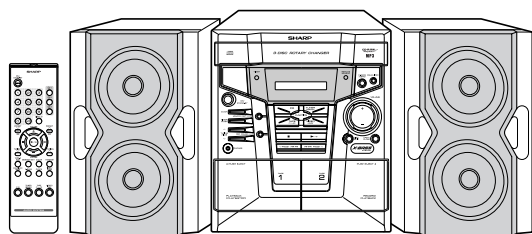


SHARP SERVICE MANUAL

<http://spain.electronica-duartes.com/index.php>



XTYREMREX

MODEL CD-MPS440W

CD-MPS440W Mini Component System consisting of CD-MPS440W (main unit) and CP-ES440(Speaker System).

CD-R/RW
Playable

3-DISC
CD CHANGER
with Play Exchange

COMPACT
disc
DIGITAL AUDIO

MP3

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

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Parts Guide

CHAPTER 1. GENERAL DESCRIPTION

[1] PRECAUTION FOR USING LEAD-FREE SOLDER

1. Employing lead-free solder

"MAIN, POWER, DISPLAY, HEADPHONES, TERMINAL, CD SERVO, T/T MOTOR, SWITCH, TAPE MECHANISM PWB" of this model employs lead-free solder.

The LF symbol indicates lead-free solder, and is attached on the PWB and service manuals. The alphabetical character following LF shows the type of lead-free solder.

Example:

LFa
Sn-Ag-Cu Indicates lead-free solder of tin, silver and copper.

2. Using lead-free wire solder

When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40 °C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

3. Soldering

As the melting point of lead-free solder (Sn-Ag-Cu) is about 220 °C which is higher than the conventional lead solder by 40 °C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.

Lead-free solder contains more tin, and the end of the soldering bit may be easily corrected. Make sure to turn on and off the power of the bit as required.

If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

Ref No.	Parts No.	Description
PWB-A	DCEKKV575SJ03	Main
PWB-B	DCEKNV575SJ03	Power(B1)/Display(B2)/Headphones(B3)/Terminal(B4)
PWB-C	DCEKSV575SJ03	CD Servo
PWB-F	_____	T/T Motor
PWB-G	_____	Switch
PWB-H	9GD192114325	Tape Mechanism

[2] 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 1 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.

[3] VOLTAGE SELECTION

Before operating the unit on mains, check the preset voltage. If the voltage is different from your local voltage, adjust the voltage as follows.

Turn the selector with a screwdriver until the appropriate voltage number appears in the window (110V, 127V, 220V or 230V - 240V AC).

[4] SPECIFICATIONS

■ General

Power source	AC 110/127/220/230-240 V, 50/60 Hz
Power consumption	151 W
Dimensions	Width: 270 mm (10-5/8") Height: 305 mm (12") Depth: 342 mm (13-1/2")
Weight	7.2 kg (15.9 lbs.)

■ Amplifier

Output power	RMS: 150 W (75 W + 75 W) (10 % T.H.D.)
Output terminals	Speakers: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 k ohms

■ CD player

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

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

■ Tuner

Frequency range	FM: 87.5 - 108.0 MHz AM: 530 - 1,720 kHz
------------------------	---

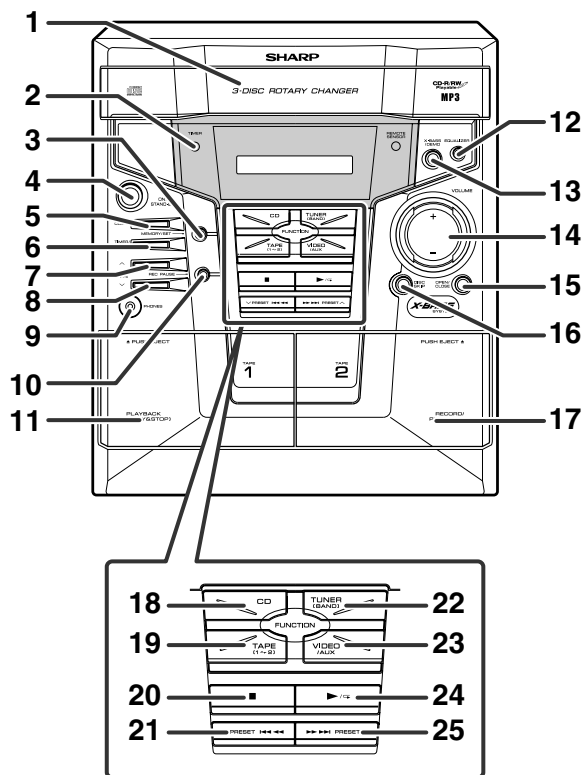
■ Cassette deck

Frequency response	125 - 8,000 Hz (normal tape)
Signal/noise ratio	50 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/playback)
Wow and flutter	0.3 % (WRMS)

■ Speaker

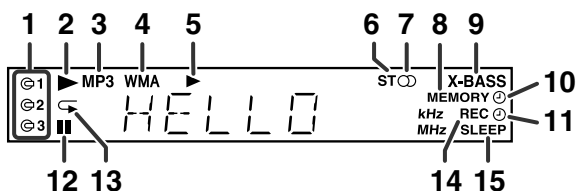
Type	Twin-drive speaker system 10 cm (4") full-range speaker×2
Maximum input power	150 W
Rated input power	75 W
Impedance	6 ohms
Dimensions	Width: 200 mm (7-7/8") Height: 305 mm (12") Depth: 220 mm (8-11/16")
Weight	3.5 kg (7.7 lbs.)/each

[5] NAMES OF PARTS



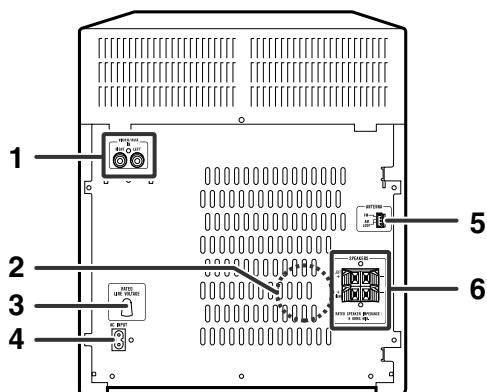
■ Front panel

1. Disc Tray
2. Timer Set Indicator
3. Memory/Set Button
4. On/Stand-by Button
5. Clock Button
6. Timer/Sleep Button
7. Tuning and Time Up Button
8. Tuning and Time Down Button
9. Headphone Socket
10. Tape 2 Record Pause Button
11. Tape 1 Cassette Compartment
12. Equaliser Mode Select Button
13. Extra Bass/Demo Mode Button
14. Volume Up and Down Buttons
15. Disc Tray Open/Close Button
16. Disc Skip Button
17. Tape 2 Cassette Compartment
18. Disc Button
19. Tape (1 ~ 2) Button
20. Disc or Tape Stop Button
21. Disc Track Down or Fast Reverse, Tape 2 Rewind, Tuner Preset Down Button
22. Tuner (Band) Button
23. Video/Auxiliary Button
24. Disc Play or Repeat, Tape Play Button
25. Disc Track Up or Fast Forward, Tape 2 Fast Forward, Tuner Preset Up Button



■ Display

1. Disc Number Indicators
2. Disc Play Indicator
3. MP3 Track Indicator
4. WMA Track Indicator
5. Tape Play Indicator
6. FM Stereo Mode Indicator
7. FM Stereo Receiving Indicator
8. Memory Indicator
9. Extra Bass Indicator
10. Timer Recording Indicator
11. Timer Play Indicator
12. Disc Pause Indicator
13. Disc Repeat Indicator
14. Tape Record Indicator
15. Sleep Indicator



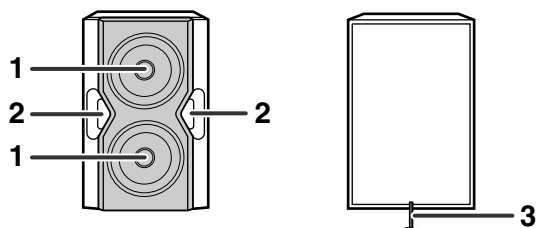
■ Rear panel

1. Video/Auxiliary (Audio Signal) Input Sockets
2. Cooling Fan
3. AC Voltage Selector
4. AC Power Input Socket
5. FM/AM Loop Aerial Socket
6. Speaker Terminals

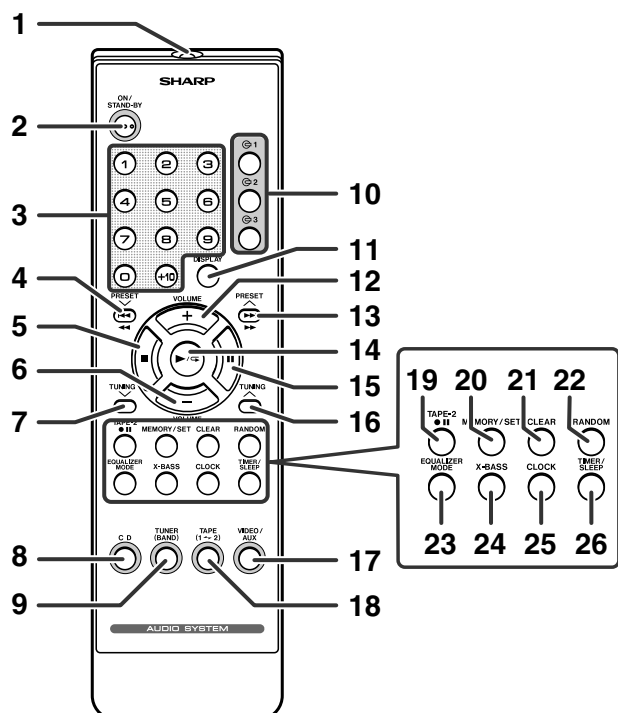
Note:

This product is equipped with a cooling fan inside, which begins to run at a specified volume level for better heat radiation.

■ Speaker system



1. Full-Range Speakers
2. Bass Reflex Ducts
3. Speaker Wire



Remote control

- 1.Remote Control Transmitter
- 2.On/Stand-by Button
- 3.Direct Search Buttons
- 4.Disc Track Down or Fast Reverse, Tape 2 Rewind, Tuner Preset Down Button
- 5.Disc or Tape Stop Button
- 6.Volume Down Button
- 7.Tuning and Time Down Button
- 8.Disc Button
- 9.Tuner (Band) Button
- 10.Disc Number Select Buttons
- 11.MP3/WMA Display Button
- 12.Volume Up Button
- 13.Disc Track Up or Fast Forward, Tape 2 Fast Forward, Tuner Preset Up Button
- 14.Disc Play or Repeat, Tape Play Button
- 15.Disc Pause Button
- 16.Tuning and Time Up Button
- 17.Video/Auxiliary Button
- 18.Tape (1-2) Button
- 19.Tape 2 Record Pause Button
- 20.Memory/Set Button
- 21.Clear Button
- 22.Disc Random Play Button
- 23.Equaliser Mode Select Button
- 24.Extra Bass Button
- 25.Clock Button
- 26.Timer/Sleep Button

CHAPTER 2. ADJUSTMENTS

[1] ADJUSTMENT

1. MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
Play: DM-300	Tape 1: Over 80 g Tape 2: Over 80 g

• Torque Check

Torque Meter	Specified Value	
	Tape 1	Tape 2
Play: DM-300	10 to 20 g.cm	10 to 20 g.cm
Fast forward: DM-300	—	Over 50 g.cm
Rewind: DM-300	—	Over 50 g.cm

• Tape Speed

	Test Tape	Adjusting Point	Specified Value	Instrument Connection
Tape speed	TCC-119	Variable Resistor in motor.	3,000 ± 30 Hz	Speaker Terminal (Load resistance: 6 ohms)

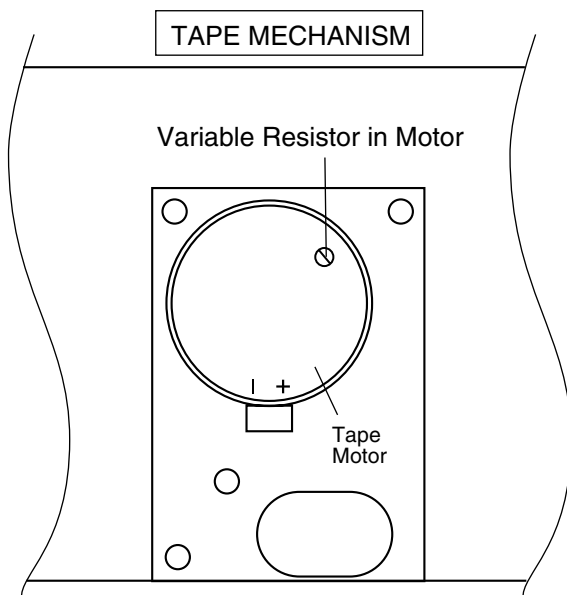


Figure 1 ADJUSTMENT POINTS

2. 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
AM Band Coverage	—	522 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	T302	*1

*1. Input: Antenna Output: Speaker terminal

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

• Check FM VT

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

Frequency	Display	Check Point	Instrument Connection
87.5 MHz	87.5 MHz	2.2V ± 1.0V	TP301
108 MHz	108 MHz	7.8V ± 1.0V	TP301

• FM Mute Level

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

Frequency	Display	Adjusting Parts	Instrument Connection
98.00 MHz	98.00 MHz (30 dBμV)	VR351*1	Input: CNP301 Output: Speaker Terminal

*1. Adjust so that an output signal appears.

• FM Detection

Signal generator: 10.7MHz FM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Point	Instrument Connection
FM IF	10.7 MHz	98.00 MHz	T304 (Turn the core of transformer T304 fully counter-clockwise)	Input: Pin 1 of IC301

• FM RF

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

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Point	Instrument Connection
FM Band Coverage	—	87.50 kHz	(fL): L303 3.4 ± 0.1 V	*1
FM RF	98.00 MHz (10-30 dB)	98.00 MHz	L302	*2

*1. Input: Antenna Output: TP301

*2. Input: Antenna Output: Speaker terminal

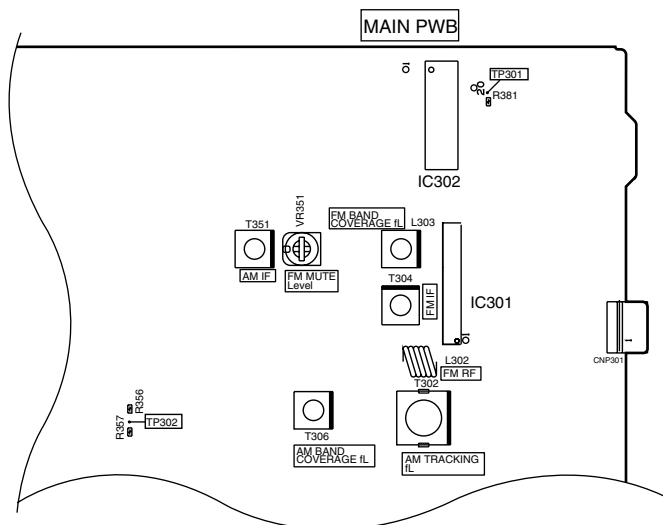


Figure 2 ADJUSTMENT POINTS

[2] TEST MODE

The test mode applied to this microcomputer has three modes, namely the ordinary test mode for adjustment or measurement, the aging test mode, and the self-diagnosis test mode for self-judgment in case of final product inspection.

1. Turning on the test mode

For obtaining each test mode, press the ON/STAND BY button, while keeping pressing the following two buttons in the ordinary stand-by mode (power off). In this case, the main unit buttons are valid. When turning the POWER on with remote control buttons, test modes are not obtained.

[Ordinary test mode]

1. CD Test Mode (TEST 1).....
DISK + VOLUME UP
2. Tuner Test Mode (TEST 2).....
TUNER(BAND) + VOLUME UP
3. Electronic Volume Test Mode (TEST 3).....
TUNING DOWN + VOLUME UP
4. Timer Test Mode (TEST 4).....
TIMER/SLEEP + VOLUME DOWN
5. FL Test Mode (TEST 5).....
CLOCK + VOLUME DOWN
6. CD MECHANISM Aging Test Mode (TEST 8).....
MEMORY/SET + VOLUME DOWN

[Self-diagnosis Test Mode]

1. Button input diagnosis test mode (TEST 6).....
TUNING UP +VOLUME UP

Processes are different depending on destinations at initial settings.

2. CD Test Mode (TEST 1)

In the CD test mode the operation of each step is possible even if the LID-SW is off. If focus cannot be taken in step 3 or any error is processed, it is impossible to proceed to the next step. During error processing, end the test mode by pressing the ON/STAND BY button or return to the step 1 by pressing the CD STOP button. Any other operations are inhibited.

1. Step 1 Mode

When the CD test mode is obtained, the following display lights up. Then CD initialization operation flow proceeds up to CD STB off to wait for the following buttons to be pressed.

TEST - 1

One second after display lights up

STEP - 1

Press the following buttons in this state to obtain the operations specified below.

"ON/STAND BY".....	Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD".....	After the pickup returns to the innermost periphery, it slides toward the outer periphery while this button is pressed.
"REW/REV".....	After the pickup returns to the innermost periphery, it slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"MEMORY/SET".....	Shift to step 2
"STOP".....	Invalid
"VIDEO/AUX".....	CLV

2. Step 2 Mode

Press the "MEMORY/SET" button in this mode to transmit the laser lighting command LDON (8400) and turn on the laser. Any other operations are not performed in this case.

STEP - 2

Press the following buttons in this state to obtain the operations specified below.

"ON/STAND BY".....	Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD".....	The pickup slides toward the outer periphery while this button is pressed.
"REW/REV".....	The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"MEMORY/SET".....	Shift to step 3

3. Step 3 Mode

While the laser keeps lighting, CD initialization operation flow proceeds up to 'CLV servo ON' to wait for the following buttons to be pressed.(Focus servo turned on for focus search)

The focus search is repeated to take focus.

STEP - 3

Press the following buttons in this state to obtain the operations specified below.

"ON/STAND BY".....	Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD".....	The pickup slides toward the outer periphery while this button is pressed.
"REW/REV".....	The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"MEMORY/SET".....	If focus has been taken, shift to step 4 is executed. If not, acceptance is inhibited.

*If the focus is not received after it has been taken, the process returns to step 1.

4. Step 4 Mode

The CLV servo ON command (8600) is transmitted to wait for the following buttons to be pressed. (The disc is rotated for CLV lock.)



The time display always indicates "0:00".

Press the following buttons in this state to obtain the operations specified below.

"ON/STAND BY".....	Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD".....	The pickup slides toward the outer periphery while this button is pressed.
"REW/REV".....	The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"MEMORY/SET".....	Return to step 5

*If the focus is not received, the process returns to step 1.

5. Step 5 Mode

When the CD initialization operation flow is completed, the mute is turned off, and playback is started. Even if playback reaches the outermost periphery of disc, the operation does not stop. The LCD display indicates the playback passage time as in case of ordinary CD playback.



Press the following buttons in this state to obtain the operations specified below.

"ON/STAND BY".....	Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD".....	The pickup slides toward the outer periphery while this button is pressed.
"REW/REV".....	The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"PLAY".....	Invalid
"STOP".....	Return to step 1

*If the focus is not received, the process returns to step 1.

Other cautions

- TOC IL is not available for this test mode.

3. Tuner Test Mode (TEST 2)

1. Outline of tuner (radio) test mode

The tuner test mode is intended to store the adjustment and measurement frequencies in the preset memory CH. When adjusting the tuner section in the production line, adjusting personnel are not required to set frequency.

2. Details of tuner test mode

Press the "TUNER(BAND)" and "VOLUME UP" buttons in POWER OFF state and turn on the power by the use of "ON/STAND BY" button to preset and store frequency for adjustment and measurement of destination specified by the AREA terminal in the preset memory CH. However, Ordinary 1 and Ordinary 2 are stored in the destinations when the test mode is obtained.

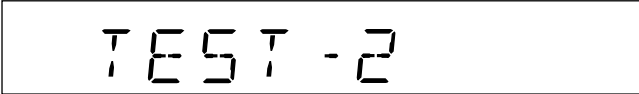
(As for frequencies to be preset and stored for each destination, refer to item 3.)

The tuner test mode is started from preset No.1.

The operations of test mode are identical with the ordinary operations of TUNER function. FUNCTION switching is invalid.

It is necessary to discard the content of preset memory when the tuner test mode is ended; be sure to write "0000" or "1111" bits in the memory to be checked for judging memory error at initial setting and to initialize memory.

When the tuner test mode is obtained, the following display lights for one second.



- The TUNER TEST 2 mode is obtained with >> + MEMORY/SET + ON/STAND-BY. ->Turn off AC in the TEST 2 mode to restore the initial state.



Turn off POWER to protect the memory of TEST 2 mode.

Turn off POWER again to obtain the ordinary operation while the data is stored in the memory (besides TUNER).



If AC OFF state is maintained in this state for about 1/2 day, start is executed in the initial state.

- To clear the whole memory, insert the AC cord, pressing MEMORY/SET + CD PLAY.

3. Preset frequencies for various destinations
(random preset memory)

CH	BAND	FM
1	FM STEREO	FM 87.5 MHz
2		FM108.0 MHz
3		FM 98.0 MHz
4		FM 90.0 MHz
5		FM106.0 MHz

CH	BAND	FM
6	AM	AM 530 kHz
7		AM1720 kHz
8		AM 990 kHz
9		AM 600 kHz
10		AM1400 kHz

CH	BAND	FM
16-35		
36	FM MONO	FM106.0 MHz
37		FM 90.0 MHz
38		FM 98.0 MHz
39		FM108.0 MHz
40		FM 87.5 MHz

- The slant line sections of the table store no memory.

4. Electronic volume Test Mode (TEST 3)

When this test mode is obtained, the following display lights for one second.

TEST - 3

In this mode, volume is Volume -14 dB (STEP 23), FLAT AND X-BASS ON, and start-up function to CD, respectively. The button operations in the test mode are the same as those of ordinary operation except volume UP/DOWN.

- The display is the same as that of ordinary operation except test mode setting.
- Unlike the ordinary state, the volume is controlled with the Volume UP/DOWN button in accordance with the following three steps.
Volume-∞ (STEP 0) <-> Volume-14 dB (STEP 23) <-> Volume-0 (STEP 30)
- X-BASS is switched when button is pressed.

5. Timer test Mode (TEST 4)

When this test mode is obtained, the following display lights for one second.

TEST - 4

Set the current time and timer time according to the following procedure to reproduce the timer.

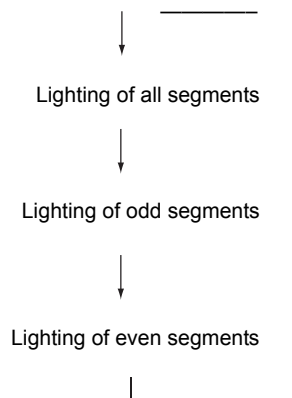
- Set the current time to 1:00, the timer to ON time 1:05, the function to CD, and volume to STEP 12, respectively. One minute is counted as one second, and the timer is reproduced. The fade-in (when playback is started) is executed at a rate of one step for 1 sec. After completion of fade-in, the fade-out is executed at a rate of one step for 1 sec (WAIT 1 sec inserted).

After completion of fade-out, the power is turned off (after WAIT 1 sec), and the mode is shifted to the standby.

The display during operation is the same as that of ordinary timer operation.

6. FL Test Mode (TEST 5)

When the FL test mode is obtained, all the FL segments are lighted. Then pressing the "PLAY" button switches display as below.



7. Button input diagnosis Test Mode (TEST 6)

When the test mode is obtained, the following is displayed.

(STAND-BY AND DEMO OFF STATUS)

TEST - 6

This test mode is intended to check whether all the main unit buttons can be detected. Accordingly, in this test mode, it is checked whether the "ON/STAND BY" button was pressed after all the buttons shown below were pressed. If the result is OK, OK is displayed. If any one of keys was not pressed, an error is displayed. In both cases of OK termination or error termination, the mode is shifted to the standby mode if the "ON/STAND BY" button is pressed subsequently.

All models using this type of microcomputer are not always provided with the same buttons. Since the buttons used are different depending on models, types of buttons to be used are determined by whether SURROUND, and an electric lid are available at the initial setting by MODEL port.

The order of buttons to be pressed is not determined. Accordingly, it is checked whether all buttons have been pressed.

- PU-IN buttons: REW/PRESET DOWN + CD STOP

Since this model is provided with SURROUND (HAVE OR NOT), and electric CD lid, the following 10 buttons are detected as all buttons.

PLAY, X-BASS/DEMO, FUNCTION, VOLUME UP/DOWN, MEMORY/SET, REW, FF, STOP, DISK TRAY OPEN/CLOSE

The OK/ERROR display of test result is as follows.

ERROR

OK

8. CD MECHANISM Aging Test Mode (TEST 8)

OPEN/CLOSE & 3 DISC CHANGER aging test.

DISPLAY:

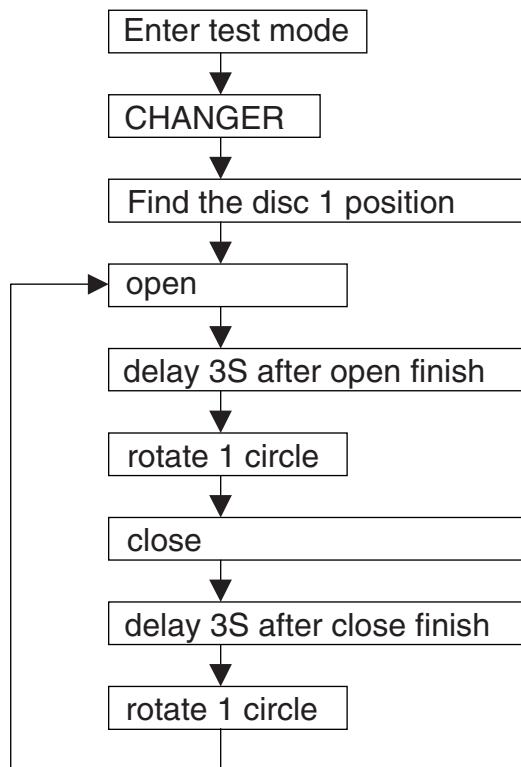
TEST - 8

FUNCTION:

Enter the TEST MODE 8, MCU control the 3 DISC CHANGER OPEN/CLOSE. After open finished, tray rotate 1 circle (360 degree). Then close, After close finished, tray rotate 1 circle (360 degree) again.

Request:

Every period include 4 operation. Below is TIMING:



CHAPTER 3. MECHANICAL DESCRIPTION

[1] REMOVING AND REINSTALLING THE MAIN PARTS

1. TAPE MECHANISM SECTION

Perform steps 1 to 6 and 8 of the disassembly method to remove the tape mechanism.

1.1. How to remove the record/playback and erase heads (TAPE 1) (See Fig. 1)

1. When you remove the screws (A1) x 2 pcs., the record/playback head can be removed.

1.2. How to remove the playback head (TAPE 2) (See Fig. 2)

1. When you remove the screws (B1) x 2 pcs., the erase head can be removed.
2. When you remove the screws (B2) x 2 pcs., the record/playback head can be removed.

NOTE: After replacing the heads and performing the azimuth adjustment, be sure to apply screw lock.

1.3. How to remove the pinch roller (TAPE 1,2) (See Fig. 3)

1. when you remove the screw (C1) x 1pc., the pinch roller can be removed.

Note:

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

1.4. How to remove the motor (See Fig. 4)

1. Remove the belt.
2. Remove the screws (D1) x 4 pcs., to remove the motor bracket.
3. Remove the screws (D2) x 3 pcs., to remove the motor.

1.5. How to remove the belt (TAPE 1) (See Fig. 5)

1. Remove the main belt (F1) x 1 pc., from the motor side.

1.6. How to remove the belt (TAPE 2) (See Fig. 5)

1. Remove the main belt (G1) x 1 pc., from the motor side.
2. Remove the FF/REW belt (G2) x 1 pc.

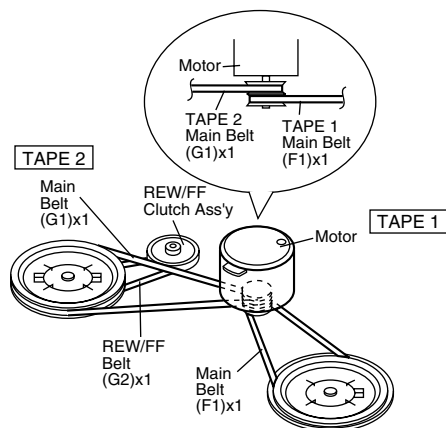


Figure 5

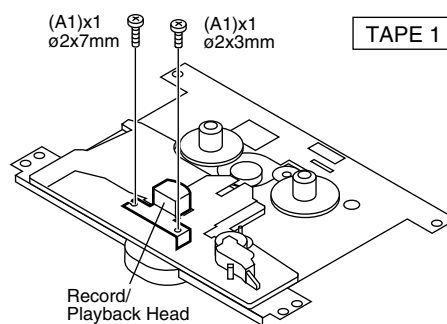


Figure 1

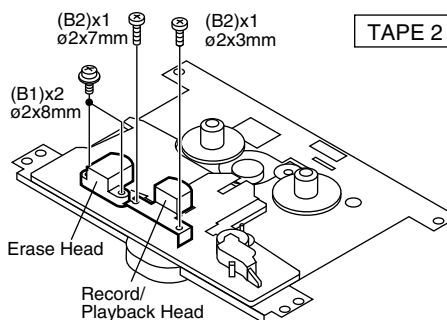


Figure 2

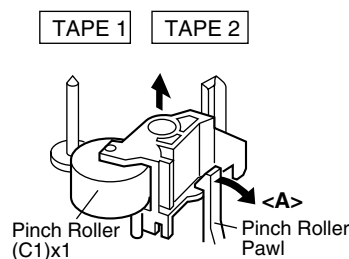


Figure 3

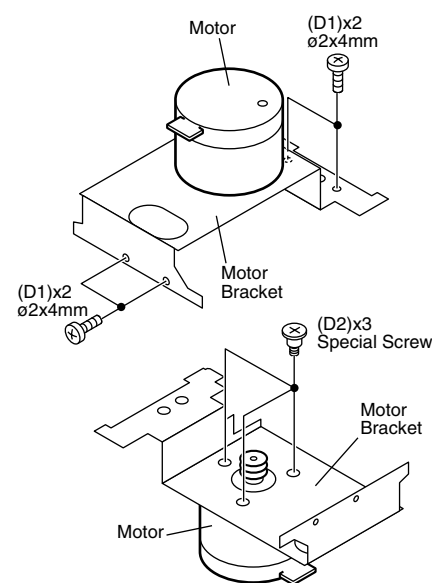


Figure 4

1.7. How to remove the flywheel (TAPE1,2) (See Fig. 6)

1. Remove the stop washer (H1) x 1 pc., with a small precision screw-driver to extract the flywheel from the capstan metal.

NOTE: When the stop washer is deformed or damaged, replace it with a new one.

1.8. How to reinstall the parts

1. Install each part in the reverse order of the removal with care.

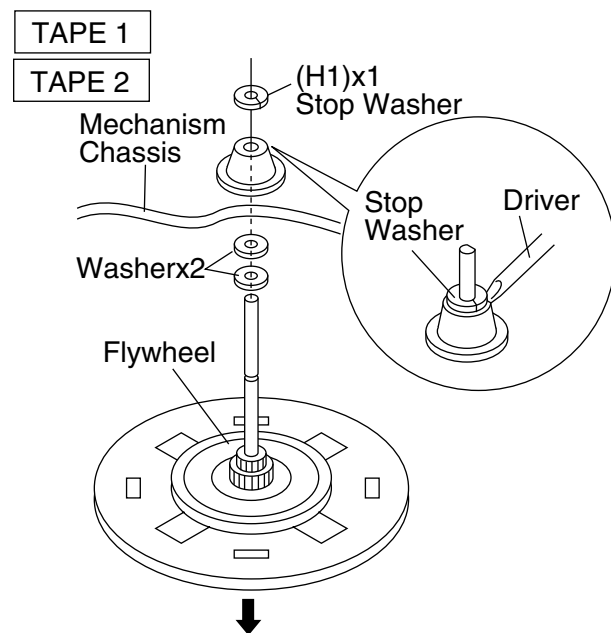


Figure 6

1.9. How to remove the tape mechanism PWB (TAPE 1,2)(See Fig. 7)

1. Remove the screw (J1) x 1 pc., to remove the tape mechanism PWB.
2. Remove the screw (J2) x 1 pc.
3. Remove the solder joints (J3) x 2 pcs., to remove the tape mechanism PWB.

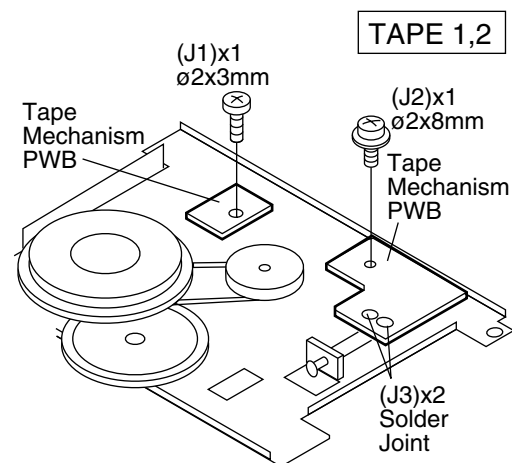


Figure 7

2. CD PLAY SECTION

Perform steps 1, 2, 3, 10, 11 and 12 of the disassembly method to remove the CD mechanism.

2.1. How to remove the T/T rotate motor (See Fig. 1)

1. Remove the screws (A1) x 2 pcs.
2. Remove the belt (A2) x 1 pc.
3. Remove the screws (A3) x 2 pcs., to remove the T/T rotate motor.

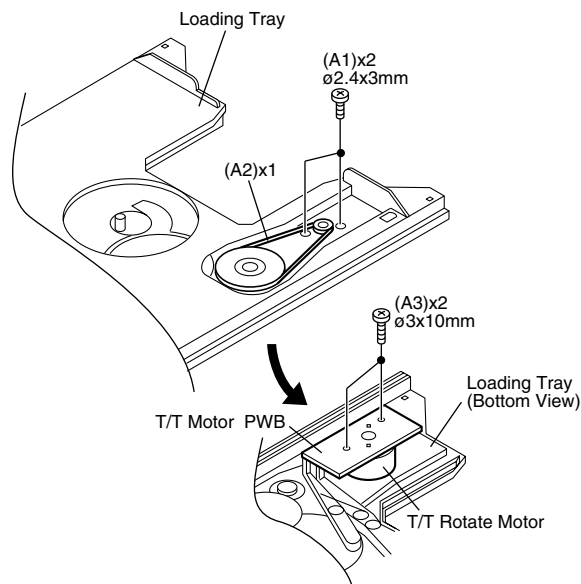


Figure 1

2.2. How to remove the up/down loading motor (See Fig.2)

1. Remove the screws (B1) x 2 pcs.
2. Remove the belt (B2) x 1 pc.

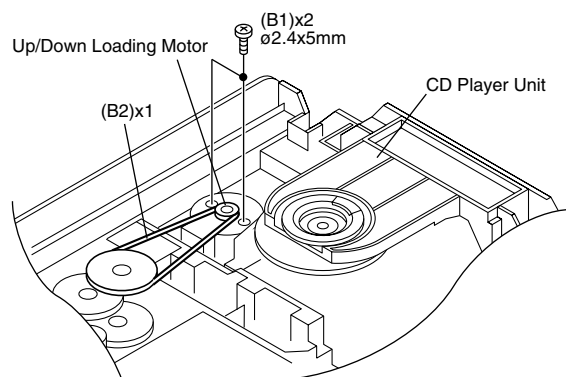


Figure 2

2.3. How to remove the CD mechanism unit (See Fig.3)

Perform steps 1, 2, 3, 10 and 13 of the disassembly method to remove the CD mechanism.

1. Remove the screws (C1) x 4 pcs., to remove the mechanism unit.

NOTE: After removing the connector for the optical pickup from the connector wrap the conductive aluminium foil around the front end of connector so as to protect the optical pickup from electrostatic damage.

