

Service Manual

DVD Changer



MASH
multi-stage noise shaping

SL-DV170

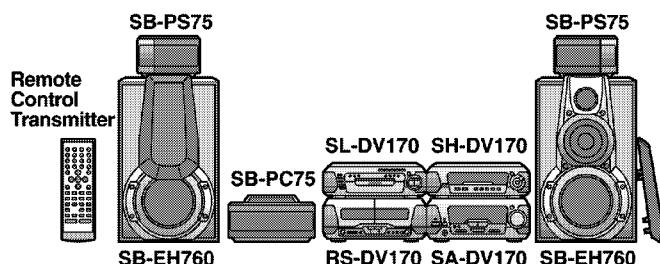
Traverse Deck: RD-DAC031-A
Mechanism Series

Colour

(S).....Silver Type

Area

(EG).....Europe.



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

System	SC-DV170
Sound Processor	SH-DV170
Tuner/Amplifier	SA-DV170
DVD Changer	SL-DV170
Cassette Deck	RS-DV170
Front Speakers*	SB-EH760
Center Speaker*	SB-PC75
Surround Speakers*	SB-PS75

* : Made in Spain.

Specifications

Discs played Section

DVD-Video disc: 8/12 cm single-sided, single-layer
8/12 cm single-sided, double-layer
8/12 cm double-sided, double-layer
(One layer per side)

Compact disc (CD-DA, VIDEO CD): 8/12 cm disc

Audio Section

DA converter: Delta-sigma DAC

Frequency response:

CD audio; 4 – 20 kHz $\pm$ 1 dB

DVD (linear audio); 4 – 22 kHz $\pm$ 1 dB
(48 kHz sampling)
4 – 44 kHz $\pm$ 1, –3 dB
(96 kHz sampling)

Video Section

Signal system: PAL (PAL60/NTSC)

Output level:

Composite Video; 1 Vp-p (75 Ω)

S-video Y; 1 Vp-p (75 Ω)

S-video C; 0.300 Vp-p (75 Ω) PAL
0.286 Vp-p (75 Ω) NTSC

Pickup Section

Beam source: Semiconductor laser

Wavelength: 668 nm

General

Dimensions (W×H×D): 293×89×288 mm

Mass: 2.5 kg

Notes: Specifications are subject to change without notice.
Mass and dimensions are approximate.

⚠ 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.

Technics®

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1 Note

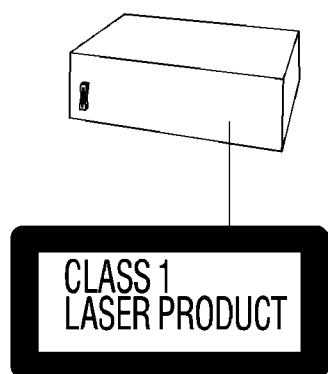
Refer to the service manual for Model No. SA-DV170 (ORDER No. AD0005112C2) for information on Accessories and Packaging.

2 Precaution of Laser Diode

Caution:

This unit utilizes a class 1 laser. Invisible laser radiation is emitted from the optical pickup lens when the unit is turned on:

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



(Back of product)

DANGER	LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.	(Inside of product)
DANGERS	RADIATION LASER LORSQUE OUVERT. ÉVITER TOUTE EXPOSITION AU FASCEAU.	(Intérieur de l'appareil)
ADVARSEL	LASERSTRÅLING VED ÅBNING. NÅR SIKKERHEDSÅFBRYDERE ER LIDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.	(Indersiden af apparatet)
VARO!	AVATTAESSA JA SUOJALUKUTUS OHITETTAESSA OLET ALTIINA LASERSÄTELYLLE. ÄLÄ KATSO SÄTEESEEN.	(Tuotteen sisällä)
VARNING	LASERSTRÅLING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRÄKTA EJ STRÅLEN.	(Apparatens insida)
ADVARSEL	LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.	(Produktets inside)
VORSICHT	LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.	(Im Inneren des Gerätes)

3 Handling Precautions for Traverse Deck

The laser diode in the optical pickup 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 pickup.

3.1. Handling of optical pickup

1. Do not subject the optical pickup to static electricity as it is extremely sensitive to electrical shock.
2. To prevent the breakdown of the laser diode, an antistatic shorting pin is inserted into the flexible board (FPC board). Refer to Fig. 3-1.
When removing or connecting the short pin, finish the job in as short time as possible.
3. Be careful not to apply excessive stress to the flexible board (FPC board).
4. Do not turn the variable resistor (Laser power adjustment).

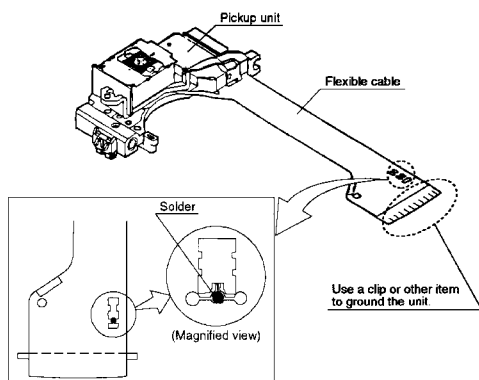


Fig. 3-1.

3.2. Grounding for electrostatic breakdown prevention

3.2.1. Human body grounding

Use the antistatic wrist strap to discharge the static electricity from your body. Refer to Fig. 3-2.

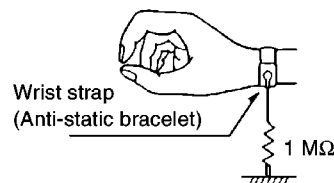


Fig. 3-2.

3.2.2. Work table grounding

Put a conductive material (sheet) or steel sheet on the area where the optical pickup is placed and ground the sheet. Refer to Fig. 3-3.

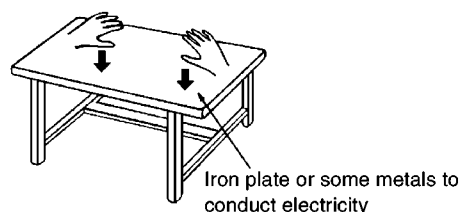
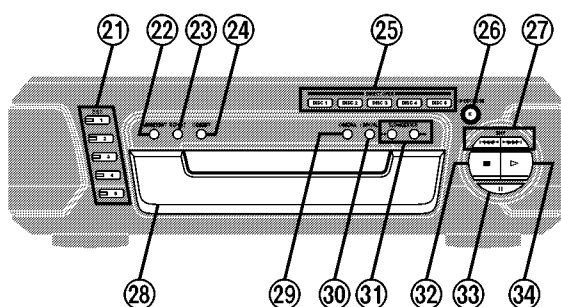


Fig. 3-3.

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 pickup.

4 Location of Controls



- ②① **Disc select buttons and indicators (DISC, 1–5)**
Green: Indicates that the tray is ready to play its disc or to be opened.
- ②② **A-B repeat button (A-B REPEAT)**
- ②③ **Repeat button (REPEAT)**
- ②④ **CD edit button (CD EDIT)**
- ②⑤ **Disc direct open buttons (DIRECT OPEN, DISC 1– DISC 5)**
- ②⑥ **Disc tray open/close button (▲ OPEN/CLOSE)**
- ②⑦ **Skip buttons (◀◀, ▶▶ SKIP)**
- ②⑧ **Disc tray**
- ②⑨ **Cinema mode button (CINEMA)**
- ③⑦ **Disc management select button (1 DISC/ALL)**
- ③① **Slow/search buttons (◀◀, ▶▶ SLOW/SEARCH)**
- ③② **Stop button (■)**
- ③③ **Pause button (||)**
- ③④ **Play button and Indicator (▷)**

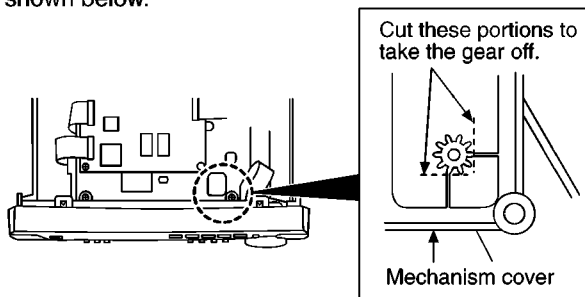
5 Operation Checks and Component Replacement Procedures

- 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.

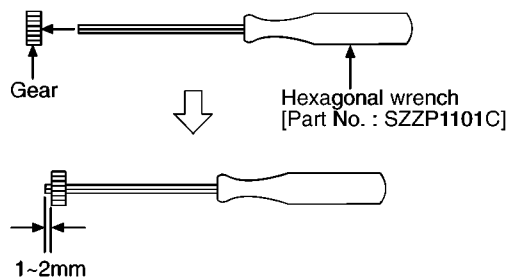
Gear for servicing (as jig) information

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

1. Remove the gear provided with mechanism cover as shown below.



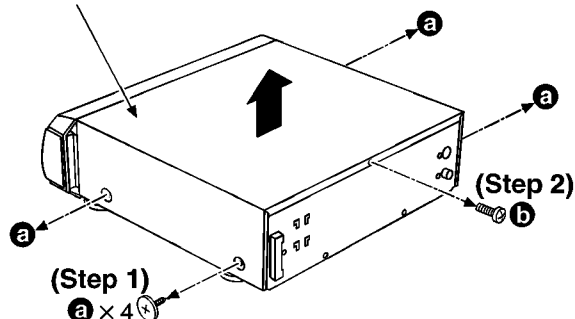
2. Insert the hexagonal wrench (2mm) into the gear, and then project the tip of wrench for 1~2mm length.



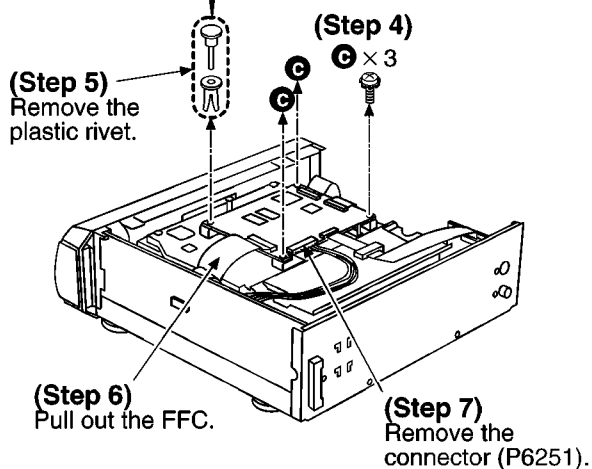
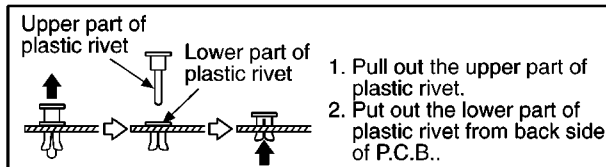
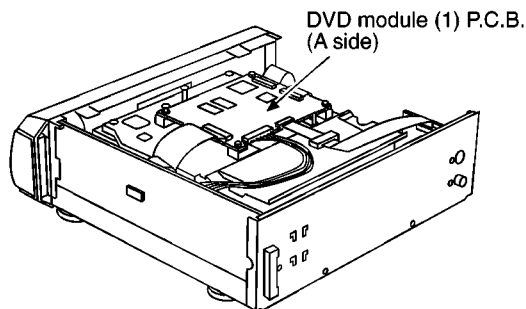
(Preparation of gear as jig is completed.)

5.1. Checking for the DVD module (1) P.C.B.

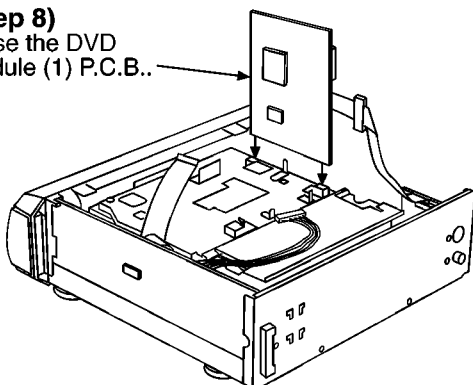
- (Step 3)
Remove the top cabinet.



- Check the DVD module (1) P.C.B. (A side) as shown below.

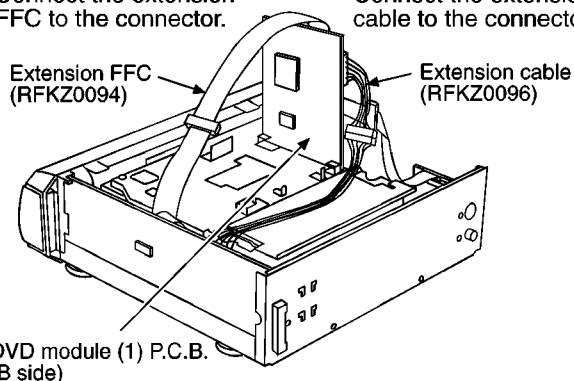


(Step 8)
Raise the DVD
module (1) P.C.B..



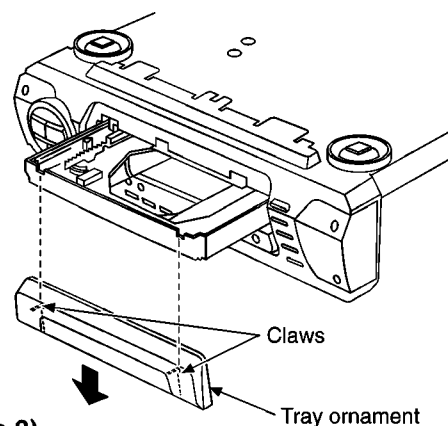
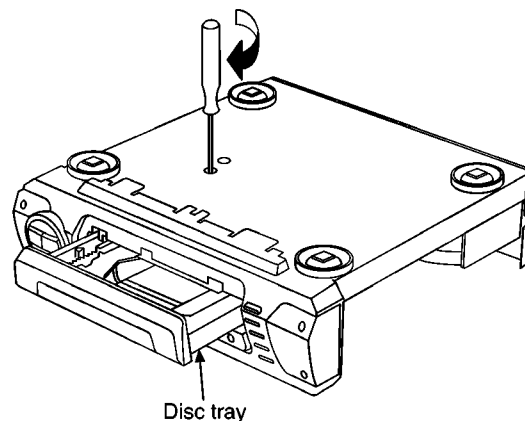
• Check the DVD module (1) P.C.B. (B side) as shown below.

(Step 9)
Connect the extension
FFC to the connector.



(Step 10)
Connect the extension
cable to the connector.

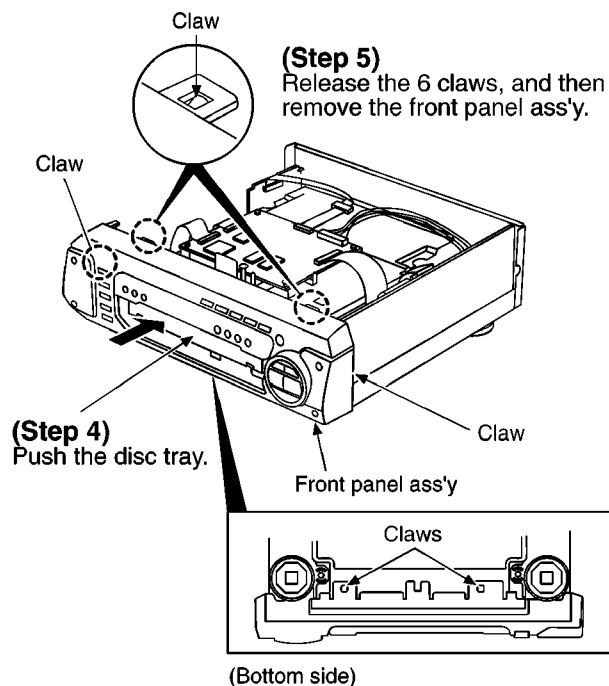
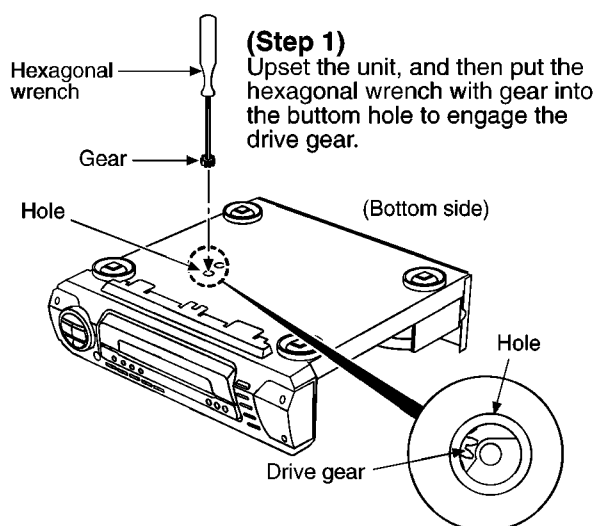
(Step 2)
Rotate the hexagonal wrench with gear in direction of arrow, and then open the disc tray.

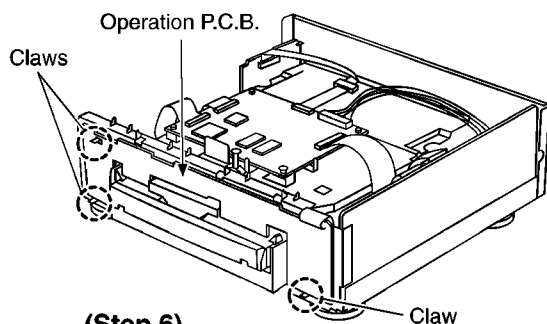


(Step 3)
Release the 2 claws, and then
remove the tray ornament.

5.2. Checking for the operation P.C.B.

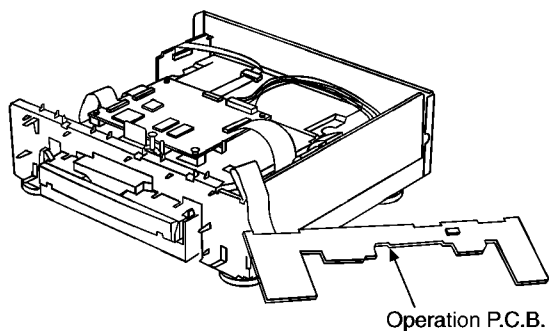
• Follow the **(Step 1)** - **(Step 3)** of item 5.1.





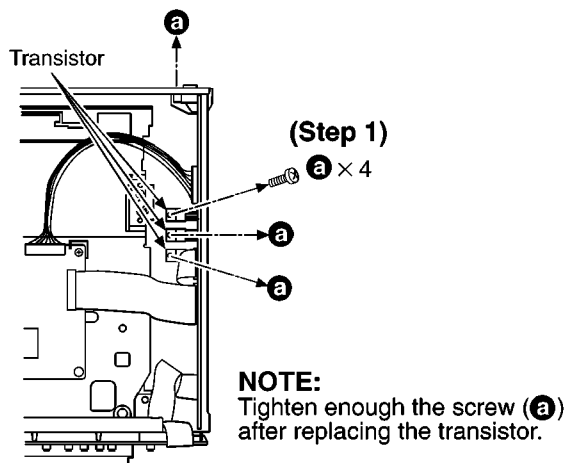
(Step 6)
Release the 3 claws, and then
remove the operation P.C.B..

• Check the operation P.C.B. as shown below.



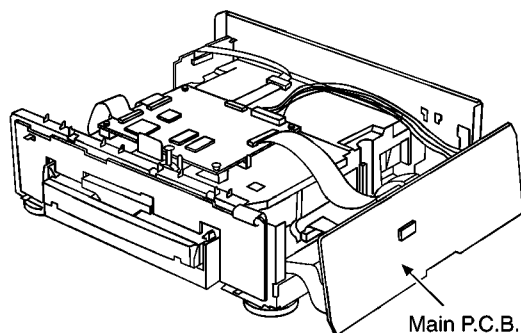
5.3. Checking for the main P.C.B.

- Follow the (Step 1) - (Step 3) of item 5.1.
- Follow the (Step 1) - (Step 5) of item 5.2.



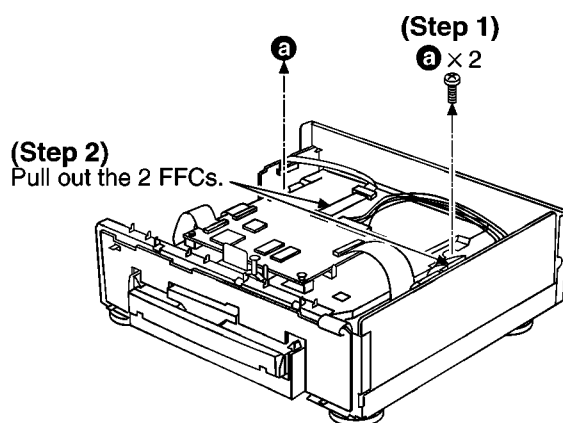
• Check the main P.C.B. as shown below.

(Step 2)
Remove the main P.C.B., and then
place it on the side of unit.

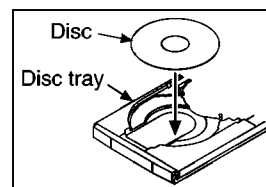


5.4. Checking for the DVD module (2) P.C.B.

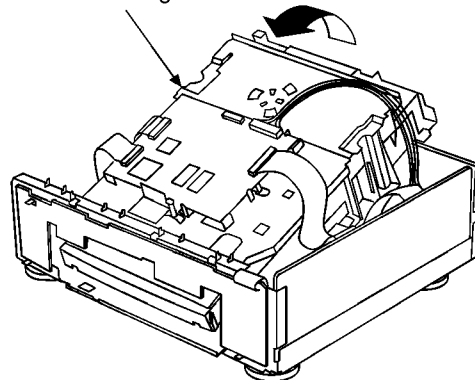
- Follow the (Step 1) - (Step 3) of item 5.1.
- Follow the (Step 1) - (Step 5) of item 5.2.



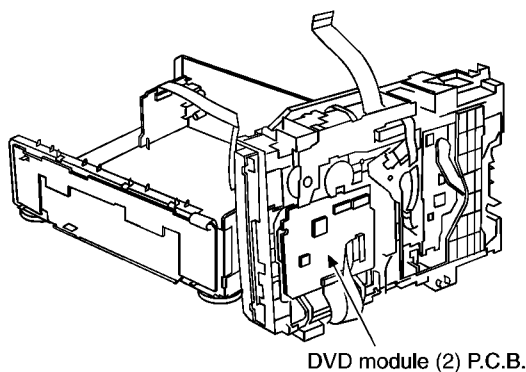
NOTE:
Put in the disc to disc tray.



(Step 3)
Remove the loading unit.

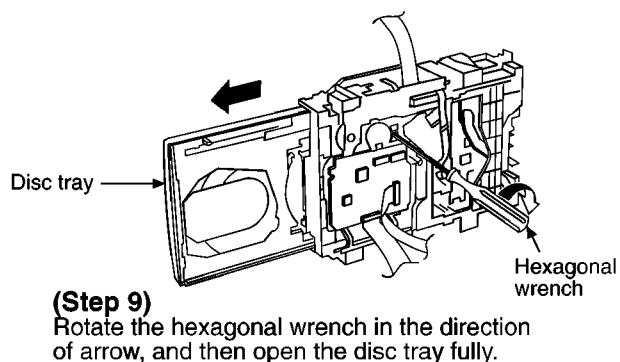
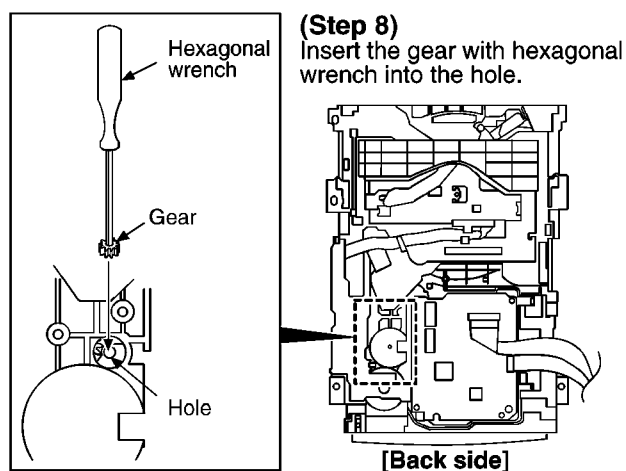
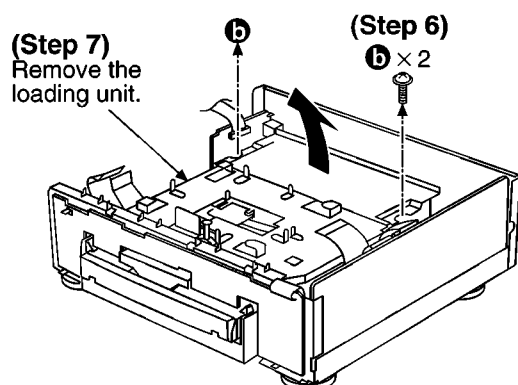
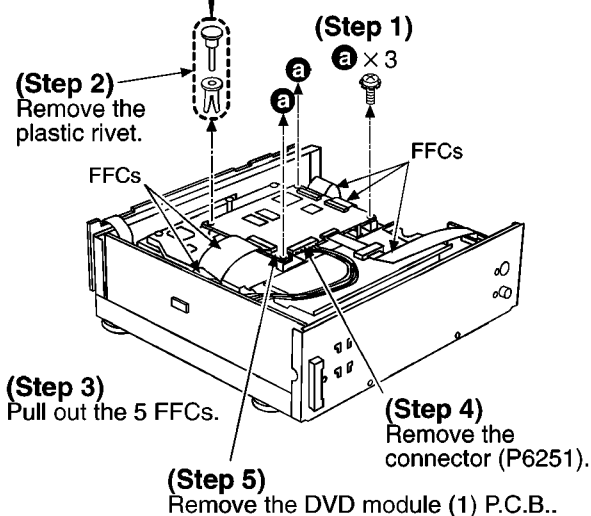
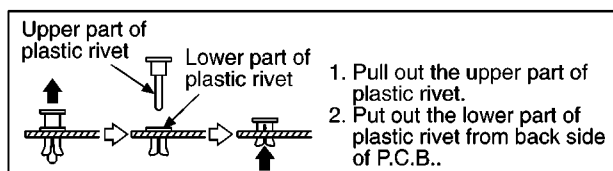


- Check the DVD module (2) P.C.B. as shown below.

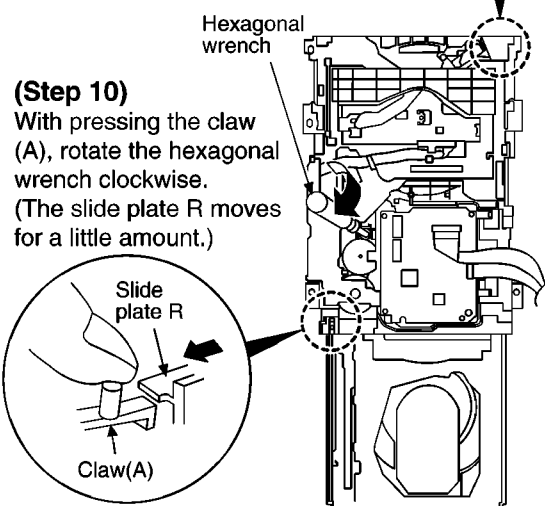
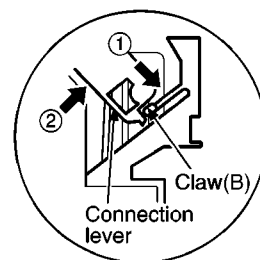


5.5. Replacement for the traverse ass'y

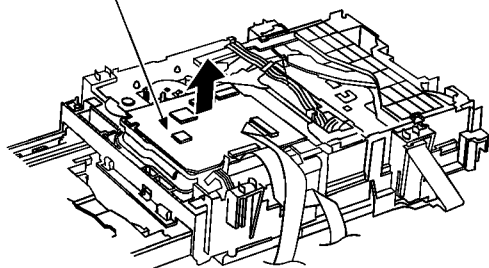
- Follow the (Step 1) - (Step 3) of item 5.1.
- Follow the (Step 1) - (Step 5) of item 5.2.



- (Step 11) Pressing the claw (B) in the direction of arrow ①, the connection lever moves in the direction of arrow ②.

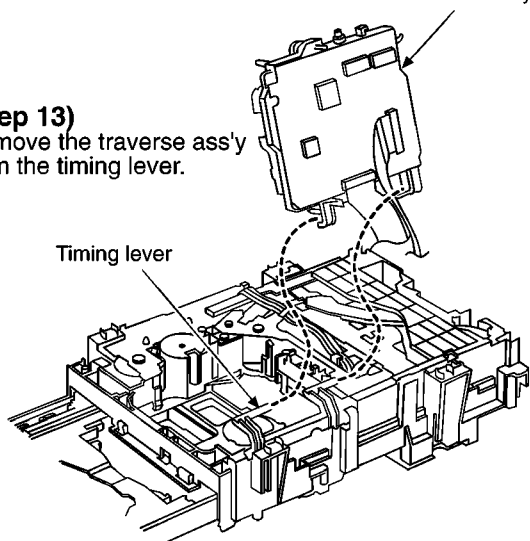


(Step 12)
Lift up the traverse ass'y.



Traverse ass'y

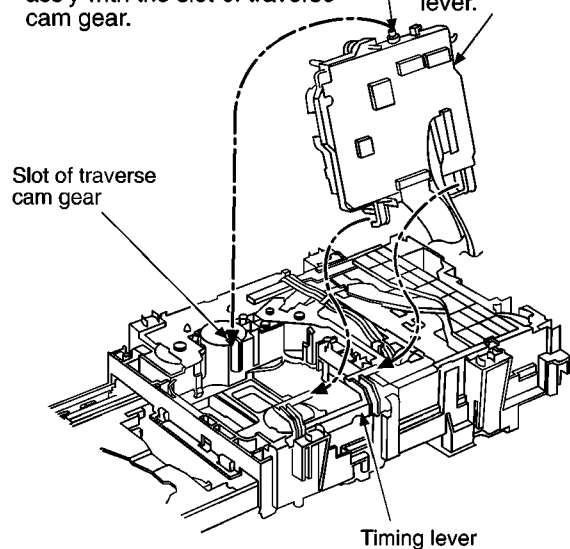
(Step 13)
Remove the traverse ass'y from the timing lever.



Timing lever

Installation for traverse ass'y

(Step 2)
Align the boss of traverse ass'y with the slot of traverse cam gear.

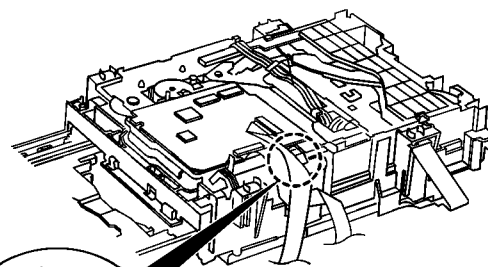


Slot of traverse cam gear

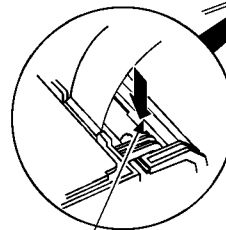
Timing lever

(Step 1)
Install the traverse ass'y to the timing lever.

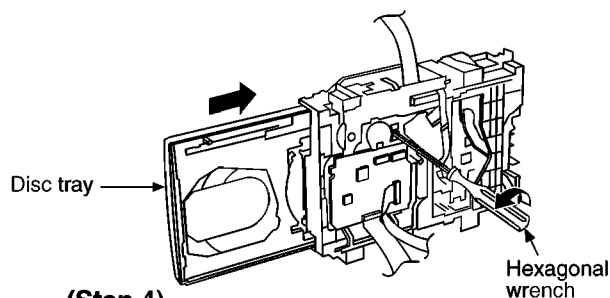
Boss



(Step 3)
Force the claw of timing lever.



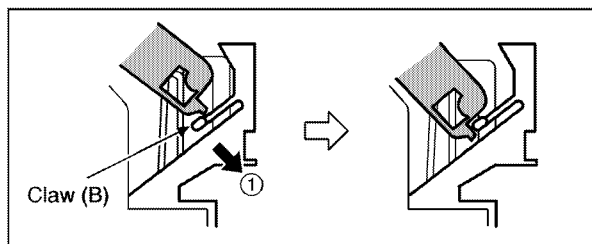
Claw of timing lever



Disc tray

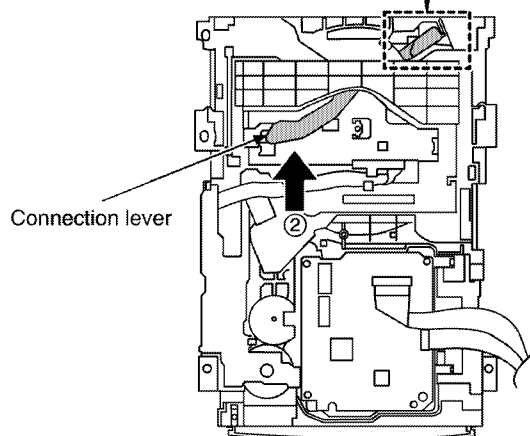
Hexagonal wrench

(Step 4)
Rotate the hexagonal wrench in the direction of arrow, and then close the disc tray fully.



