

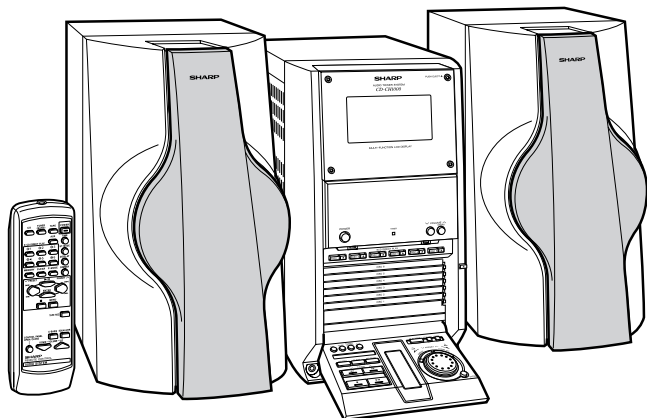
# SHARP SERVICE MANUAL

No. S8070CDCH1000

## AUDIO TOWER SYSTEM

# MODEL CD-CH1000

CD-CH1000 Audio Tower System consisting of CD-CH1000 (main unit) and CP-RW5000 (speaker system).



**COMPACT**  
**disc**  
**DIGITAL AUDIO**

• In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified should be used.

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# CD-CH1000

FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

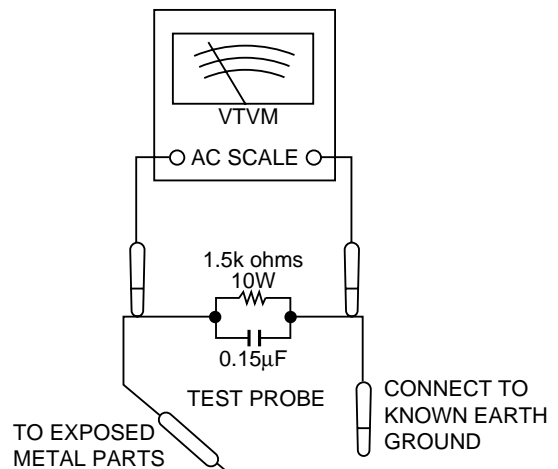
## IMPORTANT SERVICE NOTES (FOR U.S.A. ONLY)

### BEFORE RETURNING THE AUDIO PRODUCT

(Fire & Shock Hazard)

Before returning the audio product to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the audio product.
2. Inspect all protective devices such as insulating materials, cabinet, terminal board, adjustment and compartment covers or shields, mechanical insulators etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.
  - \* Plug the AC line cord directly into a 120 volt AC outlet.
  - \* Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as conduit or electrical ground connected to earth ground.
  - \* Use a VTVM or VOM with 1000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor (See diagram).
  - \* Connect the resistor connection to all exposed metal parts having a return path to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.



All tests must be repeated with the AC line cord plug connection reversed.  
 Any reading of 0.3 volt RMS (this corresponds to 0.2 milliamp. AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the audio product to the owner.

## SPECIFICATIONS

### CD-CH1000

#### ■ General

<b>Power source</b>	AC 120 V, 60 Hz
<b>Power consumption</b>	175 W
<b>Dimensions</b>	Width: 7-7/8" (200 mm) Height: 13-7/8" (352 mm) Depth: 14-7/8" (377 mm)
<b>Weight</b>	21.4 lbs. (9.7 kg)

#### ■ Amplifier

<b>Output power</b>	100 watts minimum RMS per channel into 6 ohms from 60 Hz to 20 kHz, 10 % total harmonic distortion  Subwoofer: 60 W/ch (60 Hz - 200 Hz, 6 ohms, 10 % T.H.D.) Main: 40 W/ch (200 Hz - 20 kHz, 6 ohms, 10 % T.H.D.)
<b>Output terminals</b>	Speakers: 6 ohms Headphones: 16-50 ohms (recommended; 32 ohms)
<b>Input terminals</b>	Auxiliary: 500 mV/47 kohms

#### ■ CD player

<b>Type</b>	6-disc multi-play compact disc changer player
<b>Signal readout</b>	Non-contact, 3-beam semiconductor laser pickup
<b>D/A converter</b>	1-bit D/A converter
<b>Frequency response</b>	20 - 20,000 Hz
<b>Dynamic range</b>	90 dB (1 kHz)

#### ■ Cassette deck

<b>Frequency response</b>	50-14,000 Hz (Normal tape)
<b>Signal/noise ratio</b>	50 dB (recording/playback)
<b>Wow and flutter</b>	0.3 % (WRMS)

#### ■ Tuner

<b>Frequency range</b>	FM: 87.5-108.0 MHz AM: 530-1,720 kHz
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### CP-RW5000

<b>Type</b>	3-way type speaker system 2" (5 cm) Tweeter 5-1/4" (13 cm) Woofer 5-1/4" (13 cm) Subwoofer
<b>Maximum input power (Total)</b>	200 W
<b>Rated input power (Total)</b>	100 W
<b>Impedance</b>	6 ohms
<b>Dimensions</b>	Width: 8-1/4" (210 mm) Height: 15-7/16" (392 mm) Depth: 13-9/16" (345 mm)
<b>Weight</b>	11.2 lbs. (5.1 kg)/each

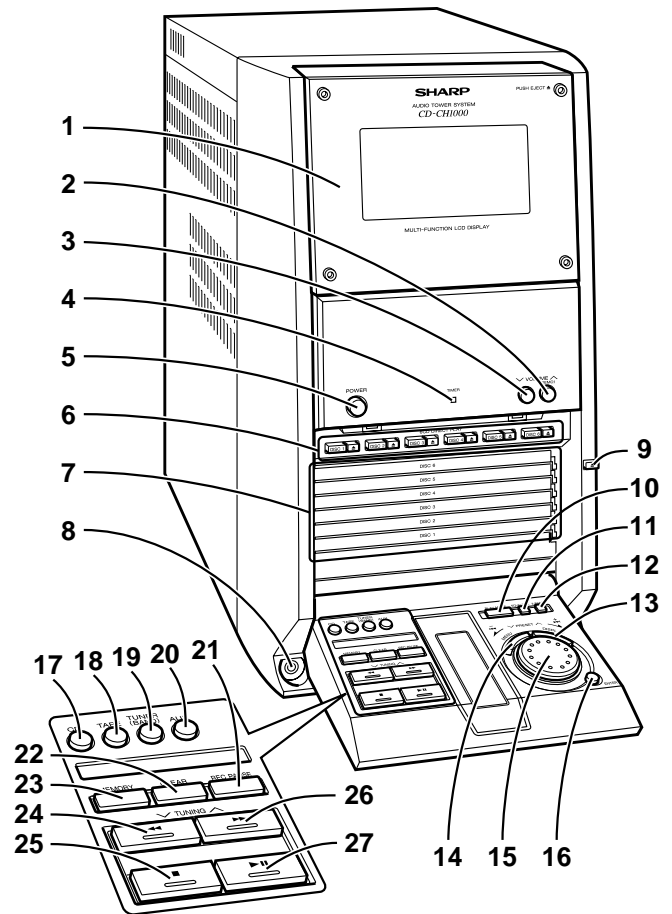
Specifications for this model are subject to change without prior notice.

## NAMES OF PARTS

### CD-CH1000

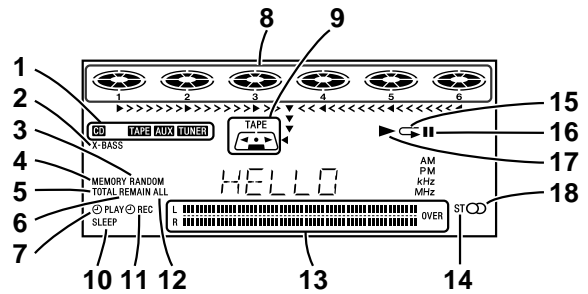
#### ■ Front panel

1. Cassette Compartment
2. Volume Up/Demo Button
3. Volume Down Button
4. Timer Set Indicator
5. Power Button
6. CD Direct Play Buttons (with Indicator)/  
CD Eject Buttons
7. Disc Trays
8. Headphone Jack
9. Control Panel Open/Close Button
10. CD Play Mode Select Button
11. Equalizer Mode Select Button
12. Extra Bass Button
13. Display Button
14. Menu Button
15. Jog Dial
16. Enter Button
17. CD Button
18. Tape Button
19. Tuner (Band) Button
20. Auxiliary Button
21. Tape Record Pause Button
22. Clear Button
23. Memory Button
24. Tuning Down/  
Fast Reverse Button (with Indicator)
25. Stop Button (with Indicator)
26. Tuning Up/  
Fast Forward Button (with Indicator)
27. CD Play or Pause/  
Tape Play Button (with Indicator)



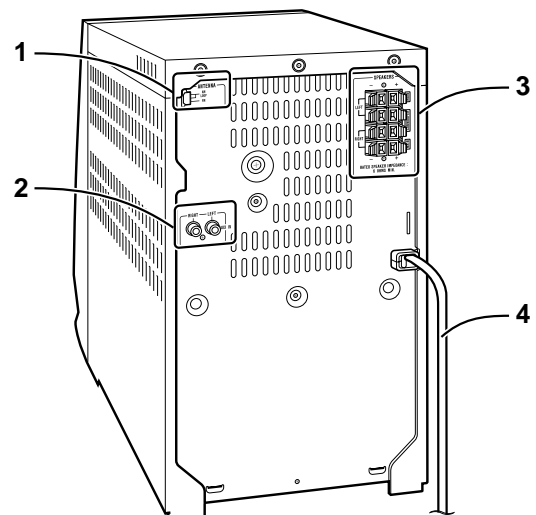
#### ■ Multi-function LCD display

1. Function Indicator
2. Extra Bass Indicator
3. Random Play Indicator
4. Memory Indicator
5. Total Indicator
6. Remain Indicator
7. Timer Play Indicator
8. CD Indicators
9. Cassette Indicator
10. Sleep Indicator
11. Timer Recording Indicator
12. All Disc Play Indicator
13. Level Meter
14. FM Stereo Mode Indicator
15. CD Repeat Indicator
16. CD Pause Indicator
17. CD Play Indicator
18. FM Stereo Indicator



#### ■ Rear panel

1. FM/AM Antenna Jack
2. Auxiliary Input Jacks
3. Speaker Terminals
4. AC Power Cord

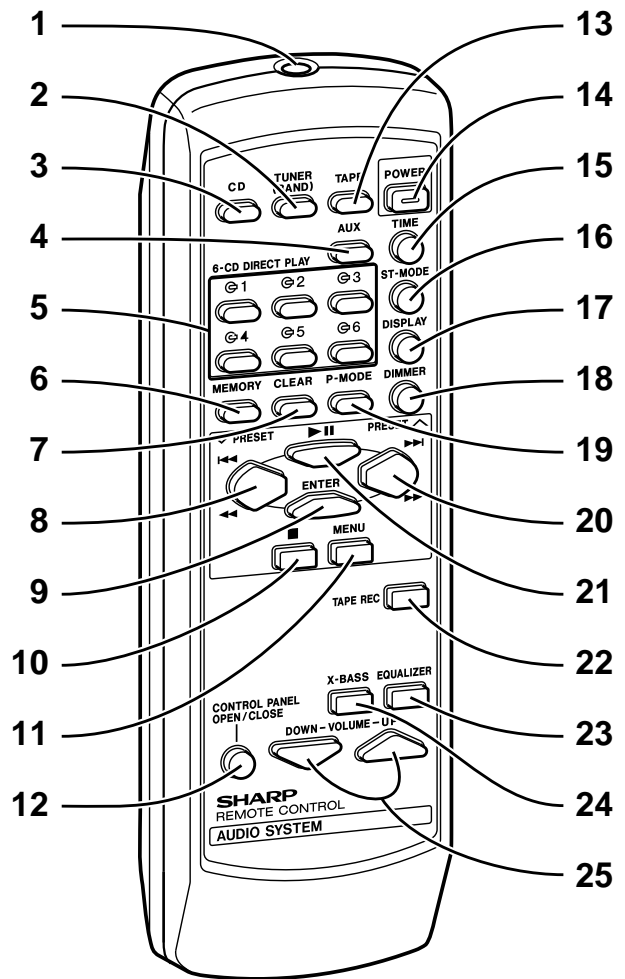


# CD-CH1000

## CD-CH1000

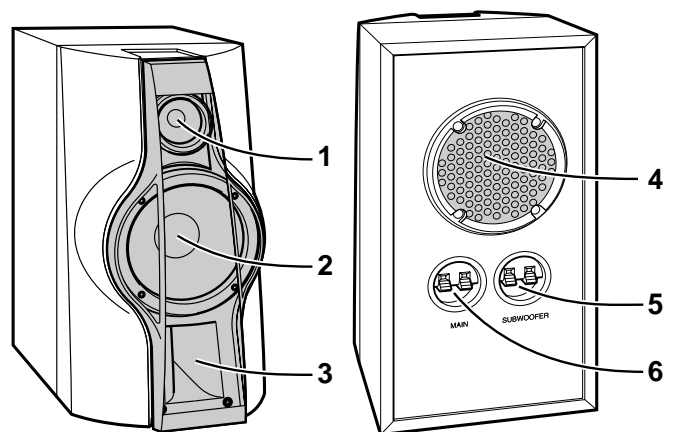
### Remote control

1. Remote Control Transmitter
2. Tuner (Band) Button
3. CD Button
4. Auxiliary Button
5. CD Direct Play Buttons
6. Memory Button
7. Clear Button
8. Fast Reverse/Preset Down Button
9. Enter Button
10. Stop Button
11. Menu Button
12. Control Panel Open/Close Button
13. Tape Button
14. Power Button
15. Time Button
16. FM Stereo Mode Button
17. Display Button
18. Dimmer Button
19. CD Play Mode Select Button
20. Fast Forward/Preset Up Button
21. CD Play or Pause/Tape Play Button
22. Tape Record Pause Button
23. Equalizer Mode Select Button
24. Extra Bass Button
25. Volume Up or Down Buttons



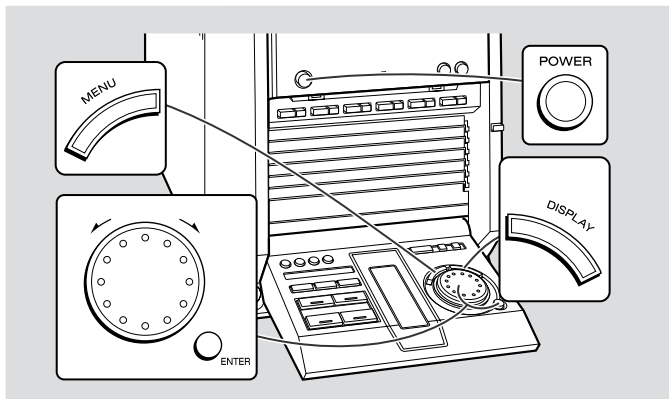
## CP-RW5000

1. Tweeter
2. Woofer
3. Bass Reflex Duct
4. Subwoofer
5. Subwoofer Terminals
6. Main Speaker Terminals



OPERATION MANUAL

Setting the Clock

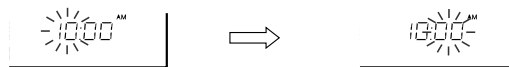


In this example, the clock is set for the 12-hour (AM)12:00 display.

- 1 Press the **POWER** button to turn the power on.
- 2 Press the **MENU** button.
- 3 Turn the jog dial to select "CLOCK" and within 10 seconds, press the **ENTER** button.
- 4 Turn the jog dial to select the 12-hour or 24-hour display and within 2 minutes, press the **ENTER** button.
 

"AM 12:00"	→ The 12-hour display will appear. (AM 12:00 - PM 11:59)
"AM 0:00"	→ The 12-hour display will appear. (AM 0:00 - PM 11:59)
"0:00"	→ The 24-hour display will appear. (0:00 - 23:59)

5 Turn the jog dial to adjust the hour and within 2 minutes, press the **ENTER** button.



• When the 12-hour display is selected, "AM" will change automatically to "PM".

6 Turn the jog dial to adjust the minutes and within 2 minutes, press the **ENTER** button.



• The hour will not advance even if minutes advance from "59" to "00".  
 • The clock starts from "0" second. (Seconds are not displayed.)  
 The time display will disappear after a few seconds.

**To confirm the time display:**

Press the **DISPLAY** button. The time display will appear for about 3 seconds.



**Note:**

The "CLOCK" will appear or time will flash at the push of the **DISPLAY** button when the AC power supply is restored after a power failure or after unplugging the unit. Reset the clock as follows.

**To reset the clock:**

Perform "Setting the Clock" from the beginning. At this time, step 4 (for selecting the 12-hour or 24-hour display) will be skipped.

**To change the 12-hour or 24-hour display:**

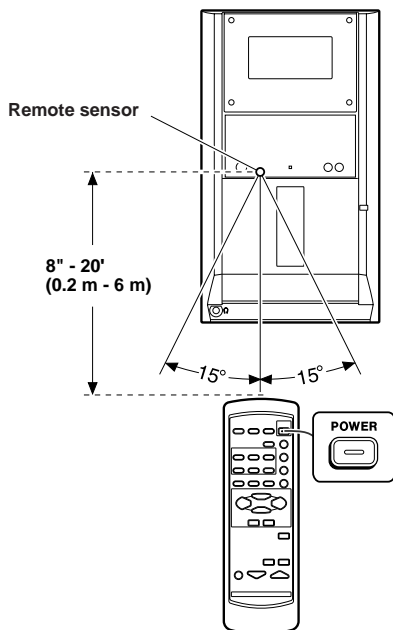
Clear all the programmed contents. [Refer to "If trouble occurs (reset)" on page 30 for details.] Perform "Setting the Clock" from the beginning.

Remote Control

■ Test of the remote control

Face the remote control directly to the remote sensor on the unit.

The remote control can be used within the range shown below: Press the **POWER** button. Does the power turn on? Now, you can enjoy the music.



Troubleshooting Chart (continued)

■ If trouble occurs (reset)

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

If such a problem occurs, do the following:

1. Press the **POWER** button to enter the power stand-by mode.
2. While pressing down the **VOLUME** button, press the **POWER** button until "ALL CLEAR" appears.

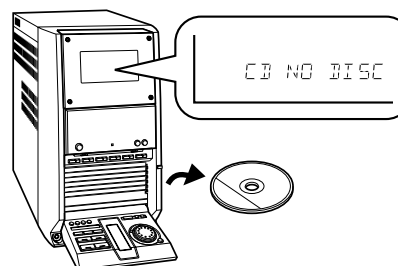


**Caution:**

This operation will erase all data stored in memory including clock and timer settings, and tuner and CD presets.

■ Before transporting the unit

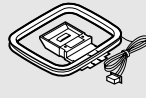
Remove all CDs from the unit. Your unit checks whether there are any discs inside the unit when the tray is closed. "CD NO DISC" appears if no disc is left. Then, set the unit to the power stand-by mode. Carrying the unit with discs left inside can damage it.



# 1 Accessories Accesorios



Remote control × 1  
Controlador remoto × 1



FM/AM loop antenna × 1  
Antena de FM/cuadro de AM × 1

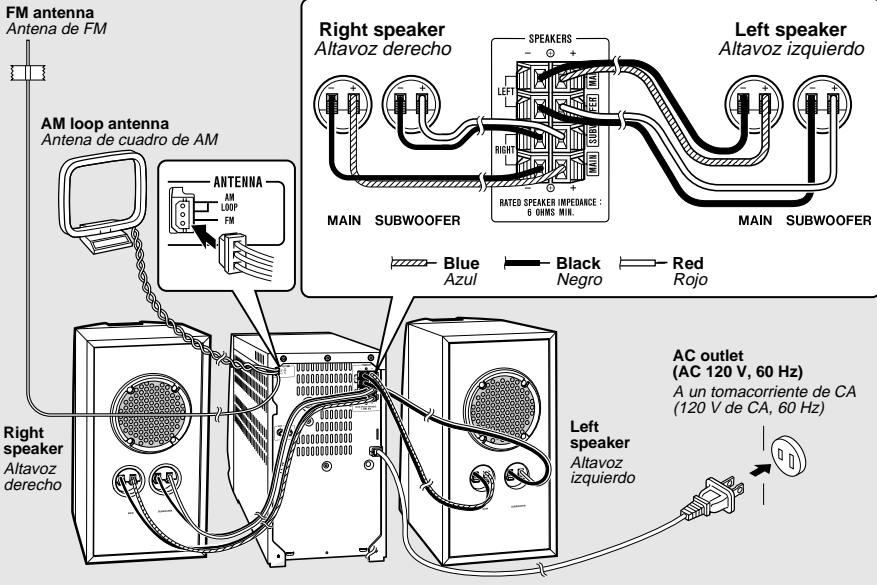


Blue Azul  
Black Negro  
Speaker wire for MAIN terminals × 2  
Cable del altavoz para los terminales MAIN × 2



Red Rojo  
Black Negro  
Speaker wire for SUBWOOFER terminals × 2  
Cable del altavoz para los terminales SUBWOOFER × 2

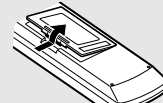
# 2 System Connections Conexiones del sistema



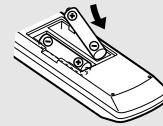
# 3 Battery installation

Use 2 "AA" size batteries (UM/SUM-3, R6, HP-7 or similar).  
Batteries are not included.  
Use dos pilas del tamaño "AA" (UM/SUM-3, R6, HP-7 o equivalentes).  
Las pilas no están incluidas.

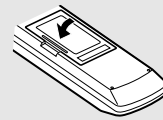
1 Remove the battery cover.  
Extraiga la cubierta de las pilas.



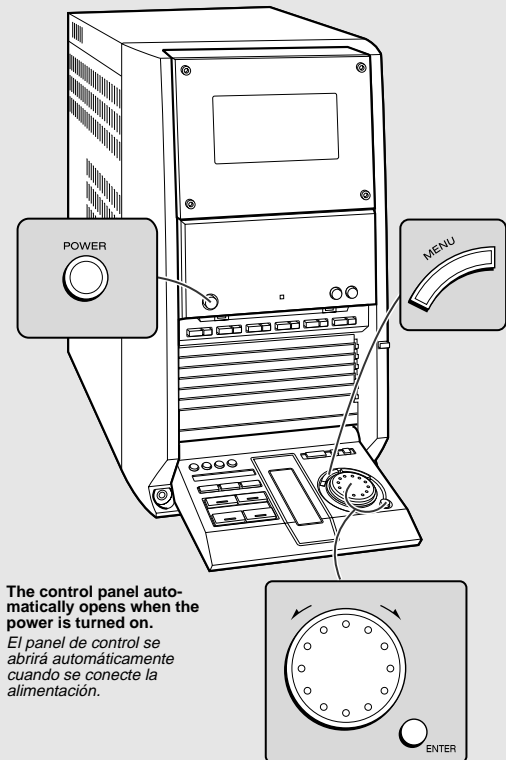
2 Insert the batteries.  
Inserte las pilas.



3 Replace the cover.  
Vuelva a colocar la cubierta de las pilas.



# 4 Setting the clock Ajuste del reloj



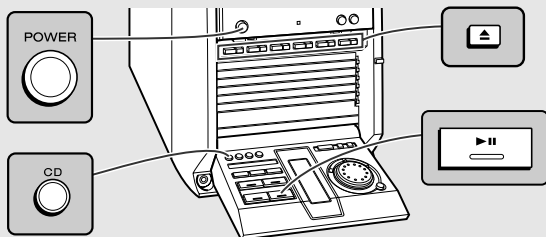
In this example, the clock is set for the 12-hour (AM12:00) display.




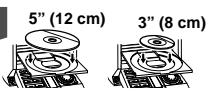


En este ejemplo, el reloj está ajustado para la visualización de 12 horas (AM12:00).

- Press the POWER button to turn the power on.  
Pulse el botón POWER para conectar la alimentación.
- Press the MENU button.  
Pulse el botón MENU.
- Turn the jog dial to select "CLOCK" and within 10 seconds, press the ENTER button.  
Gire el mando de lanzadera para seleccionar "CLOCK", y antes de transcurrir 10 segundos, pulse el botón ENTER.
- Turn the jog dial to select the 12-hour or 24-hour display and within 2 minutes, press the ENTER button.  
Gire el mando de lanzadera para seleccionar la visualización de 12 horas o de 24 horas, y antes de transcurrir 2 minutos, pulse el botón ENTER.

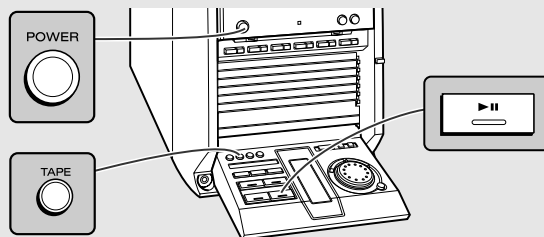
"AM 12:00" → "AM 0:00" → "0:00"
- Turn the jog dial to adjust the hour and within 2 minutes, press the ENTER button.  
● When the 12-hour display is selected, "AM" will change automatically to "PM".  
Gire el mando de lanzadera para ajustar la hora, y antes de transcurrir 2 minutos, pulse el botón ENTER.  
● Cuando se seleccione la visualización de 12 horas, "AM" cambiará automáticamente a "PM".
- Turn the jog dial to adjust the minutes and within 2 minutes, press the ENTER button.  
Gire el mando de lanzadera para ajustar los minutos, y antes de transcurrir 2 minutos, pulse el botón ENTER.




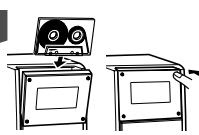

## Listening to a CD (CDs) Audición de un disco CD (CDs)



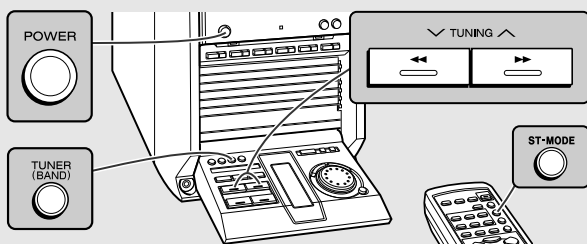
- 1**  **Press the POWER button to turn the power on.**  
*Pulse el botón POWER para conectar la alimentación.*
- 2**  **Press the CD button.**  
*Pulse el botón CD.*
- 3**  **Press the DISC 1 button to open the disc tray 1.**  
*Pulse el botón DISC 1 para abrir la bandeja del disco 1.*
- 4**  **Place the CD on the disc tray 1, label side up.**  
*Coloque el disco compacto en la bandeja del disco 1, con el lado de la etiqueta hacia arriba.*
- 5**  **Press the DISC 1 button to close the disc tray 1.**  
*Pulse el botón DISC 1 para cerrar la bandeja del disco 1.*
- 6** **You can place discs on the trays 2 - 6 by following the steps 3 - 5.**  
*Podrá colocar discos en las bandejas 2 - 6 según los pasos 3 - 5.*
- 7**  **Press the play button to start playback.**  
*Pulse el botón para iniciar la reproducción.*



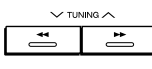

## Listening to a Cassette Tape Audición de un cassette



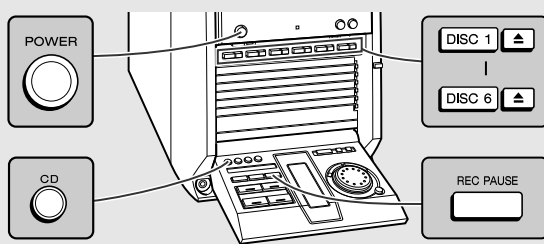
- 1**  **Press the POWER button to turn the power on.**  
*Pulse el botón POWER para conectar la alimentación.*
- 2**  **Press the TAPE button.**  
*Pulse el botón TAPE.*
- 3**  **Open the cassette door by pushing the area marked "PUSH EJECT".**  
*Abra la puerta del cassette pulsando la parte marcada "PUSH EJECT".*
- 4**  **Load the cassette into the cassette compartment.**  
*Inserte el cassette en el compartimiento del cassette.*
- 5**  **Press the play button to start playback.**  
*Pulse el botón para iniciar la reproducción.*





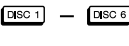
## Listening to the Radio Audición de la radio



- 1**  **Press the POWER button to turn the power on.**  
*Pulse el botón POWER para conectar la alimentación.*
- 2**  **Press the TUNER (BAND) button to select the desired frequency band (FM or AM).**  
*Pulse el botón TUNER (BAND) para seleccionar la banda de frecuencia deseada (FM o AM).*
- 3**  **Press the TUNING (v or ^) button to tune into the desired station.**  
*Pulse el botón TUNING (v o ^) para sintonizar la emisora deseada.*
- 4**  **To receive an FM stereo transmission, press the ST-MODE button on the remote control. The "ST" indicator lights up.**  
*Para recibir la transmisión de FM en estéreo, pulse el botón ST-MODE del controlador remoto. Se enciende el indicador "ST".*

## Recording from the CD Grabación de un disco CD



- 1**  **Press the POWER button to turn the power on.**  
*Pulse el botón POWER para conectar la alimentación.*
- 2**  **Press the CD button and load the desired disc.**  
*Pulse el botón CD y ponga el disco deseado.*
- 3**  **Load a cassette into the cassette compartment.**  
*Inserte un cassette en el compartimiento del cassette.*
- 4**  **Press the REC PAUSE button.**  
*Pulse el botón REC PAUSE.*
- 5**  **Press the DISC 1 - DISC 6 button to start recording.**  
*Pulse el botón DISC 1 - DISC 6 para iniciar la grabación.*

# DISASSEMBLY

### Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

### CD-CH1000

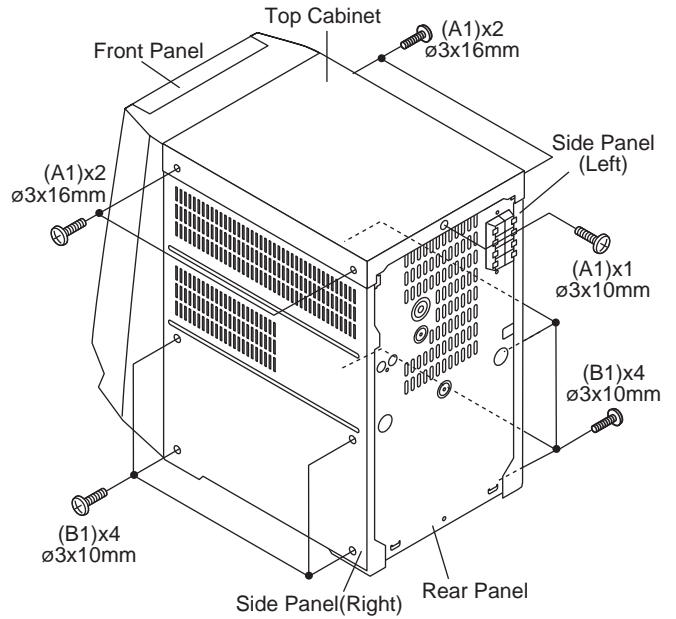


Figure 8-1

### CD-CH1000

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw ..... (A1) x5	8-1
2	Side Panel(Left/Right)	1. Screw ..... (B1) x8	8-1
3	Rear Panel	1. Screw ..... (C1) x3 2. Screw ..... (C2) x6	8-2
4	Front Panel	1. Flat Cable ..... (D1) x1 2. Screw ..... (D2) x4 3. Socket ..... (D3) x6	8-2
5	Sub Trans PWB	1. Screw ..... (E1) x3 2. Socket ..... (E2) x5	8-2
6	Main PWB	1. Flat Cable ..... (F1) x1 2. Screw ..... (F2) x2 3. Screw ..... (F3) x1 4. Socket ..... (F4) x1	8-2
7	Power PWB/ Speaker PWB	1. Socket ..... (G1) x1 2. Screw ..... (G2) x2	9-1
8	Tape Mechanism	1. Open the cassette holder 2. Screw ..... (H1) x4	9-2
9	CD Switch PWB	1. Socket ..... (J1) x1 2. Screw ..... (J2) x6 3. Hook ..... (J3) x2	9-2
10	Switch PWB	1. Screw ..... (K1) x1	9-2
11	Headphones PWB	1. Screw ..... (L1) x1 2. Bracket ..... (L2) x1	9-2
12	CD Changer door panel/ Control Panel	1. Screw ..... (M1) x3 2. Screw ..... (M2) x2	9-2
13	Motor PWB	1. Solder ..... (P1) x2	9-2
14	CD Changer door panel	1. Screw ..... (Q1) x4	9-3
15	Control Panel	1. Screw ..... (R1) x7	9-3
16	Control PWB	1. Screw ..... (S1) x6 2. Socket ..... (S2) x1	9-4
17	Jog PWB	1. Screw ..... (T1) x6	9-4
18	LED B PWB	1. Screw ..... (U1) x3	9-4
19	Cassette holder Cover	1. Open the cassette holder Cover 2. Screw ..... (V1) x4 3. Display Panel .... (V2) x1 4. Hook ..... (V3) x4	9-5
20	Display PWB/ LED A PWB	1. Screw ..... (W1) x4 2. Hook ..... (W2) x6	9-6

