

HCD-GNZ7D/GNZ8D/GNZ9D

SERVICE MANUAL

Ver. 1.1 2005. 12



(Photo: HCD-GNZ7D)

- HCD-GNZ7D/GNZ8D/GNZ9D are the tuner, deck, DVD and amplifier section in MHC-GNZ7D/GNZ8D/GNZ9D.

E Model
HCD-GNZ7D/GNZ8D/GNZ9D
Australian Model
HCD-GNZ9D

DVD Section	Model Name Using Similar Mechanism	NEW
	DVD Mechanism Type	CDM74HF-DVBU101/C
	Optical Pick-up Name	KHM-310CAB/C2NP
Tape Deck Section	Model Name Using Similar Machanism	NEW

SPECIFICATIONS

Amplifier section

HCD-GNZ9D

The following measured at AC 120, 127, 220, 230 – 240 V, 50/60 Hz

Continuous RMS power output (reference)

Front speaker: 115 + 115 watts
(6 ohms at 1 kHz, 10% THD)

Center speaker: 50 watts (6 ohms at 1 kHz, 10% THD)

Surround speaker: 50 + 50 watts
(6 ohms at 1 kHz, 10% THD)

Subwoofer: 170 watts (4 ohms at 100 Hz, 10% THD)

HCD-GNZ8D

The following measured at AC 120, 127, 220, 230 – 240 V, 50/60 Hz

Continuous RMS power output (reference)

Front speaker: 100 + 100 watts
(6 ohms at 1 kHz, 10% THD)

Center speaker: 40 watts (6 ohms at 1 kHz, 10% THD)

Surround speaker: 40 + 40 watts
(6 ohms at 1 kHz, 10% THD)

HCD-GNZ7D

The following measured at AC 120, 127, 220, 230 – 240 V, 50/60 Hz

Continuous RMS power output (reference)

100 + 100 watts
(6 ohms at 1 kHz, 10% THD)

Inputs

VIDEO/SAT IN (audio) (phono jacks):
voltage 450/250 mV,
impedance 47 kilohms

VIDEO INPUT VIDEO (phono jack):
1 Vp-p, 75 ohms

VIDEO INPUT AUDIO (phono jacks):
voltage 250 mV,
impedance 47 kilohms

MIC1/MIC2 (phone jack):
sensitivity 1 mV,
impedance 10 kilohms

Outputs

VIDEO/SAT OUT (audio) (phono jacks):
voltage 250 mV,
impedance 1 kilohm

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

S-VIDEO OUT (4-pin/mini-DIN jack):
Y: 1 Vp-p, unbalanced,
Sync negative,
C: 0.286 Vp-p, load
impedance 75 ohms

COMPONENT VIDEO OUT:
Y: 1 Vp-p, 75 ohms
Pb, Pr: 0.7 Vp-p, 75 ohms

– Continued on next page –

DVD DECK RECEIVER

9-879-622-02

2005L04-1

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Sony Corporation

Home Audio Division

Published by Sony Engineering Corporation

SONY®

HCD-GNZ7D/GNZ8D/GNZ9D

DIGITAL OPTICAL OUT (Square optical connector jack, rear panel) (HCD-GNZ7D only)
Wavelength 660 nm
PHONES (stereo mini jack):
accepts headphones of 8 ohms or more

Disc player section

System Compact disc and digital audio and video system
Laser Semiconductor laser (DVD: λ=650 nm, CD: λ=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 Latin American model: NTSC
Other models: 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

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
Latin American models: 530 – 1,710 kHz (with the interval set at 10 kHz)
531 – 1,710 kHz (with the interval set at 9 kHz)
Saudi Arabian model: 531 – 1,602 kHz (with the interval set at 9 kHz)
Other models: 531 – 1,602 kHz (with the interval set at 9 kHz)
530 – 1,710 kHz (with the interval set at 10 kHz)
Antenna AM loop antenna
Antenna terminals External antenna terminal
Intermediate frequency 450 kHz

General

Power requirements
Australian model: 230 – 240 V AC, 50/60 Hz
Saudi Arabian model: 120 – 127 V, 220 V or 230 – 240 V AC, 50/60 Hz
Adjustable with voltage selector
Indian model: 220 – 240 V AC, 50/60 Hz
Mexican model: 127 V AC, 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
MHC-GNZ9D 400 watts
MHC-GNZ8D 280 watts
MHC-GNZ7D 210 watts

Dimensions (w/h/d)
MHC-GNZ9D Approx. 280 × 326 × 400 mm
MHC-GNZ8D/GNZ7D Approx. 280 × 326 × 380 mm

Mass (excl. speakers)
HCD-GNZ9D Approx. 14 kg
HCD-GNZ8D Approx. 12 kg
HCD-GNZ7D Approx. 11 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

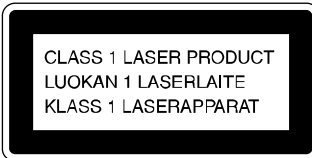
The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter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

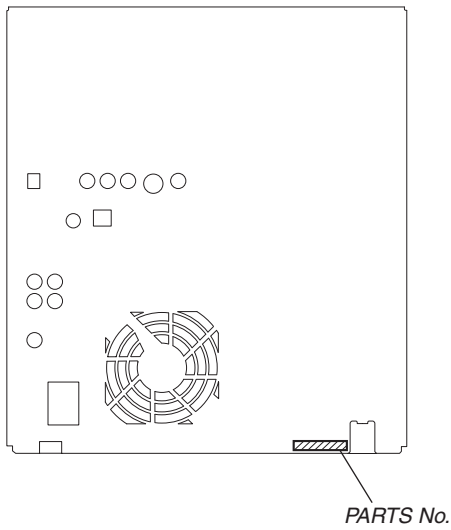
Note on DMB10 board or DMB11 board replacement

New part of EEPROM (IC103) on the DMB10 board or DMB11 board cannot be used. Therefore, if the mounted DMB10 board (A-1095-784-A, etc.) is replaced, exchange new EEPROM (IC103) with that used before the replacement.

HCD-GNZ7D/GNZ8D/GNZ9D

MODEL IDENTIFICATION

– BACK PANEL –



- Abbreviation
 - E2 : 120 V AC area in E model
 - 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
 - E51 : Chilean and Peruvian model
 - AUS : Australian model
 - EA : Saudi arabia model
 - PH : Philippine model
 - SP : Singapore model
 - MX : Mexican model
 - TH : Thai model

MODEL	PARTS No.
GNZ9D: SP	2-582-750-0□
GNZ9D: E3, E15	2-582-750-1□
GNZ9D: E12, E13	2-582-750-2□
GNZ9D: PH	2-582-750-3□
GNZ9D: EA	2-582-750-4□
GNZ9D: TH	2-582-750-5□
GNZ9D: AUS	2-582-750-6□
GNZ9D: E2	2-582-750-7□
GNZ9D: E51	2-582-750-8□
GNZ9D: MX	2-582-750-9□
GNZ8D: SP	2-582-751-0□
GNZ8D: E3, E15	2-582-751-1□
GNZ8D: E12, E13	2-582-751-2□
GNZ8D: PH	2-582-751-3□
GNZ8D: EA	2-582-751-4□
GNZ8D: TH	2-582-751-5□
GNZ7D: SP	2-582-752-0□
GNZ7D: E3, E15	2-582-752-1□
GNZ7D: E12, E13	2-582-752-2□
GNZ7D: PH	2-582-752-3□
GNZ7D: EA	2-582-752-4□
GNZ7D: TH	2-582-752-5□
GNZ7D: E2	2-582-752-6□