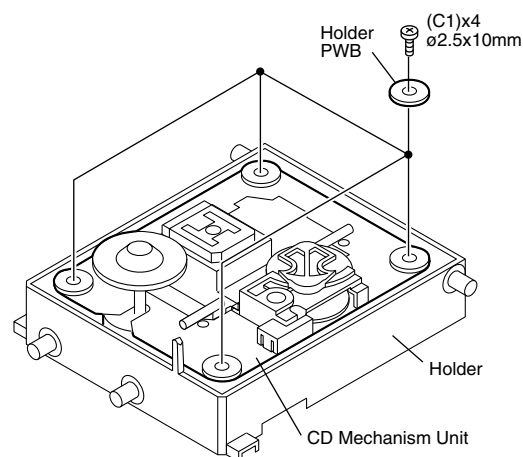


Figure 3

[2] 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.

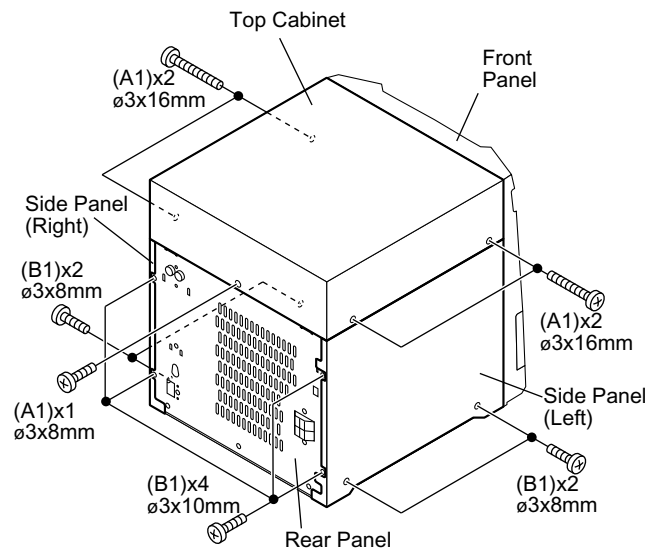
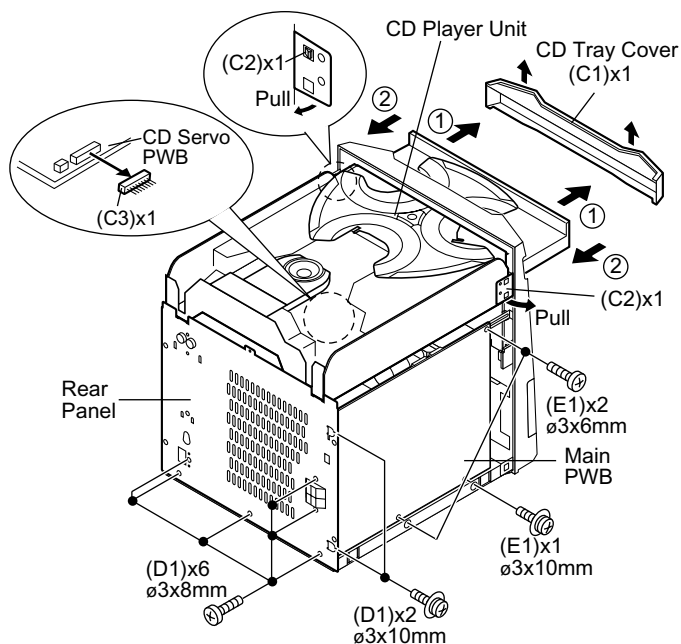
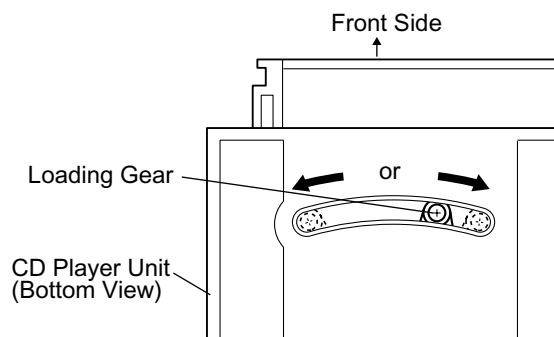
STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw.....(A1) x 5	1
2	Side Panel (Left/Right)	1. Screw.....(B1) x 8	1
3	CD Player unit	1. Turn on the power supply, open the disc tray, take out the CD tray cover, and close.....(Note 1) 2. CD Tray Cove.....(C1) x 1 3. Hook.....(C2) x 2 4. Socket.....(C3) x 1 5. Socket.....(C4) x 2	2 4
4	Rear Panel	1. Screw.....(D1) x 8	2
5	Main PWB	1. Screw.....(E1) x 3 2. Socket.....(E2) x 9 3. Socket.....(E3) x 2	2 4 5
6	Front PWB	1. Screw.....(F1) x 3 2. Hook.....(F2) x 2 3. Socket.....(F3) x 1	4
7	Display PWB	1. Screw.....(G1) x 13	5
8	Tape Mechanism	1. Open the cassette holder. 2. Screw.....(H1) x 8	5
9	Headphones PWB	1. Screw.....(J1) x 1	5
10	CD Servo PWB	1. Screw.....(K1) x 4 2. Socket.....(K2) x 3 3. Flat Cable.....(K3) x 1 4. Solder.....(K4) x 2	6
11	Turntable	1. Screw.....(L1) x 1 2. Spacer.....(L2) x 1	7
12	Loading Tray	1. Push forward the loading tray. 2. Inserting the flat head into the hole, push in the direction indicated by the arrow.....(M1) x 2	7
13	CD Mechanism Block	1. Hook.....(N1) x 2	8

Note 1: How to open the change manually. (Fig. 3)

1. In this state, turn fully the loading Gear in the arrow direction through the hold on the loading tray bottom.
2. After that, push forward the loading tray.

Note 2:

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

**Figure 1****Figure 2****Figure 3**

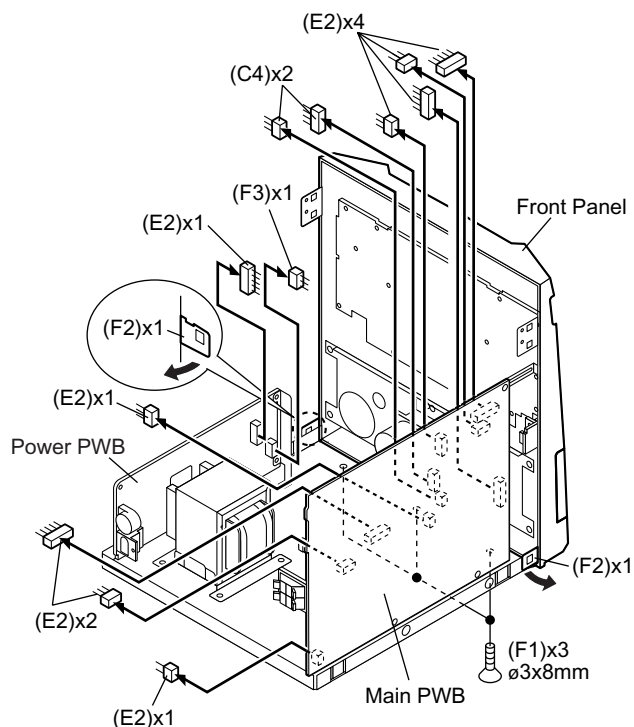


Figure 4

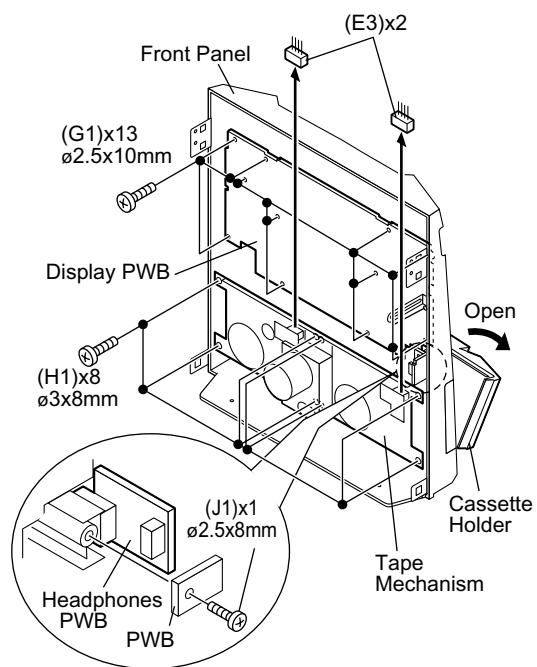


Figure 5

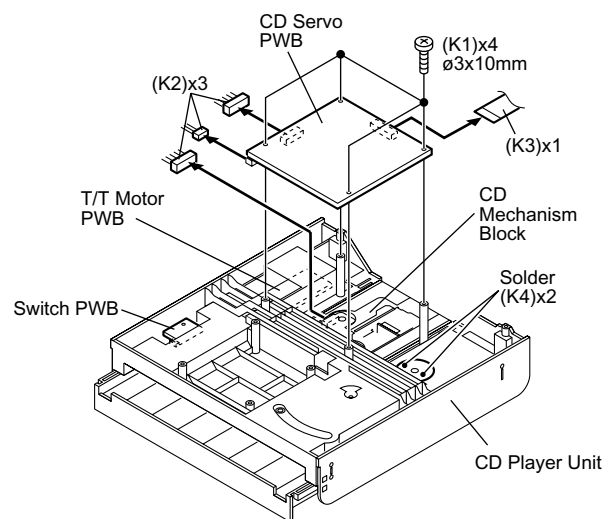


Figure 6

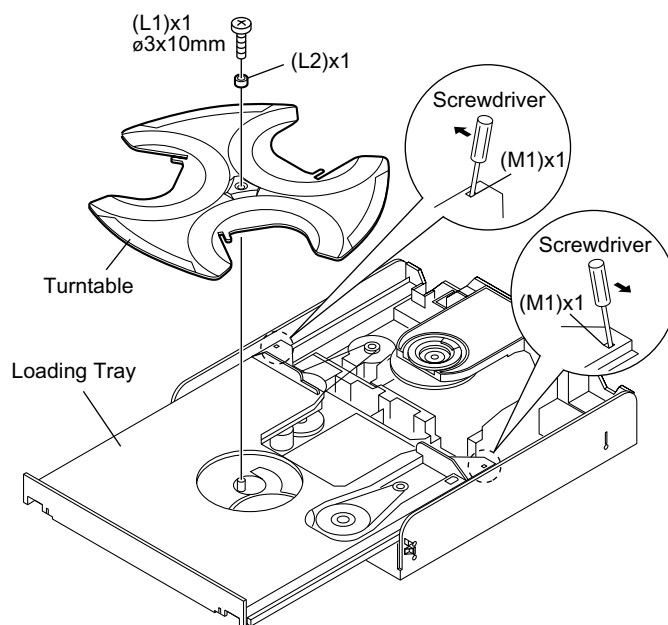


Figure 7

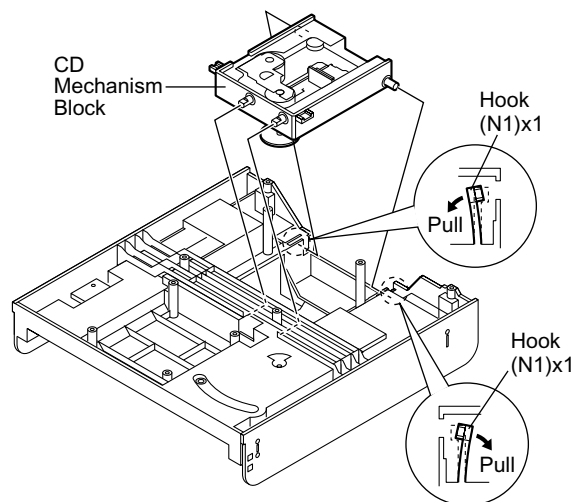


Figure 8

CP-ES440

These speaker CP-ES440 are available in assemblies only and may not be disassembled.

CHAPTER 4. DIAGRAMS

[1] BLOCK DIAGRAM MAIN

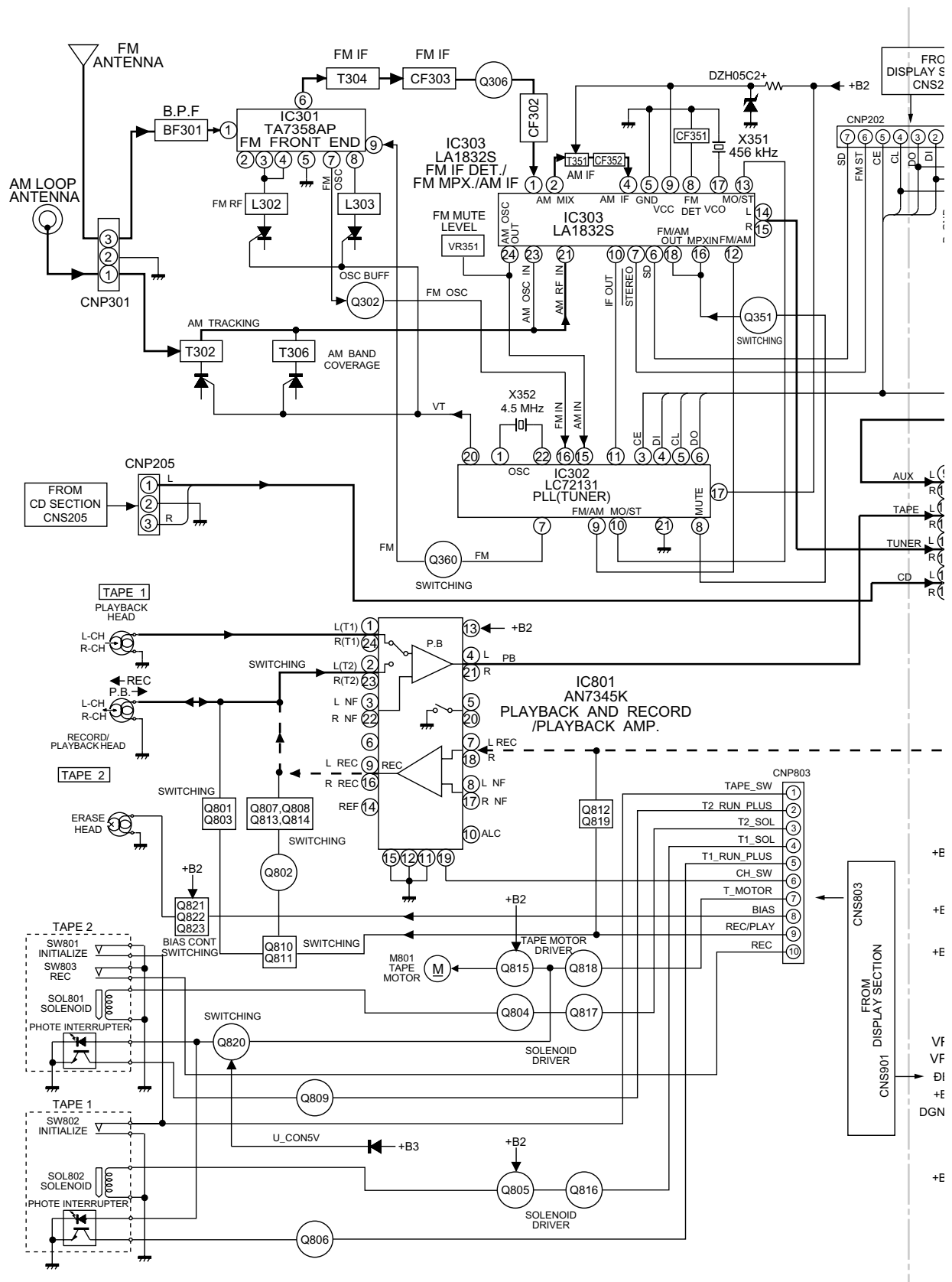


Figure 4-1 BLOCK DIAGRAM (1/4)

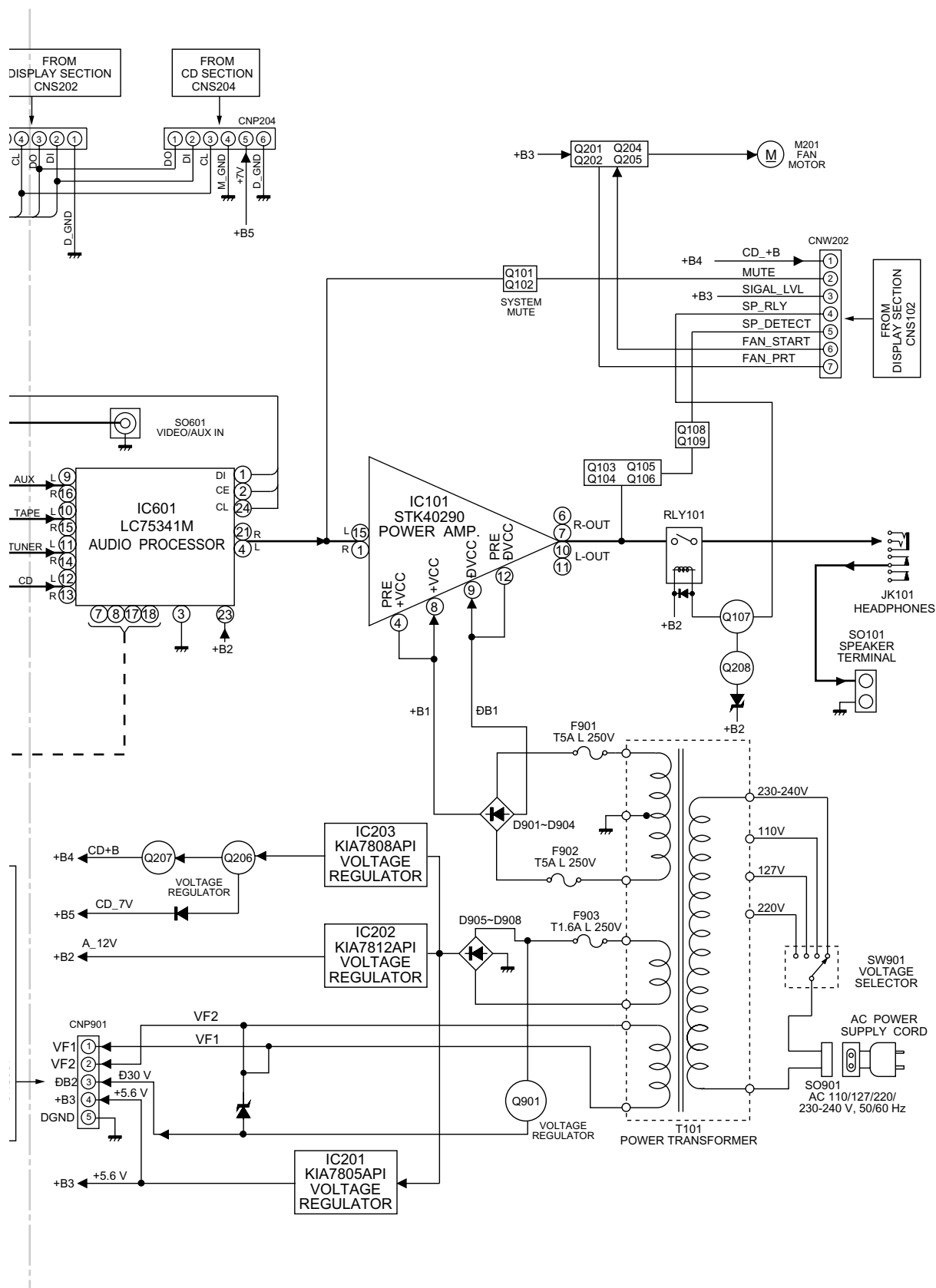


Figure 4-2 BLOCK DIAGRAM (2/4)

[2] BLOCK DIAGRAM DISPLAY

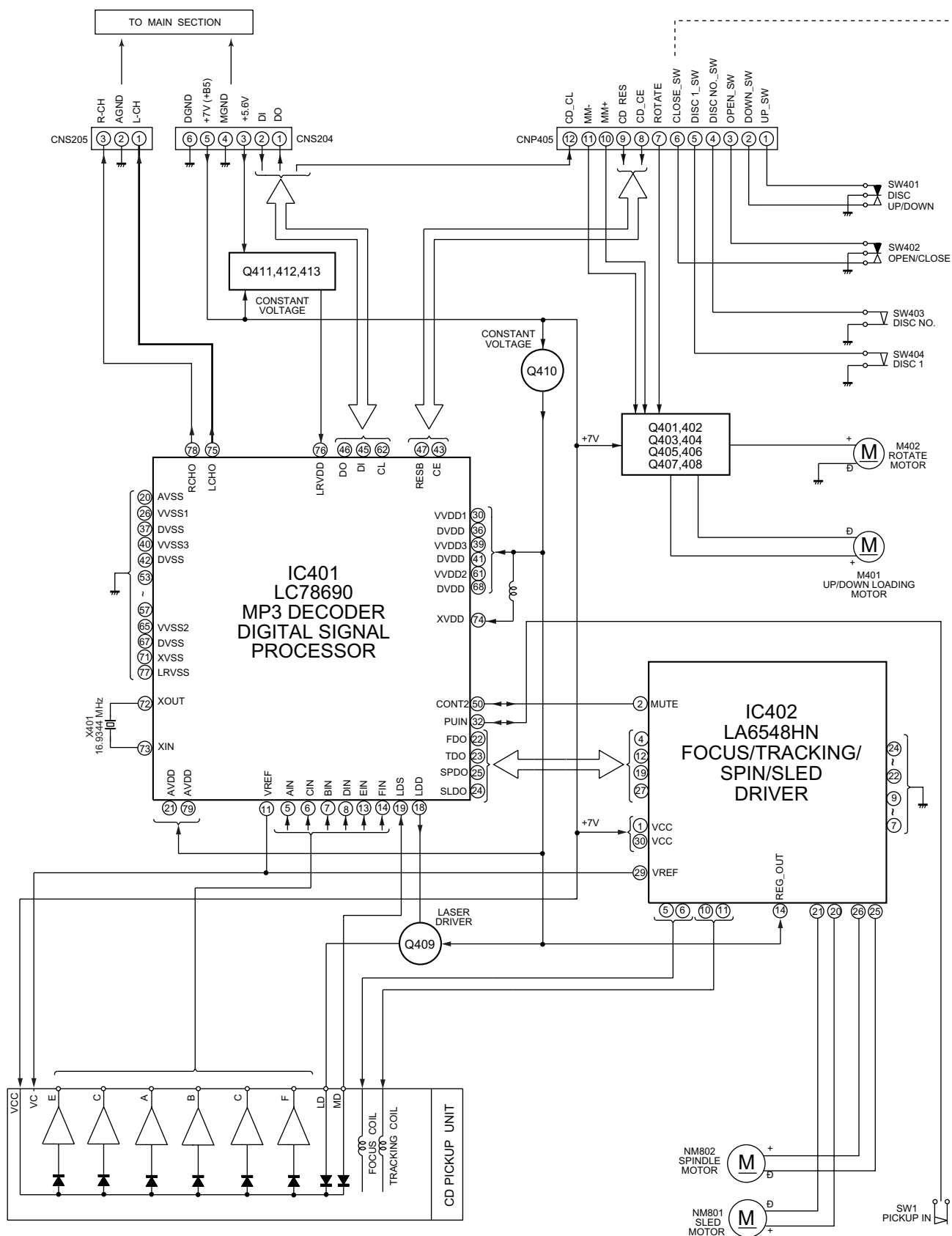


Figure 4-3 BLOCK DIAGRAM (3/4)

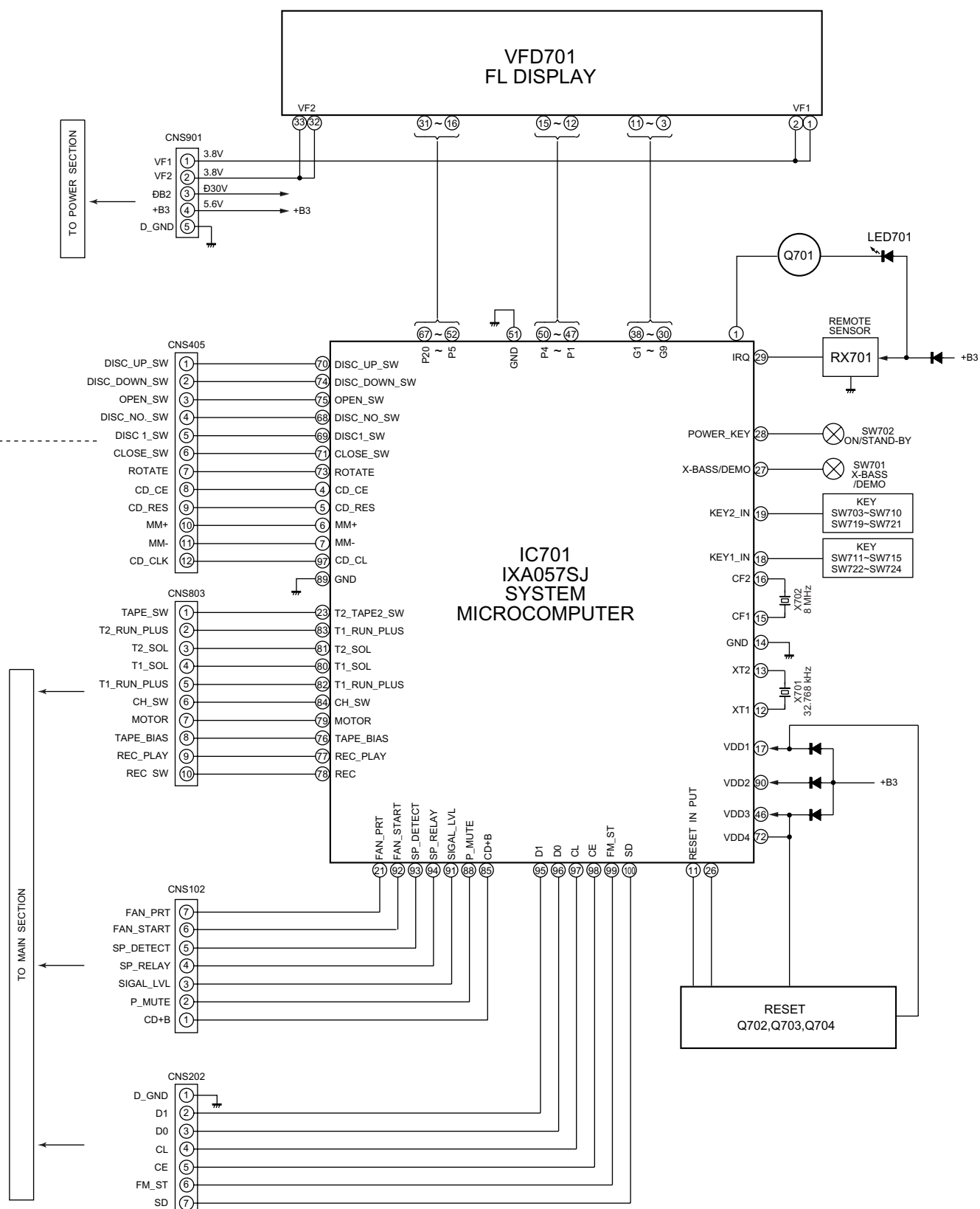
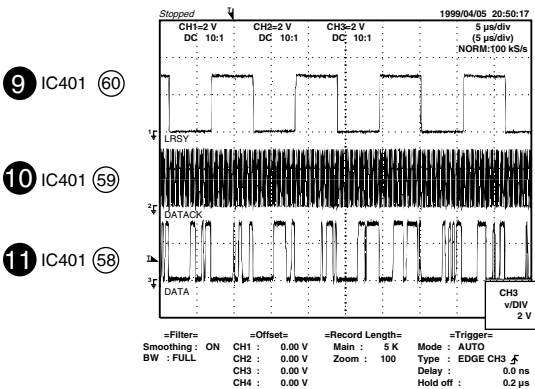
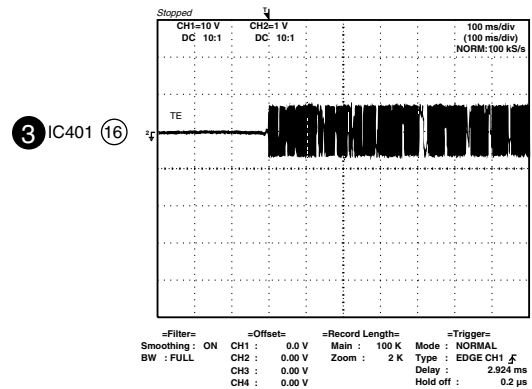
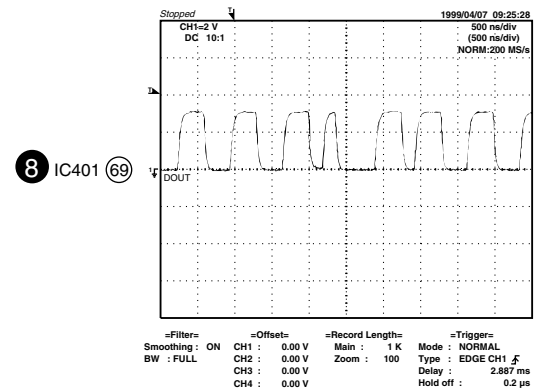
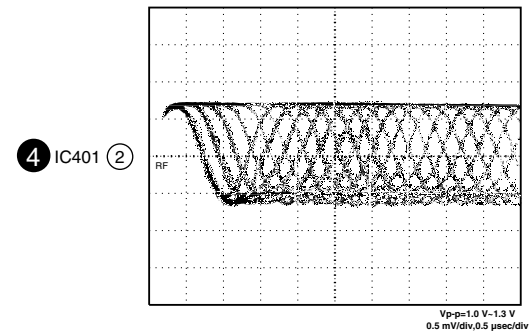
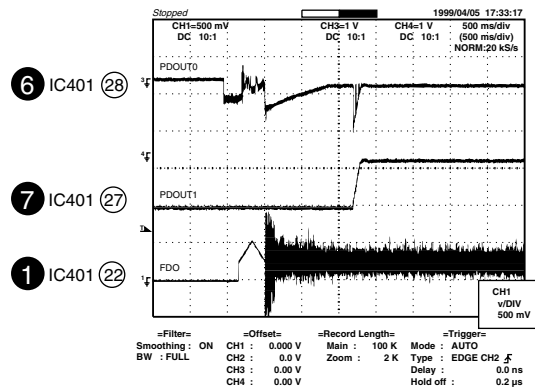
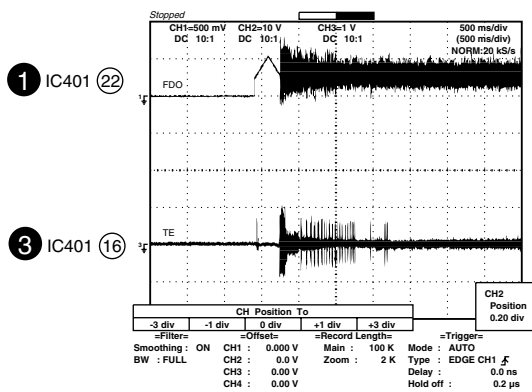
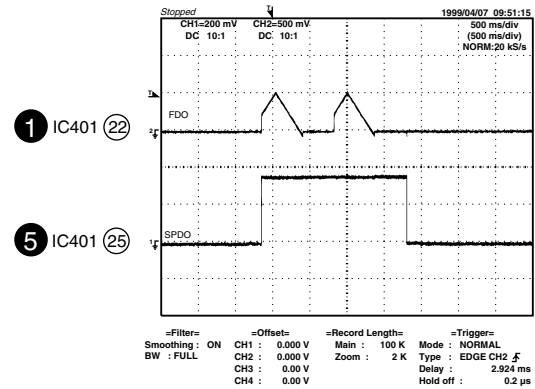
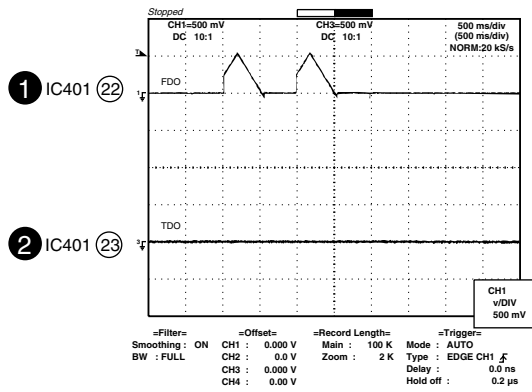


Figure 4-4 BLOCK DIAGRAM (4/4)

CHAPTER 5. CIRCUIT DESCRIPTION

[1] WAVEFORMS OF CD CIRCUIT



[2] VOLTAGE

IC101	
PIN NO.	VOLTAGE
1	1.45V
2	0V
3	0.02V
4	27.3V
5	-26.1V
6	0V
7	0V
8	28.5V
9	-28.5V
10	0V
11	0V
12	-27.2V
13	0V
14	0V
15	0V

IC201	
PIN NO.	VOLTAGE
1	19V
2	0.65V
3	5.61V

IC202	
PIN NO.	VOLTAGE
1	19V
2	0V
3	12V

IC203	
PIN NO.	VOLTAGE
1	19V
2	0V
3	7.9V

IC402	
PIN NO.	VOLTAGE
1	7.1V
2	1.6V
3	0V
4	1.6V
5	3V
6	3V
7	0V
8	0V
9	0V
10	3.1V
11	3.1V
12	1.6V
13	1.64V
14	3.8V
15	3.2V
16	6.48V
17	3.25V
18	1.64V
19	1.6V
20	3V
21	3V
22	0V
23	0V
24	0V
25	3V
26	3V
27	1.6V
28	1.65V
29	0V
30	7.1V

IC401	
PIN NO.	VOLTAGE
1	1.6V
2	1V
3	1.6V
4	1.5V
5	3.25V
6	0V
7	1.6V
8	1.63V
9	1.6V
10	1.6V
11	1.6V
12	1.6V
13	1.6V
14	1.4V
15	1.4V
16	0.09V
17	1.1V
18	3.2V
19	0V
20	1.6V
21	1.6V
22	1.6V
23	1.6V
24	0.04V
25	0V
26	3.25V
27	2.30V
28	3.25V
29	0.04V
30	0V
31	0V
32	0V
33	0V
34	0V
35	0V
36	0V
37	0V
38	3.25V
39	0V
40	0V
41	3.5V
42	1.73V
43	0V
44	0V
45	1.6V
46	1.55V
47	1.65V
48	1.65V
49	1.64V
50	0.04V
51	0.04V
52	0V
53	0V
54	0V
55	0V
56	0V
57	0V
58	0V
59	0V
60	0V
61	0V
62	4.86V
63	4.86V
64	5.11V
65	5.05V
66	4.86V
67	0V
68	5.04V
69	0V
70	0V
71	0.63V
72	0.50V
73	0.64V
74	0.01V
75	0V
76	1.04V
77	3.25V
78	2.47V
79	0V
80	3.23V

IC601	
PIN NO.	VOLTAGE
1	3.7V
2	0V
3	0V
4	3.52V
5	3.5V
6	3.5V
7	3.5V
8	3.52V
9	3.52V
10	3.52V
11	3.52V
12	3.52V
13	3.52V
14	3.52V
15	3.52V
16	3.52V
17	3.52V
18	3.52V
19	3.52V
20	3.52V
21	3.52V
22	3.52V
23	7V
24	3.52V

IC801	
PIN NO.	VOLTAGE
1	0V
2	0V
3	0.56V
4	2.42V
5	0V
6	0.06V
7	0V
8	0.58V
9	4.10V
10	0V
11	0V
12	0V
13	8.25V
14	4.82V
15	0V
16	4.1V
17	0.58V
18	0V
19	2.5V
20	0V
21	2.4V
22	0.56V
23	0V
24	0V

Q101	
PIN NO.	VOLTAGE
E	0V
C	0V
B	0.625V

Q102	
PIN NO.	VOLTAGE
E	0V
C	0V
B	0.63V

Q103	
PIN NO.	VOLTAGE
E	0V
C	5.3V
B	0V

Q104	
PIN NO.	VOLTAGE
E	0V
C	5.34V
B	0V

Q105	
PIN NO.	VOLTAGE
E	0V
C	5.28V
B	0V

Q106	
PIN NO.	VOLTAGE
E	0V
C	5.28V
B	0V

IC701			
PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0V	51	-27.26V
2	0V	52	-27.26V
3	4.6V	53	-13.05V
4	0V	54	-20.14V
5	0V	55	-20.14V
6	0V	56	-20.14V
7	1.69V	57	-27.35V
8	0V	58	-13V
9	0V	59	-23.70V
10	0V	60	-27.25V
11	4.83V	61	-28.12V
12	0V	62	-23.72V
13	0V	63	-23.63V
14	0V	64	-22.71V
15	2.22V	65	-27.27V
16	2.48V	66	-27.27V
17	4.85V	67	-27.27V
18	4.81V	68	4.72V
19	4.82V	69	4.72V
20	5.29V	70	0V
21	5.29V	71	0V
22	0.7V	72	0V
23	4.8V	73	4.71V
24	0V	74	4.71V
25	0V	75	4.71V
26	4.83V	76	0V
27	4.82V	77	4.72V
28	4.82V	78	4.72V
29	4.86V	79	0V
30	-27V	80	0V
31	-24.85V	81	0V
32	-24.85V	82	0V
33	-24.85V	83	0V
34	-24.85V	84	4.57V
35	-24.85V	85	4.87V
36	-24.85V	86	4.87V
37	-24.85V	87	4.77V
38	-24.85V	88	4.77V
39	-20.48V	89	0V
40	-20.48V	90	4.88V
41	-20.48V	91	5.34V
42	-20.48V	92	0V
43	-20.48V	93	4.87V
44	-20.48V	94	4.30V
45	-16.61V	95	0V
46	-4.82V	96	0V
47	-24.83V	97	4.64V
48	-24.83V	98	0V
49	-16.57V	99	0V
50	-16.57V	100	0V

Q107	
PIN NO.	VOLTAGE
E	0.06V
C	0.13V
B	0.87V

Q108	
PIN NO.	VOLTAGE
1	5.57V
2	0V
3	5.5V

Q109	
PIN NO.	VOLTAGE
1	0V
2	4.88V
3	0V

Q201	
PIN NO.	VOLTAGE
1	
2	
3	

Q202	
PIN NO.	VOLTAGE
1	
2	
3	

Q203	
PIN NO.	VOLTAGE
1	
2	
3	

Q204	
PIN NO.	VOLTAGE
E	0V
C	
B	

Q205	
PIN NO.	VOLTAGE
1	
2	
3	

Q206	
PIN NO.	VOLTAGE
E	7.43V
C	0.02V
B	7.98V

Q207	
PIN NO.	VOLTAGE
E	0V
C	7.43V
B	0V

Q208	
PIN NO.	VOLTAGE
E	0.83V
C	0.66V
B	0V

Q302	
PIN NO.	VOLTAGE
E	0V
C	0.4V
B	2.3V

Q306	
PIN NO.	VOLTAGE
E	0V
C	0.8V
B	3.0V

Q351	
PIN NO.	VOLTAGE
1	5V
2	0V
3	0V

Q401	
PIN NO.	VOLTAGE
E	0V
C	4V
B	0V

Q402	
PIN NO.	VOLTAGE
E	0.45V
C	0V
B	5.96V

Q403	
PIN NO.	VOLTAGE
E	0V
C	5.9V
B	0V

Q404	
PIN NO.	VOLTAGE
E	0V
C	5.96V
B	0V

Q405	
PIN NO.	VOLTAGE
E	6.46V
C	0V
B	5.96V

Q406	
PIN NO.	VOLTAGE
1	0V
2	5V
3	0V

Q407	
PIN NO.	VOLTAGE
E	0V
C	6V
B	0V

Q408	
PIN NO.	VOLTAGE
E	0.1V
C	0V
B	5.9V

Q409	
PIN NO.	VOLTAGE
E	3.24V
C	0V
B	2.26V

Q410	
PIN NO.	VOLTAGE
E	
C	
B	

Q411	
PIN NO.	VOLTAGE
E	7.13V
C	3.27V
B	6.49V

Q412	
PIN NO.	VOLTAGE
E	5.10V
C	7.14V
B	5.8V

Q701	
PIN NO.	VOLTAGE
E	0V
C	3.72V
B	0V

Q702	
PIN NO.	VOLTAGE
1	0V
2	4.84V
3	0V

Q703	
PIN NO.	VOLTAGE
E	0.3V
C	4.83V
B	0.31V

Q704	
PIN NO.	VOLTAGE
E	0.31V
C	0.31V
B	1.66V

Q801	
PIN NO.	VOLTAGE
E	0V
C	0V
B	0.03V

Q802	
PIN NO.	VOLTAGE
E	4V
C	3.96V
B	3.33V

Q803	
PIN NO.	VOLTAGE
E	0V
C	0V
B	0.03V

Q804	
PIN NO.	VOLTAGE
E	11.8V
C	0V
B	11.9V

Q805	
PIN NO.	VOLTAGE
E	11.9V
C	0V
B	11.8V

||
||
||

CD-MPS440W

-MEMO-

CHAPTER 6. CIRCUIT SCHEMATICS AND PARTS LAYOUT

[1] NOTES ON SCHEMATIC DIAGRAM

- Resistor:

To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with "Fusible" is a fuse type.

