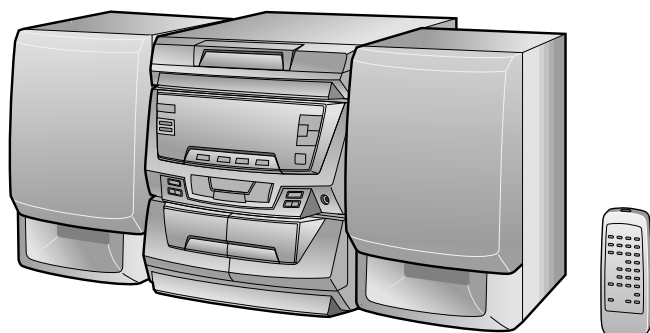


SHARP SERVICE MANUAL

No. S5728CDC410H/



CD-C410H CP-C410

CD-C410H and CP-C410 constitute CD-C410H.

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

• Note for users in UK

Recording and playback of any material may require consent which SHARP is unable to give. Please refer particularly to the provisions of Copyright Act 1956, the Dramatic and Musical Performers Protection Act 1956, the Performers Protection Acts 1963 and 1972 and to any subsequent statutory enactments and orders.

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SAFETY PRECAUTION FOR SERVICE MANUAL

Precaution to be taken when replacing and servicing the Laser Pickup.

The AEL (Accessible Emission Level) of Laser Power Output for this model is specified to be lower than Class I Requirements. However, the following precautions must be observed during servicing to protect your eyes against exposure to the laser beam.

- (1) When the cabinet has been removed, the power is turned on without a compact disc, and the Pickup is on a position outer than the lead-in position, the Laser will light for several seconds to detect a disc. Do not look into the Pickup Lens.
- (2) The Laser Power Output of the Pickup inside the unit and replacement service parts have already been adjusted prior to shipping.
- (3) No adjustment to the Laser Power should be attempted when replacing or servicing the Pickup.
- (4) Under no circumstances look directly into the Pickup Lens at any time.
- (5) CAUTION - Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

VARNING-OSYNLIG LASERSTRÅNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.

VARO! AVATTAESSA OLET ALTTIINA NÄKYMÄTÖN LASERSÄTEILYLLE.
ÄLÄ TUIJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LÄPI.

VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.

Laser Diode Properties

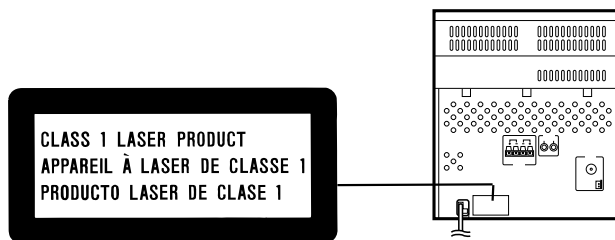
Material: GaAlAs

Wavelength: 780 nm

Emission Duration: continuous

Laser Output: max. 0.6 mW

(Except for UK)



LASER KLASSE 1

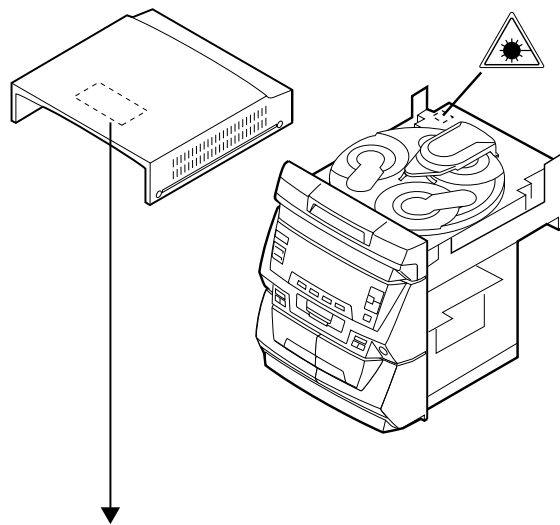
LUOKAN 1 LASERLAITE

KLASS 1 LASERAPPARAT

LASER TŘÍDY 1

LASER TRIEDY 1

(For UK)



CAUTION-INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.

ADVERSEL-USYNLIG LASERSTRÅLING VED ÅBNING. SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.

VARO! AVATTAESSA OLET ALTTIINA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUIJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LÄPI.

VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.

ADVERSEL-USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.

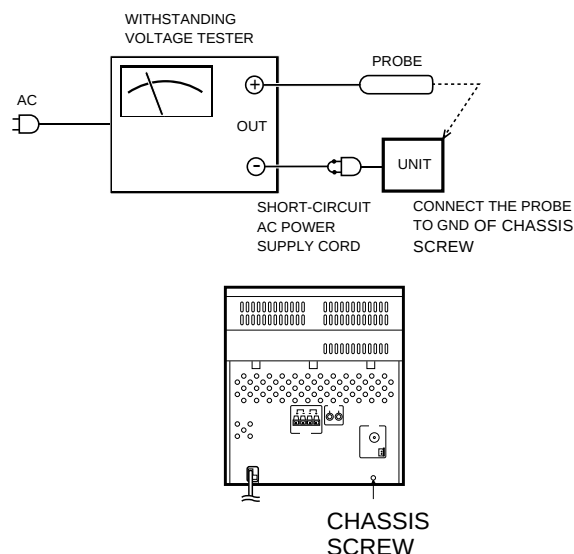
FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

IMPORTANT SERVICE NOTES (FOR UK ONLY)

Before returning the unit to the customer after completion of a repair or adjustment it is necessary for the following withstand voltage test to be applied to ensure the unit is safe for the customer to use.

Setting of Withstanding Voltage Tester and set.

Set name	set value
Withstanding Voltage Tester	
Test voltage	4,240 VPEAK 3,000 VRMS
Set time	6 secs
Set current(Cutoff current)	4 mA
Unit	
Judgment	
OK: The "GOOD" lamp lights.	
NG: The "NG" lamp lights and the buzzor sounds.	



SPECIFICATIONS

CD-C410H

● General

Power source: AC 230 V, 50 Hz
Power consumption: 65 W
Dimensions: Width; 270 mm (10-5/8")
 Height; 300mm (11-13/16")
 Depth; 359.5mm (14-3/16")
Weight: 4.8 kg (10.6 lbs.)

● Amplifier section

Output power: PMPO; 68 W
 (Except for UK) MPO; 34 W (17 W + 17 W)
 (DIN 45 324)
 RMS; 20 W (10 W + 10 W)
 (DIN 45 324)
Output power: MPO; 34 W (17 W + 17 W) (10 % T.H.D.)
 (For UK) RMS; 20 W (10 W + 10 W) (10 % T.H.D.)
Output terminals: Speakers; 8 ohms
 Headphones; 16-50 ohms
 (recommended; 32 ohms)
Input terminals: VIDEO/AUX (audio signal);
 245 mV/47 kohms

● Tuner section

Frequency range: FM; 87.5 - 108 MHz
 AM; 522 - 1,620 kHz

● Compact disc player section

Type: 3-disc multi-play compact disc player
Signal readout: Non-contact, 3-beam semi-con-ductor
 laser pickup
D/A Converter: 1-bit D/A converter
Frequency response: 20 - 20,000 Hz
Dynamic range: 90 dB (1 kHz)

● Cassette deck section

Frequency response: 50 - 14,000 Hz (Normal tape)
Signal/noise ratio: 55 dB (TAPE 1, playback)
 50 dB (TAPE 2, recording/playback)
Wow and flutter: 0.25 % (DIN 45 511)
 (Except for UK)
Wow and flutter: 0.15 % (WRMS)
 (Except for UK)

CP-C410

● Speaker section

Type: 100 mm (4") full range speaker
Maximum input power: 20 W
Impedance: 8 ohms
Dimensions: Width; 180 mm (7-1/8")
 Height; 300 mm (11-13/16")
 Depth; 204 mm (8")
Weight: 2.1 kg (4.6 lbs.)/each

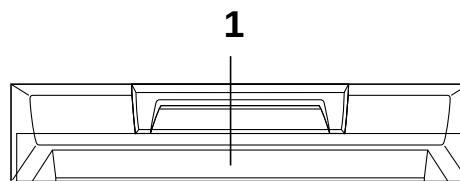
Specifications for this model are subject to change without prior notice.

NAMES OF PARTS

CD-C410H

■ Front Panel

1. Disc Tray



2. Disc Number Indicator

3. Timer Indicator

4. Record Indicator

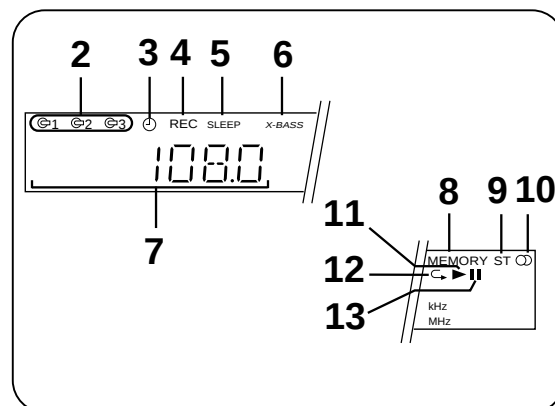
5. Sleep Indicator

6. Extra Bass Indicator: X-BASS

7. Function/CD Track/CD Counter/Frequency/Preset Channel/Volume/Timer/Sleep Time Indicator

8. Memory Indicator

9. FM Stereo Mode Indicator: ST

10. FM Stereo Indicator: 11. CD Play Indicator: 12. CD Repeat Indicator: 13. CD Pause Indicator: 

14. On/Stand-by Switch

15. Extra Bass/Equalizer Mode Button

16. Volume Up/Down Buttons:

17. Random/Demo Button

18. Clock Button

19. Timer/Sleep Button

20. Function Selector Buttons

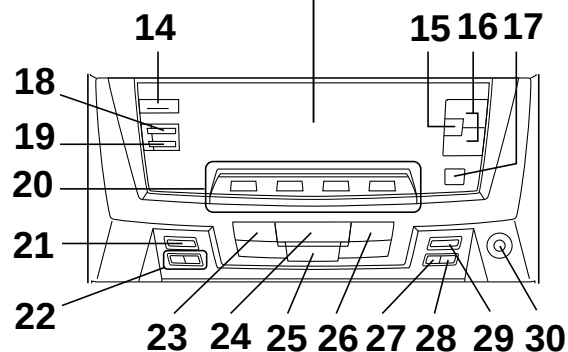
21. Memory/Set Button

22. Tuning and Time Up/Down Buttons: 23. Track Down/Review/Preset Down Button: 24. Play/Repeat Button: 25. Stop Button: 26. Track Up/Cue/Preset Up Button:

27. Disc Skip Button

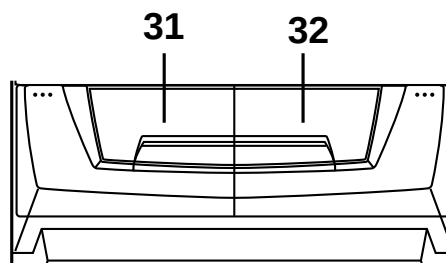
28. Open/Close Button: 29. Record Pause Button:

30. Headphone Socket



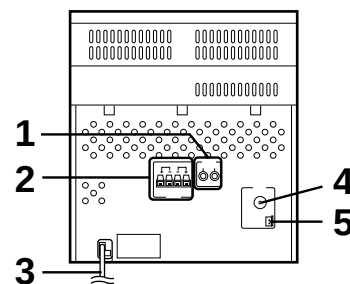
31. (TAPE 1) Cassette Compartment

32. (TAPE 2) Cassette Compartment

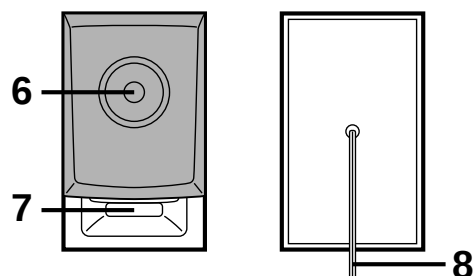


CD-C410H**■ Rear Panel**

1. Video/Auxiliary (Audio Signal) Input Sockets
2. Speaker Terminals
3. AC Power Lead
4. FM 75 ohms Aerial Socket
5. AM Loop Aerial Input Socket

**CP-C410****■ Speaker Section**

6. Full Range Speaker
7. Bass Reflex Duct
8. Speaker Wire

**■ Remote Control**

1. Remote Control Transmitter LED

● CD Control section

2. Disc Number Select Buttons
3. Track Down/Review Button: ◀◀/◀◀
4. Track Up/Cue Button: ▶▶/▶▶
5. Disc Skip Button
6. Play/Repeat Button: ▶↺
7. Stop Button: ■
8. Memory Button
9. Clear Button
10. Random Button
11. Pause Button: ||

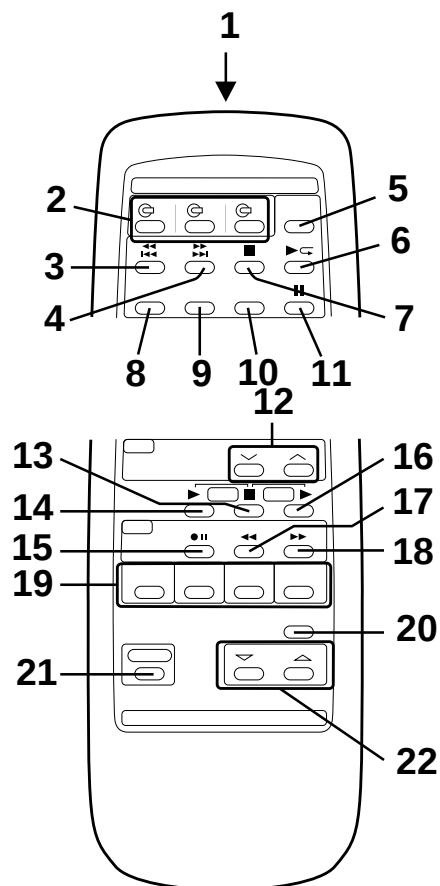
● Tuner control section

12. Preset Up/Down Buttons: ∇/△

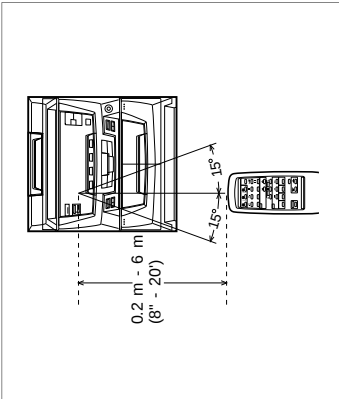
● Tape control section

13. (TAPE 1/2) Stop Button: ■
14. (TAPE 1) Play Button: ▶
15. (TAPE 2) Record Pause Button: ●||
16. (TAPE 2) Play Button: ▶
17. (TAPE 2) Rewind Button: ◀◀
18. (TAPE 2) Fast Forward Button: ▶▶

19. Function Selector Buttons
20. Extra Bass/Equalizer Mode Button
21. Power Button
22. Volume Up/Down Buttons: ∇/△



PREPARATION FOR USE



- Notes concerning use:**
- Replace the batteries if control distance decreases or operation becomes erratic.
 - Periodically clean the transmitter LED on the remote control and the sensor on the main unit with a soft cloth.
 - Exposing the sensor on the main unit to strong light may interfere with operation. Change the lighting or the direction of the unit.
 - Keep the remote control away from moisture, excessive heat, shock, and vibrations.

RESETTING THE MICROCOMPUTER

- Reset the microcomputer under the following conditions:-
- 1 Press the ON/STAND-BY (POWER) switch to enter the standby mode.
 - 2 Press and hold down the VOLUME ∇ button, the $\blacktriangle$ button and the ON/STAND-BY (POWER) switch all at the same time. Hold them for at least 1 second.

SETTING THE CLOCK

In this example, the clock is set for the 24-hour (0:00) system.

ON/STAND-BY CLOCK
MEMORY/SET
TUNING/TIME (∇ or $\blacktriangle$)

- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

0:00 $\leftrightarrow$ AM 0:00 $\leftrightarrow$ AM 12:00

- 1 Press the ON/STAND-BY switch to enter the stand-by mode.
- 2 Press the CLOCK button.
- 3 Within 3 seconds, press the MEMORY/SET button.
- 4 Press the TUNING/TIME (∇ or $\blacktriangle$) button to select the time display.
 - "0:00" $\rightarrow$ The 24-hour display will appear. (0:00 - 23:59)
 - "AM 0:00" $\rightarrow$ The 12-hour display will appear. (AM 0:00 - PM 11:59)
 - "AM 12:00" $\rightarrow$ The 12-hour display will appear. (AM 12:00 - PM 11:59)
- 5 Press the MEMORY/SET button.
- 6 Press the TUNING/TIME (∇ or $\blacktriangle$) button to adjust the hour. Press the TUNING/TIME button once to advance the time by 1 hour. Press for more than 0.5 seconds to advance continuously.
- When the 12-hour display is selected, "AM" will change automatically to "PM".
- 7 Press the MEMORY/SET button.
- 8 Press the TUNING/TIME (∇ or $\blacktriangle$) button to adjust the minutes.
 - Press the button for at least 0.5 seconds to change the time in 5 minute intervals.
 - The hour setting will not advance even if minutes advance from "59" to "00".
- 9 Press the MEMORY/SET button.
 - The clock starts operating from "0" seconds. (Seconds are not displayed.)

Note:

- In the event of a power failure or when the AC power lead is disconnected, the clock display will go out. When the AC power supply is restored, the clock display will flash on and off to indicate the time when the power failure occurred or when the AC power lead was disconnected. If this happens follow the procedure below to change the clock time.

To change the clock time:

When the ON/STAND-BY switch is set to STAND-BY.

- 1 Press the MEMORY/SET button.
 - 2 Perform steps 6 - 9 above.
- When the ON/STAND-BY switch is set to ON.
- 1 Press the CLOCK button.
 - 2 Within 3 seconds, press the MEMORY/SET button.
 - 3 Perform steps 6 - 9 above.

To see the time display: (When the power is ON)

Press the CLOCK button.

- The time display will appear for about 3 seconds.

To switch the time display mode:

- 1 Press the ON/STAND-BY switch to enter the stand-by mode.
- 2 Press and hold down the VOLUME ∇ button, the $\blacktriangle$ button and the ON/STAND-BY switch all at the same time. Hold them for at least 2 second. (Refer to RESETTING THE MICROCOMPUTER on page 16.)
- 3 Perform steps 1 - 9 above.

Note:

- The operation explained above will erase all data stored in memory, such as clock and timer settings, tuner and CD presets.

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 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-C410H

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw (A1) x4	7-1
2	Side Panel (Left/right)	1. Screw (B1) x6	7-1
3	CD Player Unit/ CD Tray Cover	1. Turn on the power supply, open the disc tray, take out the CD cover, and close. (Note 1) 2. Hook (C1) x3 3. Hook (C2) x2 4. Socket (C3) x4	7-2
4	Back Board	1. Screw (D1) x5	7-2
5	Main PWB/ Display PWB/ Headphone PWB	1. Screw (E1) x12 2. Socket (E2) x4	8-1
6	Front Panel	1. Screw (F1) x2 2. Hook (F2) x2	8-1
7	Tape Mechanism	1. Open the cassette holder. 2. Screw..... (G1) x6	8-2
8	Turntable	1. Screw (H1) x1 2. Cover (H2) x1	8-3
9	Disc Tray	1. Screw (J1) x2 2. Guide (J2) x2	8-3
10	CD Changer Mechanism	1. Screw (K1) x4	8-4
11	CD Mechanism	1. Screw (L1) x1	8-4

Note 1:

How to open the changer manually. (Fig. 7-3)

1. Insert the tip of fine screwdriver into the hole of CD player base, and press down the worm wheel < A > .
2. Then, turn fully the lock lever in the arrow direction through the hole on the loading chassis bottom in this state. After that, push forward the CD player base.

CP-C410

STEP	REMOVAL	PROCEDURE	FIGURE
1	Speaker	1. Front panel (A1) x1 2. Screw (A2) x4	9-5 9-6

CP-C410H

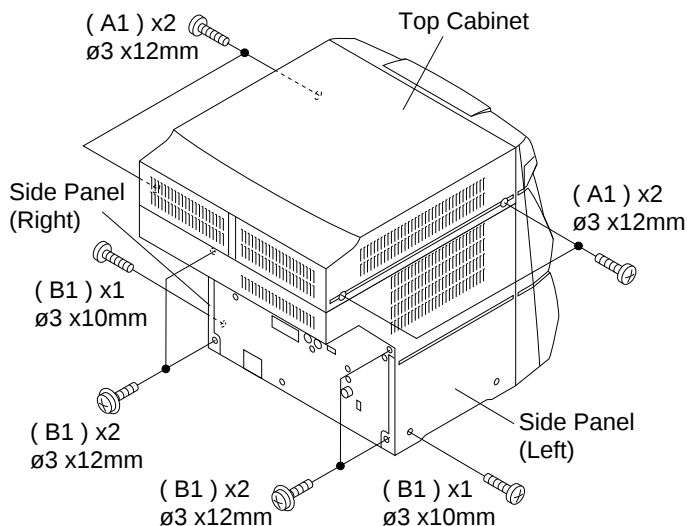


Figure 7-1

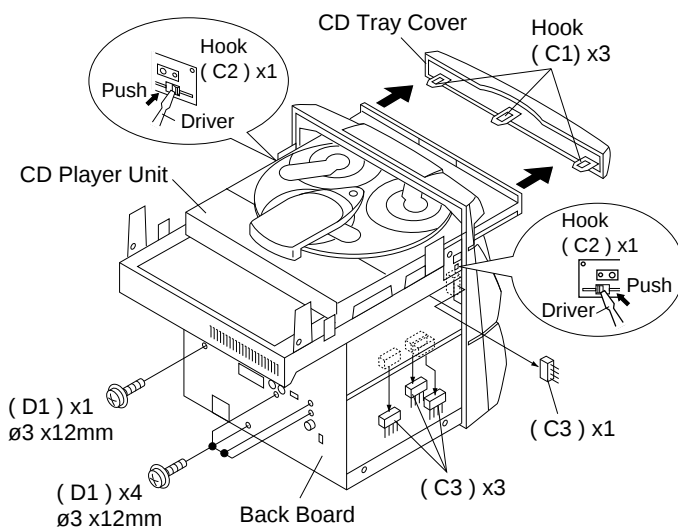


Figure 7-2

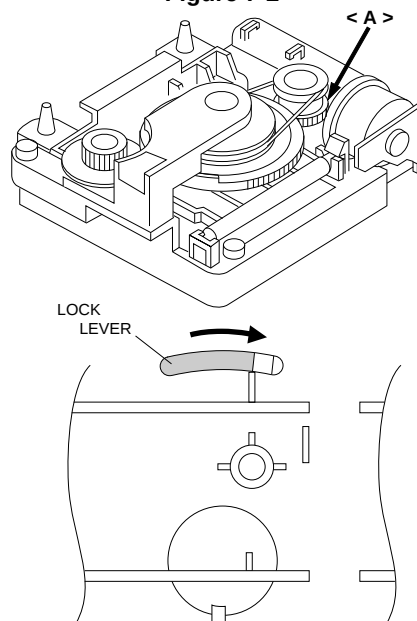


Figure 7-3

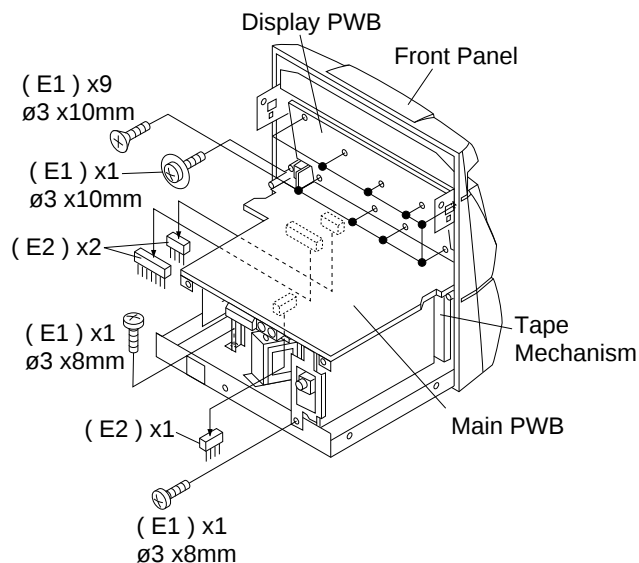


Figure 8-1

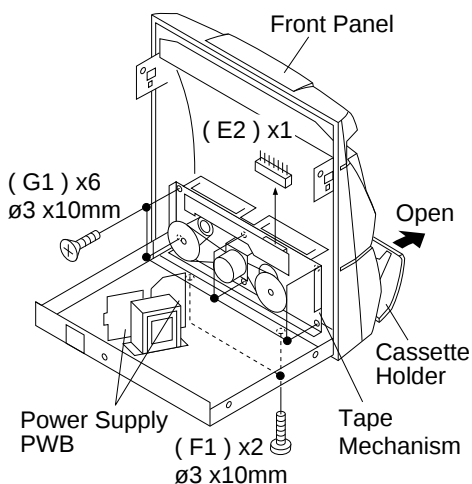


Figure 8-2

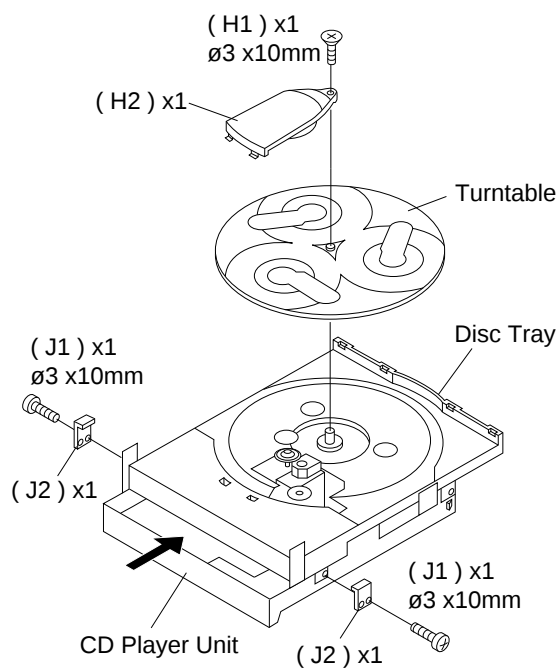
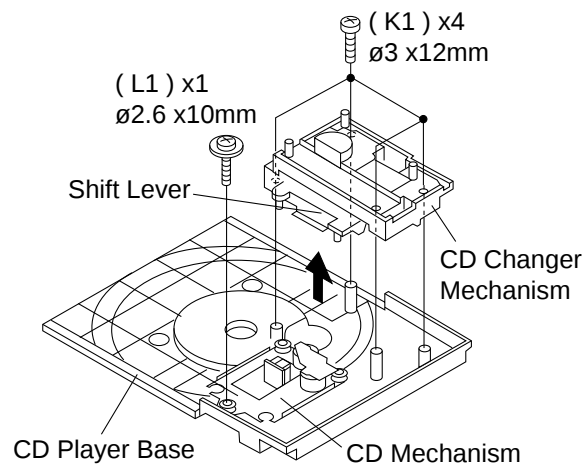


Figure 8-3



Care when installing the CD changer mechanism. Install the CD changer mechanism on the CD player base after the shift lever has been set in the highest position.

Figure 8-4

CP-C410

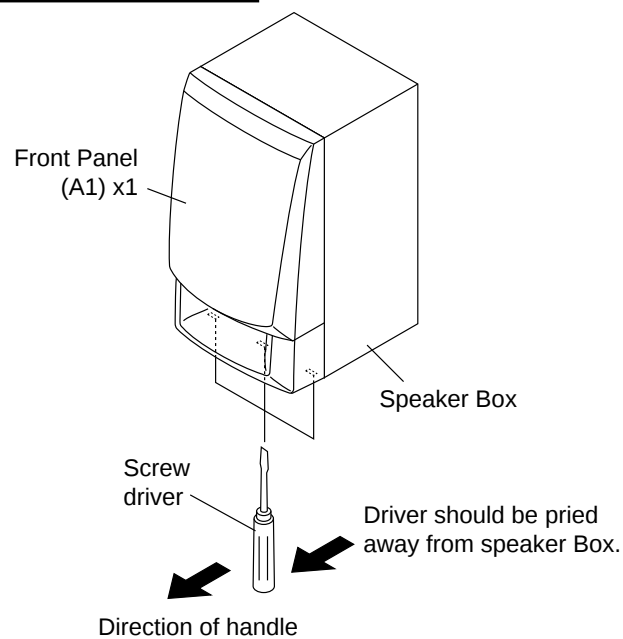


Figure 8-5

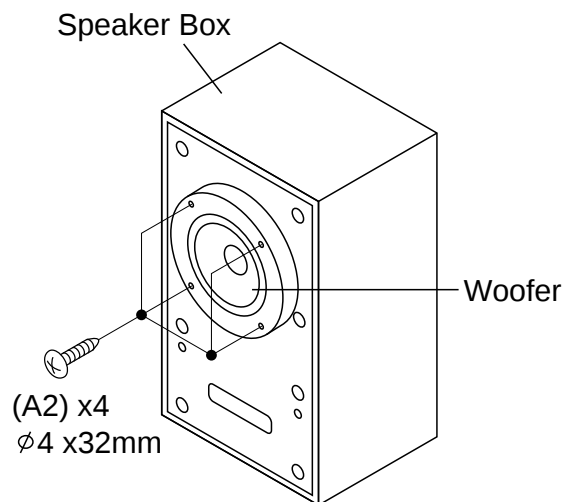


Figure 8-6

REMOVING AND REINSTALLING THE MAIN PARTS

CD MECHANISM SECTION

Perform steps 1, 2, 3, 10 and 11 of the disassembly method to remove the CD mechanism.

