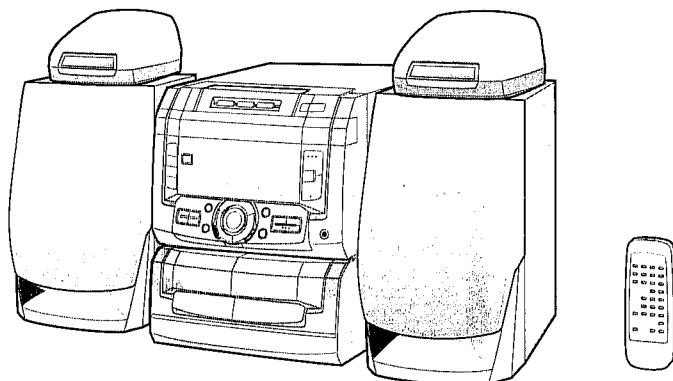


SHARP SERVICE MANUAL

No. S7850CDC421W/



CD-C421W

CD-C421W mini component system consisting of
CD-C421W mini component system, CP-C421 and
surround (GBOXS00019AWZZ) speaker system.



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

CONTENTS

	Page
SAFETY PRECAUTION FOR SERVICE MANUAL	2
VOLTAGE SELECTION	2
SPECIFICATIONS	3
NAMES OF PARTS	4
OPERATION MANUAL	6
DISASSEMBLY	7
REMOVING AND REINSTALLING THE MAIN PARTS	9
ADJUSTMENT	10
NOTES ON SCHEMATIC DIAGRAM	12
BLOCK DIAGRAM	13
WAVEFORMS OF CD CIRCUIT	16
SCHEMATIC DIAGRAM / WIRING SIDE OF P.W.BOARD	17
TROUBLESHOOTING (CD CHANGER CONTROL / CD SECTION)	34
FUNCTION TABLE OF IC	38
FL DISPLAY	44
REPLACEMENT PARTS LIST/EXPLODED VIEW	

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.

Laser Diode Properties

Material: GaAlAs

Wavelength: 780 nm

Emission Duration: continuous

Laser Output: max. 0.6 mW

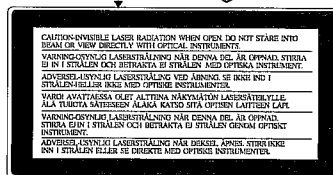
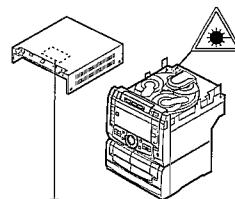
Laser Diode Properties

Material: GaAlAs

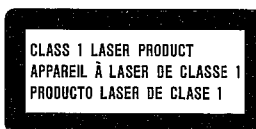
Wavelength: 780 nm

Emission Duration: continuous

Laser Output: max. 0.6 mW



CAUTION



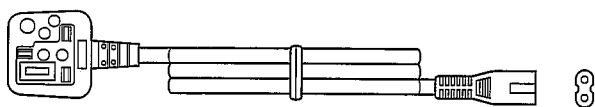
- This Mini Component System is classified as a CLASS 1 LASER product.
- The CLASS 1 LASER PRODUCT label is located on the rear cover.
- Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

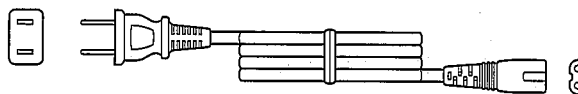
VOLTAGE SELECTION

The voltage selector is located on the AC voltage selector box. If adjustment is necessary, use a screwdriver in order to turn the selector in either direction the correct voltage figure is displayed in the window next to the adjustment screw.

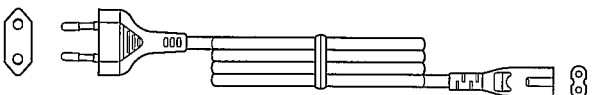
QACCB0002AW00



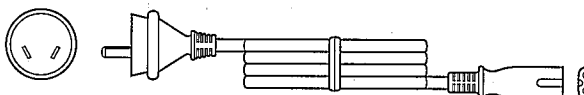
92LCORD577B



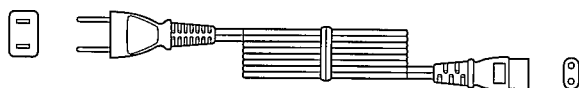
QACCE0007AW00



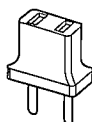
QACCL0002AW00



92LCORDZ1652A



92LPLUG027



92LPLUG155A



Figure 2 POWER SUPPLY CORD AND PLUG ADAPTOR

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

SPECIFICATIONS

● General

Power source: AC 110/127/220/230-240 V,
50/60 Hz
Power consumption: 47 W
Dimensions: Width; 270 mm (10-5/8")
Height; 303 mm (11-13/16")
Depth; 341 mm (13-7/16")
Weight: 5.6 kg (12.3 lbs.)

● Amplifier section

Output power: PMPO; 320 W (total)
MPO; 60 W (30 W + 30 W)
(10 % T.H.D.)
RMS; 40 W (20 W + 20 W)
(10 % T.H.D.)
RMS; 28 W (14 W + 14 W)
(0.9 % T.H.D.)
Output terminals: Front speakers; 5.4 ohms
Surround speakers; 16 ohms
Headphones; 16-50 ohms
(recommended; 32 ohms)
Input terminals: Video/Auxiliary (audio signal);
245 mV/47 kohms

● Tuner section

Frequency range: FM; 88-108 MHz
AM; 531-1,602 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: 0.15 % (WRMS)

● Compact disc player section

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

● Front speaker section

Type: 2-way [10 cm (4") woofer and 5 cm
(2") tweeter]
Maximum input power: 30 W
Impedance: 5.4 ohms
Dimensions: Width; 180 mm (7-1/8")
Height; 300 mm (11-13/16")
Depth; 204 mm (8-1/16")
Weight: 2.1 kg (4.6 lbs.)/each

● Surround speaker section

Type: 10 cm (4") full-range speaker
Maximum input power: 10 W
Impedance: 16 ohms
Dimensions: Width; 170 mm (6-11/16")
Height; 120 mm (4-3/4")
Depth; 175 mm (6-7/8")
Weight: 0.6 kg (1.3 lbs.)/each

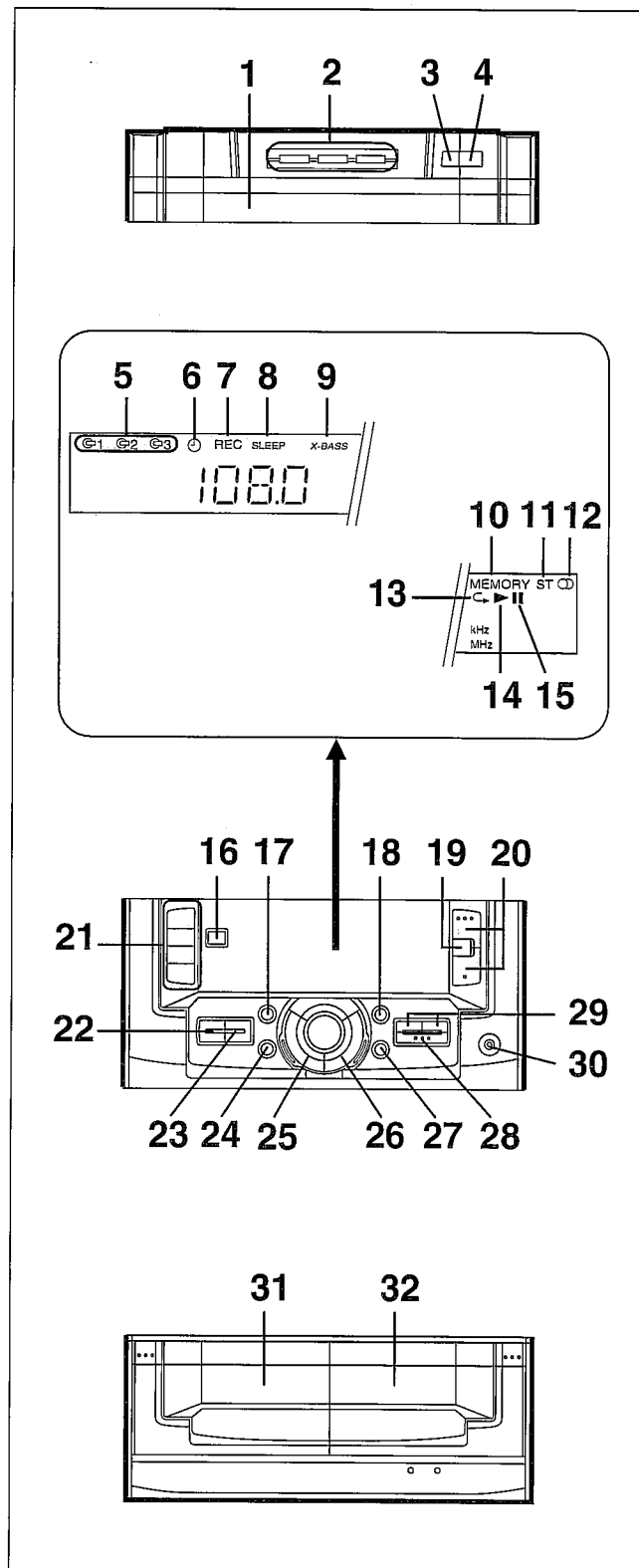
Specifications for this model are subject to change without prior notice.

NAMES OF PARTS

CD-C421W

■ Front panel

1. Disc Tray
2. Disc Number Select Buttons
3. Disc Skip Button
4. Open/Close Button: ▲
5. Disc Number Indicator
6. Timer Indicator
7. Record Indicator
8. Sleep Indicator
9. Extra Bass Indicator: X-BASS
10. Memory Indicator
11. FM Stereo Mode Indicator: ST
12. FM Stereo Indicator: 
13. CD Repeat Indicator: 
14. CD Play Indicator: ►
15. CD Pause Indicator: 
16. On/Stand-by Button
17. Memory/Set Button
18. Record Pause Button: ● 
19. Extra Bass/Equalizer Mode Button: X-BASS
20. Volume Up/Down Buttons: ▲ / ▼
21. Function Selector Buttons
22. Clock Button
23. Timer/Sleep Button
24. (CD) Track Down/Review Button: ◀◀ / ◀◀
(TUNER) Preset Down Button: ▼
25. Stop Button: ■
26. Play/Repeat Button: ► / 
27. (CD) Track Up/Cue Button: ►► / ►►
(TUNER) Preset Up Button: ▲
28. Random/Demo Button
29. Tuning and Time Up/Down Buttons: ▲ / ▼
30. Headphone Socket
31. (TAPE 1) Cassette Compartment
32. (TAPE 2) Cassette Compartment



■ Rear panel

1. Span Selector Switch
2. Speaker Terminals
3. AC Voltage Selector
4. AC Power Input Socket
5. Video/Auxiliary (Audio Signal) Input Sockets
6. FM 75 Ohms Aerial Terminal
7. Aerial Earth Terminal
8. AM Aerial Terminal

CP-C421

■ Speaker section

9. Tweeter
10. Woofer
11. Bass Reflex Duct
12. Speaker Wire

GBOXS00019AWZZ

13. Full-Range Speaker
14. Speaker Wire

■ Remote control

1. Remote Control Transmitter LED

● CD control section

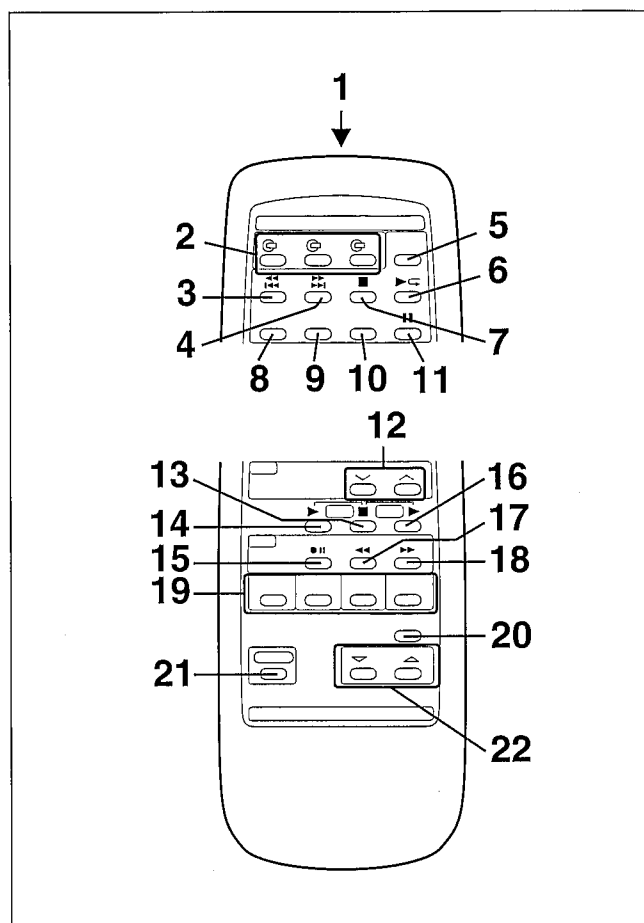
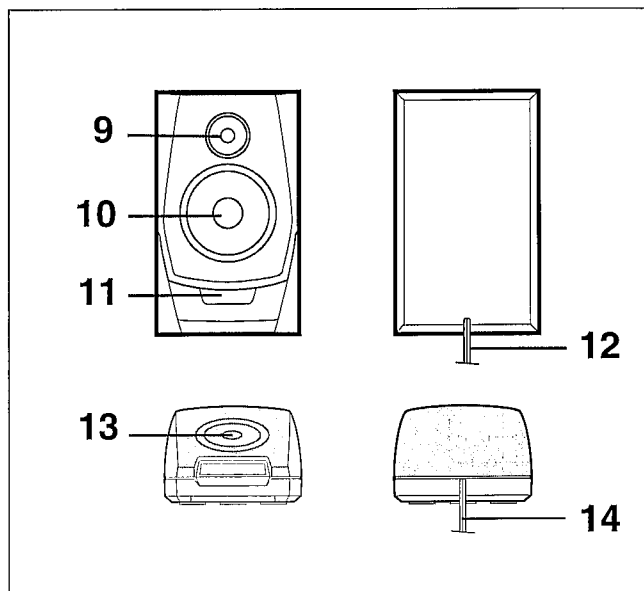
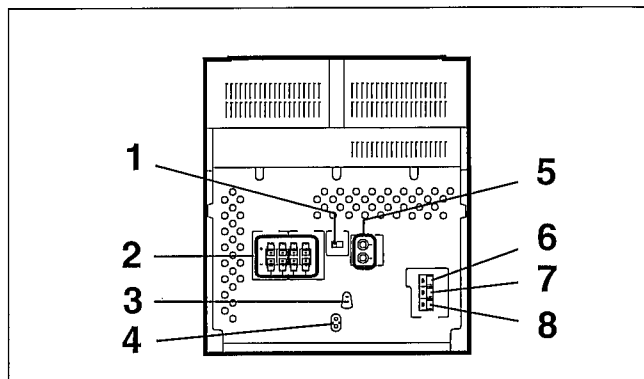
2. Disc Number Select Buttons
3. Track Down/Review Button: ◀◀/◀◀
4. Track Up/Cue Button: ▶▶/▶▶
5. Disc Skip Button
6. Play/Repeat Button: ▶ ◀
7. Stop Button: ■
8. Memory Button
9. Clear Button
10. Random Button
11. Pause Button: ||

● Tuner control section

12. Preset Up/Down Buttons: ^ / v

● 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. On/Stand-by Button
22. Volume Up/Down Buttons: ▲ / ▼



OPERATION MANUAL

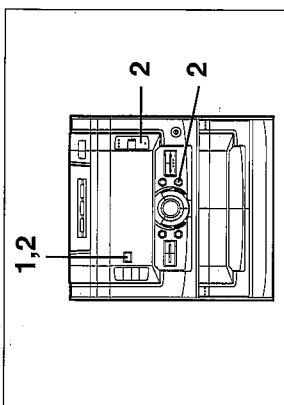
RESETTING THE MICROCOMPUTER

- Reset the microcomputer under the following conditions:**
- To erase all of the stored memory contents (clock and timer settings, and tuner and CD presets).
 - If the display is not correct.
 - If the operation is not correct.

- 1 Press the ON/STAND-BY button to enter the stand-by mode.
- 2 While pressing down the VOLUME ∇ button and the $\wedge$ button, hold down the ON/STAND-BY button for at least 1 second.

Caution:

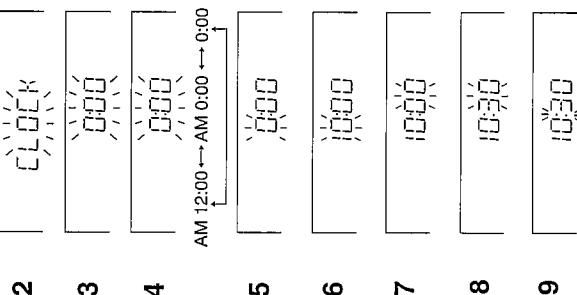
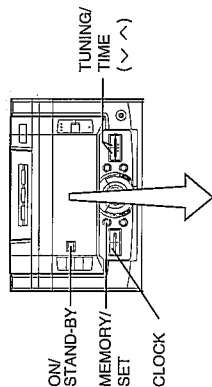
- The operation explained above will erase all data stored in memory including clock and timer settings, and tuner and CD presets.



SETTING THE CLOCK

(Main unit operation)

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



- 1 Press the ON/STAND-BY button to enter the stand-by mode.
- 2 Press the CLOCK button.

- 3 Within 5 seconds, press the MEMORY/SET button.

- 4 Press the TUNING/TIME ($\vee$ or $\wedge$) button to select the time display mode.

"AM 12:00" → The 12-hour display will appear.

"AM 0:00" → The 12-hour display will appear.

"0:00" → The 24-hour display will appear.

(0:00 - 23:59)

- Note that this can only be set when the unit is first installed or it has been reset (see page 17).

- 5 Press the MEMORY/SET button.

- 6 Press the TUNING/TIME ($\vee$ or $\wedge$) button to adjust the hour.

- Press the TUNING/TIME ($\vee$ or $\wedge$) button once to advance the time by 1 hour. Hold it down 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 ($\vee$ or $\wedge$) button to adjust the minutes.

- Press the TUNING/TIME ($\vee$ or $\wedge$) button once to advance the time by 1 minute. Hold it down 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 unit is in the stand-by mode:

- 1 Press the MEMORY/SET button.

- 2 Perform steps 6 - 9 above.

When the unit is on:

- 1 Press the CLOCK button.

- 2 Within 5 seconds, press the MEMORY/SET button.

- 3 Perform steps 6 - 9 above.

To see the time display:

Press the CLOCK button.

- The time display will appear for about 5 seconds.

To change the time display mode:

- 1 Perform steps 1 - 2 in the section "RESETTING THE MICROCOMPUTER", on page 17.

- 2 Perform steps 1 - 9 above.

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-C421W

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw (A1) x4	7-1
2	Side Panel (Left/right)	1. Screw (B1) x2 2. Screw (B2) x4	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) x6	7-2
5	Tuner PWB	1. Screw (E1) x3 2. Socket (E2) x1	8-1
6	Switch PWB/ Display PWB/ Main PWB/	1. Screw (F1) x6 2. Screw (F2) x1 3. Screw (F3) x1 4. Socket (F4) x4	8-1.2
7	Front Panel	1. Screw (G1) x3 2. Hook (G2) x2	8-2
8	Tape Mechanism	1. Open the cassette holder. 2. Screw (H1) x6	8-2
9	Turntable	1. Screw (J1) x1 2. Cover (J2) x1	8-3
10	Disc Tray	1. Screw (K1) x2 2. Guide (K2) x2	8-3
11	CD Changer Mechanism	1. Screw (L1) x4	8-4
12	CD Mechanism	1. Screw (M1) 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.

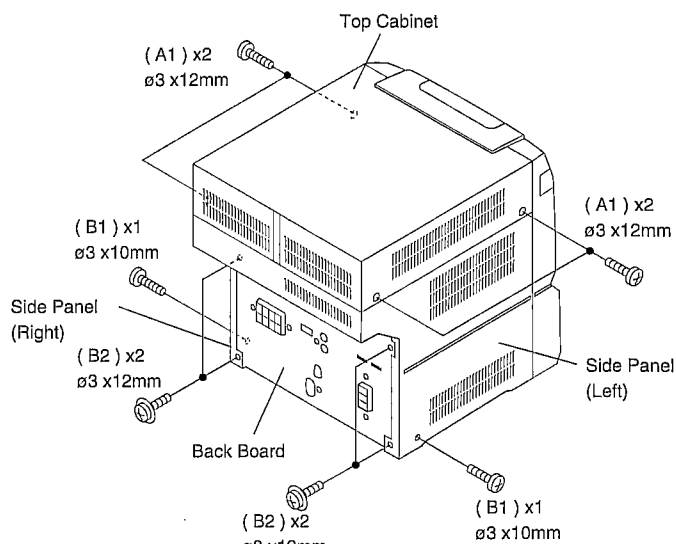
CD-C421W

Figure 7-1

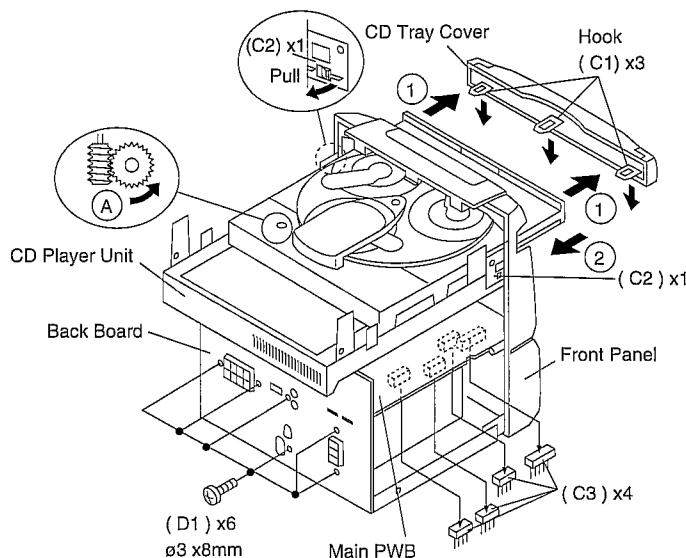


Figure 7-2

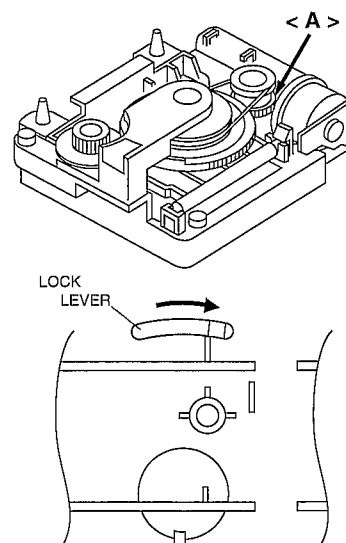


Figure 7-3

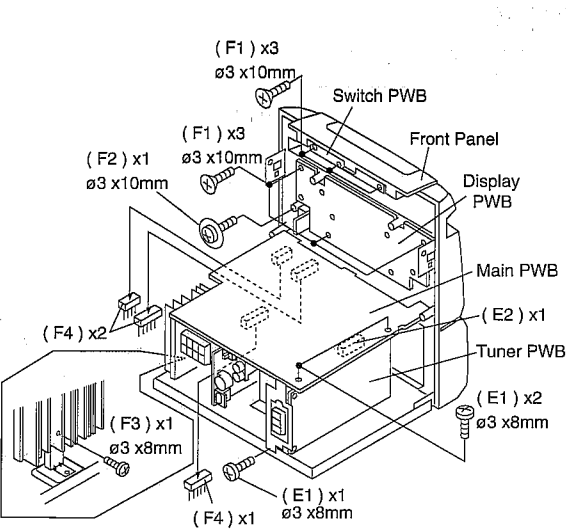


Figure 8-1

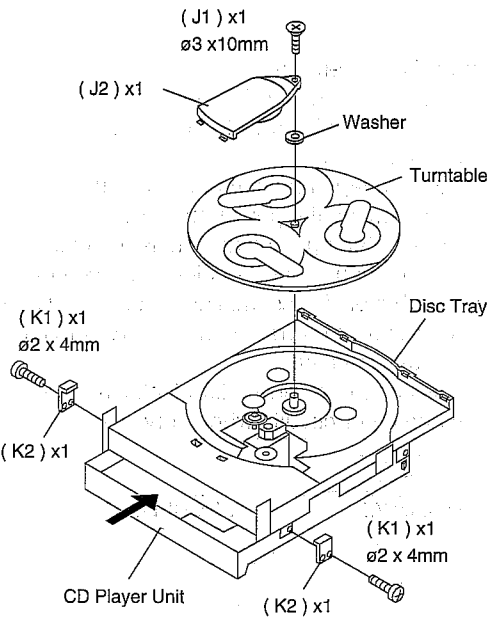


Figure 8-3

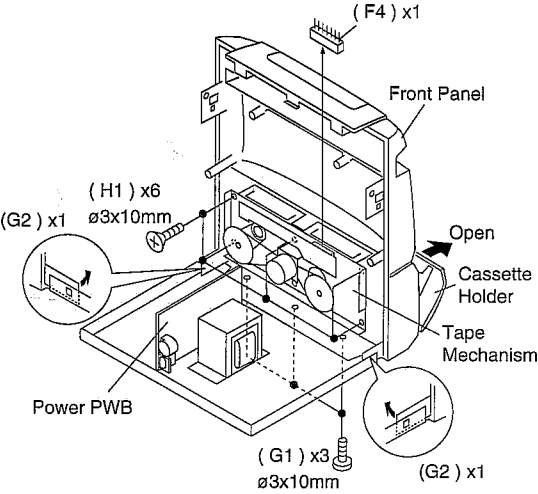
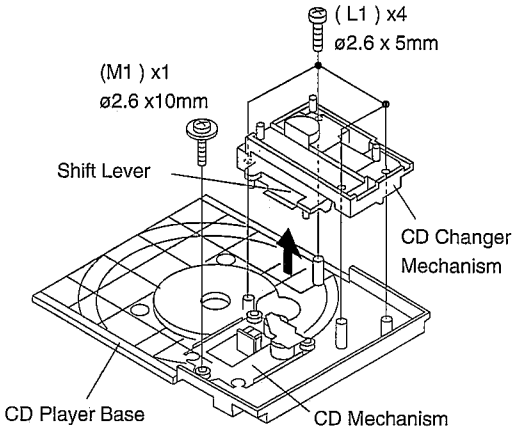


Figure 8-2



Be careful 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-C421

STEP	REMOVAL	PROCEDURE	FIGURE
1	Front Speaker	1. Net Frame (A1) x1 2. Duct Panel (A2) x1 3. Screw (A3) x4 4. Screw (A4) x4	8-5

Notes:

The Surround speakers can be easily disassembled. Therefore the disassembling method is not discribed. For details refer to the disassembling drawing in the Parts Guide.

