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Service Manual

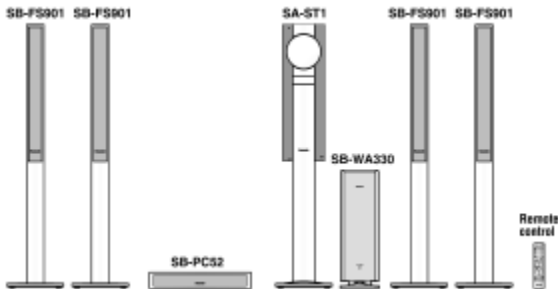
DVD/ Tuner unit



- SA-ST1PP
SA-ST1EB
SA-ST1EG

Colour

(S).....Silver Type



System	SC-ST1
DVD/Tuner unit	SA-ST1
Front and surround speakers*1	SB-FS901

Because of unique interconnecting cables, when a component

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

Front and surround speakers*1	SB-FS901
Center speaker*1	SB-PC52
Active sub woofer*2	SB-WA330

*1 : Made in Singapore.

*2 : Made in Malaysia.

Specifications

Amplifier section

RMS Output Power (10 % total harmonic distortion):

1 kHz;	
Front	40 W per channel (6 Ω)
Surround	50 W per channel (6 Ω)
Center	120 W (6 Ω)

100 Hz;	
Sub woofer	200 W (4 Ω)

RMS Total Output Power 500 W

FTC Output Power (1.0 % total harmonic distortion)*3:

120 Hz - 20 kHz;	
Front	27 W per channel (6 Ω)
Surround	27 W per channel (6 Ω)
Center	62 W (6 Ω)

45 Hz - 120 Hz;	
Sub woofer	130 W (4 Ω)

FTC Total Output Power 300 W

DIN Output Power (1.0 % total harmonic distortion)*4:

1 kHz;	
Front	30 W per channel (6 Ω)
Surround	35 W per channel (6 Ω)
Center	90 W (6 Ω)

100 Hz;	
Sub woofer	130 W (4 Ω)

DIN Total Output Power 350 W

Input sensitivity/input impedance:

VCR/AUX;	350 mV, 10 kΩ
TV for SA-ST1PP;	350 mV, 10 kΩ
TV (RCA/AV terminal) except for SA-ST1PP;	350 mV, 10 kΩ

FM tuner section

Frequency range:

For SA-ST1PP;	87.9 – 107.9 MHz (200 kHz steps)
	87.5 – 108.0 MHz (100 kHz steps)
Except for SA-ST1PP;	87.5 – 108.0 MHz (50 kHz steps)

Antenna terminal(s): 75 Ω (unbalanced)

Disc section

Disc played

DVD-AUDIO, DVD-VIDEO,
DVD-RAM/DVD-R (DVD-VIDEO formatted discs),
CD (CD-DA), VIDEO-CD,
CD-R/RW (CD-DA, VIDEO-CD, WMA, MP3 formatted discs)

Audio:

Number of channels; 5.1 (FL, FR, SL, SR, C, SW)

Video:

Signal system; NTSC
For SA-ST1PP;

Except for SA-ST1PP; PAL, PAL60/NTSC

Output terminal; RCA terminal (composite video)
S terminal (Y, C)

Component video terminals (Y, P_B, P_R)

Except for SA-ST1PP only; AV terminal (composite, Y/C, RCB)

Pickup:

Beam source; Semiconductor Laser

Wavelength;

DVD; 658 nm

VCD/CD; 790 nm

General

Power supply:

SC-ST1PP; AC 120 V, 60 Hz

SC-ST1EB; AC 230 - 240 V, 50 Hz

SC-ST1EG; AC 230 V, 50 Hz

Power consumption for SC-ST1: 210 W

Dimensions (WxHxD):

250x1,063x250 mm

(9²⁷/₃₂" x 41⁷/₈" x 9²⁷/₃₂")

(including protrusions)

7.8 kg (17.2 lb.)

Mass:

Power consumption in standby mode:

For SC-ST1PP; 0.5 W

Except for SC-ST1PP; 0.7 W

Except for SA-ST1PP; 87.5 – 108.0 MHz (50 kHz steps)
Antenna terminal(s): 75 Ω (unbalanced)
AM tuner section
Frequency range:
For SA-ST1PP; 520 – 1710 kHz (10 kHz steps)
Except for SA-ST1PP; 522 – 1629 kHz (9 kHz steps)

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Notes: Specifications are subject to change without notice.
Mass and dimensions are approximate.
Total harmonic distortion is measured by the digital spectrum analyzer.
*3: SA-ST1PP only
*4: Except for SA-ST1PP only

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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.

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

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 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.

Panasonic

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1 Before Repairs

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Note:

This item is indicated the contents of [SB-WA330](#) .

1. Turn off the power supply. Using a 10 Ω , 10 W resistor, connect both ends of power supply capacitors (C546, C547, C548, C549) in order to discharge the voltage.
2. Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50/60 Hz in NO SIGNAL mode (VOL: MIN, SELECTOR: DVD/CD)should be shown below with respect to supply voltage 120/230/240 V.

Power supply voltage	AC 120 V, 60 Hz	AC 230 V, 50 Hz	AC 230-240 V, 50 Hz
Consumed current	Less than 1000 mA	Less than 400 mA	Less than 400 mA

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2 Protection Circuitry

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Note:

This item is indicated the contents of [SB-WA330](#) .

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

- No sound is heard when the power is switched ON.
- Sound stops during a performance.

The functions 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 this unit are used.

If this occurs, follow the procedures outlined below.

1. Switch OFF the power.
2. Determine the cause of the problem and correct it.
3. Switch ON the power once again.

Note:

When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

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3 Disc information

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■ CD-R and CD-RW discs

This unit can play CD-R/RW (audio recording disc) recorded with CD-DA, video CD, WMA or MP3. Finalize* the disc after recording.

■ DVD-R discs

Panasonic DVD-R recorded and finalized* on a Panasonic DVD video recorder are played as DVD-Video on this unit.

*A process that allows play on compatible equipment.

■ DVD-RAM discs

DVD-RAM discs must meet the following conditions for this unit to be able to play them.

Type	● Non-cartridge discs ● Discs that can be removed from their cartridges (TYPE 2 and 4)
Capacity	● 12 cm (5") 9.4 GB (double-sided) and 4.7 GB (single-sided) ● 8 cm (3") 2.8 GB (double-sided)
Recording format	Discs recorded with DVD video recorders, DVD video cameras, personal computers, etc., using Version 1.1 of the Video Recording Format (a unified video recording standard).

- Remove TYPE 2 and 4 discs from their cartridges before use, then return them when you are finished. Read the instructions for the disc carefully.
- Do not allow the disc to become dirty or scratched. Store discs in their cartridges and ensure the disc label and cartridge label face the same way.
- Some parts of the disc, for example where one program ends and another begins, may not play smoothly.

Note

It may not be possible to play CD-R, CD-RW, DVD-R and DVD-RAM in all cases due to the type of disc or condition of the recording.

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4 Safety Precaution

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Note:

This item is indicated the contents of [SB-WA330](#) .

(This “Safety Precaution” is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacture’s recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields etc..
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

[4.1 Insulation resistance test](#)

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4.1 Insulation resistance test

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1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet parts, such as screw heads antenna, control shafts, handle brackets, etc..
Equipment with antenna terminals should read between $3\text{ M}\Omega$ - $5.2\text{ M}\Omega$ to all exposed parts. Refer to [Fig. 4-1](#). Equipment without antenna terminals should read approximately infinity to all exposed parts. Refer to [Fig. 4-2](#).

Note:

Some exposed parts may be isolated from the chassis by design. These will read infinity.

4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

Fig. 4-1.

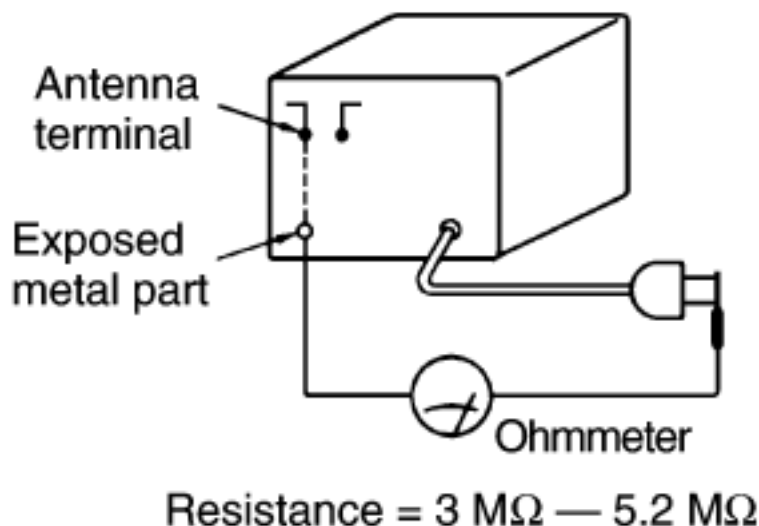
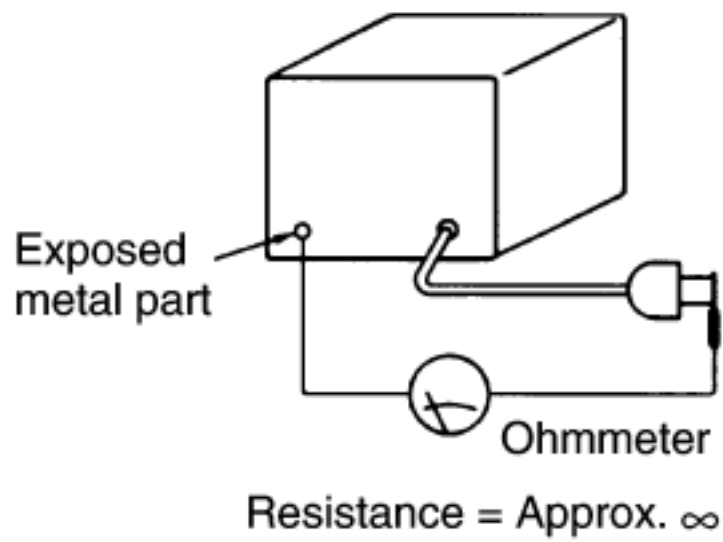


Fig. 4-2.



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5 Precaution of Laser Diode

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- [For SA-ST1PP](#)

Caution:

This unit utilizes a class 1 laser. Invisible laser radiation is emitted from the optical pick-up lens when the unit is turn on:

1. Do not look directly into the pick-up lens.
2. Do not use optical instruments to look at pick-up lens.
3. Do not adjust the preset variable resistor on the optical pick-up.
4. Do not disassemble the optical pick-up unit.
5. If the optical pick-up is replaced, use the manufacture's specified replacement pick-up only.
6. Use of control or adjustment or performance of procedures other than those specified herein may result in hazardous radiation exposure.

- [For SA-ST1EB, SA-ST1EG](#)

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.

CAUTION: This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pick-up lens.
Wave length: 658/790 nm
Maximum output radiation power from pick-up: 100 μ W/VDE

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

1. Do not disassemble the 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.

ACHTUNG: Dieses Produkt enthält eine Laserdiode. Im eingeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit abgestrahlt.

Wellenlänge: 658/790 nm

Maximale Strahlungsleistung der Lasereinheit: 100 μ W/VDE

Die strahlungen der Lasereinheit ist ungefährlich, wenn folgende Punkte beachtet werden:

1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Den werkseitig justierten Einstellregler der Lasereinheit nicht verstellen.
3. Nicht mit optischen Instrumenten in die Fokussierlinse blicken.
4. Nicht über längere Zeit in die Fokussierlinse blicken.



CAUTION - LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.	PSA/J1 CTR/Class I
CAUTION - FIBRE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.	CLASS I (Class I)
ATTENTION - RAYON LASER INVISIBLE QUAND OUVERT. NE PAS REGARDER DANS LE FOCUS.	
ADVARSEL - STRÅLG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNNSÅ UDSÆTTELSE FOR STRÅLING.	
VARO! - KÄRÄTÄMÄN OLETTÄ KÄRÄTÄN NÄKYMÄ JA NÄKYMÄTÖN LASERSTRÄLÄ. ÄLÄ KATSO SUORAAN.	
WARNING - STRÅLG OG USYNLIG LASERSTRÅLING NÅR DENNE DEL ER ÅBNET. BEHOLDT ØJE STRÅLING.	
ADVARSEL - STRÅLG OG USYNLIG LASERSTRÅLING NÅR DENNE DEL ÅBNET. BEHOLDT ØJE STRÅLING.	
VORSICHT - LASERSTRAHLUNG UND UNSEHBARE LASERSTRAHLUNG, WENN ABGESICHT GEÖFFNET. NICHT DEM STRAHLEN AUSSETZEN.	
注意 - 打开时有可能有不可见激光辐射。请勿直视光束。	
注意 - 打开时有可能有不可见激光辐射。请勿直视光束。	

(Back of product)

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6 Handling Precautions for Traverse Deck

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The laser diode in the optical pick-up may break down due to potential difference caused by static electricity of clothes or human body.

So be careful of electrostatic breakdown during repair of the optical pick-up.

[6.1 Handling of optical pick-up](#)

[6.2 Grounding for electrostatic breakdown prevention](#)

[6.2.1 Human body grounding](#)

[6.2.2 Work table grounding](#)

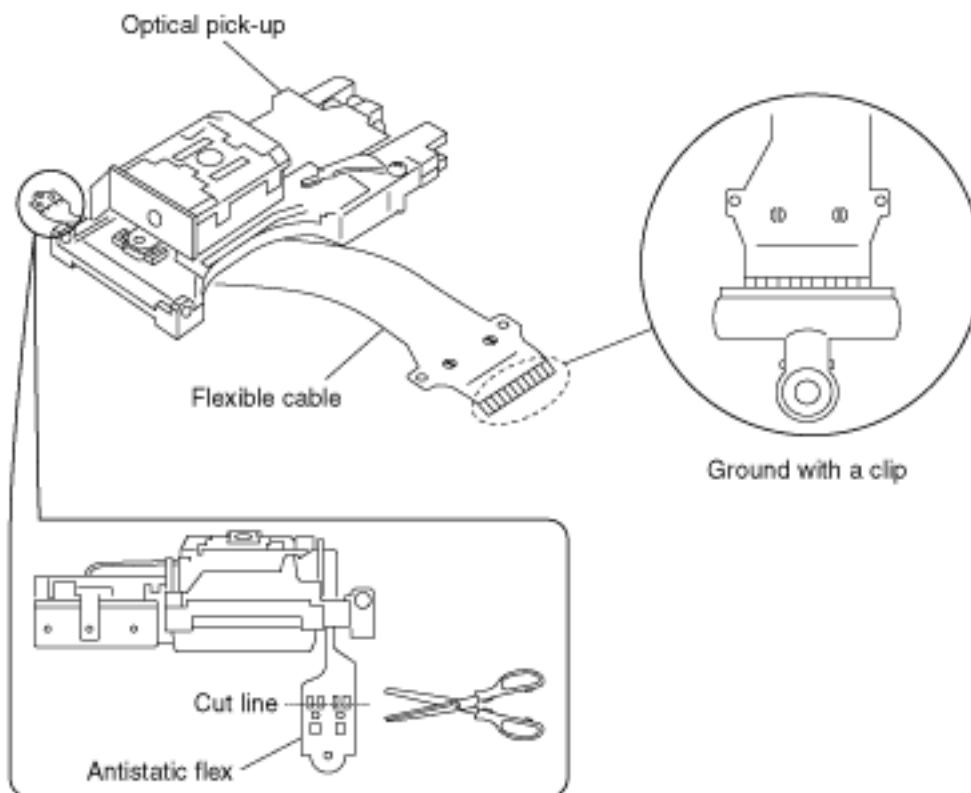
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6.1 Handling of optical pick-up

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1. Do not subject the optical pick-up to static electricity as it is extremely sensitive to electrical shock.
2. To prevent the breakdown of the laser diode, an antistatic shorting pin or similar object is inserted into the flexible board (FFC board). Refer to [Fig. 6-1](#).
When removing or connecting the shortpin, finish the job in as short time as possible.
3. Be careful not to apply excessive stress to the flexible board (FFC board).
4. A new optical pick-up has an antistatic flex. When the optical pick-up is replaced, connect the flexible cable (FFC) to the connector first, and then cut the antistatic flex. Refer to [Fig. 6-1](#).
5. Do not turn the variable resistor (Laser power adjustment).

Fig. 6-1.



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6.2 Grounding for electrostatic breakdown prevention

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[6.2.1 Human body grounding](#)

[6.2.2 Work table grounding](#)

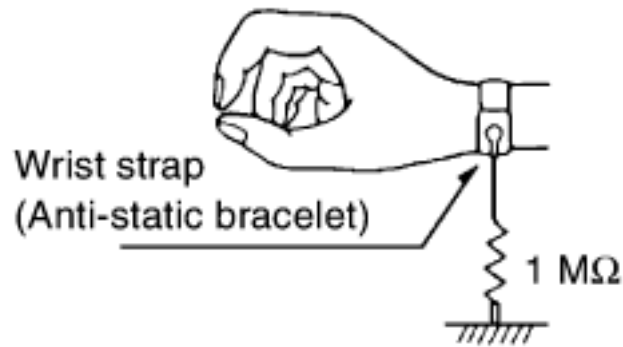
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6.2.1 Human body grounding

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Use the antistatic wrist strap to discharge the static electricity from your body. Refer to [Fig. 6-2](#).

Fig. 6-2.



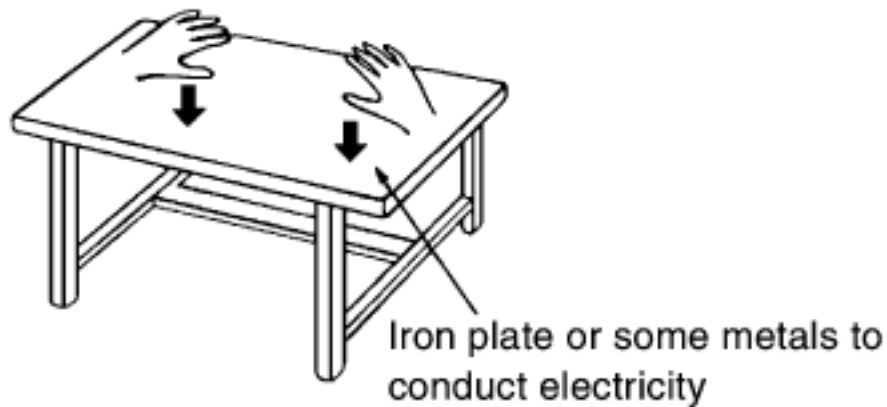
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6.2.2 Work table grounding

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Put a conductive material (sheet) or steel sheet on the area where the optical pick-up is placed and ground the sheet. Refer to [Fig. 6-3](#).

Fig. 6-3.



Caution:

The static electricity of your clothes will not be grounded through the wrist strap. So take care not to let your clothes touch the optical pick-up.

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7 Accessories

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- AC power supply cord

For SA-ST1PP (RJA0065-K).....1 pc.

For SA-ST1EB (RJA0053-3X).....1 pc.

For SA-ST1EG (RJA0019-2X).....1 pc.

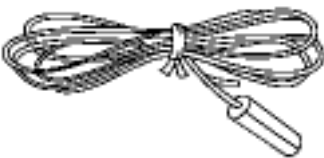


Note:

The configuration of AC power supply cord depends on the area.

- FM indoor antenna

(RSA0007).....1 pc.



- AM loop antenna

(N1DAAAA00001).....1 pc.



- Speaker cables

(REE1203C)(10 m<33 feet>).....2 pcs.

(REE1203A)(4 m<13 feet>).....3 pcs.



• Video cable

(K2KA2HA00003).....1 pc.



• System cable

(K1HA25JA00002).....1 pc.



• Sheet of speaker feet

(RFA0631A-K).....1 pc.



• Screws

(XSN5+16FN).....8 pcs.



• Clips

(QWBG002AA).....4 pcs.



• Black screws

(XTB3+10JFZ).....4 pcs.



- String for main unit

(RMF0321).....1 pc.



- Sheet of speaker-cable stickers

(RQCA1029).....1 pc.



- Remote control

For SA-ST1PP (EUR7623X20).....1 pc.

Except for SA-ST1PP (EUR7623X40).....1 pc.



- Batteries for remote control

(R6/LR6, “AA”, UM-3).....2 pcs.

Note: These are available on sales route.



- Antenna plug for SA-ST1PP only

(K2RC021B0001).....1 pc.



- Antenna plug adaptor for SA-ST1EB only

(SJP9009).....1 pc.



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8 Caution for AC Mains Lead

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Note:

This item is indicated the contents of [SB-WA330](#) .

(For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL  OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

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.

Figure A

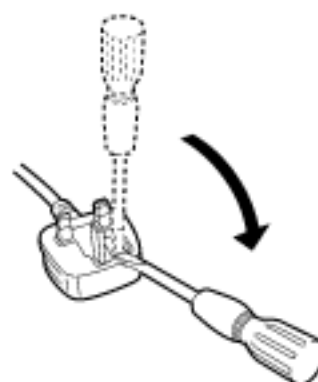
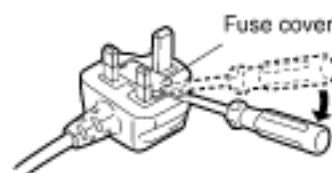


Figure B



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

Figure A



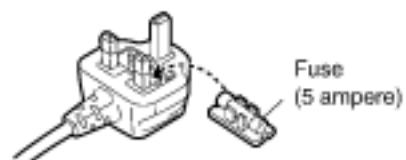
Figure B



the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

Figure B



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9 Location of Controls

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10 Connections and Operations

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This item indicates excerpts about the connection to the speakers and some operations from operation instructions.



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11 DVD Optical Pick-up Self-Diagnosis and Replacement Procedure

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[11.1 Self-diagnosis](#)

[11.2 Caution to be used before replacing the optical pick-up and spindle motor assembly](#)

[11.2.1 Caution to be taken when replacing the optical pick-up](#)

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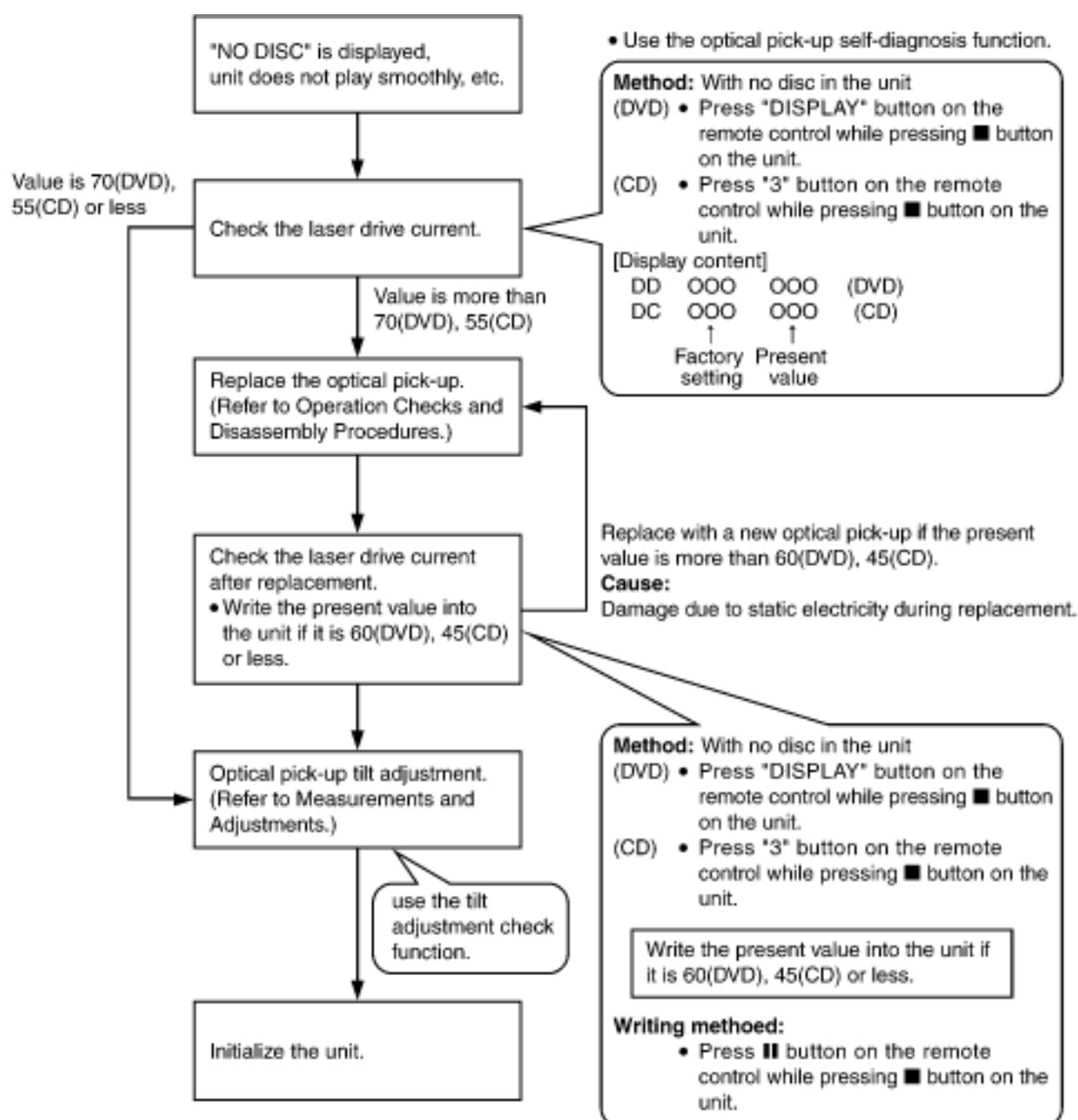
11.1 Self-diagnosis

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The optical pick-up self-diagnosis function and tilt adjustment check function have been included in this unit. When repairing, use the following procedure for effective self-diagnosis and tilt adjustment. Be sure to use the self-diagnosis function before replacing the optical pick-up when “NO DISC” is displayed. As a guideline, you should replace the optical pick-up when the value of the laser drive current is more than 70(DVD), 55(CD).

Note:

Press the Standby/on button to turn on the power, and check the value within 3 minutes before the unit warms up.
(Otherwise, the unit will be incorrect.)



Initialize the unit.

Writing methoed:

- Press **II** button on the remote control while pressing **■** button on the unit.

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11.2 Caution to be used before replacing the optical pick-up and spindle motor assembly

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Before replacing the optical pick-up and spindle motor assembly, check the total using hours for each of them. The checking method is as follows:

Item	Play mode and button combination	Display
Using hours of DVD and CD laser	In STOP mode (no disc), while pressing ■ button on the unit, press ▲ button on the remotecontrol.	0xxxx0yyyy xxxx(DVD), yyyy(CD): Time is shown in 4 digits of decimal notation in a unit of an hours. Note: 1-digit and 6-digit of “0” is not changed.
Using hours of spindle motor	In STOP mode (no disc), while pressing ■ button on the unit, press ▶ button on the remotecontrol.	T2-xxxx--- (- indicates a space.) xxxx: Time is shown in 4 digits of decimal notation in a unit of 10 hours.
Resetting using hours of DVD and CD laser	When displaying the using hours of DVD and CD laser, while pressing ■ button on the unit, press ▼ button on the remote control.	0000000000
Resetting using hours of spindle motor	When displaying using hours of spindle motor, while pressing ■ button on the unit, press ◀ buttonon the remote control.	T2-0000---

11.2.1 Caution to be taken when replacing the optical pick-up

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11.2.1 Caution to be taken when replacing the optical pick-up

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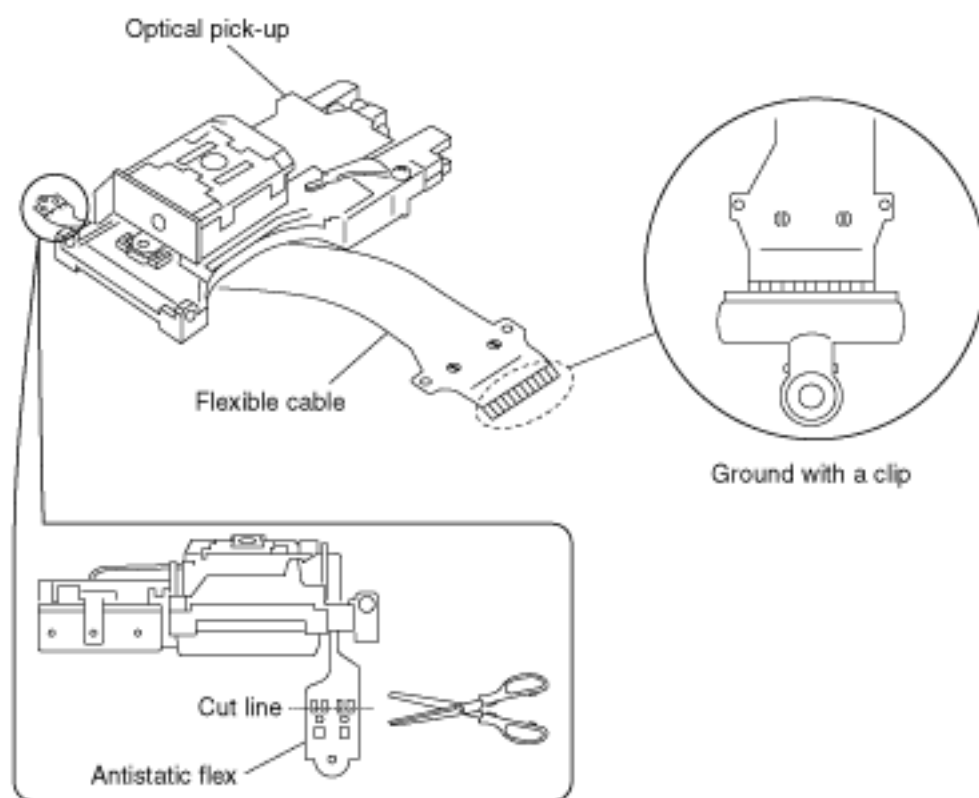
The optical pick-up may break down due to the static electricity of human body. Take proper protection measures against static electricity before repairing the parts around the optical pick-up. Refer to “Handling Precaution for TraverseDeck”.

- Do not touch the area around the laser diode and actuator.
- Do not judge the laser diode with a tester.
- It is recommended to use an antistatic soldering iron for short-circuit or removing the laser diode.
(Recommended soldering iron) HAKKO ESD Product
- Solder the land of the flexible cable in the optical pick-up.

Note:

When using a soldering iron which is not antistatic, short-circuit the terminal of the flexible cable first. After that, short the land.

- An antistatic flex is connected with the new optical pick-up. Cut the antistatic flex after the optical pick-up is replaced.



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12 Self-Diagnostic Function

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This unit is equipped with a self-diagnostic function which, in the event of a malfunction, automatically displays a code indicating the nature of the malfunction.

Use this self-diagnostic function when servicing the unit.

[12.1 To display the malfunction code automatically](#)

[12.1.1 Automatically display function](#)

[12.1.2 To redisplay the malfunction code](#)

[12.1.3 Automatically display contents](#)

[12.2 Malfunction code stored in memory](#)

[12.2.1 How to enter the mode and display](#)

[12.2.2 To redisplay the malfunction code](#)

[12.2.3 Clearing self-diagnostic function](#)

[12.3 Service mode table 1](#)

[12.4 DVD / CD error code display](#)

[12.5 Last error code saved during NO PLAY](#)

[12.6 Service mode table 2](#)

[12.7 Sales demonstration lock function](#)

[12.7.1 Setting](#)

[12.7.2 Cancellation](#)

[12.8 Handling after completing repairs](#)

12.1 To display the malfunction code automatically

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[12.1.1 Automatically display function](#)

[12.1.2 To redisplay the malfunction code](#)

[12.1.3 Automatically display contents](#)

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12.1.1 Automatically display function

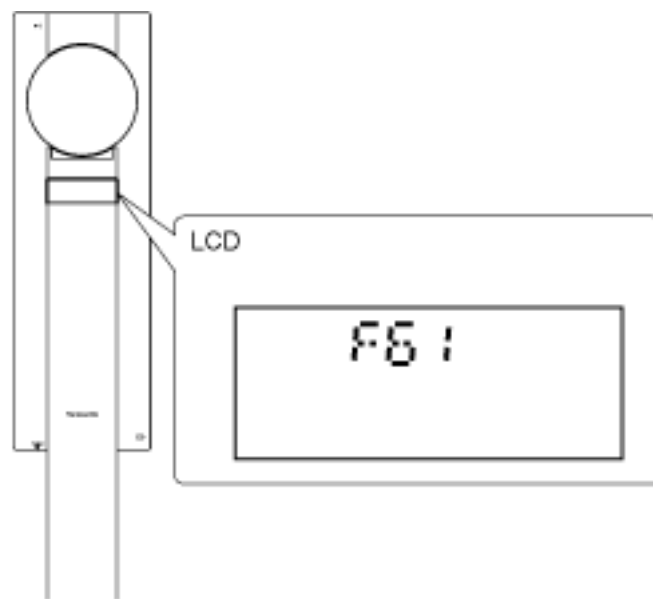
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Automatically display when the unit detects the malfunction of power supply.

- F61:

Automatically displays on the LCD when a malfunction occurs. Refer to [Fig. 12-1](#).

Fig. 12-1.



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12.1.2 To redisplay the malfunction code

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- [For F61](#)
 - If F61 is displayed, the power will automatically be switched off and the standby indicator will light up.
 - F61 will be displayed for 3 seconds, and then the clock will be displayed.
 - To redisplay the code, switch the power on. F61 will be redisplayed, and then after 3 seconds the clock will be displayed and the power will automatically switch off.

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12.1.3 Automatically display contents

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12.1.3.1 F61

- [Problem or condition](#)

When the “Standby/on” switch is switched on, it automatically switches back off, making it impossible to switch power on.

- [Correction procedure](#)

Faulty power supply signal line or when a DC voltage is applied to speaker terminals. (Check and replace the malfunction parts.)

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12.2 Malfunction code stored in memory

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[12.2.1 How to enter the mode and display](#)

[12.2.2 To redisplay the malfunction code](#)

[12.2.3 Clearing self-diagnostic function](#)

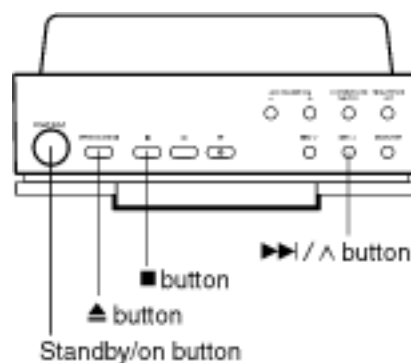
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12.2.1 How to enter the mode and display

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1. Turn on the power.
2. Press “SELECTOR” button to select DVD/CD. With no disc on the unit, hold down
■ button for at least 2 seconds, and then press
▶▶/◀ button for at least 2 seconds. Refer to [Fig. 12-2](#). The LCD is displayed “T-----”
3. Press “OPEN/CLOSE
▲” button. Refer to [Fig. 12-2](#). (The loading tray is opened automatically, and after a second, close it automatically.)
4. Press
■ button. Refer to [Fig. 12-2](#). Malfunction code stored in memory is displayed if any. Refer to Table 12-1. If there are multiple error, they can be successively by pressing
■ button.

Fig. 12-2.



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12.2.2 To redisplay the malfunction code

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- Press the “Standby/on” button to turn off. And then press the “Standby/on” button again to turn it on again.
- The contents of self-diagnostic function are stored in memory. To redisplay, perform the procedures “How to enter the mode and display”.

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12.2.3 Clearing self-diagnostic function

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- After repairing, continue to press
 - button for at least 5 seconds. And then “T-----” is displayed on the LCD.
(- indicates a space.)
(Clearing the contents of self-diagnostic function.)
- Always be sure to clear memories after completing repair.

Table 12-1

Display code	Symptom	Cause
H15	When the loading tray opens, it closes by itself.	Loading tray open detect switch (S913) fault. (Check and replace)
H16	When the loading tray closes, it opens by itself.	Loading tray close detect switch (S914) fault. (Check and replace)

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12.3 Service mode table 1

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Pressing various button combinations on the unit and remote control can activate the service modes.

Unit button	Remote control button	Application
■	0	Displaying the error code. (Refer to the item 12.4. “DVD/CD error code display”.)
	5	Jitter check, optical pick-up tilt adjustment.
	6	Checking the region numbers and broadcast system.
	7	Checking the program version.
	DISPLAY	Checking DVD laser drive current measurement.
	3	Checking CD laser drive current measurement.
		Writing the laser drive current value after replacing the optical pick-up. (Do not perform this mode except for replacing the optical pick-up.)
	≡10	Initialization (Restore factory preset settings) Perform this mode when replacing the microcomputer, its peripheral parts and P.C.B..

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12.4 DVD/ CD error code display

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Error Code	Error Content	Additional error explanation	Defect 1	Defect 2	Defect 3	Defect 4	Defect 5
U, H error							
U11	Focus error						
H01	Tray loading error						
H02	Spindle servo error	(Spindle servo, DSC motor, CLV servo error.)					
H03	Traverse motor error						
H04	Tracking servo error						
H05	Seek error						
DSC related							
F500	DSC error	DSC stops in the occurrence of servo error. (startup, focus error, etc.)	OPU	ADSC	FEP	servo drive	
F501	DSC not Ready error	DSC-system computer communication error (Communication failure caused by idling of DSC.)	ADSC	CPU			
F502	DSC Time out error	Similar disposal as F500.	OPU	ADSC	FEP	servo drive	
F503	DSC communication Failure	Communication error (result error occurred although communication command was sent.)	ADSC	FEP	EEPROM		
F505	DSC Attention error	Similar disposal as F500.	OPU	ADSC	FEP	servo drive	
F506	Invalid media	Disc is flipped over, TOC unreadable, incompatible disc.	DISC	FEP	ADSC	ODC	
ODC related							
F600	Access failure to management information caused by demodulation error.	Operation stopped because navigation data is not accessible caused by the demodulation defect.	ODC	FEP	ADSC		
F601	Indeterminate sector ID requested.	Operation stopped caused by the request to access abnormal ID data.	ODC	FEP	ADSC		
F602	Access failure to LEAD-IN caused by demodulation error.	LEAD IN data unreadable.					

F603	Access failure to KEYDET caused by demodulation error.	Access failure to CSS data of disc					
F610	ODC abnormality	No permission for command execution	ODC				
F611	6626 QCODE don't read error.	Access failure to seek address in CD series	ODC				
F612	No CRC OK for a specific time	Access failure to ID data in DVD series	ODC				
Disc code							
F103	Illegal highlight position	Every possibility of disc specification violation during highlight display	DISC				
IIC error							
F4FF	Force initialize failure (time out)		EEPROM	CPU	FEP	ADSC	
Microcomputer error							
F700	MBX overflow	When replying message to disc manager.					
F701	Message command does not end.	Next message is sent before replying to disc manager.					
F702	Message command changes.	Message is changed before it is sent as a reply to disc manager.					
F880	Task number is not appropriate.	Message coming from a non-existing task.					
F890	Sending message when message is being sent to AV task.	Sending message to AV task.					
F891	Message could not be sent to AV task.	Begin sending message to AV task.					
F893	FROM falsification		FROM	CPU			
F894	EEPROM abnormality		EEPROM	Serial communication line			
F8A0	Message command is not appropriate.	Begin sending message to AV task.					

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12.5 Last error code saved during NO PLAY

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Error code	Error Content	System computer	Setting task	System computer internal error code
F0BF	6) Cannot playback because physical layer is not recognizable.	PCND_NOPLAY_PHYSICAL 0x50	DriveManager	0xD0BF
F0C0	8) DVD: Cannot playback because it is not DVD Video/ Audio/VR.	PCND_NOPLAY_VIDEO 0x70	DiscManager	0xD0C0
F0C1	9) DVD: Prohibited by the restricted region code.	PCND_NOPLAY_RCD 0x80	DiscManager	0xD0C1
F0C2	A) DVD: PAL restricted playback.	PCND_NOPLAY_PAL 0x90	DiscManager	0xD0C2
F0C3	B) DVD: Parental lock setting prohibits the playback of the entire title.	PCND_NOPLAY_PTL 0xA0	DiscManager	0xD0C3
F0C4	C) VCD: Prohibited because it is in PHOTO CD format.	PCND_NOPLAY_PHOTO CD 0xB0	DiscManager	0xD0C4
F0C5	D) VCD/CD: Prohibited because it is CD-ROM without CD-DA.	PCND_NOPLAY_CDROM 0xC0	DiscManager	0xD0C5

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12.6 Service mode table 2

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Pressing various button combinations on the unit and remote control can activate the service modes.

Item	Unit mode and button combination	Function	Display	Cancellation method
Jitter check	In STOP mode (no disc), press ■ button on the unit and “5” button on the remote control.	Jitter check Jitter rate is measured and displayed. Measurement is repeatedly done in the cycle of one second. Read error counter starts from zero upon mode setting. When target block data failed to be readout, the counter advances by one increment. When the failure is caused by minor error, it may be corrected when retried to enable successful reading. In this case, the counter advances by one. When the error persists even after retry, the counter may jump by two or more.	xxx*1-yyy*2-zz*3 (- indicates a space.) *1: Jitter rate *2: Read error counter *3: Focus drive value Jitter rate is shown in decimal notation to one place of decimal. Focus drive value is shown in hexadecimal notation.	Press ■ button or open the loading tray.
Error code check	In STOP mode (no disc), press ■ button on the unit and “0” button on the remote control. *With displaying error code, panel controller switches serial number of history and sends out the command accordingly by pressing ▲ and ▼ button.	Error code check The latest error code stored in EEPROM is displayed.	Error code (play_err) is expressed in the following convention. Error code=0xDAXX is expressed→DVD nn-UXX- Error code=0xDBXX is expressed→DVD nn-HXX- Errorcode=0xDXXX is expressed→DVD nn-FXXX Error code=0x0000 is expressed→ DVD nn-F--- Error code except above→DVDnn-XXXX *nn denotes the serial number of history.	Cancelled automatically 5 seconds later.

Initial setting of laser drive current	In STOP mode (no disc), press ■ button on the unit and button on the remote control.	Initial setting of laser drive current Initial current value for each of DVD and CD laser is separately saved in EEPROM.	D0*1-034*2-028*3 *1: Laser current measurement mode *2: DVD laser current measurement *3:CD laser current measurement The value denotes the current in decimal notation. The above example shows the initial current is 34 mA and 28 mA for DVD and CD laser.	Cancelled automatically 5 seconds later.
DVD laser drive current measurement	In STOP mode (no disc), press ■ button on the unit and “DISPLAY” button on the remote control.	DVD laser drive current measurement DVD laser drive current is measured and the result is displayed together with the initial value stored in EEPROM. After the measurement, DVD laser emission is kept on. It is turned off when Standby/on key is switched off. (It is also turned off when the primary power is switched off.)	DD*1-034*2-032*3 *1: DVD laser current measurement mode *2: Initial current stored in EEPROM *3:Measured current The value denotes the current in decimal notation. The above example shows the initial current is 34 mA and the measured value is 32 mA.	Cancelled automatically 5 seconds later.
ADSC internal RAM data check	In STOP mode (no disc), press ■ button on the unit and “1” or “2” button on the remote control.	ADSC internal RAM data check ADSC internal RAM data is read out and displayed. Change the address with “CANCEL” key operation to show the data for 16 addresses.	A*1-0FA*2-6901*3 *1: ADSC internal RAM data check mode *2: Address *3: RAM data for specified address The value is shown in hexadecimal notation. The above example shows the data in ADSC address 0FAh is 6901h.	Press ■ button or open the loading tray.
CD laser drive current measurement	In STOP mode (no disc), press ■ button on the unit and “3” button on the remote control.	CD laser drive current measurement CD laser drive current is measured and the result is displayed together with the initial value stored in EEPROM. After the measurement, CD laser emission is kept on. It is turned off when Standby/on key is switched off. (It is also turned off when the primary power is switched off.)	DC*1-028*2-026*3 *1: CD laser current measurement mode *2: Initial current stored in EEPROM *3:Measured current The value denotes the current in decimal notation. The above example shows the initial current is 28 mA and the measured value is 26 mA.	Cancelled automatically 5 seconds later.

User initialization	In STOP mode (no disc), press ■ button on the unit and “  ” button on the remote control.	User initialization User setting are cancelled and unit is initialized to factory preset settings.	“INITIALIZE”	
Region display	In STOP mode (no disc), press ■ button on the unit and “6” button on the remote control.	Region display	-w*1-x*2y*3-zzz*4- *1: Region No. *2: N; no PAL/P;PAL *3: N; NTSC/6; PAL60 *4: Panel controller jumper information	Cancelled automatically 5 seconds later.
Firmware version display	In STOP mode (no disc), press ■ button on the unit and “7” button on the remote control.	Firmware version display	rrr*1-xx*2y*3zzz*4 *1: Panel controller release number *2: System controller generation *3: System controller model number *4: System controller release number	Cancelled automatically 5 seconds later.
Region & firmware version display	In STOP mode (no disc), press ■ button on the unit and “8” button on the remote control.	Region & firmware version display	-r*1--xx*2y*3zzz*4 *1: Region No. *2: System controller generation *3: System controller model number *4: System controller release number	Cancelled automatically 5 seconds later.
Timer 1 check	In STOP mode (no disc), press ■ button on the unit and  button on the remote control.	Timer 1 check Laser operation timer. Operation time is measured separately for DVD and CD laser.	0123405678 Shown to the left (from 1 to 5-digit) is DVD laser time, and to the right (6 to 10-digit) is CD laser time. Time is shown in 4 digits of decimal notation in a unit of an hour. “0000” will follow “9999”. Note: 1-digit and 6-digit of “0” is not changed.	Cancelled automatically 5 seconds later.
Timer 1 reset	While displaying Timer 1 data, press ■ button on the unit and  button on the remote control.	Timer 1 reset Laser operation timer. Operation time is reset all at once for DVD and CD laser.	0000000000	Cancelled automatically 5 seconds later.

Timer 2 check	In STOP mode (no disc), press ■ button on the unit and ▶ button on the remote control.	Timer 2 check Spindle motor operation timer.	T2-1234--- Time is shown in 4 digits of decimal notation in a unit of 10 hours. “0000” will follow “9999”.	Cancelled automatically 5 seconds later.
Timer 2 reset	While displaying Timer 2 data, press ■ button on the unit and ◀ button on the remote control.	Timer 2 reset Spindle motor operation timer.	T2-0000---	Cancelled automatically 5 seconds later.
Communication error display	In STOP mode (no disc), press ■ button on the unit and “MENU” button on the remote control.	Communication error display Displaying the number of communication error times between IC6201 and IC801.	ERR-02*1-/30*2 *1: Number of error times *2: Number of communication times(Fixed)	Cancelled automatically 5 seconds later.

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12.7 Sales demonstration lock function

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This function prevents discs from being lost when the unit is used for sales demonstration, disable to eject the disc and some operations for disc. When the unit is operated in this mode, “ ---LOCKED--” is displayed on the LCD and prohibited operation is disabled.

[12.7.1 Setting](#)

[12.7.2 Cancellation](#)

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12.7.1 Setting

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- [Setting for eject operation](#)

1. Press “SELECTOR” button to select DVD/CD.

2. Hold down

■ button on the unit, and then press “Standby/on” button on the remote control for at least 3 seconds.
“ ---LOCKED--” is displayed on the LCD for 3 seconds, and then start to play the disc on the unit. (This indicates the unit enters into sales demonstration lock function.)

[Note:](#)

When “OPEN/CLOSE

▲” is pressed, “ ---LOCKED--” is displayed and disabled to open/close the loading tray.

- [Setting for selector and some operations for disc](#)

1. Press “SELECTOR” button to select DVD/CD.

2. Hold down

▶ button on the unit, and then press “Standby/on” button on the remote control for at least 3 seconds.
“ ---LOCKED--” is displayed on the LCD for 3 seconds, and then start to play the disc on the unit. (This indicates the unit enters into sales demonstration lock function.)

[Note:](#)

When buttons as shown below are pressed, “ ---LOCKED--” is displayed and disabled to operate.

Unit	OPEN/CLOSE , , SELECTOR, , , , , RDS(Except for SA-ST1PP)
Remote control	SLEEP, REPEAT, GROUP, FM MODE/SET UP, CH SELECT, , TEST, FL DISPLAY, , DIMMER, , MIX 2CH, TV, VCR/AUX, TUNNER/BAND, 0-9, , 10, , , , , , , DISPLAY, RETURN, POSITION MEMORY, MUTING,

12.7.2 Cancellation

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This function can be cancelled by the same procedures shown above.
(“ -UNLOCKED-” is displayed for about 3 seconds and cancels the sales demonstration lock function.)

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12.8 Handling after completing repairs

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Perform the following procedures after completing repairs.

1. Close the loading tray to press “OPEN/CLOSE
” button.
2. Turn off the power to press “Standby/on” button.
3. Disconnect an AC power supply cord from the outlet.

Note:

Do not disconnect an AC power supply cord from the outlet with the loading tray is still opens, then close the loading tray manually.

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13 Service Precautions

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[13.1 Recovery after the DVD player is repaired](#)

[13.2 Firmware version-up of the DVD player](#)

[13.3 Cumulative operation time display function](#)

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13.1 Recovery after the DVD player is repaired

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- When a FROM or 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: [RFKZD5TR006](#) or [RFKZD03R004](#))
- Performing recovery
 1. Load the recovery disc ([RFKZD5TR006](#) or [RFKZD03R004](#)) on to the unit 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.

Note:

This unit requires no initialization process carried out after the traditional DVD players were repaired.

When the recovery measure are taken, the customer setting will return to the factory preset settings as same as the procedure described in item of “User initialization” in 12.6. is carried out. Write down the contents of the setting before recovery processing, and reset the unit.

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13.2 Firmware version-up of the DVD player

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- The firmware of the DVD player may be renewed to improve the quality including operability and playback ability to the substandard discs processing to optimize the drive.

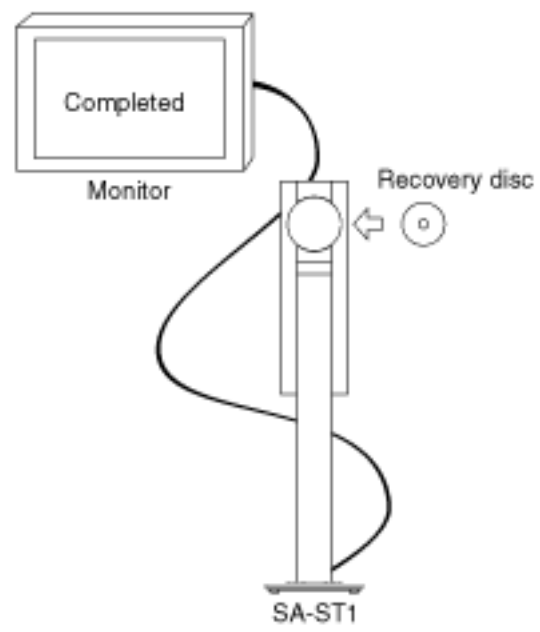
The recovery disc has also firmware version-up.

- After version-up, recovery processing is executed automatically.
- Part number of the recovery disc for version-up will be noticed when it is supplied.
- Updating firmware
 1. Load the recovery disc that is supplied to the unit and run it.
 2. Firmware version of the unit is automatically checked. Appropriate message appears whenever necessary.
 3. Using remote control cursor key, select whether version updating is to be done or not. (Selection of Yes/No)
 4.
 - a. If Yes is selected, version updating is performed.
 - b. If No is selected, only recovery is performed.
 5.
 - a. When updating is finished, remove the disc according to the message appearing on the screen.
 - b. Remove the disc according to the message appearing on the screen.
 6. Turn off the power.

Note:

If the AC power supply is shut down during version-up due to a power failure, the version-up is improperly carried out.

In such a case, replace the FROM and carry out the version-up again.



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13.3 Cumulative operation time display function

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1. Operation/display

0 1 2 3 4 0 5 6 7 8	DVD/CD laser operation time Unit: an hour in decimal notation
T2_1 2 3 4 _ _ _	Spindle motor operation time Unit: 10 hours in decimal notation

Key operations are as follows.

- Laser operation time.....

In STOP mode (no disc), while pressing

■ button on the unit, press

▲ button on the remote control

- Spindle motor operation time.....

In STOP mode (no disc), while pressing

■ button on the unit, press

▶ button on the remote control.

To reset the timer, perform the following while displaying the time with above key operation.

- Laser operation time.....

While pressing

■ button on the unit, press

▼ button on the remote control.

- Spindle motor operation time.....

While pressing

■ button on the unit, press

◀ button on the remote control.

2. How to utilize

Reference information in fault diagnosis of laser or spindle motor system.

Review of faulty point in repeated repair.