Claw (B)

①



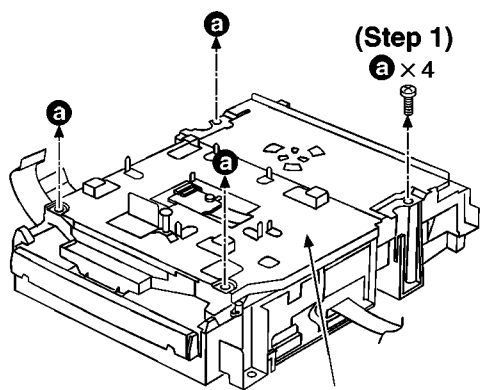
Connection lever

②

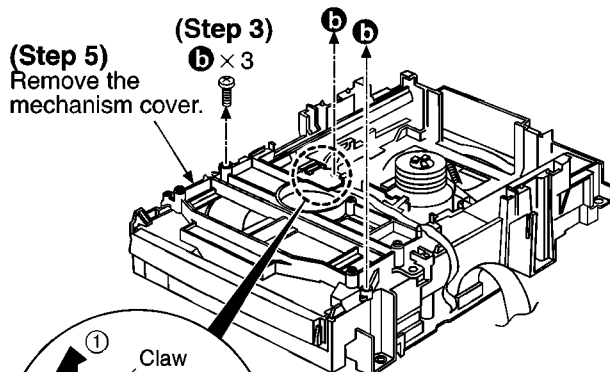
(Step 5)
With pressing the claw (B) in the direction of arrow ①, force the connection lever in the direction of arrow ②.

5.6. Replacement for the disc tray

- Follow the (Step 1) - (Step 3) of item 5.1.
- Follow the (Step 1) - (Step 5) of item 5.2.
- Follow the (Step 1) - (Step 7) of item 5.5.

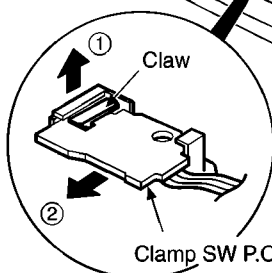


(Step 2)
Remove the upper plate.

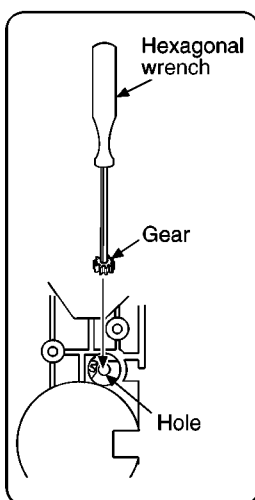


(Step 5)
Remove the mechanism cover.

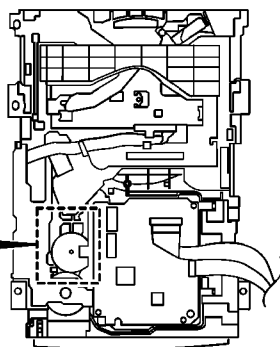
(Step 4)
With lifting the claw in the direction of arrow ①, draw the clamp SW P.C.B. in the direction of arrow ②.



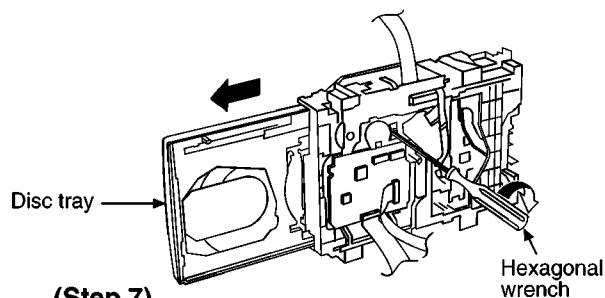
Clamp SW P.C.B.



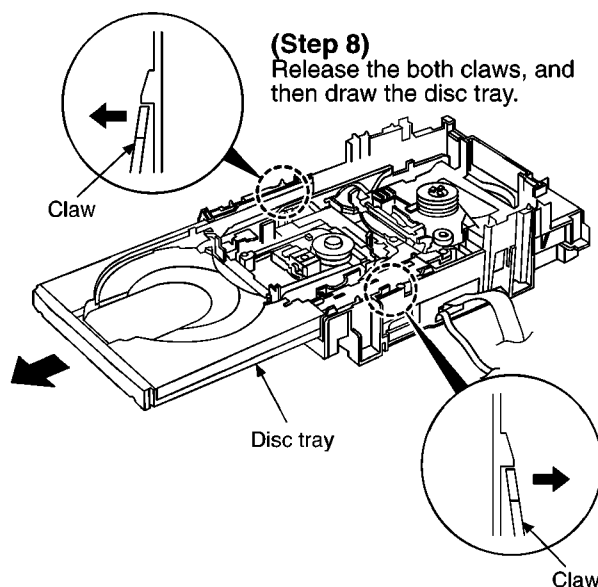
(Step 6)
Insert the gear with hexagonal wrench into the hole.



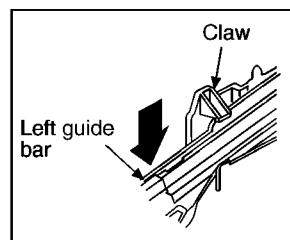
(Back side)



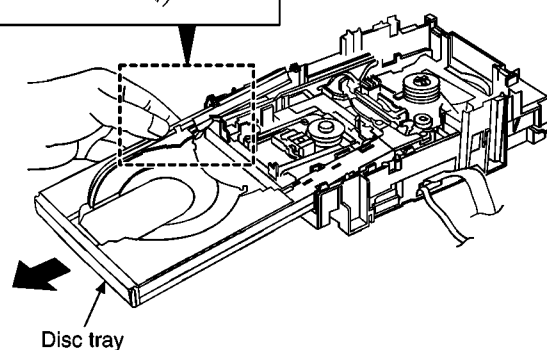
(Step 7)
Rotate the hexagonal wrench in the direction of arrow, and then open the disc tray fully.



(Step 8)
Release the both claws, and then draw the disc tray.



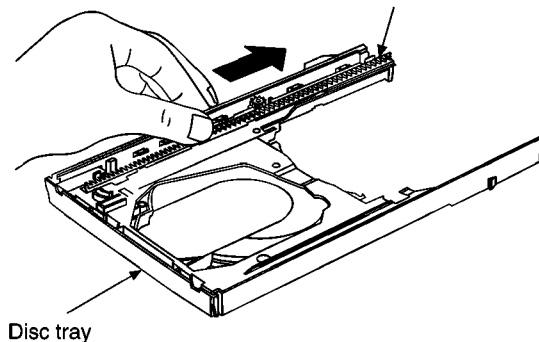
(Step 9)
With forcing the left guide bar manually because the left guide bar interferes with claw, draw the disc tray.



Installation of the disc tray after replacement

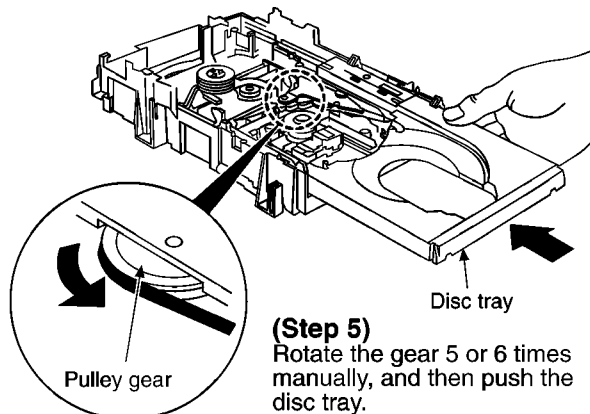
(Step 1)

Slide the drive rack fully in the direction of arrow.



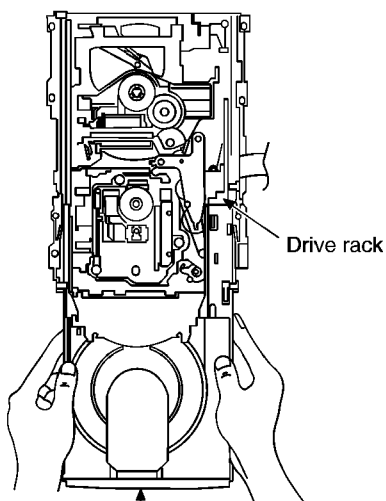
(Step 4)

Holding the disc tray manually, rotate the pulley gear in the direction of arrow.



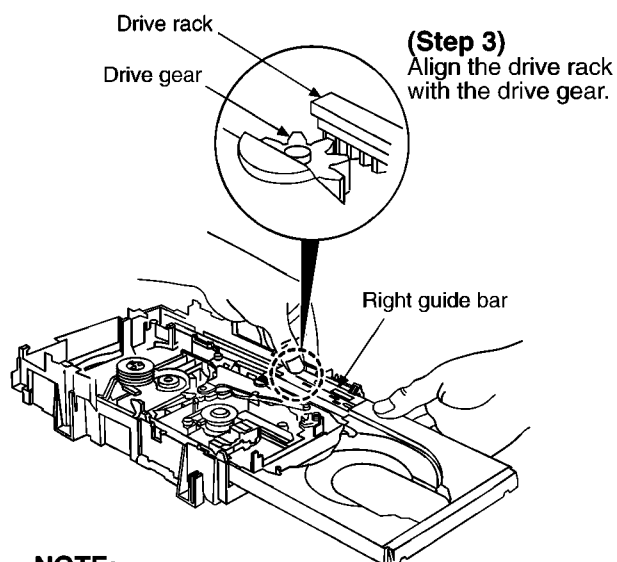
(Step 5)

Rotate the gear 5 or 6 times manually, and then push the disc tray.



(Step 2)

Holding the drive rack not to move, install the disc tray.



NOTE:

Force the right guide bar of tray base manually not to move upwards.

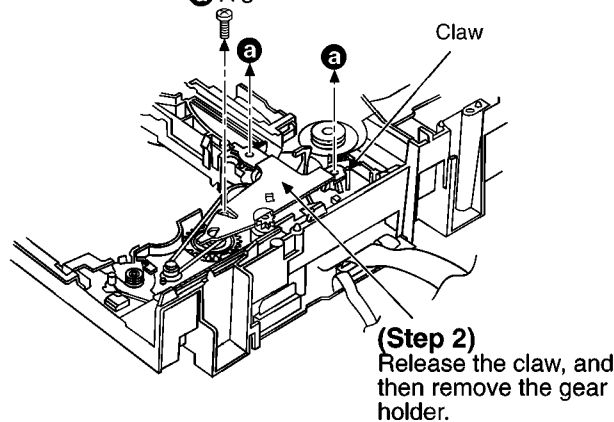
5.7. Disassembly and reassembly for mechanism base drive unit

Disassembly for mechanism base drive unit

- Follow the (Step 1) - (Step 3) of item 5.1.
- Follow the (Step 1) - (Step 5) of item 5.2.
- Follow the (Step 1) - (Step 13) of item 5.5.
- Follow the (Step 1) - (Step 9) of item 5.6.

(Step 1)

a × 3

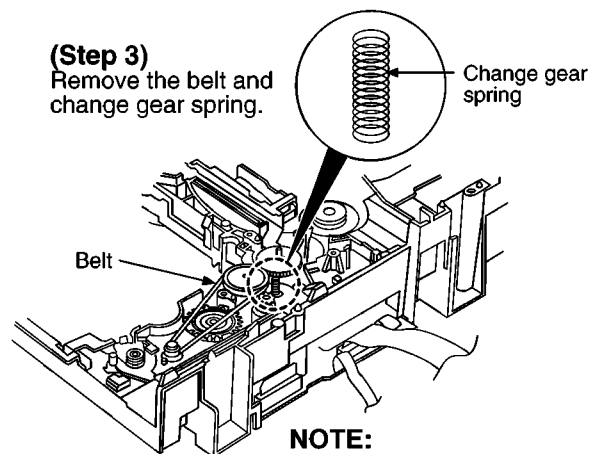


(Step 2)

Release the claw, and then remove the gear holder.

(Step 3)

Remove the belt and change gear spring.

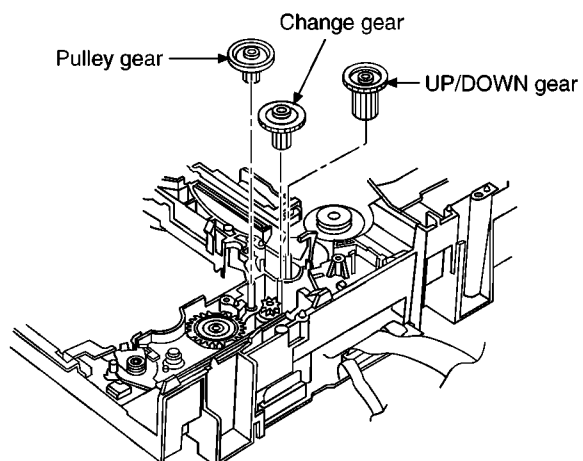


NOTE:

Take care not to lose the change gear spring.

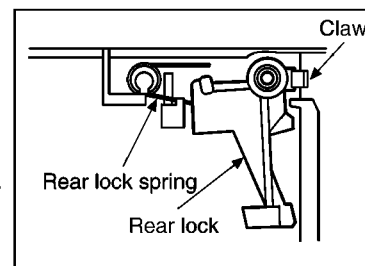
(Step 4)

Remove the pulley gear, change gear and UP/DOWN gear.

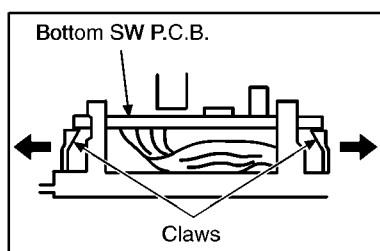
**(Step 8)**

Release the claw, and then remove the rear lock.

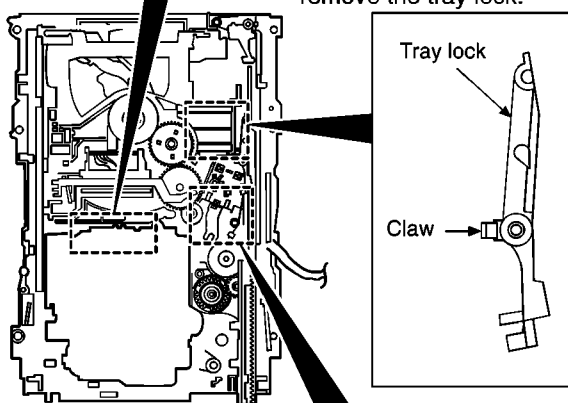
NOTE:
Take care not take the rear lock spring off.

**(Step 5)**

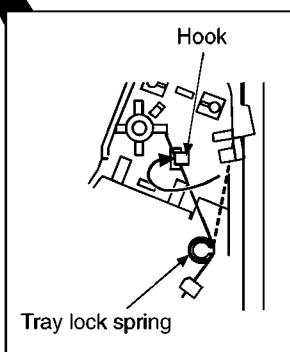
Release the 2 claws, and then remove the bottom SW P.C.B..

**(Step 7)**

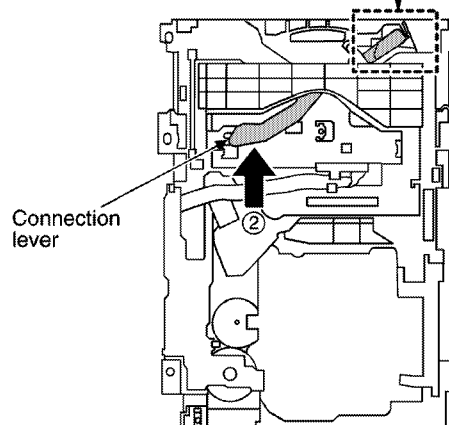
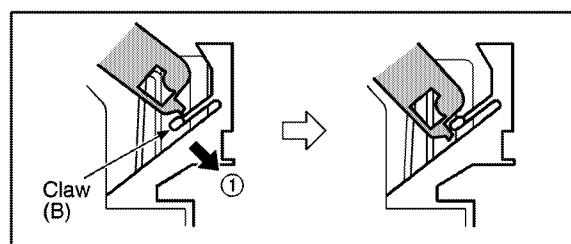
Release the claw, and then remove the tray lock.

**(Step 6)**

Install the tray lock spring to the hook temporarily.

**(Step 9)**

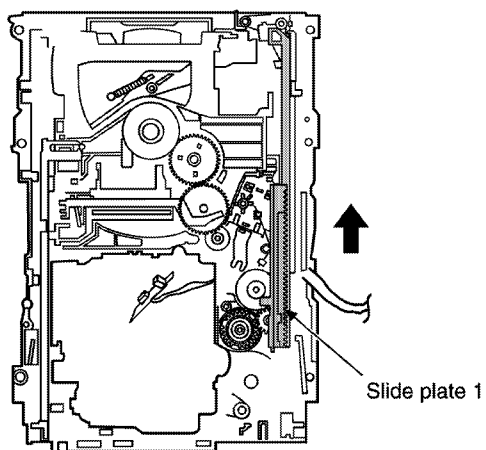
Pressing the claw (B) in the direction of arrow ①, force the connection lever in the direction of arrow ②.



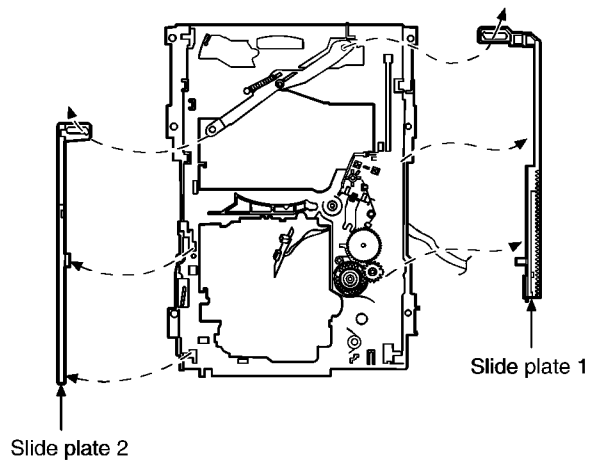
(Step 10)

Move the slide plate 1 to the end of stock side.

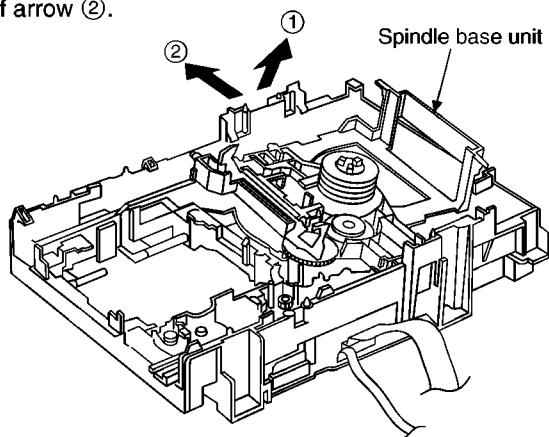
(Stock side)

**(Step 12)**

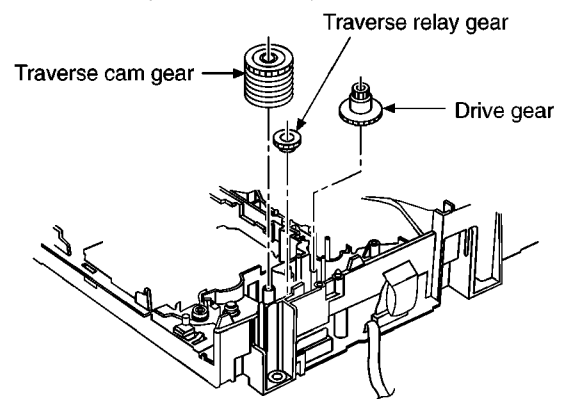
Remove the slide plate 1 and slide plate 2.

**(Step 11)**

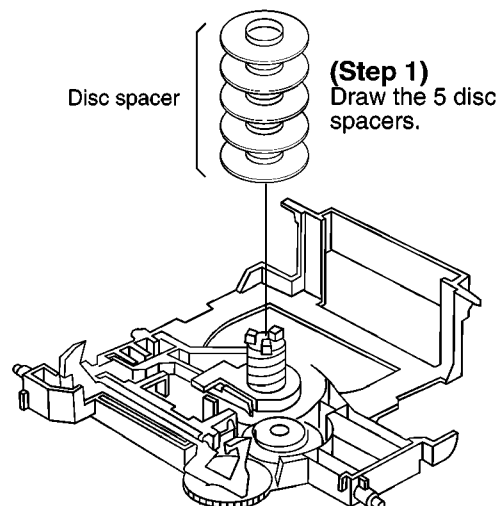
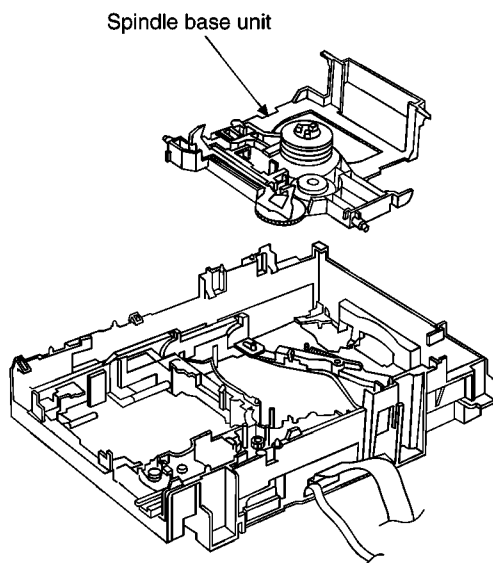
Lift up the left end of spindle base unit in the direction of arrow ①, and then remove the unit in the direction of arrow ②.

**(Step 13)**

Remove the traverse relay gear, traverse cam gear and drive gear.

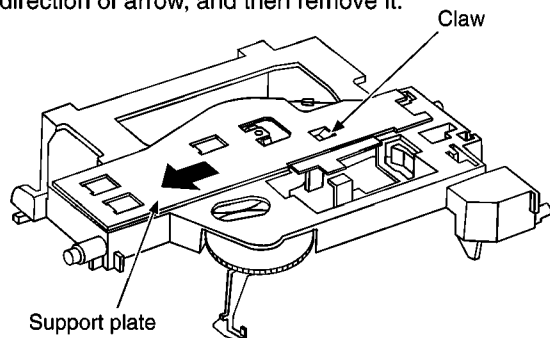


Disassembly/reassembly for the spindle base unit

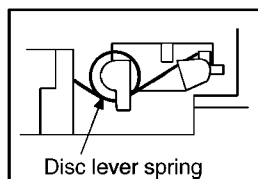


(Step 2)

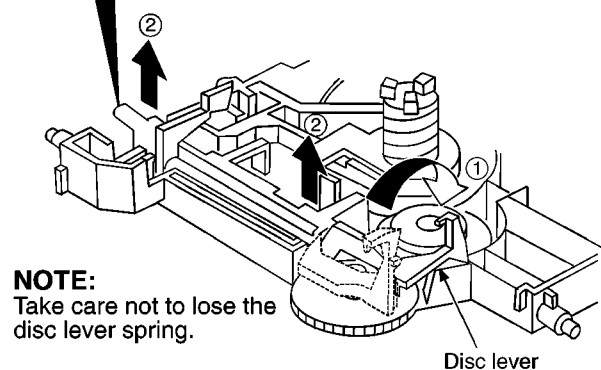
Pushing the claw, slide the support plate in the direction of arrow, and then remove it.



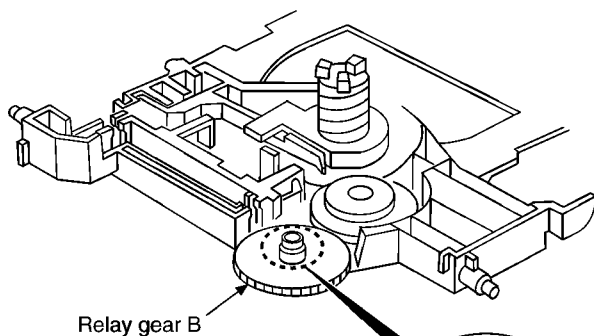
(Installation for disc lever spring)

**(Step 3)**

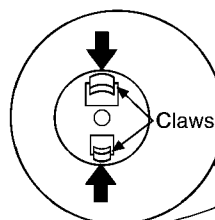
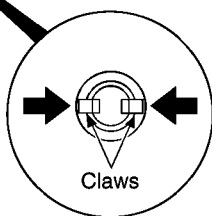
Rotate the disc lever in the direction of arrow ①, draw the disc lever.

**NOTE:**

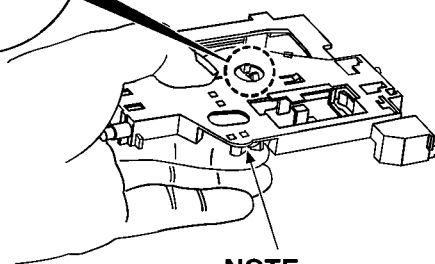
Take care not to lose the disc lever spring.

**(Step 4)**

Release the 2 claws, and then draw the relay gear B.

**(Step 5)**

Release the 2 claws.

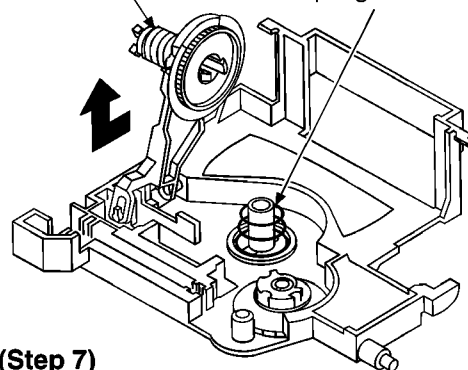
**NOTE:**

Hold the loading stopper ass'y manually because it is flipped by spring.

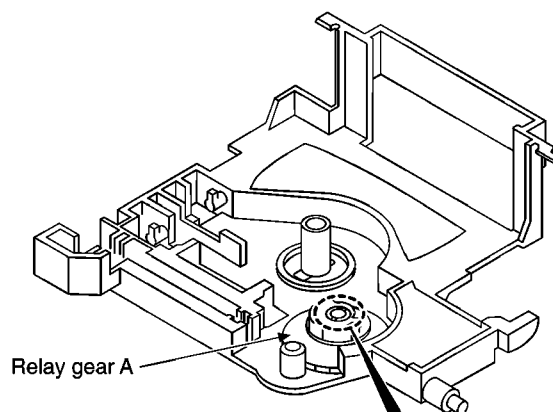
Loading stopper ass'y

(Step 6)

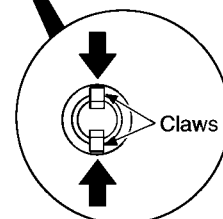
Remove the cushion spring.

**(Step 7)**

Remove the loading stopper ass'y in the direction of arrow.

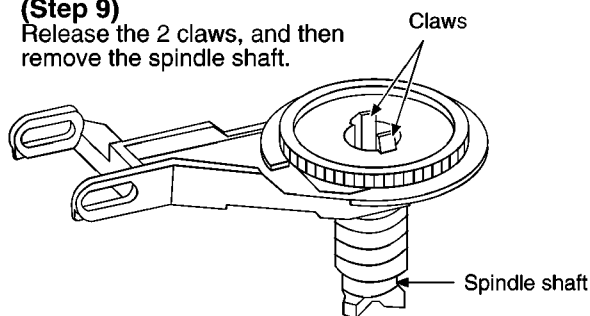
**(Step 8)**

Release the 2 claws, and then remove the relay gear A.

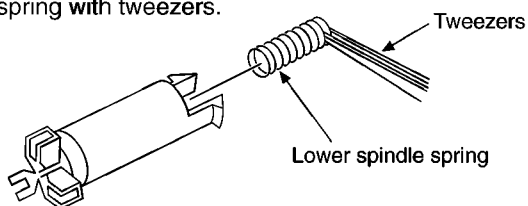


(Step 9)

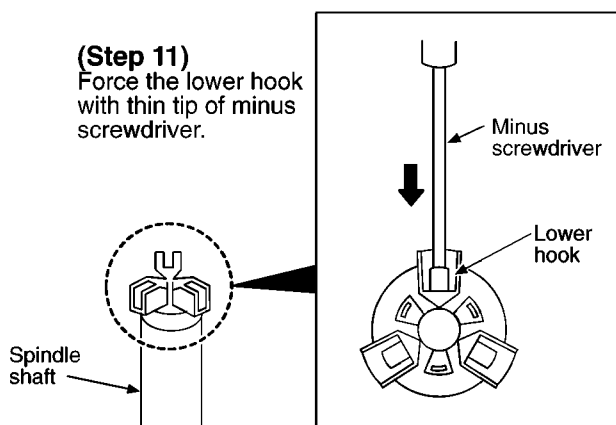
Release the 2 claws, and then remove the spindle shaft.

**(Step 10)**

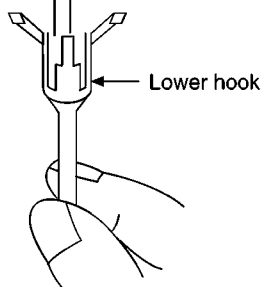
Remove the lower spindle spring with tweezers.

**(Step 11)**

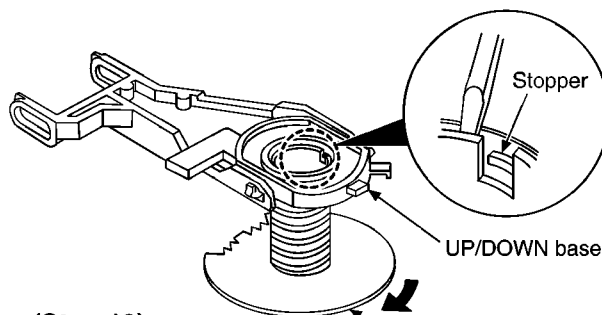
Force the lower hook with thin tip of minus screwdriver.

**(Step 12)**

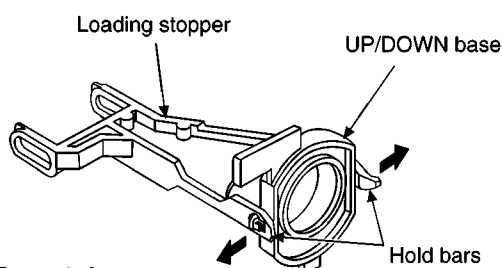
Squeeze the shaft of lower hook, and then draw it.

**(Step 14)**

Insert the thin tip of minus screwdriver between the lower spindle and UP/DOWN base, and then slacken the lower spindle to release the stopper. Then, rotate the lower spindle and remove it.

**(Step 13)**

Rotate the lower spindle in the direction of arrow until the lower spindle interferes with stopper.

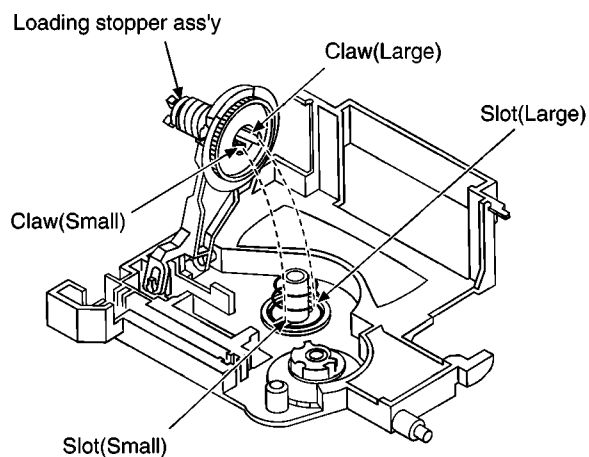
**(Step 15)**

Rotate the UP/DOWN base at a 90 degree angle. Then, spread the hold bars of loading stopper and remove the UP/DOWN base.

Installation for loading stopper ass'y

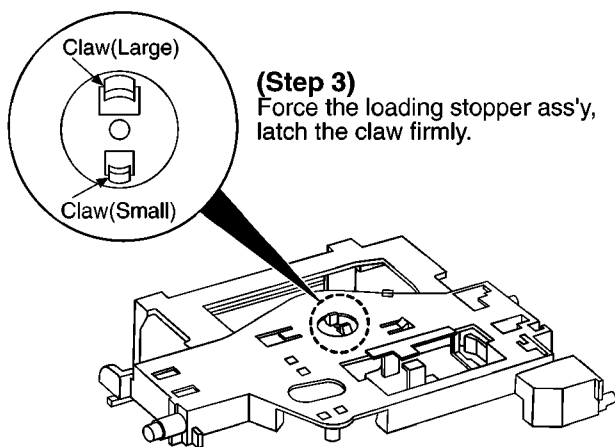
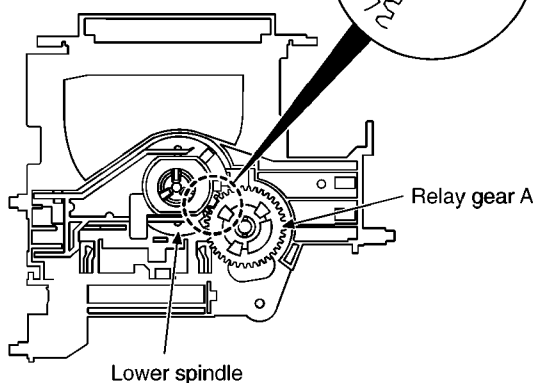
(Step 1)

Align the claw of loading stopper ass'y with the slot of spindle base. (Caution should be exercised when alignment of claw due to the size of claws.)