How to remove the loading motor (See Fig. 9-1)

1. Remove the screws (A1) x 2 pcs., to remove the loading motor.

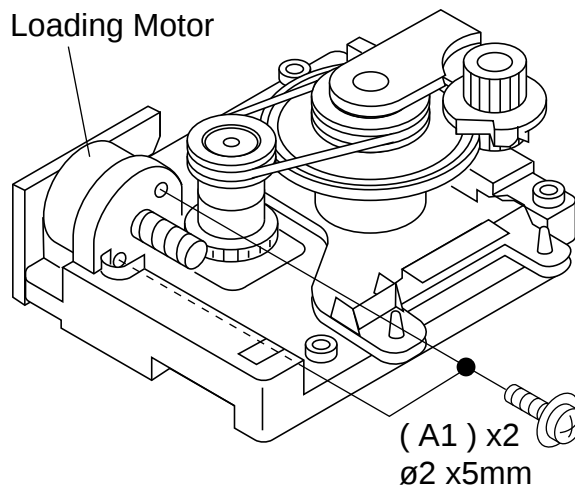


Figure 9-1

How to remove the pickup (See Fig. 9-2)

1. Remove the screws (C1) x 2 pcs., to remove the shaft (C2).
2. Remove the stop washer (C3) x 1 pc., to remove the gear (C4).
3. Remove the pickup.

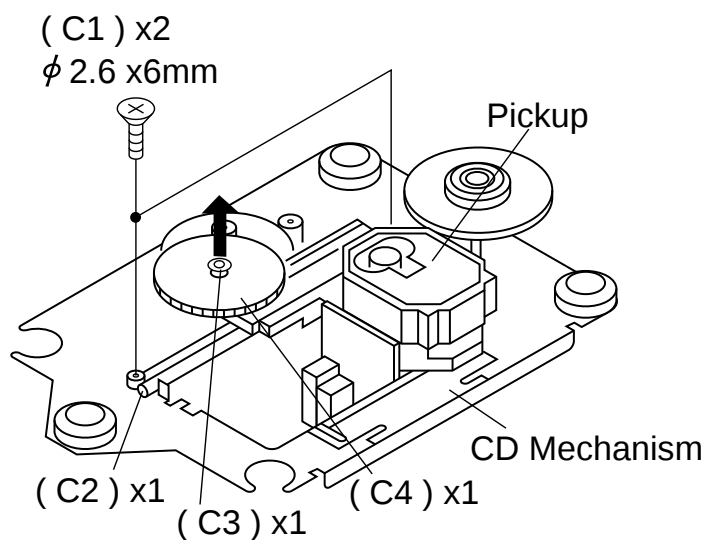


Figure 9-2

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
Play: TW-2412	Tape 1: Over 80 g Tape 2: Over 80 g

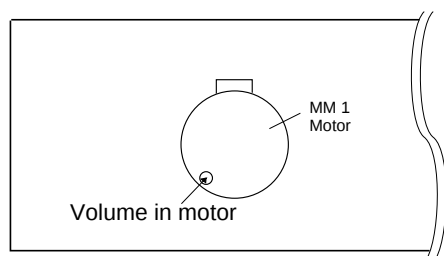
• Torque Check

Torque Meter	Specified Value	
	Tape 1	Tape 2
Play: TW-2111	30 to 60 g. cm	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
Normal speed	MTT-111	Volume in motor.	3,000 ± 30 Hz	Speaker terminal (Load resistance: 8 ohms)

TAPE MECHANISM



TUNER SECTION

fL: Low-range frequency

fH: High-range frequency

• AM IF/RF

Signal generator: 400 Hz, 30%, AM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Parts	Instrument Connection
IF	450 kHz	1,620 kHz	T351	*1
Band Coverage	—	522 kHz	(fL): T302 1.1 ± 0.1 V	*2
Tracking	990 kHz	990 kHz	(fL): T302	*1

*1. Input: Antenna, Output: TP302

*2. Input: Input is not connected, Output: TP301

• Setting the Test Mode

Keeping the TUNING (DOWN) button and MEMORY button pressed, turn on POWER. Then, the frequency is initially set in the memory as shown in Table. Call it with the PRESET button to use it for adjustment and check of tuner circuit.

Preset No.	FM	Preset No.	AM
1	87.50 MHz	6	522 kHz
2	108.00 MHz	7	1,620 kHz
3	90.00 MHz	8	603 kHz
4	106.00 MHz	9	1,404 kHz
5	98.00 MHz	10	990 kHz
11 ~ 40	—		

• FM Mute Level

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

Frequency	Frequency Display	Adjusting Parts	Instrument Connection
98.00 MHz (25 dBμV)	98.00 MHz	VR351 *1	Input: So301 Output: Speaker Terminal

*1. Adjust so that an output signal appears

TUNER PWB

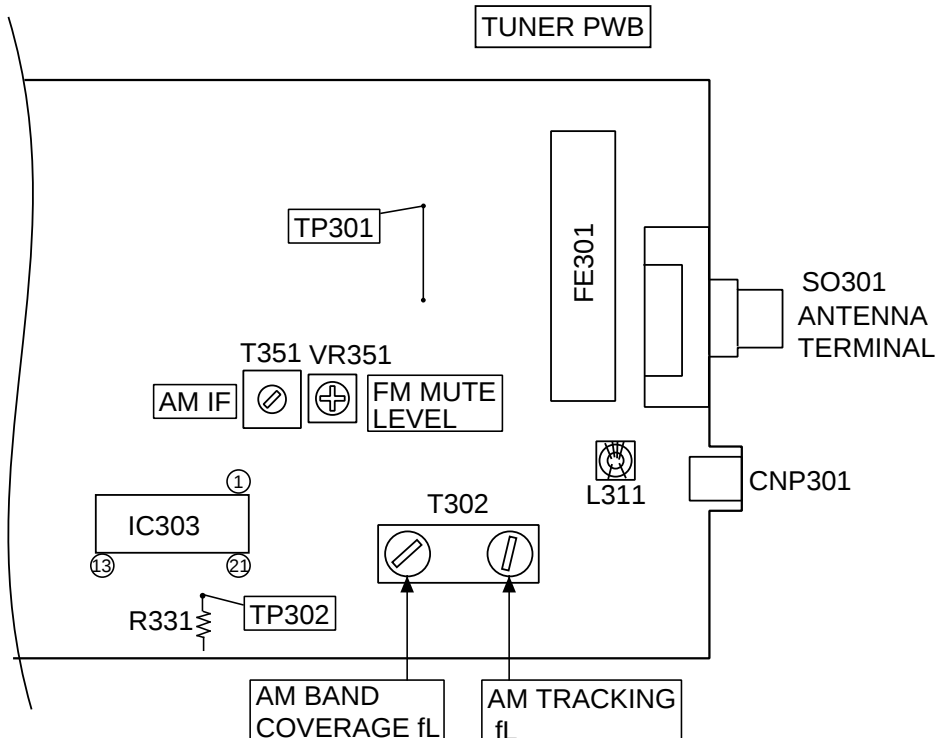


Figure 10-1 ADJUSTMENT POINTS

TEST MODE

• Setting the test mode

Any one of test mode can be set by pressing several keys as follows.

<REC. PAUSE> + <DISC. SKIP> + <POWER> TEST: CD operation test

• TEST mode

Function — CD test mode

Setting of TEST mode

Indication of CD TST mode (Fig. 11-1)

OPEN/CLOSE operation is manual operation.

The pickup can be moved by using the (▶▶) or (◀◀) key.

IL is not performed.

<MEMORY> LASER ON — <MEMORY> Tracking on the spot. SERVO OFF PLAY — <MEMORY> Tracking on the spot. SERVO ON PLAY — <STOP> STOP

<PLAY> key input — TOC. IL is performed, and the ordinary PLAY is performed. — Press <STOP> key. — Stop

If the following key is pressed during PLAY, it is possible

to specify directly any Track No.

<Disc Number 1> key: Track 4

<Disc Number 2> key: Track 9

<Disc Number 3> key: Track 15

Note:

Only in STOP state it is possible to slide the pickup with the (▶▶) or (◀◀) key.

VOL. --- Last memory

BAL. --- CENTER

R.GEQ. --- FLAT

X-BAS --- OFF

Canceling method - POWER OFF

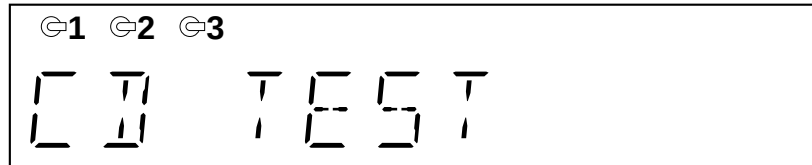


Figure 11-1

CD SECTION

Since this CD system incorporates the following automatic adjustment function, when the pickup is replaced, it is not necessary to readjust it.

Since this CD unit does not need adjustment, the combination of PWB and laser pickup unit is not restricted.

• Automatic adjustment item

1. Focus offset (Fig. 11-2)
2. Tracking offset (Fig. 11-3)
3. E/F balance (tracking error balance) (Fig. 11-4)
4. RF level AGC function (HF level: constant)
5. RF level automatic follow-up of the tracking gain

This automatic adjustment is performed each time a disc is changed. Therefore, each disc is played back using the optimal settings.

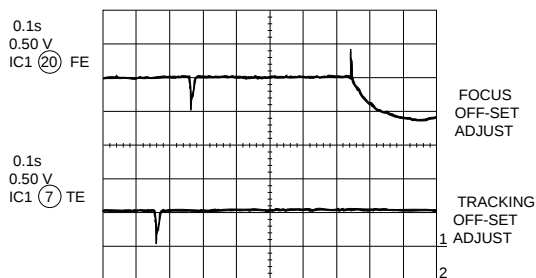


Figure 11-2

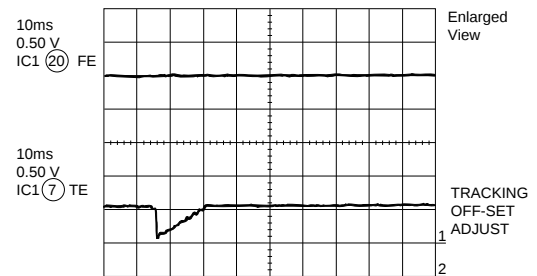


Figure 11-3

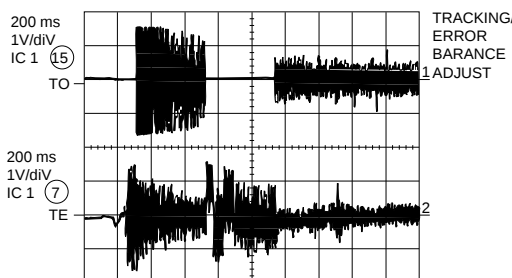


Figure 11-4

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 micro-micro-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
SW1	OPEN/CLOSE	ON—OFF
SW2	MECHA UP	ON—OFF
SW3	DISC NUMBER	ON—OFF
SW4	PICKUP IN	ON—OFF
SW701	RANDOM/DEMO	ON—OFF
SW702	VOLUME DOWN	ON—OFF
SW703	X-BASS	ON—OFF
SW704	VOLUME UP	ON—OFF
SW705	OPEN/CLOSE	ON—OFF
SW706	DISC SKIP	ON—OFF
SW709	REC./PAUSE	ON—OFF
SW710	UP	ON—OFF
SW711	STOP	ON—OFF
SW712	PLAY	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW713	DOWN	ON—OFF
SW714	TUNING UP	ON—OFF
SW715	TUNING DOWN	ON—OFF
SW717	POWER	ON—OFF
SW718	CLOCK	ON—OFF
SW719	TIMER/SLEEP	ON—OFF
SW721	MEMORY/SET	ON—OFF
SW722	CD	ON—OFF
SW723	TUNER	ON—OFF
SW724	TAPE	ON—OFF
SW725	AUX	ON—OFF
SWM 3	FOOL PROOF	ON—OFF
SWM 4	F.A.S.	ON—OFF
SWM 5	CAM	ON—OFF

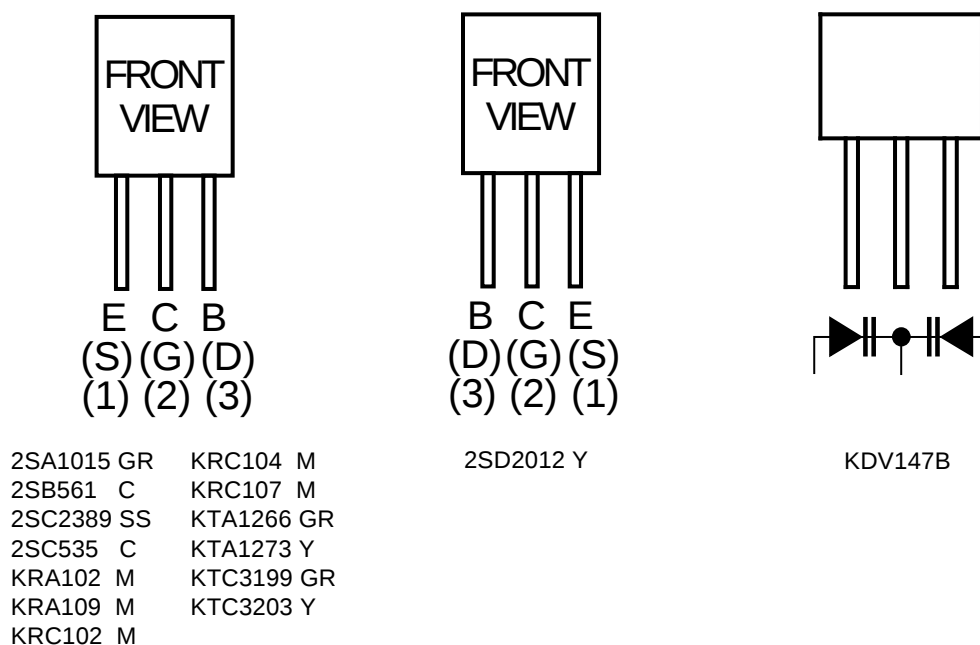


Figure 12 TYPES OF TRANSISTOR

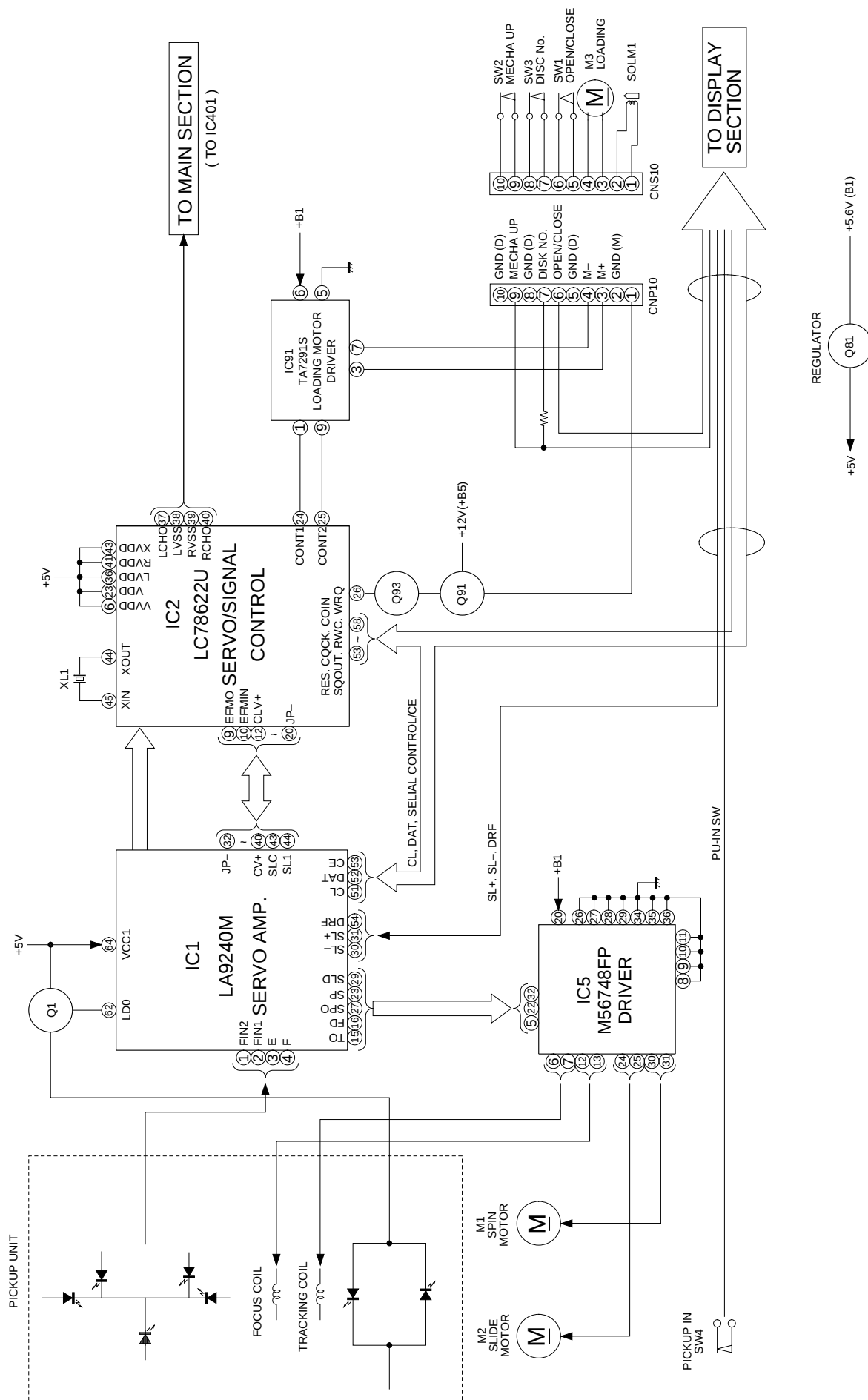
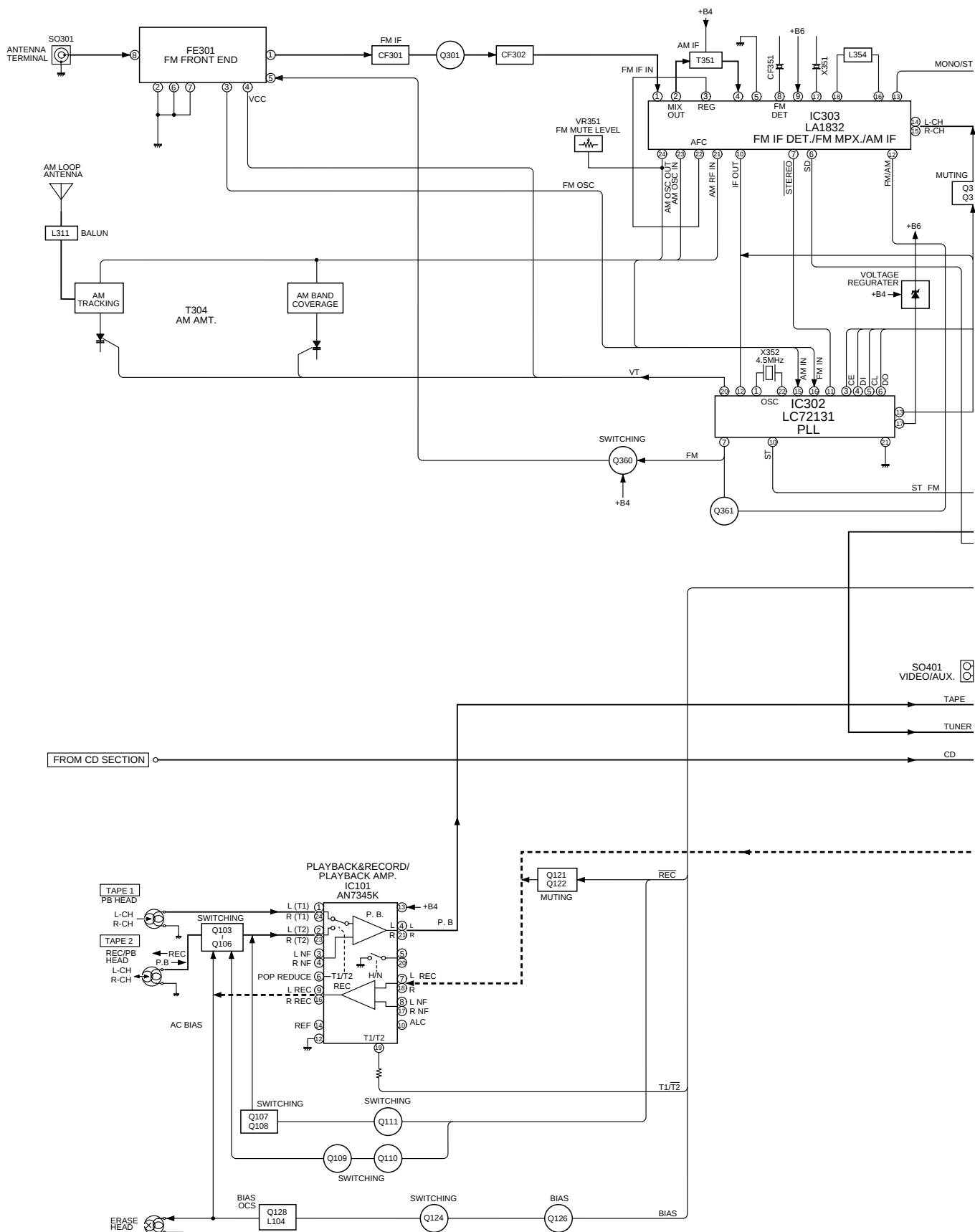


Figure 13 BLOCK DIAGRAM (1/3)



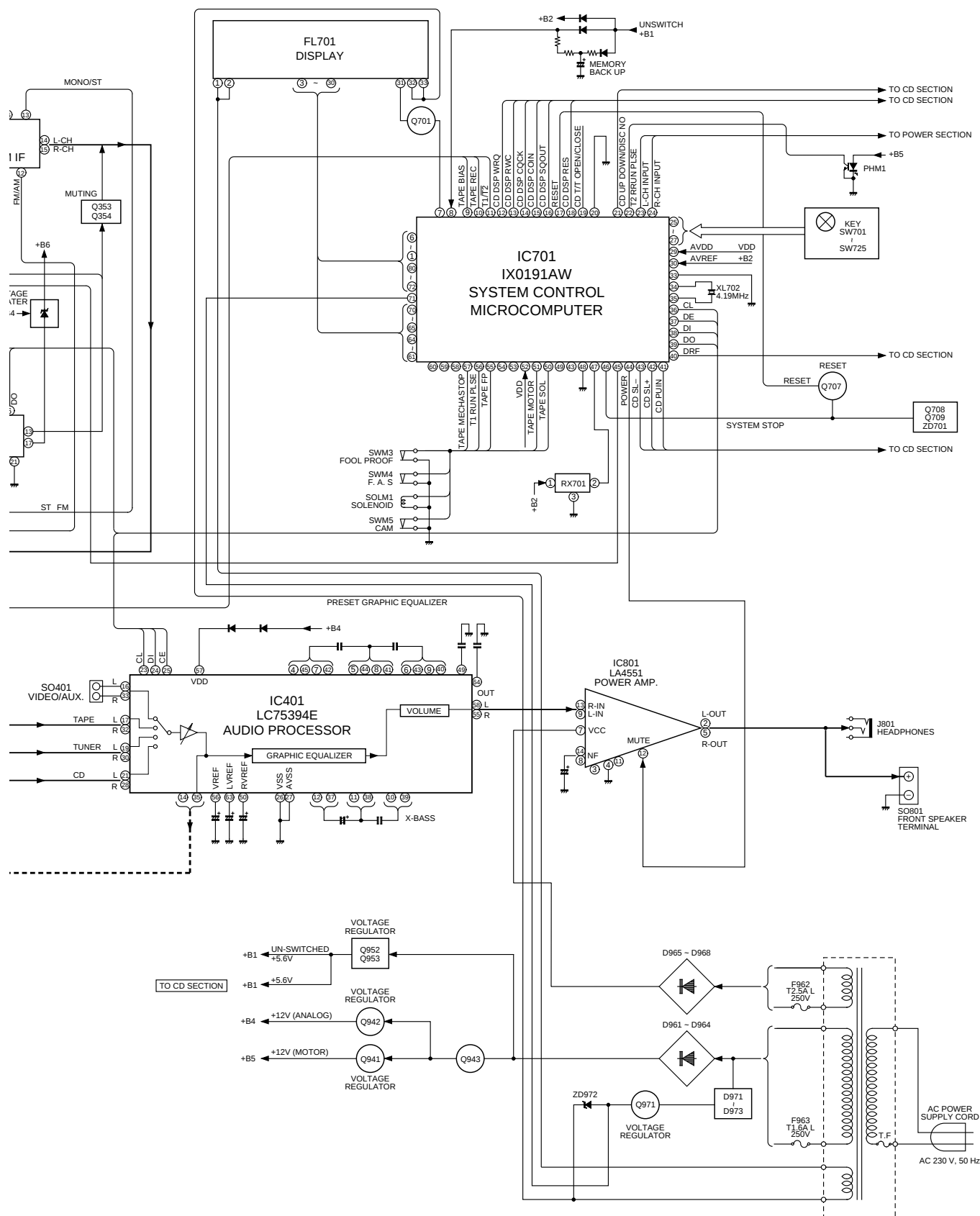
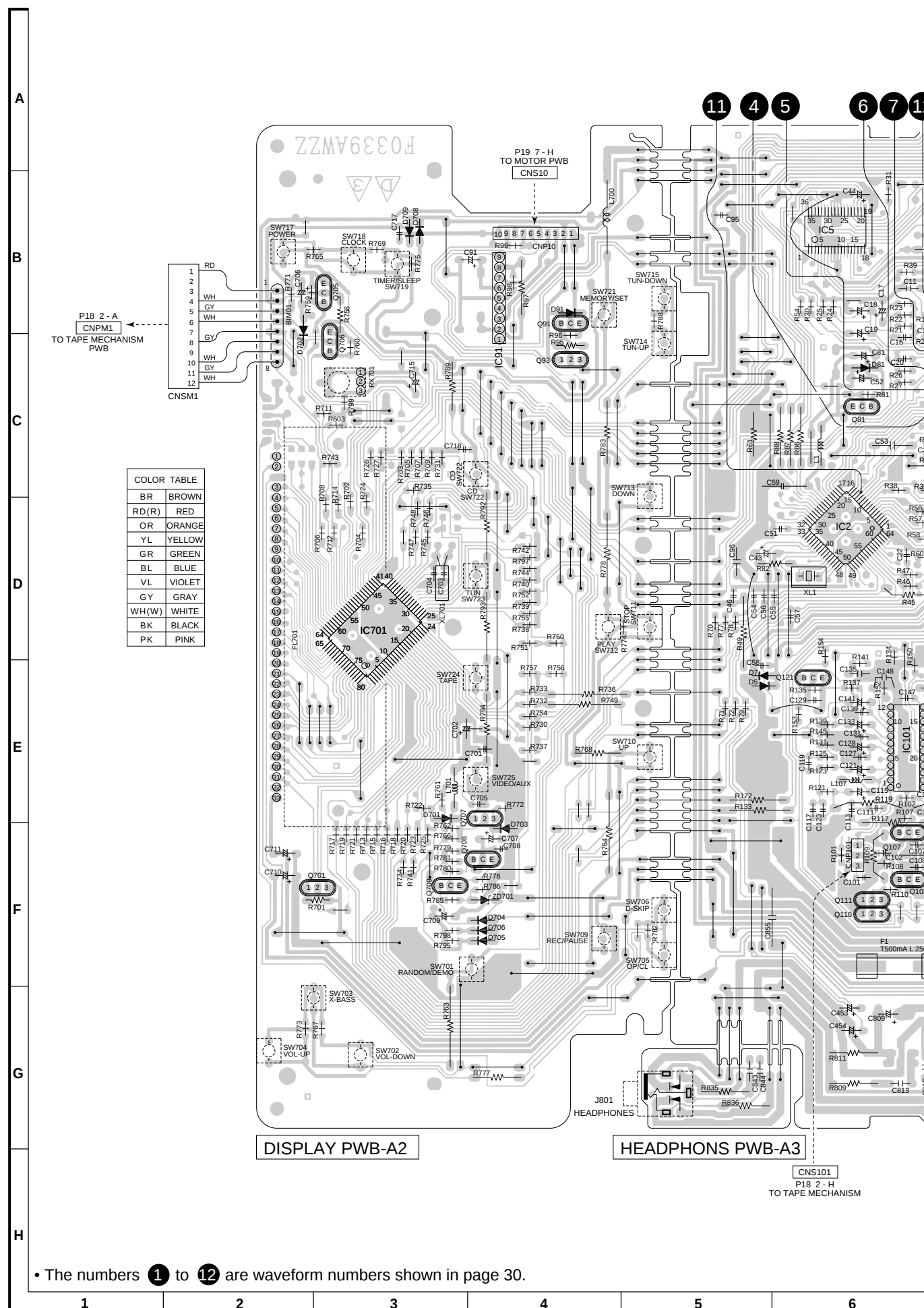


Figure 15 BLOCK DIAGRAM (3/3)



• The numbers 1 to 12 are waveform numbers shown in page 30.

