

PMC-D305/D305L

SERVICE MANUAL

Ver 1.2 1999.11
With SUPPLEMENT-1
(9-923-212-81)



Photo: PMC-D305L

US Model
Canadian Model
E Model
Australian Model
PMC-D305
AEP Model
UK Model
PMC-D305L

CD Section	Model Name Using Similar Mechanism	CFD-ZW150, ZW150L
	CD Mechanism Type	KSM-213CAM/C2NP
	Optical Pick-up Name	KSS-213B/S-RP
TAPE Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	MF-D305

SPECIFICATIONS

For the US model

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION
With 6.0-ohm loads, both channels driven from 100-15,000 Hz; rated 9.4 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

CD player section system

Compact disc digital audio system
Laser diode properties
Material: GaAlAs
Wave length: 780 nm
Emission duration: Continuous
Laser output: Less than 44.6 μ W (This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)
Spindle speed
200 r/min (rpm) to 500 r/min (rpm) (CLV)
Number of channels
2
Frequency response
20-20,000 Hz + 1/- 2.5 dB
Wow and flutter
Below measurable limit

Radio section

Frequency range

	FM	AM (MW)	LW
US, Canadian, E Models	87.6 – 108 MHz	530 – 1,710 kHz	—
AEP, UK, CET Models	87.6 – 107 MHz	531 – 1,602 kHz	153 – 279 kHz
Italian Model	87.5 – 108 MHz	531 – 1,602 kHz	153 – 279 kHz
Australian Model	87.6 – 108 MHz	531 – 1,602 kHz	—

IF

FM: 10.7 MHz
AM (MW)/LW: 450 kHz

Aerials

FM: Lead aerial (D305)
FM: External aerial terminal (D305L)
AM (MW)/LW: External aerial terminal

– Continued on next page –

PERSONAL COMPONENT SYSTEM



SONY®

Cassette-corder section

Recording system

4-track 2 channel stereo

Fast winding time

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

Frequency response

TYPE I (normal):40-15,000 Hz

General

Speaker

Full range: 8 cm (3 1/4 in.) dia., 6.0 ohms, cone type ×2

Input

LINE IN jack (stereo minijack)

Minimum input level 250 mV

Outputs

Headphones jack (stereo minijack)

For 16-68 ohms impedance headphones

LINE OUT jack (stereo minijack)

Rated output level 440 mV at load impedance

47 kilohms

Optical digital output (optical output connector)

Wave length: 630 – 690 nm

Power output (excluding US model)

10 W + 10 W (at 6.0 ohms, 10% harmonic distortion)

Power requirements

For personal component system:

US, Canadian, E models	120 V AC, 60 Hz
------------------------	-----------------

AEP, UK, Italian, CET, Australian models	230 V AC, 50 Hz
---	-----------------

For remote commander:

3 V DC, 2 size AA (R6) batteries

Power consumption

AC 35 W

Dimensions (incl. projecting Parts)

Player: approx. 130 × 211 × 200 mm (w/h/d)

(5 1/8 × 8 3/8 × 7 7/8 inches)

Left speaker: approx. 125 × 210 × 234 mm

(w/h/d)

(5 × 8 3/8 × 9 1/4 inches)

Right speaker: approx. 125 × 210 × 200 mm

(w/h/d)

(5 × 8 3/8 × 7 7/8 inches)

Mass

Player: approx. 1.7 kg (3 lb. 12 oz)

Left speaker: approx. 2.8 kg (6 lb. 3 oz)

Right speaker: approx. 1.1 kg (2 lb. 7 oz)

Supplied accessories

Remote commander (1)

FM lead aerial (1) (D305L)

AM (MW)/LW loop aerial (1)

Audio connecting cord (1)

Design and specifications are subject to change without notice.

• Abbreviation

CET : East European, Russian

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SECTION 1 SERVICING NOTES

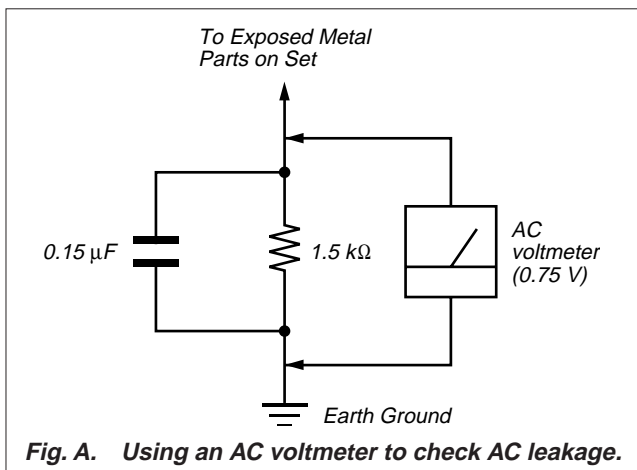
SAFETY CHECK-OUT

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



SAFETY-RELATED COMPONENT WARNING!!

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

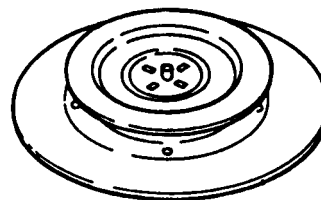
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

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

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



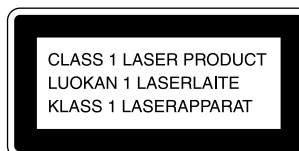
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

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

NOTES ON LASER DIODE EMISSION CHECK

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



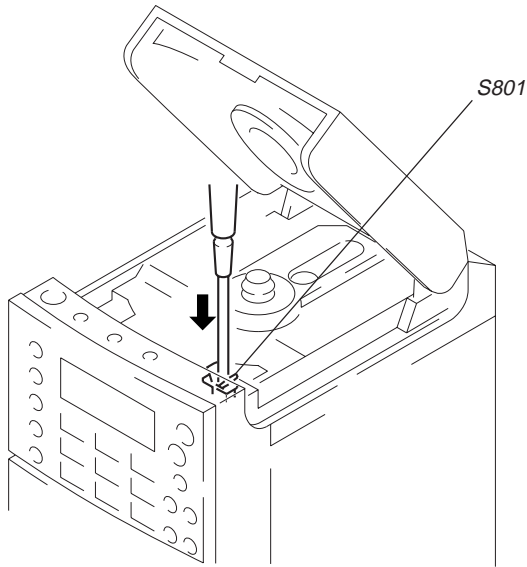
This Compact Disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT table is location on the rear exterior.

CAUTION

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

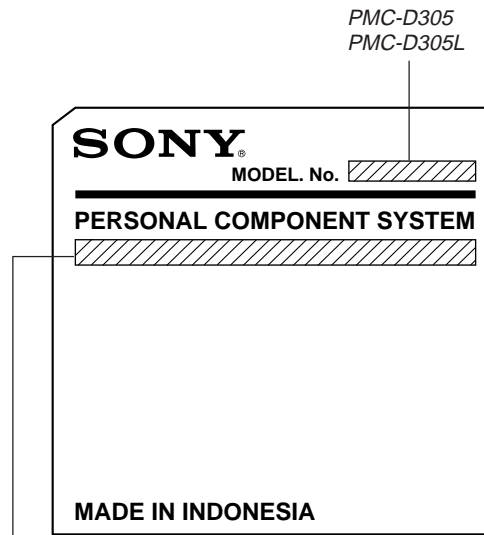
LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Turn POWER switch on with disc inserted and make Function switch to CD position.
2. Open the lid for CD.
3. Turn on S801 as following figure.
4. Press the \triangleright button.
5. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken.
Objective lens moves up and down three times for focus search.



MODEL IDENTIFICATION

– Model Number Label – Carved on rear cabinet



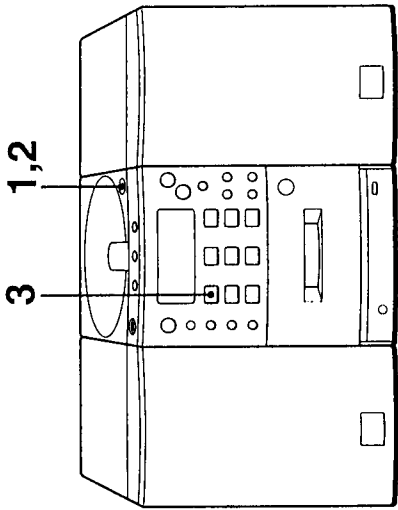
US, Canadian, E models
AC: 120 V 60 Hz 35 W
AEP, UK, Italian, CET, Australian models
AC: 230 V ~ 50 Hz 35 W

- Abbreviation
CET: East European, Russian


HOW TO CHANGE THE FM CERAMIC FILTERS

This model is used two ceramic filters of CF1, 2 and CF3. Therefore, the ceramic filter must change two pieces together since it's supply two pieces in one package as a spare parts.

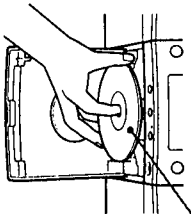

Playing a CD

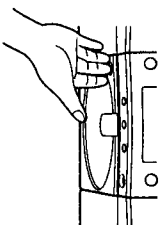



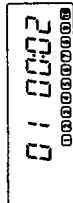
For hookup instructions, see pages 26 - 29.

- 1**  Press **OPEN/CLOSE** down to open the CD compartment and place the CD on the CD compartment.

With the label side up

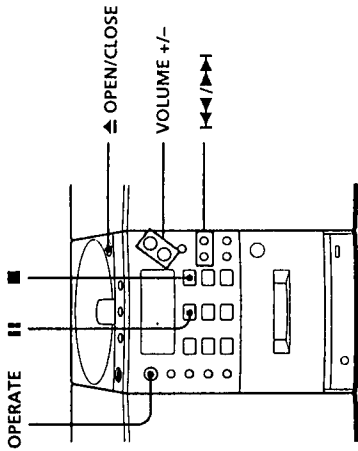

- 2**  Close the lid of the CD compartment.


- 3**  Press **▶** on the CD section (direct power-on). The player plays all the tracks once.

Display 

Tip
Next time you want to listen to a CD, just press **▶**. The player turns on automatically and starts playing the CD.

Use these buttons for additional operations

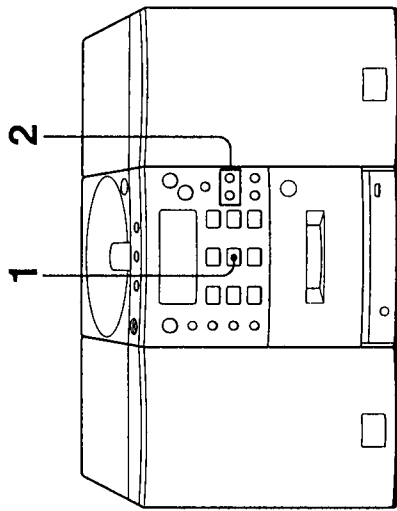


To	Press
Adjust the volume	VOLUME +/-
Stop playback	■
Pause playback	
Go to the next track	▶▶
Go back to the previous track	◀◀
Remove the CD	◀ OPEN/CLOSE
Turn on/off the player	OPERATE

SECTION 2 GENERAL


This section is extracted from PMC-D305L's instruction manual.

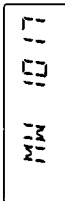
Listening to the radio

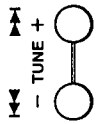


For hookup instructions, see pages 26 - 29.

- 1**

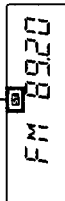
 Press **BAND** until the band you want appears in the display (direct power-on).

Display 
- 2**

 Hold down **TUNE +/-** until the frequency digits begin to change in the display.

The player automatically scans the radio frequencies and stops when it finds a clear station.

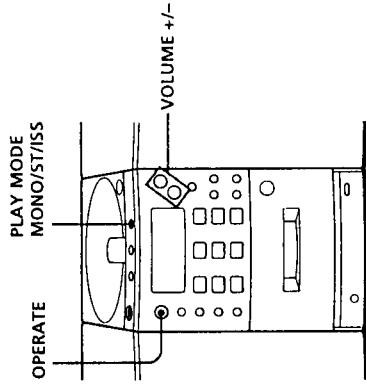
If you can't tune in a station, press the button once at a time.

Display 

Indicates an FM stereo broadcast.

- Tips**
- If the FM broadcast is noisy, press **PLAY MODE/MONO/ST/ISS** on the player until "Mono" appears in the display and the radio will play in monaural.
 - Next time you want to listen to the radio, just press **BAND**. The player turns on automatically and starts playing the previous station.

Use these buttons for additional operations



To	Press
Adjust the volume	VOLUME +/-
Turn on/off the radio	OPERATE

To improve broadcast reception

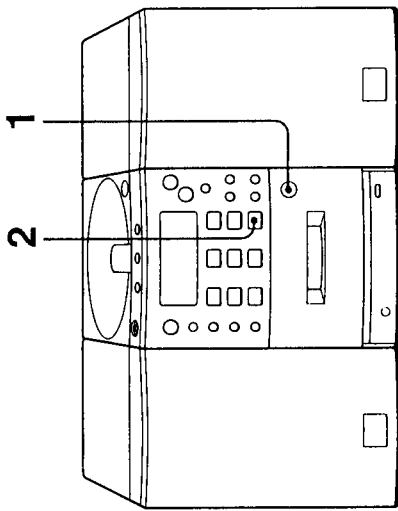
FM

Connect the supplied FM lead aerial. If the FM broadcast is still noisy, disconnect the FM lead aerial and connect the FM outdoor aerial (not supplied) (see pages 28 and 29.)

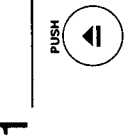
MW/LW

Reorient the MW/LW loop aerial (supplied) (see page 28.)

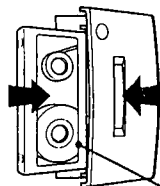
Playing a tape



For hookup instructions, see pages 26 - 29.



Press **▲** PUSH to open the tape compartment and insert a recorded tape. Use **TYPE I** (normal) tape only. Close the compartment.



With the side you want to play facing forward

2



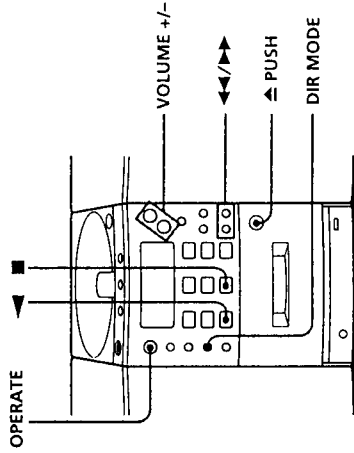
Press **▶** on the **TAPE** section. The player turns on (direct power-on) and starts playing.

Display



Tape counter

Use these buttons for additional operations



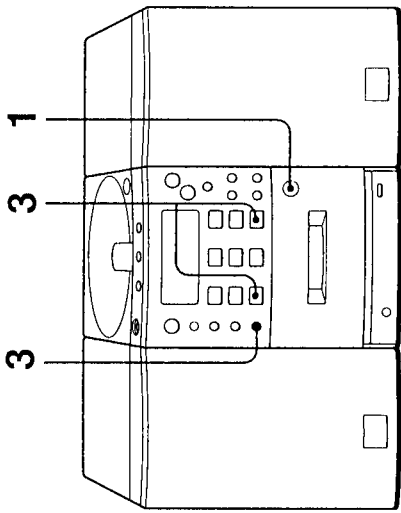
To	Press
Adjust the volume	VOLUME +/-
Stop playback	■
Play the reverse side	◀
Fast-forward or rewind the tape	▶▶ or ◀◀
Eject the cassette	▲ PUSH
Turn on/off the player	OPERATE

To select the direction of the tape
Press **DIR MODE** repeatedly.

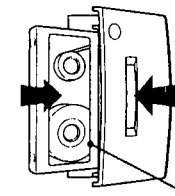
To play	Display shows
One side of the tape	—
Both sides of the tape from the front side to reverse side only	↔
Both sides of the tape repeatedly	↻

- Tips**
- Press **COUNTER RESET** on the remote to reset the counter to "000." (on the remote only)
 - Next time you want to listen to a tape, just press **▶** or **◀**. The player turns on automatically and starts playing the tape.

Recording on a tape



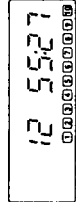
For hookup instructions, see pages 26 - 29.



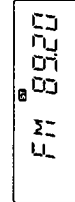
With the side you want to record on facing forward

1 Press **▲** PUSH to open the tape compartment and insert a blank tape. Use TYPE I (normal) tape only.

2 Select the program source you want to record.



To record from the CD player, insert a CD (see page 4) and press **■** on the CD section.



To record from the radio, press BAND and tune in the station you want (see page 6.)



3

Start recording.

1 Press **●/||**.

The **◀/▶** indication in the display flashes.

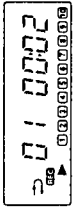
2 Press **▶** (for the front side) or **◀** (for the reverse side) on the TAPE section to select the recording side of the tape. Recording will start automatically.

(On the remote, while keeping **●/||** pressed, press **▶** or **◀** on the TAPE section.)

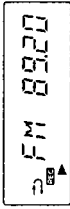
Note

If recording does not start, press **●/||** and then **▶** or **◀** again.

Recording from the CD player



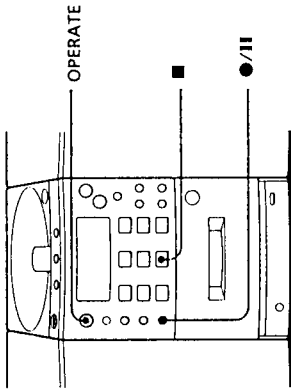
Recording from the radio



Tips

- Adjusting the volume or the audio emphasis (see page 32) will not affect the recording level.
- When **▶** is displayed, recording will be made on both sides of the tape. To record on one side, press DIR MODE to display **---**.
- If the .MW/LW radio makes a whistling sound after you've pressed **●/||** in step 3, press PLAY MODE/MONO/ST/ISS to select the position that most decreases the noise.
- To erase a recording, proceed as follows:
 - Insert a tape you want to erase its recording and press **■** on the tape section.
 - On the player: press **●/||** and then **▶** or **◀**. On the remote: While keeping **●/||** pressed, press **▶** or **◀**.

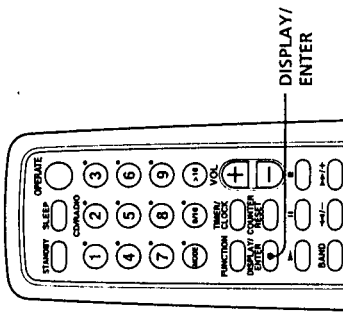
Use these buttons for additional operations



To	Press
Stop recording	■ on the TAPE section
Pause recording	●/ Press the button again to resume recording.
Turn on/off the player	OPERATE

Using the display

You can check information about the CD using the display.



Checking the total track number and playing time

Press DISPLAY/ENTER in stop mode.

If the CD has more than 10 tracks, "OVER 10" appears in the display.

Total playing time	12 55:27
Total track number	0000000000
Music calendar	0000000000

Checking the remaining time

Press DISPLAY/ENTER while playing a CD.

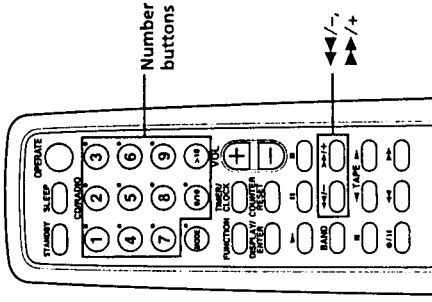
The track numbers in the music calendar disappear after they are played.

To display	Press DISPLAY/ENTER
The current track number and the remaining time on the current track*	Once
The remaining time on the CD and the number of tracks left	Twice
The current track number and playing time	Three times

* For a track whose number is more than 20 the remaining time appears as "----".

Locating a specific track

You can quickly locate any track using the number buttons. You can also find a specific point in a track while playing a CD.



Note

You cannot locate a specific track if "PCM" or "SHUF REP" is lit in the display. Turn off the indication by pressing **■** on the CD section.

Tip

When you locate a track numbered over 10, press > 10 first, then the corresponding number buttons.

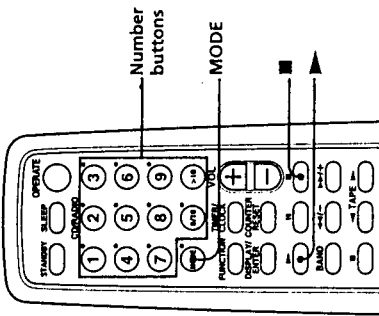
Example:

To play track number 23, press > 10 first, then 2 and 3.

To locate	Press
a specific track directly	number button of the track.
a point while listening to the sound	▶▶/+ (forward) or ◀◀/- (backward) while playing and hold down until you find the point. When you use the buttons on the player, use ◀◀/▶▶.
a point while observing the display	▶▶/+ (forward) or ◀◀/- (backward) in pause and hold down until you find the point. When you use the buttons on the player, use ◀◀/▶▶.

Playing tracks repeatedly (Repeat Play)

You can play tracks repeatedly in normal, shuffle or program play modes (see pages 15 and 16).



- 1 Press **■** on the CD section. "Cd" appears in the display.
- 2 Press **MODE** until the repeat mode you want appears in the display.

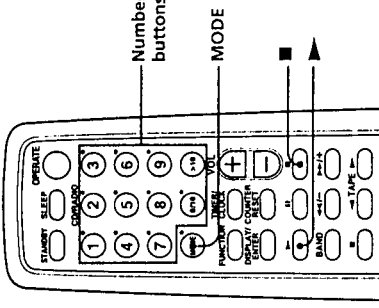
To repeat	Select
a single track	REP 1
all the tracks	REP ALL
tracks in random order	PGM REP
programmed tracks	PGM REP and then program tracks (see steps 3 on page 15).
- 3 Do either of the following to start repeat play:
 - When you've selected **REP 1**, select the track by pressing the number button.
 - When you've selected **REP ALL**, **SHUF REP** or **PGM REP**, press **▶**.

Note
When you repeat a single track or all the tracks, make sure neither "PGM" nor "SHUF REP" is lit in the display. If either is lit, turn it off by pressing **■** on the CD section.

To cancel Repeat Play
Press **MODE** until "REP" disappears from the display.

Creating your own program (Program Play)

You can make a program of up to 20 tracks in the order you want them to be played.



- 1 Press **■** on the CD section. "Cd" appears in the display.
- 2 Press **MODE** until "PGM" appears in the display.
- 3 Press the number buttons for the tracks you want to program in the order you want.

Track number	Total programmed time
01	12:20
- 4 Press **▶** to start program play.

Playing order

Tips

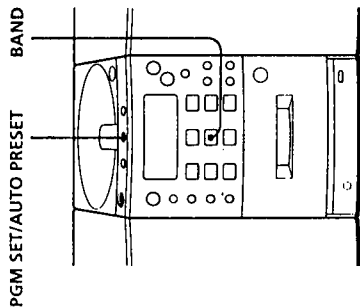
- To create your own program on the player by selecting the track you want while listening to the CD, proceed as follows:
 - 1 Press **▶** on the CD section to start play.
 - 2 Press **PGM SET / AUTO PRESET**. "PGM" flashes in the display.
 - 3 Press **◀ / ▶** to select the track you want to program, and press **DISPLAY / ENTER / MEM**. Repeat this step.
 - 4 Press **■**.
 - 5 Press **▶** to start program play.

Note
When you program a track from the CD having more than 21 tracks:
If you program a track whose track number is more than 21, "21" is displayed instead of the total programmed time.

continued

Presetting radio stations

You can store radio stations into the player's memory. You can preset up to 30 radio stations, 10 for each band in any order.



The Radio

Creating your own program (Program Play) (continued)

Notes

- You can play the same program again, since the program is saved until you open the CD compartment.
- You can record your own program. After you've created the program, insert a blank tape into the tape compartment and press ●/|| and ► (or ◀) to start recording.

To cancel Program Play

Press MODE until "PGM" disappears in the display.

To check the order of tracks before play

Press ►► on the player.

Every time you press the button, the track number appears in the programmed order.

To change the current program

Press ■ once if the CD is stopped and twice if the CD is playing. The current program will be erased. Then create a new program following the programming procedure.

- 1 Press BAND until the band you want appears in the display.
- 2 Press PGM SET / AUTO PRESET until "AUTO " appears.

The stations are stored in memory from the lower frequencies unless a station has a weak signal.

If a station cannot be preset automatically

You need to preset a station with a weak signal manually. Also, when you want to replace a preset station with a new one, do the following:

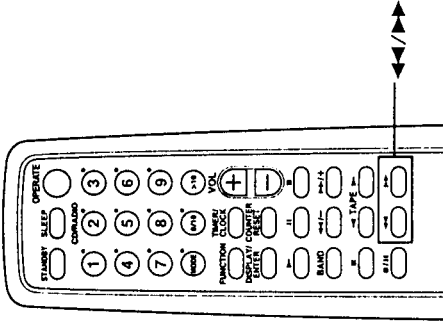
- 1 Press BAND until the band you want appears in the display.
- 2 Tune in a station you want.
- 3 On the remote, hold down the number buttons that you want to preset the new station for about 2 seconds.

On the player:

Press DISPLAY / ENTER / MEM for about 2 seconds until "PRESET" flashes. Select the preset number that you want to preset the new station by pressing PRESET + / - , and press DISPLAY / ENTER / MEM. The new station replaces the old one.

Finding the beginning of a track

The player senses where a track begins by detecting the pauses between the tracks.



While playing a tape, press **▶▶** or **◀◀**.

Playing side	The beginning of the next track	The beginning of the current track
Front side (▶)	▶▶	◀◀
Reverse side (◀)	◀◀	▶▶

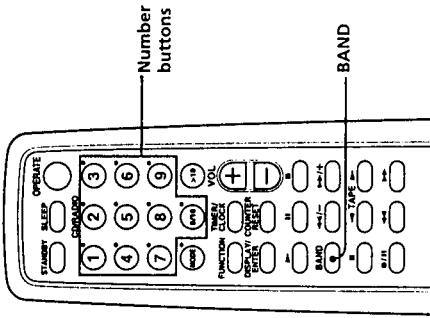
The tape is wound or rewound to the beginning of the next or current track, and play will start automatically.

Notes

- If a soft sound like pianissimo continues for some seconds in a track, the player may start to play as the next track.
- If you press the **▶▶** or **◀◀** when there is no sound in the track, this function does not operate correctly.
- To find the beginning of a track correctly, a pause of approx. 4 seconds is necessary.

Playing preset radio stations

Once you've preset the stations, use the number buttons to tune in your favorite stations.

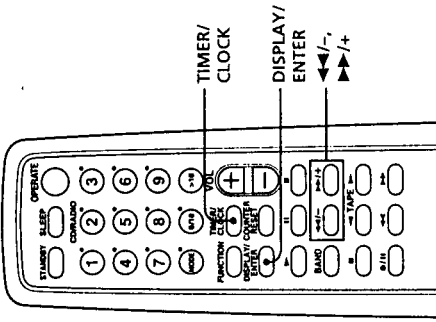


- Press **BAND** to select the band.
- Press the number buttons to tune in a stored station.

Tip You can tune in a preset station with the player. Use **PRESET +/-** instead of the number buttons.

Setting the clock

"0:00" indication appears in the display until you set the clock. As long as the clock goes, ":" flashes.



Tip
The time display system:
24-hour system

Before you begin, hook up the systems (see page 26.)

1 Press and hold **TIMER/CLOCK** for about 2 seconds until the hour digit flash.

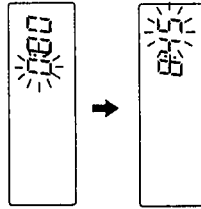
2 Set the clock.

① Press **◀/–** or **▶/+** to set the hour and press **DISPLAY/ENTER**.

② Press **◀/–** or **▶/+** to set the minutes.

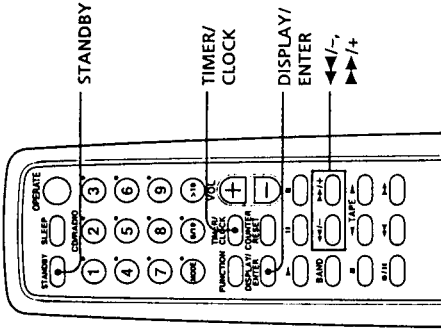
3 Press **DISPLAY/ENTER**.

":" flashes and the clock starts from 00 seconds.



Waking up to music

You can wake up to music or a radio program at a preset time. Make sure you have set the clock ("Setting the clock" on page 20).



Before you begin, make sure the **Ⓢ** (clock) indication is not lit in the display. If it is lit, press **STANDBY**.

1 Prepare the music source you want to play.

Source	Do this
CD	Insert a CD.
TAPE	Insert a tape.
RADIO	Tune in a station.
LINE	Turn on the equipment connected to LINE IN.

2 Press **TIMER/CLOCK** to display the **Ⓢ** indication. Do the following operations by checking the display window.

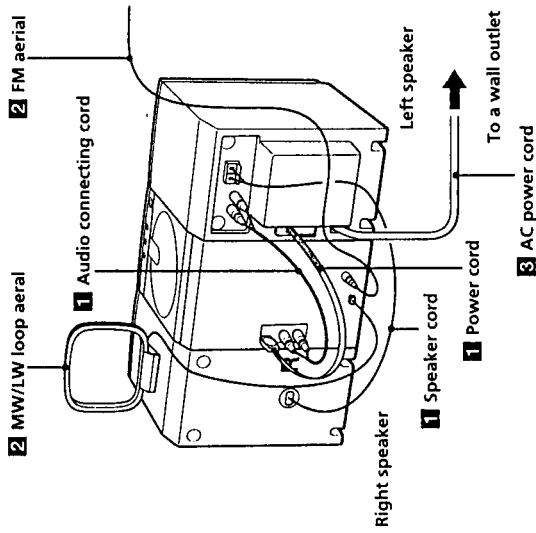
3 Press **◀/–** or **▶/+** until "PLAY" appears in the display and press **DISPLAY/ENTER**.

4 Press **◀/–**, **▶/+** until the music source ("Cd," "TAPE," "RADIO" or "LINE") you want to play appears in the display and press **DISPLAY/ENTER**.

continued

Hooking up the system

Make sure you turn off the power before making any connections.

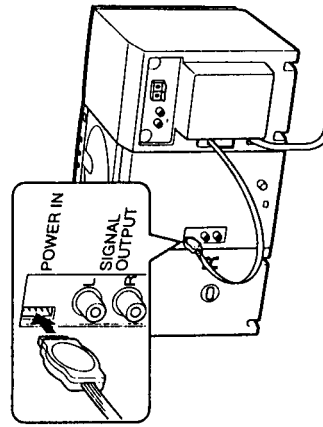


Note

Connect the right speaker for this unit only to the speaker terminals of the left speaker. If you connect any other speaker or equipment, malfunction may occur.

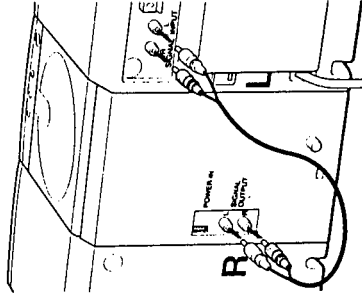
1 Hooking up the speakers

- 1 Connect the power cord of the left speaker to the POWER IN jack of the player.

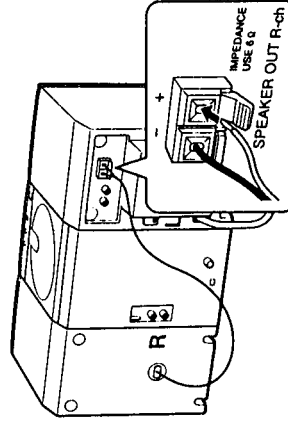


Setting Up

- 2 Connect the audio connecting cord (supplied) to the SIGNAL OUTPUT jacks of the player and the SIGNAL INPUT jacks of the left speaker. Connect the white plugs to the L (left) jacks and the red plugs to the R (right) jacks.



- 3 Connect the speaker cord of the right speaker to the SPEAKER OUT terminals of the left speaker. Connect the red wire to the (+) plus terminal, and the black wire to the (-) minus terminal.



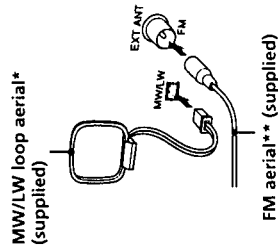
continued

Hooking up the system (continued)

Note

Keep the aerials away as far as possible from the speaker cords and other connecting cords. If you do not, noise may be heard.

2 Hooking up the aerials



*Reorient the aerial to improve broadcast reception.
**Keep the aerial as horizontal as possible.

Setting up the MW/LW loop aerial



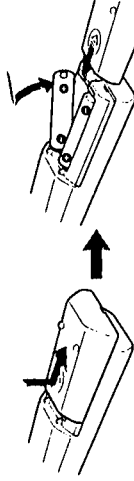
3 Connecting the AC power cord

Connect the AC power cord to the wall outlet.

Tip

The sound quality may be changed depending on the polarity of the plug. Change the direction of inserting the plug and check the sound quality.

4 Inserting batteries into the remote



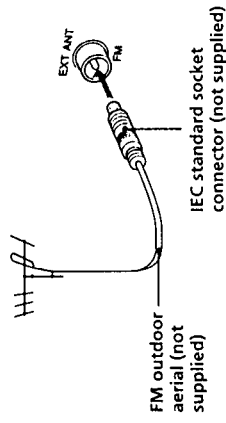
Insert two R6 (size AA) batteries (not supplied)

Replacing batteries

With normal use, the batteries should last for about six months. When the remote no longer operates the player, replace all the batteries with new ones.

To improve the FM reception

Disconnect the supplied FM aerial and connect the FM outdoor aerial (not supplied). If you use a distributor, you can also use the TV aerial.

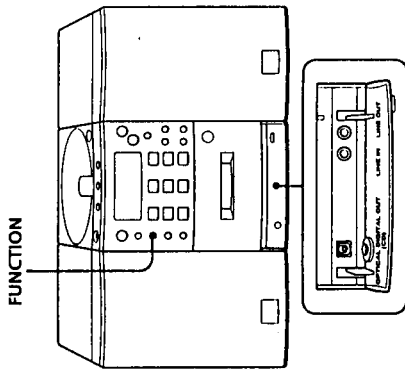


Connecting optional components

You can enjoy the sound from a VCR or MiniDisc player/recorder through the speakers of this player.