(Step 2)

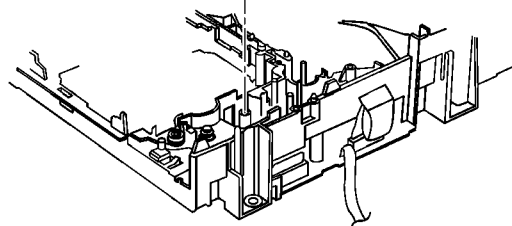
Lower the loading stopper ass'y, and then align the lower spindle with the trapezoid tooth of relay gear A.

**(Step 3)**

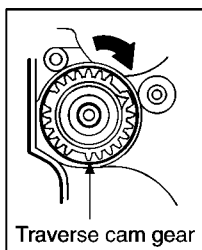
Force the loading stopper ass'y, latch the claw firmly.

Reassembling for mechanism base drive unit

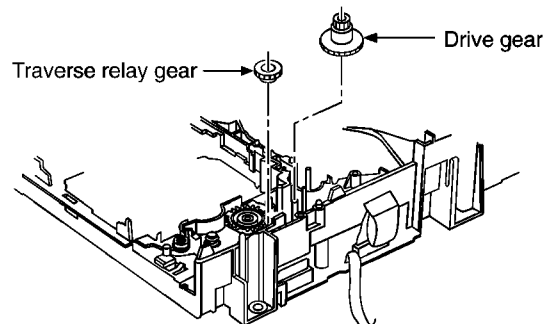
Traverse cam gear →
(Step 1)
 Install the traverse cam gear.

**(Step 2)**

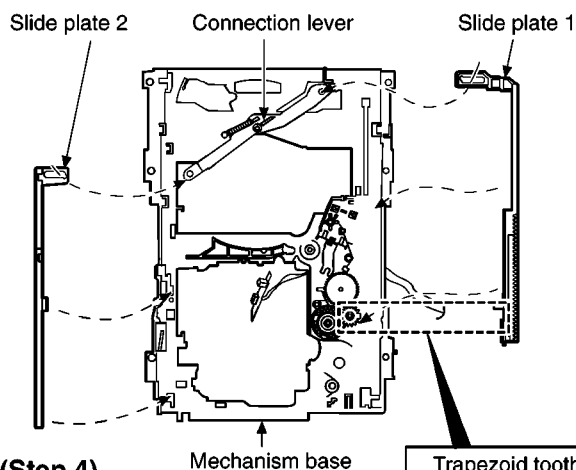
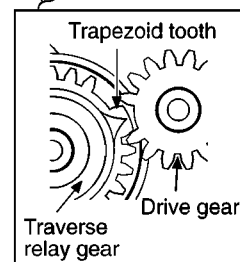
Rotate the traverse cam gear to the direction of arrow.

**(Step 3)**

Install the drive gear and traverse relay gear.



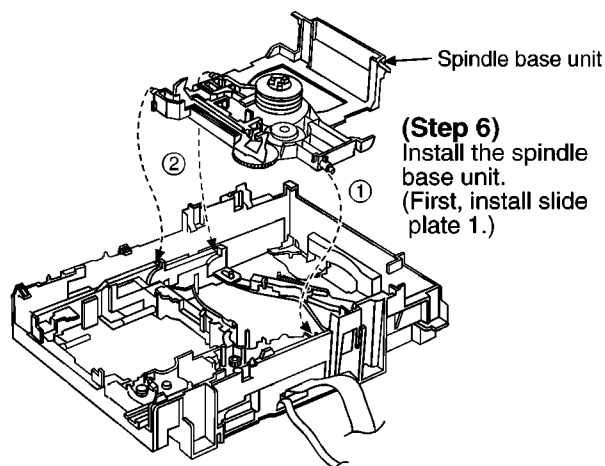
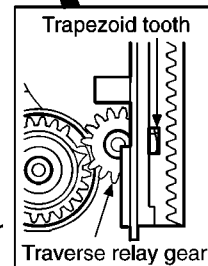
※ When installing the traverse relay gear, align the trapezoid tooth of gear with tooth of drive gear.

**(Step 4)**

Install the slide plate 2 to the mechanism base, and then match to the connection lever.

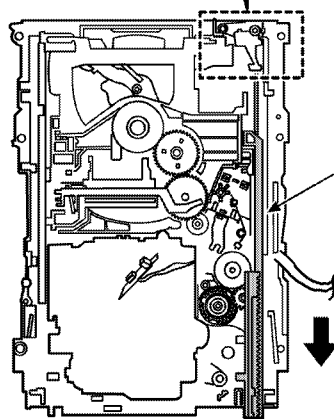
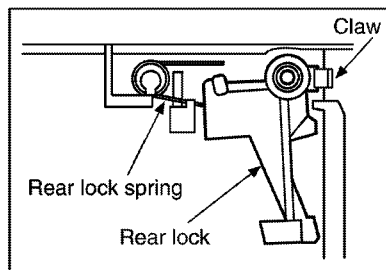
(Step 5)

Install the slide plate 1 to the mechanism base, and then match to the connection lever and align the trapezoid tooth of traverse relay gear with the slide plate 1.

**(Step 6)**

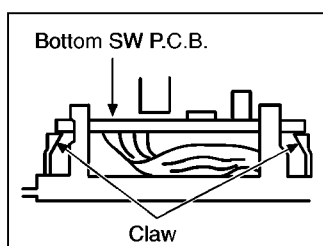
Install the spindle base unit.
(First, install slide plate 1.)

(Step 8)
Install the rear lock.
(The claw should be latched.)



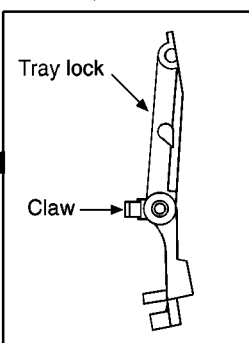
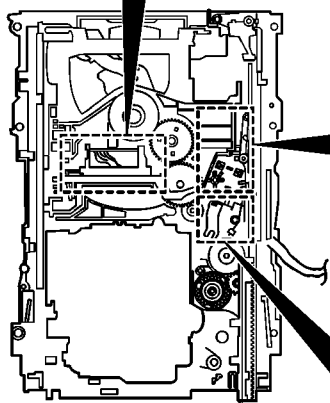
(Front side)

(Step 7)
Move the slide plate 1 to forward fully.

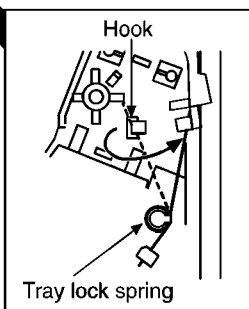


(Step 9)
Install the bottom SW P.C.B..
(The claw should be latched.)

(Step 10)
Install the tray lock.
(The claw should be latched.)

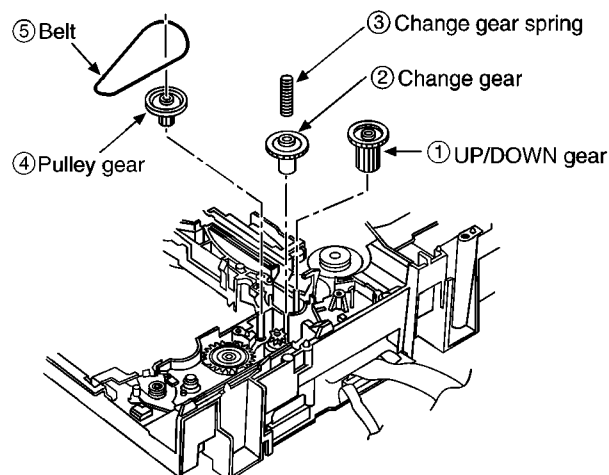


(Step 11)
Remove the tray lock spring from hook, and then latch to the tray lock.



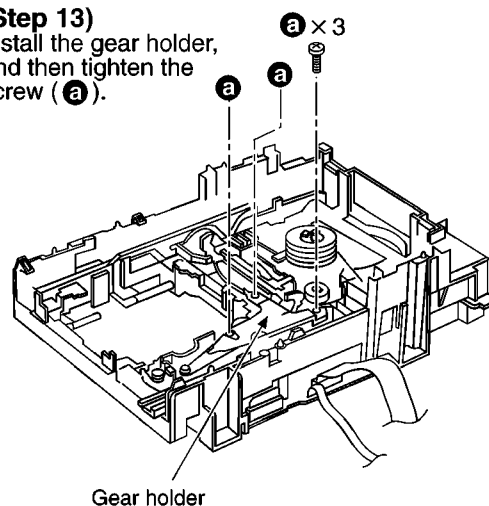
(Step 12)

Install the UP/DOWN gear, change gear, change gear spring, pulley gear and belt in the order of ①-⑤.



(Step 13)

Install the gear holder, and then tighten the screw (a).



Gear holder

(Step 14)

Install the tray base, traverse ass'y, mechanism cover and upper plate.
(Refer to the items 5.5. and 5.6. of Main Component Replacement Procedures.)

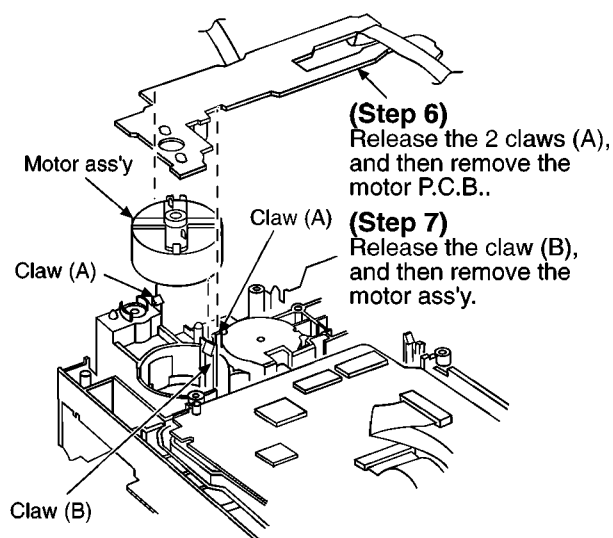
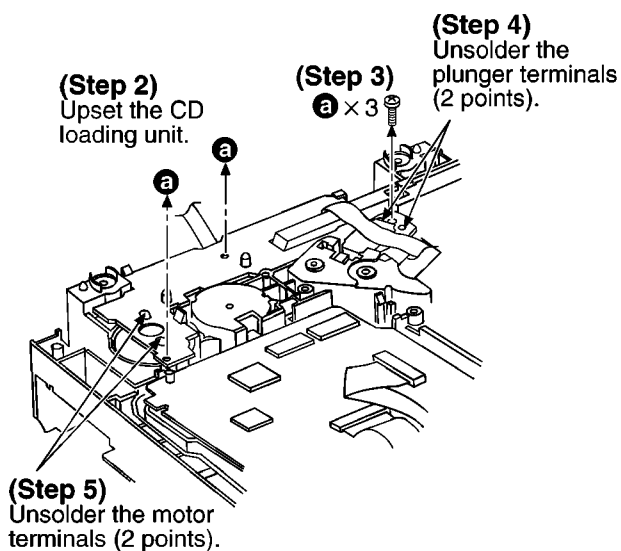
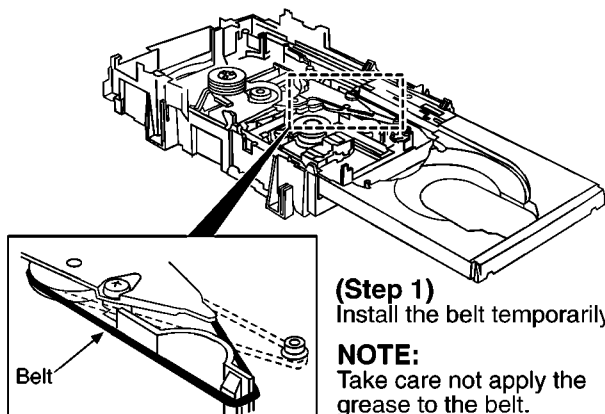
[Operation check after servicing]

Check the proper operation of following items with gear and hexagonal screwdriver.

- 1) Open/close of tray base.
- 2) Moving the tray base to the stock side.
- 3) UP/DOWN operation of spindle base unit.
- 4) UP/DOWN operation of traverse ass'y.

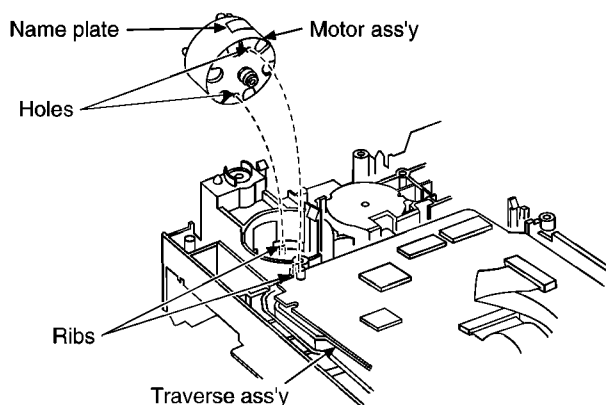
5.8. Replacement for the motor ass'y

- Follow the (Step 1) - (Step 3) of item 5.1.
- Follow the (Step 1) - (Step 5) of item 5.2.
- Follow the (Step 1) - (Step 7) of item 5.5.
- Follow the (Step 1) - (Step 7) of item 5.6.



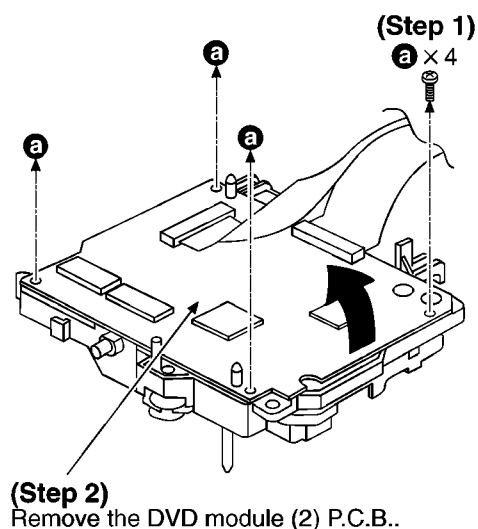
Notice for motor ass'y installation

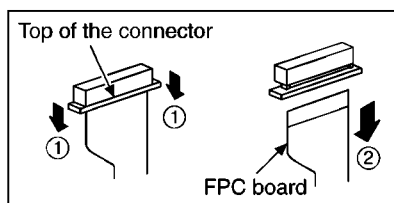
1. Locate the name plate of motor to the traverse ass'y.
2. Align the hole of motor with the ribs.



5.9. Replacement for the traverse motor ass'y, optical pickup and spindle motor ass'y

- Follow the (Step 1) - (Step 3) of item 5.1.
- Follow the (Step 1) - (Step 5) of item 5.2.
- Follow the (Step 1) - (Step 13) of item 5.5.

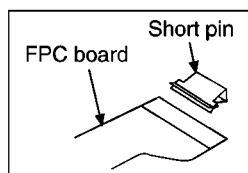




(Step 4)
Remove the FPC board.

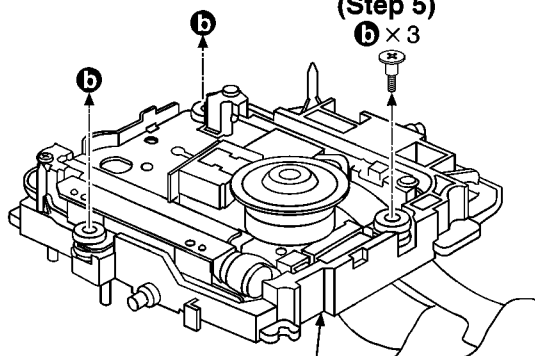
(Step 3)
Pull out the FFC.

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



(Step 5)

b × 3



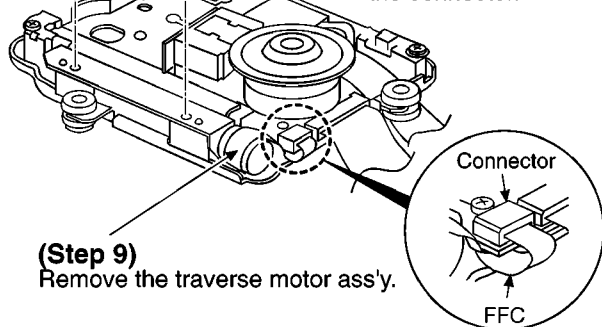
(Step 6)
Remove the traverse chassis.

(Step 8)

c × 2

(Step 7)

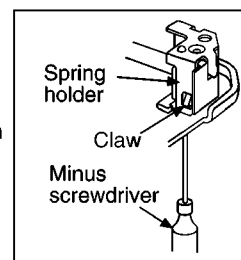
Remove the FFC from the connector.



(Step 9)
Remove the traverse motor ass'y.

(Step 10)

Release the claw, and then remove the spring holder.

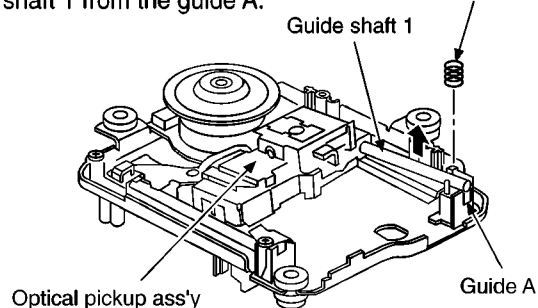


(Step 12)

Lift up the optical pickup ass'y. and then remove the guide shaft 1 from the guide A.

(Step 11)

Remove the spring.

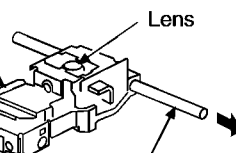


NOTE:

Take care not to lose the spring.

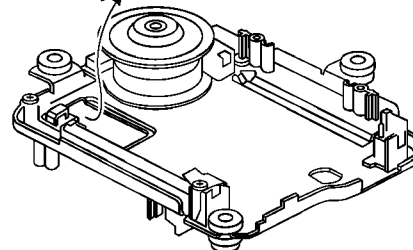
(Step 13)

Remove the optical pickup ass'y.



(Step 14)

Pull out the guide shaft 1.

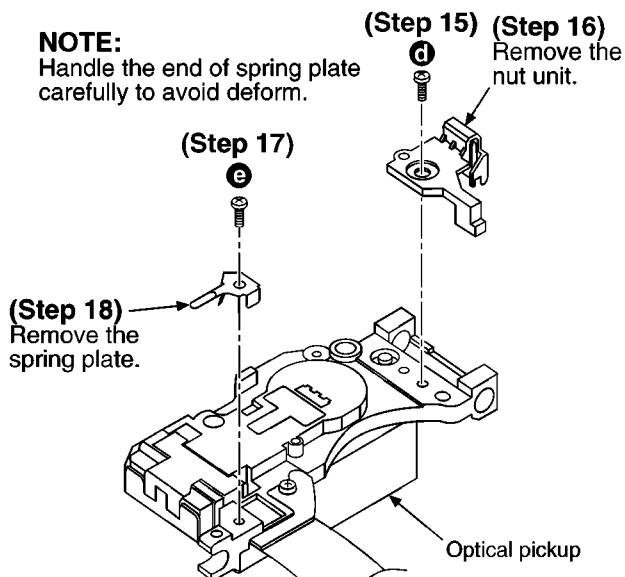


NOTE:

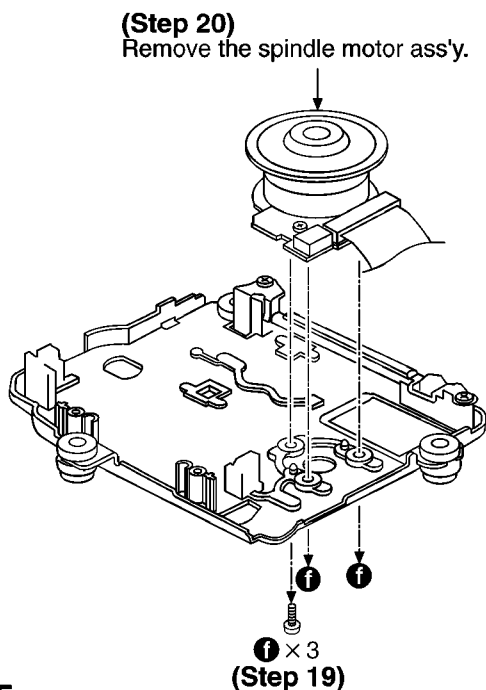
1. Use care to prevent damage the optical pickup, due to the precision construction.
2. Do not touch the lens of the optical pickup.

NOTE:

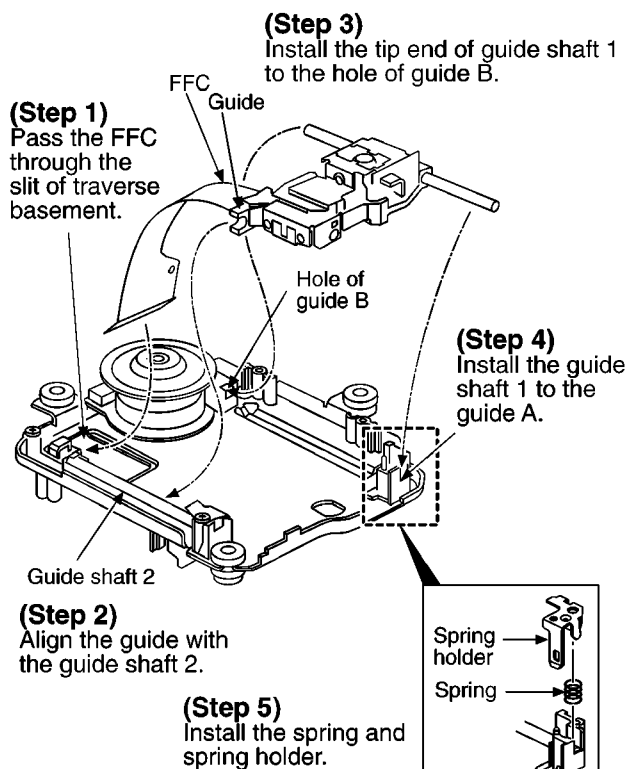
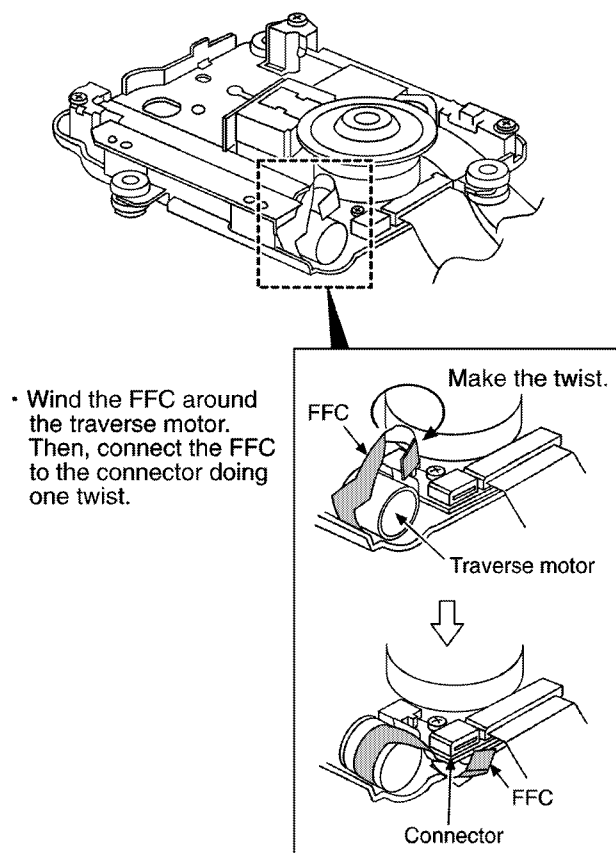
Handle the end of spring plate carefully to avoid deform.

**NOTE:**

Tighten the screw, and then apply the locktite sealant.

**NOTE:**

Tighten the screw, and then apply the locktite sealant.

Installing the optical pickup**Installing the traverse motor ass'y**

6 To Supply Power Source

Caution:

- It is very dangerous to look at or touch the laser beam. (Laser radiation is invisible.)
With the unit turned on, laser radiation is emitted from the pickup lens.
- Avoid exposure to the laser beam, especially when performing adjustments.

This unit SL-DV170 is designed to operate on power supplied from the system connected. For system connection, refer to Fig. 6-1.

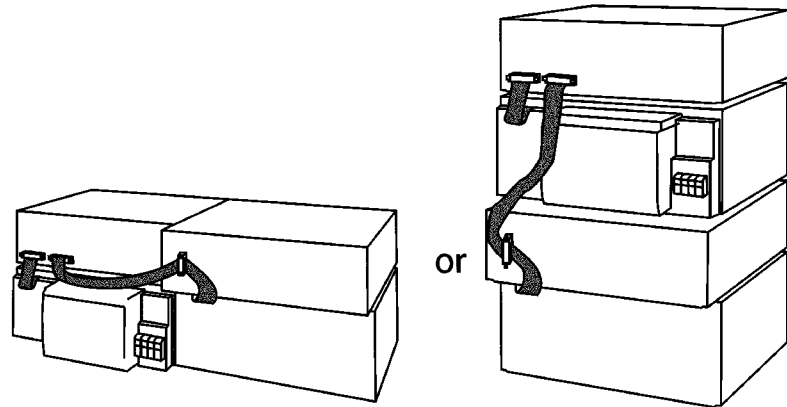


Fig. 6-1.

When the unit SL-DV170 has to test and service alone, use the following method to supply power source.

1. Short the JK1-pin 3 , JK1-pin 6 , JK1-pin 10 and JK1-pin 17 . Refer to Fig. 6-2.
2. Connect a DC power supply to JK1-pin 5 and **A** . Then adjust the output to 10 V. Refer to Fig. 6-3.

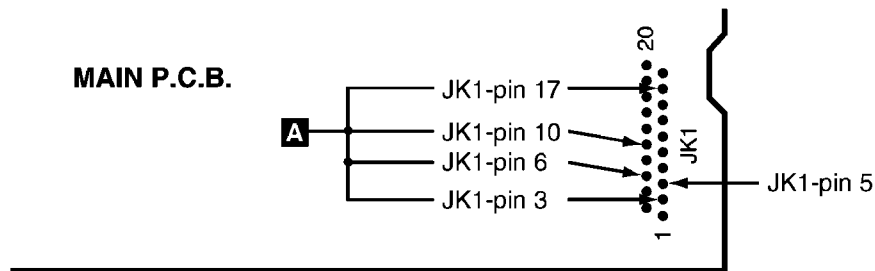


Fig. 6-2.

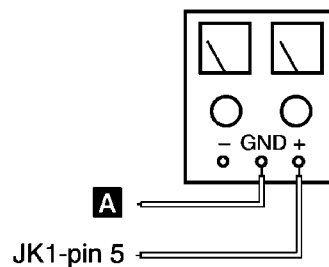


Fig. 6-3.

Notes:

Use only this method when checking the voltage etc..

In case of checking operations, use the system connections to supply power source.

7 Schematic Diagram Notes

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

Notes:

S1:	Disc tray position 1 detect switch in OFF position
S2:	Disc tray position 2 detect switch in OFF position
S3:	Disc tray open detect switch in OFF position
S4:	Clamp switch in OFF position
S5:	Bottom switch in OFF position
S601:	Disc select switch (DISC 5)
S602:	Disc select switch (DISC 4)
S603:	Disc select switch (DISC 3)
S604:	Disc select switch (DISC 2)
S605:	Disc select switch (DISC 1)
S606:	Disc direct open switch (DIRECT OPEN DISC 1)
S607:	Disc direct open switch (DIRECT OPEN DISC 2)
S608:	Disc direct open switch (DIRECT OPEN DISC 3)
S609:	Disc direct open switch (DIRECT OPEN DISC 4)
S610:	Disc direct open switch (DIRECT OPEN DISC 5)
S611:	Disc tray open/close switch (▲ OPEN/CLOSE)
S612:	A-B repeat switch (A-B REPEAT)
S613:	Repeat switch (REPEAT)
S614:	CD edit switch (CD EDIT)
S615:	Cinema mode switch (CINEMA)
S616:	Disc management select switch (1 DISC/ALL)
S617:	R.Slow/search switch (◀◀ , SLOW/SEARCH)
S618:	F.Slow/search switch (▶▶ , SLOW/SEARCH)
S619:	Pause switch ()
S620:	Stop switch (■)
S621:	Play switch (▷)
S622:	R.Skip switch (◀◀◀ , SKIP)
S623:	F.Skip switch (▶▶▶ , SKIP)

- 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 : Stop
() : 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.

• 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.

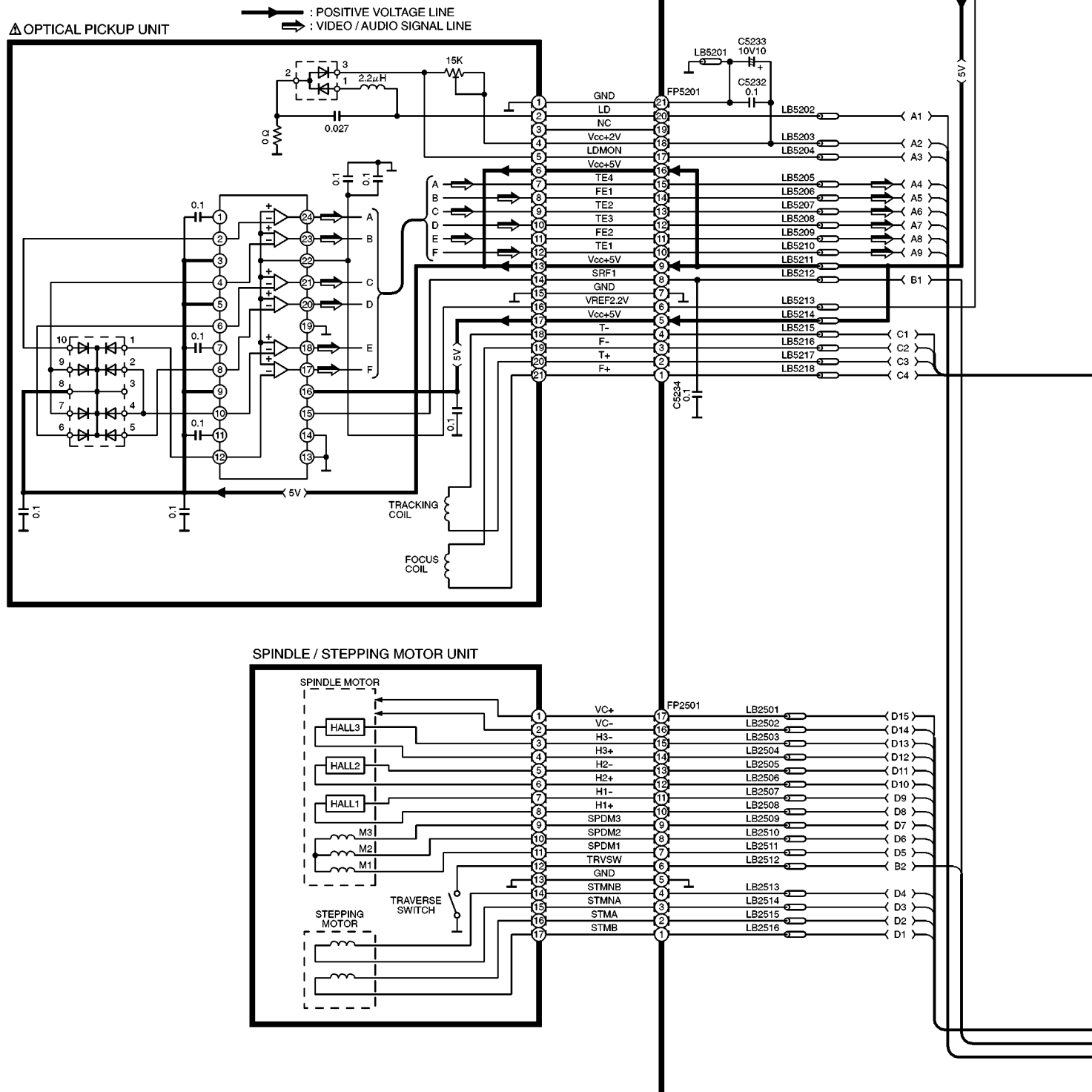
- Voltage and signal line

	: Positive voltage line
	: Audio signal line
	: Video signal line
	: Video/Audio signal line
	: Center sp.drive signal line
	: Surround sp.drive signal line
	: Sub woofer signal line

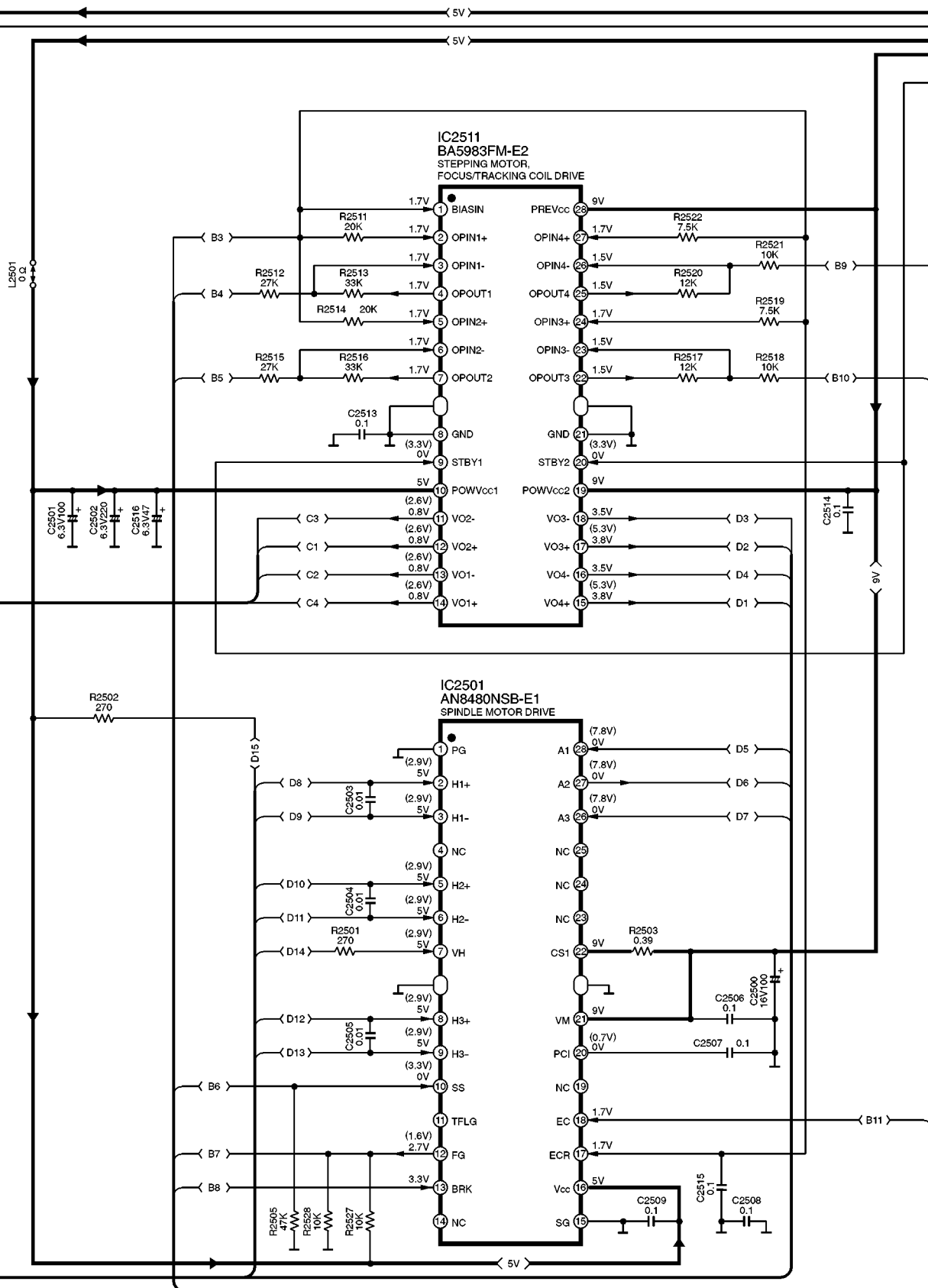
8 Schematic Diagram

SCHEMATIC DIAGRAM-1

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.

