

# CFD-S400/S500

## SERVICE MANUAL

Ver 1.1 2002.07

US Model

CFD-S500

Canadian Model

E Model

CFD-S400



Photo: CFD-S500

CD Section	Model Name Using Similar Mechanism	CFD-S36
	CD Mechanism Type	KSM-213RDP
	Optical Pick-up Name	KSS-213R
TC Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	MF-S200

### SPECIFICATIONS

#### AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION  
With 3.2-ohm loads, both channels driven from 150 - 6,300 Hz; rated 1.8 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  $\mu$ 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

FM: 87.5 - 108 MHz

AM: 530 - 1,710 kHz

Antennas

FM: Telescopic antenna

AM: Built-in ferrite bar antenna

#### Cassette-corder section

Recording system

4-track 2 channel stereo

Fast winding time

Approx. 120 sec. with Sony cassette C-60

Frequency response

TYPE I (normal): 80 - 10,000 Hz

— Continued on next page —

## CD RADIO CASSETTE-CORDER

9-873-982-02

2002G0400-1

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**Sony Corporation**

Personal Audio Company

Published by Sony Engineering Corporation

# SONY®

# CFD-S400/S500

## General

### Speaker

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

### Outputs

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

### Power output

2.3 W + 2.3 W (at 3.2 ohms, 10%  
harmonic distortion)

### Power requirements

For CD radio cassette-corder:  
US, CND, E92, MX model:  
120 V AC, 60 Hz  
KR model:  
220 V AC, 60 Hz  
SP model:  
230 V AC, 50 Hz  
9 V DC, 6 size D (R20) batteries  
For remote control:  
3 V DC, 2 size AA (R6) batteries

### Power consumption

AC 20 W

### Battery life

For CD radio cassette-corder:

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#### FM recording

Sony R20P: approx. 13.5 h

Sony alkaline LR20: approx. 20 h

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#### Tape playback

Sony R20P: approx. 7.5 h

Sony alkaline LR20: approx. 15 h

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#### CD playback

Sony R20P: approx. 2.5 h

Sony alkaline LR20: approx. 7 h

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### Dimensions

Approx. 386 × 166 × 252 mm (w/h/d)  
(15 1/4 × 6 5/8 × 10 inches) (incl. projecting parts)

### Mass

Approx. 3.3 kg (7 lb. 4 oz.) (incl. batteries)

### Supplied accessories

AC power cord (1)  
Remote control (RMT-CS400A) (1)  
Headphones (1) (CFD-S500 only)

Design and specifications are subject to change without notice.

### • Abbreviation

CND : Canadian model  
E92 : AC 120V area in E model  
MX : Mexican model  
SP : Singapore model  
KR : Korean model

## CAUTION

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

## 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.

## 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 from more than 30 cm away from the objective lens.

## SAFETY-RELATED COMPONENT WARNING!!

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

## 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.**

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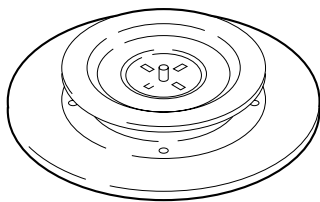
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## SECTION 1 SERVICING NOTES

### CHUCK PLATE JIG ON REPAIRING

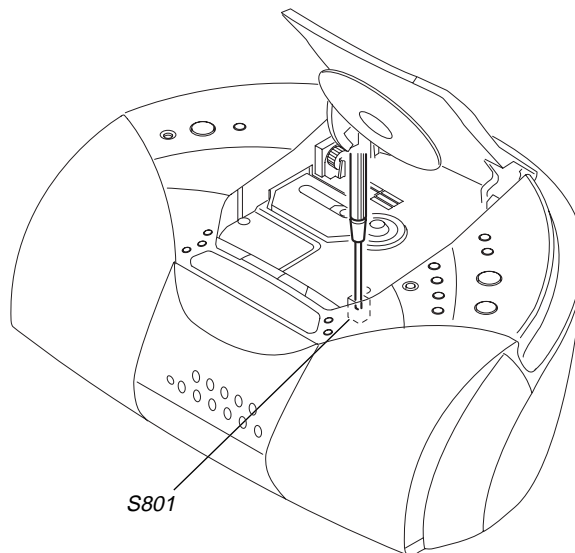
On repairing CD section, playing a disc without the lid (CD), use Chuck Plate Jig.

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



### LASER DIODE AND FOCUS SEARCH OPERATION CHECK

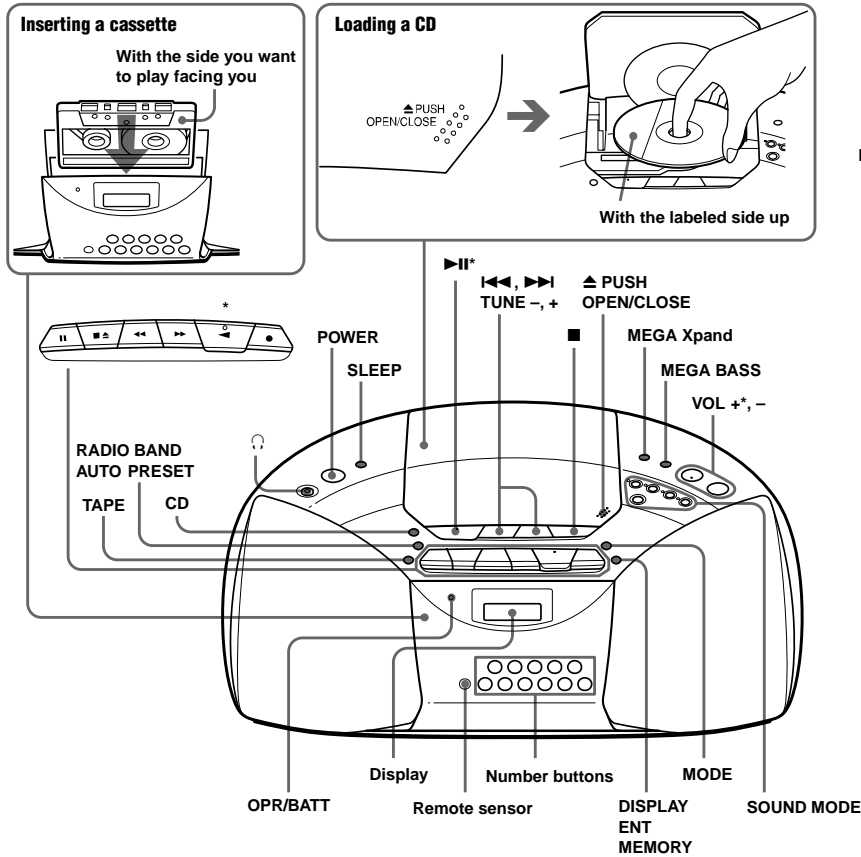
1. Turn ON the **POWER** button and press **CD** button to CD position.
2. Open the CD lid.
3. Turn on S801 with screwdriver, etc. as following figure.
4. Press the **▶||** (CD) button.
5. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken. Objective lens moves up and down three times for focus search.



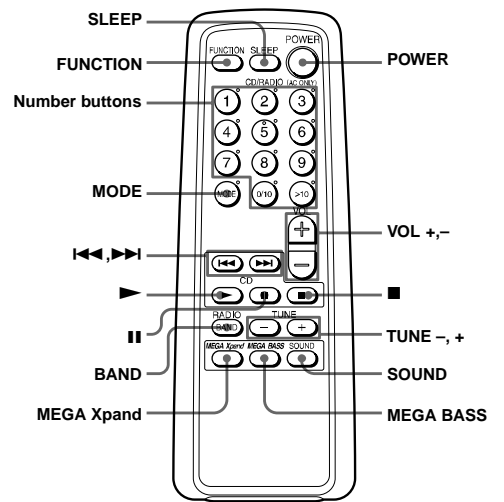
## SECTION 2 GENERAL

This section is extracted from instruction manual.

### Location of controls



### Remote Control



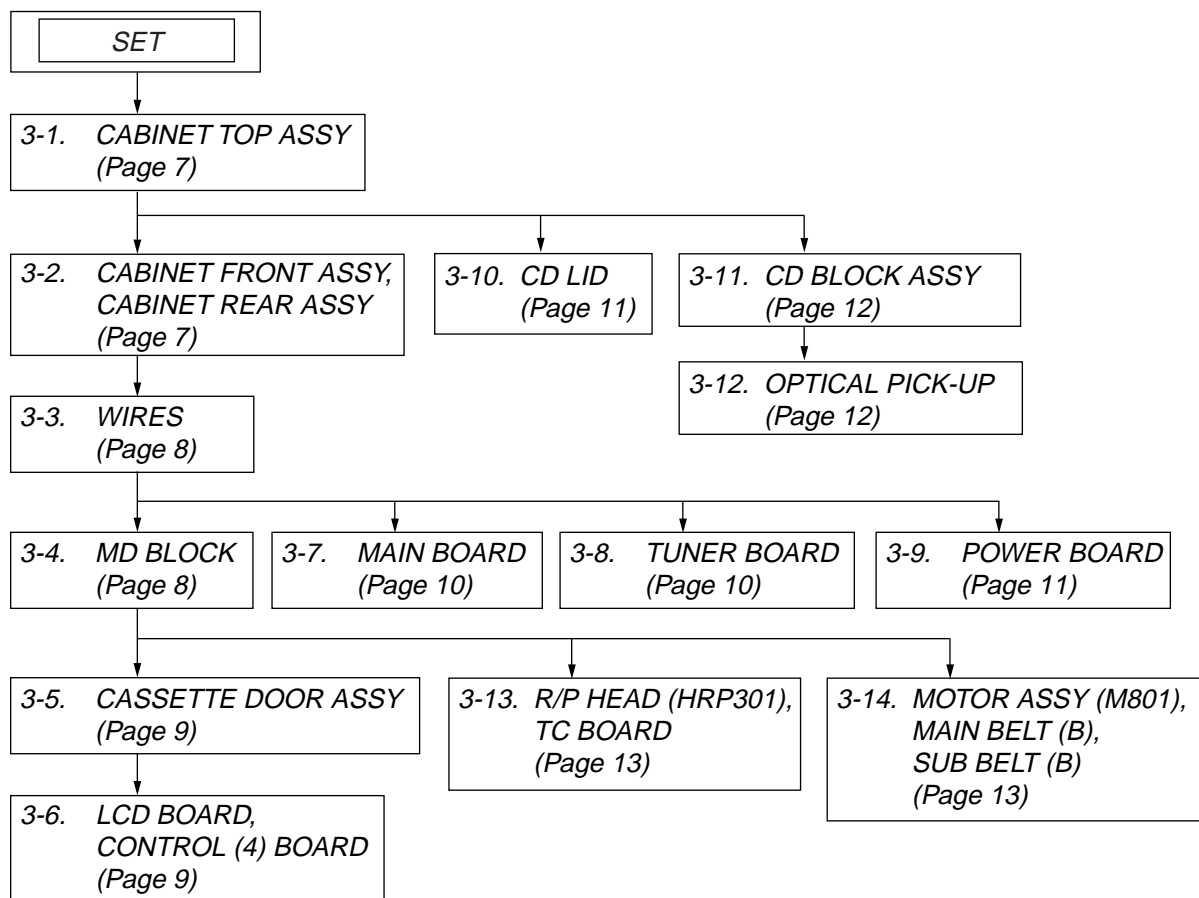
\*The button has a tactile dot.

### Display



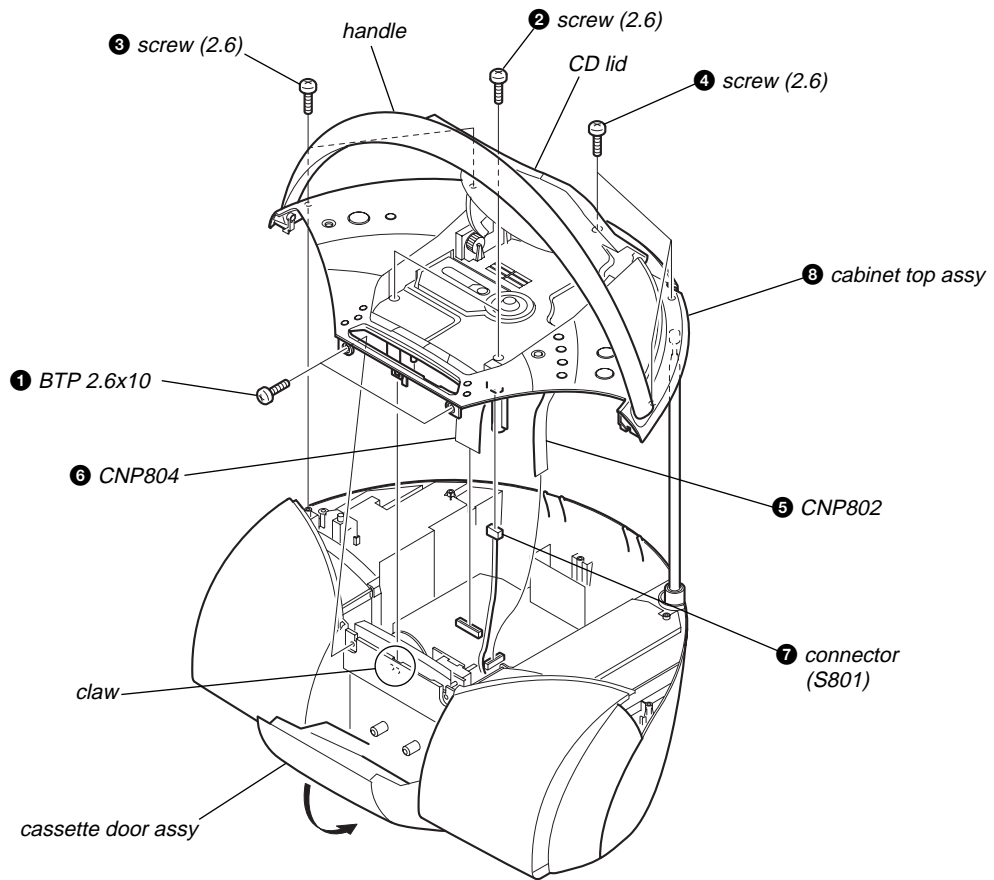
### SECTION 3 DISASSEMBLY

- The equipment can be removed using the following procedure.

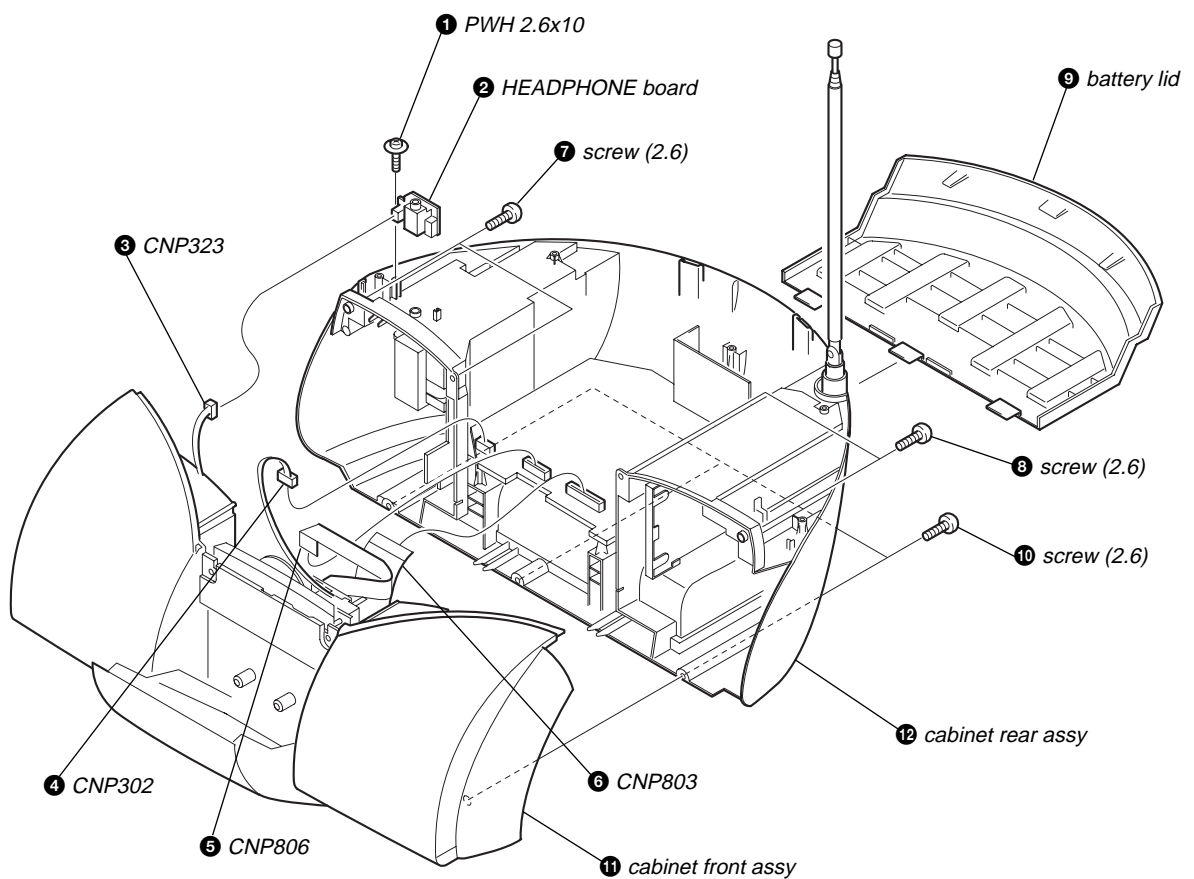


**Note :** Follow the disassembly procedure in the numerical order given.

**3-1. CABINET TOP ASSY**

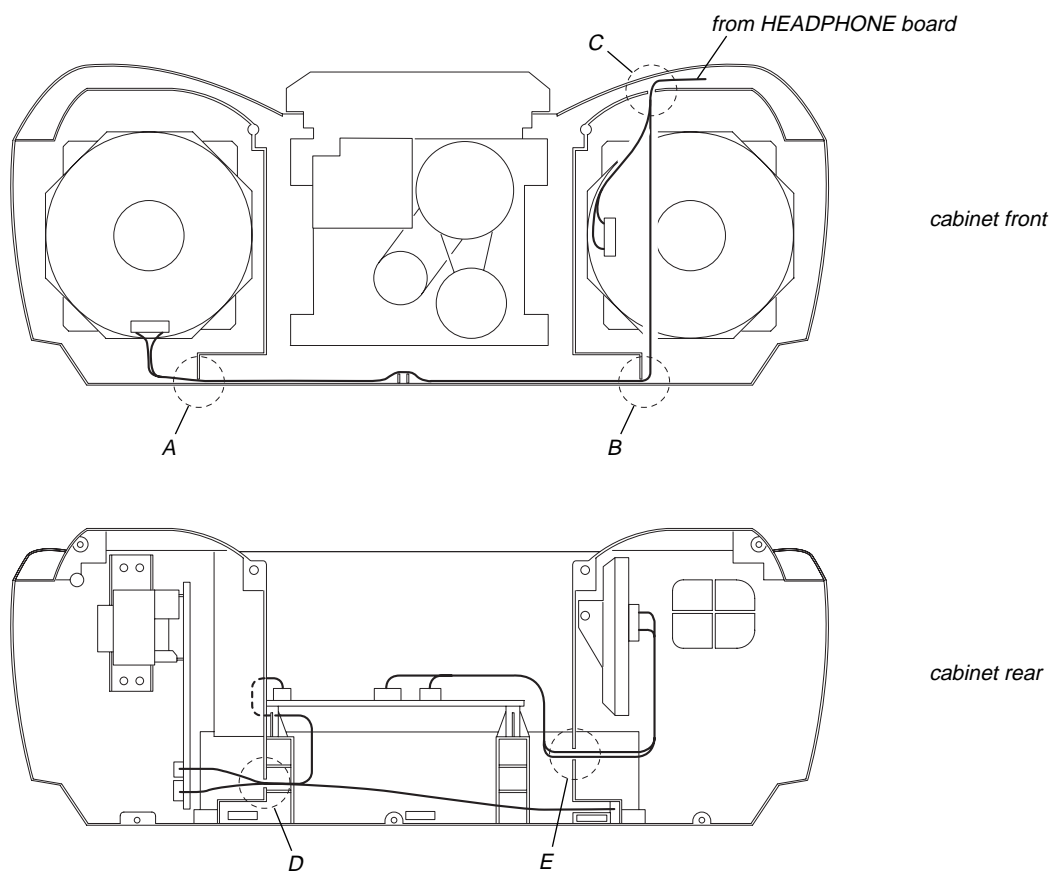


**3-2. CABINET FRONT ASSY, CABINET REAR ASSY**

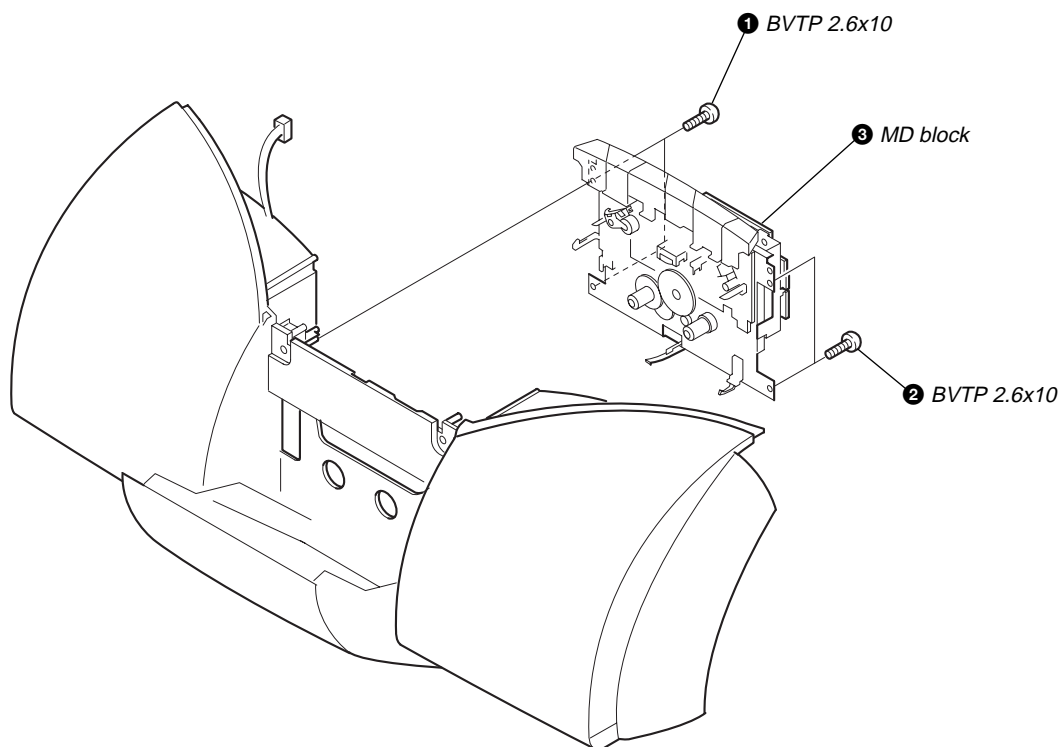


## 3-3. WIRES

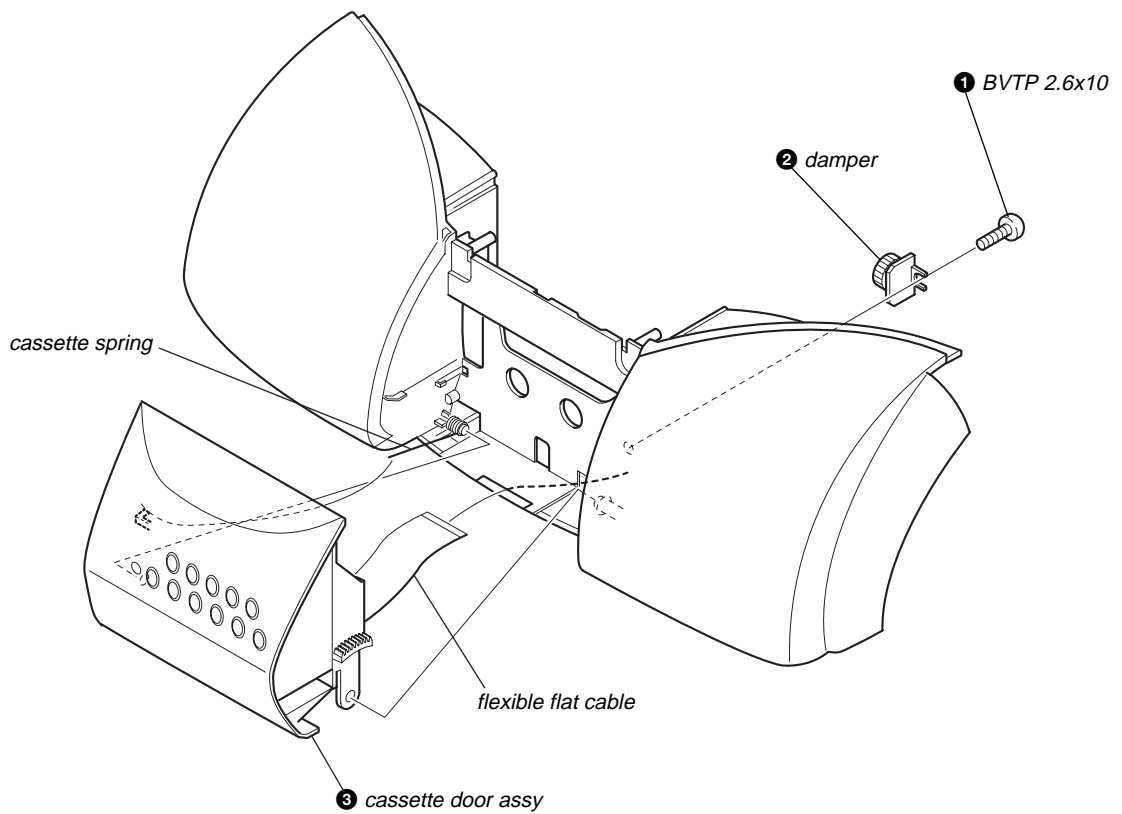
Put flat cable and wires between the cabinets and push them in the grooves located at A to E in the figure to prevent disconnection before assembling the set.



