

HCD-GNZ5D

SERVICE MANUAL

E Model

Ver. 1.1 2005. 12



- HCD-GNZ5D is the tuner, deck, DVD and amplifier section in MHC-GNZ5D.

DVD Section	Model Name Using Similar Mechanism	HCD-GNZ7D/GNZ8D/GNZ9D
	DVD Mechanism Type	CDM74HF-DVBU101//C
	Optical Pick-up Name	KHM-310CAB/C2NP
Tape Deck Section	Model Name Using Similar Machanism	HCD-GNZ7D/GNZ8D/GNZ9D
	Tape Transport Mechanism Type	CWM43FR601

SPECIFICATIONS

Amplifier section

The following measured at AC 120, 220, 230 – 240 V, 50/60 Hz

Continuous RMS power output (reference)
50 + 50 watts
(6 ohms at 1 kHz, 10% THD)

Inputs

MIC (phone jack): sensitivity 1 mV,
impedance 10 kilohms

Outputs

VIDEO OUT (phono jack):
max. output level
1 Vp-p, unbalanced, Sync
negative, load impedance
75 ohms

DIGITAL OPTICAL OUT (Square optical connector jack,
rear panel)

Wavelength 660 nm

PHONES (stereo mini jack):

accepts headphones of
8 ohms or more

FRONT SPEAKER: Use only the supplied
speaker SS-GNZ5D

Disc player section

System Compact disc and digital
audio and video system

Laser Semiconductor laser
(DVD: $\lambda=650$ nm,
CD: $\lambda=790$ nm)
Emission duration:
continuous

Frequency response DVD (PCM 48 kHz):
2 Hz – 22 kHz (± 1 dB)
CD: 2 Hz – 20 kHz (± 1 dB)

Video color system format
NTSC, PAL

Tape deck section

Recording system 4-track 2-channel stereo
Frequency response 40 – 13,000 Hz (± 3 dB),
using Sony TYPE I
cassette

– Continued on next page –

DVD DECK RECEIVER

9-879-821-02

2005L04-1

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Sony Corporation

Home Audio Division

Published by Sony Engineering Corporation

SONY®

HCD-GNZ5D

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	87.5 – 108.0 MHz (50-kHz step)
Antenna	FM lead antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	530 – 1,710 kHz (with the interval set at 10 kHz) 531 – 1,602 kHz (with the interval set at 9 kHz)
Antenna	AM loop antenna
Antenna terminals	External antenna terminal
Intermediate frequency	450 kHz

General

Power requirements	
Indian model:	220 – 240 V AC, 50/60 Hz
Thai model:	220 V AC, 50/60 Hz
Other models:	120 V, 220 V or 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption	110 watts
Dimensions (w/h/d) (excl. speakers)	Approx. 280 × 326 × 365 mm
Mass (excl. speakers)	Approx. 9 kg

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead free mark (LF) indicating the solder contains no lead.

(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

LF : LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
Soldering irons using a temperature regulator should be set to about 350 °C.
Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

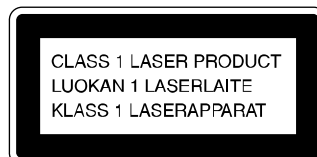
The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



This appliance is classified as a CLASS 1 LASER product. This label is located on the rear exterior.

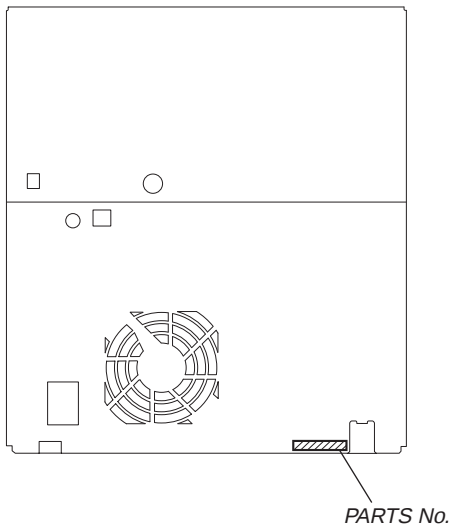
Note on DMB11 board replacement

New part of EEPROM (IC103) on the DMB11 board cannot be used. Therefore, if the mounted DMB11 board (A-1109-317-A, etc.) is replaced, exchange new EEPROM (IC103) with that used before the replacement.

HCD-GNZ5D

MODEL IDENTIFICATION

– BACK PANEL –



- Abbreviation
 - E3 : 240 V AC area in E model
 - E12 : 220 – 240 V AC area in E model
 - E13 : 220 – 230 V AC area in E model
 - E15 : Iran model
 - PH : Philippine model

MODEL	PARTS No.
GNZ5D: PH	2-582-753-0□
GNZ5D: E3, E15	2-582-753-1□
GNZ5D: E12, E13	2-582-753-2□

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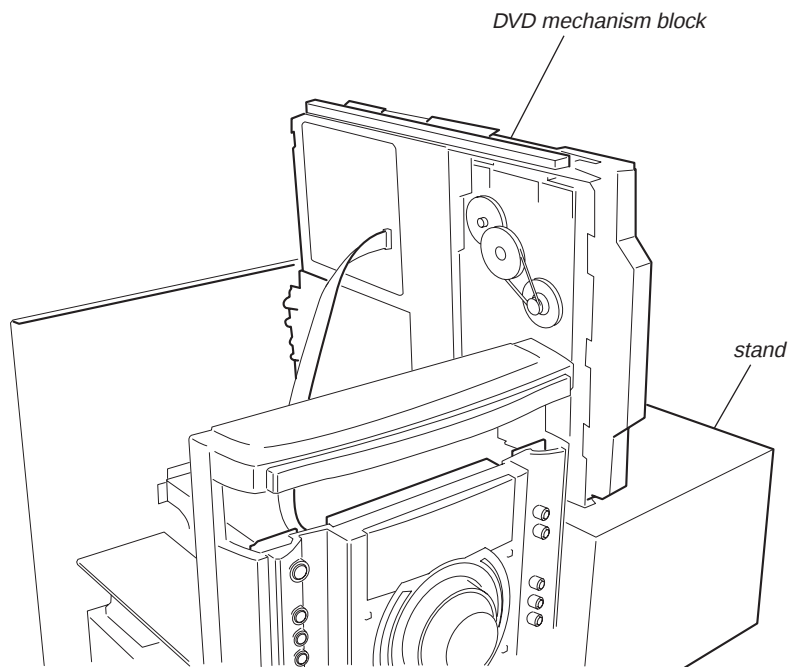
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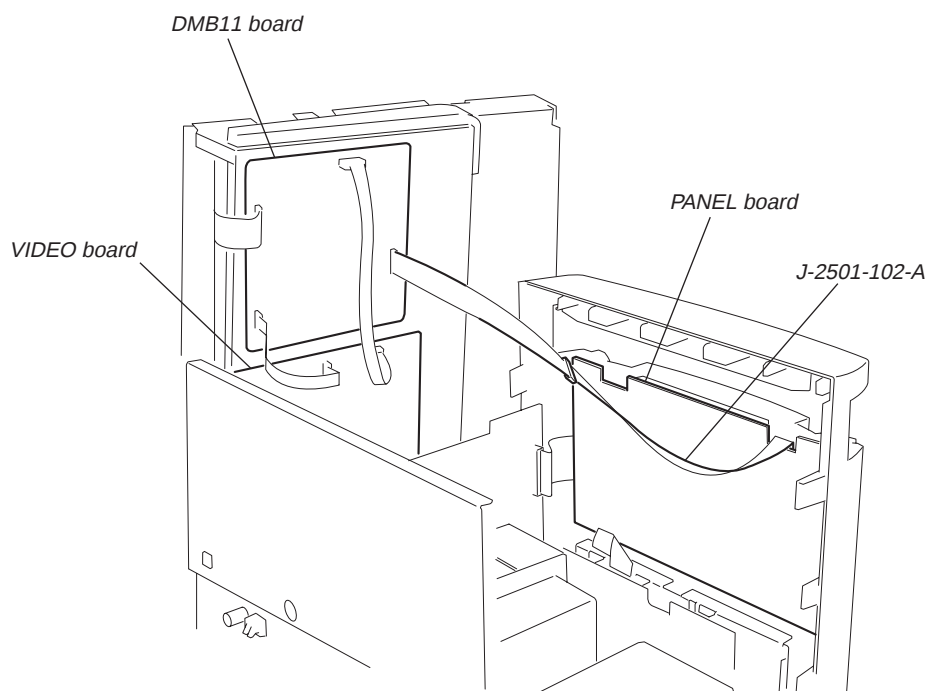
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SECTION 1 SERVICE NOTE

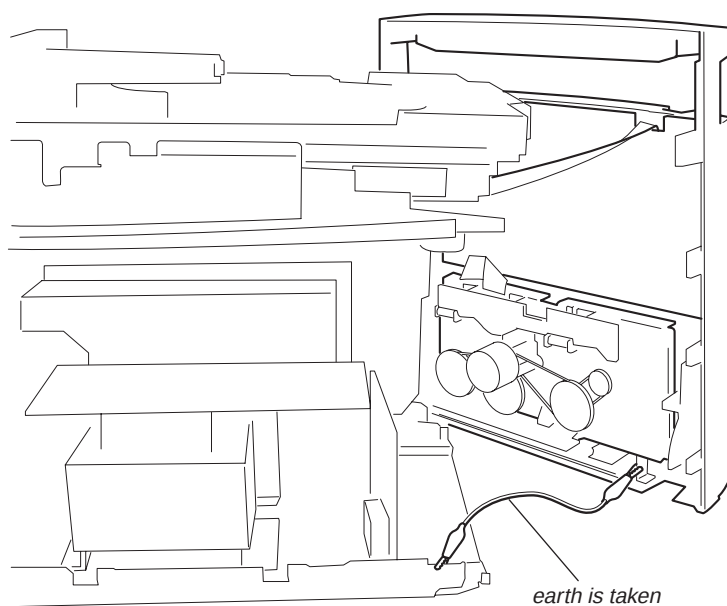
1-1. SERVICE POSITION OF CDM



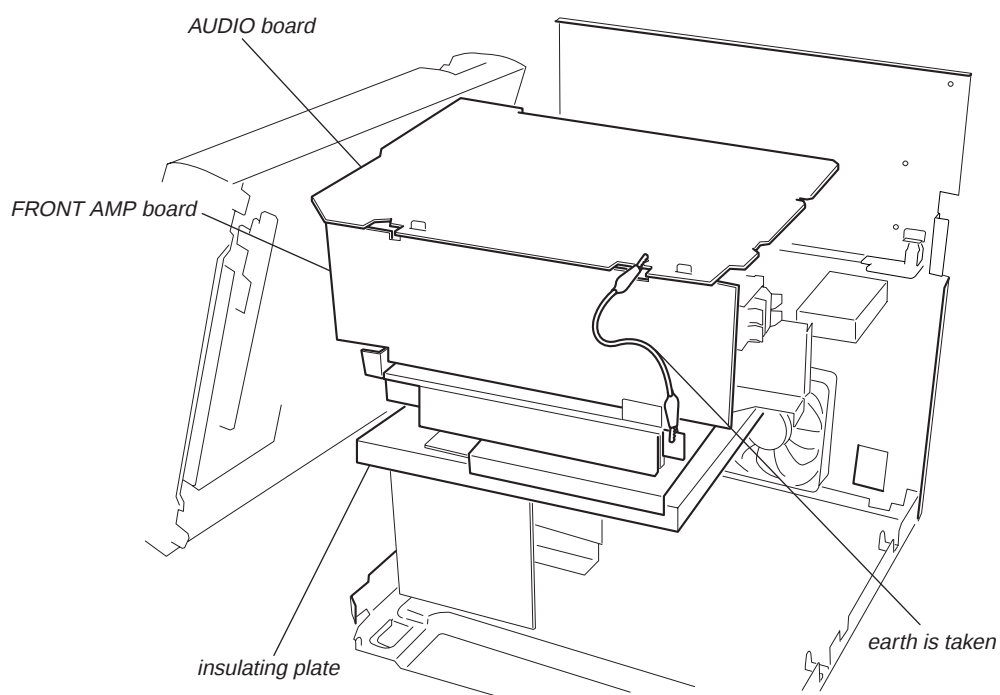
1-2. SERVICE POSITION OF DMB11 BOARD, VIDEO BOARD



1-3. SERVICE POSITION OF TCM



1-4. SERVICE POSITION OF FRONT AMP BOARD



This section is extracted from instruction manual.

List of button locations and reference pages

How to use this page

Use this page to find the location of buttons and other parts of the system that are mentioned in the text.

Illustration number

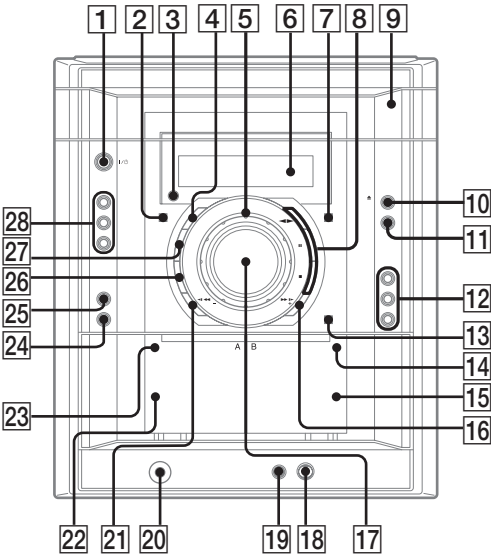
TAPE A/B 28 (37, 38, 39)

Name of button/part

Reference page

Main unit

ALPHABETICAL ORDER		BUTTON DESCRIPTIONS
A — N	O — Z	I/⏻ (power) 1 (8, 36, 45, 56)
CD SYNC 25 (38)	Operation Dial (⏮⏪⏩⏭) 5 (41)	▶▶ (play) 8 (11, 29, 37, 38)
Deck A 22 (37, 39)	PHONES jack 20 (41)	⏸ (pause) 8 (8, 11, 37)
Deck B 15 (37, 38, 39, 46)	PRESET EQ 27 (40, 41)	■ (stop) 8 (9, 11, 30, 37, 38, 56)
DIRECTION 13 (37, 38, 39)	REC PAUSE/START 24 (38, 39)	▲ OPEN/CLOSE 10 (11)
DISC 1 – 3 12 (12, 14, 38, 56)	Remote sensor 3	▲ PUSH (deck B) (eject) 14 (37)
DISC SKIP/EX-CHANGE 11 (9, 11, 12, 14, 38)	SOUND FIELD 7 (40)	▶▶ (fast forward) 16 (12, 37)
Disc tray 9 (11)	TAPE A/B 28 (37, 38, 39)	▶▶ (slow forward) 16 (12)
DISPLAY 2 (47, 48, 56)	TUNER/BAND 28 (35, 36, 39)	◀◀ (rewind) 21 (12, 37)
Display window 6	TUNING + 16 (35, 36)	◀◀ (slow rewind) 21 (12)
DVD 28 (9, 38)	TUNING – 21 (35, 36)	▲ PUSH (deck A) (eject) 23 (37)
EQ BAND/MEMORY 4 (41)	VOLUME control 17 (42)	
GROOVE 26 (40)		
MIC jack 19 (41)		
MIC LEVEL 18 (41)		



Additional Information

Remote control

ALPHABETICAL ORDER

A — Q

ALBUM +/- [24] (11, 50)
 ANGLE [5] (34)
 AUDIO [4] (25, 41)
 CLEAR [32] (10, 14, 15, 16, 20, 23)
 DISC SKIP [20] (12, 14)
 DISPLAY [17] (47, 48)
 ENTER [12] (9, 13, 14, 16, 17, 19, 21, 23, 27, 35, 43, 45, 46, 56)
 FM MODE [22] (36)
 FUNCTION +/- [2] (10, 11, 35, 36)
 KARAOKE MODE [15] (41)
 KARAOKE PON [16] (42)
 MENU [6] (16, 18, 19, 21, 35)
 Number buttons* [14] (17, 31)
 PICTURE NAVI [3] (20, 24)
 PRESET + [26] (36)
 PRESET - [30] (36)

R — Z

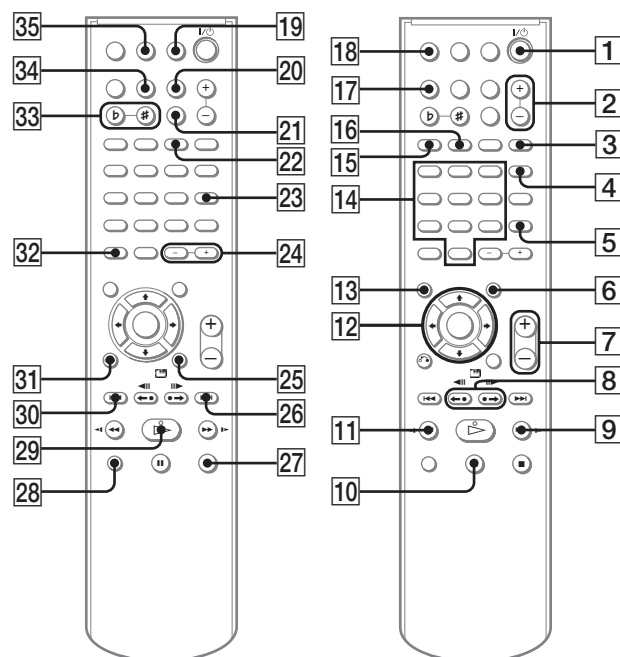
REPEAT [22] (15)
 SLEEP [18] (45)
 SOUND FIELD [21] (40)
 SUBTITLE [23] (34)
 THEATRE SYNC [19] (50)
 TIMER MENU [35] (9, 45, 46)
 TIME/TEXT [34] (47, 48)
 TOP MENU [13] (16)
 TUNING + [9] (35, 36)
 TUNING - [11] (35, 36)
 TV [28] (50)
 TV CH + [26] (50)
 TV CH - [30] (50)
 TV/VIDEO [18] (50)
 TV VOL +/-* [7] (50)
 VOLUME +/-* [7] (45)

BUTTON DESCRIPTIONS

I/⏻ (power) [1] (8, 45, 56)
 TV I/⏻ [1] (50)
 ◀• REPLAY/ADVANCE •▶ /
 ◀◀ STEP/STEP ▶▶ [8] (12)
 SLOW ▶▶ [9] (12)
 ▶▶ (fast forward) [9] (12, 37)
 ⏸ (pause) [10] (11, 37)
 ◀◀ SLOW [11] (12)
 ◀◀ (rewind) [11] (12, 37)
 ⏮/⏭/◀▶▶▶ [12] (9, 13, 26, 43, 45)
 ☐ DISPLAY [25] (13, 26, 49)
 ▶▶▶ (go forward) [26] (11)
 ■ (stop) [27] (37)
 ◀◀ (go back) [30] (11)
 ▷ (play)* [29] (11, 29)
 ⏮ RETURN [31] (17)
 -/-- [32]

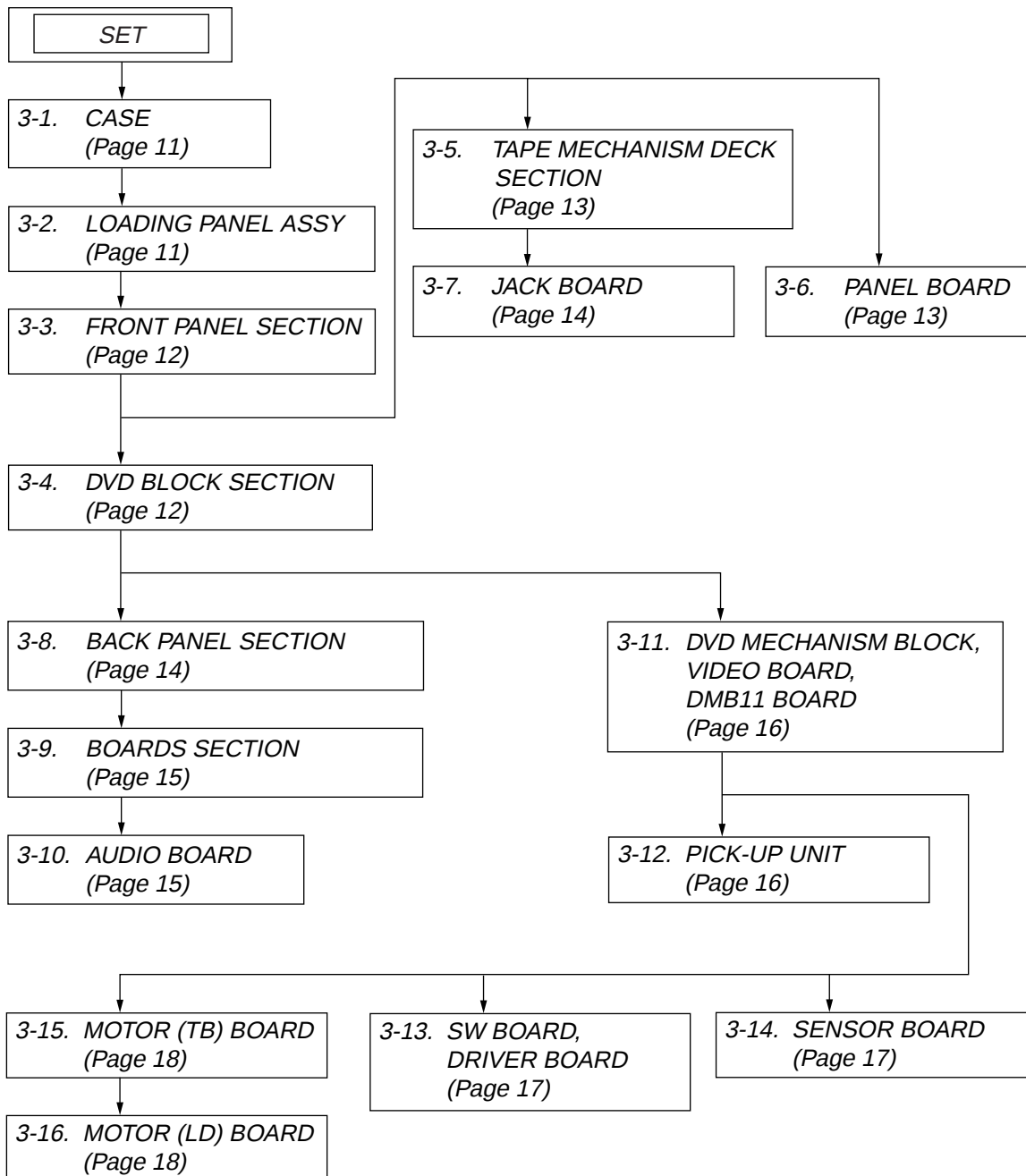
KEY CONTROL #/b [33] (42)

* The ▷, number 5 and
 VOLUME + (TV VOL +)
 buttons have tactile dots. Use
 the tactile dots as references
 when operating the system.



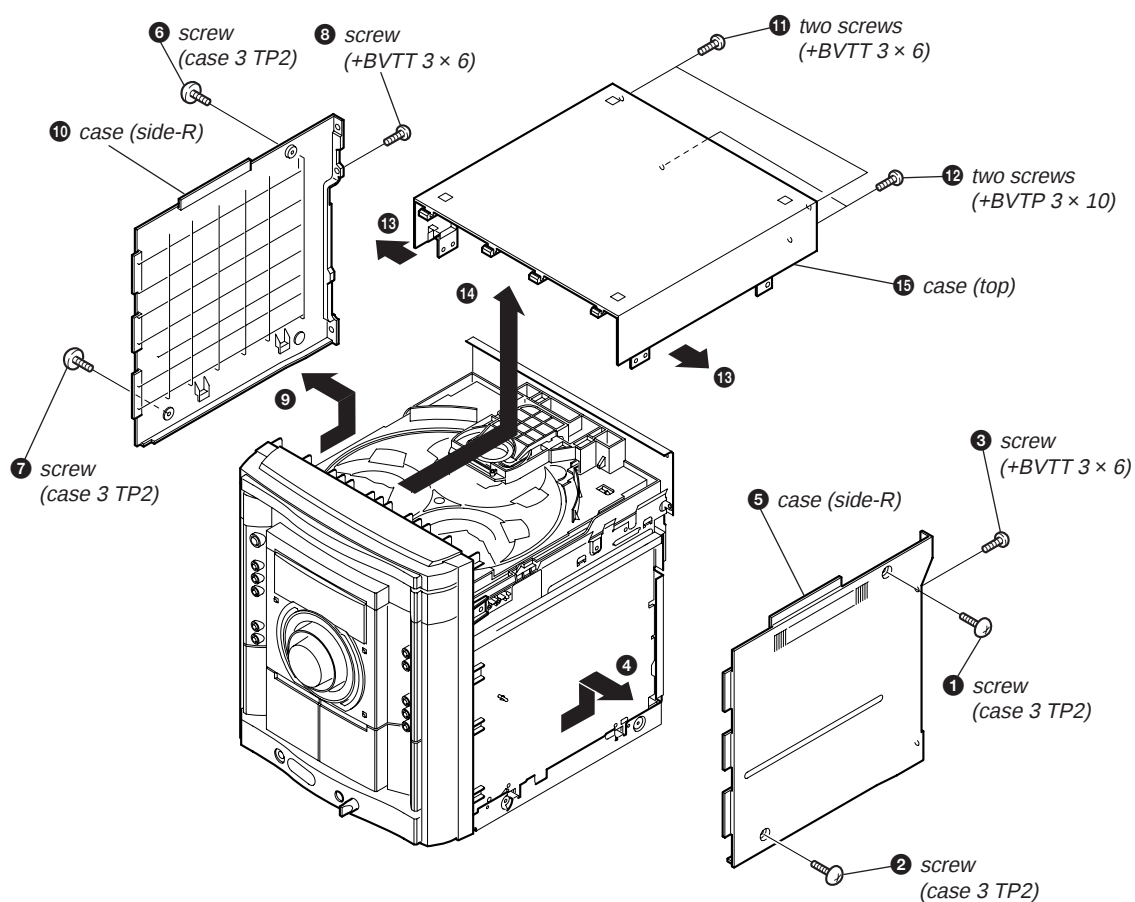
SECTION 3 DISASSEMBLY

Note : Disassemble the unit in the order as shown below.

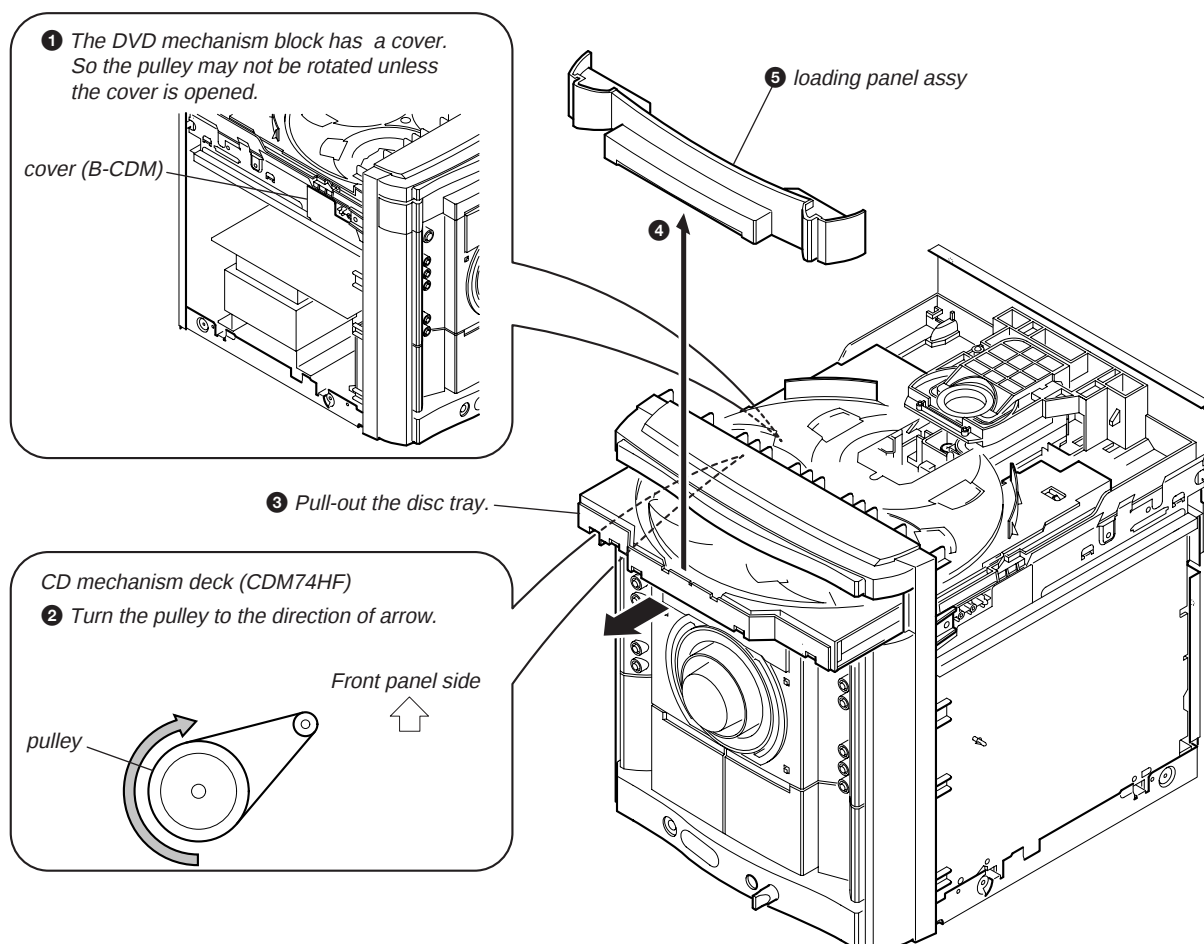


Note : Follow the disassembly procedure in the numerical order given.