Figure 16 WIRING SIDE OF P.W.BOARD (1/4)

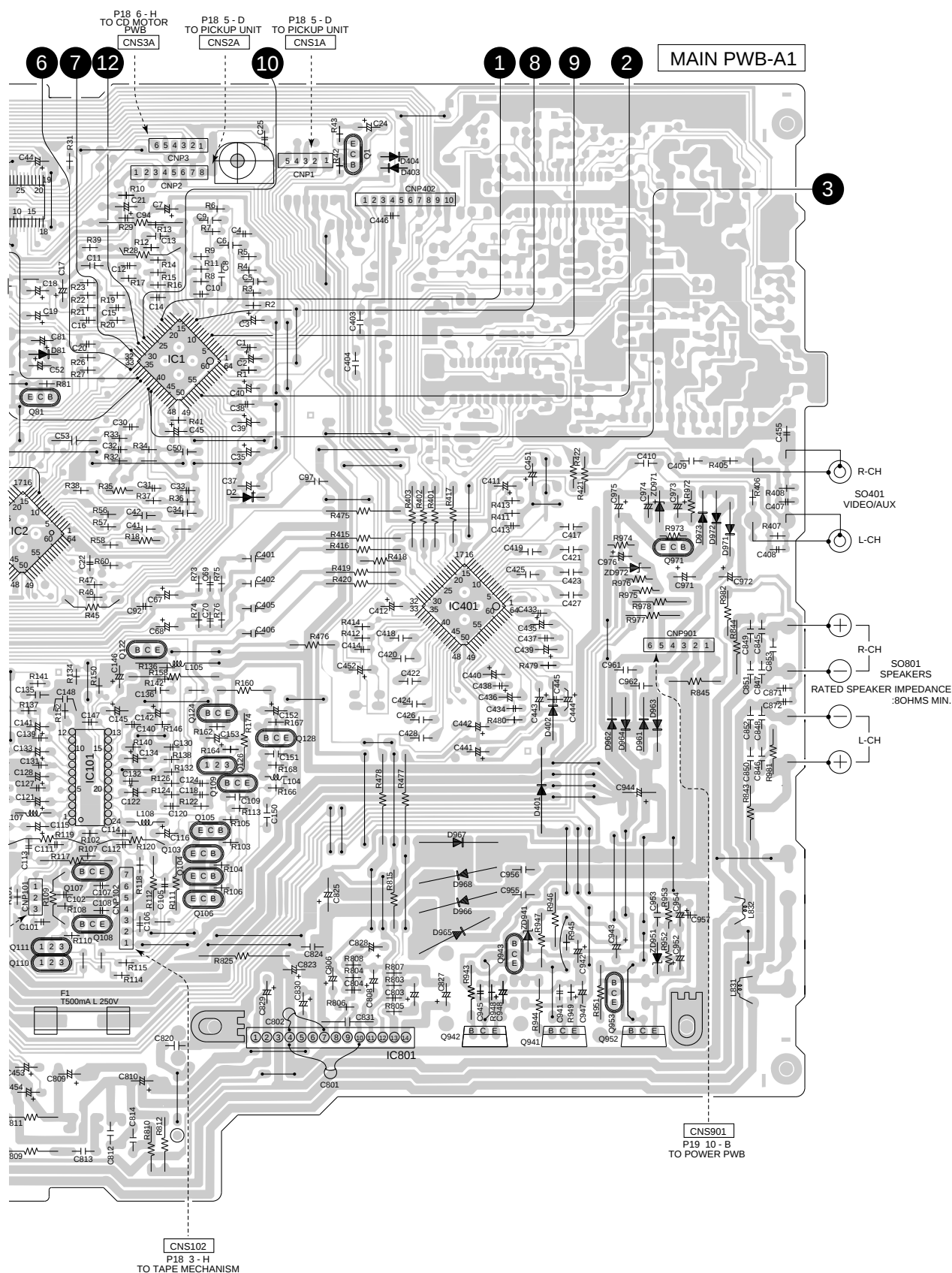
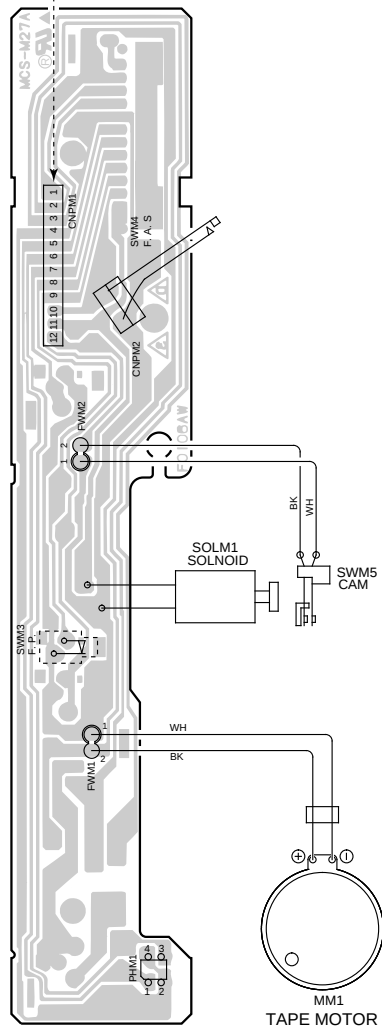


Figure 17 WIRING SIDE OF P.W.BOARD (2/4)



PICKUP UNIT

CNS1B 1 2 3 4 5
BK PK WH YL BK

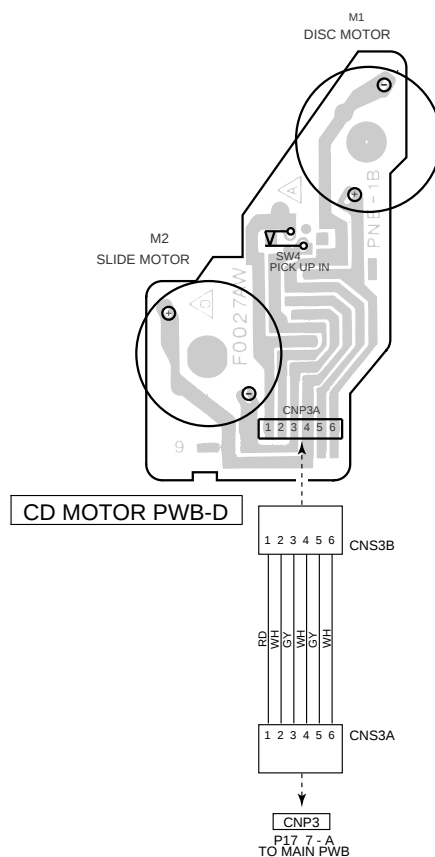
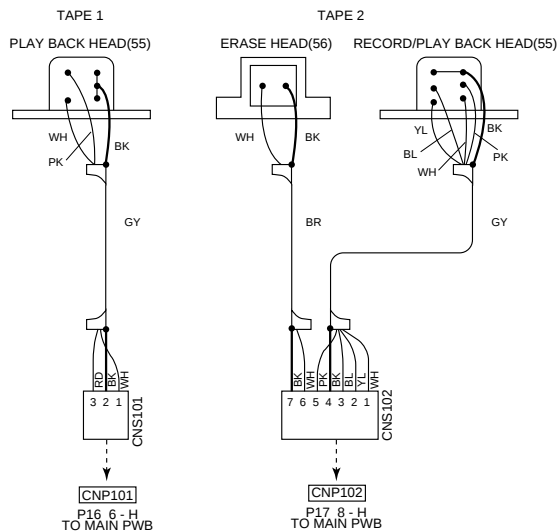
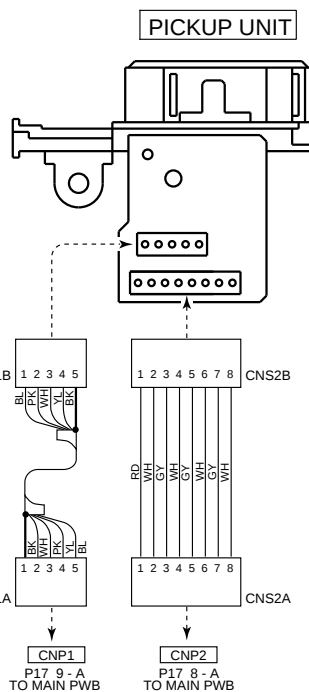
CNS2B 1 2 3 4 5 6 7 8
RD YL GY WH WH WH WH WH

CNS1A 1 2 3 4 5
BK WH PK YL BL

CNS2A 1 2 3 4 5 6 7 8

CNP1
P17 9-A
TO MAIN PWB

CNP2
P17 8-A
TO MAIN PWB



- 18 -

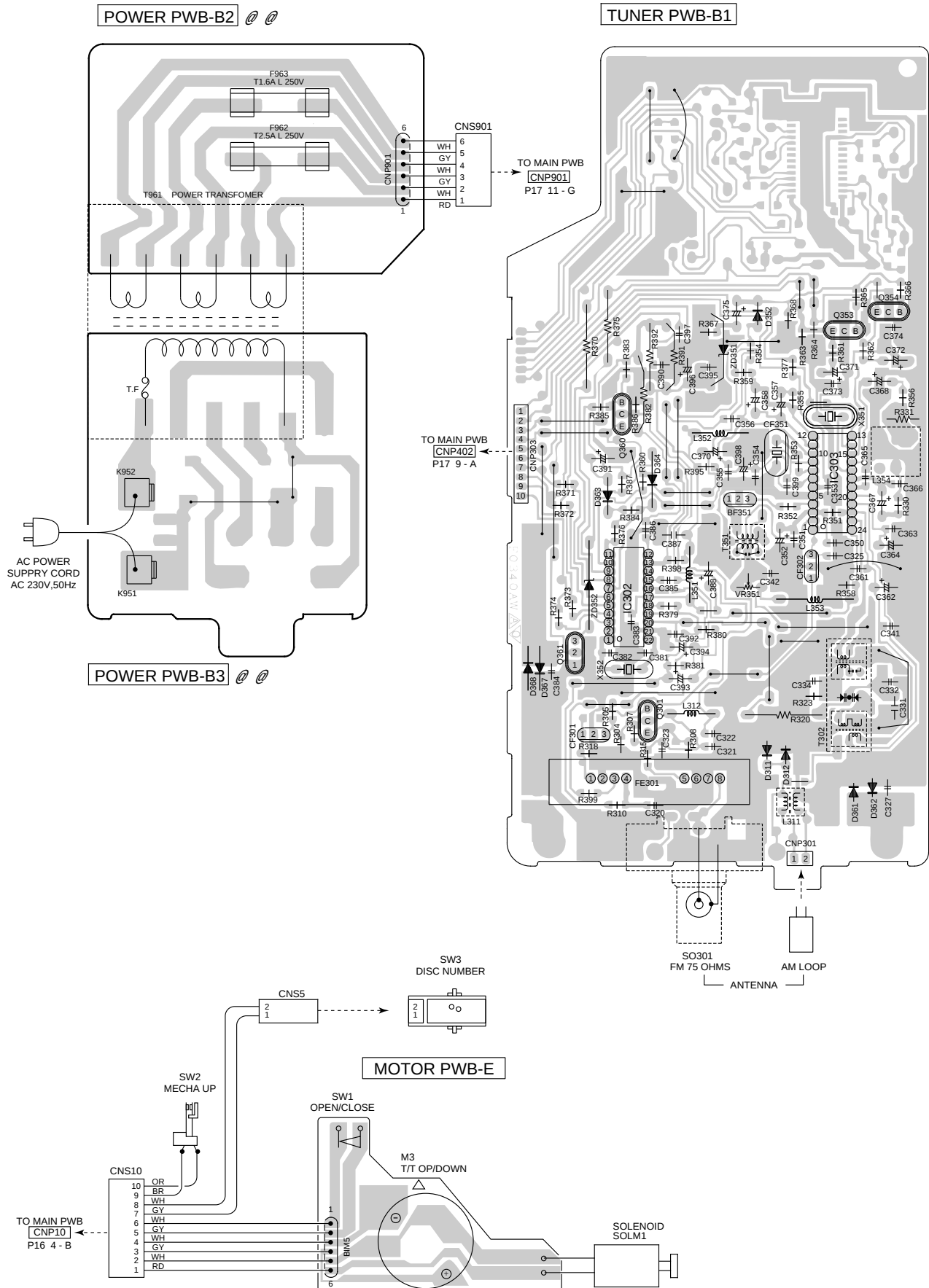


Figure 19 WIRING SIDE OF P.W.BOARD (4/4)

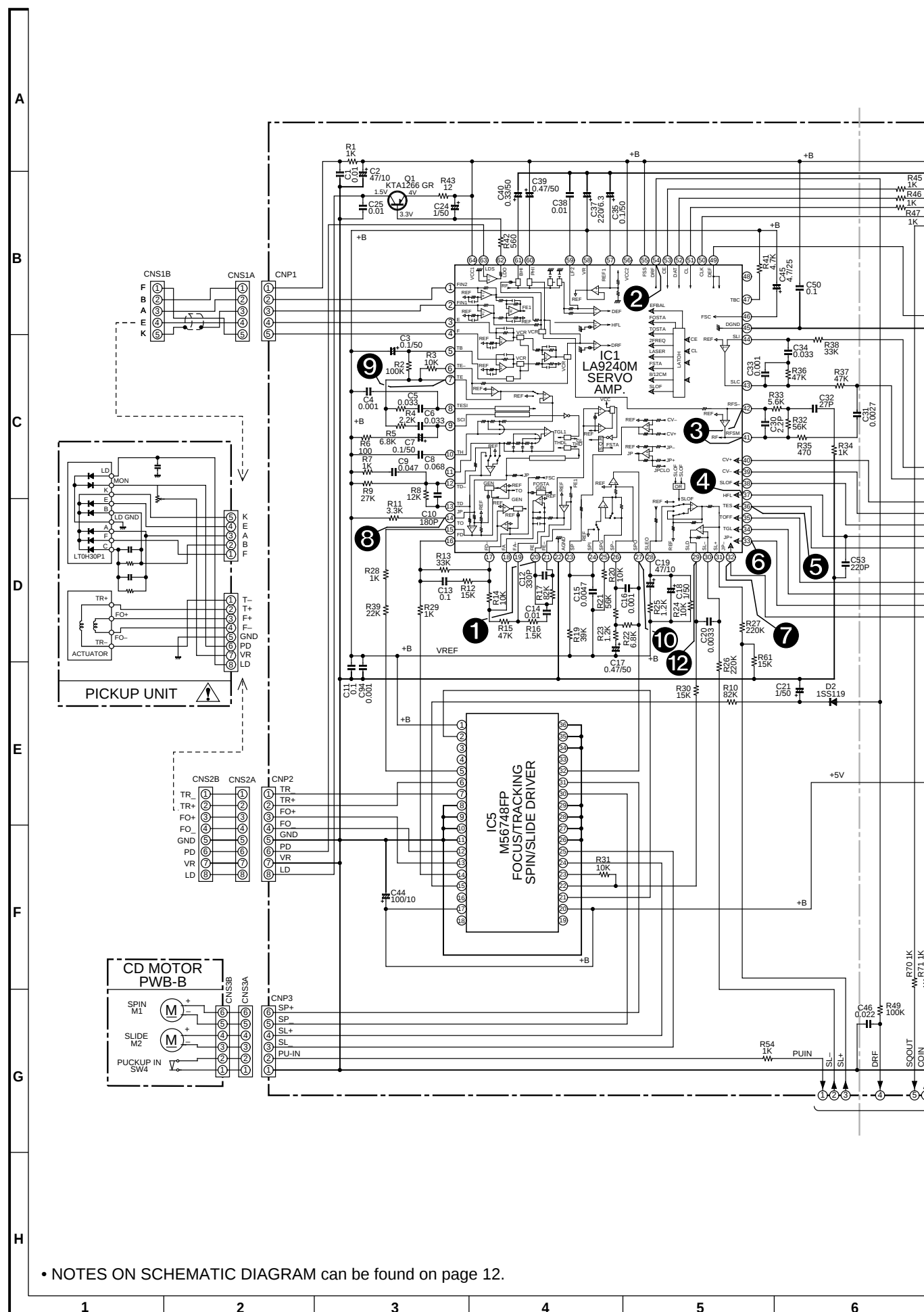
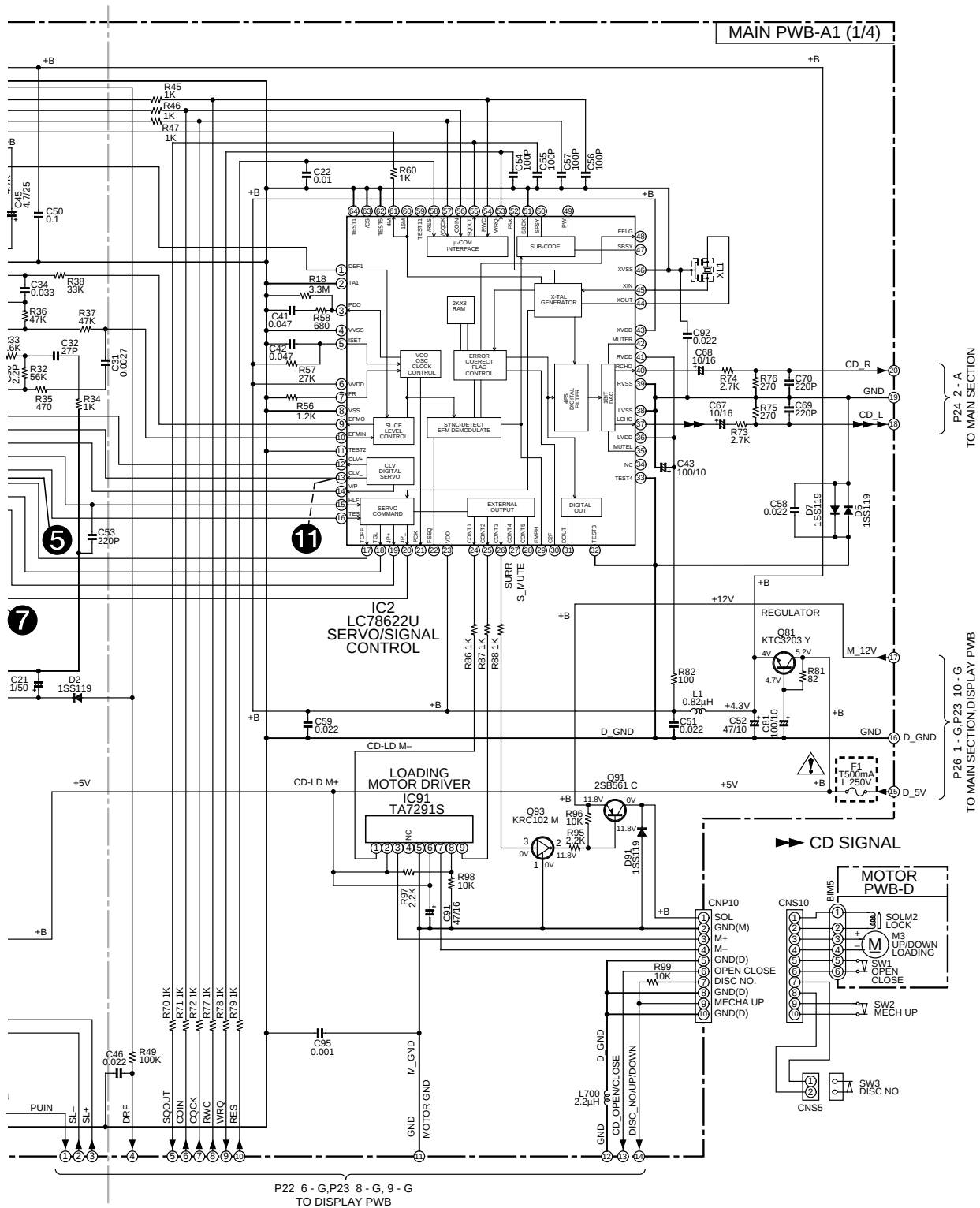


Figure 20 SCHEMATIC DIAGRAM (1/10)



- The numbers ① to ⑫ are waveform numbers shown in page 30.

7	8	9	10	11	12
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Figure 21 SCHEMATIC DIAGRAM (2/10)

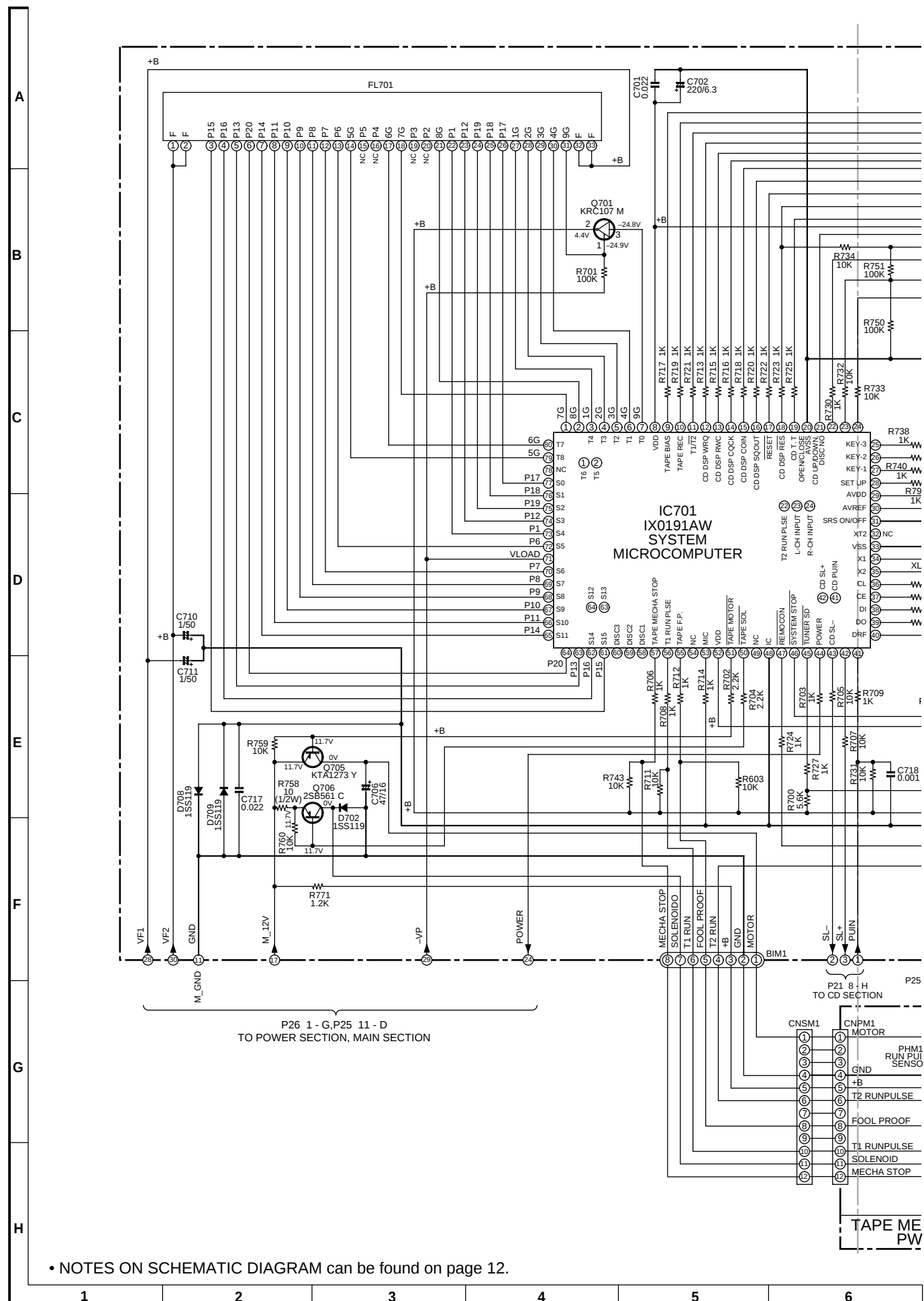


Figure 22 SCHEMATIC DIAGRAM (3/10)



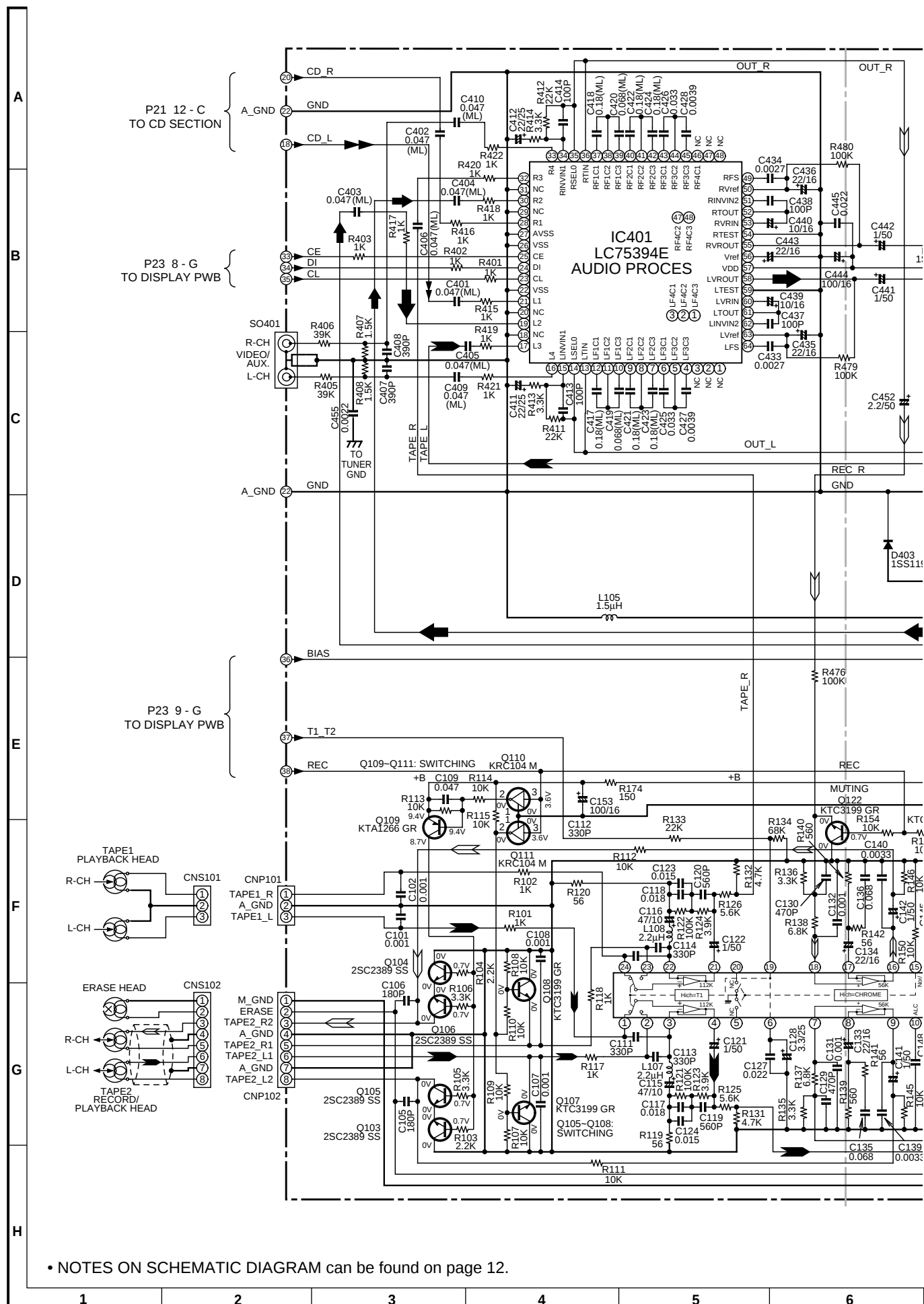
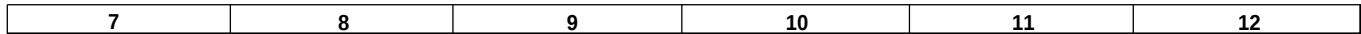