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14 Measurements and Adjustments

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[14.1 Service tool and equipment](#)

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[14.4 Optical pick-up adjustment](#)

[14.4.1 Optical pick-up tilt adjustment](#)

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14.1 Service tool and equipment

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Applications	Parts Name	Parts Number
Tilt adjustment	DVD test disc	DVDT-S15 or DVDT-S01
	Hexagonal wrench	Commercially available (2mm)
Others	Screw lock	RZZ0L01
	Grease	RFKXGAK152,RFKXPG641
Confirmation	CD test disc	PVCD-K06 or any other commercially available disc.
	VCD test disc	
	Recovery disc	RFKZD5TR006 or RFKZD03R004

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14.2 Important points in adjustments

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[14.2.1 Important points in optical adjustments](#)

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14.2.1 Important points in optical adjustments

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- Before starting optical adjustment, be sure to take an antistatic measures.
- Optical pick-up tilt adjustment is needed after replacement of the following components.
 1. Optical pick-up
 2. Spindle motor unit
 3. Optical pick-up peripheral parts (such as rail)

Remarks:

Adjustment is generally unnecessary after replacing other parts of traverse unit. However, make an adjustment if there is noticeable degradation in picture quality. Optical adjustments cannot be made inside the optical pick-up. Adjustment is generally unnecessary after replacing the traverse unit.

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14.3 Storing and handling test discs

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Surface precision is vital for DVD test discs. Be sure to store and handling them carefully.

- Do not place discs directly onto the workbench etc., after use.
- Handle discs carefully in order to maintain their flatness. Place them into their case after use and store them vertically. Store discs in cool place where they are not exposed to direct sunlight or air from air conditioners.
- Accurate adjustment will not be possible if the disc is warped when placed on a surface made of glass etc.. If it is warped, use a new test disc to make optical adjustments.
- If adjustment is performed with a warped disc, the adjustment will be incorrect and some discs will not be playable.

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14.4 Optical pick-up adjustment

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[14.4.1 Optical pick-up tilt adjustment](#)

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14.4.1 Optical pick-up tilt adjustment

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Measurement point	Adjustment point	Mode	Disc
	Tangential adjustment screw Tilt adjustment screw	T1 (inner periphery) play T43 (outer periphery) play	DVDT-S15 or DVDT-S01
Measurement equipment		Adjustment value	
None (Use the LCD indication on the unit.)		Adjust the jitter value to the minimum level.	

14.4.1.1 Preparation for adjustment

Follow the [\(Step 1\)](#) - [\(Step 7\)](#) of item 15.1. in “Operation Checks and Disassembly Procedures”.

1. Remove the rear panel and stand ass’y.
2. Connect the system cable to jack (JK700), and then to supply the power.

14.4.1.2 Adjustment procedures

1. In STOP mode (no disc), while pressing
 - button on the unit, press “5” button on the remote control.
2. Confirm that “xxx-yyy-zz” is shown on the display of the unit.

[For your reference:](#)

“yyy” and “zz” shown to the right have nothing to do with jitter value. “yyy” is the error counter, while “zz” is the focus drive value.

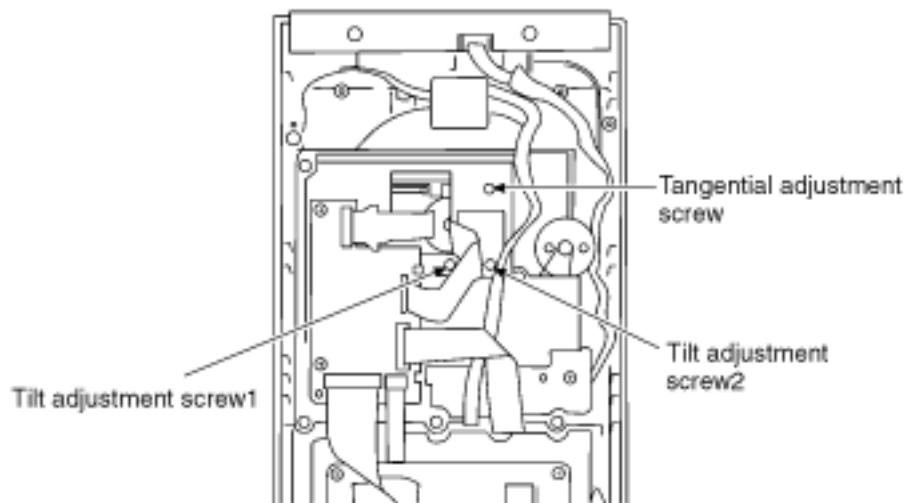
[Note:](#)

Jitter value appears on the display of the unit.

3. Play test disc T1 (inner periphery).
4. Adjust tangential adjustment screw so that the jitter value is minimized. Refer to [Fig. 14-1](#).
5. Play test disc T43 (outer periphery).

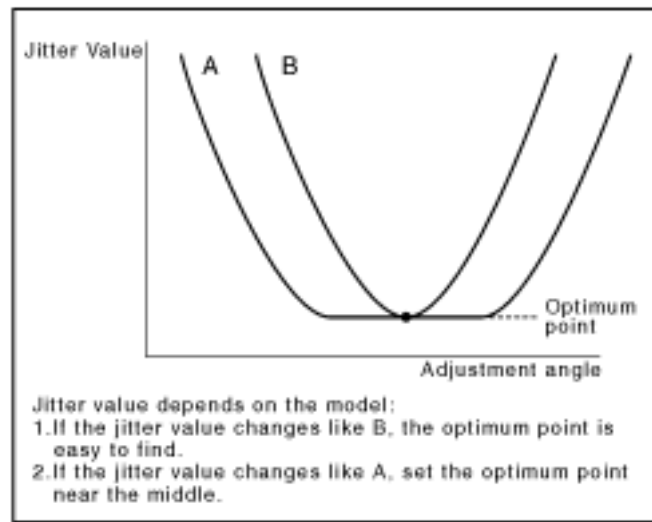
6. Adjust tilt adjustment screw1 so that the jitter value is minimized. Refer to [Fig. 14-1](#).
7. Play test disc T43 (outer periphery).
8. Adjust tilt adjustment screw2 so that the jitter value is minimized. Refer to [Fig. 14-1](#).
9. Repeat adjusting tilt adjustment screw1 and 2 alternately until the jitter value is minimized.

Fig. 14-1.



14.4.1.3 Important point

1. Make tangential adjustment first, and then make tilt adjustment.
2. Repeat adjusting two or three times to find the optimum point.
3. Finish the procedure with tilt adjustment.



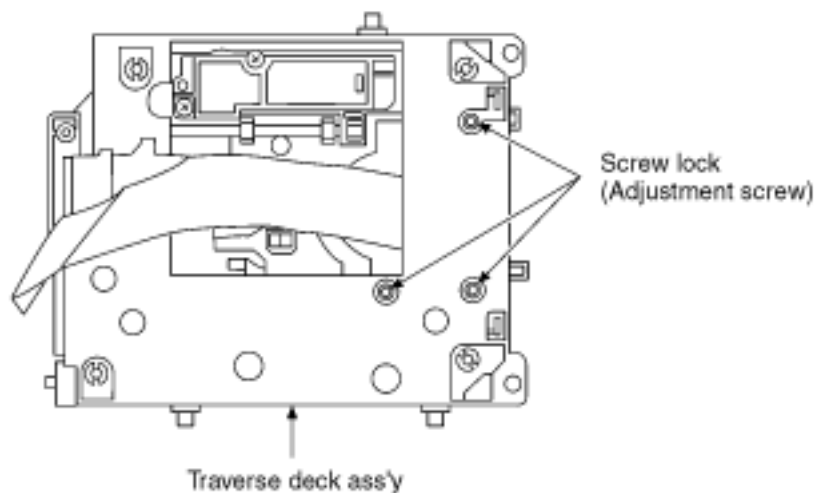
14.4.1.4 Check after adjustment

Play test disc or any other disc to make sure there is no picture degradation in the inner, middle and outer peripheries, and no audio skipping. After adjustment is finished, lock each adjustment screws in position using screw lock.

14.4.1.5 Procedure for screw lock

After the adjustment is performed, fix each adjustment screws with screw lock. Refer to [Fig. 14-2](#).

Fig. 14-2.



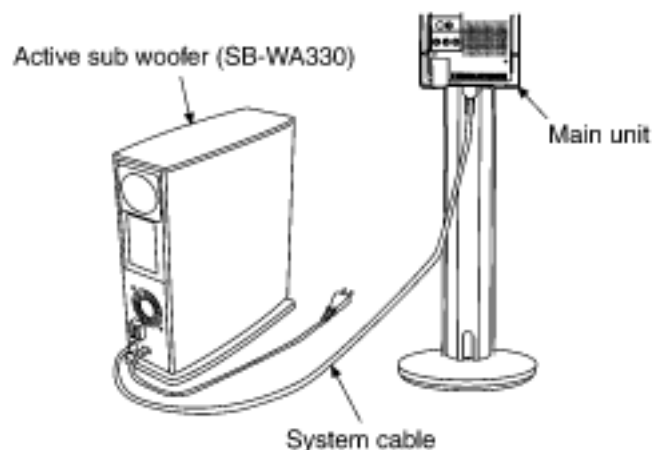
15 Operation Checks and Disassembly Procedures

[TOP](#) [PREVIOUS](#) [NEXT](#)

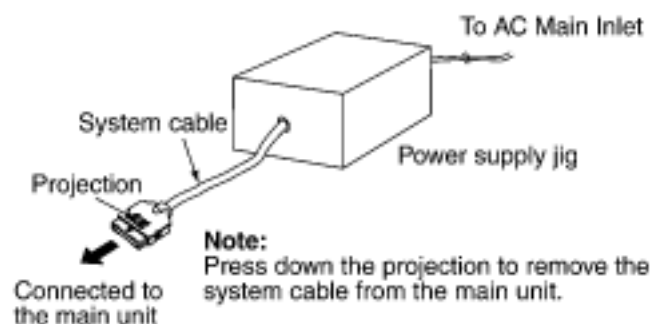
- This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
- For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.

[To supply power source to main unit]

This unit is received power supply from Active sub woofer (SB-WA330). When this unit is performed the operation checks (or checking the P.C.B.), this unit has to connect to Active sub woofer.



When Active sub woofer is not prepared, use the power supply jig to check this unit as shown below.
[Part No.] [RFKZ0182](#) (110 V, 127 V, 220 V, 230 - 240 V for overseas domestic use)



[15.1 Checking for the DVD module P.C.B., IN / OUT terminal P.C.B., Interface P.C.B., FL P.C.B. and main P.C.B.](#)

[15.2 Replacement for the traverse unit](#)

[15.3 Replacement for the optical pick-up](#)

[15.4 Replacement for the traverse motor and spindle motor](#)

[15.5 Disassembly for loading unit](#)

[15.6 Replacement for the motor](#)

[15.7 Replacement for the interface P.C.B., detecting SW P.C.B., motor pulley, intermediate gear, gear \(A\) and drive rack](#)

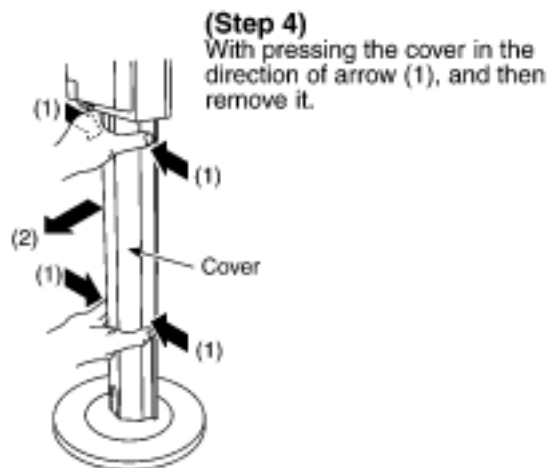
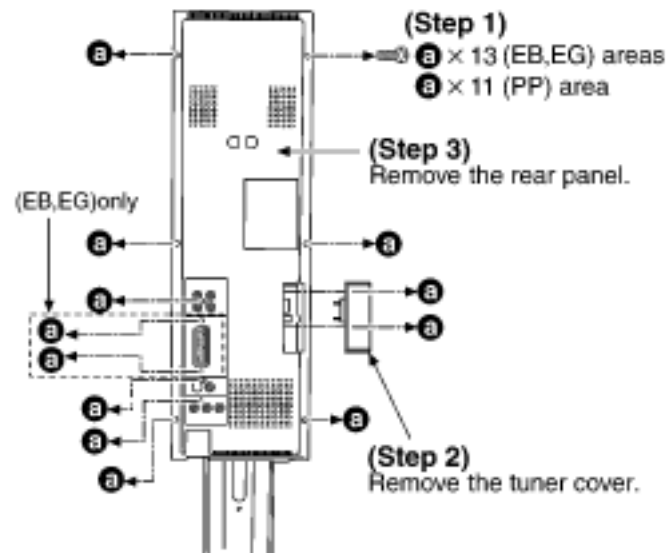
[15.8 Replacement for the lid ass'y](#)

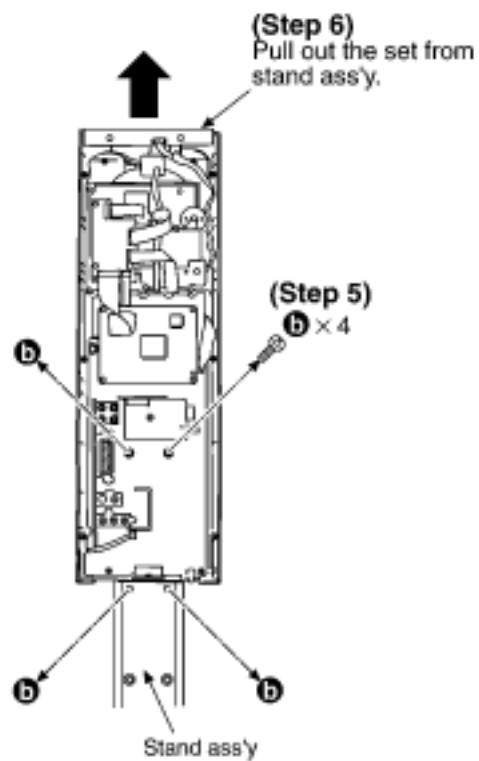
[15.9 Replacement for the 8cm holder, lid cover, metal, magnet and magnet holder](#)

[TOP](#) [PREVIOUS](#) [NEXT](#)

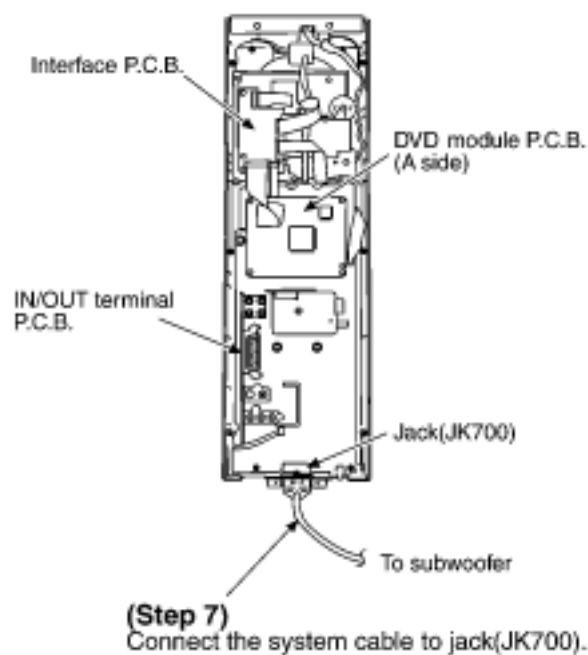
15.1 Checking for the DVD module P.C.B., IN/OUT terminal P.C.B., Interface P.C.B., FL P.C.B. and main P.C.B.

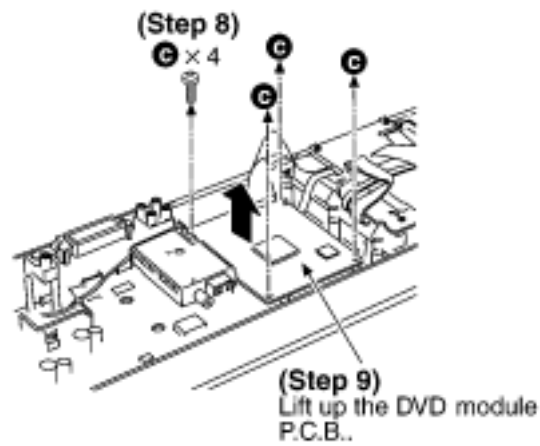
[TOP](#) [PREVIOUS](#) [NEXT](#)



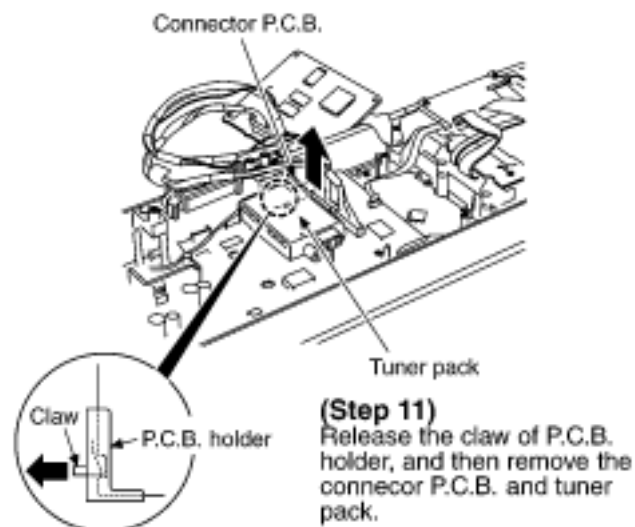
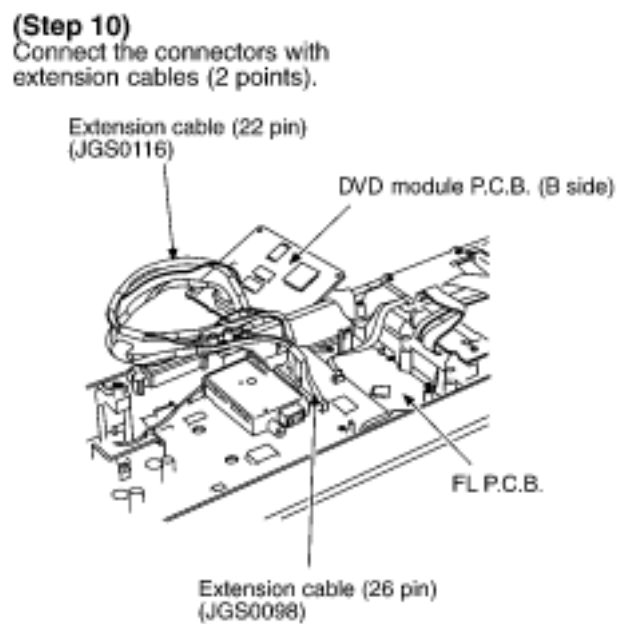


- Check the DVD module P.C.B. (A side), IN/OUT terminal P.C.B. and interface P.C.B. as shown below.

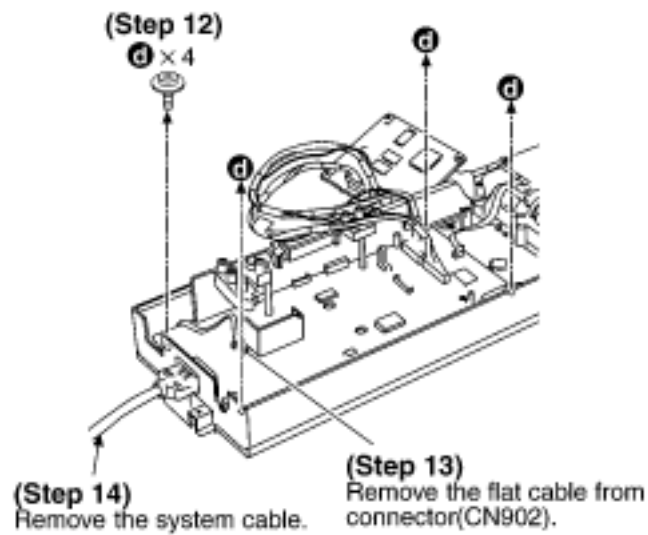
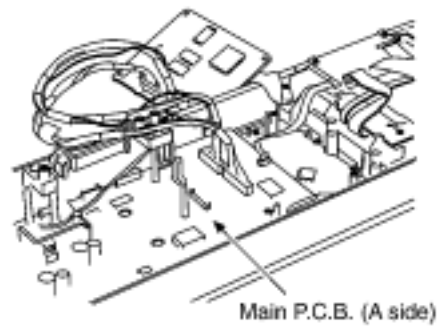




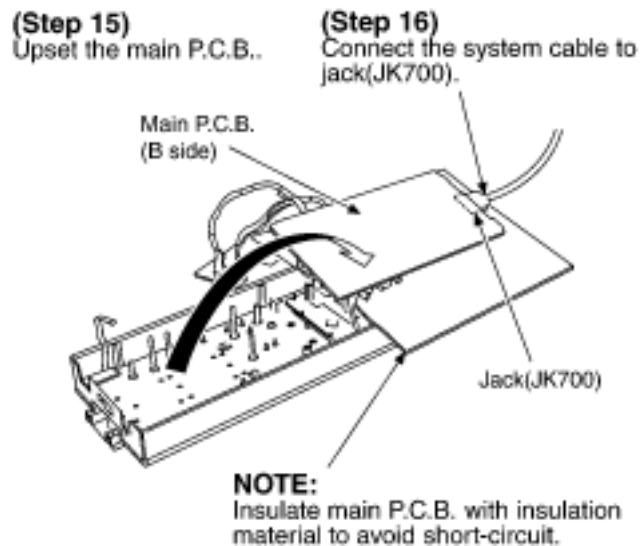
- Check the DVD module P.C.B. (B side) and FL P.C.B. as shown below.



- Check the main P.C.B. (A side) as shown below.



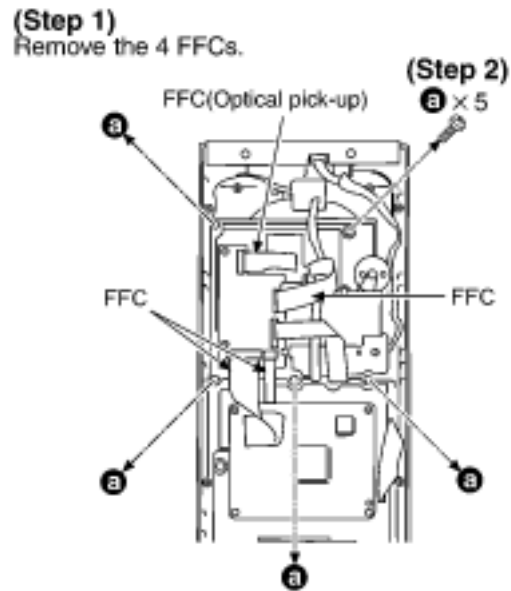
- Check the main P.C.B. (B side) as shown below.



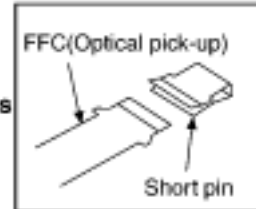
15.2 Replacement for the traverse unit

[TOP](#) [PREVIOUS](#) [NEXT](#)

- Follow the (Step 1) - (Step 6) of item 15.1.

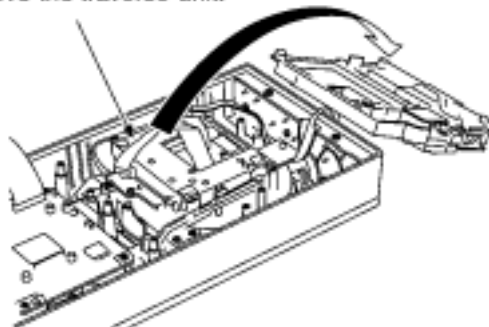


Caution:
Insert short pin into the traverse unit FFC.
(Refer to "Handling Precautions for Traverse Deck".)



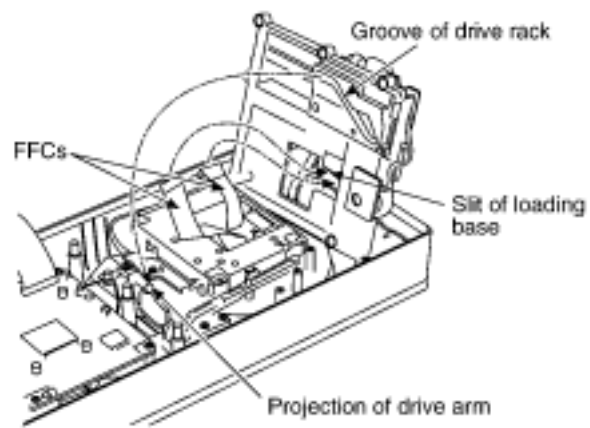
(Step 3)
Move the loading unit in the direction of arrow.

(Step 4)
Remove the traverse unit.



Notice for loading unit installation

1. Align the groove of drive rack with the projection of drive arm.
2. Pass the 2 FFCs through the slit of loading base.



[TOP](#) [PREVIOUS](#) [NEXT](#)

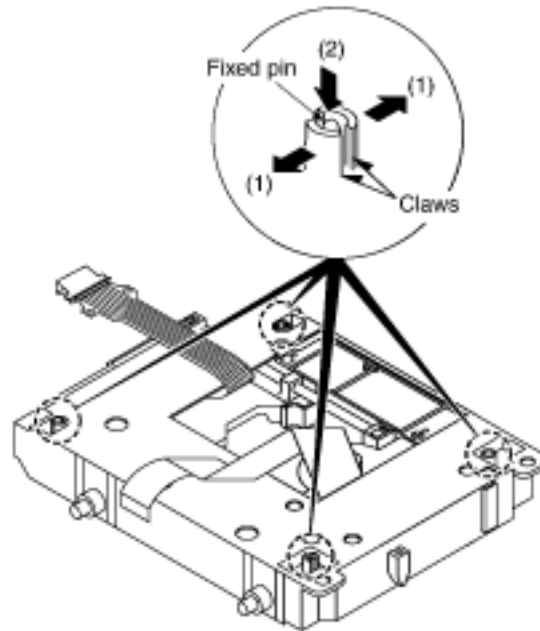
15.3 Replacement for the optical pick-up

[TOP](#) [PREVIOUS](#) [NEXT](#)

- Follow the (Step 1) - (Step 6) of item 15.1.
- Follow the (Step 1) - (Step 4) of item 15.2.

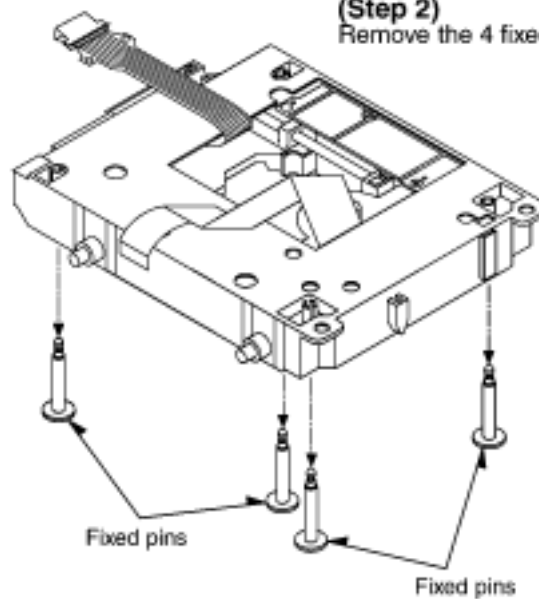
(Step 1)

Release the 2 claws, and then push the fixed pin in the direction of arrow.



(Step 2)

Remove the 4 fixed pins.



(Step 4)

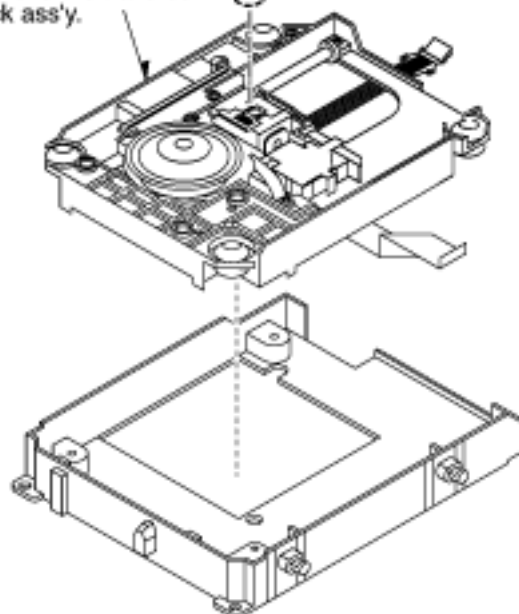
Release the 3 claws, and then remove the pick-up cover.

Pick-up cover

Claws

(Step 3)

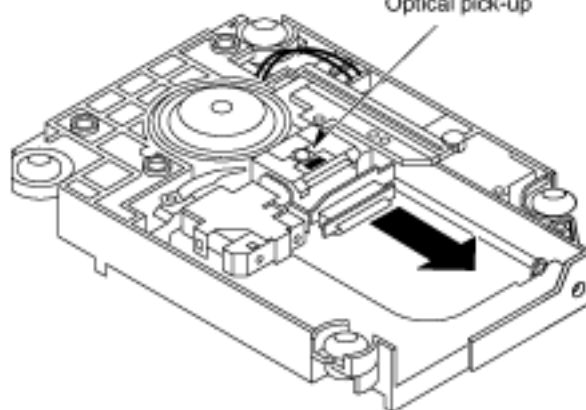
Remove the traverse deck ass'y.



(Step 5)

Move the optical pick-up in the direction of arrow.

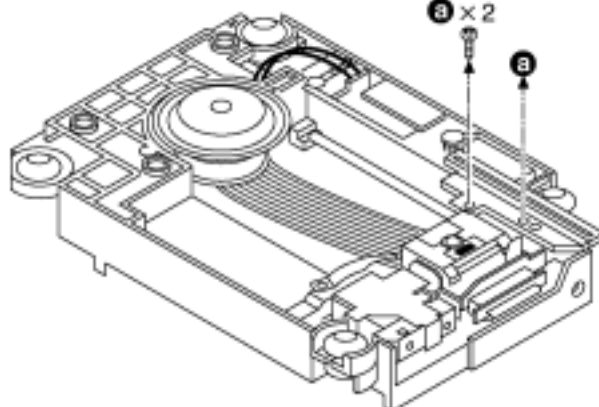
Optical pick-up



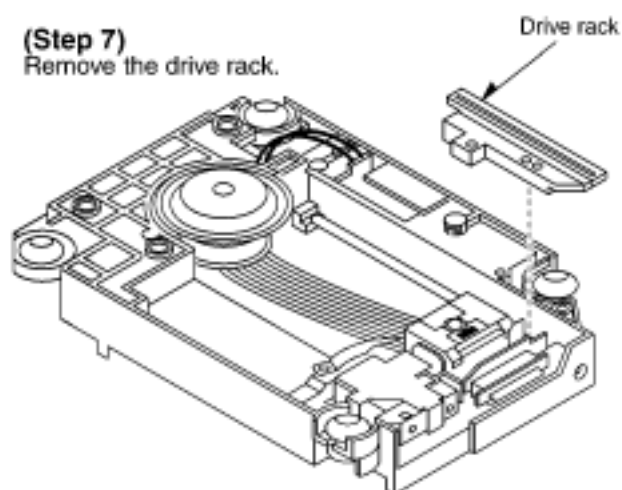
(Step 6)

a × 2

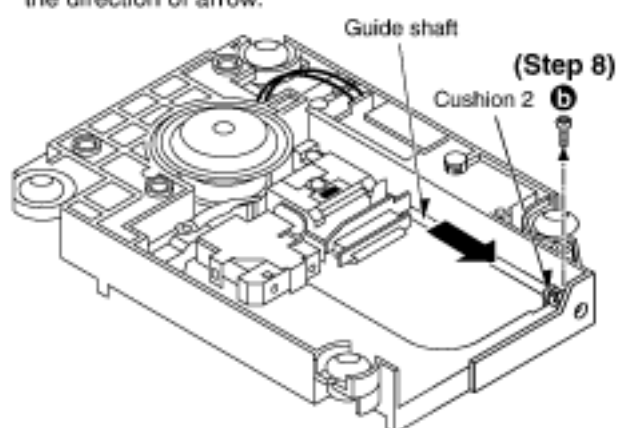
a



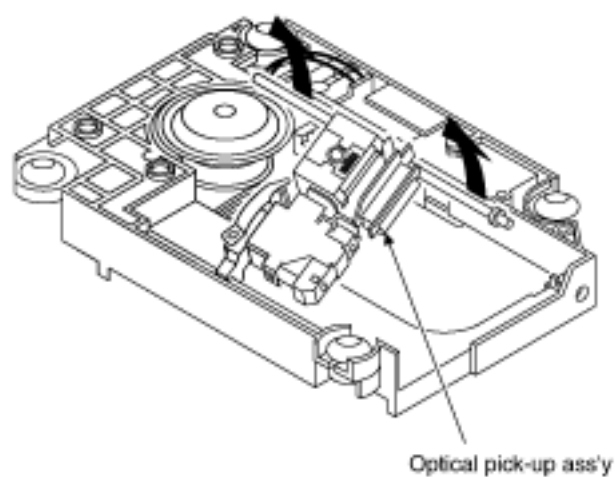
(Step 7)
Remove the drive rack.

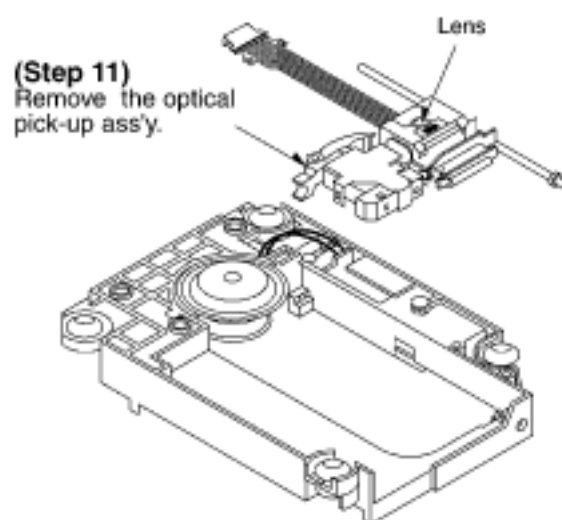


(Step 9)
Move the guide shaft in the direction of arrow.



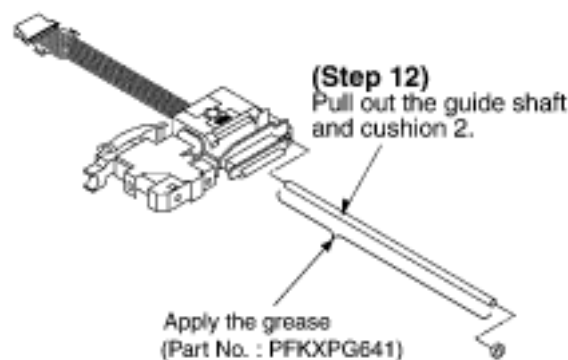
(Step 10)
Lift up the optical pick-up ass'y.





NOTE:

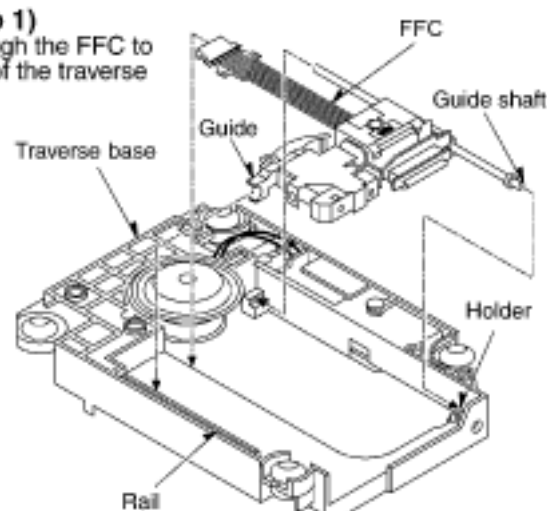
1. Use care to prevent damage the optical pick-up, due to the precision construction.
2. Do not touch the lens of the optical pick-up.



Installation of the optical pick-up ass'y

(Step 1)

Through the FFC to hole of the traverse base.



(Step 2)

Put on the guide of optical pick-up to the rail.

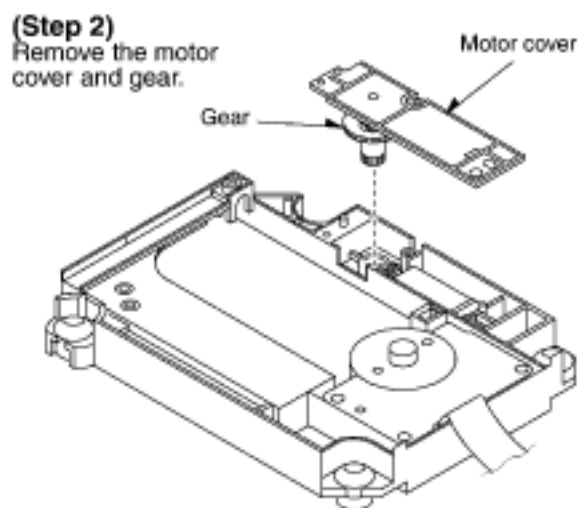
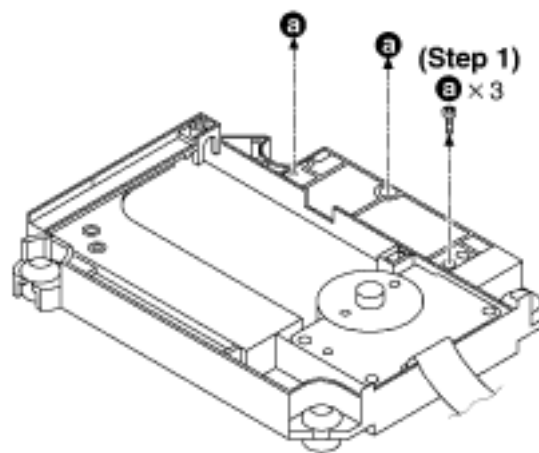
(Step 3)

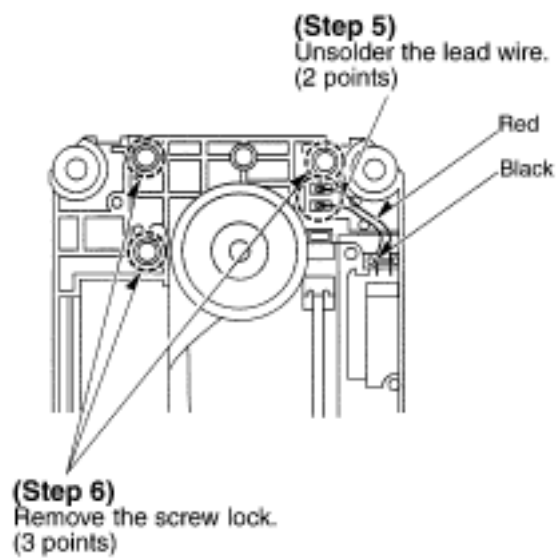
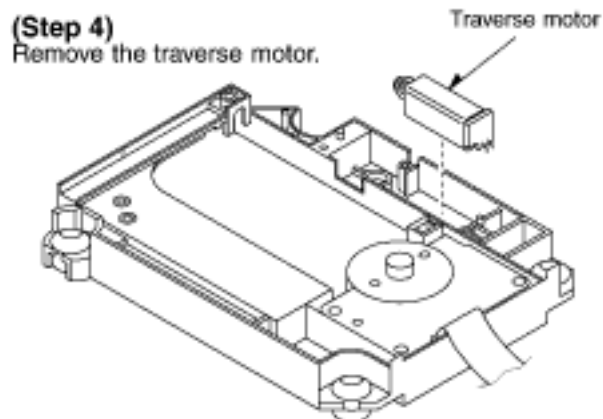
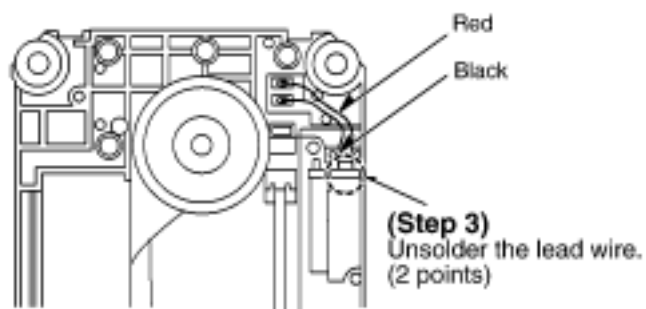
Install the guide shaft to the holder.

15.4 Replacement for the traverse motor and spindle motor

[TOP](#) [PREVIOUS](#) [NEXT](#)

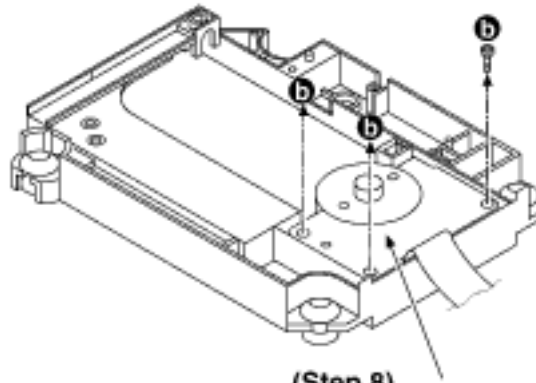
- Follow the (Step 1) - (Step 6) of item 15.1.
- Follow the (Step 1) - (Step 4) of item 15.2.
- Follow the (Step 1) - (Step 11) of item 15.3.





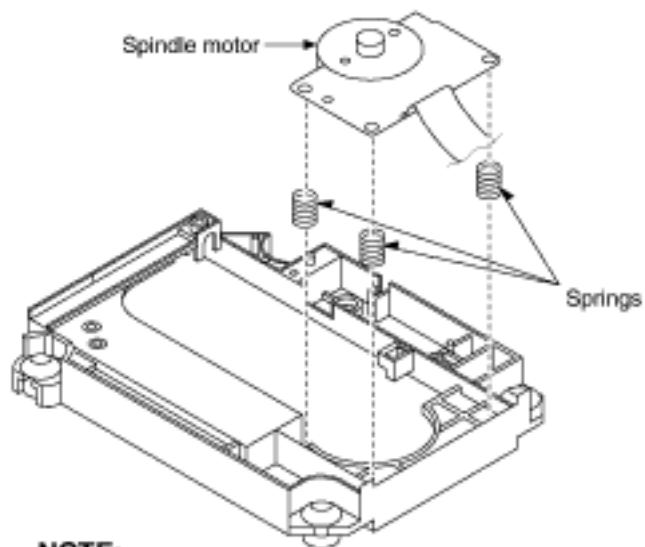
(Step 7)

Remove the screws(**b** × 3) with minus screwdriver(1.8 mm).



(Step 8)

Remove the spindle motor.



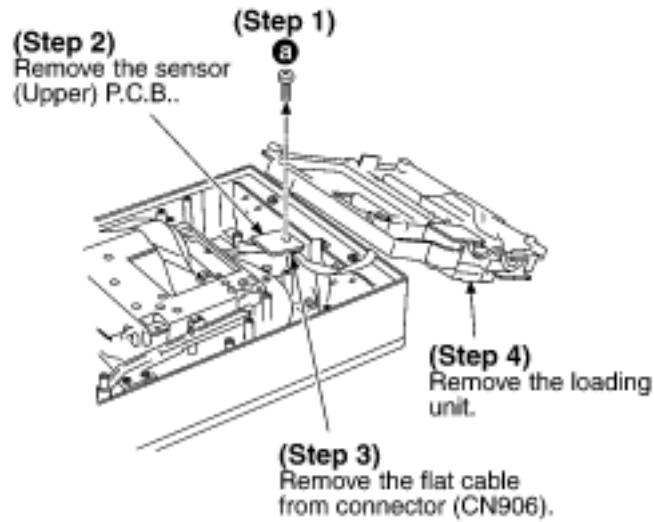
NOTE:

Be careful not to lose the 3 springs because those will also be removed on removal of the spindle motor.

15.5 Disassembly for loading unit

[TOP](#) [PREVIOUS](#) [NEXT](#)

- Follow the (Step 1) - (Step 6) of item 15.1.
- Follow the (Step 1) - (Step 3) of item 15.2.



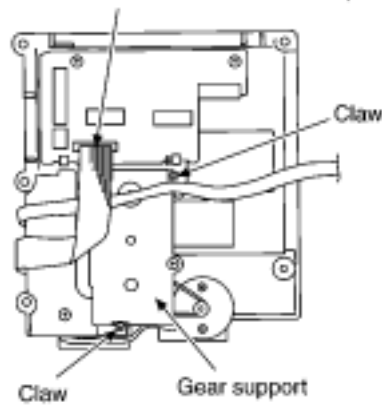
[TOP](#) [PREVIOUS](#) [NEXT](#)

15.6 Replacement for the motor

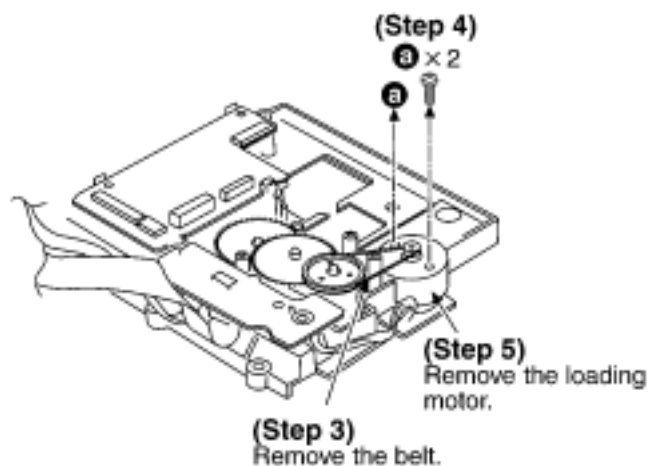
[TOP](#) [PREVIOUS](#) [NEXT](#)

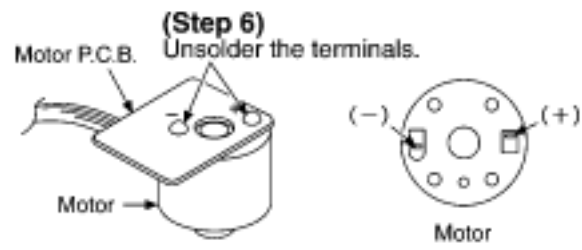
- Follow the (Step 1) - (Step 6) of item 15.1.
- Follow the (Step 1) - (Step 3) of item 15.2.
- Follow the (Step 1) - (Step 4) of item 15.5.

(Step 1)
Remove the flat cable from connector (CN2501).



(Step 2)
Remove the 2 claws, and then remove the gear support.



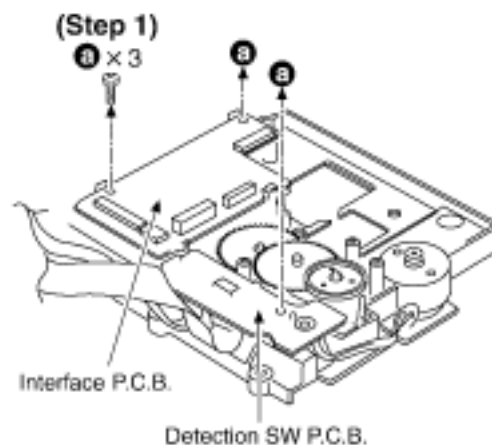


[TOP](#) [PREVIOUS](#) [NEXT](#)

15.7 Replacement for the interface P.C.B., detecting SW P.C.B., motor pulley, intermediate gear, gear (A) and drive rack

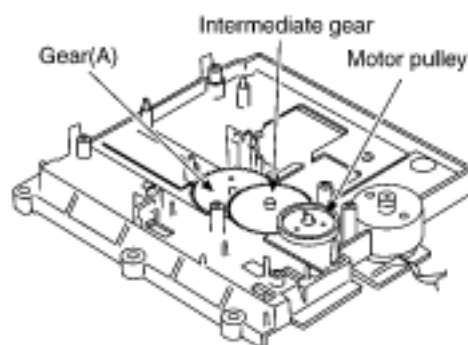
[TOP](#) [PREVIOUS](#) [NEXT](#)

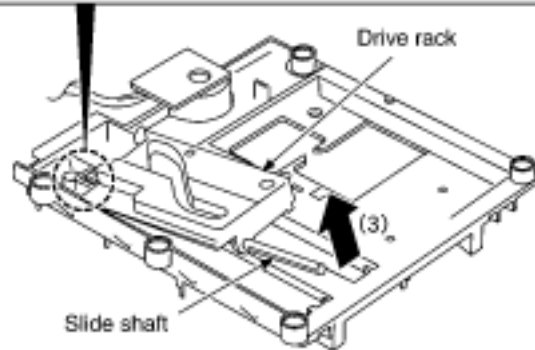
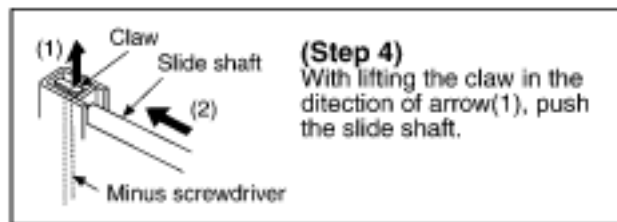
- Follow the (Step 1) - (Step 6) of item 15.1.
- Follow the (Step 1) - (Step 3) of item 15.2.
- Follow the (Step 1) - (Step 4) of item 15.5.
- Follow the (Step 1) - (Step 3) of item 15.6.



(Step 2)
Remove the interface P.C.B. and detection SW P.C.B..

(Step 3)
Remove the motor pulley, intermediate gear and gear(A).





(Step 5)
Lift up the slide shaft, and then remove the drive rack and slide shaft.

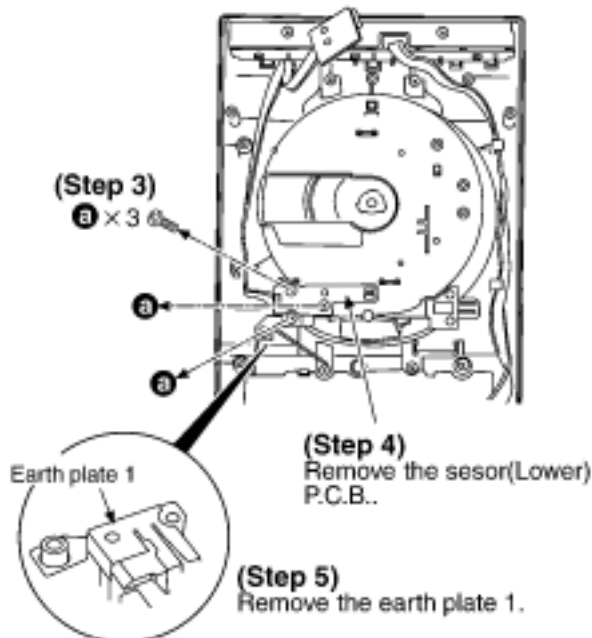
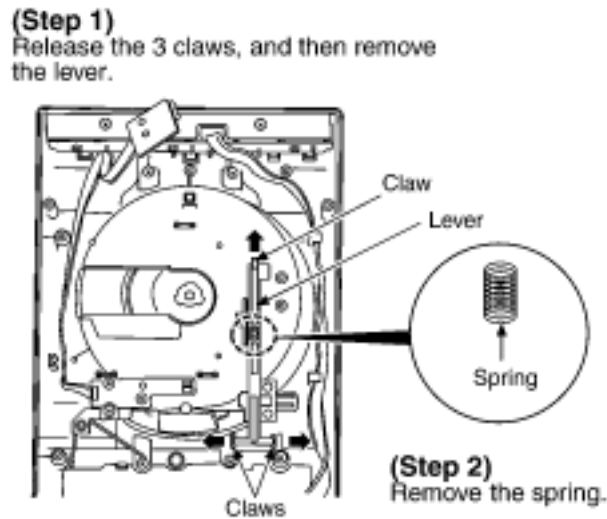
NOTE:
Be careful not to break it that push the claw strongly.

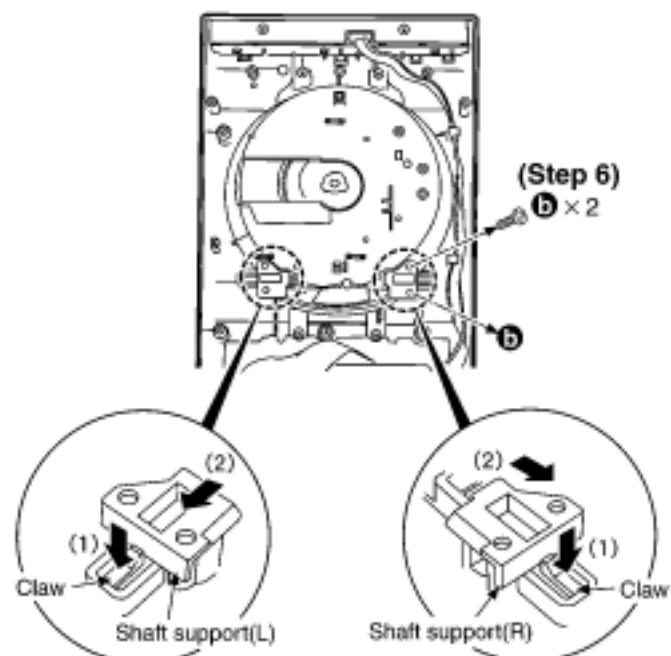
[TOP](#) [PREVIOUS](#) [NEXT](#)

15.8 Replacement for the lid ass'y

[TOP](#) [PREVIOUS](#) [NEXT](#)

- Follow the (Step 1) - (Step 6) of item 15.1.
- Follow the (Step 1) - (Step 4) of item 15.2.