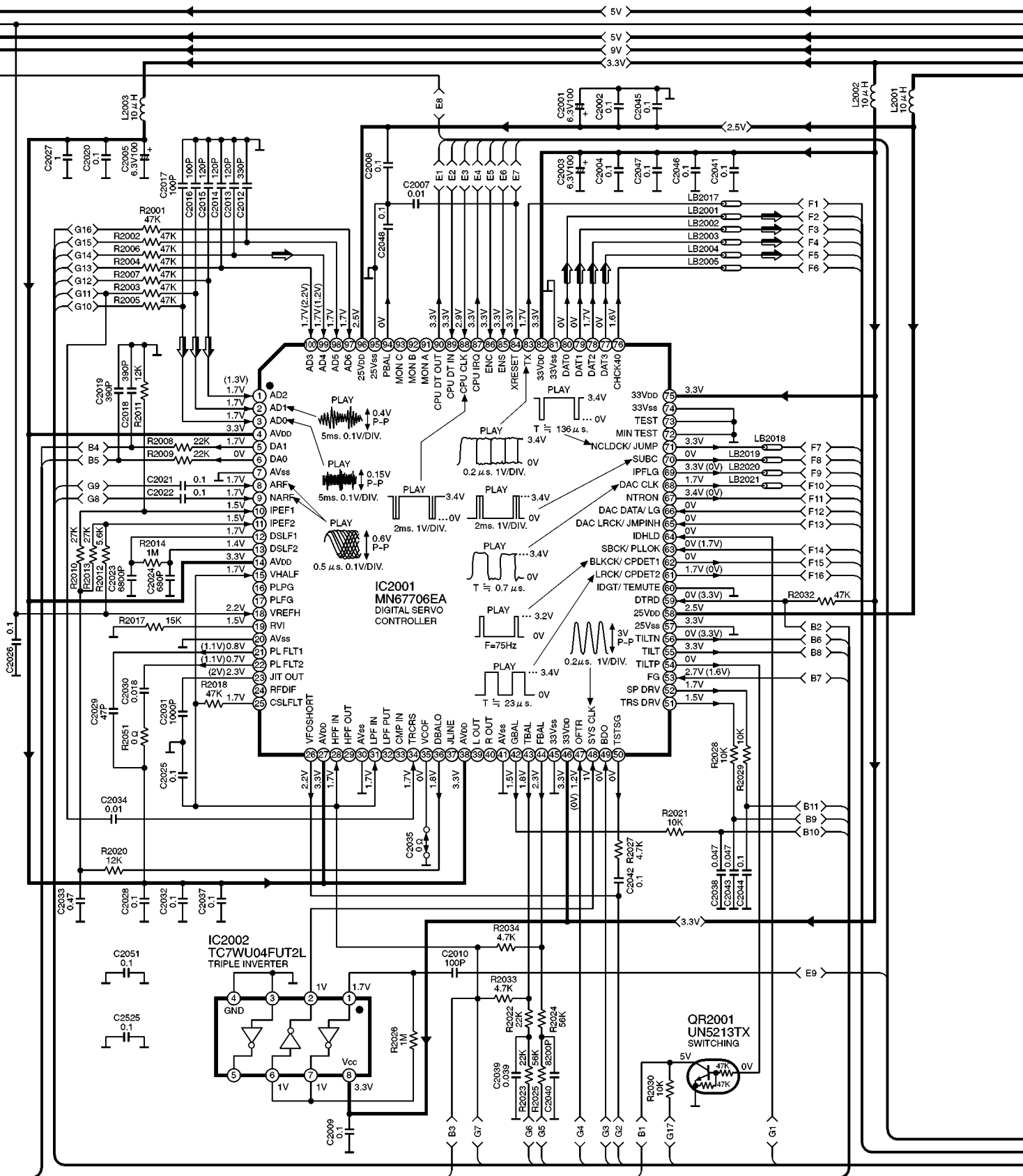


SCHEMATIC DIAGRAM-2

 : POSITIVE VOLTAGE LINE


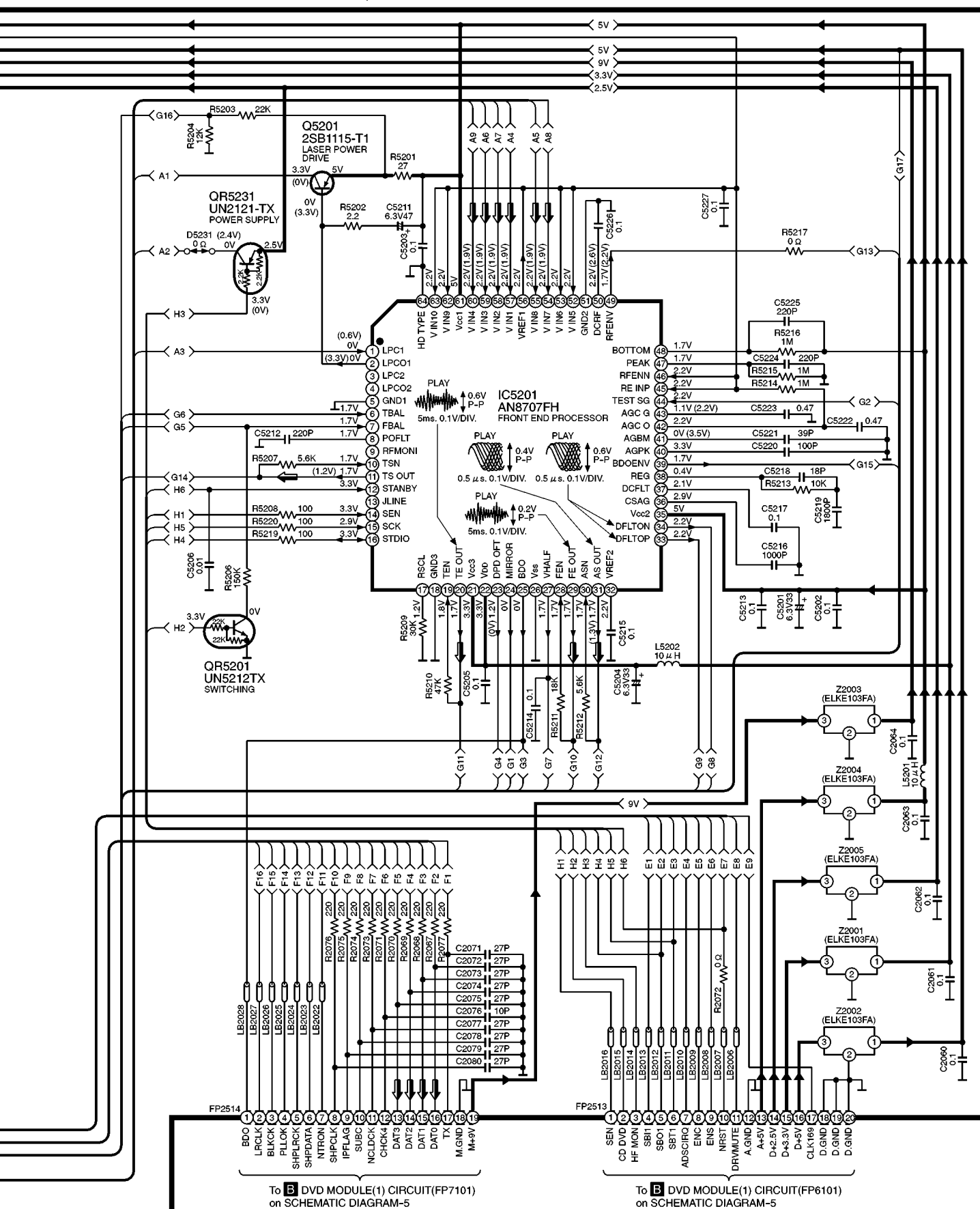
SCHEMATIC DIAGRAM-3
A DVD MODULE(2) CIRCUIT

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



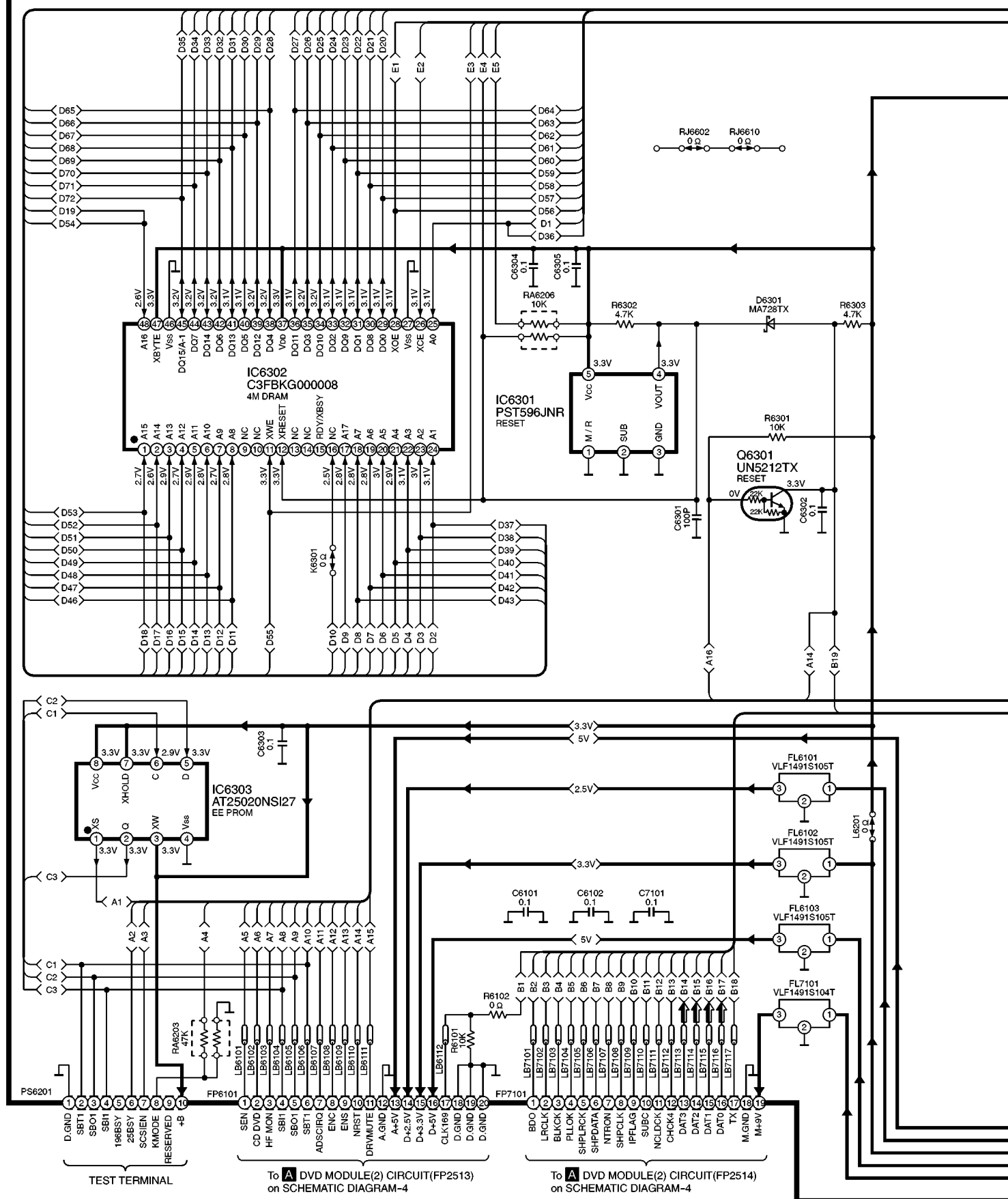
SCHEMATIC DIAGRAM-4

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



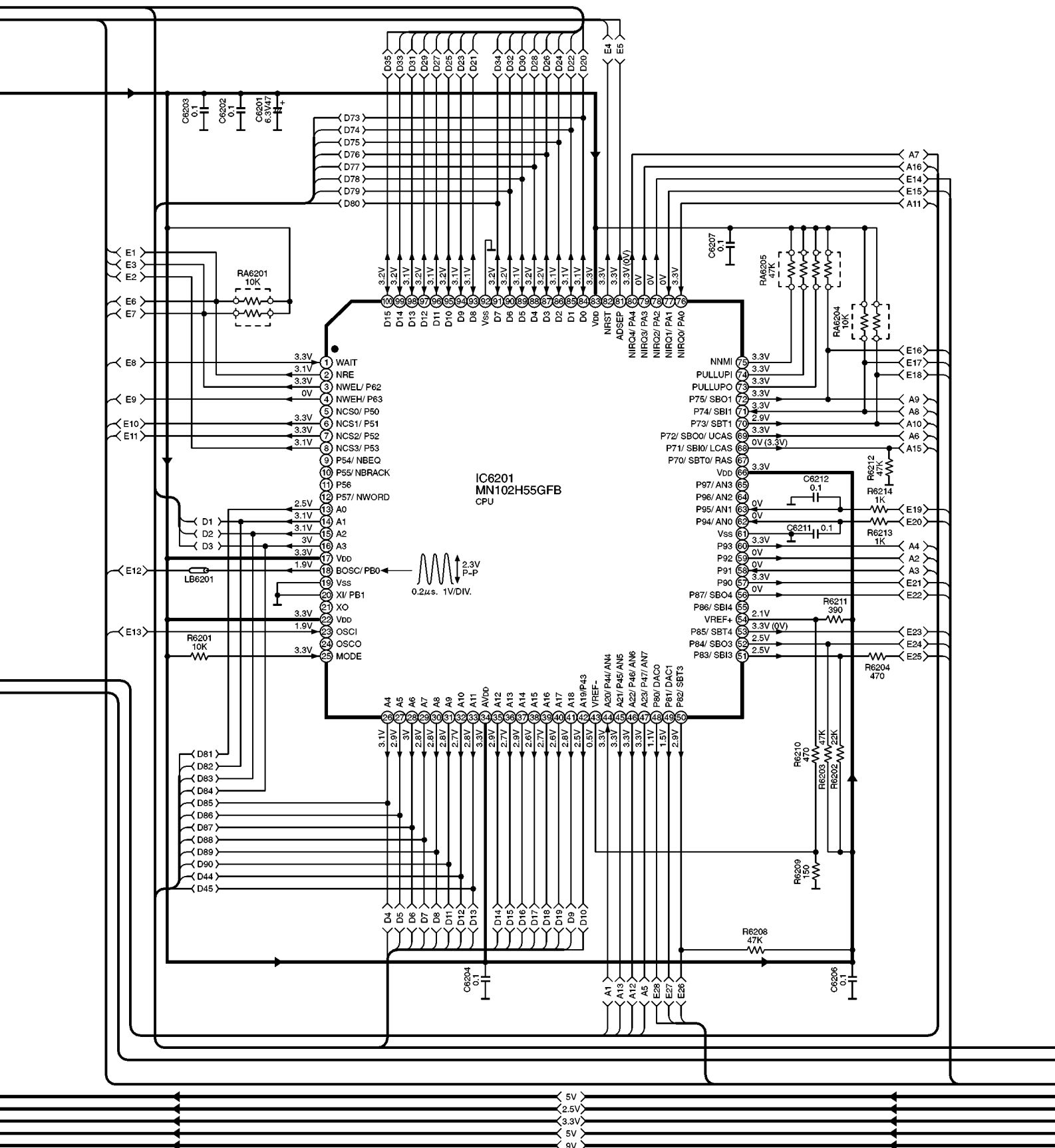
B DVD MODULE(1) CIRCUIT

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



SCHEMATIC DIAGRAM-6

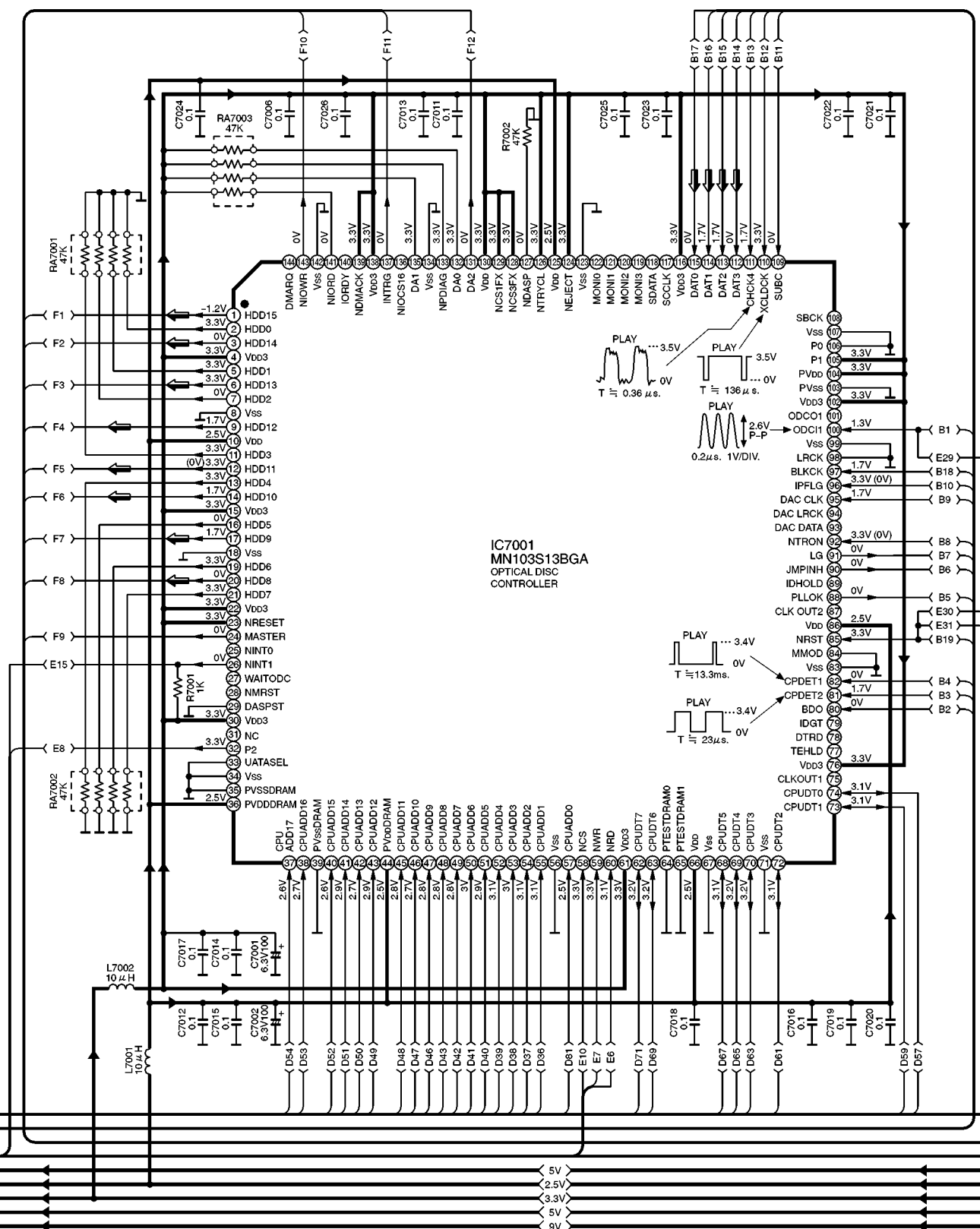
→ : POSITIVE VOLTAGE LINE



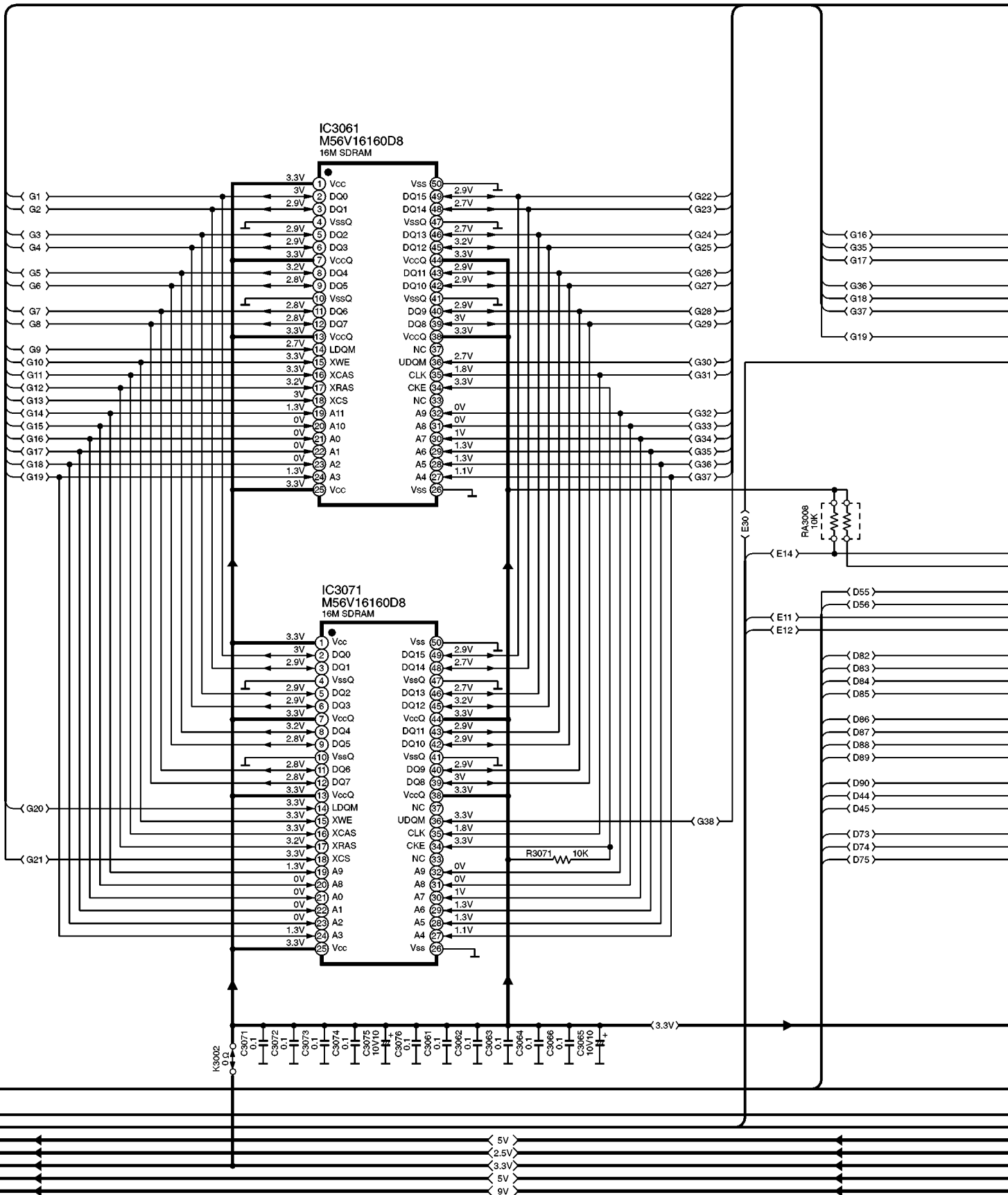
SCHEMATIC DIAGRAM-7

B DVD MODULE(1) CIRCUIT

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

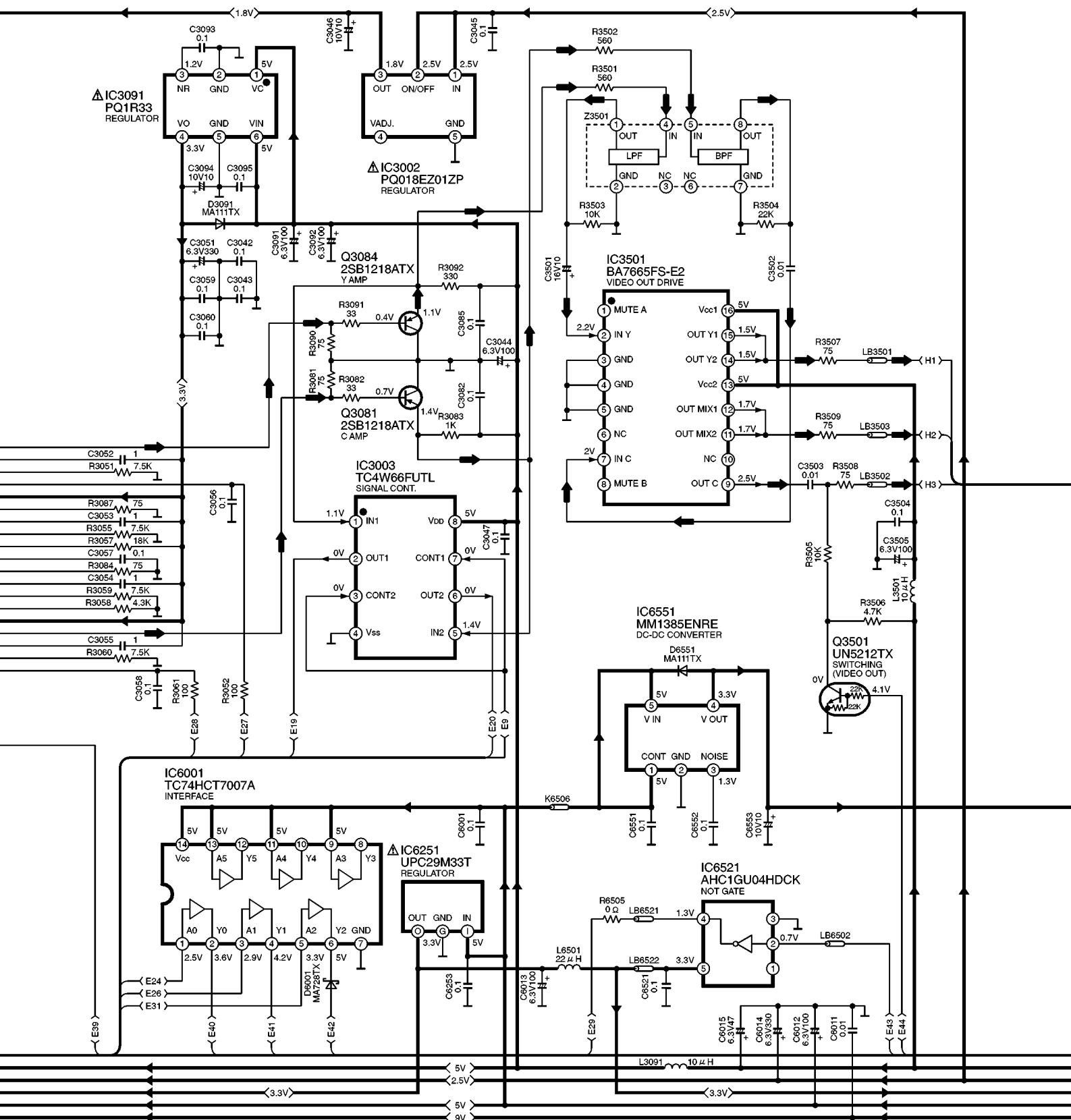


SCHEMATIC DIAGRAM-8

 : POSITIVE VOLTAGE LINE


SCHEMATIC DIAGRAM-10

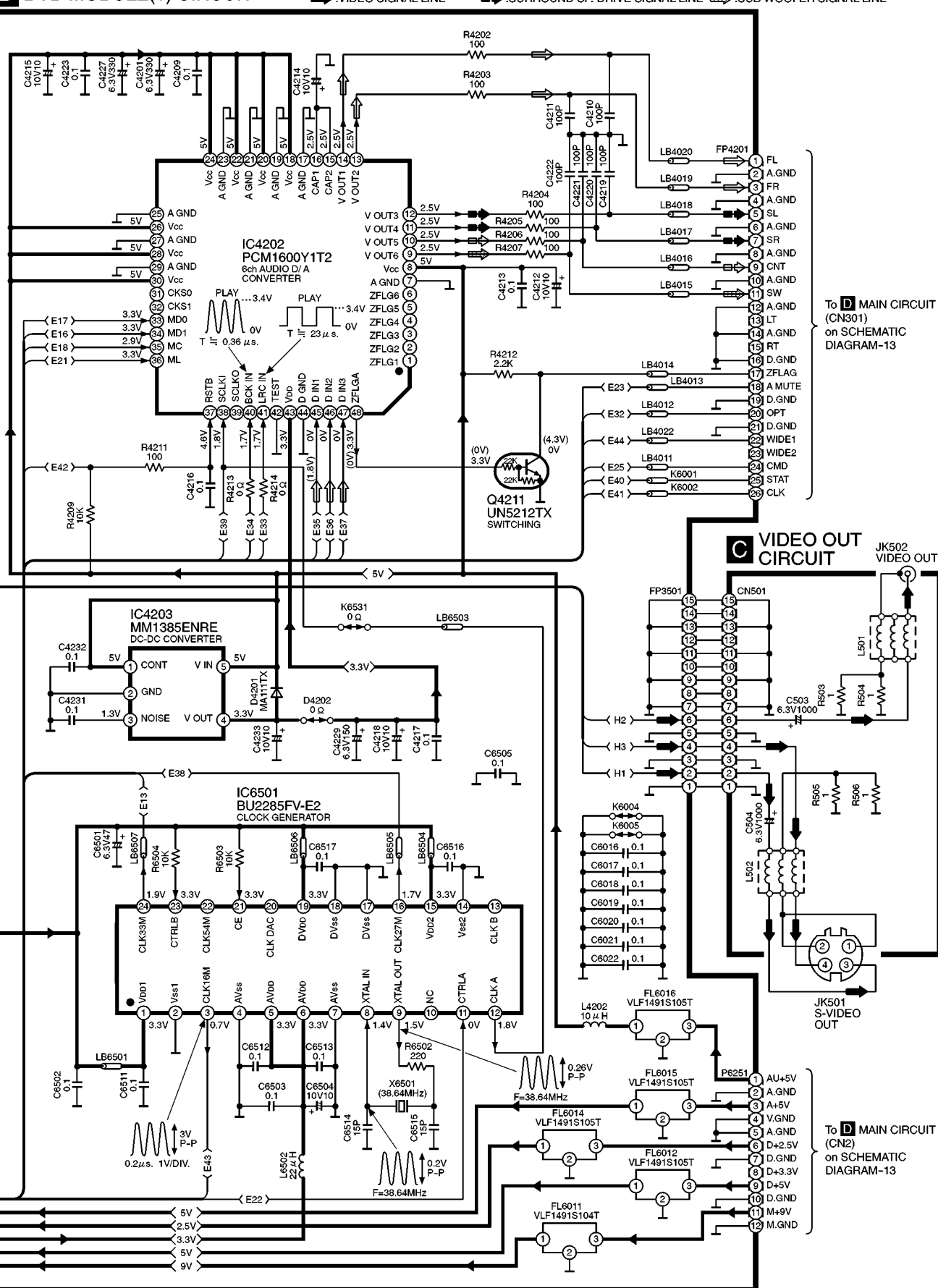
→:POSITIVE VOLTAGE LINE →:VIDEO SIGNAL LINE



