

## SERVICE MANUAL

MODEL	JP	E3	E2	EK	E2A	E1C	E1K	EUT
<b>DVM-2845CI</b>		✓						

## DVD AUDIO-VIDEO AUTO CHANGER

### 注意

サービスをおこなう前に、このサービスマニュアルを必ずお読みください。本機は、火災、感電、けがなどに対する安全性を確保するために、さまざまな配慮をおこなっており、また法的には「電気用品安全法」にもとづき、所定の許可を得て製造されております。従ってサービスをおこなう際は、これらの安全性が維持されるよう、このサービスマニュアルに記載されている注意事項を必ずお守りください。

• For purposes of improvement, specifications and design are subject to change without notice.

• 本機の仕様は性能改良のため、予告なく変更することがあります。  
• 補修用性能部品の保有期間は、製造打切後 8 年です。

• Please use this service manual with referring to the operating instructions without fail.

• 修理の際は、必ず取扱説明書を参照の上、作業を行ってください。

• Some illustrations using in this service manual are slightly different from the actual set.

• 本文中に使用しているイラストは、説明の都合上現物と多少異なる場合があります。

# DENON

TOKYO, JAPAN  
Denon Brand Company, D&M Holdings Inc.

## SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

### LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

### LASER RADIATION

Caution - Class 1M visible and invisible laser radiation when open.  
Do not view directly with optical instruments.

**CAUTION** Please heed the points listed below during servicing and inspection.

#### ◎ Heed the cautions!

Spots requiring particular attention when servicing, such as the cabinet, parts, chassis, etc., have cautions indicated on labels or seals. Be sure to heed these cautions and the cautions indicated in the handling instructions.

#### ◎ Caution concerning electric shock!

(1) An AC voltage is impressed on this set, so touching internal metal parts when the set is energized could cause electric shock. Take care to avoid electric shock, by for example using an isolating transformer and gloves when servicing while the set is energized, unplugging the power cord when replacing parts, etc.

(2) There are high voltage parts inside. Handle with extra care when the set is energized.

#### ◎ Caution concerning disassembly and assembly!

Though great care is taken when manufacturing parts from sheet metal, there may in some rare cases be burrs on the edges of parts which could cause injury if fingers are moved across them. Use gloves to protect your hands.

#### ◎ Only use designated parts!

The set's parts have specific safety properties (fire resistance, voltage resistance, etc.). For replacement parts, be sure to use parts which have the same properties. In particular, for the important safety parts that are marked  $\triangle$  on wiring diagrams and parts lists, be sure to use the designated parts.

#### ◎ Be sure to mount parts and arrange the wires as they were originally!

For safety reasons, some parts use tape, tubes or other insulating materials, and some parts are mounted away from the surface of printed circuit boards. Care is also taken with the positions of the wires inside and clamps are used to keep wires away from heating and high voltage parts, so be sure to set everything back as it was originally.

#### ◎ Inspect for safety after servicing!

Check that all screws, parts and wires removed or disconnected for servicing have been put back in their original positions, inspect that no parts around the area that has been serviced have been negatively affected, conduct an insulation check on the external metal connectors and between the blades of the power plug, and otherwise check that safety is ensured.

(Insulation check procedure)

Unplug the power cord from the power outlet, disconnect the antenna, plugs, etc., and turn the power switch on. Using a 500V insulation resistance tester, check that the insulation resistance between the terminals of the power plug and the externally exposed metal parts (antenna terminal, headphones terminal, microphone terminal, input terminal, etc.) is 1M $\Omega$  or greater. If it is less, the set must be inspected and repaired.

### CAUTION Concerning important safety parts

Many of the electric and structural parts used in the set have special safety properties. In most cases these properties are difficult to distinguish by sight, and using replacement parts with higher ratings (rated power and withstand voltage) does not necessarily guarantee that safety performance will be preserved. Parts with safety properties are indicated as shown below on the wiring diagrams and parts lists in this service manual. Be sure to replace them with parts with the designated part number.

(1) Schematic diagrams ... Indicated by the  $\triangle$  mark.

(2) Parts lists ... Indicated by the  $\triangle$  mark.

Using parts other than the designated parts could result in electric shock, fires or other dangerous situations.

**注意** サービス、点検時にはつぎのことにご注意願います。

#### ◎注意事項をお守りください!

サービスのとき特に注意を必要とする箇所についてはキャビネット、部品、シャーシなどにラベルや捺印で注意事項を表示しています。これらの注意書きおよび取扱説明書などの注意事項を必ずお守りください。

#### ◎感電に注意!

(1) このセットは、交流電圧が印加されていますので通電時に内部金属部に触れると感電することがあります。従って通電サービス時には、絶縁トランスの使用や手袋の着用、部品交換には、電源プラグを抜くなどして感電にご注意ください。

(2) 内部には高電圧の部分がありますので、通電時の取扱には十分ご注意ください。

#### ◎分解、組み立て作業時のご注意!

板金部品の端面の『バリ』は、部品製造時に充分管理をしておりますが、板金端面は鋭利となっている箇所がありますので、部品端面に触れたまま指を動かすとまれに怪我をする場合がありますので十分注意して作業して下さい。手の保護のために手袋を着用して下さい。

#### ◎指定部品の使用!

セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は、使用されていたものと同じ特性の部品を使用してください。特に配線図、部品表に  $\triangle$  印で指定されている安全上重要な部品は必ず指定のものをご使用ください。

#### ◎部品の取付けや配線の引きまわしは、元どおりに!

安全上、テープやチューブなどの絶縁材料を使用したり、プリント基板から浮かして取付けた部品があります。また内部配線は引きまわしやクランプによって発熱部品や高圧部品に接近しないように配慮されていますので、これらは必ず元どおりにしてください。

#### ◎サービス後は安全点検を!

サービスのために取り外したねじ、部品、配線などが元どおりにになっているか、またサービスした箇所の周辺を劣化させてしまったところがないかなどを点検し、外部金属端子部と、電源プラグの刃の間の絶縁チェックをおこなうなど、安全性が確保されていることを確認してください。

(絶縁チェックの方法)

電源コンセントから電源プラグを抜き、アンテナやプラグなどを外し、電源スイッチを入れます。500V 絶縁抵抗計を用いて、電源プラグのそれぞれの端子と外部露出金属部 [アンテナ端子、ヘッドホン端子、マイク端子、入力端子など] との間で、絶縁抵抗値が 1 M $\Omega$  以上であることを確認してください。この値以下のときはセットの点検修理が必要です。

### 注意 安全上重要な部品について

本機に使用している多くの電気部品、および機構部品は安全上、特別な特性を持っています。この特性はほとんどの場合、外観では判別つきにくく、またもとの部品より高い定格(定格電力、耐圧)を持ったものを使用しても安全性が維持されることは、限りません。安全上の特性を持った部品は、このサービスマニュアルの配線図、部品表につきのように表示していますので必ず指定されている部品番号のものを使用願います。

(1) 配線図...  $\triangle$ マークで表示しています。

(2) 部品表...  $\triangle$ マークで表示しています。

指定された部品と異なるものを使用した場合には、感電、火災などの危険を生じる恐れがあります。

## SPECIFICATIONS

Item	Conditions	Unit	Nominal	Limit
1. Video Output	75 $\Omega$ load	Vpp	1.0	$\pm 0.1$
2. Optical Digital Out		dBm	-18	
3. Audio (PCM)				
3-1. Output Level	1 kHz, 0 dB	Vrms	2.0	
3-2. S/N		dB	120	
3-3. Freq. Response				
DVD	fs = 48 kHz, 20 Hz ~ 22 kHz	dB	$\pm 0.5$	
CD	fs = 44.1 kHz, 20 Hz ~ 20 kHz	dB	$\pm 0.5$	
3-4. THD+N				
DVD	1 kHz, 0 dB	%	0.003	
CD	1 kHz, 0 dB	%	0.003	

**Notes:**

1. All Items are measured without pre-emphasis unless otherwise specified.
2. Power supply: AC 120 V, 60 Hz
3. Load Impedance: 100 k $\Omega$  load (Audio Output)
4. Room Ambient: 5  $^{\circ}$ C - 40  $^{\circ}$ C

## Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts, and wires have been returned to their original positions. Afterwards, do the following tests and confirm the specified values to verify compliance with safety standards.

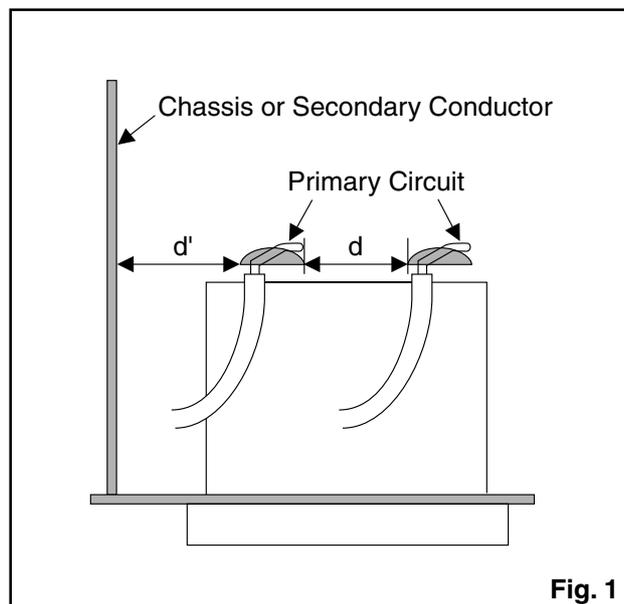
### 1. Clearance Distance

When replacing primary circuit components, confirm specified clearance distance (d) and (d') between soldered terminals, and between terminals and surrounding metallic parts. (See Fig. 1)

**Table 1: Ratings for selected area**

AC Line Voltage	Clearance Distance (d), (d')
120 V	≥ 3.2 mm (0.126 inches)

**Note:** This table is unofficial and for reference only. Be sure to confirm the precise values.



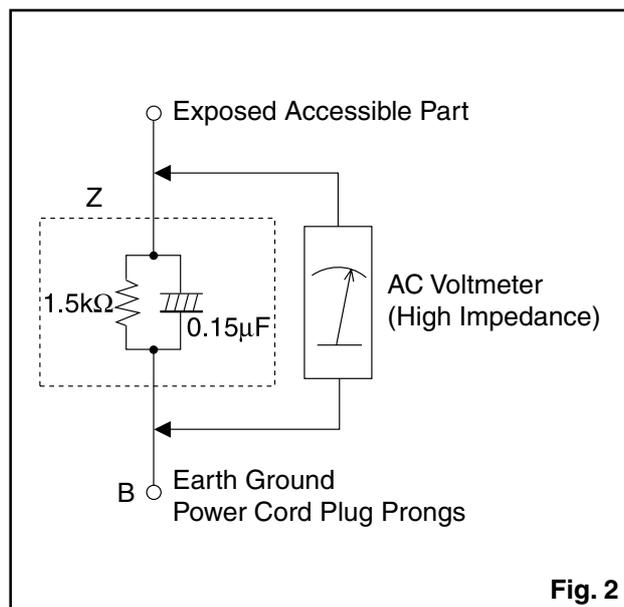
**Fig. 1**

### 2. Leakage Current Test

Confirm the specified (or lower) leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.) is lower than or equal to the specified value in the table below.

#### Measuring Method (Power ON):

Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across the terminals of load Z. See Fig. 2 and the following table.



**Fig. 2**

**Table 2: Leakage current ratings for selected areas**

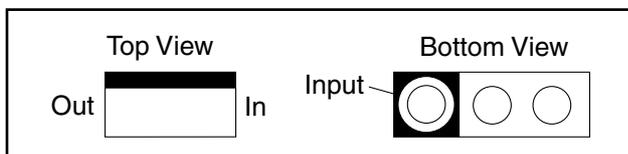
AC Line Voltage	Load Z	Leakage Current (i)	Earth Ground (B) to:
120 V	0.15 μF CAP. & 1.5 kΩ RES. Connected in parallel	$i \leq 0.5 \text{ mA Peak}$	Exposed accessible parts

**Note:** This table is unofficial and for reference only. Be sure to confirm the precise values.

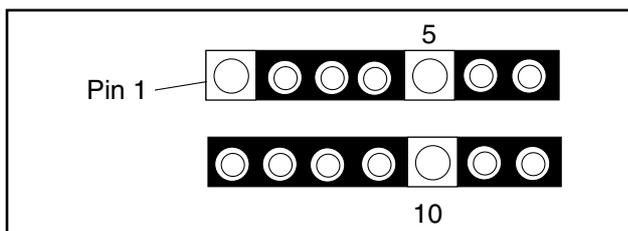
## STANDARD NOTES FOR SERVICING

### Circuit Board Indications

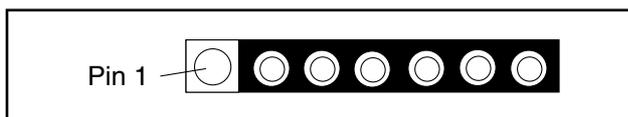
1. The output pin of the 3 pin Regulator ICs is indicated as shown.



2. For other ICs, pin 1 and every fifth pin are indicated as shown.

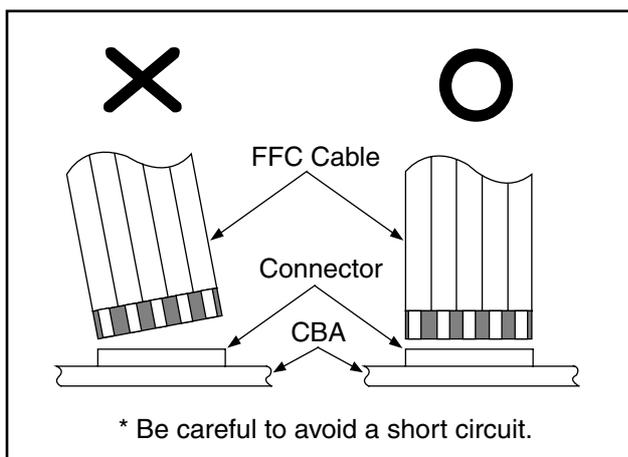


3. The 1st pin of every male connector is indicated as shown.



### Instructions for Connectors

1. When you connect or disconnect the FFC (Flexible Foil Connector) cable, be sure to first disconnect the AC cord.
2. FFC (Flexible Foil Connector) cable should be inserted parallel into the connector, not at an angle.



### Pb (Lead) Free Solder

When soldering, be sure to use the Pb free solder.

### How to Remove / Install Flat Pack-IC

#### 1. Removal

With Hot-Air Flat Pack-IC Desoldering Machine:

1. Prepare the hot-air flat pack-IC desoldering machine, then apply hot air to the Flat Pack-IC (about 5 to 6 seconds). (Fig. S-1-1)

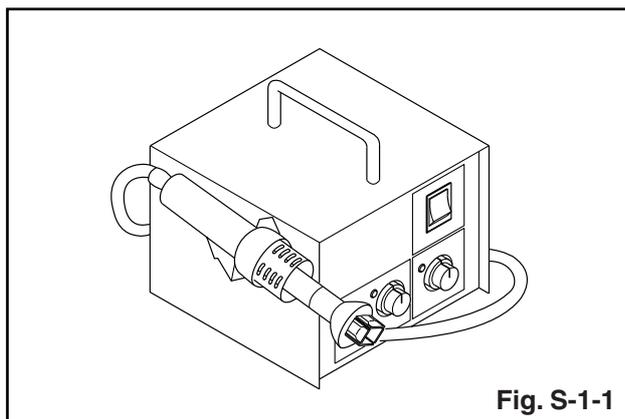


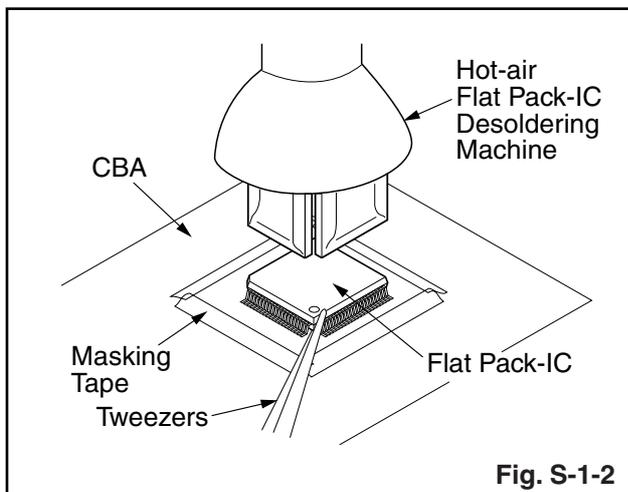
Fig. S-1-1

2. Remove the flat pack-IC with tweezers while applying the hot air.
3. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
4. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

#### CAUTION:

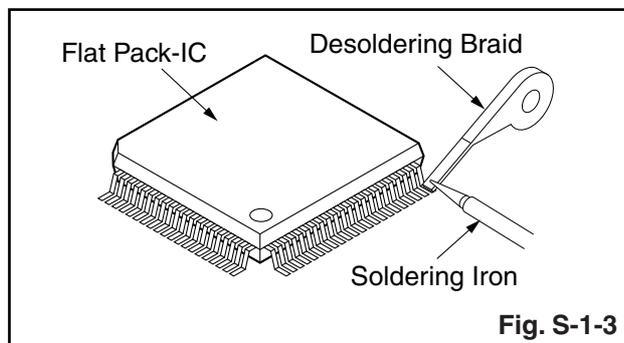
1. The Flat Pack-IC shape may differ by models. Use an appropriate hot-air flat pack-IC desoldering machine, whose shape matches that of the Flat Pack-IC.
2. Do not supply hot air to the chip parts around the flat pack-IC for over 6 seconds because damage to the chip parts may occur. Put masking tape around the flat pack-IC to protect other parts from damage. (Fig. S-1-2)

- The flat pack-IC on the CBA is affixed with glue, so be careful not to break or damage the foil of each pin or the solder lands under the IC when removing it.

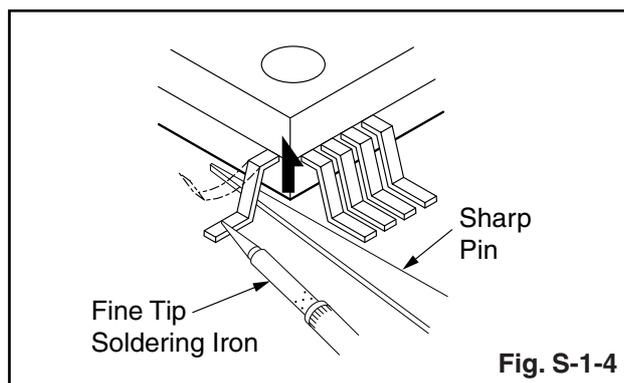


#### With Soldering Iron:

- Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)



- Lift each lead of the flat pack-IC upward one by one, using a sharp pin or wire to which solder will not adhere (iron wire). When heating the pins, use a fine tip soldering iron or a hot air desoldering machine. (Fig. S-1-4)



- Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
- Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

### With Iron Wire:

1. Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)
2. Affix the wire to a workbench or solid mounting point, as shown in Fig. S-1-5.
3. While heating the pins using a fine tip soldering iron or hot air blower, pull up the wire as the solder melts so as to lift the IC leads from the CBA contact pads as shown in Fig. S-1-5.
4. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
5. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

**Note:** When using a soldering iron, care must be taken to ensure that the flat pack-IC is not being held by glue. When the flat pack-IC is removed from the CBA, handle it gently because it may be damaged if force is applied.

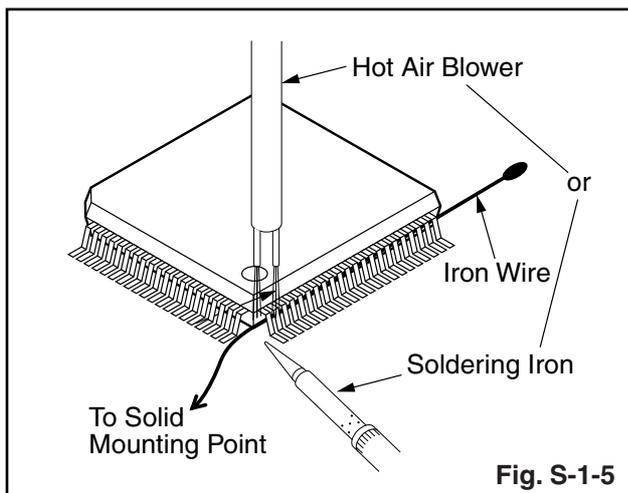


Fig. S-1-5

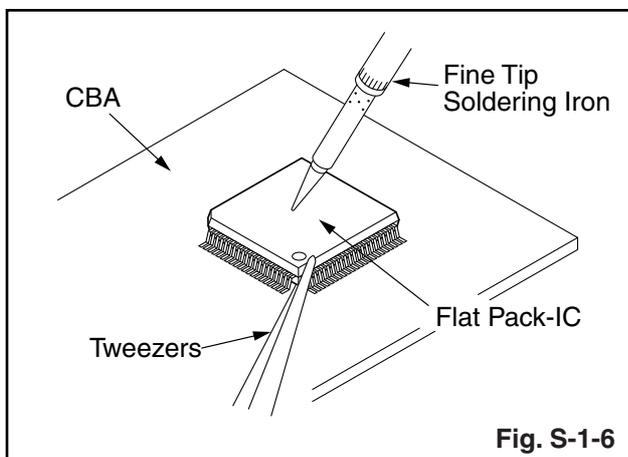


Fig. S-1-6

## 2. Installation

1. Using desoldering braid, remove the solder from the foil of each pin of the flat pack-IC on the CBA so you can install a replacement flat pack-IC more easily.
2. The "●" mark on the flat pack-IC indicates pin 1. (See Fig. S-1-7.) Be sure this mark matches the 1 on the PCB when positioning for installation. Then presolder the four corners of the flat pack-IC. (See Fig. S-1-8.)
3. Solder all pins of the flat pack-IC. Be sure that none of the pins have solder bridges.

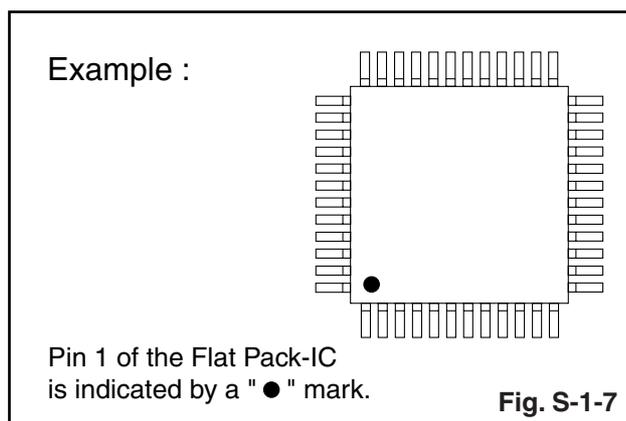


Fig. S-1-7

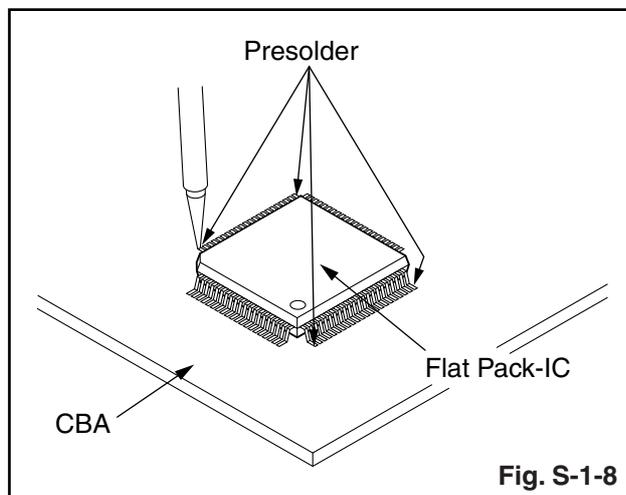


Fig. S-1-8

## Instructions for Handling Semi-conductors

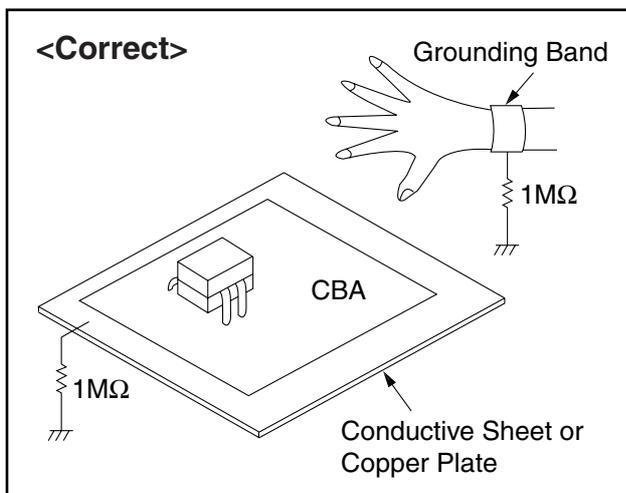
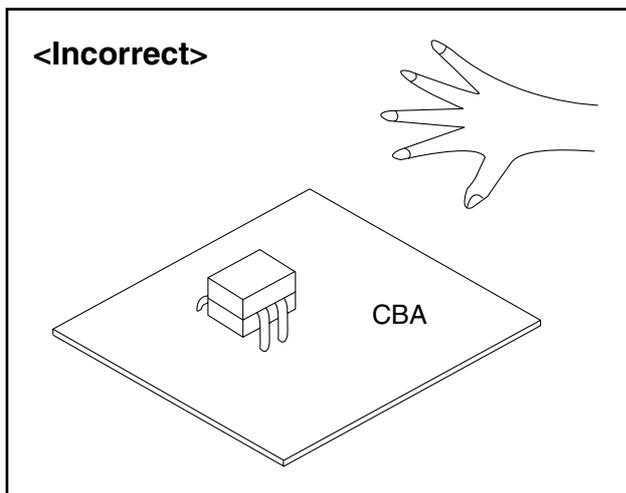
Electrostatic breakdown of the semi-conductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

### 1. Ground for Human Body

Be sure to wear a grounding band ( $1\text{ M}\Omega$ ) that is properly grounded to remove any static electricity that may be charged on the body.

### 2. Ground for Workbench

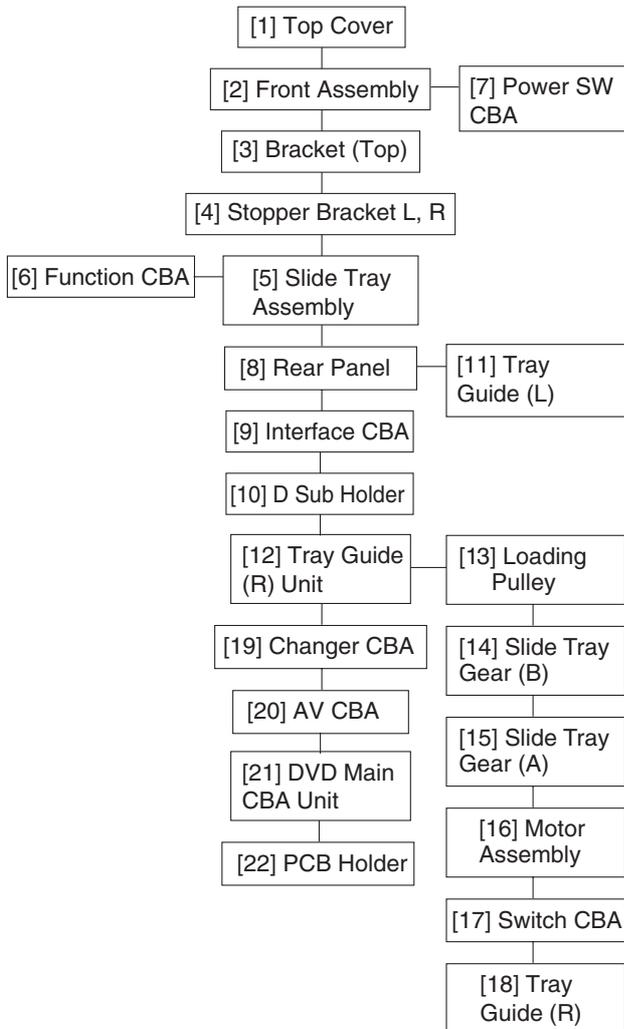
Be sure to place a conductive sheet or copper plate with proper grounding ( $1\text{ M}\Omega$ ) on the workbench or other surface, where the semi-conductors are to be placed. Because the static electricity charge on clothing will not escape through the body grounding band, be careful to avoid contacting semi-conductors with your clothing.



