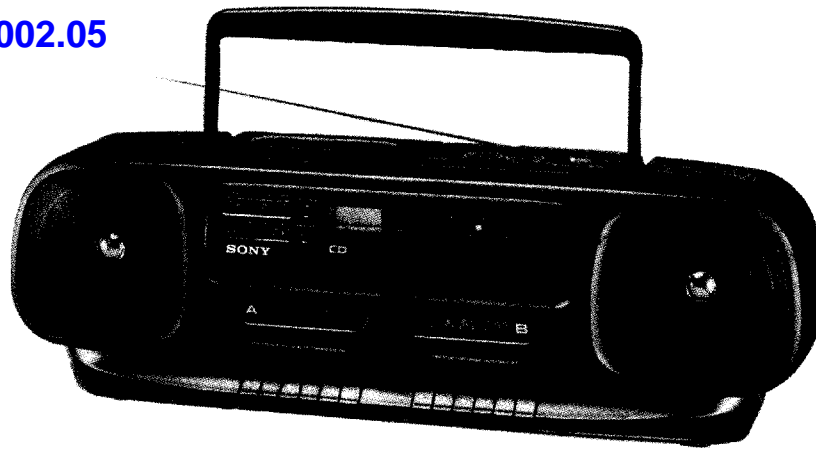


# CFD-100/W100

## SERVICE MANUAL

Ver 1.1 2002.05



*US Model*  
*Canadian Model*  
CFD-100

*Australian Model*  
CFD-W100

### SPECIFICATIONS

Model Name Using Similar Mechanism	CD Section	CFD-775
	Tape Section	CFS-W305
Optical Device Name		KSM-2101BAN
Tape Transport Mechanism Type		MF-100-64, M

### AUDIO POWER SPECIFICATIONS

#### POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 3.2-ohm loads, both channels drive from 150–10,000 Hz: rated 2.0 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 Wavelength 780 nm Emission duration: Continuous Laser output: Less than 44.6 $\mu$ W*
Frequency response	20 – 20,000 Hz $\pm 1$ dB
Wow and flutter	Below measurable limit

#### Radio section

Frequency range	FM: 87.6 – 108 MHz AM: 530 – 1,710 kHz
Antennas	FM: Telescopic antenna AM: Built-in ferrite bar antenna

#### Tape recorder section and general

Recording system	4-track 2-channel stereo
Frequency response	70 – 10,000 Hz (with TYPE I < normal > cassette)
Speaker	Full-range speakers: 10 cm dia., cone type
Power output	2.3 W + 2.3 W (at 3.2 ohms, 10% harmonic distortion)

Input	Mixing microphone input jack (minijack) Sensitivity 2.5 mV For low impedance microphone
Output	Headphone jack (stereo minijack) For 16 – 68 ohms impedance headphones
Power requirements	Australian model: 240 V AC, 50 Hz Models for other countries: 120 V AC, 60 Hz DC 9 V, 6 size D (R20) batteries AC 25 W
Power consumption	
Battery life	(hours)

	FM recording	Playback	CD playing
Sony SUM-1 (NS)	approx. 7.5	approx. 5.5	approx. 2.5
Sony Alkaline AM1 (N)	approx. 17	approx. 11	approx. 4.5

Dimensions	640 × 205 × 224 mm (w/h/d) (25 $\frac{1}{4}$ × 8 $\frac{1}{8}$ × 8 $\frac{7}{8}$ inches) incl. projecting parts and controls
Weight	Approx. 5.4 kg incl. batteries (Approx. 11 lb 14 oz).
Supplied accessory	AC power cord (1)

Design and specifications subject to change without notice.

9-956-602-12  
2002E0500-1  
© 2002.05

**Sony Corporation**  
Personal Audio Company  
Published by Sony Engineering Corporation

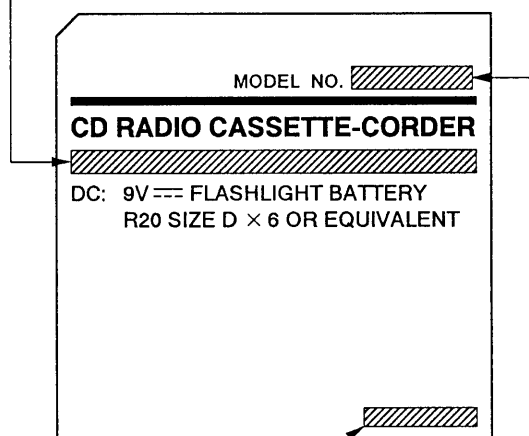
**CD RADIO CASSETTE-CORDER**  
**SONY®**

# MODEL IDENTIFICATION

— Model Number Label —

US, Canadian model: CFD-100  
Australian model: CFD-W100

US, Canadian model: AC: 120V ~60Hz 25W  
Australian model: AC: 240V ~50Hz 25W



US, Canadian model : Carved on rear cabinet  
Australian model : 3-371-895-01

## 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.

# TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
	Specifications .....	1
	Model Identification .....	2
<b>1.</b>	<b>SERVICING NOTES</b>	
<b>2.</b>	<b>GENERAL</b>	
	Parts Identification .....	4
<b>3.</b>	<b>DISASSEMBLY</b> .....	5
<b>4.</b>	<b>MECHANICAL ADJUSTMENTS</b>	
	Torque Measurement .....	7
	Tape Tension Measurement .....	7
<b>5.</b>	<b>ELECTRICAL ADJUSTMENTS</b>	
5-1.	Tape Recorder Section .....	7
5-2.	Tuner Section .....	8
5-3.	CD Section .....	10
<b>6.</b>	<b>DIAGRAMS</b>	
6-1.	Tuner Section Block Diagram .....	14
6-2.	CD Section Block Diagram .....	15
6-3.	Tape, Power Supply Section Block Diagram ..	17
6-4.	Tuner Section Printed Wiring Board and Schematic Diagram .....	19
6-5.	Audio, CD, Power Supply Section Printed Wiring Boards .....	23
6-6.	Tape, Power Supply Section Schematic Diagram .....	27
6-7.	CD Section Schematic Diagram .....	32
<b>7.</b>	<b>EXPLODED VIEWS</b> .....	37
<b>8.</b>	<b>ELECTRICAL PARTS LIST</b> .....	43

## SECTION 1

### SERVICING NOTES

#### SAFETY CHECK-OUT

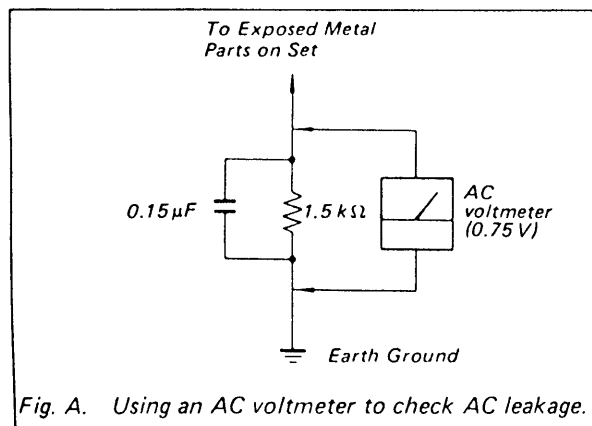
After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

#### LEAKAGE TEST

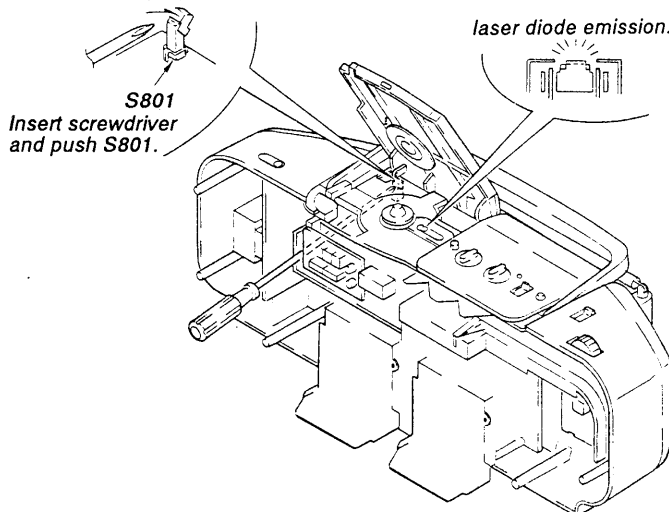
The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

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



#### LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Make Function switch to CD position with no disc inserted.
2. Open the lid for CD.
3. Turn on S801 as following figure.
4. Press ► key.
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 once for the focus search.



#### 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.

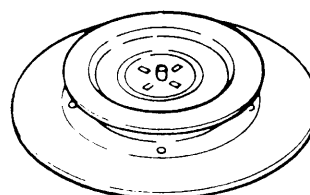
#### NOTES ON LASER DIODE EMISSION CHECK

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 25 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.

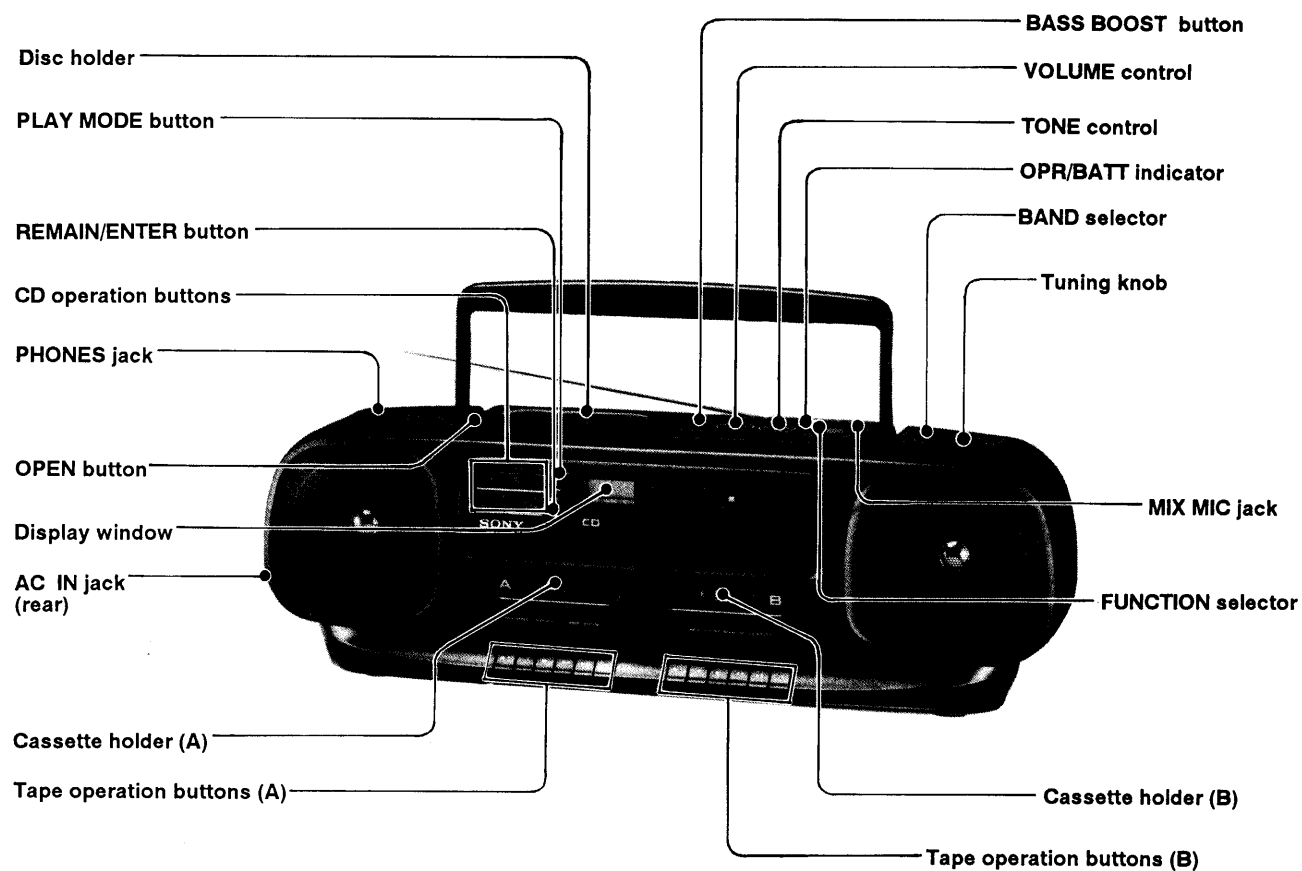
- Code number of Chuck Plate Jig: X-4918-255-1



## SECTION 2 GENERAL

### • Parts Identification

#### CD Player Section

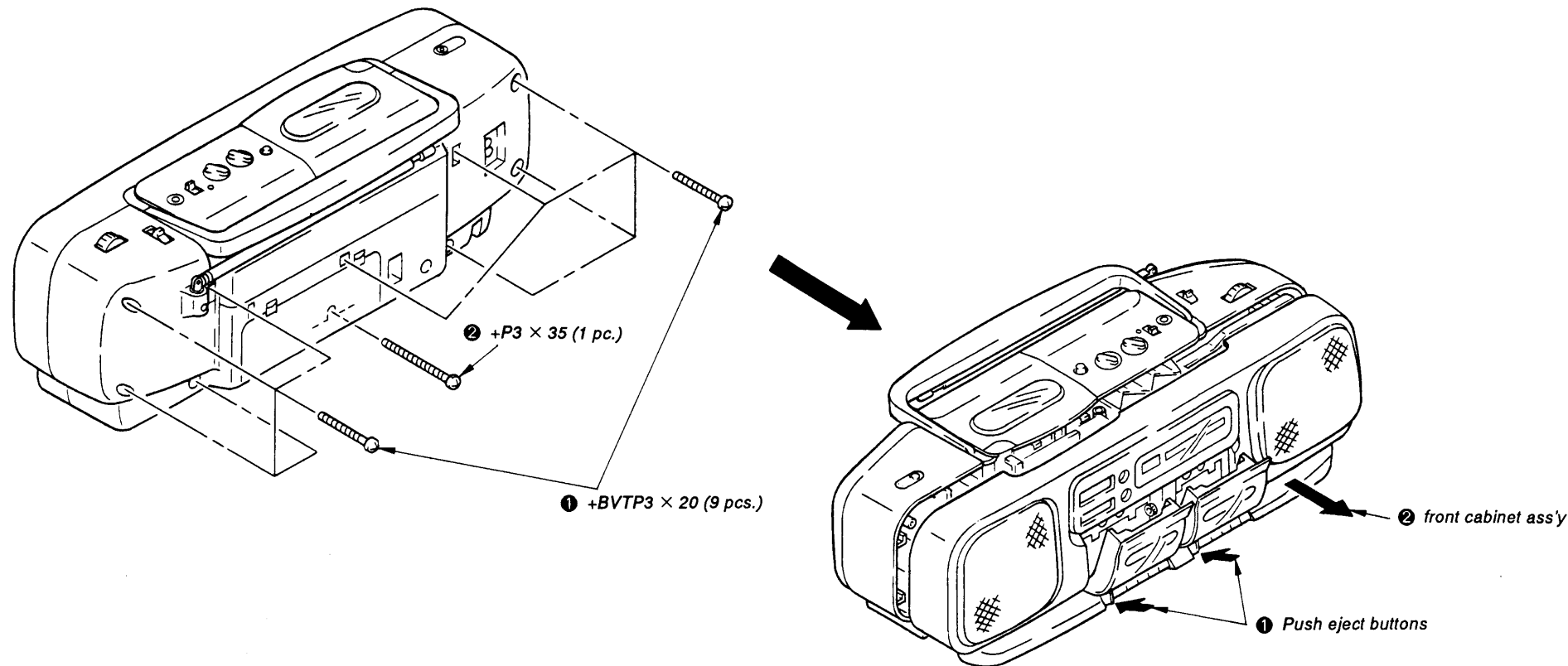




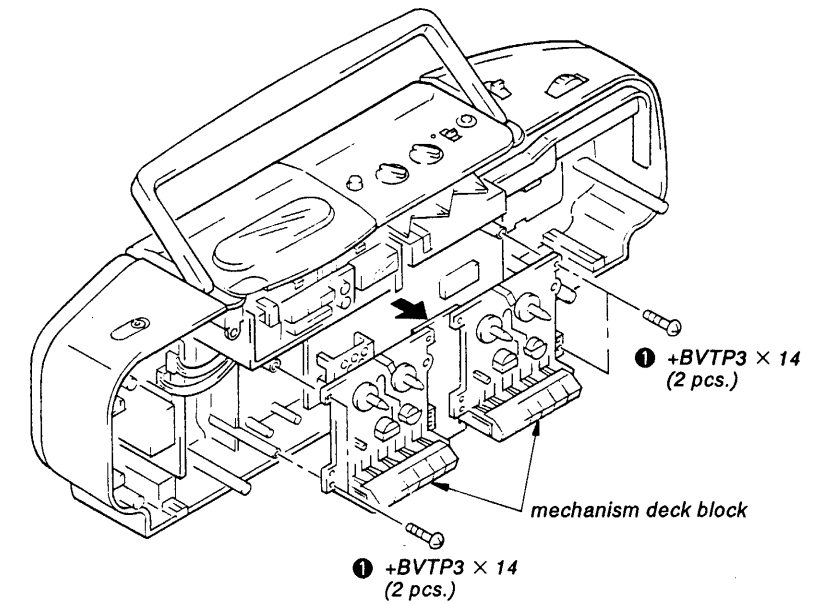
### SECTION 3 DISASSEMBLY

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

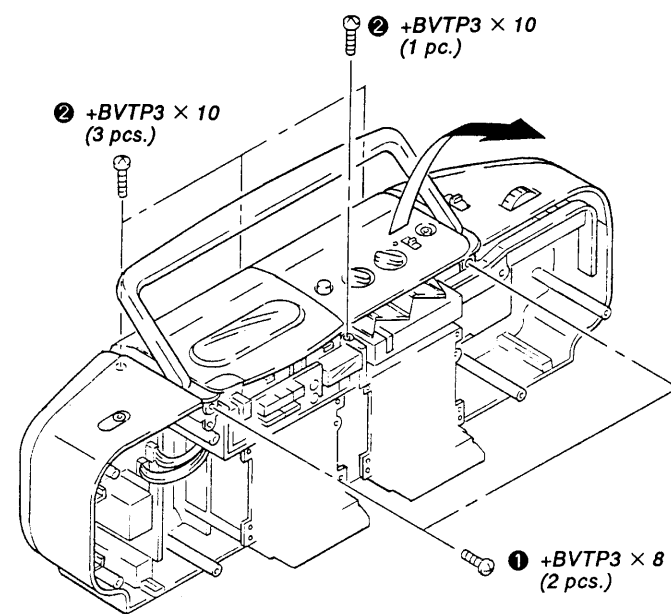
#### FRONT CABINET ASSY



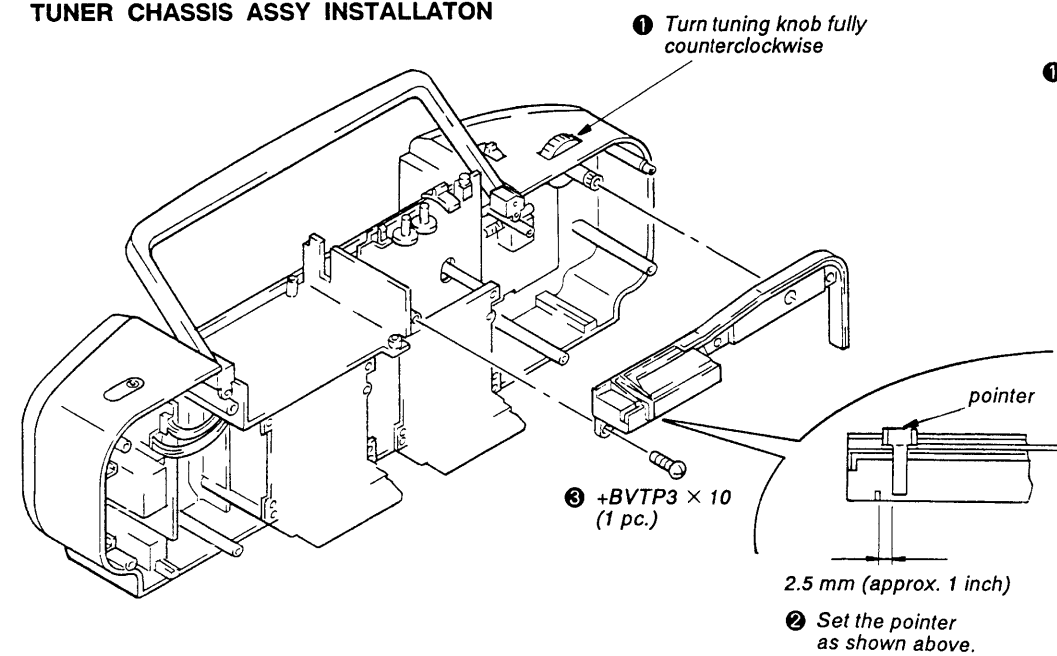
#### MECHANISM DECK BLOCK



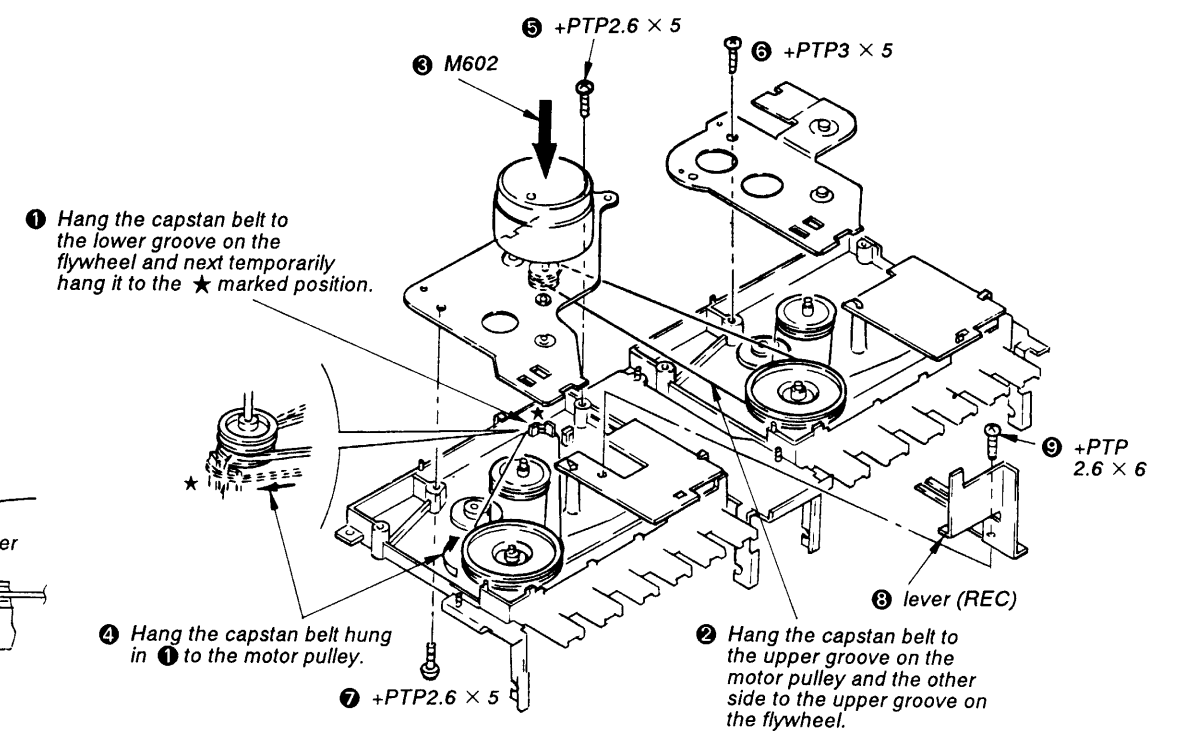
#### UPPER CABINET ASSY



#### TUNER CHASSIS ASSY INSTALLATION



#### DECK A CAPSTAN BELT REPLACEMENT



## SECTION 4 MECHANICAL ADJUSTMENTS

### PRECAUTION

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

record/playback head	pinch roller
erase head	rubber belts
capstan	idlers
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. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
6. Power supply voltage: 9V dc.

### Torque Measurement DECK A DECK B

Torque	Meter Reading	Torque Meter
Forward	22 – 55 g•cm (0.30 – 0.76 oz•inch)	CQ-102C
Fast Forward and Rewind	45 g•cm or more (0.62 oz•inch)	CQ-201B
Back Tension	2 – 5 g•cm (0.03 – 0.07 oz•inch)	CQ-102C

### Tape Tension Measurement

Meter	Meter Reading
CQ-403A	more than 100 g•cm (1.38 oz•inch)

## SECTION 5 ELECTRICAL ADJUSTMENTS

### PRECAUTION

1. Adjustments should be performed in the order given. Generally playback circuit adjustments should be completed before performing recording circuit adjustments.
2. Adjustments should be performed for both L-ch and R-ch. Switches and controls should be set as follows unless otherwise specified.
  - Positions of switches and control knobs
 

TONE .....	maximum
BASS BOOST .....	OFF
  - **Standard recording position**  
Adjust the VOLUME knob so that the following regulated input/output signal levels are obtained.

#### • Standard input level

Input Pin	MIX MIC
Signal source impedance	300 Ω
Input signal level	2.5 mV (– 50 dB)
Frequency	1 kHz

#### • Standard output level

Output Pin	Speaker (L, R)	PHONES
Signal source impedance	3.2 Ω	32 Ω
Output signal level	0.775 V (0 dB)	0.245 V (– 10 dB)

0 dB=0.775 V

### 5-1. TAPE RECORDER SECTION

#### • Test Tape

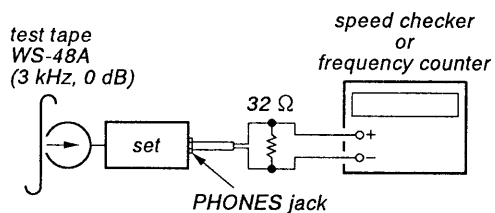
Type	Signal	Used for
WS-48A	3 kHz, 0 dB	tape speed adjustment

## Tape Speed Adjustment DECK A DECK B

Adjust deck A first, and check deck B.