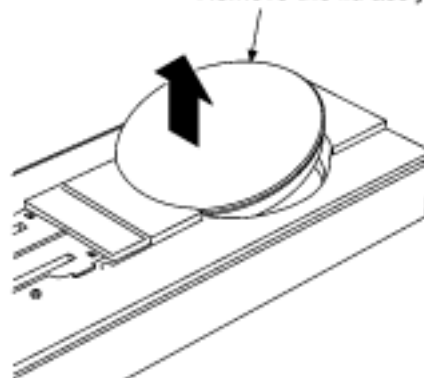


(Step 7)

With pressing the claw in the direction of arrow (1) , slide the shaft support (L),(R) in the direction of arrow (2).

(Step 8)

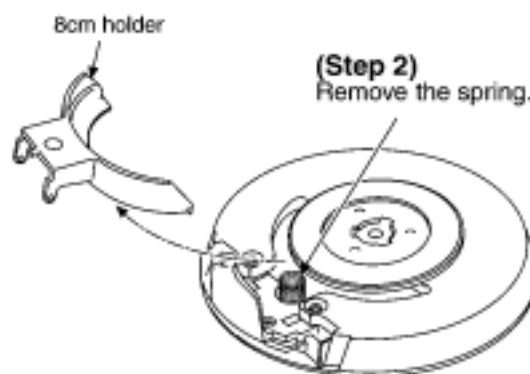
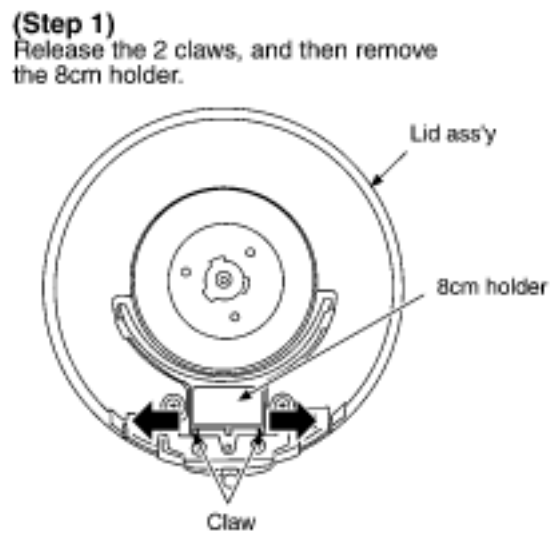
Remove the lid ass'y.



15.9 Replacement for the 8cm holder, lid cover, metal, magnet and magnet holder

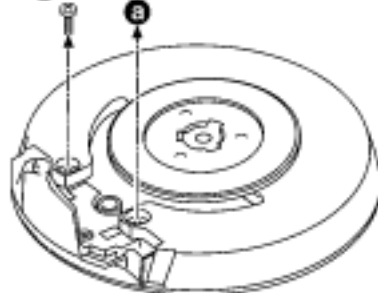
[TOP](#) [PREVIOUS](#) [NEXT](#)

- Follow the (Step 1) - (Step 6) of item 15.1.
- Follow the (Step 1) - (Step 4) of item 15.2.
- Follow the (Step 1) - (Step 8) of item 15.8.



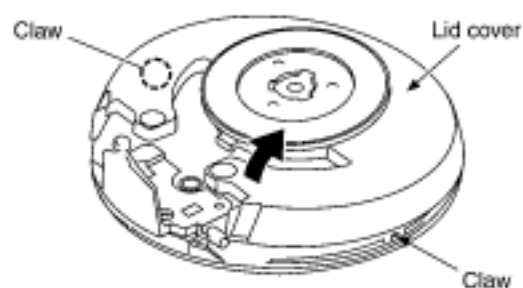
(Step 3)

③ × 2



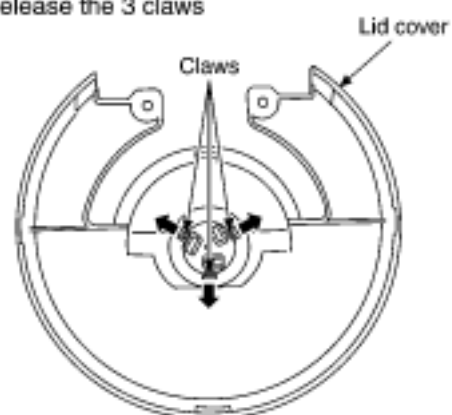
(Step 4)

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



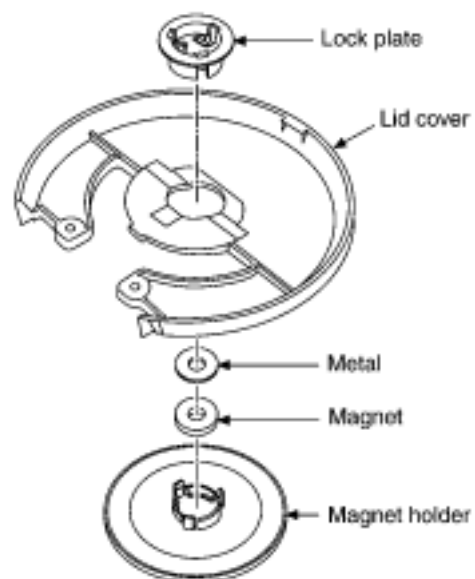
(Step 5)

Release the 3 claws



(Step 6)

The parts illustrated below will be free.



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16 Schematic Diagram Notes

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- This schematic diagram may be modified at any time with the development of new technology.

Notes:

- S901:

For SA-ST1PP

Standby/on switch (POWER



Except for SA-ST1PP

Standby/on switch (



- S902:

Open/close switch
(OPEN/CLOSE



- S903:

Play switch (



- S904:

Pause switch (



- S905:

Stop switch (



- S906:

R.skip preset channel, TV channel down switch (



- S907:

F.skip preset channel, TV channel up switch (



- S908:

Volume switch (VOLUME-)

- S909:

Volume switch (VOLUME+)

- S910:

Source selector switch (SELECTOR)

- S911:

For SA-ST1PP

Progressive out switch
(PROGRESSIVE OUT)

Except for SA-ST1PP

RDS switch (RDS)

- S912:

Custom sound memory switch
(CUSTOM SOUND MEMORY)

- S913:

Loading tray open detect switch in OFF position

- S914:

Loading tray close detect switch in ON position

- S915:

Laser ON/OFF switch in ON position

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

- No mark

: DVD/CD stop

- ()

: DVD/CD play

- Important 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.

- The supply part number is described alone in the replacement parts list.

- Voltage and signal line

-



: Positive voltage line

-



: Negative voltage line

○



: Audio signal line

○



: Video signal line

○



: Audio & Video signal line

○



: FM/AM signal line

○



: Center sp. signal line

○



: Sub woofer signal line

○



: Surround sp. signal line

Caution!

IC and LSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

Cover the parts boxes made of plastics with aluminum foil.

Ground the soldering iron.

Put a conductive mat on the work table.

Do not touch the legs of IC or LSI with the fingers directly.

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17 Schematic Diagram

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

18 Printed Circuit Board Diagram

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19 Type Illustration of ICs, Transistors and Diodes

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20 Wiring Connection Diagram

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21 Block Diagram

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22 Terminal Function of ICs

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[22.1 IC801\(C2CBJH000054\): System Control](#)

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22.1 IC801(C2CBJH000054): System Control

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Pin No.	Terminal Name	I/O	Function
1	VSEL B	-	Not used, open
2	VSEL A	-	Not used, open
3	VMUTE2	O	Component out select signal output
4	VMUTE1	O	Video out mute signal output
5	WIDE1	O	Wide1 setting signal output
6	DWIDE1	O	D wide1 setting signal output
7	DWIDE2	O	D wide2 setting signal output
8	BYTE	-	Not used, connected to GND
9	CNVSS	-	GND
10	NC	-	Not used, open
11	NC	-	Not used, open
12	/RESET	I	Reset signal input
13	XOUT	O	Oscillator connected terminal (F=10 MHz)
14	VSS	-	GND
15	XIN	I	Oscillator connected terminal (F=10 MHz)
16	VCC	I	Power supply terminal
17	/MNI	I	Power supply terminal
18	AC IN	I	Power failure detect signal input
19	REMO CON	I	Remote control signal input
20	NC	-	Not used, open
21	DRV1	O	Loading tray control signal output
22	DRV2	O	Loading tray control signal output
23	DRY MUTE	O	Loading tray control signal output
24	CLOSE SW	I	Loading tray close SW detect signal input
25	OPEN SW	I	Loading tray open SW detect signal input
26	TRY/TRV	O	Loading tray/traverse drive select signal output
27	DVD MUTE	I	DVD mute signal input
28	D CLK	I	DVD clock signal input
29	D ST	I	DVD status signal input

30	D CMD	I	DVD command signal input
31	FL DA	O	FL drive IC data signal output
32	FL CS	O	FL drive IC chip select signal output
33	FL CK	O	FL drive IC clock signal output
34	FL RST	O	FL drive IC reset signal output
35	M SO	-	Not used, open
36	M SI	-	Not used, open
37	M CK	-	Not used, open
38	M RST	-	Not used, open
39	SW4	I	Not used, connected to VCC via resistor
40	SW3	I	Not used, connected to VCC via resistor
41	EPM	-	Not used, connected to GND via resistor
42	SW2	I	Not used, connected to VCC via resistor
43	SW1	I	Not used, connected to VCC via resistor
44	JOG A	I	Not used, connected to VCC via resistor
45	JOG B	I	Not used, connected to VCC via resistor
46	CE	I	Not used, connected to VCC via resistor
47	HP SW	I	Headphone connecting detect signal input
48	AAC ST	O	Store signal output for IC400
49	AAC DA	O	Data signal output for IC400
50	AAC CK	O	Clock signal output for IC400
51	VOL LA	O	4 ch volume latch signal output
52	VOL DA	O	4 ch volume data signal output
53	VOL CK	O	4 ch volume clock signal output
54	HP MUTE	O	Headphone muting signal output
55	ECS	O	EEPROM chip select signal output
56	EDA	I/O	EEPROM data signal input/output
57	ECK	O	EEPROM clock signal output
58	NC	-	Not used, open
59	NC	-	Not used, open
60	NC	-	Not used, open
61	CF1/2	O	Center focus 1/2 select signal output
62	VCC	I	Power supply terminal
63	CF ON/OFF	O	Center focus ON/OFF signal output
64	VSS	-	GND
65	BS L	-	Not used, open

66	PCONT	O	Power supply control signal output
67	DVD PWCNT	O	DVD module power supply control signal output
68	D3V ON/OFF	O	DVD module power supply control signal output
69	VOL AT	O	Attenuator control signal output
70	SUB W MIXSW	O	Sub woofer mute signal output
71	MUT S	O	Center and surround speaker mute signal output
72	MUT A	O	Front speaker and sub woofer mute signal output
73	MUTE H	O	Power amp mute signal output
74	DSP RST	O	DSP reset signal output
75	DSP DA	O	DSP data signal output
76	DSP CK	O	DSP clock signal output
77	DSP CS	O	DSP chip select signal output
78	DC DET	I	DC detect signal input
79	TUN CE	O	PLL chip enable signal output
80	TUN CK	O	PLL clock signal output
81	TUN DI M	I	Tuner data/stereo signal input
82	TUN DO M	O	PLL data signal output
83	TUN SD	I	Tuner signal detect signal input
84	RDS RDY	I	RDS ready signal input
85	RDS IN	I	RDS data signal input
86	RDS CK	I	RDS clock signal input
87	AAC RQM	-	Not used, open
88	AAC RQS	-	Not used, open
89	AAC MUTE	-	Not used, open
90	DPL MODE	I	Connected to VREF via resistor
91	MT1/ST1	I	Model select signal input
92	PROG/ INT	I	Progressive/interlace select signal input
93	DES3	-	Connected to GND via resistor
94	DES2	-	Connected to GND via resistor
95	DES1	-	Connected to GND via resistor
96	AVSS	-	GND
97	KEY	I	Operation key signal input
98	VREF	I	Reference voltage input terminal
99	AVCC	I	Power supply terminal

100	525P	O	Progressive ON/OFF signal output
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23 Abbreviations

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INITIAL/LOGO		ABBREVIATIONS
A	A0-UP ACLK AD0-UP ADATA ALE AMUTE AREQ ARF ASI ASO ASYNC	ADDRESS AUDIO CLOCK ADDRESS BUS AUDIO PES PACKET DATA ADDRESS LATCH ENABLE AUDIO MUTE AUDIO PES PACKET REQUEST AUDIO RF SERVO AMP INVERTED INPUT SERVOAMP OUTPUT AUDIO WORD DISTINCTION SYNC
B	BCK BCKIN BDO BLKCK BOTTOM BYP BYTCK	BIT CLOCK (PCM) BIT CLOCK INPUT BLACK DROP OUT SUB CODE BLOCK CLOCK CAP. FOR BOTTOM HOLD BYPATH BYTE CLOCK
C	CAV CBDO CD CDSCK CDSRDATA CDRF CDV CHNDATA CKSL CLV COFTR CPA CPCS CPDT CPUADR CPUADT CPUIRQ CPRD CPWR CS CSYNCIN CSYNCOUT	CONSTANT ANGULAR VELOCITY CAP. BLACK DROP OUT COMPACT DISC CD SERIAL DATA CLOCK CD SERIAL DATA CD RF (EFM) SIGNAL COMPACT DISC-VIDEO CHANNEL DATA SYSTEMCLOCK SELECT CONSTANT LINEAR VELOCITY CAP. OFF TRACK CPU ADDRESS CPU CHIP SELECT CPU DATA CPU ADDRESS LATCH CPU ADDRESS DATA BUS CPU INTERRUPT REQUEST CPU READ ENABLE CPU WRITE ENABLE CHIPSELECT COMPOSITE SYNC IN COMPOSITE SYNC OUT

D	DACCK DEEMP DEMPH DIG0-UP DIN DMSRCK DMUTE DO DOUT0-UP DRF DRPOUT DREQ DRESP DSC DSLFF DVD	D/A CONVERTER CLOCK DEEMPHASIS BIT ON/OFF DEEMPHASIS SWITCHING FL DIGIT OUTPUT DATA INPUT DM SERIAL DATA READ CLOCK DIGITAL MUTE CONTROL DROPOUT DATA OUTPUT DATA SLICE RF (BIAS) DROP OUT SIGNAL DATA REQUEST DATA RESPONSE DIGITAL SERVO CONTROLLER DATA SLICE LOOP FILTER DIGITAL VIDEO DISC
E	EC ECR ENCSEL ETMCLK ETSCLK	ERROR TORQUE CONTROL ERROR TORQUE CONTROL REFERENCE ENCODER SELECT EXTERNAL M CLOCK (81MHz/40.5MHz) EXTERNAL S CLOCK (54MHz)
F	FBAL FCLK FE FFI FEO FG FSC FSCK	FOCUS BALANCE FRAME CLOCK FOCUS ERROR FOCUS ERROR AMP INVERTED INPUT FOCUS ERROR AMP OUTPUT FREQUENCY GENERATOR FREQUENCY SUB CARRIER FS (384 OVERSAMPLING) CLOCK
G	GND	COMMON GROUNDING (EARTH)
H	HA0-UP HD0-UP HINT HRXW	HOST ADDRESS HOST DATA HOST INTERRUPT HOST READ/WRITE
I	IECOUT IPFLAG IREF ISEL	IEC958 FORMAT DATA OUTPUT INTERPOLATION FLAG I (CURRENT) REFERENCE INTERFACE MODE SELECT
L	LDON LPC LRCK	LASER DIODE CONTROL LASER POWER CONTROL L CH/R CH DISTINCTION CLOCK

M	MA0-UP MCK MCKI MCLK MDATA MDQ0-UP MDQM MLD MPEG	MEMORY ADDRESS MEMORY CLOCK MEMORY CLOCK INPUT MEMORY SERIAL COMMAND CLOCK MEMORY SERIAL COMMAND DATA MEMORY DATA INPUT/OUTPUT MEMORY DATA I/OMASK MEMORY SERIAL COMMAND LOAD MOVING PICTURE EXPERTS GROUP
O	ODC OFTR OSCI OSCO OSD	OPTICAL DISC CONTROLLER OFF TRACKING OSCILLATOR INPUT OSCILLATOR OUTPUT ON SCREEN DISPLAY
P	P1-UP PCD PCK PDVD PEAK PLLCLK PLOCK PWMCTL PWMDA PWMOA, B	PORT CD TRACKING PHASE DIFFERENCE PLL CLOCK DVD TRACKING PHASE DIFFERENCE CAP. FOR PEAK HOLD CHANNEL PLL CLOCK PLL LOCK PWM OUTPUT CONTROL PULSEWAVE MOTOR DRIVE A PULSE WAVE MOTOR OUT A, B
R	RE RFENV RFO RS RSEL RST RSV	READ ENABLE RF ENVELOPE RF PHASE DIFFERENCE OUTPUT (CD-ROM) REGISTER SELECT RF POLARITY SELECT RESET RESERVE
S	SBCK SBI0, 1 SB00 SBT0, 1 SCK SCKR SCL SCLK SDA SEG0-UP SELCLK SEN SIN1, 2 SOUT1, 2 SPDI SPDO SPEN SPRCLK SPWCLK	SUB CODE CLOCK SERIAL DATA INPUT SERIAL DATA OUTPUT SERIAL CLOCK SERIAL DATA CLOCK AUDIO SERIAL CLOCK RECEIVER SERIAL CLOCK SERIAL CLOCK SERIALDATA FL SEGMENT OUTPUT SELECT CLOCK SERIAL PORT ENABLE SERIAL DATA IN SERIAL DATA OUT SERIAL PORT DATA INPUT SERIAL PORT DATA OUTPUT SERIAL PORT R/W ENABLE SERIAL PORT READ CLOCK SERIALPORT WRITE CLOCK

	SQCK SQCX SRDATA SRMADR SRMDT0-7 SS STAT STCLK STD0-UP STENABLE STSEL STVALID SUBC SUBQ SYSCLK	SUB CODE Q CLOCK SUB CODE Q DATA READ CLOCK SERIAL DATA SRAM ADDRESS BUS SRAM DATA BUS 0-7 START/STOP STATUS STREAM DATA CLOCK STREAM DATA STREAM DATA INPUT ENABLE STREAMDATA POLARITY SELECT STREAM DATA VALIDITY SUB CODE SERIAL SUB CODE Q DATA SYSTEM CLOCK
T	TE TIBAL TID TIN TIP TIS TPSN TPSO TPSP TRCRS TRON TRSON	TRACKING ERROR BALANCE CONTROL BALANCE OUTPUT 1 BALANCE INPUT BALANCE INPUT BALANCE OUTPUT 2 OP AMP INPUT OP AMP OUTPUT OP AMP INVERTED INPUT TRACKCROSS SIGNAL TRACKING ON TRAVERSE SERVO ON
V	VBLANK VCC VCDCONT VDD VFB VREF VSS	V BLANKING COLLECTOR POWER SUPPLY VOLTAGE VIDEO CD CONTROL (TRACKING BALANCE) DRAIN POWER SUPPLY VOLTAGE VIDEO FEED BACK VOLTAGE REFERENCE SOURCEPOWER SUPPLY VOLTAGE
W	WAIT WDCK WEH WSR	BUS CYCLE WAIT WORD CLOCK WRITE ENABLE HIGH WORD SELECT RECEIVER

X	X	X' TAL
	XALE	X ADDRESS LATCH ENABLE
	XAREQ	X AUDIO DATA REQUEST
	XCDROM	X CD ROM CHIP SELECT
	XCS	X CHIP SELECT
	XCSYNC	X COMPOSITE SYNC
	XDS	X DATA STROBE
	XHSYNCO	X HORIZONTAL SYNC OUTPUT
	XHINT	XH INTERRUPTREQUEST
	XI	X' TAL OSCILLATOR INPUT
	XINT	X INTERRUPT
	XMW	X MEMORY WRITE ENABLE
	XO	X' TAL OSCILLATOR OUTPUT
	XRE	X READ ENABLE
	XSRMCE	X SRAM CHIP ENABLE
	XSRMOE	X SRAM OUTPUT ENABLE
	XSRMWE	X SRAM WRITE ENABLE
	XVCS	X V-DEC CHIPSELECT
	XVDS	X V-DEC CONTROL BUS STROBE
	XVSYNCO	X VERTICAL SYNC OUTPUT

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24 Replacement Parts List

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Notes:

- Important 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 manufacture’s specified parts shown in the parts list.

- The parenthesized indications in Remarks columns specify the areas.

(PP): SA-ST1PP

(EB): SA-ST1EB

(EG): SA-ST1EG

- The marking [RTL] indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.
- All parts are supplied by SPC.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	XYN4+F16F	SCREW	6	
2	XTWS3+10T	SCREW	4	
3	XTW3+15T	SCREW	4	
4	XTB3+10J	SCREW	10	
5	XTB3+8JFZ	SCREW	13	
<u>6</u>	RSC0666-1	REAR SHIELD	1	
<u>9</u>	RKF0662A-H	TUNER COVER	1	
<u>10</u>	RKF0661-S	STAND COVER	1	

<u>11</u>	RKF0660-H	COVER	1	
<u>12</u>	RKA0146-H	CUSION	5	
<u>13</u>	RGP0975A-H	REAR PANEL	1	(PP)
13	RGP0975B-H	REAR PANEL	1	(EB)(EG)
<u>14</u>	RMX0249	SPACER A	1	
<u>15</u>	RMX0250	SPACER B	1	
<u>16</u>	REZ1518	FFC(50P)	1	
<u>17</u>	RSC0665-2	FRONT SHIELD	1	
<u>18</u>	REZ1520-1	FFC(7P)	1	
<u>19</u>	REZ1519-1	FFC(14P)	1	
<u>20</u>	RGU2171-S	BUTTON,POWER ETC	1	
<u>21</u>	RSC0682	EARTH PLATE 1	1	
<u>23</u>	RMQ1200	STOPPER	1	
<u>24</u>	RMR1513-W	LED FILTER	1	
<u>25</u>	RMQ1179	SHAFT SUPPORT(R)	1	
<u>26</u>	RMQ1178	SHAFT SUPPORT(L)	1	
<u>27</u>	RML0644	LEVER	1	
<u>28</u>	RMN0203	P.C.B. HOLDER	2	
<u>29</u>	RME0391	EARTH SPRING	1	
<u>30</u>	RME0385	SPRING	1	
<u>31</u>	RGG0221-S	PANEL ORNAMENT 2	1	
<u>32</u>	RGG0220-S	PANEL ORNAMENT 1	1	
<u>33</u>	REZ1542	WIRE ASS'Y	1	
34	XQN2+C3	SCREW	2	
<u>35</u>	RMS0800	SLIDE SHAFT	1	
<u>36</u>	RMQ1180	GEAR SUPPORT	1	
<u>37</u>	RMK0554	LOADING BASE	1	
<u>38</u>	RDV0070	BELT	1	
<u>39</u>	RDP0088	MOTOR PULLY	1	
<u>40</u>	RDK0043	DRIVE RACK	1	
<u>41</u>	RDG0561	GEAR	1	
<u>42</u>	RDG0546	PULLEY	1	
<u>43</u>	RDG0544	GEAR	1	
<u>44</u>	MDN4RB6SZA	MOTOR	1	

<u>45</u>	RYQ0410A-S	LID ASS'Y	1	(PP)
45	RYQ0410-S	LID ASS'Y	1	(EB)(EG)
<u>45-1</u>	RGC0029-K	SENSOR SHEET 1	1	
<u>45-2</u>	RGC0030-K	SENSOR SHEET 2	1	
<u>45-3</u>	RMB0509-1	SPRING	1	
<u>45-4</u>	RMF0326	DISC SHEET	2	
<u>45-5</u>	RML0643	DRIVE ARM	1	
<u>45-6</u>	RMR1505-K	8CM HOLDER	1	
<u>45-7</u>	RME0392	SPRING	1	
45-8	XTB3+10JFZ	SCREW	4	
<u>45-9</u>	RMQ0653	MAGNET	1	
<u>45-10</u>	RKF0659-S1	LID COVER	1	
<u>45-11</u>	RMA1003	METAL	1	
<u>45-12</u>	RMR1504-K	LOCK PLATE	1	
<u>45-13</u>	RYQ0408-K	MAGNET HOLDER	1	
<u>45-14</u>	RSC0697	GASKET	1	(PP)
46	XYA3+FJ10	SCREW	4	
<u>47</u>	REZ1514	WIRE ASS'Y	1	
<u>48</u>	REZ1516	WIRE ASS'Y	1	
<u>49</u>	REZ1567	WIRE ASS'Y	1	
<u>50</u>	REZ1566	WIRE ASS'Y	1	
<u>51</u>	REZ1561	FLAT CABLE	1	
<u>52</u>	RMN0738	FL HOLDER	1	
53	XTB3+10JFZ	SCREW	29	
<u>54</u>	RGK1604-K	PANEL ORNAMENT 3	1	
<u>55</u>	RGK1605-K	PANEL ORNAMENT 4	2	
<u>56</u>	RGK1606A-S	TRAY ORNAMENT	1	(PP)
56	RGK1606-S	TRAY ORNAMENT	1	(EB)(EG)
<u>57</u>	RGP0974A-S	FRONT PANEL	1	(PP)
57	RGP0974B-S	FRONT PANEL	1	(EB)(EG)
<u>58</u>	RKW0716-K	PANEL ORNAMENT 5	1	
<u>59</u>	RKW0717-K	PANEL ORNAMENT6	1	
<u>60</u>	RKW0718-S	FL WINDOW	1	
<u>61</u>	RGB0036-1S	PANASONIC BADGE	1	

<u>62</u>	RGG0222-S1	ORNAMENT 1	1	(PP)
62	RGG0222A-S	ORNAMENT 1	1	(EB)(EG)
<u>63</u>	RGN2446-K	NAME PLATE	1	(PP)
63	RGN2446A-K	NAME PLATE	1	(EB)(EG)
<u>64</u>	RSC0700	EARTH PLATE 2	1	(PP)
<u>65</u>	RSC0705	SHIELD PLATE	1	(PP)
<u>67</u>	RQCC2036	ENERGY LABEL	1	(PP)
<u>68</u>	RQLA0724	CONNECTOR CAUTION LABEL	1	(PP)
<u>69</u>	RQLS0288	LASER CAUTION LABEL	1	
<u>70</u>	RSC0693	SHIELD PLATE	1	(PP)
70	RSC0690	SHIELD PLATE	1	(EB)(EG)
<u>71</u>	RQLS0277	CAUTION LABEL	1	(PP)
71	SQWD7	CAUTION LABEL	1	(EB)(EG)
<u>73</u>	J0KD00000018	FERRITE CORE 1	1	
<u>74</u>	J0KE00000064	FERRITE CORE 2	1	
<u>75</u>	RSC0691	SHIELD PLATE	1	
<u>76</u>	RSC0692	EARTH SPRING	1	
<u>301</u>	RMG0598-A	FLOATING RUBBER	4	
<u>302</u>	BML3E1CRL	SPINDLE MOTOR	1	
<u>303</u>	REU33K028S	WIRE ASS'Y(BLACK)	1	
<u>304</u>	REU33R032S	WIRE ASS'Y(RED)	1	
305	RHD17040	SCREW	2	
306	RHD17042	SCREW	3	
<u>307</u>	RMB0713	SPRING	1	
<u>308</u>	RMB0714	SPRING	3	
<u>309</u>	RMG0618-H	CUSHION 1	1	
<u>310</u>	RMS0798	SHAFT 1	1	
<u>311</u>	RMX0247	WASHER	1	
312	VHD1224	SCREW	4	
<u>313</u>	RDG0557	SHAFT 2	1	
<u>314</u>	RDG0558	RING	1	
<u>315</u>	RMM0252	DRIVE RACK	1	
<u>316</u>	RMQ1112	MOTOR COVER	1	
<u>317</u>	RMR1466-K	TRAVERSE BASE	1	

318	RMX0233	WASHER	1	
319	RXQ0946	MOTOR	1	
320	RAF3023A-1	OPTICAL PICK-UP	1	
321	RHD14095	SCREW	1	
322	RJB2621A	FFC	1	
323	RMG0617-H	CUSHION 2	1	
324	RMS0788	GUIDE SHAFT	1	
325	RMR1467-K	MIDDLE CHASSIS	1	
326	RMS0789	FIXED PIN	4	
327	RMR1519-K	PICK-UP COVER	1	
A1	EUR7623X20	REMOTE CONTROL	1	(PP)
A1	EUR7623X40	REMOTE CONTROL	1	(EB)(EG)
A1-1	UR76EC2303B	BATTERY COVER	1	
A2	K1HA25JA0002	SYSTEM CABLE	1	
A3	K2KA2HA00003	VIDEO CABLE	1	
A4	N1DAAAA00001	AM LOOP ANTENNA	1	
A5	RSA0007	FM INDOOR ANTENNA	1	N1EAYY000002
A6	QWBG002AA	CLIP	4	
A7	RFA0631A-K	SHEET OF SPEAKER FEET	1	
A8	REE1203C	SPEAKER CABLE(10M)	2	
A9	REE1203A	SPEAKER CABLE(4M)	3	
A10	RJA0065-K	AC POWER SUPPLY CORD	1	 K2CB2CB00005 (PP)
A10	RJA0053-3X	AC POWER SUPPLY CORD	1	 (EB)
A10	RJA0019-2X	AC POWER SUPPLY CORD	1	 (EG)
A11	RMF0321	STRING FOR MAIN UNIT	1	
A12	XSN5+16FN	SCREW	8	
A13	XTB3+10JFZ	SCREW	4	
A14	K2RC021B0001	ANTENNA PLUG	1	(PP)

A15	RQT6945-Y	OPERATING INSTRUCTIONS	1	(PP), ENGLISH, CANADIAN FRENCH
A15	RQT6949-B	OPERATING INSTRUCTIONS	1	(EB), ENGLISH
A15	RQT6946-D	OPERATING INSTRUCTIONS	1	(EG), GERMANY, ITALIAN, FRENCH
A15	RQT6947-H	OPERATING INSTRUCTIONS	1	(EG), NETHERLANDS, DANISH, SWEDISH
A15	RQT6948-R	OPERATING INSTRUCTIONS	1	(EG), SPANISH, CZECH, POLISH
A16	RQCA1029	SPEAKER CABLE STICKERS	1	
A17	SJP9009	ANTENNA PLUG ADAPTOR	1	K1YZ02000013 (EB)
C12	ECEA1HKA4R7	50V 4.7U	1	
C13	F1H1H104A783	50V 0.1U	1	
C14	F1H1H473A783	50V 0.047U	1	
C15	ECA1CAK100XB	16V 10U	1	
C16,17	ECUVNH103KBV	50V 0.01U	2	F1H1H103A748
C18	ECA1EAM101XB	25V 100U	1	
C20	EEUFC0J821B	6.3V 820U	1	
C21	ECA1CAK100XB	16V 10U	1	
C22,23	F1H1A105A028	10V 1U	2	
C24	EEUFC0J821B	6.3V 820U	1	
C25	F1H1H104A783	50V 0.1U	1	
C26	RCE1AKA101BG	10V 100U	1	F2A1A1010020
C27	F1H1H104A783	50V 0.1U	1	
C28	RCE1AKA101BG	10V 100U	1	F2A1A1010020
C29	ECA1CAK100XB	16V 10U	1	
C30	F1H1H473A783	50V 0.047U	1	
C31	ECA1CAK100XB	16V 10U	1	
C32	F1H1H104A783	50V 0.1U	1	
C33	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C35-37	ECJ1VB1H102K	50V 1000P	3	

C38	ECQE1104KF3	100V 0.1U	1	
C39	ECA1EAK100XB	25V 10U	1	(EB)(EG)
C40	RCE1VKA100BG	35V 10U	1	F2A1V1000011
C43,44	ECA1JAM101XB	63V 100U	2	
C45	ECA1HAM101XB	50V 100U	1	
C46	ECA1EAM102XB	25V 1000U	1	
C47	ECA1HAM101XB	50V 100U	1	
C48	ECA1EAM102XB	25V 1000U	1	
C49	F1H1H104A783	50V 0.1U	1	
C50	ECA1CAK100XB	16V 10U	1	
C51	ECJ1VB1H102K	50V 1000P	1	
C52	ECA1CAK101XB	16V 100U	1	
C53	ECA1EAK100XB	25V 10U	1	
C54	ECA1HAK220XB	50V 22U	1	(EB)(EG)
C55	ECA1EAM682XE	25V 6800U	1	
C56	ECA1CAK470XB	16V 47U	1	
C57	ECA1CAK100XB	16V 10U	1	
C58,59	F1K1E1050001	25V 1U	2	
C61	ECJ1VB1H102K	50V 1000P	1	
C101,02	ECJ1VB1H472K	50V 4700P	2	(PP)
C151	ECA1CAK100XB	16V 10U	1	(EB)(EG)
C152	ECUV1H331KBV	50V 330P	1	ECJ1VB1H331K (EB)(EG)
C153	ECJ1VB1H102K	50V 1000P	1	(EB)(EG)
C154	ECA0JAK470XH	6.3V 47U	1	(EB)(EG)
C155	ECJ1VB1H561K	50V 560P	1	(EB)(EG)
C156,57	ECUV1H470JCV	50V 47P	2	ECJ1VC1H470J (EB)(EG)
C158	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748 (EB)(EG)
C159	ECJ1VB1H102K	50V 1000P	1	(EB)(EG)
C160	ECA0JAK470XH	6.3V 47U	1	(EB)(EG)
C303-06	ECUV1H101JCV	50V 100P	4	ECJ1VC1H101J
C307	F1H1A105A028	10V 1U	1	
C308	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748 (EB)(EG)
C311	ECA0JAK221XH	6.3V 220U	1	
C312	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748

C314	ECA0JAM102XB	6.3V 1000U	1	
C315	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C316	ECA0JAK101XB	6.3V 100U	1	
C317	ECA0JAK470XH	6.3V 47U	1	
C318	ECUV1H470JCV	50V 47P	1	ECJ1VC1H470J
C319	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C320	ECA0JAM102XB	6.3V 1000U	1	
C321	ECA0JAK470XH	6.3V 47U	1	
C322	ECA0JAK101XB	6.3V 100U	1	
C324	ECA0JAM102XB	6.3V 1000U	1	
C325	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C326	ECA0JAK101XB	6.3V 100U	1	
C327	ECA0JAK470XH	6.3V 47U	1	(PP)
C327	ECEA1AKN470B	10V 47U	1	(EB)(EG)
C328	ECA0JAK331XB	6.3V 330U	1	
C329	ECA0JAK470XH	6.3V 47U	1	(PP)
C329	ECEA1AKN470B	10V 47U	1	(EB)(EG)
C331	ECA0JAK331XB	6.3V 330U	1	
C333,34	F1H1H104A783	50V 0.1U	2	
C336	ECA0JAK101XB	6.3V 100U	1	(EB)(EG)
C337	ECA0JAM102XB	6.3V 1000U	1	(EB)(EG)
C338	ECA1CAK220XB	16V 22U	1	(EB)(EG)
C339	F1H1H104A783	50V 0.1U	1	(EB)(EG)
C340	ECA1HAK010XI	50V 1U	1	(EB)(EG)
C344	ECA1HAK010XI	50V 1U	1	(EB)(EG)
C345	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748 (EB)(EG)
C346	ECA1HAK010XI	50V 1U	1	(EB)(EG)
C347	F1H1H104A783	50V 0.1U	1	(EB)(EG)
C348,49	ECUVNH103KBV	50V 0.01U	2	F1H1H103A748 (EB)(EG)
C350	ECA1HAK010XI	50V 1U	1	(EB)(EG)
C351	ECUV1H470JCV	50V 47P	1	ECJ1VC1H470J
C352,53	ECUVNH103KBV	50V 0.01U	2	F1H1H103A748 (EB)(EG)
C354	F1H0J2250003	6.3V 2.2U	1	
C355,56	F1H1A105A028	10V 1U	2	(EB)(EG)

C357	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748 (EB)(EG)
C359	ECA0JAK101XB	6.3V 100U	1	(EB)(EG)
C362	F1H0J2250003	6.3V 2.2U	1	(EB)(EG)
C415,16	ECUV1H471KBV	50V 470P	2	F1H1H471A013
C419,20	F1H1H104A783	50V 0.1U	2	
C421	ECUV1H471KBV	50V 470P	1	F1H1H471A013
C422-24	ECUV1H470JCV	50V 47P	3	ECJ1VC1H470J
C425-32	ECA1CAK100XB	16V 10U	8	
C433,34	ECUV1H470JCV	50V 47P	2	ECJ1VC1H470J
C435,36	ECUV1H471KBV	50V 470P	2	F1H1H471A013
C437	ECJ1VB1H102K	50V 1000P	1	
C439,40	ECUV1H471KBV	50V 470P	2	F1H1H471A013
C441	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C449-52	F1H1H104A783	50V 0.1U	4	
C453-55	ECUV1H471KBV	50V 470P	3	F1H1H471A013
C501-08	ECA1HAK010XI	50V 1U	8	
C511	ECEA1HKA4R7	50V 4.7U	1	
C512	F1H1H104A783	50V 0.1U	1	
C513	ECEA1HKA4R7	50V 4.7U	1	
C514	ECA0JAK101XB	6.3V 100U	1	
C515	F1H1A105A028	10V 1U	1	
C516	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C517	ECJ1VC1H050C	50V 5P	1	
C518	ECJ1VC1H120J	50V 12P	1	
C519,20	F1H1A105A028	10V 1U	2	
C521,22	ECJ1VB1H222K	50V 2200P	2	
C523	EEAFC0J101B	6.3V 100U	1	
C524	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C525,26	F1H1A105A028	10V 1U	2	
C527	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C528	ECA0JAK470XH	6.3V 47U	1	
C529	EEAFC0J101B	6.3V 100U	1	
C530	ECA0JAK470XH	6.3V 47U	1	
C531	ECA0JAK101XB	6.3V 100U	1	
C532,33	F1H1A105A028	10V 1U	2	
C535,36	ECJ1VB1H222K	50V 2200P	2	

C537-39	F1H1A105A028	10V 1U	3	
C542	ECJ1VB1E223K	25V 0.022U	1	
C543-45	F1H1A105A028	10V 1U	3	
C546	ECA1AAK221XH	10V 220U	1	
C547	ECJ1VB1E223K	25V 0.022U	1	
C548	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C551,52	F1H1A105A028	10V 1U	2	
C555,56	ECUV1H101JCV	50V 100P	2	ECJ1VC1H101J
C557,58	ECA1CAK100XB	16V 10U	2	
C559,60	ECUVNA154KBV	10V 0.15U	2	F1H1A154A028
C561,62	RCE1HKAR47BG	50V 0.47U	2	F2A1HR47A015
C565	F1H1A105A028	10V 1U	1	
C566	ECA1CAK100XB	16V 10U	1	
C569	F1H1H123A219	50V 0.012U	1	
C571,72	ECUV1H221KBV	50V 220P	2	ECJ1VB1H221K
C573,74	ECA1CAK100XB	16V 10U	2	
C575	ECQV1H154JM3	50V 0.15U	1	
C576	ECA1CAK100XB	16V 10U	1	
C577	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C578,79	ECUV1H470JCV	50V 47P	2	ECJ1VC1H470J
C591	F1H1H104A783	50V 0.1U	1	
C593	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C594	F1H1H104A783	50V 0.1U	1	
C595	ECA1CAK220XB	16V 22U	1	
C601,02	ECA1HAK2R2XB	50V 2.2U	2	
C605,06	ECEA1HKA4R7	50V 4.7U	2	
C607,08	ECUV1H101JCV	50V 100P	2	ECJ1VC1H101J
C609,10	ECUV1H680KCV	50V 68P	2	ECJ1VC1H680K
C611,12	F1H1H473A783	50V 0.047U	2	
C615,16	ECA1CAK100XB	16V 10U	2	
C617	ECA0JAK101XB	6.3V 100U	1	
C625	ECA1CAK100XB	16V 10U	1	
C626	RCE1HKA3R3BG	50V 3.3U	1	F2A1H3R3A015
C627,28	ECA1CAK100XB	16V 10U	2	
C631,32	ECJ1VB1H102K	50V 1000P	2	
C635,36	ECUVNH103KBV	50V 0.01U	2	F1H1H103A748
C639,40	ECA1CAK100XB	16V 10U	2	

C641-44	ECUV1C563KBV	16V 0.056U	4	ECJ1VB1C563K
C645,46	ECUV1H101JCV	50V 100P	2	ECJ1VC1H101J
C647,48	ECA1HAK010XI	50V 1U	2	
C655,56	ECA1HAK010XI	50V 1U	2	
C661	ECUV1H471KBV	50V 470P	1	F1H1H471A013
C662	ECA1CAK220XB	16V 22U	1	
C663	F1H1H473A783	50V 0.047U	1	
C664	ECJ1VB1H562K	50V 5600P	1	
C665	ECUVNA154KBV	10V 0.15U	1	F1H1A154A028
C666	ECJ1VB1C393K	16V 0.039U	1	
C667	F1H1H104A783	50V 0.1U	1	
C668	RCE1AKA330BG	10V 33U	1	F2A1A330A011
C669,70	ECUVNH103KBV	50V 0.01U	2	F1H1H103A748
C673,74	ECUV1H330JCV	50V 33P	2	ECJ1VC1H330J
C675,76	ECUV1H101JCV	50V 100P	2	ECJ1VC1H101J
C677,78	ECA1HAK010XI	50V 1U	2	
C679,80	ECA1CAK100XB	16V 10U	2	
C683,84	ECUV1H101JCV	50V 100P	2	ECJ1VC1H101J
C685	ECUV1H470JCV	50V 47P	1	ECJ1VC1H470J
C686	ECJ1VB1H102K	50V 1000P	1	
C687	ECA1HAK010XI	50V 1U	1	
C688,89	ECA1CAK100XB	16V 10U	2	
C690	ECA1CAK220XB	16V 22U	1	
C691	ECA1CAK100XB	16V 10U	1	
C693,94	ECUVNH103KBV	50V 0.01U	2	F1H1H103A748
C701,02	RCE1HKA3R3BG	50V 3.3U	2	F2A1H3R3A015
C703,04	F1H1H104A783	50V 0.1U	2	
C728	ECEA1HKA4R7	50V 4.7U	1	
C733,34	F1H1H104A783	50V 0.1U	2	
C802	ECA1HAK010XI	50V 1U	1	
C803	RCE1HKA3R3BG	50V 3.3U	1	F2A1H3R3A015
C810	F1H1H104A783	50V 0.1U	1	
C811	ECA0JAK101XB	6.3V 100U	1	
C812	ECJ1VB1H102K	50V 1000P	1	
C813	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C814	ECJ1VB1H102K	50V 1000P	1	
C815	ECA1AAM102XB	10V 1000U	1	

C850	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C860	ECJ1VB1H102K	50V 1000P	1	
C890	ECJ1VB1H561K	50V 560P	1	
C891	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C892	ECA1CAK220XB	16V 22U	1	
C901	EEAFC0J101B	6.3V 100U	1	
C902	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C903	ECUV1H121JCV	50V 120P	1	F1H1H121A004
C904	ECST1AY475R	10V 4.7U	1	
C905,06	ECUVNH103KBV	50V 0.01U	2	F1H1H103A748
C907-10	ECEA1EKS220B	25V 22U	4	
C911	F1H1H104A783	50V 0.1U	1	
C912-14	ECUV1H560KCV	50V 56P	3	ECJ1VC1H560K
C915,16	ECBT1C103KS3	16V 0.01U	2	
C917,18	ECBT1H104KB5	50V 0.1U	2	F1D1H1040002
C2001,02	EEE0JA101SP	6.3V 100U	2	
C2003-18	ECJ1ZF1C104Z	16V 0.1U	16	
C2021	EEE0JA101SP	6.3V 100U	1	
C2022-25	ECJ1ZF1C104Z	16V 0.1U	4	
C2031,32	ECJ1VB1C104K	16V 0.1U	2	
C2034	ECJ1VB1C393K	16V 0.039U	1	
C2035	ECJ1VB1H822K	50V 8200P	1	
C2036	ECJ1VB1C104K	16V 0.1U	1	
C2038	ECJ1VB1C104K	16V 0.1U	1	
C2039	ECJ1VB1H103K	50V 0.01U	1	
C2040	ECJ1VC1H102J	50V 1000P	1	
C2041,42	ECJ1VC1H331J	50V 330P	2	
C2043	ECJ1VC1H101J	50V 100P	1	
C2044	ECJ1VC1H391J	50V 390P	1	
C2045,46	ECJ1VC1H102J	50V 1000P	2	
C2047	ECJ1VB1H103K	50V 0.01U	1	
C2048	ECUV1C153KBV	16V 0.015U	1	ECJ1VB1C153K
C2050	ECJ1VB1C333K	16V 0.033U	1	
C2051	ECUV1H680JCV	50V 68P	1	ECJ1VC1H680J
C2052,53	ECJ1ZF1C104Z	16V 0.1U	2	
C2054	ECUX1H681JCV	50V 680P	1	
C2055	ECJ1VB1H682K	50V 6800P	1	

C2056,57	ECJ1VB1H272K	50V 2700P	2	
C2058	ECJ1VC1H102J	50V 1000P	1	
C2059	ECUV1H821JCV	50V 820P	1	ECJ1VC1H821J
C2060	ECJ1VC1H102J	50V 1000P	1	
C2061,62	ECJ1VC1H331J	50V 330P	2	
C2063-65	ECJ1VC1H102J	50V 1000P	3	
C2066,67	ECJ1VB1H472K	50V 4700P	2	
C2073	ECJ1ZF1C104Z	16V 0.1U	1	
C2101,02	ECJ1ZF1C104Z	16V 0.1U	2	
C2501	ECEA1CKS101	16V 100U	1	
C2502-04	ECJ1VB1C104K	16V 0.1U	3	
C2511-14	ECJ1VB1C104K	16V 0.1U	4	
C2521	ECEA1CKS101	16V 100U	1	
C2522	ECEA1CKS220	16V 22U	1	
C2523	EEAFC0J101B	6.3V 100U	1	
C2524-29	ECJ1VB1C104K	16V 0.1U	6	
C2530	EEAFC0J101B	6.3V 100U	1	
C3001,02	F2G0J331A015	6.3V 330U	2	
C3003-18	ECJ1ZF1C104Z	16V 0.1U	16	
C3019	F1H0J1050013	6.3V 1U	1	
C3020	ECJ1ZF1C104Z	16V 0.1U	1	
C3021	F1H0J1050013	6.3V 1U	1	
C3022-36	ECJ1ZF1C104Z	16V 0.1U	15	
C3037	F2G0J331A015	6.3V 330U	1	
C3038,39	ECJ1ZF1C104Z	16V 0.1U	2	
C3051	ECJ1VC1H220J	50V 22P	1	
C3061-74	ECJ1ZF1C104Z	16V 0.1U	14	
C3110	EEE0JA101SP	6.3V 100U	1	
C3111	ECJ1ZF1C104Z	16V 0.1U	1	
C3116	ECJ1ZF1C104Z	16V 0.1U	1	
C3121	ECJ1ZF1C104Z	16V 0.1U	1	
C3213,14	ECJ1VC1H120J	50V 12P	2	
C3215	ECJ1VB1H103K	50V 0.01U	1	
C3217,18	ECJ1VC1H120J	50V 12P	2	
C3219	ECJ1VB1H103K	50V 0.01U	1	
C3222,23	ECJ1VC1H150J	50V 15P	2	
C3224	ECJ1VB1H103K	50V 0.01U	1	

C4207-10	ECJ1ZF1C104Z	16V 0.1U	4	
C4211	F3F1A1060002	10V 10U	1	
C4215	ECJ1ZF1C104Z	16V 0.1U	1	
C4216	F2G0J101A015	6.3V 100U	1	
C4217	ECJ1ZF1C104Z	16V 0.1U	1	
C4219,20	F3F1A1060002	10V 10U	2	
C4222,23	F2G0J331A015	6.3V 330U	2	
C4234-37	ECJ1ZF1C104Z	16V 0.1U	4	
C5101,02	ECJ1VB1C104K	16V 0.1U	2	
C5103	ECST1AY106R	10V 10U	1	
C5110,11	ECEA0JKS470	6.3V 47U	2	
C5115,16	ECEA0JKS470	6.3V 47U	2	
C5117	ECJ1VB1C104K	16V 0.1U	1	
C5201,02	EEE1CA100SR	16V 10U	2	
C5203-05	ECJ1ZF1C104Z	16V 0.1U	3	
C5221	ECJ1ZF1C104Z	16V 0.1U	1	
C5232-34	ECJ1ZF1C104Z	16V 0.1U	3	
C5235,36	ECJ1VB1C104K	16V 0.1U	2	
C5254	ECUV1H391KBV	50V 390P	1	ECJ1VB1H391K
C5256	ECJ1VB1H222K	50V 2200P	1	
C5262	ECJ1VC1H181J	50V 180P	1	
C5264	ECJ1VB1C183K	16V 0.018U	1	
C5271	ECJ1VB1H102K	50V 1000P	1	
C5272	ECJ1VB1A224K	10V 0.22U	1	
C5273	ECJ1VB1H182K	50V 1800P	1	
C5274	ECJ1VB1C104K	16V 0.1U	1	
C5282	ECJ1VB1H103K	50V 0.01U	1	
C5283	ECJ1VC1H561J	50V 560P	1	
C5290	ECJ1VB1H102K	50V 1000P	1	
C5291	ECJ1VB1H272K	50V 2700P	1	
C5292	ECJ1VC1H101J	50V 100P	1	
C5299	ECJ1VC1H331J	50V 330P	1	
C6201	EEE0JA330WR	6.3V 33U	1	
C6202-06	ECJ1ZF1C104Z	16V 0.1U	5	
C6211	ECJ1VC1H101J	50V 100P	1	
C6215	ECJ1VB1C104K	16V 0.1U	1	
C6221-23	ECJ1ZF1C104Z	16V 0.1U	3	

C6251-53	F3F1A1060002	10V 10U	3	
C6254,55	ECJ1ZF1C104Z	16V 0.1U	2	
C6256	ECJ1VB1C104K	16V 0.1U	1	
C6257	EEE0JA101SP	6.3V 100U	1	
C6301,02	ECJ1ZF1C104Z	16V 0.1U	2	
C6561	EEE0GA470SR	4V 47U	1	
C6563	EEE0GA470SR	4V 47U	1	
C6564	ECJ1ZF1C104Z	16V 0.1U	1	
C6565	ECJ1VC1H150J	50V 15P	1	
C6566	ECJ1ZF1C104Z	16V 0.1U	1	
C6567	ECJ1VC1H150J	50V 15P	1	
C6568	ECJ1ZF1C104Z	16V 0.1U	1	
CN301	RJU100W07	CONNECTOR(7P)	1	K1KB07A00018
CN302,03	RJU100W11	CONNECTOR(11P)	2	K1KB11A00020
CN401	K1KA26A00089	CONNECTOR(26P)	1	
CN402	K1KA22A00044	CONNECTOR(22P)	1	
CN403	K1MN07A00032	CONNECTOR(7P)	1	
CN901	RJS1A9414	CONNECTOR(14P)	1	K1MN14A00049
CN902	RJS1A6603T1	CONNECTOR(3P)	1	K1MP03A00010
CN904	RJU100W11	CONNECTOR(11P)	1	K1KB11A00020
CN905	RJS4T6ZA	CONNECTOR(4P)	1	K1MP04B00006
CN906	RJS4T7ZA	CONNECTOR(4P)	1	K1MP04B00005
CN911	VJS4333B014W	CONNECTOR(14P)	1	K1MN14B00058
CN2501	RJS1A5208	CONNECTOR(8P)	1	K1MP08A00006
CP101	RJT100W11	CONNECTOR(11P)	1	K1KA11A00093
CP301	RJT100W07	CONNECTOR(7P)	1	K1KA07A00082
CP302,03	RJT100W11	CONNECTOR(11P)	2	K1KA11A00093
CP901	RJT100W11	CONNECTOR(11P)	1	K1KA11A00093
D11-14	1N5402BF	DIODE	4	
D16	MA143TX	DIODE	1	MA3J14300L
D17,18	B0AAMM000009	DIODE	2	(EB)(EG)
D19	MAZ80820HL	DIODE	1	
D20	MA143TX	DIODE	1	MA3J14300L
D22	SFPB-72V	DIODE	1	B0JCPC000004