# CABINET DISASSEMBLY INSTRUCTIONS

## 1. Disassembly Flowchart

This flowchart indicates the disassembly steps to gain access to item(s) to be serviced. When reassembling, follow the steps in reverse order. Bend, route, and dress the cables as they were originally.



## 2. Disassembly Method

ID/ LOC. No.	PART	REMOVAL		
		Fig. No.	REMOVE/*UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOLDER	Note
[1]	Top Cover	D1	6(S-1)	-
[2]	Front Assembly	D2	*8(L-1)	1
[3]	Bracket (Top)	D3	2(S-2)	-
[4]	Stopper Bracket L, R	D3	4(S-3)	-

ID/ LOC. No.	PART	REMOVAL		
		Fig. No.	REMOVE/*UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOLDER	Note
[5]	Slide Tray Assembly	D4 D5	CN5001, CN5004	2 3 4
[6]	Function CBA	D4	*2(L-2), CN2201	-
[7]	Power SW CBA	D4	CN2103, (S-4)	-
[8]	Rear Panel	D6	4(S-5), 13(S-6), (S-7), 2(S-8)	-
[9]	Interface CBA	D7	*3(L-3), CNF02	-
[10]	D Sub Holder	D7	-----	-
[11]	Tray Guide (L)	D7	(S-9)	-
[12]	Tray Guide (R) Unit	D7	(S-10), CN3003, CN3004	-
[13]	Loading Pulley	D8	(S-11), Belt L	-
[14]	Slide Tray Gear (B)	D8	(S-12), *(P-1)	-
[15]	Slide Tray Gear (A)	D8	-----	-
[16]	Motor Assembly	D8	(S-13)	-
[17]	Switch CBA	D8	*2(L-4)	-
[18]	Tray Guide (R)	D8	-----	-
[19]	Changer CBA	D9	CN3102, CN3301, 2(S-14)	-
[20]	AV CBA	D9	5(S-15), CN1001, CN1601, CN1602	-
[21]	DVD Main CBA Unit	D10	3(S-16)	-
[22]	PCB Holder	D10	-----	-

- (1)                      ↓                      (2)                      ↓                      (3)                      ↓                      (4)                      ↓                      (5)

- (1): Identification (location) No. of parts in the figures
- (2): Name of the part
- (3): Figure Number for reference
- (4): Identification of parts to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.  
P=Spring, L=Locking Tab, S=Screw, CN=Connector  
\*=Unhook, Unlock, Release, Unplug, or Desolder  
e.g. 2(S-2) = two Screws (S-2),  
2(L-2) = two Locking Tabs (L-2)
- (5): Refer to "Reference Notes."

## Reference Notes

**CAUTION 1:** Locking Tabs (L-1) are fragile. Be careful not to break them.

1-1. To release eight Locking Tabs (L-1), first release five Locking Tabs (A), and then three Locking Tabs (B). (Fig. D2)

**CAUTION 2:** Electrostatic breakdown of the laser diode in the optical system block may occur as a potential difference caused by electrostatic charge accumulated on cloth, human body etc., during unpacking or repair work.

To avoid damage of pickup follow next procedures.

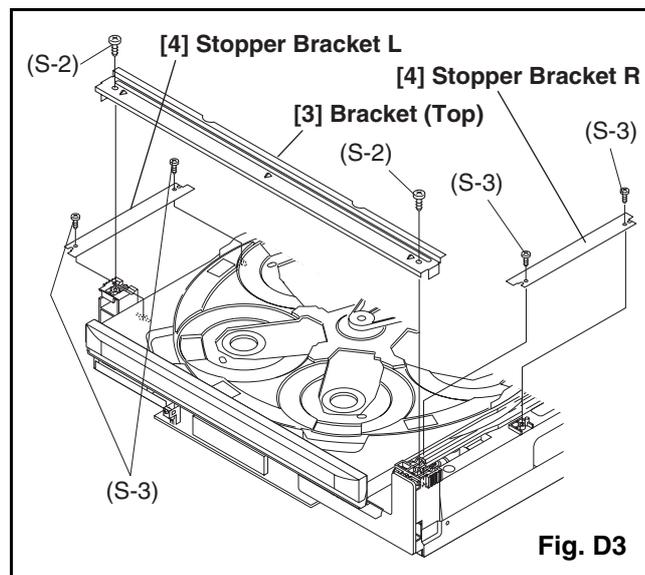
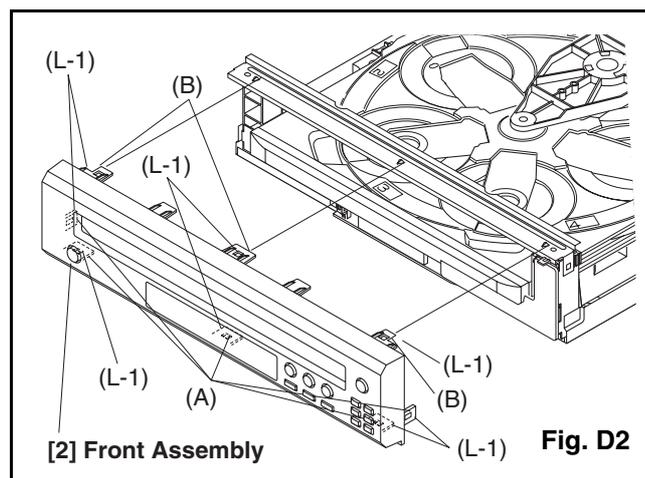
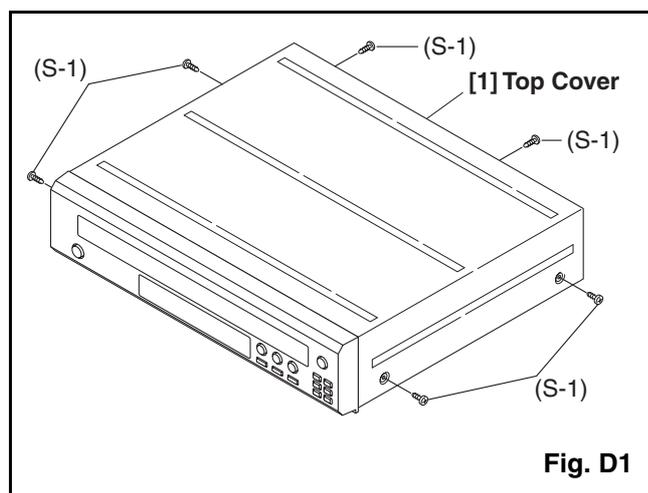
2-1. To remove the Chuck Arm, remove the Screw A, two Rotary Tray Washers and Rotary Tray Spring. (Fig. D5)

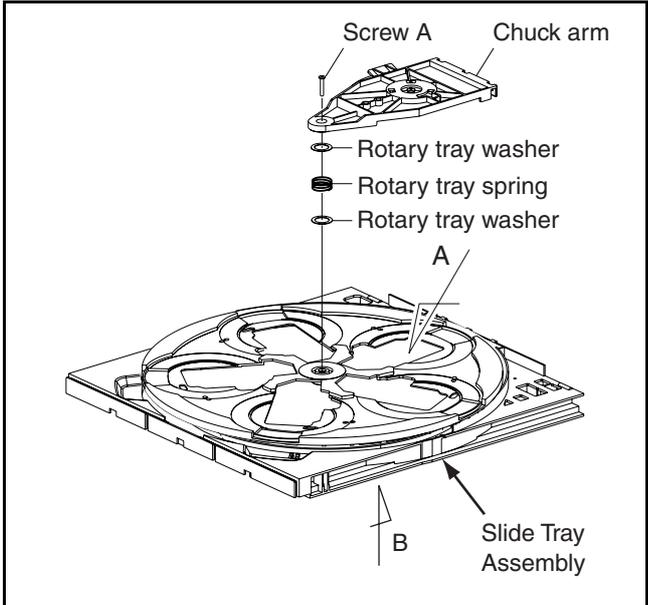
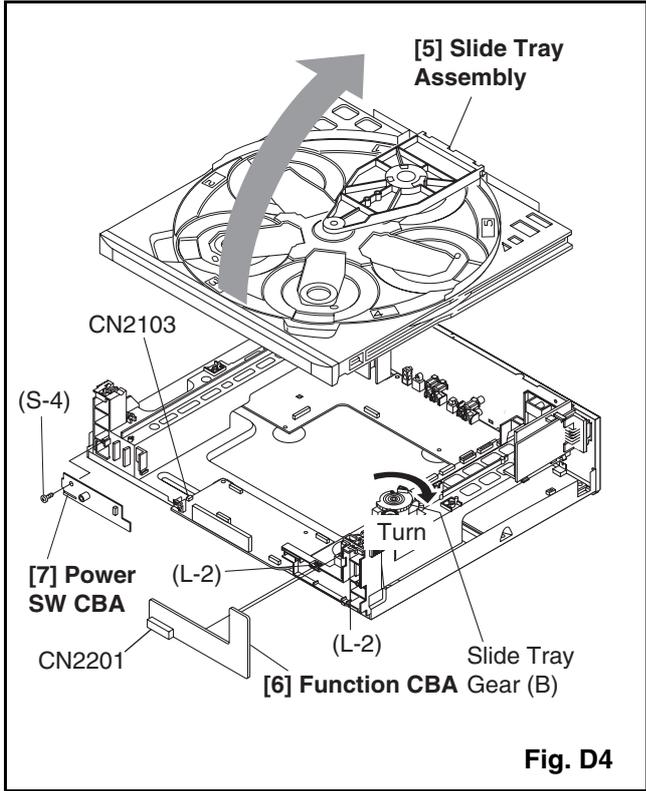
2-2. Short the three short lands of FPC cable with solder before removing the FFC cable (CN5004 on the Relay CBA). If you disconnect the FFC cable, the laser diode of pickup will be destroyed. (Fig. D5)

2-3. Disconnect Connector (CN5001). Remove the Drive Mechanism carefully. (Fig. D5)

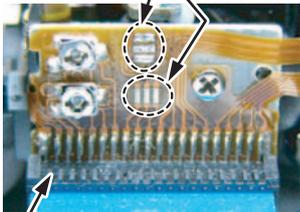
**CAUTION 3:** When reassembling, confirm the three short lands of FPC cable is soldered and confirm the FFC cable (CN5004 on the Relay CBA) is connected completely. Then remove the solder from the three short lands of FPC cable. (Fig. D5)

**CAUTION 4:** Before reinstalling, turn the Slide Tray Gear (B) fully clockwise. (Fig. D4)

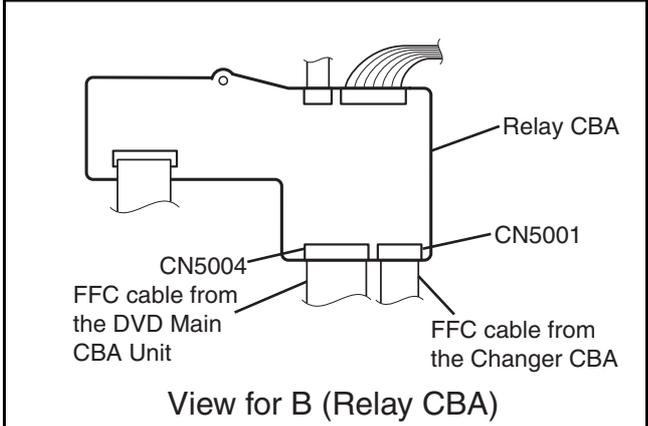




Short the three short lands by soldering.  
(Either of two places.)



FPC Cable  
View for A



**Fig. D5**

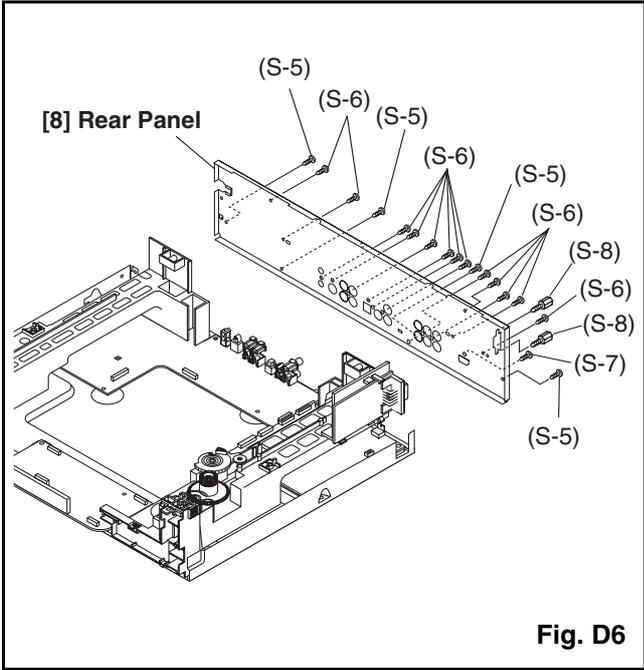


Fig. D6

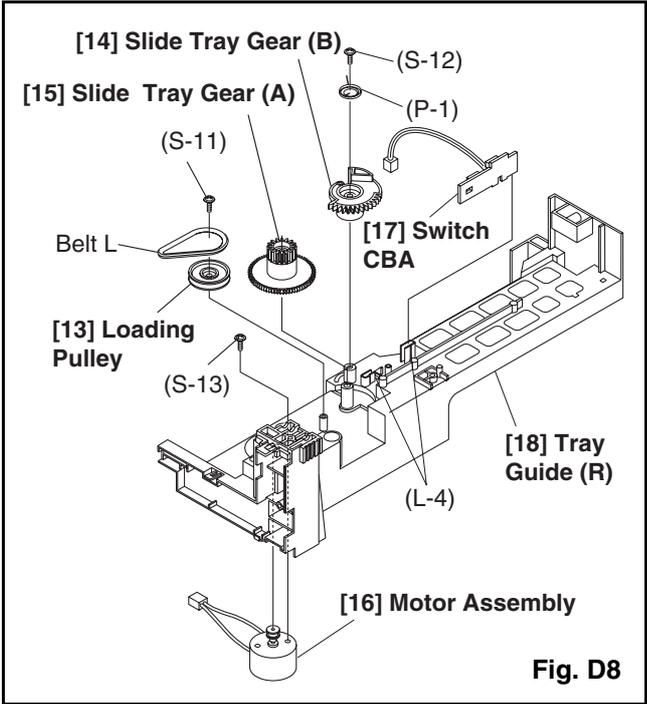


Fig. D8

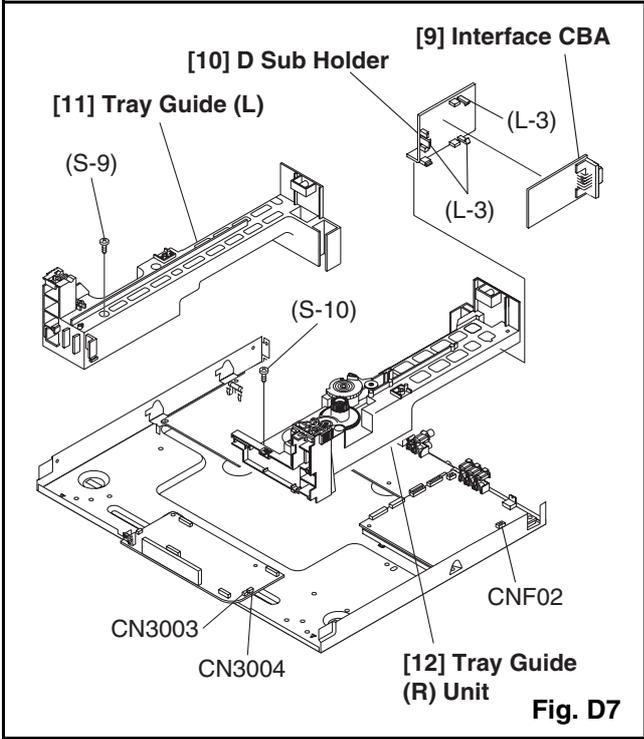


Fig. D7

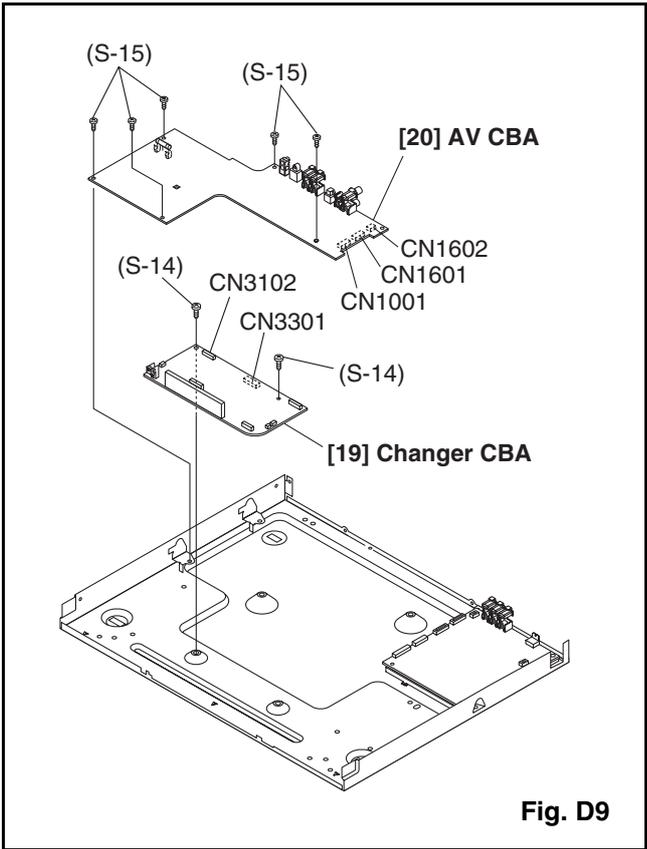
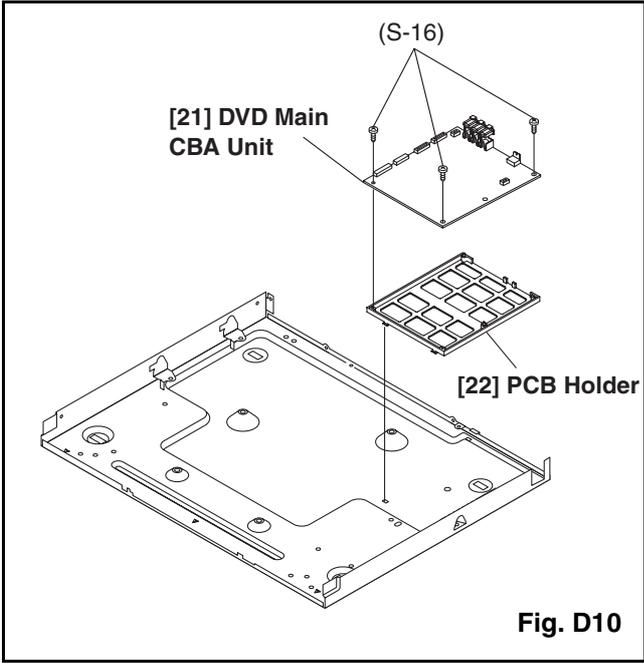


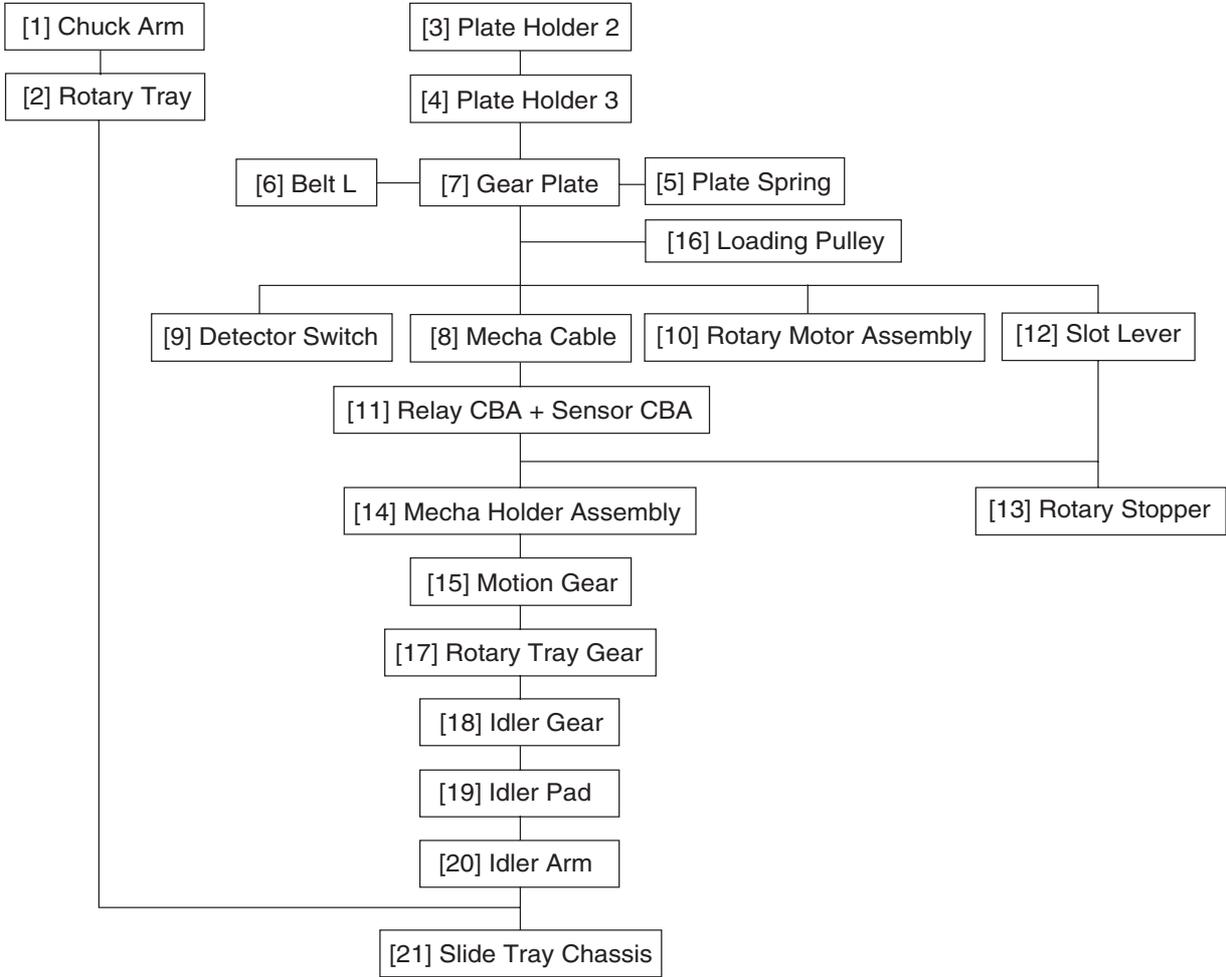
Fig. D9



# SLIDE TRAY ASSEMBLY DISASSEMBLY INSTRUCTIONS

## 1. Disassembly Flowchart

This flowchart indicates the disassembly steps to gain access to item(s) to be serviced. When Reassembly, follow the steps in reverse order. Bend, route, and dress the cables as they were originally.



## 2. Disassembly Method

ID/ LOC No.	PART	REMOVAL		
		Fig. No.	REMOVE/*UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOLDER	Note
[1]	Chuck Arm	MD1	(S-1), 2(W-1), (P-1), Magnet, Yoke, Clamper	-
[2]	Rotary Tray	MD2	-----	1 2
[3]	Plate Holder 2	MD3	2(S-2), (S-3)	-
[4]	Plate Holder 3	MD3	2(S-4)	-
[5]	Plate Spring	MD4	(S-5)	-
[6]	Belt L	MD4	-----	-
[7]	Gear Plate	MD4	3(S-6), (S-7)	-
[8]	Mecha Cable	MD4	6(L-1), *CN5002, *CN5101, (S-8) Lead clamper, Desolder	-
[9]	Detector Switch	MD4	Desolder	3
[10]	Rotary Motor Assembly	MD4	Desolder	3
[11]	Relay CBA + Sensor CBA	MD5	4(S-9), *CN5003, *CN5005	4 5
[12]	Slot Lever	MD6	*(P-2)	6 7
[13]	Rotary Stopper	MD6	-----	6 7
[14]	Mecha Holder Assembly	MD5 MD6	-----	4 5 8 9
[15]	Motion Gear	MD6	-----	8 9
[16]	Loading Pulley	MD7	(S-10), (W-2)	-
[17]	Rotary Tray Gear	MD7	-----	-
[18]	Idler Gear	MD7	*(P-3), (S-11), (W-3), (W-4)	-
[19]	Idler Pad	MD7	-----	-
[20]	Idler Arm	MD7	-----	-
[21]	Slide Tray Chassis	MD7	-----	-

(1): Identification (location) No. of parts in the figures

(2): Name of the part

(3): Figure Number for reference

(4): Identification of parts to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.  
P=Spring, L=Locking Tab, S=Screw, CN=Connector, W=Washer

\*=Unhook, Unlock, Release, Unplug, or Desolder

e.g. 2(S-2) = two Screws (S-2),

2(L-2) = two Locking Tabs (L-2)

(5): Refer to "Reference Notes."

