

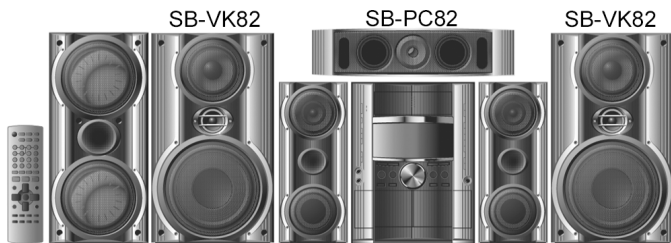
# Service Manual

## DVD Stereo System

### SA-VK825DGC

Colour

(S) .... Silver Type



Remote SB-WVK82 SB-PS82 SA-VK825D SB-PS82  
Control

Please use this manual together with the service manual for Model No. [SA-VK82DGC/GCS/GS-S, Order No. MD0506224C3].

## Specifications

### ■ AMPLIFIER SECTION

RMS Output Power: Dolby Digital Mode

Main

85 W per channel (4 Ω), 1 kHz, 10% THD

Surround Ch

60 W per channel (4 Ω), 1 kHz, 10% THD

Center Ch

80 W per channel (4 Ω), 1 kHz, 10% THD

Subwoofer Ch

90 W per channel (4 Ω), 100 Hz, 10% THD

Total RMS Dolby Digital mode power

460 W

PMPO output power

5600 W

### ■ FM/AM TUNER, TERMINALS SECTION

Preset station

FM 15 stations

AM 15 stations

Frequency Modulation (FM)

Frequency range

87.50 - 108.00 MHz (50 kHz step)

Sensitivity

2.5 μV (IHF)

S/N 26dB

2.2 μV

Antenna terminals

75 Ω (unbalanced)

Amplitude Modulation (AM)

Frequency range

522 - 1629 kHz (9 kHz step)

520 - 1630 kHz (10 kHz step)

AM Sensitivity S/N 20dB at 999 kHz

560 μV/m

Audio performance (Amplifier)

Input sensitivity/Input impedance

Aux

250 mV, 20 kΩ

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

# Panasonic

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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
Erasing System	AC Erase 100 kHz
Tape Speed	4.8 cm/s
Overall frequency response (+3, -6 dB) at DECK OUT	
Normal	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

#### n DISC SECTION

Disc played [8 cm or 12 cm]

(1) DVD (DVD-Video, DVD-Audio, DivX<sup>\*6,\*7</sup>)

(2) DVD-RAM (DVD-VR, JPEG<sup>\*4,\*7</sup>, MPEG4<sup>\*5,\*7</sup>, DivX<sup>\*6,\*7</sup>)

(3) DVD-R (DVD-Video, DivX<sup>\*6,\*7</sup>)

(4) DVD-RW (DVD-Video, DVD-VR, DivX<sup>\*6,\*7</sup>)

+ R/RW (Video)

(5) CD,CD-R/RW [CD-DA, Video CD, SVCD<sup>\*1</sup>, MP3<sup>\*2,\*7</sup>, WMA<sup>\*3,\*7</sup>, JPEG<sup>\*4,\*7</sup>, MPEG4<sup>\*5,\*7</sup>, DivX<sup>\*6,\*7</sup>, HighMAT Level 2 (Audio and Image)]

<sup>\*1</sup> Conforming to IEC62107

<sup>\*2</sup> MPEG-1 Layer 3, MPEG-2 Layer 3

<sup>\*3</sup> Windows Media Audio Ver.9.0. L3

Not compatible with Multiple Bit Rate (MBR)

<sup>\*4</sup> Exif Ver 2.1 JPEG Baseline files

Picture resolution: between 160 x 120 and 6144 x 4096 pixels (Sub sampling is 4:2:2 or 4:2:0)

<sup>\*5</sup> MPEG4 data recorded with Panasonic SD multi cameras or DVD video recorders.

Conforming to SD VIDEO specifications (ASF standard)/ MPEG4 (Simple Profile) video system/G.726 audio system

<sup>\*6</sup> DivX 3.11, 4.x, 5.x

GMC (Global Motion Compensation) is not supported

<sup>\*7</sup>The total combined maximum number of recognizable audio, picture and video contents and groups: 4000 audio ,picture and video contents and 400 groups.

Pick up

Wavelength

CD 785 nm

DVD 662 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 to 20 kHz (+1 dB,-2 dB)

#### n VIDEO SECTION

Video system

Signal system PAL625/50, PAL525/60, NTSC

Composite video output

Output level 1 Vp-p (75 Ω)

Terminal Pin jack (1 system)

S-video output

Y output level 1 Vp-p (75 Ω)

C output level 0.3 Vp-p (75 Ω) (PAL)

0.286 Vp-p (75 Ω) (NTSC)

Terminal S terminal (1 system)

Component video output

[NTSC: 525 (480)p/525 (480)i, PAL: 625 (576)p/625 (576)i]

Y output level 1 Vp-p (75 Ω)

P<sub>B</sub> output level 0.7 Vp-p (75 Ω)

P<sub>R</sub> output level 0.7 Vp-p (75 Ω)

Terminal

Pin jack (Y: green, P<sub>B</sub>: blue, P<sub>R</sub>: red) (1 system)

#### n GENERAL

Power supply

AC 110 to 127V/220 to 240 V, 50/60Hz

Power consumption 365 W

Power consumption in standby mode:

0.9 W (approximate)

Dimensions (W x H x D) 250 x 330 x 348 mm

Mass 9.4 kg

Operating temperature range +5°C to +35°C

Operating humidity range 5% to 90% RH (no condensation)

#### n SYSTEM

SC-VK825D (GC)

Music System: SF-VK825D (GC)

Speakers: SB-VK82D (GC)

Music System	SF-VK825D GC
Music Center	SA-VK825D GC-S
Satellite Speakers	SB-PT82 GC-S

Speaker System	SB-PT82 GC-S
Surround Speakers	SB-PS82 GC-S
Center Speaker	SB-PC82 GC-S

Speaker System	SB-VK82D GC-S
Front Speakers	SB-VK82 GC-S
Subwoofer	SB-WVK82 GC-S

**Notes:**

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

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

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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.



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HDCD system manufactured under license from Pacific Microsonics, Inc. This product is covered by one or more of the following: In the USA: 5,479,168, 5,638,074, 5,640,161, 5,808,574, 5,838,274, 5,854,600, 5,864,311, 5,872,531, and in Australia: 669114, with other patents pending.

### ⚠ **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.

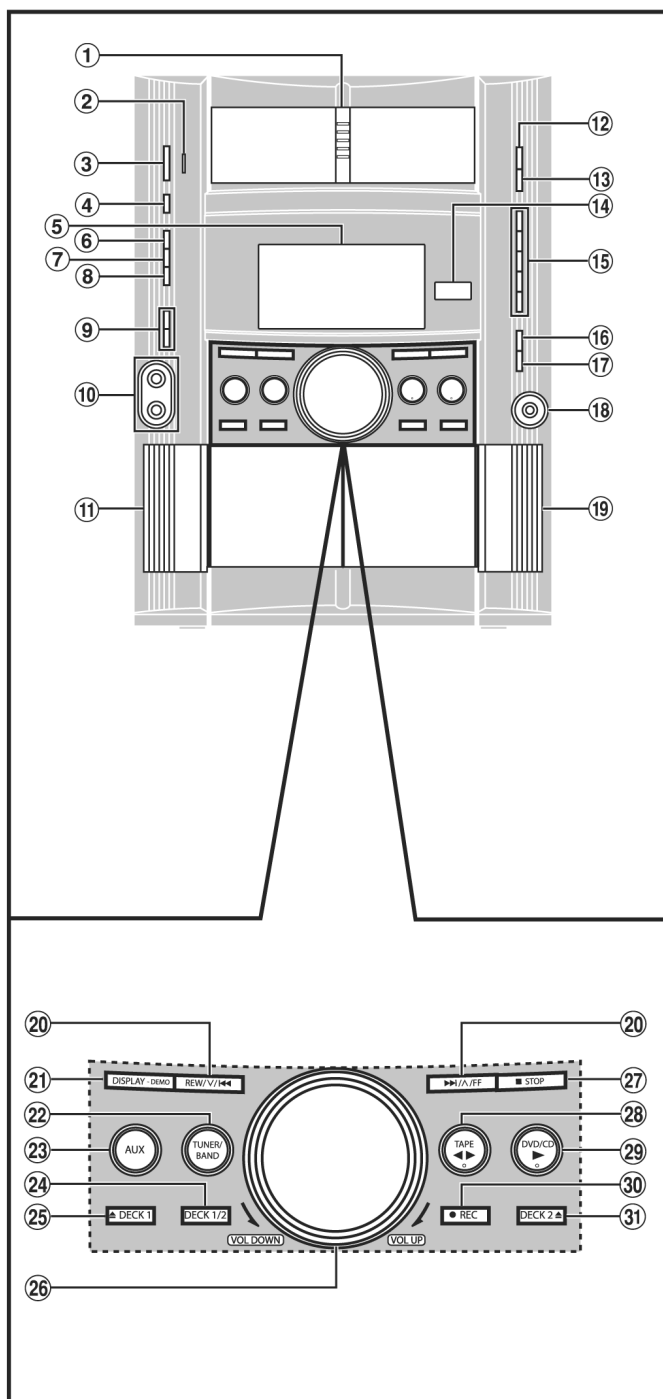
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# 1 Operating Procedures

## Control reference guide

### Main unit

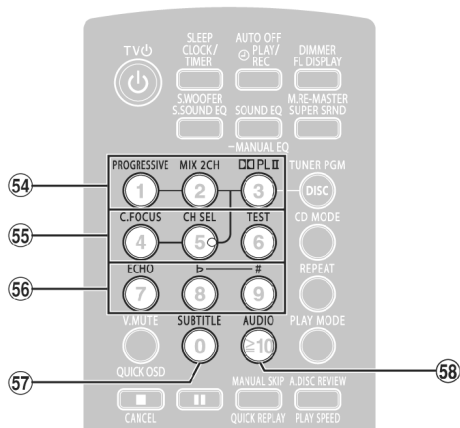
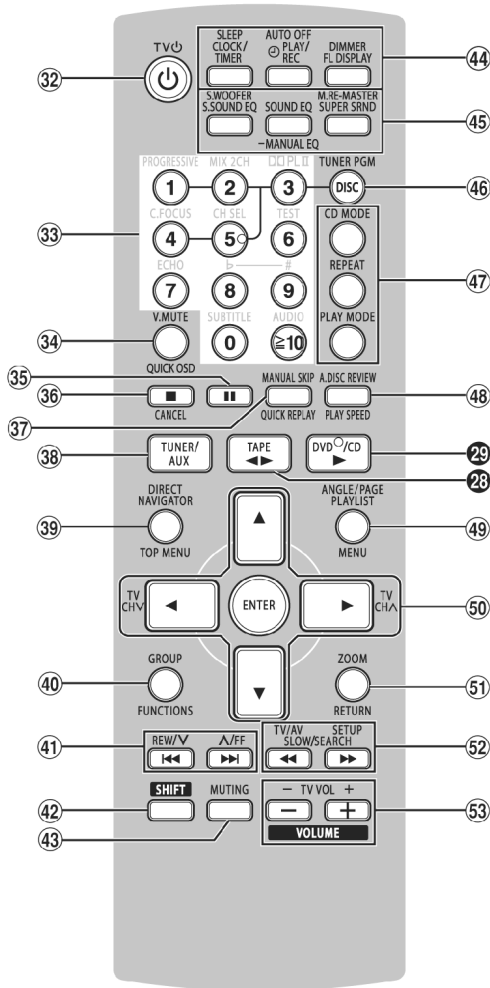


- ① Disc drawer
- ② AC supply indicator [AC IN]  
This indicator lights when the unit is connected to the AC mains supply.
- ③ Standby/on switch [⏻/⏻]  
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- ④ Disc check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

### Center console

- ⑳ Disc skip/search/slow-motion play, tape fast-forward/rewind, tune, time adjust buttons [REW/V/⏪, ⏩/A/FF]
- ㉑ Display mode, demonstration button [DISPLAY -DEMO]
- ㉒ Tuner/band select button [TUNER/BAND]
- ㉓ AUX button [AUX]
- ㉔ Deck 1/2 selection button [DECK 1/2]
- ㉕ Deck 1 open button [⏏ DECK 1]
- ㉖ Volume control [VOL DOWN, VOL UP]
- ㉗ Stop button [■ STOP]
- ㉘ Tape play/direction button [⏪, ⏩, TAPE]
- ㉙ DVD/CD play button [▶, DVD/CD]
- ㉚ Record button [● REC]
- ㉛ Deck 2 open button [DECK 2 ⏏]

## Remote control



Buttons such as 28 function in exactly the same way as the buttons on the main unit.










- 32 Standby/on, TV power on/off button [⏻, TV⏻]
- 33 Numbered buttons [0 – 9, ≥10]
- 34 Quick OSD, Vocal mute button [QUICK OSD, V.MUTE]
- 35 Pause button [⏸]
- 36 Stop, Cancel button [■, CANCEL]
- 37 Manual skip, Quick replay button [MANUAL SKIP, QUICK REPLAY]
- 38 Tuner/aux button [TUNER/AUX]
- 39 Top menu, Direct navigator button [TOP MENU, DIRECT NAVIGATOR]
- 40 Functions, Group button [FUNCTIONS, GROUP]
- 41 Disc skip, tape fast-forward/rewind, preset channel select, time adjust buttons [⏮, REW/∨, ⏭, ∧/FF]
- 42 Shift button [SHIFT]

To use functions labeled in orange:

While pressing [SHIFT], press the corresponding button.