D23	MA7075A	DIODE	1	
D24	SFPB-72V	DIODE	1	B0JCPC000004
D25	MA7075A	DIODE	1	
D26	MA2J11100L	DIODE	1	
D29	MA2J11100L	DIODE	1	
D30	MA143TX	DIODE	1	MA3J14300L
D32	MA2J11100L	DIODE	1	
D45	MA8075MTX	DIODE	1	MAZ80750ML
D51	MA8120M	DIODE	1	MAZ81200M (EB)(EG)
D71	MAZ82700ML	DIODE	1	
D72-77	B0AAMM000009	DIODE	6	
D78	MA143TX	DIODE	1	MA3J14300L
D79	MA2J11100L	DIODE	1	
D151	MA8051M	DIODE	1	MAZ80510M (EB)(EG)
D301	MA2J11100L	DIODE	1	(EB)(EG)
D401,02	MA2J11100L	DIODE	2	
D591	MA8051M	DIODE	1	MAZ80510M
D617	MA8043M	DIODE	1	MAZ80430M
D618,19	MA2J11100L	DIODE	2	
D645,46	MA2J11100L	DIODE	2	
D653,54	MA2J11100L	DIODE	2	
D718	B0AAMM000009	DIODE	1	
D720,21	MA2J11100L	DIODE	2	
D723	MA2J11100L	DIODE	1	
D729	MA2J11100L	DIODE	1	
D731,32	B0AAMM000009	DIODE	2	
D801,02	1SS380TE-17	DIODE	2	
D803-05	MA2J11100L	DIODE	3	
D902	MA8043M	DIODE	1	MAZ80430M
D903	MA2J11100L	DIODE	1	
D2521	B0ECKM000003	DIODE	1	
D5131	MA2J72800L	DIODE	1	
D6215	MA2J72800L	DIODE	1	
FL901	A2BB00000117	DISPLAY	1	
FL4201	F1H0J1050018	FILTER	1	

FL6251	F1H0J1050018	FILTER	1	
FL6253, 54	F1H0J1050018	FILTER	2	
FL6255	VLF1491S104T	FILTER	1	F1J1E1040022
FP71	K5G202AA0002	FUSE PROTECTOR	1	
FP2501	K1MN15A00037	CONNECTOR(15P)	1	
FP2502	RJS2A4207	CONNECTOR(7P)	1	K1MN07B00009
FP5101	K1MN30B00031	CONNECTOR(30P)	1	
FP5102	K1MN50B00021	CONNECTOR(50P)	1	
FP5201	K1MN50A00005	CONNECTOR(50P)	1	
IC11	C0DBAJG00002	IC	1	
IC12	C0DAAHG00011	IC	1	
IC13	C0CBADE00034	IC	1	
IC42	C0CBAHE00002	IC	1	
IC151	C1BB00000527	IC	1	(EB)(EG)
IC301	C9ZB00000377	IC	1	
IC302	C1AB00001731	IC	1	(EB)(EG)
IC303	C9ZB00000432	IC	1	(EB)(EG)
IC304	C1AB00001486	IC	1	(EB)(EG)
IC400	C0JZAS000004	IC	1	
IC401	NJM4558MTE1	IC	1	C0ABBB000109
IC402	C0JBAR000292	IC	1	
IC501	C2HBZC000013	IC	1	
IC502	M62444FPE1	IC	1	C1BB00000386
IC601	NJM4580D	IC	1	C0AABB000085
IC602	M62456FPE1	IC	1	C1BB00000389
IC603	C0ABCB000052	IC	1	
IC702,03	C0CBADE00034	IC	2	
IC801	C2CBJH000054	IC	1	
IC802	C3EBCG000031	IC	1	
IC901	C0HBB0000033	IC	1	
IC902	TC74HC00AFT1	IC	1	C0JBAC000135
IC903,04	GP2S40J	IC	2	B3NAB0000020
IC2001	MN103S26EGA	IC	1	
IC2101	C0JBAS000116	IC	1	

IC2501	C0GBF0000004	IC	1	
IC2521	C0GBG0000033	IC	1	
IC3001	MN6775511	IC	1	
IC3061, 62	C3ABPG000121	IC	2	
IC4211	C0FBBK000036	IC	1	
IC5201	AN22030A-VT	IC	1	
IC6201	MN102H60GFD	IC	1	
IC6211	PST596JNR	IC	1	C0EBE0000070
IC6221	C3EBGC000033	IC	1	
IC6222, 23	C0JBAA000001	IC	2	
IC6251	C0DBEZG00011	IC	1	
IC6252	C0DBFFG00004	IC	1	
IC6253	C0DBCGE00002	IC	1	
IC6301	RFKFMA66K320	IC	1	
IC6561	C1DB00000582	IC	1	
JK301	K2HA408B0052	JK,VCR IN/AUX,TV IN	1	
JK304	K2HA303B0030	JK,COMPONENT VIDEO OUT	1	
JK305	K1U208B00003	JK,VIDEO OUT/S1 VIDEO OUT	1	
JK306	K1FB121B0004	JK,AV CONNECTOR	1	(EB)(EG)
JK700	K1FB125B0095	JK,SYSTEM CONNECTOR	1	
JK901	RJJ37TK01-2C	JK,HEADPHONE	1	K2HC103B0049
K2003	ERJ3GEY0R00Z	CHIP JUMPER	1	
K2501,02	ERJ3GEY0R00V	1/16W 0	2	
K3002,03	ERJ3GEY0R00Z	CHIP JUMPER	2	
K3101	ERJ3GEY0R00Z	CHIP JUMPER	1	
K3106	ERJ3GEY0R00Z	CHIP JUMPER	1	
K4202-05	ERJ3GEY0R00Z	CHIP JUMPER	4	
K6301	ERJ3GEY0R00Z	CHIP JUMPER	1	
K6303	ERJ3GEY0R00Z	CHIP JUMPER	1	
L13	G0ZZ00001930	COIL	1	
L14	G0A200D00002	COIL	1	
L15	G0ZZ00001930	COIL	1	

L16,17	G0A200D00002	COIL	2	
L18,19	BL02RN2R65T2	COIL	2	J0JKB0000022
L41	RLQB100JTD-D	COIL	1	G0C100JA0030 (EB)(EG)
L151-53	J0JBC0000041	COIL	3	(EB)(EG)
L303,04	ELJFCR68KF	COIL	2	
L307,08	G0BYYYYY00016	COIL	2	
L521	J0JBC0000041	COIL	1	
L540	G0A200D00002	COIL	1	
L541	J0JBC0000041	COIL	1	
L545	J0JBC0000041	COIL	1	
L595	RLQB100JTD-D	COIL	1	G0C100JA0030
L596	G0A200D00002	COIL	1	
L801,02	J0JBC0000041	COIL	2	
L901	G0C101JA0019	COIL	1	
L2001,02	G1C100K00020	COIL	2	
L2021	G1C100K00020	COIL	1	
L3001	G1C100K00020	COIL	1	
L3091	G1C100K00020	COIL	1	
L3212,13	VLQ0808J4R7	COIL	2	G1C4R7J00008
L3216,17	VLQ0808J4R7	COIL	2	G1C4R7J00008
L3221,22	VLQ0808J4R7	COIL	2	G1C4R7J00008
L4211	G1C220KA0038	COIL	1	
L5110	G1C100K00020	COIL	1	
L5201,02	G1C100K00020	COIL	2	
L6561,62	G1C220KA0038	COIL	2	
LB2501-03	J0JHC0000045	COIL	3	
LB3001,02	J0JHC0000045	COIL	2	
LB3201-03	ERJ3GEYJ101	1/16W 100	3	D0GB101JA002
LB3205-09	J0JBC0000015	COIL	5	
LB4200	J0JBC0000015	COIL	1	
LB4201	VLP0155-T	COIL	1	J0JCC0000119
LB4207-12	VLP0155-T	COIL	6	J0JCC0000119

LB4214, 15	ERJ3GEY0R00Z	1/16W 0	2	
LB4218	ERJ3GEY0R00Z	1/16W 0	1	
LB5101	J0JHC0000045	COIL	1	
LB5102, 03	J0JBC0000015	COIL	2	
LB5202, 03	J0JHC0000045	COIL	2	
LB5205, 06	J0JBC0000015	COIL	2	
LB5208-10	J0JBC0000015	COIL	3	
LB5213	J0JBC0000015	COIL	1	
LB5217-19	J0JBC0000015	COIL	3	
LB5221-24	VLP0155-T	COIL	4	J0JCC0000119
LB5225	J0JBC0000015	COIL	1	
LB5226	VLP0155-T	COIL	1	J0JCC0000119
LB5227	J0JBC0000015	COIL	1	
LB5228-31	VLP0155-T	COIL	4	J0JCC0000119
LB5232	J0JBC0000015	COIL	1	
LB5233	VLP0155-T	COIL	1	J0JCC0000119
LB5235-38	VLP0155-T	COIL	4	J0JCC0000119
LB5239	J0JBC0000015	COIL	1	
LB6201	J0JBC0000015	COIL	1	
LB6202	VLP0155-T	COIL	1	J0JCC0000119
LB6221	J0JBC0000015	COIL	1	
LB6561	J0JBC0000015	COIL	1	
LB6562, 63	VLP0155-T	COIL	2	J0JCC0000119
LB6564	ERJ3GEYJ470V	1/16W 47	1	
LB6565	J0JCC0000077	COIL	1	
LB6566	VLP0155-T	COIL	1	J0JCC0000119
LB6567	J0JBC0000015	COIL	1	
<u>P1</u>	SFYF09A15Z	PROTECTION BAG	1	
<u>P2</u>	RPF0139-1	PROTECTION BAG (ACCESS.)	1	

<u>P4</u>	RPF0358	PROTECTION SHEET 1	1	
<u>P5</u>	RPG6506	PACKING CASE	1	(PP)
P5	RPG6504	PACKING CASE	1	(EB)(EG)
<u>P6</u>	RPH0242	PROTECTION SHEET 2	1	
<u>P7</u>	RPQ1434-1	ACCESSORY BOX	1	
<u>P8</u>	RPN1575	PAD	1	
<u>P9</u>	RPQ1536	SPECER 2	1	
<u>P10</u>	RPQ1544	SHEET	1	
<u>PCB1</u>	REP3479L-N	DVD MODULE PCB ASS'Y	1	[RTL](PP)
PCB1	REP3479M-N	DVD MODULE PCB ASS'Y	1	[RTL] (EB)(EG)
<u>PCB2</u>	REP3448B-M	MAIN PCB ASS'Y	1	[RTL](PP)
PCB2	REP3448C-M	MAIN PCB ASS'Y	1	[RTL] (EB)(EG)
<u>PCB3</u>	REP3449AB-S	OPERATION PCB ASS'Y	1	[RTL]
<u>PCB4</u>	REP3449AD-S	MOTOR PCB ASS'Y	1	[RTL]
<u>PCB5</u>	REP3449AE-S	CONNECT PCB ASS'Y	1	[RTL]
<u>PCB6</u>	REP3449AF-S	SENSOR PCB1 ASS'Y	1	[RTL]
<u>PCB7</u>	REP3449AG-S	SENSOR PCB2 ASS'Y	1	[RTL]
<u>PCB8</u>	REP3449BA-S	FL PCB ASS'Y	1	[RTL]
<u>PCB9</u>	REP3449BC-S	DETECTOR SW PCB ASS'Y	1	[RTL]
<u>PCB10</u>	REP3449BH-S	SENSOR PCB3 ASS'Y	1	[RTL]
PS2001	VJS4047C010	CONNECTOR(10P)	1	K1MN10A00030
PS3201	K1KB22A00025	CONNECTOR(22P)	1	
PS4201	K1KB26A00027	CONNECTOR(26P)	1	
PS6201	VJS4047C010	CONNECTOR(10P)	1	K1MN10A00030
Q11	2SA20570P	TRANSISTOR	1	
Q12	2SD1819A0L	TRANSISTOR	1	
Q14,15	UN5214TX	TRANSISTOR	2	UNR521400L
Q16	2SB1417PQTA	TRANSISTOR	1	2SB14170JA
Q17	2SD1819A0L	TRANSISTOR	1	
Q18	2SB621A-R	TRANSISTOR	1	2SB0621AH

Q19	2SD1819A0L	TRANSISTOR	1	
Q20	2SB1218A	TRANSISTOR	1	
Q41	2SD2374PQAU	TRANSISTOR	1	2SD23740J1AU
Q42	2SB621A-R	TRANSISTOR	1	2SB0621AH
Q43	2SB1218A	TRANSISTOR	1	
Q71	2SB621A-R	TRANSISTOR	1	2SB0621AH
Q304	UN5111TX	TRANSISTOR	1	UNR511100L (EB)(EG)
Q305	UN5214TX	TRANSISTOR	1	UNR521400L (EB)(EG)
Q307	UN5214TX	TRANSISTOR	1	UNR521400L (EB)(EG)
Q308	UN5213TX	TRANSISTOR	1	UNR521300L (EB)(EG)
Q309,10	UN5214TX	TRANSISTOR	2	UNR521400L
Q311-13	2SB1218A	TRANSISTOR	3	(EB)(EG)
Q314	2SD1819A0L	TRANSISTOR	1	(EB)(EG)
Q315	2SB1218A	TRANSISTOR	1	(EB)(EG)
Q316,17	UN5214TX	TRANSISTOR	2	UNR521400L (EB)(EG)
Q401,02	UN5214TX	TRANSISTOR	2	UNR521400L
Q601,02	B1GFGCAA0001	TRANSISTOR	2	
Q603,04	UN5115TX	TRANSISTOR	2	UNR511500L
Q605,06	B1ABGC000001	TRANSISTOR	2	
Q607,08	UN5115TX	TRANSISTOR	2	UNR511500L
Q610	B1GFGCAA0001	TRANSISTOR	1	
Q611,12	B1ABGC000001	TRANSISTOR	2	
Q690	B1GFGCAA0001	TRANSISTOR	1	
Q691	UN5115TX	TRANSISTOR	1	UNR511500L
Q701,02	UN5115TX	TRANSISTOR	2	UNR511500L
Q703	2SB1218A	TRANSISTOR	1	
Q704	UNR521100L	TRANSISTOR	1	
Q731	UN5111TX	TRANSISTOR	1	UNR511100L
Q801	UN5214TX	TRANSISTOR	1	UNR521400L
Q901	UN5214TX	TRANSISTOR	1	UNR521400L
Q2001	2SD1819A0L	TRANSISTOR	1	
Q3111	2SB1218ARL	TRANSISTOR	1	
Q3116	2SB1218ARL	TRANSISTOR	1	
Q3121	2SB1218ARL	TRANSISTOR	1	

Q3212	2SB1218ARL	TRANSISTOR	1	
Q3217	2SB1218ARL	TRANSISTOR	1	
Q3222	2SB1218ARL	TRANSISTOR	1	
Q5111	2SB1115-T	TRANSISTOR	1	B1BDBF000004
Q5115	2SB1115-T	TRANSISTOR	1	B1BDBF000004
Q5271	UNR521100L	TRANSISTOR	1	
Q6215	UN5212TX	TRANSISTOR	1	UNR521200L
QR5221	UN2121	TRANSISTOR	1	
R11	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R12	ERJ3GEYJ102V	1/16W 1K	1	
R13	ERJ3GEYJ331V	1/16W 330	1	
R15	ERDS1FJ102	1/2W 1K	1	
R16	ERDS1FJ681	1/2W 680	1	
R17	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R18-21	ERJ3GEYJ1R0V	1/16W 1	4	
R22,23	ERJ3GEYJ102V	1/16W 1K	2	
R24	ERJ3GEYJ822V	1/16W 8.2K	1	D0GB822JA002
R25,26	ERJ3GEYJ102V	1/16W 1K	2	
R27	ERJ3GEYJ182V	1/16W 1.8K	1	
R28	ERJ3GEYJ472V	1/16W 4.7K	1	
R29	ERJ3GEYJ271V	1/16W 270	1	
R30	ERJ3GEYJ334V	1/16W 330K	1	
R31	ERJ3GEYJ681V	1/16W 680	1	D0GB681JA002
R32	ERJ3GEYJ472V	1/16W 4.7K	1	
R33	ERJ3GEYJ154V	1/16W 150K	1	
R34	ERJ3GEYJ681V	1/16W 680	1	D0GB681JA002
R35	ERJ3GEYJ271V	1/16W 270	1	
R41	ERDS1FJ2R2	1/2W 2.2	1	
R42	ERJ3GEYJ392V	1/16W 3.9K	1	
R43	ERJ3GEYJ151V	1/16W 150	1	
R44	ERJ3GEYD153V	1/16W 15K	1	D0HB153ZA002
R45	ERJ3GEYJ272V	1/16W 2.7K	1	
R47	ERDS1FJ2R2	1/2W 2.2	1	
R48	ERJ3GEYJ472V	1/16W 4.7K	1	
R49	ERJ3GEYD153V	1/16W 15K	1	D0HB153ZA002

R50	ERJ3GEYJ152V	1/16W 1.5K	1	(EB)(EG)
R71	ERJ3GEYJ472V	1/16W 4.7K	1	
R72	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R73	ERDS1FJ561	1/2W 560	1	
R74	ERJ3GEYJ154V	1/16W 150K	1	
R101,02	ERJ3GEYJ102V	1/16W 1K	2	
R103,04	ERJ3GEYJ103V	1/16W 10K	2	D0GB103JA002
R151	ERJ3GEYJ221V	1/16W 220	1	(EB)(EG)
R152,53	ERJ3GEYJ102V	1/16W 1K	2	(EB)(EG)
R156	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002 (EB)(EG)
R157-59	ERJ3GEYJ102V	1/16W 1K	3	(EB)(EG)
R305,06	ERJ3GEYJ822V	1/16W 8.2K	2	D0GB822JA002
R307,08	ERJ3GEYJ103V	1/16W 10K	2	D0GB103JA002
R309,10	ERJ3GEYJ822V	1/16W 8.2K	2	D0GB822JA002
R311,12	ERJ3GEYJ103V	1/16W 10K	2	D0GB103JA002
R315	ERJ3RBD221	1/16W 220	1	(EB)(EG)
R316	ERJ3RBD182V	1/16W 1.8K	1	(EB)(EG)
R317	ERJ3RBD221	1/16W 220	1	(EB)(EG)
R318	ERJ3RBD182V	1/16W 1.8K	1	(EB)(EG)
R319	ERJ3RBD102V	1/16W 1K	1	(EB)(EG)
R320	ERJ3RBD132V	1/16W 1.3K	1	(EB)(EG)
R321	ERJ3GEYJ472V	1/16W 4.7K	1	(EB)(EG)
R323	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R324	ERJ3EKF75R0	1/16W 75	1	(EB)(EG)
R325,26	ERJ3GEY0R00V	1/16W 0	2	(PP)
R329,30	ERJ3GEY0R00V	1/16W 0	2	(EB)(EG)
R334	ERJ3GEYJ1R0V	1/16W 1	1	
R335	ERJ3EKF75R0	1/16W 75	1	
R336	ERJ3GEYJ1R0V	1/16W 1	1	
R337,38	ERJ3EKF75R0	1/16W 75	2	
R339,40	ERJ3GEYJ1R0V	1/16W 1	2	
R341-43	ERJ3EKF75R0	1/16W 75	3	
R349-51	ERJ3EKF75R0	1/16W 75	3	(EB)(EG)
R352	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002 (EB)(EG)
R353	ERJ3GEY0R00V	1/16W 0	1	(EB)(EG)
R354-57	RLBV252AV-Y	COIL	4	J0JBC0000019

R358,59	ERJ3GEYJ102V	1/16W 1K	2	(EB)(EG)
R360	ERJ3GEY0R00V	1/16W 0	1	(PP)
R361	ERJ3GEYJ472V	1/16W 4.7K	1	(EB)(EG)
R362	ERJ3GEY0R00V	1/16W 0	1	
R374	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002 (EB)(EG)
R375	ERJ3GEYJ183V	1/16W 18K	1	D0GB183JA002 (EB)(EG)
R376	ERJ3GEYJ471V	1/16W 470	1	(EB)(EG)
R377	ERJ3GEYJ822V	1/16W 8.2K	1	D0GB822JA002 (EB)(EG)
R378	ERJ3EKF75R0	1/16W 75	1	(EB)(EG)
R379	ERJ3GEYJ822V	1/16W 8.2K	1	D0GB822JA002 (EB)(EG)
R380	ERJ3EKF75R0	1/16W 75	1	(EB)(EG)
R381	ERJ3GEYJ222V	1/16W 2.2K	1	
R385,86	ERJ3GEYJ102V	1/16W 1K	2	(EB)(EG)
R410	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R411,12	ERJ3GEYD153V	1/16W 15K	2	D0HB153ZA002
R415,16	ERJ3GEYJ682V	1/16W 6.8K	2	D0GB682JA002
R421	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R422	ERJ3GEYJ224V	1/16W 220K	1	D0GB224JA002
R427,28	ERJ3GEYJ332V	1/16W 3.3K	2	D0GB332JA002
R431,32	ERJ3GEYJ103V	1/16W 10K	2	D0GB103JA002
R433,34	ERJ3GEYJ104	1/16W 100K	2	
R435,36	ERJ3GEYJ123V	1/16W 12K	2	
R437,38	ERJ3GEYJ102V	1/16W 1K	2	
R439,40	ERJ3GEYJ393V	1/16W 39K	2	D0GB393JA002
R451,52	ERJ3GEYJ104	1/16W 100K	2	
R454	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R455-57	ERJ3GEYJ102V	1/16W 1K	3	
R461,62	ERJ3GEYJ272V	1/16W 2.7K	2	
R463,64	ERJ3GEYJ222V	1/16W 2.2K	2	
R465-67	ERJ3GEYJ682V	1/16W 6.8K	3	D0GB682JA002
R468	ERJ3GEYJ222V	1/16W 2.2K	1	
R473,74	ERJ3GEYJ104	1/16W 100K	2	
R475	ERJ3GEY0R00V	1/16W 0	1	
R501-08	ERJ3GEYJ102V	1/16W 1K	8	

R509	ERJ3GEYJ104	1/16W 100K	1	
R510-13	RLBV252AV-Y	COIL	4	J0JBC0000019
R516	ERJ3GEYJ470V	1/16W 47	1	
R517	ERJ3GEYJ105V	1/16W 1M	1	
R518	ERJ3GEYJ221V	1/16W 220	1	
R521,22	ERJ3GEYJ271V	1/16W 270	2	
R537,38	ERJ3GEYJ271V	1/16W 270	2	
R541	ERJ3GEYJ472V	1/16W 4.7K	1	
R542	ERJ3GEYJ104	1/16W 100K	1	
R543-45	ERJ3GEYJ331V	1/16W 330	3	
R551,52	ERJ3GEYJ103V	1/16W 10K	2	D0GB103JA002
R553,54	ERJ3GEYJ272V	1/16W 2.7K	2	
R555,56	ERJ3GEYJ123V	1/16W 12K	2	
R559,60	ERJ3GEYJ392V	1/16W 3.9K	2	
R565	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R567	ERJ3GEYJ471V	1/16W 470	1	
R568	ERJ3GEYJ332V	1/16W 3.3K	1	D0GB332JA002
R569	ERJ3GEYJ471V	1/16W 470	1	
R571	ERJ3GEYJ222V	1/16W 2.2K	1	
R572	ERJ3GEYJ123V	1/16W 12K	1	
R575	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R578,79	ERJ3GEYJ222V	1/16W 2.2K	2	
R580	ERJ3GEYJ472V	1/16W 4.7K	1	
R581-83	ERJ3GEYJ473V	1/16W 47K	3	D0GB473JA002
R584-86	ERJ3GEYJ102V	1/16W 1K	3	
R591	ERJ3GEYJ391V	1/16W 390	1	
R592-94	ERJ3GEYJ473V	1/16W 47K	3	D0GB473JA002
R595	ERJ3GEYJ102V	1/16W 1K	1	
R601,02	ERJ3GEYJ122V	1/16W 1.2K	2	
R603,04	ERJ3GEYJ471V	1/16W 470	2	
R605,06	ERJ3GEYJ223V	1/16W 22K	2	D0GB223JA002
R607,08	ERJ3GEYJ332V	1/16W 3.3K	2	D0GB332JA002
R609,10	ERJ3GEYJ823V	1/16W 82K	2	D0GB823JA002
R611,12	ERJ3GEYJ392V	1/16W 3.9K	2	
R613,14	ERJ3GEYJ182V	1/16W 1.8K	2	
R615,16	ERJ3GEYJ102V	1/16W 1K	2	
R619,20	ERJ3GEYJ223V	1/16W 22K	2	D0GB223JA002

R621,22	ERJ3GEYJ183V	1/16W 18K	2	D0GB183JA002
R623,24	ERJ3GEYJ223V	1/16W 22K	2	D0GB223JA002
R625	ERJ3GEYJ123V	1/16W 12K	1	
R626	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R627,28	ERJ3GEYJ393V	1/16W 39K	2	D0GB393JA002
R629	ERJ3GEYJ682V	1/16W 6.8K	1	D0GB682JA002
R631,32	ERJ3GEYJ100	1/16W 10	2	
R633-36	ERJ3GEYJ390	1/16W 39	4	
R639,40	MCR03PZHJ561	1/16W 560	2	
R641,42	ERJ3GEYJ683V	1/16W 68K	2	D0GB683JA002
R643,44	ERJ3GEYJ333V	1/16W 33K	2	D0GB333JA002
R645,46	ERJ3GEYJ562V	1/16W 5.6K	2	D0GB562JA002
R647,48	ERJ3GEYJ473V	1/16W 47K	2	D0GB473JA002
R649,50	ERJ3GEYJ102V	1/16W 1K	2	
R651	ERJ3GEYD153V	1/16W 15K	1	D0HB153ZA002
R652	ERJ3GEYJ104	1/16W 100K	1	
R653	ERJ3GEYJ273V	1/16W 27K	1	D0GB273JA002
R654	ERJ3GEYJ824V	1/16W 820K	1	D0GB824JA002
R655,56	ERJ3GEYJ103V	1/16W 10K	2	D0GB103JA002
R657,58	ERJ3GEYJ332V	1/16W 3.3K	2	D0GB332JA002
R660	ERJ3GEYJ222V	1/16W 2.2K	1	
R661	ERJ3GEYJ123V	1/16W 12K	1	
R662	ERJ3GEYJ102V	1/16W 1K	1	
R663,64	ERJ3GEYJ823V	1/16W 82K	2	D0GB823JA002
R665	ERJ3GEYJ822V	1/16W 8.2K	1	D0GB822JA002
R666	ERJ3GEYD153V	1/16W 15K	1	D0HB153ZA002
R667,68	MCR03PZHJ561	1/16W 560	2	
R671,72	ERJ3GEYJ472V	1/16W 4.7K	2	
R673,74	ERJ3GEYJ473V	1/16W 47K	2	D0GB473JA002
R675,76	ERJ3GEYJ102V	1/16W 1K	2	
R677,78	ERJ3GEYJ273V	1/16W 27K	2	D0GB273JA002
R681	ERJ3GEYJ392V	1/16W 3.9K	1	
R682	ERJ3GEYJ682V	1/16W 6.8K	1	D0GB682JA002
R683	ERJ3GEY0R00V	1/16W 0	1	
R685,86	ERJ3GEYJ563V	1/16W 56K	2	
R687	ERJ3GEYJ222V	1/16W 2.2K	1	
R688	ERJ3GEYJ393V	1/16W 39K	1	D0GB393JA002

R689,90	ERJ3GEYJ273V	1/16W 27K	2	D0GB273JA002
R691	ERJ3GEY0R00V	1/16W 0	1	
R692	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R693-98	ERJ3GEYJ102V	1/16W 1K	6	
R699	ERJ3GEYJ221V	1/16W 220	1	
R701,02	ERJ3GEYJ102V	1/16W 1K	2	
R703,04	ERJ3GEYJ183V	1/16W 18K	2	D0GB183JA002
R705,06	ERJ3GEYJ223V	1/16W 22K	2	D0GB223JA002
R711,12	ERJ3GEYJ223V	1/16W 22K	2	D0GB223JA002
R717	ERJ3GEYJ682V	1/16W 6.8K	1	D0GB682JA002
R723	ERJ3GEYJ224V	1/16W 220K	1	D0GB224JA002
R724	ERJ3GEYJ683V	1/16W 68K	1	D0GB683JA002
R725	ERJ3GEYJ102V	1/16W 1K	1	
R726	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R727	ERJ3GEYJ333V	1/16W 33K	1	D0GB333JA002
R728	ERJ3GEYJ472V	1/16W 4.7K	1	
R729	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R730	ERJ3GEYJ472V	1/16W 4.7K	1	
R731	ERJ14YKR39H	1/4W 0.39	1	
R733	ERDS1FVJ220T	1/2W 22	1	
R801,02	ERJ3GEYJ103V	1/16W 10K	2	D0GB103JA002
R803,04	ERJ3GEYJ221V	1/16W 220	2	
R805	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002 (PP)
R807	ERJ3GEY0R00V	1/16W 0	1	(EB)(EG)
R808	ERJ3GEY0R00V	1/16W 0	1	
R809	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R810	ERJ3GEYJ472V	1/16W 4.7K	1	
R811,12	ERJ3GEYJ103V	1/16W 10K	2	D0GB103JA002
R813	ERJ3GEYJ102V	1/16W 1K	1	
R814	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R815	ERJ3GEYJ472V	1/16W 4.7K	1	
R816,17	ERJ3GEYJ473V	1/16W 47K	2	D0GB473JA002
R818-25	ERJ3GEYJ221V	1/16W 220	8	
R826,27	ERJ3GEYJ103V	1/16W 10K	2	D0GB103JA002
R828-30	ERJ3GEYJ681V	1/16W 680	3	D0GB681JA002
R831	ERJ3GEYJ101	1/16W 100	1	D0GB101JA002

R835	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R836	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R837	ERJ3GEYJ102V	1/16W 1K	1	
R838	ERJ3GEYJ331V	1/16W 330	1	
R839	ERJ3GEYJ274V	1/16W 270K	1	
R840	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R841	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R842	ERJ3GEY0R00V	1/16W 0	1	(PP)
R842	ERJ3GEYJ821V	1/16W 820	1	(EB)(EG)
R843	ERJ3GEYJ331V	1/16W 330	1	
R844-47	ERJ3GEYJ102V	1/16W 1K	4	
R848	ERJ3GEY0R00V	1/16W 0	1	
R849	ERJ3GEYJ182V	1/16W 1.8K	1	(EB)(EG)
R849	ERJ3GEYJ821V	1/16W 820	1	(PP)
R850-52	ERJ3GEYJ223V	1/16W 22K	3	D0GB223JA002
R853	ERJ3GEYJ472V	1/16W 4.7K	1	
R854	ERJ3GEYJ221V	1/16W 220	1	
R855-57	ERJ3GEYJ102V	1/16W 1K	3	
R858	ERJ3GEYJ104	1/16W 100K	1	
R859	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R861,62	ERJ3GEYJ472V	1/16W 4.7K	2	
R863,64	ERJ3GEYJ104	1/16W 100K	2	(PP)
R865,66	ERJ3GEYJ331V	1/16W 330	2	
R869	ERJ3GEYJ331V	1/16W 330	1	
R870	ERJ3GEYJ221V	1/16W 220	1	
R872-75	ERJ3GEYJ331V	1/16W 330	4	
R876,77	ERJ3GEYJ221V	1/16W 220	2	
R879,80	ERJ3GEYJ221V	1/16W 220	2	
R881-85	ERJ3GEYJ102V	1/16W 1K	5	
R886	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R887	ERJ3GEYJ221V	1/16W 220	1	
R888	ERJ3GEYJ104	1/16W 100K	1	
R889-91	ERJ3GEYJ221V	1/16W 220	3	
R895,96	ERJ3GEYJ103V	1/16W 10K	2	D0GB103JA002
R897	ERJ3GEYJ101	1/16W 100	1	D0GB101JA002
R898	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R899	ERJ3GEYJ221V	1/16W 220	1	

R901,02	ERJ3GEYJ151V	1/16W 150	2	
R903-05	ERJ3GEYJ332V	1/16W 3.3K	3	D0GB332JA002
R906	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R910	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R911	ERDS2FJ821	1/4W 820	1	
R912	ERDS2FJ102	1/4W 1K	1	
R913	ERDS2FJ122	1/4W 1.2K	1	
R914	ERDS2FJ152	1/4W 1.5K	1	
R915	ERDS2FJ182	1/4W 1.8K	1	
R916	ERDS2FJ222	1/4W 2.2K	1	
R917	ERDS2FJ332	1/4W 3.3K	1	
R918	ERDS2FJ472	1/4W 4.7K	1	
R919	ERDS2TJ682T	1/4W 6.8K	1	
R920	ERDS2FJ123	1/4W 12K	1	
R921	ERDS2FJ223	1/4W 22K	1	
R922	ERJ3GEYJ152V	1/16W 1.5K	1	
R925	ERDS2FJ1R8	1/4W 1.8	1	
R926	ERDS2FJ1R5	1/4W 1.5	1	
R927	ERDS2FJ1R8	1/4W 1.8	1	
R928	ERDS2FJ1R5	1/4W 1.5	1	
R929	ERDS2FJ472	1/4W 4.7K	1	
R930	ERDS2FJ473	1/4W 47K	1	
R931	ERDS2FJ683	1/4W 68K	1	
R932	ERDS2FJ121	1/4W 120	1	
R933-35	ERDS2FJ102	1/4W 1K	3	
R2021	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R2022	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R2023	ERJ3GEYJ752V	1/16W 7.5K	1	
R2025,26	ERJ3GEYJ223V	1/16W 22K	2	D0GB223JA002
R2027,28	ERJ3GEYJ563V	1/16W 56K	2	
R2029	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R2030	ERJ3GEYJ102V	1/16W 1K	1	
R2031	MCR03PZHJ561	1/16W 560	1	
R2032	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R2033	ERJ3GEYJ472V	1/16W 4.7K	1	
R2034	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R2035	ERJ3GEYJ272V	1/16W 2.7K	1	

R2036	ERJ3GEY0R00Z	CHIP JUMPER	1	
R2037	ERJ3GEYJ683V	1/16W 68K	1	D0GB683JA002
R2038	ERJ3GEYD153V	1/16W 15K	1	D0HB153ZA002
R2039	ERJ3GEYJ105V	1/16W 1M	1	
R2040,41	ERJ3GEYJ822V	1/16W 8.2K	2	D0GB822JA002
R2042-47	ERJ3GEYD153V	1/16W 15K	6	D0HB153ZA002
R2048	ERJ3GEYJ475V	1/16W 4.7M	1	
R2049	ERJ3GEYJ102V	1/16W 1K	1	
R2051,52	ERJ3GEYJ101	1/16W 100	2	D0GB101JA002
R2053,54	ERJ3GEYJ473V	1/16W 47K	2	D0GB473JA002
R2501,02	ERJ3GEYJ101	1/16W 100	2	D0GB101JA002
R2503	ERJ3GEY0R00V	1/16W 0	1	
R2504	ERJ14YKR39H	1/4W 0.39	1	
R2521	ERJ6GEYJ6R8V	1/8W 6.8	1	
R2522-24	ERJ3GEY0R00V	1/16W 0	3	
R3001	ERJ3GEYJ220V	1/16W 22	1	
R3004	ERJ3RBD183	1/16W 18K	1	(EB)(EG)
R3004	ERJ3RBD203V	1/16W 20K	1	(PP)
R3005	ERJ3RBD122V	1/16W 1.2K	1	(PP)
R3005	ERJ3RBD911	1/16W 910	1	(EB)(EG)
R3006	ERJ3RBD153	1/16W 15K	1	
R3007	ERJ3RBD202	1/16W 2K	1	
R3008	ERJ3RBD132V	1/16W 1.3K	1	
R3009,10	ERJ3GEYJ101	1/16W 100	2	D0GB101JA002
R3051,52	ERJ3GEYJ101	1/16W 100	2	D0GB101JA002
R3101	ERJ3RED620V	1/16W 62	1	
R3102	ERJ3RED150V	1/16W 15	1	
R3106	ERJ3RED620V	1/16W 62	1	
R3107	ERJ3RED100V	1/16W 10	1	(PP)
R3107	ERJ3RED150V	1/16W 15	1	(EB)(EG)
R3111	ERJ3RBD101	1/16W 100	1	ERJ3RBD101V
R3112	ERJ3GEYJ3R3V	1/16W 3.3	1	(EB)(EG)
R3112	ERJ3RED160V	1/16W 16	1	(PP)
R3113	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3114	ERJ3GEYJ102V	1/16W 1K	1	
R3116	ERJ3RED560V	1/16W 56	1	
R3117	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002

R3118	ERJ3GEYJ102V	1/16W 1K	1	
R3121	ERJ3RED560V	1/16W 56	1	
R3122	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3123	ERJ3GEYJ102V	1/16W 1K	1	
R3235	MCR03PZHJ561	1/16W 560	1	
R3236	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R3237	ERJ3GEYJ101	1/16W 100	1	D0GB101JA002
R3238	ERJ3GEYJ102V	1/16W 1K	1	
R3239	MCR03PZHJ561	1/16W 560	1	
R3240	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R3241	ERJ3GEYJ101	1/16W 100	1	D0GB101JA002
R3242	ERJ3GEYJ102V	1/16W 1K	1	
R3243	MCR03PZHJ561	1/16W 560	1	
R3244	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R3245	ERJ3GEYJ101	1/16W 100	1	D0GB101JA002
R3246	ERJ3GEYJ102V	1/16W 1K	1	
R4213	ERJ3GEYJ470V	1/16W 47	1	
R5101	ERJ3GEYJ472V	1/16W 4.7K	1	
R5111	ERJ3GEYJ2R2V	1/16W 2.2	1	D0GB2R2JA002
R5112	ERJ12YJ270H	1/2W 27	1	
R5113	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R5114	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R5115	ERJ3GEYJ2R2V	1/16W 2.2	1	D0GB2R2JA002
R5116	ERJ12YJ270H	1/2W 27	1	
R5117	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R5121-25	ERJ3GEYJ560V	1/16W 56	5	
R5126	ERJ3GEYJ102V	1/16W 1K	1	
R5127	ERJ3GEYJ560V	1/16W 56	1	
R5132,33	ERJ3GEYJ102V	1/16W 1K	2	
R5201	ERJ3GEY0R00Z	CHIP JUMPER	1	
R5203	ERJ3GEY0R00Z	CHIP JUMPER	1	
R5221	ERJ3GEY0R00Z	CHIP JUMPER	1	
R5231,32	ERJ3GEYJ822V	1/16W 8.2K	2	D0GB822JA002
R5257	ERJ3GEY0R00Z	CHIP JUMPER	1	
R5262	ERJ3GEY0R00Z	CHIP JUMPER	1	
R5281	ERJ3GEYJ105V	1/16W 1M	1	
R5294	ERJ3GEYJ123V	1/16W 12K	1	

R5295	ERJ3GEYJ243V	1/16W 24K	1	D0GB243JA002
R5320	ERJ3GEY0R00Z	CHIP JUMPER	1	
R6201	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R6202	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R6206	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R6207,08	ERJ3GEYJ472V	1/16W 4.7K	2	
R6210	ERJ3GEYJ101	1/16W 100	1	D0GB101JA002
R6211	ERJ3GEYJ472V	1/16W 4.7K	1	
R6215	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R6216	ERJ3GEYJ102V	1/16W 1K	1	
R6251,52	ERJ3RBD101	1/16W 100	2	ERJ3RBD101V
R6253	ERJ3RBD102V	1/16W 1K	1	
R6562	ERJ3RBD331	1/16W 330	1	
R6563	ERJ3GEYJ103V	1/16W 10K	1	D0GB103JA002
R6565	ERJ3GEYJ470V	1/16W 47	1	
R6566	ERJ3GEYJ100	1/16W 10	1	
RA2021	EXBV4V102JV	1/32W 1K	1	
RA2022	EXBV4V472JV	1/32W 4.7K	1	
RA2023, 24	EXBV8VR000V	1/8W 0	2	
RA2501	EXBV4V103JV	1/32W 10K	1	
RA2521	EXBV8V473JV	1/16W 47K	1	
RA3001	EXBV4V102JV	1/32W 1K	1	
RA3002 -12	EXBV8V820JV	1/16W 82	11	
RA3013	EXBV4V220JV	1/32W 100	1	
RA3051	EXBV4V101JV	1/32W 100	1	
RA3053	EXBV4V101JV	1/32W 100	1	
RA5121	EXBV8V560JV	1/16W 56	1	
RA5122, 23	EXBV4V560J	1/32W 56	2	
RA5201	EXBV8V101JV	1/16W 100	1	
RA6201, 02	EXBV4V103JV	1/32W 10K	2	
RA6203	EXBV4V472JV	1/32W 4.7K	1	
RA6204	EXBV4V103JV	1/32W 10K	1	
RA6205	EXBV8V103J	1/16W 10K	1	D0GZ103J0001

RA6206	EXBV4V473JV	1/32W 47K	1	
RM901	RMN0738	FL HOLDER	1	
S901-12	EVQ11G05R	SW,OPERATION	12	
S913-15	RSH1A044-1A	SW,DETECTION	3	K0L1BA000044
W902	REZ1516	WIRE ASS'Y	1	
W905	REZ1567	WIRE ASS'Y	1	
W906	REZ1561	WIRE ASS'Y	1	
W2501	REZ1514	WIRE ASS'Y	1	
WA903	REZ1515	WIRE ASS'Y	1	
WA907	REZ1566	WIRE ASS'Y	1	
X151	RSXC4M33S02T	OSCILLATOR	1	H0H433400001 (EB)(EG)
X501	RSXZ36M8M01T	OSCILLATOR	1	
X801	H2B100500004	OSCILLATOR	1	
X6561	H0J368600005	OSCILLATOR	1	
Z101	ENG06701Q	TUNER PACK	1	(PP)
Z101	ENG07709Q	TUNER PACK	1	(EB)(EG)
Z301-03	J0JBC0000015	COIL	3	
Z308-10	J0JBC0000015	COIL	3	
Z311-14	J0JBC0000015	COIL	4	(EB)(EG)
Z901	B3RAD0000033	SENSOR	1	

[TOP](#) [PREVIOUS](#) [NEXT](#)

25 Cabinet Parts Location

[TOP](#) [PREVIOUS](#) [NEXT](#)



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26 Loading Unit Parts Location

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

27 Traverse Unit Parts Location

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

28 Packaging

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29 Schematic Diagram for printing with letter size

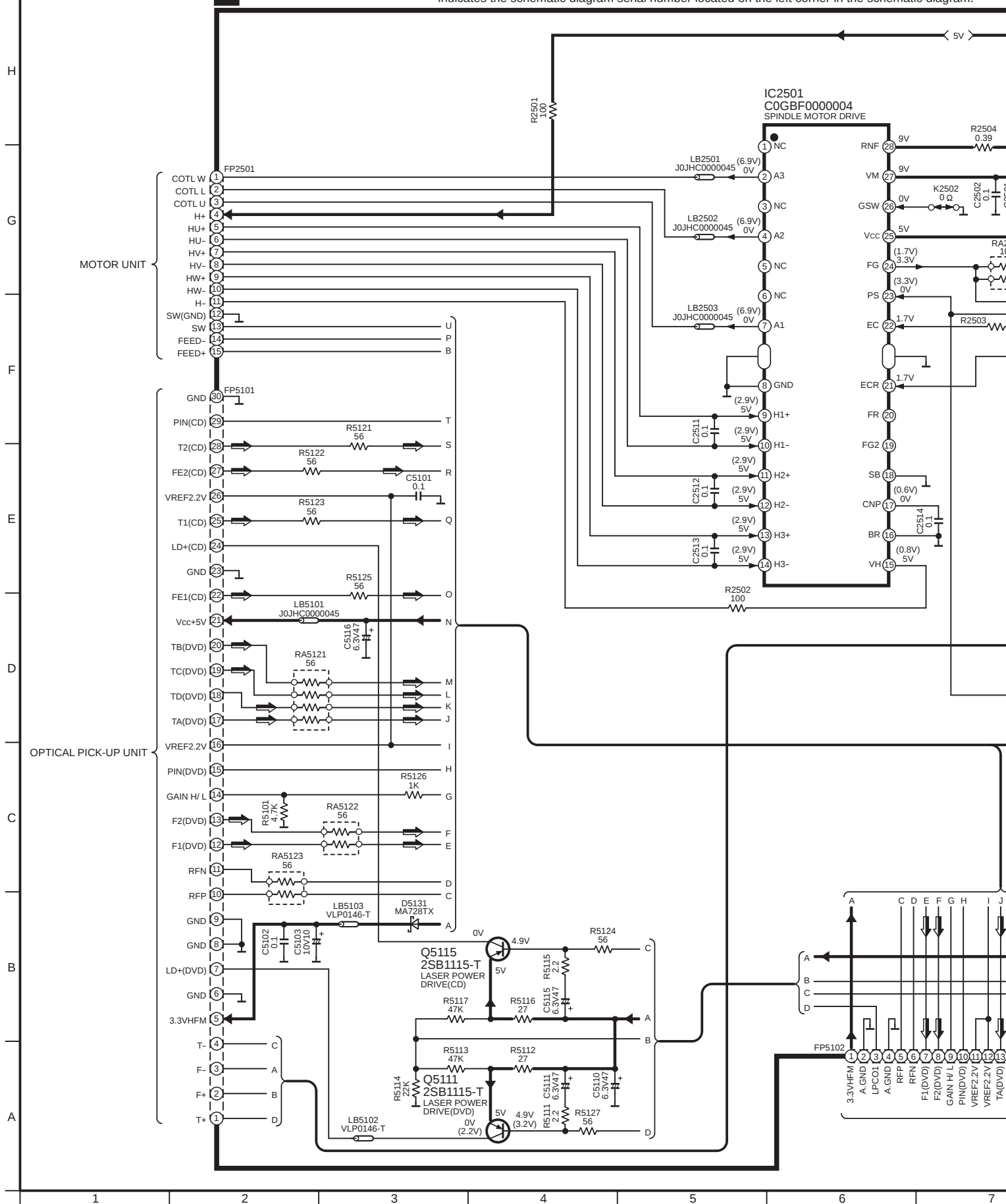
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A INTERFACE CIRCUIT

NOTE:
The number which noted at the connectors on the schematic diagram as
"SCHEMATIC DIAGRAM-1" or "SCHEMATIC DIAGRAM-2"
indicates the schematic diagram serial number located on the left corner in the schematic diagram.