## Reference Notes

- Disassembly note  
Slide the Rotary Tray slowly in the direction of the front while rotating it.
- Reassembly note  
Align the rails on the Rotary Tray with the slot on the sensor and align pin A with hole A on the Rotary Tray.
- Reassembly note  
Re-solder the leads on the Rotary Motor Assembly or the Detector Switch as shown in Fig. MD4.
- CAUTION:** Electrostatic breakdown of the laser diode in the optical system block may occur as a potential difference caused by electrostatic charge accumulated on cloth, human body, etc., during unpacking or repair work.  
To avoid damage of pickup:
  - Short the three short lands of the FPC cable with solder before removing the FFC cable (CN5005). If you disconnect the FFC cable (CN5005) without shorting them, the laser diode of the pickup will be destroyed. ("View for A" in Fig. MD5)
  - Disconnect the two connectors (CN5003 and CN5005) on the Relay CBA.
- CAUTION:** When Reassembly, confirm the FFC cable (CN5005) is connected completely. Then remove the solder from the three short lands of the FPC cable. ("View for A" in Fig. MD5)
- Disassembly note  
Remove the spring (P-2). Then remove the Slot Lever with the Rotary Stopper while turning the Slot Lever in the direction of the arrow as shown in Fig. MD6.
- Reassembly note
  - Install the Slot Lever and the Rotary Stopper with spring (P-2) as shown in "Bottom View of the Slide Tray" of Fig. MD6.
  - Align pin B on the Slot Lever with slot B on the Motion Gear.
- Disassembly note  
The Mecha Holder Assembly and the Motion Gear should be removed together.
- Reassembly note  
The pins, slots or holes on the Mecha Holder Assembly, the Motion Gear and the Slide Tray align as follows:
  - Pin C on the Mecha Holder Assembly with hole B on the Slide Tray Chassis
  - Pin D on the Mecha Holder Assembly with slot C on the Motion Gear
  - Pin E on the Mecha Holder Assembly with cavity A on the Slide Tray Chassis
  - Slot A on the Mecha Holder Assembly with rib A on the Slide Tray Chassis

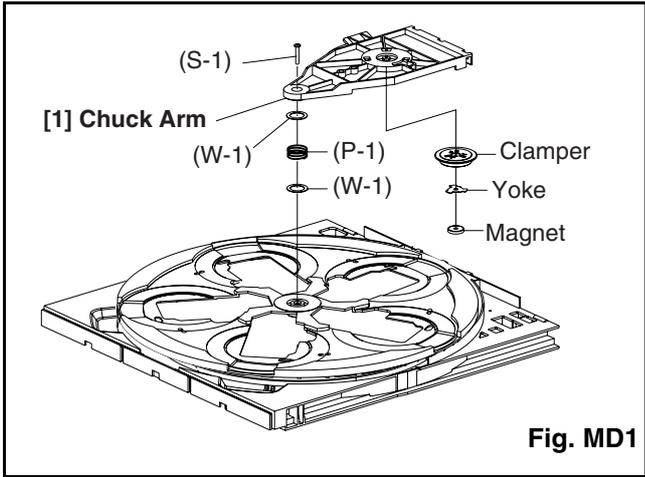


Fig. MD1

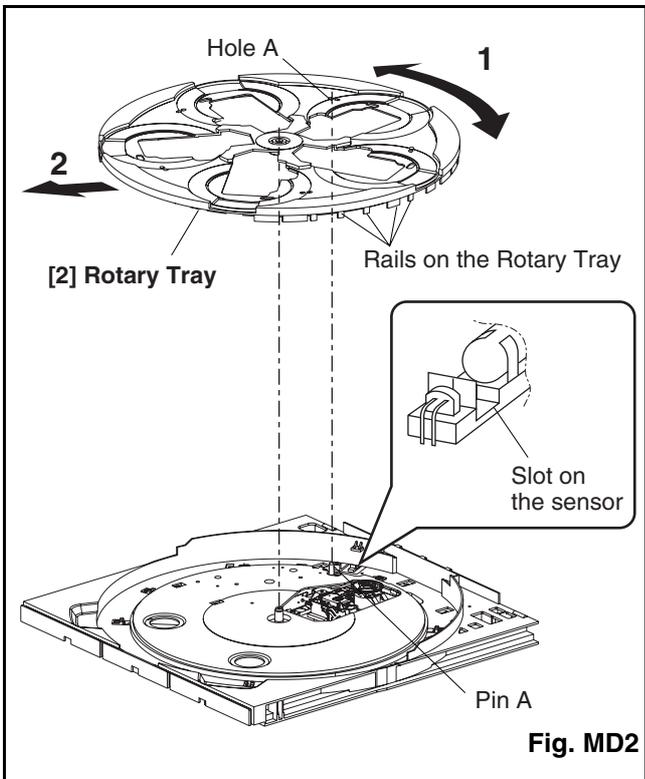


Fig. MD2

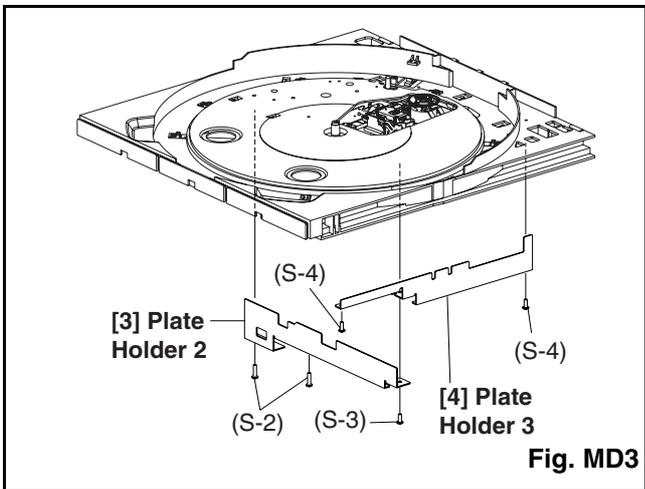
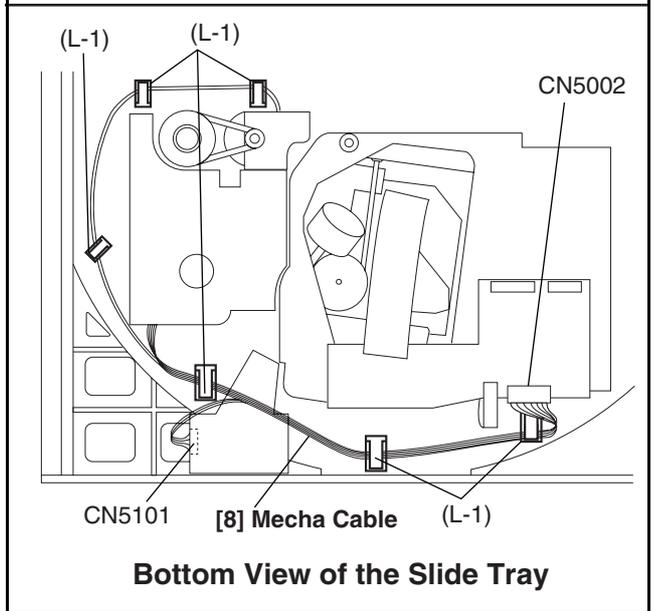
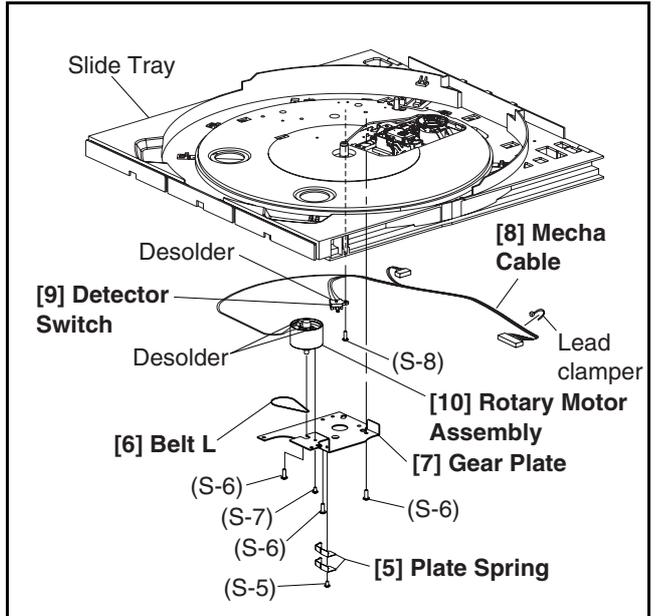


Fig. MD3



Bottom View of the Slide Tray

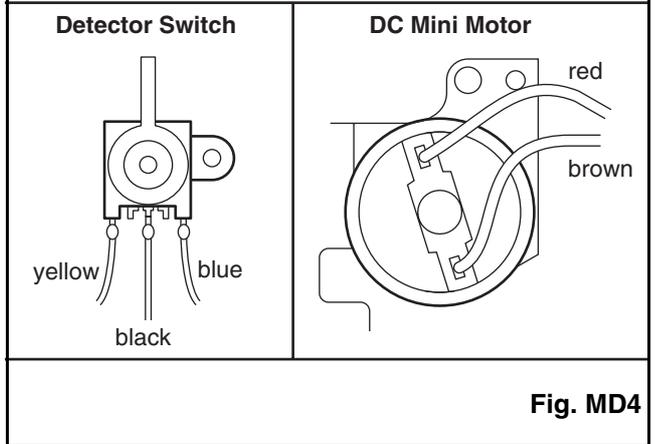
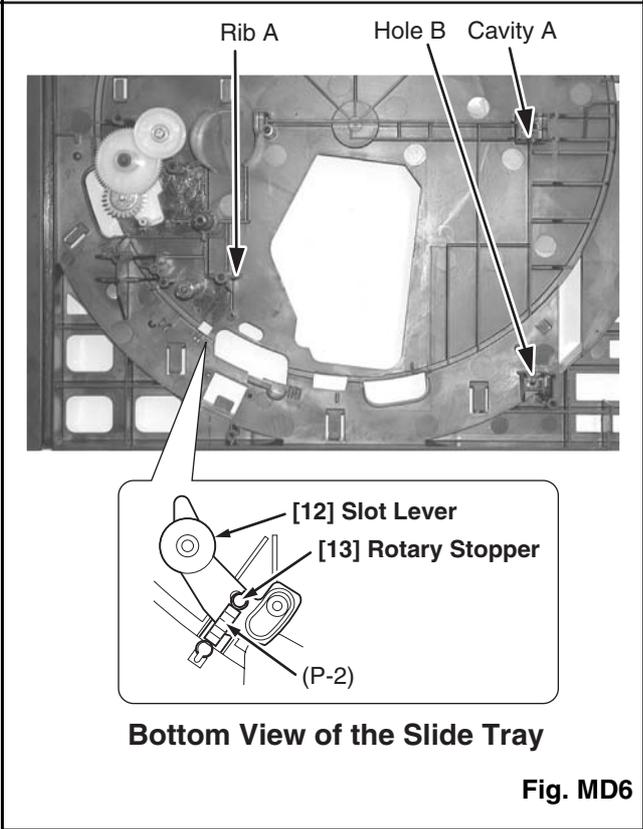
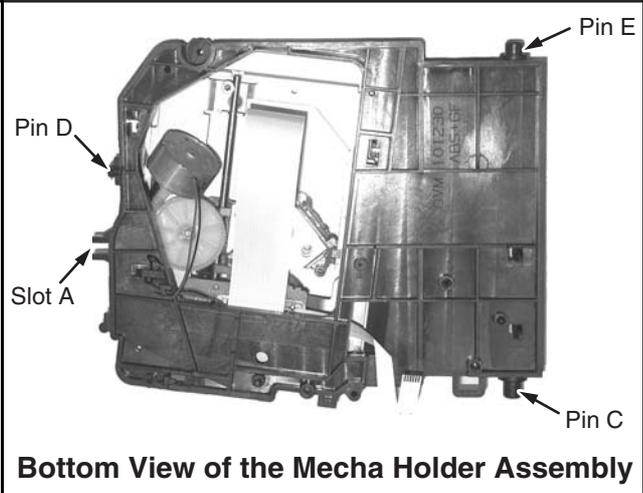
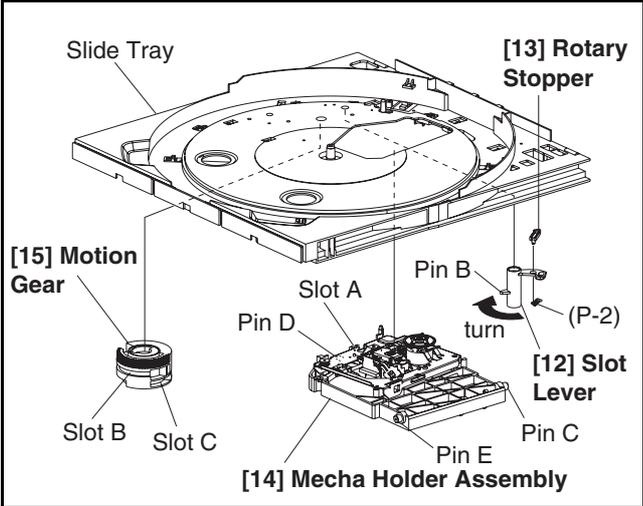
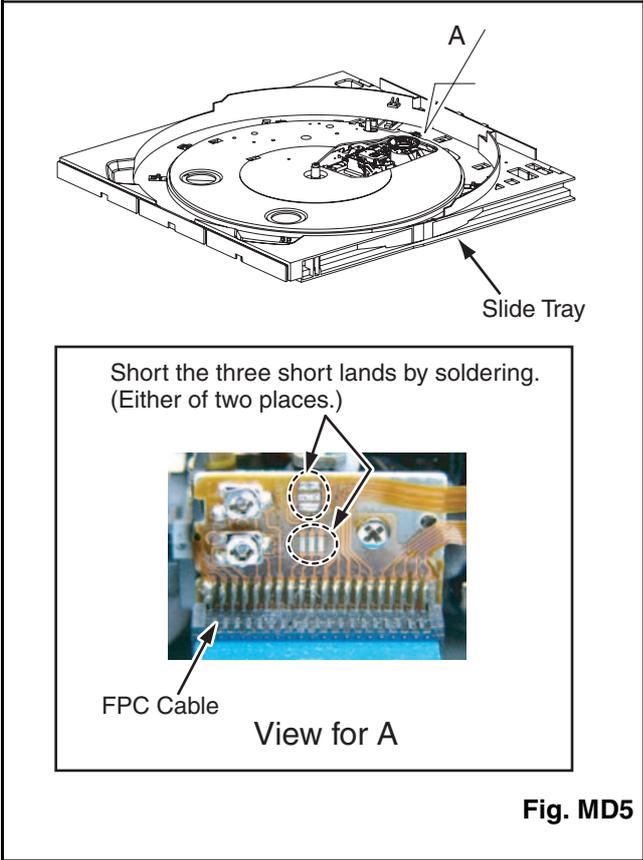
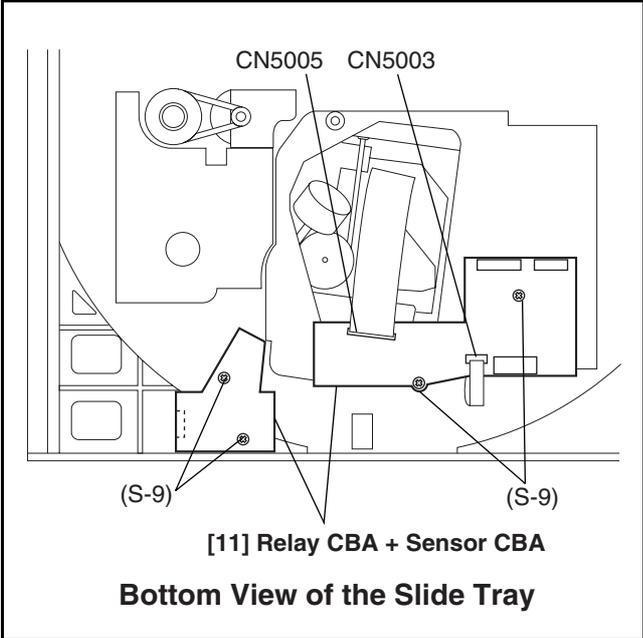


Fig. MD4



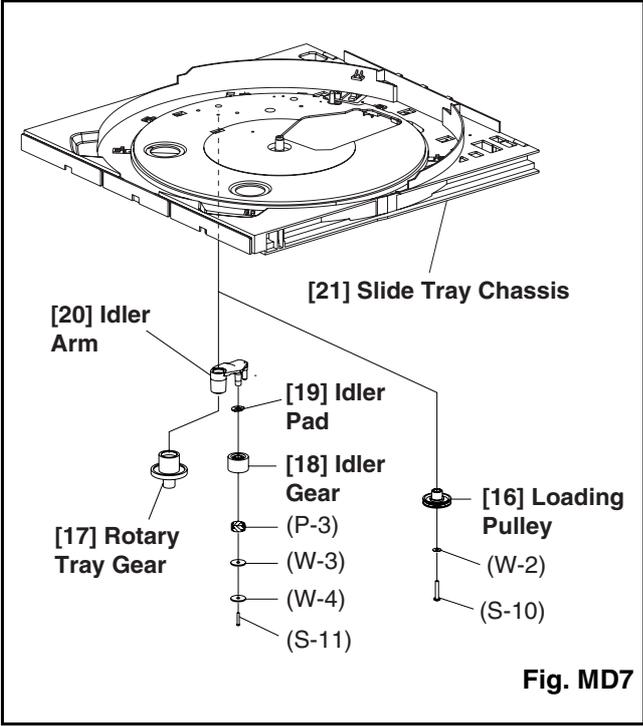
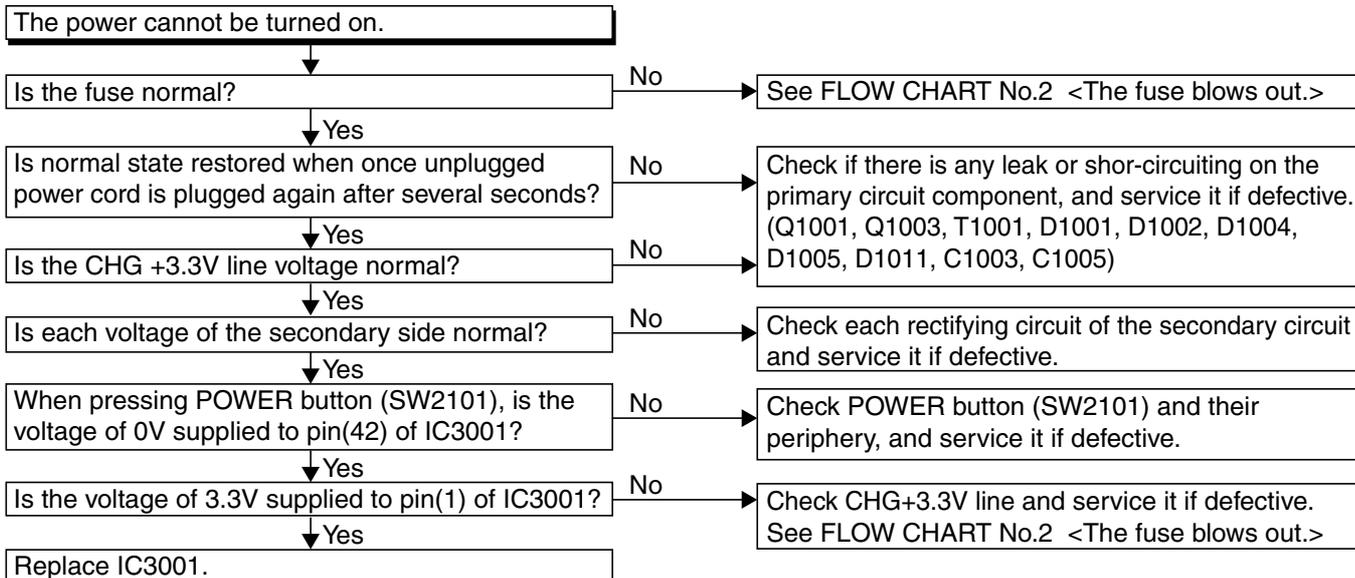


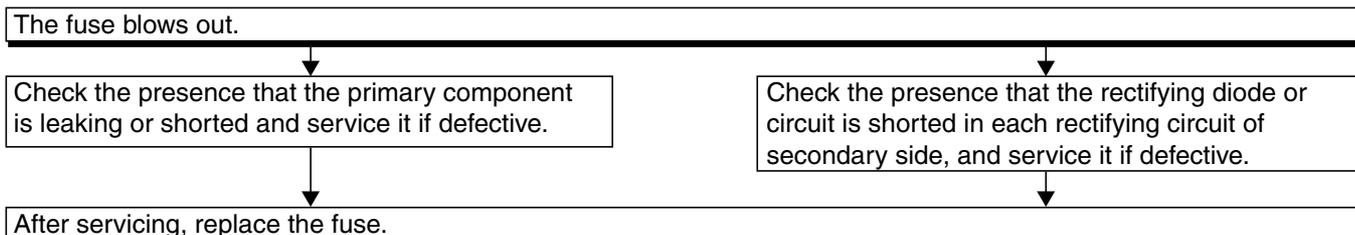
Fig. MD7

# TROUBLESHOOTING

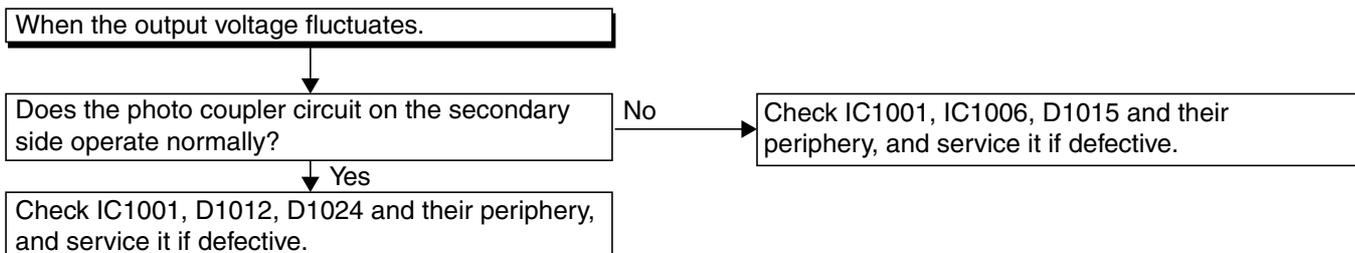
## FLOW CHART NO.1



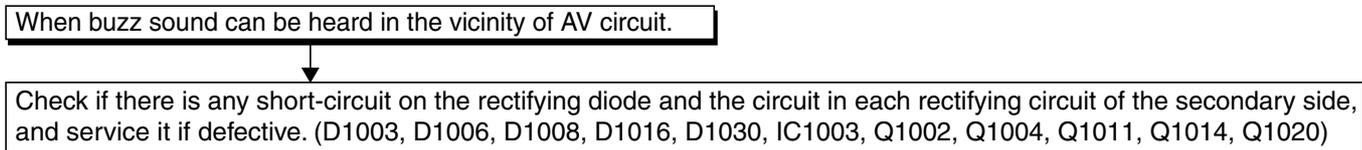
## FLOW CHART NO.2



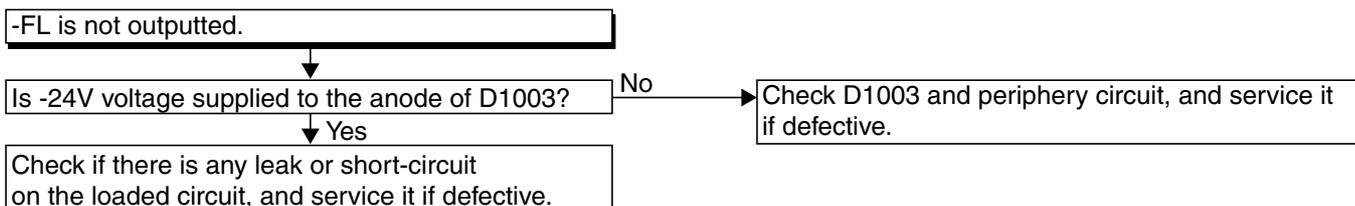
## FLOW CHART NO.3



## FLOW CHART NO.4



## FLOW CHART NO.5



**FLOW CHART NO.6**

**P-ON+10V (EV+10V) is not outputted.**

Is 10V voltage supplied to the emitter of Q1002?

No

Check D1030, C1035, C1048, L1009 and the periphery circuit, and service it if defective.

Yes

Is the voltage of base on Q1002 lower than the voltage of emitter on Q1002 when turning the power on?

No

Check Q1016 and service it if defective.

Yes

Replace Q1002.

**FLOW CHART NO.7**

**P-ON+5V is not outputted. (P-ON+10V is outputted normally.)**

Is the "H" signal inputted into the base of Q1004?

No

Check R1068 and D1046, and service it if defective.

Yes

Replace Q1004.

**FLOW CHART NO.8**

**P-ON+3.3V is not outputted. (P-ON+10V is outputted normally.)**

Is 3.3V voltage supplied to the collector of Q1011?

No

Check D1008, D1015, C1007, C1038, L1007 and the periphery circuit, and service it if defective.

Yes

Replace Q1011, R1066 and R1067.

**FLOW CHART NO.9**

**CHG+5V is not outputted.**

Is EV+10V outputted normally?

No

Refer to "FLOW CHART NO.6"  
<P-ON+10V (EV+10V) is not outputted.>

Yes

Check Q1014, D1047 and the periphery circuit, and service it if defective.

**FLOW CHART NO.10**

**EV+1.2V is not outputted.**

Is 2.9V voltage supplied to Pin(3) of IC1003?

No

Check D1006, C1014, C1050, L1008, Q1022 and the periphery circuit, and service it if defective.

Yes

Replace IC1003.

**FLOW CHART NO.11**

**EV+3.3V is not outputted.**

Is 3.3V voltage supplied to emitter of Q1020?

No

Check D1008, D1015, C1007, C1038, L1007 and the periphery circuit, and service it if defective.

Yes

Is the "L" signal inputted to base of Q1012?

No

Is the "L" signal outputted into Pin(9) of IC3001?

Yes

Check Q1012, Q1020, R1050 and R1088, and service it if defective.

Yes

Check the circuit between Pin(9) of IC3001 and base of Q1012, and service it if defective.

No

Replace IC3001.

**FLOW CHART NO.12**

The fluorescent display tube does not light up.

Is 3.3V voltage supplied to Pin(13) and Pin(43) of IC2001?

No → Check the P-ON+3.3V line and service it if defective.

Yes  
Is the voltage of approximately -24V to -28V supplied to Pin(30) of IC2001?

No → Check the -FL line and service it if defective.

Yes  
Replace the fluorescent display tube or IC2001.

**FLOW CHART NO.13**

The key operation is not functioning.

Are the contact point and the installation state of the key switches (SW2101, 2102, 2203 - 2215) normal?

No → Reinstall the switches (SW2101, 2102, 2203 - 2215) correctly or replace the poor switch.

**Terminal Voltage of Pins (40 - 42) on IC3001**

VOLTAGE	IC3001		
	42pin	41pin	40pin
	KEY1	KEY2	KEY3
APPROX. 0V	SW2101 POWER	SW2206 SKIP DOWN	SW2211 DISC3
APPROX. 0.7V	SW2102 HDMI	SW2207 SKIP UP	SW2212 DISC4
APPROX. 1.3V	SW2203 PLAY	SW2208 DISC CHANGE	SW2213 DISC2
APPROX. 2.0V	SW2204 PAUSE	SW2209 DISC5	SW2214 DISC1
APPROX. 2.7V	SW2205 STOP	SW2210 SKIP	SW2215 OPEN/CLOSE
APPROX. 3.3V	(KEY OFF)	(KEY OFF)	(KEY OFF)

Yes  
Is the control voltage normally supplied to pins(40, 41, 42) of IC3001?

No → Check the switches (SW2101, 2102, 2201 - 2214) and their periphery, and service it if defective.

Yes  
Replace IC3001.

**FLOW CHART NO.14**

No operation is possible from the remote control unit.

Operation is possible from the DVD, but no operation is possible from the remote control unit.

Is 5V voltage supplied to the Pin(3) terminal of the infrared remote control receiver (RM2001)?

No → Check CHG+5V line and service it if defective.

Yes  
Is the "L" pulse sent out Pin(1) terminal of receiver (RM2001) when the infrared remote control is activated?

No → Replace the infrared remote control receiver (RM2001). Or replace the remote control unit.

Yes  
Is the "L" pulse supplied to the Pin(6) of IC3001?

No → Check the line between Pin(1) of RM2001 and Pin(6) of IC3001, and service it if defective.

Yes  
Is the "L" pulse supplied to the Pin(14) of CN3102?

No → Check the line between Pin(1) of RM2001 and Pin(14) of CN3102, and service it if defective.

Yes  
Replace the DVD Main CBA Unit or DVD Mechanism.

**FLOW CHART NO.15**

The disc tray cannot be opened and closed. (It can be done using the remote control unit.)

Is the normal control voltage inputted to Pin(40) of IC3001?

No → Replace the "OPEN/CLOSE" button (SW2215).

Yes  
Refer to "FLOW CHART NO.16" <The disc tray cannot be opened and closed.>

**FLOW CHART NO.16**

The disc tray cannot be opened and closed.

Replace the DVD Main CBA Unit.

No improvement can be found.

No → Original DVD Main CBA Unit is poor.

Yes  
Replace the DVD Mechanism.

**FLOW CHART NO.17**

[No Disc] indicated. (When the focus error occurs.)

Replace the DVD Main CBA Unit.

No improvement can be found.

No → Original DVD Main CBA Unit is poor.

Yes  
Replace the DVD Mechanism.

**FLOW CHART NO.18**

[No Disc] indicated. (When the focus servo is not functioning.)

Replace the DVD Main CBA Unit.

No improvement can be found.

No → Original DVD Main CBA Unit is poor.

Yes

Replace the DVD Mechanism.