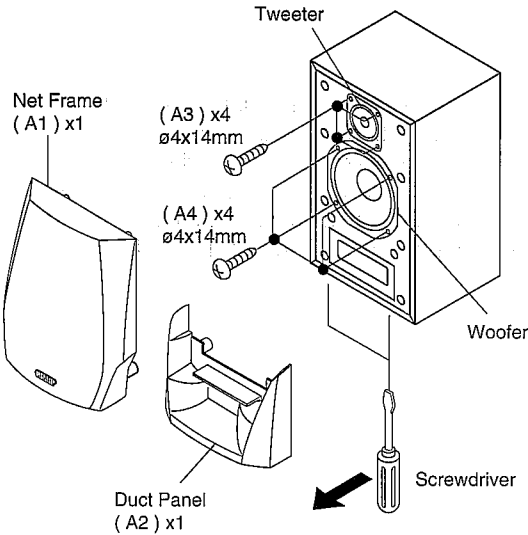


Figure 8-5

REMOVING AND REINSTALLING THE MAIN PARTS

CD MECHANISM SECTION

Perform steps 1, 2, 3, 13 and 14 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.

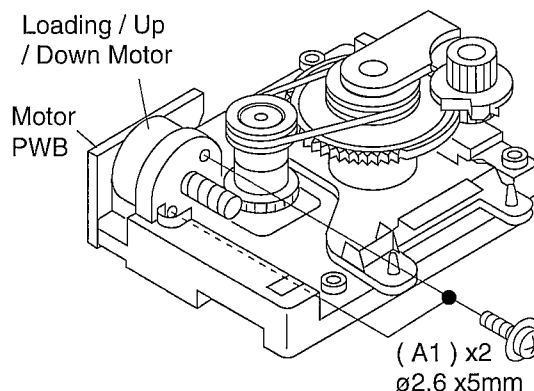


Figure 9-1

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

1. Remove the screws (B1) x 2 pcs., to remove the shaft (B2) x 1 pc.
2. Remove the stop washer (B3) x 1 pc., to remove the gear (B4) x 1 pc.
3. Remove the pickup.

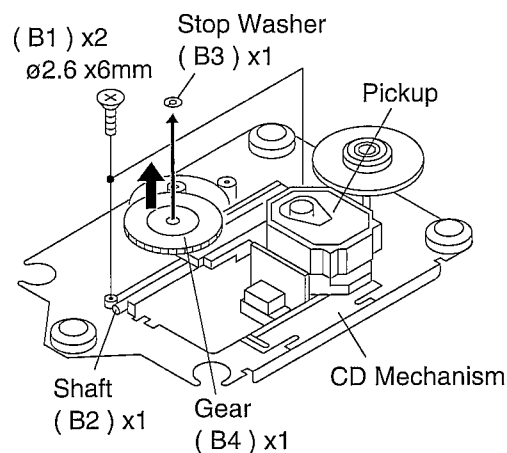


Figure 9-2

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

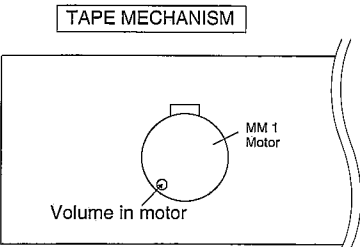
Torque Meter	Specified Value
Play: TW-2412	Tape 1: Over 80 g Tape 2: Over 80 g

• 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. (MM1)	3,000 ± 30 Hz	Speaker terminal (Load resistance: 8 ohms)



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	1,602 kHz	T351	*1
AM Band Coverage	—	531 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	(fL): T302	*1

*1. Input: Antenna, Output: TP302

*2. Input: Antenna, Output: TP301

• FM

Notes:

- 1: Description of the "FM IF Adjustment" is not carried on this Manual. It is because the IF coil in the FM front end section has been best adjusted in the factory so that its further adjustment is not needed at the field. When replacing the FM front end assembly, no adjustment is needed either.
- 2: The parts in the FM front end section are prepared in a complete unit, so you can't obtain each part individually

• 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*	Input: Antenna Output: Speaker Terminal

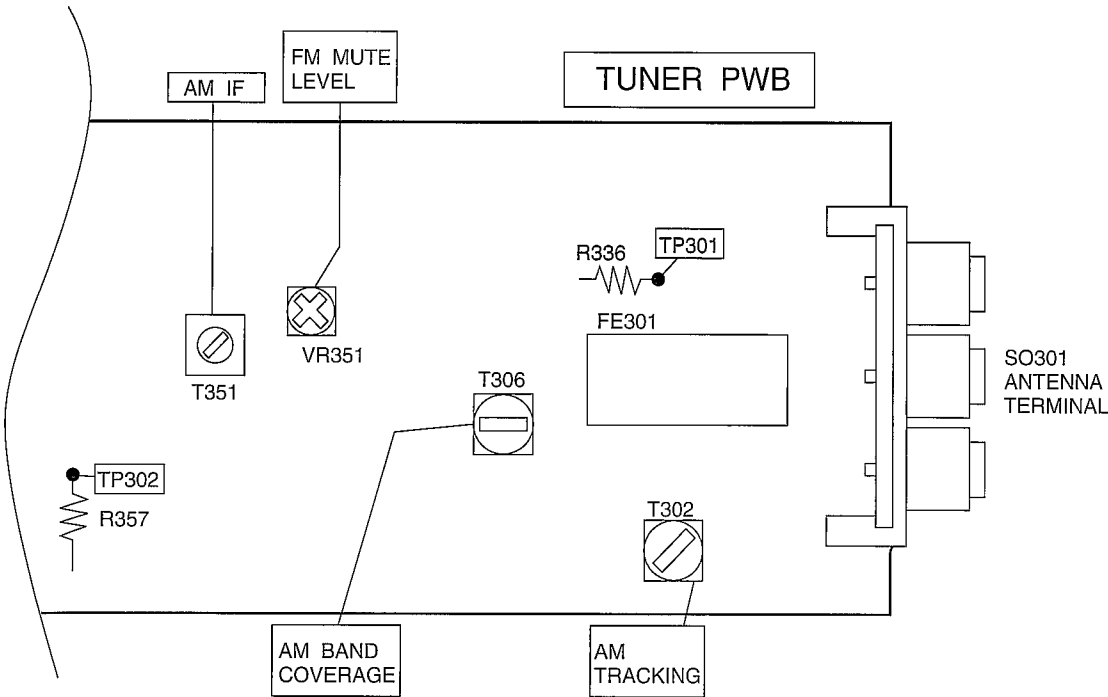


Figure 10 ADJUSTMENT POINTS

TEST MODE

• Setting the test mode

Any one of test mode can be set by pressing several keys as follows.
 <REC. PAUSE> + <CD> + <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.

IL is not performed.

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

<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

Cancelling method - POWER OFF

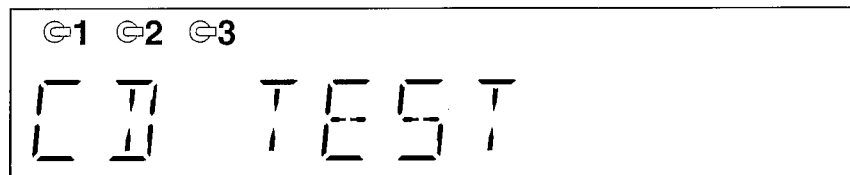


Figure 11-1

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.

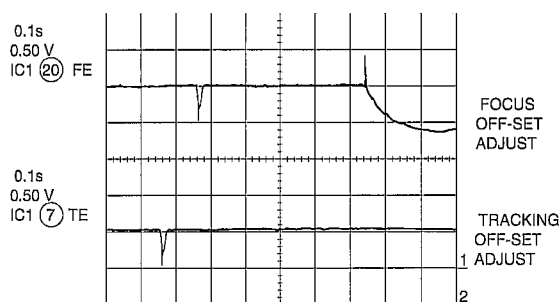


Figure 11-2

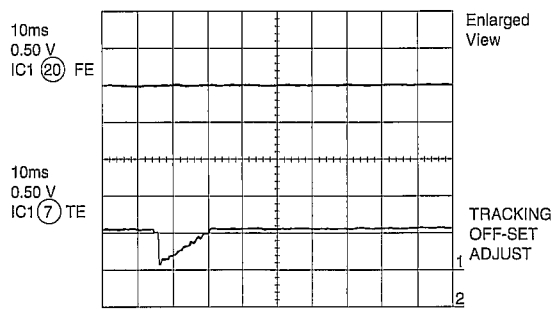


Figure 11-3

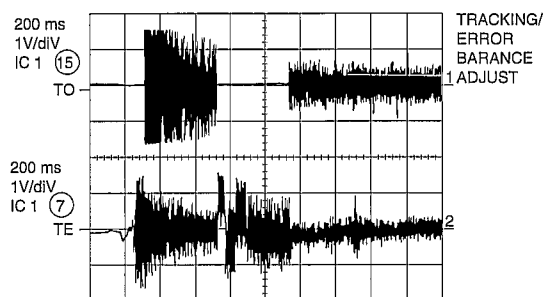


Figure 11-4

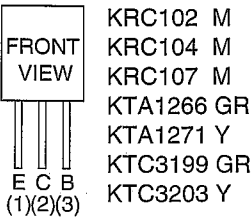
NOTES ON SCHEMATIC DIAGRAM

- 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.

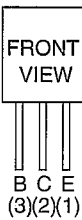
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
 1. In the tuner section,
() indicates AM
 2. In the main section, a tape is being played back.
 3. In the deck section, a tape is being played back.
() indicates 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	RANDAM / DEMO	ON—OFF
SW702	VOLUME DOWN	ON—OFF
SW703	X-BASS/EQUALIZER	ON—OFF
SW704	VOLUME UP	ON—OFF
SW705	REC/PAUSE	ON—OFF
SW706	FF	ON—OFF
SW707	STOP	ON—OFF
SW708	PLAY	ON—OFF
SW709	REW	ON—OFF
SW710	TUNING UP/TIME	ON—OFF
SW711	TUNING DOWN/TIME	ON—OFF
SW712	POWER	ON—OFF
SW713	CLOCK	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW714	TIMER/SLEEP	ON—OFF
SW715	MEMORY	ON—OFF
SW716	CD	ON—OFF
SW717	TUNER/BAND	ON—OFF
SW718	TAPE 1-2	ON—OFF
SW719	VIDEO/AUX	ON—OFF
SW720	DISC 1	ON—OFF
SW721	DISC 2	ON—OFF
SW722	DISC 3	ON—OFF
SW723	DISC SKIP	ON—OFF
SW724	OPEN/CLOSE	ON—OFF
SW725	SPAN SELECTOR	100/10—50/9
SW901	VOLTAGE SELECTOR	110—127— 220—230-240
SWM 3	FOOL PROOF	ON—OFF
SWM 4	F.A.S	ON—OFF
SWM 5	CAM	ON—OFF

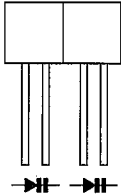


KRC102 M
KRC104 M
KRC107 M
KTA1266 GR
KTA1271 Y
KTC3199 GR
KTC3203 Y

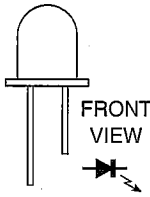


KTA1273 Y
KTC3200 GR

FRONT VIEW



KV1236Z23F



333GTH2

Figure 12 TYPES OF TRANSISTOR AND LED

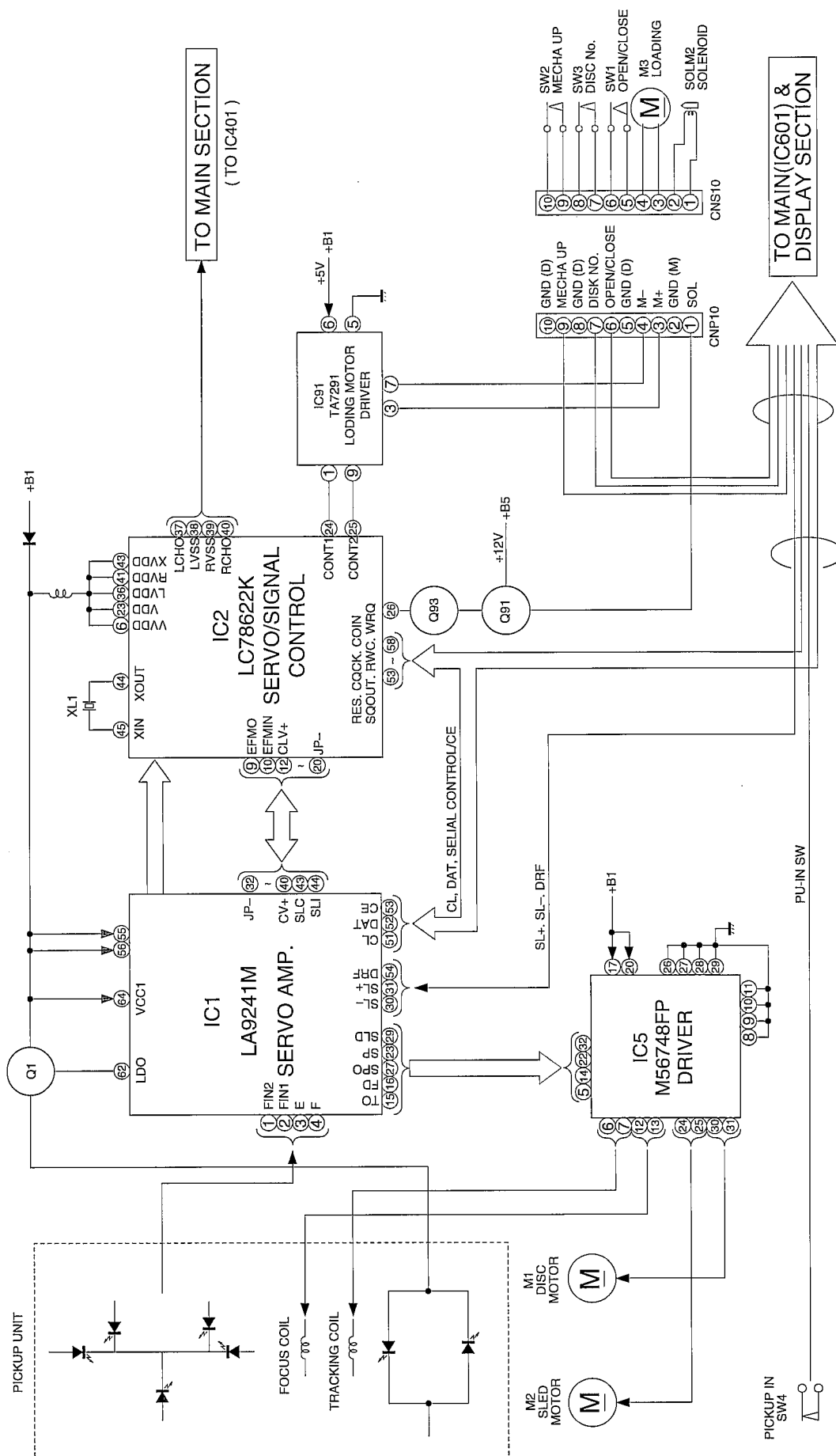


Figure 13 BLOCK DIAGRAM (1/3)

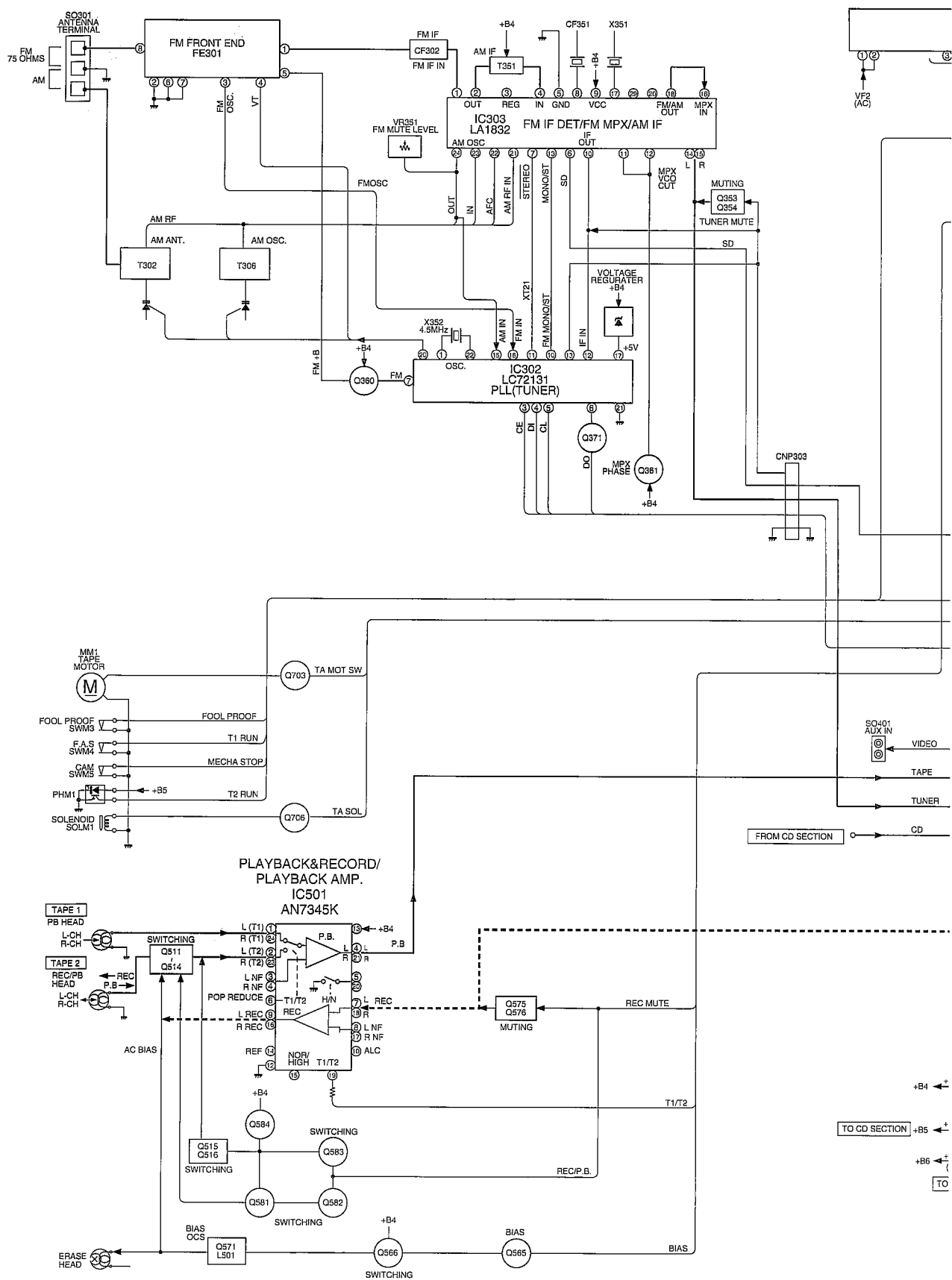


Figure 14 BLOCK DIAGRAM (2/3)

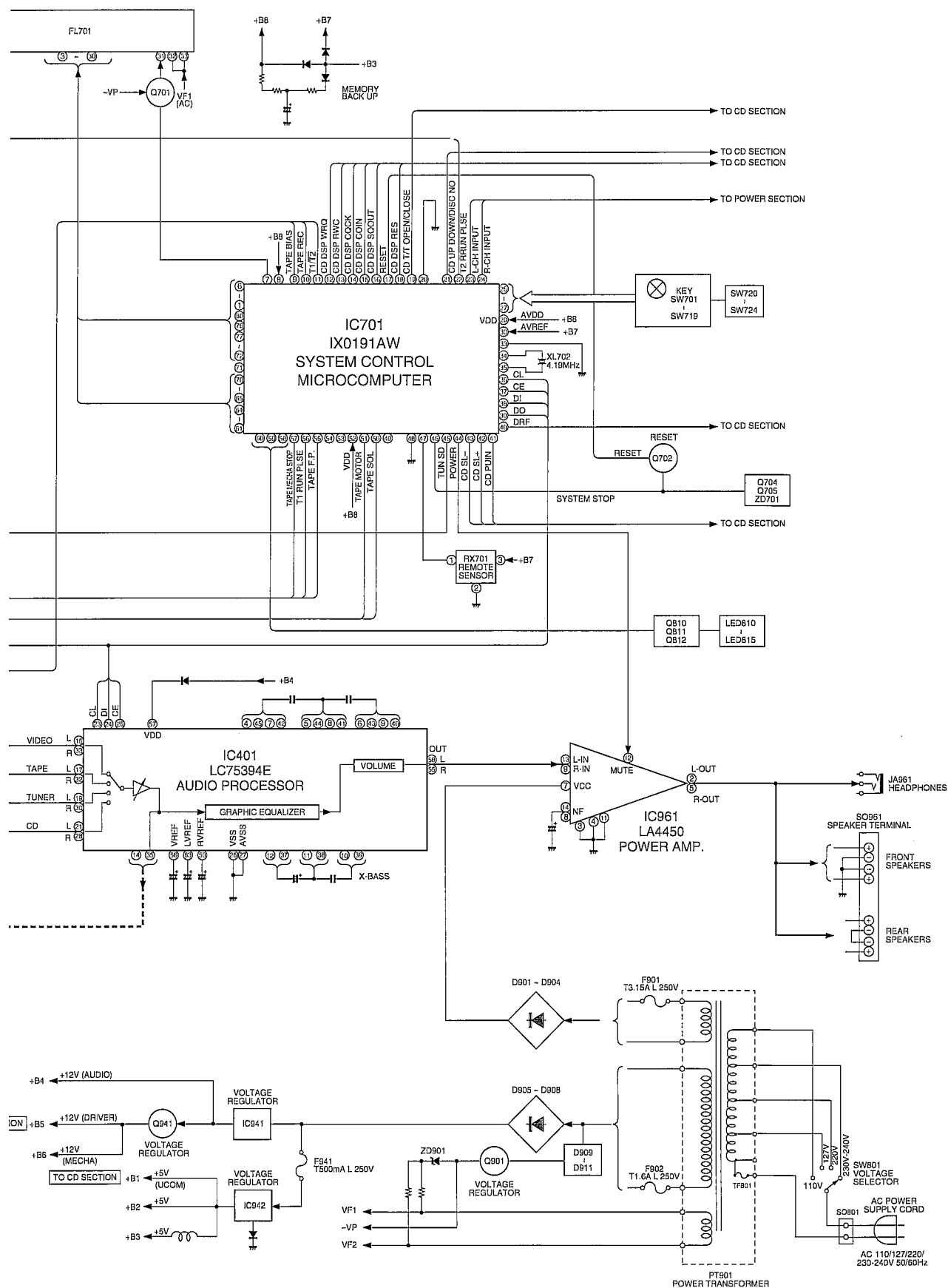
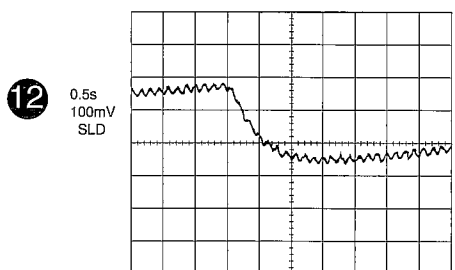
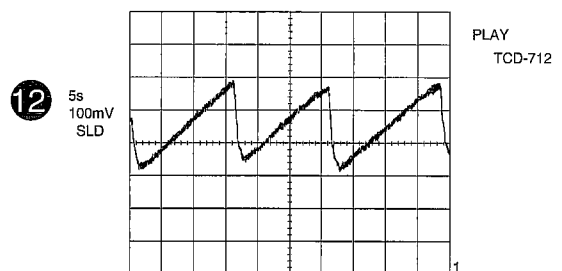
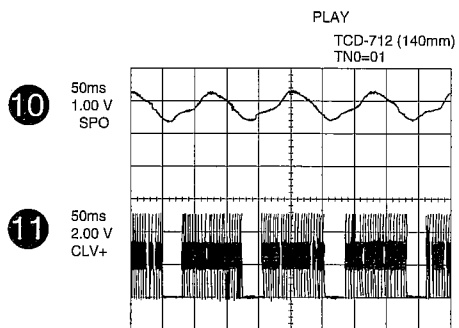
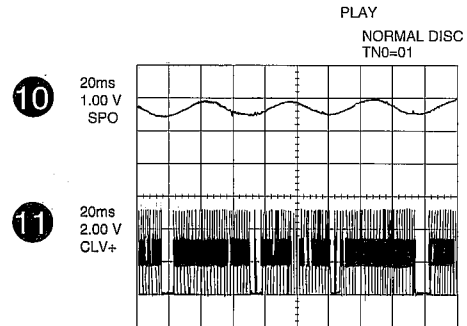
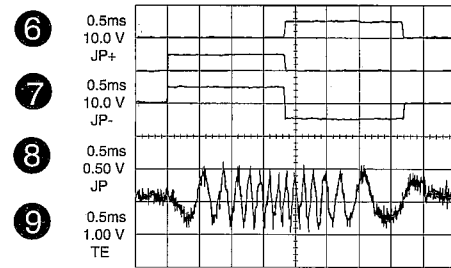
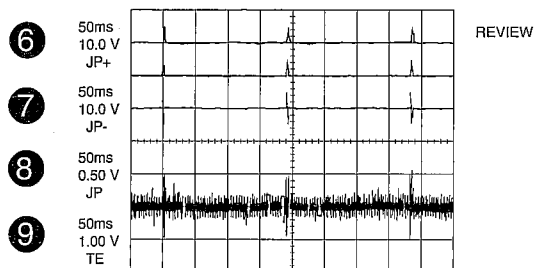
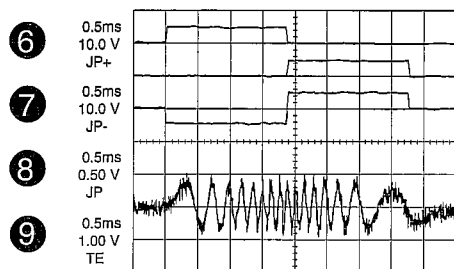
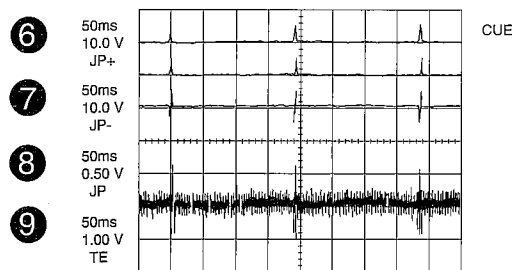
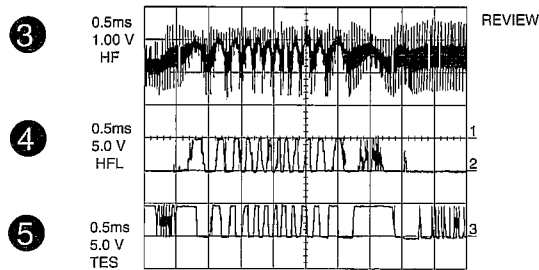
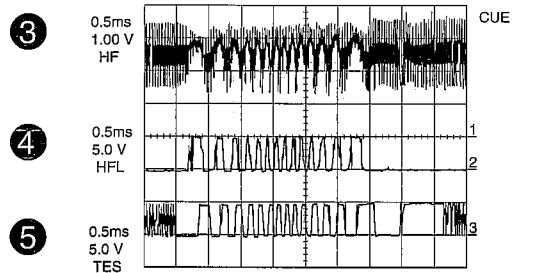
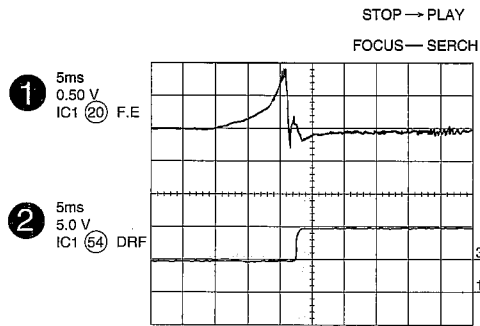