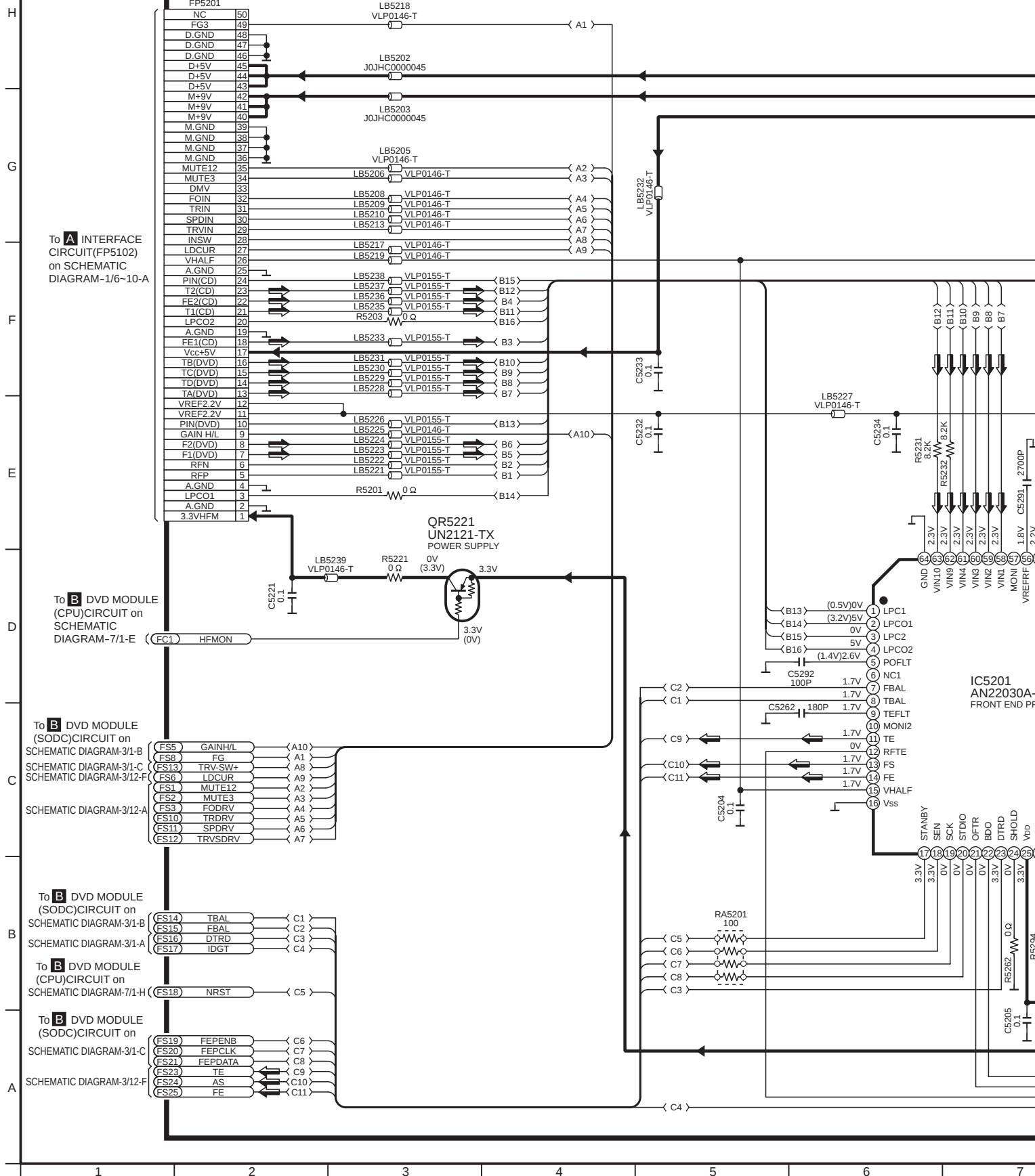


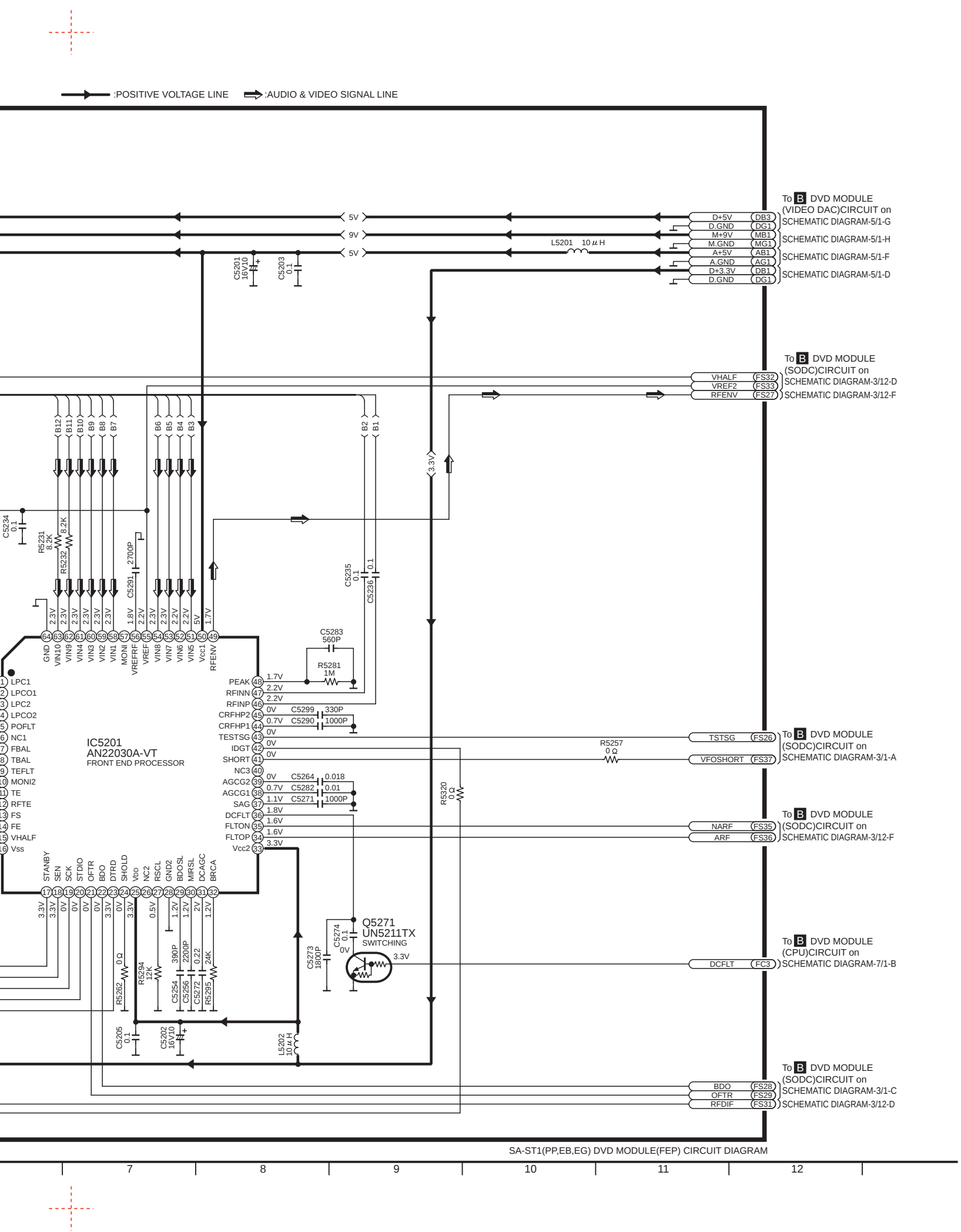
→ : POSITIVE VOLTAGE LINE ⇨ : AUDIO & VIDEO SIGNAL LINE



SCHEMATIC DIAGRAM-2

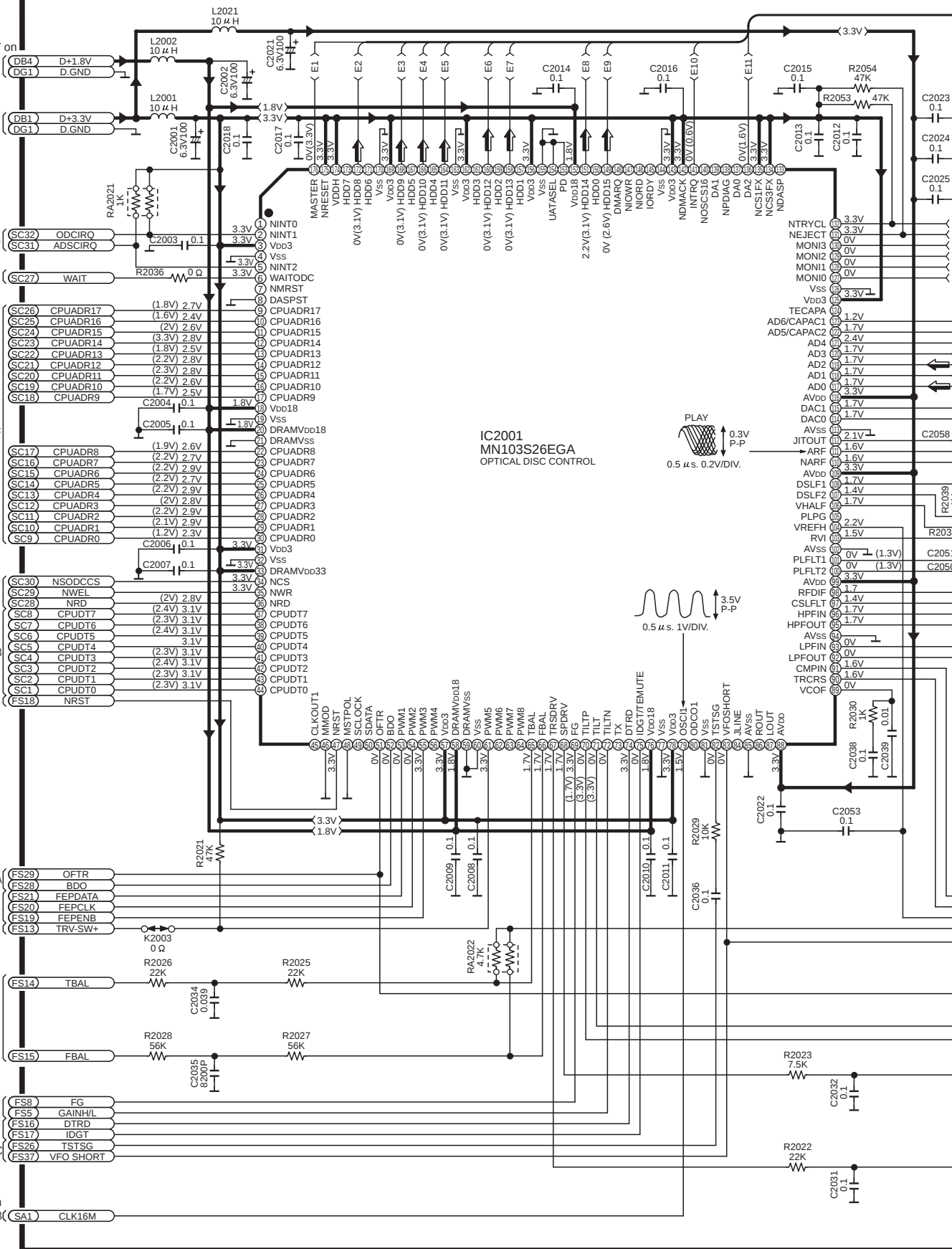
B DVD MODULE(FEP) CIRCUIT

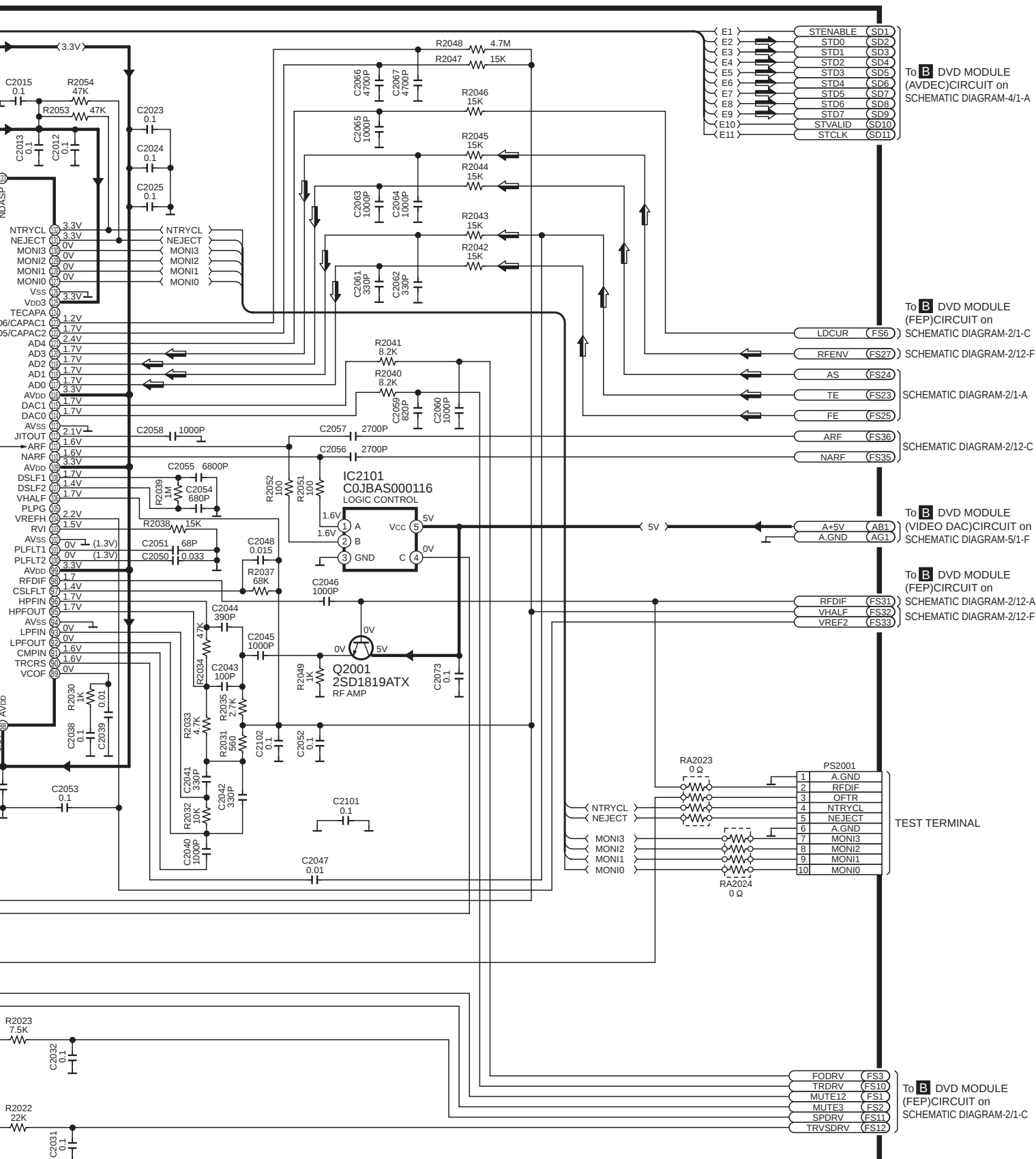




B DVD MODULE(SODC) CIRCUIT

To **B** DVD MODULE
(AUDIO DAC) CIRCUIT on
SCHEMATIC DIAGRAM-6/12-P

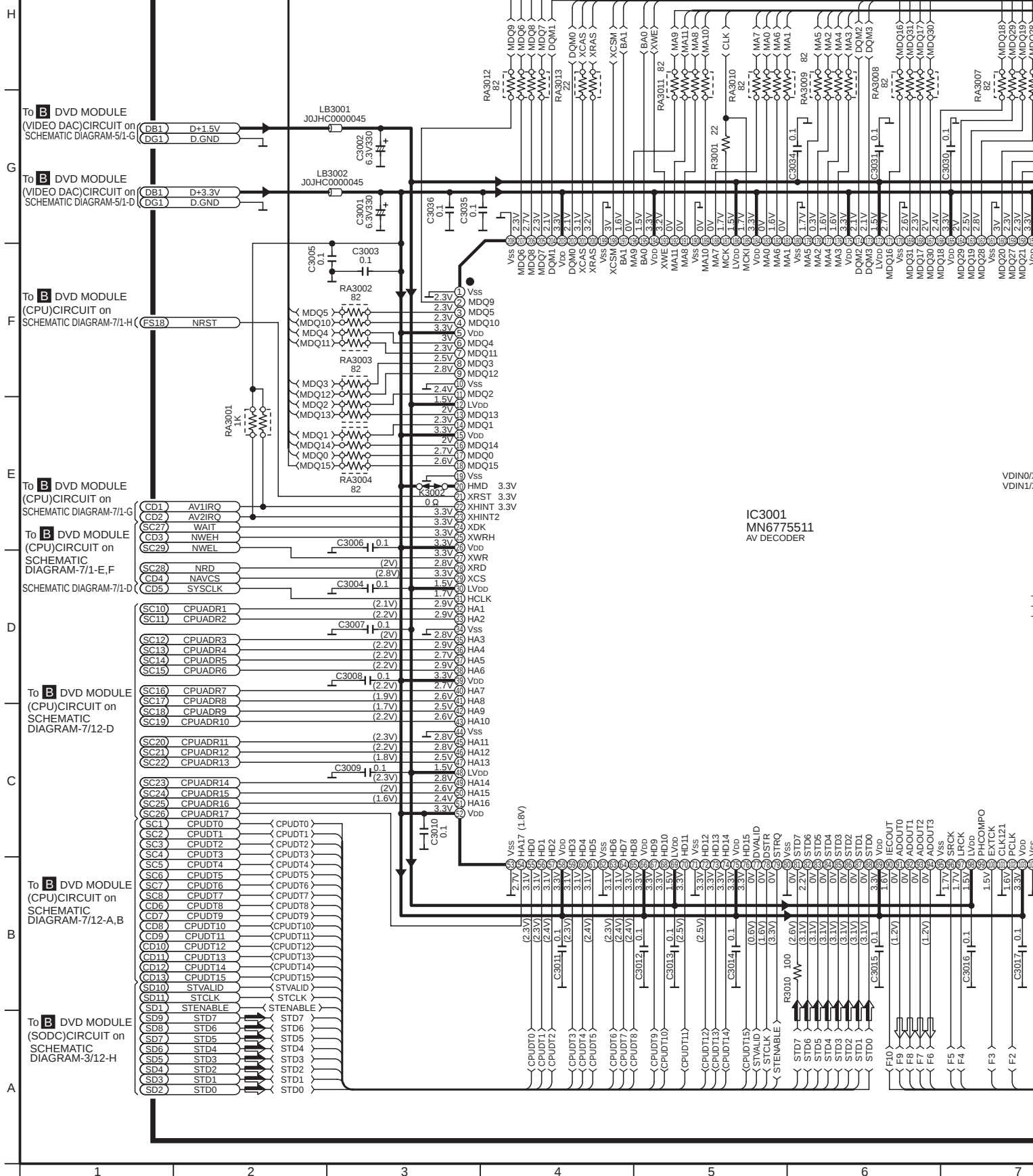




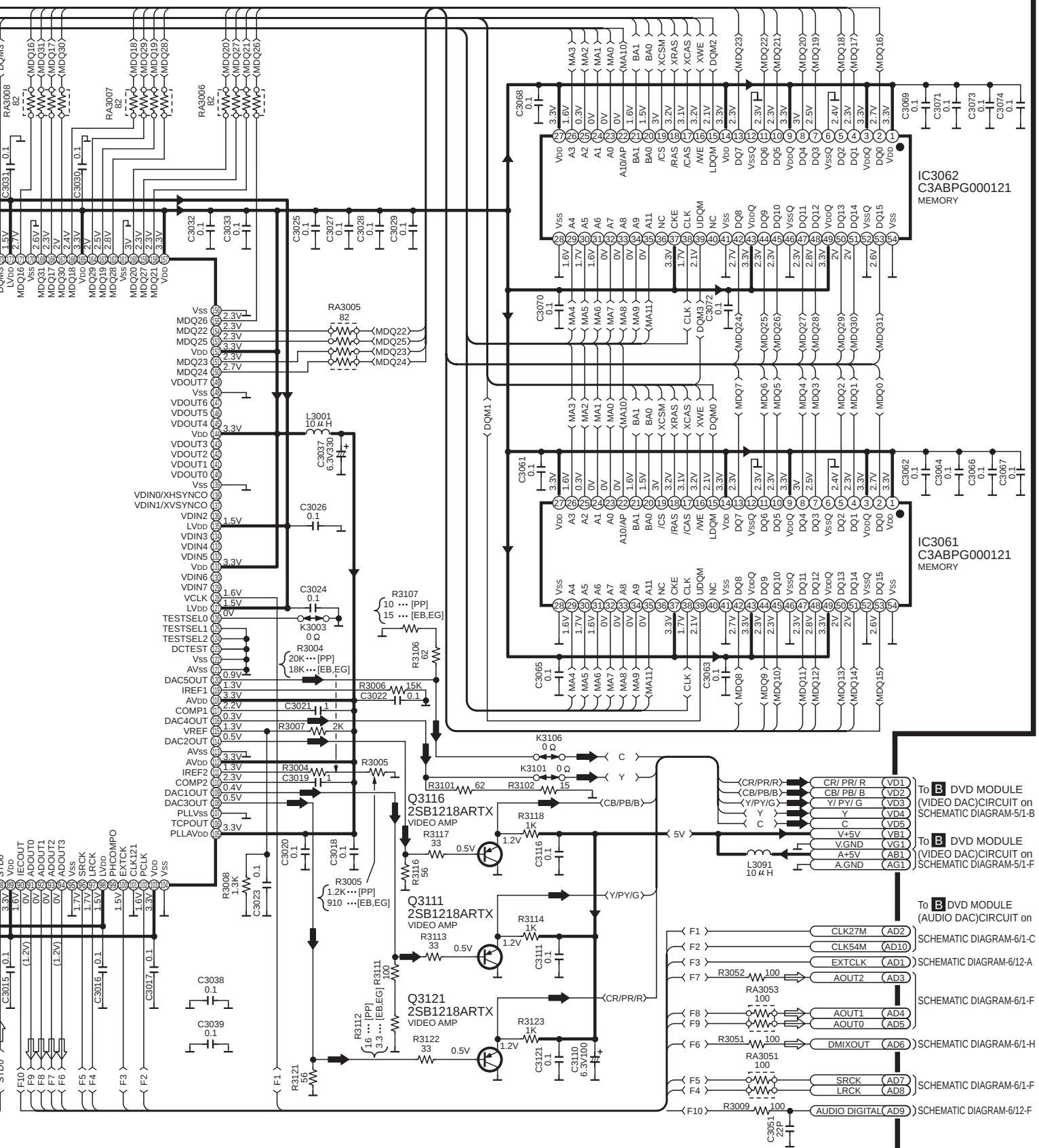
SCHEMATIC DIAGRAM-4

B DVD MODULE(AVDEC) CIRCUIT

:POSITIVE VOLTAGE LINE ➡ :AUDIO & VIDEO SIGNAL LINE ➡ :AUDIO SIGNAL LINE ➡

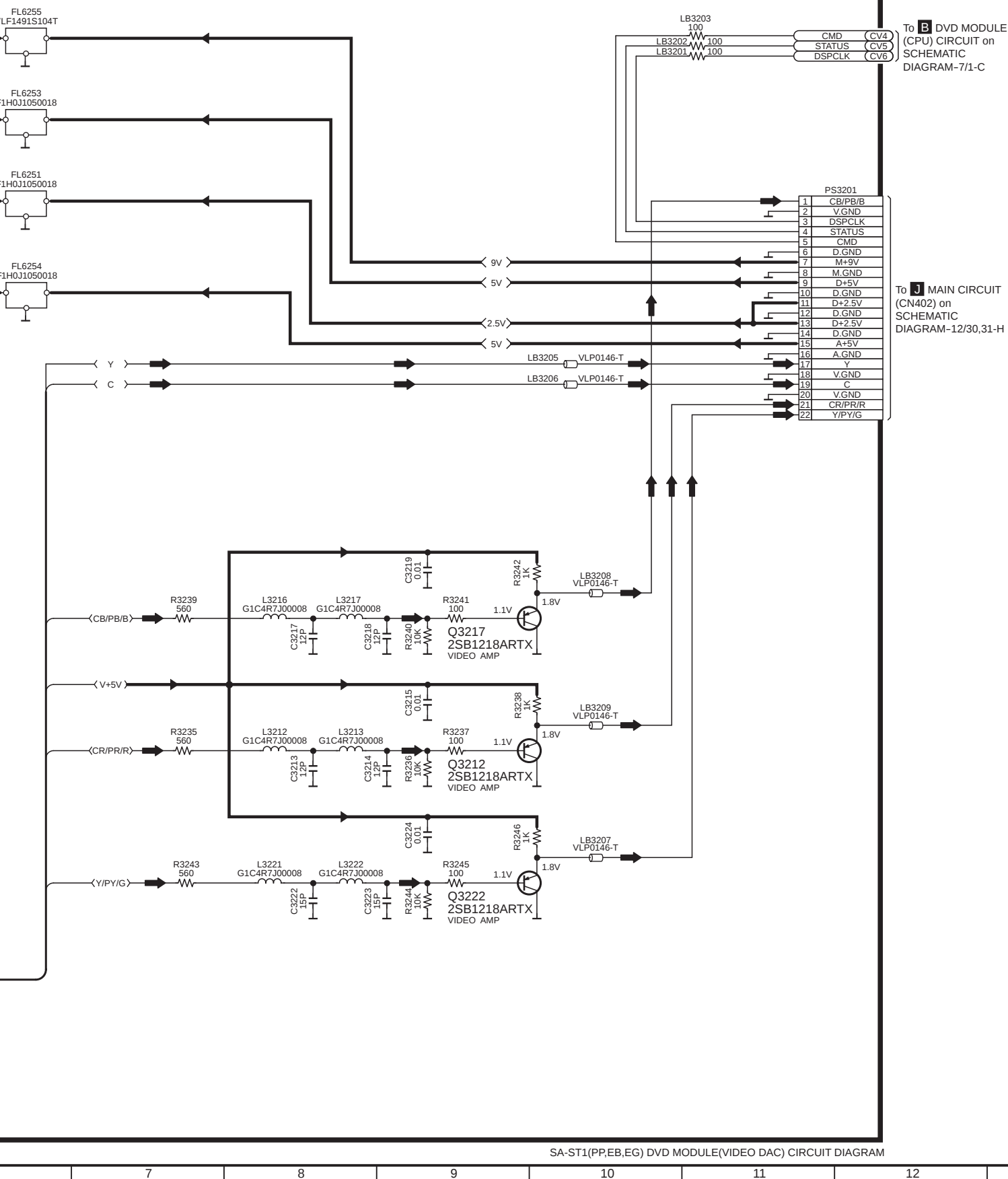


→:AUDIO SIGNAL LINE →:VIDEO SIGNAL LINE



SA-ST1(PP,EB,EG) DVD MODULE(AVDEC) CIRCUIT DIAGRAM





SCHEMATIC DIAGRAM-6

B DVD MODULE(AUDIO DAC) CIRCUIT

→ : POSITIVE VOLTAGE LINE ⇨ : AUDIO SIGNAL LINE ⇨⇨ : SURROUND SP. SIGNAL LINE

To B DVD MODULE
(AVDEC)CIRCUIT on
SCHEMATIC DIAGRAM-4/12-A

(AD6) DMIXOUT

To B DVD MODULE
(CPU)CIRCUIT on
SCHEMATIC DIAGRAM-7/12-G

(AC1) SBI1
(AC2) SBO1
(AC3) SBT1
(AC4) STBDAC2

To B DVD MODULE
(CPU)CIRCUIT on
SCHEMATIC DIAGRAM-7/1-H

(FS18) NRST

To B DVD MODULE
(AVDEC)CIRCUIT on
SCHEMATIC DIAGRAM-4/12-A

(AD7) SRCK
(AD8) LRCK

To B DVD MODULE
(VIDEO DAC)CIRCUIT on
SCHEMATIC DIAGRAM-5/1,2-C

(DB1) D+3.3V
(DG1) D.GND

To B DVD MODULE
(AVDEC)CIRCUIT on
SCHEMATIC DIAGRAM-4/12-A

(AD5) AOUT0
(AD4) AOUT1
(AD3) AOUT2

To B DVD MODULE
(AVDEC)CIRCUIT on
SCHEMATIC DIAGRAM-4/12-B

(AD10) CLK54M
(AD2) CLK27M

C4217
0.1

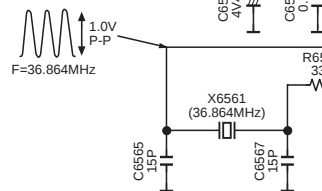
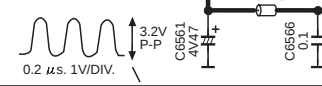
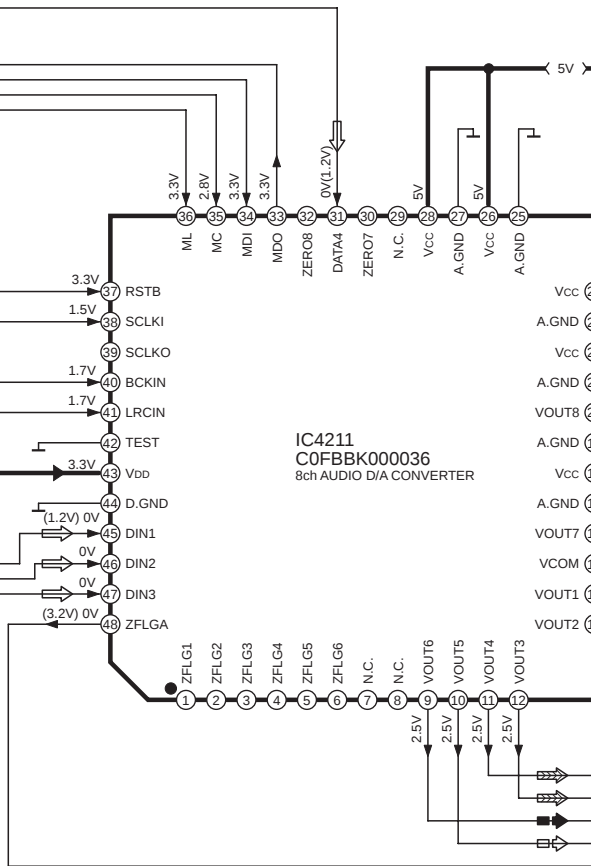
R4213
47

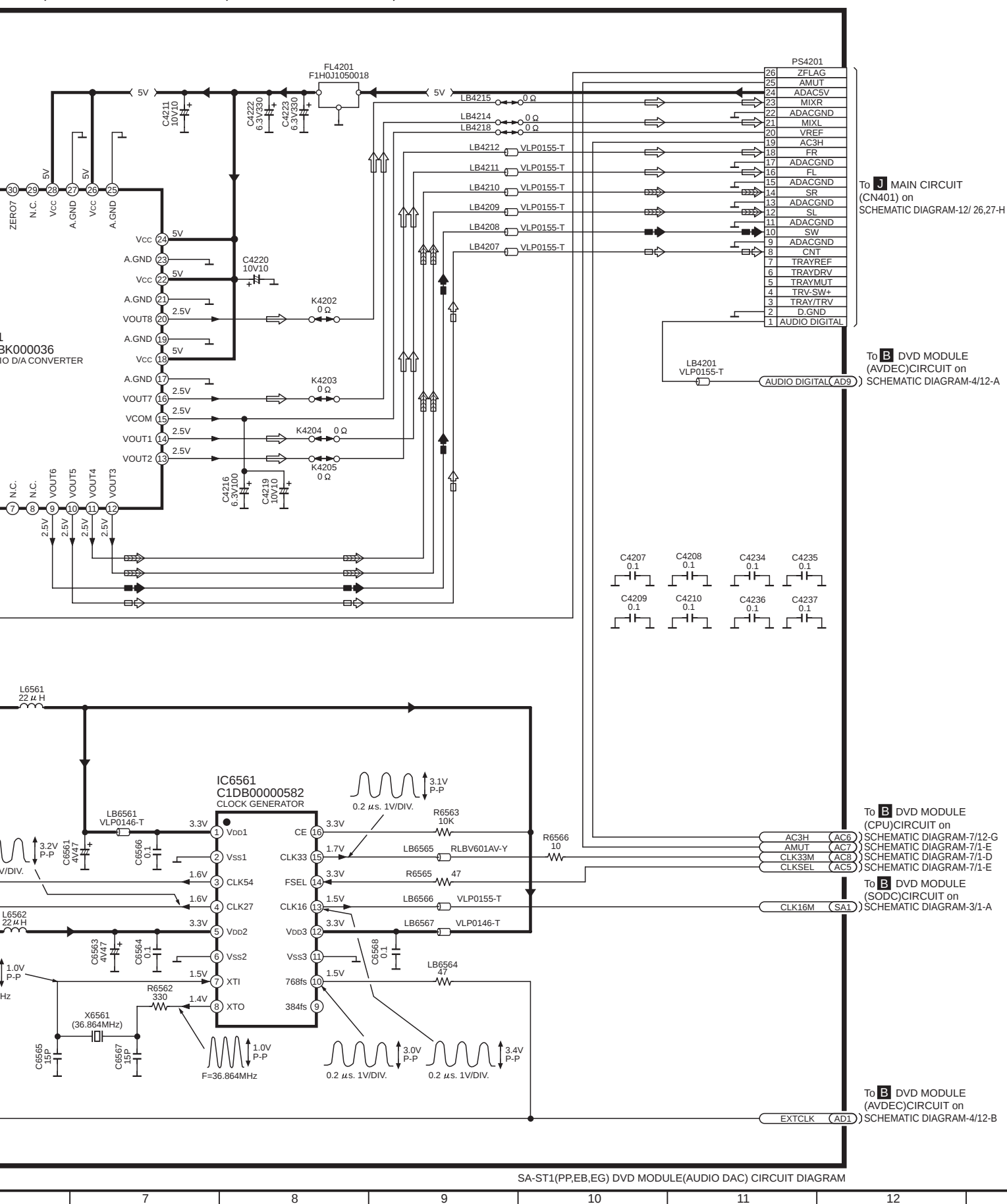
L4211
22 μ H

LB4200
VLP0146-T

C4215
0.1

IC4211
C0FBBK000036
8ch AUDIO D/A CONVERTER

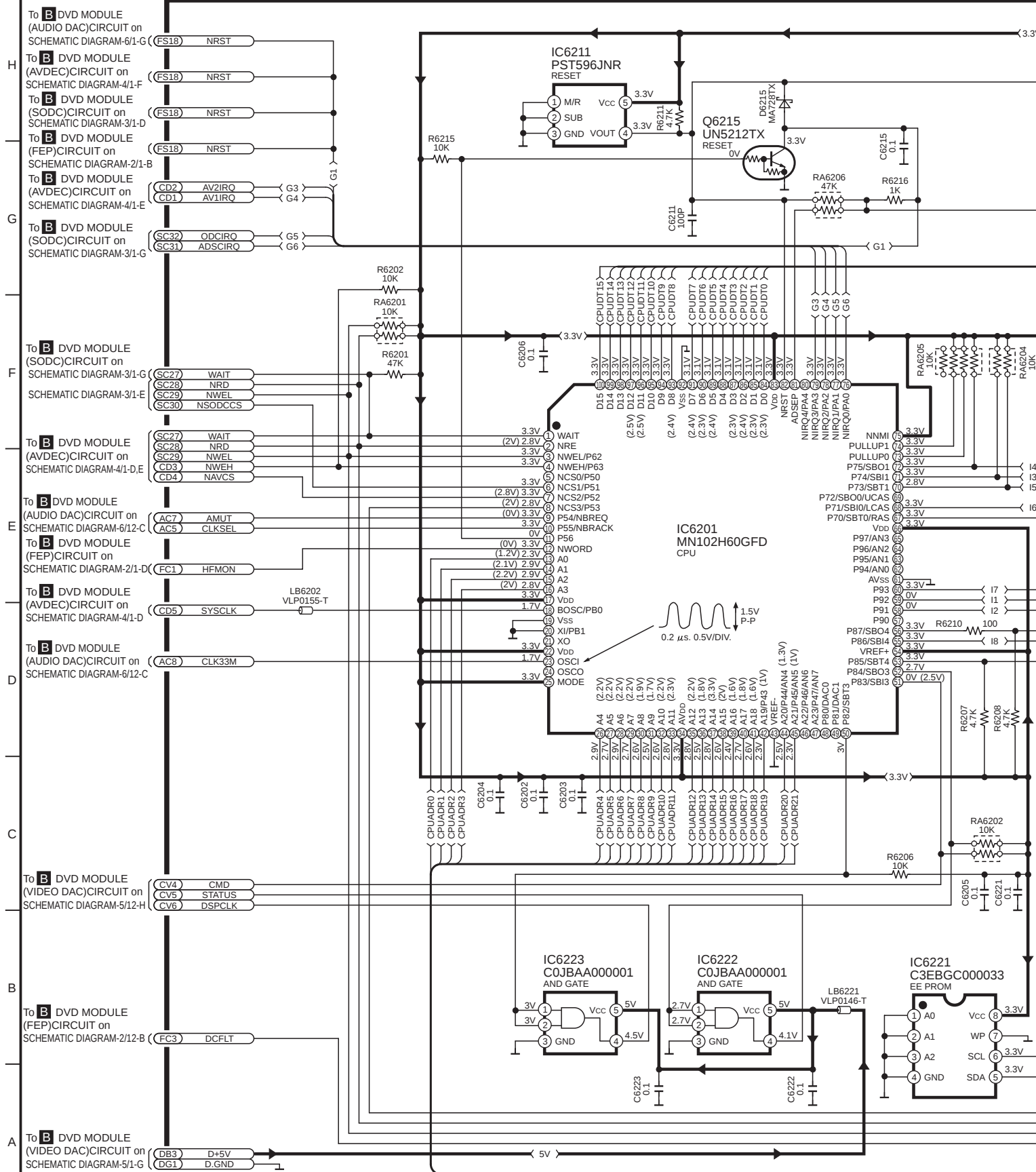


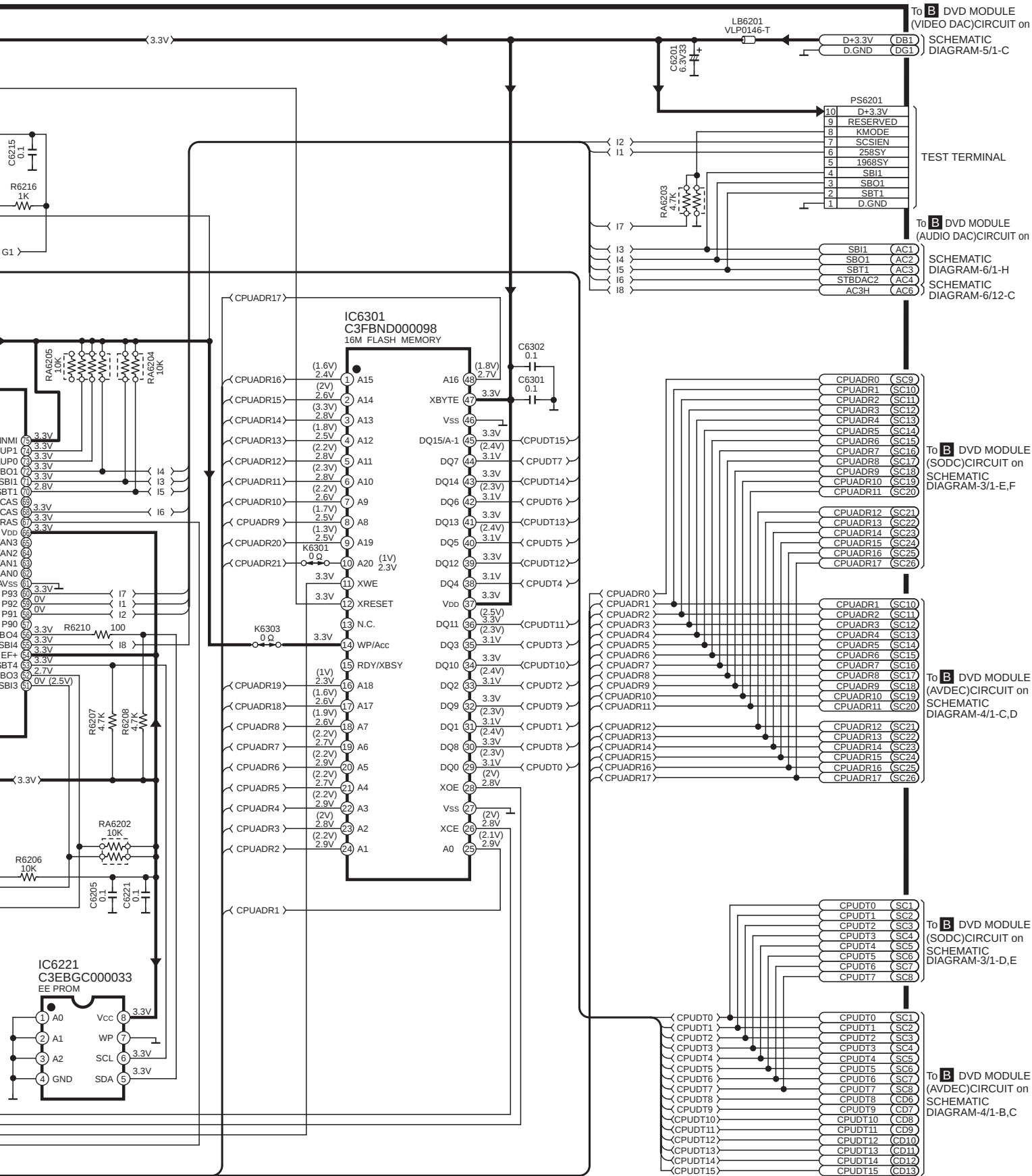


SCHEMATIC DIAGRAM-7

B DVD MODULE(CPU) CIRCUIT

→ : POSITIVE VOLTAGE LINE

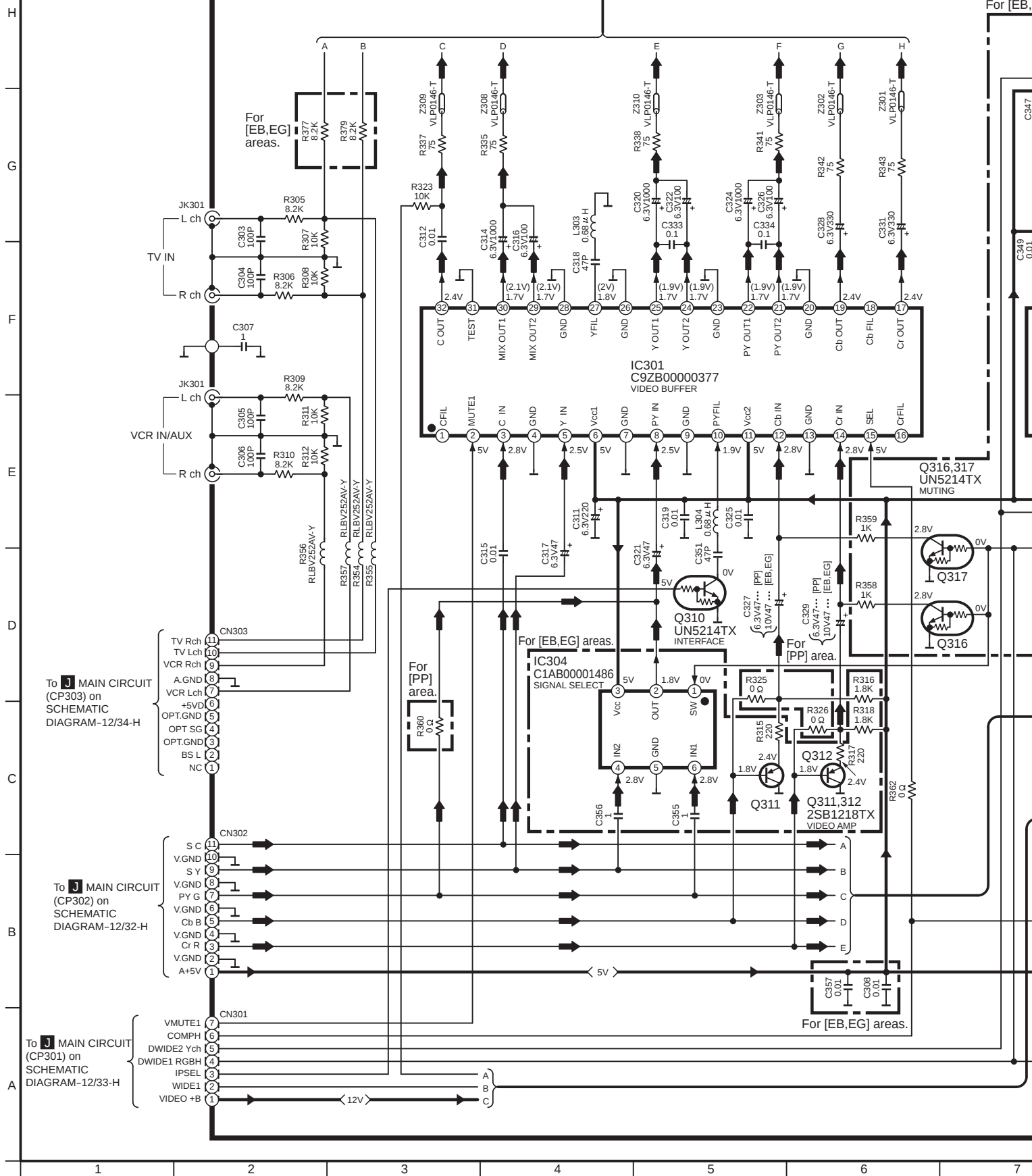


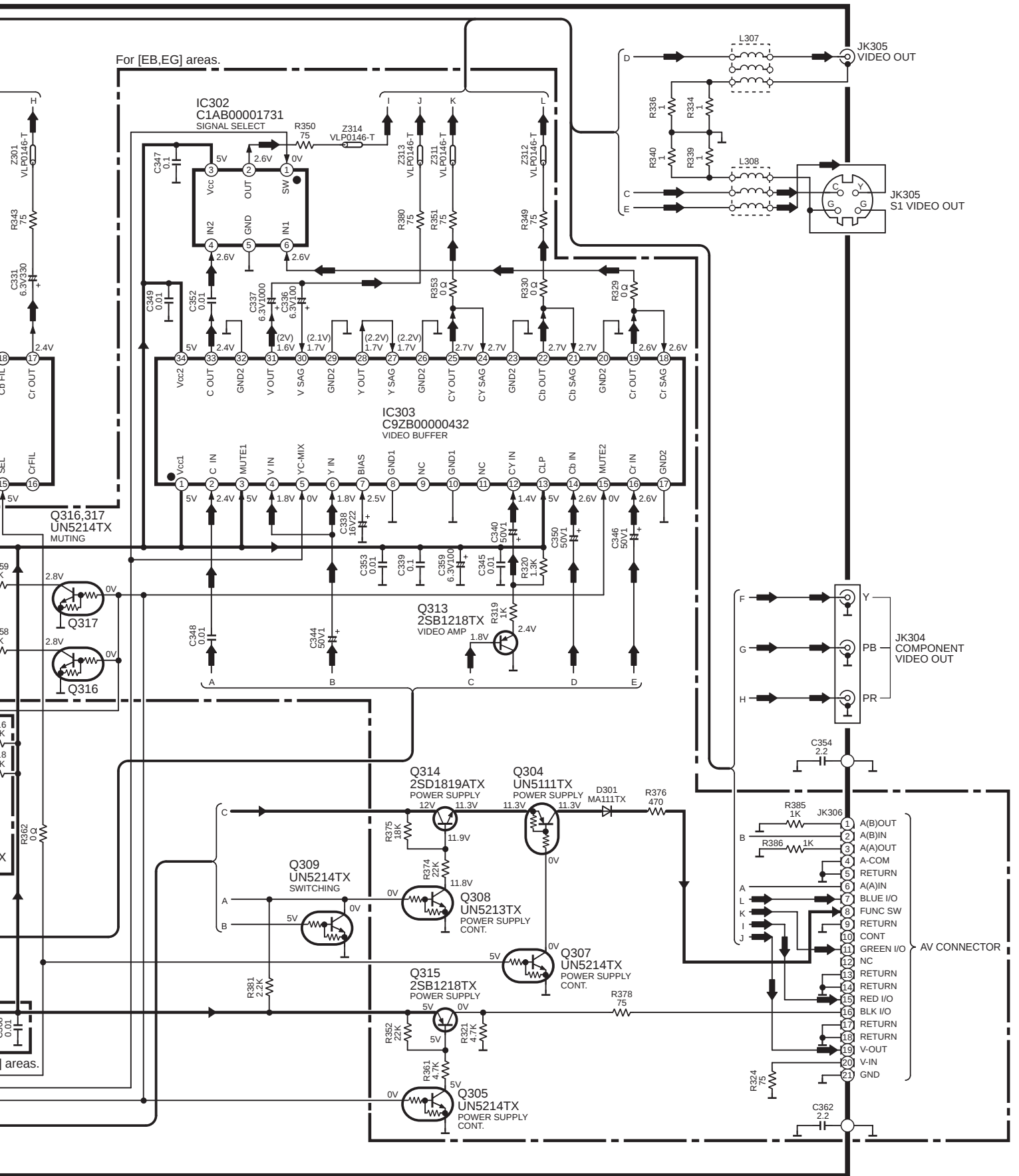


C IN/OUT TERMINAL CIRCUIT

→ : POSITIVE VOLTAGE LINE

➡ :VIDEO SIGNAL LINE





SA-ST1(PP,EB,EG) IN/OUT TERMINAL CIRCUIT DIAGRAM

D OPERATION CIRCUIT

 : POSITIVE VOLTAGE LINE
 : NEGATIVE VOLTAGE LINE
 : VIDEO SIGNAL LINE



E FL CIRCUIT

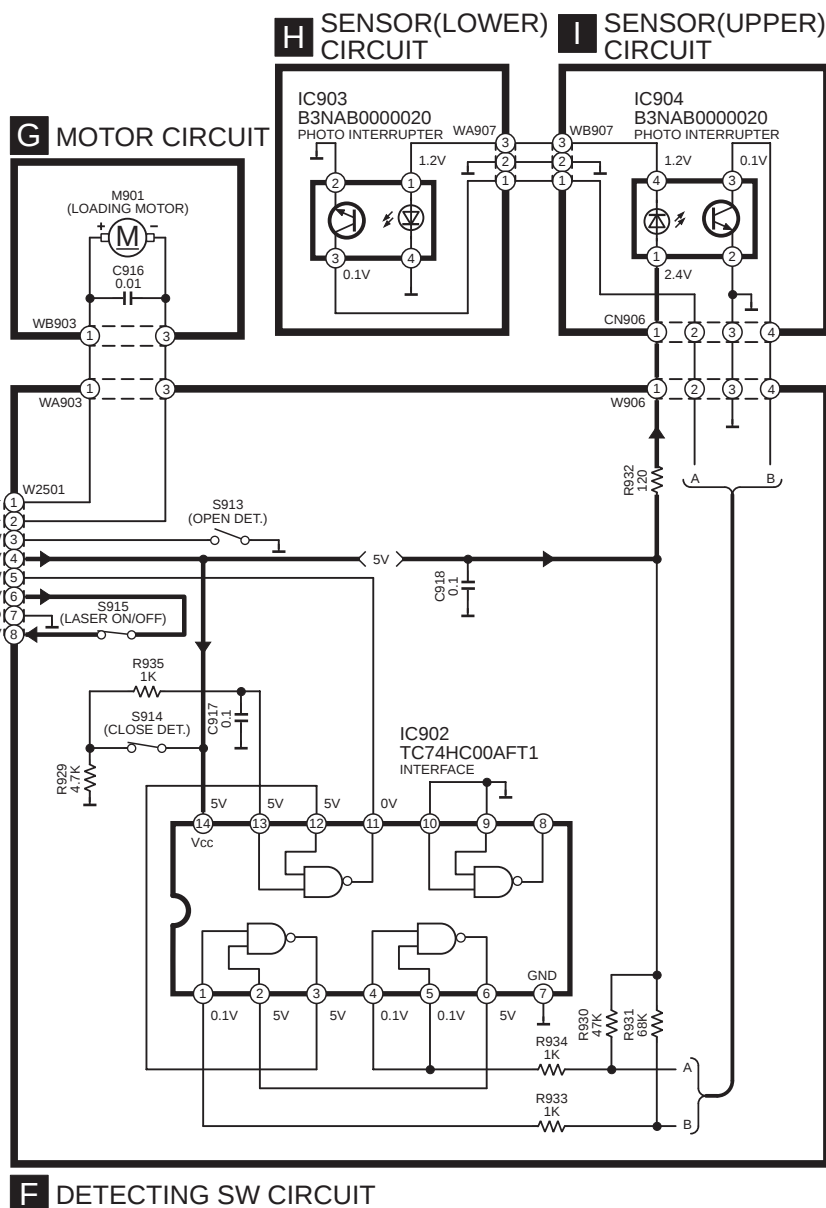


To **J** MAIN C
(CN901) on
SCHEMATIC
DIAGRAM-10/

- 14 CLOSE SW
- 13 SYS6V
- 12 LED GND
- 11 KEY
- 10 KEY GND
- 9 SW5V
- 8 FL CS
- 7 FL CK
- 6 FL RST
- 5 FL DA
- 4 -VP
- 3 FL 1
- 2 FL 2
- 1 D.GND

To **J** MAIN CIRCUIT
(CN901) on
SCHEMATIC
DIAGRAM-10/1,2-F

To **A** INTERFACE
CIRCUIT(CN2501) on
SCHEMATIC
DIAGRAM-1/11-A



SCHEMATIC DIAGRAM-10

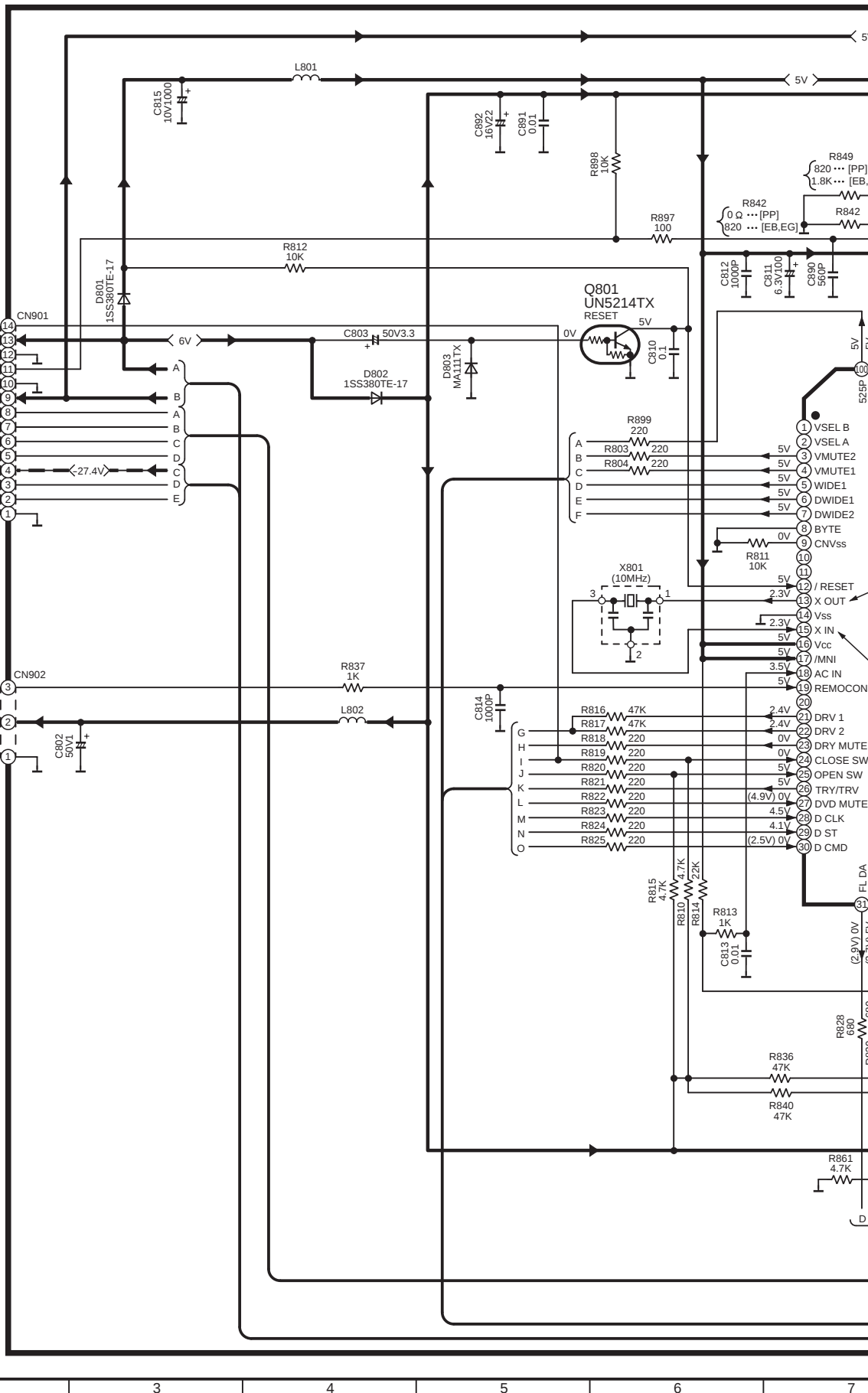
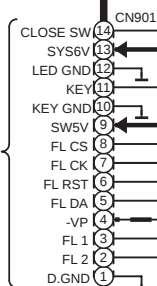
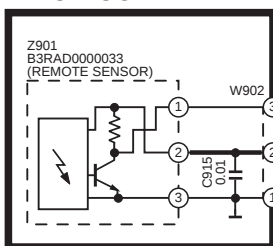
J MAIN CIRCUIT