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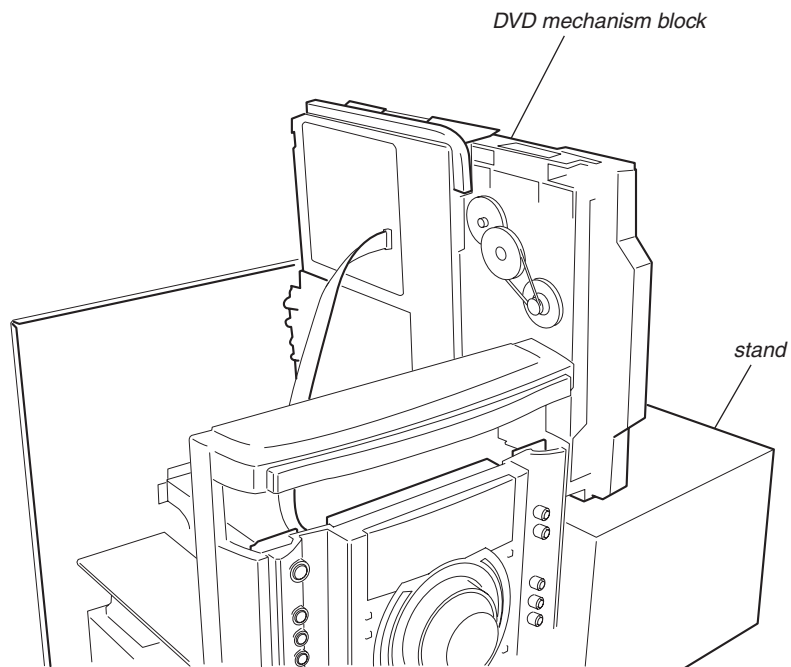
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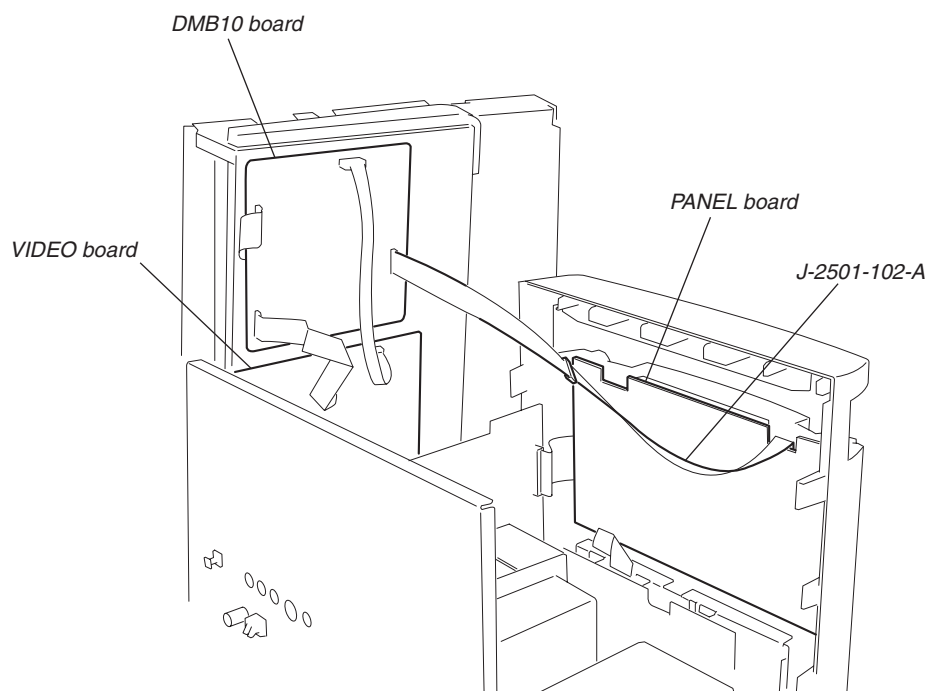
9. ELECTRICAL PARTS LIST 80

SECTION 1 SERVICE NOTE

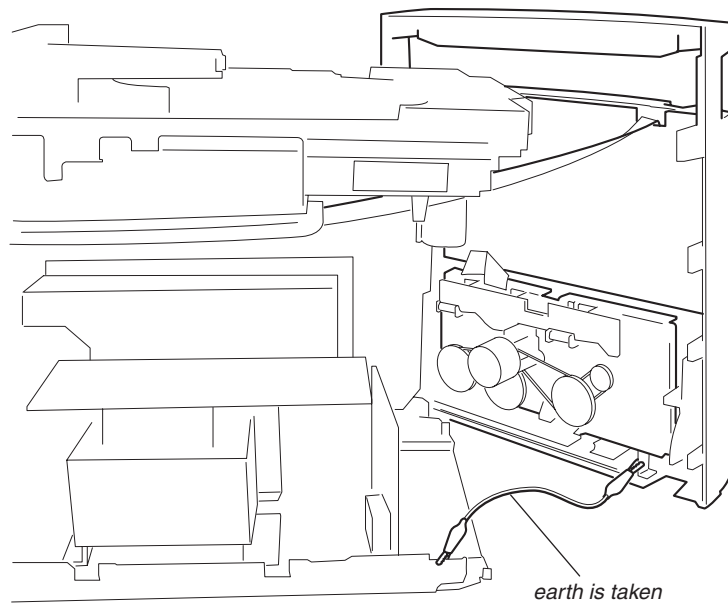
1-1. SERVICE POSITION OF CDM



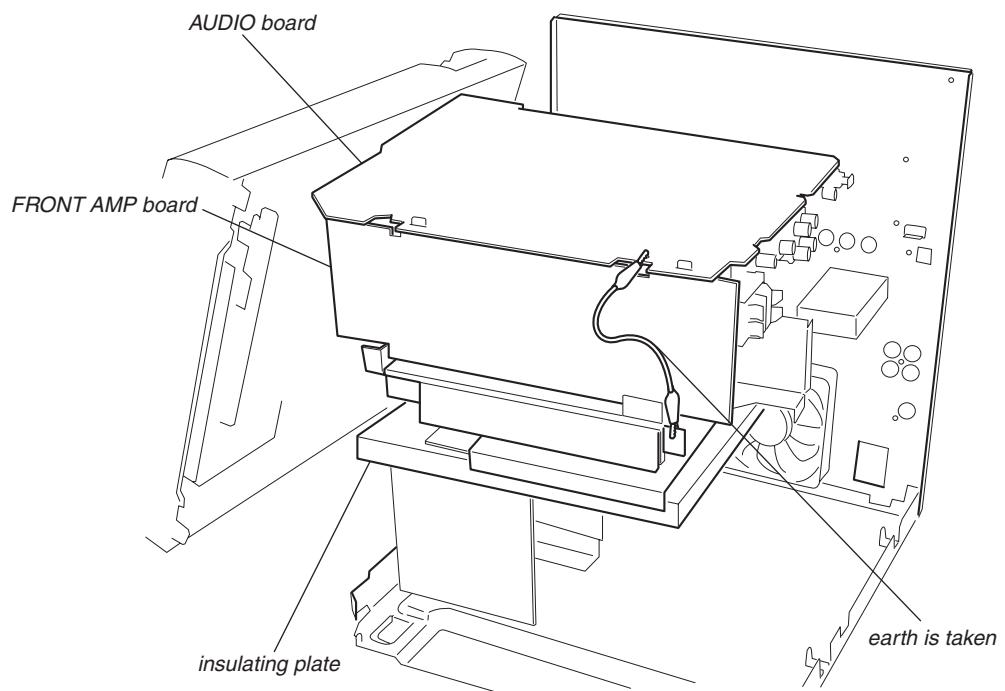
1-2. SERVICE POSITION OF DMB10 BOARD, VIDEO BOARD



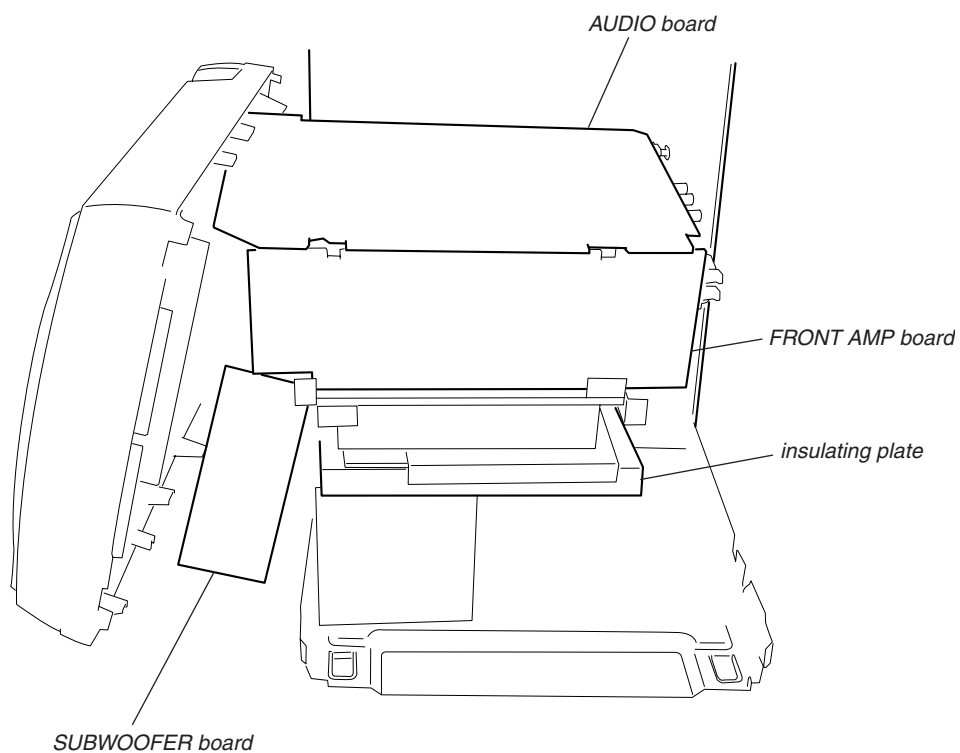
1-3. SERVICE POSITION OF TCM



1-4. SERVICE POSITION OF FRONT AMP BOARD



1-5. SERVICE POSITION OF SUBWOOFER BOARD



SECTION 2
GENERAL

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 33 (52, 53, 54)	
Name of button/part	Reference page