Figure 15 BLOCK DIAGRAM (3/3)

WAVEFORMS OF CD CIRCUIT



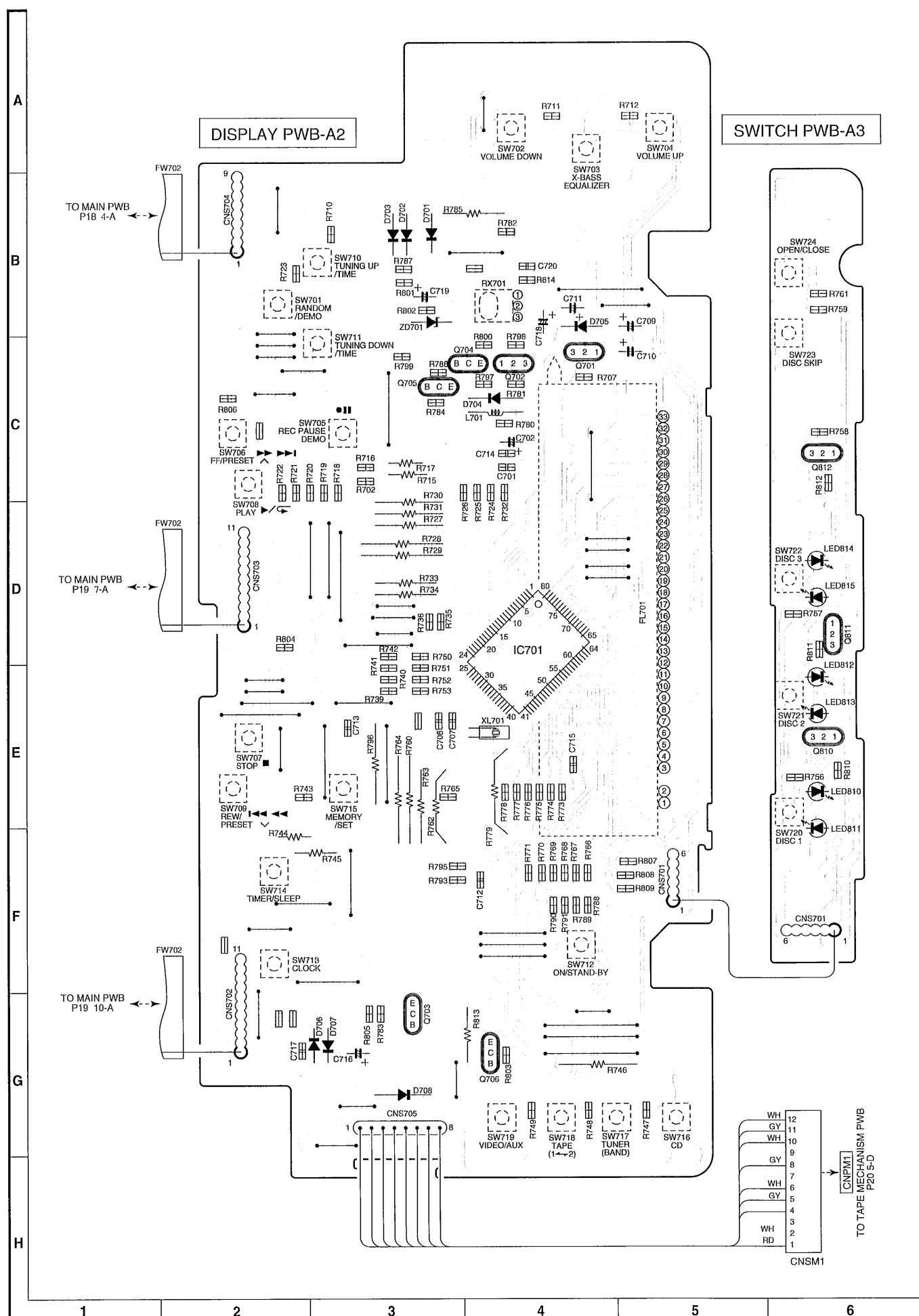


Figure 17 WIRING SIDE OF P.W.BOARD (1/6)

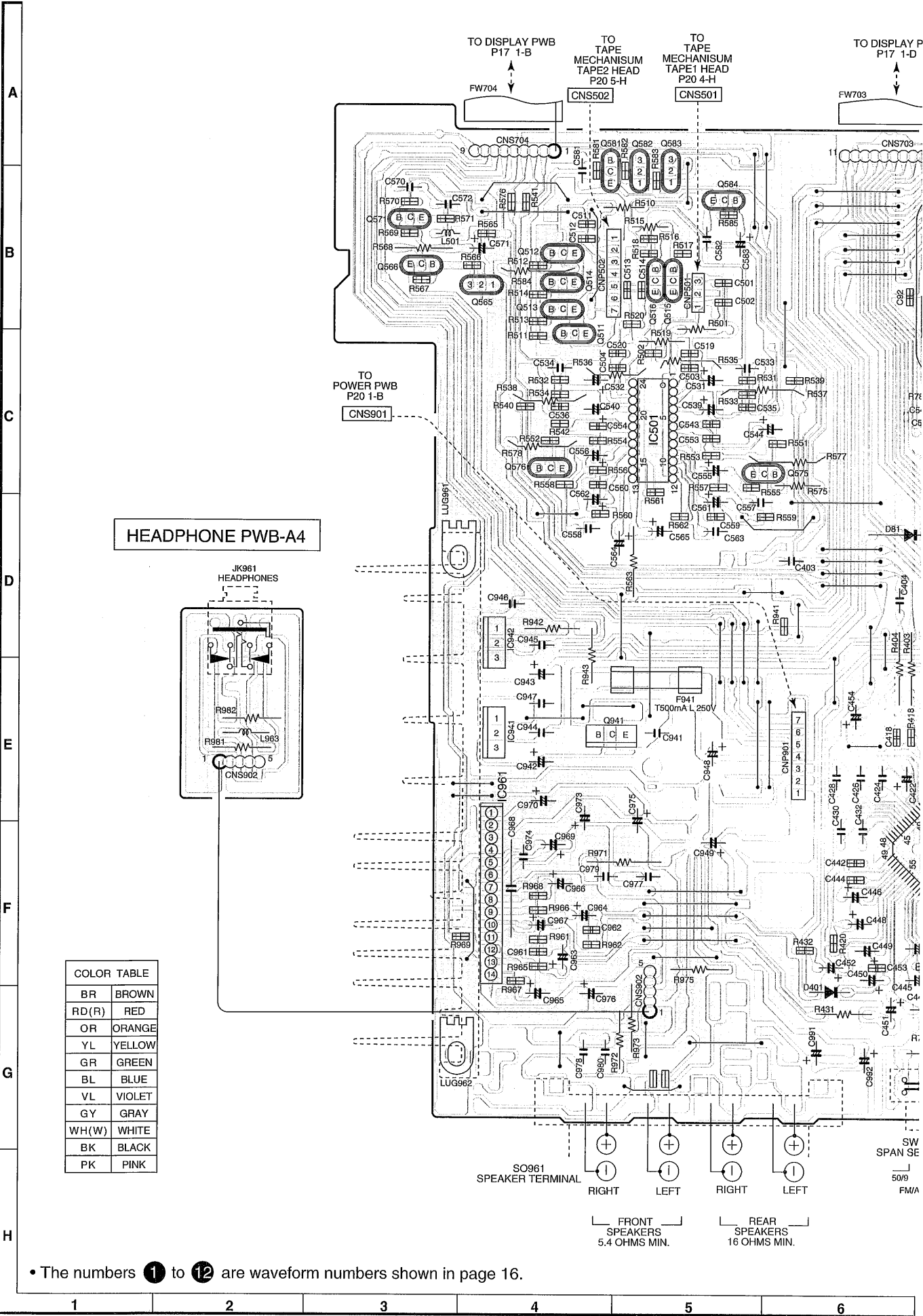


Figure 18 WIRING SIDE OF P.W.BOARD (2/6)

- 19 -

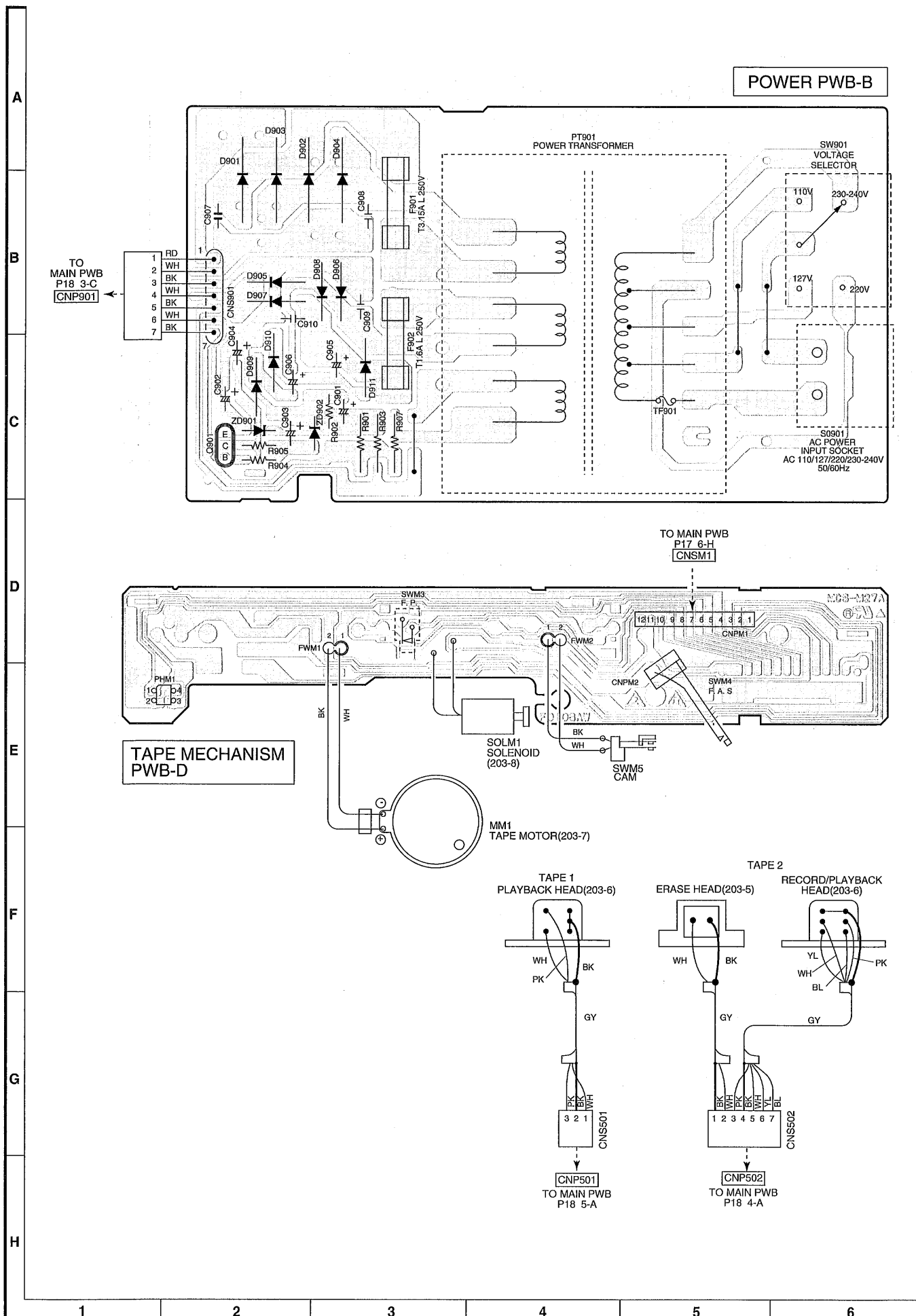


Figure 20 WIRING SIDE OF P.W.BOARD (4/6)

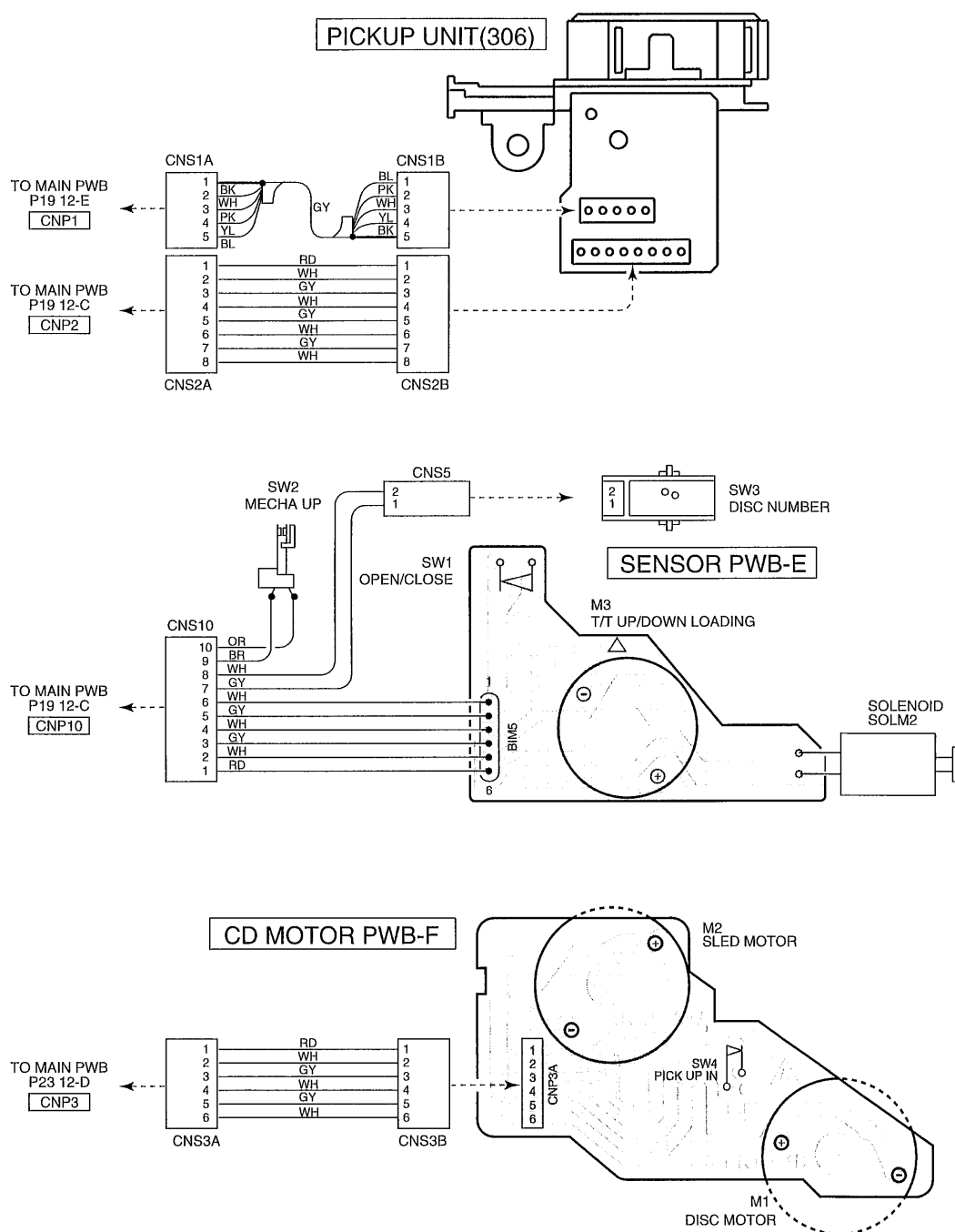


Figure 21 WIRING SIDE OF P.W.BOARD (5/6)

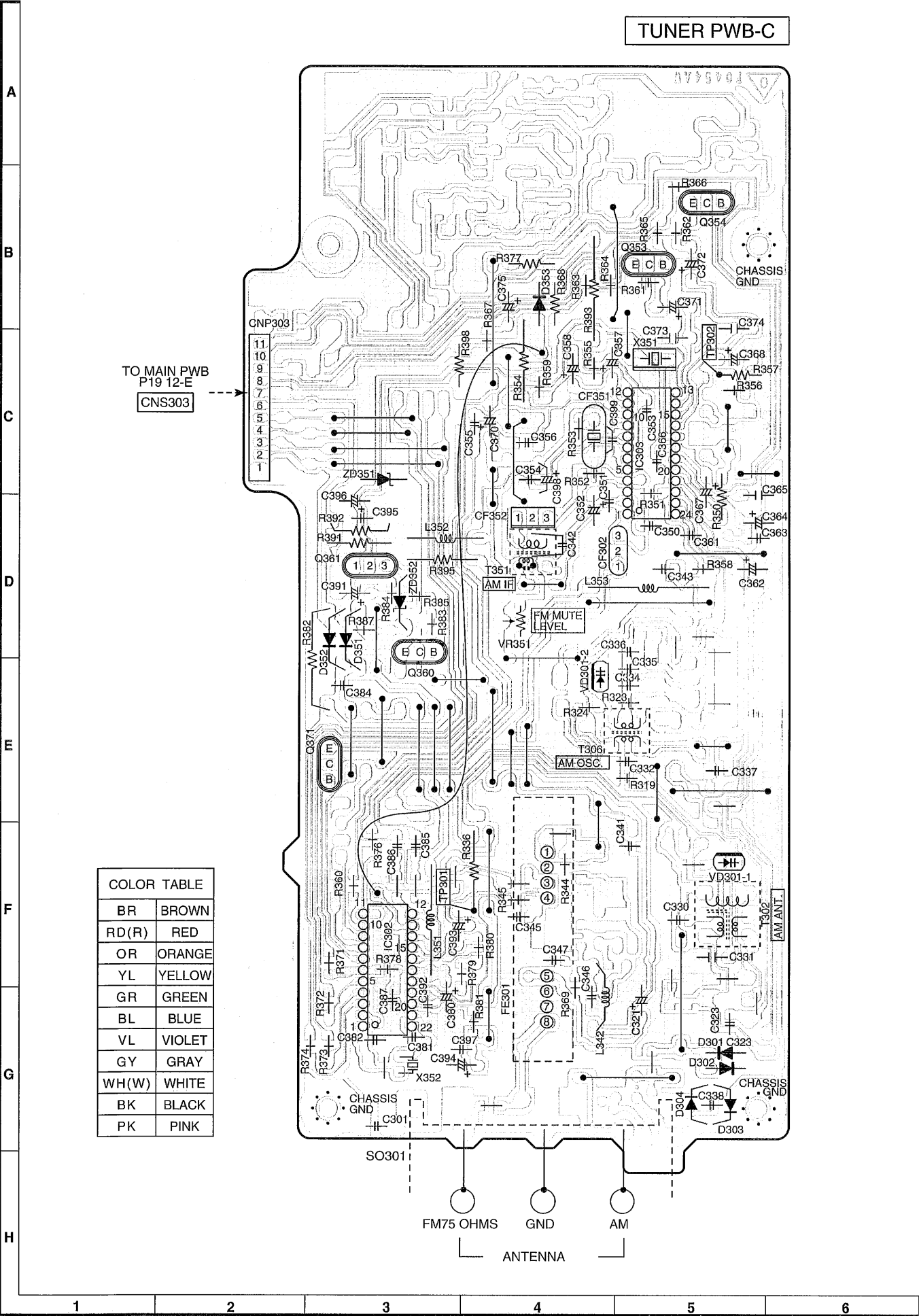


Figure 22 WIRING SIDE OF P.W.BOARD (6/6)