Be sure to turn off the power of each component before making connections.

For details, refer to the instruction manual of the component to be connected.



Note

Connect the cables firmly to avoid any malfunction.

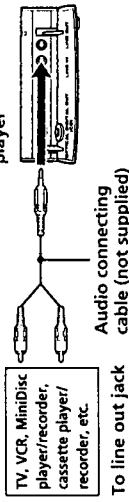
Tip

You can record the sound of the connected component. Insert a cassette, and while keeping **●**/|| pressed, press **▶** of the tape player.

Tip

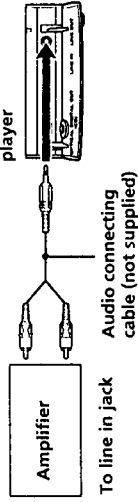
You can also record the sound of this player on another cassette recorder by connecting a cassette recorder to the LINE OUT jack of this player.

Listening to TV, VCR and MiniDisc player/recorder



When connections are finished, turn on the player and press FUNCTION to make "LINE" appear in the display.

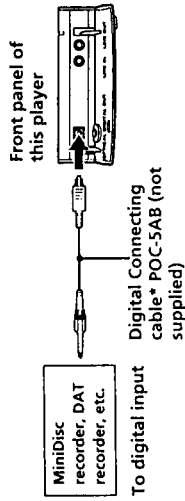
Listening through the speakers of other audio equipment



Notes

- As long as "CD" appears in the display, the optical digital output jack is in operation and the jack lights even if the CD is in stop mode.
- If you play a CD-ROM that is not for audio use, noise may be heard.

Recording a CD on a MiniDisc recorder and DAT recorder



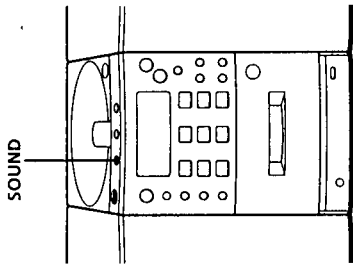
When connections are finished, turn the power on and start recording.

Select a connecting cable depending on the type of the digital input jack of the recorder to be connected. For details, refer to the instruction manual of the component to be connected. The OPTICAL DIGITAL OUT (CD) jack of this unit is square-shaped jack.

The type of the jack of the component to be connected	Model number of the connecting cable
Optical miniplug (MiniDisc Walkman, etc.)	POC-5AB
L-type 7-pin connector (DAT Walkman, etc.)	POC-DA12M
Square-shaped optical connector (MiniDisc recorder, DAT recorder, etc.)	POC-10A

Selecting the audio emphasis (Sound Mode/MEGA BASS)

You can adjust the audio emphasis of the sound you are listening to.



Selecting the sound characteristic

Press SOUND to select the audio emphasis you want.

Choose	To get
MEGA BASS SOUND --- ---	powerful, clean sounds, emphasizing low and high range audio "MEGA BASS" appears in the display.
SOUND --- ---	light, bright sounds emphasizing high and middle range audio
SOUND --- ---	the presence of vocals, stressing middle range audio
MEGA BASS SOUND --- ---	percussive sounds, emphasizing bass audio "MEGA BASS" appears in the display.
--- ---	the whole dynamic range for music such as classical music

Precautions

On safety

- As the laser beam used in the CD player section is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
- Should any solid object or liquid fall into the player, unplug the player, and have it checked by qualified personnel before operating it any further.

On power sources

- For AC operation, use the supplied AC power cord; do not use any other type.
- The player is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the player itself has been turned off.
- When the batteries are not to be used, remove them to avoid damage that can be caused by battery leakage or corrosion.
- The nameplate indicating operating voltage, power consumption, etc. is located at the rear of the left speaker.

On operation

- If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the CD player section. Should this occur, the player will not operate properly. In this case, remove the CD and wait about an hour for the moisture to evaporate.

On placement

- Do not leave the player in a location near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.
- Do not place the player on an inclined or unstable place.

continued

Precautions (continued)

Notes on CDs

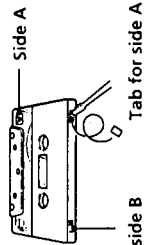
- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out.



- Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in temperature inside the car.
- Do not stick paper or sticker on the CD, nor scratch the surface of the CD.
- After playing, store the CD in its case. If there is a scratch, dirt or fingerprints on the CD, it may cause tracking error.

Notes on cassettes

- Break off the cassette tab from side A or B to prevent accidental recording. If you want to reuse the tape for recording, cover the broken tab with adhesive tape.



- To record on a tape with its tab broken off, cover the respective tab hole for side A or B with adhesive tape.
- The use of a cassette with more than 90 minutes of play time is not recommended except for long, continuous recording or playback.

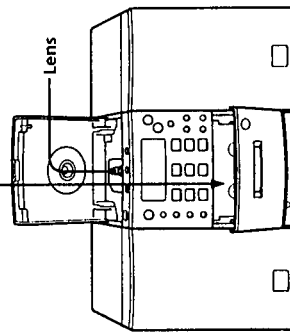
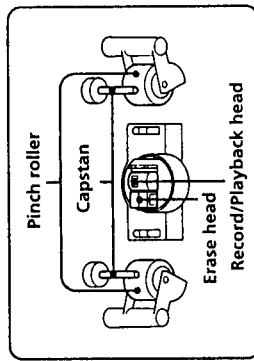
Maintenance

Cleaning the lens

If the lens becomes dirty, it may cause a skipping of sound during CD operation. Clean with a commercially available blower.

Cleaning the tape heads and tape path

Wipe the heads, the pinch rollers and the capstans with a cleaning swab slightly moistened with cleaning fluid or alcohol after every 10 hours of operation for optimum playback and recording quality. To make the best possible recording, however, we recommend that you clean all surfaces over which tape travels before each recording.



After cleaning, insert a tape when the areas cleaned are completely dry.

Demagnetizing the tape heads

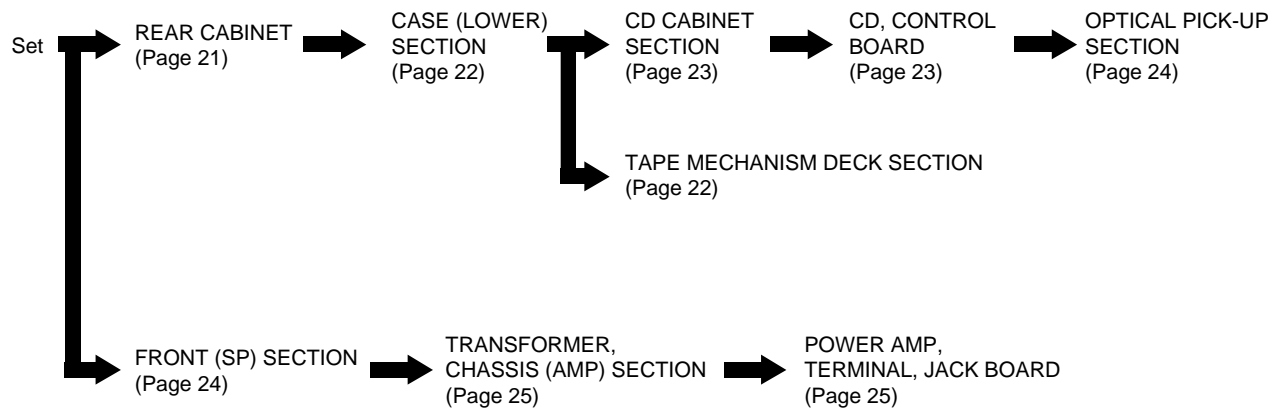
After 20 to 30 hours of use, enough residual magnetism will have built up on the tape heads to begin to cause loss of high frequency sound and hiss. At this time, you should demagnetize the heads and all metal parts in the tape path with a commercially available tape head demagnetizer.

Cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzine.

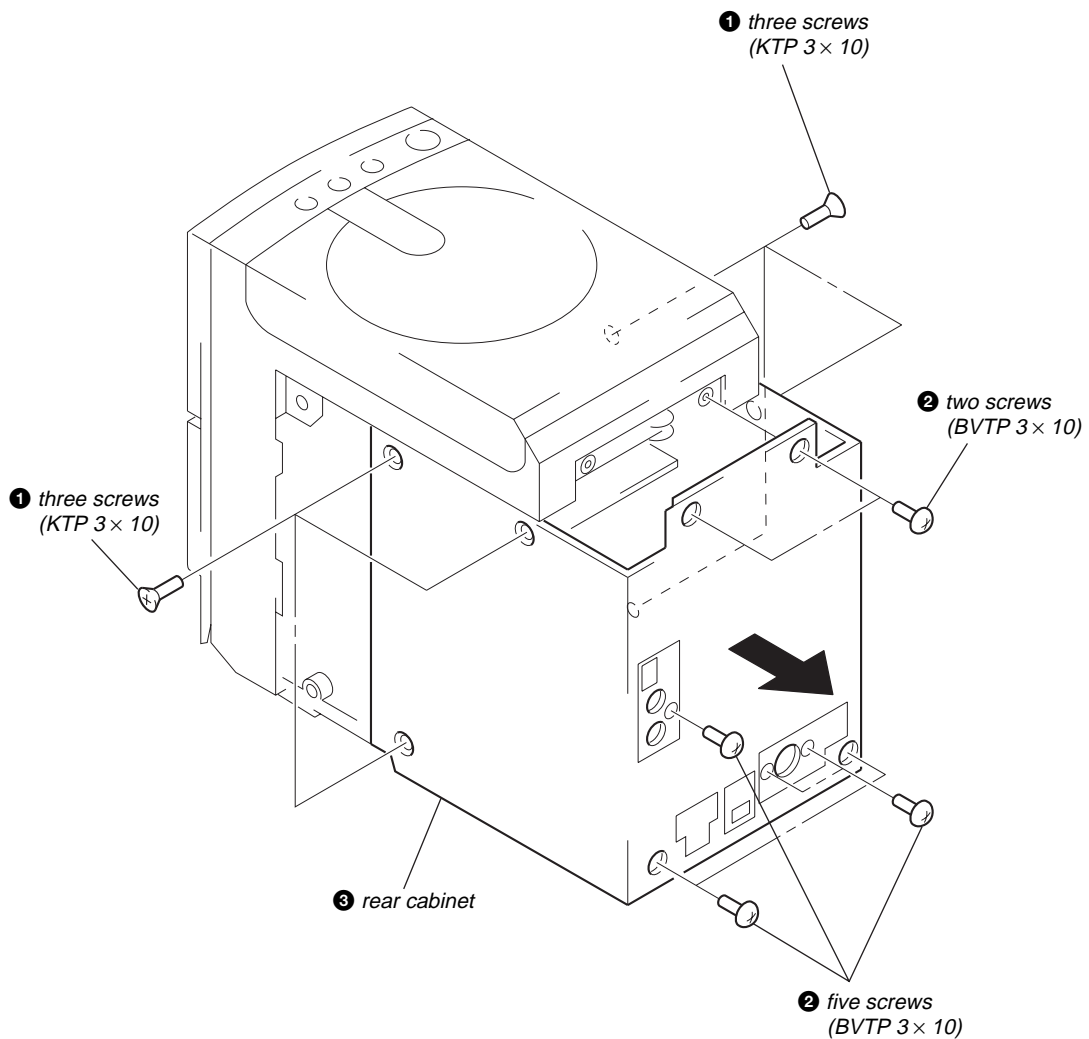
SECTION 3 DISASSEMBLY

• This set can be disassembled in the order shown below.

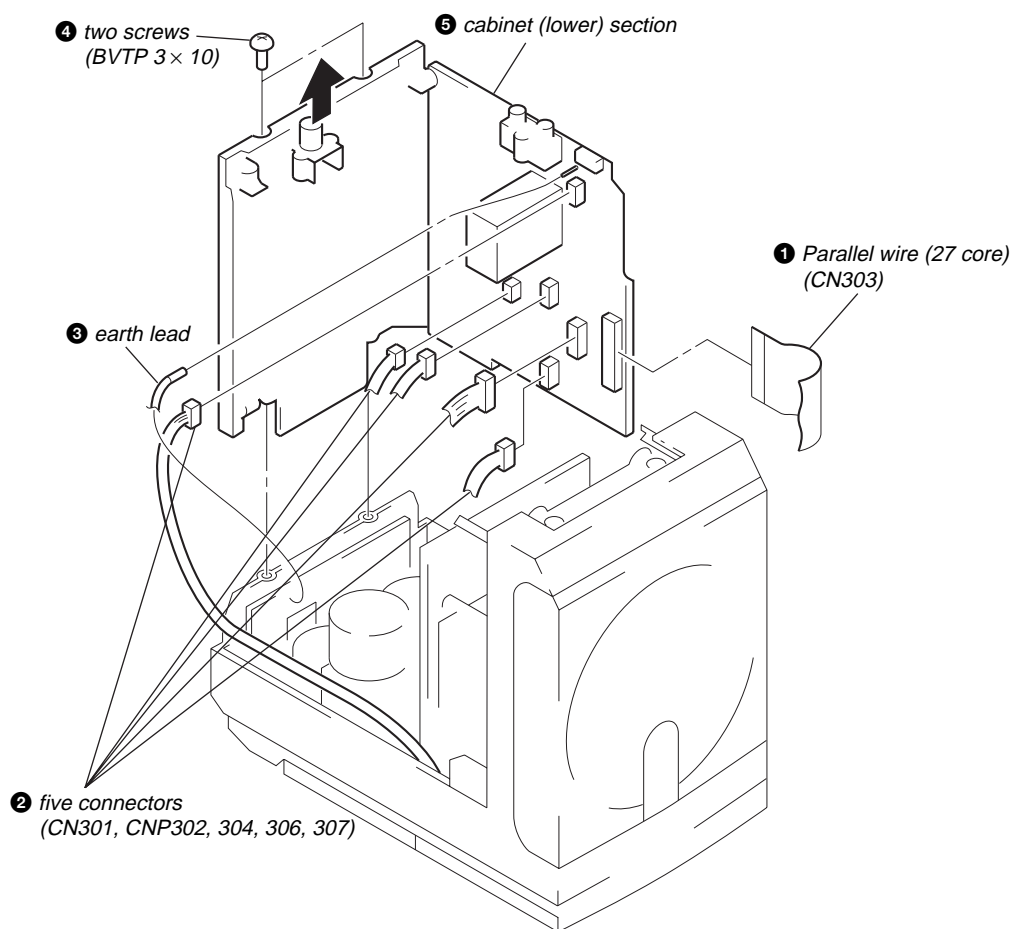


Note: Follow the disassembly procedure in the numerical order given.

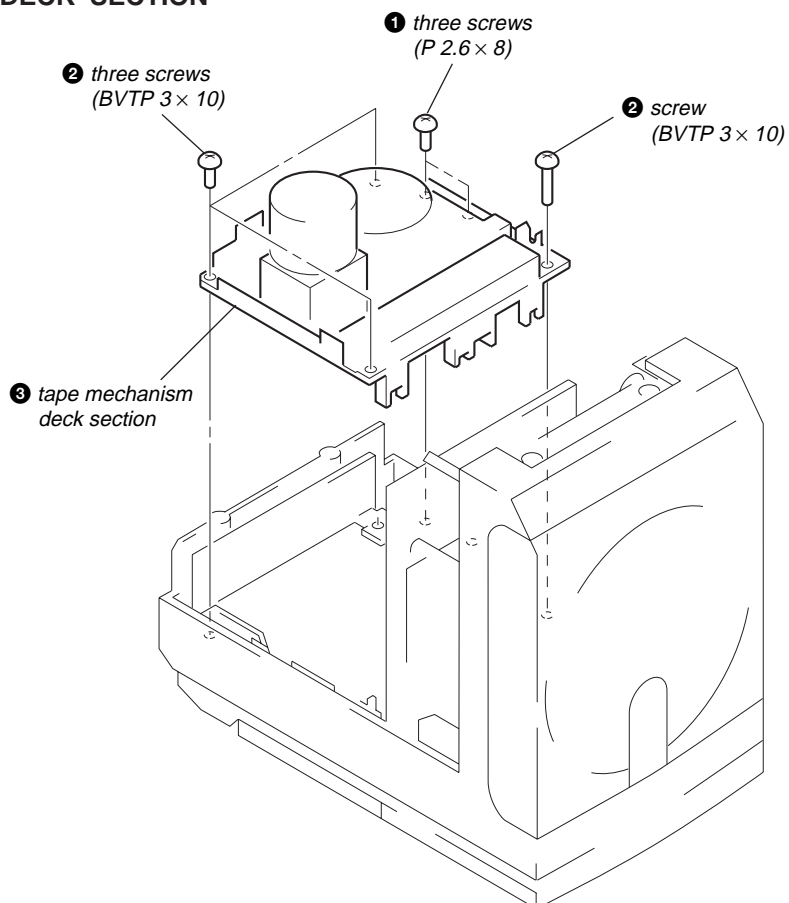
REAR CABINET



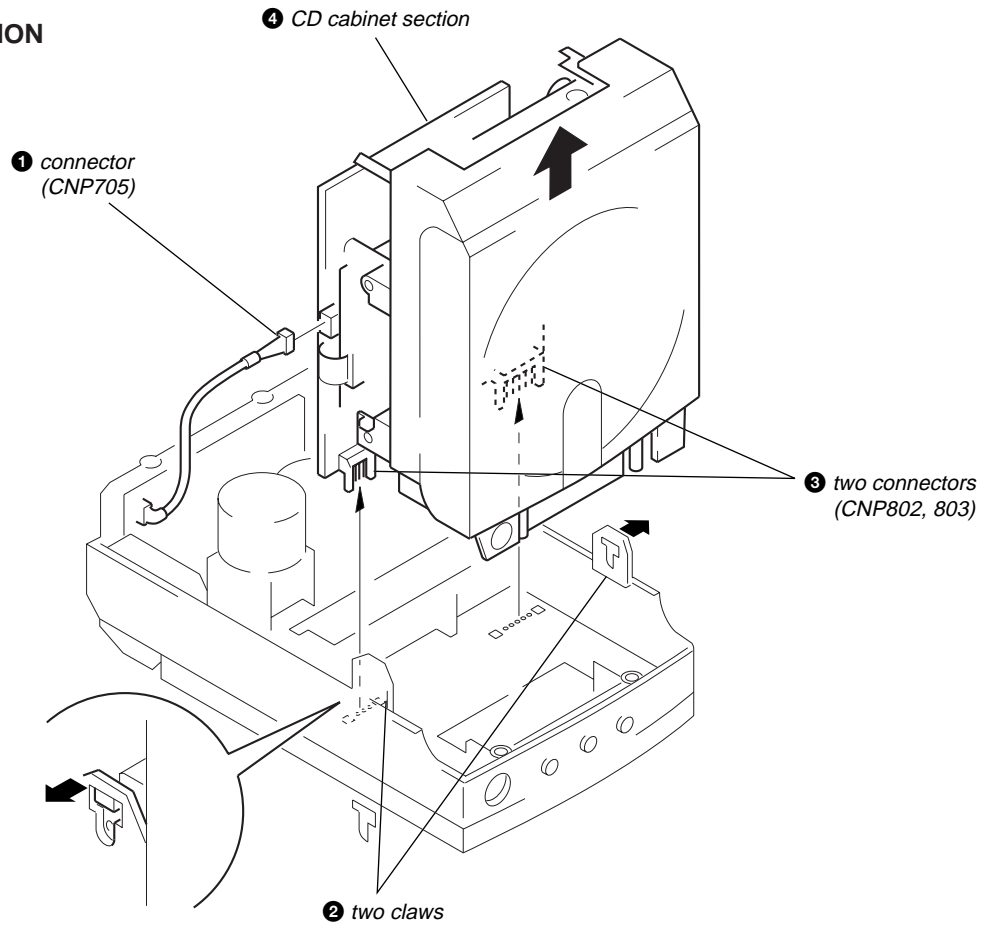
CASE (LOWER) SECTION



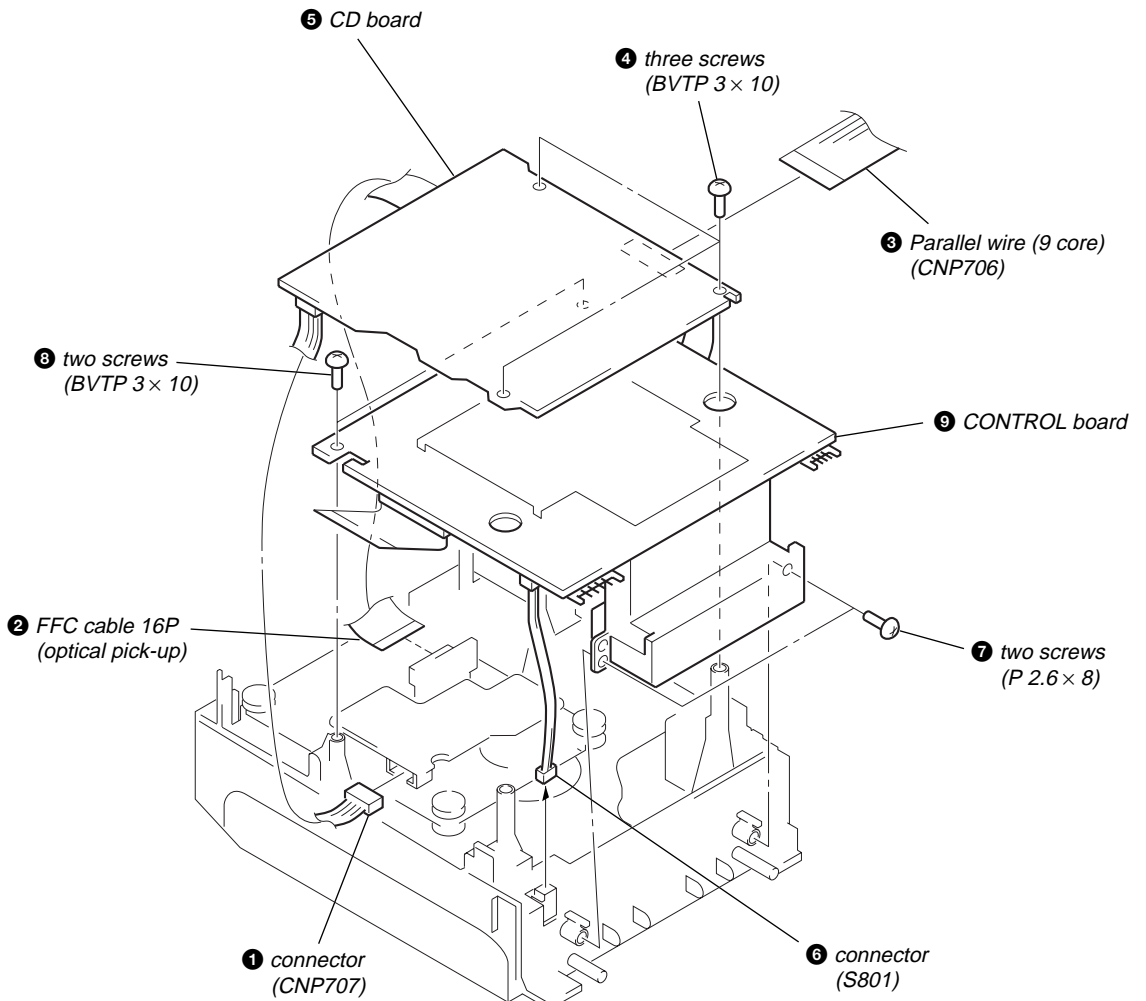
TAPE MECHANISM DECK SECTION



CD CABINET SECTION



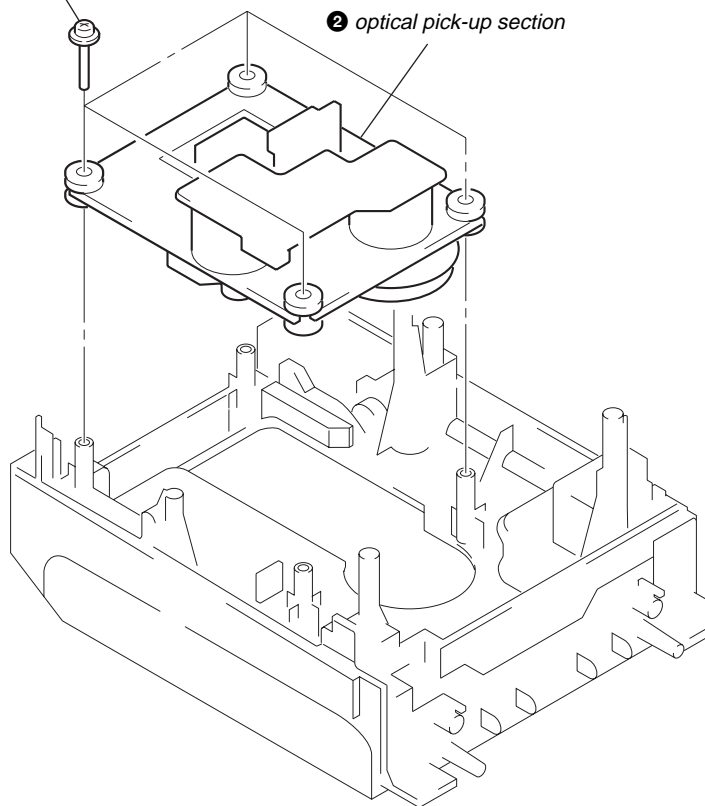
CD, CONTROL BOARD



OPTICAL PICK-UP SECTION

① four screws
(2.6 × 16)

② optical pick-up section



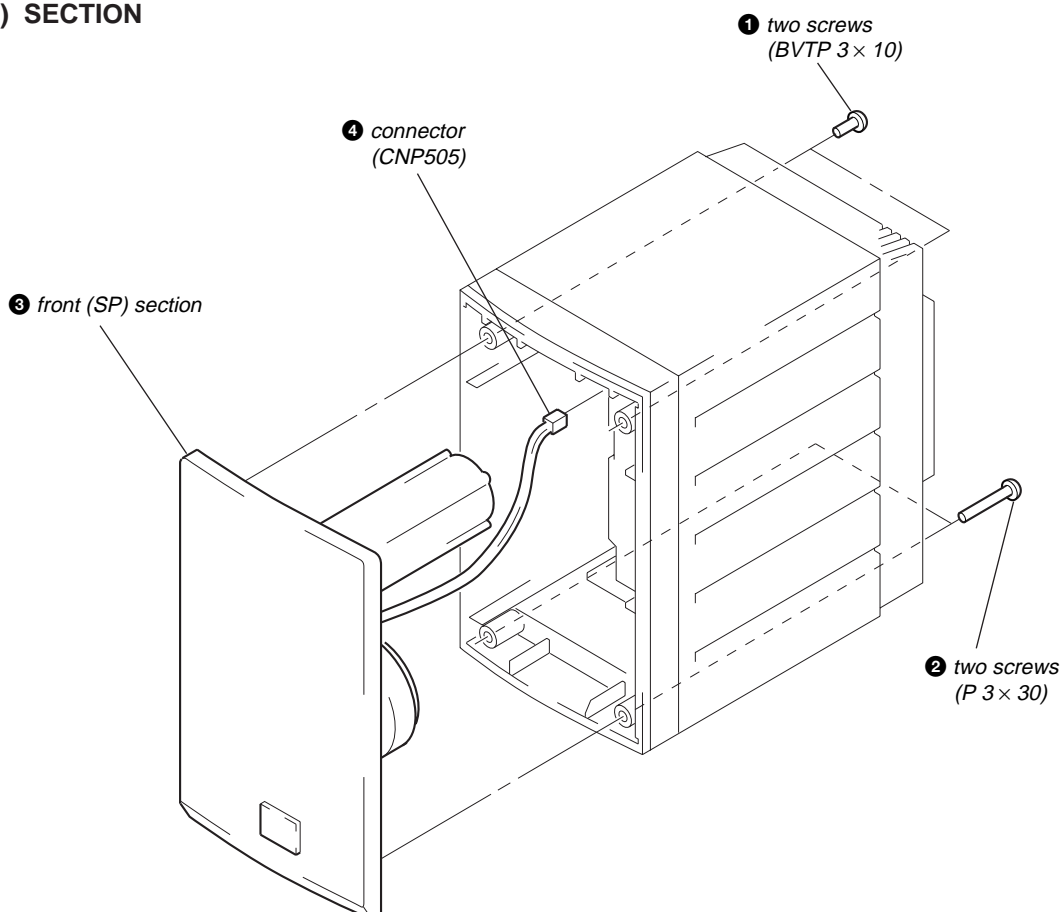
FRONT (SP) SECTION

① two screws
(BVTP 3 × 10)

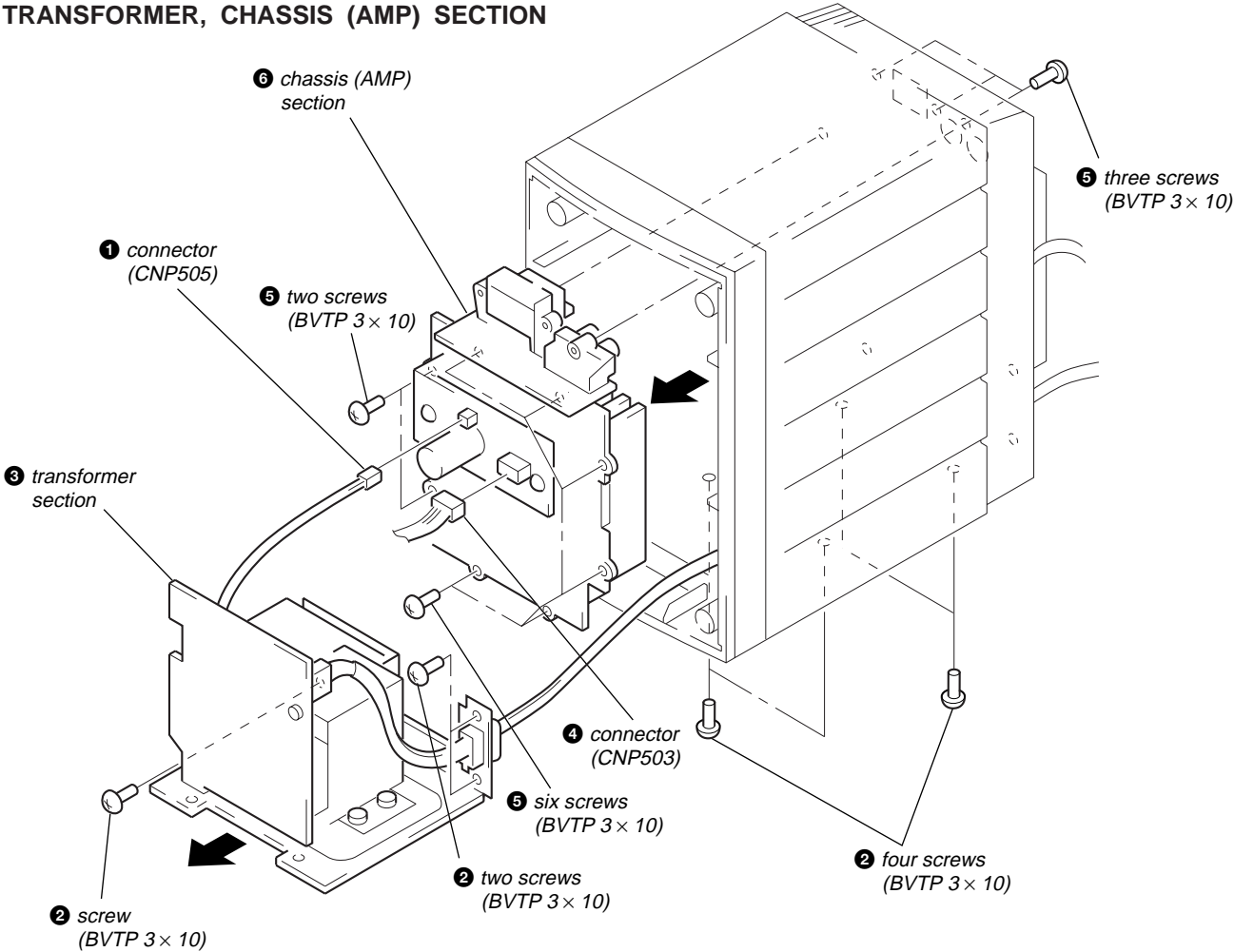
④ connector
(CNP505)

③ front (SP) section

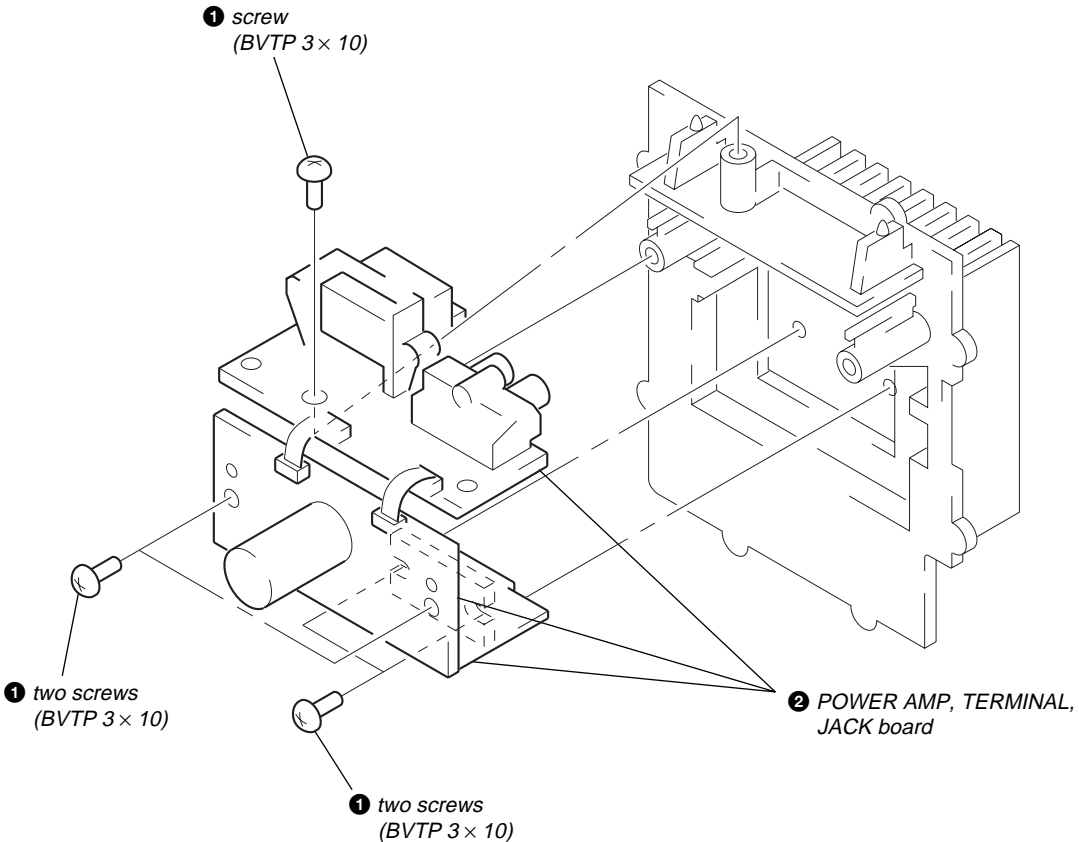
② two screws
(P 3 × 30)



TRANSFORMER, CHASSIS (AMP) SECTION



POWER AMP, TERMINAL, JACK BOARD



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.