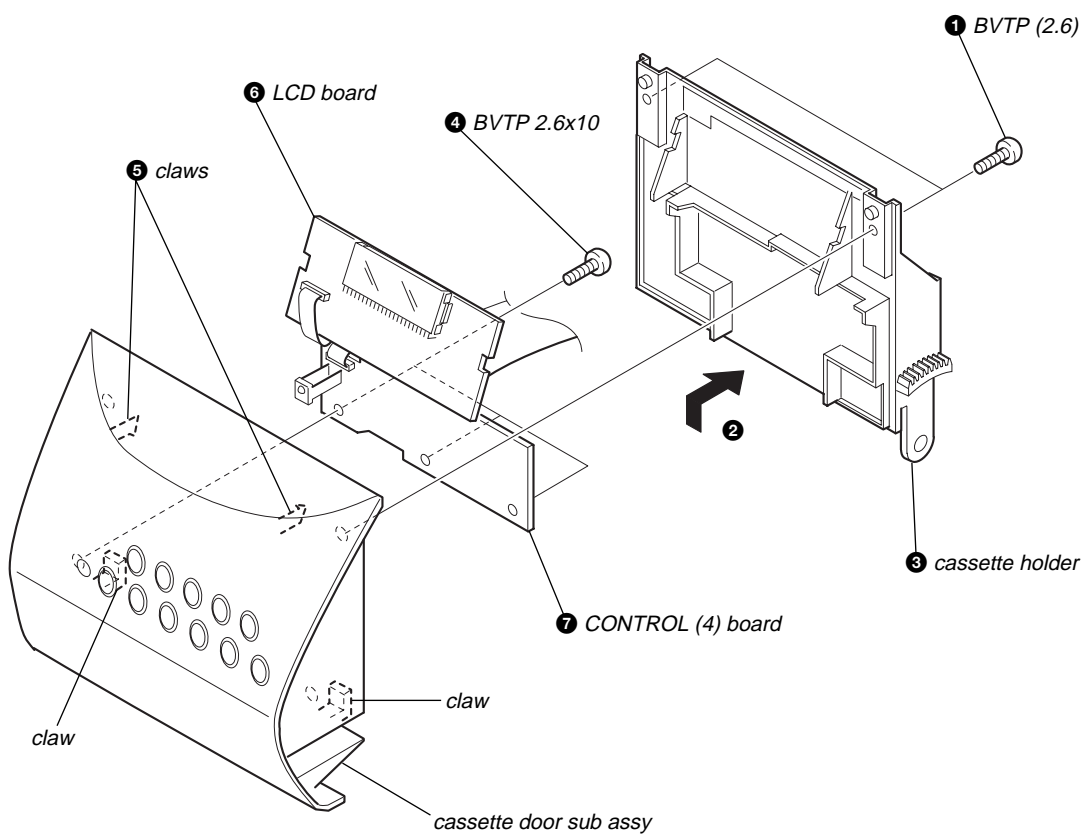
## 3-4. MD BLOCK



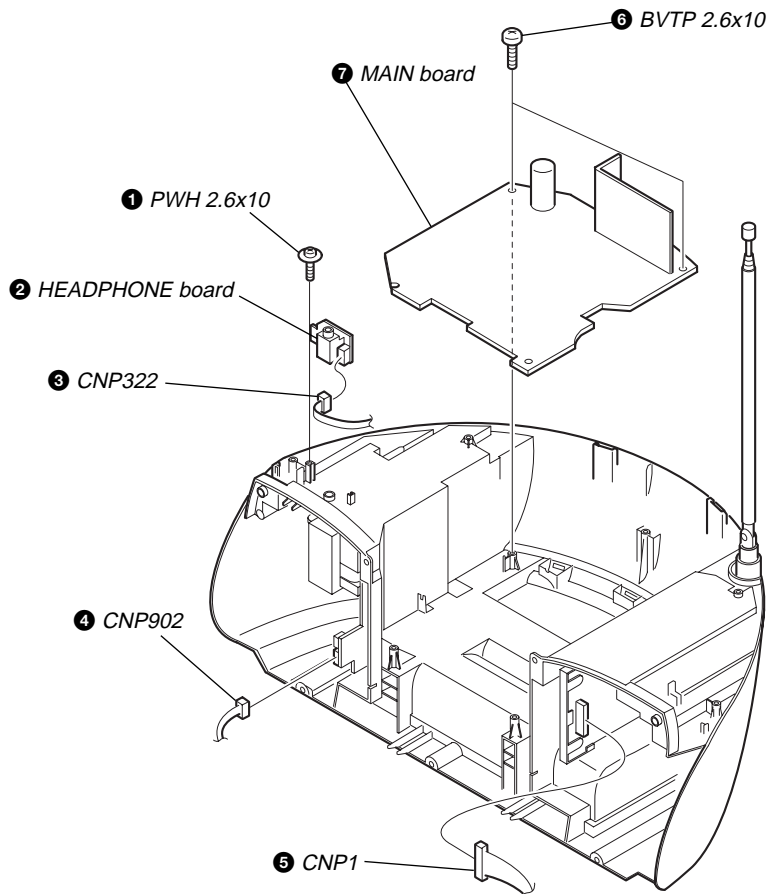
3-5. CASSETTE DOOR ASSY



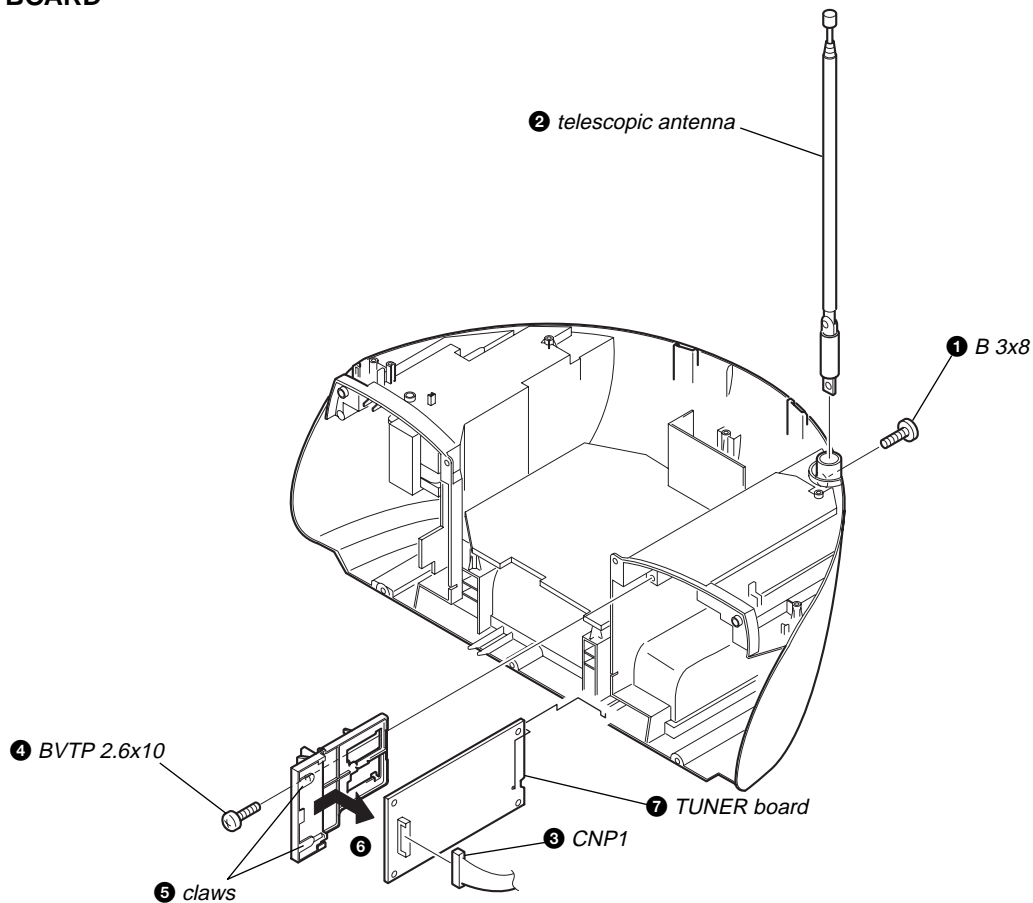
3-6. LCD BOARD, CONTROL (4) BOARD



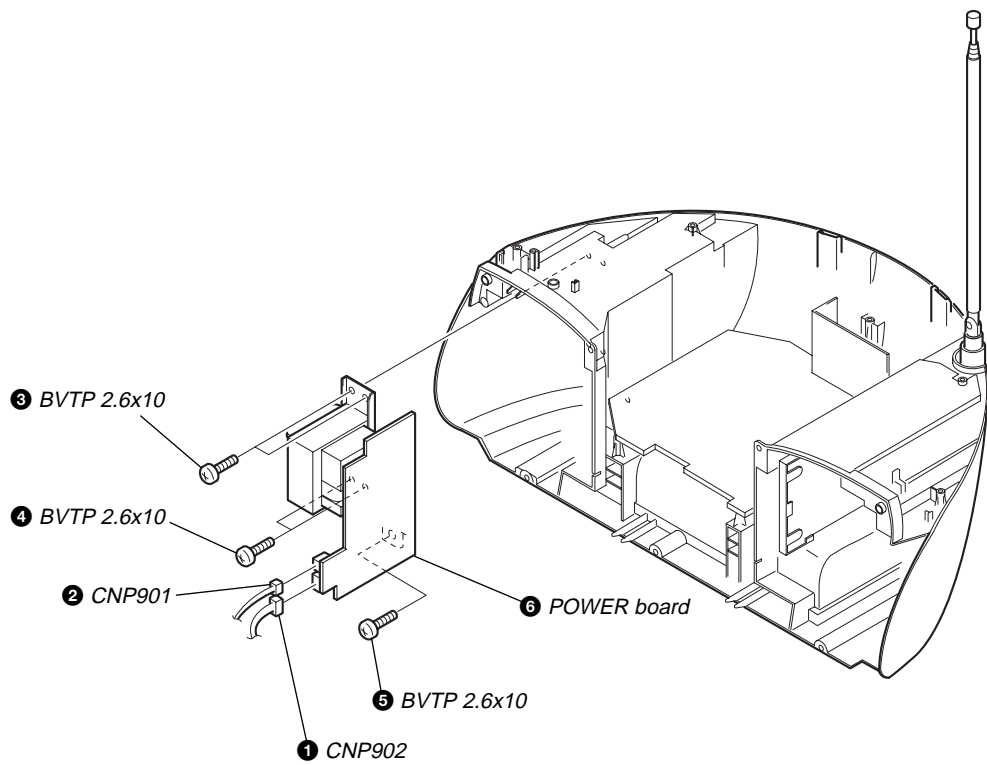
## 3-7. MAIN BOARD



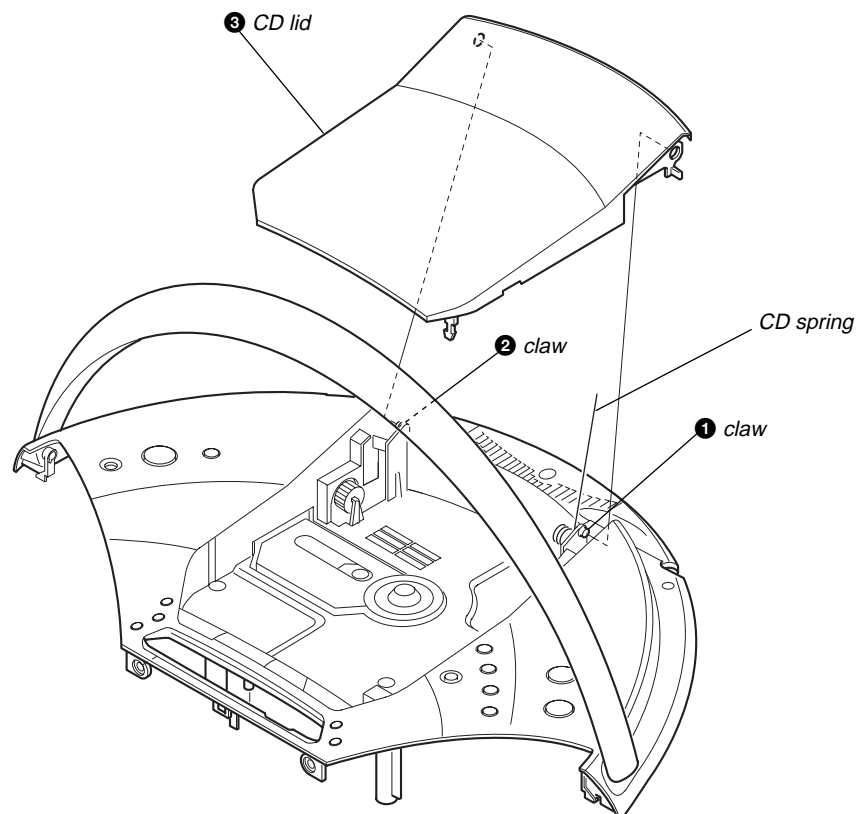
## 3-8. TUNER BOARD



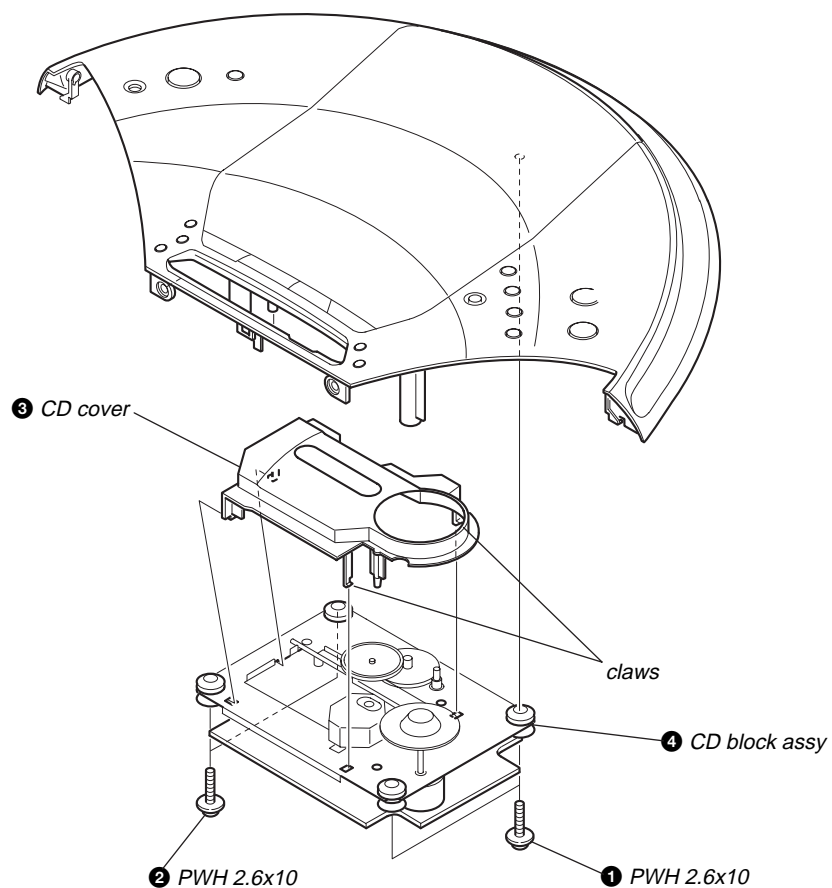
3-9. POWER BOARD



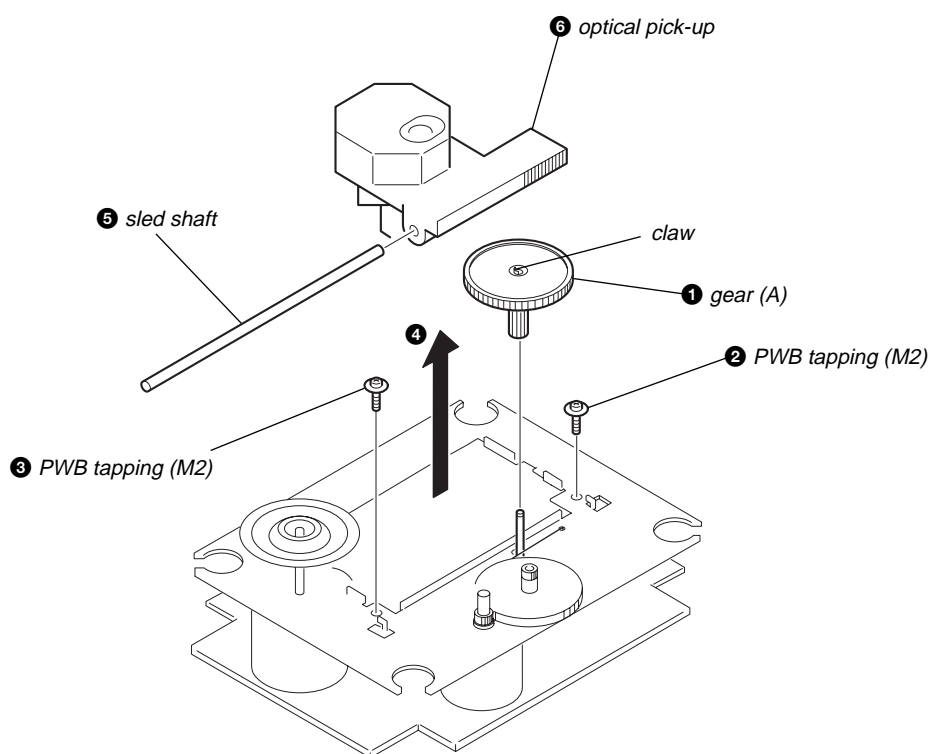
3-10. CD LID



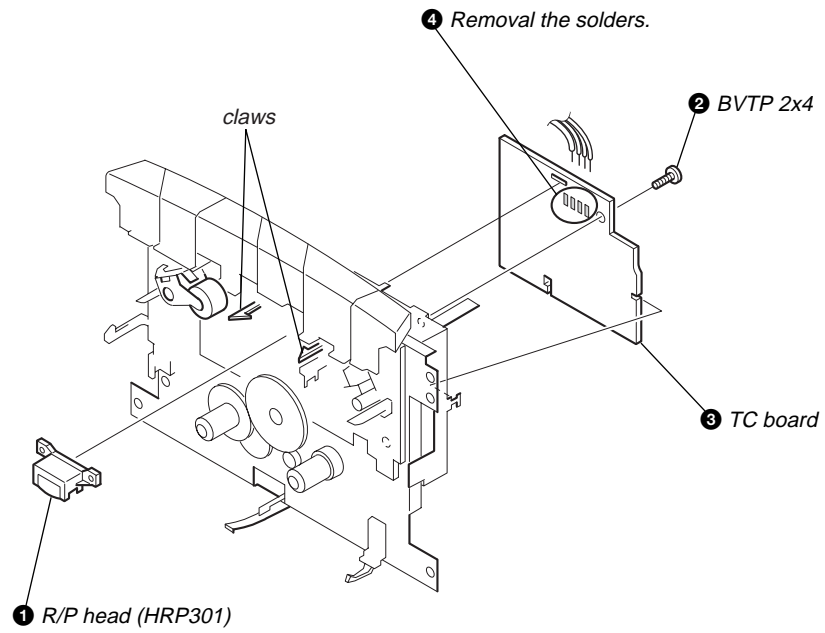
3-11. CD BLOCK ASSY



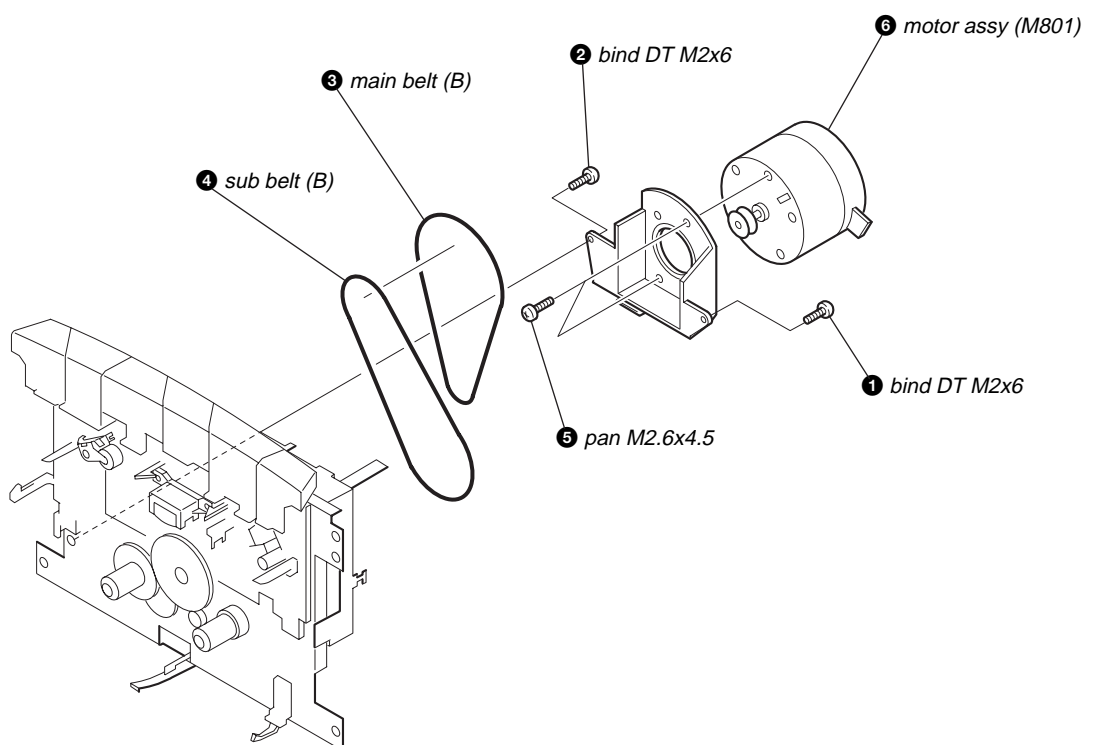
3-12. OPTICAL PICK-UP



3-13. R/P HEAD (HRP301), TC BOARD



3-14. MOTOR ASSY (M801), MAIN BELT (B), SUB BELT (B)



**SECTION 4  
MECHANICAL ADJUSTMENTS**

**PRECAUTION**

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

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

**Torque Measurement**

Mode	Torque meter	Meter reading
FWD	CQ-102C	2.95 – 6.86 mN • m (30 – 70 g • cm) (0.42 – 0.97 oz • inch)
FWD Back Tension	CQ-102C	0.15 – 0.53 mN • m (1.5 – 5.5 g • cm) (0.021 – 0.076 oz • inch)
FF	CQ-201B	more than 5.88 mN • m (more than 60 g • cm) (more than 0.83 oz • inch)
REW	CQ-201B	more than 5.88 mN • m (more than 60 g • cm) (more than 0.83 oz • inch)

**Tape Tension Measurement**

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

**SECTION 5  
ELECTRICAL ADJUSTMENTS**

**TAPE SECTION**    **0 dB = 0.775 V**

• **Standard Output Level**

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

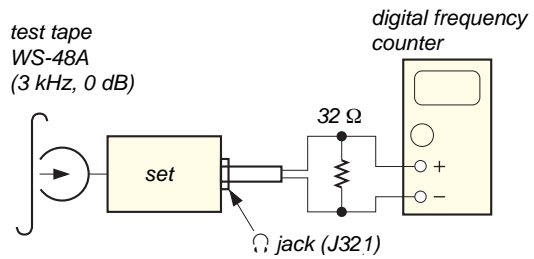
• **Test Tape**

Type	Signal	Used for
WS-48A	3 kHz, 0 dB	tape speed adjustment

**Tape Speed Adjustment**

**Procedure:**

Mode: playback



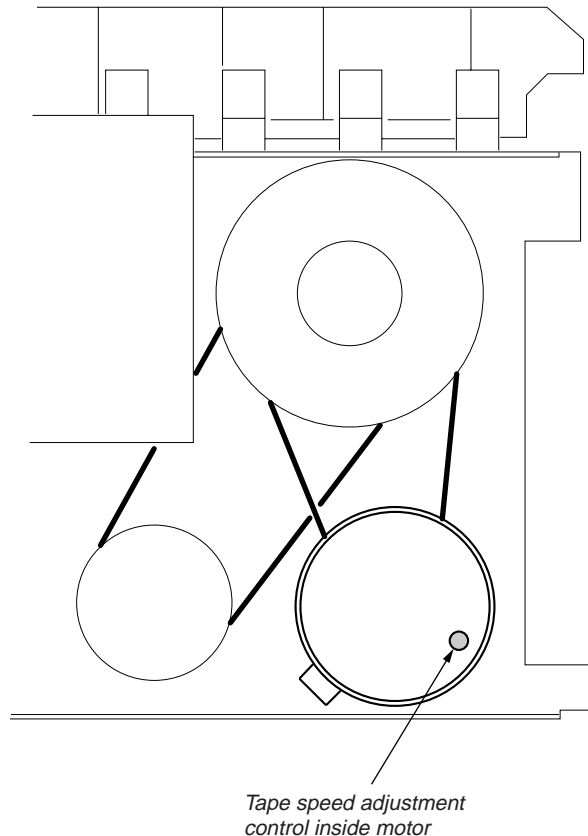
Adjust so that the value on the digital frequency counter is 3,000 Hz.

**Specification Value:**

Digital frequency counter
2,940 to 3,060 Hz

Adjust so that the frequency at the beginning and that at the end of tape winding are between 2,970 to 3,030 Hz.