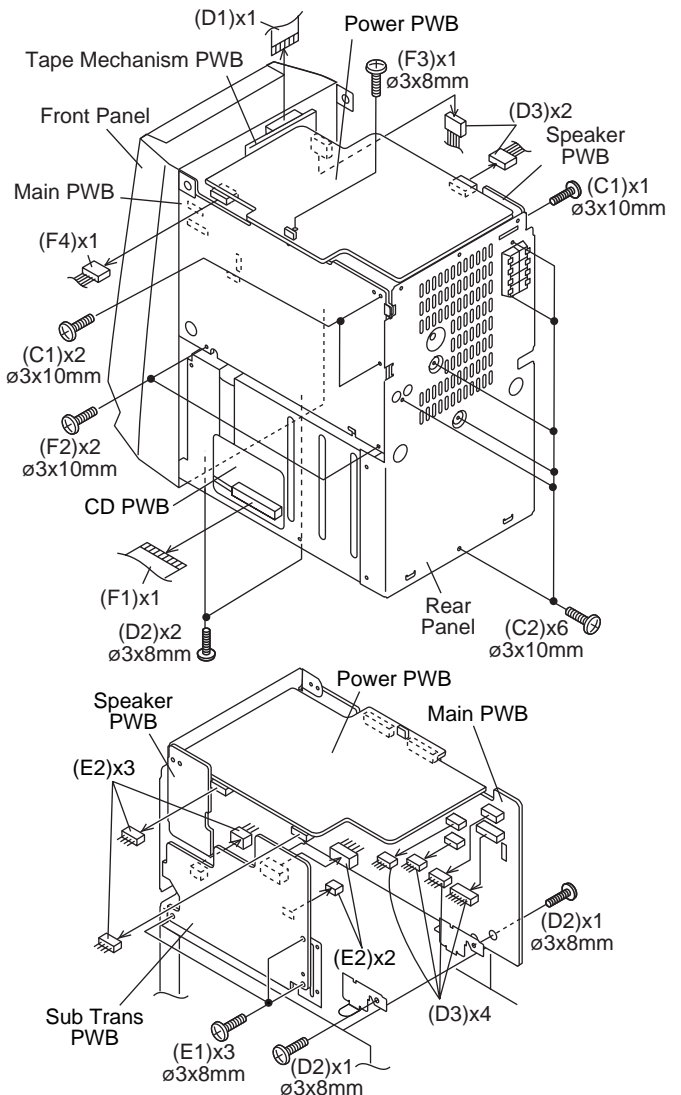


Figure 8-2



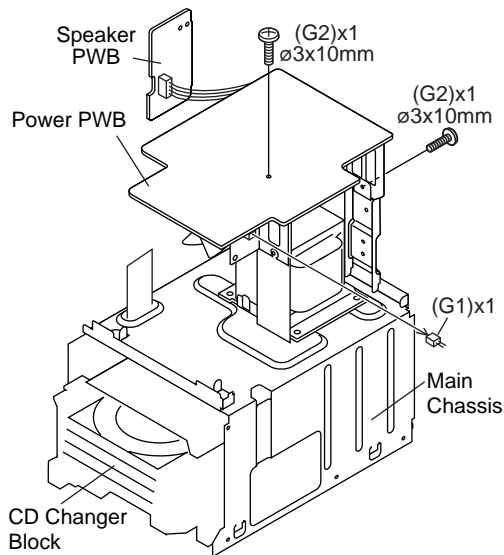


Figure 9-1

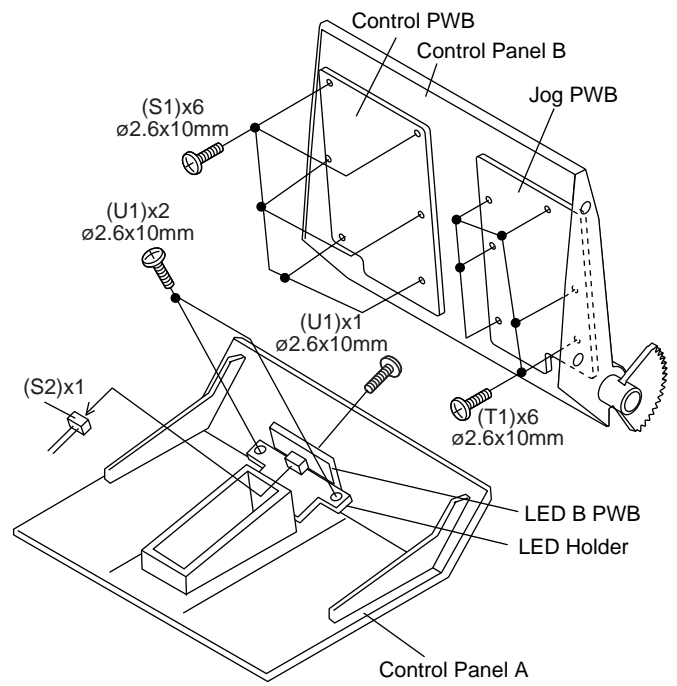


Figure 9-4

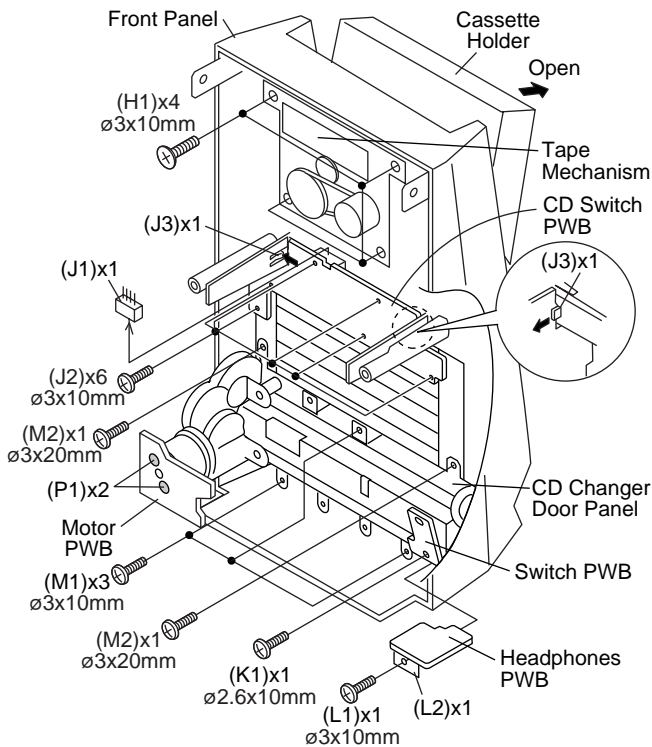


Figure 9-2

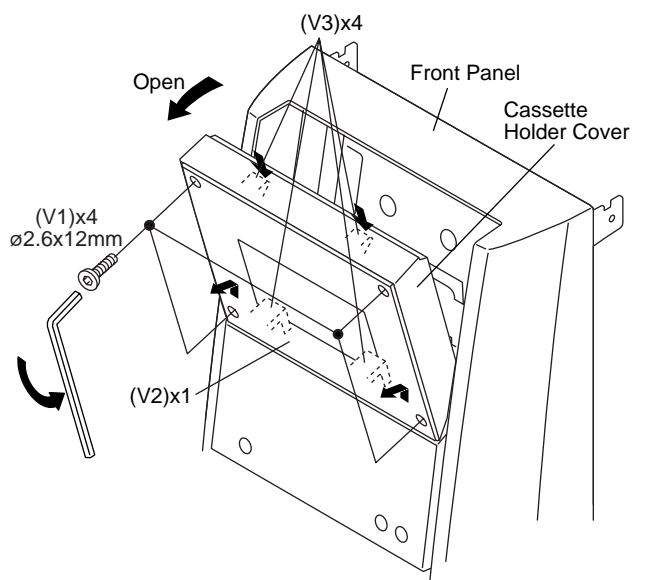


Figure 9-5

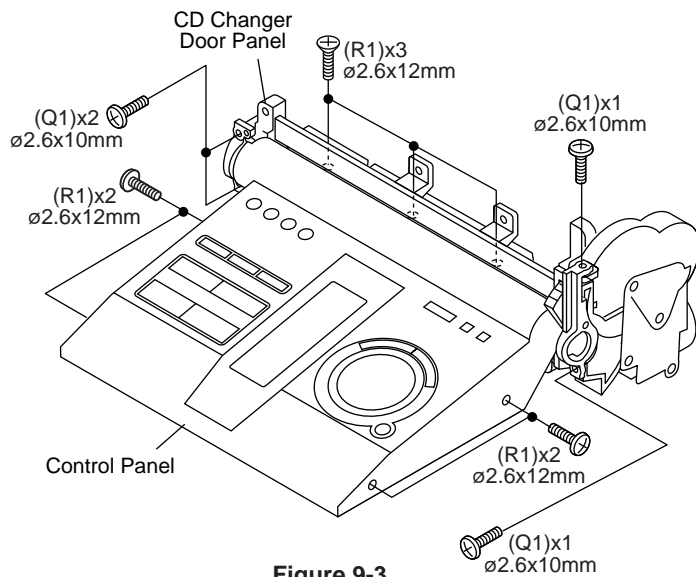


Figure 9-3

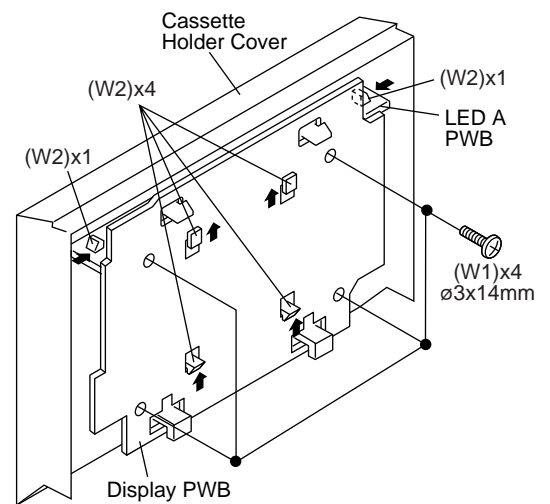


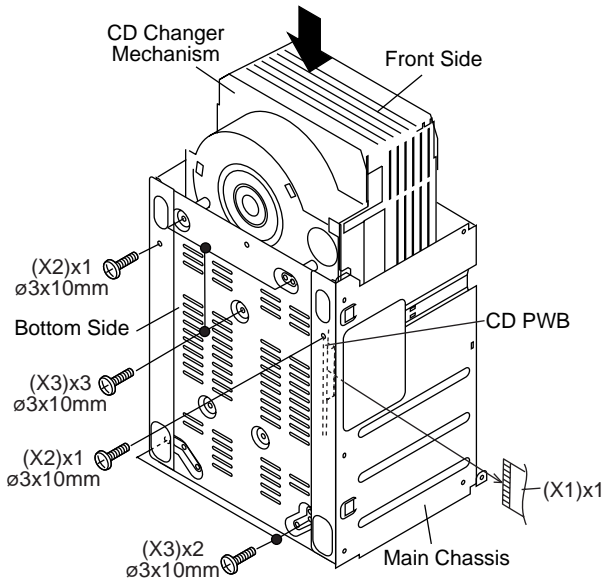
Figure 9-6

# CD-CH1000

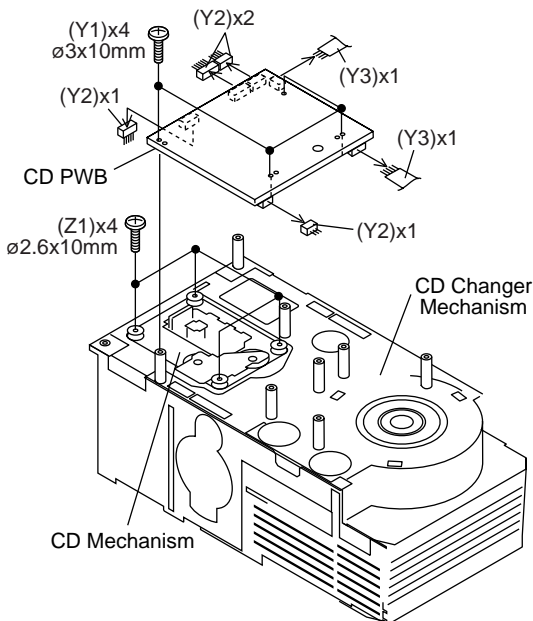
CD-CH1000 (CD CHANGER MECHANISM UNIT)			
STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw ..... (A1) x5	8-1
2	Side Panel(Left/Right)	1. Screw ..... (B1) x8	8-1
3	Rear Panel	1. Screw ..... (C1) x3 2. Screw ..... (C2) x6	8-2
4	Front Panel	1. Flat Cable ..... (D1) x1 2. Screw ..... (D2) x4 3. Socket ..... (D3) x6	8-2
5	CD Changer Mechanism	1. Flat Cable ..... (X1) x1 2. Screw ..... (X2) x2 3. Screw ..... (X3) x5	10-1
6	CD PWB (Note)	1. Screw ..... (Y1) x4 2. Socket ..... (Y2) x4 3. Flat Wire ..... (Y3) x2	10-2
7	CD Mechanism	1. Screw ..... (Z1) x4	10-2

**Note:**

After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector remove to protect the optical pickup from electrostatic damage.

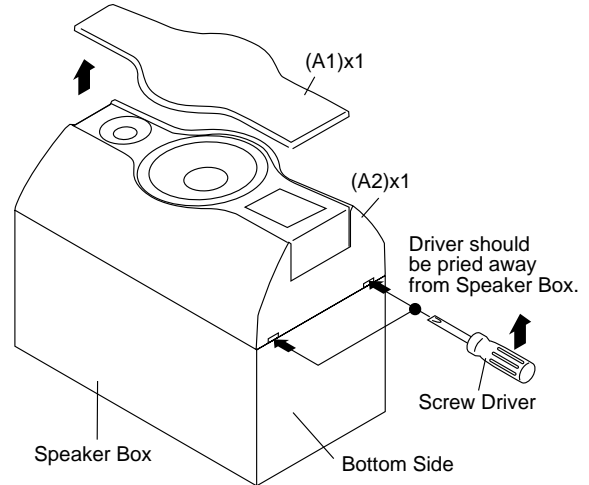


**Figure 10-1**

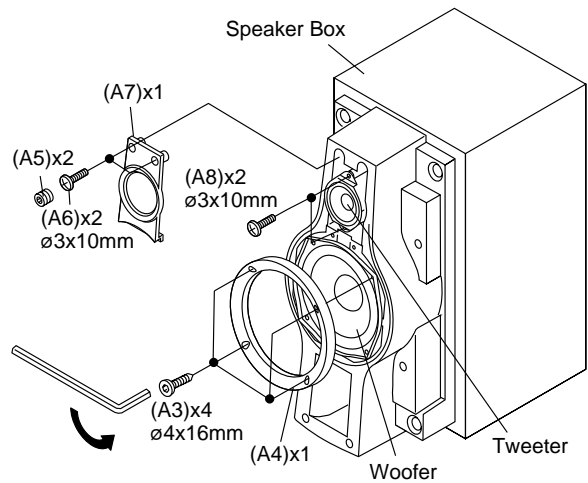


**Figure 10-2**

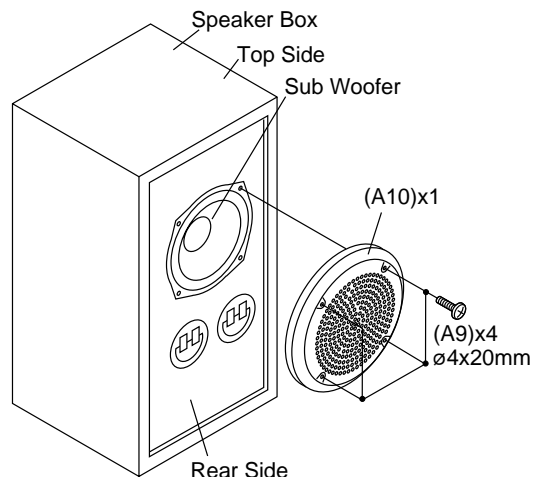
CP-RW5000			
STEP	REMOVAL	PROCEDURE	FIGURE
1	Woofer/Tweeter/ Sub Woofer	1. Net ..... (A1) x1 2. Front Panel ..... (A2) x1 3. Screw ..... (A3) x4 4. Ring ..... (A4) x1 5. Catching holder (A5) x2 6. Screw ..... (A6) x2 7. Cover ..... (A7) x1 8. Screw ..... (A8) x2 9. Screw ..... (A9) x4 10. Cover ..... (A10) x10	10-3 10-4 10-5



**Figure 10-3**



**Figure 10-4**



**Figure 10-5**

## REMOVING AND REINSTALLING THE MAIN PARTS

### TAPE MECHANISM SECTION

Perform steps 1 to 4 and 8 of the disassembly method to remove the tape mechanism.

#### How to remove the record/playback and erase heads (See Fig. 11-1)

1. Carefully remove the record/playback head and erase head screws (A1) x 2 pcs.

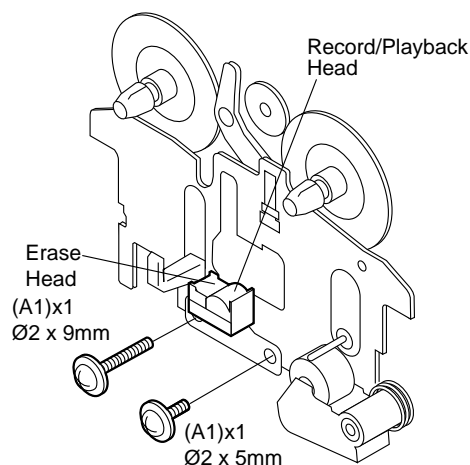


Figure 11-1

#### How to remove the pinch roller (See Fig. 11-2)

1. Carefully bend the pinch roller pawl in the direction of the arrow <A>, and remove the pinch roller (B1) x1 pc., in the direction of the arrow <B>.

#### Note:

When installing the pinch roller, pay attention to the spring mounting position.

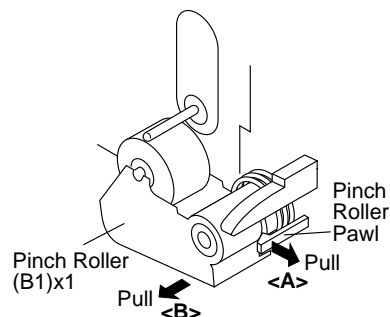


Figure 11-2

#### How to remove the belt (See Fig. 11-3)

1. Remove the motor.
2. Remove the main belt (C1) x 1 pc., from the motor side.
3. Remove the FF/REW belt (C2) x 1 pc.

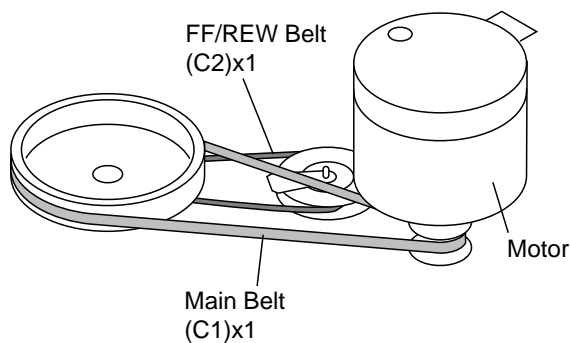


Figure 11-3

#### How to remove the motor (See Fig. 11-4)

1. Remove the belt.
2. Remove the screws (D1) x 2 pcs., to remove the motor.

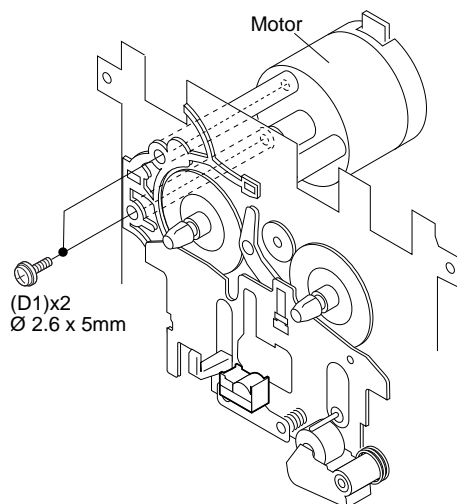


Figure 11-4

## CD-CH1000

### FRONT PANEL SECTION

Perform steps 1 to 4 of the disassembly method to remove the front panel.

#### How to remove the control panel motor (See Fig. 12-1)

1. Remove the control panel.
2. Remove the screws (E1) x 6 pcs., to remove the CD changer door panel.
3. Remove the screws (F1) x 2 pcs., to remove the control panel motor.

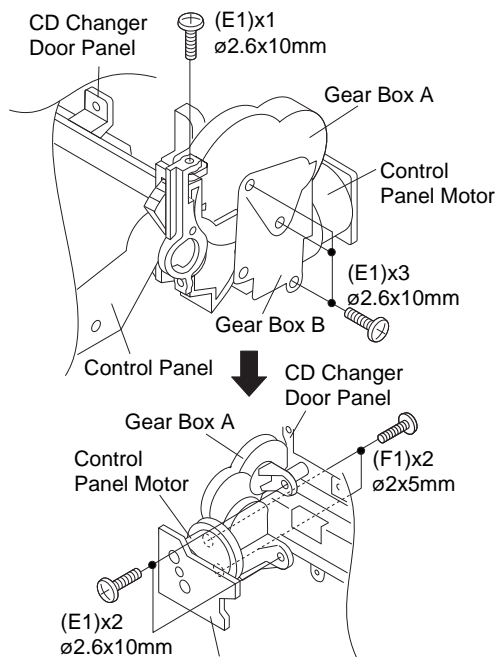


Figure 12-1

### CD MECHANISM SECTION

Perform steps 1 to 7 of the disassembly method to remove the CD mechanism. (See page 10.)

#### How to Remove the pickup (See Fig. 12-2.)

1. Remove the screws (A1) x 2 pcs., to remove shaft (A2) x 1 pc.
2. Remove stop washer (A3) x 1 pc., to remove gear (A4) x 1 pc.
3. Remove the pickup.

#### Note:

After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector remove to protect the optical pickup from electrostatic damage.

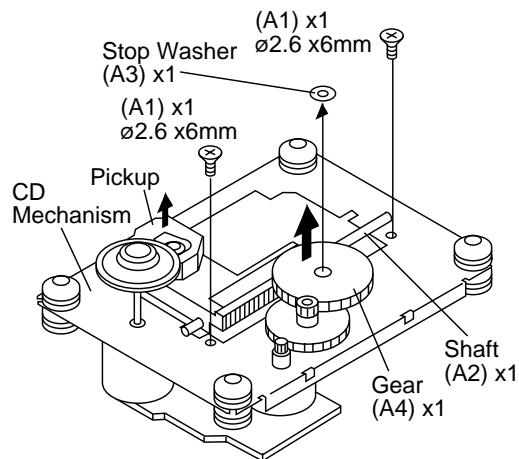


Figure 12-2

### CD CHANGER MECHANISM SECTION

Perform steps 1 to 5 of the disassembly method to remove the CD changer mechanism. (See page 10.)

#### How to Remove the tray motor/main cam motor (See Fig. 12-3.)

1. Remove the screws (B1) x 4 pcs., to remove the CD PWB.
2. Remove the (1) front top plate, (2) changer box, left/right and (3) disc trays 1~6. After that, disassemble as shown in the figure.
3. Remove the screws (B2) x 4 pcs.
4. Remove the tray motor and main cam motor.

#### Note:

The parts of (1), (2) and (3) correspond to the drawing Nos. 117, 102, 103 and 108 to 113 of the CD change mechanism disassembly drawing.

Remove the screws of 117, 102 and 103, and the parts of (1), (2) and (3) will be ready for removal and the screws of the tray motor and main cam motor will be visible.

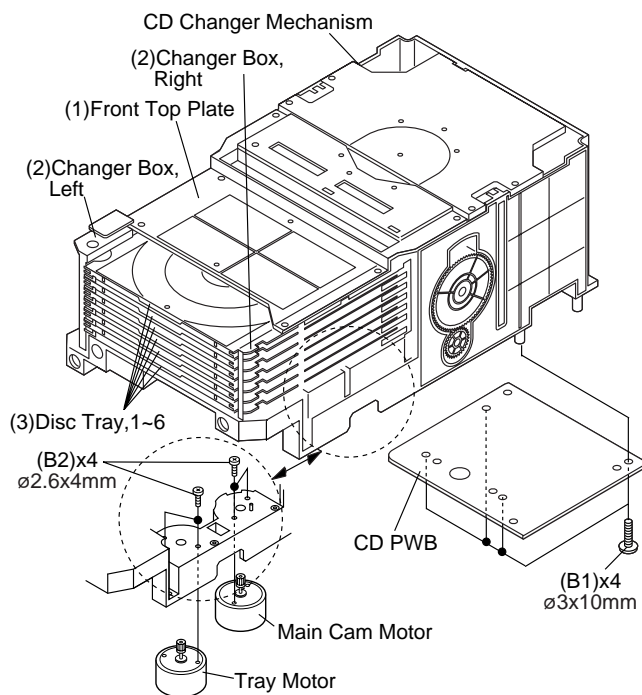


Figure 12-3

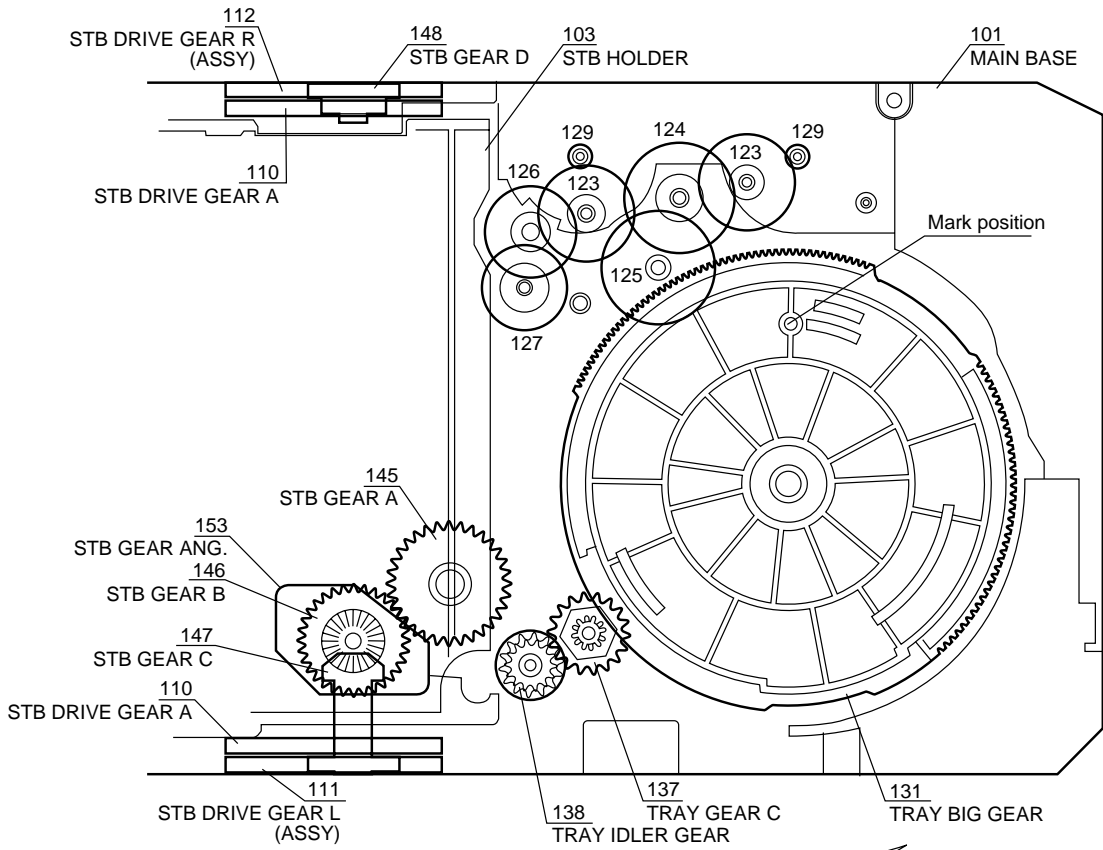
## CD CHANGER MECHANISM MAIN BASE PARTS ASSEMBLING/ADJUSTING PROCEDURE

Work content	Applied part No.	Assembly fig. No.	Remarks
1. Motor assembly (X 2) mounting (screw x 4)	101/129	Fig.14	
2. MT idle gear mounting (screw x 1)	125	Fig.14	
3. MT system gear assembly	123/124/126/127	Fig.14	
4. STB/tray drive system gear and others assembling/ mounting (screw X 3)	137/138/145/146 (153)/147/148	Fig.14	
5. Tray big gear assembly	131	Fig.14	Gear positioning
6. T.M SW PWB mounting (screw x 3)		Fig.15	
7. STB holder assembling	103	Fig.14	
8. STB drive gear L/R assembly mounting (screw x 2)	111 (110)/112 (110)	Fig.14	
9. Tray joint gear R/tray drive gear R assembling	134/136	Fig.15	Gear positioning
10. Tray gear A/B assembling	132/133	Fig.15	Gear positioning
11. Lift gear B/C assembling	143/144	Fig.16	Gear positioning
12. MT idler gear F assembling, mode big gear mounting (screw x 1)	128/142	Fig.16	
13. Change box R mounting (screw x 4)	104	Fig.16	
14. Lift gear A assembling	142	Fig.16	Gear positioning
15. Change box L assembly mounting (screw x 4)	102/130/135	Fig.17	
16. Lift cam assembling (shaft inserting)	144	Fig.17	Gear positioning
17. STB holder height adjusting		Fig.18	Check/adjustment
18. Top plate F/disc OB LEV. mounting (screw x 6)	180	Fig.18	
19. Trays 1 - 6 assembling	191/192/193/194/195/196	Fig.19	
20. Top plate R mounting (screw x 6)		-	

### CD CHANGER MECHANISM PARTS LIST

No.	Part name
101	MAIN BASE
102	CHANGE BOX L
103	STB HOLDER
104	CHANGE BOX R
110	STB DRIVE GEAR A
111	STB DRIVE GEAR L
112	STB DRIVE GEAR R
120	STABILIZER FH
123	MT IDLER GEAR A
124	MT IDLER GEAR B
125	MT IDLER GEAR C
126	MT IDLER GEAR D
127	MT IDLER GEAR E
128	MT IDLER GEAR F
129	MOTOR GEAR
130	TRAY DRIVE GEAR F
131	TRAY BIG GEAR
132	TRAY GEAR A
133	TRAY GEAR B
134	TRAY DRIVE GEAR R
135	TRAY JOINT GEAR F
136	TRAY JOINT GEAR R
137	TRAY GEAR C
138	TRAY IDLER GEAR

No.	Part name
140	LIFT CAM
141	MODE BIG GEAR
142	LIFT GEAR A
143	LIFT GEAR B
144	LIFT GEAR C
145	STB GEAR A
146	STB GEAR B
147	STB GEAR C
148	STB GEAR D
150	LIFT LEVER
151	TRAY LOCK LEVER
152	DISC OB LEVER
153	STB GEAR ANG.
180	TOP PLATE F
181	TOP PLATE R
191	TRAY T1
192	TRAY T2
193	TRAY T3
194	TRAY T4
195	TRAY T5
196	TRAY T6



After assembly TRAY BIG GEAR, turn it in the arrow direction.

TRAY BIG GEAR ASSEMBLING POSITION

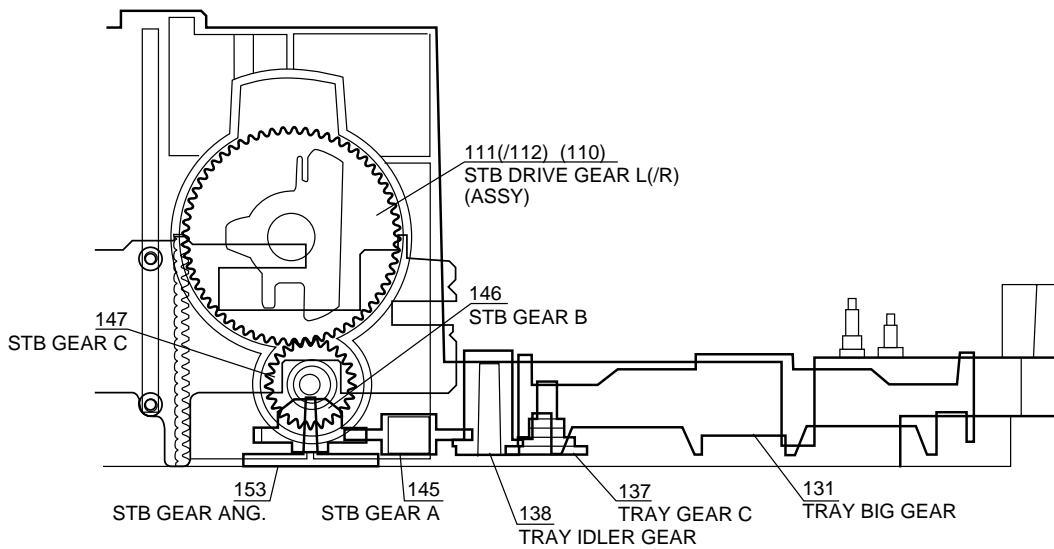


Figure 14



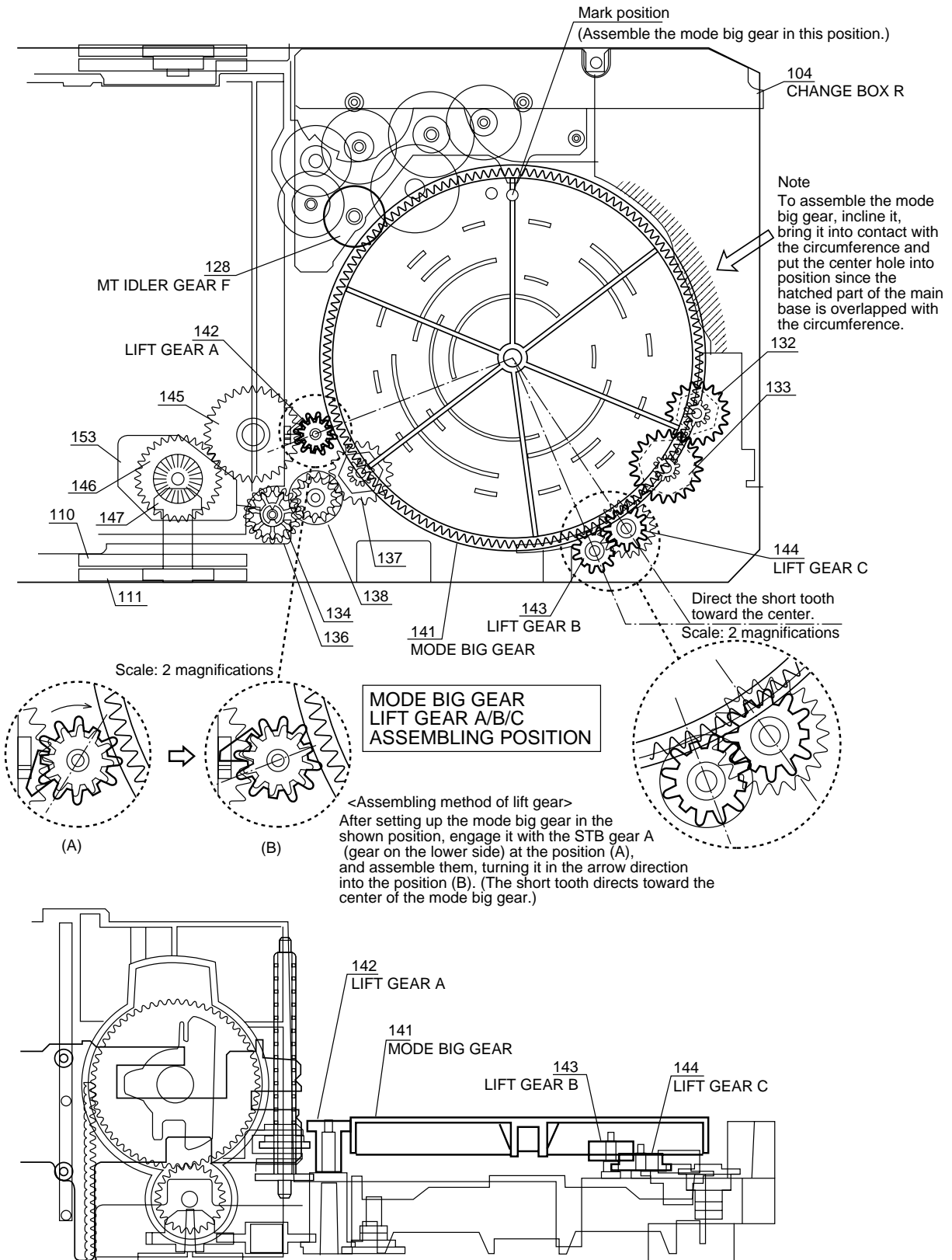


Figure 16



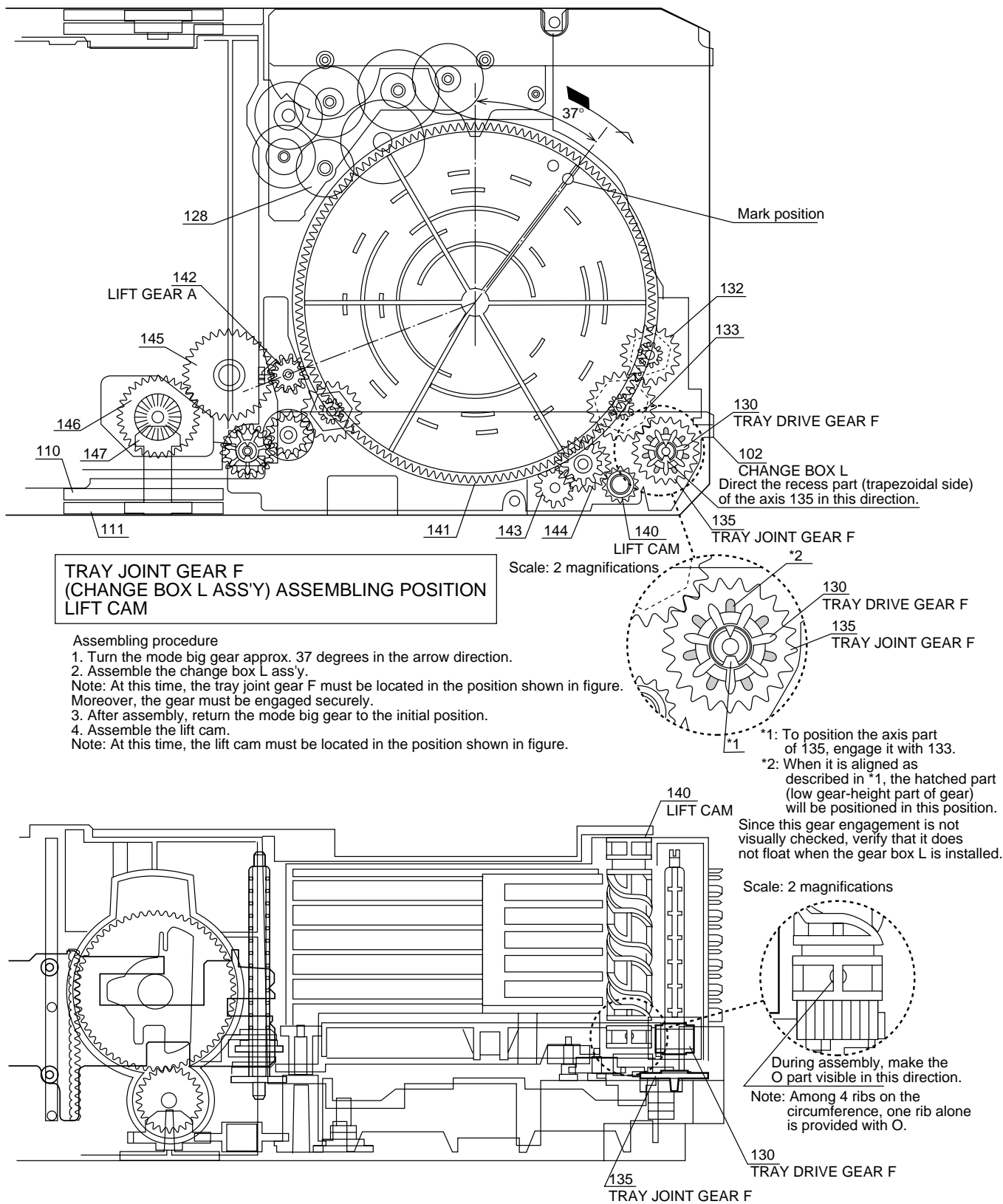
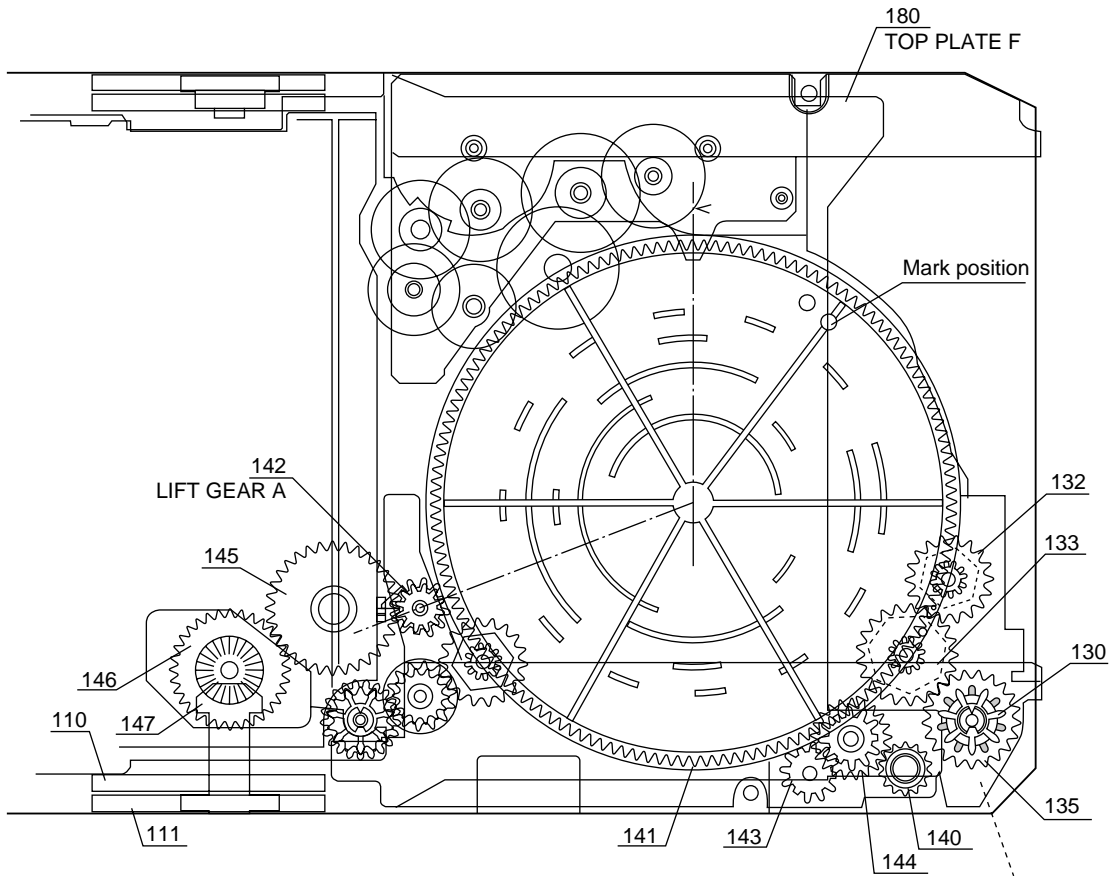


Figure 17



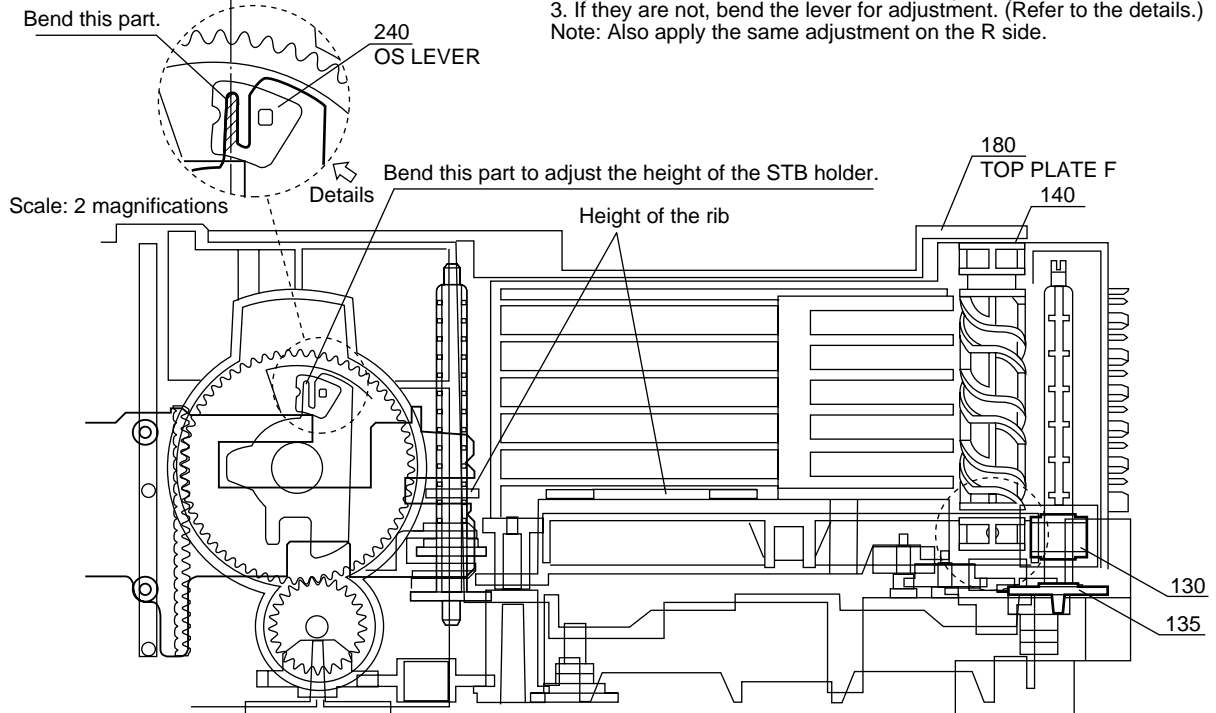
**STB HOLDER HEIGHT ADJUSTING METHOD**

When the height of STB holder is low,  
(Increase the clearance.)