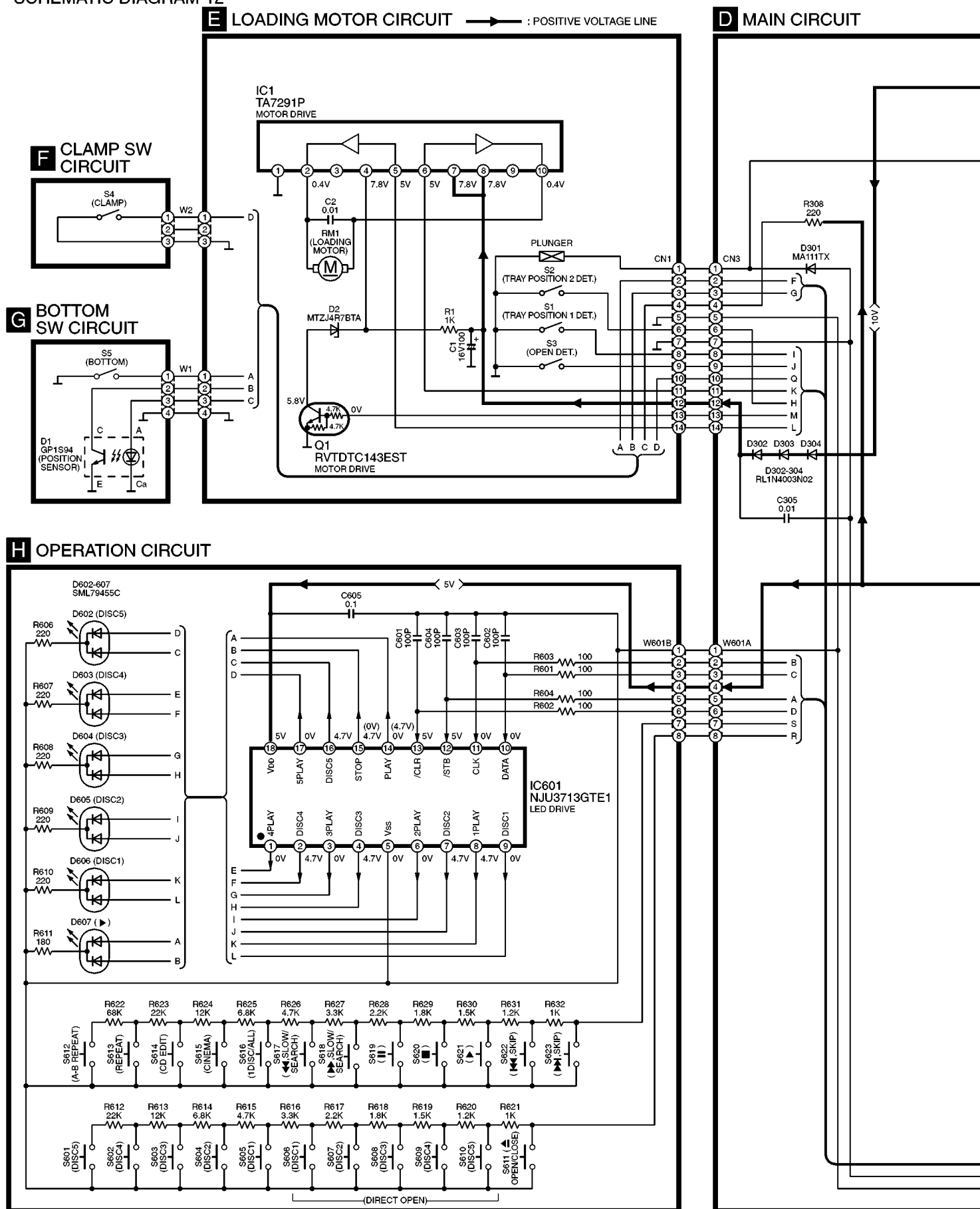
SCHEMATIC DIAGRAM-11

B DVD MODULE(1) CIRCUIT

→ : POSITIVE VOLTAGE LINE → : AUDIO SIGNAL LINE ◇ : CENTER SP. DRIVE SIGNAL LINE
 → : VIDEO SIGNAL LINE → : SURROUND SP. DRIVE SIGNAL LINE ◇ : SUB WOOFER SIGNAL LINE



SCHEMATIC DIAGRAM-12



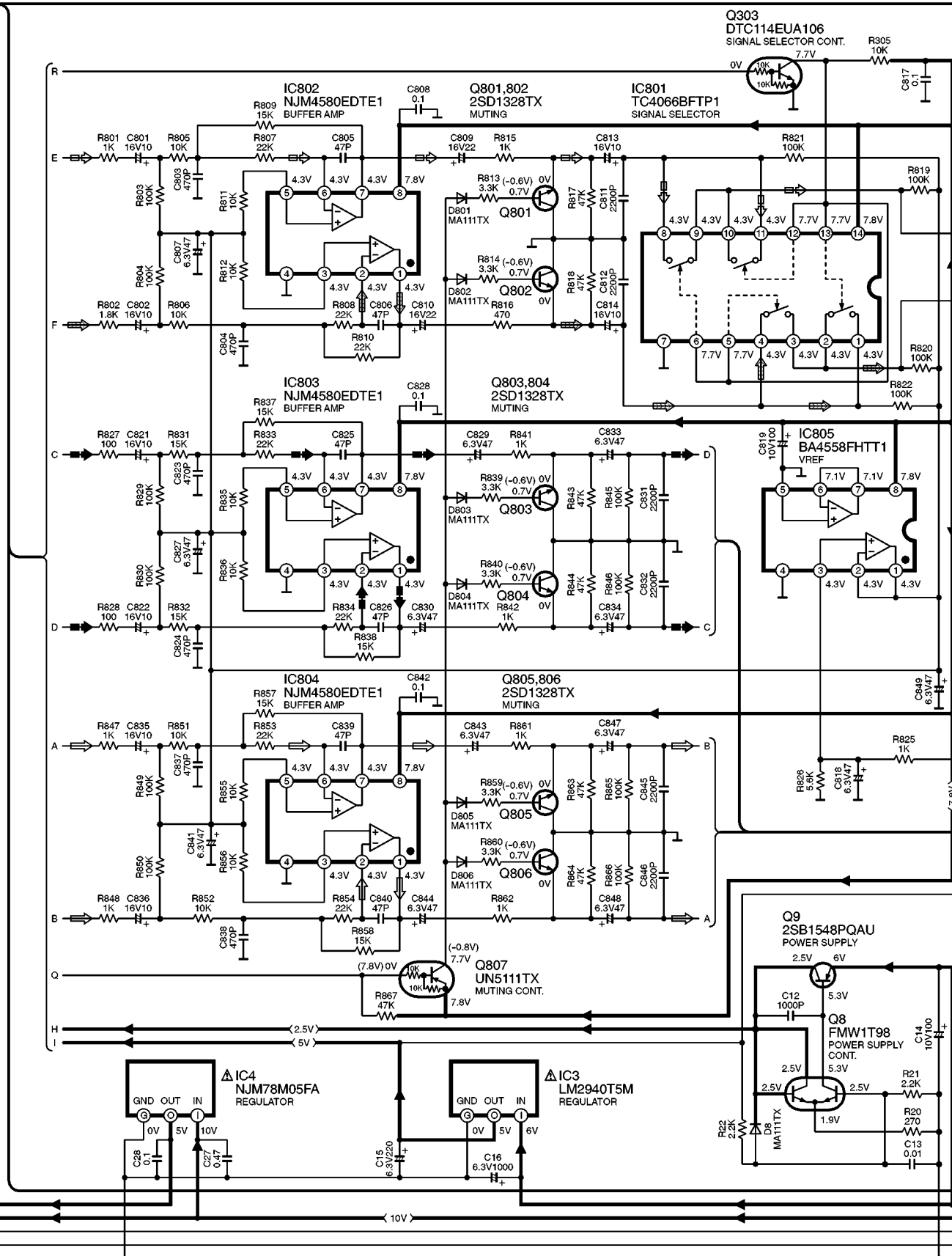
SCHEMATIC DIAGRAM-14

D MAIN CIRCUIT

→ : POSITIVE VOLTAGE LINE
 ⇨ : AUDIO SIGNAL LINE

■⇨ : SURROUND SP.DRIVE SIGNAL LINE
 □⇨ : CENTER SP.DRIVE SIGNAL LINE

⇨ : SUB WOOFER SIGNAL LINE

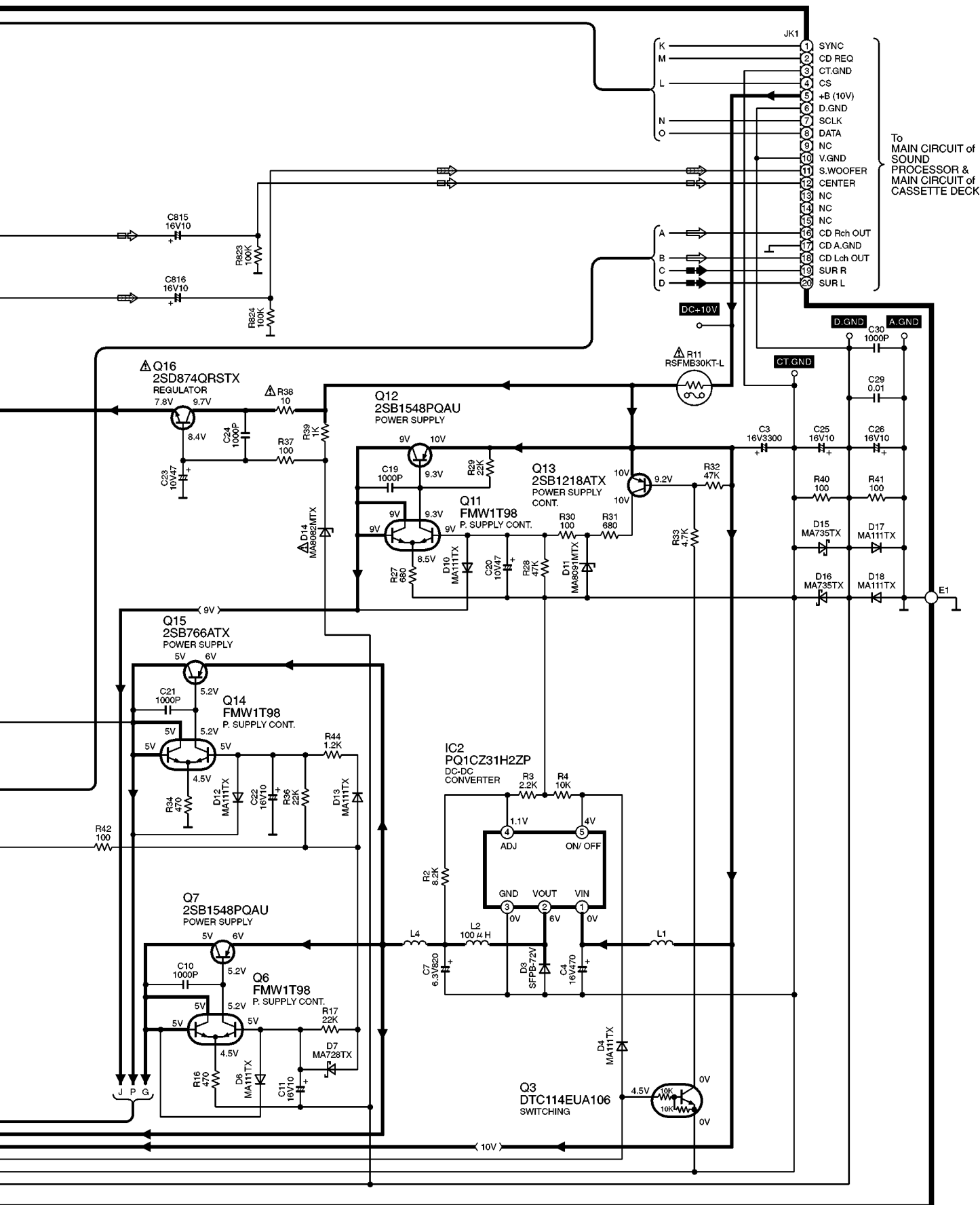


SCHEMATIC DIAGRAM-15

→ : POSITIVE VOLTAGE LINE
 ⇨ : AUDIO SIGNAL LINE

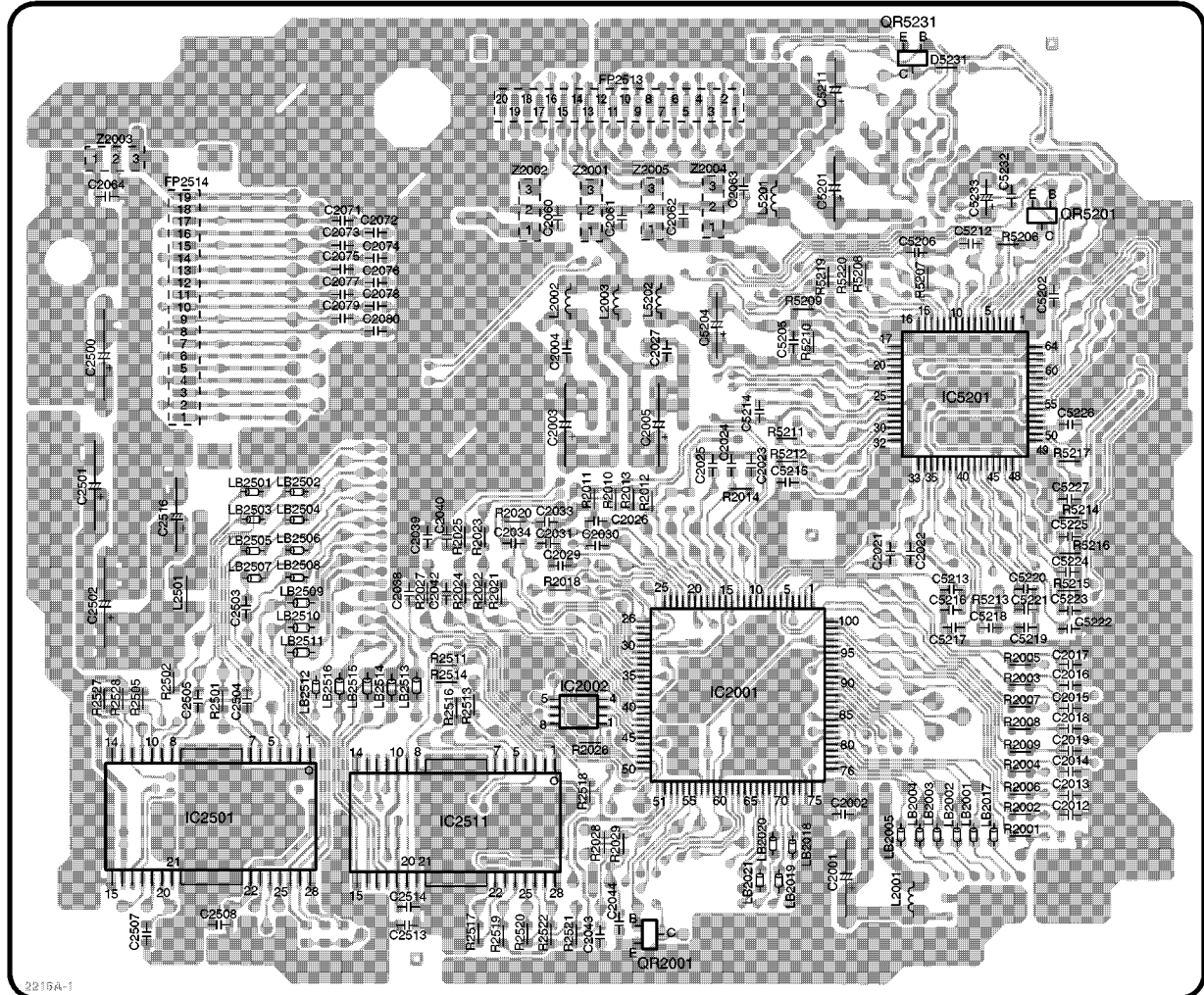
■ : SURROUND SP.DRIVE SIGNAL LINE
 □ : CENTER SP.DRIVE SIGNAL LINE

⇨ : SUB WOOFER SIGNAL LINE



9 Printed Circuit Board Diagram

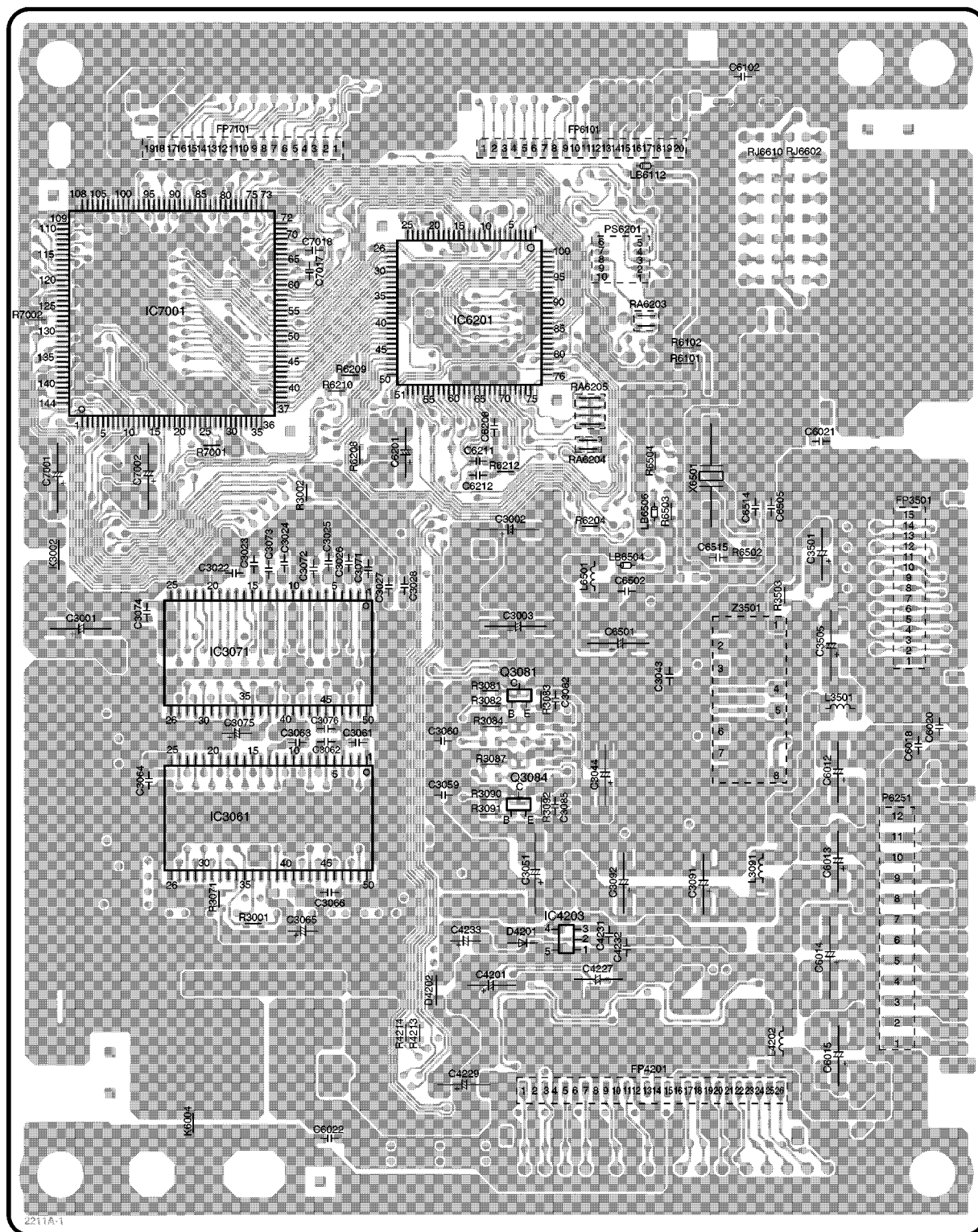
A DVD MODULE(2) P.C.B. (SIDE : A)



ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
A DVD MODULE(2) P.C.B. (SIDE: A)																			
IC2001	4D	Z2005	2D	LB2507	4B	R2010	3D	R2511	4C	R5213	4E	C2019	5F	C2060	2C	C2504	4B	C5218	4E
IC2002	4C	FP2513	2D	LB2508	4B	R2011	3C	R2513	4C	R5214	3F	C2021	4E	C2061	2D	C2505	4B	C5219	4F
IC2501	5B	FP2514	2B	LB2509	4B	R2012	3D	R2514	4C	R5215	4F	C2022	4E	C2062	2D	C2507	5A	C5220	4F
IC2511	5C	LB2001	5E	LB2510	4B	R2013	3D	R2516	4C	R5216	4F	C2023	3D	C2063	2D	C2508	5B	C5221	4F
IC5201	3E	LB2002	5E	LB2511	4B	R2014	3D	R2517	5C	R5217	3F	C2024	3D	C2064	2A	C2513	5C	C5222	4F
QR2001	5E	LB2003	5E	LB2512	4B	R2018	4C	R2518	5C	R5218	2E	C2025	3D	C2071	2B	C2514	5C	C5223	4F
QR5201	2F	LB2004	5E	LB2513	4C	R2020	4C	R2519	5C	R5220	2E	C2026	4D	C2072	2B	C2516	3B	C5224	4F
QR5231	1E	LB2005	5E	LB2514	4C	R2021	4C	R2520	5C	C2001	5E	C2027	3D	C2073	2B	C5201	2E	C5225	4F
D5231	1E	LB2017	5E	LB2515	4B	R2022	4C	R2521	5C	C2002	5E	C2029	4C	C2074	2B	C5202	2F	C5226	3F
L2001	5E	LB2018	5D	LB2516	4B	R2023	4C	R2522	5C	C2003	3C	C2030	4D	C2075	2B	C5204	3D	C5227	3F
L2002	2C	LB2019	5D	R2001	5F	R2024	4C	R2527	4A	C2004	3C	C2031	4C	C2076	2B	C5205	3D	C5232	2E
L2003	2D	LB2020	5D	R2002	5F	R2025	4C	R2528	4A	C2005	3D	C2033	4C	C2077	2B	C5206	2E	C5233	2E
L2501	4B	LB2021	5D	R2003	4F	R2026	5C	R5206	2E	C2012	5F	C2034	4C	C2078	2B	C5211	1E		
L5201	2D	LB2501	3B	R2004	4F	R2027	4C	R5207	2E	C2013	5F	C2038	4C	C2079	3B	C5212	2E		
L5202	2D	LB2502	3B	R2005	4F	R2028	5D	R5208	2E	C2014	5F	C2039	4C	C2080	3B	C5213	4E		
Z2001	2C	LB2503	4B	R2006	5F	R2029	5D	R5209	3D	C2015	4F	C2040	4C	C2500	3A	C5214	3D		
Z2002	2C	LB2504	4B	R2007	4F	R2501	4B	R5210	3E	C2016	4F	C2042	4C	C2501	3A	C5215	3D		
Z2003	2A	LB2505	4B	R2008	4F	R2502	4B	R5211	3D	C2017	4F	C2043	5D	C2502	4A	C5216	4E		
Z2004	2D	LB2506	4B	R2009	5F	R2505	4A	R5212	3D	C2018	4F	C2044	5D	C2503	4B	C5217	4E		

B DVD MODULE(1) P.C.B. (SIDE : A)



221A-1

(REP2978BB-N)

M

N

O

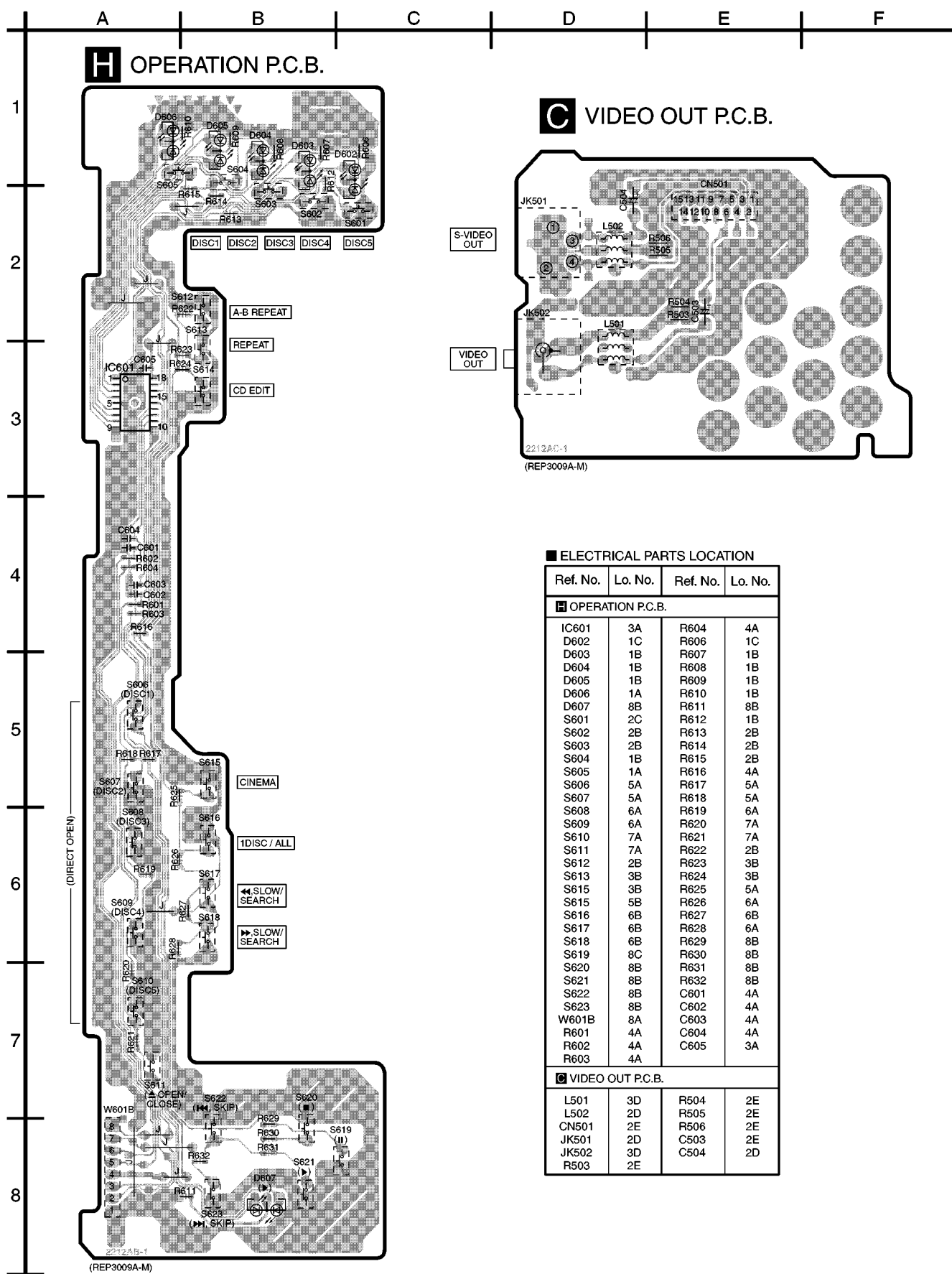
P

Q

R

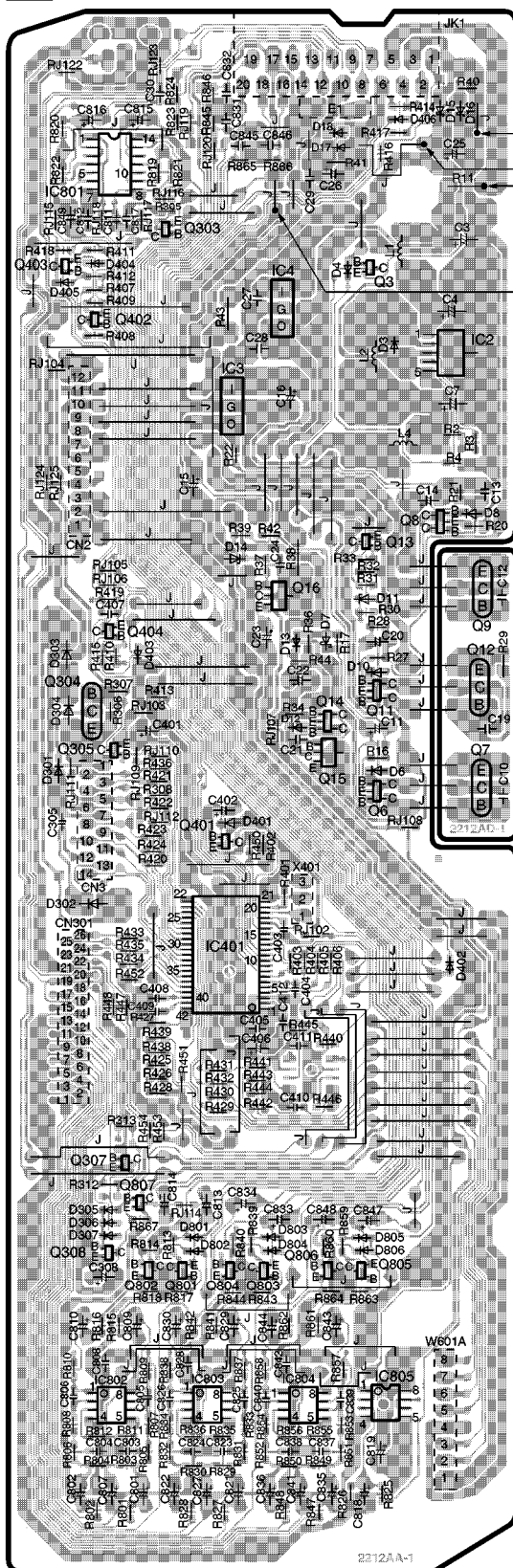
■ ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
■ DVD MODULE(1) P.C.B. (SIDE: A)											
IC3061	6B	K6004	8B	R6101	3E	C3022	4B	C3073	4B	C6018	5F
IC3071	5B	LB6112	2D	R6102	3E	C3023	4B	C3074	5B	C6020	5F
IC4203	7D	LB6504	4D	R6204	4D	C3024	4B	C3075	5B	C6021	4E
IC6201	3C	LB6506	4D	R6208	4C	C3025	4C	C3076	5C	C6022	8C
IC7001	3B	P6251	6F	R6209	3C	C3026	4C	C3082	5D	C6102	2E
Q3081	5D	PS6201	3D	R6210	3C	C3027	4C	C3085	6D	C6201	4C
Q3084	6D	R3001	6B	R6212	4D	C3028	4C	C3091	6E	C6206	4D
D4201	7D	R3002	4B	R6502	4E	C3043	5E	C3092	6D	C6211	4C
D4202	7C	R3071	6B	R6503	4E	C3044	6D	C3501	4E	C6212	4C
L3091	6E	R3081	5D	R6504	4D	C3051	6D	C3505	5E	C6501	5D
L3501	5F	R3082	5D	R7001	4B	C3059	6C	C4201	7D	C6502	5D
L4202	7E	R3083	5D	R7002	3A	C3060	5C	C4227	7D	C6505	4E
L6501	4D	R3084	5D	RA6203	3D	C3061	5C	C4229	7C	C6514	4E
Z3501	5E	R3087	6D	RA6204	4D	C3062	5C	C4231	6D	C6515	4E
X6501	4E	R3090	6C	RA6205	3D	C3063	5B	C4232	7D	C7001	4A
FP3501	4F	R3091	6C	RJ6602	2E	C3064	6B	C4233	7C	C7002	4B
FP4201	7D	R3092	6D	RJ6610	2E	C3065	6B	C6012	6E	C7017	3B
FP6101	2D	R3503	5E	C3001	5A	C3066	6C	C6013	6E	C7018	3B
FP7101	2B	R4213	7C	C3002	4D	C3071	4C	C6014	7E		
K3002	4A	R4214	7C	C3003	5D	C3072	4B	C6015	7E		
■ DVD MODULE(1) P.C.B. (SIDE: B)											
IC3001	6K	LB3501	5G	LB7109	2K	R6211	4J	C3036	4J	C6203	2J
IC3002	4I	LB3502	5G	LB7110	2K	R6213	4I	C3042	5J	C6204	3J
IC3003	6H	LB3503	5G	LB7111	2K	R6214	4I	C3045	4I	C6207	3I
IC3091	6I	LB4011	8H	LB7112	2K	R6301	3I	C3046	4I	C6253	6G
IC3501	5G	LB4012	8H	LB7113	2K	R6302	2J	C3047	6H	C6301	2K
IC4202	7J	LB4013	8H	LB7114	2K	R6303	2J	C3048	7K	C6302	2J
IC6001	7H	LB4014	8H	LB7115	2K	R6505	3H	C3052	6I	C6303	4I
IC6251	6G	LB4015	8I	LB7116	2K	RA3008	6L	C3053	6I	C6304	3J
IC6301	2J	LB4016	8I	LB7117	2K	RA3009	4J	C3054	5I	C6305	3J
IC6302	3J	LB4017	8I	TP6010	7G	RA3010	4J	C3055	5I	C6503	4G
IC6303	3I	LB4018	8I	R3003	4J	RA3011	6J	C3056	6I	C6504	4H
IC6501	4H	LB4019	8I	R3004	4J	RA6201	2I	C3057	5I	C6511	4H
IC6521	4H	LB4020	8I	R3005	4J	RA6206	3I	C3058	5I	C6512	4H
IC6551	3H	LB4022	8G	R3051	6I	RA7001	3L	C3093	6I	C6513	4H
Q3501	5G	LB6101	2J	R3052	6I	RA7002	3L	C3094	6I	C6516	4H
Q4211	7I	LB6102	2J	R3055	5I	RA7003	3L	C3095	6I	C6517	4H
Q6301	2J	LB6103	2J	R3057	5I	C3004	7J	C3502	5H	C6521	4H
D3091	6I	LB6104	2I	R3058	5I	C3005	7J	C3503	5G	C6551	3H
D6001	7H	LB6105	2I	R3059	5J	C3006	7J	C3504	5G	C6552	3H
D6301	2J	LB6106	2I	R3060	5I	C3007	7J	C4209	7J	C6553	3H
D6551	3H	LB6107	2I	R3061	5I	C3008	7J	C4210	8I	C7006	4K
L6201	4J	LB6108	2I	R3501	5H	C3009	7K	C4211	8I	C7011	3L
L6502	4G	LB6109	2I	R3502	5H	C3010	7K	C4212	7I	C7012	3L
L7001	4L	LB6110	2I	R3504	5H	C3011	7K	C4213	7J	C7013	3K
L7002	4L	LB6111	2I	R3505	5G	C3012	7K	C4214	7J	C7014	4K
FL6011	6G	LB6201	2J	R3506	5G	C3013	7K	C4215	7J	C7015	3K
FL6012	6G	LB6501	3H	R3507	5G	C3014	7K	C4216	7I	C7016	3K
FL6014	6G	LB6502	4H	R3508	5G	C3015	6L	C4217	7J	C7019	2K
FL6015	7G	LB6503	4H	R3509	5G	C3016	6L	C4218	7I	C7020	2K
FL6016	7G	LB6505	4H	R4202	8J	C3017	6L	C4219	8I	C7021	2L
FL6101	2H	LB6507	4H	R4203	8J	C3018	5L	C4220	8I	C7022	2L
FL6102	2H	LB6521	4H	R4204	8J	C3019	5L	C4221	8I	C7023	3L
FL6103	2H	LB6522	3H	R4205	8J	C3020	5L	C4222	8H	C7024	3L
FL7101	2K	LB7101	2J	R4206	8J	C3021	5L	C4223	7J	C7025	3L
K3001	5I	LB7102	2J	R4207	8J	C3029	4J	C6001	7G	C7026	3L
K6001	7H	LB7103	2J	R4209	7I	C3030	5I	C6011	6G	C7101	2K
K6002	7H	LB7104	2J	R4211	7I	C3031	5J	C6016	7G		
K6005	7K	LB7105	2J	R4212	7I	C3032	5J	C6017	7G		
K6301	3K	LB7106	2J	R6201	2J	C3033	5J	C6019	4G		
K6506	3H	LB7107	2K	R6202	4J	C3034	6J	C6101	2I		
K6531	5H	LB7108	2K	R6203	4J	C3035	6J	C6202	2J		