IC1		IC2		IC5		IC501		IC303		IC401		IC701			
PIN NO.	VOLTAGE	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	0V	1	2V(2V)	1	5V	1	-24.7V	41	0.41V
2	2V	2	0V	2	2V	2	0V	2	2V(2V)	2	5V	2	-24.7V	42	0V
3	2.1V	3	0V	3	0V	3	0.6V	3	7.2V(8.2V)	3	5V	3	-24.7V	43	0V
4	2.1V	4	0V	4	2V	4	3V	4	0.5V(0.8V)	4	5V	4	-24.7V	44	4.4V
5	2V	5	1.8V	5	2V	5	0V	5	2V(2V)	5	5V	5	-24.7V	45	0V
6	2V	6	4V	6	2.2V	6	1.3V	6	0V(0V)	6	5V	6	-24.7V	46	4.4V
7	2V	7	0V	7	2.2V	7	0V	7	5.5V(5.5V)	7	5V	7	-24.7V	47	4.4V
8	2V	8	0V	8	0V	8	0.6V	8	0V(0V)	8	5V	8	4.4V	48	0V
9	2V	9	2V	9	0V	9	3V	9	2.6V(2.6V)	9	5V	9	0V	49	2.7V
10	2V	10	2V	10	0V	10	3V	10	2.6V(2.6V)	10	5V	10	4.4V	50	11.7V
11	2V	11	0V	11	0V	11	0V	11	6.3V(8.2V)	11	5V	11	4.4V	51	11.7V
12	2V	12	0V	12	0V	12	0V	12	1.2V(1.2V)	12	5V	12	0.24V	52	4.4V
13	2V	13	0V	13	2.2V	13	6V	13	1.4V(0V)	13	5V	13	0V	53	4.4V
14	2V	14	4V	14	0V	14	3.7V	14	2.2V(2V)	14	5V	14	4.4V	54	4.4V
15	2V	15	0V	15	2V	15	0V	15	1.3V(1.4V)	15	5.1V	15	4.4V	55	0V
16	2V	16	0V	16	0V	16	3V	16	2V(1.9V)	16	4.7V	16	0.12V	56	0V
17	2V	17	4V	17	0V	17	0.6V	17	2V(2V)	17	4.7V	17	0V	57	4.4V
18	2V	18	4V	18	0V	18	0V	18	1.6V(1.6V)	18	0V	18	4.4V	58	0V
19	2V	19	0V	19	0.7V	19	0.8V	19	0.6V(0.7V)	19	4.7V	19	0V	59	0V
20	2V	20	0V	20	5.2V	20	0V	20	7.2V(8.2V)	20	0V	20	0V	60	0V
21	2V	21	2V	21	2V	21	3V	21	7.2V(8.2V)	21	4.7V	21	0V	61	-21.2V
22	0V	22	0V	22	2V	22	0.6V	22	2V(2V)	22	0V	22	3.8V	62	-18V
23	2V	23	4V	23	2V	23	0V	23	2V(2V)	23	0V	23	0V	63	-11.5V
24	2V	24	0V	24	2V	24	0V	24	2V(2V)	24	4.4V	24	0V	64	-27.8V
25	2V	25	0V	25	2.2V	25	0V	25	0V	25	0V	25	4.4V	65	-24.5V
26	2V	26	0V	26	0V	26	0V	26	0V	26	0V	26	4.4V	66	-14.8V
27	2V	27	0V	27	0V	27	0V	27	0V	27	0V	27	4.4V	67	-24.5V
28	2V	28	0V	28	0V	28	0V	28	4.7V	28	4.7V	28	0.6V	68	-21.2V
29	2V	29	0V	29	0V	29	0V	29	0V	29	0V	29	4.4V	69	-27.8V
30	1.8V	30	4V	30	2.2V	30	2.2V	30	4.7V	30	4.7V	30	0V	70	-18V
31	1.8V	31	2V	31	2.2V	31	2.2V	31	0V	31	0V	31	4.4V	71	-28V
32	0V	32	0V	32	2V	32	2V	32	0V	32	4.7V	32	0V	72	-11.5V
33	0V	33	0V	33	2V	33	2V	33	4.7V	33	4.7V	33	2V	73	-24.4V
34	4V	34	0V	34	0V	34	0V	34	5.1V	34	5.1V	34	2V	74	-24.4V
35	4V	35	4V	35	0V	35	0V	35	5.1V	35	5.1V	35	0V	75	14.7V
36	0V	36	3.8V	36	0V	36	0V	36	5.1V	36	5.1V	36	0V	76	-27.8V
37	0V	37	1.7V	37	0V	37	0V	37	5.1V	37	5.1V	37	0V	77	-24.4V
38	4V	38	0V	38	0V	38	0V	38	5.1V	38	5.1V	38	4.4V	78	-27.8V
39	0V	39	0V	39	0V	39	0V	39	5.1V	39	5.1V	39	4.4V	79	-27.8V
40	0V	40	1.7V	40	0V	40	0V	40	5.1V	40	5.1V	40	0V	80	-24.8V
41	0.3V	41	4V	41	0V	41	0V	41	5.1V	41	5.1V	41	0V		
42	2V	42	4V	42	0V	42	0V	42	5.1V	42	5.1V	42	0V		
43	2.1V	43	4V	43	0V	43	0V	43	5.1V	43	5.1V	43	0V		
44	2.1V	44	1.8V	44	0V	44	0V	44	5.1V	44	5.1V	44	0V		
45	0V	45	1.7V	45	0V	45	0V	45	5.1V	45	5.1V	45	0V		
46	2V	46	0V	46	0V	46	0V	46	5.1V	46	5.1V	46	0V		
47	2V	47	0V	47	0V	47	0V	47	5.1V	47	5.1V	47	0V		
48	0V	48	1.8V	48	0V	48	0V	48	5V	48	5V	48	0V		
49	0V	49	0V	49	0V	49	0V	49	5.1V	49	5.1V	49	0V		
50	2V	50	2V	50	0V	50	0V	50	5.1V	50	5.1V	50	0V		
51	4V	51	0V	51	0V	51	0V	51	5.1V	51	5.1V	51	0V		
52	4V	52	2V	52	0V	52	0V	52	5.1V	52	5.1V	52	0V		
53	0V	53	0V	53	0V	53	0V	53	5.1V	53	5.1V	53	0V		
54	4V	54	0V	54	0V	54	0V	54	0V	54	0V	54	0V		
55	4V	55	0V	55	0V	55	0V	55	5.1V	55	5.1V	55	0V		
56	4V	56	4.4V	56	0V	56	0V	56	5.1V	56	5.1V	56	0V		
57	2.1V	57	4.4V	57	0V	57	0V	57	10.2V	57	10.2V	57	0V		
58	2.1V	58	4.4V	58	0V	58	0V	58	5.1V	58	5.1V	58	0V		
59	0V	59	0V	59	0V	59	0V	59	0V	59	0V	59	0V		
60	0V	60	1.6V	60	0V	60	0V	60	5.1V	60	5.1V	60	0V		
61	2V	61	2V	61	0V	61	0V	61	5.1V	61	5.1V	61	0V		
62	3.4V	62	0V	62	0V	62	0V	62	5.1V	62	5.1V	62	0V		
63	0V	63	0V	63	0V	63	0V	63	5.1V	63	5.1V	63	0V		
64	4V	64	0V	64	0V	64	0V	64	5.1V	64	5.1V	64	0V		

IC302	
PIN NO.	VOLTAGE
1	1.2V(1.2V)
2	0V(0V)
3	0V(0V)
4	4.6V(4.6V)
5	0V(0V)
6	4.5V(4.5V)
7	0.4V(11.3V)
8	0V(0V)
9	0V(0V)
10	1.1V(0V)
11	5.5V(5.5V)
12	0V(0V)
13	0.5V(0.1V)
14	0V(0V)
15	0V(2.6V)
16	1.5V(0V)
17	5.6V(5.3V)
18	1.2V(1V)
19	1.2V(1V)
20	3.8V(1.2V)
21	0V(0V)
22	2.8V(2.6V)

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

IC961	
PIN NO.	VOLTAGE
1	24.7V
2	14.19V
3	0V
4	0V
5	14.05V
6	24.8V
7	31.8V
8	1.24V
9	5.3mV
10	26.7V
11	0V
12	2.25V
13	5.2mV
14	1.23V

IC941	
PIN NO.	VOLTAGE
1	17.2V
2	0V
3	12V

IC942	
PIN NO.	VOLTAGE
1	17.2V
2	0V
3	5V

Figure 23 SCHEMATIC DIAGRAM (1/11)

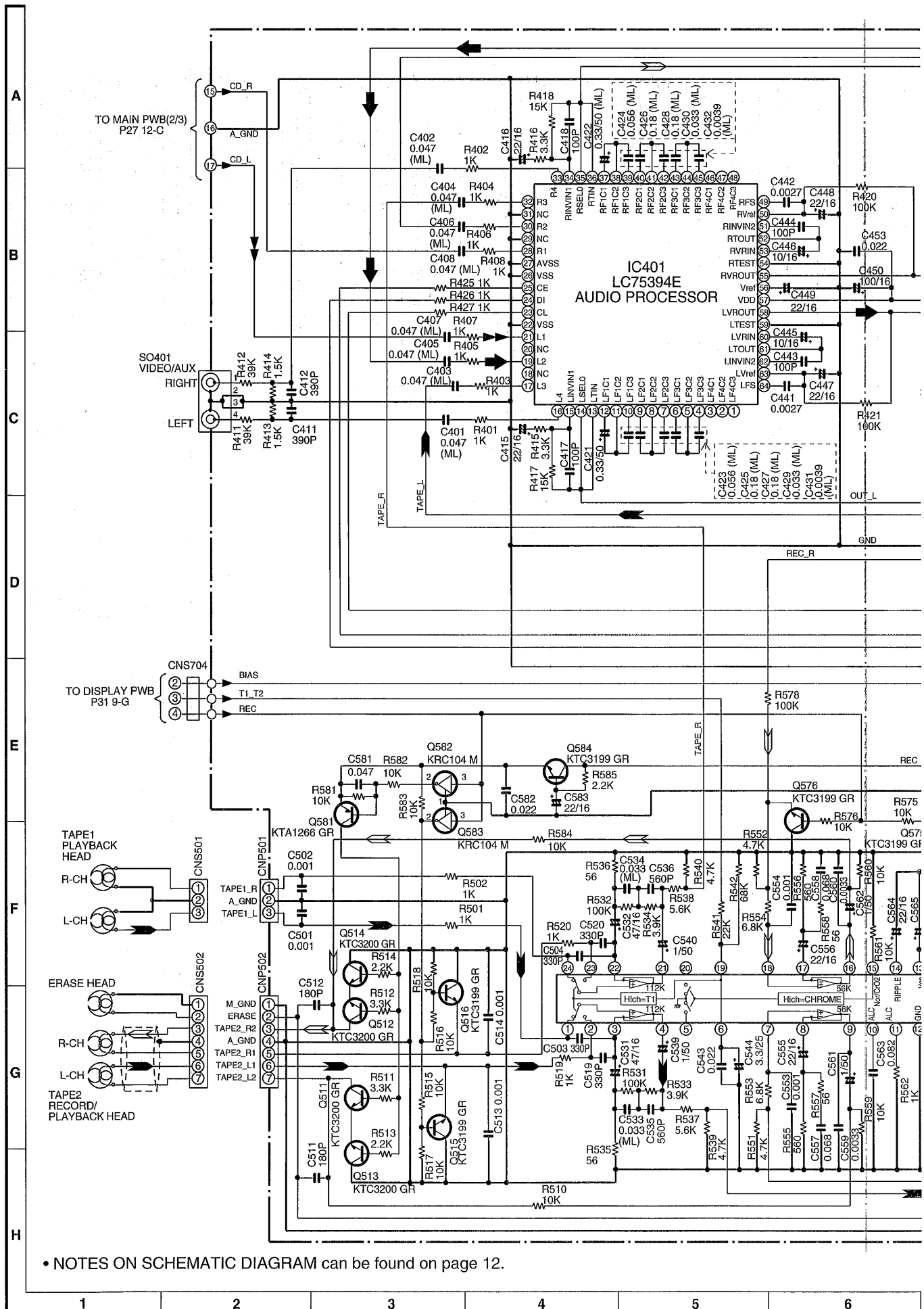


Figure 24 SCHEMATIC DIAGRAM (2/11)

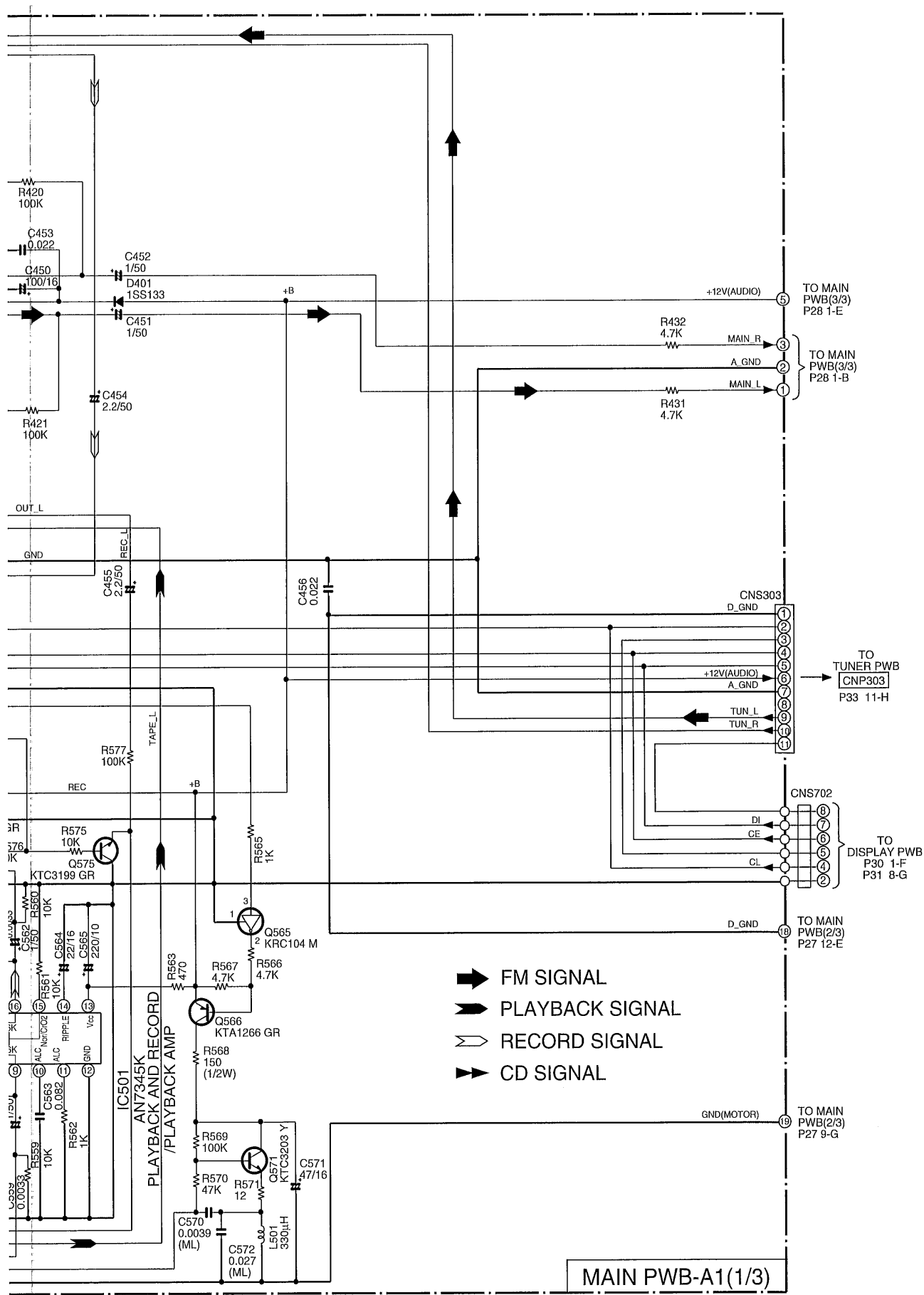
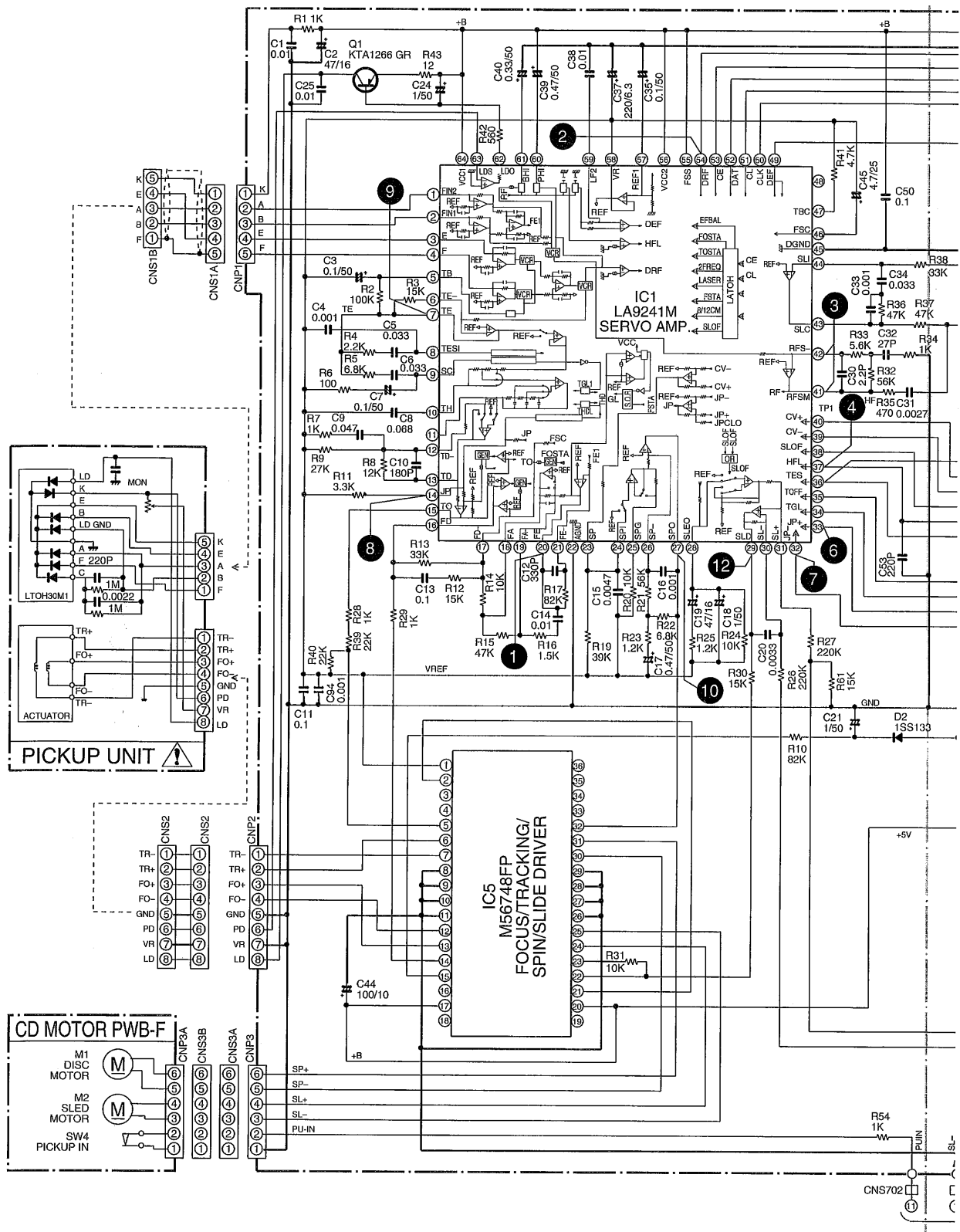


Figure 25 SCHEMATIC DIAGRAM (3/11)



- The numbers ① to ⑫ are waveform numbers shown in page 16.
- NOTES ON SCHEMATIC DIAGRAM can be found on page 12.

Figure 26 SCHEMATIC DIAGRAM (4/11)

- 27 -



- 28 -

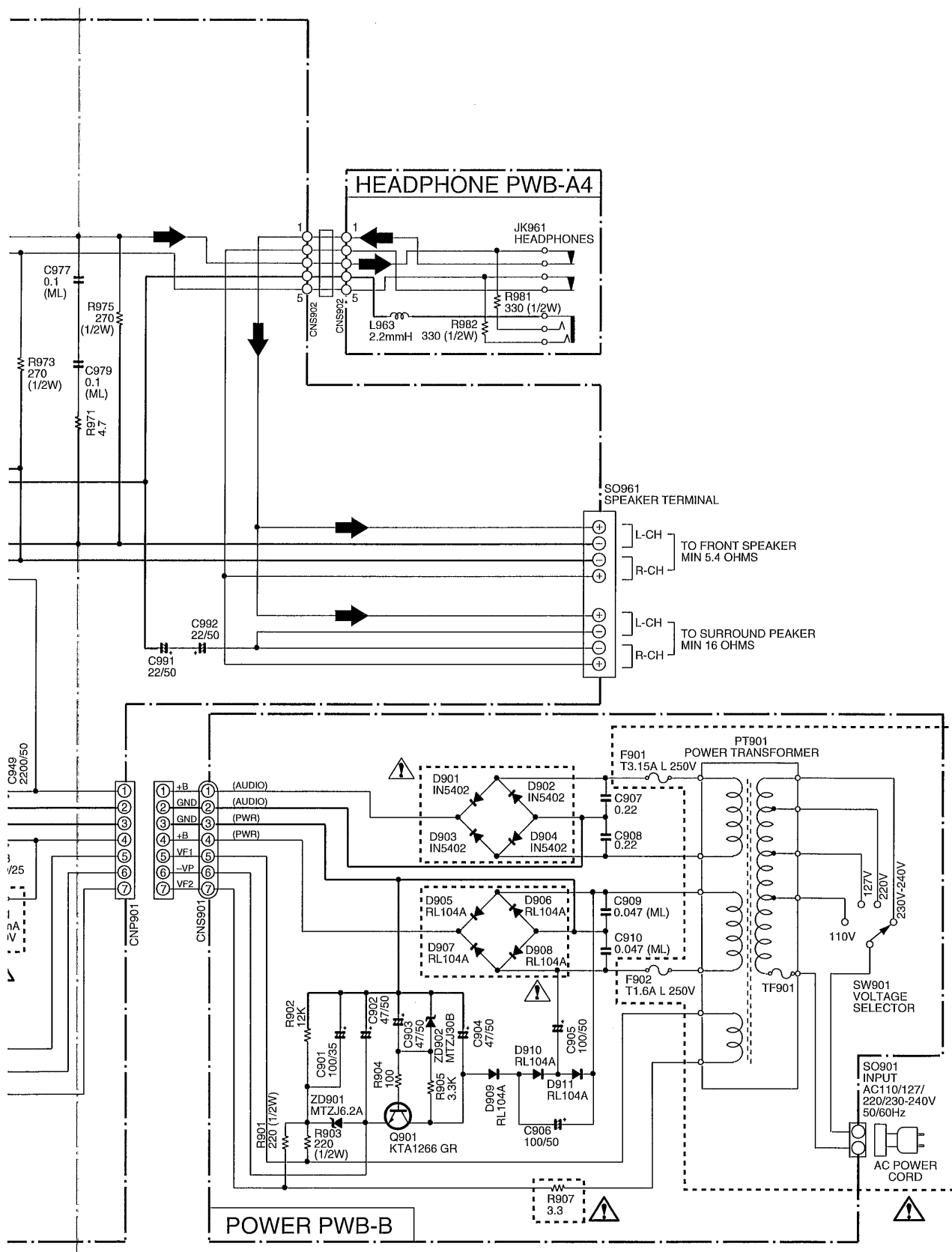


Figure 29 SCHEMATIC DIAGRAM (7/11)

- 30 -

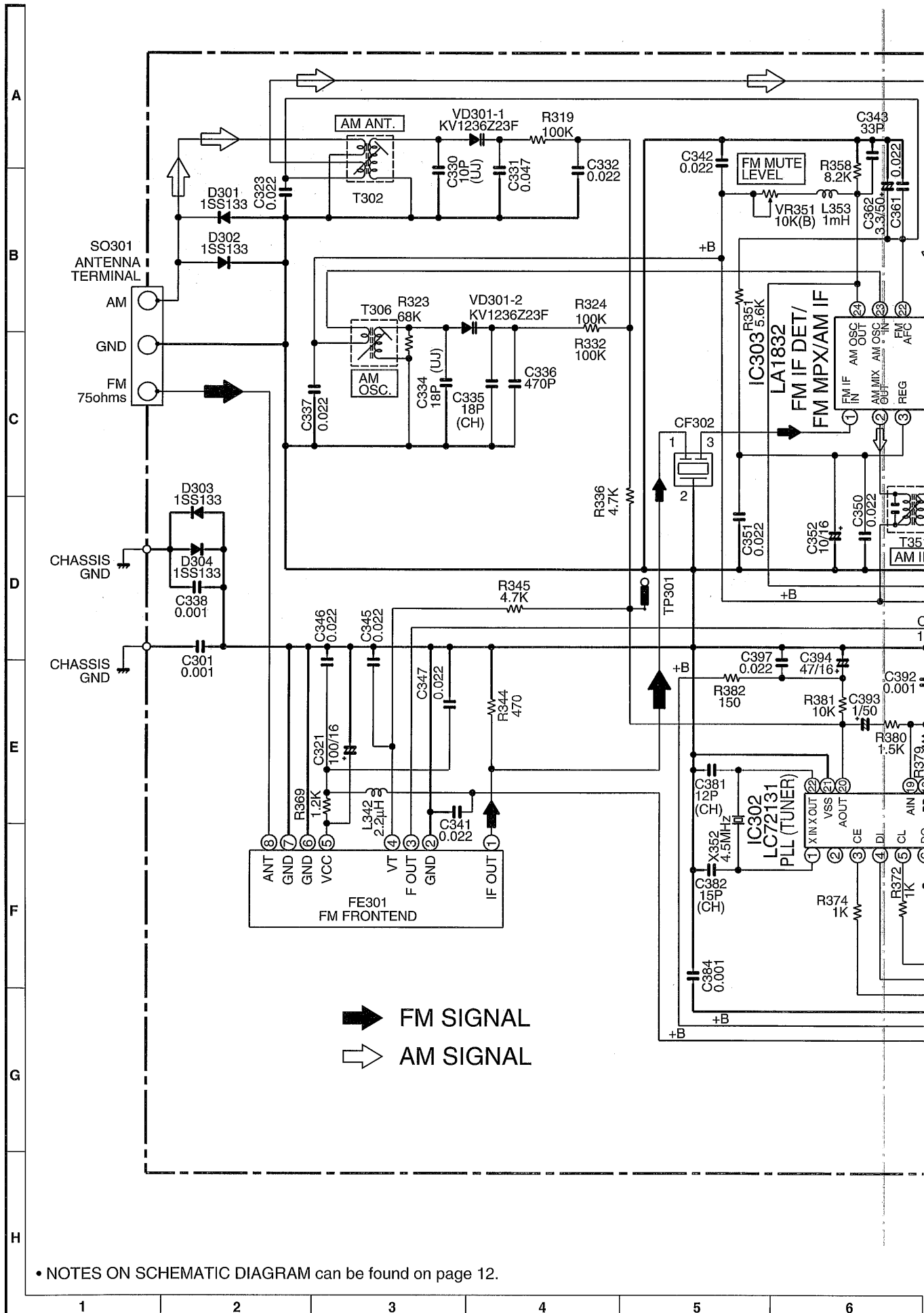


Figure 32 SCHEMATIC DIAGRAM (10/11)

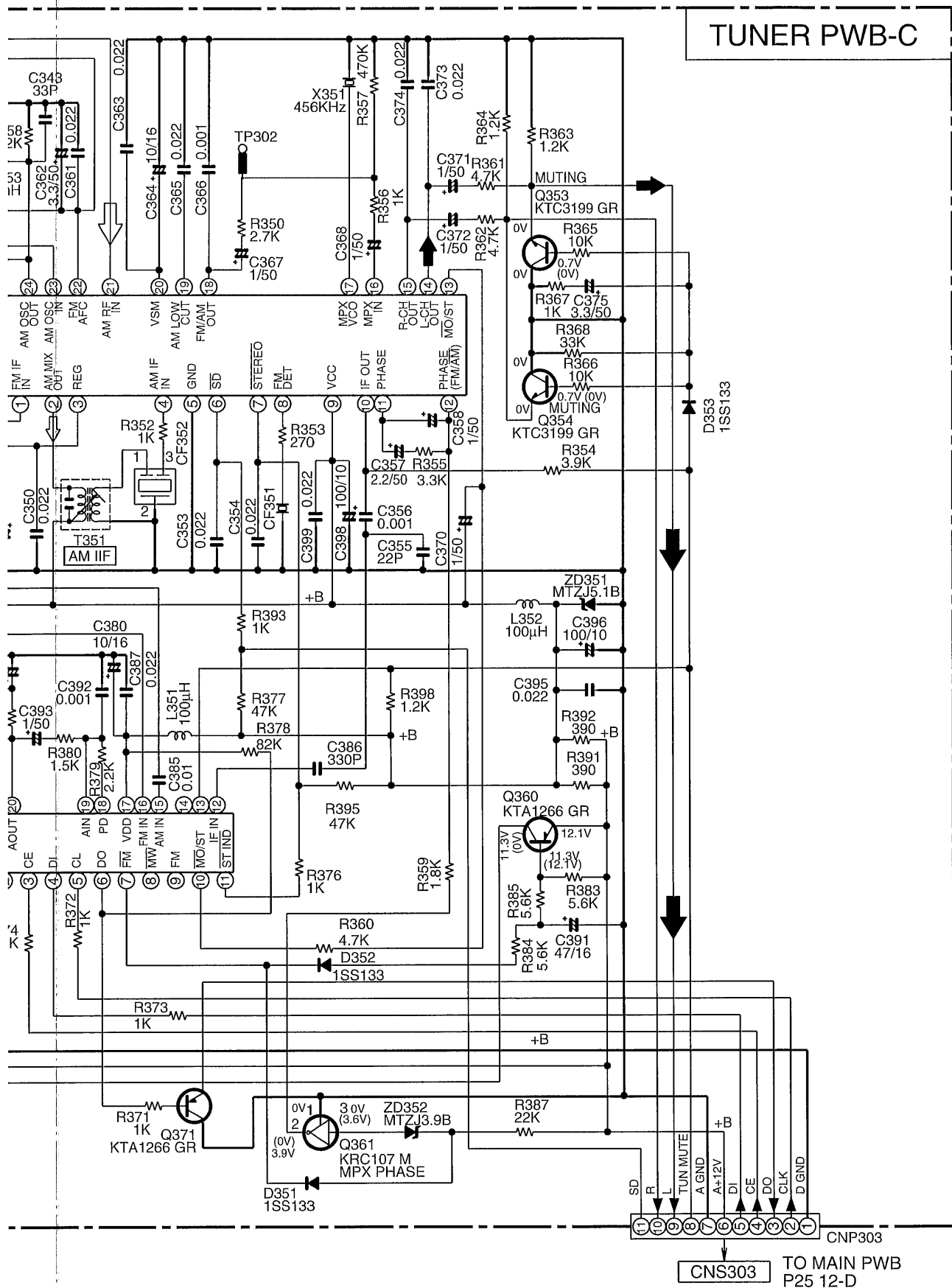


Figure 33 SCHEMATIC DIAGRAM (11/11)

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.