- Capacitor:

To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage" is used.

(CH), (TH), (RH), (UJ): Temperature compensation



(ML): Mylar type

(P.P.): Polypropylene type

- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.

- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.

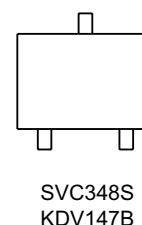
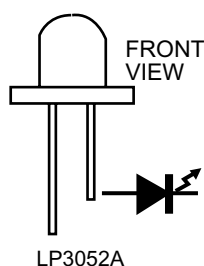
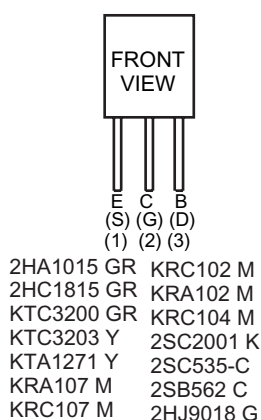
- In the tuner section, indicates AM
indicates FM stereo
- In the main section, a tape is being played back.
- In the deck section, a tape is being played back.
- In the power section, a tape is being played back.
- In the CD section, the CD is stopped.

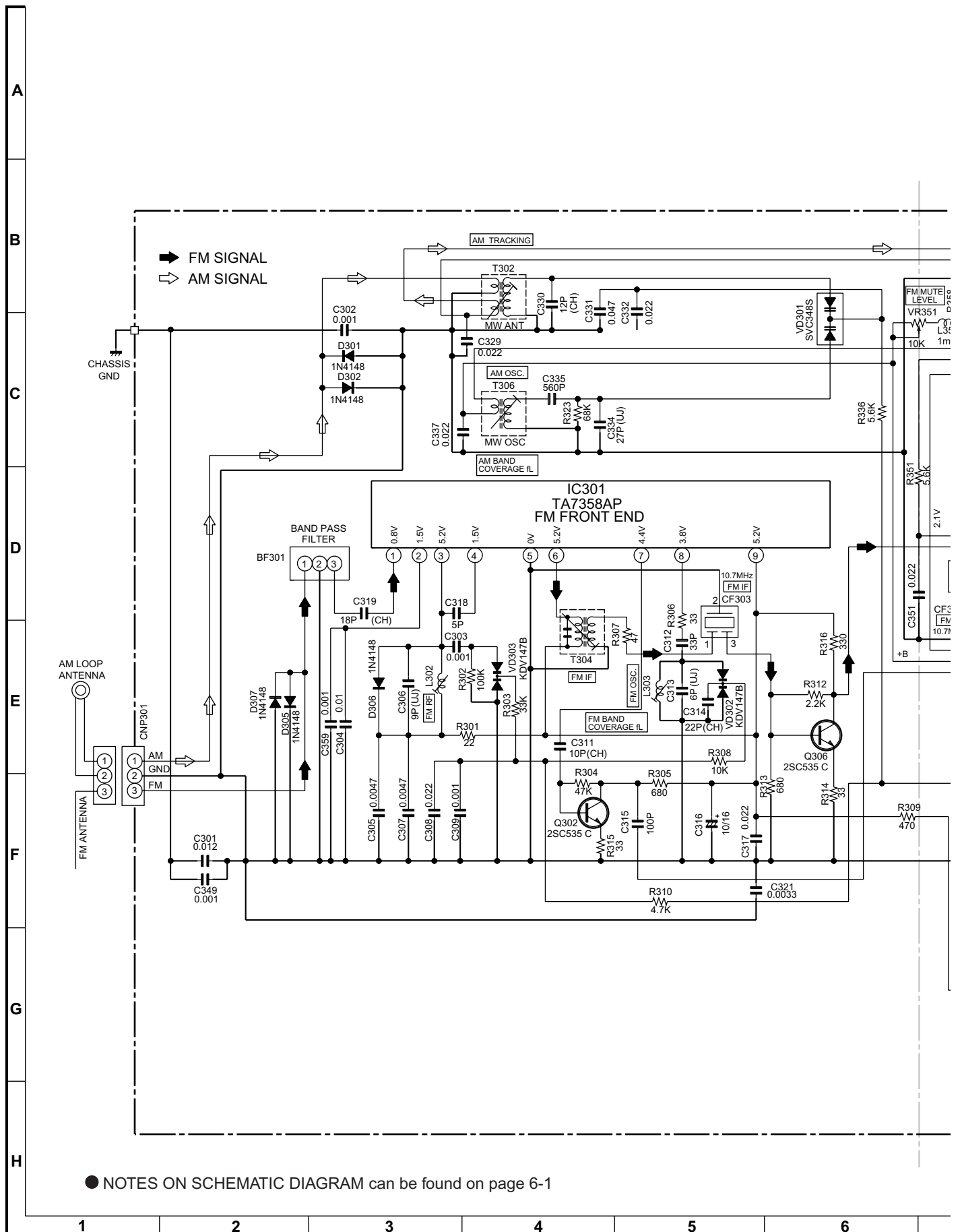
- Parts marked with "  " () are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
SW1	PICKUP IN	ON—OFF
SW401	DISK UP/DOWN	ON—OFF
SW402	OPEN/CLOSE	ON—OFF
SW403	DISC NO.	ON—OFF
SW404	DISC1	ON—OFF
SW701	X-BASS/DEMO	ON—OFF
SW702	ON/STAND-BY	ON—OFF
SW703	OPEN/CLOSE	ON—OFF
SW704	DISK SKIP	ON—OFF
SW705	VIDEO/AUX	ON—OFF
SW706	TAPE	ON—OFF
SW707	PRESET DOWN	ON—OFF
SW708	PLAY/REPEAT	ON—OFF
SW709	PRESET UP	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW710	STOP	ON—OFF
SW711	MEMORY/SET	ON—OFF
SW712	TUNING/TIME DOWN	ON—OFF
SW713	TUNING/TIME UP	ON—OFF
SW714	TIMER/SLEEP	ON—OFF
SW715	CLOCK	ON—OFF
SW719	EQUALISER	ON—OFF
SW720	VOLUME UP	ON—OFF
SW721	VOLUME DOWN	ON—OFF
SW722	TUNER(BAND)	ON—OFF
SW723	DISK	ON—OFF
SW724	REC/PAUSE	ON—OFF
SW801	TAPE2 INITIALISE	ON—OFF
SW802	TAPE1INITIALISE	ON—OFF
SW901	VOLTAGE SELECTOR	230-240V

[2] TYPES OF TRANSISTOR AND LED



[3] SCHEMATIC DIAGRAM MAIN(1/3)

● NOTES ON SCHEMATIC DIAGRAM can be found on page 6-1

Figure 6-2 SCHEMATIC DIAGRAM (1/12)



6 - 3

[4] SCHEMATIC DIAGRAM MAIN(2/3)

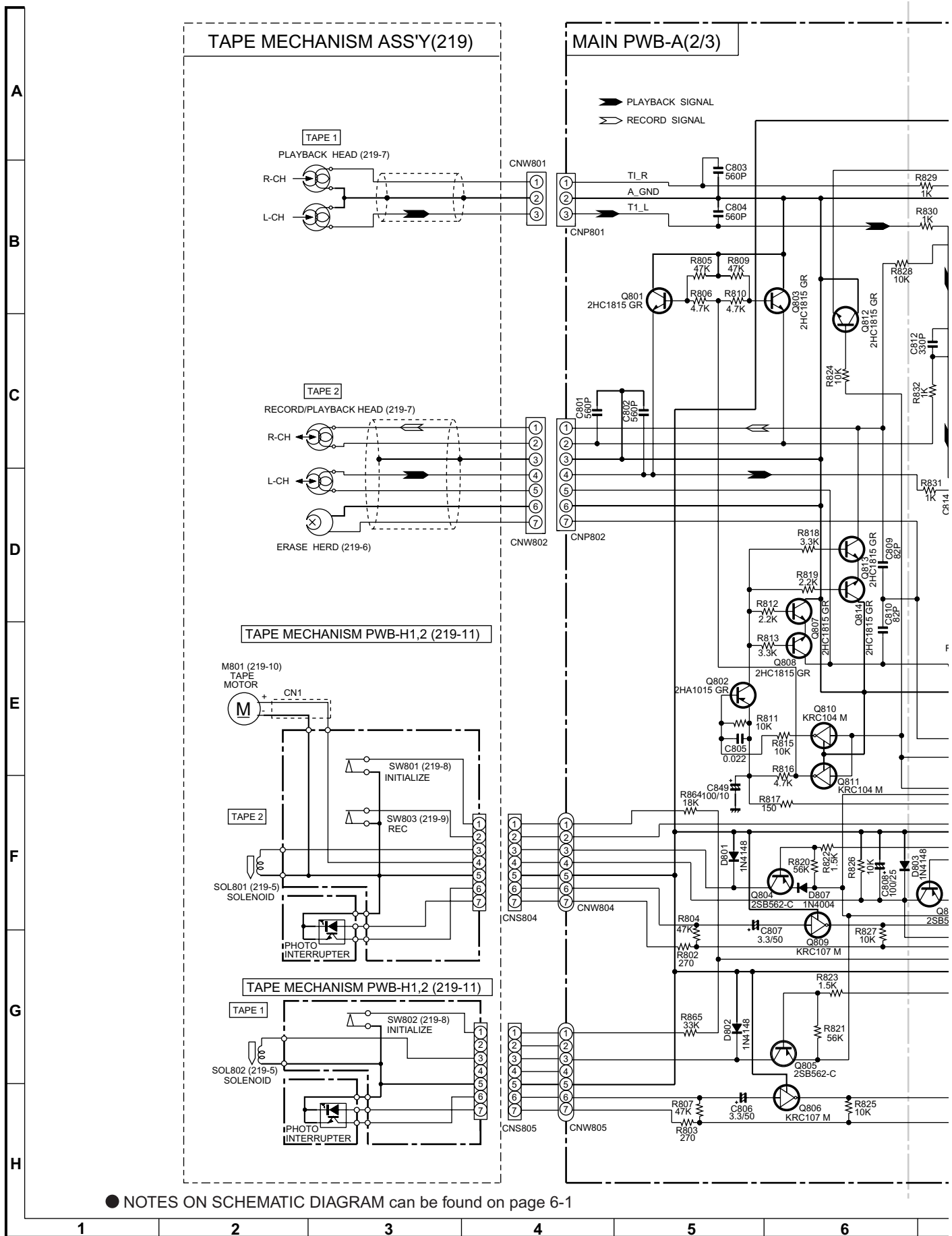


Figure 6-4 SCHEMATIC DIAGRAM (3/12)

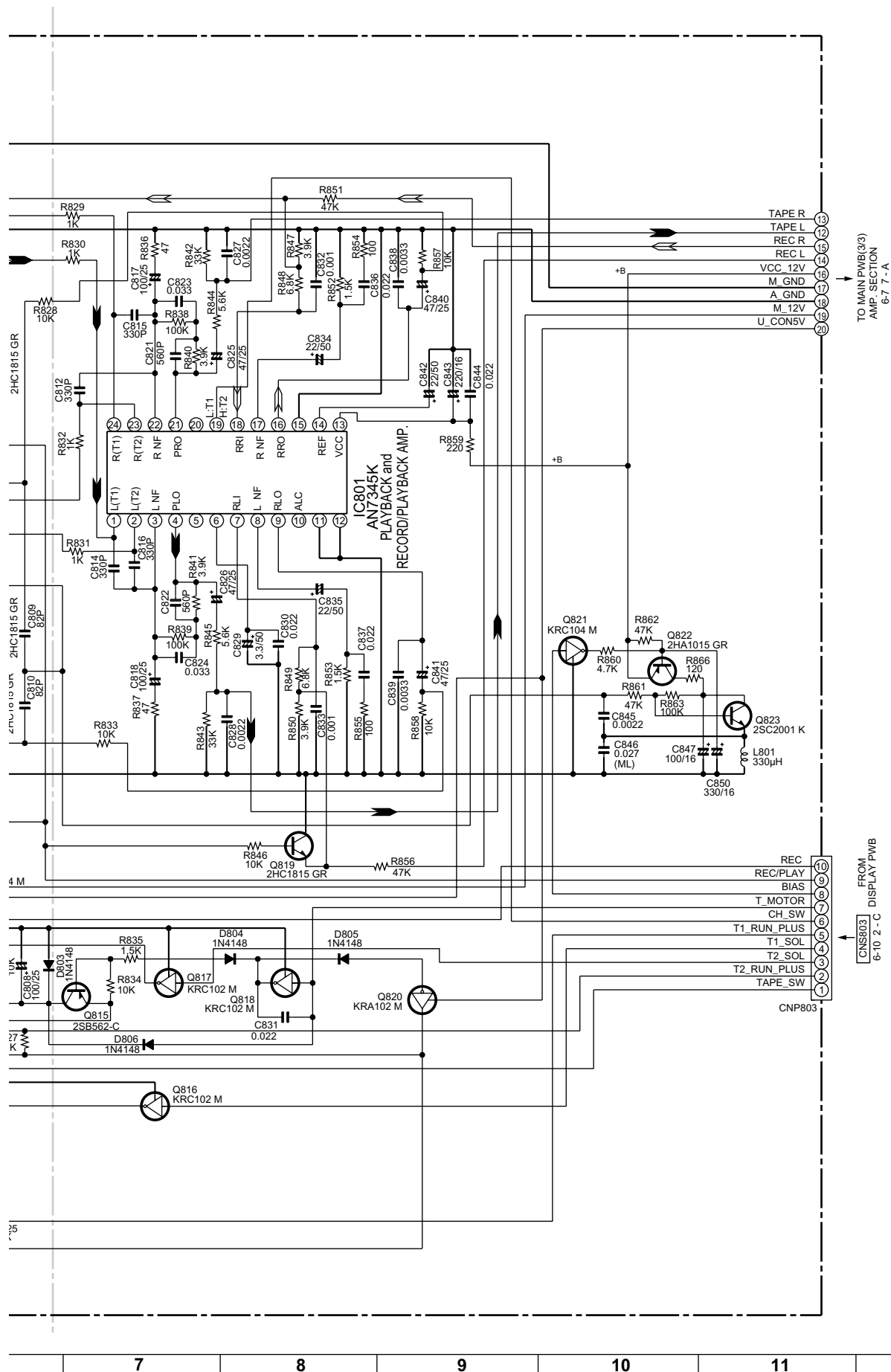
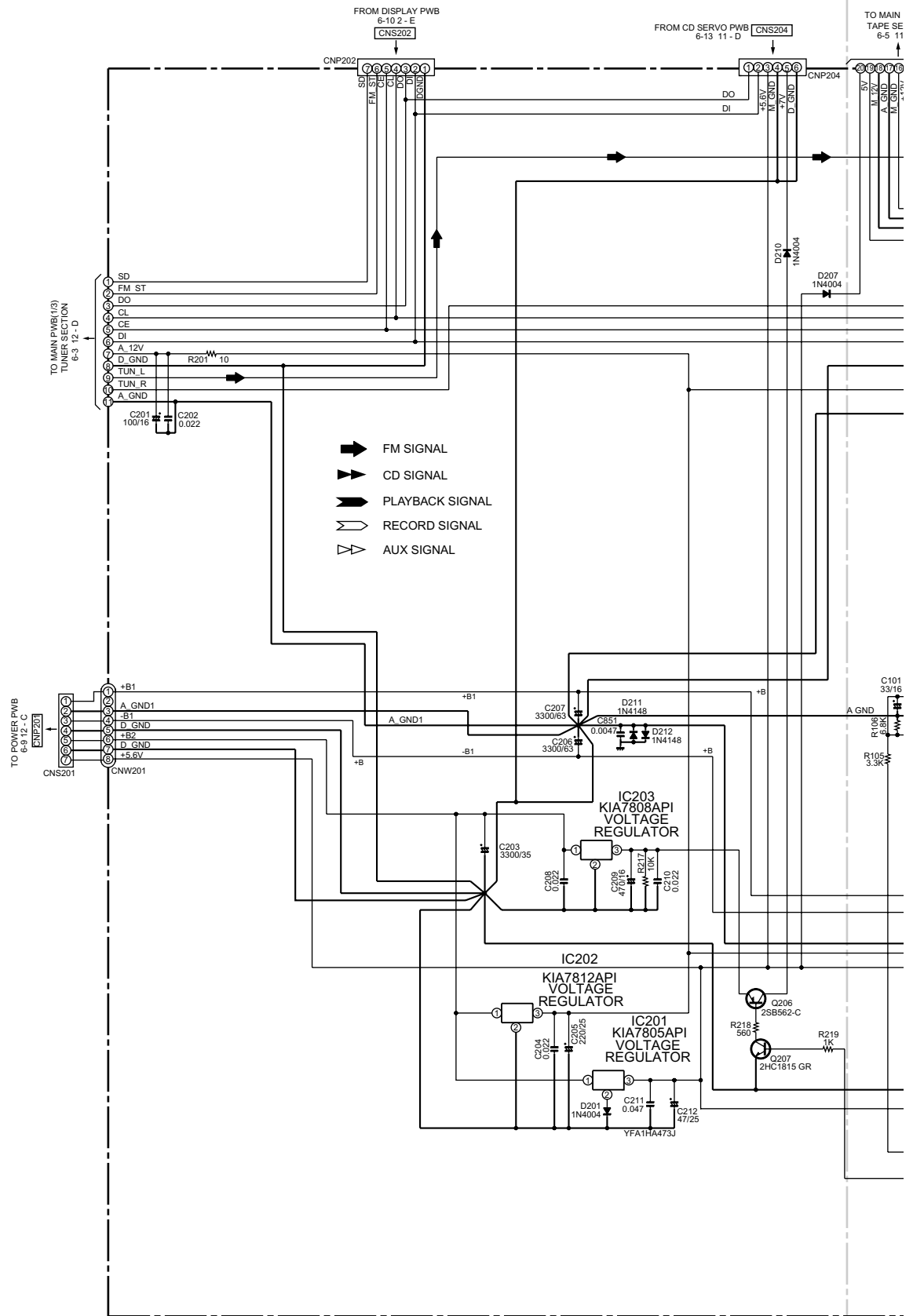


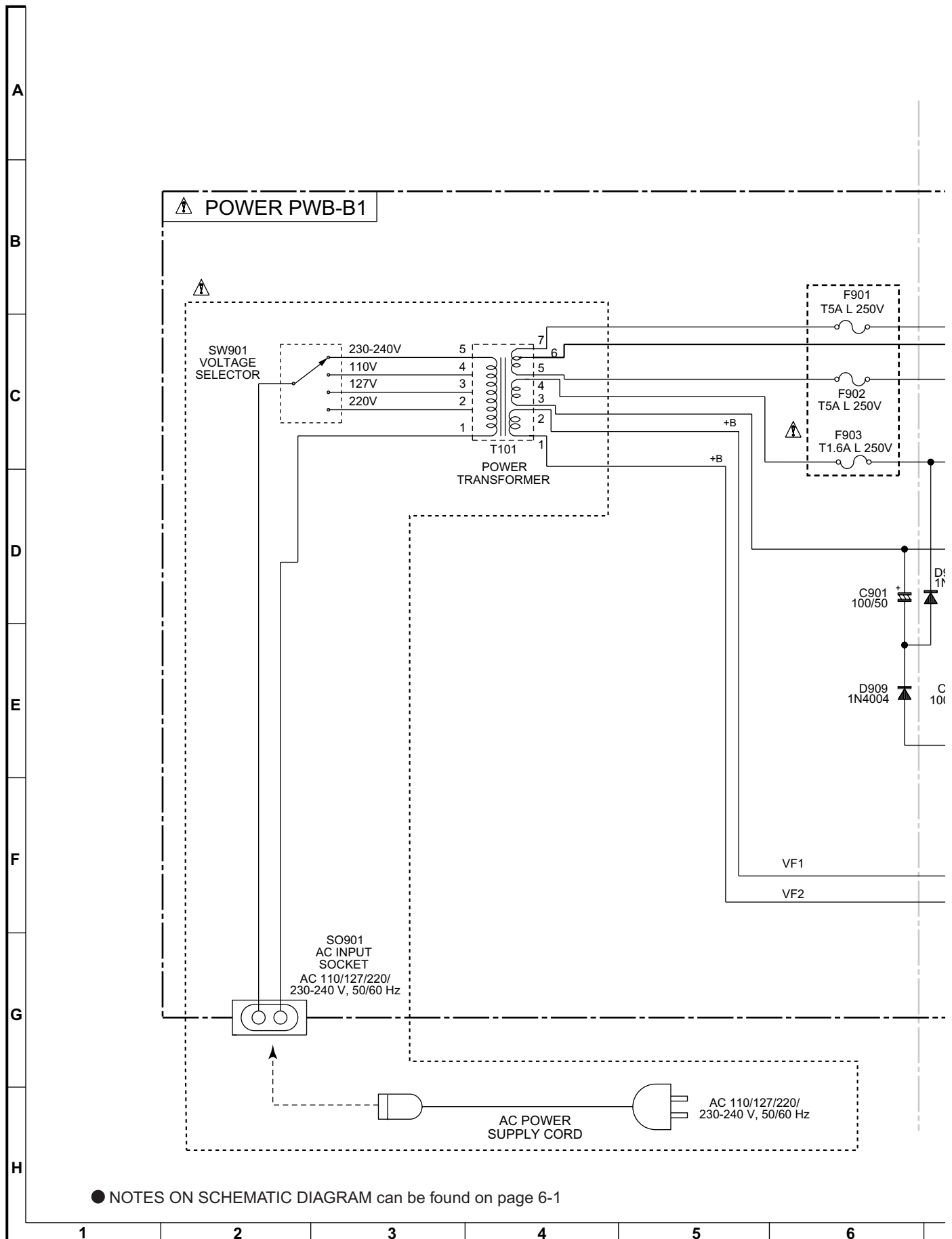
Figure 6-5 SCHEMATIC DIAGRAM (4/12)

[5] SCHEMATIC DIAGRAM MAIN(3/3)

● NOTES ON SCHEMATIC DIAGRAM can be found on page 6-1

Figure 6-6 SCHEMATIC DIAGRAM (5/12)

6-7

[6] SCHEMATIC DIAGRAM POWER**Figure 6-6 SCHEMATIC DIAGRAM (7/12)**

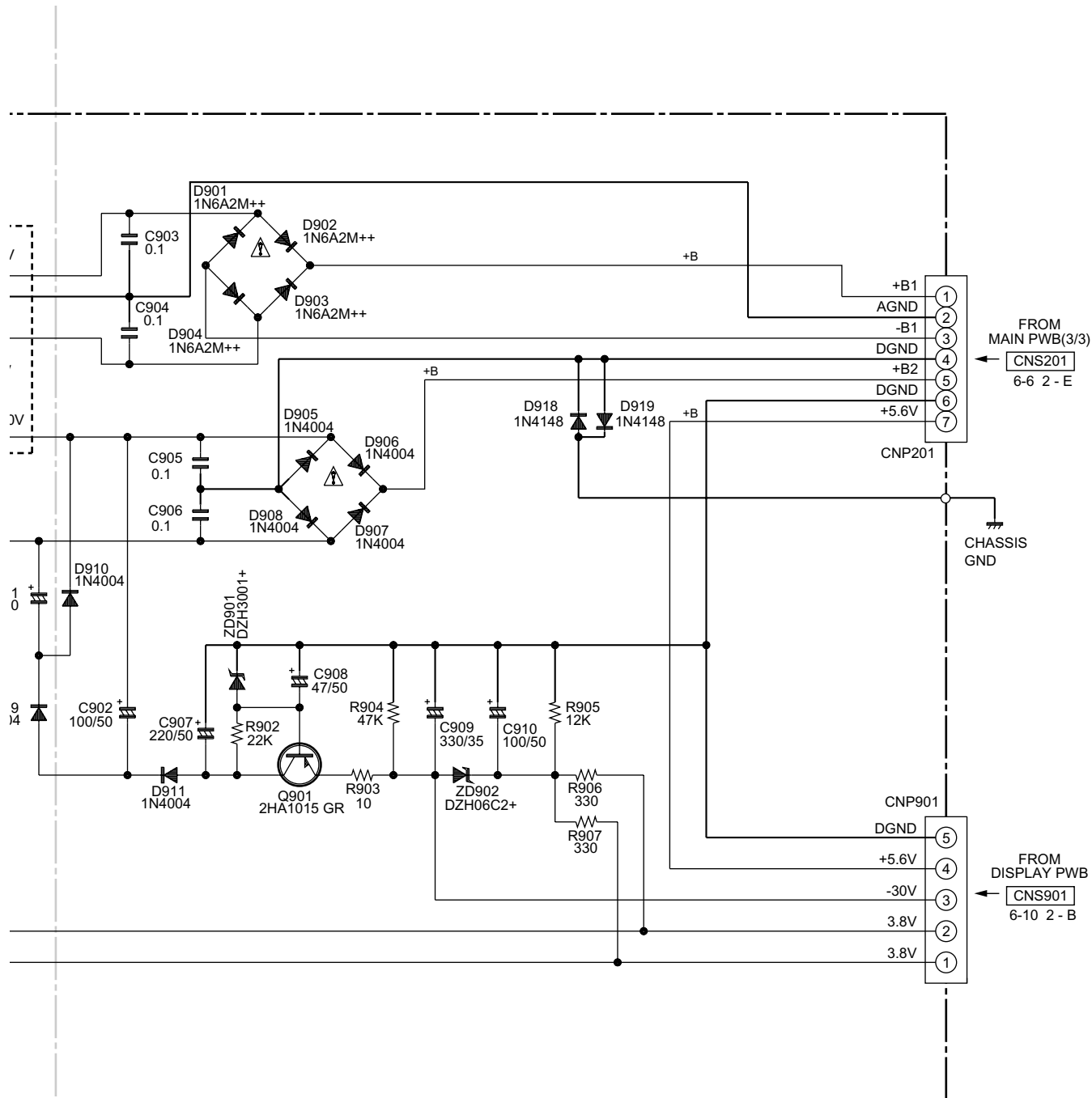
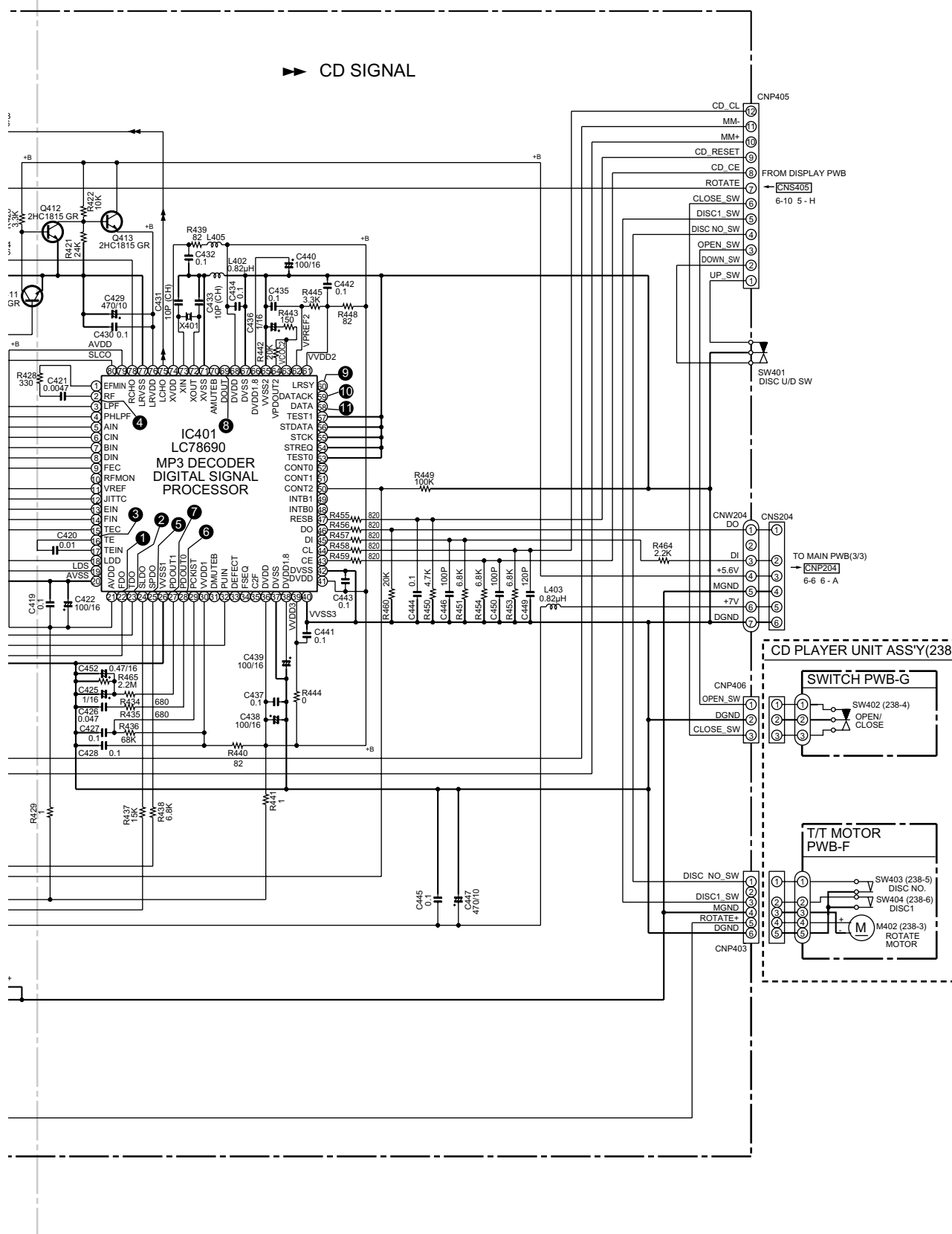


Figure 6-6 SCHEMATIC DIAGRAM (8/12)