### Procedure:

Mode: FWD playback



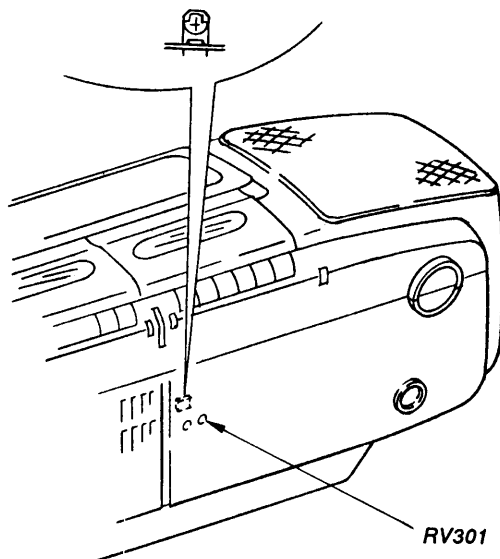
Playback the test tape WS-48A and adjust to meet the specifications below.

### Adjustment Value:

Speed	Adjustment part	speed checker reading	frequency counter reading
high	confirm	- 8.3 to - 1.7%	5,700 $\pm$ 200 Hz
normal	RV301	- 1.0 to 0%	2,985 $\pm$ 15 Hz

Frequency difference between the tape top and end should be within 0.5%

Adjustment Location: AUDIO board



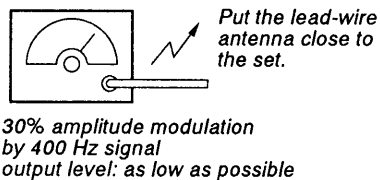
## 5-2. TUNER SECTION

### [AM]

FUNCTION switch: RADIO

BAND switch: AM

#### AM RF SSG

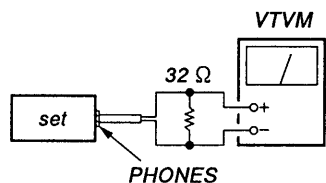
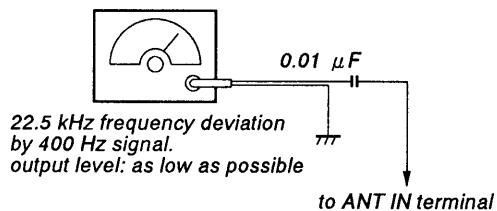


### [FM]

FUNCTION switch: RADIO

BAND switch: FM

#### FM RF SSG



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

**AM IF ADJUSTMENT**

Adjust for a maximum reading on VTVM.

T1	455 kHz
----	---------

**AM FREQUENCY COVERAGE ADJUSTMENT**

Adjust for a maximum reading on VTVM.

L4	520 kHz
CT1-4	1,780 kHz

**AM TRACKING ADJUSTMENT**

Adjust for a maximum reading on VTVM.

	CFD-100	CFD-W100
L3	600 kHz	600 kHz
CT1-3	1,500 kHz	1,400 kHz

**FM FREQUENCY COVERAGE ADJUSTMENT**

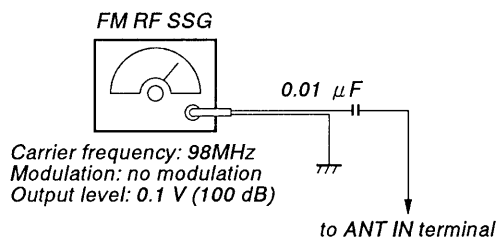
Adjust for a maximum reading on VTVM.

L2	86.5 MHz
CT1-2	109.5 MHz

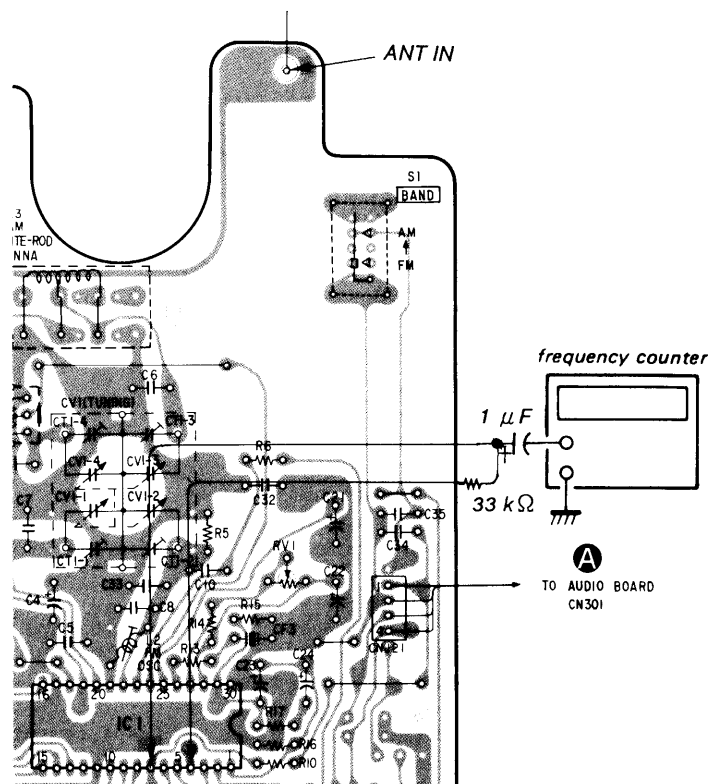
**FM TRACKING ADJUSTMENT**

Adjust for a maximum reading on VTVM.

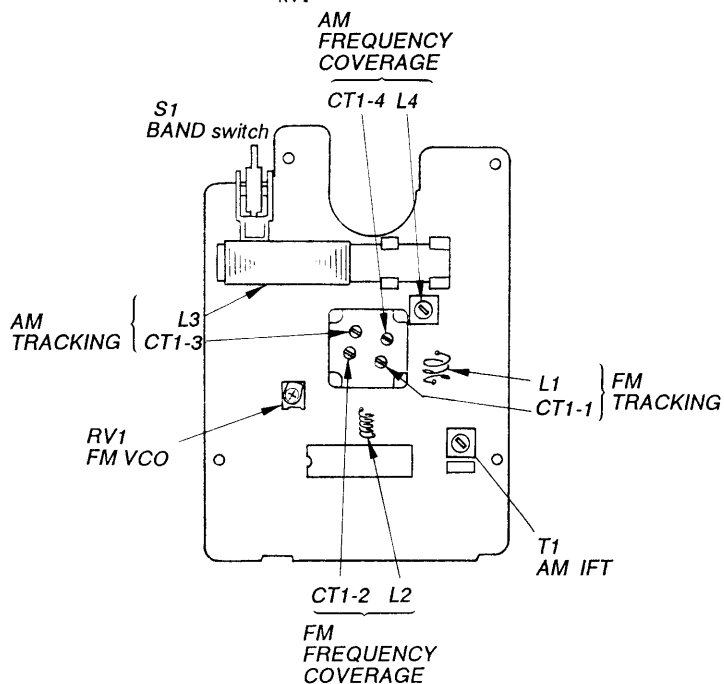
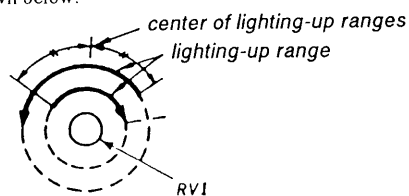
L1	86.5 MHz
CT1-1	109.5 MHz

**FM VCO Adjustment****A) Regular Method****Procedure:**

1. Connect frequency counter to the positions shown below.
2. Tune the set to 98 MHz.
3. Adjust RV1 for 76 kHz  $\pm$  500 Hz reading on the frequency counter.

**B) Simple Method****Procedure:**

1. Tune the set to the FM stereo broadcasting signal.
2. Turn RV1 clockwise or counterclockwise and memorize the lighting-up range of the FM STEREO lamp.
3. Secure RV1 at the center of the lighting-up range of both turns as shown below.



### 5-3. CD SECTION

#### Notes on Adjustment

1. Perform adjustment in service mode.  
After adjustment, be sure to release service mode.
2. Perform adjustments in the order given.
3. Use the disc (YEDS-18, Part No. 3-702-101-01) only when so indicated.

#### Before Adjustment

Put the set into service mode and perform the following checks. Repair if there are any problems.

##### • Sled Motor Check

1. Press ► key, then press || key.
2. Press ►►, ◄◄ keys and confirm that the FOP moves smoothly from the innermost to outermost circumference and back smoothly and with no catching or abnormal noises.  
►► : FOP moves to the outer circumference  
◄◄ : FOP moves to the inner circumference

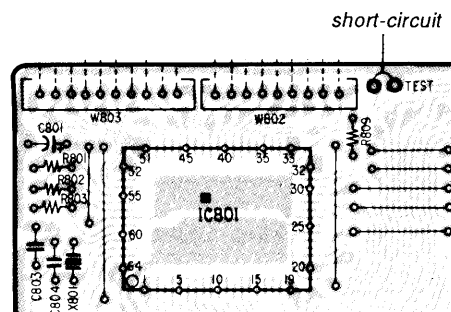
##### • Focus Search Check

1. Press ► key. (Focus search operation is performed continuously.)
2. Look at the FOP objective lens and confirm that it moves up and down smoothly, with no catching or abnormal noises.
3. Press ■ key.  
Confirm that focus search operation stops. If it does not, press ■ key again longer.

#### How to Put the Set into Service Mode

1. Short-circuit following portions on the CD main board.
2. Tune POWER on. (Set the FUNCTION switch to CD position.)

CD main board (conductor side)



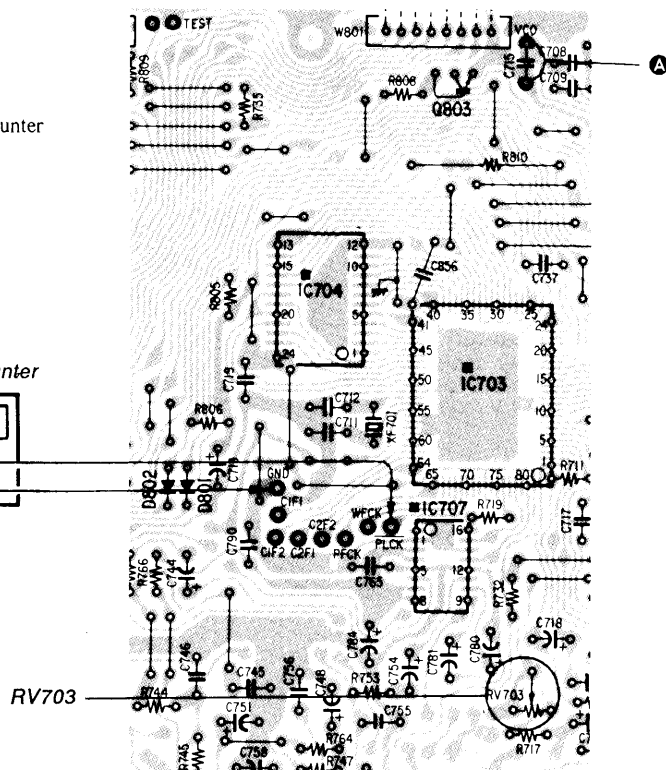
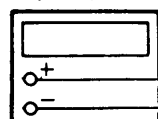
#### VCO Adjustment

##### Adjustment Procedure:

1. Short-circuit (A) portion CD main board.
2. Adjust with RV703 so that the reading on frequency counter becomes 4.3218 MHz.
3. Release the short-circuit (A) portion.

**Adjustment Location:** CD main board (conductor side)

frequency counter

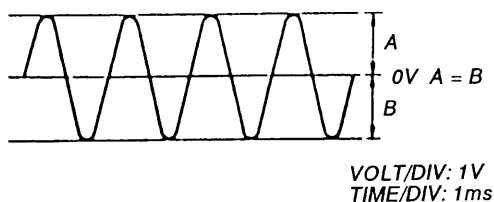


### E-F Balance Adjustment

This adjustment is to be done when the optical block is replaced.

#### Adjustment Procedure:

1. Connect the oscilloscope between IC701 pins ① and ②⑤.
2. Put the set into service mode. (See page 10)
3. Press the ►► and ◄◄ keys to move the FOP to the center.
4. Insert disc (YEDS-18) and press ► key.
5. Adjust RV701 so that the oscilloscope traverse waveform is symmetrical, as shown in the figure below.
6. Release service mode after adjustment is completed.



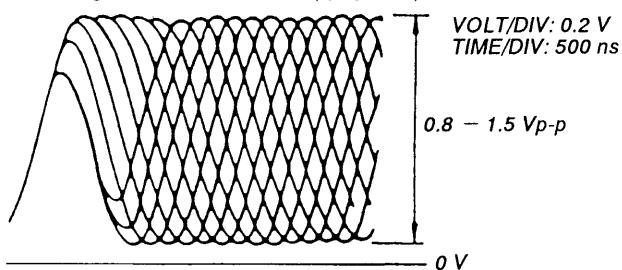
### Focus Bias Adjustment

This adjustment is to be done when the optical block is replaced.

#### Adjustment Procedure:

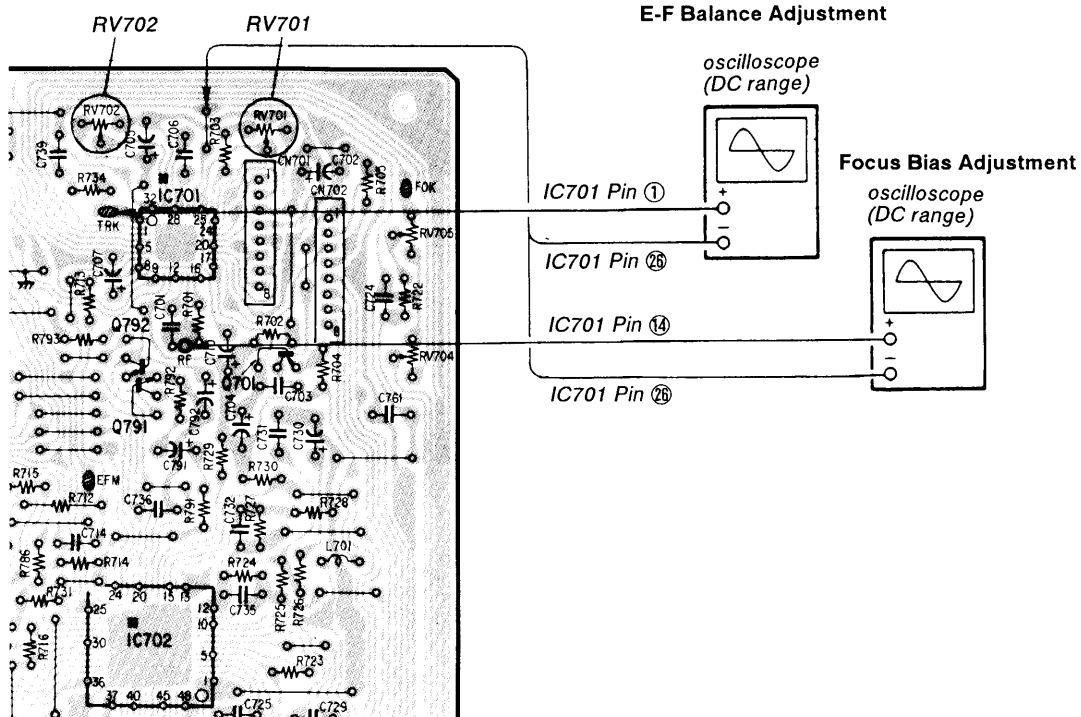
1. Connect the oscilloscope between IC701 pins ⑭ and ②⑤.
2. Put the set into service mode. (See page 10)
3. Press the ►► and ◄◄ keys to move the FOP to the center. (Move the FOP to the music area on the disc to enable easy visibility of the eye pattern.)
4. Insert disc (YEDS-18) and press ► key.
5. Adjust RV702 so that the oscilloscope waveform is as shown in the figure below (eye pattern).
6. Release service mode after adjustment is completed.

- RF signal reference waveform (eye pattern)



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

### Adjustment Location: CD main board (conductor side)



## REFERENCE

## Focus/Tracking Gain Adjustment

A frequency response analyzer is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

Symptoms \ Gain	Focus	Tracking
<ul style="list-style-type: none"> <li>• The time until music starts becomes longer for STOP → ► PLAY or automatic selection (◀◀, ▶▶ buttons pressed). (Normally takes about 2 seconds.)</li> </ul>	low	low or high
<ul style="list-style-type: none"> <li>• Music does not start and disc continues to rotate for STOP → ► PLAY or automatic selection (◀◀, ▶▶ buttons pressed).</li> </ul>	—	low
<ul style="list-style-type: none"> <li>• Sound is interrupted during PLAY. Or time counter display stops progressing.</li> </ul>	—	low
<ul style="list-style-type: none"> <li>• More poise during 2-axis device operation.</li> </ul>	high	high

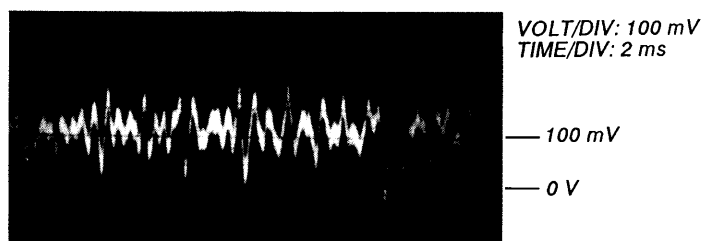
The following is a simple adjustment method.

## — Simple Adjustment —

**Note:** Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.

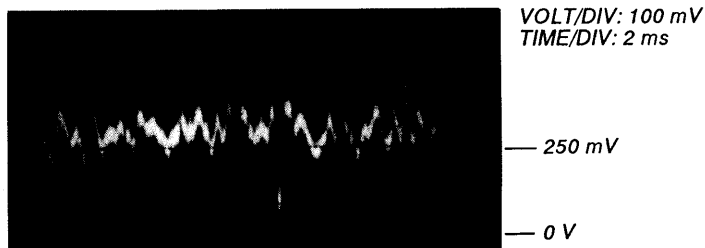
**Procedure:**

1. Keep the set horizontal.  
(If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2-axis device.)
2. Insert disc (YEDS-18) and press ►PLAY button.
3. Connect the oscilloscope between IC701 pins ② and ③.
4. Adjustment RV705 so that the waveform is as shown in the figure below. (focus gain adjustment)

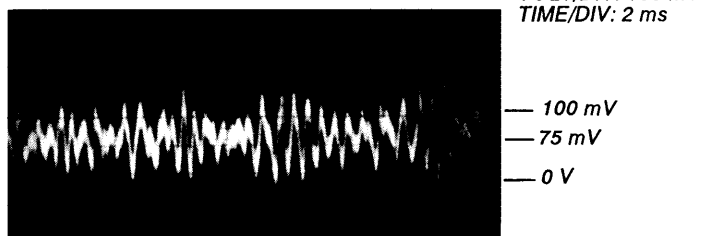


- Incorrect Examples (DC level changes more than on adjusted waveform)

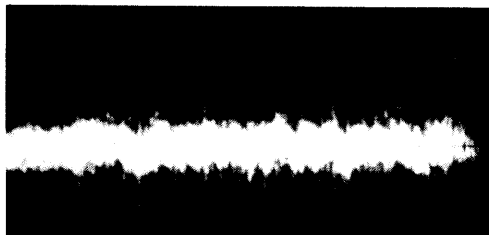
low focus gain



high focus gain



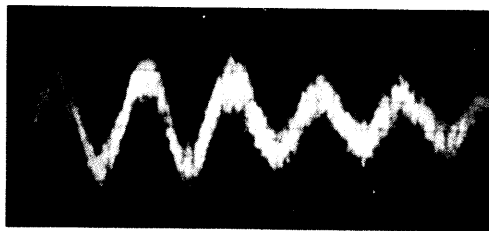
5. Connect the oscilloscope between IC701 pins ① and ②⑥
6. Adjust RV704 so that the waveform is as shown in the figure below. (tracking gain adjustment)



VOLT/DIV: 1 V  
TIME/DIV: 2 ms

— 0 V

- Incorrect Examples (fundamental wave appears)
- low track gain*



VOLT/DIV: 1 V  
TIME/DIV: 2 ms

— 0 V

*high track gain*  
(higher fundamental wave than for low gain)

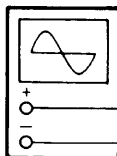


VOLT/DIV: 1 V  
TIME/DIV: 2 ms

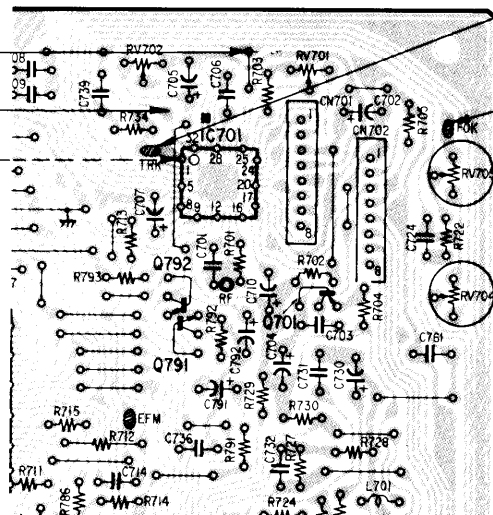
— 0 V

**Adjustment Location:** CD main board (conductor side)

oscilloscope  
(DC range)



IC701 pin ②⑥  
IC701 pin ①  
IC701 pin ②⑥



Remove the solder bridge while adjusting the tracking gain.  
(After adjustment make the solder bridge.)

Remove the solder bridge while adjusting the focus gain.  
(After adjustment make the solder bridge.)