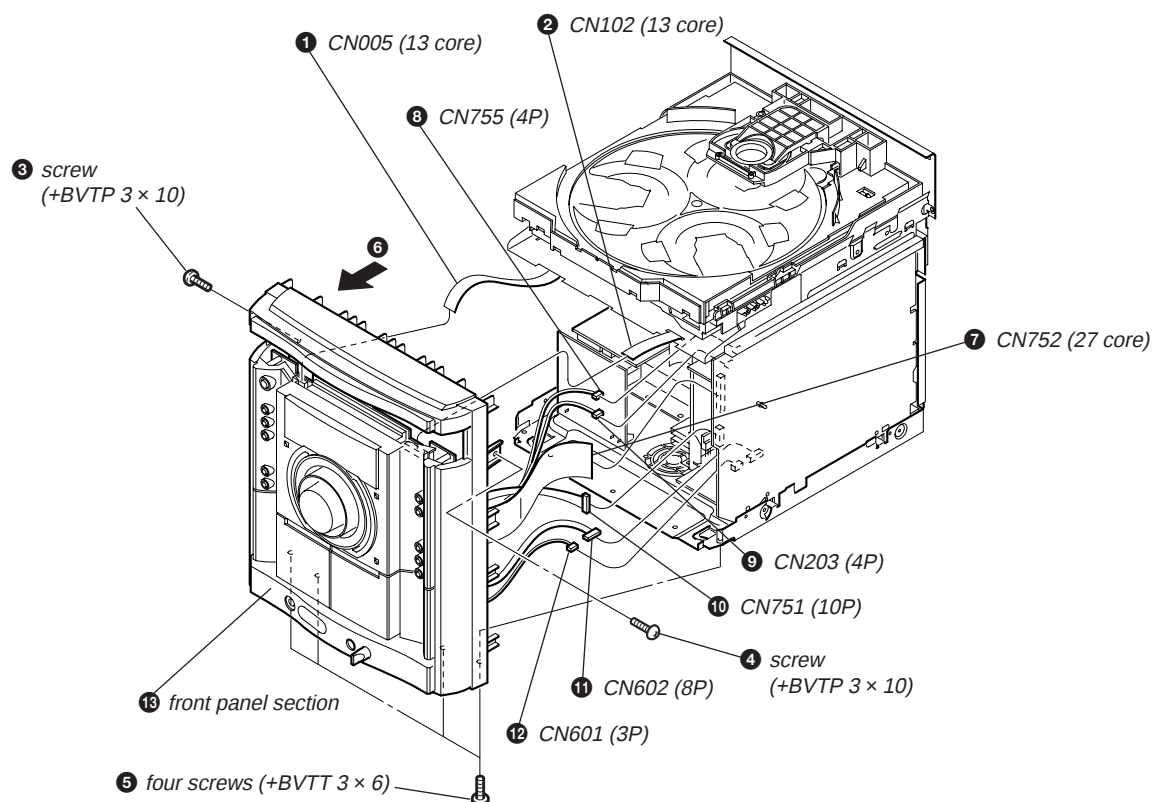
3-1. CASE



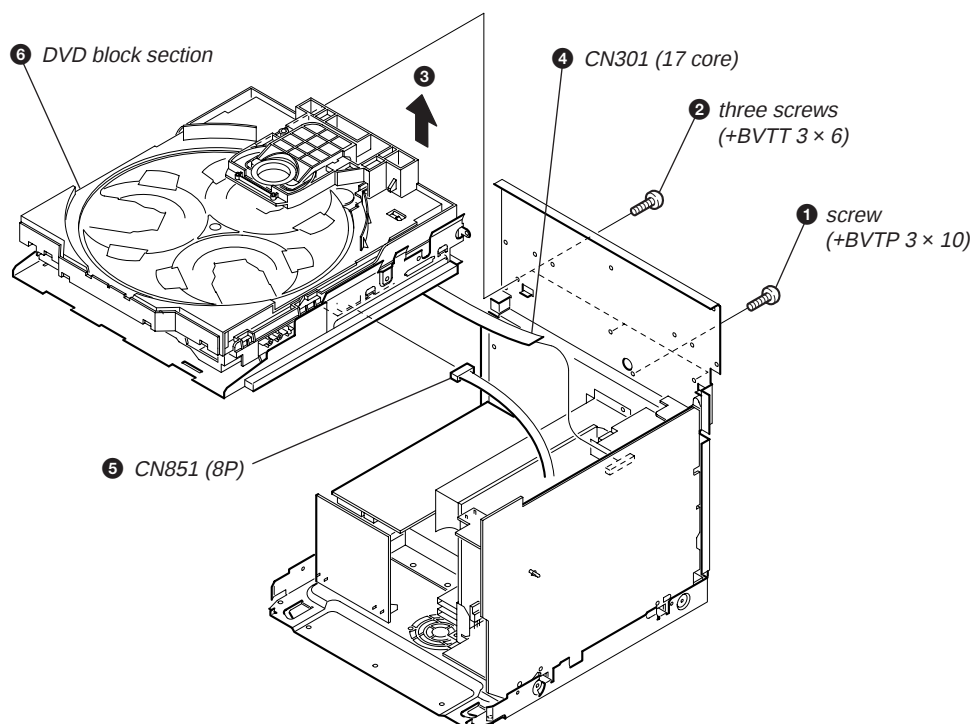
3-2. LOADING PANEL ASSY



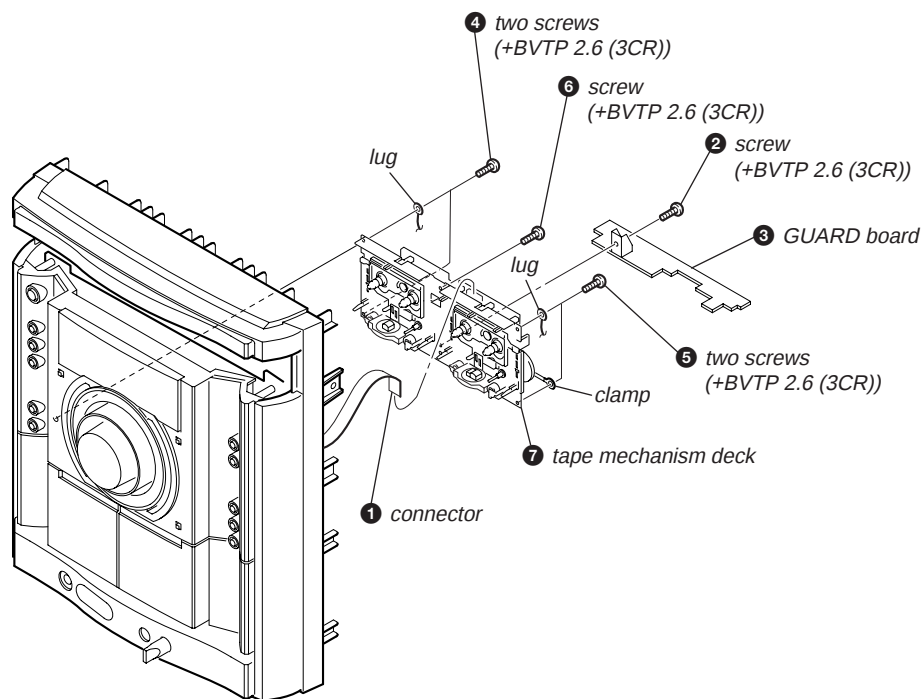
3-3. FRONT PANEL SECTION



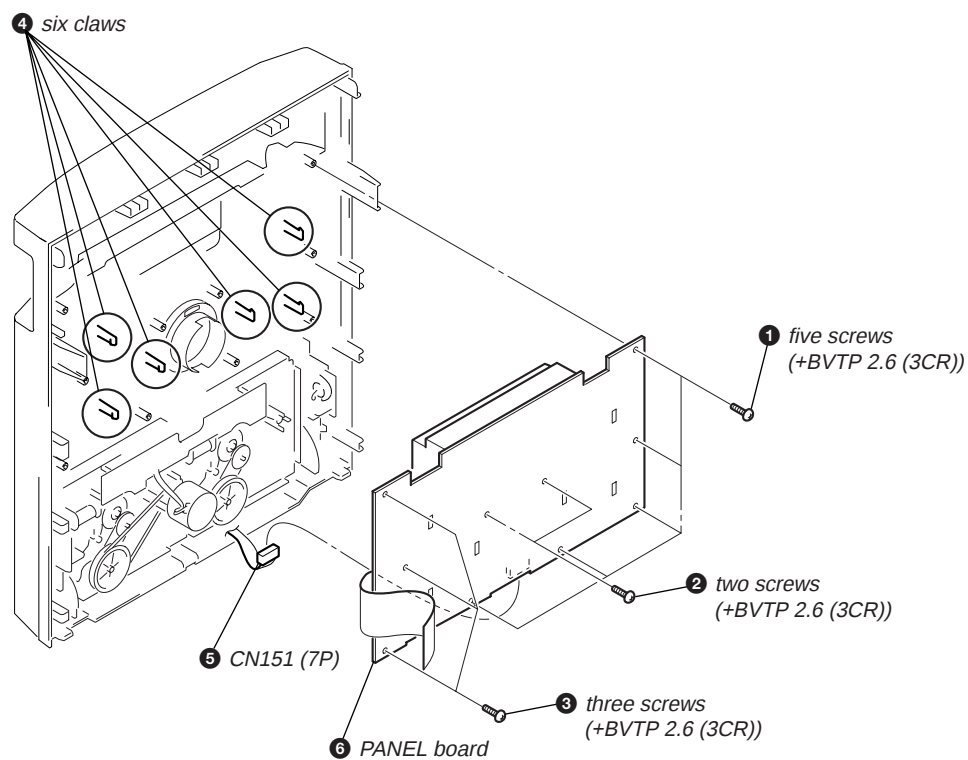
3-4. DVD BLOCK SECTION



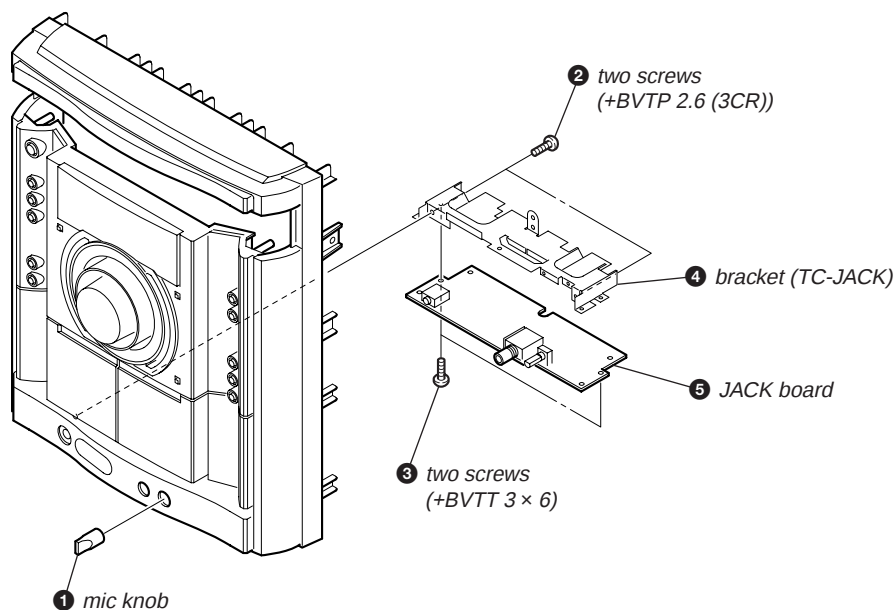
3-5. TAPE MECHANISM DECK SECTION



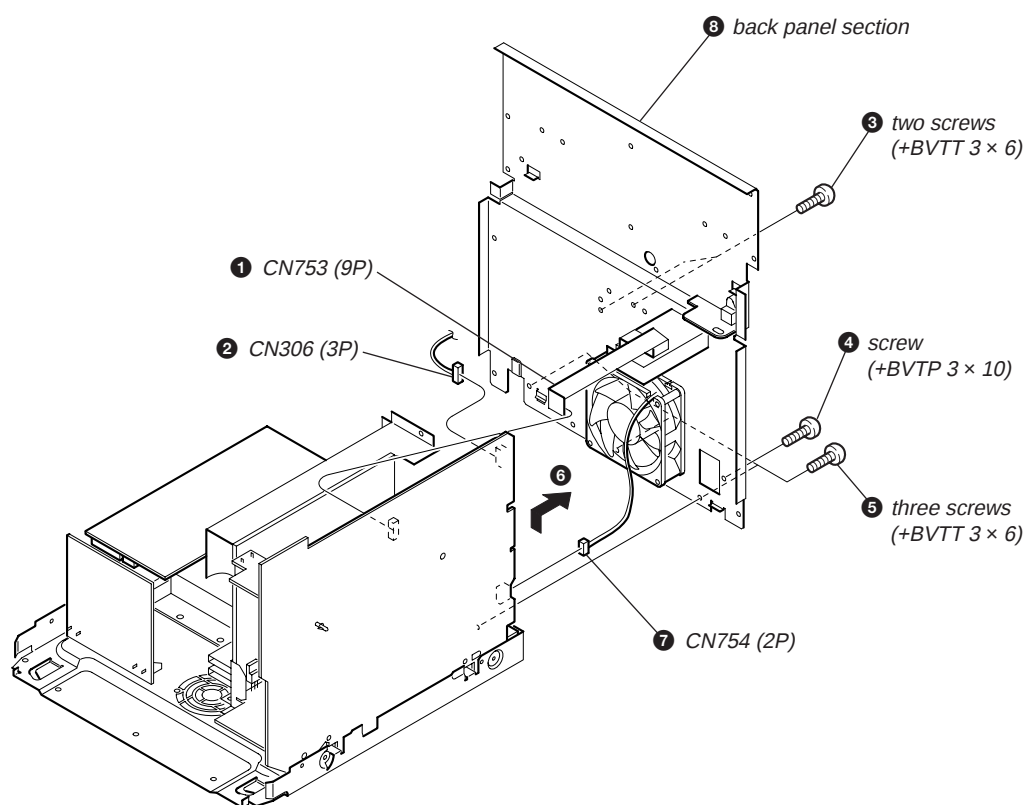
3-6. PANEL BOARD



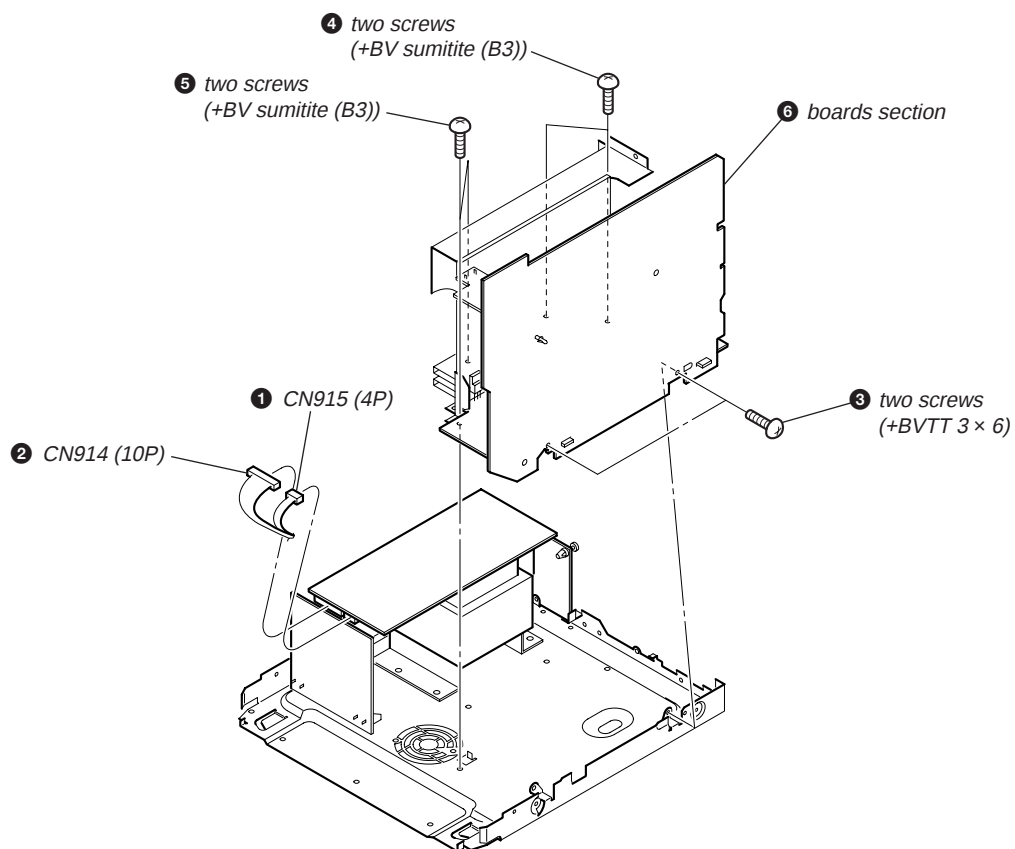
3-7. JACK BOARD



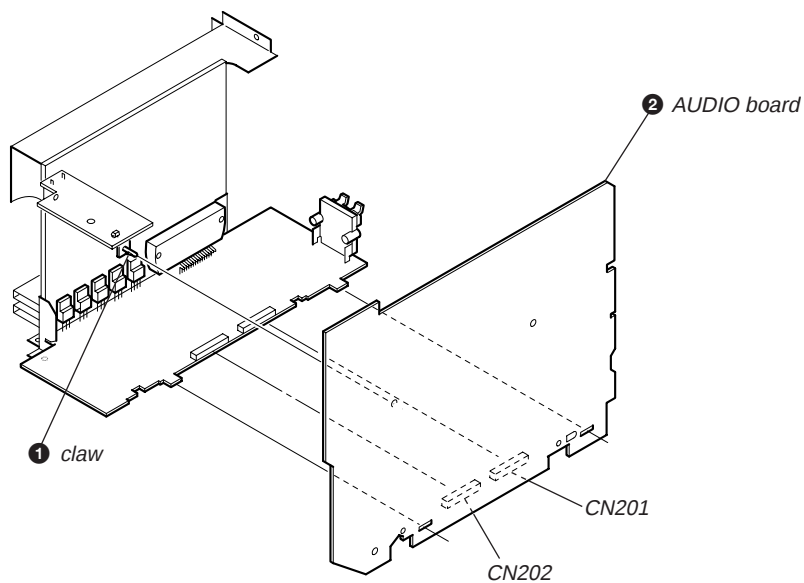
3-8. BACK PANEL SECTION



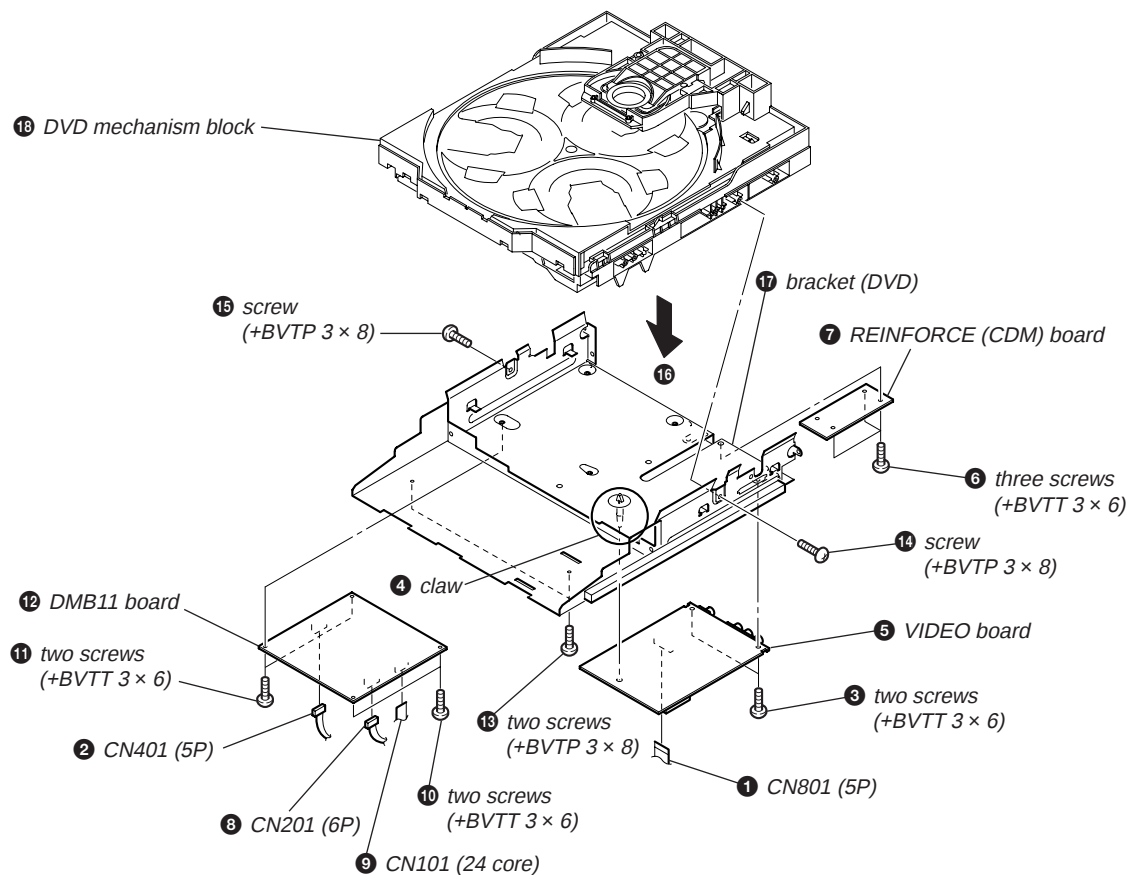
3-9. BOARDS SECTION



3-10. AUDIO BOARD

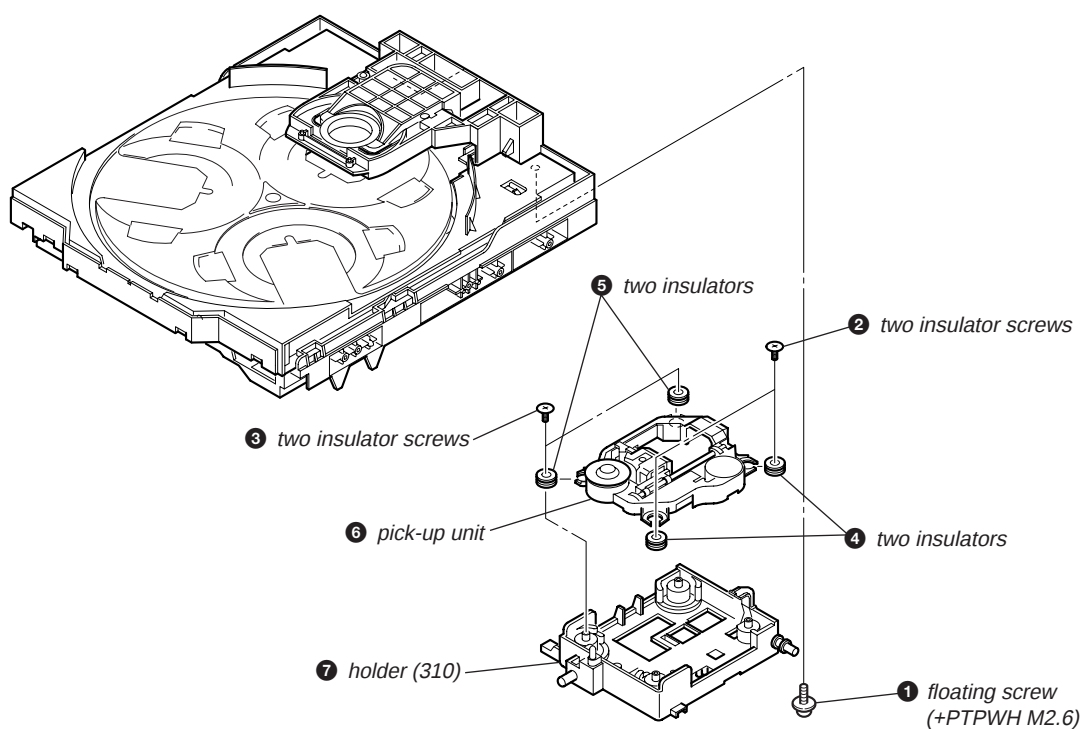


3-11. DVD MECHANISM BLOCK, VIDEO BOARD, DMB11 BOARD

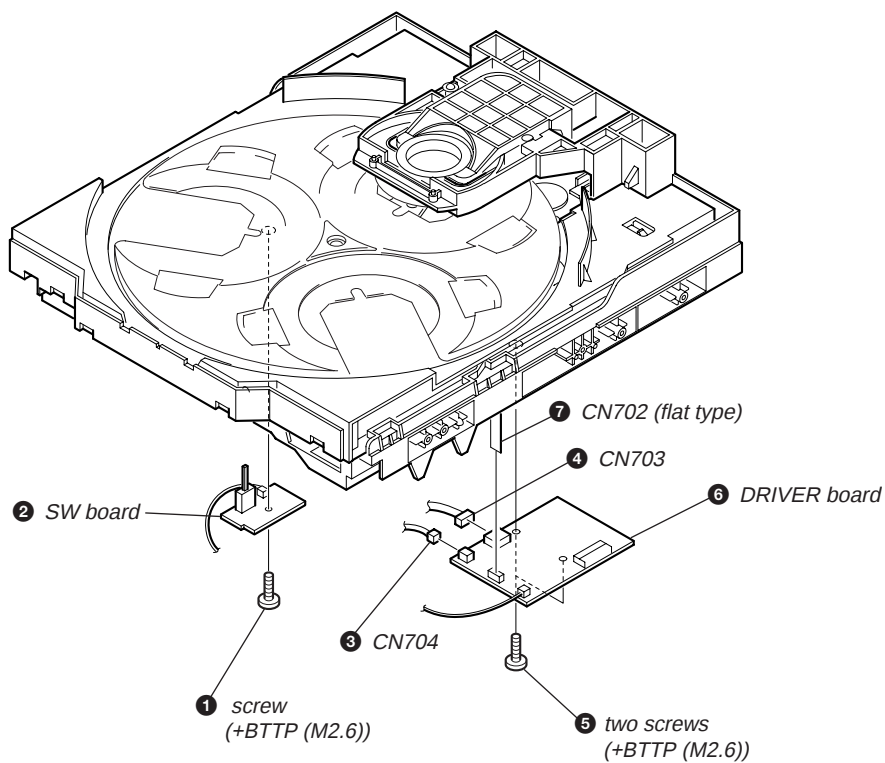


Note : Be short-circuited of the land of optical pick-up when CN101 is done in pulling out.

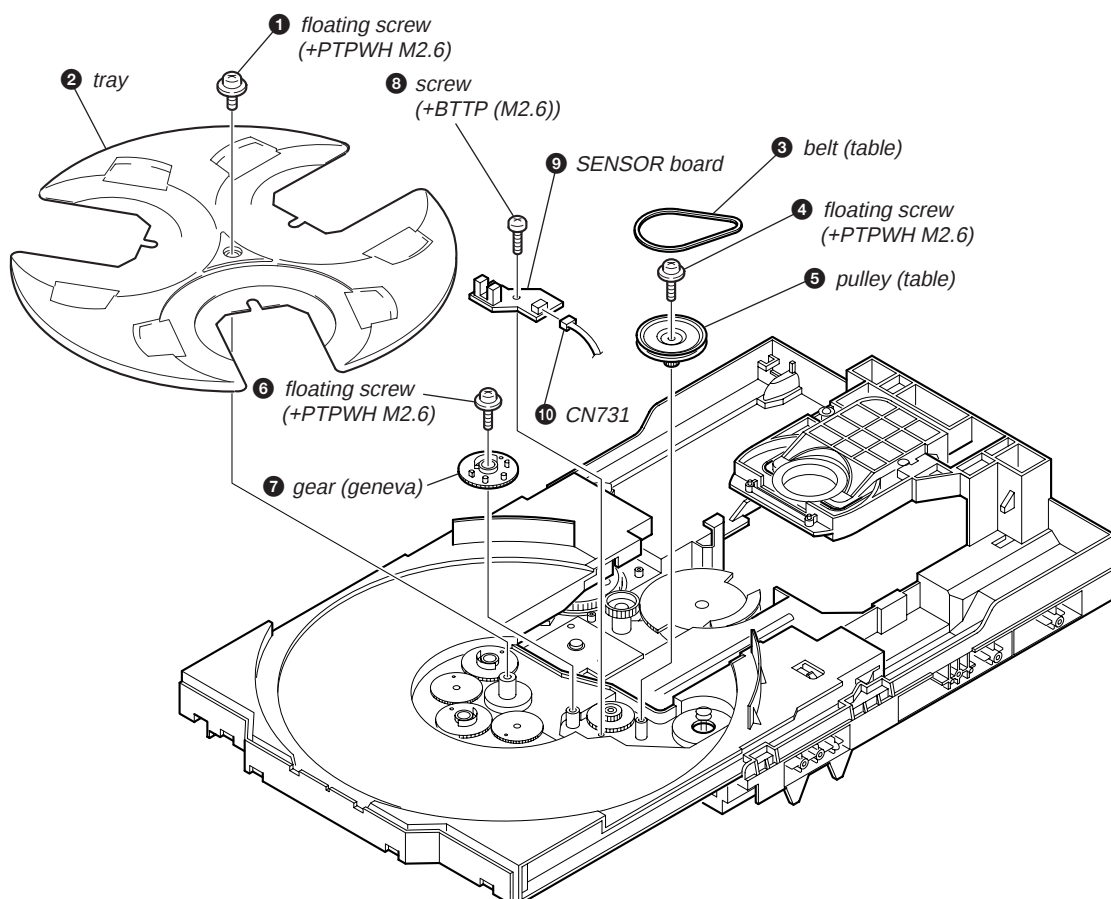
3-12. PICK-UP UNIT



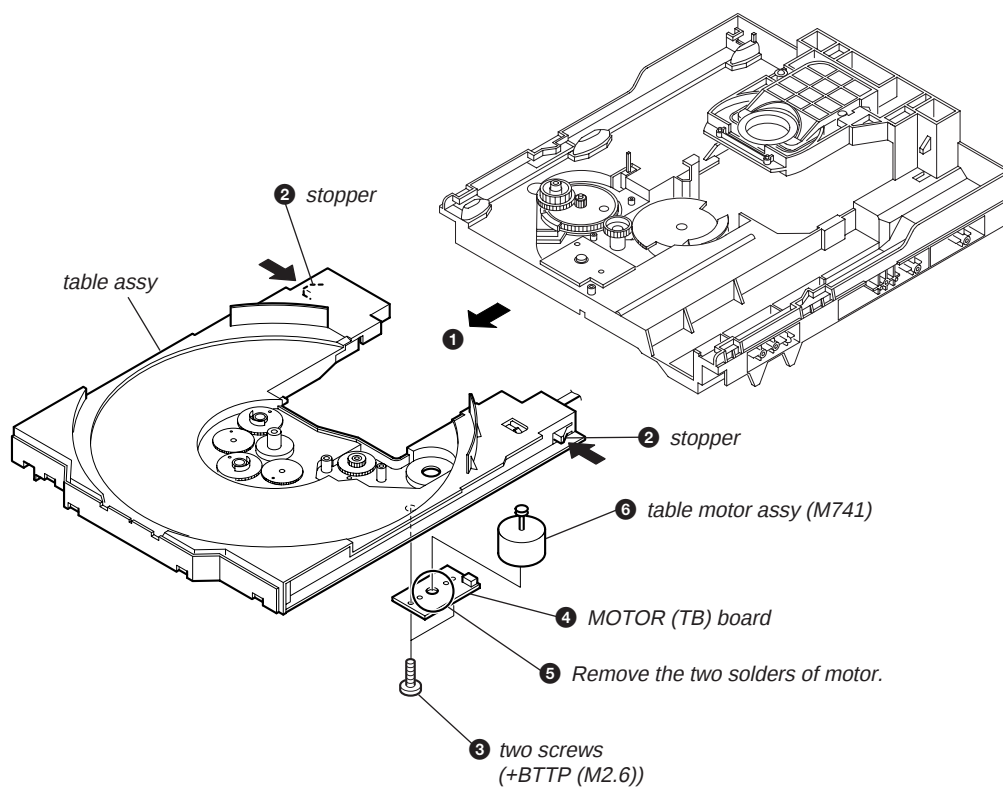
3-13. SW BOARD, DRIVER BOARD



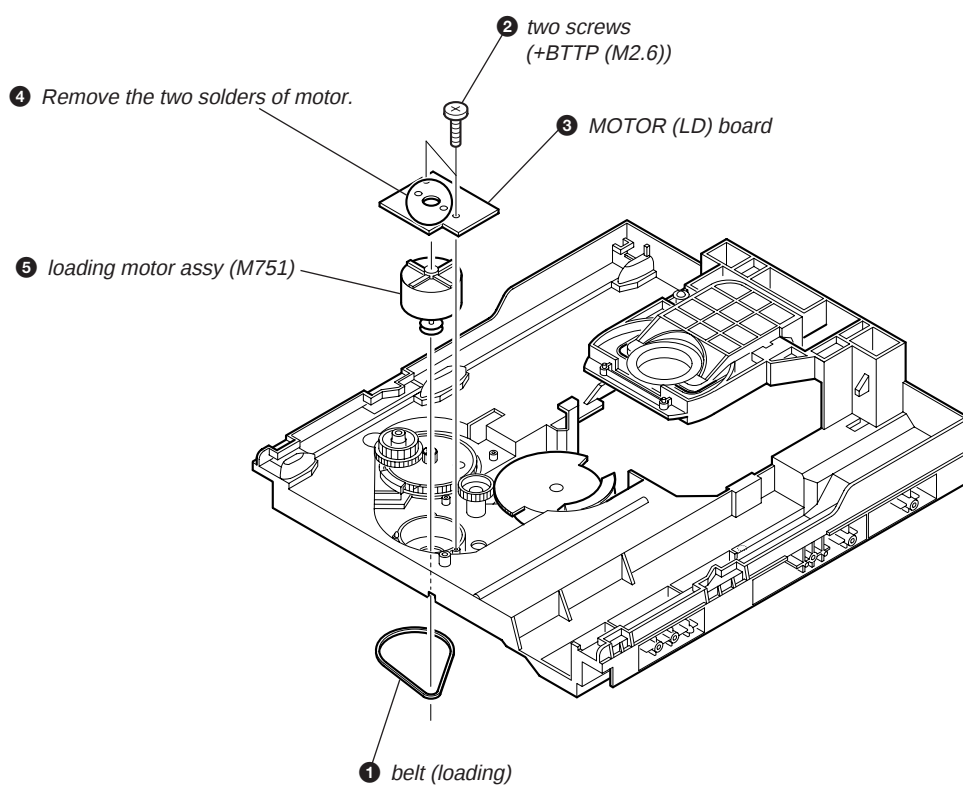
3-14. SENSOR BOARD



3-15. MOTOR (TB) BOARD



3-16. MOTOR (LD) BOARD



SECTION 4

TEST MODE

[Cold Reset]

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

- Press three buttons of **[■]**, **[DISPLAY]** and **[DISC 1]** simultaneously.
- The message "COLD RESET" is displayed, and the set is reset.

[Tuner Step Change]

- A step of AM channels can be changed over between 9 kHz and 10 kHz.

Procedure:

- Press the **[I/⏻]** button to turn the power ON, and set the function to TUNER/BAND "AM".
- Press the **[I/⏻]** button to turn the power OFF.
- Press two buttons of **[TUNING+]** and **[I/⏻]** simultaneously, and the message changes to "AM 9 k STEP" or "AM 10 k STEP", and thus the channel step is changed over.

[Color System Change]

Procedure:

- Press the **[I/⏻]** button to turn the power ON.
- Press two buttons of **[■]** and **[I/⏻]** simultaneously.
- The message "COLOR NTSC" or "COLOR PAL" is displayed.

[Disc Tray Lock]

The disc tray lock function for the antitheft of a demonstration disc in the store is equipped.

Setting Procedure :

- Press the **[I/⏻]** button to turn the power ON.
- Press two buttons of **[■]** and **[▲]** simultaneously for five seconds.
- The message "LOCKED" is displayed, and the tray is locked.

Releasing Procedure :

- Press two buttons of **[■]** and **[▲]** simultaneously for five seconds.
- The message "UNLOCKED" is displayed, and the tray is unlocked.

Note: When the message "LOCKED" is displayed, the tray lock is not released by turning power ON/OFF with the **[I/⏻]** button.

[Panel Test Mode]

- This mode is used to check the fluorescent indicator tube, LEDs, keyboard, volume and phones.

Enter The Panel Test Mode

Procedure:

- Press three buttons of **[■]**, **[DISPLAY]** and **[DISC 2]** simultaneously.
- LEDs and fluorescent indicator tube are all turned on.

Model Information

Procedure:

- It puts it into the start of the panel test mode.
- Press the **[DIRECTION]** button, the mode change model name or destination display.

Key Test Mode

Procedure:

- It puts it into the start of the panel test mode.
- Press the **[◀▶]** button, the mode change key test mode.

VACS Display

Procedure:

- It puts it into the start of the panel test mode.
- Press the **[■]** button, the mode change VACS display. The message "VACS 0+0" is displayed.

Version Display

Procedure:

- It puts it into the start of the panel test mode.
- Press the **[DIRECTION]** button, the mode change version display. Press the **[DISPLAY]** button, the mode change version or days is displayed.
- You can exit the Test Mode when you press three buttons of **[■]**, **[DISPLAY]** and **[DISC 2]** simultaneously.

[Common Test Mode]

- This mode is used to check operations of the respective sections of Amplifier and Tape.

Procedure:

- To enter MC Test Mode

- Press the **[I/⏻]** button to turn the power ON.
- Press three buttons of **[■]**, **[DISPLAY]** and **[DISC 3]** simultaneously.

* Check of Amplifier

Initial settings: EQ ➔ FLAT
VACS ➔ ON

- When you press the **[EQ BAND/MEMORY]** button, the message "GEQ FLAT" is displayed, and the entire band of the graphic equalizer is set to the center level.
- Whenever you press the **[GROOVE]** button, it toggles between "VACS ON" and "VACS OFF" so that you can switch ON or OFF of VACS.

* To return to normal mode again.

- When you want to exit this mode, press the **[I/⏻]** button.
- The cold reset is enforced at the same time.

[DVD and CD Ship Mode (No Memory Clear)]

- This mode moves the position to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

- Press the **[I/⏻]** button to turn the power ON.
- Press two buttons of **[■]** and **[DISC SKIP]** simultaneously.
- After the "STANDBY" display blinks 15 times, the message "LOCK" is displayed, and the DVD ship mode is set.

[DVD and CD Ship Mode (Memory Clear)]

- This mode moves the pickup to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

- Press the **[I/⏻]** button to turn the power ON.
- Press three buttons of **[■]**, **[DISPLAY]** and **[DIRECTION]** simultaneously.
- After the "STANDBY" display blinks 15 times, the message "LOCK" is displayed, and the DVD ship mode is set.

DVD SECTION

[TEST DISC LIST]

Be sure to use the DVD disc that matches the signal standards of your region.

- CD
 - YEDS-18 (Part No.: 3-702-101-01)
 - PATD-012 (Part No.: 4-225-203-01)
- DVD SL (Single Layer)
 - NTSC : HLX-503 (Part No.: J-6090-069-A)
 - HLX-504 (Part No.: J-6090-088-A)
 - PAL : HLX-506 (Part No.: J-6090-077-A)
- DVD DL (Dual Layer)
 - NTSC : HLX-501 (Part No.: J-6090-071-A)
 - HLX-505 (Part No.: J-6090-089-A)
 - PAL : HLX-507 (Part No.: J-6090-078-A)

4-1. GENERAL DESCRIPTION

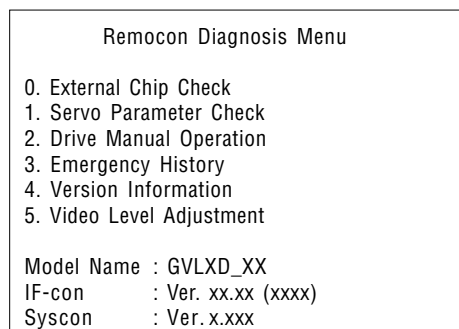
The Mirror Time and IOP measurement allows you to make diagnosis and adjustment simply by using the remote commander and monitor TV. The instructions, diagnosis results, etc. are given on the on screen display (OSD).

The Mirror Time and IOP measurement is required is such events where servicing a DVD-Player includes changing the Base Unit (BU). For each new BU to be used with a certain MV-044 board, Mirror Time and IOP measurement need to be carried out.

4-2. STARTING TEST MODE

Press three buttons ,  and  simultaneously with the DVD player in standby mode.

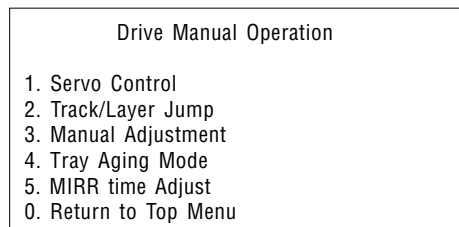
The Test Mode starts, then the menu shown below will be displayed on the TV screen.



The menu above is the Remocon Diagnosis Menu screen which consists of six main function. At the bottom of the menu screen, the model name and IF-con version. To enter Mirror Time Adjustment menu, press button  on the remote commander to enter Drive Manual Operation menu. To exit from the Test Mode, press the power button on the remote commander.

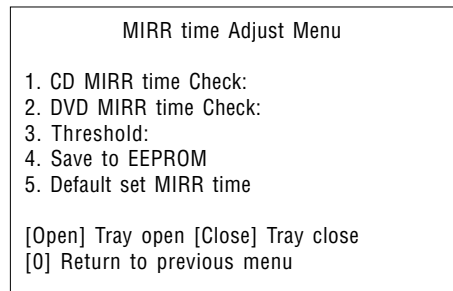
4-3. DRIVE MANUAL OPERATION

The Drive Manual Operation menu consists of five main function. By pressing  button on the remote commander in the Remocon Diagnosis Menu, the screen will appear as below.



4-4. MIRROR TIME ADJUSTMENT

To enter Mirror Time Adjustment, press  button on the remote commander. The screen will appear as below.



There are five main commands in the MIRR time Adjust menu as shown in the figure above. The functions of each command are described in the following page.

1. CD MIRR time Check

This command checks the Mirror time value for CD disc.

2. DVD MIRR time Check

This command checks the Mirror time value for DVD disc.

3. Threshold

This command displays the threshold value between CD and DVD mirror time.

4. Save to EEPROM

This command saves an adjusted mirror time value to the EEPROM.

5. Default set MIRR time

This command will set CD and DVD mirror time to firmware default value.

[Open] / [Close]

Pressing the  button controls the tray for disc change during mirror time adjustment.

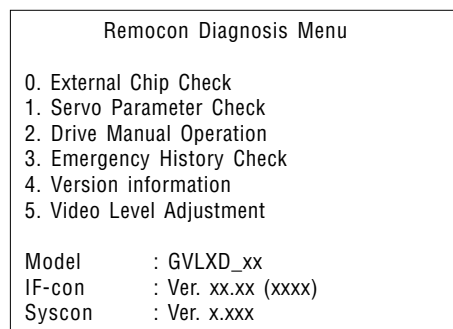
[0] Return to previous menu

Press  button to return to previous menu.

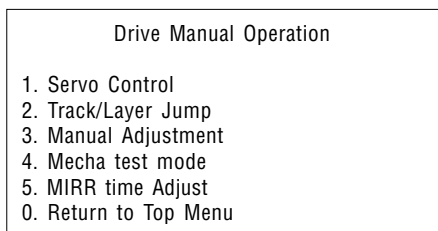
4-4-1. EXECUTING MIRROR TIME ADJUSTMENT

In order to execute mirror time adjustment, the following standard procedures must be followed.

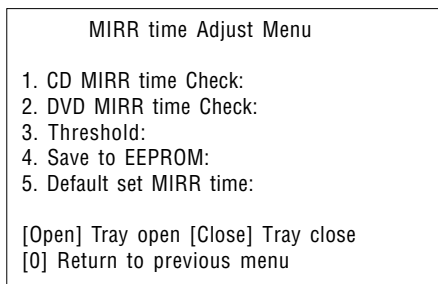
- (1) In standby mode, press three buttons ,  and  simultaneously.
- (2) Select "2. Drive Manual Operation".



- (3) Select “5. MIRR time Adjust”.

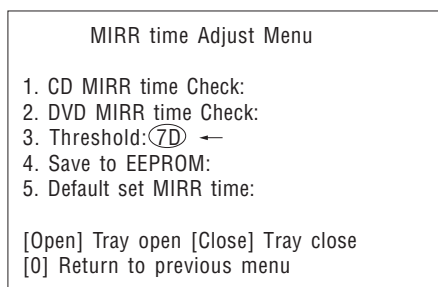


- (4) Select “5. Default set MIRR time”.



- (5) Select “3. Threshold”.

- (6) Confirm the number. If it is 7D, go to next step. If it is any other value, return to step 4.



- (7) Push button to eject tray.

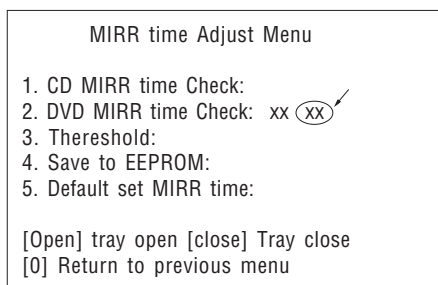
- (8) Insert Test Disc HLX-504 into tray.

- (9) Push button to close tray.

- (10) Push “2. DVD MIRR time Check”.

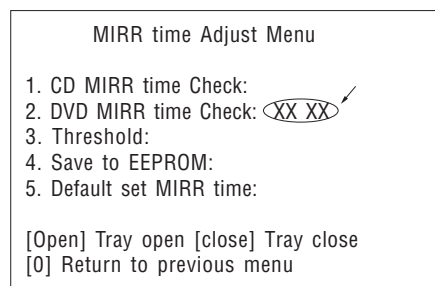
- (11) Wait for HEX number to display.

- (12) Confirm the number, if XX is 28 ~ 70, proceed with next step. If no, return to 8.



- (13) Push “4. Save to EEPROM”.

- (14) Confirm the same values are displayed. If it is not same, return to step 7.



- (15) Push button to eject tray.

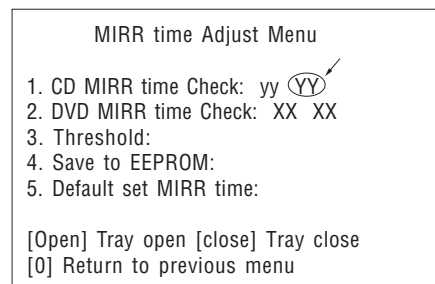
- (16) Take out HLX-504 and insert Test Disc YEDS-18 into tray.

- (17) Push button to close tray.

- (18) Push “1. CD MIRR time check”.

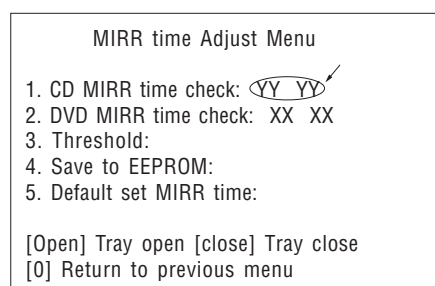
- (19) Wait for HEX number to display.

- (20) Confirm the number, if YY is 5A ~ E8, proceed with next step. If no, return to 15.



- (21) Push “4. Save to EEPROM”.

- (22) Confirm the same values are displayed. If it is not the same, return to step 15.



- (23) Push button to eject tray.

- (24) Remove Test Disc YEDS-18 from tray.

- (25) Push button to close tray.

- (26) Press [0 “R”] button to the Drive Manual Operation menu.

- (27) Press [0 “R”] button to return to the Remocon Diagnosis Menu.

- (28) Press the button to switch OFF set.

4-5. EXECUTING IOP MEASUREMENT

In order to execute mirror time adjustment, the following standard procedures must be followed.

- (1) In standby mode, press three buttons  ,  and **VOLUME +** simultaneously.

Remocon Diagnosis Menu

0. External Chip Check
1. Servo Parameter Check
2. Drive Manual Operation
3. Emergency History Check
4. Version information
5. Video Level Adjustment

Model : GVLXD XX
IF-con Ver : XX.XX (XXXX)
Syscon Ver : X.XX

- (2) Select “2. Drive Manual Operation” by pressing the **2 “R”** button on the remote commander. The screen will appear as below.