Main unit

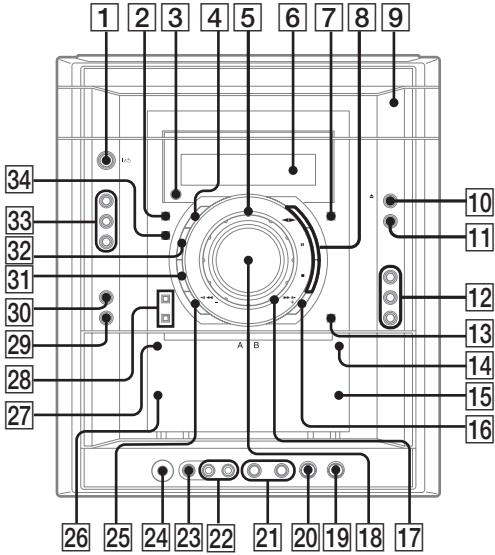
ALPHABETICAL ORDER

A – Q
CD SYNC 28 (for MHC-GNZ9D/GNZ8D/GNZ7D)
30 (for MHC-GNZ5D) (53)
Deck A 26 (52, 54)
Deck B 15 (52, 53, 54, 62)
DIRECTION 13 (52, 53, 54)
DISC 1 – 3 12 (18, 21, 53, 77)
DISC SKIP/EX-CHANGE 11 (12, 17, 18, 21, 53)
Disc tray 9 (17)
DISPLAY 2 (40, 63, 65, 77)
Display window 6
DVD 33 (12, 40, 53)
ECHO LEVEL²⁾ 19 (57)
EQ BAND/MEMORY 4 (57)
GROOVE 31 (55)
ILLUMINATION 34²⁾ (63)
MIC 1/2 jack 21¹⁾ (57)
MIC LEVEL 20 (57)
Operation Dial (◀◀◀ ▶▶▶) 5 (57)
PHONES jack 24
Power illuminator 17 (63)
PRESET EQ 32 (55, 57)

R – Z
REC PAUSE/START 28 (for MHC-GNZ9D/GNZ8D/GNZ7D)
29 (for MHC-GNZ5D) (53, 54)
Remote sensor 3
SOUND FIELD 7 (55)
TAPE A/B 33 (52, 53, 54)
TUNER/BAND 33 (50, 51, 54)
TUNING + 16 (50, 51)
TUNING – 25 (50, 51)
TV/SAT 30²⁾ (54, 70)
VIDEO 29²⁾ (54, 70)
VIDEO INPUT AUDIO L/R jacks 22 (54, 69)
VIDEO INPUT VIDEO jack 23 (69)
VOLUME control 18 (44, 58)

BUTTON DESCRIPTIONS

I/⏻ (power) 1 (10, 51, 61, 68, 77)
◀▶ (play) 8 (17, 39, 52, 53)
⏸ (pause) 8 (11, 18, 52)
■ (stop) 8 (12, 18, 45, 52, 53, 77)
▲ OPEN/CLOSE 10 (17)
▲ PUSH (deck B) (eject) 14 (52)
▶▶ (fast forward) 16 (18, 52)
▶ (slow forward) 16 (18)
◀◀ (rewind) 25 (18, 52)
◀ (slow rewind) 25 (18)
▲ PUSH (deck A) (eject) 27 (52)
¹⁾ MHC-GNZ5D has only one MIC jack.
²⁾ Except for MHC-GNZ5D



continued

Remote control

ALPHABETICAL ORDER

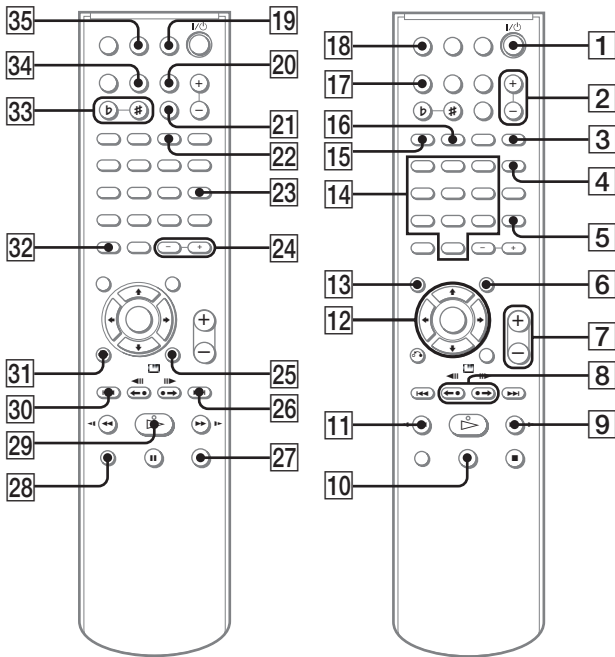
- A - Q**
- ALBUM +/- [24] (18, 68)
ANGLE [5] (49)
AUDIO [4] (35, 57, 70)
CLEAR [32] (14, 20, 21, 23, 28, 33, 43)
DISC SKIP [20] (18, 21)
DISPLAY [17] (63, 65)
ENTER [12] (14, 23, 20, 21, 23, 24, 27, 29, 32, 33, 34, 37, 45, 50, 59, 61, 62, 77)
FM MODE [22] (51)
FUNCTION +/- [2] (14, 17, 50, 51)
KARAOKE MODE [15] (57)
KARAOKE PON [16] (59)
MENU [6] (23, 26, 27, 29, 31, 50)
Number buttons* [14] (24, 46)
PICTURE NAVI [3] (28, 34)
PRESET + [26] (51)
PRESET - [30] (51)

- R - Z**
- REPEAT [22] (22)
SLEEP [18] (61)
SOUND FIELD [21] (55, 70)
SUBTITLE [23] (49)
THEATRE SYNC [19] (68)
TIMER MENU [35] (14, 61, 62)
TIME/TEXT [34] (64, 65)
TOP MENU [13] (23)
TUNING + [9] (50, 51)
TUNING - [11] (50, 51)
TV [28] (68)
TV CH + [26] (68)
TV CH - [30] (68)
TV/VIDEO [18] (68)
TV VOL +/-* [7] (68)
VOLUME +/-* [7] (44, 61)

BUTTON DESCRIPTIONS

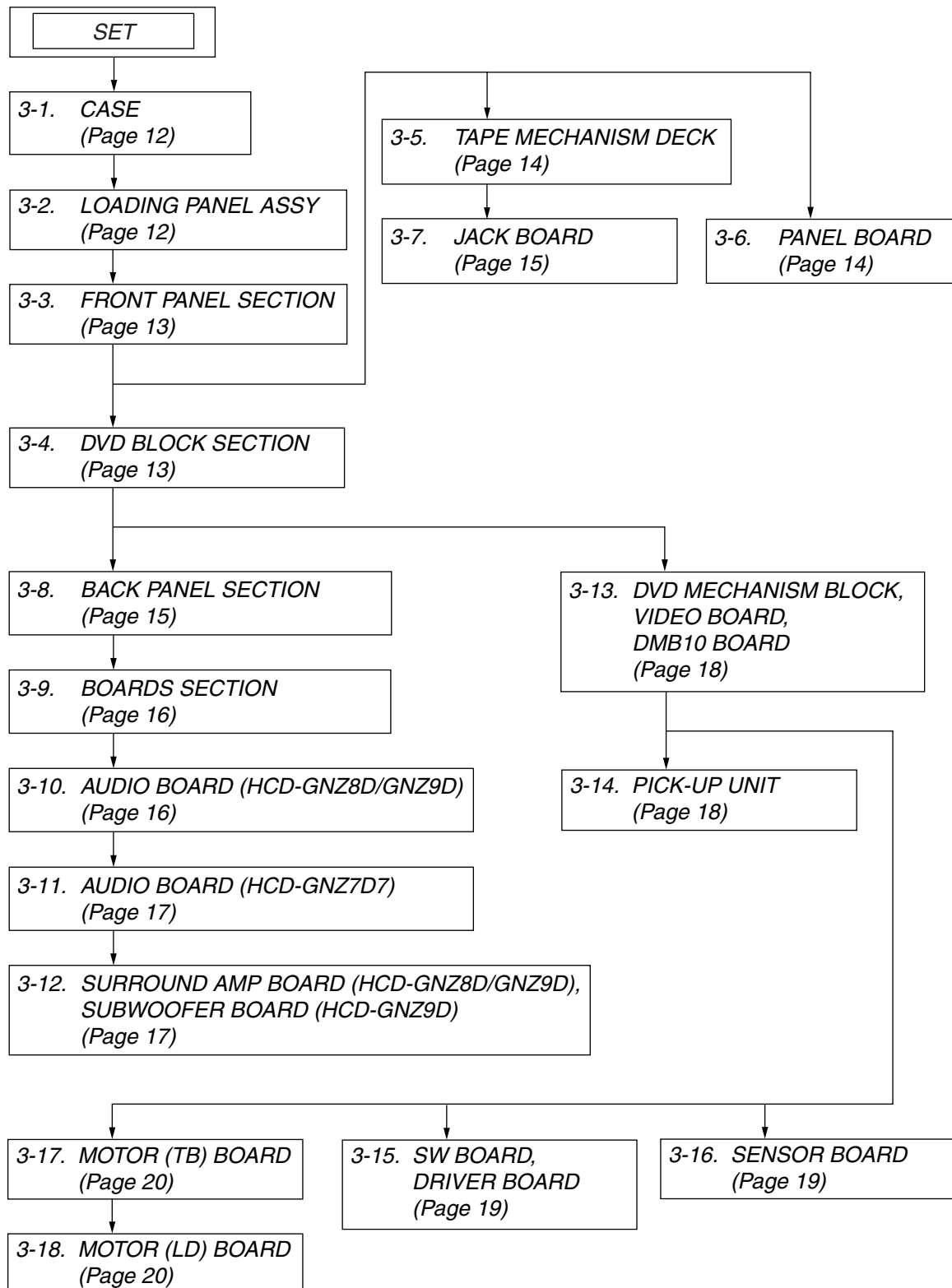
- I/⏻ (power) [1] (10, 61, 68, 77)
TV I/⏻ [1] (68)
◀• REPLAY/ADVANCE •▶/
◀◀ STEP/STEP ▶▶ [8] (18)
SLOW ▶▶ [9] (18)
▶▶ (fast forward) [9] (18, 52)
⏸ (pause) [10] (18, 52)
◀◀ SLOW [11] (18)
◀◀ (rewind) [11] (18, 52)
⏮/⏪/⏩/⏭ [12] (14, 20, 37, 59, 61, 77)
⏻ DISPLAY [25] (21, 45, 65, 67)
▶▶ (go forward) [26] (18)
■ (stop) [27] (52)
◀◀ (go back) [30] (18)
▷ (play)* [29] (17, 39)
↺ RETURN [31] (24)
-/- [32]
- KEY CONTROL #/b [33] (59)