- 43 Muting button [MUTING]
- 44 Clock/timer, Sleep timer button [CLOCK/TIMER, SLEEP]
- Play/record timer, Auto off button [⏻PLAY/REC, AUTO OFF]
- 45 Super Sound EQ, Subwoofer button [S.SOUND EQ, SUBWOOFER]
- Sound EQ, Manual EQ button [SOUND EQ, –MANUAL EQ]
- Super surround, Multi Re-master button [SUPER SRND, M.RE-MASTER]
- 46 Disc select, Tuner program button [DISC, TUNER PGM]
- 47 CD mode button [CD MODE]
- Repeat button [REPEAT]
- Play mode button [PLAY MODE]
- 48 Advanced disc review, Play speed button [A.DISC REVIEW, PLAY SPEED]
- 49 Menu, Playlist, Angle/Page button [MENU, PLAYLIST, ANGLE/PAGE]
- 50 Cursor buttons [▲, ▼, ◀, ▶], Enter button [ENTER]
- These buttons have the following functions.
- [◀, ▶]: TV channel select buttons [TV CH▼, TV CH▲]
- 51 Return, Zoom button [RETURN, ZOOM]
- 52 Slow/search, Tuning buttons [◀◀, ▶▶, SLOW/SEARCH]
- These buttons have the following functions.
- [◀◀]: TV/AV input mode select button [TV/AV]
- [▶▶]: Setup button [SETUP]
- 53 Volume buttons, TV volume buttons [–, +, VOLUME, – TV VOL +]
- 54 Progressive video button [PROGRESSIVE]
- 2 channel down-mixing button [MIX 2CH]
- Dolby Pro Logic II button [DOLBY PLII]
- 55 Center focus button [C.FOCUS]
- Channel select button [CH SEL]
- Test signal button [TEST]
- 56 Echo button [ECHO]
- Key control buttons [b, #]
- 57 Subtitle button [SUBTITLE]
- 58 Audio button [AUDIO]

## 2 Disc information

Disc information			
Discs that can be played			
Disc	Logo	Indication in these operating instructions	Remarks
DVD-RAM		<b>RAM</b>	Recorded with devices using Version 1.1 of the Video Recording Format (a unified video recording standard) such as DVD video recorders, DVD video cameras, personal computers, etc.
		<b>JPEG</b>	Recorded with Panasonic SD multi cameras or DVD video recorders using the DCF (Design rule for Camera File system) Standard Version 1.0.
		<b>MPEG4</b>	Recorded with Panasonic SD multi cameras or DVD video recorders [conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system].
		<b>DivX</b> <sup>*1</sup>	—
DVD-Audio		<b>DVD-A</b>	—
		<b>DVD-V</b>	Some DVD-Audio discs contain DVD-Video content. To play DVD-Video content, select "Play as DVD-Video" in Other Menu.
DVD-Video			—
DVD-R (DVD-Video)/ DVD-RW (DVD-Video)		<b>DVD-V</b>	Discs recorded and finalized <sup>*2</sup> on Panasonic DVD video recorders or DVD video cameras.
+R (Video)/ +RW (Video)	—		Discs recorded and finalized <sup>*2</sup> on DVD video recorders or DVD video cameras.
DVD-R (DivX Video)/ DVD-RW (DivX Video)		<b>DivX</b> <sup>*1</sup>	Finalize <sup>*2</sup> the disc after recording.
DVD-RW (DVD-VR)		<b>DVD-RW (VR)</b>	Discs recorded and finalized <sup>*2</sup> on DVD video recorders or DVD video cameras using Version 1.1 of the Video Recording Format (a unified video recording standard).
Video CD		<b>VCD</b>	—
SVCD			Conforming to IEC62107.
CD		<b>CD</b>	This unit is compatible with HDCD, but does not support the 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.
CD-R CD-RW	—	<b>WMA</b> <b>MP3</b> <b>JPEG</b> <b>CD</b> <b>MPEG4</b> <b>DivX</b> <sup>*1</sup> <b>VCD</b>	<ul style="list-style-type: none"> <li>This unit can play CD-R/RW (audio recording disc) recorded with the formats on the left. Close the sessions or finalize<sup>*2</sup> the disc after recording.</li> <li><b>HighMAT discs</b> WMA, MP3 or JPEG files only. To play without using the HighMAT function, select "Play as Data Disc" in Other Menu.</li> <li><b>WMA</b> This unit does not support Multiple Bit Rate (MBR: a file that contains the same content encoded at several different bit rates).</li> </ul>

\*1 Created using DivX ver.3.11, 4.x, 5.x [DivX video system/MP3, Dolby Digital or MPEG audio system].

\*2 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, the recording method and how the files were created.

### ■ Discs that cannot be played

Version 1.0 of DVD-RW, DVD-ROM, CD-ROM, CDV, CD-G, SACD 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.

### ■ Audio format of DVDs

This unit automatically recognizes and decodes discs with these symbols.



### ■ To clean discs

Wipe with a damp cloth and then wipe dry.



### ■ 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

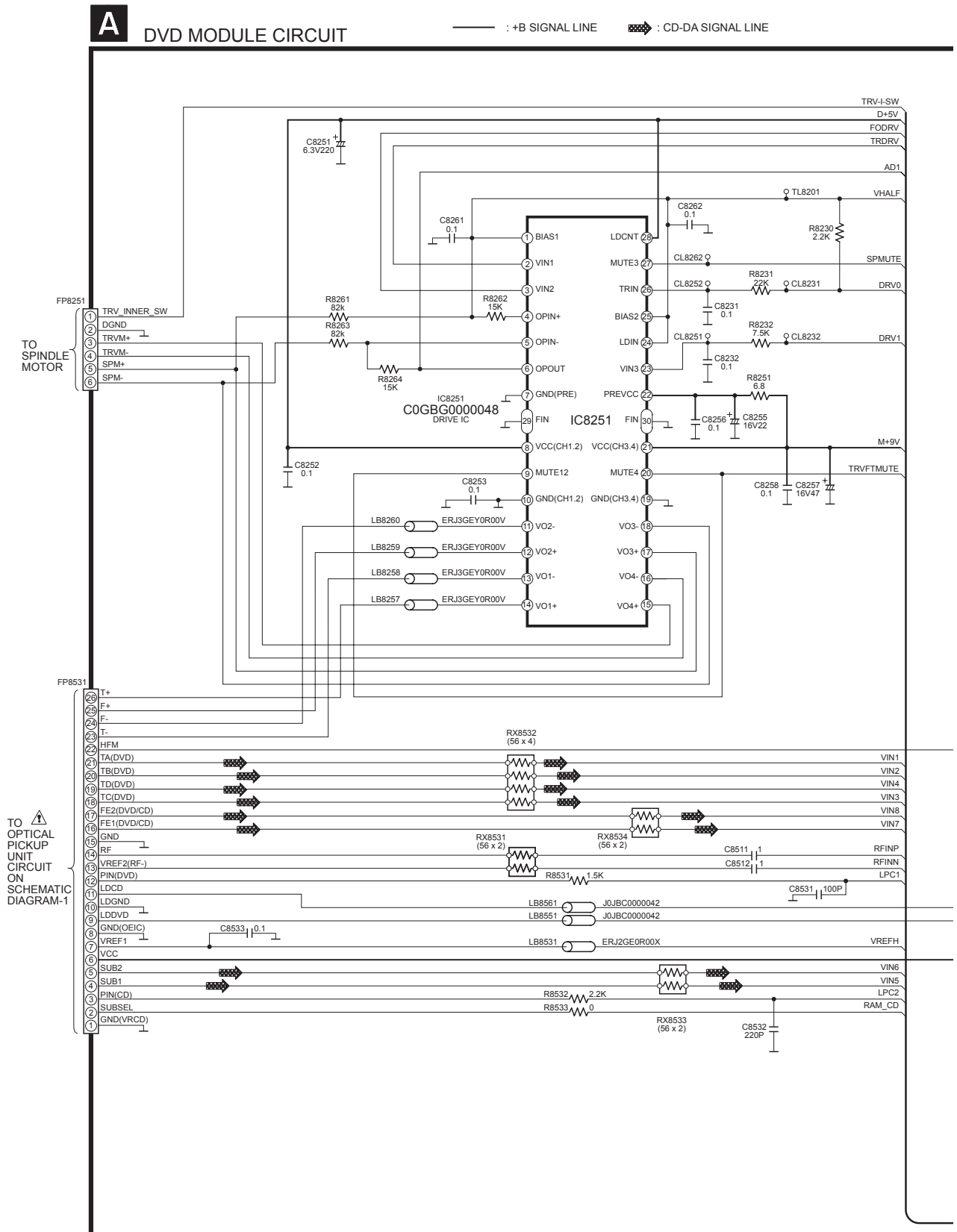
- This unit can play PAL and NTSC, but your television must match the system used on the disc.
- PAL discs cannot be correctly viewed on an NTSC television.
- This unit can convert NTSC signals to PAL 60 for viewing on a PAL television.

### 3 Schematic Diagram (Updating)

Note: With reference to page 81~87, 89~97 & 104 (section 22) of the original service manual for SA-VK82DGC/GCS/GS-S. Below are the updates.