Drive Manual Operation

1. Servo Control
2. Track/Layer Jump
3. Manual Adjustment
4. Tray Aging Mode
5. MIRR time adjust
0. Return to top Menu

- (3) Select “3. Manual Adjustment” by pressing the **3 “R”** button on the remote commander. The screen will appear as below.

Manual Adjust

1. Track Balance Adjust:
2. Track Gain Adjust:
3. Focus Balance Adjust:
4. Focus Gain Adjust:
5. Eg boost Adjust:
6. Iop:
7. TRV. Level:
8. S curve(FE) Level:
9. RFL(PI) Level:
0. MIRR Time:

↓ ↑ Change Value
[RETURN] Return to previous menu

- (4) Select Iop by pressing **6 “R”** button on the remote commander.

- (5) Wait until a hexadecimal number appear.

Manual Adjust

1. Track Balance Adjust:
2. Track Gain Adjust:
3. Focus Balance Adjust:
4. Focus Gain Adjust:
5. Eq Boost Adjust:
6. Iop: **5B**
7. TRV. Level:
8. S curve(FE) Level:
9. RFL(PI) Level:
0. MIRR Time:

Change Value
[0] Return to previous menu

- (6) Convert each data from hexadecimal to decimal using conversion table.

- (7) Subtract between these two values.

- (8) If the remainder is smaller than 93 (decimal), then it is OK. However if the value is higher than 93, then the BU is defective and need to be change.

- (9) Press **RETURN “R”** button to return back to previous menu.

- (10) Press **0 “R”** button to return to Top Menu and power OFF the DVD Player.

SECTION 5

MECHANICAL ADJUSTMENTS

Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:

record/playback heads	pinch rollers
erase head	rubber belts
capstan	idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	3.06 N • m to 6.96 N • m 31 to 71 g • cm (0.43 – 0.98 oz • inch)
FWD back tension	CQ-102C	0.19 N • m to 0.58 N • m 2 to 6 g • cm (0.02 – 0.08 oz • inch)
REV	CQ-102RC	3.06 N • m to 6.96 N • m 31 to 71 g • cm (0.43 – 0.98 oz • inch)
REV back tension	CQ-102RC	0.19 N • m to 0.58 N • m 2 to 6 g • cm (0.02 – 0.08 oz • inch)
FF/REW	CQ-201B	6.96 N • m to 14.02 N • m 71 to 143 g • cm (0.98 – 1.99 oz • inch)
FWD tension	CQ-403A	9.80 N • m 100 g or more (3.53 oz or more)
REV tension	CQ-403R	9.80 N • m 100 g or more (3.53 oz or more)

SECTION 6 ELECTRICAL ADJUSTMENTS

DVD SECTION

When the base unit is replaced, perform the adjustment and the measurement as shown below in this order.

- 1) MIRROR TIME ADJUSTMENT (See page 20)
- 2) EXECUTING IOP MEASUREMENT (See page 22)

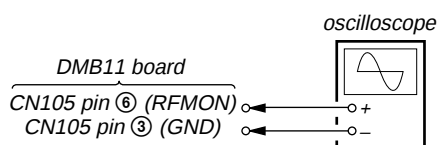
[TEST DISC LIST]

Be sure to use the DVD disc that matches the signal standards of your region.

- CD
 - YEDS-18 (Part No.: 3-702-101-01)
 - PATD-012 (Part No.: 4-225-203-01)
- DVD SL (Single Layer)
 - NTSC : HLX-503 (Part No.: J-6090-069-A)
 - HLX-504 (Part No.: J-6090-088-A)
 - PAL : HLX-506 (Part No.: J-6090-077-A)
- DVD DL (Dual Layer)
 - NTSC : HLX-501 (Part No.: J-6090-071-A)
 - HLX-505 (Part No.: J-6090-089-A)
 - PAL : HLX-507 (Part No.: J-6090-078-A)

[RFMON Level Check]

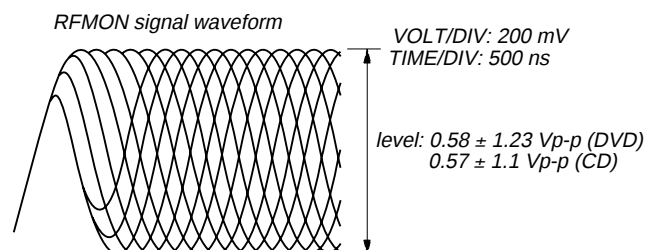
Connection:



Procedure:

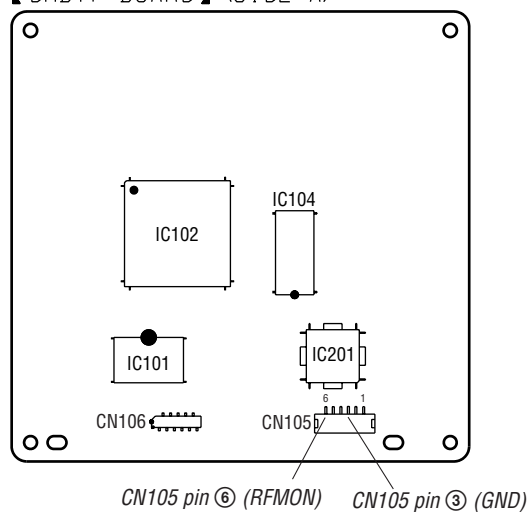
1. Connect an oscilloscope to CN105 pin ⑥ (RFMON) and CN105 pin ③ (GND) on the DMB11 board.
2. Turn the power on.
3. Set the test disc (refer to the TEST DISC LIST) on the tray and press button to playback.
4. Confirm that oscilloscope waveform is clear and check RFMON signal level is correct or not.

Note: A clear RFMON signal waveform means that the shape “” can be clearly distinguished at the center of the waveform.



Checking Location: DMB10 board (Side A)

【DMB11 BOARD】(SIDE A)

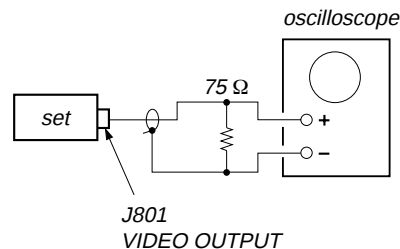


VIDEO SECTION

Video Level Check (VIDEO BOARD)

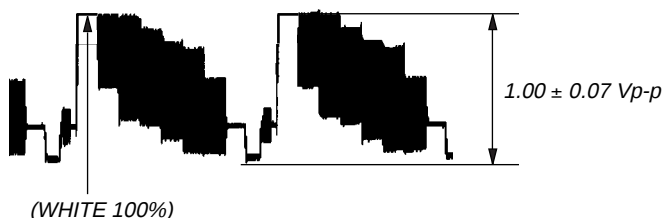
Purpose

This adjustment is made to satisfy the NTSC standard, and if not adjusted correctly, the brightness will be too large or small.



Procedure:

1. Connect oscilloscope to VIDEO output.
2. Load a DVD reference disc playback.
3. Check the video signal level is $1.00 \pm 0.07 \text{ Vp-p}$.



DECK SECTION

0 dB=0.775 V

1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjust.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

• Test Tape

Tape	Signal	Used for
P-4-A063	6.3 kHz, -10 dB	Azimuth Adjustment

Record/Playback Head Azimuth Adjustment

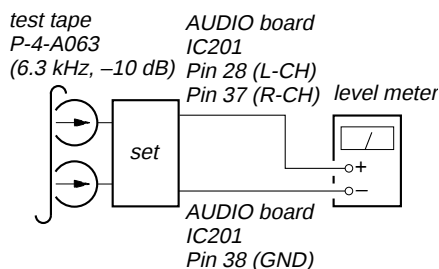
DECK A

DECK B

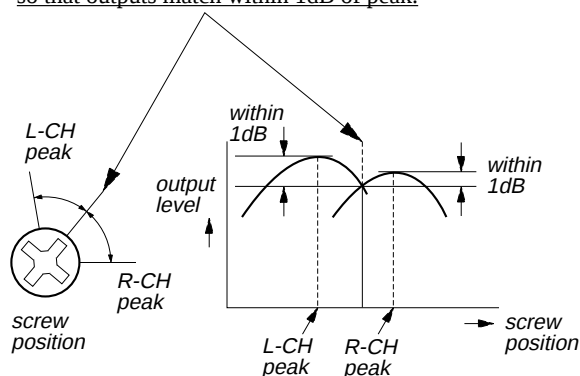
Note: Perform this adjustments for both decks

Procedure:

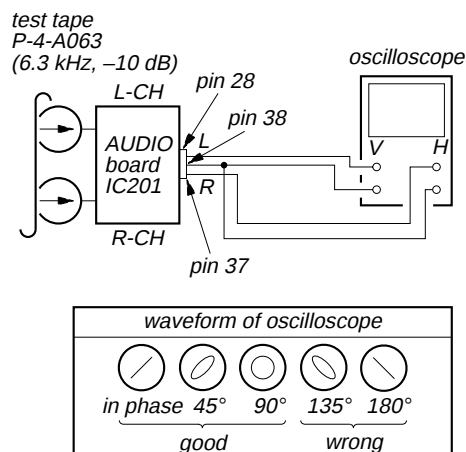
1. Mode: Playback



2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.



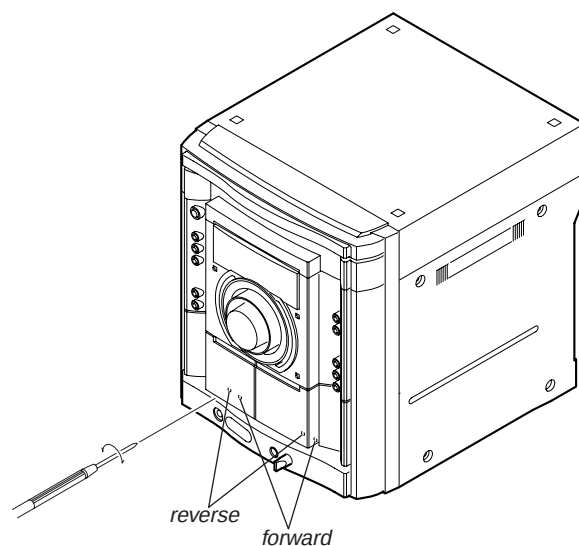
3. Mode: Playback



4. After the adjustments, apply suitable locking compound to the parts adjusted.

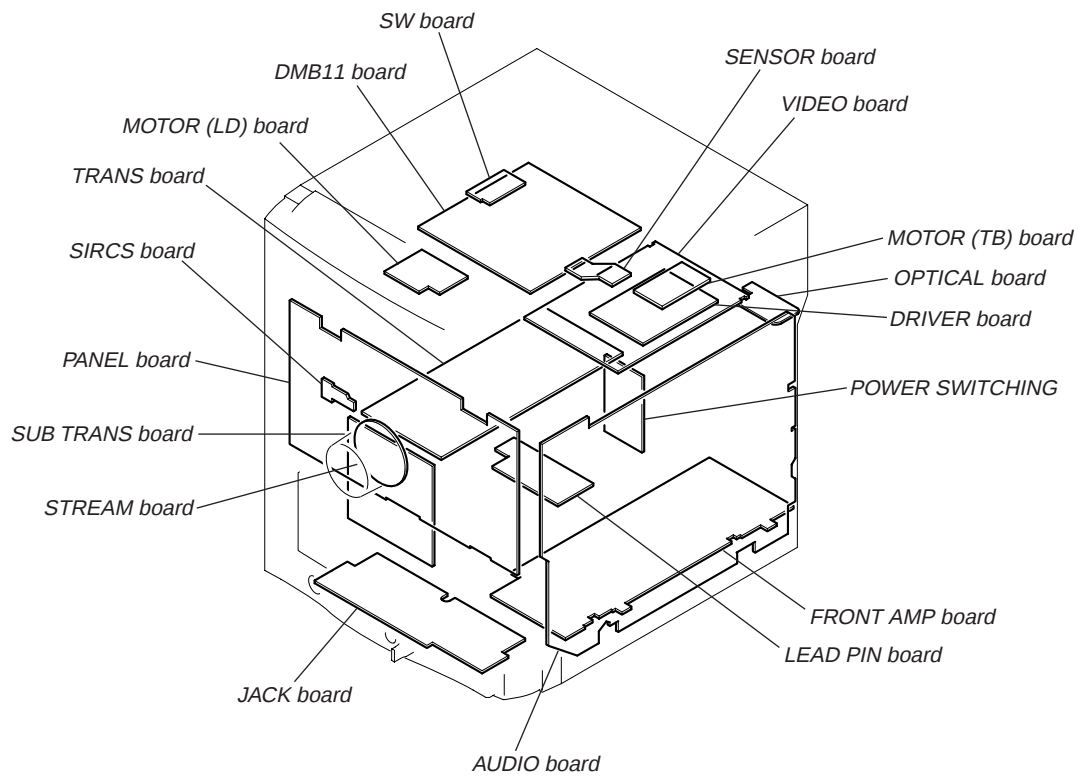
Adjustment Location: Playback Head (Deck A).

Record/Playback/Erase Head (Deck B).

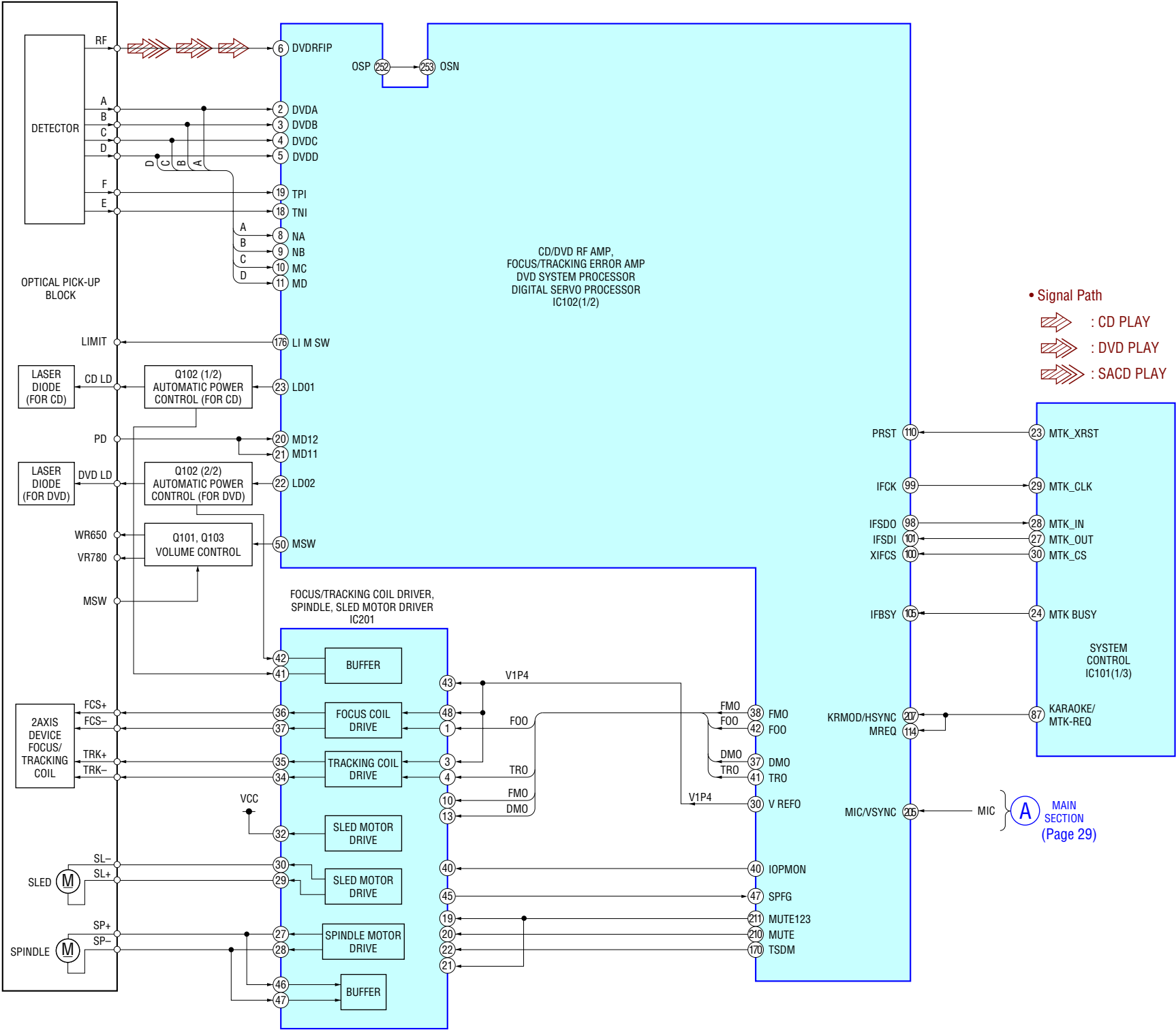


SECTION 7 DIAGRAMS

7-1. CIRCUIT BOARDS LOCATION



7-2. BLOCK DIAGRAM — RF/SERVO SECTION —

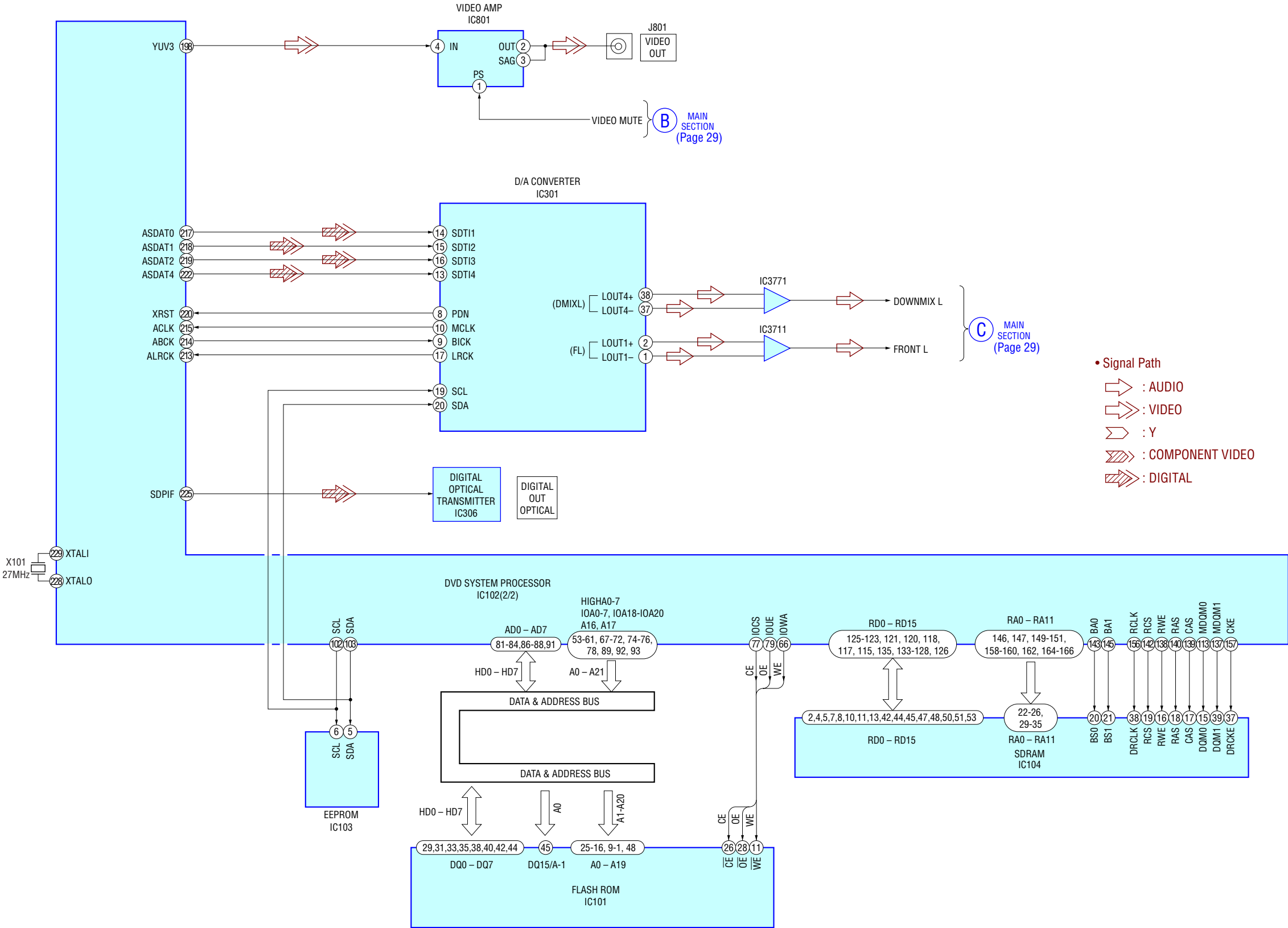


• Signal Path

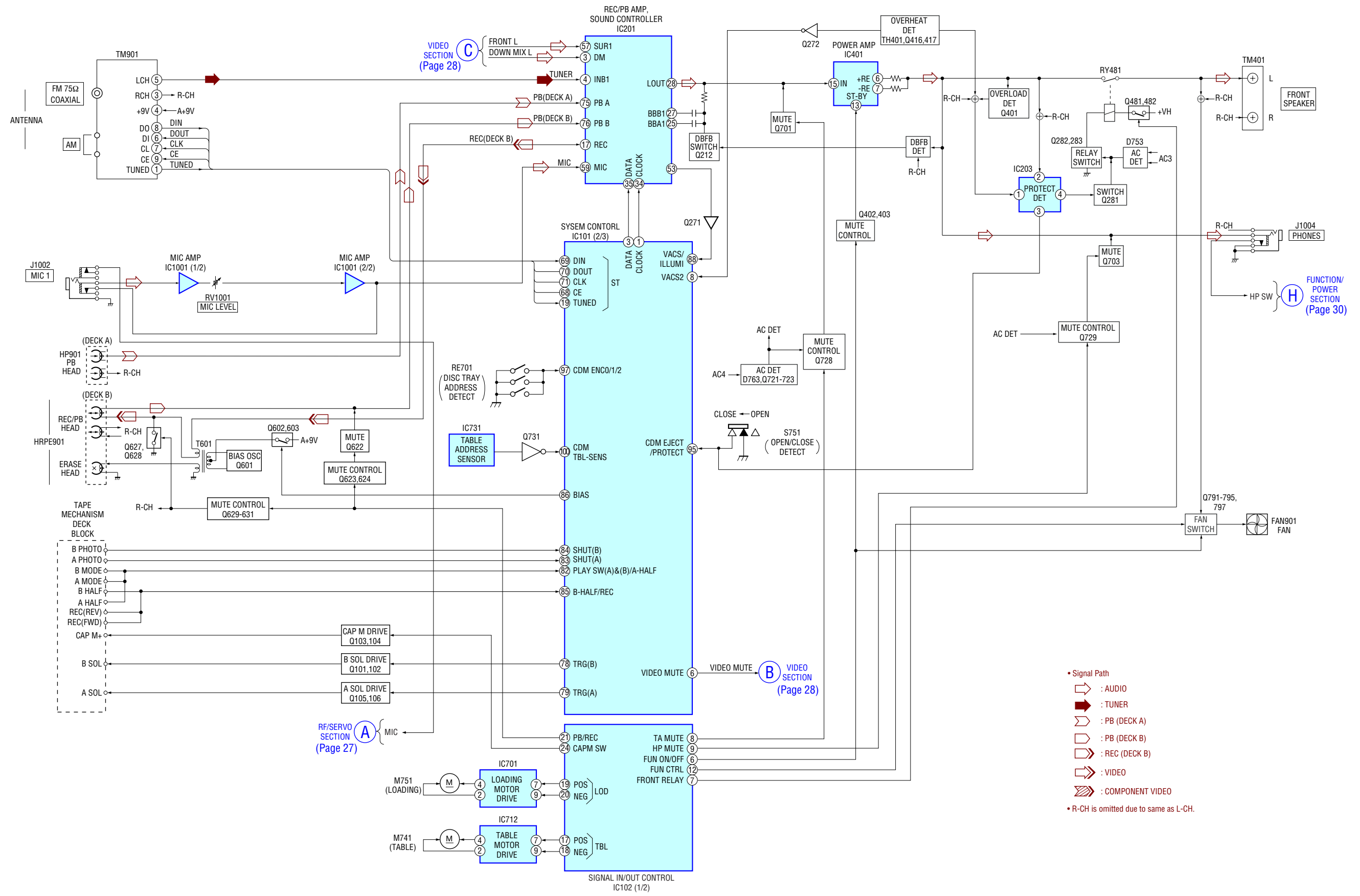
- CD PLAY
- DVD PLAY
- SACD PLAY

MAIN SECTION (Page 29)

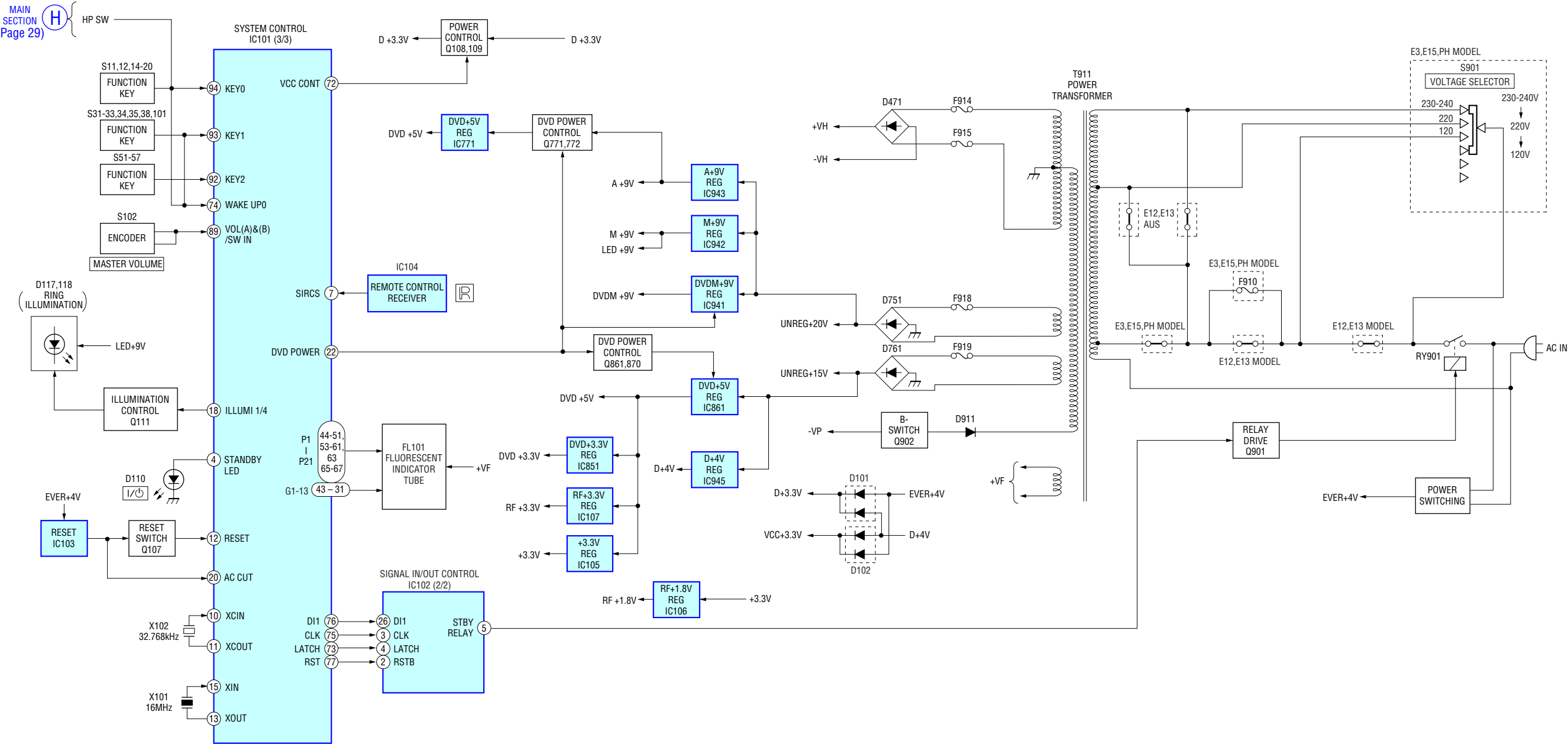
7-3. BLOCK DIAGRAM — VIDEO SECTION —



7-4. BLOCK DIAGRAM — MAIN SECTION —



7-5. BLOCK DIAGRAM — FUNCTION/POWER SECTION —



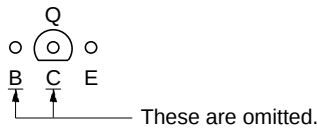
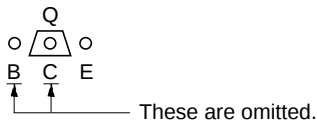
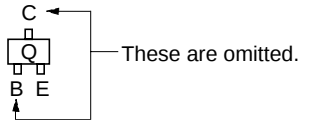
• NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Board:

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : Pattern from the side which enables seeing.
(The other layer's patterns are not indicated.)

Caution:
Pattern face side: Parts on the pattern face side seen from
(Conductor Side) the pattern face are indicated.
Parts face side: Parts on the parts face side seen from
(Component Side) the parts face are indicated.

- Indication of transistor.



UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

LF : LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.

Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.

Soldering irons using a temperature regulator should be set to about 350 °C.

Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!

- Strong viscosity

Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.

- Usable with ordinary solder

It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

Note on Schematic Diagram:

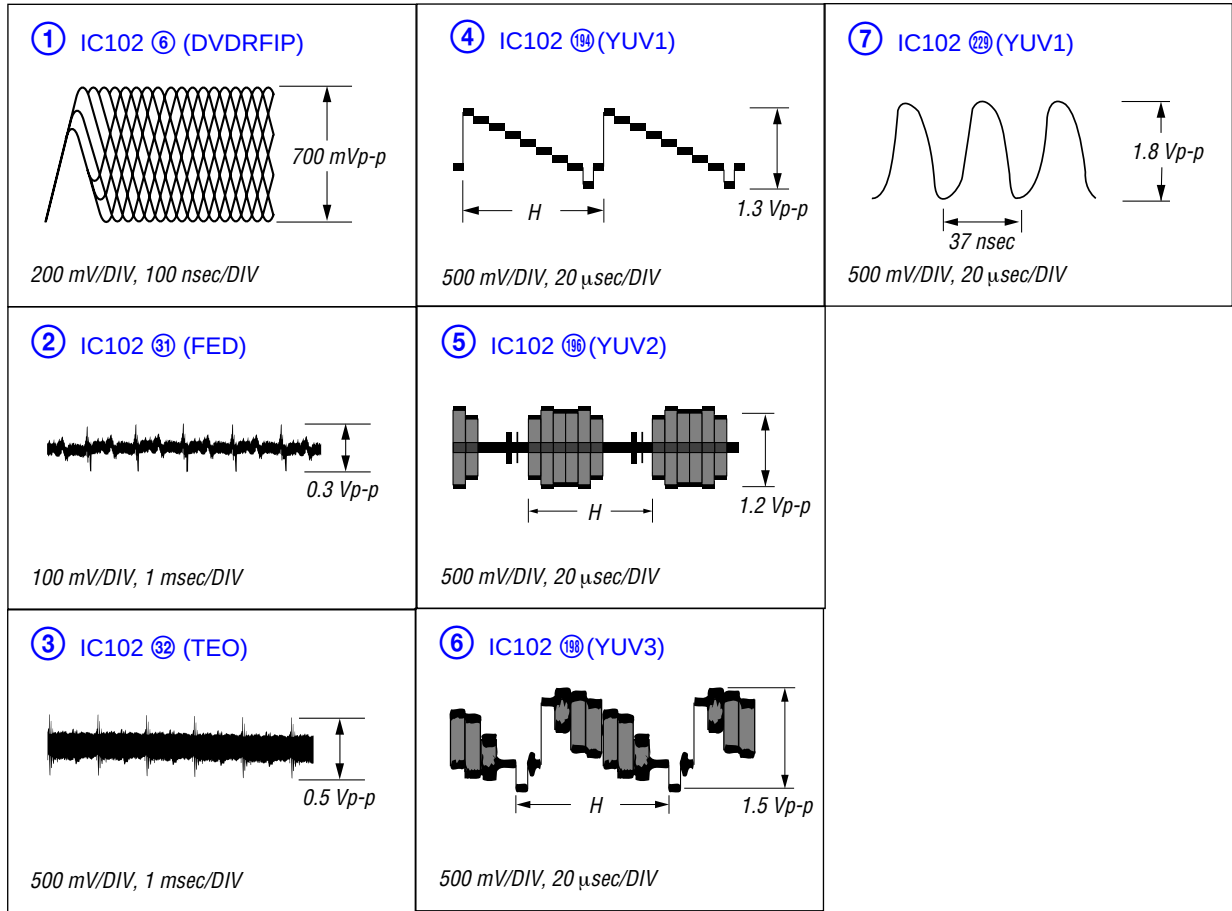
- All capacitors are in μF unless otherwise noted. (p: pF)
- 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}W$ or less unless otherwise specified.
- : nonflammable resistor.
- : panel designation.

Note: The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety.
Replace only with part number specified.

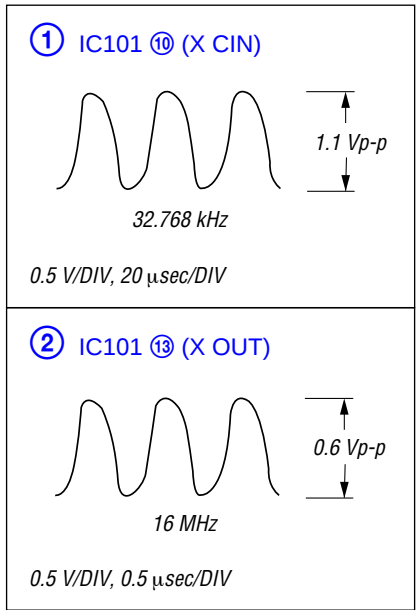
- : B+ Line.
- : B- Line.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : FM
* : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 M Ω).
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
⇒ : AUDIO
⇒ : TUNER
⇒ : VIDEO (COMPONENT)
⇒ : VIDEO (COMPOSITE)
⇒ : TAPE PLAY (DECK A)
⇒ : TAPE PLAY (DECK B)
⇒ : TAPE REC (DECK B)
⇒ : DVD (AUDIO)
⇒ : DVD (RF)
⇒ : DVD (DIGITAL)
- Abbreviation
E3 : 240 V AC area in E model
E12 : 220 – 240 V AC area in E model
E13 : 220 – 230 V AC area in E model
E15 : Iran model
PH : Philippine model

• WAVEFORMS

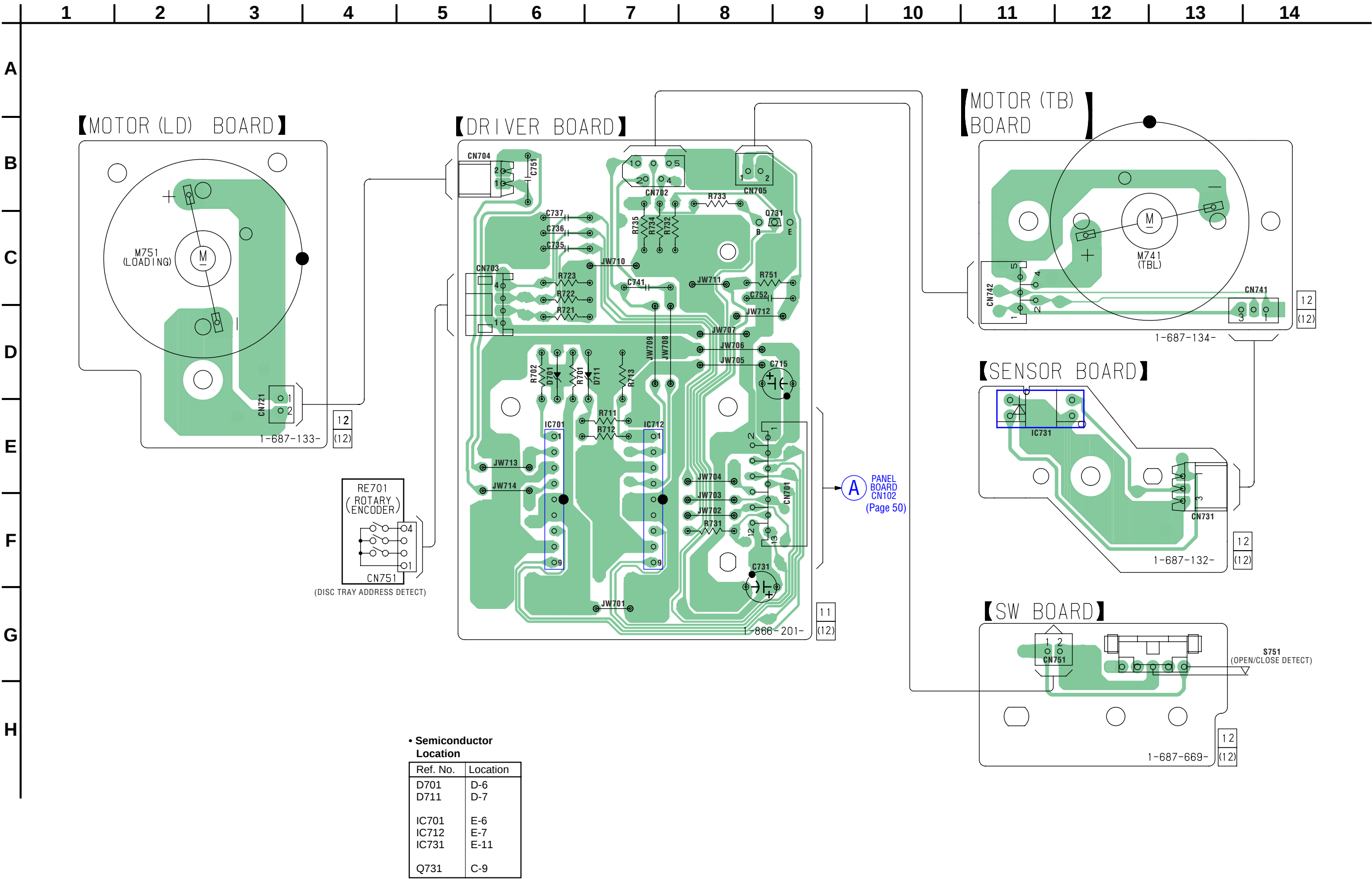
– DMB11 BOARD –



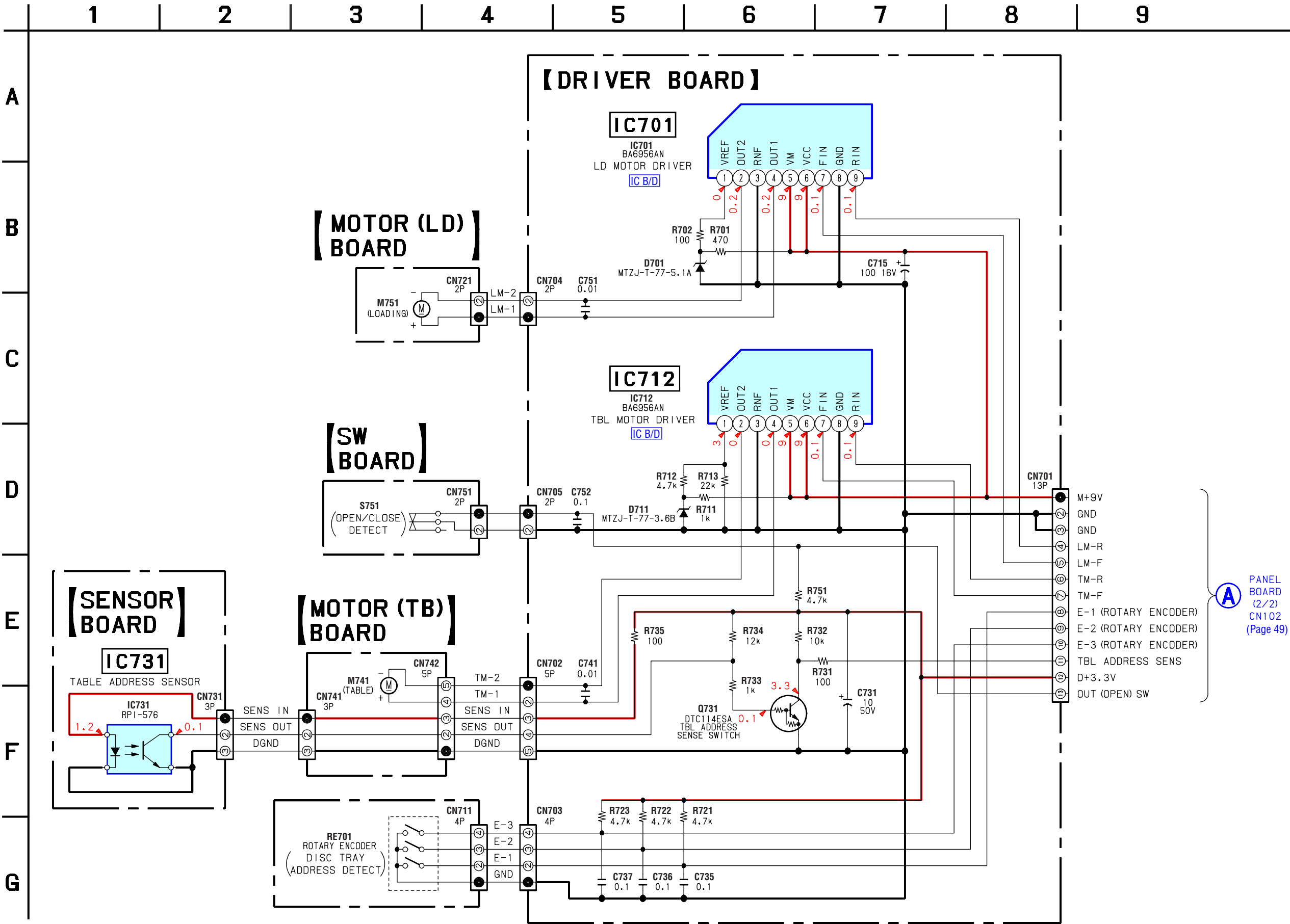
– PANEL BOARD –



7-6. PRINTED WIRING BOARDS — DRIVER SECTION — • Refer to page 26 for Circuit Boards Location. : Uses unleaded solder.