**Adjustment Location:**

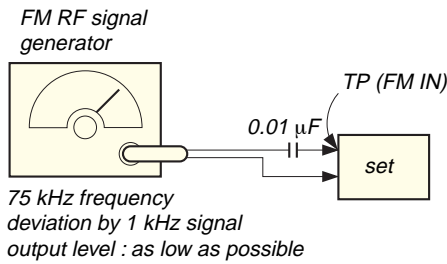


**TUNER SECTION**    **0 dB = 1 μV**

• **FM Section**

**Setting:**

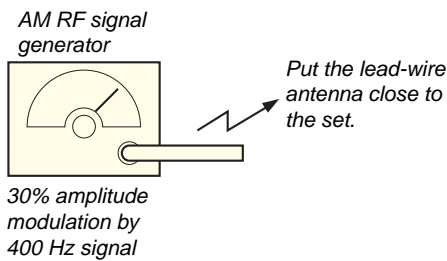
RADIO BAND•AUTO PRESET button: FM



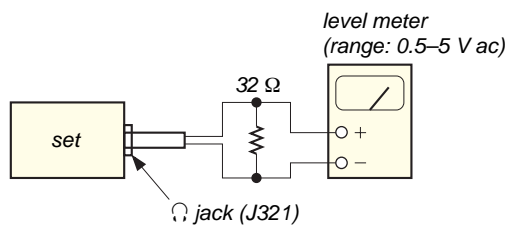
• **AM Section**

**Setting:**

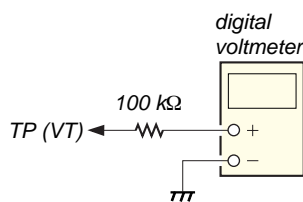
RADIO BAND•AUTO PRESET button: AM



• **Connecting Level Meter (FM and AM)**



• **Connecting Digital Voltmeter (FM and AM)**



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

FM IF ADJUSTMENT	
Adjust for a maximum reading on level meter.	
T2	
10.7 MHz	

FM FREQUENCY COVERAGE ADJUSTMENT		
Frequency Display	87.5 MHz	108 MHz
Reading on Digital voltmeter	1.3 ± 0.3 V	3.0 ± 0.2 V
Adjustment Part	<confirmation>	L2

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

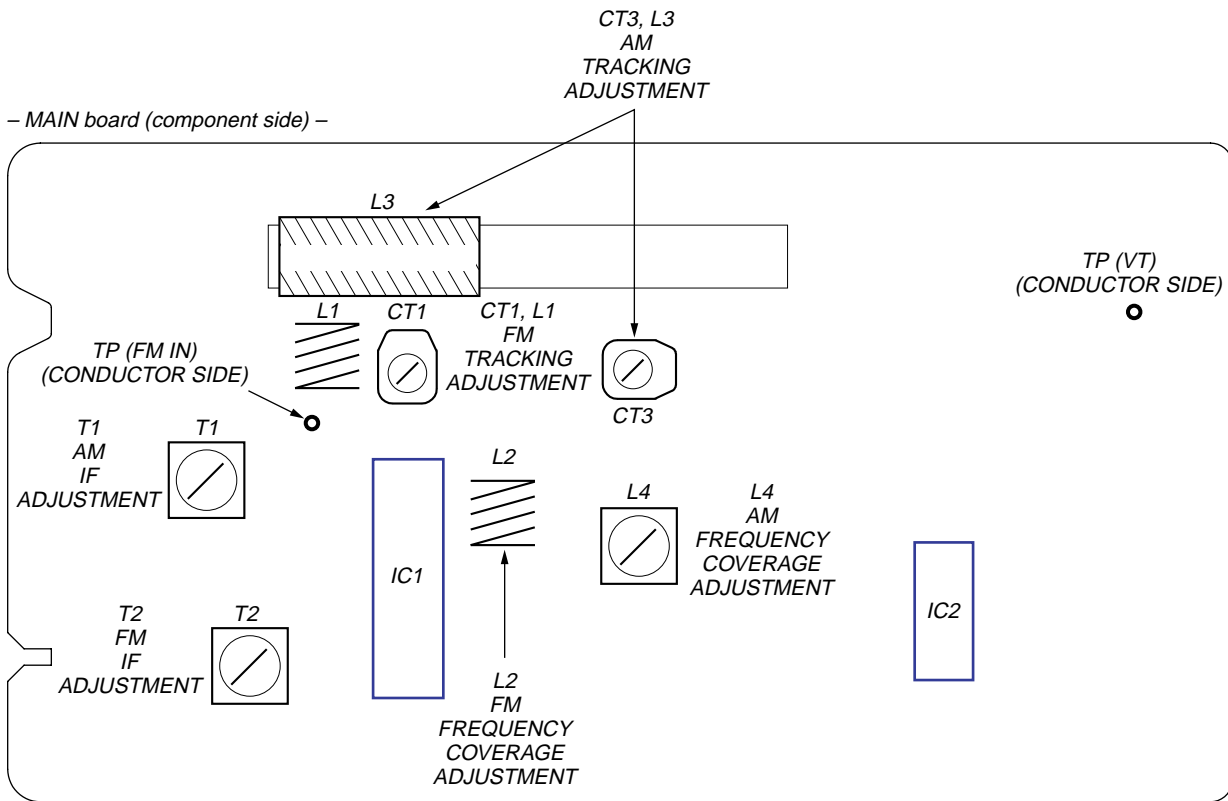
AM IF ADJUSTMENT	
Adjust for a maximum reading on level meter.	
T1	
450 kHz	

AM FREQUENCY COVERAGE ADJUSTMENT		
Frequency Display	530 kHz	1,710 kHz
Reading on Digital voltmeter	1.0 ± 0.05 V	5.3 ± 0.7 V
Adjustment Part	L4	<confirmation>

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

**Adjustment Location:** See page 16.

## Adjustment Location:



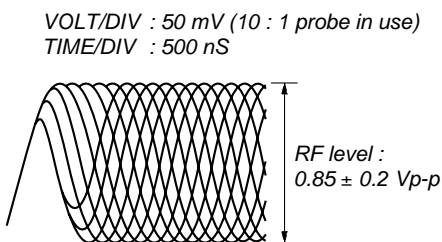
## CD SECTION

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

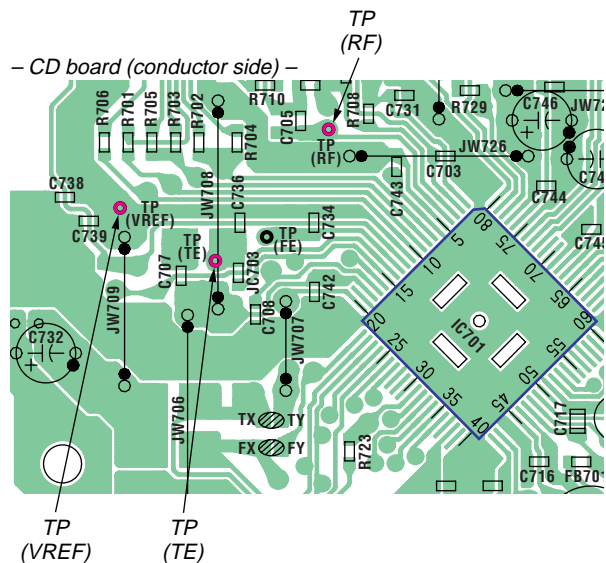
### FOCUS BIAS CHECK

1. Connect the oscilloscope between IC701 pin ④ and pin ⑩ (or TP (RF) and TP (VREF)).
2. Insert the disc (YEDS-18). (Part No. : 3-702-101-01)
3. Press the ► || (CD) button.
4. 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)



### Test Point:



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

## SECTION 6 DIAGRAMS

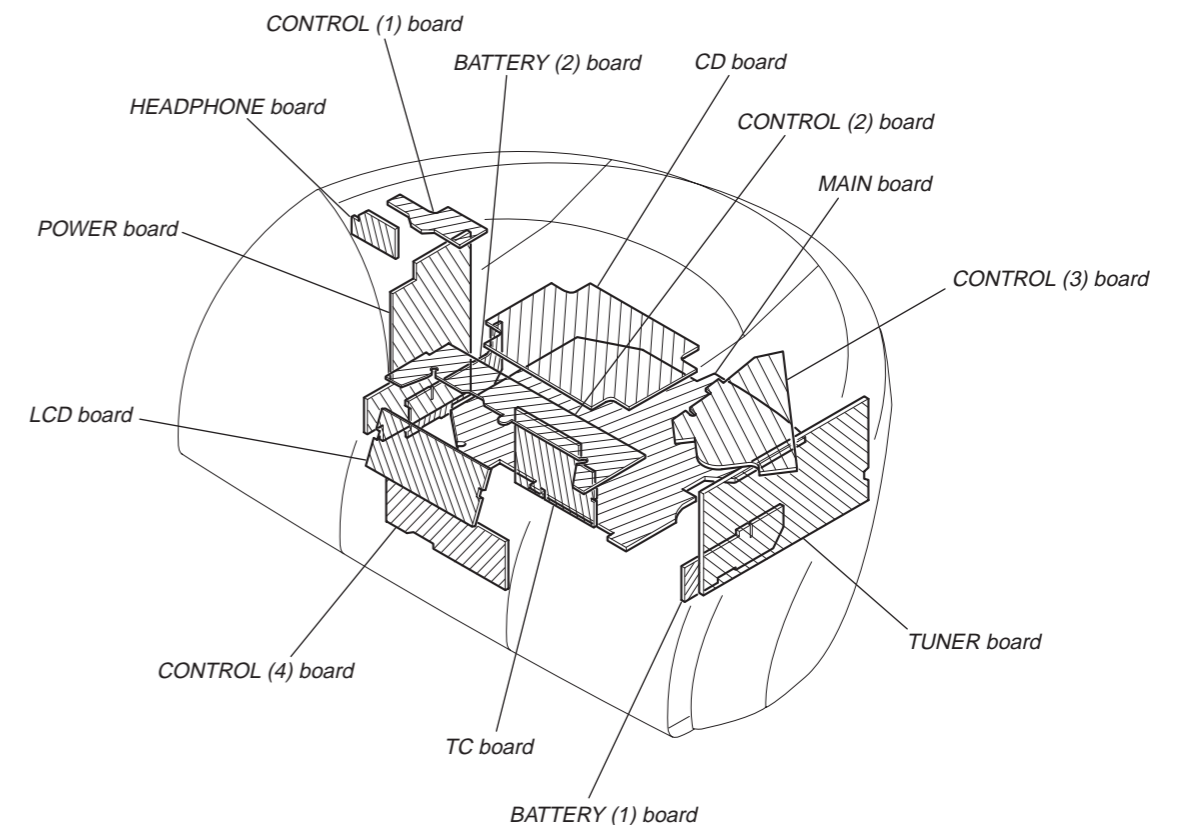
### 6-1. IC PIN DESCRIPTION

#### • IC802 uPD789477GC-A14-8BT (SYSTEM CONTROLLER)

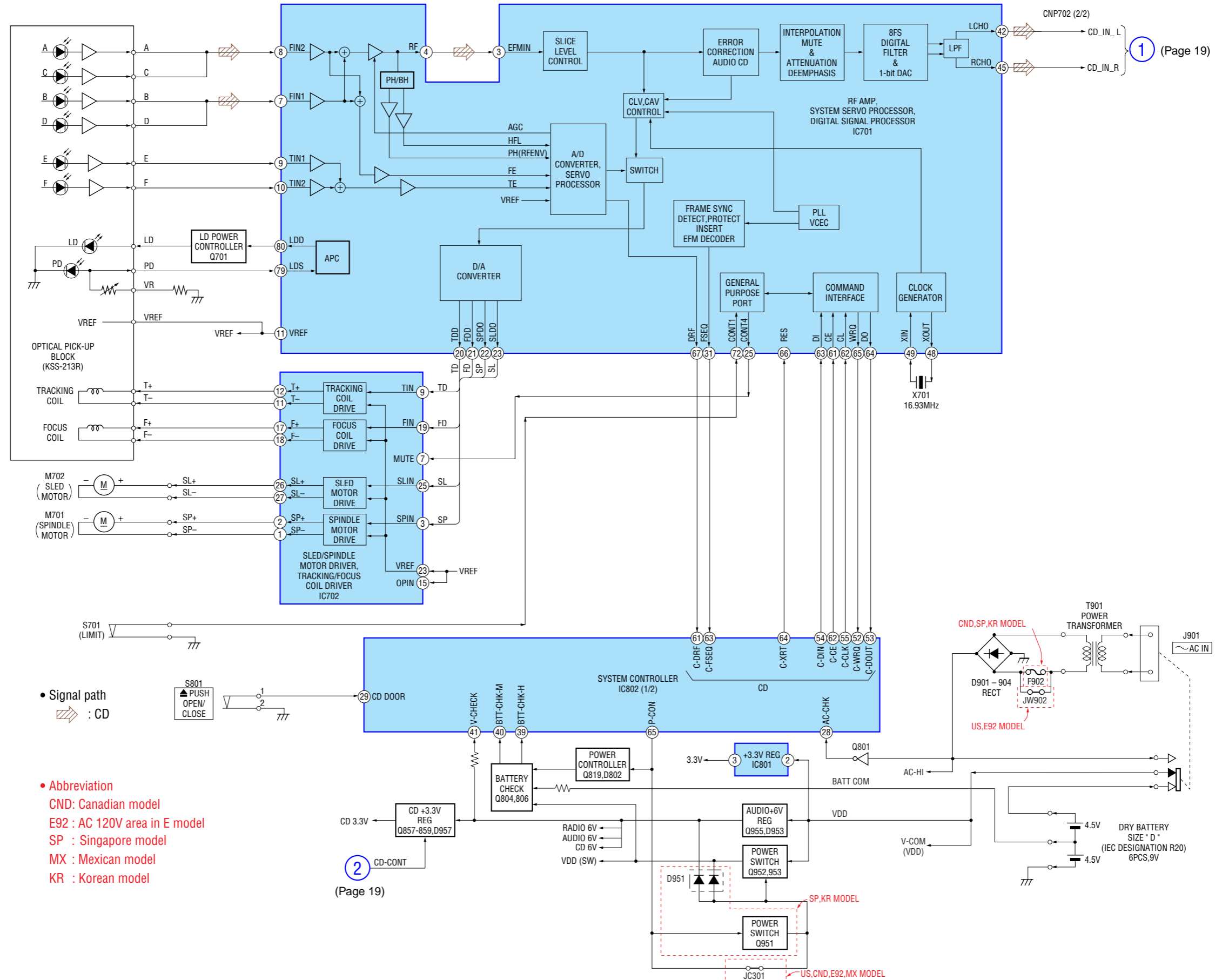
Pin No.	Pin Name	I/O	Pin Description
1, 2	NC	—	Not used. (Open)
3 to 5	VLC2 to 0	I	LCD drive bias voltage output
6 to 9	COM0 to 3	O	LCD drive common output
10 to 26	S0 to 16	O	LCD drive segment output
27	REC	I	Tape record signal input H: REC
28	AC-CHK	I	AC power supply detection signal input L: AC in
29	CD-DOOR	I	CD door open/close switch input L: Close
30	S-ROCK	O	ROCK LED control signal output
31	S-POP	O	POP LED control signal output
32	S-JAZZ	O	JAZZ LED control signal output
33	S-VOCAL	O	VOCAL LED control signal output
34	S-SUR	O	SURROUND LED control signal output Not used. (Open)
35	A-MUTE	O	Audio mute output H: Mute
36	CD	O	CD function output H: CD
37	TAPE	O	Tape function output H: Tape
38	AVDD	—	Analog power supply pin for A/D converter (+3.3 V)
39	BTT-CHK-H	I	Battery check input for Hi-voltage
40	BTT-CHK-M	I	Battery check input for Mid-voltage
41	V-CHECK	I	Voltage transaction check input
42 to 45	KEY4 to 1	I	Key input
46	MODE CHK	I	Destination setting input
47	AGND	—	Analog ground for A/D converter
48	REMOTE	I	Sircs receiver data input
49	TC-PLAY	I	Tape play switch input L: Play
50	WP/INI	O	Wake-up/Initial setting read signal output
51	MT-CONT	O	Motor control signal output Not used. (Open)
52	C-WRQ	I	CD write request data input
53	C-DOUT	I	CD digital signal processor data input
54	C-DIN	O	CD digital signal processor data output
55	C-CLK	I	CD serial data transfer clock signal input
56	R-COUNT	I	Tuner PLL IF count input
57	R-DATA	O	Tuner PLL data output
58	R-CLK	O	Tuner PLL clock output
59	R-LAT	O	Tuner PLL latch output
60	B-MUTE	O	Tuner mute signal output H: Mute
61	C-DRF	I	CD DRF signal input
62	C-CE	O	CD chip enable output
63	C-FSEQ	I	CD frame SYNC input
64	C-XRT	O	CD system reset output
65	P-CON	O	System power control output H: PCON
66	ISS1	O	ISS1 output
67	ISS2	O	ISS2 output
68	DBB	O	MEGA BASS control output H: MEGA BASS off, L: MEGA BASS on
69	ICO	I	Connected to VSS.
70	XT1	I	Sub system oscillation input (32.768 kHz)
71	XT2	O	Sub system oscillation output (32.768 kHz)
72	VDD	—	Main power supply pin for A/D converter (+3.3 V)
73	VSS	—	Main ground
74	X1	I	Main system oscillation input (4.19 MHz)

Pin No.	Pin Name	I/O	Pin Description
75	X2	O	Main system oscillation output (4.19 MHz)
76	RST	I	System reset input
77	V-CLK	O	Volume clock output
78	V-DATA	O	Volume data output
79	SCL	O	EEPROM clock output
80	SDA	I/O	EEPROM input/output

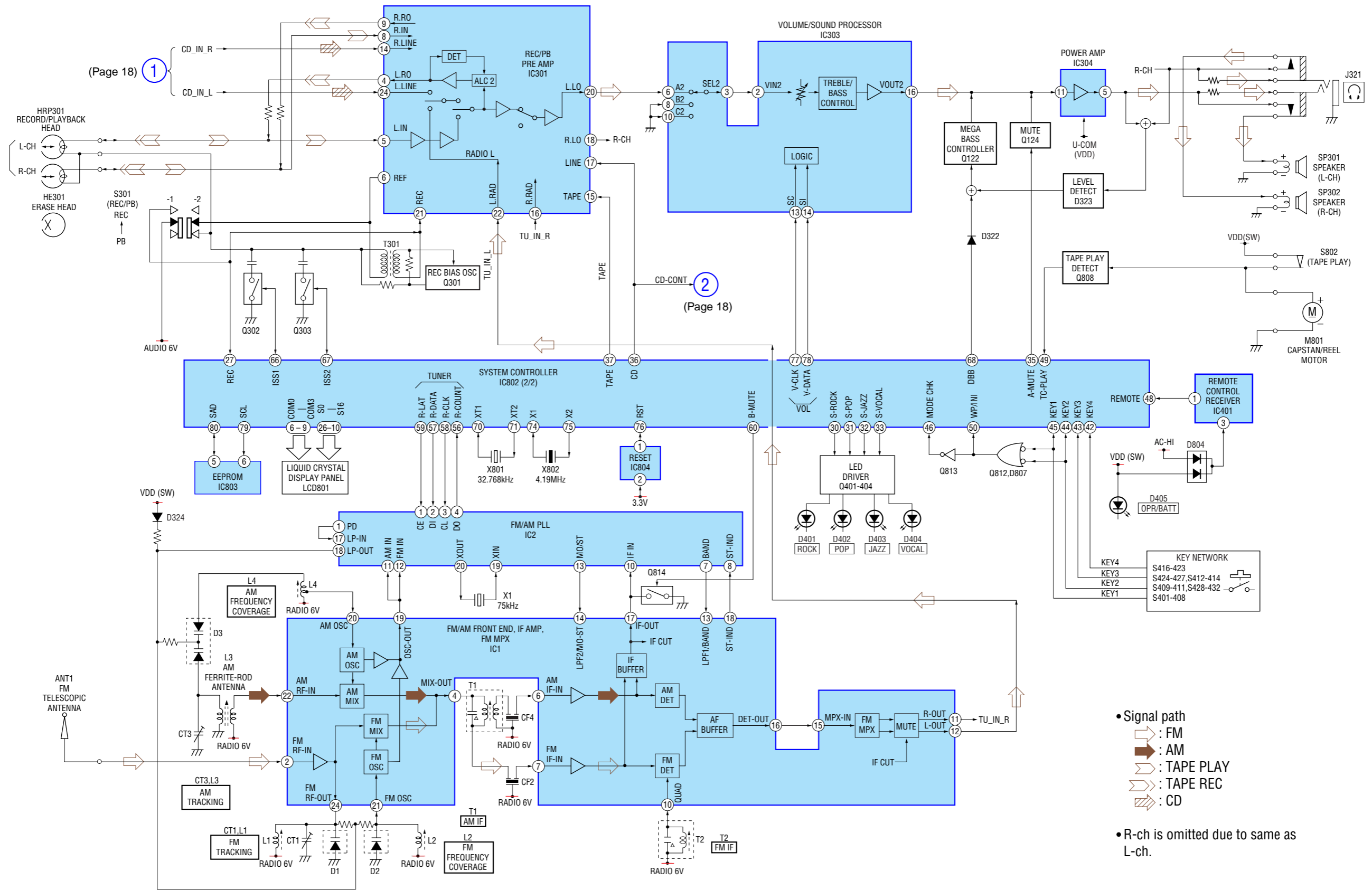
### 6-2. CIRCUIT BOARDS LOCATION



6-3. BLOCK DIAGRAM — CD SECTION —



6-4. BLOCK DIAGRAM — MAIN SECTION —



6-5. PRINTED WIRING BOARD — CD SECTION — • Refer to page 17 for Circuit Boards Location.

**THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.**  
(In addition to this, the necessary note is printed in each block.)

**Common Note on Schematic Diagrams:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- $\Delta$  : internal component.
- : panel designation.

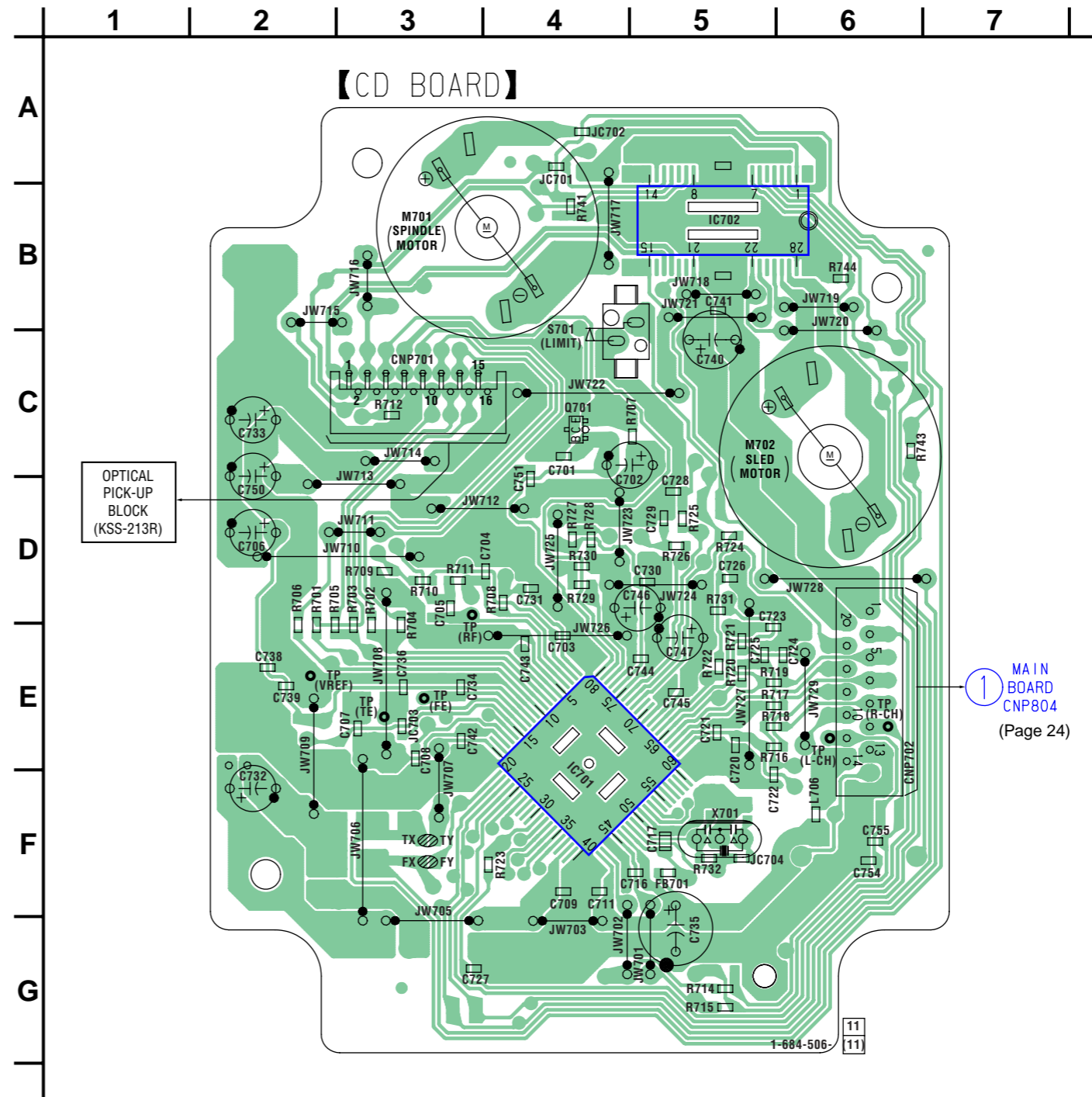
**Note:**  
The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

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

- : B+ Line.
- : adjustment for repair.
- Total current is measured with no cassette installed.
- Power voltage is dc 9V and fed with regulated dc power supply from battery terminal.
- Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : FM
  - : AM
  - : PB
  - : REC
  - : CD
- Abbreviation
  - CND : Canadian model.
  - E92 : AC 120V area in E model.
  - MX : Mexican model.
  - SP : Singapore model.
  - KR : Korean model.