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	30-70 g•cm (0.42-1.02 oz•inch)
FWD Back tension		2.0-6.0 g•cm (0.028-0.076 oz•inch)
FF	CQ-201B	80-170 g•cm (1.12-2.38 oz•inch)
REW	CQ-201B	80-170 g•cm (1.12-2.38 oz•inch)

Tape Tension Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 90 g (3.17 oz)

SECTION 5 ELECTRICAL ADJUSTMENTS

TAPE DECK SECTION

0 dB=0.775 V

1. The adjustments should be performed in the order given in the service manual. (As a general rule, Playback circuit adjustment should be completed before performing recording circuit adjustment.)
2. The adjustments should be performed for both L-ch and R-ch unless otherwise indicated.

Standard Output Level

	SP OUT	PHONES
Load impedance	6Ω	32Ω
Output level	0.775 V (0 dB)	0.25 V (-10 dB)

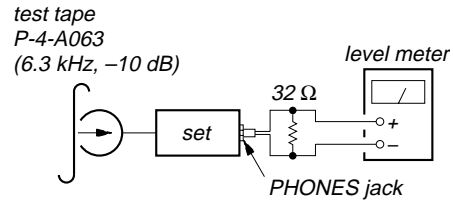
Test Tape

Type	Signal	Used for
WS-48B	3 kHz, 0 dB	Tape speed adjustment
P-4-A063	6.3 kHz, -10 dB	Head azimuth adjustment

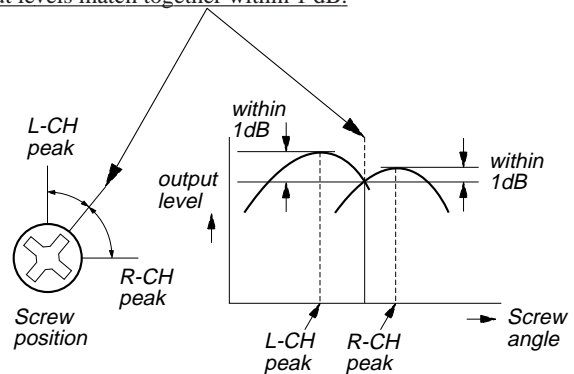
Record/Playback Head Azimuth Adjustment

Procedure:

1. Mode: playback

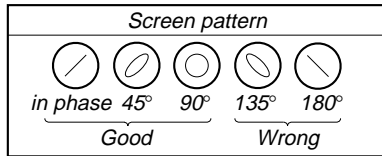
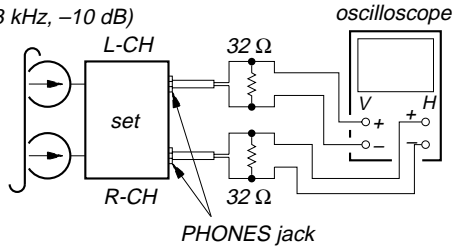


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB.



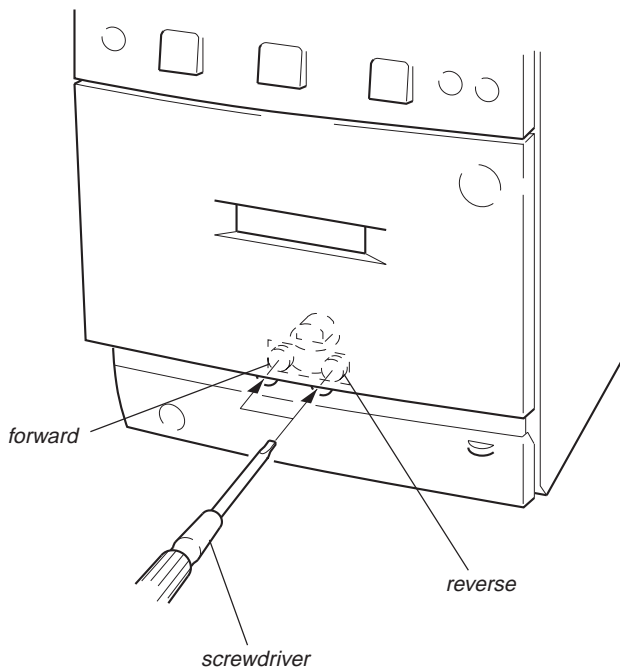
3. Phase Check
Mode: playback

test tape
P-4-A063
(6.3 kHz, -10 dB)



4. After the adjustment, lock the screws with locking compound.

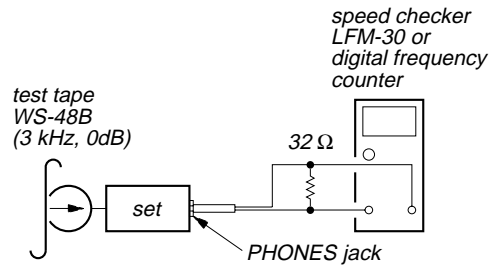
Adjustment Location:



Tape Speed Adjustment

Procedure:

Mode: playback

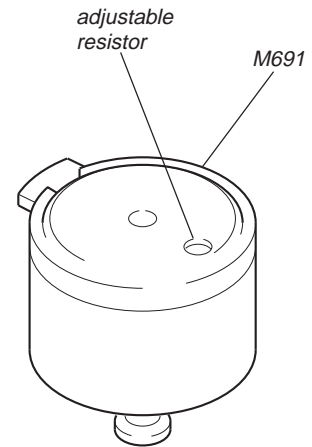


Adjustment Values:

Speed checker	Digital frequency counter
-1% to +1%	2,970 to 3,030 Hz

Frequency difference between the beginning and the end of the tape should be within 1% (30 Hz).

Adjustment Location:



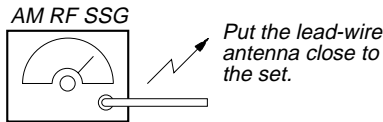
TUNER SECTION

Precautions in Repairing

Note: As a FM front-end (TU1) is difficult to repair if faulty, replace it with new one.

[AM]

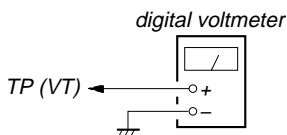
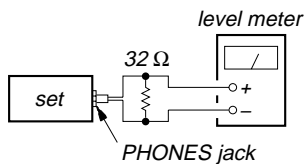
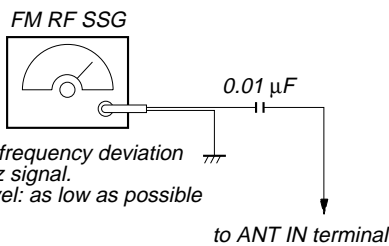
FUNCTION Switch: RADIO
BAND Switch: AM, MW, LW



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

[FM]

FUNCTION Switch: RADIO
BAND Switch: FM



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

- Abbreviation
D305: PMC-D305
D305L: PMC-D305L

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

(D305)

AM FREQUENCY COVERAGE CONFIRM		
Confirm for a reading on digital voltmeter.		
Confirm	530 kHz <531 kHz>	1.0 ± 0.5 V
Confirm	1,710 kHz <1611 kHz>	5.0 ± 1.0 V <4.8 ± 1.0 V>

Note: Not use the AM RF signal generator in this confirm.
< >: Australian model

(D305)

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	620 kHz
CT2	1,400 kHz

(D305L)

MW FREQUENCY COVERAGE CONFIRM		
Confirm for a reading on digital voltmeter.		
Confirm	531 kHz	0.85 ± 0.5 V
Confirm	1611 kHz	6.8 ± 1.5 V

Note: Not use the AM RF signal generator in this confirm.

(D305L)

MW TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	621 kHz
CT4	1,404 kHz

(D305L)

LW FREQUENCY COVERAGE ADJUSTMENT		
Adjust for a reading on digital voltmeter.		
Confirm	153 kHz	0.7 ± 0.5 V
L4	279 kHz	7.5 ± 0.2 V

Note: Not use the AM RF signal generator in this adjustment.

(D305L)

LW TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L5	162 kHz
CT5	261 kHz

(D305)

FM FREQUENCY COVERAGE ADJUSTMENT		
Adjust for a reading on digital voltmeter.		
L2	87.5 MHz	1.6 ± 0.4 V
Confirm	108 MHz	6.5 ± 0.5 V

Note: Not use the FM RF signal generator in this adjustment.

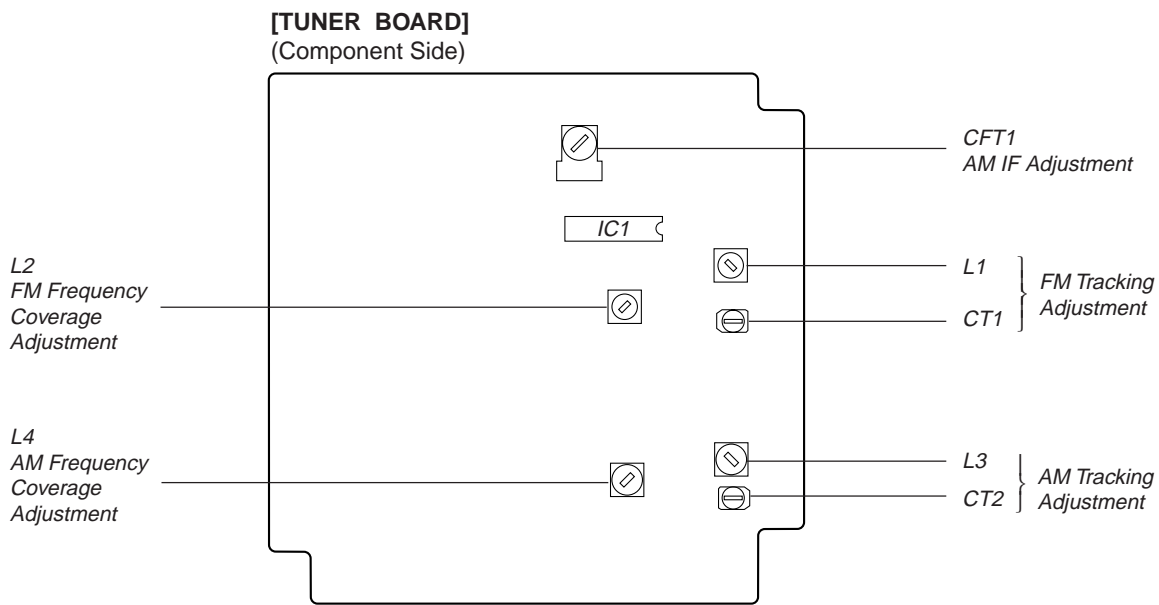
(D305)

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

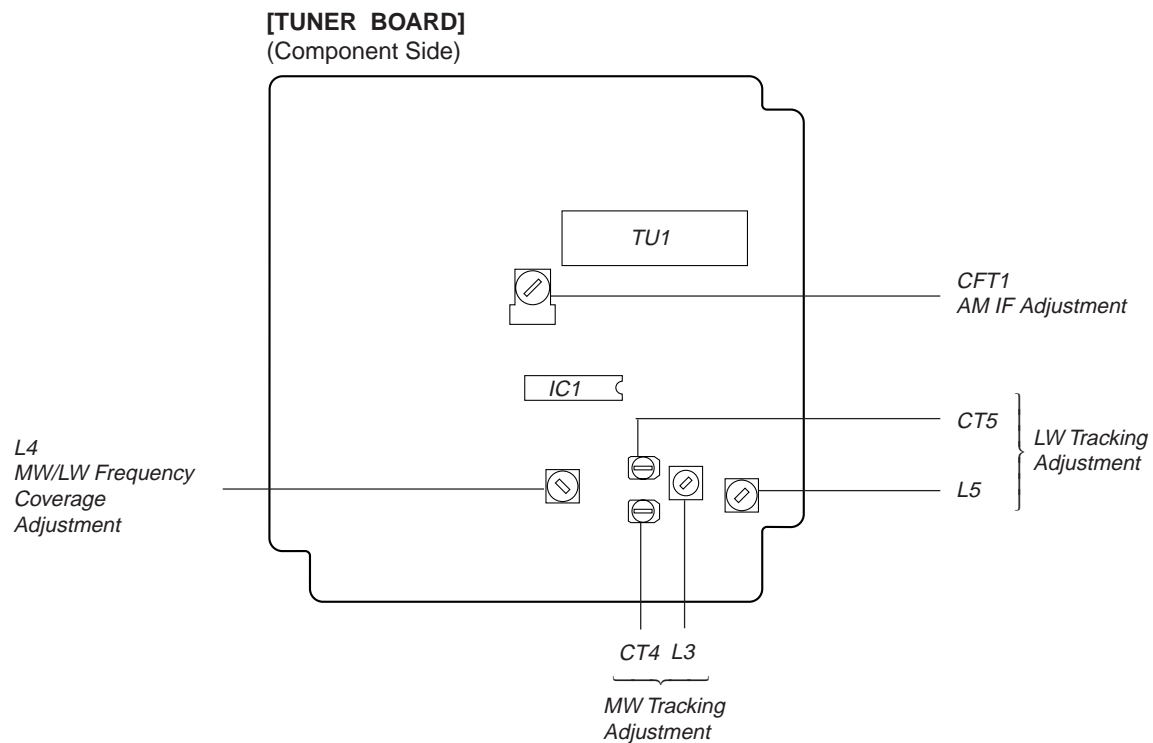
Adjustment Location: TUNER board (See page 29.)

Adjustment Location:

• **PMC-D305**



• **PMC-D305L**



CD SECTION

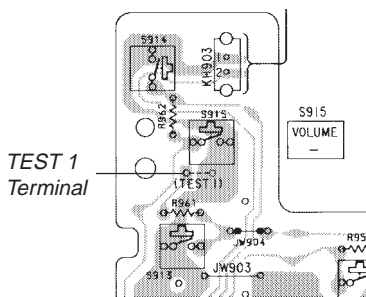
Notes on Adjustment

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

How to Put the Set into Test Mode

1. Disconnect an AC plug cord.
2. Turn on the power while shorting the test point (TEST1). (Connect the AC plug cord)
3. Opening the shorted test point puts the set into Test Mode.

[SW (A) BOARD] (Conductor Side)



How to Release the Test Mode

1. Press the **OPERATE** button to put the set into the standby status.
2. Finally, disconnect and connect the AC plug cord.

Before Beginning Adjustment

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

• Sled Motor Check

Press the **▶▶**, **◀◀** buttons and confirm that the optical pick-up moves smoothly from the innermost to outermost circumference and back smoothly and with no catching or abnormal noises.

- ▶▶** : Optical pick-up moves to the outer circumference
- ◀◀** : Optical pick-up moves to the inner circumference

• Focus Search Check

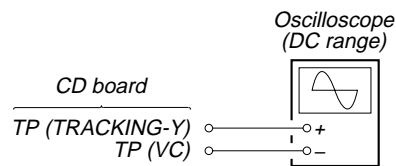
1. Press the **▶** button. (Focus search operation is performed continuously.)
2. Look at the optical pick-up objective lens and confirm that it moves up and down smoothly, when no catching or abnormal noises.
3. Press the **■** button.
Confirm that focus search operation stops. If it does not, press the **■** button again longer.

Note: When the malfunction is occurred by mis-passing other keys, turn off the power and check again from making the test mode.

E-F Balance Adjustment

This adjustment is to be done when the optical pick-up is replaced.

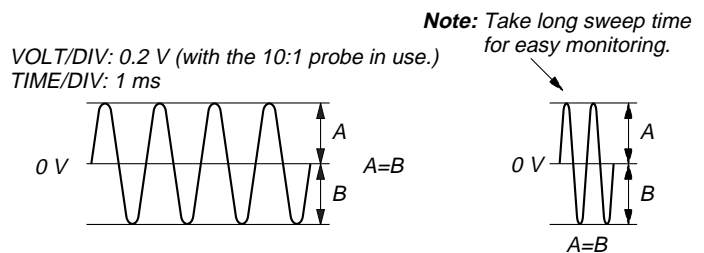
Procedure:



1. Connect the oscilloscope to TP (TRACKING-Y) and TP (VC) on the CD board.
2. Insert the disc (YEDS-18) in and close the lid for CD.
3. Put the set into test mode.
4. Press the **▶▶** and **◀◀** buttons to move the optical pick-up to the center.
5. Press the **▶** button.

[From focus searching, focus is turned ON while entering CLV drawing-in mode. Tracking and sled are turned OFF.]

6. Adjust RV703 so that the oscilloscope traverse waveform is symmetrical, as shown in the figure below.



Adjustment value: 0.4 ± 0.2 Vp-p (A + B)

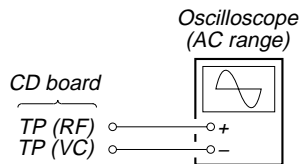
7. Release the test mode after adjustment is completed.

Adjustment Location: CD board (See page 33.)

Focus Bias Adjustment

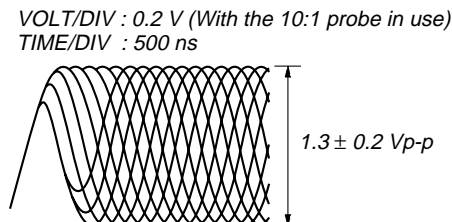
This adjustment is to be done when the optical pick-up is replaced.

Procedure:



1. Connect the oscilloscope TP (RF) and TP (VC) on the CD board.
2. Insert the disc (YEDS-18) in and close the lid for CD.
3. Put the set into test mode. (See page 30.)
4. Press **▶▶▶** and **◀◀◀** buttons to move the optical pick-up to the center. (Move the optical pick-up to the music area on the disc to enable easy visibility of the eye pattern.)
5. Press the **▶** button.
From focus searching, focus is turned ON while entering CLV drawing-in mode. Tracking and sled are turned OFF.
6. Press the **▶** button.
[Both tracking and sled are turned ON.]
7. Adjust RV701 so that the oscilloscope waveform is as shown in the figure below. (eye pattern)
 A good eye pattern means that the diamond shape (\approx) in the center of the waveform can be clearly distinguished.

• RF signal reference waveform (eye pattern)



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

8. Release the test mode after adjustment is completed.

Adjustment Location: CD board (See page 33.)

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.

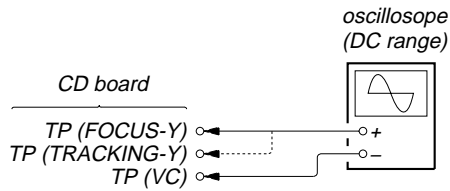
- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

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

The following is a simple adjustment method.

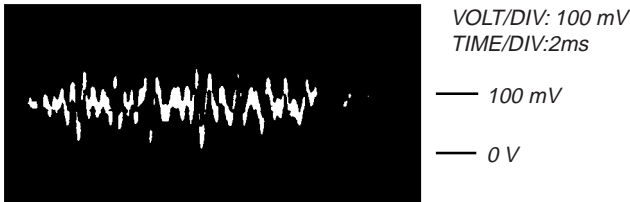
– Simple Adjustment –

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

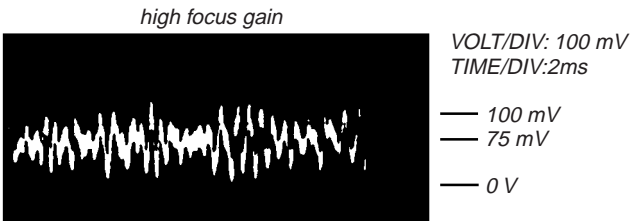
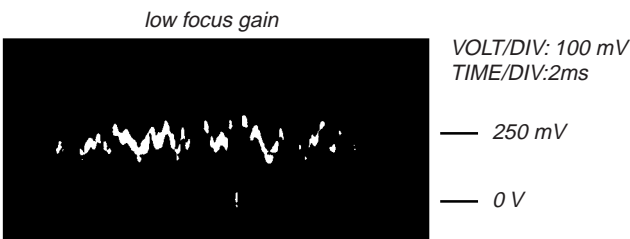


Procedure:

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. Connect the oscilloscope TP (FOCUS-Y) and TP (VC) on the CD board.
3. Insert the disc (YEDS-18) in and close the lid for CD.
4. Put the set into test mode. (See page 30.)
5. Press the ► button.
[From focus searching, focus is turned ON while entering] CLV drawing-in mode. Tracking and sled are turned OFF.]
6. Press the ► button.
[Both tracking and sled are turned ON.]
7. Adjust RV702 so that the waveform is as shown in the figure below. (Focus gain adjustment)



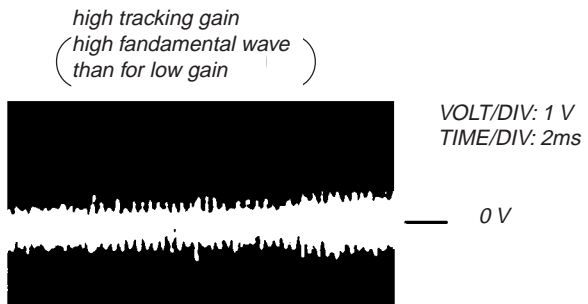
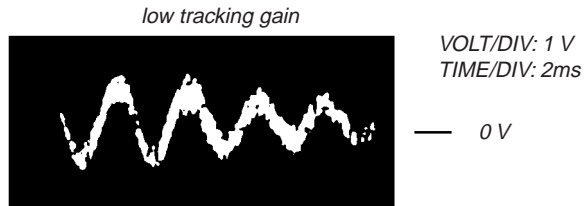
- Inconnect Examples (DC level changes more than on adjusted waveform)



8. Connect the oscilloscope to TP (TRACKING-Y) and TP (VC) on the CD board.
9. Adjust RV704 so that the waveform is as shown in the figure below. (tracking gain adjustment)



- Incorrect Examples (fundamental wave appears)



Note:
VOLT/DIV: with the 10:1 probe in used.

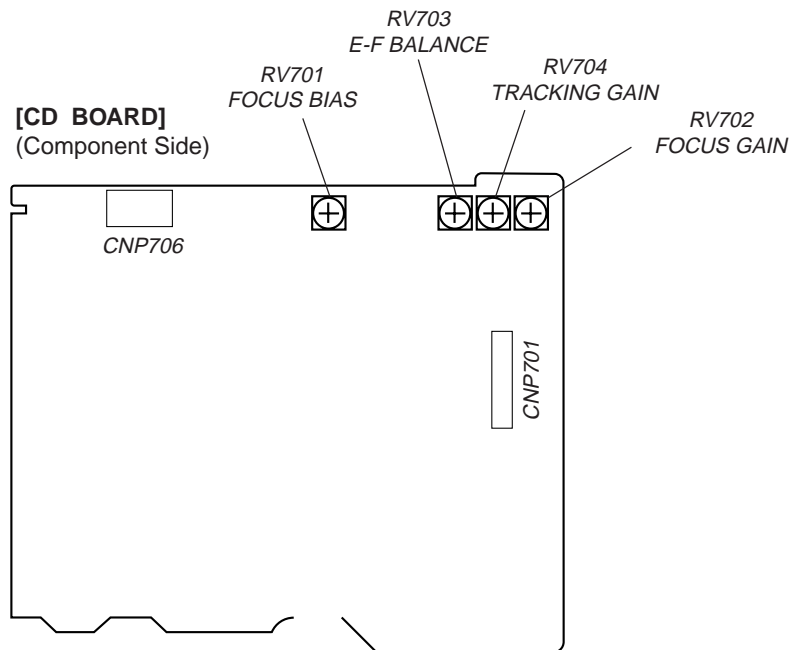
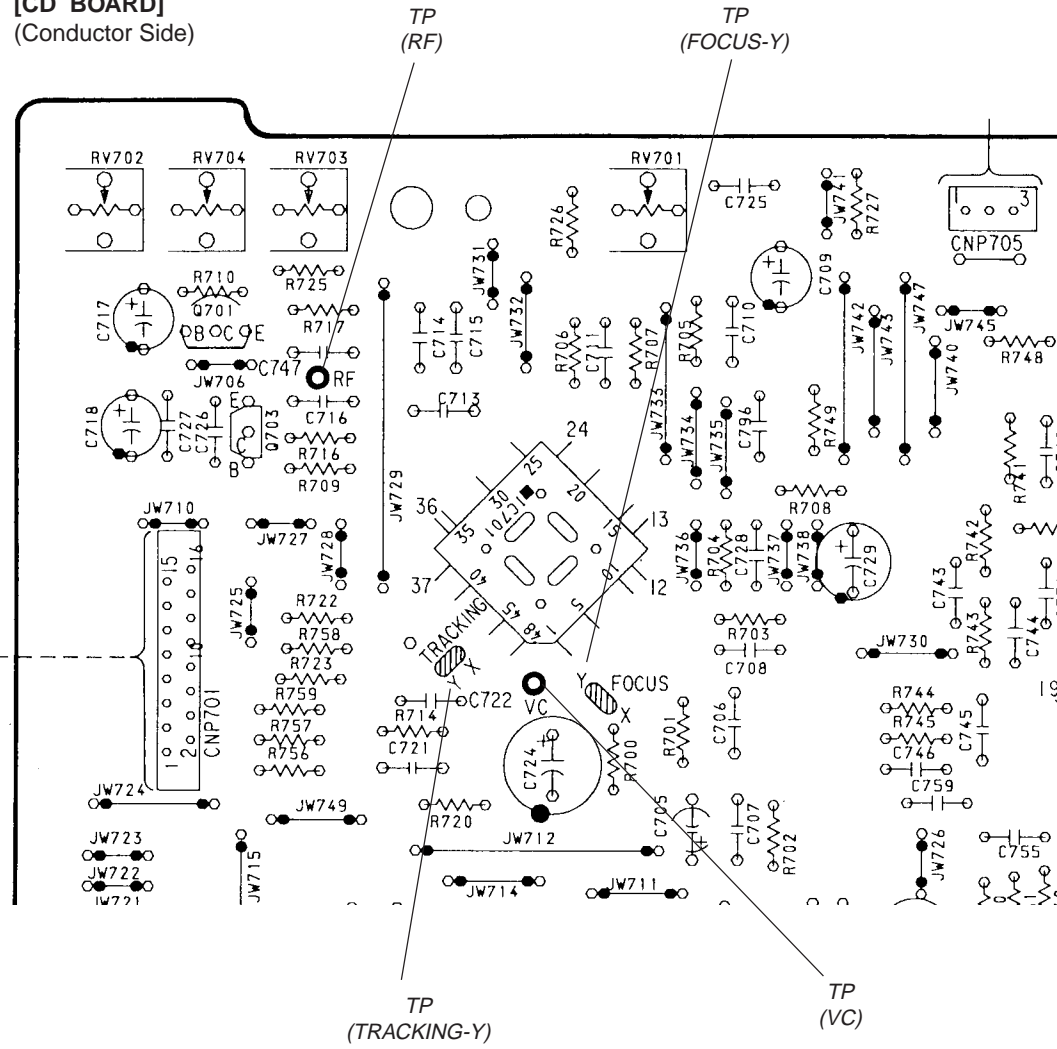
10. Release test mode after adjustment is completed.

Adjustment Location: CD board (See page 33.)

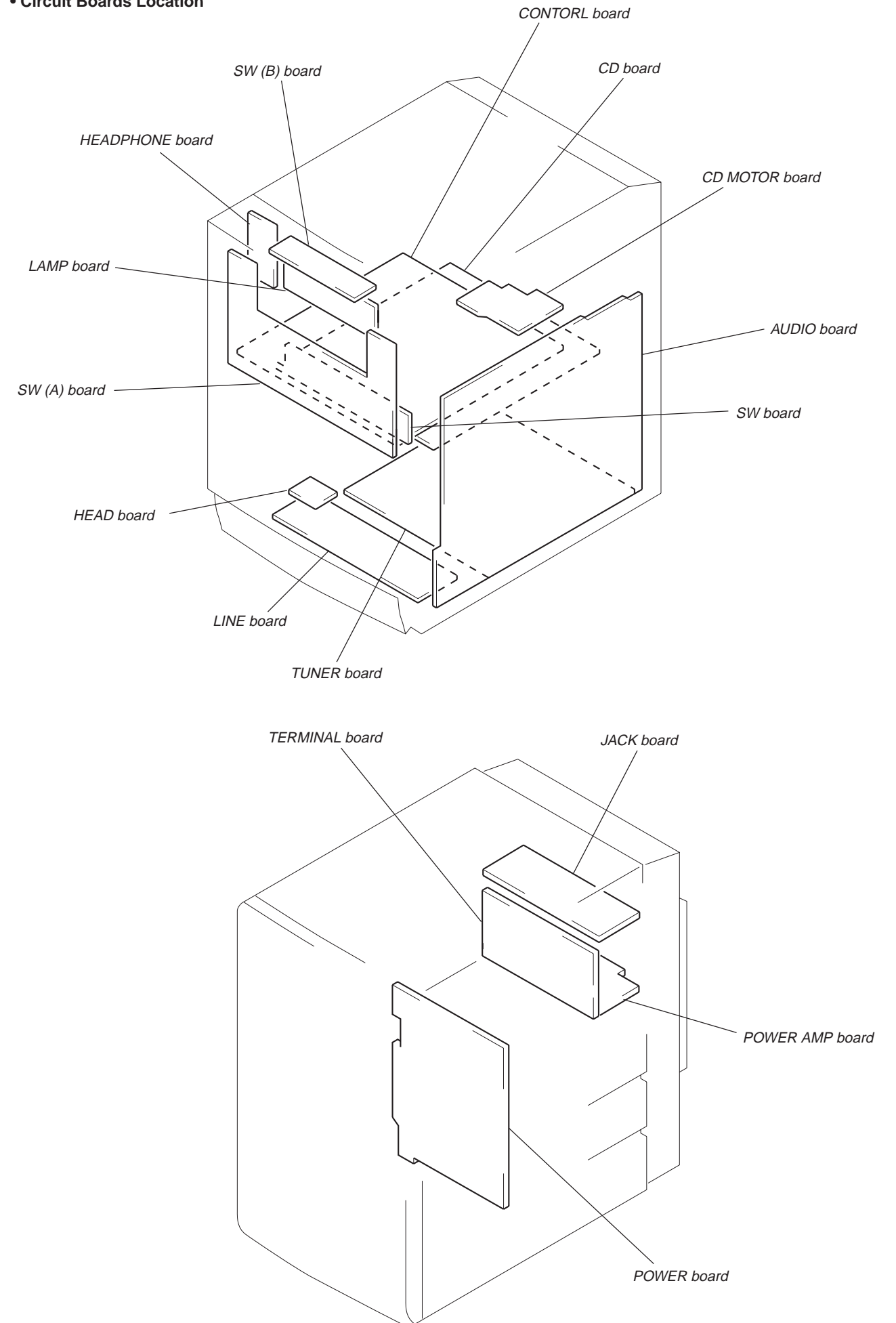
SECTION 6 DIAGRAMS

Connection and Adjustment Location:

[CD BOARD]
(Conductor Side)



• Circuit Boards Location

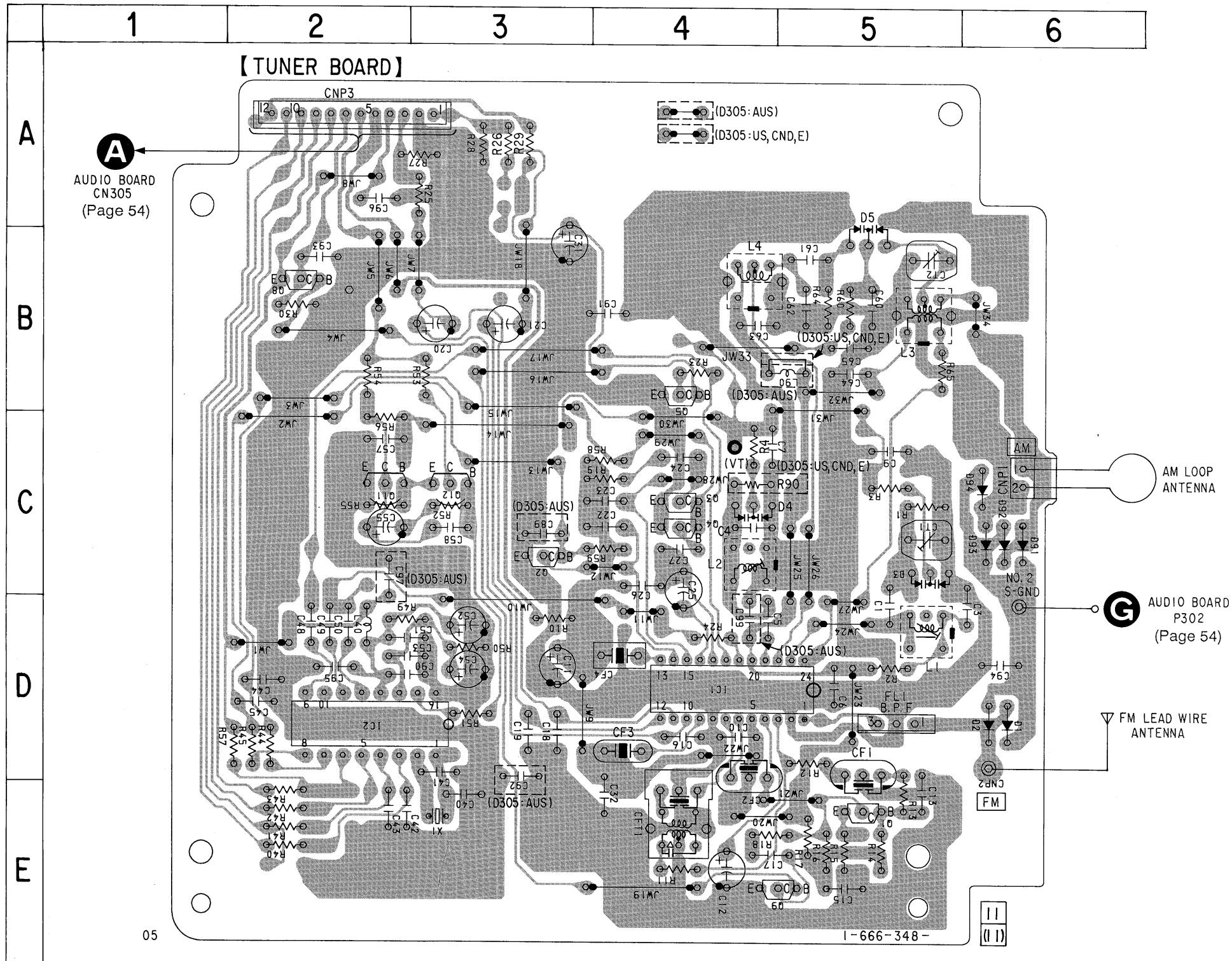


6-1. PRINTED WIRING BOARD - TUNER Section - (PMC-D305)

• See page 34 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
D1	D-6
D2	D-6
D3	C-5
D4	C-4
D5	B-5
D91	C-6
D92	C-6
D93	C-6
D94	C-6
IC1	D-4
IC2	D-2
Q1	E-5
Q2	C-3
Q3	C-4
Q4	C-4
Q5	B-4
Q8	B-2
Q9	E-5
Q11	C-2
Q12	C-3



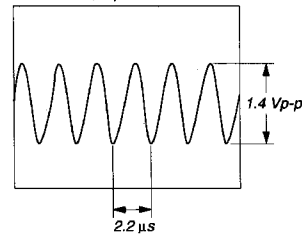
Note on Printed Wiring Board:

- ○ : parts extracted from the component side.
- □ : indicates side identified with part number.
- Δ : internal component.
- [Pattern] : Pattern from the side which enables seeing.
- Abbreviation
Aus : Australian

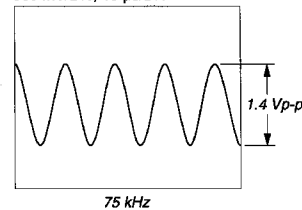
6-3. SCHEMATIC DIAGRAM - TUNER Section - (PMC-D305L) • See page 45 for IC Block Diagrams.