7-7. SCHEMATIC DIAGRAM — DRIVER SECTION — • Refer to page 56 for IC Block Diagrams.

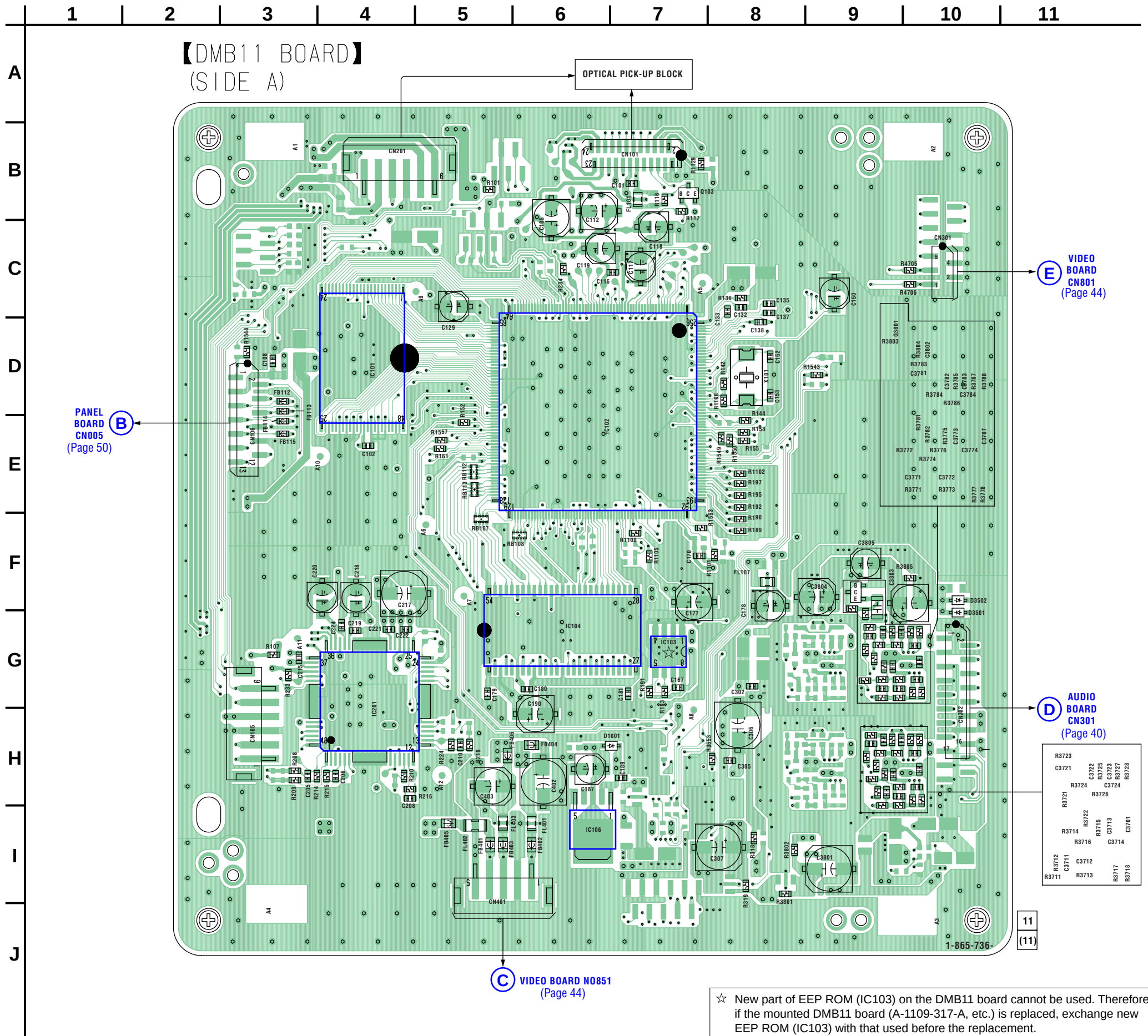


7-8. PRINTED WIRING BOARD — DMB11 SECTION — • Refer to page 26 for Circuit Boards Location. : Uses unleaded solder.

• Semiconductor
Location

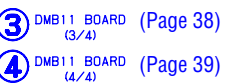
Ref. No.	Location
D1001	H-6
D3501	G-10
D3502	F-10
IC101	D-4
IC102	E-6
IC103	G-7
IC104	G-6
(IC105)	C-5
IC106	I-6
(IC107)	C-8
IC201	G-4
(IC301)	H-8
(IC3711)	H-9
(IC3771)	G-9
(Q101)	B-7
(Q102)	B-6
Q103	B-7
Q3801	F-9

(): SIDE B

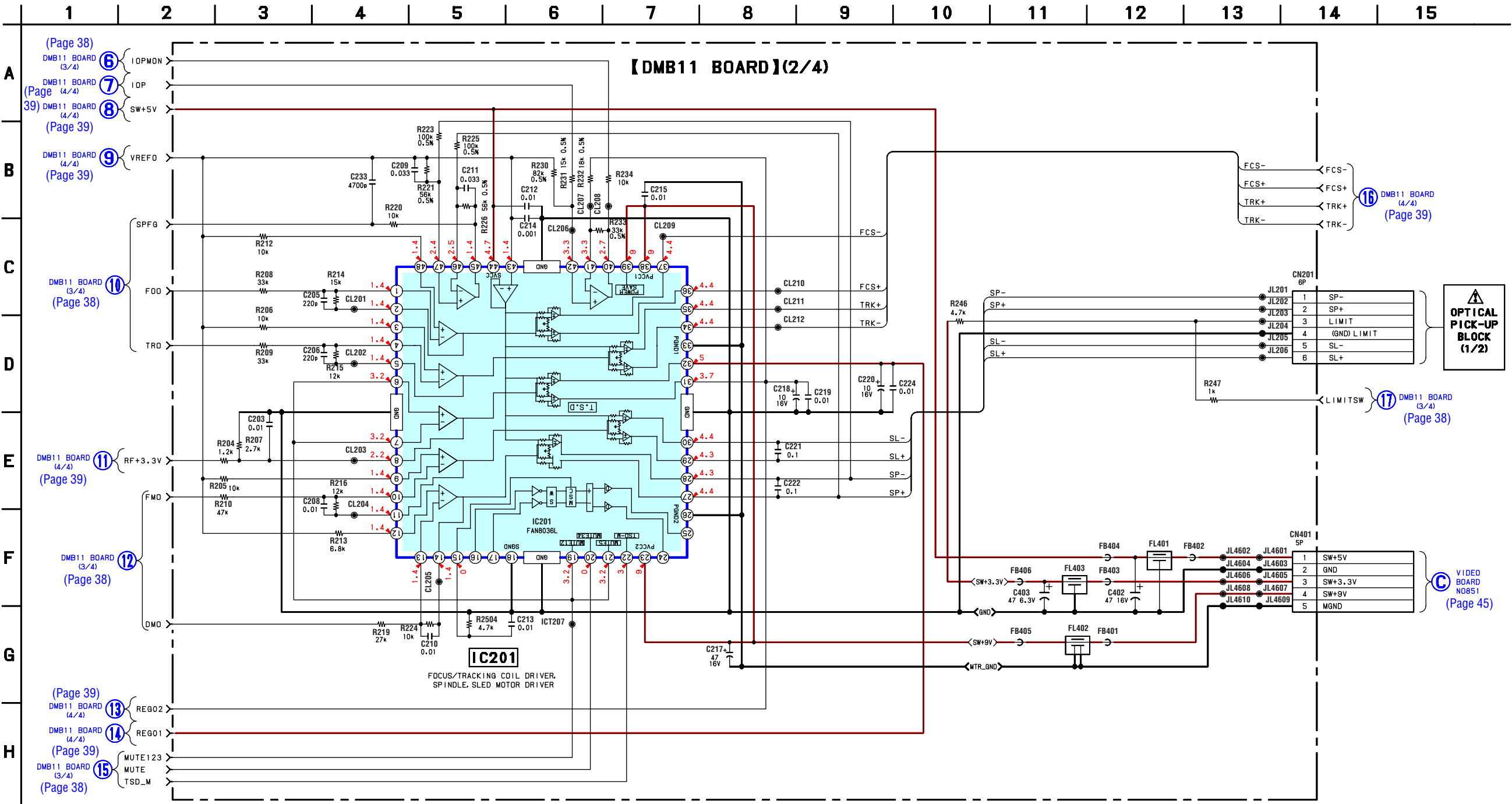




36

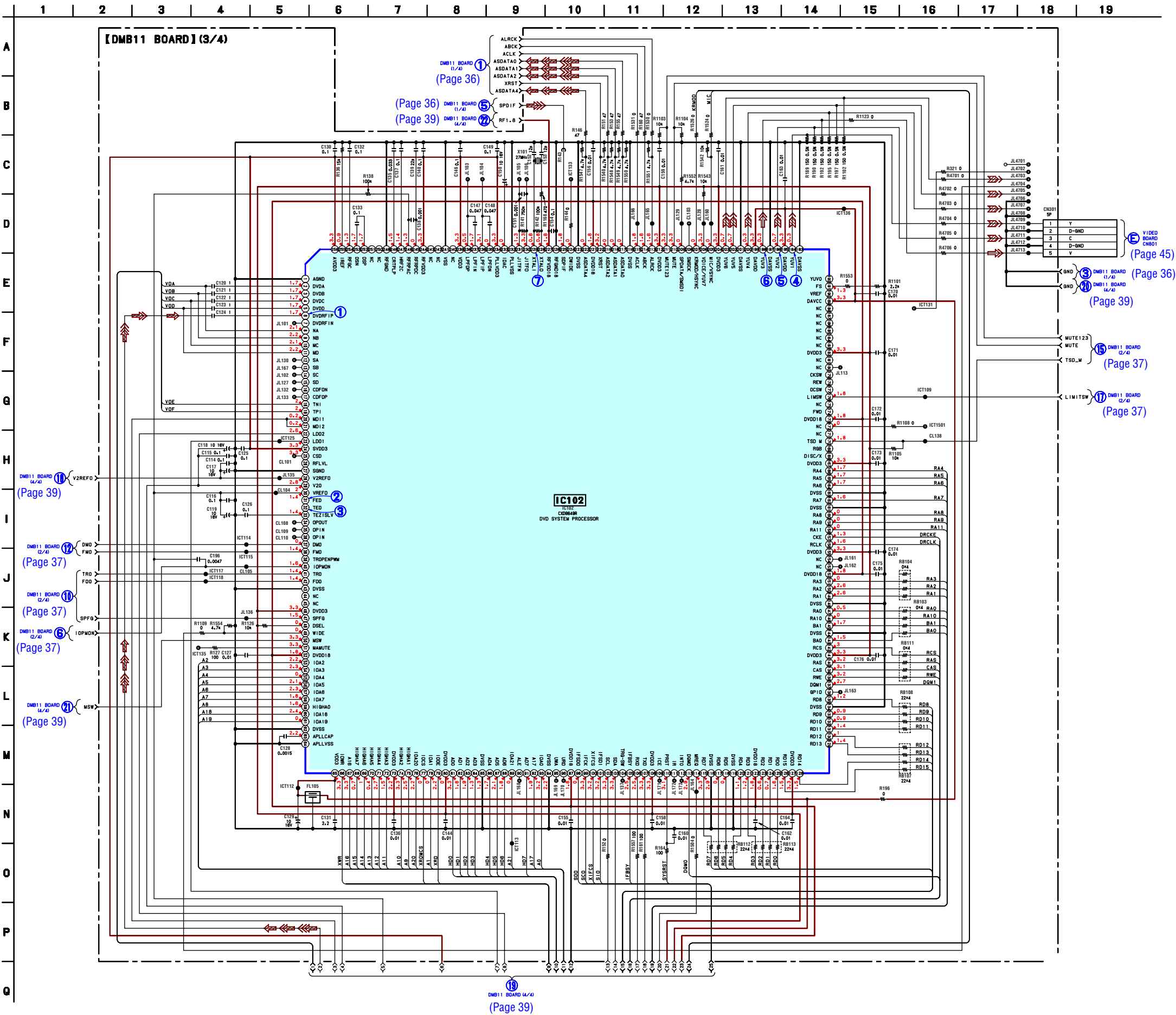


7-10. SCHEMATIC DIAGRAM — DMB11 SECTION (2/4) —



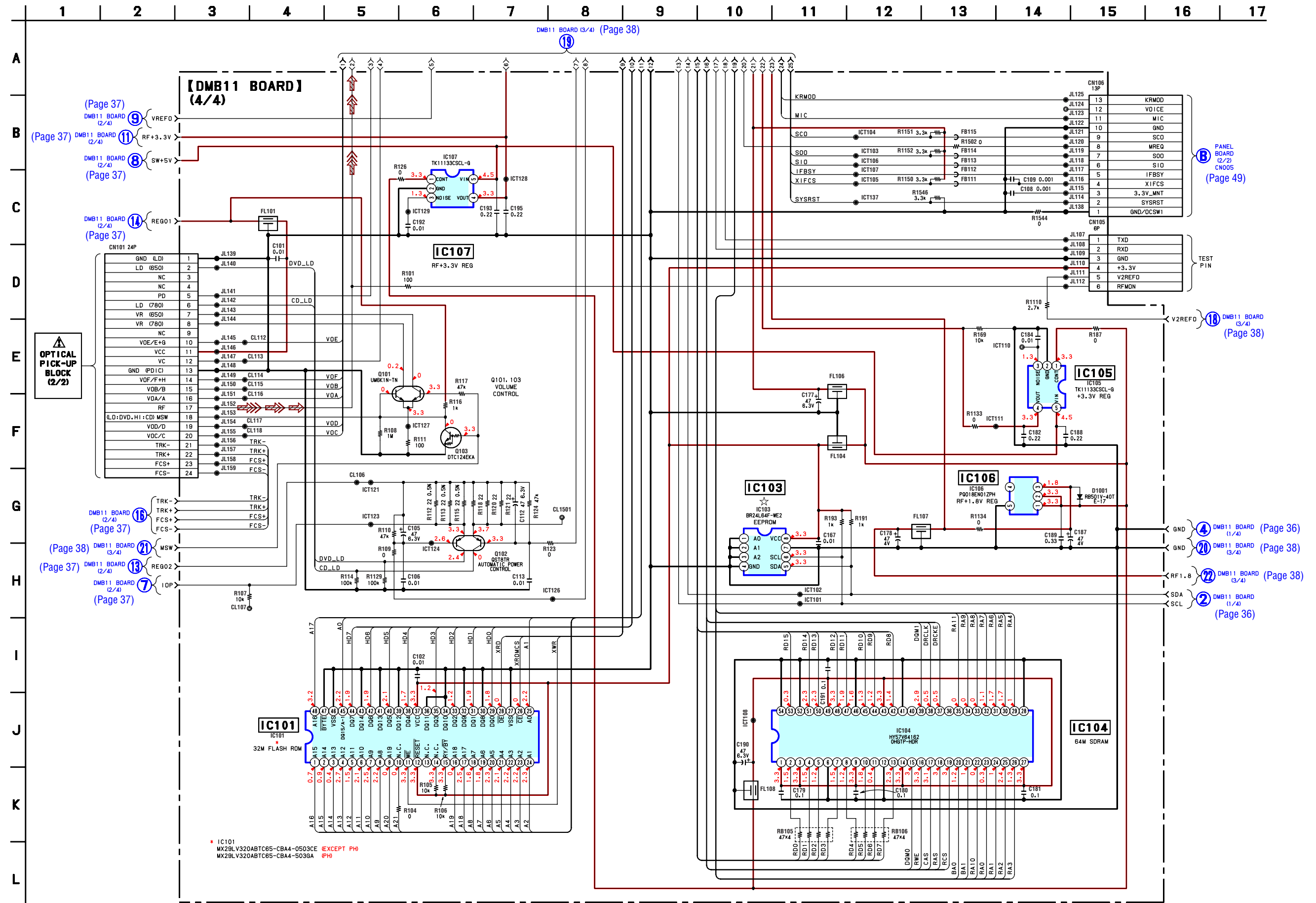
7-11. SCHEMATIC DIAGRAM — DMB11 SECTION (3/4) —

- Refer to page 59 for IC Pin Descriptions.
- Refer to page 31 for Waveforms.



7-12. SCHEMATIC DIAGRAM — DMB11 SECTION (4/4) —

☆ New part of EEP ROM (IC103) on the DMB11 board cannot be used. Therefore, if the mounted DMB11 board (A-1109-317-A, etc.) is replaced, exchange new EEP ROM (IC103) with that used before the replacement.



41



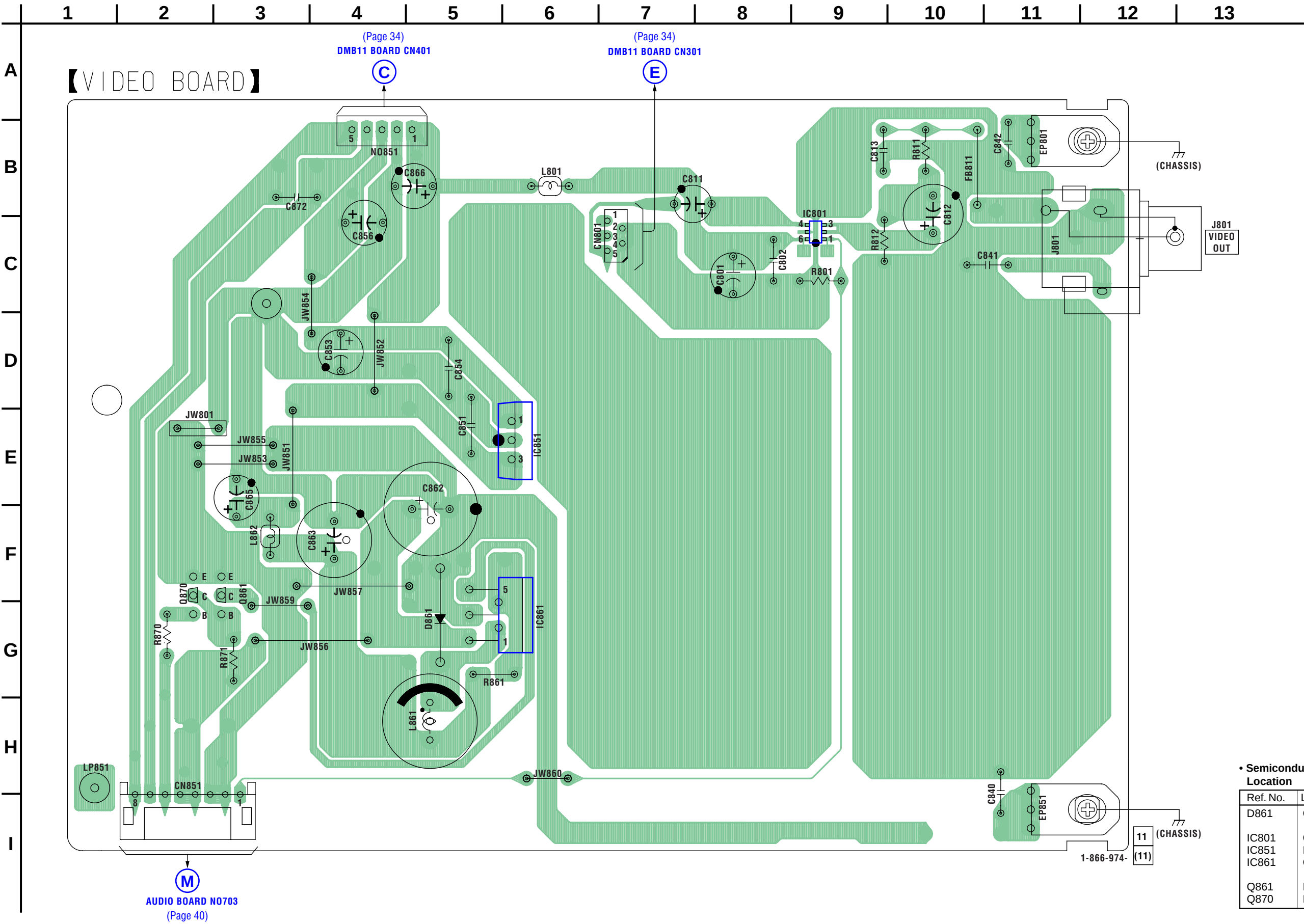
42



43



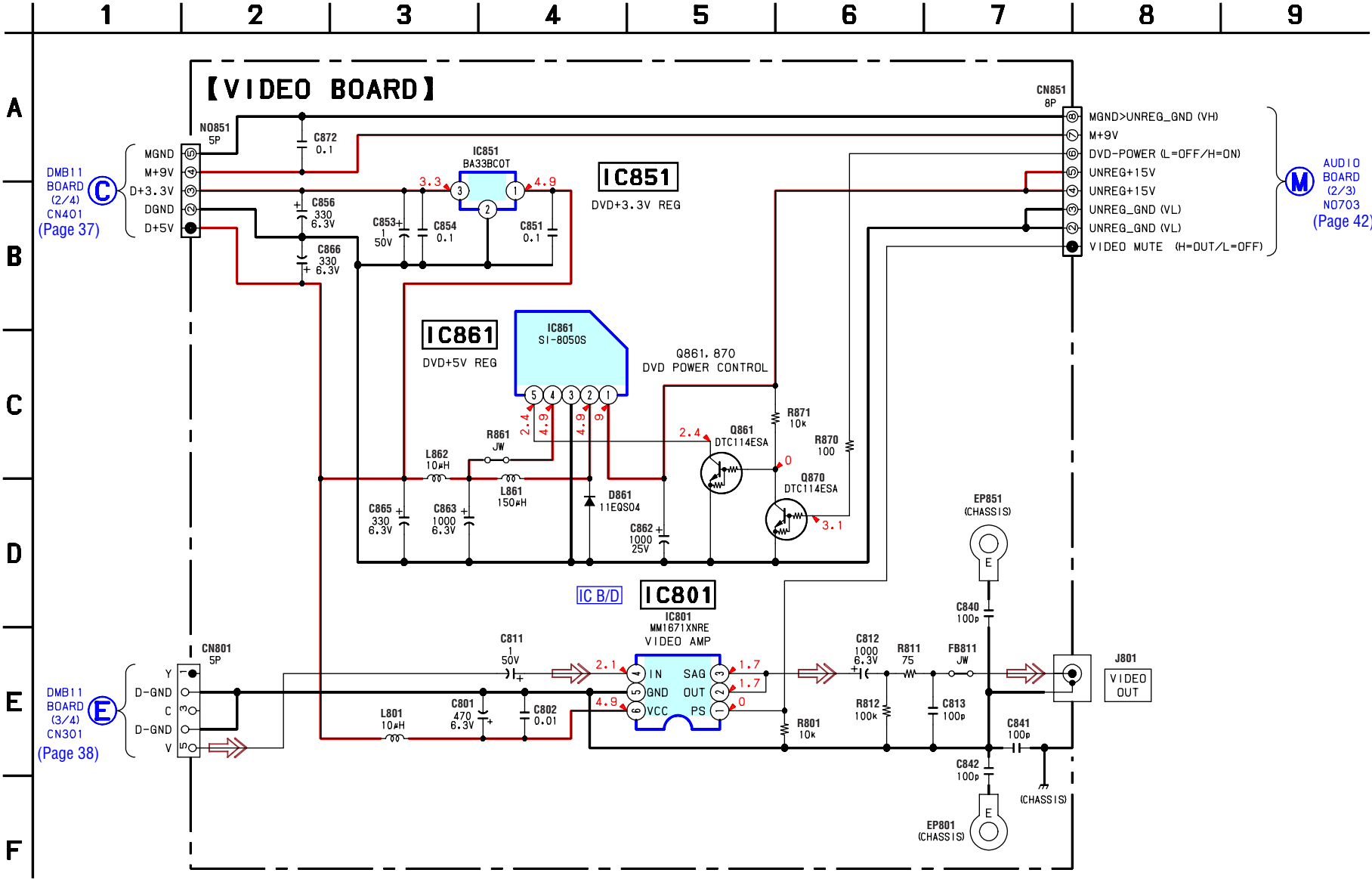
7-17. PRINTED WIRING BOARD — VIDEO SECTION — • Refer to page 26 for Circuit Boards Location.  : Uses unleaded solder.



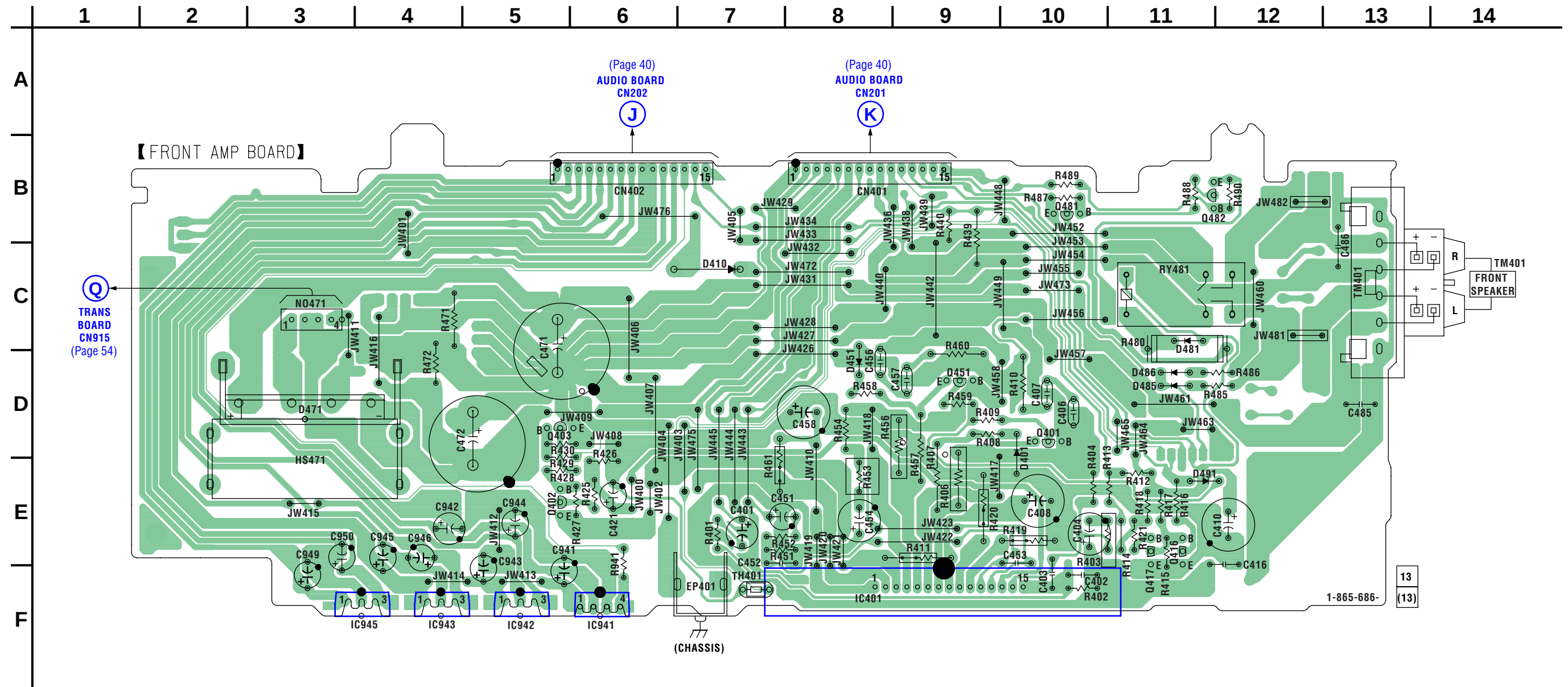
• Semiconductor Location

Ref. No.	Location
D861	G-5
IC801	C-9
IC851	E-6
IC861	G-6
Q861	F-3
Q870	F-2

7-18. SCHEMATIC DIAGRAM — VIDEO SECTION —



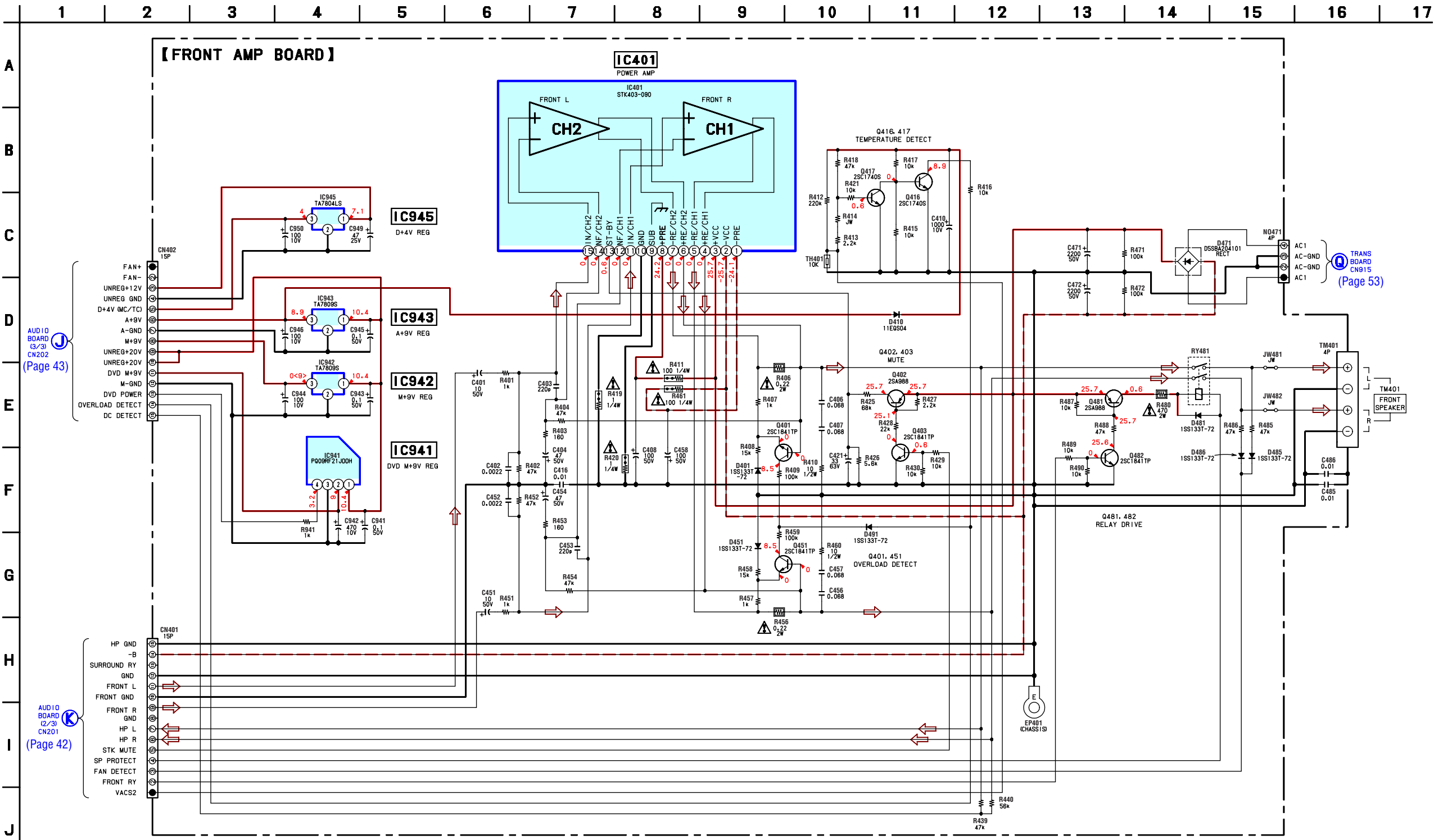
7-19. PRINTED WIRING BOARD — FRONT AMP SECTION — • Refer to page 26 for Circuit Boards Location. **4F** : Uses unleaded solder.