RV705

RV704

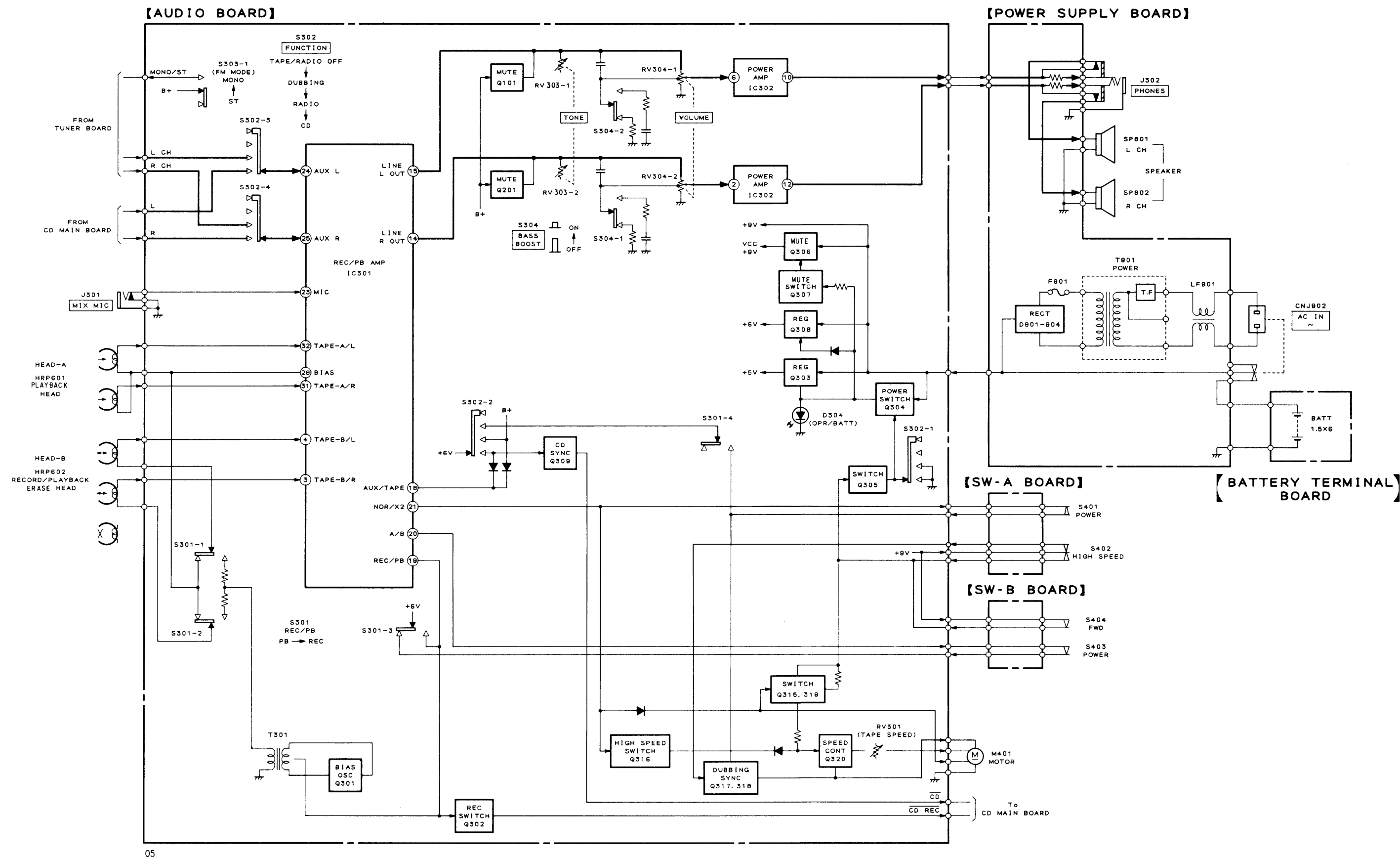




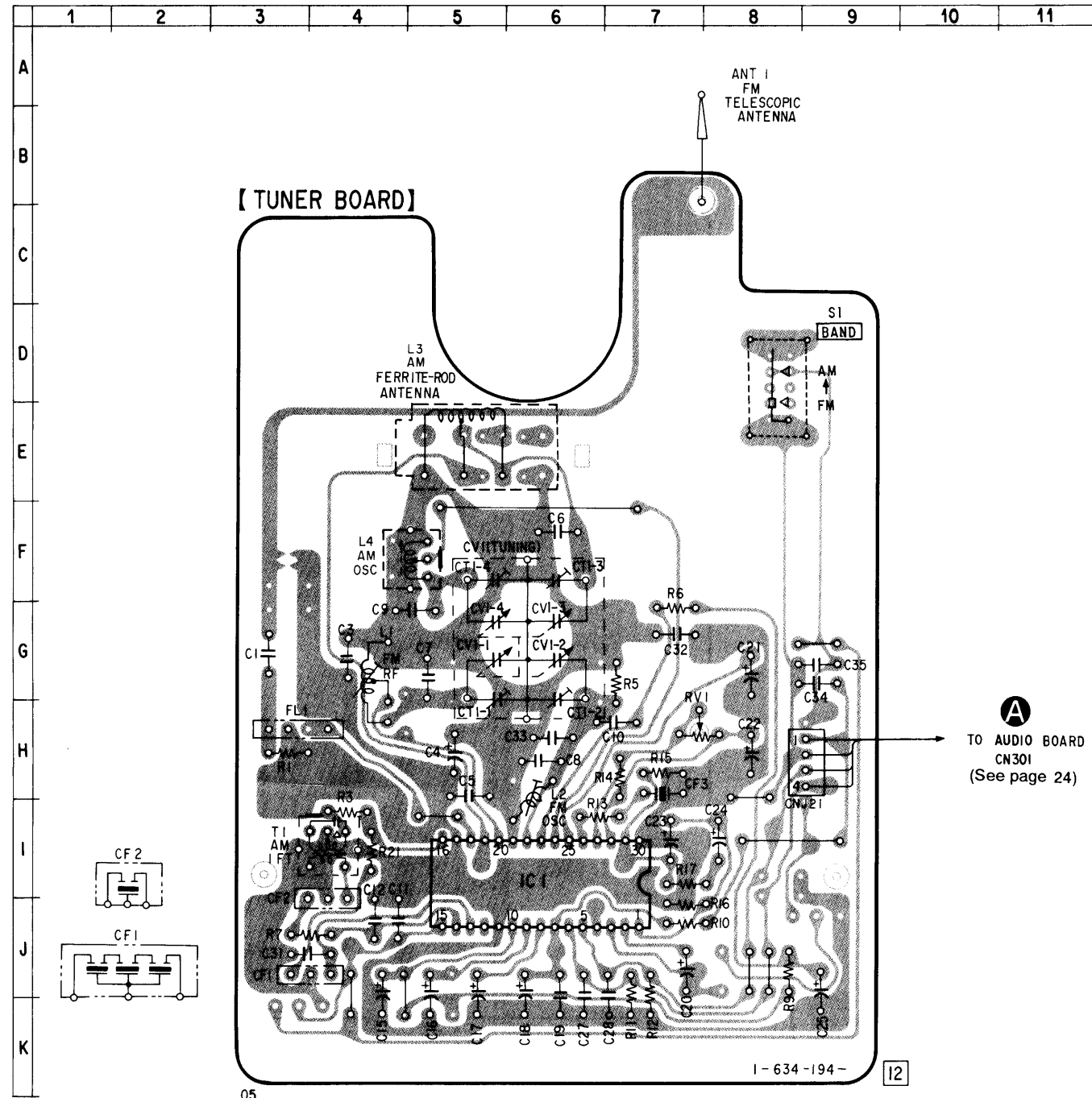
## 05



6-3. TAPE, POWER SUPPLY SECTION BLOCK DIAGRAM



# 6-4. TUNER SECTION PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM



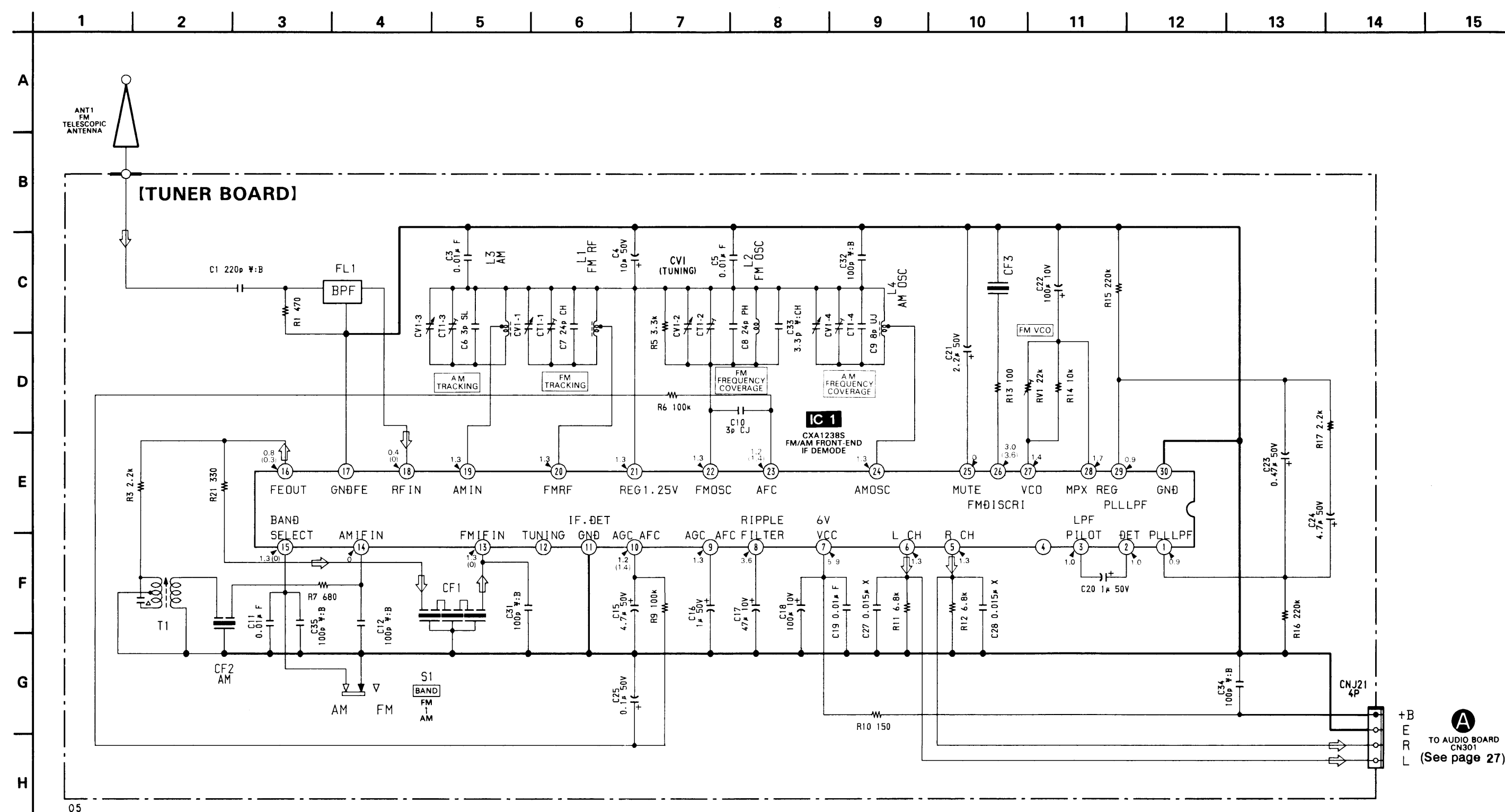
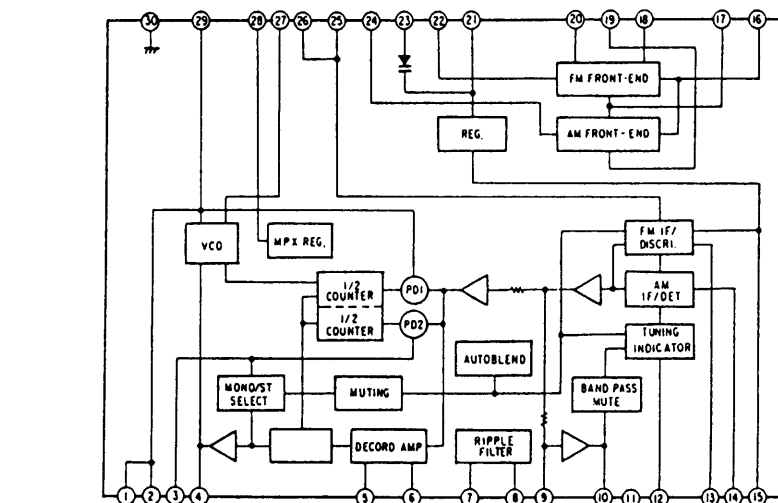
## Semiconductor Location

Ref. No.	Location
IC1	I-6

## Note on Printed Wiring Board:

- Indicates side identified with part number.
- Internal component.

## IC Block Diagram

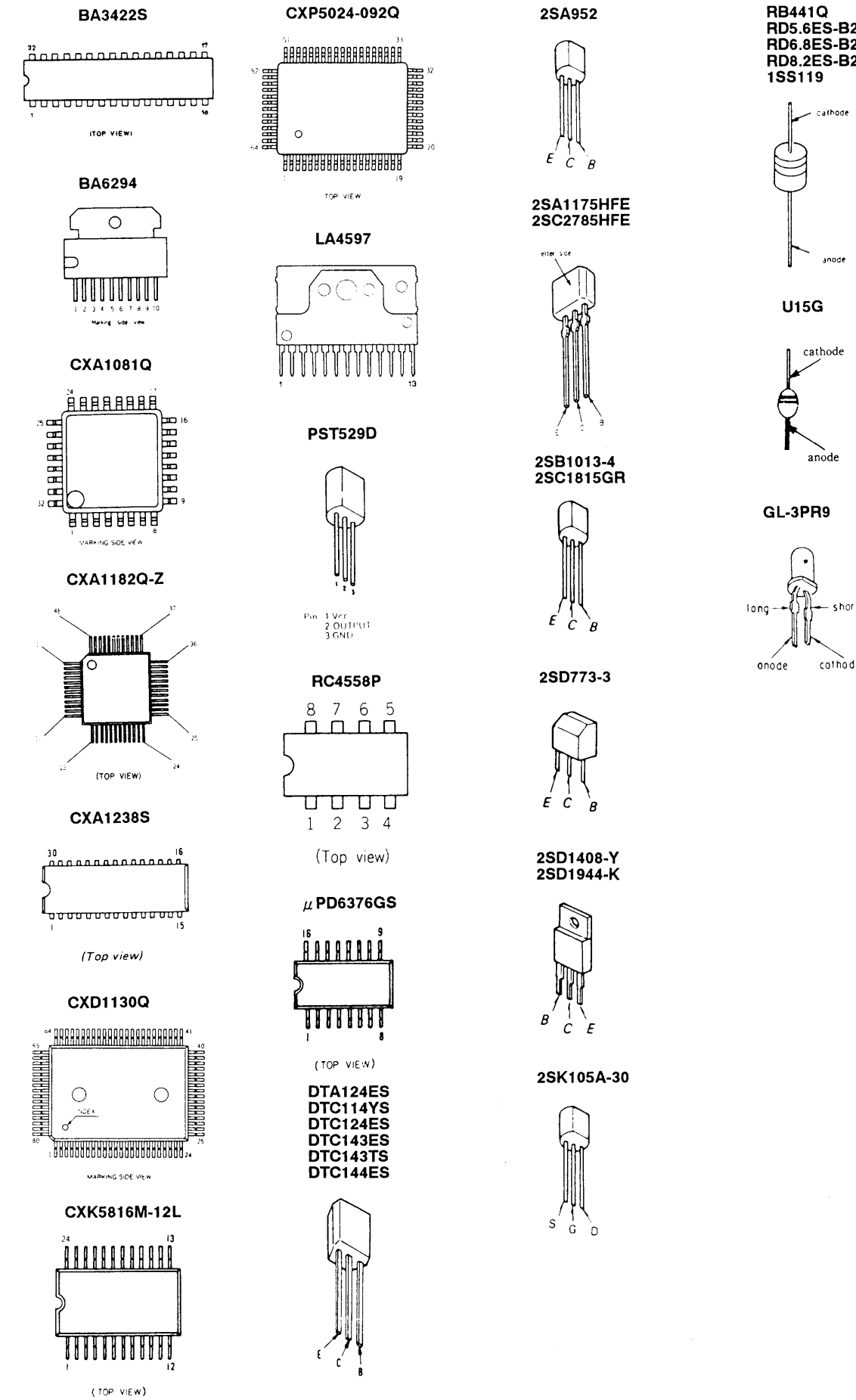


## Note on Schematic Diagram:

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

- Voltagess and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- : AM
- Voltagess are taken with a VOM (10 M $\Omega$ /V).
- Voltagess variations may be noted due to normal production tolerances.
- Signal path.
- : FM

## Semiconductor Lead Layouts





6-5. AUDIO, CD, POWER SUPPLY SECTION PRINTED WIRING BOARDS

• See page 22 for Semiconductor Lead Layouts.

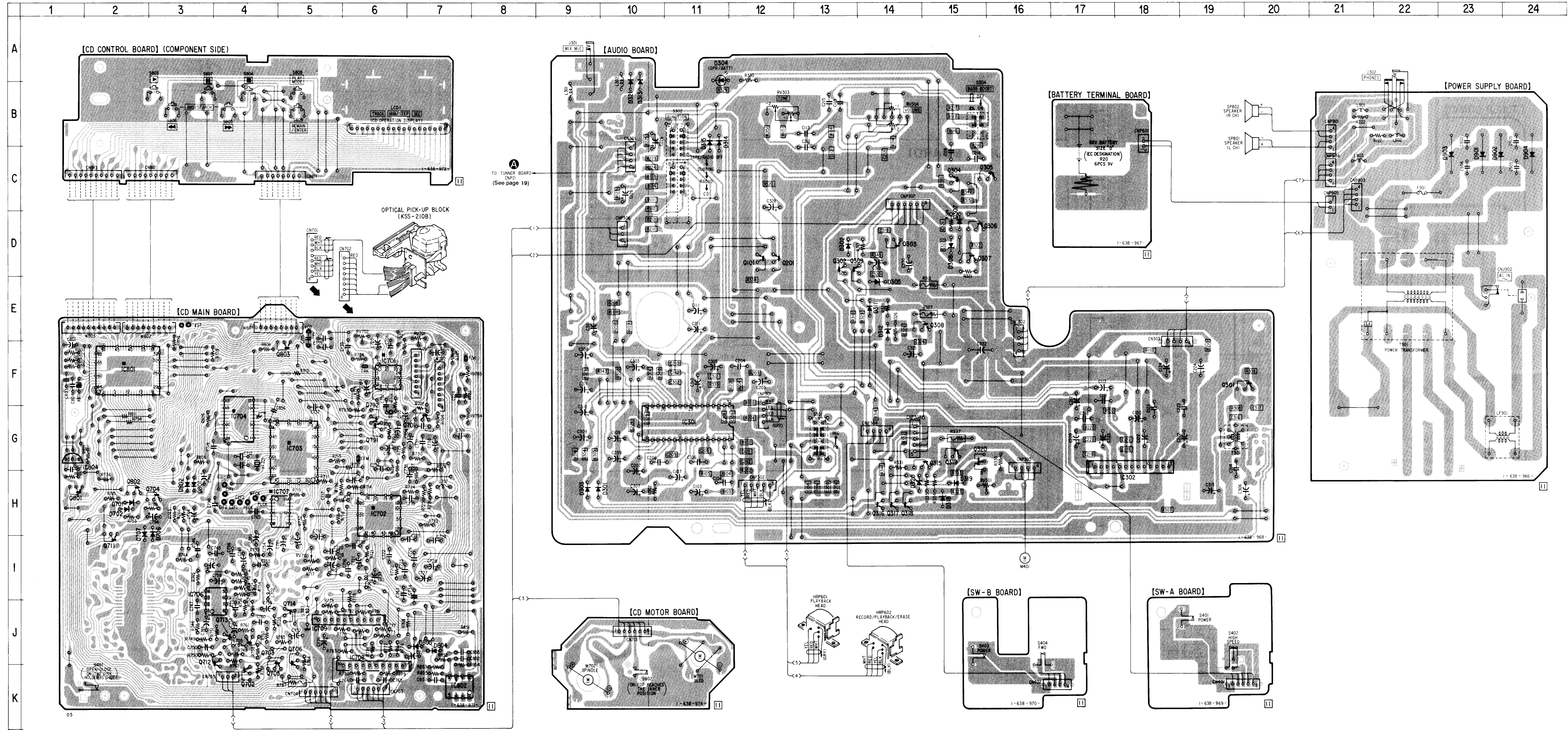
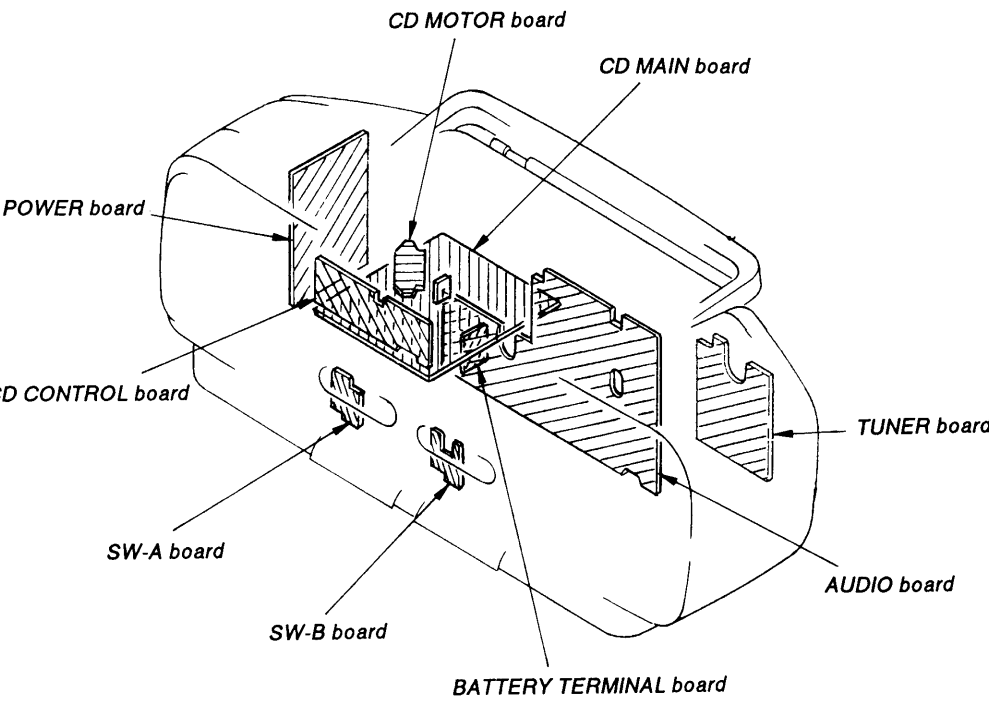
Note on Printed Wiring Board:

- : parts extracted from the component side.
- : parts mounted on the conductor side.
- : Jumper wire connected to the ground pattern on the component side.

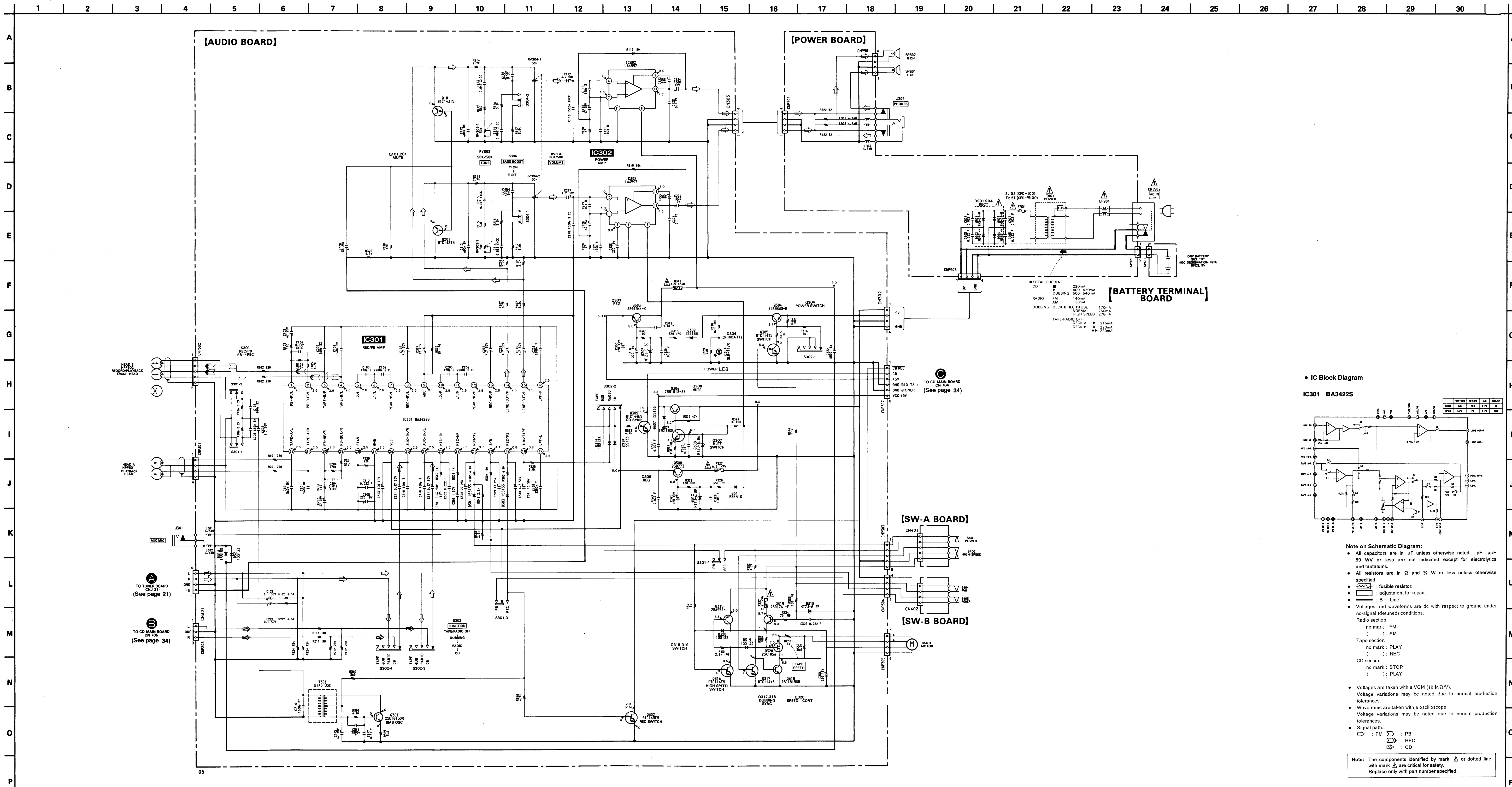
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D301	H-9	IC709	J-5
D302	D-13	IC801	F-2
D303	H-9	IC802	K-7
D304	A-11	IC804	G-1
D305	E-14		
D307	D-15	Q101	D-12
D308	D-15	Q201	D-12
D311	E-14	Q301	F-19
D312	E-14	Q302	D-13
D313	B-10	Q303	D-14
D314	B-11	Q304	C-15
D315	B-11	Q305	C-15
D318	H-15	Q306	D-15
D319	H-15	Q307	D-15
D320	H-14	Q308	E-15
D321	B-10	Q309	D-13
D701	H-2	Q315	G-15
D702	H-2	Q316	H-14
D706	H-3	Q317	H-14
D707	H-2	Q318	H-14
D801	H-3	Q319	G-15
D802	H-3	Q320	G-15
D804	J-7	Q701	G-7
D805	J-7	Q702	K-4
D901	C-23	Q703	J-4
D902	C-23	Q704	H-3
D903	C-23	Q705	K-4
D904	C-24	Q706	J-5
		Q711	I-2
IC301	J-11	Q712	J-4
IC302	H-18	Q713	J-4
IC701	F-6	Q714	J-5
IC702	H-6	Q791	G-6
IC703	G-5	Q792	G-6
IC704	G-4	Q801	H-1
IC706	I-3	Q802	H-2
IC707	H-5	Q803	F-5
IC708	J-6		

• Circuit Boards Location

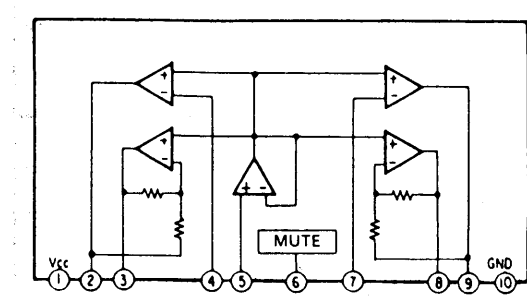
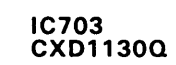
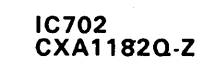








IC701  
CXA1081Q





## SECTION 7


**NOTE:**

- Example:  
KNOB, BALANCE (WHITE) . . . (RED)

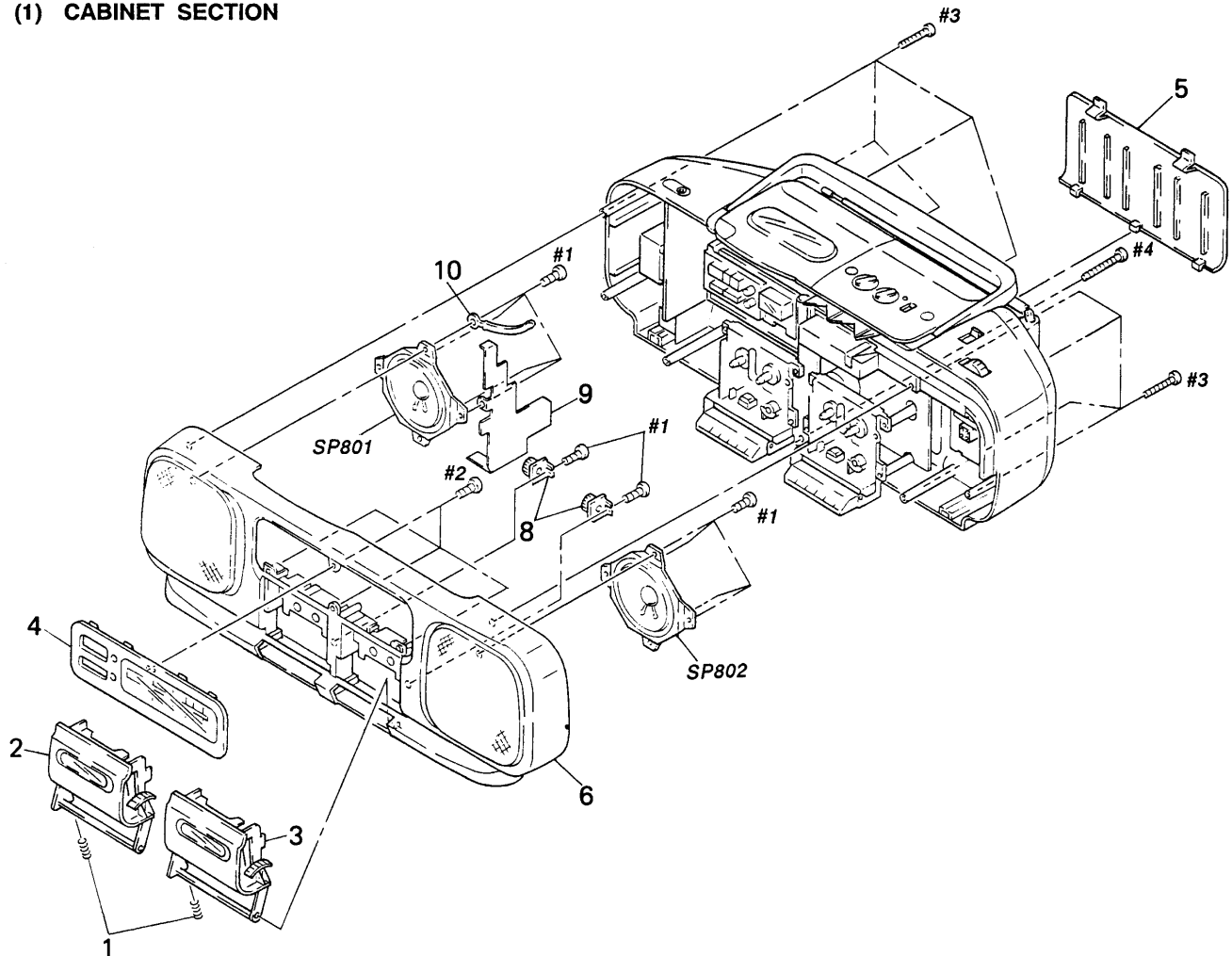
Parts Color      Cabinet's Color

- 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 is given in the last of this parts list.

