

Service Manual

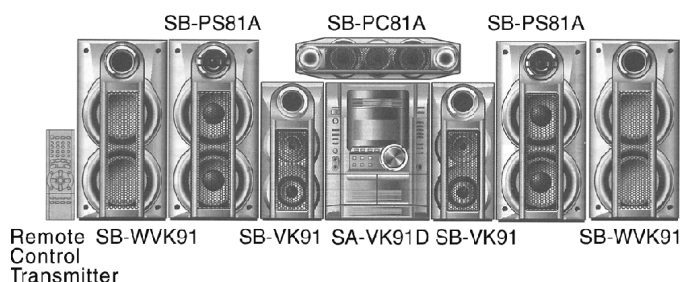
DVD Stereo System



SA-VK91DGC SA-VK91DGS

Colour

(S)... Silver Type



Specifications

■ AMPLIFIER SECTION

RMS Output Power : Dolby Digital Mode

Front - High Ch

90 W per channel (6 Ω), 1 kHz, 10% THD

Front - Low Ch

45 W per channel (12 Ω), 100 Hz, 10% THD

Surround Ch

45 W per channel (6 Ω), 1 kHz, 10% THD

Center Ch

100 W per channel (6 Ω), 1 kHz, 10% THD

Subwoofer

95 W per channel (6 Ω), 100 Hz, 10% THD

Total RMS Dolby Digital mode power

650 W

PMPO output power

7300 W

■ FM/AM TUNER, TERMINALS SECTION

Preset station

FM 15 stations

AM/MW 15 stations

Frequency Modulation (FM)

Frequency range

87.50 - 108.00 MHz (50 kHz step)

Sensitivity

2.5 μ V (IHF)

S/N 26dB

2.2 μ V

Antenna terminals

75 Ω (unbalanced)

Amplitude Modulation (AM/MW)

Frequency range

522 - 1629 kHz (9 kHz step)

520 - 1630 kHz (10 kHz step)

AM sensitivity S/N 20 dB at 1000 kHz

560 μ V/m

Audio performance (Amplifier)

Input sensitivity/Input impedance

Aux

250 mV, 20 k Ω

Phone jack

Terminal

Stereo, 3.5 mm jack

Mic jack

Sensitivity

0.7 mV, 600 Ω

Terminal

Mono, 6.3 mm jack (2 system)

■ CASSETTE DECK SECTION

Type

Auto Reverse

Track system

4 Track, 2 Channel

Head Record/Playback

Solid Permalloy Head

Erasure

Double Gap Ferrite Head

Motor

DC Servo Motor

Recording System

AC Bias 100 kHz

Erase System

AC Erase 100 kHz

Tape Speed

4.8 cm/s

Overall Frequency Response (+3, -6 dB) at DECK OUT

Normal (TYPE I)

35 Hz - 14 kHz

S/N Ratio

50 dB (A weighted)

Wow and Flutter

0.18 % (WRMS)

Fast Forward and Rewind Time

Approx. 120 seconds with
C-60 cassette tape

■ DISC SECTION

Disc played [8 cm or 12 cm]

(1) DVD-RAM (DVD-VR compatible, JPEG formatted disc)

(2) DVD-Audio

Panasonic

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(3) DVD-Video	
(4) DVD-R (DVD-Video compatible)	
(5) CD-Audio (CD-DA)	
(6) Video CD	
(7) SVCD (Conforming to IEC62107)	
(8) CD-R/CD-RW (CD-DA, Video CD, SVCD, MP3, WMA, JPEG formatted disc)	
(9) MP3/WMA*	
• Compatible compression rate:	
MP3: between 32 kbps and 320 kbps	
WMA: between 48 kbps and 192 kbps	
(10) JPEG*	
• Exif Ver 2.1 JPEG Baseline files	
• Picture resolution: between 320x240 and 6144x4096 pixels	
(Sub sampling is 4:2:2 or 4:2:0)	
(11) HighMAT Level 2 (Audio and Image)	
• The total combined maximum number of recognizable audio and picture contents and groups: 4000 audio and picture contents and 400 groups.	
Pick up	
Wavelength (DVD/CD)	662 nm/785 nm
Audio output (Disc)	
Number of channels	5.1 ch (FL, FR, C, SL, SR, SW)
Audio performance (measurement at: Line out terminal)	
Frequency response	
CD-Audio	4 Hz - 20 kHz (+1, -2 dB)
n VIDEO SECTION	
Video system	
Signal system	PAL625/50, PAL525/60, NTSC
Composite video output	
Output level	1 Vp-p (75Ω)
Terminal	Pin jack (1 system)
S VIDEO output	
Y output level	1 Vp-p (75Ω)
C output level	0.3 Vp-p (75Ω) (PAL)
	0.286 Vp-p (75Ω) (NTSC)
Terminal	S terminal (1 system)
Component video output (480P/480I)	
Y output level	1 Vp-p (75 Ω)
P _B output level	0.7 Vp-p (75 Ω)

P _R output level	0.7 Vp-p (75 Ω)
Terminal	

Pin jack (Y: green, P_B: blue, P_R: red) (1 system)**n GENERAL**

Power supply	AC 110V/127V/220-230V/240V, 50/60Hz
Power consumption	313 W
Power consumption in standby mode:	1 W
Dimensions (WxHxD)	250 x 330 x 372 mm
Mass	9.6 kg
Operating temperature range	+ 5°C to + 35°C
Operating humidity range	5% to 90% RH (no condensation)

n SYSTEM

SC-VK91D (GC)	Music Center: SF-VK91D (GC)
	Front Speakers: SB-VK91D (GC)
	Center Speaker: SB-PC81A (GC)
	x 1
	Surround Speakers: SB-PS81A (GC) x 2
	Subwoofers: SB-WVK91 (GC) x 2
SC-VK91D (GS)	Music Center: SF-VK91D (GS)
	Front Speakers: SB-VK91D (GC)
	Center Speaker: SB-PC81A (GC)
	x 1
	Surround Speakers: SB-PS81A (GC) x 2
	Subwoofers: SB-WVK91 (GC) x 2

SF-VK91D GC-S consists of SA-VK91D GC-S & SB-PT81A GC-S

SF-VK91D GS-S consists of SA-VK91D GS-S & SB-PT81A GC-S

SB-PT81A GC-S consists of SB-PS81A GC (x 2) & SB-PC81A GC (x 1)

SB-VK91D GC-S consists of SB-VK91 GC-S (x 2) & SB-WVK91 GC-S (x 2)

Notes:

- Specifications are subject to change without notice. Mass and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyzer.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 Safety precautions

Note on AC power supply cord (For Saudi Arabia and Kuwait only)

Before use

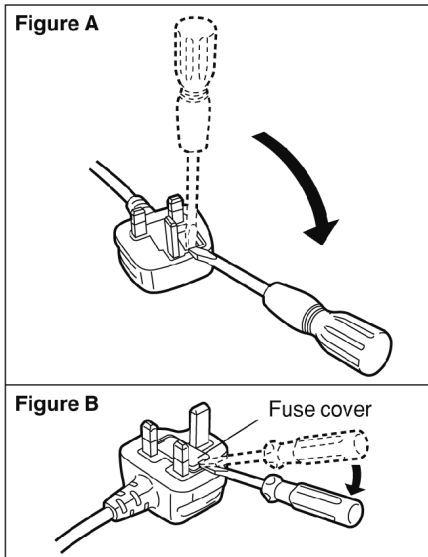
Remove the connector cover.

How to replace the fuse

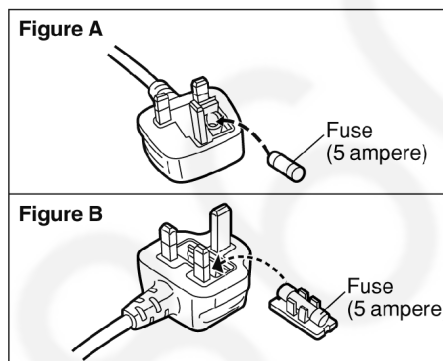
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



2 Before Use

Be sure to disconnect the mains cord before adjusting the voltage selector.

Use a minus(-) screwdriver to set the voltage selector (on the rear panel) to the voltage setting for the area in which the unit will be used. (If the power supply in your area is 117V or 120V, set to the "127V" position.)

Note that this unit will be seriously damaged if this setting is not made correctly. (There is no voltage selector for some countries, the correct voltage is already set.)

3 Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C5815~C5818, C5829~C5830, C5835~C5836 and C5841 through a 10Ω, 5W resistor to ground.

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

Current consumption at AC 110/127/220~230V, 50/60 Hz in NO SIGNAL at (vol. min, in CD mode) should be as below:

AC 50/60Hz	110 V	~ 1200 mA
	127 V	~ 1100 mA
	220-230 V	~ 700 mA
	240 V	~ 650 mA

4 Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are “shorted”, or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note :

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

5 Safety Precautions

5.1. General Guidelines

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

5.1.1. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between $1M\Omega$ and $5.2M\Omega$.

When the exposed metal does not have a return path to the chassis, the reading must be ∞ .

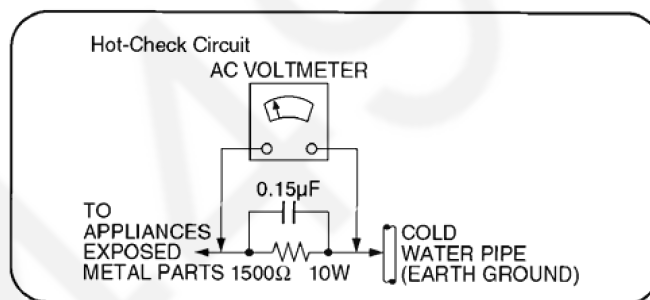


Figure 5.1

5.1.2. Leakage Current Hot Check (See Figure 5.1)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a $1.5k\Omega$, 10 watts resistor, in parallel with a $0.15\mu F$ capacitor, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 5.1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is out of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

6 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor “chip” components. The following techniques should be used to help reduce the incidence of component damage

caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminium foil, to prevent electrostatic charge build up or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder remover device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminium foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize body motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by Δ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

7 Handling the Lead-free Solder

7.1. About lead free solder (PbF)

Distinction of PbF P.C.B.:

P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

Caution:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of soldering iron with temperature control, please set it to 700 ± 20°F (370 ± 10°C).
- Pb free solder will tend to splash when heated too high (about 1100°F/600°C).
- When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

8 Cautions to be taken when handling Optical Pickup

The laser diode used inside optical pickup could be destroyed due to static electricity as a potential difference is caused by electrostatic load discharged from clothes or human body. Handling the parts carefully to avoid electrostatic destruction during repair.

8.1. Handling Optical Pickup

1. Do not impact on optical pickup as the unit structurally uses an extremely precise technology.
2. Short-circuit the flexible cable of optical pickup remove from the circuit board using a short-circuit pin or clip in order to prevent laser diode from electrostatic destruction (Refer to Fig. 8.1 and Fig. 8.2)
3. Do not handle flexible cables forcibly as this may cause snapping. Handle the parts carefully (Refer to Fig. 8.1)
4. A new optical pickup is equipped with an anti-static flexible cable. After replacing and connecting to the flexible board, cut the anti-static flexible cable. (Refer to Fig. 8.1)

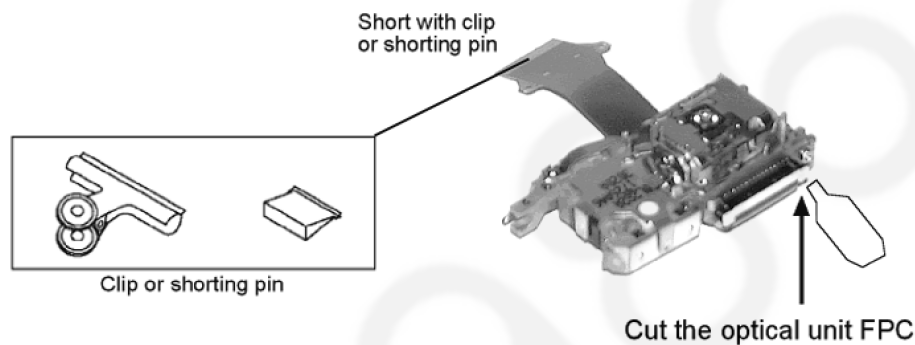


Fig. 8.1

8.2. Replacing Precautions for Optical Pickup Unit

DVD/CD Optical Pickup

The optical pickup by which part supply was carried out attaches the short clip to the flexible board for laser diode electrostatic discharge damage prevention. Please remove the short clip and be sure to check that the short land is open, before connecting. (Please remove solder, when the short land short-circuits.)

8.3. Grounding for Preventing Electrostatic Destruction

1. Human body grounding
Use the anti-static wrist strap to discharge the static electricity accumulated in your body. (Refer to Fig. 8.2)
2. Work place grounding
Place a conductive material (conductive sheet) or ironboard where optical pickup is placed. (Refer to Fig. 8.2)

Note :

Keep your clothes away from optical pickup as wrist strap does not release the static electricity charged in clothes.

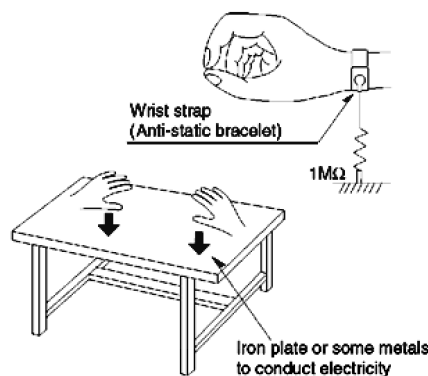


Fig. 8.2

9 Precaution of Laser Diode

Caution :

This product utilizes a laser diode with the unit turned "ON", invisible laser radiation is emitted from the pick up lens.

Wavelength : 662 nm(DVD)/785 nm(CD)

Maximum output radiation power from pick up : 100 μ W/VDE

Laser radiation from pick up unit is safety level, but be sure the followings:

1. Do not disassemble the optical pick up unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pick up unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pick up lens for a long time.

CAUTION!

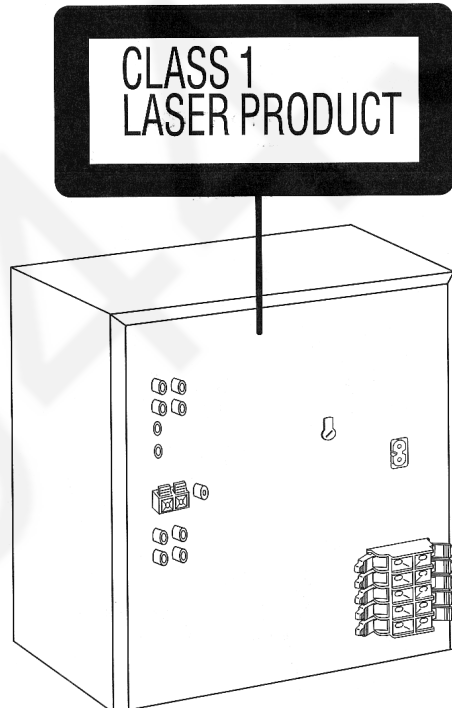
THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

n Use of Caution Labels

CAUTION	- LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.	FDA 21 CFR / Class II
CAUTION	- VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.	IEC60825-1 / Class 3b
VARNING	- SYNLIK OCH OSYNLIK LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN.	
ADVARSEL	- SYNLIK OG OSYNLIK LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.	
ADVARSEL	- SYNLIK OG OSYNLIK LASERSTRÅLING NÄR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.	
VARO!	- AVATTAESSA OLET ALTIINNA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLÄ. ÄLÄ KATSO SÄTEESEEN.	
VORSICHT	- SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG. WENN ABDECKUNG GEÖFFNET, NICHT DEM STRAHL AUSSETZEN.	
ATTENTION	- RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.	
注意	- 打开时有可见及不可见激光辐射。避免激光照射。	
注意	- ここを開くと可視及び不可視レーザー光が出ます。ビームを見たり、触れたりしないで下さい。	

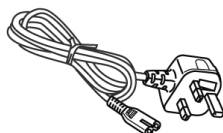
(Inside of product)



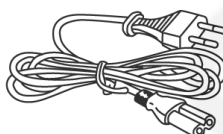
10 Accessories



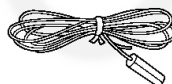
Remote control



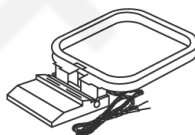
AC cord (For GS only)



AC cord (For GC & GS only)



FM antenna



AM antenna

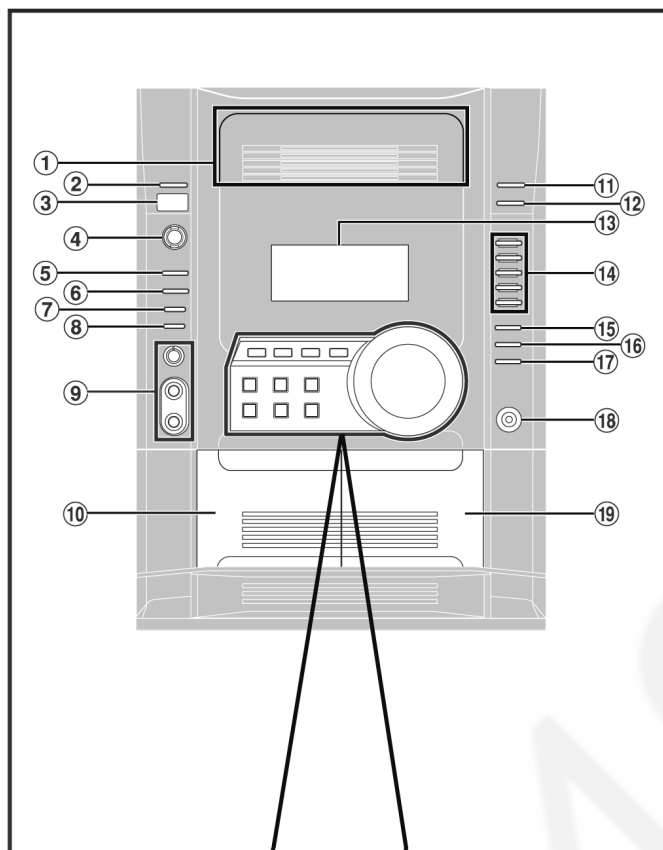


Video cable

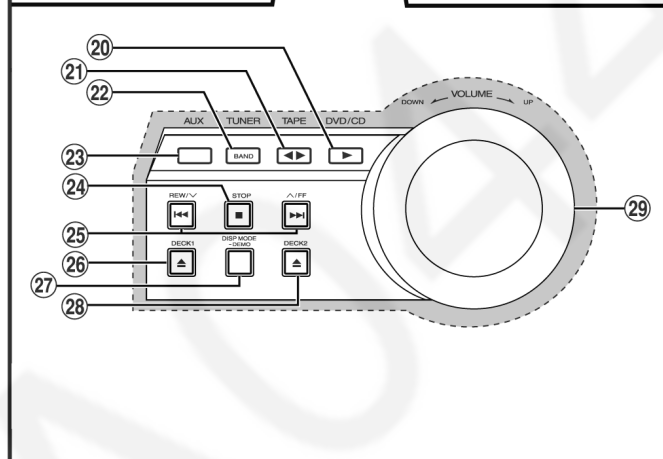
11 Operation Procedures

Control reference guide

Main unit



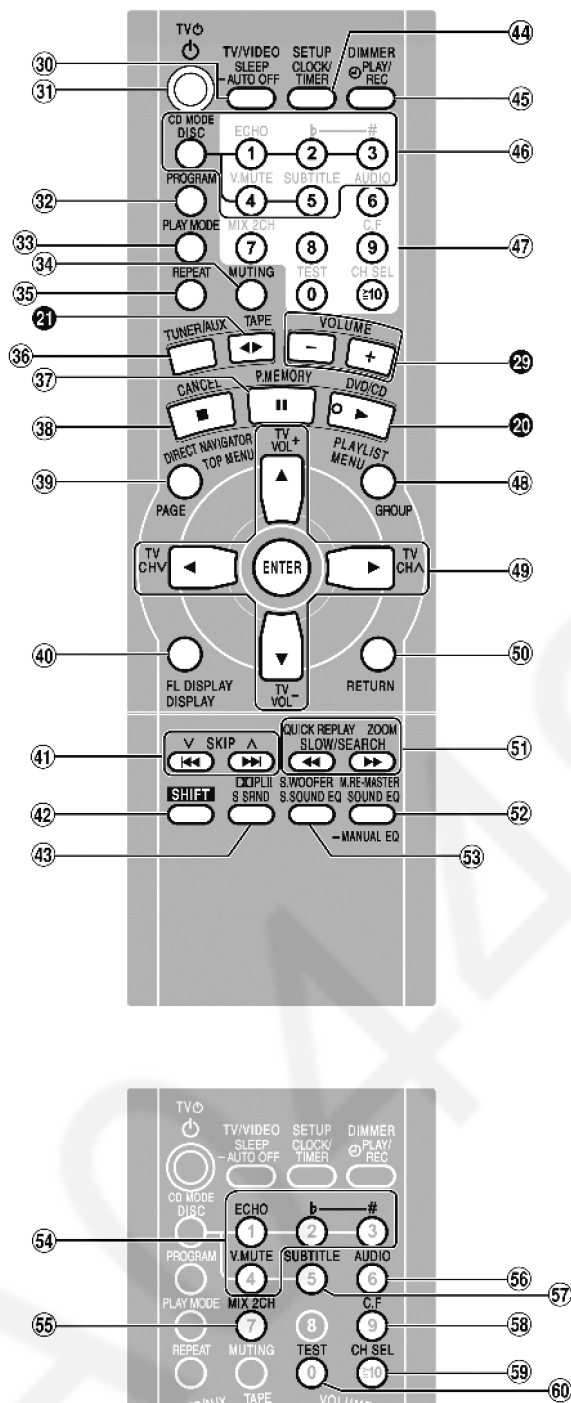
- ① Disc trays
- ② Disc check button [DISC CHECK]
- ③ Remote control signal sensor
- ④ AC supply indicator [AC IN]
This indicator lights when the unit is connected to the AC mains supply.
- Standby/on switch [⏻/⏻]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- ⑤ Multi re-master button [MULTI RE-MASTER]
- ⑥ Super surround button [SUPER SURROUND]
- ⑦ Deck 1/2 selection button [DECK 1/2]
- ⑧ Record button [● REC]
- ⑨ Microphone volume control [MIC VOL MIN, MAX]
Microphone jacks [MIC 1, 2]
- ⑩ Deck 1 cassette holder
- ⑪ Disc tray open/close button [OPEN/CLOSE ▲]
- ⑫ Disc change button [DISC CHANGE ▲]
- ⑬ Display
- ⑭ DVD/CD direct play buttons [1–5]
- ⑮ Super sound EQ button [SUPER SOUND EQ]
- ⑯ Sound EQ button [SOUND EQ]
- ⑰ Subwoofer button [SUBWOOFER]
- ⑱ Headphones jack [PHONES]
- ⑲ Deck 2 cassette holder



Center console

- ⑳ DVD/CD play button [▶, DVD/CD]
- ㉑ Tape play/direction button [◀▶, TAPE]
- ㉒ Tuner/band select button [BAND, TUNER]
- ㉓ AUX button [AUX]
- ㉔ Stop button [■, STOP]
- ㉕ Disc skip/search/slow-motion play, tape fast-forward/rewind, tune/preset channel select, time adjust buttons [◀◀, REW/V, ▶▶, /FF]
- ㉖ Deck 1 open button [▲, DECK1]
- ㉗ Display mode, demonstration button [DISP MODE, –DEMO]
- ㉘ Deck 2 open button [▲, DECK2]
- ㉙ Volume control [VOLUME DOWN, UP]

Remote control



Buttons such as ③ function in exactly the same way as the button on the main unit.

- ③ Sleep timer, Auto off, TV/Video input mode select button [SLEEP, –AUTO OFF, TV/VIDEO]
- ④ Standby/on, TV power on/off button [⏻, TV⏻]
- ⑤ Program button [PROGRAM]
- ⑥ Play mode select button [PLAY MODE]
- ⑦ Muting button [MUTING]
- ⑧ Repeat button [REPEAT]
- ⑨ Tuner/aux button [TUNER/AUX]
- ⑩ Pause, Position memory button [⏸, P. MEMORY]
- ⑪ Stop, Cancel button [■, CANCEL]
- ⑫ Top menu, Direct navigator, Page button [TOP MENU, DIRECT NAVIGATOR, PAGE]
- ⑬ Display, FL display button [DISPLAY, FL DISPLAY]
- ⑭ Disc skip, tape fast-forward/rewind, preset channel select, time adjust buttons [⏮, ⏭, √ SKIP ∨]
- ⑮ Shift button [SHIFT]
To use functions labeled in orange:
While pressing [SHIFT], press the corresponding button.
- ⑯ Super Surround, Dolby Pro Logic II button [S.SRND, ⓂPLII]
- ⑰ Clock/timer, Setup button [CLOCK/TIMER, SETUP]
- ⑱ Play timer/record timer, Dimmer button [⌚PLAY/REC, DIMMER]
- ⑲ Disc select, CD mode button [DISC, CD MODE], Disc button [1 – 5]
- ⑳ Numbered buttons [0 – 9, ≥10]
- ㉑ Menu, Playlist, Group button [MENU, PLAYLIST, GROUP]
- ㉒ Cursor buttons [▲, ▼, ◀, ▶], Enter button [ENTER]
These buttons have the following functions.
[▲, ▼] : TV volume buttons [TV VOL +, TV VOL –]
[◀, ▶] : TV channel select buttons [TV CH ∨, TV CH ∧]
- ㉓ Return button [RETURN]
- ㉔ Slow/search, Tuning buttons [◀◀, ▶▶, SLOW/SEARCH]
These buttons have the following functions.
[◀◀] : Quick replay button [QUICK REPLAY]
[▶▶] : Zoom button [ZOOM]
- ㉕ Sound EQ, Manual EQ, Multi re-master button [SOUND EQ, –MANUAL EQ, M.RE-MASTER]
- ㉖ Super Sound EQ, Subwoofer button [S.SOUND EQ, S.WOOFER]
- ㉗ For Saudi Arabia, Kuwait, the Middle East, South Africa and Southeast Asia:
Echo button [ECHO]
Key control buttons [b, #]
Vocal mute button [V. MUTE]
- ㉘ 2 channel down-mixing button [MIX 2CH]
- ㉙ Audio button [AUDIO]
- ㉚ Subtitle button [SUBTITLE]
- ㉛ Center focus button [C.F]
- ㉜ Channel select button [CH SEL]
- ㉝ Test signal button [TEST]

12 Disc information

Disc information

Discs that can be played

Disc	Logo	Indication in these operating instructions	Remarks
DVD-RAM		RAM	Recorded using Version 1.1 of the Video Recording Format (a unified video recording standard). • Recorded with DVD-Video recorders, DVD-Video cameras, personal computers, etc. • Remove discs from their cartridges before use.
		JPEG	Recorded using the DCF (Design rule for Camera File system) standard. • Recorded with Panasonic DVD-Video recorders. • To play JPEG files, select "Play as Data Disc" in Other Menu (⇒ page 21).
DVD-Audio		DVD-A	—
		DVD-V	Some DVD-Audio discs contain DVD-Video content. To play DVD-Video content, select "Play as DVD-Video" in Other Menu (⇒ page 21).
DVD-Video		DVD-V	—
DVD-R			Panasonic DVD-R recorded and finalized* on Panasonic DVD-Video recorders or DVD-Video cameras are played as DVD-Video on this unit.
Video CD		VCD	—
SVCD			Conforming to IEC62107.
CD		CD	This unit is compatible with HDCD, but does not support Peak Extend function. (A function which expands the dynamic range of high level signals) HDCD-encoded CDs sound better because they are encoded with 20 bits, as compared with 16 bits for all other CDs. • During HDCD play, "HDCD" appears on the main unit's display.
CD-R CD-RW	—	WMA MP3 JPEG CD VCD	• This unit can play CD-R/RW (audio recording disc) recorded with the formats on the left. Close the sessions or finalize* the disc after recording. • HighMAT discs WMA, MP3 or JPEG files only. To play without using the HighMAT function, select "Play as Data Disc" in Other Menu (⇒ page 21).

* A process that allows play on compatible equipment.

• It may not be possible to play the above discs in all cases due to the type of disc or condition of the recording.

Discs that cannot be played

DVD-ROM, CD-ROM, CDV, CD-G, DVD+R, +RW, DVD-RW, SACD, Divx Video Discs and Photo CD, DVD-RAM that cannot be removed from their cartridge, 2.6-GB and 5.2-GB DVD-RAM, and "Chaoji VCD" available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

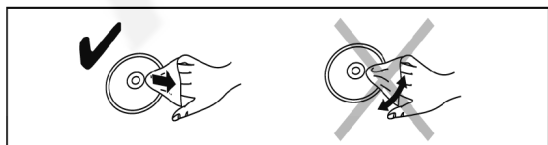
Playing DVDs and Video CDs

The producer of these discs can control how they are played so you may not always be able to control play as described in these operating instructions (for example if the play time is not displayed or if a Video CD has menus). Read the disc's instructions carefully.

To clean discs

DVD-A DVD-V VCD CD

Wipe with a damp cloth and then wipe dry.



RAM DVD-R

- Clean with an optional DVD-RAM/PD disc cleaner (LF-K200DCA1, where available).
- Never use cloths or cleaners for CDs, etc.

Disc handling precautions

- Do not attach labels or stickers to discs (This may cause disc warping, rendering it unusable).
- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not use scratch-proof protectors or covers.
- Do not use the following discs:
 - Discs with exposed adhesive from removed stickers or labels (rented discs, etc).
 - Discs that are badly warped or cracked.
 - Irregularly shaped discs, such as heart shapes.

Video systems

- This unit can play PAL and NTSC, but your television must match the system used on the disc.
- PAL discs cannot be correctly viewed on an NTSC television.
- This unit can convert NTSC signals to PAL 60 for viewing on a PAL television.

Tips for making WMA/MP3, CD text and JPEG discs

- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit is compatible with multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.

Naming folders and files

At the time of recording, prefix folder and file names with 3-digit numbers in the order you want to play them (this may not work at times). Files must have the extension:

“.WMA” or “.wma”
 “.MP3” or “.mp3”
 “.JPG”, “.jpg”, “.JPEG” or “.jpeg”

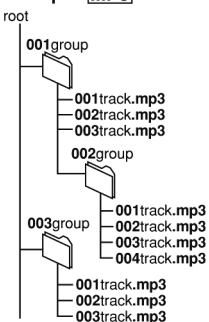
WMA

- You cannot play WMA files that are copy protected.

MP3

- This unit is not compatible with ID3 tags.
- Compatible sampling rate: 8, 11.02, 12, 16, 22.05, 24, 32, 44.1 and 48 kHz.

Example: MP3



JPEG

- To view JPEG files on this unit:
 - Take them on a digital camera that meets the DCF (Design rule for Camera File system) Version 1.0. Some digital cameras have functions that are not supported by the DCF Standard Version 1.0 like automatic picture rotation which may render a picture unviewable.
 - Do not alter the files in any way or save them under a different name.
- This unit cannot display moving pictures, Motion JPEG and other such formats, still pictures other than JPEG (example: TIFF) or play associated sound.

Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.



WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.

MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.



HighMAT and the HighMAT logo are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

13 About HighMAT

13.1. What is HighMAT?

This word combines the abbreviations of Matsushita Electric Industrial Co. Ltd. and High Performance Media Access Technology, and is a trademark of Microsoft Corporation. The products with the HighMAT logo shown below are made according to the HighMAT standard.

HighMAT is a format that allows users to save digital contents such as photographs, audio, and images on a CD. This gives consistency in the way of reading data when general consumer products (such as DVD players) and PCs are used, and thus, it is easy to operate for the user.

13.2. Why use HighMAT?

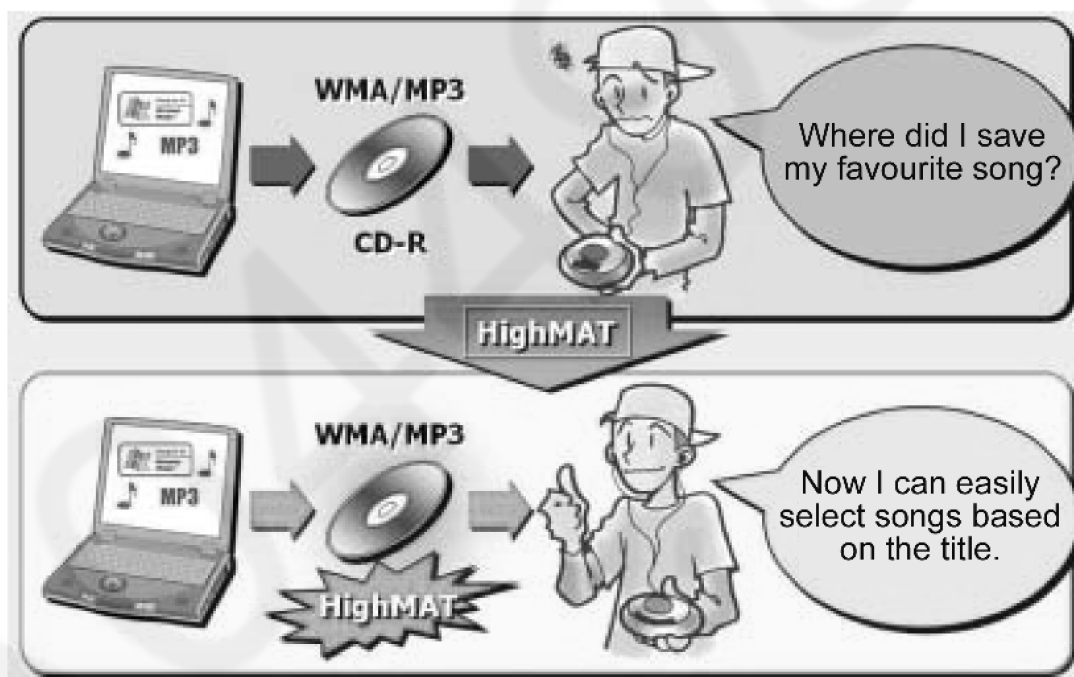
Up to now, there was no harmonized standard from playing digital content stored in CD-ROM formats (including CD-R) on consumer products like DVD players. Therefore, we used to have problems such as follow:

- There was no common play list or attached information on contents, which is called metadata.
- The data compression method differed according to the equipment.
- As the number of CD-ROMs recorded increased retrieved the contents became more difficult.
- Because display and operation methods were different depending on the equipment, the play order of the content on the same disc could change.

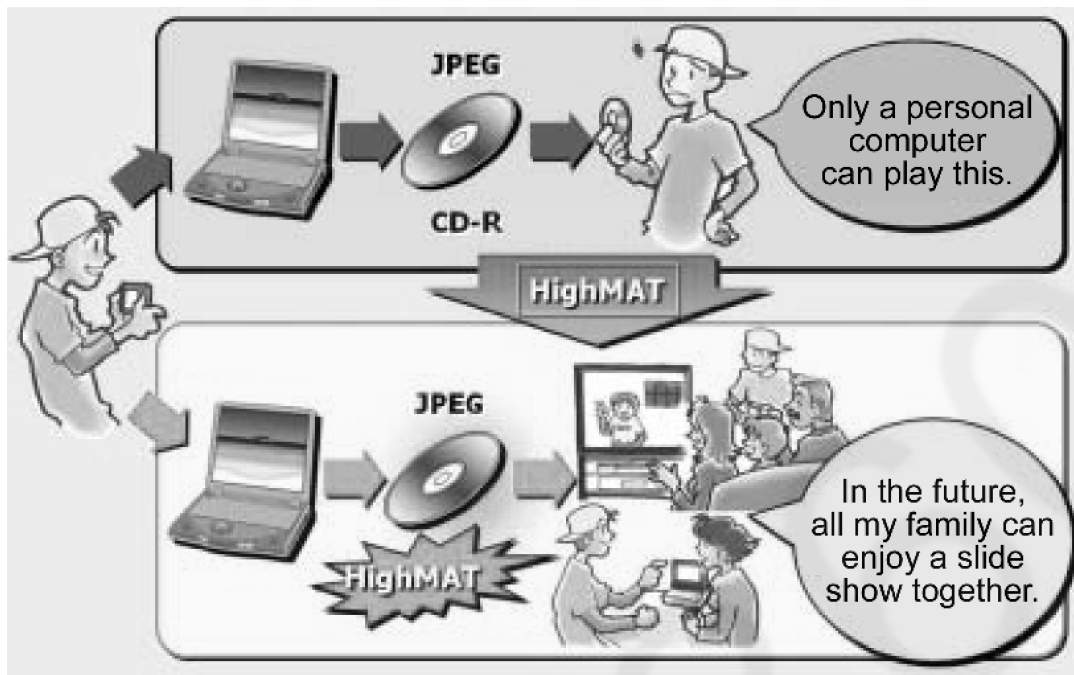
13.3. The advantages of using HighMAT

Applying the HighMAT standard will solve the following problems and will improve usability.

- It will create a common user interface for both PC and consumer products.



- Regardless of the types of consumer products, such as DVD players, portable CD players, car stereos, and micro computers, a consistent way to pay for digital content will be created and it will make it easier to retrieve data.

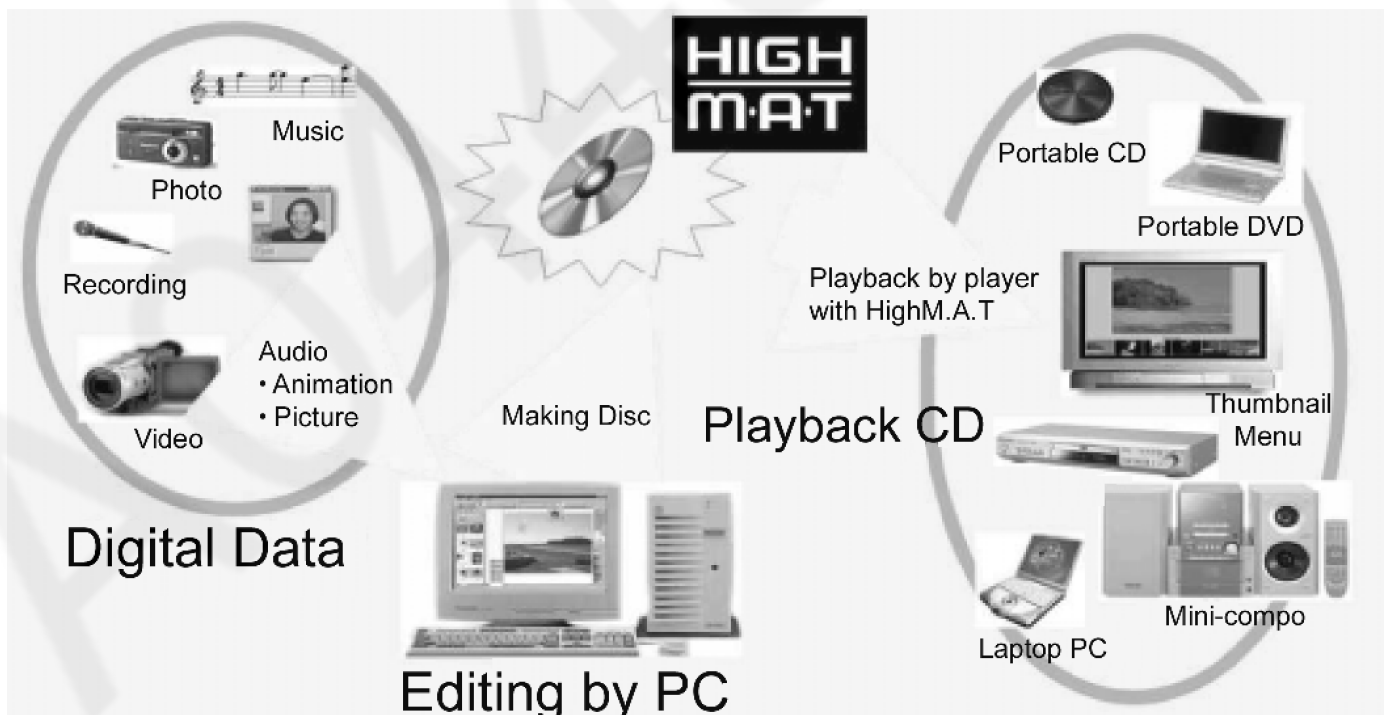


- You can also play digital content on the disc, which was created in accordance with the HighMAT format with a conventional CD-ROM player.

13.4. Outline of the HighMAT standard

1. Recording medium

- CD-R/CD-RW
- Supports ISO 9660 Level Expanded Joliet
- For multiple session



2. Support data format

- Level 1 player: WMA, MP3 (MPEG-1 Audio Layer 3)
- Level 2 player: WMA, MP3 (MPEG-1 Audio Layer 3), JPEG
- Level 3 player: WMA, MP3 (MPEG-1 Audio Layer 3), JPEG, WMV, MPEG4 (optional)

3. Limitation of data format

- WMA, MP3 (MPEG-1 Audio Layer 3) 64 kbps - 160.999 kbps, 44.1 KHz, stereo, fixed bit rate/ variable bit rate.
- WMA, V2 and above, excluding Lossless/Voice/Pro
- JPEG: Max 6M pixel, Maximum file size: 3 MB

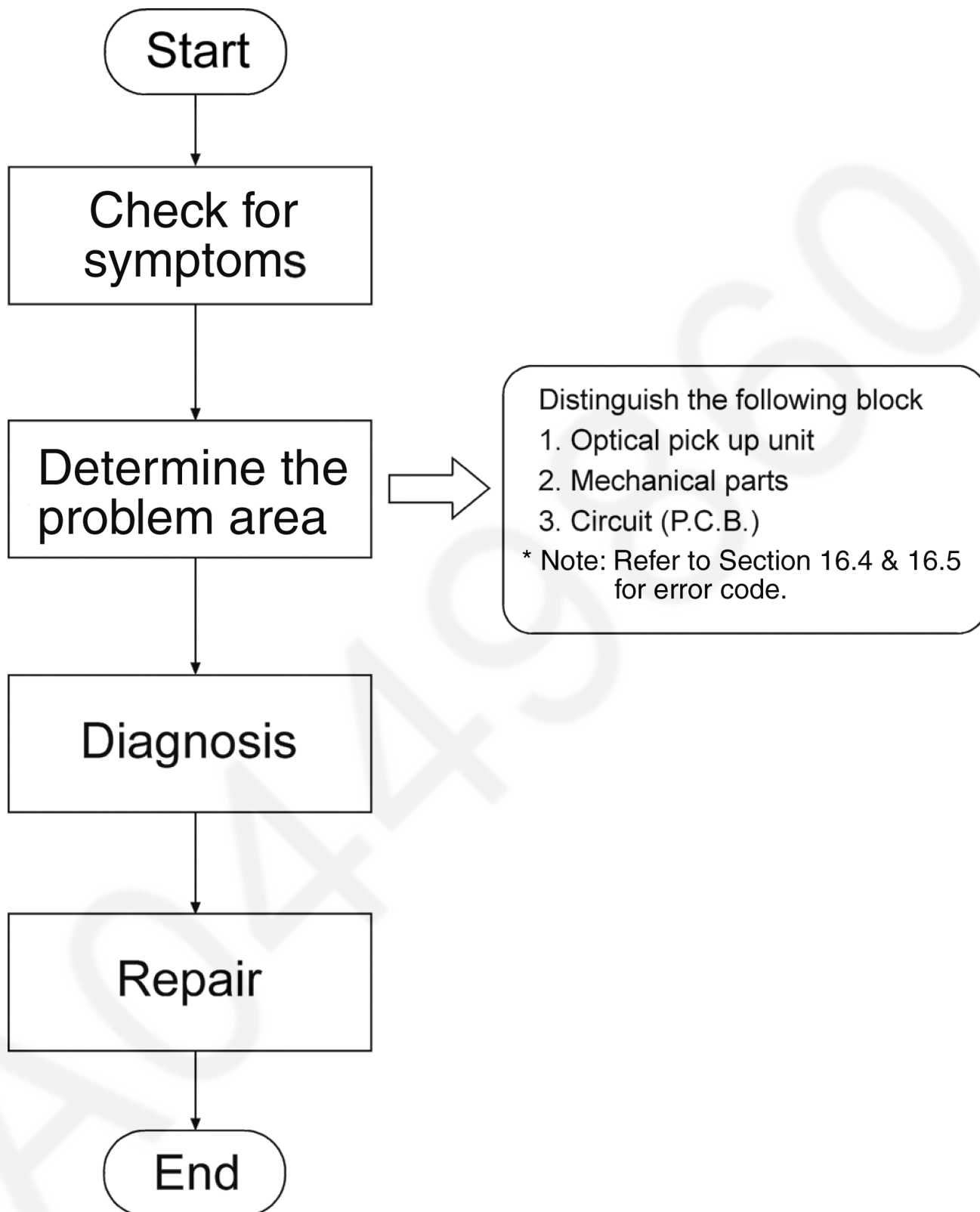
4. Limitations regarding the number of files on the media, etc.

- Total number of audio files: Maximum 450
- Total number of still picture files: Maximum 999
- Total number of animation files: Maximum 200
- Total number of directories: Maximum 400
- Length of a file name: Maximum 108 characters (Unicode)
- Total number of play lists: Maximum 200
- Number of contents in the playlist: Maximum 900

5. Composition of HighMAT disc

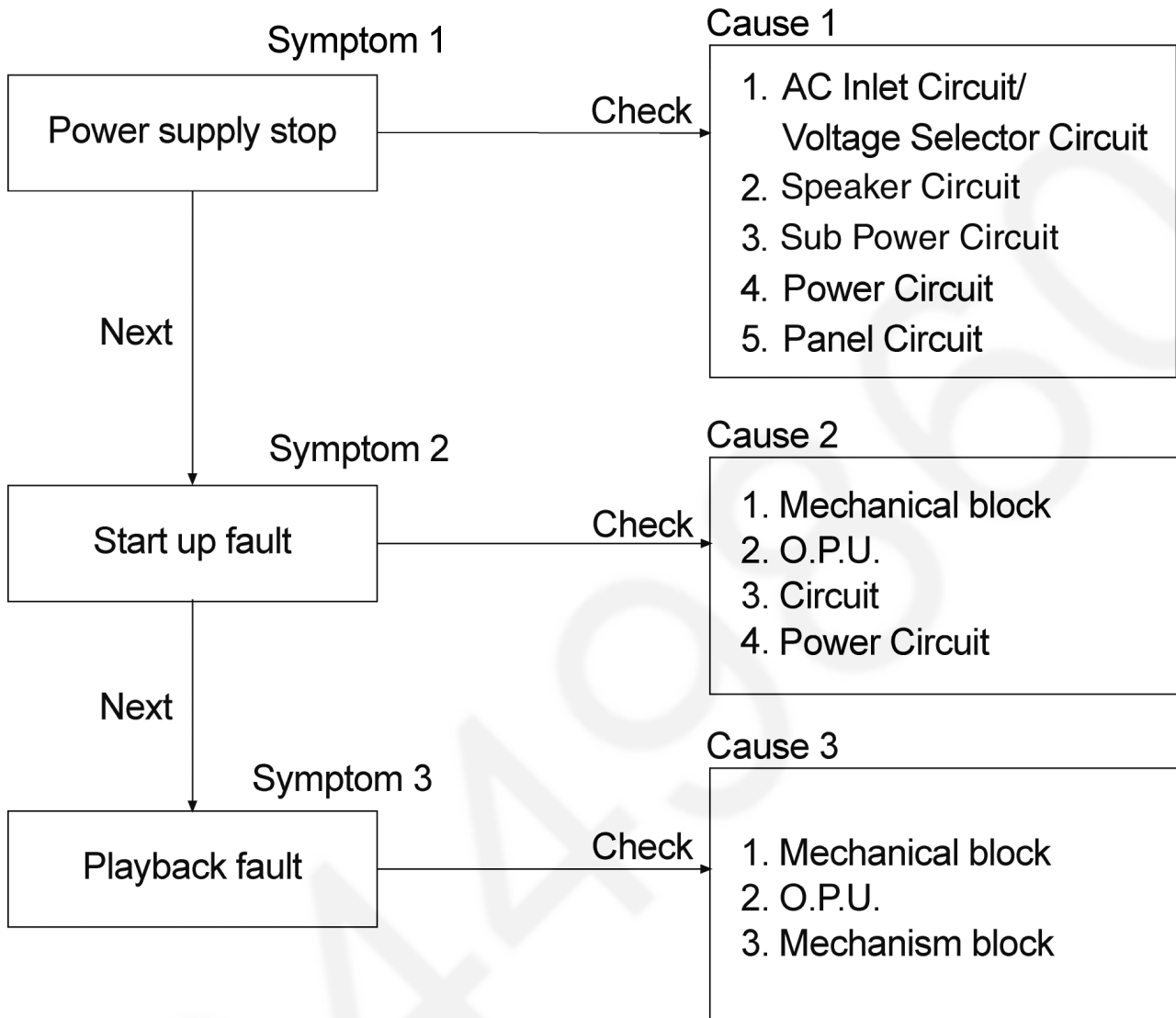
- Menu: Classified for the navigation of the HighMAT digital contents. When menu selected, its submenu or the play list will be displayed.
- Play list: A list in which one or more digital contents are arranged in order
- Group: Sub-divided group of a play list.
- Digital Contents: Audio, still picture and animation data.

14 Procedure for repairing the set



14.1. Distinguish the problem

- Check flow



How to distinguish the trouble

1. View mechanical part if visual damage occurred.

Confirm the movement of mechanical parts assembly
(tray ass'y, loading mechanism ass'y, etc.).

2. Diagnose if Optical Pickup Unit is faulty (refer to diagnosis of Optical Pickup Unit).

3. If mechanism and OPU are OK, it is P.C.B.

14.1.1. Troubleshooting Guide Part 1

Checking Points	Possible Faults	Possible Reasons	Countermeasure
AC Inlet Circuit/Voltage Selector Circuit	1. Failure to power-up the main unit. 2. Power On switch	• Wrong selection of AC power to main unit. • Voltage selector is faulty. • AC inlet JK500 is faulty. • AC Line filter L500 is faulty. • Power On switch broken.	• Replace of fuse if found faulty. • Replace of voltage selector if found faulty. • Replace of AC Inlet if found faulty or damaged. • Replace AC Line filter is found faulty or damaged. • Replace Power On button switch if necessary. • If conditions as mentioned above is in good condition. Check for wire connection. (W1/W2/W3/W4/W6/W7). If connection is good, please proceed to check for Transformer Circuit.
	3. Intermittent Power supply to main unit.	• Check for connection.	• If condition 1 to 4 as mentioned above is in good condition. Check for wire connection. (W1/W2/W3/W4/W6/W7). If connection is good, please proceed to check for Transformer Circuit

Checking Points	Possible Faults	Possible Reasons	Countermeasure
Transformer Circuit	1. No power supply voltage to the Power Circuit from AC In.	- Transformer no output voltage. - Power Line filter relay RL502. - D950 open circuit.	- Replace of Transformer T501 if found faulty. - Replace of Power Relay if found faulty.
Speaker Circuit	1. No supply voltage to Power Supply Circuit from Transformer Circuit. (+VccL/+VccH/-VccL/-VccH)	- Fuse F3/F4 blown. - Rectifier Circuit problem.	- Replace fuse F3/F4 if found faulty. - Replace D5832/D5831/D5846/D5847 if any is found to be faulty or damage.
	1. No supply voltage to Main & Power Supply Circuit from Transformer Circuit. (+VccL/+VccH/-VccL/-VccH)	- Rectifier Circuit problem. - F5801/FP5802 open circuit.	- Replace D5844 if found faulty. - Replace FP5801/FP5802 of the same type as indicated in the part-list if found faulty.
	1. No supply voltage to Panel Circuit.	- Q5815/D5835 faulty. (-VP voltage not sufficient to power FL display at - 30V) - Q5816/D5839 faulty. (Sys 6V not sufficient to power micro-processor IC at 6V).	- Replace Q5815/D5835 if found faulty. - Replace Q5816/D5839 if found faulty.
Sub Power Circuit	1. No output FL/FR output signal.	No supply voltage to IC5803. (+VccL/+VccH/-VccL/-VccH/+Vd/-Vd).	Replace IC5803 if found faulty.
Power Circuit	1. No +9V/-9V/SW5V/8V/LED9V/M010V Supply Voltage to Main Circuit.	IC5802 problem. (Check pin 2,8,9,10,11 for voltages)	Replace IC5802 if found faulty.
	2. No output SL/SR/C signal (Check for input signal before troubleshooting for IC5801.)	IC5801 problem. (Check pin 1,2,5 for output signal)	Replace IC5801 if found faulty.

14.1.2. Troubleshooting Guide Part 2

Checking Points	Possible Faults	Possible Reasons	Countermeasure
Deck Circuit	1. No PLAYBACK (PB)/Rec signal.	- IC1001 problem. (Check pin 23/24 for PB input, pin 5/20 for PB output). - Q1013/Q1012 shorted to ground with no muting OFF. - Q1020/Q1021 shorted to ground with no muting OFF.	- Replace IC1001 if necessary. - Replace Q1013/Q1012 if necessary. - Replace Q1020/Q1021 if necessary.
	2. Bias frequency.	L1002 /IC1004/Q1004/Q1005 problem. Check level of bias frequency and oscillation.	Replace these components if necessary when level is below specification.
	3. No supply voltage (+B/M0+B)	See section on Panel Circuit.	
Panel Circuit	1. FL No Display	-Vp too low to power FL display. - FL Display Driver IC problem. (IC6803)	- See section on Power Circuit. - Replace IC6803 is faulty.
	2. Error codes	See section on error codes (Micro-processor IC6800)	
Main Circuit	1. Audio Signal (I/P & O/P) problem.	Check for IC2815.	Replace IC2815 if faulty.
	2. Video Signal problem.	Refer to below section.	

14.1.3. Checking of VIDEO COMPONENT OUTPUT

VIDEO SIGNAL	Y	C	CR/PR/R	CB/PB/B	PY/Y/G
Input	Pin 5 (IC2809)	Pin 3 (IC2809)	Pin 14 (IC2809)	Pin 12 (IC2809)	Pin 8 (IC2809)

VIDEO SIGNAL	Y	C	CR	CB/PB/B	PY
Output	Pin 24/25 (IC2809)	Pin 32 (IC2809)	Pin 17 (IC2809)	Pin 19 (IC2809)	Pin 21/22 (IC2809)

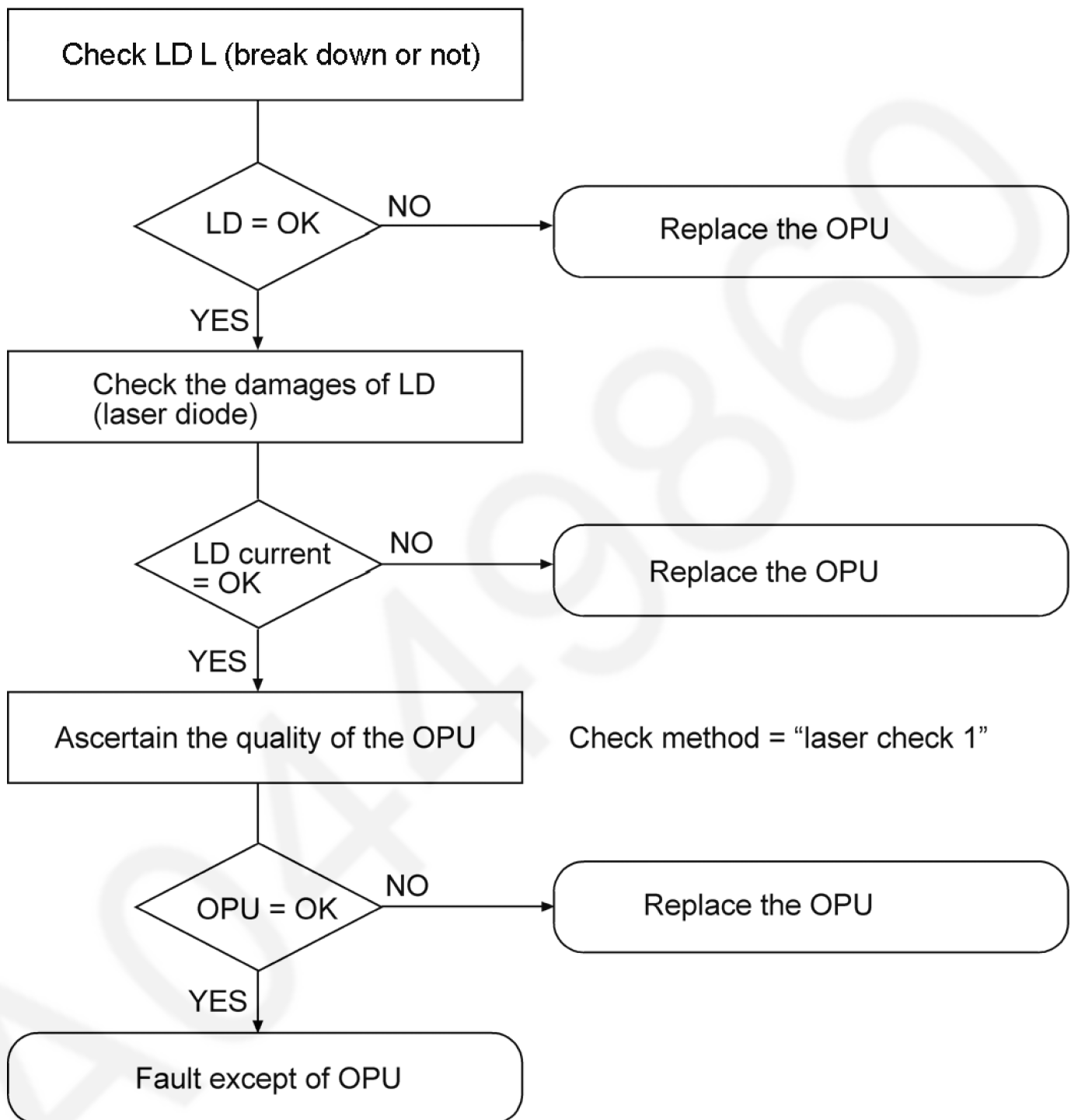
Terminal Defination (IC2809 - C9ZB00000377)

Pin No	Pin Name	Pin Description
21/22	PYOUT1/PYOUT2	Signal Output Terminal for luminance signal (progressive type)
17/19	CrOUT/CbOUT	Signal Output Terminal for color-difference signal
32	COU	Signal Output Terminal for chroma signal
29/30	MIXOUT1/MIXOUT2	Signal Ouput Terminal for Y/C Mix Signal
24/25	YOUT1/YOUT2	Signal Output Terminal for luminance signal (interlaced type)
3/12/14	CIN/CBIN/CRIN	Input signal terminal for chroma signal and color difference
5/8	YIN/PYIN	Input signal terminal for luminance signal

14.2. Diagnosis of Optical Pick-up Unit

Diagnosis Method

Diagnose the OPU by the following procedure



Note : When LD does not emit light after replacing the OPU, check the LD drive circuit in the module P.C.B.

How to distinguish Laser destruction/damage

Confirmation 1

Remove cover of mechanism block so that you will see the lens of optical pickup.

Confirm emission of laser at the moment when power switch is turned on.

If there is no laser emission, laser diode is faulty.

Confirmation 2

While press and hold "STOP" on main unit , press "Display" button on the remote controller. Unit display laser current on FL.
From the reading of display, you can judge if laser diode is damaged or not.

Reading on the right side should be less than 70. If reading is more than 70, laser is damaged.

How to confirm if Optical Pickup is OK

Confirmation 1

1. Confirmation of jitter value with test disc. (Refer below for how to check jitter)
2. Lens cleaning.
3. Reconfirm jitter value.
4. Perform tilt adjustment. (Refer to tilt adjustment)
5. Reconfirm jitter value. (To confirm jitter value, while pressing "STOP" on main unit and "5" on remote controller.)

Unit display jitter value on FL.

Confirmation 2

If servo is very unstable due to optical error and you cannot confirm jitter value, clean the lens and check appearance of pick up unit (cutting coil of actuator, etc), then check circuitry.

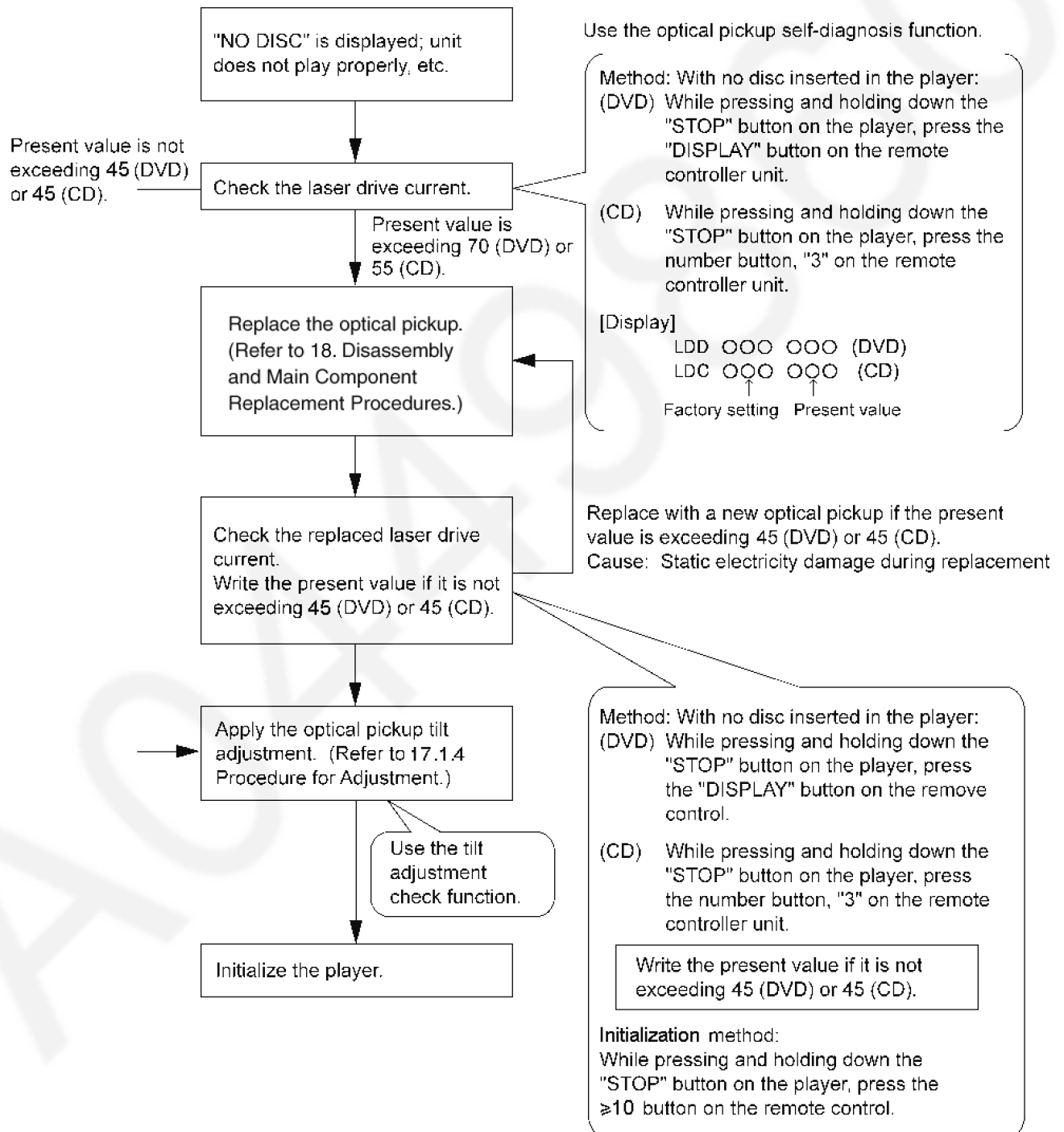
15 Optical Pickup Self-Diagnosis and Replacement Procedure

15.1. Self-diagnosis

This unit is equipped with the optical pickup self-diagnosis function and the tilt adjustment check function. Follow the procedure described below during repair in order to perform self-diagnosis and tilt adjustment effectively. Especially when "NO DISC" is displayed, be sure to apply the self-diagnosis function before replacing with an optical pickup. Replacement of optical pickup generally requires when the present value of laser drive exceeds 45 (DVD) or 45 (CD).

Note:

Start diagnosis within three minutes after turning on the power (as diagnosis fails when the unit becomes warm).



15.2. Cautions to Be Taken During Replacement of Optical Pickup and Spindle Motor

Before replacing the optical pickup and spindle motor, check a total usage time respectively. Follow the checking method described below.

Item	Status and Key Function	Display
Checking DVD, CD laser usage time	With the unit stopped and no disc inserted, press the ■ button on the player and the ▲ button on the remote controller unit.	T1_xxxx_yyyy xxxx(DVD), yyyy(CD): total time is displayed with a four-digit number by the ten hours.
Checking spindle motor usage time	With the unit stopped and no disc inserted, press the ■ button on the player and the ► button on the remote controller unit.	T2_xxxx xxxx: total time is displayed with a four-digit number by the ten hours.
Resetting DVD, CD laser usage time	While the DVD and CD laser usage times are displayed, press the ■ button on the player and the ▼ button on the remote controller unit.	T1_0000_0000
Resetting spindle motor usage time	While the spindle motor usage time is displayed, press the ■ button on the player and the ◀ button on the remote controller unit.	T2_0000

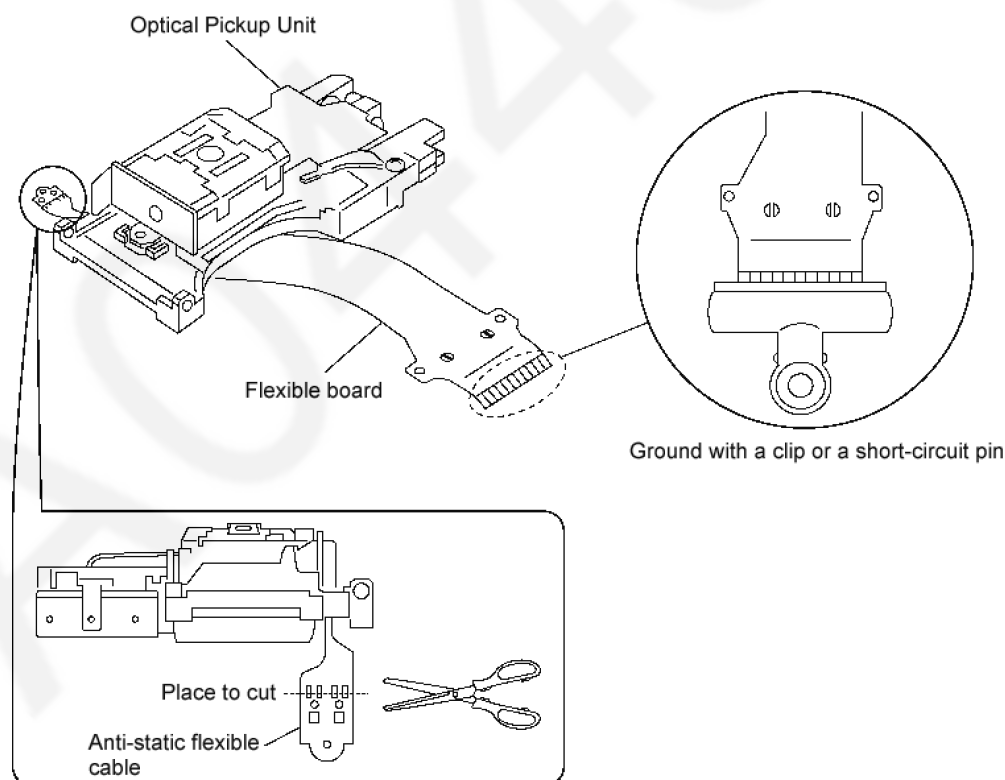
15.2.1. Cautions to be taken during replacement of optical pickup

Optical pickup could be damaged due to the static electricity discharged from human body. Wear proper protection gear against static electricity during optical pickup and its peripheral repair. (Refer to "Cautions to Be Taken When Handling Optical Pickup".)

- Do not touch laser diode, actuator and their peripherals.
- Do not check laser diode with a tester and such. (The tester will be destroyed.)
- For short-circuiting or removing laser diode, the use of an anti-static soldering iron is recommended. (Recommended model: HAKKO ESD product)
- Solder the land of the flexible cable in the optical pickup.

Note:

If an anti-static soldering iron is not available, short-circuit the terminal surface of the flexible cable and then the land using a clip or equivalent device.



16 Self-Diagnosis Function

This unit is equipped with the self-diagnosis function, which displays an error when it occurs, for use during servicing.

16.1. Automatic Displayed Error Codes

16.1.1. Automatic Display Function

For a power unit error, the code is automatically displayed.

F61: Automatically displayed on the LCD of the player.

16.1.2. Re-Display

• For F61 Display

- When the code, F61 is displayed, the power is automatically turned off.
- The code, F61 is displayed for three seconds, and then the current time appears.
- To retrieve the code, turn on the power button so that the code F61 appears, however, is switched to time display after three seconds, and the power is automatically turned off.

• For F76 Display

- The abnormalities is an output or the abnormalities in a power supply of POWER AMP IC.

16.1.3. Description of Error Code

16.1.3.1. F61

• State, Condition

When the power is turned on, the unit is automatically turned off. The power does not turn on.

• Cause, Troubleshooting

Power circuit system failure and/or direct current flown to speaker terminal

Identify the cause and replace with new parts.

16.2. Memorized Error Codes

16.2.1. Activating Self-Diagnosis Function and Displaying Method

1. Turn on the power.
2. Select DVD/CD function. With no DVD/CD inserted in the player, press and hold down the ■ button for at least two seconds, and press the “0” button on the remote control for at least two seconds in order to display “DVD_F_ _ _”.
3. Press the ■ button. If a memorized error is detected, the result of self diagnosis is displayed. (Ex.: T H15)
If several errors are detected, press the ■ button to display each.

16.2.2. Re-Display

- Press the power button to turn off the power, and then turn on the power.
- The details of self diagnosis are stored in the unit memory.
To retrieve them, follow the procedure described the above, “Activating Self-Diagnosis Function and Displaying Method”.

16.3. Mode Table 1

Following modes are available with combinations of the pressed buttons on the player and on the remote controller unit.

Player	Remote Controller Unit	Usage
■ button	0	Error code display (Refer to the Item 16.4. DVD Error Code Description)
	5	Tilt adjustment (Jitter)
	6	Region number and broadcasting system check
	8	Built-in program version check (Micro-P)
	DISPLAY	DVD laser drive current check
	3	CD laser drive current check
	PAUSE	Writing of laser drive current value after replacement of optical pickup (Do use this function only when optical pickup is replaced.)
	≧10	Initialization of the player (factory setting is restored.) Used after replacement of micro-computer and its peripherals and printed circuit board.

16.4. DVD/CD Self-Diagnosis Error Code Description

Error Code	State, Conditon	Cause, Troubleshooting
H15	The disc tray cannot be opened: it closes spontaneously.	Disc tray open/close detection switch (S1001) failure. (Check and replace)
H16	The disc tray cannot be closed: it opens spontaneously.	

Error Code	Meaning	Details
U. H. Error		
U11	Focus servo failure	
H01	Tray loading failure	
H02	Spindle servo failure	(Spindle servo, DSC, SP motor, CLV servo failure)
H03	Traverse motor failure	
H04	Tracking servo error	
H05	Seek timeout failure	
H06	Power supply error	
DSC system		
F500	DSC failure	DSC stops due to servo failure. (Startup, focus failure, etc.)
F501	DSC not Ready failure	Communication failure between DSC and system computer (No communication because DSC does not move)
F502	DSC Time out failure	See F500.
F503	DSC communication failure	Communication failure (Result failure occurs after communication command is transmitted.)
F505	DSC Attention Error	See F500.
F506	Invalid media	Disc is placed upside down; TOC is unreadable or invalid disc is inserted.
Disc Code		
F103	Illegal highlight position	Disc standard is possibly illegal when highlight is displayed.
IIC Error		
F4FF	Forced initialization failure (Time out)	
F880	Unsuitable task number	When a message arrives from not existing task
F890	A message is sent during AV task transmission	During transmission of a message to AV task
F891	Unable to transmit a message to AV task	When transmission of a message to AV task starts
F893	DVD Module problem	Check for firmware version
F894	EEPROM failure	
F895	Firmware compatibility problem	Check for firm version for Main & DVD Module P.C.B.
F897	Initialization is not done properly	Follow proper steps for initialization & reset
F8A0	Unsuitable message command	When transmission of a message to AV task starts

16.5. Error Codes Stored During No Play

Error Code	Meaning	System Computer Item	Setting Task	Internal error in system computer
F0BF	6) Unable to replay due to physical layer identification failure	PCND_NOPLAY_PHYSICAL 0x50	DriveManager	0xD0BF
F0C0	8) DVD: Unable to replay due to no DVD Video/Audio/VR	PCND_NOPLAY_VIDEO 0x70	DiscManager	0xD0C0
F0C1	9) DVD: Prohibited due to illegal regional code	PCND_NOPLAY_RCD 0x80	DiscManager	0xD0C1
F0C2	A) DVD: No replay due to PAL system	PCND_NOPLAY_PAL 0x90	DiscManager	0xD0C2
F0C3	B) DVD: All title replay prohibited in parental setting	PCND_NOPLAY_PTL 0xA0	DiscManager	0xD0C3
F0C4	C) VCD: Prohibited due to PHOTO CD format	PCND_NOPLAY_PHOTOCD 0xB0	DiscManager	0xD0C4
F0C5	D) VCD/CD: Prohibited due to CD-ROM without CD-DA	PCND_NOPLAY_CDROM 0xC0	DiscManager	0xD0C5

16.6. Mode Table 2

Following modes are available with combinations of the pressed buttons on the player and on the remote controller unit.