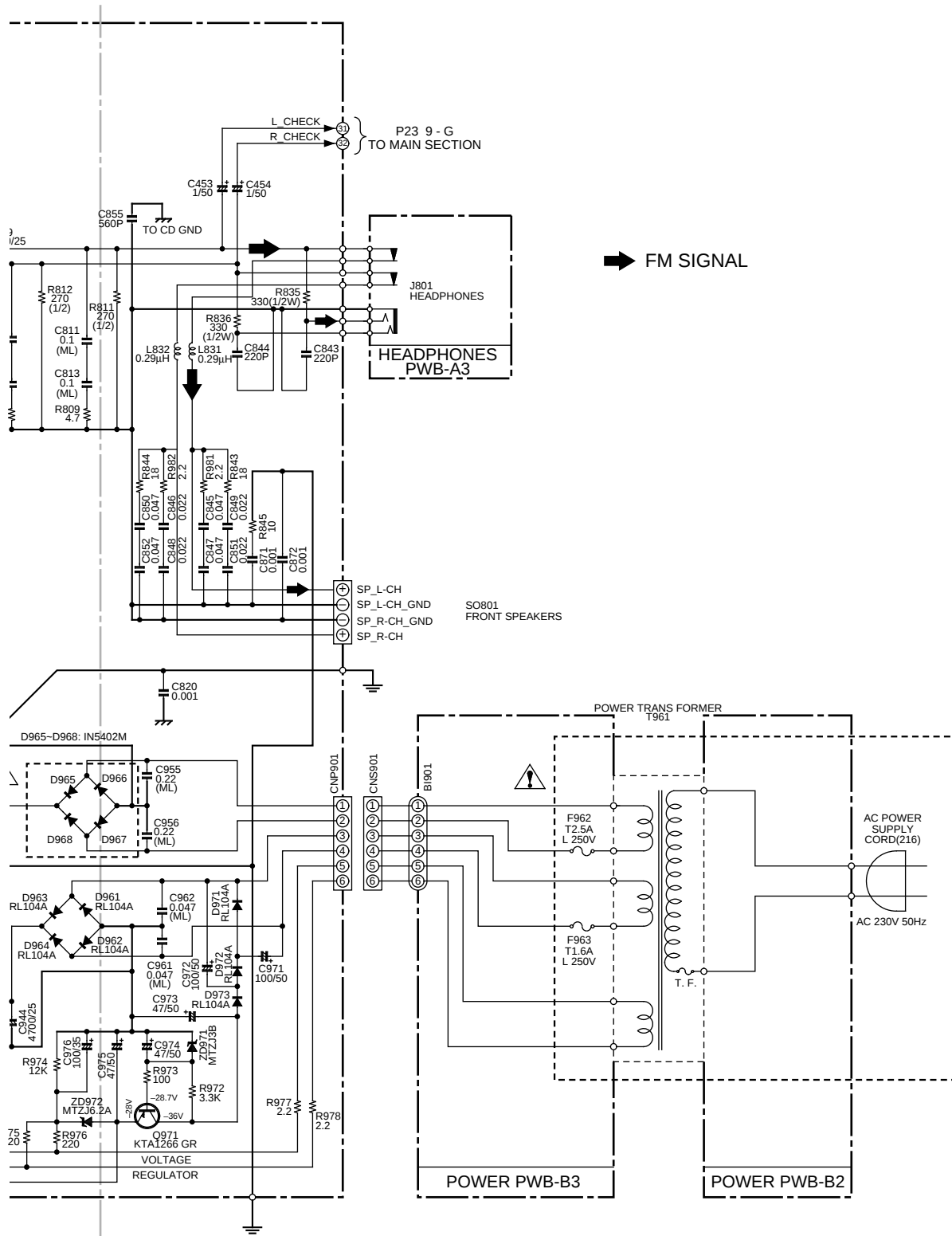
Figure 24 SCHEMATIC DIAGRAM (5/10)



- 25 -



- 26 -



7

8

9

10

11

12

Figure 27 SCHEMATIC DIAGRAM (8/10)

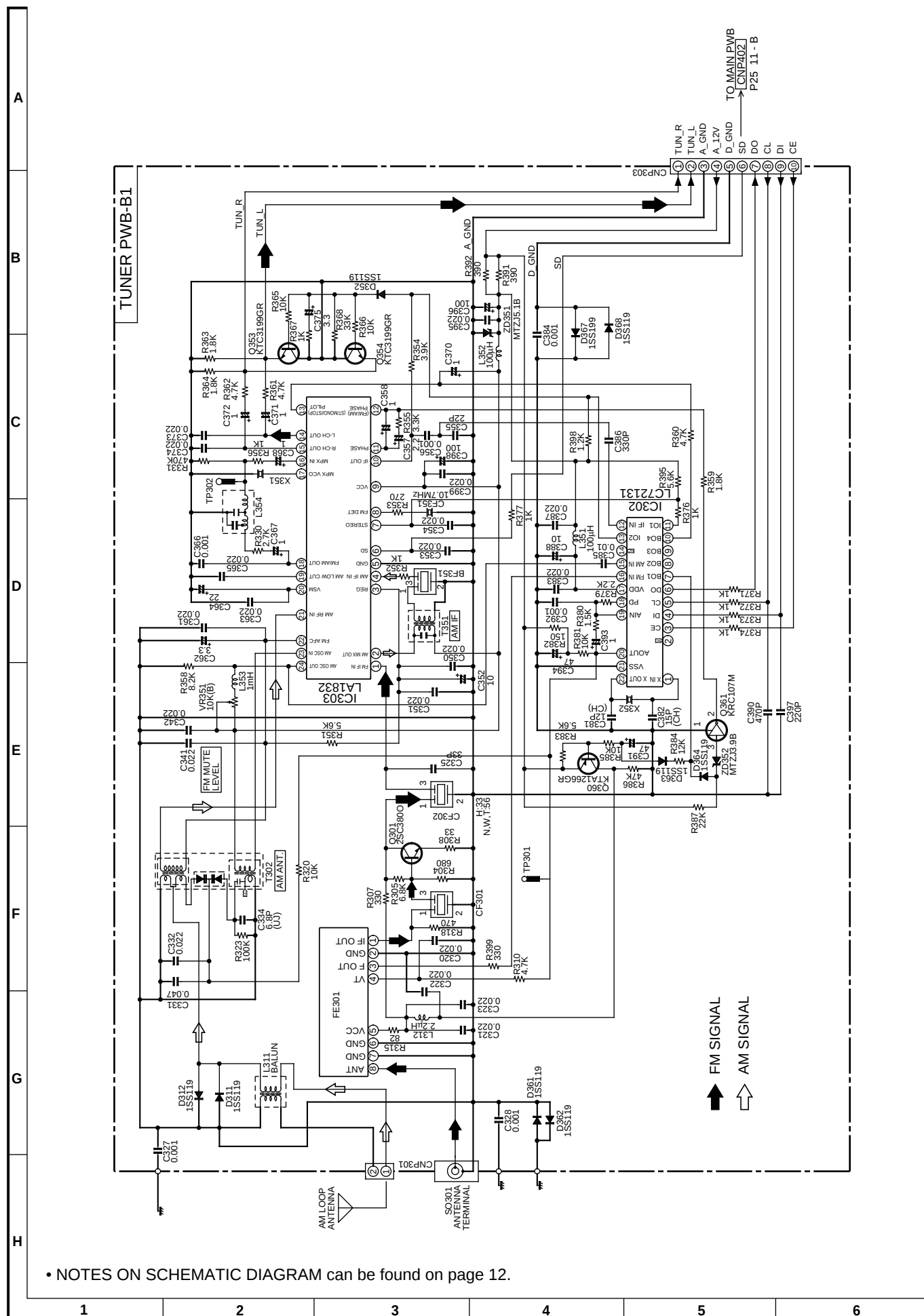


Figure 28 SCHEMATIC DIAGRAM (9/10)

IC1		IC2		IC5		IC302		IC401		IC701			
PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2V	1	0V	1	2V	1	1.2V(1.2V)	1	5V	1	-24.7V	41	0.41V
2	2V	2	0V	2	2V	2	0V(0V)	2	5V	2	-24.7V	42	0V
3	2.1V	3	0V	3	0V	3	0V(0V)	3	5V	3	-24.7V	43	0V
4	2.1V	4	0V	4	2V	4	4.6V(4.6V)	4	5V	4	-24.7V	44	4.4V
5	2V	5	1.8V	5	2V	5	0V(0V)	5	5V	5	-24.7V	45	0V
6	2V	6	4V	6	2.2V	6	4.5V(4.5V)	6	5V	6	-24.7V	46	4.4V
7	2V	7	0V	7	2.2V	7	0.4V(11.3V)	7	5V	7	-24.7V	47	4.4V
8	2V	8	0V	8	0V	8	0V(0V)	8	5V	8	4.4V	48	0V
9	2V	9	2V	9	0V	9	0V(0V)	9	5V	9	0V	49	2.7V
10	2V	10	2V	10	0V	10	1.1V(0V)	10	5V	10	4.4V	50	11.7V
11	2V	11	0V	11	0V	11	5.5V(5.5V)	11	5V	11	4.4V	51	11.7V
12	2V	12	0V	12	0V	12	0V(0V)	12	5V	12	0.24V	52	4.4V
13	2V	13	0V	13	2.2V	13	0.5V(0.1V)	13	5V	13	0V	53	4.4V
14	2V	14	4V	14	0V	14	0V(0V)	14	5V	14	4.4V	54	4.4V
15	2V	15	0V	15	2V	15	0V(2.6V)	15	5.1V	15	4.4V	55	0V
16	2V	16	0V	16	0V	16	1.5V(0V)	16	4.7V	16	0V	56	0V
17	2V	17	4V	17	0V	17	5.6V(5.3V)	17	4.7V	17	4.4V	57	4.4V
18	2V	18	4V	18	0V	18	1.2V(1V)	18	0V	18	0V	58	0V
19	2V	19	0V	19	0.7V	19	1.2V(1V)	19	4.7V	19	0V	59	0V
20	2V	20	0V	20	5.2V	20	3.8V(1.2V)	20	0V	20	0V	60	0V
21	2V	21	2V	21	2V	21	0V(0V)	21	4.7V	21	0V	61	-21.2V
22	0V	22	0V	22	2V	22	2.8V(2.6V)	22	0V	22	3.8V	62	-18V
23	2V	23	4V	23	2V			23	0V	23	0V	63	-11.5V
24	2V	24	0V	24	2V			24	4.4V	24	0V	64	-27.8V
25	2V	25	0V	25	2.2V			25	0V	25	4.4V	65	-24.5V
26	2V	26	0V	26	0V			26	0V	26	4.4V	66	-14.8V
27	2V	27	0V	27	0V			27	0V	27	4.4V	67	-24.5V
28	2V	28	0V	28	0V			28	4.7V	28	0.6V	68	-21.2V
29	2V	29	0V	29	0V			29	0V	29	4.4V	69	-27.8V
30	1.8V	30	4V	30	2.2V			30	4.7V	30	0V	70	-18V
31	1.8V	31	2V	31	2.2V			31	0V	31	4.4V	71	-28V
32	0V	32	0V	32	2V			32	4.7V	32	0V	72	-11.5V
33	0V	33	0V	33	2V			33	4.7V	33	2V	73	-24.4V
34	4V	34	0V	34	0V			34	5.1V	34	2V	74	-24.4V
35	4V	35	4V	35	0V			35	5.1V	35	0V	75	14.7V
36	0V	36	3.8V	36	0V			36	5.1V	36	0V	76	-27.8V
37	0V	37	1.7V	37	0V			37	5.1V	37	0V	77	-24.4V
38	4V	38	0V	38	0V			38	5.1V	38	4.4V	78	-27.8V
39	0V	39	0V	39	0V			39	5.1V	39	4.4V	79	-27.8V
40	0V	40	1.7V	40	0V			40	5.1V	40	0V	80	-24.8V
41	0.3V	41	4V	41	4V			41	5.1V				
42	2V	42	4V	42	4V			42	5.1V				
43	2.1V	43	4V	43	4V			43	5.1V				
44	2.1V	44	1.8V	44	1.8V			44	5.1V				
45	0V	45	1.7V	45	1.7V			45	5.1V				
46	2V	46	0V	46	0V			46	5.1V				
47	2V	47	0V	47	0V			47	5.1V				
48	0V	48	1.8V	48	1.8V			48	5V				
49	0V	49	0V	49	0V			49	5.1V				
50	2V	50	2V	50	2V			50	5.1V				
51	4V	51	0V	51	0V			51	5.1V				
52	4V	52	2V	52	2V			52	5.1V				
53	0V	53	0V	53	0V			53	5.1V				
54	4V	54	0V	54	0V			54	0V				
55	4V	55	0V	55	0V			55	5.1V				
56	4V	56	4.4V	56	4.4V			56	5.1V				
57	2.1V	57	4.4V	57	4.4V			57	10.2V				
58	2.1V	58	4.4V	58	4.4V			58	5.1V				
59	0V	59	0V	59	0V			59	0V				
60	0V	60	1.6V	60	1.6V			60	5.1V				
61	2V	61	2V	61	2V			61	5.1V				
62	3.4V	62	0V	62	0V			62	5.1V				
63	0V	63	0V	63	0V			63	5.1V				
64	4V	64	0V	64	0V			64	5.1V				

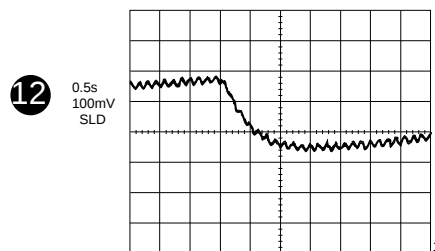
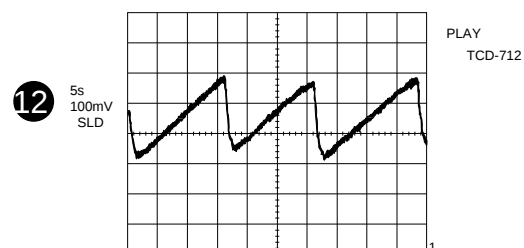
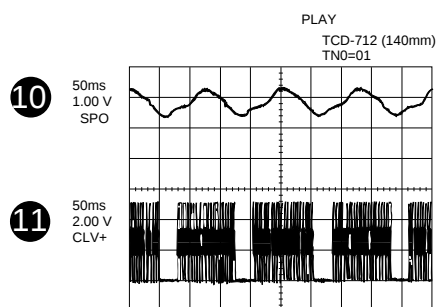
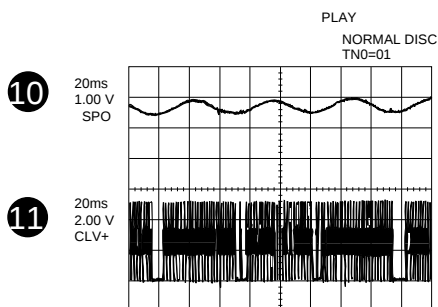
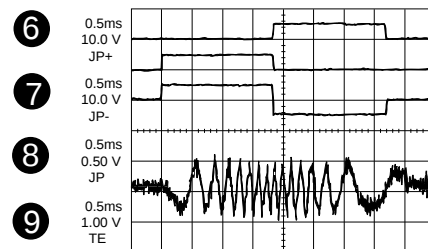
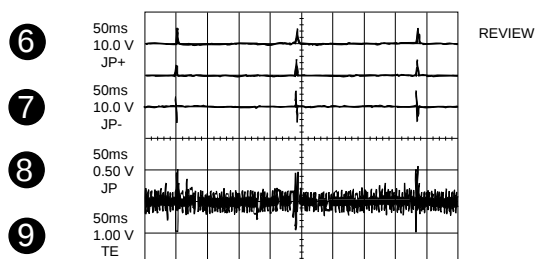
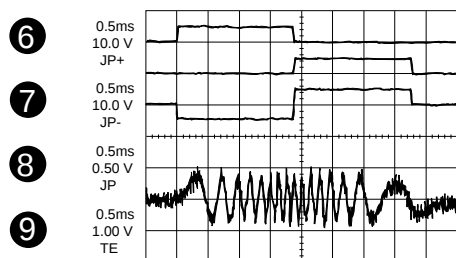
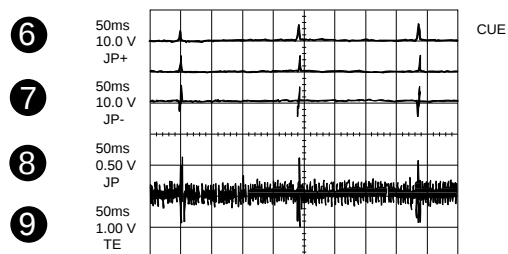
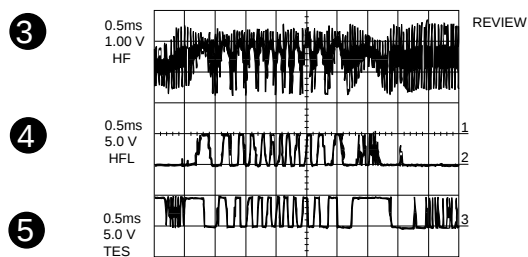
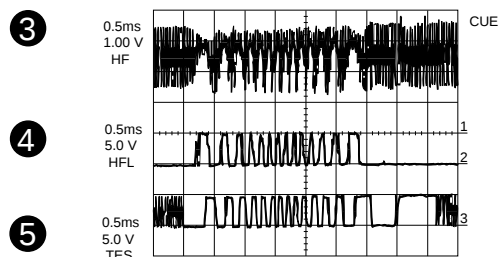
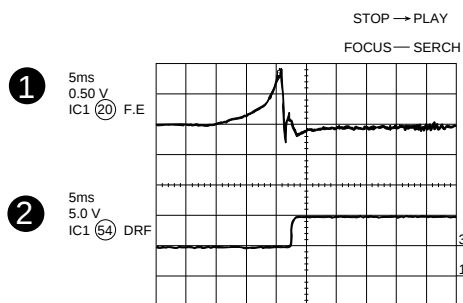
IC303	
PIN NO.	VOLTAGE
1	2V(2V)
2	2V(2V)
3	7.2V(8.2V)
4	0.5V(0.8V)
5	2V(2V)
6	0V(0V)
7	5.5V(5.5V)
8	0V(0V)
9	2.6V(2.6V)
10	2.6V(2.6V)
11	6.3V(8.2V)
12	1.2V(1.2V)
13	1.4V(0V)
14	2.2V(2V)
15	1.3V(1.4V)
16	2V(1.9V)
17	2V(2V)
18	1.6V(1.6V)
19	0.6V(0.7V)
20	7.2V(8.2V)
21	7.2V(8.2V)
22	2V(2V)
23	2V(2V)
24	2V(2V)

IC91	
PIN NO.	VOLTAGE
1	0V
2	5.1V
3	0.1V
4	0V
5	0V
6	5.1V
7	0V
8	4.2V
9	0V

IC101	
PIN NO.	VOLTAGE
1	0V
2	0V
3	0.6V
4	3V
5	0V
6	1.3V
7	0V
8	0.6V
9	3V
10	3V
11	0V
12	0V
13	6V
14	3.7V
15	0V
16	3V
17	0.6V
18	0V
19	0.8V
20	0V
21	3V
22	0.6V
23	0V
24	0V

IC801	
PIN NO.	VOLTAGE
1	24.7V
2	14.19V
3	0V
4	0V
5	14.05V
6	24.8V
7	27.8V(C420)/31.8V(C2700)
8	1.24V
9	5.3mV
10	26.7V
11	0V
12	2.25V
13	5.2mV
14	1.23V

WAVEFORMS OF CD CIRCUIT



TROUBLESHOOTING (CD SECTION)

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.

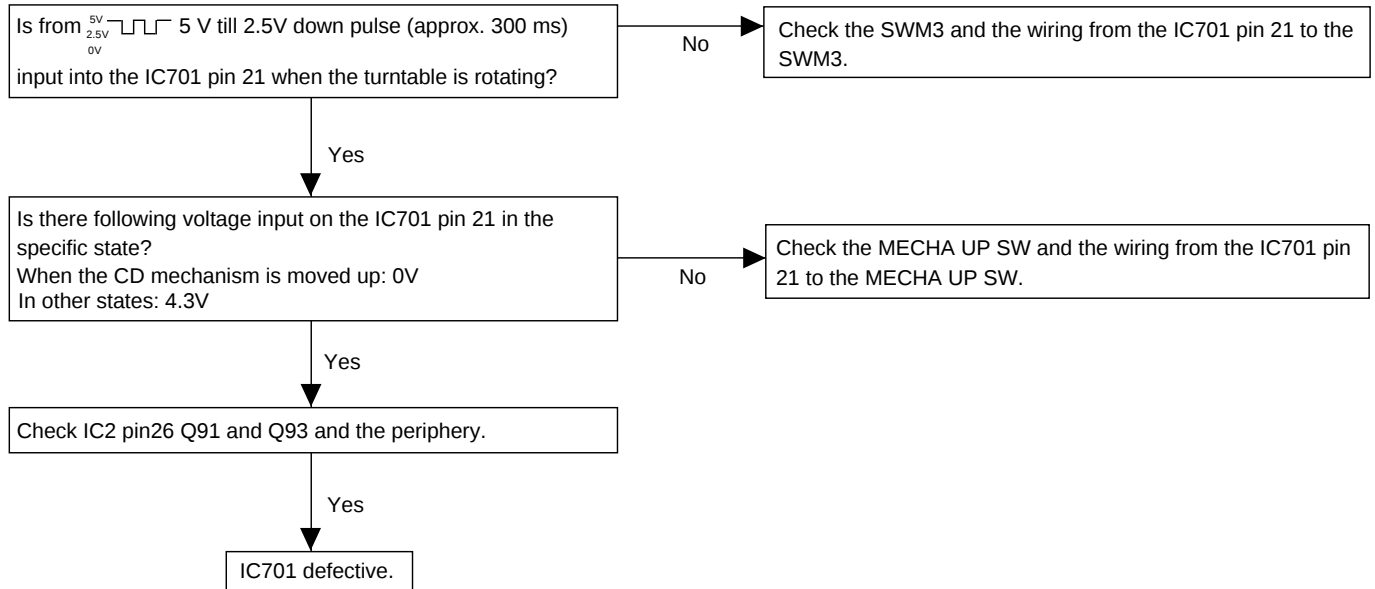
"Track skipping and/or no TOC(Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn the power off.

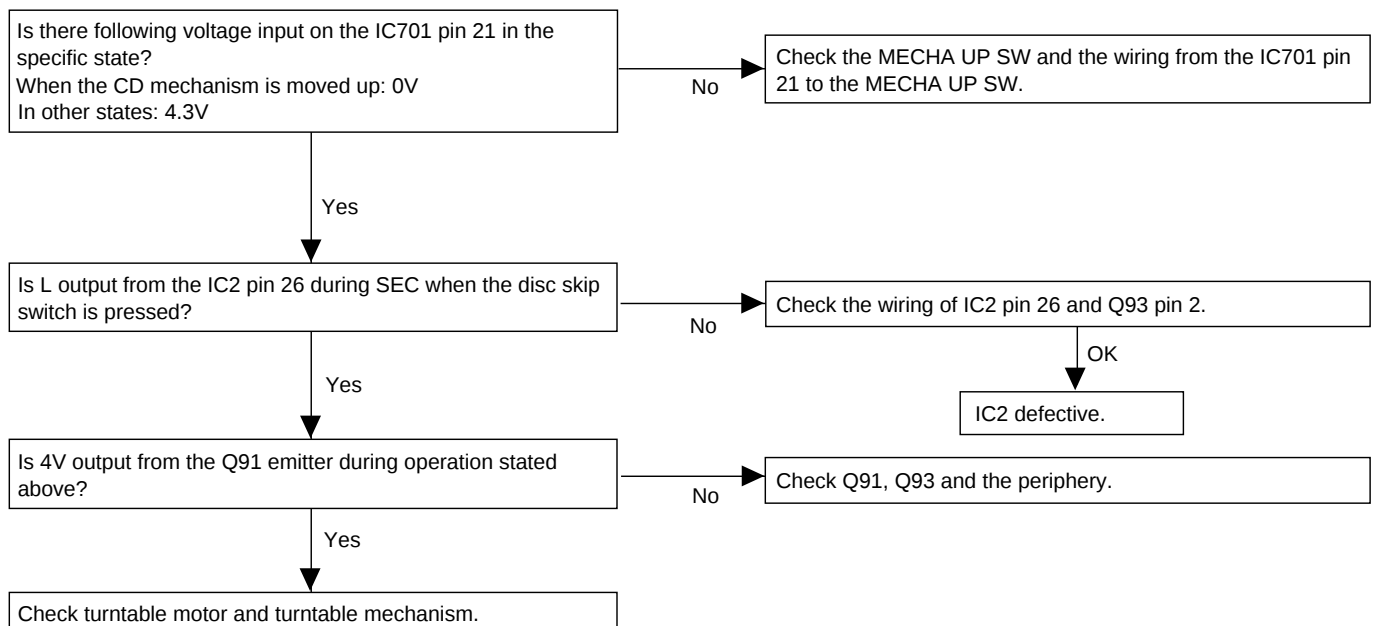
Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.

Do not touch the lens with the bare hand.

• When the turntable fails to stop.

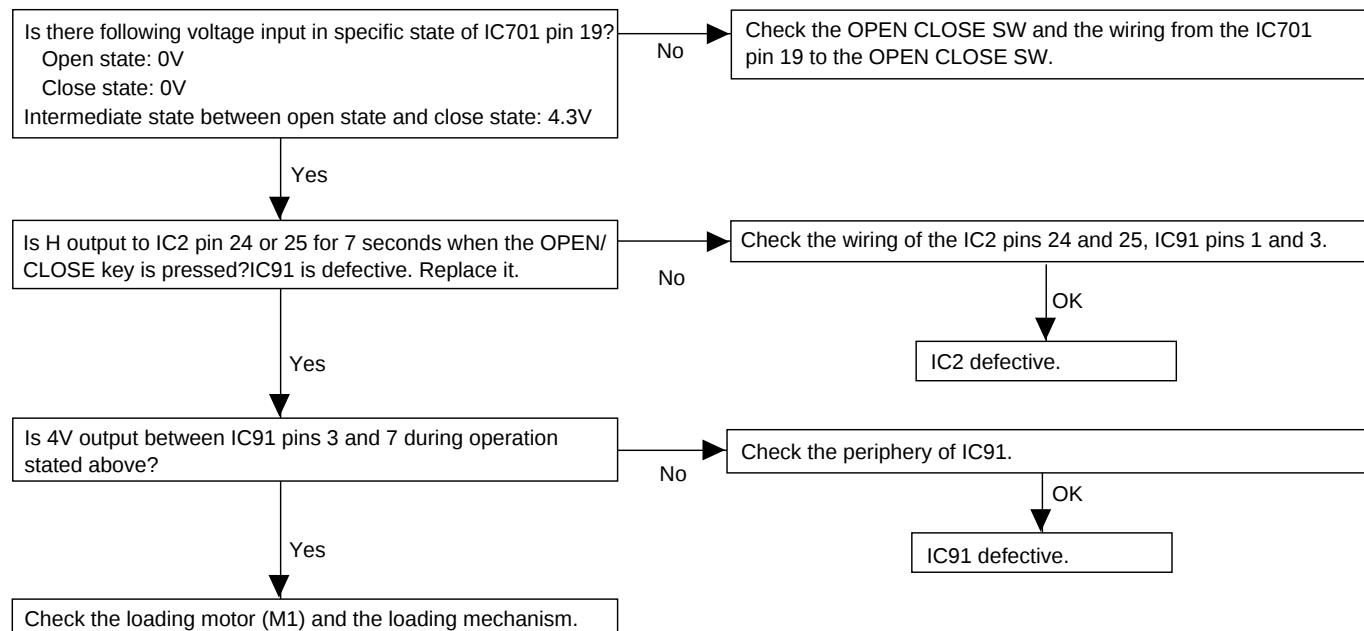


• When turntable fails to move.

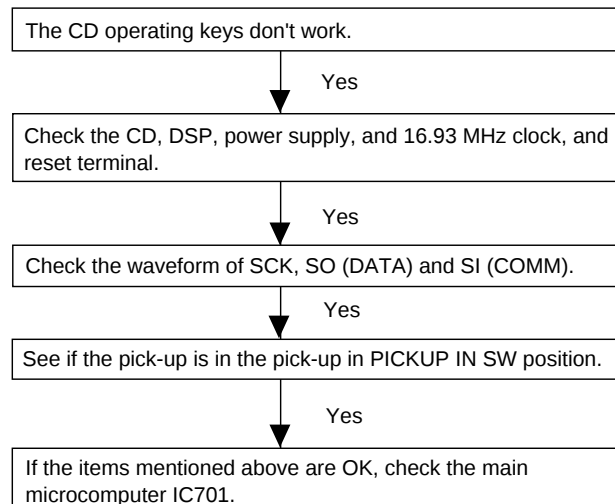


CD-C410H,CP-C410

• When the CD tray fails to open or close.



• The CD function will not work.



• The CD operating keys work.