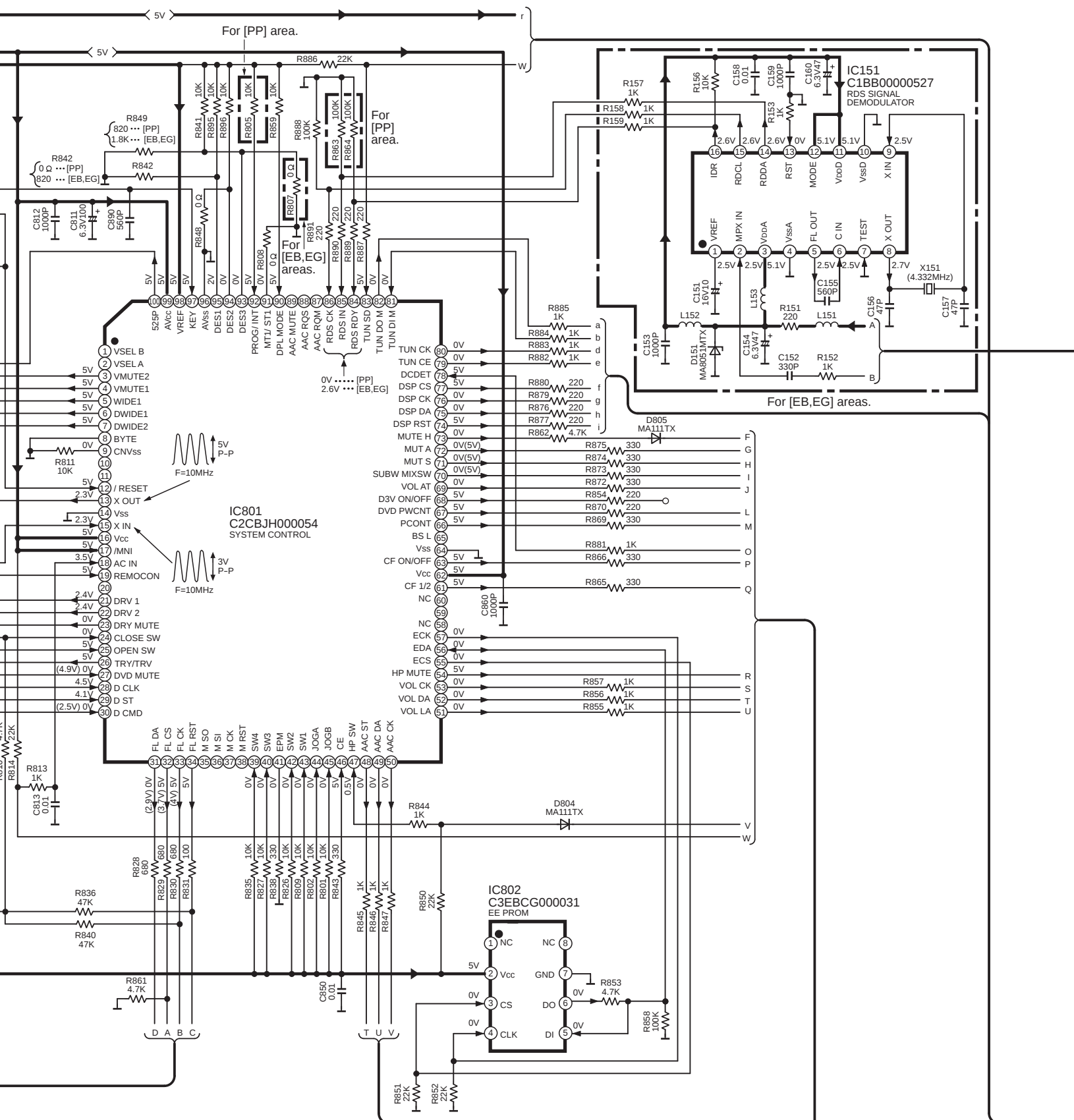
- : POSITIVE VOLTAGE LINE

— :NEGATIVE VOLTAGE LINE

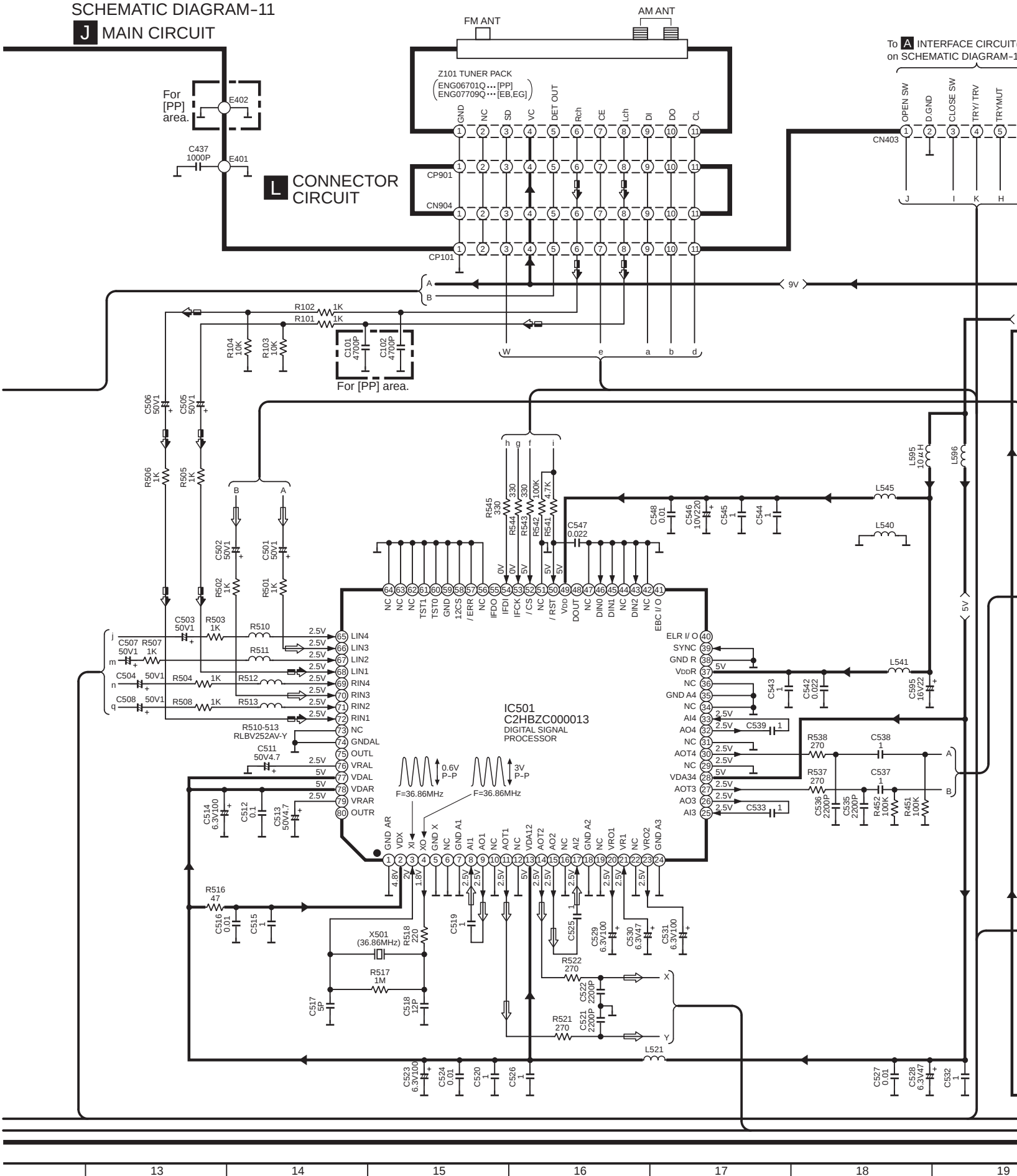


K REMOTE SENSOR CIRCUIT

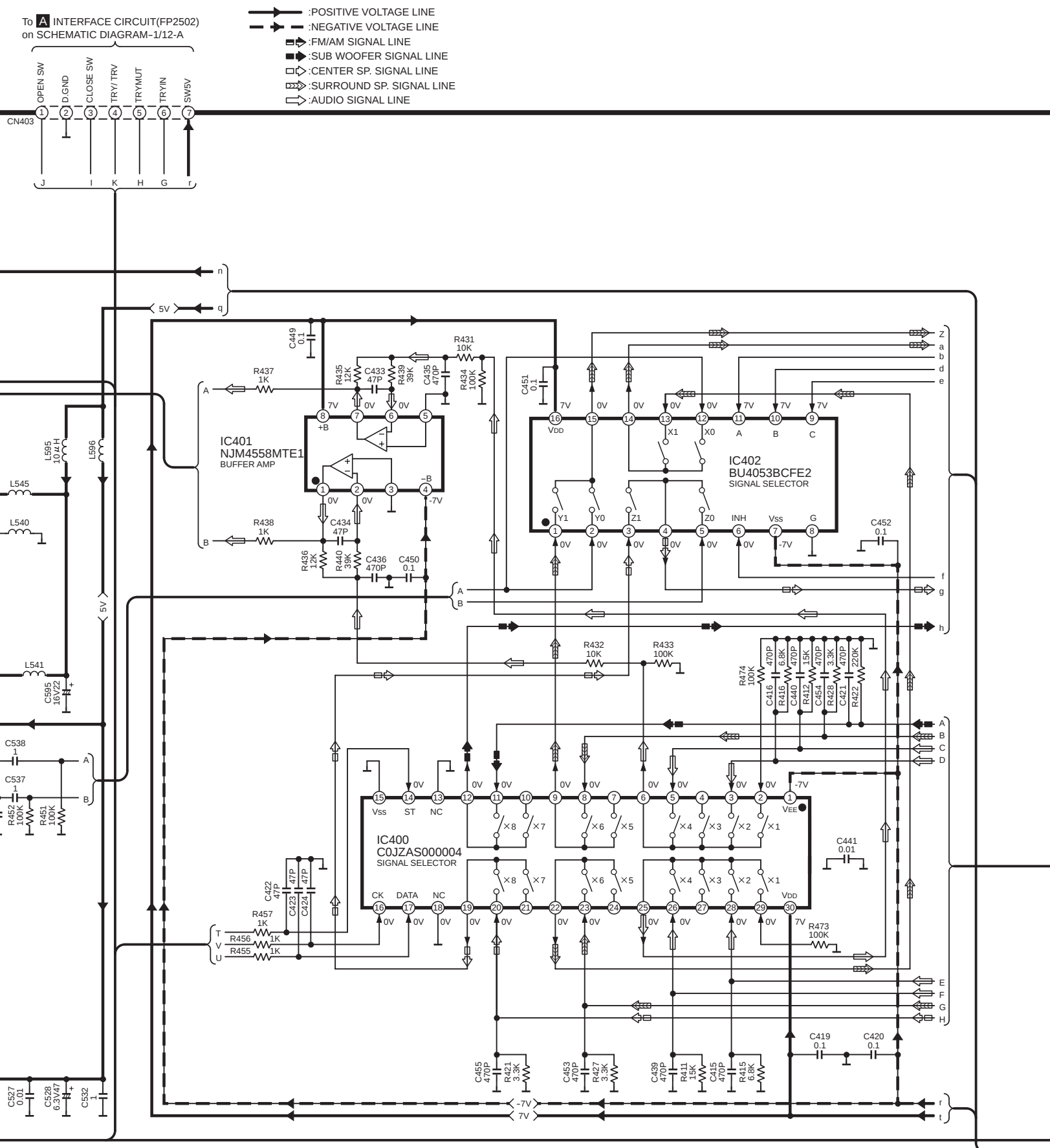




J MAIN CIRCUIT



To **A** INTERFACE CIRCUIT(FP2502)
on SCHEMATIC DIAGRAM-1/12-A



To **B** DVD MODULE(VIDEO DAC)CIRCUIT(PS3201)
on SCHEMATIC DIAGRAM-5/12-F,G



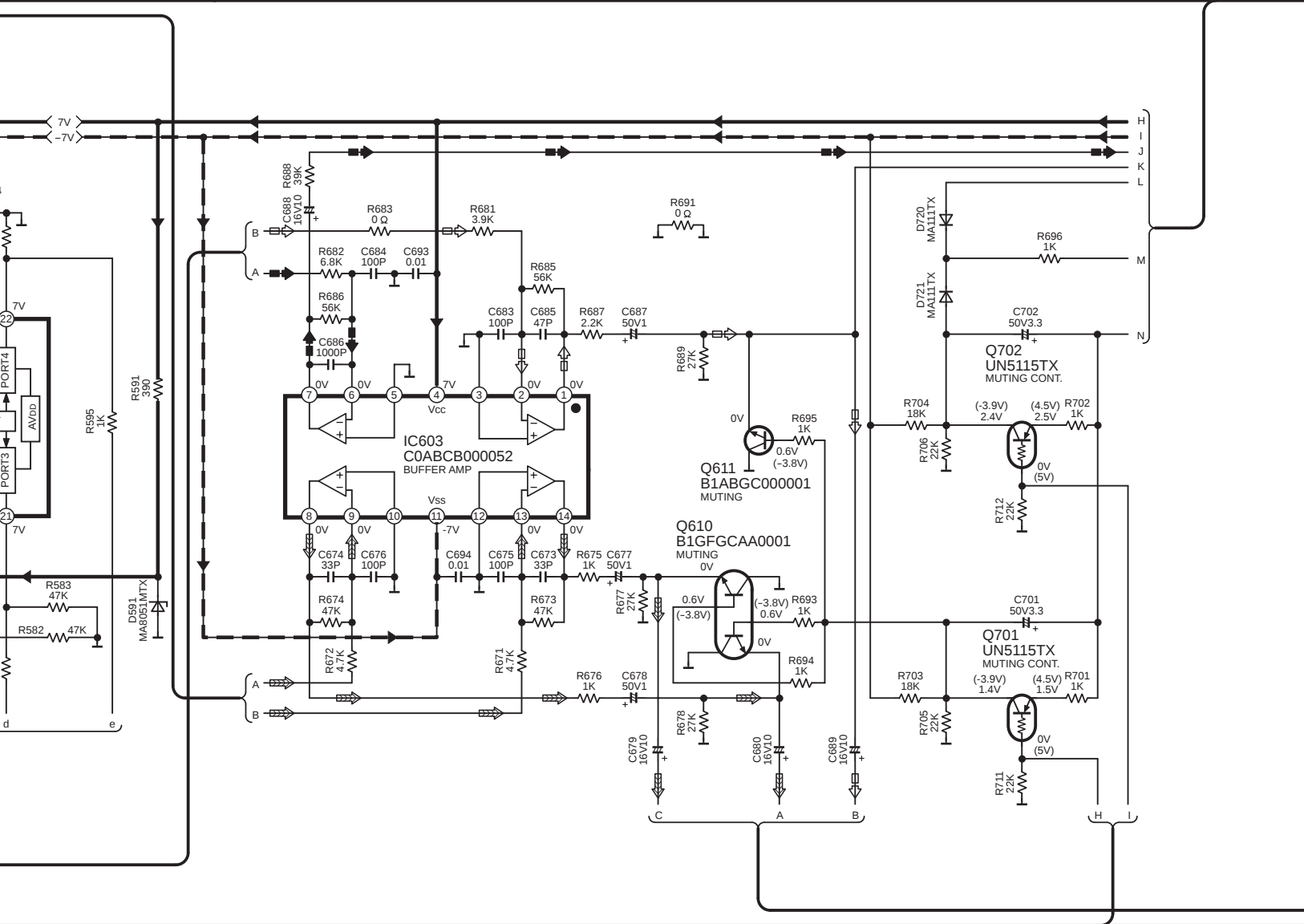
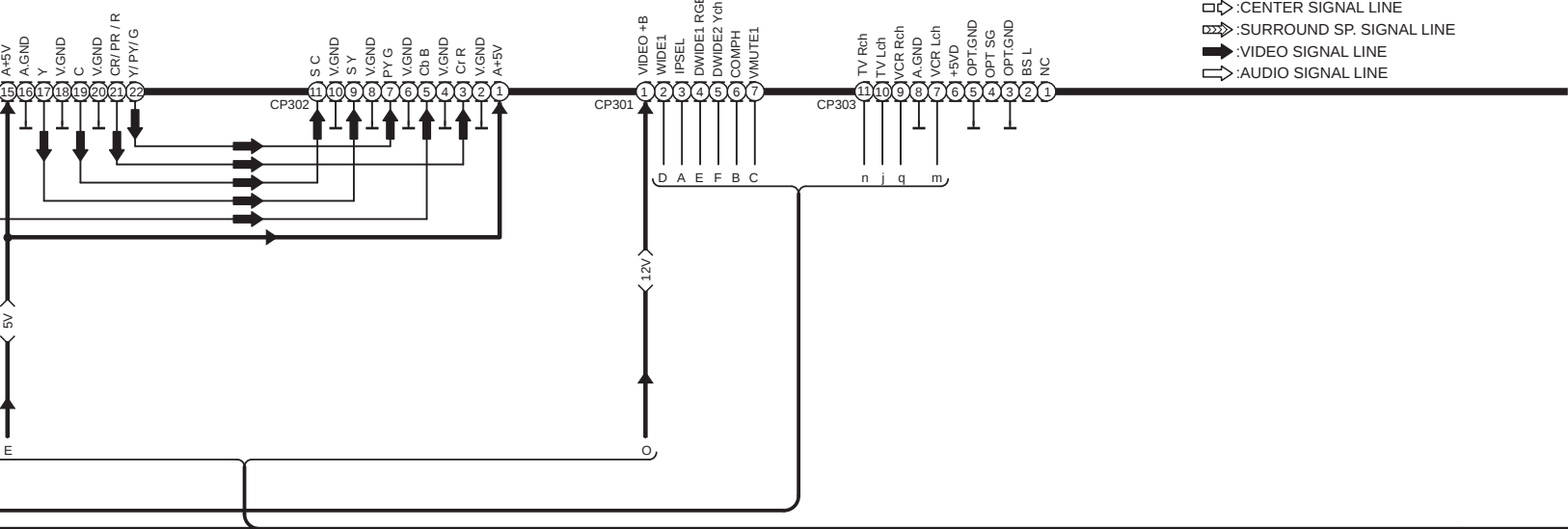
CIRCUIT(PS3201)
G

To **C** IN/OUT TERMINAL
CIRCUIT(CN302) on
SCHEMATIC DIAGRAM-8/1-B

To **C** IN/OUT TERMINAL
CIRCUIT(CN301) on
SCHEMATIC DIAGRAM-8/1-A

To **C** IN/OUT TERMINAL
CIRCUIT(CN303) on
SCHEMATIC DIAGRAM-8/1-C

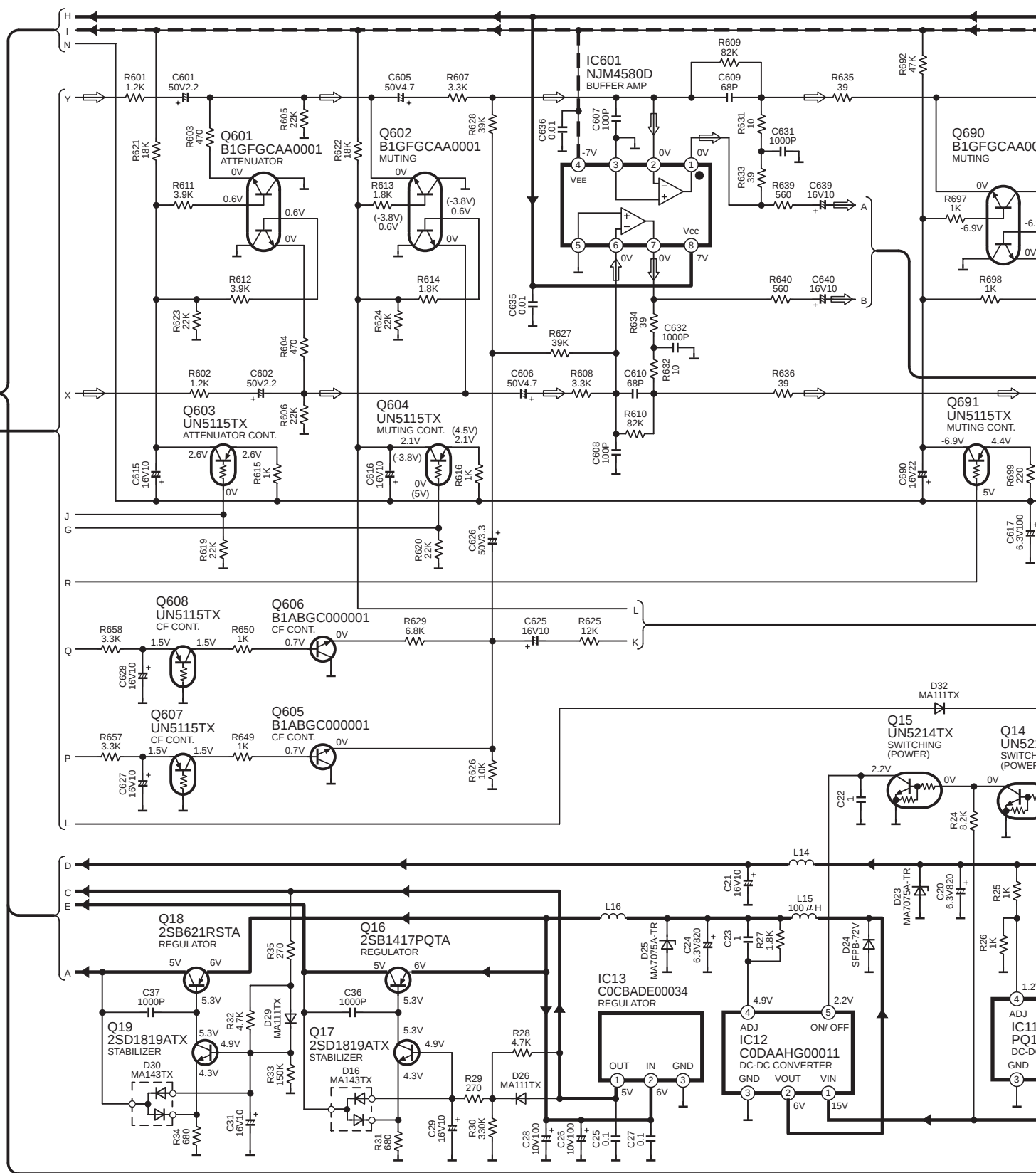
- : POSITIVE VOLTAGE LINE
- - - - - : NEGATIVE VOLTAGE LINE
- ▣ : SUB WOOFER SIGNAL LINE
- : CENTER SIGNAL LINE
- ▤ : SURROUND SP. SIGNAL LINE
- ▢ : VIDEO SIGNAL LINE
- ▧ : AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-13

J MAIN CIRCUIT

→ : POSITIVE VOLTAGE LINE → : NEGATIVE VOLTAGE LINE ⇨ : AUDIO SIGNAL LINE ■ : SUB WOOFER SIGNAL

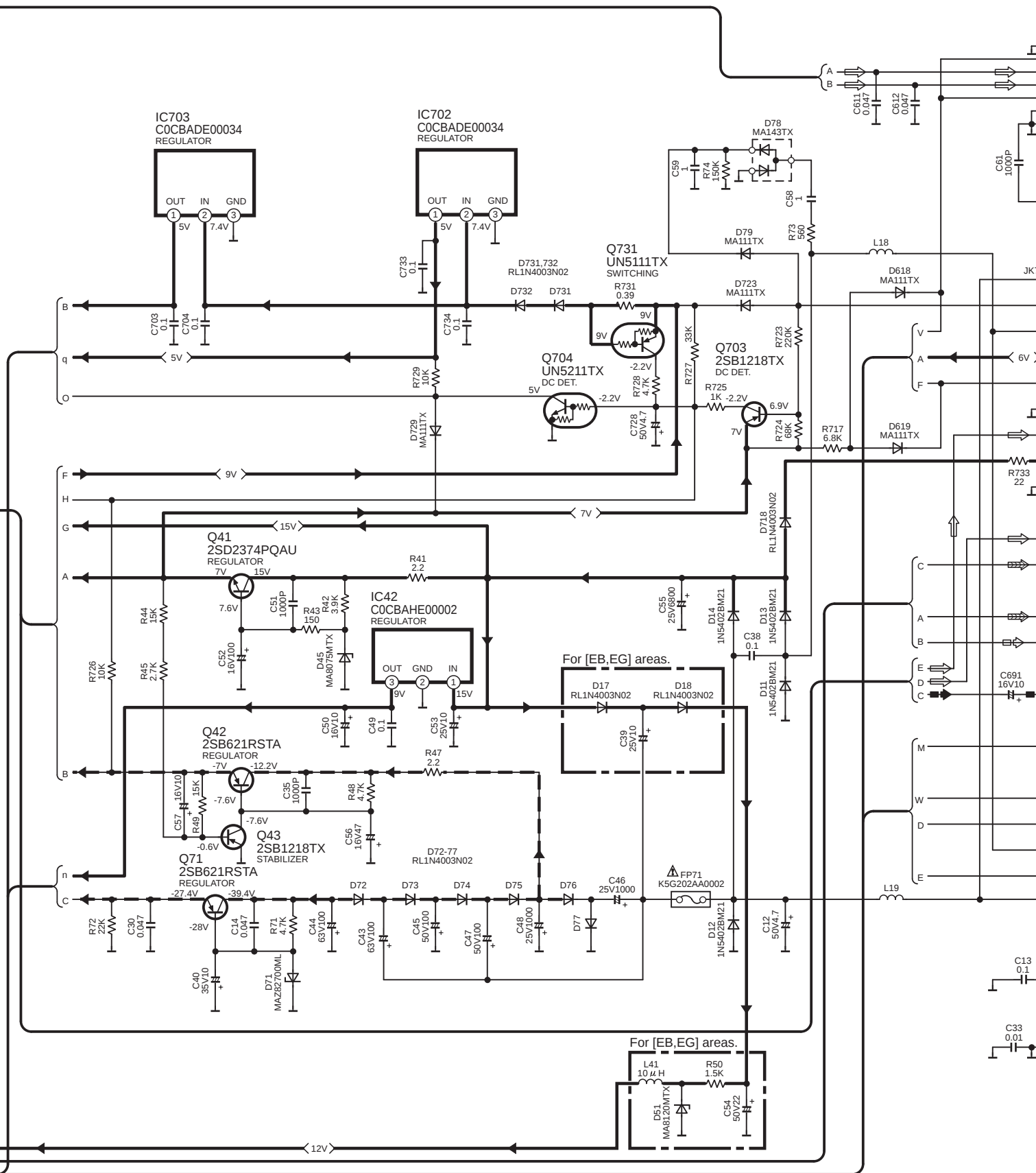


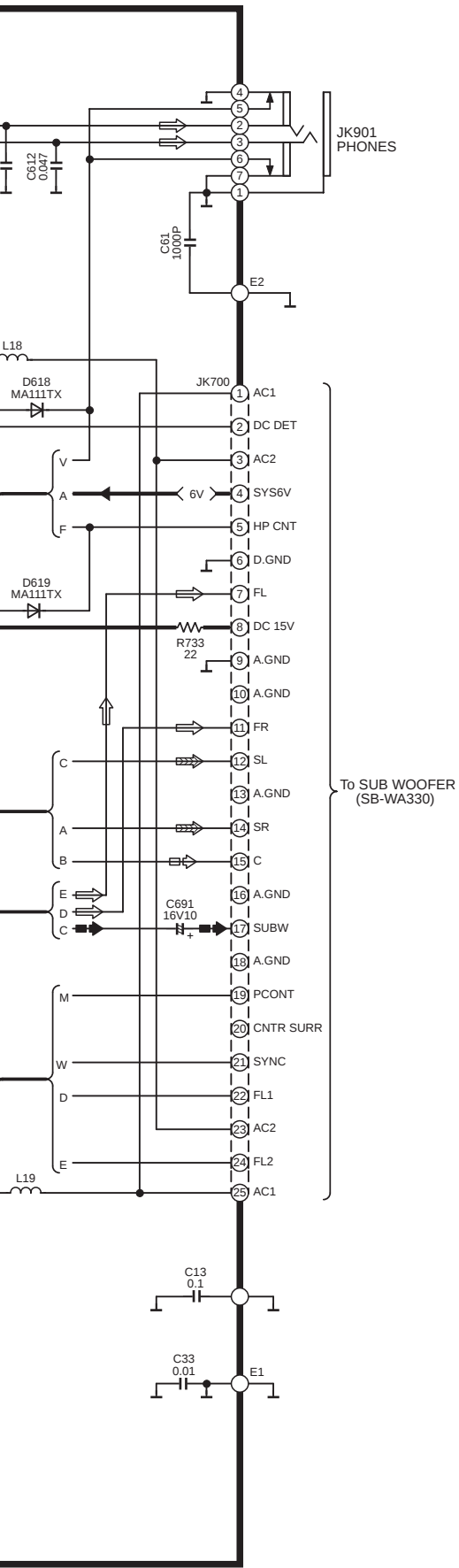


SCHEMATIC DIAGRAM-14

J MAIN CIRCUIT

: POSITIVE VOLTAGE LINE
 : SURROUND SP. SIGNAL LINE
 : SUB WOOFER SIGNAL LINE
 : NEGATIVE VOLTAGE LINE
 : AUDIO SIGNAL LINE
 : CENTER SP. SIGNAL LINE





(PP,EB,EG) MAIN CIRCUIT DIAGRAM

H

G

F

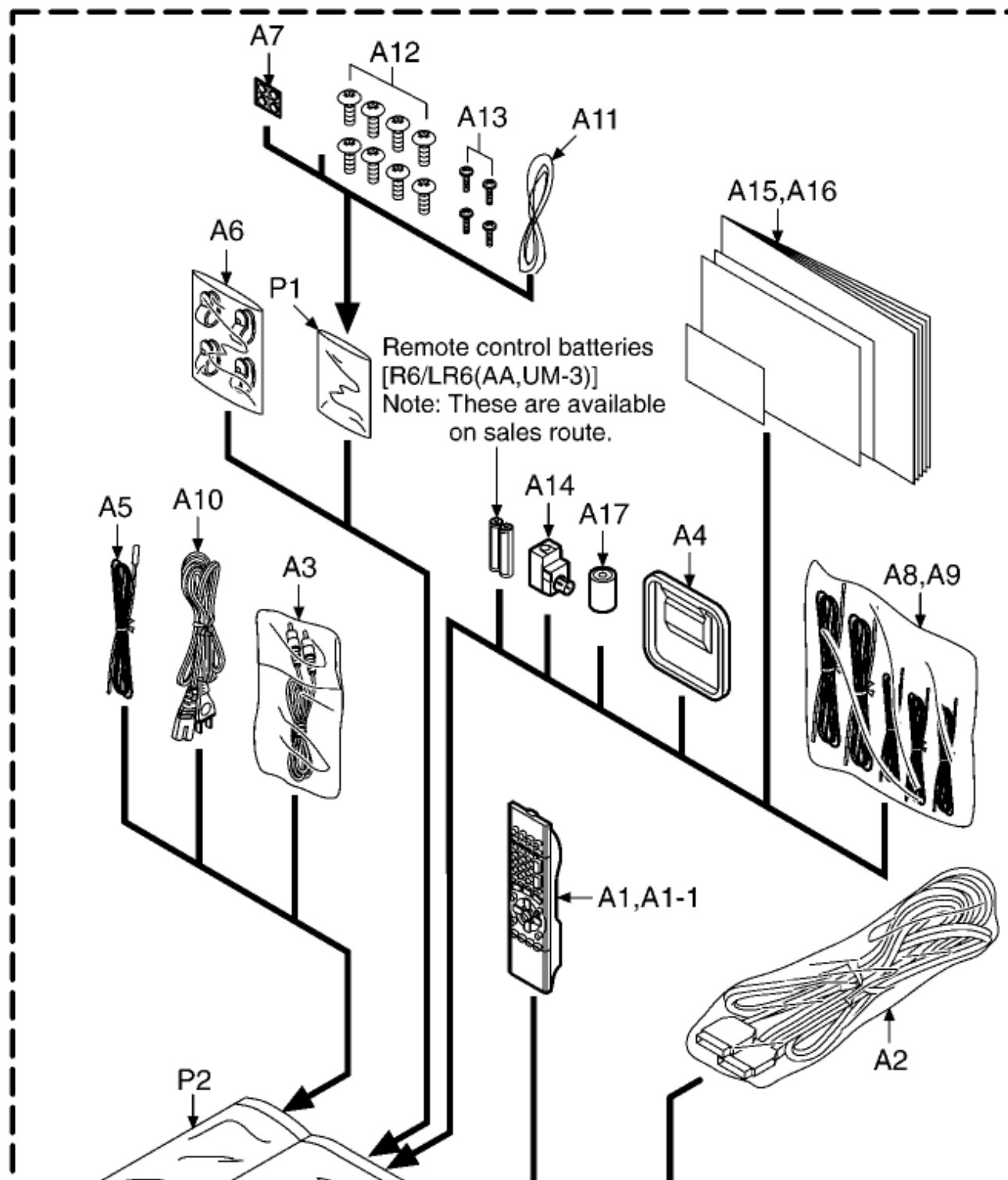
E

D

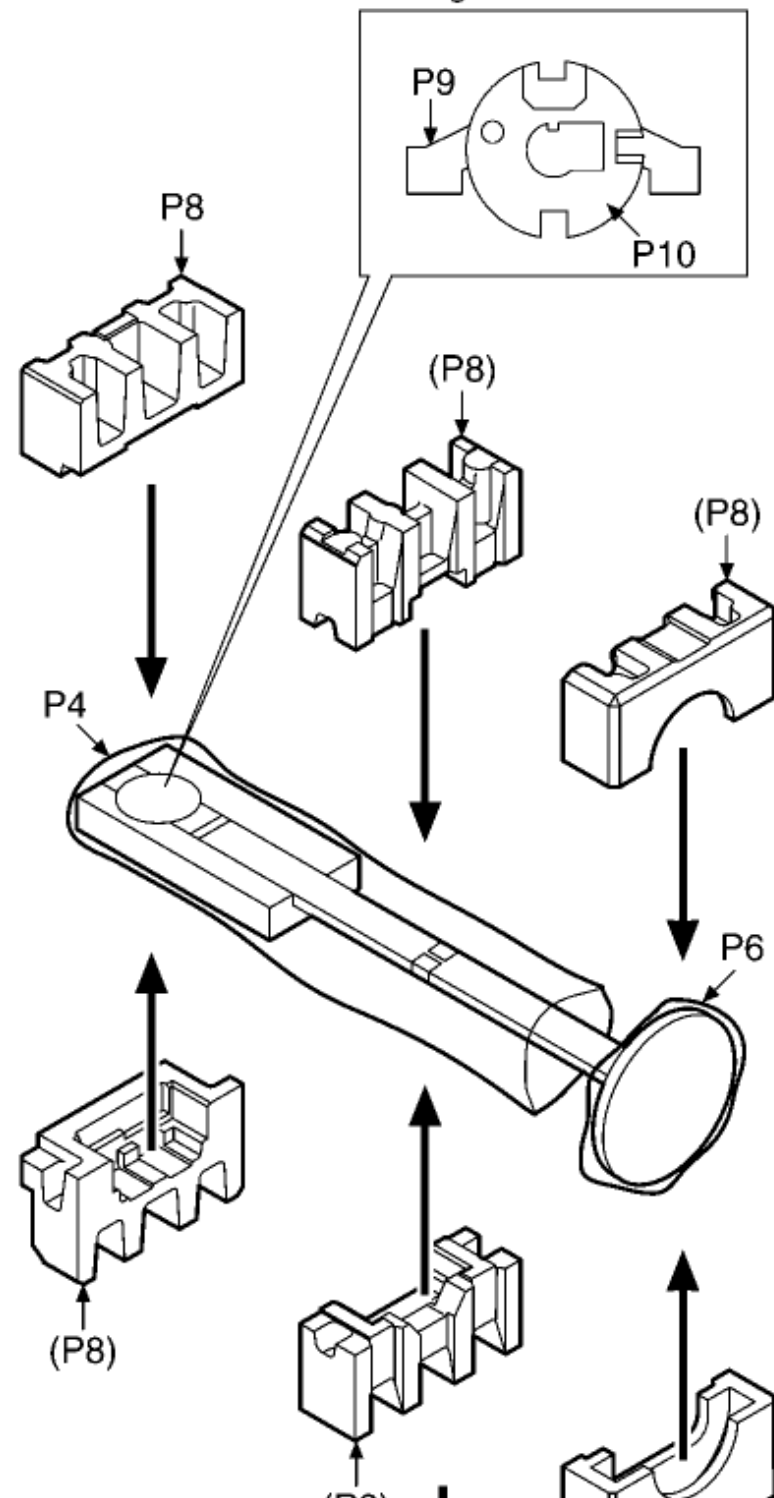
C

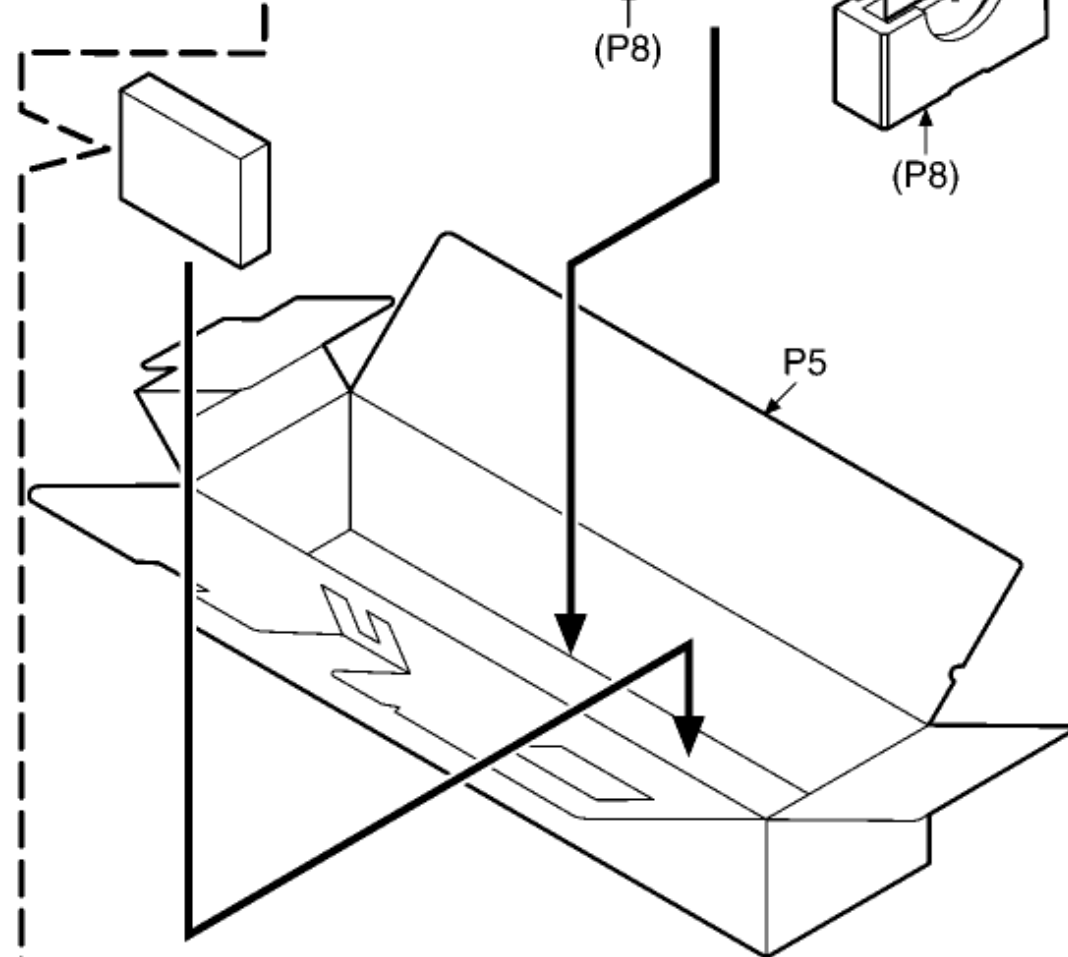
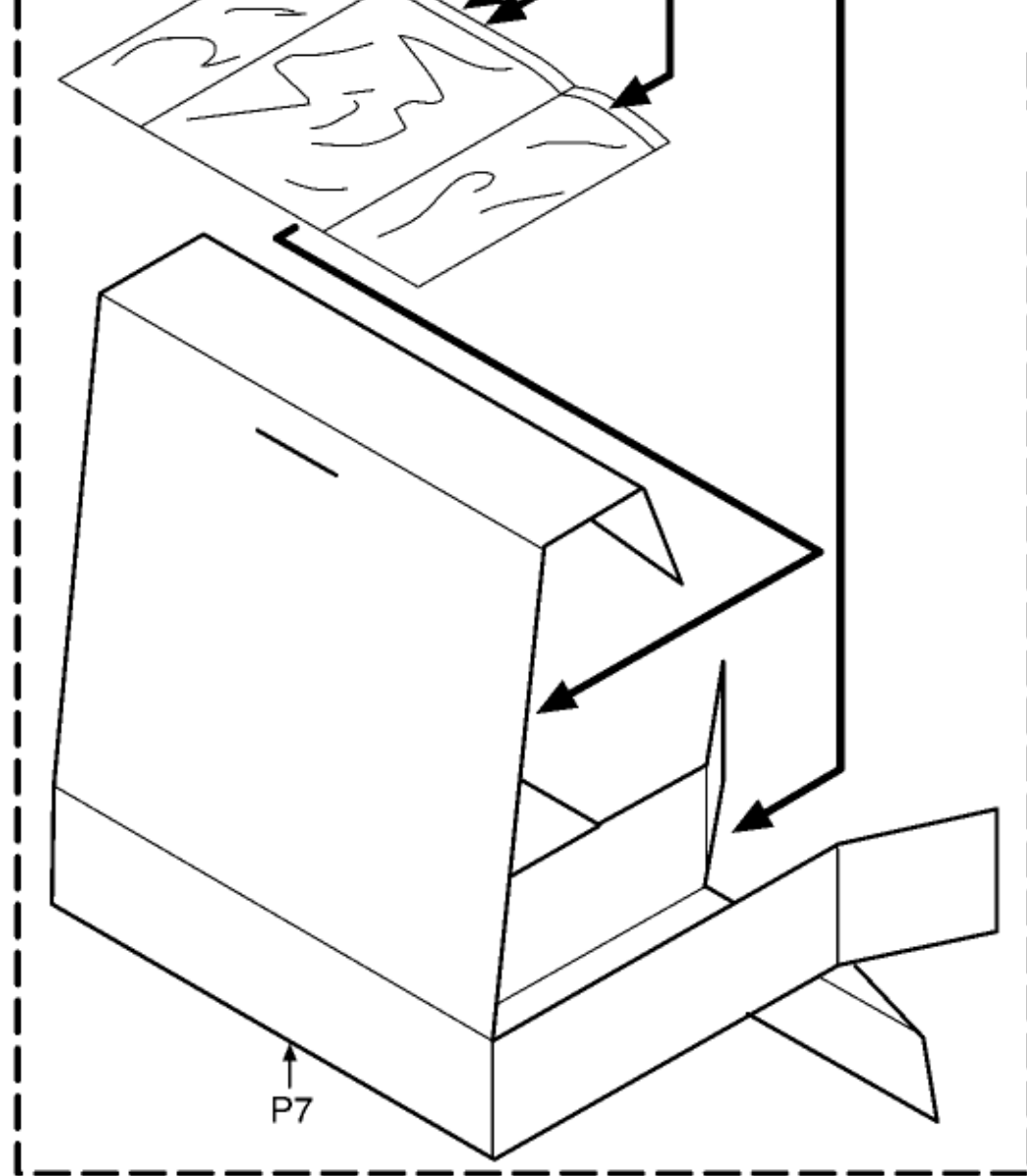
B

A



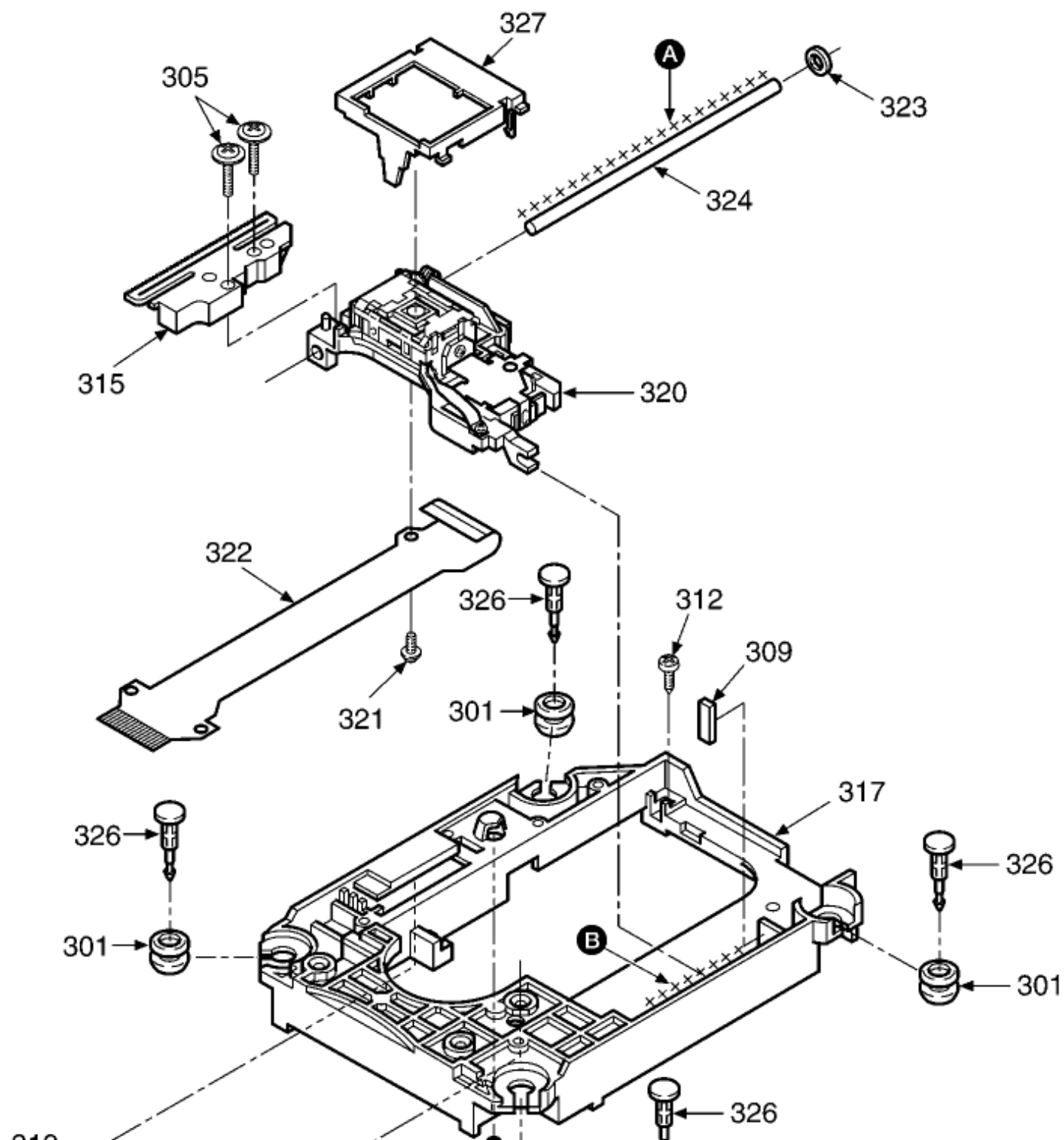
The figure inside DVD lid.

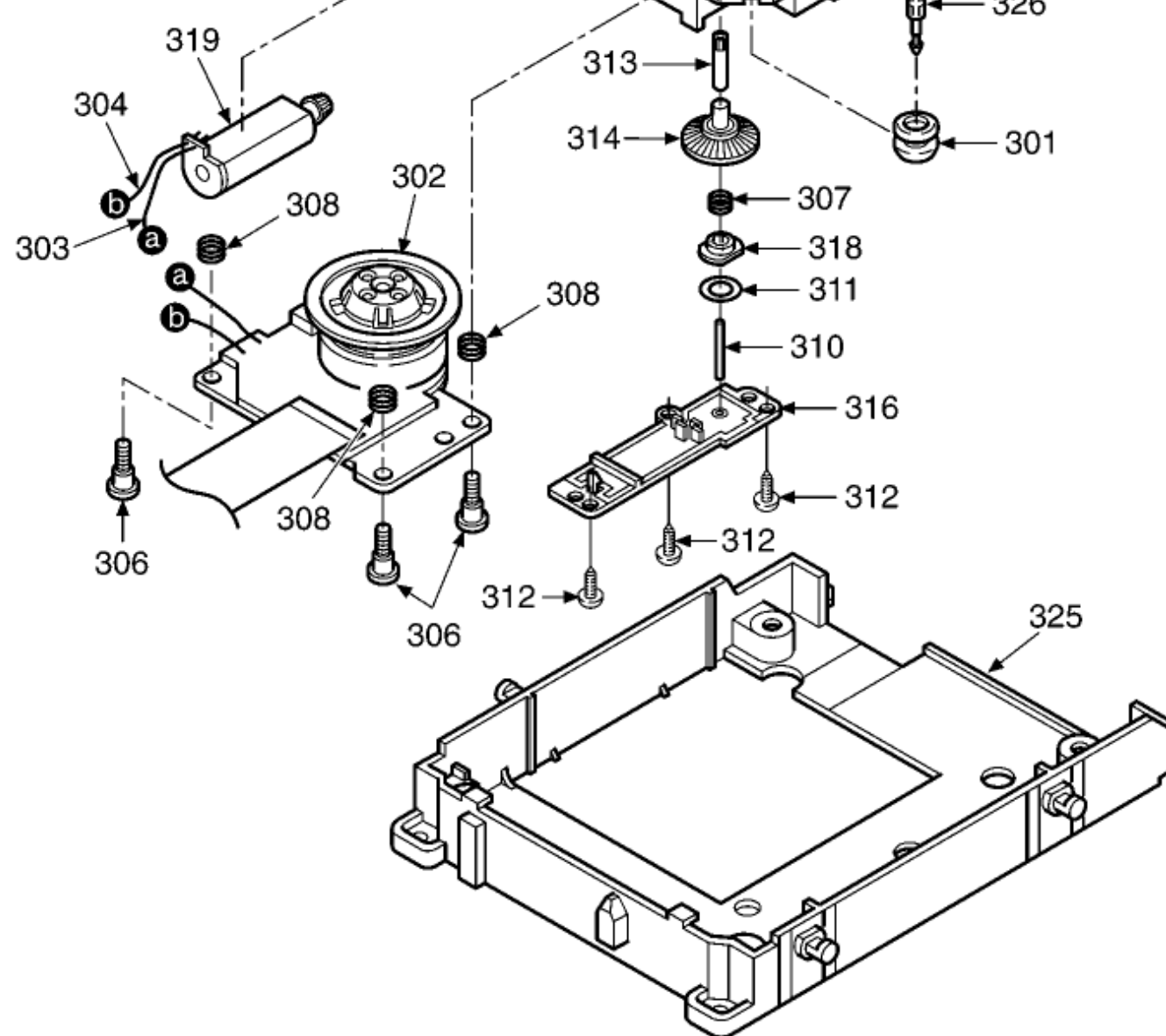


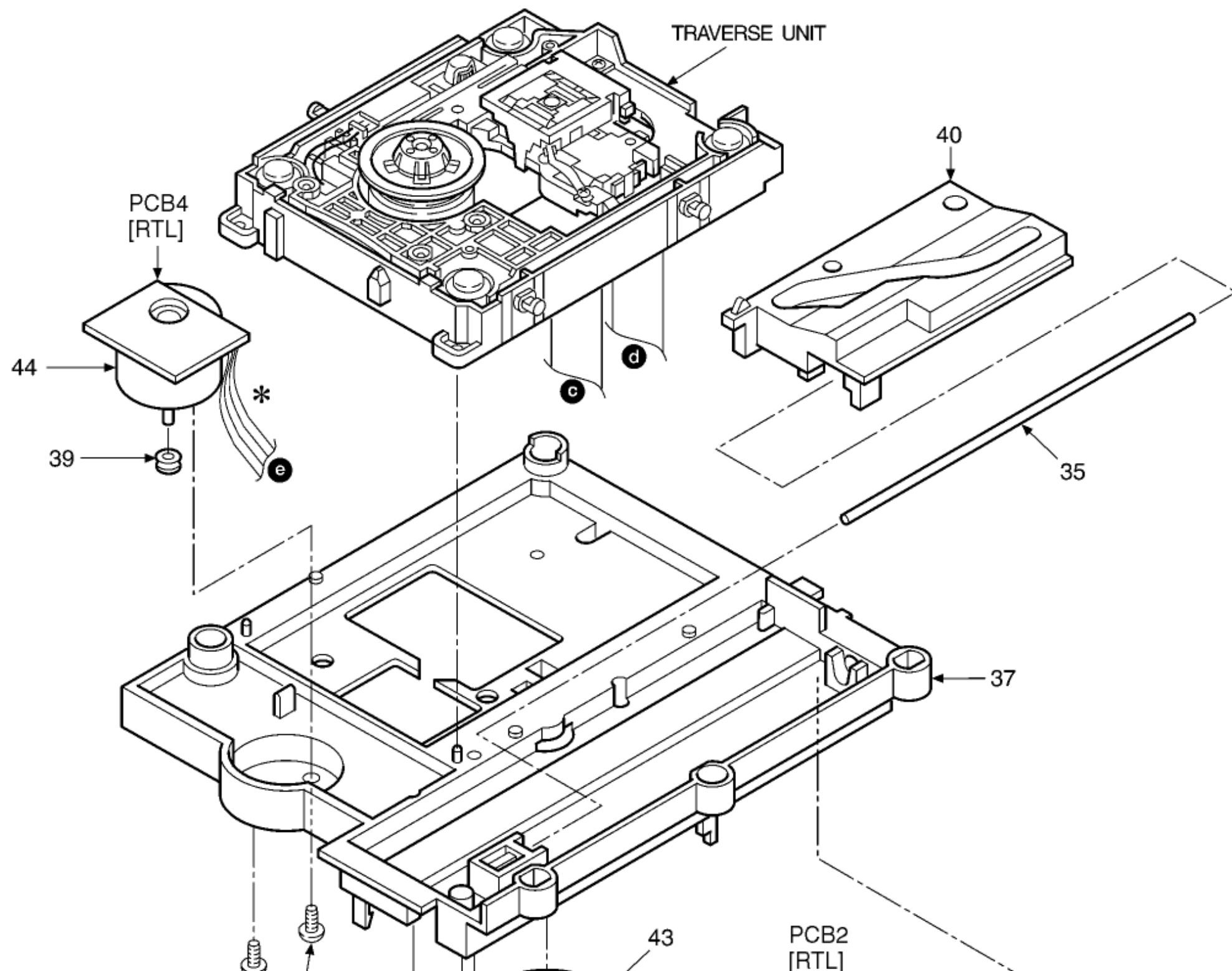


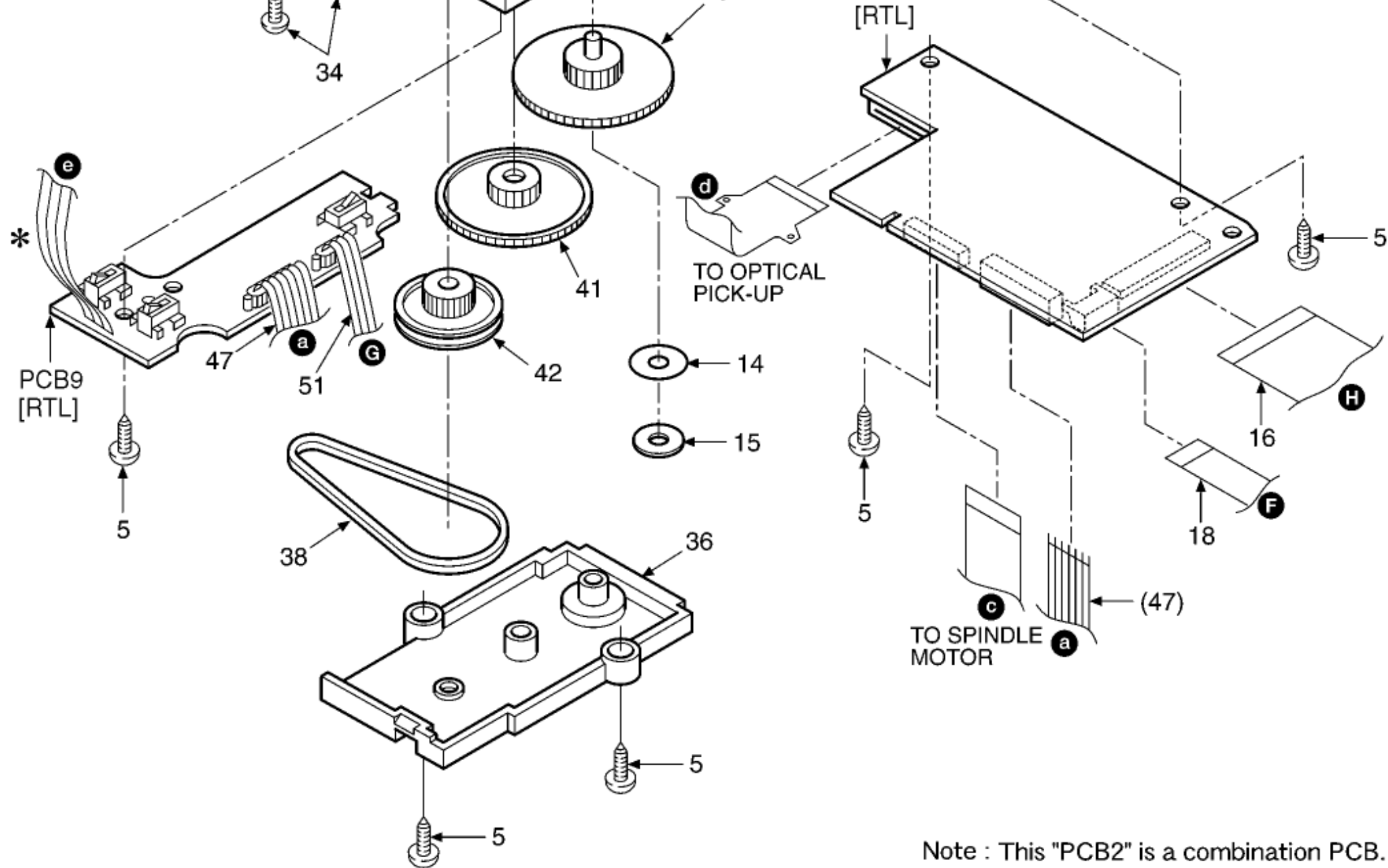
Note :

- The configuration of AC power supply cord depends on the area.