Item	Operational Condition and Key Function	Details	Display	TO Exit Mode
Jitter display	While the player is stopped and no disc is inserted, press and hold down the  button on the player and the number button, "5" on the remote controller unit.	Jitter display Measures and displays jitter. Measurement is repeated every second. Read error counter starts at 0 at the mode setting, and increased by one as data read fails at target block. A small defect is allowed to correct by retry. Any possibility is counted as one increment. Repetitive errors after retry increase by two levels or more.	J ^{*1} xxx ^{*2} _yy ^{*3} _zz ^{*4} ^{*1} : Jitter display mode ^{*2} : Jitter measurement value ^{*3} : Read error counter ^{*4} : Focus driving value Values are shown to one decimal place in the decimal digit. Focus driving value is displayed in the hexadecimal digit.	Press the STOP or OPEN button.
Error code display	While the player is stopped and no disc is inserted, press and hold down the  button on the player and the number button, "0" on the remote controller unit.	Error code display Displays the latest error code stored in EEPROM.	DVDnn_F--- *nn: Error history *--: Error number DVD 01 FOBF	Press the OPEN button.
Measurement of laser current electricity initialization value	While the player is stopped and no disc is inserted, press and hold down the  button on the player and the  button on the remote controller unit.	Measurement of laser current electricity initialization value Memorizes each initialization value of DVD and CD in EEPROM.	LDO ^{*1} _013 ^{*2} _032 ^{*3} ^{*1} : Laser current electricity measurement mode ^{*2} : DVD current electricity value ^{*3} : CD current electricity value Values are shown in the decimal digit. The above example indicates that the current electricity initialization value is 13mA at DVD laser and 32mA at CD laser when laser is turned on.	Automatically exits the mode after five seconds.
Measurement of DVD laser current electricity	While the player is stopped and no disc is inserted, press and hold down the  button on the player and the DISPLAY button on the remote controller unit.	Measurement of DVD laser current electricity Measures DVD laser current electricity and displays the result together with the initialization value stored in EEPROM. After measurement, DVD laser is lit till the power is turned off (or goes off when the primary power is turned off).	LDD ^{*1} _012 ^{*2} _014 ^{*3} ^{*1} : DVD laser current electricity measurement mode ^{*2} : Current electricity initialization value stored in EEPROM ^{*3} : Present value of current electricity Values are shown in the decimal digit. The above example indicates that the current electricity initialization value is 12mA and its present value is 14mA.	Automatically exits the mode after five seconds.
ADSC internal RAM display	While the player is stopped and no disc is inserted, press and hold down the  button on the player and the number button "1" or "2" on the remote controller unit.	ADSC internal RAM display Reads and displays the RAM value inside ADSC. The address is renewed when the CLEAR key is pressed so that the values at eleven points appear.	A ^{*1} _FB0 ^{*2} _0000 ^{*3} ^{*1} :ADSC internal RAM display mode ^{*2} : Address ^{*3} : RAM value at displayed address Values are shown in the hexadecimal digit. The above example indicates that ADSC value at the address, FB0h is 0000h.	Press the STOP or OPEN button.

Item	Operational Condition and Key Function	Details	Display	TO Exit Mode
Measurement of CD laser current electricity	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button "3" on the remote controller unit.	Measurement of CD laser current electricity Measures CD laser current electricity and displays the result together with the initialization value stored in EEPROM. After measurement, CD laser is lit till the power is turned off (or goes off when the primary power is turned off).	LDC ^{*1} _032 ^{*2} _032 ^{*3} ^{*1} : CD laser current electricity measurement mode ^{*2} : Current electricity initialization value stored in EEPROM ^{*3} : Present value of current electricity Values are shown in the decimal digit. The above example indicates the current electricity initialization value is 28mA and its present value is 26mA when laser is turned on.	Automatically exits the mode after five seconds.
User initialization	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button ≥10 on the remote controller unit.	User initialization The user setting recovers the factory setting.	"INITIALIZE"	-
Region display	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, "6" on the remote controller unit.	Region display	[srrrxyzzzz] s : Panecon model type rrr : Panecon release number x : Syscon generation (45) y : Syscon model type zzz : Syscon release number	Automatically exits the mode after five seconds.
Firmware version display	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, "7" on the remote controller unit.	Firmware version display	rrr ^{*1} _xx ^{*2} y ^{*3} zzz ^{*4} ^{*1} : Panel computer release number ^{*2} : System computer generation ^{*3} : System computer model type ^{*4} : System computer release number	Automatically exits the mode after five seconds.
Region and firmware display	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the number button, "8" on the remote controller unit.	Region and firmware version display	_r ^{*1} _xx ^{*2} y ^{*3} zzz ^{*4} ^{*1} : Region number ^{*2} : System computer generation ^{*3} : System computer model type ^{*4} : System computer release number	Automatically exits the mode after five seconds.
Laser use time	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the ▲ button on the remote controller unit.	Laser usage time Measures each for DVD and CD respectively.	T1_1234_5678 The numbers in the left show usage time for DVD laser and those in the right for CD laser. The four-digit number is shown by the ten hours in the decimal digit. The number after 0000 is 9999.	Automatically exits the mode after five seconds.
Reset laser use time	While the usage time 1 is displayed, press and hold down the ■ button on the player and the ▼ button on the remote controller unit.	Laser usage time reset Resets both for DVD and CD at once.	T1_0000_0000	Automatically exits the mode after five seconds.
Spindle use time	While the player is stopped and no disc is inserted, press and hold down the ■ button on the player and the ► button on the remote controller unit.	Spindle motor usage time	T2_1234 The four-digit number is shown by the ten hours in the decimal digit. The number after 00000 is 99999.	Automatically exits the mode after five seconds.
User reset	While the player is stopped and no disc is inserted, press "STOP" & "ENTER" on remote control.	Reset the unit.	"DVD RESET"	Automatically exits the mode after five seconds.

Item	Operational Condition and Key Function	Details	Display	TO Exit Mode
Reset spindle use time	While the usage time 2 is displayed, press and hold down the  button on the player and the  button on the remote controller unit.	Usage time 2 reset Spindle motor usage time	T2_0000	Automatically exits the mode after five seconds.
Communication error display	While the player is stopped and no disc is inserted, press and hold down the  button on the player and the MENU button on the remote controller unit.	Displays frequency of communication errors between system computer firm IC and mechanical computer IC during DVD module.	ERR_00/30	Automatically exits the mode after five seconds.

16.7. Tray Lock Function

16.7.1. Setting

• Disc Lock Function

1. With the SELECTOR on DVD/CD and POWER ON, hold down the [ STOP] KEY on the main unit, and then press the [POWER] KEY on the remote control for 3 seconds to enter to Lock mode A. [_ _ _ LOCKED _] will be displayed for 3 seconds, and then current disc will begin playing.
2. In Lock mode A, the following key is disabled.

[OPEN/CLOSE]

• Operation Lock Function

1. With the SELECTOR on DVD/CD and POWER ON, hold down the [CD PLAY] KEY on the main unit, and then press the [POWER] KEY on the remote control for 3 seconds to enter Lock mode B.
- [_ _ _ LOCKED _] will be displayed for 3 seconds, and the current disc will begin playing.
2. Lock mode B primarily controls the selector and disc operations, and disenable for the following keys.

Note:

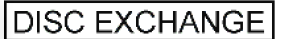
OPEN/CLOSE  button are invalid and the player displays “_ _ _ LOCKED _” while the lock function mode is entered.

• Prohibiting operation of selector and disk

1. Select the DVD/CD function.
2. Press and hold down the  button on the player and the power button on the remote controller unit for at least three seconds. (The message, “_ _ _ LOCKED _” appears when the function is activated.)

Note:

The following buttons are invalid and the player displays “_ _ _ LOCKED _” while the lock function mode is entered.

Main unit:  ,  ,  ,  OPEN/CLOSE ,  SKIP  ,
 ,  /REVERSE ,  /FORWARD

Remote control:  ,  ,  ,  ,
 , 

16.8. Things to Do After Repair

Follow the procedure described below after repair.

1. While the power is on, press the  button to close the tray.
2. Press the power button to turn off the power.
3. Unplug the power cable.

Note:

It is prohibited to unplug the power cable while the tray is opened and to close the tray manually.

17 Cautions To Be Taken During Servicing

17.1. Recovery after the dvd player is repaired

- When Flash ROM or DVD Module P.C.B. is replaced, carry out the recovery processing to optimize the drive. Playback the recovery disc to process the recovery automatically.
- Recovery disc (Product number=RFKZD03R005)
- Performing recovery
 1. Load the recovery disc (Product number: RFKZD03R005) to the player and run it.
 2. Recovery is performed automatically. When it is finished, a message appears on the screen.
 3. Remove the recovery disc.
 4. Turn off the power.

17.2. DVD Player Firmware Version Upgrade Process

Firmware of DVD player may upgrade to conform to improvement of its performance and quality including operational range, playability of non-standardized discs, etc. The version upgrade disc contains the recovery function, and the recovery disc is not necessary.

Note:

Version upgrade process cannot be complete if the AC power is cut off due to power failure and other occasions during the process. If this occurs, replace FLASH ROM IC and restart version upgrade. Version upgrade disc number is informed when ordered.

17.3. Firmware Version Upgrade Process by Using Disc and Recovery Process

- Recovery process
- Firmware version upgrade process

Both of the above procedures automatically start when the recovery disc is replayed. General CD-R disc allows version upgrade process and recovery process, making version upgrade through disc simple.

Recovery process: Optimization process of player after replacement of FLASH ROM, EEPROM, or module circuit board

Version upgrade process: Renewal of firmware for improvement of operational range and performance

17.3.1. Self-Diagnosis Function

- Total usage time display (spindle motor, DVD/CD laser)
- ADSC internal RAM display
- Others: Last error count.....20 items

Efficiency of failure diagnosis is expected to improve by using the above functions together with the repair process.

[Purpose of Use]

Total usage time display: used for estimating a failure due to exhausted spindle motor, laser, or other parts.

ADSC internal RAM display: used for deciding servo system failure according to servo learning values.

17.4. Using Recovery Disc

17.4.1. Recovery Process

1. Insert the recovery disc (RFKZD03R005) to the player to replay.
2. The recovery process automatically starts, and a message of completion prompts on the screen.
3. Remove the disc.
4. Turn off the power.

17.4.2. Version Upgrade Process

1. Insert the recovery disc to the player to replay.
2. The version of player is automatically checked and prompts if necessary.
3. Select version upgrade process using the cursor keys on the remote controller unit. (Select YES or NO)
4. a. If YES is selected, the process starts.

- b. If NO is selected, only the recovery process is applied.
- 5. a. When the version upgrade process is complete, a message of completion appears on the screen. Remove the disc.
b. Follow the instruction appearing on the screen, and remove the disc.
- 6. Turn off the power.

17.5. Total Usage Time Display

1. Details of Operation/Display

1 2 3 4 5 6 7 8	Total usage time of DVD/CD lasers Time is shown by the ten hours in the decimal digit.
____ T 2 _ 1 2 3 4	Total usage time of spindle motor Time is shown by the ten hours in the decimal digit.

Keys for Operation:

Laser usage time: While the player is stopped and no disc is inserted, press both the ■ button on the player and the ▲ button on the remote controller unit.

Spindle motor usage time: While the player is stopped and no disc is inserted, press both the ■ button on the player and the ► button on the remote controller unit.

To reset the usage time, **while the usage time is displayed:**

Laser usage time: press both the ■ button on the player and the ▼ button on the remote controller unit.

Spindle motor usage time: press both the ■ button on the player and the ◀ button on the remote controller unit.

2. Purpose of Use

To obtain reference data of laser and spindle motor systems during failure diagnosis.

To check faulty parts during re-repair.

17.6. After replacement of DVD Module

Below steps is to be performed after changing of DVD Module

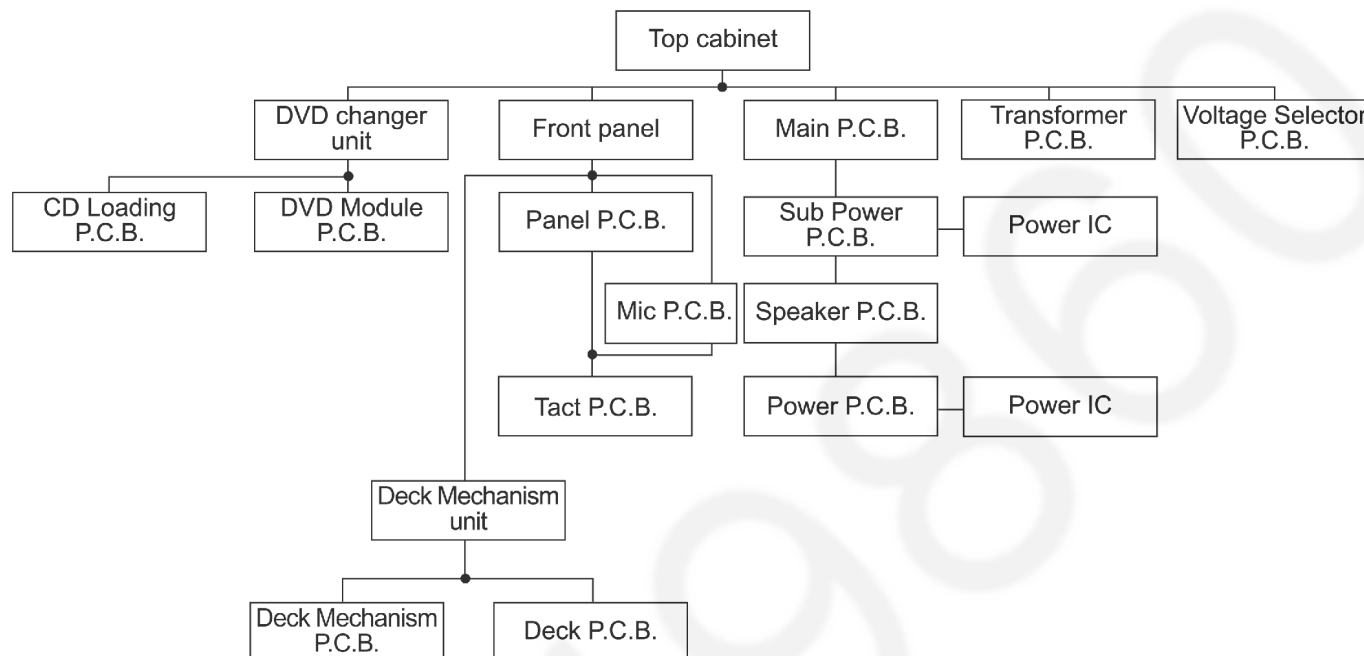
1. Press ≥ 10 on remote control while pressing "STOP" on main unit.
2. FL will display "INITIALIZE".
3. Press "STOP" & "ENTER" on remote control (For reset of unit)
4. FL will display "DVD RESET" before change to TOC reading again.
5. Power off the set. Unplug AC cord & wait for few seconds.
6. Plug in AC cord & power on set.

18 Disassembly and Assembly of Main Component

18.1. Disassembly flow chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.

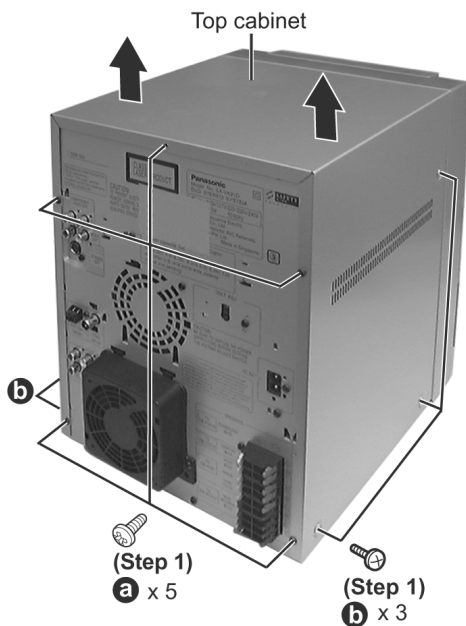
To assemble the unit, reverse the steps shown in the chart as below.



18.2. Disassembly of Top Cabinet

Step 1 Remove 3 screws each side and 5 screws at rear panel.

Step 2 Lift up both sides of cabinet ass'y, push the cabinet ass'y toward the rear and remove the top cabinet.



Step 5 Remove 2 screws.

18.3. Disassembly for DVD changer unit

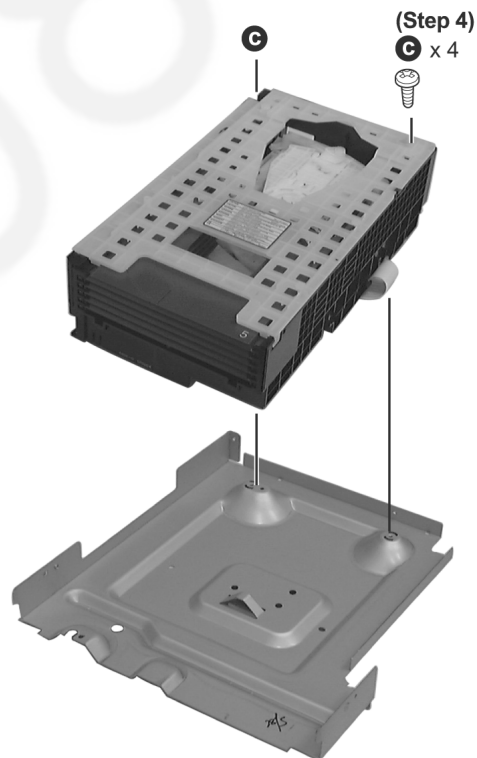
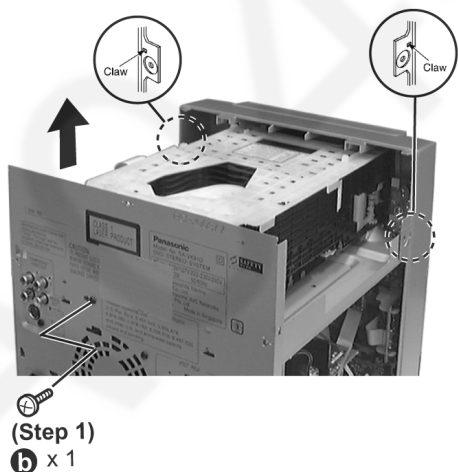
· Follow the (Step 1) - (Step 2) of Item 18.2.

Step 1 Detach FFC Boards (CN2811 & CN2815).

Step 2 Remove 1 screw at rear cabinet as show below.

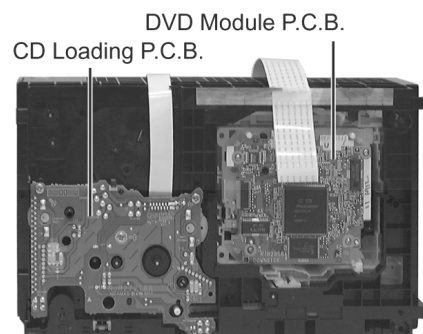
Step 3 Lift the DVD changer unit upwards.

Step 4 Release the claws on both ends, and remove the DVD changer unit.



Step 6 Remove the mechanism unit cover.

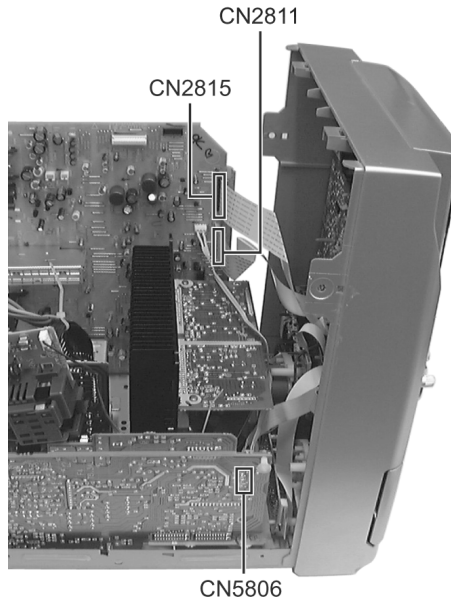
Step 7 Lay the unit.



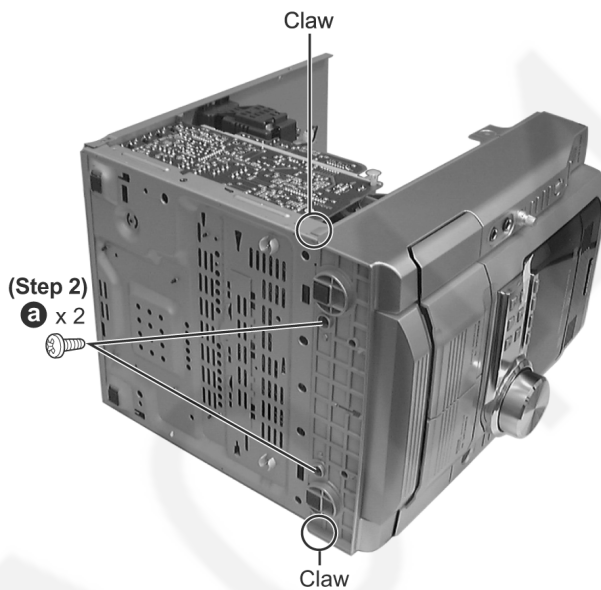
18.4. Disassembly for Panel P.C.B., MIC P.C.B. & Tact Switch P.C.B.

- Follow the (Step 1) - (Step 2) of Item 18.2.
- Follow the (Step 1) - (Step 4) of Item 18.3.

Step 1 Disconnect FFC board (CN2811 , CN2815 & CN5806).



Step 2 Lay the unit as shown below.



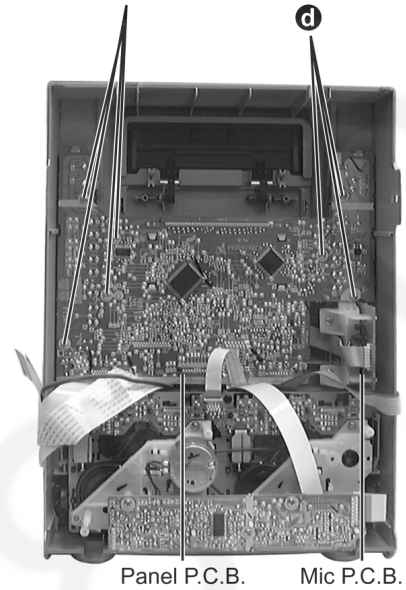
Step 3 Remove 2 screws at the bottom chassis.

Step 4 Release the 2 claws, and then draw the front panel ass'y forward.

- Disassembly of Panel P.C.B. & Mic P.C.B.

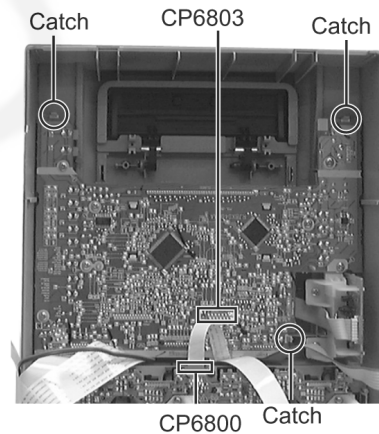
(Step 3)

d x 7

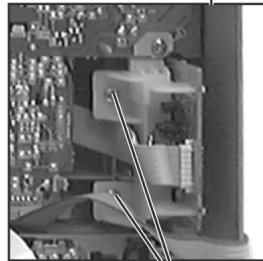
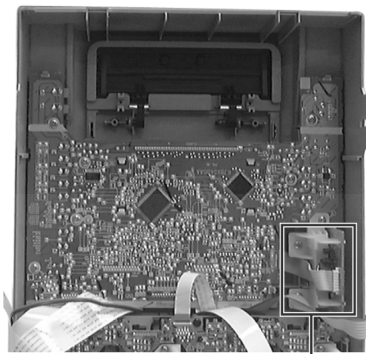


Step 5 Remove 7 screws.

Step 6 Detach FFC board (CP6803 & CP6800).



Step 7 Release 3 catches.



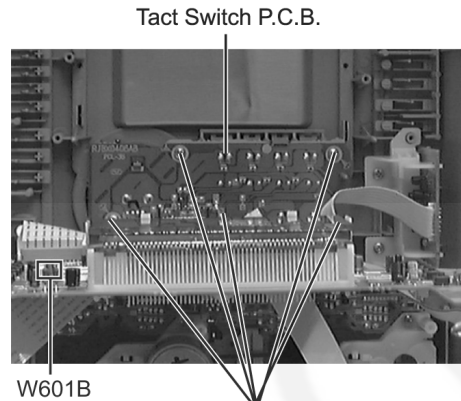
d x 2
(Step 8)

Step 8 Remove 2 screws.

Step 9 Lift up Mic P.C.B. to remove it.

• **Disassembly of Tact Switch P.C.B.**

Step 10 Remove the volume knob.



W601B

d x 2
(Step 12)

Step 11 Disconnect connector W601B.

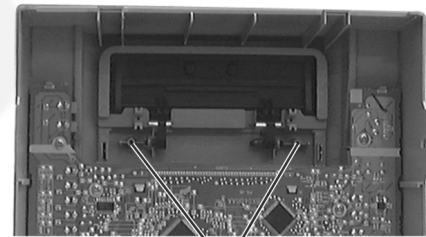
Step 12 Remove 5 screws.

Step 13 Draw Tact Switch P.C.B. forward.

18.4.1. Disassembly of Lid

- Follow the (Step 1) - (Step 2) of Item 18.2.
- Follow the (Step 1) - (Step 4) of Item 18.3.
- Follow the (Step 1) - (Step 4) of Item 18.4.

Step 1 Remove 2 screws.



d x 2
(Step 1)

Step 2 Lift the spring sideward.

Step 3 Remove Lid.

Note: Do not misplace the spring.

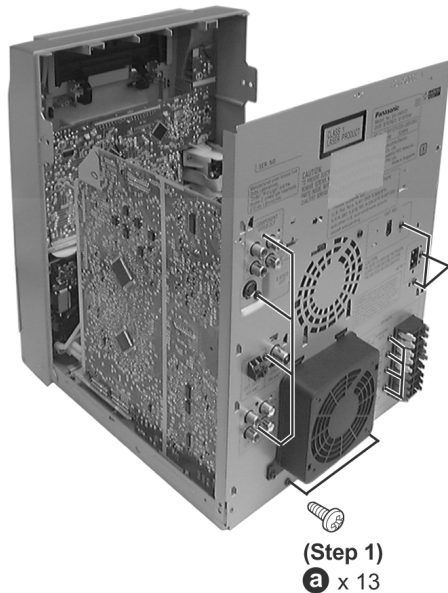
18.5. Disassembly of Main P.C.B., Speaker P.C.B., Sub Power P.C.B., Power P.C.B., Transformer P.C.B. & Voltage Selector P.C.B.

- Follow the (Step 1) - (Step 2) of Item 18.2.
- Follow the (Step 1) - (Step 4) of Item 18.3.
- **Disassembly of Main P.C.B.**

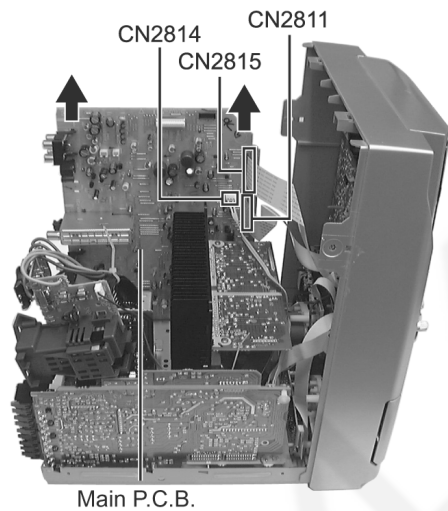
Step 1 Remove the 12 screws.

Step 2 Detach CN2808 & CN2809 (Fan).

Step 3 Push the catch outwards & draw the rear panel to remove it.



Step 4 Detach FFC boards (CN2811, CN2814 & CN2815).

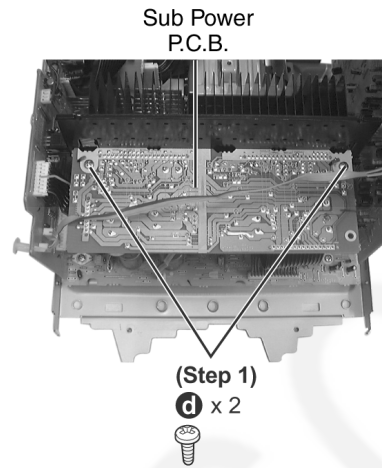


Step 5 Lift up Main P.C.B. as arrow shown.

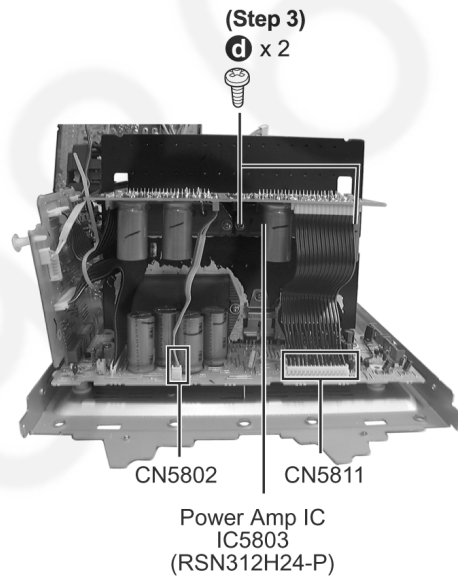
18.5.1. Disassembly of Sub Power P.C.B.

- Follow the (Step 1) - (Step 2) of Item 18.2.
- Follow the (Step 1) - (Step 4) of Item 18.3.
- Follow the (Step 1) - (Step 4) of Item 18.4.
- Follow the (Step 1) - (Step 3) of Item 18.5.

Step 1 Remove the 2 screws.



Step 2 Detach cables (CN5802 & CN5803).



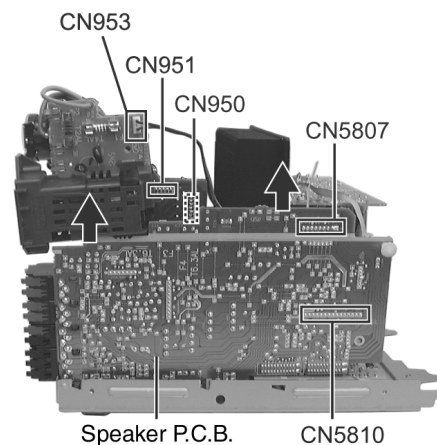
Step 3 Remove the 2 screws.

18.5.2. Disassembly of Speaker P.C.B.

- Follow the (Step 1) - (Step 2) of Item 18.2.
- Follow the (Step 1) - (Step 4) of Item 18.3.
- Follow the (Step 1) - (Step 4) of Item 18.4.
- Follow the (Step 1) - (Step 3) of Item 18.5.

Step 1 Detach cable (CN953, CN950 & CN951).

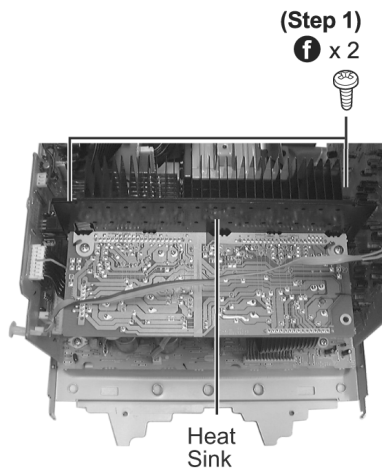
Step 2 Detach cable (CN5807 & CN5810).



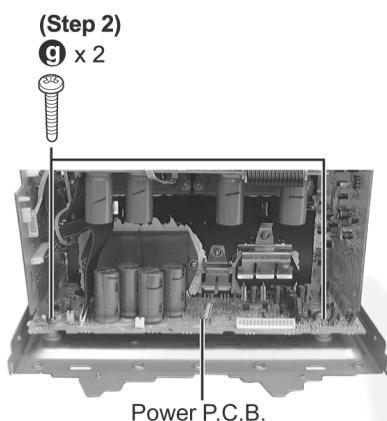
Step 3 Lift up Speaker P.C.B. as arrow shown.

18.5.3. Disassembly of Power P.C.B.

Step 1 Remove the 2 screws at heat sink.

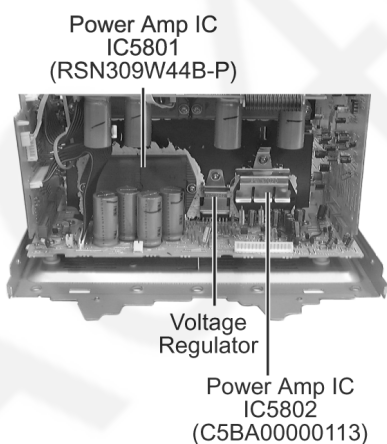


Step 2 Remove the 2 screws.



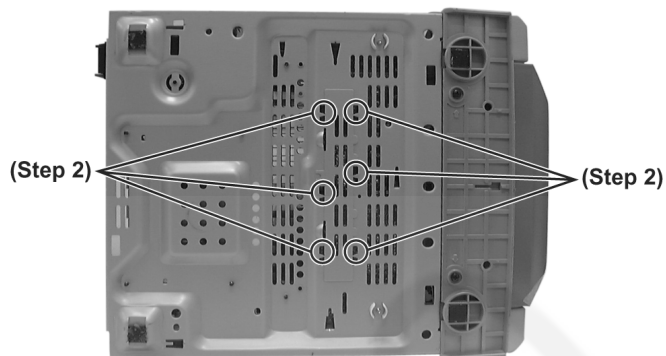
• Replacement of Power Amp IC

Step 1 Remove 2 screws fixed to the Power Amplifier IC.

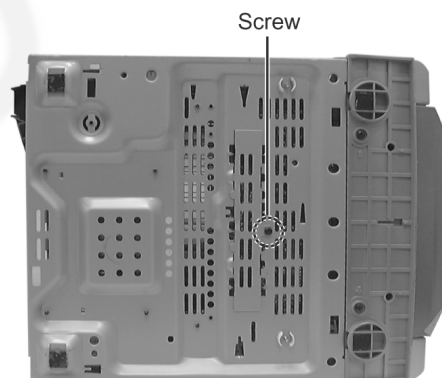
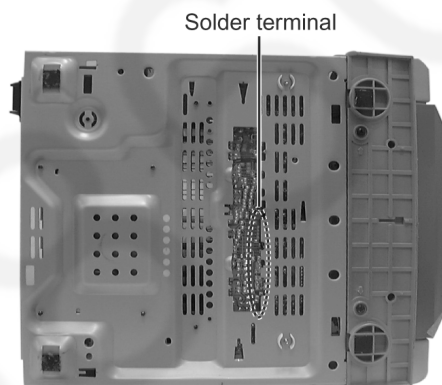


Step 2 Remove 2 screws fixed to the Power Amplifier IC and Voltage Regulator.

Step 3 Break the joint with a metal cutter as shown below.



Step 4 Unsolder the terminals of Power Amp IC, replace the component.



Step 5 Fix back the bottom chassis with a screw as shown.

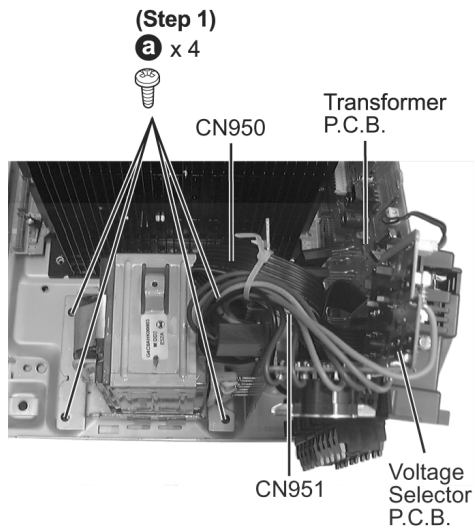
NOTE:

Insulate Power P.C.B. with insulation material to avoid short circuit.

18.5.4. Disassembly of Transformer P.C.B. & Voltage Selector P.C.B.

- Follow the (Step 1) - (Step 2) of Item 18.2.
- Follow the (Step 1) - (Step 4) of Item 18.3.

Step 1 Remove 4 screws.



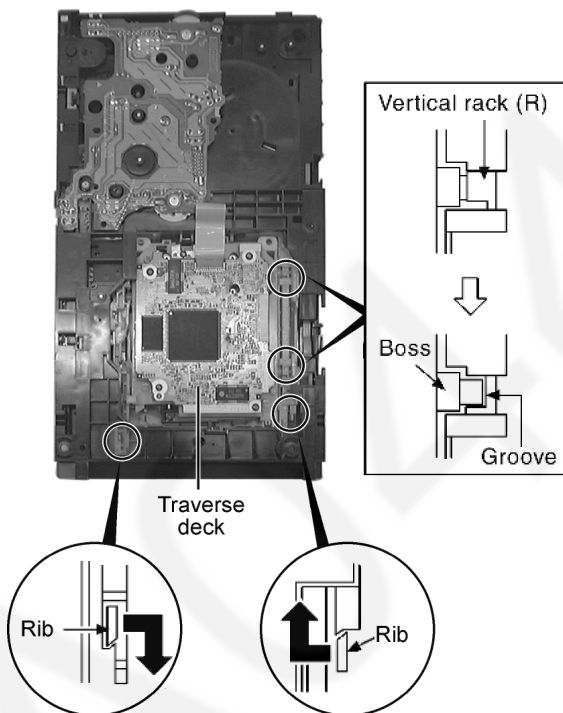
Step 2 Disconnect connector CN950 & CN951.

18.6. Replacement for traverse deck

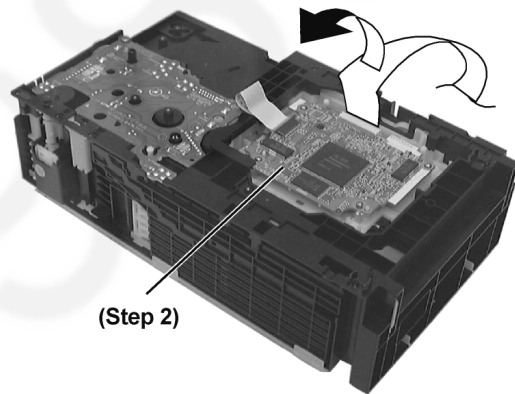
- Follow the (Step 1) - (Step 2) of Item 18.2.
- Follow the (Step 1) - (Step 7) of Item 18.3.

Step 1 Move ribs at both sides to the arrow direction (The vertical rack (R) slides and the groove opens).

(Bottom side)



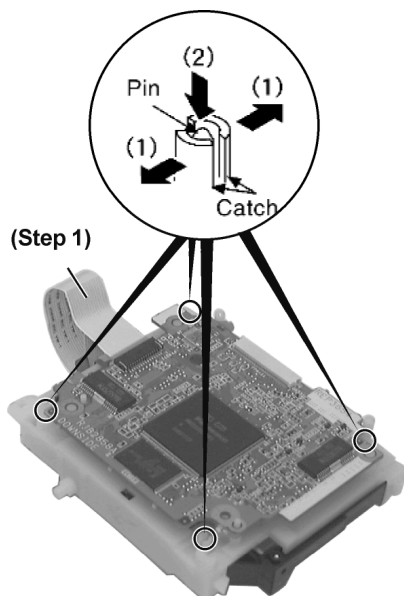
Step 2 Remove DVD traverse deck by rotating to the arrow direction.



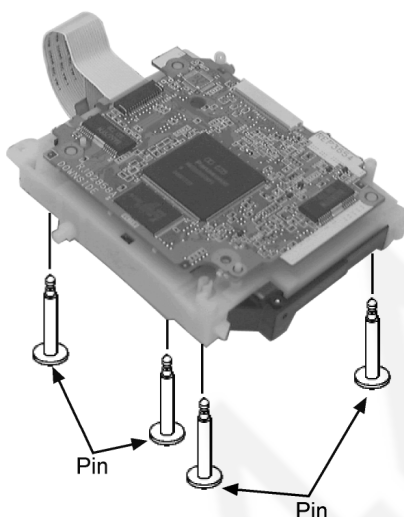
18.7. Replacement for optical pickup unit (DVD mechanism)

- Follow the (Step 1) - (Step 2) of Item 18.2
- Follow the (Step 1) - (Step 7) of Item 18.3.
- Follow the (Step 1) - (Step 2) of Item 18.6

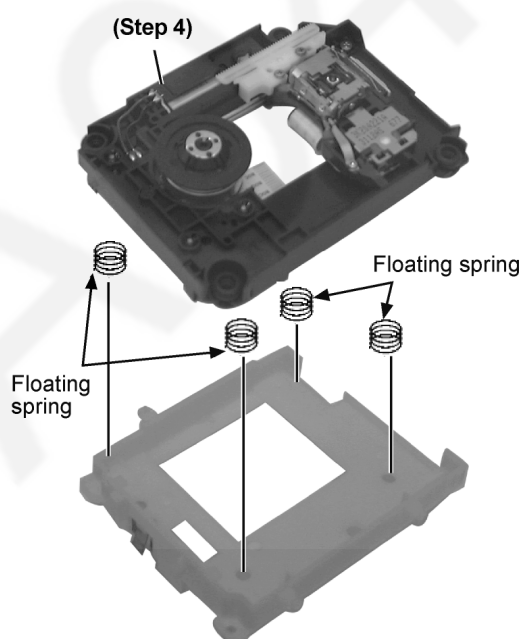
Step 1 Pull out FFC.



Step 2 Widening the catch, push the pin in.



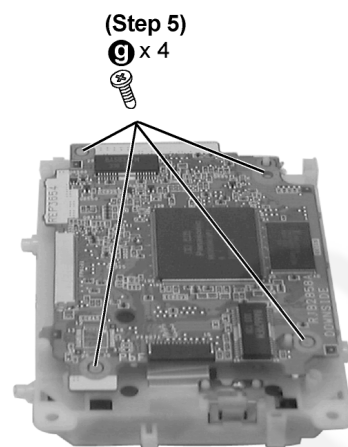
Step 3 Remove 4 pins.



Step 4 Remove the traverse deck.

Note: As floating springs (4 pieces) come off at the same time,

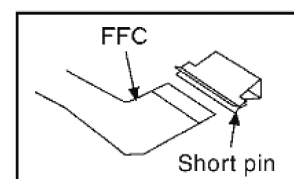
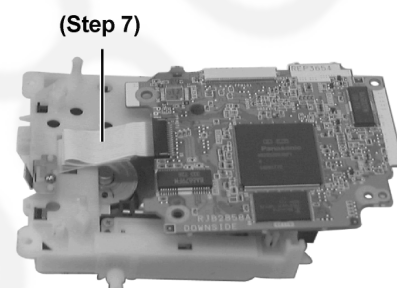
be careful not to lose them.



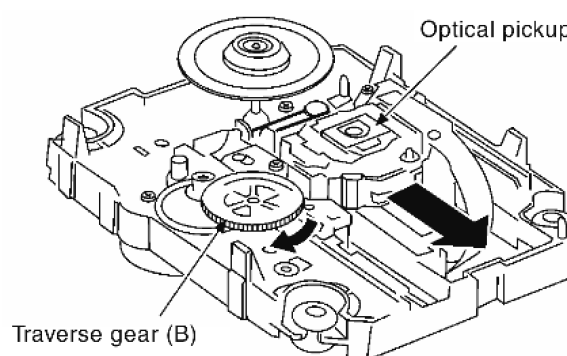
Step 6 Remove the dvd module board and turn it over.

Step 7 Pull FFC out from the connector.

Note: Insert a short pin into FFC of the optical pickup. [See "Notice on handling of the optical pickup"].

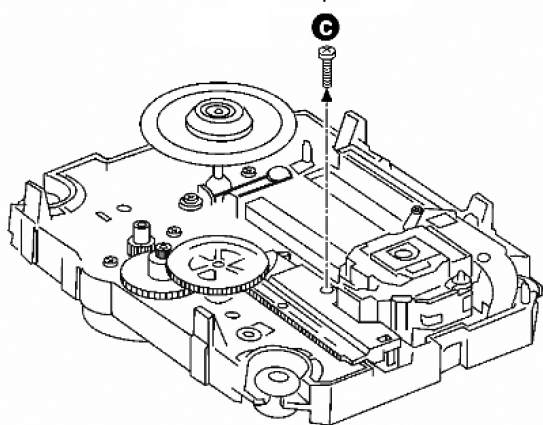


Step 8 Rotate the traverse deck (B) to the arrow direction and shift the optical pickup to the furthest backward.

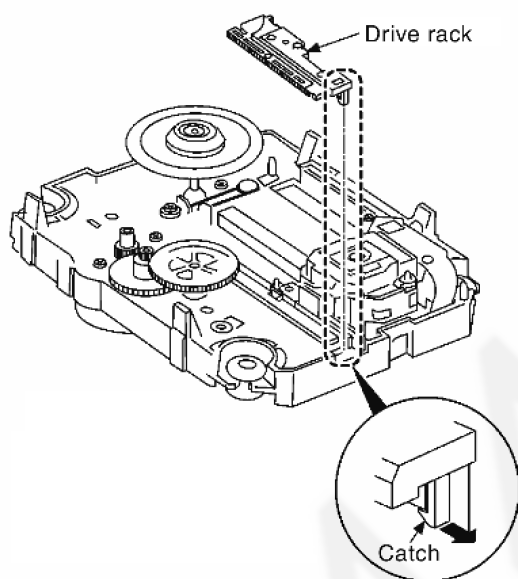


Step 9 Remove 1 screw.

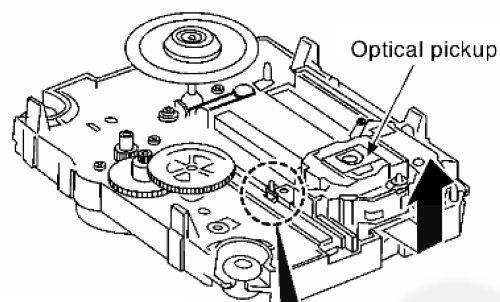
Step 9



Step 10 Remove the catch of the drive rack, and take out the drive rack.

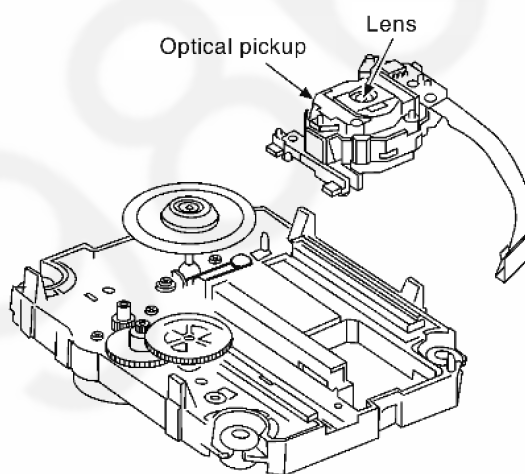


Step 11 Place the convex part of an optical pickup to the concave part of a traverse base, then take out the optical pickup.



Concave part of
traverse base

Convex part of
optical pickup



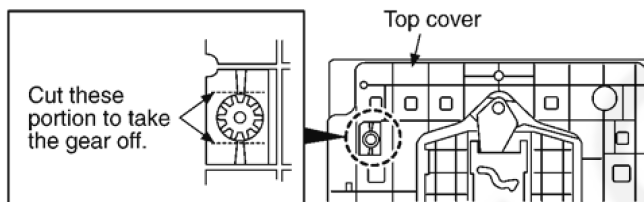
Note:
Do not touch the lens of the optical pickup

1. Turn off by pressing power SW in the body.
2. Unplug AC power cord after the indication of [GOOD-BYE], then disassemble the body.

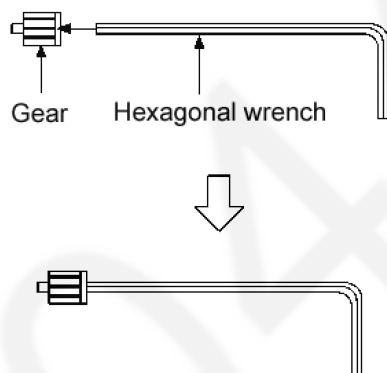
3. Disassemble the body, and take out CD loading mechanism.
4. Perform disassembly according to the following procedure for disassembly.

18.9.1. Gear for servicing information

- This unit has a gear which used for checking items (open/close of disc tray, up/down operation of traverse unit by manually) when servicing. (For gear information, that is described on the items for disassembly procedures.)
 - For preparation of gear (for servicing), perform the procedures as follows.
 - In case of re-servicing the same set, the "gear for servicing" may be took off because it had been used. So, the "gear for servicing" must be stored.
1. Remove the gear attached to top cover of CD loading mechanism.



2. Insert the hexagonal wrench (2.5mm) into the gear.

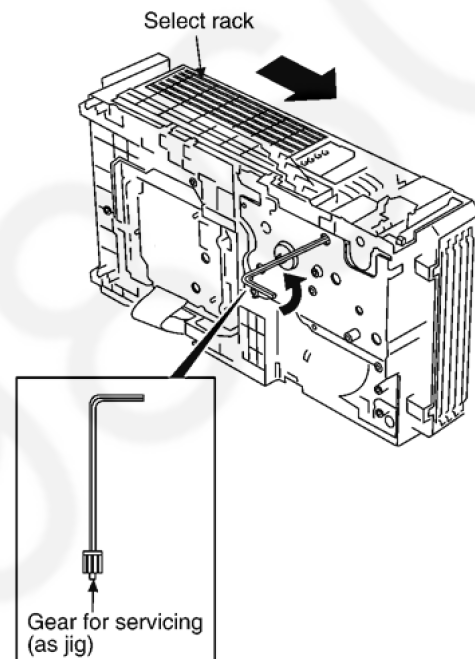


(Preparation of gear as jig is completed)

18.9.2. Replacement for the disc tray

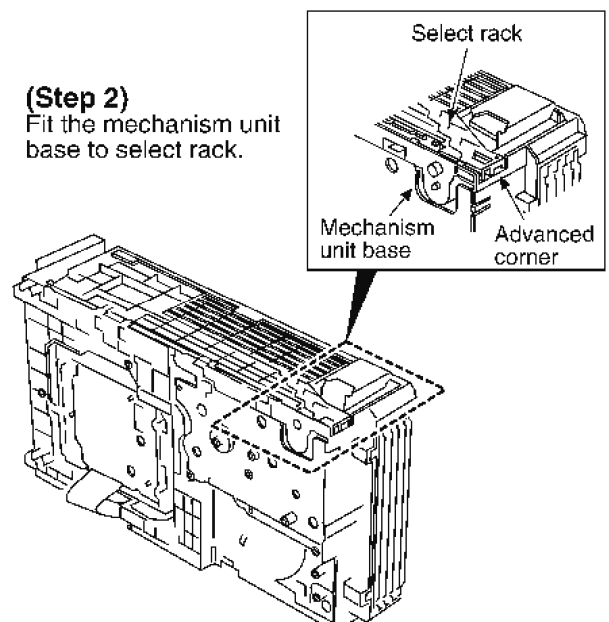
(Step 1)

Rotate the gear for servicing and move the select rack to advanced corner.



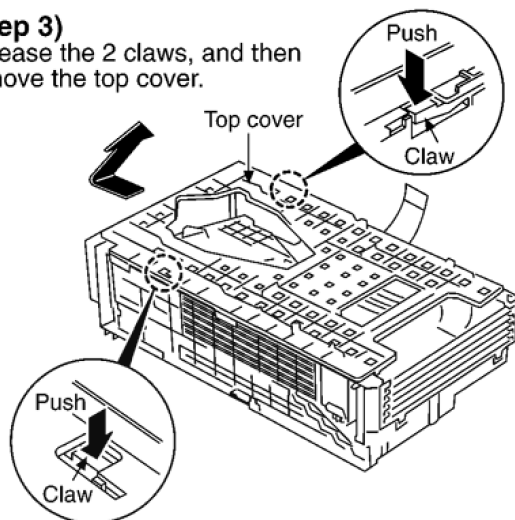
(Step 2)

Fit the mechanism unit base to select rack.

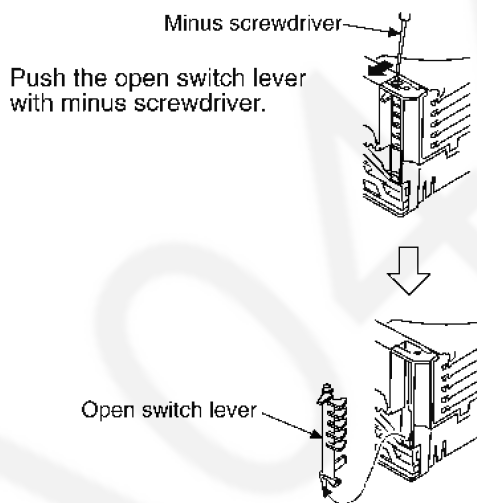
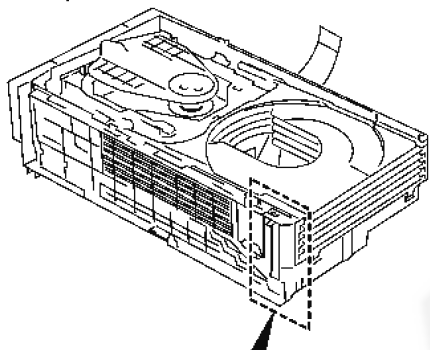


(Step 3)

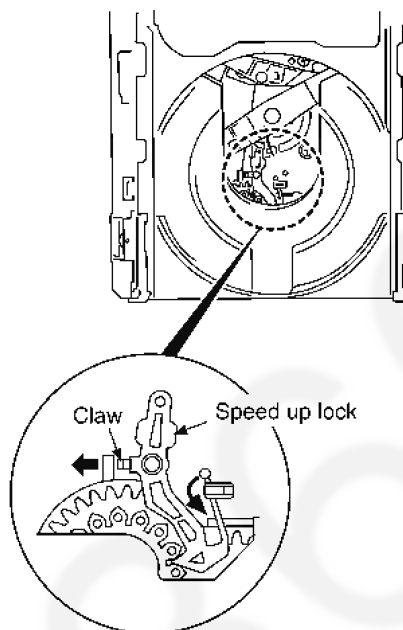
Release the 2 claws, and then remove the top cover.

**(Step 4)**

Remove the open switch lever.

**(Step 5)**

Release the claw, and then remove the speed up lock.



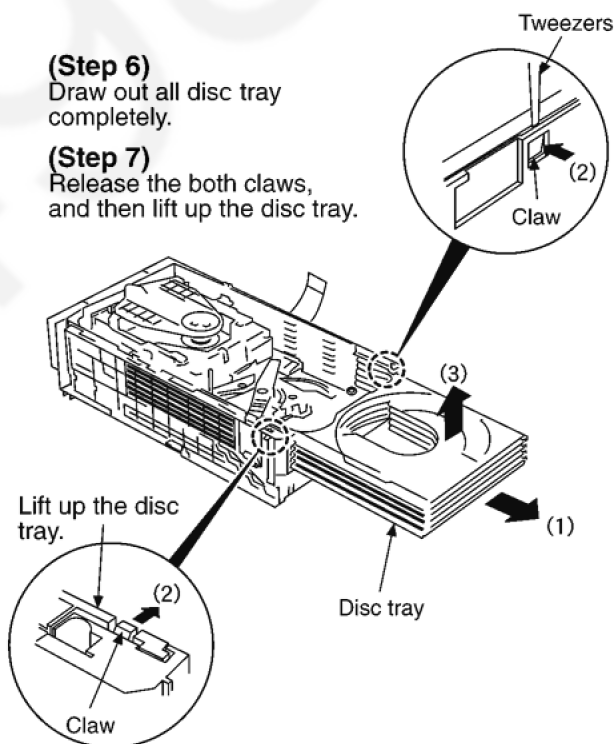
Insert the tweezers between the mechanism base and disc tray, and then lift up the disc tray.

(Step 6)

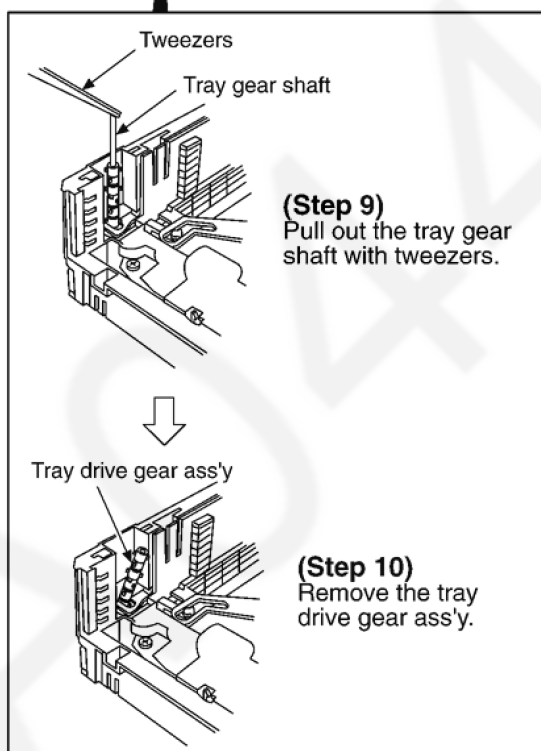
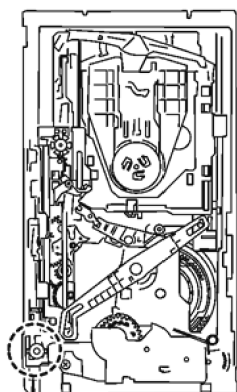
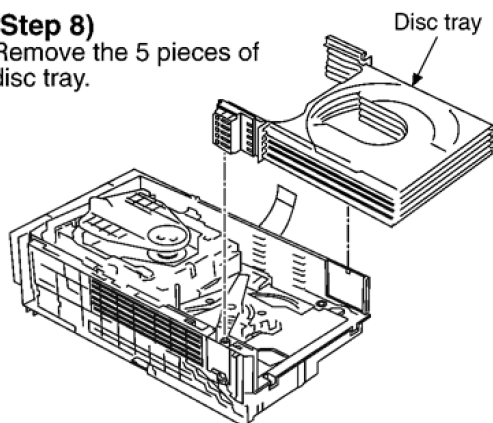
Draw out all disc tray completely.

(Step 7)

Release the both claws, and then lift up the disc tray.



(Step 8)
Remove the 5 pieces of
disc tray.



18.9.3. Replacement for the traverse deck

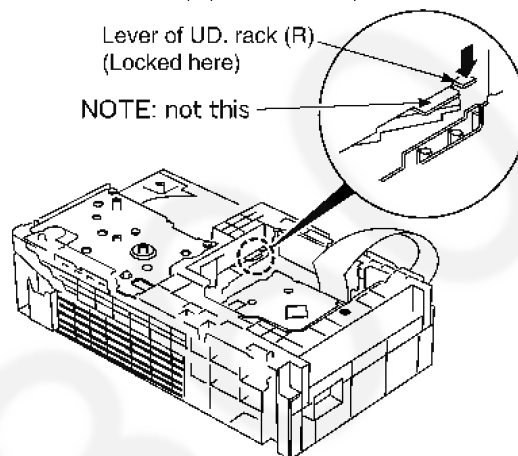
• Follow the **(Step 1)** - **(Step 10)** of item 18.9.2.

(Step 1)

Confirm the position for lever of UD. rack (R) to
remove traverse unit.

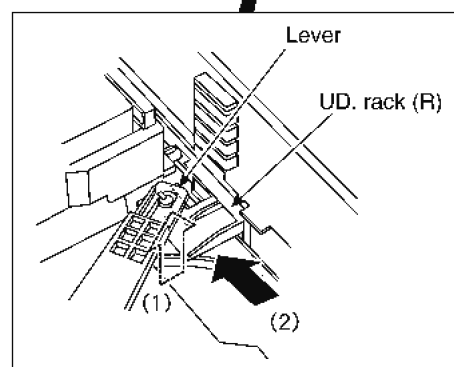
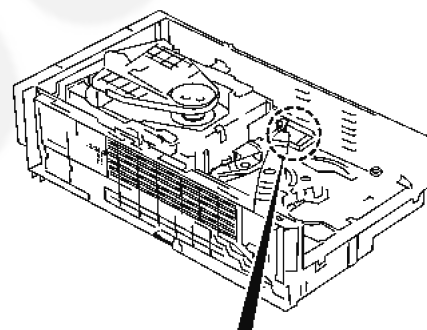
(Step 2)

Turn the unit over. (Upside: P.C.B.)

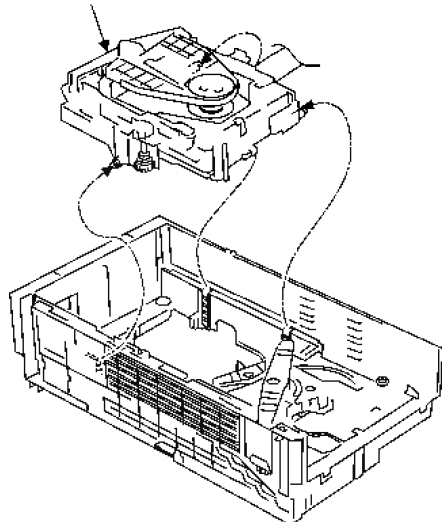


(Step 3)

Turn the unit over again, slide UD. rack (R) while
pushing up the lever from the bottom.

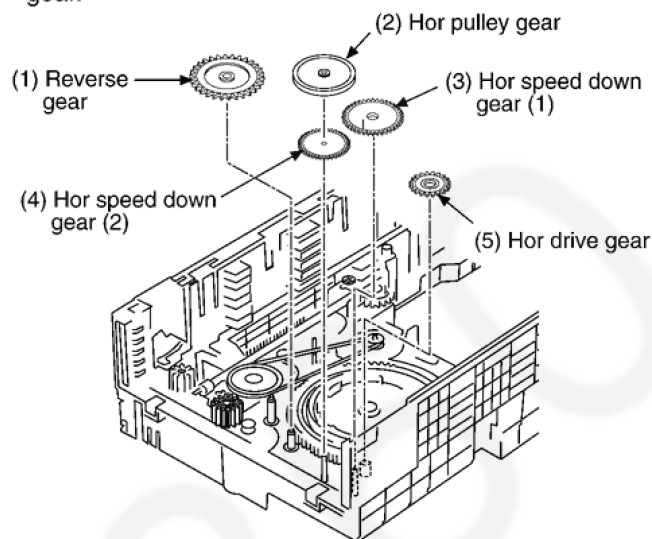


(Step 4)
Remove the traverse unit.



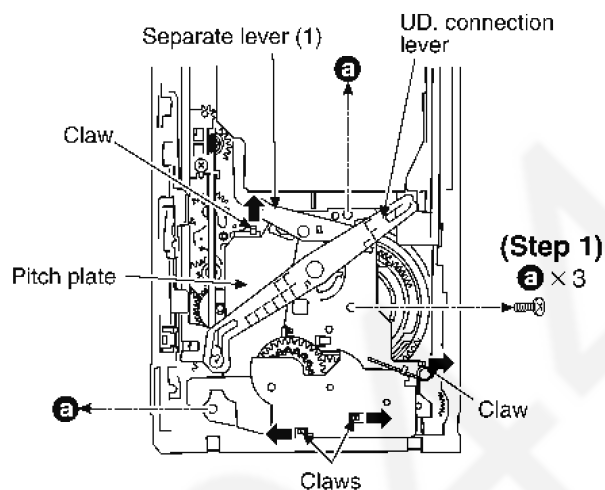
(Step 4)

Remove the reverse gear, hor pulley gear, hor speed down gear (1), hor speed down gear (2) and hor drive gear.



18.9.4. Disassembly for CD loading unit

- Follow the **(Step 1)** - **(Step 10)** of item 18.9.2.
- Follow the **(Step 1)** - **(Step 3)** of item 18.9.3.

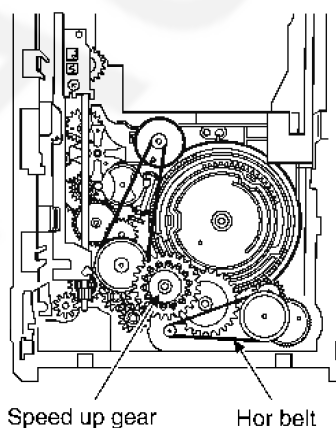


(Step 2)

Release the 4 claws, and then remove the pitch plate together with separate lever (1) and UD. connection lever.

(Step 3)

Remove the speed up gear and hor belt.

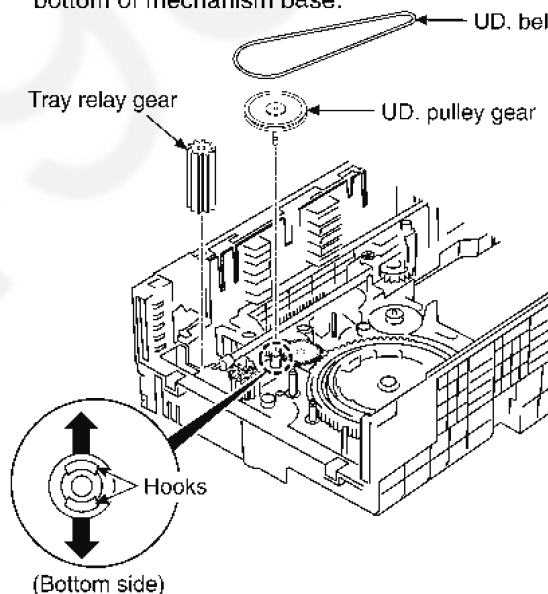


(Step 5)

Remove the UD. belt and tray relay gear.

(Step 6)

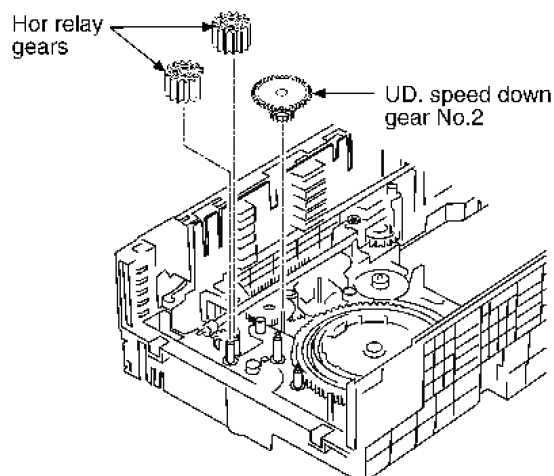
Pull out the UD. pulley gear, loosen 2 hooks of the bottom of mechanism base.



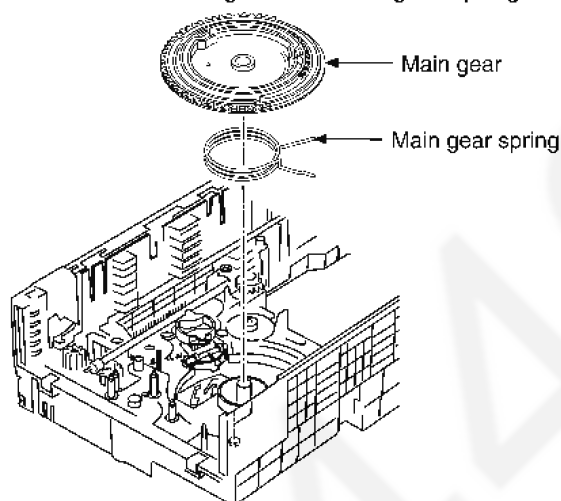
(Bottom side)

(Step 7)

Remove the 2 hor relay gears and UD. speed down gear No.2.

**(Step 8)**

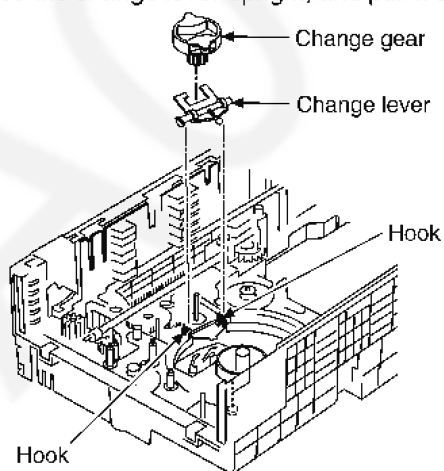
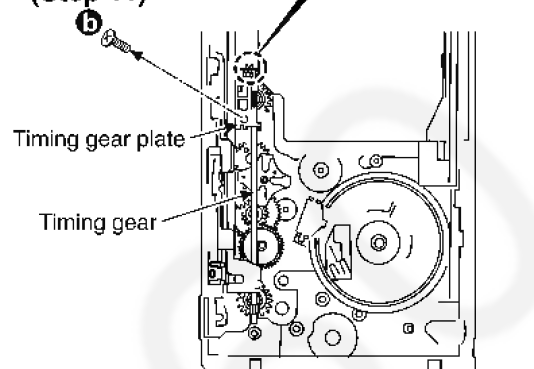
Remove the main gear and main gear spring.

**(Step 9)**

Remove the change gear.

(Step 10)

Raise the change lever upright, and pull it out of hook.

**(Step 11)****(Step 12)**

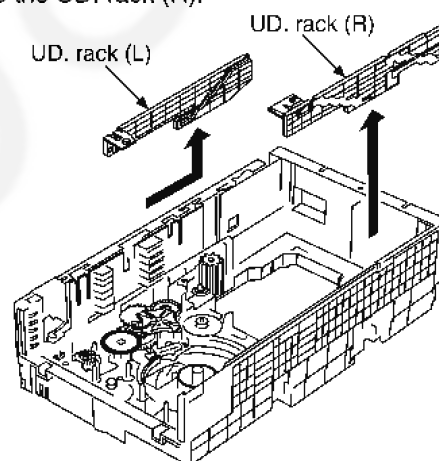
Release the 2 claws, and then remove the timing gear and timing gear plate.

(Step 13)

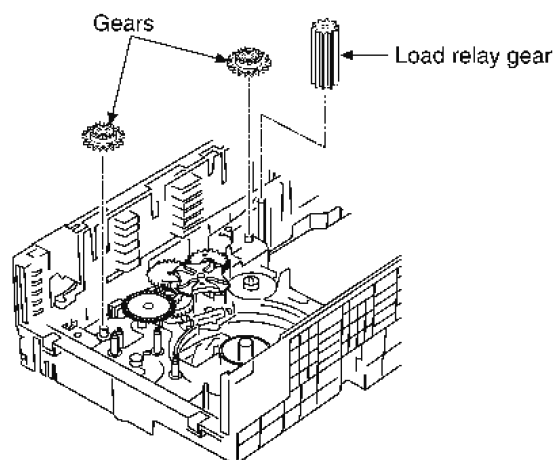
Move the UD. rack (L) to backward, and then remove it.

(Step 14)

Remove the UD. rack (R).

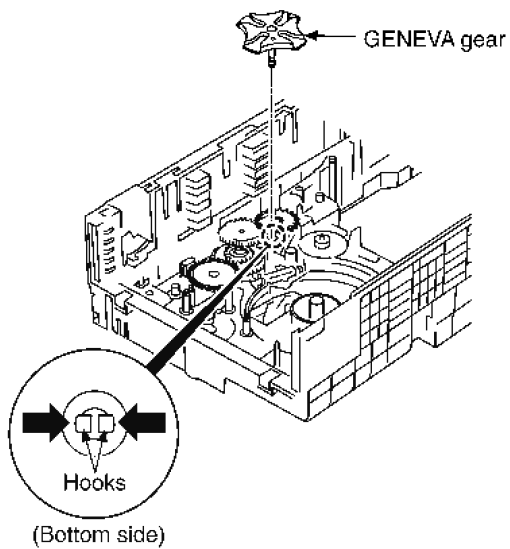
**(Step 15)**

Remove the 2 gears and load relay gear.

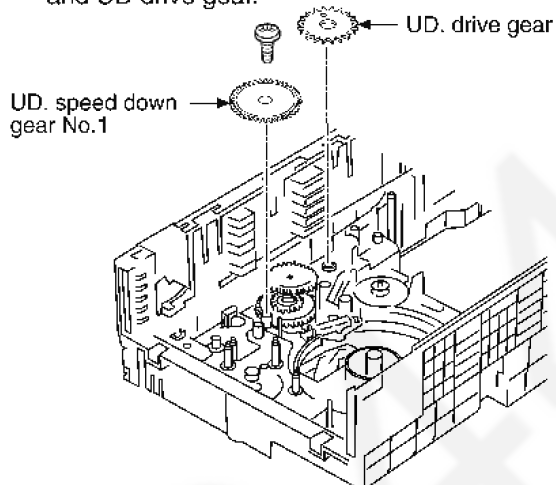


(Step 16)

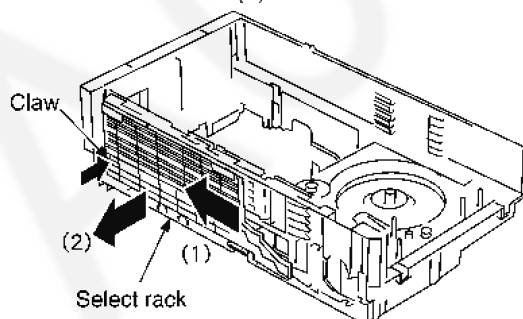
Pull out the GENEVA gear, loosen 2 hooks of the bottom of mechanism base.

**(Step 17)**

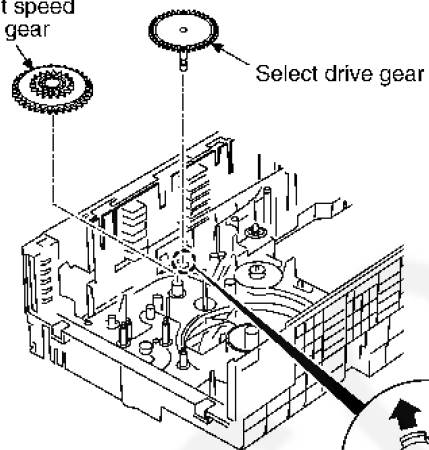
Remove the UD. speed down gear No.1 and UD drive gear.

**(Step 18)**

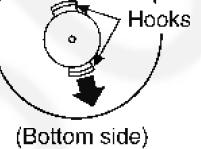
Slide the select rack to the edge direction of the arrow (1). Push the claw and pull out to arrow (2) while sliding the select rack to the arrow (1).



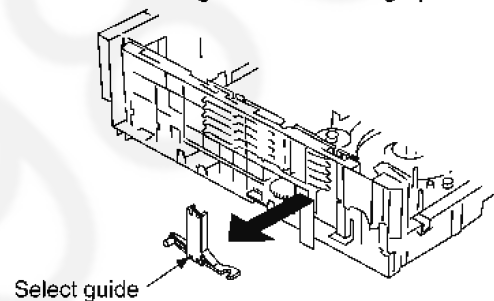
Select speed down gear

**(Step 19)**

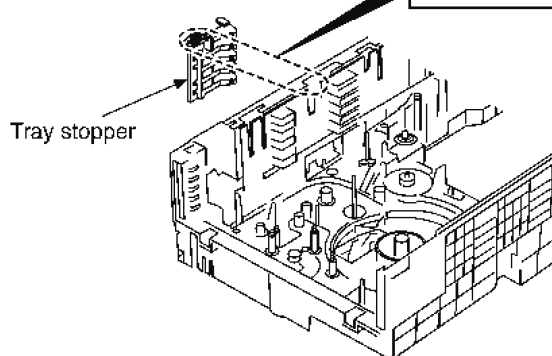
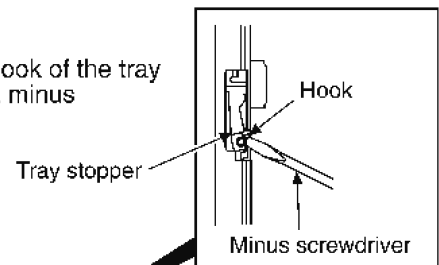
Pull out the select drive gear, loosen 2 hooks of the bottom of mechanism base. Then, remove the select speed down gear.