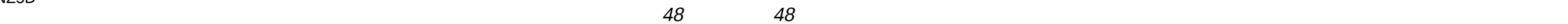


- **Semiconductor Location**

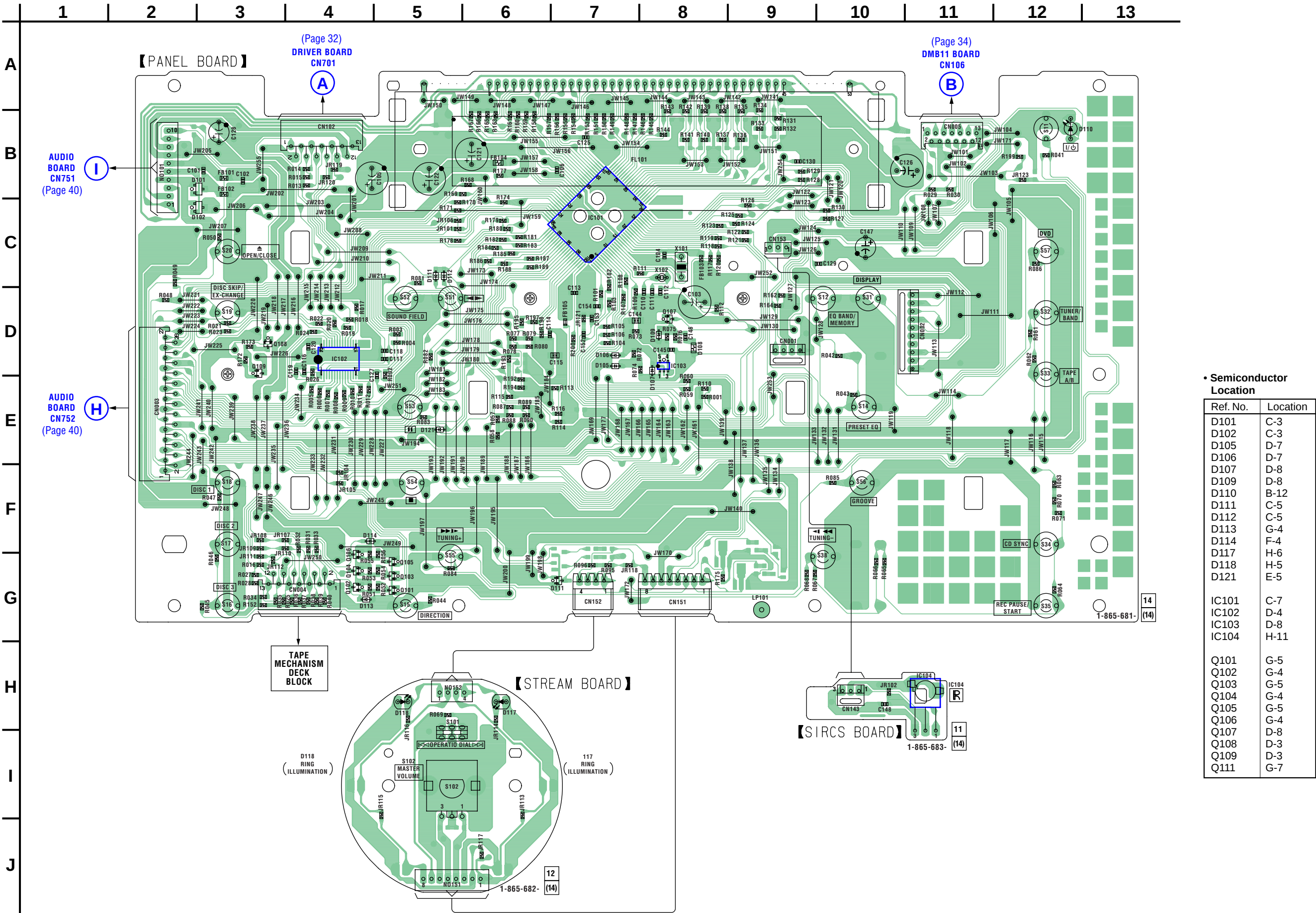
Ref. No.	Location	Ref. No.	Location
D401	D-10	IC943	F-4
D410	C-7	IC945	F-4
D451	D-8		
D471	D-3	Q401	D-10
D481	C-11	Q402	E-5
D485	D-11	Q403	D-5
D486	D-11	Q416	E-11
D491	E-11	Q417	F-11
		Q451	D-9
IC401	F-9	Q481	B-10
IC941	F-6	Q482	B-11
IC942	F-5		

7-20. SCHEMATIC DIAGRAM — FRONT AMP SECTION —

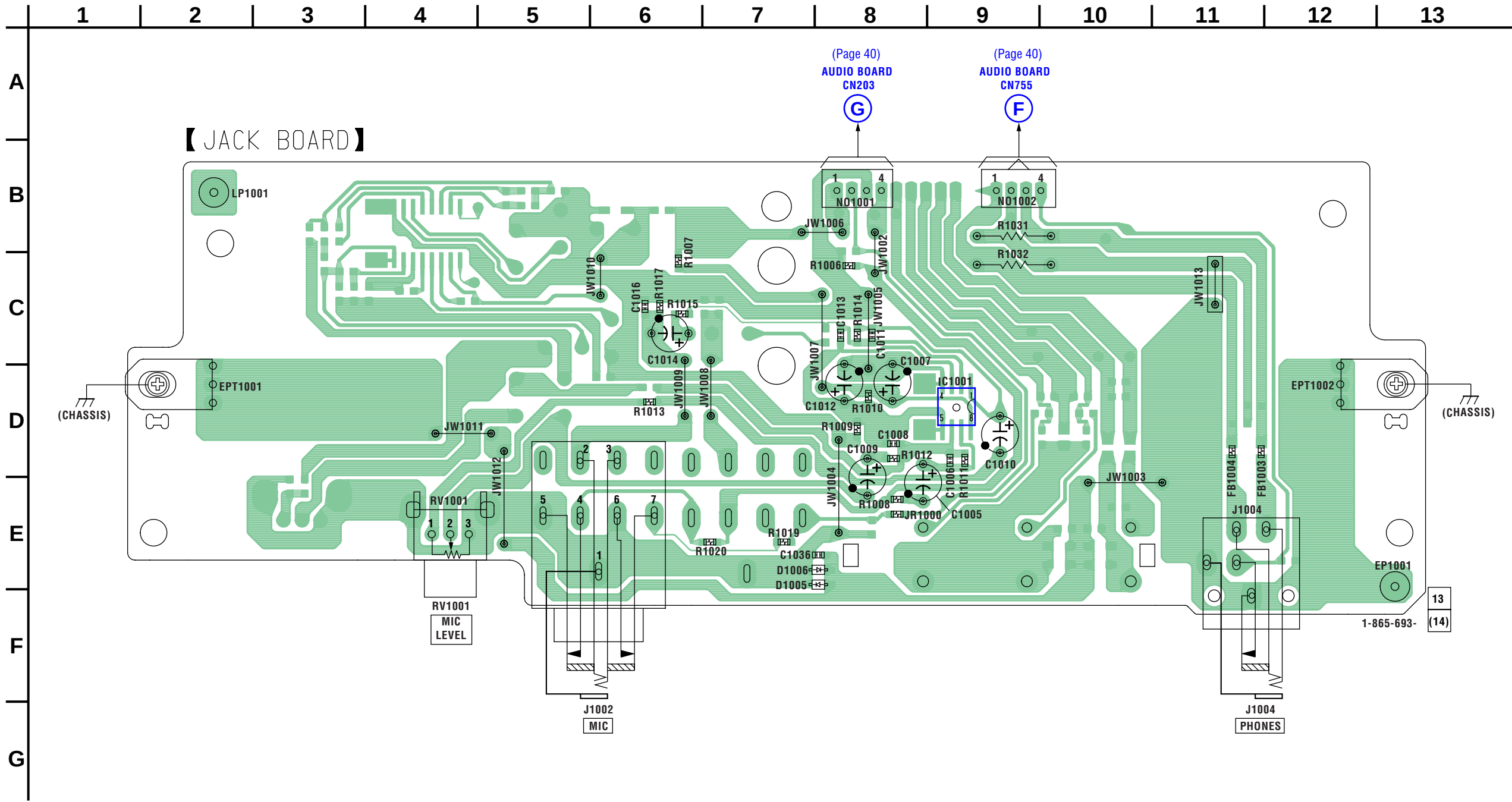




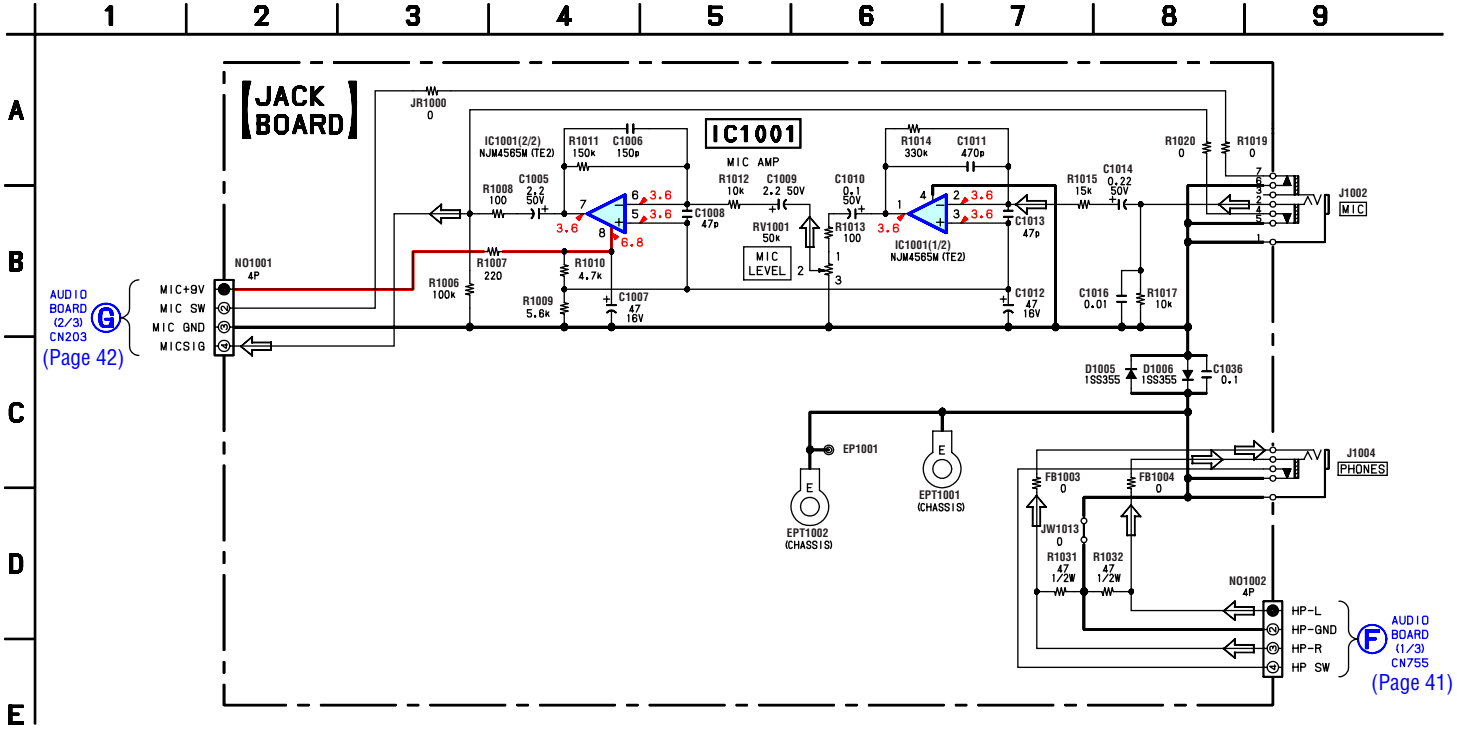
7-23. PRINTED WIRING BOARDS — PANEL SECTION — • Refer to page 26 for Circuit Boards Location.  : Uses unleaded solder.



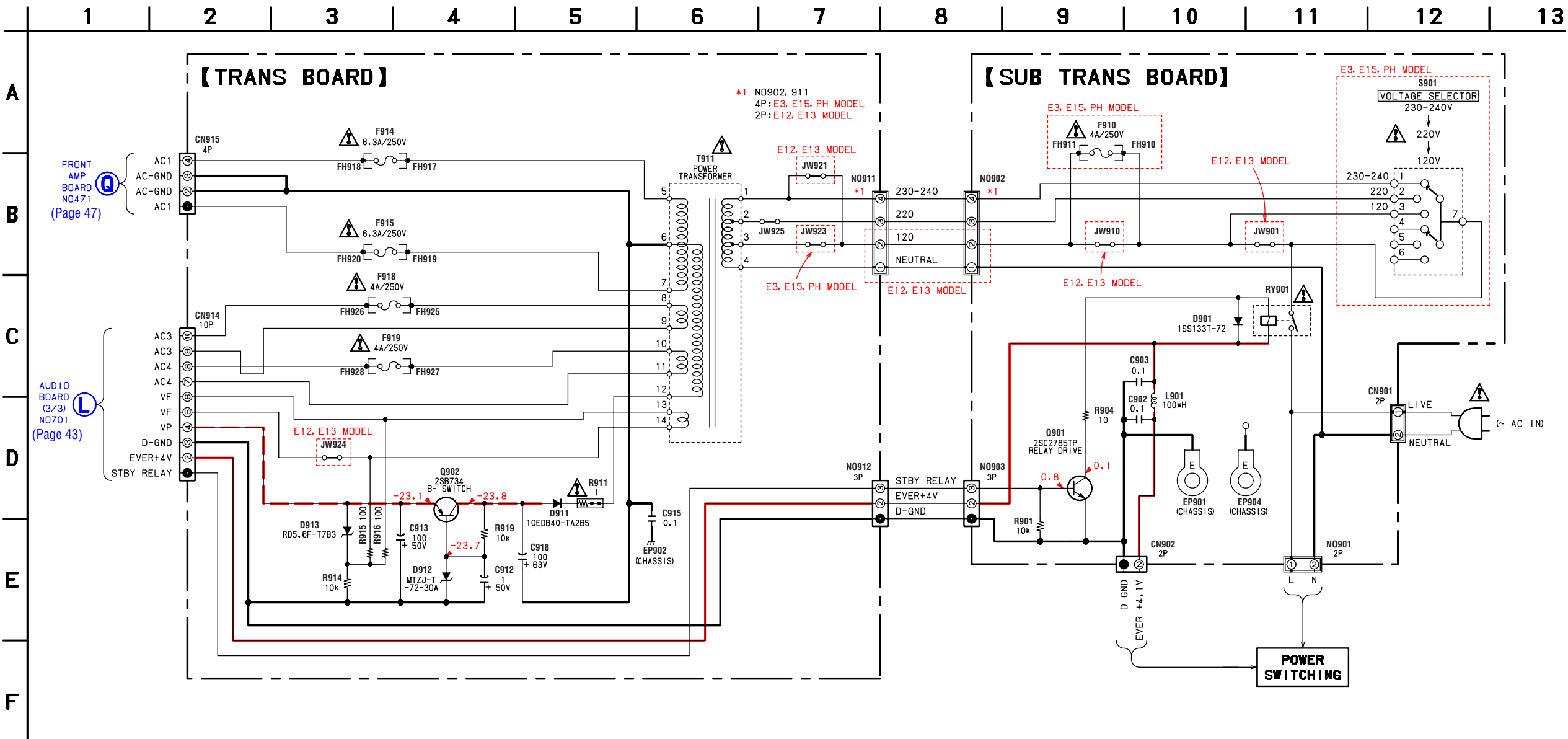
7-24. PRINTED WIRING BOARD — JACK SECTION — • Refer to page 26 for Circuit Boards Location.  : Uses unleaded solder.



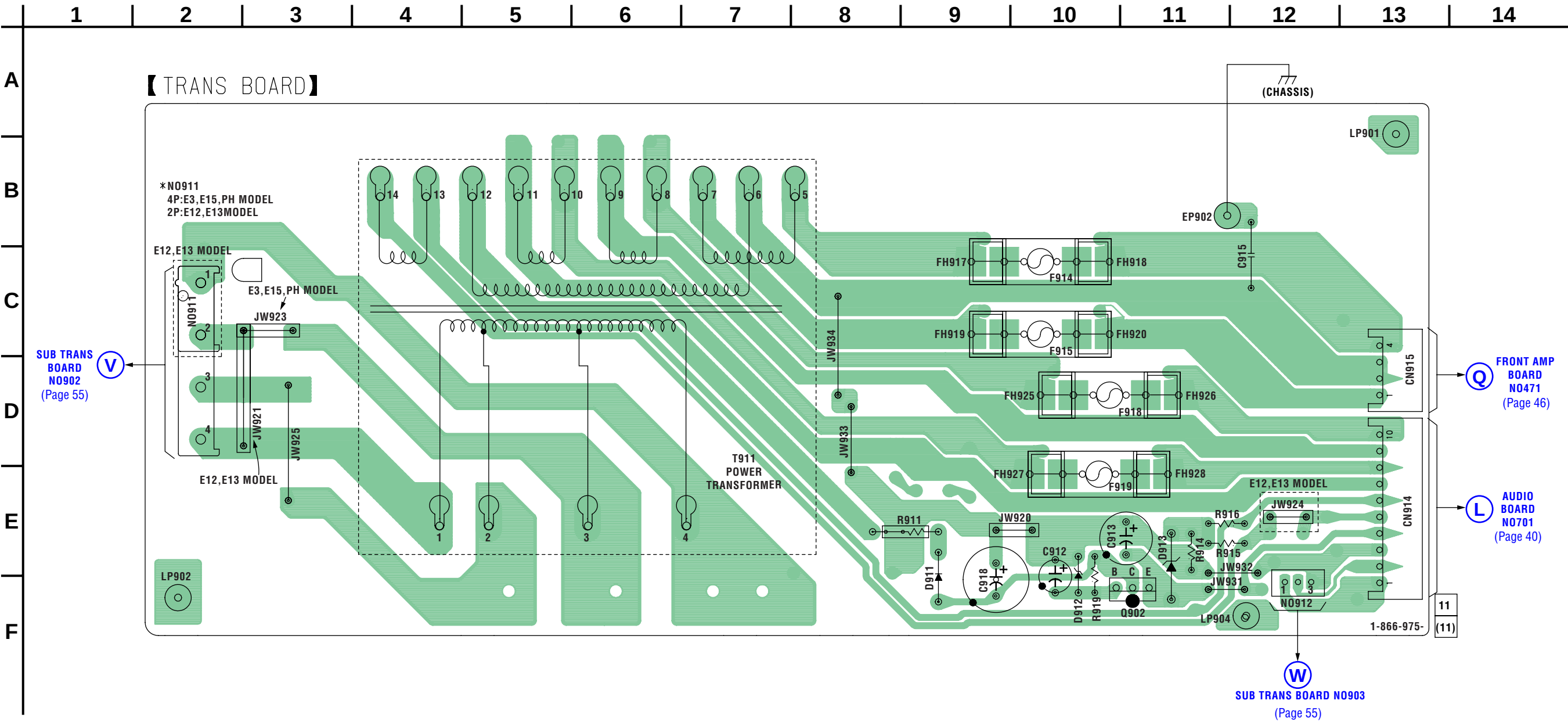
7-25. SCHEMATIC DIAGRAM — JACK SECTION —



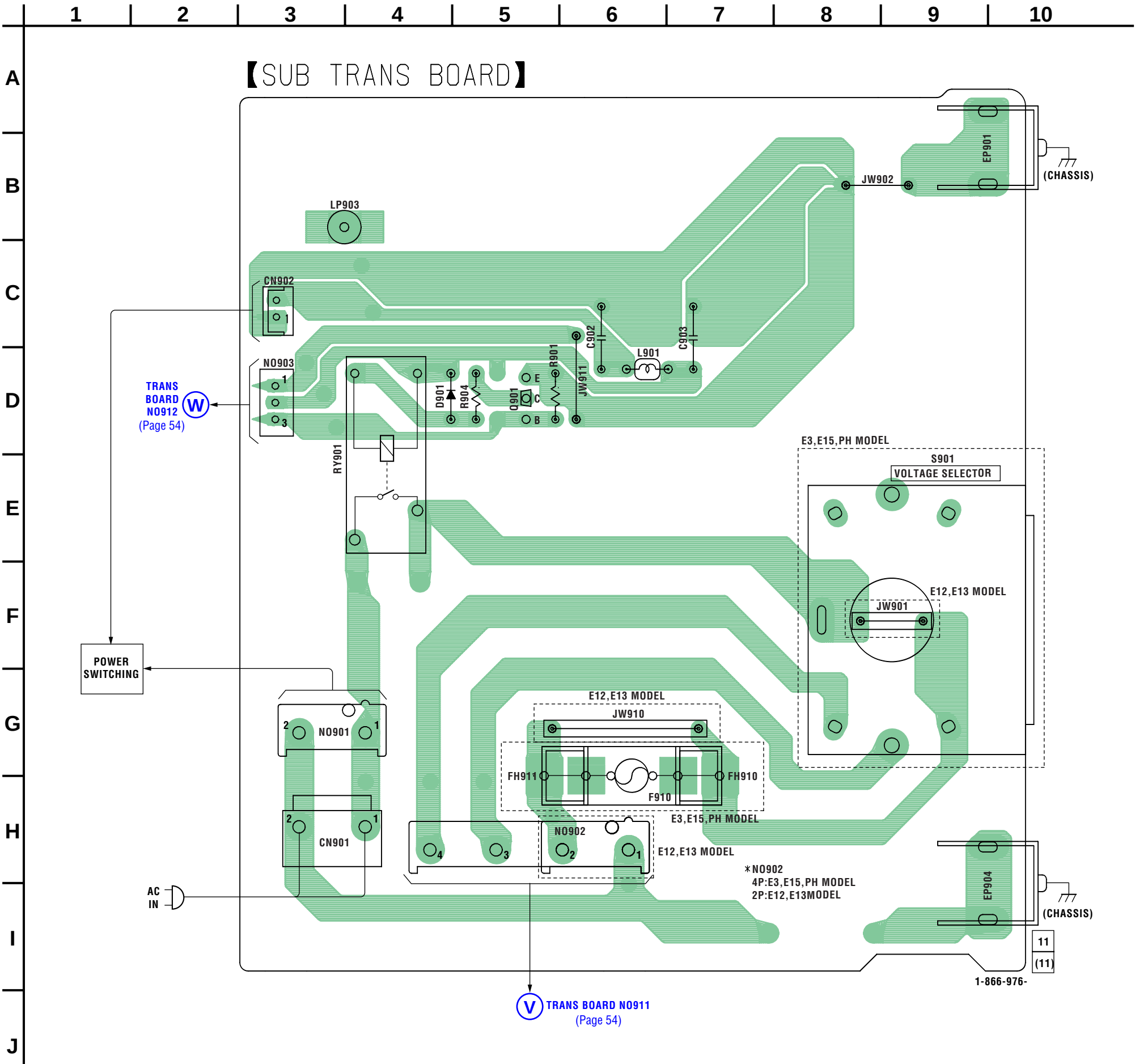
7-26. SCHEMATIC DIAGRAM — POWER SECTION —



7-27. PRINTED WIRING BOARD — TRANS SECTION — • Refer to page 26 for Circuit Boards Location.  : Uses unleaded solder.

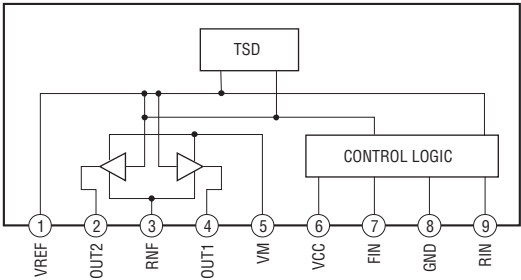


7-28. PRINTED WIRING BOARD — SUB TRANS SECTION — • Refer to page 26 for Circuit Boards Location.  : Uses unleaded solder.

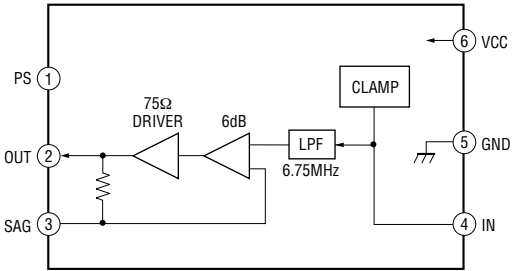


• IC BLOCK DIAGRAMS

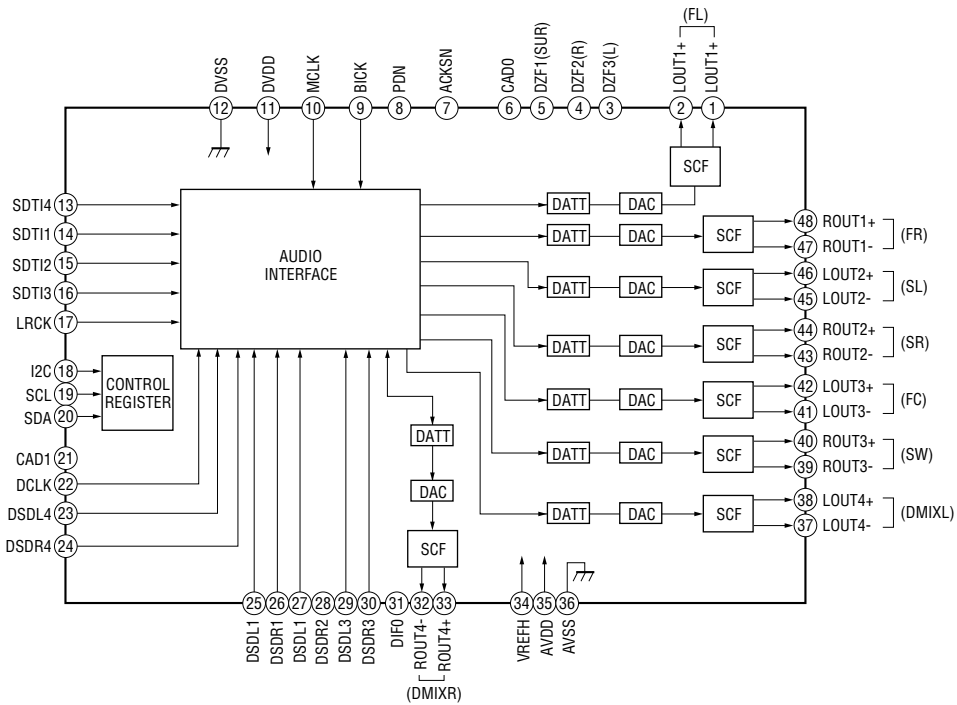
IC701 BA6956AN (DRIVER Board)
IC712 BA6956AN (DRIVER Board)



IC801 MM1671XNRE (VIDEO Board)



IC301 AK4358VQ-L (DMB11 Board (1/4))



• IC PIN Descriptions

IC101 M30392MEP-A10FPU0 (SYSTEM CONTROL) (PANEL BOARD (2/2))

Pin No.	Pin Name	I/O	Pin Description
1	61537 CLK	O	TA device control serial clock signal output
2	61530 CLK	O	TA device control serial clock signal output
3	TA DATA	O	TA device control serial data signal output
4	STANDBY LED	O	Standby LED control signal output
5	VIDEO OUT SW	O	Video out switch control signal output “H”: VIDEO
6	VIDEO MUTE	O	Video mute signal output “L”: VIDEO
7	SIRCS	I	Remote control signal input
8	VACS2	I	VACS signal input
9	CN VSS	—	Connector ground pin
10	X CIN	I	Sub clock signal input (32.768 kHz)
11	X COUT	O	Sub clock signal output (32.768 kHz)
12	RESET	I	Reset signal input
13	XOUT	O	Main clock signal output (16 MHz)
14	VSS	—	Ground pin
15	X IN	I	Main clock signal input (16 MHz)
16	VCC1	—	Power supply pin (+3.3 V)
17	P85	I	Pull up (EVER+3.3 V)
18	ILLUMI 1/4	O	Illumination on/off control signal output “H”: On
19	ST TUNED	I	ST tuned signal input
20	AC CUT	I	AC cut signal input
21	ILLUMI CTRL	O	Illumination control signal output
22	DVD POWER	O	DVD power supply control signal output
23	MTK RESET	O	MTK reset signal output
24	MTK BUSY	O	MTK busy signal output
25	I2C CLK	I/O	I2C serial clock signal input/output
26	I2C DATA	I/O	I2C serial data signal input/output
27	MTK OUT	O	MTK serial data signal output
28	MTK IN	I	MTK serial data signal input
29	MTK CLK	I	MTK serial clock signal input
30	MTK CS	I	MTK chip select signal input
31 to 43	G13 to G1	O	Grid and segment control signal output
44 to 51	P1 to P8	O	Grid and segment control signal output
52	VEE	—	Power supply pin
53 to 61	P9 to P17	O	Grid and segment control signal output
62	VCC2	—	Power supply pin (+3.3 V)
63	P18	O	Grid and segment control signal output
64	VSS	—	Ground pin
65 to 67	P19 to P21	O	Grid and segment control signal output
68	ST CE	O	Tuner chip enable signal output
69	ST DIN	I	Tuner data in signal input
70	ST DOUT	O	Tuner data out signal output
71	ST CLK	O	Tuner serial clock signal output
72	I/O VCC CONT	O	In/out power supply control signal output
73	I/O LATCH	O	In/out serial latch control signal output
74	WAKE UP0	I	Wake up signal input
75	I/O CLK	O	In/out serial clock control signal output
76	I/O DI1	O	In/out serial data control signal output
77	I/O RST	O	In/out reset signal output
78	TRG (B)	O	Tape mechanism logic (Trigger B) control signal output
79	TRG (A)	O	Tape mechanism logic (Trigger A) control signal output
80	ILLUMI 3/6	O	Illumination on/off control signal output “H”: On
81	ILLUMI 2/5	O	Illumination on/off control signal output “H”: On
82	PLAY SW (A) & (B)/ A-HALF	I	Head up switch detect signal input (A deck and B deck) A deck HALF signal input

HCD-GNZ5D

Pin No.	Pin Name	I/O	Pin Description
83	SHUT (A)	I	Protect detect signal input (A deck)
84	SHUT (B)	I	Protect detect signal input (B deck)
85	B HALF/REC	I	B deck HALF signal input/Record signal input (A deck and B deck)
86	BIAS	O	Bias on/off signal output
87	KARAOKE/ MTK M REQ	I	MTK KARAOKE mode signal input MTK mute request signal input
88	VACS/ILLUMI	I	VACS and illumination (L+R) control signal input
89	VOL (A) & (B)/ SW IN	I	Volume A and B control signal input Sub woofer control signal input
90	SPEC IN	I	Specification signal input
91	MODEL IN	I	Serial line up signal input
92 to 94	KEY2 to KEY0	I	Key signal input
95	CDM EJECT/ PROTECT	I	CD mechanism eject detect signal input Protect detect signal input
96	AVSS	—	Ground pin
97	CDM ENC0/1/2	I	CD mechanism switch signal input
98	VREF	—	Voltage reference pin
99	AVCC	—	Power supply pin (+3.3 V)
100	CDM TBL SENS	I	CD mechanism table sensor detect signal input

IC102 BH2210FV (SIGNAL IN/OUT CONTROL) (PANEL BOARD (2/2))

Pin No.	Pin Name	I/O	Pin Description
1	CTLIO	I	IN/OUT control port (Fixed at “H” in this set.)
2	RSTB	I	Reset signal input
3	CLK	I	Serial clock signal input
4	LATCH	I	Serial latch signal input
5	STBY RELAY	O	Standby relay on/off signal output “H”: On, “L”: Off
6	FAN ON/OFF	O	Fan on/off signal output “H”: Off, “L”: On
7	FRONT RELAY	O	Front relay on/off signal output “H”: On, “L”: Off
8	TA MUTE	O	TA line mute on/off signal output “H”: Off, “L”: On
9	HP MUTE	O	Headphones mute on/off signal output “H”: Off, “L”: On
10	AU-OUT MUTE	O	Audio out mute on/off signal output “H”: Off, “L”: On
11	SW MUTE	O	Subwoofer mute on/off signal output “H”: Off, “L”: On
12	FAN CTRL	O	FAN control signal output “L”: Off
13 to 15	NO USE	O	Not used. (Open)
16	NO USE	O	Not used. (Fixed at “L”).
17	TBL POS	O	CD mechanism table position control signal output
18	TBL NEG	O	CD mechanism table NEG control signal output
19	LOD POS	O	CD mechanism table loading position control signal output
20	LOD NEG	O	CD mechanism table NEG control signal output
21	PB/REC	O	Tape playback/record signal output “H”: REC, “L”: PB
22	REAR RELAY	O	Rear relay on/off signal output “H”: On, “L”: Off
23	SW RELAY	O	Subwoofer relay on/off signal output “H”: On, “L”: Off
24	CAPM SW	O	Capstan motor on/off signal output “H”: On, “L”: Off
25	DO2	O	Not used. (Open)
26	DI1	I	Serial data signal input
27	VSS	—	Ground pin
28	VDD	—	Power supply pin (+3 V)

IC102 CXD9849R (DMB11 BOARD (3/4))**(CD/DVD RF AMP, FOCUS/TRACKING ERR AMP, DVD SYSTEM PROCESSOR, DIGITAL SERVO PROCESSOR)**

Pin No.	Pin Name	I/O	Description
1	AGND	—	Terminal Ground
2	DVDA	I	AC coupled input path A
3	DVDB	I	AC coupled input path B
4	DVDC	I	AC coupled input path C
5	DVDD	I	AC coupled input path D
6	DVDRFIP	I	AC coupled DVD RF signal input RFIP
7	DVDRFIN	I	AC coupled DVD RF signal input RFIN (not used)
8	NA	I	DC coupled main-beam RF signal input A
9	NB	I	DC coupled main-beam RF signal input B
10	MC	I	DC coupled main-beam RF signal input C
11	MD	I	DC coupled main-beam RF signal input D
12	SA	I	DC coupled sub-beam RF signal input A (not used)
13	SB	I	DC coupled sub-beam RF signal input B (not used)
14	SC	I	DC coupled sub-beam RF signal input C (not used)
15	SD	I	DC coupled sub-beam RF signal input D (not used)
16	CDFON	I	CD focusing error negative input (not used)
17	CDFOP	I	CD focusing error positive input (not used)
18	TNI	I	3 beam satellite PD signal negative input
19	TPI	I	3 beam satellite PD signal positive input
20	MDI1	I	Laser power PD monitor input
21	MDI2	I	Laser power PD monitor input
22	LDO2	O	Laser drive output
23	LDO1	O	Laser drive output
24	SVDD3	—	Power Supply (+3.3V)
25	CSO	O	Central servo, Positive main beam summing output (not used)
26	RFLVL	O	RFRP low pass, or Positive main beam summing output (not used)
27	SGND	—	Terminal Ground
28	V2REFO	O	Reference voltage 2.8V
29	V2O	O	Reference voltage 2.0V
30	VREFO	O	Reference voltage 1.4V
31	FEO	O	Focus error monitor output (not used)
32	TEO	O	Tracking error monitor output (not used)
33	TEZISLY	O	TE Slicing Level (not used)
34	OPOUT	O	Op amp output (not used)
35	OPIN	I	Op amp negative input (not used)
36	OPIN	I	Op amp positive input (not used)
37	DMO	O	Disk motor control output. PWM output
38	FMO	O	Feed motor control. PWM output
39	TROPENPWM	O	Tray PWM output/Tray open output.
40	IOPMON	O	General PWM output
41	TRO	O	Tracking servo output
42	FOO	O	Focus servo output
43	DVSS	—	Terminal Ground
44	NC	—	Not used. (Open)
45	NC	—	Not used. (Open)
46	DVDD3	—	Power Supply (+3.3V)
47	SPFGG	I	Motor Hall sensor input

HCD-GNZ5D

Pin No.	Pin Name	I/O	Description
48	DSEL	O	Select signal output
49	WIDE	O	SI signal output to VIDEO AMP
50	MSW	O	Volume control signal output to Optical pick-up
51	MAMUTE	O	MAMUTE signal output to System Controller (IC509) (not used)
52	DVDD18	—	Power Supply (+1.8V)
53 to 58	IOA 2 to 7	O	Address bus 2 to 7 output to PROM (IC101)
59	HIGHA0	O	Address bus 8 output to PROM (IC101)
60, 61	IOA18, 19	O	Address bus 18, 19 output to PROM (IC101)
62	DVSS	—	Terminal Ground
63	APLLCAP	I	APLL External Capacitance connection
64	APLLVSS	—	Terminal Ground
65	DVDD3	—	Power Supply (+3.3V)
66	IOWA	O	WE signal output to PROM (IC101)
67	A16	O	Address bus 16 output to PROM (IC101)
68 to 72	HIGHA 7 to 3	O	Address bus 15 to 11 output to PROM (IC101)
73	DVDD3	—	Power Supply (+3.3V)
74, 75	HIGHA 2, 1	O	Address bus 10, 9 output to PROM (IC101)
76	IOA20	O	Address bus 20 output to PROM (IC101)
77	IOCS	O	CE signal output to PROM (IC101)
78	IOA1	O	Address bus 1 output to PROM (IC101)
79	IOOE	O	OE signal output to PROM (IC101)
80	DVDD3	—	Power Supply (+3.3V)
81 to 84	AD 0 to 3	I	Data bus 0 to 3 input from PROM (IC101)
85	DVSS	—	Terminal Ground
86 to 88	AD 4 to 6	I	Data bus 4 to 6 input from PROM (IC101)
89	IOA21	O	Address bus 21 output to PROM (IC101)
90	ALE	O	Address latch enable (not used)
91	AD7	I	Data bus 7 input from PROM (IC101)
92	A17	O	Address bus 17 output to PROM (IC101)
93	IOA0	O	Address bus 0 output to PROM (IC101)
94	DVSS	—	Terminal Ground
95	UWA	I	System Controller write strobe (not used)
96	URB	I	System Controller read strobe (not used)
97	DVDD18	—	Power Supply (+1.8V)
98	IFSDO	I	DVD SOD signal input from System Controller (IC509)
99	IFCK	O	DVD SCO signal output to System Controller (IC509)
100	XIFCS	I	DVD XIFCS signal input from System Controller (IC509)
101	IFSDI	I	VIFBUSY signal output from System Controller (IC509)
102	SCL	O	SCL signal output to EEPROM (IC103)
103	SDA	O	SDA signal output to EEPROM (IC103)
104	TRG-SW	O	RS232 RXD signal output (not used)
105	IF-BSY	I	RS232 TXD signal input from System Controller (IC509)
106	RXD	I	RD232 RXD clock
107	TXD	I	RD232 TXD data
108	DVDD3	—	Power Supply (+3.3V)
109	ICE	I	ICE mode enable (not used)
110	PRST	I	MTRST signal input from System Controller (IC509)
111	IR	I	IR control signal input (not used)
112	INT0	I	External interrupt0 (not used)
113	DQMO	O	DQM0 signal output to SD-RAM (IC104)

Pin No.	Pin Name	I/O	Description
114	MREQ	I	DQM signal input
115	RD7	I	Data bus 7 from SD-RAM (IC104)
116	DVSS	—	Terminal Ground
117, 118	RD 6, 5	I	Data bus 6, 5 from SD-RAM (IC104)
119	DVSS	—	Terminal Ground
120, 121	RD 4, 3	I	Data bus 4, 3 from SD-RAM (IC104)
122	DVDD18	—	Power Supply (+1.8V)
123 to 125	RD 2 to 0	I	Data bus 2 to 0 from SD-RAM (IC104)
126	RD15	I	Data bus 15 from SD-RAM (IC104)
127	DVDD3	—	Power Supply (+3.3V)
128	RD 14	I	Data bus 14 from SD-RAM (IC104)
129 to 133	RD 13 to 9	I	Data bus 13 to 9 from SD-RAM (IC104)
134	DVSS	—	Terminal Ground
135	RD8	I	Data bus 8 from SD-RAM (IC104)
136	GPI0	—	Not used. (Open)
137	DQM1	O	DQM1 signal output to SD-RAM (IC104)
138	REW	O	WE signal output to SD-RAM (IC104)
139	CAS	O	CAS signal output to SD-RAM (IC104)
140	RAS	O	RAS signal output to SD-RAM (IC104)
141	DVDD3	—	Power Supply (+3.3V)
142	RCS	O	RCS signal output to SD-RAM (IC206)
143	BAO	O	BAO signal output to SD-RAM (IC206)
144	DVSS	—	Terminal Ground
145	BA1	O	BA1 signal output to SD-RAM (IC104)
146	RA10	O	Address bus 10 output to SD-RAM (IC104)
147	RA0	O	Address bus 0 output to SD-RAM (IC104)
148	DVSS	—	Terminal Ground
149 to 151	RA 1 to 3	O	Address bus 1 to 3 output to SD-RAM (IC104)
152	DVDD18	—	Power Supply (+1.8V)
153	NC	—	Not used. (Open)
154	NC	—	Not used. (Open)
155	DVDD3	—	Power Supply (+3.3V)
156	RCLK	O	CLK signal output to SD-RAM (IC104)
157	CKE	O	CKE signal output to SD-RAM (IC104)
158 to 160	RA 11 to 8	O	Address bus 11 to 8 output to SD-RAM (IC104)
161	DVSS	—	Terminal Ground
162	RA7	O	Address bus 7 output to SD-RAM (IC104)
163	DVSS	—	Terminal Ground
164 to 166	RA 6 to 4	O	Address bus 6 to 4 output to SD-RAM (IC104)
167	DVDD3	—	Power Supply (+3.3V)
168	DISC/X	—	Not used. (Open)
169	RGB	O	RGB control signal output Not used. (Open)
170	TSD M	O	TSDM signal output to Motor driver (IC201)
171	NC	—	Not used. (Open)
172	NC	—	Not used.
173	DVDD18	—	Power Supply (+1.8V)
174	FWD	O	FWD signal output to Motor driver (IC201) Not used. (Open)
175	NC	—	Not used. (Open)
176	LIMSW	O	LIMSW signal output to Optical pick-up

Pin No.	Pin Name	I/O	Description
177	OCSW	I	SEN signal input from System Controller (IC509)/OCSW signal input
178	REW	O	REV signal output to Motor driver (IC201) Not used. (Open)
179	CKSW	I	CKSW signal input Not used. (Open)
180	NC	—	Not used. (Open)
181	NC	—	Not used. (Open)
182	DVDD3	—	Power Supply (+3.3V)
183	NC	—	Not used. (Open)
184	NC	—	Not used. (Open)
185	NC	—	Not used. (Open)
186	NC	—	Not used. (Open)
187	NC	—	Not used. (Open)
188	NC	—	Not used. (Open)
189	DAVCC	—	Power Supply (+3.3V)
190	VREF	I	Bandgap reference voltage Not used. (Open)
191	FS	O	Full scale adjustment (pull down)
192	YUV0	—	Not used. (Open)
193	DVSS	—	Terminal Ground
194	YUV1	O	Y signal output to VIDEO AMP (IC201)
195	DAVDD	—	Power Supply (+3.3V)
196	YUV2	O	CHROMA signal output to VIDEO AMP (IC201)
197	DVSS	—	Terminal Ground
198	YUV3	O	VIDEO signal output to VIDEO AMP (IC201)
199	DAVDD	—	Power Supply (+3.3V)
200	YUV4	O	G signal output to VIDEO AMP (IC201)
201	DVSS	—	Terminal Ground
202	YUV5	O	B signal output to VIDEO AMP (IC201)
203	YUV6	O	R signal output to VIDEO AMP (IC201)
204	DVDD3	—	Power Supply (+3.3V)
205	MIC/VSYN	O	MIC control signal output
206	VOICE/YUV7	—	Not used.
207	KRMOB/HSYN	O	KARAOKE mode control signal output
208	SMSCK	—	Not used. (Open)
209	SPDATA/SMSDI	I	Audio data of SPDIF input
210	MUTE	O	MUTE signal output to Motor driver (IC201)
211	MUTE123	O	MUTE signal output to Motor driver (IC201)
212	DVDD3	—	Power Supply (+3.3V)
213	ALRCK	I	Audio left/right channel clock
214	ABCK	O	Audio bit clock
215	ACLK	I	Audio DAC master clock
216	DVSS	—	Terminal Ground
217	ASDATA0	O	Audio serial data
218	ASDATA1	O	Audio serial data
219	ASDATA2	O	Audio serial data
220	XRST	O	Reset signal output
221	DVDD18	—	Power Supply (+1.8V)
222	ASDATA4	O	Audio serial data (not used)
223	DVSS	—	Terminal Ground
224	DWIDE	—	Not used. (Open)
225	SDPIF	—	SPDIF output (not used)
226	RFGND18	—	Terminal Ground