**Common Note on Printed Wiring Boards:**

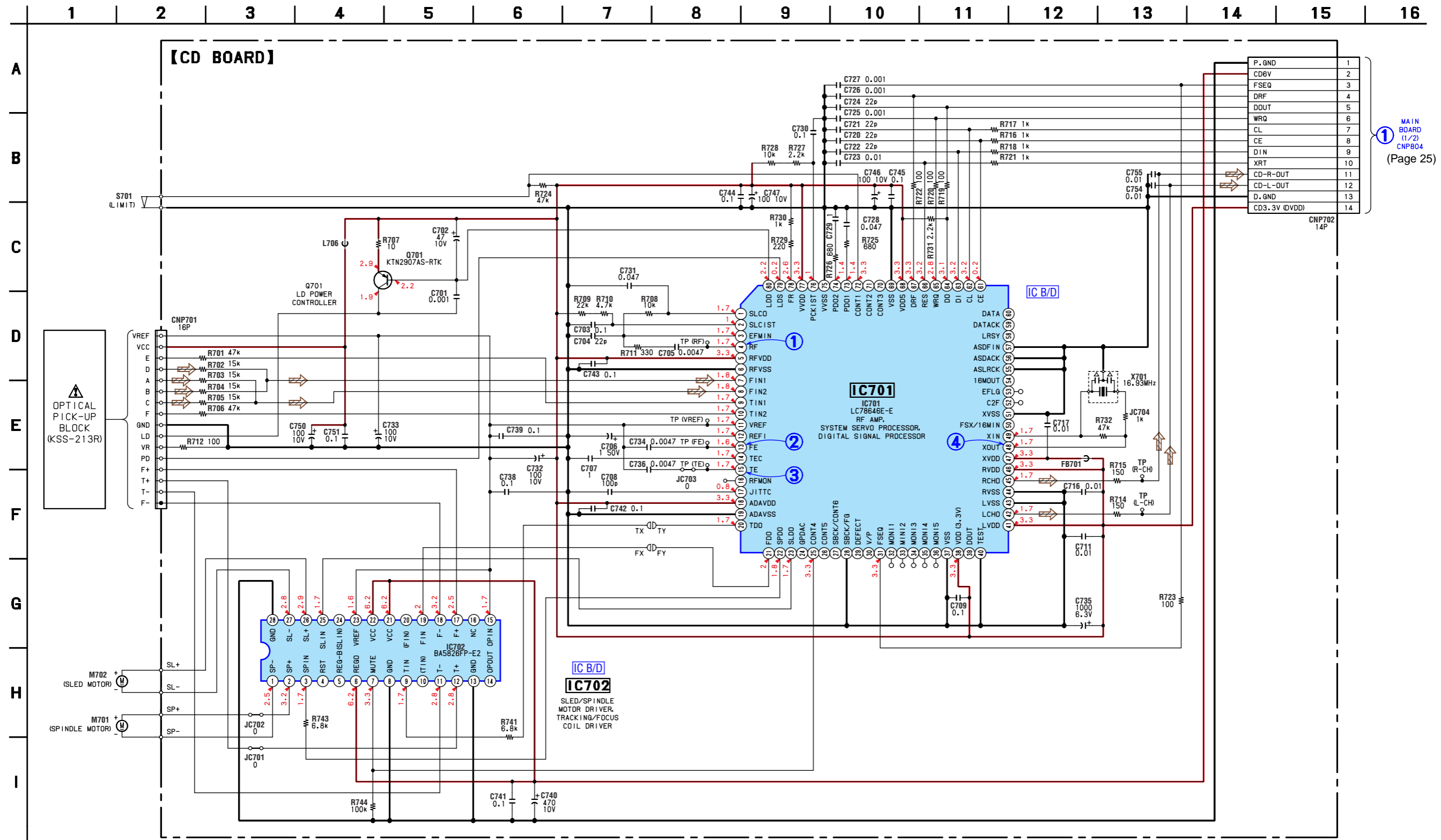
- : parts extracted from the component side.
- : parts extracted from the conductor side.
- $\Delta$  : internal component.
- : Pattern from the side which enables seeing.
- Abbreviation
  - CND : Canadian model.
  - E92 : AC 120V area in E model.
  - MX : Mexican model.
  - SP : Singapore model.
  - KR : Korean model.



**• Semiconductor Location**

Ref. No.	Location
IC701	E-4
IC702	B-5
Q701	C-4

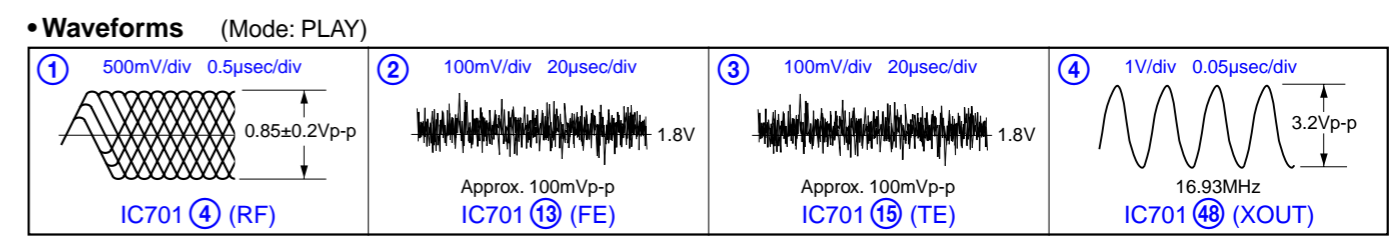
6-6. SCHEMATIC DIAGRAM — CD SECTION — • Refer to page 20 for Common Note on Schematic Diagrams and page 35 for IC Block Diagrams.



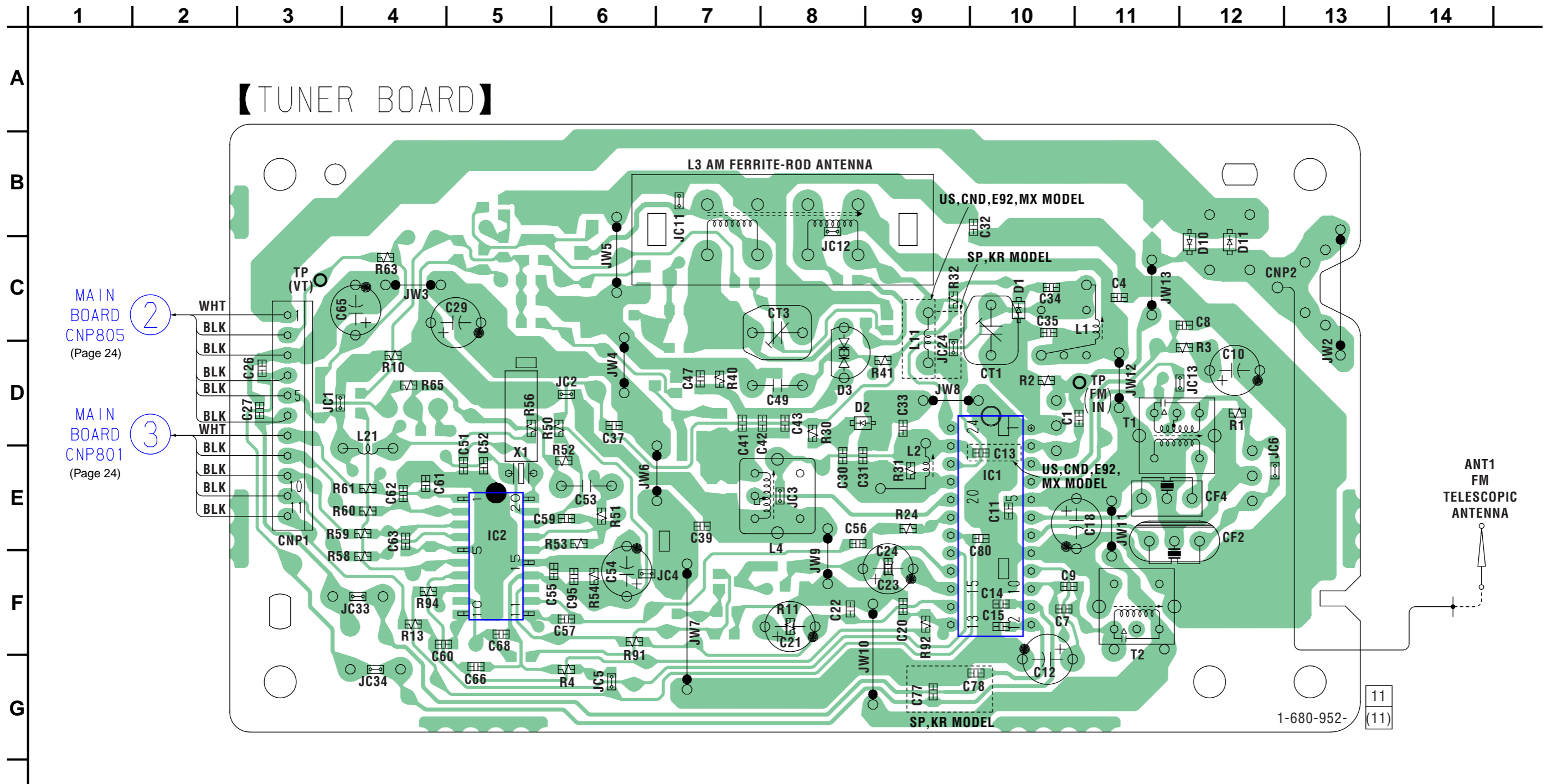
P.GND	1
CD6V	2
FSEQ	3
DRF	4
DOUT	5
WRQ	6
CL	7
CE	8
DIN	9
XRT	10
CD-R-OUT	11
CD-L-OUT	12
D.GND	13
CD3.3V (VDD)	14

1 MAIN BOARD (1/2) CNP804 (Page 25)

• Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
no mark : CD PLAY



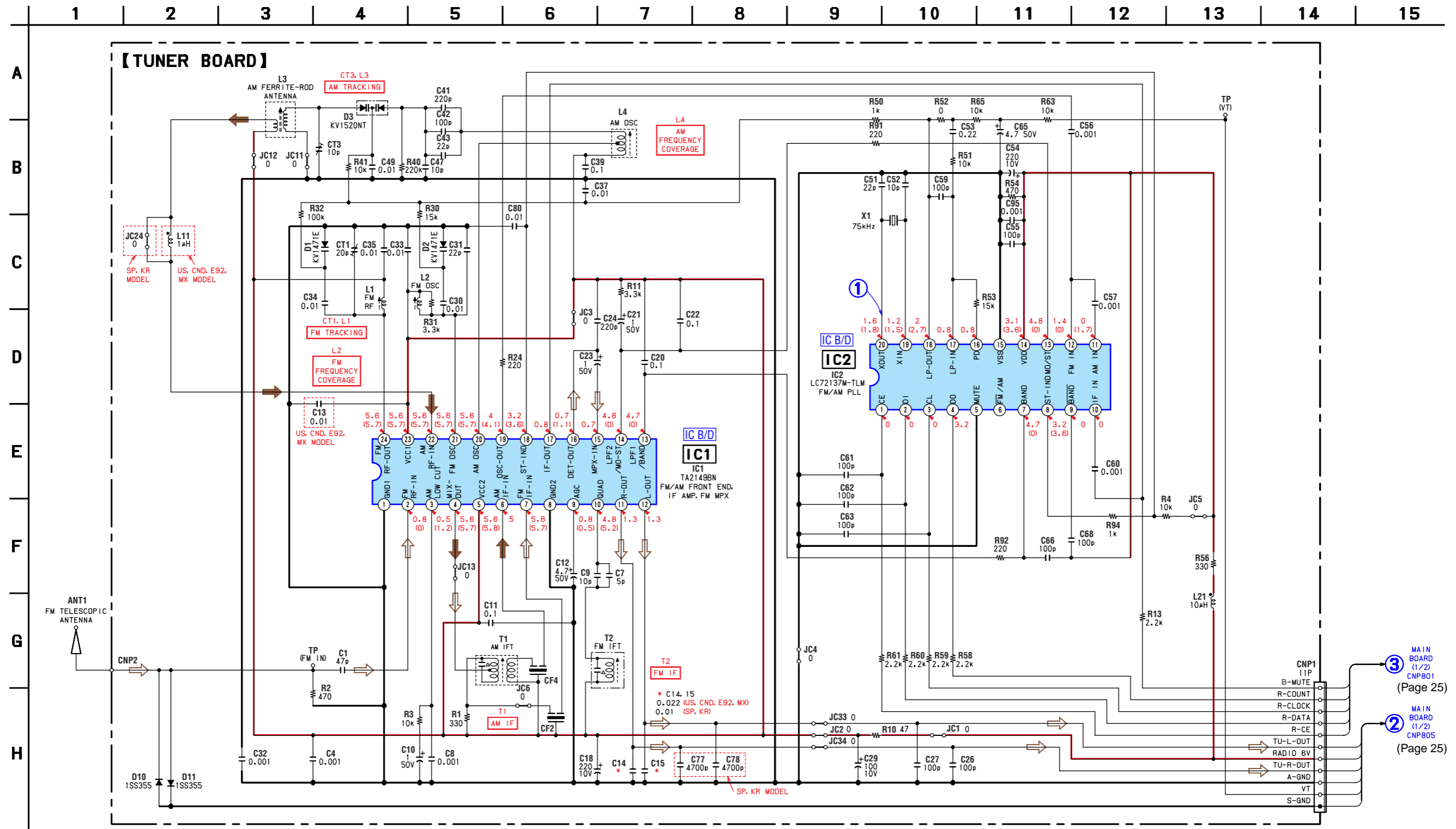
6-7. PRINTED WIRING BOARD — TUNER SECTION — • Refer to page 17 for Circuit Boards Location and page 20 for Common Note on Printed Wiring Boards.



• Semiconductor Location

Ref. No.	Location
D1	C-10
D2	D-8
D3	D-8
D10	B-12
D11	B-12
IC1	E-10
IC2	E-5

6-8. SCHEMATIC DIAGRAM — TUNER SECTION — • Refer to page 20 for Common Note on Schematic Diagrams and page 36 for IC Block Diagrams.



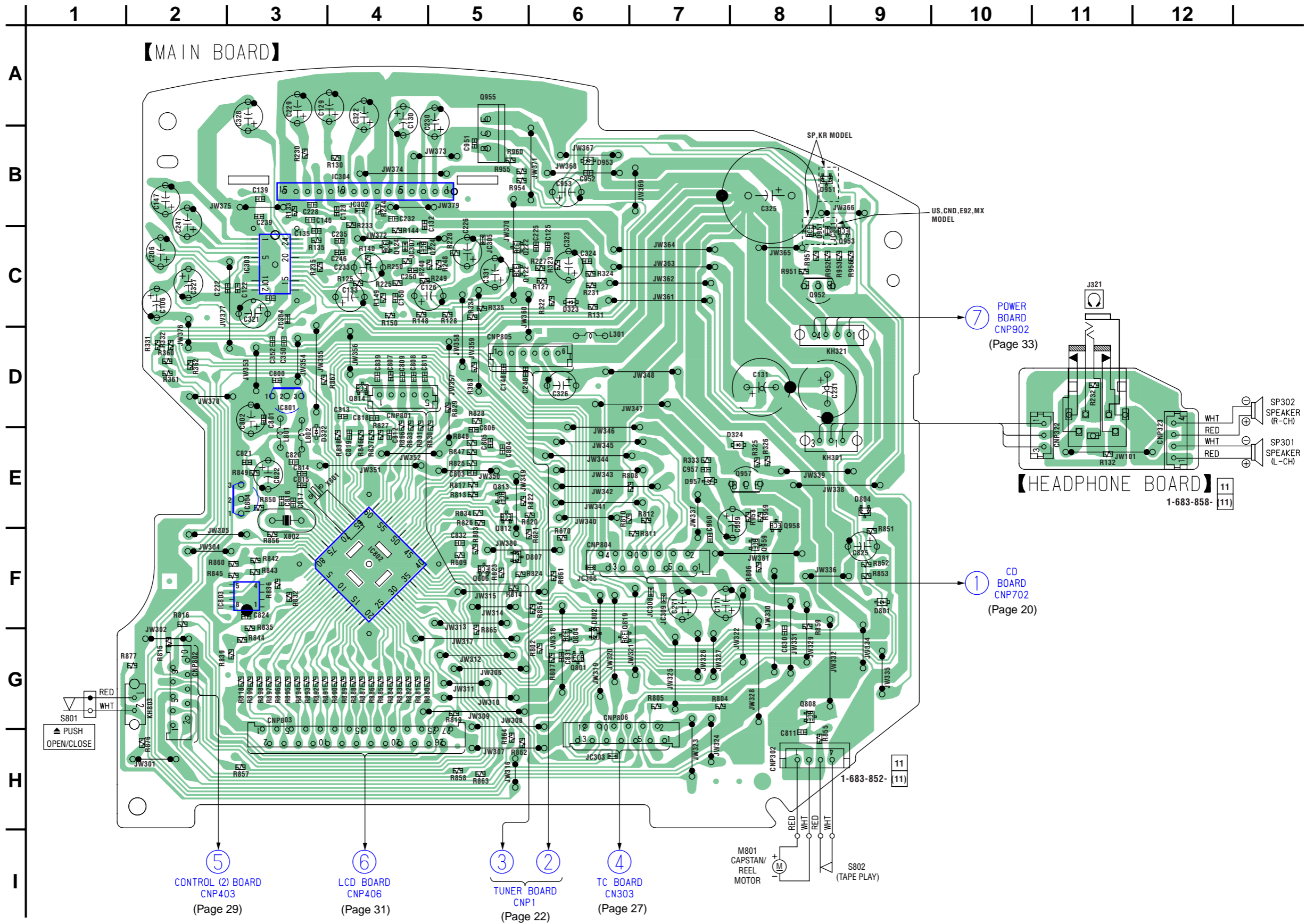
• Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
 no mark : FM  
 ( ) : AM

③ MAIN BOARD (1/2) CNP801 (Page 25)  
 ② MAIN BOARD (1/2) CNP805 (Page 25)

6-9. PRINTED WIRING BOARDS — MAIN SECTION — • Refer to page 17 for Circuit Boards Location and page 20 for Common Note on Printed Wiring Boards.

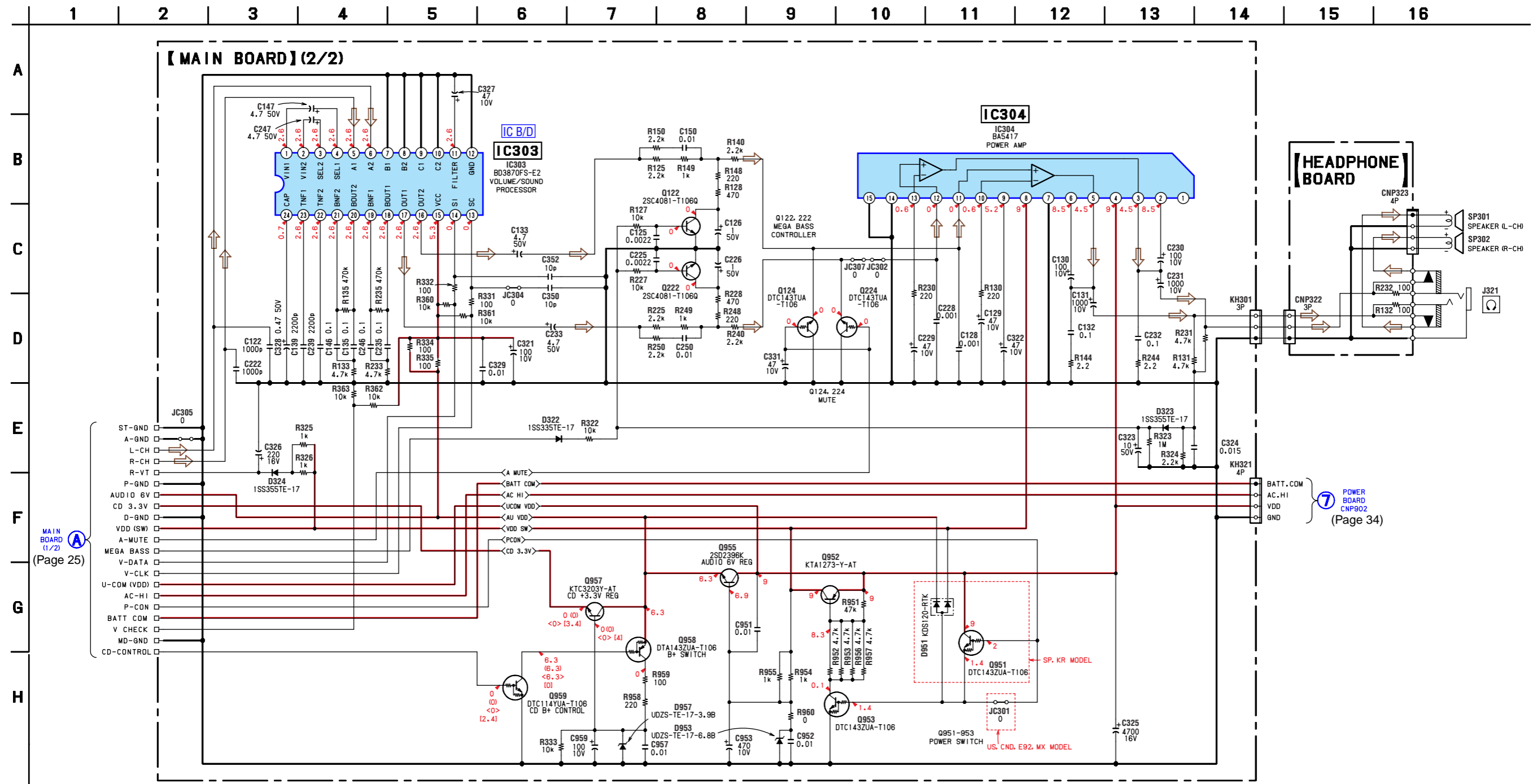
• Semiconductor Location

Ref. No.	Location
D322	E-3
D323	C-6
D324	E-8
D801	F-9
D802	G-6
D804	E-9
D807	F-5
D951	B-8
D953	B-6
D957	E-7
IC303	C-3
IC304	B-4
IC801	D-3
IC802	F-4
IC803	F-3
IC804	E-3
Q122	C-5
Q124	C-4
Q222	C-5
Q224	C-4
Q801	G-6
Q804	G-6
Q806	F-5
Q808	G-8
Q812	E-5
Q813	E-5
Q814	D-4
Q819	G-6
Q951	C-8
Q952	C-8
Q953	C-9
Q955	A-5
Q957	E-8
Q958	E-8
Q959	F-8





6-11. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) — • Refer to page 20 for Common Note on Schematic Diagrams and page 37 for IC Block Diagrams.



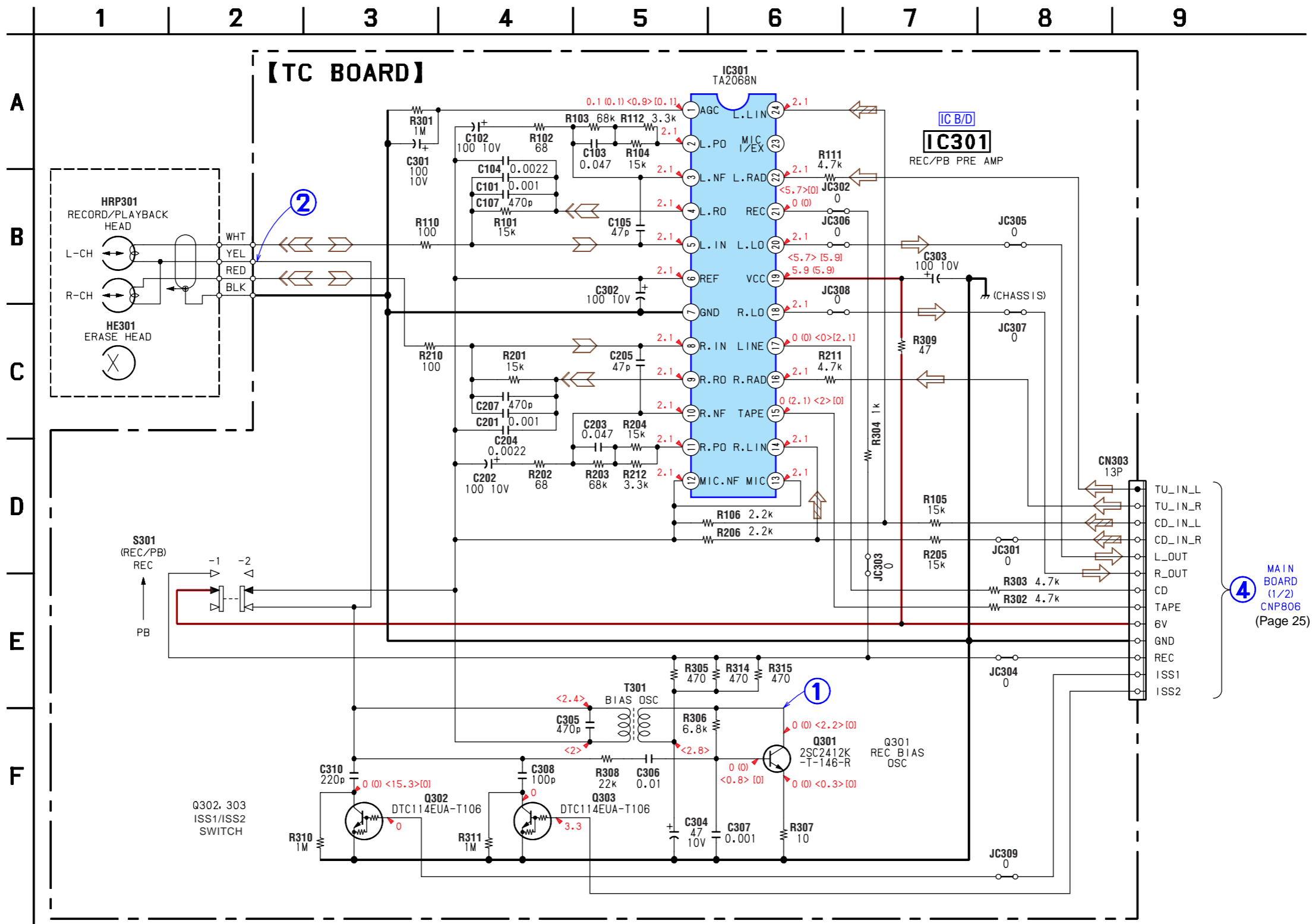
MAIN BOARD (1/2) (Page 25)

POWER BOARD CNP902 (Page 34)

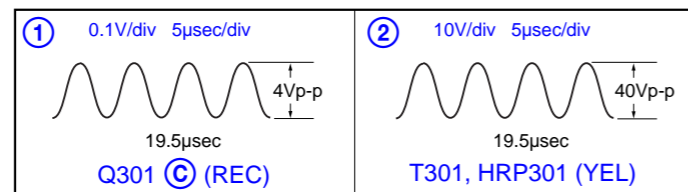
- Voltage is dc with respect to ground under no-signal (detuned) condition.
- no mark : FM
- ( ) : PB
- < > : REC
- [ ] : CD PLAY



6-13. SCHEMATIC DIAGRAM — TC SECTION — • Refer to page 20 for Common Note on Schematic Diagrams and page 37 for IC Block Diagrams.