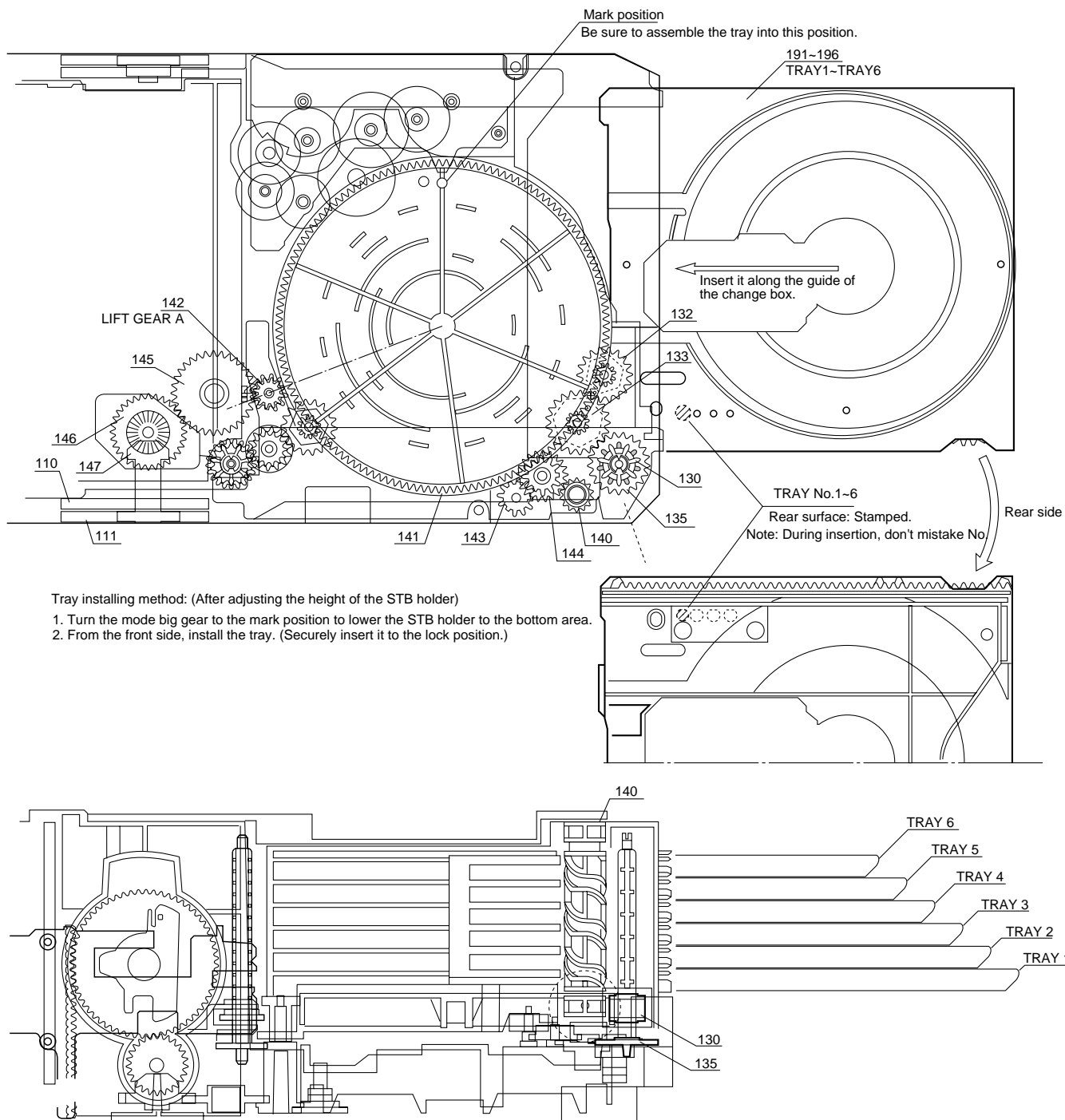
When the height of STB holder is high,  
(Decrease the clearance.)

**Adjusting procedure**

1. Turn the mode big gear approx. 37 degrees in the arrow direction.
  2. Viewing from the front side of the mechanism, verify that the guide ribs (CHANGE BOX L/R and STB HOLDER) of tray are as tall as each other.
  3. If they are not, bend the lever for adjustment. (Refer to the details.)
- Note: Also apply the same adjustment on the R side.



**Figure 18**



Tray installing method: (After adjusting the height of the STB holder)  
 1. Turn the mode big gear to the mark position to lower the STB holder to the bottom area.  
 2. From the front side, install the tray. (Securely insert it to the lock position.)

Figure 19

**Measure to be taken when a disc cannot be removed due to a mechanism trouble**

First, remove the mechanism unit section from the set, and check for the state of the disc.

(Remove the top plate R if necessary.)

**<State of the disc>**

- (1) When the disc is in the normal PLAY (chucking) position -> Try to eject the disc by turning the mode big gear/tray big gear manually.  
 \* At this time, be sure to adjust the tray's position (height).
- (2) When the disc is in the normal STOCK position -> Try to eject the disc by turning the tray big gear manually.  
 \* At this time, be sure to adjust the tray's position (height).
- (3) When the disc is not in the normal position -> The tray or disc is not in the normal position. (The tray or disc may catch somewhere.)



Remove the TOP PLATE F/DISC OB lever.  
 Unlock the tray lock lever and pull out the tray which is not caught.  
 Move the caught tray or disc and remove the disc.

In case of (1) and (2), the mechanism is normal (defective circuit parts, etc.). However, it may stop somewhere. This is the reason why you should try to turn the tray big gear first.

In case of (3), either of the big gears does not turn.

## ADJUSTMENT

### MECHANISM SECTION

• **Driving Force Check**

Torque Meter	Specified Value
Play: TW-2412	Over 80 g

• **Torque Check**

Torque Meter	Specified Value
Play: TW-2111	30 to 60 g. cm
Fast forward: TW-2231	60 to 120 g.cm
Rewind: TW-2231	60 to 120 g.cm

• **Tape Speed**

Test Tape	Adjusting Point	Specified Value	Instrument Connection
MTT-111	Variable resistor in motor.	3,000 ±90 Hz	Speaker terminal

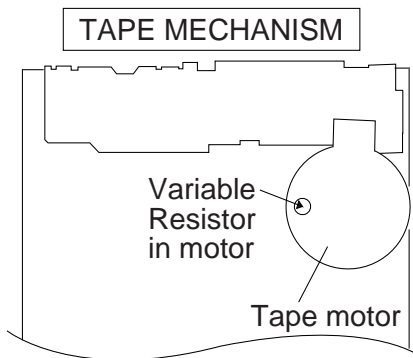


Figure 20-1 ADJUSTMENT POINT

### TUNER SECTION

fL: Low-range frequency  
fH: High-range frequency

• **AM IF/RF**

Signal generator: 400 Hz, 30%, AM modulated

Frequency	Frequency	Display	Setting/ Adjusting Parts	Instrument Connection
AM IF	450 kHz	1,720 kHz	T351	*1
AM Band Coverage	—	530 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	T302	*1

\*1. Input: Antenna Output: Speaker Terminal

\*2. Input: Antenna Output: TP301

• **FM RF**

Signal generator: 1 kHz, 75 kHz dev., FM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Parts	Instrument Connection
FM Band Coverage	—	87.50 MHz	(fL): T311 1.3 ± 50mV	*1
FM RF	98.00 MHz (10~30 dB)	98.0 MHz	L312	*2

\*1. Input: Antenna Output: TP301

\*2. Input: Antenna Output: Speaker Terminal

• **FM Mute Level (FM ST MODE)**

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Frequency	Display	Adjusting Parts	Instrument Connection
98.00 MHz (26 dBμV)	98.00 MHz	VR351*1	Input: CNP303 Output: Speaker Terminal

\*1. Adjust so that an output signal appears.

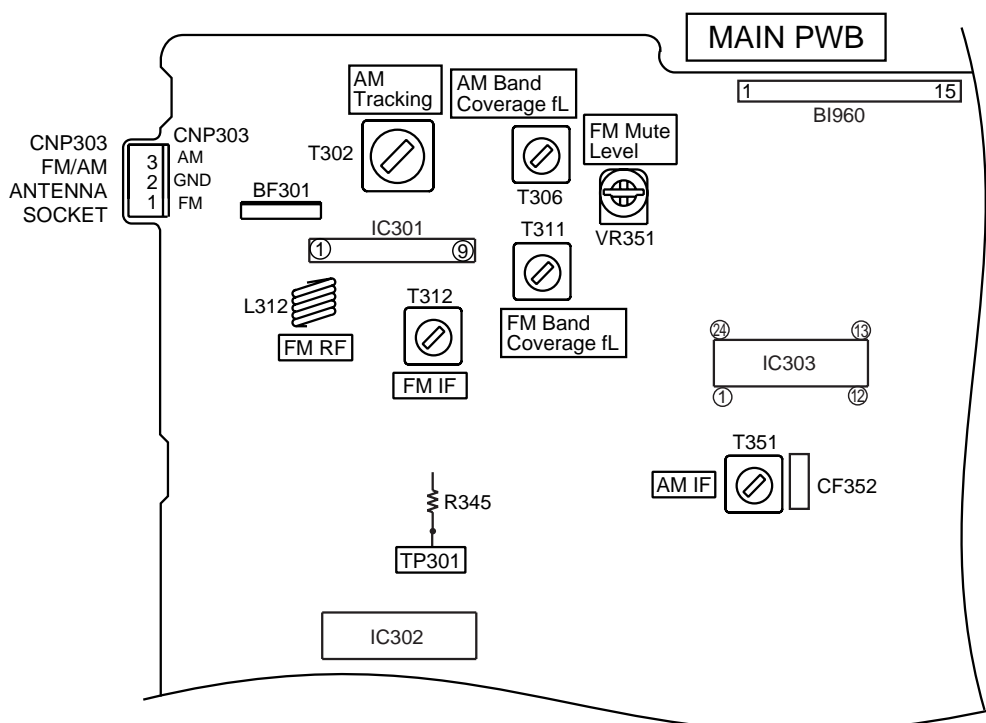


Figure 20-2 ADJUSTMENT POINTS

## TEST MODE

### Outline

While the unit is turned off, press the POWER key while holding down the VOLUME-DOWN and PANEL OP/CL keys to enter the test mode selection mode. Then, the unit is started, the panel is opened, and the microcomputer's version/destination/span is displayed. If the following data is entered from the keyboard while in the test mode selection mode, the unit directly enters the specified test mode. This operation is applied to the main unit's keys only.

Item	Type	Character display										Note				
		Auxiliary display	1	2	3	4	5	6	7	8	:		9	10	Auxiliary display	
Version•Destination			V		*	•	*									Left adjust in the first line
					Number					:	Span					

Destination

Example: V1. 1\_W:\_9

In the destination display, a destination code (H/W/U/J) is displayed. For the span display, "9" means 9 kHz/50 kHz, and "10" means 10/100 kHz. All pictures will disappear except the characters.

By pressing the specific key, you can enter the test mode whose functions are as follows:

	Menu display	Shortcut Key	Model	
System	INITIAL	CD1 PLAY	ALL	Shipping status setting
	SOFT_RESET	CD2 PLAY	ALL	Soft rest
CD	CD_TEST	CD1 EJECT	ALL	CD test
Tuner	TUN_PRESET	CD4 EJECT	ALL	Tuner test frequency preset
	TUNER_TEST	CD5 EJECT	ALL	Tuner test

### Outline of Test Mode

	Name	Description
1	Shipping status setting	Sets up the unit for shipping.
2	Soft set setting	Initializes the unit.
3	CD test	Performs tests such as the CD mechanism test, hardware test, and constant setting test.
4	Tuner test frequency preset	Presets the test frequency.
5	Tuner preset clear setting	Clears all presets.

### Shipping status setting test mode

Purpose: To Set up the unit for shipping.

Function: To check the unit for a CD disc, and initialize all functions.

Operation: While checking for a CD disc, the test name (INITIAL) is displayed.

The initial operation for a CD disc is performed. In this operation, the unit is checked for a CD disc.

If a CD disc is found in the unit during the initial operation, "CD\* OPEN" is displayed, the tray is opened (only for the disc found first), and the unit is turned on via the CD function normally.

If no CD disc is found, the CD mechanism is placed in the chucking status.

After the unit is checked for discs, all settings are initialized, "FINISH" is displayed as in the sample display, and data entry is prohibited including data to turn on or off the unit.

### To exit the test mode

The unit returns to the normal operation through reset entry (hard).

### Table Character display for test mode 1

Item	Type	Character display										Note				
		Auxiliary display	1	2	3	4	5	6	7	8	:		9	10	Auxiliary display	
Test mode name			I	N	I	T	I	A	L							
CD disc inserted	Operation		C	D	*		O	P	E	N						
Set-Up Complete	Function		F	I	N	I	S	H								

In the destination display, a destination code is displayed. For the span display, "9" means 9 kHz/50 kHz, and "10" means 10/100 kHz.

# CD-CH1000

## 2. Soft reset

Purpose: To initialize the unit.  
 Function: To initialize all functions.  
 Operation: "ALL CLEAR" is displayed, all functions are initialized, and the unit is turned on.

To exit the test mode

When the initialization through soft reset is complete, the unit is turned on.

**Table Character display for test mode 2**

Item	Type	Character display										Note		
		Auxiliary display	1	2	3	4	5	6	7	8	:		9	10
Reset operation display	Operation		A	L	L		C	L	E	A	R			

## 3. CD test mode (If this test mode is not activated, refer to CD troubleshooting on page 54.)

In the CD test mode, each step can be performed even if the LID-SW is off. However, if you cannot obtain a focus in step 3 or if other kind of error handling starts, you cannot proceed to the following steps. In error handling, press the POWER key to exit the test mode, or press the STOP key to prohibit operations other than returning to step 1.

### (1) Step 1 mode

In the CD test mode, the following display appears, CD initialization is performed, and you are prompted for data.  
 Reset operation display / Operation

"CD\_TEST"  
 After lighting up for one second



"T1\_\_\_\_\_0:00"

The keys you can press here and the resulting operations are as follows:

- "POWER" ..... The test mode is turned off, the power is turned off, and the unit is placed in the normal standby mode.
- "FWD" ..... While holding down this key, the pickup moves outward after returning to the innermost track.
- "REV" ..... While holding down this key, the pickup moves inward after returning to the innermost track.
- "PLAY" ..... Jumps to step 2.
- "STOP" ..... Cancelled.
- "TAPE REC" ..... Jumps to step 5.

\* While the pickup is moving to the innermost track in the initialization, none of the keys except POWER is accepted. When PU-IN SW ON cannot be detected in ten seconds, the unit stops the slide motor and shows the following error code. Then, you can press the POWER key to exit the test mode, or the STOP key to return to step 1. You cannot perform other operations.

"E--CD01"

### (2) Step 2 mode

When the "PLAY" key is pressed in the above mode, the laser is turned on. At this time, another operation must not be performed.

Display "T2\_\_\_\_\_0:00"

The keys you can press here and the resulting operations are as follows:

- "POWER" ..... The test mode is turned off, the power is turned off, and the unit is placed in the normal standby mode.
- "FWD" ..... While holding down this key, the pickup is moved outward.
- "REV" ..... While holding down this key, the pickup is moved inward.
- "PLAY" ..... Jumps to step 2.
- "STOP" ..... Returns to step 1.
- "TAPE REC" ..... Jumps to step 5.

**(3) Step 3 mode**

Performs focus search and turns on the focus servo.  
Focus search is repeated until it is brought into focus.

Display "T3\_\_\_\_\_0:00"

The keys you can press here and the resulting operations are as follows:  
 "POWER" ..... The test mode is turned off, the power is turned off, and the unit is placed in the normal standby mode.  
 "FF/FWD" ..... While holding down this key, the pickup is moved outward.  
 "REW/REV" ..... While holding down this key, the pickup is moved inward.  
 "PLAY" ..... Jumping to step 4 when a focus is obtained. Otherwise, data entry is prohibited.  
 "STOP" ..... Returns to step 1.  
 "TAPE REC" ..... Jumps to step 5.

\* You should return to step 1 if it is out of focus after bringing it into focus.

**(4) Step 4 mode**

Rotate a disc.

Displayed string: "T4\_\_\_\_\_0:00"

The clock display should always be "0:00".

The keys you can press here and the resulting operations are as follows:  
 "POWER" ..... The test mode is turned off, the power is turned off, and the unit is placed in the normal standby mode.  
 "FF/FWD" ..... While holding down this key, the pickup is moved outward.  
 "REW/REV" ..... While holding down this key, the pickup is moved inward.  
 "PLAY" ..... Jumps to step 5.  
 "STOP" ..... Returns to step 1.  
 "TAPE REC" ..... Jumps to step 5.

\* You should return to step 1 if it is out of focus.

**(5) Step 5 mode**

Start playback. When the pickup reaches the outermost track, it does not stop. The LCD screen shows the replay time elapsed as in the normal CD playback.

Display "T5\_\_\_\_\_0:00"

The keys you can press here and the resulting operations are as follows:  
 "POWER" ..... The test mode is turned off, the power is turned off, and the unit is placed in the normal standby mode.  
 "FWD" ..... While holding down this key, the pickup is moved outward.  
 "REV" ..... While holding down this key, the pickup is moved inward.  
 "PLAY" ..... Canceled.  
 "STOP" ..... Returns to step 1.

\* You should return to step 1 if it is out of focus.

**Notes:**

- In the test mode, TOC IL is not performed.
- Only the keys for adjusting the volume are accepted except the keys described

**4. Tuner test frequency preset**

Purpose: To preset a test frequency for an in-factory test.

Function: To preset each preset number to the band and frequency shown in Table 24 based on the initial setting for the destination.

Operation: To preset the band and frequency shown in the table below and turn the unit on with the following setting.

Function	Tuner
Band	FM monaural
Tuning mode	Preset call selection
Call preset number	Preset number 1 frequency
Band's last preset channel	See Table 24
X-BASS	Off
Preset equalizer	FLAT

For other functions, the value which was set when the unit was turned off last time is valid (last state).

To exit the test mode

After the frequency is preset and the set-up is done, the unit is turned on and normal operations start.

# CD-CH1000

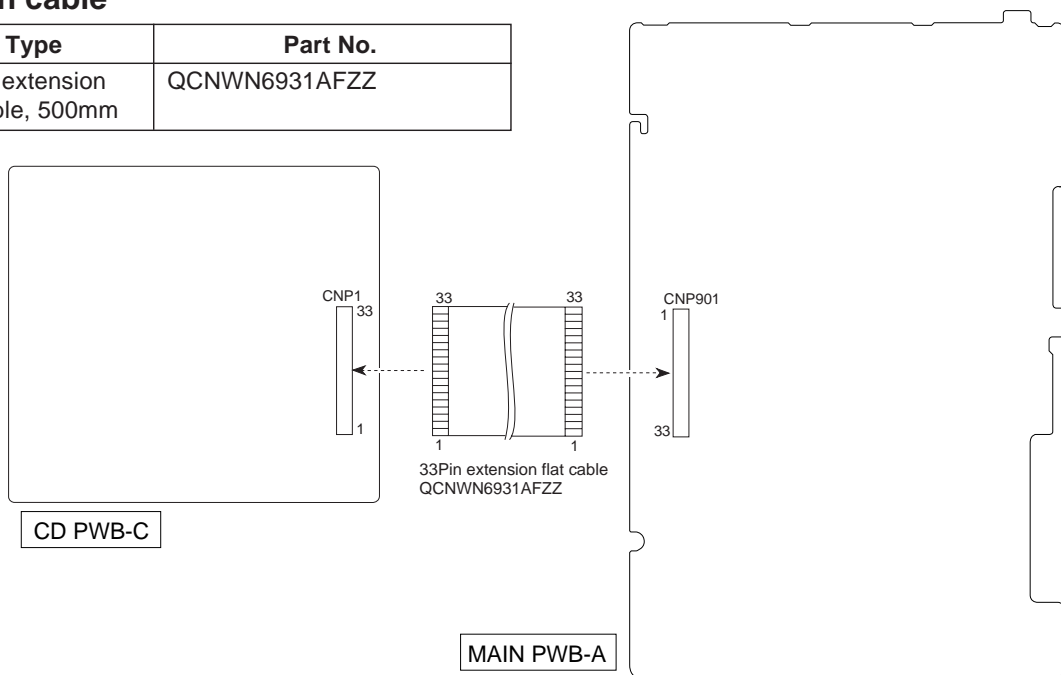
**Table 24. TEST-TuSet preset frequencies**

CH	BAND	U.S.A.
1 %	FM	FM 87.5 MHz
2		FM108.0 MHz
3		FM 90.0 MHz
4		FM106.0 MHz
5		FM 98.0 MHz
6 %	AM	AM 530 kHz
7		AM1720 kHz
8		AM 600 kHz
9		AM1400 kHz
10		AM 990 kHz
11-40	_____	_____

Unused channels are indicated with "\_".  
 '%' indicates the last channel for each band.  
 All FM bands are preset to FM monaural.

## Extension cable

	Type	Part No.
1.	33 Pin extension flat cable, 500mm	QCNWN6931AFZZ



**Figure 24**

## ERROR MESSAGE LIST

### CD error messages

Errors	Messages	Remarks
Pickup mechanism error	E-CD01	Slide motor operation error (PU-IN SW detection NG)
Tray error	E-CD20	Tray open/close operation error
Changer mechanism error	E-CD10	Changer mechanism operation error

### TUNER error messages



Errors	Messages	Remarks
Relation to RDS EON reception impossible	WEAK SIG	When switching to an EON station, it cannot be received due to weak signal.
PLL UN LOCK	Frequency indicator flashing	Reception error or PLL control error

### TAPE error messages

Errors	Messages	Remarks
You tried to record on a tape removing the recording prevention tabs.	'PROTECTED'	
TAPE mechanism error	E-TA01	Mechanism initialize abnormal end



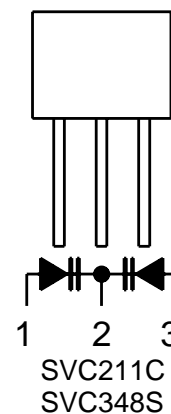
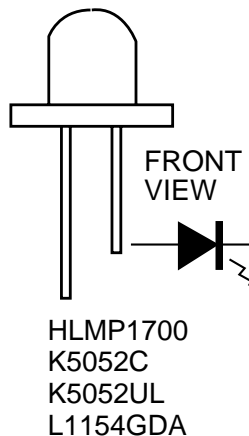
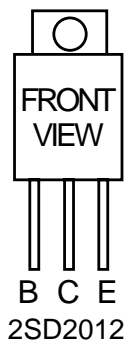
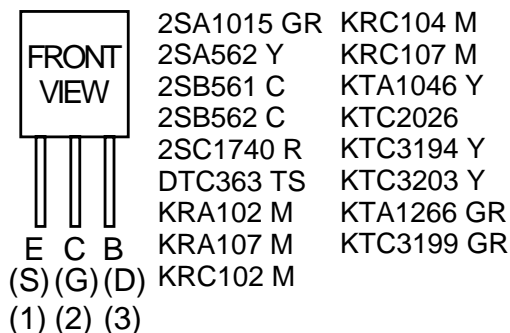
## NOTES ON SCHEMATIC DIAGRAM

- Resistor:  
To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with "Fusible" is a fuse type.
- Capacitor:  
To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage" is used.  
(CH), (TH), (RH), (UJ): Temperature compensation  
(ML): Mylar type  
(P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,  
( ) indicates AM  
< > indicates FM stereo
  2. In the main section, a tape is being played back.
  3. In the deck section, a tape is being played back.  
( ) indicates the record state.
  4. In the power section, a tape is being played back.
  5. In the CD section, the CD is stopped.
- Parts marked with "△" (  ) (  ) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
NSW1	PICKUP IN	ON—OFF
SW701	POWER	ON—OFF
SW705	OPEN/CLOSE	ON—OFF
SW710	PANEL OPEN/CLOSE	ON—OFF
SW711	VOLUME DOWN	ON—OFF
SW712	VOLUME UP	ON—OFF
SW720	CD 1 EJECT	ON—OFF
SW721	CD 2 EJECT	ON—OFF
SW722	CD 3 EJECT	ON—OFF
SW723	CD 4 EJECT	ON—OFF
SW724	CD 5 EJECT	ON—OFF
SW725	CD 6 EJECT	ON—OFF
SW730	CD 1 PLAY	ON—OFF
SW731	CD 2 PLAY	ON—OFF
SW732	CD 3 PLAY	ON—OFF
SW733	CD 4 PLAY	ON—OFF
SW734	CD 5 PLAY	ON—OFF
SW735	CD 6 PLAY	ON—OFF
SW750	RECORD PAUSE	ON—OFF
SW751	CLEAR	ON—OFF
SW752	MEMORY	ON—OFF
SW753	FAST REVERSE	ON—OFF
SW755	FAST FORWARD	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW756	PLAY/PAUSE	ON—OFF
SW758	STOP	ON—OFF
SW761	AUX	ON—OFF
SW762	TUNER	ON—OFF
SW763	TAPE	ON—OFF
SW764	CD	ON—OFF
SW770	PLAY MODE	ON—OFF
SW772	EQUALIZER MODE	ON—OFF
SW773	X-BASS	ON—OFF
SW774	DISPLAY	ON—OFF
SW776	MENU	ON—OFF
SW778	ENTER	ON—OFF
SWB101	DISC DETECT 1	ON—OFF
SWB102	DISC DETECT 2	ON—OFF
SWB103	DISC DETECT 3	ON—OFF
SWB104	MODE 1	ON—OFF
SWB105	MODE 2	ON—OFF
SWB106	MODE 3	ON—OFF
SWB107	MODE 4	ON—OFF
SWB108	MODE 5	ON—OFF
SWB109	TRAY 1	ON—OFF
SWB110	TRAY 2	ON—OFF

## TYPES OF TRANSISTOR AND LED



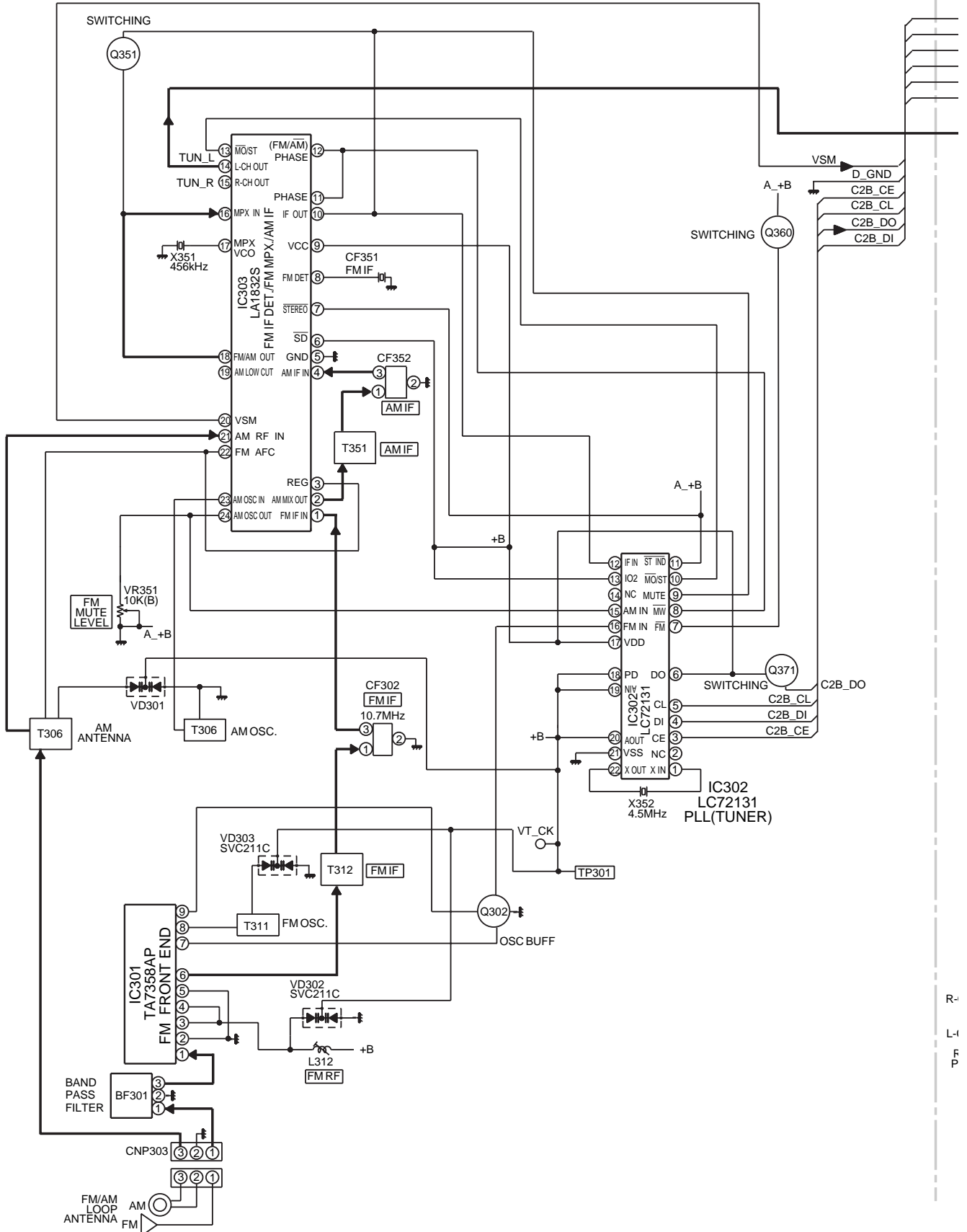


Figure 26 BLOCK DIAGRAM (1/6)

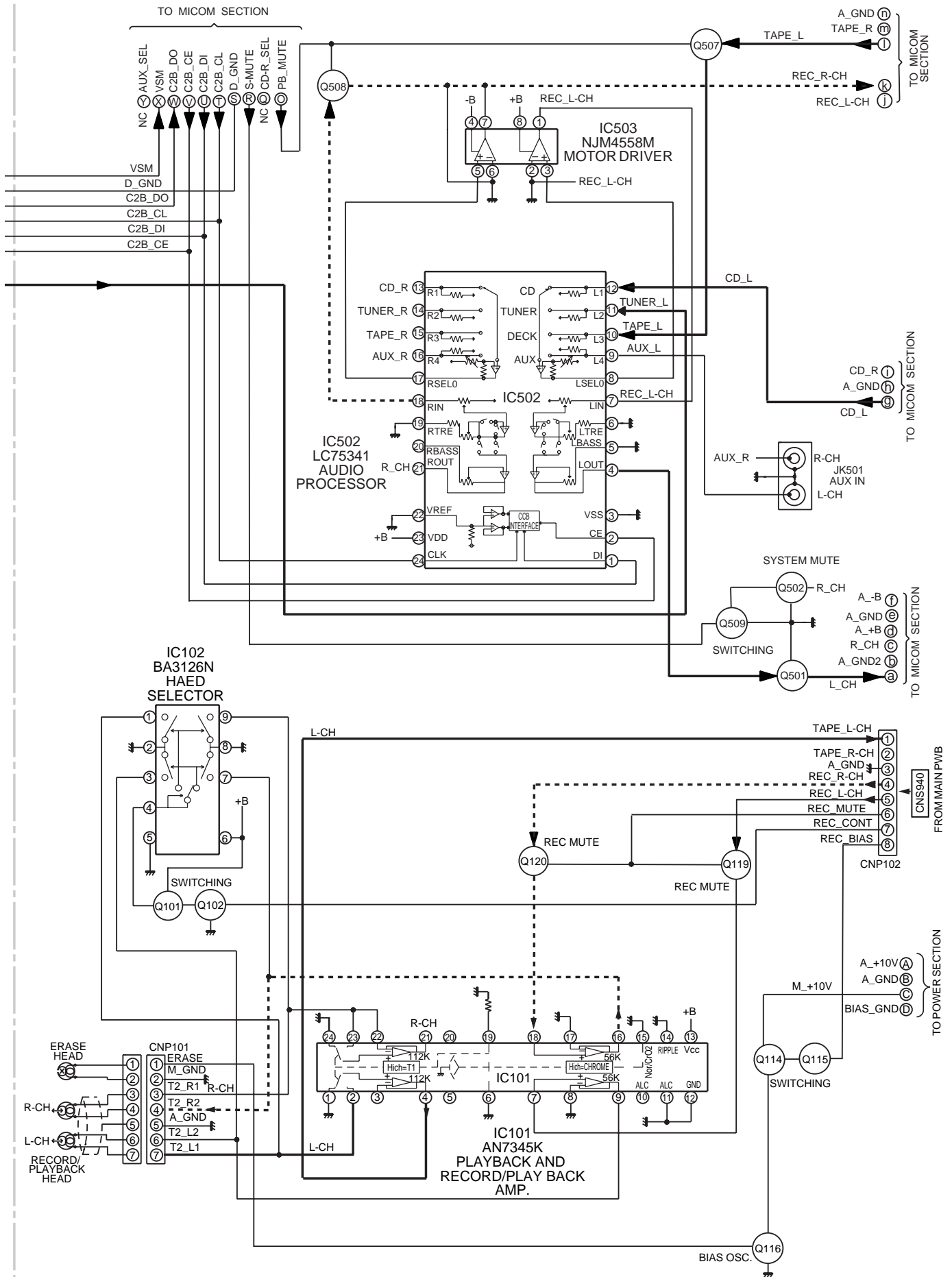


Figure 27 BLOCK DIAGRAM (2/6)

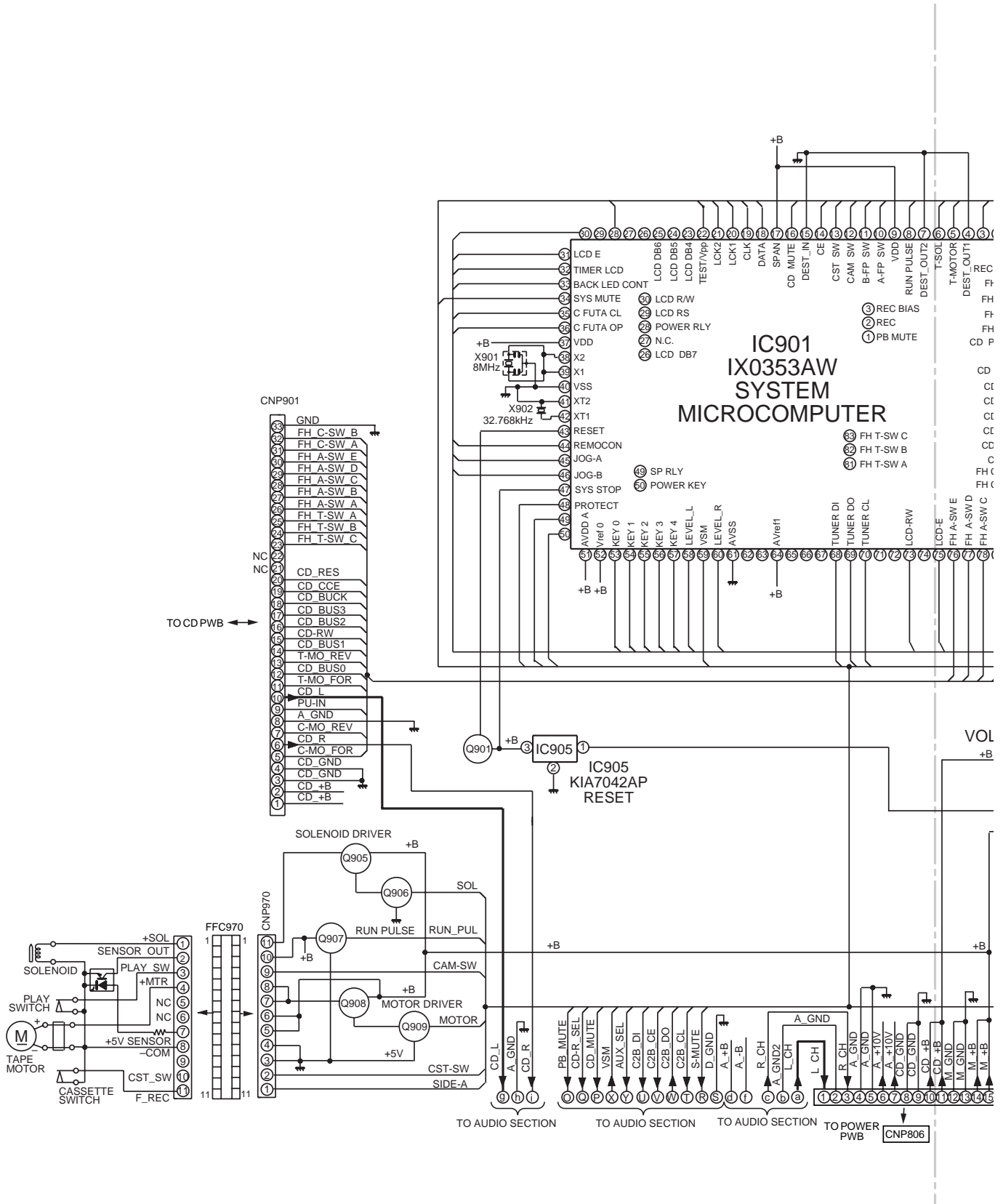


Figure 28 BLOCK DIAGRAM (3/6)

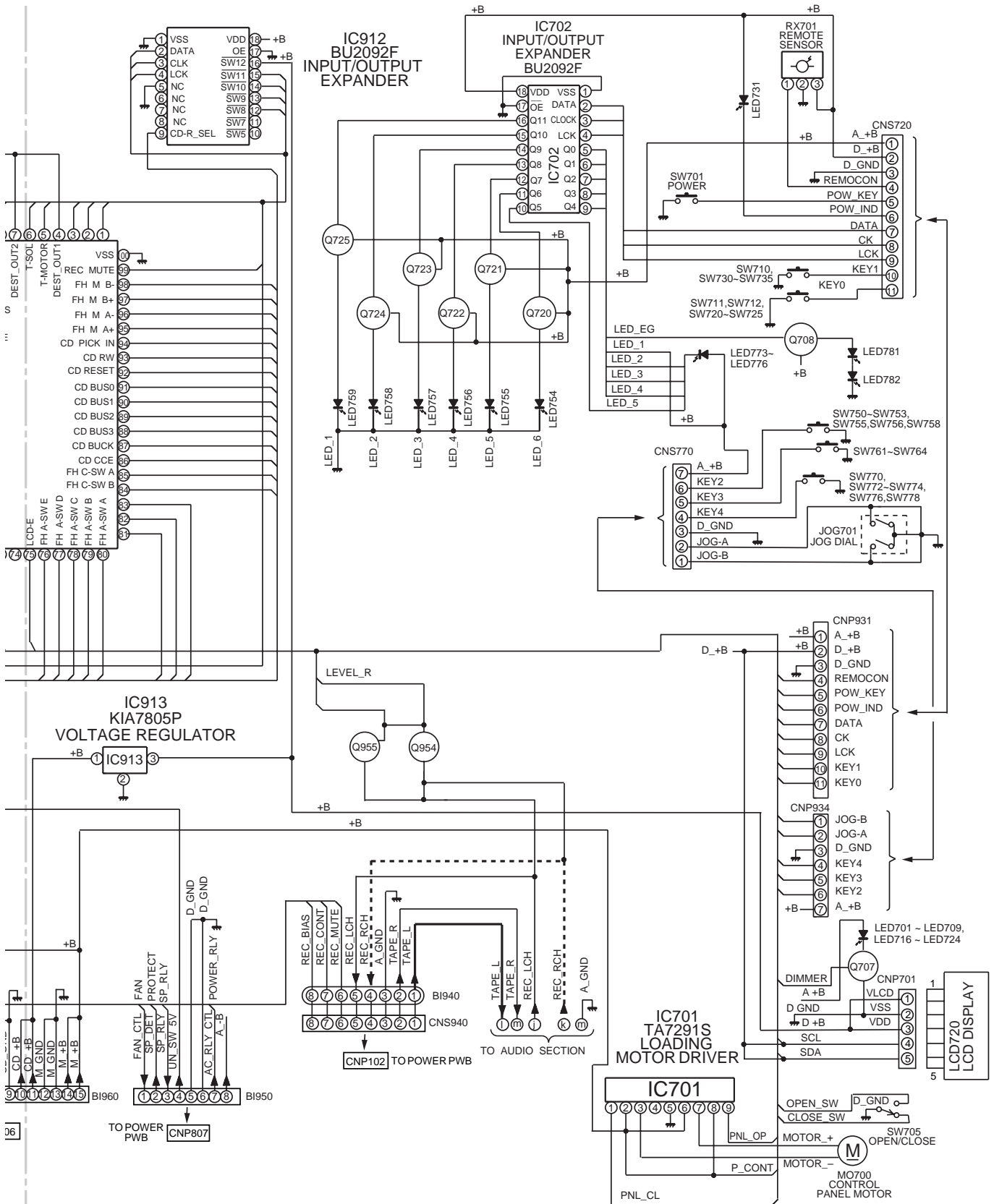


Figure 29 BLOCK DIAGRAM (4/6)