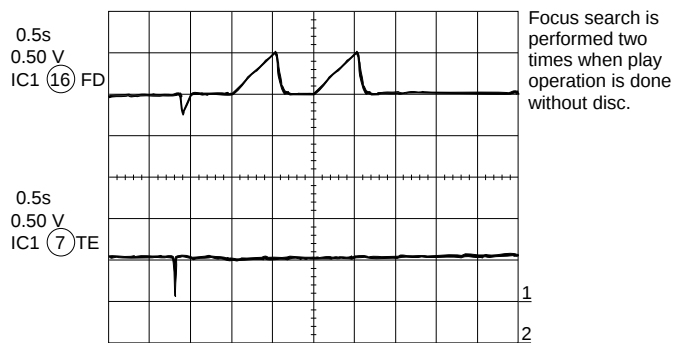
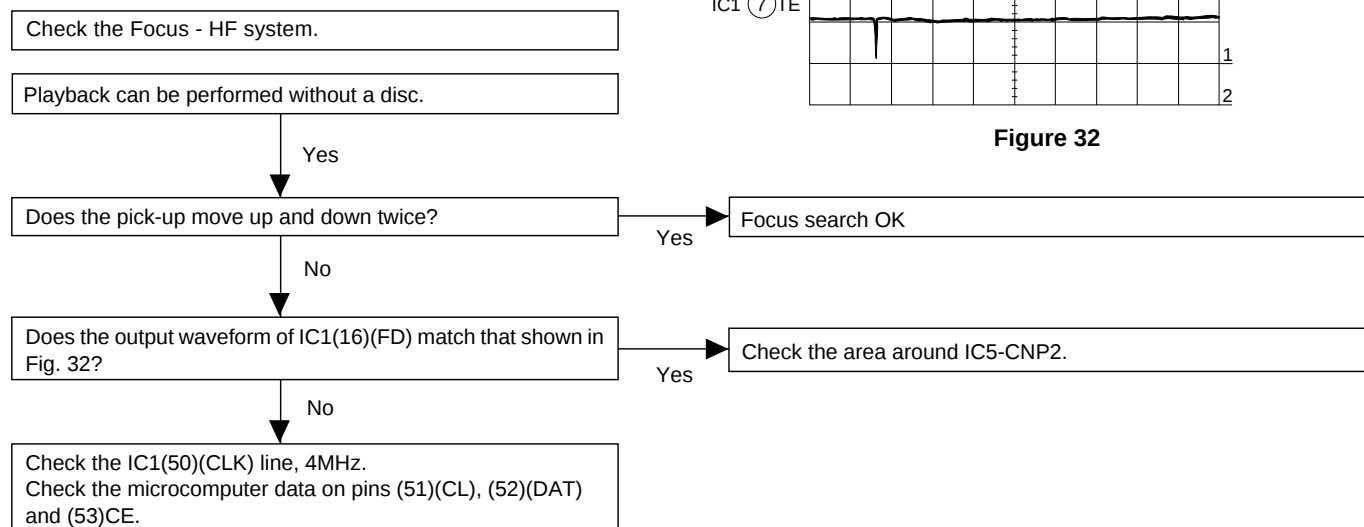
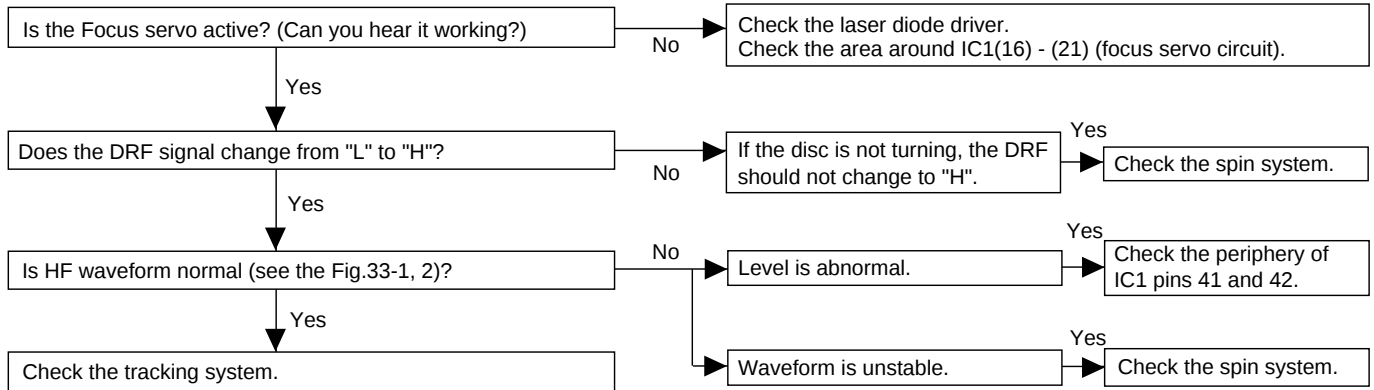


Figure 32

- Playback can only be performed when a disc is loaded.



HF
1.0V/DIV
0.5 μ sec/DIV(DC)
(When playing back the disc)

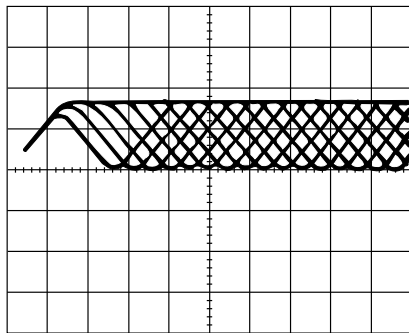


Figure 33-1

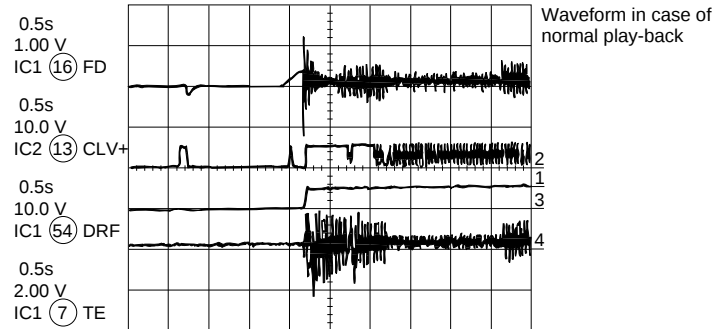


Figure 33-2

- Check the tracking system.

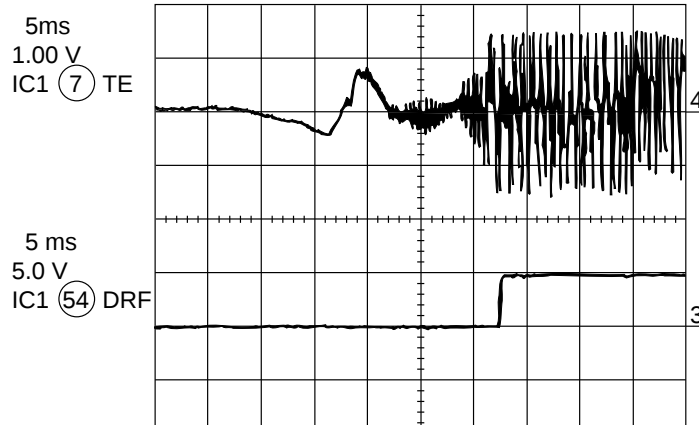
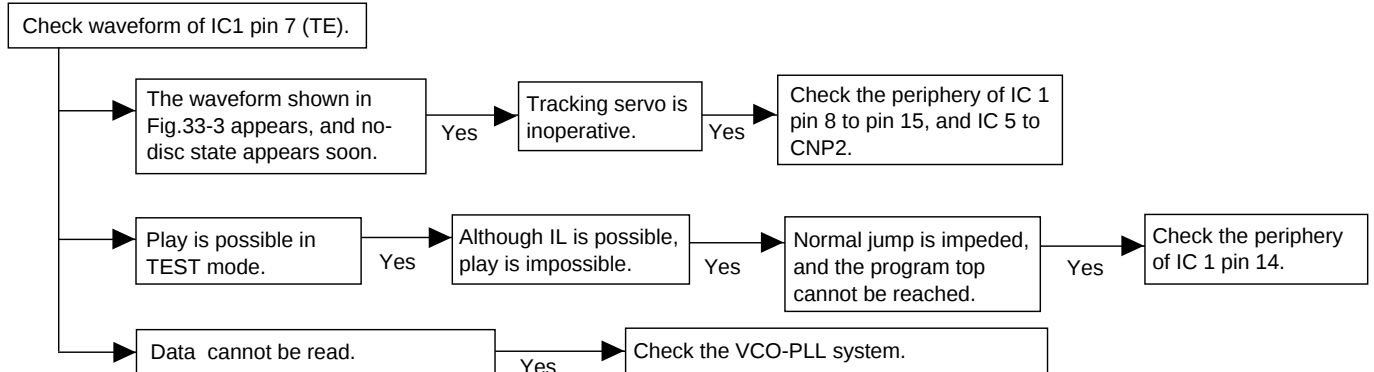


Figure 33-3

CD-C410H,CP-C410

• Checking the spin system.

Play operation is performed without disc.

Yes

The turntable rotates a little.

Yes

The spin driver circuit is normal.

No

The turntable fails to rotate or rotates at high speed.

Yes

Check the periphery of IC1 pins 23 to 27, pin 39, and pin 40, IC2 pin 12 and pin 13, IC5 to CNP3.

• Checking the VCO-PLL system

Play operation is performed when disc exits.

Yes

Although HF waveform is normal, TOC data cannot be read.

Yes

Check PDO waveform (Fig. 34).

Abnormal

Check the IC1 pins 43 and 44, IC2 pins 3, 5, 7, 10, and 11.

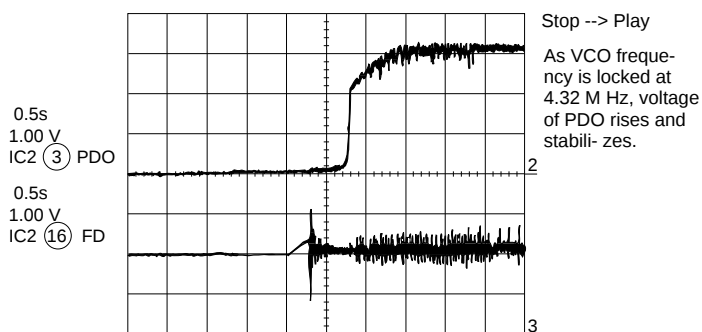


Figure 34

• Although HF waveform is normal and the time indication is normal, no sound is emitted.

Check IC 2 pin 48 (EFLG).

No

Usually, the number of pulses of flawless disc is 100 pulses/sec or less.

Yes

Check IC2 pins 37, 40.

Abnormal

Check IC 401 and POWER AMP IC 801.

FUNCTION TABLE OF IC

IC2 VHiLC78622U-1:Servo/Signal Control(LC78622U) (1/2)

Pin No.	Terminal Name	Input/Output	Function	
1	DEFI	Input	Input terminal of defect detection signal (DEF). (Connected to OV when not used.)	
2	TAI	Input	For PLL	Input terminal for test. Pull-down resistor is integrated. Surely connected to 0V.
3	PDO	Output		Output terminal of phase comparison for external VCO control.
4	VVSS	—		Ground terminal for integrated VCO. Surely connected to 0V.
5	ISET	Input		Resistance connection terminal for current adjustment of PDO output.
6	VVDD	—		Power terminal for integrated VCO.
7	FR	Input		VCO frequency range adjustment.
8	VSS	—	Ground terminal of digital system. Surely connected to 0V.	
9	EFMO	Output	For slice level control	EFM signal output terminal.
10	EFMIN	Input		EFM signal input terminal.
11	TEST2	Input	Input terminal for test. Pull-down resistor is integrated. Surely connected to 0V.	
12	CLV+	Outout	Output for disk motor control. 3 values can be output with the commands.	
13	CLV-	Output	Output for disk motor control. 3 values can be output with the commands.	
14	V/P	Output	Monitor output terminal for automatic switch of rough servo/phase control. "H" for rough servo, and "L" for phase servo.	
15	HFL	Intput	Input terminal of track detection signal. Schmit input.	
16	TES	Input	Input terminal of tracking error signal. Schmit input.	
17	TOFF	Output	Tracking OFF output terminal.	
18	TGL	Output	Output terminal for switch of tracking gain "L" increases the gain.	
19	JP+	Output	Output for track jump control. 3 values can be output with the commands.	
20	JP-	Output	Output for track jump control. 3 values can be output with the commands.	
21	PCK	Output	Clock monitor terminal for EFM data replay. 4,3218MHz as the phase clock.	
22	FSEQ	Output	Output terminal synchronous signal detection. "H" is output when synchronous signal detected by EFM signal matches synchronous signal internally generated.	
23	VDD	—	Power terminal of digital system.	
24	CONT1	Input/Output	General purpose input/output terminal 1	Controlled with serial data command from micro computer. When not used, set it as the input terminal and open it by connecting to 0V, or set it as the output terminal and open it.
25	CONT2	Input/Output	General purpose input/output terminal 2	
26	CONT3	Input/Output	General purpose input/output terminal 3	
27	CONT4	Input/Output	General purpose input/output terminal 4	
28	CONT5	Input/Output	General purpose input/output terminal 5	
29	EMPH	Output	Difference monitor terminal At "H", deemphasis disk is being replayed.	
30	C2F	Output	C2 flag output terminal.	
31	DOUT	Output	Output terminal of digital OUTPUT. (EIAJ format)	
32	TEST3	Input	Input terminal for test. Pull-down resistor is integrated. Surely connected to 0V.	
33	TEST4	Input	Input terminal for test. Pull-down resistor is integrated. Surely connected to 0V.	
34	N.C.	—	Terminal not used. Open during operation.	
35	MUTEL	Output	L channel 1 bit DAC	Mute output terminal for L channel.
36	LVDD	—		Power terminal for L channel.
37	LCHO	Output		L channel output terminal.
38	LVSS	—		Ground terminal for L channel Surely connected to 0V.
39	RVSS	—	R channel 1 bit DAC	Ground terminal for R channel Surely connected to 0V.
40	RCH0	Output		R channel output terminal.
41	RVDD	—		Power terminal for R channel.
42	MUTER	Output		Mute output terminal for R channel.
43	XVDD	—	Power terminal for quartz oscillation.	
44	XOUT	Output	Ground terminal of 16.9344 MHz quartz oscillator.	
45	XIN	Input	Ground terminal of 16.9344 MHz quartz oscillator.	
46	XVSS	—	Ground terminal for quartz oscillation. Surely connected to 0V.	
47	SBSY	Output	Output terminal of synchronous signal of subcode block.	
48	EFLG	Output	Correction monitor terminal of C1, C2, single and double.	

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

IC2 VHiLC78622U-1:Servo/Signal Control(LC78622U) (2/2)

Pin No.	Terminal Name	Input/Output	Function
49	PW	Output	Output terminal of subcodes P, A, R, S, T, U and W.
50	SFSY	Output	Output terminal of synchronous signal of subcode frame. It drops when subcode stands by.
51	SBCK	Input	Clock input terminal to read subcode. Schmit input (Connected to 0V when not used.)
52	FSX	Output	Output terminal of synchronous signal of 7.35kHz divided from quartz oscillation.
53	WRQ	Output	Output terminal to stand by output of subcode Q.
54	RWC	Input	Input terminal of read/write. Schmit input.
55	SQOUT	Output	Output terminal of subcode Q.
56	COIN	Input	Command input terminal from microcomputer.
57	CQCK	Input	Clock input terminal to fetch command input, or pick up subcode from SQOUT. Schmit input
58	RES	Input	Reset input terminal of LC78622. When turning on power, set it at "L".
59	TST11	Output	Output terminal for test. Used in the open state ("L" output as ordinary).
60	16M	Output	Output terminal of 16.9344Hz.
61	4.2M	Output	Output terminal of 4.2336MHz.
62	TEST5	Input	Input terminal for test Pull-down resistor is integrated. Surely connected to 0V.
63	CS	Input	Chip selection input terminal. Pull-down resistor is integrated. Connected to 0when not controlled.
64	TEST1	Input	Input terminal for test Pull-down resistor is integrated. Surely connected to 0V.

Note: The same potential must be supplied to the power terminals (VDD, VVDD, LVDD, RVDD, XVDD).

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

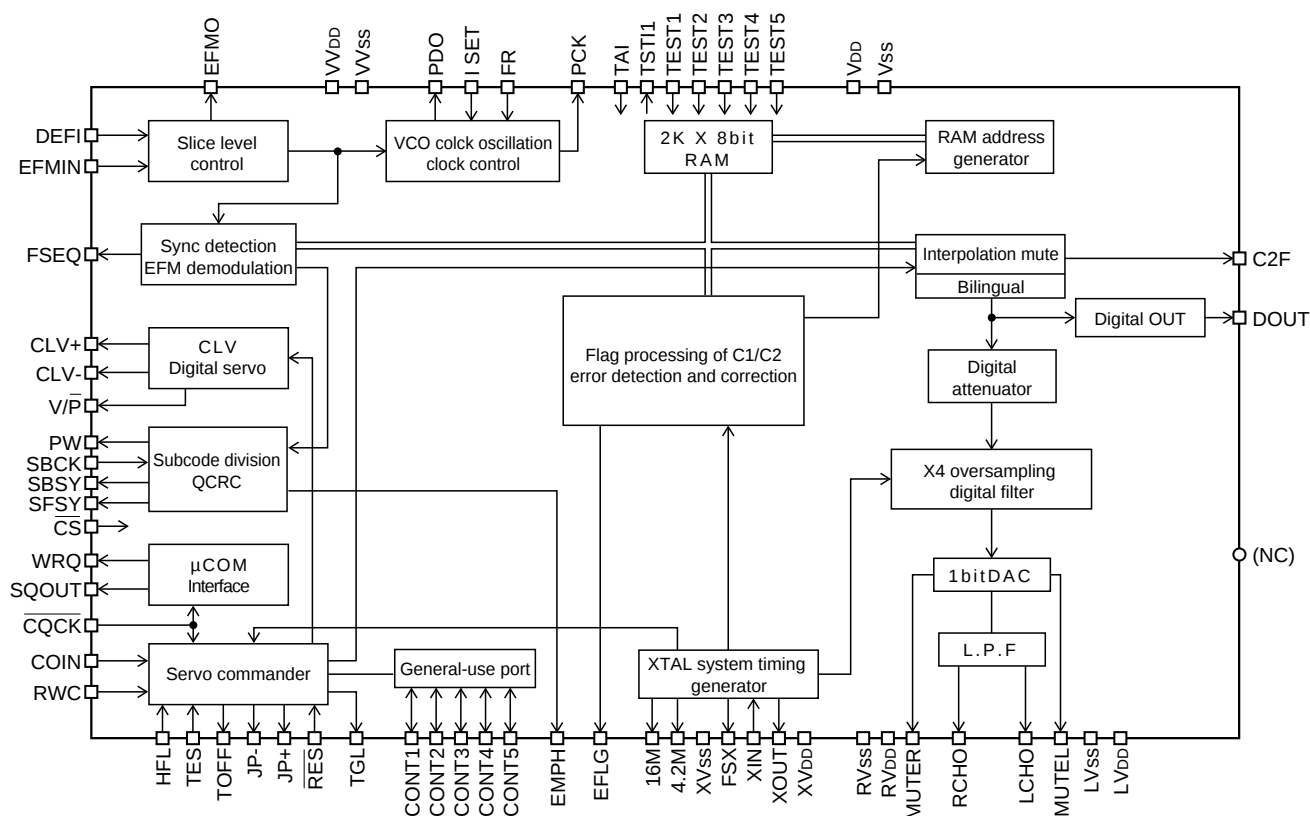


Figure 36 BLOCK DIAGRAM OF IC

IC1 VHiLA9240M/-1:Servo Amp.,(LA9240M) (1/2)

Pin No.	Port Name	Function
1	FIN2	Connection pin for photodiode of pickup. RF signal is generated through addition with FIN pin, and FE signal is generated through subtraction.
2	FIN1	Connection pin for photodiode of pickup.
3	E	Connection pin for photodiode of pickup. TE signal is generated through subtraction with F pin.
4	F	Connection pin for photodiode of pickup.
5	TB	Pin for input of DC component of TE signal.
6	TE-	Pin to connect gain setting resistor of TE signal to TE signal.
7	TE	TE signal output pin.
8	TESI	TES (Track error sense) comparator input pin. TE signal is band-passed and input.
9	SCI	Input pin for shock detection.
10	TH	Pin to set time constant of tracking gain.
11	TA	TA amplifier output pin.
12	TD-	Pin to compose tracking phase compensation constant between TD and VR pins.
13	TD	Pin to set tracking phase compensation.
14	JP	Pin to set amplitude of tracking jump signal (kick pulse).
15	TO	Tracking control signal output pin.
16	FD	Focusing control signal output pin.
17	FD-	Pin to compose focusing phase compensation constant between FD and FA pins.
18	FA	Pin to compose focusing phase compensation constant between FD-/FA-pins.
19	FA-	Pin to compose focusing phase compensation constant between FA and FE pins.
20	FE	Output pin of FE signal.
21	FE-	Pin to connect gain setting resistor of FE signal across TE pin.
22	AGND	GND for analog signal.
23	SP	Single end output for CV+ and CV- pin input.
24	SPI	Spindle amplifier input.
25	SPG	Pin to connect gain setting resistor in the 12cm mode of spindle.
26	SP-	Pin to connect spindle phase compensation constant together with SPD pin.
27	SPD	Spindle control signal output pin.
28	SLEQ	Pin to connect thread phase compensation constant.
29	SLD	Thread control signal output pin.
30	SL-	Input pin of thread feed signal from micro computer.
31	SL+	Input pin of thread feed signal from micro computer.
32	JP-	Input pin of tracking jump signal from DSP.
33	JP+	Input pin of tracking jump signal from DSP.
34	TGL	Input pin of tracking gain control signal from DSP. TGL = Gain low at "H"
35	TOFF	Input pin of tracking off control signal from DSP. TOFF = Off at "H"
36	TES	Output pin of TES signal to DSP.
37	HFL	(HIGH FREQUENCY LEVEL) is used to judge whether main beam is positioned on the bit or on the mirror.
38	SLOF	Thread servo off control input pin.
39	CV-	Pin to input CLV error signal from DSP.
40	CV+	Pin to input CLV error signal from DSP.
41	RFSM	RF output pin.
42	RFS-	Pin to set gain of RF and set 3T compensation constant together with RFSM pin.
43	SLC	(SLICE LEVEL CONTROL) is the output pin to control of the level of the data slice with RF waveform DSP.
44	SLI	Input pin to control the level of data slice with DSP.
45	DGND	GND pin in the digital system.
46	FSC	Output pin for focus search smoothening capacitor.
47	TBC	(Tracking Balance Control) Pin to set EF balance variable range.
48	NC	No connect.
49	DEF	Defect detection output pin of disk.
50	CLK	Reference clock input pin. 4.23MHz of DSP is input.

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

IC1 VHiLA9240M/-1: Servo Amp.,(LA9240M) (2/2)

Pin No.	Port Name	Function
51	CL	Micro computer command clock input pin.
52	DAT	Micro computer command data input pin.
53	CE	Micro computer command chip enable input pin.
54	DRF	(DETECT RF) RF level detection output.
55	FSS	(Focus Serch Select) Pin to switch focus search mode. ($\pm$ search/+ search for reference voltage)
56	VCC2	VCC pin for servo system and digital system.
57	REFI	Pin to connect pass control for reference voltage.
58	VR	Reference voltage output pin.
59	LF2	Pin to set defect detection time constant of disk.
60	PH1	Pin to connect capacitor for peak hold of RF signal.
61	BH1	Pin to connect capacitor for bottom hold of RF signal.
62	LDD	APC circuit output pin.
63	LDS	APC circuit output pin.
64	VCC1	RF system VCC pin.

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

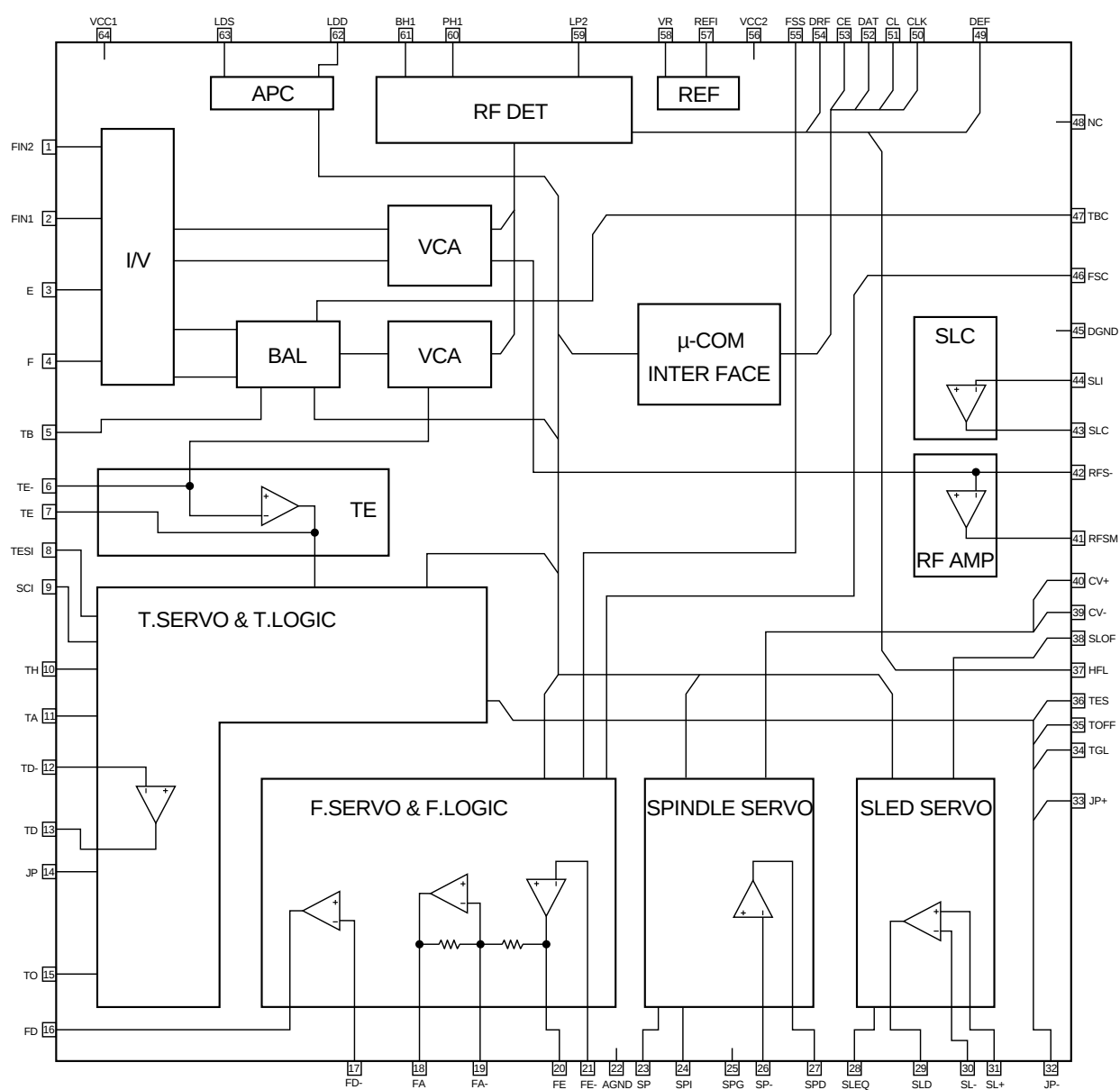


Figure 38 BLOCK DIAGRAM OF IC

IC701 RH-iX0191AWZZ: System Microcomputer (IX0191AW) (1/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
1-7	FIP6-0	FL DRIVER	Output	Segment Output
8	VDD		—	Connect with BACK UP VDD
9	P27	TAPE BIAS	Output	TAPE BIAS ON: H
10	P26	TAPE REC	Output	TAPE REC. ON: L
11	P25	T1/T2	Output	TAPE2 PLAY: L
12	P24	CD DSP WRQ	Input	CD DSP Write request
13	P23	CD DSP RWC	Output	CD DSP Read write control
14	SCK1	CD DSP CQCK	Output	CD DSP Clock
15	SO1	CD DSP COIN	Output	CD DSP Comand
16	SI1	CD DSP SQOUT	Input	CD DSP Code Q out
17	RESET	RESET	Input	Reset Input: L
18	P74	CD DSP RES	Outout	CD DSP RES interface signal
19	P73	CD T/T OPEN/CLOSE	Input	CD Turntable open close
20	AVSS	—	—	Connect with GND
21	ANI7	CD UP/DOWN CD DISC NO	Intput	CD mecha up/down CD disc no
22	ANI6	T2 RUN PLSE	Input	TAPE2 Run pulse
23	ANI5	L-CH CHECK	Input/Output	For TEST mode
24	ANI4	R-CH CHECK	Input/Output	For TEST mode
25	ANI3	KEY INPUT 3	Input	Key input 3
26	ANI2	KEY INPUT 2	Input	Key input 2
27	ANI1	KEY INPUT 1	Input	Key input 1
28	ANI0	Initial setting input	Input	Initial setting input
29	AVDD	AVDD	—	Connect with BACK UP VDD
30	AVREF	AVREF	—	Connect with UNBACK UP VDD
31	P04	SRS	Input	SRS provided/not provided
32*	XT2		—	Non connect
33	VSS		—	Connect with GND
34	X1	X1	Input	MAIN CLOCK 4.19MHz
35	X2	X2	Output	MAIN CLOCK 4.19NHz
36	P37	C ² B CL	Output	C ² B Bus clock
37	P36	C ² B CE	Output	C ² B Bus chip enable
38	P35	C ² B DI	Output	C ² B Bus comand
39	P34	C ² B DO	Input	C ² B Bus data
40	P33	CD DRF	Input	Data read fiug from DSP
41	P32	CD PUIN	Input	L: Innermost periphery
42	P31	CD SL+	Output	CD pickup slide motor control
43	P30	CD SL-	Output	CD pickup slide motor control
44	P03	POWER	Output	POWER ON: H
45	P02	TUNER SD	Input	Tuner SD Signal
46	INPT1	SYSTEM STOP	Input	System Stop Signal
47	INPT0	REMOCON	Input	Remote Control Code Input
48	IC	INTERNALLY CONNECTED	—	Connect with GND
49*	P72	P.B MUTE	Output	P.B MUTE ON: H
50	P71	TAPE SOL.	Output	TAPE SOL. ON: L
51	P70	TAPE MOTOR	Output	TAPE MOTOR ON: L
52	VDD	VDD	—	Connect with BACK UP VDD
53	P127	MIC MUTE	Input	MIC MUTE: L CD STOP, TAPE STOP state: Mute cancel
54*	P126	—	Output	Non connect
55	P125	TAPE F.P.	Input	TAPE FOOL PROOF REC: L