Pin No.	Pin Name	I/O	Description
227	RFVDD18	—	Power Supply (+1.8V)
228	ZTALO	O	Oscillator output signal
229	ZTALI	I	Oscillator input signal
230	JITFO	O	RF jitter meter output
231	JITFN	I	Negative input of operation amplifier for RF jitter meter
232	PLLVSS	—	Terminal Ground
233	IDAC	—	Not used.
234	PLLVDD3	—	Power Supply (+3.3V)
235	LPFON	O	Negative output of loop filter amplifier
236	LPFIP	I	Positive input of loop filter amplifier
237	LPFIN	I	Negative input of loop filter amplifier
238	LPFOP	O	Positive output of loop filter amplifier
239	VDD3	I	Power Supply (+3.3V)
240	NC	—	Not used. (Open)
241	VSS	—	Terminal Ground
242	NC	—	Not used. (Open)
243	NC	—	Not used. (Open)
244	RFVDD3	—	Power Supply (+3.3V)
245	RFRPDC	I	RFRP signal input
246	RFRPAC	I	RFRP signal input
247	HRFZC	I	High frequency RF ripple zero crossing
248	CRTPLP	O	Defect level filter capacitor connecting
249	RFGND	—	Terminal Ground
250	NC	—	Not used. (Open)
251	NC	—	Not used. (Open)
252	OSP	O	RF offset cancellation capacitor connecting
253	OSN	I	RF offset cancellation capacitor connecting
254	RFGC	O	RF offset loop capacitor connecting for DVD-ROM
255	IREF	I	Current reference input
256	AVDD3	—	Power Supply (+3.3V)

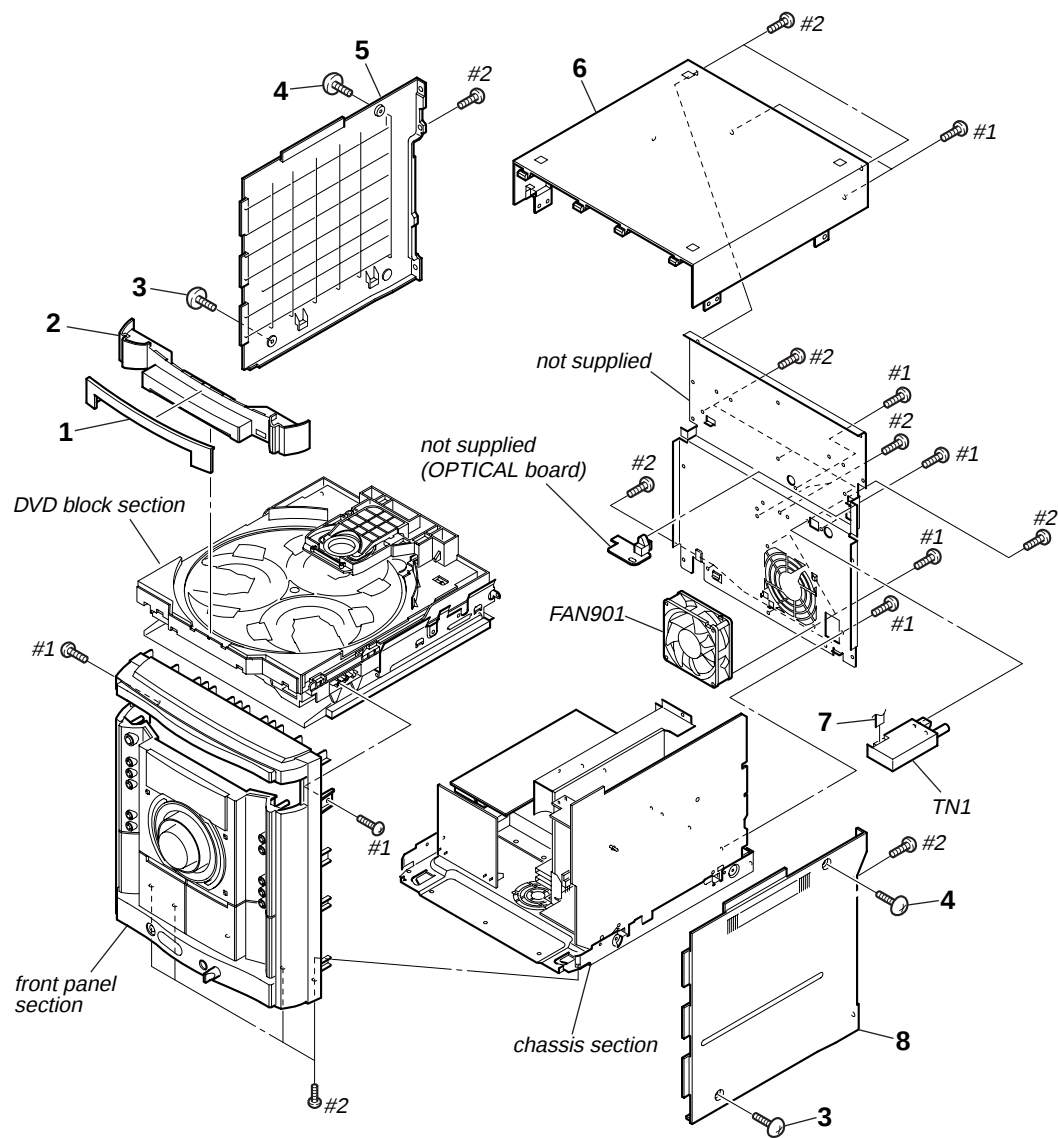
SECTION 8
EXPLODED VIEWS

- NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
 - Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
 - -XX and -X mean standardized parts, so they may have some difference from the original one.
 - Accessories are given in the last of this parts list.

- Abbreviation
E3 : 240 V AC area in E model
E12 : 220 – 240 V AC area in E model
E13 : 220 – 230 V AC area in E model
E15 : Iran model
PH : Philippine model

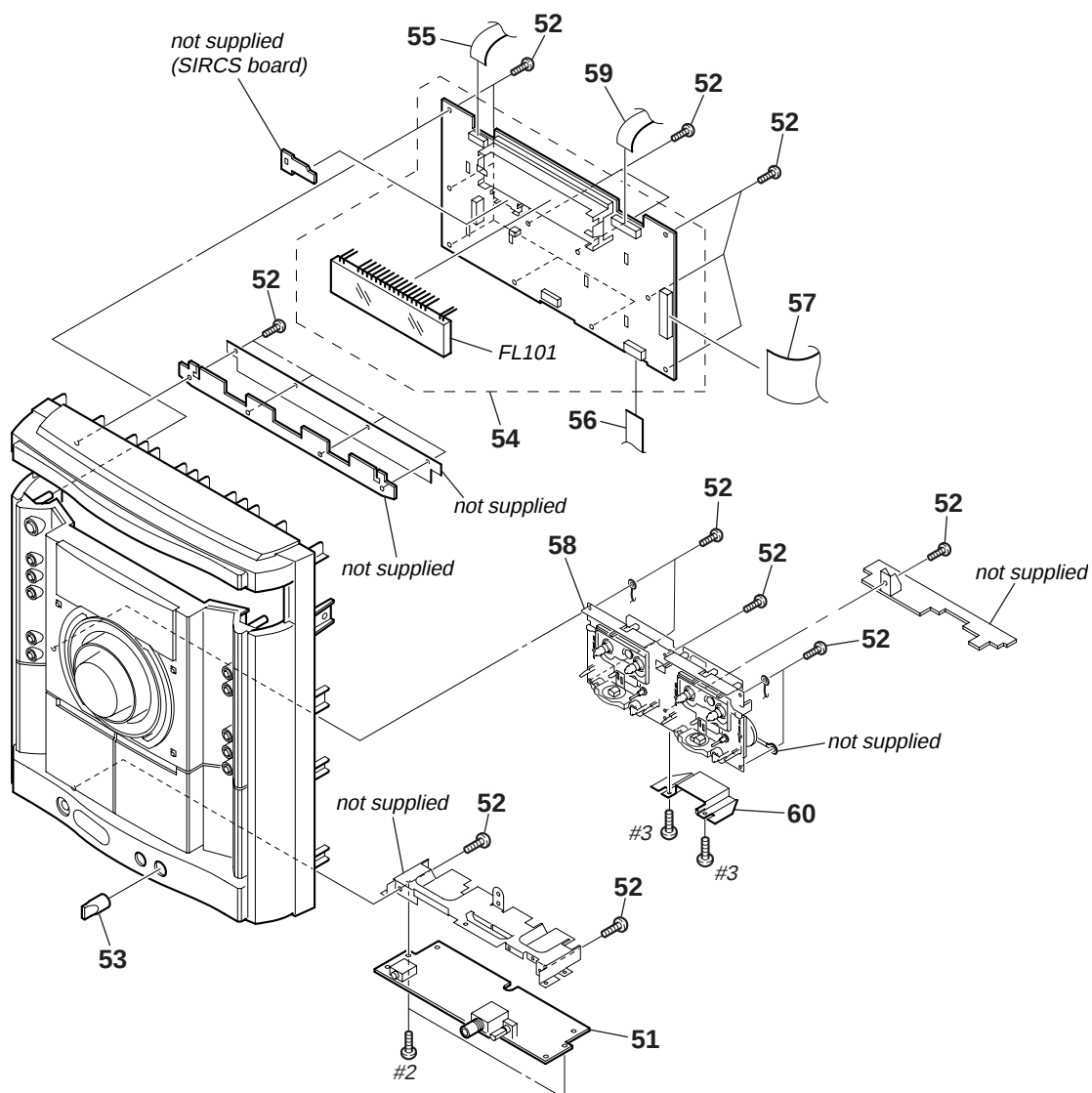
The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety. Replace only with part number specified.

8-1. MAIN SECTION



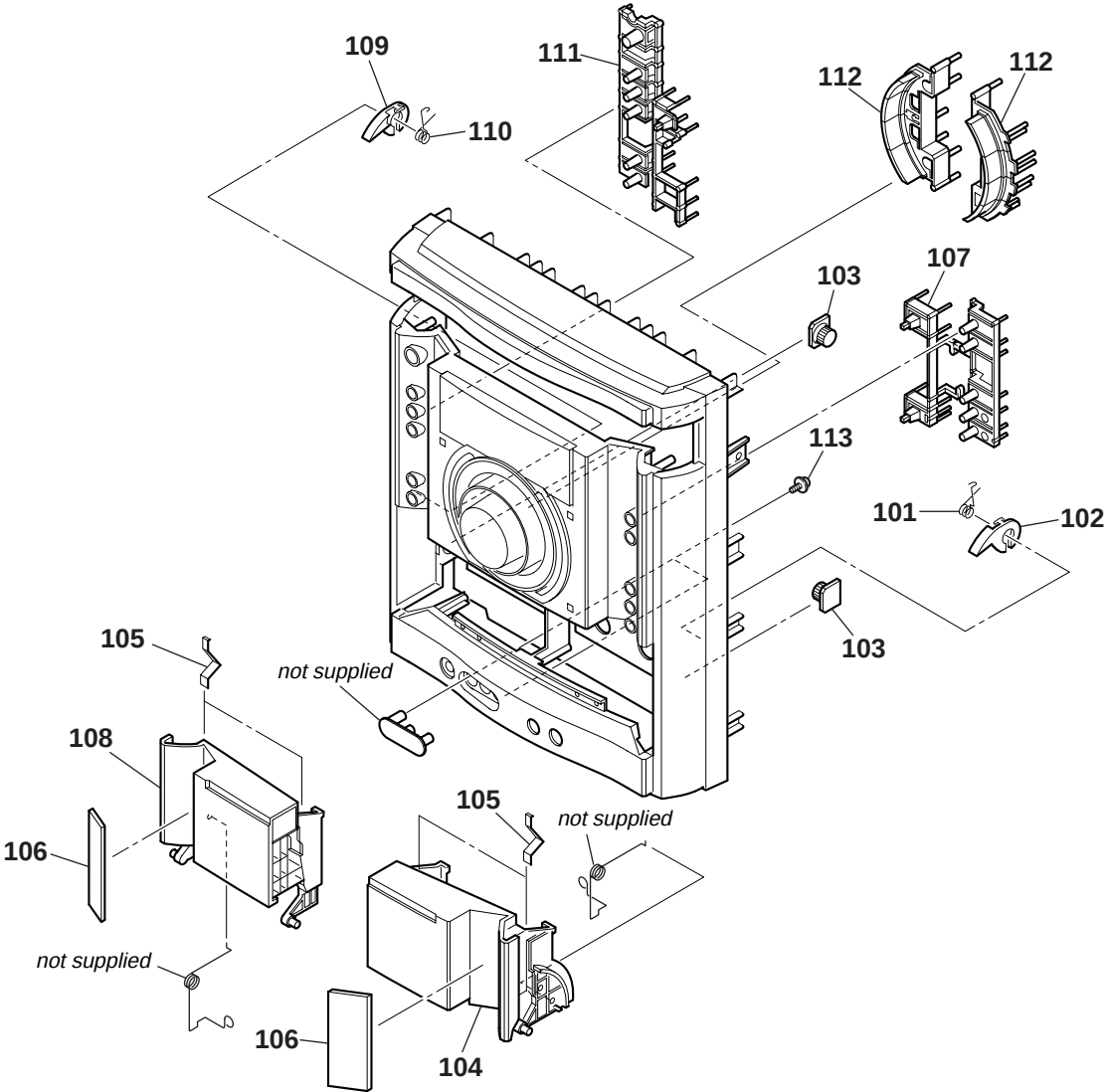
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	2-582-718-31	ESCUTCHEON (LOADING)		7	1-828-956-11	WIRE (FLAT TYPE) (9 CORE)	
2	2-582-709-51	PANEL, LOADING		8	4-245-184-71	CASE (SIDE-R)	
3	3-363-099-02	SCREW (CASE 3 TP2)		FAN901	1-763-072-11	FAN, DC	
4	3-363-099-32	SCREW (CASE 3 TP2)		TN1	1-693-671-11	TUNER (FM/AM) (TM-10E)	
5	4-245-183-71	CASE (SIDE-L)		#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 TT (B)	
6	4-244-849-71	CASE (TOP)		#2	7-685-871-01	SCREW +BVTT 3X6 (S)	

8-2. FRONT PANEL SECTION (1)



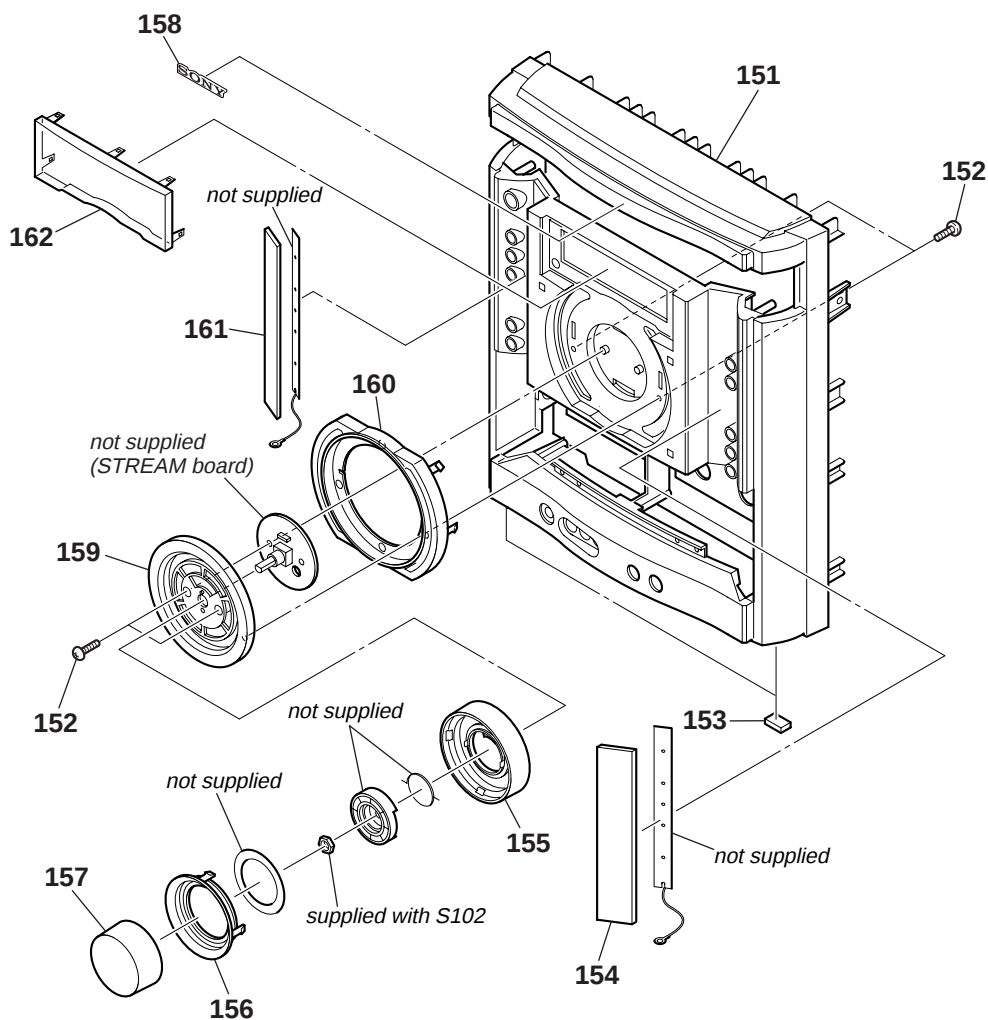
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	A-1109-321-A	JACK BOARD, COMPLETE		58	1-797-246-11	DECK, MECHANISM	
52	3-087-053-01	+BVTP 2.6 (3CR)		59	1-828-332-11	WIRE (FLAT TYPE) (13 CORE)	
53	4-238-628-12	MIC KNOB		60	4-245-758-02	PLATE (HEAD), SHIELD	
54	A-1141-196-A	PANEL BOARD, COMPLETE		FL101	1-519-811-11	INDICATOR TUBE, FLUORESCENT	
55	1-828-977-11	WIRE (FLAT TYPE) (13 CORE)		#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
56	1-828-971-11	WIRE (FLAT TYPE) (13 CORE)		#3	7-685-853-04	SCREW +BVTT 2X6 (S)	
57	1-829-041-11	WIRE (FLAT TYPE) (27 CORE)					

8-3. FRONT PANEL SECTION (2)



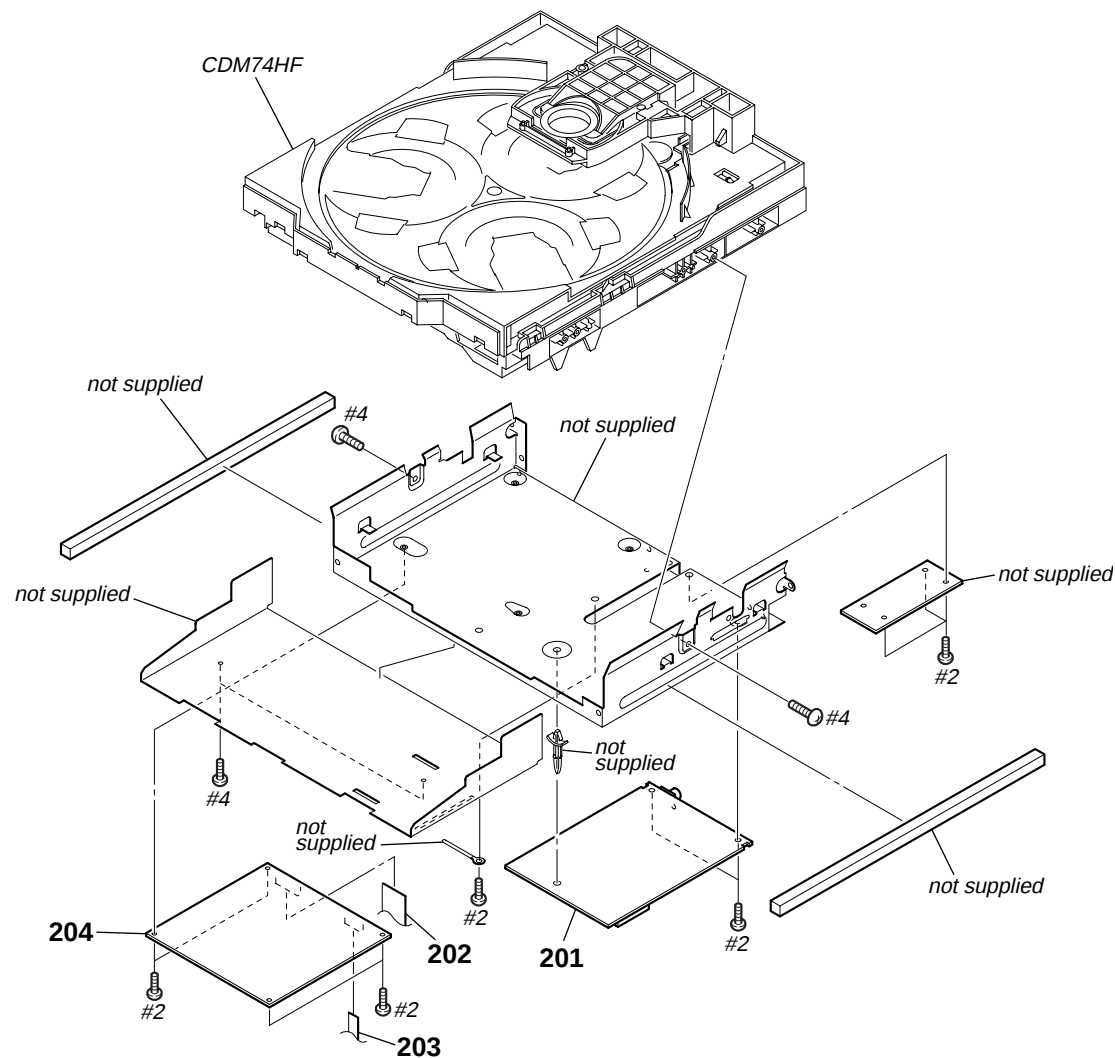
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	4-231-836-01	SPRING (HEART CAM-A)		108	2-582-707-01	LID (A), CASSETTE	
102	4-231-824-01	CAM (A), HEART		109	4-231-825-01	CAM (B), HEART	
103	4-224-104-41	DAMPER		110	4-231-841-01	SPRING (HEART CAM-B)	
104	2-582-708-01	LID (B), CASSETTE		111	X-2050-168-1	BUTTON (POWER) ASSY	
105	4-238-631-01	TAPE SPRING		112	2-582-712-01	BUTTON (PLAY)	
106	2-582-720-01	ESCUTCHEON (LID TC)		113	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
107	2-582-711-01	BUTTON (DISC)					

8-4. FRONT PANEL SECTION (3)



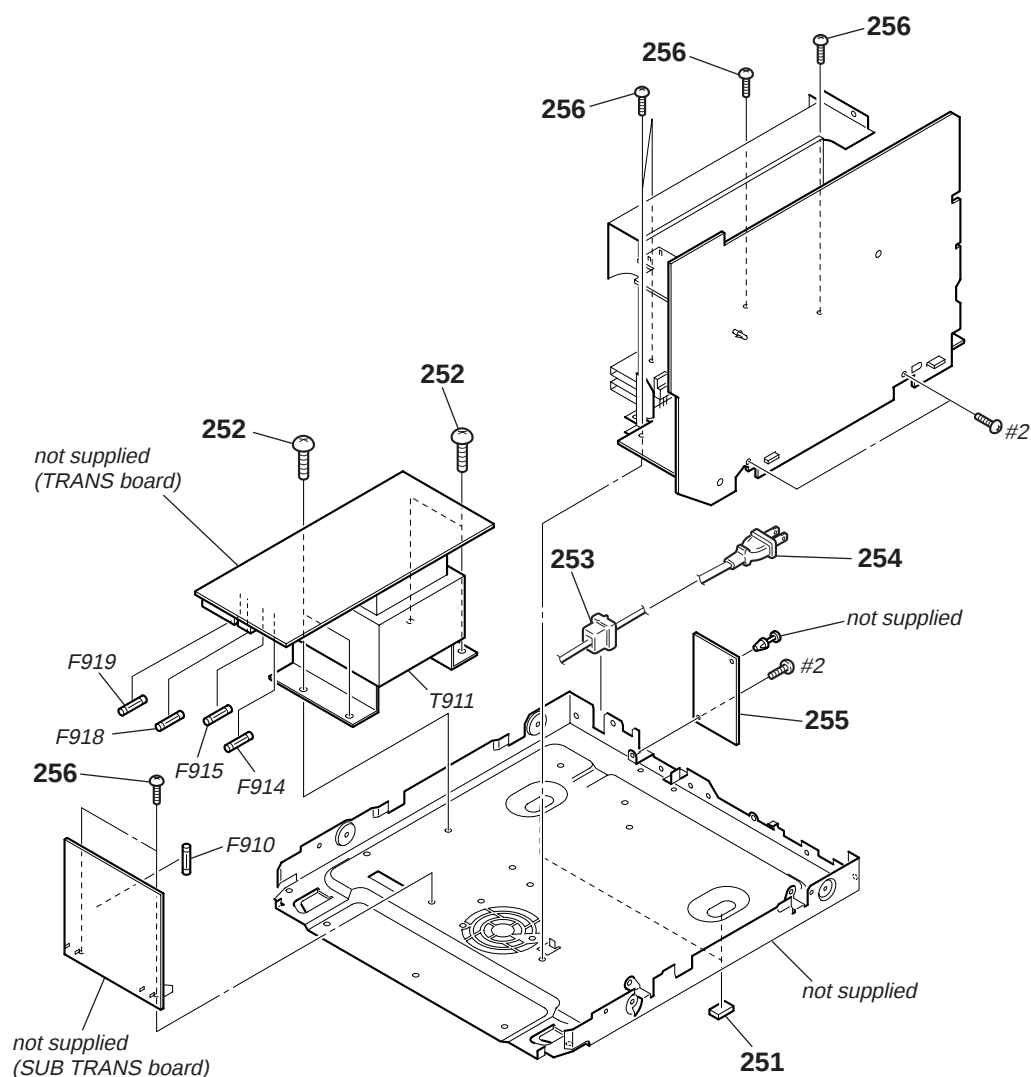
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	2-582-706-12	PANEL, FRONT		157	2-590-671-12	KNOB (VOL)	
152	3-087-053-01	+BVTP 2.6 (3CR)		158	3-038-018-01	EMBLEM, SONY	
153	4-233-980-01	RUBBER FOOT		159	2-582-716-01	ESCUTCHEON (JOG)	
154	2-582-719-01	ESCUTCHEON (PANEL)		160	2-582-717-01	ORNAMENT (PLAY)	
155	2-582-715-01	RING (JOG)		161	2-582-719-21	ESCUTCHEON (PANEL)	
156	2-582-714-01	INDICATOR (JOG)		162	2-582-721-02	WINDOW, INDICATION	

8-5. DVD BLOCK SECTION



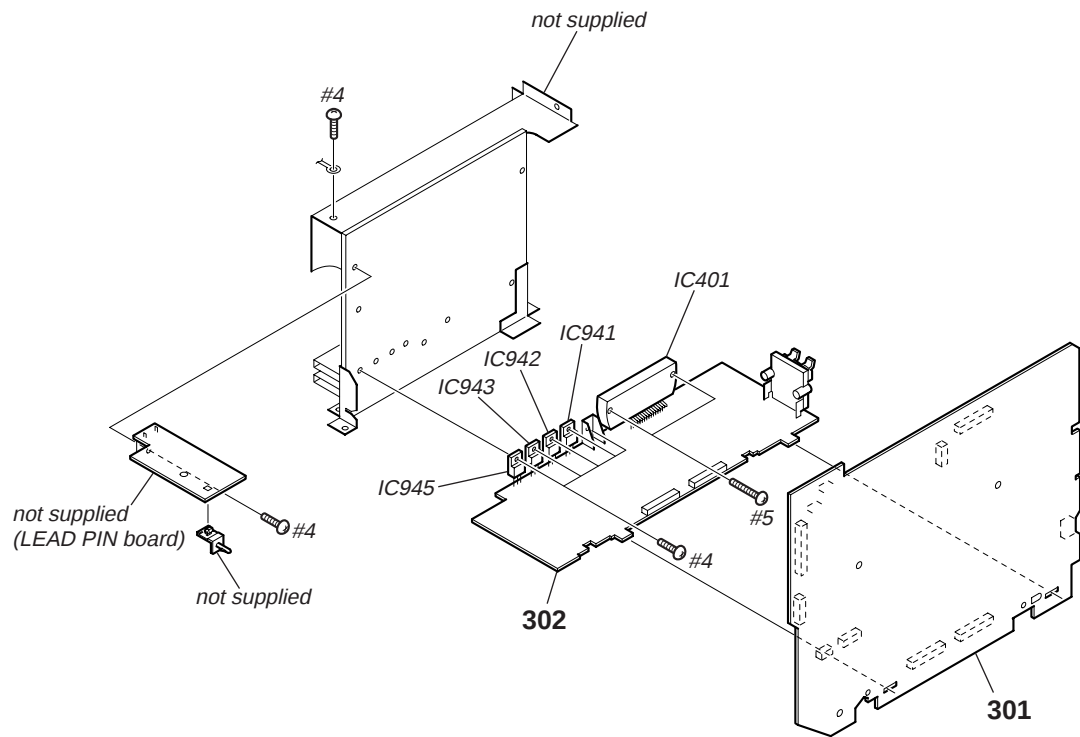
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	A-1109-328-A	VIDEO BOARD, COMPLETE		204	A-1109-317-A	DMB11 BOARD, COMPLETE (EXCEPT PH)	
202	1-828-354-11	WIRE (FLAT TYPE) (17 CORE)		#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
203	1-828-290-11	WIRE (FLAT TYPE) (5 CORE)		#4	7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT (B)	
204	A-1109-316-A	DMB11 BOARD, COMPLETE (PH)					

8-6. CHASSIS SECTION



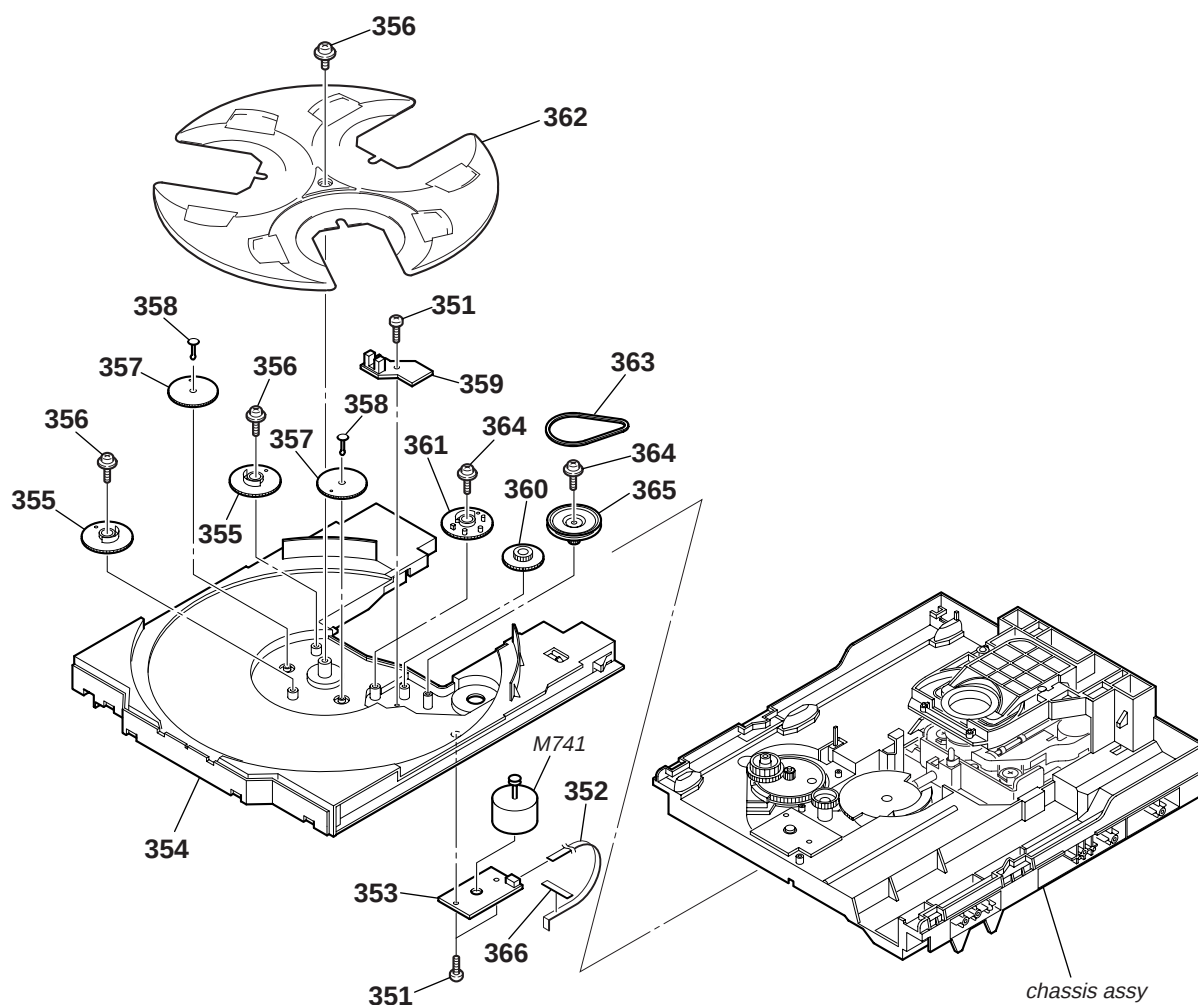
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	4-233-980-01	RUBBER FOOT		△ F910	1-532-504-33	FUSE (4A/250V) (E3,E15,PH)	
252	4-900-386-01	SCREW		△ F914	1-532-506-33	FUSE (6.3A/250V)	
253	3-703-244-00	BUSHING (2104), CORD (E12,E13,PH)		△ F915	1-532-506-33	FUSE (6.3A/250V)	
* 253	3-703-571-12	BUSHING (S) (4516), CORD (E3,E15)		△ F918	1-532-504-33	FUSE (4A/250V)	
△ 254	1-777-071-23	CORD, POWER (E12,E13,PH)		△ F919	1-532-504-33	FUSE (4A/250V)	
△ 254	1-827-226-31	CORD, POWER (E3,E15)		△ T911	1-443-792-11	TRANSFORMER, POWER	
△ 255	1-468-737-21	POWER, SWITCHING		#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
256	3-970-608-01	SUMITITE (B3), +BV					

8-7. AUDIO BOARD SECTION



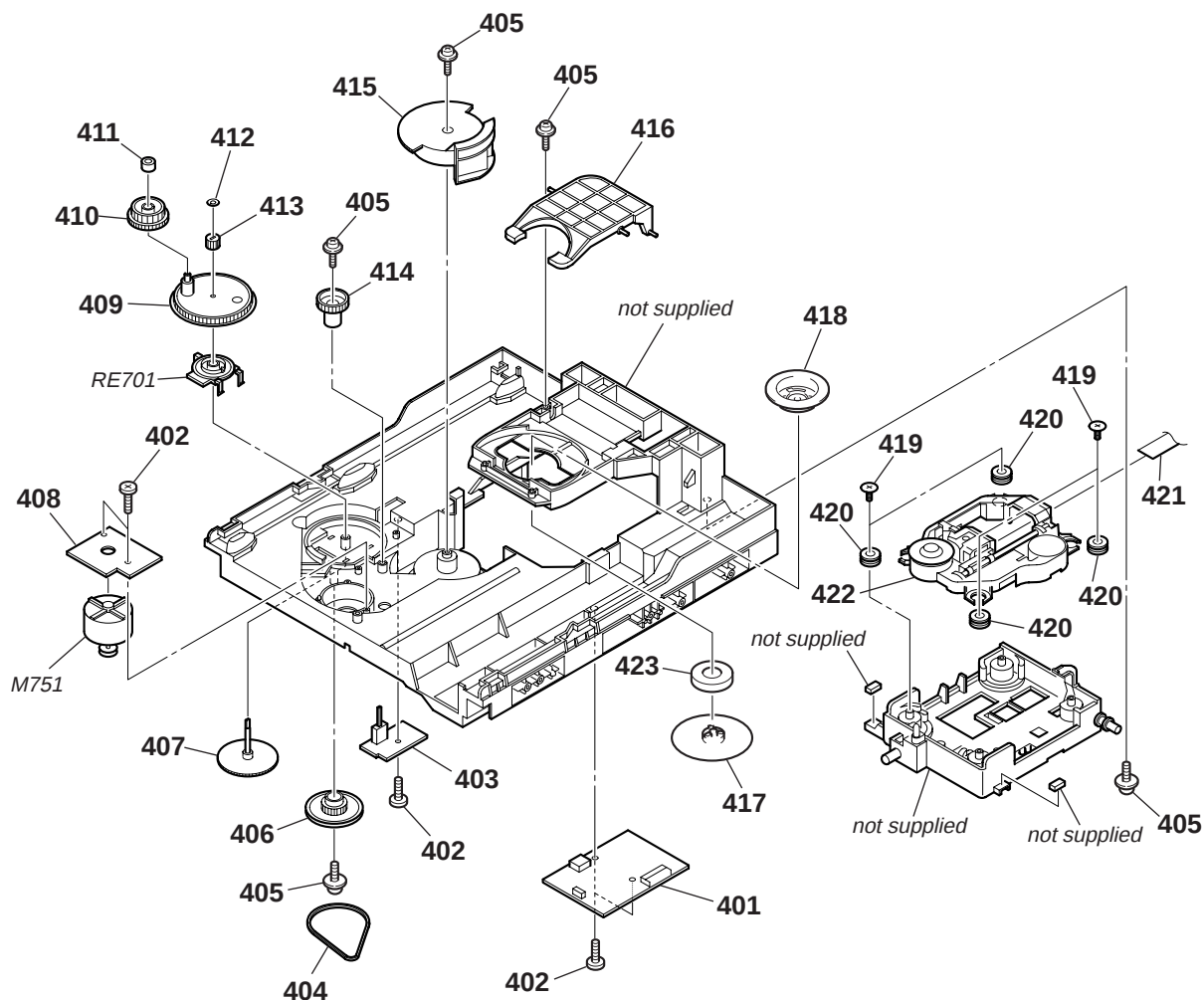
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	A-1109-313-A	AUDIO BOARD, COMPLETE		IC943	8-759-701-59	IC NJM78M09FA	
302	A-1109-314-A	FRONT AMP BOARD, COMPLETE		IC945	6-703-546-01	IC TA7804LS	
IC401	6-705-845-01	IC STK403-090		#4	7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT (B)	
IC941	8-759-198-03	IC PQ09RF21J00H		#5	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
IC942	8-759-701-59	IC NJM78M09FA					

8-8. DVD MECHANISM DECK SECTION (1)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
351	4-218-253-62	SCREW (M2.6), +BTTP		360	4-243-820-01	GEAR (TABLE)	
352	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)		361	4-243-819-01	GEAR (GENEVA)	
353	1-687-134-12	MOTOR (TB) BOARD		362	4-243-816-21	TRAY	
354	4-243-815-11	TABLE (LOADING)		363	4-243-823-01	BELT (TABLE)	
355	4-245-571-02	GEAR (STOPPER)		364	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
356	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING		365	4-243-821-01	PULLEY (TABLE)	
357	4-245-570-01	GEAR (JOINT)		366	3-231-598-01	SHEET (BA)	
358	4-245-572-01	BUSHING (GEAR)		M741	A-1108-965-A	MOTOR ASSY, TABLE (TABLE)	
359	1-687-132-12	SENSOR BOARD					

8-9. DVD MECHANISM DECK SECTION (2)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
401	A-1103-756-A	DRIVER BOARD, COMPLETE		414	4-224-606-01	GEAR (RV)	
402	4-218-253-52	SCREW (M2.6), +BTTP		415	4-243-818-01	GEAR (U/D)	
403	1-687-669-12	SW BOARD		416	2-541-918-01	LEVER (LIFTER (H))	
404	4-244-034-01	BELT (LOADING)		417	2-345-982-01	PULLEY A (310), CHUCKING	
405	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING		418	2-345-983-01	PULLEY B (310), CHUCKING	
406	4-225-844-01	GEAR (LOADING A)		419	3-087-599-01	INSULATOR SCREW	
407	4-224-613-01	GEAR (SHAFT)		420	2-634-618-01	INSULATOR	
408	1-687-133-12	MOTOR (LD) BOARD		421	1-828-771-51	WIRE (FLAT TYPE) (24 CORE)	
409	4-244-108-01	GEAR, SWING		△ 422	8-820-291-02	OPTICAL PICK-UP (KHM-310CAB/C2RP)	
410	4-224-609-01	GEAR (LOADING C)		423	4-251-923-01	YOKE (310)	
411	4-224-608-01	COLLAR, SWING		M751	A-1108-966-A	MOTOR ASSY, LOADING (LOADING)	
412	3-016-533-11	WASHER (FR), STOPPER		RE701	1-477-680-12	ENCODER, ROTARY (DISC TRAY ADDRESS DETECT)	
413	4-224-611-01	GEAR (LOADING B)					

SECTION 9

ELECTRICAL PARTS LIST

AUDIO

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u : μ , for example:
uA.. : μ A.. uPA.. : μ PA..
uPB.. : μ PB.. uPC.. : μ PC.. uPD.. : μ PD..
- CAPACITORS
uF : μ F
- COILS
uH : μ H

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board.