**(Step 20)**

Remove the select guide after sliding upside.

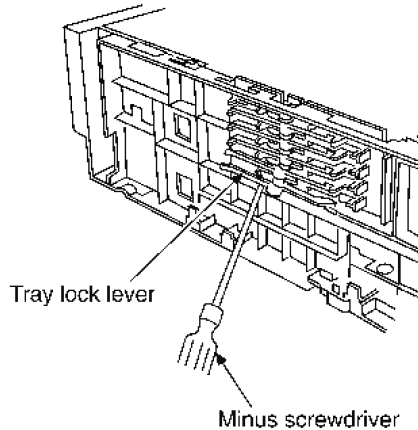
**(Step 21)**

Remove the hook of the tray stopper with a minus screwdriver.

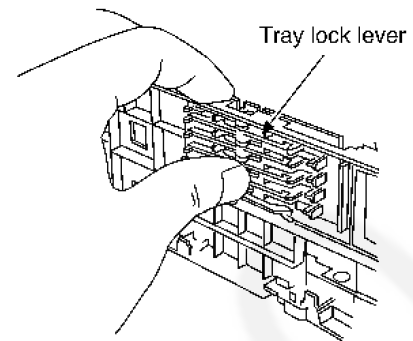


(Step 22)

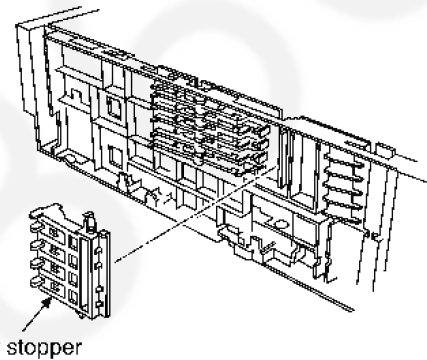
Remove the bottom of the tray lock lever with a minus screwdriver and others.

**(Step 2)**

Push the tray lock lever with a hand and install it.

**(Step 3)**

Install the tray stopper to mechanism base.



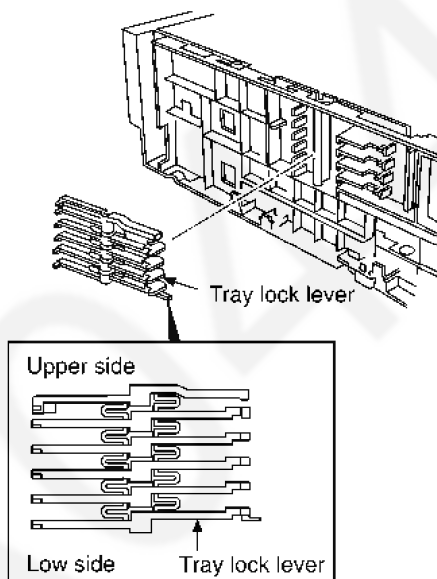
18.10. CR16 MECHANISM ASSEMBLY PROCEDURE

The following specified greases and/or oil must be applied when some specific parts are changed.

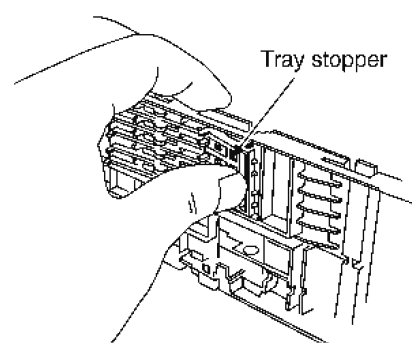
1. Floil grease (VFK1298) : The floil grease must be applied to tray, tray (L) and tray (R).
2. Hanarl oil (VFK1700) : The hanarl oil must be applied to any parts with grease other than the said parts.

(Step 1)

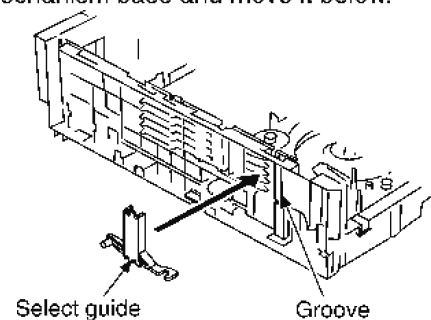
Install the tray lock lever to mechanism base.

**(Step 4)**

Push the tray stopper with a hand and install it.

**(Step 5)**

Insert the select guide with a groove of the mechanism base and move it below.



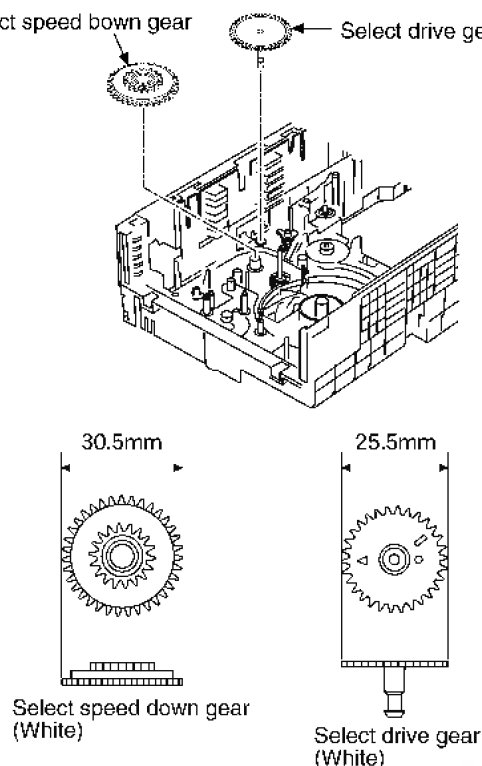
(Step 6)

Install the select speed down gear to mechanism base.

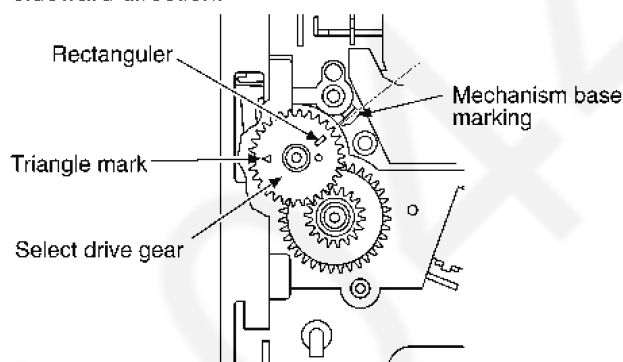
(Step 7)

Install the select drive gear to mechanism base.

Select speed down gear Select drive gear

**(Step 8)**

Fit a mechanism base marking to the rectangular mark of gear so that the triangle mark can indicate the sideward direction.

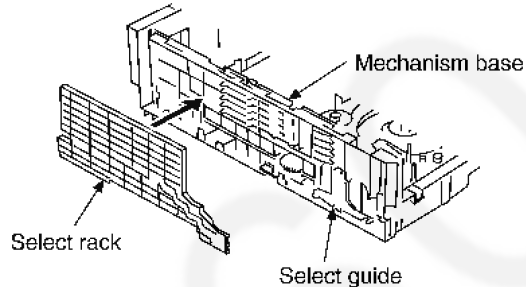
**(Step 9)**

Install the select rack to mechanism base.

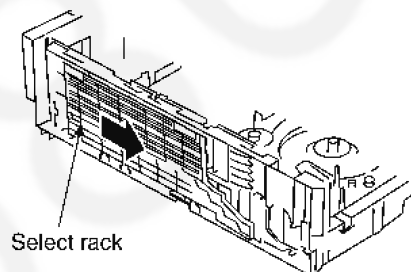
(Checking items before the installation.)

1. Check select guide is completely in lowest position.
2. Check its phase of select drive gear is correct position. (Rectangle/Triangular mark) (Refer to Step 8)

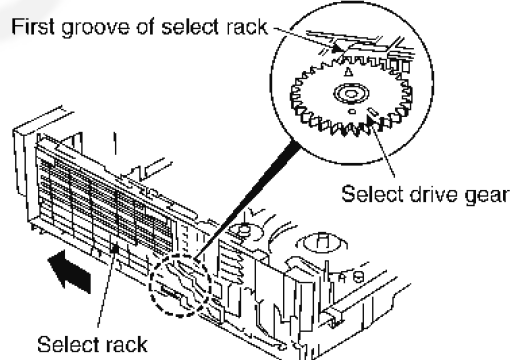
1. Put a select rack down with it fitted to its circumference of mechanism base.



2. Slide the select rack with it's pushing to a little right direction and install it.

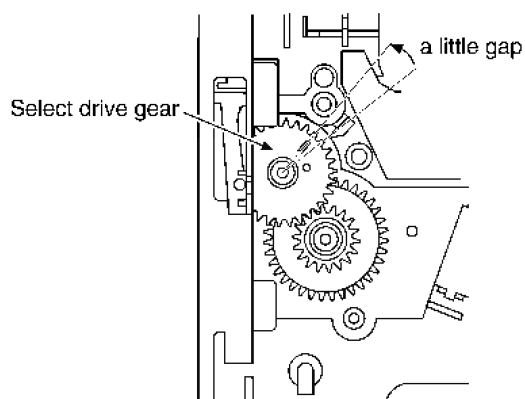


(Figure to see from the inside)



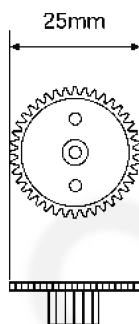
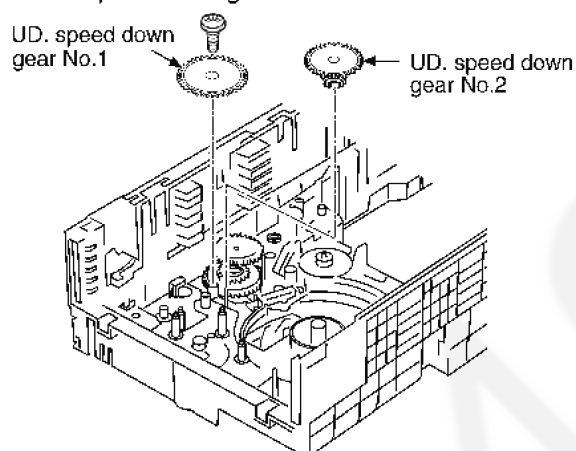
3. Check whether its end of triangular mark is in first groove of select rack, after fixing.
4. After insertion of select rack, continue the following work until the indication that it gese forward. And, all the while it must be checked that select rack is in the extreme end.

5. After insertion the select rack, the marking of select gear has a little gap when it is in the extreme end.

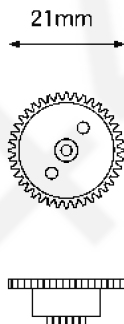


(Step 10)

Install the UD. speed down gear No.1 and UD. speed down gear No.2.



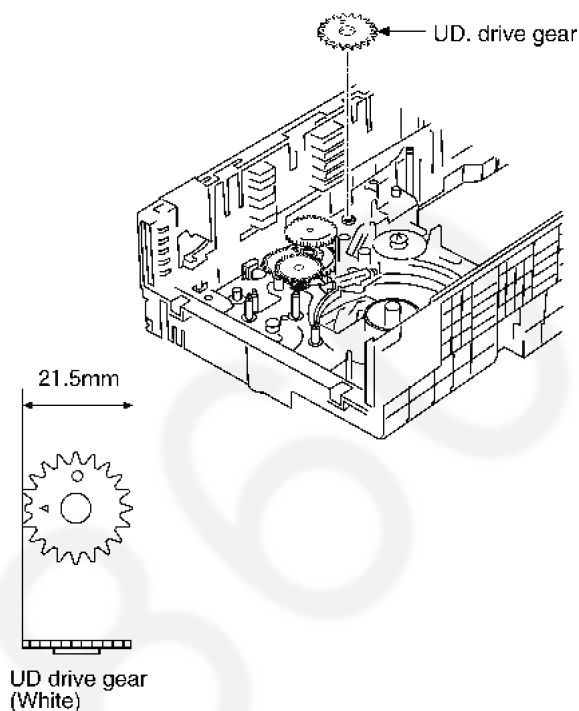
UD. speed down gear No.1
(White)



UD. speed down gear No.2
(Semi-transparent)

(Step 11)

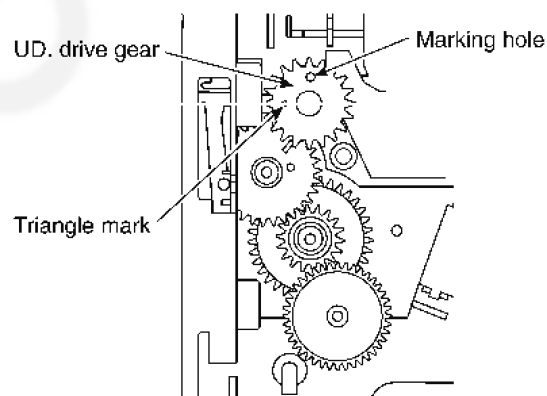
Install the UD. drive gear to mechanism base.



UD drive gear
(White)

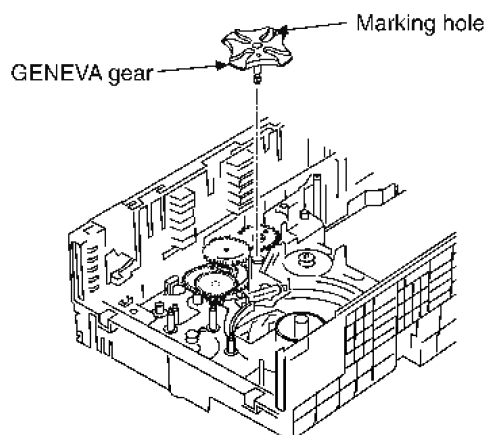
(Step 12)

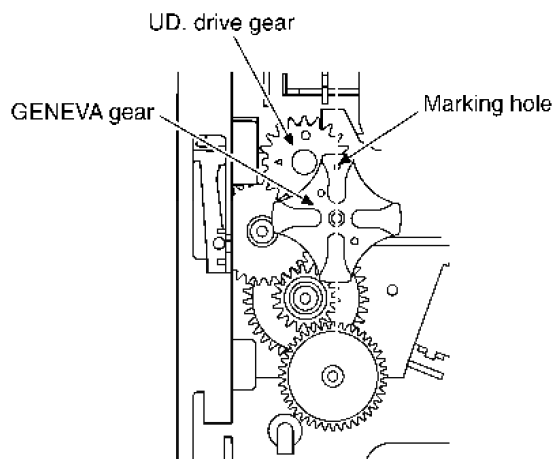
Insert the UD. drive gear with its marking hole upward. At that time, its triangle mark should be sideways.



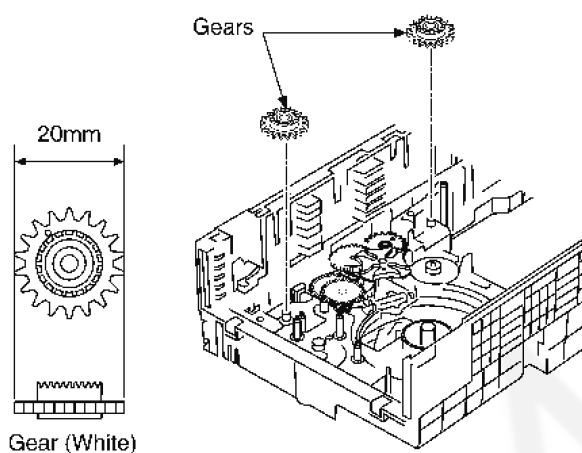
(Step 13)

Insert the GENEVA gear with its marking hole upward, and fix it by 2 hooks on bottom of mechanism base. At that time, UD. drive gear mustn't be moved.

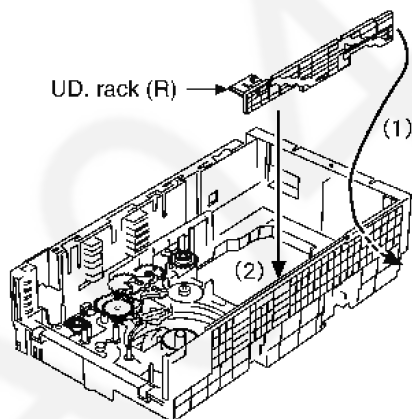


**(Step 14)**

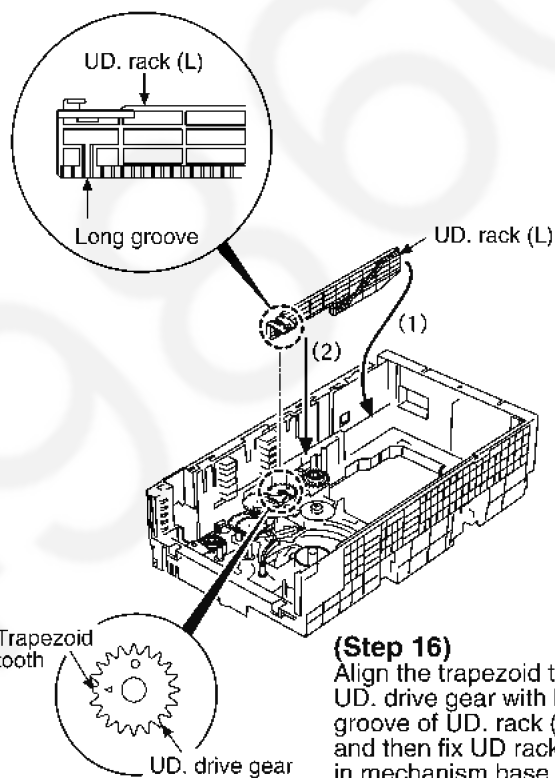
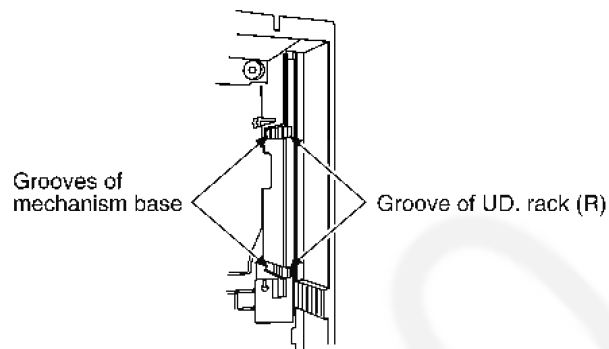
Install the 2 gears to mechanism base.

**(Step 15)**

Insert the UD. rack (R) to (2) from arrow (1).

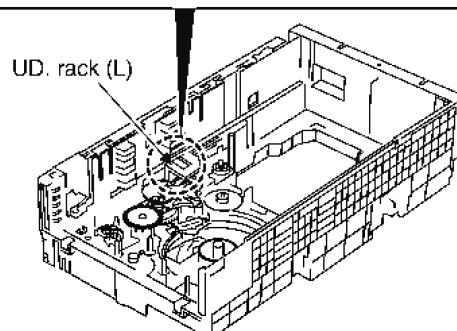
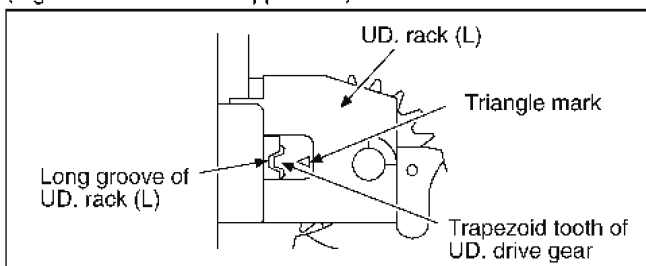
**NOTE:**

Put a groove of the mechanism base to the UD. rack (R).

**(Step 16)**

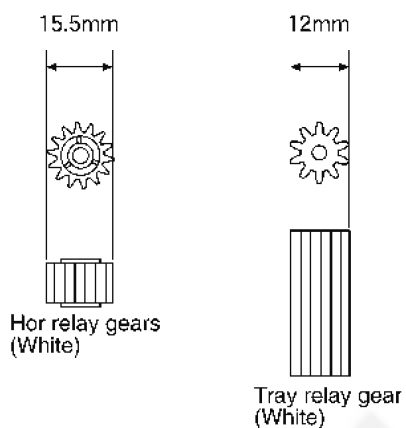
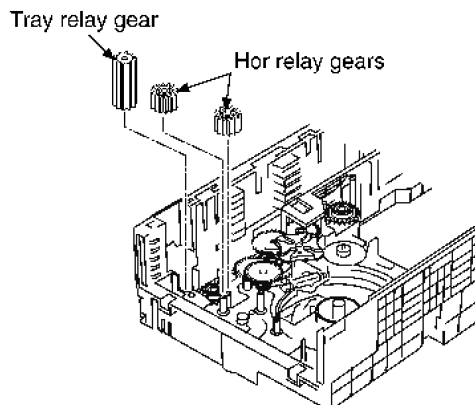
Align the trapezoid tooth of UD. drive gear with long groove of UD. rack (L), and then fix UD rack (L) in mechanism base.

(Figure to see from the upper side)

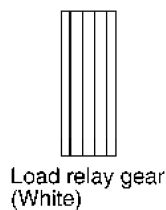
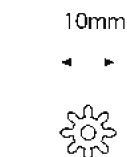
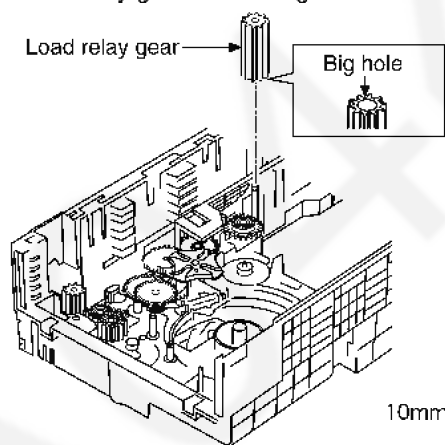


(Step 17)

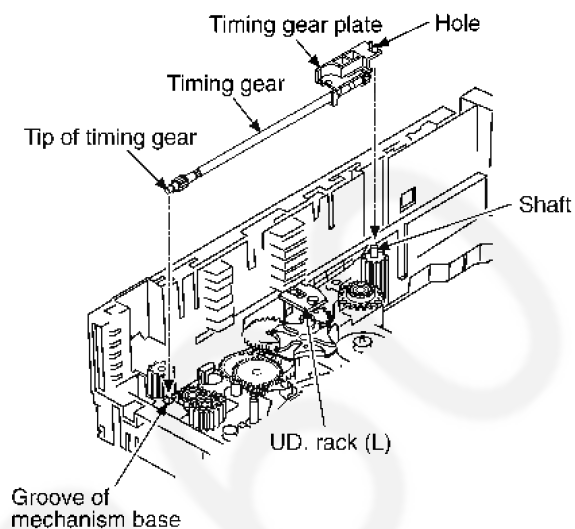
Install the tray relay gear and 2 hor relay gears.

**(Step 18)**

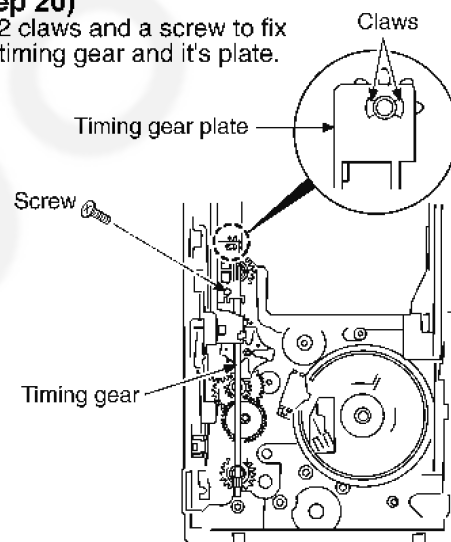
Install the load relay gear to mechanism base.
(Fit load relay gear with its big hole downward.)

**(Step 19)**

Put on the top of the timing gear, then, install the timing gear and it's plate.
At that time avoid the UD. rack (L).

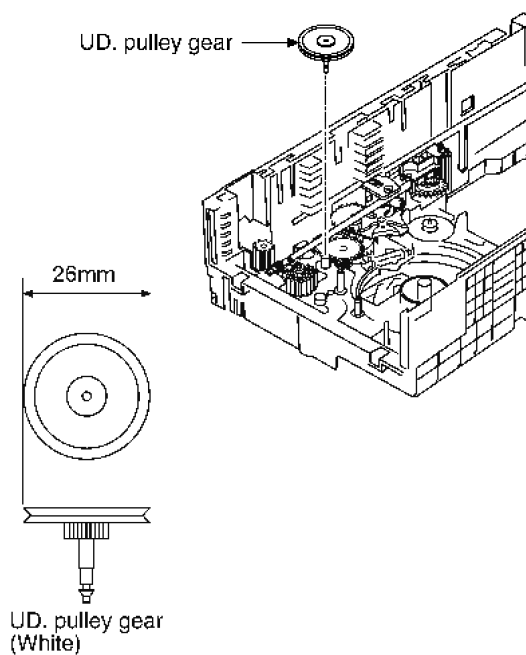
**(Step 20)**

Fix 2 claws and a screw to fix the timing gear and it's plate.

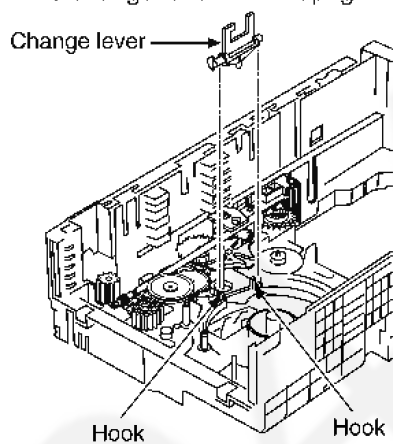


(Step 21)

Install the UD. pulley gear to mechanism base.

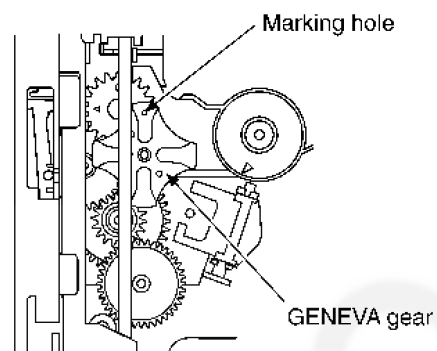
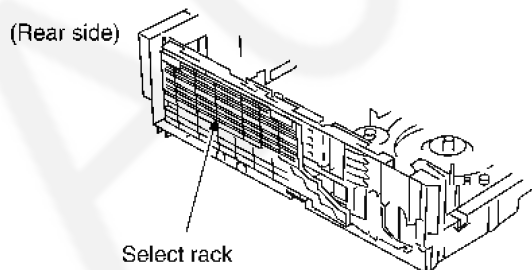
**(Step 22)**

Insert the change lever with it upright.

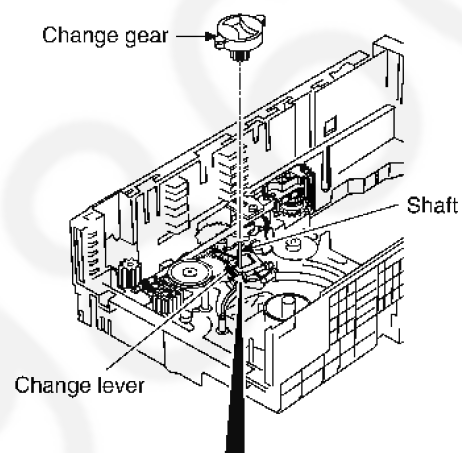
**(Step 23)**

Be sure the notice of bellow before fixing the change gear.

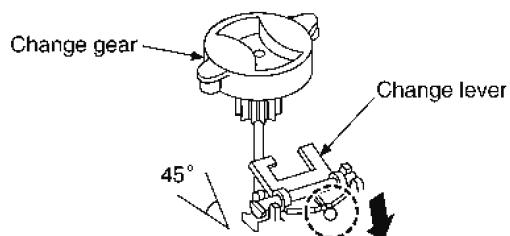
1. Select track should be in the rear of mechanism base.
2. Its hole of GENEVA gear should turn up.

**(Step 24)**

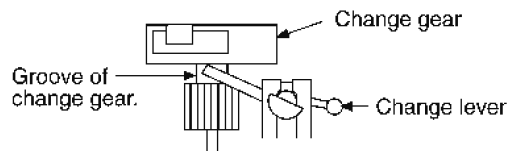
Install the change gear as insert the change lever into the groove of change gear.



1. Pushing the ○ part and pull up the change lever 45°.



2. Insert the change lever into the groove of change gear.



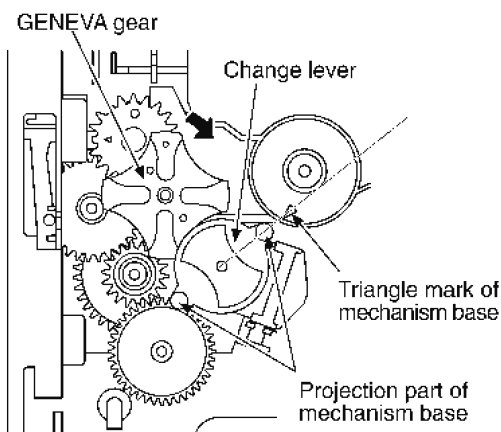
(Step 25)

Put change gear down with projection part of change gear fitted to triangle mark of mechanism base, when fixing change gear.

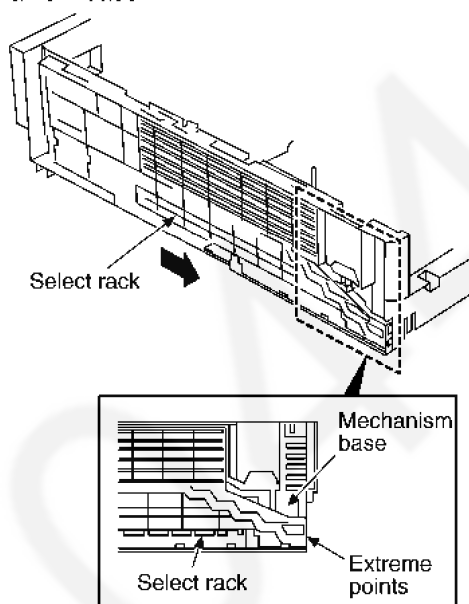
At that time, check change gear is inserted into the groove of change lever.

(Step 26)

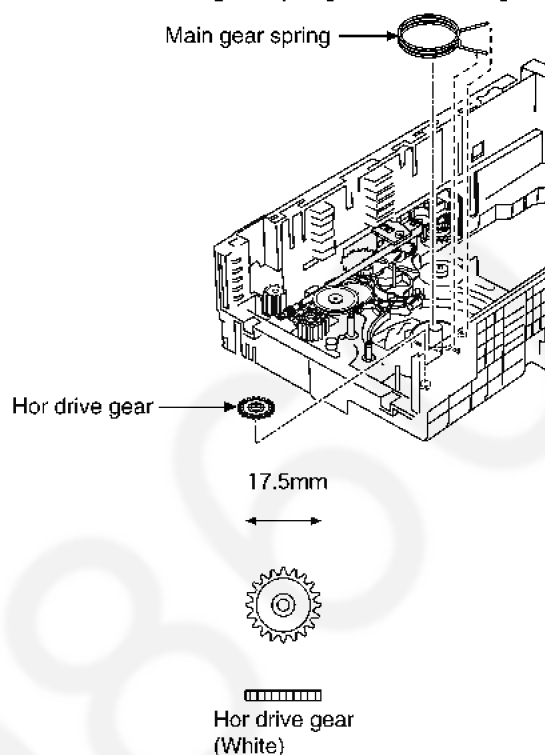
Lastly, turn GENEVA gear clockwise slightly and drop change gear to mechanism base.

**(Step 27)**

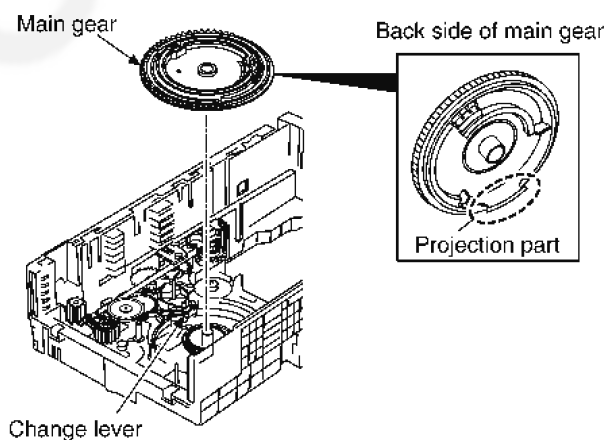
Move the select rack smoothly forward manually until 2 extreme points of both select track and mechanism base.

**(Step 28)**

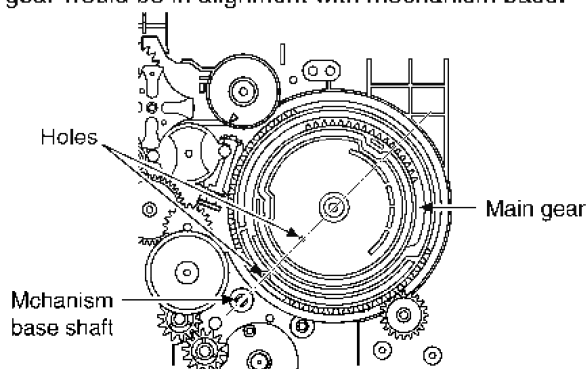
Install the main gear spring and hor drive gear.

**(Step 29)**

Don't bring change lever into touch to projection part of main gear, when fixing main gear in mechanism base.

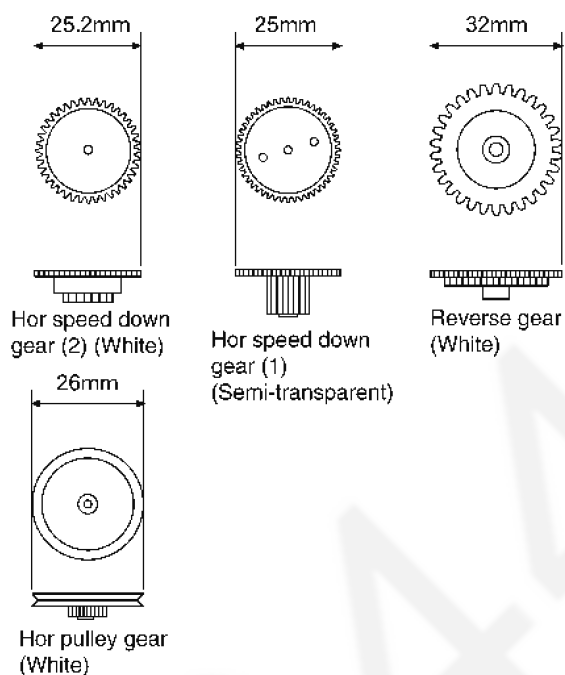
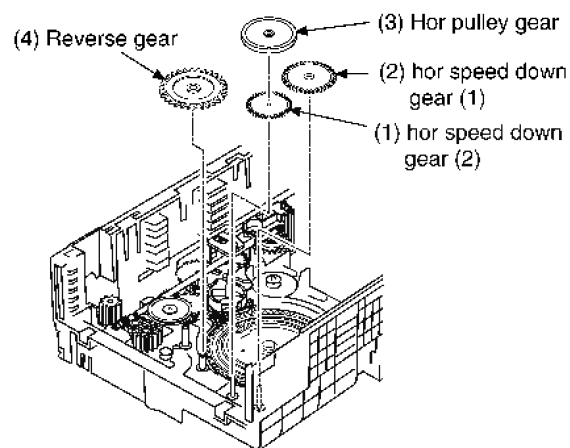
**(Step 30)**

After that, turn main gear so that 2 holes inside main gear would be in alignment with mechanism base.



(Step 31)

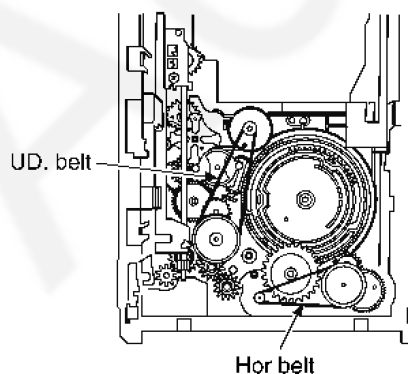
Install the hor speed down gear (2), hor speed down gear (1), hor pulley gear and reverse gear.

**(Step 32)**

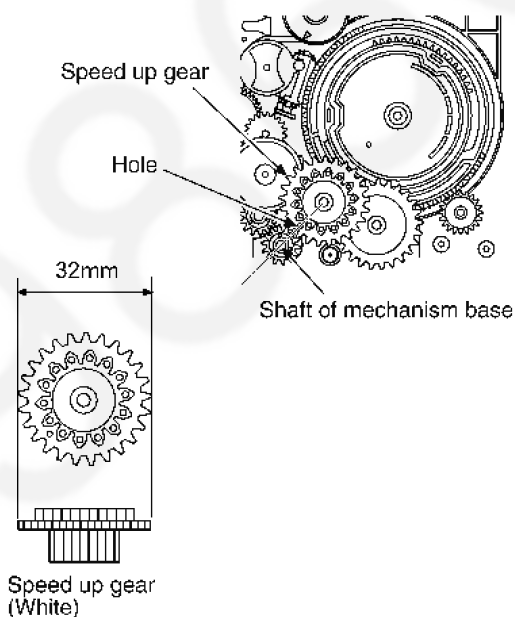
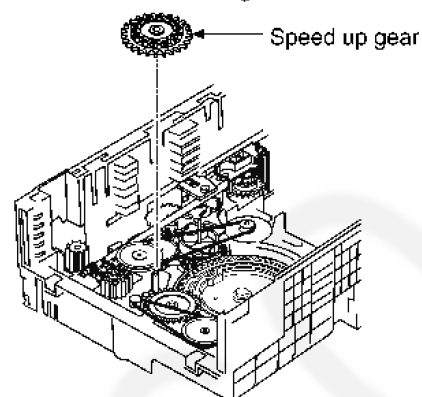
Install the UD. belt and hor belt.

NOTE:

1. Take care not apply the grease to the belt.
2. Install the belt without twist.

**(Step 33)**

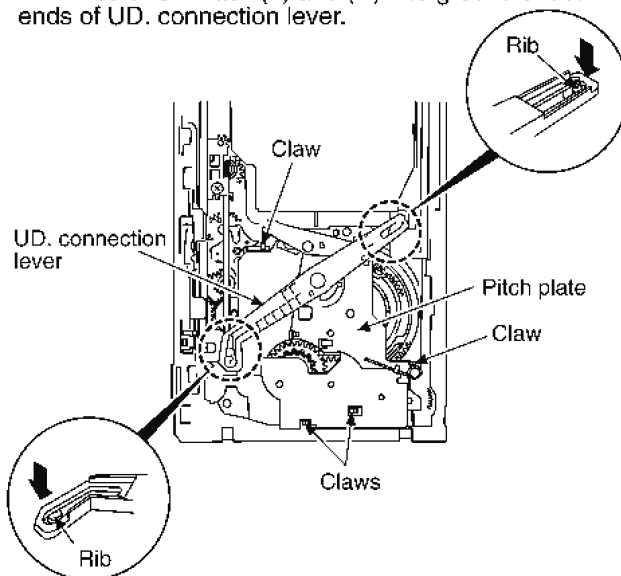
Install speed up gear to its shaft of mechanism base with 2 fitting.

**(Step 34)**

Install the pitch plate. (The 4 claws should be latched.)

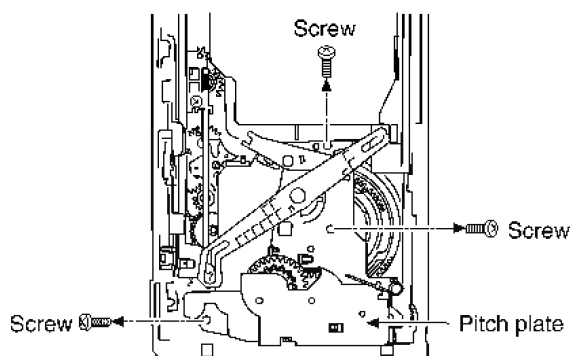
(Step 35)

Fix 2 ribs of UD. rack (L) and (R) into groove of both ends of UD. connection lever.



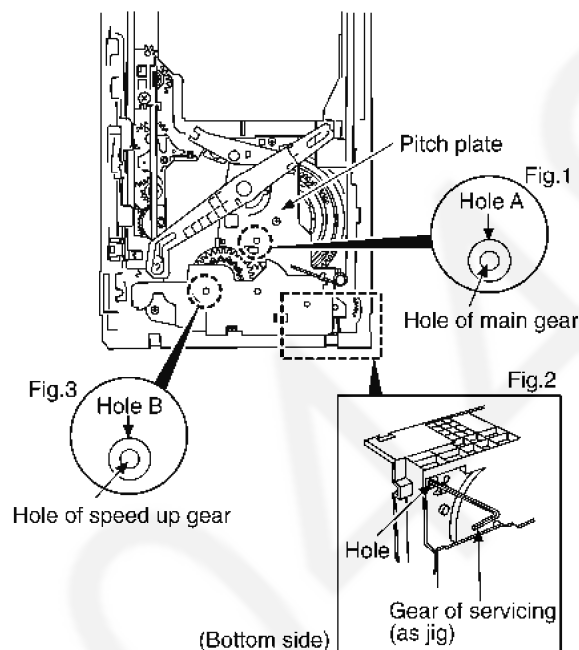
(Step 36)

Fixed it by three screws further.

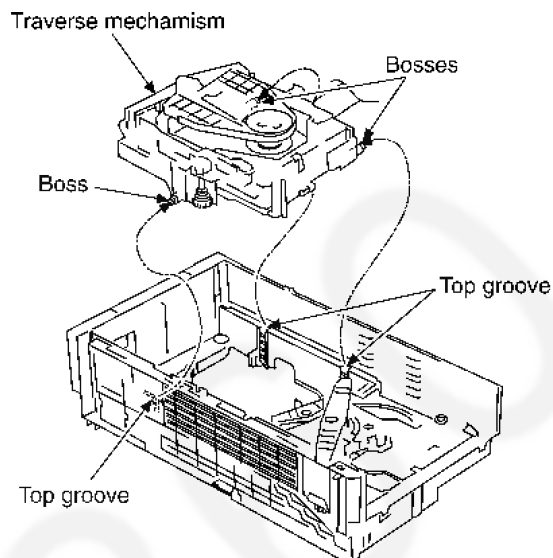
**(Step 37)**

Be sure the notice of below before fixing the traverse mechanism.

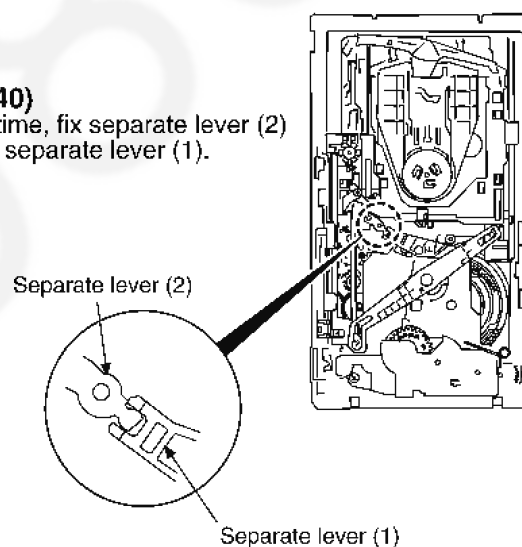
1. Check that 2 holes of both pitch plate and main gear is fitted. (Refer to Fig.1)
If it's not fitted, put the gear for servicing in the hole of the bottom side and adjust it. (Refer to Fig.2)
2. Check that 2 holes of both pitch plate and speed up gear is fitted. (Refer Fig.3)
If it's not fitted turn the speed up gear to adjust it.

**(Step 39)**

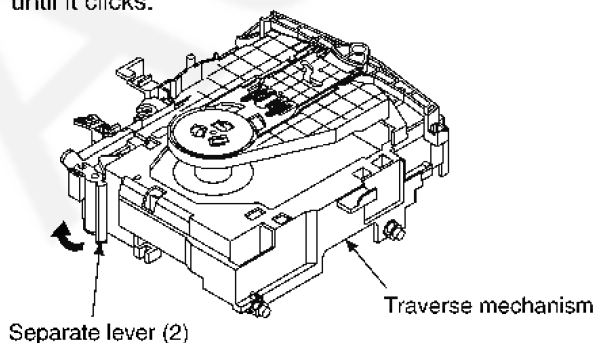
Fix the left boss into the top groove of the UD. rack (L) and fix 2 bosses into the groove of the UD. rack (R).

**(Step 40)**

At that time, fix separate lever (2) into the separate lever (1).

**(Step 38)**

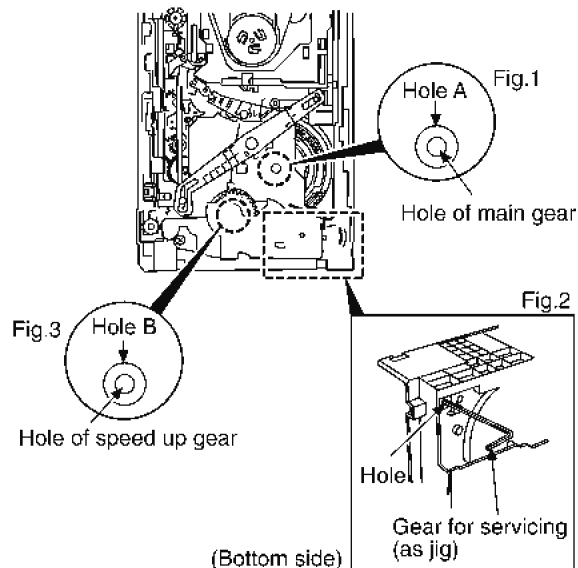
Turn the separate lever (2) slowly toward left side until it clicks.



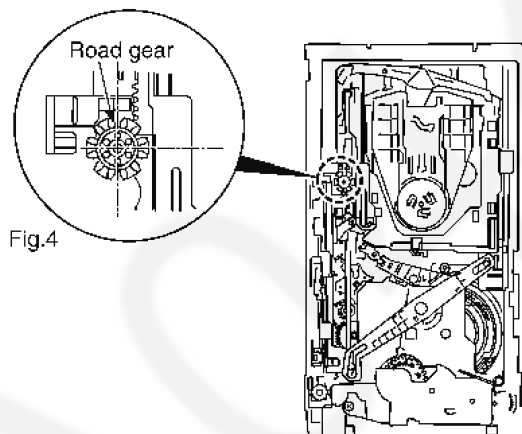
(Step 41)

After the traverse mechanism fixed, confirm the phase in order below.

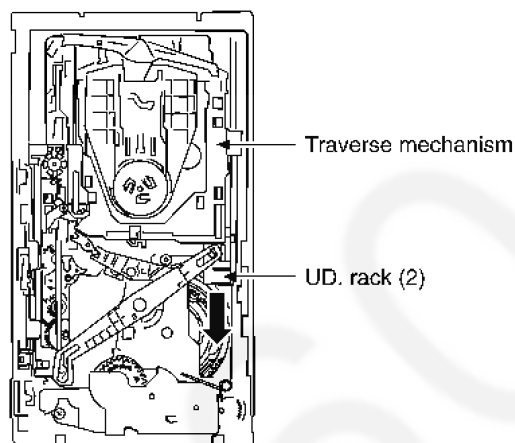
1. Check that 2 holes of both pitch plate and main gear is fitted. (Refer to Fig.1)
If it's not fitted, put the gear for servicing in the hole of the bottom side and adjust it. (Refer to Fig.2)
2. Check that 2 holes of both pitch plate and speed up gear is fitted. (Refer Fig.3)
If it's not fitted turn the speed up gear to adjust it.



3. In the cog of road gear, the groove with it's cutting halfway set side ward. (Refer to Fig.4)
Remove the traverse mechanism again when it is not set side ward and install it after adjustment of inserting position.
NOTE: By this time, do not adjust to rotate the road gear.

**(Step 42)**

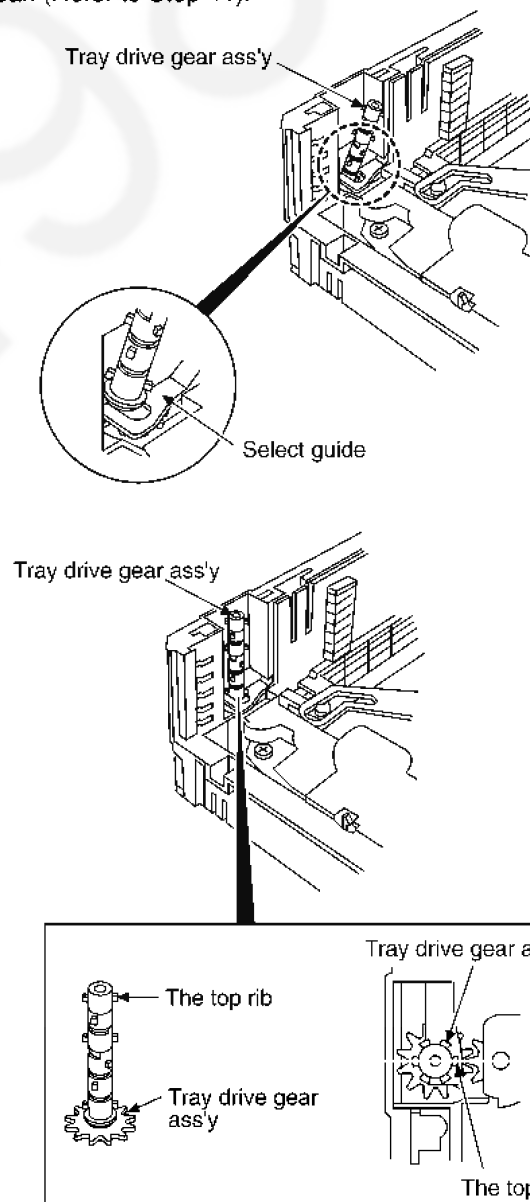
After insertion of traverse mechanism, pull the UD. rack (R) on this side that each phase is "OK" and then lock the traverse mechanism.

**(Step 43)**

Install the tray drive gear to select guide.
(Install the top rib of the tray drive gear with side ward.)

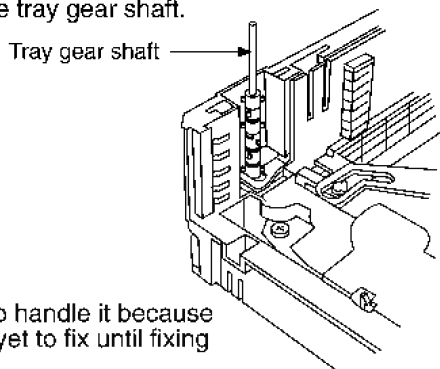
NOTE:

Confirm the each phase surely before install the tray drive gear. (Refer to Step 41).



(Step 44)

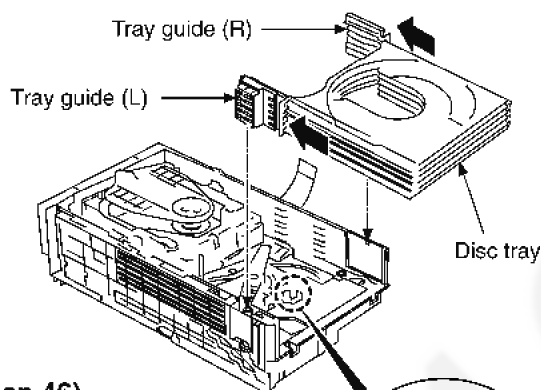
Insert the tray gear shaft.

**NOTE:**

Be careful to handle it because the shaft is yet to fix until fixing top cover.

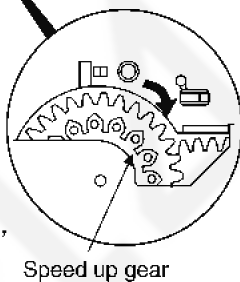
(Step 45)

Move the tray guide (R) and (L) to direction of arrow that fixed (stopped) it and install 5 pieces of disc tray.

**(Step 46)**

Confirm that when the disc tray insert the upper side, the speed up gear is rotate clockwise a little.

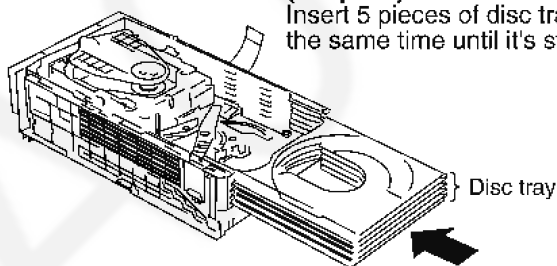
- When the rotation of speed up gear is not clockwise or rotate, repeat from Step 45.
- Until the speed up gear rotate, repeat from Step 45 and 46.

**NOTE:**

While keeping all position, install 5 pieces of disc tray.

(Step 47)

Insert 5 pieces of disc tray at the same time until it's stop.

**(Step 48)**

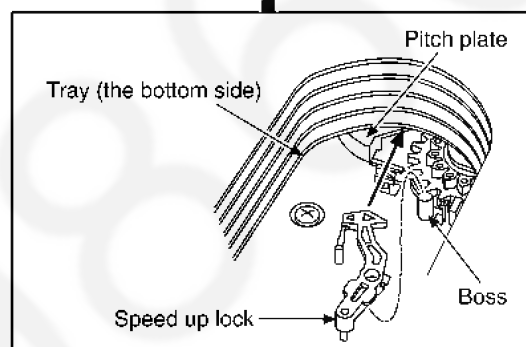
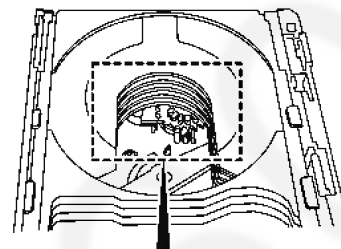
Turn the traverse side 180°.

(Step 49)

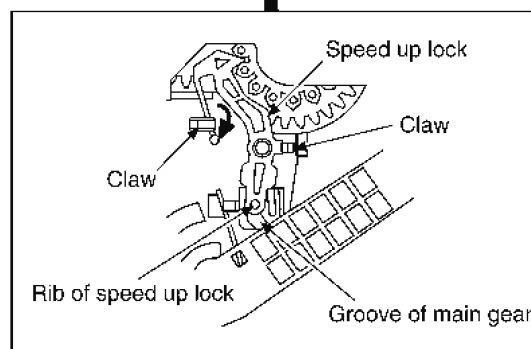
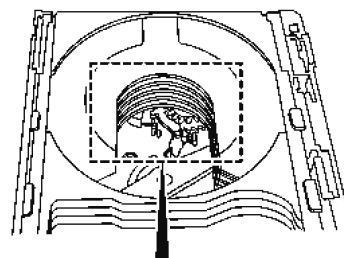
While install the tip of speed up lock between tray (No.1) of the most lower side and pitch plate for the time being. (Do not to insert the cog of speed up gear), insert it to boss.

NOTE:

At that time, do not move the tray. (See the tray the most front side)

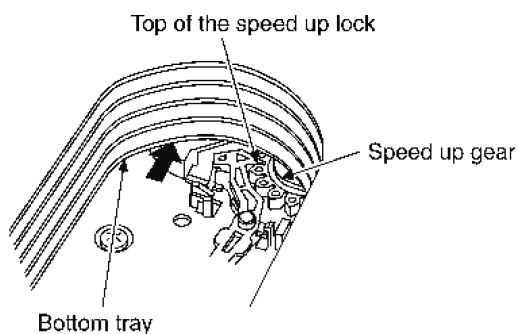
**(Step 50)**

Insert the rib of speed up lock into a groove of main gear, and lock it with 2 claws.

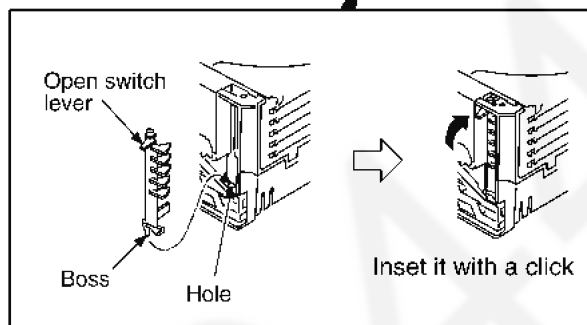
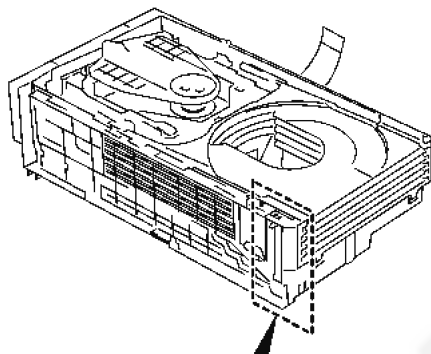


(Step 51)

Move the bottom tray to the arrow while pushing the top of the speed up gear. And insert it to a cog of the speed up gear.

**(Step 52)**

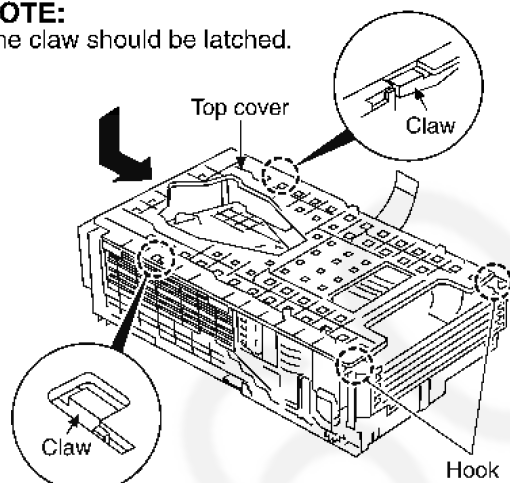
Install the open switch lever.
(Put the boss into the hole of the mechanism base.)

**(Step 53)**

Install the top cover.
Fix it into hooks and slide direction to the arrow.

NOTE:

The claw should be latched.



18.11. Disassembly for Traverse Unit

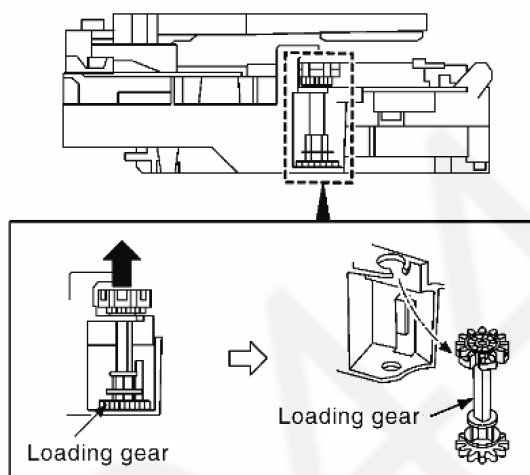
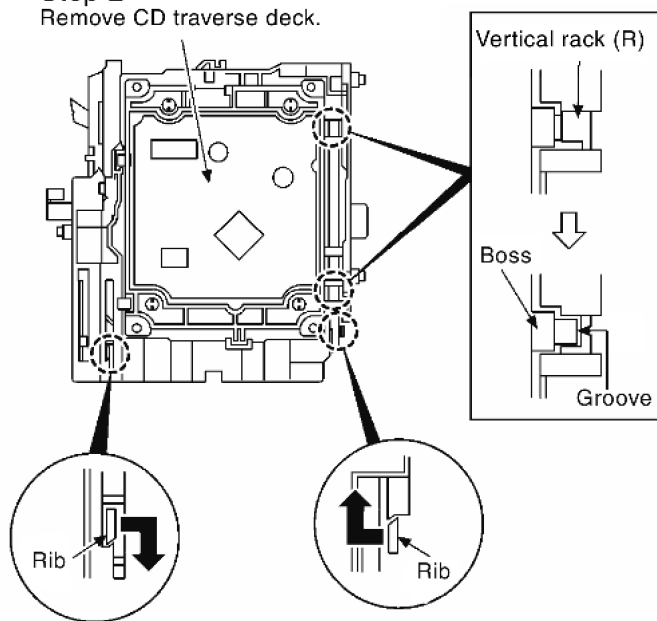
- Follow the **(Step 1)** - **(Step 10)** of item 18.9
- Follow the **(Step 1)** - **(Step 3)** of item 18.10

Step 1

Shift ribs of both side to the arrow direction.
(A vertical rack (R) slides and groove opens)

Step 2

Remove CD traverse deck.

**Step 3**

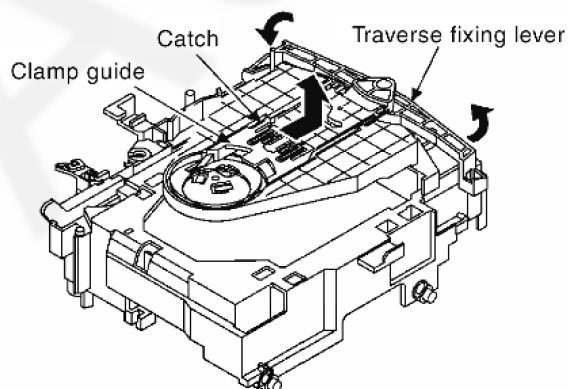
Lift a loading gear slightly and pull out.

Step 4

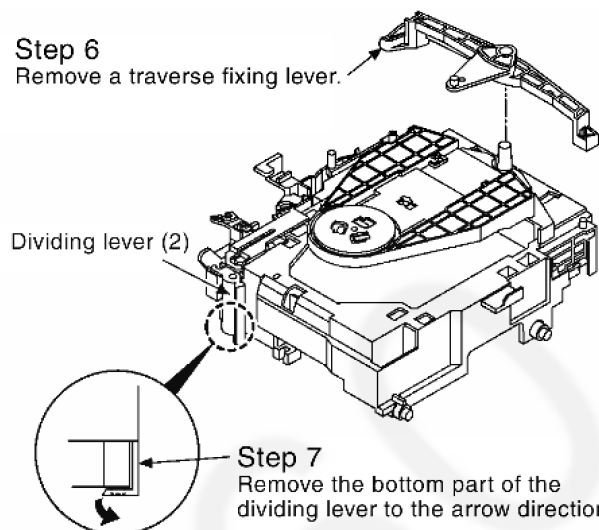
Fixing lever to the arrow direction, rotate a traverse.

Step 5

Remove catch and take out a clamp guide.

**Step 6**

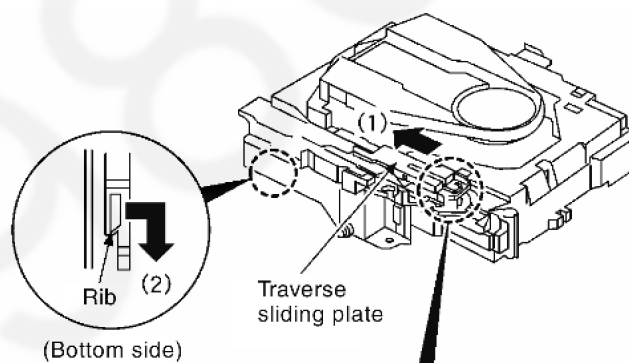
Remove a traverse fixing lever.

**Step 7**

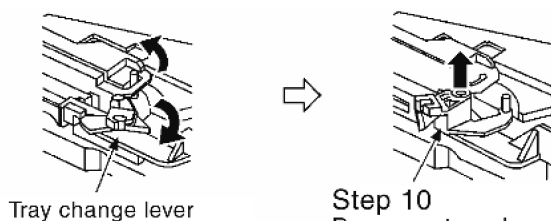
Remove the bottom part of the dividing lever to the arrow direction.

Step 8

Slide a traverse sliding plate to the arrow direction (1), and shift a rib to the arrow direction (2).

**Step 9**

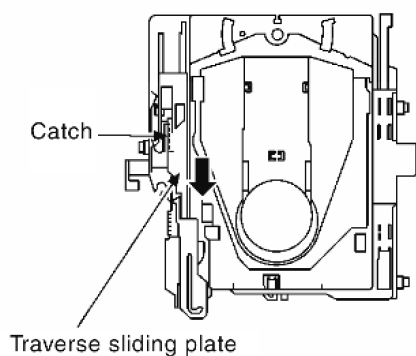
Shifting a traverse sliding plate slightly and rotate a tray change lever.

**Step 10**

Remove a tray change lever.

Step 11

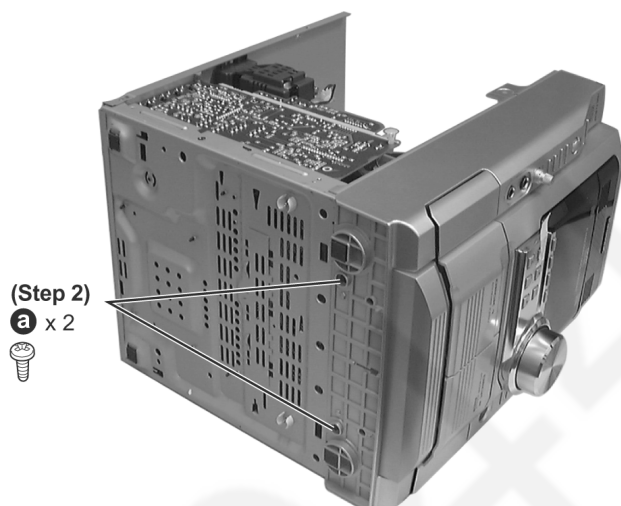
Holding the catch down, slide a traverse sliding plate to the arrow direction and remove it.



18.12. Disassembly of Deck Mechanism Unit

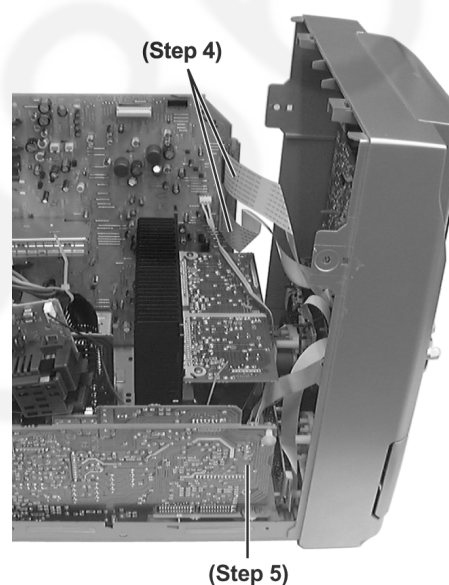
- Follow the (Step 1) - (Step 2) of Item 18.2.
- Follow the Disassembly for the CD changer unit of Item 17.2.1.

Step 1 Lay unit as show below.



Step 2 Remove 2 screws.

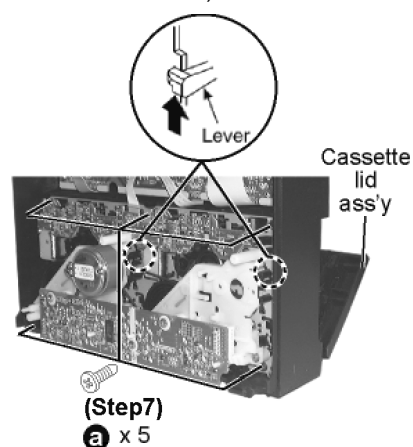
Step 3 Remove the 2 claws, and then draw the front panel ass'y.



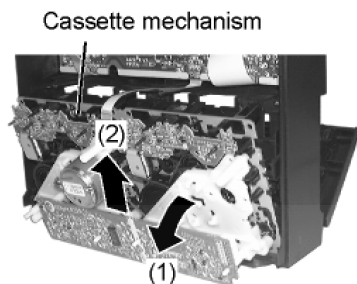
Step 4 Detach FFC Board (CN2811 & CN2815).

Step 5 Detach flat cable wire (CN5806).

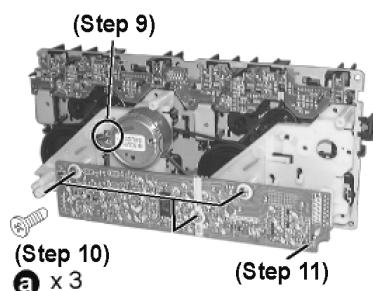
Step 6 Push the lever upward, and then open the cassette lid ass'y (For DECK1 and DECK2).



Step 7 Remove the 5 screw.



Step 8 Tilt the cassette mechanism in the direction of arrow (1), and then remove it in the direction of arrow (2).



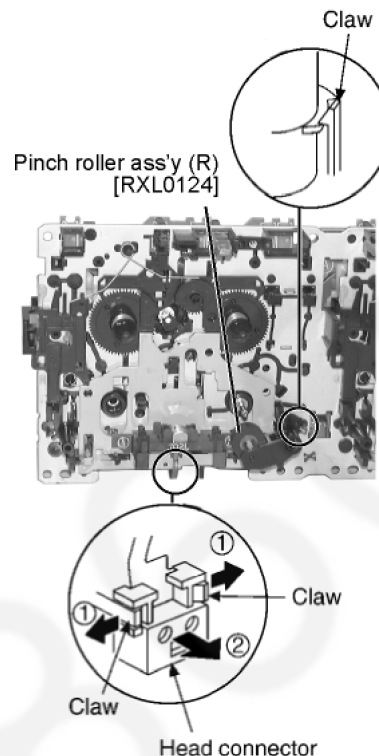
• **Disassembly of Deck P.C.B.**

Step 9 Unsolder the motor terminals.

Step 10 Remove 4 screws.

Step 11 Remove Deck P.C.B.

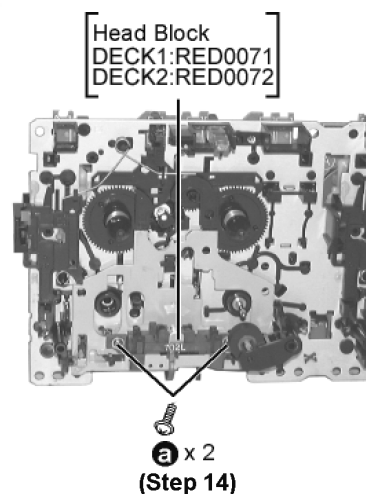
* The mechanism as shown below is for DECK1. For the one of DECK 2, perform the same procedures.



• **Disassembly of pinch roller ass'y & head block**

Step 12 Release the 2 claws, and then remove the pinch roller (R), (F).

Step 13 Release the 2 claws, and then remove the head connector.



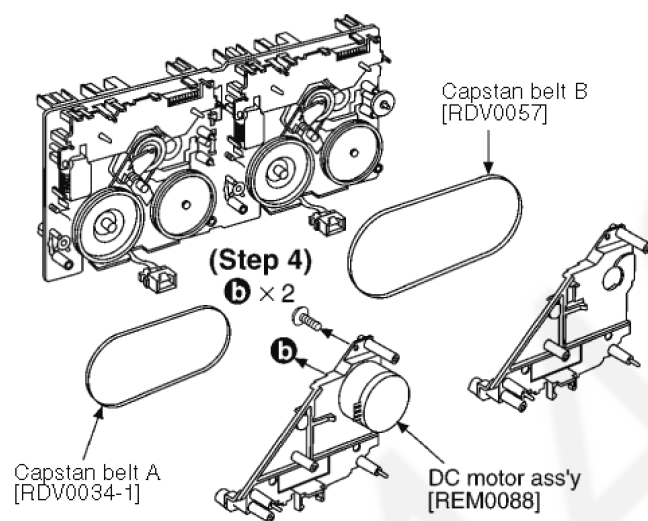
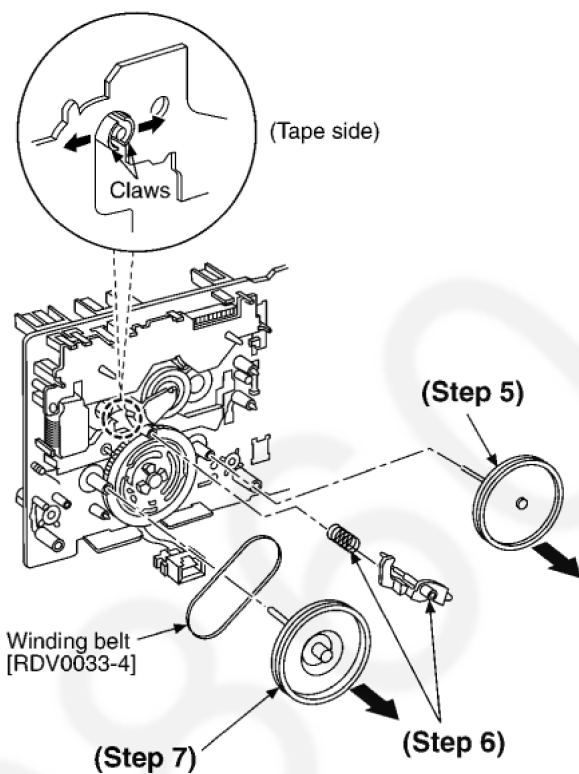
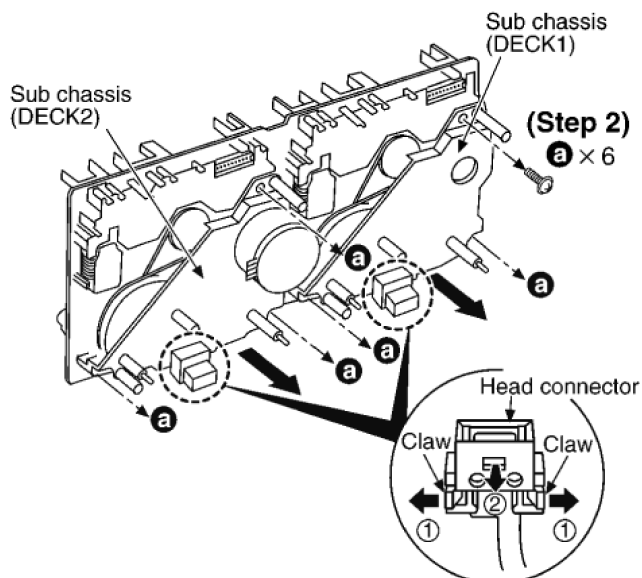
Step 14 Remove 2 screws.

18.12.1. Replacement for the CD motor ass'y, capstan belt A, capstan belt B and winding belt

Step 1 Release the 2 claws, and then remove the head connector.