**FLOW CHART NO.19**

[No Disc] indicated. (When the laser beam does not light up.)

Replace the DVD Main CBA Unit.

No improvement can be found.

No → Original DVD Main CBA Unit is poor.

Yes

Replace the DVD Mechanism.

**FLOW CHART NO.20**

Both functions of picture and sound do not operate normally.

Replace the DVD Main CBA Unit.

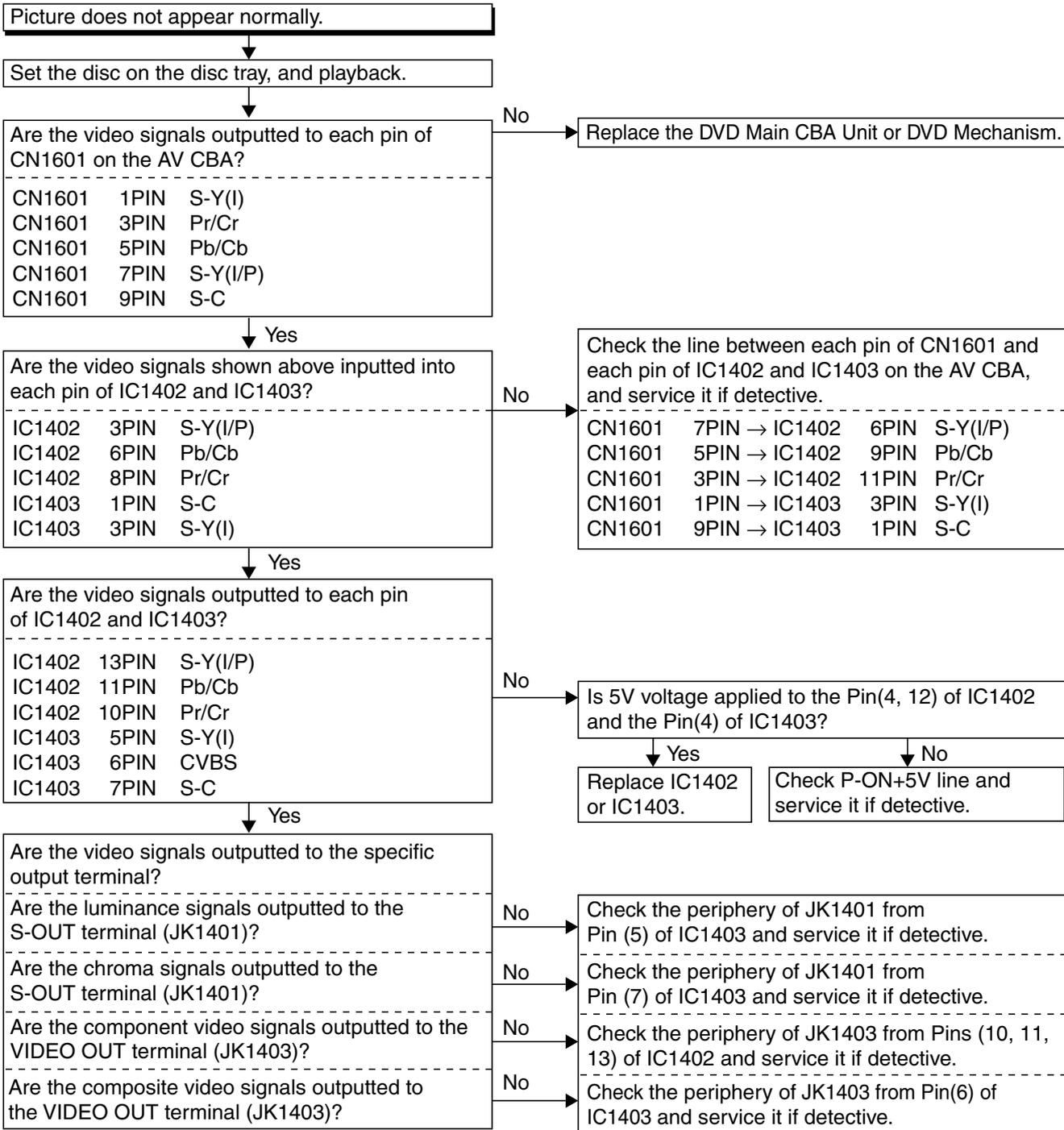
No improvement can be found.

No → Original DVD Main CBA Unit is poor.

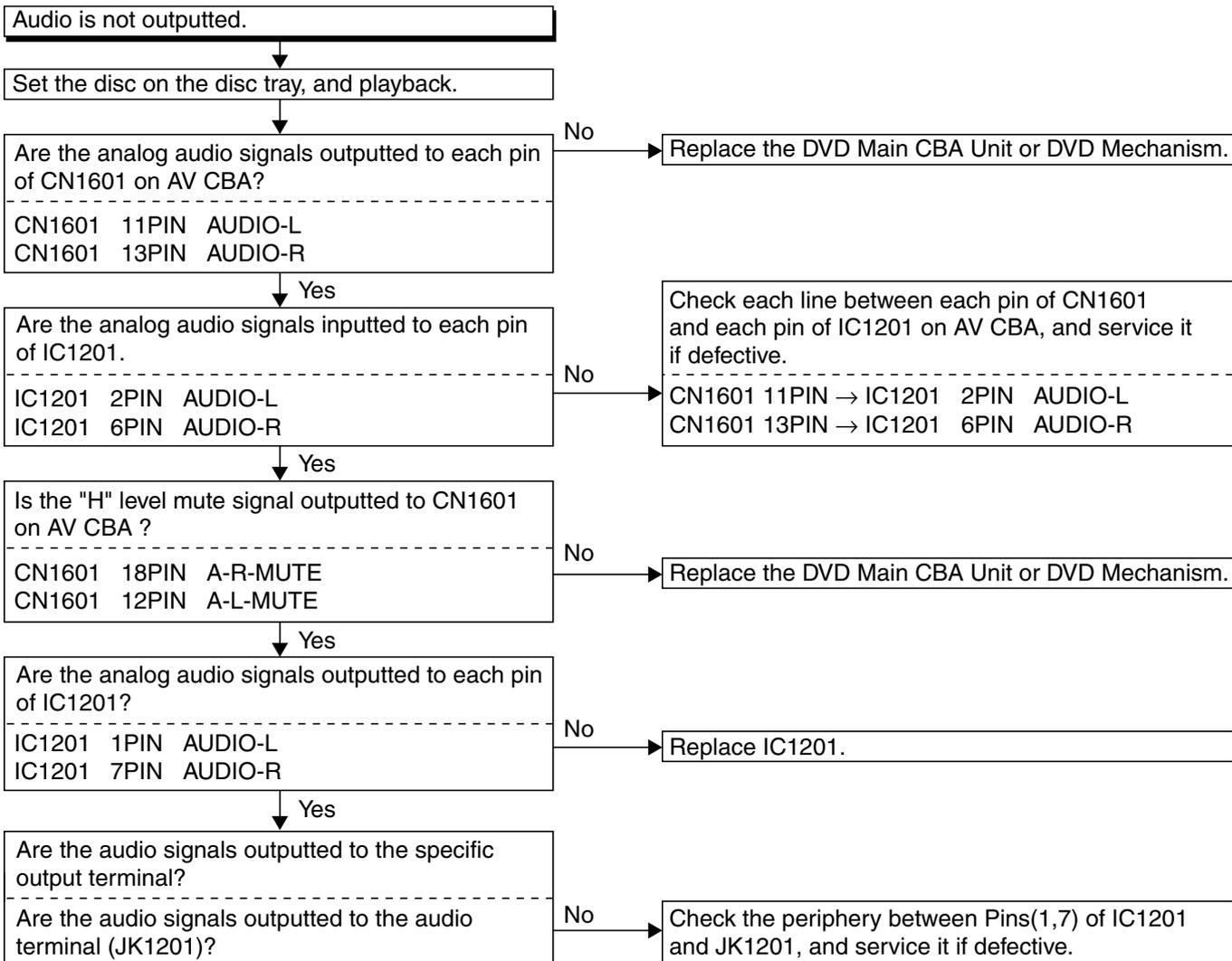
Yes

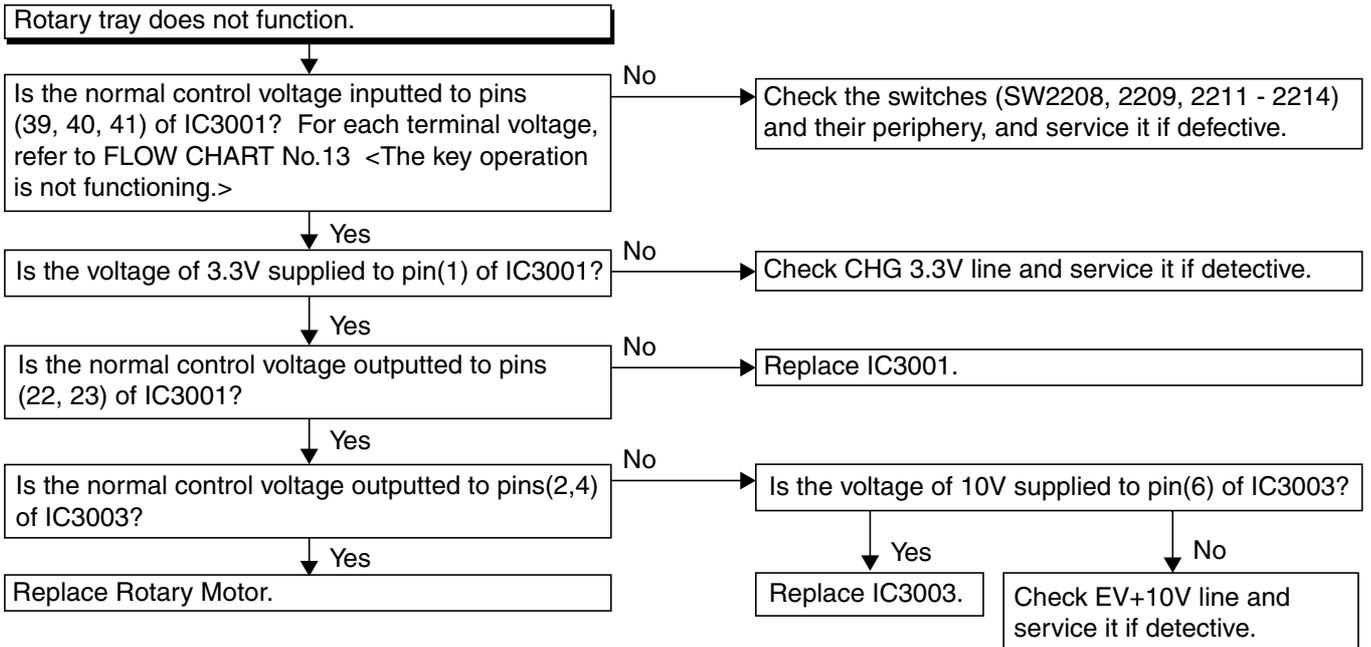
Replace the DVD Mechanism.

**FLOW CHART NO.21**



**FLOW CHART NO.22**

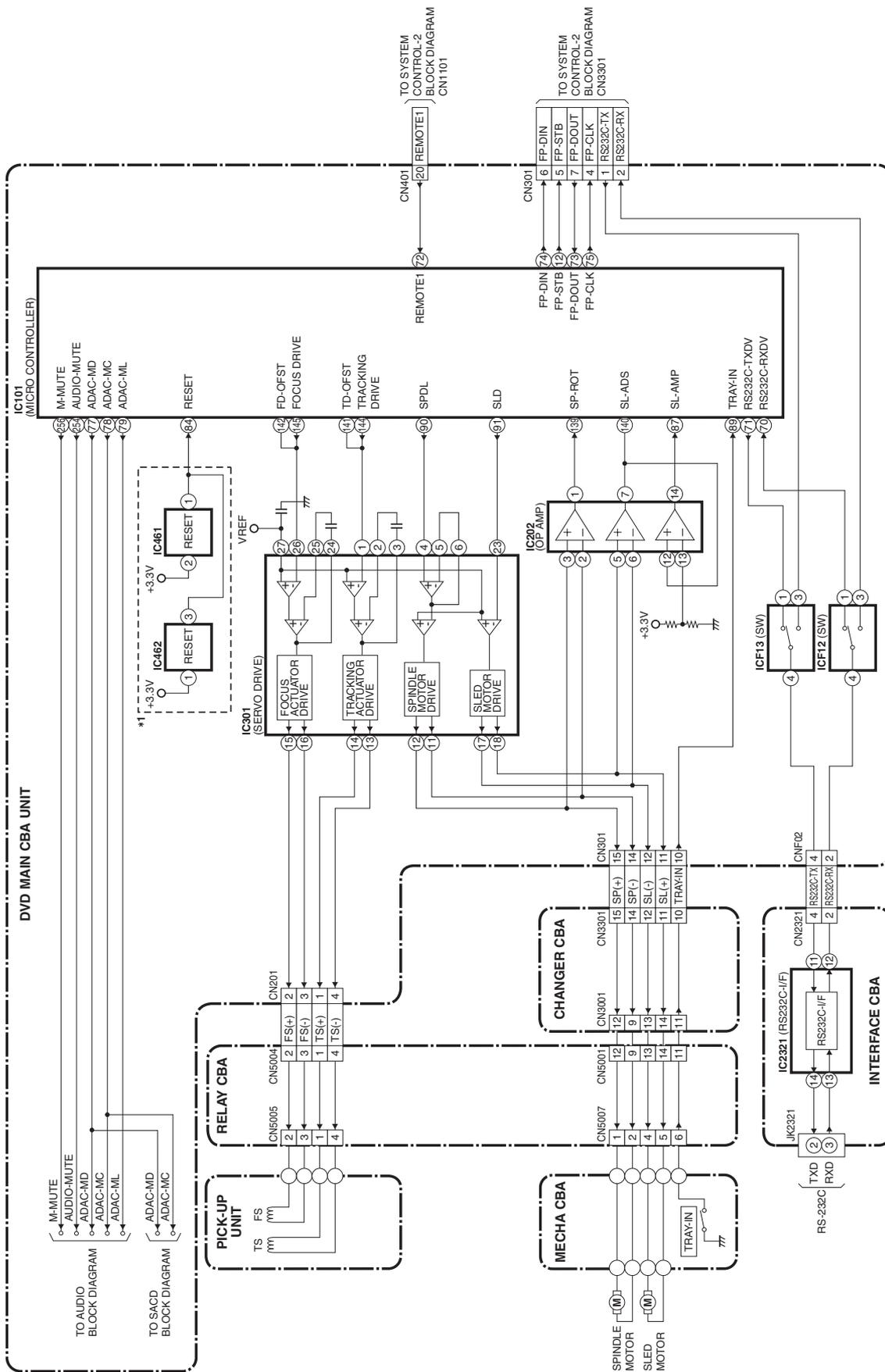


**FLOW CHART NO.23**

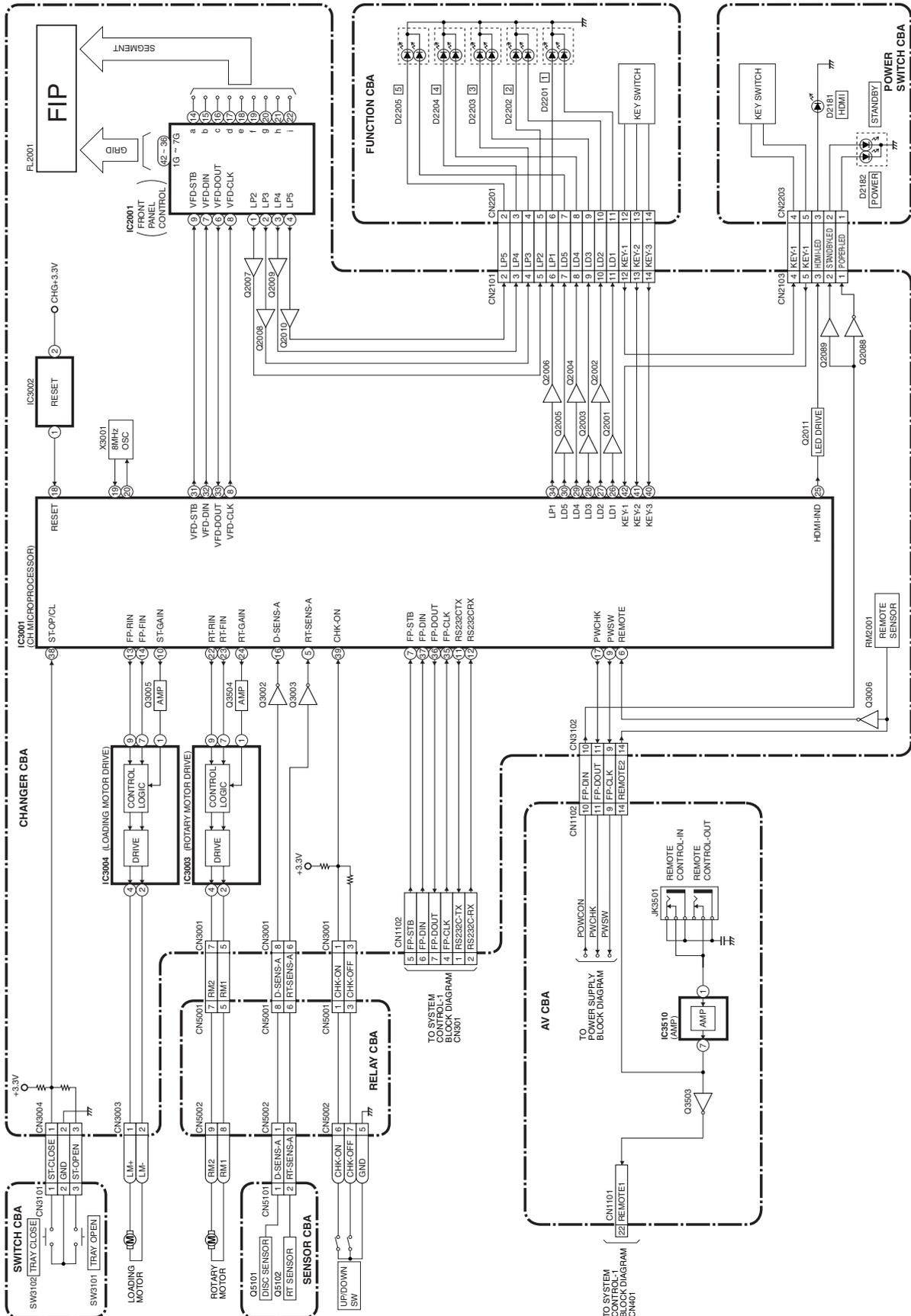
# BLOCK DIAGRAMS

## System Control-1 Block Diagram

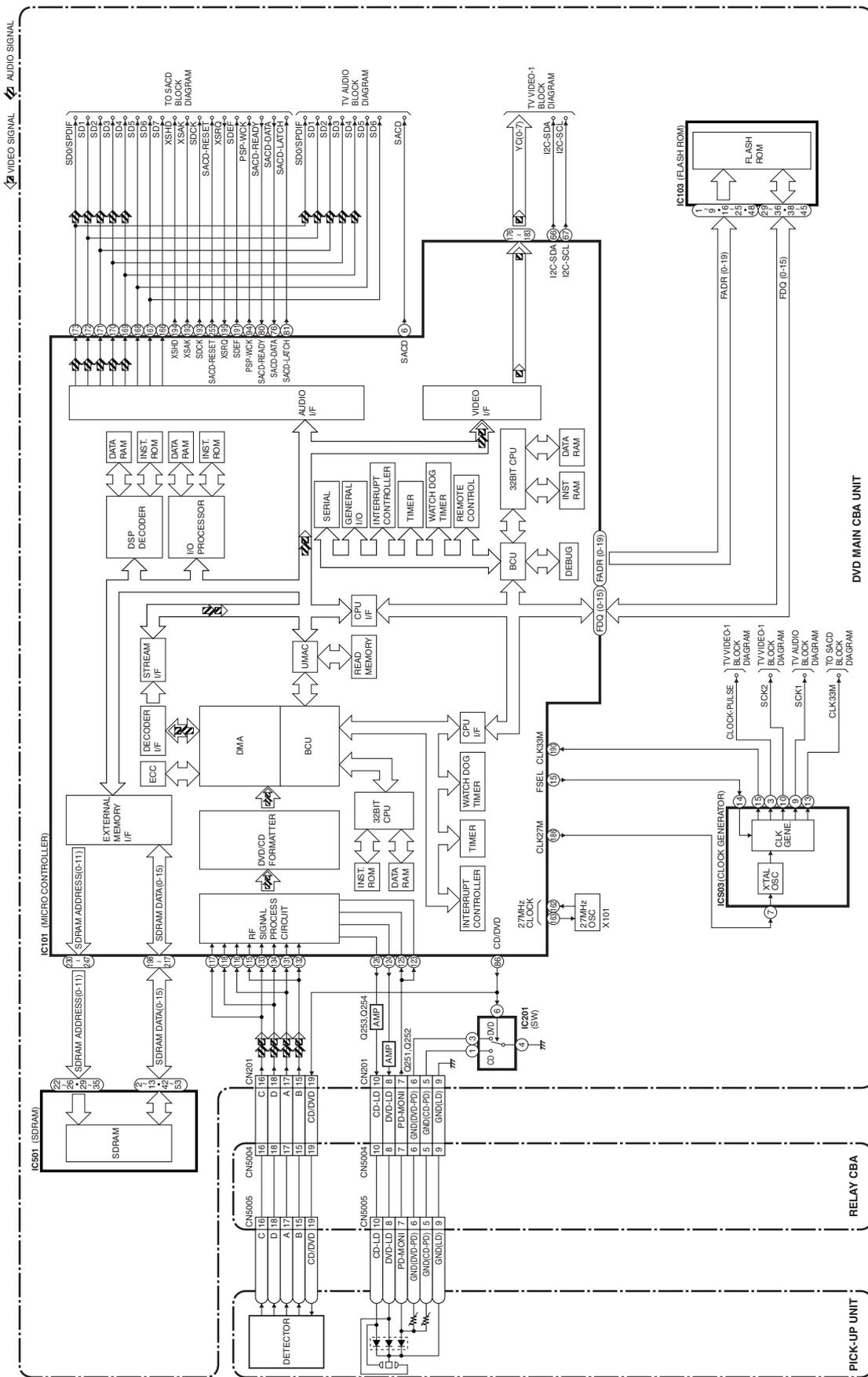
\*1 NOTE:  
Either IC461 or IC462 is used for DVD MAIN CBA UNIT.