• Waveforms

IC1 (VCO)
500 mV/DIV, 2 μs/DIV



IC2 (X OUT)
500 mV/DIV, 10 μs/DIV



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- Δ : internal component.
- □ : panel designation.
- B+ : B+ Line.
- □ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : FM
- () : MW
- << >> : LW
- Voltages are taken with a VOM (input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- ⇨ : FM
- ⇨ : MW/LW

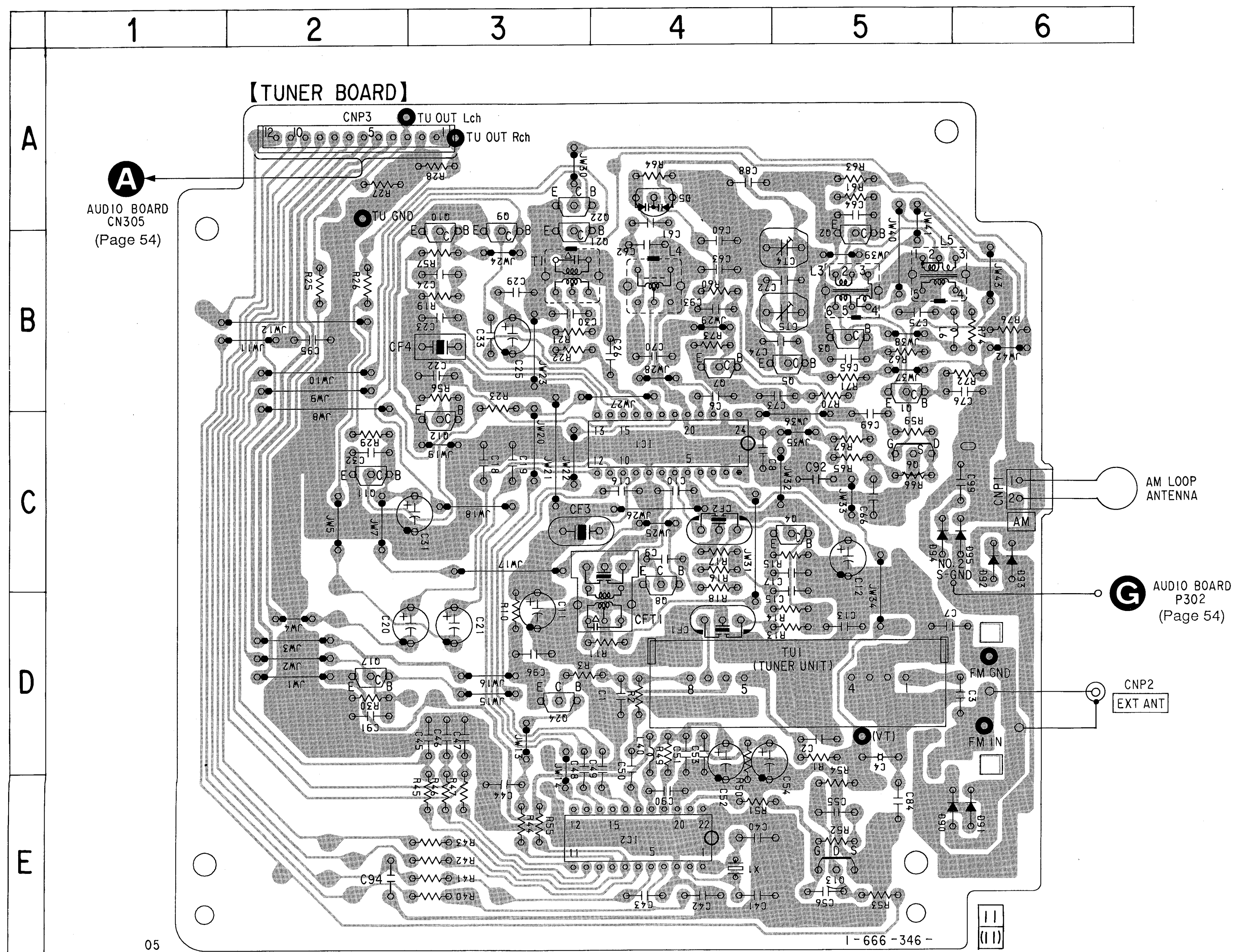


1	R CH
2	A. GND
3	L CH
4	PLL 5V
5	RADIO 7.5V
6	VT
7	STEREO
8	COUNT DATA
9	RADIO DATA
10	RADIO CLOCK
11	RADIO CE
12	BAWE MUTE

(A) AUDIO BOARD CN305 (Page 56)

(G) AUDIO BOARD PCB2 (Page 55)

6-4. PRINTED WIRING BOARD - TUNER Section - (PMC-D305L)
 • See page 34 for Circuit Boards Location.



• Semiconductor Location

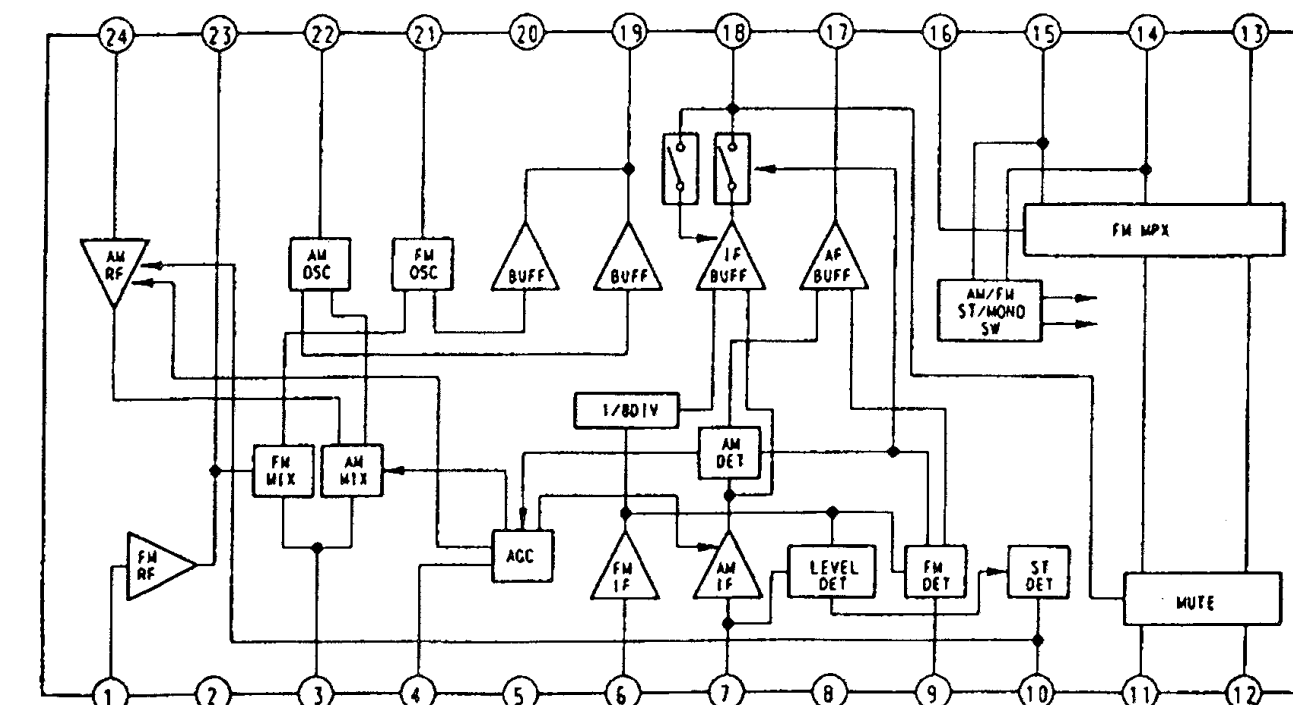
Ref. No.	Location
D5	A-4
D90	E-6
D91	E-6
D92	C-6
D93	C-6
D94	C-5
D95	C-6
IC1	C-4
IC2	E-4
Q1	B-5
Q2	B-5
Q3	B-5
Q4	C-5
Q5	B-5
Q6	C-5
Q7	B-4
Q8	D-4
Q9	B-3
Q10	B-3
Q11	C-2
Q12	C-3
Q13	E-5
Q17	D-2
Q21	B-3
Q22	A-3
Q24	D-3

Note on Printed Wiring Board:

- : parts extracted from the component side.
- : indicates side identified with part number.
- △ : internal component.
- ▨ : Pattern from the side which enables seeing.

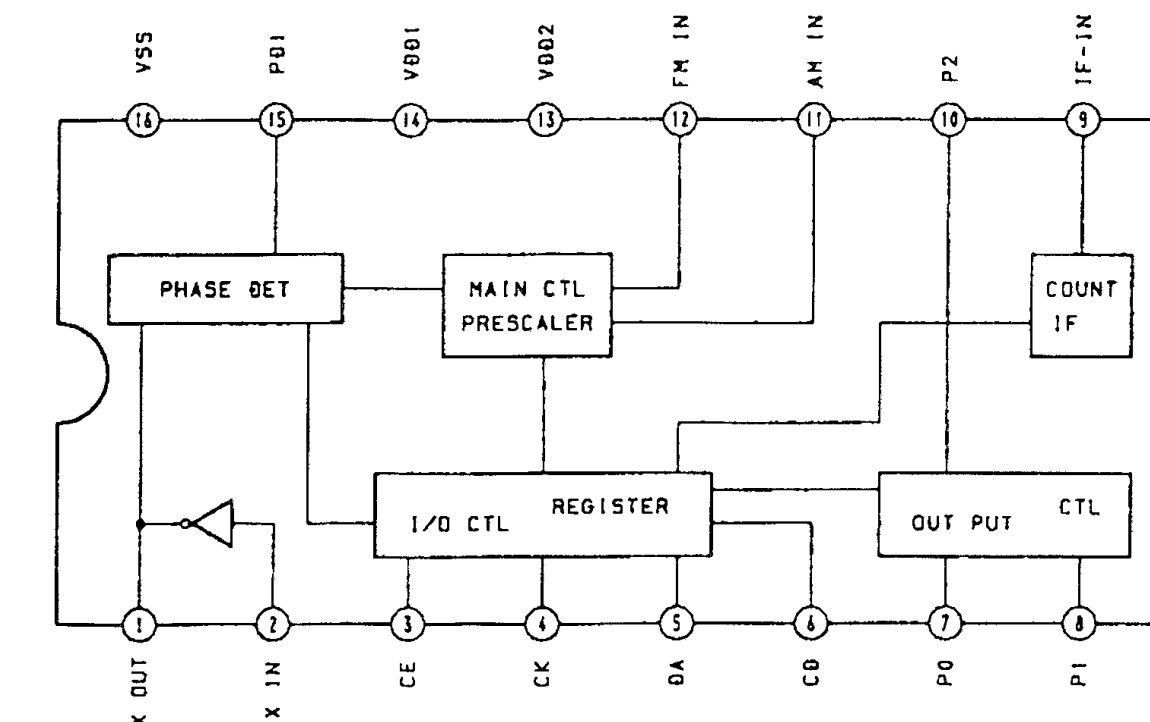
• IC Block Diagrams

IC1 TA2008AN



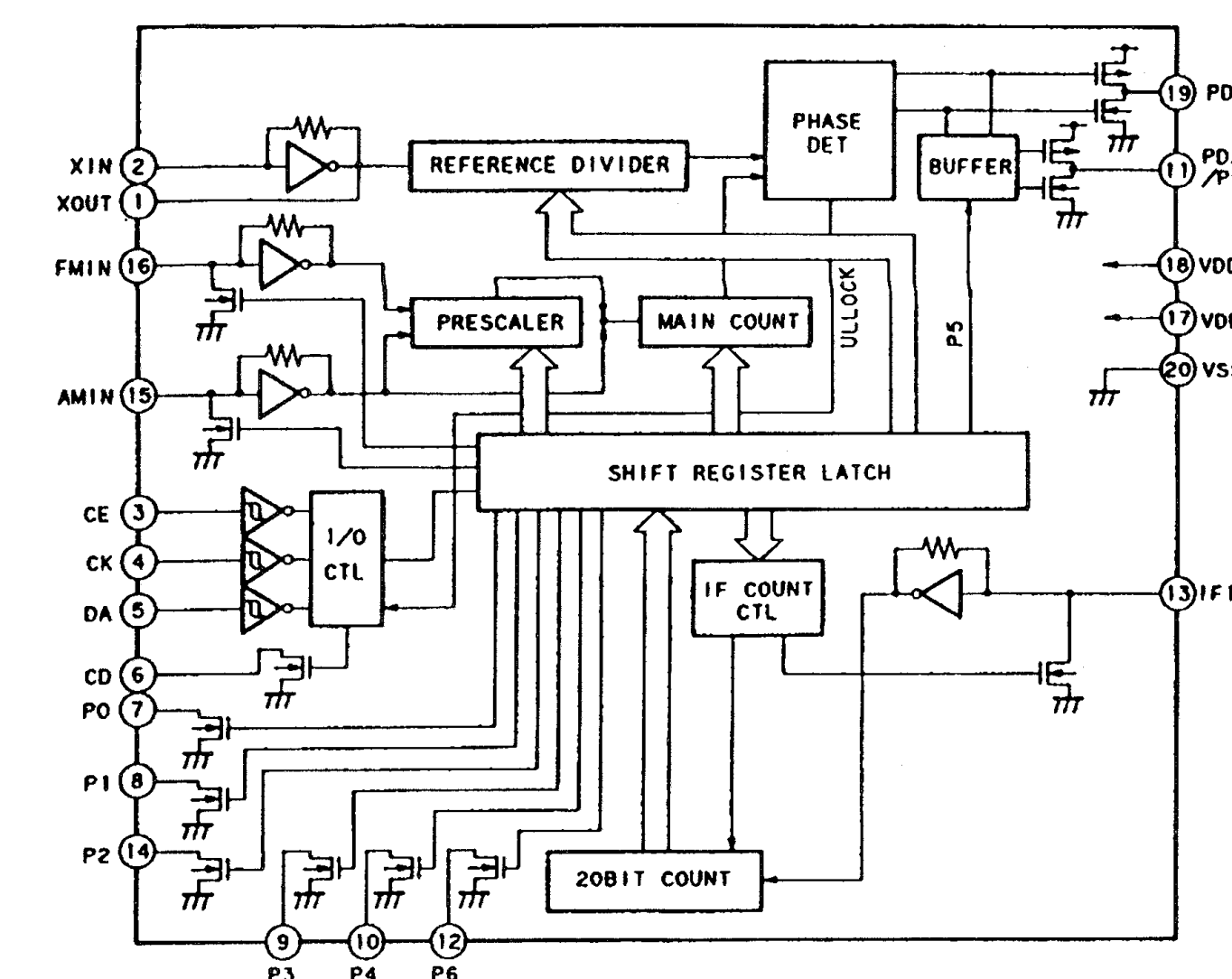
— PMC-D305 —

IC2 BU2614



— PMC-D305L —

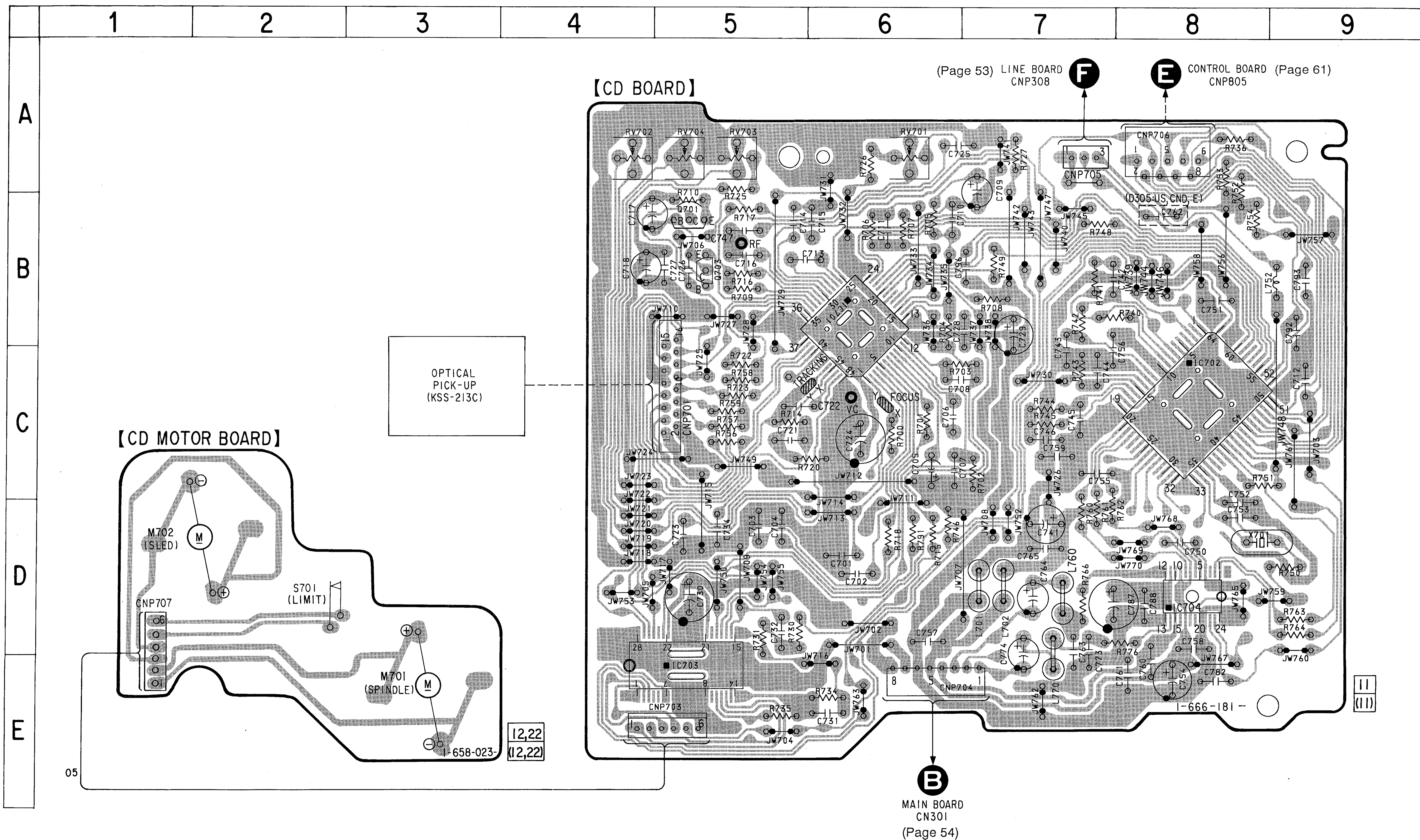
IC2 BU2615S



6-5. PRINTED WIRING BOARDS - CD Section -
 • See page 34 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
IC701	B-6
IC702	C-8
IC703	E-5
IC704	D-8
Q701	B-5
Q703	B-5



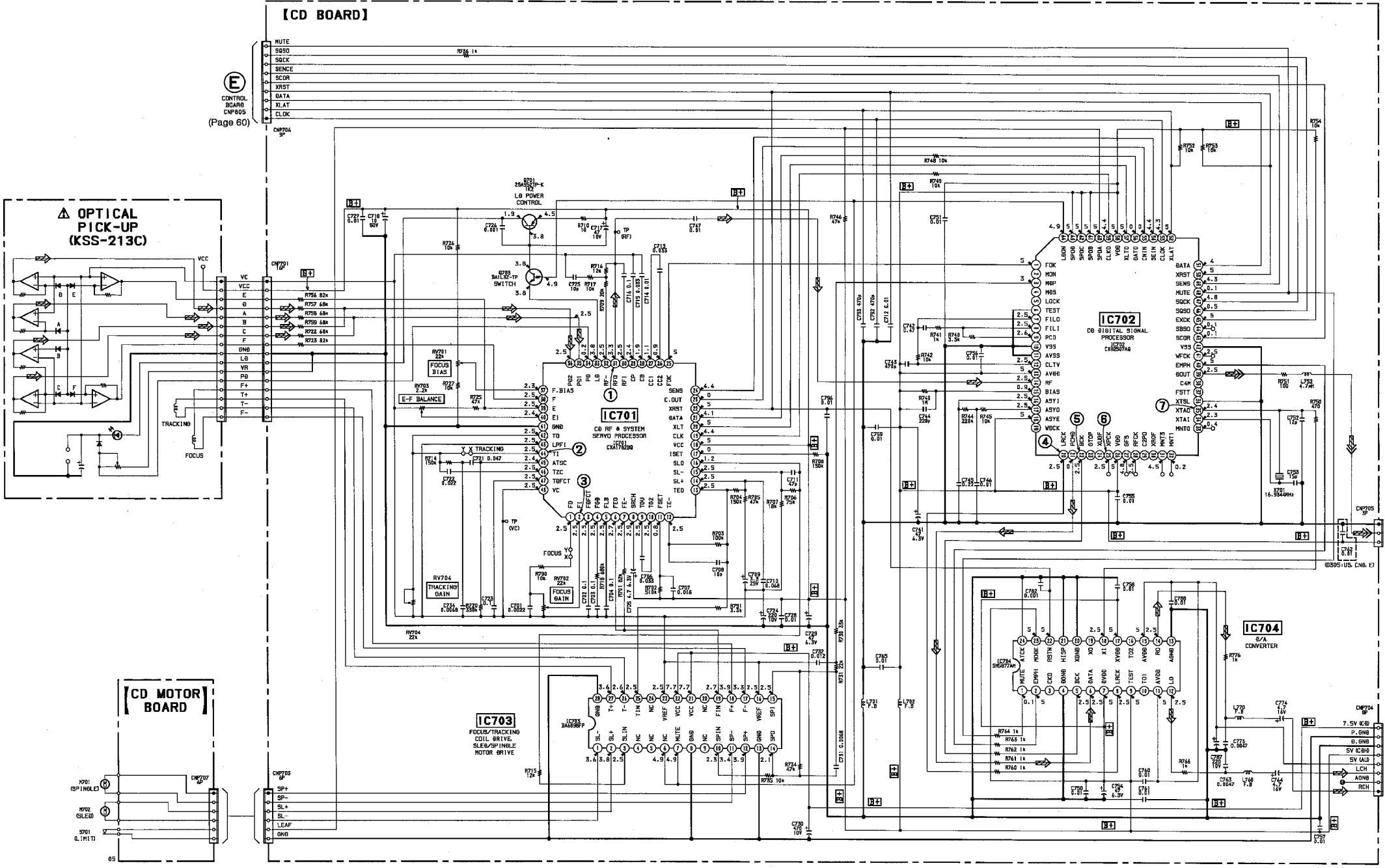
Note on Printed Wiring Board:

- : parts extracted from the component side.
- : parts mounted on the conductor side.
- ▨ : Pattern from the side which enables seeing.
- Abbreviation
CND : Canadian

6-6. SCHEMATIC DIAGRAM - CD Section - See page 71 for waveforms. See page 70 to 72 for IC Block Diagrams.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

A B C D E F G H I J K L



Note on Schematic Diagram:

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

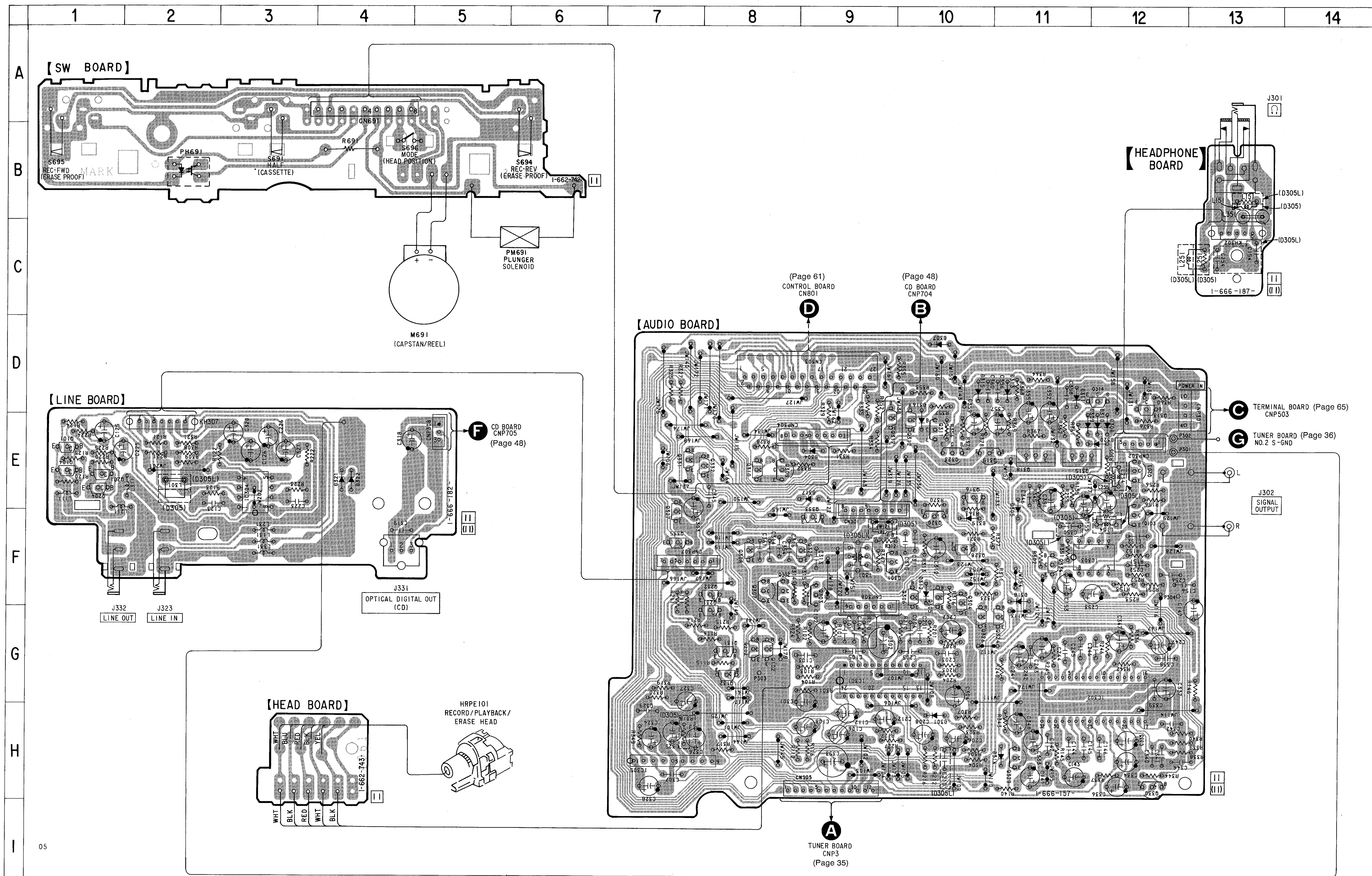
<p>Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.</p>	<p>Note: Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
--	--

- B+ : B+ Line.
- B- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions. no mark : CD
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Signal path.
- \Rightarrow : CD
- \Rightarrow : digital out
- Abbreviation
- CND : Canadian

6-7. PRINTED WIRING BOARDS - MAIN Section - • See page 34 for Circuit Boards Location.

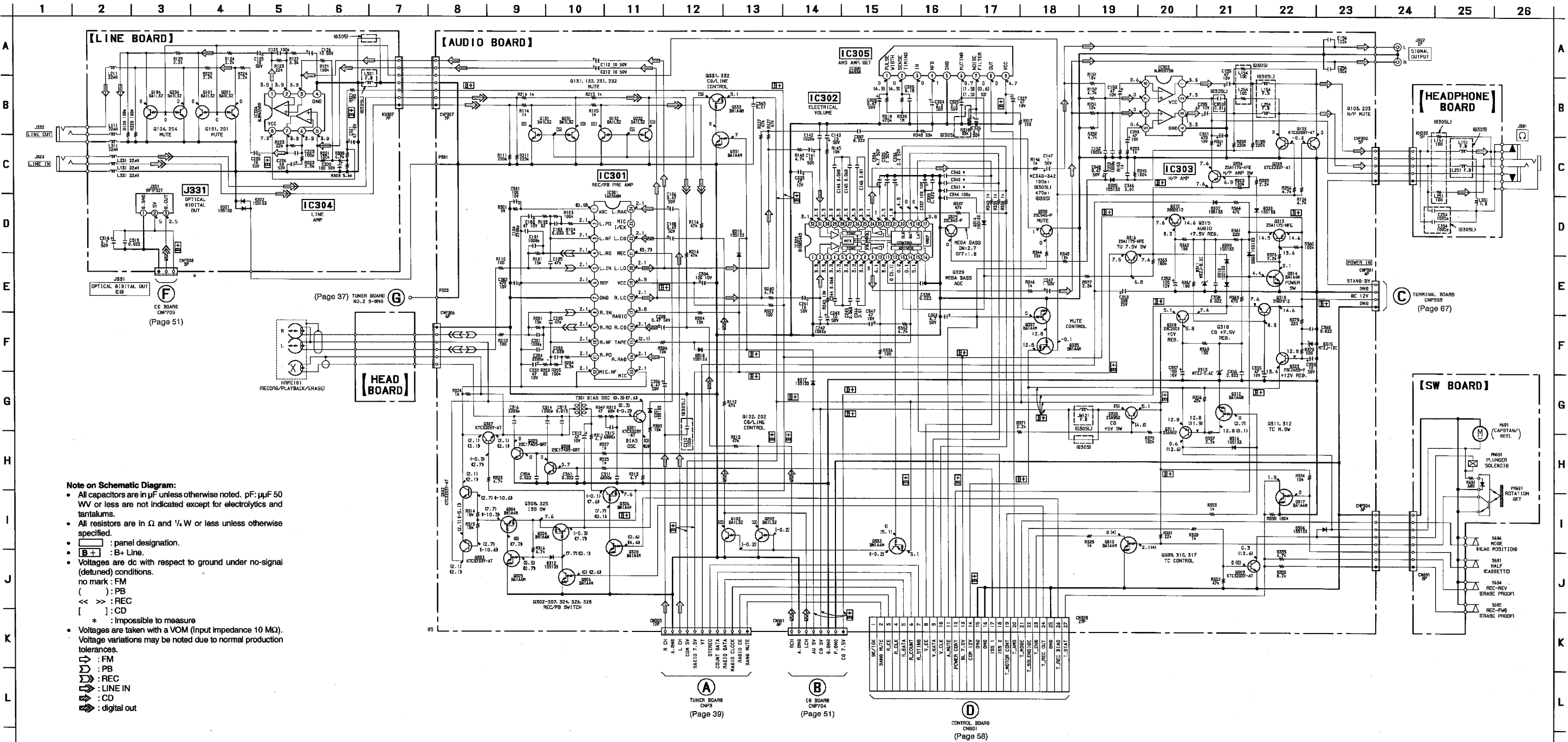
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D301	H-10	Q203	E-12
D304	E-9	Q204	E-1
D305	F-11	Q231	G-8
D307	D-10	Q232	F-8
D308	E-12	Q301	F-9
D309	D-11	Q302	F-8
D310	E-12	Q303	F-9
D311	D-11	Q304	F-10
D312	F-10	Q305	F-10
D313	D-11	Q306	F-10
D314	H-11	Q307	F-8
D315	D-10	Q308	F-8
D316	E-10	Q309	E-8
D317	E-9	Q310	E-8
D318	F-11	Q311	E-10
D319	F-10	Q312	E-10
D320	E-12	Q313	D-12
D321	E-4	Q314	D-12
D322	E-4	Q315	E-11
		Q316	E-10
IC301	G-9	Q317	E-9
IC302	G-12	Q318	E-11
IC303	F-12	Q319	E-10
IC304	E-3	Q320	F-10
IC305	H-7	Q323	E-10
		Q324	G-11
J331	F-4	Q325	F-9
		Q326	G-10
PH691	B-2	Q327	F-7
		Q328	F-10
Q101	E-1	Q329	H-11
Q102	G-8	Q330	H-12
Q103	F-12	Q331	E-7
Q104	E-1	Q332	E-8
Q131	G-8	Q333	F-9
Q132	G-8	Q334	F-11
Q201	E-1	Q335	F-7
Q202	G-8		



Note on Printed Wiring Board:
 • — : parts extracted from the component side.
 • ▨ : Pattern from the side which enables seeing.