6 - 11





[9] WIRING SIDE OF PWB

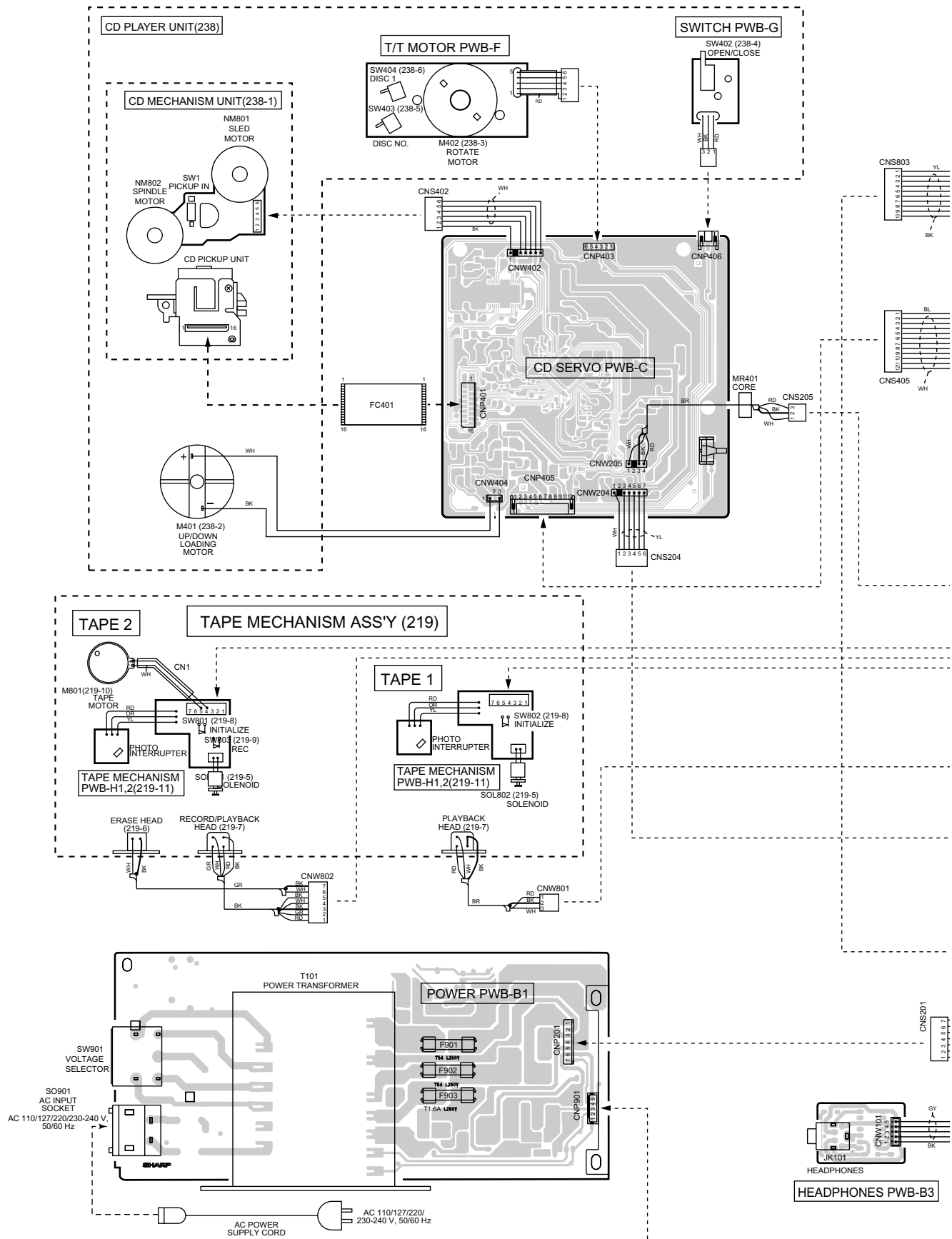


Figure 6-14 WIRING SIDE OF PWB (1/14)

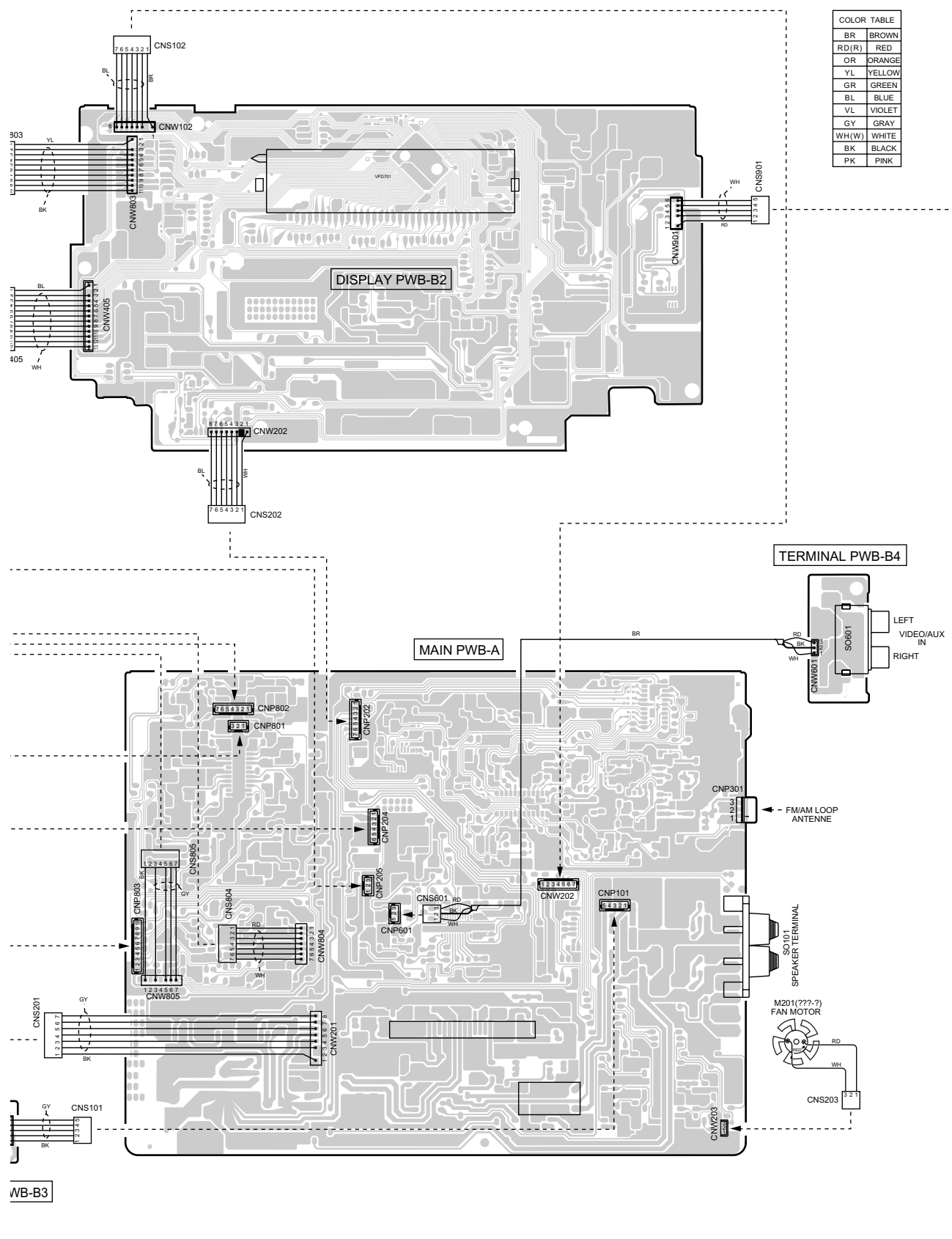


Figure 6-15 WIRING SIDE OF PWB (2/14)



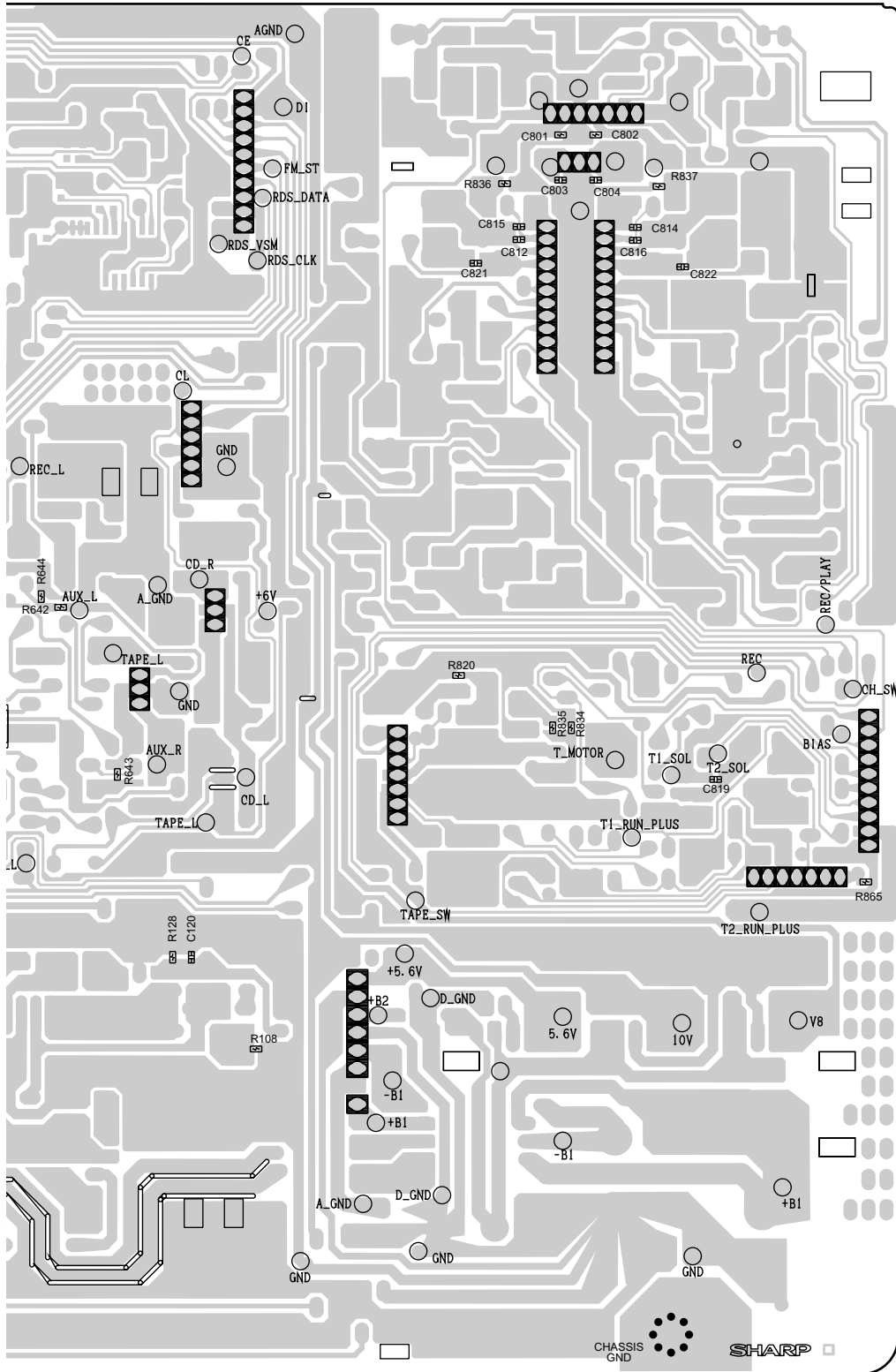
	7	8	9	10	11	12
--	---	---	---	----	----	----

6 - 17

[illegible]

6 - 18

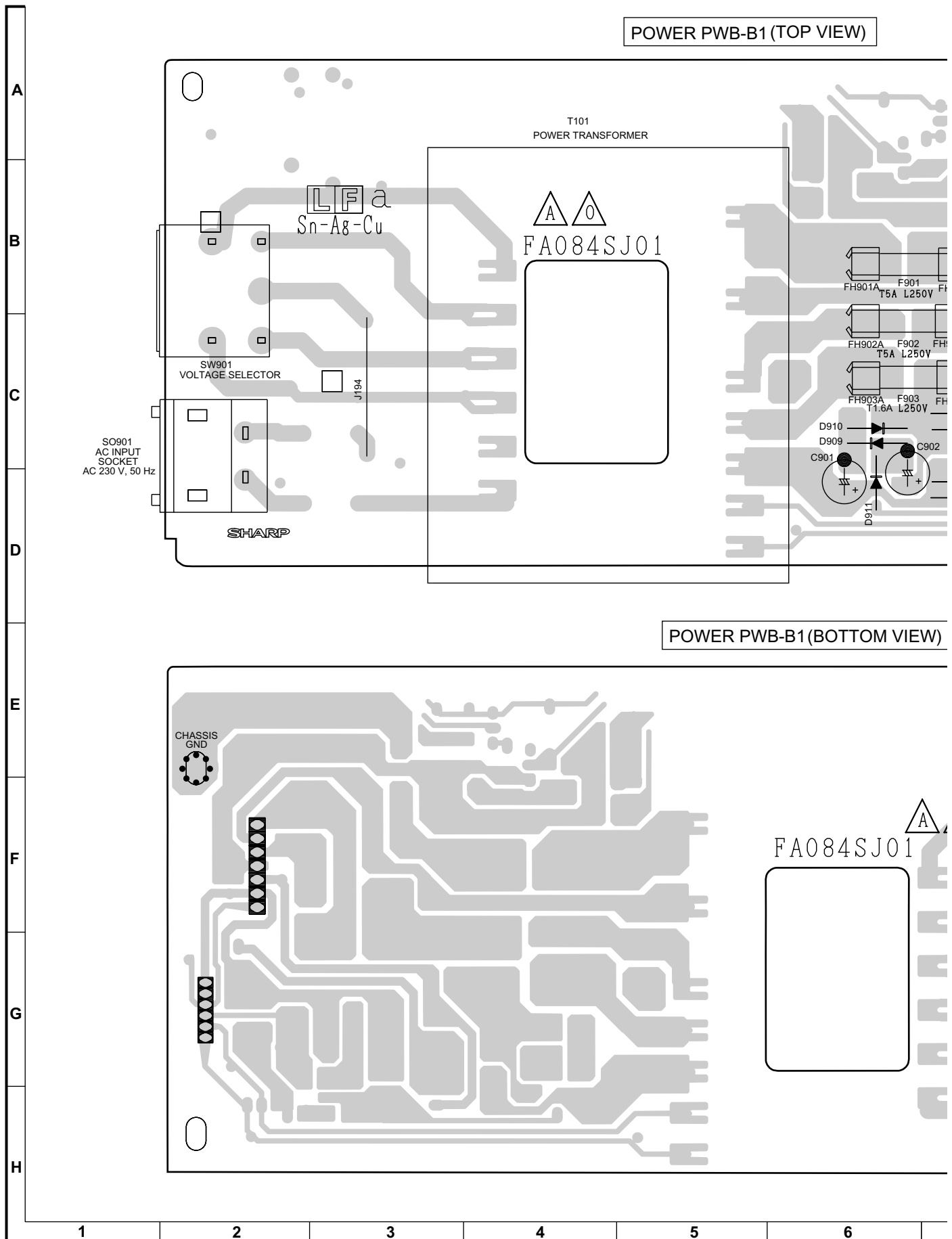
M VIEW)

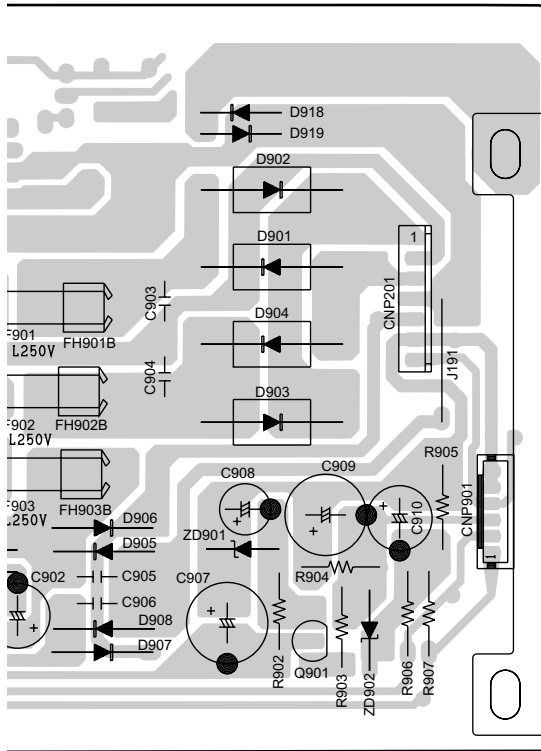


7	8	9	10	11	12
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Figure 6-19 WIRING SIDE OF PWB (6/14)

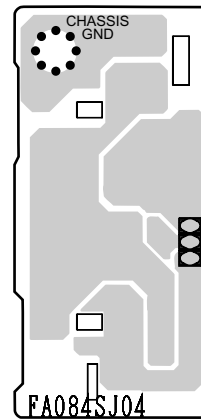
[12] WIRING SIDE OF PWB POWER



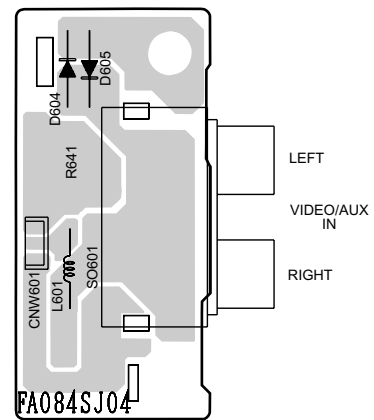


TERMINAL PWB-B4

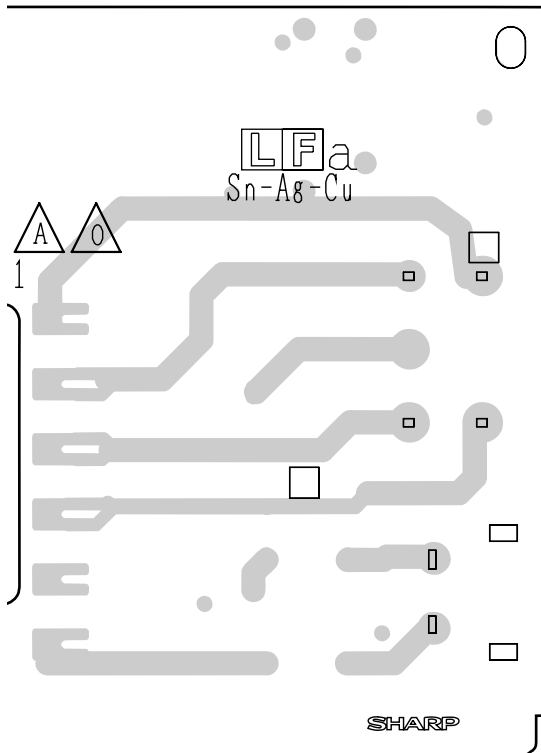
(BOTTOM VIEW)



(TOP VIEW)

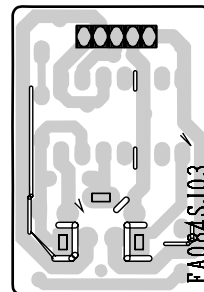


(VIEW)

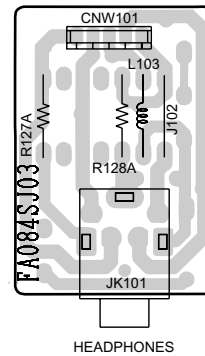


HEADPHONES PWB-B3

(BOTTOM VIEW)



(TOP VIEW)



7	8	9	10	11	12
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Figure 6-21 WIRING SIDE OF PWB (8/14)

DISPLAY PWB-B2 (

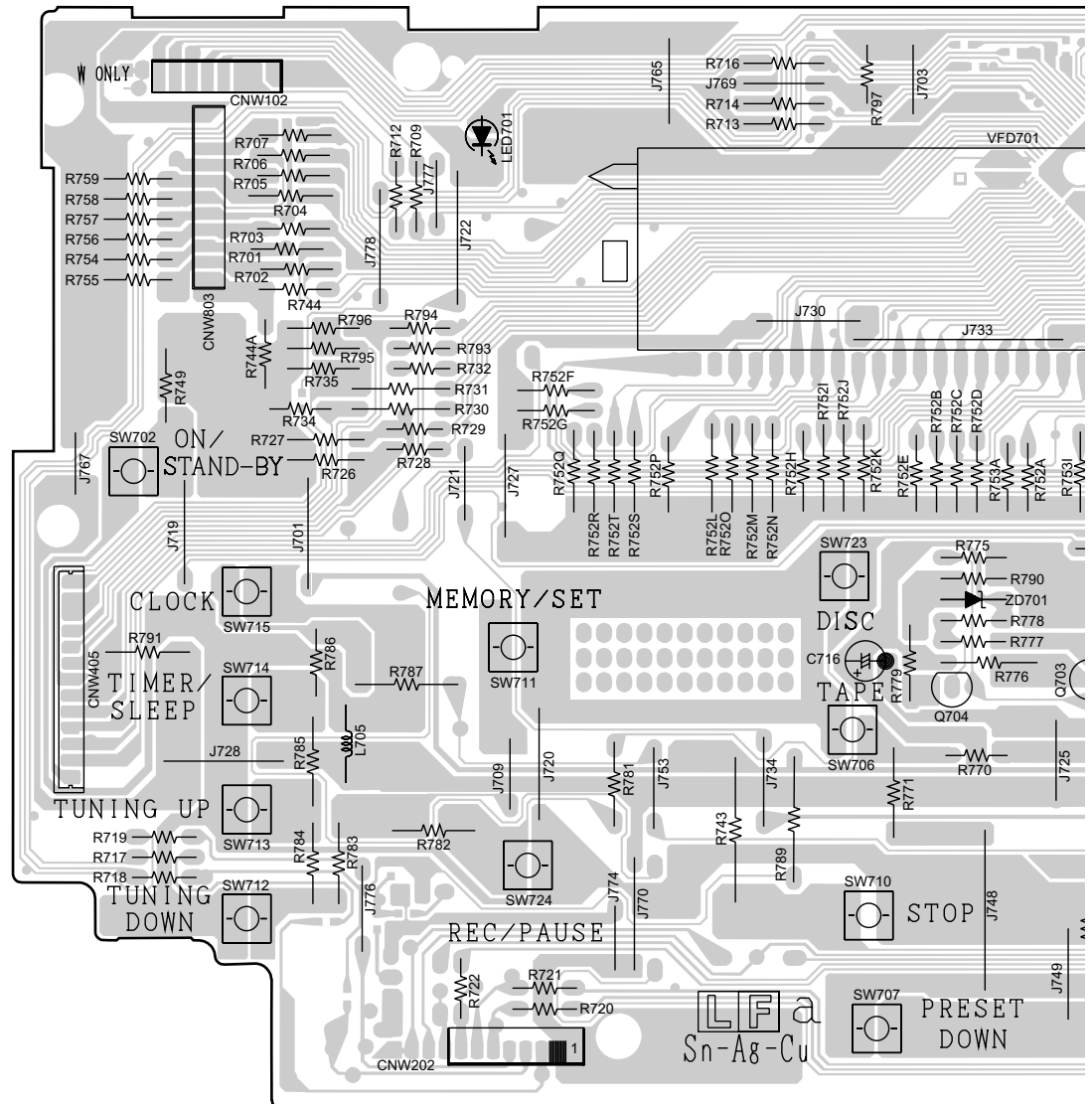
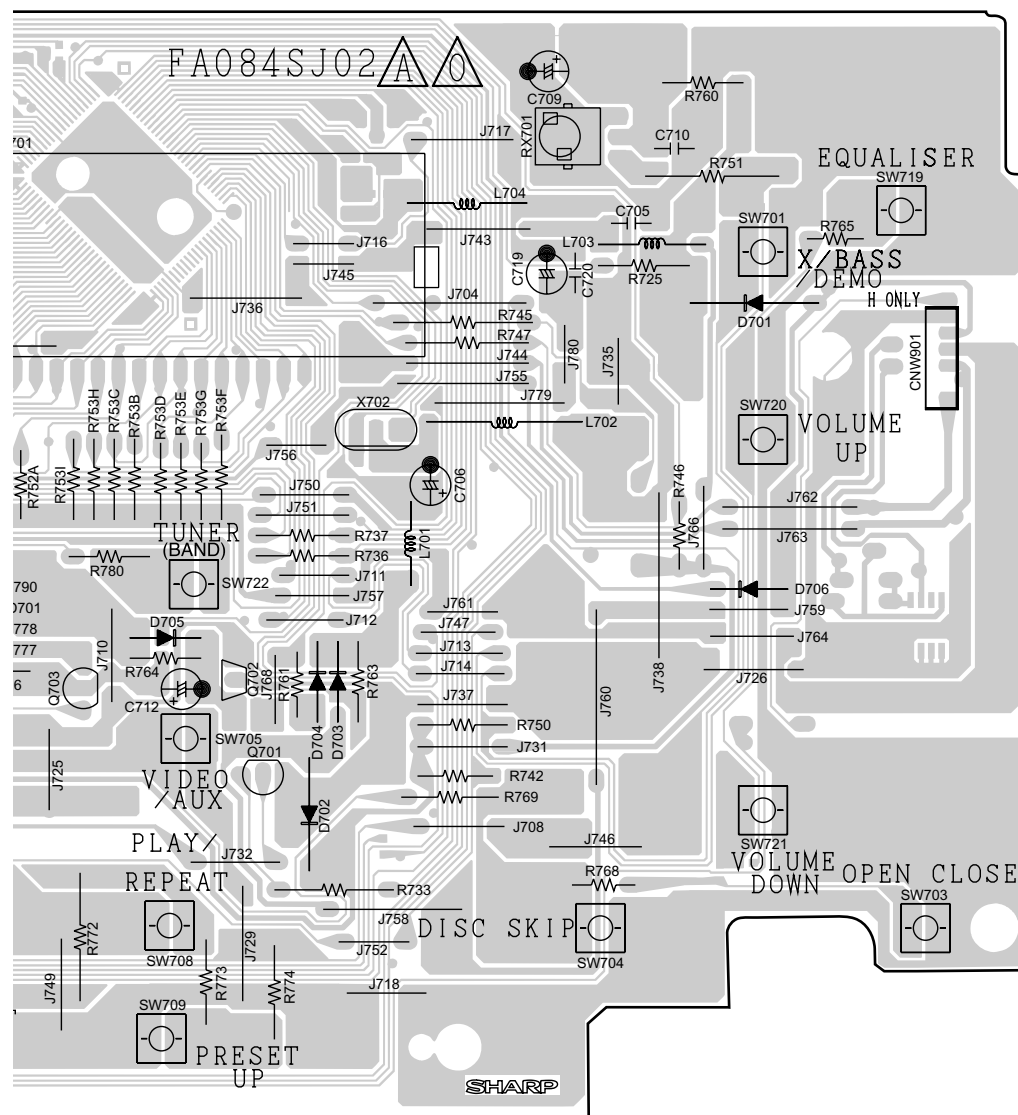


Figure 6-22 WIRING SIDE OF PWB (9/14)

B2 (TOP VIEW)



7	8	9	10	11	12
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Figure 6-23 WIRING SIDE OF PWB (10/14)

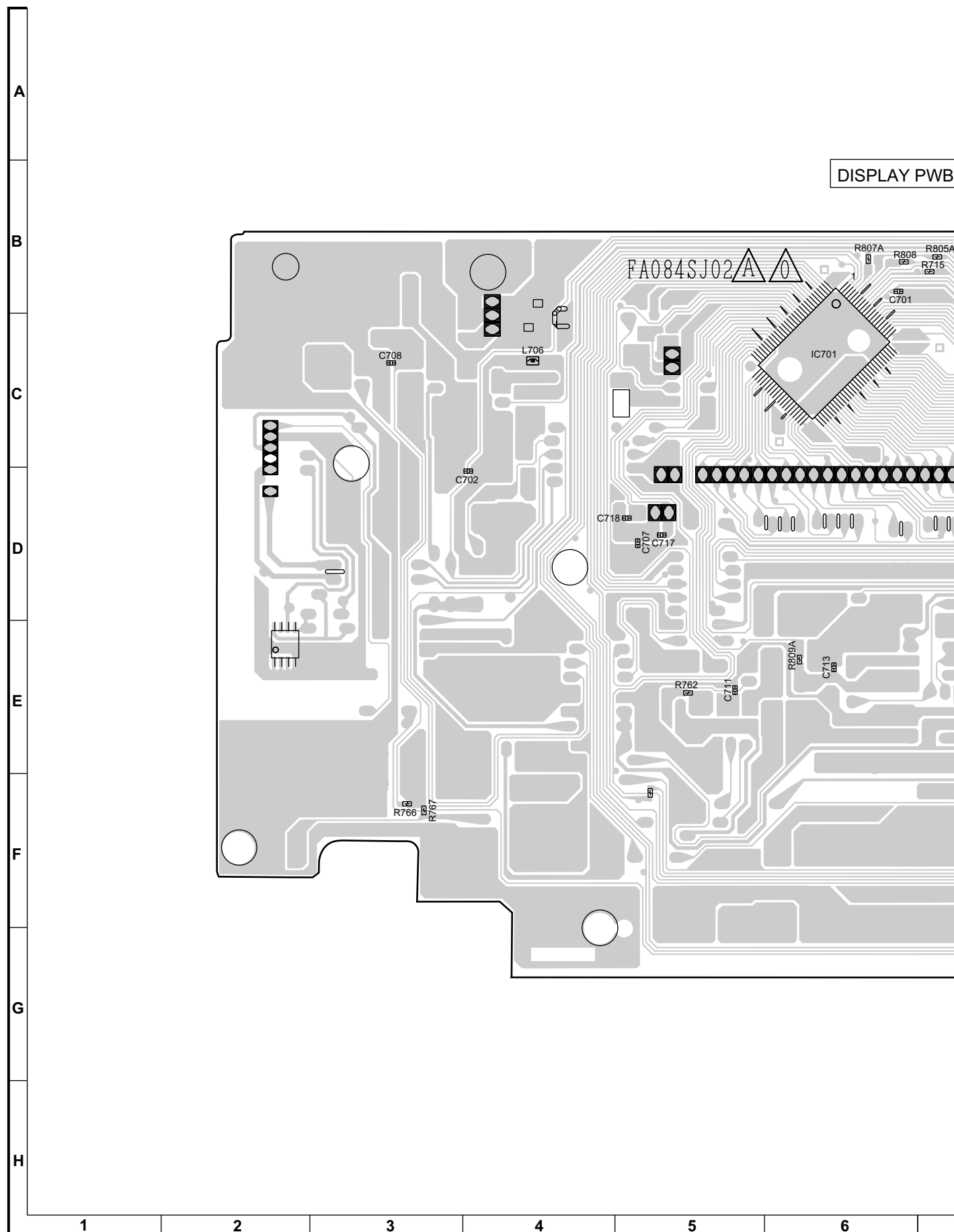
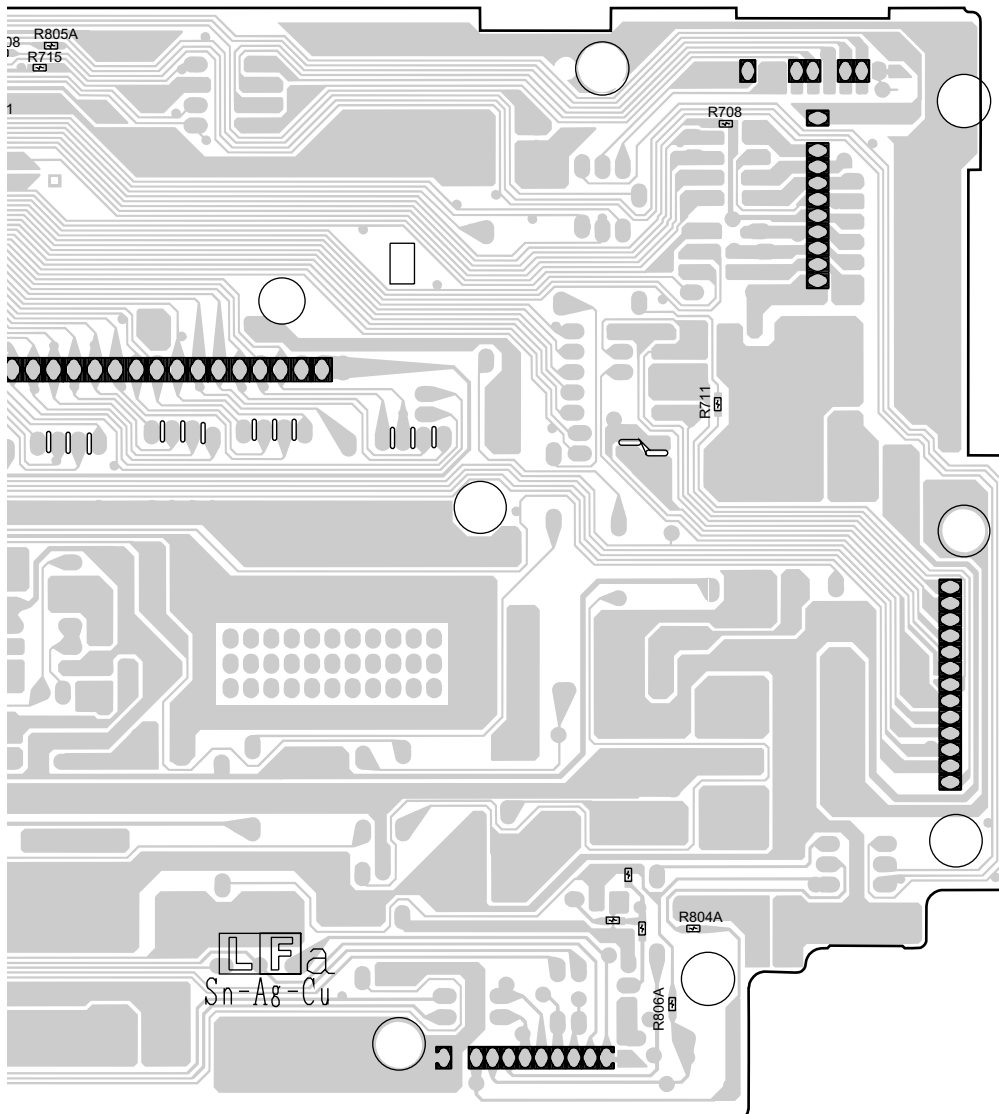
[14] WIRING SIDE OF PWB DISPLAY BOTTOM

Figure 6-24 WIRING SIDE OF PWB (11/14)

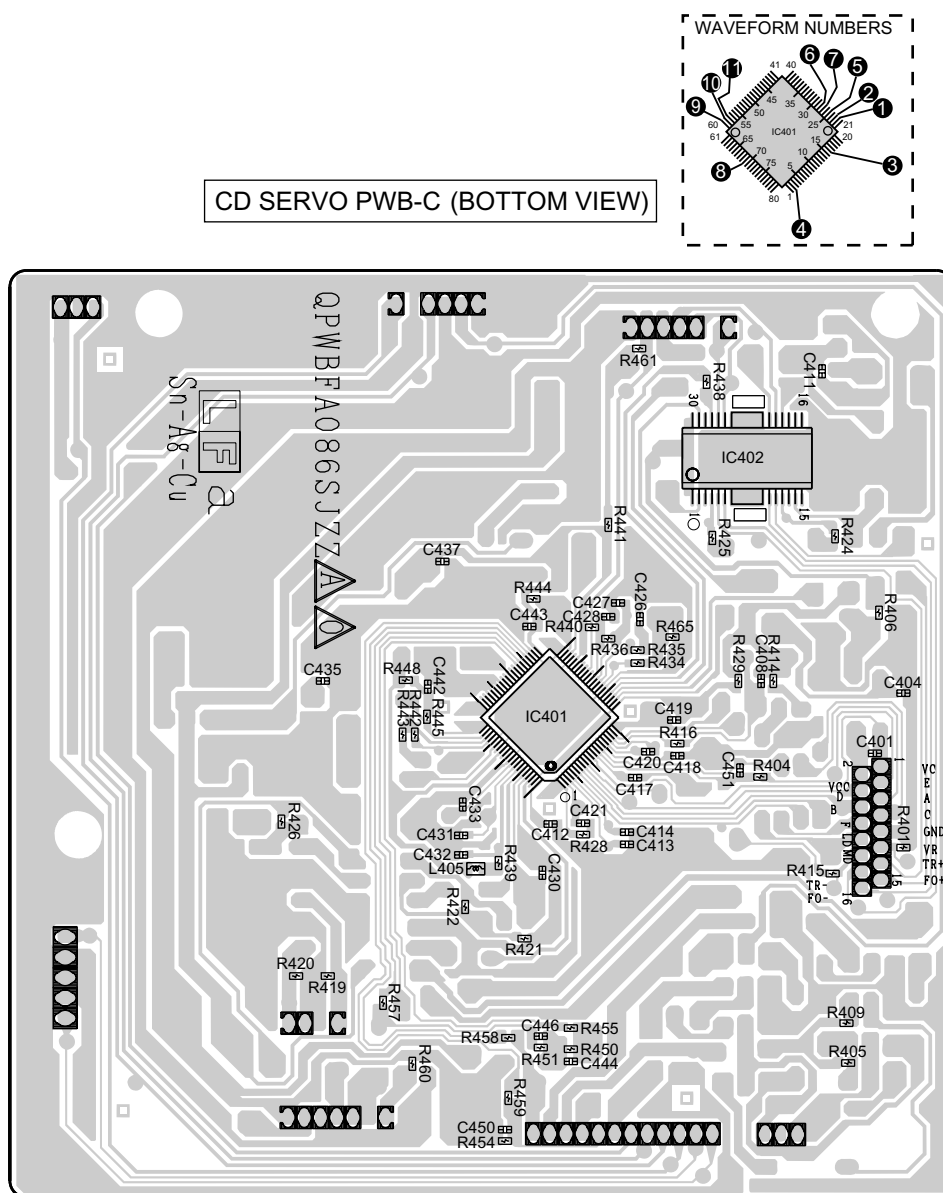
PWB-B2 (BOTTOM VIEW)



7	8	9	10	11	12
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Figure 6-24 WIRING SIDE OF PWB (12/14)





● The numbers ① to ⑪ are waveform numbers shown in page 5-1

7	8	9	10	11	12
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Figure 6-24 WIRING SIDE OF PWB (14/14)

CHAPTER 7. FLOWCHART

[1] TROUBLESHOOTING

1. When the CD does not function

The CD section may not operate when the objective lens of the optical pickup is dirty. 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 trouble shooting 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.