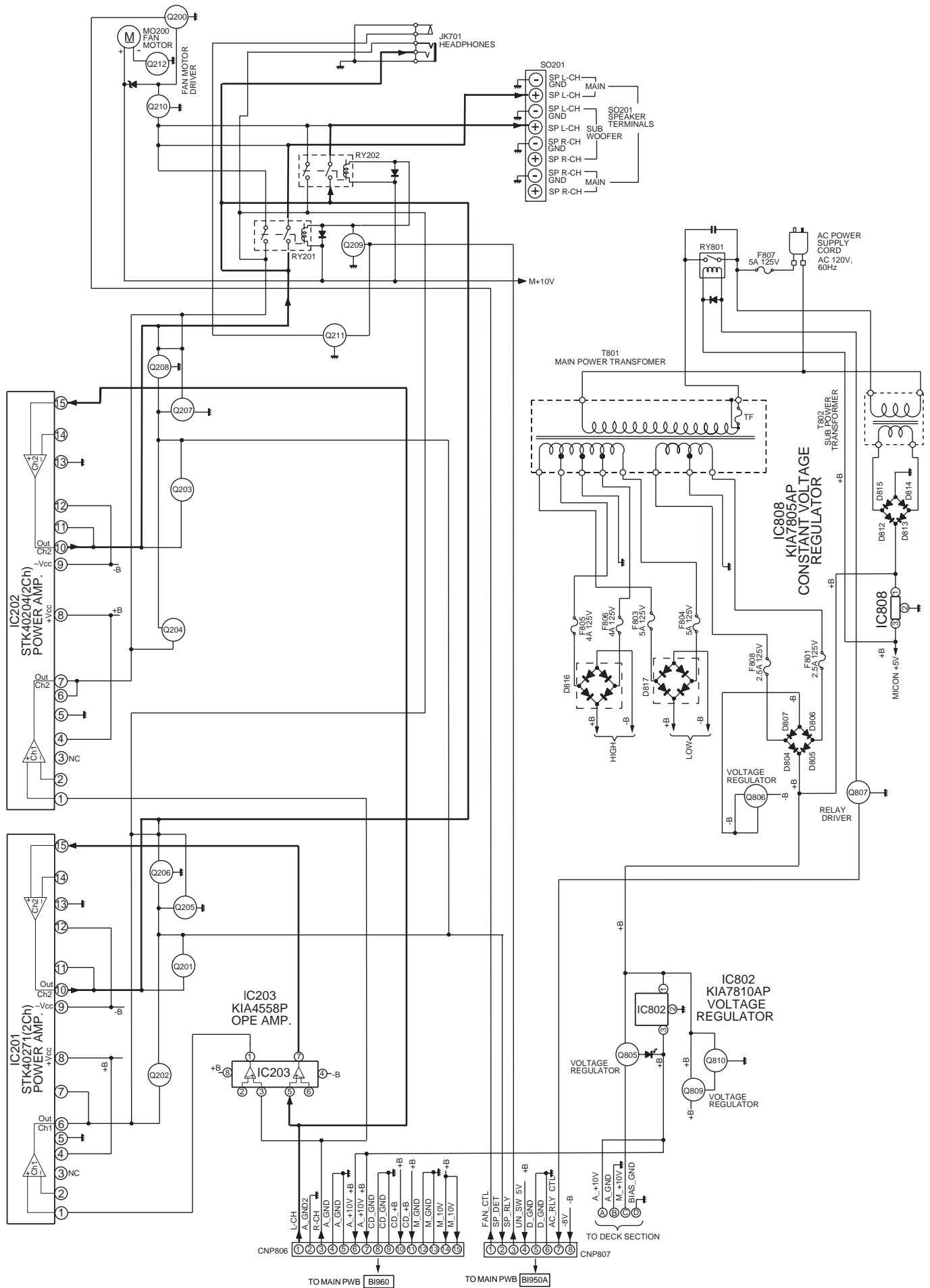


Figure 30 BLOCK DIAGRAM (5/6)

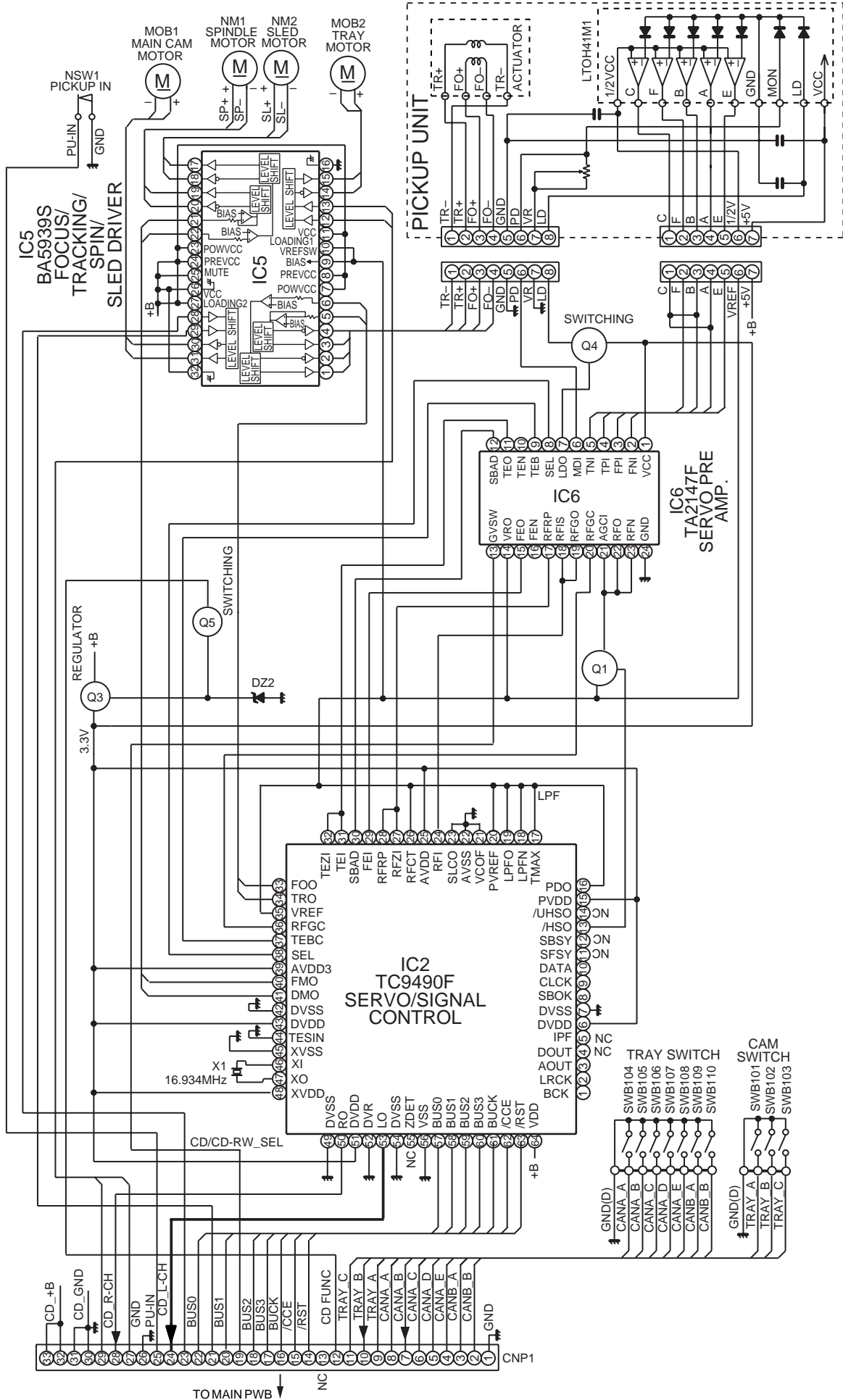
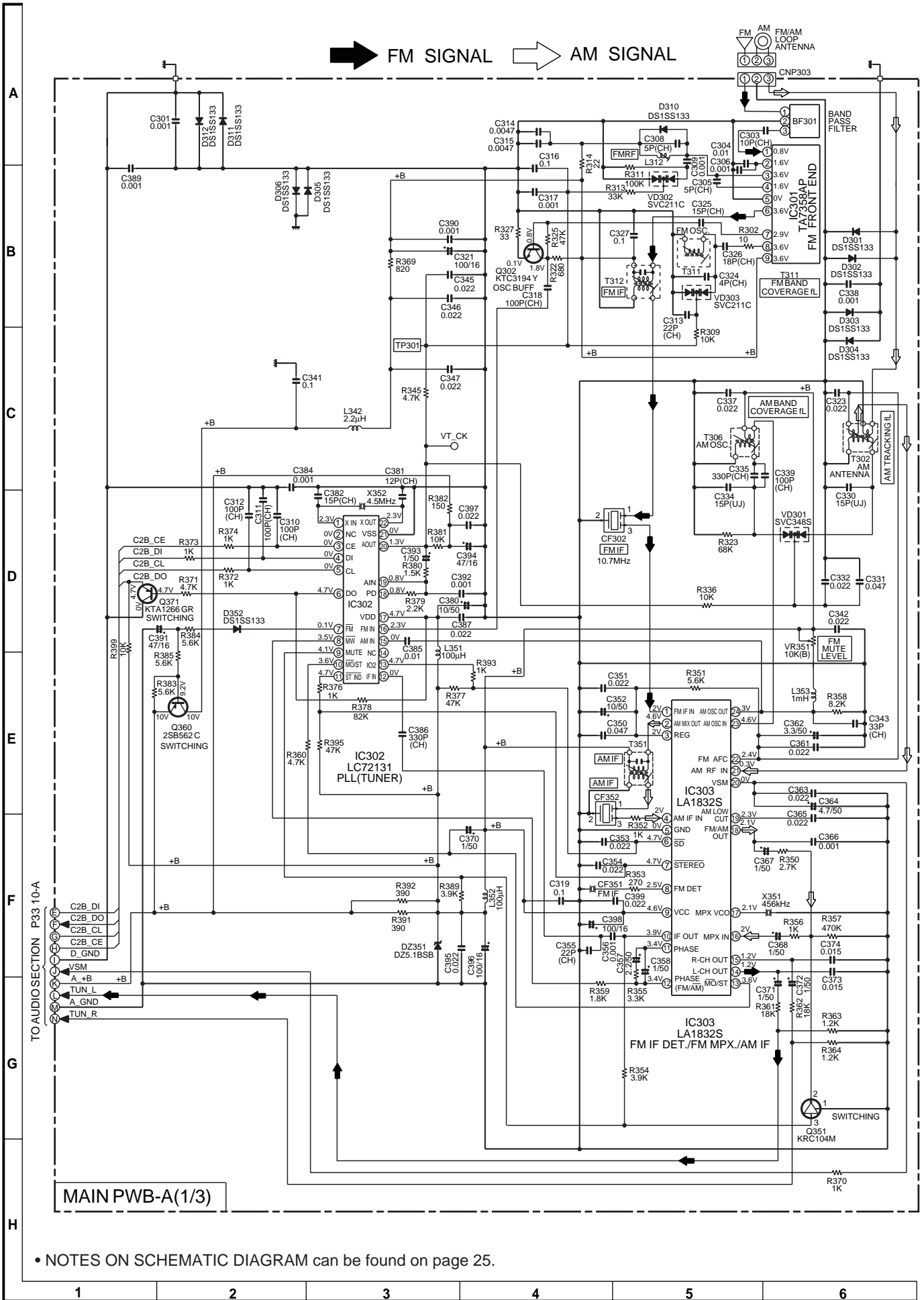


Figure 31 BLOCK DIAGRAM (6/6)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 25.

Figure 32 SCHEMATIC DIAGRAM (1/11)



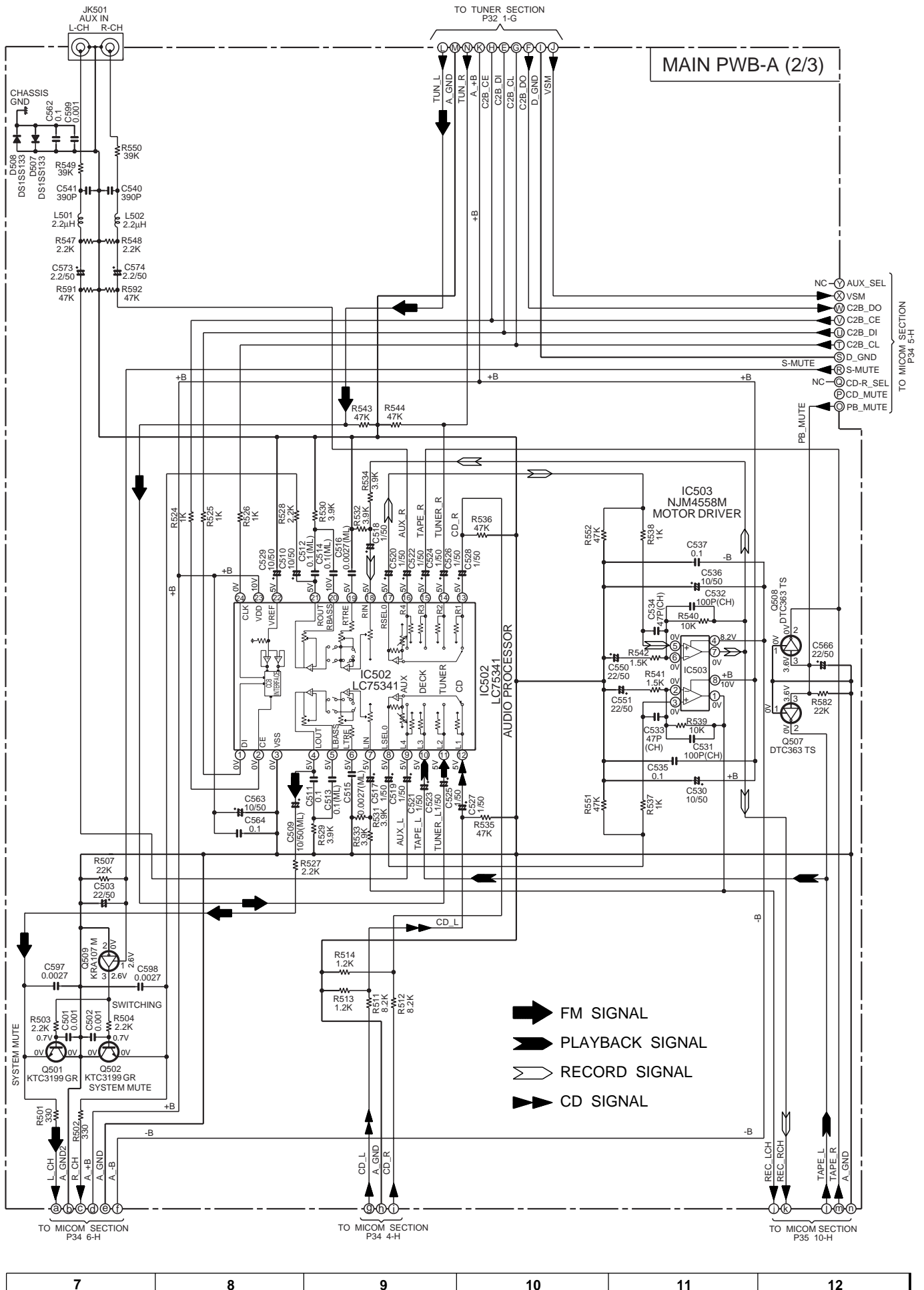


Figure 33 SCHEMATIC DIAGRAM (2/11)

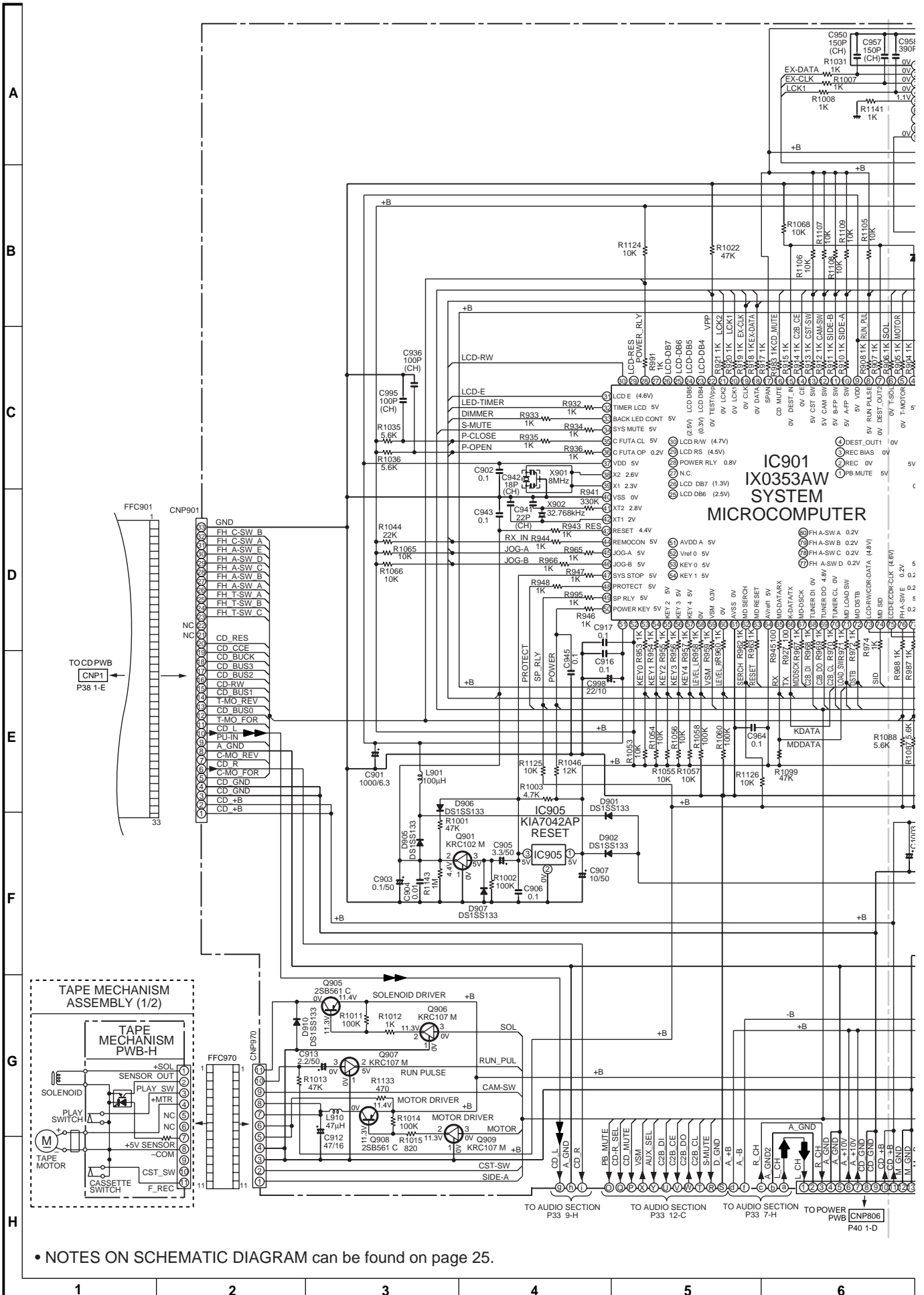
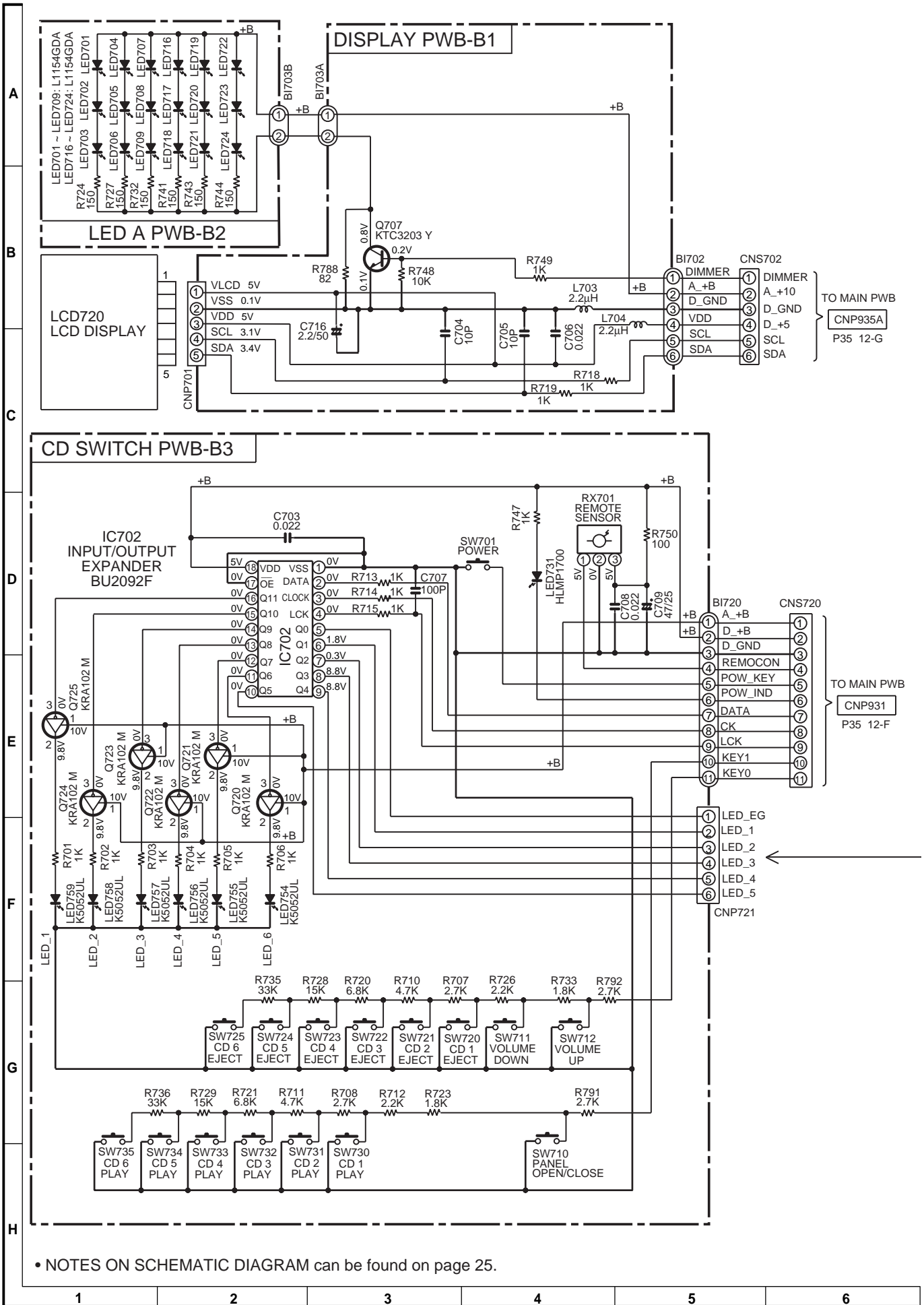


Figure 34 SCHEMATIC DIAGRAM (3/11)



CD-CH1000



• NOTES ON SCHEMATIC DIAGRAM can be found on page 25.

Figure 36 SCHEMATIC DIAGRAM (5/11)

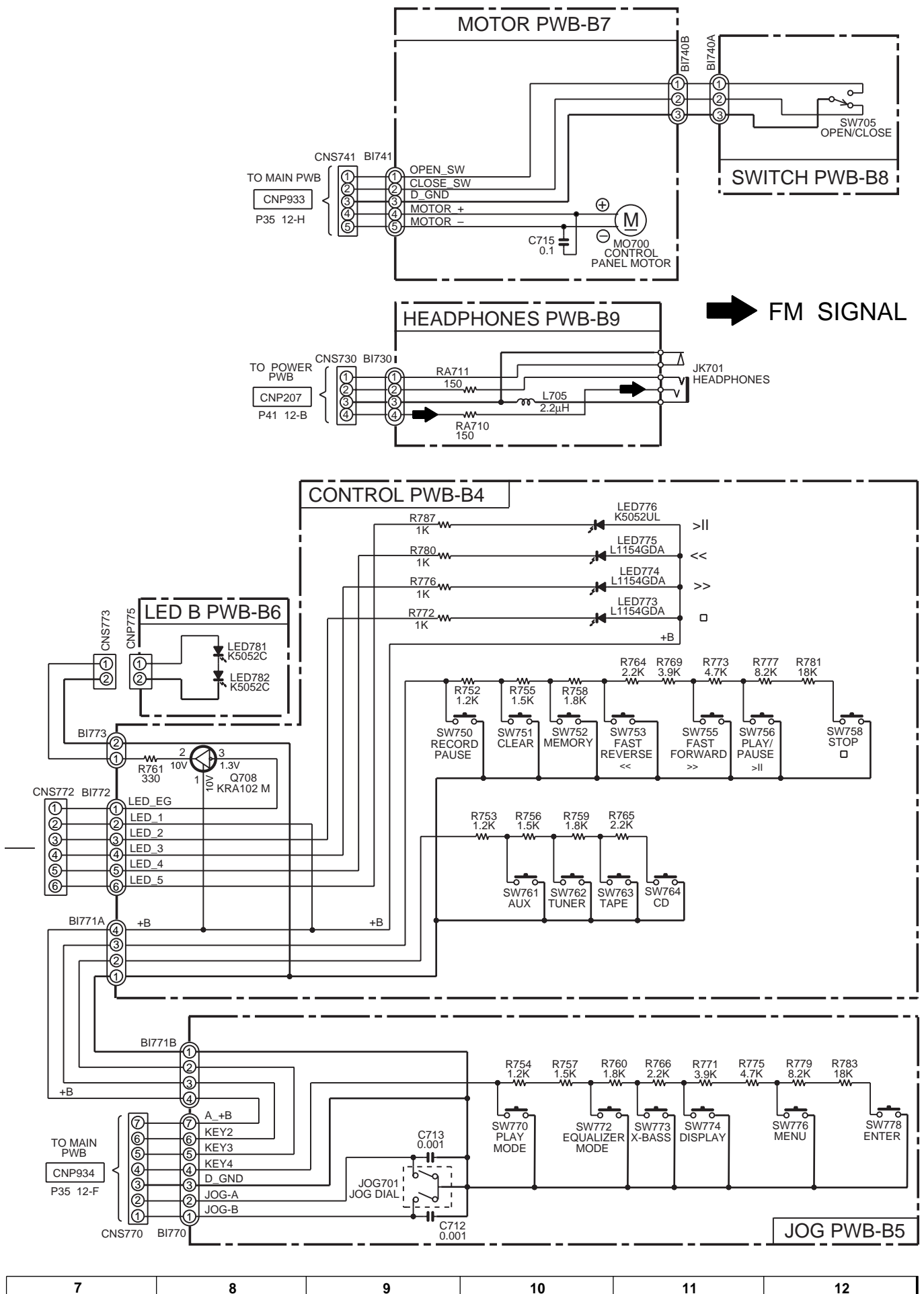
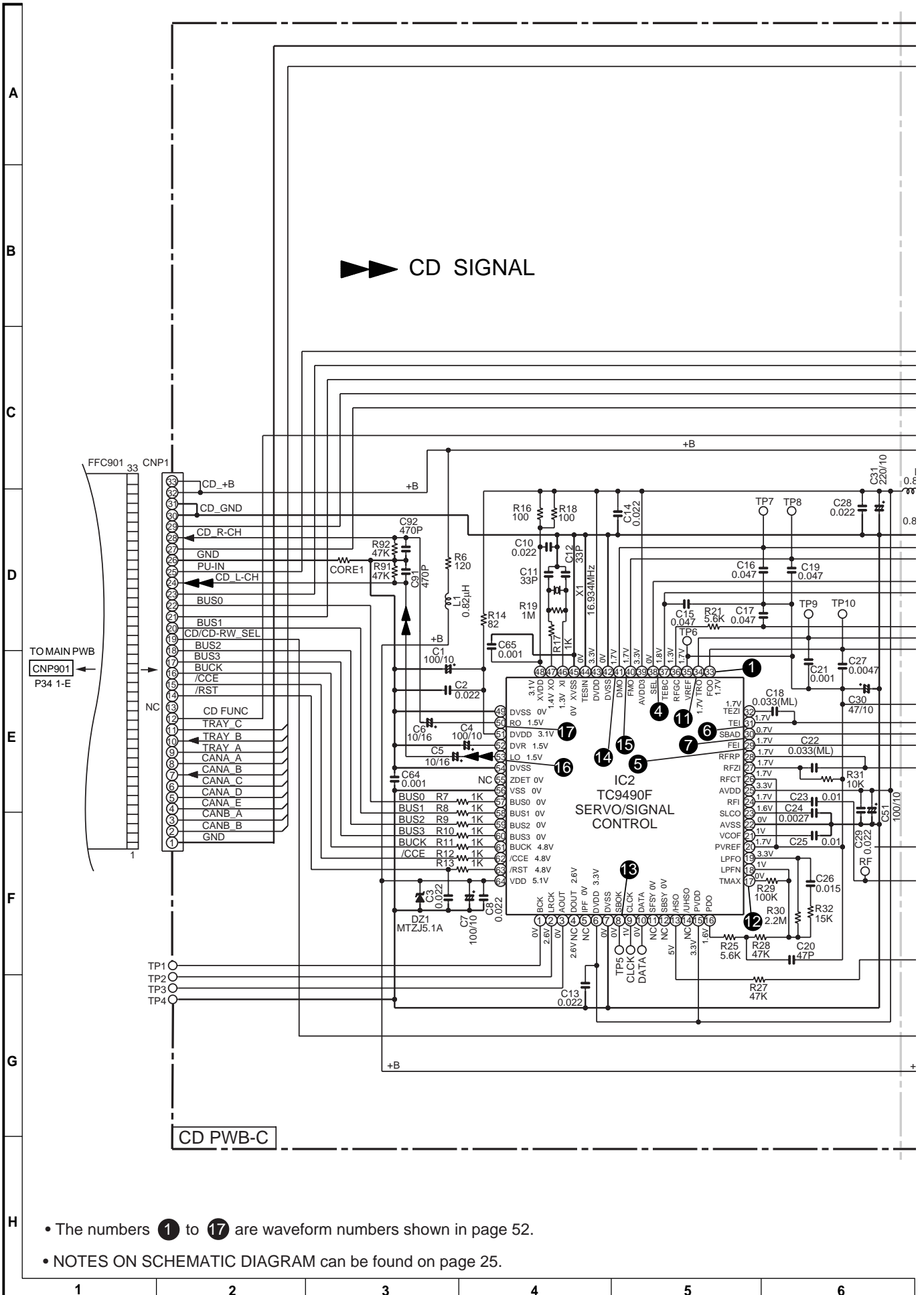


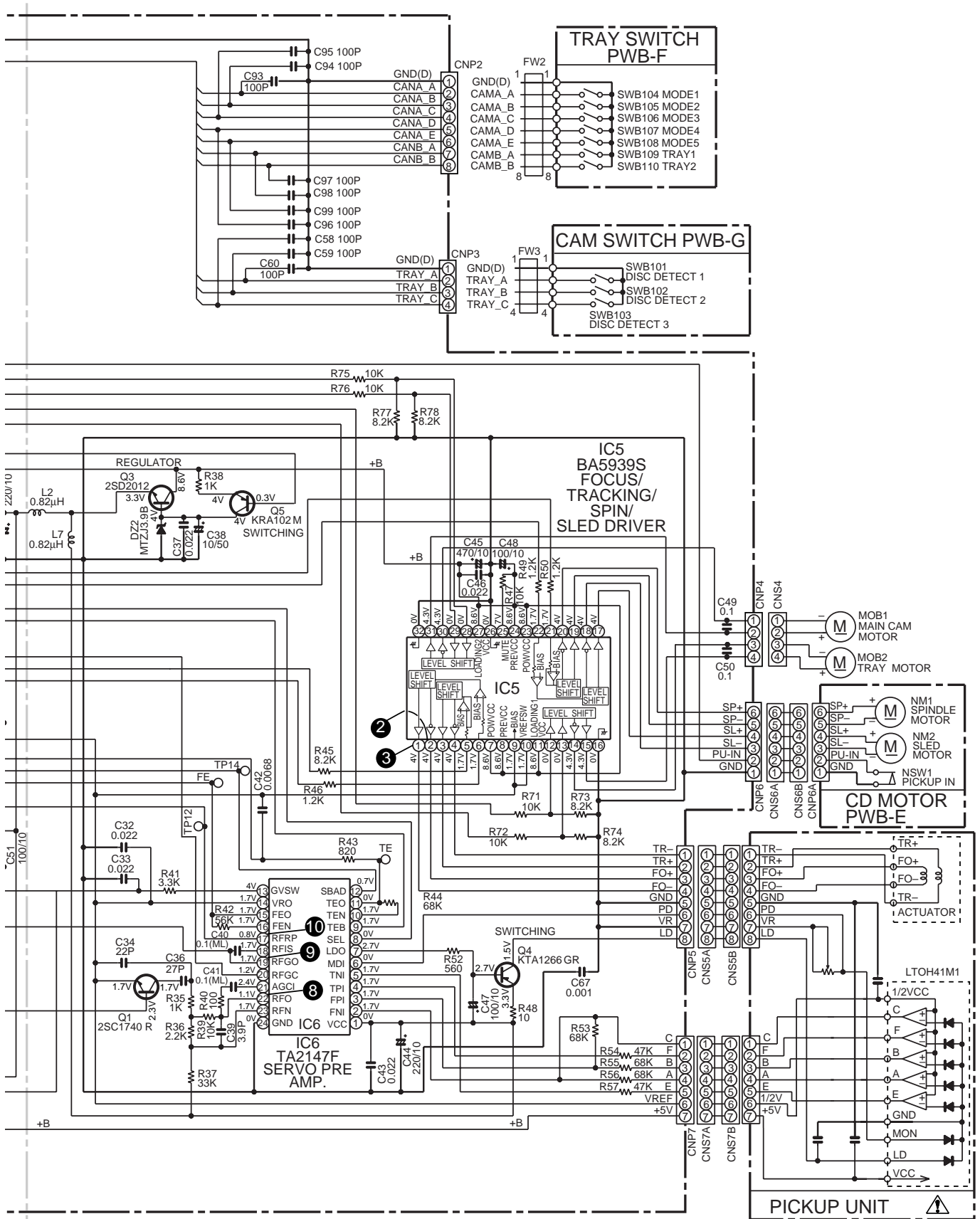
Figure 37 SCHEMATIC DIAGRAM (6/11)

CD-CH1000



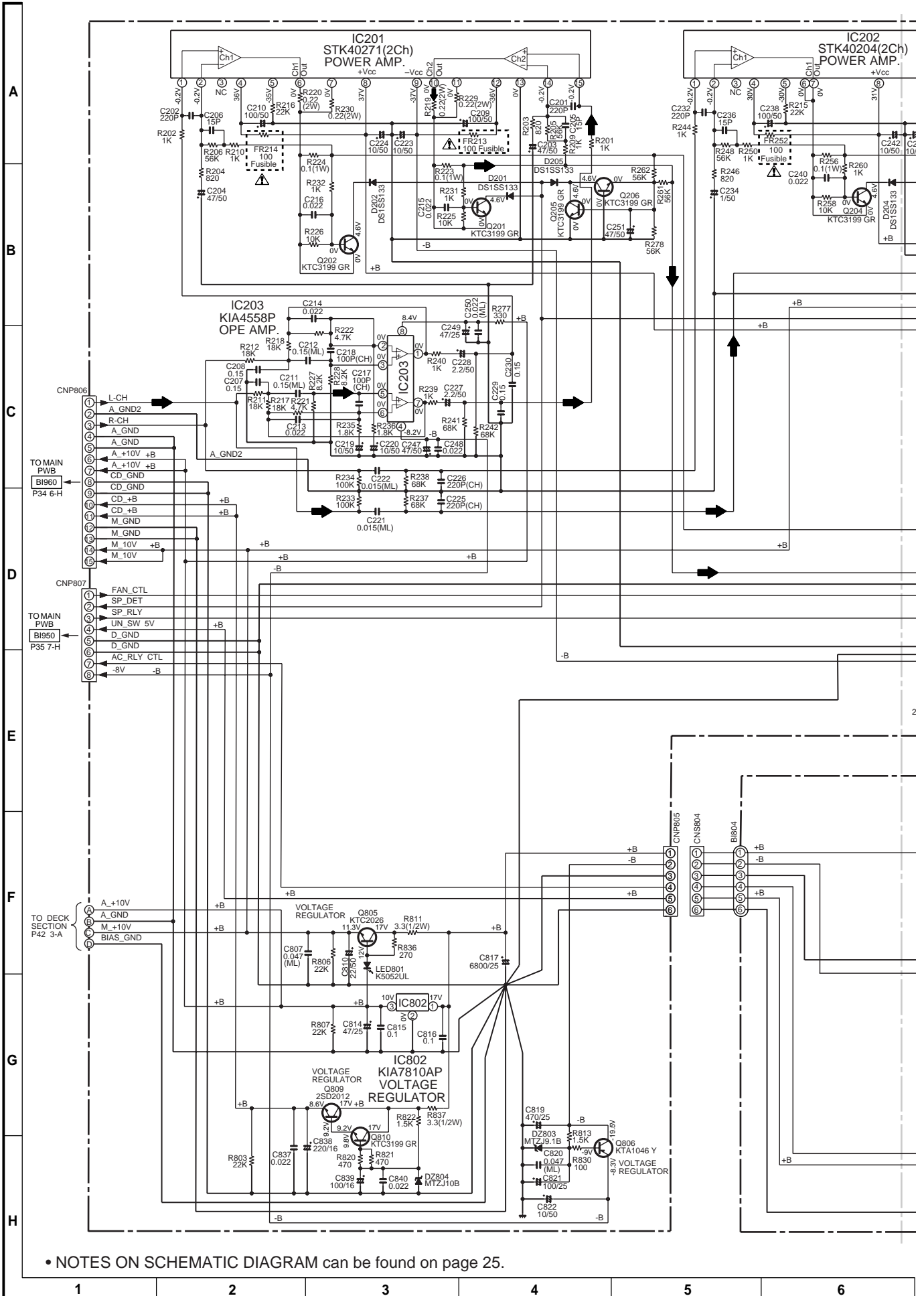
- The numbers ① to ⑰ are waveform numbers shown in page 52.
- NOTES ON SCHEMATIC DIAGRAM can be found on page 25.

Figure 38 SCHEMATIC DIAGRAM (7/11)



7	8	9	10	11	12
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Figure 39 SCHEMATIC DIAGRAM (8/11)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 25.