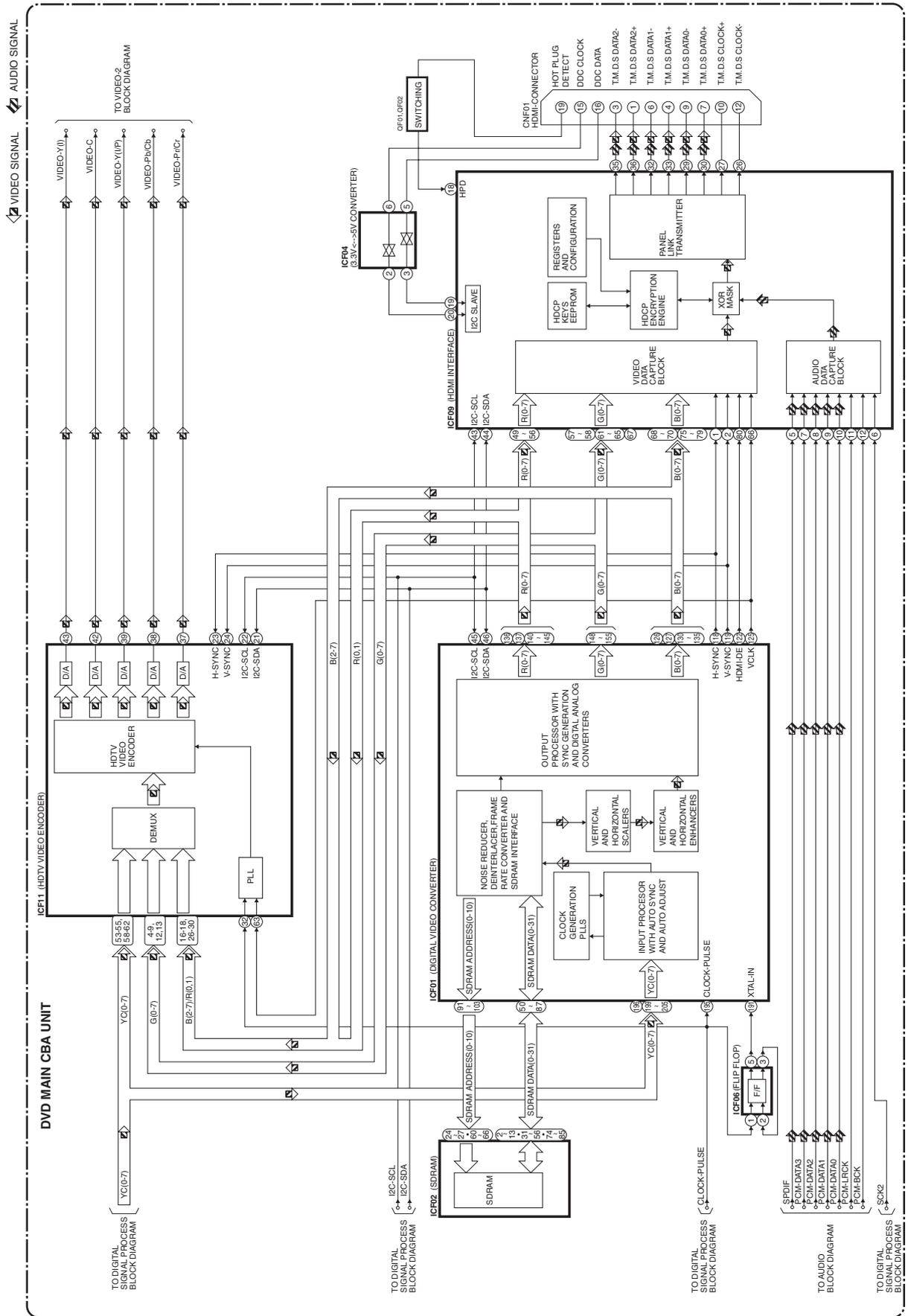
# System Control-2 Block Diagram



# Digital Signal Process Block Diagram

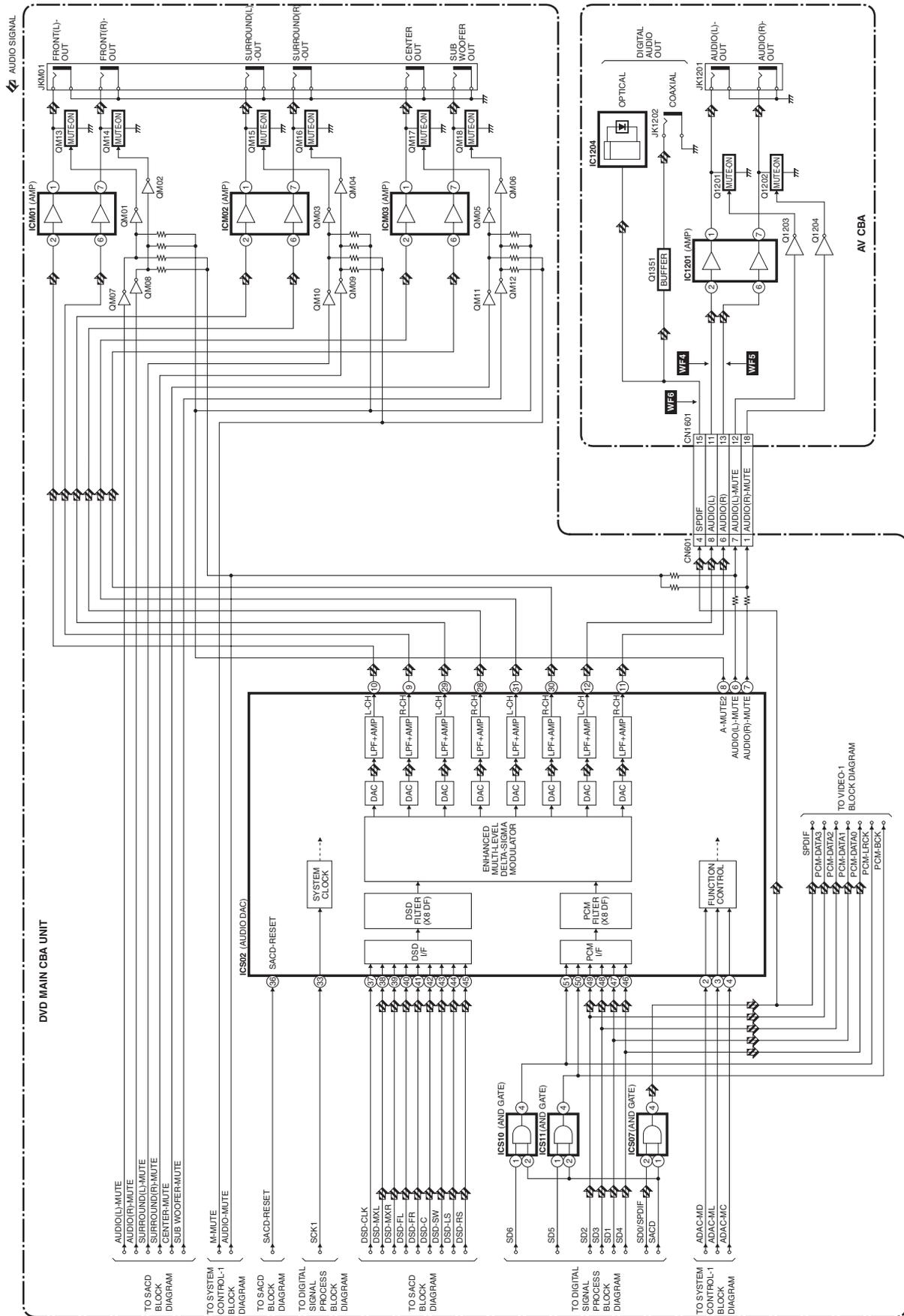


# Video-1 Block Diagram

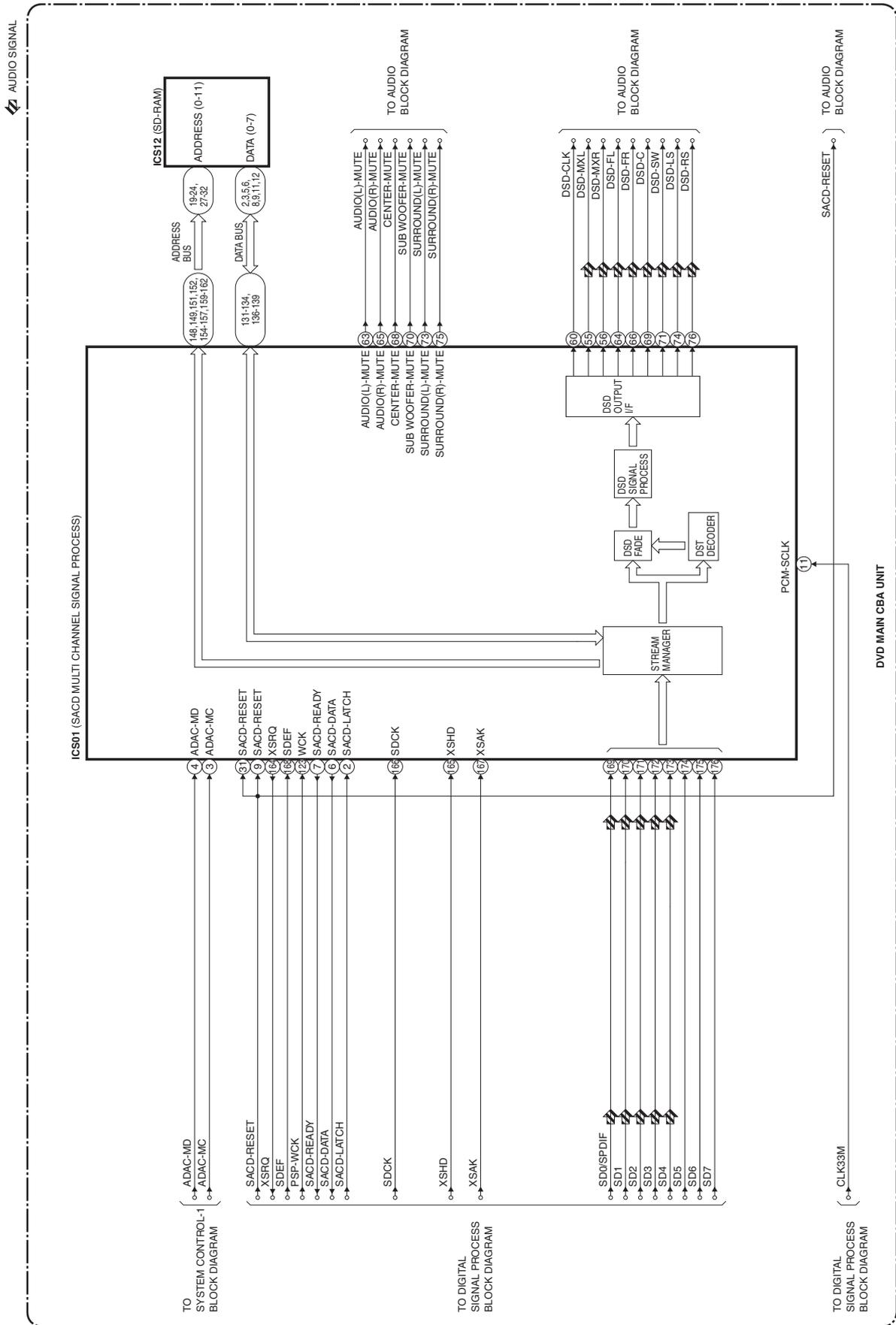




# Audio Block Diagram



# SACD Block Diagram



# Power Supply Block Diagram

**CAUTION !**

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F1001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

**CAUTION !**

For continued protection against fire hazard, replace only with the same type fuse.

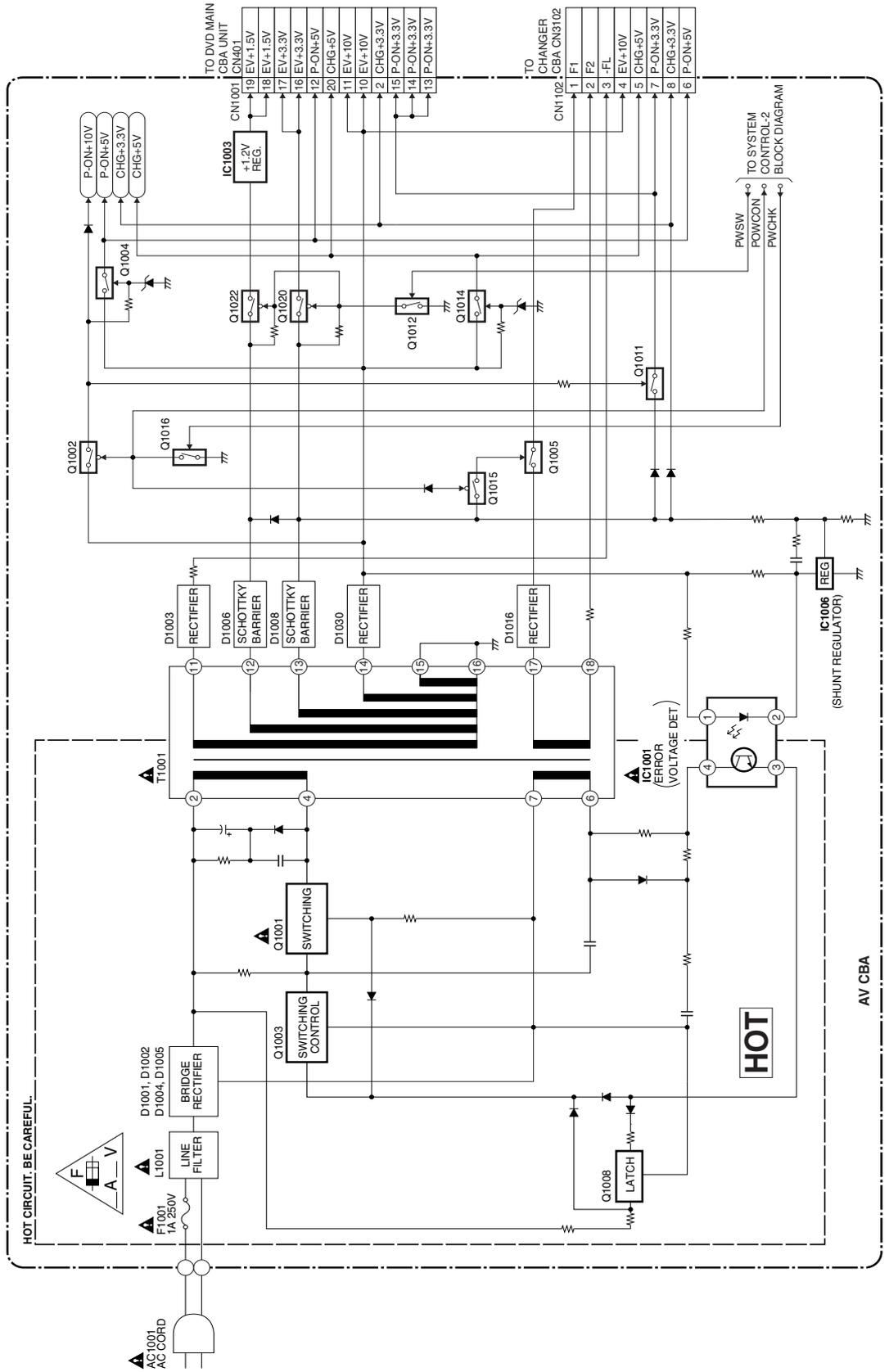
**ATTENTION :** Pour une protection continue les risques d'incendie n'utiliser que des fusibles de même type.

**Risk of fire-**replace fuse as marked.

⚠ "This symbol means fast operating fuse."  
"Ce symbole représente un fusible à fusion rapide."

**NOTE:**

The voltage for parts in hot circuit is measured using hot GND as a common terminal.



# SCHEMATIC DIAGRAMS / CBA'S AND TEST POINTS

## Standard Notes

### WARNING

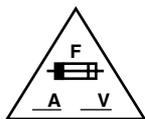
Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the mark "▲" in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

### Notes:

1. Do not use the part number shown on these drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since these drawings were prepared.
2. All resistance values are indicated in ohms (K =  $10^3$ , M =  $10^6$ ).
3. Resistor wattages are 1/4W or 1/6W unless otherwise specified.
4. All capacitance values are indicated in  $\mu\text{F}$  (P =  $10^{-6}$   $\mu\text{F}$ ).
5. All voltages are DC voltages unless otherwise specified.

## LIST OF CAUTION, NOTES, AND SYMBOLS USED IN THE SCHEMATIC DIAGRAMS ON THE FOLLOWING PAGES:

### 1. CAUTION:



FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.  
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D'INCELE N'UTILISER QUE DES FUSIBLE DE MÊME TYPE.  
RISK OF FIRE-REPLACE FUSE AS MARKED.



This symbol means fast operating fuse.  
Ce symbole représente un fusible à fusion rapide.

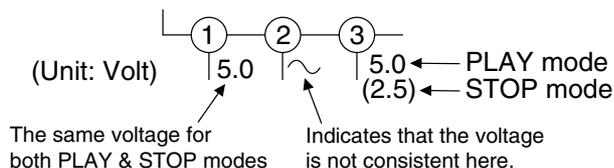
### 2. CAUTION:

Fixed Voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
If Main Fuse (F1001) is blown, first check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

### 3. Note:

- Do not use the part number shown on the drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since the drawings were prepared.
- To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

### 4. Voltage indications for PLAY and STOP mode on the schematics are as shown below:

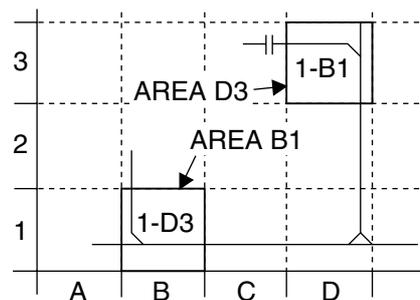


### 5. How to read converged lines

1-D3  
 Distinction Area  
 Line Number  
 (1 to 3 digits)

Examples:

- "1-D3" means that line number "1" goes to the line number "1" of the area "D3".
- "1-B1" means that line number "1" goes to the line number "1" of the area "B1".

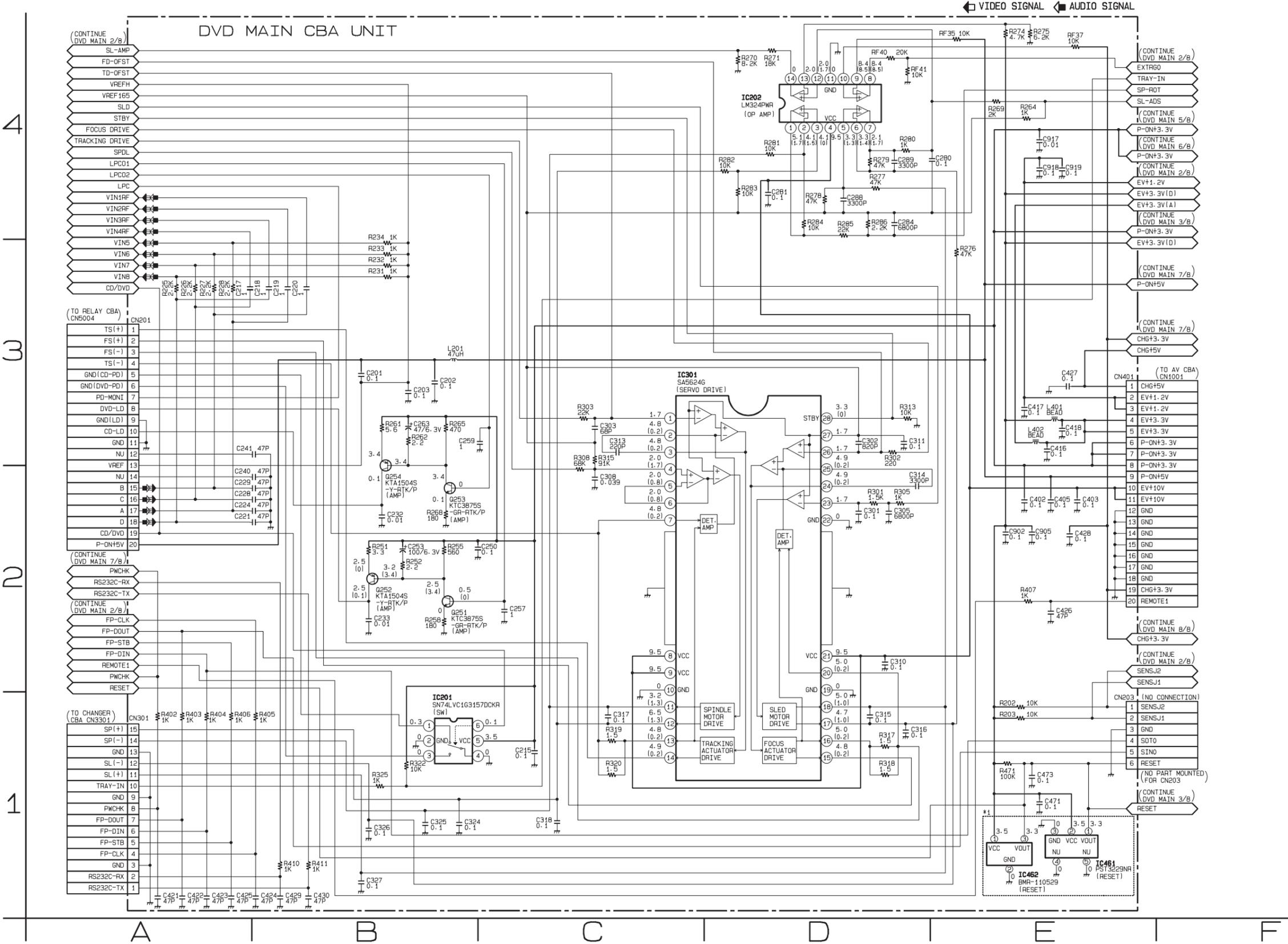


### 6. Test Point Information

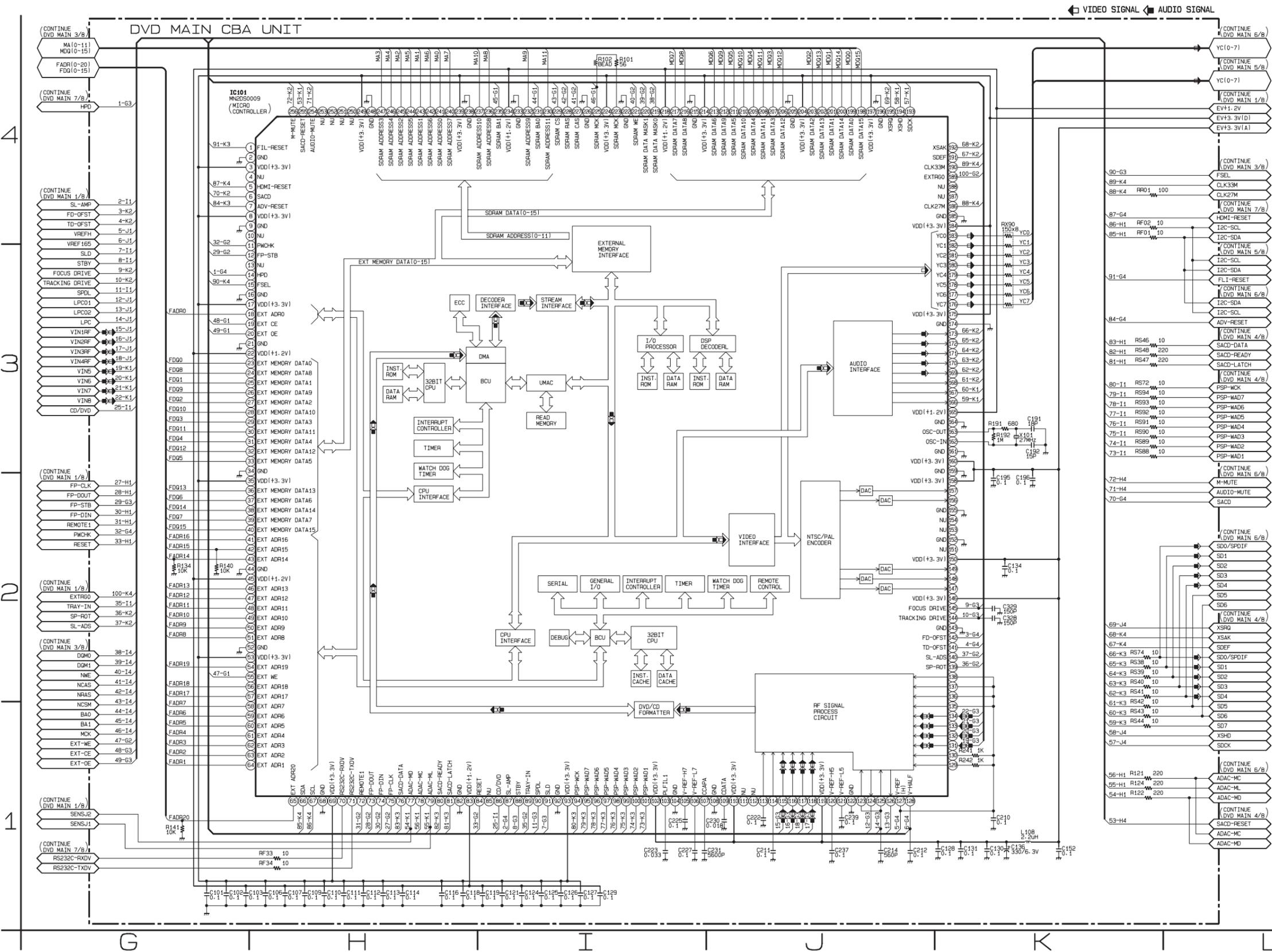
- : Indicates a test point with a jumper wire across a hole in the PCB.
- : Used to indicate a test point with a component lead on foil side.
- : Used to indicate a test point with no test pin.
- : Used to indicate a test point with a test pin.