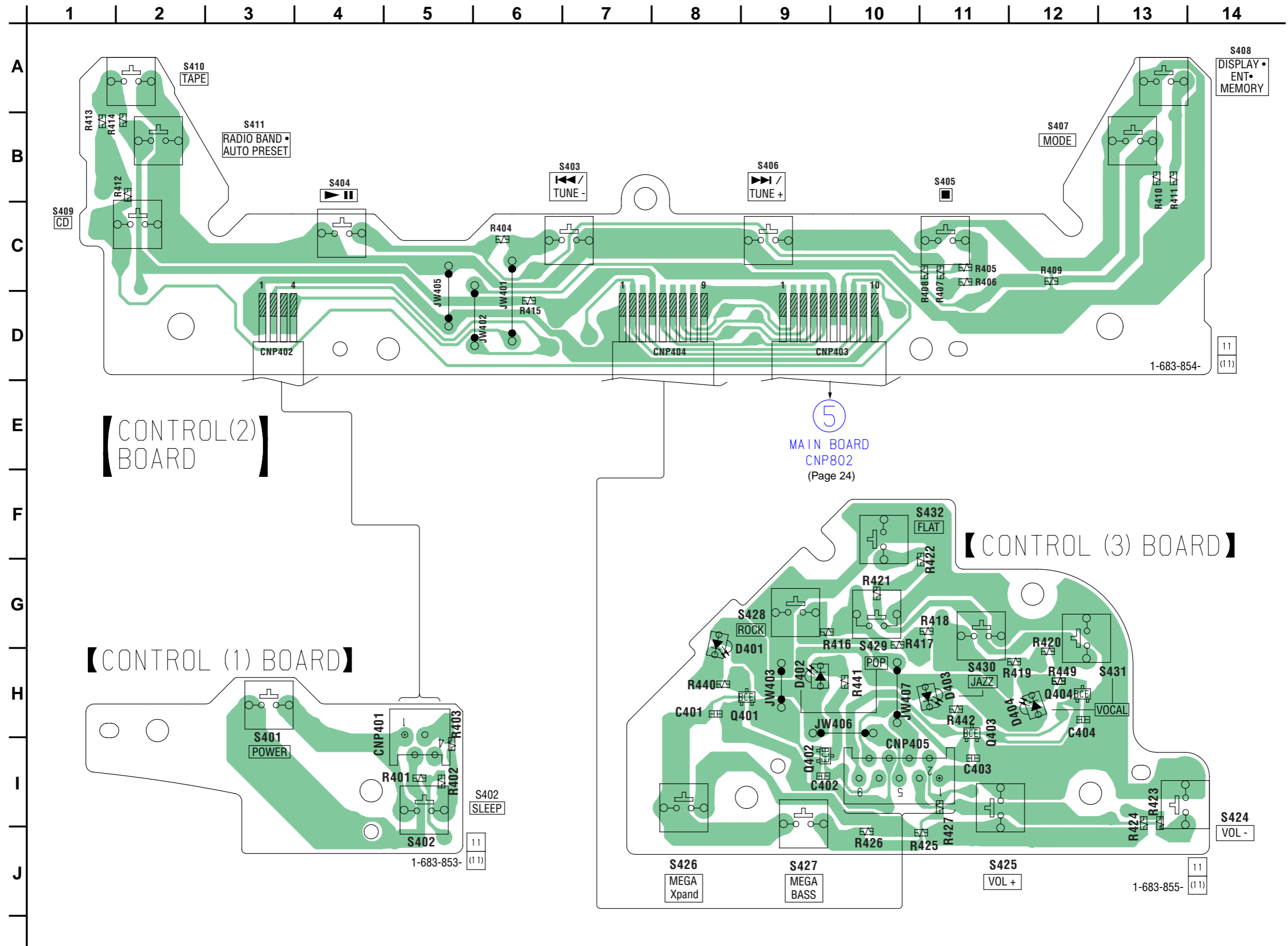


• Waveform



• Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
 no mark : FM  
 ( ) : PB  
 < > : REC  
 [ ] : CD PLAY

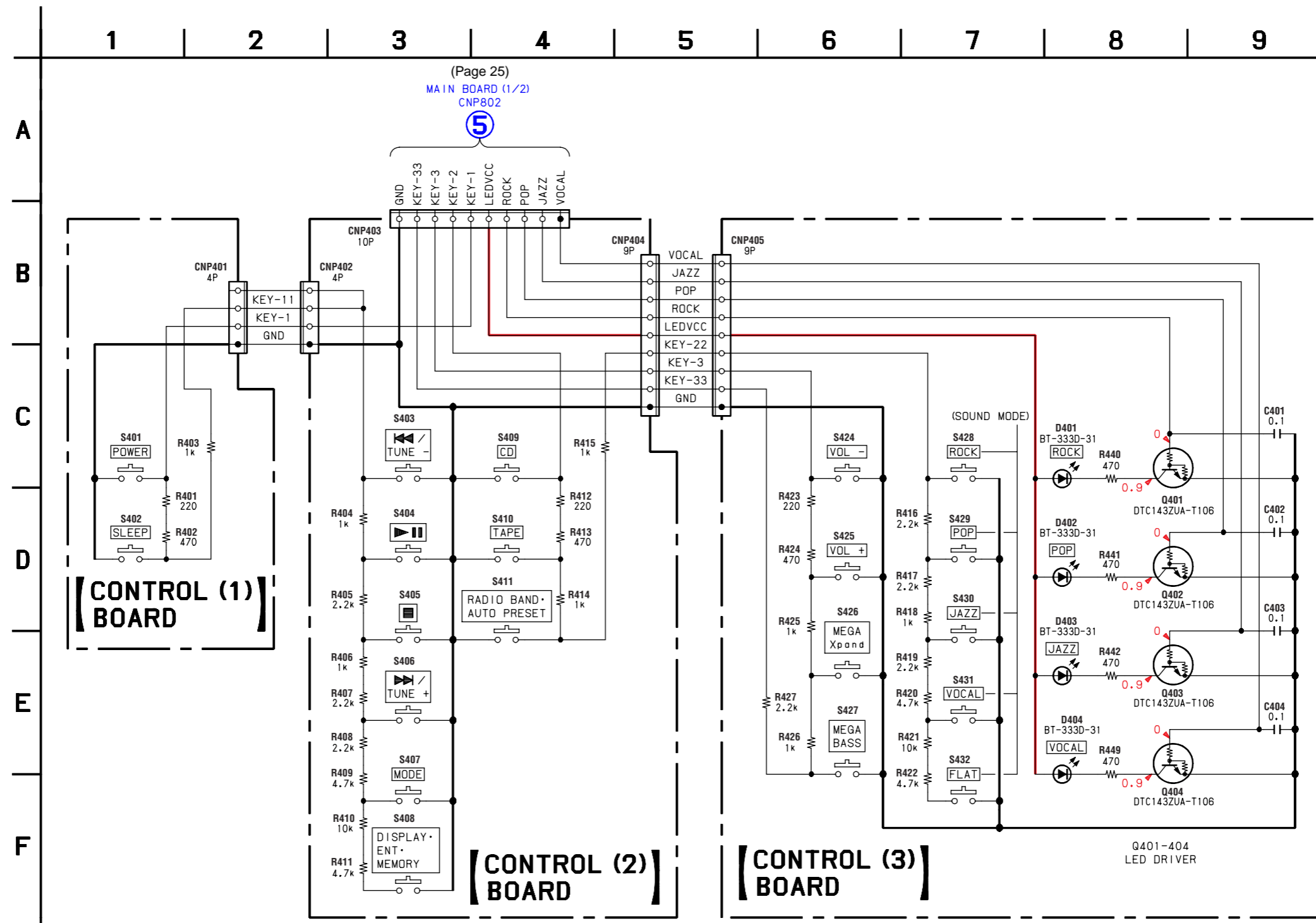
6-14. PRINTED WIRING BOARDS — CONTROL SECTION — • Refer to page 17 for Circuit Boards Location and page 20 for Common Note on Printed Wiring Boards.



• Semiconductor Location

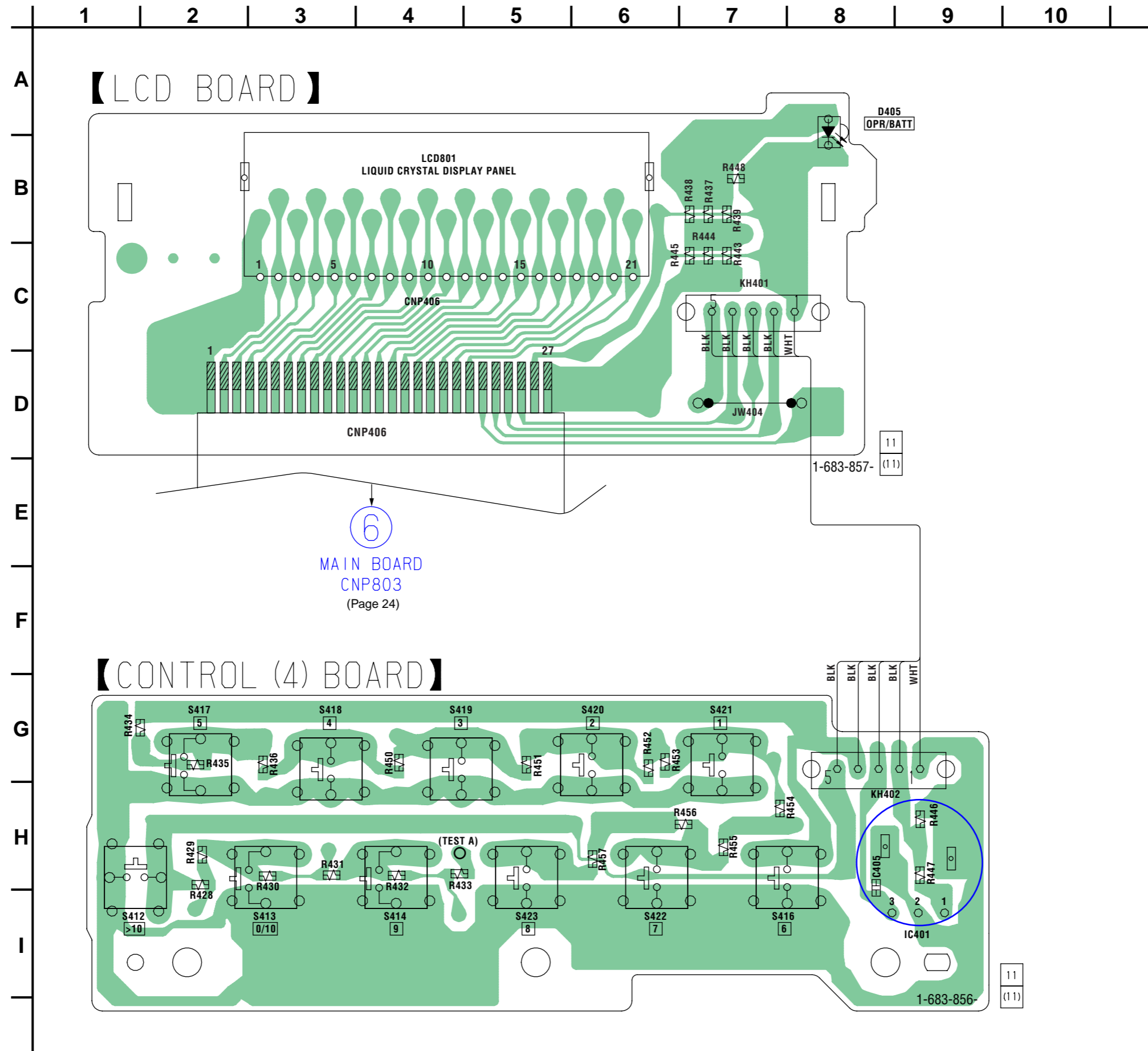
Ref. No.	Location
D401	G-8
D402	H-9
D403	H-11
D404	H-12
Q401	H-9
Q402	I-9
Q403	I-11
Q404	H-12

6-15. SCHEMATIC DIAGRAM — CONTROL SECTION — • Refer to page 20 for Common Note on Schematic Diagrams.



• Voltage is dc with respect to ground under no-signal (detuned) condition.  
no mark : FM

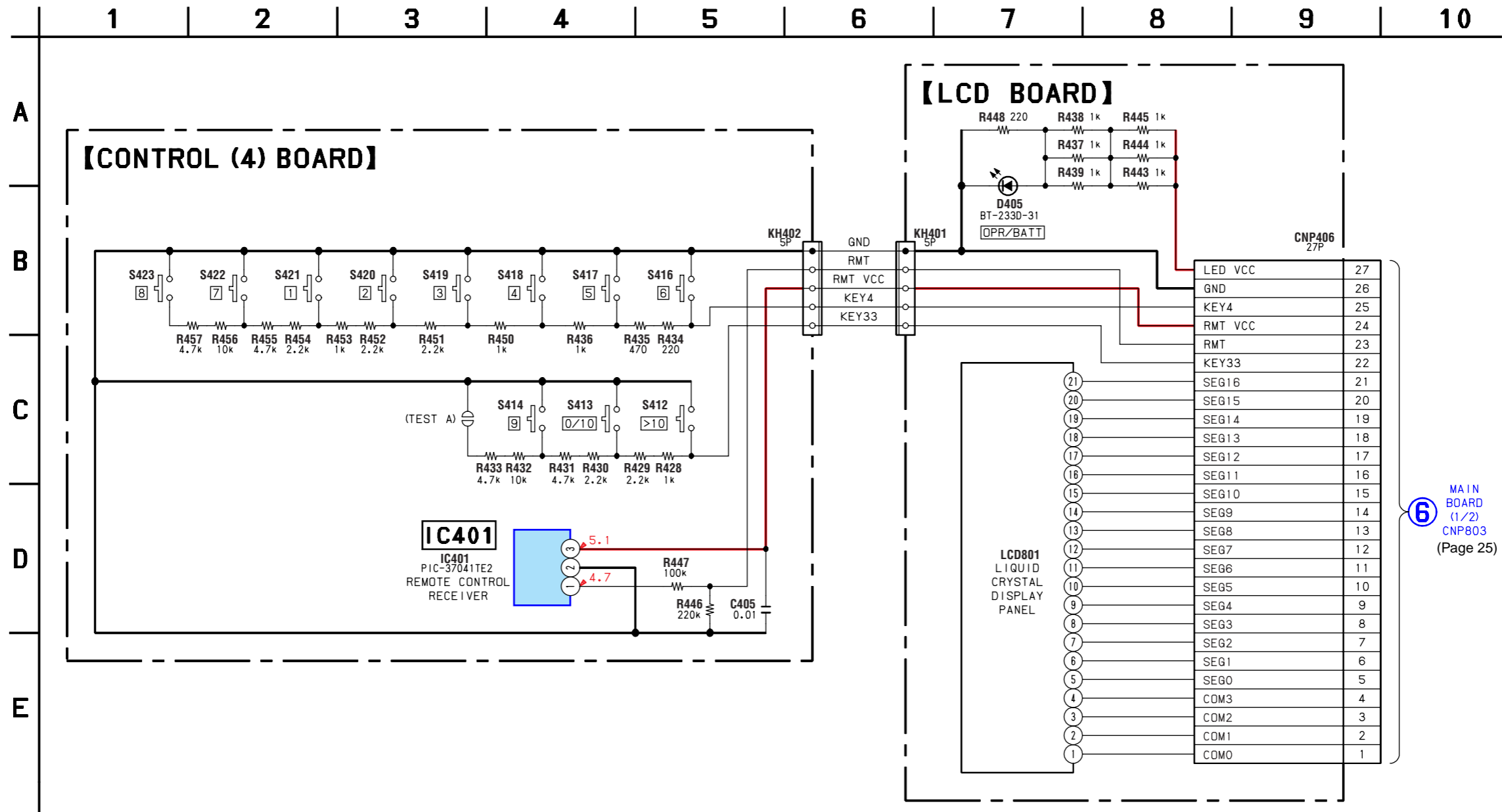
6-16. PRINTED WIRING BOARDS — DISPLAY SECTION — • Refer to page 17 for Circuit Boards Location and page 20 for Common Note on Printed Wiring Boards.



• Semiconductor Location

Ref. No.	Location
D405	A-8
IC401	H-9

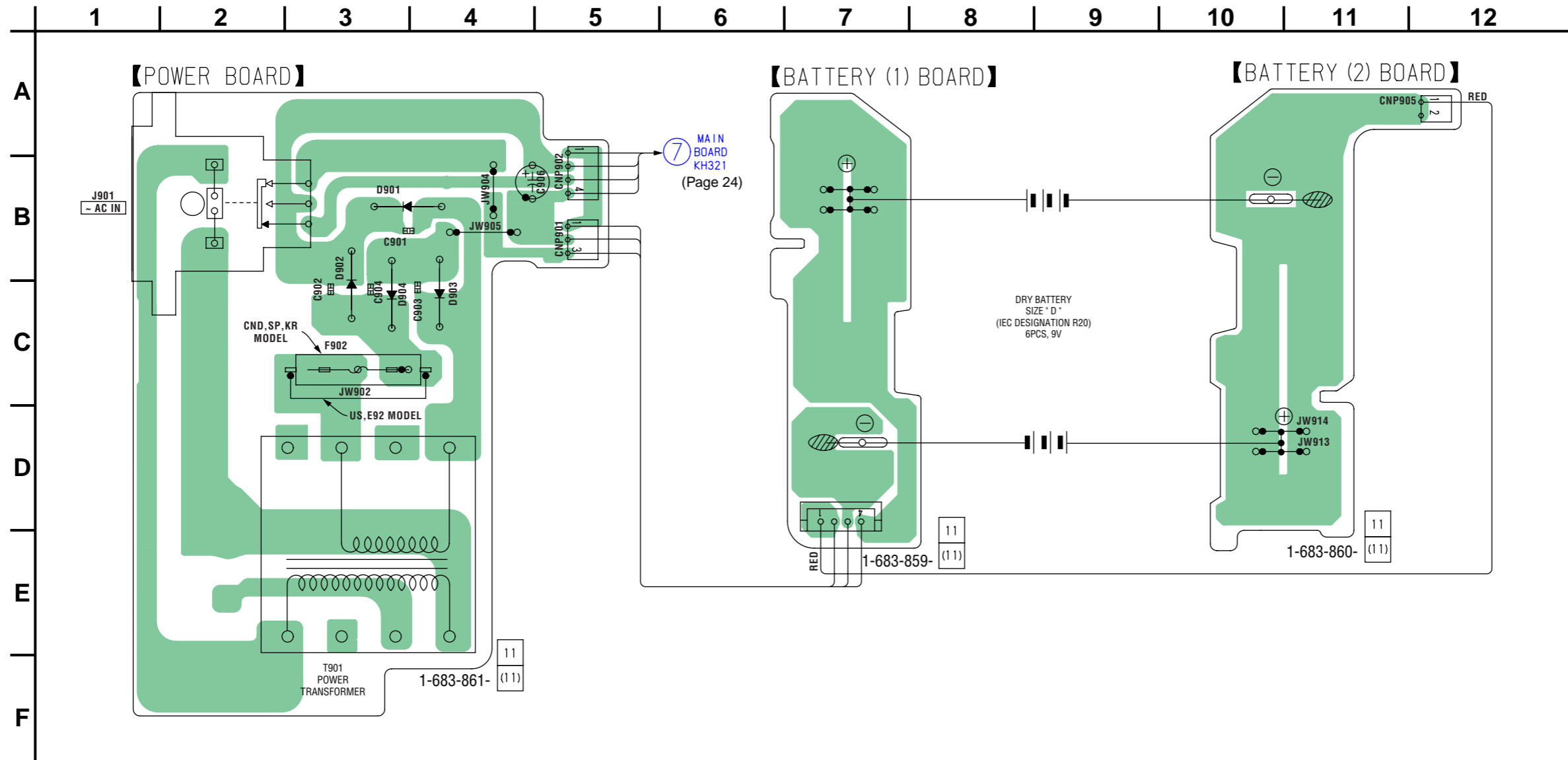
6-17. SCHEMATIC DIAGRAM — DISPLAY SECTION — • Refer to page 20 for Common Note on Schematic Diagrams.



6 MAIN BOARD (1/2) CNP803 (Page 25)

• Voltage is dc with respect to ground under no-signal (detuned) condition.  
no mark : FM

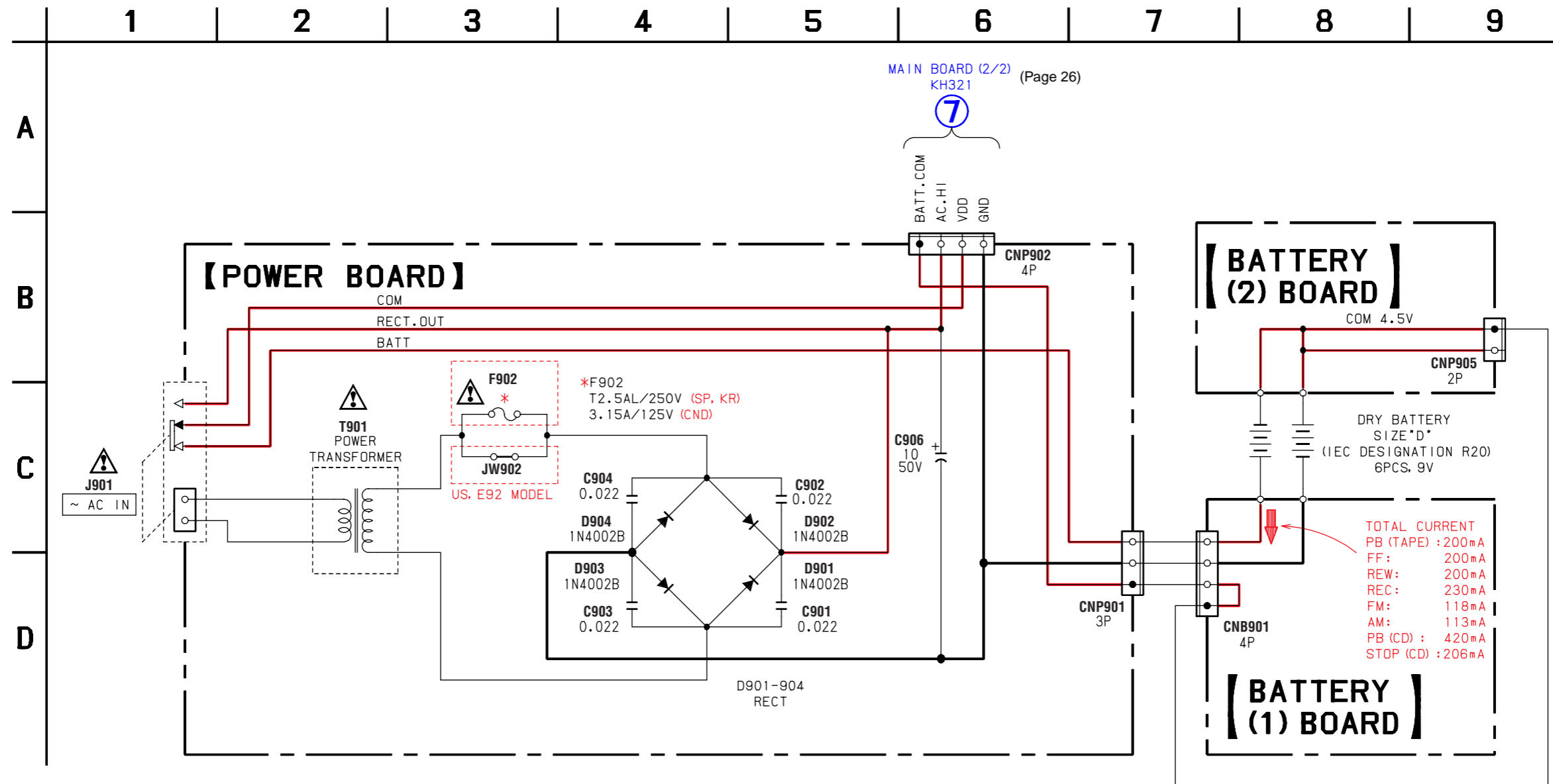
6-18. PRINTED WIRING BOARDS — POWER SUPPLY SECTION — • Refer to page 17 for Circuit Boards Location and page 20 for Common Note on Printed Wiring Boards.



• Semiconductor Location

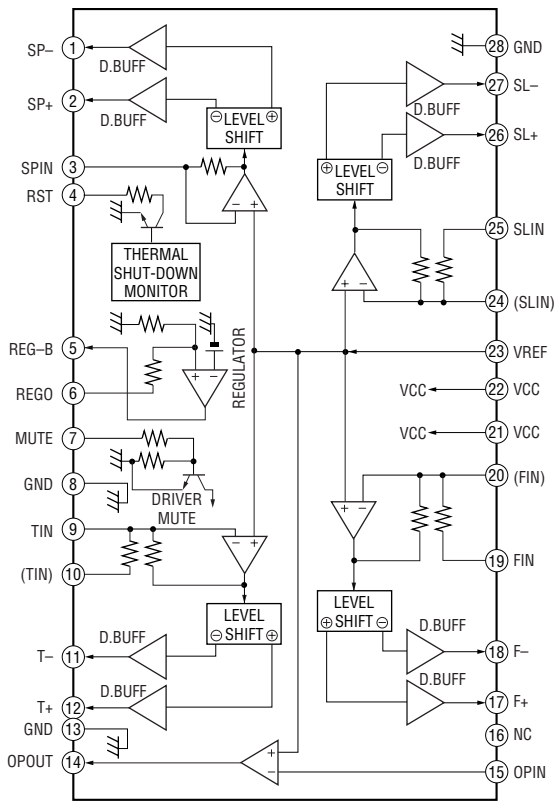
Ref. No.	Location
D901	B-3
D902	B-3
D903	C-4
D904	C-3

6-19. SCHEMATIC DIAGRAM — POWER SUPPLY SECTION — • Refer to page 20 for Common Note on Schematic Diagrams.