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



SECTION 3 DISASSEMBLY

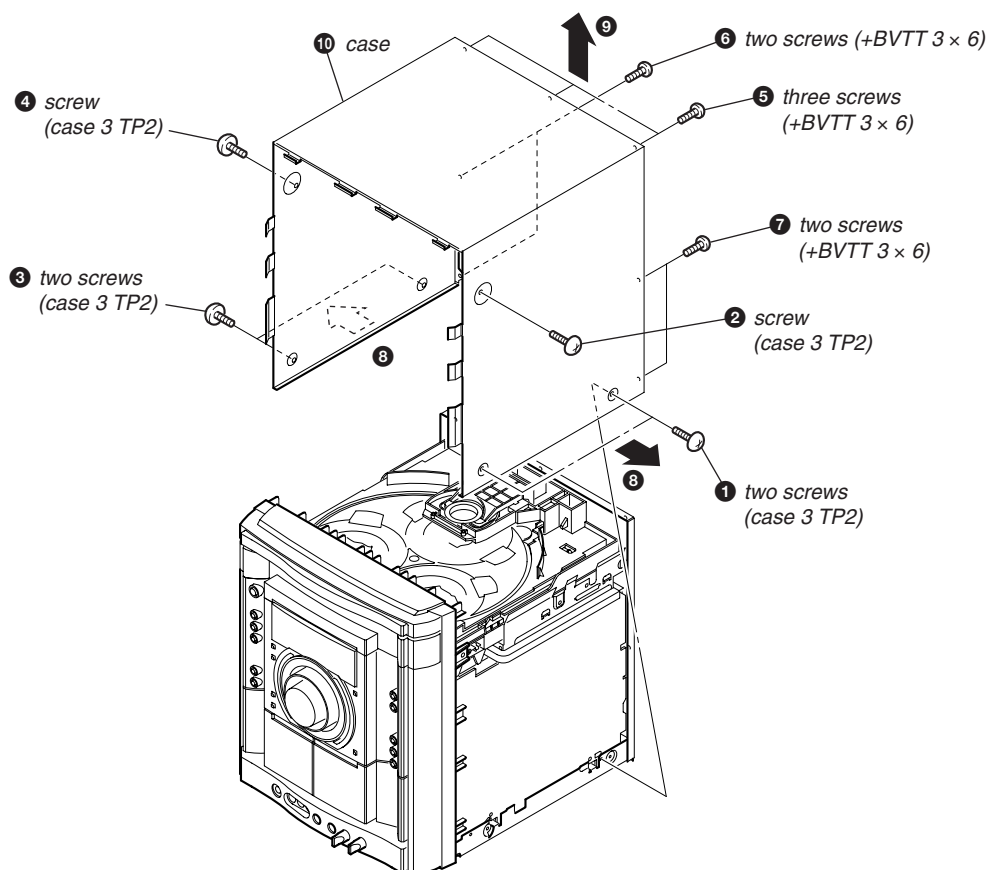
Note : Disassemble the unit in the order as shown below.