Step 2 Remove 6 screws.

Step 3 Remove the sub chassis.



Step 4 Remove 2 screws.

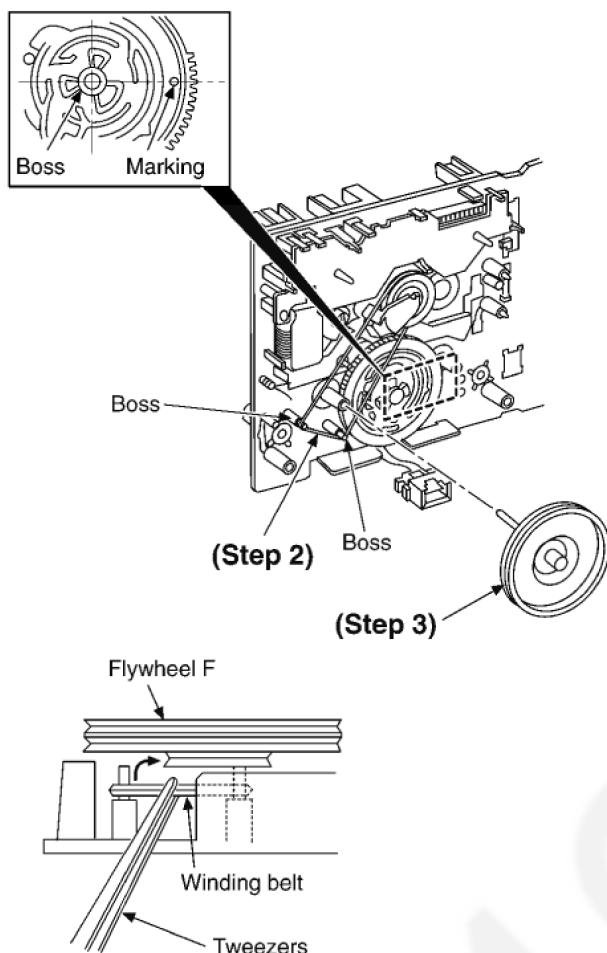
Step 5 Remove the flywheel R.

Step 6 Release the claw of tape side, and then remove the winding lever and spring.

Step 7 Remove the flywheel F.

[Installation of the belt]

Step 1 The boss and marking should be positioned horizontally.



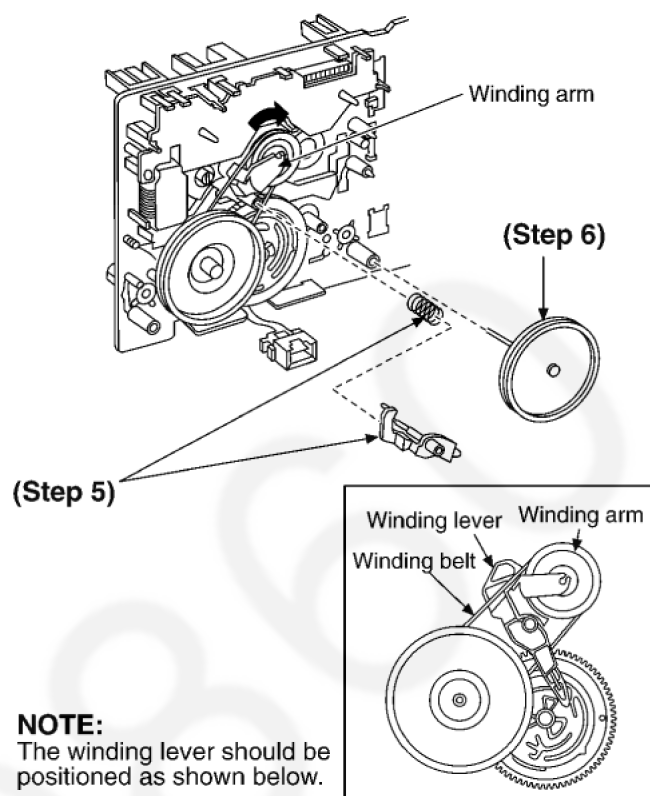
Step 2 Put the winding belt on the pulley temporarily.

Step 3 Install the flywheel F.

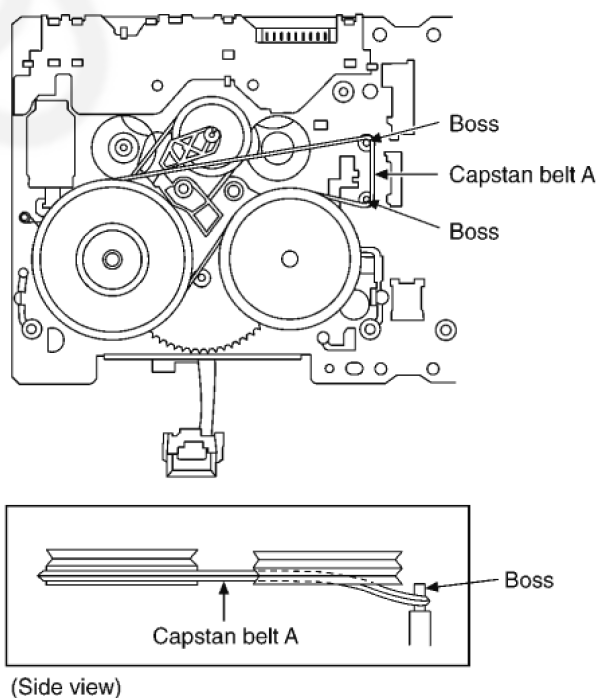
Step 4 Put the winding belt on the flywheel F.

Step 5 Install the winding lever and spring while pressing the winding arm in the direction of arrow.

Step 6 Install the flywheel R.

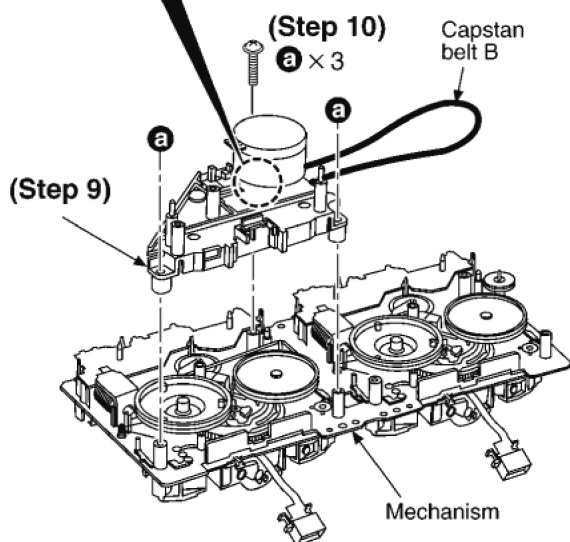
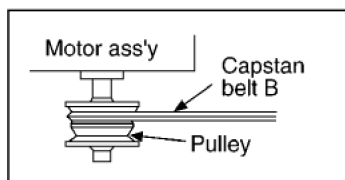


Step 7 Put the capstan belt A temporarily as shown below.



Step 8 Put the capstan belt B on the motor ass'y pulley.

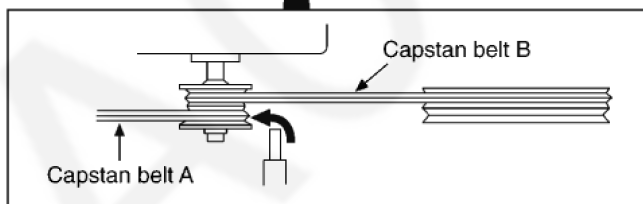
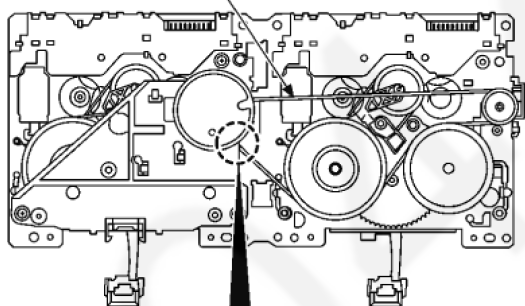
Step 9 Install the sub chassis to the mechanism, and then tighten screws.



Step 10 Remove 3 screws.

Step 11 Put the capstan belt B as shown below.

(Step 11)

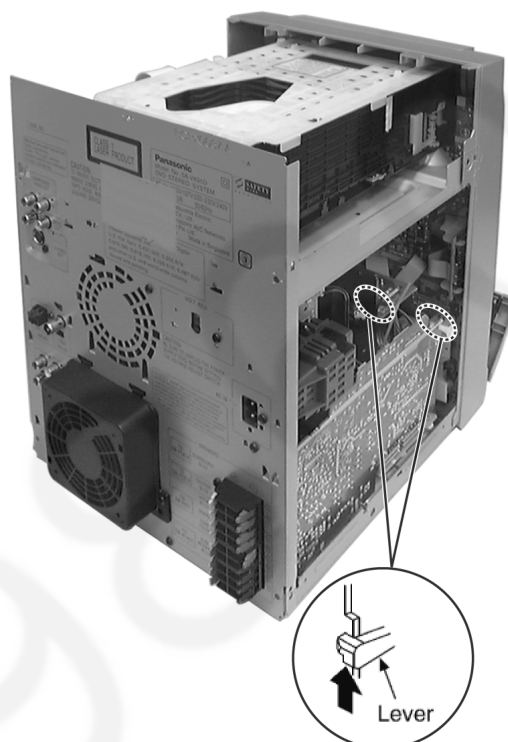


Step 12 Put the capstan belt A on the motor ass'y pulley.

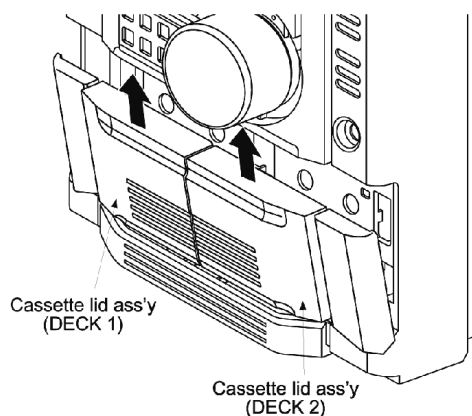
18.13. Replacement for the cassette lid ass'y

· Follow the (Step 1) - (Step 2) of Item 18.2.

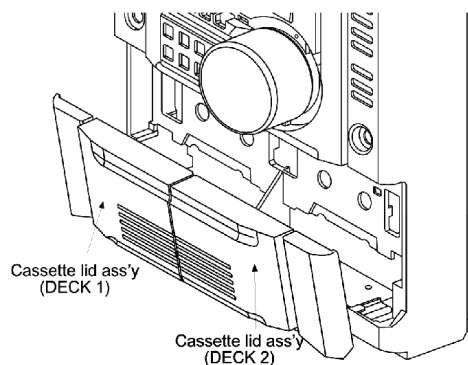
Step 1 Force the lever upward, open the cassette lid ass'y. (For DECK1 and DECK2)



Step 2 Lift up the cassette lid ass'y in the direction of arrow. (For DECK1 and DECK2).



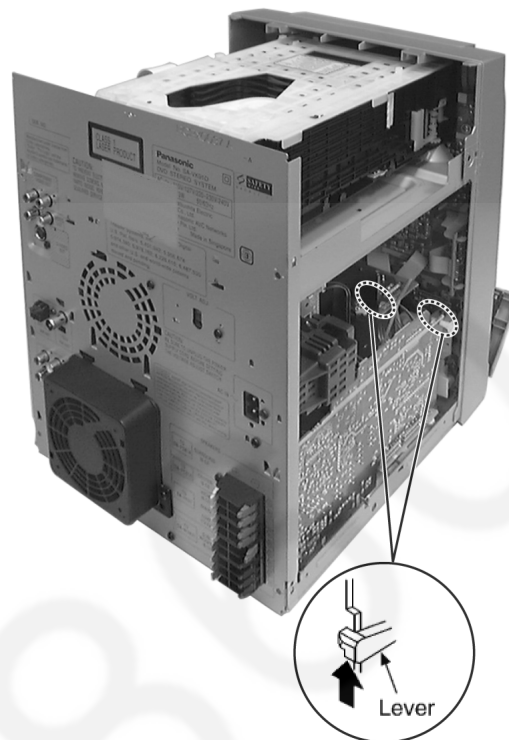
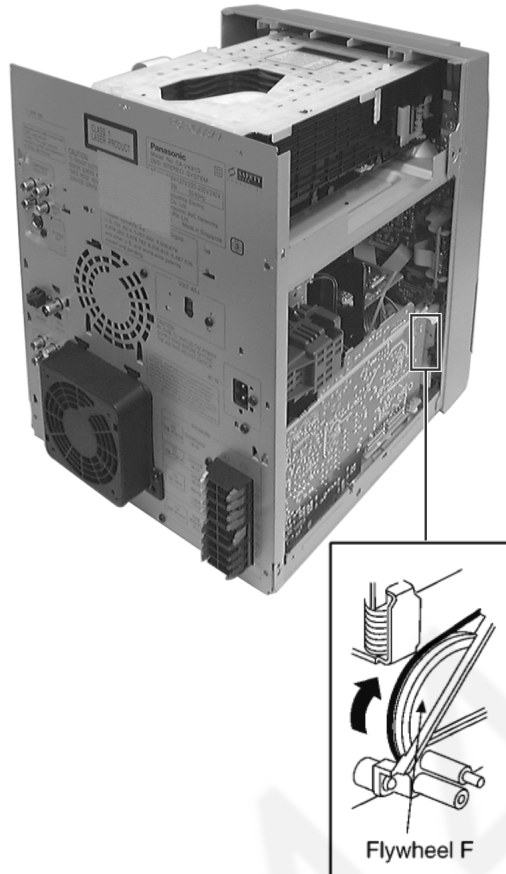
Step 3 Remove the cassette lid ass'y. (For DECK1 and DECK2).



18.14. Counter-measure for tape trouble

- Follow the (Step 1) - (Step 2) of Item 18.2.

Step 1 If a cassette tape cannot be removed from the deck since the tape is caught by the capstan or pinch roller during playback or recording, rotate the flywheel F in the direction of the arrow to remove the tape.



Step 2 Force the lever upward and open the cassette lid ass'y. Take the cassette tape off.

19 Service Position

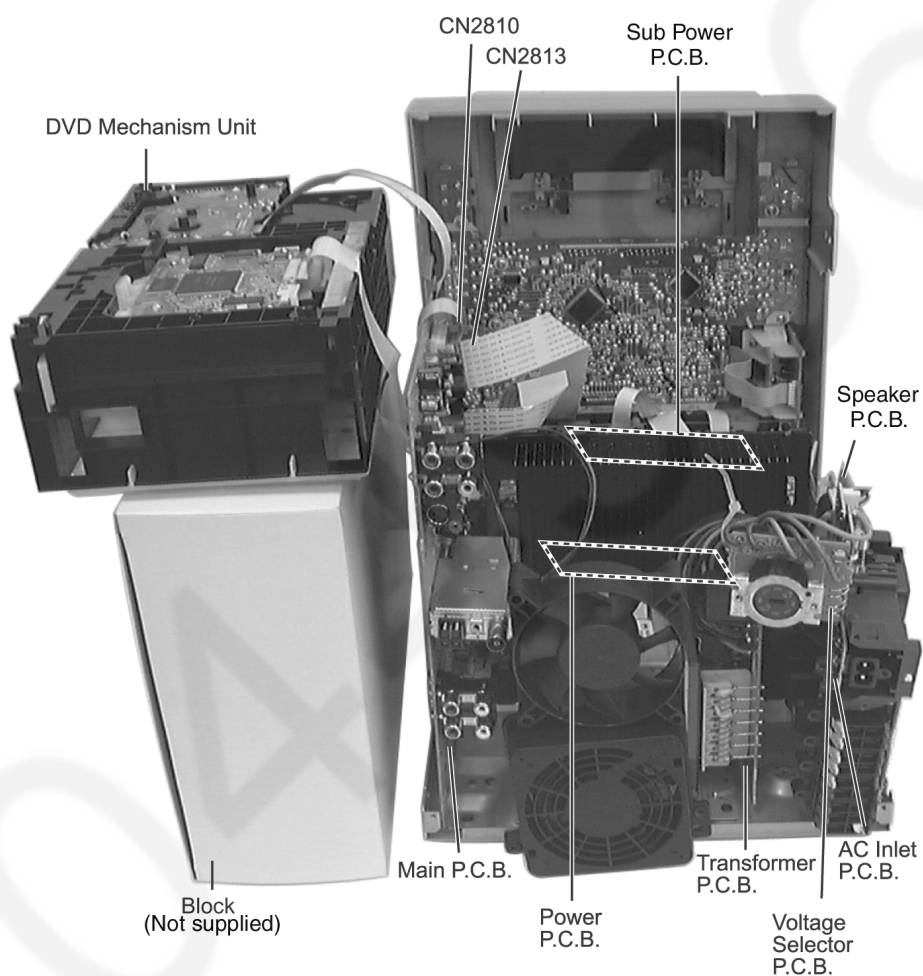
19.1. Checking Procedure

Note:

For the disassembling procedure, see Section 18.

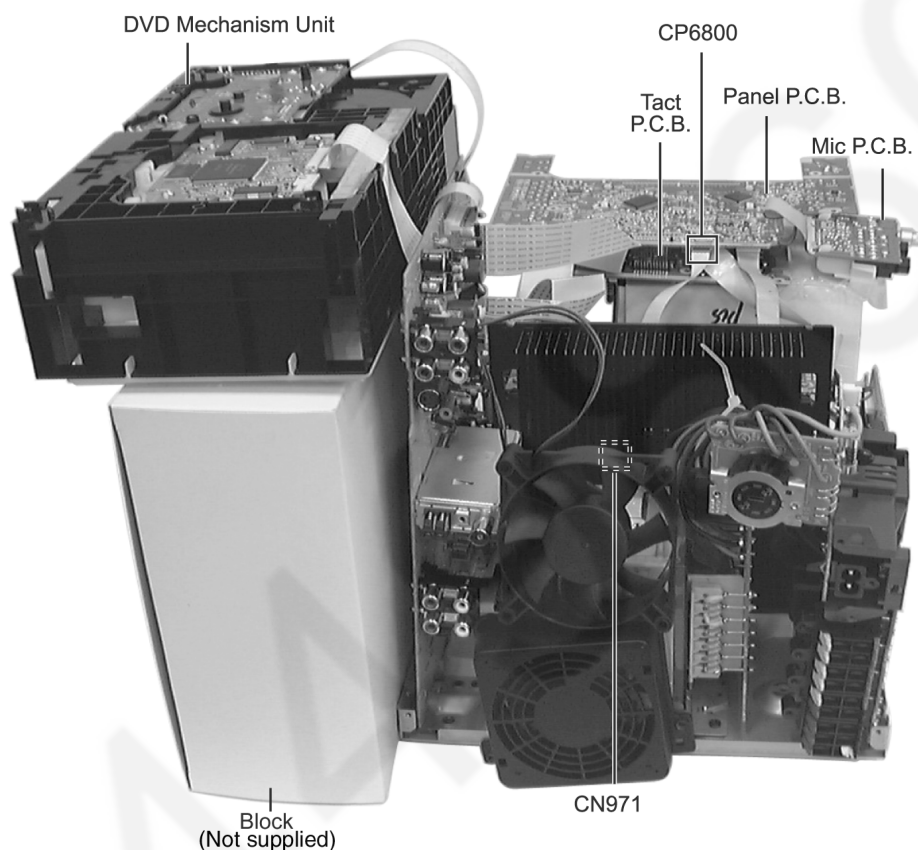
19.2. Checking the Main P.C.B., Speaker P.C.B., Power P.C.B., Sub Power P.C.B., Transformer P.C.B., Voltage Selector P.C.B. and AC Inlet P.C.B.

1. Remove Top Cabinet and Rear Panel.
2. Remove DVD Mechanism Unit.
3. Connect FFC board (CN2810 & CN2813) from DVD Mechanism Unit.



19.3. Checking the Panel P.C.B., Tact P.C.B., Mic P.C.B., Deck P.C.B. & Deck Mechanism P.C.B.

1. Remove Top Cabinet and Rear Panel.
2. Remove DVD Mechanism Unit.
3. Remove volume knob at front panel.
4. Remove Panel P.C.B., Mic P.C.B. & Tact Switch P.C.B.
5. Remove Deck Mechanism P.C.B.
6. Use the extension cable (REEX0310 - 10 Pins) to reconnect (CP6800) Panel P.C.B. and (CN971) Deck Mechanism P.C.B.



Service Tools	
Extension FFC Panel P.C.B. - Deck Mechanism P.C.B.	REEX0310 (10 Pins)

20 Measurements and Adjustments

20.1. Cassette Deck Section

- Measurement Condition
 - Reverse-mode selector switch: 
 - Tape edit: NORMAL
 - Make sure head, capstan and press roller are clean.
 - Judgeable room temperature $20 \pm 5^{\circ}\text{C}$ ($68 \pm 9^{\circ}\text{F}$)
- Measuring instrument
 - EVM (DC Electronic voltmeter)
 - Digital frequency counter
- Test Tape
 - Tape speed gain adjustment (3 kHz, -10 dB); QZZCWAT

20.1.1. Head Azimuth Adjustment (Deck 1/2)

Caution:

- Please replace both azimuth adjustment screw and springs simultaneously when readjusting the head azimuth. (shown in Fig. 2) Even if you wish to readjust the head azimuth without replacing the screws and springs, a fine adjustment to the azimuth screw and spring.
- Please remove the screw-locking bond left on the head base when replacing the azimuth screw.
- If you wish to readjust the head azimuth, be sure to adjust with adhering the cassette tape closely to the mechanism by pushing the center of cassette tape with your finger. (shown in Fig. 3)

1. Playback the azimuth adjustment portion (8 kHz, -20dB) of the test tape (QZZCFM) in the forward play mode. Vary the azimuth adjustment screw until the output of the R-CH (PB OUT-R) are maximized.
2. Perform the same adjustment in the reverse play mode.
3. After the adjustment, apply screwlock to the azimuth adjusting screw.

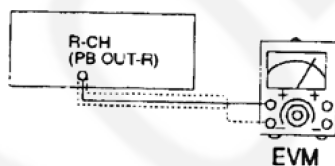


Fig. 1

-  Screw
-  Springs

Fig. 2

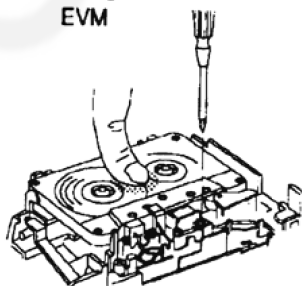


Fig. 3

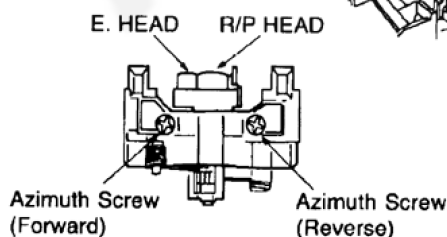


Fig. 4

20.1.2. Tape Speed Adjustment (Deck 1/2)

1. Set the tape edit button to "NORMAL" position.
2. Insert the test tape (QZZCWAT) to DECK 2 and playback (FWD side) the middle portion of it.
3. Adjust Motor VR (DECK 2) for the output value shown below.

Adjustment target: 2940 ~ 3060 Hz (NORMAL speed)

4. After alignment, assure that the output frequency of the DECK 1 FWD are within ± 60 Hz of the value of the output frequency of DECK 2 FWD.

UNIT

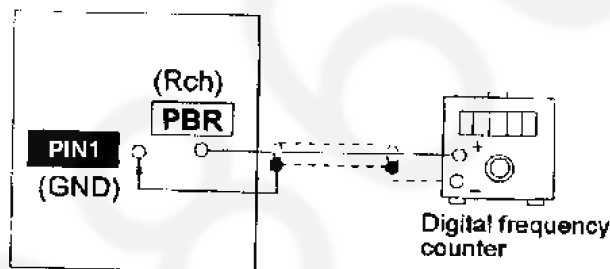


Fig. 1

20.1.3. Bias and Erase Voltage Check

1. Set the unit "AUX" position.
2. Insert the Normal blank tape (QZZCRA) into DECK 2 and the unit to "REC" mode (use "I REC/STOP" key).
3. Measure and make sure that the output is within the standard value.

Bias voltage for Deck 2	14 $\pm$ 4mV (Normal)
Erase voltage for Deck 2	80mV (Normal)

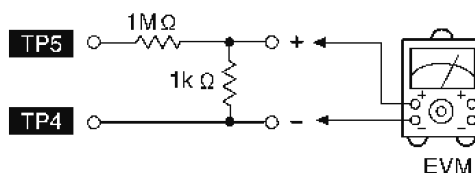


Fig. 2

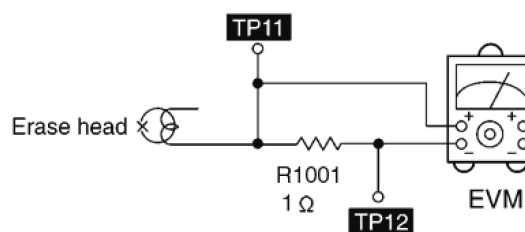


Fig. 3

20.1.4. Bias Frequency Adjustment (Deck 1/2)

1. Set the unit to "AUX" position.
2. Insert the Normal blank tape (QZZCRA) into DECK 2 and set the unit to "REC" mode (I use "REC/STOP" key).
3. Adjust L1002 so that the output frequency is within the standard value.

Standard Value: $97 \pm 8 \text{ kHz}$

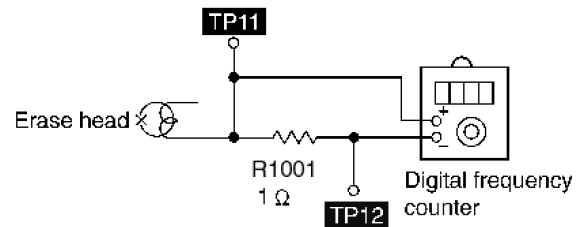


Fig. 4

20.2. Tuner Section

20.2.1. AM-IF Alignment

1. Connect the instrument as shown in Fig. 5.
2. Set the unit to AM mode.
3. Apply signal as shown in Fig. 5 from AM-SG.
4. Adjust Z102 so that the output frequency is maximized in Fig. 6.

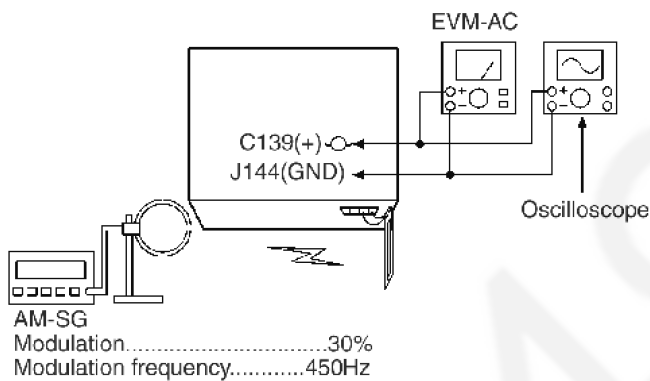


Fig. 5

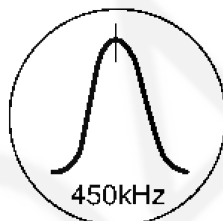


Fig. 6

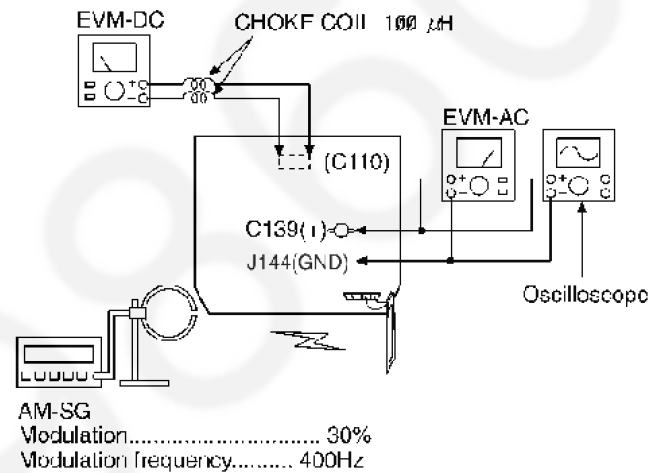


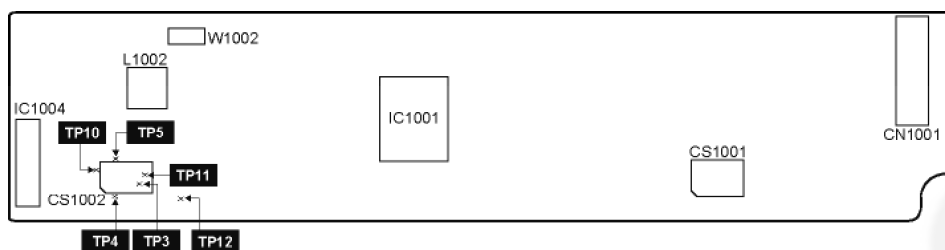
Fig. 7

20.2.2. AM RF Adjustment

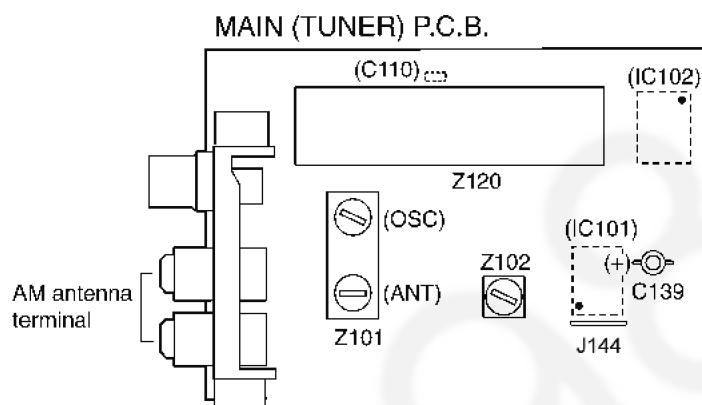
1. Connect the instrument as shown in Fig. 7.
2. Set the unit to AM mode.
3. Set AM-SG to 520kHz.
4. Receive 520kHz in the unit.
5. Adjust Z101 (OSC) so that the EVM-AC is maximized.
6. Set AM-SG to 600Hz.
7. Receive 600Hz in the unit.
8. Adjust Z101 (ANT) so that the EVM-SG is maximized.
9. Set AM-SG to 520kHz.
10. Receive 520kHz in the unit.
11. Adjust Z101 (OSC) so that the EVM-DC value is with $1.1 \pm 0.5 \text{ V}$.

20.3. Alignment Points

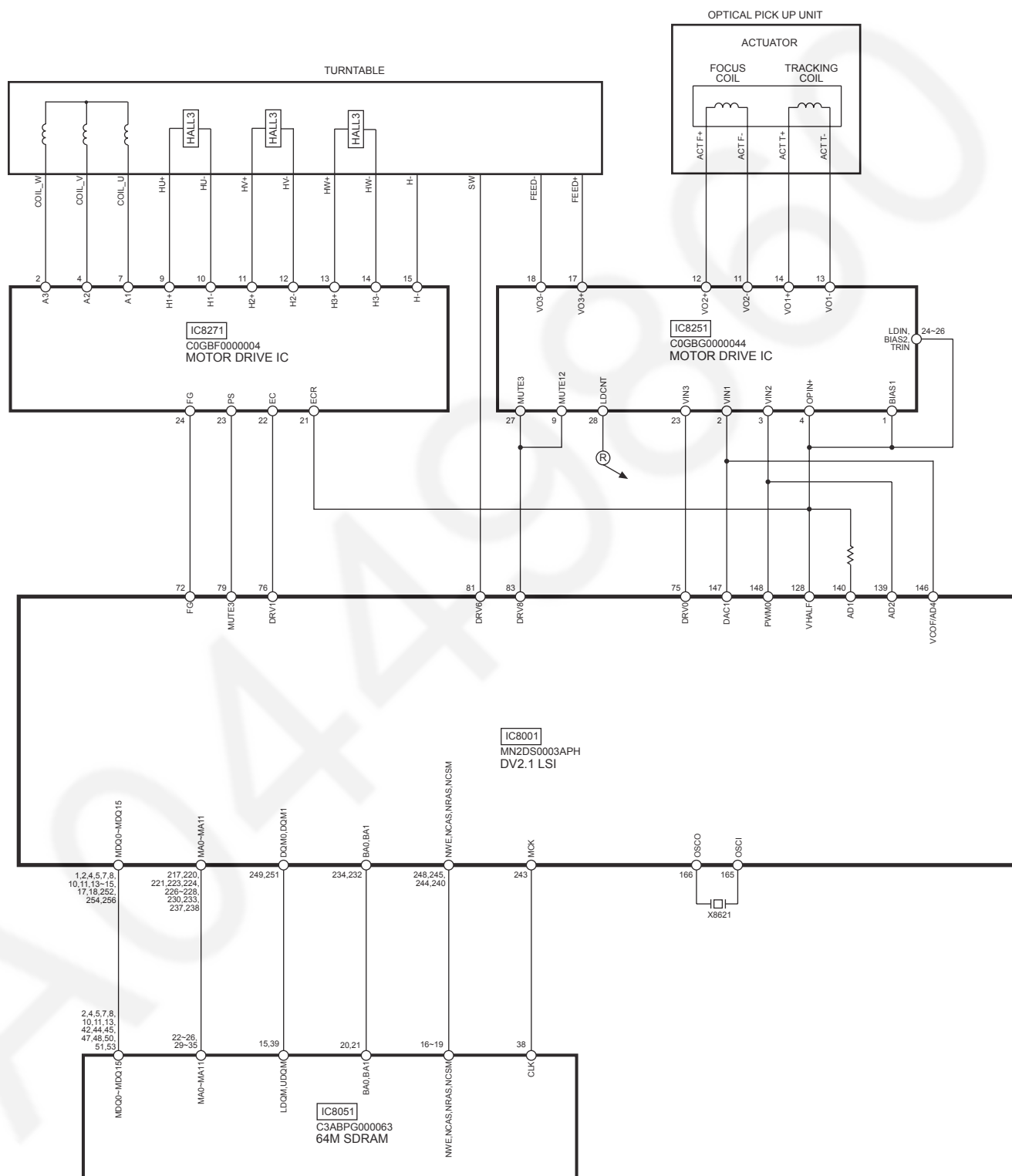
20.3.1. Cassette Deck Section

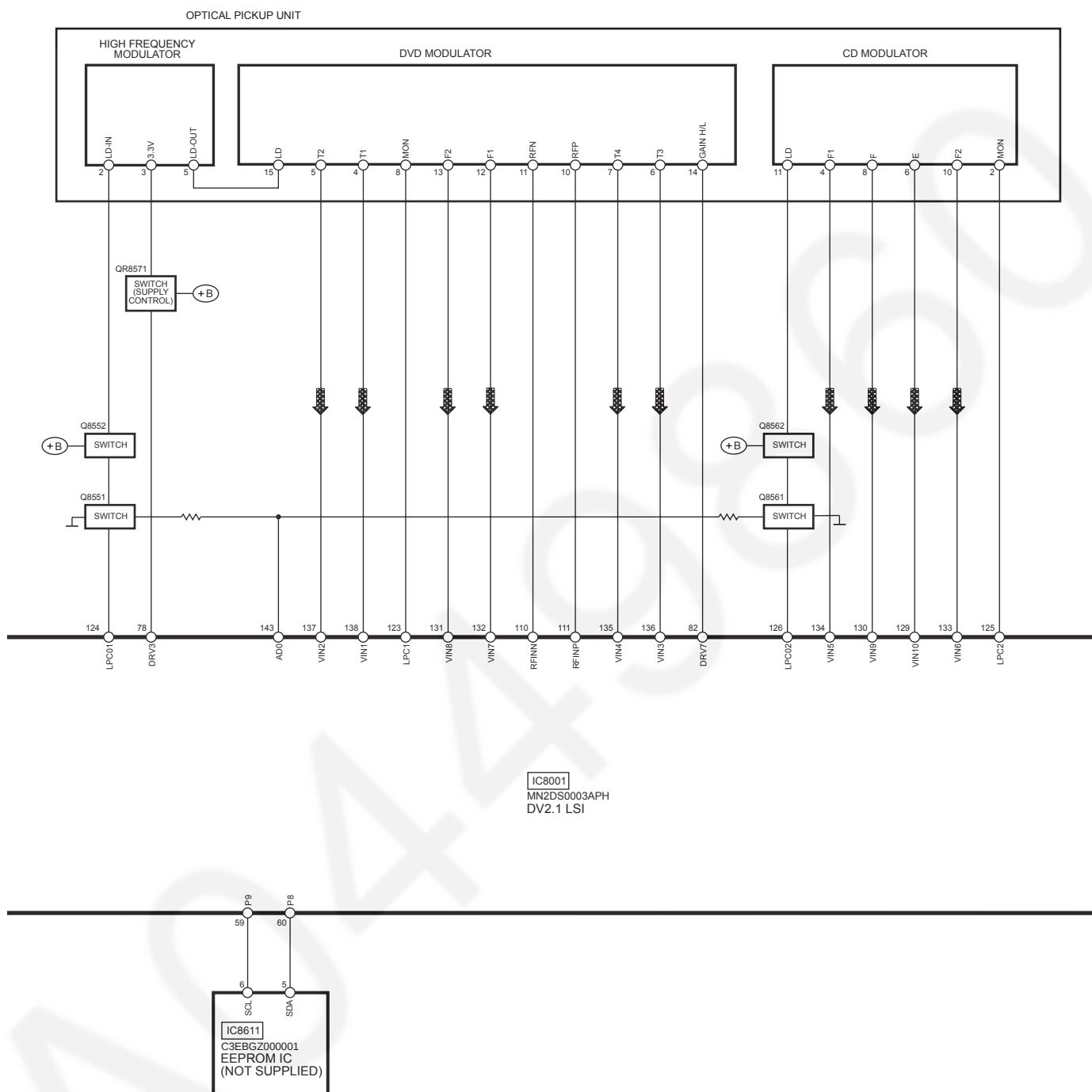


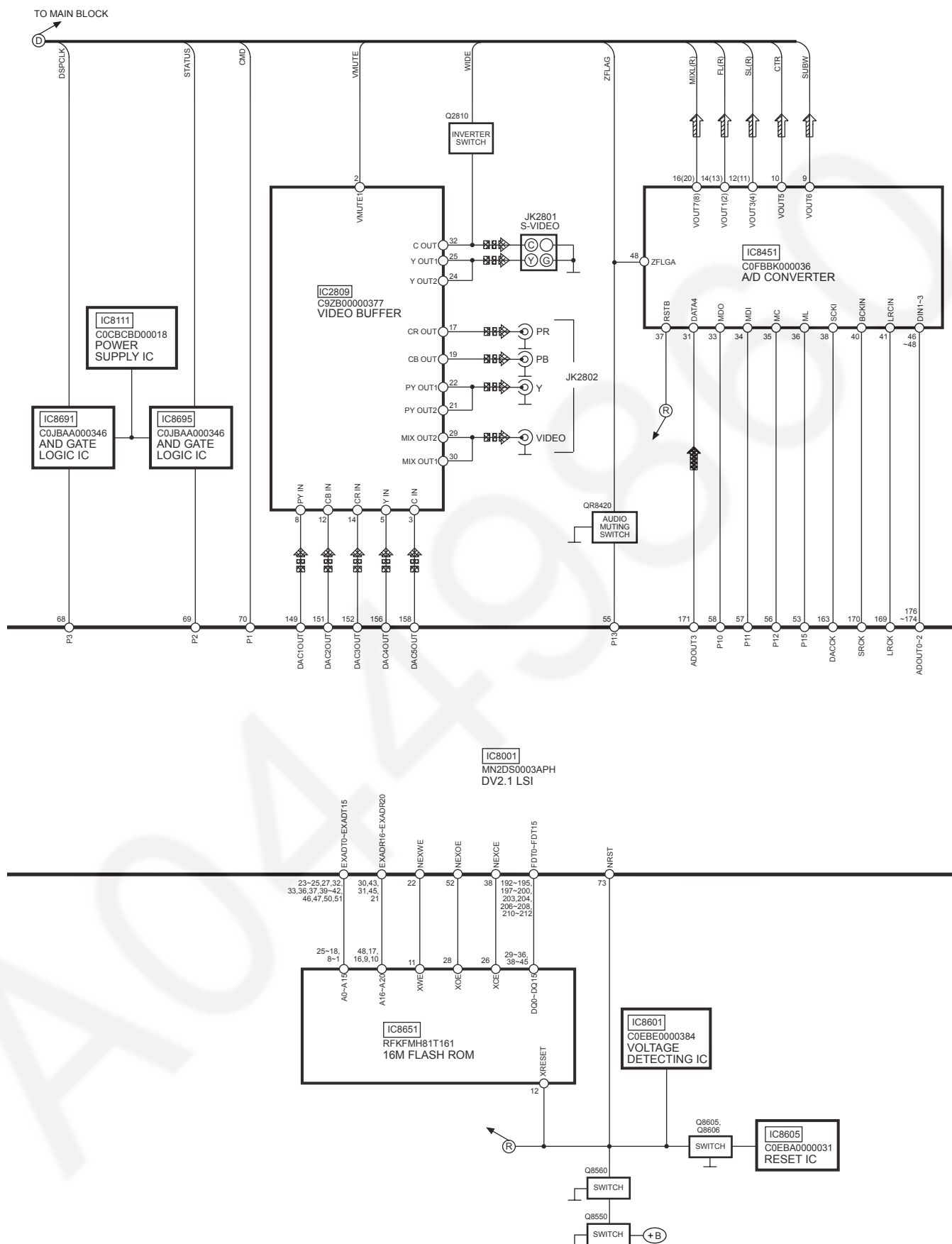
20.3.2. Adjustment Point

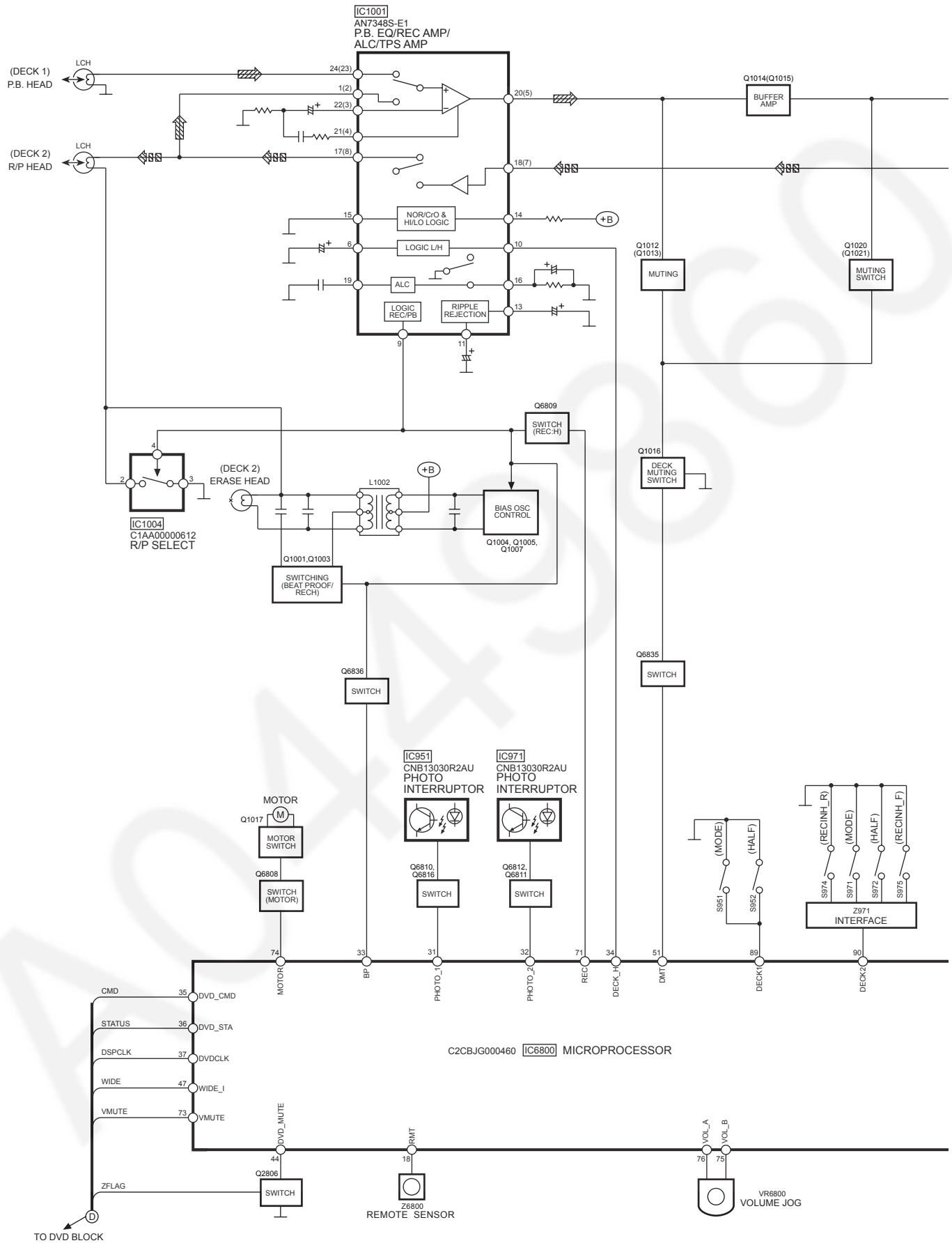


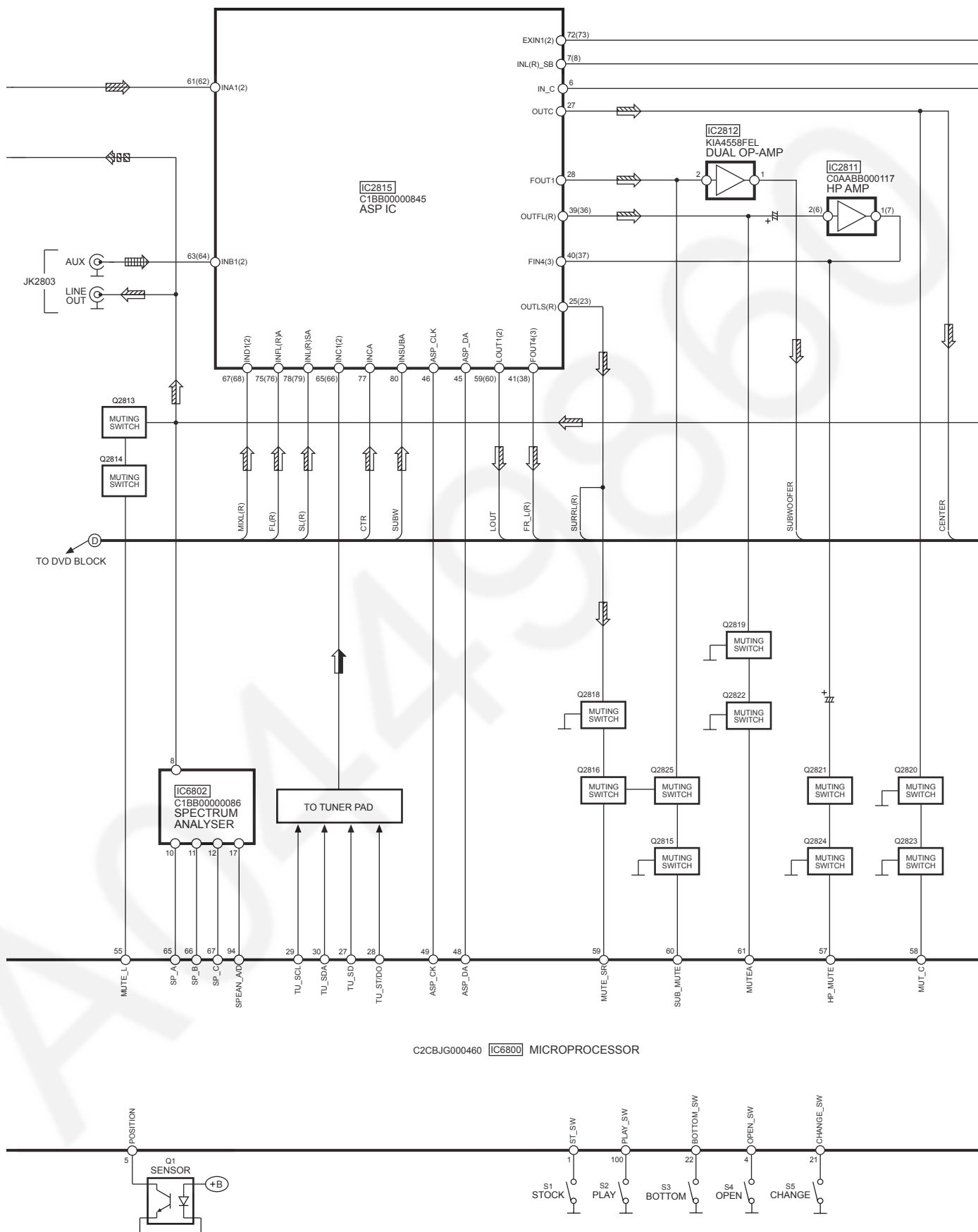
21 Block Diagram

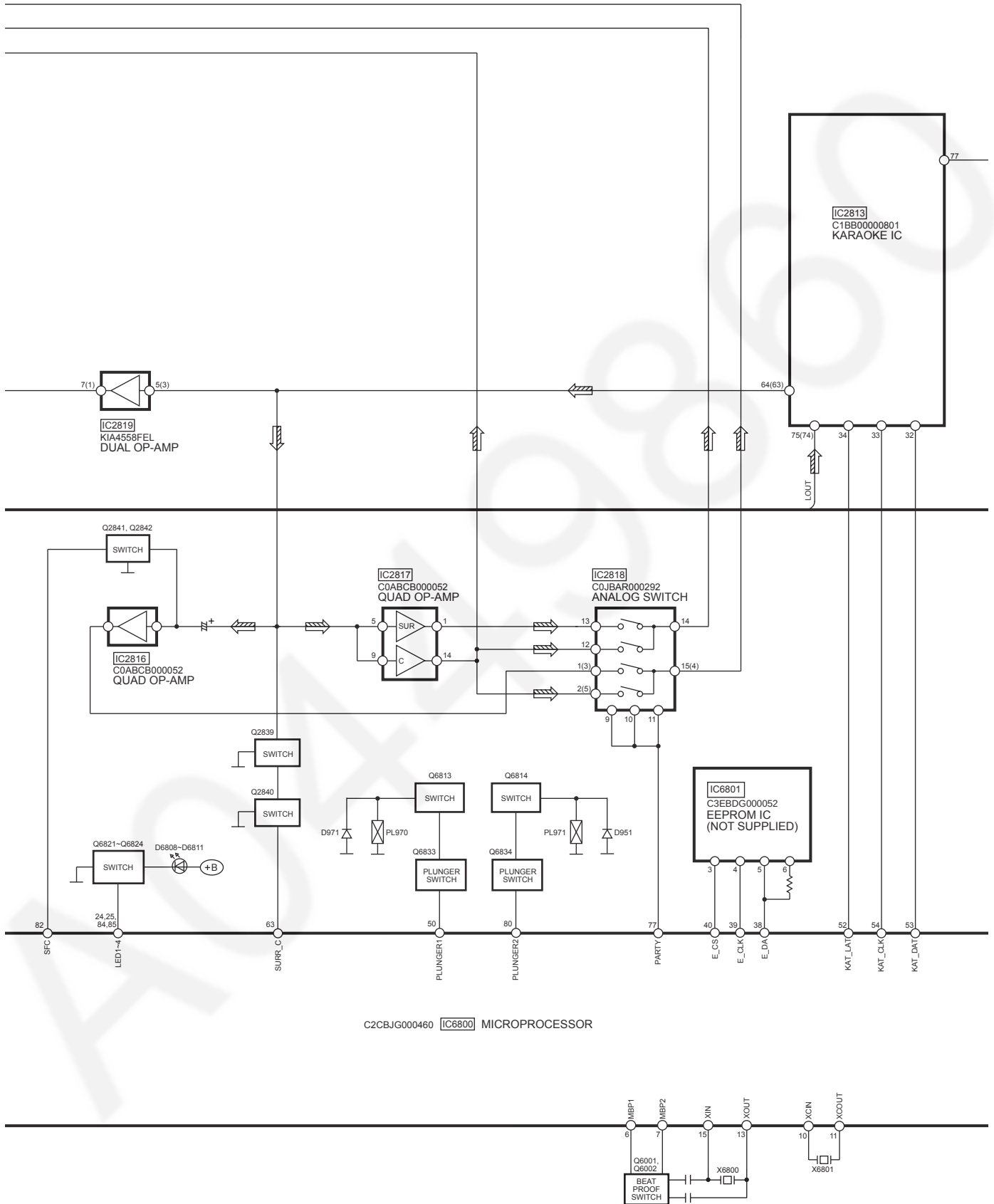


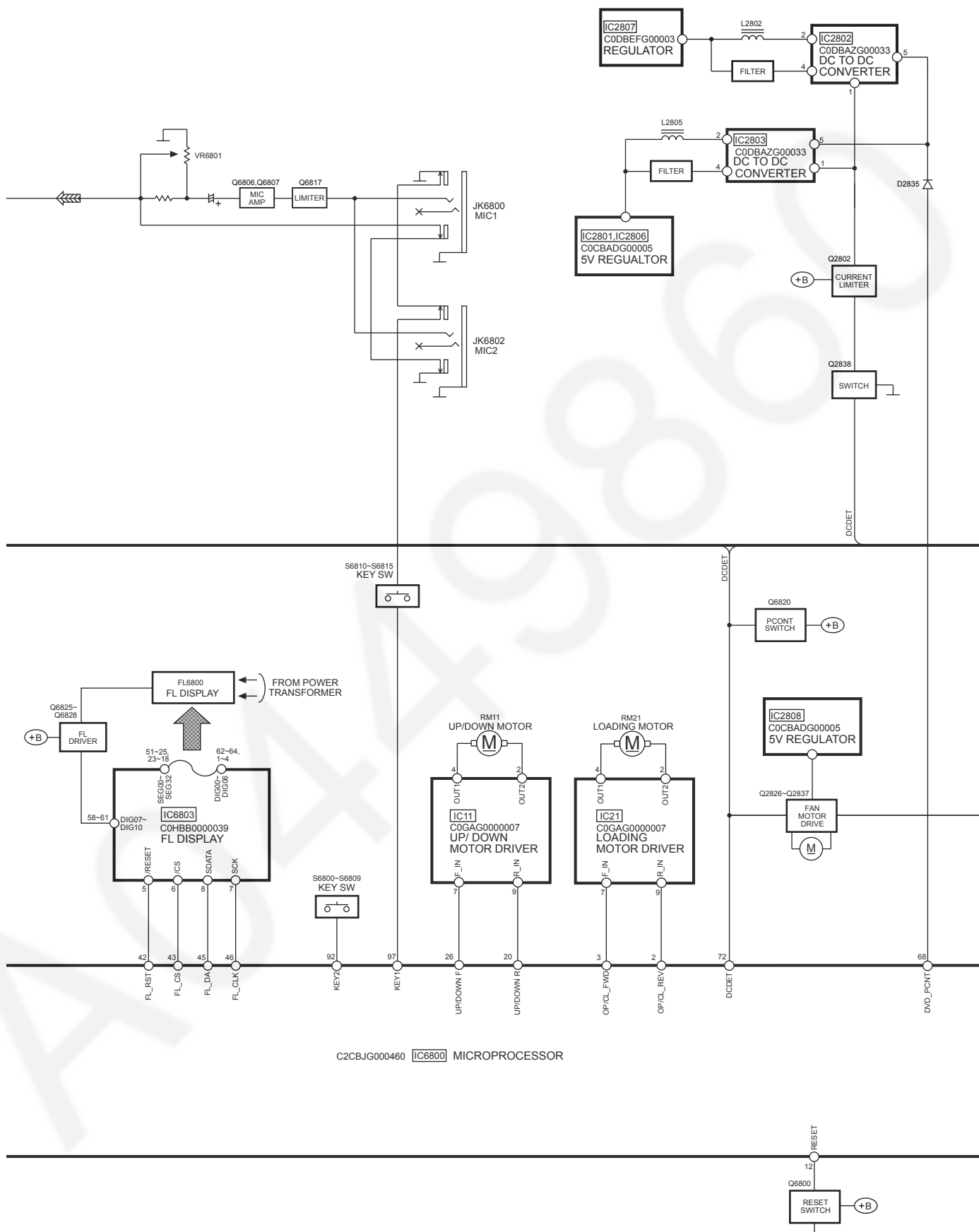


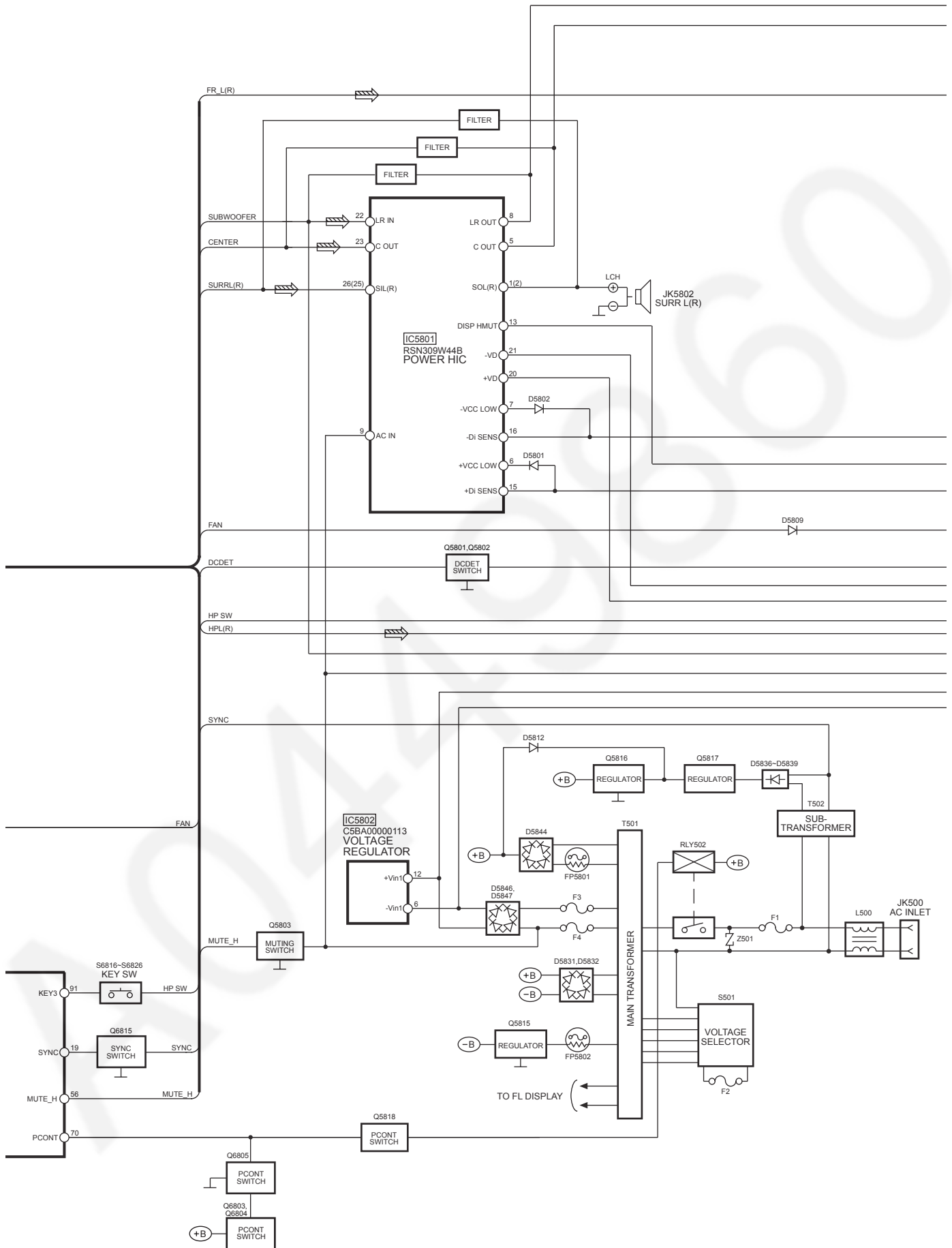


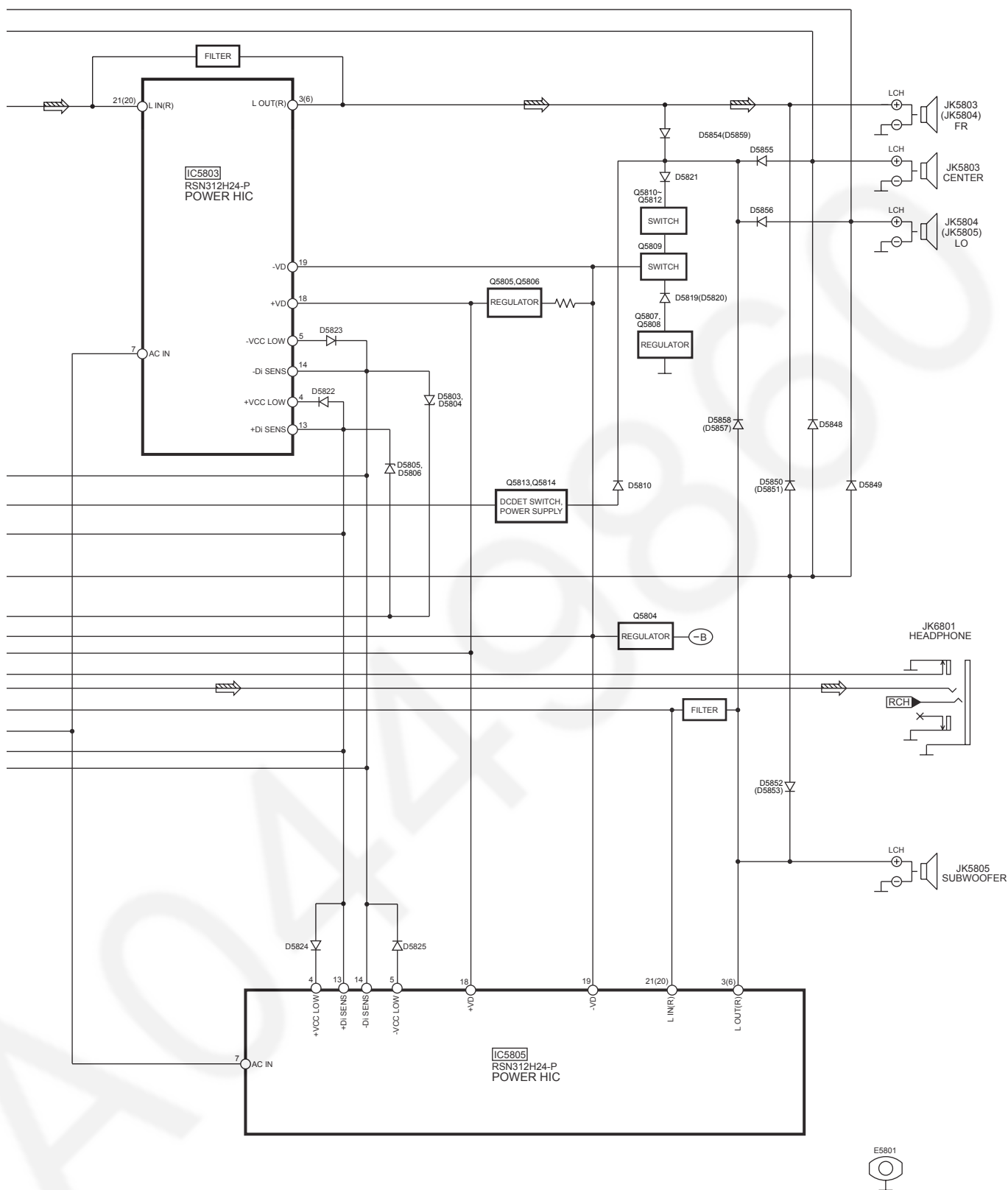












SIGNAL LINES

	: MAIN SIGNAL LINE		: CD-DA (AUDIO /VIDEO) SIGNAL LINE		: PLAYBACK SIGNAL LINE
	: AUX SIGNAL LINE		: DVD AUDIO SIGNAL LINE		: RECORD SIGNAL LINE
	: FM /AM SIGNAL LINE		: DVD VIDEO SIGNAL LINE		: MIC SIGNAL LINE

() Indicates the Pin No. of Right Channel.

NOTE : Signal Lines are applicable to the Left Channel only.

22 Schematic Diagram

(All schematic diagrams may be modified at any time with the development of the new technology)

Note:

S1	: Stock Switch
S2	: Play Switch
S3	: Bottom Switch
S4	: Open Switch
S5	: Change Switch
S501	: Voltage Selector Switch
S951	: Mode Switch
S952	: Half Switch
S971	: Mode Switch
S972	: Half Switch
S974	: Recinh_R Switch
S975	: Recinh_F Switch
S6800	: DVD/CD Switch
S6801	: Tape Switch
S6802	: Tuner Switch
S6803	: Aux Switch
S6804	: Deck 1 Switch
S6805	: Display Switch
S6806	: Deck 2 Switch
S6807	: Rew Switch
S6808	: FF Switch
S6809	: Stop Switch
S6810	: Power Switch
S6811	: Disc Check Switch
S6812	: Multi Re-Master Switch
S6813	: Super Surround Switch
S6814	: Deck1/2 Switch
S6815	: Rec Switch
S6816	: CD Open/Close Switch
S6817	: Disc Change Switch
S6819	: Disc 5 Switch
S6820	: Disc 4 Switch
S6821	: Disc 3 Switch
S6822	: Disc 2 Switch
S6823	: Disc 1 Switch
S6824	: SSEQ Switch
S6825	: S.Woofer Switch
S6826	: Sound EQ Switch
VR6800	: VR Volume Jog
VR6801	: VR Mic

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

(()) : CD < > : FM

• Importance safety notice :

Components identified by  mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

Caution !