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.

**(1) CABINET SECTION**

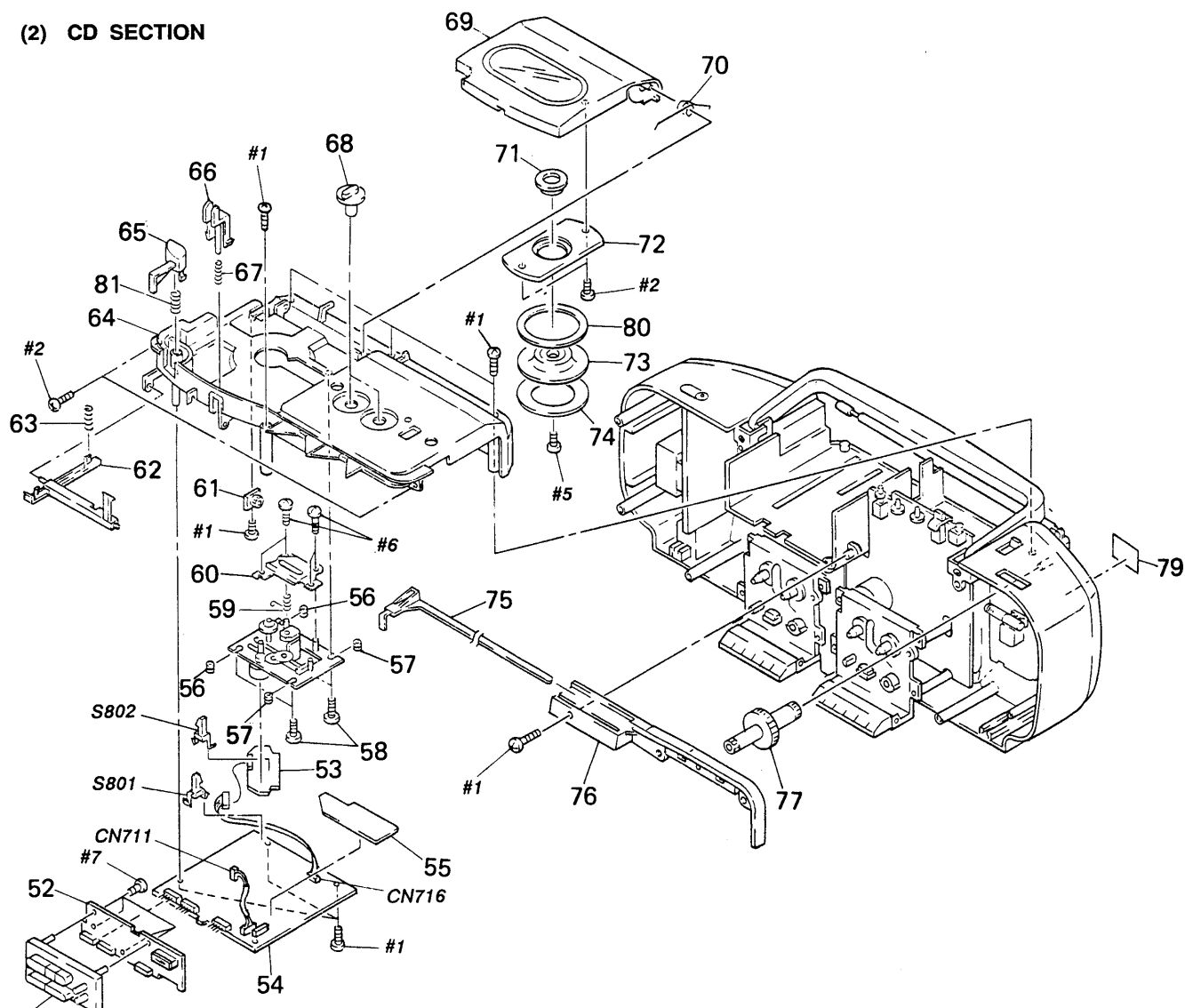


Ref. No.	Part No.	Description	Remark
-----	-----	-----	-----
1	3-369-061-01	SPRING (C HOLDER), COMPRESSION	
2	A-3208-730-A	HOLDER (A) ASSY, CASSETTE	
3	A-3208-731-A	HOLDER (B) ASSY, CASSETTE	
4	A-3208-841-A	PANEL ASSY, FRONT	
5	3-343-064-31	LID, BATTERY CASE	
6	A-3208-728-A	CABINET (FRONT) SUB ASSY	

Ref. No.	Part No.	Description	Remark
-----	-----	-----	-----
8	3-351-377-01	DAMPER	
9	* 3-372-250-01	PLATE, ACOUSTIC ISOLATION	
10	3-703-150-11	STOPPER, WIRING	
SP801	1-544-154-11	SPEAKER	
SP802	1-544-154-11	SPEAKER	

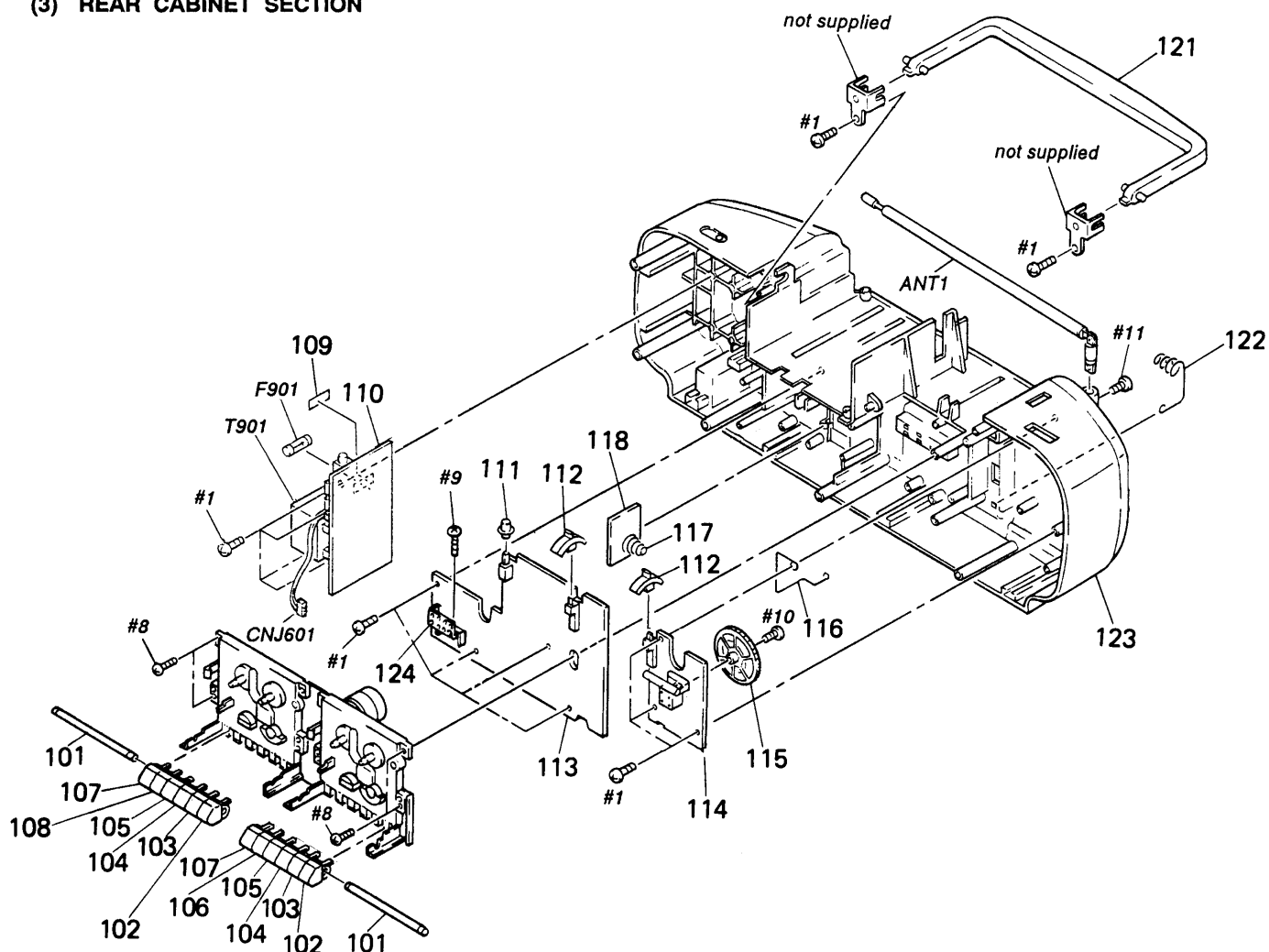


## (2) CD SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-369-075-01	BUTTON (CD)		65	3-369-043-01	BUTTON (CD HOLDER OPEN)	
52	* 1-638-972-11	CD CONTROL BOARD		66	* 3-369-044-01	BUTTON (CD HOLDER UP)	
53	* 1-638-974-11	CD MOTOR BOARD		67	3-369-060-01	SPRING (CD UP), COMPRESSION	
54	* A-3275-099-A	CD MAIN BOARD, COMPLETE		68	3-369-038-01	KNOB (VOL)	
55	* 4-930-246-11	PAPER (N), SHIELD		69	A-3208-734-A	HOLDER SUB ASSY, CD	
56	4-922-858-11	DAMPER (BLU)		70	3-369-063-01	SPRING (CD HOLDER)	
57	4-922-858-01	DAMPER (BRN)		71	1-452-558-11	MAGNET	
58	4-931-373-01	SCREW, CD FITTING		72	* 3-369-046-01	HOLDER, MAGNET	
59	4-931-358-01	SPRING		73	4-919-973-01	PLATE (C), CHUCK	
60	4-928-936-01	COVER, CD		74	4-919-972-01	WASHER	
61	3-351-377-11	DAMPER		75	3-369-070-01	POINTER	
62	3-369-071-01	CLAW, LOCK		76	3-369-074-01	GUIDE, RACK	
63	3-369-062-01	SPRING (LOCK CLAW), COMPRESSION		77	3-369-041-01	KNOB (TUNE)	
64	3-369-082-11	CABINET (CD) (US, Canadian)		79	* 4-941-548-01	LABEL, CLASS 1 (Australian)	
64	3-369-082-71	CABINET (CD) (Australian)		80	4-923-370-01	WASHER (CD)	
				81	3-371-901-01	SPRING (CD OPEN BUTTON), COMPRESSION	
				CN711	* 1-562-650-11	SOCKET, CONNECTOR 8P	
				CN716	* 1-563-474-11	HOUSING, CONNECTOR 6P	
				S801	1-571-274-11	SWITCH, LEAF	
				S802	1-571-274-11	SWITCH, LEAF	

## (3) REAR CABINET SECTION



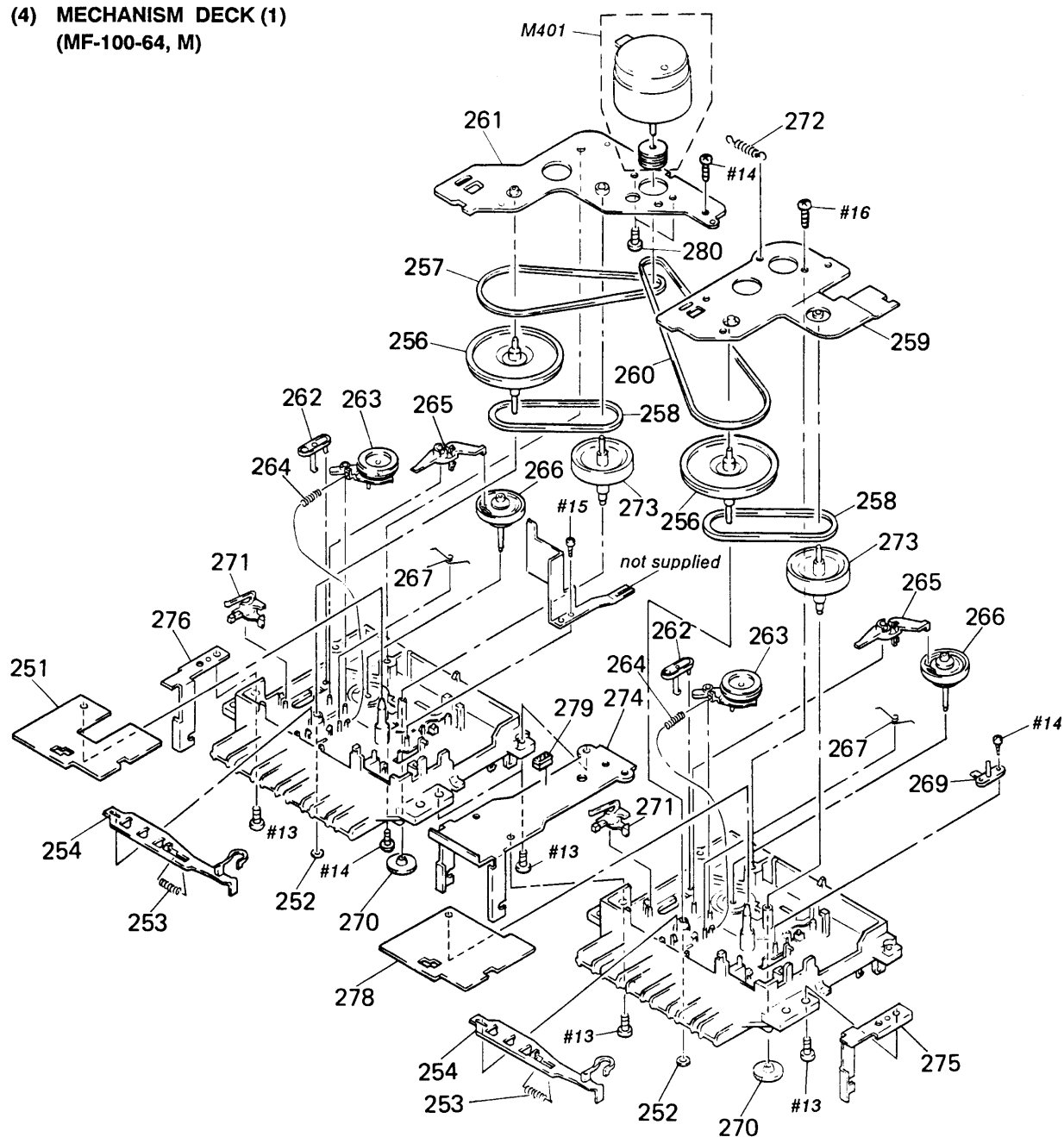
Ref. No.	Part No.	Description	Remark
101	* 3-369-042-01	SHAFT (MD BUTTON)	
102	3-369-052-01	BUTTON (PAUSE)	
103	3-369-058-01	BUTTON (FF)	
104	3-369-057-01	BUTTON (REW)	
105	3-369-051-01	BUTTON (PLAY)	
106	3-369-059-01	BUTTON (REC)	
107	3-369-050-01	BUTTON (STOP)	
108	3-369-056-01	BUTTON (HSD)	
109	3-701-947-15	LABEL (T2. 5A), FUSE (Australian)	
110	* 1-638-966-11	POWER BOARD	
111	3-369-037-01	BUTTON (BASS BOOST)	
112	3-369-039-01	KNOB (FUNCTION)	
113	* A-3261-770-A	AUDIO BOARD, COMPLETE	
114	* A-3261-771-A	TUNER BOARD, COMPLETE	
115	3-338-505-01	DRUM, TUNING CAPACITOR	

Ref. No.	Part No.	Description	Remark
116	* 3-369-066-01	TERMINAL, ANTENNA	
117	* 1-639-064-01	SPRING (-) BATTERY COIL	
118	* 1-639-725-11	BATTERY TERMINAL BOARD	
121	A-3208-737-A	HANDLE ASSY	
122	3-369-065-01	SPRING (+, -), BATTERY COIL	
123	3-369-081-11	CABINET (REAR) (US, Australian)	
123	3-369-081-41	CABINET (REAR) (Canadian)	
124	* 4-936-037-01	HEAT SINK	
ANT1	1-501-378-11	ANTENNA, TELESCOPIC	
CNJ601	* 1-563-470-11	HOUSING, CONNECTOR 2P	
F901	Δ 1-532-286-00	FUSE TIME-LAG (T2. 5A 250V) (Australian)	
F901	Δ 1-532-745-11	FUSE (3. 15A 125V) (US, Canadian)	
T901	Δ 1-450-515-11	TRANSFORMER, POWER (US, Canadian)	
T901	Δ 1-450-516-11	TRANSFORMER, POWER (Australian)	

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

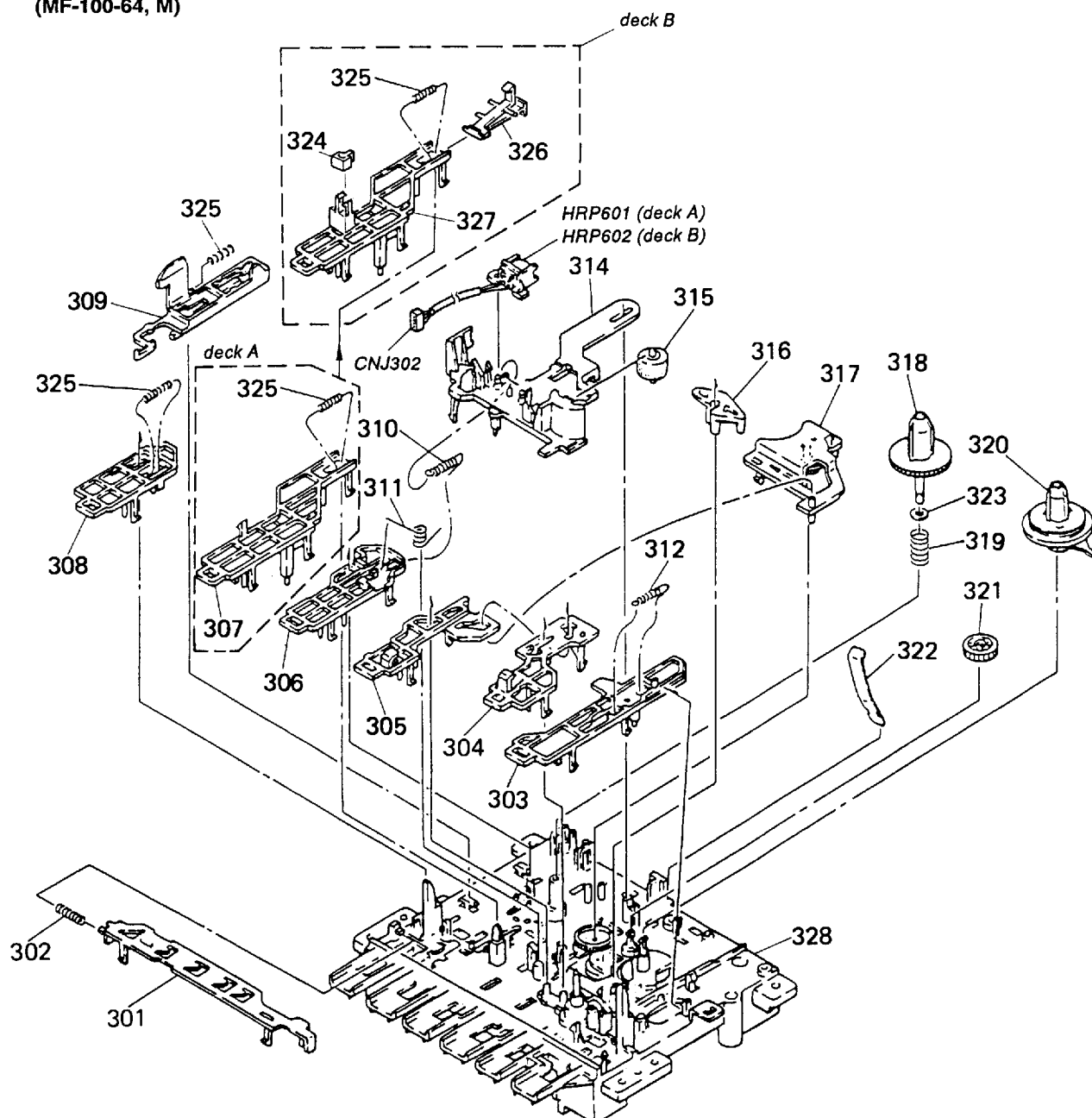
**Note:**  
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

(4) MECHANISM DECK (1)  
(MF-100-64, M)



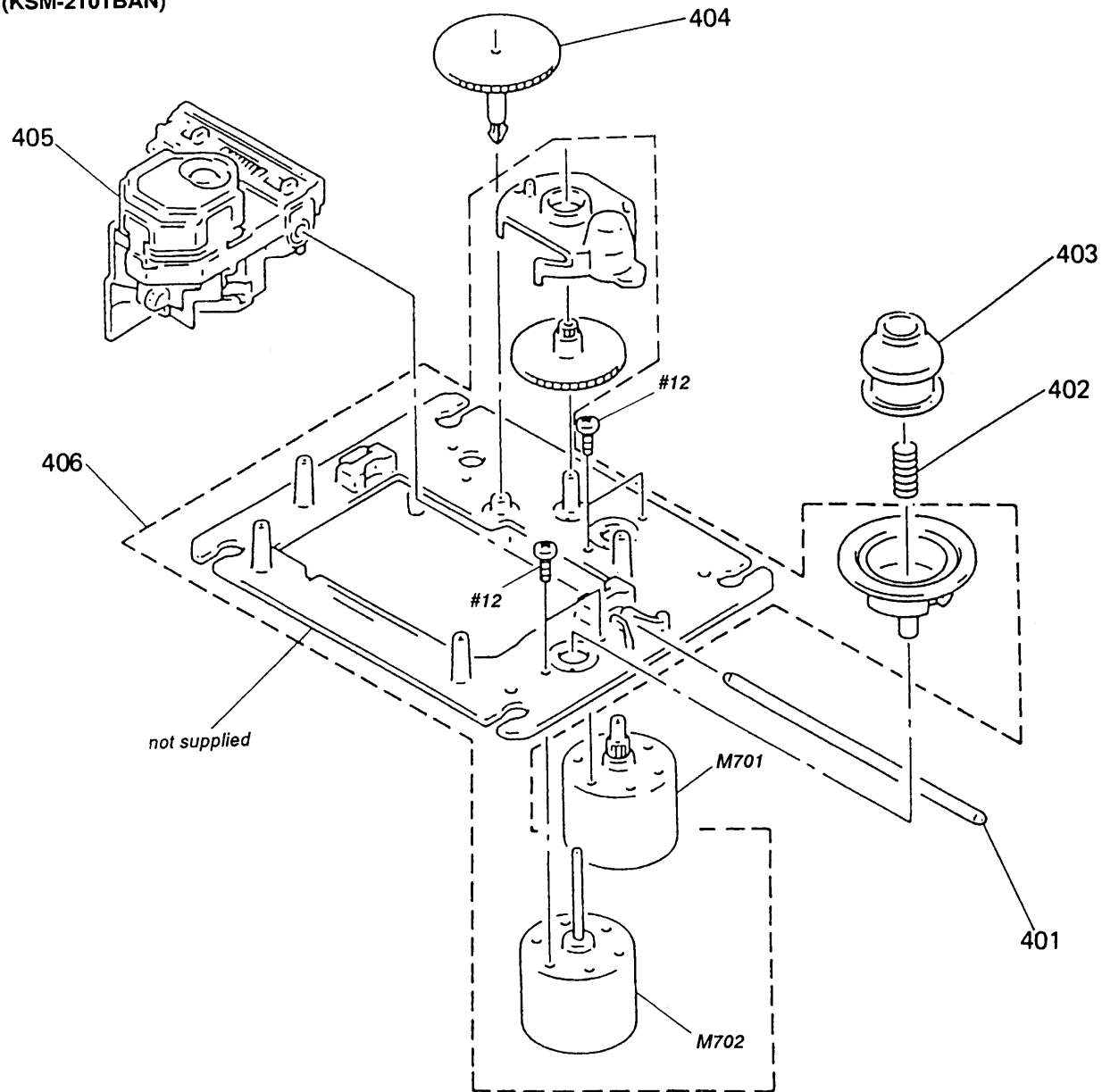
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	* 1-638-970-11	SW-B BOARD		266	X-4918-582-1	PLATE ASSY, TAKE-UP REEL	
252	3-343-358-01	RING, RETAINING		267	4-928-958-01	SPRING, FR RETURN	
253	4-932-656-01	SPRING, COMPRESSION		269	4-928-976-01	LEVER, SW	
254	4-928-996-01	LEVER, SW		270	4-928-967-01	GEAR (C), MIDWAY	
255	X-4920-923-1	WHEEL (W) ASSY, CAPSTAN		271	4-928-987-01	LEVER (T), SHUT-OFF	
256	4-934-521-01	BELT		272	3-322-527-01	SPRING, TENSION	
257	4-928-974-01	BELT (MIDWAY)		273	X-4920-922-1	PULLEY (W) ASSY, FR	
258	* X-4918-598-1	PLATE ASSY, GROUND		274	* 3-369-047-01	BRACKET (MD1)	
259	4-934-520-01	BELT		275	* 3-369-049-01	BRACKET (MD3)	
260	X-4920-921-1	PLATE (W) ASSY, GROUND		276	* 3-369-048-01	BRACKET (MD2)	
261	4-928-961-01	PLATE, PAUSE LOCK		277	* 1-638-969-11	SW-A BOARD	
262	X-4920-346-1	LEVER (S) ASSY, IDLER		278	4-934-522-01	CUSHION	
263	4-932-655-01	SPRING, COMPRESSION		279	3-343-251-01	SCREW (M2.6X2.5)	
264	4-928-986-01	LEVER (S), SHUT-OFF		280	X-4920-924-1	MOTOR ASSY	
265				M401			