#### 3.1. (A) DVD Module Circuit

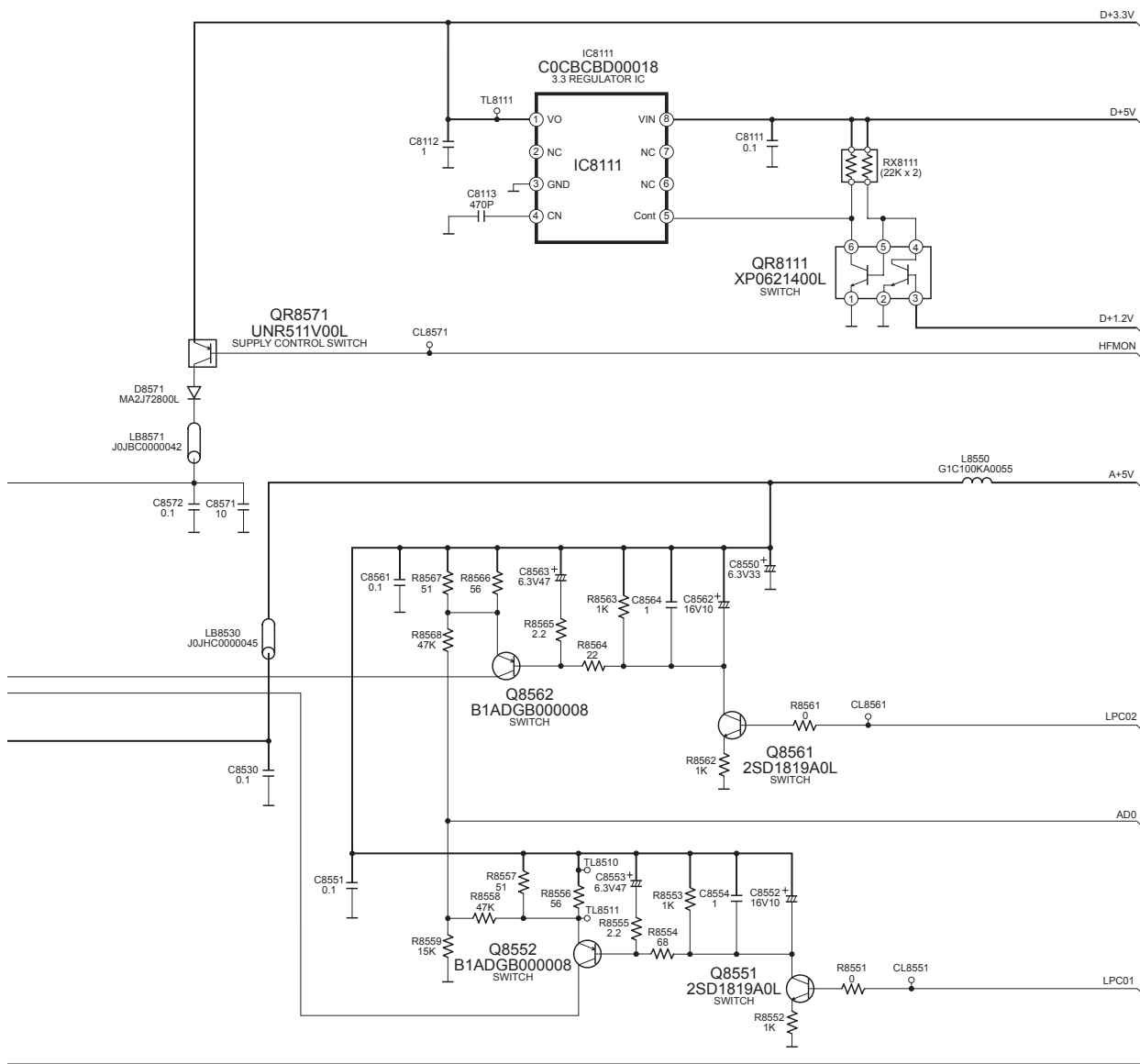
SCHEMATIC DIAGRAM - 2



SCHEMATIC DIAGRAM - 3

**A** DVD MODULE CIRCUIT


— : +B SIGNAL LINE

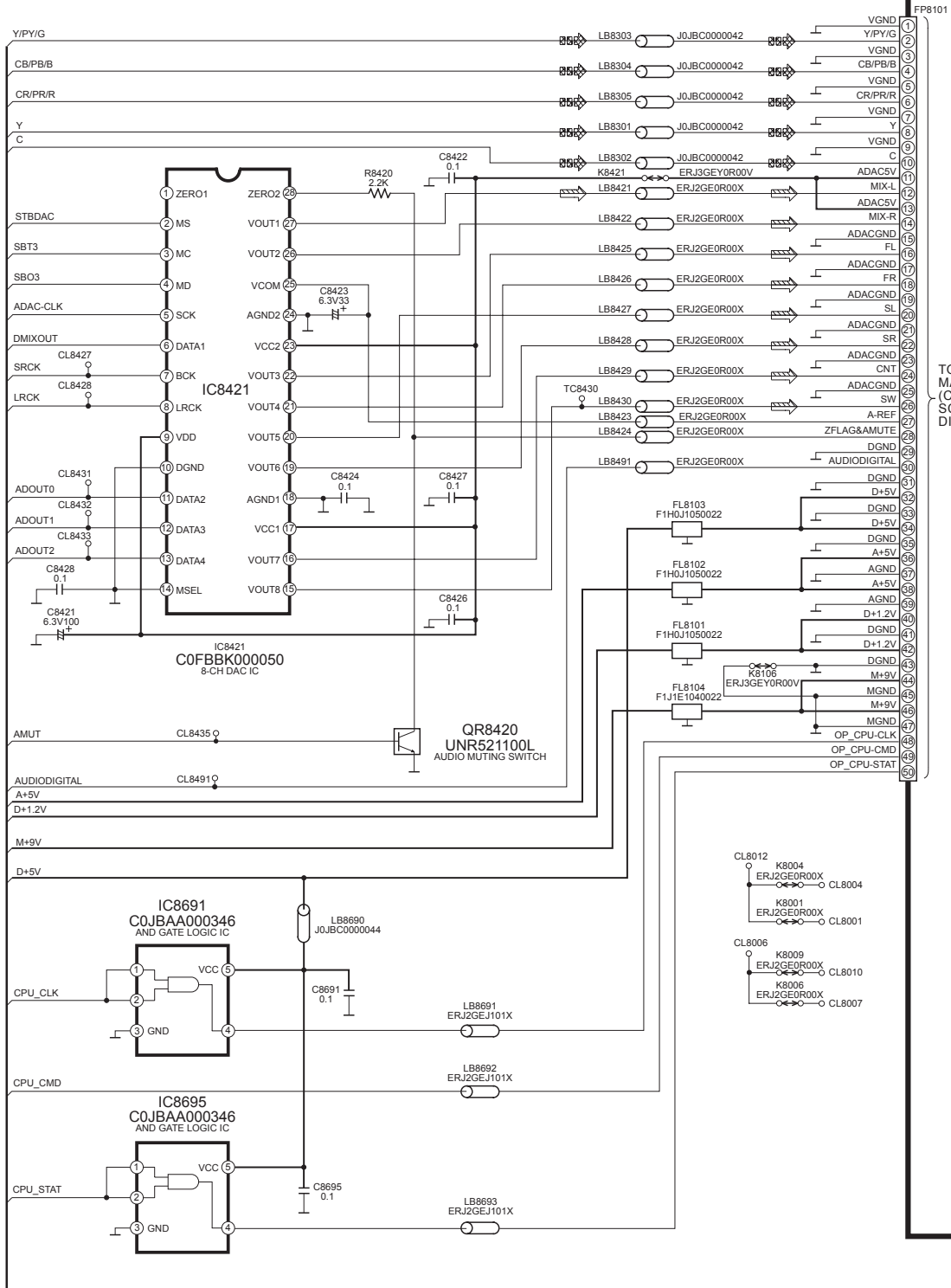




SCHEMATIC DIAGRAM - 4

**A** DVD MODULE CIRCUIT

⇒ : MAIN SIGNAL LINE  
 — : +B SIGNAL LINE  
 : DVD VIDEO SIGNAL LINE



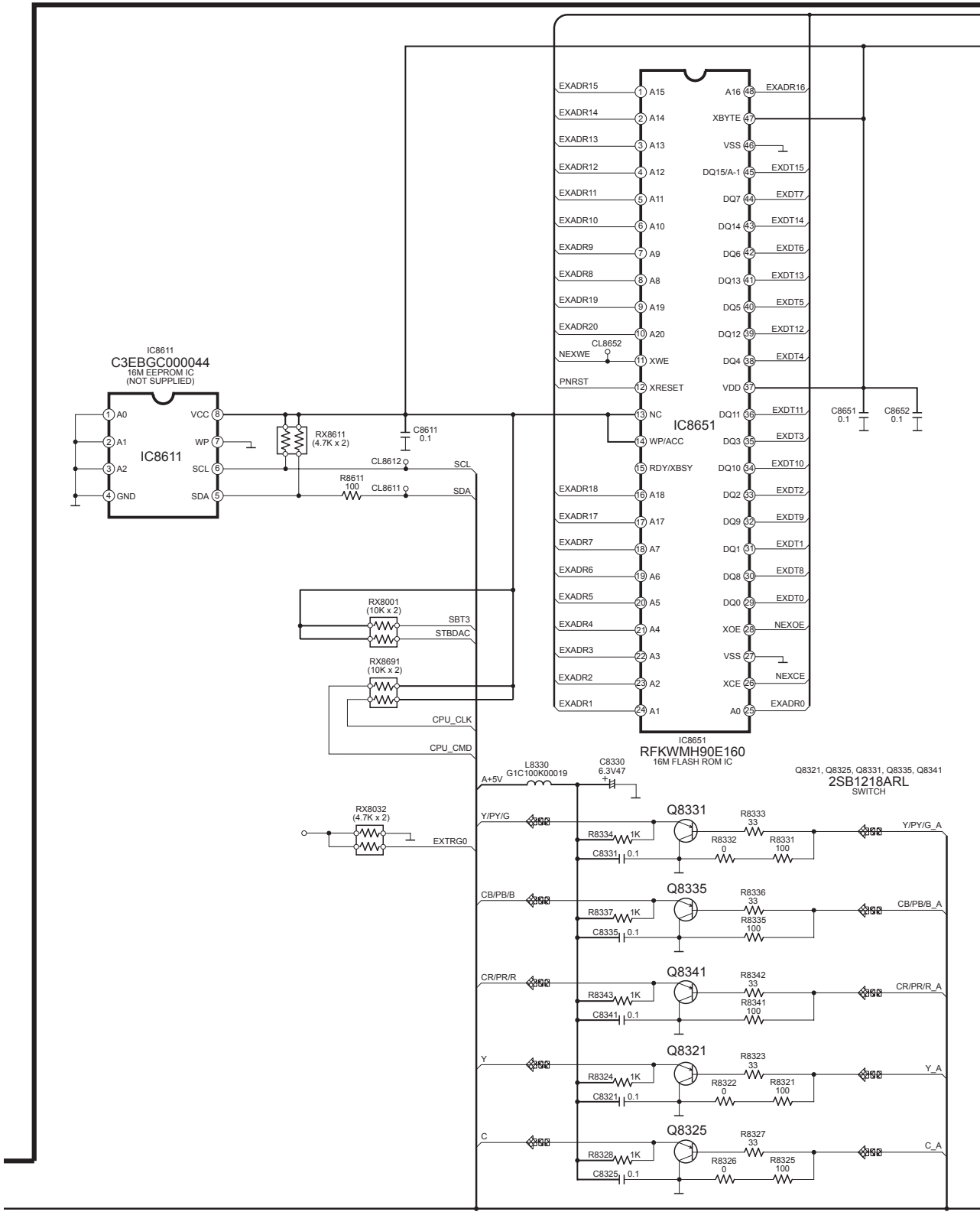
**B** TO MAIN CIRCUIT (CN2813) ON SCHEMATIC DIAGRAM - 11

SCHEMATIC DIAGRAM - 5

**A** DVD MODULE CIRCUIT

— : +B SIGNAL LINE

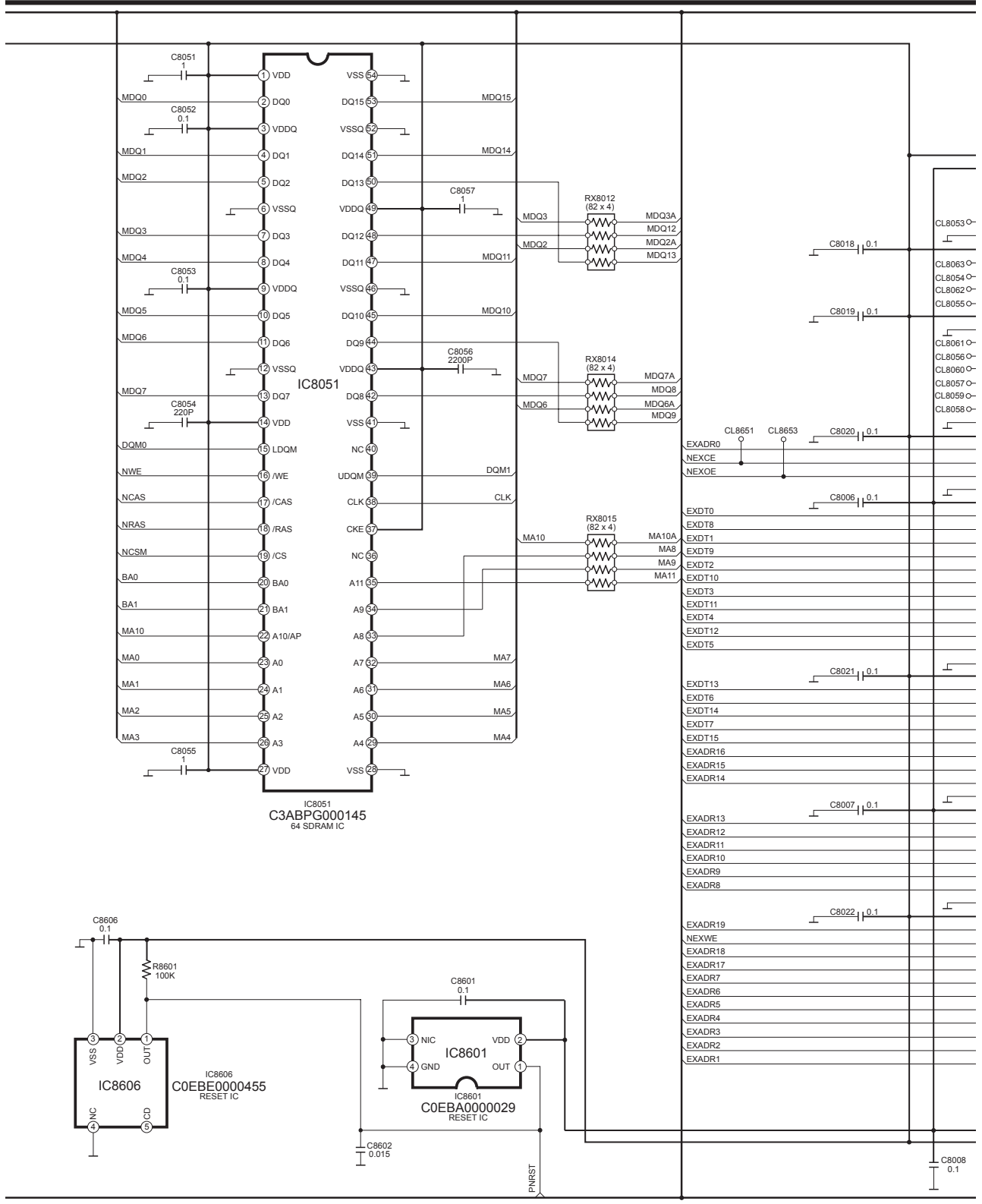