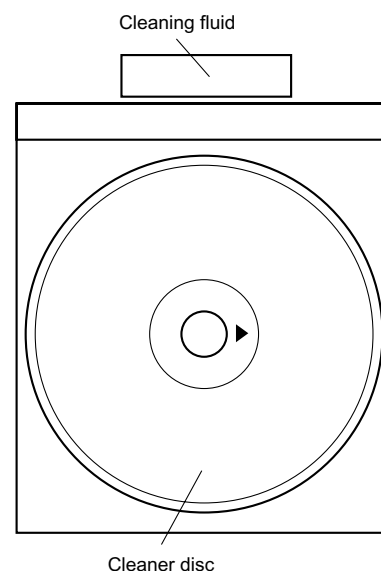
		Parts code
1.	CD optical pickup Lens cleaner disc	UDSKA0004AFZZ

HOW TO USE

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

CAUTION

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



2. When a CD cannot be played

2.1. Pressing the CD operation key is accepted, but playback does not occur.

- 1) Focus-HF system check
- 2) Tracking system check
- 3) Spin system check
- 4) PLL system check
- 5) Others

(1) Focus-HF system check.

Although a CD is inserted and the cover is closed, "NO DISC" is displayed.

Press the OPEN/CLOSE switch (SW703) without inserting a disc, and try starting the playback operation.

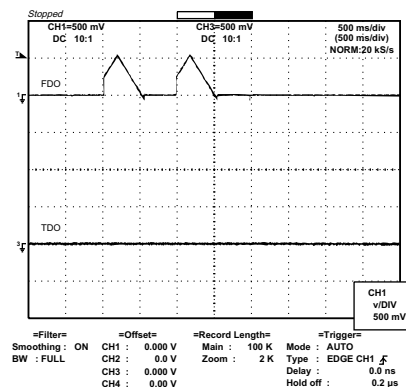


Figure 1

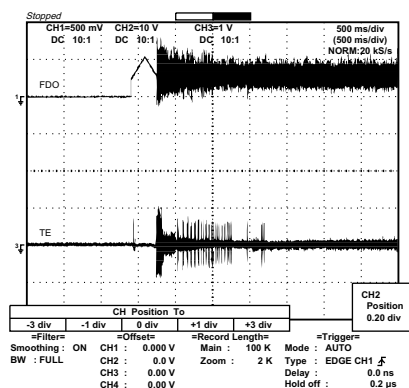
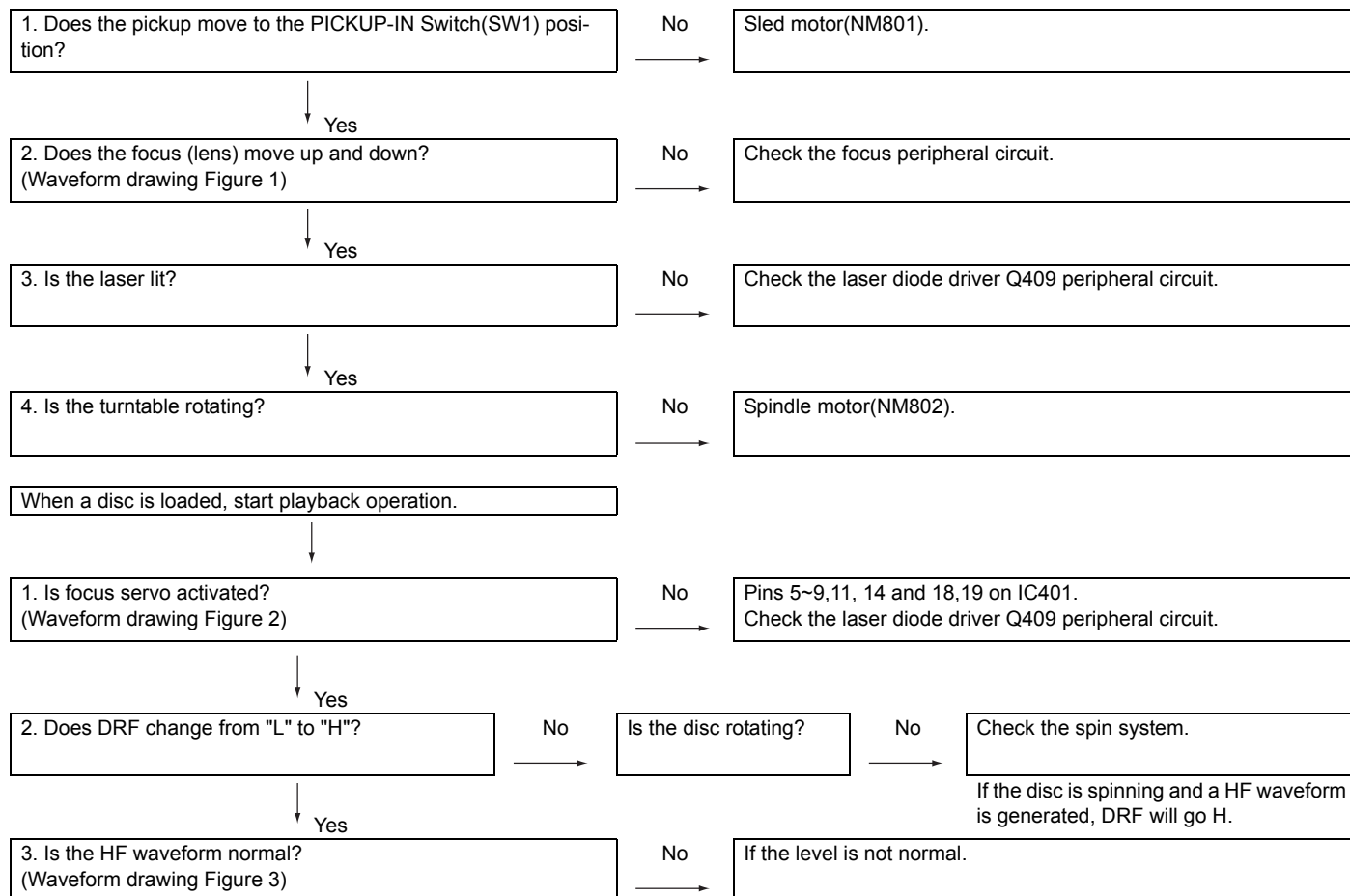


Figure 2

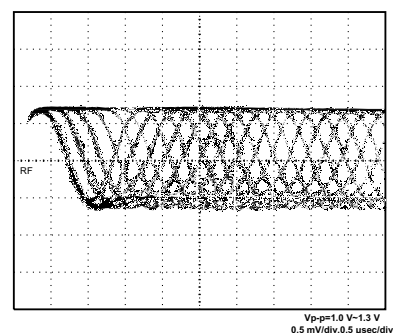


Figure 3

(2) Tracking system check.**Check the TE waveform at pin 16 on IC401.**

If the waveform shown in Figure 4 appears and soon after NO DISC appears?

Yes

The tracking servo is not activated.
Check the peripheral circuits at pins 15, 16 and 23 on IC401, and FC401.

No

"Initialization" is possible, but play is not possible?

Yes

A normal jump operation cannot be completed or the beginning of the track cannot be found.
Check the around pin 23 on IC401.

No

"Initialization" is not possible.

Data cannot be read. Check the VCO-PLL (Pin26~30 on IC401) system.

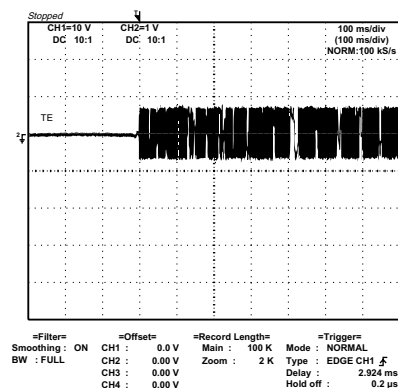


Figure 4

(3) Spin system check.

Press the OPEN/CLOSE switch without inserting a disc, and then try starting the play operation.

1. The turntable rotates a little?
(Waveform drawing Figure 5)

Yes

The spin driver circuit is OK.

No

2. The turntable doesn't rotate.

Check around pin 25 on IC401, pins 10 and 11 on IC402, and CNW402.

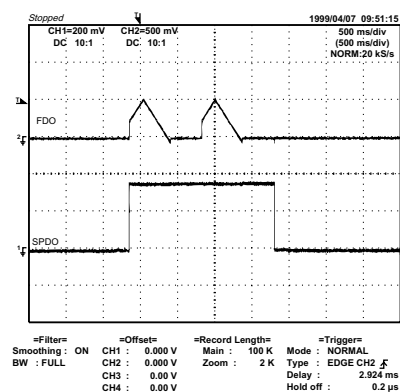


Figure 5

(4) PLL system check.

When a disc is loaded, start play operation.

The HF waveform is normal, but the TOC data cannot be read.

Check the PDOUT waveform. (Figure 6)

Check around pins 26~30 on IC401.

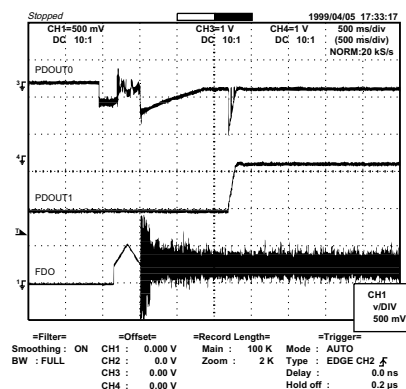


Figure 6

(5) Others.

The HF waveform is normal and the time is displayed normally, but no sound is produced. Or the sound has drop-outs.

Is pin 35 (C2F) on IC401 "L"?

No

There are too many error flags on a damaged disc which makes error correction impossible.

Yes

1. When playing at normal speed.
Check the peripheral circuit at pin 69 (DOUT) on IC401 and the waveform (Figure 7).

If OK, Check the unit.

Check again using a known good disc.

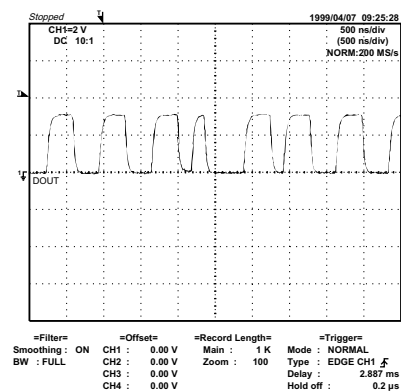


Figure 7

CHAPTER 8. OTHERS

[1] FUNCTION TABLE OF IC

IC401 VHiLC7890/-1: MP3 Decoder Digital Signal Processor (LC78690)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function	
1	EFMIN	Input	Input	RF signal input.	
2	RFOUT	Output	Unfix	RF signal output.	
3	LPF	Output	Unfix	To LPF capacitor for detecting DC level of RF signal.	
4	PHLPF	Output	Unfix	To LPF capacitor for detecting scratch.	
5	AIN	Input	Input	A signal input.	
6	CIN	Input	Input	C signal input.	
7	BIN	Input	Input	B signal input.	
8	DIN	Input	Input	D signal input.	
9	FEC	Output	Unfix	To LPF capacitor for FE signal.	
10*	RFMON	Output	Unfix	Monitoring for LSI internal analog signal.	
11	VREF	Output	AVDD/2	VREF voltage output.	
12	JITTC	Output	Unfix	For jitter detection capacitor.	
13	EIN	Input	Input	E signal input.	
14	FIN	Input	Input	F signal input.	
15	TEC	Output	Unfix	To LPF capacitor for TE signal.	
16	TE	Output	Unfix	TE signal output.	
17	TEIN	Input	Input	TE signal input for TES signal generation.	
18	LDD	Output	Unfix	Laser power control signal output.	
19	LDS	Input	Input	Laser power detection signal input.	
20	AVSS	-	-	Analog GND. Connected to 0V.	
21	AVDD	-	-	Analog power supply.	
22	FDO	Output	AVDD/2	Focus control signal output. D/A output.	
23	TDO	Output	AVDD/2	Tracking control signal output. D/A output.	
24	SLDO	Output	AVDD/2	Sled control signal output. D/A output.	
25	SPDO	Output	AVDD/2	Spindle control signal output. D/A output.	
26	VVSS1	-	-	For EFM PLL	GND for built-in VCO. Connected to 0V.
27	PDOUT1	Output	Unfix		Phase comparison output pin 1 for built-in VCO control.
28	PDOUT0	Output	Unfix		Phase comparison output pin 0 for built-in VCO control.
29	PCKIST	Input	Input		To resistance for current setting of PDOUT0, 1 output.
30	VVDD1	-	-		Power supply for built-in VCO
31*	DMUTEB	Output	L	DMUTEB (general-purpose) output	
32	PUIN	Input/Output	Input	PUIN (general-purpose) input/output (Built-in Pull-Up resistance)	
33*	DETECT	Output	L	Scratch detection signal output	
34*	FSEQ	Output	L	Sync signal output. Switches to "H" when sync signal detected from EFM signal and sync signal generated internally are the same.	
35*	C2F	Output	L	C2 error signal output.	
36	DVDD	-	-	Digital power supply.	
37	DVSS	-	-	Digital GND. Connected to 0V.	
38	DVDD1.8	Output	H	To power supply capacitor for digital circuit.	
39	VVDD3	-	-	Power supply for built-in PLL.	
40	VVSS3	-	-	GND for built-in PLL. Connected to 0V.	
41	DVDD	-	-	Digital power supply.	
42	DVSS	-	-	Digital GND. Connected to 0V.	
43	CE	Input	Input	For micro-processor interface	Enable signal input.
44	CL	Input	Input		Data transfer clock input.
45	DI	Input	Input		Data input
46	DO	Output	(H)		Data output (Tri-state output: Built-in Pull-Up resistance)
47	RESB	Input	-	Reset input for this LSI. Set as "L" when turning power on.	
48*	INTB0	Output	H	Interrupt signal output pin 0 (Servo section)	
49*	INTB1	Output	H	Interrupt signal output pin 1 (Decoder section)	
50	CONT2	Input/Output	Input	General-purpose input/ output pin 2	Controlled by command from microprocessor. When not in use, set as input and connect to 0V, or set as output and leave open.
51*	CONT1	Input/Output	Input	General-purpose input/ output pin 1	
52*	CONT0	Input/Output	Input	General-purpose input/ output pin 0 (Built-in Pull- Up resistance)	
53	TEST0	Input	L	Input for testing. Connected to 0V.	
54	STREQ	Input/Output	Input	Stream data request signal output.	

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function	
55	STCK	Input/Output	Input	Bit clock input for stream data.	
56	STDATA	Input/Output	Input	Stream data input.	
57	TEST1	Input	L	Input for testing. Connected to 0V.	
58*	DATA	Output	L	L/R channel data output.	
59*	DATACK	Output	L	Bit clock output	
60*	LRSY	Output	L	L/R ch clock output	
61	VVDD2	-	-	For EFM PLL	Power supply for built-in VCO
62	VPREF2	Input	Input		Input for oscillation range setting of built-in VCO.
63	VCOC2	Input	Input		Input for control voltage setting of built-in VCO.
64	VPDOUT2	Output	Unfix		Output for controlling built-in VCO.
65	VVSS2	-	-		GND for built-in VCO. Connected to 0V.
66	DVDD1.8	Output	H	To power supply capacitor for digital circuit.	
67	DVSS	-	-	Digital GND. Connected to 0V.	
68	DVDD	-	-	Digital power supply.	
69*	DOUT	Output	L	Digital OUT output. EIAJ format.	
70*	AMUTEB	Output	L	AMUTEB (general-purpose) output.	
71	XVSS	-	-	Digital GND. Connected to 0V.	
72	XOUT	Output	Oscillator	For crystal oscillation	To 16.9344 MHz oscillator
73	XIN	Input	Oscillator		
74	XVDD	-	-	Digital power supply	
75	LCHO	Output	LRVDD/2	D/A con- verter	L channel output.
76	LRVDD	-	-		Power supply for LR channel.
77	LRVSS	-	-		GND for LR channel. Connected to 0V.
78	RCHO	Output	LRVDD/2		R channel output.
79	AVDD	-	-	Analog power supply.	
80	SLCO	Output	Unfix	Slice level control output.	

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

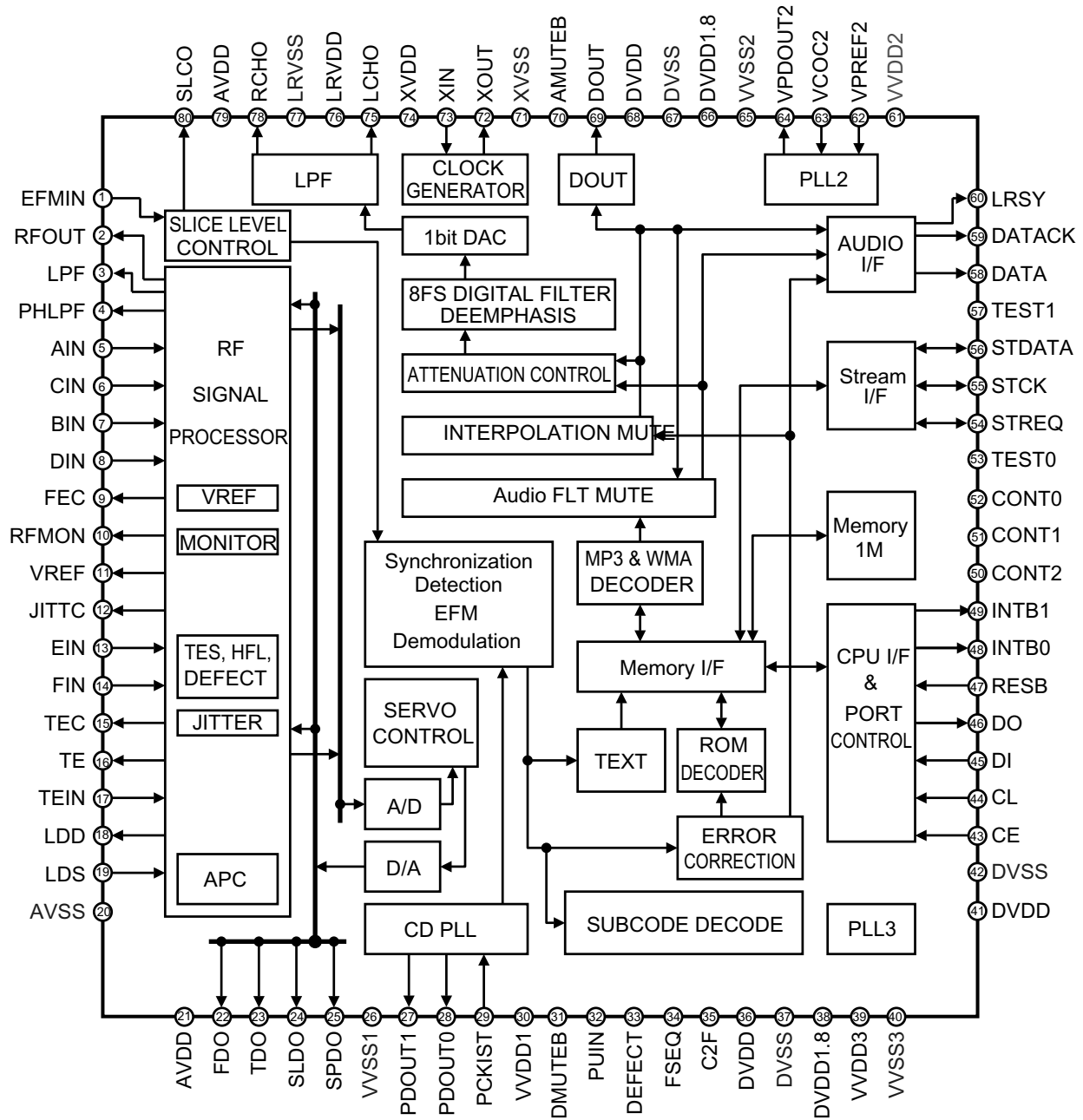


Figure 1 BLOCK DIAGRAM OF IC

IC601 VHiLC75341M-1: Signal Control (LC75341M)

Pin No.	Terminal Name	Function
1	DI	Serial data and clock input pin for control.
2	CE	Chip enable pin. Data written into an internal latch in a timing of "H" to "L". Each analog switch is activated. Data transfer enabled at "H" level.
3	VSS	Ground pin.
4	LOUT	Bass band filter comprising capacitor and resistor connection pin and bass/treble output pin.
5	LBASS	Bass band filter comprising capacitor and resistor connection pin.
6	LTRE	Treble band filter comprising capacitor and resistor connection pin.
7	LIN	Volume + equaliser output pin.
8	LSEL0	Input selector output pin.
9,10,11,12	L4-1	Input signal pin.

Pin No.	Terminal Name	Function
13,14,15,16	R1-4	Input signal pin.
17	RSEL0	Input selector output pin.
18	RIN	Volume + equaliser output pin
19	RTRE	Treble band filter comprising capacitor and resistor connection pin.
20	RBASS	Bass band filter comprising capacitor and resistor connection pin.
21	ROUT	Bass band filter comprising capacitor and resistor connection pin and bass/ treble output pin.
22	VREF	0.5x VDD voltage generation block for analog ground. Capacitor of several 10 μ F to be connected between VREF and AWSS (VSS) as a counter-measure against power ripple.
23	VDD	Supply pin
24	CL	Serial data and clock input pin for control.

IC601 VHiLC75341M-1: Signal Control (LC75341M)

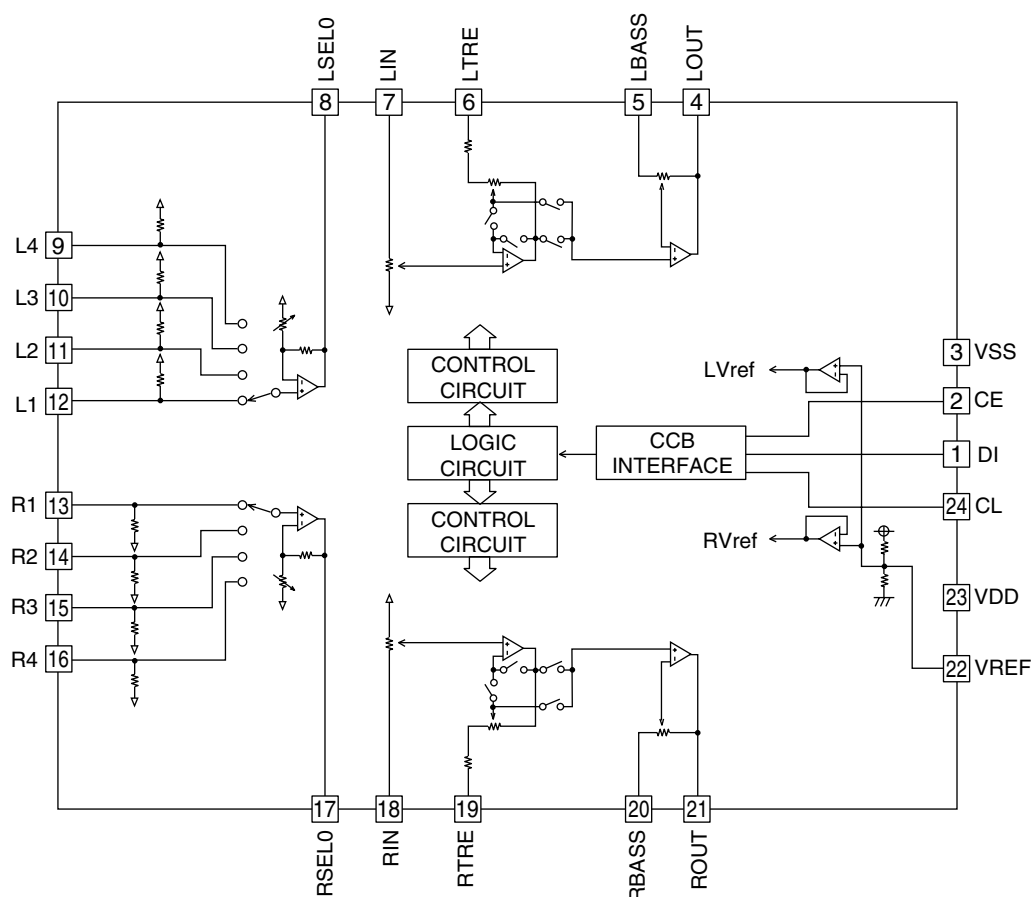


Figure 2 BLOCK DIAGRAM OF IC

CD-MPS440W

IC701 RH-iXA057SJZZ: System Microcomputer (IXA057SJ)

Pin No.	Port Name	Terminal Name	Input/Output	Function
1	P16	TIMER_LED	Output	Timer LED control.
2*	P17	RDS_DATA	Input/Output	Open
3*	P30	RDS_CLE	Input/Output	Open
4	P31	CD_CE	Output	CD DSP CE output.
5	P32	CD_RES	Output	CD DSP reset.
6	P33	MM+		
7	P34	MM-		
8*	P35	PROG0	Input/Output	Open
9*	P36	PROG1	Input/Output	Open
10*	P37	PROG2	Input/Output	Open
11	RES	RESET IN PUT	Input	Reset signal input.
12*	XT1	XT1	Input	Open
13*	XT2	XT2	Input/Output	Open
14	VSS1	GND	-	Ground voltage.
15	CF1	CF1	Input	Main clock.
16	CF2	CF2	Output	Main clock.
17	VDD1	VDD1	-	(+)Power supply.
18	P80	KEY1_IN	Input	Key input.
19	P81	KEY2_IN	Input	Key input.
20*	P82	SPAN		
21	P83	FAN_PRT	Input	Fan protect circuit input.
22	P84	MODE_CKECK	Input	Ground level input.
23	P85	T2_TAPE2_SW	Input	Tape SW detection.
24*	P86	EEP_DAT		
25*	P87	RDS_VSM	Input/Output	Open
26	P70	SYS_STOP	Input	System stop input.
27	P71	X-BASS/DEMO	Input	Key input.
28	P72	POWER_KEY	Input	Key input.
29	P73	IRQ	Input	Remocon input.
30-38	P74	G9-G1	Output	FL(VFD) segment driver.
39*-45*	S9/T9-S15/T15	NO USE	Input/Output	Open
46	VDD3	VDD3	-	(+)Power supply.
47-50	S16-S19	P1-P4	Output	FL(VFD) segment driver.
51	FIX0	GND	-	Connect to GND.
52-67	S20-S35	P5-P20	Output	FL(VFD) segment driver.
68	S36	DISC_NO_SW	Input	Tray disc no. SW detection
69	S37	DISC1_SW	Input	Tray disc 1 SW detection.
70	S38	DISC_UP_SW	Input	Tray disc up SW detection.
71	S39	CLOSE_SW	Input	Tray close SW detection.
72	VDD4	VDD4	-	(+) Power supply.
73	S40	ROTATE	Output	Tray motor control.
74	S41	DISC_DOWN_SW	Input	Tray disc down SW detection.
75	S42	OPEN_SW	Input	Tray open SW detection.
76	S43	TAPE_BIAS	Output	Tape record bias.
77	S44	REC_PLAY	Output	Tape REC/PLAY change.
78	S45	REC	Input	Tape 2 rec SW detection.
79	S46	MOTOR	Output	Tape motor control.
80	S47	T1_SOL	Output	Tape 1 solenoid control.
81	S48	T2_SOL	Output	Tape 2 solenoid control.
82	S49	T1_RUN_PLUS	Input	Tape 1 RUN PULSE input.
83	S50	T2_RUN_PLUS	Input	Tape 2 RUN PULSE input.
84	S51	CH_SW	Output	Tape T1/T2 switch output.
85	P00	CD+B	Output	CD servo power supply circuit control output.
86*	P01	P_CON	Input/Output	Open
87	P02	CL		
88	P03	P_MUTE	Output	Power mute output.
89	VSS2	GND	-	GND
90	VDD2	VDD2	-	(+) Power supply.
91	P04	SIGAL_LVL	Input	Power Amp.output level detection signal input.
92	P05	FAN_START	Output	Fan motor control.
93	P06	SP_DETECT	Output	Speaker output detect.
94	P07	SP_RELAY	Output	Speaker relay control.
95	P10	DI	Output	Data output.

Pin No.	Port Name	Terminal Name	Input/Output	Function
96	P11	DO	Input	Data input.
97	P12	CD_CL		
98	P13	CE	Output	CE output.
99	P14	FM_ST	Input	Radio stereo broadcast reception detection input.
100	P15	SD	Input	Broadcast reception status detection input.

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

IC701 RH-iXA057SJZZ: System Microcomputer (IXA057SJ)

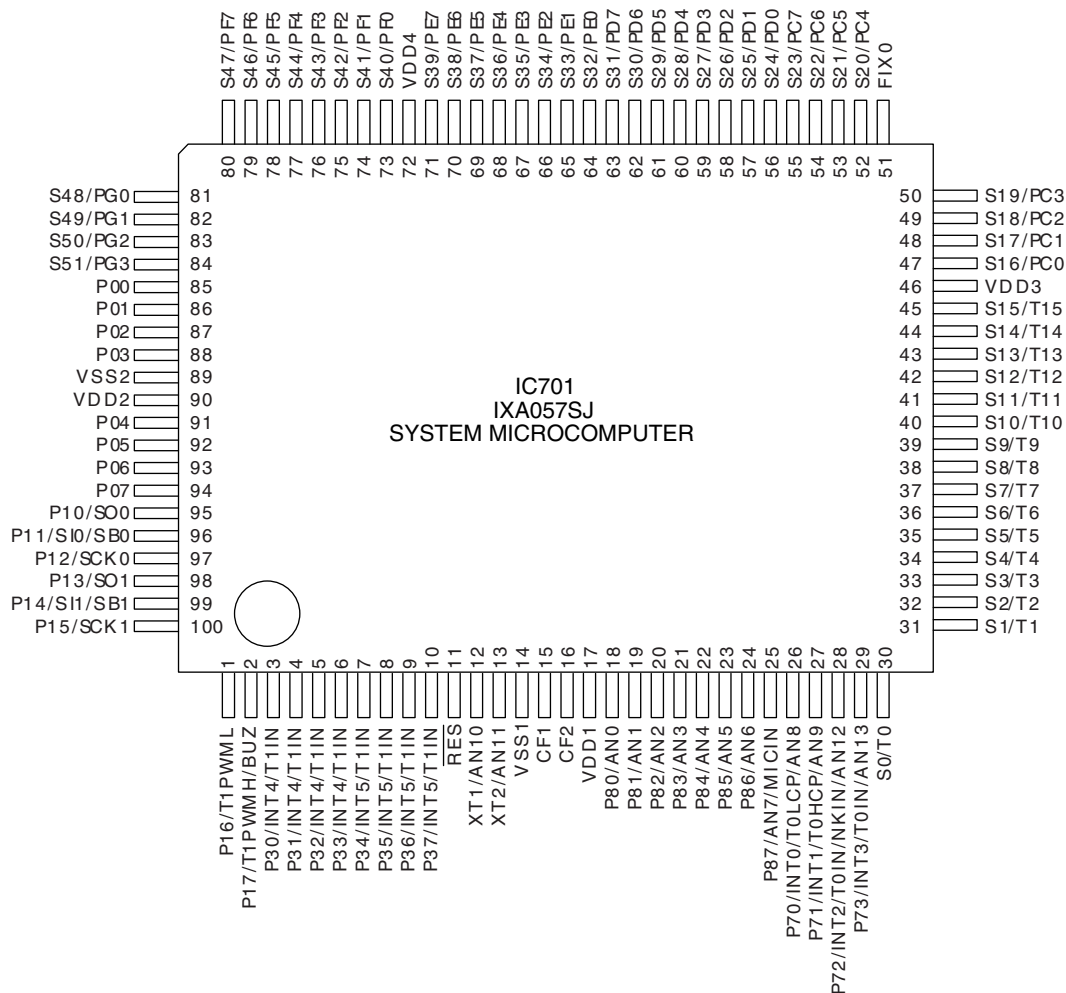
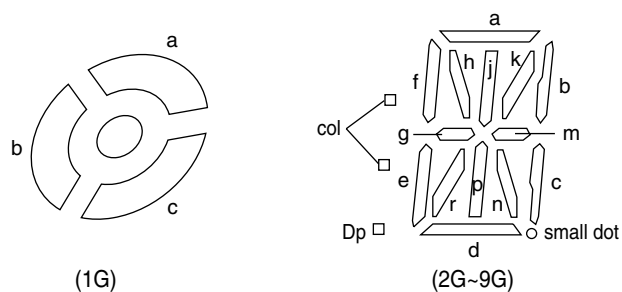
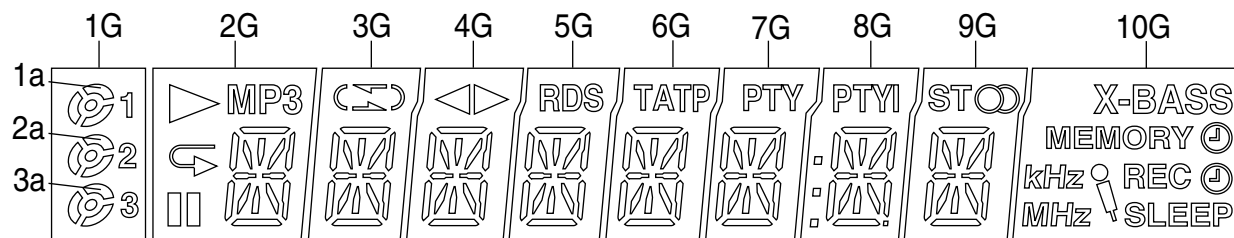


Figure 3 BLOCK DIAGRAM OF IC

[2] FL DISPLAY

VFD701: VVK200912F/-1

GRID ASSIGNMENTANODE CONNECTION

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G
P1	1	MP3	(▷	RDS	TA	PTY	PTYI	ST	⌂
P2	1a	▷)	◁		TP		col	∞	
P3	1b	□□	⌂					Dp		⌂ (white)
P4	1c	⌂						small dot		⌂ (Rsh.o)
P5	2	a	a	a	a	a	a	a	a	SLEEP
P6	2a	b	b	b	b	b	b	b	b	X-BASS
P7	2b	k	k	k	k	k	k	k	k	
P8	2c	j	j	j	j	j	j	j	j	
P9	3	h	h	h	h	h	h	h	h	MEMORY
P10	3a	f	f	f	f	f	f	f	f	
P11	3b	m	m	m	m	m	m	m	m	
P12	3c	d	d	d	d	d	d	d	d	
P13		g	g	g	g	g	g	g	g	MHz
P14		p	p	p	p	p	p	p	p	
P15		e	e	e	e	e	e	e	e	kHz
P16		n	n	n	n	n	n	n	n	REC
P17		r	r	r	r	r	r	r	r	
P18		c	c	c	c	c	c	c	c	

SHARP PARTS GUIDE

MINI COMPONENT SYSTEM MODEL **CD-MPS440W**

CD-MPS440W Mini Component System consisting of CD-MPS440W (main unit) and CP-ES440(Speaker System).

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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.