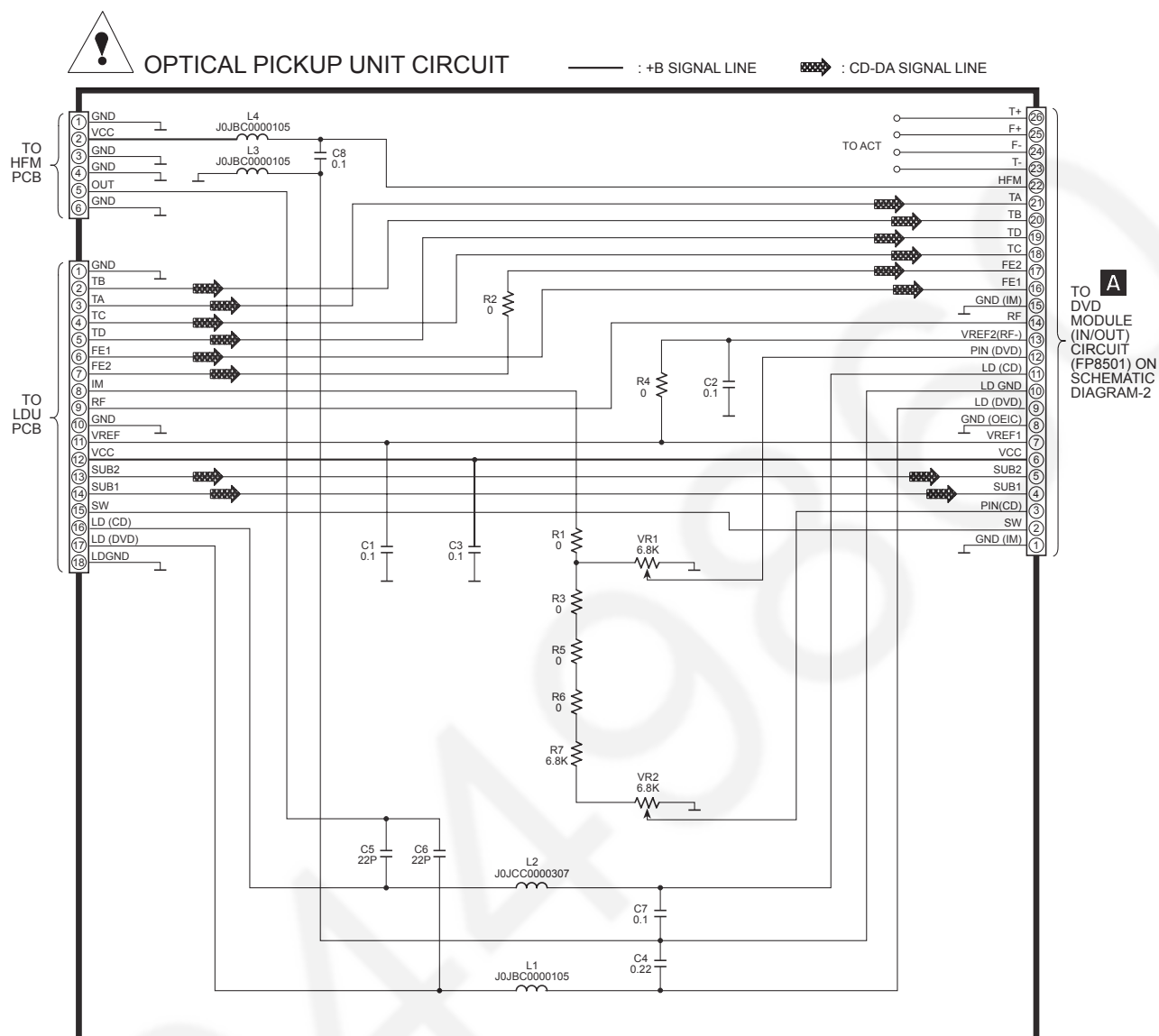
IC, LSI and VLSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.
- Put a conductive mat on the work table.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

22.1. Optical Pickup Unit Circuit

SCHEMATIC DIAGRAM - 1



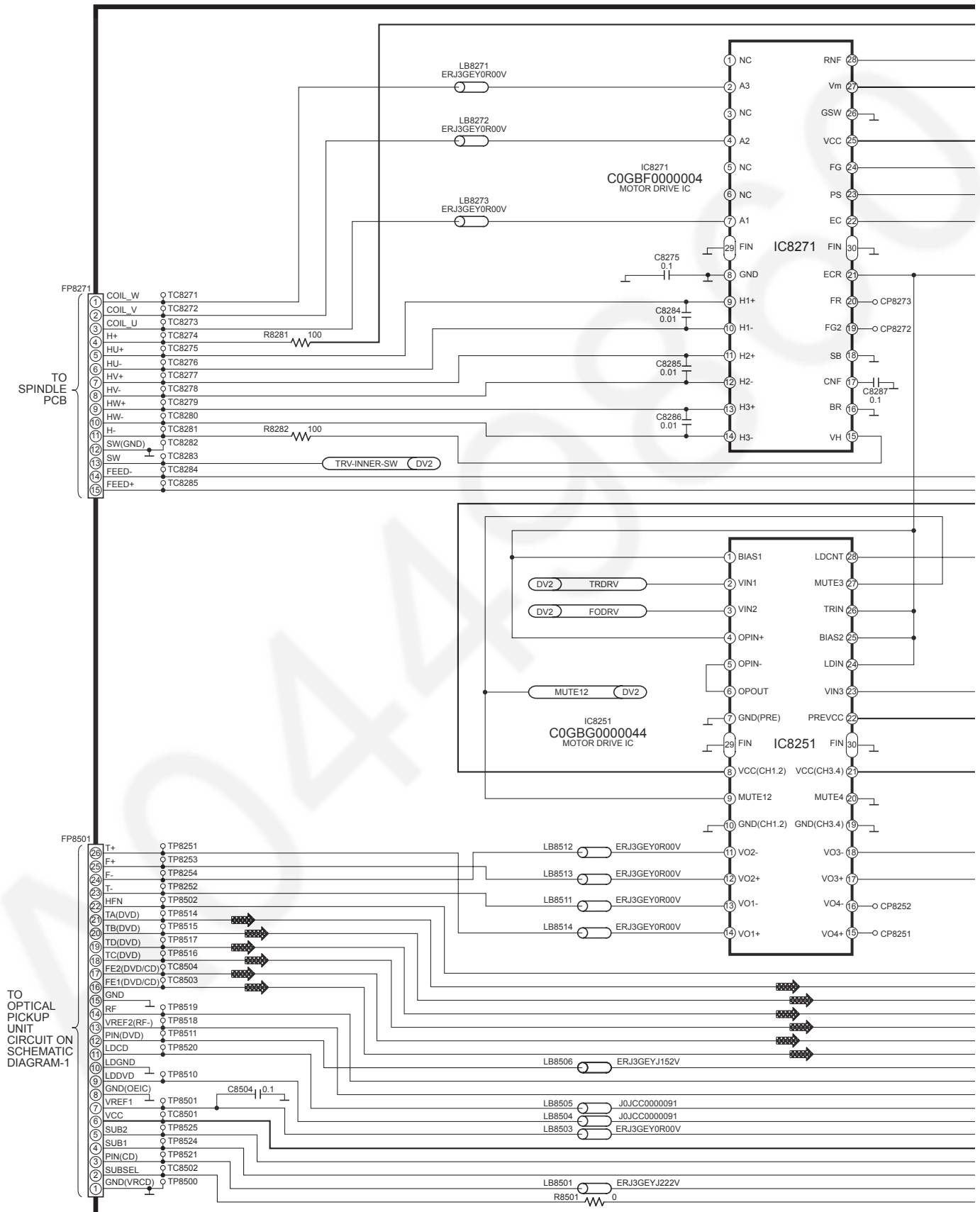
22.2. (A) DVD Module Circuit

SCHEMATIC DIAGRAM - 2

A

DVD MODULE (IN/OUT) CIRCUIT

— : +B SIGNAL LINE

 : CD-DA SIGNAL LINE


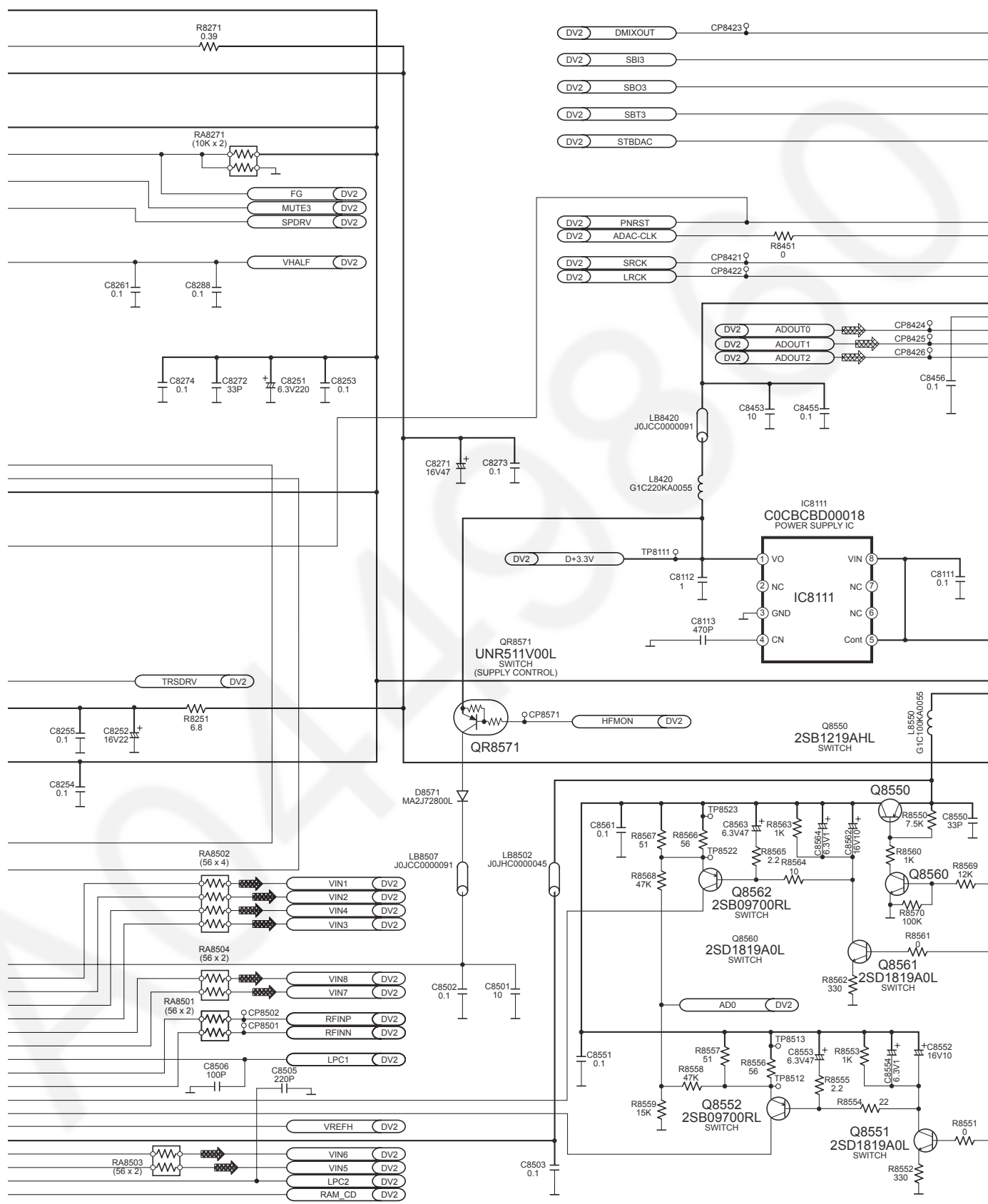
SCHEMATIC DIAGRAM - 3

A DVD MODULE (IN/OUT) CIRCUIT

— : +B SIGNAL LINE

▨ : DVD AUDIO SIGNAL LINE

▨ : CD-DA SIGNAL LINE



SCHEMATIC DIAGRAM - 4

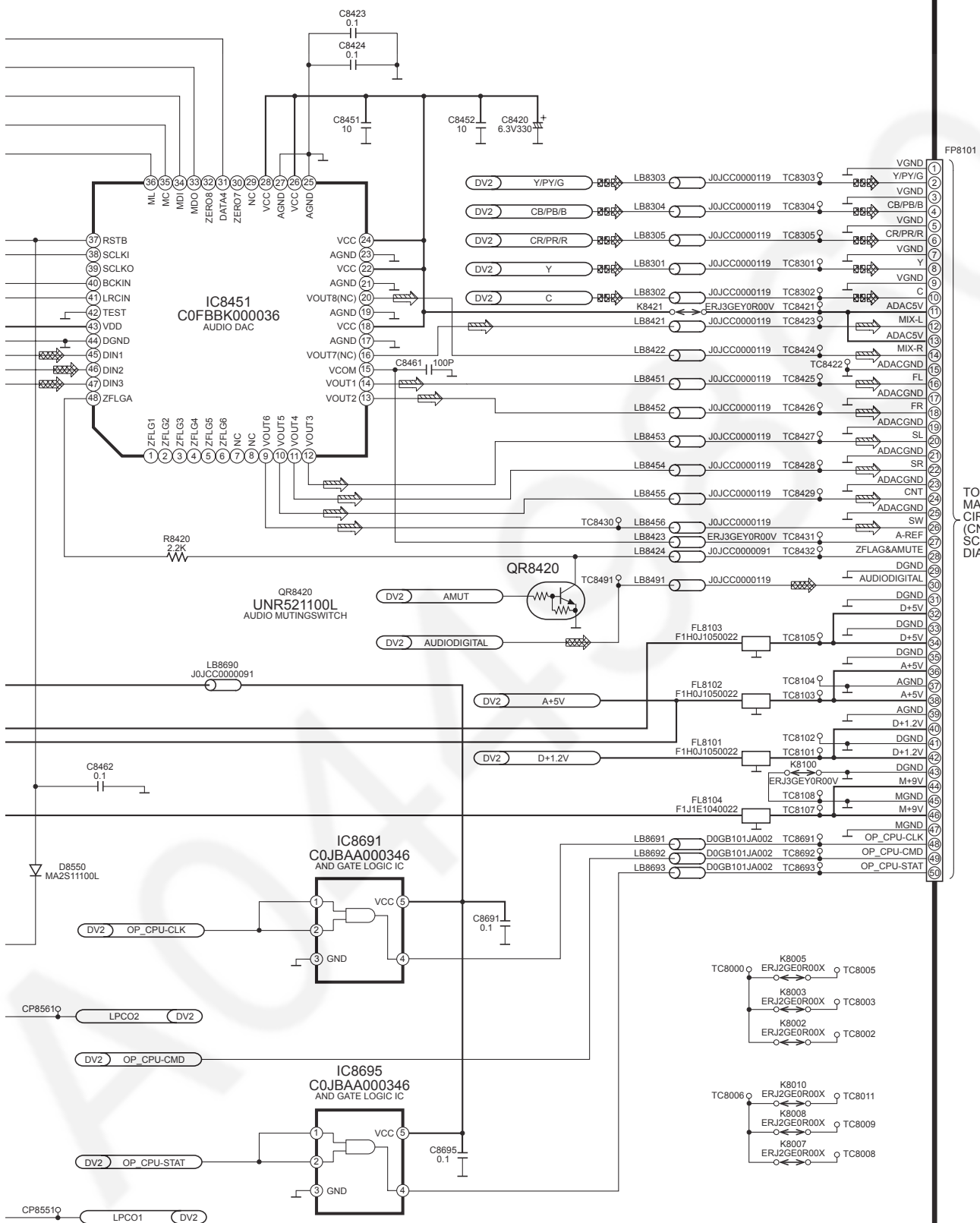
A

DVD MODULE (IN/OUT) CIRCUIT

 : MAIN SIGNAL LINE

 : +B SIGNAL LINE

 : DVD AUDIO SIGNAL LINE

 : DVD VIDEO SIGNAL LINE


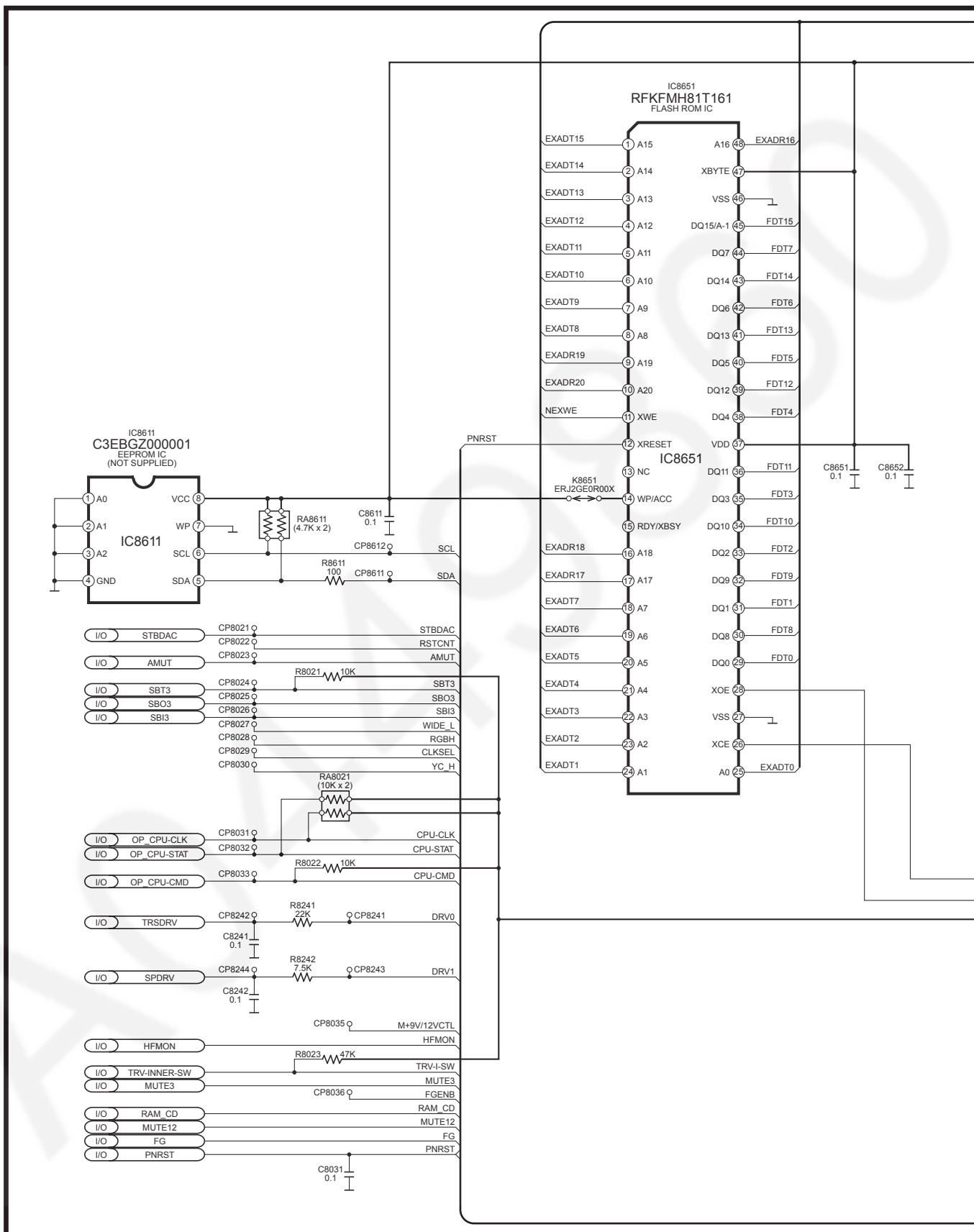
B
TO MAIN
CIRCUIT
(CN2813) ON
SCHEMATIC
DIAGRAM - 15

SCHEMATIC DIAGRAM - 5

A

DVD MODULE (DV2) CIRCUIT

— : +B SIGNAL LINE

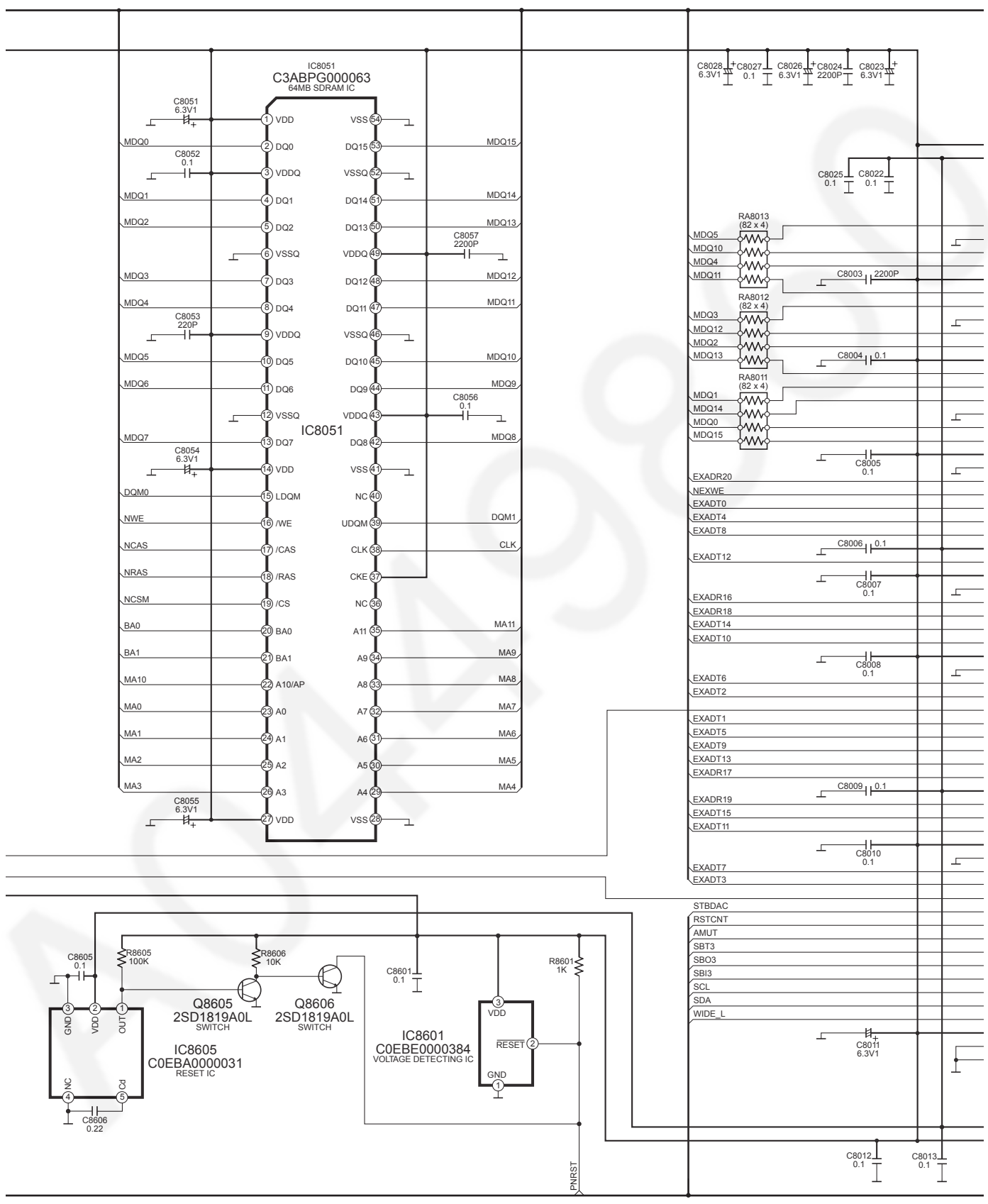


SCHEMATIC DIAGRAM - 6

A

DVD MODULE (DV2) CIRCUIT

— : +B SIGNAL LINE



SCHEMATIC DIAGRAM - 8

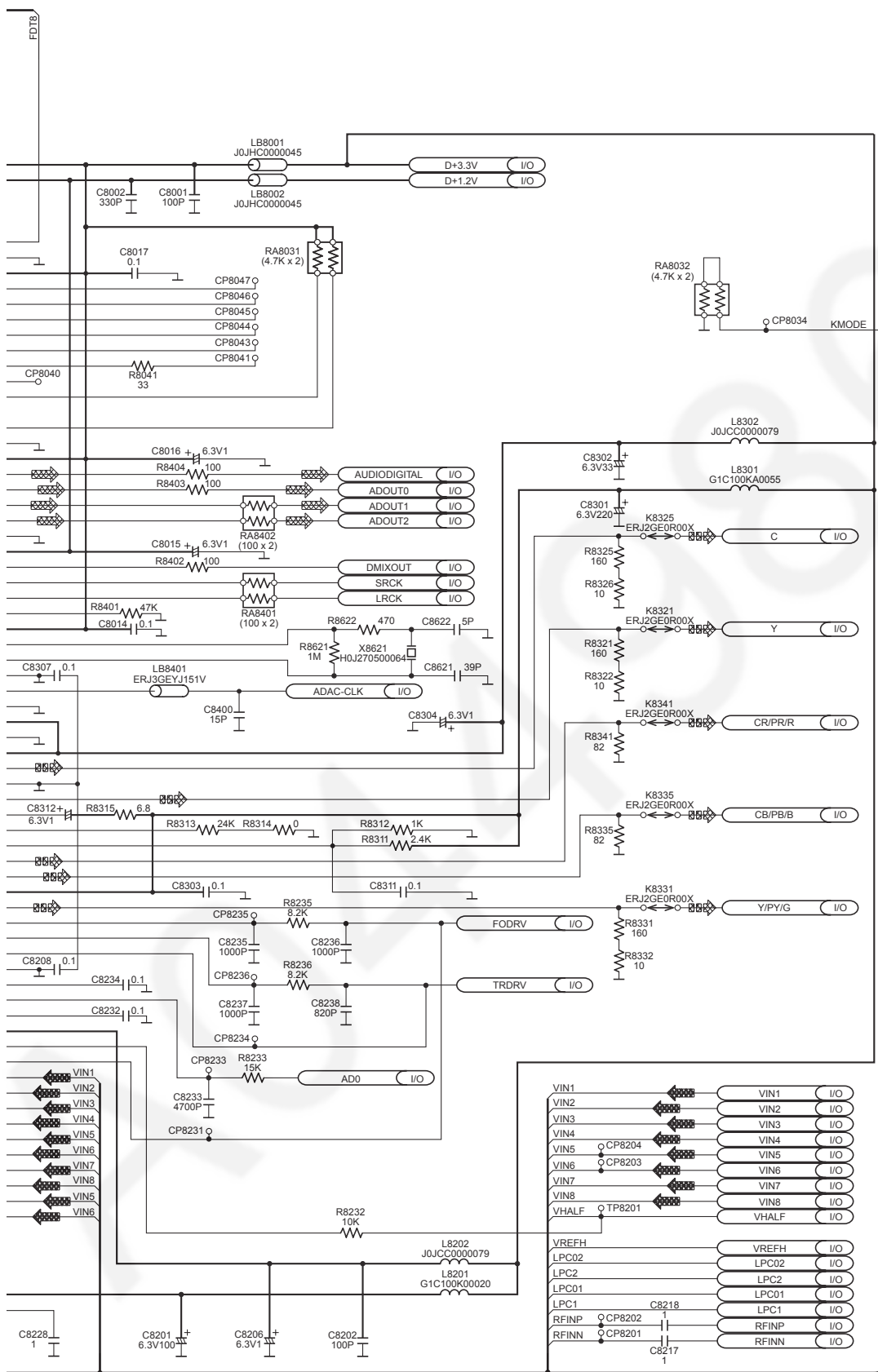
A

 DVD MODULE (DV2) CIRCUIT

 : CD-DA SIGNAL LINE

 : DVD VIDEO SIGNAL LINE

 : +B SIGNAL LINE

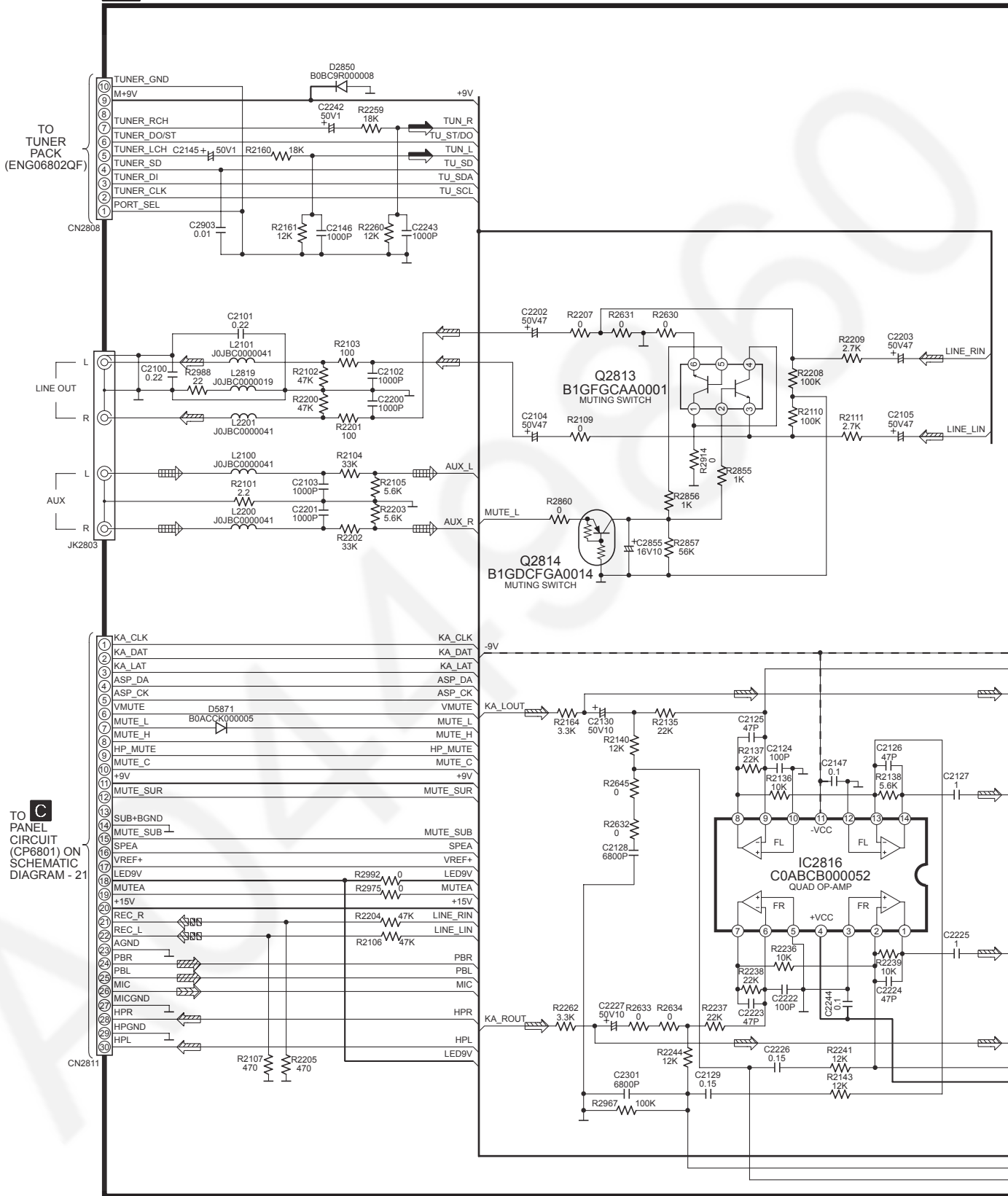
 : DVD AUDIO SIGNAL LINE


22.3. (B) Main Circuit

SCHEMATIC DIAGRAM - 9

B MAIN CIRCUIT

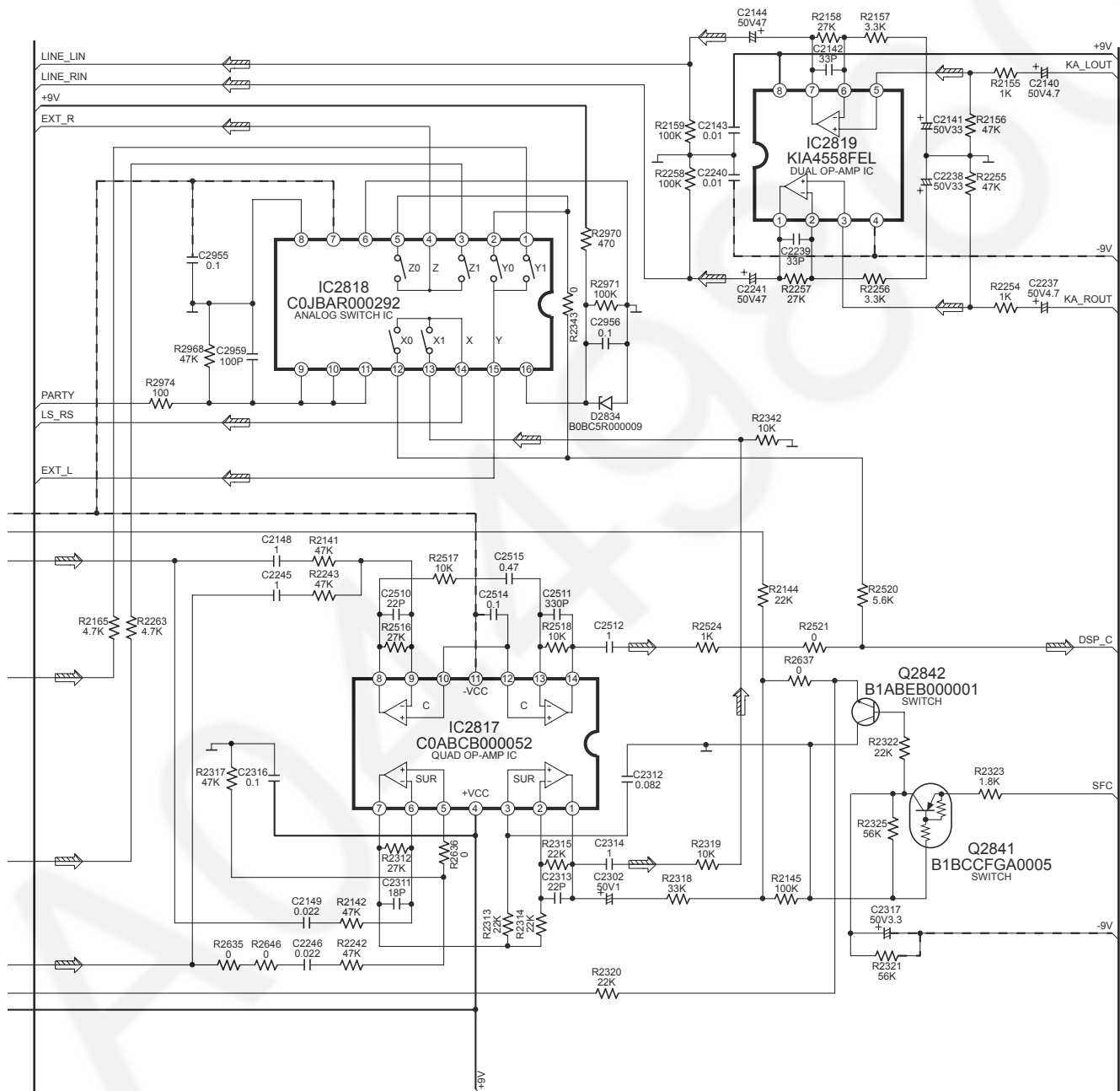
 : MIC SIGNAL LINE  : MAIN SIGNAL LINE
 : AUX SIGNAL LINE  : PLAYBACK SIGNAL LINE
 : AM/FM SIGNAL LINE  : RECORD SIGNAL LINE



SCHEMATIC DIAGRAM - 10

B MAIN CIRCUIT

— : +B SIGNAL LINE
 - - - : -B SIGNAL LINE : MAIN SIGNAL LINE



SCHEMATIC DIAGRAM - 11

B

MAIN CIRCUIT

MIC SIGNAL LINE

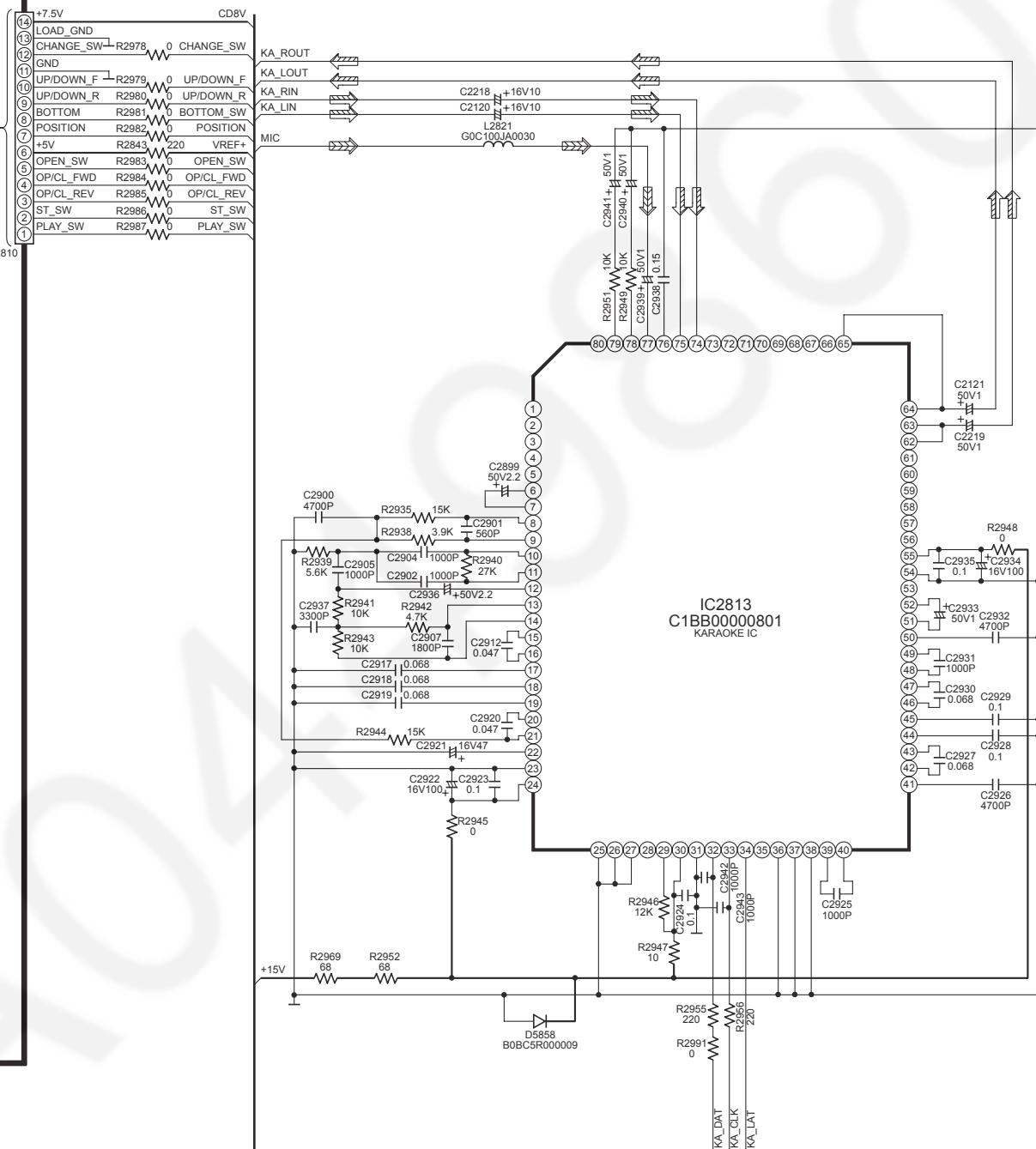
: +B SIGNAL LINE

MAIN SIGNAL LINE

TO
CD LOADING
CIRCUIT
(CN1) ON
SCHEMATIC
DIAGRAM - 29

N

CN2810

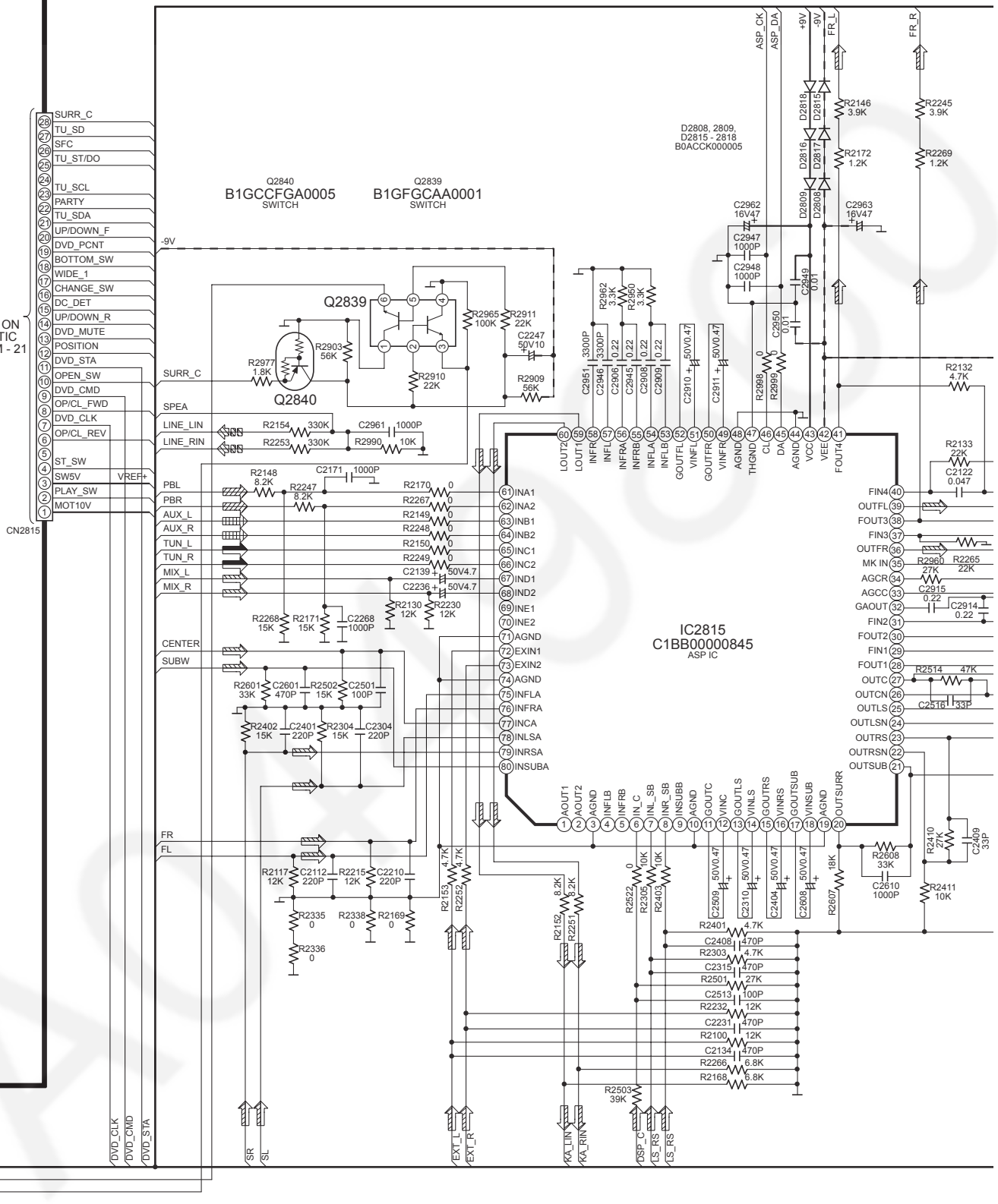


SCHEMATIC DIAGRAM - 12

B MAIN CIRCUIT

— : +B SIGNAL LINE ▬ : AUX SIGNAL LINE ▬ : MAIN SIGNAL LINE
 - - - : -B SIGNAL LINE ▬ : AM/FM SIGNAL LINE ▬ : PLAYBACK SIGNAL LINE
 ▬ : RECORD SIGNAL LINE

C
 TO PANEL CIRCUIT
 (CP6802) ON
 SCHEMATIC
 DIAGRAM - 21



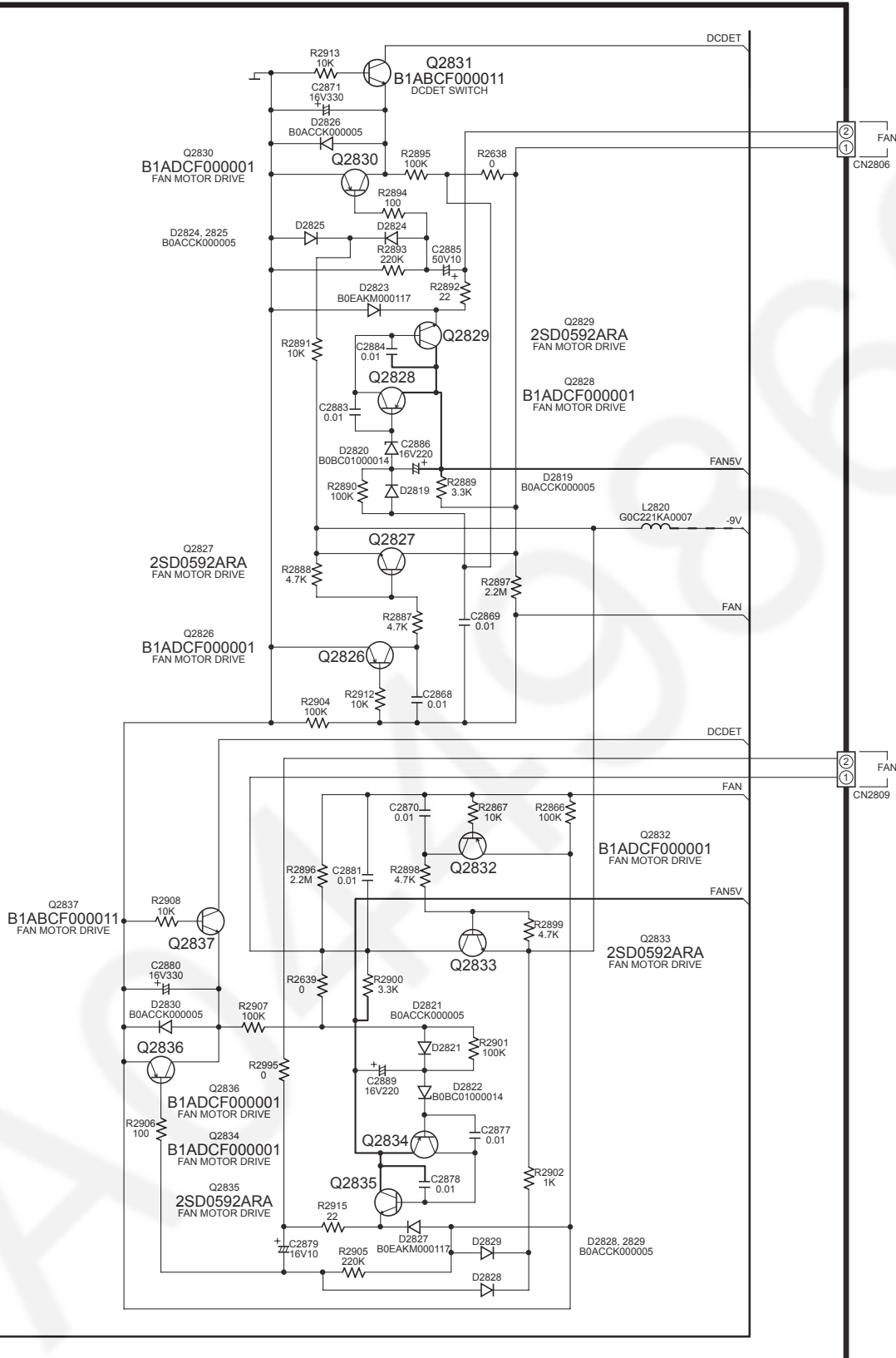
SCHEMATIC DIAGRAM - 17

B

MAIN CIRCUIT

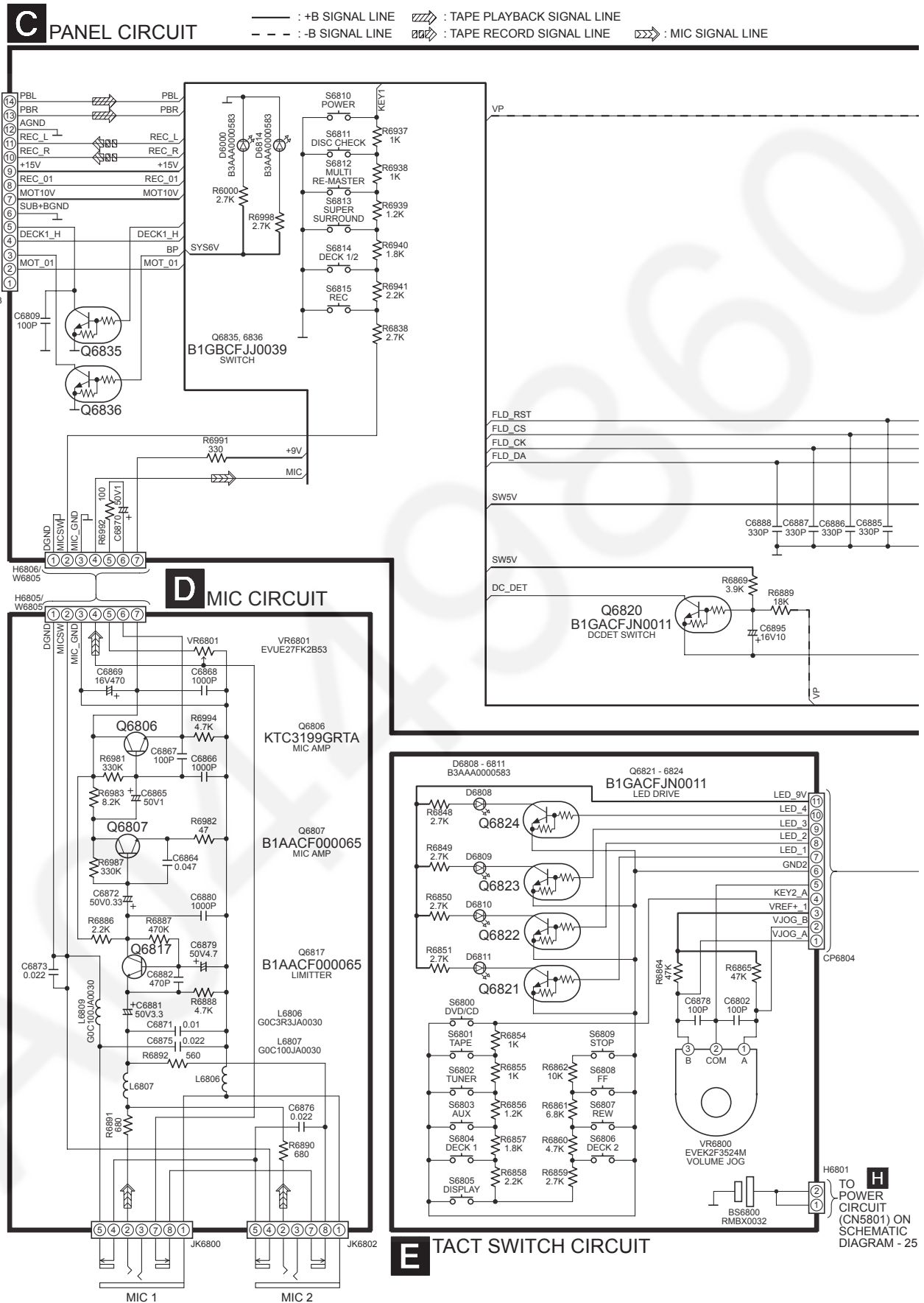
—— : +B SIGNAL LINE

— — — : -B SIGNAL LINE



22.4. (C) Panel Circuit , (D) Mic Circuit & (E) Tact Switch Circuit

SCHEMATIC DIAGRAM - 18



SCHEMATIC DIAGRAM - 19

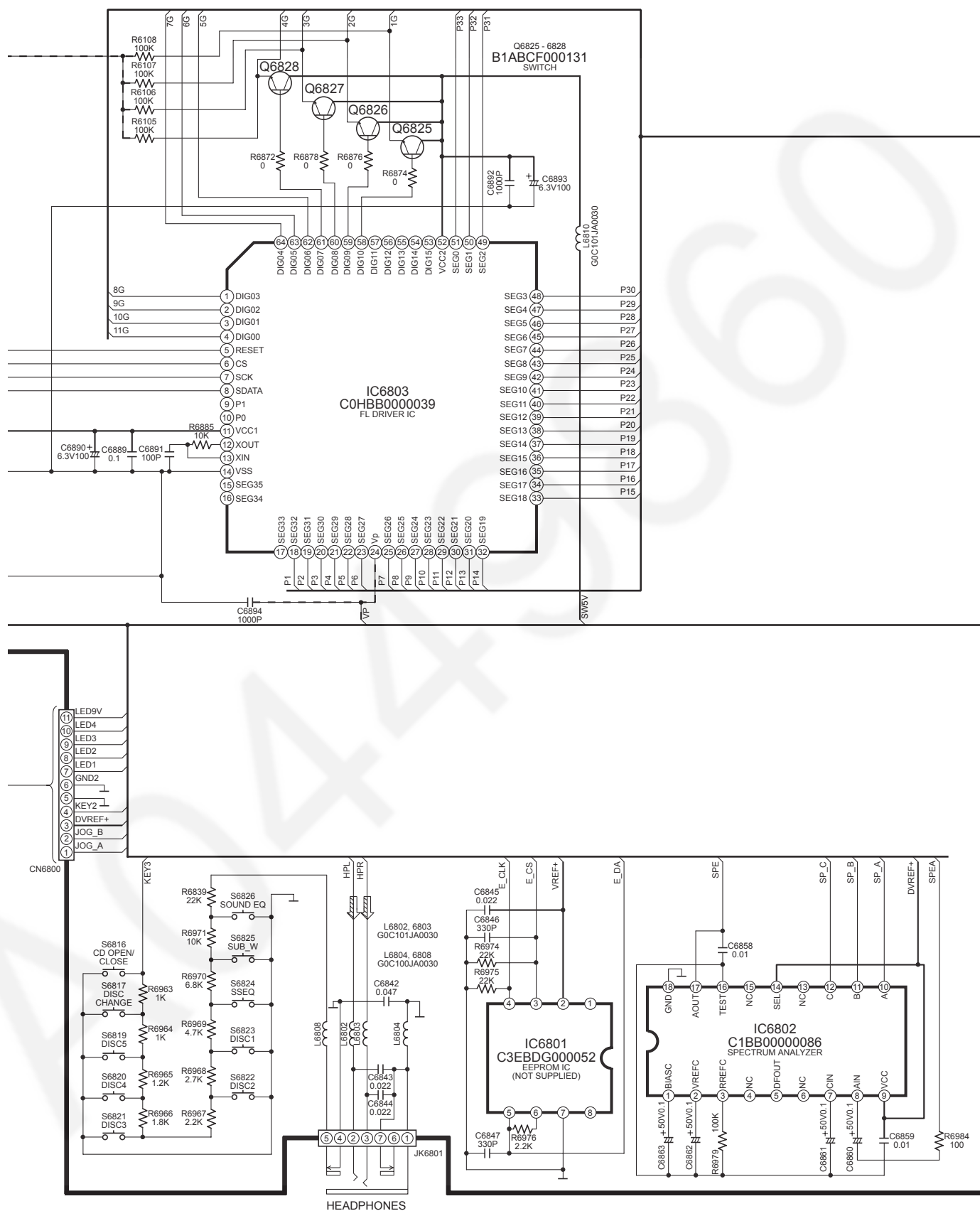
C

PANEL CIRCUIT

— : +B SIGNAL LINE

- - - : -B SIGNAL LINE

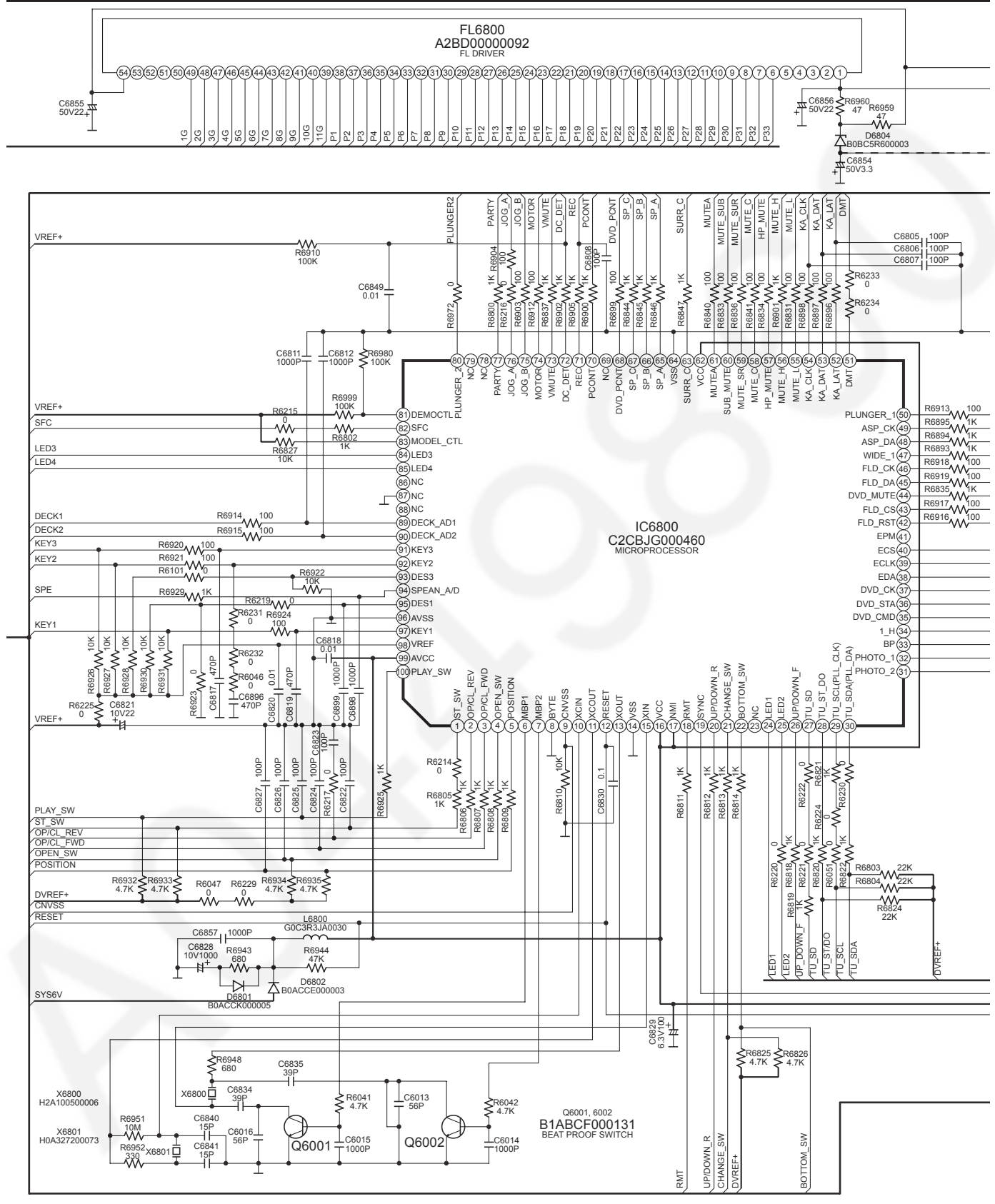
⇒ : MAIN SIGNAL LINE



SCHEMATIC DIAGRAM - 20

C PANEL CIRCUIT

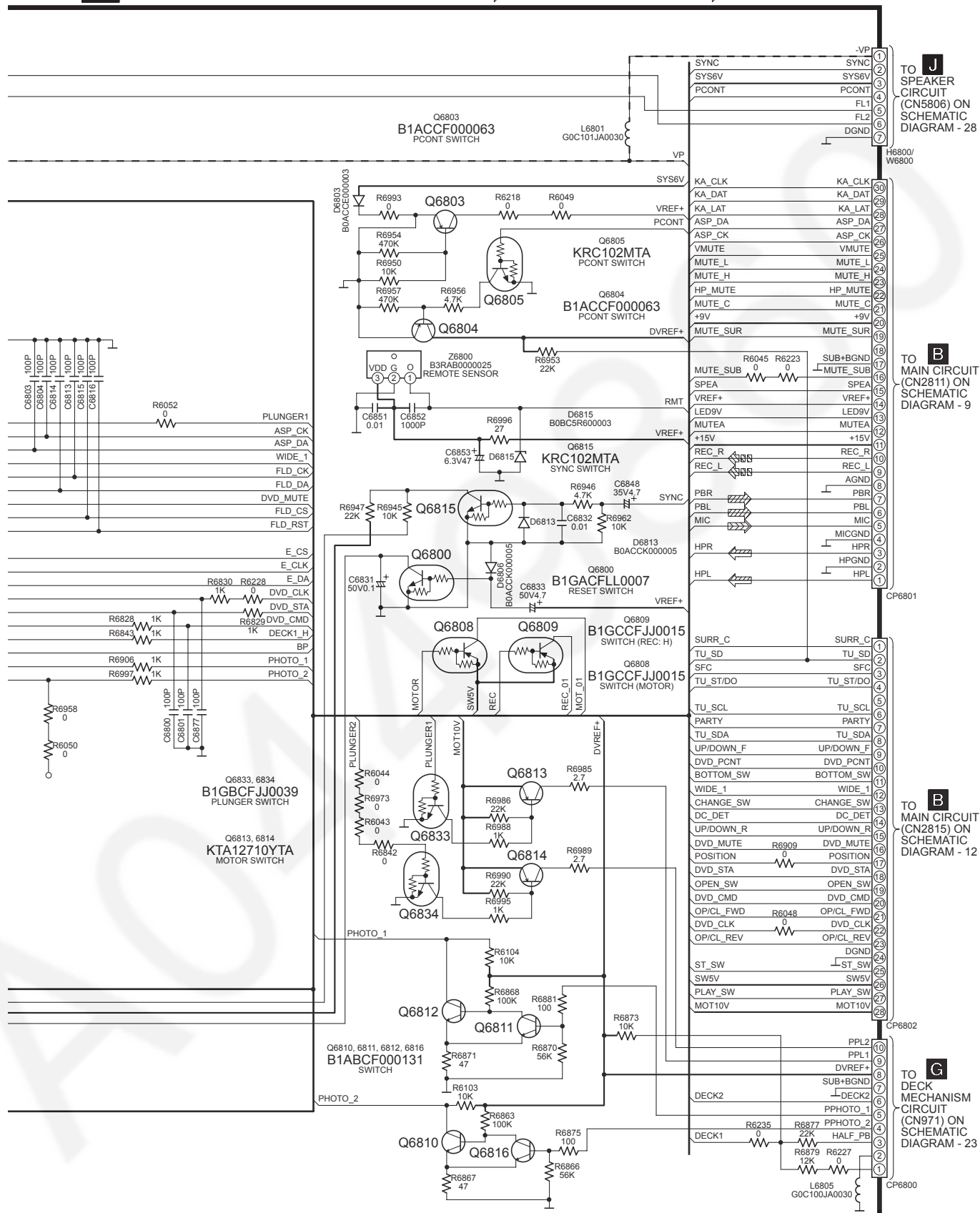
— : +B SIGNAL LINE
- - - : -B SIGNAL LINE



SCHEMATIC DIAGRAM - 21

C PANEL CIRCUIT

 : +B SIGNAL LINE
 : TAPE PLAYBACK SIGNAL LINE
 : MAIN SIGNAL LINE
 : -B SIGNAL LINE
 : TAPE RECORD SIGNAL LINE
 : MIC SIGNAL LINE

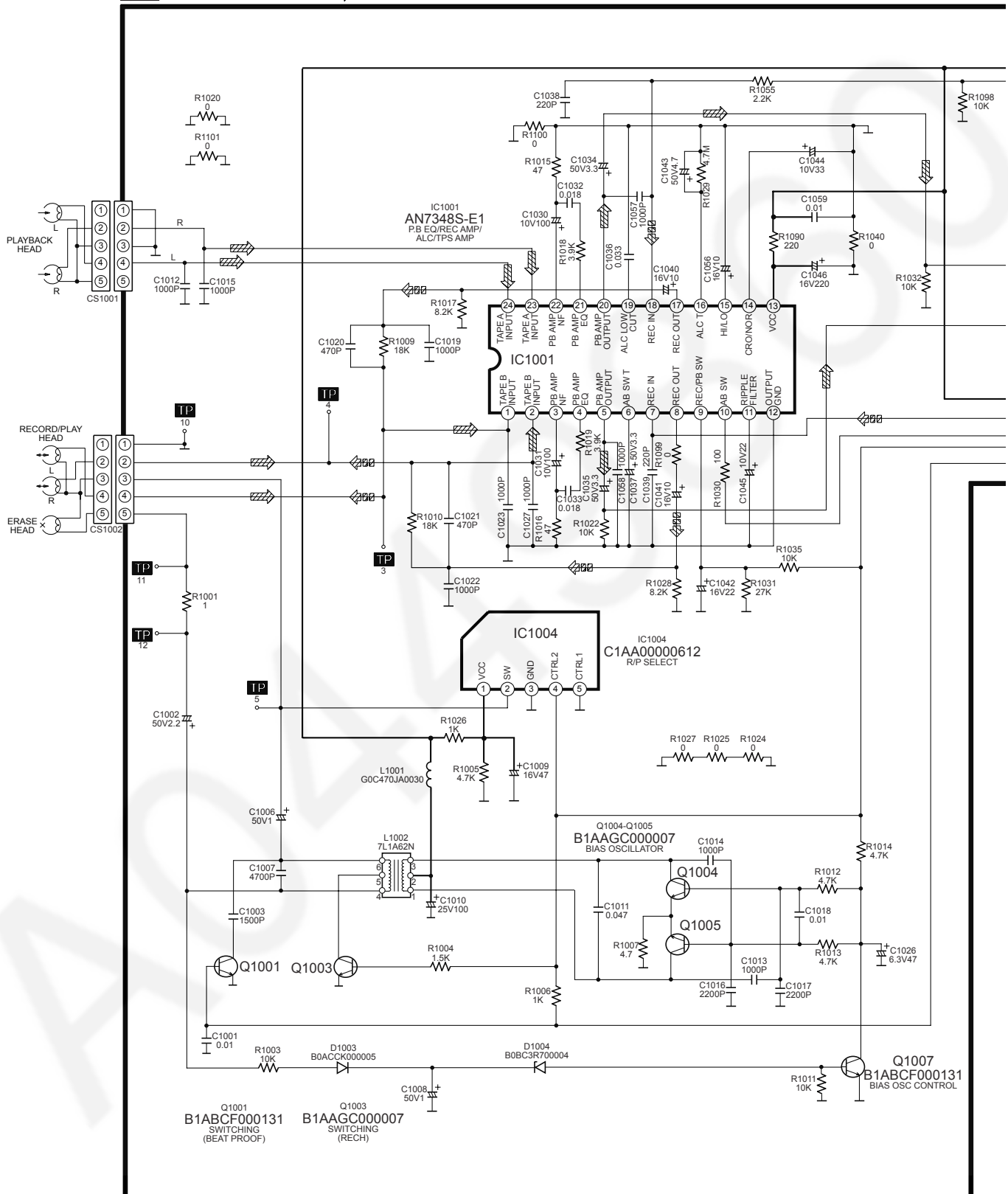


22.5. (F) Deck Circuit & (G) Deck Mechanism Circuit

SCHEMATIC DIAGRAM - 22

— : +B SIGNAL LINE
 [Symbol] : RECORD SIGNAL LINE
 [Symbol] : PLAYBACK SIGNAL LINE

F DECK CIRCUIT



SCHEMATIC DIAGRAM - 23

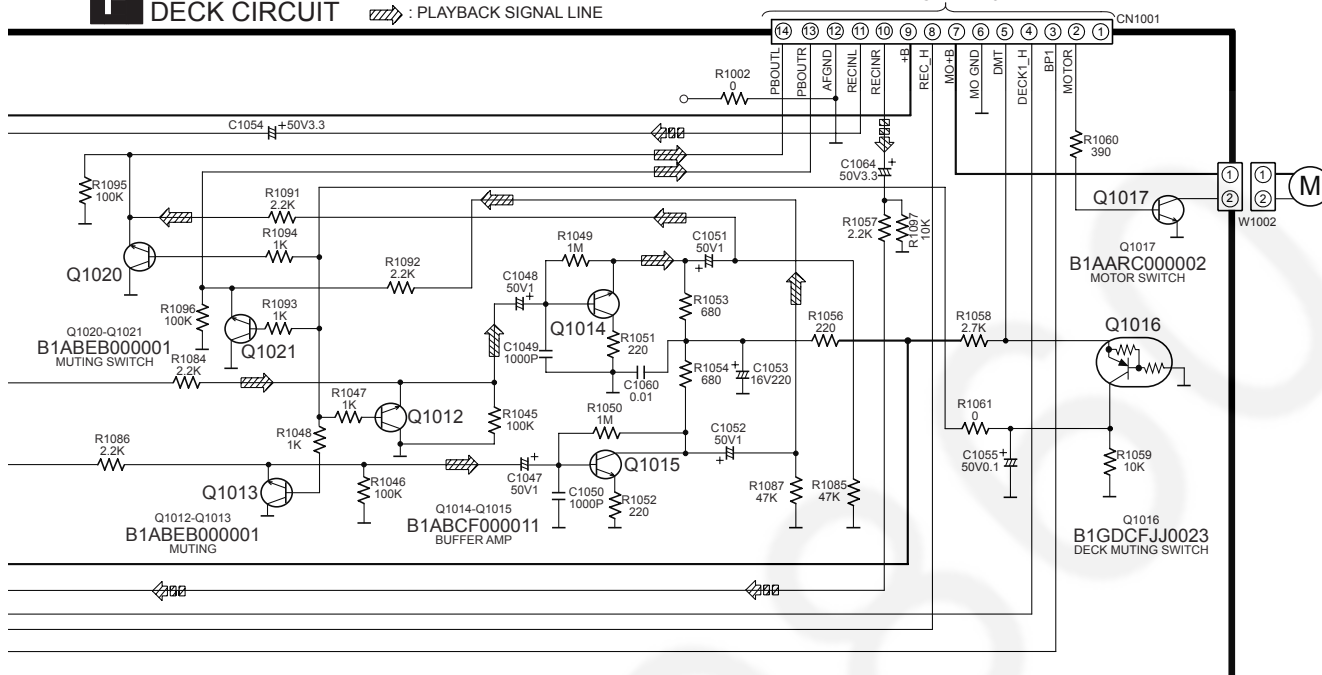
F

DECK CIRCUIT

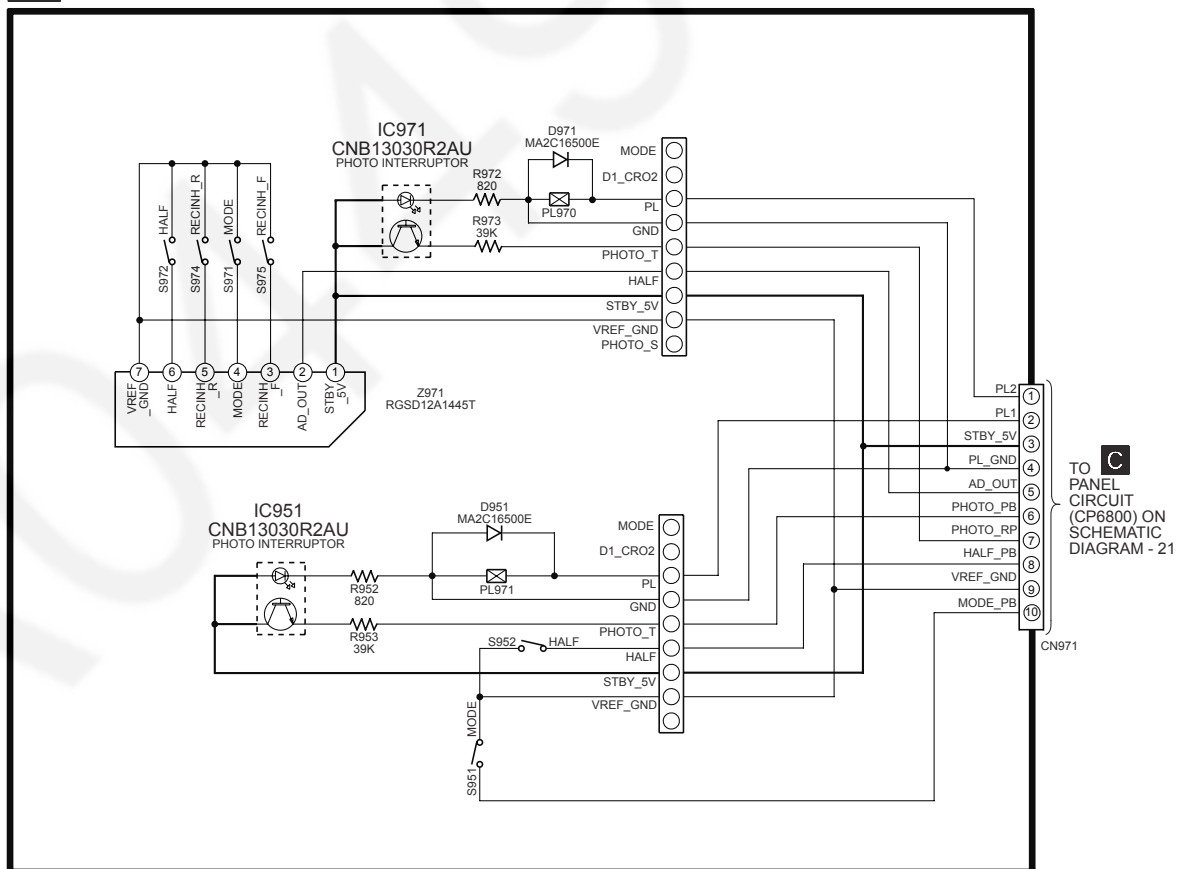
— : +B SIGNAL LINE

— : RECORD SIGNAL LINE

— : PLAYBACK SIGNAL LINE

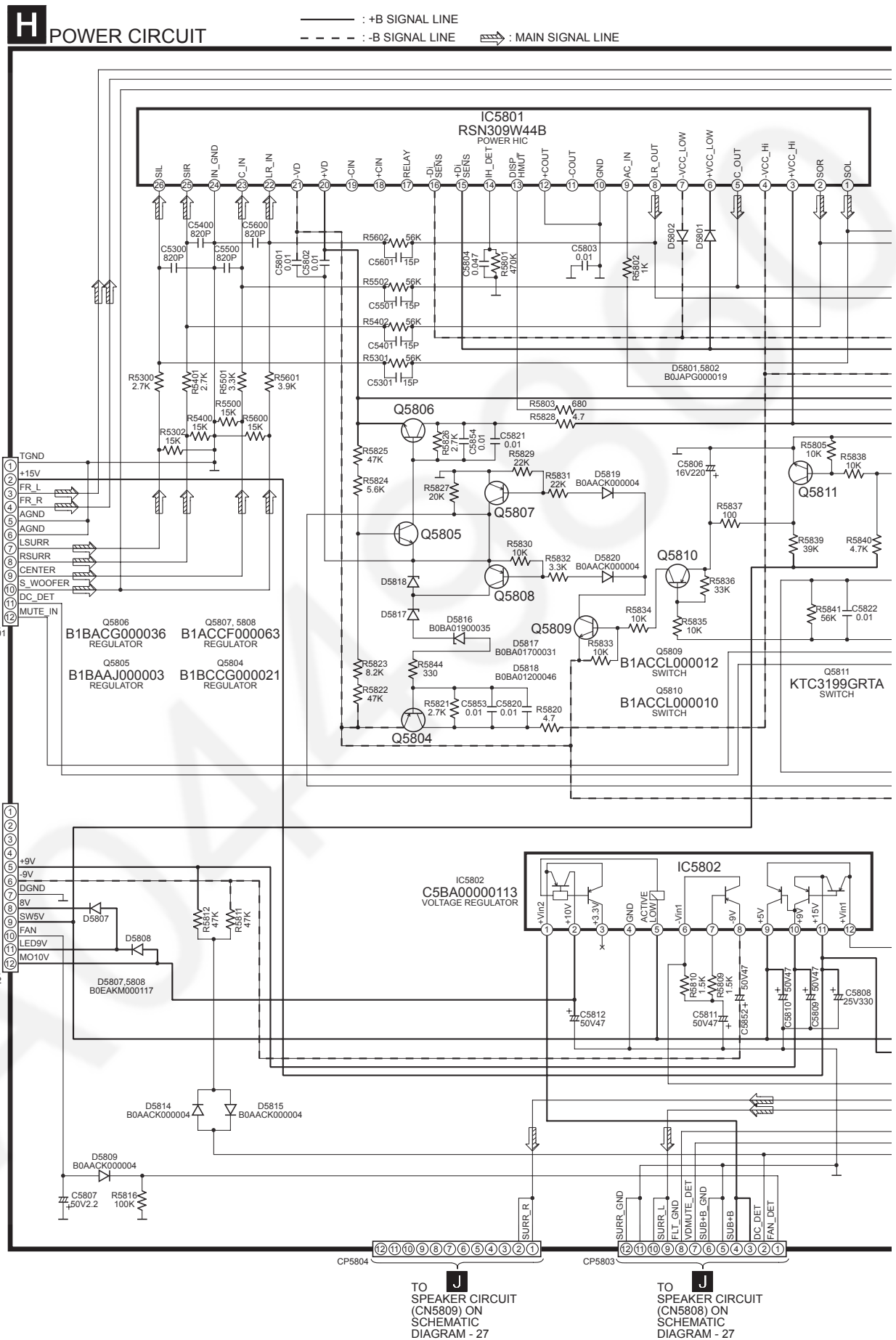
TO
PANEL CIRCUIT
(CP6803) ON
SCHEMATIC
DIAGRAM - 18**G**