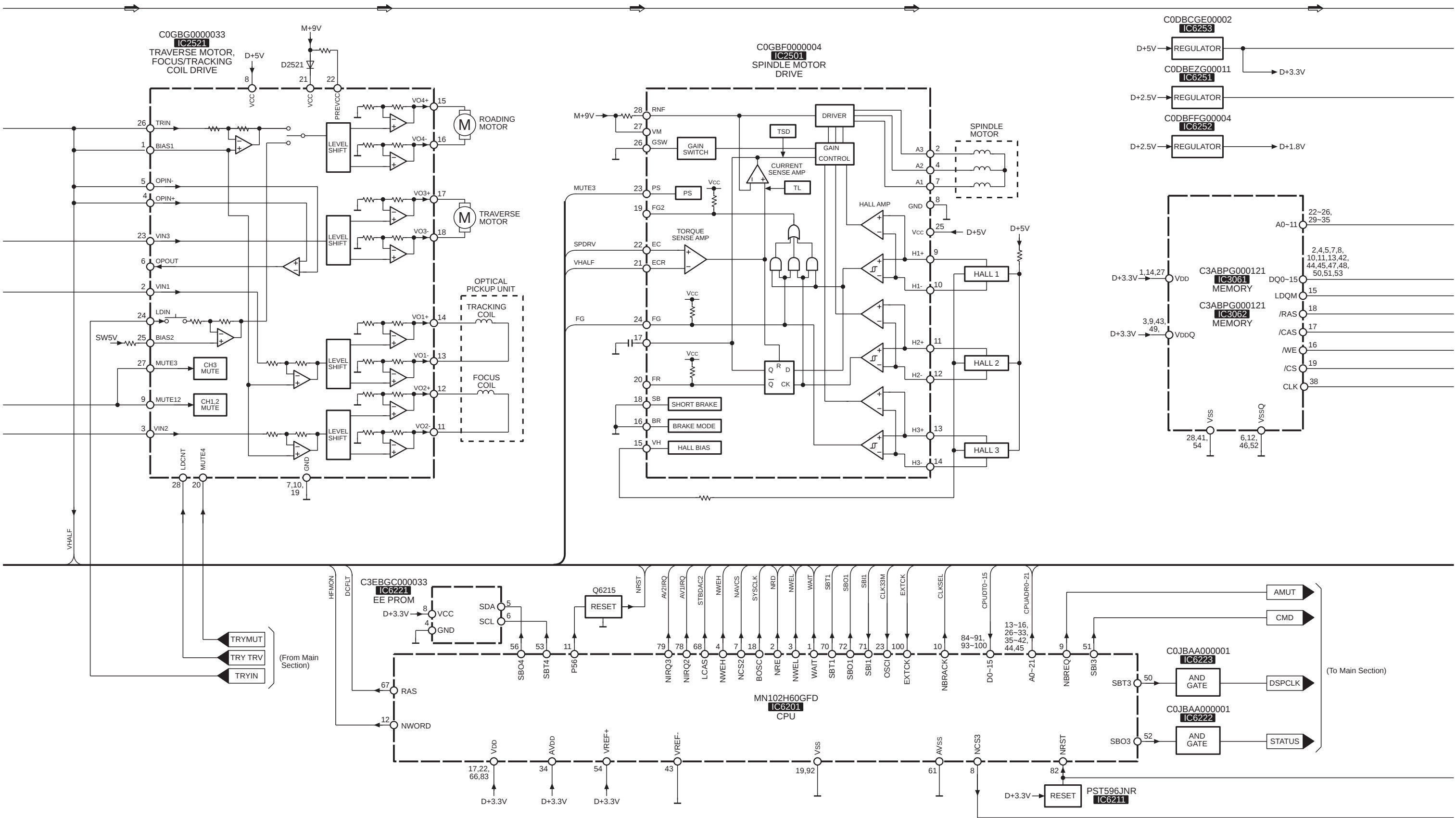


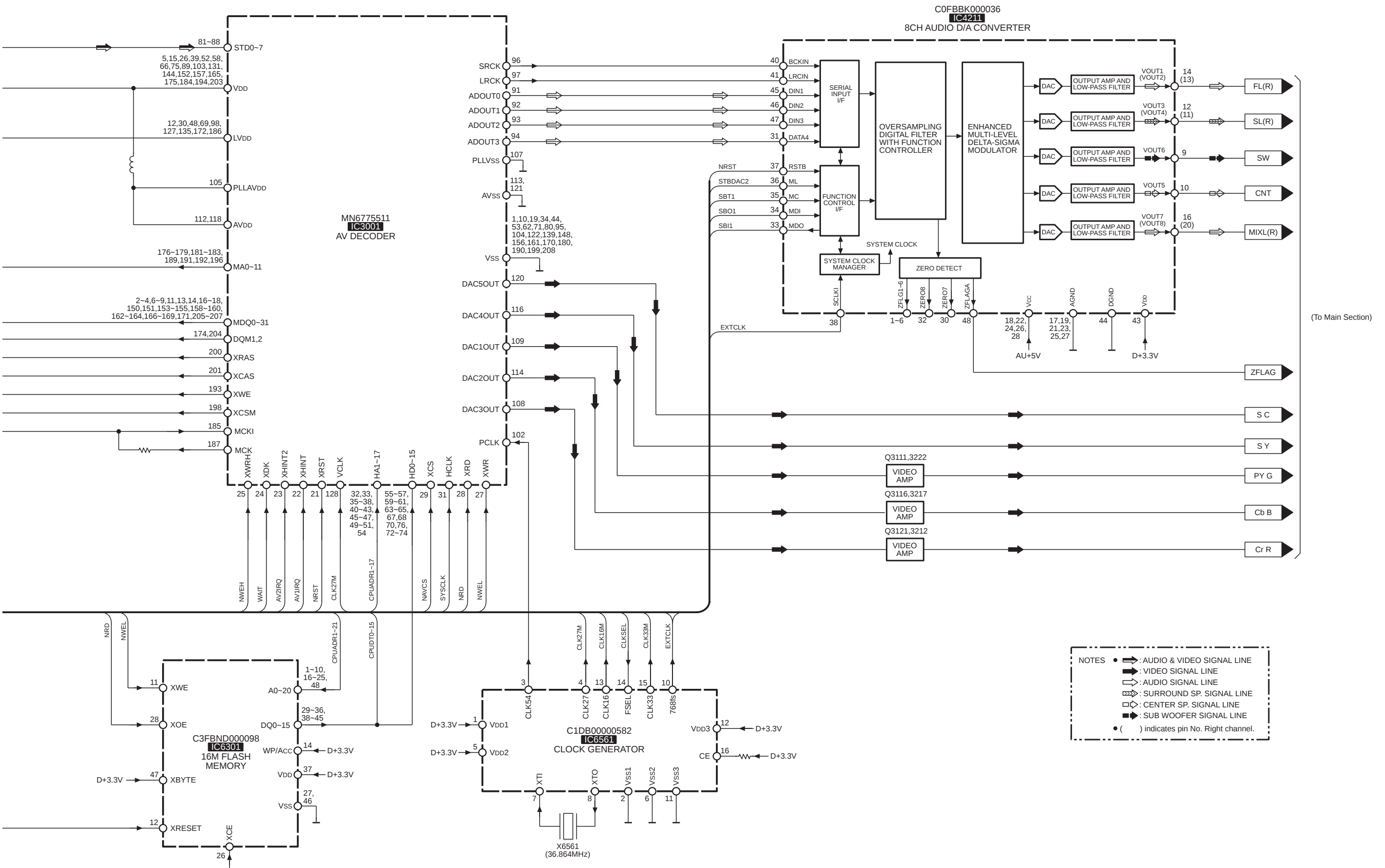




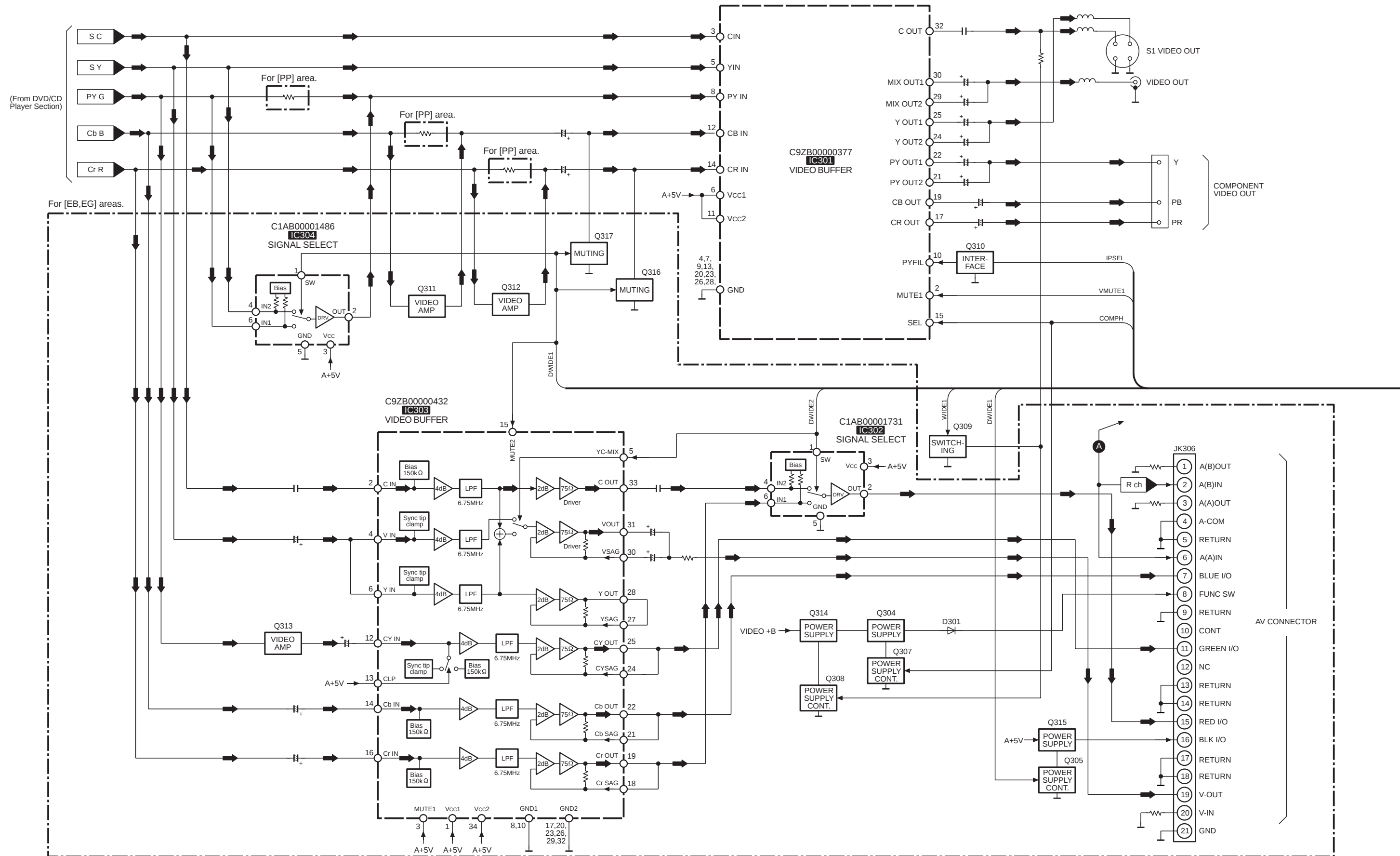


Note : This "PCB2" is a combination PCB.

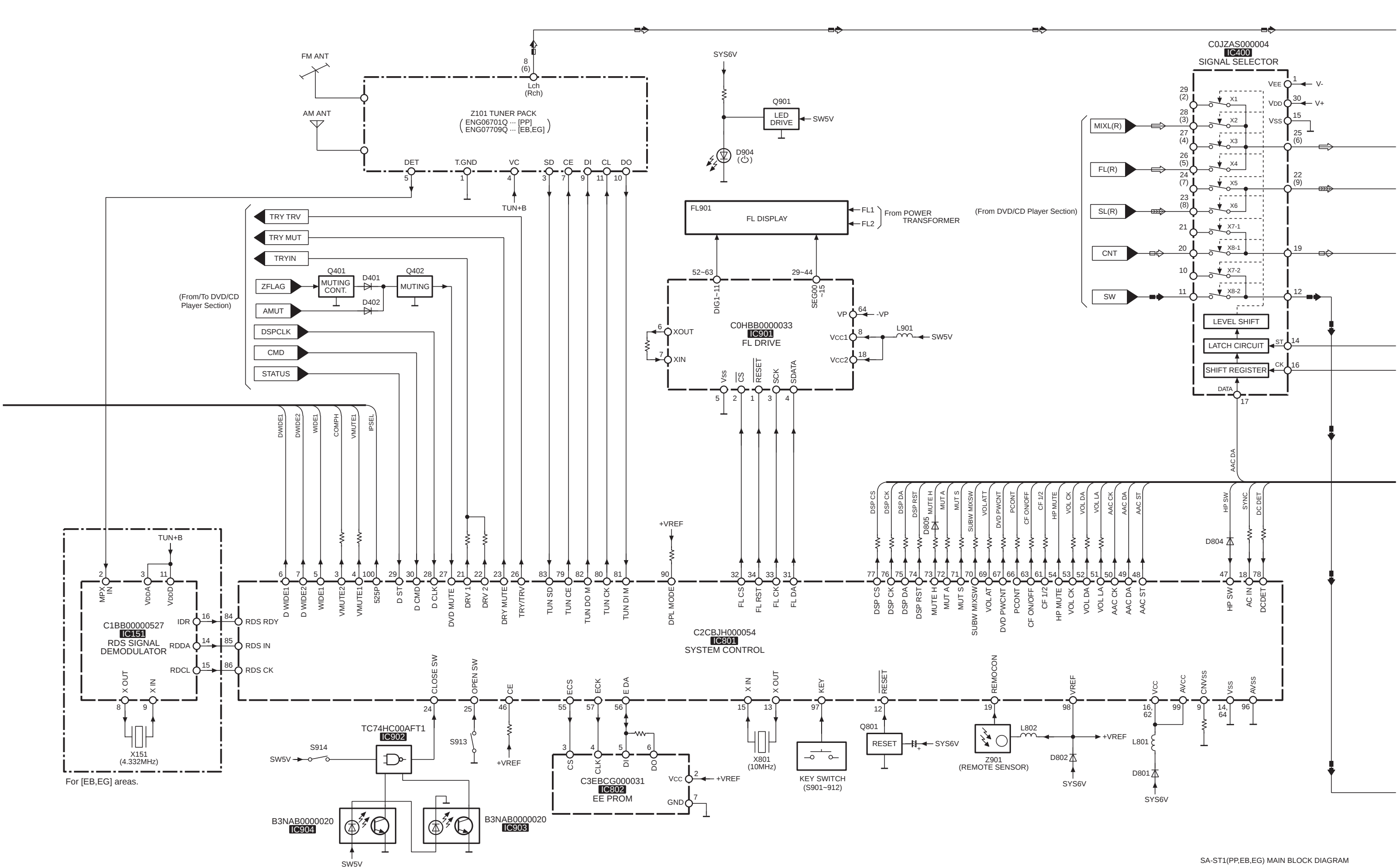




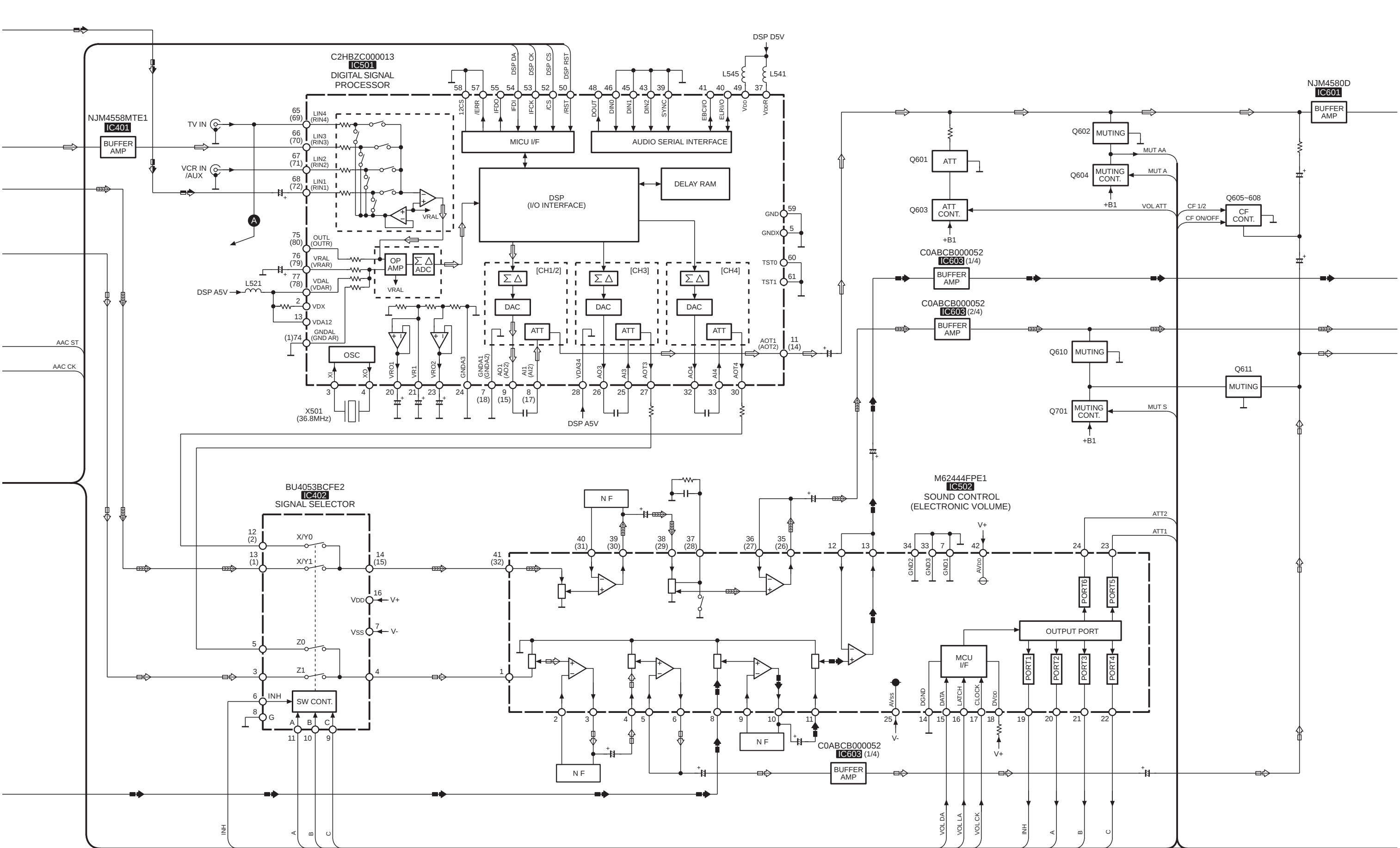
● MAIN SECTION

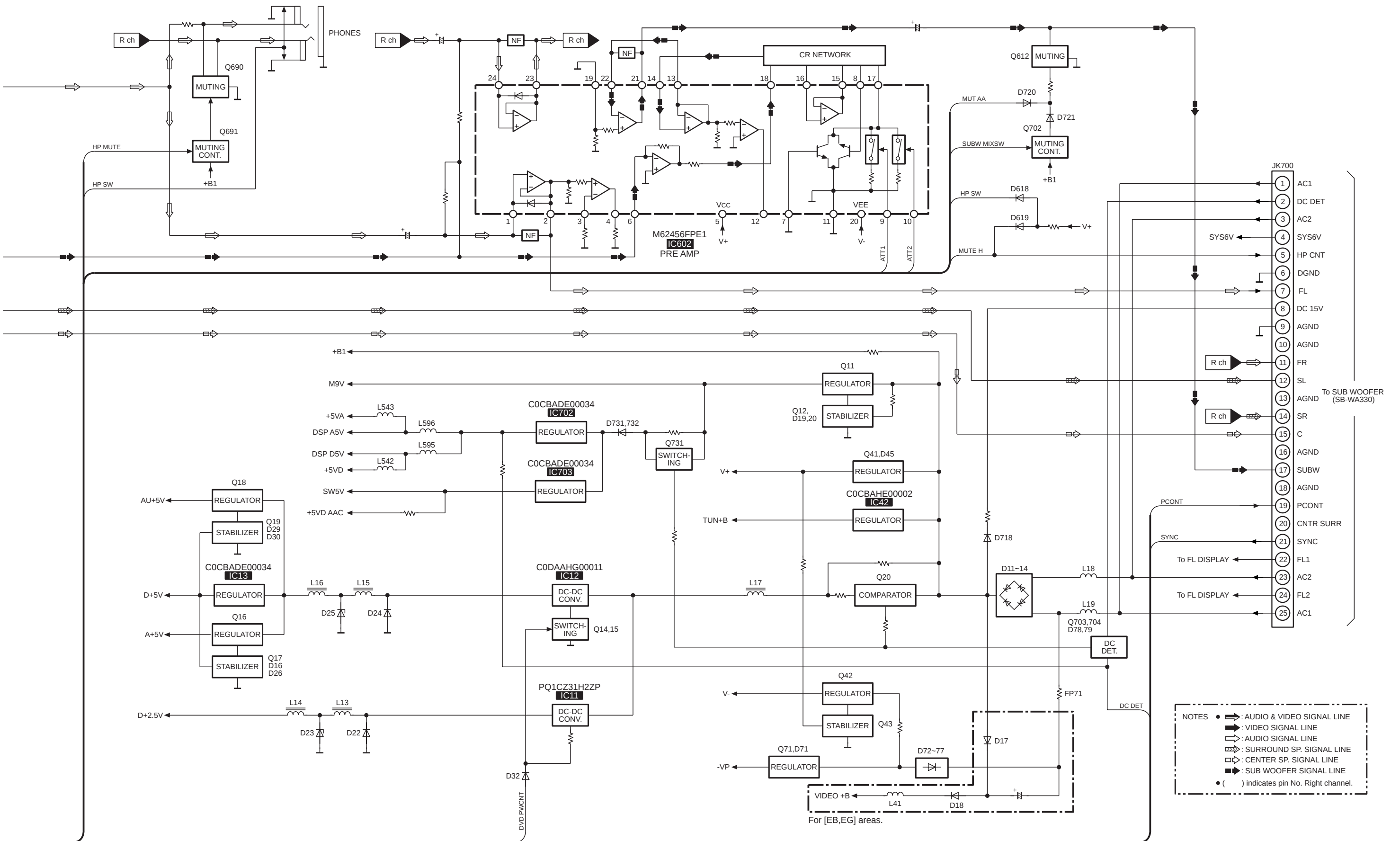


SA-ST1(PP,EB,EG) MAIN BLOCK DIAGRAM

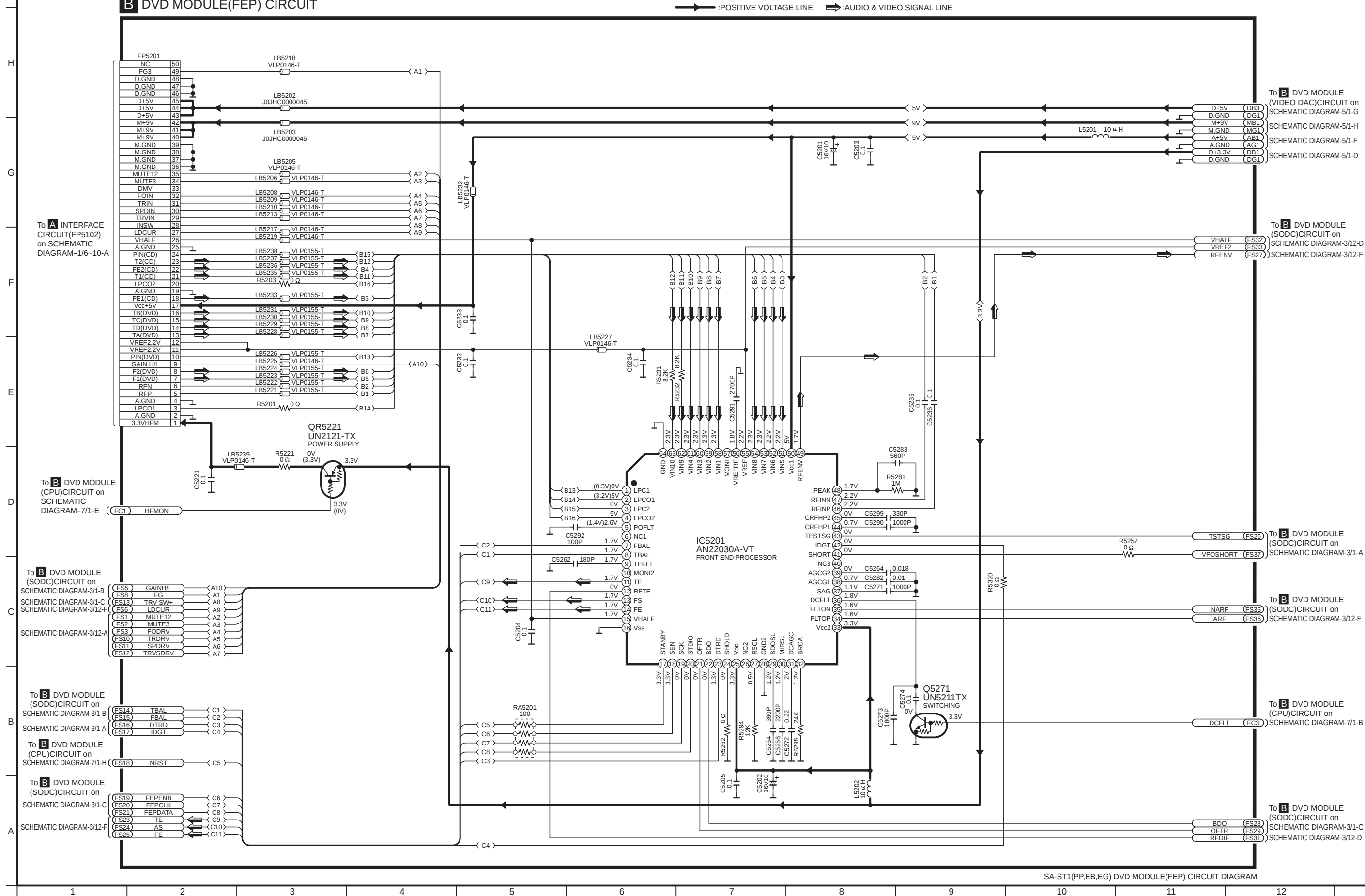


SA-ST1(PP,EB,EG) MAIN BLOCK DIAGRAM





B DVD MODULE(FEP) CIRCUIT

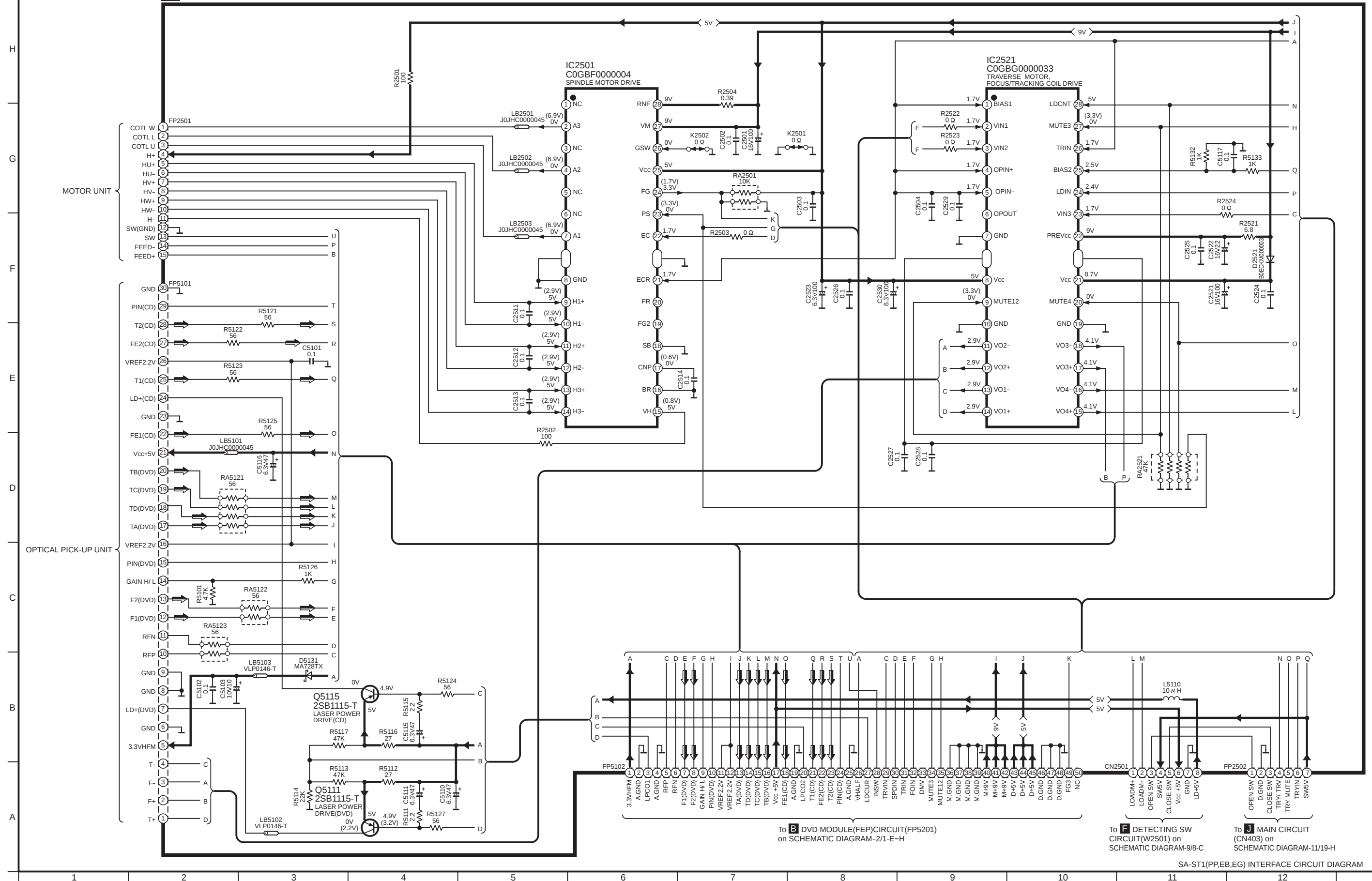


SCHEMATIC DIAGRAM-1

A INTERFACE CIRCUIT

NOTE:
The number which noted at the connectors on the schematic diagram as
"SCHEMATIC DIAGRAM-1" or "SCHEMATIC DIAGRAM-2"
indicates the schematic diagram serial number located on the left corner in the schematic diagram.

→ : POSITIVE VOLTAGE LINE ⇨ : AUDIO & VIDEO SIGNAL LINE



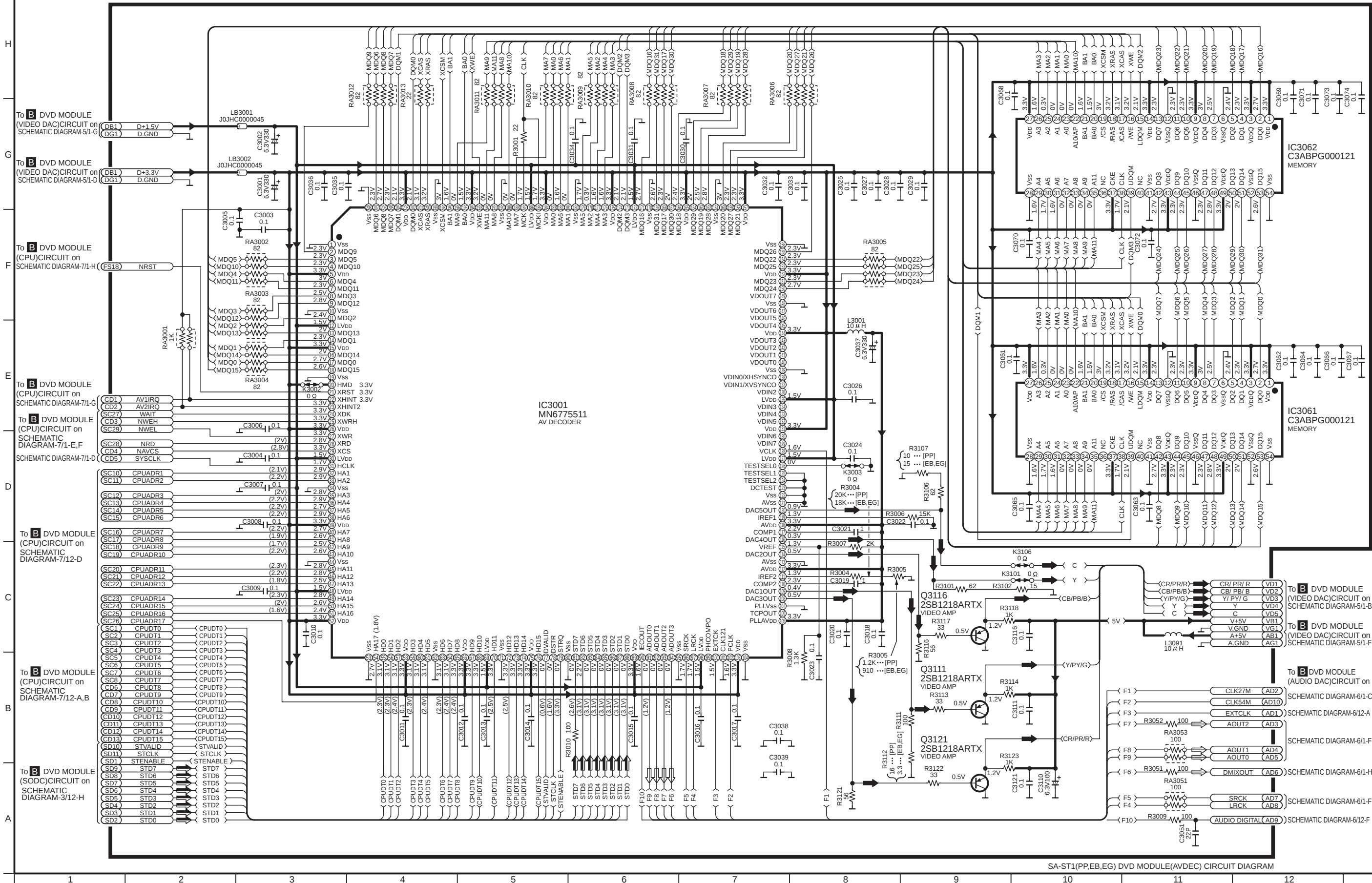
B DVD MODULE(SODC) CIRCUIT

→ : POSITIVE VOLTAGE LINE ⇨ : AUDIO & VIDEO SIGNAL LINE



B DVD MODULE(AVDEC) CIRCUIT

→ : POSITIVE VOLTAGE LINE → : AUDIO & VIDEO SIGNAL LINE ⇨ : AUDIO SIGNAL LINE ⇨ : VIDEO SIGNAL LINE



SCHEMATIC DIAGRAM-5

B DVD MODULE(VIDEO DAC) CIRCUIT

→ : POSITIVE VOLTAGE LINE
➡ : VIDEO SIGNAL LINE

To B DVD MODULE
(FEP)CIRCUIT on
SCHEMATIC DIAGRAM-2/12-G

(MB1) M+9V
(MG1) M.GND

To B DVD MODULE
(CPU)CIRCUIT on
SCHEMATIC DIAGRAM-7/1-A

(DB3) D+5V
(DG1) D.GND

To B DVD MODULE
(FEP)CIRCUIT on
SCHEMATIC DIAGRAM-2/12-H

(DB3) D+5V
(DG1) D.GND

To B DVD MODULE
(AVDEC)CIRCUIT on
SCHEMATIC DIAGRAM-4/1-G

(DB1) D+1.5V
(DG1) D.GND

To B DVD MODULE
(FEP)CIRCUIT on
SCHEMATIC DIAGRAM-2/12-G

(AB1) A+5V
(AG1) A.GND

To B DVD MODULE
(AVDEC)CIRCUIT on
SCHEMATIC DIAGRAM-4/12-C

(AB1) A+5V
(AG1) A.GND

To B DVD MODULE
(SODC)CIRCUIT on
SCHEMATIC DIAGRAM-3/12-E

(AB1) A+5V
(AG1) A.GND

To B DVD MODULE
(SODC)CIRCUIT on
SCHEMATIC DIAGRAM-3/1-H

(DB4) D+1.8V
(DG1) D.GND

To B DVD MODULE
(FEP)CIRCUIT on
SCHEMATIC DIAGRAM-2/12-G

(DB1) D+3.3V
(DG1) D.GND

To B DVD MODULE
(SODC)CIRCUIT on
SCHEMATIC DIAGRAM-3/1-H

(DB1) D+3.3V
(DG1) D.GND

To B DVD MODULE
(AVDEC)CIRCUIT on
SCHEMATIC DIAGRAM-4/1-G

(DB1) D+3.3V
(DG1) D.GND

To B DVD MODULE
(AUDIO DAC)CIRCUIT on
SCHEMATIC DIAGRAM-6/1-F

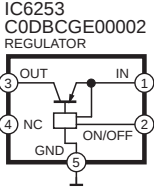
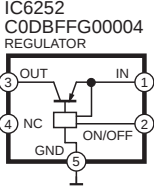
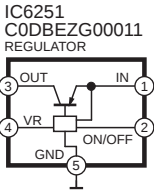
(DB1) D+3.3V
(DG1) D.GND

To B DVD MODULE
(CPU)CIRCUIT on
SCHEMATIC DIAGRAM-7/12-H

(DB1) D+3.3V
(DG1) D.GND

To B DVD MODULE
(AVDEC)CIRCUIT on
SCHEMATIC DIAGRAM-4/12-C

(VD1) CR/PR/R
(VD2) CB/PB/B
(VD3) Y/PY/G
(VD4) Y
(VD5) C
(VB1) V+5V
(VG1) V.GND



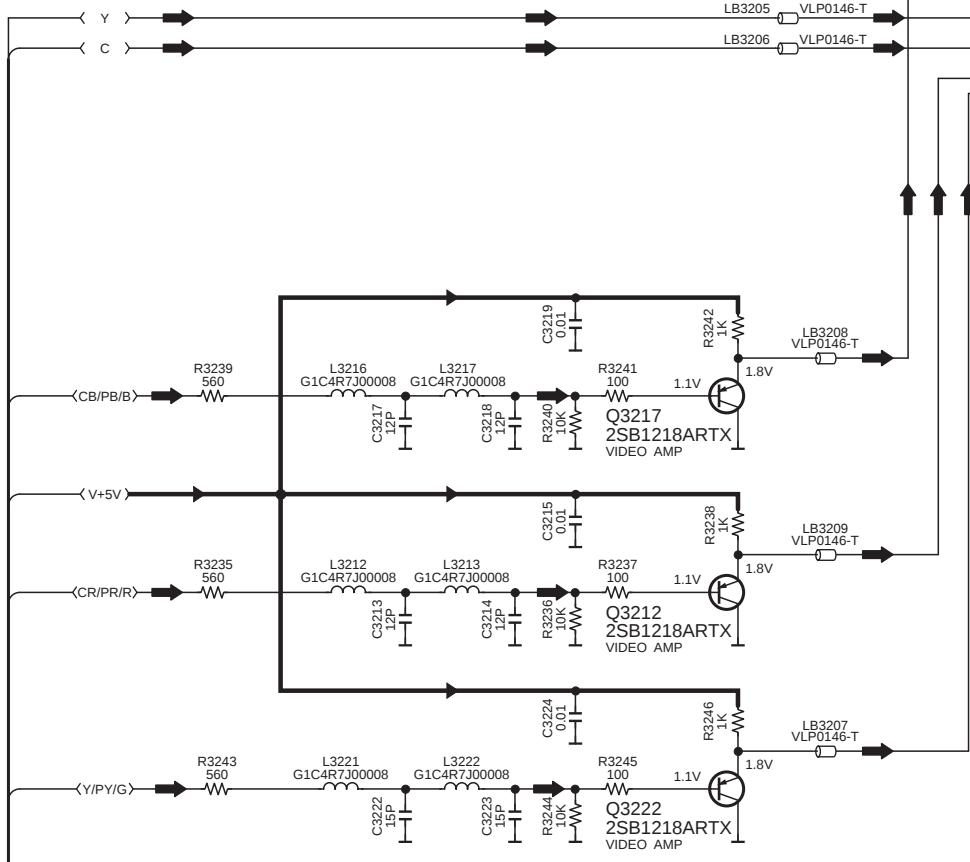
CMD (CV4)
STATUS (CV5)
DSPCLK (CV6)

PS3201

1	CB/PB/B
2	V.GND
3	DSPCLK
4	STATUS
5	CMD
6	D.GND
7	M+9V
8	M.GND
9	D+5V
10	D.GND
11	D+2.5V
12	D.GND
13	D+2.5V
14	D.GND
15	A+5V
16	A.GND
17	V
18	V.GND
19	C
20	V.GND
21	CR/PR/R
22	Y/PY/G

To B DVD MODULE
(CPU) CIRCUIT on
SCHEMATIC
DIAGRAM-7/1-C

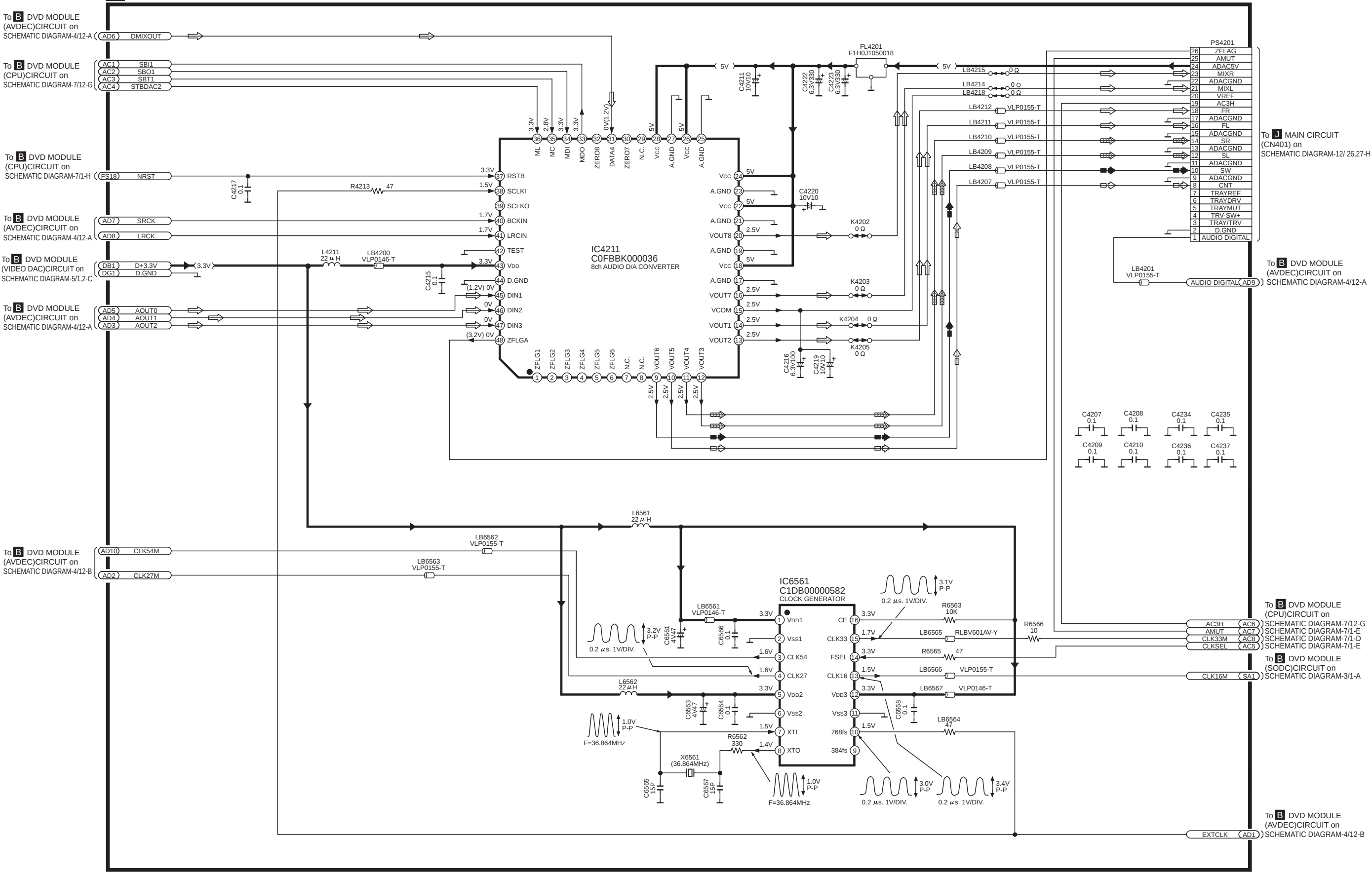
To J MAIN CIRCUIT
(CN402) on
SCHEMATIC
DIAGRAM-12/30,31-H



SCHEMATIC DIAGRAM-6

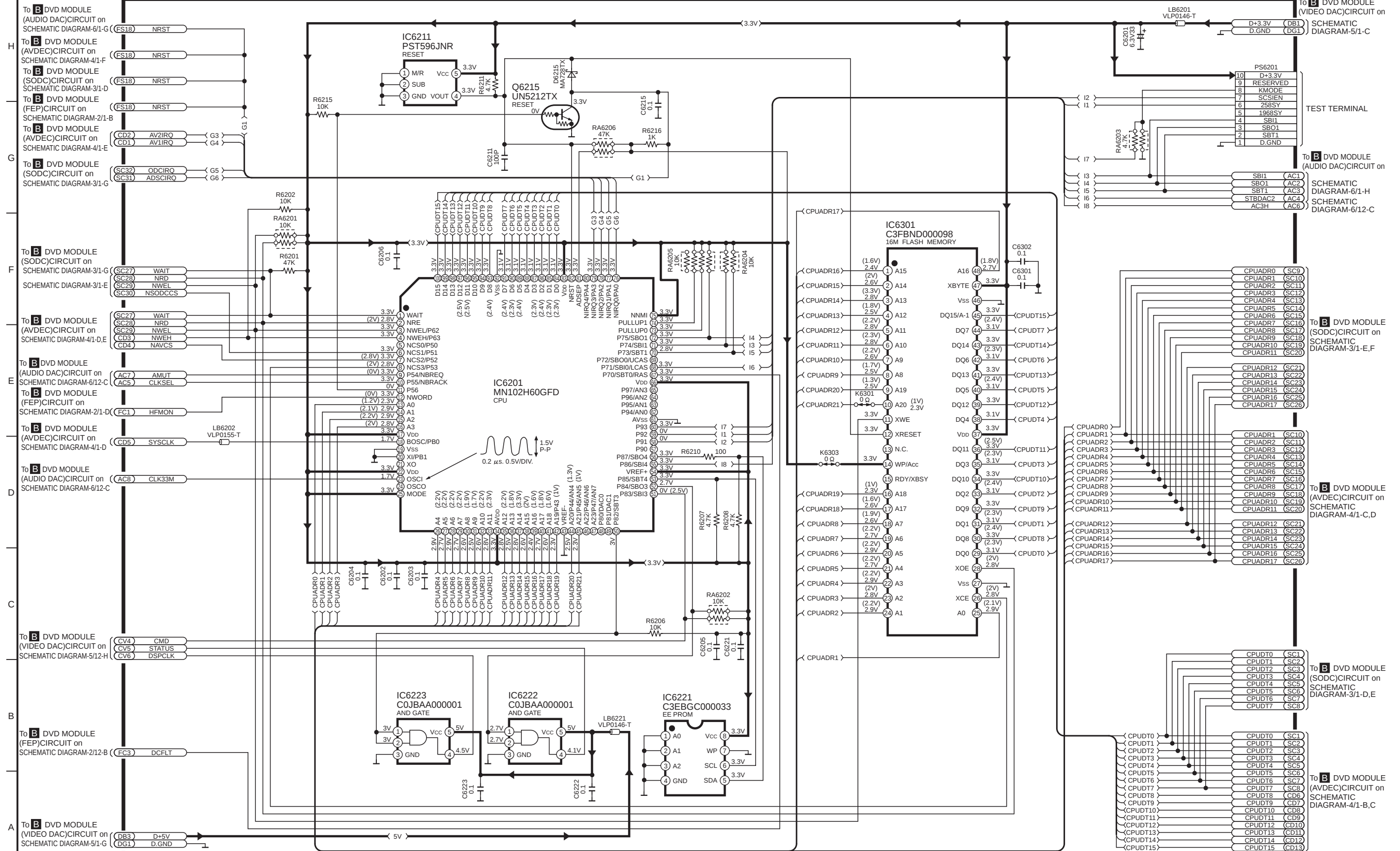
B DVD MODULE(AUDIO DAC) CIRCUIT

→ : POSITIVE VOLTAGE LINE ⇨ : AUDIO SIGNAL LINE ⇨⇨ : SURROUND SP. SIGNAL LINE ⇨⇨⇨ : CENTER SP. SIGNAL LINE ⇨⇨⇨⇨ : SUB WOOFER SIGNAL LINE