(5) MECHANISM DECK (2)  
(MF-100-64, M)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	4-932-695-01	SLIDER (FR), LOCK		317	X-4920-347-1	LEVER (S) ASSY, FR	
302	4-932-656-01	SPRING, COMPRESSION		318	4-928-978-01	GEAR (C), SUPPLY REEL	
303	4-928-994-01	LEVER, PAUSE		319	3-343-381-01	SPRING, COMPRESSION	
304	4-928-993-01	LEVER, FF		320	X-4920-350-1	GEAR (S) ASSY, T REEL	
305	4-928-992-01	LEVER, REW		321	3-343-285-01	GEAR, FF	
306	4-928-991-01	LEVER, PLAY		322	4-928-957-01	RETAINER, CASSETTE	
307	4-921-195-01	LEVER (AC), REC		323	4-931-795-11	WASHER	
308	4-928-985-01	LEVER, STOP		324	1-543-525-11	HEAD, MAGNETIC (ERASE)	
309	4-936-206-01	SLIDER (S), EJECT		325	4-932-648-01	SPRING, COMPRESSION	
310	4-928-972-01	SPRING, TENSION		326	4-928-960-02	CLAW, SAFETY	
311	4-928-973-01	SPRING		327	4-934-511-01	LEVER (S), REC	
312	3-313-372-01	SPRING, TENSION		328	X-4920-348-1	CHASSIS(S) ASSY, MECHANICAL	
314	4-932-693-03	DECK(S), HEAD		CNJ302 *	1-563-473-21	HOUSING, CONNECTOR 5P	
315	4-928-962-01	PINCH ROLLER		HRP601	1-543-714-11	HEAD, MAGNETIC (REC/PB)	
316	4-928-982-01	LEVER (C)		HRP602	1-543-714-11	HEAD, MAGNETIC (REC/PB)	

(6) OPTICAL PICK-UP SECTION  
(KSM-2101BAN)



Ref. No.	Part No.	Description	Remark
401	4-917-565-01	SHAFT, SLED	
402	2-625-191-01	SPRING, COMPRESSION	
403	2-625-186-01	RING (C), CENTER	
404	2-625-188-02	GEAR (A)	
405	⚠ 8-848-137-11	DEVICE, OPTICAL KSS-210B	
406	X-2625-133-2	CHASSIS ASSY, TT (WITH M702 SPINDLE)	
M701	X-2625-132-1	GEAR ASSY, MOTOR (SLED)	

**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.

# SECTION 8

## ELECTRICAL PARTS LIST

AUDIO

**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:  $\mu$ , 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 including parts by reference number, please include the board name.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	* A-3261-770-A	AUDIO BOARD, COMPLETE *****		C201	1-163-199-00	CERAMIC MELF 560PF	10% 50V
	3-369-037-01	BUTTON (BASS BOOST)		C202	1-163-199-00	CERAMIC MELF 560PF	10% 50V
	3-369-039-01	KNOB (FUNCTION)		C203	1-124-477-11	ELECT 47uF	20% 25V
	* 4-936-037-01	HEAT SINK		C204	1-162-840-11	CERAMIC 0.012uF	10% 16V
	7-685-870-01	SCREW +BVT 3X5 (S)		C205	1-163-197-00	CERAMIC MELF 470PF	10% 50V
	< CAPACITOR >			C206	1-102-121-00	CERAMIC 2200PF	10% 50V
C101	1-163-199-00	CERAMIC MELF 560PF	10% 50V	C207	1-124-927-11	ELECT 4.7uF	20% 100V
C102	1-163-199-00	CERAMIC MELF 560PF	10% 50V	C208	1-163-201-00	CERAMIC MELF 680PF	10% 50V
C103	1-124-477-11	ELECT 47uF	20% 25V	C209	1-124-927-11	ELECT 4.7uF	20% 100V
C104	1-162-840-11	CERAMIC 0.012uF	10% 16V	C210	1-163-181-00	CERAMIC MELF 100PF	10% 50V
C105	1-163-197-00	CERAMIC MELF 470PF	10% 50V	C211	1-124-902-00	ELECT 0.47uF	20% 50V
C106	1-102-121-00	CERAMIC 2200PF	10% 50V	C212	1-163-201-00	CERAMIC MELF 680PF	10% 50V
C107	1-124-927-11	ELECT 4.7uF	20% 100V	C213	1-162-847-11	CERAMIC 0.047uF	10% 16V
C108	1-163-201-00	CERAMIC MELF 680PF	10% 50V	C214	1-162-850-11	CERAMIC 0.082uF	10% 16V
C109	1-124-927-11	ELECT 4.7uF	20% 100V	C215	1-102-125-00	CERAMIC 4700PF	10% 50V
C110	1-163-181-00	CERAMIC MELF 100PF	10% 50V	C217	1-124-927-11	ELECT 4.7uF	20% 100V
C111	1-124-902-00	ELECT 0.47uF	20% 50V	C218	1-102-119-00	CERAMIC 1500PF	10% 50V
C112	1-163-201-00	CERAMIC MELF 680PF	10% 50V	C219	1-163-181-00	CERAMIC MELF 100PF	10% 50V
C113	1-162-847-11	CERAMIC 0.047uF	10% 16V	C220	1-124-477-11	ELECT 47uF	20% 25V
C114	1-162-850-11	CERAMIC 0.082uF	10% 16V	C221	1-163-181-00	CERAMIC MELF 100PF	10% 50V
C115	1-102-125-00	CERAMIC 4700PF	10% 50V	C222	1-124-443-00	ELECT 100uF	20% 10V
C117	1-124-927-11	ELECT 4.7uF	20% 100V	C223	1-130-495-00	MYLAR 0.1uF	5% 50V
C118	1-102-119-00	CERAMIC 1500PF	10% 50V	C224	1-124-473-11	ELECT 1000uF	20% 10V
C119	1-163-181-00	CERAMIC MELF 100PF	10% 50V	C225	1-163-053-00	CERAMIC MELF 0.0033uF	20% 16V
C120	1-124-477-11	ELECT 47uF	20% 25V	C226	1-124-463-00	ELECT 0.1uF	20% 50V
C121	1-163-181-00	CERAMIC MELF 100PF	10% 50V	C301	1-124-902-00	ELECT 0.47uF	20% 50V
C122	1-124-443-00	ELECT 100uF	20% 10V	C302	1-163-063-00	CERAMIC MELF 0.022uF	25V
C123	1-130-495-00	MYLAR 0.1uF	5% 50V	C303	1-124-903-11	ELECT 1uF	20% 50V
C124	1-124-473-11	ELECT 1000uF	20% 10V	C305	1-126-176-11	ELECT 220uF	20% 10V
C125	1-163-053-00	CERAMIC MELF 0.0033uF	20% 16V	C306	1-124-927-11	ELECT 4.7uF	20% 100V
C126	1-124-463-00	ELECT 0.1uF	20% 50V	C307	1-126-233-11	ELECT 22uF	20% 50V
				C308	1-126-233-11	ELECT 22uF	20% 50V
				C309	1-124-477-11	ELECT 47uF	20% 25V
				C310	1-124-927-11	ELECT 4.7uF	20% 100V
				C311	1-124-907-11	ELECT 10uF	20% 50V

## AUDIO

Ref. No.	Part No.	Description	Remark
C312	1-163-063-00	CERAMIC MELF 0.022uF	25V
C313	1-124-443-00	ELECT 100uF	20% 10V
C314	1-130-471-00	MYLAR 0.001uF	5% 50V
C315	1-124-477-11	ELECT 47uF	20% 25V
C316	1-163-053-00	CERAMIC MELF 0.0033uF	20% 16V
C317	1-163-059-00	CERAMIC CHIP 0.01uF	10% 50V
C318	1-126-176-11	ELECT 220uF	20% 10V
C319	1-163-059-00	CERAMIC CHIP 0.01uF	10% 50V
C320	1-163-059-00	CERAMIC CHIP 0.01uF	10% 50V
C321	1-163-063-00	CERAMIC MELF 0.022uF	25V
C322	1-163-059-00	CERAMIC CHIP 0.01uF	10% 50V
C324	1-163-063-00	CERAMIC MELF 0.022uF	25V
C325	1-126-176-11	ELECT 220uF	20% 10V
C326	1-163-059-00	CERAMIC CHIP 0.01uF	10% 50V
C327	1-163-063-00	CERAMIC MELF 0.022uF	25V
C328	1-124-482-11	ELECT 33uF	20% 35V
C330	1-126-176-11	ELECT 220uF	20% 10V
C332	1-126-017-11	ELECT 6800uF	20% 16V
C333	1-124-120-11	ELECT 220uF	20% 25V
C336	1-124-120-11	ELECT 220uF	20% 25V
< CONNECTOR >			
CN301	* 1-565-386-11	HOLDER, CABLE 5P	
CN302	* 1-565-385-11	HOLDER, CABLE 4P	
CN303	* 1-565-385-11	HOLDER, CABLE 4P	
CNP301	* 1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P	
CNP302	* 1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P	
CNP303	* 1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P	
CNP304	* 1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P	
CNP305	* 1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P	
CNP306	* 1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P	
CNP307	* 1-506-988-11	PIN, CONNECTOR (PC BOARD) 6P	
< DIODE >			
D301	8-719-911-19	DIODE 1SS119	
D302	8-719-911-19	DIODE 1SS119	
D303	8-719-911-19	DIODE 1SS119	
D304	8-719-918-76	LED GL-3PR9 (OPR/BATT)	
D305	8-719-109-89	DIODE RD5.6ES-B2	
D307	8-719-911-19	DIODE 1SS119	
D308	8-719-109-97	DIODE RD6.8ES-B2	
D311	8-719-986-73	DIODE RB441Q	
D312	8-719-109-97	DIODE RD6.8ES-B2	
D313	8-719-911-19	DIODE 1SS119	
D314	8-719-911-19	DIODE 1SS119	
D315	8-719-911-19	DIODE 1SS119	

Ref. No.	Part No.	Description	Remark
D318	8-719-110-08	DIODE RD8.2ES-B2	
D319	8-719-911-19	DIODE 1SS119	
D320	8-719-911-19	DIODE 1SS119	
D321	8-719-911-19	DIODE 1SS119	
< IC >			
IC301	8-759-501-37	IC BA3422S	
IC302	8-759-820-22	IC LA4597	
< JACK >			
J301	1-563-330-11	JACK (MIX MIC)	
< COIL >			
L301	1-410-324-11	INDUCTOR 4.7uH	
L302	1-410-324-11	INDUCTOR 4.7uH	
< TRANSISTOR >			
Q101	8-729-900-74	TRANSISTOR DTC143TS	
Q201	8-729-900-74	TRANSISTOR DTC143TS	
Q301	8-729-281-53	TRANSISTOR 2SC1815-GR	
Q302	8-729-921-65	TRANSISTOR DTC143ES	
Q303	8-729-905-67	TRANSISTOR 2SD1944-K	
Q304	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q305	8-729-904-36	TRANSISTOR DTC114YS	
Q306	8-729-801-84	TRANSISTOR 2SB1013-4	
Q307	8-729-900-80	TRANSISTOR DTC114ES	
Q308	8-729-177-32	TRANSISTOR 2SD773-34	
Q309	8-729-900-89	TRANSISTOR DTC144ES	
Q315	8-729-195-23	TRANSISTOR 2SA952-K2	
Q316	8-729-900-80	TRANSISTOR DTC114ES	
Q317	8-729-904-36	TRANSISTOR DTC114YS	
Q318	8-729-281-53	TRANSISTOR 2SC1815-GR	
Q319	8-729-202-03	TRANSISTOR 2SD1408-Y	
Q320	8-729-115-30	TRANSISTOR 2SK105A-30	
< RESISTOR >			
R101	1-249-409-11	CARBON 220 5% 1/4W	
R102	1-249-409-11	CARBON 220 5% 1/4W	
R103	1-216-175-00	CARBON MELF 110 5% 1/8W	
R104	1-215-479-00	METAL 270K 1% 1/6W	
R105	1-249-425-11	CARBON 4.7K 5% 1/4W	
R106	1-249-428-11	CARBON 8.2K 5% 1/4W	
R107	1-249-428-11	CARBON 8.2K 5% 1/4W	
R108	1-249-422-11	CARBON 2.7K 5% 1/4W	
R110	1-249-429-11	CARBON 10K 5% 1/4W	
R111	1-249-429-11	CARBON 10K 5% 1/4W	
R112	1-216-229-00	CARBON MELF 20K 5% 1/8W	

## AUDIO

## BATTERY TERMINAL

## CD CONTROL

Ref. No.	Part No.	Description	Remark
R114	1-249-422-11	CARBON	2.7K 5% 1/4W
R115	1-249-414-11	CARBON	560 5% 1/4W
R116	1-249-423-11	CARBON	3.3K 5% 1/4W
R117	1-249-424-11	CARBON	3.9K 5% 1/4W
R120	1-249-401-11	CARBON	47 5% 1/4W
R123	1-249-423-11	CARBON	3.3K 5% 1/4W
R124	1-249-431-11	CARBON	15K 5% 1/4W
R201	1-249-409-11	CARBON	220 5% 1/4W
R202	1-249-409-11	CARBON	220 5% 1/4W
R203	1-216-175-00	CARBON MELF	110 5% 1/8W
R204	1-215-479-00	METAL	270K 1% 1/6W
R205	1-249-425-11	CARBON	4.7K 5% 1/4W
R206	1-249-428-11	CARBON	8.2K 5% 1/4W
R207	1-249-428-11	CARBON	8.2K 5% 1/4W
R208	1-249-422-11	CARBON	2.7K 5% 1/4W
R210	1-249-429-11	CARBON	10K 5% 1/4W
R211	1-249-429-11	CARBON	10K 5% 1/4W
R212	1-216-229-00	CARBON MELF	20K 5% 1/8W
R214	1-249-422-11	CARBON	2.7K 5% 1/4W
R215	1-249-414-11	CARBON	560 5% 1/4W
R216	1-249-423-11	CARBON	3.3K 5% 1/4W
R217	1-249-424-11	CARBON	3.9K 5% 1/4W
R220	1-249-401-11	CARBON	47 5% 1/4W
R223	1-249-423-11	CARBON	3.3K 5% 1/4W
R224	1-249-431-11	CARBON	15K 5% 1/4W
R301	1-249-417-11	CARBON	1K 5% 1/4W
R302	1-247-903-00	CARBON	1M 5% 1/4W
R303	1-249-427-11	CARBON	6.8K 5% 1/4W
R304	1-249-429-11	CARBON	10K 5% 1/4W
R305	1-249-427-11	CARBON	6.8K 5% 1/4W
R307	1-247-820-11	CARBON MELF	360 5% 1/8W
R308	1-249-427-11	CARBON	6.8K 5% 1/4W
R309	1-249-390-11	CARBON	5.6 5% 1/6W
R310	1-249-425-11	CARBON	4.7K 5% 1/4W
R312	△ · 1-217-638-00	FUSIBLE	1.5 5% 1/4W F
R313	1-249-411-11	CARBON	330 5% 1/4W
R314	1-249-429-11	CARBON	10K 5% 1/4W
R315	1-249-417-11	CARBON	1K 5% 1/4W
R316	1-249-417-11	CARBON	1K 5% 1/4W
R318	1-249-421-11	CARBON	2.2K 5% 1/4W
R320	1-249-425-11	CARBON	4.7K 5% 1/4W
R321	1-249-407-11	CARBON	150 5% 1/4W
R322	1-249-437-11	CARBON	47K 5% 1/4W
R323	1-249-425-11	CARBON	4.7K 5% 1/4W
R324	1-249-417-11	CARBON	1K 5% 1/4W
R325	1-249-427-11	CARBON	6.8K 5% 1/4W
R326	1-249-405-11	CARBON	100 5% 1/4W
R327	△ · 1-217-642-00	FUSIBLE	6.8 5% 1/4W F
R328	1-249-411-11	CARBON	330 5% 1/4W

Ref. No.	Part No.	Description	Remark
R329	1-215-406-00	METAL	240 1% 1/6W
R330	1-249-416-11	CARBON	820 5% 1/4W
R331	1-249-421-11	CARBON	2.2K 5% 1/4W
R332	1-249-425-11	CARBON	4.7K 5% 1/4W
R333	1-249-441-11	CARBON	100K 5% 1/4W
R334	1-247-804-11	CARBON	75 5% 1/4W
R335	1-249-407-11	CARBON	150 5% 1/4W
R336	1-249-424-11	CARBON	3.9K 5% 1/4W
R337	△ · 1-217-639-00	FUSIBLE	2.2 5% 1/4W F
R338	1-249-437-11	CARBON	47K 5% 1/4W
R339	1-249-433-11	CARBON	22K 5% 1/4W
R340	1-249-417-11	CARBON	1K 5% 1/4W
R341	1-249-417-11	CARBON	1K 5% 1/4W
R342	1-249-441-11	CARBON	100K 5% 1/4W
R343	1-249-421-11	CARBON	2.2K 5% 1/4W
R345	1-249-405-11	CARBON	100 5% 1/4W

&lt; VARIABLE RESISTOR &gt;

RV301	1-241-036-21	RES. ADJ. CARBON 1K
RV303	1-241-575-11	RES. VAR. CARBON 50K/50K (TONE)
RV304	1-241-574-11	RES. VAR. CARBON 50K/50K (VOLUME)

&lt; SWITCH &gt;

S301	1-572-325-11	SWITCH, SLIDE (REC/PB)
S302	1-572-236-11	SWITCH, LEVER SLIDE (FUNCTION)
S304	1-572-833-11	SWITCH, PUSH (1 KEY) (BASS BOOST)

&lt; TRANSFORMER &gt;

T301	1-433-346-11	TRANSFORMER, BIAS OSCILLATION
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\* 1-639-725-11 BATTERY TERMINAL BOARD

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3-369-064-01 SPRING (-), BATTERY COIL

&lt; CONNECTOR &gt;

CNP601	* 1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P
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\* 1-638-972-11 CD CONTROL BOARD

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3-369-075-01 BUTTON (CD)

7-685-105-19 TPG +P 2X8, TYPE 2, NON-SLIT

## 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.



## CD CONTROL

## CD MAIN

Ref.No.	Part No.	Description	Remark
		< CONNECTOR >	
CN811	* 1-566-970-11	HOUSING, CONNECTOR (PC BOARD)	8P
CN812	* 1-565-980-11	HOUSING, CONNECTOR (PC BOARD)	9P
CN813	* 1-568-451-11	HOUSING, CONNECTOR (PC BOARD)	10P
		< LIQUID CRYSTAL DISPLAY >	
LCD1	1-808-930-11	DISPLAY PANEL, LIQUID CRYSTAL	
		< SWITCH >	
S803	1-572-198-11	SWITCH, KEYBOARD (▶)	
S804	1-572-198-11	SWITCH, KEYBOARD (■)	
S805	1-572-198-11	SWITCH, KEYBOARD (▶▶)	
S806	1-572-198-11	SWITCH, KEYBOARD (◀◀)	
S807	1-572-198-11	SWITCH, KEYBOARD (II)	
S808	1-572-198-11	SWITCH, KEYBOARD (PLAY MODE)	
S809	1-572-198-11	SWITCH, KEYBOARD (REMAIN/ENTER)	
*****			
	* A-3275-099-A CD MAIN BOARD, COMPLETE		
	*****		
	* 4-930-246-11 PAPER (N), SHIELD		
		< CAPACITOR >	
C701	1-130-475-00	MYLAR	0.0022uF 5% 50V
C702	1-124-034-51	ELECT	33uF 20% 16V
C703	1-162-294-31	CERAMIC	0.001uF 10% 50V
C704	1-124-584-00	ELECT	100uF 20% 10V
C705	1-126-176-11	ELECT	220uF 20% 10V
C706	1-130-489-00	MYLAR	0.033uF 5% 50V
C707	1-131-374-00	TANTALUM	33uF 10% 16V
C708	1-130-489-00	MYLAR	0.033uF 5% 50V
C709	1-130-483-00	MYLAR	0.01uF 5% 50V
C710	1-124-229-00	ELECT	33uF 20% 10V
C711	1-162-207-31	CERAMIC	22PF 5% 50V
C712	1-162-207-31	CERAMIC	22PF 5% 50V
C713	1-124-472-11	ELECT	470uF 20% 10V
C714	1-161-379-00	CERAMIC	0.01uF 20% 25V
C715	1-136-173-00	FILM	0.47uF 5% 50V
C716	1-130-483-00	MYLAR	0.01uF 5% 50V
C717	1-162-294-31	CERAMIC	0.001uF 10% 50V
C718	1-124-902-00	ELECT	0.47uF 20% 50V
C719	1-162-851-11	CERAMIC	0.1uF 16V
C720	1-130-489-00	MYLAR	0.033uF 5% 50V
C721	1-124-034-51	ELECT	33uF 20% 16V
C722	1-130-475-00	MYLAR	0.0022uF 5% 50V
C723	1-162-847-11	CERAMIC	0.047uF 10% 16V
C724	1-162-294-31	CERAMIC	0.001uF 10% 50V

Ref.No.	Part No.	Description	Remark
C725	1-136-165-00	FILM	0.1uF 5% 50V
C726	1-136-165-00	FILM	0.1uF 5% 50V
C727	1-124-034-51	ELECT	33uF 20% 16V
C728	1-131-377-00	TANTALUM	10uF 10% 10V
C729	1-136-165-00	FILM	0.1uF 5% 50V
C730	1-126-157-11	ELECT	10uF 20% 16V
C731	1-162-849-11	CERAMIC	0.068uF 10% 16V
C732	1-162-215-31	CERAMIC	47PF 5% 50V
C733	1-124-034-51	ELECT	33uF 20% 16V
C734	1-130-481-00	MYLAR	0.0068uF 5% 50V
C735	1-162-284-31	CERAMIC	150PF 10% 50V
C736	1-161-379-00	CERAMIC	0.01uF 20% 25V
C737	1-161-379-00	CERAMIC	0.01uF 20% 25V
C738	1-161-379-00	CERAMIC	0.01uF 20% 25V
C739	1-161-379-00	CERAMIC	0.01uF 20% 25V
C740	1-124-034-51	ELECT	33uF 20% 16V
C743	1-130-479-00	MYLAR	0.0047uF 5% 50V
C744	1-124-903-11	ELECT	1uF 20% 50V
C745	1-130-475-00	MYLAR	0.0022uF 5% 50V
C746	1-130-471-00	MYLAR	0.001uF 5% 50V
C747	1-102-966-00	CERAMIC	43PF 5% 50V
C748	1-126-176-11	ELECT	220uF 20% 10V
C749	1-124-903-11	ELECT	1uF 20% 50V
C750	1-130-488-00	MYLAR	0.027uF 5% 50V
C751	1-124-903-11	ELECT	1uF 20% 50V
C752	1-124-604-00	ELECT	330uF 20% 10V
C753	1-126-176-11	ELECT	220uF 20% 10V
C754	1-126-301-11	ELECT	1uF 20% 50V
C755	1-130-475-00	MYLAR	0.0022uF 5% 50V
C756	1-130-471-00	MYLAR	0.001uF 5% 50V
C757	1-102-966-00	CERAMIC	43PF 5% 50V
C758	1-124-903-11	ELECT	1uF 20% 50V
C759	1-124-903-11	ELECT	1uF 20% 50V
C760	1-130-488-00	MYLAR	0.027uF 5% 50V
C761	1-136-173-00	FILM	0.47uF 5% 50V
C763	1-162-199-31	CERAMIC	10PF 5% 50V
C764	1-162-199-31	CERAMIC	10PF 5% 50V
C765	1-162-294-31	CERAMIC	0.001uF 10% 50V
C770	1-124-360-00	ELECT	1000uF 20% 16V
C771	1-124-903-11	ELECT	1uF 20% 50V
C780	1-124-034-51	ELECT	33uF 20% 16V
C781	1-124-034-51	ELECT	33uF 20% 16V
C784	1-126-176-11	ELECT	220uF 20% 10V
C790	1-161-379-00	CERAMIC	0.01uF 20% 25V
C791	1-126-163-11	ELECT	4.7uF 20% 50V
C792	1-126-160-11	ELECT	1uF 20% 50V
C794	1-124-903-11	ELECT	1uF 20% 50V
C801	1-124-034-51	ELECT	33uF 20% 16V
C802	1-161-379-00	CERAMIC	0.01uF 20% 25V

## CD MAIN

Ref. No.	Part No.	Description	Remark
C803	1-162-282-31	CERAMIC 100PF	10% 50V
C804	1-162-282-31	CERAMIC 100PF	10% 50V
C851	1-162-292-31	CERAMIC 680PF	10% 50V
C852	1-162-215-31	CERAMIC 47PF	5% 50V
C853	1-162-215-31	CERAMIC 47PF	5% 50V
C856	1-101-004-00	CERAMIC 0.01uF	50V

## &lt; CONNECTOR &gt;

CN701	* 1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
CN702	* 1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
CN704	* 1-506-988-11	PIN, CONNECTOR (PC BOARD) 6P	
CN705	* 1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P	
CN713	* 1-563-976-11	HOUSING, CONNECTOR 6P	
CN716	* 1-563-474-11	HOUSING, CONNECTOR 6P	

## &lt; DIODE &gt;

D701	8-719-911-19	DIODE 1SS119	
D702	8-719-911-19	DIODE 1SS119	
D706	8-719-911-19	DIODE 1SS119	
D707	8-719-911-19	DIODE 1SS119	
D801	8-719-911-19	DIODE 1SS119	
D802	8-719-911-19	DIODE 1SS119	
D804	8-719-911-19	DIODE 1SS119	
D805	8-719-911-19	DIODE 1SS119	

## &lt; IC &gt;

IC701	8-752-033-14	IC CXA1081Q	
IC702	8-752-037-48	IC CXA1182Q-Z	
IC703	8-752-328-46	IC CXD1130Q	
IC704	8-752-323-63	IC CXK5816M-12L	
IC706	8-759-945-58	IC RC4558P	
IC707	8-759-148-30	IC uPD6376	
IC708	8-759-501-65	IC BA6294	
IC709	8-759-501-65	IC BA6294	
IC801	8-752-814-10	IC CXP5024-092Q	
IC802	8-759-945-58	IC RC4558P	
IC804	8-759-971-11	IC PST529D	

## &lt; COIL &gt;

L701	1-410-316-11	INDUCTOR 1uH	
L702	1-410-678-31	INDUCTOR 220uH	
L703	1-410-316-11	INDUCTOR 1uH	
L704	1-410-678-31	INDUCTOR 220uH	
L705	1-424-090-11	COIL, LINE FILTER	