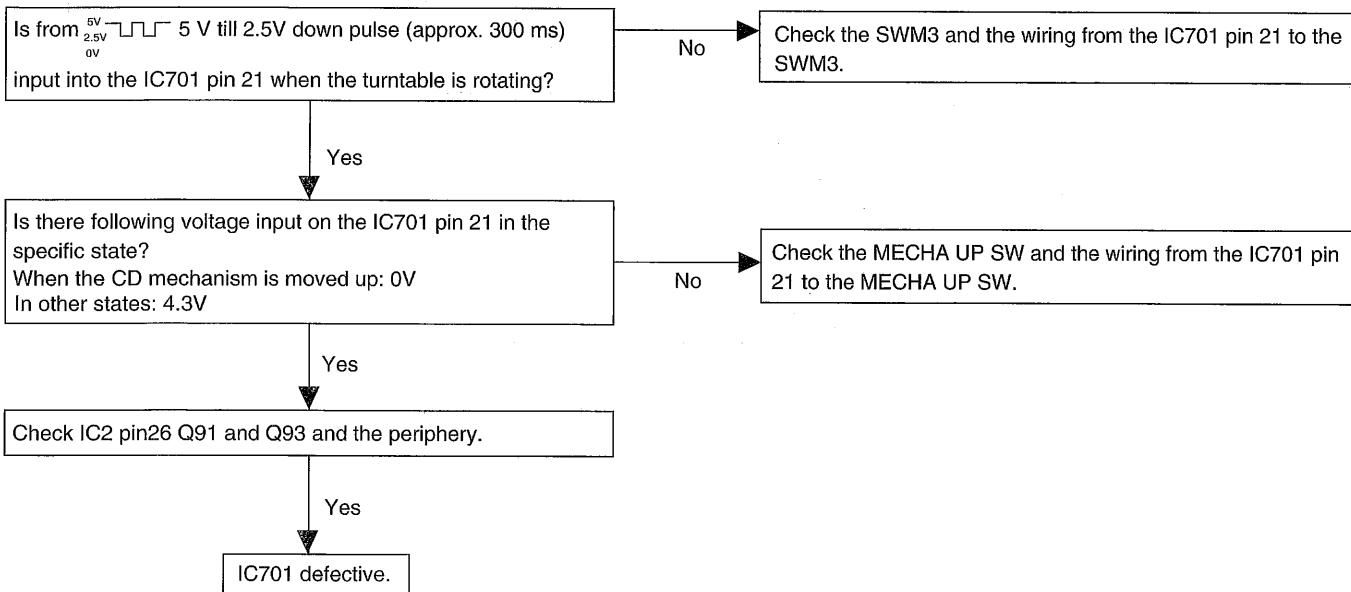
"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust or other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn the power off.

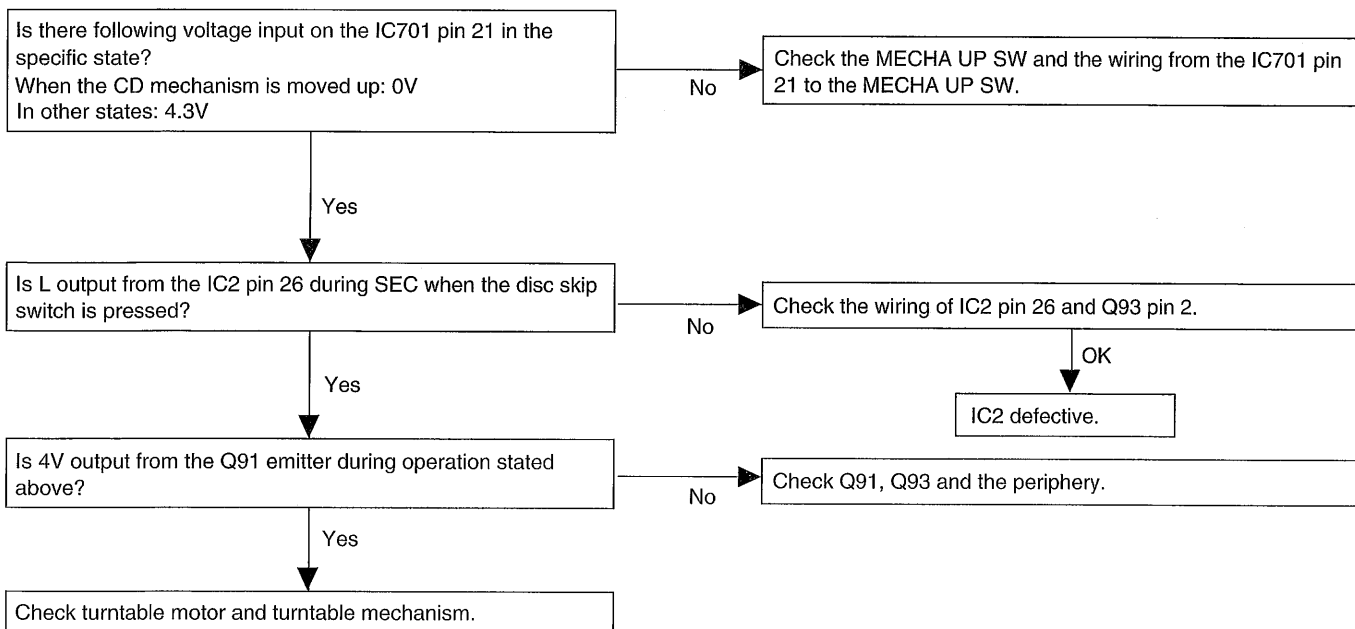
Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.

Do not touch the lens with the bare hand.

• When the turntable fails to stop.



• When turntable fails to move.



• When the CD tray fails to open or close.

Is there following voltage input in specific state of IC701 pin 19?
 Open state: 0V
 Close state: 0V
 Intermediate state between open state and close state: 4.3V

No

Check the OPEN CLOSE SW and the wiring from the IC701 pin 19 to the OPEN CLOSE SW.

Yes

Is H output to IC2 pin 24 or 25 for 7 seconds when the OPEN/CLOSE key is pressed? IC91 is defective. Replace it.

No

Check the wiring of the IC2 pins 24 and 25, IC91 pins 1 and 3.

OK

IC2 defective.

Yes

Is 4V output between IC91 pins 3 and 7 during operation stated above?

No

Check the periphery of IC91.

OK

IC91 defective.

Yes

Check the loading motor (M3) and the loading mechanism.

• The CD function will not work.

The CD operating keys don't work.

Yes

Check the CD, DSP, power supply, and 16.93 MHz clock, and reset terminal.

Yes

Check the waveform of SCK, SO (DATA) and SI (COMM).

Yes

See if the pick-up is in the PICKUP IN SW position.

Yes

If the items mentioned above are OK, check the main microcomputer IC701.

• The CD operating keys work.

Check the Focus - HF system.

Playback can be performed without a disc.

Yes

Does the pick-up move up and down twice?

Yes

Focus search OK

No

Does the output waveform of IC1(16)(FD) match that shown in Fig. 35?

Yes

Check the area around IC5-CNP2.

No

Check the IC1(50)(CLK) line, 4MHz.
 Check the microcomputer data on pins (51)(CL), (52)(DAT) and (53)CE.

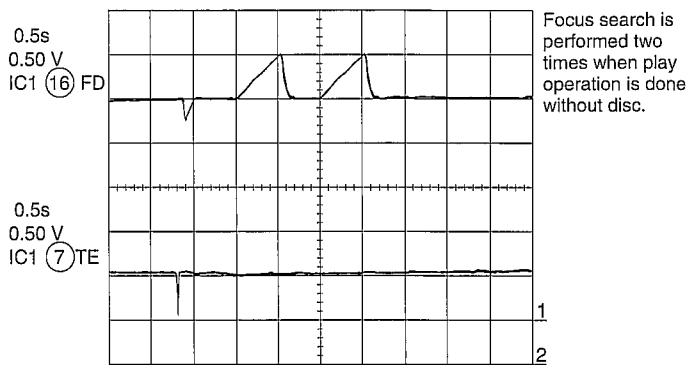


Figure 35

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

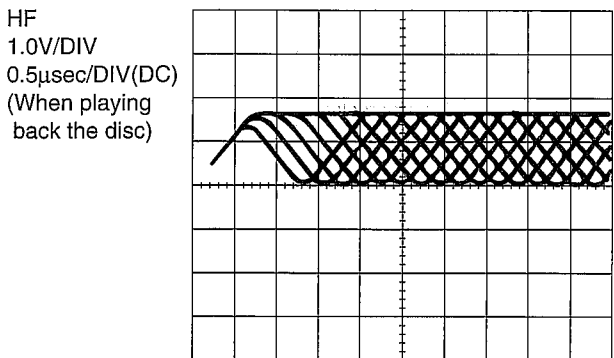
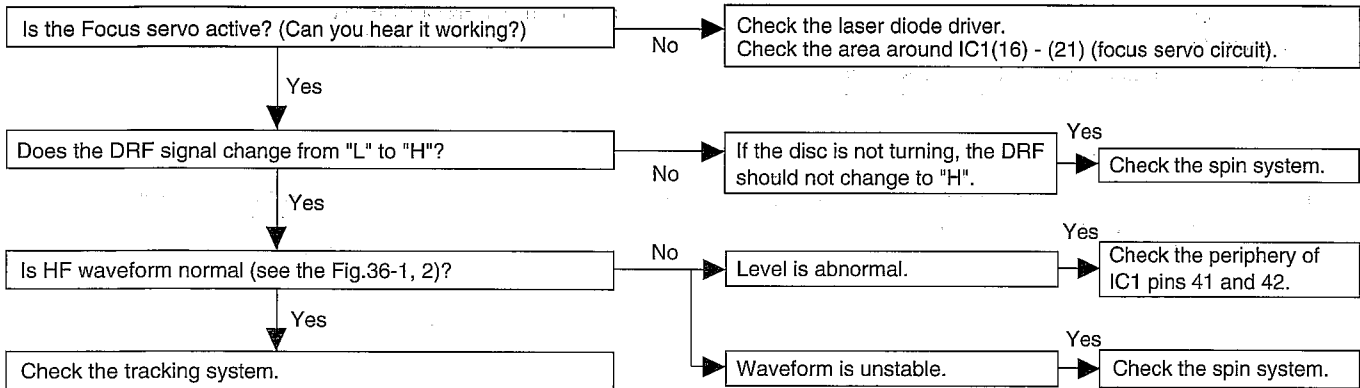


Figure 36-1

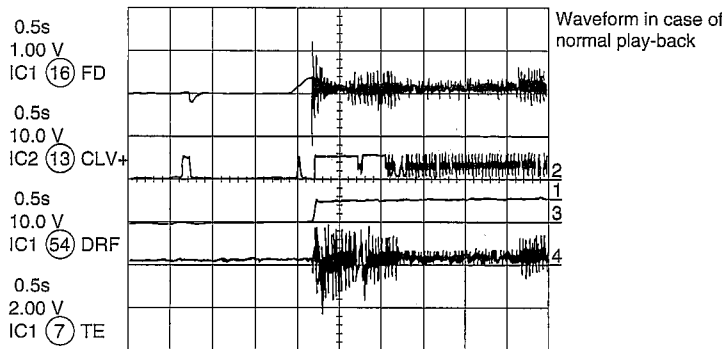


Figure 36-2

• Check the tracking system.

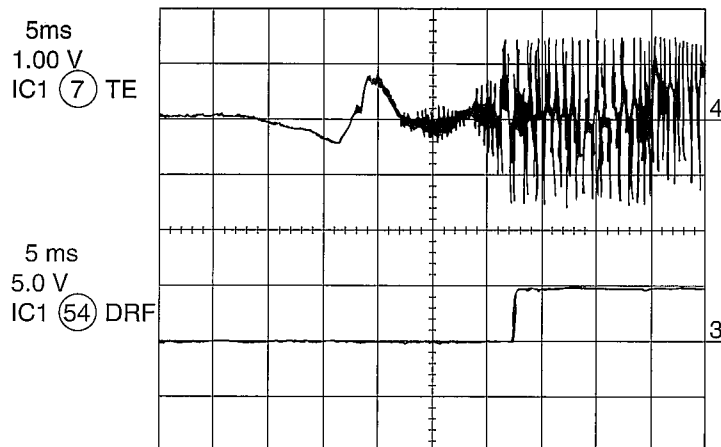
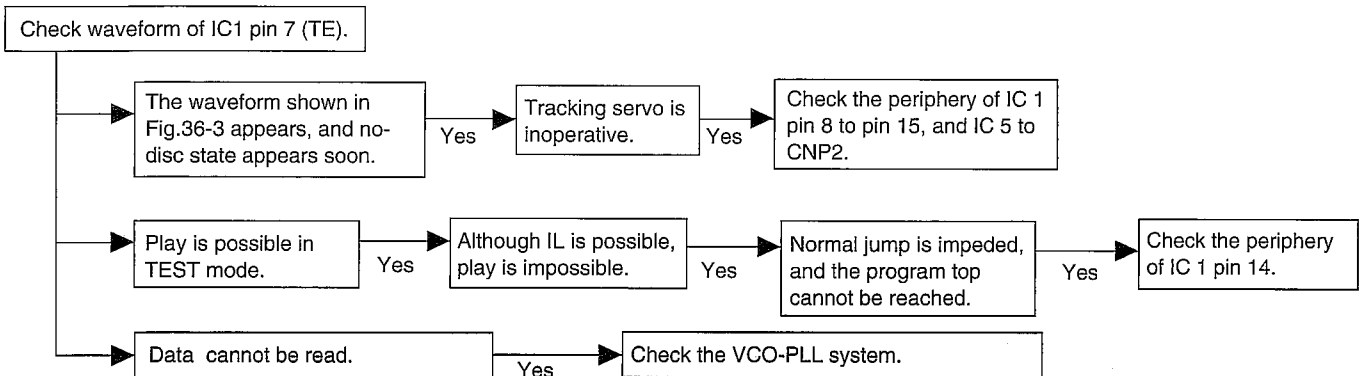


Figure 36-3

• 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. 37).

Abnormal

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

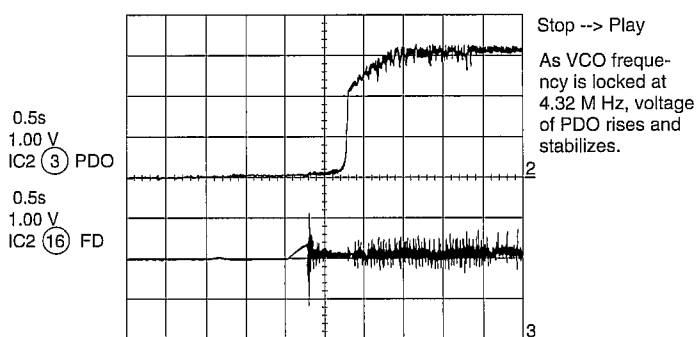


Figure 37

• 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 961.

FUNCTION TABLE OF IC

IC2 VHiLC78622K-1: Servo/Signal Control(LC78622K) (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 OV.
3	PDO	Output		Output terminal of phase comparison for external VCO control.
4	VVSS	—		Ground terminal for integrated VCO. Surely connected to OV.
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 OV.	
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 OV.	
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	HLF	Input	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 OV, 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 OV.	
33	TEST4	Input	Input terminal for test. Pull-down resistor is integrated. Surely connected to OV.	
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 OV.
39	RVSS	—	R channel 1 bit DAC	Ground terminal for R channel Surely connected to OV.
40	RCHO	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 OV.	
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 VHiLC78622K-1:Servo/Signal Control(LC78622K) (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*	TEST11	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 0 when 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.

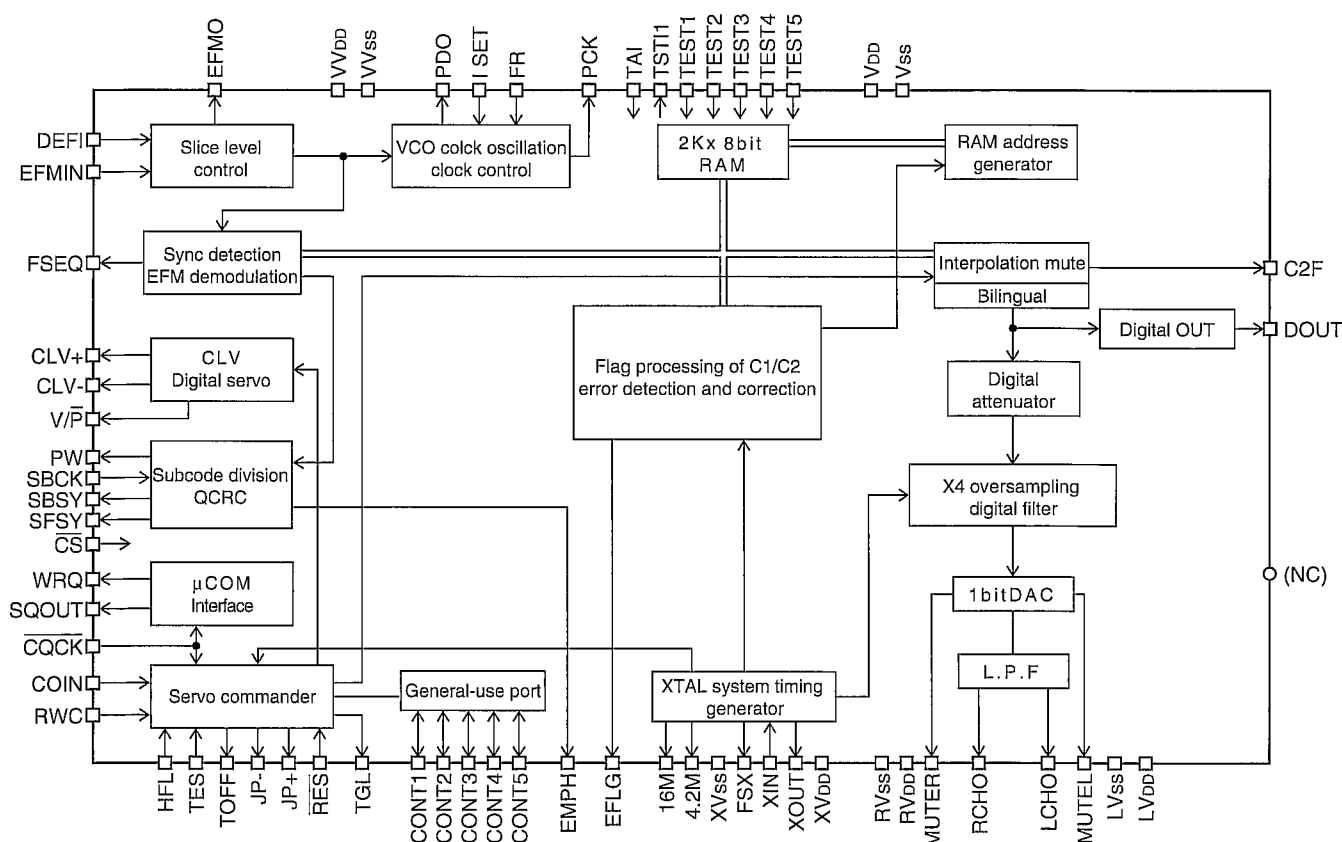


Figure 39 BLOCK DIAGRAM OF IC

CD-C421W**IC1 VHiLA9241M/-1: Servo Amp.(LA9241M) (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 and 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	SPO	Spindle control signal output pin.
28	SLEO	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 VHiLA9241M/-1: Servo Amp.(LA9241M) (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	PHI	Pin to connect capacitor for peak hold of RF signal.
61	BHI	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.

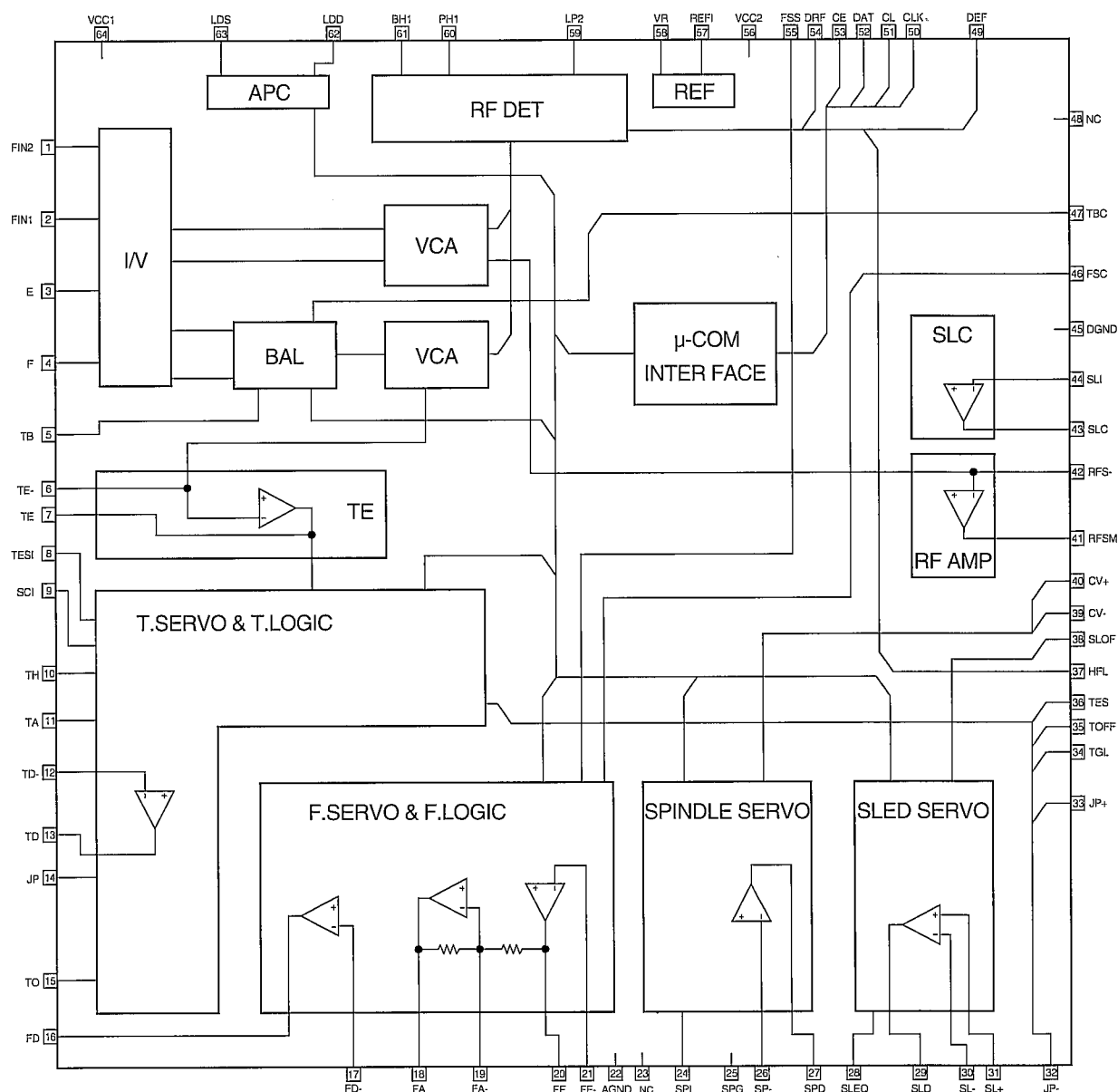


Figure 41 BLOCK DIAGRAM OF IC

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	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 Command
16	SI1	CD DSP SQOUT	Input	CD DSP Code Q out
17	RESET	RESET	Input	Reset Input: L
18	P74	CD DSP RES	Output	CD Display Reset
19	P73	CD T/T OPEN/CLOSE	Input	CD Turntable open close
20	AVSS	AVSS	—	Connect with GND
21	ANI7	CD UP/DOWN CD DISC NO	Input	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	—	—	Not connect
33	VSS	VSS	—	Connect with GND
34	X1	X1	Input	MAIN CLOCK 4.19MHz
35	X2	X2	Output	MAIN CLOCK 4.19MHz
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 command
39	P34	C ² B DO	Input	C ² B Bus data
40	P33	CD DRF	Input	Data read flag 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	VOL.0 MUTE	Output	VOL.0 MUTE
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	LED drive output
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	Not 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.