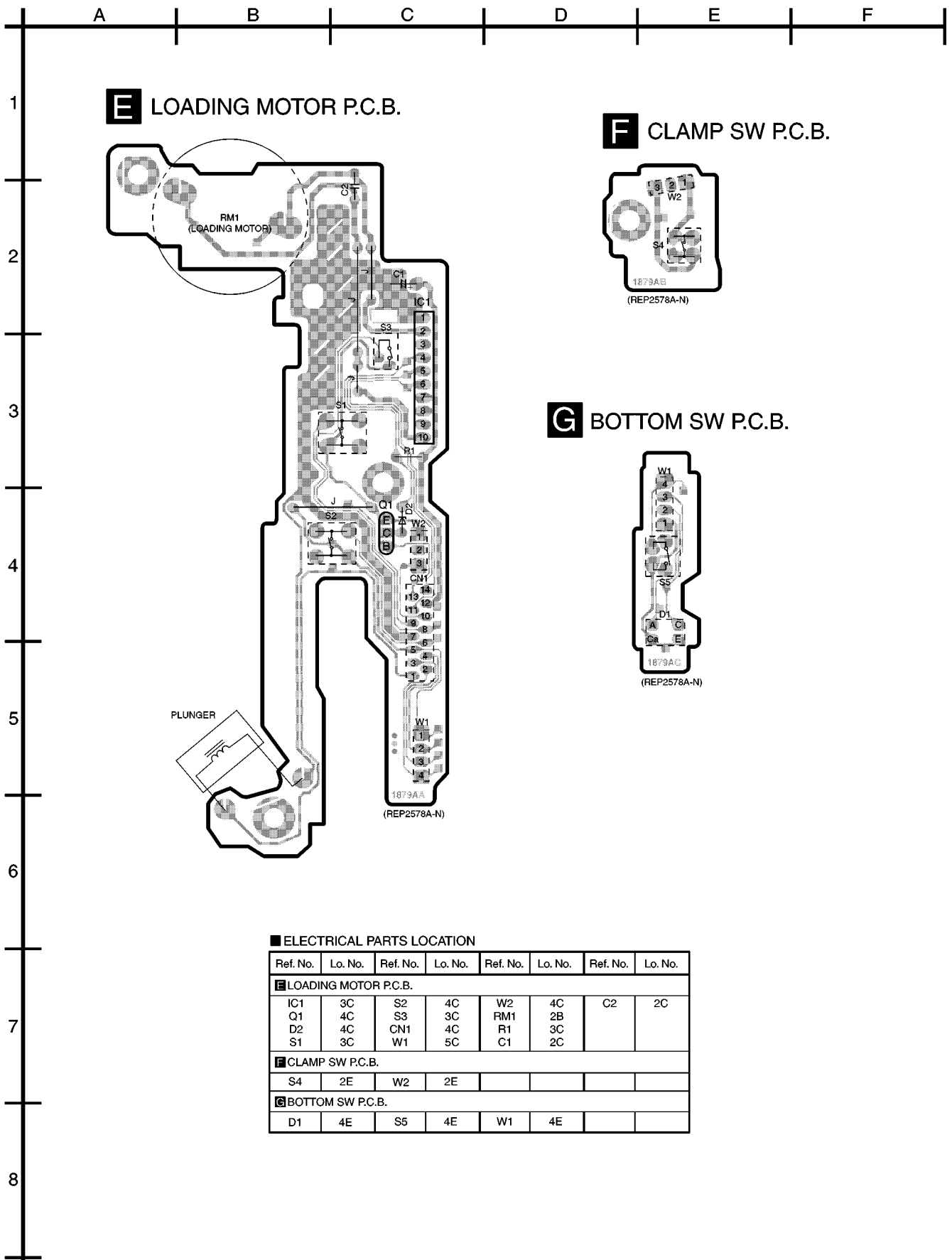
MAIN P.C.B.

TO SOUND PROCESSOR &
CASSETTE DECK

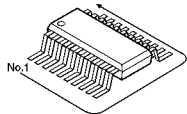
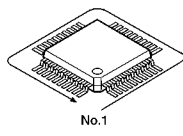
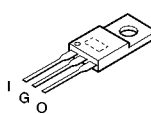
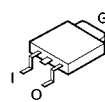
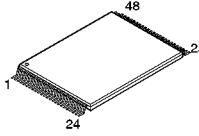
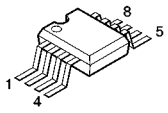
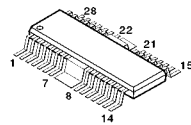
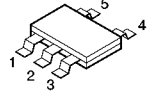
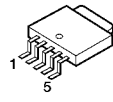
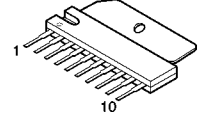
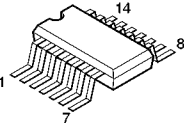
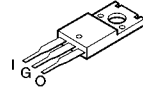
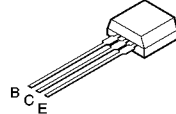
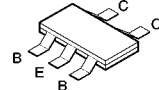
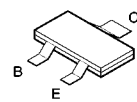
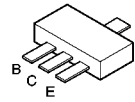
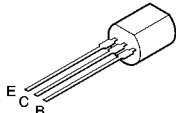
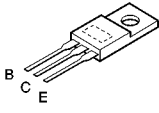
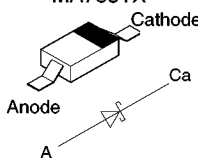
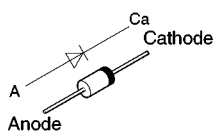
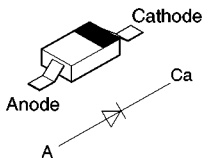
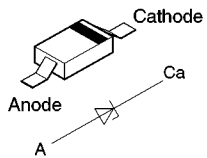
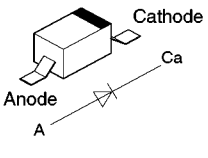
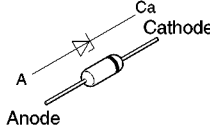
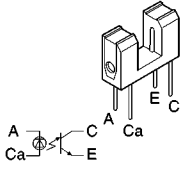
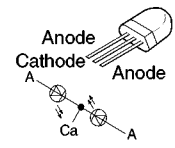


■ ELECTRICAL PARTS LOCATION

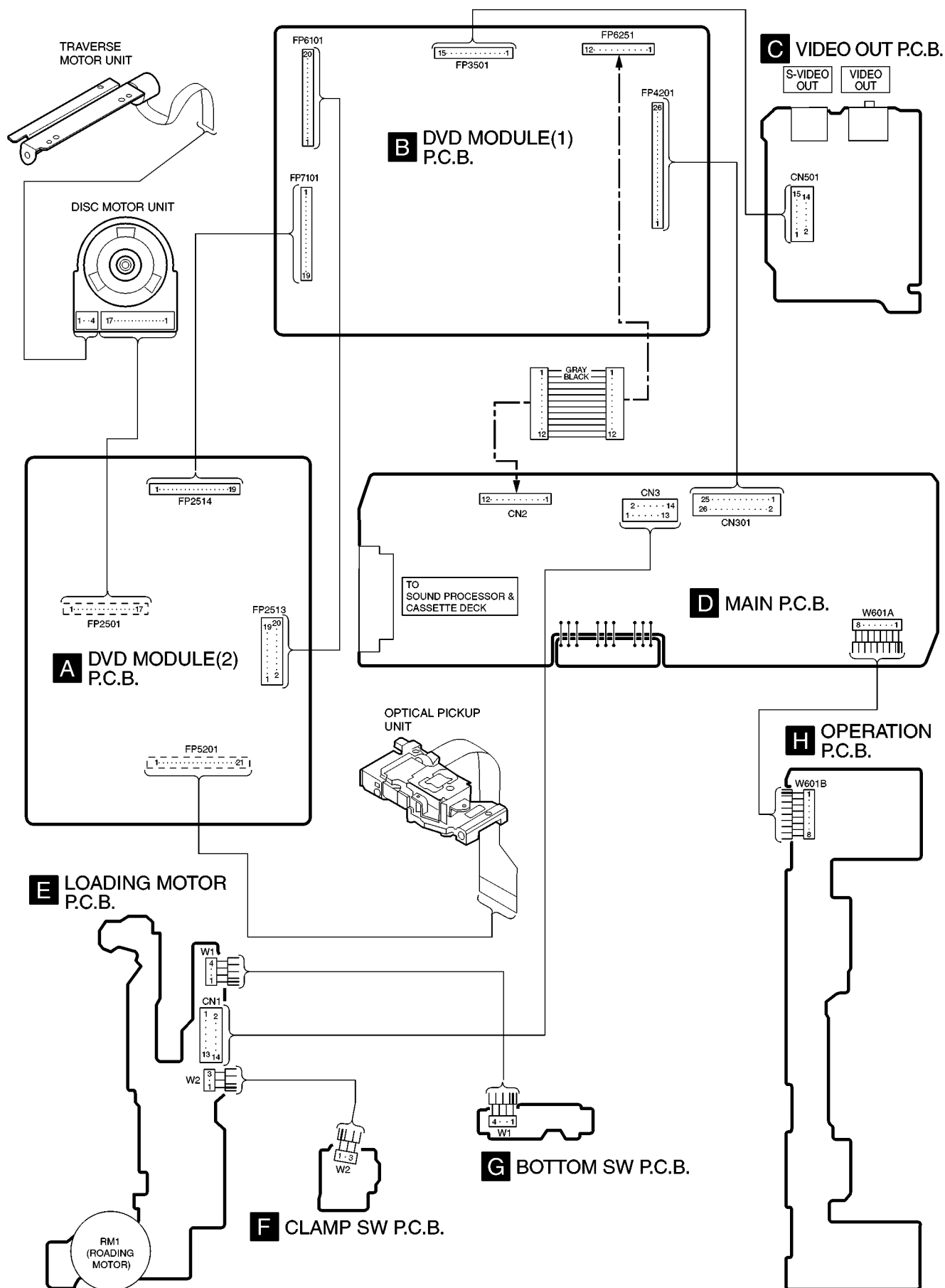
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D MAIN P.C.B.									
IC2	3C	D806	7C	R426	6B	R842	7B	C29	2B
IC3	3B	L1	2C	R427	6B	R843	7B	C30	1B
IC4	2B	L2	3C	R428	6B	R844	7B	C305	5A
IC401	5B	L4	3C	R429	6B	R845	1B	C308	7A
IC801	2A	X401	5B	R430	6B	R846	1B	C401	4B
IC802	8A	CN2	3A	R431	6B	R847	8B	C402	5B
IC803	8B	CN3	5A	R432	6B	R848	8B	C403	5B
IC804	8B	CN301	6A	R433	5A	R849	8B	C404	6B
IC805	8C	W601A	8C	R434	5A	R850	8B	C405	6B
Q3	2C	JK1	1B	R435	5A	R851	8B	C406	6B
Q6	5C	E1	1B	R436	5B	R852	8B	C407	4A
Q7	5C	R2	3C	R438	6B	R853	8B	C408	6B
Q8	3C	R3	3C	R439	6B	R854	8B	C409	6B
Q9	4C	R4	3C	R440	6B	R855	8B	C410	6B
Q11	4C	R11	2C	R441	6B	R856	8B	C411	6B
Q12	4C	R16	4C	R442	6B	R857	7B	C412	6B
Q13	3C	R17	4B	R443	6B	R858	7B	C801	8A
Q14	4B	R20	3C	R444	6B	R859	7B	C802	8A
Q15	4B	R21	3C	R445	6B	R860	7B	C803	8A
Q16	4B	R22	3B	R446	6B	R861	7B	C804	8A
Q303	2B	R27	4C	R447	6A	R862	7B	C805	8B
Q304	4A	R28	4C	R448	6A	R863	7C	C806	8A
Q305	4A	R29	4C	R450	5B	R864	7B	C807	8A
Q307	6A	R30	4C	R451	6B	R865	2B	C808	7A
Q308	7A	R31	4C	R452	6A	R866	2B	C809	7A
Q401	5B	R32	4C	R453	6B	R867	7A	C810	7A
Q402	2A	R33	4C	R454	6B	RJ102	5B	C811	2A
Q403	2A	R34	4B	R801	8A	RJ103	4B	C812	2A
Q404	4A	R36	4B	R802	8A	RJ104	3A	C813	7B
Q801	7B	R37	4B	R803	8A	RJ105	4A	C814	7B
Q802	7B	R38	4B	R804	8A	RJ106	4A	C815	1A
Q803	7B	R39	3B	R805	8B	RJ107	4B	C816	1A
Q804	7B	R40	1C	R806	8A	RJ108	5C	C817	2A
Q805	7C	R41	2B	R807	8B	RJ109	4A	C818	8C
Q806	7B	R42	3B	R808	8A	RJ110	4B	C819	8C
Q807	7A	R43	2B	R809	7B	RJ111	5A	C821	8B
D3	3C	R44	4B	R810	7A	RJ112	5B	C822	8B
D4	2B	R305	2B	R811	8A	RJ114	7B	C823	8B
D6	5C	R306	4A	R812	8A	RJ115	2A	C824	8B
D7	4B	R307	4A	R813	7B	RJ116	2B	C825	8B
D8	3C	R308	5B	R814	7B	RJ117	2A	C826	8B
D10	4C	R312	7A	R815	7A	RJ118	2A	C827	8B
D11	4C	R313	6A	R816	7A	RJ119	1B	C828	7B
D12	4B	R401	5B	R817	7B	RJ120	2B	C829	7B
D13	4B	R402	5B	R818	7B	RJ122	1A	C830	7B
D14	4B	R403	5B	R819	2B	RJ123	1B	C831	1B
D15	1C	R404	5B	R820	1A	RJ124	3A	C832	1B
D16	1C	R405	5B	R821	2B	RJ125	3A	C833	7B
D17	2B	R406	5B	R822	2A	C3	2C	C834	7B
D18	1B	R407	2A	R823	1B	C4	2C	C835	8B



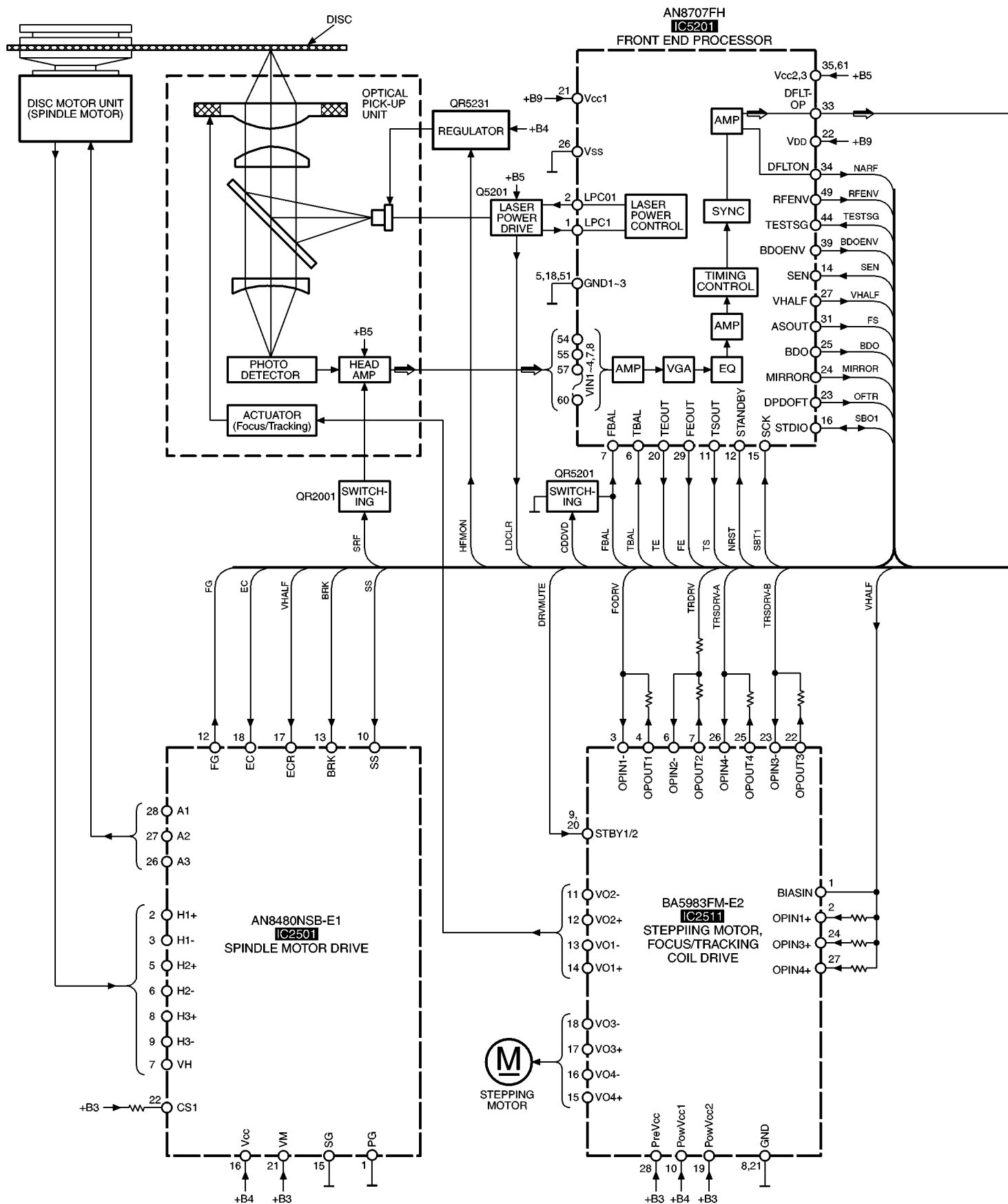
10 Type Illustration of ICs, Transistors and Diodes

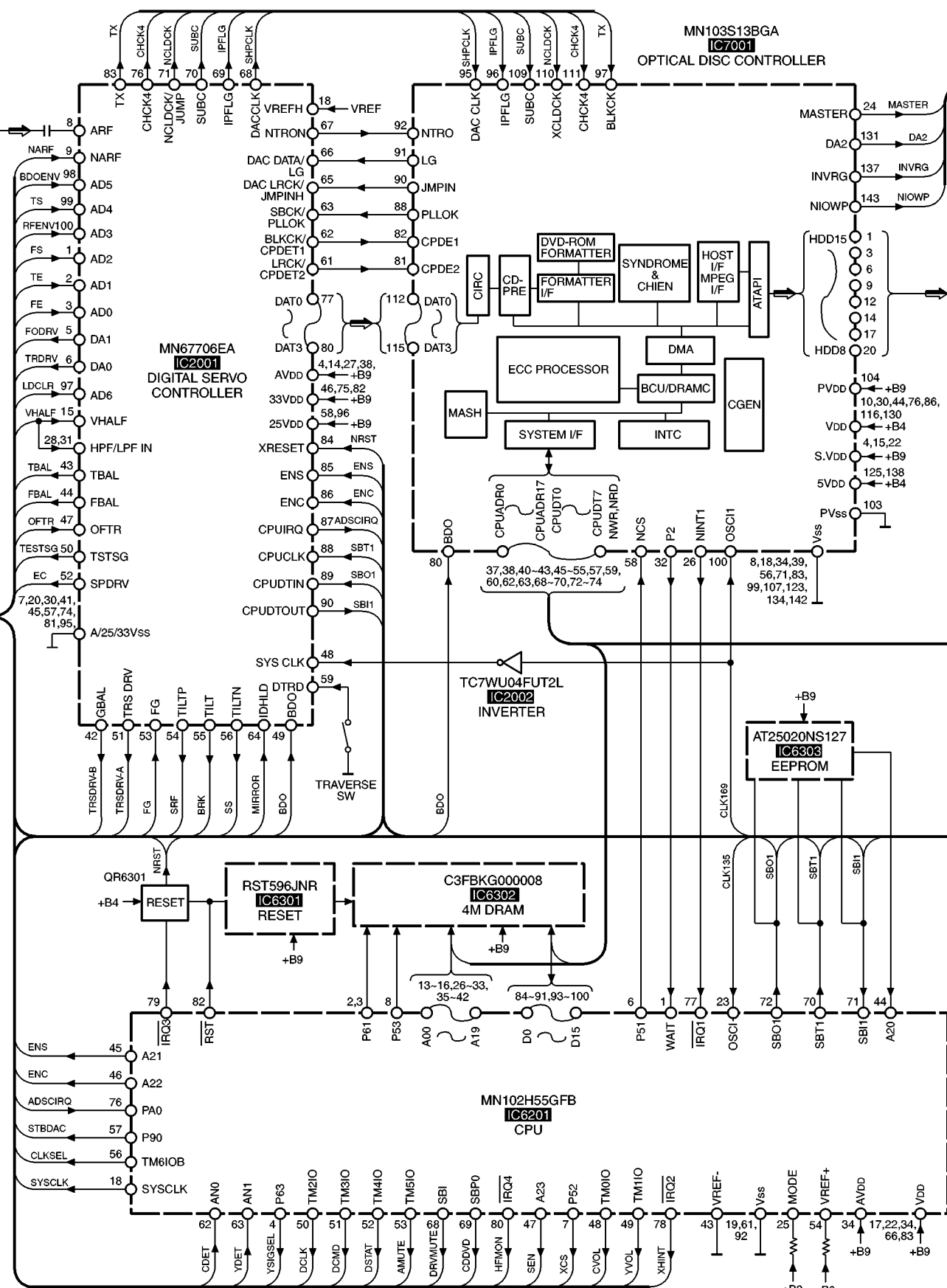
		<table><tr><td>NJM4580EDTE1</td><td>8PIN</td><td>BA7665FS-E2</td><td>16PIN</td></tr><tr><td>M38504M6209F</td><td>42PIN</td><td>M56V16160D8</td><td>50PIN</td></tr><tr><td>PQ1R33</td><td>6PIN</td><td>AT25020NSI27</td><td>8PIN</td></tr><tr><td>BU2285FV-E2</td><td>24PIN</td><td>TC7WU04FUT2L</td><td>8PIN</td></tr><tr><td>TC4W66FUTL</td><td>8PIN</td><td>NJU3713GTE1</td><td>18PIN</td></tr></table>		NJM4580EDTE1	8PIN	BA7665FS-E2	16PIN	M38504M6209F	42PIN	M56V16160D8	50PIN	PQ1R33	6PIN	AT25020NSI27	8PIN	BU2285FV-E2	24PIN	TC7WU04FUT2L	8PIN	TC4W66FUTL	8PIN	NJU3713GTE1	18PIN			<table><tr><td>MN102H55GFB</td><td>100PIN</td></tr><tr><td>MN103S13BGA</td><td>144PIN</td></tr><tr><td>MN67706EA</td><td>100PIN</td></tr><tr><td>AN8707FH</td><td>64PIN</td></tr><tr><td>MN677532JA</td><td>208PIN</td></tr><tr><td>PCM1600Y1T2</td><td>48PIN</td></tr></table>		MN102H55GFB	100PIN	MN103S13BGA	144PIN	MN67706EA	100PIN	AN8707FH	64PIN	MN677532JA	208PIN	PCM1600Y1T2	48PIN	 LM2940T5M	
NJM4580EDTE1	8PIN	BA7665FS-E2	16PIN																																						
M38504M6209F	42PIN	M56V16160D8	50PIN																																						
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PCM1600Y1T2	48PIN																																								
UPC29M33T 		C3FBKG000008 		BA4558FHTT1 		AN84840NSB-E1 BA5983FM-E2 		PST596JNR AHC1GU04HDCK MM1385ENRE 																																	
PQ1CZ31H2ZP PQ018EZ01ZP 		TA7291P 		TC74HCT7007A TC4066BFTP1 		NJM78M05FA 		RVTDTTC143EST 		FMW1T98 																															
		2SB1218ATX UN5111TX UN5212TX UN2121-TX UN5213TX		UN5214TX UN521NTX 2SD1819ATX 2SD1328TX DTC114EUA106		2SB766ATX 2SD874QRSTX 2SB1115-T1 		2SB621ARSTA 		2SB1548PQAU 																															
MA728TX MA735TX 		RL1N4003N02 		MA111TX 		MA8082MTX MA8091MTX 		SFPB-72V 		MTZJ4R7BTA 																															
GP1S94 		SML79455C 																																							