DECK MECHANISM CIRCUIT



22.6. (H) Power Circuit

SCHEMATIC DIAGRAM - 24

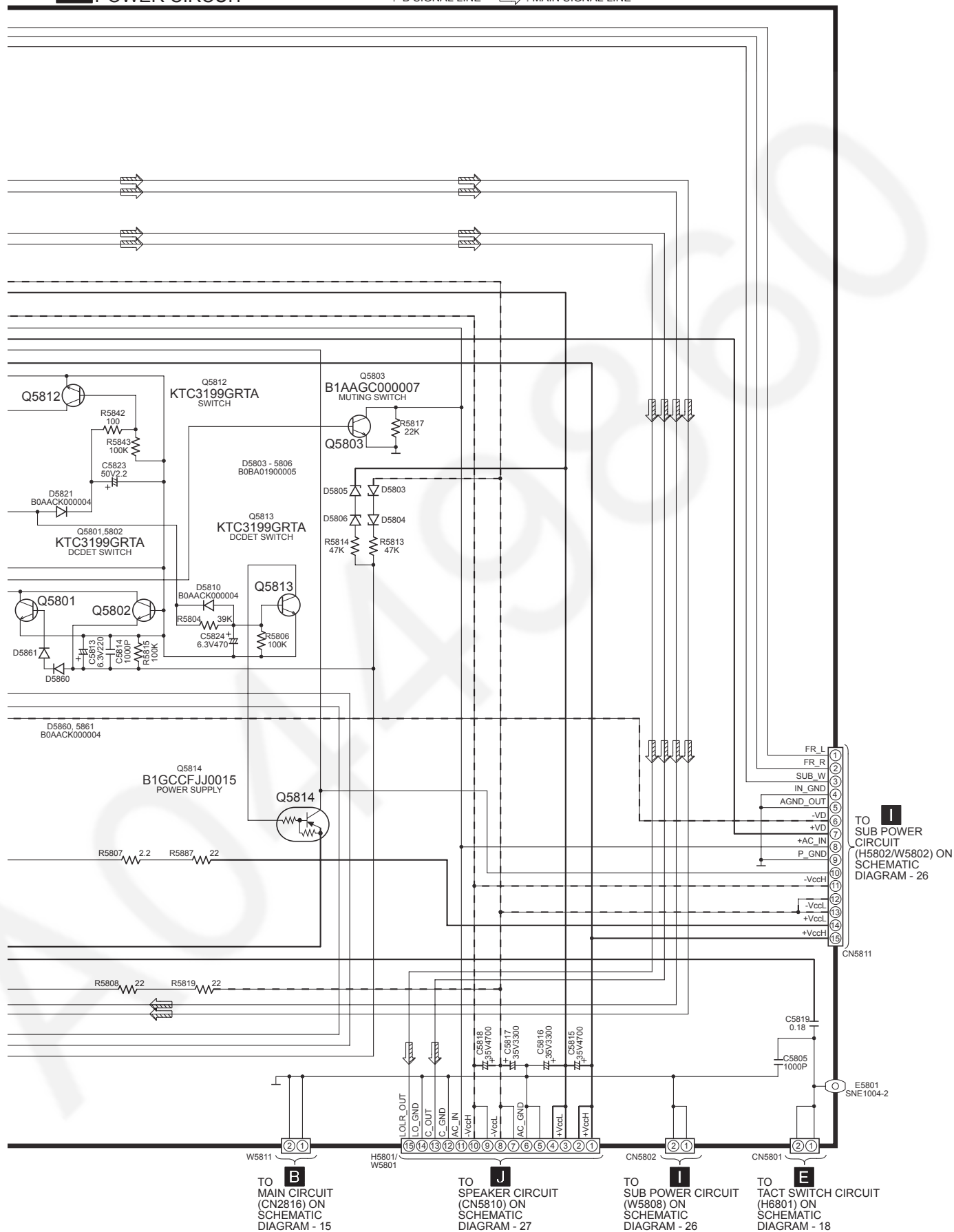


SCHEMATIC DIAGRAM - 25



POWER CIRCUIT

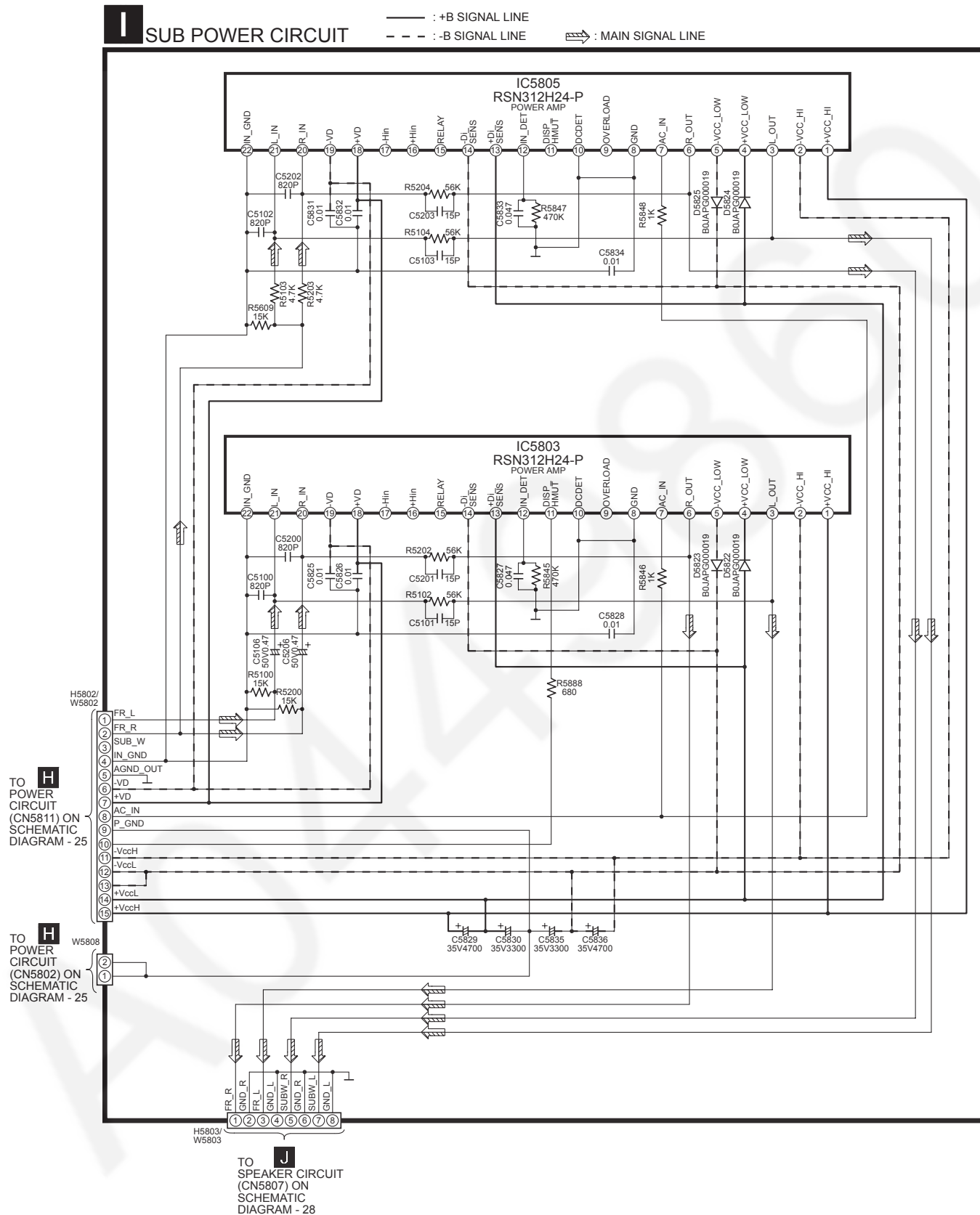
— : +B SIGNAL LINE
 - - - : -B SIGNAL LINE ➡ : MAIN SIGNAL LINE



22.7. (I) Sub Power Circuit

SCHEMATIC DIAGRAM - 26

I SUB POWER CIRCUIT

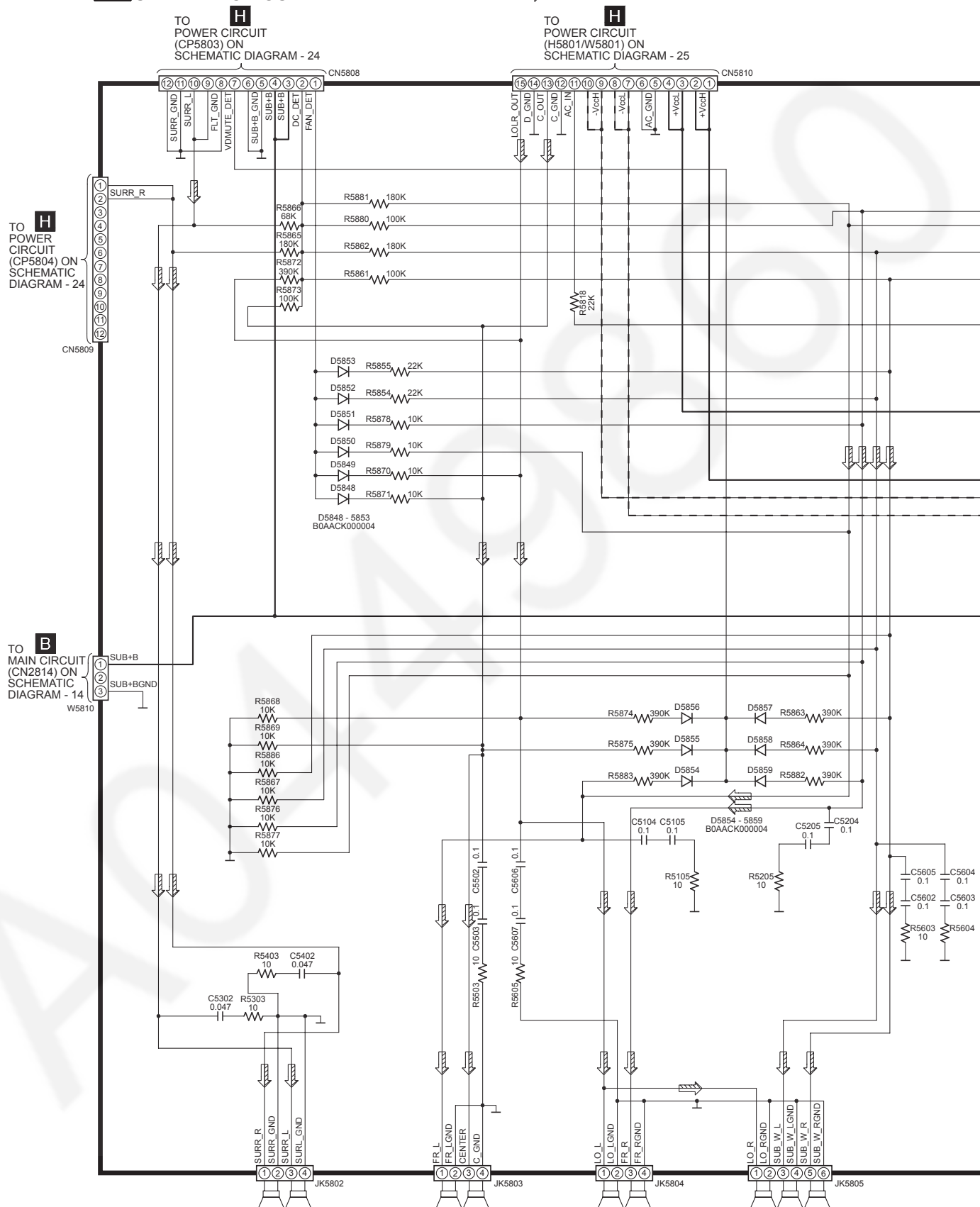


22.8. (J) Speaker Circuit

SCHEMATIC DIAGRAM - 27

J SPEAKER CIRCUIT

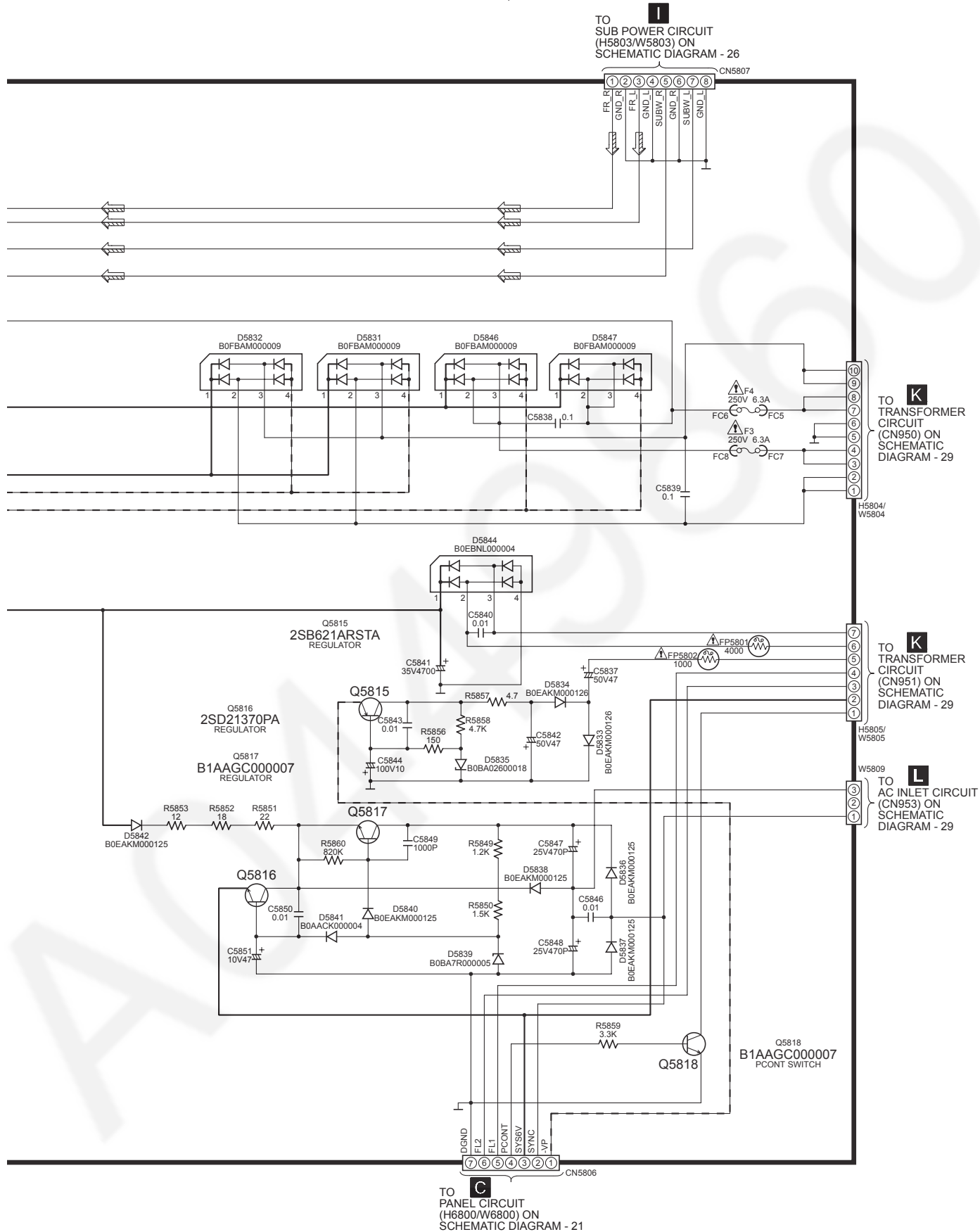
— : +B SIGNAL LINE
 - - - : -B SIGNAL LINE
 : MAIN SIGNAL LINE



SCHEMATIC DIAGRAM - 28

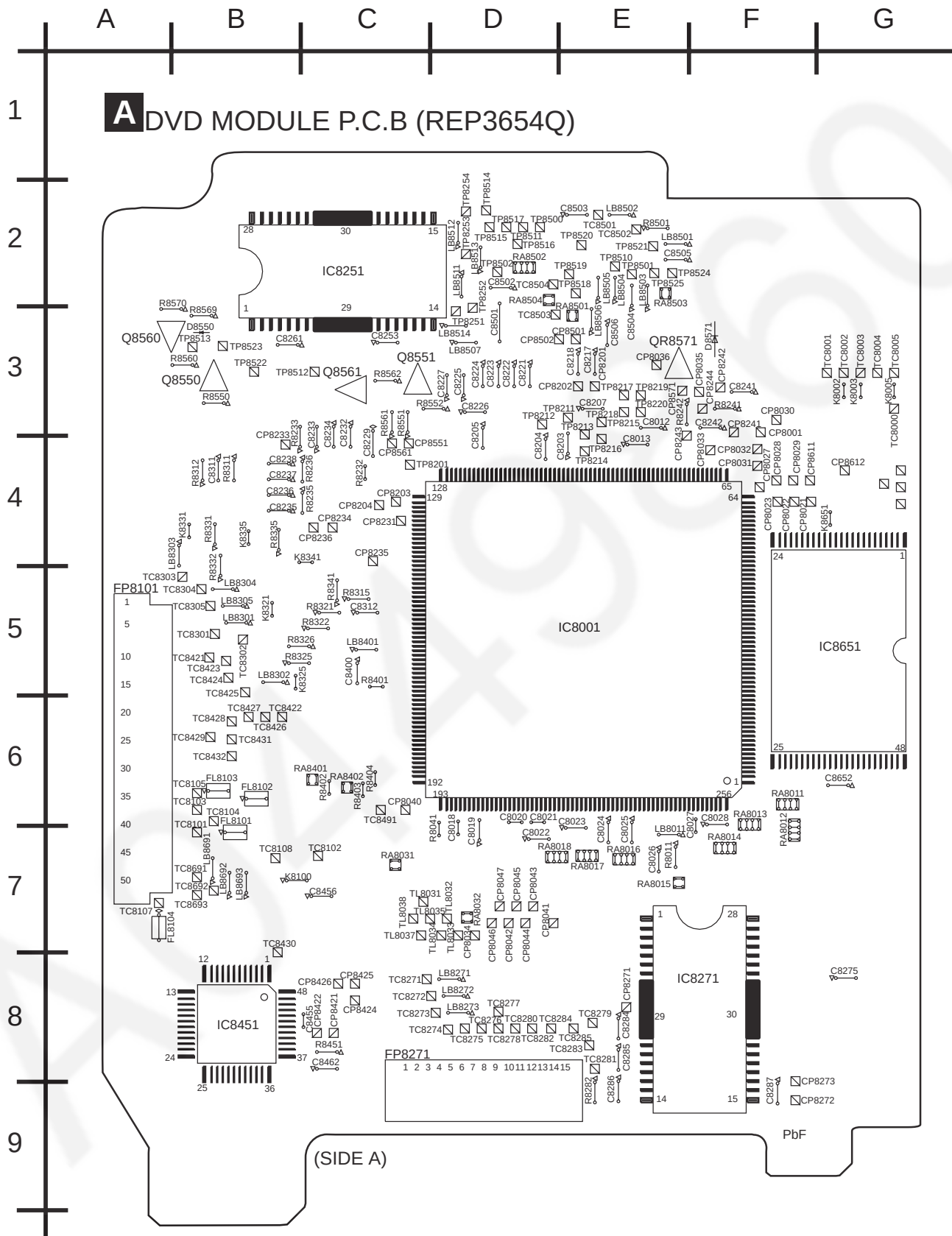
J SPEAKER CIRCUIT

— : +B SIGNAL LINE
 - - - : -B SIGNAL LINE
 ⇨ : MAIN SIGNAL LINE

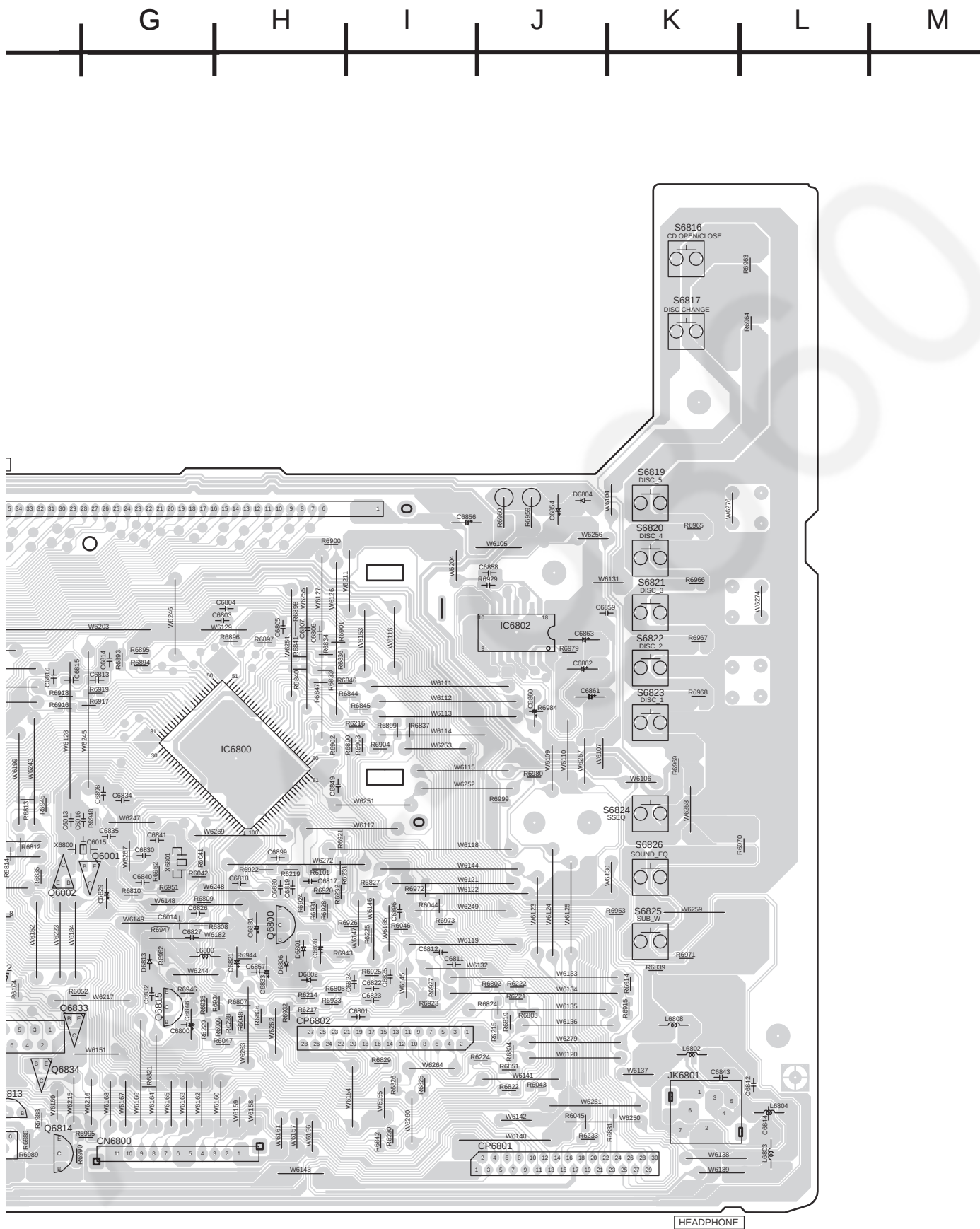


23 Printed Circuit Board

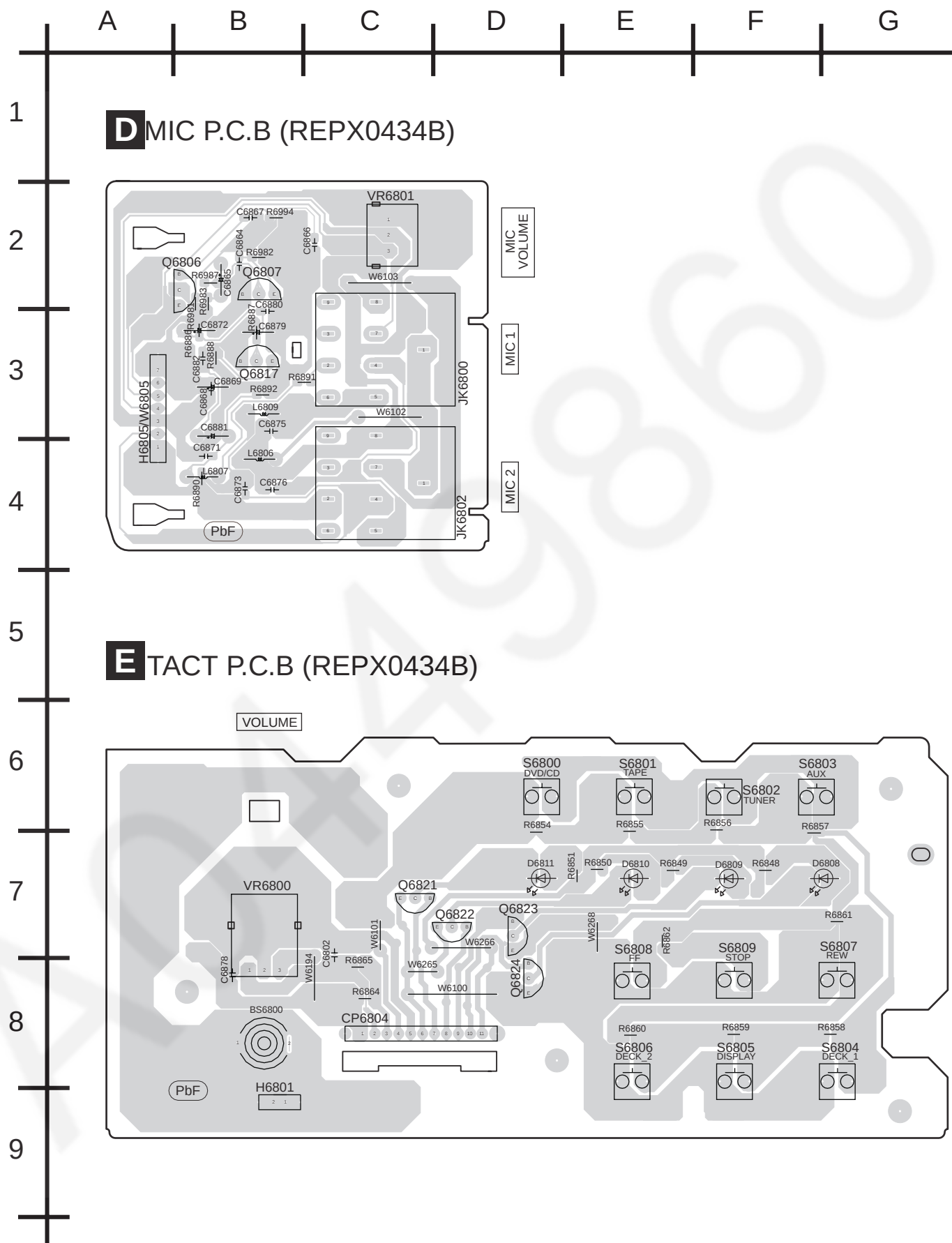
23.1. (A) DVD Module P.C.B. (Side: A & B)





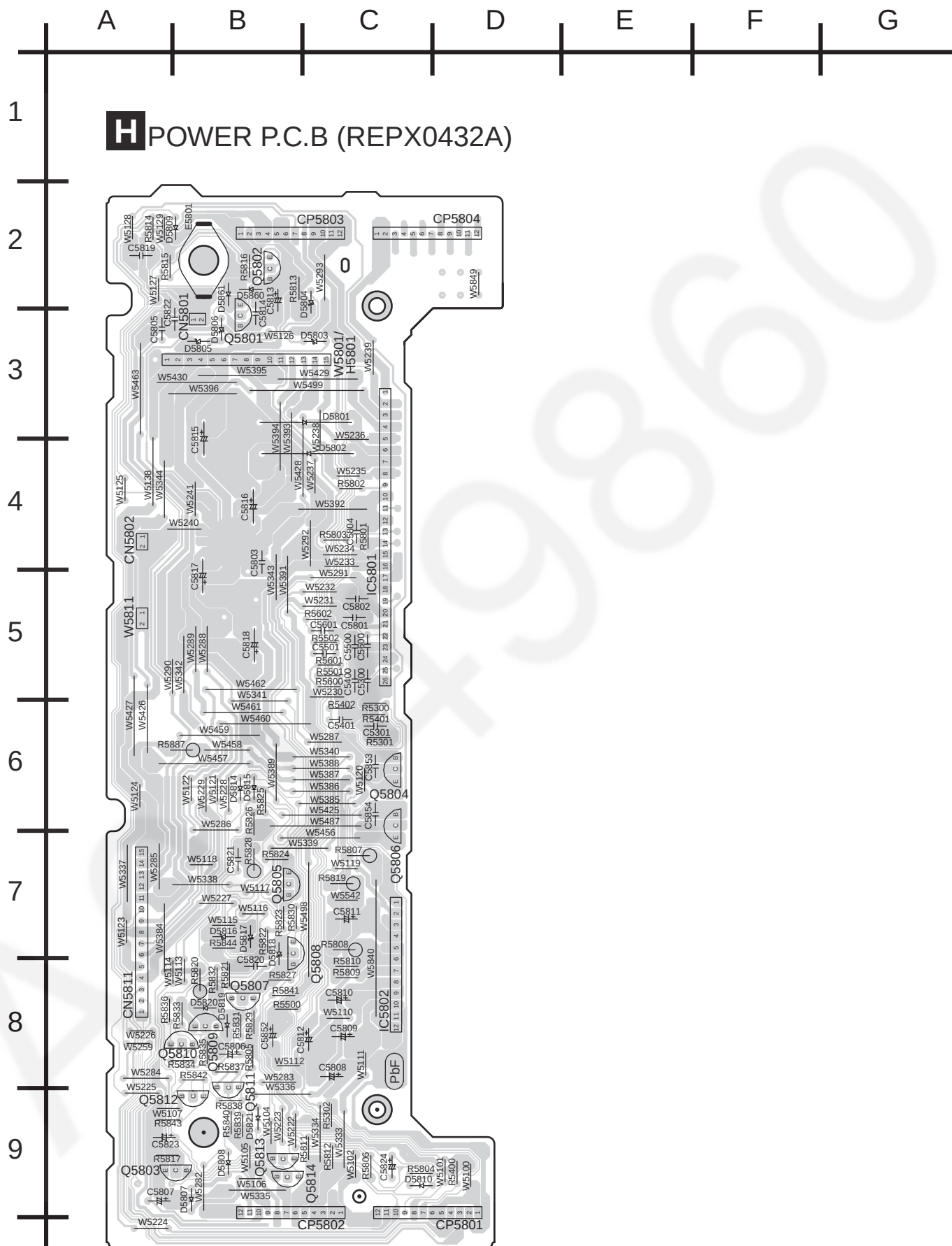


23.4. (D) Mic P.C.B. & (E) Tact P.C.B.

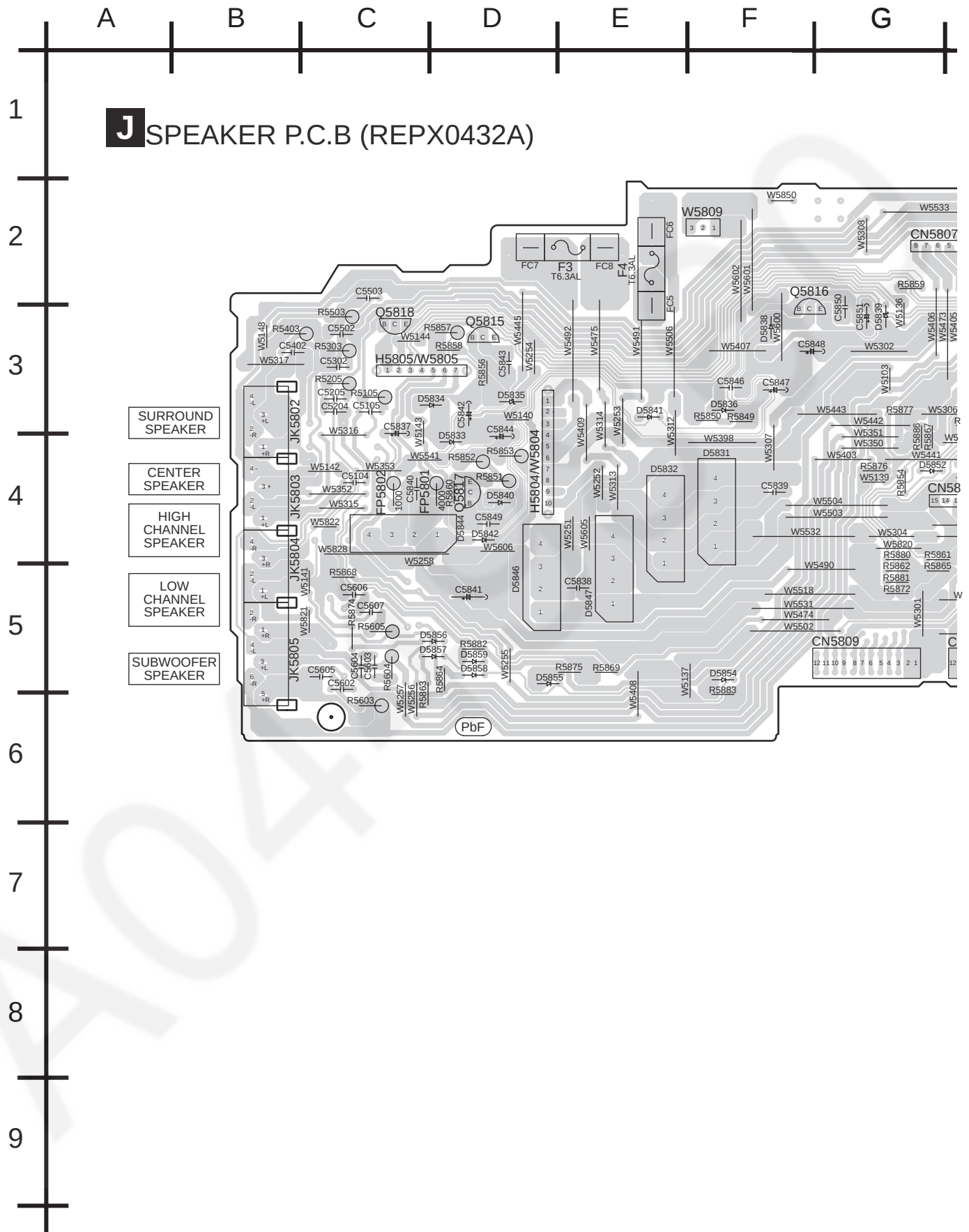




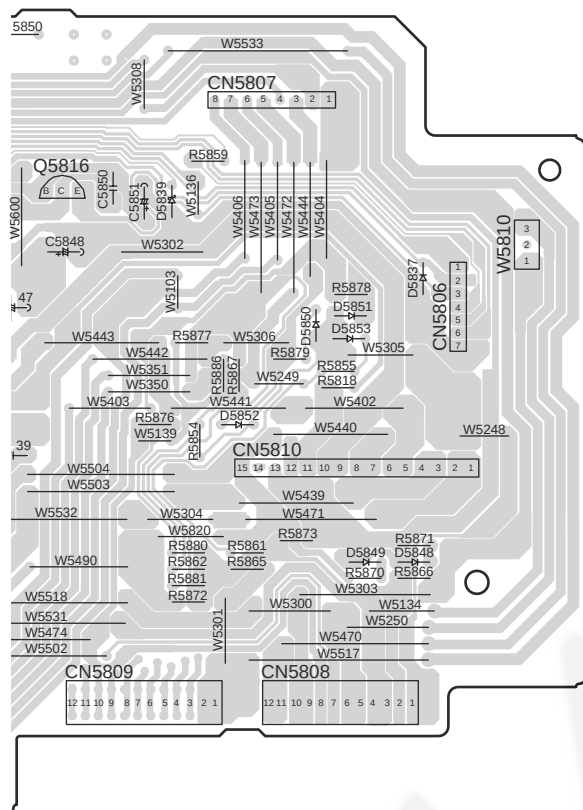
23.6. (H) Power P.C.B.



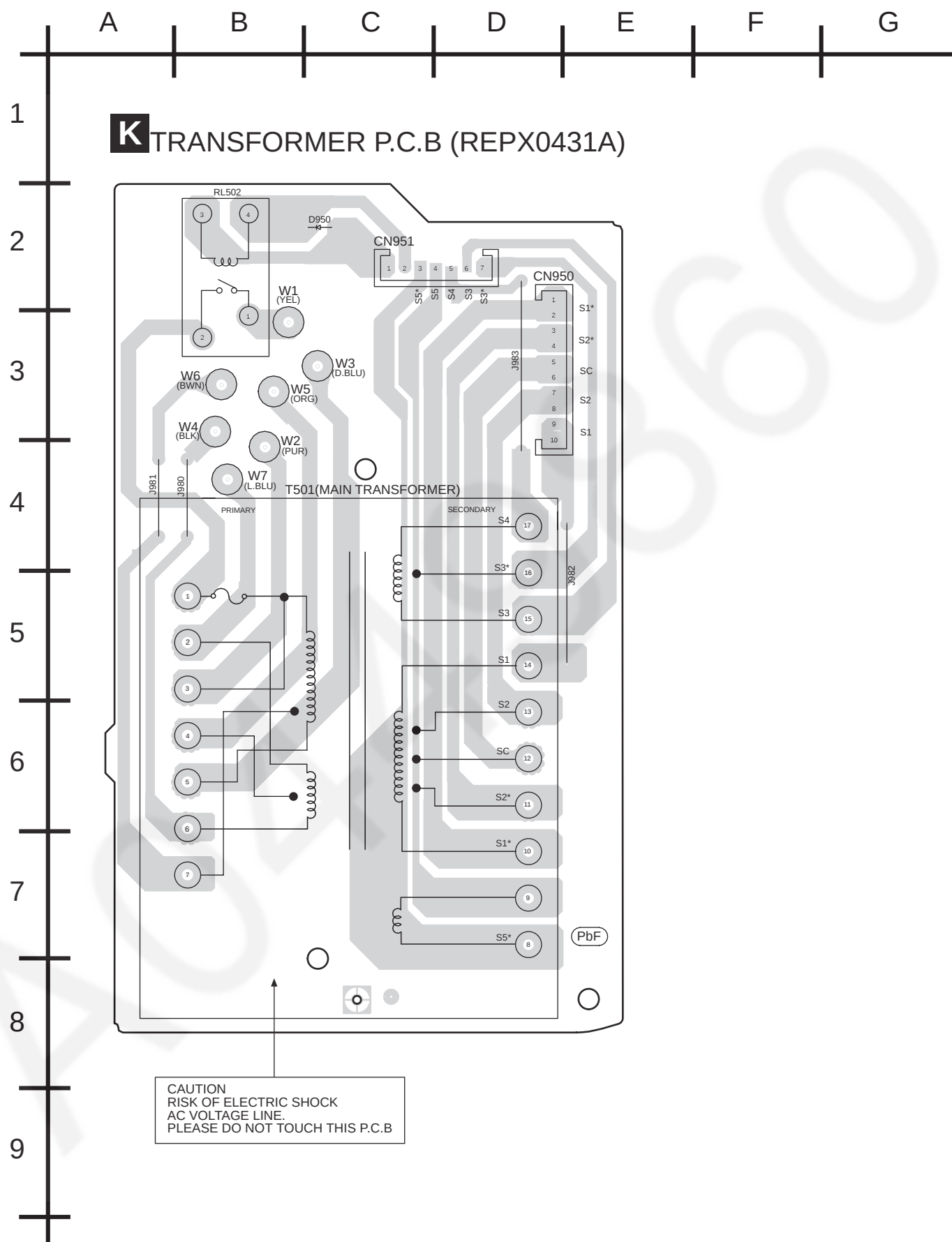
23.8. (J) Speaker P.C.B.



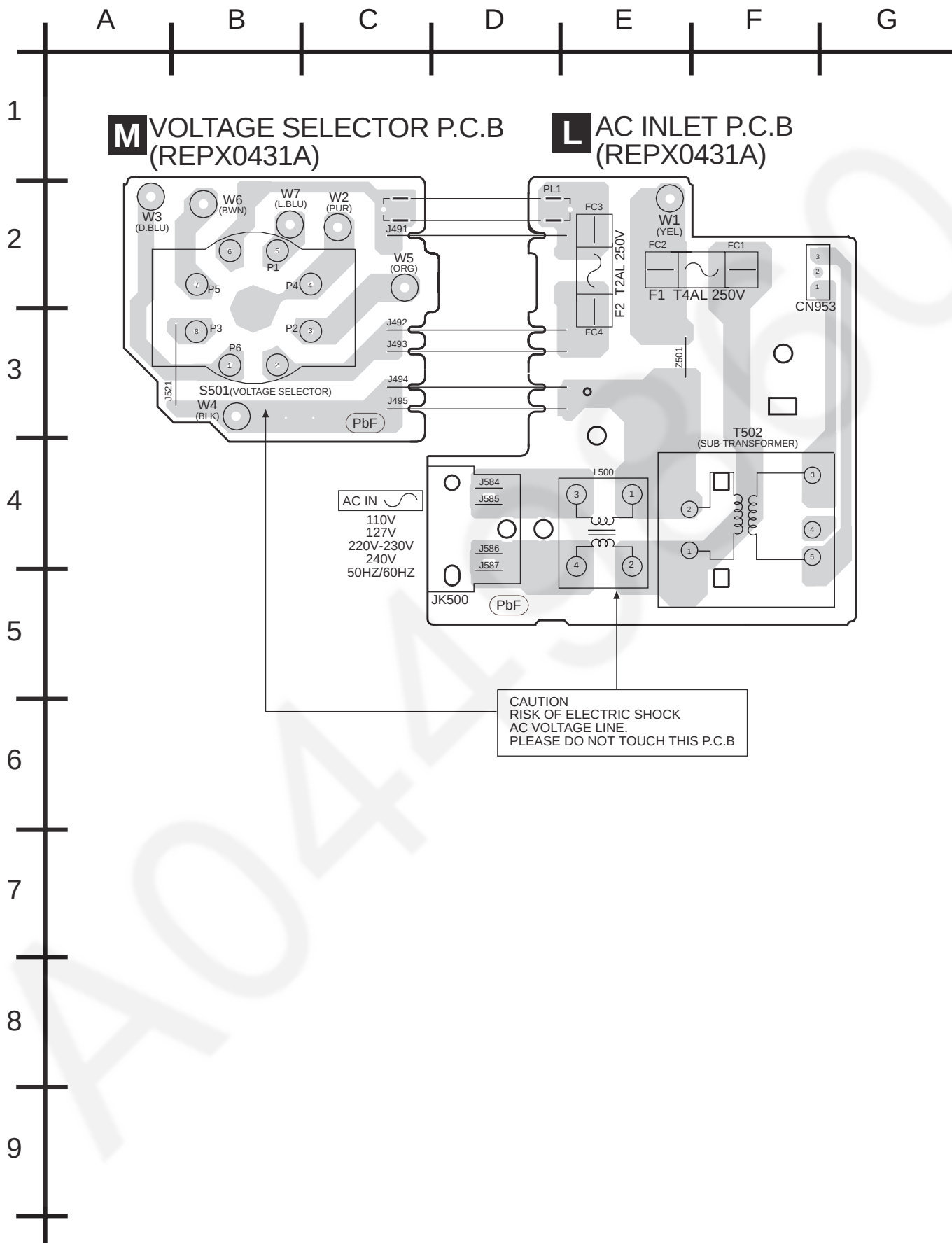
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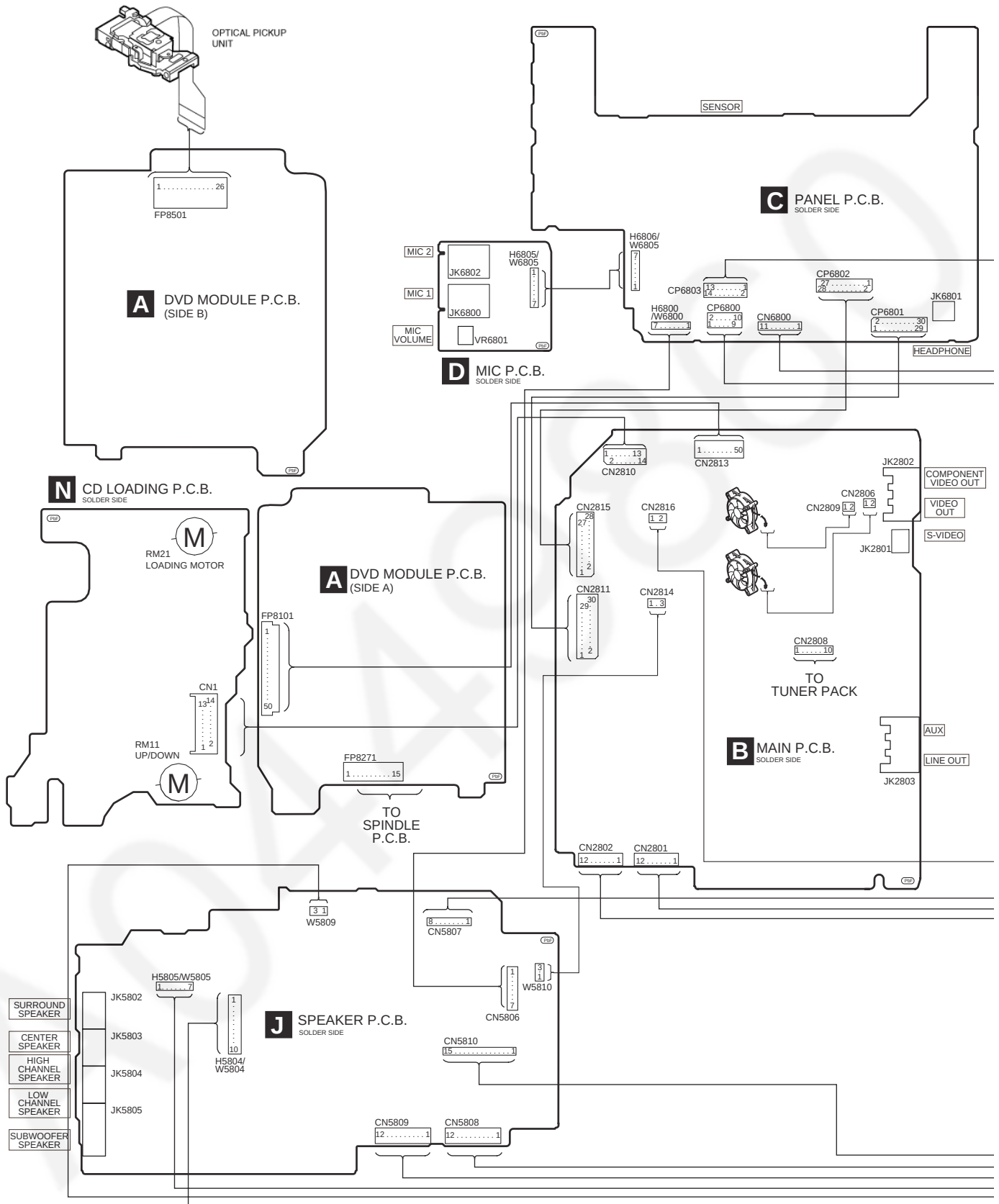
23.9. (K) Transformer P.C.B.

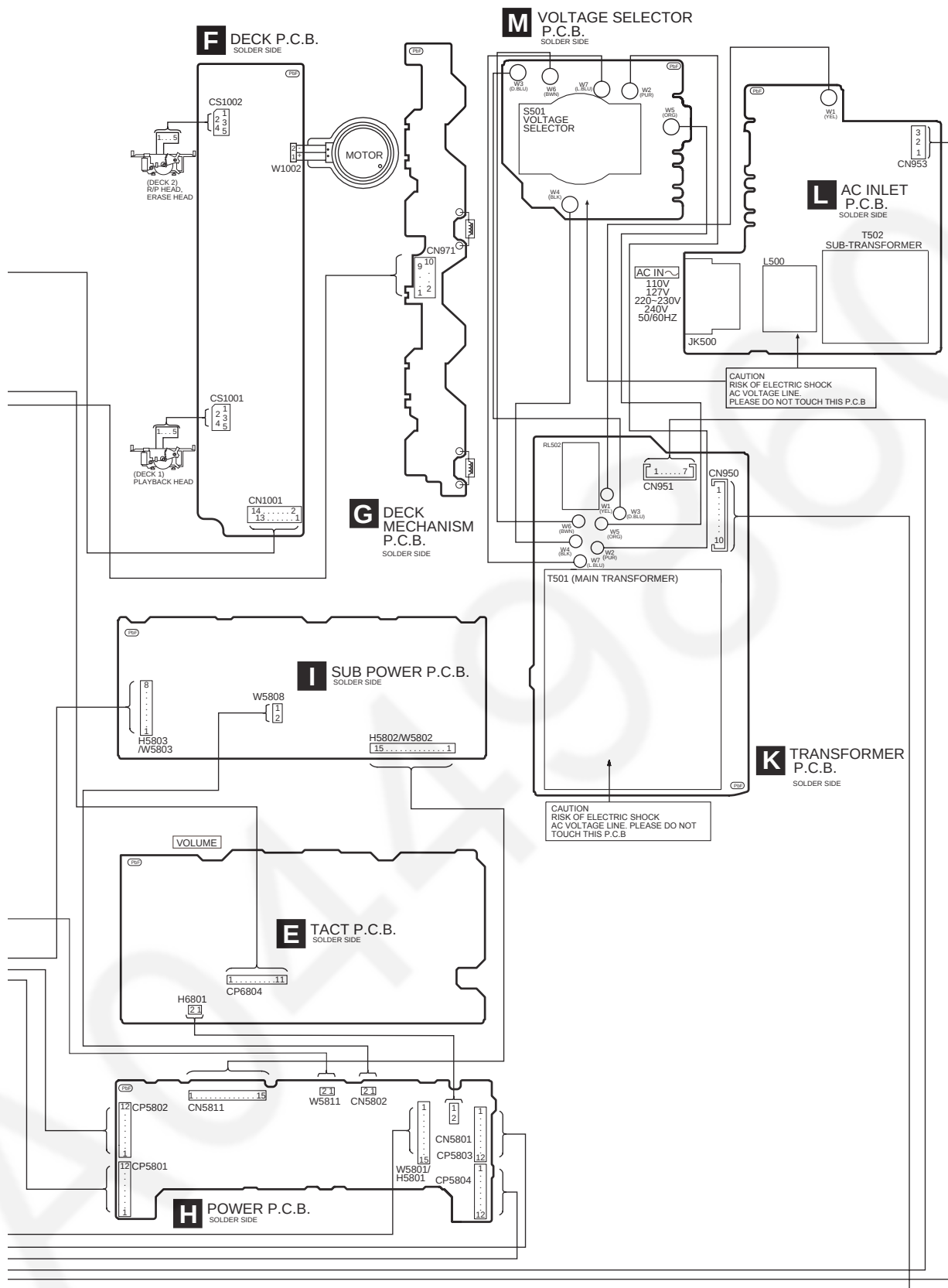


23.10. (L) AC Inlet P.C.B. & (M) Voltage Selector P.C.B.

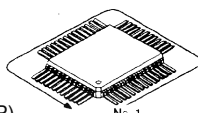
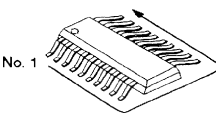
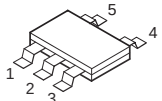
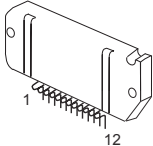
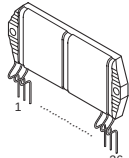
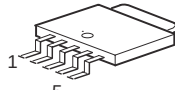
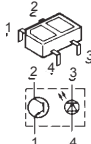
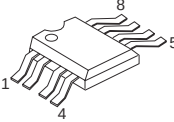
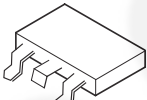
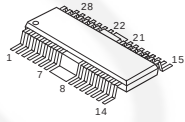
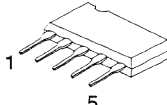
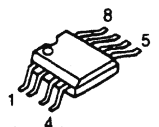
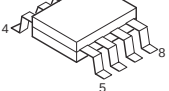
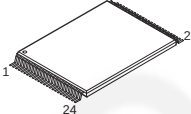
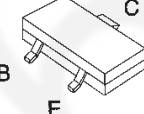
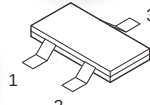
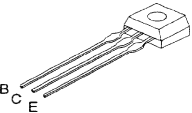
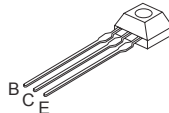
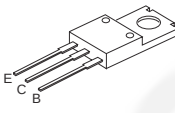
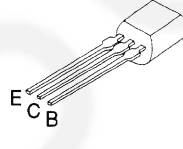
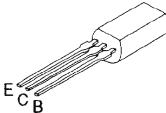
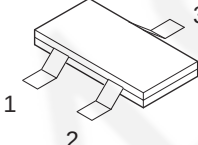
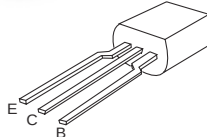
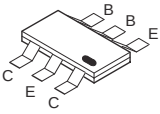
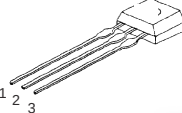
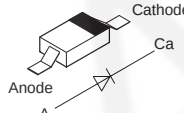
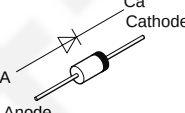
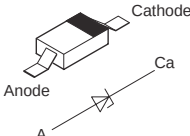
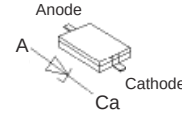
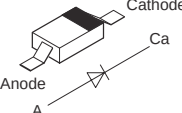
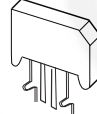
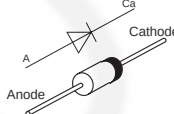
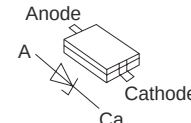
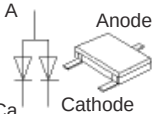
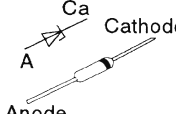
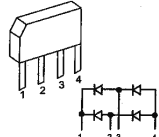
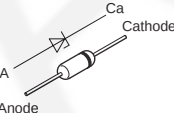
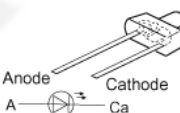
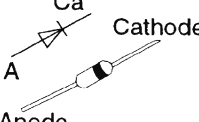


24 Wiring Connection Diagram





25 Illustration of ICs, Transistors and Diodes

C1BB00000801(80P) C1BB00000845(80P) C0HBB0000039 (64P) C0FBBK0000036(48P) MN2DS0003APH (256P)	 No. 1	C1BB0000086(18P) C9ZB00000377(32P) KIA4558FEL(8P) C3ABPG000063(54P) C0GBF0000004 (16P) AN7348S-E1 (24P) C0JBAR000292(16p)	No. 1 	C0EBE0000384 C0EBA0000031 C0JBAA000346		RSN312H24-P 
RSN309W44B 	C0DBAZG00033 (5P) C0DBEFG00003 (5P) 	CNB13030R2AU 	C0ABCB000052 (14P) 	C0CBADG00005 	C0GBG0000044 	
C1AA00000612 	C0AABB000117 	C0CBCBD00018 	RFKFMH81T61 	2SB1219AHL 	2SD1819A0L 	
KTC3199GRTA B1AAGC000007 	B1ACCF000063 KRC102MTA 	B1BCCG000021 	KTA12710YTA 2SB621ARSTA B1ACCL000012 B1ACCL000010 2SD0592ARA 	2SD21370PA 		
B1ABCF000131 B1GDCFGA0014 B1ABEB000001 B1GBCFJJ0039 2SB09700RL	B1ADCF000001 B1ABCF000011 B1GDCFJJ0023 UNR521100L UNR511V00L		B1GCCFJJ00015 B1GACFLL0007 B1GCCFGA0005 B1AACF000065 B1AARC000002 	B1GFGCAA0001 		
B1BAAJ000003 	MA2S11100L 	B0EAKM000117 B0BC01000014 B0EAKM000125 	B0BC7R500001 B0BC5R000009 	B0ACCK000005 B0BC3R700004 	B0ACCE000003 	
B0FBAM000009 	B0JAPG000019 	B0BC5R600003 	B0ADCJ000020 	B0BA03100002 B0BA019000005 	B0EBNL000004 	
B0BA7R000005 	B3AAA0000583 	B0AACK00004 MA2C16500E MA2J72800L 				

26 Terminal Function of IC

26.1. IC6800 (C2CBJG000460) System Microprocessor

Pin No.	Mark	I/O	Function
1	ST_SW	I	Stock switch of changer
2	OP/CL_REV	O	Reverse control signal for OPEN/CLOSE motor
3	OP/CL_FWD	O	Forward control signal for OPEN/CLOSE motor
4	OPEN_SW	I	Signal from Rotary tray OPEN switch
5	POSITION	I	Signal from of Position Detection sensor
6	MBP1	O	Micon Beat Proof 1
7	MBP2	O	Micon Beat Proof 2
8	BYTE	I	VSS (Gnd)
9	CNVss	-	VSS (GND) The only Pull High Pin
10	XCIN	-	Sub Clock Input (32.768 kHz)
11	XCOUT	-	Sub Clock Output (32.768 kHz)
12	RESET	I	System Reset Input
13	XOUT	-	Main Clock Output (10 MHz)
14	VSS	-	GND (0V)
15	XIN	-	Main Clock Input (10 MHz)
16	VCC	-	Power Supply (5V)
17	NMI	I	Connect to VCC, External Interrupt I/P
18	RMT	I	Remocon Input
19	SYNC	I	AC Failure Detect Input
20	UP/DOWN_R	O	Changer Motor 2 Reverse Control
21	CHANGE_SW	I	changer Change Switch
22	BOTTOM_SW	I	Changer Bottom Switch
23	N.C.	-	No Connection
24	LED1	O	Port to Control LED1 (DVD/D)
25	LED2	O	Port to Control LED2 (TAPE)
26	UP/DOWN_F	O	Changer Motor 2 Forward Control
27	TU_SD	I	Signal DET Input from Tuner
28	TU_ST_DO	I	Stereo Indicator from Tuner/DO-OUTPUT of Tuner IC
29	TU_SCL(PLL_CLK)	O	I2C Clock for Tuner (Clock Signal for the PLL Tuner)
30	TU_SDA(PLL_DA)	O	I2C Data for Tuner (PLL DATA - DI INPUT of Tuner)
31	PHOTO_2	I	Deck 2 Photo Detection
32	PHOTO_1	I	Deck 2 Photo Detection
33	BP	O	AM Beat Proof 1 (Active 1)
34	1_H	I	H WHEN Deck 1 Playback Head is Selected
35	DVD_CMD	O	CMD signal for the DVD Module
36	DVD_STA	I	STATUS signal from the DVD Module
37	DVD_CK	I	CLK signal for the DVD Module
38	EDA	O/I	DATA Signal for the EEPROM
39	ECLK	O	CLOCK Signal for the EEPROM
40	ECS	O	LATCH Signal for the EEPROM

Pin No.	Mark	I/O	Function
41	EPM	I	For Flash
42	FLD_RST	O	Reset Signal for the FL Driver
43	FLD_CS	O	Latch Signal for the FL Driver
44	DVD_MUTE	I	Signal from DVD Module control mute circuit
45	FLD_DA	O	Data input for the FL Driver
46	FLD_CK	O	Clock Signal for the FL Driver
47	WIDE_1	O	S-Video output control
48	ASP_DA	O	DATA signal for 6ch VOL ASP
49	ASP_CK	O	CLOCK signal for 6ch VOL ASP
50	PLUNGER	O	Deck 1 Plunger Control (L=OFF, H=ON)
51	DMT	O	Deck Mute at Mecha Transition (H=Mute Off, L= Mute On)
52	KA_LAT	O	Karaoke Latch
53	KA_DAT	O	Karaoke Data
54	KA_CLK	O	Karaoke Clock
55	MUTE_L	O	Mute control of Lout
56	MUTE_H	O	HIC MUTE
57	HP_MUTE	O	Head Phone Mute signal
58	MUTE_C	O	Port for Mute control of Center
59	MUTE_SR	O	Port for Mute Control of SL/SR
60	SUB_MUTE	O	Subwoofer Mute Signal
61	MUTE_A	O	Mute Control for FL/FR
62	VCC	-	POWER SUPPLY 5.0V
63	SURR_C	O	Surround Control Port
64	VSS	-	GND (0V)
65	SP_A	O	Control Speana IC's port A
66	SP_B	O	Control Speana IC's port B
67	SP_C	O	Control Speana IC's port C
68	DVD_PCNT	O	Control Signal for the Power for the DVD Module
69	N.C.	-	No Connection
70	PCONT	O	Control Signal for the Power Control Relay
71	REC	O	Deck Recording Control (Recording = L)
72	DC_DET	I	Signal from the DC Detection circuit
73	VMUTE	O	Control Signal for Video Output
74	MOTOR	O	Deck Motor Control (L=OFF, H=ON)
75	JOG_B	I	Signal B from Volume JOG
76	JOG_A	I	Signal A from Volume JOG
77	PARTY	O	Party output For Analog Surround Active L (DSP_CLK)
78-79	N.C.	O	No Connection
80	PLUNGER_2	O	Deck 2 Plunger Control (L=OFF, H=ON)
81	DEMOCTL	I	Control for DEMO function
82	SFC	O	SFC Out for Analog Surround (Active L)
83	MODEL_CTL	I	To select Model when power on (VK71=L, VK81/91=H)
84	LED3	O	Port to control LED3 (TUNER)
85	LED4	O	Port to control LED4 (AUX)
86-88	N.C.	-	No Connection

Pin No.	Mark	I/O	Function
89	DECK_AD1	A/D I	Deck AD Input 1 (Mode 1/Half 1)
90	DECK_AD2	A/D I	Deck AD Input 2 (RINH/MODE2/RINH/HALF2)
91	KEY3	I	Key 3 line input
92	KEY2	I	Key 2 line input
93	DES3	I	REGION Setting for DVD
94	SPEANA_A/D	A/DI	Connect to Speana IC's OUT port
95	DES1	I	REGION Setting for DVD (Tuner Region)
96	AVSS	-	ANALOG POWER SUPPLY INPUT
97	KEY1	I	Key 1 line input
98	VREF	-	REFERENCE VOLTAGE INPUT
99	AVCC	-	ANALOG POWER SUPPLY INPUT
100	PLAY_SW	I	Play Switch

27 Parts Location and Replacement Parts List

Notes:

- Important safety notice:

Components identified by $\triangle$ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.

When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)

Parts without these indications can be used for all areas.

- Warning: This product uses a laser diode. Refer to caution statements on "Precaution of Laser Diode".

- Capacitor values are in microfarads (μF) unless specified otherwise, P= Pico-farads (pF), F= Farads.

- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM).

- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

- [M] markings in the Remarks columns indicates parts supplied by **PAVCSG**.

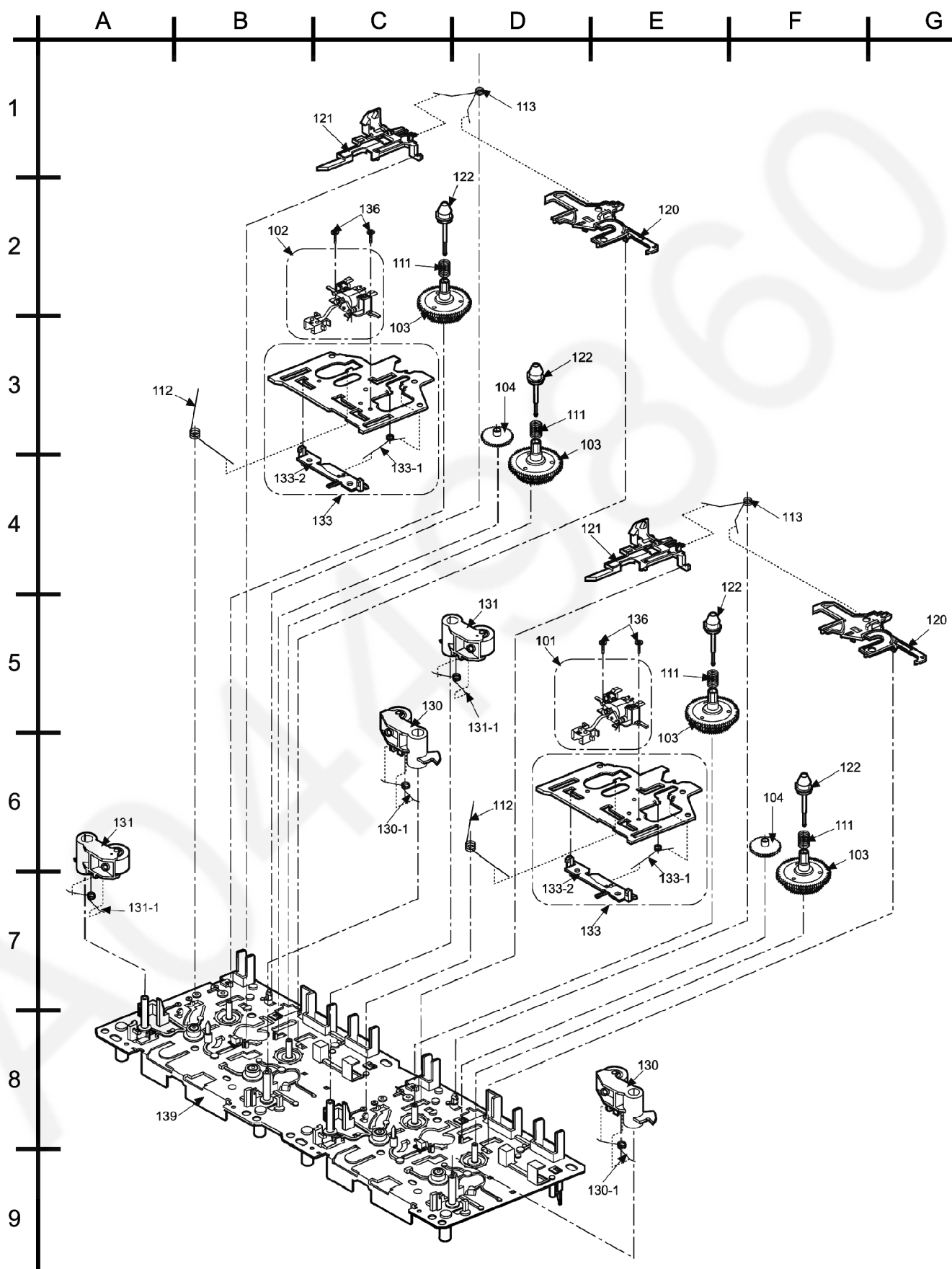
- [SPC] markings in the Remarks columns indicates parts that are supplied by **PAVC**.

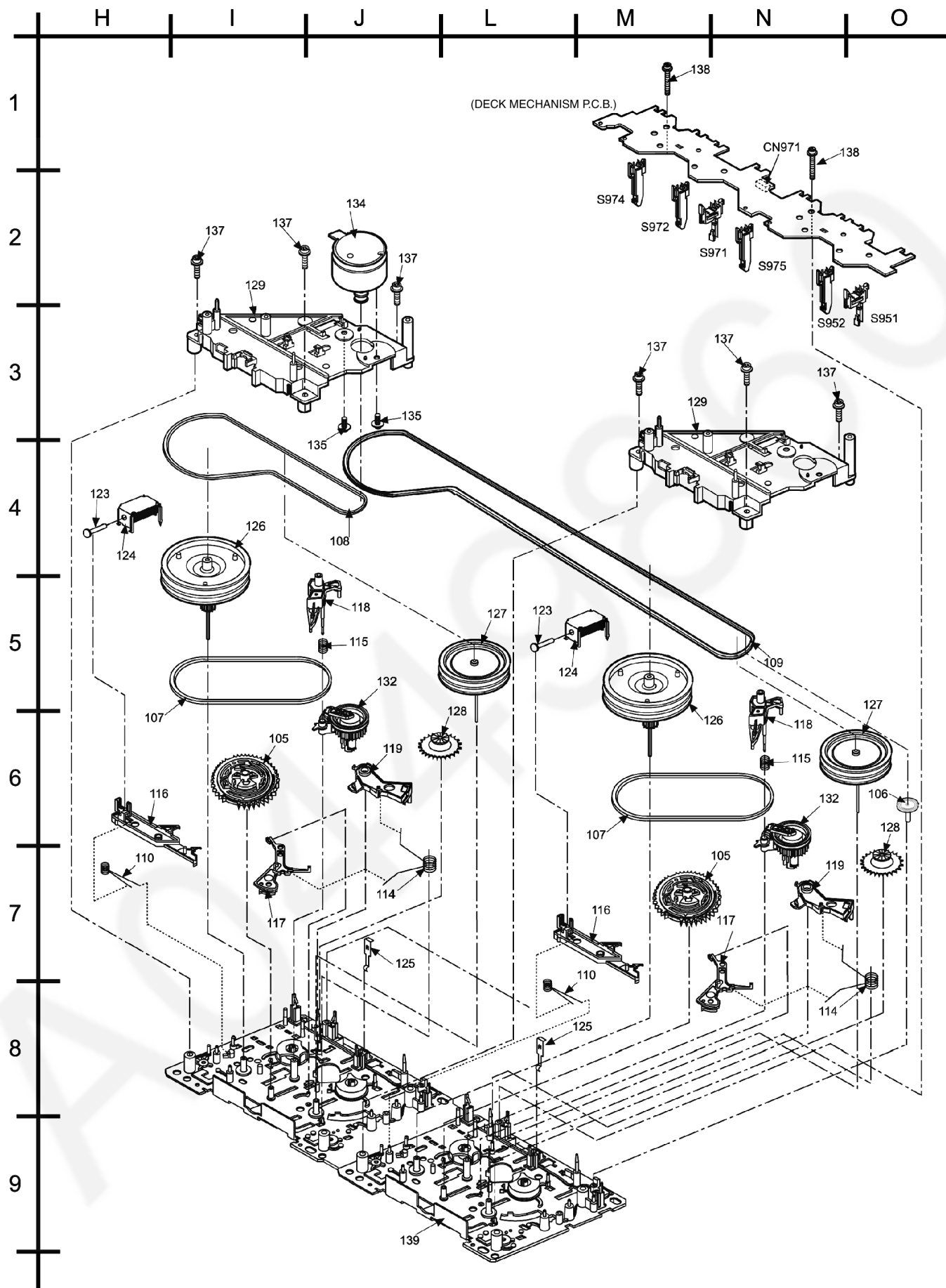
- Reference for O/I book languages are as follows:

Ar :	Arabic	Du :	Dutch	It :	Italian	Sp :	Spanish
Cf :	Canadian French	En :	English	Ko :	Korean	Sw :	Swedish
Cz :	Czech	Fr :	French	Po :	Polish	Co :	Traditional Chinese
Da :	Danish	Ge :	German	Ru :	Russian	Cn :	Simplified Chinese
Pe :	Persian						

27.1. Deck Mechanism (RAA3412-S)

27.1.1. Deck Mechanism Parts Location



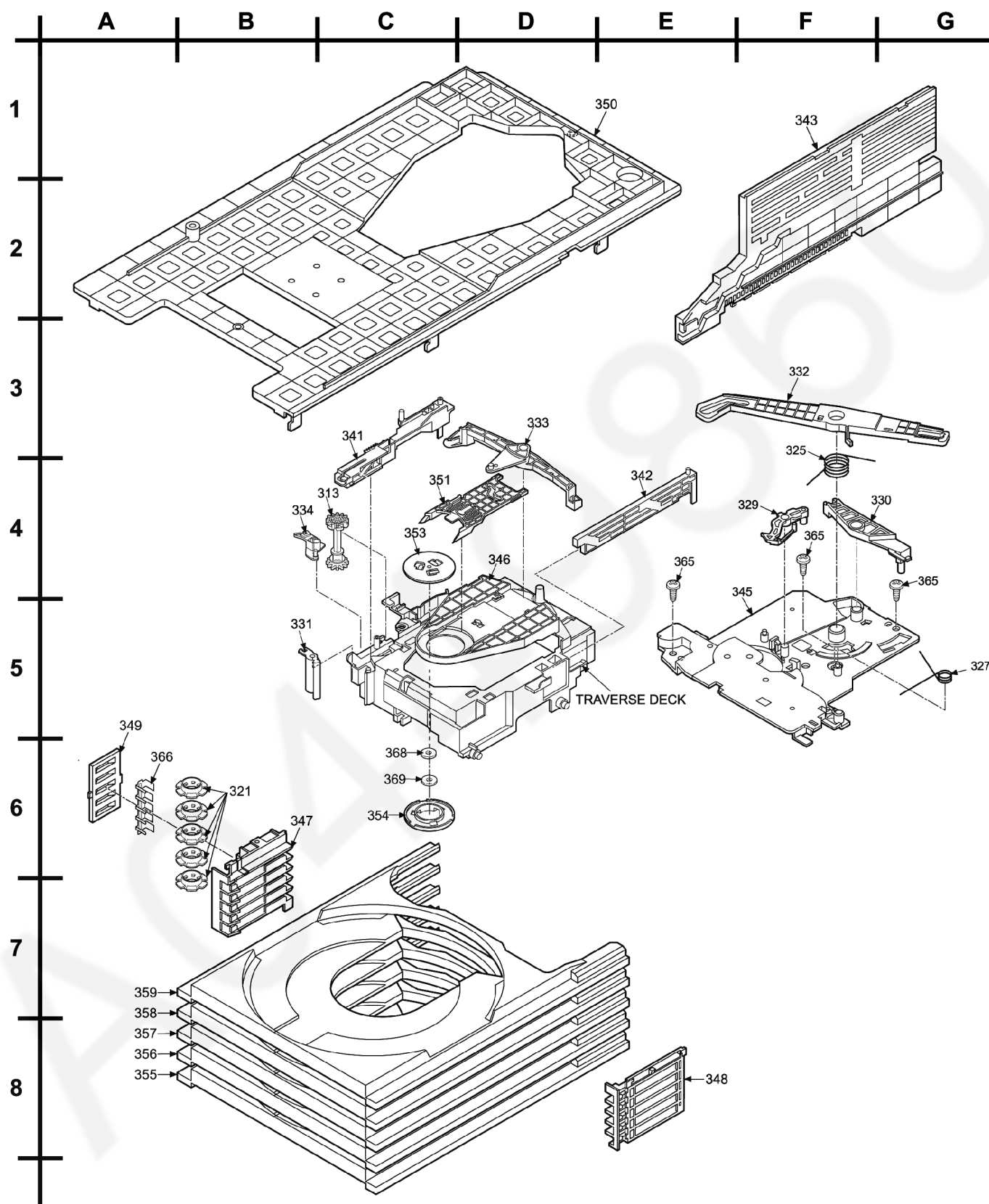


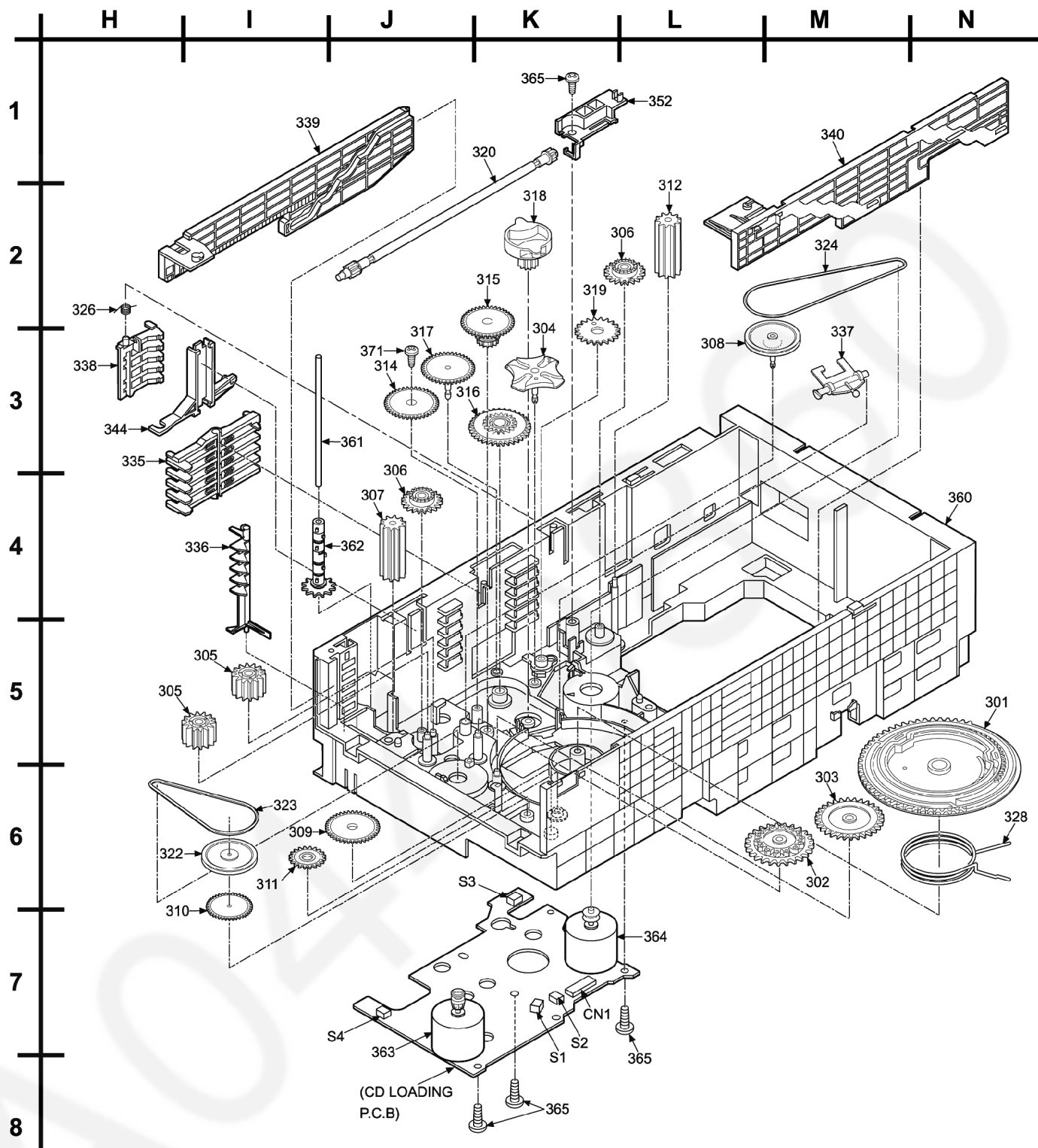
27.1.2. Deck Mechanism Parts List

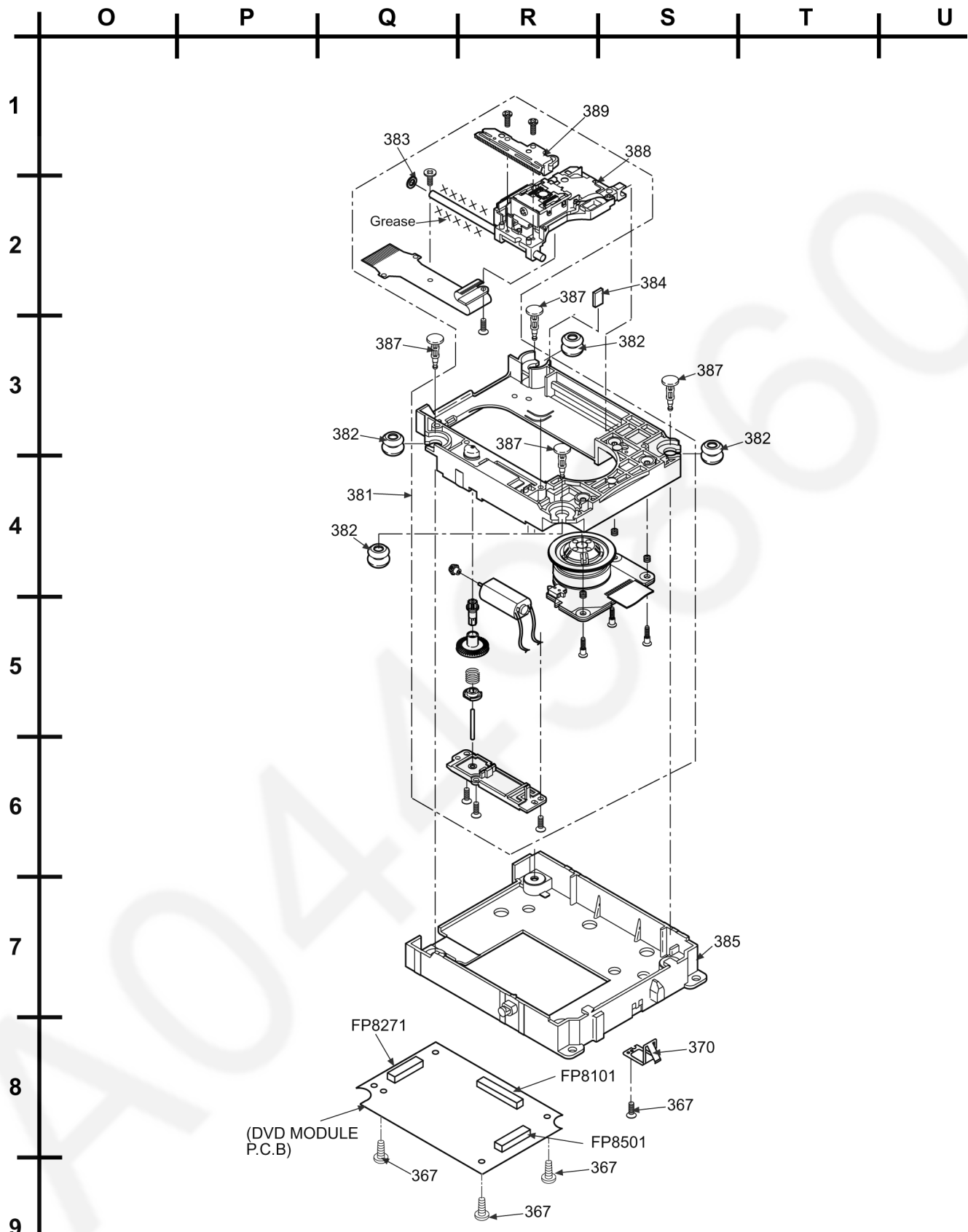
Ref. No.	Part No.	Part Name & Description	Remarks
		CASSETTE DECK	
101	RED0071	R/P HEAD BLOCK UNIT	[M]
102	RED0072	P/B HEAD BLOCK UNIT	[M]
103	RDG0300	REEL BASE GEAR	[M]
104	RDG0301	WINDING RELAY GEAR	[M]
105	RDK0026	MAIN GEAR	[M]
106	RDR0029-3	RELAY PULLEY	[M]
107	RDV0033-4	WINDING BELT	[M]
108	RDV0034-2	CAPSTAN BELT A	[M]
109	RDV0057	MAIN BELT B	[M]
110	RMB0312	TRIGGER LEVER SPRING	[M]
111	RMB0400	REEL SPRING	[M]
112	RMB0403	HEAD PANEL SPRING	[M]
113	RMB0404	BRAKE ROD SPRING	[M]
114	RMB0406	FR LEVER SPRING	[M]
115	RMB0408	THRUST SPRING	[M]
116	RML0370	TRIGGER LEVER	[M]
117	RML0371	FR LEVER	[M]
118	RML0372	WINDING LEVER	[M]
119	RML0374	EJECT LEVER	[M]
120	RMM0131	BRAKE ROD	[M]
121	RMM0133-1	EJECT ROD	[M]
122	RMQ0519	REEL HUB	[M]
123	RMS0398-1	MOVING CORE	[M]
124	RSJ0003	PLUNGER ASS'Y	[M]
125	RMC0061	PACK SPRING	[M]
126	RXF0049	FLYWHEEL F ASS'Y	[M]
127	RXF0050	FLYWHEEL R ASS'Y	[M]
128	RXG0040	FF RELAY GEAR ASS'Y	[M]
129	RMK0283A-J	SUB-CHASSIS	[M]
130	RXL0124	PINCH ROLLER F ASS'Y	[M]
130-1	RMB0401	PINCH ARM SPRING F	[M]
131	RXL0125	PINCH ROLLER R ASS'Y	[M]
131-1	RMB0402	PINCH ARM SPRING R	[M]
132	RXL0126	WINDING ARM ASS'Y	[M]
133	RXQ0412	HEAD PANEL ASS'Y	[M]
133-1	RMB0405	FR ROD SPRING	[M]
133-2	RMM0132	FR ROD	[M]
134	REM0121	CAP MOTOR ASS'Y	[M]
135	RHD26022	MOTOR SCREW	[M]
136	XTW2+5L	HEAD BLOCK UNIT SCREW	[M]
137	XTW26+10S	SUB-CHASSIS SCREW	[M]
138	XYC2+JF17	PCB EARTH SCREW	[M]
139	RFKJXED70-K	MAIN CHASSIS	[M]