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

IC701 RH-IX0191AWZZ: System Microcomputer (IX0191AW) (2/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
56	P124	TAPE1 RUN PULSE	Input	TAPE1 Run pluse
57	P123	TAPE MECHA STOP	Input	Tape mecha up state: L
58*-60*	P122-P120	DISC1-DISC3	Output	Non connect
61-70	FIP25-16	FL DRIVER	Output	Segment output
71	VLOAD	VLOAD	Output	Connect with VPP
72-77	FIP15-FIP10	FL DRIVER	Output	Segment output
78*	P97	—	Output	Non connect
79,80	FIP8,FIP7	FL DRIVER	Output	Segment output

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

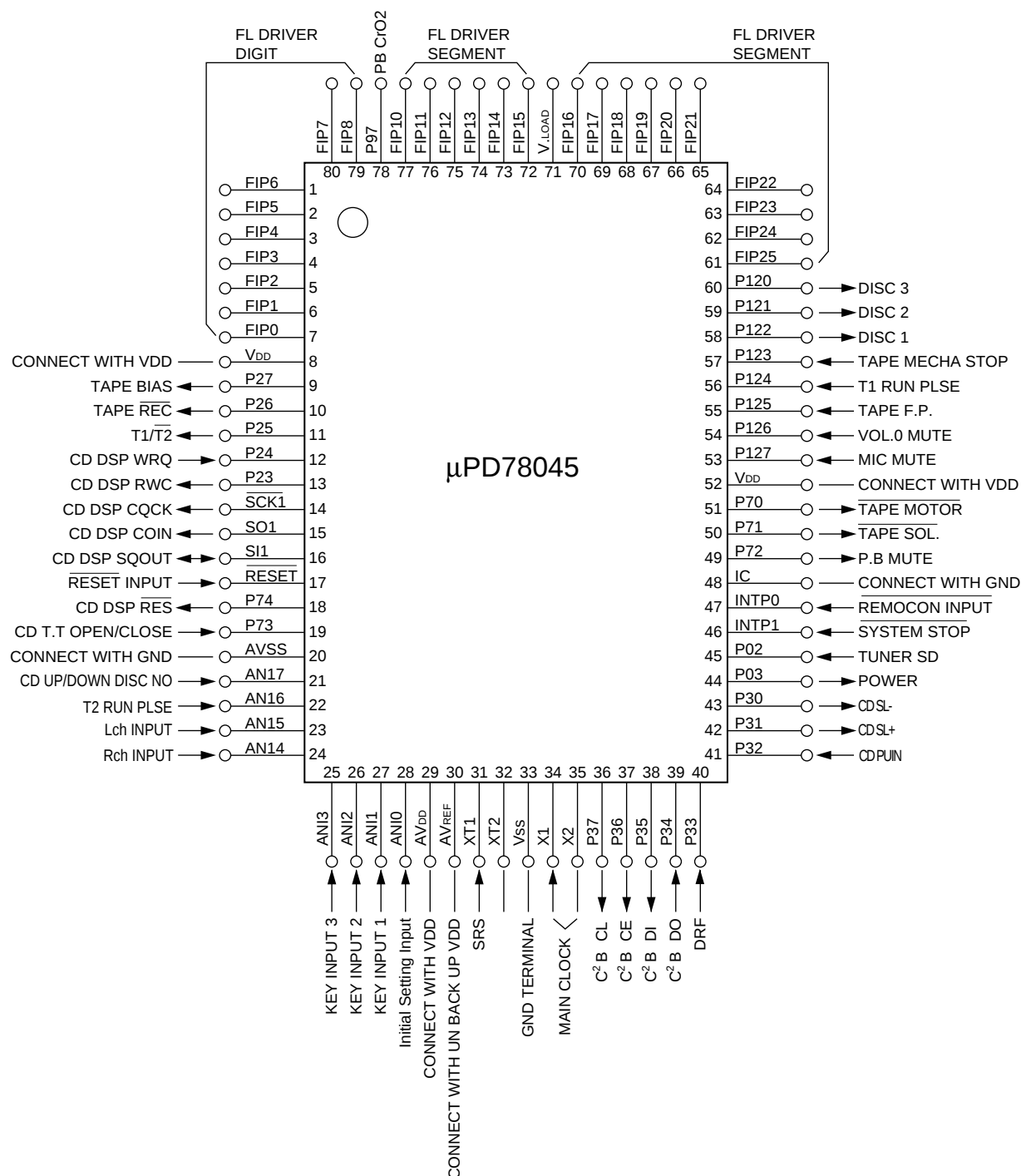


Figure 40 BLOCK DIAGRAM OF IC

IC5 VHiM56748FP-1:Focus/Tracking/Spin/Slide Driver (M56748FP)

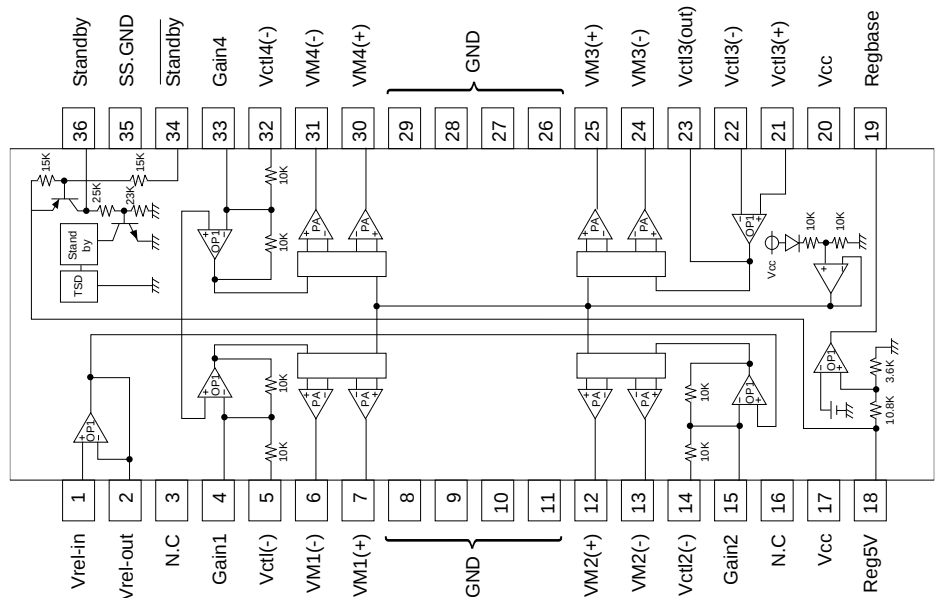


Figure 41-1 BLOCK DIAGRAM OF IC

LCD701 : VVKFiP9EM7R-1 FL Display

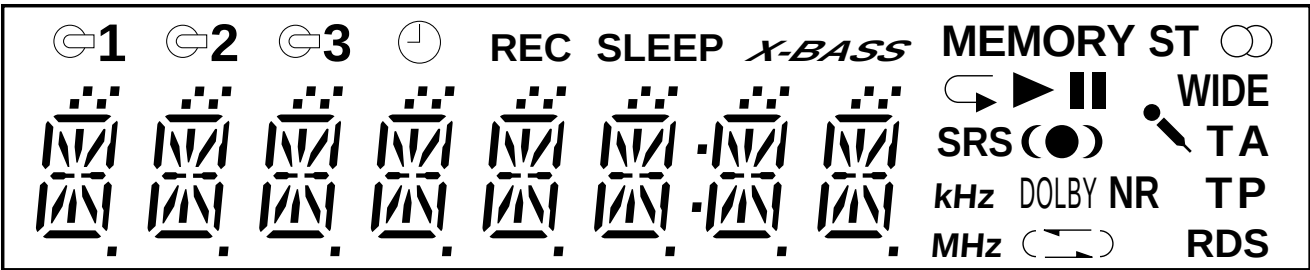


Figure 41-2 FL DISPLAY

WIRING OF PRIMARIY SUPPLY LEADS (FOR UK ONLY)

If any one of the bands shown in Fig. 41-3 is removed for some reason, be sure replace it to the original position and same appearance as before.

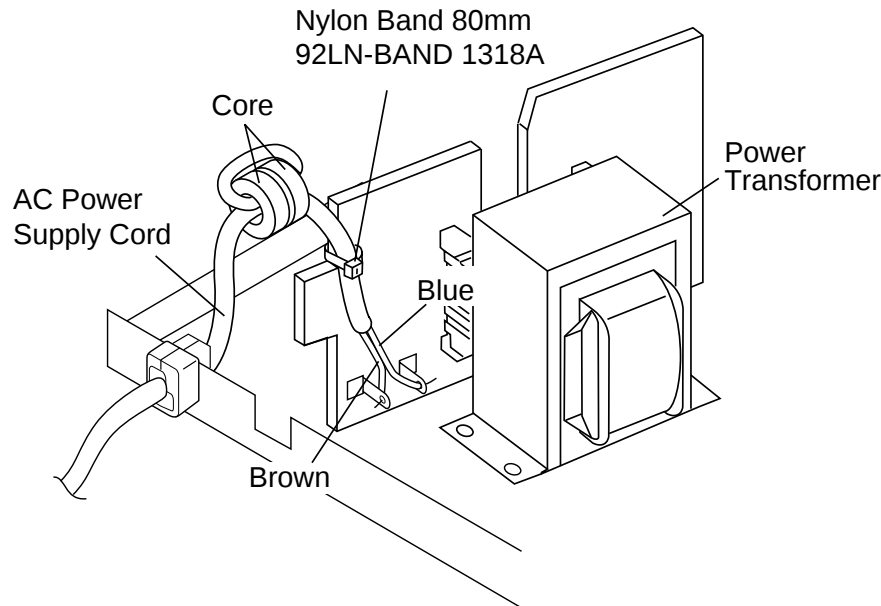


Figure 41-3

CD-C410H,CP-C410

— M E M O —

SHARP PARTS GUIDE

MODEL CD-C410H CP-C410

“HOW TO ORDER REPLACEMENT PARTS”

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

1. MODEL NUMBER

3. PART NO.
2. REF. 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" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±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" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±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-C410H,CP-C410

NO.	PART CODE	★ PRICE RANK	DESCRIPTION
CD-C410H			
INTEGRATED CIRCUITS			
IC1	VHILA9240M/-1	J AV	Servo Amp.,LA9240M
IC2	VHILC78622U-1	J AT	Servo/Signal Control,LC78622U
IC5	VHIM56748FP-1	J AR	Focus/Tracking/Spin/Slide Driver,M56748FP
IC91	VHITA7291S/-1	J AH	Loading Motor Driver, TA7291S
IC101	VHIAN7345K/-1	J AM	Playback and Record/ Playback Amp.,AN7345K
IC302	VHILC72131/-1	J AP	PLL (Tuner),LC72131
IC303	VHILA1832/-1	J AR	FM IF Det./FM Mpx./ AM IF, LA1832
IC401	VHILC75394E-1	J AX	Audio Processor,LC75394E
IC701	RH-IX0191AWZZ	J AZ	System Microcomputer, IX0191AW
IC801	VHILA4451/-1	J AN	Power Amp.,LA4451

TRANSISTORS

Q1	VSKTA1266GR-1	J AB	Silicon,PNP,KTA1266 GR
Q81	VSKTC3203Y/-1	J AC	Silicon,NPN,KTC3203 Y
Q91	VS2SB561-C/-1	J AC	Silicon,PNP,2SB561 C
Q93	VSKRC102M/-1	J AC	Digital,NPN,KRC102 M
Q103-106	VS2SC1845F/-1	J AC	Silicon,NPN,2SC1845 F
Q107,108	VSKTC3199GR-1	J AB	Digital,NPN,KTC3199 GR
Q109	VSKTA1266GR-1	J AB	Silicon,PNP,KTA1266 GR
Q110,111	VSKRC104M/-1	J AC	Digital,NPN,KRC104 M
Q121,122	VSKTC3199GR-1	J AB	Digital,NPN,KTC3199 GR
Q124	VS2SA1015GR-1	J AB	Silicon,PNP,2SA1015 GR
Q126	VSKRC104M/-1	J AC	Digital,NPN,KRC104 M
Q128	VSKTC3203Y/-1	J AC	Silicon,NPN,KTC3203 Y
Q301	VS2SC380-O/-1	J AC	Silicon,NPN,2SC380 O
Q353,354	VSKTC3199GR-1	J AB	Digital,NPN,KTC3199 GR
Q360	VSKTA1266GR-1	J AB	Silicon,PNP,KTA1266 GR
Q361	VSKRC107M/-1	J AC	Digital,NPN,KRC107 M
Q701	VSKRC107M/-1	J AC	Digital,NPN,KRC107 M
Q705	VSKTA1273Y/-1	J AE	Silicon,PNP,KTA1273 Y
Q706	VS2SB561-C/-1	J AC	Silicon,PNP,2SB561 C
Q707	VSKRC102M/-1	J AC	Digital,NPN,KRC102 M
Q708,709	VSKTC3199GR-1	J AB	Digital,NPN,KTC3199 GR
Q941,942	VS2SD2012Y/-1	J AF	Silicon,NPN,2SD2012 Y
Q943	VSKTC3199GR-1	J AB	Digital,NPN,KTC3199 GR
Q952	VS2SD2012Y/-1	J AF	Silicon,NPN,2SD2012 Y
Q953	VSKTC3199GR-1	J AB	Digital,NPN,KTC3199 GR
Q971	VSKTA1266GR-1	J AB	Silicon,PNP,KTA1266 GR

DIODES

D2	VHD1SS119/-1	J AA	Silicon,1SS119
D5	VHD1SS119/-1	J AA	Silicon,1SS119
D7	VHD1SS119/-1	J AA	Silicon,1SS119
D81	VHD1SS119/-1	J AA	Silicon,1SS119
D91	VHD1SS119/-1	J AA	Silicon,1SS119
D311,312	VHD1SS119/-1	J AA	Silicon,1SS119
D352	VHD1SS119/-1	J AA	Silicon,1SS119
D361-364	VHD1SS119/-1	J AA	Silicon,1SS119
D367,368	VHD1SS119/-1	J AA	Silicon,1SS119
D401-404	VHD1SS119/-1	J AA	Silicon,1SS119
D701-706	VHD1SS119/-1	J AA	Silicon,1SS119
D708,709	VHD1SS119/-1	J AA	Silicon,1SS119
D941,942	VHD1SS119/-1	J AA	Silicon,1SS119
D951	VHD1SS119/-1	J AA	Silicon,1SS119
D961-964	VHDL104A/-1	J AB	Silicon,RL104A
D965-968	VHD1N5402M/-1	J AE	Silicon,1N5402M
D971-973	VHDL104A/-1	J AB	Silicon,RL104A
PHM1	VHP13153CD-1	J AG	Photo Interrupter
ZD351	VHEMTZJ5R1B-1	J AC	Zener,5.1V,MTZJ5.1B
ZD352	VHEMTZJ3R9B-1	J AC	Zener,3.9V,MTZJ3.9B
ZD701	VHEMTZJ3R3B-1	J AA	Zener,3.3V,MTZJ3.3B
ZD941	VHEMTZJ130A-1	J AC	Zener,13V,MTZJ13A
ZD951	VHEMTZJ36R2C-1	J AC	Zener,6.2V,MTZJ6.2C
ZD971	VHEMTZJ300B-1	J AB	Zener,3V,MTZJ3B
ZD972	VHEMTZJ6R2A-1	J AA	Zener,6.2V,MTZJ6.2A

FILTERS

BF351	RFILA0009AWZZ	J AE	AM IF
CF301,302	RFILF0072AFZZ	J AG	FM IF
CF351	RFILF0003AWZZ	J AK	FM IF

TRANSFORMERS

T302	RCILZ0014AWZZ	J AL	AM Antenna
T351	RCILI0011AWZZ	J AD	AM IF
△T961	RTRNP0118AWZZ	J AW	Power

COILS

L1	VP-XHR82K0000	J AC	0.82 μH,Choke
L104	VP-MK331K0000	J AB	330 μH,Choke
L105	VP-DH1R5K0000	J AC	1.5 μH
L107,108	VP-XH2R2K0000	J AB	2.2 μH,Choke
L311	RBLN-0001AWZZ	J AD	Balun
L312	VP-DH2R2K0000	J AB	2.2 mmH,Peaking
L351,352	VP-DH101K0000	J AB	100 μH,Choke
L353	VP-DH102K0000	J AB	1 mH,Choke
L354	RFILL0001AWZZ	J AE	Low Pass Filter
L700	VP-XH2R2K0000	J AB	2.2 μH,Choke
L701	VP-DH2R2K0000	J AB	2.2 μH,Peaking
L831,832	RCILZ0137AFZZ	J AA	0.29 μH

VARIABLE RESISTOR

VR351	RVR-M0999AFZZ	J AB	10 kohm (B),Semi-VR [FM Mute Level]
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VIBRATORS

X351	RCRM-0075AFZZ	J AD	Crystal,456 kHz
X352	RCRSP0002AWZZ	J AH	Crystal,4.5 MHz
XL1	RCRM-0008AWZZ	J AF	Ceramic,16.93 MHz
XL701	RCRSP0003AWZZ	J AH	Crystal

CAPACITORS

C1	VCTYMN1CY103N	J AA	0.01 μF,16V
C2	RC-GZA476AF1A	J AB	47 μF,10V,Electrolytic
C3	RC-GZA104AF1H	J AB	0.1 μF,50V,Electrolytic
C4	VCKYMN1HB102K	J AA	0.001 μF,50V
C5,6	VCTYPA1CX333K	J AA	0.033 μF,16V
C7	RC-GZA104AF1H	J AB	0.1 μF,50V,Electrolytic
C8	VCTYPA1CX683K	J AA	0.068 μF,16V
C9	VCTYPA1CX473K	J AA	0.047 μF,16V
C10	VCKYMN1HB181K	J AA	180 pF,50V
C11	VCTYPA1CX104K	J AB	0.1 μF,16V
C12	VCKYMN1HB331K	J AA	330 pF,50V
C13	VCTYPA1CX104K	J AB	0.1 μF,16V
C14	VCTYMN1CY103K	J AA	0.01 μF,16V
C15	VCTYMN1CX472K	J AA	0.0047 μF,16V
C16	VCKYMN1HB102K	J AA	0.001 μF,50V
C17	RC-GZA474AF1H	J AA	0.47 μF,50V,Electrolytic
C18	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic
C19	RC-GZA476AF1A	J AB	47 μF,10V,Electrolytic
C20	VCTYMN1CX332K	J AA	0.0033 μF,16V
C21	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic
C22	VCTYMN1CY103N	J AA	0.01 μF,16V
C24	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic
C25	VCTYMN1CY103N	J AA	0.01 μF,16V
C30	VCCSMN1HL2R2C	J AB	2.2 pF,50V
C31	VCTYMN1CX272K	J AA	0.0027 μF,16V
C32	VCCSMN1HL270J	J AA	27 pF,50V
C33	VCKYMN1HB102K	J AA	0.001 μF,50V
C34	VCTYPA1CX333K	J AA	0.033 μF,16V
C35	RC-GZA104AF1H	J AB	0.1 μF,50V,Electrolytic
C37	RC-GZA227AF0J	J AB	220 μF,6.3V,Electrolytic
C38	VCTYMN1CY103K	J AA	0.01 μF,16V
C39	RC-GZA474AF1H	J AA	0.47 μF,50V,Electrolytic
C40	RC-GZA334AF1H	J AA	0.33 μF,50V,Electrolytic
C41,42	VCTYPA1CX473K	J AA	0.047 μF,16V
C43,44	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic
C45	RC-GZA475AF1E	J AB	4.7 μF,25V,Electrolytic
C46	VCTYMN0JY223N	J AA	0.022 μF,6.3V
C50	VCTYPA1CX104K	J AB	0.1 μF,16V
C51	VCTYMN1EF223Z	J AA	0.022 μF,25V
C52	RC-GZA476AF1A	J AB	47 μF,10V,Electrolytic
C53	VCKYBT1HB221K	J AA	220 pF,50V
C54-57	VCKYMN1HB101K	J AA	100 pF,50V
C58	VCTYMN1EF223Z	J AA	0.022 μF,25V
C59	VCKZPA1HF223Z	J AA	0.022 μF,50V
C67,68	RC-GZA106AF1C	J AB	10 μF,16V,Electrolytic
C69,70	VCKYMN1HB221K	J AA	220 pF,50V
C81	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic

CD-C410H,CP-C410

NO.	PART CODE	★	PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C91	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic	C433,434	VCTYMN1CX272K	J	AA	0.0027 μF,16V
C92	VCTYMN1EF223Z	J	AA	0.022 μF,25V	C435,436	RC-GZA226AF1C	J	AB	22 μF,16V,Electrolytic
C94,95	VCKYMN1HB102K	J	AA	0.001 μF,50V	C437,438	VCKYMN1HB101K	J	AA	100 pF,50V
C96,97	VCTYPA1EX102M	J	AA	0.001 μF,25V	C439,440	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic
C101,102	VCKYMN1HB102K	J	AA	0.001 μF,50V	C441,442	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic
C105,106	VCKYMN1HB181K	J	AA	180 pF,50V	C443	RC-GZA226AF1C	J	AB	22 μF,16V,Electrolytic
C107,108	VCKYMN1HB102K	J	AA	0.001 μF,50V	C444	RC-GZA107AF1C	J	AB	100 μF,16V,Electrolytic
C109	VCKZPA1HF473Z	J	AA	0.047 μF,50V	C445,446	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C111~114	VCKYMN1HB331K	J	AA	330 pF,50V	C451,452	RC-GZA225AF1H	J	AB	2.2 μF,50V,Electrolytic
C115,116	RC-GZA476AF1A	J	AB	47 μF,10V,Electrolytic	C453,454	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic
C117,118	VCTYMN03Y183M	J	AA	0.018 μF,6.3V	C455	VCKYMN1HB221K	J	AA	220 pF,50V
C119,120	VCKYMN1HB561K	J	AA	560 pF,50V	C701	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C121,122	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic	C702	RC-GZA227AF0J	J	AB	220 μF,6.3V,Electrolytic
C123,124	VCTYMN03Y153M	J	AA	0.015 μF,6.3V	C703	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C127	VCTYMN1EF223Z	J	AA	0.022 μF,25V	C704	VCCCMN1HH180J	J	AA	18 pF (CH),50V
C128	RC-GZA335AF1E	J	AB	3.3 μF,25V,Electrolytic	C705	VCTYMN1CY103N	J	AA	0.01 μF,16V
C129,130	VCKYMN1HB471K	J	AA	470 pF,50V	C706	RC-EZY476AF1C	J	AB	47 μF,16V,Electrolytic
C131,132	VCKYMN1HB102K	J	AA	0.001 μF,50V	C707	RC-GZA335AF1H	J	AB	3.3 μF,50V,Electrolytic
C133,134	RC-GZA226AF1C	J	AB	22 μF,16V,Electrolytic	C708	VCTYMN1CY103N	J	AA	0.01 μF,16V
C135,136	VCTYPA1CX683K	J	AA	0.068 μF,16V	C709	RC-EZY107AF0J	J	AB	100 μF,6.3V,Electrolytic
C139,140	VCTYMN1CX332K	J	AA	0.0033 μF,16V	C710,711	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic
C141,142	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic	C715	RC-GZA227AF0J	J	AB	220 μF,6.3V,Electrolytic
C145	RC-GZA226AF1C	J	AB	22 μF,16V,Electrolytic	C717	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C146	RC-GZA227AF1A	J	AB	220 μF,10V,Electrolytic	C718	VCKYMN1HB102K	J	AA	0.001 μF,50V
C147	VCTYMN1EF223Z	J	AA	0.022 μF,25V	C801,802	RC-QZ0026AWZZ	J	AB	0.1 μF,50V,Mylar
C148	VCTYPA1CX823K	J	AB	0.082 μF,16V	C803,804	VCTYMN1CX152K	J	AA	0.0015 μF,16V
C150	RC-QZA392AFYJ	J	AB	0.0039 μF,50V,Mylar	C805,806	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic
C151	RC-QZA273AFYJ	J	AB	0.027 μF,50V,Mylar	C808	RC-GZA476AF1H	J	AB	47 μF,50V,Electrolytic
C152	RC-GZA476AF1A	J	AB	47 μF,10V,Electrolytic	C809,810	RC-GZV108AF1E	J	AD	1000 μF,25V,Electrolytic
C153	RC-GZA107AF1C	J	AB	100 μF,16V,Electrolytic	C811~814	RC-QZA104AFYK	J	AB	0.1 μF,50V,Mylar
C320~323	VCTYMN1EF223Z	J	AA	0.022 μF,25V	C820	VCKYPA1HB102K	J	AA	0.001 μF,50V
C325	VCCSMN1HL330J	J	AA	33 pF,50V	C823	RC-GZA107AF1H	J	AC	100 μF,50V,Electrolytic
C327	VCKYMN1HB102K	J	AA	0.001 μF,50V	C824	VCKZPA1HF223Z	J	AA	0.022 μF,50V
C331	VCKZPA1HF473Z	J	AA	0.047 μF,50V	C825	RC-GZW228AF1H	J	AC	2200 μF,50V,Electrolytic
C332	VCTYMN1EF223Z	J	AA	0.022 μF,25V	C827,828	RC-GZA107AF1H	J	AC	100 μF,50V,Electrolytic
C334	VCCUMN1HJ6R8D	J	AB	6.8 pF (UJ),50V	C829,830	RC-GZA476AF1H	J	AB	47 μF,50V,Electrolytic
C341,342	VCTYMN1EF223Z	J	AA	0.022 μF,25V	C831	VCKYBT1HB102K	J	AA	0.001 μF,50V
C350,351	VCTYMN1EF223Z	J	AA	0.022 μF,25V	C843,844	VCKYPA1HB221K	J	AA	220 pF,50V
C352	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic	C845	VCKZPA1HF473Z	J	AA	0.047 μF,50V
C353,354	VCTYMN1EF223Z	J	AA	0.022 μF,25V	C846	VCKZPA1HF223Z	J	AA	0.022 μF,50V
C355	VCCCPA1HH220J	J	AA	22 pF (CH),50V	C847	VCKZPA1HF473Z	J	AA	0.047 μF,50V
C356	VCKYMN1HB102K	J	AA	0.001 μF,50V	C848,849	VCKZPA1HF223Z	J	AA	0.022 μF,50V
C357	RC-GZA225AF1H	J	AB	2.2 μF,50V,Electrolytic	C850	VCKZPA1HF473Z	J	AA	0.047 μF,50V
C358	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic	C851	VCKZPA1HF223Z	J	AA	0.022 μF,50V
C361	VCTYMN1EF223Z	J	AA	0.022 μF,25V	C852	VCKZPA1HF473Z	J	AA	0.047 μF,50V
C362	RC-GZA335AF1H	J	AB	3.3 μF,50V,Electrolytic	C853	VCKZPA1HF103Z	J	AA	0.01 μF,50V
C363	VCTYMN1EF223Z	J	AA	0.022 μF,25V	C855	VCKYBT1HB561K	J	AA	560 pF,50V
C364	RC-GZA226AF1C	J	AB	22 μF,16V,Electrolytic	C871,872	VCKYMN1HB102K	J	AA	0.001 μF,50V
C365	VCTYMN1EF223Z	J	AA	0.022 μF,25V	C941	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C366	VCKYMN1HB102K	J	AA	0.001 μF,50V	C942	RC-GZA107AF1C	J	AB	100 μF,16V,Electrolytic
C367,368	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic	C943	RC-GZV477AF1E	J	AC	470 μF,25V,Electrolytic
C370~372	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic	C944	RC-GZW478AF1E	J	AG	4700 μF,25V,Electrolytic
C373,374	VCTYMN03Y223M	J		0.022 μF,6.3V	C945	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C375	RC-GZA335AF1H	J	AB	3.3 μF,50V,Electrolytic	C947,948	RC-GZA106AF1H	J	AB	10 μF,50V,Electrolytic
C381	VCCCMN1HH120J	J	AA	12 pF (CH),50V	C952	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic
C382	VCCCMN1HH150J	J	AA	15 pF (CH),50V	C953	VCKZPA1HF103Z	J	AA	0.01 μF,50V
C383	VCTYMN1EF223Z	J	AA	0.022 μF,25V	C954	RC-GZA106AF1H	J	AB	10 μF,50V,Electrolytic
C384	VCKYMN1HB102K	J	AA	0.001 μF,50V	C955,956	RC-QZA224AFYJ	J	AB	0.22 μF,50V,Mylar
C385	VCTYMN1CY103K	J	AA	0.01 μF,16V	C957	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C386	VCKYMN1HB331K	J	AA	330 pF,50V	C961,962	RC-QZA473AFYJ	J	AB	0.047 μF,50V,Mylar
C387	VCKZPA1HF223Z	J	AA	0.022 μF,50V	C971,972	RC-GZA107AF1H	J	AC	100 μF,50V,Electrolytic
C388	RC-GZA106AF1H	J	AB	10 μF,50V,Electrolytic	C973~975	RC-GZA476AF1H	J	AB	47 μF,50V,Electrolytic
C390	VCKYMN1HB471K	J	AA	470 pF,50V	C976	RC-GZA107AF1V	J	AB	100 μF,35V,Electrolytic
C391	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic					
C392	VCTYMN1CX102K	J	AA	0.001 μF,16V					
C393	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic					
C394	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic					
C395	VCTYMN1EF223Z	J	AA	0.022 μF,25V					
C396	RC-GZA107AF1A	J	AB	100 μF,10V,Electrolytic					
C397	VCKYMN1HB221K	J	AA	220 pF,50V					
C398	RC-GZA107AF0J	J	AB	100 μF,6.3V,Electrolytic					
C399	VCTYMN1EF223Z	J	AA	0.022 μF,25V					
C401~406	RC-QZA473AFYK	J	AB	0.047 μF,50V,Mylar					
C407,408	VCKYMN1HB391K	J	AA	390 pF,50V					
C409,410	RC-QZA473AFYK	J	AB	0.047 μF,50V,Mylar					
C411,412	RC-GZA226AF1E	J	AB	22 μF,25V,Electrolytic					
C413,414	VCKYMN1HB101K	J	AA	100 pF,50V					
C417,418	RC-QZA184AFYJ	J	AC	0.18 μF,50V,Mylar					
C419,420	RC-QZA683AFYJ	J	AB	0.068 μF,50V,Mylar					
C421~424	RC-QZA184AFYJ	J	AC	0.18 μF,50V,Mylar					
C425,426	RC-QZA333AFYJ	J	AB	0.033 μF,50V,Mylar					
C427,428	RC-QZA392AFYJ	J	AB	0.0039 μF,50V,Mylar					