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[1] INTEGRATED CIRCUITS					
IC101	VHISTK40290-1	AY			Power Amp.,STK40290
IC201	VHIA7805API	AF			Voltage Regulator,KIA7805API
IC202	VHIA7812API	AE			Voltage Regulator,KIA7812API
IC203	VHIA7808API	AF			Voltage Regulator,KIA7808API
IC301	VHIA7358AP-1	AG			FM Front End,TA7358AP
IC302	VHILC72131/-1	AP			PLL (Tuner),LC72131
IC303	VHILA1832S/-1	AN			FM IF Det./FM Mpx./AM IF,LA1832S
IC401	VHILC78690/-1	BE			Servo/Signal,LC78690
IC402	VHILA6548NH-1	AL			Focus/Tracking/Spin/Sled Driver,LA6548NH
IC601	VHILC75341M-1	AM			Audio Processor,LC75341M
IC701	RH-IXA057SJZZ		N		System Microcomputer,IXA057SJ
IC801	VHIAN7345K/-1	AM			Playback and Record/Playback Amp.,AN7345K
[2] TRANSISTORS					
Q101	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q102	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q103	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q104	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q105	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q106	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q107	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q108	VSKRA107M/-1	AE			Digital,PNP,KRA107 M
Q109	VSKRC107M/-1	AC			Digital,NPN,KRC107 M
Q201	VSKTC3200GR-1	AC			Silicon,NPN,KTC3200 GR
Q202	VS2HJ9018-G-1		N		????,???,2HJ9018 G
Q203	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q204	VS2HA1015GR-1	AB			Silicon,PNP,2HA1015 GR
Q205	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q206	VS2SB562-C/-1	AD			Silicon,PNP,2SB562 C
Q207	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q208	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q302	VS2SC535-C/-1	AC			Silicon,NPN,2SC535 C
Q306	VS2SC535-C/-1	AC			Silicon,NPN,2SC535 C
Q351	VSKRC104M/-1	AC			Digital,NPN,KRC104 M
Q360	VS2HA1015GR-1	AB			Silicon,PNP,2HA1015 GR
Q401	VSKTC3203Y/-1	AC			Silicon,NPN,KTC3203 Y
Q402	VSKTA1271Y/-1	AC			Silicon,PNP,KTA1271 Y
Q403	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q404	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q405	VSKTA1271Y/-1	AC			Silicon,PNP,KTA1271 Y
Q406	VSKTC3203Y/-1	AC			Silicon,NPN,KTC3203 Y
Q407	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q408	VSKTA1271Y/-1	AC			Silicon,PNP,KTA1271 Y
Q409	VS2HA1015GR-1	AB			Silicon,PNP,2HA1015 GR
Q410	VSKTC3203Y/-1	AC			Silicon,NPN,KTC3203 Y
Q411	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q412	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q413	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q701	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q702	VSKRC102M/-1	AC			Digital,NPN,KRC102 M
Q703	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q704	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q801	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q802	VS2HA1015GR-1	AB			Silicon,PNP,2HA1015 GR
Q803	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q804	VS2SB562-C/-1	AD			Silicon,PNP,2SB562 C
Q805	VS2SB562-C/-1	AD			Silicon,PNP,2SB562 C
Q806	VSKRC107M/-1	AC			Digital,NPN,KRC107 M
Q807	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q808	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q809	VSKRC107M/-1	AC			Digital,NPN,KRC107 M
Q810	VSKRC104M/-1	AC			Digital,NPN,KRC104 M
Q811	VSKRC104M/-1	AC			Digital,NPN,KRC104 M
Q812	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q813	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q814	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q815	VS2SB562-C/-1	AD			Silicon,PNP,2SB562 C
Q816	VSKRC102M/-1	AC			Digital,NPN,KRC102 M
Q817	VSKRC102M/-1	AC			Digital,NPN,KRC102 M
Q818	VSKRC102M/-1	AC			Digital,NPN,KRC102 M
Q819	VS2HC1815GR-1	AB			Silicon,NPN,2HC1815 GR
Q820	VSKRA102M/-1	AC			Digital,PNP,KRA102 M
Q821	VSKRC104M/-1	AC			Digital,NPN,KRC104 M
Q822	VS2HA1015GR-1	AB			Silicon,PNP,2HA1015 GR
Q823	VS2SC2001-K-1	AD			Silicon,NPN,2SC2001 K
Q901	VS2HA1015GR-1	AB			Silicon,PNP,2HA1015 GR

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[3] DIODES					
D101	VHD1N4148//-1	AA			Silicon,1N4148
D102	VHD1N4148//-1	AA			Silicon,1N4148
D103	VHD1N4148//-1	AA			Silicon,1N4148
D104	VHD1N4004//-1	AB			Silicon,1N4004
D201	VHD1N4004//-1	AB			Silicon,1N4004
D202	VHD1N4004//-1	AB			Silicon,1N4004
D203	VHD1N4004//-1	AB			Silicon,1N4004
D204	VHD1N4004//-1	AB			Silicon,1N4004
D205	VHD1N4004//-1	AB			Silicon,1N4004
D207	VHD1N4004//-1	AB			Silicon,1N4004
D210	VHD1N4004//-1	AB			Silicon,1N4004
D211	VHD1N4148//-1	AA			Silicon,1N4148
D212	VHD1N4148//-1	AA			Silicon,1N4148
D301	VHD1N4148//-1	AA			Silicon,1N4148
D302	VHD1N4148//-1	AA			Silicon,1N4148
D305	VHD1N4148//-1	AA			Silicon,1N4148
D306	VHD1N4148//-1	AA			Silicon,1N4148
D307	VHD1N4148//-1	AA			Silicon,1N4148
D308	VHD1N4148//-1	AA			Silicon,1N4148
D401	VHD1N4004//-1	AB			Silicon,1N4004
D402	VHD1N4004//-1	AB			Silicon,1N4004
D403	VHD1N4004//-1	AB			Silicon,1N4004
D604	VHD1N4148//-1	AA			Silicon,1N4148
D605	VHD1N4148//-1	AA			Silicon,1N4148
D701	VHD1N4004//-1	AB			Silicon,1N4004
D702	VHD1N4148//-1	AA			Silicon,1N4148
D703	VHD1N4148//-1	AA			Silicon,1N4148
D704	VHD1N4148//-1	AA			Silicon,1N4148
D705	VHD1N4148//-1	AA			Silicon,1N4148
D706	VHD1N4004//-1	AB			Silicon,1N4004
D801	VHD1N4148//-1	AA			Silicon,1N4148
D802	VHD1N4148//-1	AA			Silicon,1N4148
D803	VHD1N4148//-1	AA			Silicon,1N4148
D804	VHD1N4148//-1	AA			Silicon,1N4148
D805	VHD1N4148//-1	AA			Silicon,1N4148
D806	VHD1N4148//-1	AA			Silicon,1N4148
△ D901	VHD1N6A2M++-1	AD			Silicon,1N6A2M++
△ D902	VHD1N6A2M++-1	AD			Silicon,1N6A2M++
△ D903	VHD1N6A2M++-1	AD			Silicon,1N6A2M++
△ D904	VHD1N6A2M++-1	AD			Silicon,1N6A2M++
△ D905	VHD1N4004//-1	AB			Silicon,1N4004
△ D906	VHD1N4004//-1	AB			Silicon,1N4004
△ D907	VHD1N4004//-1	AB			Silicon,1N4004
△ D908	VHD1N4004//-1	AB			Silicon,1N4004
△ D909	VHD1N4004//-1	AB			Silicon,1N4004
△ D910	VHD1N4004//-1	AB			Silicon,1N4004
△ D911	VHD1N4004//-1	AB			Silicon,1N4004
LED701	VHPLP3052A+-1	AC			LED,Red,LP3052A
VD301	VHCSVC348S/-1	AK			Variable Capacitance,SVC348S
VD302	VHCKDV147B/-1	AH			Variable Capacitance,KDV147B
VD303	VHCKDV147B/-1	AH			Variable Capacitance,KDV147B
ZD201	VHEDZH05C2+-1	AB			Zener,5.1V,DZH05C2+
ZD351	VHEDZH05C2+-1	AB			Zener,5.1V,DZH05C2+
ZD401	VHEDZH05C2+-1	AB			Zener,5.1V,DZH05C2+
ZD402	VHEDZH04B2+-1	AB			Zener,3.9V,DZH04B2
ZD701	VHEDZH03C3+-1	AB			Zener,3.3V,DZH03C3+
ZD901	VHEDZH3001+-1	AB			Zener,30V,DZH3001+
ZD902	VHEDZH06C2+-1	AB			Zener,6.2V,DZH06C2+
[4] FILTERS					
BF301	RF i LRA001SJZZ	AD			Band Pass Filter
CF302	RF i LF0004SJZZ	AG			FM RF,10.7 MHz
CF303	RF i LF0004SJZZ	AG			FM RF,10.7 MHz
CF351	RF i LF0003AWZZ	AK			FM IF
CF352	RF i LA0003SJZZ	AF			AM IF
[5] TRANSFORMERS					
△ T101	RTRNPA048SJZZ		N		Power
T302	RC i LAA002SJZZ	AC			AM Antenna
T304	RC i L i 0005SJZZ	AF			FM IF
T306	RC i LBA006SJZZ	AC			AM OSC.
T351	RC i L i 0004SJZZ	AF			AM IF
[6] COILS					
L103	VP-DH100K0000	AB			10 μ H,Choke
L105	VP-DH2R2K0000	AB			2.2 μ H,Peaking
L302	RC i LR0003SJZZ	AD			FM RF
L303	RC i LB0016SJZZ	AD			FM OSC.
L351	VP-DH101K0000	AB			100 μ H,Choke
L352	VP-DH101K0000	AB			100 μ H,Choke
L353	VP-DH102K0000	AB			1 mH,Choke
L401	VP-DHR82K0000	AE			0.82 μ H,Choke
L402	VP-DHR82K0000	AE			0.82 μ H,Choke
L403	VP-DHR82K0000	AE			0.82 μ H,Choke

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[6] COILS					
L405	RBLN-A003SJZZ	AB			Ferrite Bead,1 kohms
L601	VP-DH2R2K0000	AB			2.2 μ H,Peaking
L701	VP-DHR82K0000	AE			0.82 μ H,Choke
L703	VP-DHR82K0000	AE			0.82 μ H,Choke
L705	VP-DHR82K0000	AE			0.82 μ H,Choke
L801	VP-MK331K0000	AB			330 μ H,Choke
[7] VIBRATORS					
X351	RCRM-0007SJZZ	AG			VCO,456 kHz
X352	RCRSP0003SJZZ	AL			Crystal,4.5 MHz
X401	RCRSPA011SJZZ		N		
X702	RCRSP0013SJZZ	AE			Crystal,8 MHz
[8] CAPACITORS					
C101	RC-GZA336AF1C	AB			33 μ F,16V,Electrolytic
C102	RC-GZA335AF1C	AB			3.3 μ F,16V,Electrolytic
C103	RC-GZA105AF1H	AB			1 μ F,50V,Electrolytic
C104	RC-GZA105AF1H	AB			1 μ F,50V,Electrolytic
C105	VCKYPA1HB152K	AA			0.0015 μ F,50V
C106	VCKYPA1HB152K	AA			0.0015 μ F,50V
C107	RC-GZA106AF1H	AB			10 μ F,50V,Electrolytic
C108	RC-GZA106AF1H	AB			10 μ F,50V,Electrolytic
C109	VCCCPA1HH3R0C	AA			3 pF (CH),50V
C110	VCCCPA1HH3R0C	AA			3 pF (CH),50V
C111	RC-GZA106AF1J	AB			10 μ F,63V,Electrolytic
C112	RC-GZA106AF1J	AB			10 μ F,63V,Electrolytic
C113	VCKYPA1HF223Z	AB			0.022 μ F,50V
C114	VCKYPA1HF223Z	AB			0.022 μ F,50V
C115	RC-GZA107AF1H	AC			100 μ F,50V,Electrolytic
C116	RC-GZA107AF1H	AC			100 μ F,50V,Electrolytic
C117	VCKYPA1HF223Z	AB			0.022 μ F,50V
C118	VCKYPA1HF223Z	AB			0.022 μ F,50V
C119	VCKYCY1HB221K	AA			220 pF,50V
C120	VCKYCY1HB221K	AA			220 pF,50V
C121	VCKYCY1HB102K	AA			0.001 μ F,50V
C125	VCFYFA1HA104J	AC			0.1 μ F,50V,Thin Film
C126	VCFYFA1HA104J	AC			0.1 μ F,50V,Thin Film
C127	VCFYFA1HA104J	AC			0.1 μ F,50V,Thin Film
C128	VCFYFA1HA104J	AC			0.1 μ F,50V,Thin Film
C130	RC-GZA476AF1H	AB			47 μ F,50V,Electrolytic
C133	VCKYPA1HF223Z	AB			0.022 μ F,50V
C134	VCKYPA1HF223Z	AB			0.022 μ F,50V
C135	VCKYPA1HF223Z	AB			0.022 μ F,50V
C136	VCKYPA1HF223Z	AB			0.022 μ F,50V
C145	VCKYPA1HB472K	AB			0.0047 μ F,50V
C146	VCKYPA1HB472K	AB			0.0047 μ F,50V
C201	RC-GZA107AF1C	AB			100 μ F,16V,Electrolytic
C202	VCKYPA1HF223Z	AB			0.022 μ F,50V
C203	RC-GZW338AF1V	AH			3300 μ F,35V,Electrolytic
C204	VCKYPA1HF223Z	AB			0.022 μ F,50V
C205	RC-GZA227AF1E	AB			220 μ F,25V,Electrolytic
C206	RC-GZW338AF1J		N		3300 μ F,63V,Electrolytic
C207	RC-GZW338AF1J		N		3300 μ F,63V,Electrolytic
C208	VCKYPA1HF223Z	AB			0.022 μ F,50V
C209	RC-GZA477AF1C	AC			470 μ F,16V,Electrolytic
C210	VCKYPA1HF223Z	AB			0.022 μ F,50V
C211	VCFYFA1HA473J	AB			0.047 μ F,50V,Thin Film
C212	RC-GZA476AF1E	AB			47 μ F,25V,Electrolytic
C213	RC-GZA476AF1C	AB			47 μ F,16V,Electrolytic
C214	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C301	VCKYCY1EF123Z	AA			0.012 μ F,25V
C302	VCKYCY1HB102K	AA			0.001 μ F,50V
C303	VCKYCY1HB102K	AA			0.001 μ F,50V
C304	VCKYCY1EF103Z	AA			0.01 μ F,25V
C305	VCKYCY1HB472K	AA			0.0047 μ F,50V
C306	VCCUCY1HJ9R0D	AB			9 pF (UJ),50V
C307	VCKYCY1HB472K	AA			0.0047 μ F,50V
C308	VCKYCY1EF223Z	AB			0.022 μ F,25V
C309	VCKYCY1HB102K	AA			0.001 μ F,50V
C311	VCCCPA1HH100J	AA			10 pF (CH),50V
C312	VCCSCY1HL330J	AD			33 pF,50V
C313	VCCUCY1HJ6R0D	AB			6 pF (UJ),50V
C314	VCCCCY1HH220J	AA			22 pF (CH),50V
C315	VCKYCY1HB101K	AB			100 pF,50V
C316	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C317	VCKYCY1EF223Z	AB			0.022 μ F,25V
C318	VCCSCY1HL5R0C	AD			5 pF,50V
C319	VCCCCY1HH180J	AA			18 pF (CH),50V
C321	VCKYCY1HB332K	AA			0.0033 μ F,50V
C329	VCKYCY1EF223Z	AB			0.022 μ F,25V
C330	VCCCPA1HH120J	AA			12 pF (CH),50V
C331	VCKYCY1EF473Z	AB			0.047 μ F,25V
C332	VCKYPA1HF223Z	AB			0.022 μ F,50V
C334	VCCUPA1HJ270J	AA			27 pF (UJ),50V
C335	VCKYCY1HB561K	AA			560 pF,50V

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[8] CAPACITORS					
C337	VCKYPA1HF223Z	AB			0.022 μ F,50V
C343	VCCSCY1HL330J	AD			33 pF,50V
C344	VCCSCY1HL330J	AD			33 pF,50V
C349	VCKYCY1HB102K	AA			0.001 μ F,50V
C350	VCKYCY1EF223Z	AB			0.022 μ F,25V
C351	VCKYCY1EF223Z	AB			0.022 μ F,25V
C352	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C353	VCKYCY1EF223Z	AB			0.022 μ F,25V
C354	VCKYCY1EF223Z	AB			0.022 μ F,25V
C355	VCCSCY1HL220J	AD			22 pF,50V
C356	VCKYCY1HB102K	AA			0.001 μ F,50V
C357	RC-GZA225AF1H	AB			2.2 μ F,50V,Electrolytic
C358	RC-GZA105AF1H	AB			1 μ F,50V,Electrolytic
C359	VCKYCY1HB102K	AA			0.001 μ F,50V
C360	VCKYCY1EF223Z	AB			0.022 μ F,25V
C361	VCKYCY1EF223Z	AB			0.022 μ F,25V
C362	RC-GZA335AF1H	AB			3.3 μ F,50V,Electrolytic
C363	VCKYCY1EF223Z	AB			0.022 μ F,25V
C364	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C365	VCKYCY1EF223Z	AB			0.022 μ F,25V
C366	VCKYCY1HB102K	AA			0.001 μ F,50V
C367	RC-GZA105AF1H	AB			1 μ F,50V,Electrolytic
C368	RC-GZA105AF1H	AB			1 μ F,50V,Electrolytic
C369	VCCSCY1HL560J	AD			56 pF,50V
C370	RC-GZA105AF1H	AB			1 μ F,50V,Electrolytic
C371	RC-GZA105AF1H	AB			1 μ F,50V,Electrolytic
C372	RC-GZA105AF1H	AB			1 μ F,50V,Electrolytic
C373	VCTYPA1CX223K	AA			0.022 μ F,16V
C374	VCTYPA1CX223K	AA			0.022 μ F,16V
C378	VCKYPA1HB331K	AA			330 pF,50V
C380	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C381	VCCCCY1HH120J	AA			12 pF (CH),50V
C382	VCCCCY1HH150J	AA			15 pF (CH),50V
C383	VCKYCY1EF223Z	AB			0.022 μ F,25V
C384	VCKYCY1HB102K	AA			0.001 μ F,50V
C385	VCKYPA1HF103Z	AB			0.01 μ F,50V
C386	VCKYPA1HB331K	AA			330 pF,50V
C387	VCKYCY1EF223Z	AB			0.022 μ F,25V
C391	RC-GZA476AF1C	AB			47 μ F,16V,Electrolytic
C392	VCKYCY1HB102K	AA			0.001 μ F,50V
C393	RC-GZA105AF1H	AB			1 μ F,50V,Electrolytic
C394	RC-GZA476AF1C	AB			47 μ F,16V,Electrolytic
C395	VCKYCY1EF223Z	AB			0.022 μ F,25V
C396	RC-GZA107AF1A	AB			100 μ F,10V,Electrolytic
C397	VCKYCY1EF223Z	AB			0.022 μ F,25V
C398	RC-GZA107AF1A	AB			100 μ F,10V,Electrolytic
C399	VCKYPA1HF223Z	AB			0.022 μ F,50V
C401	VCKYCY1EF104Z	AA			0.1 μ F,25V
C402	RC-GZA336AF1C	AB			33 μ F,16V,Electrolytic
C403	VCKYPA1HB104K	AC			0.1 μ F,50V
C404	VCKYCY1EF104Z	AA			0.1 μ F,25V
C405	RC-EZD477AF1A	AB			470 μ F,10V,Electrolytic
C406	VCKYPA1HB104K	AC			0.1 μ F,50V
C407	RC-GZA107AF1C	AB			100 μ F,16V,Electrolytic
C408	VCKYCY1EF104Z	AA			0.1 μ F,25V
C411	VCKYCY1EF104Z	AA			0.1 μ F,25V
C412	VCKYCY1EF473Z	AB			0.047 μ F,25V
C413	VCKYCY1EF103Z	AA			0.01 μ F,25V
C414	VCKYCY1EF473Z	AB			0.047 μ F,25V
C415	VCKYPA1HB563K	AC			0.056 μ F,50V
C416	RC-GZA107AF1C	AB			100 μ F,16V,Electrolytic
C417	VCKYCY1EF103Z	AA			0.01 μ F,25V
C418	VCKYCY1EB563K	AD			0.056 μ F,25V
C419	VCKYCY1EF104Z	AA			0.1 μ F,25V
C420	VCKYCY1EF103Z	AA			0.01 μ F,25V
C421	VCKYCY1HB472K	AA			0.0047 μ F,50V
C422	RC-GZA107AF1C	AB			100 μ F,16V,Electrolytic
C423	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C424	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C425	RC-GZA105AF1C	AB			1 μ F,16V,Electrolytic
C426	VCKYCY1EF473Z	AB			0.047 μ F,25V
C427	VCKYCY1EF104Z	AA			0.1 μ F,25V
C428	VCKYCY1EF104Z	AA			0.1 μ F,25V
C429	RC-EZD477AF1A	AB			470 μ F,10V,Electrolytic
C430	VCKYCY1EF104Z	AA			0.1 μ F,25V
C431	VCCCCY1HH100J	AA			10 pF (CH),50V
C432	VCKYCY1HF104Z	AB			0.1 μ F,50V
C433	VCCCCY1HH100J	AA			10 pF (CH),50V
C434	VCKYPA1HB104K	AC			0.1 μ F,50V
C435	VCKYCY1HF104Z	AB			0.1 μ F,50V
C436	RC-GZA105AF1C	AB			1 μ F,16V,Electrolytic
C437	VCKYCY1HF104Z	AB			0.1 μ F,50V
C438	RC-GZA107AF1C	AB			100 μ F,16V,Electrolytic
C439	RC-GZA107AF1C	AB			100 μ F,16V,Electrolytic
C440	RC-GZA107AF1C	AB			100 μ F,16V,Electrolytic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[8] CAPACITORS					
C441	VCKYPA1HB104K	AC			0.1 μ F,50V
C442	VCKYCY1HB104K	AD			0.1 μ F,50V
C443	VCKYCY1HF104Z	AB			0.1 μ F,50V
C444	VCKYCY1HB104K	AD			0.1 μ F,50V
C445	VCKYPA1HB104K	AC			0.1 μ F,50V
C446	VCKYCY1HB101K	AB			100 pF,50V
C447	RC-EZD477AF1A	AB			470 μ F,10V,Electrolytic
C449	VCCSPA1HL121J	AA			120 pF,50V
C450	VCCSCY1HL101J	AA			100 pF,50V
C451	VCKYCY1HB102K	AA			0.001 μ F,50V
C452	RC-GZA474AF1C	AB			0.47 μ F,16V,Electrolytic
C601	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C602	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C603	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C604	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C605	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C606	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C607	RC-GZA475AF1H	AB			4.7 μ F,50V,Electrolytic
C608	RC-GZA475AF1H	AB			4.7 μ F,50V,Electrolytic
C609	RC-GZA225AF1H	AB			2.2 μ F,50V,Electrolytic
C610	RC-GZA225AF1H	AB			2.2 μ F,50V,Electrolytic
C611	VCKYCY1HB272K	AA			0.0027 μ F,50V
C612	VCKYCY1HB272K	AA			0.0027 μ F,50V
C613	RC-QZA104AFYJ	AC			0.1 μ F,50V,Mylar
C614	RC-QZA104AFYJ	AC			0.1 μ F,50V,Mylar
C615	RC-GZA105AF1C	AB			1 μ F,16V,Electrolytic
C616	RC-GZA105AF1C	AB			1 μ F,16V,Electrolytic
C617	RC-GZA336AF1C	AB			33 μ F,16V,Electrolytic
C618	RC-GZA107AF1C	AB			100 μ F,16V,Electrolytic
C619	VCKYPA1HB221K	AA			220 pF,50V
C620	VCKYPA1HB221K	AA			220 pF,50V
C621	VCKYPA1HB221K	AA			220 pF,50V
C622	VCKYPA1HB104K	AC			0.1 μ F,50V
C623	VCKYPA1HB104K	AC			0.1 μ F,50V
C624	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C625	RC-GZA106AF1C	AB			10 μ F,16V,Electrolytic
C701	VCKYCY1EB104K	AD			0.1 μ F,25V
C702	VCKYCY1EB104K	AD			0.1 μ F,25V
C705	VCKYPA1HB104K	AC			0.1 μ F,50V
C706	RC-GZA227AF1A	AB			220 μ F,10V,Electrolytic
C707	VCKYCY1EF104Z	AA			0.1 μ F,25V
C708	VCKYCY1HB101K	AB			100 pF,50V
C709	RC-EZD107AF1A	AB			100 μ F,10V,Electrolytic
C710	VCKYPA1HF473Z	AB			0.047 μ F,50V
C711	VCKYCY1EB104K	AD			0.1 μ F,25V
C712	RC-GZA336AF1C	AB			33 μ F,16V,Electrolytic
C713	VCKYCY1HF103Z	AB			0.01 μ F,50V
C716	RC-GZA476AF1C	AB			47 μ F,16V,Electrolytic
C717	VCCCCY1HH180J	AA			18 pF (CH),50V
C718	VCCCCY1HH180J	AA			18 pF (CH),50V
C719	VCKYCY1HB104K	AD			0.1 μ F,50V
C720	RC-GZA337AF1A	AB			330 μ F,10V,Electrolytic
C801	VCKYTV1HB561K	AA			560 pF,50V
C802	VCKYTV1HB561K	AA			560 pF,50V
C803	VCKYTV1HB561K	AA			560 pF,50V
C804	VCKYTV1HB561K	AA			560 pF,50V
C805	VCKYPA1HF223Z	AB			0.022 μ F,50V
C806	RC-GZA335AF1H	AB			3.3 μ F,50V,Electrolytic
C807	RC-GZA335AF1H	AB			3.3 μ F,50V,Electrolytic
C808	RC-GZA107AF1E	AB			100 μ F,25V,Electrolytic
C809	VCCSPA1HL820J	AA			82 pF,50V
C810	VCCSPA1HL820J	AA			82 pF,50V
C812	VCKYCY1HB331K	AA			330 pF,50V
C814	VCKYCY1HB331K	AA			330 pF,50V
C815	VCKYCY1HB331K	AA			330 pF,50V
C816	VCKYCY1HB331K	AA			330 pF,50V
C817	RC-GZA107AF1E	AB			100 μ F,25V,Electrolytic
C818	RC-GZA107AF1E	AB			100 μ F,25V,Electrolytic
C819	VCKYCY1EF223Z	AB			0.022 μ F,25V
C820	VCKYPA1HF223Z	AB			0.022 μ F,50V
C821	VCKYCY1HB561K	AA			560 pF,50V
C822	VCKYCY1HB561K	AA			560 pF,50V
C823	VCKYPA1HF333Z	AA			0.033 μ F,50V
C824	VCKYPA1HF333Z	AA			0.033 μ F,50V
C825	RC-GZA476AF1E	AB			47 μ F,25V,Electrolytic
C826	RC-GZA476AF1E	AB			47 μ F,25V,Electrolytic
C827	VCKYPA1HB222K	AA			0.0022 μ F,50V
C828	VCKYPA1HB222K	AA			0.0022 μ F,50V
C829	RC-GZA335AF1H	AB			3.3 μ F,50V,Electrolytic
C830	VCKYPA1HF223Z	AB			0.022 μ F,50V
C831	VCKYPA1HF223Z	AB			0.022 μ F,50V
C832	VCKYPA1HB102K	AA			0.001 μ F,50V
C833	VCKYPA1HB102K	AA			0.001 μ F,50V
C834	RC-GZA226AF1H	AB			22 μ F,50V,Electrolytic
C835	RC-GZA226AF1H	AB			22 μ F,50V,Electrolytic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[8] CAPACITORS					
C836	VCKYPA1HF223Z	AB			0.022 μ F,50V
C837	VCKYPA1HF223Z	AB			0.022 μ F,50V
C838	VCKYPA1HB332K	AA			0.0033 μ F,50V
C839	VCKYPA1HB332K	AA			0.0033 μ F,50V
C840	RC-GZA476AF1E	AB			47 μ F,25V,Electrolytic
C841	RC-GZA476AF1E	AB			47 μ F,25V,Electrolytic
C842	RC-GZA226AF1H	AB			22 μ F,50V,Electrolytic
C843	RC-GZA227AF1C	AB			220 μ F,16V,Electrolytic
C844	VCKYPA1HF223Z	AB			0.022 μ F,50V
C845	VCQPKA2AA222J	AA			0.0022 μ F,100V,Polypropylene
C846	VCQYKA1HM273J	AB			0.027 μ F,50V,Mylar
C847	RC-GZA107AF1C	AB			100 μ F,16V,Electrolytic
C849	RC-GZA107AF1A	AB			100 μ F,10V,Electrolytic
C850	RC-GZA337AF1C	AC			330 μ F,16V,Electrolytic
C851	VCKYPA1HB472K	AB			0.0047 μ F,50V
C901	RC-GZA107AF1H	AC			100 μ F,50V,Electrolytic
C902	RC-GZA107AF1H	AC			100 μ F,50V,Electrolytic
C903	VCFYFA1HA104J	AC			0.1 μ F,50V,Thin Film
C904	VCFYFA1HA104J	AC			0.1 μ F,50V,Thin Film
C905	VCFYFA1HA104J	AC			0.1 μ F,50V,Thin Film
C906	VCFYFA1HA104J	AC			0.1 μ F,50V,Thin Film
C907	RC-GZV227AF1H	AC			220 μ F,50V,Electrolytic
C908	RC-GZA476AF1H	AB			47 μ F,50V,Electrolytic
C909	RC-GZV337AF1V	AB			330 μ F,35V,Electrolytic
C910	RC-GZA107AF1H	AC			100 μ F,50V,Electrolytic
[9] RESISTORS					
R101	VRD-ST2EE102J	AA			1 kohm,1/4W
R102	VRD-ST2CD102J	AA			1 kohm,1/6W
R103	VRD-ST2CD103J	AA			10 kohm,1/6W
R104	VRD-ST2CD103J	AA			10 kohm,1/6W
R105	VRD-ST2EE332J	AA			3.3 kohms,1/4W
R106	VRD-ST2EE682J	AA			6.8 kohms,1/4W
R107	VRD-ST2CD393J	AA			39 kohms,1/6W
R108	VRS-CY1JB393J	AA			39 kohms,1/16W
R109	VRD-ST2EE102J	AA			1 kohm,1/4W
R110	VRD-ST2EE102J	AA			1 kohm,1/4W
R111	VRD-ST2EE471J	AA			470 ohms,1/4W
R112	VRD-ST2EE471J	AA			470 ohms,1/4W
R113	VRD-ST2CD102J	AA			1 kohm,1/6W
R114	VRD-ST2CD102J	AA			1 kohm,1/6W
R115	VRD-ST2CD393J	AA			39 kohms,1/6W
R116	VRD-ST2CD393J	AA			39 kohms,1/6W
R117	VRG-ST2EC101J	AB			100 ohm,1/4W,Fusible
R118	VRG-ST2EC101J	AB			100 ohm,1/4W,Fusible
R119	VRD-RT2HDR10J		N		??,1/2W
R120	VRD-RT2HDR10J		N		??,1/2W
R121	VRD-ST2EE392J	AA			3.9 kohms,1/4W
R122	VRD-ST2EE392J	AA			3.9 kohms,1/4W
R123	VRD-ST2EE123J	AA			12 kohms,1/4W
R124	VRD-ST2EE123J	AA			12 kohms,1/4W
R125	VRD-ST2CD563J	AA			56 kohms,1/6W
R126	VRD-ST2CD563J	AA			56 kohms,1/6W
R127	VRS-CY1JB102J	AA			1 kohm,1/16W
R127A	VRD-ST2EE391J	AA			390 ohms,1/4W
R128	VRS-CY1JB102J	AA			1 kohm,1/16W
R128A	VRD-ST2EE391J	AA			390 ohms,1/4W
R130	VRS-CY1JB562J	AA			5.6 kohms,1/16W
R131	VRD-ST2CD473J	AA			47 kohms,1/6W
R132	VRS-CY1JB223J	AA			22 kohms,1/16W
R135	VRD-ST2EE6R8J	AA			6.8 ohms,1/4W
R136	VRD-ST2EE6R8J	AA			6.8 ohms,1/4W
R137	VRD-ST2EE4R7J	AA			4.7 ohms,1/4W
R138	VRD-ST2EE4R7J	AA			4.7 ohms,1/4W
R201	VRD-ST2EE100J	AA			10 ohm,1/4W
R202	VRD-ST2CD223J	AA			22 kohms,1/6W
R203	VRD-ST2EE332J	AA			3.3 kohms,1/4W
R204	VRS-CY1JB103J	AA			10 kohm,1/16W
R205	VRD-ST2CD223J	AA			22 kohms,1/6W
R206	VRD-ST2CD103J	AA			10 kohm,1/6W
R207	VRD-ST2EE474J	AA			470 kohms,1/4W
R208	VRD-ST2EE183J	AA			18 kohms,1/4W
R209	VRD-ST2CD104J	AA			100 kohm,1/6W
R210	VRD-RT2HD390J	AA			39 ohms,1/2W
R211	VRD-ST2CD273J	AA			27 kohms,1/6W
R212	VRD-ST2CD104J	AA			100 kohm,1/6W
R213	VRD-ST2EE332J	AA			3.3 kohms,1/4W
R217	VRD-ST2CD103J	AA			10 kohm,1/6W
R218	VRD-ST2CD561J	AA			560 ohms,1/6W
R219	VRD-ST2CD102J	AA			1 kohm,1/6W
R221	VRD-ST2CD221J	AA			220 ohms,1/6W
R301	VRD-ST2EE220J	AA			22 ohms,1/4W
R302	VRS-CY1JB104J	AA			100 kohm,1/16W
R303	VRD-ST2CD333J	AA			33 kohms,1/6W
R304	VRS-CY1JB473J	AA			47 kohms,1/16W