# DVD Main 1/8 Schematic Diagram

**\*1 NOTE:**  
Either IC461 or IC462 is used for DVD MAIN CBA UNIT.



# DVD Main 2/8 Schematic Diagram

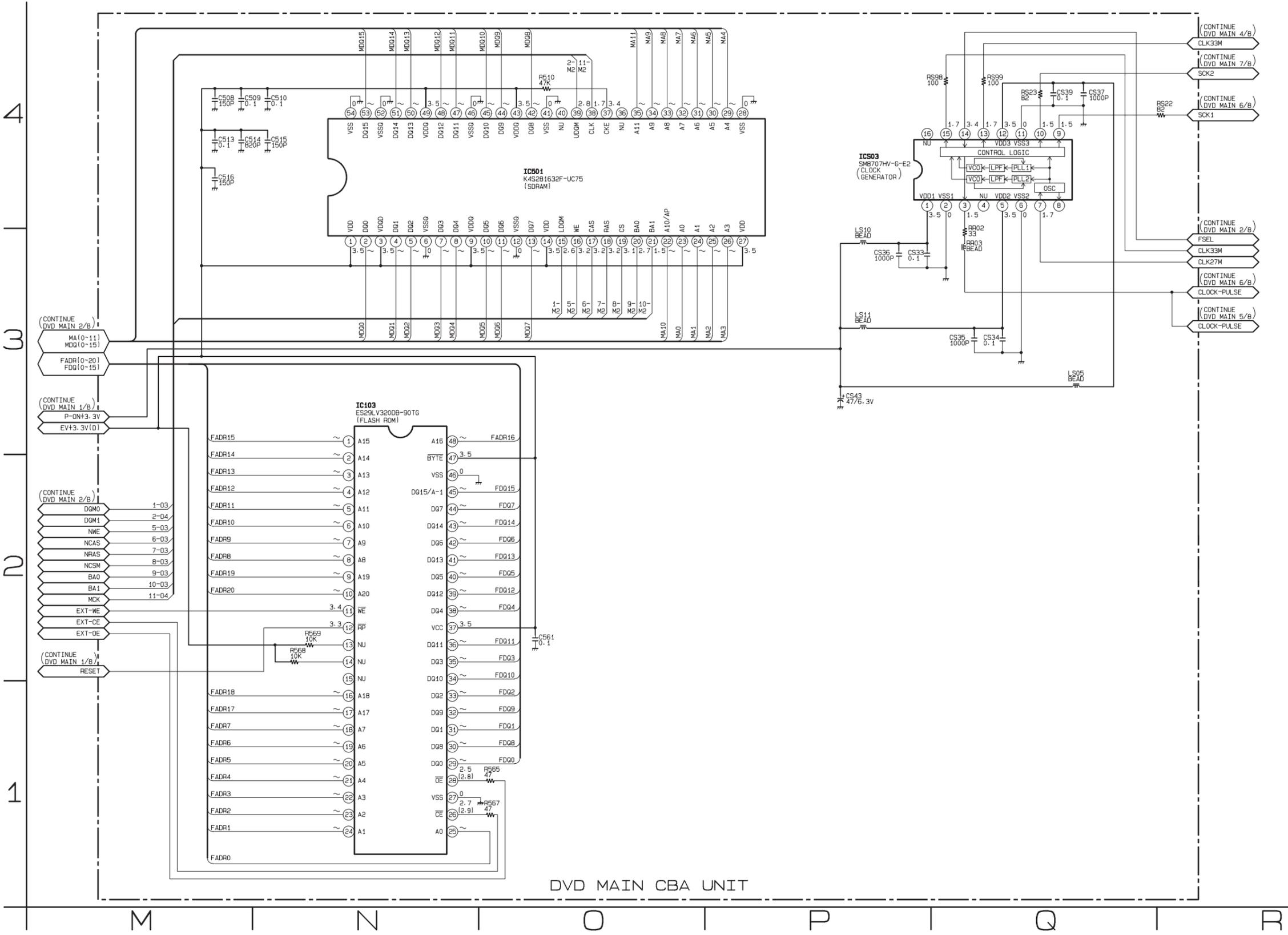


### IC101 Voltage Chart

~ : Voltage is not consistent    ---- : Not used    Unit : Volts

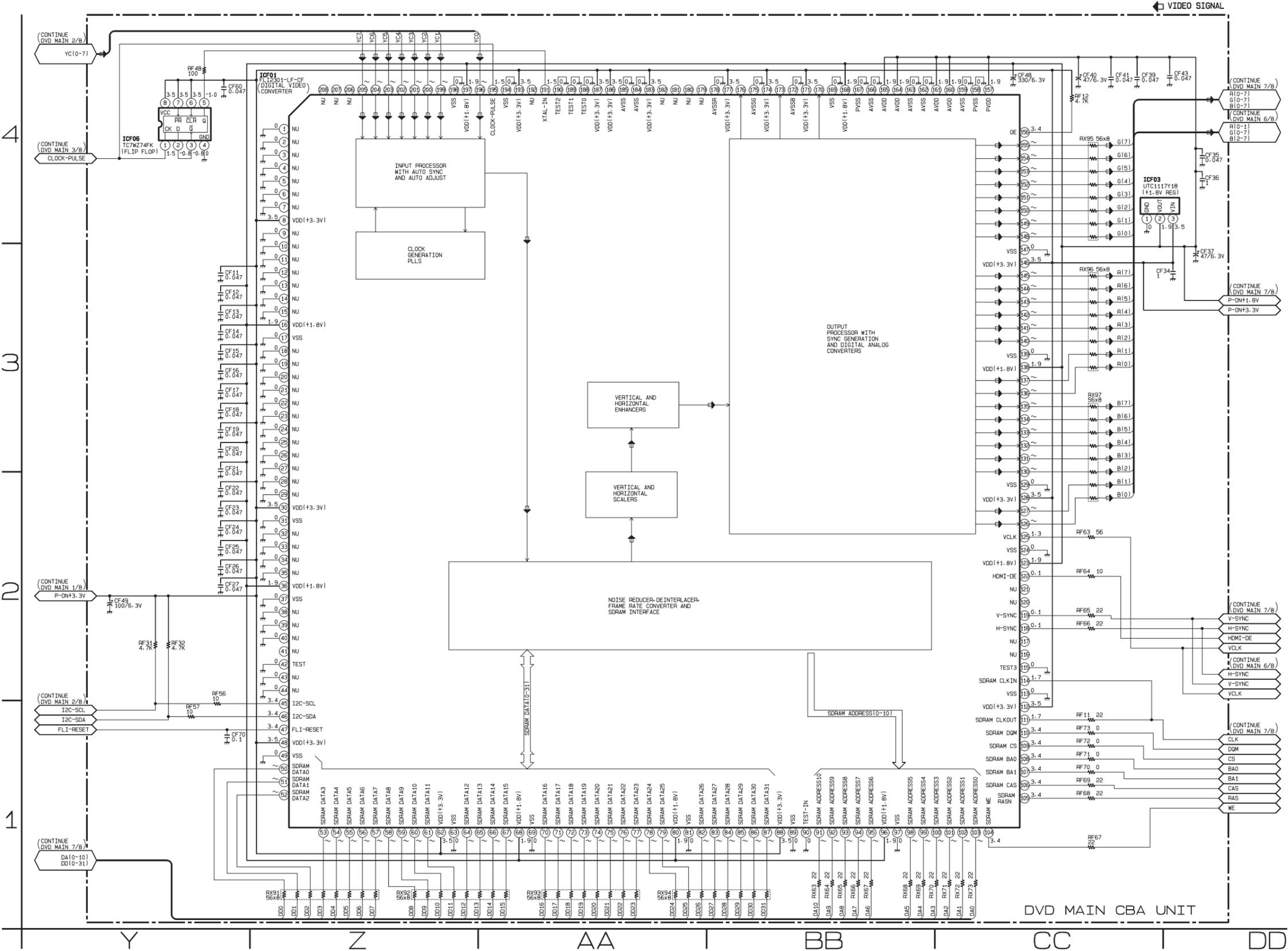
PIN.NO	PLAY	STOP																					
1	3.4	3.4	33	~	~	65	~	~	97	0.1	0.1	129	2.3	2.3	161	0	0	193	0.1	0.1	225	1.7	1.7
2	0	0	34	0	0	66	3.4	3.4	98	0.1	0.1	130	2.3	2.3	162	1.7	1.7	194	0.1	0.1	226	0	0
3	3.5	3.5	35	3.5	3.5	67	3.4	3.4	99	0.1	0.1	131	2.3	2.3	163	1.7	1.7	195	0.1	0.1	227	3.2	3.2
4	----	----	36	~	~	68	0	0	100	0.1	0.1	132	2.4	2.3	164	0	0	196	0	0	228	3.2	3.2
5	3.4	3.4	37	~	~	69	3.5	3.5	101	0.1	0.1	133	2.4	2.4	165	1.3	1.3	197	3.5	3.5	229	3.1	3.1
6	3.4	3.4	38	~	~	70	4.1	4.1	102	3.5	3.5	134	2.4	2.4	166	1.5	1.5	198	~	~	230	~	~
7	3.4	3.4	39	~	~	71	3.4	3.4	103	0.9	0.8	135	2.3	2.3	167	1.7	1.7	199	~	~	231	2.7	2.7
8	3.5	3.5	40	~	~	72	3.2	3.2	104	0	0	136	2.3	2.3	168	1.6	1.6	200	~	~	232	0	~
9	0	0	41	~	~	73	3.5	3.5	105	2.4	2.4	137	2.3	2.3	169	1.3	1.3	201	~	~	233	0	0
10	----	----	42	~	~	74	3.4	3.4	106	1.9	1.9	138	2.3	2.3	170	0.1	0.1	202	~	~	234	1.3	1.3
11	3.4	3.4	43	~	~	75	3.4	3.4	107	0.4	0.3	139	2.1	1.7	171	0.1	0.1	203	~	~	235	1.5	1.5
12	2.8	2.8	44	0	0	76	3.4	3.4	108	0	0	140	1.7	1.7	172	1.3	1.3	204	3.5	3.5	236	~	~
13	----	----	45	1.3	1.3	77	3.4	3.4	109	1.7	1.7	141	1.7	1.7	173	1.7	1.7	205	0	0	237	~	~
14	0	0	46	~	~	78	3.4	3.4	110	3.5	3.5	142	1.7	1.7	174	0	0	206	~	~	238	0	0
15	3.4	3.4	47	~	~	79	3.6	3.4	111	----	----	143	0	0	175	3.5	3.5	207	~	~	239	3.5	3.5
16	0	0	48	~	~	80	3.4	3.4	112	----	----	144	1.7	1.7	176	~	~	208	~	~	240	~	~
17	3.5	3.5	49	~	~	81	3.4	3.4	113	1.9	1.9	145	1.7	1.7	177	~	~	209	~	~	241	~	~
18	~	~	50	~	~	82	0	0	114	1.9	1.9	146	3.5	3.5	178	~	~	210	~	~	242	~	~
19	2.7	2.9	51	~	~	83	1.3	1.3	115	1.7	1.7	147	----	----	179	~	~	211	~	~	243	~	~
20	2.5	2.8	52	0	0	84	3.3	3.3	116	1.7	1.7	148	----	----	180	~	~	212	~	~	244	~	~
21	0	0	53	3.5	3.5	85	----	----	117	1.7	1.7	149	----	----	181	~	~	213	~	~	245	~	~
22	1.3	1.3	54	~	~	86	0.1	0.1	118	1.7	1.7	150	3.5	3.5	182	~	~	214	3.5	3.5	246	~	~
23	~	~	55	3.4	3.4	87	0	0	119	3.5	3.5	151	----	----	183	~	~	215	0	0	247	~	~
24	~	~	56	~	~	88	3.3	0	120	2.0	2.0	152	0	0	184	3.5	3.5	216	~	~	248	0	0
25	~	~	57	~	~	89	3.4	3.5	121	1.5	1.5	153	----	----	185	0	0	217	~	~	249	3.5	3.5
26	~	~	58	~	~	90	2.3	1.8	122	0	0	154	----	----	186	1.5	1.5	218	1.3	1.3	250	----	----
27	~	~	59	~	~	91	1.7	1.8	123	0.3	0.1	155	0	0	187	----	----	219	2.6	2.6	251	----	----
28	~	~	60	~	~	92	0	0	124	0.5	0	156	----	----	188	----	----	220	2.8	2.8	252	----	----
29	~	~	61	~	~	93	3.5	3.5	125	0.3	0.1	157	----	----	189	8.4	8.5	221	3.2	3.2	253	----	----
30	~	~	62	~	~	94	2.6	2.6	126	0	0	158	3.5	3.5	190	1.6	1.6	222	0	0	254	3.5	0.1
31	~	~	63	~	~	95	0.1	0.1	127	2.3	2.3	159	0	0	191	0.1	0.1	223	1.6	1.6	255	3.4	3.4
32	~	~	64	~	~	96	0.1	0.1	128	1.7	1.7	160	3.5	3.5	192	0.1	0.1	224	3.5	3.5	256	3.3	0.8

DVD Main 3/8 Schematic Diagram

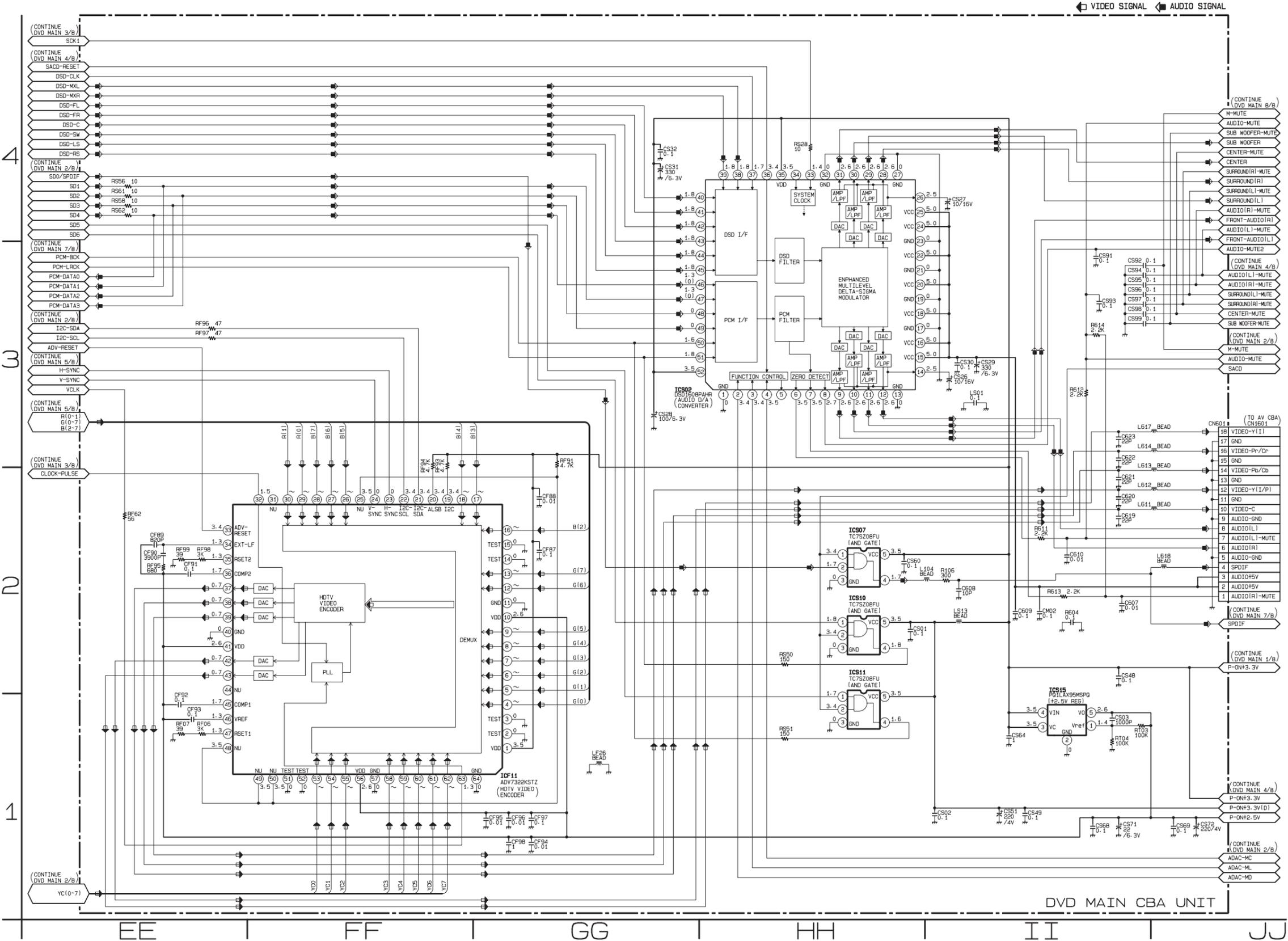




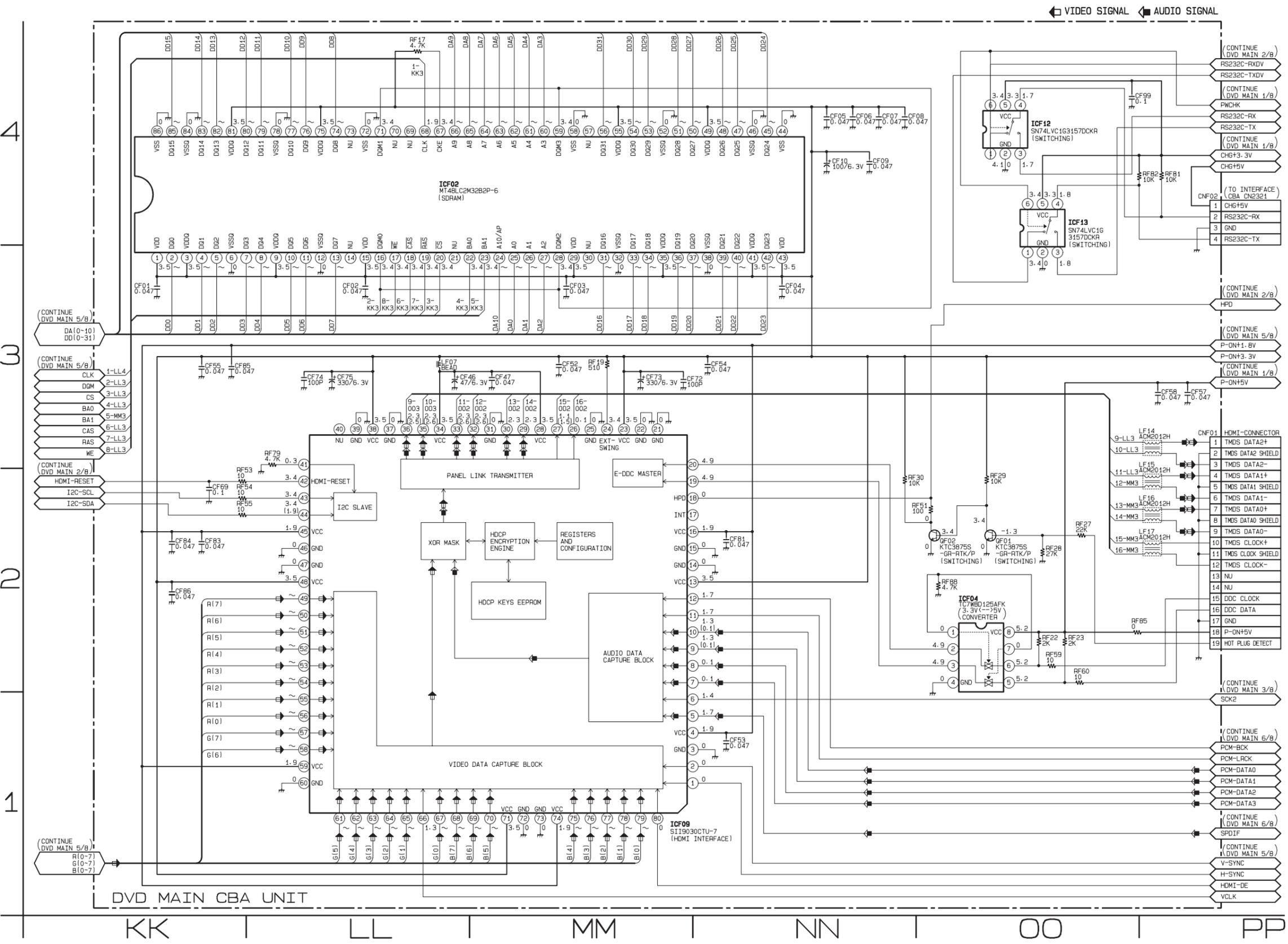
# DVD Main 5/8 Schematic Diagram



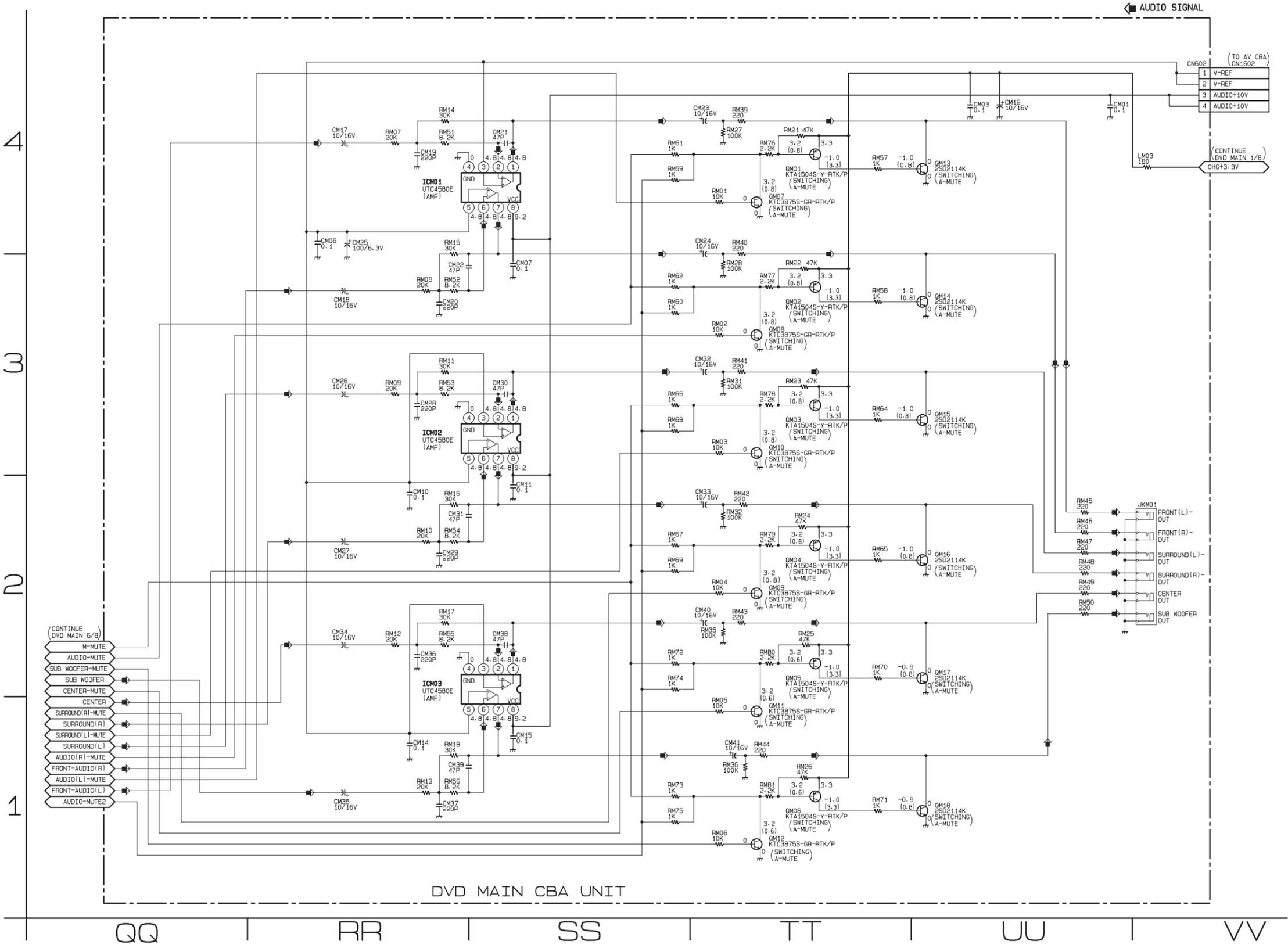
# DVD Main 6/8 Schematic Diagram



DVD Main 7/8 Schematic Diagram



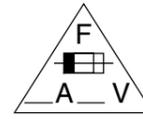
DVD Main 8/8 Schematic Diagram



# AV 1/2 Schematic Diagram

**CAUTION !**

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
 If Main Fuse (F1001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.  
 Otherwise it may cause some components in the power supply circuit to fail.

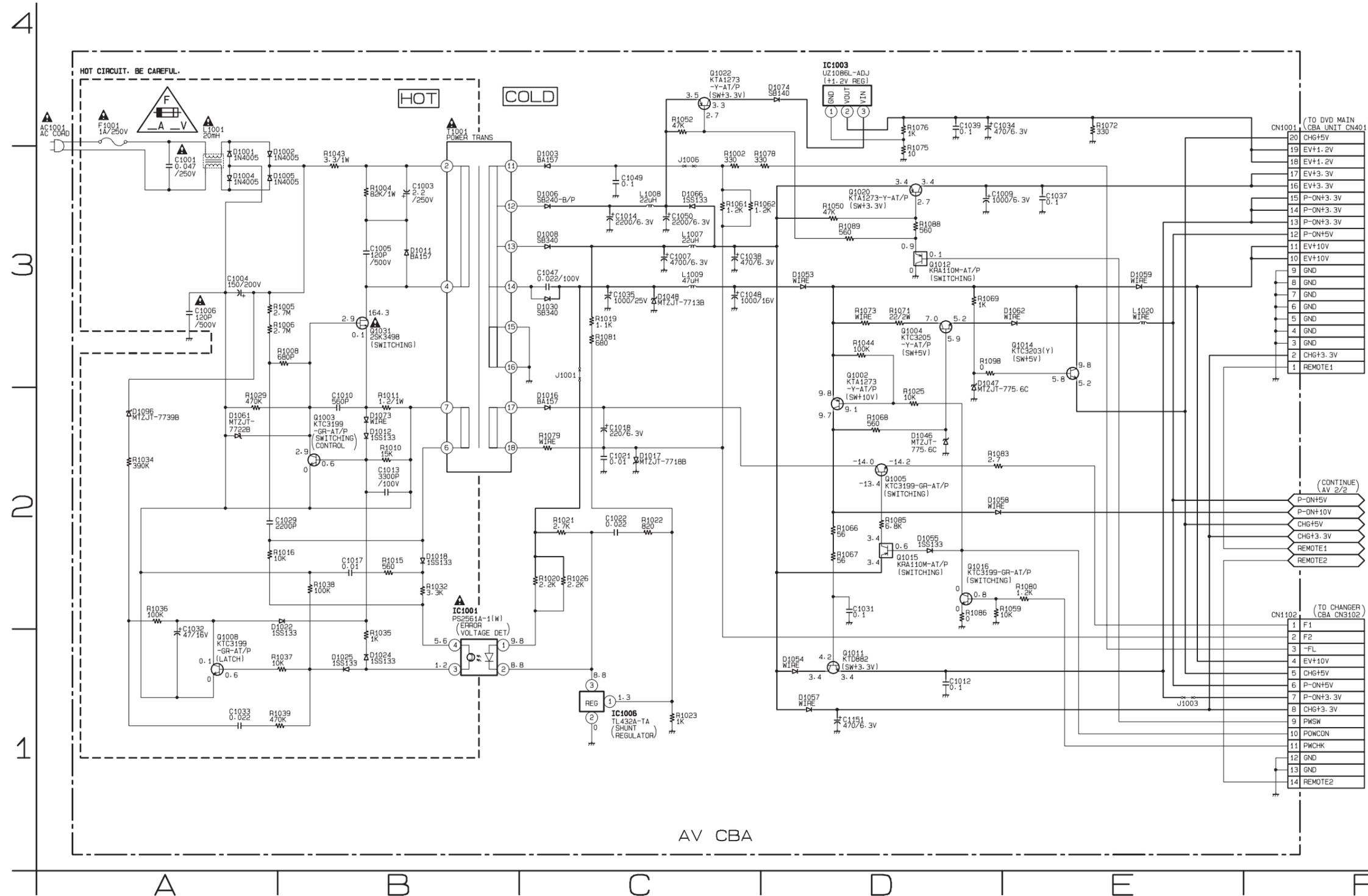


**CAUTION !**

For continued protection against fire hazard, replace only with the same type fuse.  
**ATTENTION :** Pour une protection continue les risques d'Incele n'utiliser que des fusible de même type.  
**Risk of fire-replace fuse as marked.**  
 "This symbol means fast operating fuse."  
 "Ce symbole représente un fusible à fusion rapide."

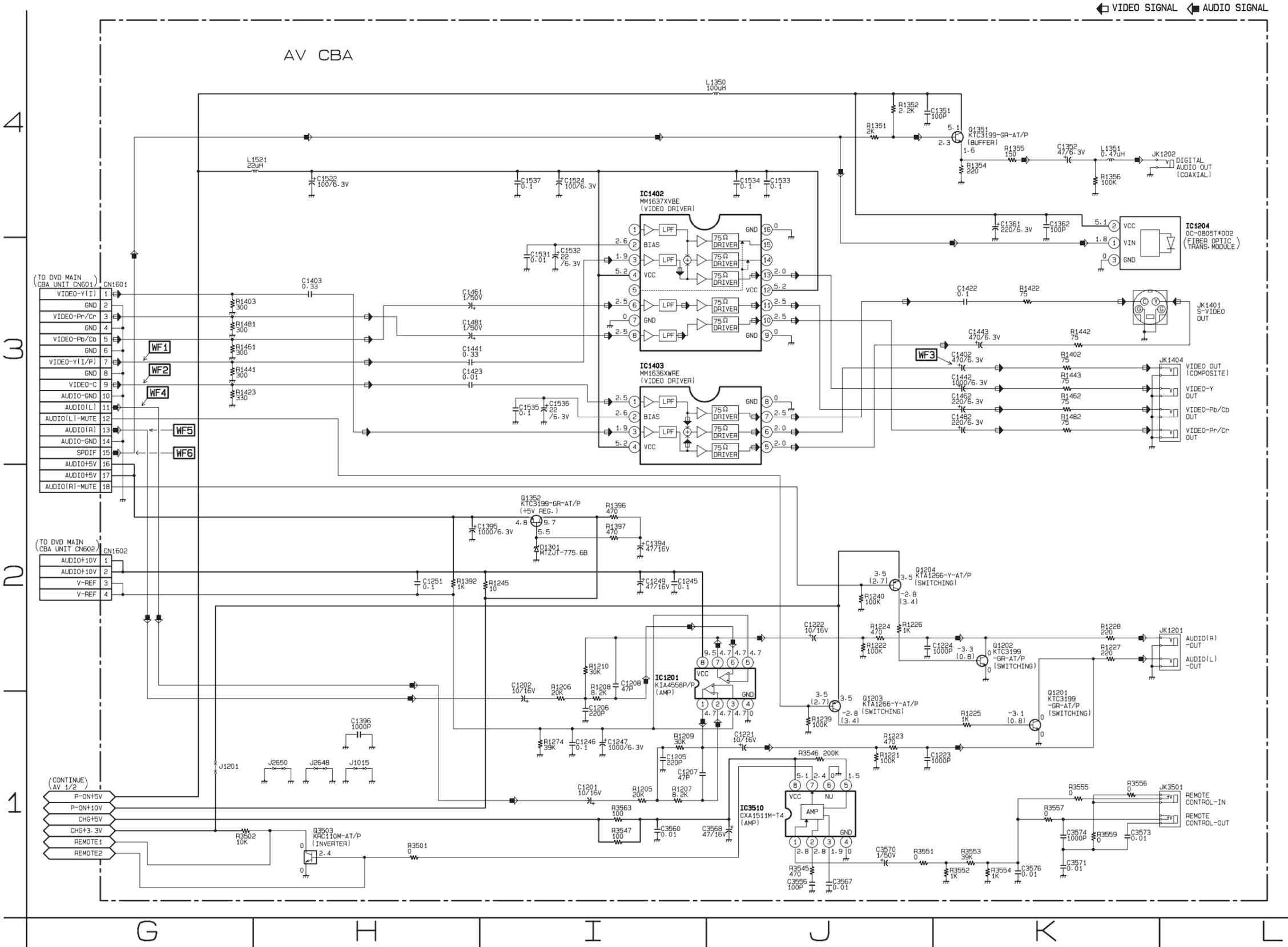
**NOTE:**

The voltage for parts in hot circuit is measured using hot GND as a common terminal.