Ref. No.	Part No.	Description	Remark
		< TRANSISTOR >	
Q701	8-729-801-84	TRANSISTOR 2SB1013-4	
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q703	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q704	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q705	8-729-900-63	TRANSISTOR DTA124ES	
Q706	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q711	8-729-900-36	TRANSISTOR DTC124ES	
Q712	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q713	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q714	8-729-900-63	TRANSISTOR DTA124ES	
Q791	8-729-900-36	TRANSISTOR DTC124ES	
Q792	8-729-900-36	TRANSISTOR DTC124ES	
Q801	8-729-900-63	TRANSISTOR DTA124ES	
Q802	8-729-900-74	TRANSISTOR DTC143TS	
Q803	8-729-119-78	TRANSISTOR 2SC2785-HFE	

## &lt; RESISTOR &gt;

R701	1-249-433-11	CARBON 22K 5%	1/4W
R702	1-249-417-11	CARBON 1K 5%	1/4W
R703	1-249-433-11	CARBON 22K 5%	1/4W
R704	1-249-397-11	CARBON 22 5%	1/4W
R705	1-247-806-11	CARBON 91 5%	1/4W
R711	1-249-428-11	CARBON 8.2K 5%	1/4W
R712	1-247-856-00	CARBON 11K 5%	1/4W
R713	1-249-441-11	CARBON 100K 5%	1/4W
R714	1-249-425-11	CARBON 4.7K 5%	1/4W
R715	1-249-441-11	CARBON 100K 5%	1/4W
R716	1-247-886-11	CARBON 200K 5%	1/4W
R717	1-249-422-11	CARBON 2.7K 5%	1/4W
R718	1-247-903-00	CARBON 1M 5%	1/4W
R719	1-249-417-11	CARBON 1K 5%	1/4W
R720	1-247-883-00	CARBON 150K 5%	1/4W
R721	1-249-437-11	CARBON 47K 5%	1/4W
R722	1-249-429-11	CARBON 10K 5%	1/4W
R723	1-249-441-11	CARBON 100K 5%	1/4W
R724	1-249-438-11	CARBON 56K 5%	1/4W
R725	1-247-885-00	CARBON 180K 5%	1/4W
R726	1-249-437-11	CARBON 47K 5%	1/4W
R727	1-249-441-11	CARBON 100K 5%	1/4W
R728	1-247-854-11	CARBON 9.1K 5%	1/4W
R729	1-247-894-11	CARBON 430K 5%	1/4W
R730	1-249-441-11	CARBON 100K 5%	1/4W
R731	1-215-457-00	METAL 33K 1%	1/6W
R732	1-215-457-00	METAL 33K 1%	1/6W
R733	1-247-895-00	CARBON 470K 5%	1/4W
R734	1-249-417-11	CARBON 1K 5%	1/4W
R735	1-249-417-11	CARBON 1K 5%	1/4W

## CD MAIN

## CD MOTOR

Ref. No.	Part No.	Description	Remark		
R736	1-249-429-11	CARBON	10K	5%	1/4W
R743	1-215-438-00	METAL	5.1K	1%	1/6W
R744	1-215-461-00	METAL	47K	1%	1/6W
R745	1-215-453-00	METAL	22K	1%	1/6W
R746	1-215-461-00	METAL	47K	1%	1/6W
R747	1-249-431-11	CARBON	15K	5%	1/4W
R748	1-249-422-11	CARBON	2.7K	5%	1/4W
R749	1-247-834-11	CARBON	1.3K	5%	1/4W
R750	1-249-414-11	CARBON	560	5%	1/4W
R751	1-247-903-00	CARBON	1M	5%	1/4W
R752	1-249-430-11	CARBON	12K	5%	1/4W
R753	1-215-438-00	METAL	5.1K	1%	1/6W
R754	1-215-461-00	METAL	47K	1%	1/6W
R755	1-215-453-00	METAL	22K	1%	1/6W
R756	1-215-461-00	METAL	47K	1%	1/6W
R757	1-247-887-00	CARBON	220K	5%	1/4W
R758	1-249-422-11	CARBON	2.7K	5%	1/4W
R759	1-247-834-11	CARBON	1.3K	5%	1/4W
R760	1-249-414-11	CARBON	560	5%	1/4W
R761	1-247-903-00	CARBON	1M	5%	1/4W
R762	1-249-422-11	CARBON	2.7K	5%	1/4W
R763	1-249-422-11	CARBON	2.7K	5%	1/4W
R764	1-247-887-00	CARBON	220K	5%	1/4W
R765	1-249-395-11	CARBON	15	5%	1/4W
R766	1-249-395-11	CARBON	15	5%	1/4W
R768	1-249-405-11	CARBON	100	5%	1/4W
R770	1-215-453-00	METAL	22K	1%	1/6W
R771	1-215-453-00	METAL	22K	1%	1/6W
R772	1-215-453-00	METAL	22K	1%	1/6W
R773	1-215-453-00	METAL	22K	1%	1/6W
R774	1-215-429-00	METAL	2.2K	1%	1/6W
R775	1-215-457-00	METAL	33K	1%	1/6W
R776	1-215-457-00	METAL	33K	1%	1/6W
R777	1-215-457-00	METAL	33K	1%	1/6W
R778	1-215-433-00	METAL	3.3K	1%	1/6W
R779	1-247-868-11	CARBON	36K	5%	1/4W
R780	1-249-435-11	CARBON	33K	5%	1/4W
R781	1-247-876-11	CARBON	75K	5%	1/4W
R782	1-249-435-11	CARBON	33K	5%	1/4W
R783	1-249-417-11	CARBON	1K	5%	1/4W
R784	1-249-429-11	CARBON	10K	5%	1/4W
R785	1-249-410-11	CARBON	270	5%	1/4W
R786	1-249-425-11	CARBON	4.7K	5%	1/4W
R787	△ 1-212-861-11	FUSIBLE	15	5%	1/4W F
R789	1-249-433-11	CARBON	22K	5%	1/4W
R791	1-247-838-00	CARBON	2K	5%	1/4W
R792	1-249-437-11	CARBON	47K	5%	1/4W
R793	1-249-429-11	CARBON	10K	5%	1/4W
R794	1-249-405-11	CARBON	100	5%	1/4W

**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.

Ref. No.	Part No.	Description	Remark		
R801	1-249-435-11	CARBON	33K	5%	1/4W
R802	1-249-435-11	CARBON	33K	5%	1/4W
R803	1-249-435-11	CARBON	33K	5%	1/4W
R805	1-249-437-11	CARBON	47K	5%	1/4W
R806	1-249-437-11	CARBON	47K	5%	1/4W
R807	1-249-441-11	CARBON	100K	5%	1/4W
R808	1-249-441-11	CARBON	100K	5%	1/4W
R809	1-249-437-11	CARBON	47K	5%	1/4W
R810	1-249-405-11	CARBON	100	5%	1/4W
R811	1-249-405-11	CARBON	100	5%	1/4W
R821	1-249-441-11	CARBON	100K	5%	1/4W
R851	1-215-457-00	METAL	33K	1%	1/6W
R852	1-247-893-11	CARBON	390K	5%	1/4W
R853	1-249-441-11	CARBON	100K	5%	1/4W
R854	1-247-895-00	CARBON	470K	5%	1/4W
R855	1-249-441-11	CARBON	100K	5%	1/4W
< VARIABLE RESISTOR >					
RV701	1-230-497-11	RES. ADJ. CARBON 20K			
RV702	1-230-498-11	RES. ADJ. CARBON 50K			
RV703	1-228-991-00	RES. ADJ. METAL 2.2K			
RV704	1-230-497-11	RES. ADJ. CARBON 20K			
RV705	1-230-497-11	RES. ADJ. CARBON 20K			
< SWITCH >					
S801	1-571-274-11	SWITCH, LEAF (OPEN/CLOSE)			
< CONNECTOR >					
W801	* 1-566-973-11	PIN, CONNECTOR (PC BOARD) 8P			
W802	* 1-568-454-11	PIN, CONNECTOR (PC BOARD) 9P			
W803	* 1-568-455-11	PIN, CONNECTOR (PC BOARD) 10P			
< VIBRATOR >					
X801	1-567-094-00	VIBRATOR, CERAMIC (3.58MHz)			
XF701	1-567-908-11	VIBRATOR, CRYSTAL (16.9344MHz)			
*****					
* 1-638-974-11 CD MOTOR BOARD					
*****					
< CONNECTOR >					
CN713	* 1-566-003-11	PIN, CONNECTOR (PC BOARD) 6P			
< JUMPER >					
JW860	* 3-368-054-01	PIN (UX-50), GROUND			
JW861	* 3-368-054-01	PIN (UX-50), GROUND			

## POWER



## SW-A


## SW-B

## TUNER

Ref. No.	Part No.	Description	Remark
	* 1-638-966-11	POWER BOARD *****	
	3-701-947-15	LABEL (T2.5A), FUSE (Australian)	
		< CAPACITOR >	
C902	1-101-005-00	CERAMIC 22000PF	50V
C903	1-101-005-00	CERAMIC 22000PF	50V
C904	1-101-005-00	CERAMIC 22000PF	50V
C905	1-101-005-00	CERAMIC 22000PF	50V
		< CONNECTOR >	
CN904	* 1-566-001-21	PIN, CONNECTOR (PC BOARD) 4P	
		< INLET >	
CNJ902A	1-526-818-11	INLET, AC (~AC IN) (US, Canadian)	
CNJ902A	1-526-838-11	INLET, AC (~AC IN) (Australian)	
		< CONNECTOR >	
CNP901	* 1-566-001-11	PIN, CONNECTOR (PC BOARD) 4P	
CNP903	* 1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P	
CNP905	* 1-506-998-11	PIN, CONNECTOR (PC BOARD) 2P	
		< DIODE >	
D901 A	8-719-902-17	DIODE U15G	
D902 A	8-719-902-17	DIODE U15G	
D903 A	8-719-902-17	DIODE U15G	
D904 A	8-719-902-17	DIODE U15G	
		< FUSE >	
F901 A	1-532-286-00	FUSE, TIME-LAG (2.5A 250V) (Australian)	
F901 A	1-532-745-11	FUSE (3.15A 125V) (US, Canadian)	
		< HOLDER >	
FH901	1-533-217-31	HOLDER, FUSE	
FH902	1-533-217-31	HOLDER, FUSE	
		< JACK >	
J302	1-566-891-11	JACK (PHONES)	
		< COIL >	
L901	1-410-324-11	INDUCTOR 4.7uH	
L902	1-410-324-11	INDUCTOR 4.7uH	
L903	1-410-324-11	INDUCTOR 4.7uH	
		< LINE FILTER >	
LF901 A	1-424-150-11	TRANSFORMER, LINE FILTER	

Ref. No.	Part No.	Description	Remark
		< RESISTOR >	
R122	1-249-404-00	CARBON 82 5% 1/4W	
R222	1-249-404-00	CARBON 82 5% 1/4W	
		< TRANSFORMER >	
T901 A	1-450-515-11	TRANSFORMER, POWER (US, Canadian)	
T901 A	1-450-516-11	TRANSFORMER, POWER (Australian)	
		*****	
	* 1-638-969-11	SW-A BOARD *****	
		< CONNECTOR >	
CN401	* 1-565-386-11	HOLDER, CABLE 5P	
CNJ303	* 1-563-473-11	HOUSING, CONNECTOR 5P	
		< SWITCH >	
S401	1-571-330-21	SWITCH, LEAF (MD POWER)	
S402	1-571-890-11	SWITCH, LEAF (HIGH SPEED)	
		*****	
	* 1-638-970-11	SW-B BOARD *****	
		< HOLDER >	
CN402	* 1-565-385-11	HOLDER, CABLE 4P	
		< SWITCH >	
S403	1-571-890-11	SWITCH, LEAF (MD POWER)	
S404	1-571-890-11	SWITCH, LEAF (FWD)	
		*****	
	* A-3261-771-A	TUNER BOARD, COMPLETE *****	
	3-338-505-01	DRUM, TUNING CAPACITOR	
	3-369-039-01	KNOB (FUNCTION)	
	7-621-770-87	SCREW +P 2.6X5	
		< CAPACITOR >	
C1	1-162-286-31	CERAMIC 220PF 10% 50V	
C3	1-164-096-11	CERAMIC 0.01uF 50V	
C4	1-124-907-11	ELECT 10uF 20% 50V	
C5	1-164-096-11	CERAMIC 0.01uF 50V	
C6	1-164-039-11	CERAMIC 3PF 0.25PF 50V	

**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.

## TUNER

Ref. No.	Part No.	Description	Remark
C7	1-164-028-11	CERAMIC 24PF	5% 50V
C8	1-102-960-00	CERAMIC 24PF	5% 50V
C9	1-102-945-00	CERAMIC 8.0PF	+0.5PF 50V
C10	1-164-012-11	CERAMIC 3PF	0.25PF 50V
C11	1-164-096-11	CERAMIC 0.01uF	50V
C12	1-162-282-31	CERAMIC 100PF	10% 50V
C15	1-124-927-11	ELECT 4.7uF	20% 100V
C16	1-124-903-11	ELECT 1uF	20% 50V
C17	1-124-126-00	ELECT 47uF	20% 10V
C18	1-124-443-00	ELECT 100uF	20% 10V
C19	1-164-096-11	CERAMIC 0.01uF	50V
C20	1-124-903-11	ELECT 1uF	20% 50V
C21	1-124-925-11	ELECT 2.2uF	20% 100V
C22	1-124-443-00	ELECT 100uF	20% 10V
C23	1-124-902-00	ELECT 0.47uF	20% 50V
C24	1-124-927-11	ELECT 4.7uF	20% 100V
C25	1-124-463-00	ELECT 0.1uF	20% 50V
C27	1-161-053-00	CERAMIC 0.015uF	10% 50V
C28	1-161-053-00	CERAMIC 0.015uF	10% 50V
C31	1-162-282-31	CERAMIC 100PF	10% 50V
C32	1-162-282-31	CERAMIC 100PF	10% 50V
C33	1-162-193-31	CERAMIC 3.3PF	10% 50V
C34	1-162-282-31	CERAMIC 100PF	10% 50V
C35	1-162-282-31	CERAMIC 100PF	10% 50V
< FILTER >			
CF1	1-567-166-00	FILTER, CERAMIC	
CF2	1-527-870-00	FILTER	
CF3	1-567-166-00	FILTER, CERAMIC	
< CONNECTOR >			
CNJ21	* 1-568-271-11	SOCKET, CONNECTOR 5P	
< VARIABLE CAPACITOR >			
CV1	1-151-624-11	CAP. VARIABLE	
< FILTER >			
FL1	1-236-022-11	FILTER, BAND PASS	
< IC >			
IC1	8-752-050-20	IC CXA1238S	
< COIL >			
L1	1-420-855-00	CAIL, FM ANT	
L2	1-406-161-11	COIL, FM OSCILLATOR	
L3	1-402-577-11	ANTENNA, FERRITE-ROD (MM)	
L4	1-406-040-00	COIL (OSC)	

Ref. No.	Part No.	Description	Remark
< RESISTOR >			
R1	1-249-413-11	CARBON 470	5% 1/4W
R3	1-249-421-11	CARBON 2.2K	5% 1/4W
R5	1-249-423-11	CARBON 3.3K	5% 1/4W
R6	1-249-441-11	CARBON 100K	5% 1/4W
R7	1-249-415-11	CARBON 680	5% 1/4W
R9	1-249-441-11	CARBON 100K	5% 1/4W
R10	1-249-407-11	CARBON 150	5% 1/4W
R11	1-249-427-11	CARBON 6.8K	5% 1/4W
R12	1-249-427-11	CARBON 6.8K	5% 1/4W
R13	1-249-405-11	CARBON 100	5% 1/4W
R14	1-249-429-11	CARBON 10K	5% 1/4W
R15	1-247-887-00	CARBON 220K	5% 1/4W
R16	1-247-887-00	CARBON 220K	5% 1/4W
R17	1-249-421-11	CARBON 2.2K	5% 1/4W
R21	1-249-411-11	CARBON 330	5% 1/4W
< VARIABLE RESISTOR >			
RV1	1-238-601-11	RES. ADJ. CARBON 22K	
< SWITCH >			
S1	1-570-729-11	SWITCH, LEVER SLIDE (BAND)	
< TRANSFORMER >			
T1	1-404-355-00	TRANSFORMER, IF	
*****			
MISCELLANEOUS			
*****			
71	1-452-558-11	MAGNET	
117	* 1-639-064-01	SPRING (-) BATTERY COIL	
ANT1	1-501-378-11	ANTENNA, TELESCOPIC	
CNJ11	* 1-562-650-11	SOCKET, CONNECTOR 8P	
CNJ601	* 1-563-470-11	HOUSING, CONNECTOR 2P	
SP801	1-544-154-11	SPEAKER	
SP802	1-544-154-11	SPEAKER	

Ref. No.	Part No.	Description	Remark
-----	-----	-----	-----
		ACCESSORIES & PACKING MATERIALS	
		*****	
	△	1-555-074-00 CORD, POWER (Australian)	
	△	1-557-287-11 CORD, POWER (Canadian)	
	△	1-559-047-11 CORD, POWER (US)	
	*	3-369-785-01 CUSHION (L)	
	*	3-369-786-01 CUSHION (R)	
	*	3-369-781-01 INDIVIDUAL CARTON (US, Canadian)	
	*	3-372-533-01 INDIVIDUAL CARTON (Australian)	
		3-753-597-21 MANUAL, INSTRUCTION (ENGLISH)	
		3-753-597-31 MANUAL, INSTRUCTION (FRENCH) (Canadian)	

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### HARDWARE LIST

#1	7-685-647-79 SCREW +BVTP 3X10 TYPE2 N-S
#2	7-685-646-79 SCREW +BVTP 3X8 TYPE2 N-S
#3	7-685-651-79 SCREW +BVTP 3X20 TYPE2
#4	7-685-154-19 SCREW +P 3X35 TYPE2 NON-SLIT
#5	7-621-772-10 SCREW +B 2X4
#6	7-685-104-19 SCREW +P 2X6 TYPE2 NON-SLIT
#7	7-685-105-19 TPG +P 2X8, TYPE 2, NON-SLIT
#8	7-685-649-79 SCREW +BVTP 3X14 TYPE2 N-S
#9	7-685-870-01 SCREW +BVTT 3X5 (S)
#10	7-621-770-87 SCREW +P 2.6X5
#11	7-682-548-09 SCREW +B 3X8
#12	7-621-255-15 SCREW +P 2X3
#13	7-682-548-04 SCREW +BVTT 3X8 (S)
#14	7-685-132-19 SCREW +P 2.6X5 TYPE2 NON-SLIT
#15	7-685-133-19 SCREW +P 2.6X6 TYPE2
#16	7-685-144-19 SCREW +P 3X5 TYPE2 NON-SLIT

**Note:**

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**Note:**

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MEMO

# CFD-100/W100

## SONY SERVICE MANUAL

*US Model*  
*Canadian Model*  
*CFD-100*

## SUPPLEMENT-1

*Australian Model*  
*CFD-W100*

File this supplement with the service manual.

**Subject:**

1. Schematic diagram and Printed wiring board of CD section are modified.
2. Part No. changed.
3. Electrical parts list (CD section) are added.

### FORMER

## Features

### CD player

- Intro scan function for playing the first ten seconds of all the selections.
- Repeat function for playing the entire disc or a desired selection.
- Repeat shuffle function for playing selections repeatedly in random order.
- Program play function for playing the selections in the desired order (up to 16 selections).

### NEW

## Features

### CD player

- 8-times over-sampling and digital filter  
Signal process frequency of 8 times the reference frequency means CD playback with less distortion.
- Dual D/A conversion system  
High-fidelity CD playback with less phase shift is accomplished by the dual converter which works for the left and right channels independently.
- Intro scan function for playing the first ten seconds of all the selections.
- Repeat function for playing the entire disc or a desired selection.
- Repeat shuffle function for playing selections repeatedly in random order.
- Program play function for playing the selections in the desired order (up to 34 selections).





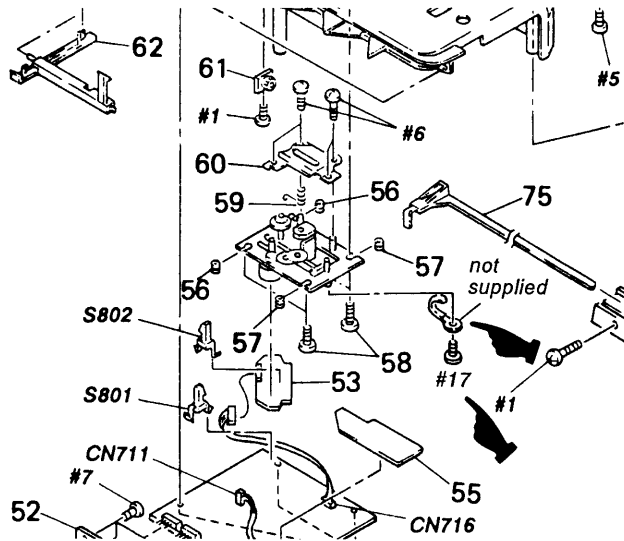
- Some mechanical and electrical parts have been changed in its part numbers.
- The different parts list are as follows.

Page	Ref. No.	Former		New	
		Part No.	Description	Part No.	Description
37	4	A-3208-841-A	PANEL ASSY, FRONT	A-3253-357-A	PANEL ASSY, FRONT
	6	A-3208-728-A	CABINET (FRONT) SUB ASSY	X-3364-228-1	GRILL ASSY, F/CABINET & SPEAKER
	10	3-703-150-11	STOPPER, WIRING		Delete
38	52	*1-638-972-11	CD CONTROL BOARD	*1-642-547-11	CD CONTROL BOARD
	53	*1-638-974-11	CD MOTOR BOARD	*1-642-548-11	CD MOTOR BOARD
	54	*A-3275-099-A	CD MAIN BOARD, COMPLETE	*A-3275-338-A	CD MAIN BOARD, COMPLETE
	S801	1-571-274-11	SWITCH, LEAF	1-571-274-11	SWITCH, LEAF <u>(OPEN/CLOSE)</u>
	S802	1-571-274-11	SWITCH, LEAF	1-571-274-11	SWITCH, LEAF <u>(LIMIT)</u>
39	109	3-701-947-15	LABEL (T2.5A) FUSE (Australian)	4-949-520-18	LABEL <u>(T2.5AL)</u> FUSE (Australian)
	113	*A-3261-770-A	AUDIO BOARD, COMPLETE	A-3262-738-A	AUDIO BOARD, COMPLETE
	117	*1-639-064-01	SPRING (-) BATTERY COIL	*3-369-064-01	SPRING (-) BATTERY COIL
	118	*1-639-725-11	BATTERY TERMINAL BOARD	*1-638-967-11	BATTERY TERMINAL BOARD
	121	A-3208-737-A	HANDLE ASSY	X-3364-229-1	HANDLE ASSY
	F901	<u>A</u> 1-532-745-11	FUSE (3.15A 125V) (US, Canadian)	<u>A</u> 1-576-107-11	FUSE (3.15A <u>250V</u> ) (US, Canadian)
40	254	4-928-996-01	LEVER, SW	4-928-996-11	LEVER, SW
41	307	4-921-195-01	LEVER (AC), REC	4-921-195-01	LEVER (AC) REC, <u>(DECK A)</u>
	314	X-4920-345-1	BASE (S) ASSY, HEAD	X-4918-577-1	HEAD (BASE) (S) ASSY
	324	1-543-525-11	HEAD, MAGNETIC (ERASE)		Delete
	HE601	_____	_____	1-543-876-11	HEAD (ERASE) <u>(DECK B)</u>
	326	4-928-960-02	CLAW, SAFETY	4-928-960-02	CLAW, SAFETY <u>(DECK B)</u>
	327	4-934-511-01	LEVER (S), REC	4-934-511-01	LEVER (S), REC <u>(DECK B)</u>
	CNJ301	_____	_____	1-563-472-11	HOUSING, CONNECTOR 4P <u>(DECK A)</u>
	CNJ302	*1-563-473-21	HOUSING, CONNECTOR 5P	*1-563-473-21	HOUSING, CONNECTOR 5P <u>(DECK B)</u>
42	401	4-917-565-01	SHAFT, SLED	4-917-565-01	SHAFT <u>(K)</u> , SLED
	406	X-2625-133-2	CHASSIS ASSY, TT (WITH M702 SPINDLE)	X-2625-133-1	CHASSIS <u>(MB)</u> , TT (WITH M702 SPINDLE)
	M701	X-2625-132-1	GEAR ASSY, MOTOR (SLED)	X-2625-132-1	GEAR ASSY <u>(MB)</u> , MOTOR (SLED)
43		*A-3261-770-A	AUDIO BOARD, COMPLETE	A-3262-738-A	AUDIO BOARD, COMPLETE
44	C338	_____	_____	1-161-494-00	CERAMIC 0.022 $\mu$ F 25V
	CNP307	*1-506-988-11	PIN, CONNECTOR (PC BOARD) 6P	*1-568-272-11	SOCKET, CONNECTOR 6P
	L304	_____	_____	1-410-324-11	INDUCTOR 4.7 $\mu$ H
	L305	_____	_____	1-410-316-11	INDUCTOR 1 $\mu$ H
	Q308	8-729-177-32	TRANSISTOR 2SD773-34	8-729-140-98	TRANSISTOR 2SD773-34