Figure 40 SCHEMATIC DIAGRAM (9/11)





CD-CH1000

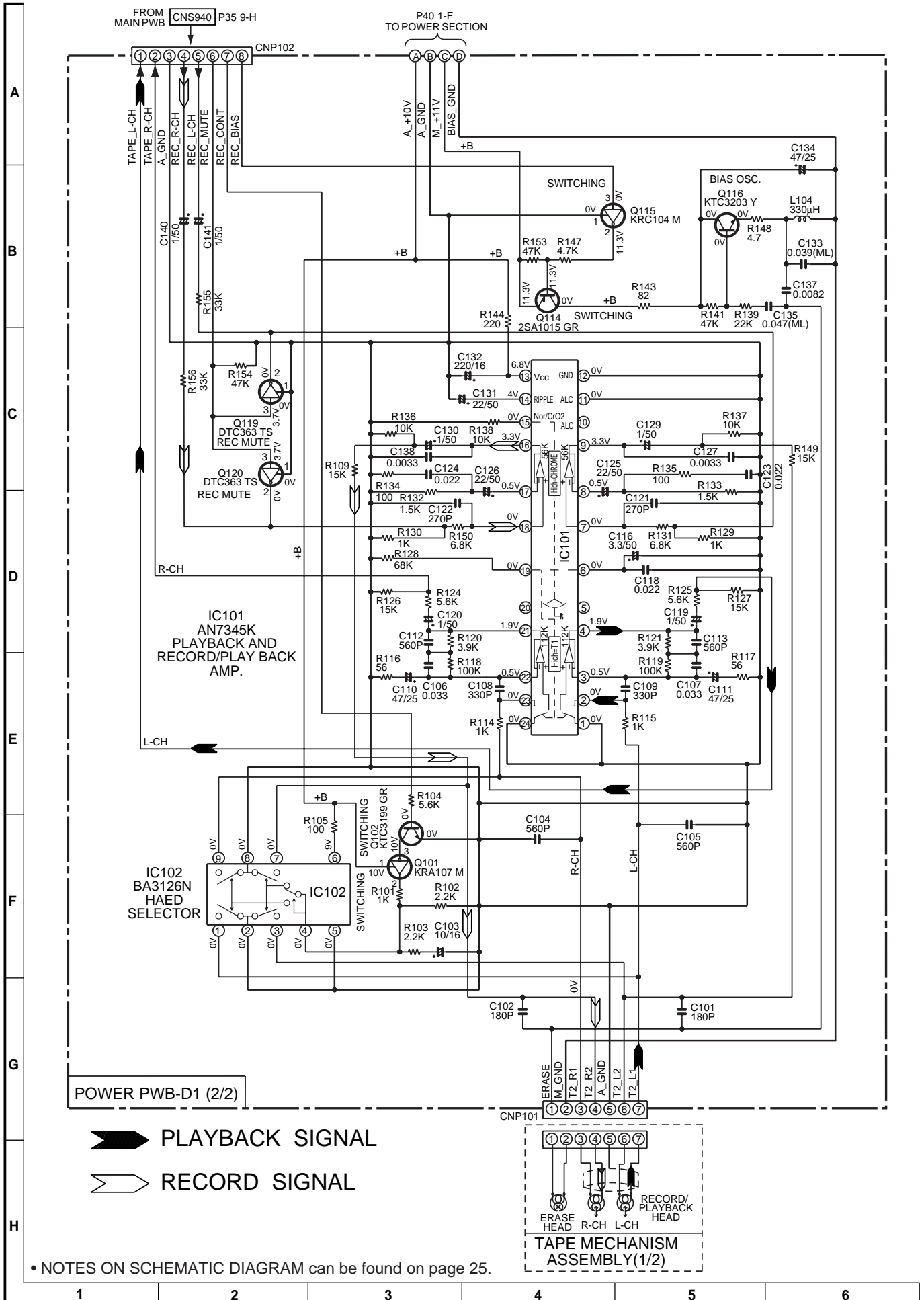
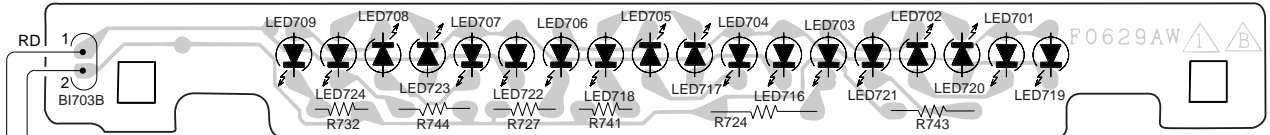
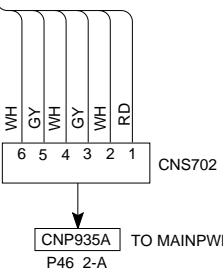
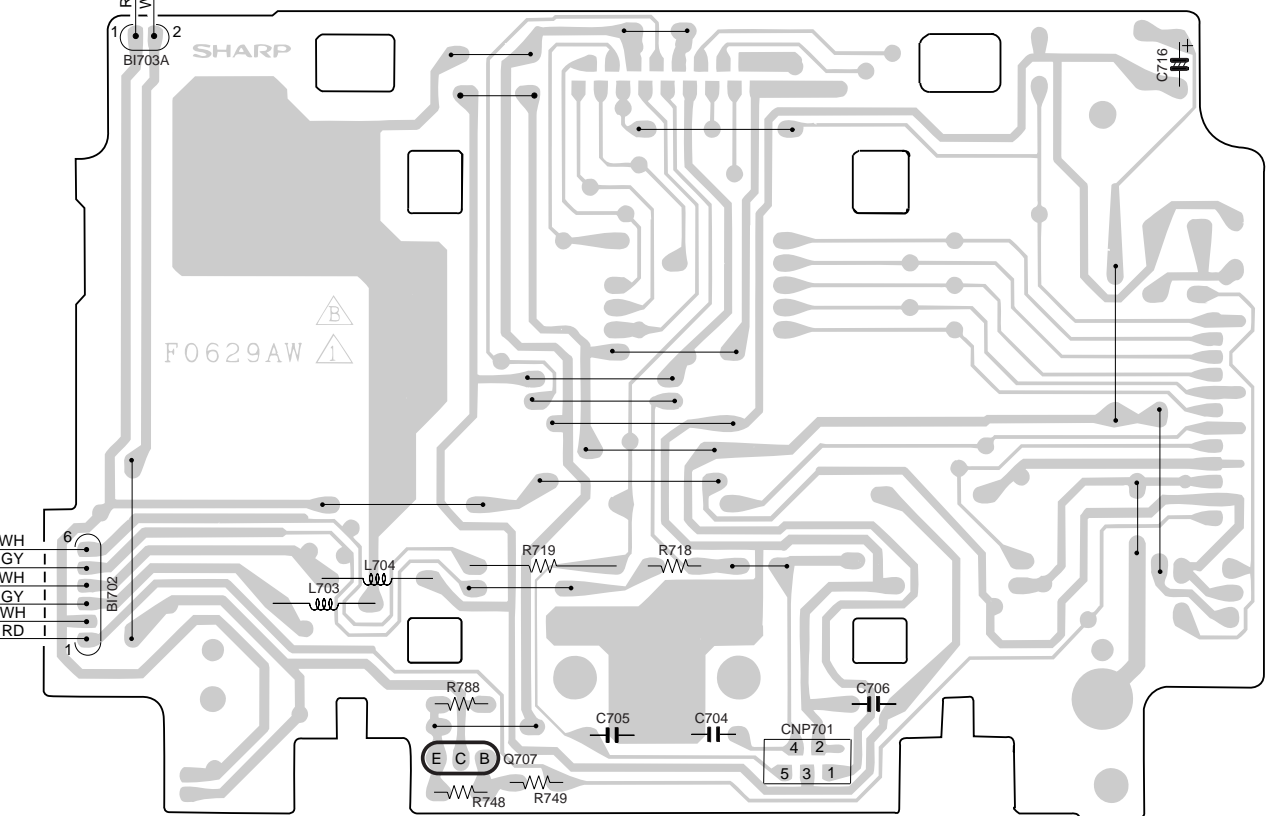


Figure 42 SCHEMATIC DIAGRAM (11/11)

LED A PWB-B2



DISPLAY PWB-B1



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

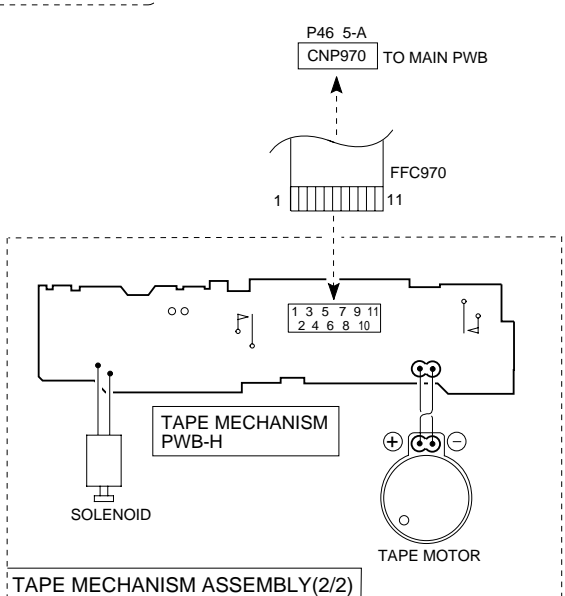
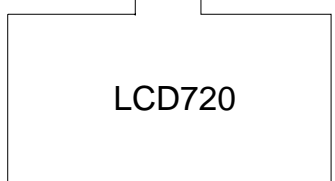


Figure 43 WIRING SIDE OF P.W.BOARD (1/9)

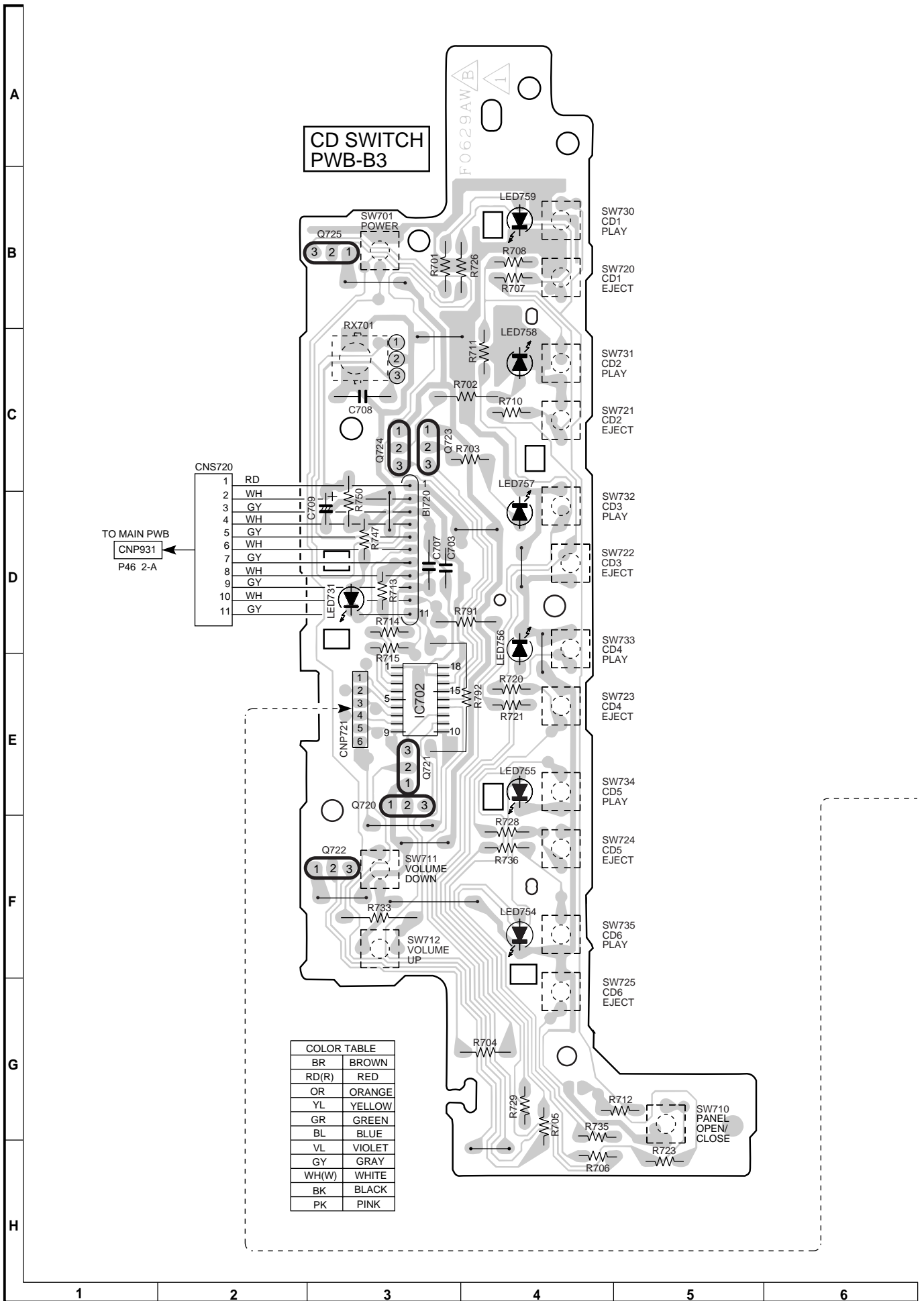
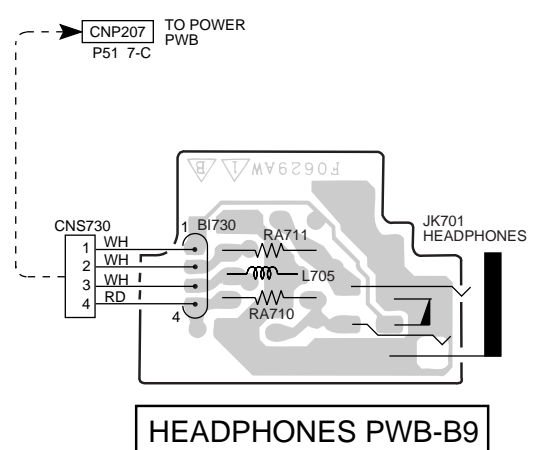
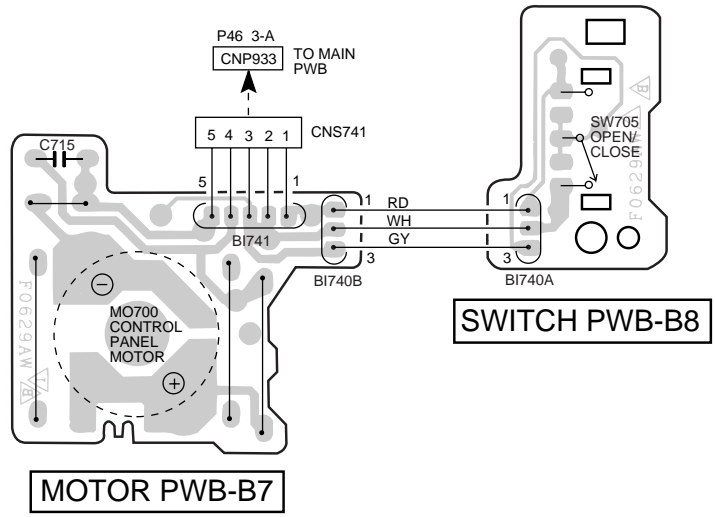
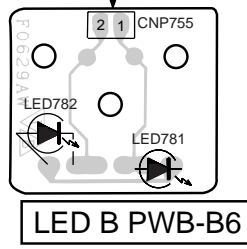
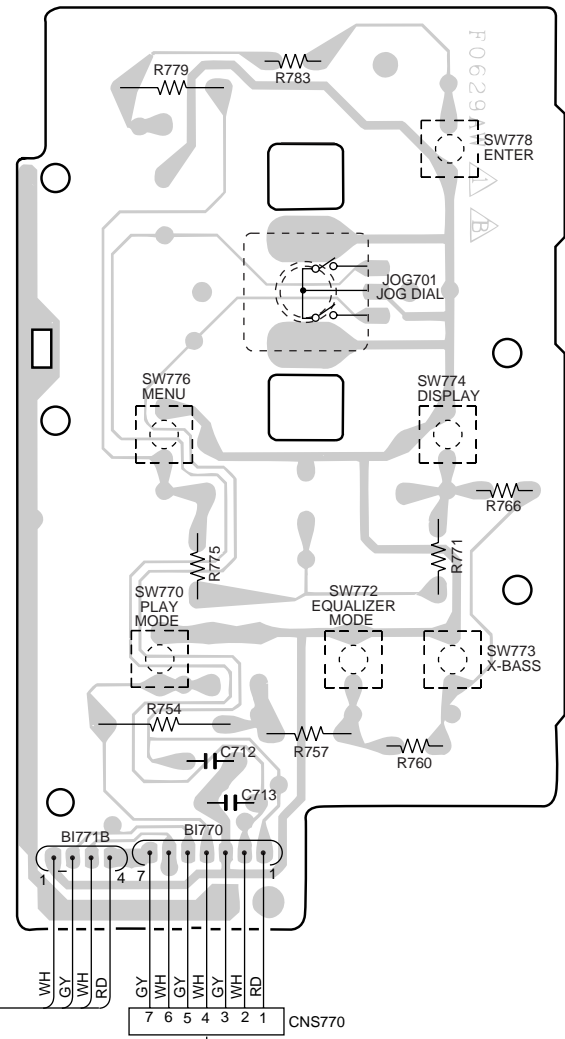
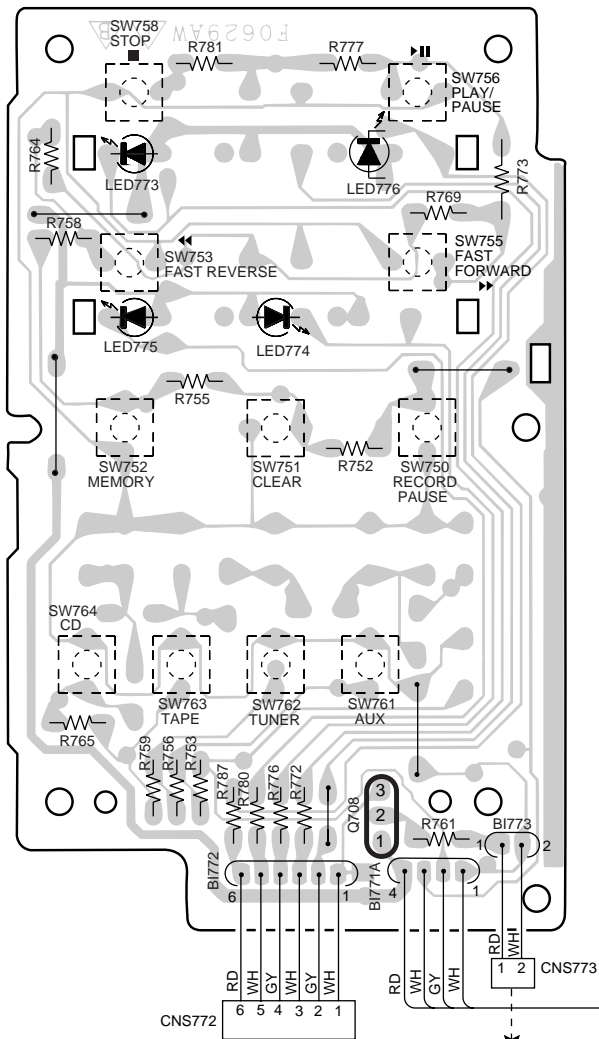


Figure 44 WIRING SIDE OF P.W.BOARD (2/9)

CONTROL PWB-B4

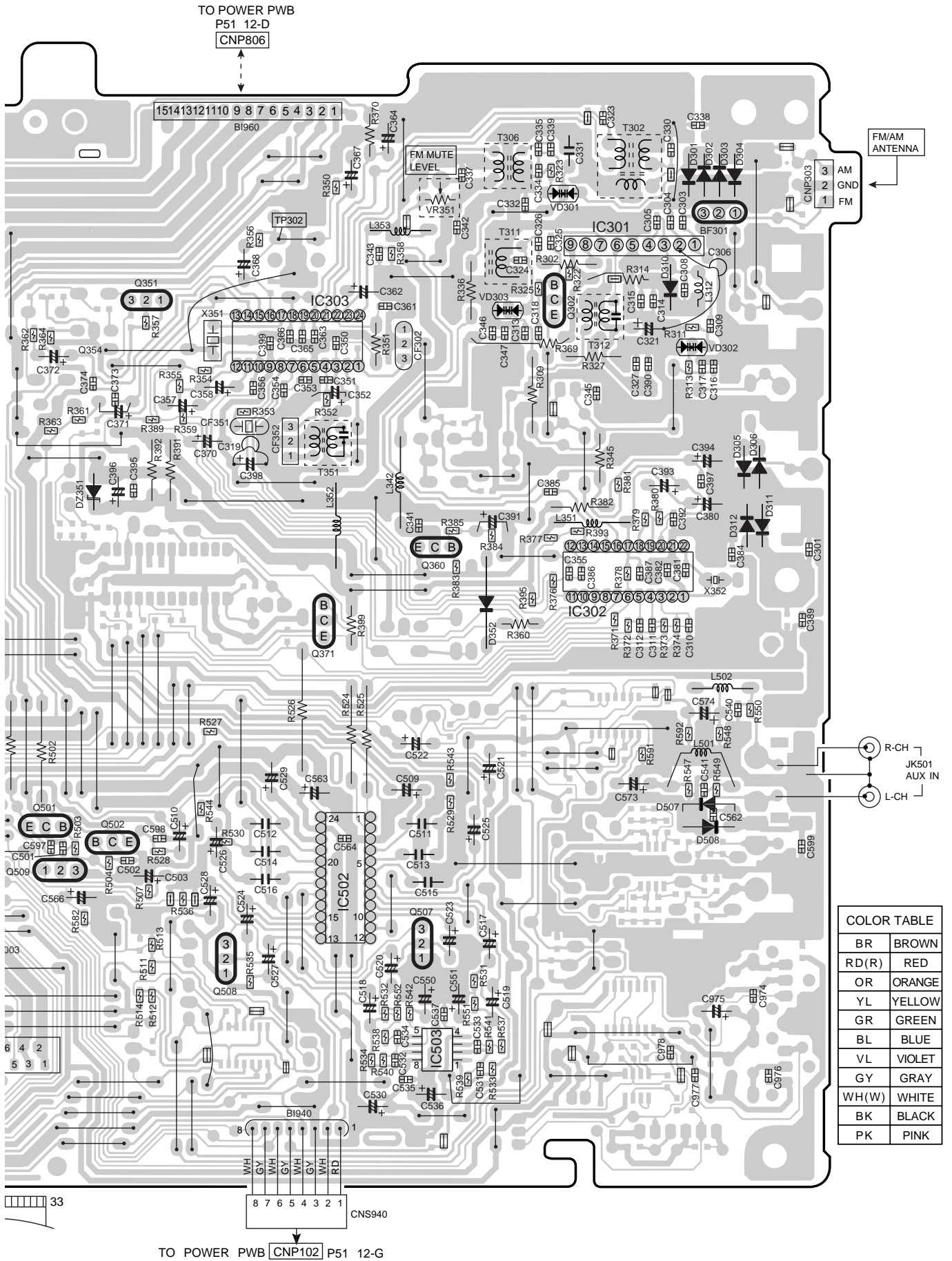
JOG PWB-B5



7	8	9	10	11	12
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Figure 45 WIRING SIDE OF P.W.BOARD (3/9)





COLOR TABLE

BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

Figure 47 WIRING SIDE OF P.W.BOARD (5/9)





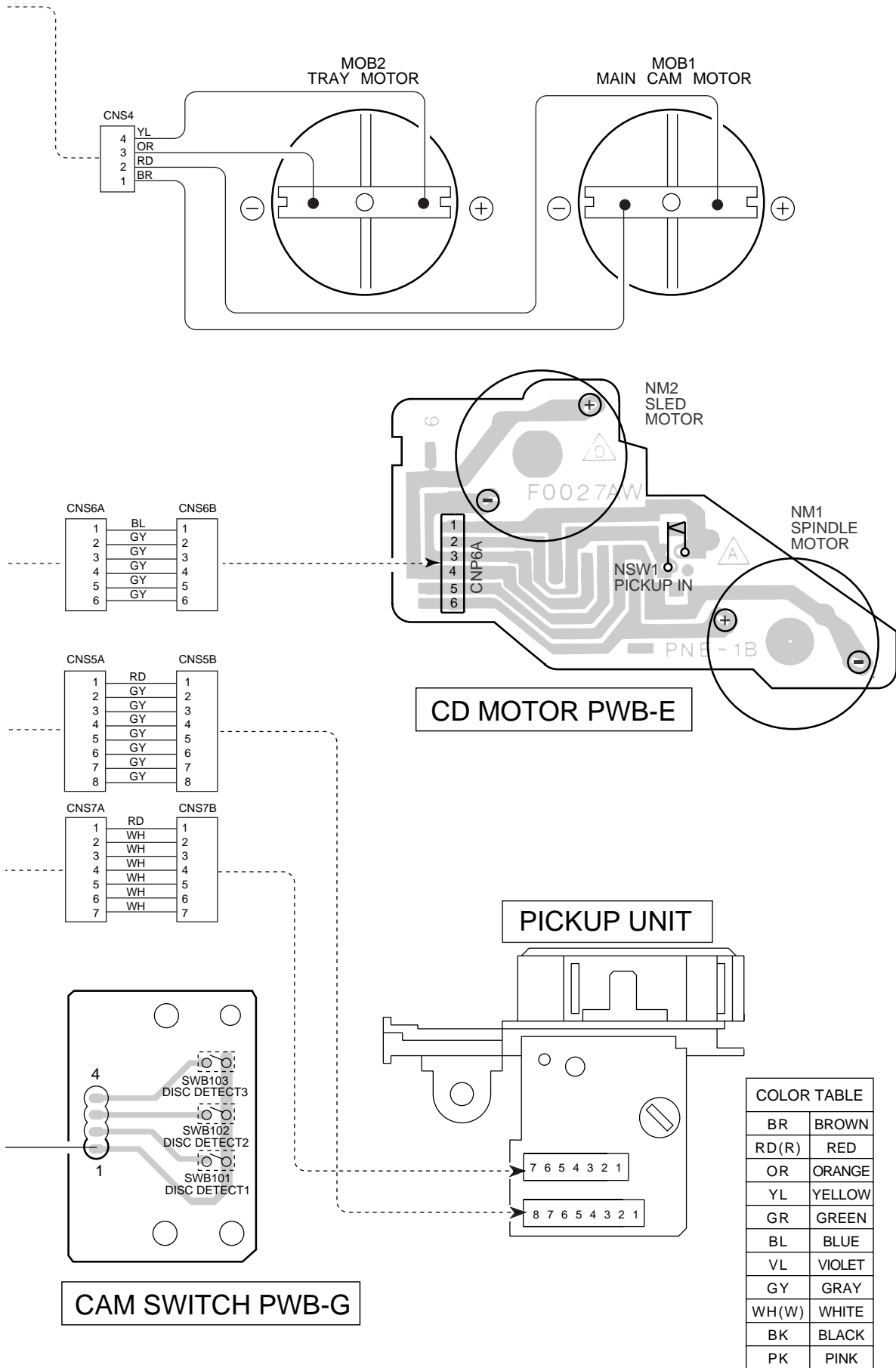


Figure 49 WIRING SIDE OF P.W.BOARD (7/9)

CD-CH1000

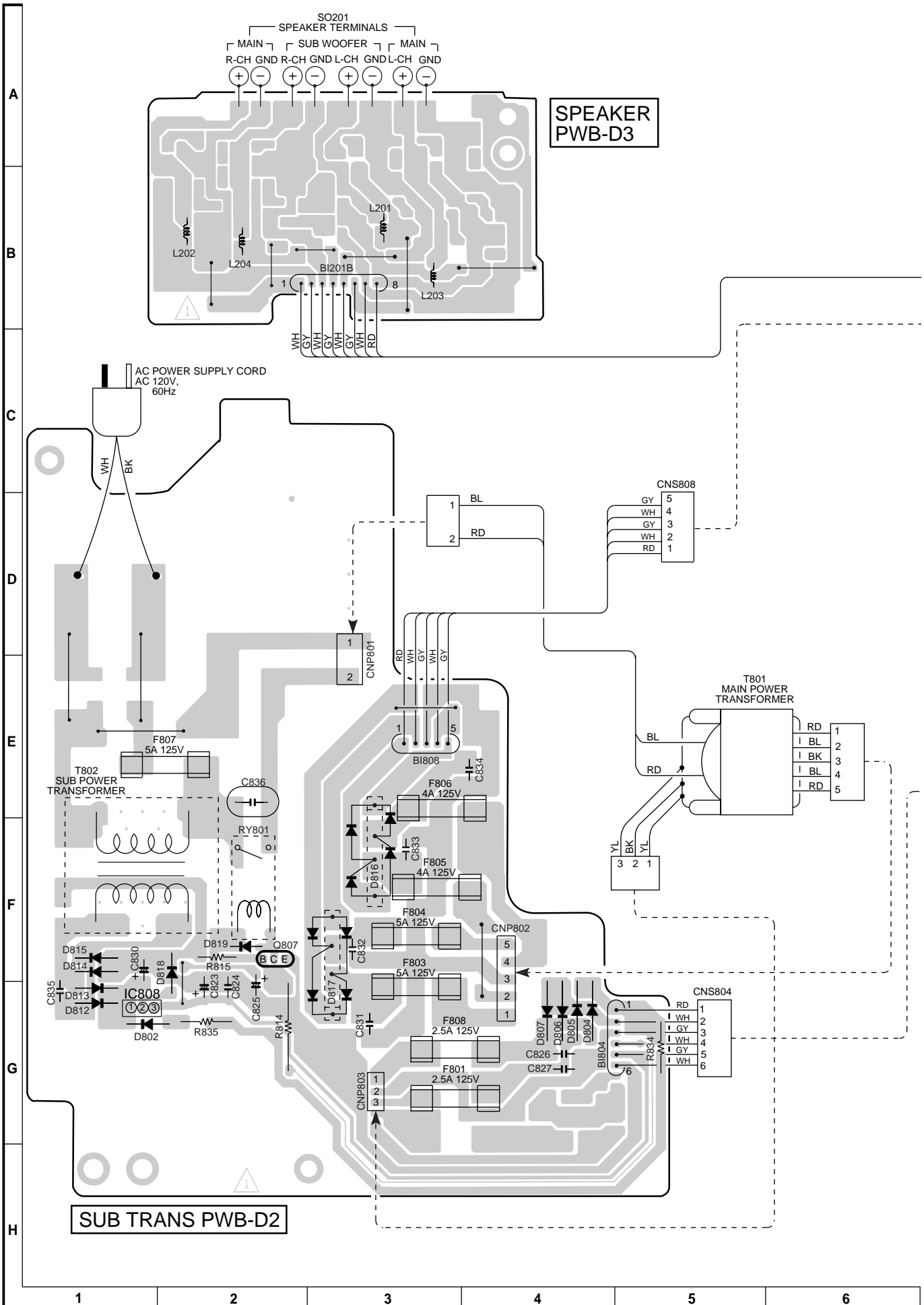


Figure 50 WIRING SIDE OF P.W.BOARD (8/9)

POWER PWB-D1

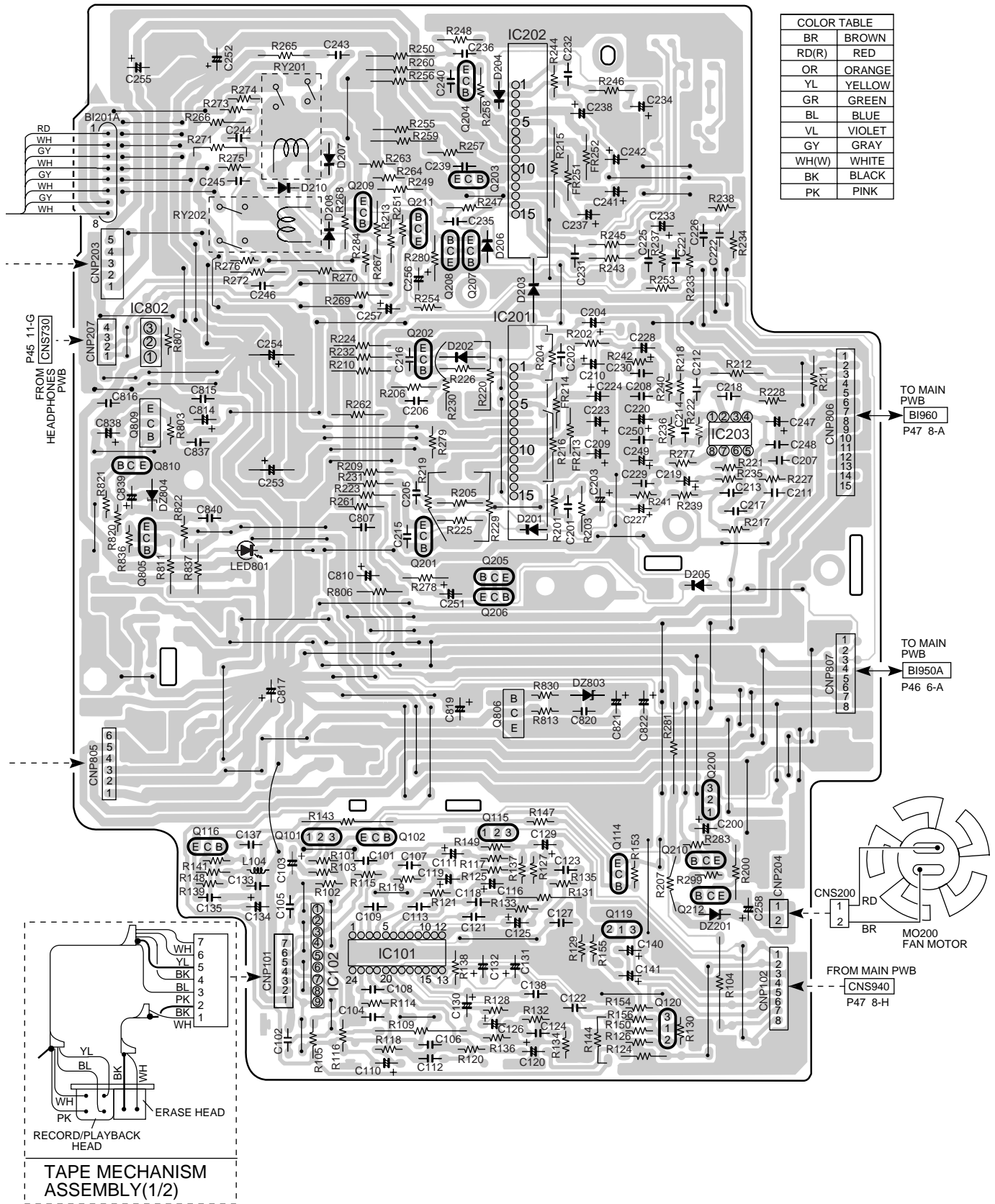
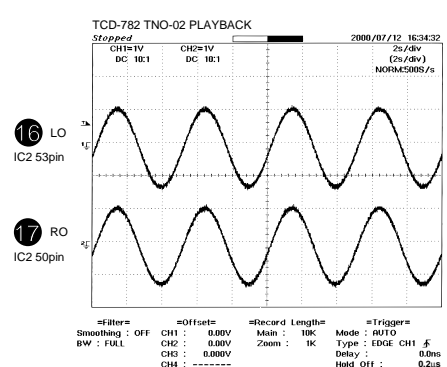
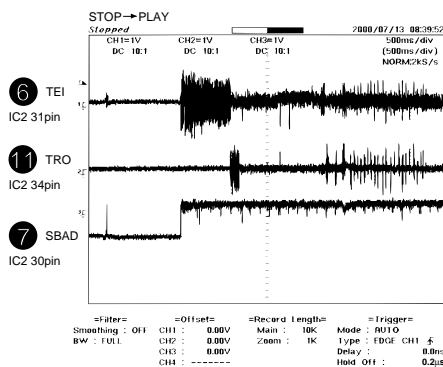
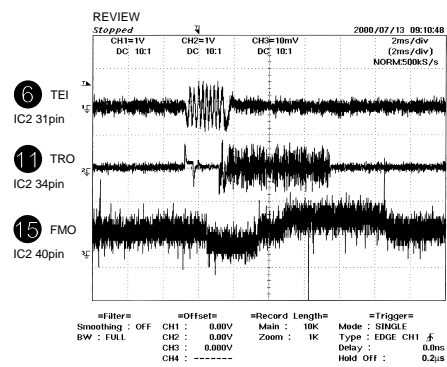
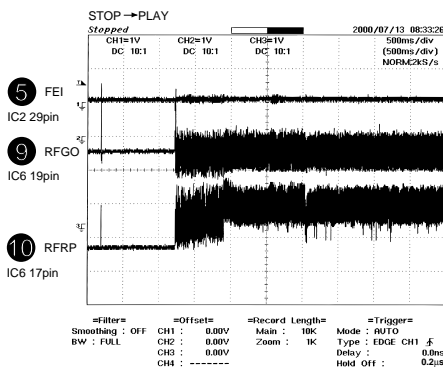
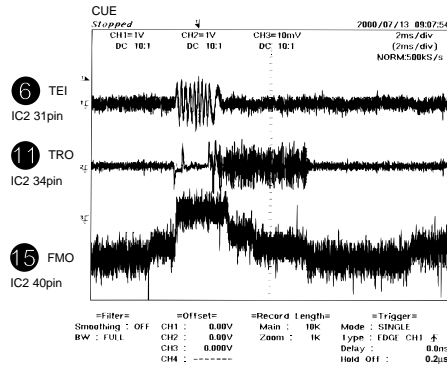
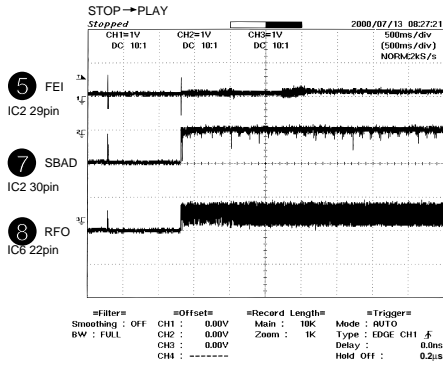
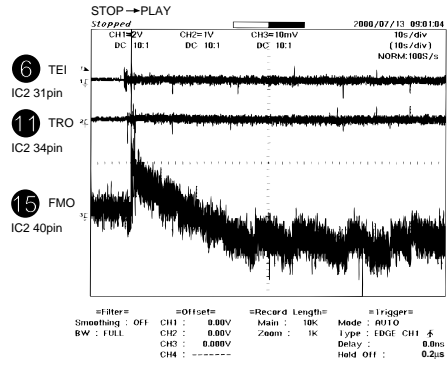
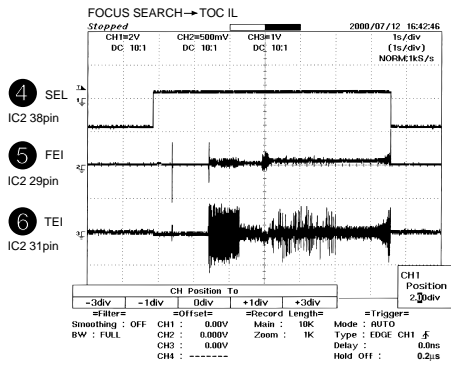
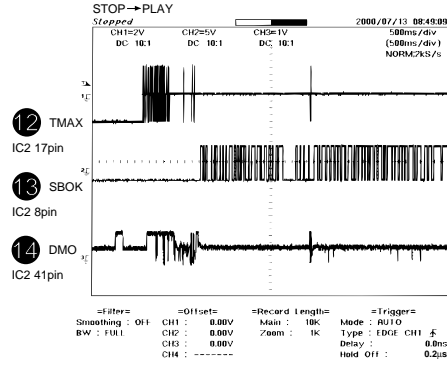
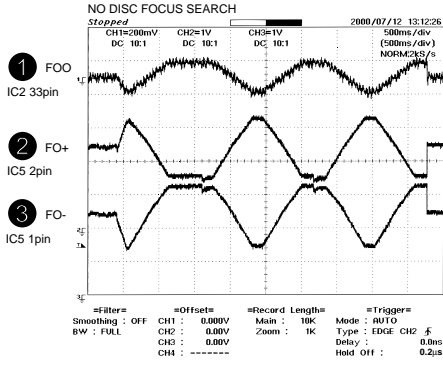


Figure 51 WIRING SIDE OF P.W.BOARD (9/9)

# WAVEFORMS OF CD CIRCUIT



## TROUBLESHOOTING

### When the CD does not function

When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.