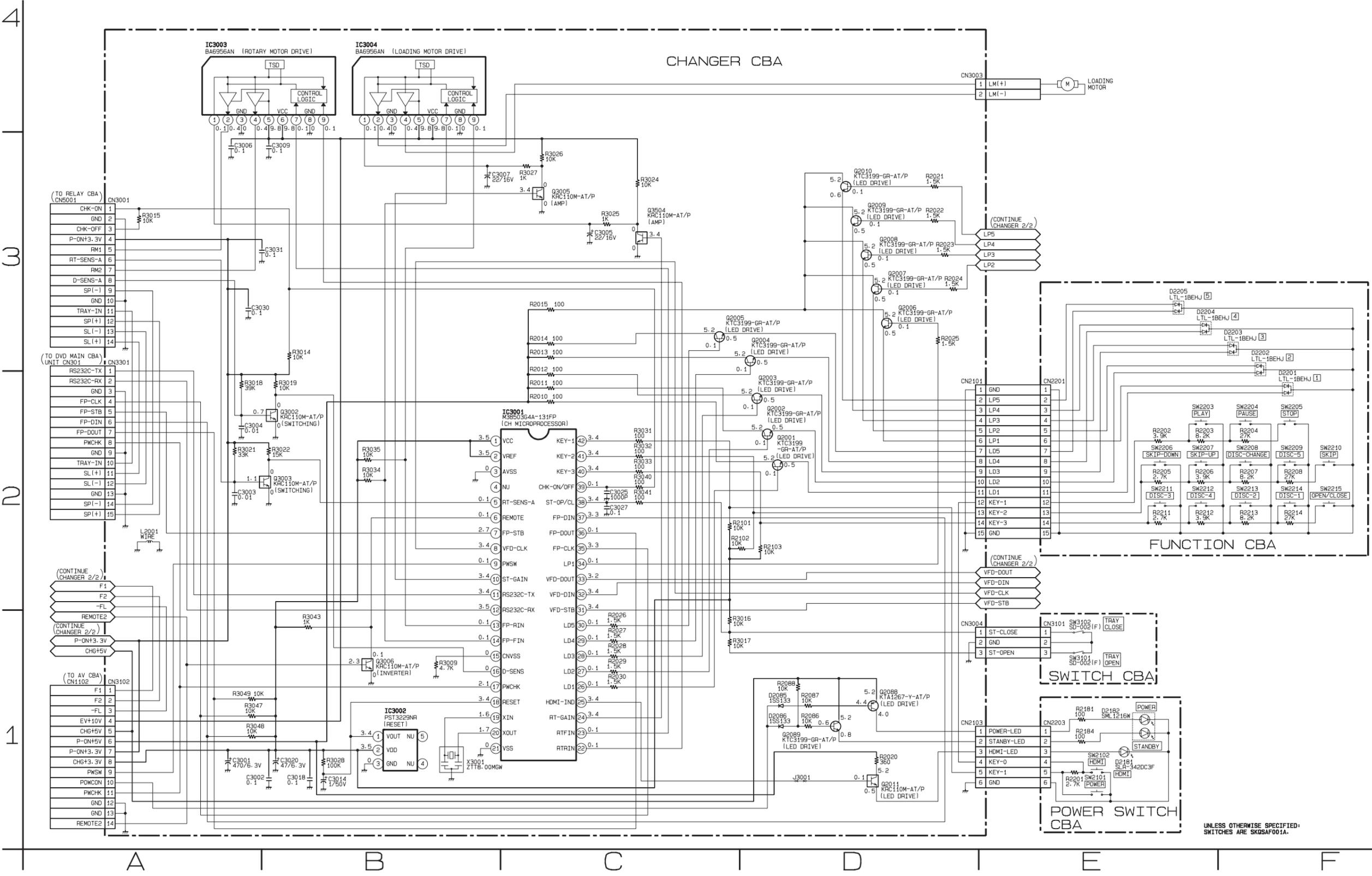


AV CBA

AV 2/2 Schematic Diagram

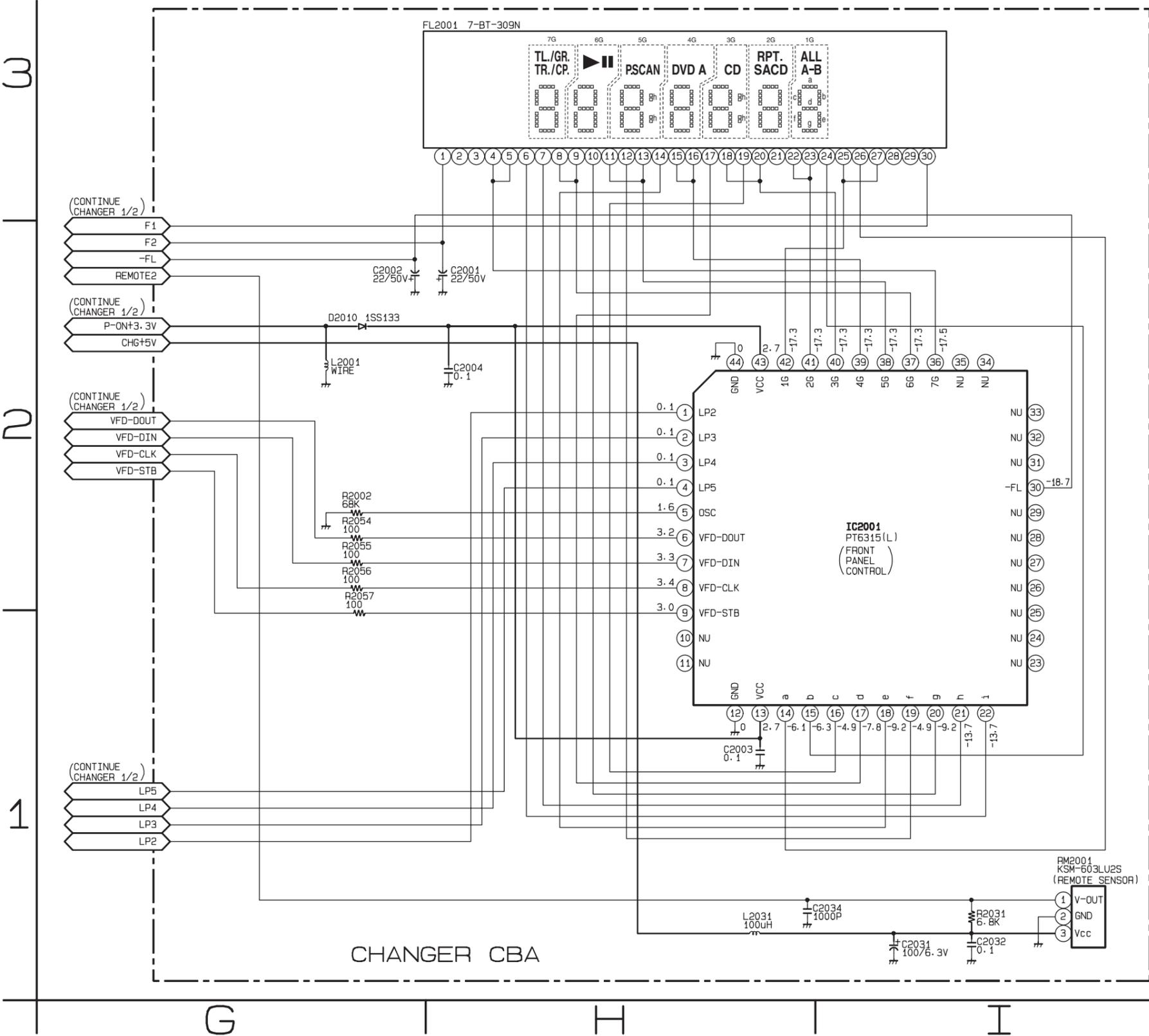


### Changer 1/2 , Function , Power Switch & Switch Schematic Diagram



UNLESS OTHERWISE SPECIFIED: SWITCHES ARE SKQSAF001A.

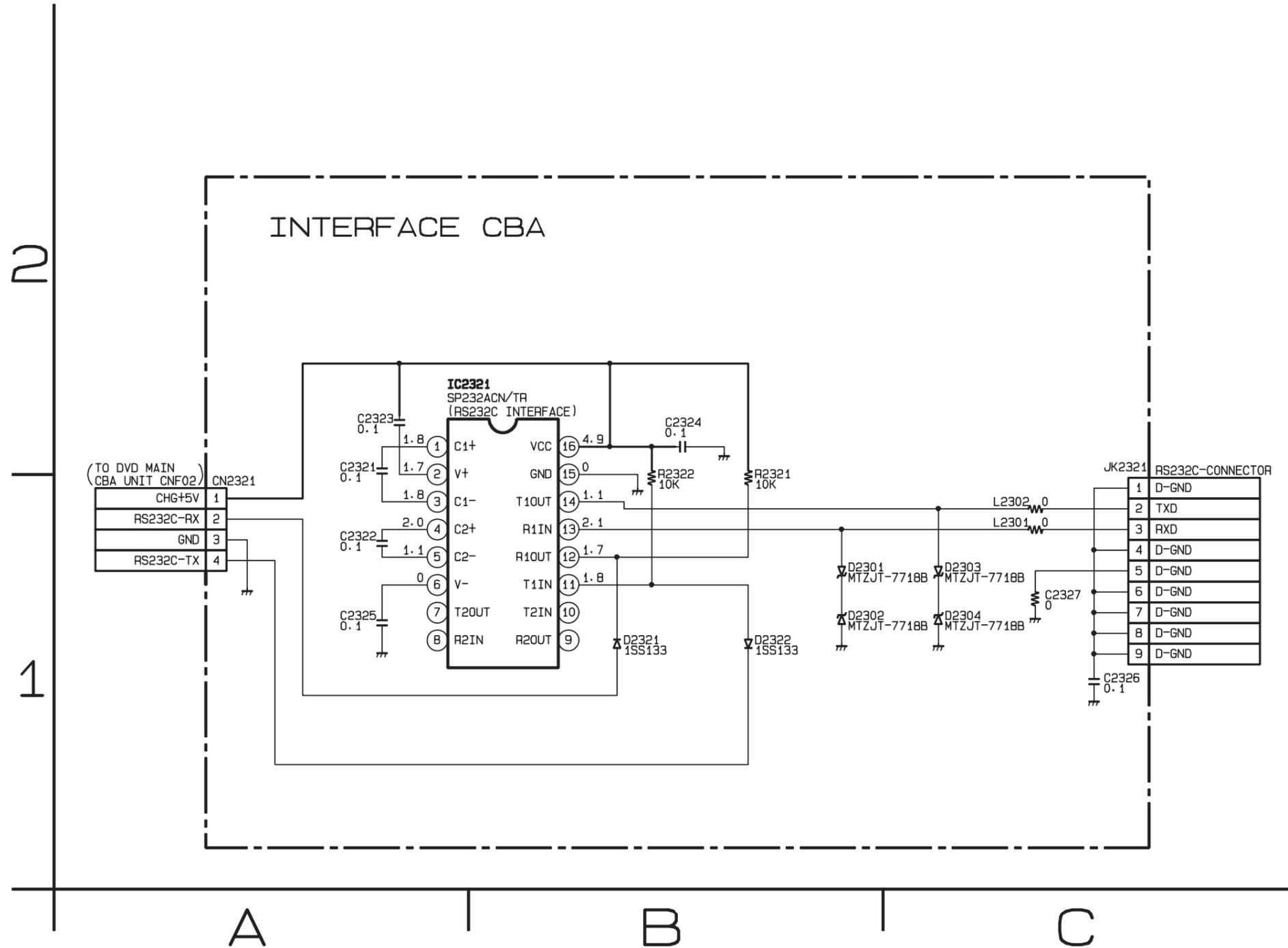
Changer 2/2 Schematic Diagram



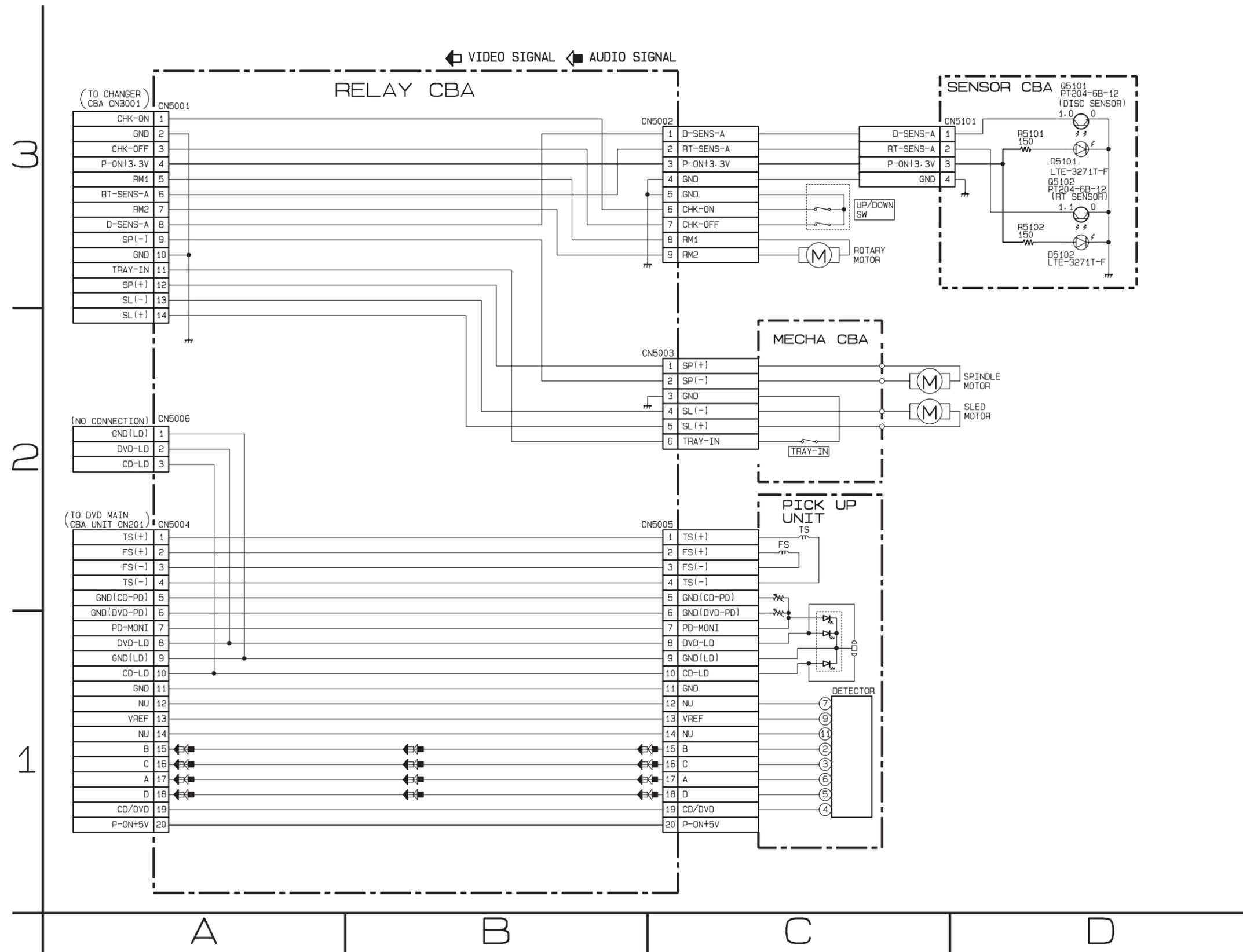
FL2001 MATRIX CHART

	7G	6G	5G	4G	3G	2G	1G
a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d
e	e	e	e	e	e	e	e
f	f	f	f	f	f	f	f
g	g	g	g	g	g	g	g
h	TL./GR. TR./CP.	▶	PSCAN	DVD A	h	RPT. SACD	ALL A-B
i							

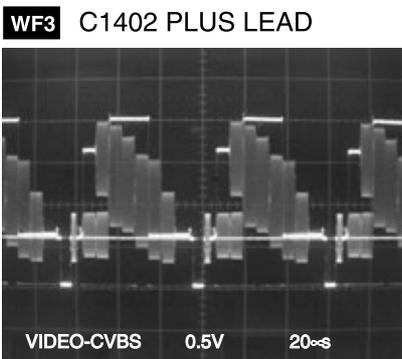
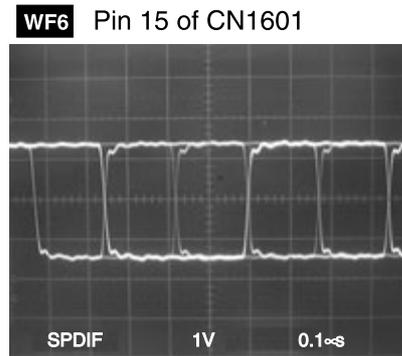
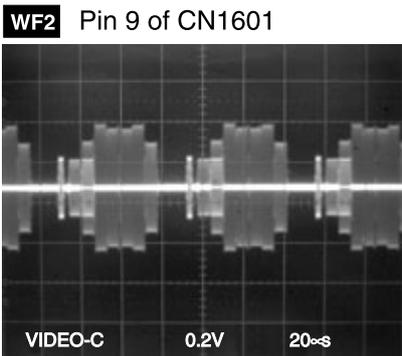
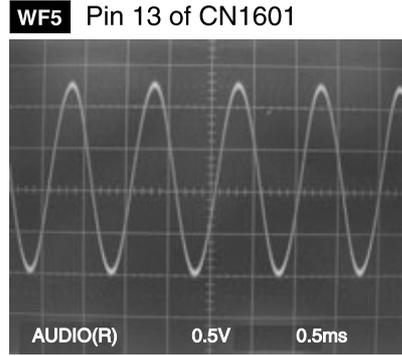
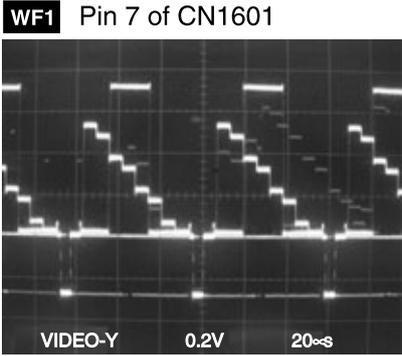
Interface Schematic Diagram



### Relay , Sensor , Mecha & Pick Up Unit Schematic Diagram



# WAVEFORMS



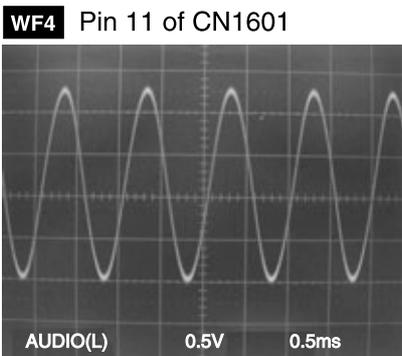
**NOTE:**

Measuring Disc :

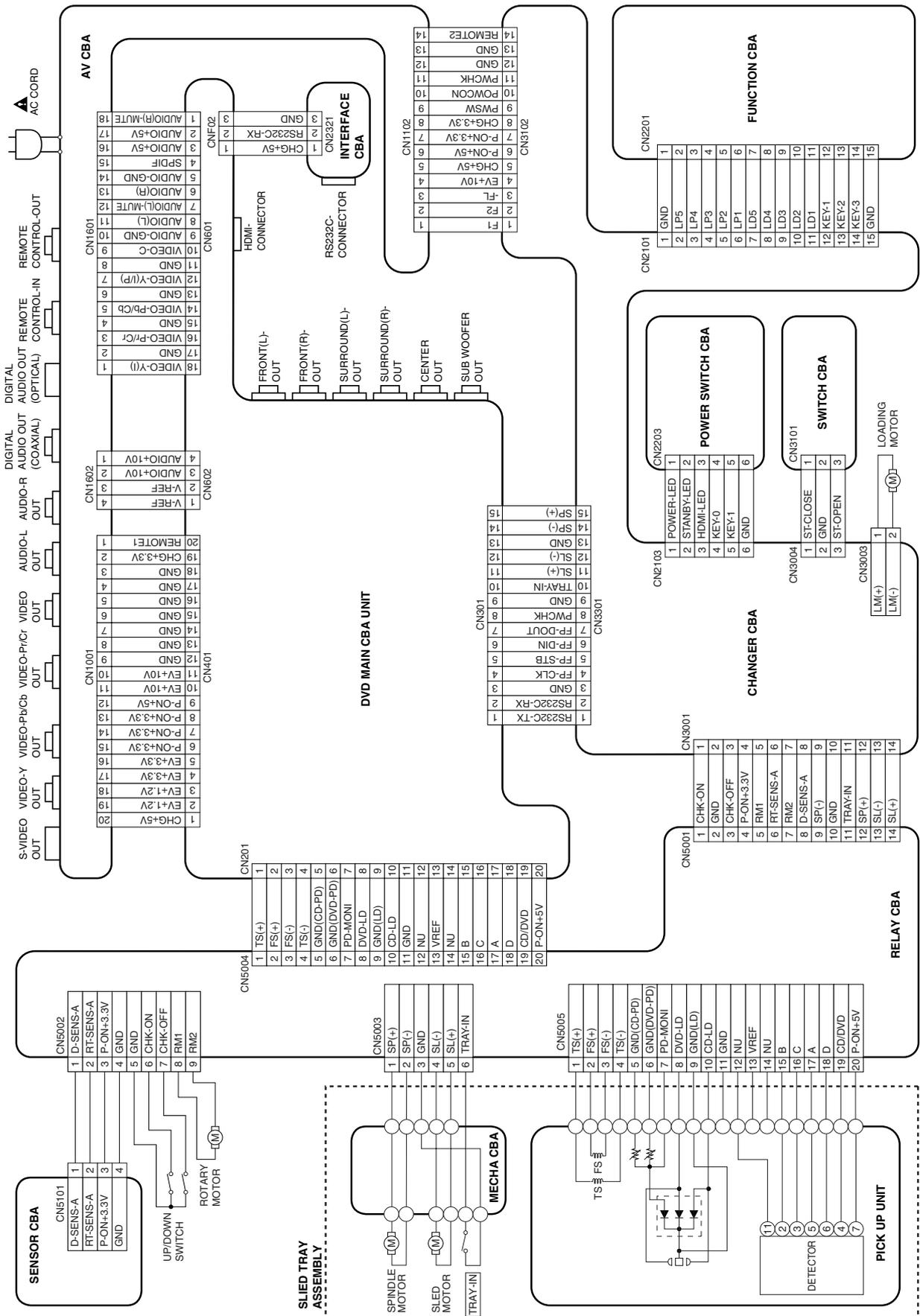
- △ DVD PLAY Disc : DVDT-S01
- CD PLAY Disc : TCD-784

Input Signal

VIDEO: 75% NTSC COLOR BAR  
AUDIO: 1KHz, 0dB



# WIRING DIAGRAM



## FIRMWARE RENEWAL MODE

1. Turn the power on and remove the disc on the tray.
2. To put the DVD player into version up mode, press [9], [8], [7], [6], and [SEARCH MODE] buttons on the remote control unit in that order. The tray will open automatically.

Fig. a appears on the screen and Fig. b appears on the VFD.

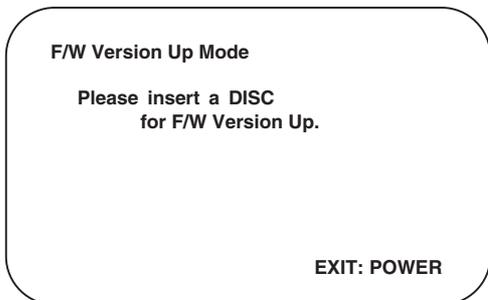


Fig. a Version Up Mode Screen



Fig. b VFD in Version Up Mode

The DVD player can also enter the version up mode with the tray open. In this case, Fig. a will be shown on the screen while the tray is open.

3. Load the disc for version up.
4. The DVD player enters the F/W version up mode automatically. Fig. c appears on the screen and Fig. d appears on the VFD.

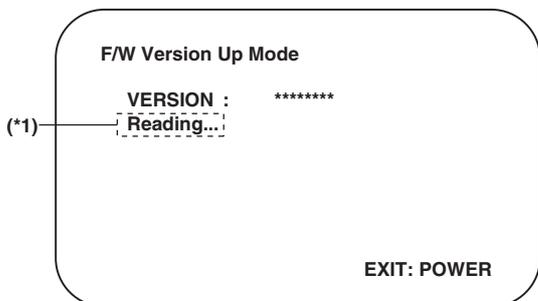


Fig. c Programming Mode Screen



Fig. d VFD in Programming Mode (Example)

The appearance shown in (\*1) of Fig. c is described as follows:

No.	Appearance	State
1	Reading...	Sending files into the memory
2	Erasing...	Erasing previous version data
3	Programming...	Writing new version data

5. After programming is finished, the tray opens automatically. Fig. e appears on the screen and the checksum in (\*2) of Fig. e appears on the VFD. (Fig. f)

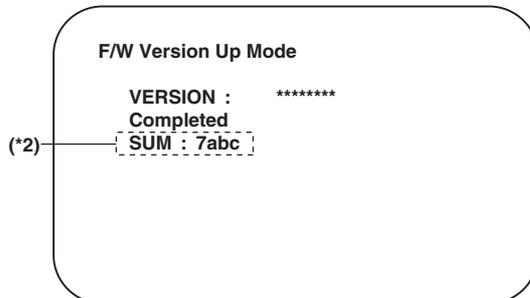


Fig. e Completed Program Mode Screen



Fig. f VFD upon Finishing the Programming Mode (Example)

At this time, no buttons is available.

6. Unplug the AC cord from the AC outlet. Then plug it again.
7. Turn the power on by pressing [POWER] button and the tray will close.
8. Press [1], [2], [3], [4], and [DISPLAY] buttons on the remote control unit in that order. Fig. g appears on the screen.

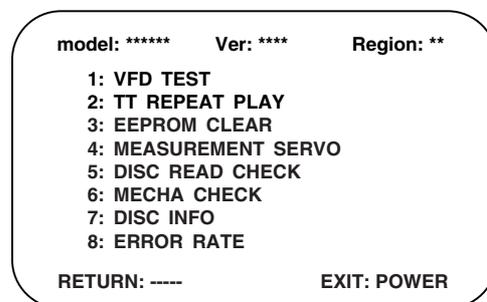


Fig. g

9. Press [3] button on the remote control unit. Fig. h appears on the screen.

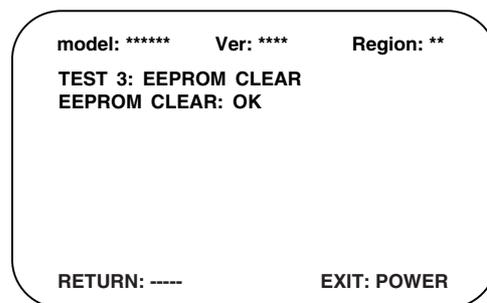
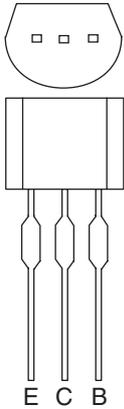


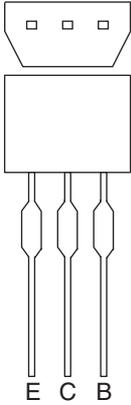
Fig. h

10. To exit this mode, press [POWER] button.

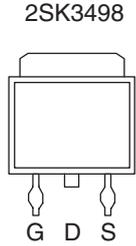
# LEAD IDENTIFICATIONS



2SC1815-(GR)(TE2 F T)  
 2SA966-Y(TE6 F M)  
 KTC3205-Y-AT/P  
 KTA1273-Y-AT/P

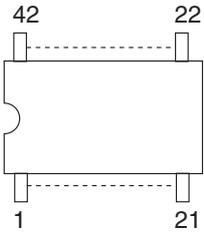


2SA1015-Y(TE2 F T)  
 KRA110M-AT/P  
 KRC110M-AT/P  
 KTA1266-Y-AT/P  
 KTA1267-Y-AT/P  
 KTC3199-GR-AT/P

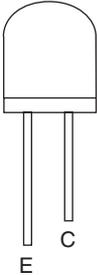


2SK3498

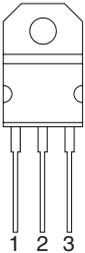
M38503G4A-131FP



PT204-6B-12

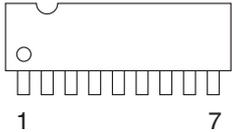


LD1117V  
 UZ1086L-ADJ

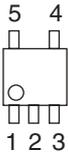


1: Vin  
 2: Vo  
 3: GND

BA6956AN



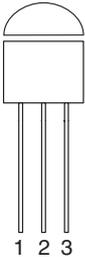
PST3229NR



KIA4558P/P  
 RC4580IP  
 UTC4558  
 CXA1511M-T4  
 MM1636XWRE

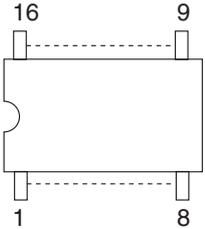


KIA2431AP-AT/P  
 TL432A-TA

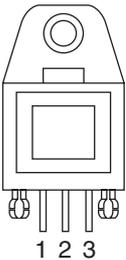


1: R  
 2: A  
 3: K

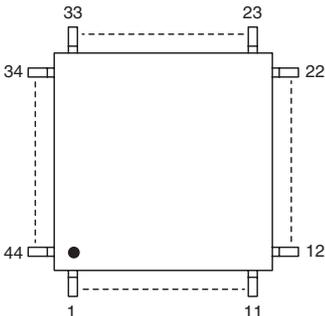
ADM232AARN  
 SP232ACN/TR



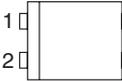
OC-0805T\*002



PT6315(L)



EL817(B,C)  
 LTV-817C-F  
 PS2561A-1(W)