CD-C410H,CP-C410

NO.	PART CODE	★	PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R16	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W	R310	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R17	VRD-MN2BD823J	J	AA	82 kohms,1/8W	R315	VRD-MN2BD820J	J	AA	82 ohms,1/8W
R18	VRD-ST2CD335J	J	AA	3.3 Mohms,1/6W	R318	VRD-MN2BD471J	J	AA	470 ohms,1/8W
R19	VRD-MN2BD393J	J	AA	39 kohms,1/8W	R320	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R20	VRD-MN2BD103J	J	AA	10 kohm,1/8W	R323	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R21	VRD-MN2BD563J	J	AA	56 kohms,1/8W	R330	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W
R22	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W	R331	VRD-ST2CD474J	J	AA	470 kohms,1/6W
R23	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W	R351	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R24	VRD-MN2BD103J	J	AA	10 kohm,1/8W	R352	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R25	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W	R353	VRD-MN2BD271J	J	AA	270 ohms,1/8W
R26,27	VRD-MN2BD224J	J	AA	220 kohms,1/8W	R354	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R28,29	VRD-ST2CD102J	J	AA	1 kohm,1/6W	R355	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R30	VRD-MN2BD153J	J	AA	15 kohms,1/8W	R356	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R31	VRD-MN2BD103J	J	AA	10 kohm,1/8W	R358	VRD-MN2BD822J	J	AA	8.2 kohms,1/8W
R32	VRD-MN2BD563J	J	AA	56 kohms,1/8W	R359	VRD-MN2BD182J	J	AA	1.8 kohms,1/8W
R33	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W	R360-362	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R34	VRD-MN2BD102J	J	AA	1 kohm,1/8W	R363,364	VRD-MN2BD182J	J	AA	1.8 kohms,1/8W
R35	VRD-ST2CD471J	J	AA	470 ohms,1/6W	R365,366	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R36,37	VRD-MN2BD473J	J	AA	47 kohms,1/8W	R367	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R38	VRD-MN2BD333J	J	AA	33 kohms,1/8W	R368	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R39	VRD-MN2BD223J	J	AA	22 kohms,1/8W	R371-374	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R41	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W	R376,377	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R42	VRD-MN2BD561J	J	AA	560 ohms,1/8W	R379	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R43	VRD-MN2BD120J	J	AA	12 ohms,1/8W	R380	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R45	VRD-ST2CD102J	J	AA	1 kohm,1/6W	R381	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R46,47	VRD-MN2BD102J	J	AA	1 kohm,1/8W	R382	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R49	VRD-ST2CD104J	J	AA	100 kohm,1/6W	R383	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R54	VRD-MN2BD102J	J	AA	1 kohm,1/8W	R384	VRD-MN2BD123J	J	AA	12 kohms,1/8W
R56	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W	R385	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R57	VRD-MN2BD273J	J	AA	27 kohms,1/8W	R386	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R58	VRD-MN2BD681J	J	AA	680 ohms,1/8W	R387	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R60	VRD-MN2BD102J	J	AA	1 kohm,1/8W	R391,392	VRD-ST2EE391J	J	AA	390 ohms,1/4W
R61	VRD-ST2CD153J	J	AA	15 kohms,1/6W	R395	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R70-72	VRD-MN2BD102J	J	AA	1 kohm,1/8W	R398	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R73,74	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W	R399	VRD-MN2BD331J	J	AA	330 ohms,1/8W
R75,76	VRD-MN2BD271J	J	AA	270 ohms,1/8W	R401-403	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R77-79	VRD-MN2BD102J	J	AA	1 kohm,1/8W	R405,406	VRD-MN2BD393J	J	AA	39 kohms,1/8W
R81	VRD-MN2BD820J	J	AA	82 ohms,1/8W	R407,408	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R82	VRD-ST2CD101J	J	AA	100 ohm,1/6W	R411,412	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R86-88	VRD-ST2CD102J	J	AA	1 kohm,1/6W	R413,414	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R95	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W	R415-422	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R96	VRD-MN2BD103J	J	AA	10 kohm,1/8W	R475,476	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R97	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W	R477,478	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R98,99	VRD-MN2BD103J	J	AA	10 kohm,1/8W	R479,480	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R101,102	VRD-MN2BD102J	J	AA	1 kohm,1/8W	R603	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R103,104	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W	R700	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R105,106	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W	R701	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R107,108	VRD-MN2BD103J	J	AA	10 kohm,1/8W	R702	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R109	VRD-ST2CD103J	J	AA	10 kohm,1/6W	R703	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R110	VRD-MN2BD103J	J	AA	10 kohm,1/8W	R704	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R111,112	VRD-ST2CD103J	J	AA	10 kohm,1/6W	R705	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R113-115	VRD-MN2BD103J	J	AA	10 kohm,1/8W	R706	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R117	VRD-ST2CD102J	J	AA	1 kohm,1/6W	R707	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R118	VRD-MN2BD102J	J	AA	1 kohm,1/8W	R708,709	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R119,120	VRD-ST2CD560J	J	AA	56 ohms,1/6W	R711	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R121,122	VRD-MN2BD104J	J	AA	100 kohm,1/8W	R712-725	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R123,124	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W	R726	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R125,126	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W	R727	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R131,132	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W	R730	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R133	VRD-ST2CD223J	J	AA	22 kohms,1/6W	R731-735	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R134	VRD-MN2BD683J	J	AA	68 kohms,1/8W	R736	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R135,136	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W	R737	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R137,138	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W	R738-740	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R139,140	VRD-MN2BD561J	J	AA	560 ohms,1/8W	R741-743	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R141,142	VRD-MN2BD560J	J	AA	56 ohms,1/8W	R744	VRD-MN2BD822J	J	AA	8.2 kohms,1/8W
R145,146	VRD-MN2BD103J	J	AA	10 kohm,1/8W	R745-748	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R150	VRD-MN2BD103J	J	AA	10 kohm,1/8W	R749	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R152	VRD-MN2BD102J	J	AA	1 kohm,1/8W	R750,751	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R153,154	VRD-MN2BD103J	J	AA	10 kohm,1/8W	R752	VRD-MN2BD822J	J	AA	8.2 kohms,1/8W
R158	VRD-ST2EE471J	J	AA	470 ohms,1/4W	R753,754	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R160	VRD-RT2HD151J	J	AA	150 ohms,1/2W	R755	VRD-MN2BD822J	J	AA	8.2 kohms,1/8W
R162	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W	R756,757	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R164	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W	R758	VRD-RT2HD100J	J	AA	10 ohm,1/2W
R166	VRD-MN2BD473J	J	AA	47 kohms,1/8W	R759,760	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R167	VRD-MN2BD104J	J	AA	100 kohm,1/8W	R761,762	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R168	VRD-MN2BD120J	J	AA	12 ohms,1/8W	R763,764	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R172	VRD-ST2CD102J	J	AA	1 kohm,1/6W	R765	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R174	VRD-ST2EE151J	J	AA	150 ohms,1/4W	R766	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R304	VRD-MN2BD681J	J	AA	680 ohms,1/8W	R767	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R305	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W	R768	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R307	VRD-MN2BD331J	J	AA	330 ohms,1/8W	R769	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R308	VRD-MN2BD330J	J	AA	33 ohms,1/8W	R770	VRD-ST2CD103J	J	AA	10 kohm,1/6W

NO.	PART CODE	★	PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R771	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W	SO801	QTANA0404AWZZ	J	AF	Terminal,Speaker
R772	VRD-MN2BD104J	J	AA	100 kohm,1/8W	SOLM1,2	RPLU-0002AWZZ	J	AH	Solenoid Ass'y
R773~775	VRD-MN2BD182J	J	AA	1.8 kohms,1/8W	SW1	QSW-P0004AWZZ	J	AE	Switch,Push Type [Open/Close]
R776	VRD-MN2BD820J	J	AA	82 ohms,1/8W	SW2	QSW-F0001AWZZ	J	AD	Switch,Leaf Type [Mecha Up]
R777,778	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W	SW3	QSW-P0005AWZZ	J	AD	Switch,Push Type [Disc Number]
R779	VRD-MN2BD102J	J	AA	1 kohm,1/8W	SW4	QSW-F9001AWZZ	J	AE	Switch,Push Type [Pickup In]
R780,781	VRD-MN2BD103J	J	AA	10 kohm,1/8W	SW701	92LSWICH-1401A	J	AC	Switch,Key Type [Random/Demo]
R782	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W	SW702	92LSWICH-1401A	J	AC	Switch,Key Type [Volume Down]
R783	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W	SW703	92LSWICH-1401A	J	AC	Switch,Key Type [X-BASS]
R785	VRD-MN2BD101J	J	AA	100 ohm,1/8W	SW704	92LSWICH-1401A	J	AC	Switch,Key Type [Volume Up]
R786	VRD-MN2BD102J	J	AA	1 kohm,1/8W	SW705	92LSWICH-1401A	J	AC	Switch,Key Type [Open/Close]
R788	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W	SW706	92LSWICH-1401A	J	AC	Switch,Key Type [Disc Skip]
R789	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W	SW709	92LSWICH-1401A	J	AC	Switch,Key Type [Rec./Pause]
R792	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W	SW710	92LSWICH-1401A	J	AC	Switch,Key Type [Up]
R793	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W	SW711	92LSWICH-1401A	J	AC	Switch,Key Type [Stop]
R794	VRD-ST2CD123J	J	AA	12 kohms,1/6W	SW712	92LSWICH-1401A	J	AC	Switch,Key Type [Play]
R795	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W	SW713	92LSWICH-1401A	J	AC	Switch,Key Type [Down]
R797	VRD-MN2BD102J	J	AA	1 kohm,1/8W	SW714	92LSWICH-1401A	J	AC	Switch,Key Type [Tuning Up]
R798	VRD-MN2BD151J	J	AA	150 ohms,1/8W	SW715	92LSWICH-1401A	J	AC	Switch,Key Type [Tuning Down]
R799	VRD-MN2BD120J	J	AA	12 ohms,1/8W	SW717	92LSWICH-1401A	J	AC	Switch,Key Type [Power]
R803,804	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W	SW718	92LSWICH-1401A	J	AC	Switch,Key Type [Clock]
R805,806	VRD-MN2BD102J	J	AA	1 kohm,1/8W	SW719	92LSWICH-1401A	J	AC	Switch,Key Type [Timer/Sleep]
R807,808	VRD-MN2BD181J	J	AA	180 ohms,1/8W	SW721	92LSWICH-1401A	J	AC	Switch,Key Type [Memory/Set]
R809,810	VRD-ST2EE4R7J	J	AA	4.7 ohms,1/4W	SW722	92LSWICH-1401A	J	AC	Switch,Key Type [CD]
R811,812	VRD-RT2HD271J	J	AA	270 ohms,1/2W	SW723	92LSWICH-1401A	J	AC	Switch,Key Type [Tuner]
R815	VRD-ST2CD103J	J	AA	10 kohm,1/6W	SW724	92LSWICH-1401A	J	AC	Switch,Key Type [Tape]
R825	VRD-ST2EE103J	J	AA	10 kohm,1/4W	SW725	92LSWICH-1401A	J	AC	Switch,Key Type [Aux]
R835,836	VRD-RT2HD331J	J	AA	330 ohms,1/2W	SWM3	92LM-SW1676A	J	AC	Switch,Leaf Type [Fool Proof]
R843,844	VRD-ST2EE2R2J	J	AA	2.2 ohms,1/4W	SWM4	QSW-F9003AWZZ	J	AG	Switch,Leaf Type [F.A.S.]
R845	VRD-ST2CD100J	J	AA	10 ohm,1/6W	SWM5	92LM-SW1658A	J	AB	Switch,Leaf Type [CAM]
R943,944	VRD-ST2EE180J	J	AA	18 ohms,1/4W					
R945	VRD-MN2BD333J	J	AA	33 kohms,1/8W					
R946	VRD-ST2EE101J	J	AA	100 ohm,1/4W					
R947	VRD-ST2EE271J	J	AA	270 ohms,1/4W					
R948,949	VRD-MN2BD223J	J	AA	22 kohms,1/8W					
R951	VRD-ST2EE152J	J	AA	1.5 kohms,1/4W					
R952	VRD-ST2CD333J	J	AA	33 kohms,1/6W					
R953	VRD-ST2CD103J	J	AA	10 kohm,1/6W					
R972	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W					
R973	VRD-ST2CD101J	J	AA	100 ohm,1/6W					
R974	VRD-ST2CD123J	J	AA	12 kohms,1/6W					
R975,976	VRD-ST2CD221J	J	AA	220 ohms,1/6W					
R977,978	VRD-ST2EE2R2J	J	AA	2.2 ohms,1/4W					
R981,982	VRD-ST2EE2R2J	J	AA	2.2 ohms,1/4W					

OTHER CIRCUITRY PARTS

BI901/CNS901	QCNCWN0890AWZZ	J	AE	Connector Ass'y,6-6Pin
BIM1/CNSM1	QCNCWN0897AWZZ	J	AF	Connector Ass'y,8-12Pin
BIM5/CNS10/CNS5	QCNCWN0894AWZZ	J	AH	Connector Ass'y,6-10-2Pin
CNP1	QCNCM931EAFZZ	J	AC	Plug,5Pin
CNP2	92LCONE8P53253	J	AC	Plug,8Pin
CNP3	92LCONE6P53253	J	AC	Plug,6Pin
CNP10	92LCONEAP53254	J	AD	Plug,10Pin
CNP101	QCNCM742CAFZZ	J	AA	Plug,3Pin
CNP102	QCNCM588GAFZZ	J	AB	Plug,7Pin
CNP301	QCNCM602BAFZZ	J	AA	Plug,2Pin
CNP303	QCNCW010KAWZZ	J	AD	Plug,10Pin
CNP402	QCNCM010KAWZZ	J	AC	Plug,10Pin
CNP901	QCNCM742FAFZZ	J	AB	Plug,6Pin
CNPM1	QCNCM932MAFZZ	J	AE	Plug,11Pin
CNPM2	QCNCM030BAWZZ	J	AB	Plug,2Pin
CNS1A/B	QCNCWN0891AWZZ	J	AG	Connector Ass'y,5-5Pin
CNS2A/B	QCNCWN0892AWZZ	J	AF	Connector Ass'y,8-8Pin
CNS3A/B	QCNCWN0893AWZZ	J	AF	Connector Ass'y,6-6Pin
CNS101	QCNCWN0895AWZZ	J	AE	Connector Ass'y,3Pin
CNS102	QCNCWN0896AWZZ	J	AG	Connector Ass'y,8Pin
△ F1	92LFUSE-T501E	J	AD	Fuse,T500mA L,250V
△ F962	92LFUSE-T252E	J	AD	Fuse,T2.5A L 250V
△ F963	92LFUSE-T162-E	J	AD	Fuse,T1.6A L 250V
FE301	RTUNSO007AWZZ	J	AT	FM Front End
FL701	VVKFIP9EM7R-1	J	AV	FL Display
FWM1	QCNCWN0328AWZZ	J	AC	Flat Cable,2Pin
FWM2	QCNCWN0338AWZZ	J	AD	Flat Cable,2Pin
J801	QJAKM0005AWZZ	J	AD	Jack,Headphones
M1	92LMTR1858CASY	J	AS	Motor with Chassis [Disc]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Slide]
M3	92LMTR2037AS1	J	AP	Motor with Worm [T/T Up/Down]
MM1	RMOTV0006AWM1	J	AR	Motor with Pulley [Tape]
RX701	VHLSPPSP440/-1	J	AH	Remote Sensor,SPSP440
SO301	QTANCO0103AWZZ	J	AD	Antenna Terminal
SO401	QSOCJ0209AWZZ	J	AD	Jack,VIDEO/AUX.

CASSETTE MECHANISM PARTS

1	LCHSM0014AW01	J	AN	Main Chassis Ass'y
2	LPLTP0001AWZZ	J	AD	Plate,Head [Tape 1]
3	LPLTP0002AWZZ	J	AD	Plate,Head [Tape 2]
4	NDAIR0004AW01	J	AG	Take-Up Reel Ass'y [Tape 1]
5	NDAIR0005AW01	J	AG	Take-Up Reel Ass'y [Tape 2]
6	NGERH0024AWZZ	J	AB	Gear,Supply Reel
7	NROLY0002AWZZ	J	AF	Pinch Roller Ass'y
8	NFLYC0002AWZZ	J	AG	Flywheel Ass'y [Tape 1]
9	NFLYC0003AWZZ	J	AH	Flywheel Ass'y [Tape 2]
10	MLEVP0024AW01	J	AH	Lever,FF/REW Roller Ass'y
11	NGERH0027AWZZ	J	AE	Gear,Cam
12	NGERH0028AWZZ	J	AB	Gear,Flywheel
13	NGERH0030AWZZ	J	AE	Gear,Play Idler
14	NGERH0032AWZZ	J	AC	Gear,FF
15	NPLYB0004AWZZ	J	AB	Sensor,Wing
16	MLEVP0026AWZZ	J	AC	Lever,Trigger
17	MLEVP0027AWZZ	J	AC	Lever,Lock [Tape 1]
18	MLEVP0028AWZZ	J	AC	Lever,Eject Obstruct [Tape 1]
19	MLEVP0069AWZZ	J	AB	Lever,Eject Obstruct [Tape 2]
20	LHLS1001AW01	J	AE	Holder,Bearing
21	PGIDM0007AWZZ	J	AC	Guide,Cassette [Tape 2]
22	PGIDM0009AWZZ	J	AC	Guide,Cassette [Tape 1]
23	MLEVF0004AWFW	J	AB	Lever,Over Strok [Tape 1]
24	MLEVF0005AW01	J	AE	Lever,Over Strok Ass'y [Tape 2]
25	MLEVF0006AW01	J	AD	Lever,Mode Ass'y
26	MLEVF0007AW01	J	AC	Lever,Idler Ass'y [Tape 1]
27	MLEVF0008AW01	J	AD	Lever,Idler Ass'y [Tape 2]
28	LANGT0025AWFW	J	AD	Blacket Motor
29	LANGT0026AWFW	J	AC	Blacket Hold
30	LANGT0033AWFW	J	AB	Blacket,Switch
31	MSPRP0005AWFW	J	AB	Spring,Cassette
32	MSPRC0008AWFJ	J	AB	Spring,Back Tention
33	MSPRD0031AWFJ	J	AB	Spring,Lock Lever [Tape 1]
34	MSPRD0032AWFJ	J	AB	Spring,Mode Lever
35	MSPRD0033AWFJ	J	AB	Spring,Play Idler Lever
36	MSPRD0034AWFJ	J	AB	Spring,Play Roller
37	MSPRD0035AWFJ	J	AB	Spring,Eject Obstruct [Tape 1]
38	MSPRD0036AWFJ	J	AB	Spring,Play Return
39	MSPRD0037AWFJ	J	AB	Spring,Over Strok Lever
40	MSPRD0038AWFJ	J	AB	Spring,Trigger Lever
41	MSPRD0039AWFJ	J	AB	Spring,FR Lever
42	MSPRD0040AWFJ	J	AB	Spring,Eject Obstruct [Tape 2]
43	NBLTK0009AWZZ	J	AC	Belt,Sub
44	NBLTK0011AWZZ	J	AC	Belt,Main [Tape 1]
45	NBLTK0012AWZZ	J	AB	Belt,Main [Tape 2]
52	92LM-LEV1756A	J	AB	Lever,Lock [Tape 2]
53	92LM-TSPR1756C	J	AB	Spring,Lock Lever [Tape 2]
55	92LMRPH1746A	J	AM	Head,Record/Playback

CD-C410H,CP-C410

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
56	92LM-EH1658A	J	AG	Head,Erase
57	92LM-REL1676B	J	AB	Cap,Supply Reel
58	92LM-CSPR1676B	J	AA	Spring,Supply Cap
59	92LN-BAND1318A	J	AA	Nylon Band,80mm
501	92LS2R6S1746A	J	AA	Screw,ø2.6×2.5mm
502	92L2TTS+4BZ	J	AA	Screw,ø2×4mm
503	92L2TTS+5BZ	J	AA	Screw,ø2×5mm
504	92L1R5WC3R8R5P	J	AA	Washer,ø1.5×ø3.8×0.5mm
505	92L2R2TW0	J	AB	Washer,ø2mm
506	LX-BZ0004AWFD	J	AC	Screw,Lock Lever
507	XHPSPD20P05000	J	AA	Screw,ø2×5mm
508	92L2R3W3R4R25P	J	AA	Washer,ø2.3×ø3.4×0.25mm
510	92L1R8WC4-R5P	J	AA	Washer,ø1.8×ø4×0.5mm
MM1	RMOTV0006AWM1	J	AR	Motor with Pulley [Tape]
SOLM1	RPLU-0002AWZZ	J	AH	Solenoid Ass'y
SWM3	92LM-SW1676A	J	AC	Switch,Leaf Type [Fool Proof]
SWM4	QSW-F9003AWZZ	J	AC	Switch,Leaf Type [F.A.S.]
SWM5	92LM-SW1658A	J	AB	Switch,Leaf Type [CAM]

CD MECHANISM PARTS

301	NGERH0011AWZZ	J	AC	Gear,Middle
302	NGERH0012AWZZ	J	AC	Gear,Drive
303	MLEVP0010AWZZ	J	AC	Rail,Guide
304	NSFTM0002AWFW	J	AE	Shaft,Guide
305	92LM-CUSN1524A	J	AC	Cushion
△ 306	92LHPC1MASY	J	BG	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
701	92L2R6S+6CZ	J	AB	Screw,ø2.6×6mm
702	92L2TTS+5BB	J	AB	Screw,ø2×5mm
703	92L2S+3PZ	J	AA	Screw,ø2×3mm
704	92L1R5WC3R8R25	J	AA	Washer,ø1.5×ø3.8×0.25mm
M1	92LMTR1858CASY	J	AS	Motor with Chassis [Disc]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Slide]
SW4	QSW-F9001AWZZ	J	AE	Switch,Leaf Type [Pickup In]

CABINET PARTS

201	92LCAB2529AS1	J	AV	Front Panel Ass'y
201- 1	—	—	—	Front Panel (Not Replacement Item)
201- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
201- 3	HDECQ0203AWSA	J	AG	Panel,Amp.
202	GCAB-1045AWSB	J	AL	Top Cabinet
203	GITAR0208AWSA	J	AG	Back Board [Except for UK/ Thailand]
203	GITAR0209AWSA	J	AG	Back Board [For UK]
203	GITAR0210AWSA	J	AF	Back Board [For Thailand]
204	92LMEC2475CTS1	J	AL	Cassette Holder Ass'y,Tape 1
204- 1	—	—	—	Cassette Holder Tape 1 (Not Replacement Item)
204- 2	HDECQ0173AWSA	J	AD	Panel,Cassette,Tape 1
206	92LMEC2475CTS2	J	AL	Cassette Holder Ass'y,Tape 2
206- 1	—	—	—	Cassette Holder Tape 2 (Not Replacement Item)
206- 2	HDECQ0174AWSA	J	AD	Panel,Cassette,Tape 2
208	MSPRD0093AWFJ	J	AB	Spring,Cassette,Tape 2
209	92LCAB2475BS1	J	AK	Side Panel Ass'y,Left
209- 1	—	—	—	Side Panel,Left (Not Replacement Item)
209- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
210	92LCAB2475CS1	J	AK	Side Panel Ass'y,Right
210- 1	—	—	—	Side Panel,Right (Not Replacement Item)
210- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
211	GCOVA1135AWSB	J	AF	Cover,CD Tray
213	MLIFP0003AWZA	J	J	Damper
214	MSPRD0092AWFJ	J	AB	Spring,Cassette,Tape 1
215	LCHSM0045AWFW	J	AR	Main Chassis
△ 216	QACCB0003AW00	J	BA	AC Power Supply Cord [For UK]
△ 216	QACCE0008AW00	J	AG	AC Power Supply Cord [Except For UK]
217	92LN-BAND1318A	J	AA	Nylon Band,80mm
218	LANGT0043AWFW	J	AC	Bracket,Heat Sink Support
220	LANGT0045AWFW	J	AD	Bracket,Terminal
221	JKNBZ0335AWSA	J	AC	Knob,Tuner/Memory
222	JKNBZ0334AWSA	J	AD	Knob,Function
223	JKNBZ0332AWSA	J	AD	Knob,Operation A