⚡ : DVD VIDEO SIGNAL LINE



SCHEMATIC DIAGRAM - 6

**A** DVD MODULE CIRCUIT

— : +B SIGNAL LINE

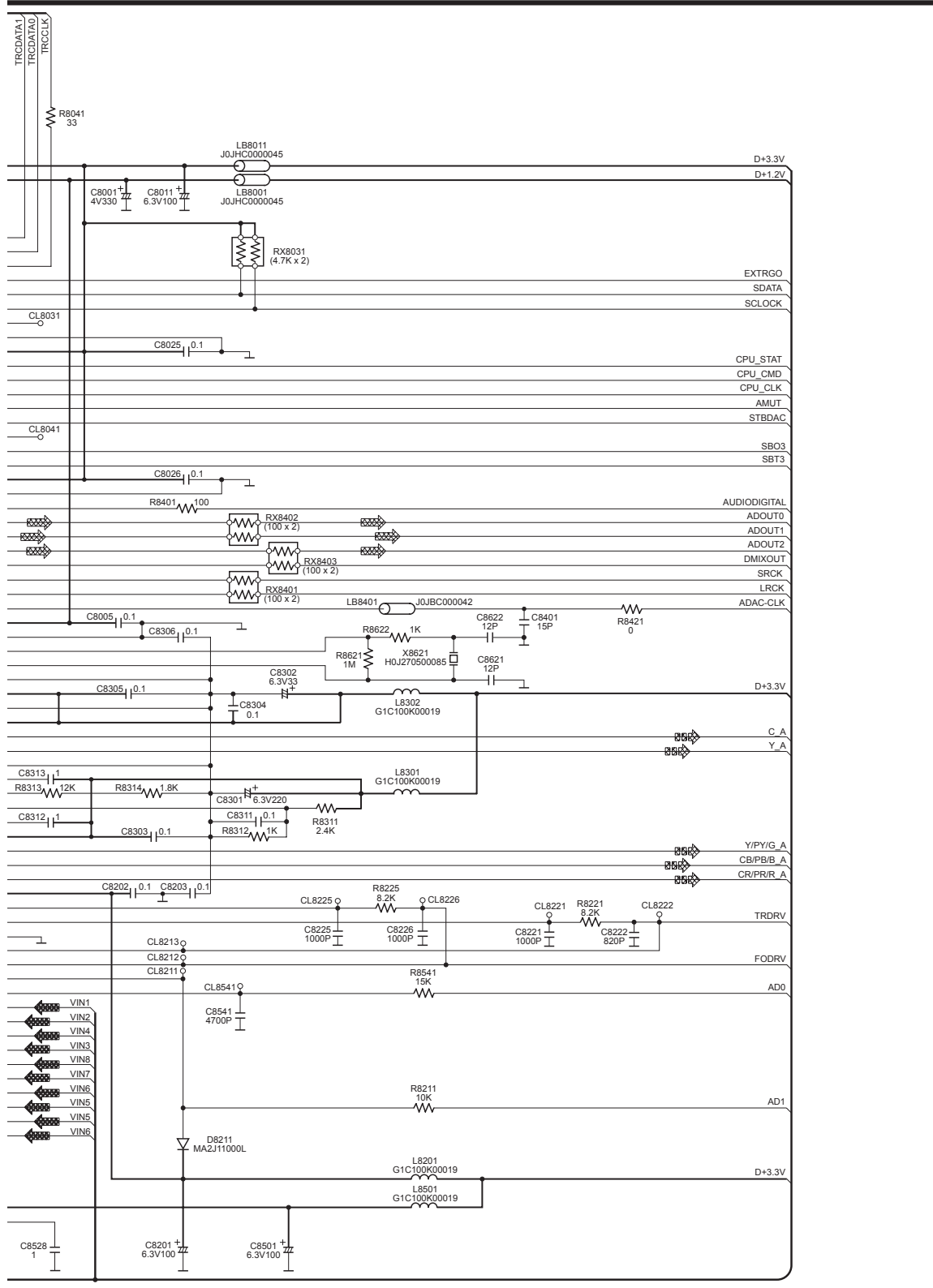




SCHEMATIC DIAGRAM - 8

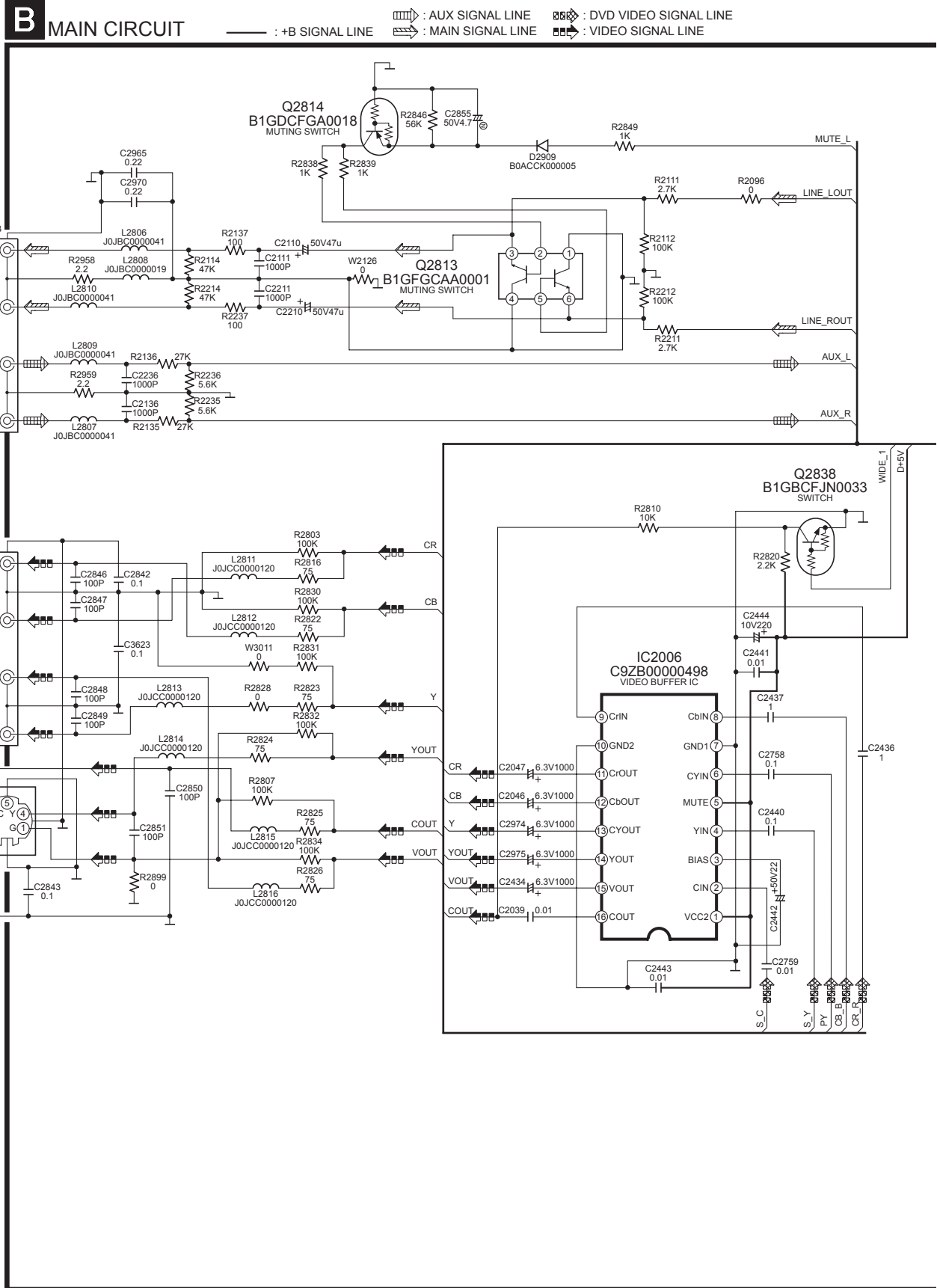
**A** DVD MODULE CIRCUIT

 : CD-DA SIGNAL LINE  
 : DVD VIDEO SIGNAL LINE  
 : DVD AUDIO SIGNAL LINE  
 : +B SIGNAL LINE



### 3.2. (B) Main Circuit

SCHEMATIC DIAGRAM - 10

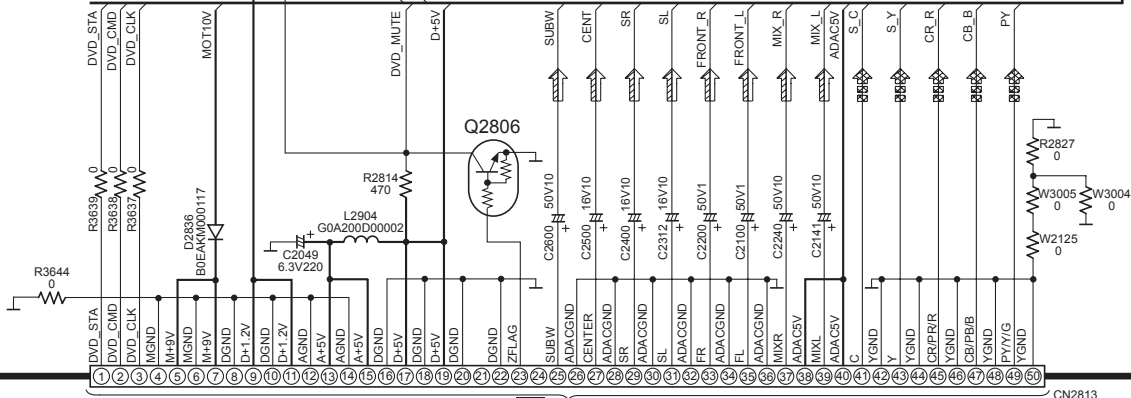
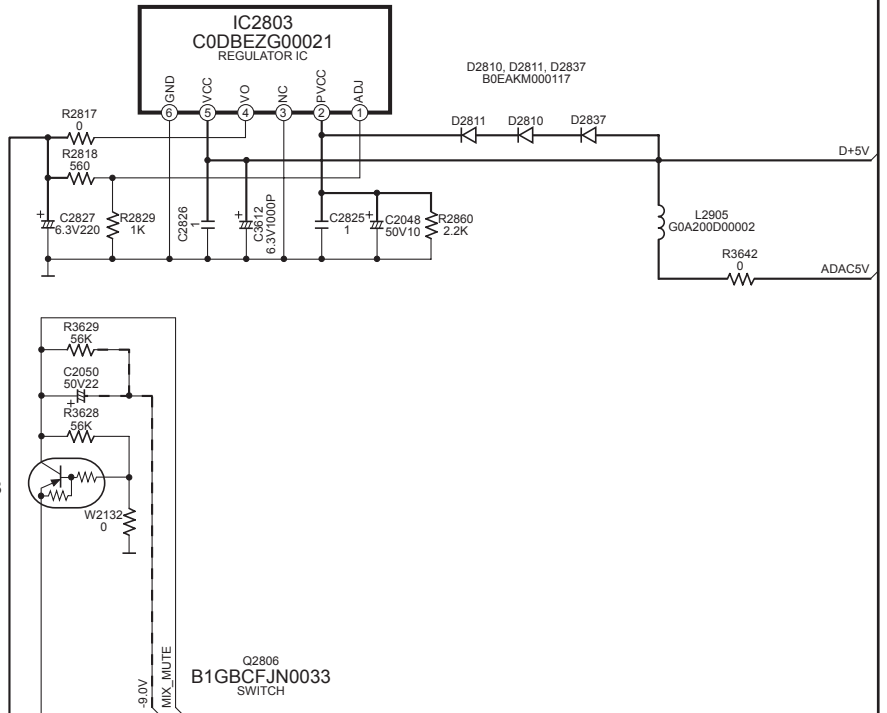
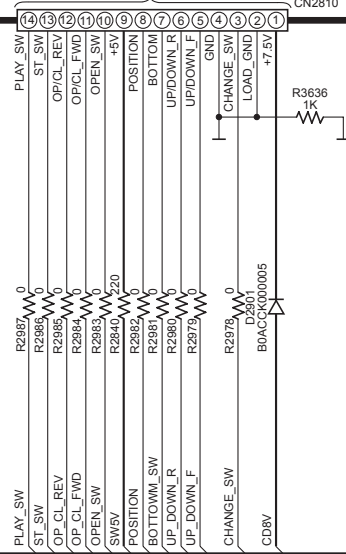
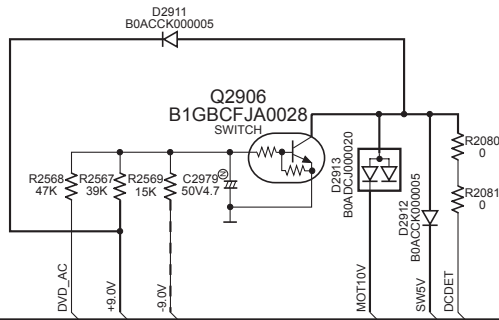