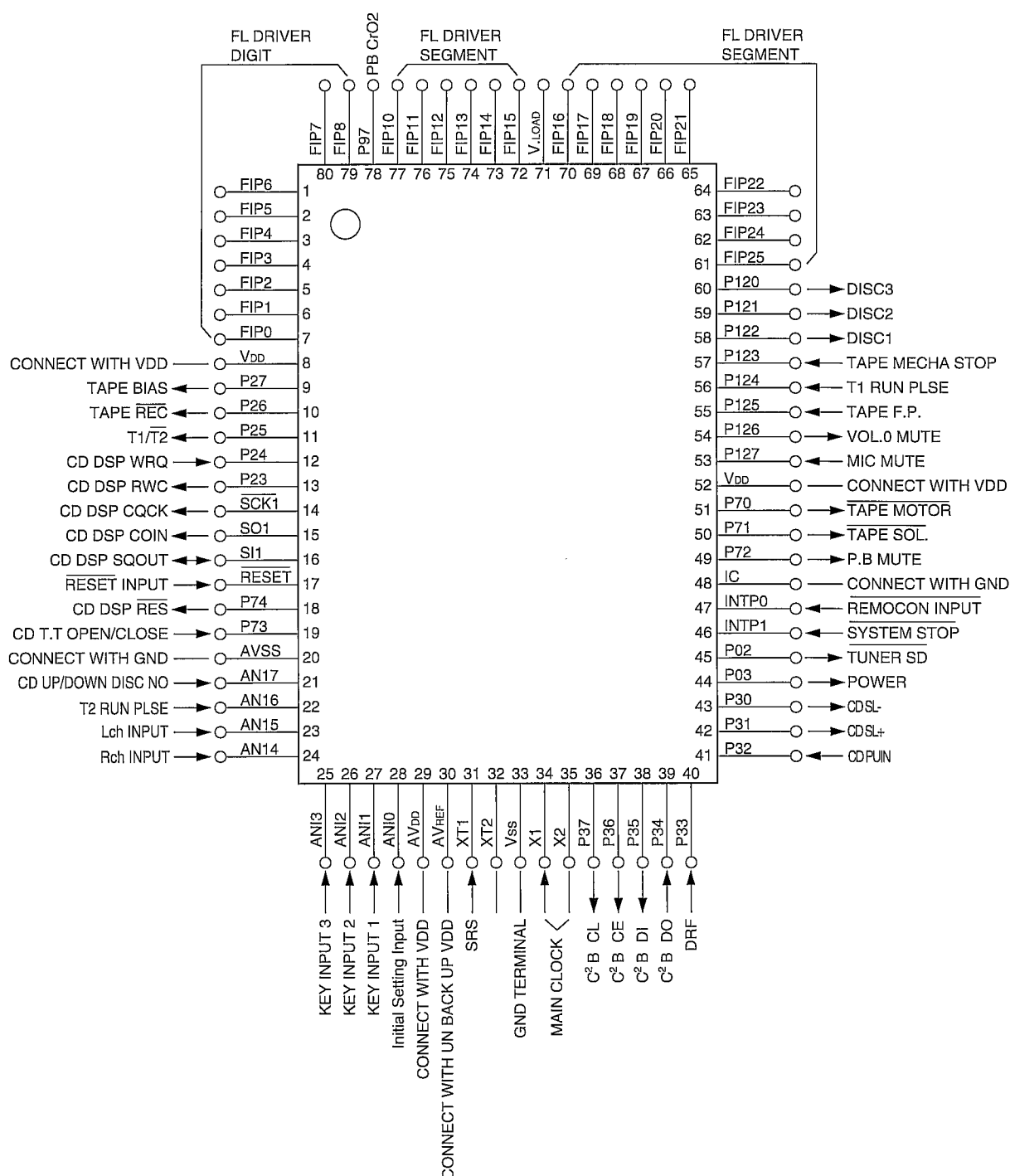


Figure 43 BLOCK DIAGRAM OF IC

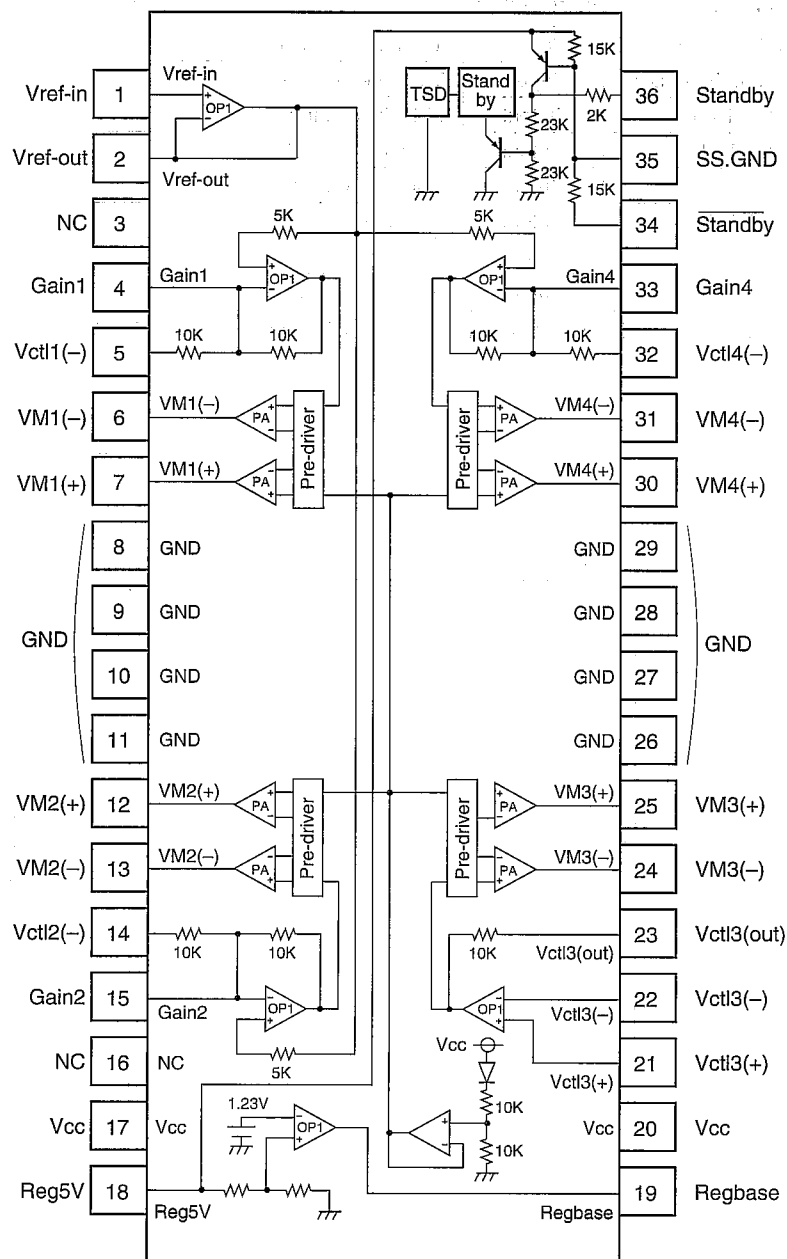


Figure 44-1 BLOCK DIAGRAM OF IC5

FL701 : VVKFiP9EM7R-1 FL Display

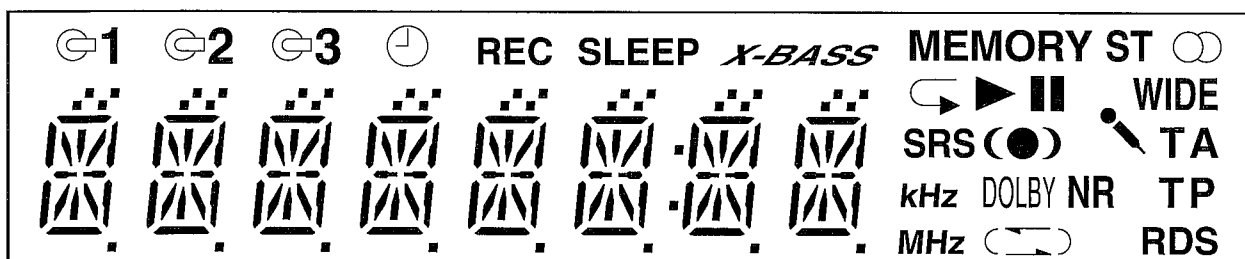


Figure 44-2 FL DISPLAY

SHARP PARTS GUIDE

CD-C421W

CD-C421W mini component system consisting of
CD-C421W mini component system, CP-C421 and
surround (GBOXS00019AWZZ) 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" ±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-C421W

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
INTEGRATED CIRCUITS				
IC1	VHILA9241M/-1	J	AS	Servo Amp.,LA9241M
IC2	VHILC78622K-1	J	AY	Servo/Signal Control,LC78622K
IC5	VHIM56748FP-1	J	AR	Focus/Tracking/Spin/Slide Driver,M56748FP
IC91	VHITA7291S/-1	J	AH	Loading Motor Driver,TA7291S
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
IC501	VHIAN7345K/-1	J	AM	Playback and Record/Playback Amp.,AN7345K
IC701	RH-IX0191AWZZ	J	AZ	System Microcomputer, IX0191AW
IC941	VHIIA7812P-1	J	AE	Voltage Regulator,KIA7812P
IC942	VHIIA7805P-1	J	AF	Voltage Regulator,KIA7805P
IC961	VHILA4450/-1	J	AH	Power Amp.,LA4450

TRANSISTORS

Q1	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q91	VSKTA1271Y/-1	J	AC	Silicon,PNP,KTA1271 Y
Q93	VSKRC102M/-1	J	AC	Digital,NPN,KRC102 M
Q353,354	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q360	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q361	VSKRC107M/-1	J	AC	Digital,NPN,KRC107 M
Q371	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q511~514	VSKTC3200GR-1	J	AC	Silicon,NPN,KTC3200 GR
Q515,516	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q565	VSKRC104M/-1	J	AC	Digital,NPN,KRC104 M
Q566	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q571	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q575,576	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q581	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q582,583	VSKRC104M/-1	J	AC	Digital,NPN,KRC104 M
Q584	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q701	VSKRC107M/-1	J	AC	Digital,NPN,KRC107 M
Q702	VSKRC102M/-1	J	AC	Digital,NPN,KRC102 M
Q703	VSKTA1273Y/-1	J	AE	Silicon,PNP,KTA1273 Y
Q704,705	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q706	VSKTA1271Y/-1	J	AC	Silicon,PNP,KTA1271 Y
Q810~812	VSKRC102M/-1	J	AC	Digital,NPN,KRC102 M
Q901	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q941	VS2SD2012Y/-1	J	AF	Silicon,NPN,2SD2012 Y

DIODES

D2	VHD1SS133/-1	J	AA	Silicon,1SS133
D81	VHD1SS133/-1	J	AA	Silicon,1SS133
D91	VHD1SS133/-1	J	AA	Silicon,1SS133
D301~304	VHD1SS133/-1	J	AA	Silicon,1SS133
D351~353	VHD1SS133/-1	J	AA	Silicon,1SS133
D401	VHD1SS133/-1	J	AA	Silicon,1SS133
D701~708	VHD1SS133/-1	J	AA	Silicon,1SS133
△ D901~904	VHD1N5402M/-1	J	AE	Silicon,1N5402M
△ D905~908	VHDL104A/-1	J	AB	Silicon,RL104A
D909~911	VHDL104A/-1	J	AB	Silicon,RL104A
LED810~815	VHP333GTH2/-1	J	AD	LED,Green,333GTH2
VD301-1,2	VHCKV1236Z23F	J	AS	Variable Capacitance, KV1236Z23F
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
ZD901	VHEMTZJ6R2A-1	J	AA	Zener,6.2V,MTZJ6.2A
ZD902	VHEMTZJ300B-1	J	AB	Zener,30V,MTZJ30B

FILTERS

CF302	RFILF0124AFZZ	J	AD	FM IF
CF351	RFILF0003AWZZ	J	AK	FM IF
CF352	RFILA0009AWZZ	J	AE	AM IF

TRANSFORMERS

△ PT901	RTRNP0219AWZZ	J	BD	Power
T302	RCILA1064AFZZ	J	AD	AM Antenna
T306	RCILB1074AFZZ	J	AC	OSC,AM
T351	RCIL10011AWZZ	J	AD	AM IF

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
COILS				
L1	VP-CH270K0000	J	AB	2.7 μH,Choke
L342	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
L501	VP-MK331K0000	J	AB	330 μH
L701	VP-DH2R2K0000	J	AB	2.2 mmH,Peaking
L963	VP-DH2R2K0000	J	AB	2.2 mmH,Peaking

VARIABLE RESISTOR

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

VIBRATORS

X351	92LCRSTL1425A	J	AF	Crystal,456 kHz
X352	RCRSP0002AWZZ	J	AH	Crystal,4.5 MHz
XL1	92LCRSTL1746AT	J	AH	Crystal,16.93 MHz
XL701	RCRSP0003AWZZ	J	AH	Crystal,4.19 MHz

CAPACITORS

C1	VCTYMN1CY103N	J	AA	0.01 μF,16V
C2	VCEAZA1CW476M	J	AB	47 μF,16V,Electrolytic
C3	VCEAZA1HW104M	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	VCEAZA1HW104M	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	VCEAZA1HW474M	J	AB	0.47 μF,50V,Electrolytic
C18	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C19	VCEAZA1CW476M	J	AB	47 μF,16V,Electrolytic
C20	VCTYMN1CX332K	J	AA	0.0033 μF,16V
C21	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C22	VCTYMN1CY103N	J	AA	0.01 μF,16V
C24	VCEAZA1HW105M	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	VCEAZA1HW104M	J	AB	0.1 μF,50V,Electrolytic
C37	VCEAZA0JW227M	J	AC	220 μF,6.3V,Electrolytic
C38	VCTYMN1CY103K	J	AA	0.01 μF,16V
C39	VCEAZA1HW474M	J	AB	0.47 μF,50V,Electrolytic
C40	VCEAZA1HW334M	J	AB	0.33 μF,50V,Electrolytic
C41,42	VCTYPA1CX473K	J	AA	0.047 μF,16V
C43,44	VCEAZA1AW107M	J	AB	100 μF,10V,Electrolytic
C45	VCEAZA1EW475M	J	AC	4.7 μF,25V,Electrolytic
C50	VCTYPA1CX104K	J	AB	0.1 μF,16V
C51	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C52	VCEAZA1CW476M	J	AB	47 μF,16V,Electrolytic
C53	VCKYMN1HB221K	J	AA	220 pF,50V
C54~57	VCKYMN1HB101K	J	AA	100 pF,50V
C59	VCKZPA1HF223Z	J	AA	0.022 μF,50V
C67,68	VCEAZA1CW106M	J	AC	10 μF,16V,Electrolytic
C69,70	VCKYMN1HB221K	J	AA	220 pF,50V
C91	VCEAZA1CW476M	J	AB	47 μF,16V,Electrolytic
C92	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C94,95	VCKYMN1HB102K	J	AA	0.001 μF,50V
C301	VCKYMN1HB102K	J	AA	0.001 μF,50V
C321	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
C323	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C330	VCCUMN1HJ100J	J	AA	10 pF (UJ),50V
C331	VCKYPA1HF473Z	J	AB	0.047 μF,50V
C332	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C334	VCCUMN1HJ180J	J	AA	18 pF (UJ),50V
C335	VCCCMN1HH180J	J	AA	18 pF (CH),50V
C336	VCKYMN1HB471K	J	AA	470 pF,50V
C337	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C338	VCKYMN1HB102K	J	AA	0.001 μF,50V

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
C341,342	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C343	VCCSMN1HL330J	J	AA	33 pF,50V
C345~347	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C350,351	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C352	VCEAZA1CW106M	J	AC	10 μ F,16V,Electrolytic
C353,354	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C355	VCCSMN1HL220J	J	AA	22 pF,50V
C356	VCKYMN1HB102K	J	AA	0.001 μ F,50V
C357	VCEAZA1HW225M	J	AB	2.2 μ F,50V,Electrolytic
C358	VCEAZA1HW105M	J	AB	1 μ F,50V,Electrolytic
C361	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C362	VCEAZA1HW335M	J	AB	3.3 μ F,50V,Electrolytic
C363	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C364	VCEAZA1CW106M	J	AC	10 μ F,16V,Electrolytic
C365	VCTYPA1CX223K	J	AA	0.022 μ F,16V
C366	VCKYMN1HB102K	J	AA	0.001 μ F,50V
C367,368	VCEAZA1HW105M	J	AB	1 μ F,50V,Electrolytic
C370~372	VCEAZA1HW105M	J	AB	1 μ F,50V,Electrolytic
C373,374	VCTYPA1CX223K	J	AA	0.022 μ F,25V
C375	VCEAZA1HW335M	J	AB	3.3 μ F,50V,Electrolytic
C380	VCEAZA1CW106M	J	AC	10 μ F,16V,Electrolytic
C381	VCCCMN1HH120J	J	AA	12 pF (CH),50V
C382	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C384	VCKYMN1HB102K	J	AA	0.001 μ F,50V
C385	VCTYMN1CY103K	J	AA	0.01 μ F,16V
C386	VCKYMN1HB331K	J	AA	330 pF,50V
C387	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C391	VCEAZA1CW476M	J	AB	47 μ F,16V,Electrolytic
C392	VCKYMN1HB102K	J	AA	0.001 μ F,50V
C393	VCEAZA1HW105M	J	AB	1 μ F,50V,Electrolytic
C394	VCEAZA1CW476M	J	AB	47 μ F,16V,Electrolytic
C395	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C396	VCEAZA1AW107M	J	AB	100 μ F,10V,Electrolytic
C397	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C398	VCEAZA1AW107M	J	AB	100 μ F,10V,Electrolytic
C399	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C401~408	VQYKA1HM473K	J	AB	0.047 μ F,50V,Mylar
C411,412	VCKYMN1HB391K	J	AA	390 pF,50V
C415,416	VCEAZA1CW226M	J	AC	22 μ F,16V,Electrolytic
C417,418	VCKYMN1HB101K	J	AA	100 pF,50V
C421,422	VCEAZA1HW334M	J	AB	0.33 μ F,50V,Electrolytic
C423,424	VQYKA1HM563K	J	AB	0.056 μ F,50V,Mylar
C425~428	VCFYHA1HA184J	J	AC	0.18 μ F,50V,Thin Film
C429,430	VCTYPA1CX333K	J	AA	0.033 μ F,16V
C431,432	VQYKA1HM392K	J	AA	0.0039 μ F,50V,Mylar
C441,442	VCTYMN1CX272K	J	AA	0.0027 μ F,16V
C443,444	VCKYMN1HB101K	J	AA	100 pF,50V
C445,446	VCEAZA1CW106M	J	AC	10 μ F,16V,Electrolytic
C447~449	VCEAZA1CW226M	J	AC	22 μ F,16V,Electrolytic
C450	VCEAZA1CW107M	J	AC	100 μ F,16V,Electrolytic
C451,452	VCEAZA1HW105M	J	AB	1 μ F,50V,Electrolytic
C453	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C454,455	VCEAZA1HW225M	J	AB	2.2 μ F,50V,Electrolytic
C456	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C501,502	VCKYMN1HB102K	J	AA	0.001 μ F,50V
C503,504	VCKYMN1HB331K	J	AA	330 pF,50V
C511,512	VCKYMN1HB181K	J	AA	180 pF,50V
C513,514	VCKYMN1HB102K	J	AA	0.001 μ F,50V
C519,520	VCKYMN1HB331K	J	AA	330 pF,50V
C531,532	VCEAZA1CW476M	J	AB	47 μ F,16V,Electrolytic
C533,534	VCTYPA1CX333K	J	AA	0.033 μ F,16V
C535,536	VCKYMN1HB561K	J	AA	560 pF,50V
C539,540	VCEAZA1HW105M	J	AB	1 μ F,50V,Electrolytic
C543	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C544	VCEAZA1HW335M	J	AB	3.3 μ F,25V,Electrolytic
C553,554	VCKYMN1HB102K	J	AA	0.001 μ F,50V
C555,556	VCEAZA1CW226M	J	AC	22 μ F,16V,Electrolytic
C557,558	VCTYPA1CX683K	J	AA	0.068 μ F,16V
C559,560	VCTYMN1CX332K	J	AA	0.0033 μ F,16V
C561,562	VCEAZA1HW105M	J	AB	1 μ F,50V,Electrolytic
C563	VCTYPA1CX823K	J	AB	0.082 μ F,16V
C564	VCEAZA1CW226M	J	AC	22 μ F,16V,Electrolytic
C565	VCEAZA1HW227M	J	AC	220 μ F,10V,Electrolytic
C570	VQYKA1HM392K	J	AA	0.0039 μ F,50V,Mylar
C571	VCEAZA1CW476M	J	AB	47 μ F,16V,Electrolytic
C572	VQYKA1HM273K	J	AB	0.027 μ F,50V,Mylar
C581	VCKZPA1HF473Z	J	AA	0.047 μ F,50V
C582	VCKZPA1HF223Z	J	AA	0.022 μ F,50V
C583	VCEAZA1CW226M	J	AC	22 μ F,16V,Electrolytic
C701	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C702	VCEAZA0JW227M	J	AC	220 μ F,6.3V,Electrolytic
C707	VCCCMN1HH150J	J	AA	15 pF (CH),50V

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C708	VCCCMN1HH180J	J	AA	18 pF (CH),50V
C709,710	VCEAZA1HW105M	J	AB	1 μ F,50V,Electrolytic
C711	VCEAZA1EW335M	J	AB	3.3 μ F,25V,Electrolytic
C712	VCKYMN1HB102K	J	AA	0.001 μ F,50V
C713	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C714,715	VCTYMN1CY103N	J	AA	0.01 μ F,16V
C716	VCEAZA1CW476M	J	AB	47 μ F,16V,Electrolytic
C717	VCTYMN1EF223Z	J	AA	0.022 μ F,25V
C718	VCEAZA0JW227M	J	AC	220 μ F,6.3V,Electrolytic
C719	VCEAZA0JW107M	J	AC	100 μ F,6.3V,Electrolytic
C720	VCKYMN1HB102K	J	AA	0.001 μ F,50V
C901	VCEAZA1VW107M	J	AC	100 μ F,35V,Electrolytic
C902~904	VCEAZA1HW476M	J	AB	47 μ F,50V,Electrolytic
C905,906	VCEAZA1HW107M	J	AC	100 μ F,50V,Electrolytic
C907,908	VCFYHA1HA224J	J	AC	0.22 μ F,50V
C909,910	VQYKA1HM473K	J	AB	0.047 μ F,50V,Mylar
C941	VCKZPA1HF223Z	J	AA	0.022 μ F,50V
C942,943	VCEAZA1CW476M	J	AB	47 μ F,16V,Electrolytic
C944	VQYKA1HM104K	J	AB	0.1 μ F,50V,Mylar
C945	VQYKA1HM223K	J	AB	0.022 μ F,50V,Mylar
C946,947	VQYKA1HM104K	J	AB	0.1 μ F,50V,Mylar
C948	VCEAZW1EW338M	J	AG	3300 μ F,25V,Electrolytic
C949	VCEAZW1HW228M	J	AH	2200 μ F,50V,Electrolytic
C961,962	VCTYMN1CX152K	J	AA	0.0015 μ F,16V
C963,964	VCEAZA1HW105M	J	AB	1 μ F,50V,Electrolytic
C965~967	VCEAZA1HW107M	J	AC	100 μ F,50V,Electrolytic
C968	VCKYBT1HB102K	J	AA	0.001 μ F,50V
C969,970	VCEAZA1HW476M	J	AB	47 μ F,50V,Electrolytic
C973	VCEAZA1HW107M	J	AC	100 μ F,50V,Electrolytic
C974	VCKZPA1HF223Z	J	AA	0.022 μ F,50V
C975,976	VCEAZV1EW108M	J	AE	1000 μ F,25V,Electrolytic
C977~980	VQYKA1HM104K	J	AB	0.1 μ F,50V,Mylar
C991,992	VCEAZA1HW226M	J	AB	22 μ F,50V,Electrolytic