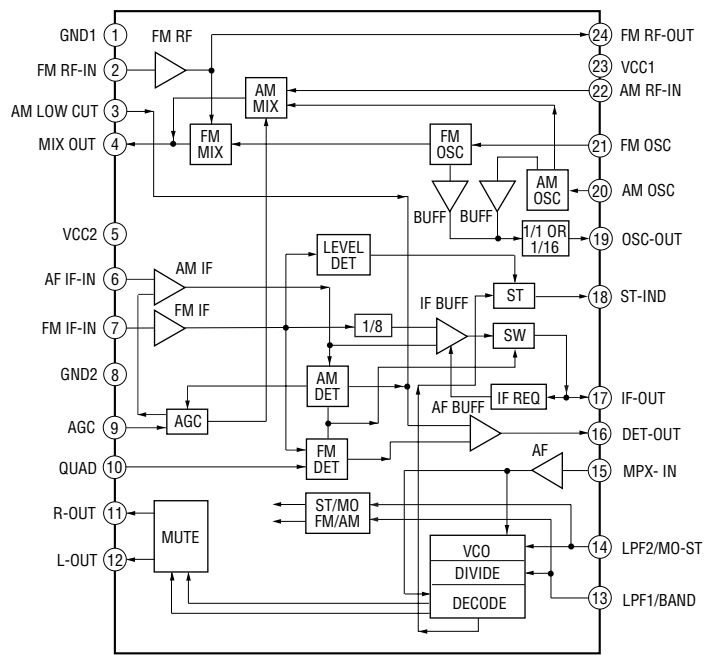




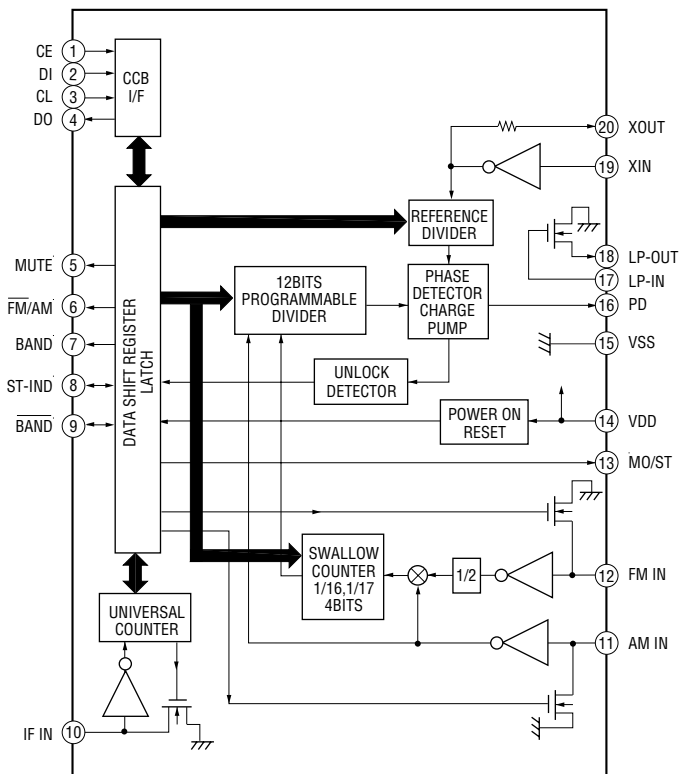
IC702 BA5826FP-E2 (CD Board)



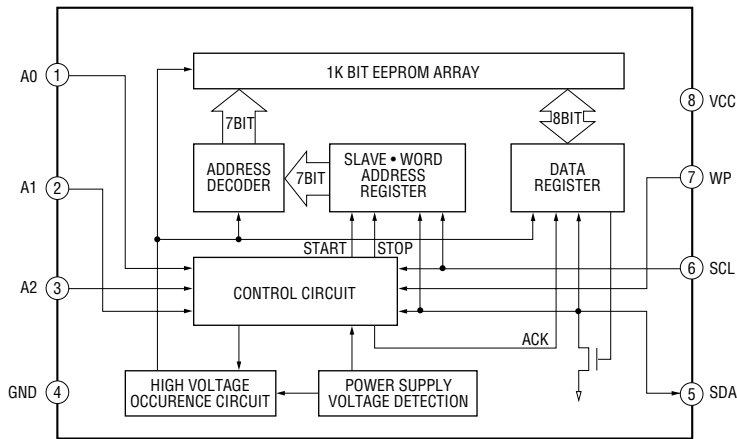
IC1 TA2149BN (TUNER Board)



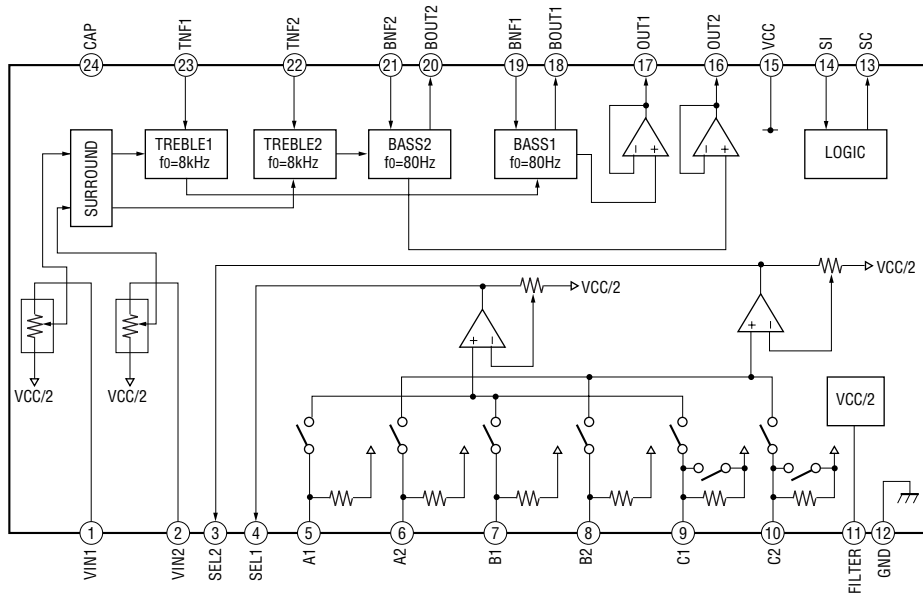
IC2 LC72137M-TLM (TUNER Board)



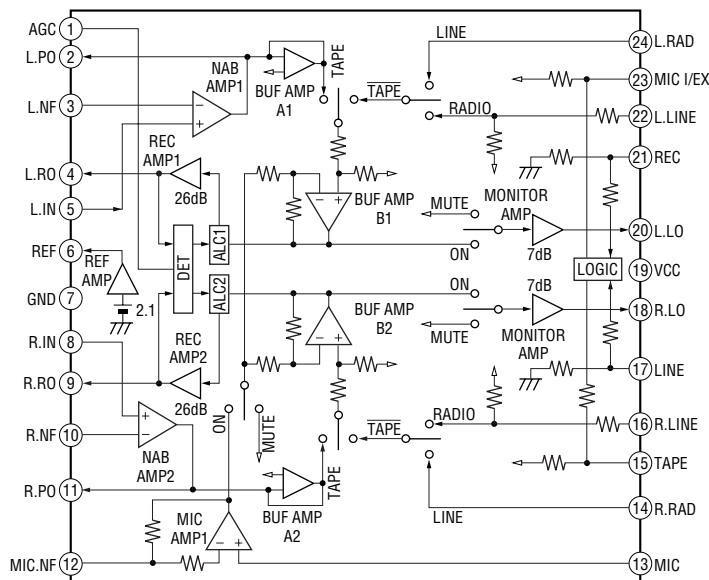
**IC803 CAT24WC02JI-1.8-TE13 (MAIN Board)**



**IC303 BD3870FS-E2 (MAIN Board)**



**IC301 TA2068N (TC Board)**



## SECTION 7 EXPLODED VIEWS

**NOTE:**

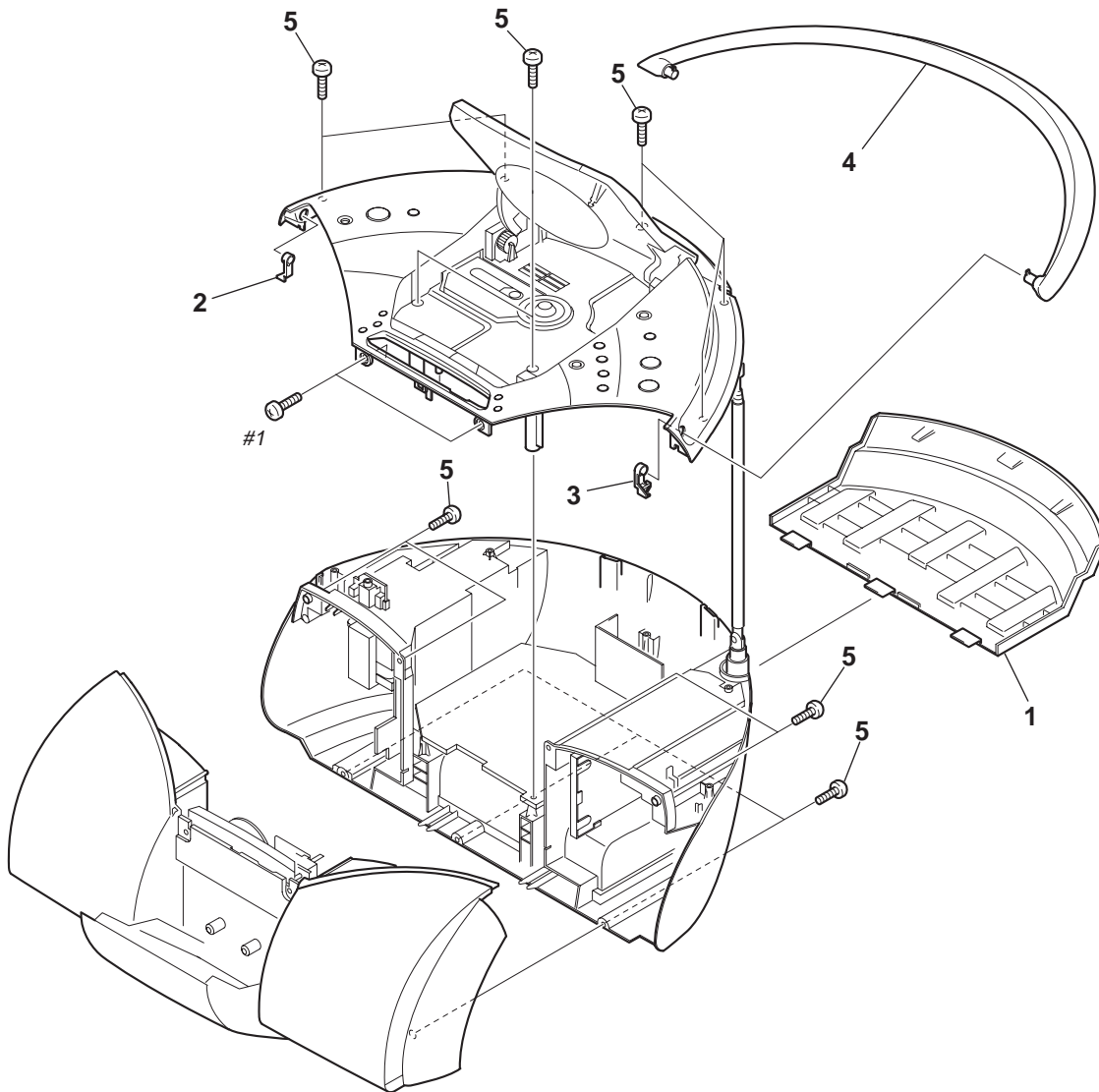
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked “\*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation  
 CND : Canadian model  
 E92 : AC 120V area in E model  
 MX : Mexican model  
 SP : Singapore model  
 KR : Korean model

- Color Indication of Appearance Parts  
 Example :  
 KNOB, BALANCE (WHITE) ... (RED)  
 ↑                    ↑  
 Parts Color    Cabinet's Color
- Accessories are given in the last of this parts list.

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

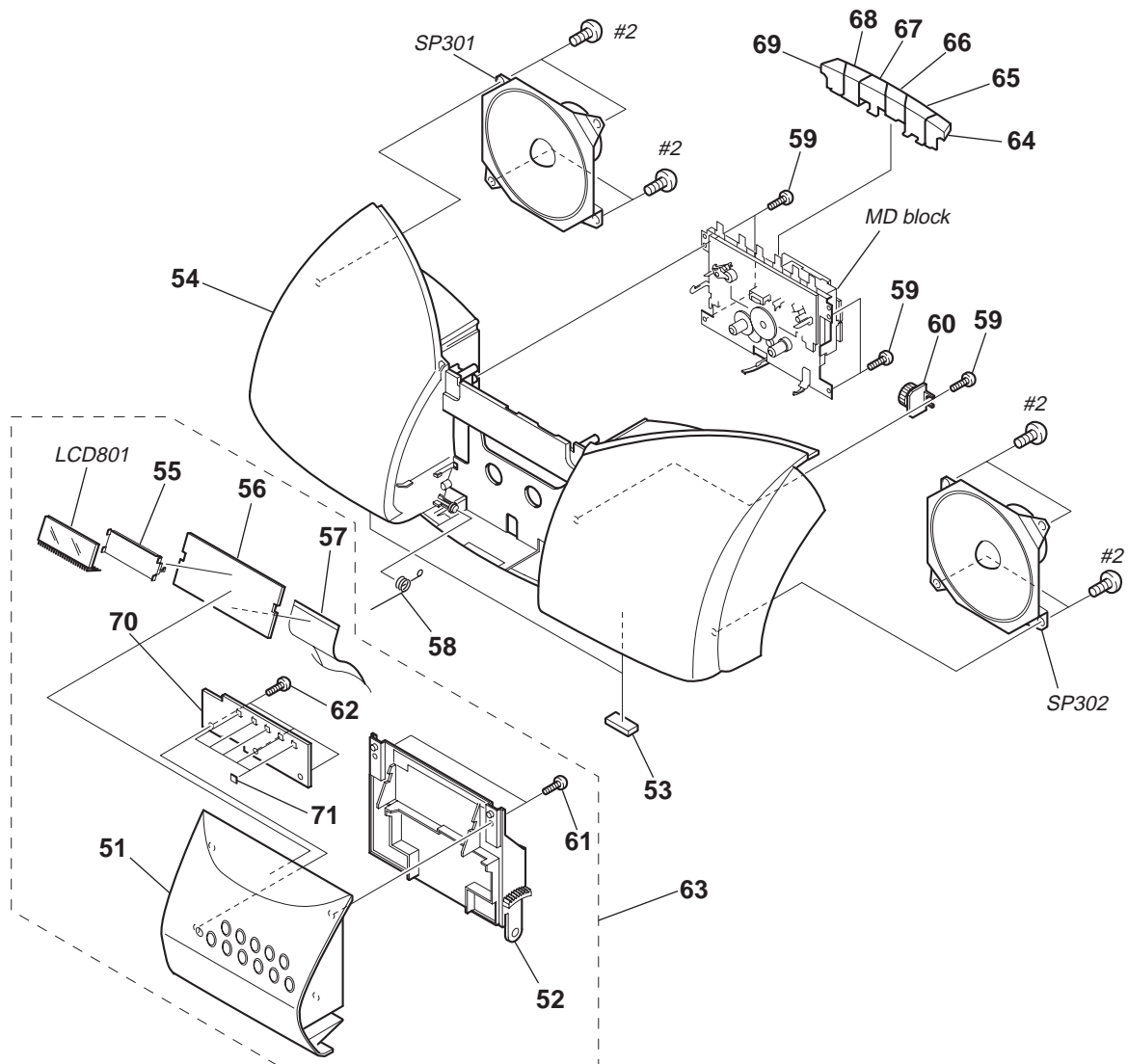
Les composants identifiés par une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

**7-1. MAIN SECTION**



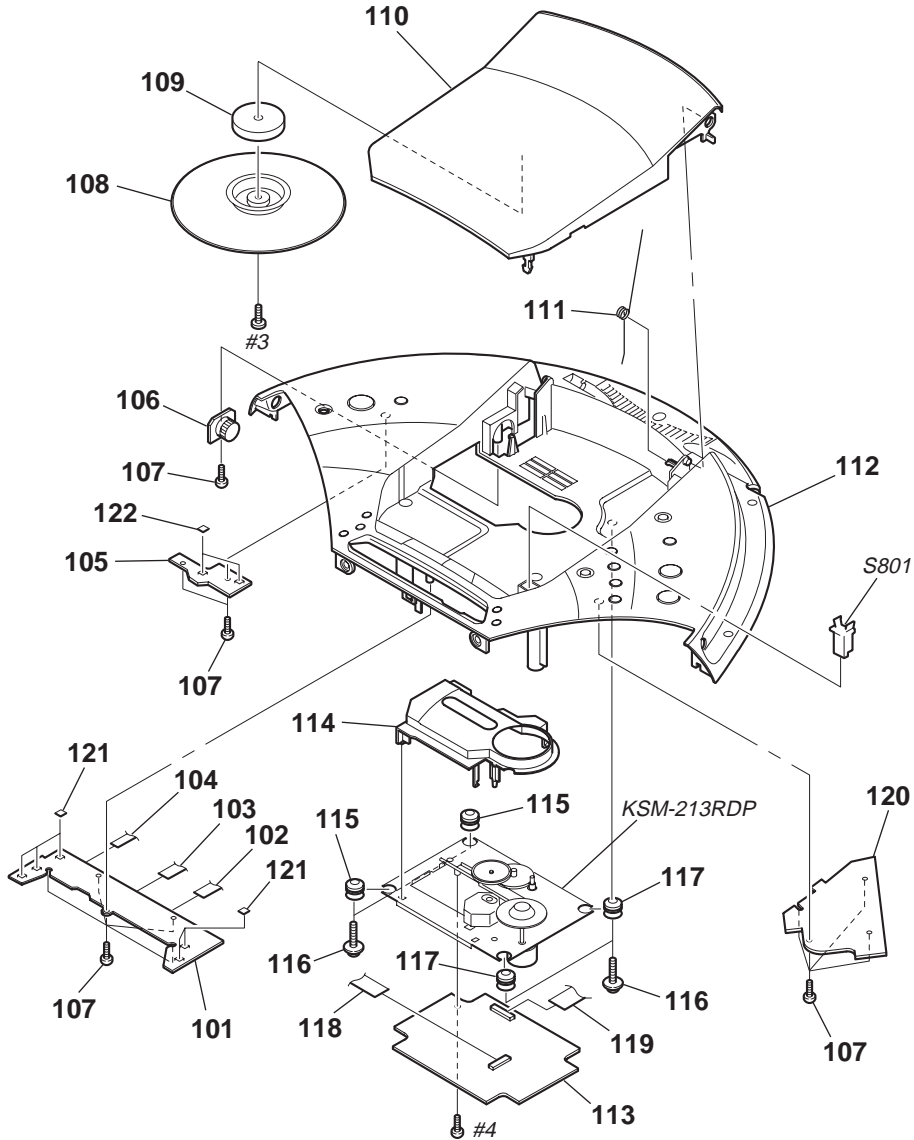
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	3-237-699-11	LID, BATTERY		4	3-237-700-01	HANDLE (S500)	
2	3-237-726-01	PLATE (L) (S500)		4	3-237-700-11	HANDLE (S400)	
2	3-237-726-11	PLATE (L) (S400)		5	4-951-620-81	SCREW (2.6)	
3	3-237-727-01	PLATE (R) (S500)		#1	7-685-535-19	SCREW +BTP 2.6X10 TYPE2 N-S	
3	3-237-727-11	PLATE (R) (S400)					

7-2. CABINET FRONT SECTION



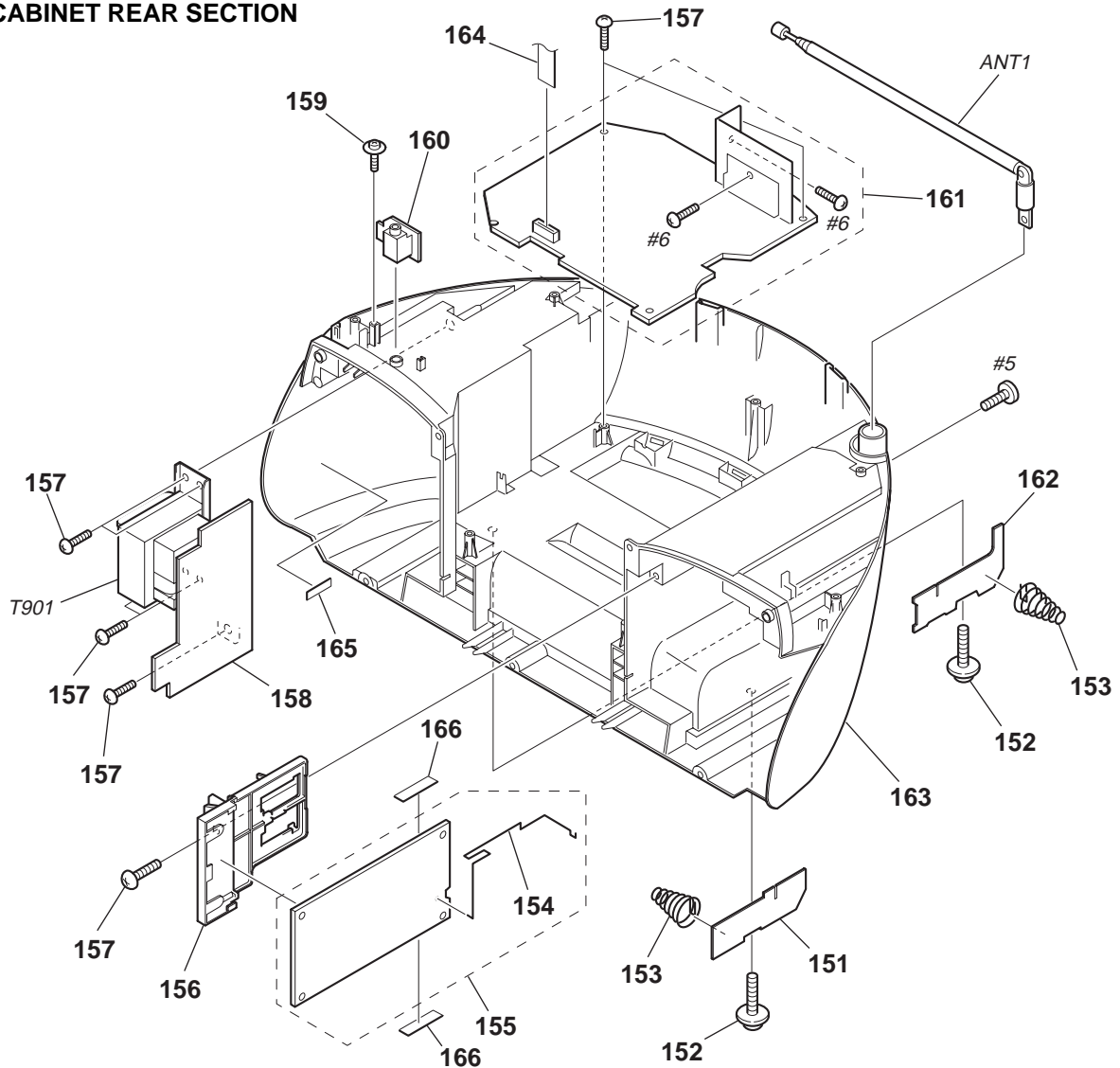
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	X-3381-559-1	DOOR SUB ASSY, CASSETTE		* 63	A-3174-265-A	DOOR ASSY, CASSETTE	
52	3-237-694-31	HOLDER, CASSETTE		64	3-237-707-31	BUTTON, REC	
53	3-040-916-01	FOOT (FRONT), RUBBER		65	3-237-706-31	BUTTON, PLAY	
* 54	X-3381-555-1	FRONT SUB ASSY, CABINET (S500)		66	3-237-704-31	BUTTON, REW	
54	X-3381-810-1	FRONT SUB ASSY, CABINET (S400)		67	3-237-705-31	BUTTON, FF	
55	3-237-717-01	HOLDER, LCD		68	3-237-703-31	BUTTON, S/E	
* 56	1-683-857-11	LCD BOARD		69	3-237-702-31	BUTTON, PAUSE	
57	1-824-037-11	CABLE, FLEXIBLE FLAT 27P (CNP406)		* 70	1-683-856-11	CONTROL (4) BOARD	
58	3-237-725-01	SPRING, CASSETTE		71	3-831-441-11	CUSHION (B)	
59	4-951-620-11	SCREW (2.6X10), +BVTP		LCD801	1-804-550-11	DISPLAY PANEL, LIQUID CRYSTAL	
60	3-922-112-41	DAMPER		SP301	1-825-031-11	SPEAKER (10cm) (L-CH)	
61	4-951-620-31	SCREW (2.6), +BVTP		SP302	1-825-031-11	SPEAKER (10cm) (R-CH)	
62	4-951-620-01	SCREW (2.6X8), +BVTP		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	