27.2. DVD Loading Mechanism

27.2.1. DVD Loading Mechanism Parts Location







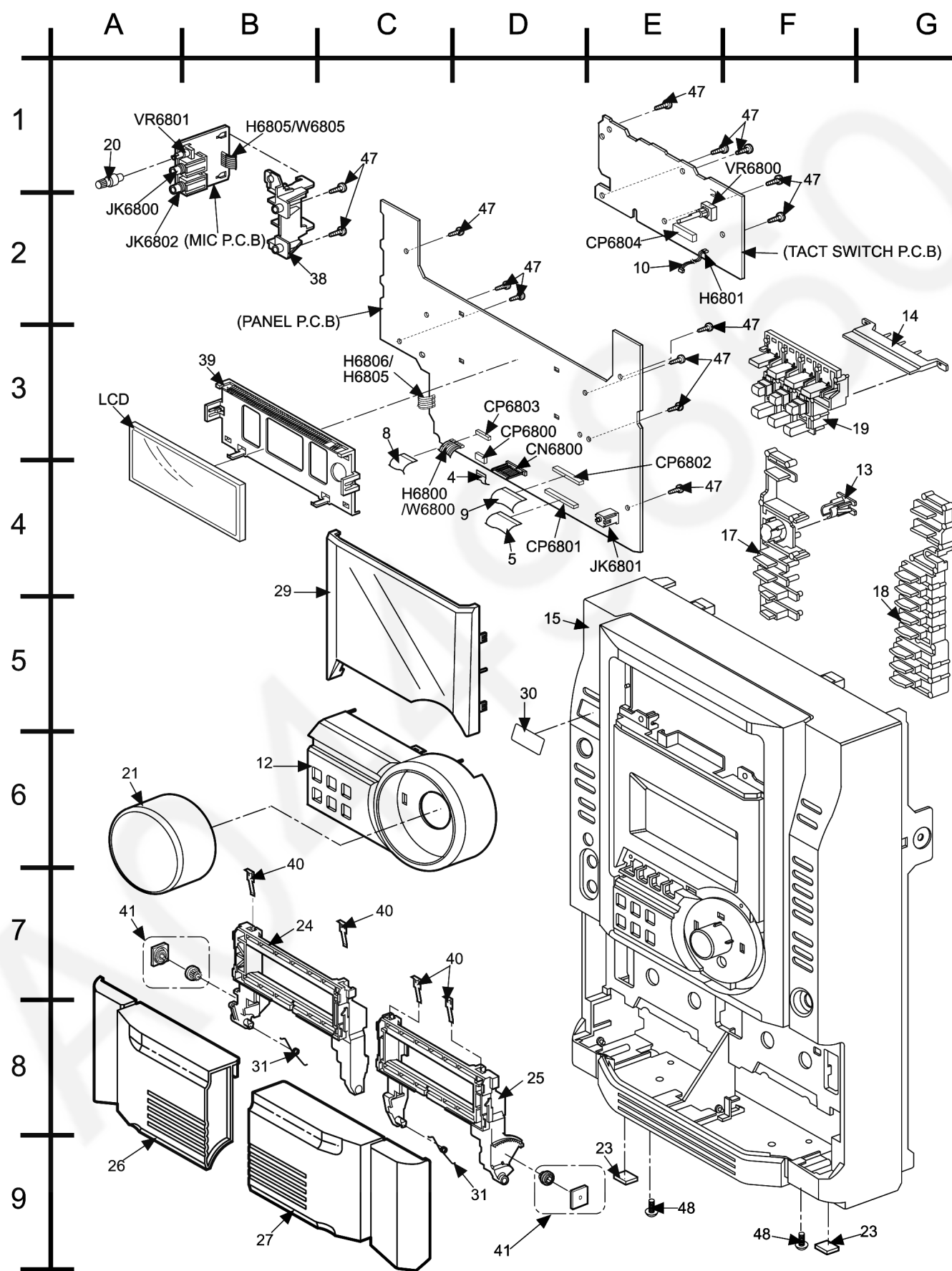
27.2.2. DVD Loading Mechanism Parts List

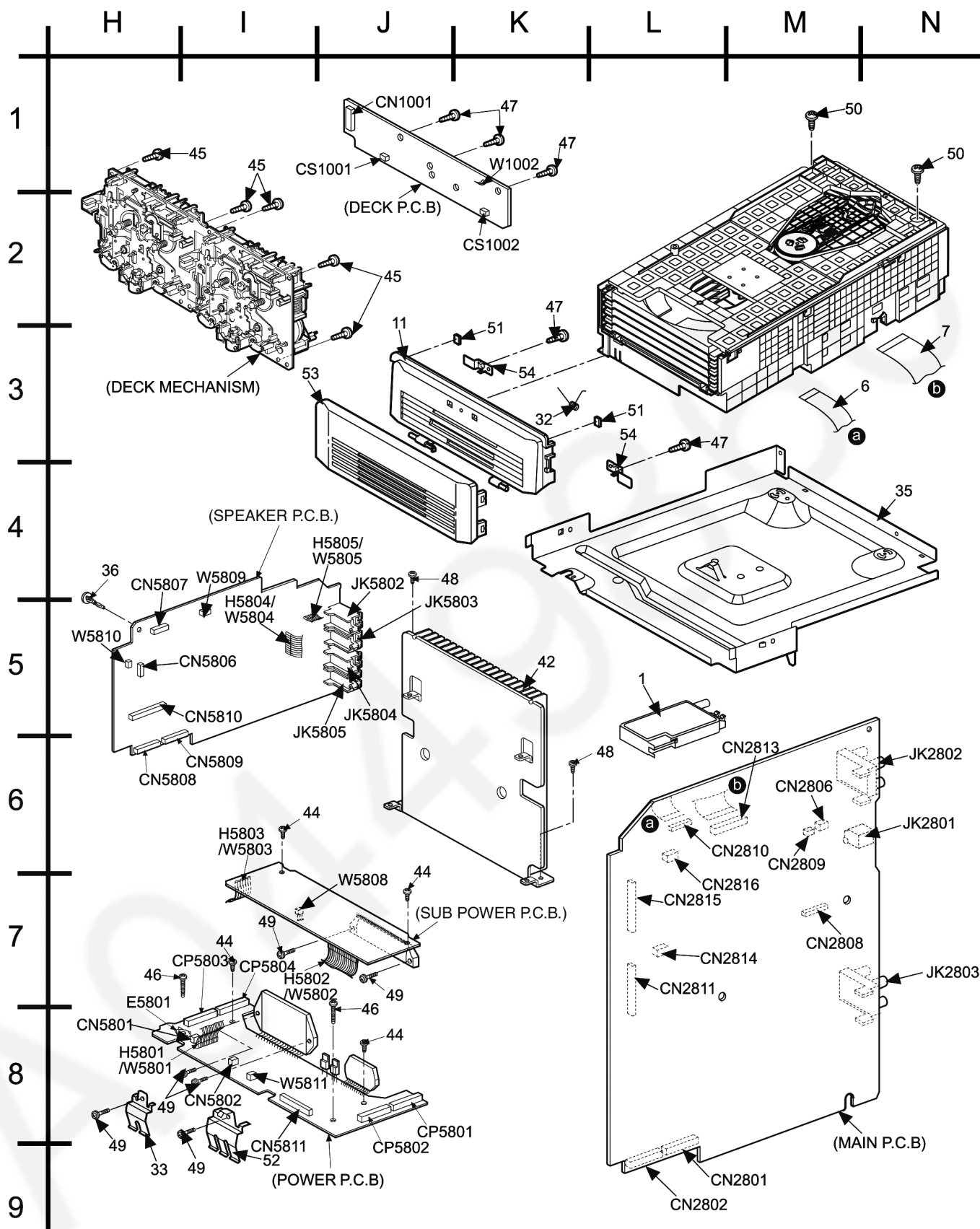
Ref. No.	Part No.	Part Name & Description	Remarks
		TRAVERSE DECK	
301	RDG0519	MAIN GEAR	[M]
302	RDG0520	SPEED UP GEAR	[M]
303	RDG0521	REVERSE GEAR	[M]
304	RDG0522	GENEVA GEAR	[M]
305	RDG0523	HOR RELAY GEAR	[M]
306	RDG0525	CROWN GEAR	[M]
307	RDG0526	TRAY RELAY GEAR	[M]
308	RDG0527	UD PULLEY GEAR	[M]
309	RDG0528	HOR SPEED DOWN GEAR	[M]
310	RDG0529	HOR SPEED DOWN GEAR	[M]
311	RDG0530	HOR DRIVE GEAR	[M]
312	RDG0531	LOAD RELAY GEAR	[M]
313	RDG0532	LOAD GEAR	[M]
314	RDG0535	UD SPEED DOWN GEAR	[M]
315	RDG0534	UD SPEED DOWN GEAR	[M]
316	RDG0536	SELECT SPEED DOWN GE	[M]
317	RDG0537-1	SELECT DRIVE GEAR	[M]
318	RDG0538-1	CHANGE GEAR	[M]
319	RDG0539	UD DRIVE GEAR	[M]
320	RDG0540	TIMING GEAR	[M]
321	RDG0542	TRAY GEAR	[M]
322	RDG0543	HOR PULLEY GEAR	[M]
323	RDV0068	HOR BELT	[M]
324	RDV0069	UD BELT	[M]
325	RME0344-1	UD ASSIST SPRING	[M]
326	RME0361	TRAY STOPPER SPRING	[M]
327	RME0363-1	LIMIT SPRING	[M]
328	RME0368-1	MAIN GEAR SPRING	[M]
329	RML0616	SPEED UP LOCK	[M]
330	RML0617-2	SEPARATE LEVER 1	[M]
331	RML0618-1	SEPARATE LEVER 2	[M]
332	RML0619-1	UD. CONNECTION LEVER	[M]
333	RML0620	TRV.CONNECT LEVER	[M]
334	RML0621-2	TRAY CHG. LEVER	[M]
335	RML0622-1	TRAY LOCK LEVER	[M]
336	RML0623	OPEN SW. LEVER	[M]
337	RML0624	CHG. LEVER	[M]
338	RML0637	TRAY STOPPER	[M]
339	RMM0239-1	UD.RACK (L)	[M]
340	RMM0240	UD.RACK (R)	[M]
341	RMM0241-1	TRV.SLIDE PLATE (L)	[M]
342	RMM0242-1	TRV.SLIDE PLATE (R)	[M]
343	RMM0243	SELECT RACK	[M]
344	RMM0244	SELECT GUIDE	[M]
345	RMQ1051-2	PITCH PLATE	[M]
346	RMQ1209	UD BASE	[M]
347	RMQ1056	TRAY GUIDE (L)	[M]
348	RMQ1057	TRAY GUIDE (R)	[M]
349	RMQ1058	GEAR HOLDER	[M]
350	RMQ1059-2	TOP COVER	[M]
351	RMQ1060	CLAMP GUIDE	[M]
352	RMQ1061	TG. PLATE	[M]
353	RMR1531-X	FIXTURE	[M]
354	RMR1446-X	CLAMPER	[M]
355	RMR1407A-H1	TRAY NO. 1	[M]
356	RMR1407B-H1	TRAY NO. 2	[M]
357	RMR1407C-H1	TRAY NO. 3	[M]
358	RMR1407D-H1	TRAY NO. 4	[M]
359	RMR1407E-H1	TRAY NO. 5	[M]
360	RFKNAPM77MDS	MECHA BASE ASS'Y	[M]
361	RMS0762	TRAY GEAR SHAFT	[M]
362	RXG0053	TRAY DRIVE GEAR ASSY	[M]
363	RXQ0803	LOADING MOTOR ASS'Y	[M]
364	RXQ0804	UD MOTOR ASS'Y	[M]
365	XTB3+10J	SCREW	[M]
366	RMC0472	TRAY SPRING	[M]
367	XTV2+6G	SCREW	[M]
368	XWG6FFY	BACK YOKE	[M]
369	JSM0048	MAGNET	[M]
370	RMC0387	SUPPORT SPRING	[M]

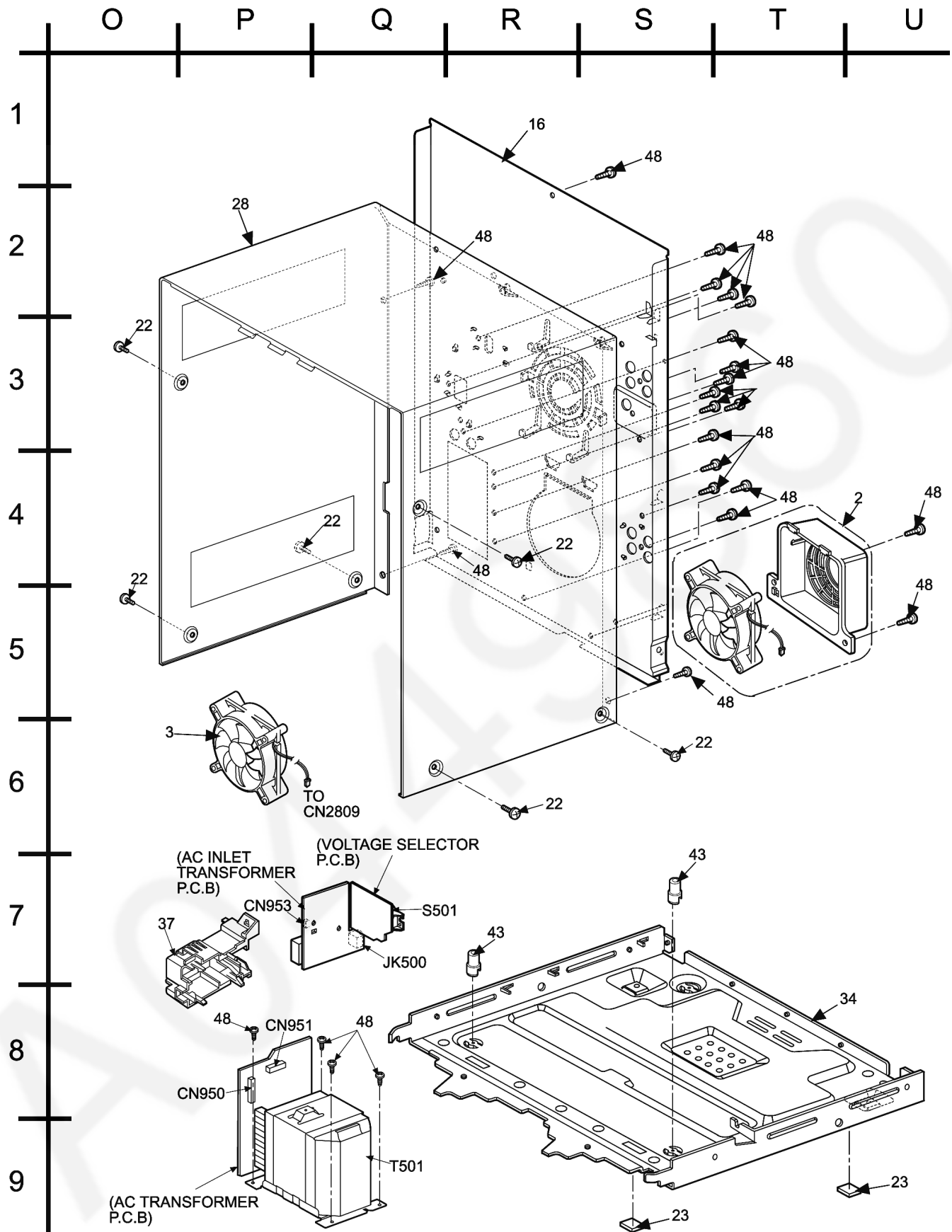
Ref. No.	Part No.	Part Name & Description	Remarks
371	XTBS26+8J	SCREW	[M]
381	RAE2008W-S	DT68 TRV SUB UNIT	[M]
382	RMG0598-A	FLOATING RUBBER	[M]
383	RMG0617-H	CUSHION RUBBER A	[M]
384	RMG0618-H	CUSHION RUBBER B	[M]
385	RMR1596-K	MIDDLE CHASSIS	[M]
387	RMS0789	FIXED PIN	[M]
388	RAF3112A-S	DVD OPU 7.1H	[M]
389	RMM0261	DRIVE RACK	[M]

27.3. Cabinet

27.3.1. Cabinet Parts Location







27.3.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	ENG06802QF	TUNER PACK	[M]
2	L6FALEFH0020	FAN COVER UNIT	[M]
3	L6FALEFH0023	FAN	[M]
4	REEX0202	10P FFC	[M]
5	REEX0370	30P FFC WIRE	[M]
6	REEX0371	14P FFC WIRE	[M]
7	REEX0380	50P FFC WIRE	[M]
8	REEX0381	14P FFC	[M]
9	REEX0382	28P FFC	[M]
10	REXX0315	2P FLAT WIRE	[M]
11	RGKX0274-S	CD LID	[M]
12	RGKX0275-S1	CONTROL PANEL	[M]
13	RGLX0095-Q	POWER LIGHT CHIP	[M]
14	RGLX0096-Q	CONTROL PANEL LIGHT	[M]
15	RGPX0160-S2	FRONT PANEL	[M]
16	RGRX0037A-B2	REAR PANEL	[M]
17	RGUX0583-S	POWER BUTTON	[M]
18	RGUX0584-S	CD CONTROL BUTTON	[M]
19	RGUX0585-S	FUNCTION BUTTON	[M]
20	RGWX0056-S	MIC VOL KNOB	[M]
21	RGWX0072-S	VOLUME KNOB	[M]
22	RHD30004-2S	SCREW	[M]
23	RKA0059-K	LEG RUBBER	[M]
24	RKFX0093-K	CASS. HOLDER (L)	[M]
25	RKFX0094-K	CASS. HOLDER (R)	[M]
26	RKFX0123-S	CASS LID L	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
27	RKFX0124-S	CASS LID R	[M]
28	RKMX0077E-S	TOP CABINET (BENT)	[M]
29	RKWX0236-H3	FL WINDOW	[M]
30	RKWX0238-S	REMOTE SENSOR WINDOW	[M]
31	RMBX0021	CASS OPEN SPRING	[M]
32	RMBX0033	CD LID OPEN SPRING	[M]
33	RMCX0020	REGMATOR IC CLIP	[M]
34	RMKX0062	BOTTOM CHASSIS	[M]
35	RMKX0096	DVD CHASSIS	[M]
36	RMNX0019	PCB SPACER	[M]
37	RMNX0029C-A	SUB TRANS HOLDER	[M]
38	RMNX0133	MIC JACK HOLDER	[M]
39	RMNX0134	FL HOLDER	[M]
40	RUS757ZAA	CASS HALF SPRING	[M]
41	RXGX0002	DAMPER GEAR	[M]
42	RXXX0035-2J	HEAT SINK UNIT	[M]
43	SHE187-5J	PCB SUPPORT	[M]
44	XTB3+10J	SCREW	[M]
45	XTB3+10JFZ	SCREW	[M]
46	XTB3+20J	SCREW	[M]
47	XTBS26+10J	SCREW	[M]
48	XTBS3+8JFZ1	SCREW	[M]
49	XTW3+15T	SCREW	[M]
50	XTW3+8T	SCREW	[M]
51	RMG0547-K	CUSHION	[M]
52	RMC0158-S2	TR-FIXTURE	[M]
53	RYQX0131-S1	CD LID COVER UNIT	[M]
54	RMAX0068	CD LID SUPPORT	[M]