SCHEMATIC DIAGRAM - 11

**B** MAIN CIRCUIT

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

TO CD LOADING CIRCUIT (CN1) ON SCHEMATIC DIAGRAM - 26



TO DVD MODULE CIRCUIT (FP8101) ON SCHEMATIC DIAGRAM - 4

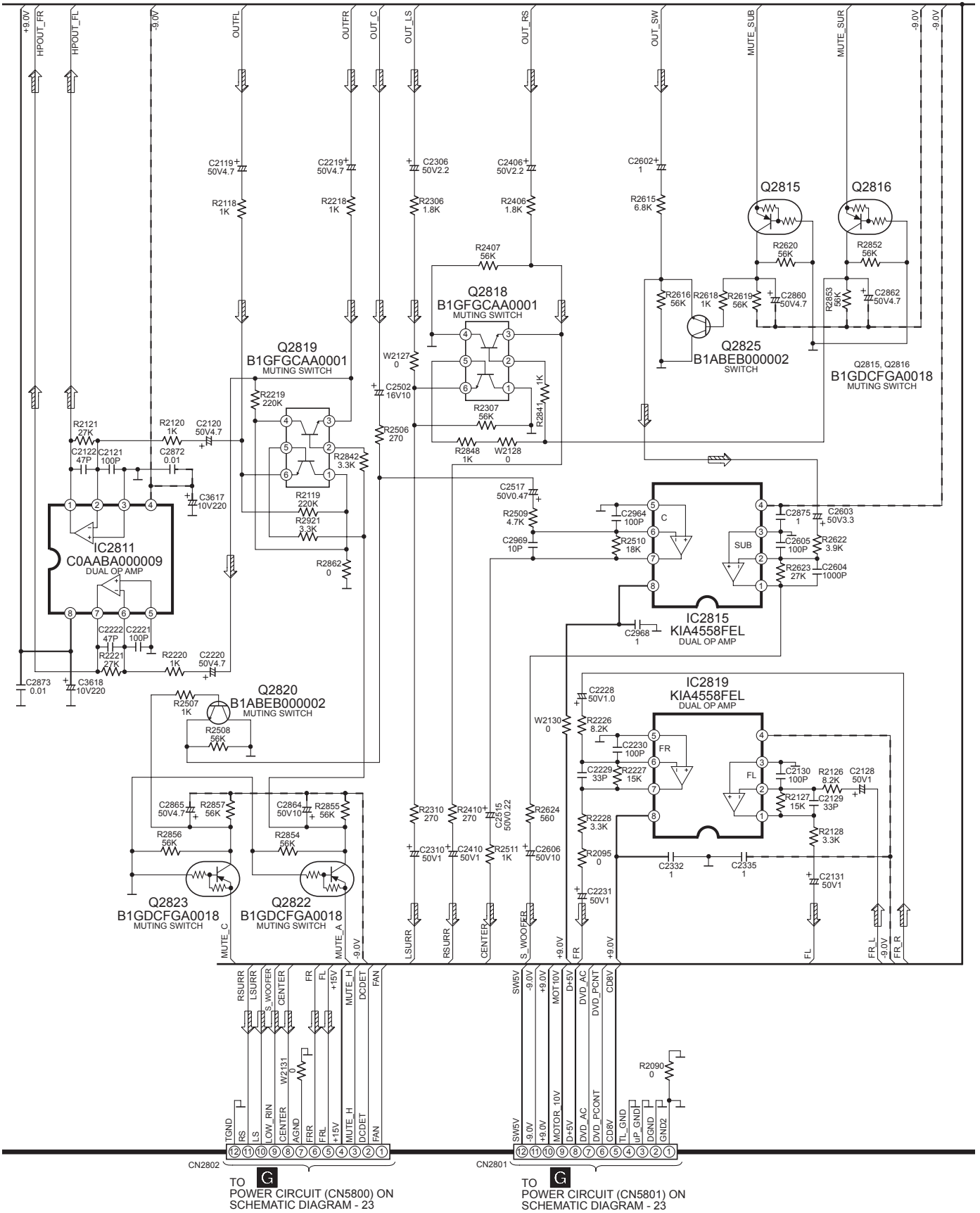




SCHEMATIC DIAGRAM - 13

**B** MAIN CIRCUIT

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



TO POWER CIRCUIT (CN5800) ON SCHEMATIC DIAGRAM - 23

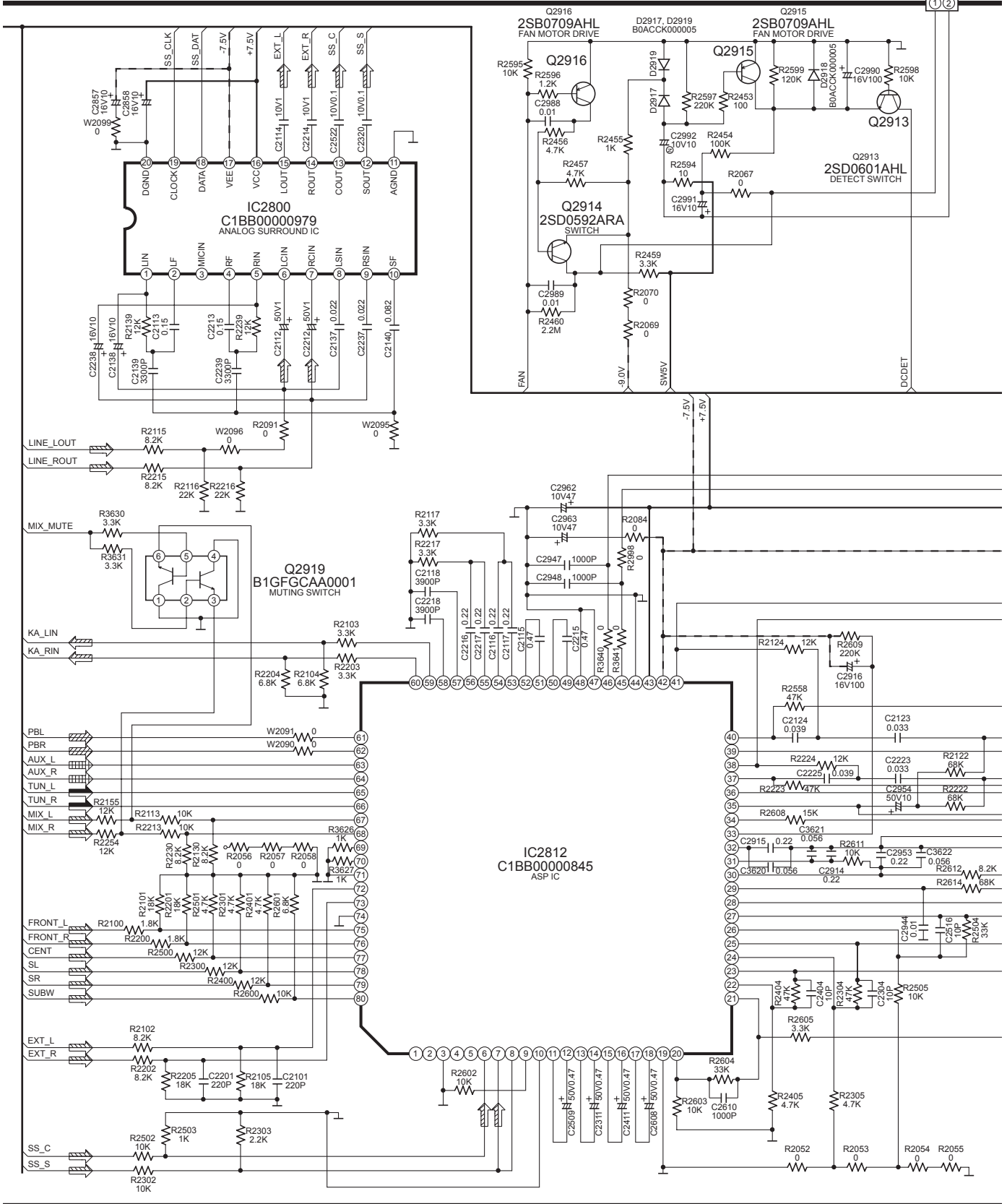
TO POWER CIRCUIT (CN5801) ON SCHEMATIC DIAGRAM - 23

SCHEMATIC DIAGRAM - 14

**B** MAIN CIRCUIT

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

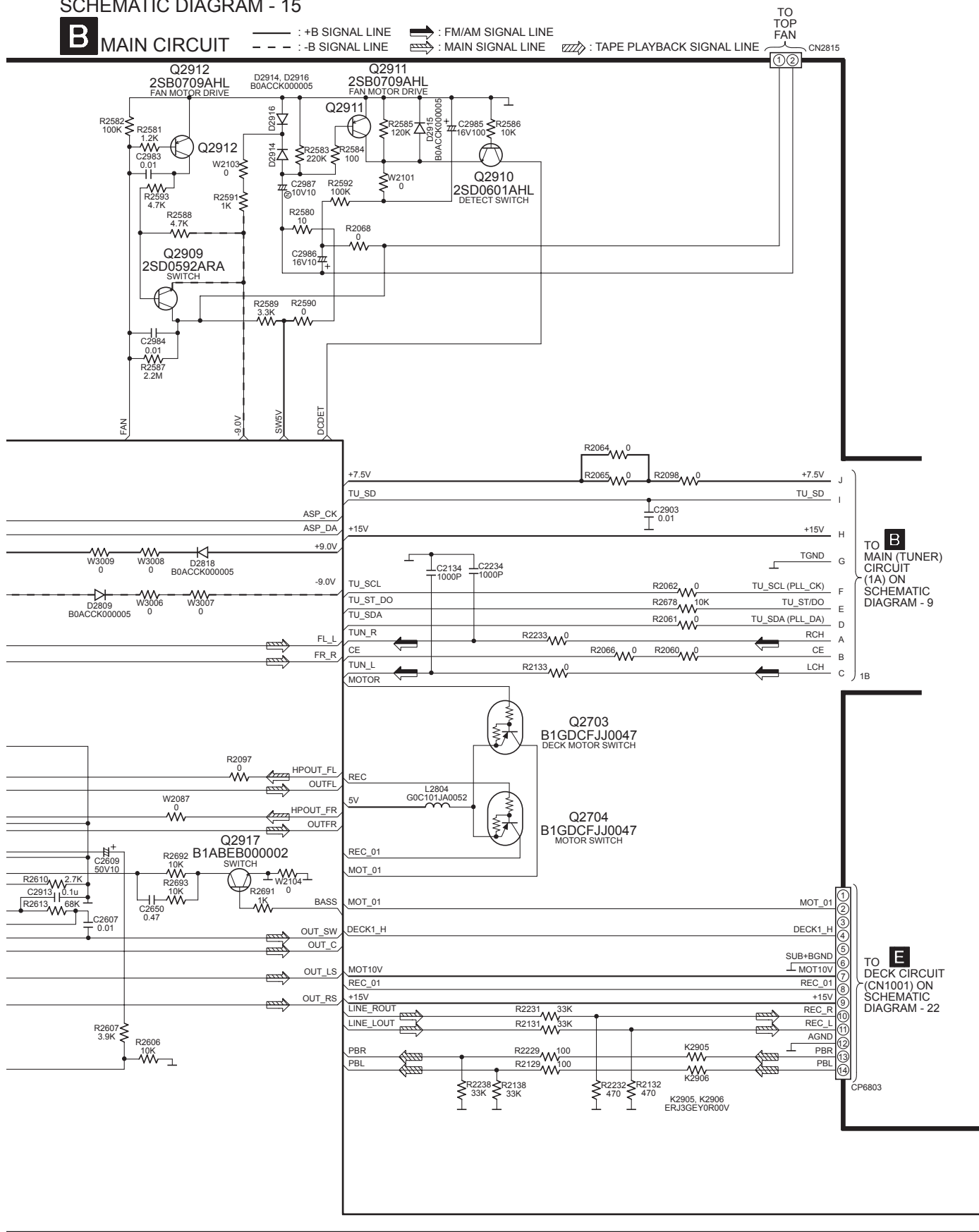
TO BOTTOM FAN  
 CN2816



SCHEMATIC DIAGRAM - 15

**B** MAIN CIRCUIT

— : +B SIGNAL LINE    — : -B SIGNAL LINE    — : FM/AM SIGNAL LINE  
 - - - : -B SIGNAL LINE    — : MAIN SIGNAL LINE    — : TAPE PLAYBACK SIGNAL LINE

