE FLAT 16P	
124	1-757-689-11	CABLE FLEXIBLE FLAT 16P	
252	X-2162-709-1	CHASSIS ASSY (CDP), MOTOR (SPINDLE)	(INCLUDING M701)
△ 253	8-848-483-05	OPTICAL PICK-UP KSS-213C	
ANT1	1-501-883-21	ANTENNA, TELESCOPIC	
HE901	1-543-876-11	HEAD (ERASE)	
HRP901	1-500-668-11	HEAD,MAGNETIC(RECORD/PLAYBACK)	
M601	A-3320-446-A	MOTOR ASSY (CAPSTAN/REEL)	(INCLUDING PULLEY)
M702	X-2625-769-1	GEAR ASSY (MB), MOTOR (SLED)	(INCLUDING GEAR)
S601	1-762-679-11	SWITCH, LEAF (MD POWER)	
S801	1-692-960-11	SWITCH, PUSH (1 KEY)	(CD DOOR OPEN/CLOSE)
SP101	1-529-723-11	SPEAKER (10cm) (L-CH) (V3)	
SP101	1-529-723-21	SPEAKER (10cm) (L-CH) (V7/V7L)	
SP201	1-529-723-11	SPEAKER (10cm) (R-CH) (V3)	
SP201	1-529-723-21	SPEAKER (10cm) (R-CH) (V7/V7L)	
△ T901	1-433-576-11	TRANSFORMER, POWER (CND,TW)	
△ T901	1-435-921-11	TRANSFORMER, POWER (EXCEPT CND,TW,E4)	
△ T901	1-435-922-11	TRANSFORMER, POWER (E4)	*****

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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Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS *****	
△	1-577-287-11	CORD, POWER (V7:TW)	
△	1-569-008-21	ADAPTOR, CONVERSION (V7:E4)	
△	1-690-952-12	CORD, POWER (V7:CND)	
△	1-696-819-11	CORD, POWER (V7:AUS)	
△	1-769-412-13	CORD, POWER (V3:AEP,CET,SP/V7:AEP,IT,CET,UK,SP,E4/V7L)	
△	1-770-019-12	ADAPTOR, CONVERSION PLUG 3P (V7:UK)	
△	1-776-985-11	CORD, POWER (V7:KR)	
△	1-783-952-11	CORD, POWER (V3:AR/V7:AR)	
	3-227-154-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH) (V7:CND)	
	3-227-154-21	MANUAL, INSTRUCTION (ENGLISH,SPANISH) (V3:AEP,AR,SP/V7:AEP,AR,AUS,SPE4,KR/V7L)	
	3-227-154-31	MANUAL, INSTRUCTION (FRENCH,GERMAN) (V3:AEP,SP/V7:AEP,SP/V7L:AEP)	
	3-227-154-41	MANUAL, INSTRUCTION (DUTCH,PORTUGUESE) (V3:AEP/V7:AEP,E4/V7L:AEP)	
	3-227-154-51	MANUAL, INSTRUCTION (ITALIAN)(V7:AEP,IT)	
	3-227-154-61	MANUAL, INSTRUCTION (SWEDISH,FINNISH) (CET)	
	3-227-154-71	MANUAL, INSTRUCTION (POLISH)(CET)	
	3-227-154-81	MANUAL, INSTRUCTION (CZECK,HUNGARIAN) (CET)	
	3-227-154-91	MANUAL, INSTRUCTION (RISSIAN,SLOVAK) (CET)	
	3-230-889-11	MANUAL, INSTRUCTION (ENGLISH,TRADITIONAL CHINESE) (V7:TW)	
	3-230-889-21	MANUAL, INSTRUCTION (KOREAN) (V7:KR)	
*	3-703-044-26	LABEL, CAUTION (V7:CND)	

		HARDWARELIST *****	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#2	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S	
#3	7-685-853-04	SCREW +BVTT 2X6 (S)	
#4	7-621-775-20	SCREW +B 2.6X5	
#5	7-682-548-04	SCREW +B 3X8	

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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CFD-V3/V7/V7L

SONY

SERVICE MANUAL

2002.06

Canadian Model
UK Model
Australian Model
CFD-V7

AEP Model
CFD-V3/V7/V7L

E Model
CFD-V3/V7

SUPPLEMENT - 1

File this Supplement with the Service Manual.