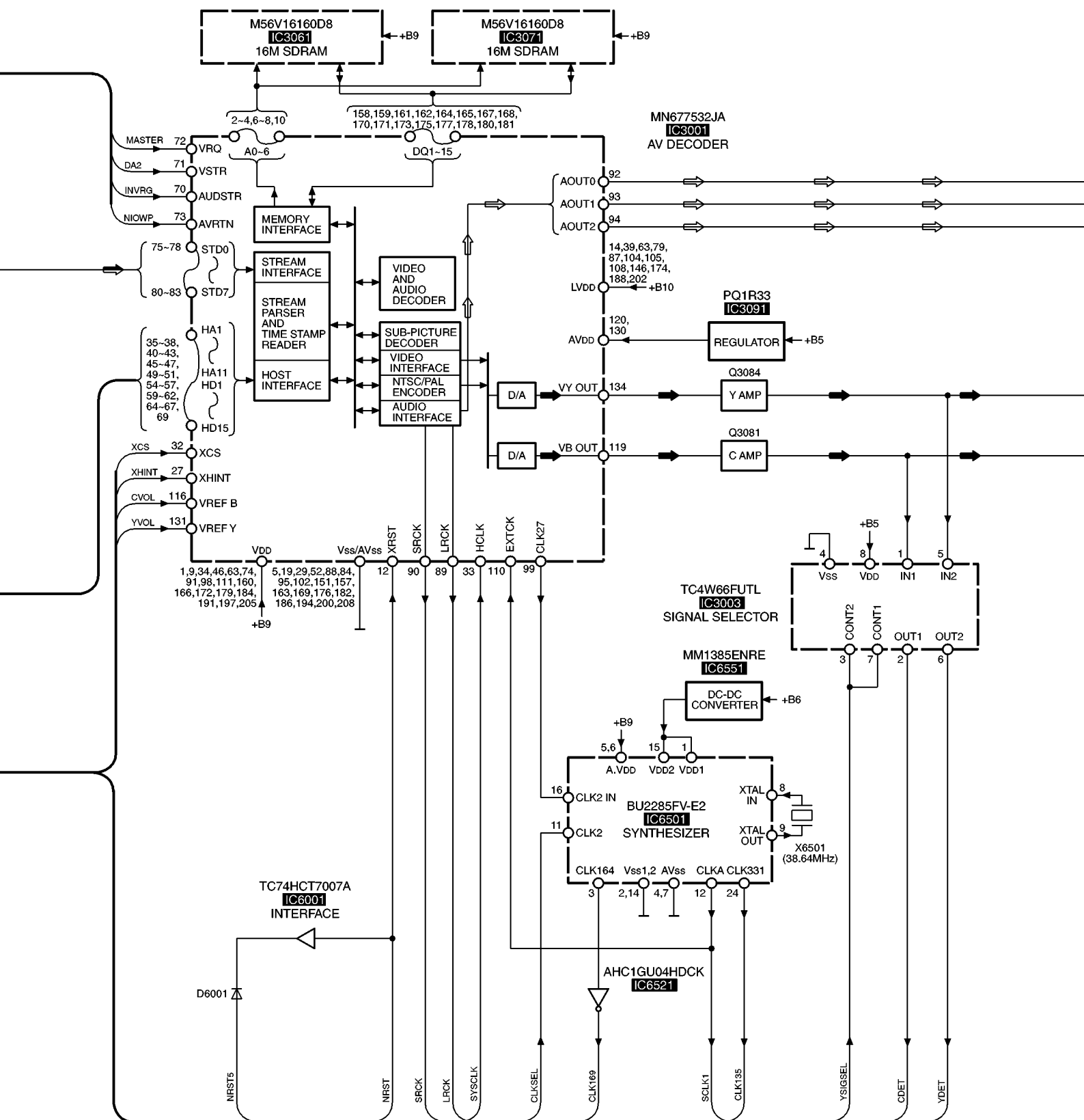
11 Wiring Connection Diagram

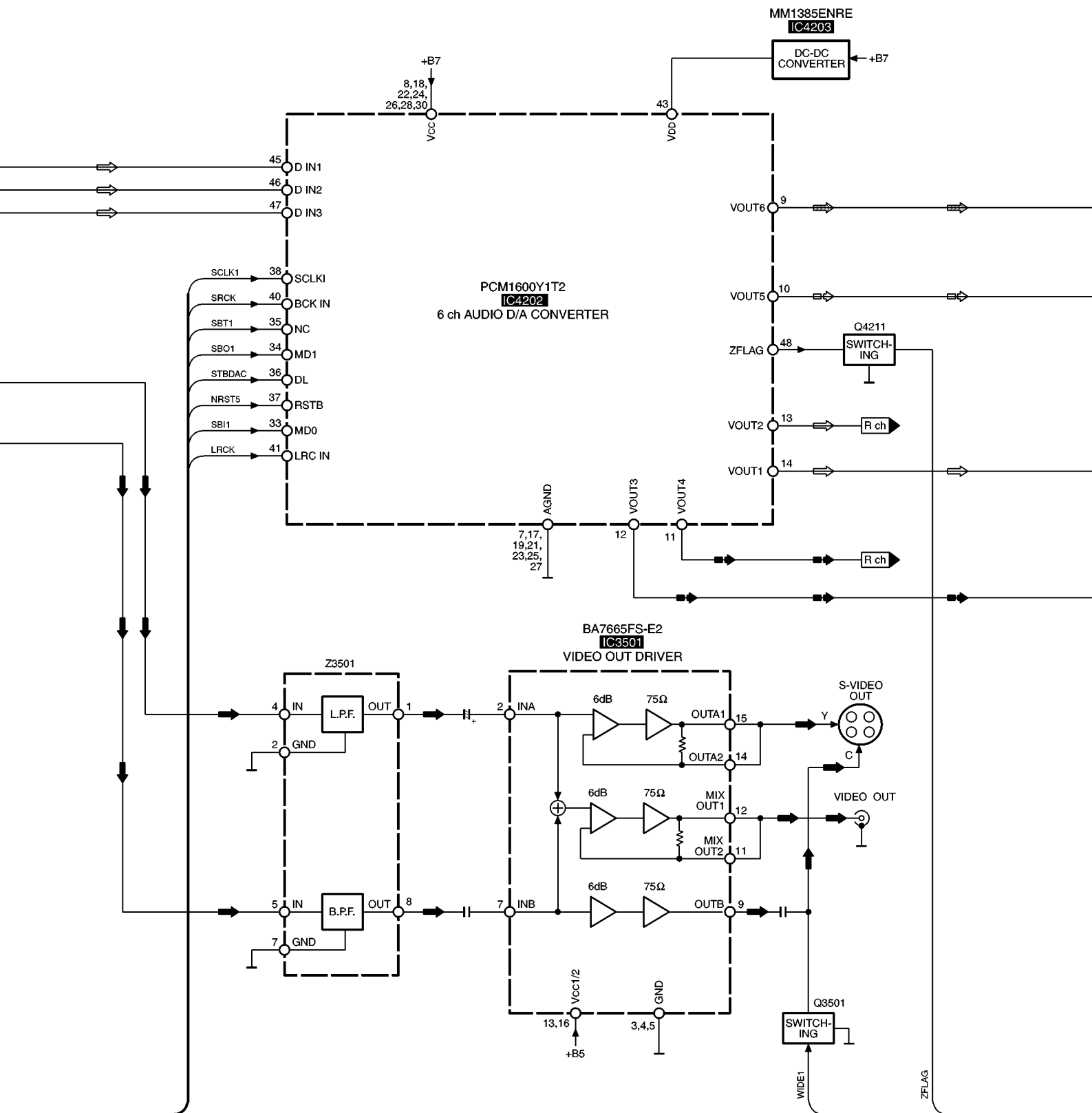


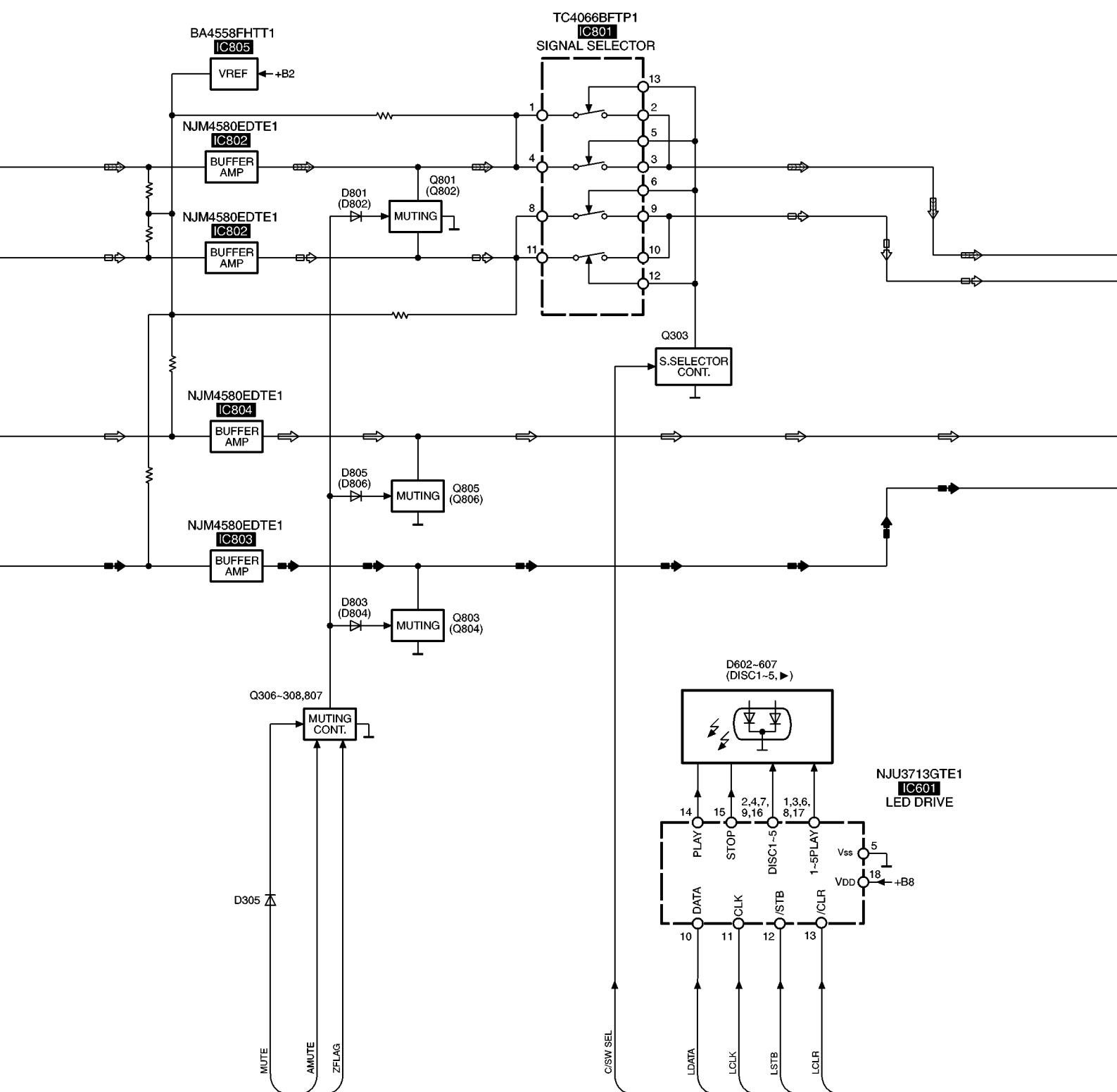
12 Block Diagram

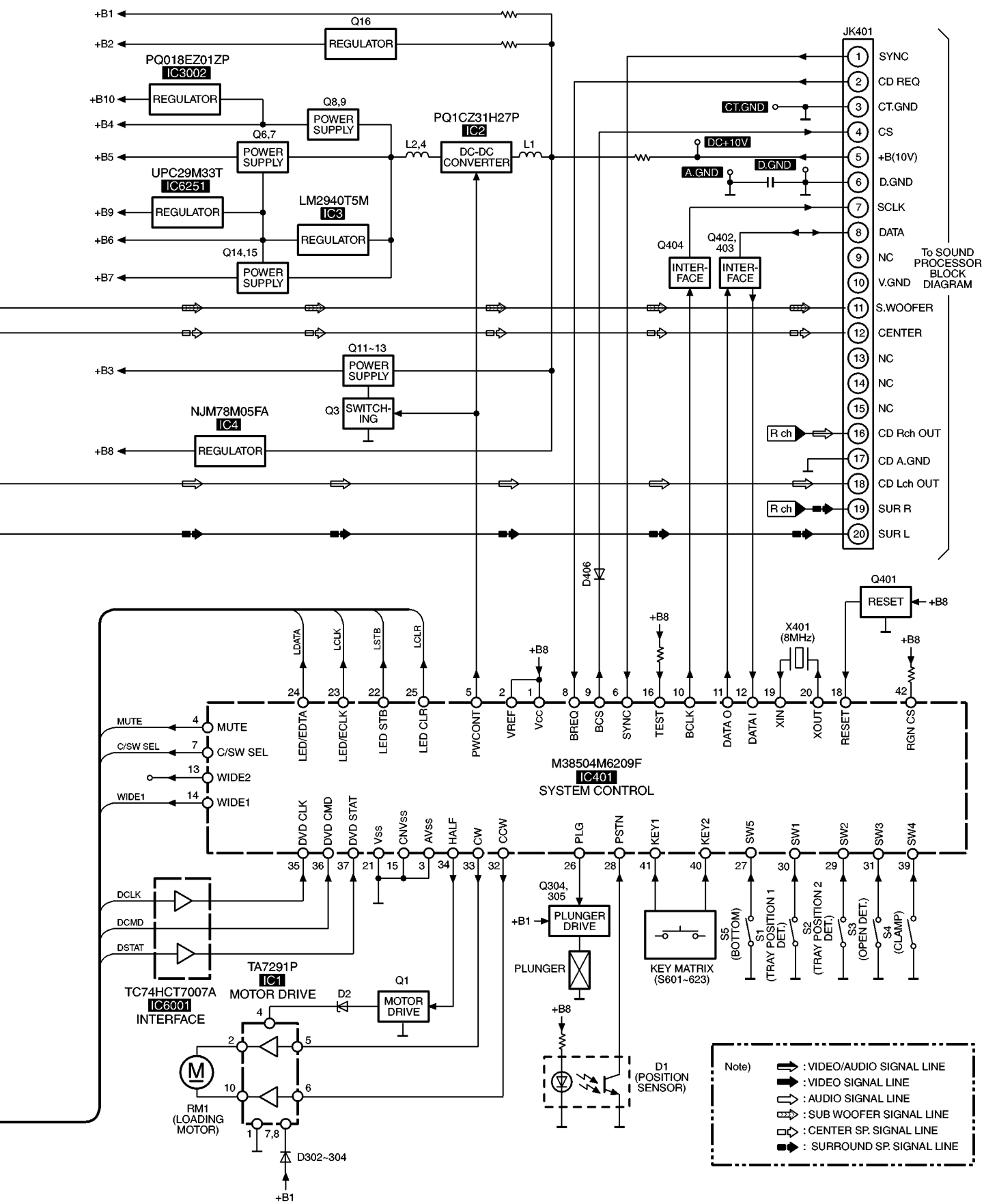












13 Terminal Function of ICs

13.1. IC401 (M38504M6209F): System Control

Pin No.	Terminal Name	I/O	Function
1	V _{CC}	I	Power supply terminal
2	VREF	I	Reference voltage input
3	AV _{SS}	-	GND terminal
4	MUTE	O	Muting control signal output
5	PWCONT	O	DVD module power control signal output
6	SYNC	I	Power failure detect signal input
7	C/SW SEL	O	Center/Sub woofer speaker select signal output
8	BREQ	I	Serial communication signal to Sound processor (Request signal input)
9	BCS	O	Serial communication signal to Sound processor (Chip select signal output)
10	BCLK	O	Serial communication signal to Sound processor (Clock signal output)
11	DATA O	O	Serial communication signal to Sound processor (Data signal output)
12	DATA I	I	Serial communication signal to Sound processor (Data signal input)
13	WIDE2	O	Select signal output for wide screen
14	WIDE1	O	Select signal output for wide screen
15	CNV _{SS}	-	Connected to V _{SS}
16	TEST	I	Test mode signal input
17	ECS	O	Serial signal (CS) output to EEPROM
18	RESET	I	Reset signal input
19	XIN	I	Oscillator connected terminal (8 MHz)
20	XOUT	O	
21	V _{SS}	-	GND terminal
22	LED STB	O	LED (strobe) drive signal output
23	LED/ECLK	O	LED (clock) drive signal output
24	LED/EDTA	O	LED (data) drive signal output
25	LED CLR	O	LED (clear) drive signal output
26	PLG	O	Plunger control signal output
27	SW5	I	Bottom switch detect signal input
28	PSTN	I	Position sensor detect signal input
29	SW2	I	Disc tray position 2 detect signal input
30	SW1	I	Disc tray position 1 detect signal input
31	SW3	I	Disc tray open detect signal input
32	CCW	O	Motor drive control signal output (Forward direction)
33	CW	O	Motor drive control signal output (Reverse direction)
34	HALH	O	Motor drive control signal output (speed)
35	DVD CLK	I	Serial communication signal to DVD module (Clock signal input)
36	DVD CMD	I	Serial communication signal to DVD module (Command signal input)
37	DVD STAT	I	Serial communication signal to DVD module (Status signal input)
38	DISC CS	I	Connected to GND via resistor
39	SW4	I	Clamp switch detect signal input
40	KEY2	I	Operation key signal input
41	KEY1	I	Operation key signal input
42	RGN CS	I	Area select signal input

14 Replacement Parts List

Notes:

- Important safety notice:

Components identified by Δ 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 marking <SPC> indicates in Remarks is supplied by Service Parts Center.
- The marking [RTL] indicates that Retention Time is Limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
- All parts are supplied by MESA.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	RKM0399-1S	TOP CABINET	1	
2	RHD30007-S	SCREW	4	
3	XTBS3+8JFZ1	SCREW	1	
4	RYF0548-S	CD LID UNIT	1	
5	RKA0105-K	RUBBER	4	
6	RKA0106-N	FOOT RING	4	
7	RYP0896F-1S	FRONT PANEL UNIT	1	
7-1	RGB0025-A	TECHNICS BADGE	1	
8	XTBS3+8JFZ1	SCREW	5	
9	XTB3+8JFZ	SCREW	3	
10	XTW3+8T	SCREW	2	
12	RHD20059	SCREW	4	
11	RHD30078	SCREW	3	
13	REX1028	FLAT CABLE (12P)	1	
14	REZ1323	FFC (26P)	1	
15	REZ1225-1	FFC (14P)	1	
16	REZ1320	FFC (15P)	1	
17	REZ1321	FFC (20P)	1	
18	REZ1322	FFC (19P)	1	
19	RMR1263-K	RIVET	1	
301	RML0517	LEVER	1	
302	RML0516	LEVER	1	
303	RMB0551	UPPER SPINDLE SPRING	1	
304	RMQ0744	LOWER HOOK	1	
305	RDV0056	BELT	1	
306	RML0525	FRONT LOCK	1	
307	RML0526	DISC SPRING LEVER	1	
308	RDG0424	GEAR, DRIVE	1	
309	RDG0425	GEAR, CHANGE	1	
310	RDG0427	TRAVERSE CAM GEAR	1	
311	RDG0428	TRAVERSE RELAY GEAR	1	
312	RDG0426	GEAR, UP/DOWN	1	
313	RDG0429	GEAR, PULLEY	1	
314	RMB0549-1	CHANGE GEAR SPRING	1	
315	RMQ0748	GEAR HOLDER	1	
316	RMB0553	SPRING	1	
317	RML0530	LEVER	1	
318	RML0518	LEVER	1	
319	RMM0201	SLIDE PLATE 1	1	
320	RMB0258	REAR LOCK SPRING	1	
321	RML0521	REAR LOCK	1	
322	RMB0257	TRAY LOCK SPRING	1	
323	RML0520	TRAY LOCK	1	
324	RMM0202	SLIDE PLATE 2	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
325	XTB3+10J	SCREW	9	
326	RMR0334	MAGNET HOLDER	1	
327	RMR0624-W2	CLAMPER	1	
328	RMB0561	ASSIST LEVER SPRING	1	
329	RMR1121-K	MECHANISM COVER	1	
330	RMQ0742	SPINDLE BASE	1	
331	RXQ0561	TRAY BASE	1	
331-1	XTN2+4F	SCREW	1	
332	RMB0261	FRONT LOCK SPRING	1	
333	RMX0140	DISC SPACER	5	
334	RHM245ZA	MAGNET	1	
335	RMQ0749	UPPER SPINDLE	1	
336	RMX0141	SPACER	1	
337	RHD20059	SCREW	4	
339	RXQ0595	MOTOR	1	
341	RXQ0470	SOLENOID	1	
341-1	RMS0398-1	SHAFT	1	
344	RML0519	CD LEVER	1	
346	RML0522	LOADING STOPPER	1	
347	RMQ0745	LOWER SPINDLE	1	
348	RMQ0746	UP/DOWN BASE	1	
349	RMB0550	LOWER SPINDLE SPRING	1	
350	RMQ0747	UPPER HOOK	1	
351	RMB0263	SPRING	1	
352	RMQ0743	SPINDLE SHAFT	1	
353	RMB0552	SPRING	1	
354	RDG0430	GEAR, RELAY A	1	
355	RDG0431	GEAR, RELAY B	1	
356	RMB0262	DISC LEVER SPRING	1	
421	REE0991	FFC (17P)	1	
422	BML3E4CRU	SPINDLE MOTOR	1	
423	VEM0720	STEPPING MOTOR UNIT	1	
424	VMB3278	FAN SPRING	2	
425	VMC1487	SUB SHAFT FAN SPRING	1	
426	VMC1606	SPRING HOLDER 1	1	
427	VMC1607	SPRING HOLDER 2	1	
429	VMT0994	FLOATING RUBBER	3	
430	RMR1292-K	TRAVERSE CHASSIS	1	
431	VMS6471	GUIDE SHAFT 1	1	
432	VMS6472	GUIDE SHAFT 2	1	
433	VED0402-1	OPTICAL PICK-UP	1	Δ
434	VMC1491	SUB SHAFT PRELOAD SPRING	1	
435	VMC1490	SPRING	1	
436	VMD3260	HOLDER	1	
437	VHD1224	SCREW	5	
438	VHD1358	SCREW	3	
439	VHD1057	SCREW	1	
440	XQNQC17+3	SCREW	1	
441	XXE26C6FN	SCREW	3	
442	VHD1223	SCREW	3	
444	XTV2+4G	SCREW	4	
C1	ECEA1CKS101	16V 100U	1	
C2	ECBALE103ZF5	25V 0.01U	1	
C3	ECA1CM332	16V 3300U	1	
C4	ECA1CM471	16V 470U	1	
C7	EEUFC0J821B	6.3V 820U	1	
C10	ECUV1H102KBN	50V 1000P	1	
C11	ECEA1CKS100	16V 10U	1	
C12	ECUV1H102KBN	50V 1000P	1	
C13	ECUV1H103KBN	50V 0.01U	1	
C14	ECEALAKS101	10V 100U	1	
C15	ECEALAKS221	6.3V 220U	1	
C16	ECA0JML02	6.3V 1000U	1	
C19	ECUV1H102KBN	50V 1000P	1	
C20	ECEALAKS470	10V 47	1	
C21	ECUV1H102KBN	50V 1000P	1	
C22	ECEA1CKS100	16V 10U	1	
C23	ECEALAKS470	10V 47	1	
C24	ECUV1H102KBN	50V 1000P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C25,26	ECEA1CKS100	16V 10U	2	
C27	ECUVNC474KBN	16V 0.47U	1	
C28	ECUVNE104ZFN	25V 0.1U	1	
C29	ECUV1H103KBN	50V 0.01U	1	
C30	ECUV1H102KBN	50V 1000P	1	
C305	ECUV1H103KBN	50V 0.01U	1	
C308	ECEA1HKS010	50V 1U	1	
C401	RCE0JKA470IG	6.3V 47U	1	
C402	ECEA1HKS3R3	50V 3.3U	1	
C403	ECUV1H103KBN	50V 0.01U	1	
C404	ECUV1H102KBN	50V 1000P	1	
C405	ECUVNE104ZFN	25V 0.1U	1	
C406	EEAF00J101B	6.3V 100U	1	
C407	ECUV1H101JCN	50V 100P	1	
C408,09	ECUV1H471JCN	50V 470P	2	
C410	ECUV1H101JCN	50V 100P	1	
C411,12	ECUVNE104ZFN	25V 0.1U	2	
C503,04	ECA0JM102	6.3V 1000U	2	
C601-04	ECUV1H101JCN	50V 100P	4	
C605	ECUVNE104ZFN	25V 0.1U	1	
C801,02	ECEA1CKS100	16V 10U	2	
C803,04	ECUV1H471JCN	50V 470P	2	
C805,06	ECUV1H470JCN	50V 47P	2	
C807	RCE0JKA470IG	6.3V 47U	1	
C808	ECUVNE104ZFN	25V 0.1U	1	
C809,10	ECEA1CKS220	16V 22U	2	
C811,12	ECUV1H222KBN	50V 2200P	2	
C813-16	ECEA1CKS100	16V 10U	4	
C817	ECUVNE104ZFN	25V 0.1U	1	
C818	RCE0JKA470IG	6.3V 47U	1	
C819	ECEA1AKS101	10V 100U	1	
C821,22	ECEA1CKS100	16V 10U	2	
C823,24	ECUV1H471JCN	50V 470P	2	
C825,26	ECUV1H470JCN	50V 47P	2	
C827	RCE0JKA470IG	6.3V 47U	1	
C828	ECUVNE104ZFN	25V 0.1U	1	
C829,30	RCE0JKA470IG	6.3V 47U	2	
C831,32	ECUV1H222KBN	50V 2200P	2	
C833,34	RCE0JKA470IG	6.3V 47U	2	
C835,36	ECEA1CKS100	16V 10U	2	
C837,38	ECUV1H471JCN	50V 470P	2	
C839,40	ECUV1H470JCN	50V 47P	2	
C841	RCE0JKA470IG	6.3V 47U	1	
C842	ECUVNE104ZFN	25V 0.1U	1	
C843,44	RCE0JKA470IG	6.3V 47U	2	
C845,46	ECUV1H222KBN	50V 2200P	2	
C847-49	RCE0JKA470IG	6.3V 47U	3	
C2001	ECEV0JA101SP	6.3V 100U	1	
C2002	ECUZNC104ZFN	16V 0.1U	1	
C2003	ECEV0JA101SP	6.3V 100U	1	
C2004	ECUZNC104ZFN	16V 0.1U	1	
C2005	ECEV0JA101SP	6.3V 100U	1	
C2007	ECUVNH103KBV	50V 0.01U	1	
C2008,09	ECUZNC104ZFN	16V 0.1U	2	
C2010	ECUV1H101KCV	50V 100P	1	
C2012	ECUV1H331KBV	50V 330P	1	
C2013-15	ECUV1H121JCV	50V 120P	3	
C2016,17	ECUV1H101KCV	50V 100P	2	
C2018,19	ECUV1H391KBV	50V 390P	2	
C2020	ECUZNC104ZFN	16V 0.1U	1	
C2021,22	ECUVNC104KBV	16V 0.1U	2	
C2023	ECUV1H682KBV	50V 6800P	1	
C2024	ECUV1H681KBV	50V 680P	1	
C2025	ECUVNC104KBV	16V 0.1U	1	
C2026	ECUZNC104ZFN	16V 0.1U	1	
C2027	ECUVNA105ZFN	10V 1U	1	
C2028	ECUZNC104ZFN	16V 0.1U	1	
C2029	ECUV1H470KCV	50V 47P	1	
C2030	ECUVNE183KBV	25V 0.018U	1	
C2031	ECUV1H102KBV	50V 1000P	1	
C2032	ECUZNC104ZFN	16V 0.1U	1	
C2033	ECUV0J474KBV	6.3V 0.47U	1	
C2034	ECUVNH103KBV	50V 0.01U	1	
C2035	ERJ3GEY0R00V	CHIP JUMPER	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C2037	ECUZNC104ZFN	16V 0.1U	1	
C2038	ECUVNC473KBV	16V 0.047U	1	
C2039	ECUV1C393KBV	16V 0.039U	1	
C2040	ECUV1H822KBV	50V 8200P	1	
C2041	ECUZNC104ZFN	16V 0.1U	1	
C2042	ECUVNC104KBV	16V 0.1U	1	
C2043	ECUVNC473KBV	16V 0.047U	1	
C2044	ECUVNC104KBV	16V 0.1U	1	
C2045-48	ECUZNC104ZFN	16V 0.1U	4	
C2051	ECUZNC104ZFN	16V 0.1U	1	
C2060-64	ECUZNC104ZFN	16V 0.1U	5	
C2071-75	ECUV1H270JCV	50V 27P	5	
C2076	ECUV1H100JCV	50V 10P	1	
C2077-80	ECUV1H270JCV	50V 27P	4	
C2500	EEVFC1C101P	16V 100U	1	
C2501	ECEV0JA101SP	6.3V 100U	1	
C2502	EEVFC0J221P	6.3V 220U	1	
C2503-05	ECUVNH103KBV	50V 0.01U	3	
C2506	ECUZNC104ZFN	16V 0.1U	1	
C2507	ECUVNC104KBV	16V 0.1U	1	
C2508,09	ECUZNC104ZFN	16V 0.1U	2	
C2513,14	ECUZNC104ZFN	16V 0.1U	2	
C2515	ECUVNC104KBV	16V 0.1U	1	
C2516	ECEV0JA470SR	6.3V 47U	1	
C2525	ECUZNC104ZFN	16V 0.1U	1	
C3001-03	ECEV0JA331P	6.3V 330U	3	
C3004-35	ECUVNC104ZFN	16V 0.1U	32	
C3036	ECUV1H220JCV	50V 22P	1	
C3042,43	ECUVNC104ZFN	16V 0.1U	2	
C3044	ECEV0JA101SP	6.3V 100U	1	
C3045	ECUVNC104ZFN	16V 0.1U	1	
C3046	ECST1AY106RR	10V 10U	1	
C3047,48	ECUVNC104ZFN	16V 0.1U	2	
C3051	ECEV0JA331P	6.3V 330U	1	
C3052-55	ECUVNA105KBN	10V 1U	4	
C3056-58	ECUVNC104KBV	16V 0.1U	3	
C3059-64	ECUVNC104ZFN	16V 0.1U	6	
C3065	ECST1AY106RR	10V 10U	1	
C3066	ECUVNC104ZFN	16V 0.1U	1	
C3071-74	ECUVNC104ZFN	16V 0.1U	4	
C3075	ECST1AY106RR	10V 10U	1	
C3076	ECUVNC104ZFN	16V 0.1U	1	
C3082	ECUVNC104KBV	16V 0.1U	1	
C3085	ECUVNC104KBV	16V 0.1U	1	
C3091,92	ECEV0JA101SP	6.3V 100U	2	
C3093	ECUVNC104ZFN	16V 0.1U	1	
C3094	ECST1AY106RR	10V 10U	1	
C3095	ECUVNC104ZFN	16V 0.1U	1	
C3501	ECEV1CA100SR	16V 10	1	
C3502,03	ECUVNH103KBV	50V 0.01U	2	
C3504	ECUVNC104KBV	16V 0.1U	1	
C3505	ECEV0JA101SP	6.3V 100U	1	
C4201	ECEV0JA331P	6.3V 330U	1	
C4209	ECUVNC104ZFN	16V 0.1U	1	
C4210,11	ECUV1H101JCV	50V 100P	2	
C4212	ECST1AY106RR	10V 10U	1	
C4213	ECUVNC104ZFN	16V 0.1U	1	
C4214,15	ECST1AY106RR	10V 10U	2	
C4216,17	ECUVNC104ZFN	16V 0.1U	2	
C4218	ECST1AY106RR	10V 10U	1	
C4219-22	ECUV1H101JCV	50V 100P	4	
C4223	ECUVNC104ZFN	16V 0.1U	1	
C4227	ECEV0JA331P	6.3V 330U	1	
C4229	RCST0JC157RE	6.3V 150U	1	
C4231,32	ECUVNC104ZFN	16V 0.1U	2	
C4233	ECST1AY106RR	10V 10U	1	
C5201	ECEV0JA330SR	6.3V 33	1	
C5202,03	ECUZNC104ZFN	16V 0.1U	2	
C5204	ECEV0JA330SR	6.3V 33	1	
C5205	ECUZNC104ZFN	16V 0.1U	1	
C5206	ECUVNH103KBV	50V 0.01U	1	
C5211	ECEV0JA470SR	6.3V 47U	1	
C5212	ECUV1H221KBV	50V 220P	1	
C5213	ECUZNC104ZFN	16V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C5214	ECUVNC104KBV	16V 0.1U	1	
C5215	ECUZNC104ZFB	16V 0.1U	1	
C5216	ECUV1H102KBV	50V 1000P	1	
C5217	ECUVNC104KBV	16V 0.1U	1	
C5218	ECUV1H180JCV	50V 18P	1	
C5219	ECUV1H182KBV	50V 1800P	1	
C5220	ECUV1H101KCV	50V 100P	1	
C5221	ECUV1H390KCV	50V 39P	1	
C5222,23	ECUV0J474KBV	6.3V 0.47U	2	
C5224,25	ECUV1H221KBV	50V 220P	2	
C5226	ECUVNC104KBV	16V 0.1U	1	
C5227	ECUZNC104ZFB	16V 0.1U	1	
C5232	ECUZNC104ZFB	16V 0.1U	1	
C5233	ECST1AY106RR	10V 10U	1	
C5234	ECUZNC104ZFB	16V 0.1U	1	
C6001	ECUVNC104ZFB	16V 0.1U	1	
C6011	ECUVNH103KBV	50V 0.01U	1	
C6012,13	ECEV0JA101SP	6.3V 100U	2	
C6014	ECEV0JA331P	6.3V 330U	1	
C6015	ECEV0JA470SR	6.3V 47U	1	
C6016-22	ECUVNC104ZFB	16V 0.1U	7	
C6101,02	ECUVNC104ZFB	16V 0.1U	2	
C6201	ECEV0JA470SR	6.3V 47U	1	
C6202-04	ECUVNC104ZFB	16V 0.1U	3	
C6206,07	ECUVNC104ZFB	16V 0.1U	2	
C6211,12	ECUVNC104ZFB	16V 0.1U	2	
C6253	ECUVNC104ZFB	16V 0.1U	1	
C6301	ECUV1H101JCV	50V 100P	1	
C6302	ECUVNC104KBV	16V 0.1U	1	
C6303-05	ECUVNC104ZFB	16V 0.1U	3	
C6501	ECEV0JA470SR	6.3V 47U	1	
C6502,03	ECUVNC104ZFB	16V 0.1U	2	
C6504	ECST1AY106RR	10V 10U	1	
C6505	ECUVNC104ZFB	16V 0.1U	1	
C6511-13	ECUVNC104ZFB	16V 0.1U	3	
C6514,15	ECUV1H150JCV	50V 15P	2	
C6516,17	ECUVNC104ZFB	16V 0.1U	2	
C6521	ECUVNC104ZFB	16V 0.1U	1	
C6551,52	ECUVNC104ZFB	16V 0.1U	2	
C6553	ECST1AY106RR	10V 10U	1	
C7001,02	ECEV0JA101SP	6.3V 100U	2	
C7006	ECUVNC104ZFB	16V 0.1U	1	
C7011-26	ECUVNC104ZFB	16V 0.1U	16	
C7101	ECUVNC104ZFB	16V 0.1U	1	
CN1	RJS1A9414	CONNECTOR (14P)	1	
CN2	RJP12G17ZA	CONNECTOR (12P)	1	
CN3	RJS1A6714-Q	CONNECTOR (14P)	1	
CN301	RJS2A7726	CONNECTOR (26P)	1	
CN501	RJS2A7715	CONNECTOR (15P)	1	
D1	GP1S94	PHOTO INTERRUPTOR	1	
D2	MTZJ4R7B	DIODE	1	
D3	SFPB-72V	DIODE	1	
D4	MA111TX	DIODE	1	
D6	MA111TX	DIODE	1	
D7	MA728TX	DIODE	1	
D8	MA111TX	DIODE	1	
D10	MA111TX	DIODE	1	
D11	MA8091MTX	DIODE	1	
D12,13	MA111TX	DIODE	2	
D14	MA8082M	DIODE	1	△
D15,16	MA735TX	DIODE	2	
D17,18	MA111TX	DIODE	2	
D301	MA111TX	DIODE	1	
D302-04	RLN4003N02	DIODE	3	
D305-07	MA111TX	DIODE	3	
D401-06	MA111TX	DIODE	6	
D602-07	SML79455C	LED	6	
D801-06	MA111TX	DIODE	6	
D3091	MA111TX	DIODE	1	
D4201	MA111TX	DIODE	1	
D4202	ERJ6GEY0R00V	CHIP JUMPER	1	
D5231	ERJ3GEY0R00V	CHIP JUMPER	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D6001	MA728TX	DIODE	1	
D6301	MA728TX	DIODE	1	
D6551	MA111TX	DIODE	1	
FL6011	VLF1491S104T	CHIPFILTER	1	
FL6012	VLF1491S105T	CHIPFILTER	1	
FL6014-16	VLF1491S105T	CHIPFILTER	3	
FL6101-03	VLF1491S105T	CHIPFILTER	3	
FL7101	VLF1491S104T	CHIPFILTER	1	
FP2501	RJS2A5017T	CONNECTOR (17P)	1	
FP2513	RJS2A7520T	CONNECTOR (20P)	1	
FP2514	RJS2A0619T	CONNECTOR (19P)	1	
FP3501	RJS2A7515T	CONNECTOR (15P)	1	
FP4201	RJS2A7526T	CONNECTOR (26P)	1	
FP5201	RJS2A0621T	CONNECTOR (21P)	1	
FP6101	RJS2A7520T	CONNECTOR (20P)	1	
FP7101	RJS2A7519T	CONNECTOR (19P)	1	
IC1	TA7291P	IC	1	
IC2	PQ1CZ31H2ZP	IC	1	
IC3	LM2940T5	IC	1	△
IC4	NJM78M05FA	IC	1	△
IC401	M38504M6209F	IC	1	
IC601	NJU3713GTE1	IC	1	
IC801	TC4066BFTP1	IC	1	
IC802-04	NJM4580EDTE1	IC	3	
IC805	BA4558FHTT1	IC	1	
IC2001	MN67706EA	IC	1	
IC2002	TC7WU04FUT2L	IC	1	
IC2501	AN8480NSB-E1	IC	1	
IC2511	BA5983FM-E2	IC	1	
IC3001	MN677532JA	IC	1	
IC3002	PQ018EZ01ZP	IC	1	△
IC3003	TC4W66FUTL	IC	1	
IC3061	M56V16160D8	IC	1	
IC3071	M56V16160D8	IC	1	
IC3091	PQ1R33	IC	1	△
IC3501	BA7665FS	IC	1	
IC4202	PCM1600Y1T2	IC	1	
IC4203	MML385ENRE	IC	1	
IC5201	AN8707FH	IC	1	
IC6001	TC74HCT7007A	IC	1	
IC6201	MN102H55GFB	IC	1	
IC6251	UPC29M33T	IC	1	△
IC6301	PST596JNR	IC	1	
IC6302	VUB8011C517	IC	1	<SPC>
IC6303	AT25020NSI27	IC	1	
IC6501	BU2285FV-E2	IC	1	
IC6521	AHC1GU04HDCK	IC	1	
IC6551	MML385ENRE	IC	1	
IC7001	MN103S13BGA	IC	1	
JK1	RJT065K20	SYSTEM CONNECTOR (20P)	1	
JK501	SJS9418-1	JACK	1	
JK502	SJFD7-6	JACK	1	
K3001	ERJ3GEY0R00V	CHIP JUMPER	1	
K3002	ERJ14Y0R00H	COIL	1	
K6001,02	VLP0323A601R	COIL	2	
K6004,05	ERJ3GEY0R00V	CHIP JUMPER	2	
K6301	ERJ3GEY0R00V	CHIP JUMPER	1	
K6506	VLP0323A601R	COIL	1	
K6531	ERJ3GEY0R00V	CHIP JUMPER	1	
L1	RLL500050T-Y	COIL	1	
L2	RLQX101M-T	COIL	1	
L4	RLL500050T-Y	COIL	1	
L501,02	G0BYYYY00016	COIL	2	
L2001-03	RLQU100KT-W	COIL	3	
L2501	ERJ14Y0R00H	COIL	1	
L3091	ELJEA100KF	COIL	1	
L3501	ELJEA100KF	COIL	1	
L4202	ELJEA100KF	COIL	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L5201,02	RLQU100KT-W	COIL	2	
L6201	ERJ14Y0R00H	COIL	1	
L6501,02	ELJFC220KF	COIL	2	
L7001,02	ELJEA100KF	COIL	2	
LB2001-28	VLP0323A601R	COIL	28	
LB2501-08	VLP0323A601R	COIL	8	
LB2509-11	JALBK2HS470T	COIL	3	
LB2512	VLP0323A601R	COIL	1	
LB2513-16	JALBK2HS470T	COIL	4	
LB3501-03	VLP0323A601R	COIL	3	
LB4011-20	VLP0323A601R	COIL	10	
LB4022	VLP0323A601R	COIL	1	
LB5201,02	VLP0323A601R	COIL	2	
LB5203	JALBK2HS470T	COIL	1	
LB5204-10	VLP0323A601R	COIL	7	
LB5211	JALBK2HS470T	COIL	1	
LB5212-14	VLP0323A601R	COIL	3	
LB5215	JALBK2HS470T	COIL	1	
LB5216	VLP0323A601R	COIL	1	
LB5217	JALBK2HS470T	COIL	1	
LB5218	VLP0323A601R	COIL	1	
LB6101-11	VLP0323A601R	COIL	11	
LB6112	VLP0157-T	COIL	1	
LB6201	VLP0155-T	COIL	1	
LB6501	VLP0323A601R	COIL	1	
LB6502,03	VLP0155-T	COIL	2	
LB6504	VLP0323A601R	COIL	1	
LB6505	VLP0155-T	COIL	1	
LB6506	VLP0323A601R	COIL	1	
LB6507	VLP0155-T	COIL	1	
LB6521	VLP0155-T	COIL	1	
LB6522	VLP0323A601R	COIL	1	
LB7101-07	VLP0323A601R	COIL	7	
LB7108-17	VLP0155-T	COIL	10	
P6251	RJS2A8212T	CONNECTOR (12P)	1	
PCB1	REP2578A-N	LOADING PCB	1	[RTL]
PCB2	REP3009A-M	MAIN PCB	1	[RTL]
PCB3	REP2981A-N	DVD PCB	1	[RTL]
PCB4	REP2978BB-N	B/E PCB	1	[RTL]
PS6201	VJS2961C010	CONNECTOR (10P)	1	
Q1	RVTDTC143EST	TRANSISTOR	1	
Q3	DTC114EUA106	TRANSISTOR	1	
Q6	FMW1T98	TRANSISTOR	1	
Q7	2SB1548PQAU	TRANSISTOR	1	
Q8	FMW1T98	TRANSISTOR	1	
Q9	2SB1548PQAU	TRANSISTOR	1	
Q11	FMW1T98	TRANSISTOR	1	
Q12	2SB1548PQAU	TRANSISTOR	1	
Q13	2SB1218ATX	TRANSISTOR	1	
Q14	FMW1T98	TRANSISTOR	1	
Q15	2SB766ATX	TRANSISTOR	1	
Q16	2SD874QRSTX	TRANSISTOR	1	△
Q303	DTC114EUA106	TRANSISTOR	1	
Q304	2SB621A-R	TRANSISTOR	1	
Q305	UN521NTX	TRANSISTOR	1	
Q307,08	DTC114EUA106	TRANSISTOR	2	
Q401	UN5214TX	TRANSISTOR	1	
Q402-04	2SD1819ATX	TRANSISTOR	3	
Q801-06	2SD1328QRSTX	TRANSISTOR	6	
Q807	UN5111TX	TRANSISTOR	1	
Q3081	2SB1218ATX	TRANSISTOR	1	
Q3084	2SB1218ATX	TRANSISTOR	1	
Q3501	UN5212TX	TRANSISTOR	1	
Q4211	UN5212TX	TRANSISTOR	1	
Q5201	2SB1115-T1	TRANSISTOR	1	
Q6301	UN5212TX	TRANSISTOR	1	
QR2001	UN5213TX	TRANSISTOR	1	
QR5201	UN5212TX	TRANSISTOR	1	