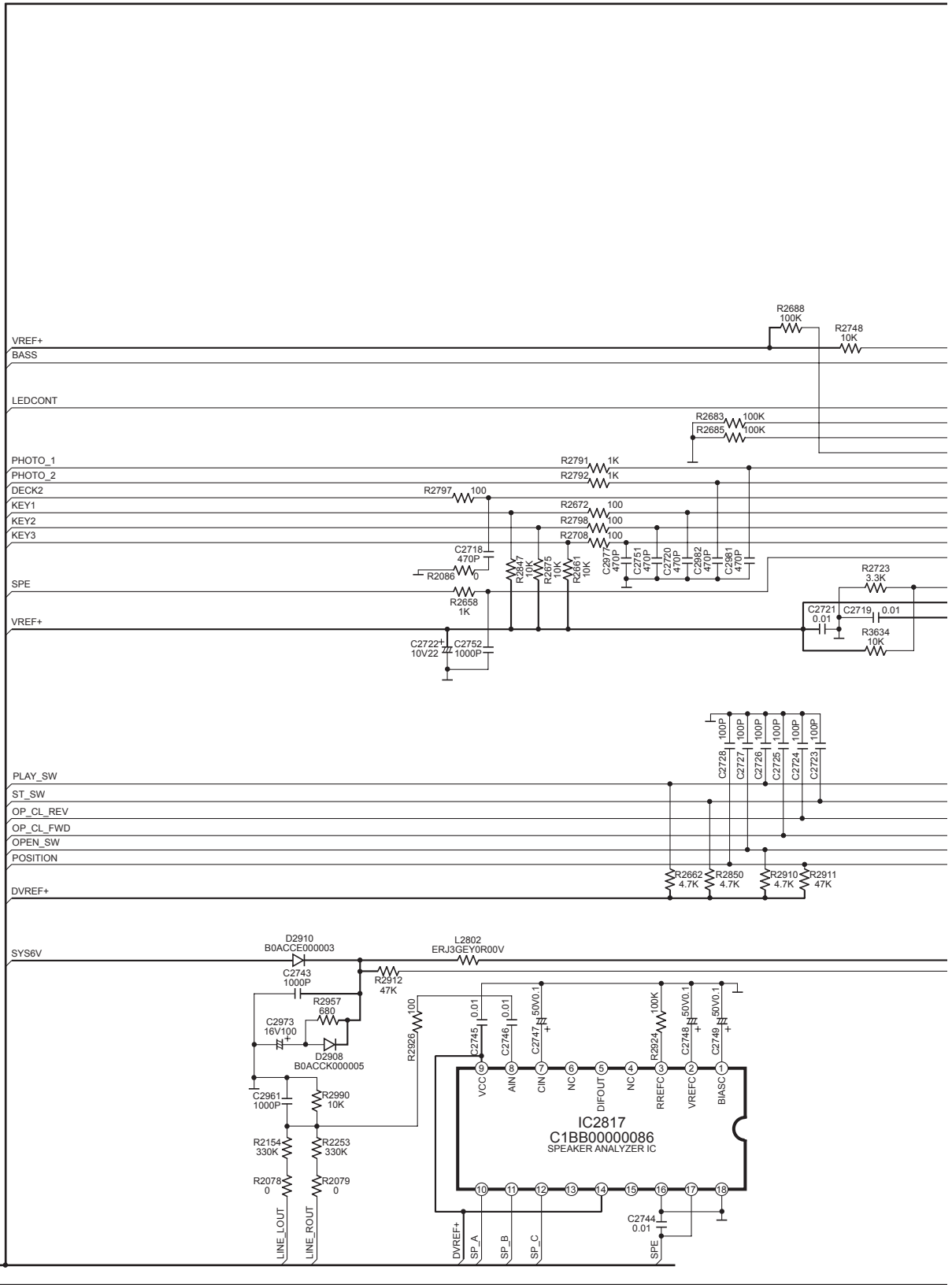


**B** TO MAIN (TUNER) CIRCUIT (1A) ON SCHEMATIC DIAGRAM - 9

**E** TO DECK CIRCUIT (CN1001) ON SCHEMATIC DIAGRAM - 22

SCHEMATIC DIAGRAM - 16

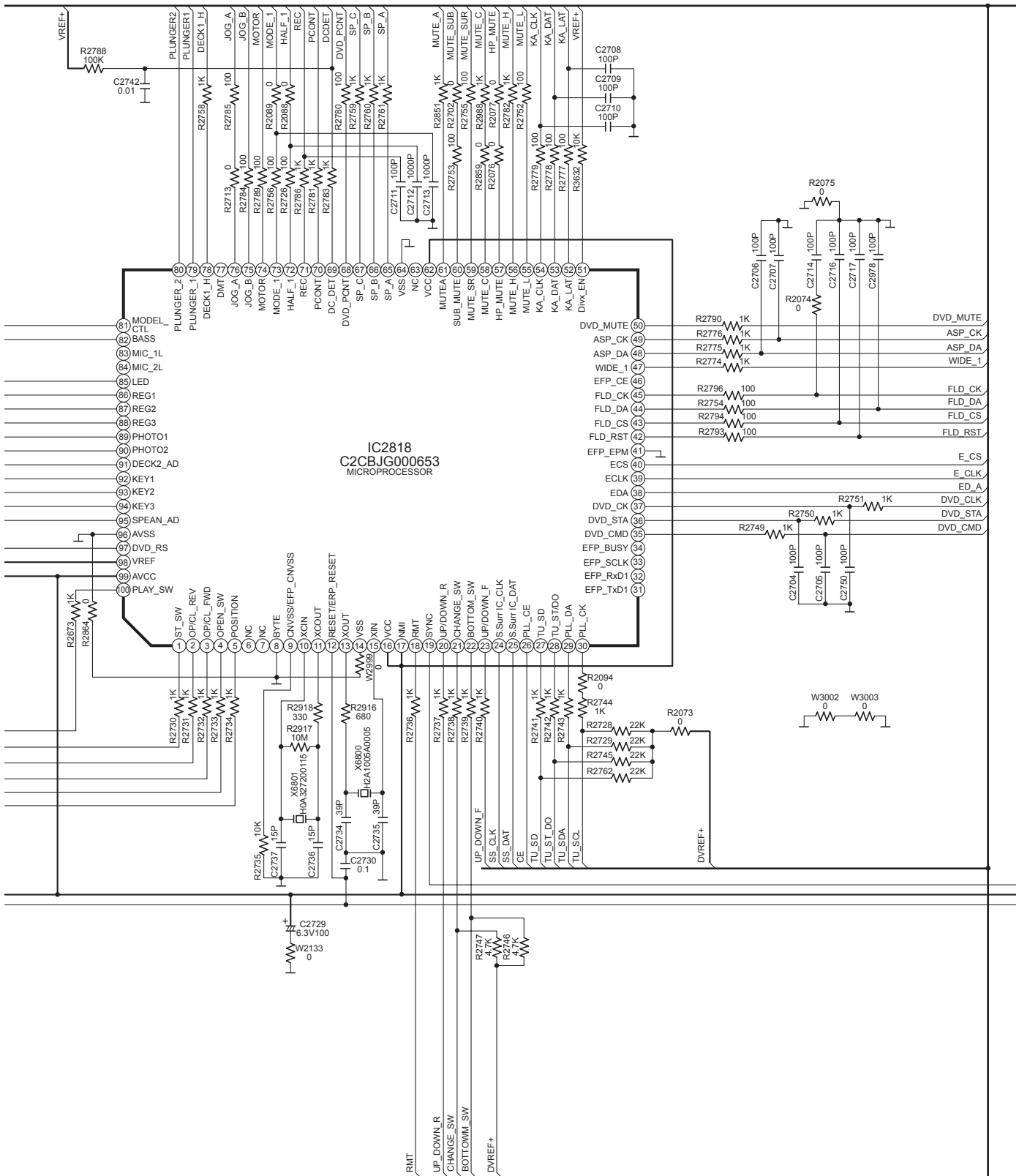
**B** MAIN CIRCUIT — : +B SIGNAL LINE



SCHEMATIC DIAGRAM - 17



**B** MAIN CIRCUIT

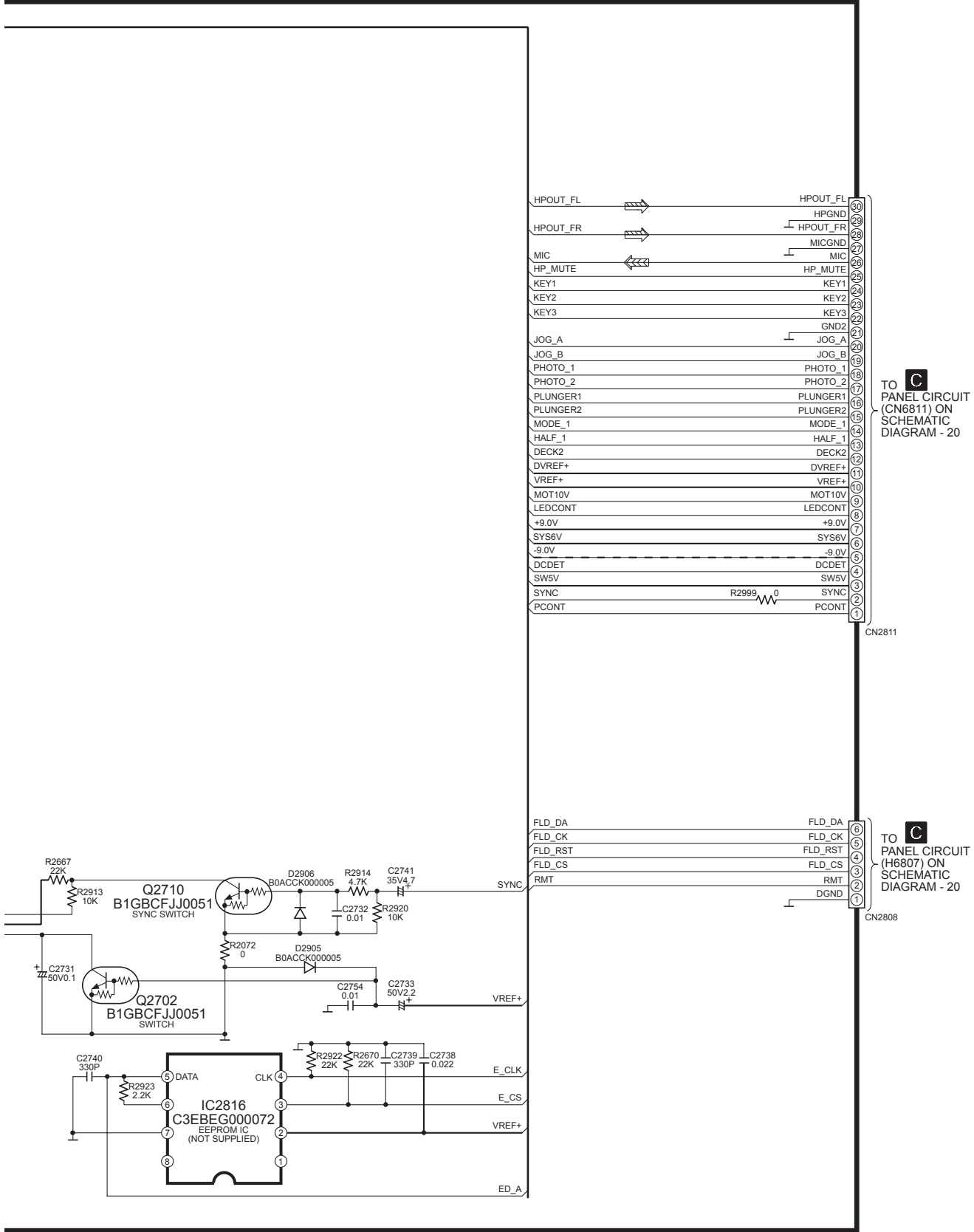
— : +B SIGNAL LINE



SCHEMATIC DIAGRAM - 18

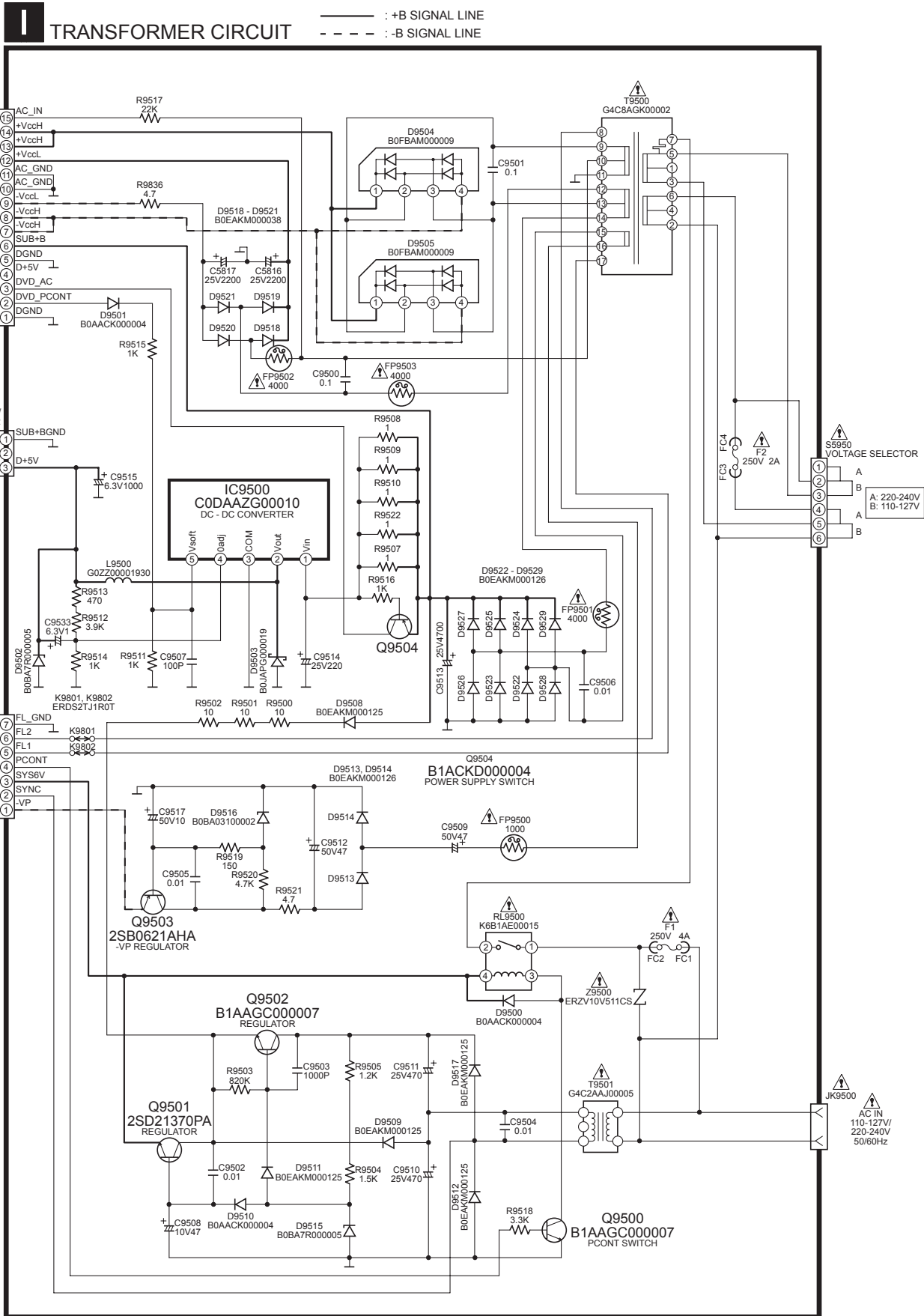
**B** MAIN CIRCUIT

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



### 3.3. (I) Transformer Circuit

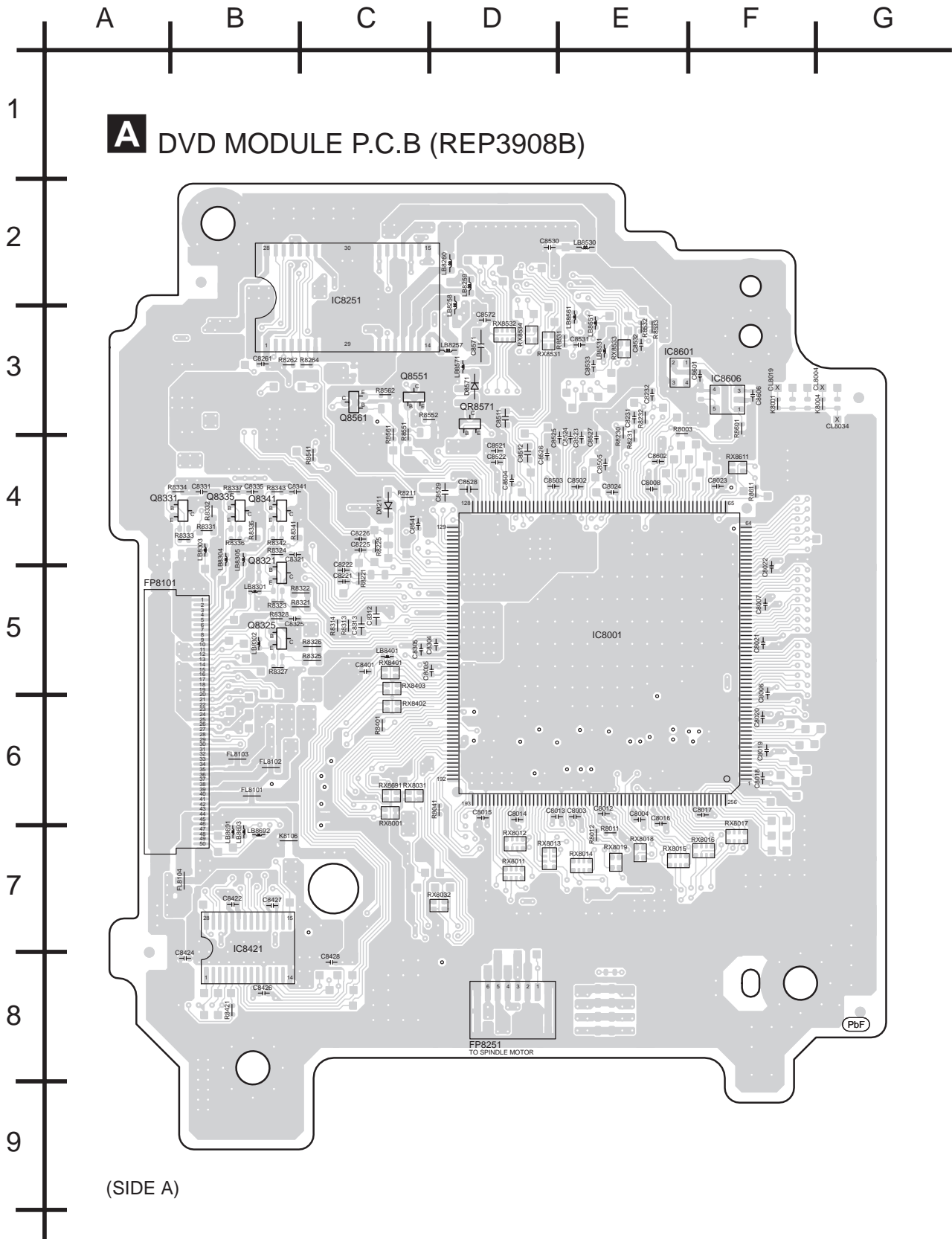
SCHEMATIC DIAGRAM - 25



# 4 Printed Circuit Board (Updating)

Note: With reference to page 106~116 (section 23) of the original service manual for SA-VK82DGCP/GCS/GS-S. Below are the updates.