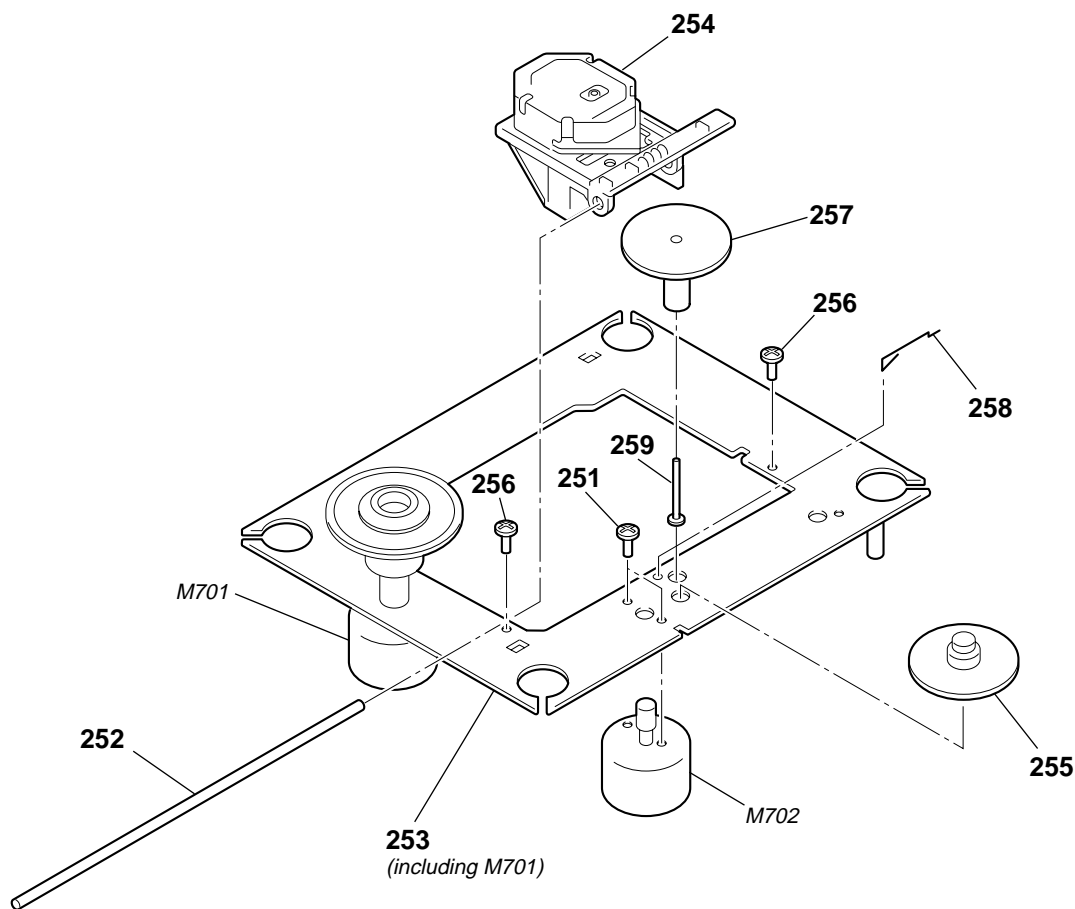
Subject : CHANGE OF CD MECHANISM

(SPM-02027)

CD mechanism changed to KSM-213RDP from KSM-213CDP.
Please check serial No. when you exchange the parts of CD mechanism.

- Serial No. of changed model
 - CFD-V3 : No. 1,076,878 and later
 - CFD-V7 : No. 1,387,153 and later
 - CFD-V7L : (not changed)

OPTICAL PICK-UP SECTION (KSM-213RDP)



<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
251	3-713-786-51	SCREW (M2X3)		256	2-169-388-01	TAPPING (M2), +PWB	
252	2-626-908-01	SHAFT, SLED		* 257	2-169-065-01	GEAR (A)	
253	X-2162-707-1	CHASSIS ASSY (RDP) (RP), MOTOR (SPINDLE) (INCLUDING M701)		* 258	2-169-385-01	SPRING, SLED	
\triangle 254	8-820-161-02	OPTICAL PICK-UP KSS-213R		* 259	2-169-384-01	SHAFT (S), GEAR	
* 255	2-647-408-02	GEAR (B)		M702	X-2162-712-1	GEAR ASSY (R) (RP), MOTOR (MB) (SLED) (INCLUDING GEAR)	

MEMO