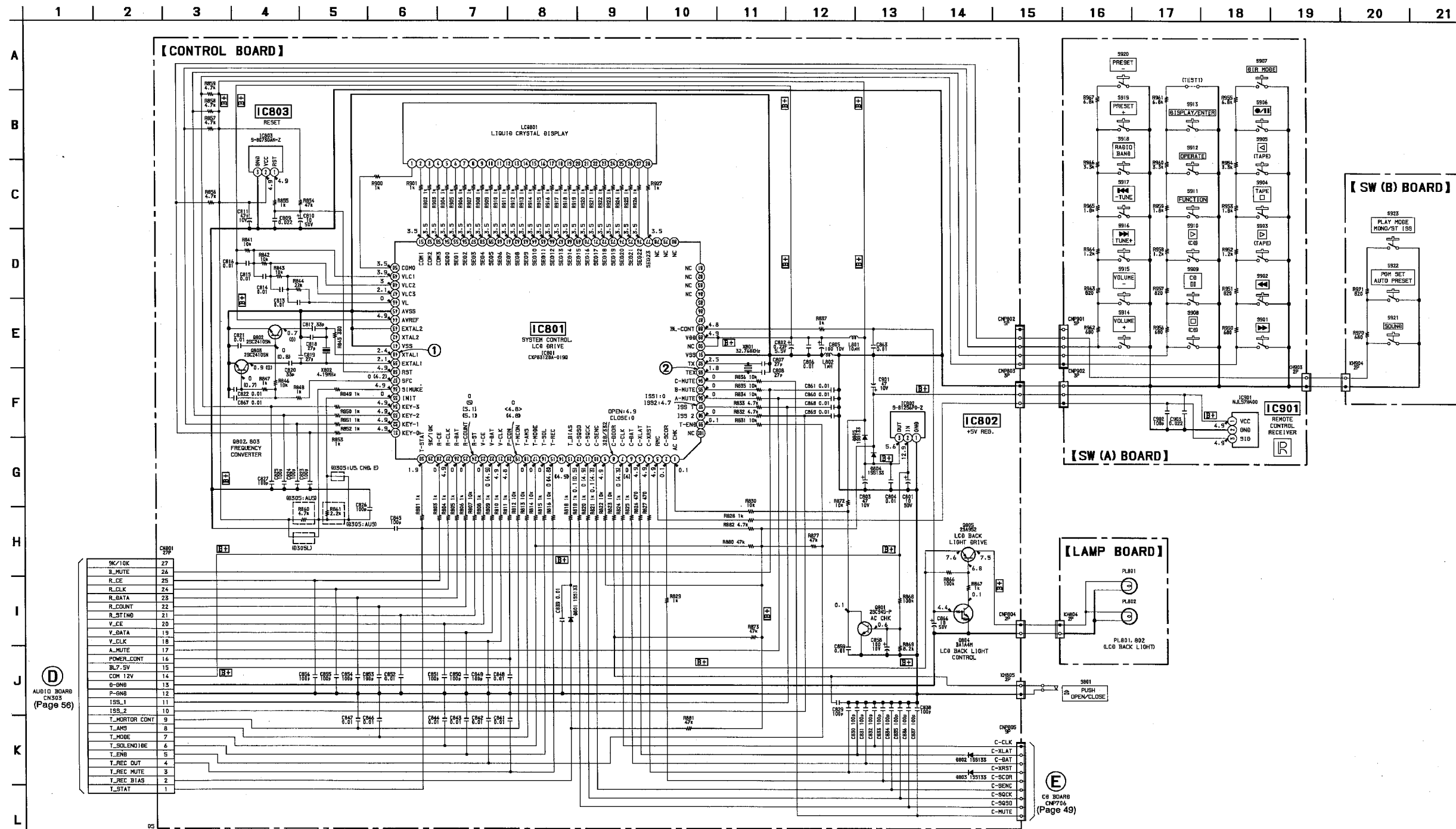
6-8. SCHEMATIC DIAGRAM - MAIN Section - See page 72, 73 for IC Block Diagrams.



Note on Schematic Diagram:

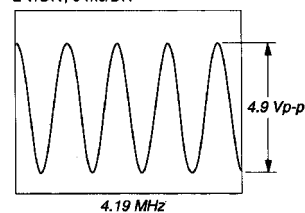
- All capacitors are in μF unless otherwise noted. pF; μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.
- Panel designation: \square
- B+ Line: $\square+$
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
 - no mark : FM
 - () : PB
 - << >> : REC
 - [] : CD
- * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- FM: \rightarrow
- PB: \rightarrow
- REC: \rightarrow
- LINE IN: \rightarrow
- CD: \rightarrow
- digital out: \rightarrow

6-9. SCHEMATIC DIAGRAM - CONTROL Section - See page 74, 75 for IC Pin Function Description.

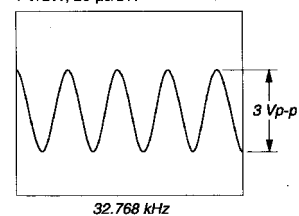


• Waveforms

● IC801 (XTAL1)
2 V/DIV, 5 ms/DIV



● IC801 (TEX)
1 V/DIV, 20 μs/DIV



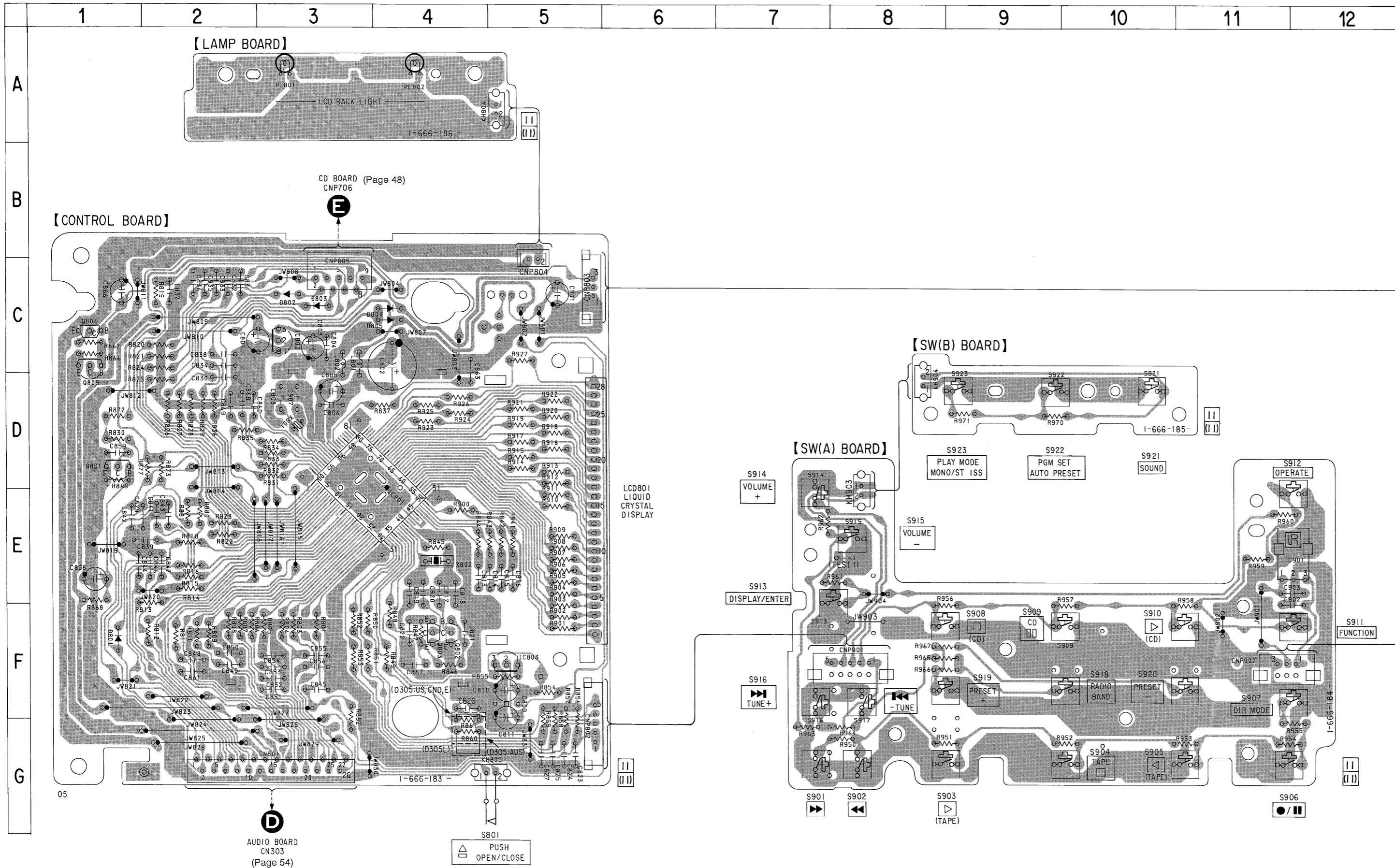
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μF/50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- [] : panel designation.
- [B+] : B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : FM
() : PB
<< >> : REC
[] : CD
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Abbreviation
AUS : Australian

Ⓓ AUDIO BOARD
CNS305
(Page 56)

Ⓔ CB BOARD
CNE716
(Page 49)

6-10. PRINTED WIRING BOARDS - CONTROL Section - • See page 34 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location
D801	F-1
D802	C-3
D803	C-3
D804	C-4
D805	C-4
IC801	E-4
IC802	C-3
IC803	F-5
IC901	E-12
Q801	D-1
Q802	F-4
Q803	F-4
Q804	C-1
Q805	D-1

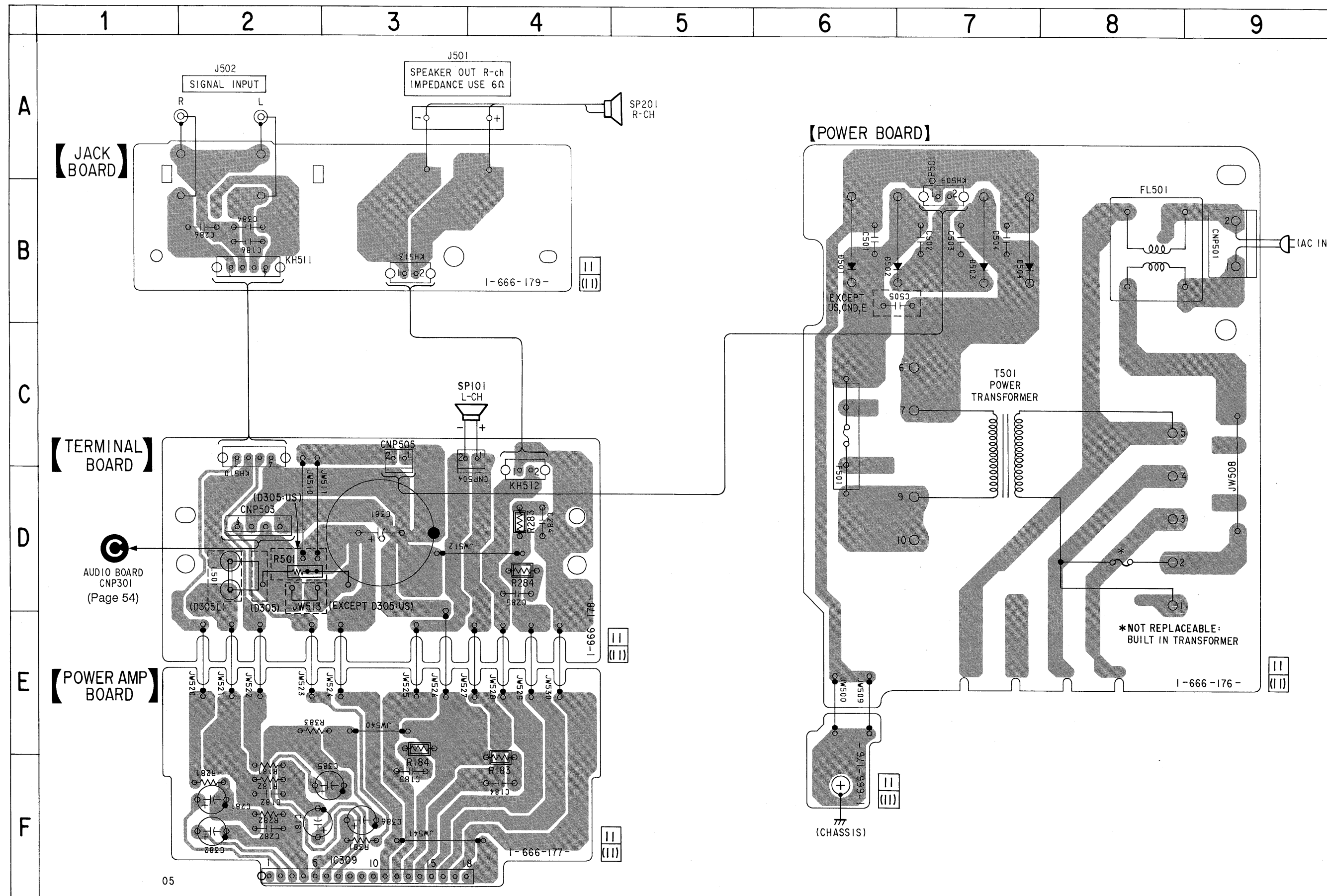
Note on Printed Wiring Board:

- : parts extracted from the component side.
- : parts mounted on the conductor side.
- : Pattern from the side which enables seeing.
- Abbreviation
- AUS : Australian

6-11. PRINTED WIRING BOARDS - POWER Section - • See page 34 for Circuit Boards Location.

• Semiconductor Location

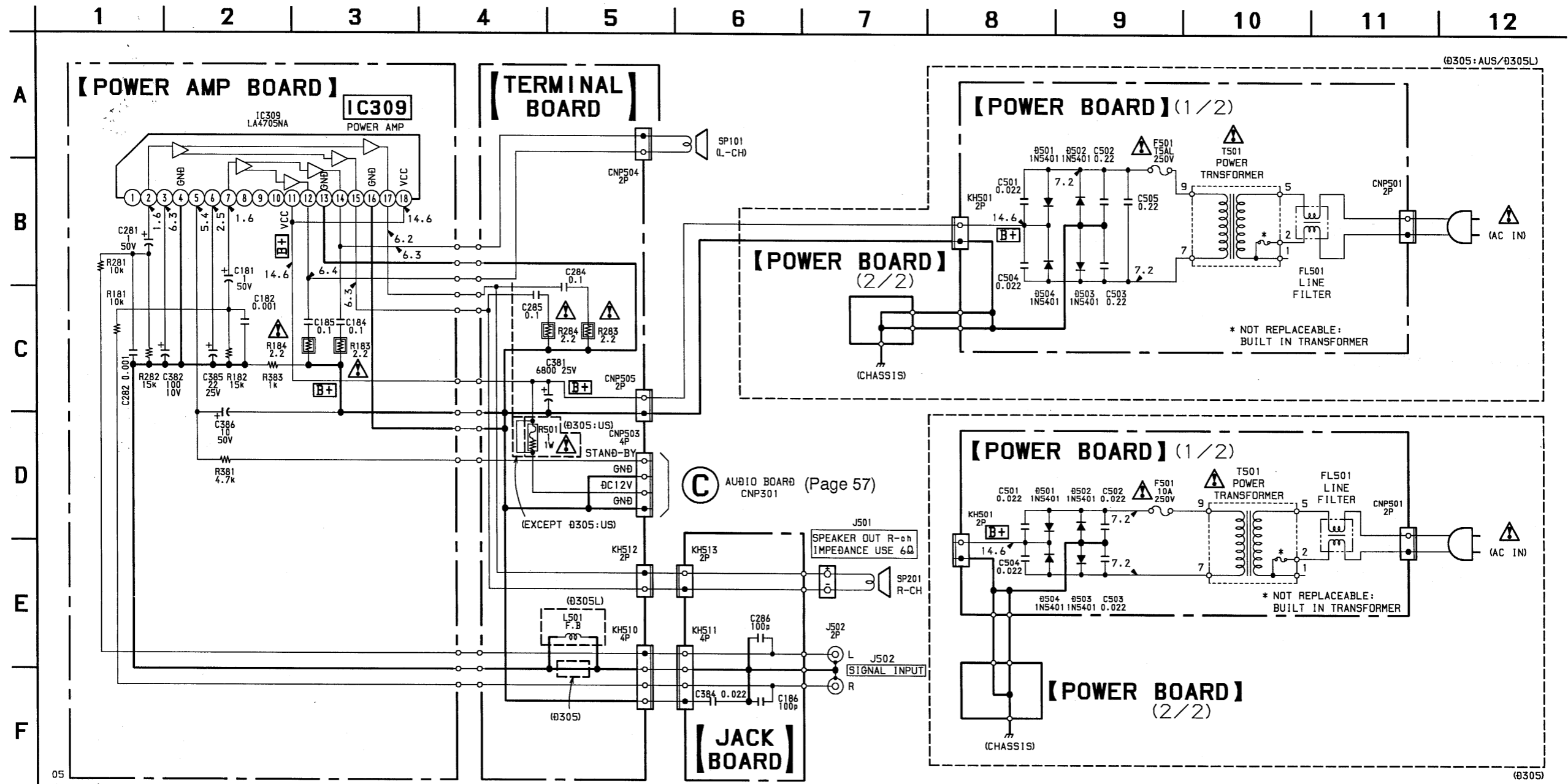
Ref. No.	Location
D501	B-6
D502	B-7
D503	B-7
D504	B-7
IC309	F-3



Note on Printed Wiring Board:

- : parts extracted from the component side.
- : Pattern from the side which enables seeing.
- Abbreviation
CND : Canadian
AUS : Australian

6-12. SCHEMATIC DIAGRAM - POWER Section -



Note on Schematic Diagram:

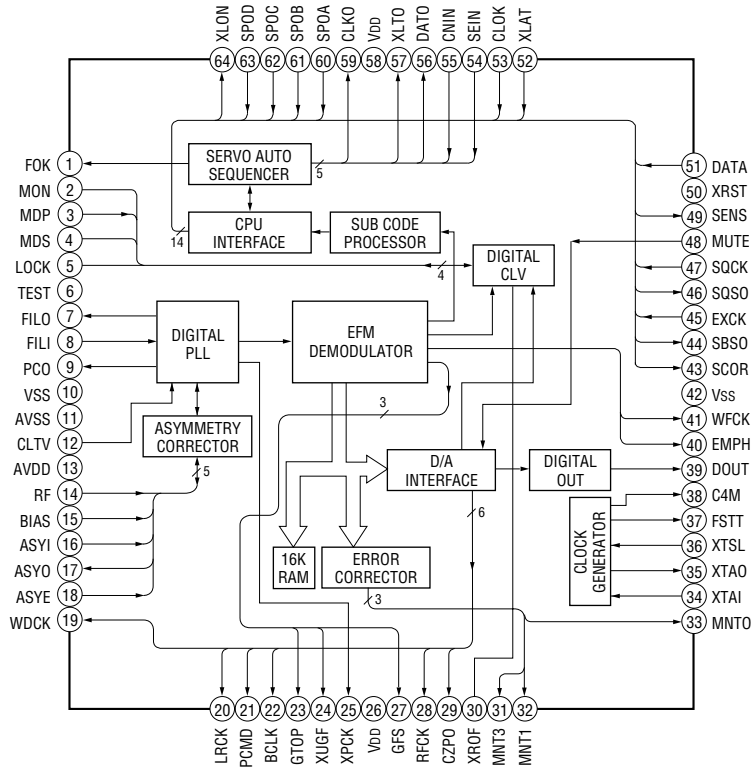
- All capacitors are in μF unless otherwise noted. pF: μpF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4$ W or less unless otherwise specified.
- : nonflammable resistor.
- : panel designation.

- : B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions. no mark : FM
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Abbreviation
CND : Canadian
AUS : Australian

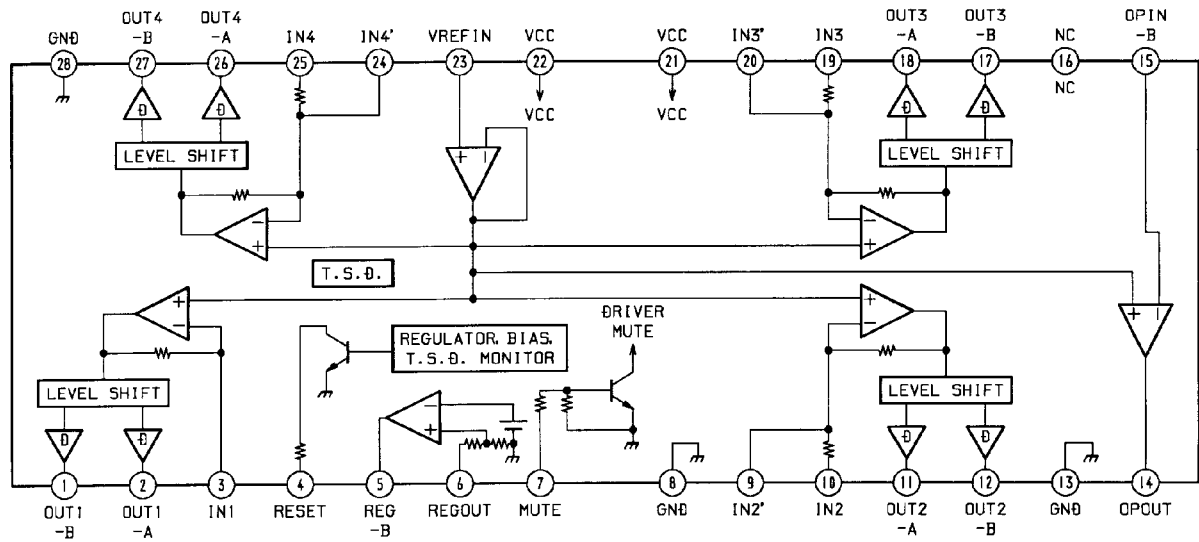
Note:
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

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

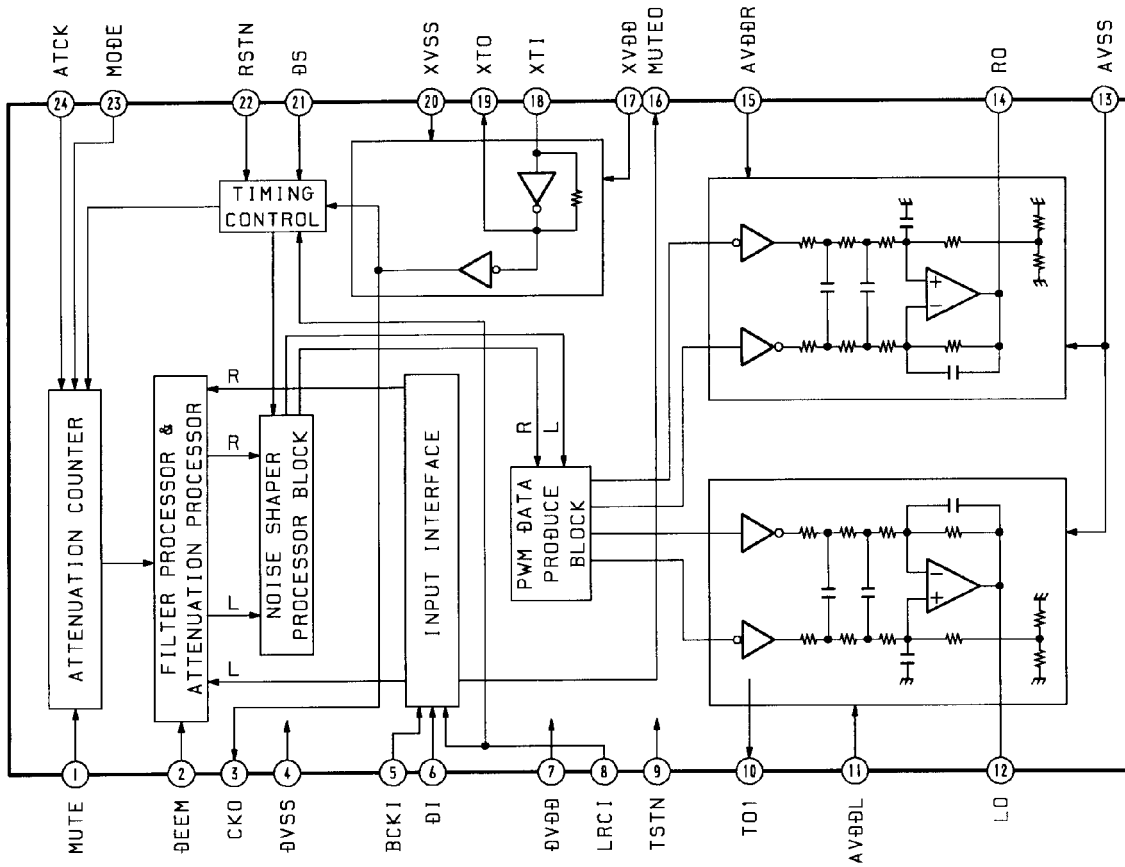
IC702 CXD2507AQ



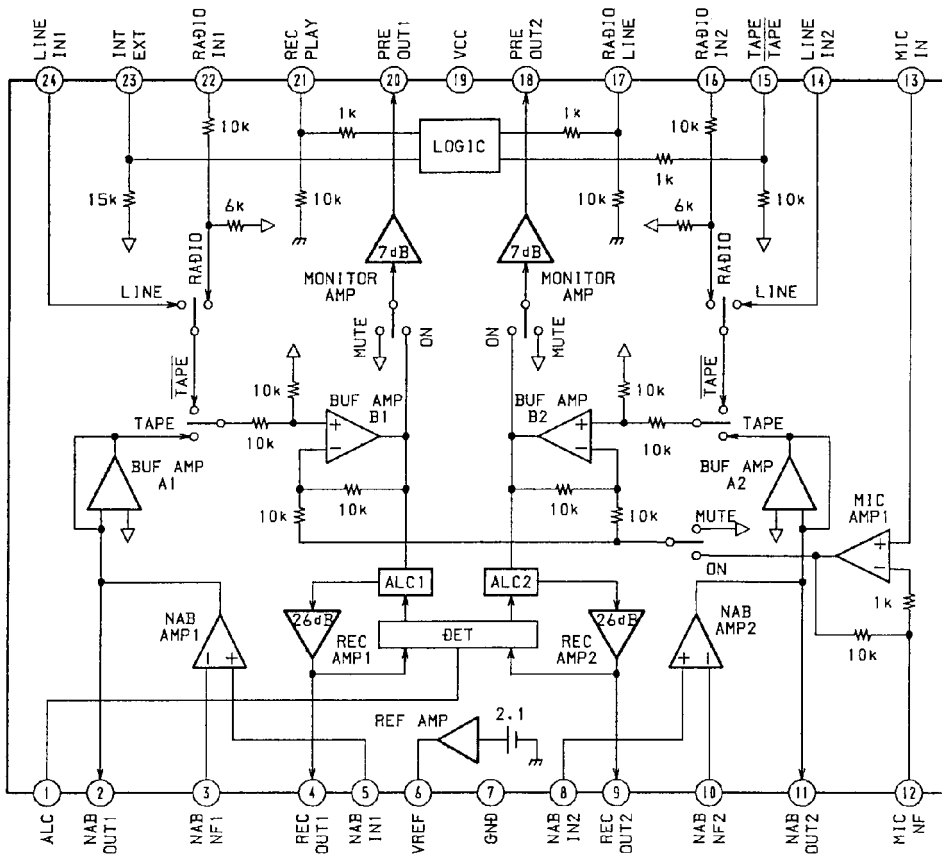
IC703 BA6898FP



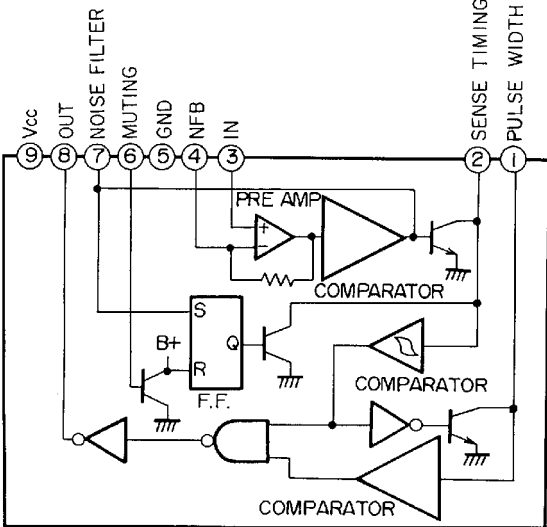
IC704 SM5877AM



- MAIN Section -
IC301 TA2068N



IC305 BA338



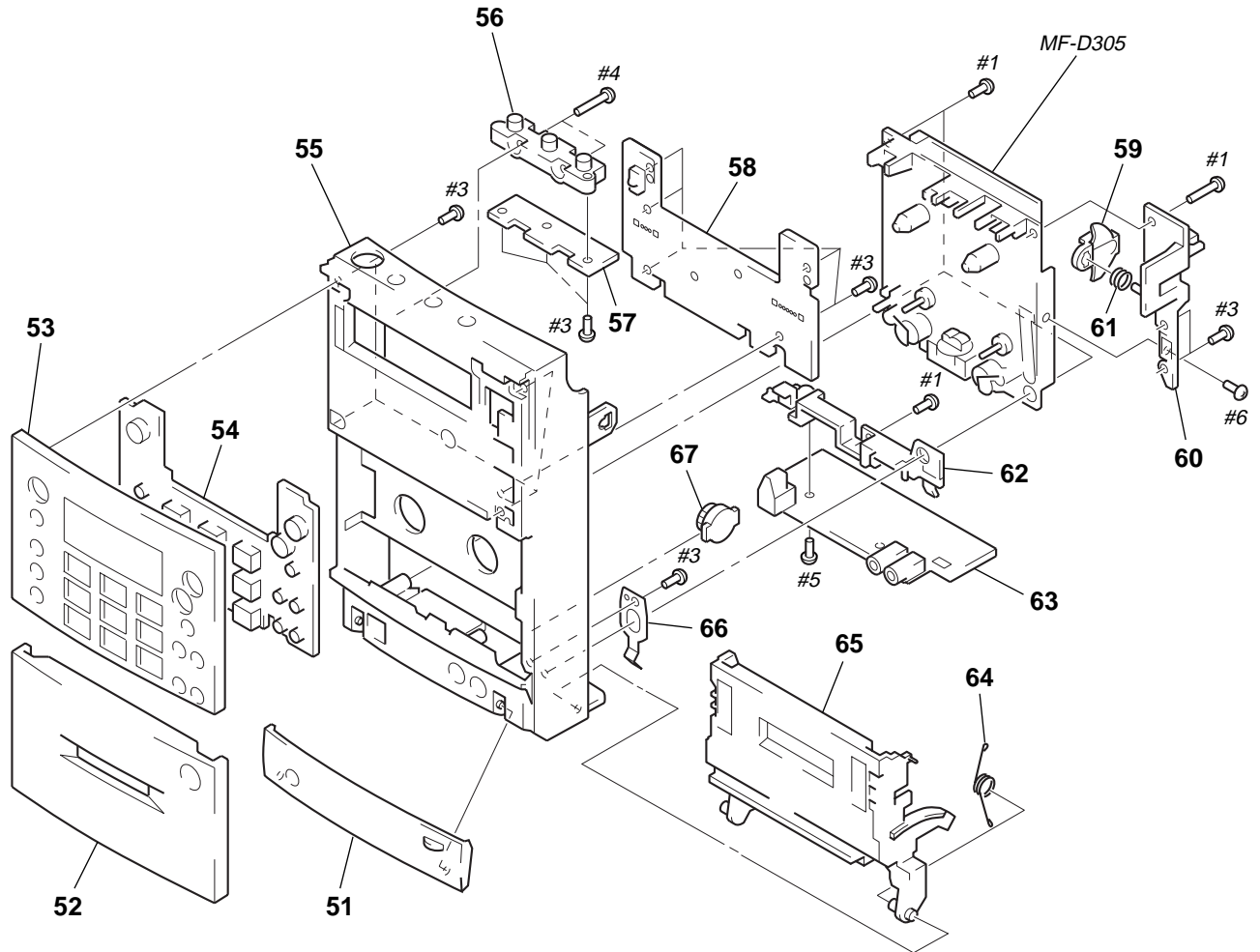
6-13. IC PIN FUNCTION DESCRIPTION

CONTROL BOARD IC801 CXP83120A-019Q (SYSTEM CONTROL, LCD DRIVE)