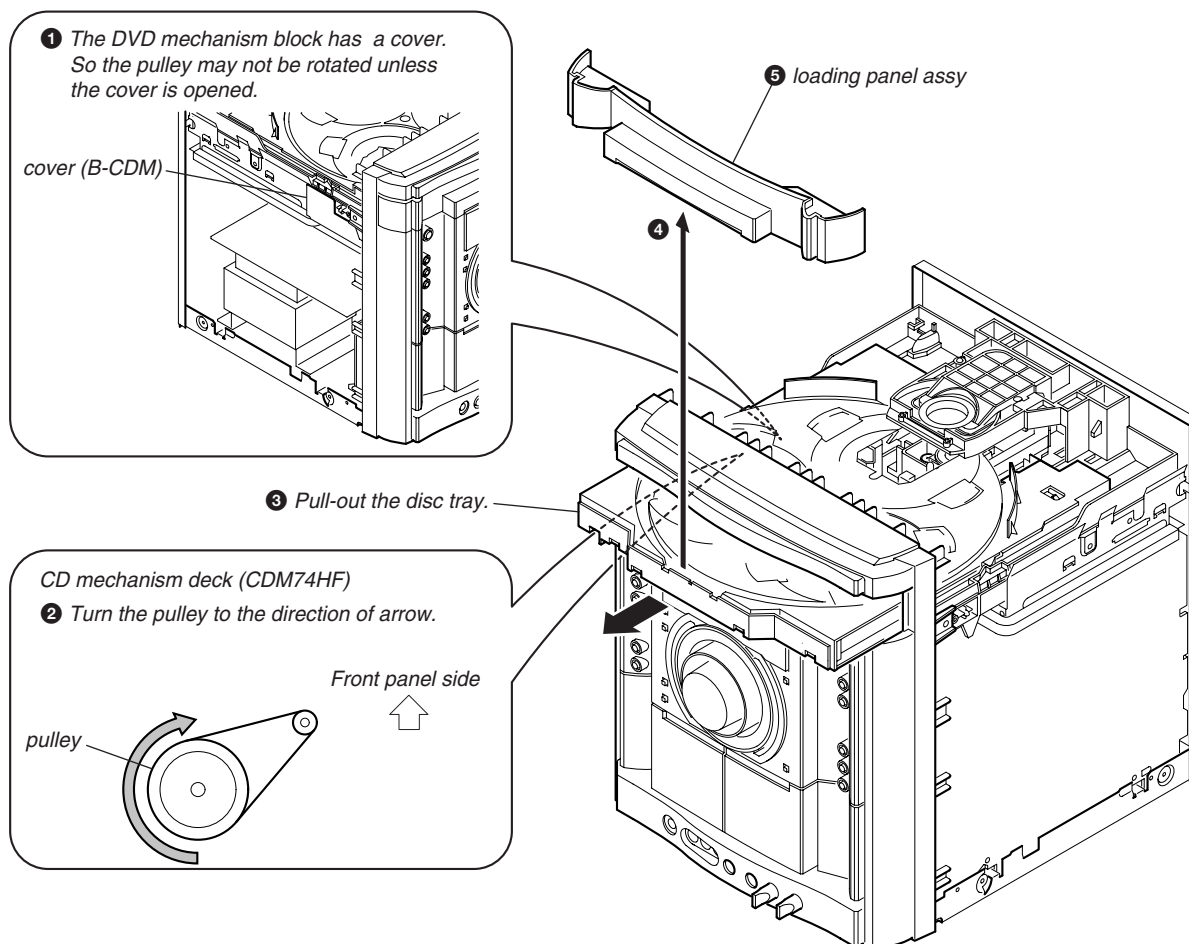
HCD-GNZ7D/GNZ8D/GNZ9D

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

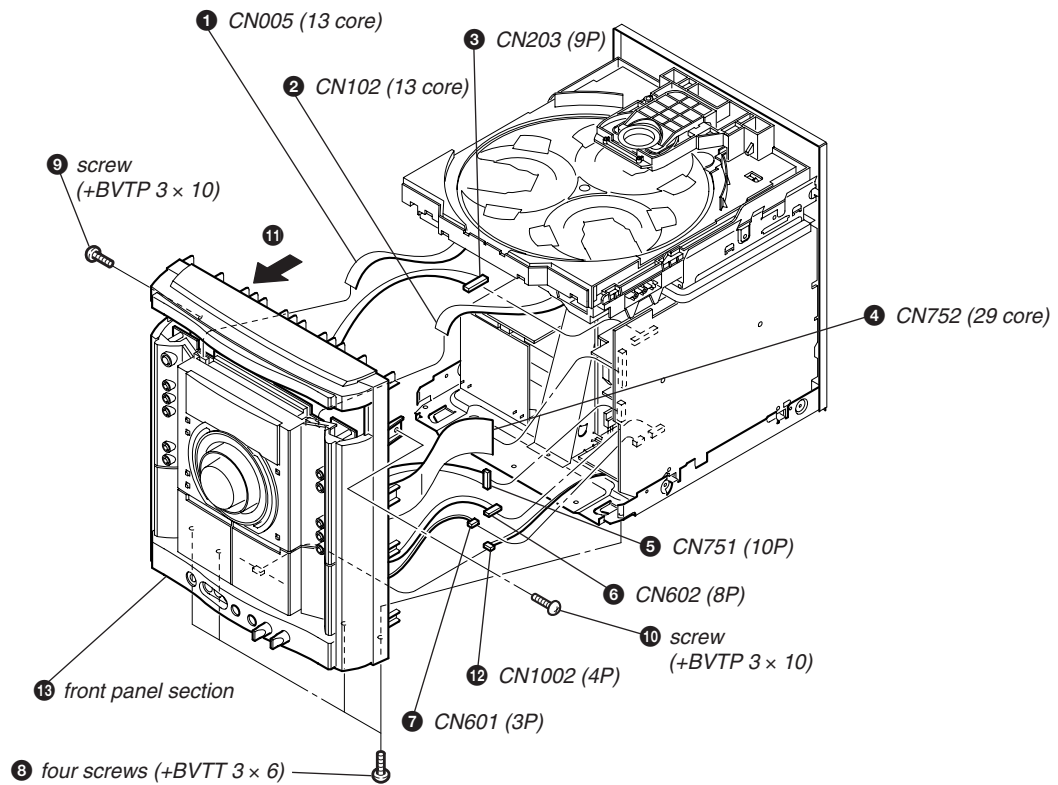
3-1. CASE



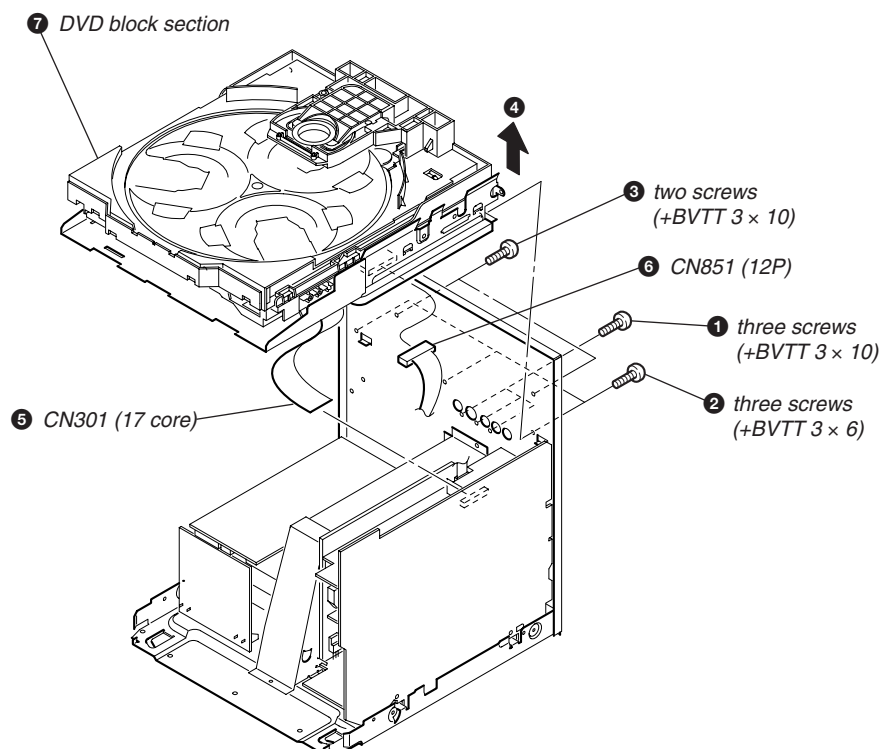
3-2. LOADING PANEL ASSY



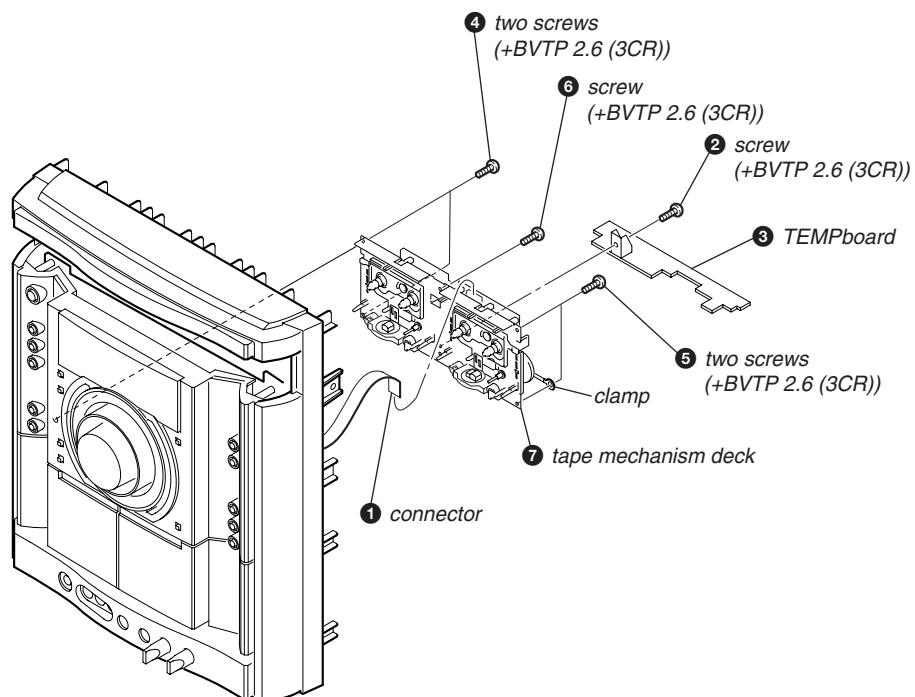
3-3. FRONT PANEL SECTION