RESISTORS

	VRD-MN2BD000C	J	AA	0 ohm,Jumper, ϕ 1.4x3.5mm,Ivory
R1	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R2	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R3	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R4	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R5	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R6	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R7	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R8	VRD-MN2BD123J	J	AA	12 kohms,1/8W
R9	VRD-MN2BD273J	J	AA	27 kohms,1/8W
R10	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R11	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R12	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R13	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R14	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R15	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R16	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R17	VRD-MN2BD823J	J	AA	82 kohms,1/8W
R18	VRD-ST2CD335J	J	AA	3.3 Mohms,1/6W
R19	VRD-MN2BD393J	J	AA	39 kohms,1/8W
R20	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R21	VRD-MN2BD563J	J	AA	56 kohms,1/8W
R22	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R23	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R24	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R25	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R26	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R27	VRD-MN2BD224J	J	AA	220 kohms,1/8W
R28,29	VRD-ST2CD102J	J	AA	1 kohms,1/6W
R30	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R31	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R32	VRD-MN2BD563J	J	AA	56 kohms,1/8W
R33	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R34	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R35	VRD-MN2BD471J	J	AA	470 ohms,1/8W
R36,37	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R38	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R39,40	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R41	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R42	VRD-MN2BD561J	J	AA	560 ohms,1/8W
R43	VRD-MN2BD120J	J	AA	12 ohms,1/8W
R44~47	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R54	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R56	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R57	VRD-MN2BD273J	J	AA	27 kohms,1/8W
R58	VRD-MN2BD681J	J	AA	680 ohms,1/8W

CD-C421W

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
R60	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R61	VRD-MN2BD153J	J	AA	15 kohms, 1/8W
R70~72	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R73,74	VRD-MN2BD272J	J	AA	2.7 kohms, 1/8W
R75,76	VRD-MN2BD271J	J	AA	270 ohms, 1/8W
R77~79	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R82	VRD-MN2BD101J	J	AA	100 ohm, 1/8W
R86~88	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R95	VRD-MN2BD222J	J	AA	2.2 kohms, 1/8W
R96	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R97	VRD-MN2BD222J	J	AA	2.2 kohms, 1/8W
R98	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R99	VRD-ST2EE560J	J	AA	56 ohms, 1/4W
R319	VRD-MN2BD104J	J	AA	100 kohm, 1/8W
R323	VRD-MN2BD683J	J	AA	68 kohms, 1/8W
R324	VRD-MN2BD104J	J	AA	100 kohm, 1/8W
R336	VRD-ST2CD472J	J	AA	4.7 kohms, 1/6W
R344	VRD-MN2BD471J	J	AA	470 ohms, 1/8W
R345	VRD-MN2BD472J	J	AA	4.7 kohms, 1/8W
R350	VRD-ST2CD272J	J	AA	2.7 kohms, 1/6W
R351	VRD-MN2BD562J	J	AA	5.6 kohms, 1/8W
R352	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R353	VRD-MN2BD271J	J	AA	270 ohms, 1/8W
R354	VRD-ST2CD392J	J	AA	3.9 kohms, 1/6W
R355	VRD-MN2BD332J	J	AA	3.3 kohms, 1/8W
R356	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R357	VRD-ST2CD474J	J	AA	470 kohms, 1/6W
R358	VRD-MN2BD822J	J	AA	8.2 kohms, 1/8W
R359	VRD-MN2BD182J	J	AA	1.8 kohms, 1/8W
R360~362	VRD-MN2BD472J	J	AA	4.7 kohms, 1/8W
R363,364	VRD-MN2BD122J	J	AA	1.2 kohms, 1/8W
R365,366	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R367	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R368	VRD-ST2CD333J	J	AA	33 kohms, 1/6W
R369	VRD-MN2BD122J	J	AA	1.2 kohms, 1/8W
R371~374	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R376	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R377	VRD-ST2CD473J	J	AA	47 kohms, 1/6W
R378	VRD-MN2BD823J	J	AA	82 kohms, 1/8W
R379	VRD-MN2BD222J	J	AA	2.2 kohms, 1/8W
R380	VRD-MN2BD152J	J	AA	1.5 kohms, 1/8W
R381	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R382	VRD-ST2EE151J	J	AA	150 ohms, 1/4W
R383~385	VRD-MN2BD562J	J	AA	5.6 kohms, 1/8W
R387	VRD-MN2BD223J	J	AA	22 kohms, 1/8W
R391,392	VRD-ST2EE391J	J	AA	390 ohms, 1/4W
R393	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R395	VRD-ST2CD473J	J	AA	47 kohms, 1/6W
R398	VRD-ST2CD122J	J	AA	1.2 kohms, 1/6W
R401~408	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R411,412	VRD-MN2BD393J	J	AA	39 kohms, 1/8W
R413,414	VRD-MN2BD152J	J	AA	1.5 kohms, 1/8W
R415,416	VRD-MN2BD332J	J	AA	3.3 kohms, 1/8W
R417,418	VRD-MN2BD153J	J	AA	15 kohms, 1/8W
R420	VRD-MN2BD104J	J	AA	100 kohm, 1/8W
R421	VRD-ST2CD104J	J	AA	100 kohm, 1/6W
R425~427	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R431	VRD-ST2CD472J	J	AA	4.7 kohms, 1/6W
R432	VRD-MN2BD472J	J	AA	4.7 kohms, 1/8W
R501	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R502	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R510	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R511,512	VRD-MN2BD332J	J	AA	3.3 kohms, 1/8W
R513,514	VRD-MN2BD222J	J	AA	2.2 kohms, 1/8W
R515	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R516~518	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R519	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R520	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R531,532	VRD-MN2BD104J	J	AA	100 kohm, 1/8W
R533,534	VRD-MN2BD392J	J	AA	3.9 kohms, 1/8W
R535,536	VRD-ST2CD560J	J	AA	56 ohms, 1/6W
R537,538	VRD-ST2CD562J	J	AA	5.6 kohms, 1/6W
R539,540	VRD-MN2BD472J	J	AA	4.7 kohms, 1/8W
R541	VRD-MN2BD223J	J	AA	22 kohms, 1/8W
R542	VRD-MN2BD683J	J	AA	68 kohms, 1/8W
R551,552	VRD-MN2BD472J	J	AA	4.7 kohms, 1/8W
R553,554	VRD-MN2BD682J	J	AA	6.8 kohms, 1/8W
R555,556	VRD-MN2BD561J	J	AA	560 ohms, 1/8W
R557,558	VRD-MN2BD560J	J	AA	56 ohms, 1/8W
R559~561	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R562	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R563	VRD-ST2EE471J	J	AA	470 ohms, 1/4W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R565	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R566,567	VRD-MN2BD472J	J	AA	4.7 kohms, 1/8W
R568	VRD-RT2HD151J	J	AA	150 ohms, 1/2W
R569	VRD-MN2BD104J	J	AA	100 kohm, 1/8W
R570	VRD-MN2BD473J	J	AA	47 kohms, 1/8W
R571	VRD-MN2BD120J	J	AA	12 ohms, 1/8W
R575	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R576	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R577,578	VRD-ST2CD104J	J	AA	100 kohm, 1/6W
R581~583	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R584	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R585	VRD-MN2BD222J	J	AA	2.2 kohms, 1/8W
R701	VRD-ST2CD153J	J	AA	15 kohms, 1/6W
R702	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R703	VRD-MN2BD273J	J	AA	27 kohms, 1/8W
R707	VRD-MN2BD104J	J	AA	100 kohm, 1/8W
R710	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R711	VRD-MN2BD122J	J	AA	1.2 kohms, 1/8W
R712	VRD-MN2BD182J	J	AA	1.8 kohms, 1/8W
R715	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R716	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R717	VRD-ST2CD332J	J	AA	3.3 kohms, 1/6W
R718	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R719	VRD-MN2BD122J	J	AA	1.2 kohms, 1/8W
R720	VRD-MN2BD182J	J	AA	1.8 kohms, 1/8W
R721	VRD-MN2BD222J	J	AA	2.2 kohms, 1/8W
R722	VRD-MN2BD392J	J	AA	3.9 kohms, 1/8W
R723	VRD-MN2BD562J	J	AA	5.6 kohms, 1/8W
R724~726	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R727~731	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R732	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R733,734	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R735,736	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R739	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R740~742	VRD-MN2BD822J	J	AA	8.2 kohms, 1/8W
R743	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R744	VRD-ST2CD122J	J	AA	1.2 kohms, 1/6W
R745	VRD-ST2CD182J	J	AA	1.8 kohms, 1/6W
R746	VRD-ST2CD222J	J	AA	2.2 kohms, 1/6W
R747	VRD-MN2BD392J	J	AA	3.9 kohms, 1/8W
R748	VRD-MN2BD562J	J	AA	5.6 kohms, 1/8W
R749	VRD-MN2BD123J	J	AA	12 kohms, 1/8W
R750~753	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R756	VRD-MN2BD333J	J	AA	33 kohms, 1/8W
R757	VRD-MN2BD123J	J	AA	12 kohms, 1/8W
R758	VRD-MN2BD562J	J	AA	5.6 kohms, 1/8W
R759	VRD-MN2BD392J	J	AA	3.9 kohms, 1/8W
R760	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R761	VRD-MN2BD222J	J	AA	2.2 kohms, 1/8W
R762~764	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R765~769	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R770,771	VRD-MN2BD222J	J	AA	2.2 kohms, 1/8W
R773	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R774	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R775,776	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R777,778	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R779	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R780~782	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R783,784	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R785	VRD-ST2EE120J	J	AA	12 ohms, 1/4W
R786	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R787	VRD-MN2BD151J	J	AA	150 ohms, 1/8W
R788~791	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R793	VRD-MN2BD562J	J	AA	5.6 kohms, 1/8W
R795	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R796	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R797	VRD-MN2BD332J	J	AA	3.3 kohms, 1/8W
R798	VRD-MN2BD104J	J	AA	100 kohm, 1/8W
R799	VRD-MN2BD101J	J	AA	100 ohm, 1/8W
R800	VRD-MN2BD820J	J	AA	82 ohms, 1/8W
R801	VRD-MN2BD222J	J	AA	2.2 kohms, 1/8W
R802	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R803	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R804	VRD-MN2BD104J	J	AA	100 kohm, 1/8W
R805	VRD-MN2BD122J	J	AA	1.2 kohms, 1/8W
R806	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R807~809	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R810~812	VRD-MN2BD821J	J	AA	820 ohms, 1/8W
R813	VRD-RT2HD100J	J	AA	10 ohm, 1/2W
R814	VRD-MN2BD224J	J	AA	220 kohms, 1/8W
R901	VRD-ST2EE221J	J	AA	220 ohms, 1/4W
R902	VRD-ST2CD123J	J	AA	12 kohms, 1/6W

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
R903	VRD-ST2EE221J	J	AA	220 ohms, 1/4W
R904	VRD-ST2CD101J	J	AA	100 ohm, 1/6W
R905	VRD-ST2CD332J	J	AA	3.3 kohms, 1/6W
△ R907	VRG-ST2EG3R3J	J	AB	3.3 ohms, 1/4W, Fusible
R941	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R942,943	VRS-VV3AA3R3J	J		3.3 ohms, Metal Oxide Film
R961,962	VRD-MN2BD333J	J	AA	33 kohms, 1/8W
R965,966	VRD-MN2BD102J	J	AA	1 kohm, 1/8W
R967,968	VRD-MN2BD221J	J	AA	220 ohms, 1/8W
R969	VRD-MN2BD103J	J	AA	10 kohm, 1/8W
R971,972	VRD-ST2EE4R7J	J	AA	4.7 ohms, 1/4W
R973	VRD-RT2HD271J	J	AA	270 ohms, 1/2W
R975	VRD-RT2HD271J	J	AA	270 ohms, 1/2W
R981,982	VRD-RT2HD331J	J	AA	330 ohms, 1/2W

OTHER CIRCUITRY PARTS

BIMS/CNS10/CNS5	QCNWN0894AWZZ	J	AH	Connector Ass'y, 6-10-2Pin
CNP1	92LCONE5P53253	J	AB	Plug, 5Pin
CNP2	92LCONE8P53253	J	AC	Plug, 8Pin
CNP3	92LCONE6P53253	J	AC	Plug, 6Pin
CNP3A	92LCONE6P53254	J	AC	Plug, 6Pin
CNP10	92LCONEAF53253	J	AC	Plug, 10Pin
CNP303	QCNCW010LAWZZ	J	AD	Socket, 11Pin
CNP501	92LCONE3P5267X	J	AB	Plug, 3Pin
CNP502	92LCONE7P5267X	J	AC	Plug, 7Pin
CNP901	QCNCM035GAWZZ	J	AC	Plug, 7Pin
CNPM1	QCNCM932MAFZZ	J	AE	Plug, 12Pin
CNPM2	QCNCM030BAWZZ	J	AB	Pin Holder, 2Pin
CNS1A/B	QCNWN0891AWZZ	J	AG	Connector Ass'y, 5-5Pin
CNS2A/B	QCNWN0892AWZZ	J	AF	Connector Ass'y, 8-8Pin
CNS3A/B	QCNWN0893AWZZ	J	AF	Connector Ass'y, 6-6Pin
CNS303	QCNCM010LAWZZ	J	AC	Plug, 11Pin
CNS501	QCNWN0895AWZZ	J	AE	Connector Ass'y, 3Pin
CNS502	QCNWN0896AWZZ	J	AG	Connector Ass'y, 7Pin
CNS701	QCNWN0946AWZZ	J	AD	Flat Cable, 3Pin
CNS702,703	QCNWN1250AWZZ	J	AE	Flat Wire, 11Pin
CNS704	QCNWN1251AWZZ	J	AE	Flat Wire, 9Pin
CNS705/CNSM1	QCNWN0897AWZZ	J	AF	Connector Ass'y, 8-12Pin
CNS901	QCNWN1248AWZZ	J	AK	Connector Ass'y, 7-7Pin
CNS902	QCNWN1249AWZZ	J	AE	Flat Wire, 5Pin
△ F901	92LFUSE-T12E-E	J	AD	Fuse, T3.15A L 250V
△ F902	92LFUSE-T162-E	J	AD	Fuse, T1.6A L 250V
△ F941	92LFUSE-T501E	J	AD	Fuse, T500mA L, 250V
FE301	RTUNS0008AWZZ	J	AN	FM Front End
FL701	VVKFIP9EM7R-1	J	AV	FL Display
FWM1	QCNWN1274AWZZ	J	AC	Flat Cable, 2Pin
FWM2	QCNWN0338AWZZ	J	AD	Flat Cable, 2Pin
JK961	QJAKM0004AWZZ	J	AK	Jack, Headphones
M1	92LMTR1858CASY	J	AS	Motor with Chassis [Disc]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
M3	92LMTR2037AS1	J	AP	Motor with Pulley [T/T Up/Down Loading]
MM1	RMOTV0006AWM1	J	AR	Motor with Pulley [Tape]
PHM1	VHP13153CD-1	J	AG	Photo Interrupter
RX701	VHLN63H380A-1	J	AK	Remote Sensor, N63H380A
SO301	QTANQ0301AWZZ	J	AH	Terminal, Antenna
SO401	92LJACKL1676A	J	AF	Jack, AUX/VIDEO
△ SO901	QSOCA0204AWZZ	J	AF	Socket, AC Power Input
SO961	QTANA0801AWZZ	J	AK	Terminal, Speaker
SOLM1	RPLU-0002AWZZ	J	AH	Solenoid Ass'y. [TAPE]
SOLM2	RPLU-0002AWZZ	J	AH	Solenoid Ass'y. [CD]
SW1	QSW-P0004AWZZ	J	AE	Switch, Push Type [Open/Close]
SW2	QSW-F0001AWZZ	J	AD	Switch, Leaf/Skeleton Type [Mecha Up]
SW3	QSW-P0005AWZZ	J	AD	Switch, Push Type [DISC Number]
SW4	QSW-F9001AW01	J	AD	Switch, Leaf Type [Pickup In]
SW701	92LSWICH1401AT	J	AC	Switch, Key Type [RANDOM/DEMO]
SW702	92LSWICH1401AT	J	AC	Switch, Key Type [VOLUME DOWN]
SW703	92LSWICH1401AT	J	AC	Switch, Key Type [X-BASS/E.Q.]
SW704	92LSWICH1401AT	J	AC	Switch, Key Type [VOLUME UP]
SW705	92LSWICH1401AT	J	AC	Switch, Key Type [REC/PAUSE]
SW706	92LSWICH1401AT	J	AC	Switch, Key Type [FF]
SW707	92LSWICH1401AT	J	AC	Switch, Key Type [STOP]
SW708	92LSWICH1401AT	J	AC	Switch, Key Type [Play]
SW709	92LSWICH1401AT	J	AC	Switch, Key Type [REW]
SW710	92LSWICH1401AT	J	AC	Switch, Key Type [TUNING UP/TIME]

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
SW711	92LSWICH1401AT	J	AC	Switch, Key Type [TUNING DOWN/TIME]
SW712	92LSWICH1401AT	J	AC	Switch, Key Type [ON/STAND-BY]
SW713	92LSWICH1401AT	J	AC	Switch, Key Type [CLOCK]
SW714	92LSWICH1401AT	J	AC	Switch, Key Type [TIMER/SLEEP]
SW715	92LSWICH1401AT	J	AC	Switch, Key Type [MEMORY]
SW716	92LSWICH1401AT	J	AC	Switch, Key Type [CD]
SW717	92LSWICH1401AT	J	AC	Switch, Key Type [TUNER/BAND]
SW718	92LSWICH1401AT	J	AC	Switch, Key Type [TAPE 1-2]
SW719	92LSWICH1401AT	J	AC	Switch, Key Type [VIDEO/AUX]
SW720	92LSWICH1401AT	J	AC	Switch, Key Type [DISC 1]
SW721	92LSWICH1401AT	J	AC	Switch, Key Type [DISC 2]
SW722	92LSWICH1401AT	J	AC	Switch, Key Type [DISC 3]
SW723	92LSWICH1401AT	J	AC	Switch, Key Type [DISC SKIP]
SW724	92LSWICH1401AT	J	AC	Switch, Key Type [OPEN/CLOSE]
SW725	QSW-S0024AWZZ	J	AE	Switch, Slide Type [Span Selector]
△ SW901	QSOCE0005AWZZ	J	AH	Switch, Voltage Selector
SWM3	92LM-SW1676A	J	AC	Switch, Leaf Type [Fool Proof]
SWM4	QSW-F9003AWZZ	J	AG	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	XBSSD26P06000	J	AA	Screw, ø2.6x6mm
702	XHBSD20P05000	J	AA	Screw, ø2x5mm
703	XBBSD20P03000	J	AA	Screw, ø2x3mm
704	LX-WZ1070AFZZ	J	AA	Washer, ø1.5xø3.8x0.25mm
M1	92LMTR1858CASY	J	AS	Motor with Chassis [Disc]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
SW4	QSW-F9001AW01	J	AD	Switch, Leaf Type [Pickup In]

CABINET PARTS

201	92LCAB2828AS1	J	AX	Front Panel Ass'y
201-1				Front Panel (Not Replacement Item)
201-2	JKNBZ0473AWSA	J	AD	Button [OPEN/CLOSE]
201-3	PCUSG0022AWZZ	J	AB	Cushion, Leg
202	LHLDLM1003AWZZ	J	AF	Stabilizer
203	92LMECHA2823A	J	BL	Cassette Mechanism Ass'y
203-1	NBLTK0011AWZZ	J	AC	Belt, Main, Tape 1
203-2	NBLTK0012AWZZ	J	AB	Belt, Main, Tape 2
203-3	NBLTK0030AWZZ	J	AC	Belt, Sub
203-4	NROLY0002AWZZ	J	AF	Pinch Roller Ass'y
203-5	RHEDA0001AWZZ	J	AG	Head, Erase [Tape 2]
203-6	92LMRPH1746A	J	AM	Head, Record/Playback [Tape 1/Tape 2]
203-7	RMOTV0006AWM1	J	AR	Motor with Pulley [TAPE], [MM1]
203-8	RPLU-0002AWZZ	J	AH	Solenoid Ass'y [TAPE], [SOLM1]
204	92LN-BAND1318A	J	AA	Nylon Band, 80mm
205	GCAB-1044AWSA	J	AM	Cabinet, CD Player Base
206	GCAB-1050AWSB	J	AS	Top Cabinet
207	GCOVA1186AWSB	J	AF	Cover, CD Tray Panel, Left
208	GCOVA1187AWSB	J	AF	Cover, CD Tray Panel, Right
209	GCOVA1199AWSA	J	AG	Cover, CD Tray
210	GDORF0054AWSC	J	AK	Cassette Holder, Tape 1
211	GDORF0055AWSC	J	AK	Cassette Holder, Tape 2
212	GITAR0372AWSA	J	AG	Back Board [Except for Thailand]
212	GITAR0373AWSA	J	AG	Back Board [For Thailand]
213	GITAS0050AWSB	J	AM	Side Panel, Left
214	GITAS0051AWSB	J	AM	Side Panel, Right
215	HDECQ0296AWSA	J	AF	Panel, Cassette, Tape 1
216	HDECQ0297AWSA	J	AF	Panel, Cassette, Tape 2
217	HDECQ0299AWSA	J	AG	CD Top Panel
218	HDECQ0374AWSA	J	AH	Display Panel
219	JKNBZ0516AWSB	J	AG	Button Function

CD-C421W

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
220	JKNBZ0517AWSB	J	AF	Button [X-BASS]
221	JKNBZ0518AWSA	J	AD	Button [CLOCK/TIMER/SLEEP]
222	JKNBZ0519AWSA	J	AH	Button, OPERATION A
223	JKNBZ0520AWSA	J	AH	Button, OPERATION B
224	JKNBZ0521AWSA	J	AE	Button [TUNING/TIME]
225	JKNBZ0522AWSA	J	AE	Button [RANDOM/DEMO]
226	LANGF0032AWZZ	J	AC	Support, T/T Lock Lever
227	LANGT0051AWFW	J	AF	Bracket, Heat Sink
228	LCHSM0074AWFW	J	AS	Chassis, Bottom
229	LCHSZ0010AWZZ	J	AM	Chassis, Loading
230	LCHSZ0011AWZZ	J	AG	Chassis, CD Mechanism
231	LHLDZ1087AWZZ	J	AC	Holder, FL Display
232	LHLDZ1139AWSA	J	AD	Support, Stabilizer
233	LHLDZ1140AWZZ	J	AB	Guide
234	LHLDZ1141AWZZ	J	AB	Support, Pitch
235	MLEVP0066AWZZ	J	AE	Lever, Shift
236	MLEVP0067AWZZ	J	AC	Lever, Lock
237	MLEVP0068AWZZ	J	AB	Lever, Change
238	MLEVP0070AWZZ	J	AB	Lever, T/T Lock
239	MLIFP0003AWZZ	J	AE	Damper
240	MSPRC0020AWFJ	J	AB	Spring, T/T Lock Lever
241	MSPRC0024AWFW	J	AB	Spring, Solenoid
242	MSPRD0044AWFJ	J	AB	Spring, Lock Lever
243	MSPRD0092AWFJ	J	AB	Spring, Cassette, Tape 1
244	MSPRD0093AWFJ	J	AB	Spring, Cassette, Tape 2
245	NBLTK0029AWZZ	J	AB	Belt, Drive
246	NGERH0064AWZZ	J	AD	Gear, Cam
247	NGERH0065AWZZ	J	AB	Gear, Turntable
248	NGERK0003AWZZ	J	AC	Gear, Drive
249	NGERK0004AWZZ	J	AB	Gear, Bevel
250	NGERK0005AWZZ	J	AB	Gear, Loading
251	NGERW0006AWZZ	J	AC	Gear, Worm Wheel
252	NPLYD0001AWZZ	J	AB	Pulley
253	NROLP0009AWZZ	J	AB	Roller
254	NTNT-0018AWSA	J	AK	Turntable
255	PCUSG0022AWZZ	J	AB	Cushion
256	PRDAR0113AWFW	J	AV	Heat Sink
△ 257	QFSDH0001AWZZ	J	AB	Holder, Fuse
258	QLUGP0001AWZZ	J	AC	Lug Terminal [Lug 961]
259	LHLDZ1188AWZZ	J	AC	Holder, LED
260	LANGT0049AWFW	J	AK	Bracket, Tuner and Main PWB
261	LANGT0050AWFW	J	AG	Bracket, Tuner PWB
262	92LCAUT1706A1	J	AC	Label, CD Laser Caution
263	92LCAUT1706B	J	AA	Label, CD Laser Caution Mark
264	PMAGF0001AWZZ	J	AF	Magnet
265	92LSUPT1749D	J	AA	Support, Magnet
266	JKNBZ0472AWSB	J	AG	Button, DISC No.
267	TSPC-0509AWZZ	J	AD	Label, Specification
267	TSPC-0510AWZZ	J	AD	Label, Specification [For Taiwan]
268	TLABS0162AWZZ	J	AB	Label, CPA
269	TCAUS0019AWZZ	J	AD	Caution Label
269	TLABS0091AWZZ	J	AB	Label, Set NOM
269	TLABS0171AWZZ	J	AB	Caution Label [For Hong Kong]
269	92LPANEL713A	J	AB	Panel, MADE IN MALAYSIA
601	LX-EZ0005AWFD	J	AA	Screw, Special
602	LX-JZ0002AWFD	J	AA	Screw, ø3×10mm
603	LX-JZ0003AWFF	J	AA	Screw, ø3×12mm
604	LX-JZ0022AFFD	J	AA	Screw, ø3×8mm
605	LX-TZ0019AFZZ	J	AB	Screw, Special
606	XBPSD26P05JS0	J	AA	Screw, ø2.6×5mm
607	XEBSD26P12000	J	AA	Screw, ø2.6×12mm
608	XEBSD30P10000	J	AA	Screw, ø3×10mm
609	XEBSD30P12000	J	AA	Screw, ø3×12mm
610	XHBSD40P08000	J	AA	Screw, ø4×8mm
611	XEBSF30P10000	J	AA	Screw, ø3×10mm
612	XEBSF30P12000	J	AA	Screw, ø3×12mm
613	XESSD30P10000	J	AA	Screw, ø3×10mm
614	XHBSF30P08000	J	AA	Screw, ø3×8mm
615	XJBSD30P08000	J	AA	Screw, ø3×8mm
616	XJBSD30P10000	J	AA	Screw, ø3×10mm
617	XJSSF30P10000	J	AA	Screw, ø3×10mm
618	XWHJZ62-09510	J	AB	Washer, ø6.2×ø10×0.9mm
619	XJBFSF30P10000	J	AA	Screw, ø3×10mm
620	XJBFSF30P08000	J	AA	Screw, ø3×8mm

FRONT SPEAKER BOX PARTS [CP-C421]

901	999723001006	J	BB	Speaker Box Ass'y.
902	199731800070	J	AV	Net Frame Ass'y.