27.4. Electrical Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PRINTED CIRCUIT BOARD	
	REP3654Q	DVD MODULE P.C.B. (SIDE: A)	[M](RTL)
	REP3654Q	DVD MODULE P.C.B. (SIDE: B)	[M](RTL)
	REPX0433E	MAIN P.C.B.	[M](RTL)
	REPX0434B	PANEL P.C.B.	[M](RTL)
	REPX0434B	MIC P.C.B.	[M](RTL)
	REPX0434B	TACT P.C.B.	[M](RTL)
	REPX0331C	DECK P.C.B.	[M](RTL)
	REPX0321B	DECK MECHANISM P.C.B.	[M](RTL)
	REPX0432A	POWER P.C.B.	[M](RTL)
	REPX0432A	SPEAKER P.C.B.	[M](RTL)
	REPX0432A	SUB POWER P.C.B.	[M](RTL)
	REP3569A	CD LOADING P.C.B.	[M](RTL)
	REPX0431A	TRANSFORMER P.C.B.	[M](RTL)
	REPX0431A	VOLTAGE SELECTOR P.C.B.	[M](RTL)
	REPX0431A	AC INLET P.C.B.	[M](RTL)
		INTEGRATED CIRCUITS	
IC11	C0GAG0000007	IC UP/DOWN MOTOR DRIVE	[M]
IC21	C0GAG0000007	IC LOADING MOTOR DRIVE	[M]
IC951	CNB13030R2AU	IC PHOTO INTERRUPTOR	[M]
IC971	CNB13030R2AU	IC PHOTO INTERRUPTOR	[M]
IC1001	AN7348S-E1	IC P.B. EQ/REC AMP/ALC/TPS	[M]
IC1004	C1AA00000612	IC R/P SELECT	[M]
IC2801	C0CBADG00005	IC 5V REGULATOR	[M]
IC2802	C0DBAZG00033	IC DC TO DC CONVERTER	[M]
IC2803	C0DBAZG00033	IC DC TO DC CONVERTER	[M]
IC2806	C0CBADG00005	IC 5V REGULATOR	[M]
IC2807	C0DBEF000003	IC REGULATOR	[M]
IC2808	C0CBADG00005	IC 5V REGULATOR	[M]
IC2809	C9ZB00000377	IC VIDEO BUFFER	[M]
IC2811	C0AABB000117	IC HP AMP	[M]
IC2812	KIA4558FEL	IC DUAL OP-AMP	[M]
IC2813	C1BB00000801	IC KARAOKE	[M]
IC2815	C1BB00000845	IC ASP	[M]
IC2816	C0ABC0000052	IC QUAD OP-AMP	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
IC2817	C0ABC0000052	IC QUAD OP-AMP	[M]
IC2818	C0JBAR000292	IC ANALOG SWITCH	[M]
IC2819	KIA4558FEL	IC DUAL OP-AMP	[M]
IC5801	RSN309W44B	IC POWER HIC	[M]
IC5802	C5BA00000113	IC VOLTAGE REGULATOR	[M]
IC5803	RSN312H24-P	IC POWER AMP	[M]
IC5805	RSN312H24-P	IC POWER AMP	[M]
IC6800	C2CBJG000460	IC MICROPROCESSOR	[M]
IC6802	C1BB00000086	IC SPECTRUM ANALYZER	[M]
IC6803	C0HBB0000039	IC FL DRIVER	[M]
IC8001	MN2DS0003APH	IC DV2.1 LSI	[M]
IC8051	C3ABPG000063	IC 64MB SDRAM	[M]
IC8111	C0CBCBD00018	IC POWER SUPPLY	[M]
IC8251	C0GBG0000044	IC MOTOR DRIVE	[M]
IC8271	C0GBF0000004	IC MOTOR DRIVE	[M]
IC8451	C0FBBK000036	IC AUDIO DAC	[M]
IC8601	C0EBE0000384	IC VOLTAGE DETECTING	[M]
IC8605	C0EBA0000031	IC RESET	[M]
IC8651	RFKFMH81T161	IC FLASH ROM	[SPC]
IC8691	C0JBAA000346	IC AND GATE LOGIC	[M]
IC8695	C0JBAA000346	IC AND GATE LOGIC	[M]
		TRANSISTORS	
Q1	B3NAA0000068	TRANSISTOR	[M]
Q1001	B1ABCF000131	TRANSISTOR	[M]
Q1003	B1AAGC000007	TRANSISTOR	[M]
Q1004	B1AAGC000007	TRANSISTOR	[M]
Q1005	B1AAGC000007	TRANSISTOR	[M]
Q1007	B1ABCF000131	TRANSISTOR	[M]
Q1012	B1ABEB000001	TRANSISTOR	[M]
Q1013	B1ABEB000001	TRANSISTOR	[M]
Q1014	B1ABCF000011	TRANSISTOR	[M]
Q1015	B1ABCF000011	TRANSISTOR	[M]
Q1016	B1GDCFJ00023	TRANSISTOR	[M]
Q1017	B1AARC000002	TRANSISTOR	[M]
Q1020	B1ABEB000001	TRANSISTOR	[M]
Q1021	B1ABEB000001	TRANSISTOR	[M]
Q2802	B1ADCF000001	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q2806	B1GBCFJN0021	TRANSISTOR	[M]
Q2810	B1GBCFJN0021	TRANSISTOR	[M]
Q2813	B1GFCAA0001	TRANSISTOR	[M]
Q2814	B1GDCFGA0014	TRANSISTOR	[M]
Q2815	B1GDCFGA0014	TRANSISTOR	[M]
Q2816	B1GDCFGA0014	TRANSISTOR	[M]
Q2818	B1GFCAA0001	TRANSISTOR	[M]
Q2819	B1GFCAA0001	TRANSISTOR	[M]
Q2820	B1ABEB000001	TRANSISTOR	[M]
Q2821	B1GFCAA0001	TRANSISTOR	[M]
Q2822	B1GCCFGA0005	TRANSISTOR	[M]
Q2823	B1GCCFGA0005	TRANSISTOR	[M]
Q2824	B1GCCFGA0005	TRANSISTOR	[M]
Q2825	B1ABEB000001	TRANSISTOR	[M]
Q2826	B1ADCF000001	TRANSISTOR	[M]
Q2827	2SD0592ARA	TRANSISTOR	[M]
Q2828	B1ADCF000001	TRANSISTOR	[M]
Q2829	2SD0592ARA	TRANSISTOR	[M]
Q2830	B1ADCF000001	TRANSISTOR	[M]
Q2831	B1ABCF000011	TRANSISTOR	[M]
Q2832	B1ADCF000001	TRANSISTOR	[M]
Q2833	2SD0592ARA	TRANSISTOR	[M]
Q2834	B1ADCF000001	TRANSISTOR	[M]
Q2835	2SD0592ARA	TRANSISTOR	[M]
Q2836	B1ADCF000001	TRANSISTOR	[M]
Q2837	B1ABCF000011	TRANSISTOR	[M]
Q2838	B1GBCFJA0015	TRANSISTOR	[M]
Q2839	B1GFCAA0001	TRANSISTOR	[M]
Q2840	B1GCCFGA0005	TRANSISTOR	[M]
Q2841	B1GCCFGA0005	TRANSISTOR	[M]
Q2842	B1ABEB000001	TRANSISTOR	[M]
Q5801	KTC3199GRTA	TRANSISTOR	[M]
Q5802	KTC3199GRTA	TRANSISTOR	[M]
Q5803	B1AAGC000007	TRANSISTOR	[M]
Q5804	B1BCCG000021	TRANSISTOR	[M]
Q5805	B1BAJ000003	TRANSISTOR	[M]
Q5806	B1BACG000036	TRANSISTOR	[M]
Q5807	B1ACCF000063	TRANSISTOR	[M]
Q5808	B1ACCF000063	TRANSISTOR	[M]
Q5809	B1ACCL000012	TRANSISTOR	[M]
Q5810	B1ACCL000010	TRANSISTOR	[M]
Q5811	KTC3199GRTA	TRANSISTOR	[M]
Q5812	KTC3199GRTA	TRANSISTOR	[M]
Q5813	KTC3199GRTA	TRANSISTOR	[M]
Q5814	B1GCCFJJ0015	TRANSISTOR	[M]
Q5815	2SB621ARST	TRANSISTOR	[M]
Q5816	2SD21370PA	TRANSISTOR	[M]
Q5817	B1AAGC000007	TRANSISTOR	[M]
Q5818	B1AAGC000007	TRANSISTOR	[M]
Q6001	B1ABCF000131	TRANSISTOR	[M]
Q6002	B1ABCF000131	TRANSISTOR	[M]
Q6800	B1GACFL0007	TRANSISTOR	[M]
Q6803	B1ACCF000063	TRANSISTOR	[M]
Q6804	B1ACCF000063	TRANSISTOR	[M]
Q6805	KRC102MTA	TRANSISTOR	[M]
Q6806	KTC3199GRTA	TRANSISTOR	[M]
Q6807	B1ACCF000065	TRANSISTOR	[M]
Q6808	B1GCCFJJ0015	TRANSISTOR	[M]
Q6809	B1GCCFJJ0015	TRANSISTOR	[M]
Q6810	B1ABCF000131	TRANSISTOR	[M]
Q6811	B1ABCF000131	TRANSISTOR	[M]
Q6812	B1ABCF000131	TRANSISTOR	[M]
Q6813	KTA12710YTA	TRANSISTOR	[M]
Q6814	KTA12710YTA	TRANSISTOR	[M]
Q6815	KRC102MTA	TRANSISTOR	[M]
Q6816	B1ABCF000131	TRANSISTOR	[M]
Q6817	B1AACF000065	TRANSISTOR	[M]
Q6820	B1GACFJN0011	TRANSISTOR	[M]
Q6821	B1GACFJN0011	TRANSISTOR	[M]
Q6822	B1GACFJN0011	TRANSISTOR	[M]
Q6823	B1GACFJN0011	TRANSISTOR	[M]
Q6824	B1GACFJN0011	TRANSISTOR	[M]
Q6825	B1ABCF000131	TRANSISTOR	[M]
Q6826	B1ABCF000131	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q6827	B1ABCF000131	TRANSISTOR	[M]
Q6828	B1ABCF000131	TRANSISTOR	[M]
Q6833	B1GBCFJJ0039	TRANSISTOR	[M]
Q6834	B1GBCFJJ0039	TRANSISTOR	[M]
Q6835	B1GBCFJJ0039	TRANSISTOR	[M]
Q6836	B1GBCFJJ0039	TRANSISTOR	[M]
Q8550	2SB1219AHL	TRANSISTOR	[M]
Q8551	2SD1819A0L	TRANSISTOR	[M]
Q8552	2SB09700RL	TRANSISTOR	[M]
Q8560	2SD1819A0L	TRANSISTOR	[M]
Q8561	2SD1819A0L	TRANSISTOR	[M]
Q8562	2SB09700RL	TRANSISTOR	[M]
Q8605	2SD1819A0L	TRANSISTOR	[M]
Q8606	2SD1819A0L	TRANSISTOR	[M]
QR8420	UNR521100L	CHIP TRANSISTOR	[M]
QR8571	UNR511V00L	CHIP TRANSISTOR	[M]
		DIODES	
D950	B0EAKM000126	DIODE	[M]
D951	MA2C16500E	DIODE	[M]
D971	MA2C16500E	DIODE	[M]
D1003	B0ACCK000005	DIODE	[M]
D1004	B0BC3R700004	DIODE	[M]
D2801	B0JCPD000025	DIODE	[M]
D2802	B0JCPD000025	DIODE	[M]
D2803	B0BC7R500001	DIODE	[M]
D2804	B0BC7R500001	DIODE	[M]
D2808	B0ACCK000005	DIODE	[M]
D2809	B0ACCK000005	DIODE	[M]
D2815	B0ACCK000005	DIODE	[M]
D2816	B0ACCK000005	DIODE	[M]
D2817	B0ACCK000005	DIODE	[M]
D2818	B0ACCK000005	DIODE	[M]
D2819	B0ACCK000005	DIODE	[M]
D2820	B0BC01000014	DIODE	[M]
D2821	B0ACCK000005	DIODE	[M]
D2822	B0BC01000014	DIODE	[M]
D2823	B0EAKM000117	DIODE	[M]
D2824	B0ACCK000005	DIODE	[M]
D2825	B0ACCK000005	DIODE	[M]
D2826	B0ACCK000005	DIODE	[M]
D2827	B0EAKM000117	DIODE	[M]
D2828	B0ACCK000005	DIODE	[M]
D2829	B0ACCK000005	DIODE	[M]
D2830	B0ACCK000005	DIODE	[M]
D2831	B0ACCK000005	DIODE	[M]
D2832	B0ADCJ000020	DIODE	[M]
D2833	B0ACCK000005	DIODE	[M]
D2834	B0BC5R000009	DIODE	[M]
D2835	B0ACCK000005	DIODE	[M]
D2836	B0EAKM000117	DIODE	[M]
D2850	B0BC9R000008	DIODE	[M]
D5801	B0JAPG000019	DIODE	[M]
D5802	B0JAPG000019	DIODE	[M]
D5803	B0BA01900005	DIODE	[M]
D5804	B0BA01900005	DIODE	[M]
D5805	B0BA01900005	DIODE	[M]
D5806	B0BA01900005	DIODE	[M]
D5807	B0EAKM000117	DIODE	[M]
D5808	B0EAKM000117	DIODE	[M]
D5809	B0AACK000004	DIODE	[M]
D5810	B0AACK000004	DIODE	[M]
D5814	B0AACK000004	DIODE	[M]
D5815	B0AACK000004	DIODE	[M]
D5816	B0BA01900035	DIODE	[M]
D5817	B0BA01700031	DIODE	[M]
D5818	B0BA01200046	DIODE	[M]
D5819	B0AACK000004	DIODE	[M]
D5820	B0AACK000004	DIODE	[M]
D5821	B0AACK000004	DIODE	[M]
D5822	B0JAPG000019	DIODE	[M]
D5823	B0JAPG000019	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D5824	B0JAPG000019	DIODE	[M]
D5825	B0JAPG000019	DIODE	[M]
D5831	B0FBAM000009	DIODE	[M]
D5832	B0FBAM000009	DIODE	[M]
D5833	B0EAKM000126	DIODE	[M]
D5834	B0EAKM000126	DIODE	[M]
D5835	B0BA02600018	DIODE	[M]
D5836	B0EAKM000125	DIODE	[M]
D5837	B0EAKM000125	DIODE	[M]
D5838	B0EAKM000125	DIODE	[M]
D5839	B0BA7R000005	DIODE	[M]
D5840	B0EAKM000125	DIODE	[M]
D5841	B0AACK000004	DIODE	[M]
D5842	B0EAKM000125	DIODE	[M]
D5844	B0EBNL000004	DIODE	[M]
D5846	B0FBAM000009	DIODE	[M]
D5847	B0FBAM000009	DIODE	[M]
D5848	B0AACK000004	DIODE	[M]
D5849	B0AACK000004	DIODE	[M]
D5850	B0AACK000004	DIODE	[M]
D5851	B0AACK000004	DIODE	[M]
D5852	B0AACK000004	DIODE	[M]
D5853	B0AACK000004	DIODE	[M]
D5854	B0AACK000004	DIODE	[M]
D5855	B0AACK000004	DIODE	[M]
D5856	B0AACK000004	DIODE	[M]
D5857	B0AACK000004	DIODE	[M]
D5858	B0AACK000004	DIODE	[M]
D5858	B0BC5R000009	DIODE	[M]
D5859	B0AACK000004	DIODE	[M]
D5859	B0EAKM000117	DIODE	[M]
D5860	B0AACK000004	DIODE	[M]
D5861	B0AACK000004	DIODE	[M]
D5871	B0ACCK000005	DIODE	[M]
D6000	B3AAA0000583	DIODE	[M]
D6801	B0ACCK000005	DIODE	[M]
D6802	B0ACCE000003	DIODE	[M]
D6803	B0ACCE000003	DIODE	[M]
D6804	B0BC5R600003	DIODE	[M]
D6806	B0ACCK000005	DIODE	[M]
D6808	B3AAA0000583	DIODE	[M]
D6809	B3AAA0000583	DIODE	[M]
D6810	B3AAA0000583	DIODE	[M]
D6811	B3AAA0000583	DIODE	[M]
D6813	B0ACCK000005	DIODE	[M]
D6814	B3AAA0000583	DIODE	[M]
D6815	B0BC5R600003	DIODE	[M]
D8550	MA2S11100L	DIODE	[M]
D8571	MA2J72800L	DIODE	[M]
		CHIP INDUCTORS	
LB8001	J0JHC0000045	CHIP INDUCTOR	[M]
LB8002	J0JHC0000045	CHIP INDUCTOR	[M]
LB8011	ERJ3GEYJ220V	CHIP INDUCTOR	[M]
LB8271	ERJ3GEY0R00V	0 1/16W	[M]
LB8272	ERJ3GEY0R00V	0 1/16W	[M]
LB8273	ERJ3GEY0R00V	0 1/16W	[M]
LB8301	J0JCC0000119	CHIP INDUCTOR	[M]
LB8302	J0JCC0000119	CHIP INDUCTOR	[M]
LB8303	J0JCC0000119	CHIP INDUCTOR	[M]
LB8304	J0JCC0000119	CHIP INDUCTOR	[M]
LB8305	J0JCC0000119	CHIP INDUCTOR	[M]
LB8401	ERJ3GEYJ151V	150 1/16W	[M]
LB8420	J0JCC0000091	FILTER	[M]
LB8421	J0JCC0000119	CHIP INDUCTOR	[M]
LB8422	J0JCC0000119	CHIP INDUCTOR	[M]
LB8423	ERJ3GEY0R00V	0 1/16W	[M]
LB8424	J0JCC0000091	FILTER	[M]
LB8451	J0JCC0000119	CHIP INDUCTOR	[M]
LB8452	J0JCC0000119	CHIP INDUCTOR	[M]
LB8453	J0JCC0000119	CHIP INDUCTOR	[M]
LB8454	J0JCC0000119	CHIP INDUCTOR	[M]
LB8455	J0JCC0000119	CHIP INDUCTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
LB8456	J0JCC0000119	CHIP INDUCTOR	[M]
LB8491	J0JCC0000119	CHIP INDUCTOR	[M]
LB8501	ERJ3GEYJ222V	2.2K 1/16W	[M]
LB8502	J0JHC0000045	CHIP INDUCTOR	[M]
LB8503	ERJ3GEY0R00V	0 1/16W	[M]
LB8504	J0JCC0000091	FILTER	[M]
LB8505	J0JCC0000091	FILTER	[M]
LB8506	ERJ3GEYJ152V	1.5K 1/16W	[M]
LB8507	J0JCC0000091	FILTER	[M]
LB8511	ERJ3GEY0R00V	0 1/16W	[M]
LB8512	ERJ3GEY0R00V	0 1/16W	[M]
LB8513	ERJ3GEY0R00V	0 1/16W	[M]
LB8514	ERJ3GEY0R00V	0 1/16W	[M]
LB8690	J0JCC0000091	FILTER	[M]
LB8691	D0GB101JA002	100 1/16W	[M]
LB8692	D0GB101JA002	100 1/16W	[M]
LB8693	D0GB101JA002	100 1/16W	[M]
		VARIABLE RESISTORS	
VR6800	EVEKE2F3524M	VR VOLUME JOG	[M]
VR6801	EVUE27FK2B53	VR MIC	[M]
		SWITCHES	
S1	K0L1BA000065	SW STOCK	[M]
S2	K0L1BA000065	SW PLAY	[M]
S3	K0L1BA000078	SW BOTTOM	[M]
S4	RS1A045-1A	SW OPEN	[M]
S5	K0L1BA000065	SW CHANGE	[M]
S501	K0AFZA000005	SW VOLTAGE SELECTOR	[M] △
S951	K0J1BB000017	SW MODE	[M]
S952	RS1A019-2U	SW HALF	[M]
S971	K0J1BB000017	SW MODE	[M]
S972	RS1A019-2U	SW HALF	[M]
S974	RS1A019-2U	SW RECINH_R	[M]
S975	RS1A019-2U	SW RECINH_F	[M]
S6800	EVQ21405R	SW DVD/CD	[M]
S6801	EVQ21405R	SW TAPE	[M]
S6802	EVQ21405R	SW TUNER/BAND	[M]
S6803	EVQ21405R	SW AUX	[M]
S6804	EVQ21405R	SW DECK 1	[M]
S6805	EVQ21405R	SW DISPLAY	[M]
S6806	EVQ21405R	SW DECK 2	[M]
S6807	EVQ21405R	SW REW	[M]
S6808	EVQ21405R	SW FF	[M]
S6809	EVQ21405R	SW STOP	[M]
S6810	EVQ21405R	SW POWER	[M]
S6811	EVQ21405R	SW DISC CHECK	[M]
S6812	EVQ21405R	SW MULTI RE-MASTER	[M]
S6813	EVQ21405R	SW SUPER SURROUND	[M]
S6814	EVQ21405R	SW DECK 1/2	[M]
S6815	EVQ21405R	SW REC	[M]
S6816	EVQ21405R	SW CD OPEN/CLOSE	[M]
S6817	EVQ21405R	SW DISC CHANGE	[M]
S6819	EVQ21405R	SW DISC 5	[M]
S6820	EVQ21405R	SW DISC 4	[M]
S6821	EVQ21405R	SW DISC 3	[M]
S6822	EVQ21405R	SW DISC 2	[M]
S6823	EVQ21405R	SW DISC 1	[M]
S6824	EVQ21405R	SW SSEQ	[M]
S6825	EVQ21405R	SW S.WOOFER	[M]
S6826	EVQ21405R	SW SOUND EQ	[M]
		CONNECTORS	
CN1	K1MN14B00066	14P FFC CONNECTOR	[M]
CN950	RJT119W10V	10P CONNECTOR	[M]
CN951	RJT119W07V	7P WIRE CONNECTOR	[M]
CN953	K1KA03A00083	3P CONNECTOR	[M]
CN971	K1MN10B00104	10P FFC CONNECTOR	[M]
CN1001	K1MN14B00058	14P CONNECTOR	[M]
CN2801	K1KB12B00036	12P CONNECTOR	[M]
CN2802	K1KB12B00036	12P CONNECTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
CN2806	K1KA02A00008	2P CONNECTOR	[M]
CN2808	K1KA10A00263	10P CONNECTOR	[M]
CN2809	K1KA02A00375	2P LOADING MOTOR WIRE	[M]
CN2810	K1MN14B00066	14P CONNECTOR	[M]
CN2811	K1MN30A00046	30P FFC CONNECTOR	[M]
CN2813	K1MN50A00008	50P CONNECTOR	[M]
CN2814	K1KA03A00083	3P CONNECTOR	[M]
CN2815	K1MN28A00016	28P FFC CONNECTOR	[M]
CN2816	K1KA02A00375	2P LOADING MOTOR WIRE	[M]
CN5801	K1KA02A00375	2P LOADING MOTOR WIRE	[M]
CN5802	K1KA02A00375	2P LOADING MOTOR WIRE	[M]
CN5806	K1KA07A00184	7P CONNECTOR	[M]
CN5807	RJT119W08V	8P CONNECTOR	[M]
CN5808	K1KB12B00036	12P CONNECTOR	[M]
CN5809	K1KB12B00036	12P CONNECTOR	[M]
CN5810	RJT119W15V	15P WIRE HOLDER	[M]
CN5811	RJT119W15V	15P WIRE HOLDER	[M]
CN6800	K1KA11B00033	11P CONNECTOR	[M]
CP5801	K1KA12A00184	12P CONNECTOR	[M]
CP5802	K1KA12A00184	12P CONNECTOR	[M]
CP5803	K1KA12A00184	12P CONNECTOR	[M]
CP5804	K1KA12A00184	12P CONNECTOR	[M]
CP6800	K1MN10B00104	10P FFC CONNECTOR	[M]
CP6801	K1MN30A00046	30P FFC CONNECTOR	[M]
CP6802	K1MN28A00016	28P FFC CONNECTOR	[M]
CP6803	K1MN14A00049	14P FFC CONNECTOR	[M]
CP6804	RJU071H11M	11P CONNECTOR	[M]
CS1001	RJS1A6805-J	5P CONNECTOR	[M]
CS1002	RJS1A6805-J	5P CONNECTOR	[M]
FP8101	K1MN50B00031	50P CONNECTOR	[M]
FP8271	K1MN15B00041	15P CONNECTOR	[M]
FP8501	K1MN26B00094	26P CONNECTOR	[M]
		COILS & TRANSFORMERS	
L500	G0B371HA0005	LINE FILTER	[M] △
L1001	G0C470JA0030	RF CHOKE COIL	[M]
L1002	7L1A62N	BIAS OSC COIL	[M]
L2100	J0JBC0000041	CHIP INDUCTOR	[M]
L2101	J0JBC0000041	CHIP INDUCTOR	[M]
L2200	J0JBC0000041	CHIP INDUCTOR	[M]
L2201	J0JBC0000041	CHIP INDUCTOR	[M]
L2802	G0A101G00022	COIL	[M]
L2805	G0A101G00022	COIL	[M]
L2809	ELESN220JA	COIL	[M]
L2810	ELJFCR39KF	CHIP INDUCTOR	[M]
L2811	J0JCC0000120	CHIP INDUCTOR	[M]
L2812	J0JCC0000120	CHIP INDUCTOR	[M]
L2813	J0JCC0000120	CHIP INDUCTOR	[M]
L2814	J0JCC0000120	CHIP INDUCTOR	[M]
L2815	J0JCC0000120	CHIP INDUCTOR	[M]
L2816	J0JCC0000120	CHIP INDUCTOR	[M]
L2819	J0JBC0000019	CHIP INDUCTOR	[M]
L2820	G0C221KA0007	COIL	[M]
L2821	G0C100JA0030	INDUCTOR	[M]
L6800	G0C3R3JA0030	COIL	[M]
L6801	G0C101JA0030	INDUCTOR	[M]
L6802	G0C101JA0030	INDUCTOR	[M]
L6803	G0C101JA0030	INDUCTOR	[M]
L6804	G0C100JA0030	INDUCTOR	[M]
L6805	G0C100JA0030	INDUCTOR	[M]
L6806	G0C3R3JA0030	COIL	[M]
L6807	G0C100JA0030	INDUCTOR	[M]
L6808	G0C100JA0030	INDUCTOR	[M]
L6809	G0C100JA0030	INDUCTOR	[M]
L6810	G0C101JA0030	INDUCTOR	[M]
L8201	G1C100K00020	CHIP INDUCTOR	[M]
L8202	J0JCC0000079	FILTER	[M]
L8301	G1C100KA0055	CHIP INDUCTOR	[M]
L8302	J0JCC0000079	FILTER	[M]
L8420	G1C220KA0055	CHIP INDUCTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
L8550	G1C100KA0055	CHIP INDUCTOR	[M]
T501	G4C8AHK00003	POWER TRANSFORMER	[M] △
T502	G4C2AAJ00005	BACK-UP TRANSFORMER	[M] △
		COMPONENT COMBINATIONS	
Z501	ERZV10V511CS	ZENER	[M] △
Z971	RGSD12A1445T	RADA RESISTOR	[M]
Z6800	B3RAB0000025	REMOTE SENSOR	[M]
BS6800	RMBX0032	GROUND SPRING	[M]
		RELAY	
RL502	RSY0040M-0	PRIMARY RELAY	[M] △
		OSCILLATORS	
X6800	H2A100500006	RESONATOR	[M]
X6801	H0A327200073	CRYSTAL OSCILLATOR	[M]
X8621	H0J270500064	S/MOUNTING CRYSTAL	[M]
		DISPLAY TUBES	
FL6800	A2BD00000092	FL DISPLAY	[M]
FL8101	F1H0J1050022	CHIP CAPACITOR	[M]
FL8102	F1H0J1050022	CHIP CAPACITOR	[M]
FL8103	F1H0J1050022	CHIP CAPACITOR	[M]
FL8104	F1J1E1040022	CHIP CAPACITOR	[M]
		FUSES	
F1	K5D402BL0007	FUSE	[M] △
F2	K5D202BL0007	FUSE	[M] △
F3	K5D632BL0007	FUSE	[M] △
F4	K5D632BL0007	FUSE	[M] △
		FUSE HOLDERS	
FC1	EYF52BC	FUSE HOLDER	[M]
FC2	EYF52BC	FUSE HOLDER	[M]
FC3	EYF52BC	FUSE HOLDER	[M]
FC4	EYF52BC	FUSE HOLDER	[M]
FC5	EYF52BC	FUSE HOLDER	[M]
FC6	EYF52BC	FUSE HOLDER	[M]
FC7	EYF52BC	FUSE HOLDER	[M]
FC8	EYF52BC	FUSE HOLDER	[M]
		FUSE PROTECTORS	
FP5801	K5G402A00010	FUSE PROTECTOR	[M] △
FP5802	K5G102A00023	FUSE PROTECTOR	[M] △
		HOLDERS	
H5801	K1YF15000004	15P WIRE HOLDER	[M]
H5802	K1YF15000004	15P WIRE HOLDER	[M]
H5803	RJS1A5508	8P WIRE HOLDER	[M]
H5804	K1YF10000006	10P WIRE HOLDER	[M]
H5805	K1YF07000003	7P WIRE HOLDER	[M]
H6800	RMR0316	7P WIRE HOLDER	[M]
H6801	K1YZ02000015	2P WIRE HOLDER	[M]
H6805	RMR0316	7P WIRE HOLDER	[M]
H6806	RMR0316	7P WIRE HOLDER	[M]
		JACKS	
JK500	K2AA2B000004	JK AC INLET	[M] △
JK2801	K1CB105B0039	JK S-VIDEO	[M]
JK2802	K2HA408B0061	JK COMP/VIDEO	[M]
JK2803	RJH2405L	JK 4 PIN RCA	[M]
JK5802	K4BC04B00083	JK SPEAKER	[M]
JK5803	K4BC04B00083	JK SPEAKER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
JK5804	K4BC04B00082	JK SPEAKER	[M]
JK5805	K4BC06B00049	JK SPEAKER	[M]
JK6800	K2HB102J0038	JK	[M]
JK6801	K2HC103A0023	JK SMALL SIGN	[M]
JK6802	K2HB102J0038	JK	[M]
		EARTH TERMINAL	
E5801	SNE1004-2	EARTH TERMINAL	[M]
		WIRES	
W1	REE0971	WIRE (YELLOW)	[M]
W2	REE0972	WIRE (VIOLET)	[M]
W3	REEX0059	WIRE (BLUE)	[M]
W4	REEX0061	WIRE (BLACK)	[M]
W5	REEX0057	WIRE (ORANGE)	[M]
W6	REE0973	WIRE (BROWN)	[M]
W7	REE0974	WIRE (LIGHT BLUE)	[M]
W1002	RWJ0102050CK	M/MECHA MOTOR WIRE	[M]
W5801	REXX0304	15P FLATE WIRE	[M]
W5802	REXX0304	15P FLATE WIRE	[M]
W5803	REXX0302	8P FLAT WIRE	[M]
W5804	REXX0297	10P FLAT WIRE	[M]
W5805	REXX0296	7P FLAT WIRE	[M]
W5808	REXX0383	2P WIRE	[M]
W5809	REXX0431	3P STANDBY WIRE	[M]
W5810	REXX0382-1	3P WIRE	[M]
W5811	REXX0433	2P WIRE	[M]
W6800	REXX0419	7P FLAT WIRE	[M]
W6805	REXX0413	7P FLAT WIRE	[M]
		JUMPER PLATE	
PL1	RJR0199	JUMPER PLATE	[M]
		RESISTORS	
R952	ERDS2TJ821T	820 1/4W	[M]
R953	ERDS2TJ393T	39K 1/4W	[M]
R972	ERDS2TJ821T	820 1/4W	[M]
R973	ERDS2TJ393T	39K 1/4W	[M]
R1001	ERJ3GEYJ1R0V	1 1/16W	[M]
R1002	ERJ3GEY0R00V	0 1/16W	[M]
R1003	ERJ3GEYJ103V	10K 1/16W	[M]
R1004	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1005	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1006	ERJ3GEYJ102V	1K 1/16W	[M]
R1007	ERD25FVJ4R7T	4.7 1/4W	[M]
R1009	ERJ3GEYJ183V	18K 1/16W	[M]
R1010	ERJ3GEYJ183V	18K 1/16W	[M]
R1011	ERJ3GEYJ103V	10K 1/16W	[M]
R1012	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1013	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1014	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1015	ERJ3GEYJ470V	47 1/16W	[M]
R1016	ERJ3GEYJ470V	47 1/16W	[M]
R1017	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1018	ERJ3GEYJ392V	3.9K 1/16W	[M]
R1019	ERJ3GEYJ392V	3.9K 1/16W	[M]
R1020	ERJ3GEY0R00V	0 1/16W	[M]
R1022	ERJ3GEYJ103V	10K 1/16W	[M]
R1024	ERJ3GEY0R00V	0 1/16W	[M]
R1025	ERJ3GEY0R00V	0 1/16W	[M]
R1026	ERJ3GEYJ102V	1K 1/16W	[M]
R1027	ERJ3GEY0R00V	0 1/16W	[M]
R1028	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1029	ERJ3GEYJ475V	4.7M 1/16W	[M]
R1030	D0GB101JA002	100 1/16W	[M]
R1031	ERJ3GEYJ273V	27K 1/16W	[M]
R1032	ERJ3GEYJ103V	10K 1/16W	[M]
R1035	ERJ3GEYJ103V	10K 1/16W	[M]
R1040	ERJ3GEY0R00V	0 1/16W	[M]
R1045	ERJ3GEYJ104V	100K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1046	ERJ3GEYJ104V	100K 1/16W	[M]
R1047	ERJ3GEYJ102V	1K 1/16W	[M]
R1048	ERJ3GEYJ102V	1K 1/16W	[M]
R1049	ERJ3GEYJ105V	1M 1/16W	[M]
R1050	ERJ3GEYJ105V	1M 1/16W	[M]
R1051	ERJ3GEYJ221V	220 1/16W	[M]
R1052	ERJ3GEYJ221V	220 1/16W	[M]
R1053	ERJ3GEYJ681V	680 1/16W	[M]
R1054	ERJ3GEYJ681V	680 1/16W	[M]
R1055	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1056	ERJ3GEYJ221V	220 1/16W	[M]
R1057	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1058	D0GB272JA002	2.7K 1/16W	[M]
R1059	ERJ3GEYJ103V	10K 1/16W	[M]
R1060	ERJ3GEYJ391V	390 1/16W	[M]
R1061	ERJ3GEY0R00V	0 1/16W	[M]
R1084	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1085	ERJ3GEYJ473V	47K 1/16W	[M]
R1086	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1087	ERJ3GEYJ473V	47K 1/16W	[M]
R1090	ERJ3GEYJ221V	220 1/16W	[M]
R1091	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1092	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1093	ERJ3GEYJ102V	1K 1/16W	[M]
R1094	ERJ3GEYJ102V	1K 1/16W	[M]
R1095	ERJ3GEYJ104V	100K 1/16W	[M]
R1096	ERJ3GEYJ104V	100K 1/16W	[M]
R1097	ERJ3GEYJ103V	10K 1/16W	[M]
R1098	ERJ3GEYJ103V	10K 1/16W	[M]
R1099	ERJ3GEY0R00V	0 1/16W	[M]
R1100	ERJ3GEY0R00V	0 1/16W	[M]
R1101	ERJ3GEY0R00V	0 1/16W	[M]
R2100	ERJ3GEYJ123V	12K 1/16W	[M]
R2101	ERJ3GEYJ2R2V	2.2 1/16W	[M]
R2102	ERJ3GEYJ473V	47K 1/16W	[M]
R2103	ERJ3GEYJ101V	100 1/16W	[M]
R2104	ERJ3GEYJ333V	33K 1/16W	[M]
R2105	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2106	ERJ3GEYJ473V	47K 1/16W	[M]
R2107	ERJ3GEYJ471V	470 1/16W	[M]
R2109	ERJ3GEY0R00V	0 1/16W	[M]
R2110	ERJ3GEYJ104V	100K 1/16W	[M]
R2111	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2114	ERJ3GEYJ103V	10K 1/16W	[M]
R2115	ERJ3GEYJ273V	27K 1/16W	[M]
R2117	ERJ3GEYJ123V	12K 1/16W	[M]
R2120	ERJ3GEYJ102V	1K 1/16W	[M]
R2122	ERJ3GEYJ473V	47K 1/16W	[M]
R2123	ERJ3GEYJ220V	22 1/16W	[M]
R2124	ERJ3GEYJ220V	22 1/16W	[M]
R2125	ERJ3GEYJ220V	22 1/16W	[M]
R2126	ERJ3GEYJ220V	22 1/16W	[M]
R2127	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2128	ERJ3GEYJ100V	10 1/16W	[M]
R2129	ERJ3GEYJ102V	1K 1/16W	[M]
R2130	ERJ3GEYJ123V	12K 1/16W	[M]
R2131	ERJ3GEYJ823V	82K 1/16W	[M]
R2132	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2133	ERJ3GEYJ223V	22K 1/16W	[M]
R2135	ERJ3GEYJ223V	22K 1/16W	[M]
R2136	ERJ3GEYJ103V	10K 1/16W	[M]
R2137	ERJ3GEYJ223V	22K 1/16W	[M]
R2138	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2140	ERJ3GEYJ123V	12K 1/16W	[M]
R2141	ERJ3GEYJ473V	47K 1/16W	[M]
R2142	ERJ3GEYJ473V	47K 1/16W	[M]
R2143	ERJ3GEYJ123V	12K 1/16W	[M]
R2144	ERJ3GEYJ223V	22K 1/16W	[M]
R2145	ERJ3GEYJ104V	100K 1/16W	[M]
R2146	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2148	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2149	ERJ3GEY0R00V	0 1/16W	[M]
R2150	ERJ3GEY0R00V	0 1/16W	[M]
R2152	ERJ3GEYJ822V	8.2K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2153	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2154	ERJ3GEYJ334V	330K 1/16W	[M]
R2155	ERJ3GEYJ102V	1K 1/16W	[M]
R2156	ERJ3GEYJ473V	47K 1/16W	[M]
R2157	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2158	ERJ3GEYJ273V	27K 1/16W	[M]
R2159	ERJ3GEYJ104V	100K 1/16W	[M]
R2160	ERJ3GEYJ183V	18K 1/16W	[M]
R2161	ERJ3GEYJ123V	12K 1/16W	[M]
R2162	ERJ3GEY0R00V	0 1/16W	[M]
R2164	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2165	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2167	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2168	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2169	ERJ3GEY0R00V	0 1/16W	[M]
R2170	ERJ3GEY0R00V	0 1/16W	[M]
R2171	ERJ3GEYJ153V	15K 1/16W	[M]
R2172	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2200	ERJ3GEYJ473V	47K 1/16W	[M]
R2201	ERJ3GEYJ101V	100 1/16W	[M]
R2202	ERJ3GEYJ333V	33K 1/16W	[M]
R2203	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2204	ERJ3GEYJ473V	47K 1/16W	[M]
R2205	ERJ3GEYJ471V	470 1/16W	[M]
R2207	ERJ3GEY0R00V	0 1/16W	[M]
R2208	ERJ3GEYJ104V	100K 1/16W	[M]
R2209	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2212	ERJ3GEYJ103V	10K 1/16W	[M]
R2213	ERJ3GEYJ273V	27K 1/16W	[M]
R2215	ERJ3GEYJ123V	12K 1/16W	[M]
R2218	ERJ3GEYJ224V	220K 1/16W	[M]
R2219	ERJ3GEYJ102V	1K 1/16W	[M]
R2220	ERDS1FVJ680T	68 1/2W	[M]
R2221	ERJ3GEYJ473V	47K 1/16W	[M]
R2222	ERJ3GEYJ220V	22 1/16W	[M]
R2223	ERJ3GEYJ220V	22 1/16W	[M]
R2224	ERJ3GEYJ220V	22 1/16W	[M]
R2225	ERJ3GEYJ220V	22 1/16W	[M]
R2226	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2227	ERJ3GEYJ100V	10 1/16W	[M]
R2229	ERJ3GEYJ102V	1K 1/16W	[M]
R2230	ERJ3GEYJ123V	12K 1/16W	[M]
R2232	ERJ3GEYJ123V	12K 1/16W	[M]
R2233	ERJ3GEY0R00V	0 1/16W	[M]
R2234	ERJ3GEYJ823V	82K 1/16W	[M]
R2235	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2236	ERJ3GEYJ103V	10K 1/16W	[M]
R2237	ERJ3GEYJ223V	22K 1/16W	[M]
R2238	ERJ3GEYJ223V	22K 1/16W	[M]
R2239	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2241	ERJ3GEYJ123V	12K 1/16W	[M]
R2242	ERJ3GEYJ473V	47K 1/16W	[M]
R2243	ERJ3GEYJ473V	47K 1/16W	[M]
R2244	ERJ3GEYJ123V	12K 1/16W	[M]
R2245	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2247	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2248	ERJ3GEY0R00V	0 1/16W	[M]
R2249	ERJ3GEY0R00V	0 1/16W	[M]
R2251	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2252	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2253	ERJ3GEYJ334V	330K 1/16W	[M]
R2254	ERJ3GEYJ102V	1K 1/16W	[M]
R2255	ERJ3GEYJ473V	47K 1/16W	[M]
R2256	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2257	ERJ3GEYJ273V	27K 1/16W	[M]
R2258	ERJ3GEYJ104V	100K 1/16W	[M]
R2259	ERJ3GEYJ183V	18K 1/16W	[M]
R2260	ERJ3GEYJ123V	12K 1/16W	[M]
R2261	ERJ3GEY0R00V	0 1/16W	[M]
R2262	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2263	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2264	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2265	ERJ3GEYJ223V	22K 1/16W	[M]
R2266	ERJ3GEYJ682V	6.8K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2267	ERJ3GEY0R00V	0 1/16W	[M]
R2268	ERJ3GEYJ153V	15K 1/16W	[M]
R2269	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2300	ERJ3GEYJ273V	27K 1/16W	[M]
R2301	ERJ3GEYJ103V	10K 1/16W	[M]
R2302	ERJ3GEYJ103V	10K 1/16W	[M]
R2303	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2304	ERJ3GEYJ153V	15K 1/16W	[M]
R2305	ERJ3GEYJ103V	10K 1/16W	[M]
R2306	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2307	ERJ3GEYJ563V	56K 1/16W	[M]
R2312	ERJ3GEYJ273V	27K 1/16W	[M]
R2313	ERJ3GEYJ223V	22K 1/16W	[M]
R2314	ERJ3GEYJ223V	22K 1/16W	[M]
R2315	ERJ3GEYJ223V	22K 1/16W	[M]
R2317	ERJ3GEYJ473V	47K 1/16W	[M]
R2318	ERJ3GEYJ333V	33K 1/16W	[M]
R2319	ERJ3GEYJ103V	10K 1/16W	[M]
R2320	ERJ3GEYJ223V	22K 1/16W	[M]
R2321	ERJ3GEYJ563V	56K 1/16W	[M]
R2322	ERJ3GEYJ223V	22K 1/16W	[M]
R2323	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2324	ERJ3GEY0R00V	0 1/16W	[M]
R2325	ERJ3GEYJ563V	56K 1/16W	[M]
R2335	ERJ3GEY0R00V	0 1/16W	[M]
R2336	ERJ3GEY0R00V	0 1/16W	[M]
R2337	ERJ3GEY0R00V	0 1/16W	[M]
R2338	ERJ3GEY0R00V	0 1/16W	[M]
R2339	ERJ3GEY0R00V	0 1/16W	[M]
R2340	ERJ3GEY0R00V	0 1/16W	[M]
R2341	ERJ3GEY0R00V	0 1/16W	[M]
R2342	ERJ3GEYJ103V	10K 1/16W	[M]
R2343	ERJ3GEY0R00V	0 1/16W	[M]
R2400	ERJ3GEYJ103V	10K 1/16W	[M]
R2401	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2402	ERJ3GEYJ153V	15K 1/16W	[M]
R2403	ERJ3GEYJ103V	10K 1/16W	[M]
R2404	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2410	ERJ3GEYJ273V	27K 1/16W	[M]
R2411	ERJ3GEYJ103V	10K 1/16W	[M]
R2412	ERJ3GEY0R00V	0 1/16W	[M]
R2413	ERJ3GEYJ563V	56K 1/16W	[M]
R2500	ERJ3GEYJ123V	12K 1/16W	[M]
R2501	ERJ3GEYJ273V	27K 1/16W	[M]
R2502	ERJ3GEYJ153V	15K 1/16W	[M]
R2503	ERJ3GEYJ393V	39K 1/16W	[M]
R2504	ERJ3GEYJ271V	270 1/16W	[M]
R2508	ERJ3GEYJ563V	56K 1/16W	[M]
R2514	ERJ3GEYJ473V	47K 1/16W	[M]
R2515	ERJ3GEYJ103V	10K 1/16W	[M]
R2516	ERJ3GEYJ273V	27K 1/16W	[M]
R2517	ERJ3GEYJ103V	10K 1/16W	[M]
R2518	ERJ3GEYJ103V	10K 1/16W	[M]
R2520	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2521	ERJ3GEY0R00V	0 1/16W	[M]
R2522	ERJ3GEY0R00V	0 1/16W	[M]
R2523	ERJ3GEYJ152V	1.5K 1/16W	[M]
R2524	ERJ3GEYJ102V	1K 1/16W	[M]
R2600	ERJ3GEYJ103V	10K 1/16W	[M]
R2601	ERJ3GEYJ333V	33K 1/16W	[M]
R2602	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2603	ERJ3GEYJ823V	82K 1/16W	[M]
R2604	ERJ3GEYJ102V	1K 1/16W	[M]
R2605	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2606	ERJ3GEYJ563V	56K 1/16W	[M]
R2607	ERJ3GEYJ183V	18K 1/16W	[M]
R2608	ERJ3GEYJ333V	33K 1/16W	[M]
R2609	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2610	ERJ3GEYJ563V	56K 1/16W	[M]
R2611	ERJ3GEYJ103V	10K 1/16W	[M]
R2612	ERJ3GEY0R00V	0 1/16W	[M]
R2613	ERJ3GEY0R00V	0 1/16W	[M]
R2630	ERJ3GEY0R00V	0 1/16W	[M]
R2631	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2632	ERJ3GEY0R00V	0 1/16W	[M]
R2633	ERJ3GEY0R00V	0 1/16W	[M]
R2634	ERJ3GEY0R00V	0 1/16W	[M]
R2635	ERJ3GEY0R00V	0 1/16W	[M]
R2636	ERJ3GEY0R00V	0 1/16W	[M]
R2637	ERJ3GEY0R00V	0 1/16W	[M]
R2638	ERJ3GEY0R00V	0 1/16W	[M]
R2639	ERJ3GEY0R00V	0 1/16W	[M]
R2642	ERJ3GEY0R00V	0 1/16W	[M]
R2643	ERJ3GEY0R00V	0 1/16W	[M]
R2644	ERJ3GEY0R00V	0 1/16W	[M]
R2645	ERJ3GEY0R00V	0 1/16W	[M]
R2646	ERJ3GEY0R00V	0 1/16W	[M]
R2801	ERJ3GEYJ1R0V	1 1/16W	[M]
R2802	ERJ3GEYJ1R0V	1 1/16W	[M]
R2803	ERJ3GEYJ1R0V	1 1/16W	[M]
R2804	ERJ3GEYJ1R0V	1 1/16W	[M]
R2805	ERJ3GEYJ1R0V	1 1/16W	[M]
R2806	ERJ3GEYJ102V	1K 1/16W	[M]
R2807	ERJ3GEYJ102V	1K 1/16W	[M]
R2808	ERJ3GEYJ102V	1K 1/16W	[M]
R2809	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2811	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2812	ERJ3GEYJ102V	1K 1/16W	[M]
R2813	ERJ3GEYJ102V	1K 1/16W	[M]
R2814	ERJ3GEYJ102V	1K 1/16W	[M]
R2816	ERJ3GEYJ331V	330 1/16W	[M]
R2817	ERJ3GEYJ103V	10K 1/16W	[M]
R2819	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2820	ERJ3GEYJ103V	10K 1/16W	[M]
R2821	D0HB750ZA003	75 3W	[M]
R2822	D0HB750ZA003	75 3W	[M]
R2823	D0HB750ZA003	75 3W	[M]
R2824	D0HB750ZA003	75 3W	[M]
R2825	D0HB750ZA003	75 3W	[M]
R2826	ERJ3GEYD750V	75 1/16W	[M]
R2827	ERJ3GEY0R00V	0 1/16W	[M]
R2828	ERJ3GEY0R00V	0 1/16W	[M]
R2829	ERJ3GEYJ104V	100K 1/16W	[M]
R2830	ERJ3GEYJ104V	100K 1/16W	[M]
R2831	ERJ3GEYJ104V	100K 1/16W	[M]
R2832	ERJ3GEYJ104V	100K 1/16W	[M]
R2833	ERJ3GEYJ104V	100K 1/16W	[M]
R2834	ERJ3GEYJ104V	100K 1/16W	[M]
R2836	ERJ3GEYJ1R0V	1 1/16W	[M]
R2837	ERJ3GEYJ1R0V	1 1/16W	[M]
R2843	ERJ3GEYJ221V	220 1/16W	[M]
R2852	ERJ3GEYJ102V	1K 1/16W	[M]
R2853	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2855	ERJ3GEYJ102V	1K 1/16W	[M]
R2856	ERJ3GEYJ102V	1K 1/16W	[M]
R2857	ERJ3GEYJ563V	56K 1/16W	[M]
R2858	ERJ3GEYJ103V	10K 1/16W	[M]
R2859	ERJ3GEY0R00V	0 1/16W	[M]
R2860	ERJ3GEYJ102V	1K 1/16W	[M]
R2862	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2863	ERJ3GEYJ563V	56K 1/16W	[M]
R2864	ERJ3GEY0R00V	0 1/16W	[M]
R2865	ERJ3GEY0R00V	0 1/16W	[M]
R2866	ERJ3GEYJ104V	100K 1/16W	[M]
R2867	ERJ3GEYJ103V	10K 1/16W	[M]
R2868	ERJ3GEYJ102V	1K 1/16W	[M]
R2869	ERJ3GEYJ563V	56K 1/16W	[M]
R2870	ERJ3GEYJ563V	56K 1/16W	[M]
R2871	ERJ3GEY0R00V	0 1/16W	[M]
R2872	ERJ3GEYJ563V	56K 1/16W	[M]
R2873	ERJ3GEYJ563V	56K 1/16W	[M]
R2876	ERJ3GEYJ563V	56K 1/16W	[M]
R2877	ERJ3GEYJ563V	56K 1/16W	[M]
R2878	ERJ3GEYJ563V	56K 1/16W	[M]
R2879	ERJ3GEYJ563V	56K 1/16W	[M]
R2881	ERJ3GEY0R00V	0 1/16W	[M]
R2882	ERJ3GEY0R00V	0 1/16W	[M]
R2883	ERJ3GEYJ563V	56K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2884	ERJ3GEYJ563V	56K 1/16W	[M]
R2885	ERJ3GEYJ102V	1K 1/16W	[M]
R2887	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2888	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2889	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2890	ERJ3GEYJ104V	100K 1/16W	[M]
R2891	ERJ3GEYJ103V	10K 1/16W	[M]
R2892	ERDS1FVJ220T	22 1/2W	[M]
R2893	ERJ3GEYJ224V	220K 1/16W	[M]
R2894	ERJ3GEYJ101V	100 1/16W	[M]
R2895	ERJ3GEYJ104V	100K 1/16W	[M]
R2896	ERJ3GEYJ225V	2.2M 1/16W	[M]
R2897	ERJ3GEYJ225V	2.2M 1/16W	[M]
R2898	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2899	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2900	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2901	ERJ3GEYJ104V	100K 1/16W	[M]
R2902	ERJ3GEYJ103V	10K 1/16W	[M]
R2903	ERJ3GEYJ563V	56K 1/16W	[M]
R2904	ERJ3GEYJ104V	100K 1/16W	[M]
R2905	ERJ3GEYJ224V	220K 1/16W	[M]
R2906	ERJ3GEYJ101V	100 1/16W	[M]
R2907	ERJ3GEYJ104V	100K 1/16W	[M]
R2908	ERJ3GEYJ103V	10K 1/16W	[M]
R2909	ERJ3GEYJ563V	56K 1/16W	[M]
R2910	ERJ3GEYJ223V	22K 1/16W	[M]
R2911	ERJ3GEYJ223V	22K 1/16W	[M]
R2912	ERJ3GEYJ103V	10K 1/16W	[M]
R2913	ERJ3GEYJ103V	10K 1/16W	[M]
R2914	ERJ3GEY0R00V	0 1/16W	[M]
R2915	ERDS1FVJ220T	22 1/2W	[M]
R2918	ERJ3GEYJ224V	220K 1/16W	[M]
R2920	ERJ3GEYJ102V	1K 1/16W	[M]
R2921	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2935	ERJ3GEYJ153V	15K 1/16W	[M]
R2938	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2939	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2940	ERJ3GEYJ273V	27K 1/16W	[M]
R2941	ERJ3GEYJ103V	10K 1/16W	[M]
R2942	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2943	ERJ3GEYJ103V	10K 1/16W	[M]
R2944	ERJ3GEYJ153V	15K 1/16W	[M]
R2945	ERJ3GEY0R00V	0 1/16W	[M]
R2946	ERJ3GEYJ123V	12K 1/16W	[M]
R2947	ERJ3GEYJ100V	10 1/16W	[M]
R2948	ERJ3GEY0R00V	0 1/16W	[M]
R2949	ERJ3GEYJ103V	10K 1/16W	[M]
R2950	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2951	ERJ3GEYJ103V	10K 1/16W	[M]
R2952	ERDS1FVJ680T	68 1/2W	[M]
R2955	ERJ3GEYJ221V	220 1/16W	[M]
R2956	ERJ3GEYJ221V	220 1/16W	[M]
R2957	ERJ3GEYJ124V	120K 1/16W	[M]
R2958	ERJ3GEY0R00V	0 1/16W	[M]
R2959	ERJ3GEYJ224V	220K 1/16W	[M]
R2960	ERJ3GEYJ273V	27K 1/16W	[M]
R2961	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2962	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2963	ERJ3GEYJ393V	39K 1/16W	[M]
R2964	ERJ3GEYJ153V	15K 1/16W	[M]
R2965	ERJ3GEYJ104V	100K 1/16W	[M]
R2967	ERJ3GEYJ104V	100K 1/16W	[M]
R2968	ERJ3GEYJ473V	47K 1/16W	[M]
R2969	ERDS1FVJ680T	68 1/2W	[M]
R2970	ERJ3GEYJ471V	470 1/16W	[M]
R2971	ERJ3GEYJ104V	100K 1/16W	[M]
R2972	ERJ3GEYJ471V	470 1/16W	[M]
R2973	ERJ3GEYJ103V	10K 1/16W	[M]
R2974	ERJ3GEYJ101V	100 1/16W	[M]
R2975	ERJ3GEY0R00V	0 1/16W	[M]
R2976	ERJ3GEYJ103V	10K 1/16W	[M]
R2977	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2978	ERJ3GEY0R00V	0 1/16W	[M]
R2979	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2980	ERJ3GEY0R00V	0 1/16W	[M]
R2981	ERJ3GEY0R00V	0 1/16W	[M]
R2982	ERJ3GEY0R00V	0 1/16W	[M]
R2983	ERJ3GEY0R00V	0 1/16W	[M]
R2984	ERJ3GEY0R00V	0 1/16W	[M]
R2985	ERJ3GEY0R00V	0 1/16W	[M]
R2986	ERJ3GEY0R00V	0 1/16W	[M]
R2987	ERJ3GEY0R00V	0 1/16W	[M]
R2988	ERJ3GEYJ2R2V	2.2 1/16W	[M]
R2989	ERJ3GEY0R00V	0 1/16W	[M]
R2990	ERJ3GEYJ103V	10K 1/16W	[M]
R2991	ERJ3GEY0R00V	0 1/16W	[M]
R2992	ERJ3GEY0R00V	0 1/16W	[M]
R2993	ERJ3GEY0R00V	0 1/16W	[M]
R2994	ERJ3GEY0R00V	0 1/16W	[M]
R2995	ERJ3GEY0R00V	0 1/16W	[M]
R2996	ERJ3GEYJ102V	1K 1/16W	[M]
R2998	ERJ3GEY0R00V	0 1/16W	[M]
R2999	ERJ3GEY0R00V	0 1/16W	[M]
R5100	ERDS2TJ153T	15K 1/4W	[M]
R5102	ERDS2TJ563T	56K 1/4W	[M]
R5103	ERDS2TJ472T	4.7K 1/4W	[M]
R5104	ERDS2TJ563T	56K 1/4W	[M]
R5105	ERDS1FVJ100T	10 1/2W	[M]
R5200	ERDS2TJ153T	15K 1/4W	[M]
R5202	ERDS2TJ563T	56K 1/4W	[M]
R5203	ERDS2TJ472T	4.7K 1/4W	[M]
R5204	ERDS2TJ563T	56K 1/4W	[M]
R5205	ERDS1FVJ100T	10 1/2W	[M]
R5300	ERDS2TJ272T	2.7K 1/4W	[M]
R5301	ERDS2TJ563T	56K 1/4W	[M]
R5302	ERDS2TJ153T	15K 1/4W	[M]
R5303	ERDS1FVJ100T	10 1/2W	[M]
R5400	ERDS2TJ153T	15K 1/4W	[M]
R5401	ERDS2TJ272T	2.7K 1/4W	[M]
R5402	ERDS2TJ563T	56K 1/4W	[M]
R5403	ERDS1FVJ100T	10 1/2W	[M]
R5500	ERDS2TJ153T	15K 1/4W	[M]
R5501	ERDS2TJ332T	3.3K 1/4W	[M]
R5502	ERDS2TJ563T	56K 1/4W	[M]
R5503	ERDS1FVJ100T	10 1/2W	[M]
R5600	ERDS2TJ153T	15K 1/4W	[M]
R5601	ERDS2TJ392T	3.9K 1/4W	[M]
R5602	ERDS2TJ563T	56K 1/4W	[M]
R5603	ERDS1FVJ100T	10 1/2W	[M]
R5604	ERDS1FVJ100T	10 1/2W	[M]
R5605	ERDS1FVJ100T	10 1/2W	[M]
R5609	ERDS2TJ153T	15K 1/4W	[M]
R5650	ERJ3GEY0R00V	0 1/16W	[M]
R5652	ERJ3GEY0R00V	0 1/16W	[M]
R5801	ERDS2TJ474T	470K 1/4W	[M]
R5802	ERDS2TJ102T	1K 1/4W	[M]
R5803	ERDS2TJ681T	680 1/4W	[M]
R5804	ERDS2TJ393T	39K 1/4W	[M]
R5805	ERDS2TJ103T	10K 1/4W	[M]
R5806	ERDS2TJ104T	100K 1/4W	[M]
R5807	ERDS1FVJ2R2T	2.2 1/2W	[M]
R5808	ERG2SJ220E	22 2W	[M]
R5809	ERDS2TJ152T	1.5K 1/4W	[M]
R5810	ERDS2TJ152T	1.5K 1/4W	[M]
R5811	ERDS2TJ473T	47K 1/4W	[M]
R5812	ERDS2TJ473T	47K 1/4W	[M]
R5813	ERDS2TJ473T	47K 1/4W	[M]
R5814	ERDS2TJ473T	47K 1/4W	[M]
R5815	ERDS2TJ104T	100K 1/4W	[M]
R5816	ERDS2TJ104T	100K 1/4W	[M]
R5817	ERDS2TJ223T	22K 1/4W	[M]
R5818	ERDS2TJ223T	22K 1/4W	[M]
R5819	ERG2SJ220E	22 2W	[M]
R5820	ERD2FCVJ4R7T	4.7 1/4W	[M]
R5821	ERDS2TJ272T	2.7K 1/4W	[M]
R5822	ERDS2TJ473T	47K 1/4W	[M]
R5823	ERDS2TJ822T	8.2K 1/4W	[M]
R5824	ERDS2TJ562T	5.6K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R5825	ERDS2TJ473T	47K 1/4W	[M]
R5826	ERDS2TJ272T	2.7K 1/4W	[M]
R5827	ERDS2TJ203T	20K 1/4W	[M]
R5828	ERD2FCVJ4R7T	4.7 1/4W	[M]
R5829	ERDS2TJ223T	22K 1/4W	[M]
R5830	ERDS2TJ103T	10K 1/4W	[M]
R5831	ERDS2TJ223T	22K 1/4W	[M]
R5832	ERDS2TJ332T	3.3K 1/4W	[M]
R5833	ERDS2TJ103T	10K 1/4W	[M]
R5834	ERDS2TJ103T	10K 1/4W	[M]
R5835	ERDS2TJ103T	10K 1/4W	[M]
R5836	ERDS2TJ333T	33K 1/4W	[M]
R5837	ERDS2TJ101T	100 1/4W	[M]
R5838	ERDS2TJ103T	10K 1/4W	[M]
R5839	ERDS2TJ393T	39K 1/4W	[M]
R5840	ERDS2TJ472T	4.7K 1/4W	[M]
R5841	ERDS2TJ563T	56K 1/4W	[M]
R5842	ERDS2TJ101T	100 1/4W	[M]
R5843	ERDS2TJ104T	100K 1/4W	[M]
R5844	ERDS2TJ331T	330 1/4W	[M]
R5845	ERDS2TJ474T	470K 1/4W	[M]
R5846	ERDS2TJ102T	1K 1/4W	[M]
R5847	ERDS2TJ474T	470K 1/4W	[M]
R5848	ERDS2TJ102T	1K 1/4W	[M]
R5849	ERDS2TJ122T	1.2K 1/4W	[M]
R5850	ERDS2TJ152T	1.5K 1/4W	[M]
R5851	ERDS1FVJ220T	22 1/2W	[M]
R5852	ERDS1FVJ180T	18 1/2W	[M]
R5853	ERDS1FVJ120T	12 1/2W	[M]
R5854	ERDS2TJ223T	22K 1/4W	[M]
R5855	ERDS2TJ223T	22K 1/4W	[M]
R5856	ERDS2TJ151T	150 1/4W	[M]
R5857	ERD2FCVJ4R7T	4.7 1/4W	[M]
R5858	ERDS2TJ472T	4.7K 1/4W	[M]
R5859	ERDS2TJ332T	3.3K 1/4W	[M]
R5860	ERDS2TJ824T	820K 1/4W	[M]
R5861	ERDS2TJ104T	100K 1/4W	[M]
R5862	ERDS2TJ184T	180K 1/4W	[M]
R5863	ERDS2TJ394T	390K 1/4W	[M]
R5864	ERDS2TJ394T	390K 1/4W	[M]
R5865	ERDS2TJ184T	180K 1/4W	[M]
R5866	ERDS2TJ683T	68K 1/4W	[M]
R5867	ERDS2TJ103T	10K 1/4W	[M]
R5868	ERDS2TJ103T	10K 1/4W	[M]
R5869	ERDS2TJ103T	10K 1/4W	[M]
R5870	ERDS2TJ103T	10K 1/4W	[M]
R5871	ERDS2TJ103T	10K 1/4W	[M]
R5872	ERDS2TJ394T	390K 1/4W	[M]
R5873	ERDS2TJ104T	100K 1/4W	[M]
R5874	ERDS2TJ394T	390K 1/4W	[M]
R5875	ERDS2TJ394T	390K 1/4W	[M]
R5876	ERDS2TJ103T	10K 1/4W	[M]
R5877	ERDS2TJ103T	10K 1/4W	[M]
R5878	ERDS2TJ103T	10K 1/4W	[M]
R5879	ERDS2TJ103T	10K 1/4W	[M]
R5880	ERDS2TJ104T	100K 1/4W	[M]
R5881	ERDS2TJ184T	180K 1/4W	[M]
R5882	ERDS2TJ394T	390K 1/4W	[M]
R5883	ERDS2TJ394T	390K 1/4W	[M]
R5886	ERDS2TJ103T	10K 1/4W	[M]
R5887	ERG2SJ220E	22 2W	[M]
R5888	ERDS2TJ681T	680 1/4W	[M]
R6000	ERJ3GEYJ272V	2.7K 1/16W	[M]
R6041	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6042	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6043	ERJ3GEY0R00V	0 1/16W	[M]
R6044	ERJ3GEY0R00V	0 1/16W	[M]
R6045	ERJ3GEY0R00V	0 1/16W	[M]
R6046	ERJ3GEY0R00V	0 1/16W	[M]
R6047	ERJ3GEY0R00V	0 1/16W	[M]
R6048	ERJ3GEY0R00V	0 1/16W	[M]
R6049	ERJ3GEY0R00V	0 1/16W	[M]
R6050	ERJ3GEY0R00V	0 1/16W	[M]
R6051	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R6052	ERJ3GEY0R00V	0 1/16W	[M]
R6101	ERJ3GEY0R00V	0 1/16W	[M]
R6103	ERJ3GEYJ103V	10K 1/16W	[M]
R6104	ERJ3GEYJ103V	10K 1/16W	[M]
R6105	ERJ3GEYJ104V	100K 1/16W	[M]
R6106	ERJ3GEYJ104V	100K 1/16W	[M]
R6107	ERJ3GEYJ104V	100K 1/16W	[M]
R6108	ERJ3GEYJ104V	100K 1/16W	[M]
R6214	ERJ3GEY0R00V	0 1/16W	[M]
R6215	ERJ3GEY0R00V	0 1/16W	[M]
R6216	ERJ3GEY0R00V	0 1/16W	[M]
R6217	ERJ3GEY0R00V	0 1/16W	[M]
R6218	ERJ3GEY0R00V	0 1/16W	[M]
R6219	ERJ3GEY0R00V	0 1/16W	[M]
R6220	ERJ3GEY0R00V	0 1/16W	[M]
R6221	ERJ3GEY0R00V	0 1/16W	[M]
R6222	ERJ3GEY0R00V	0 1/16W	[M]
R6224	ERJ3GEY0R00V	0 1/16W	[M]
R6225	ERJ3GEY0R00V	0 1/16W	[M]
R6227	ERJ3GEY0R00V	0 1/16W	[M]
R6228	ERJ3GEY0R00V	0 1/16W	[M]
R6229	ERJ3GEY0R00V	0 1/16W	[M]
R6230	ERJ3GEY0R00V	0 1/16W	[M]
R6231	ERJ3GEY0R00V	0 1/16W	[M]
R6232	ERJ3GEY0R00V	0 1/16W	[M]
R6233	ERJ3GEY0R00V	0 1/16W	[M]
R6234	ERJ3GEY0R00V	0 1/16W	[M]
R6235	ERJ3GEY0R00V	0 1/16W	[M]
R6800	ERJ3GEYJ102V	1K 1/16W	[M]
R6802	ERJ3GEYJ102V	1K 1/16W	[M]
R6803	ERJ3GEYJ223V	22K 1/16W	[M]
R6804	ERJ3GEYJ223V	22K 1/16W	[M]
R6805	ERJ3GEYJ102V	1K 1/16W	[M]
R6806	ERJ3GEYJ102V	1K 1/16W	[M]
R6807	ERJ3GEYJ102V	1K 1/16W	[M]
R6808	ERJ3GEYJ102V	1K 1/16W	[M]
R6809	ERJ3GEYJ102V	1K 1/16W	[M]
R6810	ERJ3GEYJ103V	10K 1/16W	[M]
R6811	ERJ3GEYJ102V	1K 1/16W	[M]
R6812	ERJ3GEYJ102V	1K 1/16W	[M]
R6813	ERJ3GEYJ102V	1K 1/16W	[M]
R6814	ERJ3GEYJ102V	1K 1/16W	[M]
R6818	ERJ3GEYJ102V	1K 1/16W	[M]
R6819	ERJ3GEYJ102V	1K 1/16W	[M]
R6820	ERJ3GEYJ102V	1K 1/16W	[M]
R6821	ERJ3GEYJ102V	1K 1/16W	[M]
R6822	ERJ3GEYJ102V	1K 1/16W	[M]
R6824	ERJ3GEYJ223V	22K 1/16W	[M]
R6825	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6826	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6827	ERJ3GEYJ103V	10K 1/16W	[M]
R6828	ERJ3GEYJ102V	1K 1/16W	[M]
R6829	ERJ3GEYJ102V	1K 1/16W	[M]
R6830	ERJ3GEYJ102V	1K 1/16W	[M]
R6831	ERJ3GEYJ101V	100 1/16W	[M]
R6833	ERJ3GEYJ101V	100 1/16W	[M]
R6834	ERJ3GEYJ101V	100 1/16W	[M]
R6835	ERJ3GEYJ102V	1K 1/16W	[M]
R6836	ERJ3GEYJ101V	100 1/16W	[M]
R6837	ERJ3GEYJ102V	1K 1/16W	[M]
R6838	ERJ3GEYJ272V	2.7K 1/16W	[M]
R6839	ERJ3GEYJ223V	22K 1/16W	[M]
R6840	ERJ3GEYJ101V	100 1/16W	[M]
R6841	ERJ3GEYJ101V	100 1/16W	[M]
R6842	ERJ3GEY0R00V	0 1/16W	[M]
R6843	ERJ3GEYJ102V	1K 1/16W	[M]
R6844	ERJ3GEYJ102V	1K 1/16W	[M]
R6845	ERJ3GEYJ102V	1K 1/16W	[M]
R6846	ERJ3GEYJ102V	1K 1/16W	[M]
R6847	ERJ3GEYJ102V	1K 1/16W	[M]
R6848	ERJ3GEYJ272V	2.7K 1/16W	[M]
R6849	ERJ3GEYJ272V	2.7K 1/16W	[M]
R6850	ERJ3GEYJ272V	2.7K 1/16W	[M]
R6851	ERJ3GEYJ272V	2.7K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R6854	ERJ3GEYJ102V	1K 1/16W	[M]
R6855	ERJ3GEYJ102V	1K 1/16W	[M]
R6856	ERJ3GEYJ122V	1.2K 1/16W	[M]
R6857	ERJ3GEYJ182V	1.8K 1/16W	[M]
R6858	ERJ3GEYJ222V	2.2K 1/16W	[M]
R6859	ERJ3GEYJ272V	2.7K 1/16W	[M]
R6860	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6861	ERJ3GEYJ682V	6.8K 1/16W	[M]
R6862	ERJ3GEYJ103V	10K 1/16W	[M]
R6863	ERJ3GEYJ104V	100K 1/16W	[M]
R6864	ERJ3GEYJ473V	47K 1/16W	[M]
R6865	ERJ3GEYJ473V	47K 1/16W	[M]
R6866	ERJ3GEYJ563V	56K 1/16W	[M]
R6867	ERJ3GEYJ470V	47 1/16W	[M]
R6868	ERJ3GEYJ104V	100K 1/16W	[M]
R6869	ERJ3GEYJ392V	3.9K 1/16W	[M]
R6870	ERJ3GEYJ563V	56K 1/16W	[M]
R6871	ERJ3GEYJ470V	47 1/16W	[M]
R6872	ERJ3GEY0R00V	0 1/16W	[M]
R6873	ERJ3GEYJ103V	10K 1/16W	[M]
R6874	ERJ3GEY0R00V	0 1/16W	[M]
R6875	ERJ3GEYJ101V	100 1/16W	[M]
R6876	ERJ3GEY0R00V	0 1/16W	[M]
R6877	ERJ3GEYJ223V	22K 1/16W	[M]
R6878	ERJ3GEY0R00V	0 1/16W	[M]
R6879	ERJ3GEYJ123V	12K 1/16W	[M]
R6881	ERJ3GEYJ101V	100 1/16W	[M]
R6885	ERJ3GEYJ103V	10K 1/16W	[M]
R6886	ERJ3GEYJ222V	2.2K 1/16W	[M]
R6887	ERJ3GEYJ474V	470K 1/16W	[M]
R6888	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6889	ERJ3GEYJ183V	18K 1/16W	[M]
R6890	ERJ3GEYJ681V	680 1/16W	[M]
R6891	ERJ3GEYJ681V	680 1/16W	[M]
R6892	ERJ3GEYJ561V	560 1/16W	[M]
R6893	ERJ3GEYJ102V	1K 1/16W	[M]
R6894	ERJ3GEYJ102V	1K 1/16W	[M]
R6895	ERJ3GEYJ102V	1K 1/16W	[M]
R6896	ERJ3GEYJ101V	100 1/16W	[M]
R6897	ERJ3GEYJ101V	100 1/16W	[M]
R6898	ERJ3GEYJ101V	100 1/16W	[M]
R6899	ERJ3GEYJ101V	100 1/16W	[M]
R6900	ERJ3GEYJ102V	1K 1/16W	[M]
R6901	ERJ3GEYJ102V	1K 1/16W	[M]
R6902	ERJ3GEYJ102V	1K 1/16W	[M]
R6903	ERJ3GEYJ101V	100 1/16W	[M]
R6904	ERJ3GEYJ101V	100 1/16W	[M]
R6905	ERJ3GEYJ102V	1K 1/16W	[M]
R6906	ERJ3GEYJ102V	1K 1/16W	[M]
R6909	ERJ3GEY0R00V	0 1/16W	[M]
R6910	ERJ3GEYJ104V	100K 1/16W	[M]
R6912	ERJ3GEYJ101V	100 1/16W	[M]
R6913	ERJ3GEYJ101V	100 1/16W	[M]
R6914	ERJ3GEYJ101V	100 1/16W	[M]
R6915	ERJ3GEYJ101V	100 1/16W	[M]
R6916	ERJ3GEYJ101V	100 1/16W	[M]
R6917	ERJ3GEYJ101V	100 1/16W	[M]
R6918	ERJ3GEYJ101V	100 1/16W	[M]
R6919	ERJ3GEYJ101V	100 1/16W	[M]
R6920	ERJ3GEYJ101V	100 1/16W	[M]
R6921	ERJ3GEYJ101V	100 1/16W	[M]
R6922	ERJ3GEYJ103V	10K 1/16W	[M]
R6923	ERJ3GEY0R00V	0 1/16W	[M]
R6924	ERJ3GEYJ101V	100 1/16W	[M]
R6925	ERJ3GEYJ102V	1K 1/16W	[M]
R6926	ERJ3GEYJ103V	10K 1/16W	[M]
R6927	ERJ3GEYJ103V	10K 1/16W	[M]
R6928	ERJ3GEYJ103V	10K 1/16W	[M]
R6929	ERJ3GEYJ102V	1K 1/16W	[M]
R6931	ERJ3GEYJ103V	10K 1/16W	[M]
R6932	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6933	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6934	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6935	ERJ3GEYJ473V	47K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R6937	ERJ3GEYJ102V	1K 1/16W	[M]
R6938	ERJ3GEYJ102V	1K 1/16W	[M]
R6939	ERJ3GEYJ122V	1.2K 1/16W	[M]
R6940	ERJ3GEYJ182V	1.8K 1/16W	[M]
R6941	ERJ3GEYJ222V	2.2K 1/16W	[M]
R6943	ERJ3GEYJ681V	680 1/16W	[M]
R6944	ERJ3GEYJ473V	47K 1/16W	[M]
R6945	ERJ3GEYJ103V	10K 1/16W	[M]
R6946	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6947	ERJ3GEYJ223V	22K 1/16W	[M]
R6948	ERJ3GEYJ681V	680 1/16W	[M]
R6950	ERJ3GEYJ103V	10K 1/16W	[M]
R6951	ERJ3GEYJ106V	10M 1/16W	[M]
R6952	ERJ3GEYJ331V	330 1/16W	[M]
R6953	ERJ3GEYJ223V	22K 1/16W	[M]
R6954	ERJ3GEYJ474V	470K 1/16W	[M]
R6956	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6957	ERJ3GEYJ474V	470K 1/16W	[M]
R6958	ERJ3GEY0R00V	0 1/16W	[M]
R6959	ERD2FCVG470T	47 1/4W	[M]
R6960	ERD2FCVG470T	47 1/4W	[M]
R6962	ERJ3GEYJ103V	10K 1/16W	[M]
R6963	ERJ3GEYJ102V	1K 1/16W	[M]
R6964	ERJ3GEYJ102V	1K 1/16W	[M]
R6965	ERJ3GEYJ122V	1.2K 1/16W	[M]
R6966	ERJ3GEYJ182V	1.8K 1/16W	[M]
R6967	ERJ3GEYJ222V	2.2K 1/16W	[M]
R6968	ERJ3GEYJ272V	2.7K 1/16W	[M]
R6969	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6970	ERJ3GEYJ682V	6.8K 1/16W	[M]
R6971	ERJ3GEYJ103V	10K 1/16W	[M]
R6972	ERJ3GEY0R00V	0 1/16W	[M]
R6973	ERJ3GEY0R00V	0 1/16W	[M]
R6974	ERJ3GEYJ223V	22K 1/16W	[M]
R6975	ERJ3GEYJ223V	22K 1/16W	[M]
R6976	ERJ3GEYJ222V	2.2K 1/16W	[M]
R6979	ERJ3GEYJ104V	100K 1/16W	[M]
R6980	ERJ3GEYJ104V	100K 1/16W	[M]
R6981	ERJ3GEYJ334V	330K 1/16W	[M]
R6982	ERJ3GEYJ470V	47 1/16W	[M]
R6983	ERJ3GEYJ822V	8.2K 1/16W	[M]
R6984	ERJ3GEYJ101V	100 1/16W	[M]
R6985	ERJ3GEYJ2R7V	2.7 1/16W	[M]
R6986	ERJ3GEYJ223V	22K 1/16W	[M]
R6987	ERJ3GEYJ334V	330K 1/16W	[M]
R6988	ERJ3GEYJ102V	1K 1/16W	[M]
R6989	ERJ3GEYJ2R7V	2.7 1/16W	[M]
R6990	ERJ3GEYJ223V	22K 1/16W	[M]
R6991	ERJ3GEYJ331V	330 1/16W	[M]
R6992	ERJ3GEYJ101V	100 1/16W	[M]
R6993	ERJ3GEY0R00V	0 1/16W	[M]
R6994	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6995	ERJ3GEYJ102V	1K 1/16W	[M]
R6996	ERJ3GEYJ270V	27 1/16W	[M]
R6997	ERJ3GEYJ102V	1K 1/16W	[M]
R6998	ERJ3GEYJ272V	2.7K 1/16W	[M]
R6999	ERJ3GEYJ104V	100K 1/16W	[M]
R8011	ERJ3GEY0R00V	0 1/16W	[M]
R8021	ERJ2GEJ103X	10K 2W	[M]
R8022	ERJ2GEJ103X	10K 2W	[M]
R8023	ERJ2GEJ473X	47K 2W	[M]
R8041	ERJ2GEJ330X	33 2W	[M]
R8232	ERJ2GEJ103X	10K 2W	[M]
R8233	ERJ3GEYJ153V	15K 1/16W	[M]
R8235	ERJ3GEYJ822V	8.2K 1/16W	[M]
R8236	ERJ3GEYJ822V	8.2K 1/16W	[M]
R8241	ERJ3GEYJ223V	22K 1/16W	[M]
R8242	ERJ3GEYJ752V	7.5K 1/16W	[M]
R8251	ERJ6GEYJ6R8V	6.8 1/10W	[M]
R8271	ERJ14YKR39H	0.39 1/4W	[M]
R8281	D0GB101JA002	100 1/16W	[M]
R8282	D0GB101JA002	100 1/16W	[M]
R8311	ERJ3RBD242V	2.4K 3W	[M]
R8312	ERJ3RBD102V	1K 3W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R8313	ERJ3RBD243V	24K 3W	[M]
R8314	ERJ3GEY0R00V	0 1/16W	[M]
R8315	ERJ3GEYJ6R8V	6.8 1/16W	[M]
R8321	ERJ3RBD161V	160 3W	[M]
R8322	ERJ3RED100V	10 3W	[M]
R8325	ERJ3RBD161V	160 3W	[M]
R8326	ERJ3RED100V	10 3W	[M]
R8331	ERJ3RBD161V	160 3W	[M]
R8332	ERJ3RED100V	10 3W	[M]
R8335	ERJ3RED820V	82 3W	[M]
R8341	ERJ3RED820V	82 3W	[M]
R8401	ERJ2GEJ473X	47K 2W	[M]
R8402	ERJ2GEJ101X	100 2W	[M]
R8403	ERJ2GEJ101X	100 2W	[M]
R8404	ERJ2GEJ101X	100 2W	[M]
R8420	ERJ3GEYJ222V	2.2K 1/16W	[M]
R8451	ERJ3GEY0R00V	0 1/16W	[M]
R8501	ERJ3GEY0R00V	0 1/16W	[M]
R8550	ERJ3GEYJ752V	7.5K 1/16W	[M]
R8551	ERJ3GEY0R00V	0 1/16W	[M]
R8552	ERJ3GEYJ331V	330 1/16W	[M]
R8553	ERJ3GEYJ102V	1K 1/16W	[M]
R8554	ERJ3GEYJ220V	22 1/16W	[M]
R8555	ERJ3GEYJ2R2V	2.2 1/16W	[M]
R8556	ERJ3GEYJ560V	56 1/16W	[M]
R8557	ERJ3GEYJ510V	51 1/16W	[M]
R8558	ERJ3GEYJ473V	47K 1/16W	[M]
R8559	ERJ3GEYJ153V	15K 1/16W	[M]
R8560	ERJ3GEYJ102V	1K 1/16W	[M]
R8561	ERJ3GEY0R00V	0 1/16W	[M]
R8562	ERJ3GEYJ331V	330 1/16W	[M]
R8563	ERJ3GEYJ102V	1K 1/16W	[M]
R8564	ERJ3GEYJ100V	10 1/16W	[M]
R8565	ERJ3GEYJ2R2V	2.2 1/16W	[M]
R8566	ERJ3GEYJ560V	56 1/16W	[M]
R8567	ERJ3GEYJ510V	51 1/16W	[M]
R8568	ERJ3GEYJ473V	47K 1/16W	[M]
R8569	ERJ3GEYJ123V	12K 1/16W	[M]
R8570	ERJ3GEYJ104V	100K 1/16W	[M]
R8601	ERJ3GEYJ102V	1K 1/16W	[M]
R8605	ERJ3GEYJ104V	100K 1/16W	[M]
R8606	ERJ3GEYJ103V	10K 1/16W	[M]
R8611	ERJ2GEJ101X	100 2W	[M]
R8621	ERJ3GEYJ105V	1M 1/16W	[M]
R8622	ERJ3RBD471V	470 3W	[M]
K8002	ERJ2GE0R00X	CHIP JUMPER	[M]
K8003	ERJ2GE0R00X	CHIP JUMPER	[M]
K8005	ERJ2GE0R00X	CHIP JUMPER	[M]
K8007	ERJ2GE0R00X	CHIP JUMPER	[M]
K8008	ERJ2GE0R00X	CHIP JUMPER	[M]
K8010	ERJ2GE0R00X	CHIP JUMPER	[M]
K8100	ERJ3GEY0R00V	CHIP JUMPER	[M]
K8321	ERJ2GE0R00X	CHIP JUMPER	[M]
K8325	ERJ2GE0R00X	CHIP JUMPER	[M]
K8331	ERJ2GE0R00X	CHIP JUMPER	[M]
K8335	ERJ2GE0R00X	CHIP JUMPER	[M]
K8341	ERJ2GE0R00X	CHIP JUMPER	[M]
K8421	ERJ3GEY0R00V	CHIP JUMPER	[M]
K8651	ERJ2GE0R00X	CHIP JUMPER	[M]
RA8011	EXB28V820JX	CHIP RESISTOR	[M]
RA8012	EXB28V820JX	CHIP RESISTOR	[M]
RA8013	EXB28V820JX	CHIP RESISTOR	[M]
RA8014	EXB28V820JX	CHIP RESISTOR	[M]
RA8015	D1H422020001	CHIP RESISTOR	[M]
RA8016	EXB28V820JX	CHIP RESISTOR	[M]
RA8017	EXB28V820JX	CHIP RESISTOR	[M]
RA8018	EXB28V820JX	CHIP RESISTOR	[M]
RA8021	D1H410320002	CHIP RESISTOR	[M]
RA8031	D1H447220001	CHIP RESISTOR	[M]
RA8032	D1H447220001	CHIP RESISTOR	[M]
RA8271	D1H410320002	CHIP RESISTOR	[M]
RA8401	D1H410120001	CHIP RESISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
RA8402	D1H410120001	CHIP RESISTOR	[M]
RA8501	D1H456020001	CHIP RESISTOR	[M]
RA8502	EXB28V560JX	CHIP RESISTOR	[M]
RA8503	D1H456020001	CHIP RESISTOR	[M]
RA8504	D1H456020001	CHIP RESISTOR	[M]
RA8611	D1H447220001	CHIP RESISTOR	[M]
		CAPACITORS	
C11	F1D1E103A001	0.01 25V	[M]
C12	F2A1C101A235	100 16V	[M]
C21	F1D1E103A001	0.01 25V	[M]
C22	F2A1C101A235	100 16V	[M]
C1001	ECKR2H103ZF5	0.01 500V	[M]
C1001	F1H1H103A753	0.01 50V	[M]
C1002	ECEA1HKN2R2B	2.2 50V	[M]
C1003	ECUV1H152KBV	1500P 50V	[M]
C1006	ECEA1HKA010B	1 50V	[M]
C1007	F0A2A472A015	4700P 100V	[M]
C1008	ECEA1HKA010B	1 50V	[M]
C1009	ECEA1CKA470B	47 16V	[M]
C1010	ECA1EM101B	100 25V	[M]
C1011	ECQV1H473JZ3	0.047 50V	[M]
C1012	ECJ1VB1H102K	1000P 50V	[M]
C1013	ECJ1VB1H102K	1000P 50V	[M]
C1014	ECJ1VB1H102K	1000P 50V	[M]
C1015	ECJ1VB1H102K	1000P 50V	[M]
C1016	ECJ1VB1H222K	2200P 50V	[M]
C1017	ECJ1VB1H222K	2200P 50V	[M]
C1018	ECJ1VB1H103K	0.01 50V	[M]
C1019	ECJ1VB1H102K	1000P 50V	[M]
C1020	ECJ1VB1H471K	470P 50V	[M]
C1021	ECJ1VB1H471K	470P 50V	[M]
C1022	ECJ1VB1H102K	1000P 50V	[M]
C1023	ECJ1VB1H102K	1000P 50V	[M]
C1026	ECEA0JKA470B	47 6.3V	[M]
C1027	ECJ1VB1H102K	1000P 50V	[M]
C1030	ECEA1AKA101B	100 10V	[M]
C1031	ECEA1AKA101B	100 10V	[M]
C1032	F1C1C183A001	0.018 16V	[M]
C1033	F1C1C183A001	0.018 16V	[M]
C1034	ECEA1HKA3R3B	3.3 50V	[M]
C1035	ECEA1HKA3R3B	3.3 50V	[M]
C1036	ECJ1VB1C333K	0.033 16V	[M]
C1037	ECEA1HKA3R3B	3.3 50V	[M]
C1038	ECJ1VB1H221K	220P 50V	[M]
C1039	ECJ1VB1H221K	220P 50V	[M]
C1040	ECEA1CKA100B	10 16V	[M]
C1041	ECEA1CKA100B	10 16V	[M]
C1042	ECEA1CKA220B	22 16V	[M]
C1043	ECEA1HKA4R7B	4.7 50V	[M]
C1044	ECEA1AKA330B	33 10V	[M]
C1045	ECEA1AKA220B	22 10V	[M]
C1046	ECEA1CKA221B	220 16V	[M]
C1047	ECEA1HKA010B	1 50V	[M]
C1048	ECEA1HKA010B	1 50V	[M]
C1049	ECJ1VB1H102K	1000P 50V	[M]
C1050	ECJ1VB1H102K	1000P 50V	[M]
C1051	ECEA1HKA010B	1 50V	[M]
C1052	ECEA1HKA010B	1 50V	[M]
C1053	ECA1CM221B	220 16V	[M]
C1054	ECEA1HKA3R3B	3.3 50V	[M]
C1055	ECEA1HKA0R1B	0.1 50V	[M]
C1056	ECEA1CKA100B	10 16V	[M]
C1057	ECJ1VB1H102K	1000P 50V	[M]
C1058	ECJ1VB1H102K	1000P 50V	[M]
C1059	ECJ1VB1H103K	0.01 50V	[M]
C1060	ECJ1VB1H103K	0.01 50V	[M]
C1064	ECEA1HKA3R3B	3.3 50V	[M]
C2100	ECJ1VB1A224K	0.22 10V	[M]
C2101	ECJ1VB1A224K	0.22 10V	[M]
C2102	ECJ1VC1H102J	1000P 50V	[M]
C2103	ECJ1VC1H102J	1000P 50V	[M]
C2104	ECEA1HKA470B	47 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2105	ECEA1HKA470B	47 50V	[M]
C2107	ECEA1HKA010B	1 50V	[M]
C2112	ECJ1VB1H221K	220P 50V	[M]
C2113	ECEA1HKA4R7B	4.7 50V	[M]
C2115	ECJ1VC1H101K	100P 50V	[M]
C2116	ECJ1VC1H330J	33P 50V	[M]
C2117	ECEA1CKA470B	47 16V	[M]
C2118	ECJ1VB1H102K	1000P 50V	[M]
C2120	ECEA1CKA100B	10 16V	[M]
C2121	ECEA1HKA010B	1 50V	[M]
C2122	ECJ1VB1C473K	0.047 16V	[M]
C2123	ECJ1VB1C823K	0.082 16V	[M]
C2124	ECJ1VC1H101K	100P 50V	[M]
C2125	ECJ1VC1H470J	47P 50V	[M]
C2126	ECJ1VC1H470J	47P 50V	[M]
C2127	ECJ1VB1C105K	1 16V	[M]
C2128	ECJ1VB1H682K	6800P 50V	[M]
C2129	ECJ2VB1C154K	0.15 16V	[M]
C2130	ECEA1HKA100B	10 50V	[M]
C2134	ECJ1VB1H471K	470P 50V	[M]
C2139	ECEA1HKA4R7B	4.7 50V	[M]
C2140	ECEA1HKA4R7B	4.7 50V	[M]
C2141	ECEA1HKA330B	33 50V	[M]
C2142	ECJ1VC1H330J	33P 50V	[M]
C2143	ECJ1VB1C103K	0.01 16V	[M]
C2144	ECEA1HKA470B	47 50V	[M]
C2145	ECEA1HKA010B	1 50V	[M]
C2146	ECJ1VB1H102K	1000P 50V	[M]
C2147	ECJ1VB1H104K	0.1 50V	[M]
C2148	ECJ1VB1C105K	1 16V	[M]
C2149	ECJ1VB1H223K	0.022 50V	[M]
C2151	ECEA1HKA4R7B	4.7 50V	[M]
C2171	ECJ1VC1H102J	1000P 50V	[M]
C2200	ECJ1VC1H102J	1000P 50V	[M]
C2201	ECJ1VC1H102J	1000P 50V	[M]
C2202	ECEA1HKA470B	47 50V	[M]
C2203	ECEA1HKA470B	47 50V	[M]
C2205	ECEA1HKA010B	1 50V	[M]
C2210	ECJ1VB1H221K	220P 50V	[M]
C2211	ECEA1HKA4R7B	4.7 50V	[M]
C2213	ECJ1VC1H101K	100P 50V	[M]
C2214	ECJ1VC1H330J	33P 50V	[M]
C2215	ECEA1CKA470B	47 16V	[M]
C2216	ECJ1VB1H102K	1000P 50V	[M]
C2218	ECEA1CKA100B	10 16V	[M]
C2219	ECEA1HKA010B	1 50V	[M]
C2220	ECJ1VB1C823K	0.082 16V	[M]
C2221	ECJ1VB1C473K	0.047 16V	[M]
C2222	ECJ1VC1H101K	100P 50V	[M]
C2223	ECJ1VC1H470J	47P 50V	[M]
C2224	ECJ1VC1H470J	47P 50V	[M]
C2225	ECJ1VB1C105K	1 16V	[M]
C2226	ECJ2VB1C154K	0.15 16V	[M]
C2227	ECEA1HKA100B	10 50V	[M]
C2231	ECJ1VB1H471K	470P 50V	[M]
C2236	ECEA1HKA4R7B	4.7 50V	[M]
C2237	ECEA1HKA4R7B	4.7 50V	[M]
C2238	ECEA1HKA330B	33 50V	[M]
C2239	ECJ1VC1H330J	33P 50V	[M]
C2240	ECJ1VB1C103K	0.01 16V	[M]
C2241	ECEA1HKA470B	47 50V	[M]
C2242	ECEA1HKA010B	1 50V	[M]
C2243	ECJ1VB1H102K	1000P 50V	[M]
C2244	ECJ1VB1H104K	0.1 50V	[M]
C2245	ECJ1VB1C105K	1 16V	[M]
C2246	ECJ1VB1H223K	0.022 50V	[M]
C2247	ECEA1HKA100B	10 50V	[M]
C2249	ECEA1HKA4R7B	4.7 50V	[M]
C2268	ECJ1VC1H102J	1000P 50V	[M]
C2301	ECJ1VB1H682K	6800P 50V	[M]
C2302	ECEA1HKA010B	1 50V	[M]
C2303	ECEA1CKA100B	10 16V	[M]
C2304	ECJ1VB1H221K	220P 50V	[M]
C2305	ECEA1HKA010B	1 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2310	ECEA1HKAR47B	0.47 50V	[M]
C2311	ECJ1VC1H180J	18P 50V	[M]
C2312	ECJ1VB1C823K	0.082 16V	[M]
C2313	ECJ1VC1H220J	22P 50V	[M]
C2314	ECJ1VB1C105K	1 16V	[M]
C2315	ECJ1VB1H471K	470P 50V	[M]
C2316	ECJ1VB1H104K	0.1 50V	[M]
C2317	ECEA1HKA3R3B	3.3 50V	[M]
C2318	ECJ1VC1H330J	33P 50V	[M]
C2319	ECEA1HKAR47B	0.47 50V	[M]
C2400	ECEA1CKA100B	10 16V	[M]
C2401	ECJ1VB1H221K	220P 50V	[M]
C2402	ECEA1HKA010B	1 50V	[M]
C2404	ECEA1HKAR47B	0.47 50V	[M]
C2408	ECJ1VB1H471K	470P 50V	[M]
C2409	ECJ1VC1H330J	33P 50V	[M]
C2410	ECEA1HKAR47B	0.47 50V	[M]
C2500	ECEA1CKA100B	10 16V	[M]
C2501	ECJ1VC1H101K	100P 50V	[M]
C2502	ECEA1HKAR47B	0.47 50V	[M]
C2509	ECEA1HKAR47B	0.47 50V	[M]
C2510	ECJ1VC1H220J	22P 50V	[M]
C2511	F1H1H331A765	330P 50V	[M]
C2512	ECJ1VB1C105K	1 16V	[M]
C2513	ECJ1VC1H101K	100P 50V	[M]
C2514	ECJ1VB1H104K	0.1 50V	[M]
C2515	ECJ1VF1C474Z	0.47 16V	[M]
C2516	ECJ1VC1H330J	33P 50V	[M]
C2517	ECEA1HKAR47B	0.47 50V	[M]
C2600	ECEA1HKA100B	10 50V	[M]
C2601	ECJ1VB1H471K	470P 50V	[M]
C2602	ECEA1HKA010B	1 50V	[M]
C2603	ECEA1HKA3R3B	3.3 50V	[M]
C2604	ECJ1VB1H102K	1000P 50V	[M]
C2605	ECJ1VC1H101K	100P 50V	[M]
C2606	ECEA1HKA100B	10 50V	[M]
C2607	ECJ1VB1C683K	0.068 16V	[M]
C2608	ECEA1HKAR47B	0.47 50V	[M]
C2609	ECEA1HKA100B	10 50V	[M]
C2610	ECJ1VC1H102J	1000P 50V	[M]
C2802	EEUFC0J821B	820P 6.3V	[M]
C2803	ECA1EM221B	220 25V	[M]
C2804	ECJ1VF1A105Z	1 10V	[M]
C2805	ECJ1VF1A105Z	1 10V	[M]
C2806	ECEA0JKA221B	220 6.3V	[M]
C2807	ECJ1VF1A105Z	1 10V	[M]
C2808	ECJ1VF1A105Z	1 10V	[M]
C2809	ECA1EM221B	220 25V	[M]
C2810	EEUFC0J821B	820P 6.3V	[M]
C2811	ECEA1CKA100B	10 16V	[M]
C2812	ECJ1VF1A105Z	1 10V	[M]
C2813	ECJ1VF1A105Z	1 10V	[M]
C2814	ECEA1AKA101B	100 10V	[M]
C2820	ECEA0JKA221B	220 6.3V	[M]
C2821	ECJ1VF1A105Z	1 10V	[M]
C2822	ECEA1AKA101B	100 10V	[M]
C2823	ECEA1AKA221B	220 10V	[M]
C2824	ECEA1CKA470B	47 16V	[M]
C2825	ECEA1CKA470B	47 16V	[M]
C2826	ECJ1VB1H103K	0.01 50V	[M]
C2827	ECJ1VC1H220J	22P 50V	[M]
C2828	ECEA1CKA470B	47 16V	[M]
C2829	ECJ1VB1H103K	0.01 50V	[M]
C2830	ECEA1CKA470B	47 16V	[M]
C2831	ECJ1VB1H103K	0.01 50V	[M]
C2832	ECJ1VB1H103K	0.01 50V	[M]
C2833	F2A0J102A130	1000P 6.3V	[M]
C2834	ECEA0JKA101B	100 6.3V	[M]
C2835	F2A0J102A130	1000P 6.3V	[M]
C2836	ECEA0JKA101B	100 6.3V	[M]
C2837	F2A0J102A130	1000P 6.3V	[M]
C2838	ECEA0JKA101B	100 6.3V	[M]
C2839	ECEA0JKA331B	330 6.3V	[M]
C2840	ECEA0JKA331B	330 6.3V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2842	ECJ1VF1A105Z	1 10V	[M]
C2843	ECJ1VF1A105Z	1 10V	[M]
C2846	ECJ1VB1H102K	1000P 50V	[M]
C2847	ECJ1VB1H102K	1000P 50V	[M]
C2848	ECJ1VB1H471K	470P 50V	[M]
C2849	ECJ1VB1H102K	1000P 50V	[M]
C2850	ECJ1VB1H471K	470P 50V	[M]
C2851	ECJ1VB1H471K	470P 50V	[M]
C2855	ECEA1CKA100B	10 16V	[M]
C2860	ECEA1HKA4R7B	4.7 50V	[M]
C2862	ECEA1HKA4R7B	4.7 50V	[M]
C2864	ECEA1HKA0R1B	0.1 50V	[M]
C2865	ECEA1HKA4R7B	4.7 50V	[M]
C2867	ECEA1HKA4R7B	4.7 50V	[M]
C2868	ECJ1VB1E103K	0.01 25V	[M]
C2869	ECJ1VB1C103K	0.01 16V	[M]
C2870	ECJ1VB1E103K	0.01 25V	[M]
C2871	ECA1CM331B	330 16V	[M]
C2872	ECJ1VB1E103K	0.01 25V	[M]
C2873	ECJ1VB1E103K	0.01 25V	[M]
C2874	ECJ1VF1A105Z	1 10V	[M]
C2875	ECJ1VF1A105Z	1 10V	[M]
C2877	ECJ1VB1E103K	0.01 25V	[M]
C2878	ECJ1VB1E103K	0.01 25V	[M]
C2879	ECEA1CN100SB	10 16V	[M]
C2880	ECA1CM331B	330 16V	[M]
C2881	ECJ1VB1E103K	0.01 25V	[M]
C2883	ECJ1VB1E103K	0.01 25V	[M]
C2884	ECJ1VB1E103K	0.01 25V	[M]
C2885	F2J1H100A048	10P 50V	[M]
C2886	ECA1CM221B	220 16V	[M]
C2889	ECA1CM221B	220 16V	[M]
C2899	ECEA1HKA2R2B	2.2 50V	[M]
C2900	ECJ1VB1H472K	4700P 50V	[M]
C2901	ECJ1VB1H561K	560P 50V	[M]
C2902	ECJ1VB1H102K	1000P 50V	[M]
C2903	ECJ1VB1E103K	0.01 25V	[M]
C2904	ECJ1VB1H102K	1000P 50V	[M]
C2905	ECJ1VB1H102K	1000P 50V	[M]
C2906	ECJ1VB1A224K	0.22 10V	[M]
C2907	ECJ1VB1H182K	1800P 50V	[M]
C2908	ECJ1VB1A224K	0.22 10V	[M]
C2909	ECJ1VB1A224K	0.22 10V	[M]
C2910	ECJ1VF1C474Z	0.47 16V	[M]
C2911	ECJ1VF1C474Z	0.47 16V	[M]
C2912	ECJ2VF1E473Z	0.047 25V	[M]
C2913	ECJ1VB1H104K	0.1 50V	[M]
C2914	ECJ1VB1A224K	0.22 10V	[M]
C2915	ECJ1VB1A224K	0.22 10V	[M]
C2916	ECEA1CKA101B	100 16V	[M]
C2917	ECJ1VB1C683K	0.068 16V	[M]
C2918	ECJ1VB1C683K	0.068 16V	[M]
C2919	ECJ1VB1C683K	0.068 16V	[M]
C2920	ECJ2VF1E473Z	0.047 25V	[M]
C2921	ECEA1CKA470B	47 16V	[M]
C2922	ECEA1CKA101B	100 16V	[M]
C2923	ECJ1VB1H104K	0.1 50V	[M]
C2924	ECJ1VB1H104K	0.1 50V	[M]
C2925	ECJ1VB1H102K	1000P 50V	[M]
C2926	ECJ1VB1H472K	4700P 50V	[M]
C2927	ECJ1VB1C683K	0.068 16V	[M]
C2928	ECJ1VB1H104K	0.1 50V	[M]
C2929	ECJ1VB1H104K	0.1 50V	[M]
C2930	ECJ1VB1C683K	0.068 16V	[M]
C2931	ECJ1VB1H102K	1000P 50V	[M]
C2932	ECJ1VB1H472K	4700P 50V	[M]
C2933	ECEA1HKA010B	1 50V	[M]
C2934	ECEA1CKA101B	100 16V	[M]
C2935	ECJ1VB1H104K	0.1 50V	[M]
C2936	ECEA1HKA2R2B	2.2 50V	[M]
C2937	ECJ1VB1H332K	3300P 50V	[M]
C2938	ECJ2VB1C154K	0.15 16V	[M]
C2939	ECEA1HKA010B	1 50V	[M]
C2940	ECEA1HKA010B	1 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2941	ECEA1HKA010B	1 50V	[M]
C2942	ECJ1VB1H102K	1000P 50V	[M]
C2943	ECJ1VB1H102K	1000P 50V	[M]
C2944	ECJ1VB1H123K	0.012 50V	[M]
C2945	ECJ1VB1A224K	0.22 10V	[M]
C2946	ECJ1VB1H332K	3300P 50V	[M]
C2947	ECJ1VC1H102J	1000P 50V	[M]
C2948	ECJ1VC1H102J	1000P 50V	[M]
C2949	ECJ1VB1E103K	0.01 25V	[M]
C2950	ECJ1VB1E103K	0.01 25V	[M]
C2951	ECJ1VB1H332K	3300P 50V	[M]
C2952	ECEA1HKN4R7B	4.7 50V	[M]
C2953	ECJ1VB1A224K	0.22 10V	[M]
C2954	ECEA1HKA100B	10 50V	[M]
C2955	ECJ1VB1H104K	0.1 50V	[M]
C2956	ECJ1VB1H104K	0.1 50V	[M]
C2959	ECJ1VC1H101K	100P 50V	[M]
C2961	ECJ1VC1H102J	1000P 50V	[M]
C2962	ECEA1CKA470B	47 16V	[M]
C2963	ECEA1CKA470B	47 16V	[M]
C5100	ECBT1H821KB5	820P 50V	[M]
C5101	ECBT1H150JC5	15P 50V	[M]
C5102	ECBT1H821KB5	820P 50V	[M]
C5103	ECBT1H150JC5	15P 50V	[M]
C5104	F1D1H1040002	0.1 50V	[M]
C5105	F1D1H1040002	0.1 50V	[M]
C5106	ECEA1HKAR47B	0.47 50V	[M]
C5200	ECBT1H821KB5	820P 50V	[M]
C5201	ECBT1H150JC5	15P 50V	[M]
C5202	ECBT1H821KB5	820P 50V	[M]
C5203	ECBT1H150JC5	15P 50V	[M]
C5204	F1D1H1040002	0.1 50V	[M]
C5205	F1D1H1040002	0.1 50V	[M]
C5206	ECEA1HKAR47B	0.47 50V	[M]
C5300	ECBT1H821KB5	820P 50V	[M]
C5301	ECBT1H150JC5	15P 50V	[M]
C5302	F1D1H473A012	0.047 50V	[M]
C5400	ECBT1H821KB5	820P 50V	[M]
C5401	ECBT1H150JC5	15P 50V	[M]
C5402	F1D1H473A012	0.047 50V	[M]
C5500	ECBT1H821KB5	820P 50V	[M]
C5501	ECBT1H150JC5	15P 50V	[M]
C5502	F1D1H1040002	0.1 50V	[M]
C5503	F1D1H1040002	0.1 50V	[M]
C5600	ECBT1H821KB5	820P 50V	[M]
C5601	ECBT1H150JC5	15P 50V	[M]
C5602	F1D1H1040002	0.1 50V	[M]
C5603	F1D1H1040002	0.1 50V	[M]
C5604	F1D1H1040002	0.1 50V	[M]
C5605	F1D1H1040002	0.1 50V	[M]
C5606	F1D1H1040002	0.1 50V	[M]
C5607	F1D1H1040002	0.1 50V	[M]
C5801	ECKR1H103ZF5	0.01 50V	[M]
C5802	ECKR1H103ZF5	0.01 50V	[M]
C5803	ECBT1E103ZF5	0.01 25V	[M]
C5804	ECBT1H473ZF5	0.047 50V	[M]
C5805	ECBT1H102KB5	1000P 50V	[M]
C5806	ECA1CM221B	220 16V	[M]
C5807	ECEA1HKA2R2B	2.2 50V	[M]
C5808	ECA1EM331B	330 25V	[M]
C5809	ECA1HM470B	47 50V	[M]
C5810	ECA1HM470B	47 50V	[M]
C5811	ECA1HM470B	47 50V	[M]
C5812	ECA1HM470B	47 50V	[M]
C5813	ECEA0JKA221B	220 6.3V	[M]
C5814	ECBT1H102KB5	1000P 50V	[M]
C5815	F2A1V472A082	4700P 35V	[M]
C5816	F2A1H332A236	3300P 50V	[M]
C5817	F2A1H332A236	3300P 50V	[M]
C5818	F2A1V472A082	4700P 35V	[M]
C5819	ECQV1H184JL3	0.18 50V	[M]
C5820	ECKR1H103ZF5	0.01 50V	[M]
C5821	ECKR1H103ZF5	0.01 50V	[M]
C5822	ECBT1H103KB5	0.01 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5823	ECEA1HKA2R2B	2.2 50V	[M]
C5824	ECA0JM471B	470 6.3V	[M]
C5825	ECKR1H103ZF5	0.01 50V	[M]
C5826	ECKR1H103ZF5	0.01 50V	[M]
C5827	ECBT1H473ZF5	0.047 50V	[M]
C5828	ECBT1E103ZF5	0.01 25V	[M]
C5829	F2A1V472A082	4700P 35V	[M]
C5830	F2A1H332A236	3300P 50V	[M]
C5831	ECKR1H103ZF5	0.01 50V	[M]
C5832	ECKR1H103ZF5	0.01 50V	[M]
C5833	ECBT1H473ZF5	0.047 50V	[M]
C5834	ECBT1E103ZF5	0.01 25V	[M]
C5835	F2A1H332A236	3300P 50V	[M]
C5836	F2A1V472A082	4700P 35V	[M]
C5837	ECA1HM470B	47 50V	[M]
C5838	ECQE1104KF3	0.1 100V	[M]
C5839	ECQE1104KF3	0.1 100V	[M]
C5840	ECKR2H103ZF5	0.01 500V	[M]
C5841	F2A1V472A155	4700P 35V	[M]
C5842	ECA1HM470B	47 50V	[M]
C5843	ECKR1H103MD5	0.01 50V	[M]
C5844	ECA2AM100B	10 100V	[M]
C5846	ECKR1H103ZF5	0.01 50V	[M]
C5847	F2A1E471A205	470P 25V	[M]
C5848	F2A1E471A205	470P 25V	[M]
C5849	ECKR1H102ZF5	1000P 50V	[M]
C5850	ECKR1H103MD5	0.01 50V	[M]
C5851	ECEA1AKA470B	47 10V	[M]
C5852	ECA1HM470B	47 50V	[M]
C5853	ECBT1H103KB5	0.01 50V	[M]
C5854	ECBT1H103KB5	0.01 50V	[M]
C6013	ECJ1VC1H560J	56P 50V	[M]
C6014	ECJ1VB1H102K	1000P 50V	[M]
C6015	ECJ1VB1H102K	1000P 50V	[M]
C6016	ECJ1VC1H560J	56P 50V	[M]
C6800	ECJ1VC1H101K	100P 50V	[M]
C6801	ECJ1VC1H101K	100P 50V	[M]
C6802	ECJ1VC1H101K	100P 50V	[M]
C6803	ECJ1VC1H101K	100P 50V	[M]
C6804	ECJ1VC1H101K	100P 50V	[M]
C6805	ECJ1VC1H101K	100P 50V	[M]
C6806	ECJ1VC1H101K	100P 50V	[M]
C6807	ECJ1VC1H101K	100P 50V	[M]
C6808	ECJ1VC1H101K	100P 50V	[M]
C6809	ECJ1VC1H101K	100P 50V	[M]
C6811	ECJ1VB1H102K	1000P 50V	[M]
C6812	ECJ1VB1H102K	1000P 50V	[M]
C6813	ECJ1VC1H101K	100P 50V	[M]
C6814	ECJ1VC1H101K	100P 50V	[M]
C6815	ECJ1VC1H101K	100P 50V	[M]
C6816	ECJ1VC1H101K	100P 50V	[M]
C6817	ECJ1VB1H471K	470P 50V	[M]
C6818	ECJ1VB1H103K	0.01 50V	[M]
C6819	ECJ1VB1H471K	470P 50V	[M]
C6820	ECJ1VB1H103K	0.01 50V	[M]
C6821	ECEA1AKA220B	22 10V	[M]
C6822	ECJ1VC1H101K	100P 50V	[M]
C6823	ECJ1VC1H101K	100P 50V	[M]
C6824	ECJ1VC1H101K	100P 50V	[M]
C6825	ECJ1VC1H101K	100P 50V	[M]
C6826	ECJ1VC1H101K	100P 50V	[M]
C6827	ECJ1VC1H101K	100P 50V	[M]
C6828	ECA1AM102B	1000 10V	[M]
C6829	ECEA0JKA101B	100 6.3V	[M]
C6830	ECJ1VB1H104K	0.1 50V	[M]
C6831	ECEA1HKA0R1B	0.1 50V	[M]
C6832	ECJ1VB1H103K	0.01 50V	[M]
C6833	ECEA1HKA4R7B	4.7 50V	[M]
C6834	ECJ1VC1H390J	39P 50V	[M]
C6835	ECJ1VC1H390J	39P 50V	[M]
C6840	ECJ1VC1H150J	15P 50V	[M]
C6841	ECJ1VC1H150J	15P 50V	[M]
C6842	ECJ2VF1E473Z	0.047 25V	[M]
C6843	ECJ1VB1C223K	0.022 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C6844	ECJ1VB1C223K	0.022 16V	[M]
C6845	ECJ1VB1C223K	0.022 16V	[M]
C6846	ECJ1VC1H331J	330P 50V	[M]
C6847	ECJ1VC1H331J	330P 50V	[M]
C6848	ECEA1VKA4R7B	4.7 35V	[M]
C6849	ECJ1VB1H103K	0.01 50V	[M]
C6851	ECJ1VB1H103K	0.01 50V	[M]
C6852	ECJ1VB1H102K	1000P 50V	[M]
C6853	ECEA0JKA470B	47 6.3V	[M]
C6854	ECEA1HKA3R3B	3.3 50V	[M]
C6855	ECEA1HKA220B	22 50V	[M]
C6856	ECEA1HKA220B	22 50V	[M]
C6857	ECJ1VB1H102K	1000P 50V	[M]
C6858	ECJ1VB1H103K	0.01 50V	[M]
C6859	ECJ1VB1H103K	0.01 50V	[M]
C6860	ECKR1H103ZF5	0.01 50V	[M]
C6861	ECEA1HKA0R1B	0.1 50V	[M]
C6862	ECEA1HKA0R1B	0.1 50V	[M]
C6863	ECEA1HKA0R1B	0.1 50V	[M]
C6864	ECJ2VF1E473Z	0.047 25V	[M]
C6865	ECEA1HKA010B	1 50V	[M]
C6866	ECJ1VB1H102K	1000P 50V	[M]
C6867	ECJ1VC1H101K	100P 50V	[M]
C6868	ECJ1VB1H102K	1000P 50V	[M]
C6869	ECA1CM471B	470 16V	[M]
C6870	ECEA1HKA010B	1 50V	[M]
C6871	ECJ1VB1H103K	0.01 50V	[M]
C6872	ECEA1HKA33B	0.33 50V	[M]
C6873	ECJ1VB1E223K	0.022 25V	[M]
C6875	ECJ1VB1C223K	0.022 16V	[M]
C6876	ECJ1VB1C223K	0.022 16V	[M]
C6877	ECJ1VC1H101K	100P 50V	[M]
C6878	ECJ1VC1H101K	100P 50V	[M]
C6879	ECEA1HKA4R7B	4.7 50V	[M]
C6880	ECJ1VB1H102K	1000P 50V	[M]
C6881	ECEA1HKA3R3B	3.3 50V	[M]
C6882	ECJ1VB1H471K	470P 50V	[M]
C6885	ECJ1VB1H331K	330P 50V	[M]
C6886	ECJ1VB1H331K	330P 50V	[M]
C6887	ECJ1VB1H331K	330P 50V	[M]
C6888	ECJ1VB1H331K	330P 50V	[M]
C6889	ECJ1VB1H104K	0.1 50V	[M]
C6890	F2A0J101A245	100P 6.3V	[M]
C6891	ECJ1VC1H101K	100P 50V	[M]
C6892	ECJ1VB1H102K	1000P 50V	[M]
C6893	F2A0J101A245	100P 6.3V	[M]
C6894	ECJ1VB1H102K	1000P 50V	[M]
C6895	F2A1C100A234	10P 16V	[M]
C6896	ECJ1VB1H471K	470P 50V	[M]
C6898	ECJ1VB1H102K	1000P 50V	[M]
C6899	ECJ1VB1H102K	1000P 50V	[M]
C8001	EEEF0J101P	100P 6.3V	[M]
C8002	EEEF0GA331WP	330P 4V	[M]
C8003	ECJ1VB1H222K	2200P 50V	[M]
C8004	ECJ0EF1C104Z	0.1 16V	[M]
C8005	ECJ1ZF1C104Z	0.1 16V	[M]
C8006	ECJ1ZF1C104Z	0.1 16V	[M]
C8007	ECJ0EF1C104Z	0.1 16V	[M]
C8008	ECJ1ZF1C104Z	0.1 16V	[M]
C8009	ECJ1ZF1C104Z	0.1 16V	[M]
C8010	ECJ0EF1C104Z	0.1 16V	[M]
C8011	ECJ1VB0J105K	1 6.3V	[M]
C8012	ECJ1ZF1C104Z	0.1 16V	[M]
C8013	ECJ1ZF1C104Z	0.1 16V	[M]
C8014	ECJ1ZF1C104Z	0.1 16V	[M]
C8015	ECJ1VB0J105K	1 6.3V	[M]
C8016	ECJ1VB0J105K	1 6.3V	[M]
C8017	ECJ0EF1C104Z	0.1 16V	[M]
C8018	ECJ0EF1C104Z	0.1 16V	[M]
C8019	ECJ1VB0J105K	1 6.3V	[M]
C8020	ECJ0EF1C104Z	0.1 16V	[M]
C8021	ECJ0EF1C104Z	0.1 16V	[M]
C8022	ECJ1ZF1C104Z	0.1 16V	[M]
C8023	ECJ1VB0J105K	1 6.3V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C8024	ECJ1VB1H222K	2200P 50V	[M]
C8025	ECJ1ZF1C104Z	0.1 16V	[M]
C8026	ECJ1VB0J105K	1 6.3V	[M]
C8027	ECJ0EF1C104Z	0.1 16V	[M]
C8028	ECJ1VB0J105K	1 6.3V	[M]
C8031	ECJ1ZF1C104Z	0.1 16V	[M]
C8051	ECJ1VB0J105K	1 6.3V	[M]
C8052	ECJ0EF1C104Z	0.1 16V	[M]
C8053	ECJ1VC1H221J	220P 50V	[M]
C8054	ECJ1VB0J105K	1 6.3V	[M]
C8055	ECJ1VB0J105K	1 6.3V	[M]
C8056	ECJ0EF1C104Z	0.1 16V	[M]
C8057	ECJ1VB1H222K	2200P 50V	[M]
C8111	ECJ1VB1C104K	0.1 16V	[M]
C8112	ECJ2FB1A105K	1 10V	[M]
C8113	ECJ1VC1H471J	470P 50V	[M]
C8201	EEEF0JA101WR	100P 6.3V	[M]
C8202	EEEF0C0J101P	100P 6.3V	[M]
C8203	ECJ1ZF1C104Z	0.1 16V	[M]
C8204	ECJ1ZF1C104Z	0.1 16V	[M]
C8205	ECJ1ZF1C104Z	0.1 16V	[M]
C8206	ECJ1VB0J105K	1 6.3V	[M]
C8207	ECJ1ZF1C104Z	0.1 16V	[M]
C8208	ECJ1ZF1C104Z	0.1 16V	[M]
C8211	ECJ1VB1C333K	0.033 16V	[M]
C8212	ECJ1ZF1C104Z	0.1 16V	[M]
C8213	ECJ1ZF1C104Z	0.1 16V	[M]
C8214	ECJ1ZF1C104Z	0.1 16V	[M]
C8215	ECJ1VB1H562K	5600P 50V	[M]
C8216	ECJ1VB1C183K	0.018 16V	[M]
C8217	ECJ1VB0J105K	1 6.3V	[M]
C8218	ECJ1VB0J105K	1 6.3V	[M]
C8221	ECJ1VB1C104K	0.1 16V	[M]
C8222	ECJ1VB1C104K	0.1 16V	[M]
C8223	ECJ1VB1C104K	0.1 16V	[M]
C8224	ECJ1VB1C104K	0.1 16V	[M]
C8225	ECJ1ZF1C104Z	0.1 16V	[M]
C8226	ECJ1ZF1C104Z	0.1 16V	[M]
C8227	ECJ1ZF1C104Z	0.1 16V	[M]
C8228	ECJ2FB1A105K	1 10V	[M]
C8229	ECJ2FB1A105K	1 10V	[M]
C8232	ECJ1ZF1C104Z	0.1 16V	[M]
C8233	ECJ1VB1H472K	4700P 50V	[M]
C8234	ECJ1ZF1C104Z	0.1 16V	[M]
C8235	ECJ1VC1H102J	1000P 50V	[M]
C8236	ECJ1VC1H102J	1000P 50V	[M]
C8237	ECJ1VC1H102J	1000P 50V	[M]
C8238	ECJ1VC1H821J	820P 50V	[M]
C8241	ECJ1VB1C104K	0.1 16V	[M]
C8242	ECJ1VB1C104K	0.1 16V	[M]
C8251	EEEF0C0J221P	220P 6.3V	[M]
C8252	EEEF1CA220WR	22P 16V	[M]
C8253	ECJ1ZF1C104Z	0.1 16V	[M]
C8254	ECJ1ZF1C104Z	0.1 16V	[M]
C8255	ECJ1ZF1C104Z	0.1 16V	[M]
C8261	ECJ1ZF1C104Z	0.1 16V	[M]
C8271	EEEF1C470P	47P 16V	[M]
C8272	EEEF0JA330WR	33P 6.3V	[M]
C8273	ECJ1ZF1C104Z	0.1 16V	[M]
C8274	ECJ1ZF1C104Z	0.1 16V	[M]
C8275	ECJ1ZF1C104Z	0.1 16V	[M]
C8284	ECJ1VB1H103K	0.01 50V	[M]
C8285	ECJ1VB1H103K	0.01 50V	[M]
C8286	ECJ1VB1H103K	0.01 50V	[M]
C8287	ECJ1VB1C104K	0.1 16V	[M]
C8288	ECJ1ZF1C104Z	0.1 16V	[M]
C8301	EEEF0JA221WP	220P 6.3V	[M]
C8302	EEEF0JA330WR	33P 6.3V	[M]
C8303	ECJ1ZF1C104Z	0.1 16V	[M]
C8304	ECJ1VB0J105K	1 6.3V	[M]
C8307	ECJ1ZF1C104Z	0.1 16V	[M]
C8311	ECJ1ZF1C104Z	0.1 16V	[M]
C8312	ECJ1VB0J105K	1 6.3V	[M]
C8400	ECJ1VC1H150J	15P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C8420	F2G0J331A015	330P 6.3V	[M]
C8423	ECJ1ZF1C104Z	0.1 16V	[M]
C8424	ECJ1ZF1C104Z	0.1 16V	[M]
C8451	F3F1A106A001	10 10V	[M]
C8452	F3F1A106A001	10 10V	[M]
C8453	F3F1A106A001	10 10V	[M]
C8455	ECJ0EF1C104Z	0.1 16V	[M]
C8456	ECJ1ZF1C104Z	0.1 16V	[M]
C8461	F2G0J101A015	100P 6.3V	[M]
C8462	ECJ1ZF1C104Z	0.1 16V	[M]
C8501	ECJ3YB1A106M	10 10V	[M]
C8502	ECJ1ZF1C104Z	0.1 16V	[M]
C8503	ECJ1ZF1C104Z	0.1 16V	[M]
C8504	ECJ1ZF1C104Z	0.1 16V	[M]
C8505	ECJ1VC1H221J	220P 50V	[M]
C8506	ECJ1VC1H101J	100P 50V	[M]
C8550	EEE0JA330WR	33P 6.3V	[M]
C8551	ECJ1ZF1C104Z	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C8552	EEEF1C100R	10P 16V	[M]
C8553	EEE0JA470WR	47P 6.3V	[M]
C8554	ECJ1VB0J105K	1 6.3V	[M]
C8561	ECJ1ZF1C104Z	0.1 16V	[M]
C8562	EEEF1C100R	10P 16V	[M]
C8563	EEE0JA470WR	47P 6.3V	[M]
C8564	ECJ1VB0J105K	1 6.3V	[M]
C8601	ECJ0EF1C104Z	0.1 16V	[M]
C8605	ECJ0EF1C104Z	0.1 16V	[M]
C8606	ECJ1VB1A224K	0.22 10V	[M]
C8611	ECJ1ZF1C104Z	0.1 16V	[M]
C8621	ECJ1VC1H390J	39P 50V	[M]
C8622	ECJ1VC1H050D	5P 50V	[M]
C8651	ECJ1ZF1C104Z	0.1 16V	[M]
C8652	ECJ1ZF1C104Z	0.1 16V	[M]
C8691	ECJ0EF1C104Z	0.1 16V	[M]
C8695	ECJ0EF1C104Z	0.1 16V	[M]

27.5. Packing Materials & Accessories Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPGX1317	PACKING CASE	[M]GC
P1	RPGX1318	PACKING CASE	[M]GS
P2	RPNX0252	POLYFOAM	[M]
P3	RPF0007	MIRAMAT BAG	[M]
		ACCESSORIES	

Ref. No.	Part No.	Part Name & Description	Remarks
A1	N2QAJB000110	REMOTE CONTROL	[M]
A1-1	RKK-HTR0283G	R/C BATTERY COVER	[M]
A2	K2CQ2CA00002	AC CORD	[M] △
A2	RJA0053-3X	AC CORD	[M]GS △
A3	RQT7700-L	O/I BOOK (En)	[M]
A3	RQT7702-A	O/I BOOK (Pe/Ar)	[M]
A4	RSA0007-L	FM ANTENNA	[M]
A5	RJL1P016B15A	VIDEO CABLE	[M]
A6	N1DAAA00001	AM ANTENNA	[M]

27.6. Packaging