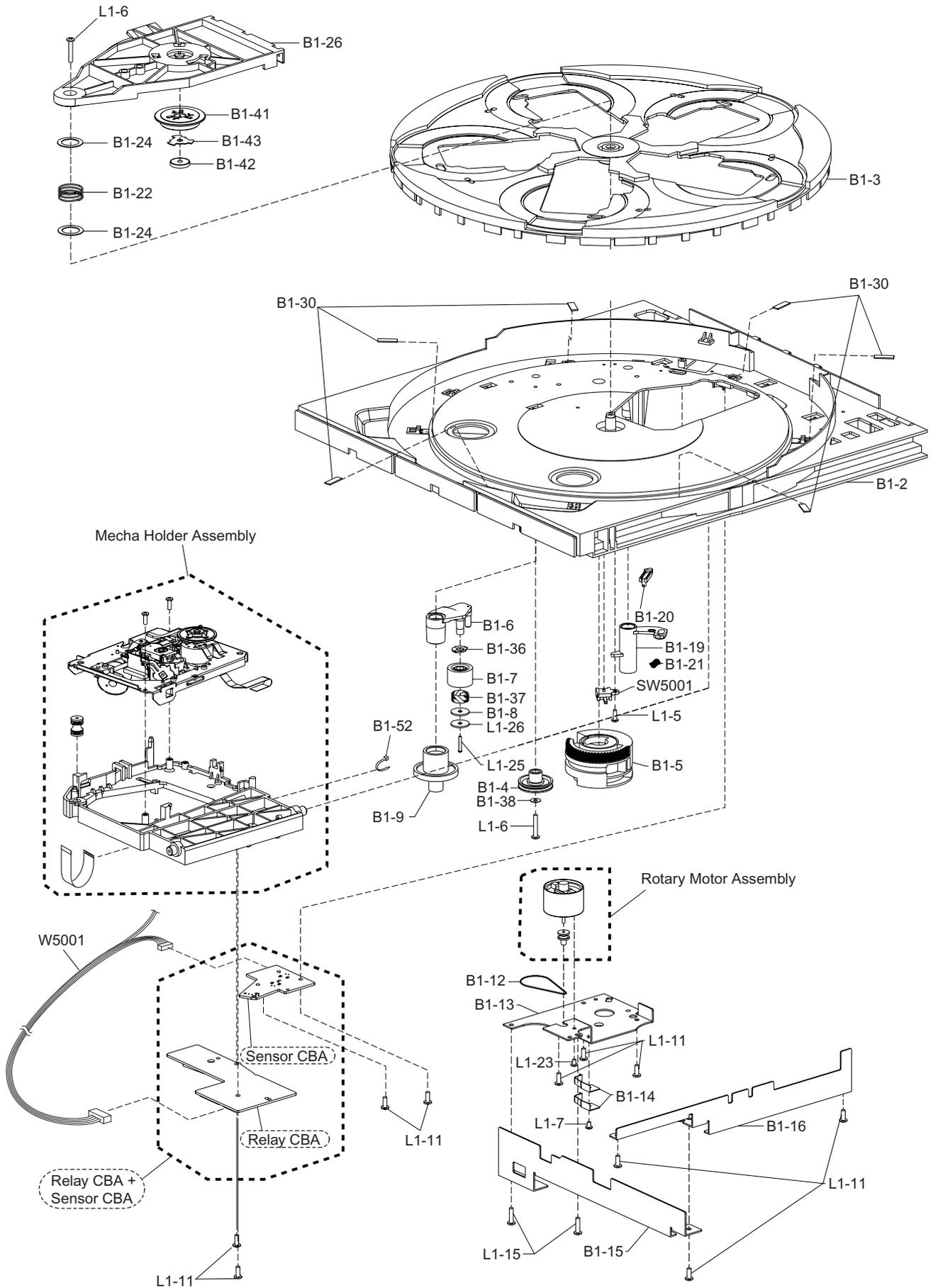
1: Anode  
 2: Cathode  
 3: Emitter  
 4: Collector

**Note:**

- A: Anode
- K: Cathode
- E: Emitter
- C: Collector
- B: Base
- R: Reference
- 1 VCC
- 2 GND
- 3 OUT



# Cabinet 2



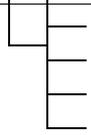
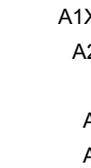
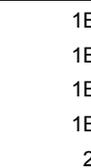
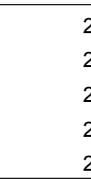
## PARTS LIST OF EXPLODED VIEW (CABINET1)

\* 本表に記載されている部品は、補修用部品のため製品に使用している部品とは一部、形状、寸法などが異なる場合があります。

\* The parts listed below are for maintenance only, might differ from the parts used in the unit in appearances or dimensions.

\* "nsp" 印の部品は常時在庫していませんので供給に長時間を要することがあります。場合によっては、供給をお断りする場合があります。

\* Part indicated with the mark "nsp" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.

	Ref. No.	nsp	Part No.	Part Name	Remark		Q'ty	New
			00D 9H2 6000 815	DVD MAIN CBA UNIT	N79D8KUP		1	*
			00D 9H2 6000 814	CHG CBA	1VSA14978		1	*
				CHANGER CBA	-			
				AV CBA	-			
				FUNCTION CBA	-			
				POWER SW CBA	-			
				SWITCH CBA	-			
				INTERFACE CBA	-			
	A1X **		00D 9H2 6000 858 **	FRONT ASSEMBLY	1VM222833C		1	*
	A2 **		00D 9H2 6000 859 **	TRAY PANEL ASSEMBLY	1VM425515		1	
	A3		00D 9H2 6000 323	FOOT	0VM406940A		2	
	A15		00D 9H2 6000 801	CHASSIS	0VM101293H		1	*
	A16		00D 9H2 6000 734	TOP COVER	0VM203048C		1	
	A17 **		00D 9H2 6000 856 **	REAR PANEL	1VM222798B		1	*
	1B1		00D 9H2 6000 803	SLIDE TRAY ASSEMBLY	N79F0KVC		1	*
				MECHANICAL PARTS	-			
				IDLER ARM ASSEMBLY	-			
				CHUCK ARM ASSEMBLY	-			
				DRIVE MECHA ASSEMBLY	-			
				MECHA CBA	-			
				TRAY CBA	-			
	1B4		00D 9H2 6000 328	LOADING PULLEY	0VM304636		1	
	1B11		00D 9H2 6000 329	MOTOR PULLEY	21P7048		1	
	1B12		00D 9H2 6000 330	BELT L	0RM400160		1	
	1B31		00D 9H2 6000 331	SLIDE TRAY GEAR(B)	0VM304632		1	
	1B32		00D 9H2 6000 332	SLIDE TRAY GEAR(A)	0VM304631		1	
	1B33		00D 9H2 6000 333	TRAY GUIDE SPRING	0VM412360		1	
	2B1		00D 9H2 6000 804	TRAY GUIDE(L)	0VM000136N		1	*
	2B2		00D 9H2 6000 805	TRAY GUIDE(R)	0VM000137R		1	*
	2B3		00D 9H2 6000 336	BRACKET(TOP)	0VM203160		1	
	2B6		00D 9H2 6000 337	STOPPER BRACKET	0VM411941		2	
	2B7		00D 9H2 6000 806	HOLDER F.I.P. 2	0VM407372D		1	*
	2B9		00D 9H2 6000 807	D SUB HOLDER	1VM323515		1	*
	2B11		00D 9H2 6000 416	MAIN PCB HOLDER	1VM323464		1	
	2B25		-	RUBBER SHEET	0VM415921		3	
	D-3		00D 9H2 6000 715	DC MINI MOTORS M31E-1(R-14 7448)	MMDZB4EMM003		1	
	W3002		00D 9H2 6000 429	MOTOR CABLE MOTOR CABLE	WX1E8620-902		1	
	W3003		00D 9H2 6000 808	WIRE ASSEMBLY MAIN TO RELAY FFC20P 250MM 20PIN	WX1E8700-003		1	*
	W3004		00D 9H2 6000 809	WIRE ASSEMBLY CONT TO RELAY FFC14P 320MM 14PIN	WX1E8700-009		1	*
<b>SCREWS</b>								
	1L016		00D 9H2 6000 351	SCREW TAP TIGHT WASHER+ P-TIGHT	GCJP3080		1	
	1L017		00D 9H2 6000 352	SCREW P-TIGHT 3X12 WASHER HEAD+	GCJP3120		1	
	1L023		00D 9H2 6000 353	SCREW SEMS M2.6X4 PAN HEAD+	CPJ39040		1	
	2L011		-	SCREW C-TIGHT M3X6	0VM412937A		7	

	Ref. No.	nsp	Part No.	Part Name	Remark		Q'ty	New
	2L012		-	SCREW TAP TIGHT M3X5 BIND HEAD+BLK NI	GBHC3050		4	
	2L021		-	SCREW TAP TIGHT M3X5 BIND HEAD+BLK NI	GBHC3050		6	
	2L031		-	SCREW P-TIGHT M3X8 BIND HEAD+	GBJP3080		2	
	2L032		-	SCREW P-TIGHT M3X8 BIND HEAD+	GBJP3080		4	
	2L033		-	SCREW B-TIGHT M3X8 BIND HEAD+	GBHB3080		13	
	2L041		-	SCREW P-TIGHT M3X6 BIND HEAD+	GBJP3060		3	
	2L043		-	SCREW TAP TIGHT M3X5 BIND HEAD+BLK NI	GBHC3050		1	
	2L051		-	SCREW S-TIGHT 3X8	0VM413320A		2	
	2L081		-	HEXAGON SPACER	1VM424730		2	
	2L103		-	SCREW P-TIGHT M3X8 BIND HEAD+	GBJP3080		1	

\*\* : This part is compatible with an old part. Please use a change part after stock of an old part disappeared.



## PARTS LIST OF EXPLODED VIEW OF SLIDE MECHANISM UNIT (CABINET2)

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\* The parts listed below are for maintenance only, might differ from the parts used in the unit in appearances or dimensions.

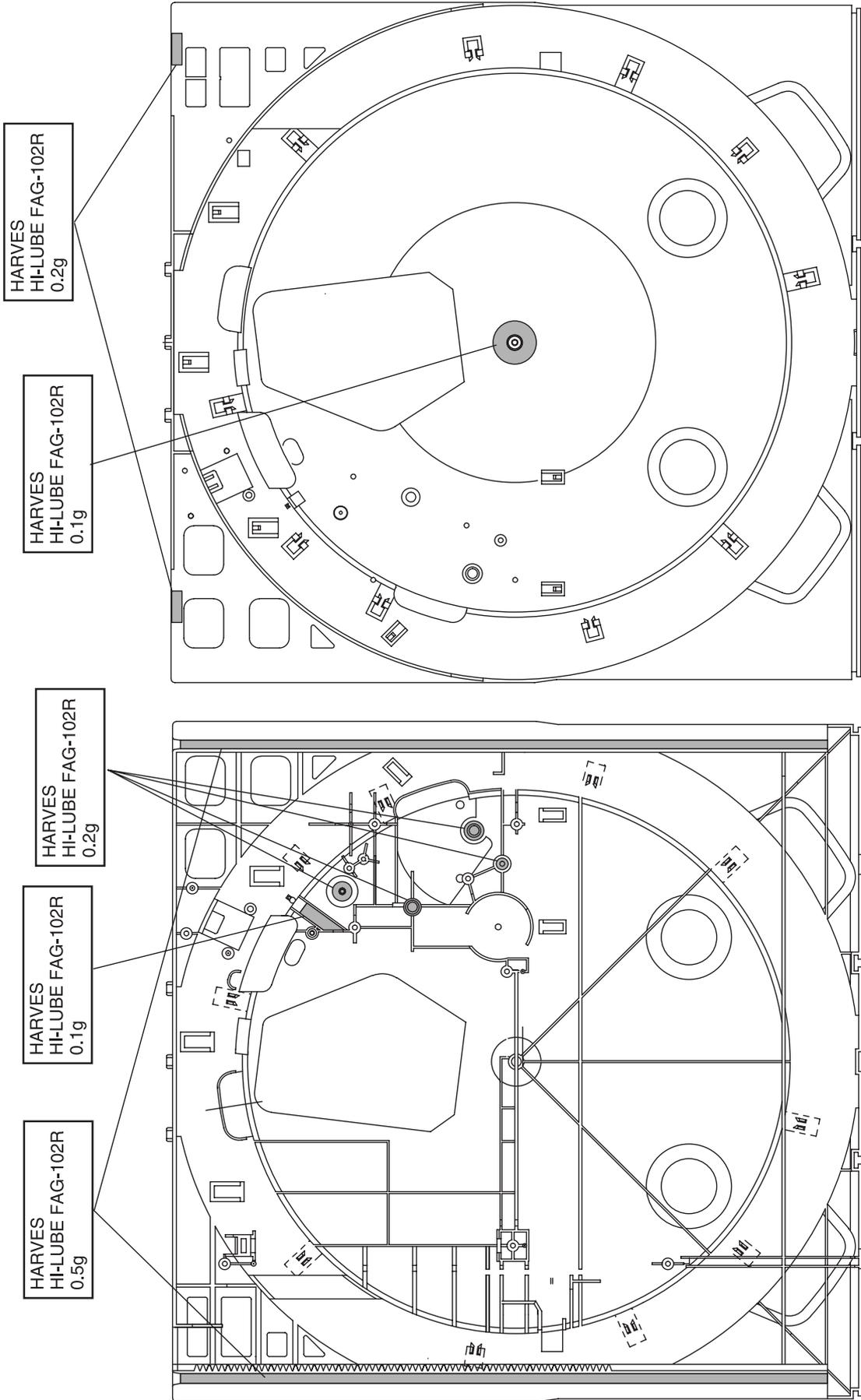
\* "nsp" 印の部品は常時在庫していませんので供給に長時間を要することがあります。場合によっては、供給をお断りする場合があります。

\* Part indicated with the mark "nsp" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.

Ref. No.	nsp	Part No.	Part Name	Remark	Q'ty	New
		00D 9H2 6000 852	MECHA HOLDER ASSEMBLY	1VSA15023	1	*
		00D 9H2 6000 855	ROTARY MOTOR ASSEMBLY	1VSA15769	1	*
		00D 9H2 6000 853	RELAY CBA + SENSOR CBA (Electrical Parts)	1VSA15375	1	*
			RELAY CBA	-		
			SENSOR CBA	-		
B1-2		00D 9H2 6000 816	SLIDE TRAY N79F0FVC	OVM000164M	1	*
B1-4		00D 9H2 6000 328	LOADING PULLEY	OVM304636	1	
B1-5		00D 9H2 6000 818	MOTION GEAR	OVM203026	1	*
B1-6		00D 9H2 6000 819	IDLER ARM	OVM304637	1	*
B1-7		00D 9H2 6000 820	IDLER GEAR	OVM304638	1	*
B1-8		00D 9H2 6000 821	WASHER	ORM401740	1	*
B1-9		00D 9H2 6000 822	ROTARY TRAY GEAR	OVM304635	1	*
B1-12		00D 9H2 6000 330	BELT L	ORM400160	1	
B1-13		00D 9H2 6000 823	GEAR PLATE	OVM304639	1	*
B1-14		00D 9H2 6000 824	PLATE SPRING(B)	OVM412343B	2	*
B1-15		00D 9H2 6000 825	PLATE HOLDER 2	OVM305255	1	*
B1-16		00D 9H2 6000 826	PLATE HOLDER 3	OVM305243	1	*
B1-19		00D 9H2 6000 827	STOP LEVER	OVM304633	1	*
B1-20		00D 9H2 6000 828	ROTARY STOPPER	OVM304634B	1	*
B1-21		00D 9H2 6000 829	STOPPER SPRING	OVM411642A	1	*
B1-22		00D 9H2 6000 830	ROTARY TRAY SPRING	OVM411643B	1	*
B1-24		00D 9H2 6000 831	ROTARY TRAY WASHER B	OVM411646	2	*
B1-26		00D 9H2 6000 832	CHUCK ARM	OVM203407K	1	*
B1-30		00D 9H2 6000 833	SLIDER	OVM412308A	6	*
B1-36		00D 9H2 6000 835	IDLER PAD	OVM411644A	1	*
B1-37		00D 9H2 6000 836	SPRING	ORM401741	1	*
B1-38		00D 9H2 6000 837	WASHER	ORM401755	1	*
B1-41		00D 9H2 6000 838	CLAMPER	OVM202842	1	*
B1-42		00D 9H2 6000 839	MAGNET	OVM409759	1	*
B1-43		00D 9H2 6000 840	YOKE	OVM411036	1	*
B1-52		00D 9H2 6000 841	LEAD CLAMPER GT-80M	XF00080HL001	1	*
SW5001		00D 9H2 6000 850	DETECTOR SWITCH SSCF210300	SSC0102AL001	1	*
W5001		00D 9H2 6000 851	MECHA CABLE MECHA CABLE	WX1E7960-919	1	*
<b>SCREWS</b>						
L1-5		00D 9H2 6000 842	SCREW P-TIGHT M2.6X8 BIND HEAD+	GBJP9080	1	*
L1-6		00D 9H2 6000 843	SCREW P-TIGHT 3X18 WASHER HEAD+	GCJP3180	2	*
L1-7		00D 9H2 6000 844	SCREW B-TIGHT M2.6X4 BIND+	GBJB9040	1	*
L1-11		00D 9H2 6000 845	SCREW P-TIGHT M3X8 BIND HEAD+	GBJP3080	10	*
L1-15		00D 9H2 6000 846	SCREW P-TIGHT 3X12 WASHER HEAD+	GCJP3120	2	*
L1-23		00D 9H2 6000 847	SCREW SEMS M2.6X4 PAN HEAD+	CPJ39040	1	*
L1-25		00D 9H2 6000 848	SCREW B-TIGHT WASHER HEAD M2X12 WASHER HEAD+	GCJB2120	1	*
L1-26		00D 9H2 6000 849	WASHER 14X3.2XT1	WPJ3141	1	*

# POINTS OF GREASING

## 1. SLIDE TRAY



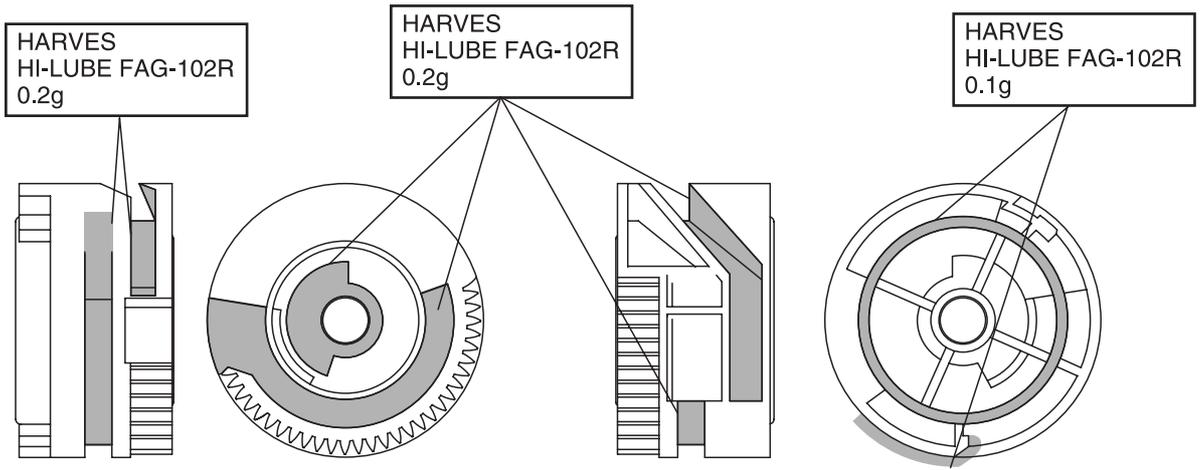
TOP SURFACE

BOTTOM SURFACE

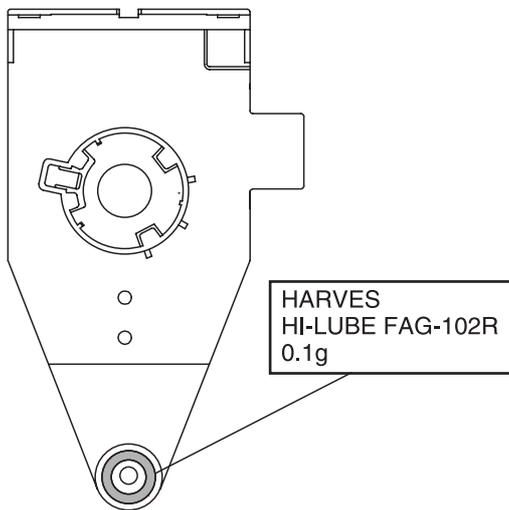
NOTE : Apply some grease to the Fill Color position.

Chief Ingredient of FAG-102R  
- Hydrocarbon synthetic oil  
- Lithium soap  
- Additives

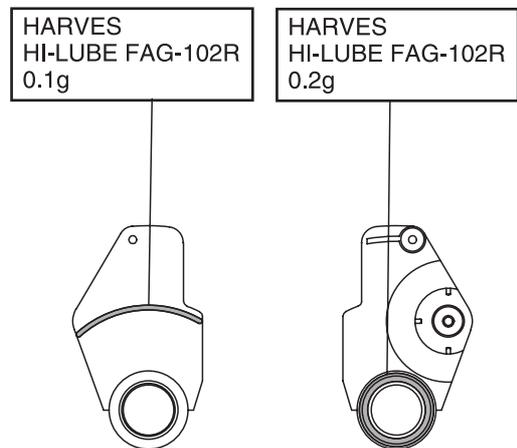
## 2. MOTION GEAR



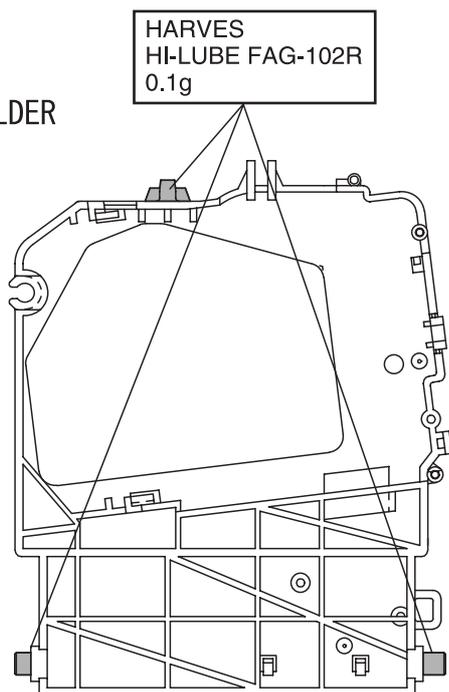
## 3. CHUCK ARM



## 4. IDLER ARM



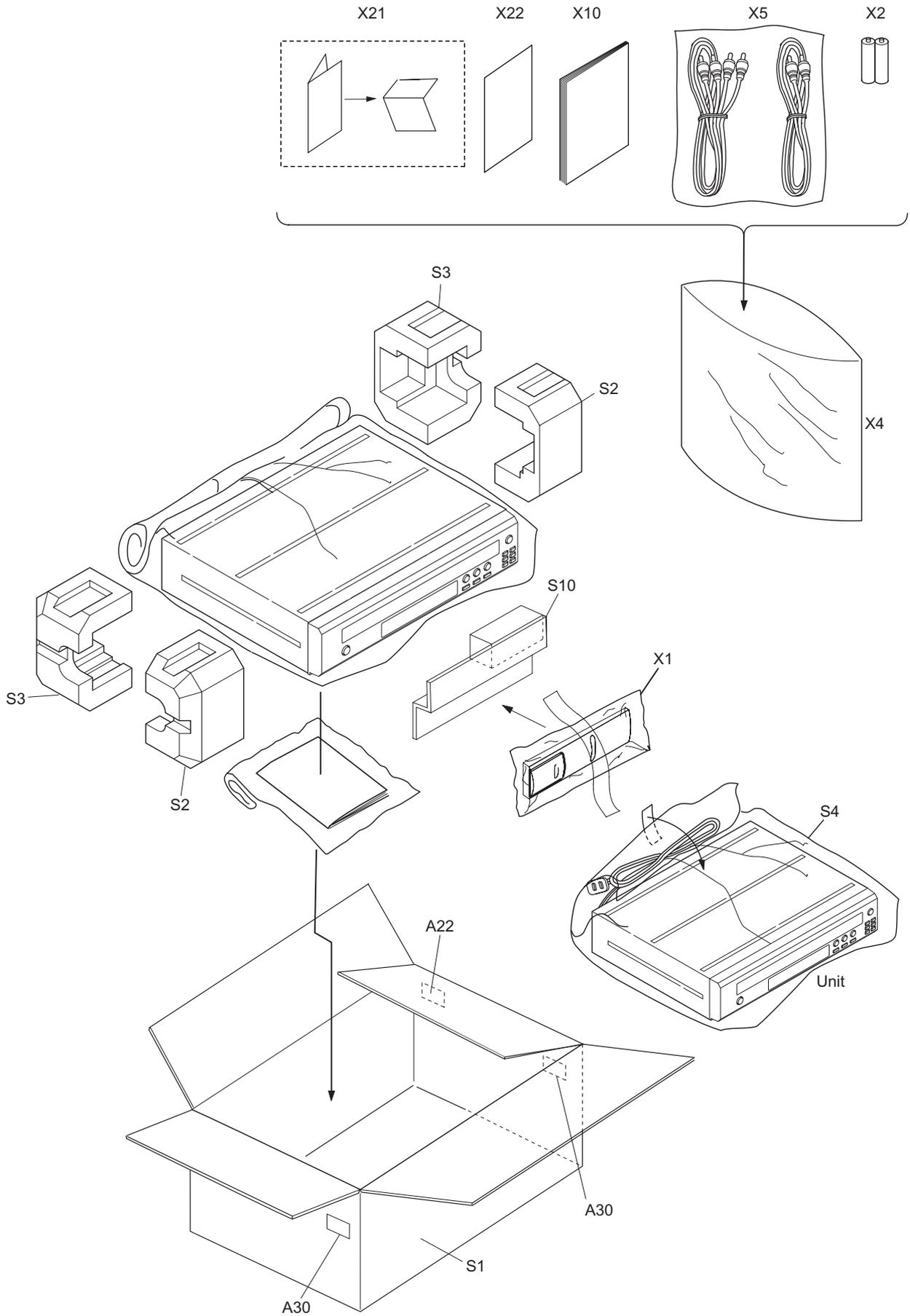
## 5. MECHA HOLDER



NOTE : Apply some grease to the Fill Color position.

Chief Ingredient of FAG-102R  
- Hydrocarbon synthetic oil  
- Lithium soap  
- Additives

# Packing



## PARTS LIST OF PACKING & ACCESSORIES

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Ref. No.	nsp	Part No.	Part Name	Remark	Q'ty	New
A21		-	LABEL SERIAL NO.	-	1	
A22		-	BAR CODE LABEL	-	1	
A30		-	CONTROL LABEL	-	2	
S1		00D 9H2 6000 810	GIFT BOX CARTON	1VM323560	1	*
S2		00D 9H2 6000 317	FRONT PAD	0VM101008A	2	
S3		00D 9H2 6000 736	REAR PAD	0VM101007A	2	
S4		00D 9H2 6000 688	SET BAG	0DM400731D	1	
S10		00D 9H2 6000 811	TRAY PAD	1VM425290	1	*
X1		00D 9H2 6000 812	REMOTE CONTROL UNIT(RC-1064)	NA842UD	1	*
X2		-	DRY BATTERY R6UW/2S	XB0M311MS001	2	
X2		-	DRY BATTERY ES-GR6M-C	XB0M571GLP01	2	
X2		-	DRY BATTERY R6P/2S	XB0M451T0001	2	
X4		00D 9H2 6000 513	ACCESSORY BAG	0VM416059	1	
X5		00D 9H2 6000 226	AV CORD WPZ0102TM015	WPZ0102TM015	1	
X5		00D 9H2 6000 243	AV CORD RCA(M*2)TO RCA(M*2)	WPZ0102LTE01	1	
X10		00D 9H2 6000 813	OWNERS MANUAL	1VMN23363	1	*
X21		-	WARRANTY SHEET	1VM323507	1	*
X22		-	SERVICE CENTER SHEET	1VM425082	1	*