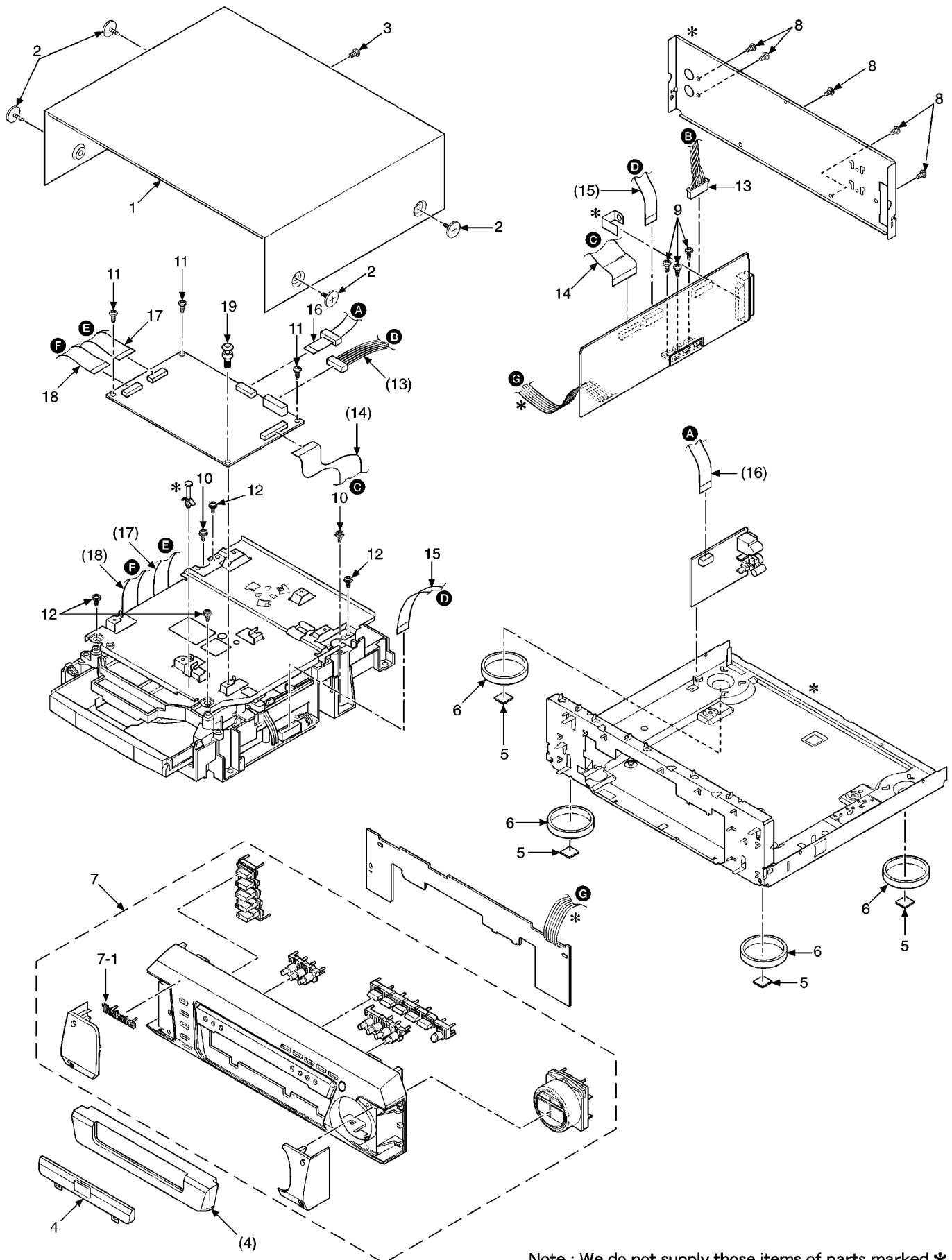
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
QR5231	UN2121-TX	TRANSISTOR	1	
R1	ERDS2FJ102	1/4W 1K	1	
R2	ERJ6GEYJ822V	1/10W 8.2K	1	
R3	ERJ6GEYJ222V	1/10W 2.2K	1	
R4	ERJ6GEYJ103V	1/10W 10K	1	
R11	RSFMB30KT-L	FUSE PROTECTOR	1	△
R16	ERJ6GEYJ471V	1/10W 470	1	
R17	ERJ6GEYJ223V	1/10W 22K	1	
R20	ERJ6GEYJ271V	1/10W 270	1	
R21,22	ERJ6GEYJ222V	1/10W 2.2K	2	
R27	ERJ6GEYJ681V	1/10W 680	1	
R28	ERJ6GEYJ473V	1/10W 47K	1	
R29	ERJ6GEYJ223V	1/10W 22K	1	
R30	ERJ6GEYJ101V	1/10W 100	1	
R31	ERJ6GEYJ681V	1/10W 680	1	
R32	ERJ6GEYJ473V	1/10W 47K	1	
R33	ERJ6GEYJ472V	1/10W 4.7K	1	
R34	ERJ6GEYJ471V	1/10W 470	1	
R36	ERJ6GEYJ223V	1/10W 22K	1	
R37	ERJ6GEYJ101V	1/10W 100	1	
R38	ERD2FCG100	10	1	△
R39	ERJ6GEYJ102V	1/10W 1K	1	
R40-42	ERJ6GEYJ101V	1/10W 100	3	
R43	ERQ16NKR33E	0.33	1	△
R44	ERJ6GEYJ122V	1/10W 1.2K	1	
R305,06	ERJ6GEYJ103V	1/10W 10K	2	
R307	ERJ6GEYJ102V	1/10W 1K	1	
R308	ERJ6GEYJ221V	1/10W 220	1	
R312	ERJ6GEYJ103V	1/10W 10K	1	
R313	ERJ6GEY0R00V	1/10W 0	1	
R401	ERJ6GEYJ681V	1/10W 680	1	
R402	ERJ6GEYJ104V	1/10W 100K	1	
R403	ERJ6GEYJ472V	1/10W 4.7K	1	
R404	ERJ6GEYJ103V	1/10W 10K	1	
R405	ERJ6GEYJ471V	1/10W 470	1	
R406	ERJ6GEYJ472V	1/10W 4.7K	1	
R407	ERJ6GEYJ473V	1/10W 47K	1	
R408	ERJ6GEYJ472V	1/10W 4.7K	1	
R409	ERJ6GEYJ103V	1/10W 10K	1	
R410,11	ERJ6GEYJ472V	1/10W 4.7K	2	
R412	ERJ6GEYJ223V	1/10W 22K	1	
R413	ERJ6GEYJ473V	1/10W 47K	1	
R414	ERJ6GEYJ221V	1/10W 220	1	
R415	ERJ6GEYJ472V	1/10W 4.7K	1	
R416	ERJ6GEYJ103V	1/10W 10K	1	
R417	ERJ6GEYJ102V	1/10W 1K	1	
R418	ERJ6GEYJ473V	1/10W 47K	1	
R419	ERJ6GEYJ102V	1/10W 1K	1	
R420	ERJ6GEYJ472V	1/10W 4.7K	1	
R421	ERJ6GEYJ473V	1/10W 47K	1	
R422-24	ERJ6GEYJ472V	1/10W 4.7K	3	
R425,26	ERJ6GEYJ103V	1/10W 10K	2	
R427	ERJ6GEYJ182V	1/10W 1.8K	1	
R428	ERJ6GEYJ103V	1/10W 10K	1	
R429-32	ERJ6GEYJ101V	1/10W 100	4	
R433-35	ERJ6GEYJ221V	1/10W 220	3	
R436	ERJ6GEYJ472V	1/10W 4.7K	1	
R438,39	ERJ6GEYJ821V	1/10W 820	2	
R440-42	ERJ6GEYJ102V	1/10W 1K	3	
R443	ERJ6GEYJ223V	1/10W 22K	1	
R444	ERJ6GEYJ104V	1/10W 100K	1	
R445	ERJ6GEYJ223V	1/10W 22K	1	
R446	ERJ6GEYJ472V	1/10W 4.7K	1	
R447,48	ERJ6GEYJ221V	1/10W 220	2	
R450,51	ERJ6GEYJ103V	1/10W 10K	2	
R452	ERJ6GEYJ821V	1/10W 820	1	
R453,54	ERJ6GEYJ472V	1/10W 4.7K	2	
R503-06	ERJ6GEYJ1R0V	1/10W 1	4	
R601-04	ERJ6GEYJ101V	1/10W 100	4	
R606-10	ERJ6GEYJ221V	1/10W 220	5	
R611	ERJ6GEYJ181V	1/19W 180	1	
R612	ERJ6GEYJ223V	1/10W 22K	1	
R613	ERJ6GEYJ123V	1/10W 12K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R614	ERJ6GEYJ682V	1/10W 6.8K	1	
R615	ERJ6GEYJ472V	1/10W 4.7K	1	
R616	ERJ6GEYJ332V	1/10W 3.3K	1	
R617	ERJ6GEYJ222V	1/10W 2.2K	1	
R618	ERJ6GEYJ182V	1/10W 1.8K	1	
R619	ERJ6GEYJ152V	1/10W 1.5K	1	
R620	ERJ6GEYJ122V	1/10W 1.2K	1	
R621	ERJ6GEYJ102V	1/10W 1K	1	
R622	ERJ6GEYJ683V	1/10W 68K	1	
R623	ERJ6GEYJ223V	1/10W 22K	1	
R624	ERJ6GEYJ123V	1/10W 12K	1	
R625	ERJ6GEYJ682V	1/10W 6.8K	1	
R626	ERJ6GEYJ472V	1/10W 4.7K	1	
R627	ERJ6GEYJ332V	1/10W 3.3K	1	
R628	ERJ6GEYJ222V	1/10W 2.2K	1	
R629	ERJ6GEYJ182V	1/10W 1.8K	1	
R630	ERJ6GEYJ152V	1/10W 1.5K	1	
R631	ERJ6GEYJ122V	1/10W 1.2K	1	
R632	ERJ6GEYJ102V	1/10W 1K	1	
R801	ERJ6GEYJ102V	1/10W 1K	1	
R802	ERJ6GEYJ182V	1/10W 1.8K	1	
R803,04	ERJ6GEYJ104V	1/10W 100K	2	
R805,06	ERJ6GEYJ103V	1/10W 10K	2	
R807,08	ERJ6GEYJ223V	1/10W 22K	2	
R809	ERJ6GEYJ153V	1/10W 15K	1	
R810	ERJ6GEYJ223V	1/10W 22K	1	
R811,12	ERJ6GEYJ103V	1/10W 10K	2	
R813,14	ERJ6GEYJ332V	1/10W 3.3K	2	
R815	ERJ6GEYJ102V	1/10W 1K	1	
R816	ERJ6GEYJ471V	1/10W 470	1	
R817,18	ERJ6GEYJ473V	1/10W 47K	2	
R819-24	ERJ6GEYJ104V	1/10W 100K	6	
R825	ERJ6GEYJ102V	1/10W 1K	1	
R826	ERJ6GEYJ562V	1/10W 5.6K	1	
R827,28	ERJ6GEYJ101V	1/10W 100	2	
R829,30	ERJ6GEYJ104V	1/10W 100K	2	
R831,32	ERJ6GEYJ153V	1/10W 15K	2	
R833,34	ERJ6GEYJ223V	1/10W 22K	2	
R835,36	ERJ6GEYJ103V	1/10W 10K	2	
R837,38	ERJ6GEYJ153V	1/10W 15K	2	
R839,40	ERJ6GEYJ332V	1/10W 3.3K	2	
R841,42	ERJ6GEYJ102V	1/10W 1K	2	
R843,44	ERJ6GEYJ473V	1/10W 47K	2	
R845,46	ERJ6GEYJ104V	1/10W 100K	2	
R847,48	ERJ6GEYJ102V	1/10W 1K	2	
R849,50	ERJ6GEYJ104V	1/10W 100K	2	
R851,52	ERJ6GEYJ103V	1/10W 10K	2	
R853,54	ERJ6GEYJ223V	1/10W 22K	2	
R855,56	ERJ6GEYJ103V	1/10W 10K	2	
R857,58	ERJ6GEYJ153V	1/10W 15K	2	
R859,60	ERJ6GEYJ332V	1/10W 3.3K	2	
R861,62	ERJ6GEYJ102V	1/10W 1K	2	
R863,64	ERJ6GEYJ473V	1/10W 47K	2	
R865,66	ERJ6GEYJ104V	1/10W 100K	2	
R867	ERJ6GEYJ473V	1/10W 47K	1	
R2001-07	ERJ3GEYJ473V	1/16W 47K	7	
R2008,09	ERJ3GEYJ223V	1/16W 22K	2	
R2010	ERJ3GEYJ273V	1/16W 27K	1	
R2011	ERJ3GEYJ123V	1/16W 12K	1	
R2012	ERJ3GEYD562V	1/16W 5.6K	1	
R2013	ERJ3GEYJ273V	1/16W 27K	1	
R2014	ERJ3GEYJ105V	1/16W 1M	1	
R2017	ERJ3GEYD153V	1/16W 15K	1	
R2018	ERJ3GEYJ473V	1/16W 47K	1	
R2020	ERJ3GEYD123V	1/16W 12K	1	
R2021	ERJ3GEYJ103Z	1/16W 10K	1	
R2022,23	ERJ3GEYJ223V	1/16W 22K	2	
R2024,25	ERJ3GEYJ563V	1/16W 56K	2	
R2026	ERJ3GEYJ105V	1/16W 1M	1	
R2027	ERJ3GEYJ472V	1/16W 4.7K	1	
R2028	ERJ3GEYJ103Z	1/16W 10K	1	
R2029	ERJ3GEYD103V	1/16W 10K	1	
R2030	ERJ3GEYJ103Z	1/16W 10K	1	
R2032	ERJ3GEYJ473V	1/16W 47K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2033,34	ERJ3GEYJ472V	1/16W 4.7K	2	
R2051	ERJ3GEY0R00V	CHIP JUMPER	1	
R2067-71	ERJ3GEYJ221V	1/16W 220	5	
R2072	ERJ3GEY0R00V	CHIP JUMPER	1	
R2073-77	ERJ3GEYJ221V	1/16W 220	5	
R2501,02	ERJ3GEYJ271V	1/16W 270	2	
R2503	ERJ14YKR39H	1/4W 0.39	1	
R2505	ERJ3GEYJ473V	1/16W 47K	1	
R2511	ERJ3GEYD203V	1/16W 20K	1	
R2512	ERJ3GEYJ273V	1/16W 27K	1	
R2513	ERJ3GEYJ333V	1/16W 33K	1	
R2514	ERJ3GEYD203V	1/16W 20K	1	
R2515	ERJ3GEYJ273V	1/16W 27K	1	
R2516	ERJ3GEYJ333V	1/16W 33K	1	
R2517	ERJ3GEYJ123V	1/16W 12K	1	
R2518	ERJ3GEYJ103Z	1/16W 10K	1	
R2519	ERJ3GEYD752V	1/16W 7.5K	1	
R2520	ERJ3GEYJ123V	1/16W 12K	1	
R2521	ERJ3GEYJ103Z	1/16W 10K	1	
R2522	ERJ3GEYD752V	1/16W 7.5K	1	
R2527,28	ERJ3GEYJ103Z	1/16W 10K	2	
R3001	ERJ3GEYJ220V	1/16W 22	1	
R3002	ERJ3GEYJ472V	1/16W 4.7K	1	
R3003	ERJ3GEYJ101V	1/16W 100	1	
R3004	ERJ3GEYJ221V	1/16W 220	1	
R3005	ERJ3GEYJ473V	1/16W 47K	1	
R3051	ERJ3GEYD752V	1/16W 7.5K	1	
R3052	ERJ3GEYJ101V	1/16W 100	1	
R3055	ERJ3GEYD752V	1/16W 7.5K	1	
R3057	ERJ3GEYD183V	1/16W 18K	1	
R3058	ERJ3RBD432V	1/16W 4.3K	1	
R3059,60	ERJ3GEYD752V	1/16W 7.5K	2	
R3061	ERJ3GEYJ101V	1/16W 100	1	
R3071	ERJ3GEYJ103Z	1/16W 10K	1	
R3081	ERJ3GEYD750V	1/16W 75	1	
R3082	ERJ3GEYJ330V	1/16W 33	1	
R3083	ERJ3GEYJ102V	1/16W 1K	1	
R3084	ERJ3GEYD750V	1/16W 75	1	
R3087	ERJ3GEYD750V	1/16W 75	1	
R3090	ERJ3GEYD750V	1/16W 75	1	
R3091	ERJ3GEYJ330V	1/16W 33	1	
R3092	ERJ3GEYJ331V	1/16W 330	1	
R3501,02	MCR03P2HJ561	1/16W 560	2	
R3503	ERJ3GEYJ103Z	1/16W 10K	1	
R3504	ERJ3GEYJ223V	1/16W 22K	1	
R3505	ERJ3GEYJ103Z	1/16W 10K	1	
R3506	ERJ3GEYJ472V	1/16W 4.7K	1	
R3507-09	ERJ3GEYD750V	1/16W 75	3	
R4202-07	ERJ3GEYJ101V	1/16W 100	6	
R4209	ERJ3GEYJ103Z	1/16W 10K	1	
R4211	ERJ3GEYJ101V	1/16W 100	1	
R4212	ERJ3GEYJ222V	1/16W 2.2K	1	
R4213,14	ERJ3GEY0R00V	CHIP JUMPER	2	
R5201	ERJ12YJ270H	1/2W 27	1	
R5202	ERJ3GEYJ2R2V	1/16W 2.2	1	
R5203	ERJ3GEYJ223V	1/16W 22K	1	
R5204	ERJ3GEYJ123V	1/16W 12K	1	
R5206	ERJ3GEYJ154V	1/16W 150K	1	
R5207	ERJ3GEYD562V	1/16W 5.6K	1	
R5208	ERJ3GEYJ101V	1/16W 100	1	
R5209	ERJ3GEYD303V	1/16W 30K	1	
R5210	ERJ3GEYD473V	1/16W 47K	1	
R5211	ERJ3GEYD183V	1/16W 18K	1	
R5212	ERJ3GEYD562V	1/16W 5.6K	1	
R5213	ERJ3GEYJ103Z	1/16W 10K	1	
R5214-16	ERJ3GEYJ105V	1/16W 1M	3	
R5217	ERJ3GEY0R00V	CHIP JUMPER	1	
R5219,20	ERJ3GEYJ101V	1/16W 100	2	
R6101	ERJ3GEYJ103Z	1/16W 10K	1	
R6102	ERJ3GEY0R00V	CHIP JUMPER	1	
R6201	ERJ3GEYJ103Z	1/16W 10K	1	
R6202	ERJ3GEYJ223V	1/16W 22K		
R6203	ERJ3GEYD473V	1/16W 47K		
R6204	ERJ3GEYD471V	1/16W 470		

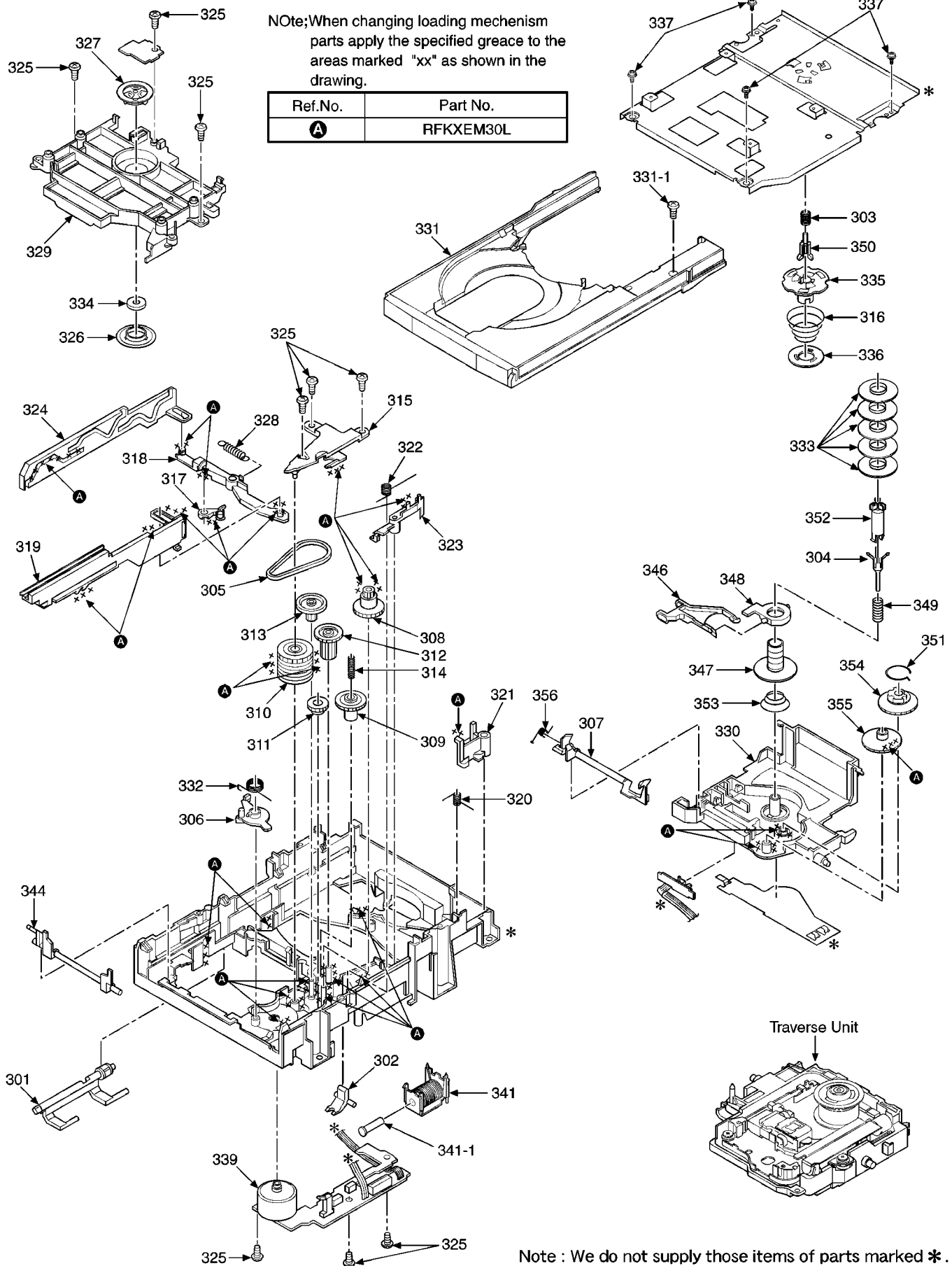
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6208	ERJ3GEYJ473V	1/16W 47K	1	
R6209	ERJ3GEYD151V	1/16W 150	1	
R6210	ERJ3GEYD471V	1/16W 470	1	
R6211	ERJ3GEYD391V	1/16W 390	1	
R6212	ERJ3GEYJ473V	1/16W 47K	1	
R6213, 14	ERJ3GEYJ102V	1/16W 1K	2	
R6301	ERJ3GEYJ103Z	1/16W 10K	1	
R6302, 03	ERJ3GEYJ472V	1/16W 4.7K	2	
R6502	ERJ3GEYJ221V	1/16W 220	1	
R6503, 04	ERJ3GEYJ103Z	1/16W 10K	2	
R6505	ERJ3GEY0R00V	CHIP JUMPER	1	
R7001	ERJ3GEYJ102V	1/16W 1K	1	
R7002	ERJ3GEYJ473V	1/16W 47K	1	
RA3008	EXBV4V103JV	1/32W 10K	1	
RA3009, 10	EXBV4V221JV	1/32W 220	2	
RA3011	EXBV4V473JV	1/32W 47K	1	
RA6201	EXBV4V103JV	1/32W 10K	1	
RA6203	EXBV4V473JV	1/32W 47K	1	
RA6204	EXBV4V103JV	1/32W 10K	1	
RA6205	EXBV8V473JV	1/32W 47K	1	
RA6206	EXBV4V103JV	1/32W 10K	1	
RA7001-03	EXBV8V473JV	1/32W 47K	3	
RJ102-12	ERJ6GEY0R00Z	1/10W 0	11	
RJ114-20	ERJ6GEY0R00Z	1/10W 0	7	
RJ122-25	ERJ6GEY0R00Z	1/10W 0	4	
RJ6602	ERJ3GEY0R00V	CHIP JUMPER	1	
RJ6610	ERJ3GEY0R00V	CHIP JUMPER	1	
S601-23	EVQ11G05R	SW	23	
SW1, W2	RSH1A032-U	SW, TRAY POSITION DET.	2	
SW3	RSH1A005	SW, OPEN DET.	1	
SW4	RSH1A91ZA-A	SW, CLAMP	1	
SW5	RSPLA017-A	SW, BOTTOM	1	
W601A	REZ1314	8PINFLATWIRE	1	
X401	RSXY8M00D01T	OSCILLATOR	1	
X6501	V SX1044	OSCILLATOR	1	
Z2001-05	ELKE103FA	FILTER	5	
Z3501	ELB4D565	VIDEO FILTER	1	

15 Cabinet Parts Location



Note : We do not supply those items of parts marked *.

16 Loading Unit Parts Location



17 Traverse Unit Parts Location