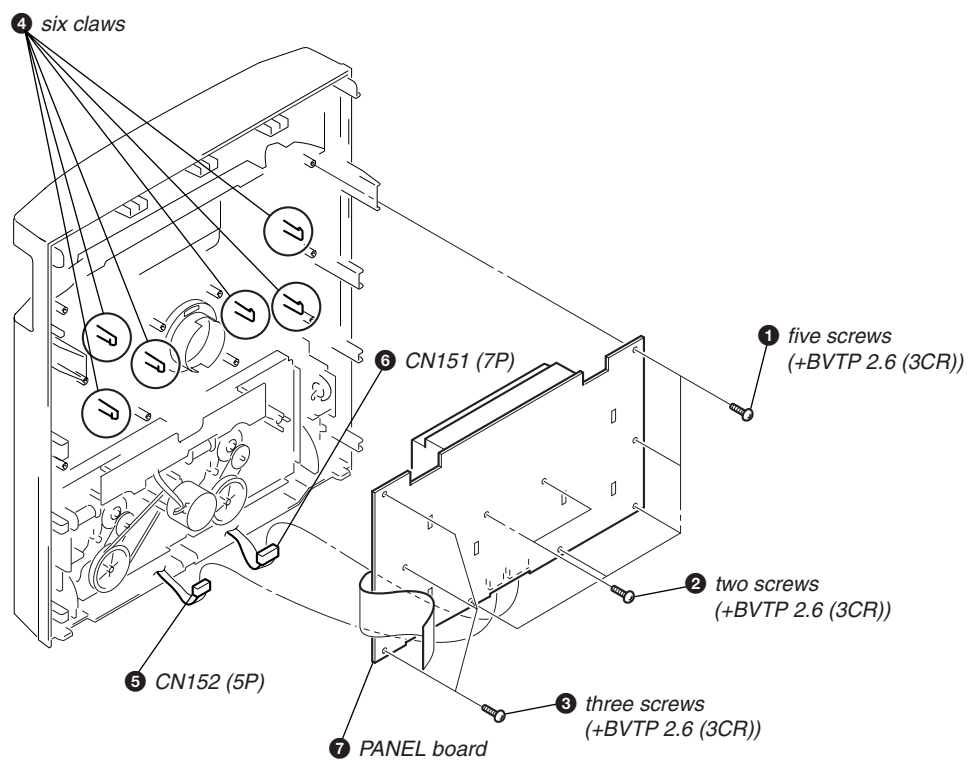
3-4. DVD BLOCK SECTION



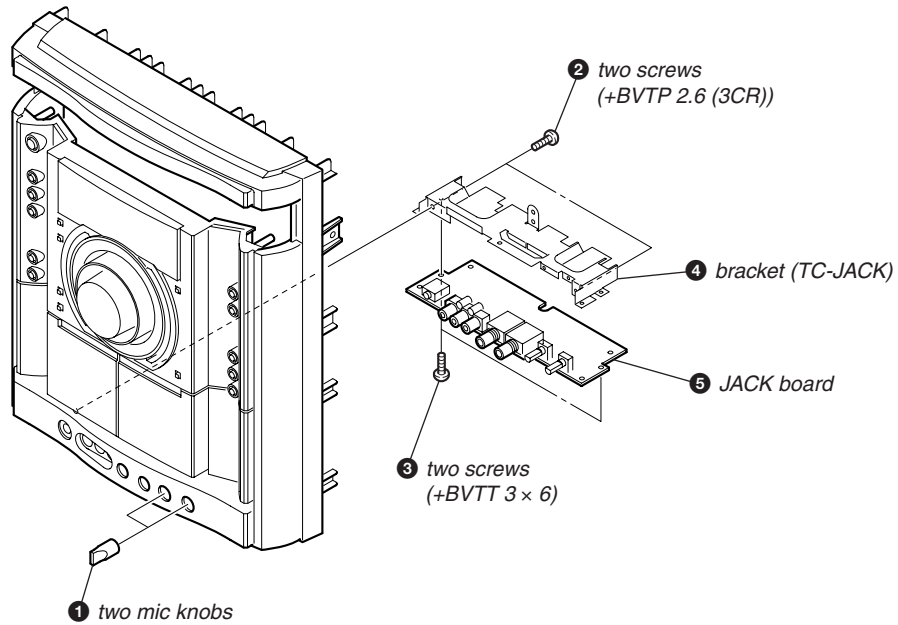
3-5. TAPE MECHANISM SECTION



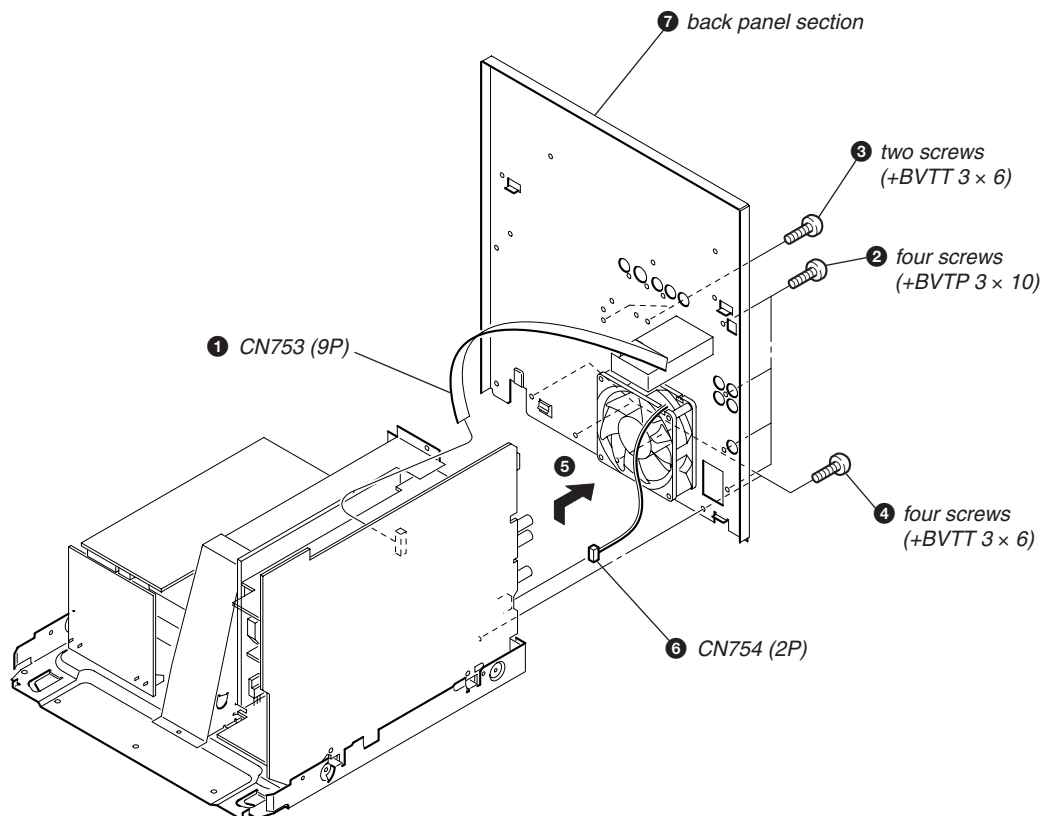
3-6. PANEL BOARD



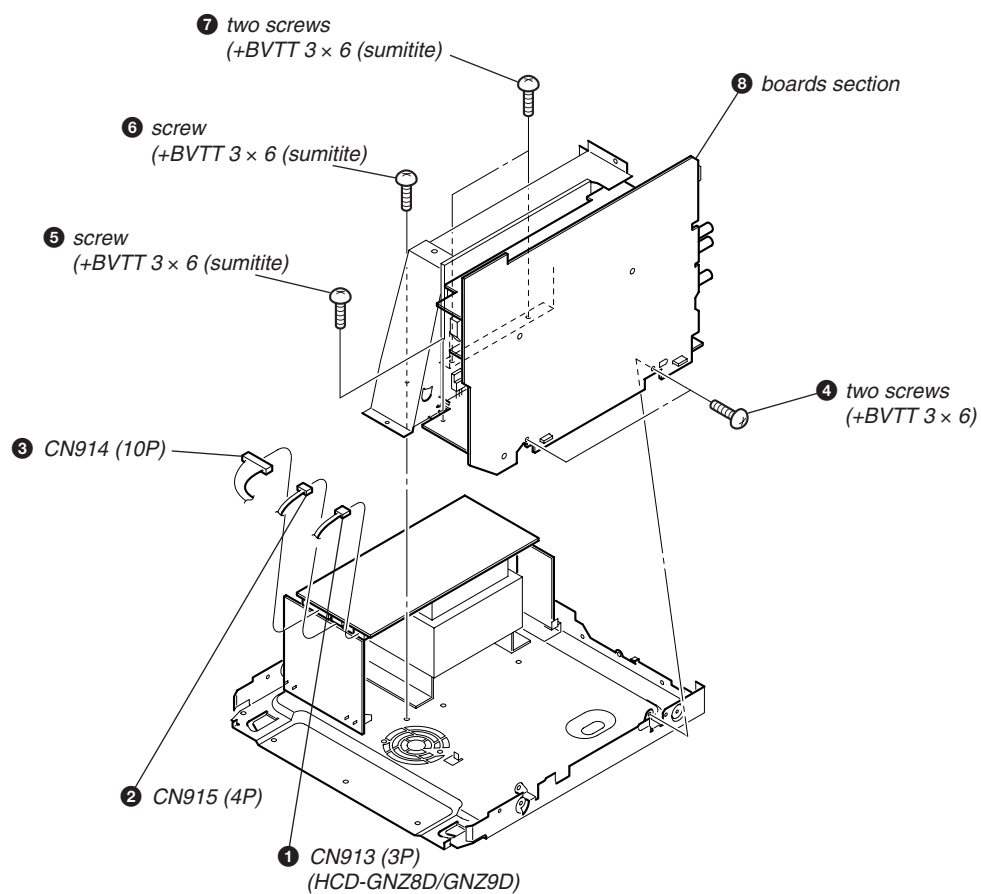
3-7. JACK BOARD



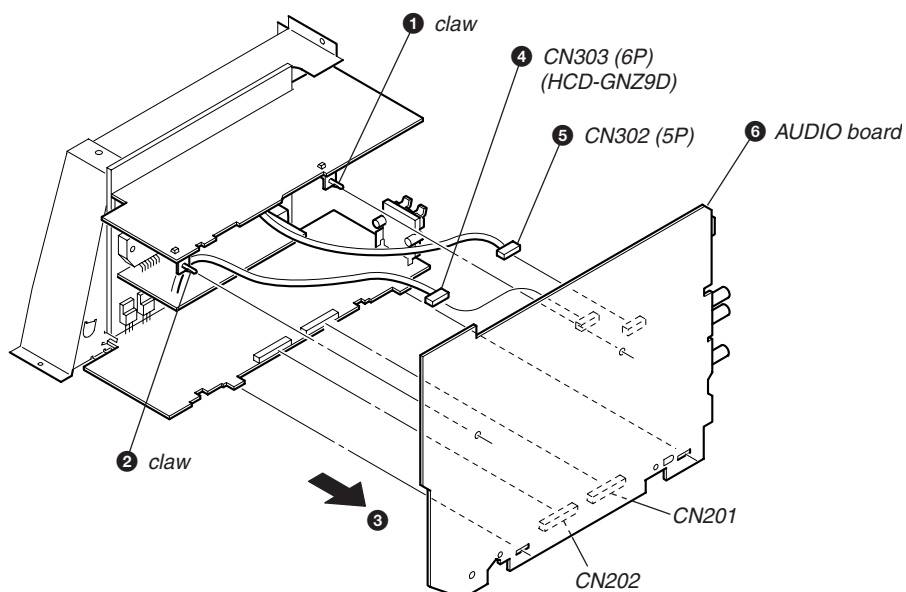