- Abbreviation
E3 : 240 V AC area in E model
E12 : 220 – 240 V AC area in E model
E13 : 220 – 230 V AC area in E model
E15 : Iran model
PH : Philippine model

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
	A-1109-313-A	AUDIO BOARD, COMPLETE *****				C285	1-126-961-11	ELECT	2.2uF	20%	50V
		< CAPACITOR >				C286	1-104-658-11	ELECT	100uF	20%	10V
						C311	1-126-964-11	ELECT	10uF	20%	50V
						C312	1-126-964-11	ELECT	10uF	20%	50V
						C316	1-126-964-11	ELECT	10uF	20%	50V
C201	1-164-156-11	CERAMIC CHIP	0.1uF		25V	C321	1-126-964-11	ELECT	10uF	20%	50V
C202	1-104-658-11	ELECT	100uF	20%	10V	C322	1-126-964-11	ELECT	10uF	20%	50V
C203	1-104-658-11	ELECT	100uF	20%	10V	C323	1-216-864-11	SHORT CHIP	0		
C204	1-104-658-11	ELECT	100uF	20%	10V	C325	1-126-964-11	ELECT	10uF	20%	50V
C205	1-104-658-11	ELECT	100uF	20%	10V	C351	1-126-964-11	ELECT	10uF	20%	50V
C211	1-126-964-11	ELECT	10uF	20%	50V	C352	1-126-964-11	ELECT	10uF	20%	50V
C213	1-126-964-11	ELECT	10uF	20%	50V	C356	1-126-964-11	ELECT	10uF	20%	50V
C214	1-126-964-11	ELECT	10uF	20%	50V	C361	1-126-964-11	ELECT	10uF	20%	50V
C218	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	C362	1-126-964-11	ELECT	10uF	20%	50V
C219	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	C363	1-216-864-11	SHORT CHIP	0		
C220	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V	C365	1-126-964-11	ELECT	10uF	20%	50V
C221	1-126-964-11	ELECT	10uF	20%	50V	C367	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C222	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	C368	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C223	1-126-964-11	ELECT	10uF	20%	50V	C601	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C224	1-137-194-81	FILM	0.47uF	5%	50V	C602	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C225	1-137-194-81	FILM	0.47uF	5%	50V	C603	1-136-155-00	FILM	0.015uF	5%	50V
C226	1-126-960-11	ELECT	1uF	20%	50V	C604	1-126-965-11	ELECT	22uF	20%	50V
C228	1-126-964-11	ELECT	10uF	20%	50V	C605	1-106-375-12	MYLAR	0.022uF	5%	200V
C236	1-130-491-00	MYLAR	0.047uF	5%	50V	C611	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C237	1-126-964-11	ELECT	10uF	20%	50V	C612	1-100-670-11	CERAMIC CHIP	4.7uF	20%	16V
C239	1-126-959-11	ELECT	0.47uF	20%	50V	C613	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C251	1-126-964-11	ELECT	10uF	20%	50V	C614	1-126-963-11	ELECT	4.7uF	20%	50V
C253	1-126-964-11	ELECT	10uF	20%	50V	C615	1-137-150-11	FILM	0.01uF	5%	100V
C254	1-126-964-11	ELECT	10uF	20%	50V	C616	1-126-947-11	ELECT	47uF	20%	35V
C256	1-126-964-11	ELECT	10uF	20%	50V	C617	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C258	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	C618	1-126-964-11	ELECT	10uF	20%	50V
C259	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	C619	1-136-497-81	FILM	0.1uF	5%	50V
C260	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V	C620	1-126-960-11	ELECT	1uF	20%	50V
C261	1-126-964-11	ELECT	10uF	20%	50V	C621	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C262	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	C622	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C263	1-126-964-11	ELECT	10uF	20%	50V	C623	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C264	1-137-194-81	FILM	0.47uF	5%	50V	C624	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C265	1-137-194-81	FILM	0.47uF	5%	50V	C651	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C266	1-126-960-11	ELECT	1uF	20%	50V	C652	1-100-670-11	CERAMIC CHIP	4.7uF	20%	16V
C268	1-126-964-11	ELECT	10uF	20%	50V	C653	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C273	1-126-964-11	ELECT	10uF	20%	50V	C654	1-126-963-11	ELECT	4.7uF	20%	50V
C274	1-126-960-11	ELECT	1uF	20%	50V	C655	1-137-150-11	FILM	0.01uF	5%	100V
C281	1-126-964-11	ELECT	10uF	20%	50V	C656	1-126-947-11	ELECT	47uF	20%	35V
C282	1-104-658-11	ELECT	100uF	20%	10V	C657	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C283	1-164-156-11	CERAMIC CHIP	0.1uF		25V	C658	1-126-964-11	ELECT	10uF	20%	50V

HCD-GNZ5D

AUDIO

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C659	1-136-497-81	FILM 0.1uF 5%	50V	IC771	6-703-547-01	IC TA7805LS	
C725	1-107-696-11	ELECT 47uF 20%	16V			< JUMPER RESISTOR >	
C726	1-107-696-11	ELECT 47uF 20%	16V	JR211	1-216-837-11	METAL CHIP 22K 5%	1/10W
C728	1-164-156-11	CERAMIC CHIP 0.1uF	25V	JR251	1-216-837-11	METAL CHIP 22K 5%	1/10W
C753	1-119-939-51	ELECT 6800uF 20%	35V	JR304	1-216-864-11	SHORT CHIP 0	
				JR305	1-216-864-11	SHORT CHIP 0	
C763	1-111-235-61	ELECT 10000uF 20%	25V	JW291	1-216-864-11	SHORT CHIP 0	
C764	1-126-963-11	ELECT 4.7uF 20%	50V				
C765	1-126-961-11	ELECT 2.2uF 20%	50V	JW293	1-216-864-11	SHORT CHIP 0	
C771	1-126-956-11	ELECT 0.1uF 20%	50V			< COIL >	
C772	1-126-923-11	ELECT 220uF 20%	10V	L302	1-408-619-31	INDUCTOR 220uH	
						< TRANSISTOR >	
C778	1-164-156-11	CERAMIC CHIP 0.1uF	25V	Q212	8-729-905-35	TRANSISTOR 2SC4081-R	
C791	1-126-963-11	ELECT 4.7uF 20%	50V	Q252	8-729-905-35	TRANSISTOR 2SC4081-R	
C793	1-162-974-11	CERAMIC CHIP 0.01uF	50V	Q271	8-729-905-35	TRANSISTOR 2SC4081-R	
C794	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V	Q272	8-729-905-35	TRANSISTOR 2SC4081-R	
C795	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V	Q281	8-729-905-35	TRANSISTOR 2SC4081-R	
		< CONNECTOR >		Q282	8-729-905-35	TRANSISTOR 2SC4081-R	
CN201	1-573-847-11	CONNECTOR, BOARD TO BOARD 15P		Q283	8-729-905-35	TRANSISTOR 2SC4081-R	
CN202	1-573-847-11	CONNECTOR, BOARD TO BOARD 15P		Q601	8-729-011-92	TRANSISTOR 2SC2001TP-K1K2	
CN203	1-785-316-11	PIN, CONNECTOR (STRAIGHT) 4P		Q602	8-729-026-53	TRANSISTOR 2SA1576A-T106-QR	
CN301	1-779-285-11	CONNECTOR, FFC (LIF(NON-ZIF)) 17P		Q603	8-729-905-35	TRANSISTOR 2SC4081-R	
CN304	1-564-506-11	PLUG, CONNECTOR 3P		Q621	8-729-021-15	TRANSISTOR 2SD2351T106W	
				Q622	8-729-021-15	TRANSISTOR 2SD2351T106W	
CN601	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P		Q623	8-729-039-18	TRANSISTOR BCR183W-GEG-E6327	
* CN602	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P		Q624	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
CN751	1-785-322-11	PIN, CONNECTOR (STRAIGHT) 10P		Q625	8-729-021-15	TRANSISTOR 2SD2351T106W	
CN752	1-784-788-11	CONNECTOR, FFC 27P		Q626	8-729-021-15	TRANSISTOR 2SD2351T106W	
CN753	1-568-828-11	CONNECTOR, FFC 9P		Q627	8-729-021-15	TRANSISTOR 2SD2351T106W	
				Q628	8-729-021-15	TRANSISTOR 2SD2351T106W	
* CN754	1-564-518-11	PLUG, CONNECTOR 3P		Q629	8-729-026-53	TRANSISTOR 2SA1576A-T106-QR	
CN755	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P		Q630	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
		< DIODE >		Q631	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
D201	6-501-193-01	DIODE 1SS355WTE-17		Q701	8-729-021-15	TRANSISTOR 2SD2351T106W	
D202	6-501-193-01	DIODE 1SS355WTE-17		Q702	8-729-021-15	TRANSISTOR 2SD2351T106W	
D235	6-501-193-01	DIODE 1SS355WTE-17		Q703	8-729-021-15	TRANSISTOR 2SD2351T106W	
D271	6-500-848-01	DIODE MC2840-T112-1		Q704	8-729-021-15	TRANSISTOR 2SD2351T106W	
D726	6-501-193-01	DIODE 1SS355WTE-17		Q721	8-729-039-18	TRANSISTOR BCR183W-GEG-E6327	
				Q722	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
D727	6-501-193-01	DIODE 1SS355WTE-17		Q723	8-729-905-35	TRANSISTOR 2SC4081-R	
D728	6-501-193-01	DIODE 1SS355WTE-17		Q728	8-729-039-18	TRANSISTOR BCR183W-GEG-E6327	
D751	8-719-028-23	DIODE D3SBA20-4101		Q729	8-729-039-18	TRANSISTOR BCR183W-GEG-E6327	
D753	6-500-335-01	DIODE MC2838-T112-1		Q771	6-550-185-01	TRANSISTOR RT1P137P-TP-1	
D761	8-719-028-23	DIODE D3SBA20-4101		Q772	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
				Q791	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
D762	6-501-193-01	DIODE 1SS355WTE-17		Q792	8-729-905-35	TRANSISTOR 2SC4081-R	
D763	6-500-335-01	DIODE MC2838-T112-1		Q793	8-729-905-35	TRANSISTOR 2SC4081-R	
D771	6-500-522-21	DIODE 10EDB40-TB3		Q794	8-729-026-68	TRANSISTOR 2SD2525(TP)	
D791	6-501-193-01	DIODE 1SS355WTE-17		Q795	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
D792	8-719-069-56	DIODE UdzSTE-176.2B		Q797	8-729-905-35	TRANSISTOR 2SC4081-R	
						< RESISTOR >	
D793	8-719-069-56	DIODE UdzSTE-176.2B		R201	1-216-821-11	METAL CHIP 1K 5%	1/10W
		< GROUND TERMINAL >		R202	1-216-821-11	METAL CHIP 1K 5%	1/10W
EPT751	1-537-771-21	TERMINAL BOARD, GROUND		R211	1-216-864-11	SHORT CHIP 0	
		< JUMPER RESISTOR >					
FB301	1-216-295-11	SHORT CHIP 0					
		< IC >					
IC201	6-705-667-01	IC M61537FP-RF0G					
IC203	6-703-610-01	IC RT8H015C-T112-1					

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R212	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R617	1-216-835-11	METAL CHIP	15K	5%	1/10W
R213	1-216-833-11	METAL CHIP	10K	5%	1/10W	R618	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R214	1-216-833-11	METAL CHIP	10K	5%	1/10W	R620	1-216-857-11	METAL CHIP	1M	5%	1/10W
R215	1-216-821-11	METAL CHIP	1K	5%	1/10W	R621	1-216-821-11	METAL CHIP	1K	5%	1/10W
R216	1-216-841-11	METAL CHIP	47K	5%	1/10W	R622	1-216-821-11	METAL CHIP	1K	5%	1/10W
R221	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R623	1-216-821-11	METAL CHIP	1K	5%	1/10W
R222	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R624	1-216-821-11	METAL CHIP	1K	5%	1/10W
△ R223	1-215-868-11	METAL OXIDE	680	5%	2W F	R625	1-216-821-11	METAL CHIP	1K	5%	1/10W
R231	1-216-864-11	SHORT CHIP	0			R626	1-216-821-11	METAL CHIP	1K	5%	1/10W
R232	1-216-833-11	METAL CHIP	10K	5%	1/10W	R627	1-216-833-11	METAL CHIP	10K	5%	1/10W
R235	1-216-837-11	METAL CHIP	22K	5%	1/10W	R628	1-216-833-11	METAL CHIP	10K	5%	1/10W
R236	1-216-837-11	METAL CHIP	22K	5%	1/10W	R629	1-216-833-11	METAL CHIP	10K	5%	1/10W
R237	1-216-833-11	METAL CHIP	10K	5%	1/10W	R632	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R238	1-216-845-11	METAL CHIP	100K	5%	1/10W	R639	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R239	1-216-857-11	METAL CHIP	1M	5%	1/10W	R651	1-216-821-11	METAL CHIP	1K	5%	1/10W
R251	1-216-864-11	SHORT CHIP	0			R652	1-216-821-11	METAL CHIP	1K	5%	1/10W
R252	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R653	1-216-851-11	METAL CHIP	330K	5%	1/10W
R253	1-216-833-11	METAL CHIP	10K	5%	1/10W	R654	1-216-835-11	METAL CHIP	15K	5%	1/10W
R254	1-216-833-11	METAL CHIP	10K	5%	1/10W	R655	1-216-812-11	METAL CHIP	180	5%	1/10W
R255	1-216-821-11	METAL CHIP	1K	5%	1/10W	R656	1-216-834-11	METAL CHIP	12K	5%	1/10W
R256	1-216-841-11	METAL CHIP	47K	5%	1/10W	R657	1-216-835-11	METAL CHIP	15K	5%	1/10W
R261	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R658	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R262	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R659	1-216-797-11	METAL CHIP	10	5%	1/10W
△ R263	1-215-868-11	METAL OXIDE	680	5%	2W F	R701	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R271	1-216-821-11	METAL CHIP	1K	5%	1/10W	R702	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R272	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R703	1-216-821-11	METAL CHIP	1K	5%	1/10W
R273	1-216-837-11	METAL CHIP	22K	5%	1/10W	R704	1-216-821-11	METAL CHIP	1K	5%	1/10W
R274	1-216-833-11	METAL CHIP	10K	5%	1/10W	R715	1-216-864-11	SHORT CHIP	0		
R275	1-216-845-11	METAL CHIP	100K	5%	1/10W	R717	1-216-864-11	SHORT CHIP	0		
R276	1-216-833-11	METAL CHIP	10K	5%	1/10W	R721	1-216-821-11	METAL CHIP	1K	5%	1/10W
R277	1-216-841-11	METAL CHIP	47K	5%	1/10W	R723	1-216-821-11	METAL CHIP	1K	5%	1/10W
R282	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R737	1-216-833-11	METAL CHIP	10K	5%	1/10W
R311	1-216-864-11	SHORT CHIP	0			R738	1-216-864-11	SHORT CHIP	0		
R312	1-216-845-11	METAL CHIP	100K	5%	1/10W	R739	1-216-841-11	METAL CHIP	47K	5%	1/10W
R313	1-216-864-11	SHORT CHIP	0			R740	1-216-833-11	METAL CHIP	10K	5%	1/10W
R315	1-216-864-11	SHORT CHIP	0			R741	1-216-864-11	SHORT CHIP	0		
R317	1-216-864-11	SHORT CHIP	0			R742	1-216-841-11	METAL CHIP	47K	5%	1/10W
R321	1-216-864-11	SHORT CHIP	0			R751	1-216-809-11	METAL CHIP	100	5%	1/10W
R322	1-216-845-11	METAL CHIP	100K	5%	1/10W	R752	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R323	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R753	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R351	1-216-864-11	SHORT CHIP	0			R762	1-216-837-11	METAL CHIP	22K	5%	1/10W
R352	1-216-845-11	METAL CHIP	100K	5%	1/10W	R763	1-216-837-11	METAL CHIP	22K	5%	1/10W
R353	1-216-864-11	SHORT CHIP	0			R764	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R355	1-216-864-11	SHORT CHIP	0			R768	1-216-809-11	METAL CHIP	100	5%	1/10W
R357	1-216-864-11	SHORT CHIP	0			R769	1-216-809-11	METAL CHIP	100	5%	1/10W
R361	1-216-864-11	SHORT CHIP	0			R790	1-216-809-11	METAL CHIP	100	5%	1/10W
R362	1-216-845-11	METAL CHIP	100K	5%	1/10W	R791	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R363	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R792	1-216-841-11	METAL CHIP	47K	5%	1/10W
R601	1-216-838-11	METAL CHIP	27K	5%	1/10W	R793	1-216-849-11	METAL CHIP	220K	5%	1/10W
R602	1-216-295-11	SHORT CHIP	0			R794	1-216-837-11	METAL CHIP	22K	5%	1/10W
R603	1-216-833-11	METAL CHIP	10K	5%	1/10W	R795	1-216-837-11	METAL CHIP	22K	5%	1/10W
R604	1-216-833-11	METAL CHIP	10K	5%	1/10W	R796	1-216-833-11	METAL CHIP	10K	5%	1/10W
R611	1-216-821-11	METAL CHIP	1K	5%	1/10W	R798	1-216-809-11	METAL CHIP	100	5%	1/10W
R612	1-216-821-11	METAL CHIP	1K	5%	1/10W	< TRANSFORMER >					
R613	1-216-851-11	METAL CHIP	330K	5%	1/10W	T601	1-437-220-11	TRANSFORMER, BIAS OSCILLATION			
R614	1-216-835-11	METAL CHIP	15K	5%	1/10W	*****					
R615	1-216-812-11	METAL CHIP	180	5%	1/10W						
R616	1-216-834-11	METAL CHIP	12K	5%	1/10W						

HCD-GNZ5D

Ver. 1.1

DMB11

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
	A-1109-316-A	DMB11 BOARD, COMPLETE (PH)				C167	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
	A-1109-317-A	DMB11 BOARD, COMPLETE (EXCEPT PH)				C170	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		*****				C171	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
						C172	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
						C173	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CAPACITOR >				C174	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C101	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C175	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C102	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C176	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C105	1-126-205-11	ELECT CHIP	47uF	20%	6.3V	C177	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C106	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C178	1-126-208-21	ELECT CHIP	47uF	20%	4V
C108	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C179	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C109	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C180	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C112	1-126-205-11	ELECT CHIP	47uF	20%	6.3V	C181	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C113	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C182	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C114	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C184	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C115	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C187	1-126-208-21	ELECT CHIP	47uF	20%	4V
C116	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C188	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C117	1-124-779-00	ELECT CHIP	10uF	20%	16V	C189	1-128-934-11	CERAMIC CHIP	0.33uF	20%	10V
C118	1-124-779-00	ELECT CHIP	10uF	20%	16V	C190	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C119	1-124-779-00	ELECT CHIP	10uF	20%	16V	C191	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C120	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	C192	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C121	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	C193	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C122	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	C195	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C123	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	C196	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C124	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	C203	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C125	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C205	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C126	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C206	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C127	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C208	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C128	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V	C209	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C129	1-124-779-00	ELECT CHIP	10uF	20%	16V	C210	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C130	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C211	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C131	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V	C212	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C132	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C213	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C133	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C214	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C135	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V	C215	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C136	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C217	1-126-204-11	ELECT CHIP	47uF	20%	16V
C137	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C218	1-124-779-00	ELECT CHIP	10uF	20%	16V
C138	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C219	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C139	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	C220	1-124-779-00	ELECT CHIP	10uF	20%	16V
C140	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C221	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C144	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C222	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C146	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C224	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C147	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V	C233	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C148	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V	C301	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C149	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C302	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C150	1-124-779-00	ELECT CHIP	10uF	20%	16V	C305	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C151	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	C306	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C152	1-162-916-11	CERAMIC CHIP	12PF	5%	50V	C307	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C153	1-162-916-11	CERAMIC CHIP	12PF	5%	50V	C402	1-126-204-11	ELECT CHIP	47uF	20%	16V
C154	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C403	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C155	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3701	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C156	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3702	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C158	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3707	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C159	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3708	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C160	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3711	1-162-977-11	CERAMIC CHIP	0.0018uF	10%	50V
C161	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3712	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C162	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3713	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C163	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3714	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C164	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						

☆ New part of EEP ROM (IC103) on the DMB11 board cannot be used. Therefore, if the mounted DMB11 board (A-1109-317-A, etc.) is replaced, exchange new EEP ROM (IC103) with that used before the replacement.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C3721	1-162-977-11	CERAMIC CHIP 0.0018uF 10%	50V	< IC >			
C3722	1-162-967-11	CERAMIC CHIP 0.0033uF 10%	50V	IC101	6-805-764-01	IC MX29LV320ABTC65-CBA4-0503CE	(EXCEPT PH)
C3723	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	IC101	6-805-765-01	IC MX29LV320ABTC65-CBA4-0503GA (PH)	
C3724	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	IC102	6-707-535-01	IC CXD9849R	
C3771	1-162-977-11	CERAMIC CHIP 0.0018uF 10%	50V	☆IC103	(not supplied)	IC BR24L64F-WE2	
C3772	1-162-967-11	CERAMIC CHIP 0.0033uF 10%	50V	IC104	6-705-929-01	IC K4S641632H-UC75T	
C3773	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	IC105	6-702-302-01	IC TK11133CSCL-G	
C3774	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	IC106	6-708-153-01	IC PQ018EN01ZPH	
C3781	1-162-977-11	CERAMIC CHIP 0.0018uF 10%	50V	IC107	6-702-302-01	IC TK11133CSCL-G	
C3782	1-162-967-11	CERAMIC CHIP 0.0033uF 10%	50V	IC201	6-704-524-01	IC FAN8036L	
C3783	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	IC301	6-704-222-01	IC AK4358VQ-L	
C3784	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	IC3711	8-759-359-49	IC NJM3414AV(TE2)	
C3801	1-126-206-11	ELECT CHIP 100uF 20%	6.3V	IC3771	8-759-359-49	IC NJM3414AV(TE2)	
C3802	1-117-370-11	CERAMIC CHIP 10uF	10V	< TRANSISTOR >			
C3803	1-126-205-11	ELECT CHIP 47uF 20%	6.3V	Q101	6-550-008-01	FET UM6K1N-TN	
C3804	1-126-205-11	ELECT CHIP 47uF 20%	6.3V	Q102	6-550-653-01	FET QST8TR	
C3805	1-126-208-21	ELECT CHIP 47uF 20%	4V	Q103	8-729-901-00	TRANSISTOR DTC124EK	
< CONNECTOR >				Q3801	8-729-230-49	TRANSISTOR 2SC2712-YG	
CN101	1-815-763-32	CONNECTOR, FFC/FPC 24P		< RESISTOR >			
* CN105	1-770-470-21	PIN, CONNECTOR (PC BOARD) 6P		R101	1-216-809-11	METAL CHIP 100 5%	1/10W
CN106	1-793-989-21	CONNECTOR, FFC/FPC 13P		R104	1-216-864-11	SHORT CHIP 0	
* CN201	1-770-470-21	PIN, CONNECTOR (PC BOARD) 6P		R105	1-216-833-11	METAL CHIP 10K 5%	1/10W
CN301	1-784-365-21	CONNECTOR, FFC/FPC 5P		R106	1-216-833-11	METAL CHIP 10K 5%	1/10W
CN302	1-784-376-11	CONNECTOR, FFC/FPC 17P		R107	1-216-833-11	METAL CHIP 10K 5%	1/10W
CN401	1-779-993-11	PIN, CONNECTOR (PWB) 5P		R108	1-216-857-11	METAL CHIP 1M 5%	1/10W
< DIODE >				R109	1-216-864-11	SHORT CHIP 0	
D1001	8-719-058-24	DIODE RB501V-40TE-17		R110	1-216-841-11	METAL CHIP 47K 5%	1/10W
D3501	6-501-193-01	DIODE 1SS355WTE-17		R111	1-216-809-11	METAL CHIP 100 5%	1/10W
D3502	6-501-193-01	DIODE 1SS355WTE-17		R112	1-211-977-11	METAL CHIP 22 0.5%	1/10W
< FERRITE BEAD >				R113	1-211-977-11	METAL CHIP 22 0.5%	1/10W
FB111	1-414-226-21	INDUCTOR, FERRITE BEAD		R114	1-216-845-11	METAL CHIP 100K 5%	1/10W
FB112	1-414-226-21	INDUCTOR, FERRITE BEAD		R115	1-211-977-11	METAL CHIP 22 0.5%	1/10W
FB113	1-414-226-21	INDUCTOR, FERRITE BEAD		R116	1-216-821-11	METAL CHIP 1K 5%	1/10W
FB114	1-414-226-21	INDUCTOR, FERRITE BEAD		R117	1-216-841-11	METAL CHIP 47K 5%	1/10W
FB115	1-414-226-21	INDUCTOR, FERRITE BEAD		R118	1-216-801-11	METAL CHIP 22 5%	1/10W
FB401	1-469-324-21	FERRITE, EMI (SMD) (2012)		R120	1-216-801-11	METAL CHIP 22 5%	1/10W
FB402	1-469-324-21	FERRITE, EMI (SMD) (2012)		R121	1-216-801-11	METAL CHIP 22 5%	1/10W
FB403	1-469-324-21	FERRITE, EMI (SMD) (2012)		R123	1-216-864-11	SHORT CHIP 0	
FB404	1-469-324-21	FERRITE, EMI (SMD) (2012)		R124	1-216-841-11	METAL CHIP 47K 5%	1/10W
FB405	1-469-324-21	FERRITE, EMI (SMD) (2012)		R126	1-216-864-11	SHORT CHIP 0	
FB406	1-469-324-21	FERRITE, EMI (SMD) (2012)		R127	1-216-809-11	METAL CHIP 100 5%	1/10W
< FILTER >				R136	1-216-835-11	METAL CHIP 15K 5%	1/10W
FL101	1-234-177-21	FILTER, CHIP EMI		R138	1-216-845-11	METAL CHIP 100K 5%	1/10W
FL104	1-234-177-21	FILTER, CHIP EMI		R141	1-218-916-11	METAL CHIP 750K 0.5%	1/10W
FL105	1-234-177-21	FILTER, CHIP EMI		R142	1-216-845-11	METAL CHIP 100K 5%	1/10W
FL106	1-234-177-21	FILTER, CHIP EMI		R143	1-469-116-21	FERRITE, EMI (SMD) (1608)	
FL107	1-234-177-21	FILTER, CHIP EMI		R144	1-216-864-11	SHORT CHIP 0	
FL108	1-234-177-21	FILTER, CHIP EMI		R146	1-216-805-11	METAL CHIP 47 5%	1/10W
FL401	1-234-177-21	FILTER, CHIP EMI		R151	1-216-805-11	METAL CHIP 47 5%	1/10W
FL402	1-233-893-21	FILTER, CHIP EMI		R152	1-216-864-11	SHORT CHIP 0	
FL403	1-234-177-21	FILTER, CHIP EMI		R153	1-216-805-11	METAL CHIP 47 5%	1/10W
				R155	1-216-805-11	METAL CHIP 47 5%	1/10W
				R160	1-216-805-11	METAL CHIP 47 5%	1/10W
				R161	1-216-809-11	METAL CHIP 100 5%	1/10W

☆ New part of EEPROM (IC103) on the DMB11 board cannot be used. Therefore, if the mounted DMB11 board (A-1109-317-A, etc.) is replaced, exchange new EEPROM (IC103) with that used before the replacement.

HCD-GNZ5D

DMB11

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R164	1-216-809-11	METAL CHIP	100	5%	1/10W	R1502	1-216-864-11	SHORT CHIP	0		
R169	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1504	1-216-864-11	SHORT CHIP	0		
R187	1-216-864-11	SHORT CHIP	0			R1524	1-216-864-11	SHORT CHIP	0		
R189	1-218-827-11	METAL CHIP	150	0.5%	1/10W	R1526	1-216-864-11	SHORT CHIP	0		
R190	1-218-827-11	METAL CHIP	150	0.5%	1/10W	R1530	1-216-864-11	SHORT CHIP	0		
R191	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1531	1-216-864-11	SHORT CHIP	0		
R192	1-218-827-11	METAL CHIP	150	0.5%	1/10W	R1540	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R193	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1542	1-216-833-11	METAL CHIP	10K	5%	1/10W
R195	1-218-827-11	METAL CHIP	150	0.5%	1/10W	R1543	1-216-833-11	METAL CHIP	10K	5%	1/10W
R196	1-216-864-11	SHORT CHIP	0			R1544	1-216-864-11	SHORT CHIP	0		
R197	1-218-827-11	METAL CHIP	150	0.5%	1/10W	R1546	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R204	1-216-822-11	METAL CHIP	1.2K	5%	1/10W	R1547	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R205	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1548	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R206	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1549	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R207	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	R1550	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R208	1-216-839-11	METAL CHIP	33K	5%	1/10W	R1551	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R209	1-216-839-11	METAL CHIP	33K	5%	1/10W	R1552	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R210	1-216-841-11	METAL CHIP	47K	5%	1/10W	R1553	1-216-864-11	SHORT CHIP	0		
R212	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1554	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R213	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W	R1557	1-216-809-11	METAL CHIP	100	5%	1/10W
R214	1-216-835-11	METAL CHIP	15K	5%	1/10W	R2504	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R215	1-216-834-11	METAL CHIP	12K	5%	1/10W	R3501	1-216-809-11	METAL CHIP	100	5%	1/10W
R216	1-216-834-11	METAL CHIP	12K	5%	1/10W	R3652	1-216-864-11	SHORT CHIP	0		
R219	1-216-838-11	METAL CHIP	27K	5%	1/10W	R3653	1-216-864-11	SHORT CHIP	0		
R220	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3711	1-218-271-11	METAL CHIP	2K	5%	1/10W
R221	1-218-889-11	METAL CHIP	56K	0.5%	1/10W	R3712	1-218-271-11	METAL CHIP	2K	5%	1/10W
R223	1-218-895-11	METAL CHIP	100K	0.5%	1/10W	R3713	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R224	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3714	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R225	1-218-895-11	METAL CHIP	100K	0.5%	1/10W	R3715	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R226	1-218-889-11	METAL CHIP	56K	0.5%	1/10W	R3716	1-216-821-11	METAL CHIP	1K	5%	1/10W
R230	1-218-893-11	METAL CHIP	82K	0.5%	1/10W	R3717	1-216-821-11	METAL CHIP	1K	5%	1/10W
R231	1-218-875-11	METAL CHIP	15K	0.5%	1/10W	R3718	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R232	1-218-877-11	METAL CHIP	18K	0.5%	1/10W	R3719	1-216-821-11	METAL CHIP	1K	5%	1/10W
R233	1-218-883-11	METAL CHIP	33K	0.5%	1/10W	R3721	1-218-271-11	METAL CHIP	2K	5%	1/10W
R234	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3722	1-218-271-11	METAL CHIP	2K	5%	1/10W
R246	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3723	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R247	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3724	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R314	1-216-809-11	METAL CHIP	100	5%	1/10W	R3725	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R318	1-216-864-11	SHORT CHIP	0			R3726	1-216-821-11	METAL CHIP	1K	5%	1/10W
R319	1-216-864-11	SHORT CHIP	0			R3727	1-216-821-11	METAL CHIP	1K	5%	1/10W
R321	1-216-864-11	SHORT CHIP	0			R3728	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1101	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3729	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1102	1-218-827-11	METAL CHIP	150	0.5%	1/10W	R3771	1-218-271-11	METAL CHIP	2K	5%	1/10W
R1103	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3772	1-218-271-11	METAL CHIP	2K	5%	1/10W
R1104	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3773	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R1105	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3774	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R1108	1-216-864-11	SHORT CHIP	0			R3775	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1109	1-216-864-11	SHORT CHIP	0			R3776	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1110	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	R3777	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1123	1-216-864-11	SHORT CHIP	0			R3778	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1126	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3779	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1129	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3781	1-218-271-11	METAL CHIP	2K	5%	1/10W
R1133	1-216-864-11	SHORT CHIP	0			R3782	1-218-271-11	METAL CHIP	2K	5%	1/10W
R1134	1-216-864-11	SHORT CHIP	0			R3783	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R1150	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3784	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R1151	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3785	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1152	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3786	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1168	1-216-817-11	METAL CHIP	470	5%	1/10W	R3787	1-216-821-11	METAL CHIP	1K	5%	1/10W

DMB11

DRIVER

FRONT AMP

Ref. No.	Part No.	Description	Remark		
R3788	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3789	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3801	1-216-864-11	SHORT CHIP	0		
R3802	1-216-864-11	SHORT CHIP	0		
R3803	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3804	1-216-836-11	METAL CHIP	18K	5%	1/10W
R3805	1-216-821-11	METAL CHIP	1K	5%	1/10W
R4701	1-216-864-11	SHORT CHIP	0		
R4702	1-216-864-11	SHORT CHIP	0		
R4703	1-216-864-11	SHORT CHIP	0		
R4704	1-216-864-11	SHORT CHIP	0		
R4705	1-216-864-11	SHORT CHIP	0		
R4706	1-216-864-11	SHORT CHIP	0		
R5005	1-216-864-11	SHORT CHIP	0		
R5011	1-216-864-11	SHORT CHIP	0		
R5016	1-216-864-11	SHORT CHIP	0 (EXCEPT PH)		
R5017	1-216-864-11	SHORT CHIP	0 (PH)		
< NETWORK RESISTOR >					
RB103	1-234-795-21	RES, NETWORK	0X4 (2010)		
RB104	1-234-795-21	RES, NETWORK	0X4 (2010)		
RB105	1-234-371-21	RES, NETWORK	47X4 (1005)		
RB106	1-234-371-21	RES, NETWORK	47X4 (1005)		
RB107	1-234-370-21	RES, NETWORK	22X4 (1005)		
RB108	1-234-370-21	RES, NETWORK	22X4 (1005)		
RB111	1-234-795-21	RES, NETWORK	0X4 (2010)		
RB112	1-234-370-21	RES, NETWORK	22X4 (1005)		
RB113	1-234-370-21	RES, NETWORK	22X4 (1005)		
< VIBRATOR >					
X101	1-781-867-21	VIBRATOR, CRYSTAL (27MHz)			

A-1103-756-A	DRIVER BOARD, COMPLETE				

< CAPACITOR >					
C715	1-126-933-11	ELECT	100uF	20%	16V
C731	1-126-964-11	ELECT	10uF	20%	50V
C735	1-164-159-21	CERAMIC	0.1uF		50V
C736	1-164-159-21	CERAMIC	0.1uF		50V
C737	1-164-159-21	CERAMIC	0.1uF		50V
C741	1-162-306-11	CERAMIC	0.01uF	20%	16V
C751	1-162-306-11	CERAMIC	0.01uF	20%	16V
C752	1-164-159-21	CERAMIC	0.1uF		50V
< CONNECTOR >					
CN701	1-784-735-11	CONNECTOR, FFC 13P			
CN702	1-784-766-11	CONNECTOR, FFC 5P			
* CN703	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P			
CN704	1-785-328-11	PIN, CONNECTOR (LIGHT ANGLE) 2P			
< DIODE >					
D701	8-719-921-42	DIODE MTZJ-5.1A			
D711	8-719-109-69	DIODE RD3.6ESB2			
< IC >					
IC701	8-759-598-69	IC BA6956AN			