7-3. CABINET TOP SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 101	1-683-854-11	CONTROL (2) BOARD		114	3-923-736-01	COVER, CD	
102	1-824-038-11	CABLE, FLEXIBLE FLAT 10P (CNP403)		115	3-931-379-21	RUBBER, VIBRATION PROOF	
103	1-824-039-11	CABLE, FLEXIBLE FLAT 9P (CNP404)		116	3-921-725-11	SCREW (2.6X10), +PWH	
104	1-824-035-11	CABLE, FLEXIBLE FLAT 4P (CNP402)		117	3-931-379-31	RUBBER, VIBRATION PROOF	
* 105	1-683-853-11	CONTROL (1) BOARD		118	1-757-689-11	CABLE, FLEXIBLE FLAT (16 CORE)	
106	3-922-112-41	DAMPER		119	1-824-034-11	CABLE, FLEXIBLE FLAT 14P	
107	4-951-620-01	SCREW (2.6X8), +BVTP		* 120	1-683-855-11	CONTROL (3) BOARD	
108	3-019-395-01	PLATE, CHUCKING		121	3-220-756-01	CUSHION (BUTTON)	
109	1-452-899-11	MAGNET		122	3-831-441-11	CUSHION (B)	
110	3-237-701-71	LID, CD		S801	1-692-960-11	SWITCH, PUSH (1 KEY)	(▲ PUSH OPEN/CLOSE)
111	3-237-723-01	SPRING, CD					
* 112	X-3381-563-1	TOP SUB ASSY, CABINET (S500)		#3	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	
112	X-3381-811-1	TOP SUB ASSY, CABINET (S400)		#4	7-685-853-04	SCREW +BVTT 2X6 (S)	
* 113	A-3178-122-A	CD BOARD, COMPLETE					

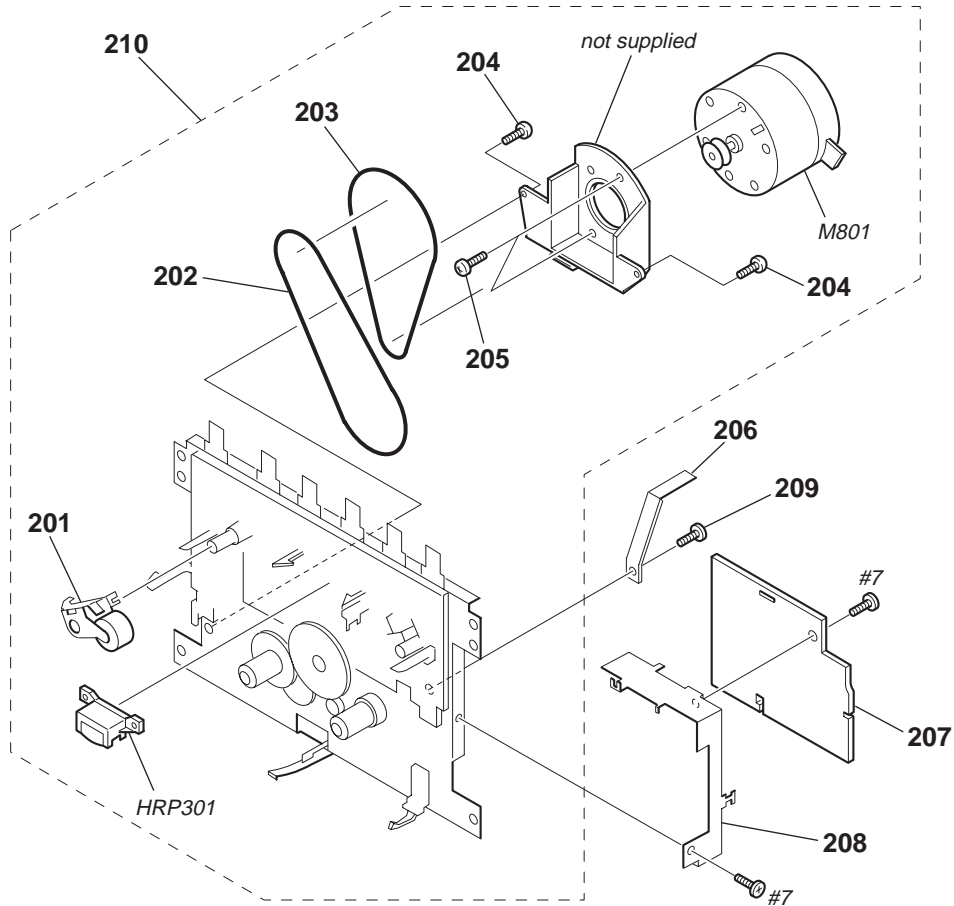
7-4. CABINET REAR SECTION



<p>The components identified by mark <math>\Delta</math> or dotted line with mark <math>\Delta</math> are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque <math>\Delta</math> sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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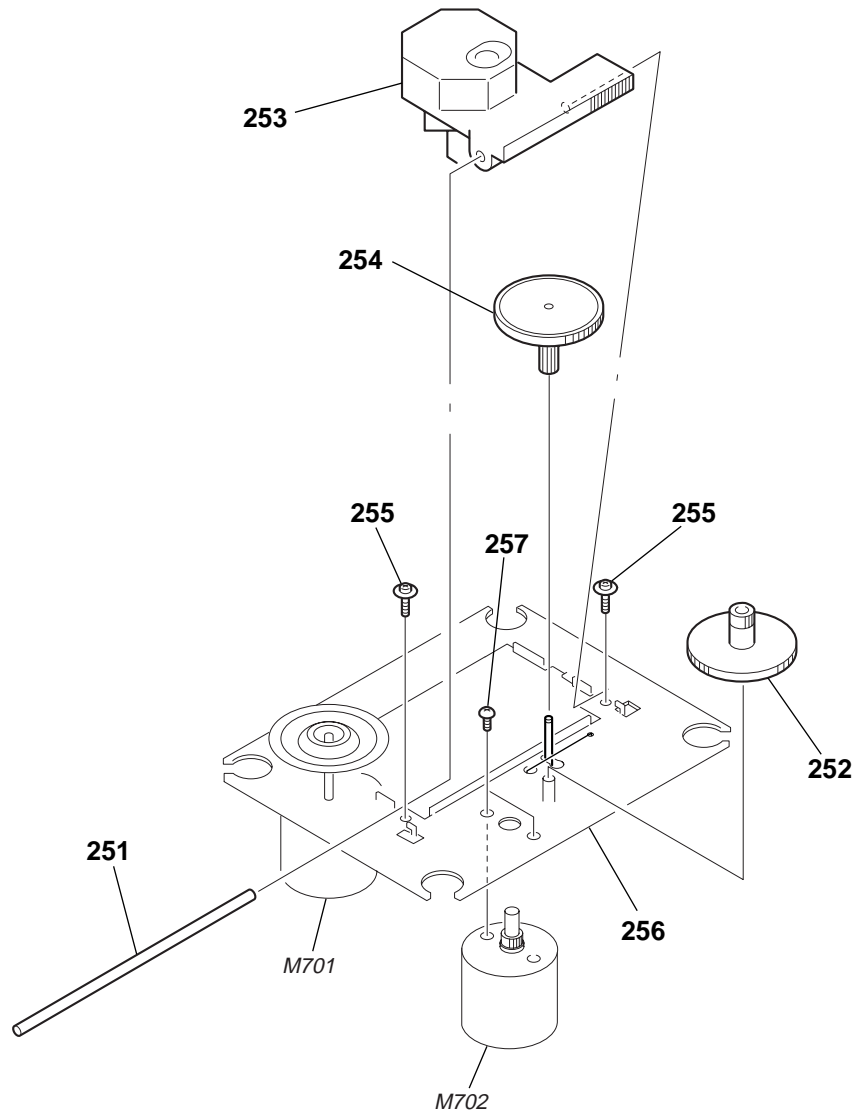
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 151	1-683-859-11	BATTERY (1) BOARD		* 162	1-683-860-11	BATTERY (2) BOARD	
152	4-960-167-01	SCREW (3X8) (DIA.10), +WH		163	3-237-697-31	REAR, CABINET (S500)	
153	3-240-561-01	TERMINAL (-), BATTERY		163	3-237-697-51	REAR, CABINET (CND,E92,MX)	
154	3-237-724-01	TERMINAL, ANTENNA (CNP2)		163	3-240-597-41	REAR, CABINET (SP,KR)	
* 155	A-3323-778-A	TUNER BOARD, COMPLETE (US,CND,E92,MX)		164	1-824-031-11	CABLE, FLEXIBLE FLAT 13P	
* 155	A-3323-815-A	TUNER BOARD, COMPLETE (SP,KR)		* 165	3-703-044-26	LABEL, CAUTION (CND)	
156	3-237-716-01	CHASSIS, TU		166	3-831-441-99	SPACER	
157	4-951-620-11	SCREW (2.6X10), +BVTP		ANT1	1-754-241-11	ANTENNA, TELESCOPIC (FM)	
* 158	1-683-861-11	POWER BOARD		$\Delta$ T901	1-435-917-11	TRANSFORMER, POWER (US,E92,MX)	
159	3-921-725-11	SCREW (2.6X10), +PWH		$\Delta$ T901	1-435-918-11	TRANSFORMER, POWER (SP,KR)	
* 160	1-683-858-11	HEADPHONE BOARD		$\Delta$ T901	1-437-540-11	TRANSFORMER, POWER (CND)	
* 161	A-3178-147-A	MAIN BOARD, COMPLETE (US)		#5	7-682-548-04	SCREW +B 3X8	
* 161	A-3178-445-A	MAIN BOARD, COMPLETE (CND)		#6	7-685-646-79	SCREW, TAPPING +BV 3X8	
* 161	A-3178-512-A	MAIN BOARD, COMPLETE (E92,MX)					
* 161	A-3178-773-A	MAIN BOARD, COMPLETE (SP)					
* 161	A-3323-945-A	MAIN BOARD, COMPLETE (KR)					

7-5. TAPE MECHANISM SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-244-086-01	ARM ASSY, PINCH ROLLER		208	3-237-719-01	CHASSIS, TC	
202	3-244-079-01	BELT (B), SUB		209	3-030-741-01	SCREW (M2X2)	
203	3-244-080-01	BELT (B), MAIN		210	A-3013-956-A	MF-S200	
204	3-244-083-01	SCREW BIND DT M2X6		HRP301	3-244-085-01	HEAD, R/P (REC/PB)	
205	3-244-084-01	SCREW PAN M2.6X4.5		M801	3-244-082-01	MOTOR ASSY (CAPSTAN/REEL)	
206	3-237-718-01	LEVER, REC		#7	7-685-851-04	SCREW +BVTT 2X4 (S)	
* 207	A-3323-806-A	TC BOARD, COMPLETE					

7-6. CD MECHANISM SECTION  
(KSM-213RDP)



<p>The components identified by mark <math>\triangle</math> or dotted line with mark <math>\triangle</math> are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque <math>\triangle</math> 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		256	X-2162-707-1	CHASSIS ASSY (RDP) (RP), MOTOR (SPINDLE) (including M701)	
* 252	2-647-408-02	GEAR (B)		257	3-713-786-51	SCREW (M2X3)	
$\triangle$ 253	8-820-161-02	PICK-UP, OPTICAL KSS-213R/C2RP		M702	X-2162-712-1	GEAR ASSY (R) (RP), MOTOR (SLED)	
* 254	2-169-065-01	GEAR (A)					
255	2-169-388-01	TAPPING (M2), +PWB					

SECTION 8  
ELECTRICAL PARTS LIST

BATTERY (1)

BATTERY (2)

CD

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
- Abbreviation  
CND : Canadian model      E92 : AC 120V area in E model  
MX : Mexican model      KR : Korean model  
SP : Singapore model

- 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 :  $\mu$ , for example:  
uA.. :  $\mu$ A..    uPA.. :  $\mu$ PA..  
uPB.. :  $\mu$ PB..    uPC.. :  $\mu$ PC..    uPD.. :  $\mu$ PD..
- CAPACITORS  
uF :  $\mu$ F
- COILS  
uH :  $\mu$ H

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

Les composants identifiés par une marque  $\Delta$  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
*	1-683-859-11	BATTERY (1) BOARD *****		C735	1-126-916-11	ELECT      1000uF    20%	6.3V
	3-240-561-01	TERMINAL (-), BATTERY *****		C736	1-162-968-11	CERAMIC CHIP    0.0047uF    10%	50V
				C738	1-164-156-11	CERAMIC CHIP    0.1uF	25V
				C739	1-164-156-11	CERAMIC CHIP    0.1uF	25V
				C740	1-126-935-11	ELECT      470uF      20%	10V
*	1-683-860-11	BATTERY (2) BOARD *****		C741	1-164-156-11	CERAMIC CHIP    0.1uF	25V
	3-240-561-01	TERMINAL (-), BATTERY		C742	1-164-156-11	CERAMIC CHIP    0.1uF	25V
		< CONNECTOR >		C743	1-164-156-11	CERAMIC CHIP    0.1uF	25V
* CNP905	1-815-550-11	PIN, CONNECTOR (PC BOARD) 2P *****		C744	1-164-156-11	CERAMIC CHIP    0.1uF	25V
				C745	1-164-156-11	CERAMIC CHIP    0.1uF	25V
*	A-3178-122-A	CD BOARD, COMPLETE *****		C746	1-104-665-11	ELECT      100uF      20%	10V
		< CAPACITOR >		C747	1-104-665-11	ELECT      100uF      20%	10V
C701	1-162-964-11	CERAMIC CHIP    0.001uF    10%	50V	C750	1-104-665-11	ELECT      100uF      20%	10V
C702	1-126-947-11	ELECT      47uF      20%	10V	C751	1-164-156-11	CERAMIC CHIP    0.1uF	25V
C703	1-107-826-11	CERAMIC CHIP    0.1uF      10%	16V	C754	1-162-970-11	CERAMIC CHIP    0.01uF      10%	25V
C704	1-162-919-11	CERAMIC CHIP    22PF      5%	50V	C755	1-162-970-11	CERAMIC CHIP    0.01uF      10%	25V
C705	1-162-968-11	CERAMIC CHIP    0.0047uF    10%	50V			< CONNECTOR >	
C706	1-126-960-11	ELECT      1uF      20%	50V	CNP701	1-779-466-11	CONNECTOR, FFC/FPC 16P	
C707	1-115-156-11	CERAMIC CHIP    1uF	10V	* CNP702	1-784-736-11	CONNECTOR, FFC 14P	
C708	1-162-927-11	CERAMIC CHIP    100PF      5%	50V			< FERRITE BEAD >	
C709	1-164-156-11	CERAMIC CHIP    0.1uF	25V	FB701	1-469-701-21	FERRITE, EMI (SMD)	
C711	1-162-974-11	CERAMIC CHIP    0.01uF	50V			< IC >	
C716	1-162-974-11	CERAMIC CHIP    0.01uF	50V	IC701	6-701-796-01	IC LC78646E-E	
C717	1-163-021-11	CERAMIC CHIP    0.01uF      10%	50V	IC702	6-701-787-11	IC BA5826FP-E2	
C720	1-162-919-11	CERAMIC CHIP    22PF      5%	50V			< JUMPER RESISTOR >	
C721	1-162-919-11	CERAMIC CHIP    22PF      5%	50V	JC701	1-216-864-11	METAL CHIP      0      5%	1/10W
C722	1-162-919-11	CERAMIC CHIP    22PF      5%	50V	JC702	1-216-864-11	METAL CHIP      0      5%	1/10W
C723	1-162-974-11	CERAMIC CHIP    0.01uF	50V	JC703	1-216-864-11	METAL CHIP      0      5%	1/10W
C724	1-162-919-11	CERAMIC CHIP    22PF      5%	50V	JC704	1-216-821-11	METAL CHIP      1K      5%	1/10W
C725	1-162-964-11	CERAMIC CHIP    0.001uF    10%	50V			< FERRITE BEAD >	
C726	1-162-964-11	CERAMIC CHIP    0.001uF    10%	50V	L706	1-414-445-11	FERRITE, EMI (SMD)	
C727	1-162-964-11	CERAMIC CHIP    0.001uF    10%	50V			< TRANSISTOR >	
C728	1-165-176-11	CERAMIC CHIP    0.047uF    10%	16V	Q701	8-729-054-57	TRANSISTOR    KTN2907AS-RTK	
C729	1-125-837-11	CERAMIC CHIP    1uF      10%	6.3V			< RESISTOR >	
C730	1-107-826-11	CERAMIC CHIP    0.1uF      10%	16V	R701	1-216-841-11	METAL CHIP      47K      5%	1/10W
C731	1-165-176-11	CERAMIC CHIP    0.047uF    10%	16V	R702	1-216-835-11	METAL CHIP      15K      5%	1/10W
C732	1-104-665-11	ELECT      100uF      20%	10V				
C733	1-104-665-11	ELECT      100uF      20%	10V				
C734	1-162-968-11	CERAMIC CHIP    0.0047uF    10%	50V				

CD

CONTROL (1)

CONTROL (2)

CONTROL (3)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R703	1-216-835-11	METAL CHIP	15K 5% 1/10W	S402	1-786-050-21	SWITCH, KEYBOARD (SLEEP)	
R704	1-216-835-11	METAL CHIP	15K 5% 1/10W	*****			
R705	1-216-835-11	METAL CHIP	15K 5% 1/10W				
R706	1-216-841-11	METAL CHIP	47K 5% 1/10W	*	1-683-854-11	CONTROL (2) BOARD	*****
R707	1-216-797-11	METAL CHIP	10 5% 1/10W				
R708	1-216-833-11	METAL CHIP	10K 5% 1/10W		1-824-035-11	CABLE, FLEXIBLE FLAT 4P (CNP402)	
R709	1-216-837-11	METAL CHIP	22K 5% 1/10W		1-824-038-11	CABLE, FLEXIBLE FLAT 10P (CNP403)	
R710	1-216-829-11	METAL CHIP	4.7K 5% 1/10W		1-824-039-11	CABLE, FLEXIBLE FLAT 9P (CNP404)	
R711	1-216-815-11	METAL CHIP	330 5% 1/10W				
R712	1-216-809-11	METAL CHIP	100 5% 1/10W			< RESISTOR >	
R714	1-216-811-11	METAL CHIP	150 5% 1/10W	R404	1-216-821-11	METAL CHIP	1K 5% 1/10W
R715	1-216-811-11	METAL CHIP	150 5% 1/10W	R405	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R716	1-216-821-11	METAL CHIP	1K 5% 1/10W	R406	1-216-821-11	METAL CHIP	1K 5% 1/10W
R717	1-216-821-11	METAL CHIP	1K 5% 1/10W	R407	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R718	1-216-821-11	METAL CHIP	1K 5% 1/10W	R408	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R719	1-216-809-11	METAL CHIP	100 5% 1/10W	R409	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R720	1-216-809-11	METAL CHIP	100 5% 1/10W	R410	1-216-833-11	METAL CHIP	10K 5% 1/10W
R721	1-216-821-11	METAL CHIP	1K 5% 1/10W	R411	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R722	1-216-809-11	METAL CHIP	100 5% 1/10W	R412	1-216-813-11	METAL CHIP	220 5% 1/10W
R723	1-216-809-11	METAL CHIP	100 5% 1/10W	R413	1-216-817-11	METAL CHIP	470 5% 1/10W
R724	1-216-841-11	METAL CHIP	47K 5% 1/10W	R414	1-216-821-11	METAL CHIP	1K 5% 1/10W
R725	1-216-819-11	METAL CHIP	680 5% 1/10W	R415	1-216-821-11	METAL CHIP	1K 5% 1/10W
R726	1-216-819-11	METAL CHIP	680 5% 1/10W			< SWITCH >	
R727	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	S403	1-786-050-21	SWITCH, KEYBOARD (◀◀/TUNE -)	
R728	1-216-833-11	METAL CHIP	10K 5% 1/10W	S404	1-786-050-21	SWITCH, KEYBOARD (▶▶)	
R729	1-216-813-11	METAL CHIP	220 5% 1/10W	S405	1-786-050-21	SWITCH, KEYBOARD (■)	
R730	1-216-821-11	METAL CHIP	1K 5% 1/10W	S406	1-786-050-21	SWITCH, KEYBOARD (▶▶/TUNE +)	
R731	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	S407	1-786-050-21	SWITCH, KEYBOARD (MODE)	
R732	1-216-841-11	METAL CHIP	47K 5% 1/10W				
R741	1-218-867-11	RES-CHIP	6.8K 5% 1/10W	S408	1-786-050-21	SWITCH, KEYBOARD (DISPLAY•ENT•MEMORY)	
R743	1-218-867-11	RES-CHIP	6.8K 5% 1/10W	S409	1-786-050-21	SWITCH, KEYBOARD (CD)	
R744	1-216-845-11	METAL CHIP	100K 5% 1/10W	S410	1-786-050-21	SWITCH, KEYBOARD (TAPE)	
		< SWITCH >		S411	1-786-050-21	SWITCH, KEYBOARD (RADIO BAND•	AUTO PRESET)
S701	1-571-936-11	SWITCH, LEAF (LIMIT)		*****			
		< VIBRATOR >		*	1-683-855-11	CONTROL (3) BOARD	*****
X701	1-781-801-21	VIBRATOR, CERAMIC (16.93MHz)			3-831-441-11	CUSHION (B)	
*****							
*	1-683-853-11	CONTROL (1) BOARD	*****			< CAPACITOR >	
	3-831-441-11	CUSHION (B)		C401	1-164-156-11	CERAMIC CHIP	0.1uF 25V
		< CONNECTOR >		C402	1-164-156-11	CERAMIC CHIP	0.1uF 25V
CNP401	1-784-726-11	CONNECTOR, FFC 4P		C403	1-164-156-11	CERAMIC CHIP	0.1uF 25V
		< RESISTOR >		C404	1-164-156-11	CERAMIC CHIP	0.1uF 25V
						< CONNECTOR >	
R401	1-216-813-11	METAL CHIP	220 5% 1/10W	CNP405	1-784-731-11	CONNECTOR, FFC 9P	
R402	1-216-817-11	METAL CHIP	470 5% 1/10W			< DIODE >	
R403	1-216-821-11	METAL CHIP	1K 5% 1/10W	D401	6-500-199-01	LED BT-333D-31 (ROCK)	
		< SWITCH >		D402	6-500-199-01	LED BT-333D-31 (POP)	
S401	1-786-050-21	SWITCH, KEYBOARD (POWER)		D403	6-500-199-01	LED BT-333D-31 (JAZZ)	
				D404	6-500-199-01	LED BT-333D-31 (VOCAL)	

CFD-S400/S500

**CONTROL (3)**      **CONTROL (4)**      **HEADPHONE**      **LCD**

Ref. No.	Part No.	Description	Remark
< TRANSISTOR >			
Q401	8-729-029-13	TRANSISTOR DTC143ZUA-T106	
Q402	8-729-029-13	TRANSISTOR DTC143ZUA-T106	
Q403	8-729-029-13	TRANSISTOR DTC143ZUA-T106	
Q404	8-729-029-13	TRANSISTOR DTC143ZUA-T106	
< RESISTOR >			
R416	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R417	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R418	1-216-821-11	METAL CHIP 1K	5% 1/10W
R419	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R420	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
R421	1-216-833-11	METAL CHIP 10K	5% 1/10W
R422	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
R423	1-216-813-11	METAL CHIP 220	5% 1/10W
R424	1-216-817-11	METAL CHIP 470	5% 1/10W
R425	1-216-821-11	METAL CHIP 1K	5% 1/10W
R426	1-216-821-11	METAL CHIP 1K	5% 1/10W
R427	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R440	1-216-817-11	METAL CHIP 470	5% 1/10W
R441	1-216-817-11	METAL CHIP 470	5% 1/10W
R442	1-216-817-11	METAL CHIP 470	5% 1/10W
R449	1-216-817-11	METAL CHIP 470	5% 1/10W
< SWITCH >			
S424	1-786-050-21	SWITCH, KEYBOARD (VOL -)	
S425	1-786-050-21	SWITCH, KEYBOARD (VOL +)	
S426	1-786-050-21	SWITCH, KEYBOARD (MEGA Xpand)	
S427	1-786-050-21	SWITCH, KEYBOARD (MEGA BASS)	
S428	1-786-050-21	SWITCH, KEYBOARD (ROCK (SOUND MODE))	
S429	1-786-050-21	SWITCH, KEYBOARD (POP (SOUND MODE))	
S430	1-786-050-21	SWITCH, KEYBOARD (JAZZ (SOUND MODE))	
S431	1-786-050-21	SWITCH, KEYBOARD (VOCAL (SOUND MODE))	
S432	1-786-050-21	SWITCH, KEYBOARD (FLAT (SOUND MODE))	
*****			
*	1-683-856-11	CONTROL (4) BOARD	*****
< CAPACITOR >			
C405	1-162-974-11	CERAMIC CHIP 0.01uF	50V
< IC >			
IC401	6-600-070-01	IC PIC-37041TE2	
< CABLE HOLDER >			
KH402	1-824-030-11	HOLDER, CABLE 5P	
< RESISTOR >			
R428	1-216-821-11	METAL CHIP 1K	5% 1/10W
R429	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R430	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R431	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
R432	1-216-833-11	METAL CHIP 10K	5% 1/10W

Ref. No.	Part No.	Description	Remark
R433	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
R434	1-216-813-11	METAL CHIP 220	5% 1/10W
R435	1-216-817-11	METAL CHIP 470	5% 1/10W
R436	1-216-821-11	METAL CHIP 1K	5% 1/10W
R446	1-216-849-11	METAL CHIP 220K	5% 1/10W
R447	1-216-845-11	METAL CHIP 100K	5% 1/10W
R450	1-216-821-11	METAL CHIP 1K	5% 1/10W
R451	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R452	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R453	1-216-821-11	METAL CHIP 1K	5% 1/10W
R454	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R455	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
R456	1-216-833-11	METAL CHIP 10K	5% 1/10W
R457	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
< SWITCH >			
S412	1-786-050-21	SWITCH, KEYBOARD (>10)	
S413	1-786-050-21	SWITCH, KEYBOARD (0/10)	
S414	1-786-050-21	SWITCH, KEYBOARD (9)	
S416	1-786-050-21	SWITCH, KEYBOARD (6)	
S417	1-786-050-21	SWITCH, KEYBOARD (5)	
S418	1-786-050-21	SWITCH, KEYBOARD (4)	
S419	1-786-050-21	SWITCH, KEYBOARD (3)	
S420	1-786-050-21	SWITCH, KEYBOARD (2)	
S421	1-786-050-21	SWITCH, KEYBOARD (1)	
S422	1-786-050-21	SWITCH, KEYBOARD (7)	
S423	1-786-050-21	SWITCH, KEYBOARD (8)	
*****			
*	1-683-858-11	HEADPHONE BOARD	*****
< CONNECTOR >			
* CNP322	1-815-444-11	PIN, CONNECTOR 3P	
CNP323	1-815-445-11	PIN, CONNECTOR 4P	
< JACK >			
J321	1-815-325-11	JACK (□)	
< RESISTOR >			
R132	1-216-809-11	METAL CHIP 100	5% 1/10W
R232	1-216-809-11	METAL CHIP 100	5% 1/10W
*****			
*	1-683-857-11	LCD BOARD	*****
1-824-037-11	CABLE, FLEXIBLE FLAT 27P (CNP406)		
3-237-717-01	HOLDER, LCD		
< DIODE >			
D405	6-500-198-01	LED BT-233D-31 (OPR/BATT)	
< CABLE HOLDER >			
KH401	1-824-030-11	HOLDER, CABLE 5P	