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[9] RESISTORS					
R305	VRS-CY1JB681J	AA			680 ohms,1/16W
R306	VRS-CY1JB330J	AA			33 ohms,1/16W
R307	VRD-ST2EE470J	AA			47 ohms,1/4W
R308	VRS-CY1JB103J	AA			10 kohm,1/16W
R309	VRD-ST2EE471J	AA			470 ohms,1/4W
R310	VRS-CY1JB472J	AA			4.7 kohms,1/16W
R312	VRS-CY1JB222J	AA			2.2 kohms,1/16W
R313	VRS-CY1JB681J	AA			680 ohms,1/16W
R314	VRS-CY1JB330J	AA			33 ohms,1/16W
R315	VRS-CY1JB330J	AA			33 ohms,1/16W
R316	VRS-CY1JB331J	AA			330 ohms,1/16W
R323	VRS-CY1JB683J	AA			68 kohms,1/16W
R336	VRD-ST2CD562J	AA			5.6 kohms,1/6W
R350	VRS-CY1JB272J	AA			2.7 kohms,1/16W
R351	VRS-CY1JB562J	AA			5.6 kohms,1/16W
R352	VRS-CY1JB102J	AA			1 kohm,1/16W
R353	VRS-CY1JB271J	AA			270 ohms,1/16W
R355	VRS-CY1JB332J	AA			3.3 kohms,1/16W
R356	VRS-CY1JB102J	AA			1 kohm,1/16W
R357	VRS-CY1JB474J	AA			470 kohms,1/16W
R358	VRS-CY1JB822J	AA			8.2 kohms,1/16W
R359	VRS-CY1JB182J	AA			1.8 kohms,1/16W
R360	VRS-CY1JB472J	AA			4.7 kohms,1/16W
R361	VRS-CY1JB123J	AA			12 kohms,1/16W
R362	VRS-CY1JB123J	AA			12 kohms,1/16W
R363	VRD-ST2CD472J	AA			4.7 kohms,1/6W
R364	VRS-CY1JB472J	AA			4.7 kohms,1/16W
R365	VRS-CY1JB103J	AA			10 kohm,1/16W
R366	VRS-CY1JB222J	AA			2.2 kohms,1/16W
R371	VRS-CY1JB102J	AA			1 kohm,1/16W
R372	VRS-CY1JB102J	AA			1 kohm,1/16W
R373	VRS-CY1JB102J	AA			1 kohm,1/16W
R374	VRS-CY1JB102J	AA			1 kohm,1/16W
R376	VRD-ST2CD103J	AA			10 kohm,1/6W
R377	VRD-ST2CD562J	AA			5.6 kohms,1/6W
R379	VRS-CY1JB222J	AA			2.2 kohms,1/16W
R380	VRD-ST2CD152J	AA			1.5 kohms,1/6W
R381	VRS-CY1JB103J	AA			10 kohm,1/16W
R382	VRD-ST2EE331J	AA			330 ohms,1/4W
R383	VRS-CY1JB562J	AA			5.6 kohms,1/16W
R384	VRD-ST2CD682J	AA			6.8 kohms,1/6W
R385	VRD-ST2CD562J	AA			5.6 kohms,1/6W
R386	VRD-ST2EE331J	AA			330 ohms,1/4W
R387	VRD-ST2CD562J	AA			5.6 kohms,1/6W
R391	VRD-ST2EE391J	AA			390 ohms,1/4W
R392	VRD-ST2EE391J	AA			390 ohms,1/4W
R393	VRS-CY1JB102J	AA			1 kohm,1/16W
R395	VRD-ST2CD473J	AA			47 kohms,1/6W
R401	VRS-CY1JB000J	AA			0 ohm,Jumper,0.8x1.55mm,Green
R402	VRD-ST2EE680J	AA			68 ohms,1/4W
R403	VRD-ST2CD822J	AA			8.2 kohms,1/6W
R404	VRS-CY1JB822J	AA			8.2 kohms,1/16W
R405	VRS-CY1JB152J	AA			1.5 kohms,1/16W
R406	VRS-CY1JB331J	AA			330 ohms,1/16W
R407	VRD-ST2CD332J	AA			3.3 kohms,1/6W
R408	VRD-ST2CD223J	AA			22 kohms,1/6W
R409	VRS-CY1JB223J	AA			22 kohms,1/16W
R410	VRD-ST2CD332J	AA			3.3 kohms,1/6W
R411	VRD-ST2CD152J	AA			1.5 kohms,1/6W
R412	VRD-ST2CD332J	AA			3.3 kohms,1/6W
R413	VRD-ST2CD471J	AA			470 ohms,1/6W
R414	VRS-CY1JB3R3J	AA			3.3 ohms,1/16W
R415	VRS-CY1JB471J	AA			470 ohms,1/16W
R416	VRS-CY1JB101J	AA			100 ohm,1/16W
R419	VRS-CY1JB104J	AA			100 kohm,1/16W
R420	VRS-CY1JB104J	AA			100 kohm,1/16W
R421	VRS-CY1JB243J	AA			24 kohms,1/16W
R422	VRS-CY1JB103J	AA			10 kohm,1/16W
R423	VRD-ST2CD561J	AA			560 ohms,1/6W
R424	VRS-CY1JB123J	AA			12 kohms,1/16W
R425	VRS-CY1JB103J	AA			10 kohm,1/16W
R426	VRS-CY1JB332J	AA			3.3 kohms,1/16W
R427	VRD-ST2CD332J	AA			3.3 kohms,1/6W
R428	VRS-CY1JB331J	AA			330 ohms,1/16W
R429	VRS-CY1JB1R0J	AA			1 ohm,1/16W
R432	VRD-ST2CD123J	AA			12 kohms,1/6W
R433	VRD-ST2CD123J	AA			12 kohms,1/6W
R434	VRS-CY1JB681J	AA			680 ohms,1/16W
R435	VRS-CY1JB681J	AA			680 ohms,1/16W
R436	VRS-CY1JB683J	AA			68 kohms,1/16W
R437	VRD-ST2CD153J	AA			15 kohms,1/6W
R438	VRS-CY1JB682J	AA			6.8 kohms,1/16W
R439	VRS-CY1JB820J	AA			82 ohms,1/16W
R440	VRS-CY1JB820J	AA			82 ohms,1/16W
R441	VRS-CY1JB1R0J	AA			1 ohm,1/16W

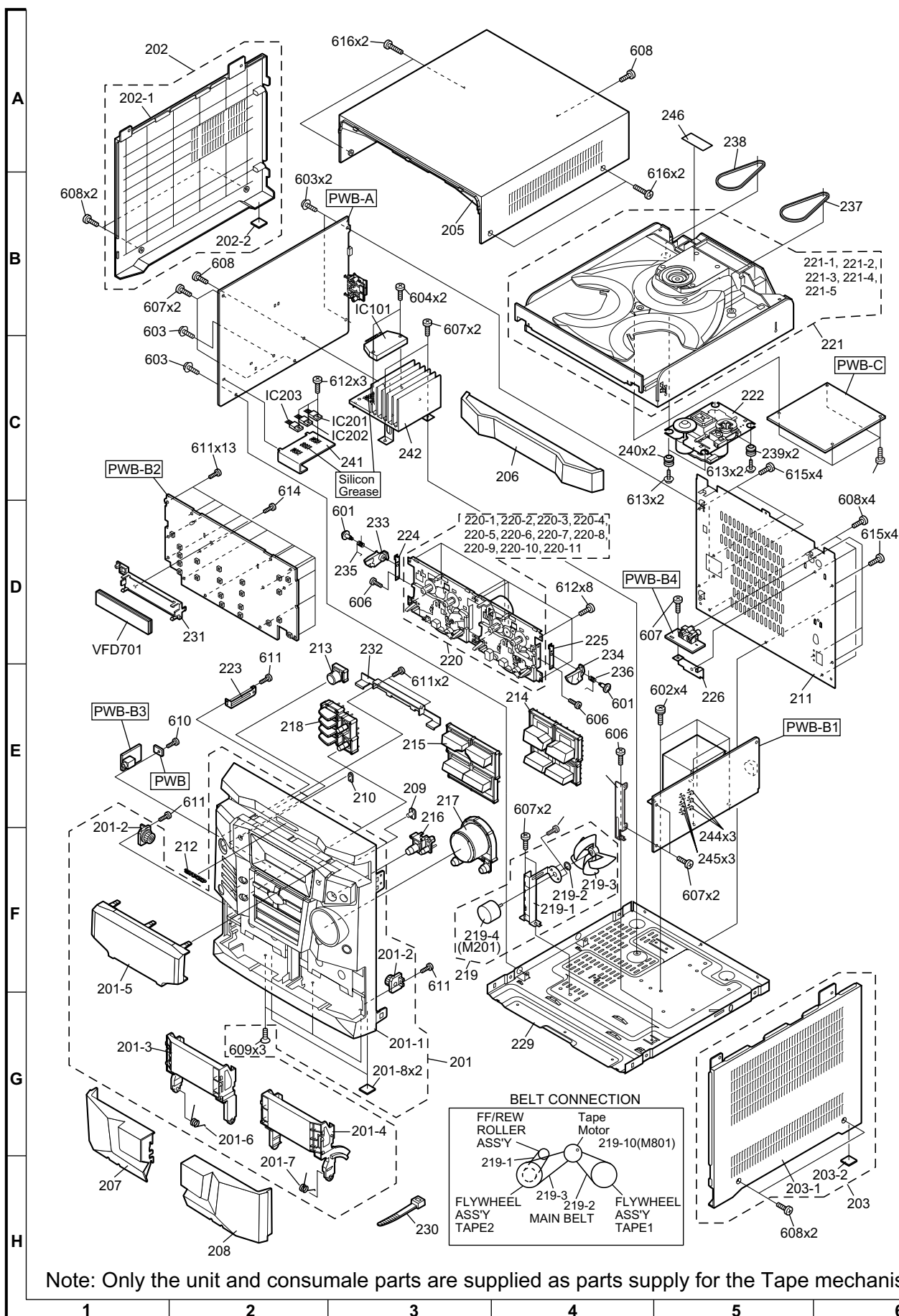
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[9] RESISTORS					
R442	VRS-CY1JB203J	AA			20 kohms,1/16W
R443	VRS-CY1JB151J	AA			150 ohms,1/16W
R444	VRS-CY1JB000J	AA			0 ohm,Jumper,0.8x1.55mm,Green
R445	VRS-CY1JB332J	AA			3.3 kohms,1/16W
R448	VRS-CY1JB820J	AA			82 ohms,1/16W
R449	VRD-ST2CD104J	AA			100 kohm,1/6W
R450	VRS-CY1JB472J	AA			4.7 kohms,1/16W
R451	VRS-CY1JB682J	AA			6.8 kohms,1/16W
R453	VRD-ST2CD682J	AA			6.8 kohms,1/6W
R454	VRS-CY1JB682J	AA			6.8 kohms,1/16W
R455	VRS-CY1JB821J	AA			820 ohms,1/16W
R456	VRD-ST2CD821J	AA			820 ohms,1/6W
R457	VRS-CY1JB821J	AA			820 ohms,1/16W
R458	VRS-CY1JB821J	AA			820 ohms,1/16W
R459	VRS-CY1JB821J	AA			820 ohms,1/16W
R460	VRS-CY1JB203J	AA			20 kohms,1/16W
R461	VRS-CY1JB103J	AA			10 kohm,1/16W
R464	VRD-ST2CD222J	AA			2.2 kohms,1/6W
R465	VRS-CY1JB225J	AA			2.2 Mohms,1/16W
R601	VRD-ST2CD102J	AA			1 kohm,1/6W
R602	VRD-ST2CD102J	AA			1 kohm,1/6W
R603	VRD-ST2CD102J	AA			1 kohm,1/6W
R604	VRD-ST2CD102J	AA			1 kohm,1/6W
R605	VRD-ST2CD102J	AA			1 kohm,1/6W
R606	VRD-ST2CD102J	AA			1 kohm,1/6W
R607	VRD-ST2CD102J	AA			1 kohm,1/6W
R608	VRD-ST2CD102J	AA			1 kohm,1/6W
R609	VRD-ST2CD102J	AA			1 kohm,1/6W
R612	VRD-ST2CD392J	AA			3.9 kohms,1/6W
R613	VRS-CY1JB392J	AA			3.9 kohms,1/16W
R614	VRD-ST2CD103J	AA			10 kohm,1/6W
R615	VRD-ST2CD103J	AA			10 kohm,1/6W
R616	VRD-ST2CD333J	AA			33 kohms,1/6W
R617	VRD-ST2CD333J	AA			33 kohms,1/6W
R618	VRD-ST2CD333J	AA			33 kohms,1/6W
R619	VRD-ST2CD333J	AA			33 kohms,1/6W
R620	VRD-ST2CD562J	AA			5.6 kohms,1/6W
R621	VRD-ST2CD562J	AA			5.6 kohms,1/6W
R622	VRD-ST2CD104J	AA			100 kohm,1/6W
R623	VRD-ST2CD104J	AA			100 kohm,1/6W
R624	VRD-ST2CD562J	AA			5.6 kohms,1/6W
R625	VRD-ST2CD562J	AA			5.6 kohms,1/6W
R628	VRD-ST2CD102J	AA			1 kohm,1/6W
R629	VRD-ST2CD102J	AA			1 kohm,1/6W
R630	VRD-ST2EE221J	AA			220 ohms,1/4W
R641	VRS-CY1JB223J	AA			22 kohms,1/16W
R642	VRS-CY1JB223J	AA			22 kohms,1/16W
R643	VRS-CY1JB222J	AA			2.2 kohms,1/16W
R644	VRS-CY1JB222J	AA			2.2 kohms,1/16W
R701	VRD-ST2CD102J	AA			1 kohm,1/6W
R702	VRD-ST2CD102J	AA			1 kohm,1/6W
R703	VRD-ST2CD102J	AA			1 kohm,1/6W
R704	VRD-ST2CD102J	AA			1 kohm,1/6W
R705	VRD-ST2CD102J	AA			1 kohm,1/6W
R706	VRD-ST2CD102J	AA			1 kohm,1/6W
R707	VRD-ST2CD102J	AA			1 kohm,1/6W
R708	VRS-CY1JB102J	AA			1 kohm,1/16W
R709	VRD-ST2CD102J	AA			1 kohm,1/6W
R711	VRS-CY1JB332J	AA			3.3 kohms,1/16W
R712	VRD-ST2CD102J	AA			1 kohm,1/6W
R713	VRD-ST2CD102J	AA			1 kohm,1/6W
R714	VRD-ST2CD102J	AA			1 kohm,1/6W
R715	VRS-CY1JB102J	AA			1 kohm,1/16W
R716	VRD-ST2CD102J	AA			1 kohm,1/6W
R717	VRD-ST2CD102J	AA			1 kohm,1/6W
R718	VRD-ST2CD102J	AA			1 kohm,1/6W
R719	VRD-ST2CD101J	AA			100 ohm,1/6W
R720	VRD-ST2CD102J	AA			1 kohm,1/6W
R721	VRD-ST2CD102J	AA			1 kohm,1/6W
R722	VRD-ST2CD102J	AA			1 kohm,1/6W
R725	VRD-ST2CD271J	AA			270 ohms,1/6W
R726	VRD-ST2CD103J	AA			10 kohm,1/6W
R727	VRD-ST2CD103J	AA			10 kohm,1/6W
R728	VRD-ST2CD102J	AA			1 kohm,1/6W
R729	VRD-ST2CD102J	AA			1 kohm,1/6W
R730	VRD-ST2CD102J	AA			1 kohm,1/6W
R731	VRD-ST2CD102J	AA			1 kohm,1/6W
R732	VRD-ST2CD102J	AA			1 kohm,1/6W
R733	VRD-ST2CD272J	AA			2.7 kohms,1/6W
R734	VRD-ST2CD103J	AA			10 kohm,1/6W
R735	VRD-ST2CD103J	AA			10 kohm,1/6W
R736	VRD-ST2CD332J	AA			3.3 kohms,1/6W
R737	VRD-ST2CD332J	AA			3.3 kohms,1/6W
R742	VRD-ST2CD103J	AA			10 kohm,1/6W
R743	VRD-ST2CD103J	AA			10 kohm,1/6W

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[9] RESISTORS					
R744	VRD-ST2CD102J	AA			1 kohm,1/6W
R744A	VRD-ST2CD473J	AA			47 kohms,1/6W
R745	VRD-ST2CD102J	AA			1 kohm,1/6W
R746	VRD-ST2CD333J	AA			33 kohms,1/6W
R747	VRD-ST2CD102J	AA			1 kohm,1/6W
R749	VRD-ST2CD103J	AA			10 kohm,1/6W
R750	VRD-ST2CD103J	AA			10 kohm,1/6W
R751	VRD-ST2CD102J	AA			1 kohm,1/6W
R754	VRD-ST2CD103J	AA			10 kohm,1/6W
R755	VRD-ST2CD103J	AA			10 kohm,1/6W
R756	VRD-ST2CD103J	AA			10 kohm,1/6W
R757	VRD-ST2CD103J	AA			10 kohm,1/6W
R758	VRD-ST2CD103J	AA			10 kohm,1/6W
R759	VRD-ST2CD103J	AA			10 kohm,1/6W
R760	VRD-ST2EE470J	AA			47 ohms,1/4W
R761	VRD-ST2CD102J	AA			1 kohm,1/6W
R762	VRS-CY1JB102J	AA			1 kohm,1/16W
R763	VRD-ST2CD332J	AA			3.3 kohms,1/6W
R764	VRD-ST2CD104J	AA			100 kohm,1/6W
R765	VRD-ST2CD753J	AA			75 kohms,1/6W
R766	VRS-CY1JB153J	AA			15 kohms,1/16W
R767	VRS-CY1JB822J	AA			8.2 kohms,1/16W
R768	VRD-ST2CD562J	AA			5.6 kohms,1/6W
R769	VRD-ST2CD392J	AA			3.9 kohms,1/6W
R770	VRD-ST2CD272J	AA			2.7 kohms,1/6W
R771	VRD-ST2CD202J	AA			2 kohms,1/6W
R772	VRD-ST2CD152J	AA			1.5 kohms,1/6W
R773	VRD-ST2CD122J	AA			1.2 kohms,1/6W
R774	VRD-ST2CD122J	AA			1.2 kohms,1/6W
R775	VRD-ST2CD820J	AA			82 ohms,1/6W
R776	VRD-ST2CD102J	AA			1 kohm,1/6W
R777	VRD-ST2CD103J	AA			10 kohm,1/6W
R778	VRD-ST2CD103J	AA			10 kohm,1/6W
R779	VRD-ST2CD121J	AA			120 ohms,1/6W
R780	VRD-ST2CD753J	AA			75 kohms,1/6W
R781	VRD-ST2CD153J	AA			15 kohms,1/6W
R782	VRD-ST2CD822J	AA			8.2 kohms,1/6W
R783	VRD-ST2CD562J	AA			5.6 kohms,1/6W
R784	VRD-ST2CD392J	AA			3.9 kohms,1/6W
R785	VRD-ST2CD272J	AA			2.7 kohms,1/6W
R786	VRD-ST2CD202J	AA			2 kohms,1/6W
R787	VRD-ST2CD392J	AA			3.9 kohms,1/6W
R789	VRD-ST2CD103J	AA			10 kohm,1/6W
R790	VRD-ST2CD102J	AA			1 kohm,1/6W
R791	VRD-ST2CD103J	AA			10 kohm,1/6W
R793	VRD-ST2CD102J	AA			1 kohm,1/6W
R794	VRD-ST2CD102J	AA			1 kohm,1/6W
R795	VRD-ST2CD103J	AA			10 kohm,1/6W
R796	VRD-ST2CD103J	AA			10 kohm,1/6W
R797	VRD-ST2CD103J	AA			10 kohm,1/6W
R802	VRD-ST2CD271J	AA			270 ohms,1/6W
R803	VRD-ST2CD271J	AA			270 ohms,1/6W
R804	VRD-ST2CD473J	AA			47 kohms,1/6W
R804A	VRS-CY1JB000J	AA			0 ohm,Jumper,0.8x1.55mm,Green
R805	VRD-ST2CD473J	AA			47 kohms,1/6W
R805A	VRS-CY1JB000J	AA			0 ohm,Jumper,0.8x1.55mm,Green
R806	VRD-ST2CD472J	AA			4.7 kohms,1/6W
R806A	VRS-CY1JB000J	AA			0 ohm,Jumper,0.8x1.55mm,Green
R807	VRD-ST2CD473J	AA			47 kohms,1/6W
R807A	VRS-CY1JB000J	AA			0 ohm,Jumper,0.8x1.55mm,Green
R808	VRS-CY1JB000J	AA			0 ohm,Jumper,0.8x1.55mm,Green
R809	VRD-ST2CD473J	AA			47 kohms,1/6W
R809A	VRS-CY1JB102J	AA			1 kohm,1/16W
R810	VRD-ST2CD472J	AA			4.7 kohms,1/6W
R811	VRD-ST2CD103J	AA			10 kohm,1/6W
R812	VRD-ST2CD222J	AA			2.2 kohms,1/6W
R813	VRD-ST2CD332J	AA			3.3 kohms,1/6W
R815	VRD-ST2CD103J	AA			10 kohm,1/6W
R816	VRD-ST2CD472J	AA			4.7 kohms,1/6W
R817	VRD-ST2CD151J	AA			150 ohms,1/6W
R818	VRD-ST2CD332J	AA			3.3 kohms,1/6W
R819	VRD-ST2CD222J	AA			2.2 kohms,1/6W
R820	VRD-ST2CD563J	AA			56 kohms,1/6W
R821	VRD-ST2CD563J	AA			56 kohms,1/6W
R822	VRD-ST2CD152J	AA			1.5 kohms,1/6W
R823	VRD-ST2CD152J	AA			1.5 kohms,1/6W
R824	VRD-ST2CD103J	AA			10 kohm,1/6W
R825	VRD-ST2CD103J	AA			10 kohm,1/6W
R826	VRD-ST2CD103J	AA			10 kohm,1/6W
R827	VRD-ST2CD103J	AA			10 kohm,1/6W
R828	VRD-ST2CD103J	AA			10 kohm,1/6W
R829	VRD-ST2CD102J	AA			1 kohm,1/6W
R830	VRD-ST2CD102J	AA			1 kohm,1/6W
R831	VRD-ST2CD102J	AA			1 kohm,1/6W
R832	VRD-ST2CD102J	AA			1 kohm,1/6W

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[9] RESISTORS					
R833	VRD-ST2CD103J	AA			10 kohm,1/6W
R834	VRS-CY1JB103J	AA			10 kohm,1/16W
R835	VRS-CY1JB152J	AA			1.5 kohms,1/16W
R836	VRS-CY1JB470J	AA			47 ohms,1/16W
R837	VRS-CY1JB470J	AA			47 ohms,1/16W
R838	VRD-ST2CD104J	AA			100 kohm,1/6W
R839	VRD-ST2CD104J	AA			100 kohm,1/6W
R840	VRD-ST2CD392J	AA			3.9 kohms,1/6W
R841	VRD-ST2CD392J	AA			3.9 kohms,1/6W
R842	VRD-ST2CD333J	AA			33 kohms,1/6W
R843	VRD-ST2CD333J	AA			33 kohms,1/6W
R844	VRD-ST2CD562J	AA			5.6 kohms,1/6W
R845	VRD-ST2CD562J	AA			5.6 kohms,1/6W
R846	VRD-ST2CD103J	AA			10 kohm,1/6W
R847	VRD-ST2CD392J	AA			3.9 kohms,1/6W
R848	VRD-ST2CD682J	AA			6.8 kohms,1/6W
R849	VRD-ST2CD682J	AA			6.8 kohms,1/6W
R850	VRD-ST2CD392J	AA			3.9 kohms,1/6W
R851	VRD-ST2CD473J	AA			47 kohms,1/6W
R852	VRD-ST2CD152J	AA			1.5 kohms,1/6W
R853	VRD-ST2CD152J	AA			1.5 kohms,1/6W
R854	VRD-ST2CD101J	AA			100 ohm,1/6W
R855	VRD-ST2CD101J	AA			100 ohm,1/6W
R856	VRD-ST2CD473J	AA			47 kohms,1/6W
R857	VRD-ST2CD103J	AA			10 kohm,1/6W
R858	VRD-ST2CD103J	AA			10 kohm,1/6W
R859	VRD-ST2EE221J	AA			220 ohms,1/4W
R860	VRD-ST2CD472J	AA			4.7 kohms,1/6W
R861	VRD-ST2CD473J	AA			47 kohms,1/6W
R862	VRD-ST2CD473J	AA			47 kohms,1/6W
R863	VRD-ST2CD104J	AA			100 kohm,1/6W
R864	VRD-ST2CD183J	AA			18 kohms,1/6W
R865	VRS-CY1JB333J	AA			33 kohms,1/16W
R866	VRD-ST2EE121J	AA			120 ohms,1/4W
R902	VRD-ST2CD223J	AA			22 kohms,1/6W
R903	VRD-ST2EE100J	AA			10 ohm,1/4W
R904	VRD-ST2CD473J	AA			47 kohms,1/6W
R905	VRD-ST2CD123J	AA			12 kohms,1/6W
R906	VRD-ST2CD331J	AA			330 ohms,1/6W
R907	VRD-ST2CD331J	AA			330 ohms,1/6W
[10] OTHER CIRCUITRY PARTS					
CN1	QCWNNA249SJZZ		N		FlatWire,2Pin
CNP101	QCNCM050ESJZZ	AD			Plug,5Pin
CNP201	QCNCM998GAFZZ	AH			Plug,7Pin
CNP202	QCNCM059GSJZZ	AB			Plug,7Pin
CNP204	QCNCM999FAFZZ	AE			Plug,6Pin
CNP205	QCNCM999CAFZZ	AG			Plug,3Pin
CNP301	QCNCM052CSJZZ	AB			Plug,3Pin
CNP401	QCNCW014RSJZZ	AD			Socket,16Pin
CNP403	QCNCM080FSJZZ	AB			Plug,6Pin
CNP405	QCNCM004MAFZZ		N		Plug,12Pin
CNP406	QCNCM004CAFZZ	AB			Plug,3Pin
CNP601	QCNCM073CSJZZ	AB			Plug,3Pin
CNP801	QCNCM074CSJZZ	AB			Plug,3Pin
CNP802	QCNCM999GAFZZ	AD			Plug,7Pin
CNP803	QCNCM999KAFZZ	AD			Plug,10Pin
CNP901	QCNCM999EAFZZ	AG			Plug,5Pin
CNS203					???,2Pin
CNW101	QCWNNA241SJZZ		N		Connector Ass'y,5/5Pin with CNS101
CNW102	QCWNNA234SJZZ		N		Connector Ass'y,8/7Pin with CNS102
CNW201	QCWNNA223SJZZ		N		Connector Ass'y,8/7Pin with CNS201
CNW202	QCNCM999GAFZZ	AD			Plug,7Pin
CNW202	QCWNNA235SJZZ		N		Connector Ass'y,8/7Pin with CNS202
CNW203	QCNCM046CSJZZ	AD			Plug,3Pin
CNW204	QCWNNA239SJZZ		N		Connector Ass'y,7/6Pin with CNS204
CNW205	QCWNNA248SJZZ		N		Connector Ass'y,4/3Pin with CNS205
CNW402	QCWNNA240SJZZ		N		Connector Ass'y,7/6Pin with CNS402
CNW404	QCWNNA246SJZZ		N		Connector Ass'y,3Pin
CNW405	QCWNNA247SJZZ		N		Connector Ass'y,13/12Pin with CNS405
CNW601	QCWNNA237SJZZ		N		Connector Ass'y,3/3Pin with CNS601
CNW801	QCWNNA243SJZZ		N		Connector Ass'y,3Pin
CNW802	QCWNNA242SJZZ		N		Connector Ass'y,7Pin
CNW803	QCWNNA236SJZZ		N		Connector Ass'y,11/10Pin with CNS803
CNW804	QCWNNA244SJZZ		N		Connector Ass'y,7/7Pin with CNS804
CNW805	QCWNNA245SJZZ		N		Connector Ass'y,7/7Pin with CNS805
CNW901	QCWNNA224SJZZ		N		Connector Ass'y,6/5Pin with CNS901
F901	QFS-D502CAWN i	AC			Fuse,T5A L 250V
F902	QFS-D502CAWN i	AC			Fuse,T5A L 250V
F903	QFS-D162CAWN i	AC			Fuse,T1.6A L 250V
FC401	QCWNNA394SJZZ		N		Flat Cable,16Pin
JK101	QJAKM0003SJZZ		N		Jack,Headphone
M201					???,(???)
M401	9GD8301-PDJ01	AL			Motor with Pulley [Up/Down/Loading] (238-2)
M402	9GD8301-PDJ02	AL			Motor with Worm Pulley [Rotate] (238-3)

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NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[10] OTHER CIRCUITRY PARTS					
M801	9GD60020322	AU			Motor with Pulley [Tape] (219-10)
MR401	RCORF0026FCZZ	AF			Core
NM801	-----				Motor with Gear [Sled](Supplied at REF No.238-1)
NM802	-----				Motor with Chassis [Spindle](Supplied at REF No.23
RLY101	RRL YD0014AWZZ	AK			Relay
RX701	VHLGP1UM271-1	AH			Remote Sensor,GP1UM271
SO101	QTANA9024SJZZ	AD			Terminal,Speaker
SO601	QSOCJ0003SJZZ	AG			Socket,Video/AUX Input
SO901	QSOCA0212AWZZ	AD			Socket AC Input
SOL801	9GD19212118	AP			Solenoid Ass'y(219-5)
SOL802	9GD19212118	AP			Solenoid Ass'y(219-5)
SW1	-----				Switch,Leaf Type [Pickup in](Supplied at REF No.23
SW401	QSW-B0002SJZZ	AE			Switch,Lever Type [DISC UP/DOWN]
SW402	9GD8301-DKG02	AF			Switch,Leaf Type [Open/Close](238-4)
SW403	9GDM03-DKG01	AB			Switch,Leaf Type [Disc No.](238-5)
SW404	9GDM03-DKG01	AB			Switch,Leaf Type [Disc 1](238-6)
SW701	QSW-K0002SJZZ	AC			Switch,Key Type [X-BASS/DEMO]
SW702	QSW-K0002SJZZ	AC			Switch,Key Type [ON/STAND-BY]
SW703	QSW-K0002SJZZ	AC			Switch,Key Type [OPEN/CLOSE]
SW704	QSW-K0002SJZZ	AC			Switch,Key Type [DISC SKIP]
SW705	QSW-K0002SJZZ	AC			Switch,Key Type [VIDEO/AUX]
SW706	QSW-K0002SJZZ	AC			Switch,Key Type [TAPE]
SW707	QSW-K0002SJZZ	AC			Switch,Key Type [PRESET DOWN]
SW708	QSW-K0002SJZZ	AC			Switch,Key Type [PLAY/REPEAT]
SW709	QSW-K0002SJZZ	AC			Switch,Key Type [PRESET UP]
SW710	QSW-K0002SJZZ	AC			Switch,Key Type [STOP]
SW711	QSW-K0002SJZZ	AC			Switch,Key Type [MEMORY/SET]
SW712	QSW-K0002SJZZ	AC			Switch,Key Type [TUNING/TIME DOWN]
SW713	QSW-K0002SJZZ	AC			Switch,Key Type [TUNING/TIME UP]
SW714	QSW-K0002SJZZ	AC			Switch,Key Type [TIMER/SLEEP]
SW715	QSW-K0002SJZZ	AC			Switch,Key Type [CLOCK]
SW719	QSW-K0002SJZZ	AC			Switch,Key Type [EQUALISER]
SW720	QSW-K0002SJZZ	AC			Switch,Key Type [VOLUME UP]
SW721	QSW-K0002SJZZ	AC			Switch,Key Type [VOLUME DOWN]
SW722	QSW-K0002SJZZ	AC			Switch,Key Type [TUNER(BAND)]
SW723	QSW-K0002SJZZ	AC			Switch,Key Type [DISC]
SW724	QSW-K0002SJZZ	AC			Switch,Key Type [REC/PAUSE]
SW801	9GD19211305	AC			Switch,Leaf Type [Tape 2 Initialize](219-8)
SW802	9GD19211305	AC			Switch,Leaf Type [Tape 1 Initialize](219-8)
SW803	9GD19211305	AC			Switch,Leaf Type [Tape 2 Rec](219-9)
SW901	QSOCE0008AWZZ	AH			Switch,Slide Type
VFD701	VVK200912F/-1		N		FL Display
VR351	RVR-M0026AWZZ	AC			10 kohm (B),Semi-VR

[11] CABINET PARTS

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[11] CABINET PARTS					
201	CPNLC1068SJ15				Front Panel Ass'y
201-1	-				Front Panel (Not Replacement Item)
201-2	NGERH0003SJSA				Gear,Damper
201-3	GDORF0030SJSA				Holder,Cassette,Left
201-4	GDORF0031SJSA				Holder,Cassette,Right
201-5	HDECQA122SJSA				Panel,Amp
201-6	MSPRD0028SJFW				Spring,Cassette Holder,Left
201-7	MSPRDA006SJFJ				Spring,Cassette Holder,Right
201-8	PCUSG0017SJSA				Cushion,Leg
202	GitAS0010SJ02				Side Panel Ass'y,Left
202-1	-				Side Panel,Left (Not Replacement Item)
202-2	PCUSG0017SJSA				Cushion,Leg
203	GitAS0011SJ02				Side Panel Ass'y,Right
203-1	-				Side Panel,Right (Not Replacement Item)
203-2	PCUSG0017SJSA				Cushion,Leg
205	GCAB-1002SJJB				Top Cabinet
206	GCOVAA046SJSA				Cover,CD Tray
207	GCOVA1031SJJB				Cover,Cassette,Left
208	GCOVA1032SJJB				Cover,Cassette,Right
209	GCOVA1033SJSA				Cover,Remote Sensor
210	GCOVA1034SJSA				Cover,Timer LED
211	GitARA055SJSA				Rear Panel
212	HBDGA1005SJSA				SHARP Badge
213	JKNBZ0083SJJB				Button,ON/STAND-BY
214	JKNBZ0085SJJB				Button,Function
215	JKNBZ0086SJJB				Button,Stop/Play
216	JKNBZ0087SJSA				Button,X-BASS
217	JKNBZ0088SJJB				Button,Volume
218	JKNBZ0089SJJB				Button,Operation
219	CFANP0001SJ09				Fan Motor Ass'y
219-1	LANGK0055SJFW				Bracket,Fan Motor
219-2	MSPRK0001SJFJ				Spring,Ring
219-3	NFANPA002SJSA				Rotary,Fan
219-4	RMOTV0409AFZZ				Motor,Air Cooling Fan (M201)
220	KMECB0012SJZZ				Tape Mechanism Ass'y
220-1	9GD18210721				Belt,FF/REW
220-2	9GD19210945				Belt,Main,Tape 1
220-3	9GD19210944				Belt,Main,Tape 2
220-4	9GD192104309				Pinch Roller Arm Ass'y
220-5	9GD19212118				Solenoid Ass'y (SOL801,802)
220-6	9GD62261401				Head,Erase
220-7	9GD620101111				Head,Record/Playback
220-8	9GD19211305				Switch,Leaf Type[Initialize] (SW801,802)
220-9	9GD19211305				Switch,Leaf Type[Rec] (SW803)
220-10	9GD60020322				Motor with Pulley[Tape] (M801)
220-11	9GD192114325				Tape Mechanism PWB Ass'y (PWB-H1,2)
221	KMECZ0006SJZZ				CD Player Unit Ass'y
221-1	9GD8301-PDJ01				Motor with Pulley[Up/Down Loading](M401)
221-2	9GD8301-PDJ02				Motor with Pulley[Rotate](M402)
221-3	9GD8301-DKG02				Switch,Leaf Type[Open/Close](SW402)
221-4	9GDM03-DKG01				Switch,Leaf Type[Disc No.](SW403)
221-5	9GDM03-DKG01				Switch,Leaf Type[Disc 1](SW404)
△ 222	KRPLE0022SJM2				CD Mechanism Unit Ass'y
223	LANGK0056SJFW				Bracket,Main PWB
224	LANGK0059SJFW				Bracket,Cassette Lock Lever,Tape 1
225	LANGK0060SJFW				Bracket,Cassette Lock Lever,Tape 2
226	LANGK0065SJFW				Bracket,Terminal PWB
227	LANGKA054SJFW				
228	LANGKA055SJFW				
229	LCHSMA016SJFW				Chassis,Main
230	LHLDW1001SJZZ				Nylon Band
231	LHLDZ1062SJSA				Holder,FL Display
232	LHLDZ1072SJSA				Bracket,Front Panel,Top
233	MLEVP0010SJJB				Lock Lever,Cassette,Tape 1
234	MLEVP0011SJJB				Lock Lever,Cassette,Tape 2
235	MSPRD0008SJFJ				Spring,Cassette Lock Lever,Tape 1
236	MSPRD0030SJFW				Spring,Cassette Lock Lever,Tape 2
237	NBLTK0009SJZZ				Belt[Rotate]
238	NBLTK0010SJZZ				Belt[Up/Down Loading]
239	PCUSGA013SJSA				Cushion
240	PCUSGA014SJSA				Cushion
241	PRDAR0087SJFW				Heat Sink
242	PRDARA021SJFW				Heat Sink,Main
243	PSHEP0015SJZZ				
△ 244	QFSDH1017CEZZ				Holder,Fuse
△ 245	QFSDH1018CEZZ				Holder,Fuse
246	TLABS0042SJZZ				Label,Laser
601	LX-BZ0007SJFN				Screw,Special
602	LX-JZA009SJFN				Screw,Special
603	LX-JZA011SJFN				Screw,Special
604	LX-JZA018SJFN				Screw,Special
605	LX-NZA001SJFN				Screw,Special
606	XHBSN20P05000				Screw,M2x5mm
607	XHBSN30P06000				Screw,M3x6mm

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[11] CABINET PARTS					
608	XHBY930P08000				Screw,M3x8mm
609	XHSSN30P08000				Screw,M3x8mm
610	XJBSN25P08000				Screw,M2.5x8mm
611	XJBSN25P10000				Screw,M2.5x10mm
612	XJBSN30P08000				Screw,M3x8mm
613	XJBSN30P10000				Screw,M3x10mm
614	XJBY925P05500				Screw,M2.5x5.5mm
615	XJBY930P10000				Screw,M3x10mm
616	XJBY930P16000				Screw,M3x16mm
[12] SPEAKER BOX PARTS					
	B3CPCDE440U				Front Speaker Box Ass'y,L-CH/R-CH
[13] ACCESSORIES/PACKING PARTS					
1	QACCE0002SJZZ				AC Power Supply Cord[For Brazil]
1	QACCZ0006SJ00				AC Power Supply Cord[For Argentine]
2	QANTL0009SJZZ				FM/AM Loop Antenna
3	QPLGA9003SJZZ				Adaptor,AC Plug[For Brazil Only]
4	RRMCGA038SJSA				Remote Control
4-1	GCOVAA020SJSA				Battery Lid,Remote Control
5	SPAKAA042SJZZ				Packing Add.,Left
6	SPAKAA043SJZZ				Packing Add.,Right
7	SPAKCA160SJZZ				Packing Case[For Brazil]
7	SPAKCA161SJZZ				Packing Case[For Argentine]
8	SSAKA0014SJZZ				Polyethylene Bag,Accessories
9	SSAKH0021SJZZ				Polyethylene Bag,Unit
10	TINSZA067SJZZ				Operation Manual
11	TLABZA102SJZZ				Label,Feature[Tape 1]
12	TLABZA103SJZZ				Label,Feature[Tape 2]
[14] P.W.B. ASSEMBLY (Not Replacement Item)					
PWB-A	DCEKKV575SJ03				Main
PWB-B	DCEKNV575SJ03				Power/Display/etc. (B1-B4)
PWB-C	DCEKSV575SJ03				MP3/CD Servo
PWB-F	-----				T/T Motor (Supplied at REF No.221,CD Player Unit)
PWB-G	-----				Switch (Supplied at REF No.221,CD Player Unit)
PWB-H	9GD192114325				Tape Mechanism (H1,2)(220-11)
[15] OTHER SERVICE PARTS					
	UDSKA0004AFZZ	AZ			CD Pickup Lens Cleaner