Pin No.	Pin Name	I/O	Function
1	AC CHK	I	AC check input
2	C-SCOR	I	CD-SCOR input
3	RMC	I	Remote commander input
4	C-XRST	O	CD system reset output
5	C-XLAT	O	CD DSP (IC702) command
6	C-DAT	O	CD DSP (IC702) command data output
7	C-CLK	O	Clock output for CD DSP (IC702) command
8	C-DOOR	I	Open/close detection input "L": close "H": open
9	328/332	I	328/332 select input (Fixed at "H")
10	C-SENC	I	CD-SENS input
11	C-SQCK	O	Clock output for CD SUBQ
12	C-SQSO	I	CD SUBQ input
13	T-BIAS	I	Tape REC BIAS input
14	-	-	Not used (Open)
15	T-REC	I	Tape REC input
16	T-SOL	O	Plunger control output
17	T-MODE	O	HEAD switching output
18	T-AMS	I	AMS sensitivitiy switching
19	T-MCON	O	Motor control output "H": Motor on
20	P-CON	O	Power on/off control output
21	V-CLK	O	Volume clock output
22	V-DAT	O	Volume data output
23	V-CE	O	Electrical volume (IC302) chip enable output
24	R-ST	I	Stereo detection input
25	R-COUNT	I	Tuner PLL IC count input
26	R-DAT	O	Tuner PLL IC data output
27	R-CLK	O	Tuner PLL IC clock output
28	R-CE	O	Tuner PLL IC chip enable output
29	9K/10K	I	9K/10K select input (Not used)
30	T-STAT	I	Tape detection input
31-34	KEY-0-3	I	Key return signal input
35	INIT	O	Initial setting output
36	SIMUKE	I	Destination setting terminal
37	SFC	O	Shift clock on/off out
38	RST	I	Reset input
39	EXTAL1	I	Clock oscillation input (4.19MHz)
40	XTAL1	O	Clock oscillation output (4.19MHz)
41	VSS	-	Ground (for A/D converter)
42	XTAL2	O	Clock oscillation output (Open)
43	EXTAL2	I	Clock oscillation output (Fixed at "L")
44	AVREF	I	Reference voltage input (for A/D converter)
45	AVSS	-	Ground (for A/D converter)

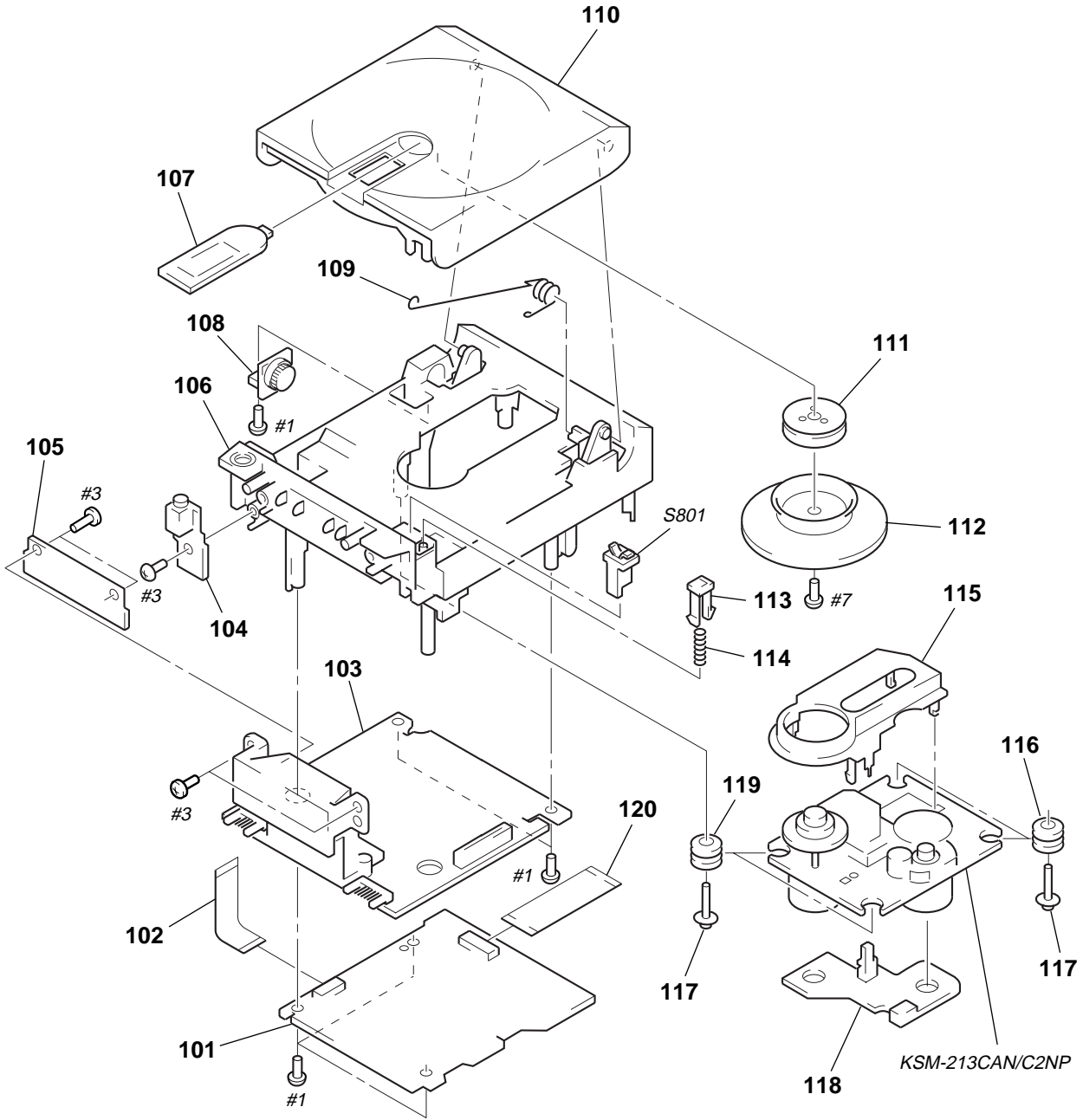
Pin No.	Pin Name	I/O	Function
46	VL	O	LCD bias resistor current control terminal (Cut off at standby)
47-49	VLC3-1	–	LCD bias power supply terminal
50-53	COM0-3	O	LCD common signal output terminal
54-77	SEG0-23	O	LCD segment signal output terminal
78-84	NC	–	Not used (Open)
85-87	–	–	Not used (Open)
88	BL-CONT	O	LCD Back light control output
89	VDD	–	Power supply (+5V)
90	NC	–	Connected to the power supply
91	VSS	–	Ground
92	TX	O	Crystal connection for clock oscillation (32.768kHz)
93	TEX	I	Crystal connection for clock oscillation (32.768kHz)
94	C-MUTE	O	Mute output for CD
95	B-MUTE	O	Mute output for Tuner
96	A-MUTE	O	Mute output for Audio
97	ISS1	I	ISS1 switch input
98	ISS2	I	ISS2 switch input
99	T-END	I	Tape end detection input
100	NC	–	Not used (Open)

(2) FRONT CABINET SECTION



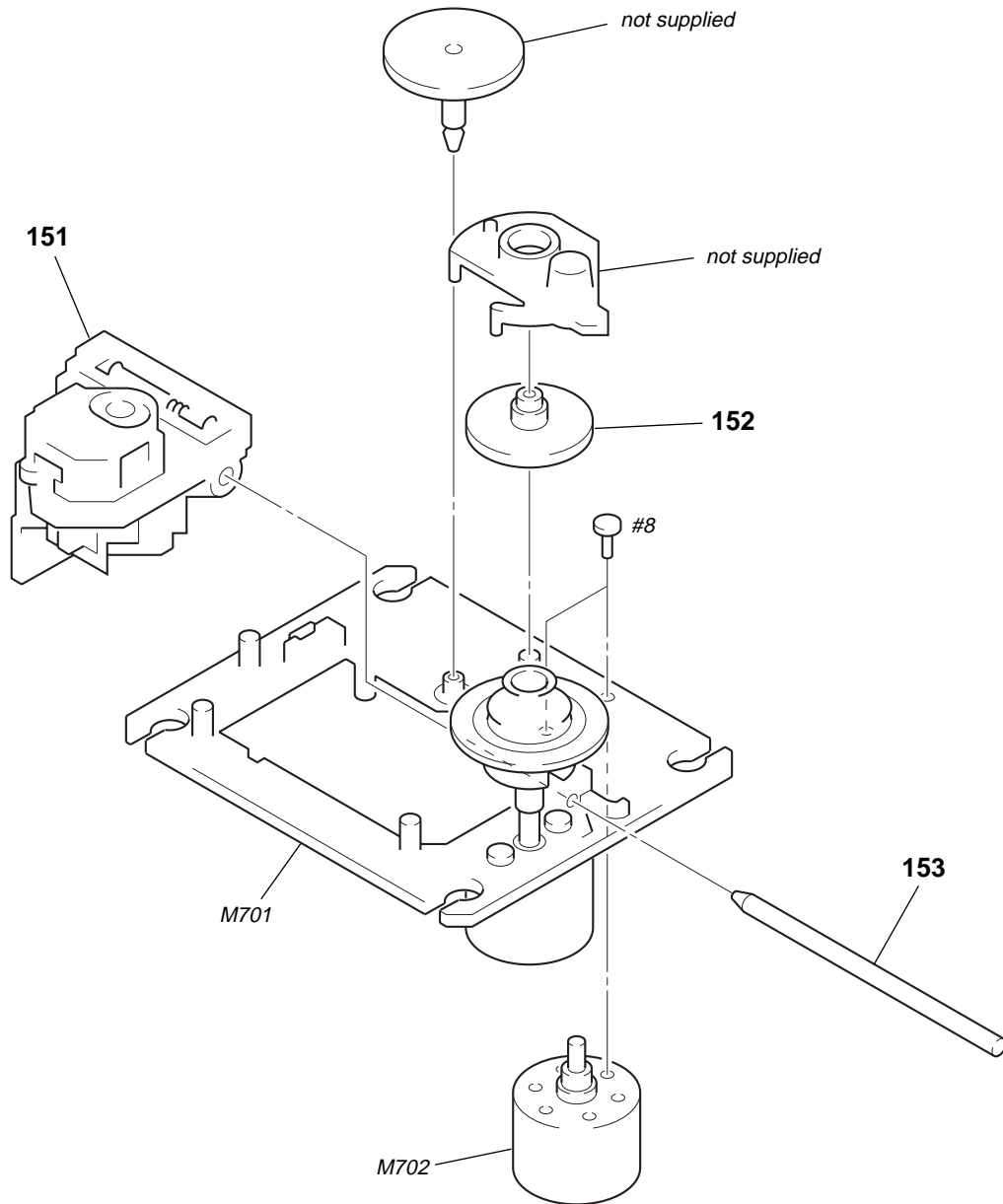
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	X-3373-799-1	LID (TERMINAL) ASSY		59	3-014-097-01	PLATE (CASSETTE), LOCK	
52	X-3373-798-1	LID (CASSETTE) ASSY (D305L)		60	3-014-098-01	RETAINER (CASSETTE), LOCK	
52	X-3374-255-1	LID (CASSETTE) ASSY (D305)		61	3-013-735-01	SPRING (CASSETTE LOCK)	
53	X-3373-797-1	PANEL (FRONT) ASSY (D305L)		62	3-014-100-01	HOLDER (TERMINAL)	
53	X-3374-254-1	PANEL (FRONT) ASSY (D305)		* 63	A-3306-625-A	LINE BOARD, COMPLETE (D305L)	
54	3-014-091-01	BUTTON (MAIN)		* 63	A-3306-833-A	LINE BOARD, COMPLETE (D305)	
55	3-014-090-01	CABINET (FRONT)		64	3-014-102-01	SPRING (CASSETTE)	
56	3-014-092-01	BUTTON (UPPER)		65	3-014-096-01	HOLDER (CASSETTE)	
* 57	1-666-185-11	SW (B) BOARD		66	3-014-103-01	SPRING (TERMINAL LID)	
* 58	1-666-184-11	SW (A) BOARD		67	3-343-248-01	DAMPER (P), SMALL	

(3) CD CABINET SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 101	A-3306-628-A	CD BOARD, COMPLETE (D305: AUS/D305L)		110	3-014-124-01	LID (CD)	
* 101	A-3306-837-A	CD BOARD, COMPLETE (D305: US, CND, E)		111	1-452-732-11	MAGNET	
102	1-782-294-11	WIRE, PARALLEL (FFC) (9 CORE)		112	3-910-112-01	PLATE, CHUCKING	
* 103	A-3306-631-A	CONTROL BOARD, COMPLETE (D305L)		113	3-014-131-01	LEVER	
* 103	A-3306-832-A	CONTROL BOARD, COMPLETE (D305: AUS)		* 114	3-014-132-01	SPRING, COMPRESSION	
* 103	A-3306-836-A	CONTROL BOARD, COMPLETE (D305: US, CND, E)		115	3-910-116-01	COVER, CD	
* 104	1-666-187-11	HEADPHONE BOARD		116	3-910-095-11	RUBBER, VIBRATION PROOF (RED)	
* 105	1-666-186-11	LANP BOARD		117	3-916-006-01	SCREW (2.6X16)	
106	3-014-123-01	CABINET (CD)		118	1-639-678-12	CD MOTOR BOARD	
107	3-014-129-01	WINDOW (CD)		119	3-910-095-01	RUBBER, VIBRATION PROOF (GREEN)	
108	3-351-377-11	DAMPER		120	1-769-069-11	CABLE, FFC 16P	
109	3-014-128-01	SPRING (CD)		S801	1-692-960-11	SWITCH, PUSH (1 KEY) (OPEN/CLOSE)	

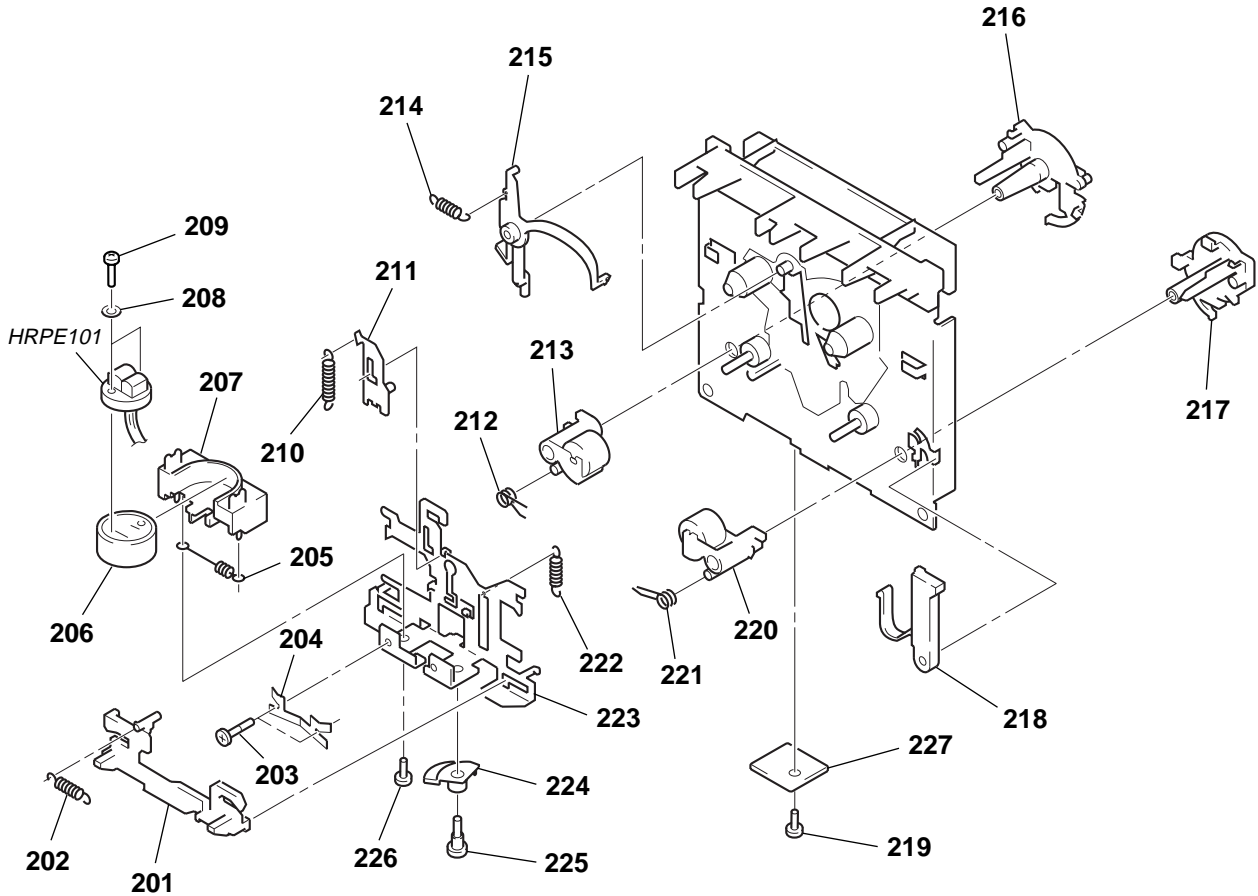
**(4) OPTICAL PICK-UP SECTION
(KSM-213CAN/C2NP)**



<p>The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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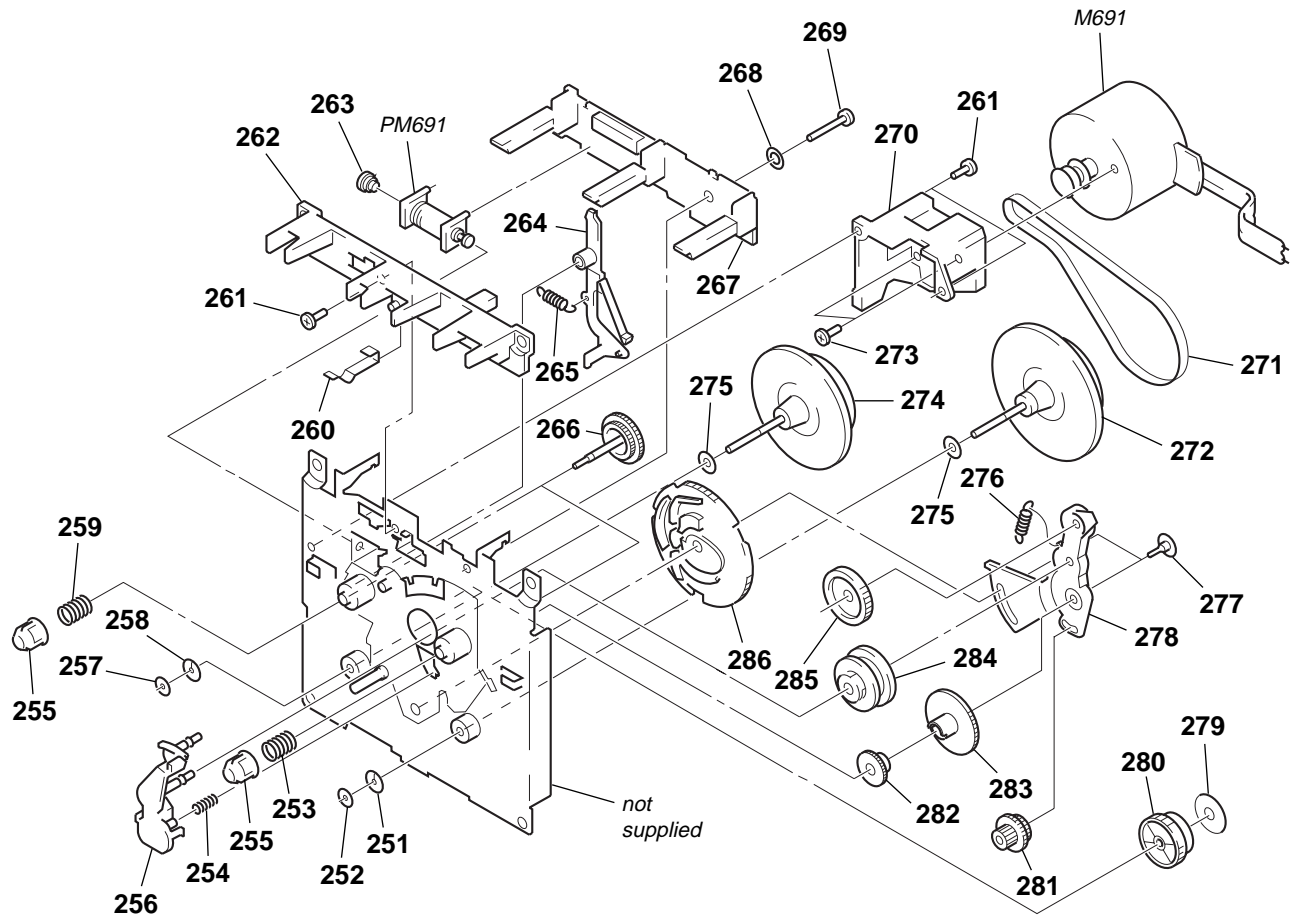
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
\triangle 151	8-848-376-11	OPTICAL PICK-UP KSS-213B/S-RP		M701	X-2625-770-1	CHASSIS ASSY (MB) (RP), MOTOR (SPINDLE)	
152	2-627-003-02	GEAR (B) (RP)		M702	X-2625-769-1	GEAR ASSY (MB), MOTOR (SLED)	
153	2-626-908-01	SHAFT, SLED					

**(5) TAPE MECHANISM DECK SECTION-1
(MF-D305)**



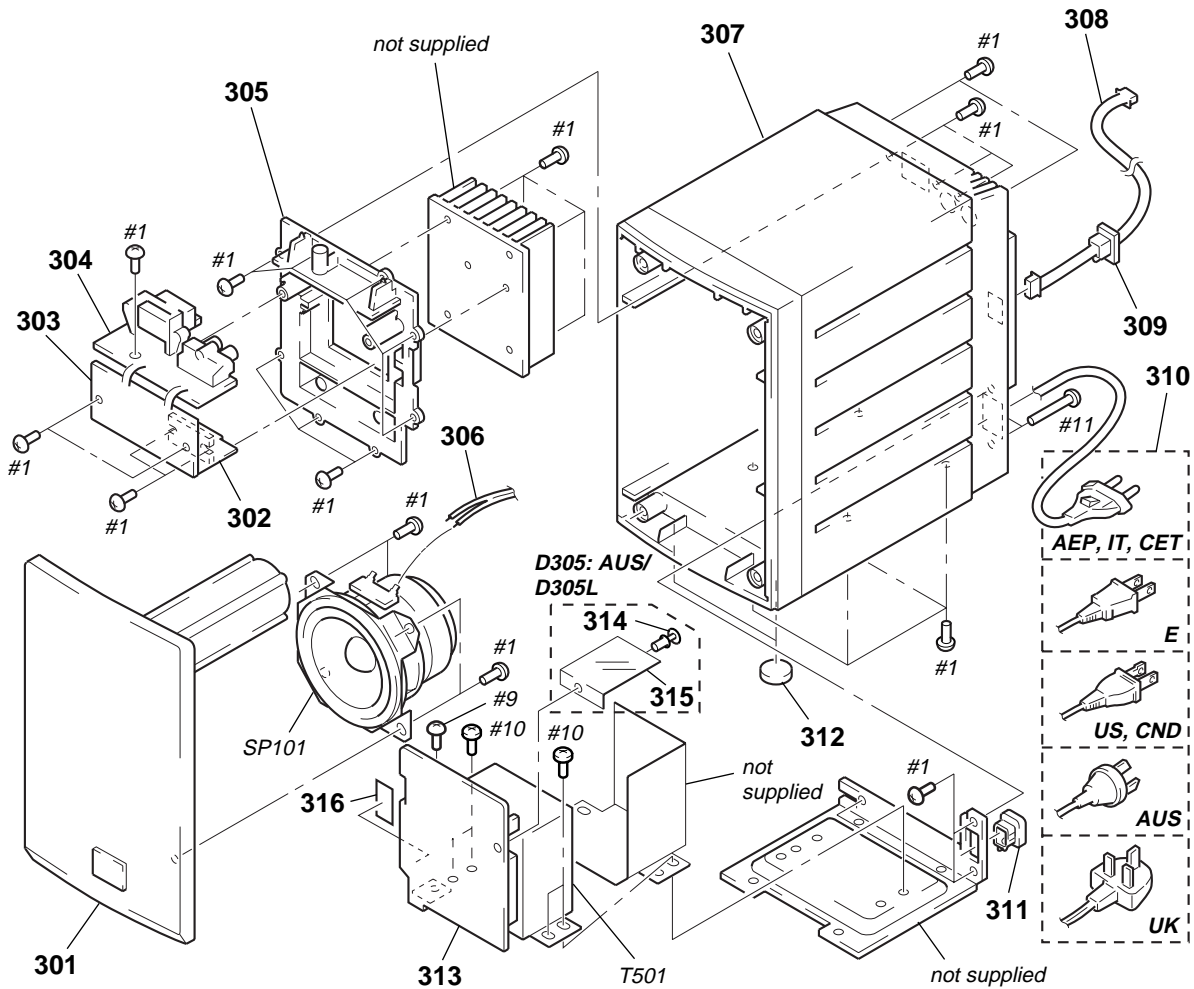
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
201	3-938-905-01	HEAD, LEVER		* 215	3-938-916-01	BRAKE, ARM	
202	3-938-940-01	SPRING (L)		* 216	3-938-914-01	FRAME (C)	
203	3-938-941-01	SCREW (A)		* 217	3-938-913-01	FRAME (B)	
204	3-938-906-01	AZIMUTH, SPRING		* 218	3-938-909-01	LOCK, EJECT	
205	3-017-432-01	SPRING (A)		219	3-938-944-01	SCREW (D)	
206	3-938-901-01	HEAD, HOLDER		220	3-017-591-01	ARM (PINCH R) ASSY	
* 207	3-938-904-01	HEAD, FRAME		221	3-938-937-01	SPRING (I)	
208	3-938-902-01	WASHER		222	3-938-938-01	SPRING (J)	
209	3-938-903-01	SCREW		* 223	3-938-911-01	HEAD (B), CHASSIS	
210	3-938-935-01	SPRING (G)		224	3-938-907-01	HEAD, GEAR ARM	
* 211	X-3372-610-1	ASSIST ASSY, LEVER		225	3-938-943-01	SCREW (C)	
212	3-938-933-01	SPRING (E)		226	3-938-942-01	SCREW (B)	
213	3-017-592-01	ARM (PINCH L) ASSY		* 227	1-662-743-11	HEAD BOARD	
214	3-938-934-01	SPRING (F)		HRPE1011-500-480-11	HEAD, MAGNETIC (REC/PB/ERASE)		

**(6) TAPE MECHANISM DECK SECTION-2
(MF-D305)**



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	3-938-949-01	WASHER (A)		270	3-017-431-01	BRACKET (MM)	
252	3-938-951-01	WASHER (D)		271	3-017-430-01	BELT	
253	3-938-936-01	SPRING (H)		272	3-017-596-01	FLYWHEEL (R) ASSY	
254	3-938-930-01	SPRING (B)		273	3-017-434-01	SCREW (H)	
255	3-938-910-01	REEL, CAP		274	3-017-595-01	FLYWHEEL (L) ASSY	
* 256	3-938-912-01	ARM (UD)		275	3-938-950-01	WASHER (C)	
257	3-938-952-01	WASHER (E)		276	3-017-433-01	SPRING (K)	
258	3-938-948-01	WASHER (B)		277	3-938-946-01	SCREW (F)	
259	3-938-932-01	SPRING (D)		* 278	3-938-919-01	ARM (FR)	
260	3-938-908-01	CASSETTE, SPRING		279	3-017-435-01	REFLECTOR	
261	3-938-945-01	SCREW (E)		280	3-017-429-01	GEAR (REF)	
262	3-017-428-01	FRAME (D)		281	3-938-917-01	GEAR (A)	
263	3-938-920-01	PLUNGER, K		282	3-938-924-01	GEAR (P)	
264	3-938-918-01	TRIGGER, ARM		283	3-938-923-01	GEAR (FR)	
265	3-938-931-01	SPRING (C)		284	X-3372-613-1	CLUTCH ASSY	
266	3-938-921-01	GEAR (REEL)		285	3-938-925-01	GEAR (IDL)	
267	3-662-742-11	SW BOARD		286	3-938-922-01	GEAR (CAM)	
268	3-938-954-01	WASHER (G)		M691	3-016-425-01	MOTOR ASSY (CARSTAN/REEL)	
269	3-938-947-01	SCREW (G)		PM691	1-454-806-11	SOLENOID, PLUNGER	

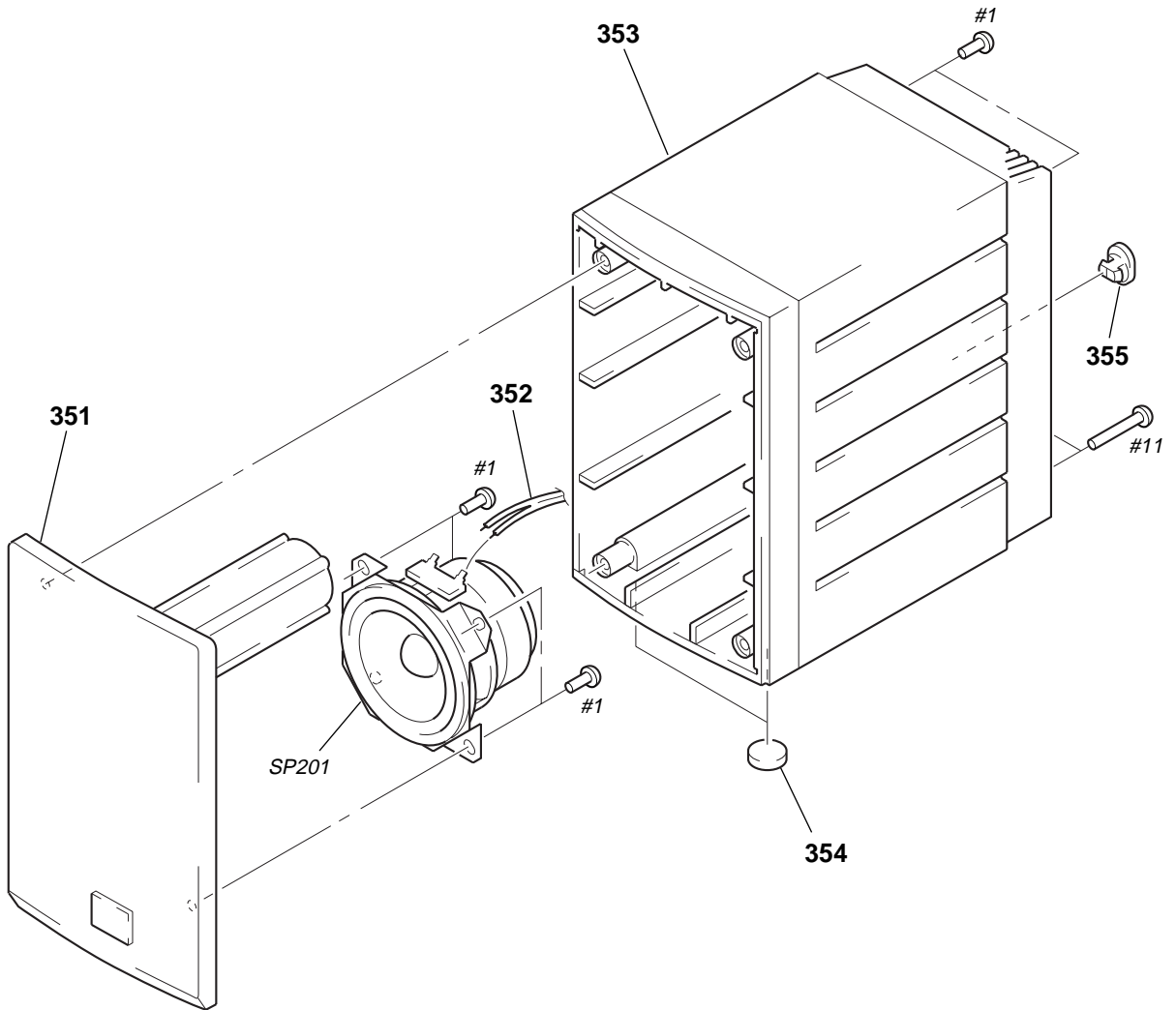
(7) SPEAKER (L) SECTION



<p>The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	X-3374-211-1	FRONT SUB ASSY		\triangle 310	1-751-520-11	CORD, POWER (D305L: UK)	
* 302	1-666-177-11	POWER AMP BOARD		\triangle 310	1-769-743-11	CORD, POWER (D305: US, CND)	
* 303	1-666-178-11	TERMINAL BOARD		311	3-703-244-00	BUSHING (FBS001), CORD (EXCEPT D305: E)	
* 304	1-666-179-11	JACK BOARD		311	4-966-266-01	BUSHING (S) (FBS002), CORD (D305: E)	
305	3-014-113-01	CHASSIS (AMP)		312	3-014-503-01	FOOT	
306	1-782-509-11	CORD, SPEAKER		* 313	1-666-176-11	POWER BOARD	
307	3-014-110-01	CABINET (REAR.SP-L)		314	4-812-134-11	RIVET (DIA. 3.5), NYLON (D305: AUS/D305L)	
308	X-3374-496-1	CORD ASSY		* 315	3-017-037-01	INSULATOR (D305: AUS/D305L)	
* 309	3-014-106-01	STOPPER (4P), CORD		316	3-017-101-01	LABEL, FUSE RATING (D305: US, CND, E)	
\triangle 310	1-575-651-11	CORD, POWER (D305L: AEP, IT, CET)		SP101	1-505-607-11	SPEAKER (8CM) (L-CH)	
\triangle 310	1-575-653-11	CORD, POWER (D305: E)		\triangle T501	1-431-353-11	TRANSFORMER, POWER (D305: AUS/D305L)	
\triangle 310	1-696-847-11	CORD, POWER (D305: AUS)		\triangle T501	1-431-354-11	TRANSFORMER, POWER (D305: US, CND, E)	

(8) SPEAKER (R) SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
351	X-3374-211-1	FRONT SUB ASSY		354	3-014-503-01	FOOT	
352	1-782-509-11	CORD, SPEAKER		* 355	3-014-109-01	STOPPER, CORD	
353	3-014-104-01	CABINET (REAR.SP-R)		SP201	1-505-607-11	SPEAKER (8CM) (R-CH)	

**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
- Abbreviation
CND : Canadian CET : East European, Russian
IT : Italian AUS : Australian

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- **SEMICONDUCTORS**
In each case, u: μ , for example:
uA. . : μ A. . uPA. . : μ PA. .
uPB. . : μ PB. . uPC. . : μ PC. .
uPD. . : μ PD. .
- **CAPACITORS**
uF: μ F
- **COILS**
uH: μ H