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
903	199741500073	J	AR	Speaker Cord Ass'y.
904	135604141031	J	AB	Screw, ø4×14mm
905	137640631127	J	AC	Label, Specification
906	109760021039	J	AF	Port Cushion
907	151731801046	J	AS	Duct Panel
SP1,2	VSP0010WBV36A	J	AZ	Speaker, Woofer
SP3,4	VSP0050TBK66A	J	AS	Speaker, Tweeter

SURROUND SPEAKER BOX PARTS (GBOXS0019AWZZ)

901	92L291-0061	J	AM	Speaker Cord
902	92L121-0153	J	AN	Net Frame Ass'y.
903	92L314-0033	J	AN	Bottom Cabinet
904	92L351-0321	J		Label, Specification
905	92L372-0028	J	AB	Screw, ø3×20mm
906	92L391-0048	J	AC	Felt
SP1,2	VSP0010PBT6WA	J	AW	Speaker, Full Range

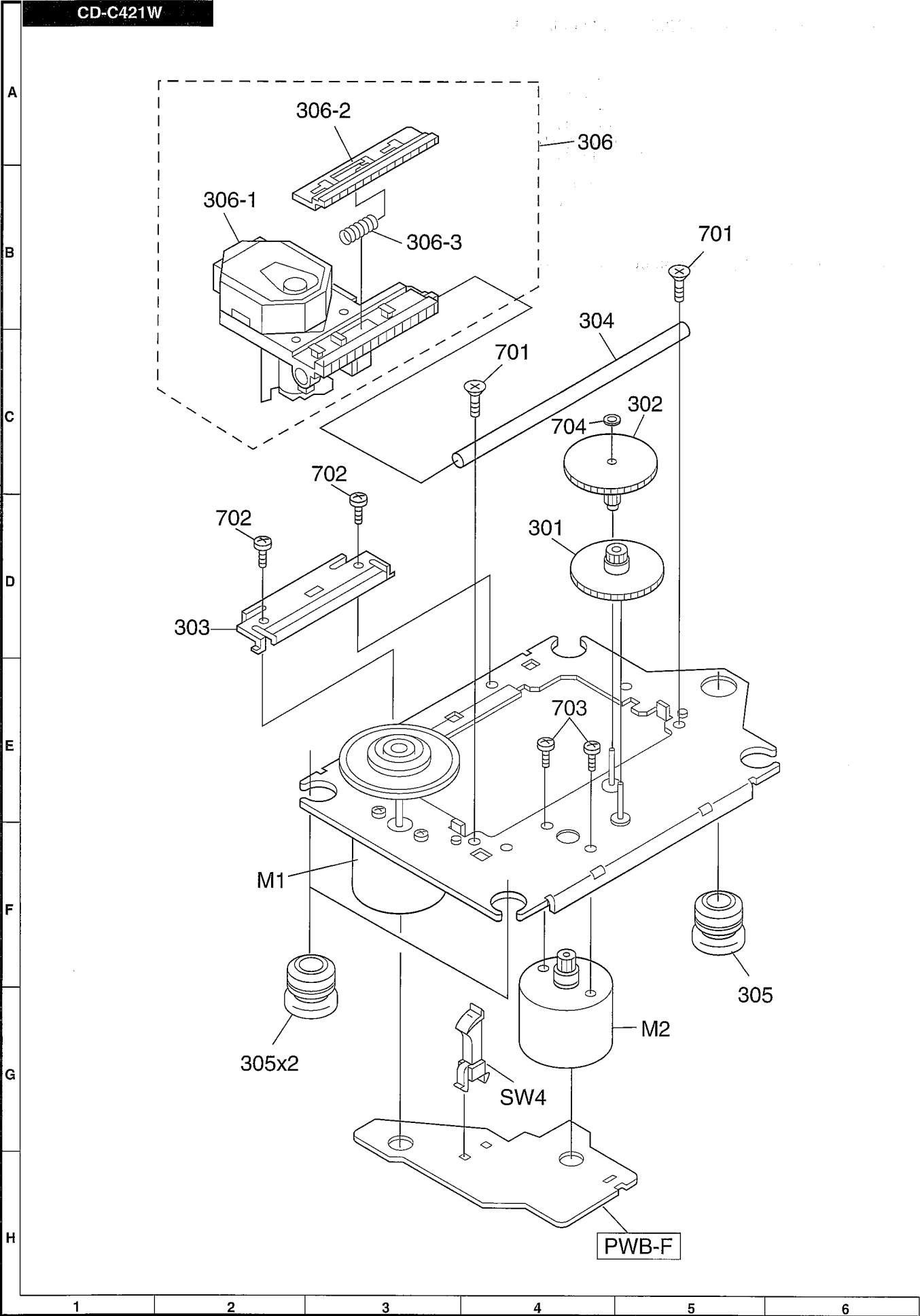
ACCESSORIES/PACKING PARTS

△	QACCB0002AW00	J	AY	AC Power Supply Cord, [For Hong Kong Only]
△	QACCE0007AW00	J	AH	AC Power Supply Cord, [Except for Australia/New Zealand]
△	QACCL0002AW00	J	AN	AC Power Supply Cord, [For Australia/New Zealand]
	QANTL0006AWZZ	J	AG	AM Loop Antenna
	SPAKA0197AWZZ	J	AN	Packing Add., Unit, Left/Right
	SPAKC0678AWZZ	J	AV	Packing Case
	SPAKP0013AWZZ1	J	AC	Polyethylene Bag, Unit
	SPAKZ0383AWZZ	J	AB	Sheet
	SPAKZ0393AWZZ	J	AD	Pad
	TCAUS0014AWZZ	J	AC	Label, Caution
	TCAUZ0035AWZZ	J	AB	Caution Sheet
	TGANE0009AW09	J	AD	Warranty Card
	TINST0040AWZZ	J		[For Philippines Only]
	TINST0040AWZZ	J		Operation Manual
	TINSZ0331AWZZ	J	AD	[For Thailand Only]
	TINSZ0331AWZZ	J	AD	Operation Manual
	TINSZ0332AWZZ	J	AK	[For Australia/New Zealand]
	TINSZ0332AWZZ	J	AK	Operation Manual
	TLABE0227AWZZ	J	AB	[Except for Australia/New Zealand]
	TLABE0227AWZZ	J	AB	Label, Bar Code [For Australia]
	TLABG0002AWZZ	J	AB	Label, Packing Case, Hong Kong
	TLABH0047AWSA	J	AH	Sheet, E/C Comparison A
	TLABH0048AWSA	J	AH	Sheet, E/C Comparison B
	TLABH0049AWSA	J	AH	Sheet, E/C Comparison C
	TLABJ0003AWZZ	J	AB	Label, Packing Case
	TLABR1004AWZZ	J	AB	Label, Packing Case
	TLABS0092AWZZ	J	AB	Label, Packing Case, NOM
	TLABZ0461AWZZ	J	AC	Label, Packing Case [For Taiwan]
	TLSTS0011AWZZ	J	AB	S/S List [For Taiwan Only]
	TMAPC0119AWZZ	J	AC	Schematic Diagram
	UBATU0001AWZZ	J	AE	Battery, UM/SUM-3
	137640521128	J	AF	Label, Feature
	139764081026	J	AN	Packing Add., Top
	139764081027	J	AN	[Front Speaker]
	139764081027	J	AN	Packing Add., Bottom
	92LBAG1460C1	J	AB	[Front Speaker]
	92LBAG1460C1	J	AB	Polyethylene Bag, Operation Manual
	92LBAG1770A	J	AB	Polyethylene Bag, AC Power Supply Cord [Hong Kong Only]
	92LBAG760C	J	AA	Polyethylene Bag, Plug Adaptor
	92LBAG760C	J	AA	[Saudi Arabia Only]
△	92LCORDZ1652A	J	AM	AC Power Supply Cord
△	92LCORDZ1652A	J	AM	[For Taiwan Only]
	92LCORDZ577B	J	AM	AC Power Supply Cord
	92LCORDZ577B	J	AM	[For Saudi Arabia Only]
	92LF-ANT1746A	J	AD	FM Antenna
	92LGCARD1266E1	J	AC	Warranty Card
	92LGCARD1266E1	J	AC	[For Australia/New Zealand]
	92LLABL1204C	J	AA	Label, MADE IN MALAYSIA
	92LLABL1507B	J	AA	Label, Packing Case, MADE IN MALAYSIA
	92LLABL1507B	J	AA	[For Australia/New Zealand]
△	92LPLUG027	J	AD	AC Plug Adaptor
	92LPLUG027	J	AD	[For Saudi Arabia Only]

NO.	PART CODE	★ PRICE RANK	DESCRIPTION
△	92LPLUG155A	J AG	AC Plug Adaptor [Except for Australia/New Zealand]
	92L411-0063	J AB	Polyethylene Bag [Surround Speaker]
	92L411-0064	J AE	Polyethylene Bag [Front Speaker]
	92L412-0064	J AQ	Packing Add.,Top and Bottom [Surround Speaker]
	RRMCG0145AWSA	J AU	Remote Control
	92LLID1782A	J AQ	Battery Lid,Remote Control

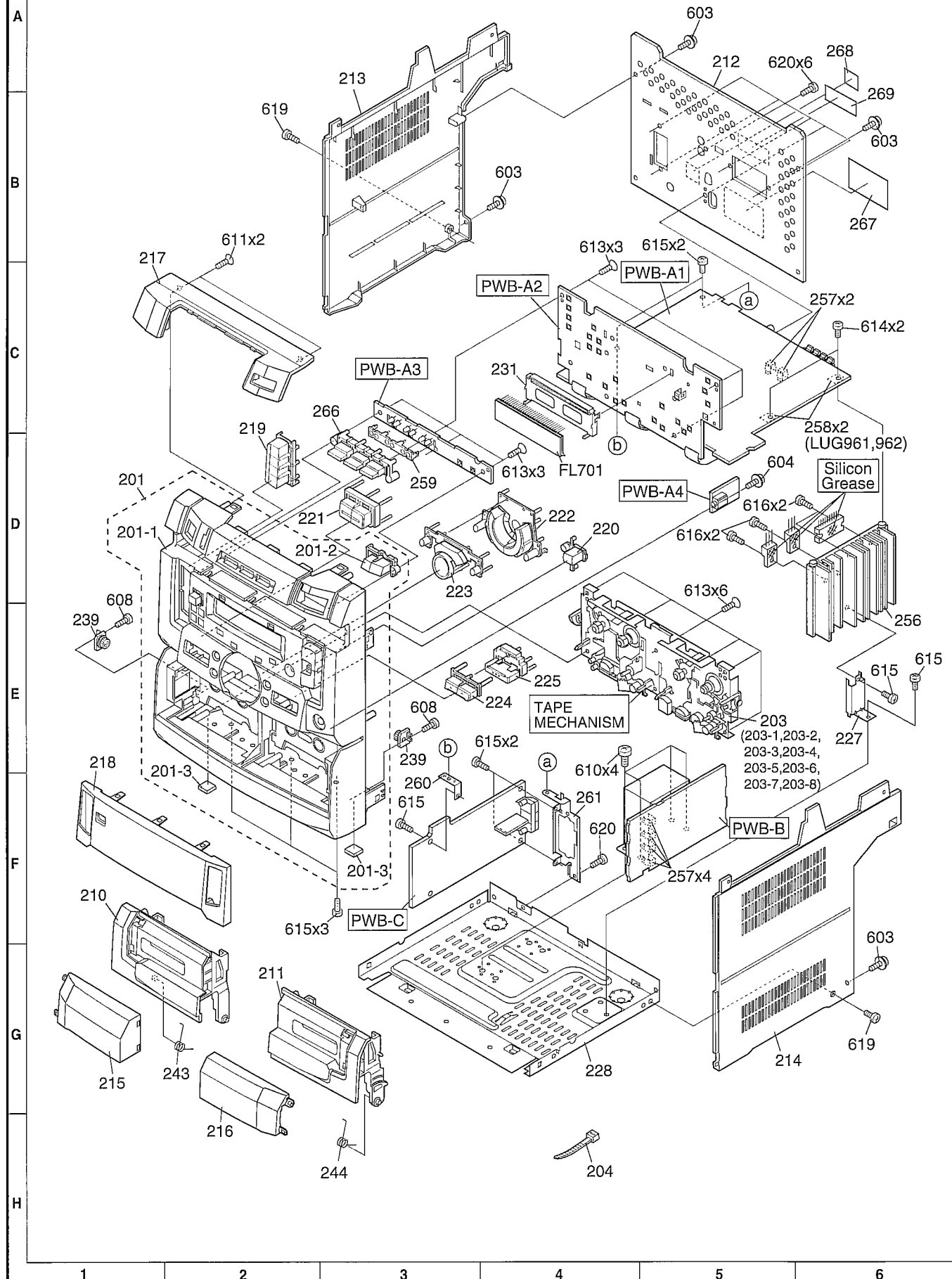
P.W.B. ASSEMBLY (Not Replacement Item)

PWB-A1~4	92LPWB2828MANS	J —	Main/Display/Switch/Headphone (Combined Ass'y)
△ PWB-B	92LPWB2828PWRS	J —	Power
PWB-C	92LPWB2828TUNS	J —	Tuner
PWB-D	QPWBF0106AWZZ	J AF	Tape Mechanism (PWB Only)
PWB-E	QPWBF0341AWZZ	J AB	Sensor (PWB Only)
PWB-F	QPWBF0027AWZZ	J AD	CD Motor (PWB Only)

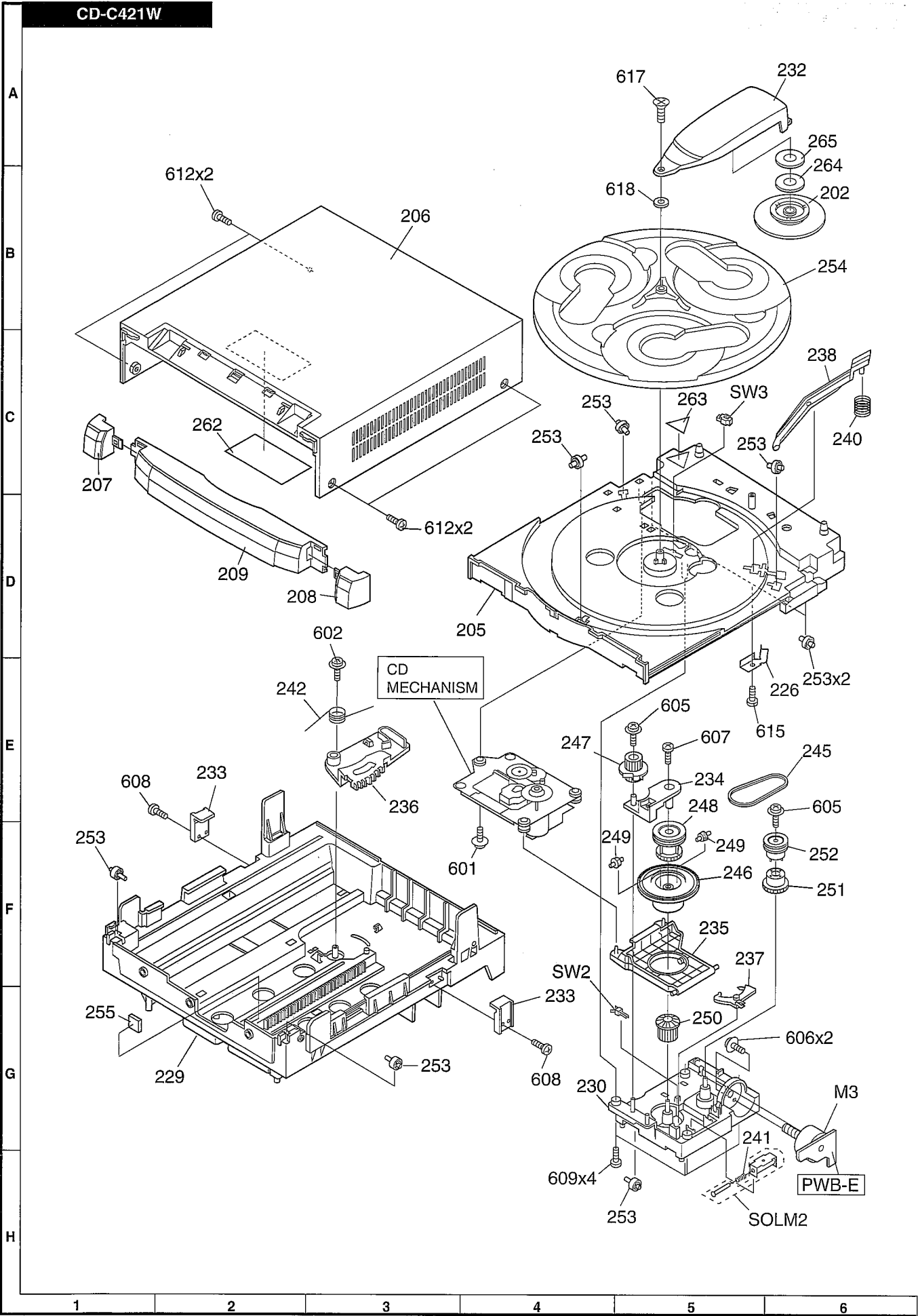


CD MECHANISM EXPLODED VIEW

CD-C421W



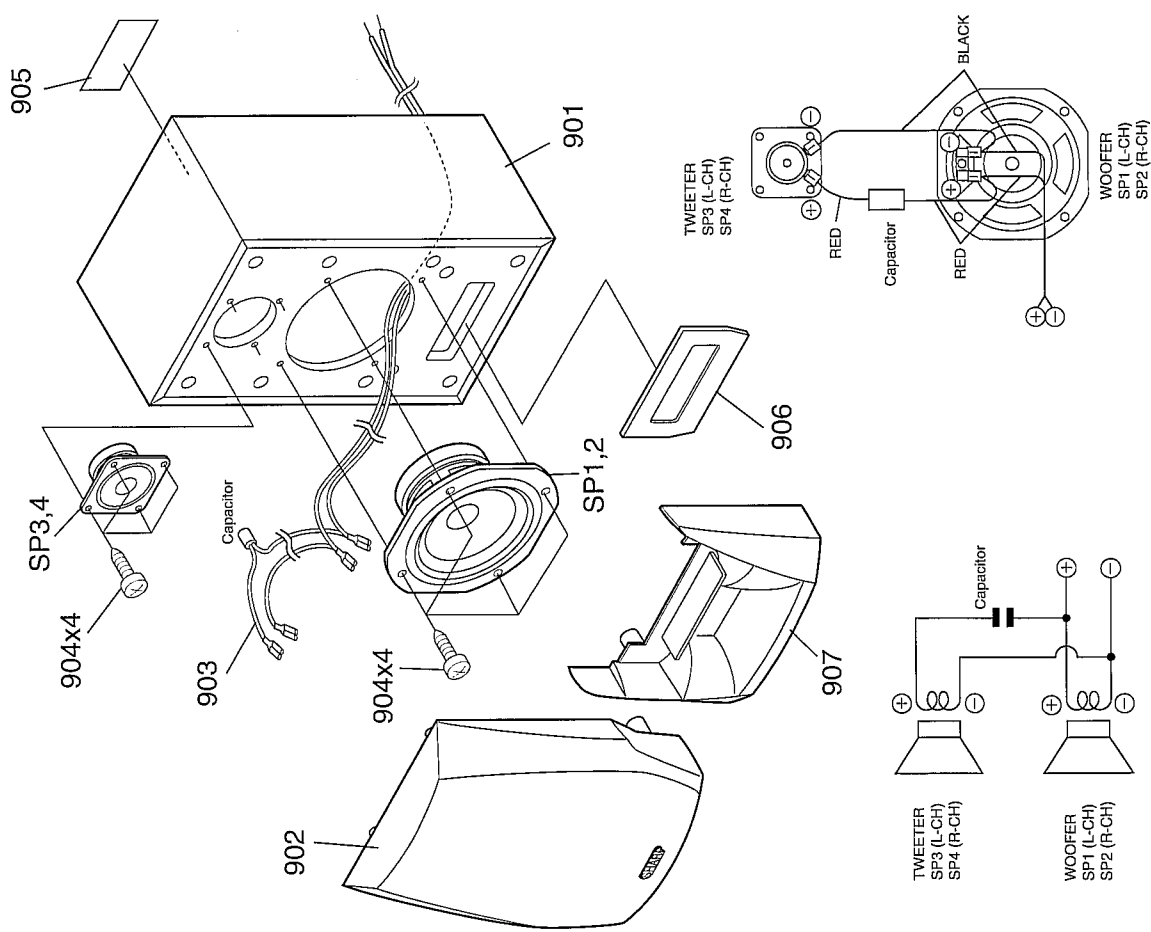
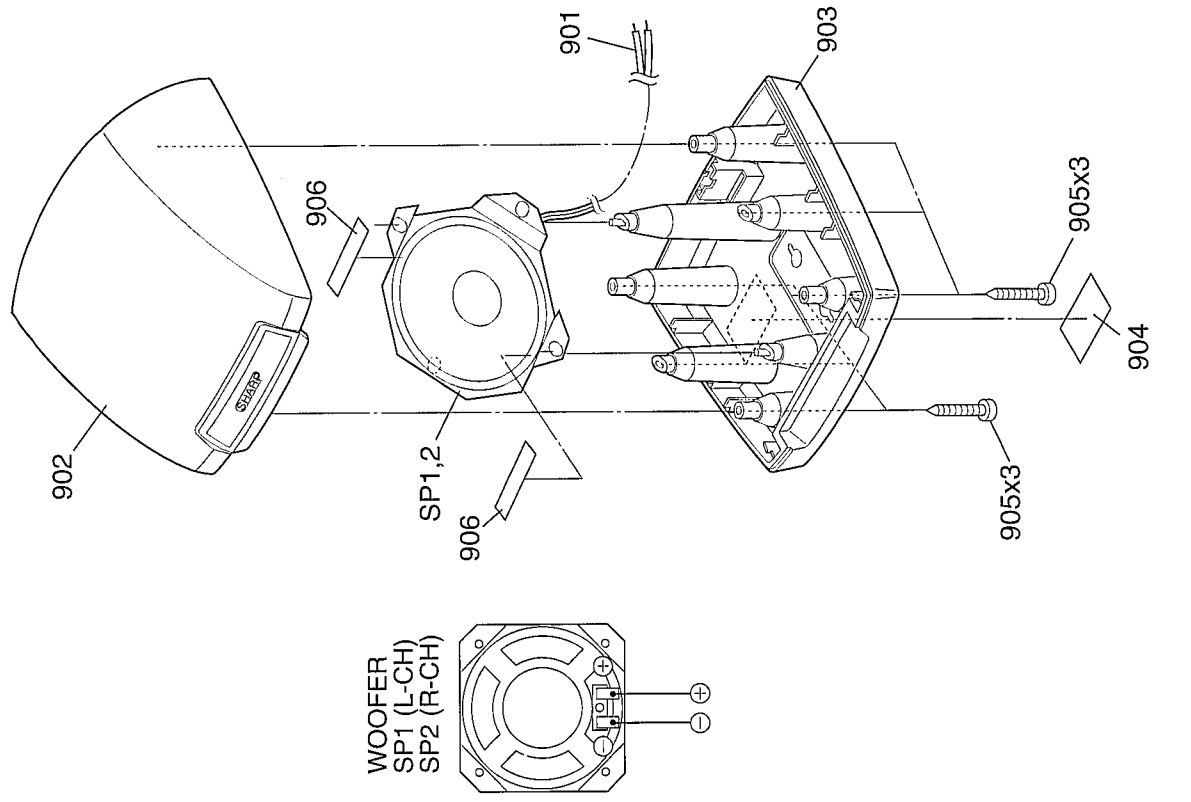
CABINET EXPLODED VIEW (1/2)



CABINET EXPLODED VIEW (2/2)

(GBOXS0019AWZZ)

CP-C421



SPEAKER EXPLODED VIEW (1/2)

SHARP

COPYRIGHT © 1998 BY SHARP CORPORATION

ALL RIGHTS RESERVED.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission of the publisher.

SHARP CORPORATION
Communication Systems Group
Quality & Reliability Control Center
Higashihiroshima, Hiroshima 739-0192, Japan
Printed in Japan

A9807-1925SS•IS•M

SA • SZ • EX