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
224	JKNBZ0333AWSA	J	AC	Knob,Operation B
225	JKNBZ0337AWSB	J	AD	Knob,X-BASS
226	JKNBZ0336AWSA	J	AC	Knob,Open/Close,Rec./Playback
227	MLEVP0068AWZZ	J	AB	Lever,Change
228	LCHSZ0011AWZZ	J	AG	Chassis,CD Mechanism
229	NGERK0004AWZZ	J	AB	Gear,Bevel
230	MSPRC0021AWFJ	J	AB	Spring,Worm Wheel
231	NGERW0006AWZZ	J	AC	Gear,Worm Wheel
232	NPLYD0001AWZZ	J	AB	Pulley
233	NGERK0005AWZZ	J	AB	Gear,Loading
234	MLEVP0066AWZZ	J	AE	Lever,Shift
235	NGERH0064AWZZ	J	AD	Gear,Cam
236	NGERK0003AWZZ	J	AC	Gear,Drive
237	LHLDZ1141AWZZ	J	AB	Support,Pitch
238	NGERH0065AWZZ	J	AB	Gear,Turntable
239	NBLTK0029AWZZ	J	AB	Belt,Drive
240	MSPRD0044AWFJ	J	AB	Spring,Lock Lever
241	MLEVP0067AWZZ	J	AC	Lever,Lock
242	LCHSZ0010AWZZ	J	AM	Chassis,Loading
243	NROLP0009AWZZ	J	AB	Roller
244	MLEVP0070AWZZ	J	AB	Lever,T/T Lock
245	MSPRC0020AWFJ	J	AB	Spring,T/T Lock Lever
246	GCAB-1044AWSA	J	AM	CD Player Base
247	LHLDZ1139AWSA	J	AD	Support,Stabilizer
248	92LHOLD2037AS1	J	AK	Stabilizer Ass'y
249	NTNT-0018AWSA	J	AK	Turntable
250	LHLDZ1140AWZZ	J	AB	Guide
252	PRDAR0069AWFW	J	AF	Heat Sink
253	LANGT0042AWFW	J	AC	Bracket
254	PRDAR0053AWFW	J	AM	Heat Sink,Fin Type,Small
255	LBSHC0002AWZZ	J	AD	Bushing,AC Power Supply Cord
256	PCUSG0027AWZZ	J	AB	Worm Wheel Cushion
257	MSPRC0024AWFW	J	AB	Spring,Solenoid
260	92LFSHOLD1652T	J	AB	Holder,Fuse
261	TSPC-0427AWZZ	J	AC	Label,Specifications [For Thailand]
262	TCAUS0019AWZZ	J	AD	Label,Caution [For Thailand Only]
263	LHLDZ1087AWSA	J	AC	Holder,FL Display
264	92LLUG1746A	J	AA	Lug,Terminal
265	PSLDM5002AWZZ	J	J	Shield
267	RPLU-0002AWZZ	J	AH	Solenoid Ass'y
268	QCNWN0769AWZZ	J	AD	Wire Lug
268	92LCAUT1706A1	J	AC	Label,Class 3A
269	92LCAUT1706B	J	AA	Label,Laser
270	92LLABL1420A1	J	AC	Label,Class 1
271	RCORF0002AWZZ	J	AE	Core
601	XESSD30P10000	J	AA	Screw,ø3×10mm
602	LX-JZ0022AFFD	J	AA	Screw,ø3×8mm
603	XEBSD30P10000	J	AA	Screw,ø3×10mm
604	XHBSD40P08000	J	AA	Screw,ø4×8mm
605	XJBSD30P06000	J	AA	Screw,ø3×6mm
606	XJBSEF30P10000	J	AA	Screw,ø3×10mm
608	XEBSEF30P12000	J	AA	Screw,ø3×12mm
609	XJBSEF30P08000	J	AA	Screw,ø3×8mm
610	LX-TZ0019AFZZ	J	AB	Screw,Special
611	XEBSD26P12000	J	AA	Screw,ø2.6×12mm
612	XEBSD30P12000	J	AA	Screw,ø3×12mm
613	LX-EZ0005AWFD	J	AA	Screw,Special
614	XJSSF30P10000	J	AA	Screw,ø3×10mm
617	LX-JZ0002AWFD	J	AA	Screw,ø3×10mm
618	XJBSD30P08000	J	AA	Screw,ø3×8mm
619	LX-JZ0003AWFF	J	AA	Screw,ø3×12mm

ACCESSORIES/PACKING PARTS

1	SPAKA0124AWZZ1	J	AH	Packing Add.,Left/Right
2	SPAKP0013AWZZ1	J	AC	Polyethylene Bag,Unit
3	SPAKC0505AWZZ	J	AN	Packing Case
3	SPAKC0507AWZZ	J	J	Packing Case
4	92LBAG1460C1	J	AB	Polyethylene Bag, Accessories
5	TINSE0155AWZZ	J	AE	Operation Manual [For UK]
5	TINST0021AWZZ	J	AH	Operation Manual [For Thailand]
5	TINSZ0210AWZZ	J	AL	Operation Manual [Except For UK/Thailand]
6	QANTL0005AWZZ	J	AG	AM Loop Antenna
7	92LF-ANT1535A	J	AF	FM Antenna
8	92LCARD1751A	J	AB	Registration Card [For UK Only]
9	RRMCG0099AWSA	J	AR	Remote Control
9- 1	92LLID1782A	J	AQ	Battery Lid,Remote Control
10	92LBAG1770A	J	AB	Polyethylene Bag,AC Power Supply Cord [For UK Only]

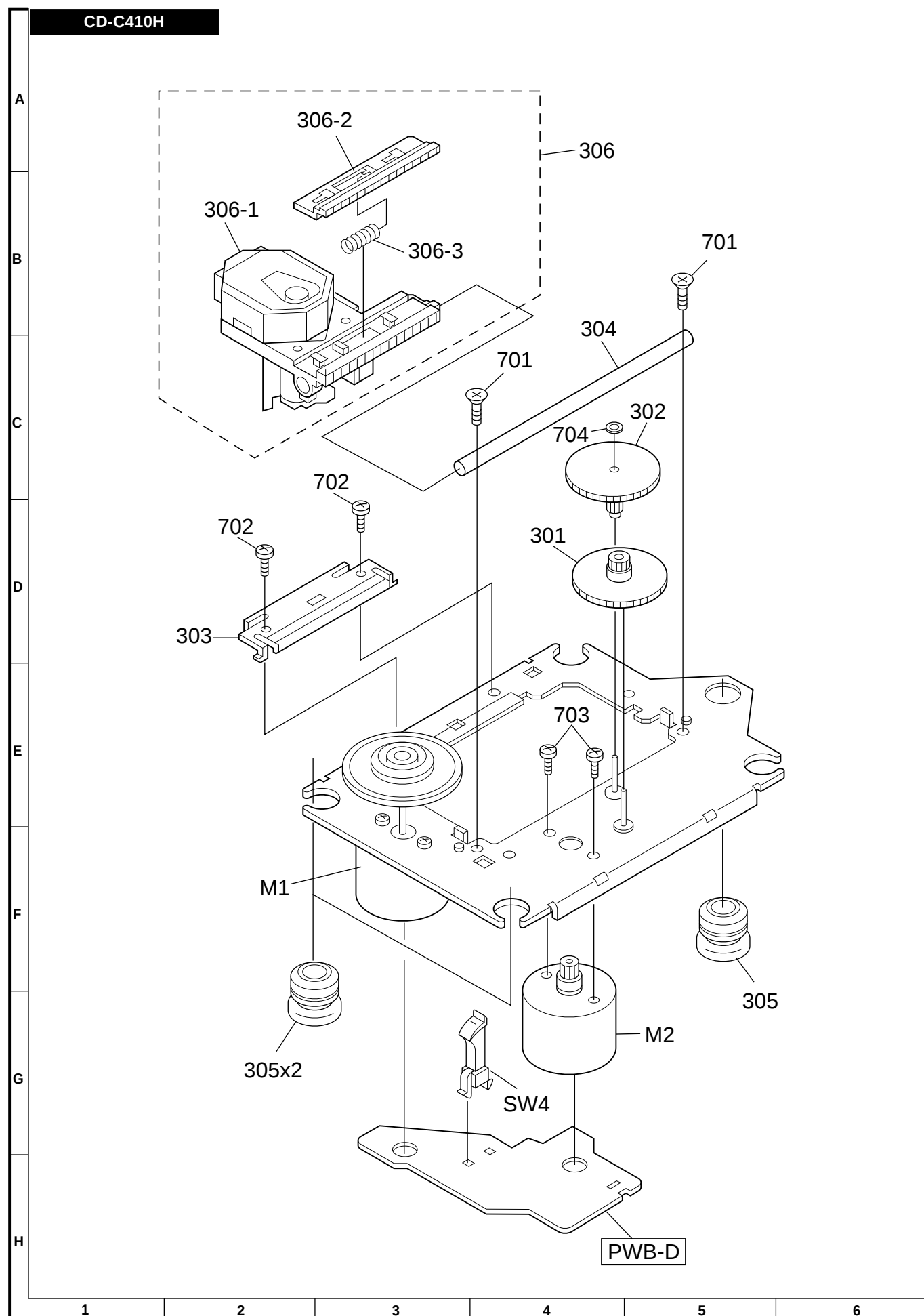
NO.	PART CODE	★ PRICE RANK	DESCRIPTION
11	TLABE0153AWZZ	J AB	Label
P.W.B. ASSEMBLY (Not Replacement Item)			
PWB-A1~3	92LPWB2529MANS	J —	Main/Display/Headphones (Combined Ass'y)
PWB-B1~3	92LPWB2529TUNS	J —	Tuner/Power/Powe (Combined Ass'y)
PWB-C	QPWBF0106AWZZ	J AF	Tape Mechanism (PWB Only)
PWB-D	QPWBF0027AWZZ	J AD	CD Motor (PWB Only)
PWB-E	QPWBF0341AWZZ	J AB	Motor (PWB Only)

CP-C410**SPEAKER BOX PARTS**

701	92L121-0068	J AP	Net Frame Ass'y
702	92L051-0036	J AW	Cabinet Ass'y
703	92L291-0032	J	Speaker Cord
704	92L351-0125	J AD	Label,Specifications
705	92L316-0030	J AN	Duct Panel
706	92L394-0024	J AC	Port Cushion
707	92L502-0008	J	Support,Woofer
708	92L372-0087	J AB	Screw,ø4×32mm
SP1,2	VSP0010PBS78A	J AU	Woofer

ACCESSORIES/PACKING PARTS

1	92L411-0064	J	Polyethylene Bag,Speaker
2	92L412-0063	J AM	Packing Add.,Speaker (Top/Bottom)
3	92L353-0046	J	Feature Label



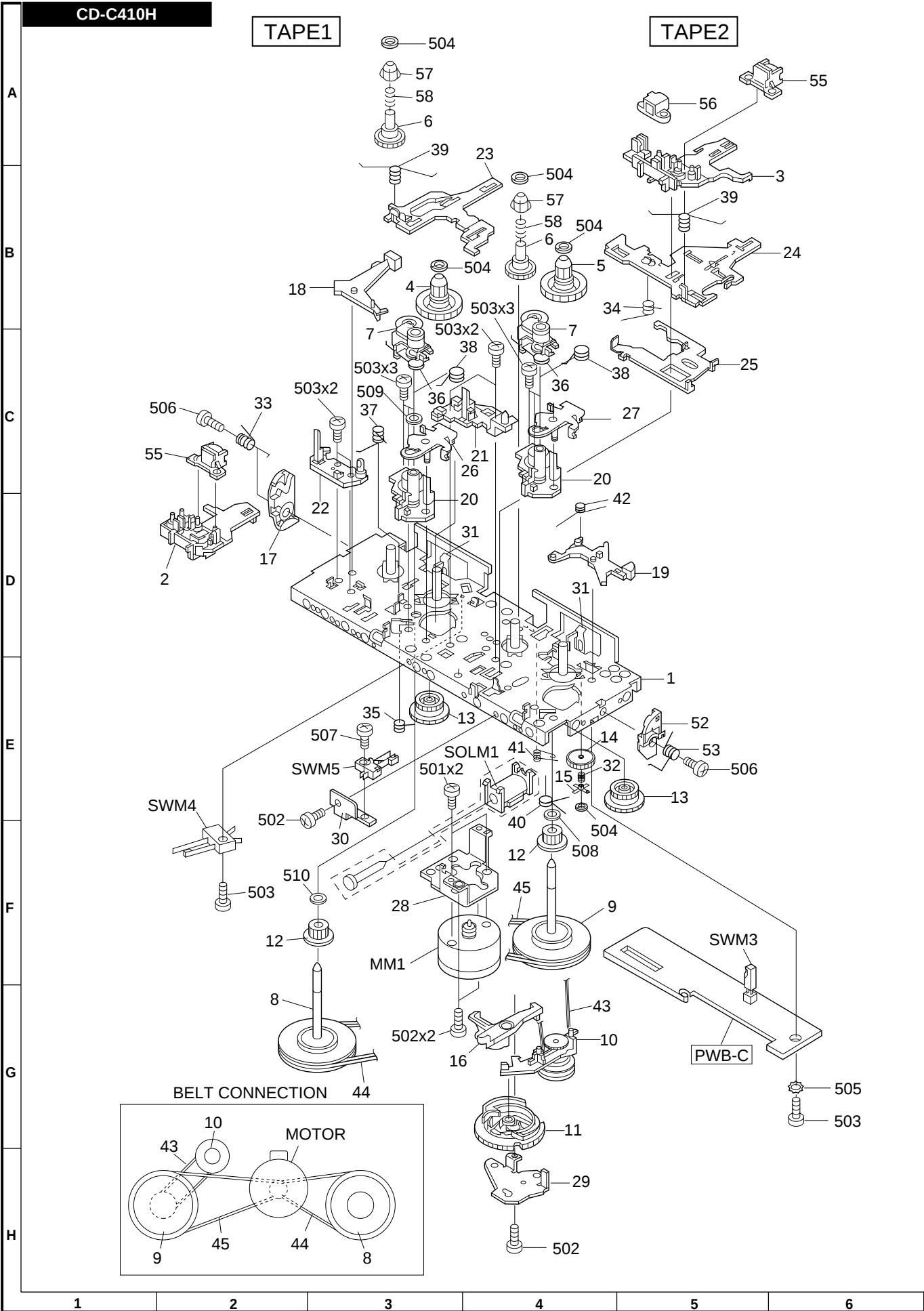


Figure 8 TAPE MECHANISM EXPLODED VIEW

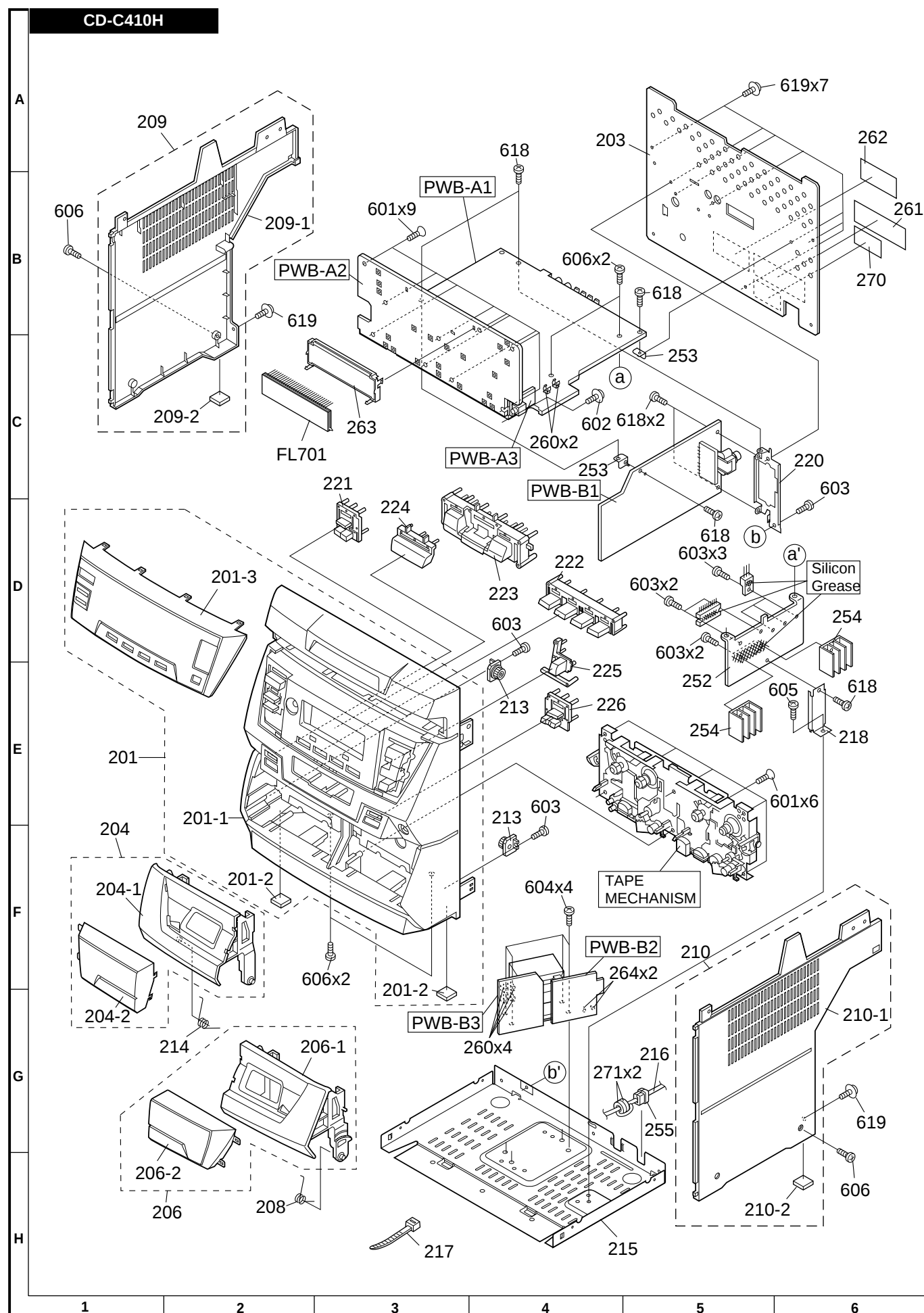


Figure 9 CABINET EXPLODED VIEW (1/2)

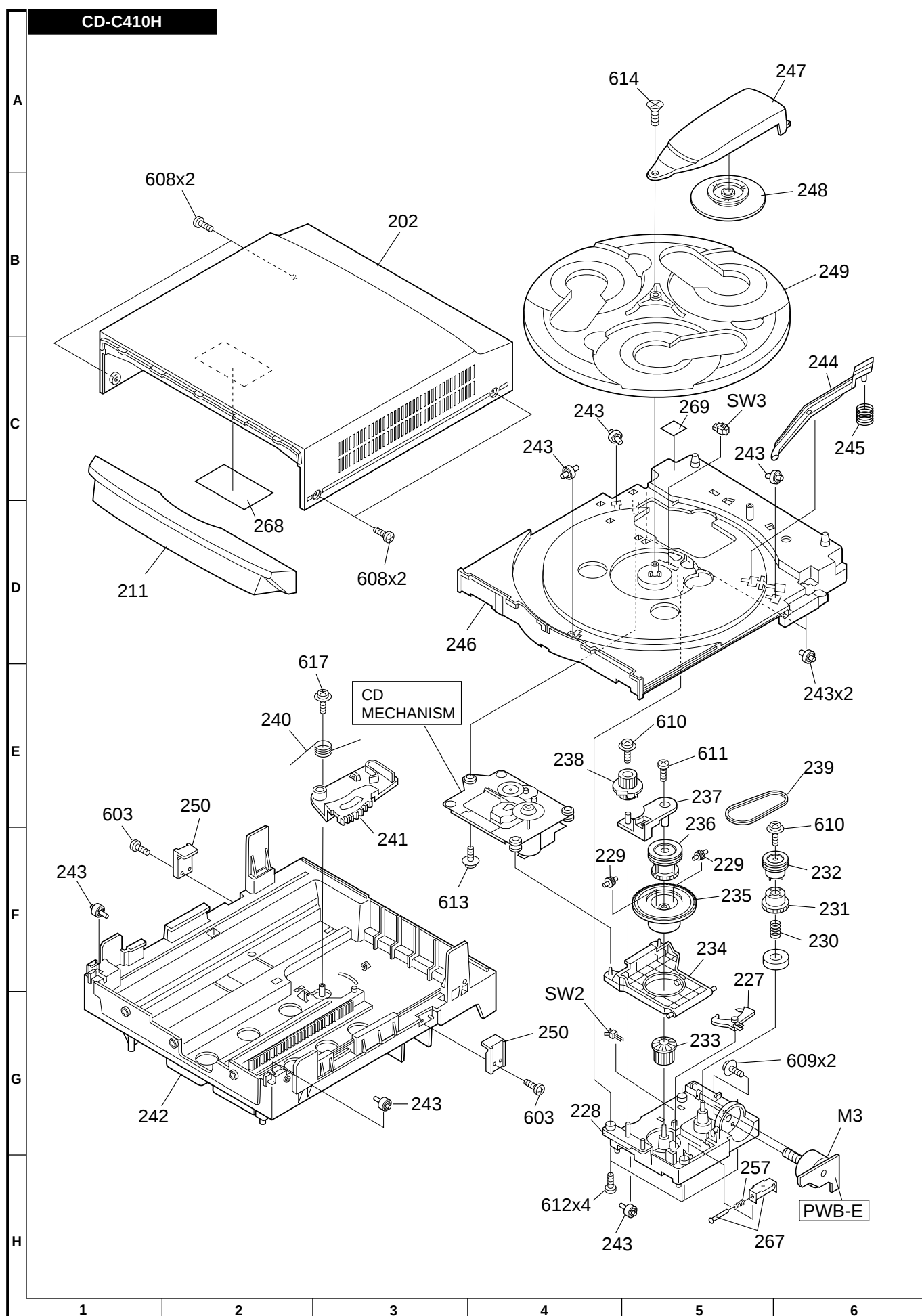


Figure 10 CABINET EXPLODED VIEW (2/2)

CP-C410

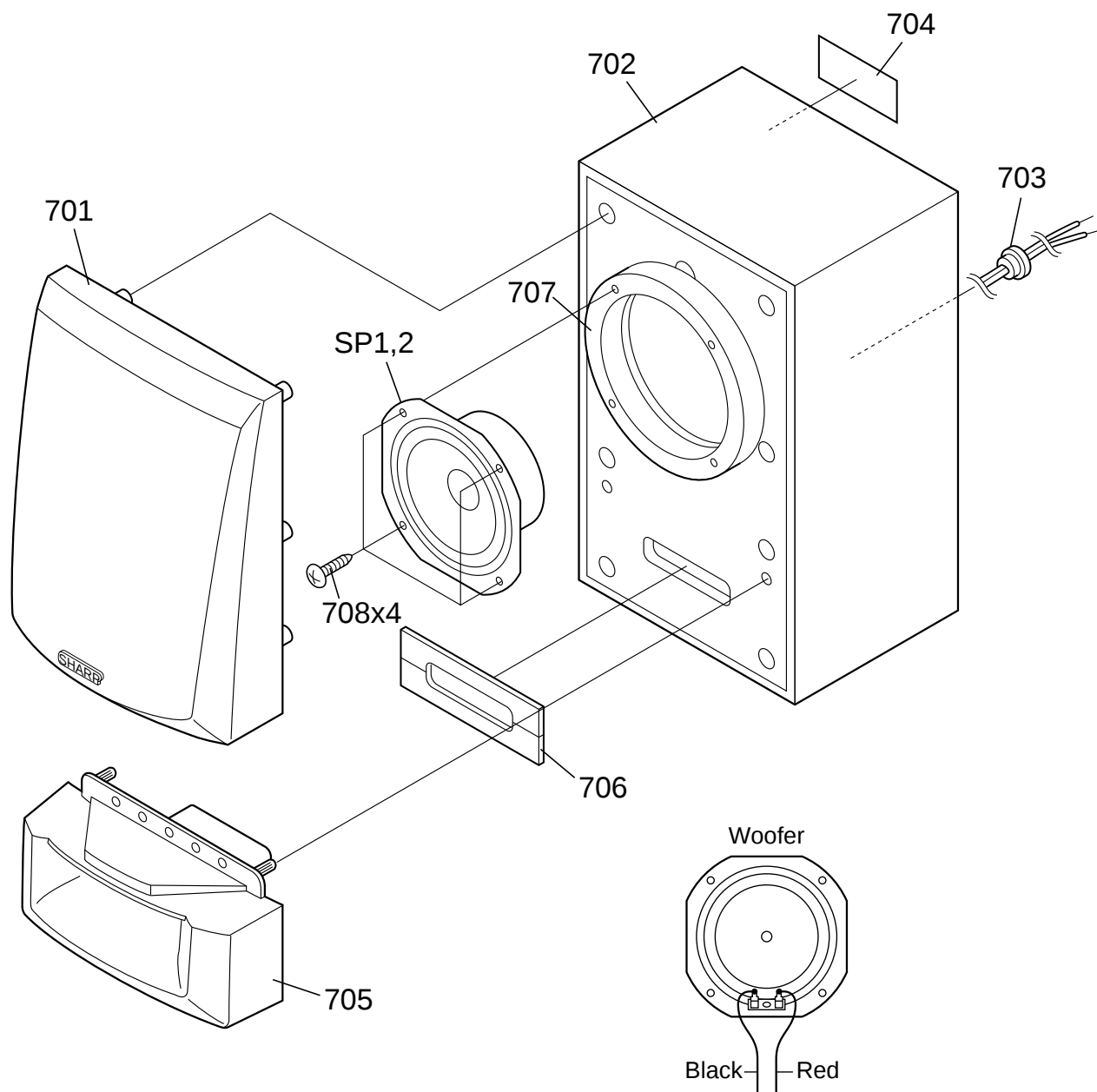


Figure 11 SPEAKER EXPLODED VIEW

PACKING METHOD (FOR UK ONLY)

Setting position of switches and knobs

Tape Mechanism

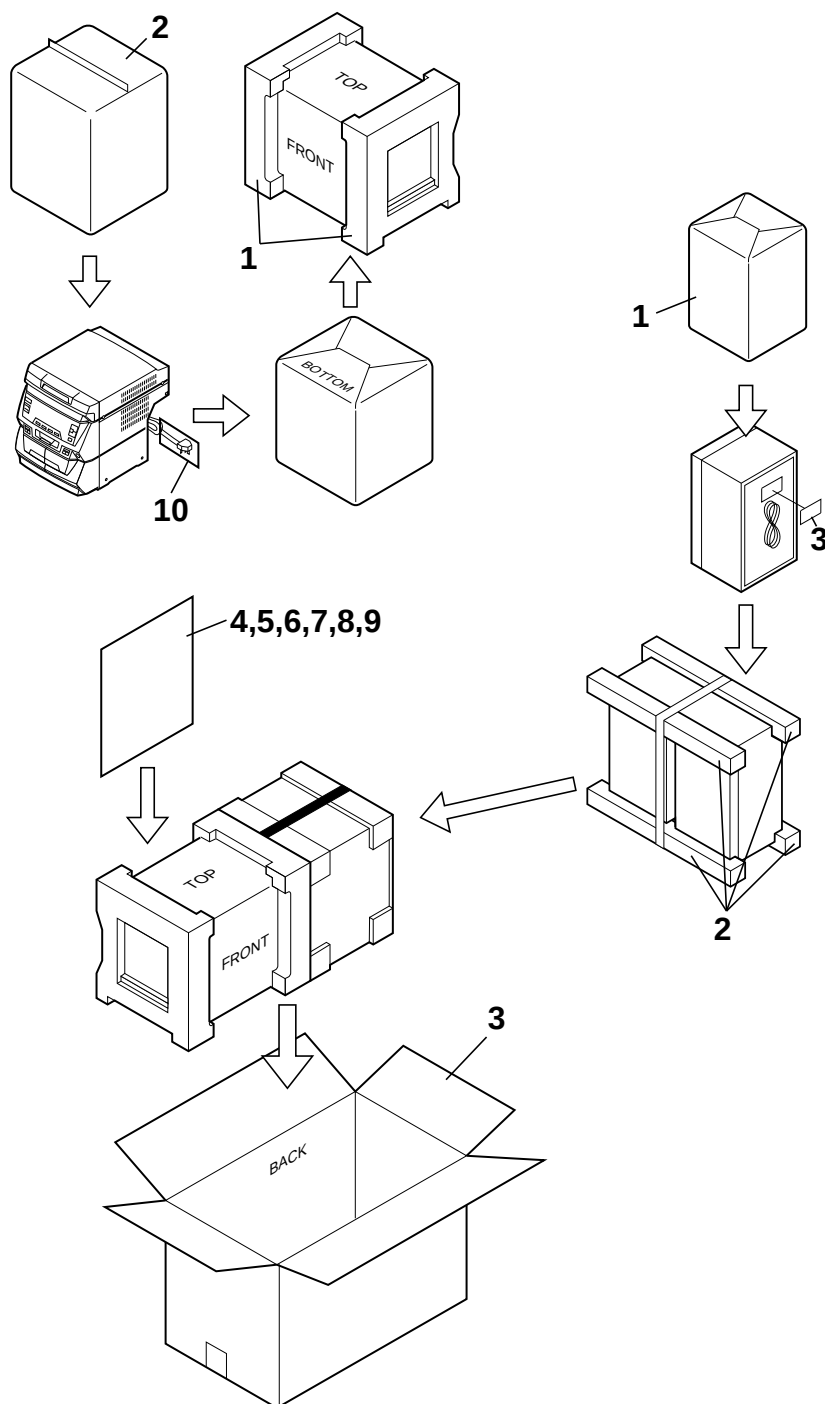
STOP

CD-C410H

- | | |
|---|----------------|
| 1. Packing Add., Left/Right | SPAKA0124AWZZ |
| 2. Polyethylene Bag, Unit | SPAKP0013AWZZ1 |
| 3. Packing Case | SPAKC0505AWZZ |
| 4. Polyethylene Bag, Accessories | 92LBAG1460C1 |
| 5. Operation Manual | TINSE0155AWZZ |
| 6. AM Loop Antenna | QANTL0005AWZZ |
| 7. FM Antenna | 92LF-ANT1535A |
| 8. Registration Card | 92LCARD1751A |
| 9. Remote Control | RRMCG0099AWSA |
| 10. Polyethylene Bag,
AC Power Supply Cord | 92LBAG1770A |
| 11. Label | TLABE0153AWZZ |

CP-C410

- | | |
|--------------------------------------|-------------|
| 1. Polyethylene Bag, Speaker | 92L411-0064 |
| 2. Packing Add.,Speaker (Top/Bottom) | 92L412-0063 |
| 3. Feature Label | 92L353-0046 |



SHARP