Ref. No.	Part No.	Description	Remark		
IC712	8-759-598-69	IC BA6956AN			
< TRANSISTOR >					
Q731	8-729-029-66	TRANSISTOR DTC114ESA			
< RESISTOR >					
R701	1-249-413-11	CARBON	470	5%	1/4W
R702	1-247-807-31	CARBON	100	5%	1/4W
R711	1-249-417-11	CARBON	1K	5%	1/4W
R712	1-249-425-11	CARBON	4.7K	5%	1/4W
R713	1-249-433-11	CARBON	22K	5%	1/4W
R721	1-249-425-11	CARBON	4.7K	5%	1/4W
R722	1-249-425-11	CARBON	4.7K	5%	1/4W
R723	1-249-425-11	CARBON	4.7K	5%	1/4W
R731	1-247-807-31	CARBON	100	5%	1/4W
R732	1-249-429-11	CARBON	10K	5%	1/4W
R733	1-249-417-11	CARBON	1K	5%	1/4W
R734	1-249-430-11	CARBON	12K	5%	1/4W
R735	1-247-807-31	CARBON	100	5%	1/4W
R751	1-249-425-11	CARBON	4.7K	5%	1/4W

A-1109-314-A	FRONT AMP BOARD, COMPLETE				

7-685-872-09	SCREW +BVTT 3X8 (S)				
< CAPACITOR >					
C401	1-126-964-11	ELECT	10uF	20%	50V
C402	1-162-302-11	CERAMIC	0.0022uF	20%	16V
C403	1-162-286-31	CERAMIC	220PF	10%	50V
C404	1-126-967-11	ELECT	47uF	20%	50V
C406	1-136-495-11	FILM	0.068uF	5%	50V
C407	1-136-495-11	FILM	0.068uF	5%	50V
C408	1-126-968-11	ELECT	100uF	20%	50V
C410	1-126-926-11	ELECT	1000uF	20%	10V
C416	1-162-306-11	CERAMIC	0.01uF	20%	16V
C421	1-128-575-11	ELECT	33uF	20%	63V
C451	1-126-964-11	ELECT	10uF	20%	50V
C452	1-162-302-11	CERAMIC	0.0022uF	20%	16V
C453	1-162-286-31	CERAMIC	220PF	10%	50V
C454	1-126-967-11	ELECT	47uF	20%	50V
C456	1-136-495-11	FILM	0.068uF	5%	50V
C457	1-136-495-11	FILM	0.068uF	5%	50V
C458	1-126-968-11	ELECT	100uF	20%	50V
C471	1-135-832-11	ELECT	2200uF	20%	50V
C472	1-135-832-11	ELECT	2200uF	20%	50V
C485	1-162-306-11	CERAMIC	0.01uF	20%	16V
C486	1-162-306-11	CERAMIC	0.01uF	20%	16V
C941	1-126-956-11	ELECT	0.1uF	20%	50V
C942	1-126-925-11	ELECT	470uF	20%	10V
C943	1-126-956-11	ELECT	0.1uF	20%	50V
C944	1-104-658-11	ELECT	100uF	20%	10V
C945	1-126-956-11	ELECT	0.1uF	20%	50V
C946	1-104-658-11	ELECT	100uF	20%	10V
C949	1-126-947-11	ELECT	47uF	20%	35V
C950	1-104-658-11	ELECT	100uF	20%	10V

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FRONT AMP JACK

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
CN401	1-573-829-11	CONNECTOR, BOARD TO BOARD 15P	
CN402	1-573-829-11	CONNECTOR, BOARD TO BOARD 15P	
< DIODE >			
D401	8-719-991-33	DIODE 1SS133T-77	
D410	8-719-210-21	DIODE 11EQS04	
D451	8-719-991-33	DIODE 1SS133T-77	
D471	8-719-510-68	DIODE D5SBA204101	
D481	8-719-991-33	DIODE 1SS133T-77	
D485	8-719-991-33	DIODE 1SS133T-77	
D486	8-719-991-33	DIODE 1SS133T-77	
D491	8-719-991-33	DIODE 1SS133T-77	
< IC >			
IC401	6-705-845-01	IC STK403-090	
< TRANSISTOR >			
Q401	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q402	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q403	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q416	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q417	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q451	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q481	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q482	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
< RESISTOR >			
R401	1-247-831-11	CARBON 1K 5%	1/4W
R402	1-247-871-11	CARBON 47K 5%	1/4W
R403	1-247-812-11	CARBON 160 5%	1/4W
R404	1-247-871-11	CARBON 47K 5%	1/4W
△ R406	1-208-602-11	METAL 0.22X2	2W
R407	1-247-831-11	CARBON 1K 5%	1/4W
R408	1-249-431-11	CARBON 15K 5%	1/4W
R409	1-247-879-11	CARBON 100K 5%	1/4W
R410	1-260-076-11	CARBON 10 5%	1/2W F
△ R411	1-212-881-11	FUSIBLE 100 5%	1/4W F
R412	1-247-887-00	CARBON 220K 5%	1/4W
R413	1-249-421-11	CARBON 2.2K 5%	1/4W
R415	1-249-429-11	CARBON 10K 5%	1/4W
R416	1-249-429-11	CARBON 10K 5%	1/4W
R417	1-249-429-11	CARBON 10K 5%	1/4W
R418	1-247-871-11	CARBON 47K 5%	1/4W
△ R419	1-202-972-61	FUSIBLE 1 5%	1/4W F
△ R420	1-202-972-61	FUSIBLE 1 5%	1/4W F
R421	1-249-429-11	CARBON 10K 5%	1/4W
R425	1-249-439-11	CARBON 68K 5%	1/4W
R426	1-249-426-11	CARBON 5.6K 5%	1/4W
R427	1-249-421-11	CARBON 2.2K 5%	1/4W
R428	1-247-863-11	CARBON 22K 5%	1/4W
R429	1-249-429-11	CARBON 10K 5%	1/4W
R430	1-249-429-11	CARBON 10K 5%	1/4W
R439	1-247-871-11	CARBON 47K 5%	1/4W
R440	1-247-873-11	CARBON 56K 5%	1/4W
R451	1-247-831-11	CARBON 1K 5%	1/4W
R452	1-247-871-11	CARBON 47K 5%	1/4W

Ref. No.	Part No.	Description			Remark
R453	1-247-812-11	CARBON	160	5%	1/4W
R454	1-247-871-11	CARBON	47K	5%	1/4W
△ R456	1-208-602-11	METAL	0.22X2		2W
R457	1-247-831-11	CARBON	1K	5%	1/4W
R458	1-249-431-11	CARBON	15K	5%	1/4W
R459	1-247-879-11	CARBON	100K	5%	1/4W
R460	1-260-076-11	CARBON	10	5%	1/2W F
△ R461	1-212-881-11	FUSIBLE	100	5%	1/4W F
R471	1-247-879-11	CARBON	100K	5%	1/4W
R472	1-247-879-11	CARBON	100K	5%	1/4W
△ R480	1-215-890-11	METAL OXIDE	470	5%	2W F
R485	1-247-871-11	CARBON	47K	5%	1/4W
R486	1-247-871-11	CARBON	47K	5%	1/4W
R487	1-249-429-11	CARBON	10K	5%	1/4W
R488	1-247-871-11	CARBON	47K	5%	1/4W
R489	1-249-429-11	CARBON	10K	5%	1/4W
R490	1-249-429-11	CARBON	10K	5%	1/4W
R941	1-247-831-11	CARBON	1K	5%	1/4W
< RELAY >					
RY481	1-515-920-11	RELAY (24V)			
< THERMISTOR >					
TH401	1-807-796-11	THERMISTOR			
< TERMINAL BOARD >					
TM401	1-694-677-12	TERMINAL BOARD (4P) (FRONT SPEAKER)			

A-1109-321-A JACK BOARD, COMPLETE					

< CAPACITOR >					
C1005	1-115-872-11	ELECT	2.2uF	20%	50V
C1006	1-162-955-11	CERAMIC CHIP	150PF	5%	50V
C1007	1-126-786-11	ELECT	47uF	20%	16V
C1008	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C1009	1-115-872-11	ELECT	2.2uF	20%	50V
C1010	1-115-867-11	ELECT	0.1uF	20%	50V
C1011	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C1012	1-126-786-11	ELECT	47uF	20%	16V
C1013	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C1014	1-115-868-11	ELECT	0.22uF	20%	50V
C1016	1-107-726-11	CERAMIC CHIP	0.01uF	10%	16V
C1036	1-164-360-11	CERAMIC CHIP	0.1uF		16V
< DIODE >					
D1005	6-501-193-01	DIODE	1SS355WTE-17		
D1006	6-501-193-01	DIODE	1SS355WTE-17		
< GROUND TERMINAL >					
EPT1001	1-537-771-21	TERMINAL BOARD, GROUND			
EPT1002	1-537-771-21	TERMINAL BOARD, GROUND			
< JUMPER RESISTOR >					
FB1003	1-216-295-11	SHORT CHIP	0		
FB1004	1-216-295-11	SHORT CHIP	0		

JACK

MOTOR (LD)

MOTOR (TB)

OPTICAL

PANEL

Ref. No.	Part No.	Description	Remark		
< IC >					
IC1001	8-759-710-97	IC NJM4565M-D			
< JACK >					
J1002	1-770-226-11	JACK (LARGE TYPE) (MIC)			
J1004	1-794-702-11	JACK, HEADPHONE (PHONES)			
< JUMPER RESISTOR >					
JR1000	1-216-295-11	SHORT CHIP	0		
< RESISTOR >					
R1006	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1007	1-216-813-11	METAL CHIP	220	5%	1/10W
R1008	1-216-809-11	METAL CHIP	100	5%	1/10W
R1009	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R1010	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1011	1-216-847-11	METAL CHIP	150K	5%	1/10W
R1012	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1013	1-216-809-11	METAL CHIP	100	5%	1/10W
R1014	1-216-851-11	METAL CHIP	330K	5%	1/10W
R1015	1-216-835-11	METAL CHIP	15K	5%	1/10W
R1017	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1019	1-216-864-11	SHORT CHIP	0		
R1020	1-216-864-11	SHORT CHIP	0		
R1031	1-260-083-11	CARBON	47	5%	1/2W
R1032	1-260-083-11	CARBON	47	5%	1/2W
< VARIABLE RESISTOR >					
RV1001	1-223-983-11	RES, VAR, CARBON 50K (MIC LEVEL)			

	1-687-133-12	MOTOR (LD) BOARD			

	1-687-134-12	MOTOR (TB) BOARD			

< CONNECTOR >					
CN742	1-784-727-11	CONNECTOR, FFC 5P			

OPTICAL BOARD					

< CAPACITOR >					
C308	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C309	1-126-923-11	ELECT	220uF	20%	10V
< IC >					
IC306	6-600-465-11	IC TOTX147 (DIGITAL OUT OPTICAL)			
< JUMPER RESISTOR >					
R304	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description	Remark		
	A-1141-196-A	PANEL BOARD, COMPLETE			

		< CAPACITOR >			
C101	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C102	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C103	1-126-916-11	ELECT	1000uF	20%	6.3V
C104	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C105	1-119-941-11	ELECT	470uF	20%	6.3V
C106	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C110	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C111	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C112	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C113	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C114	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C115	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C116	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C117	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C118	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C119	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C120	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C121	1-119-941-11	ELECT	470uF	20%	6.3V
C122	1-119-941-11	ELECT	470uF	20%	6.3V
C125	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C126	1-119-943-11	ELECT	47uF	20%	50V
C127	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C128	1-126-382-11	ELECT	100uF	20%	16V
C129	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C130	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C144	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C145	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C146	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C147	1-126-382-11	ELECT	100uF	20%	16V
C152	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C153	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C154	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
* CN001	1-568-450-11	HOUSING, CONNECTOR (PC BOARD) 4P			
* CN002	1-568-451-11	HOUSING, CONNECTOR (PC BOARD) 10P			
CN003	1-784-749-11	CONNECTOR, FFC 27P			
CN004	1-784-735-11	CONNECTOR, FFC 13P			
CN005	1-779-550-21	CONNECTOR, FFC (LIF(NON-ZIF)) 13P			
CN102	1-784-735-11	CONNECTOR, FFC 13P			
CN151	1-785-334-11	PIN, CONNECTOR (LIGHT ANGLE) 8P			
CN153	1-818-282-11	PIN, CONNECTOR (FOR PWB) 3P			
		< DIODE >			
D101	6-500-335-01	DIODE	MC2838-T112-1		
D102	6-500-335-01	DIODE	MC2838-T112-1		
D105	6-501-193-01	DIODE	1SS355WTE-17		
D106	6-501-193-01	DIODE	1SS355WTE-17		
D107	6-501-193-01	DIODE	1SS355WTE-17		
D108	1-216-295-11	SHORT CHIP	0		
D109	6-501-193-01	DIODE	1SS355WTE-17		
D110	8-719-053-43	LED	SLR-325VCT31 (I/φ)		
D111	6-501-193-01	DIODE	1SS355WTE-17		
D112	6-501-193-01	DIODE	1SS355WTE-17		

HCD-GNZ5D

PANEL

Ref. No.	Part No.	Description	Remark				Ref. No.	Part No.	Description	Remark			
D113	6-501-193-01	DIODE 1SS355WTE-17					R011	1-216-809-11	METAL CHIP 100 5%	1/10W			
D114	6-501-193-01	DIODE 1SS355WTE-17					R012	1-216-809-11	METAL CHIP 100 5%	1/10W			
D121	6-501-193-01	DIODE 1SS355WTE-17					R013	1-216-833-11	METAL CHIP 10K 5%	1/10W			
< JUMPER RESISTOR >						R014	1-216-837-11	METAL CHIP 22K 5%	1/10W				
						R015	1-216-841-11	METAL CHIP 47K 5%	1/10W				
FB101	1-216-295-11	SHORT CHIP 0					R016	1-216-833-11	METAL CHIP 10K 5%	1/10W			
FB102	1-216-295-11	SHORT CHIP 0					R017	1-216-809-11	METAL CHIP 100 5%	1/10W			
FB103	1-216-295-11	SHORT CHIP 0					R018	1-216-809-11	METAL CHIP 100 5%	1/10W			
FB104	1-216-295-11	SHORT CHIP 0					R019	1-216-809-11	METAL CHIP 100 5%	1/10W			
FB105	1-216-295-11	SHORT CHIP 0					R020	1-216-809-11	METAL CHIP 100 5%	1/10W			
< FLUORESCENT INDICATOR TUBE >						R021	1-216-809-11	METAL CHIP 100 5%	1/10W				
						R022	1-216-809-11	METAL CHIP 100 5%	1/10W				
						R023	1-216-809-11	METAL CHIP 100 5%	1/10W				
						R024	1-216-809-11	METAL CHIP 100 5%	1/10W				
						R025	1-216-829-11	METAL CHIP 4.7K 5%	1/10W				
FL101	1-519-811-11	INDICATOR TUBE, FLUORESCENT					R026	1-216-809-11	METAL CHIP 100 5%	1/10W			
< IC >						R027	1-216-837-11	METAL CHIP 22K 5%	1/10W				
						R028	1-216-841-11	METAL CHIP 47K 5%	1/10W				
						R029	1-216-829-11	METAL CHIP 4.7K 5%	1/10W				
						R030	1-216-829-11	METAL CHIP 4.7K 5%	1/10W				
IC101	6-805-918-01	IC M30392MEP-A10FPUO					R031	1-216-833-11	METAL CHIP 10K 5%	1/10W			
IC102	6-707-095-01	IC BH2210FV-E2					R032	1-216-837-11	METAL CHIP 22K 5%	1/10W			
IC103	6-707-920-01	IC BD4828G-TR					R033	1-216-841-11	METAL CHIP 47K 5%	1/10W			
< JUMPER RESISTOR >						R034	1-216-829-11	METAL CHIP 4.7K 5%	1/10W				
						R035	1-216-829-11	METAL CHIP 4.7K 5%	1/10W				
JR101	1-216-864-11	SHORT CHIP 0					R036	1-216-829-11	METAL CHIP 4.7K 5%	1/10W			
JR104	1-216-864-11	SHORT CHIP 0					R037	1-216-833-11	METAL CHIP 10K 5%	1/10W			
JR105	1-216-864-11	SHORT CHIP 0					R038	1-216-829-11	METAL CHIP 4.7K 5%	1/10W			
JR106	1-216-864-11	SHORT CHIP 0					R039	1-216-829-11	METAL CHIP 4.7K 5%	1/10W			
JR107	1-216-864-11	SHORT CHIP 0					R040	1-216-829-11	METAL CHIP 4.7K 5%	1/10W			
JR108	1-216-864-11	SHORT CHIP 0					R041	1-216-813-11	METAL CHIP 220 5%	1/10W			
JR109	1-216-864-11	SHORT CHIP 0					R042	1-216-815-11	METAL CHIP 330 5%	1/10W			
JR110	1-216-864-11	SHORT CHIP 0					R043	1-216-817-11	METAL CHIP 470 5%	1/10W			
JR111	1-216-864-11	SHORT CHIP 0					R044	1-216-819-11	METAL CHIP 680 5%	1/10W			
JR112	1-216-864-11	SHORT CHIP 0					R045	1-216-821-11	METAL CHIP 1K 5%	1/10W			
JR118	1-216-864-11	SHORT CHIP 0					R046	1-216-823-11	METAL CHIP 1.5K 5%	1/10W			
JR119	1-216-864-11	SHORT CHIP 0					R047	1-216-825-11	METAL CHIP 2.2K 5%	1/10W			
JR120	1-216-864-11	SHORT CHIP 0					R048	1-216-829-11	METAL CHIP 4.7K 5%	1/10W			
JR121	1-216-864-11	SHORT CHIP 0					R049	1-216-833-11	METAL CHIP 10K 5%	1/10W			
JR123	1-216-864-11	SHORT CHIP 0					R050	1-216-839-11	METAL CHIP 33K 5%	1/10W			
< TRANSISTOR >						R051	1-216-819-11	METAL CHIP 680 5%	1/10W				
						R052	1-216-821-11	METAL CHIP 1K 5%	1/10W				
						R053	1-216-819-11	METAL CHIP 680 5%	1/10W				
						R054	1-216-821-11	METAL CHIP 1K 5%	1/10W				
						R055	1-216-819-11	METAL CHIP 680 5%	1/10W				
Q101	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327					R056	1-216-821-11	METAL CHIP 1K 5%	1/10W			
Q102	6-550-044-01	TRANSISTOR 2SB1689-T106					R057	1-216-833-11	METAL CHIP 10K 5%	1/10W			
Q103	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327					R058	1-216-829-11	METAL CHIP 4.7K 5%	1/10W			
Q104	6-550-044-01	TRANSISTOR 2SB1689-T106					R059	1-216-833-11	METAL CHIP 10K 5%	1/10W			
Q105	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327					R060	1-216-833-11	METAL CHIP 10K 5%	1/10W			
Q106	6-550-044-01	TRANSISTOR 2SB1689-T106					R061	1-216-813-11	METAL CHIP 220 5%	1/10W			
Q107	8-729-905-35	TRANSISTOR 2SC4081-R					R062	1-216-815-11	METAL CHIP 330 5%	1/10W			
Q108	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327					R063	1-216-817-11	METAL CHIP 470 5%	1/10W			
Q109	8-729-026-53	TRANSISTOR 2SA1576A-T106-QR					R064	1-216-823-11	METAL CHIP 1.5K 5%	1/10W			
Q111	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327					R065	1-216-864-11	SHORT CHIP 0				
< RESISTOR >						R066	1-216-864-11	SHORT CHIP 0					
						R067	1-216-825-11	METAL CHIP 2.2K 5%	1/10W				
						R068	1-216-829-11	METAL CHIP 4.7K 5%	1/10W				
R001	1-216-837-11	METAL CHIP 22K 5%	1/10W										
R002	1-216-809-11	METAL CHIP 100 5%	1/10W										
R003	1-216-809-11	METAL CHIP 100 5%	1/10W										
R004	1-216-809-11	METAL CHIP 100 5%	1/10W										
R005	1-216-809-11	METAL CHIP 100 5%	1/10W										
R006	1-216-809-11	METAL CHIP 100 5%	1/10W										
R007	1-216-809-11	METAL CHIP 100 5%	1/10W										
R008	1-216-809-11	METAL CHIP 100 5%	1/10W										
R009	1-216-809-11	METAL CHIP 100 5%	1/10W										
R010	1-216-809-11	METAL CHIP 100 5%	1/10W										

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R070	1-216-819-11	METAL CHIP	680	5%	1/10W	R128	1-216-809-11	METAL CHIP	100	5%	1/10W
R071	1-216-821-11	METAL CHIP	1K	5%	1/10W	R129	1-216-809-11	METAL CHIP	100	5%	1/10W
R072	1-216-817-11	METAL CHIP	470	5%	1/10W	R130	1-216-809-11	METAL CHIP	100	5%	1/10W
R073	1-216-833-11	METAL CHIP	10K	5%	1/10W	R131	1-216-841-11	METAL CHIP	47K	5%	1/10W
R074	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R132	1-216-841-11	METAL CHIP	47K	5%	1/10W
R075	1-216-837-11	METAL CHIP	22K	5%	1/10W	R133	1-216-841-11	METAL CHIP	47K	5%	1/10W
R076	1-216-837-11	METAL CHIP	22K	5%	1/10W	R134	1-216-841-11	METAL CHIP	47K	5%	1/10W
R077	1-216-841-11	METAL CHIP	47K	5%	1/10W	R135	1-216-841-11	METAL CHIP	47K	5%	1/10W
R078	1-216-837-11	METAL CHIP	22K	5%	1/10W	R136	1-216-841-11	METAL CHIP	47K	5%	1/10W
R079	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R137	1-216-841-11	METAL CHIP	47K	5%	1/10W
R080	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R138	1-216-841-11	METAL CHIP	47K	5%	1/10W
R081	1-216-813-11	METAL CHIP	220	5%	1/10W	R139	1-216-841-11	METAL CHIP	47K	5%	1/10W
R082	1-216-815-11	METAL CHIP	330	5%	1/10W	R140	1-216-841-11	METAL CHIP	47K	5%	1/10W
R083	1-216-817-11	METAL CHIP	470	5%	1/10W	R141	1-216-841-11	METAL CHIP	47K	5%	1/10W
R084	1-216-819-11	METAL CHIP	680	5%	1/10W	R142	1-216-841-11	METAL CHIP	47K	5%	1/10W
R085	1-216-821-11	METAL CHIP	1K	5%	1/10W	R143	1-216-841-11	METAL CHIP	47K	5%	1/10W
R086	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	R144	1-216-841-11	METAL CHIP	47K	5%	1/10W
R087	1-216-837-11	METAL CHIP	22K	5%	1/10W	R145	1-216-841-11	METAL CHIP	47K	5%	1/10W
R088	1-216-841-11	METAL CHIP	47K	5%	1/10W	R146	1-216-841-11	METAL CHIP	47K	5%	1/10W
R089	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R147	1-216-841-11	METAL CHIP	47K	5%	1/10W
R090	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R148	1-216-841-11	METAL CHIP	47K	5%	1/10W
R095	1-216-813-11	METAL CHIP	220	5%	1/10W	R149	1-216-841-11	METAL CHIP	47K	5%	1/10W
R096	1-216-813-11	METAL CHIP	220	5%	1/10W	R150	1-216-841-11	METAL CHIP	47K	5%	1/10W
R101	1-216-809-11	METAL CHIP	100	5%	1/10W	R151	1-216-841-11	METAL CHIP	47K	5%	1/10W
R102	1-216-809-11	METAL CHIP	100	5%	1/10W	R152	1-216-864-11	SHORT CHIP	0		
R103	1-216-809-11	METAL CHIP	100	5%	1/10W	R153	1-216-841-11	METAL CHIP	47K	5%	1/10W
R104	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R154	1-216-841-11	METAL CHIP	47K	5%	1/10W
R105	1-216-809-11	METAL CHIP	100	5%	1/10W	R155	1-216-841-11	METAL CHIP	47K	5%	1/10W
R106	1-216-809-11	METAL CHIP	100	5%	1/10W	R156	1-216-841-11	METAL CHIP	47K	5%	1/10W
R107	1-216-809-11	METAL CHIP	100	5%	1/10W	R157	1-216-841-11	METAL CHIP	47K	5%	1/10W
R108	1-216-809-11	METAL CHIP	100	5%	1/10W	R158	1-216-841-11	METAL CHIP	47K	5%	1/10W
R109	1-216-833-11	METAL CHIP	10K	5%	1/10W	R159	1-216-841-11	METAL CHIP	47K	5%	1/10W
R110	1-216-841-11	METAL CHIP	47K	5%	1/10W	R160	1-216-841-11	METAL CHIP	47K	5%	1/10W
R111	1-216-851-11	METAL CHIP	330K	5%	1/10W	R161	1-216-841-11	METAL CHIP	47K	5%	1/10W
R112	1-216-833-11	METAL CHIP	10K	5%	1/10W	R162	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R113	1-216-811-11	METAL CHIP	150	5%	1/10W	R163	1-216-841-11	METAL CHIP	47K	5%	1/10W
R113	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R164	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R114	1-216-815-11	METAL CHIP	330	5%	1/10W	R165	1-216-841-11	METAL CHIP	47K	5%	1/10W
R114	1-216-819-11	METAL CHIP	680	5%	1/10W	R166	1-216-841-11	METAL CHIP	47K	5%	1/10W
R114	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R167	1-216-841-11	METAL CHIP	47K	5%	1/10W
R114	1-216-864-11	SHORT CHIP	0 (PH)			R168	1-216-809-11	METAL CHIP	100	5%	1/10W
R115	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R169	1-216-809-11	METAL CHIP	100	5%	1/10W
R116	1-216-864-11	SHORT CHIP	0			R170	1-216-809-11	METAL CHIP	100	5%	1/10W
R117	1-216-833-11	METAL CHIP	10K	5%	1/10W	R171	1-216-809-11	METAL CHIP	100	5%	1/10W
R118	1-216-809-11	METAL CHIP	100	5%	1/10W	R172	1-216-833-11	METAL CHIP	10K	5%	1/10W
R119	1-216-809-11	METAL CHIP	100	5%	1/10W	R173	1-216-833-11	METAL CHIP	10K	5%	1/10W
R120	1-216-841-11	METAL CHIP	47K	5%	1/10W	R174	1-216-857-11	METAL CHIP	1M	5%	1/10W
R121	1-216-809-11	METAL CHIP	100	5%	1/10W	R175	1-216-864-11	SHORT CHIP	0		
R122	1-216-809-11	METAL CHIP	100	5%	1/10W	R177	1-216-853-11	METAL CHIP	470K	5%	1/10W
R123	1-216-809-11	METAL CHIP	100	5%	1/10W	R178	1-216-809-11	METAL CHIP	100	5%	1/10W
R124	1-216-809-11	METAL CHIP	100	5%	1/10W	R179	1-216-809-11	METAL CHIP	100	5%	1/10W
R125	1-216-809-11	METAL CHIP	100	5%	1/10W	R180	1-216-809-11	METAL CHIP	100	5%	1/10W
R126	1-216-809-11	METAL CHIP	100	5%	1/10W	R181	1-216-809-11	METAL CHIP	100	5%	1/10W
R127	1-216-809-11	METAL CHIP	100	5%	1/10W	R182	1-216-809-11	METAL CHIP	100	5%	1/10W
						R183	1-216-809-11	METAL CHIP	100	5%	1/10W
						R184	1-216-809-11	METAL CHIP	100	5%	1/10W
						R185	1-216-809-11	METAL CHIP	100	5%	1/10W
						R186	1-216-809-11	METAL CHIP	100	5%	1/10W

HCD-GNZ5D

- PANEL
- SENSOR
- SIRCS
- STREAM
- SUB TRANS

Ref. No.	Part No.	Description	Remark		
R187	1-216-809-11	METAL CHIP	100	5%	1/10W
R188	1-216-809-11	METAL CHIP	100	5%	1/10W
R189	1-216-809-11	METAL CHIP	100	5%	1/10W
R192	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R193	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R194	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R195	1-216-809-11	METAL CHIP	100	5%	1/10W
R197	1-216-809-11	METAL CHIP	100	5%	1/10W
R198	1-216-864-11	SHORT CHIP	0		
R199	1-216-821-11	METAL CHIP	1K	5%	1/10W
R200	1-216-809-11	METAL CHIP	100	5%	1/10W
< SWITCH >					
S11	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			
S12	1-762-875-21	SWITCH, KEYBOARD (EQ BAND/MEMORY)			
S14	1-762-875-21	SWITCH, KEYBOARD (PRESET EQ)			
S15	1-762-875-21	SWITCH, KEYBOARD (DIRECTION)			
S16	1-762-875-21	SWITCH, KEYBOARD (DISC 3)			
S17	1-762-875-21	SWITCH, KEYBOARD (DISC 2)			
S18	1-762-875-21	SWITCH, KEYBOARD (DISC 1)			
S19	1-762-875-21	SWITCH, KEYBOARD (DISC SKIP/EX-CHANGE)			
S20	1-762-875-21	SWITCH, KEYBOARD (▲ OPEN/CLOSE)			
S31	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)			
S32	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)			
S33	1-762-875-21	SWITCH, KEYBOARD (TAPE A/B)			
S34	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)			
S35	1-762-875-21	SWITCH, KEYBOARD (REC PAUSE/START)			
S38	1-762-875-21	SWITCH, KEYBOARD (◀◀◀ TUNING -)			
S51	1-762-875-21	SWITCH, KEYBOARD (◀▶)			
S52	1-762-875-21	SWITCH, KEYBOARD (SOUND FIELD)			
S53	1-762-875-21	SWITCH, KEYBOARD (⏮)			
S54	1-762-875-21	SWITCH, KEYBOARD (■)			
S55	1-762-875-21	SWITCH, KEYBOARD (▶▶▶ TUNING +)			
S56	1-762-875-21	SWITCH, KEYBOARD (GROOVE)			
S57	1-762-875-21	SWITCH, KEYBOARD (DVD)			
< VIBRATOR >					
X101	1-795-482-11	VIBRATOR, CERAMIC (16MHz)			
X102	1-760-252-12	VIBRATOR, CRYSTAL (32.768kHz)			

	1-687-132-12	SENSOR BOARD			

< CONNECTOR >					
CN731	1-785-329-21	PIN, CONNECTOR (LIGHT ANGLE) 3P			
< IC >					
IC731	6-600-022-01	IC RPI-576			

SIRCS BOARD					

< CAPACITOR >					
C148	1-162-974-11	CERAMIC CHIP	0.01uF		50V

Ref. No.	Part No.	Description	Remark		
< CONNECTOR >					
CN143	1-816-423-11	SOCKET, CONNECTOR 3P			
< IC >					
IC104	6-600-309-01	IC RPM7240-H9 (IR)			
< JUMPER RESISTOR >					
JR102	1-216-864-11	SHORT CHIP	0		

STREAM BOARD					

< DIODE >					
D117	8-719-085-33	LED SLI-343URCT32WST	(RING ILLUMINATION)		
D118	8-719-085-33	LED SLI-343URCT32WST	(RING ILLUMINATION)		
< JUMPER RESISTOR >					
JR113	1-216-864-11	SHORT CHIP	0		
JR114	1-216-864-11	SHORT CHIP	0		
JR115	1-216-864-11	SHORT CHIP	0		
JR116	1-216-864-11	SHORT CHIP	0		
JR117	1-216-864-11	SHORT CHIP	0		
< RESISTOR >					
R069	1-216-833-11	METAL CHIP	10K	5%	1/10W
< SWITCH >					
S101	1-786-289-11	SWITCH, DETECTION (⏮◀ - EQ + ▶▶⏭)			
< ROTARY ENCODER >					
S102	1-418-725-41	ENCODER, ROTARY (12 TYPE)	(MASTER VOLUME)		

SUB TRANS BOARD					

	1-533-217-41	HOLDER, FUSE (E3,E15,PH)			
< CAPACITOR >					
C902	1-164-159-11	CERAMIC	0.1uF	50V	
C903	1-164-159-11	CERAMIC	0.1uF	50V	
< CONNECTOR >					
CN901	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
CN902	1-785-314-11	PIN, CONNECTOR (STRAIGHT) 2P			
< DIODE >					
D901	8-719-991-33	DIODE 1SS133T-77			
< COIL >					
L901	1-414-189-31	INDUCTOR	100uH		

SUB TRANS

SW

TRANS

VIDEO

Ref. No.	Part No.	Description	Remark			
		< TRANSISTOR >				
Q901	8-729-119-78	TRANSISTOR	2SC2785-HFE			
		< RESISTOR >				
R901	1-249-429-11	CARBON	10K	5%	1/4W	
R904	1-249-393-11	CARBON	10	5%	1/4W	
		< RELAY >				
△RY901	1-755-324-11	RELAY				
		< SWITCH >				
△S901	1-786-055-21	SELECTOR, VOLTAGE (VOLTAGE SELECTOR)				(E3,E15,PH)

	1-687-669-12	SW BOARD				

		< SWITCH >				
S751	1-786-514-11	SWITCH, LEVER (SLIDE) (OPEN/CLOSE DET)				

		TRANS BOARD				

	1-533-217-41	HOLDER, FUSE				
		< CAPACITOR >				
C912	1-126-960-11	ELECT	1uF	20%	50V	
					(E12,E13)	
C913	1-126-968-11	ELECT	100uF	20%	50V	
C915	1-164-159-11	CERAMIC	0.1uF		50V	
C918	1-128-576-11	ELECT	100uF	20%	63V	
		< CONNECTOR >				
* CN914	1-564-525-11	PLUG, CONNECTOR 10P				
* CN915	1-564-519-11	PLUG, CONNECTOR 4P				
		< DIODE >				
D911	6-500-522-11	DIODE	10EDB40-TA2B5			
D912	8-719-982-19	DIODE	MTZJ-30A			
D913	8-719-118-64	DIODE	RD5.6F-T7B3			
		< TRANSISTOR >				
Q902	8-729-140-97	TRANSISTOR	2SB734-34			
		< RESISTOR >				
△R911	1-217-637-00	FUSIBLE	1	5%	1/4W	F
R914	1-249-429-11	CARBON	10K	5%	1/4W	
R915	1-247-807-31	CARBON	100	5%	1/4W	
R916	1-247-807-31	CARBON	100	5%	1/4W	
R919	1-249-429-11	CARBON	10K	5%	1/4W	

Ref. No.	Part No.	Description	Remark			
	A-1109-328-A	VIDEO BOARD, COMPLETE				

		< CAPACITOR >				
C801	1-104-655-11	ELECT 470uF 20% 6.3V				
C802	1-162-306-11	CERAMIC 0.01uF 20% 16V				
C811	1-126-960-11	ELECT 1uF 20% 50V				
C812	1-126-916-11	ELECT 1000uF 20% 6.3V				
C813	1-162-282-31	CERAMIC 100PF 10% 50V				
C840	1-162-282-31	CERAMIC 100PF 10% 50V				
C841	1-162-282-31	CERAMIC 100PF 10% 50V				
C842	1-162-282-31	CERAMIC 100PF 10% 50V				
C850	1-126-942-61	ELECT 1000uF 20% 25V				
C851	1-164-159-11	CERAMIC 0.1uF 50V				
C852	1-117-245-11	ELECT 330uF 20% 6.3V				
C853	1-126-960-11	ELECT 1uF 20% 50V				
C854	1-164-159-11	CERAMIC 0.1uF 50V				
C856	1-117-245-11	ELECT 330uF 20% 6.3V				
C862	1-117-317-11	ELECT 1000uF 20% 25V				
C863	1-128-646-11	ELECT 1000uF 20% 6.3V				
C865	1-117-245-11	ELECT 330uF 20% 6.3V				
C866	1-117-245-11	ELECT 330uF 20% 6.3V				
C872	1-164-159-11	CERAMIC 0.1uF 50V				
C873	1-104-658-11	ELECT 100uF 20% 10V				
		< CONNECTOR >				
CN801	1-779-273-11	CONNECTOR, FFC (LIF(NON-ZIF)) 5P				
* CN851	1-564-724-11	PIN, CONNECTOR (SMALL TYPE) 8P				
		< DIODE >				
D861	8-719-210-21	DIODE 11EQS04				
		< GROUND TERMINAL >				
EP801	1-537-771-21	TERMINAL BOARD, GROUND				
EP851	1-537-771-21	TERMINAL BOARD, GROUND				
		< IC >				
IC801	6-600-495-01	IC MM1671XNRE				
IC851	6-705-463-01	IC BA33BC0T				
IC861	8-759-474-09	IC SI-8050S-LF1101				
		< JACK >				
J801	1-794-970-11	JACK, PIN 1P (VIDEO OUT)				
		< COIL >				
L801	1-410-470-11	INDUCTOR 10uH				
L861	1-456-513-11	INDUCTOR 150uH				
L862	1-414-741-11	INDUCTOR 10uH				
		< TRANSISTOR >				
Q861	8-729-029-66	TRANSISTOR DTC114ESA				
Q870	8-729-029-66	TRANSISTOR DTC114ESA				
		< RESISTOR >				
R801	1-249-429-11	CARBON 10K 5% 1/4W				
R811	1-247-804-11	CARBON 75 5% 1/4W				
R812	1-247-879-11	CARBON 100K 5% 1/4W				

HCD-GNZ5D

VIDEO

Ref. No.	Part No.	Description	Remark
R870	1-247-807-31	CARBON 100 5%	1/4W
R871	1-249-429-11	CARBON 10K 5%	1/4W

MISCELLANEOUS			

7	1-828-956-11	WIRE (FLAT TYPE) (9 CORE)	
55	1-828-977-11	WIRE (FLAT TYPE) (13 CORE)	
56	1-828-971-11	WIRE (FLAT TYPE) (13 CORE)	
57	1-829-041-11	WIRE (FLAT TYPE) (27 CORE)	
58	1-797-246-11	DECK, MECHANISM	
59	1-828-332-11	WIRE (FLAT TYPE) (13 CORE)	
202	1-828-354-11	WIRE (FLAT TYPE) (17 CORE)	
203	1-828-290-11	WIRE (FLAT TYPE) (5 CORE)	
△ 254	1-777-071-23	CORD, POWER (E12,E13,PH)	
△ 254	1-827-226-31	CORD, POWER (E3,E15)	
△ 255	1-468-737-21	POWER, SWITCHING	
352	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)	
421	1-828-771-51	WIRE (FLAT TYPE) (24 CORE)	
△ 422	8-820-291-02	OPTICAL PICK-UP (KHM-310CAB/C2RP)	
△ F910	1-532-504-33	FUSE (4A/250V) (E3,E15,PH)	
△ F914	1-532-506-33	FUSE (6.3A/250V)	
△ F915	1-532-506-33	FUSE (6.3A/250V)	
△ F918	1-532-504-33	FUSE (4A/250V)	
△ F919	1-532-504-33	FUSE (4A/250V)	
FAN901	1-763-072-11	FAN, DC	
IC941	8-759-198-03	IC PQ09RF21J00H	
IC942	8-759-701-59	IC NJM78M09FA	
IC943	8-759-701-59	IC NJM78M09FA	
IC945	6-703-546-01	IC TA7804LS	
M741	A-1108-965-A	MOTOR ASSY, TABLE (TABLE)	
M751	A-1108-966-A	MOTOR ASSY, LOADING (LOADING)	
RE701	1-477-680-12	ENCODER, ROTARY (DISC TRAY ADDRESS DETECT)	
△ T911	1-443-792-11	TRANSFORMER, POWER	
TN1	1-693-671-11	TUNER (FM/AM) (TM-10E)	

MEMO

REVISION HISTORY

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