3-8. BACK PANEL SECTION



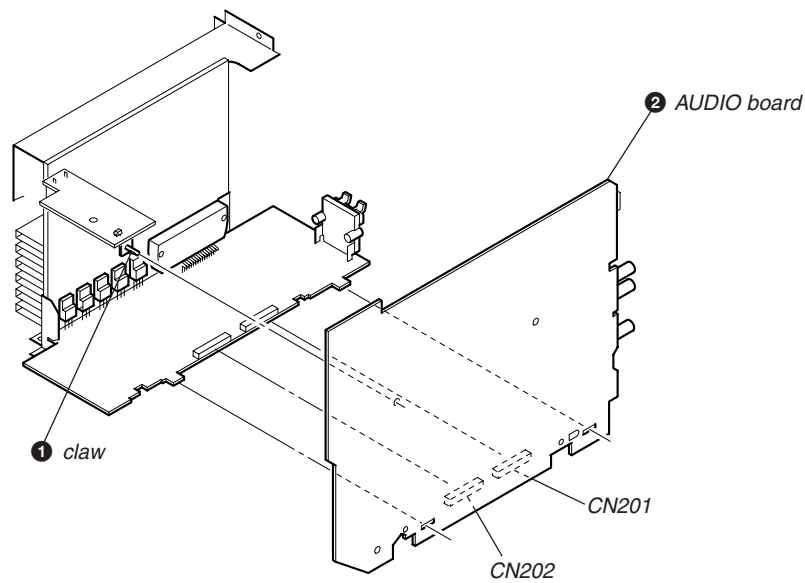
3-9. BOARDS SECTION



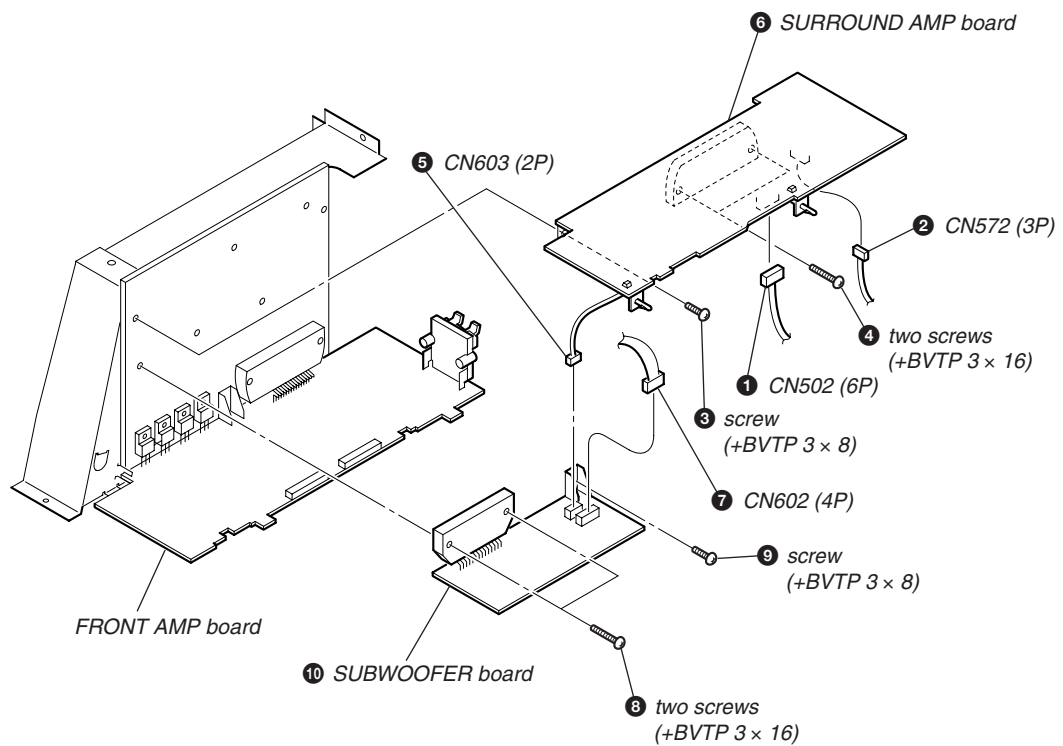
3-10. AUDIO BOARD (HCD-GNZ8D/GNZ9D)



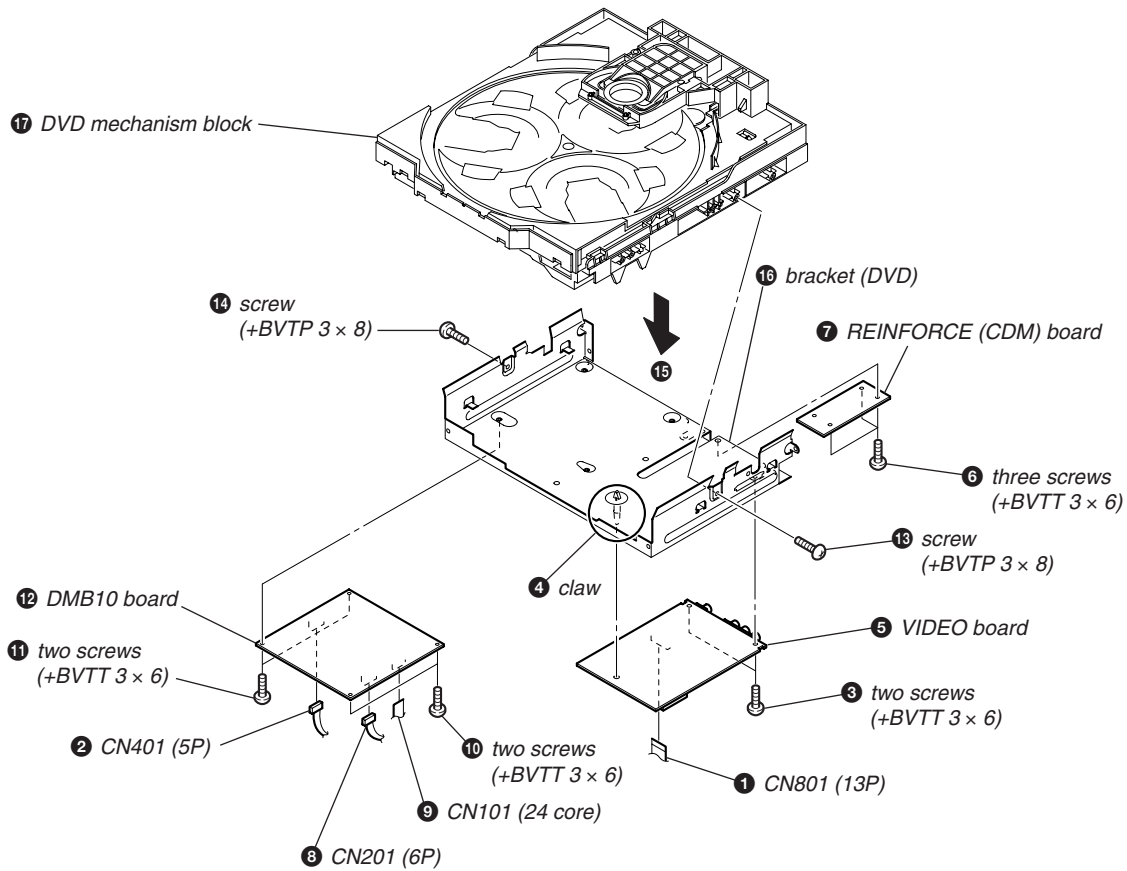
3-11. AUDIO BOARD (HCD-GNZ7D)



3-12. SURROUND AMP BOARD (HCD-GNZ8D/GNZ9D), SUBWOOFER BOARD (HCD-GNZ9D)