Remove the cabinet and follow the troubleshooting instructions.

"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn the power off.

Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.

Do not touch the lens with the bare hand.

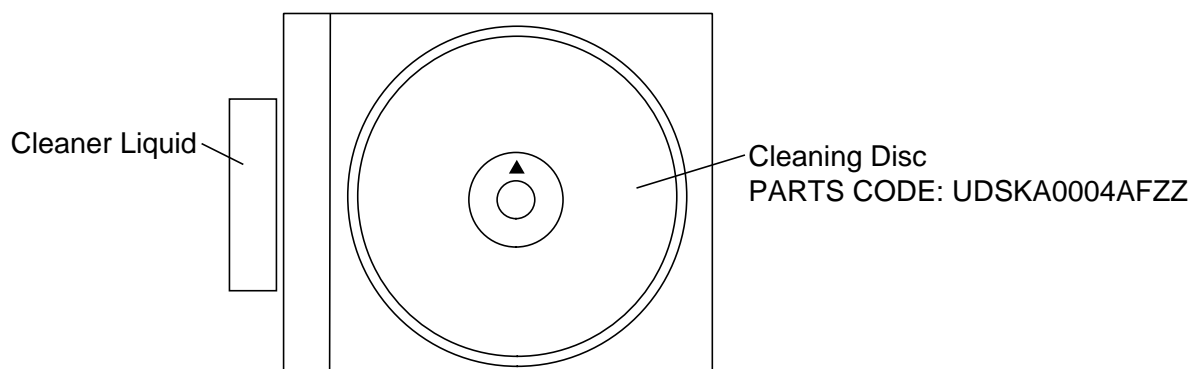
Dust gradually accumulates on the objective lens during use, and it may degrade performance. To avoid this problem, use a cleaning disc designed for CD optical pickup lenses.

#### HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has the ▲ mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down, then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continues to turn, press the stop button.

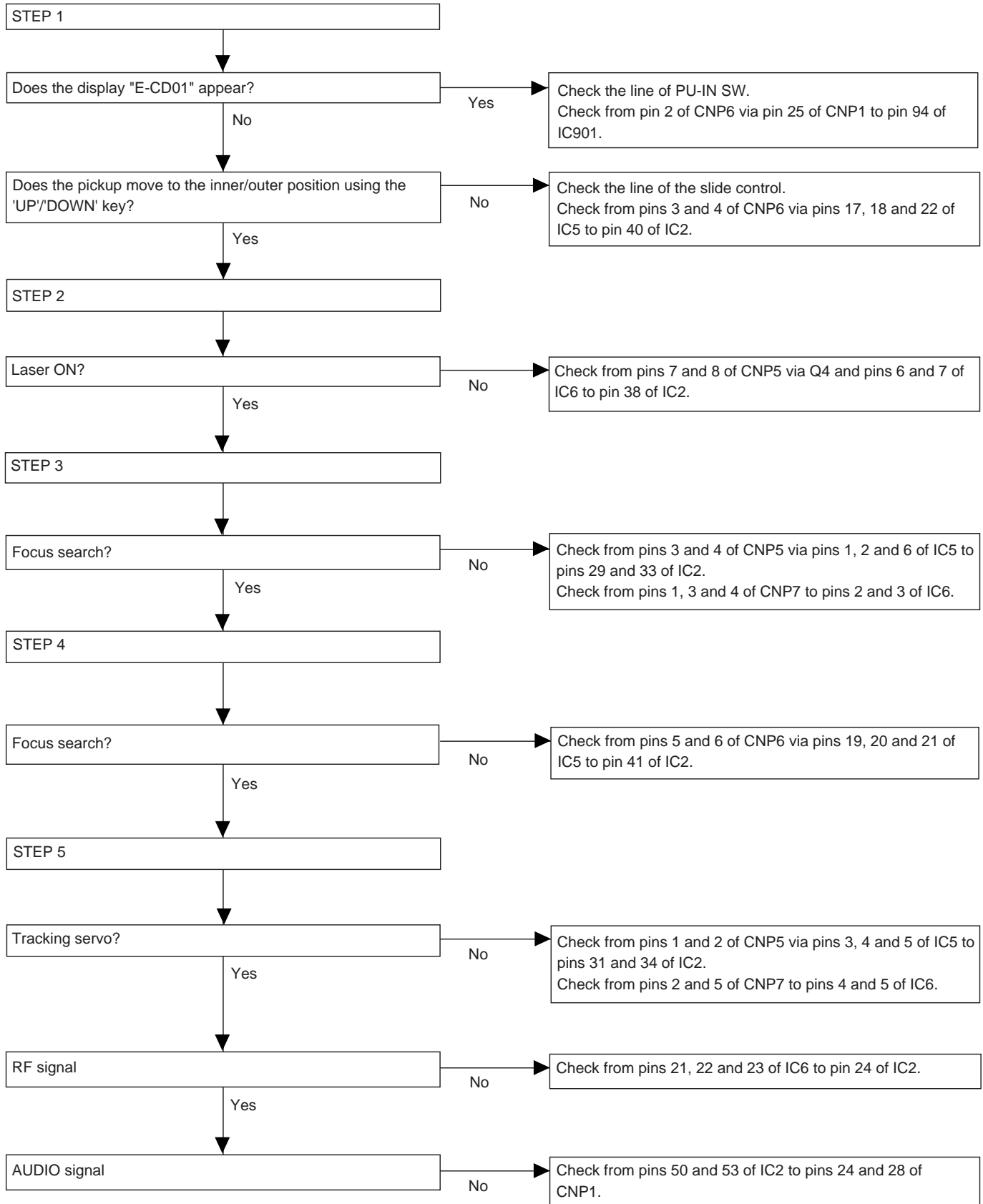
#### CAUTION

- The CD lens cleaner should be effective for 30~50 operations, however if the brushes become worn out earlier then please replace the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD players or on computer CD ROM drives.
- All rights reserved. Unauthorized duplicating, broadcasting and renting this product is prohibited by law.



# CD-CH1000

## Check in the CD test mode.



## FUNCTION TABLE OF IC

## IC2 VHiTC9490F/-1: Servo/Signal Control (TC9490F) (1/2)

Pin No.	Terminal Name	Input/Output	Function															
1	BCK	Output	Bit clock output terminal. 32fs, 48fs or 64fs can be selected by command.															
2	LRCK	Output	L/R channel clock output terminal. L channel: "L", R channel: "H". the output polarity can be inverted by command.															
3	AOUT	Output	Audio data output terminal. MSB/LSB fast can be selected by command.															
4*	DOUT	Output	Digital out output terminal. Up to double speed can be output.															
5*	IPF	Output	Correction flag output terminal. When the correction impossible symbol appears if the AOUT output corresponds to the C2 correction output: "H".															
6	VDD3	—	Digital 3.3V power supply terminal.															
7	VSS3	—	Digital GND terminal.															
8	SBOK	Output	Subcode Q data CRCC decision result output terminal. When the decision result is OK: "H".															
9	CLCK	Input/Output	Clock input/output terminal for subcodes P-W data reading. The input/output polarity can be selected by command.															
10	DATA	Output	Subcodes P-W data output terminal.															
11*	SFSY	Output	Playback system frame sync signal output terminal.															
12*	SBSY	Output	Subcode block sync output terminal. In the S1 position when the subcode sync is detected: "H".															
13 14*	/HSO /UHSO	Output Output	Playback speed mode flag output terminal. <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>/UHSO</th> <th>/HSO</th> <th>Playback speed</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>H</td> <td>Normal speed playback</td> </tr> <tr> <td>H</td> <td>L</td> <td>Double speed playback</td> </tr> <tr> <td>L</td> <td>L</td> <td>4-time speed playback</td> </tr> <tr> <td>—</td> <td>—</td> <td>—</td> </tr> </tbody> </table>	/UHSO	/HSO	Playback speed	H	H	Normal speed playback	H	L	Double speed playback	L	L	4-time speed playback	—	—	—
/UHSO	/HSO	Playback speed																
H	H	Normal speed playback																
H	L	Double speed playback																
L	L	4-time speed playback																
—	—	—																
15	PVDD3	—	3.3V power supply terminal for PLL system.															
16	PDO	Output	EFM signal/PLCK signal phase error signal output terminal.															
17	TMAX	Output	TMAX detection result output terminal. <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>TMAX detection result</th> <th>TMAX output</th> </tr> </thead> <tbody> <tr> <td>Longer than the specified period</td> <td>"PVDD3"</td> </tr> <tr> <td>Within the specified period</td> <td>"Hi-z"</td> </tr> <tr> <td>Shorter than the specified period</td> <td>"AVSS3"</td> </tr> </tbody> </table>	TMAX detection result	TMAX output	Longer than the specified period	"PVDD3"	Within the specified period	"Hi-z"	Shorter than the specified period	"AVSS3"							
TMAX detection result	TMAX output																	
Longer than the specified period	"PVDD3"																	
Within the specified period	"Hi-z"																	
Shorter than the specified period	"AVSS3"																	
18	LPFN	Input	Amp's inversion input terminal for PLL system low-pass filter.															
19	LPFO	Output	Amp's output terminal for PLL system low-pass filter.															
20	PVREF	—	VREF terminal only for PLL system.															
21	VCOF	Output	Filter terminal for VCO.															
22	AVSS3	—	Analog GND terminal.															
23	SLCO	Output	DAC output terminal for data slice level generation.															
24	RFI	Input	RF signal input terminal. Zin can be selected by command.															
25	AVDD3	—	Analog 3.3V power supply terminal.															
26	RFCT	Input	RFRP signal center level input terminal.															
27	RFZI	Input	Input terminal for RFRP signal zero crossing.															
28	RFRP	Input	RF ripple signal terminal.															
29	FEI	Input	Focus error signal input terminal.															
30	SBAD	Input	Sub-beam addition signal input terminal.															
31	TEI	Input	Tracking error input terminal. Fetch when the tracking servo is on.															
32	TEZI	Input	Input terminal for tracking error signal zero crossing.															
33	FOO	Output	Focus equalizer output terminal.															
34	TRO	Output	Tracking equalizer output terminal.															
35	VREF	—	Analog reference power supply terminal.															
36	RFGC	Output	RF amplitude adjustment control signal output terminal.															
37	TEBC	Output	Tracking balance control signal output terminal.															
38	SEL	Output	APC circuit ON/OFF signal output terminal. When the laser is on, UHS="L": "Hi-z", UHS="H": "H" output.															

In this unit, the terminal with asterisk mark (\*) is (open) terminal which is not connected to the outside.

# CD-CH1000

## IC2 VHiTC9490F/-1: Servo/Signal Control (TC9490F) (2/2)

Pin No.	Terminal Name	Input/Output	Function
39	AVDD3	—	Analog 3.3V power supply terminal.
40	FMO	Output	Feed equalizer output terminal.
41	DMO	Output	Disc equalizer output terminal.
42	VSS3	—	Digital GND terminal.
43	VDD3	—	Digital 3.3V power supply terminal.
44	TESIN	Input	Test input terminal. Usually "L" fixed.
45	XVSS3	—	GND terminal for system clock oscillation circuit.
46	XI	Input	System clock oscillation circuit input terminal.
47	XO	Output	System clock oscillation circuit output terminal.
48	XVDD3	—	3.3V power supply terminal for system clock oscillation circuit.
49	DVSS3	—	GND terminal for D/A converter.
50	RO	Output	R channel data normal rotation output terminal.
51	DVDD3	—	3.3V power supply terminal for D/A converter.
52	DVR	—	Reference voltage terminal.
53	LO	Output	L channel data normal rotation output terminal.
54	DVSS3	—	D/A converter section GND terminal.
55*	ZDET	Output	1-bit D/A converter 0 detection flag output terminal.
56	VSS5	—	GND terminal for microcomputer interface.
57-60	BUS0-BUS3	Input/Output	Data input/output terminal for microcomputer interface.
61	BUCK	Input	Clock input terminal for microcomputer interface.
62	/CCE	Input	Chip enable signal input terminal for microcomputer interface. In case of "L", BUS3-0 are active.
63	/RST	Input	Reset signal input terminal. Reset: "L".
64	VDD5	—	5V power supply terminal for microcomputer interface.

In this unit, the terminal with asterisk mark (\*) is (open) terminal which is not connected to the outside.

Note:

AI/F: Analog input/output terminal

3-5I/F: Terminal with a built-in 3-5 interface (5V system input/output terminal)

3I/F: 3V system input/output terminal

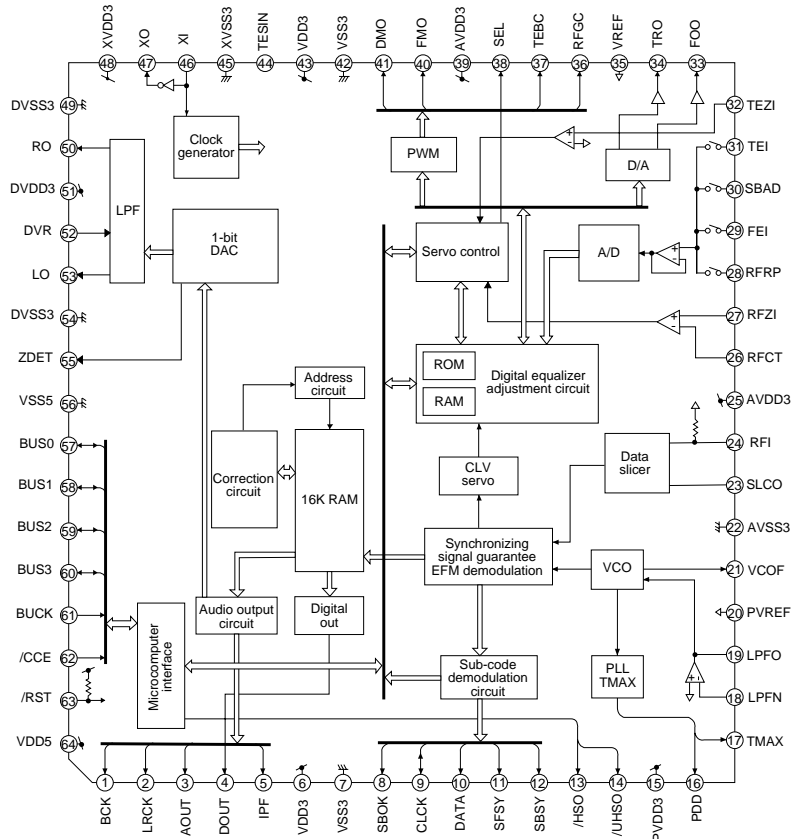


Figure 56 BLOCK DIAGRAM OF IC

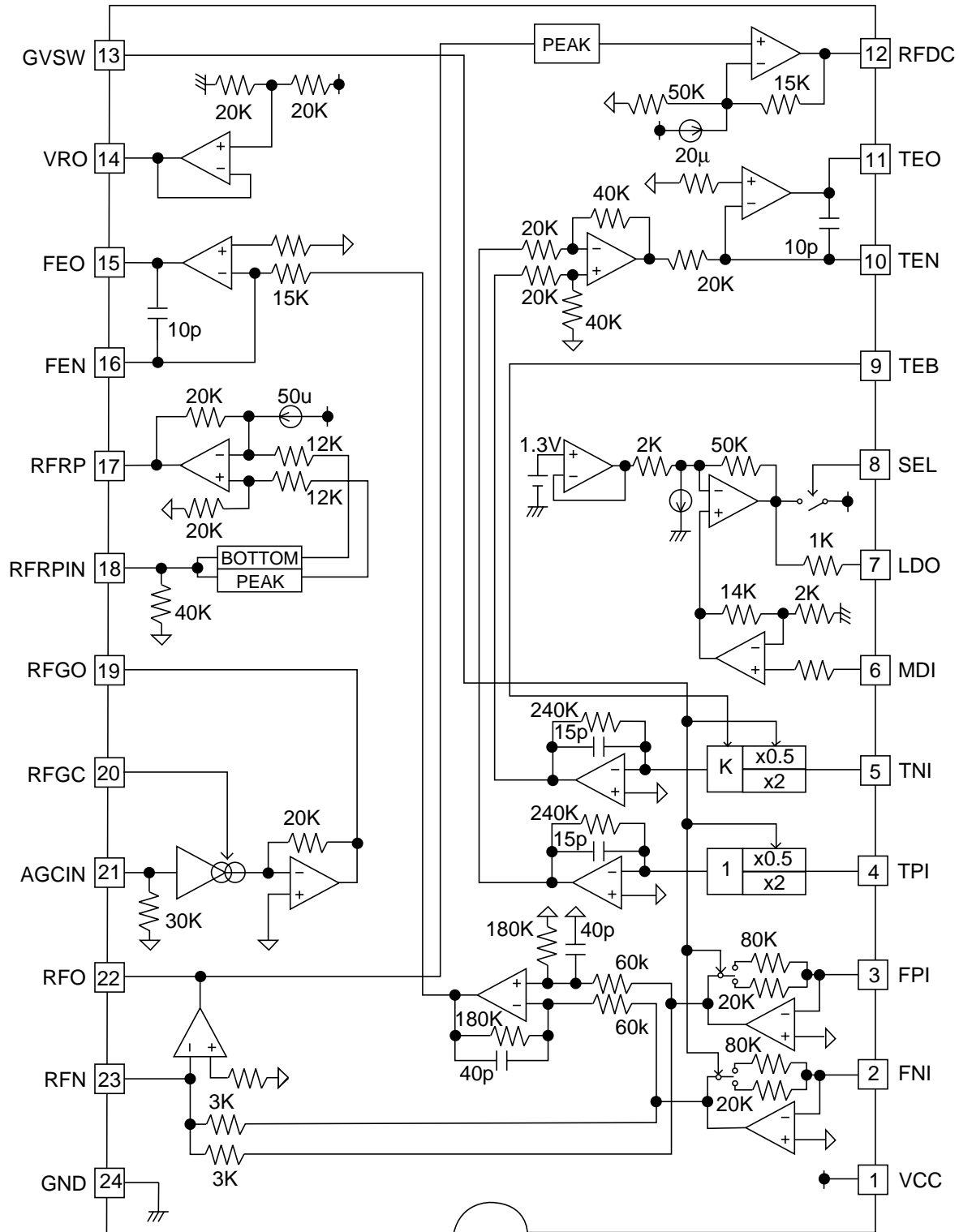


## IC6 VHiTA2147F/-1: Servo Pre Amp. (TA2147F)

Pin No.	Terminal Name	Input/Output	Function												
1	VCC	—	3.3V power supply terminal												
2	FNI	Input	Main beam amp input terminal												
3	FPI	Input	Main beam amp input terminal												
4	TPI	Input	Sub-beam amp input terminal												
5	TNI	Input	Sub-beam amp input terminal												
6	MDI	Input	Monitor photodiode amplifier input terminal												
7	LDO	Output	Laser diode amp output terminal												
8	SEL	Input	APC circuit ON/OFF signal, LDO terminal control input terminal and bottom/peak detection frequency switching terminal <table border="1" data-bbox="657 564 1305 707"> <thead> <tr> <th>SEL</th> <th>APC circuit</th> <th>LDO</th> </tr> </thead> <tbody> <tr> <td>GND</td> <td>OFF</td> <td>Connection to VCC via 1k<math>\Omega</math></td> </tr> <tr> <td>Hi-z</td> <td>ON</td> <td>Control signal output</td> </tr> <tr> <td>VCC</td> <td>ON</td> <td>Control signal output</td> </tr> </tbody> </table>	SEL	APC circuit	LDO	GND	OFF	Connection to VCC via 1k $\Omega$	Hi-z	ON	Control signal output	VCC	ON	Control signal output
SEL	APC circuit	LDO													
GND	OFF	Connection to VCC via 1k $\Omega$													
Hi-z	ON	Control signal output													
VCC	ON	Control signal output													
9	TEBC	Input	Tracking error balance adjustment signal input terminal • TEBC input voltage												
10	TEN	Input	Tracking error signal generation amp antiphase input terminal												
11	TEO	Output	Tracking error signal generation amp output terminal												
12	RFDC	Output	RF signal peak detection output terminal												
13	GVSW	Input	AGC, FE, TE amp gain switching terminal <table border="1" data-bbox="657 929 957 1072"> <thead> <tr> <th>GVSW</th> <th>Mode</th> </tr> </thead> <tbody> <tr> <td>GND</td> <td>CD-RW</td> </tr> <tr> <td>Hi-z</td> <td>CD-DA</td> </tr> <tr> <td>VCC</td> <td>CD-CA</td> </tr> </tbody> </table>	GVSW	Mode	GND	CD-RW	Hi-z	CD-DA	VCC	CD-CA				
GVSW	Mode														
GND	CD-RW														
Hi-z	CD-DA														
VCC	CD-CA														
14	VRO	Output	Reference voltage (VRO) output terminal • VCC=3.3V: VRO=1/2 VCC												
15	FEO	Output	Focus error signal generation amp output terminal												
16	FEN	Input	Focus error signal generation amp antiphase input terminal												
17	RFRP	Output	Signal generation amp output terminal for track count												
18	RFRPIN	Input	Signal generation amp input terminal for track count												
19	RFGO	Output	RF signal amplitude adjustment amp output terminal												
20	RFGC	Input	RF amplitude adjustment control signal input terminal • RFGC input voltage												
21	AGCIN	Input	RF signal amplitude adjustment amp input terminal												
22	RFO	Output	RF signal generation amp output terminal												
23	RFN	Input	RF signal generation amp input terminal												
24	GND	—	GND terminal												

CD-CH1000

IC6 VHiTA2147F/-1: Servo Pre Amp. (TA2147F)



PIN	SEL	TEB	RFGC	GVSW
V <sub>CTRL</sub>	(APC_SW)	(TE_BAL)	(AGC_Gain)	(CD/RW)
V <sub>CC</sub>	APC ON	-50%	+12dB	DA (0dB)
HiZ	APC ON	0%	+6dB	DA (0dB)
GND	APC OFF (LDO=H)	+50%	0dB	RW (+12dB)

Figure 58 BLOCK DIAGRAM OF IC

## IC901 RH-iX0353AWZZ: System Microcomputer (IX0353AW) (1/2)

Pin No.	Port Name	Input/Output	Function
1	P60/A16	Output	Cassette playback mute
2	P62/A18	Output	Recording output (Cassette)
3	P61/A17	Output	Recording bias output (Cassette)
4	P63/A19	Output	Span output for destination 1
5	P64/RD	Output	Cassette operation motor output
6	P65/WR	Output	Cassette solenoid output
7	P66/WAIT	Output	Span output for destination 2
8	P67/ASTB	Input	Pulse for tape running check
9	VDD	Input	To be connected to VDD
10	P100/T15/TO5	Input	A side foolproof switch
11	P101/T16/TO6	Input	Not used
12	P102/T17/TO7	Input	Cassette CAM switch
13	P103/T18/TO8	Input	Cassette detection switch
14	P30/TO0	Output	Tuner chip enable
15	P31/TO1	Input	Destination input
16	P32/TO2	Output	CD mute
17	P33/T11	Input	Tuner span select
18	P34/T12	Output	Expanded IC control signal
19	P35/T100	Output	Expanded IC control signal
20	P36/T101	Output	Expanded IC control signal
21	P37	Output	Expanded IC control signal
22	TEST/Vpp	Input	Not used
23*	P90	Output	Not used
24*	P91	Output	Not used
25*	P92	Output	Not used
26*	P93	Output	Not used
27*	P94	Output	Not used
28	P06/INTP6	Output	POWER relay control
29*	P120/RTP0	Output	Not used
30	P121/RTP1	Output	Not used
31	P122/RTP2	Output	Not used
32	P123/RTP3	Output	LED output for timer
33	P124/RTP4	Output	LCD backlight
34	P125/RTP5	Output	System mute output
35	P126/RTP6	Input	Panel close switch
36	P127/RTP7	Input	Panel open switch
37	Vdd	Input	Connected to VDD
38	X2	Output	8 MHz sera - lock
39	X1	Input	8 MHz sera - lock
40	Vss	Input	Ground potential to be connected to VSS
41	XT2	Output	32.768 kHz crystal
42	XT1	Input	32.768 kHz crystal
43	RESET	Input	Reset input
44	P00/INTP0	Input	Remote control signal input
45	P01/INTP1	Input	JOG A input
46	P02/INTP2/NMI	Input	JOG B input
47	P03/INTP3	Input	Power failure detection
48	P04/INTP4	Input	Speaker abnormal detection
49	P05/INTP5	Output	Speaker relay
50	P95	Input	POWER key input
51	Avdd	—	Analog power supply

In this unit, the terminal with asterisk mark (\*) is (open) terminal which is not connected to the outside.

## CD-CH1000

### IC901 RH-iX0353AWZZ: System Microcomputer (IX0353AW) (2/2)

Pin No.	Port Name	Input/Output	Function
52	AVref0	—	Analog reference potential 0
53	P10/ANI0	Input	Key input 0 (AD port)
54	P11/ANI1	Input	Key input 1 (AD port)
55	P12/ANI2	Input	Key input 2 (AD port)
56	P13/ANI3	Input	Key input 3 (AD port)
57	P14/ANI4	Input	Key input 4 (AD port)
58	P15/ANI5	Input	Level meter input L-ch
59	P16/ANI6	Input	Tuner state input
60	P17/ANI7	Input	Level meter input R-ch
61	Avss	—	Analog GND
62	P130/ANO0	Input	Tape mecha select single/reverse
63	P131/ANO1	Output	Not used
64	AVref1	Input	Analog reference potential 1
65	P70/RxD2/SI2	Input	Not used
66	P71/TxD2/SO2	Output	Not used
67	P72/ASCK2/SCK2	Input	Not used
68	P20/RxD1/SI1	Input	Tuner data input
69	P21/TxD1/SO1	Output	Tuner data output
70	P22/ASCK1/SC	Output	Tuner clock output
71	P23/PCL	Output	Not used
72	P24/BUZ	Output	Not used
73	P25/SI0/SDA0	Input/Output	Control output read/write to LCD driver
74	P26/SO0	Output	Not used
75	P27/SCK0/SCL0	Output	Control output clock to LCD driver
76	P80/A0	Input	CAM A switch e
77	P81/A1	Input	CAM A switch d
78	P82/A2	Input	CAM A switch c
79	P83/A3	Input	CAM A switch b
80	P84/A4	Input	CAM A switch a
81	P85/A5	Input	TRAY identification switch a
82	P86/A6	Input	TRAY identification switch b
83	P87/A7	Input	TRAY identification switch c
84	P40/AD0	Input	CAM C switch b
85	P41/AD1	Input	CAM C switch a
86	P42/AD2	Output	CD LSI chip enable
87	P43/AD3	Output	CD LSI clock
88	P44/AD4	Input/Output	CD LSI data input/output
89	P45/AD5	Input/Output	CD LSI data input/output
90	P46/AD6	Input/Output	CD LSI data input/output
91	P47/AD7	Input/Output	CD LSI data input/output
92	P50/A8	Output	CD LSI reset
93	P51/A9	Output	CD LSI RW switching
94	P52/A10	Input	CD pickup inner switch input
95	P53/A11	Output	Tray motor forward rotation
96	P54/A12	Output	Tray motor reverse rotation
97	P55/A13	Output	CAM motor forward rotation
98	P56/A14	Output	CAM motor reverse rotation
99	P57/A15	Output	TAPE REC mute
100	Vss	Input	Ground potential connected to VSS

**IC702 VHiBU2092F/-1: Input/Output Expander (BU2092F)**

Pin No.	Port Name	Input/Output	Function
1	VSS	Input	GND
2	DATA	Input	Serial data input
3	CLOCK	Input	Serial clock input
4	LCK	Input	Latch clock input
5	Q0	Output	Panel LED
6	Q1	Output	>    LED
7	Q2	Output	<< LED
8	Q3	Output	>> LED
9	Q4	Output	Stop LED
10	Q5	Output	Not used
11	Q6	Output	CD 6 LED
12	Q7	Output	CD 5 LED
13	Q8	Output	CD 4 LED
14	Q9	Output	CD 3 LED
15	Q10	Output	CD 2 LED
16	Q11	Output	CD 1 LED
17	OE	Output	Output enable
18	VDD	Input	Power supply

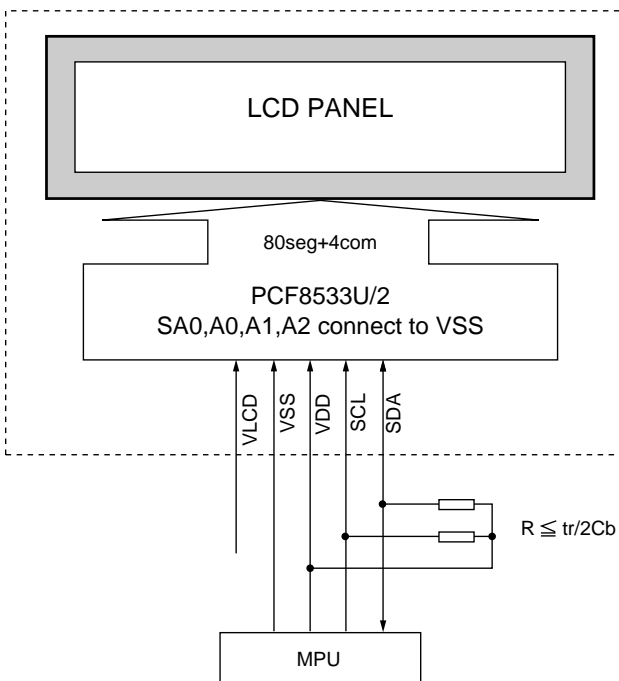
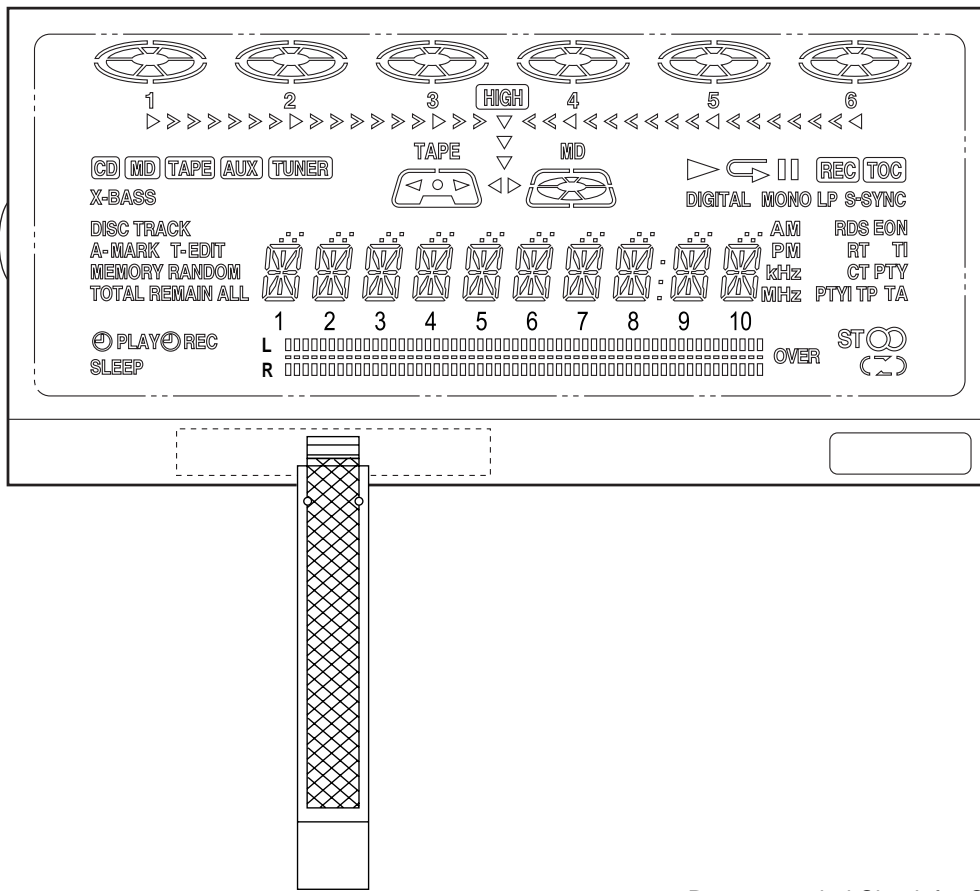
**IC912 VHiBU2092F/-1: Input/Output Expander (BU2092F)**

Pin No.	Port Name	Input/Output	Function
1	VSS	Input	GND
2	DATA	Input	Serial data input
3	CLK	Input	Serial clock input
4	LCK	Input	Latch clock input
5	Q0	Output	For CD power control
6*	Q1	Output	Not used
7*	Q2	Output	Not used
8*	Q3	Output	Not used
9	Q4	Output	Not used
10*	Q5	Output	Not used
11*	Q6	Output	Panel control switch
12	Q7	Output	Panel control output close
13	Q8	Output	Panel control output open
14	Q9	Output	Fan motor ON/OFF
15	Q10	Output	Not used
16	Q11	Output	Not used
17	OE	Input	Output enable
18	VDD	Input	Power supply

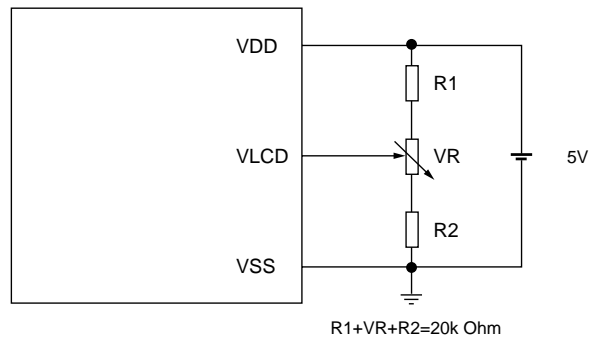
In this unit, the terminal with asterisk mark (\*) is (open) terminal which is not connected to the outside.

# LCD DISPLAY

LCD720: RUNTZ0020AWZZ



Recommended Circuit for Contrast adjustment



Pin No.	Pin Name	I/O	Connect to	Description
1	VLCD	—	Power supply	LCD supply voltage
2	VSS	—	Power supply	Logic ground
3	VDD	—	Power supply	Supply voltage (5V)
4	SCL	I	MPU	I <sup>2</sup> C-bus serial clock input
5	SDA	I/O	MPU	I <sup>2</sup> C-bus serial data input/output

# SHARP PARTS GUIDE

## AUDIO TOWER SYSTEM

# MODEL CD-CH1000

CD-CH1000 Audio Tower System consisting of CD-CH1000 (main unit) and CP-RW5000 (speaker system).

### “HOW TO ORDER REPLACEMENT PARTS”

To have your order filled promptly and correctly, please furnish the following information.

- |                 |                |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. No.    |
| 3. PART NO.     | 4. DESCRIPTION |

★ MARK: SPARE PARTS-DELIVERY SECTION

#### For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,  
Please call Toll-Free;  
1-800-BE-SHARP

## Explanation of capacitors/resistors parts codes

### Capacitors

VCC ..... Ceramic type  
 VCK ..... Ceramic type  
 VCT ..... Semiconductor type  
 VC •• MF ..... Cylindrical type (without lead wire)  
 VC •• MN ..... Cylindrical type (without lead wire)  
 VC •• TV ..... Square type (without lead wire)  
 VC •• TQ ..... Square type (without lead wire)  
 VC •• CY ..... Square type (without lead wire)  
 VC •• CZ ..... Square type (without lead wire)  
 VC •••••••• J .. The 13th character represents capacity difference.  
 ("J"  $\pm 5\%$ , "K"  $\pm 10\%$ , "M"  $\pm 20\%$ , "N"  $\pm 30\%$ ,  
 "C"  $\pm 0.25$  pF, "D"  $\pm 0.5$  pF, "Z"  $+80-20\%$ .)


If there are no indications for the electrolytic capacitors, error is  $\pm 20\%$ .

### Resistors

VRD ..... Carbon-film type  
 VRS ..... Carbon-film type  
 VRN ..... Metal-film type  
 VR •• MF ..... Cylindrical type (without lead wire)  
 VR •• MN ..... Cylindrical type (without lead wire)  
 VR •• TV ..... Square type (without lead wire)  
 VR •• TQ ..... Square type (without lead wire)  
 VR •• CY ..... Square type (without lead wire)  
 VR •• CZ ..... Square type (without lead wire)  
 VR •••••••• J .. The 13th character represents error.  
 ("J"  $\pm 5\%$ , "F"  $\pm 1\%$ , "D"  $\pm 0.5\%$ .)

If there are no indications for other parts, the resistors are  $\pm 5\%$  carbon-film type.

### NOTE:

Parts marked with “” are important for maintaining the safety of the set.

Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

# CD-CH1000

NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
<b>CD-CH1000</b>			
<b>INTEGRATED CIRCUITS</b>			
IC2	VHITC9490F/-1	J AX	Servo/Signal Control,TC9490F
IC5	VHIBA5939S/-1	J AH	Focus/Tracking/Spin/Sled Driver,BA5939S
IC6	VHITA2147F/-1	J AM	Servo Pre Amp.,TA2147F
IC101	VHIAN7345K/-1	J AM	Playback and Record/Playback Amp.,AN7345K
IC102	VHIBA3126N/-1	J AF	Head Selector,BA3126N
IC201	VHISTK40271-1	J AZ	Power AMP.,STK40271
IC202	VHISTK40204-1	J AX	Power AMP.,STK40204
IC203	VHIKIA4558P-1	J AC	Ope Amp.,KIA4558P
IC301	VHITA7358AP-1	J AG	FM Front End,TA7358AP
IC302	VHILC72131/-1	J AP	PLL (Tuner),LC72131
IC303	VHILA1832S/-1	J AN	FM IF Det./FM Mpx./AM IF,LA1832S
IC502	VHILC75341/-1	J AM	Audio Processor,LC75341
IC503	VHINJM4558M-1	J AC	Motor Driver,NJM4558M
IC701	VHITA7291S/-1	J AH	Loading Motor Driver,TA7291S
IC702	VHIBU2092F/-1	J AM	Input/Output Expander,BU2092F
IC802	VHIKIA7810AP1	J AF	Voltage Regulator,KIA7810AP
IC808	VHIKIA7805AP1	J AF	Constant Voltage Regulator,KIA7805AP
IC901	RH-IX0353AWZZ	J AY	System Microcomputer,IX0353AW
IC905	VHIKIA7042AP1	J AC	Reset,KIA7042AP
IC912	VHIBU2092F/-1	J AM	Input/Output Expander,BU2092F
IC913	VHIKIA7805P-1	J AF	Voltage Regulator,KIA7805P

## TRANSISTORS

Q1	VS2SC1740R/-1	J AB	Silicon,NPN,2SC1740 R
Q3	VS2SD2012//1	J AD	Silicon,NPN,2SD2012
Q4	VSKTA1266GR-1	J AB	Silicon,PNP,KTA1266 GR
Q5	VSKRA102M//1	J AC	Digital,PNP,KRA102 M
Q101	VSKRA107M//1	J AE	Digital,PNP,KRA107 M
Q102	VSKTC3199GR-1	J AB	Silicon,NPN,KTC3199 GR
Q114	VS2SA1015GR-1	J AB	Silicon,PNP,2SA1015 GR
Q115	VSKRC104M//1	J AC	Digital,NPN,KRC104 M
Q116	VSKTC3203Y/-1	J AC	Silicon,NPN,KTC3203 Y
Q119,120	VSDTC363TS/-1	J AC	Digital,NPN,DTC363 TS
Q200	VSKRC102M//1	J AC	Digital,NPN,KRC102 M
Q201~211	VSKTC3199GR-1	J AB	Silicon,NPN,KTC3199 GR
Q212	VS2SA562-Y/-1	J AC	Silicon,PNP,2SA562 Y
Q302	VSKTC3194Y/-1	J AD	Silicon,NPN,KTC3194 Y
Q351	VSKRC104M//1	J AC	Digital,NPN,KRC104 M
Q360	VS2SB562-C/-1	J AD	Silicon,PNP,2SB562 C
Q371	VSKTA1266GR-1	J AB	Silicon,PNP,KTA1266 GR
Q501,502	VSKTC3199GR-1	J AB	Silicon,NPN,KTC3199 GR
Q507,508	VSDTC363TS/-1	J AC	Digital,NPN,DTC363 TS
Q509	VSKRA107M//1	J AE	Digital,PNP,KRA107 M
Q707	VSKTC3203Y/-1	J AC	Silicon,NPN,KTC3203 Y
Q708	VSKRA102M//1	J AC	Digital,PNP,KRA102 M
Q720~725	VSKRA102M//1	J AC	Digital,PNP,KRA102 M
Q805	VSKTC2026//1	J AF	Silicon,NPN,KTC2026
Q806	VSKTA1046Y/-1	J AC	Silicon,PNP,KTA1046 Y
Q807	VSKTC3199GR-1	J AB	Silicon,NPN,KTC3199 GR
Q809	VS2SD2012//1	J AD	Silicon,NPN,2SD2012
Q810	VSKTC3199GR-1	J AB	Silicon,NPN,KTC3199 GR
Q901	VSKRC102M//1	J AC	Digital,NPN,KRC102 M
Q905	VS2SB561-C/-1	J AC	Silicon,PNP,2SB561 C
Q906,907	VSKRC107M//1	J AC	Digital,NPN,KRC107 M
Q908	VS2SB561-C/-1	J AC	Silicon,PNP,2SB561 C
Q909	VSKRC107M//1	J AC	Digital,NPN,KRC107 M
Q954,955	VSKTC3199GR-1	J AB	Silicon,NPN,KTC3199 GR

## DIODES

D201~208	VHDDS1SS133-1	J AB	Silicon,DS1SS133
D210	VHDDS1SS133-1	J AB	Silicon,DS1SS133
D301~306	VHDDS1SS133-1	J AB	Silicon,DS1SS133
D310~312	VHDDS1SS133-1	J AB	Silicon,DS1SS133
D352	VHDDS1SS133-1	J AB	Silicon,DS1SS133
D507,508	VHDDS1SS133-1	J AB	Silicon,DS1SS133
D802	VHD1N4004S/-1	J AB	Silicon,1N4004S
△D804~807	VHD1N4004S/-1	J AB	Silicon,1N4004S
D812~815	VHD1N4004S/-1	J AB	Silicon,1N4004S
△D816,817	VHDTS6B04GM-1	J AP	Silicon,TS6B04GM

NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
D818,819	VHDDS1SS133-1	J AB	Silicon,DS1SS133
D901,902	VHDDS1SS133-1	J AB	Silicon,DS1SS133
D905~907	VHDDS1SS133-1	J AB	Silicon,DS1SS133
D910	VHDDS1SS133-1	J AB	Silicon,DS1SS133
D951	VHDDS1SS133-1	J AB	Silicon,DS1SS133
D953,954	VHDDS1SS133-1	J AB	Silicon,DS1SS133
DZ1	VHEMTZJ5R1A-1	J AB	Zener,5.1V,MTZJ5.1A
DZ2	VHEMTZJ3R9B-1	J AC	Zener,3.9V,MTZJ3.9B
DZ201	VHEMTZJ5R6B-1	J AD	Zener,5.6V,MTZJ5.6B
DZ351	VHEDZ5R1BSB-1	J AC	Zener,5.1V,DZ5.1BSB
DZ803	VHEMTZJ9R1B-1	J AB	Zener,9.1V,MTZJ9.1B
DZ804	VHEMTZJ100B-1	J AB	Zener,10V,MTZJ10B
LED701~709	VHPL1154GDA-1	J AD	LED,Green,L1154GDA
LED716~724	VHPL1154GDA-1	J AD	LED,Green,L1154GDA
LED731	VHPHLM1700-1	J AC	LED,Red,HLM1700
LED754~759	VHPK5052UL/-1	J AD	LED,Red,K5052UL
LED773~775	VHPL1154GDA-1	J AD	LED,Green,L1154GDA
LED776	VHPK5052UL/-1	J AD	LED,Red,K5052UL
LED781,782	VHPK5052C//1	J AD	LED,Green,K5052C
LED801	VHPK5052UL/-1	J AD	LED,Red,K5052UL

## FILTERS

BF301	RFILR0008AWZZ	J AE	Band Pass Filter
CF302	RFILF0124AFZZ	J AD	FM IF,10.7 MHz
CF351	RFILF0003AWZZ	J AK	FM IF
CF352	RFILA0009AWZZ	J AE	AM IF

## TRANSFORMERS

T302	RCILA0062AWZZ	J AC	AM Antenna
T306	RCILB0066AWZZ	J AD	AM Oscillation
T311	RCILB0065AWZZ	J AC	FM Oscillation
T312	RCILIO017AWZZ	J AB	FM IF
T351	RCILIO019AWZZ	J AD	AM IF
△T801	RTRNP0315AWZZ	J BF	Power,Main
△T802	RTRNP0312AWZZ	J AM	Power,Sub

## COILS

L1,2	VP-DHR82M0000	J AB	0.82 μH,Playback PLL
L7	VP-DHR82M0000	J AB	0.82 μH,Playback PLL
L104	VP-MK331K0000	J AB	330 μH,Choke
L201~204	RCILZ0137AFZZ	J AA	0.29 μH
L312	RCILR0056AWZZ	J AB	FM RF
L342	VP-DH2R2K0000	J AB	2.2 μH,Peaking
L351,352	VP-DH101K0000	J AB	100 μH,Choke
L353	VP-DH102K0000	J AB	1 mH,Choke
L501,502	VP-DH2R2K0000	J AB	2.2 μH,Peaking
L703~705	VP-XH2R2K0000	J AB	2.2 μH,Choke
L901	VP-DH101K0000	J AB	100 μH,Choke
L910	VP-YF470K0000	J AB	47 μH,Choke
L915	VP-DH2R2K0000	J AB	2.2 μH,Peaking

## VARIABLE RESISTOR

VR351	RVR-M0026AWZZ	J AC	10 kohm (B),Semi-VR [FM Mute Level]
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## VARIABLE CAPACITORS

VD301	VHCSVC348S/-1	J AK	Variable Capacitance,SVC348S
VD302,303	VHCSVC211C/-1	J AG	Variable Capacitance,SVC211C

## VIBRATORS

X1	RCRSP0005AWZZ	J AF	Crystal,16.934 MHz
X351	92LCRSTL1425A	J AF	Crystal,456 kHz
X352	RCRSP0002AWZZ	J AH	Crystal,4.5 MHz
X901	RCRM-0173AFZZ	J AE	Ceramic,8 MHz
X902	RCRSP0011AWZZ	J AC	Crystal,32.768 kHz

## CAPACITORS

C1	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic
C2,3	VCTYMN1EF223Z	J AA	0.022 μF,25V
C4	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic
C5,6	RC-GZA106AF1C	J AB	10 μF,16V,Electrolytic
C7	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic



NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
C8	VCTYMN1EF223Z	J AA	0.022 μF,25V	C241,242	RC-GZA106AF1H	J AB	10 μF,50V,Electrolytic
C10	VCTYMN1EF223Z	J AA	0.022 μF,25V	C243~246	VCQYKA1HM104K	J AB	0.1 μF,50V,Mylar
C11,12	VCCSMN1HL330J	J AA	33 pF,50V	C247	RC-GZA476AF1H	J AB	47 μF,50V,Electrolytic
C13,14	VCTYMN1EF223Z	J AA	0.022 μF,25V	C248	VCKYPA1HF223Z	J AB	0.022 μF,50V
C15~17	VCKYPA1HF473Z	J AB	0.047 μF,50V	C249	RC-GZA476AF1E	J AB	47 μF,25V,Electrolytic
C18	VCQYKA1HM333J	J AB	0.033 μF,50V,Mylar	C250	VCQYKA1HM223K	J AB	0.022 μF,50V,Mylar
C19	VCKYPA1HF473Z	J AB	0.047 μF,50V	C251	RC-GZA476AF1H	J AB	47 μF,50V,Electrolytic
C20	VCCSMN1HL470J	J AA	47 pF,50V	C252	RC-GZW228AF1H	J AH	2200 μF,50V,Electrolytic
C21	VCKYMN1HB102K	J AA	0.001 μF,50V	C253,254	RC-EZ0027AWZZ	J AN	3300 μF,63V,Electrolytic
C22	VCQYKA1HM333J	J AB	0.033 μF,50V,Mylar	C255	RC-GZW228AF1H	J AH	2200 μF,50V,Electrolytic
C23	VCTYMN1CY103K	J AA	0.01 μF,16V	C256	RC-GZA476AF1H	J AB	47 μF,50V,Electrolytic
C24	VCTYMN1CX272K	J AA	0.0027 μF,16V	C257	RC-GZA106AF1H	J AB	10 μF,50V,Electrolytic
C25	VCTYMN1CY103K	J AA	0.01 μF,16V	C258	VCEAZA1CW107M	J AC	100 μF,16V,Electrolytic
C26	VCTYMN0JY153M	J AA	0.015 μF,6.3V	C301	VCKYCY1HB102K	J AA	0.001 μF,50V
C27	VCTYMN1CX472K	J AA	0.0047 μF,16V	C303	VCCCCY1HH100D	J AA	10 pF (CH),50V
C28,29	VCTYMN1EF223Z	J AA	0.022 μF,25V	C304	VCKYCY1HB103K	J AA	0.01 μF,50V
C30	RC-GZA476AF1A	J AB	47 μF,10V,Electrolytic	C305	VCCCCY1HH5ROC	J AA	5 pF (CH),50V
C31	RC-GZA227AF1A	J AB	220 μF,10V,Electrolytic	C306	VCKYBT1HB102K	J AA	0.001 μF,50V
C32,33	VCTYMN1EF223Z	J AA	0.022 μF,25V	C308	VCCCCY1HH5ROC	J AA	5 pF (CH),50V
C34	VCCSMN1HL220J	J AA	22 pF,50V	C309	VCKYCY1HB102K	J AA	0.001 μF,50V
C36	VCCSMN1HL270J	J AA	27 pF,50V	C310~312	VCCCCY1HH101J	J AA	100 pF (CH),50V
C37	VCTYMN1EF223Z	J AA	0.022 μF,25V	C313	VCCCCY1HH220J	J AA	22 pF (CH),50V
C38	RC-GZA106AF1H	J AB	10 μF,50V,Electrolytic	C314,315	VCKYCY1HB472K	J AA	0.0047 μF,50V
C39	VCCSMN1HL3R9C	J AA	3.9 pF,50V	C316	VCKYCY1EF104Z	J AA	0.1 μF,25V
C40,41	VCQYKA1HM104K	J AB	0.1 μF,50V,Mylar	C317	VCKYCY1HB102K	J AA	0.001 μF,50V
C42	VCTYMN1CX682K	J AA	0.0068 μF,16V	C318	VCCCCY1HH101J	J AA	100 pF (CH),50V
C43	VCTYMN1EF223Z	J AA	0.022 μF,25V	C319	VCTYPA1EX104K	J AB	0.1 μF,25V
C44	RC-GZA227AF1A	J AB	220 μF,10V,Electrolytic	C320	VCTYPA1EX473K	J AB	0.047 μF,25V
C45	RC-GZA477AF1A	J AC	470 μF,10V,Electrolytic	C321	RC-GZA107AF1C	J AB	100 μF,16V,Electrolytic
C46	VCTYMN1EF223Z	J AA	0.022 μF,25V	C323	VCKYCY1HB223K	J AA	0.022 μF,50V
C47,48	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic	C324	VCCCCY1HH4R0C	J AA	4 pF (CH),50V
C49,50	VCTYPA1HF104Z	J AB	0.1 μF,50V	C325	VCCCCY1HH150J	J AA	15 pF (CH),50V
C51	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic	C326	VCCCCY1HH180J	J AA	18 pF (CH),50V
C58~60	VCKYMN1HB101K	J AA	100 pF,50V	C327	VCKYCY1EF104Z	J AA	0.1 μF,25V
C64,65	VCKYBT1HB102K	J AA	0.001 μF,50V	C330	VCCUCY1HJ150J	J AA	15 pF (UJ),50V
C67	VCKYPA1HB102K	J AA	0.001 μF,50V	C331	VCKYPA1HF473Z	J AB	0.047 μF,50V
C91,92	VCKYMN1HB471J	J AB	470 pF,50V	C332	VCKYCY1HB223K	J AA	0.022 μF,50V
C93~99	VCKYMN1HB101K	J AA	100 pF,50V	C334	VCCUCY1HJ150J	J AA	15 pF (UJ),50V
C101,102	VCKYPA1HB181K	J AA	180 pF,50V	C335	VCCCCY1HH331J	J AA	330 pF (CH),50V
C103	RC-GZA106AF1C	J AB	10 μF,16V,Electrolytic	C337	VCKYCY1HB223K	J AA	0.022 μF,50V
C104,105	VCKYPA1HB561K	J AA	560 pF,50V	C338	VCKYCY1HB102K	J AA	0.001 μF,50V
C106,107	VCTYPA1EX333K	J AA	0.033 μF,25V	C339	VCCCCY1HH101J	J AA	100 pF (CH),50V
C108,109	VCCSPA1HL331J	J AA	330 pF,50V	C341	VCKYCY1EF104Z	J AA	0.1 μF,25V
C110,111	RC-GZA476AF1E	J AB	47 μF,25V,Electrolytic	C342	VCKYCY1HB223K	J AA	0.022 μF,50V
C112,113	VCKYPA1HB561K	J AA	560 pF,50V	C343	VCCCCY1HH330J	J AA	33 pF (CH),50V
C116	RC-GZA335AF1H	J AB	3.3 μF,50V,Electrolytic	C345~347	VCKYCY1HB223K	J AA	0.022 μF,50V
C118	VCKYPA1HF223Z	J AB	0.022 μF,50V	C350	VCKYCY1CB473K	J AA	0.047 μF,16V
C119,120	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic	C351	VCKYCY1HB223K	J AA	0.022 μF,50V
C121,122	VCKYPA1HB271K	J AA	270 pF,50V	C352	RC-GZA106AF1H	J AB	10 μF,50V,Electrolytic
C123,124	VCKYPA1EX223K	J AA	0.022 μF,25V	C353,354	VCKYCY1HB223K	J AA	0.022 μF,50V
C125,126	RC-GZA226AF1H	J AB	22 μF,50V,Electrolytic	C355	VCCCCY1HH220J	J AA	22 pF (CH),50V
C127	VCKYPU1HB332K	J AA	0.0033 μF,50V	C356	VCKYCY1HB102K	J AA	0.001 μF,50V
C129,130	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic	C357	RC-GZA225AF1H	J AB	2.2 μF,50V,Electrolytic
C131	RC-GZA226AF1H	J AB	22 μF,50V,Electrolytic	C358	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic
C132	RC-GZA227AF1C	J AB	220 μF,16V,Electrolytic	C361	VCKYCY1HB223K	J AA	0.022 μF,50V
C133	VCQYKA1HM393K	J AB	0.039 μF,50V,Mylar	C362	RC-GZA335AF1H	J AB	3.3 μF,50V,Electrolytic
C134	RC-GZA476AF1E	J AB	47 μF,25V,Electrolytic	C363	VCKYCY1HB223K	J AA	0.022 μF,50V
C135	RC-QZA473AFYJ	J AB	0.047 μF,50V,Mylar	C364	RC-GZA475AF1H	J AB	4.7 μF,50V,Electrolytic
C137	VCQPKA2AA822J	J AA	0.0082 μF,100V,Polypropylene	C365	VCKYCY1HB223K	J AA	0.022 μF,50V
C138	VCKYPU1HB332K	J AA	0.0033 μF,50V	C366	VCKYCY1HB102K	J AA	0.001 μF,50V
C140,141	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic	C367,368	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic
C200	VCEAZA1CW476M	J AB	47 μF,16V,Electrolytic	C370~372	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic
C201,202	VCCSPA1HL221J	J AA	220 pF,50V	C373,374	VCKYCY1HB153K	J AA	0.015 μF,50V
C203,204	RC-GZA476AF1H	J AB	47 μF,50V,Electrolytic	C380	RC-GZA106AF1H	J AB	10 μF,50V,Electrolytic
C205,206	VCCSPA1HL150J	J AA	15 pF,50V	C381	VCCCCY1HH120J	J AA	12 pF (CH),50V
C207,208	VCFYHA1HA154J	J AC	0.15 μF,50V,Thin Film	C382	VCCCCY1HH150J	J AA	15 pF (CH),50V
C209,210	RC-GZA107AF1H	J AC	100 μF,50V,Electrolytic	C384	VCKYCY1HB102K	J AA	0.001 μF,50V
C211,212	VCQYKA1HM154K	J AB	0.15 μF,50V,Mylar	C385	VCKYCY1HB103K	J AA	0.01 μF,50V
C213,214	VCKYPA1HF223Z	J AB	0.022 μF,50V	C386	VCCCCY1HH331J	J AA	330 pF (CH),50V
C215,216	VCKZPA1HF223Z	J AA	0.022 μF,50V	C387	VCKYCY1HB223K	J AA	0.022 μF,50V
C217,218	VCCCPA1HH101J	J AA	100 pF (CH),50V	C389,390	VCKYCY1HB102K	J AA	0.001 μF,50V
C219,220	RC-GZA106AF1H	J AB	10 μF,50V,Electrolytic	C391	RC-GZA476AF1C	J AB	47 μF,16V,Electrolytic
C221,222	VCQYKA1HM153K	J AB	0.015 μF,50V,Mylar	C392	VCKYCY1HB102K	J AA	0.001 μF,50V
C223,224	RC-GZA106AF1H	J AB	10 μF,50V,Electrolytic	C393	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic
C225,226	VCCCPU1HH221J	J AB	220 pF (CH),50V	C394	RC-GZA476AF1C	J AB	47 μF,16V,Electrolytic
C227,228	RC-GZA225AF1H	J AB	2.2 μF,50V,Electrolytic	C395	VCKYCY1HB223K	J AA	0.022 μF,50V
C229,230	VCFYHA1HA154J	J AC	0.15 μF,50V,Thin Film	C396	RC-GZA107AF1C	J AB	100 μF,16V,Electrolytic
C231,232	VCCSPA1HL221J	J AA	220 pF,50V	C397	VCKYCY1HB223K	J AA	0.022 μF,50V
C233,234	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic	C398	RC-GZA107AF1C	J AB	100 μF,16V,Electrolytic
C235,236	VCCSPA1HL150J	J AA	15 pF,50V	C399	VCKYCY1HB223K	J AA	0.022 μF,50V
C237,238	RC-GZA107AF1H	J AC	100 μF,50V,Electrolytic	C501,502	VCKYCY1HB102K	J AA	0.001 μF,50V
C239,240	VCKZPA1HF223Z	J AA	0.022 μF,50V	C503	RC-GZA226AF1H	J AB	22 μF,50V,Electrolytic



NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
R211,212	VRD-ST2CD183J	J AA	18 kohms,1/6W	R507	VRS-CY1JB223J	J AA	22 kohms,1/16W
R213	VRD-ST2CD101J	J AA	100 ohm,1/6W	R511,512	VRS-CY1JB822J	J AA	8.2 kohms,1/16W
R215,216	VRD-ST2CD223J	J AA	22 kohms,1/6W	R513,514	VRS-CY1JB122J	J AA	1.2 kohms,1/16W
R217,218	VRD-ST2CD183J	J AA	18 kohms,1/6W	R524~526	VRD-ST2CD102J	J AA	1 kohm,1/6W
R219,220	VRN-VV3DAR22J	J AC	0.22 ohms,2W	R527,528	VRS-CY1JB222J	J AA	2.2 kohms,1/16W
R221,222	VRD-ST2CD472J	J AA	4.7 kohms,1/6W	R529~534	VRS-CY1JB392J	J AA	3.9 kohms,1/16W
R223,224	VRN-VV3AAR10J	J AB	0.1 ohm,1W	R535,536	VRS-CY1JB473J	J AA	47 kohms,1/16W
R225,226	VRD-ST2CD103J	J AA	10 kohm,1/6W	R537,538	VRS-CY1JB102J	J AA	1 kohm,1/16W
R227,228	VRD-ST2CD822J	J AA	8.2 kohms,1/6W	R539,540	VRS-CY1JB103J	J AA	10 kohm,1/16W
R229,230	VRN-VV3DAR22J	J AC	0.22 ohms,2W	R541,542	VRS-CY1JB152J	J AA	1.5 kohms,1/16W
R231,232	VRD-ST2CD102J	J AA	1 kohm,1/6W	R543,544	VRS-CY1JB473J	J AA	47 kohms,1/16W
R233,234	VRD-ST2CD104J	J AA	100 kohm,1/6W	R547,548	VRS-CY1JB222J	J AA	2.2 kohms,1/16W
R235,236	VRD-ST2CD182J	J AA	1.8 kohms,1/6W	R549,550	VRS-CY1JB393J	J AA	39 kohms,1/16W
R237,238	VRD-ST2CD683J	J AA	68 kohms,1/6W	R551,552	VRS-CY1JB473J	J AA	47 kohms,1/16W
R239,240	VRD-ST2CD102J	J AA	1 kohm,1/6W	R582	VRS-CY1JB223J	J AA	22 kohms,1/16W
R241,242	VRD-ST2CD683J	J AA	68 kohms,1/6W	R591,592	VRS-CY1JB473J	J AA	47 kohms,1/16W
R243,244	VRD-ST2CD102J	J AA	1 kohm,1/6W	R701~706	VRD-ST2CD102J	J AA	1 kohm,1/6W
R245,246	VRD-ST2CD821J	J AA	820 ohms,1/6W	R707,708	VRD-ST2CD272J	J AA	2.7 kohms,1/6W
R247,248	VRD-ST2CD563J	J AA	56 kohms,1/6W	R710,711	VRD-ST2CD472J	J AA	4.7 kohms,1/6W
R249,250	VRD-ST2CD102J	J AA	1 kohm,1/6W	R712	VRD-ST2CD222J	J AA	2.2 kohms,1/6W
R251	VRD-ST2CD103J	J AA	10 kohm,1/6W	R713~715	VRD-ST2CD102J	J AA	1 kohm,1/6W
R253	VRD-ST2CD102J	J AA	1 kohm,1/6W	R718,719	VRD-ST2CD102J	J AA	1 kohm,1/6W
R254	VRD-ST2CD103J	J AA	10 kohm,1/6W	R720,721	VRD-ST2CD682J	J AA	6.8 kohms,1/6W
R255,256	VRN-VV3AAR10J	J AB	0.1 ohm,1W	R723	VRD-ST2CD182J	J AA	1.8 kohms,1/6W
R257,258	VRD-ST2CD103J	J AA	10 kohm,1/6W	R724	VRD-ST2CD151J	J AA	150 ohms,1/6W
R259,260	VRD-ST2CD102J	J AA	1 kohm,1/6W	R726	VRD-ST2CD222J	J AA	2.2 kohms,1/6W
R261~264	VRD-ST2CD563J	J AA	56 kohms,1/6W	R727	VRD-ST2CD151J	J AA	150 ohms,1/6W
R265,266	VRD-RT2HD4R7J	J AA	4.7 ohms,1/2W	R728,729	VRD-ST2CD153J	J AA	15 kohms,1/6W
R267~270	VRD-RT2HD331J	J AA	330 ohms,1/2W	R732	VRD-ST2CD151J	J AA	150 ohms,1/6W
R271,272	VRD-RT2HD4R7J	J AA	4.7 ohms,1/2W	R733	VRD-ST2CD182J	J AA	1.8 kohms,1/6W
R273~276	VRD-ST2CD223J	J AA	22 kohms,1/6W	R735,736	VRD-ST2CD333J	J AA	33 kohms,1/6W
R277	VRD-ST2CD331J	J AA	330 ohms,1/6W	R741	VRD-ST2CD151J	J AA	150 ohms,1/6W
R278	VRD-ST2CD563J	J AA	56 kohms,1/6W	R743,744	VRD-ST2CD151J	J AA	150 ohms,1/6W
R279	VRD-ST2CD223J	J AA	22 kohms,1/6W	R747	VRD-ST2CD102J	J AA	1 kohm,1/6W
R280	VRD-ST2CD563J	J AA	56 kohms,1/6W	R748	VRD-ST2CD103J	J AA	10 kohm,1/6W
R281	VRD-RT2HD120J	J AA	12 ohms,1/2W	R749	VRD-ST2CD102J	J AA	1 kohm,1/6W
R283	VRD-ST2CD474J	J AA	470 kohms,1/6W	R750	VRD-ST2CD101J	J AA	100 ohm,1/6W
R284	VRD-ST2CD102J	J AA	1 kohm,1/6W	R752~754	VRD-ST2CD122J	J AA	1.2 kohms,1/6W
R299	VRD-ST2CD392J	J AA	3.9 kohms,1/6W	R755~757	VRD-ST2CD152J	J AA	1.5 kohms,1/6W
R302	VRD-ST2CD100J	J AA	10 ohm,1/6W	R758~760	VRD-ST2CD182J	J AA	1.8 kohms,1/6W
R309	VRD-ST2CD103J	J AA	10 kohm,1/6W	R761	VRD-ST2CD331J	J AA	330 ohms,1/6W
R311	VRS-CY1JB104J	J AA	100 kohm,1/16W	R762	VRS-CY1JB682J	J AA	6.8 kohms,1/16W
R313	VRS-CY1JB333J	J AA	33 kohms,1/16W	R763	VRS-CY1JB272J	J AA	2.7 kohms,1/16W
R314	VRD-ST2CD220J	J AA	22 ohms,1/6W	R764~766	VRD-ST2CD222J	J AA	2.2 kohms,1/6W
R322	VRS-CY1JB681J	J AA	680 ohms,1/16W	R768	VRD-RT2HD2R2J	J AA	2.2 ohms,1/2W
R323	VRS-CY1JB683J	J AA	68 kohms,1/16W	R769	VRD-ST2CD392J	J AA	3.9 kohms,1/6W
R325	VRS-CY1JB473J	J AA	47 kohms,1/16W	R771	VRD-ST2CD392J	J AA	3.9 kohms,1/6W
R327	VRD-ST2CD330J	J AA	33 ohms,1/6W	R772	VRD-ST2CD102J	J AA	1 kohm,1/6W
R336	VRD-ST2CD103J	J AA	10 kohm,1/6W	R773	VRD-ST2CD472J	J AA	4.7 kohms,1/6W
R345	VRD-ST2CD472J	J AA	4.7 kohms,1/6W	R775	VRD-ST2CD472J	J AA	4.7 kohms,1/6W
R350	VRS-CY1JB272J	J AA	2.7 kohms,1/16W	R776	VRD-ST2CD102J	J AA	1 kohm,1/6W
R351	VRD-ST2CD562J	J AA	5.6 kohms,1/6W	R777	VRD-ST2CD822J	J AA	8.2 kohms,1/6W
R352	VRS-CY1JB102J	J AA	1 kohm,1/16W	R779	VRD-ST2CD822J	J AA	8.2 kohms,1/6W
R353	VRS-CY1JB271J	J AA	270 ohms,1/16W	R780	VRD-ST2CD102J	J AA	1 kohm,1/6W
R354	VRS-CY1JB392J	J AA	3.9 kohms,1/16W	R781	VRD-ST2CD183J	J AA	18 kohms,1/6W
R355	VRS-CY1JB332J	J AA	3.3 kohms,1/16W	R783	VRD-ST2CD183J	J AA	18 kohms,1/6W
R356	VRS-CY1JB102J	J AA	1 kohm,1/16W	R787	VRD-ST2CD102J	J AA	1 kohm,1/6W
R357	VRS-CY1JB474J	J AA	470 kohms,1/16W	R788	VRD-ST2EE820J	J AA	82 ohms,1/4W
R358	VRS-CY1JB822J	J AA	8.2 kohms,1/16W	R791,792	VRD-ST2CD272J	J AA	2.7 kohms,1/6W
R359	VRS-CY1JB182J	J AA	1.8 kohms,1/16W	R803	VRD-ST2CD223J	J AA	22 kohms,1/6W
R360	VRD-ST2CD472J	J AA	4.7 kohms,1/6W	R806,807	VRD-ST2CD223J	J AA	22 kohms,1/6W
R361,362	VRS-CY1JB183J	J AA	18 kohms,1/16W	R811	VRD-RT2HD3R3J	J AA	3.3 ohms,1/2W
R363,364	VRS-CY1JB122J	J AA	1.2 kohms,1/16W	R813	VRD-ST2CD152J	J AA	1.5 kohms,1/6W
R369	VRD-ST2EE821J	J AA	820 ohms,1/4W	R814	VRD-ST2CD101J	J AA	100 ohm,1/6W
R370	VRD-ST2CD102J	J AA	1 kohm,1/6W	R815	VRD-ST2CD473J	J AA	47 kohms,1/6W
R371	VRS-CY1JB472J	J AA	4.7 kohms,1/16W	R820,821	VRD-ST2CD471J	J AA	470 ohms,1/6W
R372~374	VRS-CY1JB102J	J AA	1 kohm,1/16W	R822	VRD-ST2CD152J	J AA	1.5 kohms,1/6W
R376	VRS-CY1JB102J	J AA	1 kohm,1/16W	R830	VRD-ST2CD101J	J AA	100 ohm,1/6W
R377	VRS-CY1JB473J	J AA	47 kohms,1/16W	R834,835	VRD-RT2HD560J	J AA	56 ohms,1/2W
R378	VRS-CY1JB823J	J AA	82 kohms,1/16W	R836	VRD-ST2EE271J	J AA	270 ohms,1/4W
R379	VRS-CY1JB222J	J AA	2.2 kohms,1/16W	R837	VRD-RT2HD3R3J	J AA	3.3 ohms,1/2W
R380	VRS-CY1JB152J	J AA	1.5 kohms,1/16W	R901~903	VRD-ST2CD102J	J AA	1 kohm,1/6W
R381	VRS-CY1JB103J	J AA	10 kohm,1/16W	R904	VRS-CY1JB102J	J AA	1 kohm,1/16W
R382	VRD-ST2EE151J	J AA	150 ohms,1/4W	R905,906	VRD-ST2CD102J	J AA	1 kohm,1/6W
R383~385	VRS-CY1JB562J	J AA	5.6 kohms,1/16W	R907	VRS-CY1JB102J	J AA	1 kohm,1/16W
R389	VRS-CY1JB392J	J AA	3.9 kohms,1/16W	R908	VRD-ST2CD102J	J AA	1 kohm,1/6W
R391,392	VRD-ST2EE391J	J AA	390 ohms,1/4W	R910~913	VRS-CY1JB102J	J AA	1 kohm,1/16W
R393	VRS-CY1JB102J	J AA	1 kohm,1/16W	R914~917	VRD-ST2CD102J	J AA	1 kohm,1/6W
R395	VRS-CY1JB473J	J AA	47 kohms,1/16W	R918~921	VRS-CY1JB102J	J AA	1 kohm,1/16W
R399	VRD-ST2CD103J	J AA	10 kohm,1/6W	R927	VRS-CY1JB101J	J AA	100 ohm,1/16W
R501,502	VRD-ST2CD331J	J AA	330 ohms,1/6W	R928	VRS-CY1JB102J	J AA	1 kohm,1/16W
R503,504	VRS-CY1JB222J	J AA	2.2 kohms,1/16W	R932,933	VRS-CY1JB102J	J AA	1 kohm,1/16W

# CD-CH1000

NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
R934	VRD-ST2CD102J	J AA	1 kohm,1/6W	BI740A/B	QCNCWN1673AWZZ	J AE	Connector Ass'y,3/3Pin
R935,936	VRS-CY1JB102J	J AA	1 kohm,1/16W	BI741/CNS741	QCNCWN1666AWZZ	J AG	Connector Ass'y,5/5Pin
R941	VRS-CY1JB334J	J AA	330 kohms,1/16W	BI770/CNS770	QCNCWN1667AWZZ	J AG	Connector Ass'y,7/7Pin
R943,944	VRS-CY1JB102J	J AA	1 kohm,1/16W	BI771A/B	QCNCWN1684AWZZ	J AE	Connector Ass'y,4/4Pin
R945	VRS-CY1JB101J	J AA	100 ohm,1/16W	BI772/CNS772	QCNCWN1683AWZZ	J AG	Connector Ass'y,6/6Pin
R946-948	VRD-ST2CD102J	J AA	1 kohm,1/6W	BI773/CNS773	QCNCWN1682AWZZ	J AD	Connector Ass'y,2/2Pin
R949	VRS-CY1JB102J	J AA	1 kohm,1/16W	BI804/CNS804	QCNCWN1656AWZZ	J AE	Connector Ass'y,6/6Pin
R953,954	VRD-ST2CD102J	J AA	1 kohm,1/6W	BI808/CNS808	QCNCWN1655AWZZ	J AE	Connector Ass'y,5/5Pin
R955-959	VRS-CY1JB102J	J AA	1 kohm,1/16W	BI940/CNS940	QCNCWN1661AWZZ	J AF	Connector Ass'y,8/8Pin
R960	VRD-ST2CD102J	J AA	1 kohm,1/6W	BI950	QCNCW010HAWZZ	J AD	Socket,8Pin
R962,963	VRS-CY1JB102J	J AA	1 kohm,1/16W	BI960	QCNCW010QAWZZ	J AE	Socket,15Pin
R965,966	VRD-ST2CD102J	J AA	1 kohm,1/6W	CNP1	QCNCWZF33AWZZ	J AF	Socket,33Pin
R967	VRS-CY1JB102J	J AA	1 kohm,1/16W	CNP2	QCNCW026HAWZZ	J AC	Socket,8Pin
R968-970	VRD-ST2CD102J	J AA	1 kohm,1/6W	CNP3	QCNCW026DAWZZ	J AC	Socket,4Pin
R971	VRS-CY1JB102J	J AA	1 kohm,1/16W	CNP4	92LCONE4P53254	J AC	Plug,4Pin
R972	VRD-ST2CD102J	J AA	1 kohm,1/6W	CNP5	QCNCM704HAWZZ	J AC	Plug,8Pin
R974	VRS-CY1JB102J	J AA	1 kohm,1/16W	CNP6	92LCONE6P53253	J AC	Plug,6Pin
R976-981	VRS-CY1JB102J	J AA	1 kohm,1/16W	CNP6A	92LCONE6P53254	J AC	Plug,6Pin
R982,983	VRD-ST2CD102J	J AA	1 kohm,1/6W	CNP7	QCNCM704GAWZZ	J AC	Plug,7Pin
R984-988	VRS-CY1JB102J	J AA	1 kohm,1/16W	CNP101	QCNCM704GAFZZ	J AC	Plug,7Pin
R989	VRD-ST2CD102J	J AA	1 kohm,1/6W	CNP102	QCNCM704HAFZZ	J AC	Plug,8Pin
R990	VRS-CY1JB102J	J AA	1 kohm,1/16W	CNP203	92LCONE5P5268	J AD	Plug,5Pin
R991	VRD-ST2CD102J	J AA	1 kohm,1/6W	CNP204	92LCONE2P53254	J AB	Plug,2Pin
R992-994	VRS-CY1JB102J	J AA	1 kohm,1/16W	CNP207	92LCONE4P53254	J AC	Plug,4Pin
R995	VRD-ST2CD102J	J AA	1 kohm,1/6W	CNP303	92LCONE3P5268	J AC	Plug,3Pin
R996-998	VRS-CY1JB102J	J AA	1 kohm,1/16W	CNP701	QCNCWZG05AWZZ	J AB	Socket,5Pin
R999	VRD-ST2CD102J	J AA	1 kohm,1/6W	CNP721	92LCONE6P53254	J AC	Plug,6Pin
R1001	VRS-CY1JB473J	J AA	47 kohms,1/16W	CNP775	92LCONE2P53253	J AB	Plug,2Pin
R1002	VRS-CY1JB104J	J AA	100 kohm,1/16W	CNP801	QCNCM049BAWZZ	J AC	Plug,2Pin
R1003	VRD-ST2CD472J	J AA	4.7 kohms,1/6W	CNP802	QCNCM051EAWZZ	J AD	Plug,5Pin
R1007	VRS-CY1JB102J	J AA	1 kohm,1/16W	CNP803	QCNCM035CAWZZ	J AB	Plug,3Pin
R1008	VRD-ST2CD102J	J AA	1 kohm,1/6W	CNP805	92LCONE6P5268	J AC	Plug,6Pin
R1011	VRS-CY1JB104J	J AA	100 kohm,1/16W	CNP806	QCNCM010QAWZZ	J AD	Plug,15Pin
R1012	VRS-CY1JB102J	J AA	1 kohm,1/16W	CNP807	QCNCM010HAWZZ	J AC	Plug,8Pin
R1013	VRD-ST2CD473J	J AA	47 kohms,1/6W	CNP901	QCNCWZF33AWZZ	J AF	Socket,33Pin
R1014	VRS-CY1JB104J	J AA	100 kohm,1/16W	CNP931	92LCONPB11BPHK	J AC	Plug,11Pin
R1015	VRS-CY1JB821J	J AA	820 ohms,1/16W	CNP933	92LCONE5P53253	J AB	Plug,5Pin
R1016,1017	VRS-CY1JB103J	J AA	10 kohm,1/16W	CNP934	92LCONE7P53253	J AC	Plug,7Pin
R1022	VRS-CY1JB473J	J AA	47 kohms,1/16W	CNP935A	92LCONPB6BPHK	J AB	Plug,6Pin
R1023	VRS-CY1JB102J	J AA	1 kohm,1/16W	CNP970	QCNCWZG11AWZZ	J AD	Socket,11Pin
R1024	VRS-CY1JB103J	J AA	10 kohm,1/16W	CNS4	QCNCWN1692AWZZ	J AD	Connector Ass'y,4Pin
R1026,1027	VRS-CY1JB103J	J AA	10 kohm,1/16W	CNS5A/B	QCNCWN1690AWZZ	J AG	Connector Ass'y,8/8Pin
R1028	VRS-CY1JB273J	J AA	27 kohms,1/16W	CNS6A/B	QCNCWN1668AWZZ	J AF	Connector Ass'y,6/6Pin
R1031,1032	VRS-CY1JB102J	J AA	1 kohm,1/16W	CNS7A/B	QCNCWN1689AWZZ	J AF	Connector Ass'y,7/7Pin
R1035,1036	VRS-CY1JB562J	J AA	5.6 kohms,1/16W	CNS200	QCNCWN1659AWZZ	J AC	Connector Ass'y,2Pin
R1040	VRS-CY1JB103J	J AA	10 kohm,1/16W	COR801	RCORF0015AWZZ	J AB	Core
R1044	VRS-CY1JB223J	J AA	22 kohms,1/16W	CORE1	RCORF0015AWZZ	J AB	Core
R1046	VRS-CY1JB123J	J AA	12 kohms,1/16W	△ F801	QFS-D252BSJNI	J AB	Fuse,2.5A 125V
R1048	VRS-CY1JB103J	J AA	10 kohm,1/16W	△ F803,804	QFS-D502BSJNI	J AE	Fuse,5A 125V
R1050-1052	VRS-CY1JB102J	J AA	1 kohm,1/16W	△ F805,806	QFS-D402BSJNI	J AB	Fuse,4A 125V
R1053-1057	VRS-CY1JB103J	J AA	10 kohm,1/16W	△ F807	QFS-D502BSJNI	J AE	Fuse,5A 125V
R1058	VRS-CY1JB104J	J AA	100 kohm,1/16W	△ F808	QFS-D252BSJNI	J AB	Fuse,2.5A 125V
R1060	VRS-CY1JB104J	J AA	100 kohm,1/16W	FFC901	QCNCWN1672AWZZ	J AF	Flat Cable,33Pin
R1065,1066	VRS-CY1JB103J	J AA	10 kohm,1/16W	FFC970	QCNCWN1671AWZZ	J AE	Flat Cable,11Pin
R1068	VRD-ST2CD103J	J AA	10 kohm,1/6W	FW2	QCNCWN1691AWZZ	J AD	Flat Wire,8Pin
R1071,1072	VRD-ST2CD333J	J AA	33 kohms,1/6W	FW3	QCNCWN1693AWZZ	J AC	Flat Wire,4Pin
R1081,1082	VRS-CY1JB562J	J AA	5.6 kohms,1/16W	JK501	92LJACKL1776A	J AF	Jack,AUX IN
R1084-1090	VRS-CY1JB562J	J AA	5.6 kohms,1/16W	JK701	QJAKM0010AWZZ	J AF	Jack,Headphones
R1092-1094	VRS-CY1JB562J	J AA	5.6 kohms,1/16W	JOG701	QSW-Z0011AWZZ	J AG	Switch,Push Type [Jog Dial]
R1099	VRD-ST2CD473J	J AA	47 kohms,1/6W	LCD720	RUNTZ0020AWZZ	J BC	LCD Display
R1105	VRD-ST2CD103J	J AA	10 kohm,1/6W	MO200	RMOTV0027AWZZ	J AM	Motor,Air Cooling Fan
R1106-1109	VRS-CY1JB103J	J AA	10 kohm,1/16W	MO700	RMOTV0027AWZZ	J AM	Motor,Control Panel
R1112,1113	VRS-CY1JB123J	J AA	12 kohms,1/16W	MOB1	92LMTR3435DASY	J AM	Main Cam Motor Ass'y
R1118,1119	VRS-CY1JB102J	J AA	1 kohm,1/16W	MOB2	92LMTR3435DASY	J AM	Tray Motor Ass'y
R1124-1126	VRS-CY1JB103J	J AA	10 kohm,1/16W	NM1	92LMTR2996CASY	J AS	Motor with Chassis [Spindle]
R1129,1130	VRS-CY1JB472J	J AA	4.7 kohms,1/16W	NM2	92LMTR1854BASY	J AP	Motor with Gear [Sled]
R1131,1132	VRS-CY1JB221J	J AA	220 ohms,1/16W	NSW1	QSW-F9001AW01	J AD	Switch,Push Type [Pickup In]
R1133	VRD-ST2CD471J	J AA	470 ohms,1/6W	RX701	VHLN64H380A-1	J AK	Remote Sensor,N64H380A
R1138,1139	VRS-CY1JB564J	J AA	560 kohms,1/16W	△ RY201,202	RRLYD0004AWZZ	J AP	Relay
R1140	VRD-ST2EE2R2J	J AA	2.2 ohms,1/4W	△ RY801	RRLYD0001SJZZ	J AQ	Relay
R1141	VRD-ST2CD102J	J AA	1 kohm,1/6W	SO201	QTANA0806AWZZ	J AG	Terminal,Speaker
R1142	VRD-ST2EE2R2J	J AA	2.2 ohms,1/4W	SW701	92LSWICH1401AT	J AC	Switch,Key Type [Power]
R1143	VRD-ST2CD105J	J AA	1 Mohm,1/6W	SW705	QSW-B0002AWZZ	J AF	Switch,Lever Type [Open/Close]
RA710,711	VRD-ST2CD151J	J AA	150 ohms,1/6W	SW710	92LSWICH1401AT	J AC	Switch,Key Type [Panel Open/Close]
<b>OTHER CIRCUITRY PARTS</b>				SW711	92LSWICH1401AT	J AC	Switch,Key Type [Volume Down]
BI201A/B	QCNCWN1658AWZZ	J AF	Connector Ass'y,8/8Pin	SW712	92LSWICH1401AT	J AC	Switch,Key Type [Volume Up]
BI702/CNS702	QCNCWN1668AWZZ	J AF	Connector Ass'y,6/6Pin	SW720	92LSWICH1401AT	J AC	Switch,Key Type [CD1 Eject]
BI703A/B	QCNCWN1674AWZZ	J AD	Connector Ass'y,2/2Pin	SW721	92LSWICH1401AT	J AC	Switch,Key Type [CD2 Eject]
BI720/CNS720	QCNCWN1665AWZZ	J AH	Connector Ass'y,11/11Pin	SW722	92LSWICH1401AT	J AC	Switch,Key Type [CD3 Eject]
BI730/CNS730	QCNCWN1675AWZZ	J AE	Connector Ass'y,4/4Pin	SW723	92LSWICH1401AT	J AC	Switch,Key Type [CD4 Eject]
				SW724	92LSWICH1401AT	J AC	Switch,Key Type [CD5 Eject]