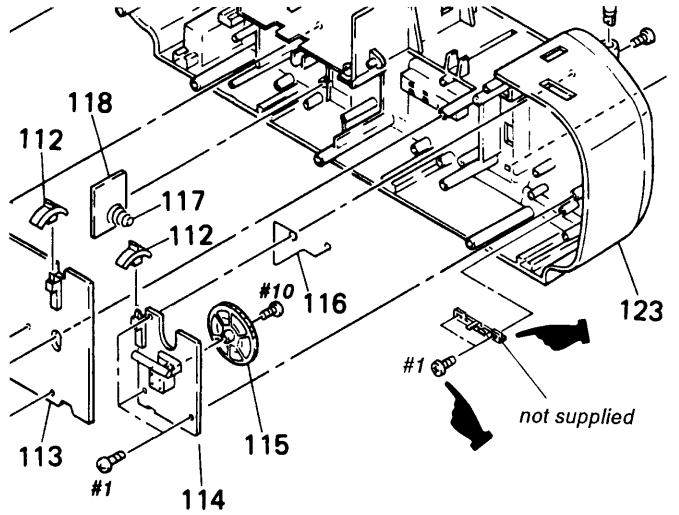
Page	Ref. No.	Former		New	
		<u>Part No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Description</u>
45	R120	1-249-401-11	CARBON 47 5% 1/4W	1-249-402-11	CARBON 56 5% 1/4W
	R220	1-249-401-11	CARBON 47 5% 1/4W	1-249-402-11	CARBON 56 5% 1/4W
	R336	1-249-424-11	CARBON 3.9K 5% 1/4W		Delete
	R346	_____		1-247-810-11	CARBON 130 5% 1/4W
	R399	_____		1-247-844-11	CARBON 3.6K 5% 1/4W
	RV301	1-241-036-21	RES. ADJ CARBON 1K	1-230-494-11	RES. ADJ CARBON 1K
		*1-639-725-11	BATTERY TERMINAL BOARD	*1-638-967-11	BATTERY TERMINAL BOARD
		*1-638-972-11	CD CONTROL BOARD	*1-642-547-11	CD CONTROL BOARD
46	LCD1	1-808-930-11	DISPLAY PANEL, LIQUID CRYSTAL		Delete
	LCD801	_____		1-808-930-11	DISPLAY PANEL, LIQUID CRYSTAL
		*A-3275-099-A	CD MAIN BOARD, COMPLETE	*A-3275-338-A	CD MAIN BOARD, COMPLETE
48		*1-638-974-11	CD MOTOR BOARD	*1-642-548-11	CD MOTOR BOARD
	JW860	*3-368-054-01	PIN (UX-50), GROUND		Delete
	JW880	_____		*3-368-054-01	PIN (UX-50), GROUND
	JW861	*3-368-054-01	PIN (UX-50), GROUND		Delete
	JW881	_____		*3-368-054-01	PIN (UX-50), GROUND
	S802	_____		1-571-274-11	SWITCH, LEAF (LIMIT)
49	CNJ303	3-701-947-15	LABEL (T2.5A), FUSE (Australian)	4-949-520-18	LEBEL (T2.5AL), FUSE (Australian)
		*1-563-473-11	HOUSING, CONNECTOR 5P		Delete
	CNJ902	△1-526-818-11	INLET, AC (~AC IN) (US, Canadian)	△1-526-818-11	INLET, AC (~AC IN) (Canadian)
	CNJ902	△1-526-818-11	INLET, AC (~AC IN) (US, Canadian)	△1-540-009-11	INLET, AC (~AC IN) (US)
	F901	△1-532-745-11	FUSE (3.15A 125V) (US, Canadian)	△1-576-107-11	FUSE (3.15A 250V) (US, Canadian)
	S401	1-571-330-21	SWITCH, LEAF (MD POWER)	1-571-890-11	SWITCH, LEAF (HIGH SPEED) (DECK A)
	S402	1-571-890-11	SWITCH, LEAF (HIGH SPEED)	1-571-330-21	SWITCH, LEAF (MD POWER) (DECK A)
	S403	1-571-890-11	SWITCH, LEAF (MD POWER)	1-571-890-11	SWITCH, LEAF (FWD) (DECK B)
	S404	1-571-890-11	SWITCH, LEAF (FWD)	1-571-890-11	SWITCH, LEAF (MD POWER) (DECK B)
50	117	*1-639-064-01	SPRING (-) BATTERY COIL	*3-369-064-01	SPRING (-) BATTERY COIL
51		△1-559-047-11	CORD, POWER (US)	△1-690-952-21	CORD, POWER (US)
		*3-369-781-01	INDIVIDUAL CARTON (US, Canadian)	*3-379-827-01	INDIVIDUAL CARTON (US, Canadian)
		*3-372-533-01	INDIVIDUAL CARTON (Australian)	*3-382-943-01	INDIVIDUAL CARTON (Australian)
		3-753-597-21	MANUAL, INSTRUCTION (ENGLISH)	3-755-080-21	MANUAL, INSTRUCTION (ENGLISH)
		3-753-597-31	MANUAL, INSTRUCTION (FRENCH) (Canadian)	3-755-080-31	MANUAL, INSTRUCTION (FRENCH) (Canadian)
	#9	7-685-870-01	SCREW +BVT3X5 (S)	7-685-871-01	SCREW +BVT3X6 (S)
	#17	_____		7-621-772-38	SCREW +B2X6

 : Added parts

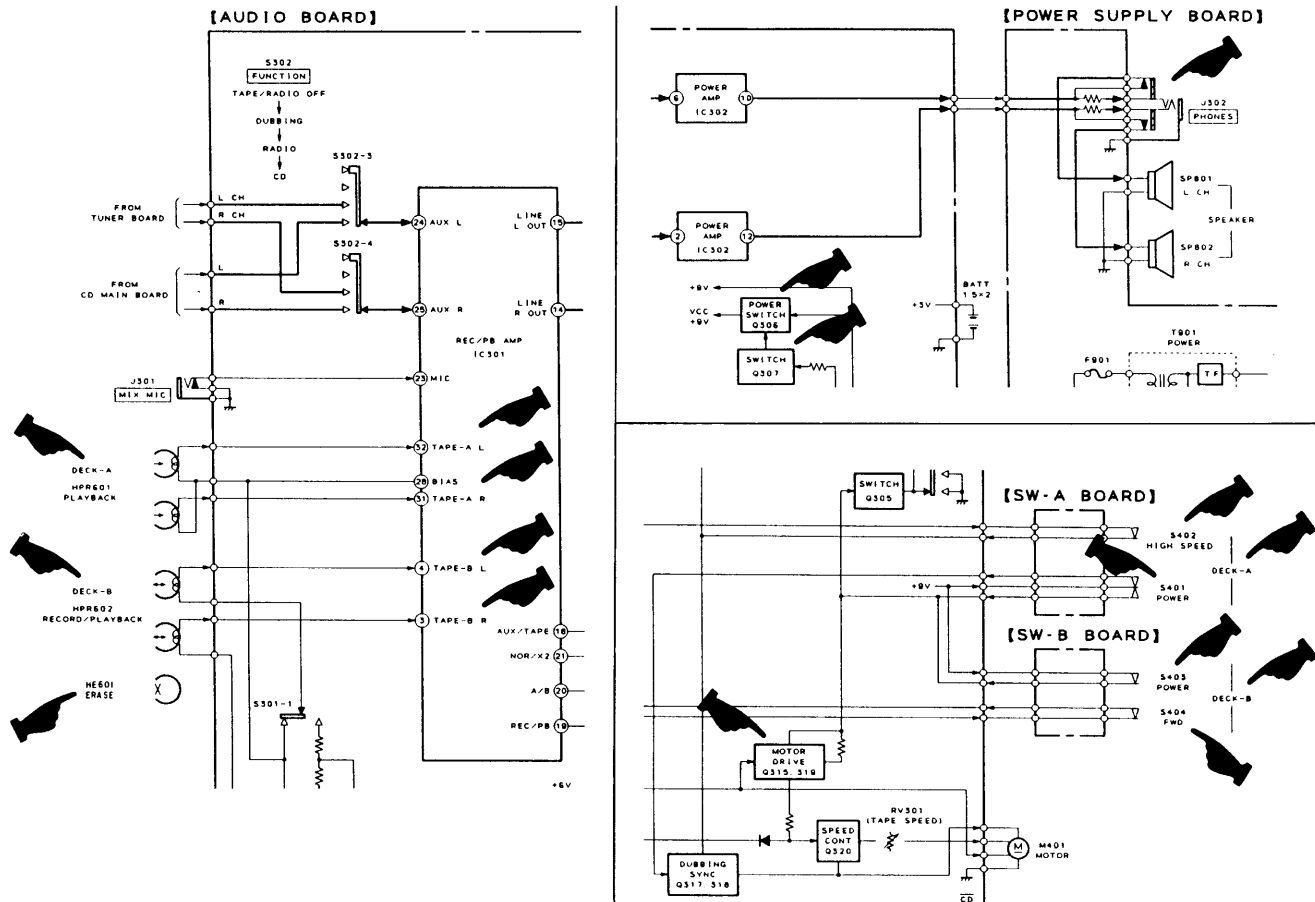
**Page. 38 (2) CD SECTION  
EXPLODED VIEW**



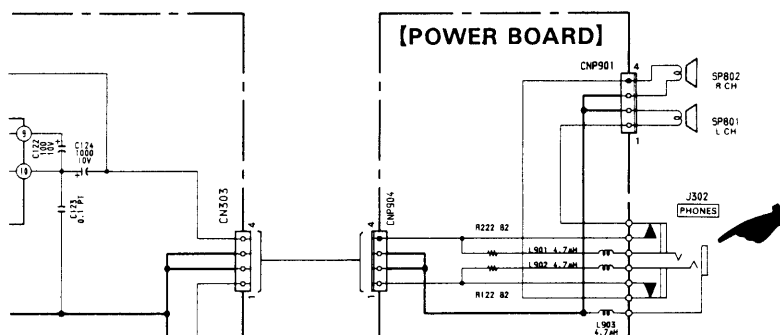
**Page. 39 (3) REAR CABINET SECTION  
EXPLODED VIEW**



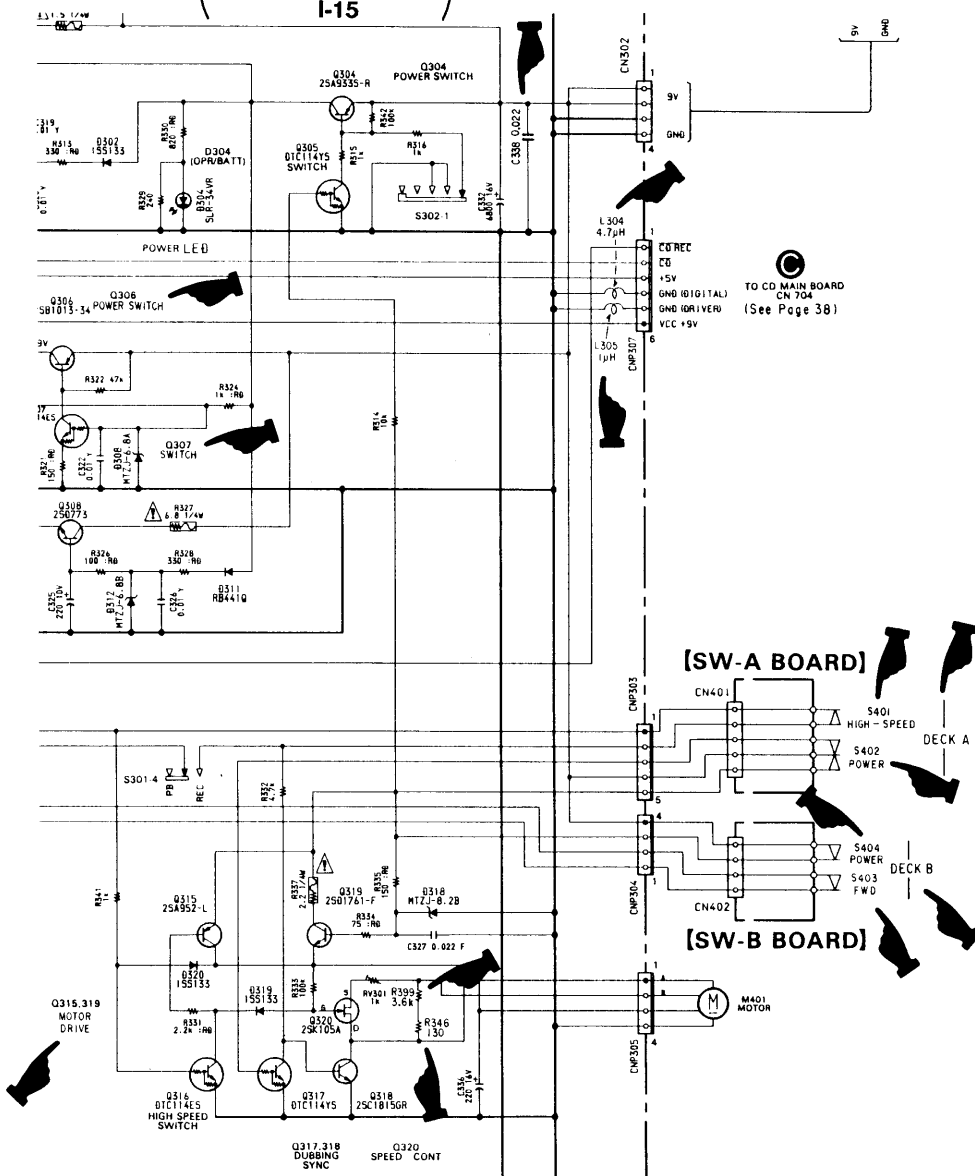
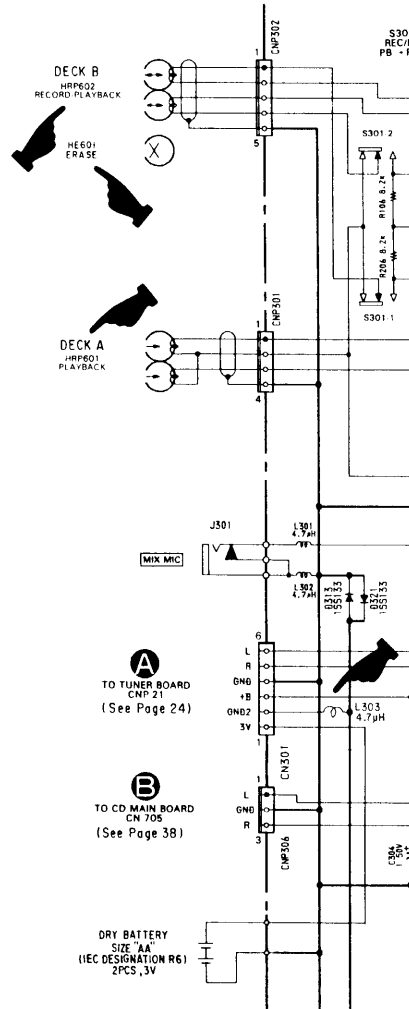
## 6-3. TAPE, POWER SUPPLY SECTION BLOCK DIAGRAM

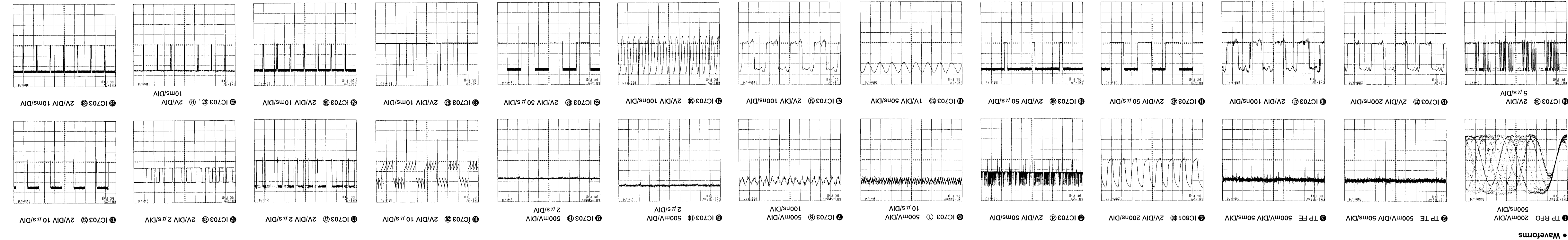


**(Location C-19)**



(Location H-3)  
J-3  
L-4





## SECTION 5 ELECTRICAL ADJUSTMENTS

### 5-3. CD SECTION (NEW TYPE)

#### Notes on Adjustment

- Perform adjustment in service mode.  
After adjustment, be sure to release service mode.
- Perform adjustments in the order given.
- Use the disc (YEDS-18, Part No. 3-702-101-01) only when so indicated.

#### Before Adjustment

Put the set into service mode and perform the following checks. Repair if there are any problems.

#### • Sled Motor Check

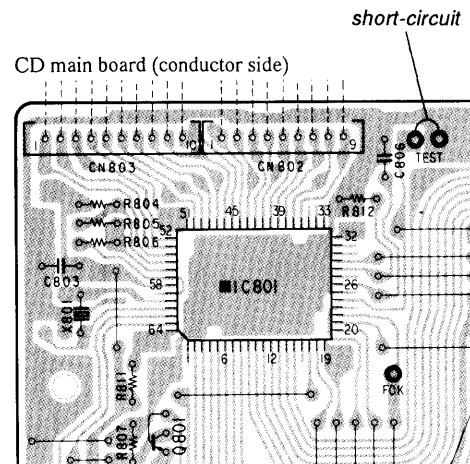
- Press **■** key for long.
- Press **▶▶** , **◀◀** keys and confirm that the FOP moves smoothly from the innermost to outermost circumference and back smoothly with no catching or abnormal noises.  
▶▶ : FOP moves to the outer circumference  
◀◀ : FOP moves to the inner circumference
- Press **■** key for long.
- Confirm that FOP moving operations stops. If it does not, press **■** key again longer.

#### • Focus Search Check

- Press **■** key.
- Press **▶** key. (Focus search operation is performed continuously.)
- Look at the FOP objective lens and confirm that it moves up and down smoothly, with no catching or abnormal noises.
- Press **■** key for long.
- Confirm that focus search operation stops. If it does not, press **■** key again longer.

#### How to Put the Set into Service Mode

- Short-circuit following portions on the CD main board.
- Tune POWER on. (Set the FUNCTION switch to CD position.)
- LCD801 indicator blinks the test mode pattern.

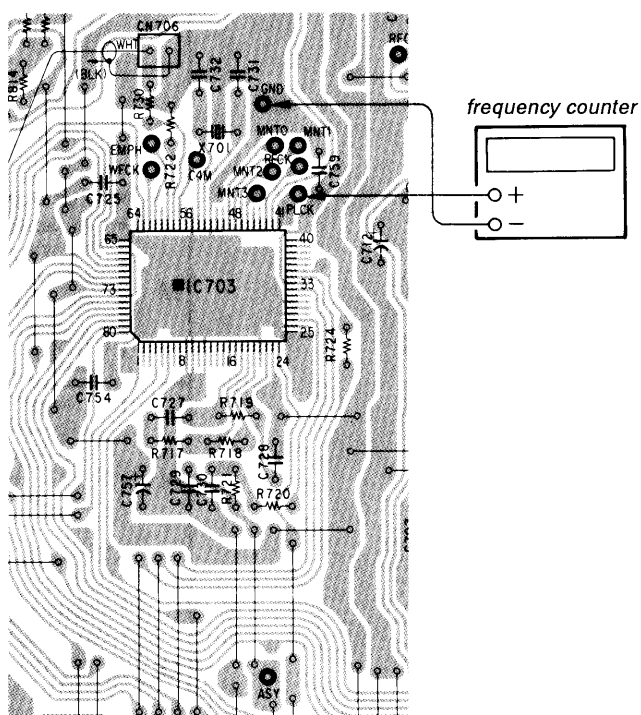


#### VCO Check

##### Check Procedure:

Confirm the reading on frequency counter becomes  $4.3218 \text{ MHz} \pm 40 \text{ kHz}$ .

Confirmation Location: CD main board (conductor side)

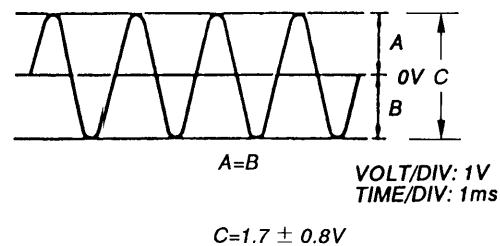


#### E-F Balance Adjustment

This adjustment is to be done when the optical block is replaced.

##### Adjustment Procedure:

- Connect the oscilloscope between IC701 pins ⑧ and ⑩.
- Put the set into service mode. (See page 7)
- Press the **▶▶** and **◀◀** keys to move the FOP to the center.
- Insert disc (YEDS-18) and press **▶** key.
- Adjust RV701 so that the oscilloscope traverse waveform is symmetrical, as shown in the figure below.
- Release service mode after adjustment is completed.



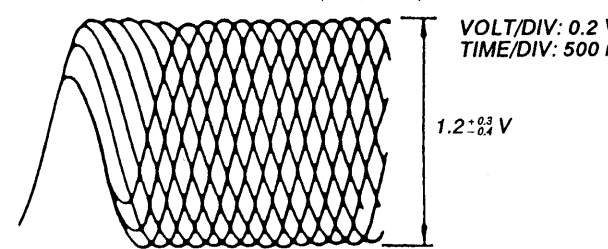
#### Focus Bias Adjustment

This adjustment is to be done when the optical block is replaced.

##### Adjustment Procedure:

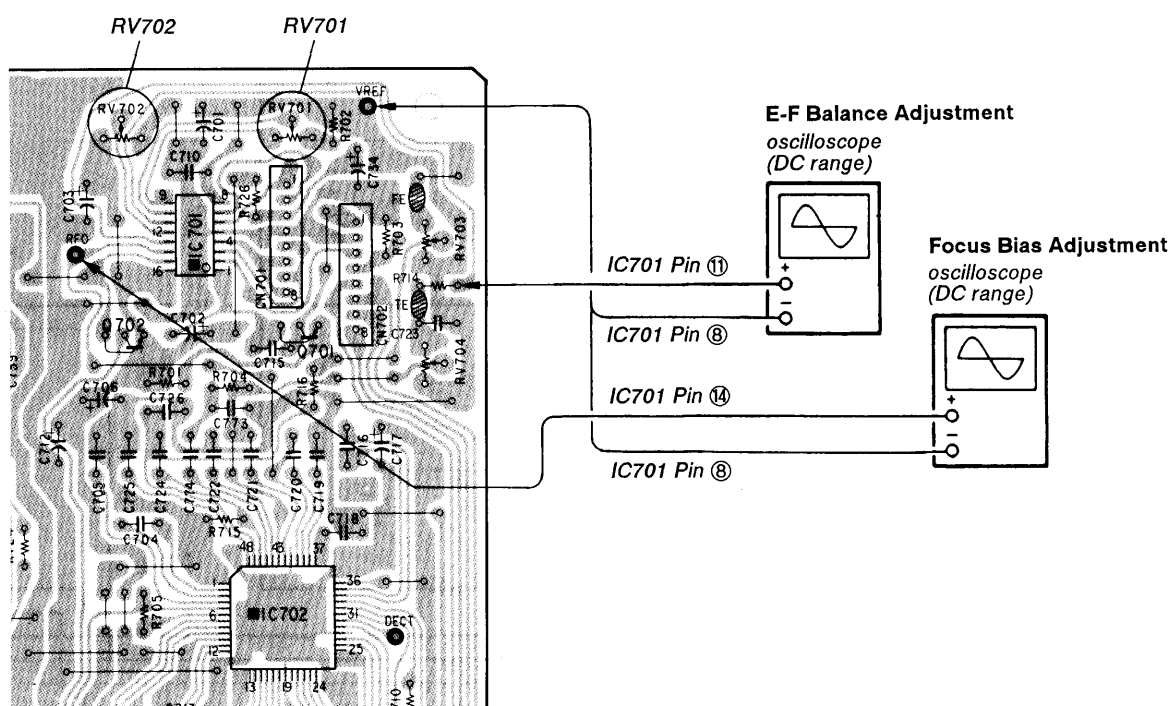
- Connect the oscilloscope between IC701 pins ⑧ and ⑩.
- Put the set into service mode. (See page 7)
- Press the **▶▶** and **◀◀** keys to move the FOP to the center. (Move the FOP to the music area on the disc to enable easy visibility of the eye pattern.)
- Insert disc (YEDS-18) and press **▶** key.
- Adjust RV702 so that the oscilloscope waveform is as shown in the figure below (eye pattern).
- Release service mode after adjustment is completed.

- RF signal reference waveform (eye pattern)



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

Adjustment Location: CD main board (conductor side)



## REFERENCE

### Focus/Tracking Gain Adjustment

A frequency response analyzer is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

	Gain	Focus	Tracking
<b>Symptoms</b>			
• The time until music starts becomes longer for STOP → ▶ PLAY or automatic selection (▶▶ buttons pressed). (Normally takes about 2 seconds.)		low	low or high
• Music does not start and disc continues to rotate for STOP → ▶ PLAY or automatic selection (▶▶ buttons pressed).		—	low
• Sound is interrupted during PLAY. Or time counter display stops progressing.		—	low
• More noise during 2-axis device operation.		high	high

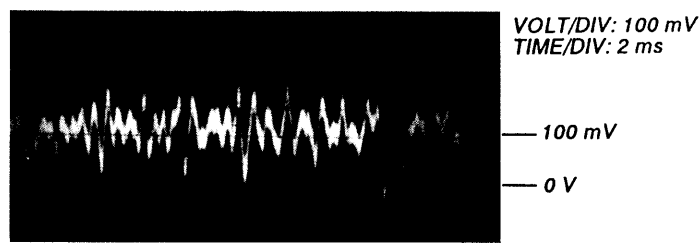
The following is a simple adjustment method.

— Simple Adjustment —

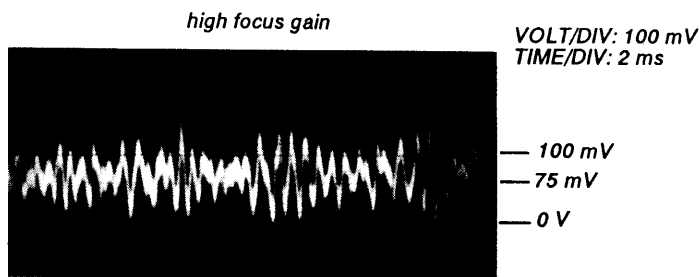
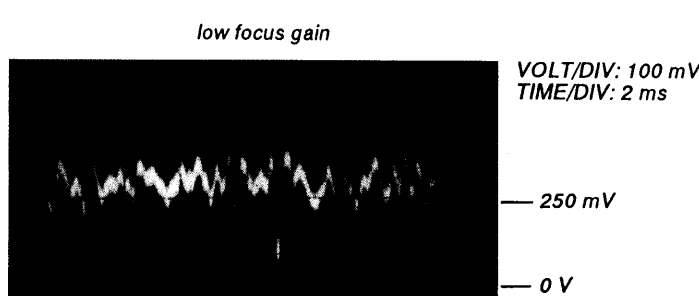
**Note:** Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.