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

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

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-3306-627-A	AUDIO BOARD, COMPLETE (D305L)		C247	1-126-960-11	ELECT	1uF 20% 50V
*	A-3306-835-A	AUDIO BOARD, COMPLETE (D305)		C252	1-162-294-31	CERAMIC	0.001uF 10% 50V
		*****		C253	1-126-967-11	ELECT	47uF 20% 10V
	7-685-871-01	SCREW +BVTT 3X6 (S)		C255	1-107-909-11	ELECT	47uF 20% 10V
		< CAPACITOR >		C256	1-162-282-31	CERAMIC	100PF 10% 50V
C101	1-162-294-31	CERAMIC	0.001uF 10% 50V	C301	1-126-933-11	ELECT	100uF 20% 10V
C102	1-126-967-11	ELECT	47uF 20% 10V	C302	1-126-925-11	ELECT	470uF 20% 10V
C103	1-161-020-11	CERAMIC	0.039uF 10% 16V	C303	1-126-963-11	ELECT	4.7uF 20% 50V
C104	1-162-302-11	CERAMIC	0.0022uF 20% 16V	C304	1-126-933-11	ELECT	100uF 20% 10V
C105	1-162-215-31	CERAMIC	47PF 5% 50V	C307	1-161-494-00	CERAMIC	0.022uF 25V
C106	1-126-959-11	ELECT	0.47uF 20% 50V	C311	1-162-305-11	CERAMIC	0.0068uF 30% 16V
C108	1-126-959-11	ELECT	0.47uF 20% 50V	C312	1-126-967-11	ELECT	47uF 20% 10V
C112	1-126-964-11	ELECT	10uF 20% 50V	C313	1-137-350-11	MYLAR	0.015uF 10% 100V
C141	1-126-964-11	ELECT	10uF 20% 50V	C314	1-162-294-31	CERAMIC	0.001uF 10% 50V
C142	1-162-294-31	CERAMIC	0.001uF 10% 50V	C315	1-162-305-11	CERAMIC	0.0068uF 30% 16V
C143	1-126-964-11	ELECT	10uF 20% 50V	C316	1-162-302-11	CERAMIC	0.0022uF 20% 16V
C144	1-162-849-11	CERAMIC	0.068uF 10% 16V	C324	1-126-961-11	ELECT	2.2uF 20% 50V
C145	1-162-849-11	CERAMIC	0.068uF 10% 16V	C325	1-126-961-11	ELECT	2.2uF 20% 50V
C146	1-162-839-11	CERAMIC	0.01uF 10% 16V	C326	1-126-963-11	ELECT	4.7uF 20% 50V
C147	1-126-960-11	ELECT	1uF 20% 50V	C327	1-126-967-11	ELECT	47uF 20% 10V
C152	1-162-294-31	CERAMIC	0.001uF 10% 50V	C328	1-126-959-11	ELECT	0.47uF 20% 50V
C153	1-126-967-11	ELECT	47uF 20% 10V	C329	1-137-189-11	FILM	0.18uF 5% 50V
C155	1-107-909-11	ELECT	47uF 20% 10V	C333	1-126-967-11	ELECT	47uF 20% 10V
C156	1-162-282-31	CERAMIC	100PF 10% 50V	C334	1-126-963-11	ELECT	4.7uF 20% 50V
C201	1-162-294-31	CERAMIC	0.001uF 10% 50V	C335	1-126-960-11	ELECT	1uF 20% 50V
C202	1-126-967-11	ELECT	47uF 20% 10V	C336	1-126-961-11	ELECT	2.2uF 20% 50V
C203	1-161-020-11	CERAMIC	0.039uF 10% 16V	C337	1-126-933-11	ELECT	100uF 20% 10V
C204	1-162-302-11	CERAMIC	0.0022uF 20% 16V	C338	1-161-494-00	CERAMIC	0.022uF 25V
C205	1-162-215-31	CERAMIC	47PF 5% 50V	C339	1-161-494-00	CERAMIC	0.022uF 25V
C206	1-126-959-11	ELECT	0.47uF 20% 50V	C340	1-162-282-31	CERAMIC	100PF 10% 50V (D305L)
C208	1-126-959-11	ELECT	0.47uF 20% 50V	C340	1-162-290-31	CERAMIC	470PF 10% 50V (D305)
C210	1-162-282-31	CERAMIC	100PF 10% 50V (D305L)	C341	1-162-282-31	CERAMIC	100PF 10% 50V (D305L)
C212	1-126-964-11	ELECT	10uF 20% 50V	C341	1-162-290-31	CERAMIC	470PF 10% 50V (D305)
C241	1-126-964-11	ELECT	10uF 20% 50V	C342	1-162-282-31	CERAMIC	100PF 10% 50V (D305L)
C242	1-162-294-31	CERAMIC	0.001uF 10% 50V	C342	1-162-290-31	CERAMIC	470PF 10% 50V (D305)
C243	1-126-964-11	ELECT	10uF 20% 50V	C344	1-162-282-31	CERAMIC	100PF 10% 50V
C244	1-162-849-11	CERAMIC	0.068uF 10% 16V				
C245	1-162-849-11	CERAMIC	0.068uF 10% 16V				
C246	1-162-839-11	CERAMIC	0.01uF 10% 16V				

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C345	1-162-306-11	CERAMIC	0.01uF 20% 16V				
C346	1-162-306-11	CERAMIC	0.01uF 20% 16V			< FERRITE BEAD INDUCTOR >	
C347	1-126-967-11	ELECT	47uF 20% 10V				
C348	1-126-959-11	ELECT	0.47uF 20% 50V	JW121	1-410-397-21	FERRITE BEAD INDUCTOR (D305L)	
C350	1-162-306-11	CERAMIC	0.01uF 20% 16V (D305L)			< COIL >	
C351	1-104-652-11	ELECT	470uF 20% 10V	L154	1-410-397-21	FERRITE BEAD INDUCTOR (D305L)	
C352	1-126-933-11	ELECT	100uF 20% 10V	L154	1-247-807-31	CARBON 100 5% 1/4W (D305)	
C353	1-126-940-11	ELECT	330uF 20% 25V	L254	1-410-397-21	FERRITE BEAD INDUCTOR (D305L)	
C354	1-161-494-00	CERAMIC	0.022uF 25V	L254	1-247-807-31	CARBON 100 5% 1/4W (D305)	
C355	1-126-967-11	ELECT	47uF 20% 10V			< LEAD PIN >	
C356	1-161-494-00	CERAMIC	0.022uF 25V	* P303	1-564-187-00	PIN, CONNECTOR	
C357	1-126-933-11	ELECT	100uF 20% 10V	* P304	1-564-187-00	PIN, CONNECTOR	
C358	1-161-494-00	CERAMIC	0.022uF 25V			< TRANSISTOR >	
C359	1-126-964-11	ELECT	10uF 20% 50V				
C360	1-161-494-00	CERAMIC	0.022uF 25V				
C361	1-161-494-00	CERAMIC	0.022uF 25V	Q102	8-729-900-74	TRANSISTOR DTC143TS	
		< CONNECTOR >		Q103	8-729-036-86	TRANSISTOR KTC3203Y-AT	
* CN301	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P		Q131	8-729-900-74	TRANSISTOR DTC143TS	
CN303	1-569-312-11	SOCKET, CONNECTOR (L TYRE) 27P		Q132	8-729-900-74	TRANSISTOR DTC143TS	
CN305	1-573-826-11	CONNECTOR, BOARD TO BOARD 12P		Q202	8-729-900-74	TRANSISTOR DTC143TS	
* CNP301	1-779-536-11	PLUG, CONNECTOR 4P (POWER IN)		Q203	8-729-036-86	TRANSISTOR KTC3203Y-AT	
CNP302	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P		Q231	8-729-900-74	TRANSISTOR DTC143TS	
* CNP304	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P		Q232	8-729-900-74	TRANSISTOR DTC143TS	
* CNP306	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P		Q301	8-729-036-86	TRANSISTOR KTC3203Y-AT	
* CNP307	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P		Q302	8-729-036-86	TRANSISTOR KTC3203Y-AT	
		< DIODE >		Q303	8-729-036-86	TRANSISTOR KTC3203Y-AT	
D301	8-719-991-33	DIODE 1SS133T-77		Q304	8-729-422-57	TRANSISTOR UN4111	
D304	8-719-991-33	DIODE 1SS133T-77		Q305	8-729-900-80	TRANSISTOR DTC114ES	
D305	8-719-991-33	DIODE 1SS133T-77		Q306	8-729-900-80	TRANSISTOR DTC114ES	
D307	8-719-991-33	DIODE 1SS133T-77		Q307	8-729-036-86	TRANSISTOR KTC3203Y-AT	
D308	8-719-991-33	DIODE 1SS133T-77		Q308	8-729-119-78	TRANSISTOR 2SC403SP-51	
D309	8-719-991-33	DIODE 1SS133T-77		Q309	8-729-036-86	TRANSISTOR KTC3203Y-AT	
D310	8-719-991-33	DIODE 1SS133T-77		Q310	8-729-900-80	TRANSISTOR DTC114ES	
D311	8-719-110-09	DIODE RD8.2ES-B3		Q311	8-729-195-23	TRANSISTOR 2SA952	
D312	8-719-991-33	DIODE 1SS133T-77		Q312	8-729-900-80	TRANSISTOR DTC114ES	
D313	8-719-109-89	DIODE RD5.6ESB2		Q313	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D314	8-719-991-33	DIODE 1SS133T-77		Q314	8-729-900-80	TRANSISTOR DTC114ES	
D315	8-719-921-89	DIODE MTZJ-13C		Q315	8-729-209-15	TRANSISTOR 2SD2012	
D316	8-719-991-33	DIODE 1SS133T-77		Q316	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D317	8-719-991-33	DIODE 1SS133T-77		Q317	8-729-900-80	TRANSISTOR DTC114ES	
D318	8-719-991-33	DIODE 1SS133T-77		Q318	8-729-209-15	TRANSISTOR 2SD2012	
D319	8-719-991-33	DIODE 1SS133T-77		Q319	8-729-011-92	TRANSISTOR 2SC2001TP-K1K2	
D320	8-719-991-33	DIODE 1SS133T-77		Q320	8-729-195-23	TRANSISTOR 2SA952	
		< IC >		Q323	8-729-265-52	TRANSISTOR 2SC2655	
IC301	8-759-264-71	IC TA2068N		Q324	8-729-422-57	TRANSISTOR UN4111	
IC302	8-759-432-41	IC BH3854AS		Q325	8-729-119-78	TRANSISTOR 2SC403SP-51	
IC303	8-759-701-54	IC NJM2073D		Q326	8-729-422-57	TRANSISTOR UN4111	
IC305	8-759-905-47	IC BA338		Q327	8-729-900-80	TRANSISTOR DTC114ES	
		< JACK >		Q328	8-729-900-80	TRANSISTOR DTC114ES	
J302	1-770-612-12	JACK, PIN 2P (SIGNAL OUTPUT) (D305)		Q329	8-729-194-57	TRANSISTOR 2SC945-P	
* J302	1-770-612-21	JACK, PIN 2P (SIGNAL OUTPUT) (D305L)		Q330	8-729-194-57	TRANSISTOR 2SC945-P	
				Q331	8-729-900-80	TRANSISTOR DTC114ES	
				Q332	8-729-422-57	TRANSISTOR UN4111	
				Q333	8-729-422-57	TRANSISTOR UN4111	
				Q334	8-729-119-76	TRANSISTOR 2SA1175-HFE	
				Q335	8-729-422-57	TRANSISTOR UN4111	

AUDIO	CD
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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< RESISTOR >				R323	1-249-425-11	CARBON	4.7K 5% 1/4W
R101	1-249-431-11	CARBON	15K 5% 1/4W	R324	1-249-417-11	CARBON	1K 5% 1/4W
R102	1-249-404-00	CARBON	82 5% 1/4W	R325	1-249-417-11	CARBON	1K 5% 1/4W
R103	1-249-441-11	CARBON	100K 5% 1/4W	R327	1-249-417-11	CARBON	1K 5% 1/4W
R104	1-247-843-11	CARBON	3.3K 5% 1/4W	R328	1-249-417-11	CARBON	1K 5% 1/4W
R110	1-247-807-31	CARBON	100 5% 1/4W	R329	1-249-417-11	CARBON	1K 5% 1/4W
R111	1-247-887-00	CARBON	220K 5% 1/4W	R331	1-247-863-91	CARBON	22K 5% 1/4W
R112	1-249-437-11	CARBON	47K 5% 1/4W	R332	1-249-437-11	CARBON	47K 5% 1/4W
R114	1-249-417-11	CARBON	1K 5% 1/4W	R334	1-249-429-11	CARBON	10K 5% 1/4W
R115	1-249-417-11	CARBON	1K 5% 1/4W	R335	1-249-425-11	CARBON	4.7K 5% 1/4W
R116	1-249-437-11	CARBON	47K 5% 1/4W	R336	1-247-807-31	CARBON	100 5% 1/4W
R127	1-249-437-11	CARBON	47K 5% 1/4W	R337	1-249-437-11	CARBON	47K 5% 1/4W
R140	1-249-425-11	CARBON	4.7K 5% 1/4W	R338	1-249-417-11	CARBON	1K 5% 1/4W
R145	1-249-429-11	CARBON	10K 5% 1/4W	R339	1-249-417-11	CARBON	1K 5% 1/4W
R146	1-249-417-11	CARBON	1K 5% 1/4W	R340	1-249-417-11	CARBON	1K 5% 1/4W
R151	1-249-429-11	CARBON	10K 5% 1/4W	R342	1-249-425-11	CARBON	4.7K 5% 1/4W
R152	1-249-425-11	CARBON	4.7K 5% 1/4W	R343	1-249-429-11	CARBON	10K 5% 1/4W
R153	1-249-417-11	CARBON	1K 5% 1/4W	R344	1-249-429-11	CARBON	10K 5% 1/4W
R155	1-247-887-00	CARBON	220K 5% 1/4W	R345	1-249-441-11	CARBON	100K 5% 1/4W
R156	1-249-425-11	CARBON	4.7K 5% 1/4W	R347	1-249-401-11	CARBON	47 5% 1/4W
R201	1-249-431-11	CARBON	15K 5% 1/4W	R349	1-249-435-11	CARBON	33K 5% 1/4W
R202	1-249-404-00	CARBON	82 5% 1/4W	R351	1-249-401-11	CARBON	47 5% 1/4W
R203	1-249-441-11	CARBON	100K 5% 1/4W	R352	1-249-428-11	CARBON	8.2K 5% 1/4W
R204	1-247-843-11	CARBON	3.3K 5% 1/4W	R353	1-249-417-11	CARBON	1K 5% 1/4W
R210	1-247-807-31	CARBON	100 5% 1/4W	R355	1-247-885-00	CARBON	180K 5% 1/4W
R211	1-247-887-00	CARBON	220K 5% 1/4W	R356	1-249-437-11	CARBON	47K 5% 1/4W
R212	1-249-437-11	CARBON	47K 5% 1/4W	R357	1-249-421-11	CARBON	2.2K 5% 1/4W
R214	1-249-417-11	CARBON	1K 5% 1/4W	R360	1-249-441-11	CARBON	100K 5% 1/4W
R215	1-249-417-11	CARBON	1K 5% 1/4W	R361	1-247-815-91	CARBON	220 5% 1/4W
R216	1-249-437-11	CARBON	47K 5% 1/4W	R362	1-247-807-31	CARBON	100 5% 1/4W
R227	1-249-437-11	CARBON	47K 5% 1/4W	R363	1-249-441-11	CARBON	100K 5% 1/4W
R240	1-249-425-11	CARBON	4.7K 5% 1/4W	R364	1-249-413-11	CARBON	470 5% 1/4W
R245	1-249-429-11	CARBON	10K 5% 1/4W	R367	1-247-807-31	CARBON	100 5% 1/4W
R246	1-249-417-11	CARBON	1K 5% 1/4W	R368	1-249-413-11	CARBON	470 5% 1/4W
R251	1-249-429-11	CARBON	10K 5% 1/4W	R369	1-247-807-31	CARBON	100 5% 1/4W
R252	1-249-425-11	CARBON	4.7K 5% 1/4W	R370	1-249-441-11	CARBON	100K 5% 1/4W
R253	1-249-417-11	CARBON	1K 5% 1/4W	R371	1-249-421-11	CARBON	2.2K 5% 1/4W
R255	1-247-887-00	CARBON	220K 5% 1/4W	R376	1-249-421-11	CARBON	2.2K 5% 1/4W
R256	1-249-425-11	CARBON	4.7K 5% 1/4W	R377	1-249-421-11	CARBON	2.2K 5% 1/4W
R301	1-247-903-00	CARBON	1M 5% 1/4W	R378	1-247-807-31	CARBON	100 5% 1/4W
R302	1-249-441-11	CARBON	100K 5% 1/4W	R379	1-247-815-91	CARBON	220 5% 1/4W
R303	1-249-429-11	CARBON	10K 5% 1/4W	< TRANSFORMER >			
R304	1-249-429-11	CARBON	10K 5% 1/4W	T301	1-429-820-11	TRANSFORMER, BIAS OSCILLATION	
R305	1-249-421-11	CARBON	2.2K 5% 1/4W	*****			
R306	1-249-429-11	CARBON	10K 5% 1/4W	*	A-3306-628-A	CD BOARD, COMPLETE (D305: AUS/D305L)	
R307	1-247-807-31	CARBON	100 5% 1/4W	*	A-3306-837-A	CD BOARD, COMPLETE (D305: US, CND, E)	
R311	1-249-389-11	CARBON	4.7 5% 1/4W	*****			
R312	1-249-439-11	CARBON	68K 5% 1/4W	< CAPACITOR >			
R313	1-249-389-11	CARBON	4.7 5% 1/4W	C701	1-162-302-11	CERAMIC	0.0022uF 30% 16V
R314	1-249-429-11	CARBON	10K 5% 1/4W	C702	1-136-165-00	FILM	0.1uF 5% 50V
R315	1-249-429-11	CARBON	10K 5% 1/4W	C703	1-136-165-00	FILM	0.1uF 5% 50V
R316	1-249-425-11	CARBON	4.7K 5% 1/4W	C704	1-136-165-00	FILM	0.1uF 5% 50V
R317	1-247-807-31	CARBON	100 5% 1/4W	C705	1-131-375-00	TANTALUM	4.7uF 10% 10V
R318	1-249-435-11	CARBON	33K 5% 1/4W	C706	1-136-159-00	FILM	0.033uF 5% 50V
R319	1-247-895-91	CARBON	470K 5% 1/4W	C707	1-136-156-00	FILM	0.018uF 5% 50V
R320	1-247-903-00	CARBON	1M 5% 1/4W				

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C708	1-162-199-31	CERAMIC	10PF	5%	50V						
C709	1-126-162-11	ELECT	3.3uF	20%	50V			< CONNECTOR >			
C710	1-136-495-11	FILM	0.068uF	5%	50V						
C711	1-162-215-31	CERAMIC	47PF	5%	50V	* CNP701	1-779-466-11	CONNECTOR, FFC/FPC 16P			
C712	1-162-306-11	CERAMIC	0.01uF	20%	16V	* CNP705	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P			
C713	1-136-159-00	FILM	0.033uF	5%	50V	CNP706	1-691-068-21	HOUSING, CONNECTOR 9P			
C714	1-162-306-11	CERAMIC	0.01uF	20%	16V			< IC >			
C715	1-136-159-00	FILM	0.033uF	5%	50V						
C716	1-136-165-00	FILM	0.1uF	5%	50V	IC701	8-752-069-56	IC CXA1782BQ			
C717	1-126-967-11	ELECT	47uF	20%	10V	IC702	8-752-372-94	IC CXD2507AQ			
C718	1-126-964-11	ELECT	10uF	20%	50V	IC703	8-759-473-42	IC BA6898FP			
C721	1-130-491-00	MYLAR	0.047uF	5%	50V	IC704	8-759-426-44	IC 27C512-C35A65-V3.03			
C722	1-161-494-00	CERAMIC	0.022uF		25V			< COIL >			
C723	1-137-399-11	FILM	0.1uF	5%	50V	L701	1-410-397-21	FERRITE BEAD INDUCTOR			
C724	1-128-241-11	ELECT	220uF	20%	10V	L702	1-410-397-21	FERRITE BEAD INDUCTOR			
C725	1-162-199-31	CERAMIC	10PF	5%	50V	L752	1-410-324-11	INDUCTOR 4.7uH			
C726	1-162-294-31	CERAMIC	0.001uF	10%	50V	L760	1-410-397-21	FERRITE BEAD INDUCTOR			
C727	1-162-306-11	CERAMIC	0.01uF	20%	16V	L770	1-410-397-21	FERRITE BEAD INDUCTOR			
C728	1-162-306-11	CERAMIC	0.01uF	20%	16V			< TRANSISTOR >			
C729	1-126-154-11	ELECT	47uF	20%	6.3V	Q701	8-729-195-23	TRANSISTOR 2SA952			
C730	1-104-652-11	ELECT	470uF	20%	10V	Q703	8-729-900-74	TRANSISTOR DTC143TS			
C731	1-162-305-11	CERAMIC	0.0068uF	30%	16V			< RESISTOR >			
C732	1-130-299-00	FILM	0.012uF	5%	50V						
C734	1-162-305-11	CERAMIC	0.0068uF	30%	16V	R700	1-249-429-11	CARBON	10K	5%	1/4W
C741	1-126-154-11	ELECT	47uF	20%	6.3V	R701	1-249-440-11	CARBON	82K	5%	1/4W
C742	1-136-173-00	FILM	0.47uF	5%	50V	R702	1-247-896-11	CARBON	510K	5%	1/4W
C743	1-162-290-31	CERAMIC	470PF	10%	50V	R703	1-249-441-11	CARBON	100K	5%	1/4W
C744	1-162-286-21	CERAMIC	220PF	10%	50V	R704	1-247-883-00	CARBON	150K	5%	1/4W
C745	1-136-169-00	FILM	0.22uF	5%	50V	R705	1-249-437-11	CARBON	47K	5%	1/4W
C746	1-162-306-11	CERAMIC	0.01uF	20%	16V	R706	1-247-876-11	CARBON	75K	5%	1/4W
C747	1-137-370-11	FILM	0.01uF	5%	50V	R707	1-249-432-11	CARBON	18K	5%	1/4W
C750	1-162-306-11	CERAMIC	0.01uF	20%	16V	R708	1-247-883-00	CARBON	150K	5%	1/4W
C751	1-162-306-11	CERAMIC	0.01uF	20%	16V	R709	1-247-862-11	CARBON	20K	5%	1/4W
C752	1-162-201-31	CERAMIC	12PF	5%	50V	R710	1-249-393-11	CARBON	10	5%	1/4W
C753	1-162-203-31	CERAMIC	15PF	5%	50V	R714	1-247-883-00	CARBON	150K	5%	1/4W
C754	1-126-154-11	ELECT	47uF	20%	6.3V	R715	1-249-430-11	CARBON	12K	5%	1/4W
C755	1-162-306-11	CERAMIC	0.01uF	20%	16V	R716	1-249-430-11	CARBON	12K	5%	1/4W
C756	1-162-306-11	CERAMIC	0.01uF	20%	16V	R717	1-249-429-11	CARBON	10K	5%	1/4W
C757	1-162-306-11	CERAMIC	0.01uF	20%	16V	R718	1-247-899-11	CARBON	680K	5%	1/4W
C758	1-162-306-11	CERAMIC	0.01uF	20%	16V	R720	1-247-891-00	CARBON	330K	5%	1/4W
C759	1-162-306-11	CERAMIC	0.01uF	20%	16V	R722	1-249-439-11	CARBON	68K	5%	1/4W
C760	1-162-306-11	CERAMIC	0.01uF	20%	16V	R723	1-249-440-11	CARBON	82K	5%	1/4W
C761	1-162-306-11	CERAMIC	0.01uF	20%	16V	R725	1-249-437-11	CARBON	47K	5%	1/4W
C762	1-162-306-11	CERAMIC	0.01uF	20%	16V	R726	1-249-429-11	CARBON	10K	5%	1/4W
					(D305: US, CND, E)	R727	1-249-429-11	CARBON	10K	5%	1/4W
C763	1-162-600-11	CERAMIC	0.0047uF	30%	16V	R730	1-249-435-11	CARBON	33K	5%	1/4W
C764	1-126-163-11	ELECT	4.7uF	20%	50V	R731	1-247-863-91	CARBON	22K	5%	1/4W
C765	1-162-306-11	CERAMIC	0.01uF	20%	16V	R734	1-249-437-11	CARBON	47K	5%	1/4W
C773	1-162-600-11	CERAMIC	0.0047uF	30%	16V	R735	1-249-429-11	CARBON	10K	5%	1/4W
C774	1-126-163-11	ELECT	4.7uF	20%	50V	R736	1-249-417-11	CARBON	1K	5%	1/4W
C782	1-162-294-31	CERAMIC	0.001uF	10%	50V	R740	1-247-843-11	CARBON	3.3K	5%	1/4W
C787	1-128-241-11	ELECT	220uF	20%	10V	R741	1-249-417-11	CARBON	1K	5%	1/4W
C788	1-162-306-11	CERAMIC	0.01uF	20%	16V	R742	1-249-429-11	CARBON	10K	5%	1/4W
C792	1-162-290-31	CERAMIC	470PF	10%	50V	R743	1-247-903-00	CARBON	1M	5%	1/4W
C793	1-162-290-31	CERAMIC	470PF	10%	50V	R744	1-247-887-00	CARBON	220K	5%	1/4W
C796	1-162-306-11	CERAMIC	0.01uF	20%	16V	R745	1-249-429-11	CARBON	10K	5%	1/4W
						R746	1-249-437-11	CARBON	47K	5%	1/4W

CD	CD MOTOR	CONTROL
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Ref. No.	Part No.	Description	Remark
R748	1-249-429-11	CARBON 10K 5%	1/4W
R749	1-249-429-11	CARBON 10K 5%	1/4W
R750	1-249-413-11	CARBON 470 5%	1/4W
R751	1-247-807-31	CARBON 100 5%	1/4W
R752	1-249-429-11	CARBON 10K 5%	1/4W
R753	1-249-429-11	CARBON 10K 5%	1/4W
R754	1-249-429-11	CARBON 10K 5%	1/4W
R756	1-249-440-11	CARBON 82K 5%	1/4W
R757	1-249-439-11	CARBON 68K 5%	1/4W
R758	1-249-439-11	CARBON 68K 5%	1/4W
R759	1-249-439-11	CARBON 68K 5%	1/4W
R760	1-249-417-11	CARBON 1K 5%	1/4W
R761	1-249-417-11	CARBON 1K 5%	1/4W
R762	1-249-417-11	CARBON 1K 5%	1/4W
R763	1-249-417-11	CARBON 1K 5%	1/4W
R764	1-249-417-11	CARBON 1K 5%	1/4W
R766	1-249-417-11	CARBON 1K 5%	1/4W
R776	1-249-417-11	CARBON 1K 5%	1/4W
R791	1-247-843-11	CARBON 3.3K 5%	1/4W
< VARIABLE RESISTOR >			
RV701	1-241-786-11	RES, ADJ, CARBON 22K	
RV702	1-241-786-11	RES, ADJ, CARBON 22K	
RV703	1-223-459-21	RES, ADJ, CERMET 2.2K	
RV704	1-241-786-11	RES, ADJ, CARBON 22K	
< VIBRATOR >			
X701	1-767-226-11	VIBRATOR, CRYSTAL (16.9344MHz)	

	1-639-678-12	CD MOTOR BOARD	

< CONNECTOR >			
CNP707	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P	
< SWITCH >			
S701	1-572-085-11	SWITCH, LEAF (LIMIT)	

*	A-3306-631-A	CONTROL BOARD, COMPLETE (D305L)	
*	A-3306-832-A	CONTROL BOARD, COMPLETE (D305: AUS)	
*	A-3306-836-A	CONTROL BOARD, COMPLETE	
(D305: US, CND, E)			

*	3-014-121-01	HOLDER (LCD)	
*	3-014-130-01	SHEET, DIFFUSION	
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	
< CAPACITOR >			
C801	1-126-964-11	ELECT 10uF 20%	50V
C802	1-104-905-11	CAPACITOR 0.22F	5.5V
C803	1-126-967-11	ELECT 47uF 20%	10V
C804	1-162-306-11	CERAMIC 0.01uF 20%	16V
C805	1-126-933-11	ELECT 100uF 20%	10V
C806	1-162-306-11	CERAMIC 0.01uF 20%	16V
C807	1-102-516-11	CERAMIC 27PF 5%	50V
C808	1-102-516-11	CERAMIC 27PF 5%	50V

Ref. No.	Part No.	Description	Remark
C809	1-161-494-00	CERAMIC 0.022uF	25V
C810	1-126-964-11	ELECT 10uF 20%	50V
C811	1-126-967-11	ELECT 47uF 20%	10V
C813	1-162-306-11	CERAMIC 0.01uF 20%	16V
C814	1-162-306-11	CERAMIC 0.01uF 20%	16V
C815	1-162-306-11	CERAMIC 0.01uF 20%	16V
C816	1-162-306-11	CERAMIC 0.01uF 20%	16V
C817	1-102-518-11	CERAMIC 33PF 5%	50V
C818	1-102-516-11	CERAMIC 27PF 5%	50V
C819	1-102-516-11	CERAMIC 27PF 5%	50V
C820	1-102-518-11	CERAMIC 33PF 5%	50V
C821	1-162-306-11	CERAMIC 0.01uF 20%	16V
C822	1-162-306-11	CERAMIC 0.01uF 20%	16V
C823	1-162-282-31	CERAMIC 100PF 10%	50V
C824	1-162-282-31	CERAMIC 100PF 10%	50V
C825	1-162-282-31	CERAMIC 100PF 10%	50V
C826	1-162-282-31	CERAMIC 100PF 10%	50V
C827	1-162-282-31	CERAMIC 100PF 10%	50V
C829	1-162-282-31	CERAMIC 100PF 10%	50V
C830	1-162-282-31	CERAMIC 100PF 10%	50V
C831	1-162-282-31	CERAMIC 100PF 10%	50V
C832	1-162-282-31	CERAMIC 100PF 10%	50V
C833	1-162-282-31	CERAMIC 100PF 10%	50V
C834	1-162-282-31	CERAMIC 100PF 10%	50V
C835	1-162-282-31	CERAMIC 100PF 10%	50V
C836	1-162-282-31	CERAMIC 100PF 10%	50V
C837	1-162-282-31	CERAMIC 100PF 10%	50V
C838	1-162-282-31	CERAMIC 100PF 10%	50V
C839	1-162-306-11	CERAMIC 0.01uF 20%	16V
C841	1-162-306-11	CERAMIC 0.01uF 20%	16V
C842	1-162-306-11	CERAMIC 0.01uF 20%	16V
C843	1-162-306-11	CERAMIC 0.01uF 20%	16V
C844	1-162-306-11	CERAMIC 0.01uF 20%	16V
C845	1-162-282-31	CERAMIC 100PF 10%	50V
C846	1-162-306-11	CERAMIC 0.01uF 20%	16V
C847	1-162-306-11	CERAMIC 0.01uF 20%	16V
C848	1-162-306-11	CERAMIC 0.01uF 20%	16V
C849	1-162-282-31	CERAMIC 100PF 10%	50V
C850	1-162-282-31	CERAMIC 100PF 10%	50V
C851	1-162-282-31	CERAMIC 100PF 10%	50V
C852	1-162-306-11	CERAMIC 0.01uF 20%	16V
C853	1-162-282-31	CERAMIC 100PF 10%	50V
C854	1-162-282-31	CERAMIC 100PF 10%	50V
C855	1-162-282-31	CERAMIC 100PF 10%	50V
C856	1-162-282-31	CERAMIC 100PF 10%	50V
C858	1-126-933-11	ELECT 100uF 20%	10V
C859	1-162-306-11	CERAMIC 0.01uF 20%	16V
C860	1-162-306-11	CERAMIC 0.01uF 20%	16V
C861	1-162-306-11	CERAMIC 0.01uF 20%	16V
C863	1-162-306-11	CERAMIC 0.01uF 20%	16V
C866	1-126-964-11	ELECT 10uF 20%	50V
C867	1-162-306-11	CERAMIC 0.01uF 20%	16V
C868	1-162-306-11	CERAMIC 0.01uF 20%	16V
C869	1-162-306-11	CERAMIC 0.01uF 20%	16V
C901	1-126-967-11	ELECT 47uF 20%	10V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< CONNECTOR >		R823	1-249-429-11	CARBON 10K 5%	1/4W
				R824	1-249-417-11	CARBON 1K 5%	1/4W
				R825	1-249-417-11	CARBON 1K 5%	1/4W
				R826	1-249-413-11	CARBON 470 5%	1/4W
				R827	1-249-413-11	CARBON 470 5%	1/4W
CN801	1-774-493-11	CONNECTOR, FFC/FPC 27P		R828	1-249-417-11	CARBON 1K 5%	1/4W
CNP802	1-770-389-11	PIN, CONNECTOR (PC BOARD) 5P		R829	1-249-417-11	CARBON 1K 5%	1/4W
CNP803	1-770-387-11	PIN, CONNECTOR (PC BOARD) 3P		R830	1-249-429-11	CARBON 10K 5%	1/4W
* CNP804	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P		R831	1-249-429-11	CARBON 10K 5%	1/4W
CNP805	1-568-852-11	CONNECTOR, FFC/FPC 9P		R832	1-249-425-11	CARBON 4.7K 5%	1/4W
		< DIODE >		R833	1-249-425-11	CARBON 4.7K 5%	1/4W
D801	8-719-991-33	DIODE 1SS133T-77		R834	1-249-429-11	CARBON 10K 5%	1/4W
D802	8-719-991-33	DIODE 1SS133T-77		R835	1-249-429-11	CARBON 10K 5%	1/4W
D803	8-719-991-33	DIODE 1SS133T-77		R836	1-249-429-11	CARBON 10K 5%	1/4W
D804	8-719-991-33	DIODE 1SS133T-77		R837	1-249-417-11	CARBON 1K 5%	1/4W
D805	8-719-991-33	DIODE 1SS133T-77		R841	1-249-429-11	CARBON 10K 5%	1/4W
		< IC >		R842	1-249-429-11	CARBON 10K 5%	1/4W
IC801	8-752-882-24	IC CXP83120A-019Q		R843	1-249-429-11	CARBON 10K 5%	1/4W
IC802	8-759-449-53	IC S-81256PG-Z		R844	1-247-863-91	CARBON 22K 5%	1/4W
IC803	8-759-511-42	IC S-80730AN		R845	1-249-411-11	CARBON 330 5%	1/4W
		< CONNECTOR >		R846	1-249-429-11	CARBON 10K 5%	1/4W
* KH805	1-573-287-11	HOLDER, CABLE 2P		R847	1-249-417-11	CARBON 1K 5%	1/4W
		< COIL >		R848	1-249-417-11	CARBON 1K 5%	1/4W
L801	1-408-117-00	INDUCTOR 10uH		R849	1-249-417-11	CARBON 1K 5%	1/4W
L802	1-412-832-11	INDUCTOR 1uH		R850	1-249-417-11	CARBON 1K 5%	1/4W
		< LIQUID CRYSTAL DISPLAY >		R851	1-249-417-11	CARBON 1K 5%	1/4W
LCD801	1-801-786-11	DISPLAY PANEL, LIQUID CRYSTAL		R852	1-249-417-11	CARBON 1K 5%	1/4W
		< TRANSISTOR >		R853	1-249-417-11	CARBON 1K 5%	1/4W
Q801	8-729-194-57	TRANSISTOR 2SC945-P		R854	1-249-437-11	CARBON 47K 5%	1/4W
Q802	8-729-922-66	TRANSISTOR 2SC2410SN		R855	1-249-417-11	CARBON 1K 5%	1/4W
Q803	8-729-922-66	TRANSISTOR 2SC2410SN		R856	1-249-425-11	CARBON 4.7K 5%	1/4W
Q804	8-729-900-80	TRANSISTOR DTC114ES		R857	1-249-425-11	CARBON 4.7K 5%	1/4W
Q805	8-729-195-23	TRANSISTOR 2SA952		R858	1-249-425-11	CARBON 4.7K 5%	1/4W
		< RESISTOR >		R859	1-249-425-11	CARBON 4.7K 5%	1/4W
R801	1-249-417-11	CARBON 1K 5%	1/4W	R860	1-249-425-11	CARBON 4.7K 5%	1/4W
R803	1-249-417-11	CARBON 1K 5%	1/4W				
R804	1-249-417-11	CARBON 1K 5%	1/4W	R861	1-249-421-11	CARBON 2.2K 5%	1/4W
R805	1-249-417-11	CARBON 1K 5%	1/4W				(D305: AUS)
R806	1-249-417-11	CARBON 1K 5%	1/4W	R866	1-249-441-11	CARBON 100K 5%	1/4W
R807	1-249-429-11	CARBON 10K 5%	1/4W	R867	1-249-417-11	CARBON 1K 5%	1/4W
R808	1-249-417-11	CARBON 1K 5%	1/4W	R868	1-249-441-11	CARBON 100K 5%	1/4W
R809	1-249-417-11	CARBON 1K 5%	1/4W	R869	1-249-428-11	CARBON 8.2K 5%	1/4W
R810	1-249-417-11	CARBON 1K 5%	1/4W	R872	1-249-429-11	CARBON 10K 5%	1/4W
R811	1-249-417-11	CARBON 1K 5%	1/4W	R873	1-249-437-11	CARBON 47K 5%	1/4W
R812	1-249-429-11	CARBON 10K 5%	1/4W	R877	1-249-437-11	CARBON 47K 5%	1/4W
R813	1-249-429-11	CARBON 10K 5%	1/4W	R880	1-249-437-11	CARBON 47K 5%	1/4W
R814	1-249-429-11	CARBON 10K 5%	1/4W	R881	1-249-437-11	CARBON 47K 5%	1/4W
R815	1-249-417-11	CARBON 1K 5%	1/4W	R882	1-249-425-11	CARBON 4.7K 5%	1/4W
R816	1-249-429-11	CARBON 10K 5%	1/4W	R900	1-249-417-11	CARBON 1K 5%	1/4W
R818	1-249-417-11	CARBON 1K 5%	1/4W	R901	1-249-417-11	CARBON 1K 5%	1/4W
R819	1-249-417-11	CARBON 1K 5%	1/4W	R902	1-249-417-11	CARBON 1K 5%	1/4W
R820	1-249-417-11	CARBON 1K 5%	1/4W	R903	1-249-417-11	CARBON 1K 5%	1/4W
R821	1-249-417-11	CARBON 1K 5%	1/4W	R904	1-249-417-11	CARBON 1K 5%	1/4W
R822	1-249-429-11	CARBON 10K 5%	1/4W	R905	1-249-417-11	CARBON 1K 5%	1/4W
				R906	1-249-417-11	CARBON 1K 5%	1/4W
				R907	1-249-417-11	CARBON 1K 5%	1/4W
				R908	1-249-417-11	CARBON 1K 5%	1/4W
				R909	1-249-417-11	CARBON 1K 5%	1/4W