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
SW725	92LSWICH1401AT	J	AC	Switch,Key Type [CD6 Eject]	122	NGERH0100AWZZ	J	AC	Gear,Stabilizer Drive,Right
SW730	92LSWICH1401AT	J	AC	Switch,Key Type [CD1 Play]	123	MSPRT0040AWFJ	J	AB	Spring,OS Lever
SW731	92LSWICH1401AT	J	AC	Switch,Key Type [CD2 Play]	124	NGERH0111AWZZ	J	AC	Gear,Tray Drive,Rear
SW732	92LSWICH1401AT	J	AC	Switch,Key Type [CD3 Play]	125	NGERH0113AWZZ	J	AF	Gear,Tray Joint,Rear
SW733	92LSWICH1401AT	J	AC	Switch,Key Type [CD4 Play]	126	NGERH0116AWZZ	J	AH	Gear,Mode Big
SW734	92LSWICH1401AT	J	AC	Switch,Key Type [CD5 Play]	127	NGERH0117AWZZ	J	AC	Gear,Lift A
SW735	92LSWICH1401AT	J	AC	Switch,Key Type [CD6 Play]	128	NGERH0118AWZZ	J	AB	Gear,Lift B
SW750	92LSWICH1401AT	J	AC	Switch,Key Type [Record Pause]	129	NGERH0119AWZZ	J	AF	Gear,Lift C
SW751	92LSWICH1401AT	J	AC	Switch,Key Type [Clear]	130	NGERH0115AWZZ	J	AC	Gear,Tray Idler
SW752	92LSWICH1401AT	J	AC	Switch,Key Type [Memory]	131	NGERH0106AWZZ	J	AC	Gear,Motor Idler,F
SW753	92LSWICH1401AT	J	AC	Switch,Key Type [Fast Reverse]	132	NGERH0120AWZZ	J	AB	Gear,Stabilizer A
SW755	92LSWICH1401AT	J	AC	Switch,Key Type [Fast Forward]	133	NSFTT0055AWM1	J	AH	Stabilizer Gear Ass'y
SW756	92LSWICH1401AT	J	AC	Switch,Key Type [Play/Pause]	133-1	NGERH0122AWZZ	J		Gear,Stabilizer C
SW758	92LSWICH1401AT	J	AC	Switch,Key Type [Stop]	133-2	NSFTT0055AWFD	J		Shaft,Stabilizer Gear
SW761	92LSWICH1401AT	J	AC	Switch,Key Type [AUX]	133-3	NGERH0123AWZZ	J		Gear,Stabilizer D
SW762	92LSWICH1401AT	J	AC	Switch,Key Type [Tuner]	134	NGERH0108AWZZ	J	AK	Gear,Tray Big
SW763	92LSWICH1401AT	J	AC	Switch,Key Type [Tape]	135	NGERH0109AWZZ	J	AB	Gear,Tray A
SW764	92LSWICH1401AT	J	AC	Switch,Key Type [CD]	136	NGERH0110AWZZ	J	AC	Gear,Tray B
SW770	92LSWICH1401AT	J	AC	Switch,Key Type [Play Mode]	137	NGERH0103AWZZ	J	AB	Gear,Motor Idler,C
SW772	92LSWICH1401AT	J	AC	Switch,Key Type [Equalizer Mode]	138	NGERH0102AWZZ	J	AC	Gear,Motor Idler,B
SW773	92LSWICH1401AT	J	AC	Switch,Key Type [X-BASS]	139	NGERH0105AWZZ	J	AB	Gear,Motor Idler,E
SW774	92LSWICH1401AT	J	AC	Switch,Key Type [Display]	140	NGERH0104AWZZ	J	AB	Gear,Motor Idler,D
SW776	92LSWICH1401AT	J	AC	Switch,Key Type [Menu]	141	NGERH0101AWZZ	J	AD	Gear,Motor Idler,A
SW778	92LSWICH1401AT	J	AC	Switch,Key Type [Enter]	142	NGERH0114AWZZ	J	AB	Gear,Tray C
SWB101	QSW-P9005AWZZ	J	AD	Switch,Push Type[Disc Detect 1]	143	NGERH0107AWZZ	J	AC	Gear,Tray Drive,Front
SWB102	QSW-P9005AWZZ	J	AD	Switch,Push Type[Disc Detect 2]	144	NGERH0112AWZZ	J	AF	Gear,Tray Joint,Front
SWB103	QSW-P9005AWZZ	J	AD	Switch,Push Type[Disc Detect 3]	145	MLEVP0097AWZZ	J	AB	Lever,Left
SWB104	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 1]	146	NSFTT0056AWFD	J	AC	Shaft,Lift Lever
SWB105	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 2]	147	LHLDZ1270AWZZ	J	AH	Holder,Stabilizer
SWB106	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 3]	148	PMAGF0001AWZZ	J	AF	Magnet
SWB107	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 4]	149	LHLDM1011AWZZ	J	AD	Stabilizer
SWB108	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 5]	150	92LNBAND1318A	J	AA	Nylon Band,80mm
SWB109	QSW-P9004AWZZ	J	AE	Switch,Push Type [Tray 1]	151	QCNCW025DAWZZ	J	AB	Holder,Flat Wire,4Pin
SWB110	QSW-P9004AWZZ	J	AE	Switch,Push Type [Tray 2]	152	QCNCW025HAWZZ	J	AC	Holder,Flat Wire,8Pin
					801	XBPSD26P04000	J	AA	Screw,ø2.6x4mm
					802	XEBSD20P07000	J	AB	Screw,ø2x7mm
					803	XEBSD20P10000	J	AA	Screw,ø2x10mm
					804	XHBSD20P05000	J	AA	Screw,ø2x5mm
					805	LX-EZ0005AWFD	J	AA	Screw,ø2.6x10mm
					806	LX-EZ0026AWFD	J		Screw,ø2x9mm
					807	LX-JZ0105AFFN	J	AA	Screw,ø1.7x5mm
					808	XEBSD30P10000	J	AA	Screw,ø3x10mm
					MOB1	92LMTR3435DASY	J	AM	Main Cam Motor Ass'y
					MOB2	92LMTR3435DASY	J	AM	Tray Motor Ass'y

**CD MECHANISM PARTS**

301	NGERH0011AWZZ	J	AC	Gear,Middle
302	NGERH0012AWZZ	J	AC	Gear,Drive
303	MLEVP0080AWZZ	J	AC	Rail,Guide
304	NSFTM0020AWFW	J	AD	Shaft,Guide
305	92LMCUSN1524A	J	AD	Cushion
△306	92LHPC1LXASY	J	BD	Pickup Unit Ass'y
306-1				Pickup Unit (Not Replacement Item)
306-2	NGERR0043AFZZ	J	AC	Gear,Rack
306-3	MSPRC0961AFZZ	J	AA	Spring,Rack
307	PCUSG0001AWSA	J	AD	Cushion
308	PCUSG0004AWSA	J	AD	Cushion
701	XBSSD26P06000	J	AA	Screw,ø2.6x6mm
702	XHBSD20P05000	J	AA	Screw,ø2x5mm
703	XBSSD20P03000	J	AA	Screw,ø2x3mm
704	LX-WZ1070AFZZ	J	AA	Washer,ø1.5xø3.8x0.25mm
NM1	92LMTR2996CASY	J	AS	Motor with Chassis [Spindle]
NM2	92LMTR1854BASY	J	AP	Motor with Gear [Slid]
NSW1	QSW-F9001AW01	J	AD	Switch,Push Type [Pickup In]

**CHANGER MECHANISM PARTS**

101	LCHSM0106AWZZ	J	AQ	Main Base
102	PGIDM0033AWZZ	J	AH	Changer Box,Left
103	PGIDM0034AWZZ	J	AG	Changer Box,Right
104	NGERH0121AWZZ	J	AC	Gear,Stabilizer B
105	PGIDM0035AWZZ	J	AH	Bracket,Stabilizer Gear
106	MLEVP0098AWZZ	J	AB	Lever,Tray Lock
107	MSPRP0040AWFW	J	AD	Spring,Tray Lock Lever
108	GCOVA1317AWZZ	J	AF	Disc Tray 1
109	GCOVA1318AWZZ	J	AF	Disc Tray 2
110	GCOVA1319AWZZ	J	AF	Disc Tray 3
111	GCOVA1320AWZZ	J	AF	Disc Tray 4
112	GCOVA1321AWZZ	J	AF	Disc Tray 5
113	GCOVA1322AWZZ	J	AF	Disc Tray 6
114	LPLTP0010AWZZ	J	AG	Top Plate,Rear
115	MCAMP0009AWZZ	J	AE	Cam,Lift
116	NSFTT0057AWFD	J	AE	Shaft,Lift Cam
117	LPLTP0009AWZZ	J	AH	Top Plate,Front
118	MLEVP0099AWZZ	J	AB	Lever,Disc OB
119	NGERH0098AWZZ	J	AC	Gear,Stabilizer Drive,Left/Right
120	NGERH0099AWZZ	J	AC	Gear,Stabilizer Drive,Left
121	MLEVF0055AWFW	J		Lever,OS,Left/Right

**CABINET PARTS**

201	92LCAB3435AASY	J		Front Panel Ass'y
201-1				Front Panel (Not Replacement Item)
201-2	GCOVA1314AWSA	J	AF	Cover,Changer Door Panel, Bottom
201-3	GCOVA1315AWSA	J	AL	Cover,Cassette Holder
201-4	GDORF0080AWSA	J	AG	Cassette Holder
201-5	GDORF0081AWSA	J	AD	Door,Changer 1
201-6	GDORF0084AWSA	J	AD	Door,Changer 2
201-7	GDORF0085AWSA	J	AD	Door,Changer 3
201-8	GDORF0086AWSA	J	AD	Door,Changer 4
201-9	GDORF0087AWSA	J	AD	Door,Changer 5
201-10	GDORF0088AWSA	J	AD	Door,Changer 6
201-11	HDECQ0597AWSA	J	AK	Panel,Changer Door
201-12	HDECQ0598AWSA	J	AN	Center Window
201-13	MLOK0005AWZZ	J	AC	Cassette Lock
201-14	JKNBZ0724AWSA	J	AF	Button,Power
201-15	JKNBZ0726AWSA	J	AG	Button,CD Play
201-16	JKNBZ0735AWSA	J	AF	Button,Control Eject
201-17	JKNBZ0741AWSA	J	AK	Button,CD Eject
201-18	LANGK0210AWFW	J	AB	Bracket,Headphones Support
201-19	LHLDZ1005AWZZ	J	AC	Holder,Soft,Left
201-20	LHLDZ1006AWZZ	J	AC	Holder,Soft,Right
201-21	LHLDZ1271AWSA	J	AD	Holder,Changer Door
201-22	LHLDZ1276AWZZ	J	AC	Holder,Cassette Lock
201-23	MLIFP0008AWZZ	J	AD	Damper
201-24	MSPRC0029AWFJ	J	AB	Spring,Cassette Lock
201-25	MSPRD0140AWFJ	J	AC	Spring,Cassette Up
201-26	MSPRD0141AWFJ	J	AB	Spring,Changer Door
201-27	PCOVA1323AWSA	J	AB	Cover,Remote Sensor
201-28	PCUSG0053AWSA	J	AB	Cushion,Center Panel
201-29	LHLDZ1272AWZZ	J	AC	Holder,Switch
201-30	PSHEM0010AWZZ	J		Shield Sheet,Tape Head
201-31	PSHEM0009AWZZ	J		Earth Sheet,Display PWB

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NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
201-32	MSPRZ0010AWFJ	J	Spring,Display PWB
201-33	JKNBK0080AWSA	J AG	Knob,Jog
201-34	PSPAZ0025AWZZ	J	Spacer,LCD PWB
201-35	LHLDZ1265AWZZ	J AC	Holder,LED,A
201-36	LHLDZ1266AWZZ	J AC	Holder,LED,B
201-37	PSHEP0040AWZZ	J AG	Sheet,LCD
201-38	LHLDZ1263AWZZ	J AE	Holder,LCD
202	92LCAB3435BASY	J	Side Panel Ass'y,Left
202- 1	GITAS0077AWSA	J AP	Side Panel,Left
202- 2	PCUSG0022AWZZ	J AB	Cushion,Leg,Left
203	92LCAB3435CASY	J	Side Panel Ass'y,Right
203- 1	GITAS0078AWSA	J AP	Side Panel,Right
203- 2	PCUSG0022AWZZ	J AB	Cushion,Leg,Right
204	G CAB-1188AWSA	J AN	Top Cabinet
205	92LPNL3435AASY	J	Control Panel Ass'y
205- 1	GCOVA1311AWSA	J AN	Control Panel A
205- 2	GCOVA1312AWSA	J AB	Indicator A,Button
205- 3	GCOVA1313AWSA	J AB	Indicator B,Button
205- 4	GDORF0082AWSA	J AQ	Control Panel B
205- 5	HDECQ0601AWSA	J AM	Decoration Plate,Outer Window
205- 6	HDECQ0602AWSA	J AG	Outer Window
205- 7	HDECQ0603AWSA	J AG	Inner Window
205- 8	HDECQ0604AWSA	J AG	Ring,Jog Knob
205- 9	JKNBZ0727AWSA	J AH	Button,Function
205-10	JKNBZ0728AWSA	J AH	Button,Control
205-11	JKNBZ0730AWSA	J AG	Button,Play Mode
205-12	JKNBZ0731AWSA	J AG	Button,Menu
205-13	JKNBZ0732AWSA	J AE	Button,Enter
205-14	MSPRD0142AWFJ	J AD	Spring,Control Panel
205-15	LHLDZ1267AWZZ	J AD	Holder,LED,C
205-16	LHLDZ1268AWZZ	J AC	Holder,LED,D
206	GEAR3435AASY1	J	Gear Ass'y
206- 1	LHLDZ1261AWZZ	J AE	Gear Box A
206- 2	LHLDZ1262AWZZ	J AC	Gear Box B
206- 3	PSPAZ0023AWZZ	J AC	Spacer,Warm Gear
206- 4	NGERH0097AWZZ	J AC	Gear,Reduc.A
206- 5	NGERH0124AWZZ	J AF	Gear,Reduc.B
206- 6	NGERW0013AWZZ	J AC	Gear,Warm
206- 7	NGERW0014AWZZ	J AF	Gear,Warm Wheel
207	GITAR0610AWSA	J AP	Rear Panel [For U.S.A.]
207	GITAR0642AWSA	J	Rear Panel [For Canada]
208	HDECQ0605AWSA	J AP	Decoration Plate, Display Window
209	LANGK0197AWFW	J AG	Bracket,Center Support
210	LANGK0198AWFW	J AE	Bracket,Fan Motor Support
211	LANGK0199AWFW	J AF	Bracket,Heat Sink Support
212	LANGK0200AWFW	J AE	Bracket,PWB Support
213	LANGK0226AWFW	J	Bracket,Panel Support,Left
214	LANGK0227AWFW	J	Bracket,Panel Support,Right
215	LANGT0042AWFW	J AC	Bracket,Power PWB/Main PWB
△ 216	LBSHC0005AWZZ	J AD	Bushing,AC Power Supply Cord
217	LCHSM0105AWFW	J AW	Main Chassis
218	LCHSZ0017AWFW	J AN	Chassis,Bottom
219	LHLDK9001AW00	J AB	Poly Core Tie
225	MSPRD0108AWFJ	J AC	Spring,Fan Motor
226	NBRGC0003AWZZ	J AC	Bearing Metal
227	NFANP0001AWZZ	J AD	Rotary Fan,Motor
228	PCUSG0008AWZZ	J AB	Cushion,Spacer
229	PCUSG0022AWZZ	J AB	Cushion,Leg
△ 230	PRDAR0163AWFW	J AP	Heat Sink,Main
△ 231	PRDAR0164AWFW	J AS	Heat Sink,Sub A
△ 232	PRDAR0165AWFW	J AH	Heat Sink,Sub B
233	92LNBAND1318A	J AA	Nylon Band,80mm
236	PSLDM3075AWFW	J	Shield Plate,Power PWB
237	PSLDM3076AWFW	J	Shield Plate,Phone
238	PSPAS0003AWZZ	J AC	Spacer,Fan Motor Support Bracket
△ 239	QACCD0022AWZZ	J AM	AC Power Supply Cord
△ 240	QFSDH0001AWZZ	J AB	Holder,Fuse
241	92LCSPPR1431C	J AA	Spring,Fan Ring
250	KMECB0015AWZZ	J BB	Tape Mechanism Ass'y
250- 1	92PF513-869	J	Head Plate Block
250- 2	92PF525-332	J	Motor with Pulley [Tape]
250- 3	92PF567-648	J	Tape Mechanism PWB Ass'y
250- 4	92PFF19U-	J	Belt,Main
250- 5	92PF514-135	J	Pinch Roller
250- 6	92PFF19S-	J	Belt,FF/REW
250- 7	92PFD58M-XX	J	Gear,Cam
250- 8	92PF765-286	J	Solenoid

NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
601	LX-BZ0880AFZZ	J AC	Screw,ø2×2.2mm
602	LX-BZ2222AXZZ	J AB	Screw,Special
603	LX-EZ0028AWFN	J AC	Screw,ø2.6×12mm
604	LX-HZ0082AFZZ	J AA	Screw,ø4×8mm
605	LX-JZ0010AFFD	J AA	Screw,ø3×10mm
606	XBBSD20P05000	J AA	Screw,ø2×5mm
607	XEBSD26P10000	J AA	Screw,ø2.6×10mm
608	XEBSD30P10000	J AA	Screw,ø3×10mm
609	XEBSD30P14000	J AA	Screw,ø3×14mm
610	XEBSD30P20000	J AA	Screw,ø3×20mm
611	XESSD26P12000	J AB	Screw,ø2.6×12mm
612	XESSD30P10000	J AA	Screw,ø3×10mm
613	XESSN26P12000	J	Screw,ø2.6×12mm
614	XJBSD30P08000	J AA	Screw,ø3×8mm
615	XJBSD30P10000	J AA	Screw,ø3×10mm
616	XJBSD30P14000	J AA	Screw,ø3×14mm
617	XJBSP30P10000	J AA	Screw,ø3×10mm
618	XJBSP30P16000	J AA	Screw,ø3×16mm
619	XJSSD30P10000	J AA	Screw,ø3×10mm
620	XWHS32-10130	J AA	Washer,ø3.2×ø13×1.0mm

## PACKING PARTS (Except for U.S.A.)

SPAKA0258AWZZ	J	Packing Add.,Left/Right (Serial No.00600001~00704000 Only)
SPAKA0268AWZZ	J	Packing Add.,Front/Rear (Serial No.00704001~)
SPAKC1041AWZZ	J	Packing Case [Except for Canada]
SPAKC1042AWZZ	J	Packing Case [For Canada]
SPAKZ0629AWZZ	J	Packing Add.,Accessories (Serial No.00600001~00704000 Only)
SSAKA0007AWZZ	J AB	Polyethylene Bag,Accessories (Serial No.007040001~)
SSAKH0038AWZZ	J AE	Polyethylene Bag,Unit
TLABN0112AWZZ	J AA	Label,Serial Number [For Canada Only]
TLABR1142AWZZ	J AB	Label,Bar Code,Packing Case
92LBAG1460C1	J AB	Polyethylene Bag,Accessories (Serial No.00600001~00704000 Only)

## ACCESSORIES

QANTL0007AWZZ	J AK	AM/FM Loop Antenna
TCAUS0042AWZZ	J AB	Caution,Sheet
TINSE0319AWZZ	J AG	Operation Manual [For U.S.A.]
TINSK0106AWZZ	J AK	Operation Manual [For Canada]
TINSZ0585AWZZ	J AB	Quick Guide [U.S.A.Only]
TLABN0100AWZZ	J	Label,Prod.Serial Number [For U.S.A.Only]
TLABZ0593AWZZ	J AB	Energy Star Label (Set)
TLABZ0818AWZZ	J	Label,Feature,CD Changer
RRMCG0240AWSA	J AU	Remote Control
GFTAB1030AWSA	J	Battery Lid,Remote Control

## P.W.B. ASSEMBLY (Not Replacement Item)

PWB-A	92LPWB3435MANS	J —	Main
PWB-B1~9	92LPWB3435DPLS	J —	Display/LED A/LED B/ CD Switch/Control/Jog/Motor/ Switch/Headphones (Combined Ass'y)
PWB-C	92LPWB3435CDUS	J —	CD
PWB-D1~3	92LPWB3435PWRS	J —	Power/Sub Trans/Speaker (Combined Ass'y)
PWB-E	QPWBF0027AWZZ	J AD	CD Motor (PWB Only)
PWB-F	QPWBF0644AWZZ	J AD	Tray Switch (PWB Only)
PWB-G	QPWBF0645AWZZ	J AC	Cam Switch (PWB Only)
PWB-H	92PF567-648	J —	Tape Mechanism

## OTHER SERVICE PARTS

QCNNW6931AFZZ	J	Extension Flat Cable (33Pin)
UDSKA0004AFZZ	J AZ	CD Pickup Lens Cleaner Disc

NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
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**CP-RW5000**

**SPEAKER BOX PARTS**

701	92L0517-01C	J	Speaker Box Ass'y
702	92LJ1934A	J AL	Front Panel Ass'y
703	92LJ1933A	J AL	Net Frame Ass'y
704	92LJ2773TA	J AH	Ring, Tweeter
705	92LJ2772WA	J AG	Ring, Woofer
706	92LJ9802	J AF	Catching Holder, Top
707	92LJ9802BK	J AC	Catching Holder, Bottom
708	92LJ2776WB	J AD	Panel, Sub Woofer
709	92LE5870	J AN	Speaker Cord Ass'y, Woofer with Capacitor
710	92LE3192RBA	J AF	Speaker Cord Ass'y, Sub Woofer
711	92LJ9763B	J AC	Cushion, Speaker Cord
712	92LJ3093L	J	Speaker Terminal, Woofer
713	92LJ3093C	J AK	Speaker Terminal, Sub Woofer
714	92LP5889	J AC	Label, Specifications
715	92LF1078	J AB	Screw, $\phi 3 \times 10$ mm
716	92LF1080	J AB	Screw, $\phi 3 \times 10$ mm
717	92LF166540ASH	J AK	Screw, $\phi 4 \times 16$ mm
718	92LF2017A	J AD	Screw, $\phi 4 \times 20$ mm
719	92LL9763B	J	Felt
720	92LJ3041B	J	Felt
SP601,602	RSPA10002AW6W	J AU	Woofer
SP603,604	RSPA00002AW6T	J AU	Tweeter
SP605,606	VSP0013WB476A	J AY	Sub Woofer

**PACKING PARTS (Except for U.S.A.)**

92LN1892B	J	Packing Add., Bottom, Speaker
92LN1892T	J	Packing Add., Top, Speaker
92LV1054C	J	Polyethylene Bag, Speaker
92LV5840	J	Center Pad, Speaker

**ACCESSORY**

92LT7809	J AM	Speaker Cord Ass'y
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CD-CH1000

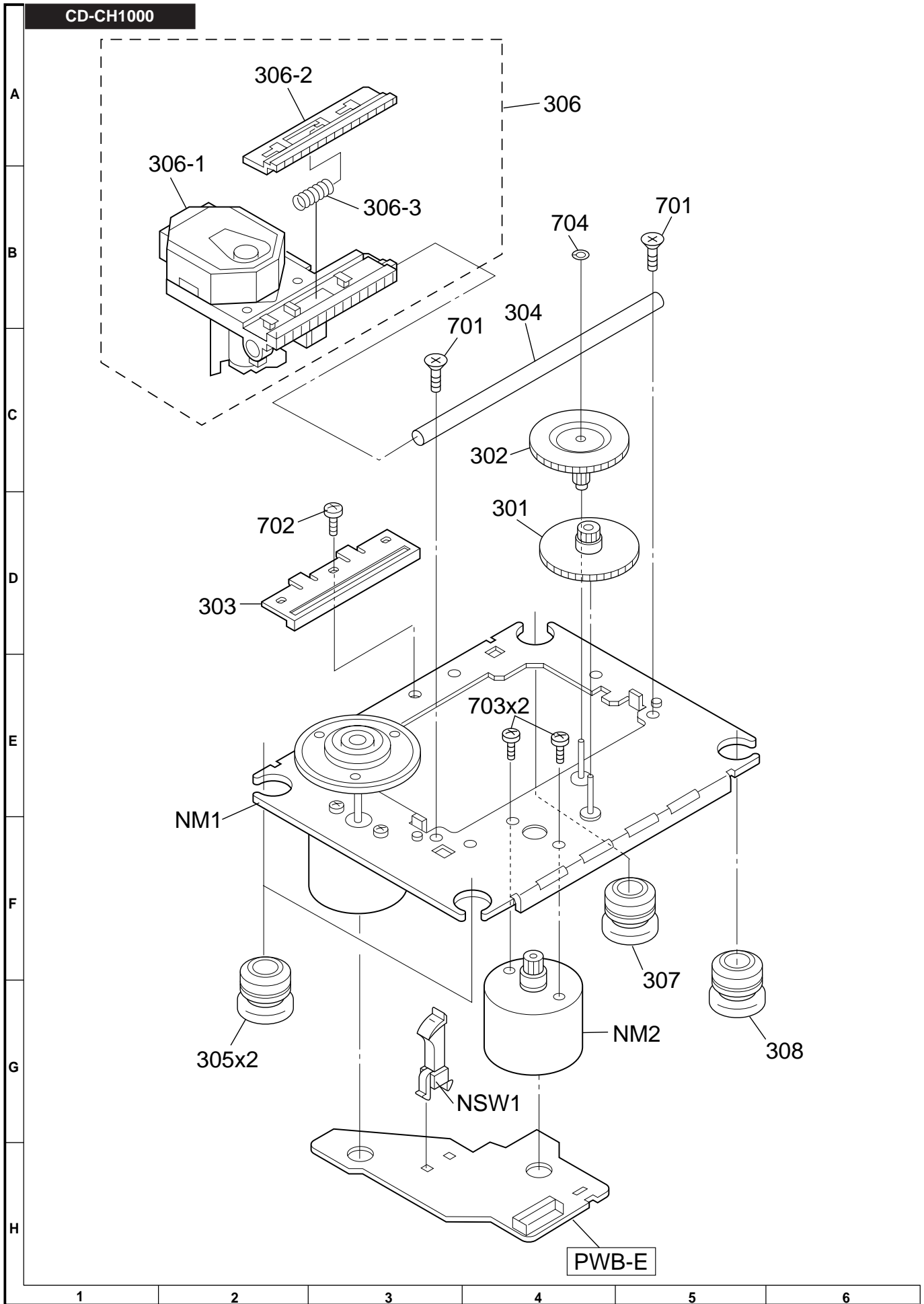


Figure 9 CD MECHANISM EXPLODED VIEW



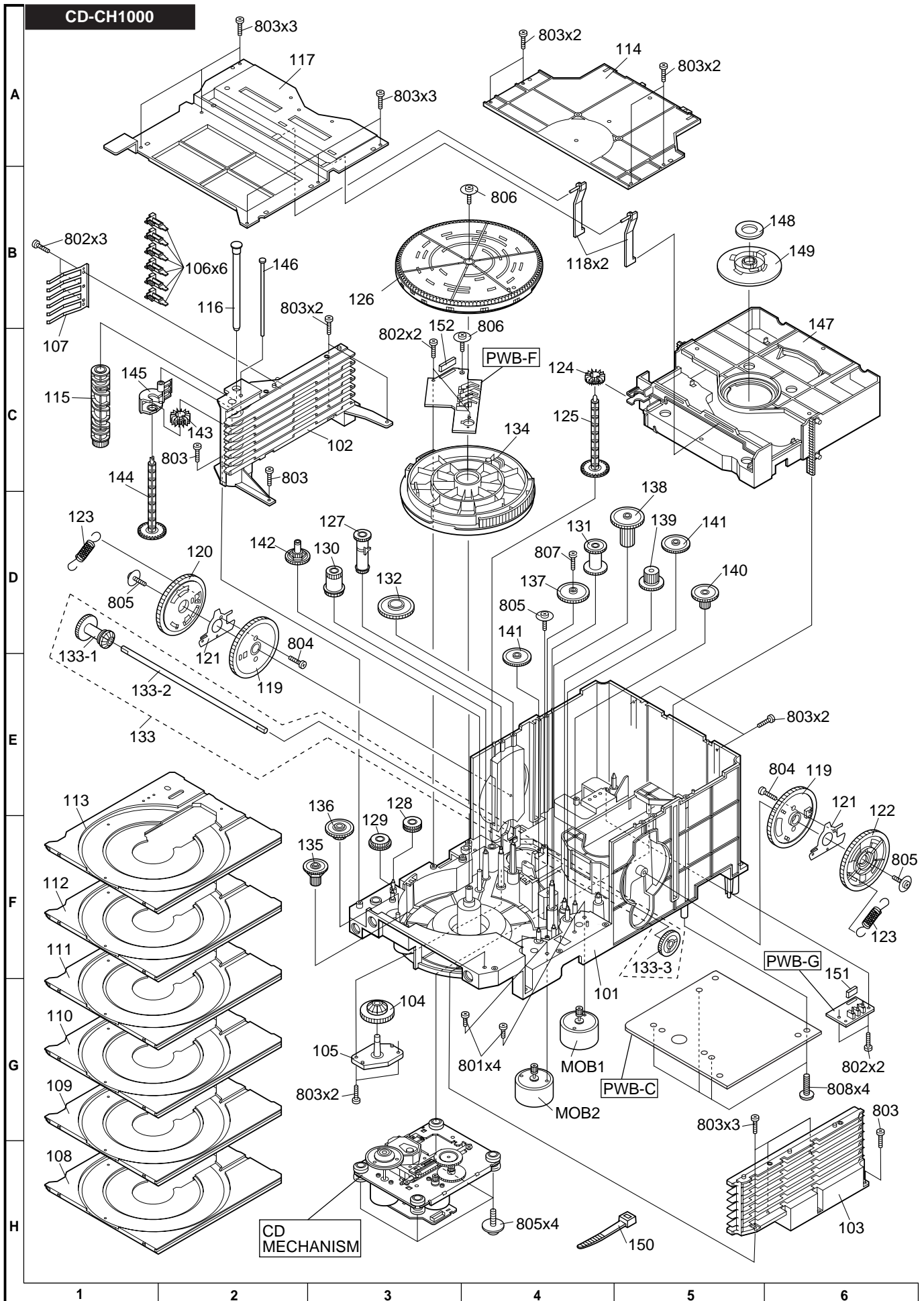


Figure 10 CD CHANGER MECHANISM EXPLODED VIEW





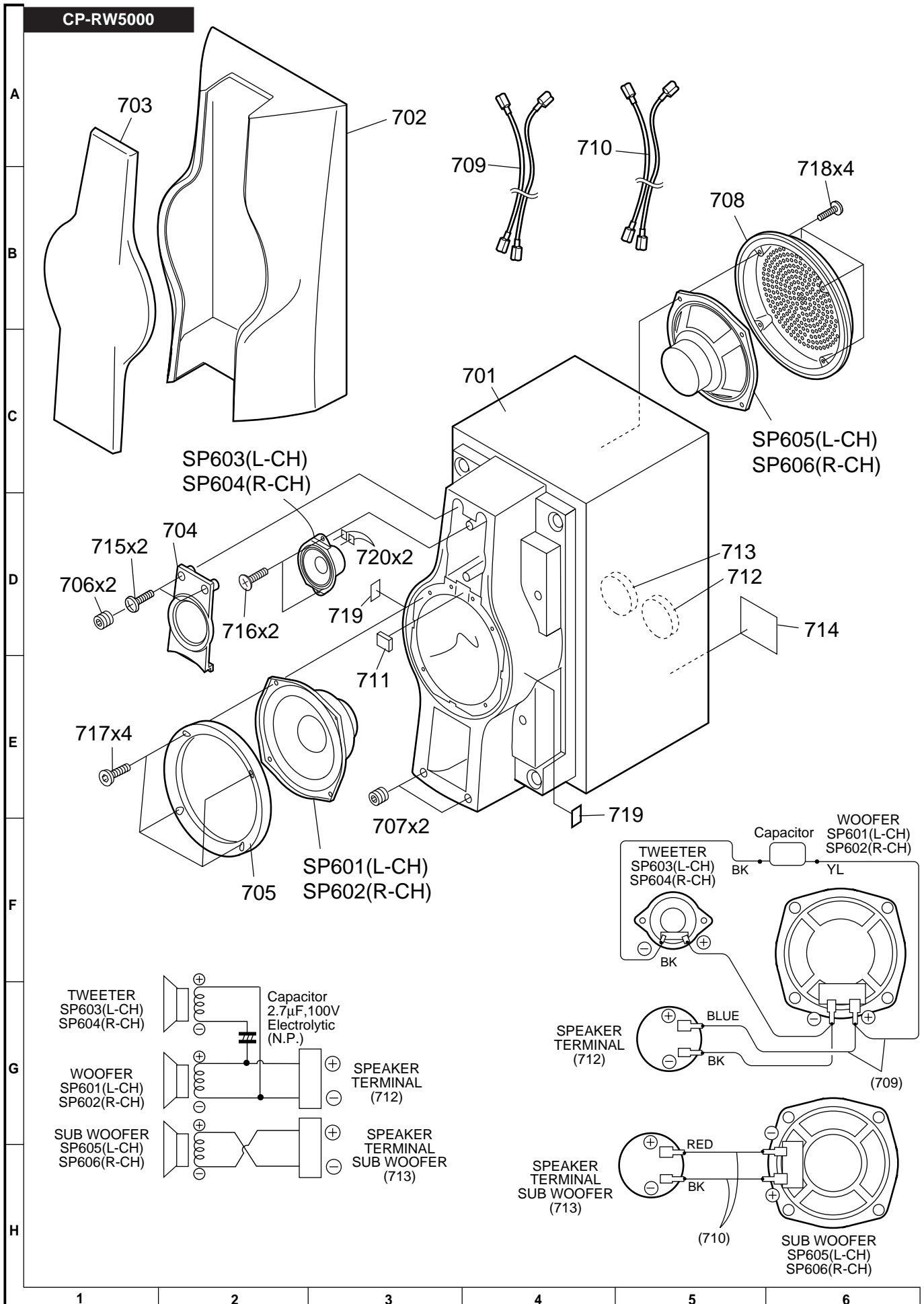


Figure 13 SPEAKER EXPLODED VIEW



CD-CH1000

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— M E M O —

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