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PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
【 B 】				
B3CPCDE440U	12-			
【 C 】				
CFANP0001SJ09	11-219			
CPNLC1068SJ15	11-201			
【 D 】				
DCEKKV575SJ03	14-PWB-A			
DCEKNV575SJ03	14-PWB-B			
DCEKSV575SJ03	14-PWB-C			
【 G 】				
GCAB-1002SJSB	11-205			
GCOVA1031SJSB	11-207			
GCOVA1032SJSB	11-208			
GCOVA1033SJSB	11-209			
GCOVA1034SJSB	11-210			
GCOVAA020SJSB	13-4-1			
GCOVAA046SJSB	11-206			
GDORF0030SJSB	11-201-3			
GDORF0031SJSB	11-201-4			
GITARA055SJSB	11-211			
GITAS0010SJ02	11-202			
GITAS0011SJ02	11-203			
【 H 】				
HBDGA1005SJSB	11-212			
HDECQA122SJSB	11-201-5			
【 J 】				
JKNBZ0083SJSB	11-213			
JKNBZ0085SJSB	11-214			
JKNBZ0086SJSB	11-215			
JKNBZ0087SJSB	11-216			
JKNBZ0088SJSB	11-217			
JKNBZ0089SJSB	11-218			
【 K 】				
KMECB0012SJZZ	11-220			
KMECZ0006SJZZ	11-221			
KRPLE0022SJM2	11-222			
【 L 】				
LANGK0055SJFW	11-219-1			
LANGK0056SJFW	11-223			
LANGK0059SJFW	11-224			
LANGK0060SJFW	11-225			
LANGK0065SJFW	11-226			
LANGKA054SJFW	11-227			
LANGKA055SJFW	11-228			
LCHSMA016SJFW	11-229			
LHLDW1001SJZZ	11-230			
LHLDZ1062SJSB	11-231			
LHLDZ1072SJSB	11-232			
LX-BZ0007SJFN	11-601			
LX-JZA009SJFN	11-602			
LX-JZA011SJFN	11-603			
LX-JZA018SJFN	11-604			
LX-NZA001SJFN	11-605			
【 M 】				
MLEVP0010SJSB	11-233			
MLEVP0011SJSB	11-234			
MSPRD0008SJFJ	11-235			
MSPRD0028SJFW	11-201-6			
MSPRD0030SJFW	11-236			
MSPRDA006SJFJ	11-201-7			
MSPRK0001SJFJ	11-219-2			
【 N 】				
NBLTK0009SJZZ	11-237			
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NFANPA002SJSB	11-219-3			
NGERH0003SJSB	11-201-2			
【 P 】				
PCUSG0017SJSB	11-201-8			
"	11-202-2			
"	11-203-2			
PCUSGA013SJSB	11-239			
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PRDAR0087SJFW	11-241			
PRDARA021SJFW	11-242			
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【 Q 】				
QACCE0002SJZZ	13-1			
QACCZ0006SJ00	13-1			
QANTL0009SJZZ	13-2			

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
QCNCM0004CAFZZ	10-CNP406	AB		
QCNCM0004MAFZZ	10-CNP405		N	
QCNCM046CSJZZ	10-CNW203	AD		
QCNCM050ESJZZ	10-CNP101	AD		
QCNCM052CSJZZ	10-CNP301	AB		
QCNCM059GSJZZ	10-CNP202	AB		
QCNCM073CSJZZ	10-CNP601	AB		
QCNCM074CSJZZ	10-CNP801	AB		
QCNCM080FSJZZ	10-CNP403	AB		
QCNCM998GAFZZ	10-CNP201	AH		
QCNCM999CAFZZ	10-CNP205	AG		
QCNCM999EAFZZ	10-CNP901	AG		
QCNCM999FAFZZ	10-CNP204	AE		
QCNCM999GAFZZ	10-CNP802	AD		
"	10-CNW202	AD		
QCNCM999KAFZZ	10-CNP803	AD		
QCNCW014RSJZZ	10-CNP401	AD		
QCWNWA223SJZZ	10-CNW201		N	
QCWNWA224SJZZ	10-CNW901		N	
QCWNWA234SJZZ	10-CNW102		N	
QCWNWA235SJZZ	10-CNW202		N	
QCWNWA236SJZZ	10-CNW803		N	
QCWNWA237SJZZ	10-CNW601		N	
QCWNWA239SJZZ	10-CNW204		N	
QCWNWA240SJZZ	10-CNW402		N	
QCWNWA241SJZZ	10-CNW101		N	
QCWNWA242SJZZ	10-CNW802		N	
QCWNWA243SJZZ	10-CNW801		N	
QCWNWA244SJZZ	10-CNW804		N	
QCWNWA245SJZZ	10-CNW805		N	
QCWNWA246SJZZ	10-CNW404		N	
QCWNWA247SJZZ	10-CNW405		N	
QCWNWA248SJZZ	10-CNW205		N	
QCWNWA249SJZZ	10-CN1		N	
QCWNWA394SJZZ	10-FC401		N	
QFS-D162CAWNI	10-F903	AC		
QFS-D502CAWNI	10-F901	AC		
"	10-F902	AC		
QFSHD1017CEZZ	11-244			
QFSHD1018CEZZ	11-245			
QJAKM0003SJZZ	10-JK101		N	
QPLGA9003SJZZ	13-3			
QSOCA0212AWZZ	10-SO901	AD		
QSOCE0008AWZZ	10-SW901	AH		
QSOCJ0003SJZZ	10-SO601	AG		
QSW-B0002SJZZ	10-SW401	AE		
QSW-K0002SJZZ	10-SW701	AC		
"	10-SW702	AC		
"	10-SW703	AC		
"	10-SW704	AC		
"	10-SW705	AC		
"	10-SW706	AC		
"	10-SW707	AC		
"	10-SW708	AC		
"	10-SW709	AC		
"	10-SW710	AC		
"	10-SW711	AC		
"	10-SW712	AC		
"	10-SW713	AC		
"	10-SW714	AC		
"	10-SW715	AC		
"	10-SW719	AC		
"	10-SW720	AC		
"	10-SW721	AC		
"	10-SW722	AC		
"	10-SW723	AC		
"	10-SW724	AC		
QTANA9024SJZZ	10-SO101	AD		
【 R 】				
RBLN-A003SJZZ	6-L405	AB		
RC-EZD107AF1A	8-C709	AB		
RC-EZD477AF1A	8-C405	AB		
"	8-C429	AB		
"	8-C447	AB		
RC-GZA105AF1C	8-C425	AB		
"	8-C436	AB		
"	8-C615	AB		
"	8-C616	AB		
RC-GZA105AF1H	8-C103	AB		
"	8-C104	AB		

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
"	8-C358	AB		
"	8-C367	AB		
"	8-C368	AB		
"	8-C370	AB		
"	8-C371	AB		
"	8-C372	AB		
"	8-C393	AB		
RC-GZA106AF1C	8-C214	AB		
"	8-C316	AB		
"	8-C352	AB		
"	8-C364	AB		
"	8-C380	AB		
"	8-C423	AB		
"	8-C424	AB		
"	8-C601	AB		
"	8-C602	AB		
"	8-C603	AB		
"	8-C604	AB		
"	8-C605	AB		
"	8-C606	AB		
"	8-C624	AB		
"	8-C625	AB		
RC-GZA106AF1H	8-C107	AB		
"	8-C108	AB		
RC-GZA106AF1J	8-C111	AB		
"	8-C112	AB		
RC-GZA107AF1A	8-C396	AB		
"	8-C398	AB		
"	8-C849	AB		
RC-GZA107AF1C	8-C201	AB		
"	8-C407	AB		
"	8-C416	AB		
"	8-C422	AB		
"	8-C438	AB		
"	8-C439	AB		
"	8-C440	AB		
"	8-C618	AB		
"	8-C847	AB		
RC-GZA107AF1E	8-C808	AB		
"	8-C817	AB		
"	8-C818	AB		
RC-GZA107AF1H	8-C115	AC		
"	8-C116	AC		
"	8-C901	AC		
"	8-C902	AC		
"	8-C910	AC		
RC-GZA225AF1H	8-C357	AB		
"	8-C609	AB		
"	8-C610	AB		
RC-GZA226AF1H	8-C834	AB		
"	8-C835	AB		
"	8-C842	AB		
RC-GZA227AF1A	8-C706	AB		
RC-GZA227AF1C	8-C843	AB		
RC-GZA227AF1E	8-C205	AB		
RC-GZA335AF1C	8-C102	AB		
RC-GZA335AF1H	8-C362	AB		
"	8-C806	AB		
"	8-C807	AB		
"	8-C829	AB		
RC-GZA336AF1C	8-C101	AB		
"	8-C402	AB		
"	8-C617	AB		
"	8-C712	AB		
RC-GZA337AF1A	8-C720	AB		
RC-GZA337AF1C	8-C850	AC		
RC-GZA474AF1C	8-C452	AB		
RC-GZA475AF1H	8-C607	AB		
"	8-C608	AB		
RC-GZA476AF1C	8-C213	AB		
"	8-C391	AB		
"	8-C394	AB		
"	8-C716	AB		
RC-GZA476AF1E	8-C212	AB		
"	8-C825	AB		
"	8-C826	AB		
"	8-C840	AB		
"	8-C841	AB		
RC-GZA476AF1H	8-C130	AB		
"	8-C908	AB		
RC-GZA477AF1C	8-C209	AC		
RC-GZV227AF1H	8-C907	AC		

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
RC-GZV337AF1V	8-C909	AB		
RC-GZW338AF1J	8-C206		N	
"	8-C207		N	
RC-GZW338AF1V	8-C203	AH		
RCiLAA002SJZZ	5-T302	AC		
RCiLB0016SJZZ	6-L303	AD		
RCiLBA006SJZZ	5-T306	AC		
RCiLi0004SJZZ	5-T351	AF		
RCiLi0005SJZZ	5-T304	AF		
RCiLR0003SJZZ	6-L302	AD		
RCORF0026FCZZ	10-MR401	AF		
RC-QZA104AFYJ	8-C613	AC		
"	8-C614	AC		
RCRM-0007SJZZ	7-X351	AG		
RCRSP0003SJZZ	7-X352	AL		
RCRSP0013SJZZ	7-X702	AE		
RCRSPA011SJZZ	7-X401		N	
RFiLA0003SJZZ	4-CF352	AF		
RFiLF0003AWZZ	4-CF351	AK		
RFiLF0004SJZZ	4-CF302	AG		
"	4-CF303	AG		
RFiLRA001SJZZ	4-BF301	AD		
RH-iXA057SJZZ	1-iC701		N	
RMOTV0409AFZZ	11-219-4			
RRLYD0014AWZZ	10-RLY101	AK		
RRMCGA038SJSA	13-4			
RTRNPA048SJZZ	5-T101		N	
RVR-M0026AWZZ	10-VR351	AC		
【 S 】				
SPAKAA042SJZZ	13-5			
SPAKAA043SJZZ	13-6			
SPAKCA160SJZZ	13-7			
SPAKCA161SJZZ	13-7			
SSAKA0014SJZZ	13-8			
SSAKH0021SJZZ	13-9			
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TiNSZA067SJZZ	13-10			
TLABS0042SJZZ	11-246			
TLABZA102SJZZ	13-11			
TLABZA103SJZZ	13-12			
【 U 】				
UDSKA0004AFZZ	15-	AZ		
【 V 】				
VCCCCY1HH100J	8-C431	AA		
"	8-C433	AA		
VCCCCY1HH120J	8-C381	AA		
VCCCCY1HH150J	8-C382	AA		
VCCCCY1HH180J	8-C319	AA		
"	8-C717	AA		
"	8-C718	AA		
VCCCCY1HH220J	8-C314	AA		
VCCCPA1HH100J	8-C311	AA		
VCCCPA1HH120J	8-C330	AA		
VCCCPA1HH3R0C	8-C109	AA		
"	8-C110	AA		
VCCSCY1HL101J	8-C450	AA		
VCCSCY1HL220J	8-C355	AD		
VCCSCY1HL330J	8-C312	AD		
"	8-C343	AD		
"	8-C344	AD		
VCCSCY1HL560J	8-C369	AD		
VCCSCY1HL5R0C	8-C318	AD		
VCCSPA1HL121J	8-C449	AA		
VCCSPA1HL820J	8-C809	AA		
"	8-C810	AA		
VCCUCY1HJ6R0D	8-C313	AB		
VCCUCY1HJ9R0D	8-C306	AB		
VCCUPA1HJ270J	8-C334	AA		
VCFYFA1HA104J	8-C125	AC		
"	8-C126	AC		
"	8-C127	AC		
"	8-C128	AC		
"	8-C903	AC		
"	8-C904	AC		
"	8-C905	AC		
"	8-C906	AC		
VCFYFA1HA473J	8-C211	AB		
VCKYCY1EB104K	8-C701	AD		
"	8-C702	AD		
"	8-C711	AD		
VCKYCY1EB563K	8-C418	AD		
VCKYCY1EF103Z	8-C304	AA		

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PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
"	8-C413	AA		
"	8-C417	AA		
"	8-C420	AA		
VCKYCY1EF104Z	8-C401	AA		
"	8-C404	AA		
"	8-C408	AA		
"	8-C411	AA		
"	8-C419	AA		
"	8-C427	AA		
"	8-C428	AA		
"	8-C430	AA		
"	8-C707	AA		
VCKYCY1EF123Z	8-C301	AA		
VCKYCY1EF223Z	8-C308	AB		
"	8-C317	AB		
"	8-C329	AB		
"	8-C350	AB		
"	8-C351	AB		
"	8-C353	AB		
"	8-C354	AB		
"	8-C360	AB		
"	8-C361	AB		
"	8-C363	AB		
"	8-C365	AB		
"	8-C383	AB		
"	8-C387	AB		
"	8-C395	AB		
"	8-C397	AB		
"	8-C819	AB		
VCKYCY1EF473Z	8-C331	AB		
"	8-C412	AB		
"	8-C414	AB		
"	8-C426	AB		
VCKYCY1HB101K	8-C315	AB		
"	8-C446	AB		
"	8-C708	AB		
VCKYCY1HB102K	8-C121	AA		
"	8-C302	AA		
"	8-C303	AA		
"	8-C309	AA		
"	8-C349	AA		
"	8-C356	AA		
"	8-C359	AA		
"	8-C366	AA		
"	8-C384	AA		
"	8-C392	AA		
"	8-C451	AA		
VCKYCY1HB104K	8-C442	AD		
"	8-C444	AD		
"	8-C719	AD		
VCKYCY1HB221K	8-C119	AA		
"	8-C120	AA		
VCKYCY1HB272K	8-C611	AA		
"	8-C612	AA		
VCKYCY1HB331K	8-C812	AA		
"	8-C814	AA		
"	8-C815	AA		
"	8-C816	AA		
VCKYCY1HB332K	8-C321	AA		
VCKYCY1HB472K	8-C305	AA		
"	8-C307	AA		
"	8-C421	AA		
VCKYCY1HB561K	8-C335	AA		
"	8-C821	AA		
"	8-C822	AA		
VCKYCY1HF103Z	8-C713	AB		
VCKYCY1HF104Z	8-C432	AB		
"	8-C435	AB		
"	8-C437	AB		
"	8-C443	AB		
VCKYPA1HB102K	8-C832	AA		
"	8-C833	AA		
VCKYPA1HB104K	8-C403	AC		
"	8-C406	AC		
"	8-C434	AC		
"	8-C441	AC		
"	8-C445	AC		
"	8-C622	AC		
"	8-C623	AC		
"	8-C705	AC		
VCKYPA1HB152K	8-C105	AA		
"	8-C106	AA		

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VCKYPA1HB221K	8-C619	AA		
"	8-C620	AA		
"	8-C621	AA		
VCKYPA1HB222K	8-C827	AA		
"	8-C828	AA		
VCKYPA1HB331K	8-C378	AA		
"	8-C386	AA		
VCKYPA1HB332K	8-C838	AA		
"	8-C839	AA		
VCKYPA1HB472K	8-C145	AB		
"	8-C146	AB		
"	8-C851	AB		
VCKYPA1HB563K	8-C415	AC		
VCKYPA1HF103Z	8-C385	AB		
VCKYPA1HF223Z	8-C113	AB		
"	8-C114	AB		
"	8-C117	AB		
"	8-C118	AB		
"	8-C133	AB		
"	8-C134	AB		
"	8-C135	AB		
"	8-C136	AB		
"	8-C202	AB		
"	8-C204	AB		
"	8-C208	AB		
"	8-C210	AB		
"	8-C332	AB		
"	8-C337	AB		
"	8-C399	AB		
"	8-C805	AB		
"	8-C820	AB		
"	8-C830	AB		
"	8-C831	AB		
"	8-C836	AB		
"	8-C837	AB		
"	8-C844	AB		
VCKYPA1HF333Z	8-C823	AA		
"	8-C824	AA		
VCKYPA1HF473Z	8-C710	AB		
VCKYTV1HB561K	8-C801	AA		
"	8-C802	AA		
"	8-C803	AA		
"	8-C804	AA		
VCQPKA2AA222J	8-C845	AA		
VCQYKA1HM273J	8-C846	AB		
VCTYPA1CX223K	8-C373	AA		
"	8-C374	AA		
VHCKDV147B/-1	3-VD302	AH		
"	3-VD303	AH		
VHCSV348S/-1	3-VD301	AK		
VHD1N4004// -1	3-D104	AB		
"	3-D201	AB		
"	3-D202	AB		
"	3-D203	AB		
"	3-D204	AB		
"	3-D205	AB		
"	3-D207	AB		
"	3-D210	AB		
"	3-D401	AB		
"	3-D402	AB		
"	3-D403	AB		
"	3-D701	AB		
"	3-D706	AB		
"	3-D905	AB		
"	3-D906	AB		
"	3-D907	AB		
"	3-D908	AB		
"	3-D909	AB		
"	3-D910	AB		
"	3-D911	AB		
VHD1N4148// -1	3-D101	AA		
"	3-D102	AA		
"	3-D103	AA		
"	3-D211	AA		
"	3-D212	AA		
"	3-D301	AA		
"	3-D302	AA		
"	3-D305	AA		
"	3-D306	AA		
"	3-D307	AA		
"	3-D308	AA		
"	3-D604	AA		

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
"	3-D605	AA		
"	3-D702	AA		
"	3-D703	AA		
"	3-D704	AA		
"	3-D705	AA		
"	3-D801	AA		
"	3-D802	AA		
"	3-D803	AA		
"	3-D804	AA		
"	3-D805	AA		
"	3-D806	AA		
VHD1N6A2M+-1	3-D901	AD		
"	3-D902	AD		
"	3-D903	AD		
"	3-D904	AD		
VHEDZH03C3+-1	3-ZD701	AB		
VHEDZH04B2+-1	3-ZD402	AB		
VHEDZH05C2+-1	3-ZD201	AB		
"	3-ZD351	AB		
"	3-ZD401	AB		
VHEDZH06C2+-1	3-ZD902	AB		
VHEDZH3001+-1	3-ZD901	AB		
VHiAN7345K/-1	1-iC801	AM		
VHiKiA7805APi	1-iC201	AF		
VHiKiA7808APi	1-iC203	AF		
VHiKiA7812APi	1-iC202	AE		
VHiLA1832S/-1	1-iC303	AN		
VHiLA6548NH-1	1-iC402	AL		
VHiLC72131/-1	1-iC302	AP		
VHiLC75341M-1	1-iC601	AM		
VHiLC78690/-1	1-iC401	BE		
VHiSTK40290-1	1-iC101	AY		
VHiTA7358AP-1	1-iC301	AG		
VHLP1UM271-1	10-RX701	AH		
VHPLP3052A+-1	3-LED701	AC		
VP-DH100K0000	6-L103	AB		
VP-DH101K0000	6-L351	AB		
"	6-L352	AB		
VP-DH102K0000	6-L353	AB		
VP-DH2R2K0000	6-L105	AB		
"	6-L601	AB		
VP-DHR82K0000	6-L401	AE		
"	6-L402	AE		
"	6-L403	AE		
"	6-L701	AE		
"	6-L703	AE		
"	6-L705	AE		
VP-MK331K0000	6-L801	AB		
VRD-RT2HD390J	9-R210	AA		
VRD-RT2HDR10J	9-R119		N	
"	9-R120		N	
VRD-ST2CD101J	9-R719	AA		
"	9-R854	AA		
"	9-R855	AA		
VRD-ST2CD102J	9-R102	AA		
"	9-R113	AA		
"	9-R114	AA		
"	9-R219	AA		
"	9-R601	AA		
"	9-R602	AA		
"	9-R603	AA		
"	9-R604	AA		
"	9-R605	AA		
"	9-R606	AA		
"	9-R607	AA		
"	9-R608	AA		
"	9-R609	AA		
"	9-R628	AA		
"	9-R629	AA		
"	9-R701	AA		
"	9-R702	AA		
"	9-R703	AA		
"	9-R704	AA		
"	9-R705	AA		
"	9-R706	AA		
"	9-R707	AA		
"	9-R709	AA		
"	9-R712	AA		
"	9-R713	AA		
"	9-R714	AA		
"	9-R716	AA		
"	9-R717	AA		

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
"	9-R718	AA		
"	9-R720	AA		
"	9-R721	AA		
"	9-R722	AA		
"	9-R728	AA		
"	9-R729	AA		
"	9-R730	AA		
"	9-R731	AA		
"	9-R732	AA		
"	9-R744	AA		
"	9-R745	AA		
"	9-R747	AA		
"	9-R751	AA		
"	9-R761	AA		
"	9-R776	AA		
"	9-R790	AA		
"	9-R793	AA		
"	9-R794	AA		
"	9-R829	AA		
"	9-R830	AA		
"	9-R831	AA		
"	9-R832	AA		
VRD-ST2CD103J	9-R103	AA		
"	9-R104	AA		
"	9-R206	AA		
"	9-R217	AA		
"	9-R376	AA		
"	9-R614	AA		
"	9-R615	AA		
"	9-R726	AA		
"	9-R727	AA		
"	9-R734	AA		
"	9-R735	AA		
"	9-R742	AA		
"	9-R743	AA		
"	9-R749	AA		
"	9-R750	AA		
"	9-R754	AA		
"	9-R755	AA		
"	9-R756	AA		
"	9-R757	AA		
"	9-R758	AA		
"	9-R759	AA		
"	9-R777	AA		
"	9-R778	AA		
"	9-R789	AA		
"	9-R791	AA		
"	9-R795	AA		
"	9-R796	AA		
"	9-R797	AA		
"	9-R811	AA		
"	9-R815	AA		
"	9-R824	AA		
"	9-R825	AA		
"	9-R826	AA		
"	9-R827	AA		
"	9-R828	AA		
"	9-R833	AA		
"	9-R846	AA		
"	9-R857	AA		
"	9-R858	AA		
VRD-ST2CD104J	9-R209	AA		
"	9-R212	AA		
"	9-R449	AA		
"	9-R622	AA		
"	9-R623	AA		
"	9-R764	AA		
"	9-R838	AA		
"	9-R839	AA		
"	9-R863	AA		
VRD-ST2CD121J	9-R779	AA		
VRD-ST2CD122J	9-R773	AA		
"	9-R774	AA		
VRD-ST2CD123J	9-R432	AA		
"	9-R433	AA		
"	9-R905	AA		
VRD-ST2CD151J	9-R817	AA		
VRD-ST2CD152J	9-R380	AA		
"	9-R411	AA		
"	9-R772	AA		
"	9-R822	AA		
"	9-R823	AA		

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PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
"	9-R852	AA		
"	9-R853	AA		
VRD-ST2CD153J	9-R437	AA		
"	9-R781	AA		
VRD-ST2CD183J	9-R864	AA		
VRD-ST2CD202J	9-R771	AA		
"	9-R786	AA		
VRD-ST2CD221J	9-R221	AA		
VRD-ST2CD222J	9-R464	AA		
"	9-R812	AA		
"	9-R819	AA		
VRD-ST2CD223J	9-R202	AA		
"	9-R205	AA		
"	9-R408	AA		
"	9-R902	AA		
VRD-ST2CD271J	9-R725	AA		
"	9-R802	AA		
"	9-R803	AA		
VRD-ST2CD272J	9-R733	AA		
"	9-R770	AA		
"	9-R785	AA		
VRD-ST2CD273J	9-R211	AA		
VRD-ST2CD331J	9-R906	AA		
"	9-R907	AA		
VRD-ST2CD332J	9-R407	AA		
"	9-R410	AA		
"	9-R412	AA		
"	9-R427	AA		
"	9-R736	AA		
"	9-R737	AA		
"	9-R763	AA		
"	9-R813	AA		
"	9-R818	AA		
VRD-ST2CD333J	9-R303	AA		
"	9-R616	AA		
"	9-R617	AA		
"	9-R618	AA		
"	9-R619	AA		
"	9-R746	AA		
"	9-R842	AA		
"	9-R843	AA		
VRD-ST2CD392J	9-R612	AA		
"	9-R769	AA		
"	9-R784	AA		
"	9-R787	AA		
"	9-R840	AA		
"	9-R841	AA		
"	9-R847	AA		
"	9-R850	AA		
VRD-ST2CD393J	9-R107	AA		
"	9-R115	AA		
"	9-R116	AA		
VRD-ST2CD471J	9-R413	AA		
VRD-ST2CD472J	9-R363	AA		
"	9-R806	AA		
"	9-R810	AA		
"	9-R816	AA		
"	9-R860	AA		
VRD-ST2CD473J	9-R131	AA		
"	9-R395	AA		
"	9-R804	AA		
"	9-R805	AA		
"	9-R807	AA		
"	9-R809	AA		
"	9-R851	AA		
"	9-R856	AA		
"	9-R861	AA		
"	9-R862	AA		
"	9-R904	AA		
"	9-R744A	AA		
VRD-ST2CD561J	9-R218	AA		
"	9-R423	AA		
VRD-ST2CD562J	9-R336	AA		
"	9-R377	AA		
"	9-R385	AA		
"	9-R387	AA		
"	9-R620	AA		
"	9-R621	AA		
"	9-R624	AA		
"	9-R625	AA		
"	9-R768	AA		
"	9-R783	AA		

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
"	9-R844	AA		
"	9-R845	AA		
VRD-ST2CD563J	9-R125	AA		
"	9-R126	AA		
"	9-R820	AA		
"	9-R821	AA		
VRD-ST2CD682J	9-R384	AA		
"	9-R453	AA		
"	9-R848	AA		
"	9-R849	AA		
VRD-ST2CD753J	9-R765	AA		
"	9-R780	AA		
VRD-ST2CD820J	9-R775	AA		
VRD-ST2CD821J	9-R456	AA		
VRD-ST2CD822J	9-R403	AA		
"	9-R782	AA		
VRD-ST2EE100J	9-R201	AA		
"	9-R903	AA		
VRD-ST2EE102J	9-R101	AA		
"	9-R109	AA		
"	9-R110	AA		
VRD-ST2EE121J	9-R866	AA		
VRD-ST2EE123J	9-R123	AA		
"	9-R124	AA		
VRD-ST2EE183J	9-R208	AA		
VRD-ST2EE220J	9-R301	AA		
VRD-ST2EE221J	9-R630	AA		
"	9-R859	AA		
VRD-ST2EE331J	9-R382	AA		
"	9-R386	AA		
VRD-ST2EE332J	9-R105	AA		
"	9-R203	AA		
"	9-R213	AA		
VRD-ST2EE391J	9-R391	AA		
"	9-R392	AA		
"	9-R127A	AA		
"	9-R128A	AA		
VRD-ST2EE392J	9-R121	AA		
"	9-R122	AA		
VRD-ST2EE470J	9-R307	AA		
"	9-R760	AA		
VRD-ST2EE471J	9-R111	AA		
"	9-R112	AA		
"	9-R309	AA		
VRD-ST2EE474J	9-R207	AA		
VRD-ST2EE4R7J	9-R137	AA		
"	9-R138	AA		
VRD-ST2EE680J	9-R402	AA		
VRD-ST2EE682J	9-R106	AA		
VRD-ST2EE6R8J	9-R135	AA		
"	9-R136	AA		
VRG-ST2EC101J	9-R117	AB		
"	9-R118	AB		
VRS-CY1JB000J	9-R401	AA		
"	9-R444	AA		
"	9-R808	AA		
"	9-R804A	AA		
"	9-R805A	AA		
"	9-R806A	AA		
"	9-R807A	AA		
VRS-CY1JB101J	9-R416	AA		
VRS-CY1JB102J	9-R127	AA		
"	9-R128	AA		
"	9-R352	AA		
"	9-R356	AA		
"	9-R371	AA		
"	9-R372	AA		
"	9-R373	AA		
"	9-R374	AA		
"	9-R393	AA		
"	9-R708	AA		
"	9-R715	AA		
"	9-R762	AA		
"	9-R809A	AA		
VRS-CY1JB103J	9-R204	AA		
"	9-R308	AA		
"	9-R365	AA		
"	9-R381	AA		
"	9-R422	AA		
"	9-R425	AA		
"	9-R461	AA		
"	9-R834	AA		

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VRS-CY1JB104J	9-R302	AA		
"	9-R419	AA		
"	9-R420	AA		
VRS-CY1JB123J	9-R361	AA		
"	9-R362	AA		
"	9-R424	AA		
VRS-CY1JB151J	9-R443	AA		
VRS-CY1JB152J	9-R405	AA		
"	9-R835	AA		
VRS-CY1JB153J	9-R766	AA		
VRS-CY1JB182J	9-R359	AA		
VRS-CY1JB1R0J	9-R429	AA		
"	9-R441	AA		
VRS-CY1JB203J	9-R442	AA		
"	9-R460	AA		
VRS-CY1JB222J	9-R312	AA		
"	9-R366	AA		
"	9-R379	AA		
"	9-R643	AA		
"	9-R644	AA		
VRS-CY1JB223J	9-R132	AA		
"	9-R409	AA		
"	9-R641	AA		
"	9-R642	AA		
VRS-CY1JB225J	9-R465	AA		
VRS-CY1JB243J	9-R421	AA		
VRS-CY1JB271J	9-R353	AA		
VRS-CY1JB272J	9-R350	AA		
VRS-CY1JB330J	9-R306	AA		
"	9-R314	AA		
"	9-R315	AA		
VRS-CY1JB331J	9-R316	AA		
"	9-R406	AA		
"	9-R428	AA		
VRS-CY1JB332J	9-R355	AA		
"	9-R426	AA		
"	9-R445	AA		
"	9-R711	AA		
VRS-CY1JB333J	9-R865	AA		
VRS-CY1JB392J	9-R613	AA		
VRS-CY1JB393J	9-R108	AA		
VRS-CY1JB3R3J	9-R414	AA		
VRS-CY1JB470J	9-R836	AA		
"	9-R837	AA		
VRS-CY1JB471J	9-R415	AA		
VRS-CY1JB472J	9-R310	AA		
"	9-R360	AA		
"	9-R364	AA		
"	9-R450	AA		
VRS-CY1JB473J	9-R304	AA		
VRS-CY1JB474J	9-R357	AA		
VRS-CY1JB562J	9-R130	AA		
"	9-R351	AA		
"	9-R383	AA		
VRS-CY1JB681J	9-R305	AA		
"	9-R313	AA		
"	9-R434	AA		
"	9-R435	AA		
VRS-CY1JB682J	9-R438	AA		
"	9-R451	AA		
"	9-R454	AA		
VRS-CY1JB683J	9-R323	AA		
"	9-R436	AA		
VRS-CY1JB820J	9-R439	AA		
"	9-R440	AA		
"	9-R448	AA		
VRS-CY1JB821J	9-R455	AA		
"	9-R457	AA		
"	9-R458	AA		
"	9-R459	AA		
VRS-CY1JB822J	9-R358	AA		
"	9-R404	AA		
"	9-R767	AA		
VS2HA1015GR-1	2-Q204	AB		
"	2-Q360	AB		
"	2-Q409	AB		
"	2-Q802	AB		
"	2-Q822	AB		
"	2-Q901	AB		
VS2HC1815GR-1	2-Q101	AB		
"	2-Q102	AB		
"	2-Q103	AB		

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
"	2-Q104	AB		
"	2-Q105	AB		
"	2-Q106	AB		
"	2-Q107	AB		
"	2-Q203	AB		
"	2-Q205	AB		
"	2-Q207	AB		
"	2-Q208	AB		
"	2-Q403	AB		
"	2-Q404	AB		
"	2-Q407	AB		
"	2-Q411	AB		
"	2-Q412	AB		
"	2-Q413	AB		
"	2-Q701	AB		
"	2-Q703	AB		
"	2-Q704	AB		
"	2-Q801	AB		
"	2-Q803	AB		
"	2-Q807	AB		
"	2-Q808	AB		
"	2-Q812	AB		
"	2-Q813	AB		
"	2-Q814	AB		
"	2-Q819	AB		
VS2HJ9018-G-1	2-Q202		N	
VS2SB562-C/-1	2-Q206	AD		
"	2-Q804	AD		
"	2-Q805	AD		
"	2-Q815	AD		
VS2SC2001-K-1	2-Q823	AD		
VS2SC535-C/-1	2-Q302	AC		
"	2-Q306	AC		
VSKRA102M// -1	2-Q820	AC		
VSKRA107M// -1	2-Q108	AE		
VSKRC102M// -1	2-Q702	AC		
"	2-Q816	AC		
"	2-Q817	AC		
"	2-Q818	AC		
VSKRC104M// -1	2-Q351	AC		
"	2-Q810	AC		
"	2-Q811	AC		
"	2-Q821	AC		
VSKRC107M// -1	2-Q109	AC		
"	2-Q806	AC		
"	2-Q809	AC		
VSKTA1271Y/-1	2-Q402	AC		
"	2-Q405	AC		
"	2-Q408	AC		
VSKTC3200GR-1	2-Q201	AC		
VSKTC3203Y/-1	2-Q401	AC		
"	2-Q406	AC		
"	2-Q410	AC		
VVK200912F/-1	10-VFD701		N	
【 X 】				
XHBSN20P05000	11-606			
XHBSN30P06000	11-607			
XHBY930P08000	11-608			
XHSSN30P08000	11-609			
XJBSN25P08000	11-610			
XJBSN25P10000	11-611			
XJBSN30P08000	11-612			
XJBSN30P10000	11-613			
XJBY925P05500	11-614			
XJBY930P10000	11-615			
XJBY930P16000	11-616			
【 9 】				
9GD18210721	11-220-1			
9GD192104309	11-220-4			
9GD19210944	11-220-3			
9GD19210945	11-220-2			
9GD19211305	10-SW801	AC		
"	10-SW802	AC		
"	10-SW803	AC		
"	11-220-8			
"	11-220-9			
9GD192114325	11-220-11			
"	14-PWB-H			
9GD19212118	10-SOL801	AP		
"	10-SOL802	AP		
"	11-220-5			
9GD60020322	10-M801	AU		

CD-MPS440W

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
"	11-220-10			
9GD620101111	11-220-7			
9GD62261401	11-220-6			
9GD8301-DKG02	10-SW402	AF		
"	11-221-3			
9GD8301-PDJ01	10-M401	AL		
"	11-221-1			
9GD8301-PDJ02	10-M402	AL		
"	11-221-2			
9GDM03-DKG01	10-SW403	AB		
"	10-SW404	AB		
"	11-221-4			
"	11-221-5			

“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.

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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.

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