LCD

MAIN

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
		< LIQUID CRYSTAL DISPLAY >											
LCD801	1-804-550-11	DISPLAY PANEL, LIQUID CRYSTAL					C271	1-126-964-11	ELECT	10uF	20%	50V	
		< RESISTOR >					C321	1-104-665-11	ELECT	100uF	20%	10V	
R437	1-216-821-11	METAL CHIP	1K	5%	1/10W	C322	1-126-947-11	ELECT	47uF	20%	10V		
R438	1-216-821-11	METAL CHIP	1K	5%	1/10W	C323	1-126-964-11	ELECT	10uF	20%	50V		
R439	1-216-821-11	METAL CHIP	1K	5%	1/10W	C324	1-162-245-11	CERAMIC CHIP	0.015uF	10%	25V		
R443	1-216-821-11	METAL CHIP	1K	5%	1/10W	C325	1-126-937-11	ELECT	4700uF	20%	16V		
R444	1-216-821-11	METAL CHIP	1K	5%	1/10W	C326	1-126-934-11	ELECT	220uF	20%	16V		
R445	1-216-821-11	METAL CHIP	1K	5%	1/10W	C327	1-126-947-11	ELECT	47uF	20%	10V		
R448	1-216-813-11	METAL CHIP	220	5%	1/10W	C328	1-126-959-11	ELECT	0.47uF	20%	50V		
		*****					C329	1-162-974-11	CERAMIC CHIP	0.01uF		50V	
*	A-3178-147-A	MAIN BOARD, COMPLETE (US)					C331	1-126-947-11	ELECT	47uF	20%	10V	
*	A-3178-445-A	MAIN BOARD, COMPLETE (CND)					C350	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V	
*	A-3178-512-A	MAIN BOARD, COMPLETE (E92,MX)					C352	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V	
*	A-3178-773-A	MAIN BOARD, COMPLETE (SP)					C800	1-164-156-11	CERAMIC CHIP	0.1uF		25V	
*	A-3323-945-A	MAIN BOARD, COMPLETE (KR)					C801	1-162-974-11	CERAMIC CHIP	0.01uF		50V	
		*****					C802	1-104-665-11	ELECT	100uF	20%	10V	
	7-685-646-79	SCREW, TAPPING +BV 3X8					C803	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
		< CAPACITOR >					C804	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V	
C106	1-126-960-11	ELECT	1uF	20%	50V	C805	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V		
C122	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C806	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V		
C125	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	C807	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		
C126	1-126-960-11	ELECT	1uF	20%	50V	C808	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		
C128	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C809	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		
C129	1-126-947-11	ELECT	47uF	20%	10V	C810	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		
C130	1-104-665-11	ELECT	100uF	20%	10V	C811	1-164-156-11	CERAMIC CHIP	0.1uF		25V		
C131	1-126-926-11	ELECT	1000uF	20%	10V	C812	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		
C132	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C813	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		
C133	1-126-963-11	ELECT	4.7uF	20%	50V	C814	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V		
C135	1-164-156-11	CERAMIC CHIP	0.1uF		25V	C815	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V		
C139	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	C816	1-162-919-11	CERAMIC CHIP	22PF	5%	50V		
C146	1-164-156-11	CERAMIC CHIP	0.1uF		25V	C817	1-162-919-11	CERAMIC CHIP	22PF	5%	50V		
C147	1-126-963-11	ELECT	4.7uF	20%	50V	C818	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		
C148	1-115-156-11	CERAMIC CHIP	1uF		10V	C819	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		
C150	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C820	1-162-974-11	CERAMIC CHIP	0.01uF		50V		
C171	1-126-964-11	ELECT	10uF	20%	50V	C821	1-115-156-11	CERAMIC CHIP	1uF		10V		
C206	1-126-960-11	ELECT	1uF	20%	50V	C822	1-126-934-11	ELECT	220uF	20%	10V		
C222	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C824	1-115-156-11	CERAMIC CHIP	1uF		10V		
C225	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	C825	1-126-964-11	ELECT	10uF	20%	50V		
C226	1-126-960-11	ELECT	1uF	20%	50V	C830	1-162-974-11	CERAMIC CHIP	0.01uF		50V		
C228	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C831	1-162-974-11	CERAMIC CHIP	0.01uF		50V		
C229	1-126-947-11	ELECT	47uF	20%	10V	C832	1-162-974-11	CERAMIC CHIP	0.01uF		50V		
C230	1-104-665-11	ELECT	100uF	20%	10V	C839	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		
C231	1-126-926-11	ELECT	1000uF	20%	10V	C951	1-162-974-11	CERAMIC CHIP	0.01uF		50V		
C232	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C952	1-162-974-11	CERAMIC CHIP	0.01uF		50V		
C233	1-126-963-11	ELECT	4.7uF	20%	50V	C953	1-126-935-11	ELECT	470uF	20%	10V		
C235	1-164-156-11	CERAMIC CHIP	0.1uF		25V	C957	1-162-974-11	CERAMIC CHIP	0.01uF		50V		
C239	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	C959	1-104-665-11	ELECT	100uF	20%	10V		
C246	1-164-156-11	CERAMIC CHIP	0.1uF		25V	C960	1-164-156-11	CERAMIC CHIP	0.1uF		25V		
C247	1-126-963-11	ELECT	4.7uF	20%	50V			< CONNECTOR >					
C248	1-115-156-11	CERAMIC CHIP	1uF		10V	CNP302	1-815-445-11	PIN, CONNECTOR 4P					
C250	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	CNP802	1-695-371-31	CONNECTOR, FFC 10P					
						CNP803	1-784-788-11	CONNECTOR, FFC 27P					
						CNP804	1-784-775-11	CONNECTOR, FFC 14P					
						CNP806	1-784-774-11	CONNECTOR, FFC 13P					

# CFD-S400/S500

## MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< DIODE >							
D322	8-719-988-61	DIODE 1SS355TE-17		Q951	8-729-029-13	TRANSISTOR DTC143ZUA-T106 (SP,KR)	
D323	8-719-988-61	DIODE 1SS355TE-17		Q952	8-729-040-76	TRANSISTOR KTA1273-Y-AT	
D324	8-719-988-61	DIODE 1SS355TE-17		Q953	8-729-029-13	TRANSISTOR DTC143ZUA-T106	
D801	8-719-069-54	DIODE UDZS-TE-17-5.1B		Q955	8-729-021-82	TRANSISTOR 2SD2396K	
D802	8-719-082-07	DIODE KDS121-RTK		Q957	8-729-212-02	TRANSISTOR 2SC2120-Y	
D804	8-719-082-07	DIODE KDS121-RTK		Q958	8-729-028-90	TRANSISTOR DTA143ZUA-T106	
D807	8-719-083-93	DIODE KDS120-RTK		Q959	8-729-028-99	TRANSISTOR DTC114YUA-T106	
D951	8-719-083-93	DIODE KDS120-RTK (SP,KR)		< RESISTOR >			
D953	8-719-978-33	DIODE DTZ-TT11-6.8B		R125	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
D957	8-719-083-58	DIODE UDZS-TE-17-3.9B		R127	1-216-833-11	METAL CHIP 10K 5%	1/10W
< IC >				R128	1-216-817-11	METAL CHIP 470 5%	1/10W
IC303	6-701-824-11	IC BD3870FS-E2		R130	1-216-813-11	METAL CHIP 220 5%	1/10W
IC304	8-759-426-51	IC BA5417		R131	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
IC801	8-759-658-46	IC S-81233SGY-Z		R133	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
IC802	6-801-838-01	IC uPD789477GC-A14-8BT		R135	1-216-853-11	METAL CHIP 470K 5%	1/10W
IC803	6-700-336-01	IC CAT24WC02JI-1.8-TE13		R140	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
IC804	8-759-645-87	IC PST9128-T		R144	1-216-789-11	METAL CHIP 2.2 5%	1/10W
< JUMPER RESISTOR >				R148	1-216-813-11	METAL CHIP 220 5%	1/10W
JC301	1-216-864-11	METAL CHIP 0 5%	1/10W (US,CND,E92,MX)	R149	1-216-821-11	METAL CHIP 1K 5%	1/10W
JC302	1-216-864-11	METAL CHIP 0 5%	1/10W	R150	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
JC303	1-216-864-11	METAL CHIP 0 5%	1/10W	R225	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
JC304	1-216-864-11	METAL CHIP 0 5%	1/10W	R227	1-216-833-11	METAL CHIP 10K 5%	1/10W
JC305	1-216-864-11	METAL CHIP 0 5%	1/10W	R228	1-216-817-11	METAL CHIP 470 5%	1/10W
JC306	1-216-864-11	METAL CHIP 0 5%	1/10W	R230	1-216-813-11	METAL CHIP 220 5%	1/10W
JC307	1-216-864-11	METAL CHIP 0 5%	1/10W	R231	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
JC308	1-216-864-11	METAL CHIP 0 5%	1/10W	R233	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
JC309	1-216-864-11	METAL CHIP 0 5%	1/10W	R235	1-216-853-11	METAL CHIP 470K 5%	1/10W
< CABLE HOLDER >				R240	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
KH301	1-824-027-11	HOLDER, CABLE 3P		R244	1-216-789-11	METAL CHIP 2.2 5%	1/10W
KH321	1-824-029-11	HOLDER, CABLE 4P		R248	1-216-813-11	METAL CHIP 220 5%	1/10W
KH803	1-824-028-11	HOLDER, CABLE 2P		R249	1-216-821-11	METAL CHIP 1K 5%	1/10W
< COIL >				R250	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
L301	1-410-324-11	INDUCTOR 4.7uH		R322	1-216-833-11	METAL CHIP 10K 5%	1/10W
L801	1-414-137-31	INDUCTOR 0.22uH		R323	1-216-857-11	METAL CHIP 1M 5%	1/10W
L802	1-410-521-11	INDUCTOR 100uH		R324	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
< TRANSISTOR >				R325	1-216-821-11	METAL CHIP 1K 5%	1/10W
Q122	8-729-905-34	TRANSISTOR 2SC4081-Q		R326	1-216-821-11	METAL CHIP 1K 5%	1/10W
Q124	8-729-029-10	TRANSISTOR DTC143TUA-T106		R331	1-216-809-11	METAL CHIP 100 5%	1/10W
Q222	8-729-905-34	TRANSISTOR 2SC4081-Q		R332	1-216-809-11	METAL CHIP 100 5%	1/10W
Q224	8-729-029-10	TRANSISTOR DTC143TUA-T106		R333	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q801	8-729-029-16	TRANSISTOR DTC144VUA-T106		R334	1-216-805-11	METAL CHIP 47 5%	1/10W
Q804	8-729-028-77	TRANSISTOR DTA115EUA-T106		R335	1-216-809-11	METAL CHIP 100 5%	1/10W
Q806	8-729-028-77	TRANSISTOR DTA115EUA-T106		R360	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q808	8-729-028-99	TRANSISTOR DTC114YUA-T106		R361	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q812	8-729-028-92	TRANSISTOR DTA144TUA-T106		R362	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q813	8-729-028-99	TRANSISTOR DTC114YUA-T106		R363	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q814	8-729-028-99	TRANSISTOR DTC114YUA-T106		R802	1-216-841-11	METAL CHIP 47K 5%	1/10W
Q819	8-729-029-00	TRANSISTOR DTC115EUA-T106		R803	1-216-841-11	METAL CHIP 47K 5%	1/10W
				R804	1-216-833-11	METAL CHIP 10K 5%	1/10W
				R805	1-216-833-11	METAL CHIP 10K 5%	1/10W
				R806	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
				R807	1-216-833-11	METAL CHIP 10K 5%	1/10W
				R808	1-216-845-11	METAL CHIP 100K 5%	1/10W
				R809	1-216-833-11	METAL CHIP 10K 5%	1/10W



# CFD-S400/S500

## POWER TC

Ref. No.	Part No.	Description	Remark
*	1-683-861-11	POWER BOARD *****	
	1-533-233-11	HOLDER, FUSE (CND,SP,KR)  < CAPACITOR >	
C901	1-162-995-11	CERAMIC CHIP 0.022uF	50V
C902	1-162-995-11	CERAMIC CHIP 0.022uF	50V
C903	1-162-995-11	CERAMIC CHIP 0.022uF	50V
C904	1-162-995-11	CERAMIC CHIP 0.022uF	50V
C906	1-126-964-11	ELECT 10uF 20%	50V
		< CONNECTOR >	
* CNP901	1-815-551-11	PIN, CONNECTOR (PC BOARD) 3P	
* CNP902	1-815-552-21	PIN, CONNECTOR (PC BOARD) 4P	
		< DIODE >	
D901	8-719-063-79	DIODE 1N4002B	
D902	8-719-063-79	DIODE 1N4002B	
D903	8-719-063-79	DIODE 1N4002B	
D904	8-719-063-79	DIODE 1N4002B	
		< FUSE >	
△ F902	1-533-469-21	FUSE, GLASS TUBE (DIA.5) (T2.5AL/250V) (SP,KR)	
△ F902	1-533-470-11	FUSE, GLASS TUBE (DIA.5) (3.15A/125V) (CND)	
		< AC INLET >	
△ J901	1-526-818-11	INLET, AC (~ AC IN) (E92,MX)	
△ J901	1-526-838-11	INLET, AC 2P (~ AC IN) (SP,KR)	
△ J901	1-540-009-11	INLET, AC (~ AC IN) (US,CND)	
		< TRANSFORMER >	
△ T901	1-435-917-11	TRANSFORMER, POWER (US,E92,MX)	
△ T901	1-435-918-11	TRANSFORMER, POWER (SP,KR)	
△ T901	1-437-540-11	TRANSFORMER, POWER (CND)	
*****			
*	A-3323-806-A	TC BOARD, COMPLETE *****	
		< CAPACITOR >	
C101	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C102	1-104-665-11	ELECT 100uF 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
C107	1-162-962-11	CERAMIC CHIP 470PF 10%	50V
C201	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C202	1-104-665-11	ELECT 100uF 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
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

Ref. No.	Part No.	Description	Remark
C303	1-104-665-11	ELECT 100uF 20%	10V
C304	1-126-947-11	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	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C308	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C310	1-164-230-11	CERAMIC CHIP 220PF 5%	50V
		< CONNECTOR >	
CN303	1-784-774-11	CONNECTOR, FFC 13P	
		< IC >	
IC301	8-759-264-71	IC TA2068N	
		< JUMPER RESISTOR >	
JC301	1-216-864-11	METAL CHIP 0 5%	1/10W
JC302	1-216-864-11	METAL CHIP 0 5%	1/10W
JC303	1-216-864-11	METAL CHIP 0 5%	1/10W
JC304	1-216-864-11	METAL CHIP 0 5%	1/10W
JC305	1-216-864-11	METAL CHIP 0 5%	1/10W
JC306	1-216-295-11	SHORT CHIP 0	
JC307	1-216-864-11	METAL CHIP 0 5%	1/10W
JC308	1-216-295-11	SHORT CHIP 0	
JC309	1-216-864-11	METAL CHIP 0 5%	1/10W
		< TRANSISTOR >	
Q301	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q302	8-729-907-00	TRANSISTOR DTC114EU	
Q303	8-729-907-00	TRANSISTOR DTC114EU	
		< RESISTOR >	
R101	1-216-835-11	METAL CHIP 15K 5%	1/10W
R102	1-216-807-11	METAL CHIP 68 5%	1/10W
R103	1-216-843-11	METAL CHIP 68K 5%	1/10W
R104	1-216-835-11	METAL CHIP 15K 5%	1/10W
R105	1-216-835-11	METAL CHIP 15K 5%	1/10W
R106	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R110	1-216-809-11	METAL CHIP 100 5%	1/10W
R111	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R112	1-216-827-11	METAL CHIP 3.3K 5%	1/10W
R201	1-216-835-11	METAL CHIP 15K 5%	1/10W
R202	1-216-807-11	METAL CHIP 68 5%	1/10W
R203	1-216-843-11	METAL CHIP 68K 5%	1/10W
R204	1-216-835-11	METAL CHIP 15K 5%	1/10W
R205	1-216-835-11	METAL CHIP 15K 5%	1/10W
R206	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R210	1-216-025-11	RES-CHIP 100 5%	1/10W
R211	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R212	1-216-827-11	METAL CHIP 3.3K 5%	1/10W
R301	1-216-857-11	METAL CHIP 1M 5%	1/10W
R302	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R303	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R304	1-216-821-11	METAL CHIP 1K 5%	1/10W
R305	1-216-817-11	METAL CHIP 470 5%	1/10W
R306	1-218-867-11	RES-CHIP 6.8K 5%	1/10W

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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TC

TUNER

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R307	1-216-797-11	METAL CHIP	10 5% 1/10W	C41	1-164-230-11	CERAMIC CHIP 220PF 5% 50V	
R308	1-216-837-11	METAL CHIP	22K 5% 1/10W	C42	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
R309	1-216-805-11	METAL CHIP	47 5% 1/10W	C43	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
R310	1-216-857-11	METAL CHIP	1M 5% 1/10W	C47	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
R311	1-216-857-11	METAL CHIP	1M 5% 1/10W	C49	1-161-051-00	CERAMIC 0.01uF 10% 50V	
R314	1-216-817-11	METAL CHIP	470 5% 1/10W	C51	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
R315	1-216-817-11	METAL CHIP	470 5% 1/10W	C52	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
		< SWITCH >		C53	1-136-169-00	FILM 0.22uF 5% 50V	
S301	1-786-126-11	SWITCH, SLIDE (REC/PB)		C54	1-126-934-11	ELECT 220uF 20% 10V	
		< TRANSFORMER >		C55	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
T301	1-416-041-11	TRANSFORMER, BIAS OSCILLATION		C56	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
*****				C57	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
*	A-3323-778-A	TUNER BOARD, COMPLETE (US,CND,E92,MX)		C59	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
*	A-3323-815-A	TUNER BOARD, COMPLETE (SP,KR)		C60	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
		*****		C61	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
	3-237-724-01	TERMINAL, ANTENNA (CNP2)		C62	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
		< CAPACITOR >		C63	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
C1	1-162-923-11	CERAMIC CHIP	47PF 5% 50V	C65	1-126-963-11	ELECT 4.7uF 20% 50V	
C4	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C66	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
C7	1-162-910-11	CERAMIC CHIP	5PF 0.25PF 50V	C68	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
C8	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C77	1-162-968-11	CERAMIC CHIP 0.0047uF 10% 50V	
C9	1-162-915-11	CERAMIC CHIP	10PF 0.5PF 50V	C78	1-162-968-11	CERAMIC CHIP 0.0047uF 10% 50V	(SP,KR)
C10	1-126-960-11	ELECT	1uF 20% 50V	C80	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C11	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C95	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C12	1-126-963-11	ELECT	4.7uF 20% 50V			< FILTER >	
C13	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	CF2	1-760-023-11	FILTER, CERAMIC	
			(US,CND,E92,MX)	CF4	1-781-962-21	FILTER, CERAMIC	
C14	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V			< CONNECTOR >	
			(SP,KR)	* CNP1	1-785-663-11	PIN, CONNECTOR (PC BOARD) 11P	
C14	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V			< TRIMMER >	
			(US,CND,E92,MX)	CT1	1-141-603-11	CAP, ADJ 20PF	
C15	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	CT3	1-141-601-11	CAP, ADJ 10PF	
			(SP,KR)			< DIODE >	
C15	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V	D1	8-719-078-48	DIODE KV1471ETR1-3	
			(US,CND,E92,MX)	D2	8-719-078-48	DIODE KV1471ETR1-3	
C18	1-126-934-11	ELECT	220uF 20% 10V	D3	8-719-050-69	DIODE KV1520N	
C20	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	D10	8-719-988-61	DIODE 1SS355TE-17	
C21	1-126-960-11	ELECT	1uF 20% 50V	D11	8-719-988-61	DIODE 1SS355TE-17	
C22	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V			< IC >	
C23	1-126-960-11	ELECT	1uF 20% 50V	IC1	6-700-512-01	IC TA2149BN	
C24	1-162-960-11	CERAMIC CHIP	220PF 10% 50V	IC2	8-759-483-40	IC LC72137M-TLM	
C26	1-162-927-11	CERAMIC CHIP	100PF 5% 50V			< JUMPER RESISTOR >	
C27	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	JC1	1-216-864-11	METAL CHIP 0 5% 1/10W	
C29	1-104-665-11	ELECT	100uF 20% 10V	JC2	1-216-864-11	METAL CHIP 0 5% 1/10W	
C30	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	JC3	1-216-864-11	METAL CHIP 0 5% 1/10W	
C31	1-162-919-11	CERAMIC CHIP	22PF 5% 50V	JC4	1-216-864-11	METAL CHIP 0 5% 1/10W	
C32	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	JC5	1-216-864-11	METAL CHIP 0 5% 1/10W	
C33	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				
C34	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				
C35	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				
C37	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				
C39	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V				

# CFD-S400/S500

## TUNER

Ref. No.	Part No.	Description	Remark
JC6	1-216-864-11	METAL CHIP	0 5% 1/10W
JC11	1-216-864-11	METAL CHIP	0 5% 1/10W
JC12	1-216-864-11	METAL CHIP	0 5% 1/10W
JC13	1-216-864-11	METAL CHIP	0 5% 1/10W
JC24	1-216-864-11	METAL CHIP	0 5% 1/10W (SP,KR)
JC33	1-216-864-11	METAL CHIP	0 5% 1/10W
JC34	1-216-864-11	METAL CHIP	0 5% 1/10W
< COIL >			
L1	1-409-775-11	COIL, AIR-CORE	
L2	1-416-509-11	COIL, AIR-CORE	
L3	1-754-117-11	ANTENNA, FERRITE-ROD (AM)	
L4	1-411-234-21	COIL, AM OSC	
L11	1-414-142-11	INDUCTOR	1uH (US,CND,E92,MX)
L21	1-410-509-61	INDUCTOR	10uH
< RESISTOR >			
R1	1-216-815-11	METAL CHIP	330 5% 1/10W
R2	1-216-817-11	METAL CHIP	470 5% 1/10W
R3	1-216-833-11	METAL CHIP	10K 5% 1/10W
R4	1-216-833-11	METAL CHIP	10K 5% 1/10W
R10	1-216-805-11	METAL CHIP	47 5% 1/10W
R11	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R13	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R24	1-216-813-11	METAL CHIP	220 5% 1/10W
R30	1-216-835-11	METAL CHIP	15K 5% 1/10W
R31	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R32	1-216-845-11	METAL CHIP	100K 5% 1/10W
R40	1-216-849-11	METAL CHIP	220K 5% 1/10W
R41	1-216-833-11	METAL CHIP	10K 5% 1/10W
R50	1-216-821-11	METAL CHIP	1K 5% 1/10W
R51	1-216-833-11	METAL CHIP	10K 5% 1/10W
R52	1-216-864-11	METAL CHIP	0 5% 1/10W
R53	1-216-835-11	METAL CHIP	15K 5% 1/10W
R54	1-216-817-11	METAL CHIP	470 5% 1/10W
R56	1-216-815-11	METAL CHIP	330 5% 1/10W
R58	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R59	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R60	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R61	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R63	1-216-833-11	METAL CHIP	10K 5% 1/10W
R65	1-216-833-11	METAL CHIP	10K 5% 1/10W
R91	1-216-813-11	METAL CHIP	220 5% 1/10W
R92	1-216-813-11	METAL CHIP	220 5% 1/10W
R94	1-216-821-11	METAL CHIP	1K 5% 1/10W
< TRANSFORMER >			
T1	1-433-741-11	TRANSFORMER, IF	
T2	1-419-465-11	COIL (DET)	
< VIBRATOR >			
X1	1-795-449-11	VIBRATOR, CRYSTAL (75kHz)	

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Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
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109	1-452-899-11	MAGNET	
118	1-757-689-11	CABLE, FLEXIBLE FLAT (16 CORE)	
119	1-824-034-11	CABLE, FLEXIBLE FLAT 14P	
164	1-824-031-11	CABLE, FLEXIBLE FLAT 13P	
△253	8-848-483-05	PICK-UP, OPTICAL KSS-213R/C2N	
ANT1	1-754-241-11	ANTENNA, TELESCOPIC (FM)	
HRP301	3-244-085-01	HEAD, R/P (REC/PB)	
M801	3-244-082-01	MOTOR ASSY (CAPSTAN/REEL)	
S801	1-692-960-11	SWITCH, PUSH (1 KEY)	(▲ PUSH OPEN/CLOSE)
SP301	1-825-031-11	SPEAKER (10cm) (L-CH)	
SP302	1-825-031-11	SPEAKER (10cm) (R-CH)	
*****			
ACCESSORIES			
*****			
	1-542-489-11	HEADPHONE (S500)	
△	1-557-287-11	CORD, POWER (E92,MX)	
△	1-575-131-11	CORD, POWER (SP)	
△	1-690-952-11	CORD, POWER (CND)	
△	1-776-985-11	CORD, POWER (KR)	
△	1-783-878-11	CORD, POWER (US)	
	3-027-153-11	LID, BATTERY CASE (for RMT-CS400A)	
	3-238-274-11	MANUAL, INSTRUCTION (ENGLISH)	(US,CND,E92,MX)
	3-238-274-21	MANUAL, INSTRUCTION (FRENCH) (CND)	
	3-238-274-31	MANUAL, INSTRUCTION (SPANISH) (E92,MX)	
	3-238-274-41	MANUAL, INSTRUCTION (ENGLISH,SPANISH)	(SP,KR)
	3-240-554-31	MANUAL, INSTRUCTION (KOREAN) (KR)	
	A-3013-974-A	REMOTE COMMANDER (RMT-CS400A)	

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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MEMO