## 4.1. (A) DVD Module P.C.B. (Side A & B)





A B C D E F G

1

# A DVD MODULE P.C.B (REP3908B)

2

3

4

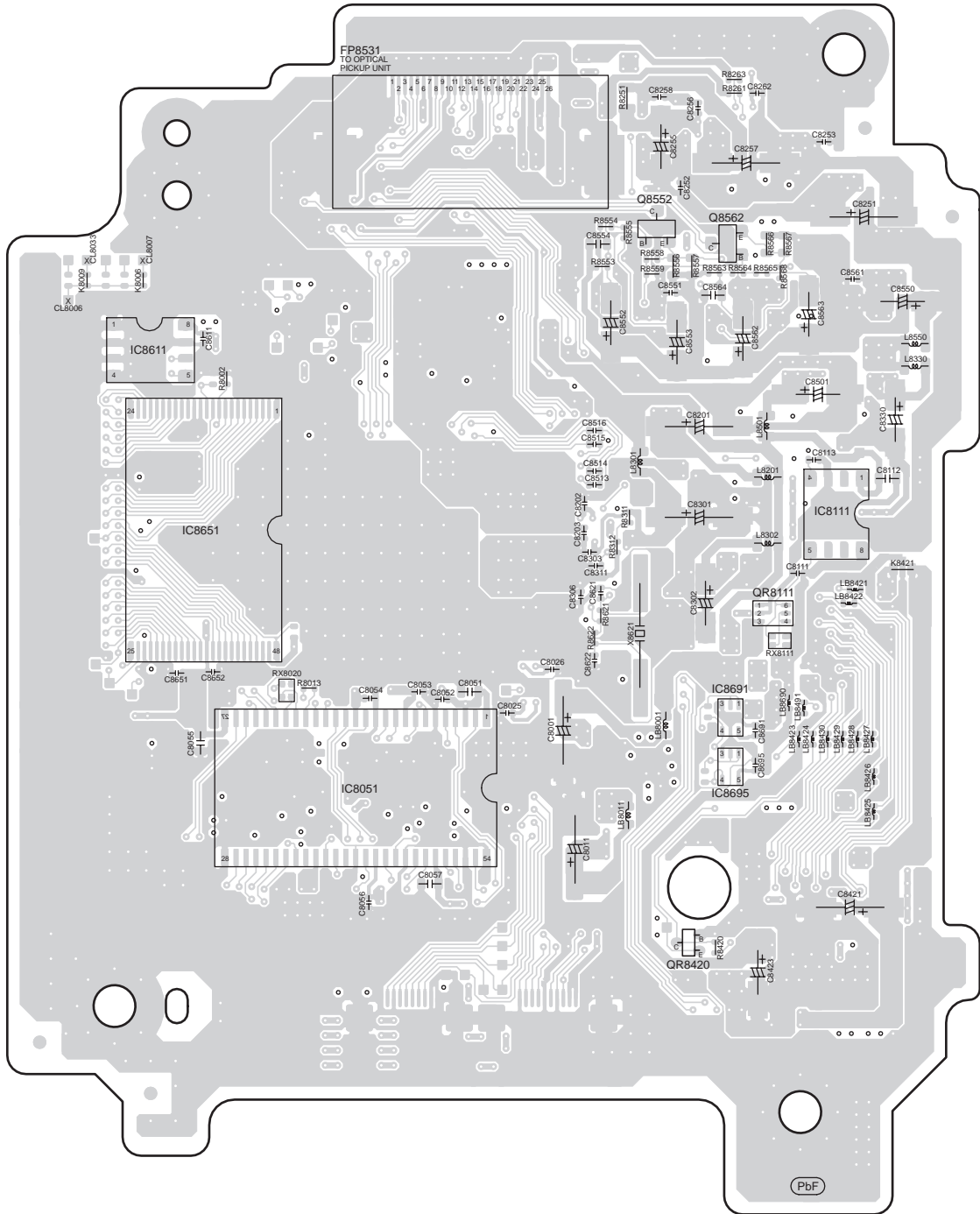
5

6

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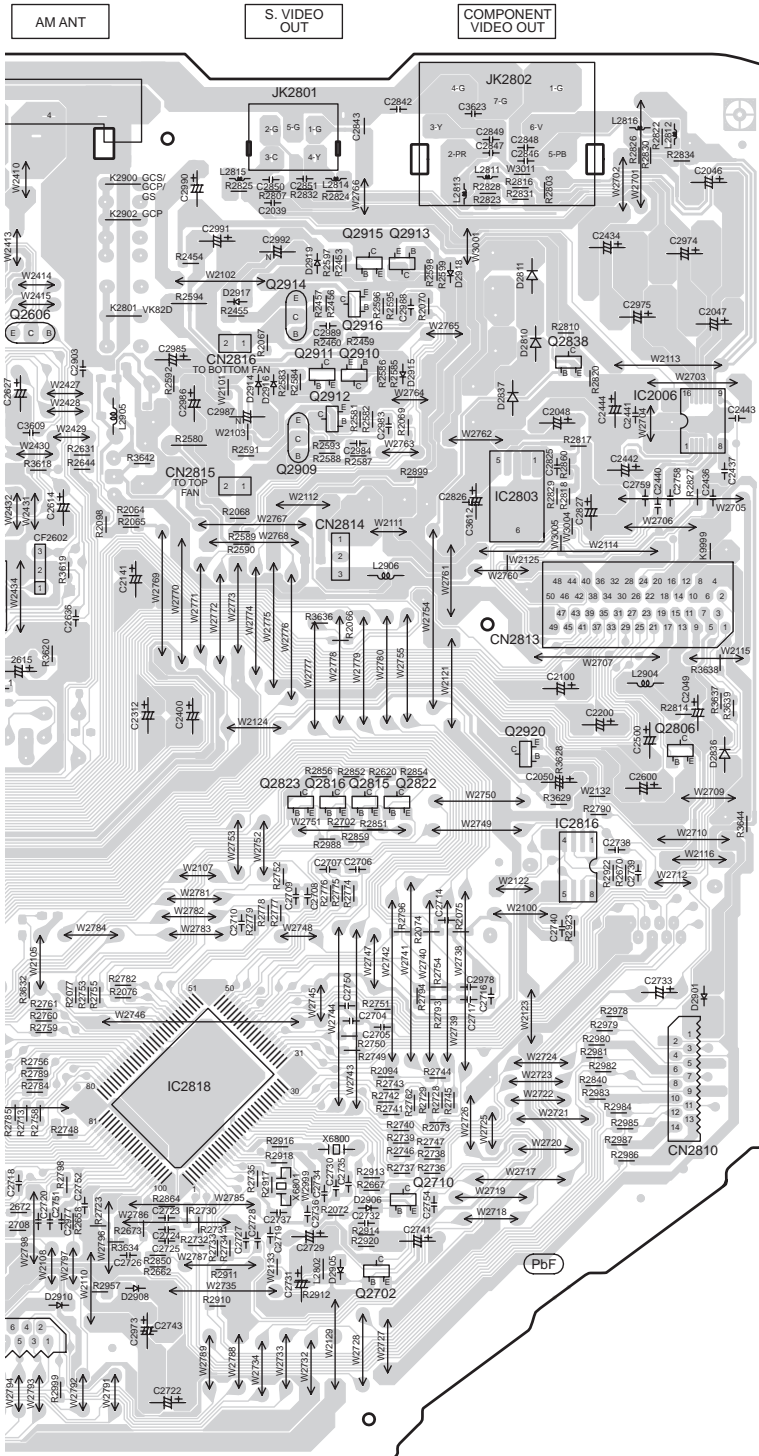
9



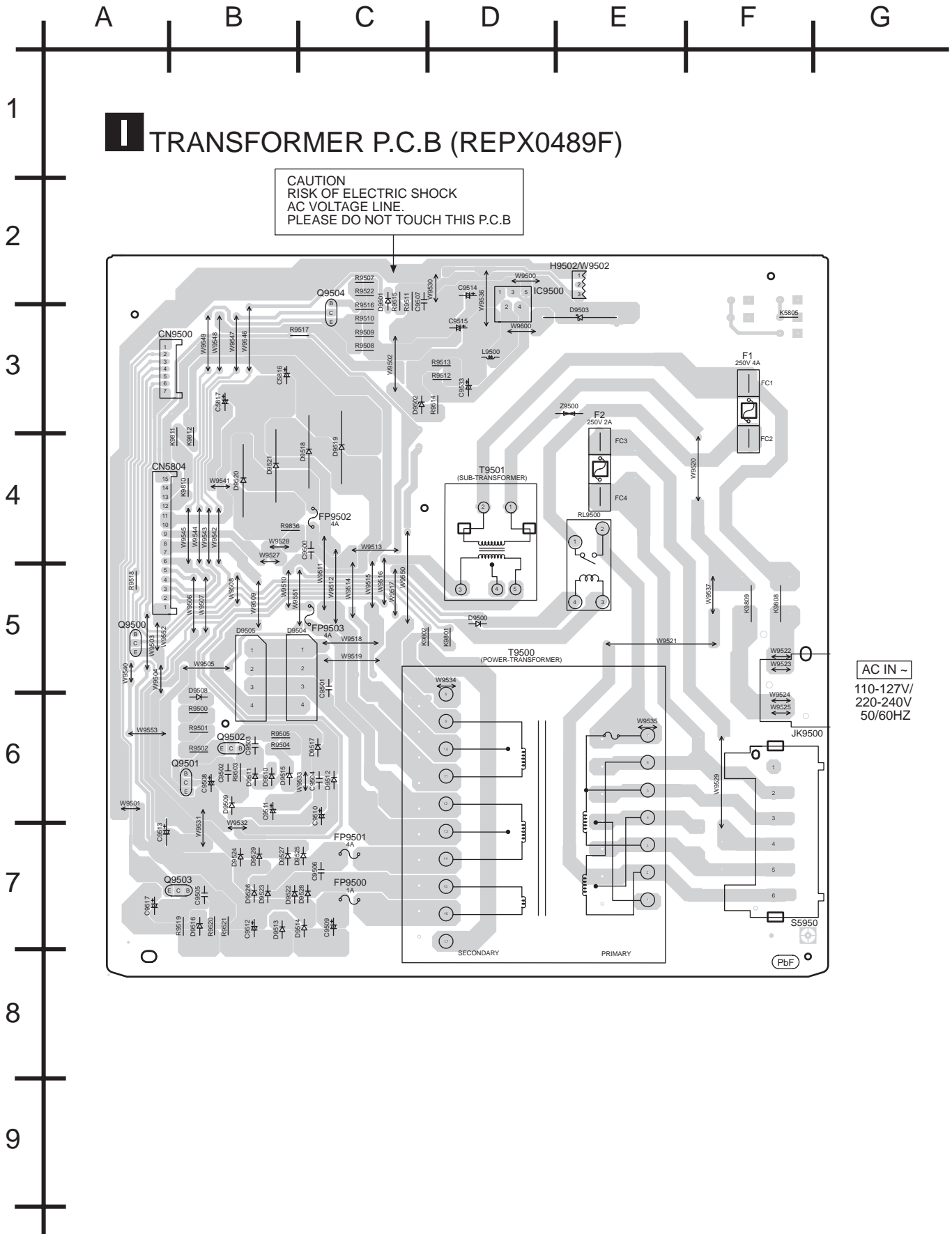
(SIDE B)



G H I J K L M

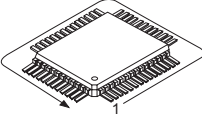
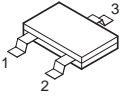
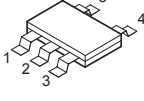
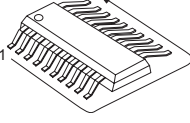
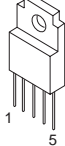
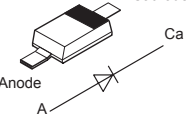
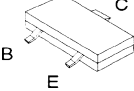


### 4.3. (I) Transformer P.C.B.



## 5 Illustration of IC's, Transistors and Diodes (Updating)

Note: With reference to page 120 (section 25) of the original service manual for SA-VK82DGCP/GCS/GS-S. Below are the updates.

<p>MN2DS0009AP (256P)</p> 	<p>C0EBA0000029</p> 	<p>C0EBA0000455</p> 	<p>C3ABPG000145 (54P)</p> 	<p>C0DAAMH00010</p> 	<p>MA2J11100L</p> 
<p>B1ADGB000008 2SB1218ARL XP0621400L</p> 					

## 6 Parts Location and Replacement Parts List (Updating)

**Note:** With reference to page 124~149 (section 27) of the original service manual for SA-VK82DGCP/GCS/GS-S. Below are the updates.

### 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 ( $\mu$ F) 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**.

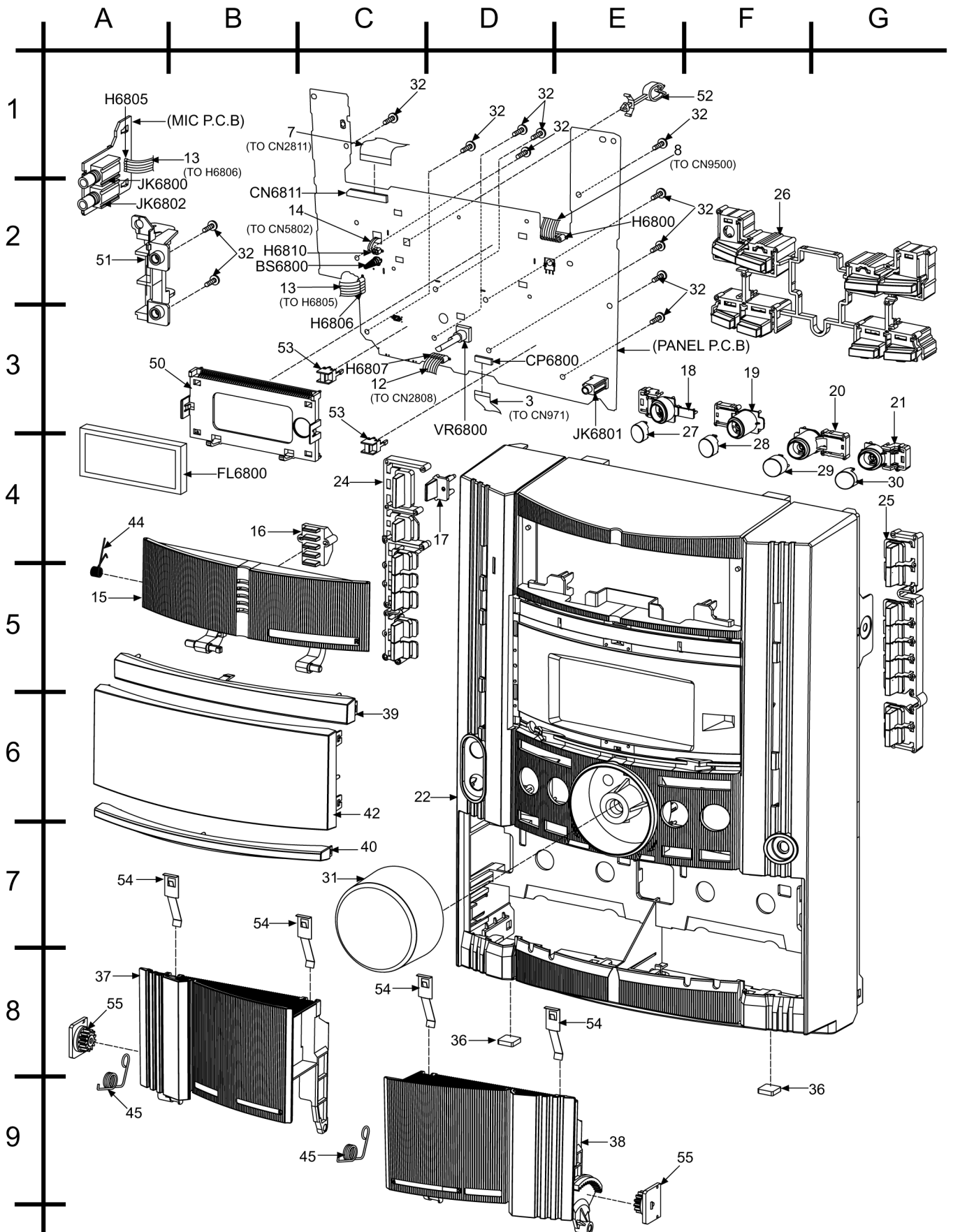
- [SPG] markings in the Remarks columns indicates parts that are supplied by **PAVC**.