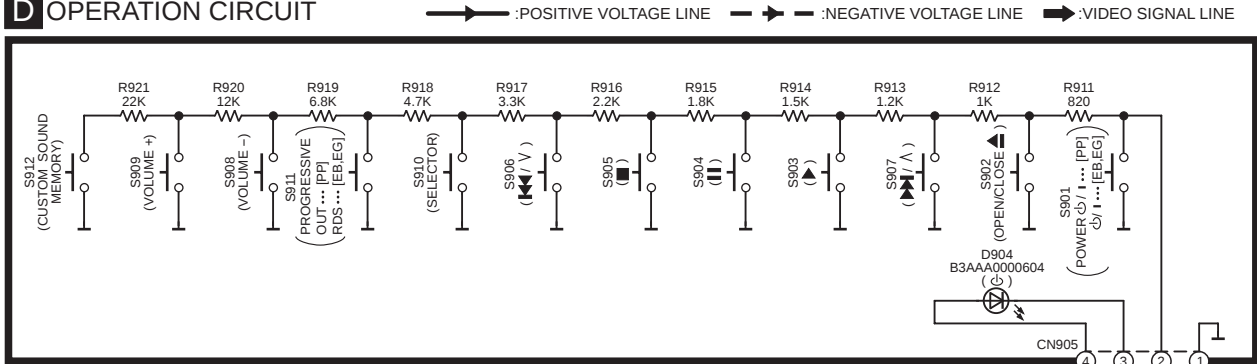
B DVD MODULE(CPU) CIRCUIT

→ : POSITIVE VOLTAGE LINE

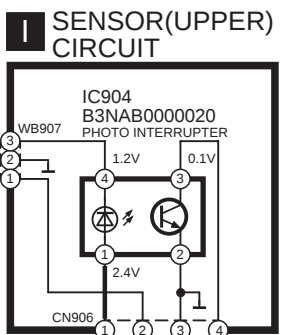
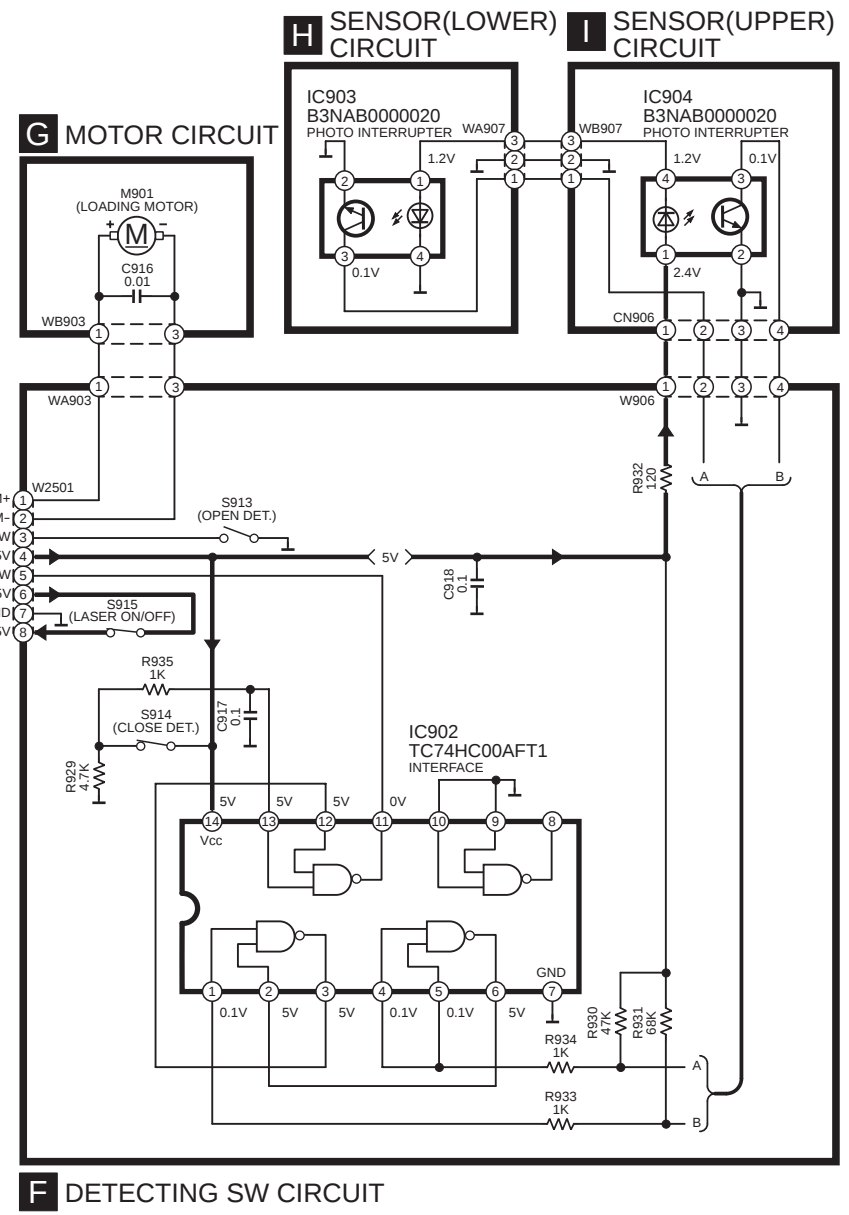
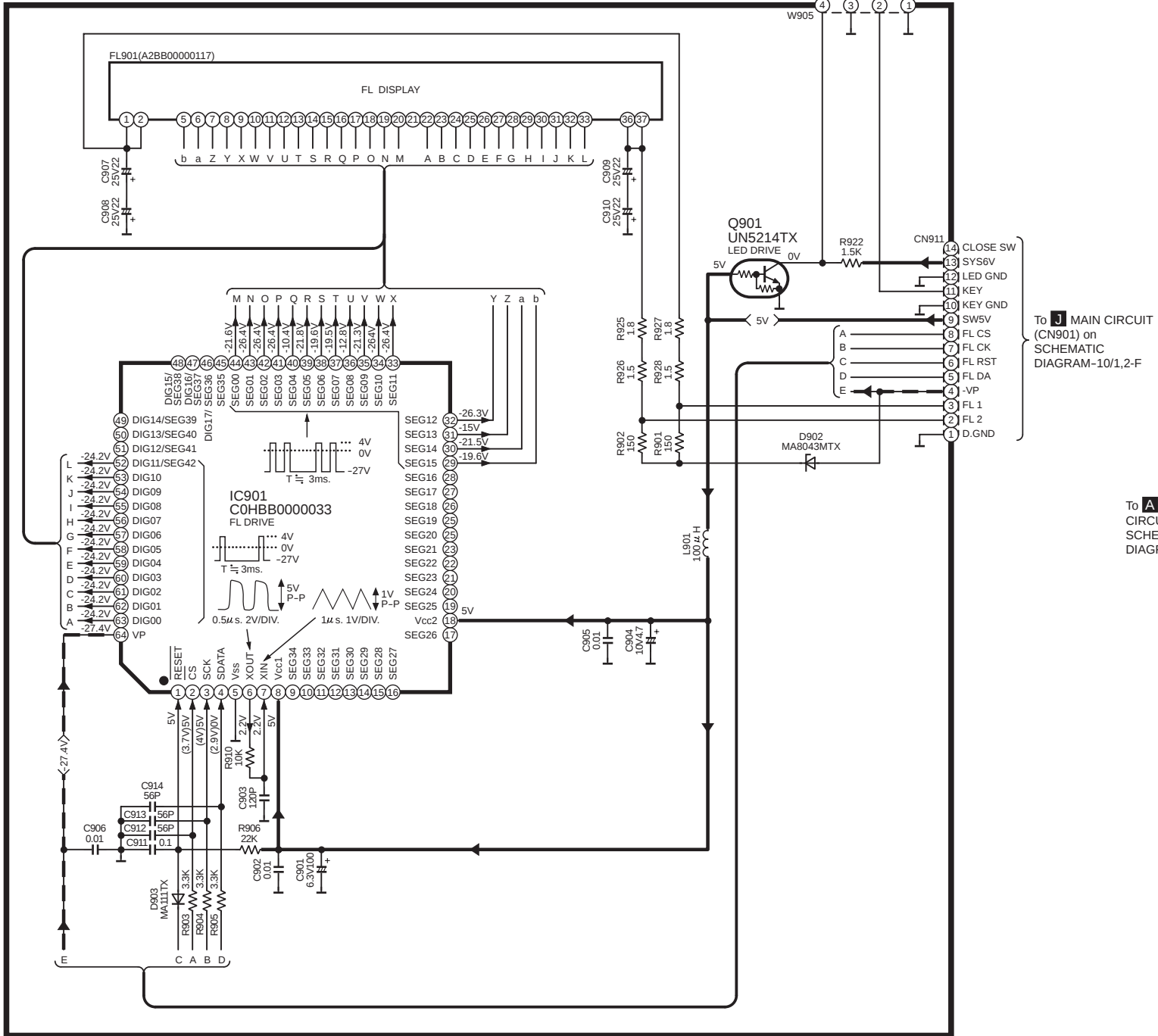




D OPERATION CIRCUIT



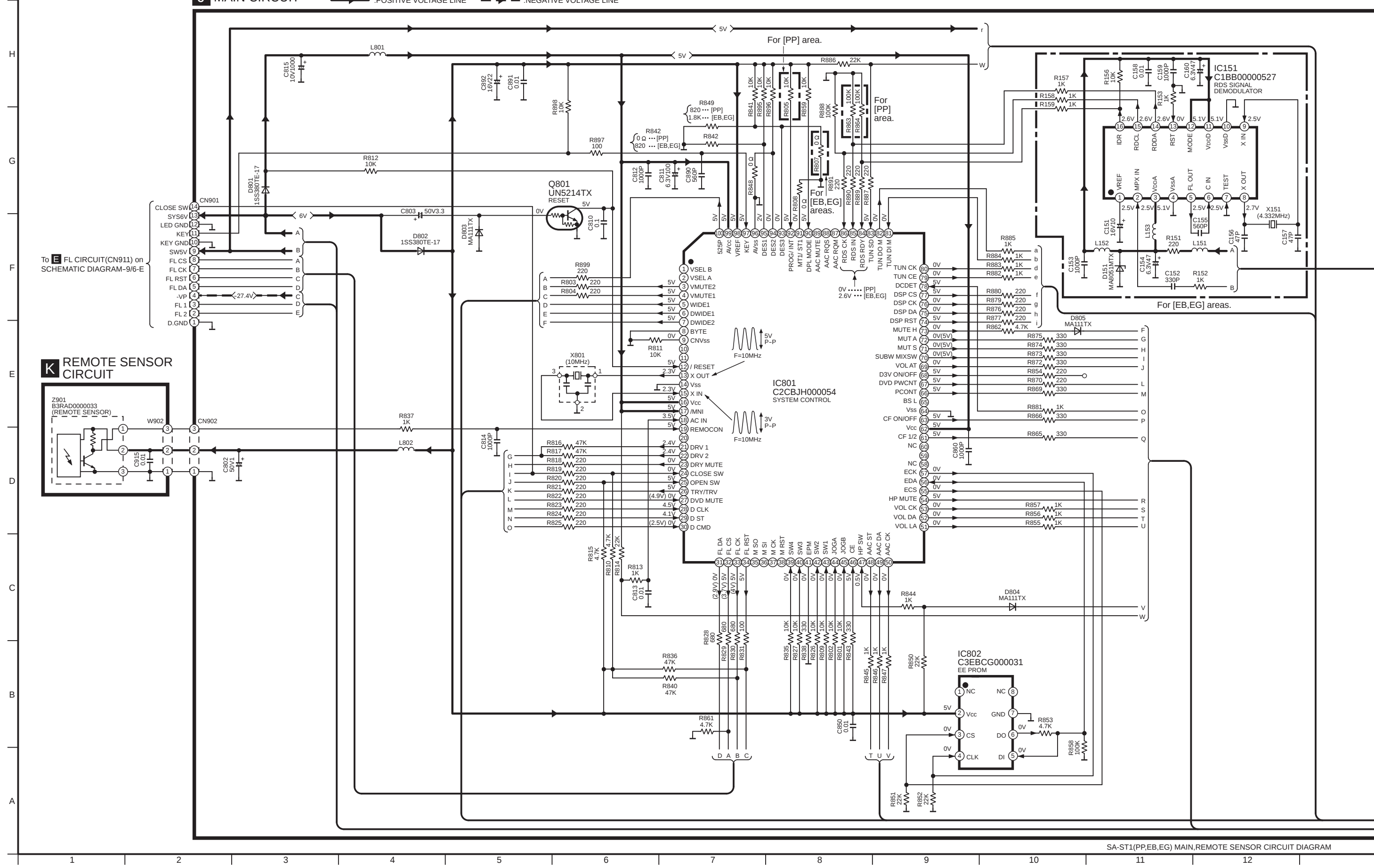
E FL CIRCUIT



J MAIN CIRCUIT

J MAIN CIRCUIT

 : POSITIVE VOLTAGE LINE
  : NEGATIVE VOLTAGE LINE



K REMOTE SENSOR CIRCUIT

J MAIN CIRCUIT



SCHEMATIC DIAGRAM-12

J MAIN CIRCUIT

To **B** DVD MODULE(AUDIO DAC)CIRCUIT(PS4201)
on SCHEMATIC DIAGRAM-6/12-G,H

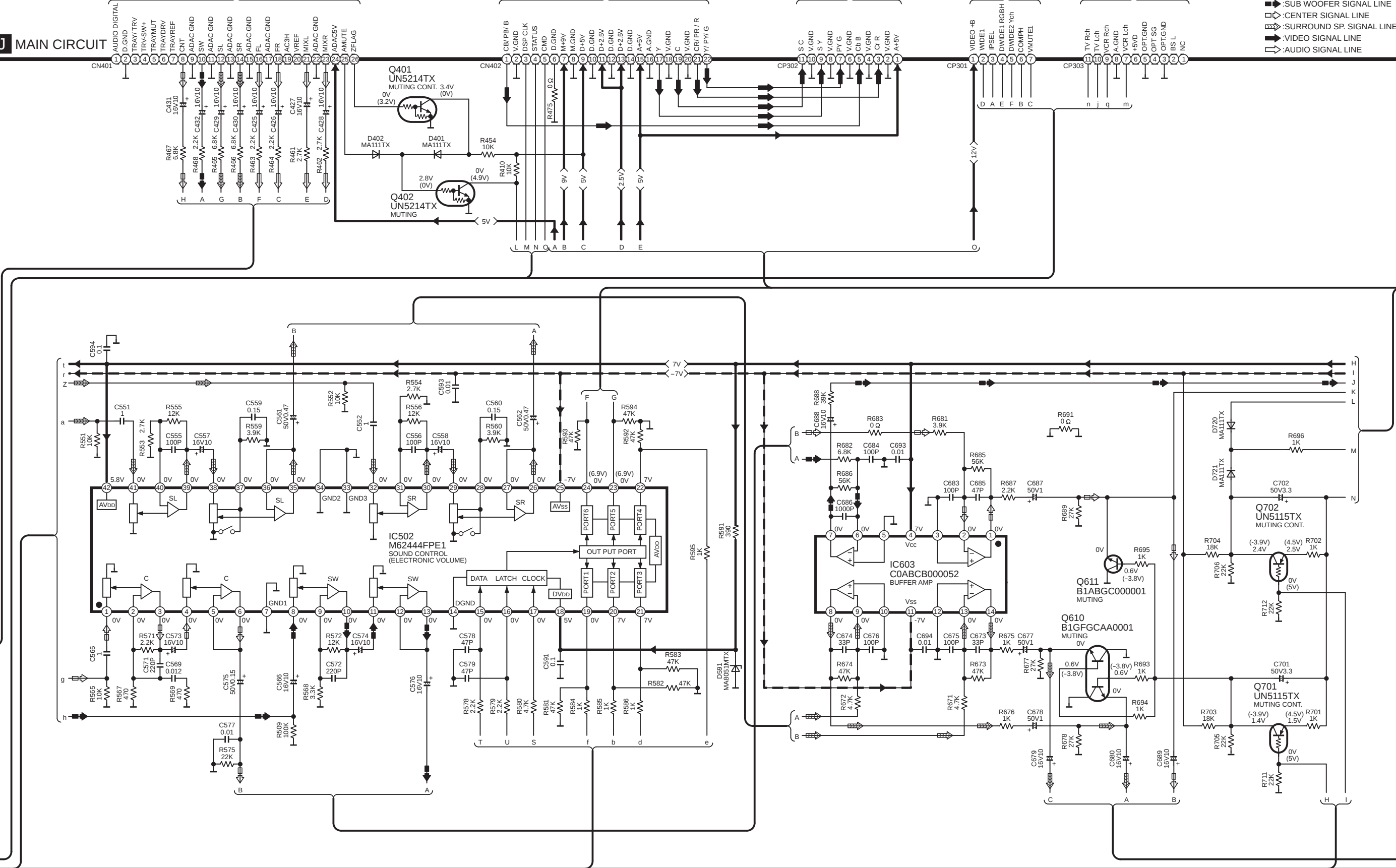
To **B** DVD MODULE(VIDEO DAC)CIRCUIT(PS3201)
on SCHEMATIC DIAGRAM-5/12-F,G

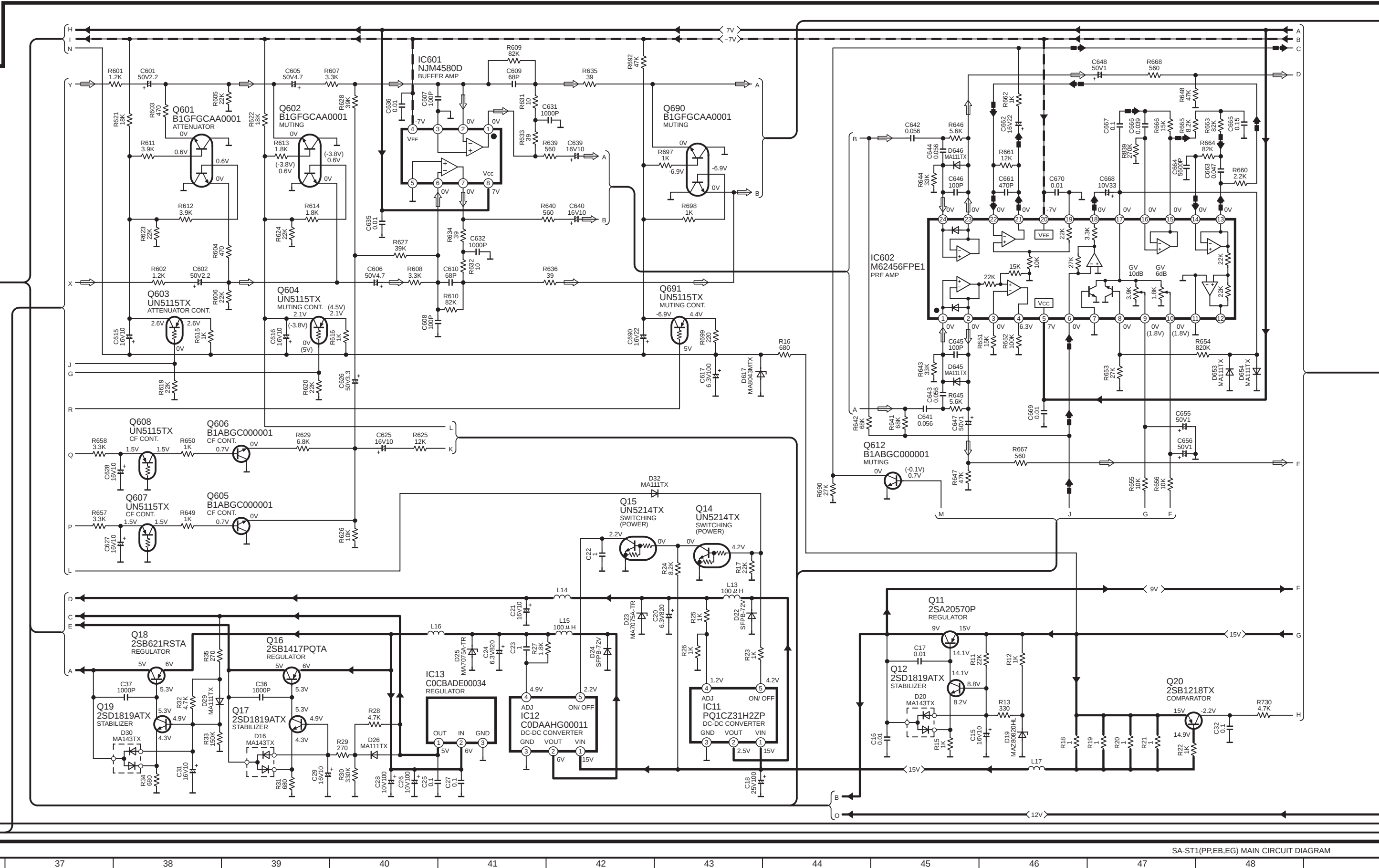
To **C** IN/OUT TERMINAL
CIRCUIT(CN302) on
SCHEMATIC DIAGRAM-8/1-B

To **C** IN/OUT TERMINAL
CIRCUIT(CN301) on
SCHEMATIC DIAGRAM-8/1-A

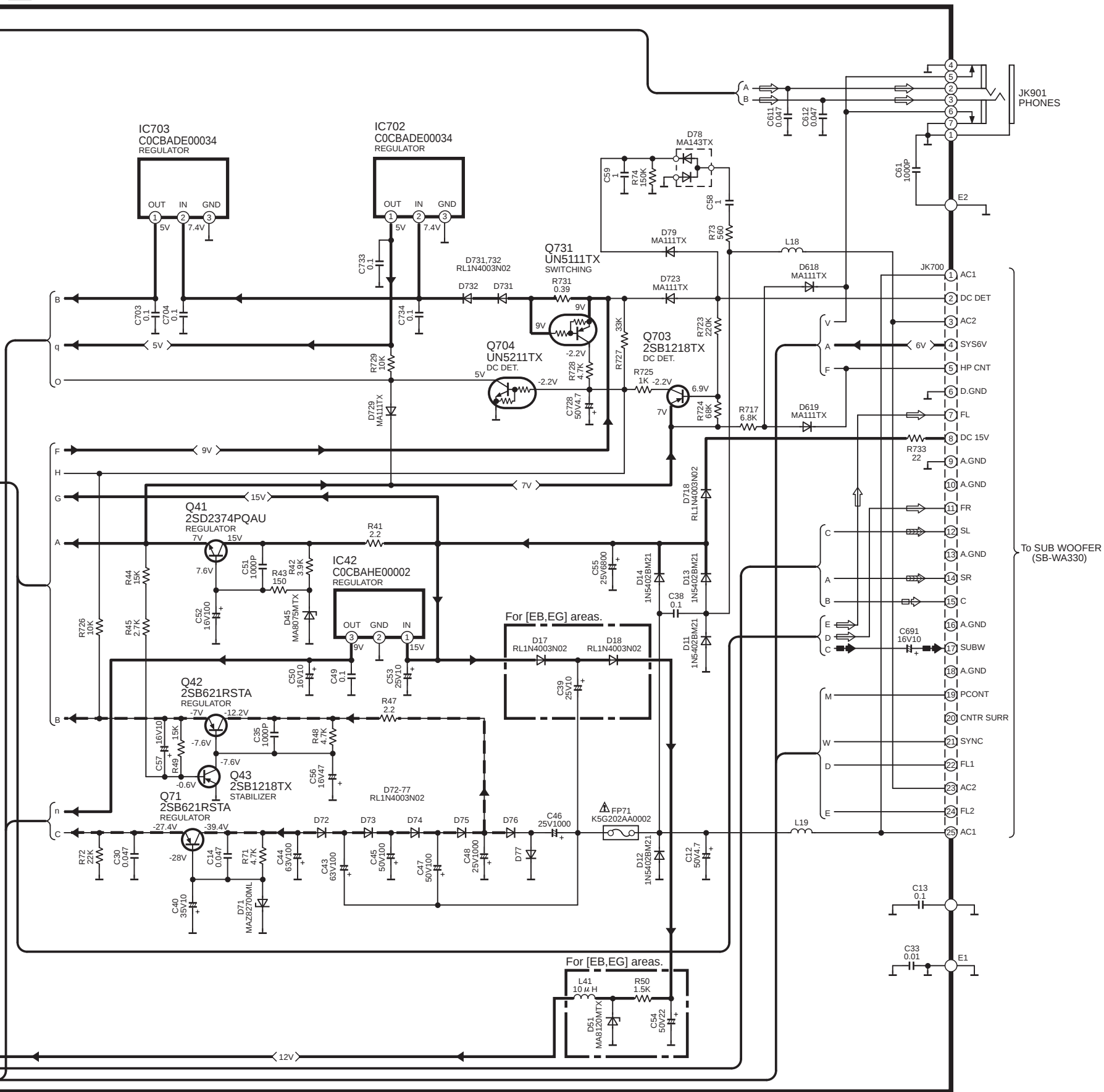
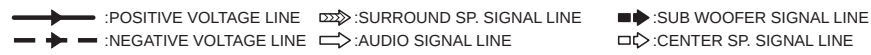
To **C** IN/OUT TERMINAL
CIRCUIT(CN303) on
SCHEMATIC DIAGRAM-8/1-C

- :POSITIVE VOLTAGE LINE
- - -> :NEGATIVE VOLTAGE LINE
- ▣ :SUB WOOFER SIGNAL LINE
- :CENTER SIGNAL LINE
- ▤ :SURROUND SP. SIGNAL LINE
- ▣ :VIDEO SIGNAL LINE
- ▢ :AUDIO SIGNAL LINE



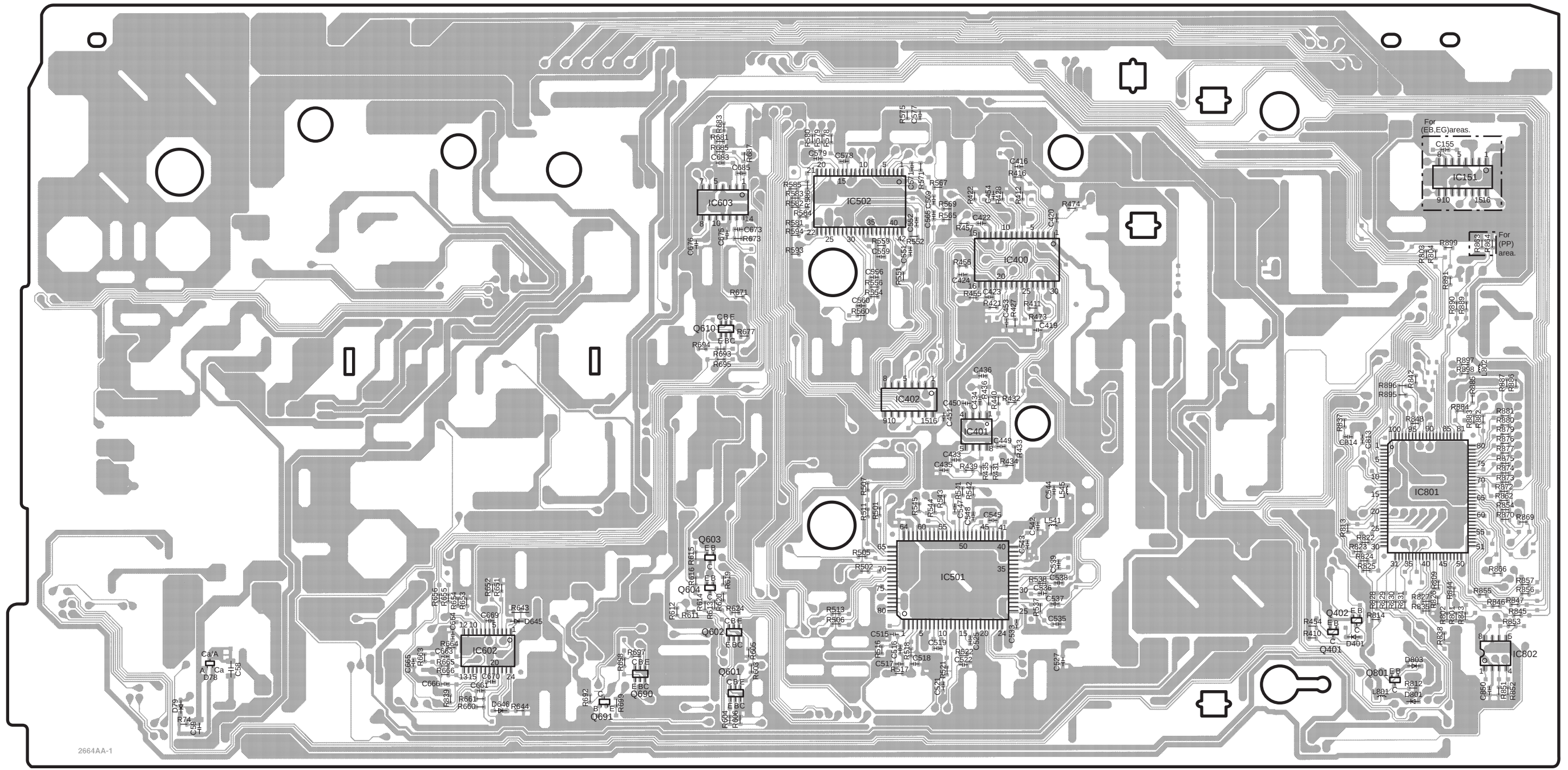


J MAIN CIRCUIT



SA-ST1(PP,EB,EG) MAIN CIRCUIT DIAGRAM

J MAIN P.C.B. (SIDE : A)



2664AA-1

(REP3448B-M...(PP)
(REP3448C-M...(EB,EG)

H

G

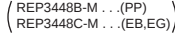


E

D



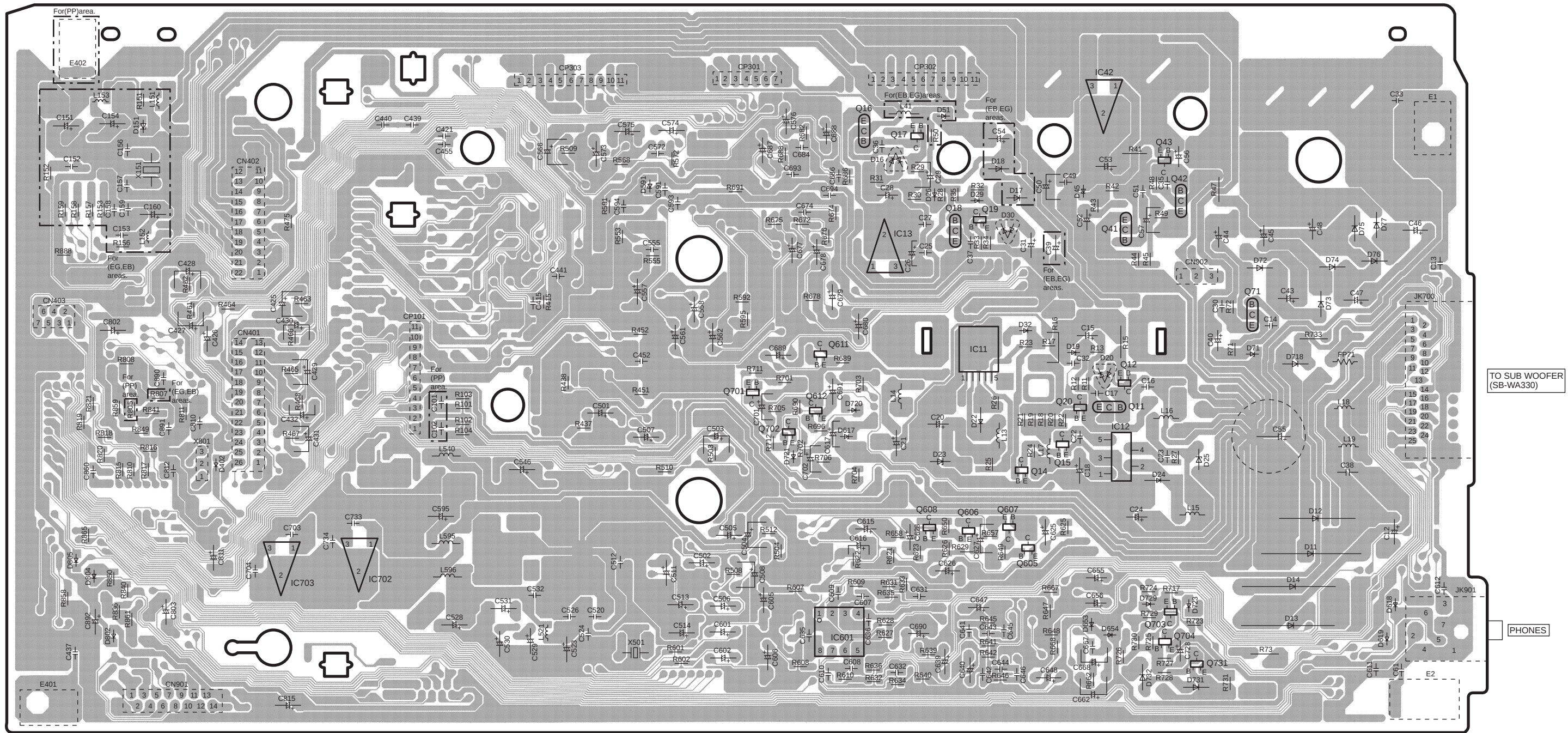
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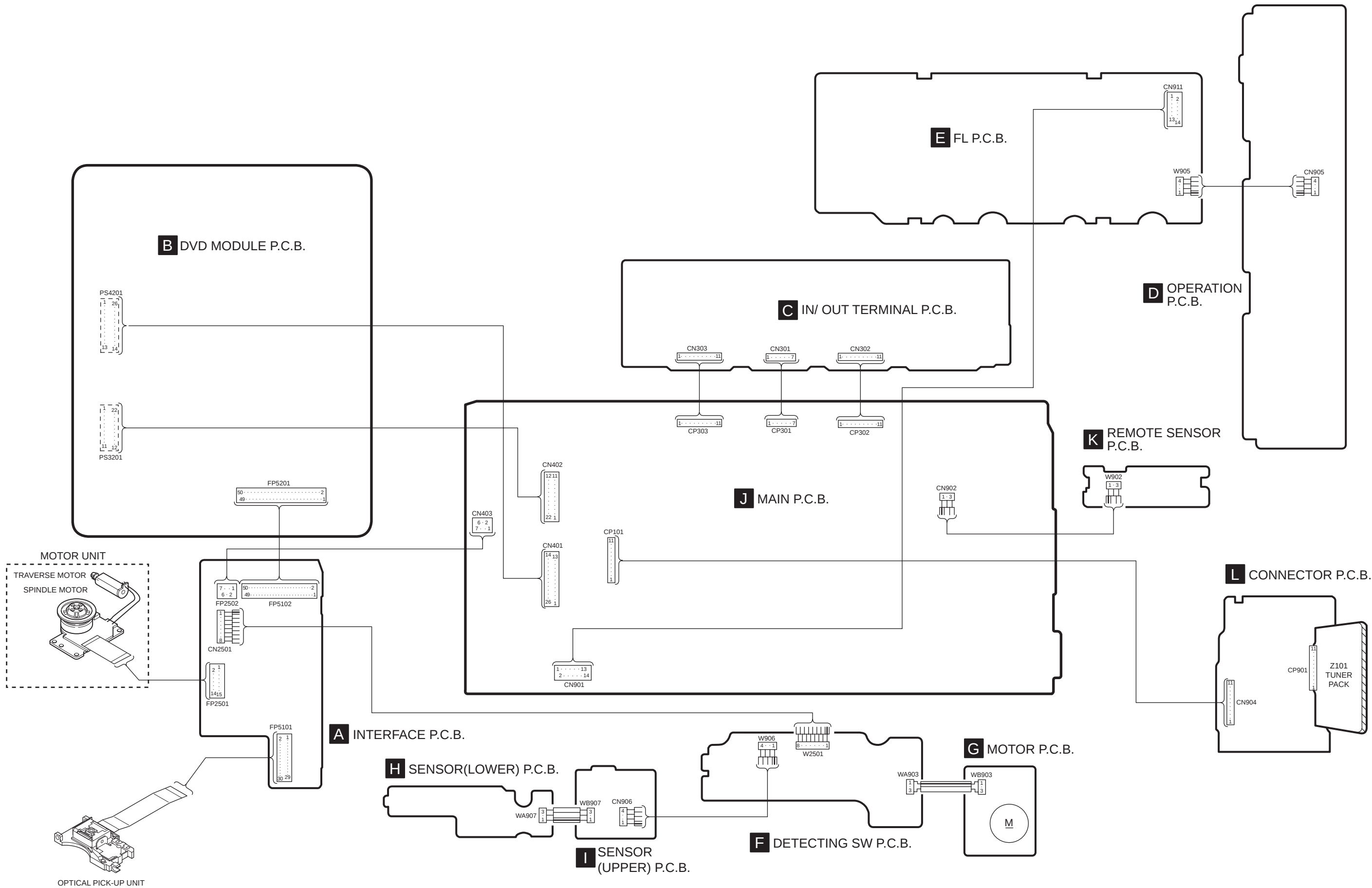


VCP IN/

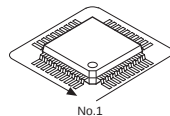
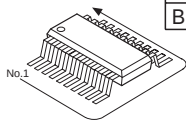


J MAIN P.C.B. (SIDE : B)



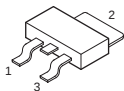


C3EBCG000031	8PIN	NJM4558MTE1	8PIN	C9ZB00000377	32PIN
C1DB00000582	16PIN	C0ABCB000052	14PIN	C1AB00001731	6PIN
C3ABPG000121	54PIN	C0JZAS000004	30PIN	C9ZB00000432	34PIN
BU4053BCFE2	16PIN	M62444FPE1	42PIN	C1BB00000527	16PIN
		M62456FPE1	24PIN	C1AB00001486	6PIN

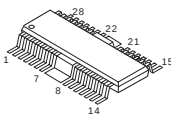


C0HBB0000033	64PIN
AN22030A-VT	64PIN
MN102H60GFD	100PIN
MN6775511	208PIN
C0FBBK000036	48PIN
MN103S26EGA	176PIN

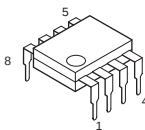
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C0CBAHE00002



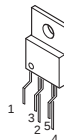
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C0GBG0000033



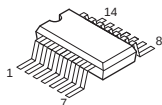
NJM4580D



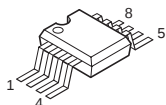
C0DAAHG00011



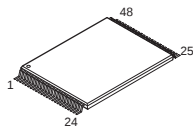
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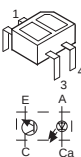
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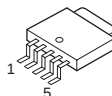
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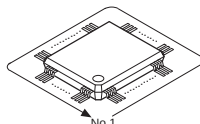
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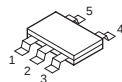
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C0DBEZG00011
C0DBFFG00004
PQ1CZ31H2ZP



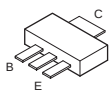
C2HBZC000013	80PIN
C2CBJH000054	100PIN



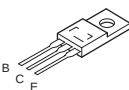
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C0JBAS000116



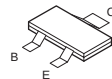
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2SA20570P
2SD2374PQAU

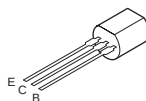


SB1218TX
2SB1218ARTX
2SD1819ATX

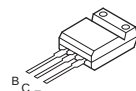


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UN5214TX
UN2121-TX
UN5212TX
UN5211TX
UN5111TX
UN5115TX
UN5213TX

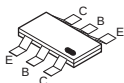
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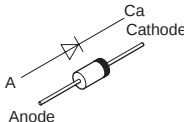
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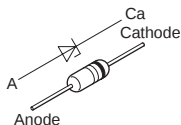
B1GFGCAA0001



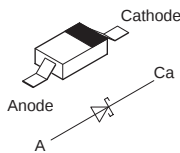
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RL1N4003N02



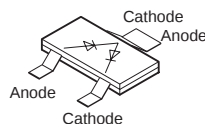
MA7075A-TR



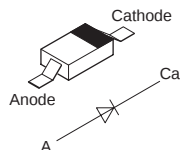
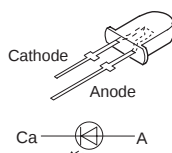
MA728TX



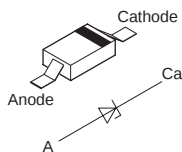
MA143TX



B3AAA0000604



MA111TX
1SS380TE-17
SFPB-72V
B0ECKM000003



MA8043MTX
MA8051MTX
MA8075MTX
MAZ80820HL
MAZ82700ML
MA8120MTX

-
- A diagram illustrating a cable management system. A cable is shown entering a vertical channel from the top. The channel is secured with a lock mechanism. The cable is then shown exiting the channel at the bottom, where it is bundled together.

Optional antenna connections

Use outdoor antennas if radio reception is poor.

Note

Disconnect the antenna when the unit is not in use.

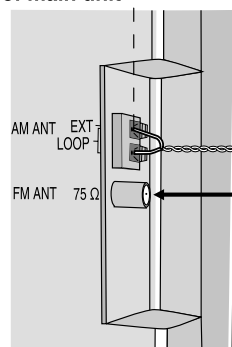
Do not use the outdoor antenna during an electrical storm.

AM outdoor antenna (Using a vinyl wire)

Run a piece of vinyl wire horizontally across a window or other convenient location.

5–12 m (16–39 feet)

Rear of main unit



Leave the loop antenna connected.

FM outdoor antenna

- Disconnect the FM indoor antenna.
- The antenna should be installed by a competent technician. Rework your outdoor antenna's 75 Ω coaxial cable as follows.

Except for SA-ST1PP

For SA-ST1EB only

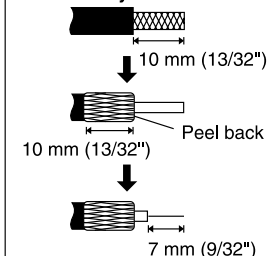
Connect the antenna plug adaptor (included)

For SA-ST1PP

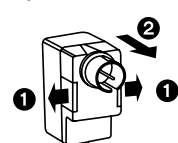
Antenna plug (included)

75 Ω coaxial cable (not included)

① Remove a piece of the outer vinyl insulator.

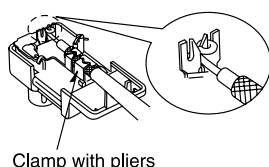


② Carefully pull the tabs apart to remove the cover.



③ Install the coaxial cable.

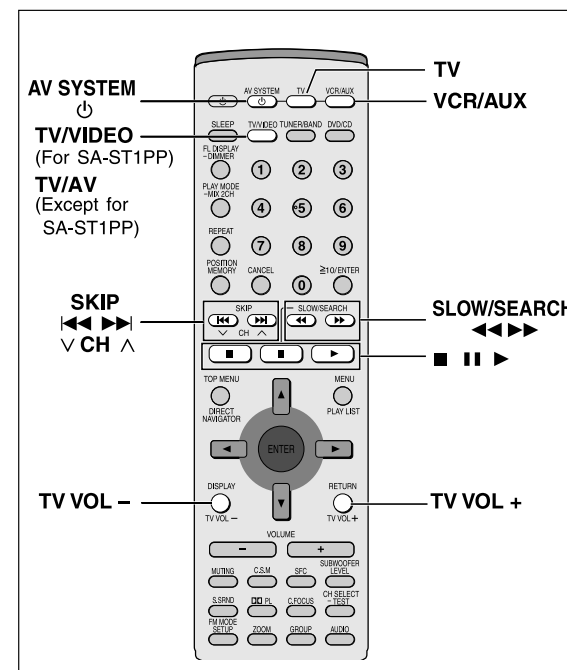
Clamp the cable conductor, and wind it on so that it does not contact anything else.



④ Attach the cover.

Operating a television or video cassette recorder

You can use the remote control to operate a Panasonic television or a video cassette recorder. (Some models cannot be operated by this remote control.)



Operating a television

Preparation

- Face the remote control at this unit and press [TV]. The button lights and "TV" appears on the unit's display. You can now operate the television.
- Face the remote control at the television for the following operations.

■ Turning the television on/off

Press [⏻, AV SYSTEM].

■ Switching the television's video input mode

Press [TV/VIDEO] (For SA-ST1PP)
Press [TV/AV] (Except for SA-ST1PP).

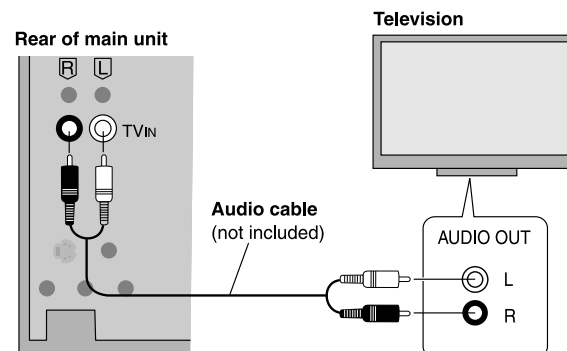
■ Changing channels

Press [◀, ∇ CH] or [▶, CH ▲].

■ Adjusting the volume

Press [TV VOL -] or [TV VOL +].

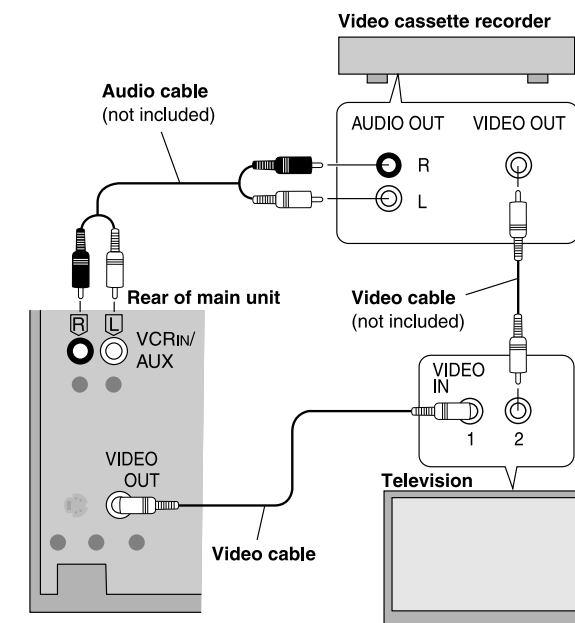
Playing the television through this unit's speakers



Reduce the volume on the television to minimum and control the volume on this unit.

Operating a video cassette recorder

Connection example



Preparation

- Face the remote control at this unit and press [VCR/AUX]. The button lights and "VCR/AUX" appears on the unit's display. You can operate the video cassette recorder.
- Change the video input mode on the television ("VIDEO 2" in the example).
- Face the remote control at the video cassette recorder for the following operations.

■ Turning the video cassette recorder on/off

Press [⏻, AV SYSTEM].

■ Play, pause and stop

Press [▶], [⏸] or [■].

■ Fast forward and rewind

Press [⏮] or [⏭].

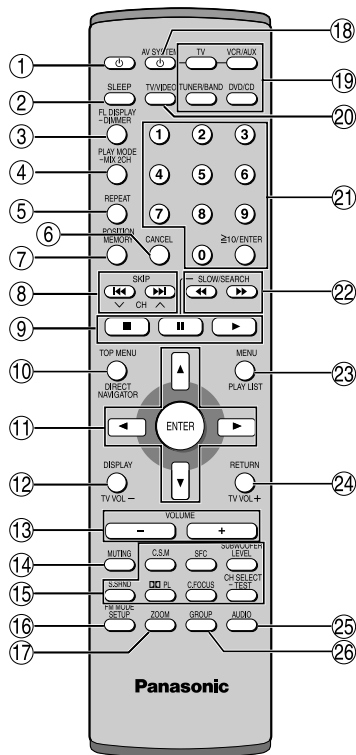
You can connect a laser disc or record player instead of a video cassette recorder.

Connect as shown above and select "VCR/AUX" as the source.

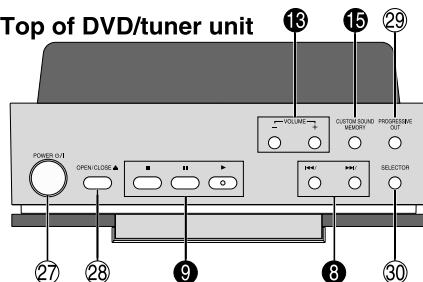
When connecting a record player

We recommend using a record player with a built-in phono equalizer.

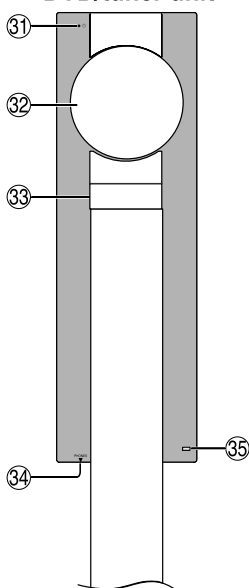
If your player doesn't have a built-in equalizer, connect it first to a separate equalizer and then connect that to this unit.



Top of DVD/tuner unit



DVD/tuner unit



Remote control

- ① Standby/on switch [⏻]
- ② Sleep button [SLEEP]
- ③ FL display, Dimmer button [FL DISPLAY, –DIMMER]
- ④ Play mode, Mix 2ch button [PLAY MODE, –MIX 2CH]
- ⑤ Repeat button [REPEAT]
- ⑥ Cancel button [CANCEL]
- ⑦ Position memory button [POSITION MEMORY]
- ⑧ Skip, Preset channel, TV channel buttons [◀◀ ▶▶ SKIP, √CH ▲]
- ⑨ Basic operation buttons
- ⑩ Top menu, Direct navigator button [TOP MENU, DIRECT NAVIGATOR]
- ⑪ Cursor buttons [▲, ▼, ◀, ▶], Enter button [ENTER]
- ⑫ Display, TV volume down button [DISPLAY, TV VOL –]
- ⑬ Volume buttons [–, +, VOLUME]
- ⑭ Muting button [MUTING]
- ⑮ Sound field, sound quality buttons
- ⑯ FM mode, Setup button [FM MODE, SETUP]
- ⑰ Zoom button [ZOOM]
- ⑱ AV system standby/on button [⏻, AV SYSTEM]
- ⑲ Source select buttons
 - Face towards this unit to change the source.
 - Press [TV] or [VCR/AUX] first to operate a Panasonic television or video cassette recorder.
- ⑳ **For SA-ST1PP**
TV/VIDEO button [TV/VIDEO]
- Except for SA-ST1PP**
TV/AV button [TV/AV]
- ㉑ **For SA-ST1PP**
Numbered buttons [1–9, 0, ≥10/ENTER]
Except for SA-ST1PP
Numbered buttons [1–9, 0, ≥10/–/–/–]
- ㉒ Slow/search, Tuning buttons [◀◀, ▶▶ SLOW/SEARCH]
- ㉓ Menu, Play list button [MENU, PLAY LIST]
- ㉔ Return, TV volume up button [RETURN, TV VOL +]
- ㉕ Audio button [AUDIO]
- ㉖ Group button [GROUP]

DVD/tuner unit

Buttons ⑧, ⑨, ⑬ and ⑮ function the same as the controls on the remote control.

- ㉗ **For SA-ST1PP**
Standby/on switch [POWER ⏻ /I]
- Except for SA-ST1PP**
Standby/on switch [⏻ /I]
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.
- ㉘ Open/close button [OPEN/CLOSE ▲]
- ㉙ **For SA-ST1PP**
Progressive out button [PROGRESSIVE OUT]
Except for SA-ST1PP
RDS button [RDS]
- ㉚ Source select button [SELECTOR]
- ㉛ Standby/on indicator [⏻]
When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.
- ㉜ Loading tray
- ㉝ Display
- ㉞ Headphone jack [PHONES]
- ㉟ Remote control signal sensor

Parts Change Notice

Model No.
SA-ST1PP
SA-ST1EB
SA-ST1EG

Please revise the original parts list in the Service Manual to conform to the change(s) shown herein.
 If new part numbers are shown, be sure to use them when ordering parts.

Reason for Change

*The circled item indicates the reason. If no marking, see the Notes in the bottom column.

	1. Improve performance	
	2. Change of material or dimension	
	3. To meet approved specification	
	4. Standardization	
	5. Addition	
	6. Deletion	
●	7. Correction	
	8. Other	

Interchangeability Code

**The circled item indicates the interchangeability. If no marking, see the Notes in the bottom column.

Parts		Set Production	
A	Original	Early	Original or new parts may be used in early or late production set. Use original parts until exhausted, then stock new parts.
	New	Late	
B	Original	Early	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts where possible, then stock new parts.
	New	Late	
C	Original	Early	New parts only may be used in early or late production sets. Stock new parts.
	New	Late	
D	Original	Early	Original parts may be used in early production sets only. New parts may be used in late production sets only. Stock both original and new parts.
	New	Late	
●	E	Other	

Part Number

Model No.	Ref. No.	Original Part No.	New Part No.	Notes	Part Name & Descriptions
SA-ST1PP/EB/EG	45-12	RXQ1001	RMR1504-K	7-E	LOCK PLATE

File this Parts Change Notice with your copy of the Service Manual.

AD0306523S5

A6

Service Manual

DVD/Tuner unit



- SA-ST1PP
SA-ST1EB
SA-ST1EG

Colour

(S).....Silver Type

Subject: To inform the correction of Part No. (Power supply jig) in “Operation Checks and Disassembly Procedures”.

Please use this supplement manual together with the service manual for Model No. SA-ST1PP, SA-ST1EB, SA-ST1EG, Order No. AD0303071C5.

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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.

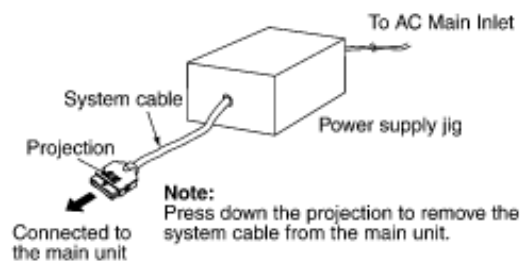
Panasonic

1 Purpose

This is to inform the correction of Part No. (Power supply jig) in original service manual of item 15. [To supply power source to main unit] in “Operation Checks and Disassembly Procedures”.

2 Operation Checks and Disassembly Procedures

When Active sub woofer is not prepared, use the power supply jig to check this unit as shown below.
[Part No.] [RFKZ0182](#) (110 V, 127 V, 220 V, 230 - 240 V for overseas domestic use)



F0306KH

[TOP](#)