#### Procedure:

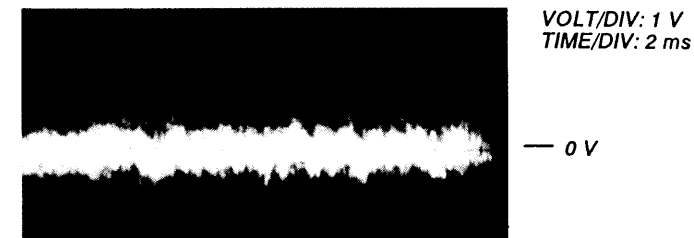
- Keep the set horizontal.  
(If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2-axis device.)
- Insert disc (YEDS-18) and press ▶ PLAY button.
- Connect the oscilloscope between IC701 pins ⑧ and ⑩.
- Adjustment RV703 so that the waveform is as shown in the figure below. (focus gain adjustment)



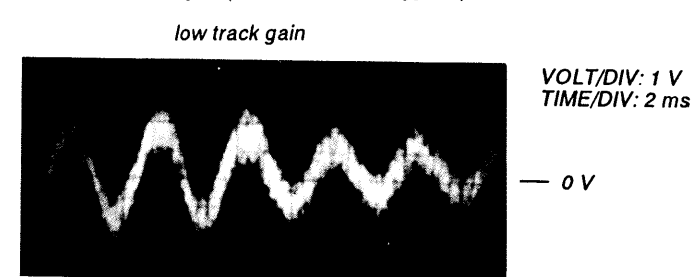
- Incorrect Examples (DC level changes more than on adjusted waveform)



- Connect the oscilloscope between IC701 pins ⑧ and ⑩.
- Adjust RV704 so that the waveform is as shown in the figure below. (tracking gain adjustment)



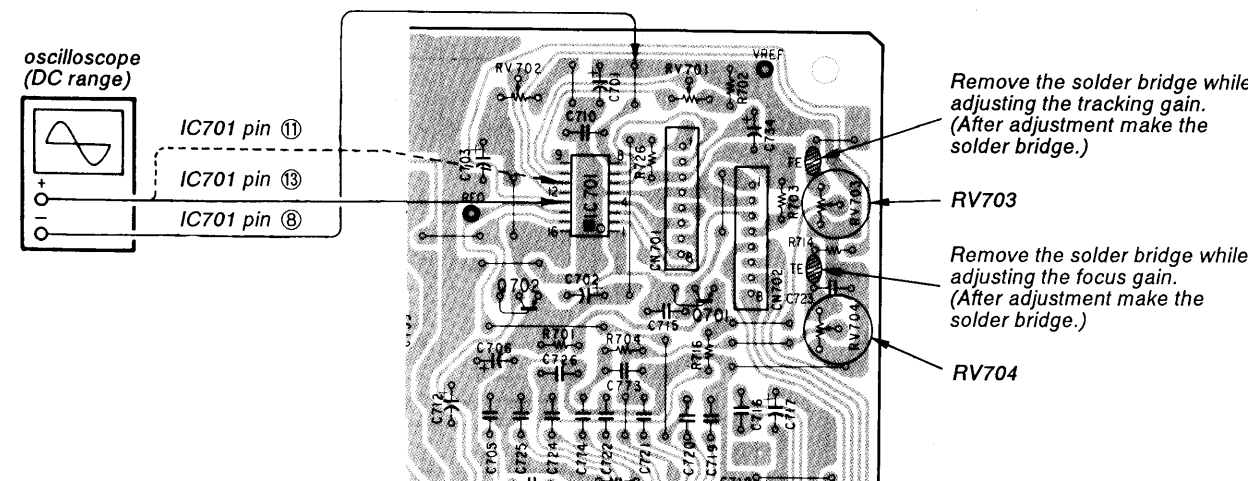
- Incorrect Examples (fundamental wave appears)



high track gain  
(higher fundamental wave than for low gain)



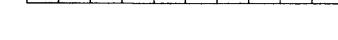
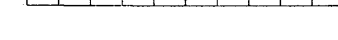
Adjustment Location: CD Main Board (conductor side)











## ⑦ IC703 ⑦ 2V/DIV 10ms/DIV



**Location**

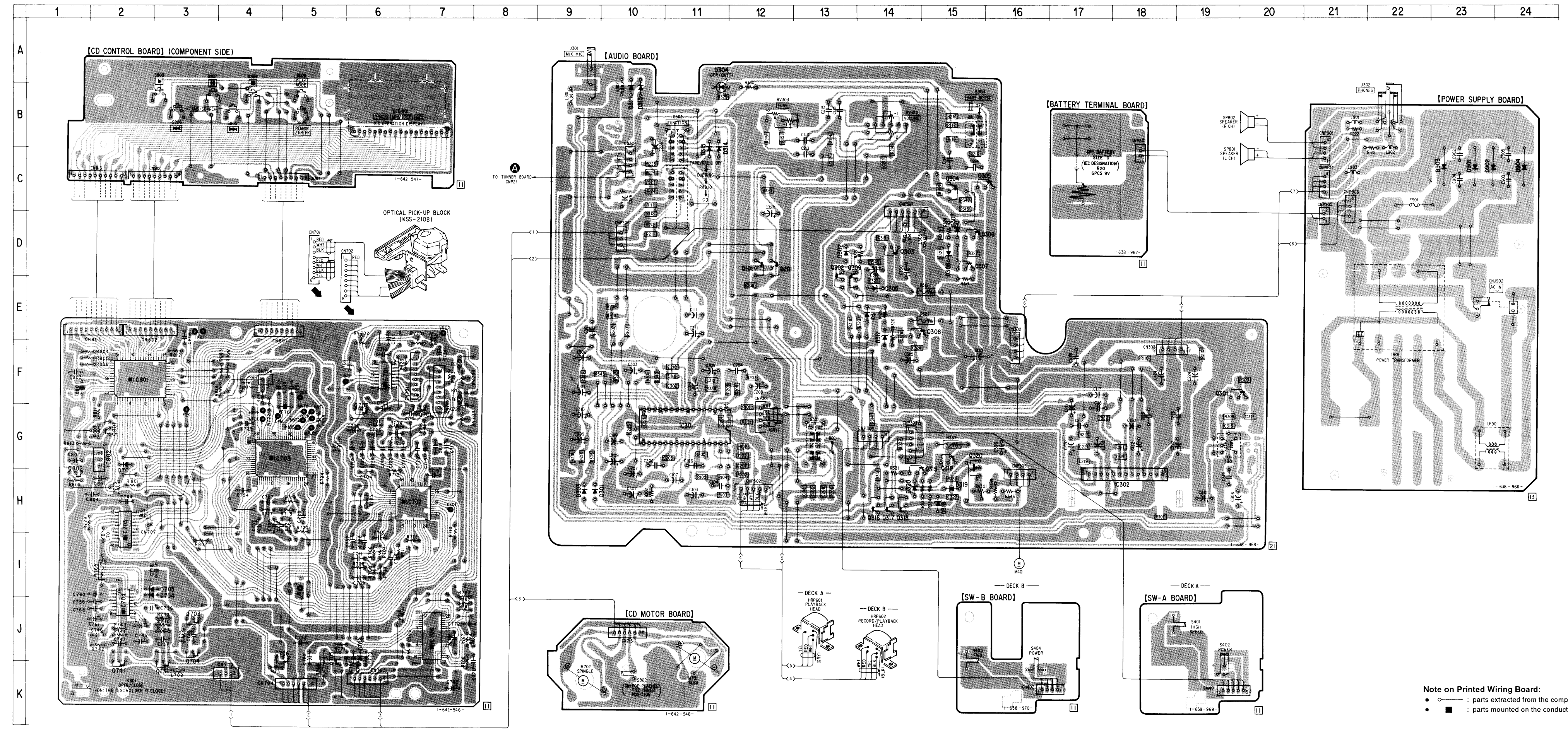
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- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ ,  $\mu\text{F}$ , 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}$  W or less unless otherwise specified.
  -  : fusible resistor.
  -  : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- CD section
  - no mark : STOP
  - ( ) : PLAY
- Voltages are taken with a VOM (10 M $\Omega$ /V).
- 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.
- Signal path,
  -  : CD

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

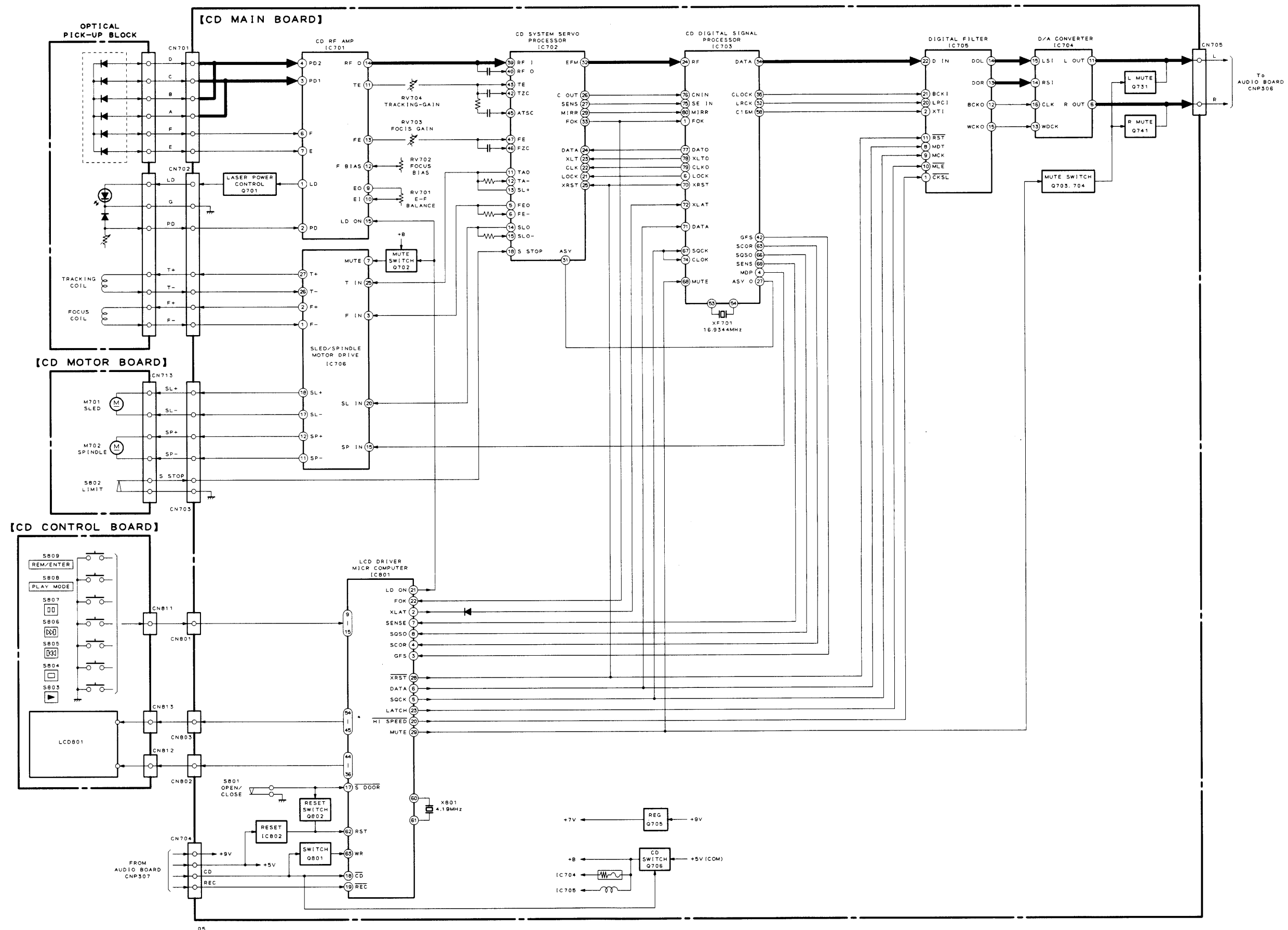


6-5. AUDIO, CD, POWER SUPPLY SECTION PRINTED WIRING BOARDS (NEW TYPE)





### 6-2. CD SECTION BLOCK DIAGRAM (NEW TYPE)



# CD MAIN

## 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:  $\mu$ , 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

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

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.

Ref. No.	Part No.	Description	Remark			
*	A-3275-338-A	CD MAIN BOARD, COMPLETE	*****			
*	1-566-497-11	PIN, CONNECTOR				
		< CAPACITOR >				
C701	1-124-443-00	ELECT	100uF	20%	10V	
C702	1-124-242-00	ELECT	33uF	20%	25V	
C703	1-124-034-51	ELECT	33uF	20%	16V	
C704	1-136-165-00	FILM	0.1uF	5%	50V	
C705	1-136-165-00	FILM	0.1uF	5%	50V	
C706	1-124-261-00	ELECT	10uF	20%	50V	
C707	1-131-368-00	TANTALUM	3.3uF	10%	16V	
C708	1-130-489-00	MYLAR	0.033uF	5%	50V	
C709	1-123-382-00	ELECT	3.3uF	20%	100V	
C710	1-136-173-00	FILM	0.47uF	5%	50V	
C711	1-130-493-00	MYLAR	0.068uF	5%	50V	
C712	1-124-589-11	ELECT	47uF	20%	16V	
C713	1-162-851-11	CERAMIC	0.1uF		16V	
C714	1-162-215-31	CERAMIC	47PF	5%	50V	
C715	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C716	1-130-489-00	MYLAR	0.033uF	5%	50V	
C717	1-124-589-11	ELECT	47uF	20%	16V	
C718	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C719	1-130-489-00	MYLAR	0.033uF	5%	50V	
C720	1-130-475-00	MYLAR	0.0022uF	5%	50V	
C721	1-161-494-00	CERAMIC	0.022uF		25V	
C722	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C723	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C724	1-130-489-00	MYLAR	0.033uF	5%	50V	
C725	1-136-165-00	FILM	0.1uF	5%	50V	
C726	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C727	1-130-491-00	MYLAR	0.047uF	5%	50V	
C728	1-161-374-11	CERAMIC	0.0015uF	20%	50V	
C729	1-136-173-00	FILM	0.47uF	5%	50V	
C730	1-161-379-00	CERAMIC	0.01uF	20%	25V	

Ref. No.	Part No.	Description	Remark			
C731	1-102-942-00	CERAMIC	5.0PF	+0.5PF	50V	
C732	1-102-942-00	CERAMIC	5.0PF	+0.5PF	50V	
C733	1-124-902-00	ELECT	0.47uF	20%	50V	
C734	1-124-907-11	ELECT	10uF	20%	50V	
C735	1-124-034-51	ELECT	33uF	20%	16V	
C736	1-124-927-11	ELECT	4.7uF	20%	100V	
C737	1-162-290-31	CERAMIC	470PF	10%	50V	
C744	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C745	1-124-034-51	ELECT	33uF	20%	16V	
C746	1-124-927-11	ELECT	4.7uF	20%	100V	
C747	1-162-290-31	CERAMIC	470PF	10%	50V	
C751	1-162-851-11	CERAMIC	0.1uF		16V	
C752	1-161-377-00	CERAMIC	0.0047uF	30%	16V	
C753	1-162-851-11	CERAMIC	0.1uF		16V	
C754	1-136-173-00	FILM	0.47uF	5%	50V	
C756	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C757	1-124-477-11	ELECT	47uF	20%	25V	
C758	1-162-851-11	CERAMIC	0.1uF		16V	
C759	1-162-290-31	CERAMIC	470PF	10%	50V	
C760	1-162-851-11	CERAMIC	0.1uF		16V	
C761	1-124-442-00	ELECT	330uF	20%	6.3V	
C762	1-124-473-11	ELECT	1000uF	20%	10V	
C763	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C764	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C765	1-124-477-11	ELECT	47uF	20%	25V	
C766	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C771	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C772	1-130-484-00	MYLAR	0.012uF	5%	50V	
C773	1-161-329-00	CERAMIC	0.0068uF	30%	16V	
C774	1-130-491-00	MYLAR	0.047uF	5%	50V	
C801	1-124-034-51	ELECT	33uF	20%	16V	
C802	1-124-902-00	ELECT	0.47uF	20%	50V	
C803	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C804	1-136-169-00	FILM	0.22uF	5%	50V	
C806	1-161-379-00	CERAMIC	0.01uF	20%	25V	

## CD MAIN

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
* CN701	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
* CN702	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
* CN703	1-563-976-11	HOUSING, CONNECTOR 6P	
* CN704	1-568-272-11	SOCKET, CONNECTOR 6P	
* CN705	1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P	
* CN706	1-563-972-11	HOUSING, CONNECTOR 2P	
* CN801	1-566-973-11	PIN, CONNECTOR (PC BOARD) 8P	
* CN802	1-568-454-11	PIN, CONNECTOR (PC BOARD) 9P	
* CN803	1-568-455-11	PIN, CONNECTOR (PC BOARD) 10P	
< DIODE >			
D701	8-719-911-19	DIODE 1SS119	
D702	8-719-109-97	DIODE RD6.8ES-B2	
D704	8-719-911-19	DIODE 1SS119	
D705	8-719-911-19	DIODE 1SS119	
< IC >			
IC701	8-752-039-03	IC CXA1421M	
IC702	8-752-053-73	IC CXA1372AQ	
IC703	8-752-337-26	IC CXD2500AQ	
IC704	8-759-148-30	IC uPD6376	
IC705	8-759-503-98	IC SM5840DS	
IC706	8-759-518-59	IC BA6296FP	
IC801	8-752-830-87	IC CXP5084H-636Q	
IC802	8-759-971-11	IC PST529D	
< COIL >			
L701	1-410-509-11	INDUCTOR 10uH	
L702	1-410-316-11	INDUCTOR 1uH	
< TRANSISTOR >			
Q701	8-729-801-82	TRANSISTOR 2SB1013-2	
Q702	8-729-900-63	TRANSISTOR DTA124ES	
Q703	8-729-904-39	TRANSISTOR DTC114TS	
Q704	8-729-902-80	TRANSISTOR DTA114YS	
Q705	8-729-905-67	TRANSISTOR 2SD1944-K	
Q706	8-729-801-84	TRANSISTOR 2SB1013-4	
Q731	8-729-900-74	TRANSISTOR DTC143TS	
Q741	8-729-900-74	TRANSISTOR DTC143TS	
Q801	8-729-900-63	TRANSISTOR DTA124ES	
Q802	8-729-900-89	TRANSISTOR DTC144ES	
< RESISTOR >			
R701	1-249-397-11	CARBON 22 5% 1/4W	
R702	1-249-433-11	CARBON 22K 5% 1/4W	
R703	1-247-806-11	CARBON 91 5% 1/4W	
R704	1-247-883-00	CARBON 150K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R705	1-249-441-11	CARBON 100K 5% 1/4W	
R706	1-249-438-11	CARBON 56K 5% 1/4W	
R707	1-247-885-00	CARBON 180K 5% 1/4W	
R708	1-249-432-11	CARBON 18K 5% 1/4W	
R709	1-249-437-11	CARBON 47K 5% 1/4W	
R710	1-249-417-11	CARBON 1K 5% 1/4W	
R711	1-247-896-11	CARBON 510K 5% 1/4W	
R712	1-247-883-00	CARBON 150K 5% 1/4W	
R713	1-249-429-11	CARBON 10K 5% 1/4W	
R714	1-249-417-11	CARBON 1K 5% 1/4W	
R715	1-247-887-00	CARBON 220K 5% 1/4W	
R716	1-249-429-11	CARBON 10K 5% 1/4W	
R717	1-249-423-11	CARBON 3.3K 5% 1/4W	
R718	1-247-881-00	CARBON 120K 5% 1/4W	
R719	1-249-423-11	CARBON 3.3K 5% 1/4W	
R720	1-247-856-00	CARBON 11K 5% 1/4W	
R721	1-249-441-11	CARBON 100K 5% 1/4W	
R722	1-249-441-11	CARBON 100K 5% 1/4W	
R723	1-249-441-11	CARBON 100K 5% 1/4W	
R724	1-249-417-11	CARBON 1K 5% 1/4W	
R725	1-249-433-11	CARBON 22K 5% 1/4W	
R726	1-249-417-11	CARBON 1K 5% 1/4W	
R727	1-249-441-11	CARBON 100K 5% 1/4W	
R728	1-249-437-11	CARBON 47K 5% 1/4W	
R729	1-249-417-11	CARBON 1K 5% 1/4W	
R730	1-249-417-11	CARBON 1K 5% 1/4W	
R731	1-249-429-11	CARBON 10K 5% 1/4W	
R732	1-249-422-11	CARBON 2.7K 5% 1/4W	
R733	1-247-838-00	CARBON 2K 5% 1/4W	
R741	1-249-429-11	CARBON 10K 5% 1/4W	
R742	1-249-422-11	CARBON 2.7K 5% 1/4W	
R743	1-247-838-00	CARBON 2K 5% 1/4W	
R751	1-249-417-11	CARBON 1K 5% 1/4W	
R761	1-249-435-11	CARBON 33K 5% 1/4W	
R762	1-249-429-11	CARBON 10K 5% 1/4W	
R763	1-249-429-11	CARBON 10K 5% 1/4W	
R764	1-249-435-11	CARBON 33K 5% 1/4W	
R765	1-247-838-00	CARBON 2K 5% 1/4W	
R766	1-249-437-11	CARBON 47K 5% 1/4W	
R767	1-249-433-11	CARBON 22K 5% 1/4W	
△R768	1-217-639-00	FUSIBLE 2.2 5% 1/4W F	
△R769	1-212-861-11	FUSIBLE 15 5% 1/4W F	

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.

## CD MAIN

Ref.No.	Part No.	Description	Remark		
R770	1-249-411-11	CARBON	330	5%	1/4W
R771	1-249-405-11	CARBON	100	5%	1/4W
R801	1-249-405-11	CARBON	100	5%	1/4W
R802	1-249-405-11	CARBON	100	5%	1/4W
R803	1-249-437-11	CARBON	47K	5%	1/4W
R804	1-249-435-11	CARBON	33K	5%	1/4W
R805	1-249-435-11	CARBON	33K	5%	1/4W
R806	1-249-435-11	CARBON	33K	5%	1/4W
R807	1-249-441-11	CARBON	100K	5%	1/4W
R809	1-249-437-11	CARBON	47K	5%	1/4W
R811	1-249-441-11	CARBON	100K	5%	1/4W
R812	1-249-429-11	CARBON	10K	5%	1/4W
R813	1-249-437-11	CARBON	47K	5%	1/4W
R814	1-249-429-11	CARBON	10K	5%	1/4W

## &lt; VARIABLE RESISTOR &gt;

RV701	1-230-497-11	RES, ADJ, CARBON 22K
RV702	1-237-288-11	RES, ADJ, CARBON 47K
RV703	1-230-497-11	RES, ADJ, CARBON 22K
RV704	1-230-497-11	RES, ADJ, CARBON 22K

## &lt; SWITCH &gt;

S801	1-571-274-11	SWITCH, LEAF (OPEN/CLOSE)
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## &lt; VIBRATOR &gt;

X801	1-567-775-11	VIBRATOR, CERAMIC (4.19MHz)
XF701	1-579-345-11	VIBRATOR, CERAMIC (16.9344MHz)

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## Printing Method for Large Sized Documents Such As Circuit Diagrams

Printing the page that exceeds A4-size two pages (or letter size) is possible by specifying the print range. (Acrobat Reader Version 4.0 or later)

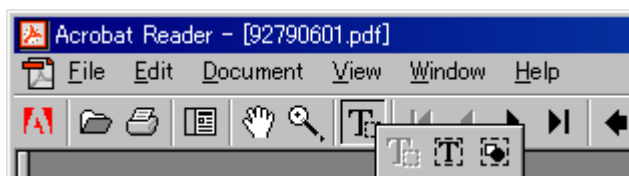
1. The enlarged print is made, if a smaller range than A4 size is specified and the A4 size is selected as a print paper.
2. Almost real sized print is made, if the range is specified, meeting the print paper size.
3. The reduced print is made, if a larger range than the print paper size is specified.

### Printing by Specifying a Range

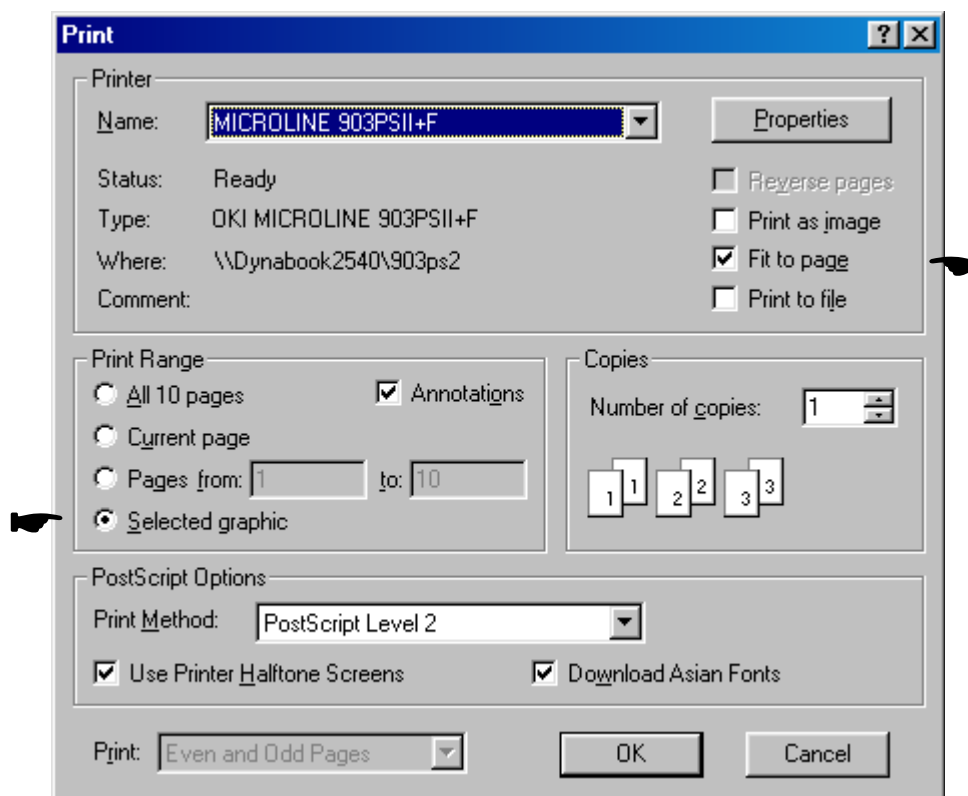
In printing out the drawings such as a schematic diagram and a printed wiring board larger than the printed paper size, they can be printed by specifying the range. (Acrobat Reader Version 4.0 or later)

1. Display the page to be printed.
2. From the File menu, select [Page Setup] and set the paper size.
3. From the Command bar, select [Graphic Select Tool].

(Keep pressing  , select  )



4. Dragging the cursor, enclose the range on the page to be printed.
5. From the File menu, select [Print] and make sure that the [Selected Graphic] is already checked. Also, if [Fit to page] is checked, the selected range is enlarged or reduced (and rotated as necessary) meeting the paper size.



6. To cancel the printed range, click an arbitrary position on the screen.

## REVISION HISTORY

Clicking the version allows you to jump to the revised page.

Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

[illegible]