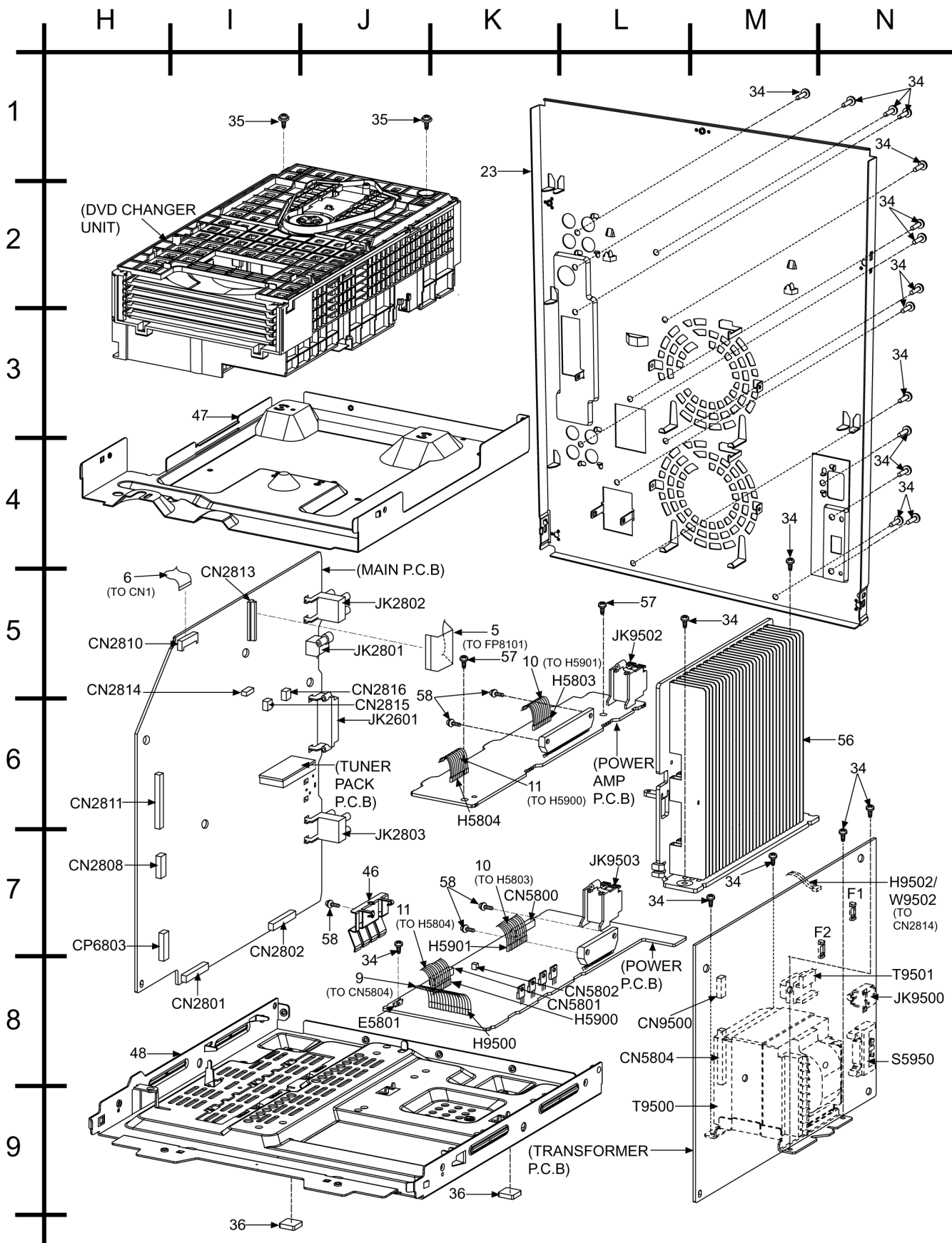
- Reference for O/I book languages are as follows:

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	Ur:	Ukraine				

## 6.1. Cabinet

### 6.1.1. Cabinet Parts Location







## 6.1.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	

Ref. No.	Part No.	Part Name & Description	Remarks
23	RGRX0052B-A	REAR PANEL	[M]
42	RKWX0252J-V	FL WINDOW	[M]

## 6.2. Electrical Parts List (Updating)

Ref. No.	Part No.	Part Name & Description	Remarks
		PRINTED CIRCUIT BOARDS	
	REP3908B	DVD MODULE P.C.B. (SIDE: A)	[M] (RTL)
	REP3908B	DVD MODULE P.C.B. (SIDE: B)	[M] (RTL)
	REPX0486N	MAIN P.C.B.	[M] (RTL)
	REPX0489F	TRANSFORMER P.C.B.	[M] (RTL)
		INTEGRATED CIRCUITS	
IC8001	MN2DS0009AP	IC DV3.2	[M]
IC8051	C3ABPG000145	IC SDRAM	[M]
IC8601	COEBA0000029	IC RESET	[M]
IC8606	COEBE0000455	IC RESET	[M]
IC8651	RFKWMH90E160	IC FLASH ROM	[SPG]
IC9500	CODAAAMH00010	IC DC-DC CONVERTER	[M]
		TRANSISTORS	
Q8321	2SB1218ARL	TRANSISTOR	[M]
Q8325	2SB1218ARL	TRANSISTOR	[M]
Q8331	2SB1218ARL	TRANSISTOR	[M]
Q8335	2SB1218ARL	TRANSISTOR	[M]
Q8341	2SB1218ARL	TRANSISTOR	[M]
Q8552	B1ADGB0000008	TRANSISTOR	[M]
Q8562	B1ADGB0000008	TRANSISTOR	[M]
QR8111	XP0621400L	CHIP TRANSISTOR	[M]
		DIODE	
D8211	MA2J11100L	DIODE	[M]
		CHIP INDUCTORS	
LB8257	ERJ3GEY0R00V	CHIP JUMPER	[M]
LB8258	ERJ3GEY0R00V	CHIP JUMPER	[M]
LB8259	ERJ3GEY0R00V	CHIP JUMPER	[M]
LB8260	ERJ3GEY0R00V	CHIP JUMPER	[M]
LB8301	J0JBC0000042	CHIP BEAD	[M]
LB8302	J0JBC0000042	CHIP BEAD	[M]
LB8303	J0JBC0000042	CHIP BEAD	[M]
LB8304	J0JBC0000042	CHIP BEAD	[M]
LB8305	J0JBC0000042	CHIP BEAD	[M]
LB8530	J0JHC0000045	CHIP INDUCTOR	[M]
LB8531	ERJ2GE0R00X	CHIP JUMPER	[M]
LB8551	J0JBC0000042	CHIP BEAD	[M]
LB8561	J0JBC0000042	CHIP BEAD	[M]
LB8571	J0JBC0000042	CHIP BEAD	[M]
LB8690	J0JBC0000044	HIGH LOSS INDUCTOR	[M]
		COILS & TRANSFORMERS	
L8201	G1C100K00019	CHIP COIL	[M]
L8301	G1C100K00019	CHIP COIL	[M]
L8302	G1C100K00019	CHIP COIL	[M]
L8330	G1C100K00019	CHIP COIL	[M]
L8501	G1C100K00019	CHIP COIL	[M]
L9500	G0ZZ00001930	COIL	[M]
		RESISTORS	
R2723	ERJ3GEYJ103V	10K 1/16W	[M]
R3632	ERJ3GEYJ103V	10K 1/16W	[M]
R7	ERJ3GEYJ682V	6.8K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R8002	ERJ2GEJ473X	47K 2W	[M]
R8003	ERJ2GEJ473X	47K 2W	[M]
R8012	ERJ2GEJ220X	22 2W	[M]
R8013	ERJ2GEJ220X	22 2W	[M]
R8211	ERJ2GEJ103X	10K 2W	[M]
R8221	ERJ2GEJ822X	8.2K 2W	[M]
R8225	ERJ2GEJ822X	8.2K 2W	[M]
R8230	ERJ2GEJ222X	2.2K 2W	[M]
R8231	ERJ2GEJ223X	22K 2W	[M]
R8232	ERJ2GEJ752X	7.5K 2W	[M]
R8262	ERJ2GEJ153X	15K 2W	[M]
R8264	ERJ2GEJ153X	15K 2W	[M]
R8313	ERJ2RHD123X	12K 2W	[M]
R8314	ERJ2RHD182X	1.8K 2W	[M]
R8321	ERJ3RBD101V	100 3W	[M]
R8322	ERJ3GEY0R00V	0 1/16W	[M]
R8323	ERJ2GEJ330X	33 2W	[M]
R8324	ERJ2GEJ102X	1K 2W	[M]
R8325	ERJ3RBD101V	100 3W	[M]
R8326	ERJ3GEY0R00V	0 1/16W	[M]
R8327	ERJ2GEJ330X	33 2W	[M]
R8328	ERJ2GEJ102X	1K 2W	[M]
R8331	ERJ3RBD101V	100 3W	[M]
R8332	ERJ3GEY0R00V	0 1/16W	[M]
R8333	ERJ2GEJ330X	33 2W	[M]
R8334	ERJ2GEJ102X	1K 2W	[M]
R8335	ERJ3RBD101V	100 3W	[M]
R8336	ERJ2GEJ330X	33 2W	[M]
R8337	ERJ2GEJ102X	1K 2W	[M]
R8341	ERJ3RBD101V	100 3W	[M]
R8342	ERJ2GEJ330X	33 2W	[M]
R8343	ERJ2GEJ102X	1K 2W	[M]
R8401	ERJ2GEJ101X	100 2W	[M]
R8531	ERJ2GEJ152X	1.5K 2W	[M]
R8532	ERJ2GEJ222X	2.2K 2W	[M]
R8533	ERJ2GE0R00X	0 2W	[M]
R8541	ERJ2GEJ153X	15K 2W	[M]
R8601	ERJ2GEJ104X	100K 2W	[M]
R9511	ERDS2TJ102T	1K 1/4W	[M]
R9513	ERDS2TJ331T	330 1/4W	[M]
RX8001	D1H410320002	CHIP RESISTOR	[M]
RX8015	D1H88204A024	CHIP RESISTOR	[M]
RX8018	D1H422020001	CHIP RESISTOR	[M]
RX8019	D1H422020001	CHIP RESISTOR	[M]
RX8020	D1H422020001	CHIP RESISTOR	[M]
RX8111	D1H422320002	CHIP RESISTOR	[M]
RX8403	D1H410120001	CHIP RESISTOR	[M]
RX8531	D1H456020001	CHIP RESISTOR	[M]
RX8532	D1H85604A024	CHIP RESISTOR	[M]
RX8533	D1H456020001	CHIP RESISTOR	[M]
RX8534	D1H456020001	CHIP RESISTOR	[M]
RX8691	D1H410320002	CHIP RESISTOR	[M]
K5805	ERDS2TJ1R0T	CARBON FILM RESISTOR	[M]
		CAPACITORS	
C2736	ECJ1VC1H180K	18 50V	[M]
C2737	ECJ1VC1H180K	18 50V	[M]
C2944	ECJ1VB1C103K	0.01 16V	[M]
C8001	EEE0GA331WP	330P 4V	[M]
C8003	ECJ0EF1C104Z	0.1 16V	[M]
C8011	F2G0J101A066	100P 6.3V	[M]
C8015	ECJ0EF1C104Z	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C8016	ECJ0EF1C104Z	0.1 16V	[M]
C8019	ECJ0EF1C104Z	0.1 16V	[M]
C8231	ECJ0EB1A104K	0.1 10V	[M]
C8251	F2G0J221A065	220P 6.3V	[M]
C8252	ECJ0EF1C104Z	0.1 16V	[M]
C8253	ECJ0EF1C104Z	0.1 16V	[M]
C8255	F2G1C220A037	22P 16V	[M]
C8257	F2G1C470A076	47P 16V	[M]
C8258	ECJ0EF1C104Z	0.1 16V	[M]
C8301	F2G0J221A031	220P 6.3V	[M]
C8302	F2G0J330A031	33P 6.3V	[M]
C8304	ECJ0EB1A104K	0.1 10V	[M]
C8305	ECJ0EB1A104K	0.1 10V	[M]
C8306	ECJ0EB1A104K	0.1 10V	[M]
C8313	ECJ1VB0J105K	1 6.3V	[M]
C8321	ECJ0EF1C104Z	0.1 16V	[M]
C8325	ECJ0EF1C104Z	0.1 16V	[M]
C8330	F2G0J470A031	47P 6.3V	[M]
C8331	ECJ0EF1C104Z	0.1 16V	[M]
C8335	ECJ0EF1C104Z	0.1 16V	[M]
C8341	ECJ0EF1C104Z	0.1 16V	[M]
C8401	ECJ0EC1H150J	15P 50V	[M]
C8501	F2G0J101A031	100P 6.3V	[M]
C8511	ECJ1VB0J105K	1 6.3V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C8512	ECJ1VB0J105K	1 6.3V	[M]
C8513	ECJ0EB1A104K	0.1 10V	[M]
C8514	ECJ0EB1A104K	0.1 10V	[M]
C8515	ECJ0EB1A104K	0.1 10V	[M]
C8516	ECJ0EB1A104K	0.1 10V	[M]
C8521	ECJ0EB1A104K	0.1 10V	[M]
C8522	ECJ0EB1A104K	0.1 10V	[M]
C8523	ECJ0EF1C104Z	0.1 16V	[M]
C8524	ECJ0EF1C104Z	0.1 16V	[M]
C8525	ECJ0EB1C562K	5600P 16V	[M]
C8526	ECJ0EB1C183K	0.018 16V	[M]
C8527	ECJ0EB1A333K	0.033 10V	[M]
C8528	ECJ1VB0J105K	1 6.3V	[M]
C8529	ECJ1VB0J105K	1 6.3V	[M]
C8530	ECJ0EF1C104Z	0.1 16V	[M]
C8531	ECJ0EC1H101J	100P 50V	[M]
C8532	ECJ0EC1H221J	220P 50V	[M]
C8533	ECJ0EF1C104Z	0.1 16V	[M]
C8541	ECJ0EB1E472K	4700P 25V	[M]
C8550	F2G0J330A031	33P 6.3V	[M]
C8553	F2G0J470A031	47P 6.3V	[M]
C8563	F2G0J470A031	47P 6.3V	[M]
C8571	ECJ3YB1A106M	10 10V	[M]
C8572	ECJ0EF1C104Z	0.1 16V	[M]

### 6.3. Packing Materials & Accessories Parts List (Updating)

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKAGING MATERIAL	
P1	RPGX1473	PACKING CASE	[M]
		ACCESSORIES	
A2	K2CQ2CA00002	AC CORD	[M] △
A3	RQT8251-G	O/I BOOK (En/Pe/Ar)	[M]