SW	SW (A)	SW (B)	TERMINAL	TUNER
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Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S691	1-762-811-11	SWITCH, LEAF (HALF)	
S694	1-762-811-11	SWITCH, LEAF (REC-REV)	
S695	1-762-811-11	SWITCH, LEAF (REC-FWD)	
S696	1-762-810-11	SWITCH, LEAF (MODE)	

*	1-666-184-11	SW (A) BOARD	

		< CAPACITOR >	
C902	1-162-282-31	CERAMIC	100PF 10% 50V
C903	1-161-494-00	CERAMIC	0.022uF 25V
		< CONNECTOR >	
CNP901	1-770-398-11	HOUSING, CONNECTOR (PC BOARD)	5P
CNP902	1-770-396-11	HOUSING, CONNECTOR (PC BOARD)	3P
		< IC >	
IC901	8-759-471-49	IC NJL57H400	
		< CONNECTOR >	
* KH903	1-573-287-11	HOLDER, CABLE 2P	
		< RESISTOR >	
R950	1-249-415-11	CARBON	680 5% 1/4W
R951	1-249-416-11	CARBON	820 5% 1/4W
R952	1-249-418-11	CARBON	1.2K 5% 1/4W
R953	1-249-420-11	CARBON	1.8K 5% 1/4W
R954	1-247-843-11	CARBON	3.3K 5% 1/4W
R955	1-249-427-11	CARBON	6.8K 5% 1/4W
R956	1-249-415-11	CARBON	680 5% 1/4W
R957	1-249-418-11	CARBON	820 5% 1/4W
R958	1-249-418-11	CARBON	1.2K 5% 1/4W
R959	1-249-420-11	CARBON	1.8K 5% 1/4W
R960	1-247-843-11	CARBON	3.3K 5% 1/4W
R961	1-249-427-11	CARBON	6.8K 5% 1/4W
R962	1-249-415-11	CARBON	680 5% 1/4W
R963	1-249-416-11	CARBON	820 5% 1/4W
R964	1-249-418-11	CARBON	1.2K 5% 1/4W
R965	1-249-420-11	CARBON	1.8K 5% 1/4W
R966	1-247-843-11	CARBON	3.3K 5% 1/4W
R967	1-249-427-11	CARBON	6.8K 5% 1/4W
		< SWITCH >	
S901	1-692-014-11	SWITCH, KEY BOARD (▶▶)	
S902	1-692-014-11	SWITCH, KEY BOARD (◀◀)	
S903	1-692-014-11	SWITCH, KEY BOARD (▷ (TAPE))	
S904	1-692-014-11	SWITCH, KEY BOARD (TAPE π)	
S905	1-692-014-11	SWITCH, KEY BOARD (◁ (TAPE))	
S906	1-692-014-11	SWITCH, KEY BOARD (●/■)	
S907	1-692-014-11	SWITCH, KEY BOARD (DIR MODE)	
S908	1-692-014-11	SWITCH, KEY BOARD (π (CD))	
S909	1-692-014-11	SWITCH, KEY BOARD (CD II)	
S910	1-692-014-11	SWITCH, KEY BOARD (▷ (CD))	
S911	1-692-014-11	SWITCH, KEY BOARD (FUNCTION)	
S912	1-692-014-11	SWITCH, KEY BOARD (OPERATE)	

Ref. No.	Part No.	Description	Remark
S913	1-692-014-11	SWITCH, KEY BOARD (DISPLAY/ENTER)	
S914	1-692-014-11	SWITCH, KEY BOARD (VOLUME +)	
S915	1-692-014-11	SWITCH, KEY BOARD (VOLUME -)	
S916	1-692-014-11	SWITCH, KEY BOARD (▶▶, TUNE +)	
S917	1-692-014-11	SWITCH, KEY BOARD (◀◀, TUNE -)	
S918	1-692-014-11	SWITCH, KEY BOARD (RADIO BAND)	
S919	1-692-014-11	SWITCH, KEY BOARD (PRESET +)	
S920	1-692-014-11	SWITCH, KEY BOARD (PRESET -)	

*	1-666-185-11	SW (B) BOARD	

		< CONNECTOR >	
* KH904	1-573-287-11	HOLDER, CABLE 2P	
		< RESISTOR >	
R970	1-249-415-11	CARBON	680 5% 1/4W
R971	1-249-416-11	CARBON	820 5% 1/4W
		< SWITCH >	
S921	1-692-014-11	SWITCH, KEY BOARD (SOUND)	
S922	1-692-014-11	SWITCH, KEY BOARD (PGM SET AUTO PRESET)	
S923	1-692-014-11	SWITCH, KEY BOARD (PLAY MODE MONO/ST ISS)	

*	1-666-178-11	TERMINAL BOARD	

		< CAPACITOR >	
C284	1-137-399-11	FILM	0.1uF 5% 50V
C285	1-137-399-11	FILM	0.1uF 5% 50V
C381	1-126-946-11	ELECT	6800uF 20% 25V
		< CONNECTOR >	
* CNP503	1-506-946-11	PIN, CONNECTOR 4P	
* CNP504	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P	
* CNP505	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P	
		< CONNECTOR >	
* KH510	1-565-385-11	HOLDER, CABLE 4P	
* KH512	1-573-287-11	HOLDER, CABLE 2P	
		< COIL >	
L501	1-410-397-21	FERRITE BEAD INDUCTOR (D305L)	
		< RESISTOR >	
△ R283	1-249-385-11	CARBON	2.2 5% 1/6W F
△ R284	1-249-385-11	CARBON	2.2 5% 1/6W F
△ R501	1-217-469-00	FUSIBLE	1 5% 1W F (D305: US)

*	A-3306-626-A	TUNER BOARD, COMPLETE (D305L)	
*	A-3306-831-A	TUNER BOARD, COMPLETE (D305: AUS)	
*	A-3306-834-A	TUNER BOARD, COMPLETE (D305: US, CND, E)	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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TUNER

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< CAPACITOR >				C31	1-126-964-11	ELECT	10uF 20% 50V
C1	1-162-294-31	CERAMIC	0.001uF 10% 50V (D305)	C32	1-162-294-31	CERAMIC	0.001uF 10% 50V (D305L)
C1	1-162-306-11	CERAMIC	0.01uF 20% 16V (D305L)	C32	1-162-306-11	CERAMIC	0.01uF 20% 16V (D305)
C2	1-162-294-31	CERAMIC	0.001uF 10% 50V (D305L)	C33	1-161-494-00	CERAMIC	0.022uF 25V (D305L)
C3	1-162-306-11	CERAMIC	0.01uF 20% 16V	C40	1-102-518-11	CERAMIC	33PF 5% 50V
C4	1-130-483-00	MYLAR	0.01uF 5% 50V (D305L)	C41	1-162-203-31	CERAMIC	15PF 5% 50V
C4	1-162-201-31	CERAMIC	12PF 5% 50V (D305)	C42	1-162-306-11	CERAMIC	0.01uF 20% 16V
C5	1-162-203-31	CERAMIC	15PF 5% 50V (D305)	C43	1-162-282-31	CERAMIC	100PF 10% 50V
C6	1-162-306-11	CERAMIC	0.01uF 20% 16V	C44	1-162-306-11	CERAMIC	0.01uF 20% 16V
C7	1-162-282-31	CERAMIC	100PF 10% 50V (D305L)	C45	1-162-306-11	CERAMIC	0.01uF 20% 16V
C7	1-162-294-31	CERAMIC	0.001uF 10% 50V (D305)	C46	1-162-306-11	CERAMIC	0.01uF 20% 16V (D305L)
C8	1-162-306-11	CERAMIC	0.01uF 20% 16V (D305L)	C47	1-162-306-11	CERAMIC	0.01uF 20% 16V (D305L)
C9	1-162-282-31	CERAMIC	100PF 10% 50V (D305)	C48	1-162-294-31	CERAMIC	0.001uF 10% 50V
C9	1-162-306-11	CERAMIC	0.01uF 20% 16V (D305L)	C49	1-162-294-31	CERAMIC	0.001uF 10% 50V
C10	1-162-306-11	CERAMIC	0.01uF 20% 16V	C50	1-162-294-31	CERAMIC	0.001uF 10% 50V
C11	1-126-933-11	ELECT	100uF 20% 10V	C51	1-162-306-11	CERAMIC	0.01uF 20% 16V
C12	1-126-963-11	ELECT	4.7uF 20% 50V	C52	1-126-964-11	ELECT	10uF 20% 50V
C13	1-162-215-31	CERAMIC	47PF 5% 50V	C53	1-162-306-11	CERAMIC	0.01uF 20% 16V
C15	1-162-306-11	CERAMIC	0.01uF 20% 16V	C54	1-126-963-11	ELECT	4.7uF 20% 50V (D305)
C16	1-162-306-11	CERAMIC	0.01uF 20% 16V	C54	1-126-964-11	ELECT	10uF 20% 50V (D305L)
C17	1-162-306-11	CERAMIC	0.01uF 20% 16V	C55	1-126-961-11	ELECT	2.2uF 20% 50V (D305)
C18	1-161-057-00	CERAMIC	0.033uF 10% 50V (D305L)	C55	1-136-177-00	FILM	1uF 5% 50V (D305L)
C18	1-162-842-11	CERAMIC	0.018uF 10% 16V (D305: AUS)	C56	1-162-306-11	CERAMIC	0.01uF 20% 16V (D305L)
C18	1-162-843-11	CERAMIC	0.022uF 10% 16V (D305: US, CND, E)	C57	1-161-020-11	CERAMIC	0.039uF 10% 16V (D305)
C19	1-161-057-00	CERAMIC	0.033uF 10% 50V (D305L)	C58	1-162-849-11	CERAMIC	0.068uF 10% 16V (D305)
C19	1-162-842-11	CERAMIC	0.018uF 10% 16V (D305: AUS)	C60	1-161-772-11	CERAMIC	0.1uF 10% 25V (D305L)
C19	1-162-843-11	CERAMIC	0.022uF 10% 16V (D305: US, CND, E)	C60	1-162-851-11	CERAMIC	0.1uF 10% 16V (D305)
C20	1-126-964-11	ELECT	10uF 20% 50V	C61	1-162-289-31	CERAMIC	390PF 10% 50V (D305)
C21	1-126-964-11	ELECT	10uF 20% 50V	C61	1-162-291-31	CERAMIC	560PF 10% 50V (D305L)
C22	1-162-850-11	CERAMIC	0.082uF 10% 16V	C62	1-162-203-31	CERAMIC	15PF 5% 50V (D305)
C23	1-162-849-11	CERAMIC	0.068uF 10% 16V	C62	1-162-207-31	CERAMIC	22PF 5% 50V (D305L)
C24	1-162-850-11	CERAMIC	0.082uF 10% 16V	C63	1-161-772-11	CERAMIC	0.1uF 10% 25V (D305L)
C25	1-126-964-11	ELECT	10uF 20% 50V	C63	1-162-851-11	CERAMIC	0.1uF 10% 16V (D305)
C26	1-162-288-31	CERAMIC	330PF 10% 50V	C64	1-162-306-11	CERAMIC	0.01uF 20% 16V
C27	1-161-494-00	CERAMIC	0.022uF 25V (D305)	C65	1-162-294-31	CERAMIC	0.001uF 10% 50V (D305)
C29	1-162-286-21	CERAMIC	220PF 10% 50V (D305L)	C65	1-162-306-11	CERAMIC	0.01uF 20% 16V (D305L)
C30	1-162-290-31	CERAMIC	470PF 10% 50V (D305L)				

TUNER

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q3	8-729-922-66	TRANSISTOR 2SC2410SN (D305L)		R25	1-249-425-11	CARBON 4.7K 5%	1/4W (D305L)
Q4	8-729-115-80	TRANSISTOR BA1A4P (D305)		R25	1-249-429-11	CARBON 10K 5%	1/4W (D305)
Q4	8-729-922-66	TRANSISTOR 2SC2410SN (D305L)		R26	1-249-425-11	CARBON 4.7K 5%	1/4W (D305L)
Q5	8-729-115-80	TRANSISTOR BA1A4P (D305)		R26	1-249-429-11	CARBON 10K 5%	1/4W (D305)
Q5	8-729-178-62	TRANSISTOR 2SC2786-L (D305L)		R27	1-249-421-11	CARBON 2.2K 5%	1/4W (D305)
Q6	8-729-119-32	TRANSISTOR 2SK193 (D305L)		R27	1-249-425-11	CARBON 4.7K 5%	1/4W (D305L)
Q7	8-729-922-66	TRANSISTOR 2SC2410SN (D305L)		R28	1-249-421-11	CARBON 2.2K 5%	1/4W (D305)
Q8	8-729-142-39	TRANSISTOR BN1A4Z-TP (D305)		R28	1-249-425-11	CARBON 4.7K 5%	1/4W (D305L)
Q8	8-729-904-39	TRANSISTOR DTC114TS (D305L)		R29	1-249-421-11	CARBON 2.2K 5%	1/4W
Q9	8-729-115-80	TRANSISTOR BA1A4P (D305L)		R30	1-249-441-11	CARBON 100K 5%	1/4W
Q9	8-729-904-39	TRANSISTOR DTC114TS (D305)		R40	1-249-429-11	CARBON 10K 5%	1/4W
Q10	8-729-115-80	TRANSISTOR BA1A4P (D305L)		R41	1-249-429-11	CARBON 10K 5%	1/4W
Q11	8-729-115-80	TRANSISTOR BA1A4P (D305L)		R42	1-249-429-11	CARBON 10K 5%	1/4W
Q11	8-729-194-57	TRANSISTOR 2SC945-P (D305)		R43	1-249-417-11	CARBON 1K 5%	1/4W (D305)
Q12	8-729-115-80	TRANSISTOR BA1A4P (D305L)		R43	1-249-429-11	CARBON 10K 5%	1/4W (D305L)
Q12	8-729-194-57	TRANSISTOR 2SC945-P (D305)		R44	1-249-417-11	CARBON 1K 5%	1/4W
Q13	8-729-012-83	TRANSISTOR 2SK679A (D305L)		R45	1-249-417-11	CARBON 1K 5%	1/4W
Q17	8-729-142-39	TRANSISTOR BN1A4Z-TP (D305L)		R46	1-249-417-11	CARBON 1K 5%	1/4W (D305L)
Q21	8-729-422-57	TRANSISTOR UN4111 (D305L)		R47	1-249-417-11	CARBON 1K 5%	1/4W (D305L)
Q22	8-729-422-57	TRANSISTOR UN4111 (D305L)		R49	1-249-412-11	CARBON 390 5%	1/4W
Q24	8-729-422-57	TRANSISTOR UN4111 (D305L)		R50	1-249-415-11	CARBON 680 5%	1/4W
		< RESISTOR >		R51	1-249-417-11	CARBON 1K 5%	1/4W (D305L)
R1	1-247-887-00	CARBON 220K 5%	1/4W (D305)	R51	1-249-429-11	CARBON 10K 5%	1/4W (D305)
R1	1-249-417-11	CARBON 1K 5%	1/4W (D305L)	R52	1-249-421-11	CARBON 2.2K 5%	1/4W (D305)
R2	1-249-411-11	CARBON 330 5%	1/4W (D305L)	R52	1-249-427-11	CARBON 6.8K 5%	1/4W (D305L)
R2	1-249-421-11	CARBON 2.2K 5%	1/4W (D305)	R53	1-247-863-91	CARBON 22K 5%	1/4W
R3	1-247-791-91	CARBON 22 5%	1/4W (D305L)	R54	1-249-417-11	CARBON 1K 5%	1/4W (D305L)
R3	1-249-441-11	CARBON 100K 5%	1/4W (D305)	R54	1-249-429-11	CARBON 10K 5%	1/4W (D305)
R4	1-249-431-11	CARBON 15K 5%	1/4W (D305)	R55	1-249-421-11	CARBON 2.2K 5%	1/4W (D305)
R10	1-249-403-11	CARBON 68 5%	1/4W	R55	1-249-437-11	CARBON 47K 5%	1/4W (D305L)
R11	1-249-425-11	CARBON 4.7K 5%	1/4W	R56	1-249-417-11	CARBON 1K 5%	1/4W (D305)
R12	1-247-815-91	CARBON 220 5%	1/4W (D305)	R56	1-249-437-11	CARBON 47K 5%	1/4W (D305L)
R13	1-249-407-11	CARBON 150 5%	1/4W	R57	1-249-437-11	CARBON 47K 5%	1/4W
R14	1-249-437-11	CARBON 47K 5%	1/4W	R58	1-249-437-11	CARBON 47K 5%	1/4W (D305)
R15	1-249-393-11	CARBON 10 5%	1/4W	R59	1-247-843-11	CARBON 3.3K 5%	1/4W (D305L)
R16	1-247-807-31	CARBON 100 5%	1/4W (D305L)	R59	1-249-437-11	CARBON 47K 5%	1/4W (D305)
R16	1-247-815-91	CARBON 220 5%	1/4W (D305)	R60	1-249-417-11	CARBON 1K 5%	1/4W
R17	1-249-421-11	CARBON 2.2K 5%	1/4W				
R18	1-249-393-11	CARBON 10 5%	1/4W				
R19	1-247-863-91	CARBON 22K 5%	1/4W				
R21	1-247-863-91	CARBON 22K 5%	1/4W (D305L)				
R22	1-249-421-11	CARBON 2.2K 5%	1/4W (D305L)				
R23	1-249-421-11	CARBON 2.2K 5%	1/4W				
R24	1-249-411-11	CARBON 330 5%	1/4W (D305)				

TUNER

Ref. No.	Part No.	Description	Remark
R60	1-249-429-11	CARBON 10K 5%	(D305) 1/4W (D305L)
R61	1-249-425-11	CARBON 4.7K 5%	1/4W (D305L)
R62	1-249-425-11	CARBON 4.7K 5%	1/4W (D305L)
R63	1-249-441-11	CARBON 100K 5%	1/4W (D305L)
R64	1-247-887-00	CARBON 220K 5%	1/4W (D305L)
R64	1-249-441-11	CARBON 100K 5%	1/4W (D305)
R65	1-247-807-31	CARBON 100 5%	1/4W (D305)
R65	1-249-411-11	CARBON 330 5%	1/4W (D305L)
R66	1-249-413-11	CARBON 470 5%	1/4W (D305L)
R67	1-249-429-11	CARBON 10K 5%	1/4W (D305L)
R70	1-249-425-11	CARBON 4.7K 5%	1/4W (D305L)
R71	1-249-425-11	CARBON 4.7K 5%	1/4W (D305L)
R72	1-249-425-11	CARBON 4.7K 5%	1/4W (D305L)
R73	1-247-887-00	CARBON 220K 5%	1/4W (D305L)
R74	1-249-416-11	CARBON 820 5%	1/4W (D305L)
R76	1-249-441-11	CARBON 100K 5%	1/4W (D305L)
R90	1-249-429-11	CARBON 10K 5%	1/4W (D305: US, CND, E)
< ENCAPSULATED COMPONENT >			
T1	1-233-306-31	ENCAPSULATED COMPONENT (D305L)	
< TUNER UNIT >			
* TU1	1-693-378-11	TUNER UNIT (D305L)	
< VIBRATOR >			
X1	1-760-130-11	VIBRATOR, CRYSTAL (75kHz)	

MISCELLANEOUS *****			
3	1-782-296-11	WIRE, PARALLEL (FFC) (27 CORE)	
102	1-782-294-11	WIRE, PARALLEL (FFC) (9 CORE)	
111	1-452-732-11	MAGNET	
120	1-769-069-11	CABLE, FFC 16P	
△ 151	8-848-376-11	OPTICAL PICK-UP KSS-213B/S-RP	
306	1-782-509-11	CORD, SPEAKER	
308	X-3374-496-1	CORD ASSY	
△ 310	1-575-651-11	CORD, POWER (D305L: AEP, IT, CET)	
△ 310	1-575-653-11	CORD, POWER (D305: E)	
△ 310	1-696-847-11	CORD, POWER (D305: AUS)	
△ 310	1-751-520-11	CORD, POWER (D305L: UK)	
△ 310	1-769-743-11	CORD, POWER (D305: US, CND)	

Ref. No.	Part No.	Description	Remark
352	1-782-509-11	CORD, SPEAKER	
HRPE1011	1-500-480-11	HEAD, MAGNETIC (REC/PB/ERASE)	
M691	3-016-425-01	MOTOR ASSY (CARSTAN/REEL)	
M701	X-2625-770-1	CHASSIS ASSY (MB) (RP), MOTOR (SPINDLE)	
M702	X-2625-769-1	GEAR ASSY (MB), MOTOR (SLED)	
PM691	1-454-806-11	SOLENOID, PLUNGER	
S801	1-692-960-11	SWITCH, PUSH (1 KEY) (OPEN/CLOSE)	
SP101	1-505-607-11	SPEAKER (8CM) (L-CH)	
SP201	1-505-607-11	SPEAKER (8CM) (R-CH)	
△ T501	1-431-353-11	TRANSFORMER, POWER (D305: AUS/D305L)	
△ T501	1-431-354-11	TRANSFORMER, POWER (D305: US, CND, E)	

***** HARDWARE LIST *****			
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#2	7-685-247-19	SCREW +KTP 3X10 TYPE2 NON-SLIT	
#3	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	
#4	7-685-136-19	SCREW +P 2.6X12 TYPE2 NON-SLIT	
#5	7-685-547-19	SCREW +BTP 3X10 TYPE2 N-S	
#6	7-685-851-04	SCREW +BVTT 2X4 (S)	
#7	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	
#8	7-621-255-15	SCREW +P 2X3	
#9	7-685-645-79	SCREW +P 3X6 TYPE2 NON-SLIT	
#10	7-685-158-19	SCREW +P 4X6 TYPE2 NON-SLIT	
#11	7-685-153-19	SCREW +P 3X30 TYPE2 NON-SLIT	

ACCESSORIES & PACKING MATERIALS *****			
	1-501-594-11	ANTENNA (FM) (D305L)	
	1-501-843-11	ANTENNA, ROOF	
	1-558-271-11	CORD, CONNECTION	
	3-860-142-11	MANUAL, INSTRUCTION (ENGLISH, GERMAN)(D305L: AEP, UK)	
	3-860-142-21	MANUAL, INSTRUCTION (FRANCH, SPANISH) (D305L: AEP)	
	3-860-142-31	MANUAL, INSTRUCTION (DUTCH, SWEDISH, PORTUGUESE) (D305L: AEP)	
	3-860-142-41	MANUAL, INSTRUCTION (ITALIAN) (D305L: AEP)	
	3-860-142-51	MANUAL, INSTRUCTION (ENGLISH) (D305)	
	3-860-142-61	MANUAL, INSTRUCTION (FRENCH) (D305: CND)	
	3-860-142-71	MANUAL, INSTRUCTION (SPANISH) (D305: E)	
	3-860-142-81	MANUAL, INSTRUCTION (POLISH, CZECH, HUNGARIAN) (D305: CET)	
	8-917-598-90	REMOTE COMMANDER RMT-C305A SET (D305)	
	8-917-602-90	REMOCON, RMT-C305AD SET (D305L)	
	4-991-047-01	LID, BATTERY CASE (for RMT-C305)	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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PMC-D305/D305L

SONY

SERVICE MANUAL

1998. 12

US Model
Canadian Model
E Model
Australian Model
PMC-D305
AEP Model
UK Model
PMC-D305L

SUPPLEMENT-1

File this supplement with the service manual.

Subject: Paint color change

(SPM-98011)

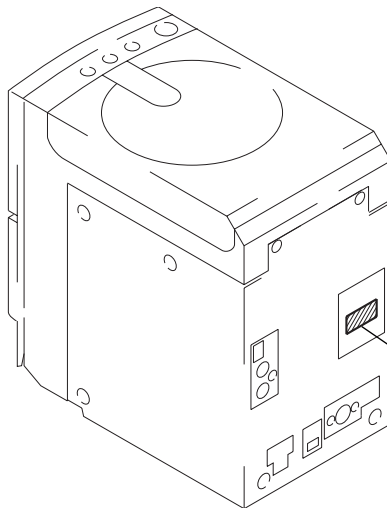
The paint color of this set was changed in the midway of production.
With this color change, the following parts were changed.

1. NEW/FORMER DISCRIMINATION

GENERAL SECTION

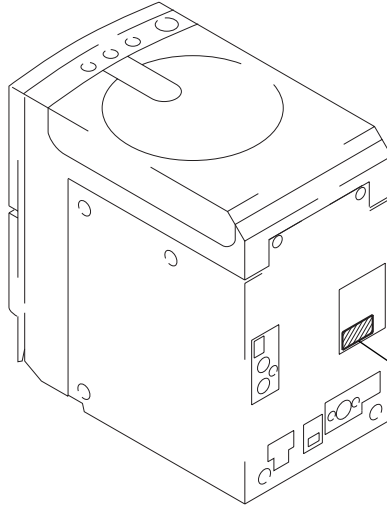
– Rear view –

US Model



LABEL, SERIAL NUMBER

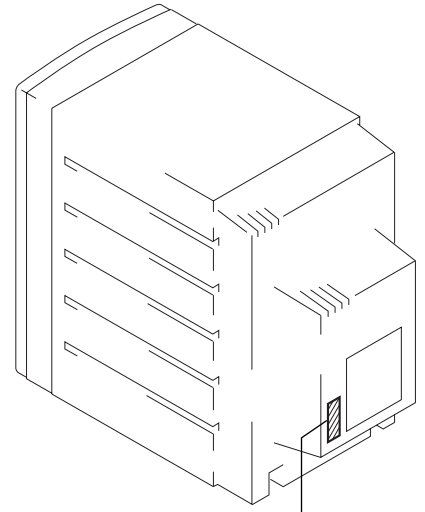
EXCEPT US Model



LABEL, SERIAL NUMBER

SPEAKER SECTION

– L-CH Rear view –



LABEL, SERIAL NUMBER

Model	Destination	Serial No.
PMC-D305	US	from 6135476
	E	from 6139027
PMC-D305L	AEP	from 6130226
	UK	from 6130226
	Italian	from 6191727
	East Euporean, Russian	from 6135476

2. DIFFERENCE PARTS LIST

Page	FORMER				NEW			
	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
77	52	X-3373-798-1	LID (CASSETTE) ASSY (D305L)		52	X-3376-183-1	LID (CASSETTE) ASSY (D305L)	
	53	X-3373-797-1	PANEL (FRONT) ASSY (D305L)		53	X-3376-182-1	PANEL (FRONT) ASSY (D305L)	
	53	X-3374-254-1	PANEL (FRONT) ASSY (D305)		53	X-3376-185-1	PANEL (FRONT) ASSY (D305)	
	54	3-014-091-01	BUTTON (MAIN)		54	3-014-091-11	BUTTON (MAIN)	
	56	3-014-092-01	BUTTON (UPPER)		56	3-014-092-11	BUTTON (UPPER)	
82	301	X-3374-211-1	FRONT SUB ASSY	301	X-3376-181-1	FRONT SUB ASSY		
83	351	X-3374-211-1	FRONT SUB ASSY	351	X-3376-181-1	FRONT SUB ASSY		

PMC-D305/D305L

SONY®

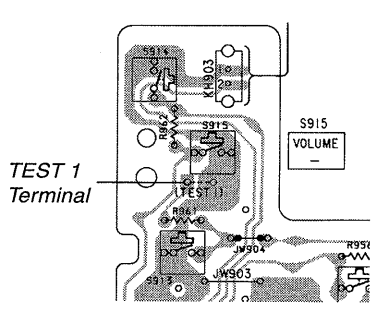
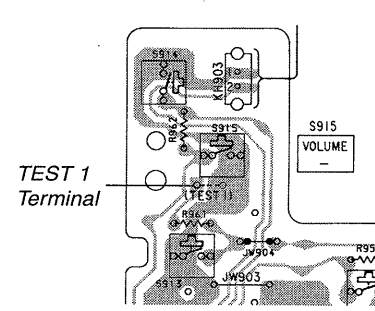
SERVICE MANUAL

US Model
 Canadian Model
 E Model
 Australian Model
 PMC-D305
 AEP Model
 UK Model
 PMC-D305L

CORRECTION-1

Correct your service manual as shown below.

 : Indicates corrected portion.

Page	INCORRECT	CORRECT
30	<p>How to Put the Set into Test Mode</p> <ol style="list-style-type: none"> 1. Disconnect an AC plug cord. (Power is not applied to the set) 2. Solder across the TEST1 terminal. 3. Close the lid for CD. 4. Connect an AC plug cord. <p>[SW (A) BOARD] (Conductor Side)</p>  <p>How to Release the Test Mode</p> <ol style="list-style-type: none"> 1. Be sure to disconnect the AC plug cord and remove the solder bridge at the TEST1 terminal connected before in setting. 2. The set thus becomes available for normal operation. 	<p>How to Put the Set into Test Mode</p> <ol style="list-style-type: none"> 1. Disconnect an AC plug cord. 2. Turn on the power while shorting the test point (TEST1). (Connect the AC plug cord) 3. Opening the shorted test point puts the set into Test Mode. <p>[SW (A) BOARD] (Conductor Side)</p>  <p>How to Release Test Mode</p> <ol style="list-style-type: none"> 1. Press the OPERATE button to put the set into the standby status. 2. Finally, disconnect and connect the AC plug cord.

(SPM-99048)