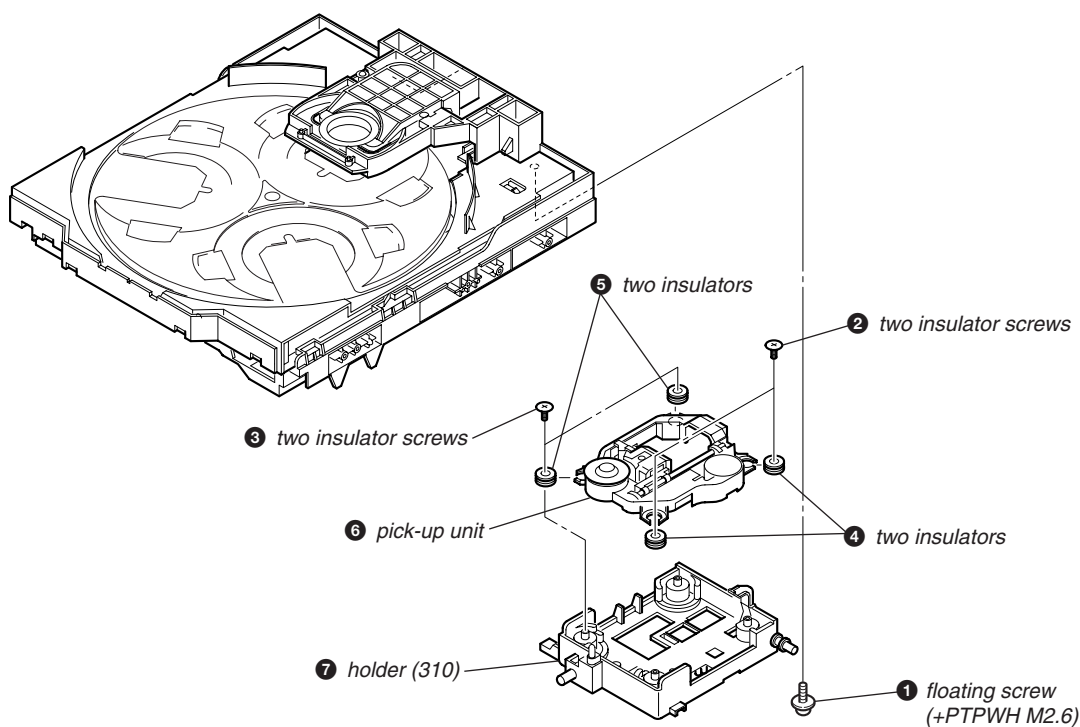


3-13. DVD MECHANISM BLOCK, VIDEO BOARD, DMB10 BOARD

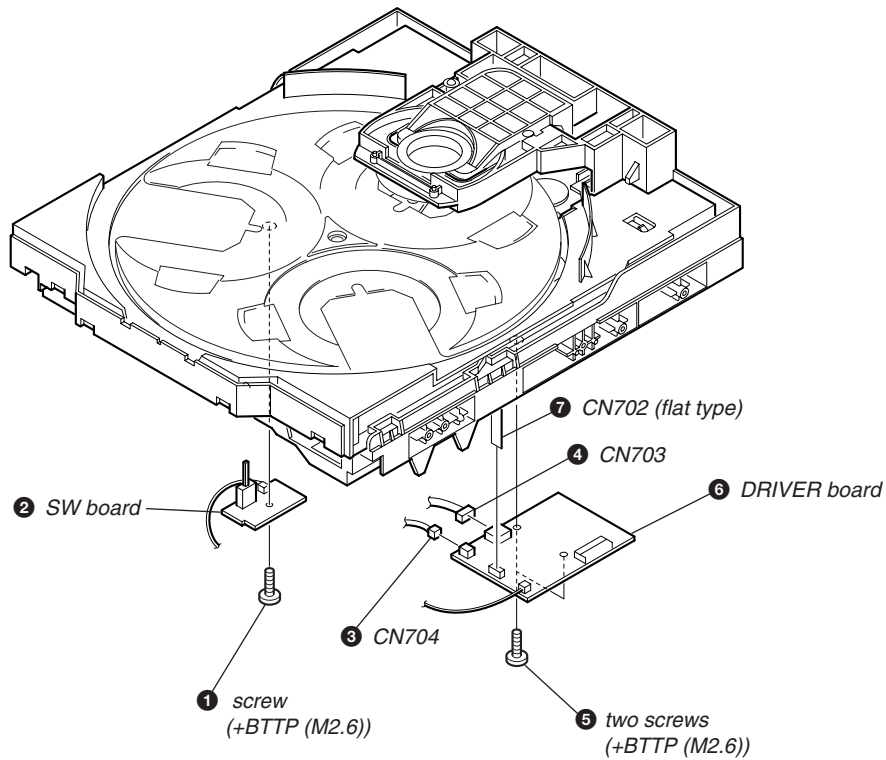


Note : Be short-circuited of the land of optical pick-up when CN101 is done in pulling out.

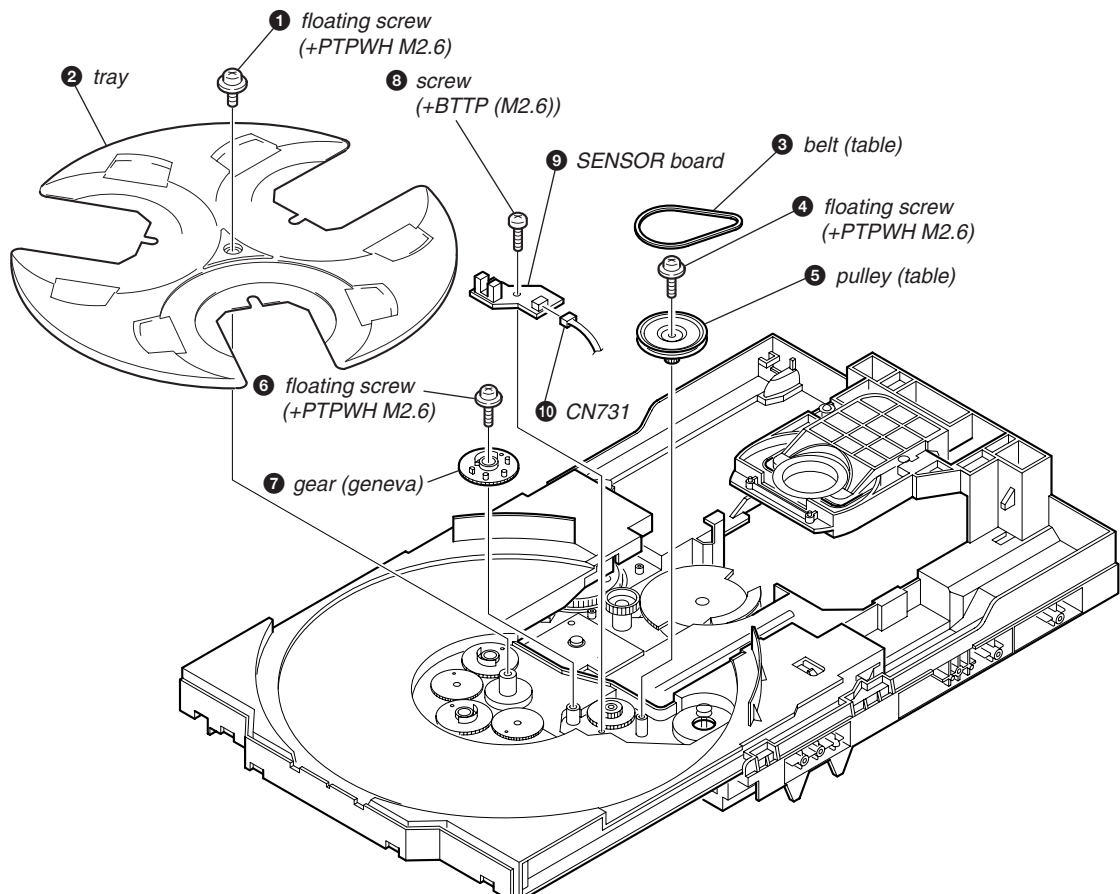
3-14. PICK-UP UNIT



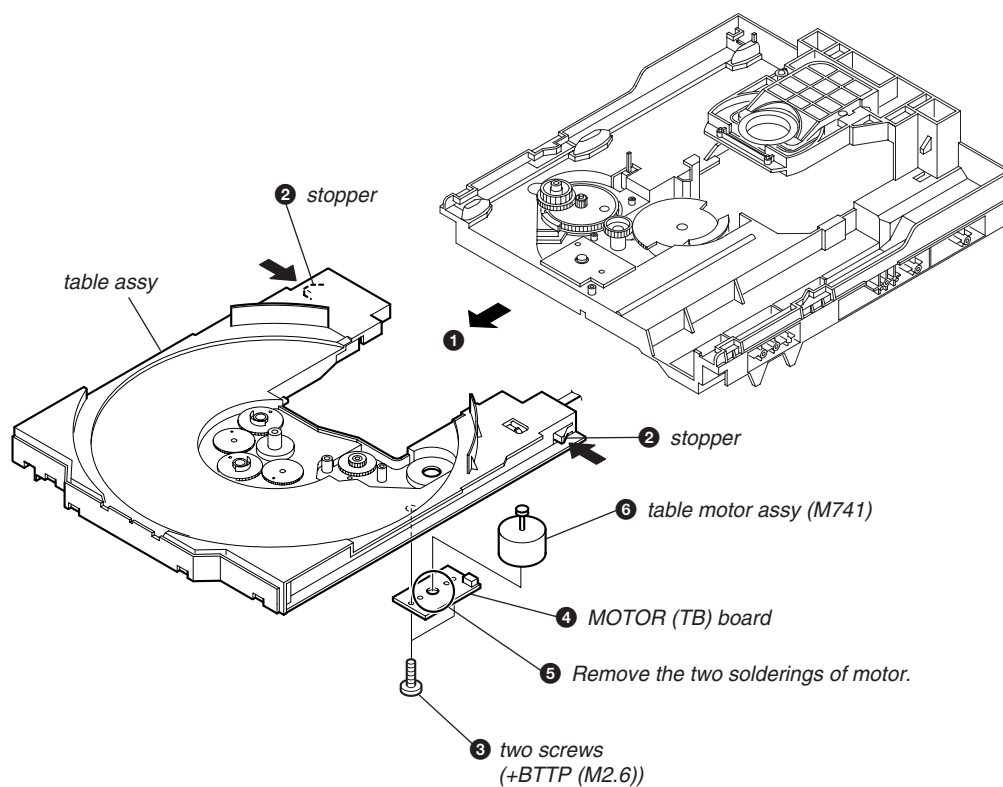
3-15. SW BOARD, DRIVER BOARD



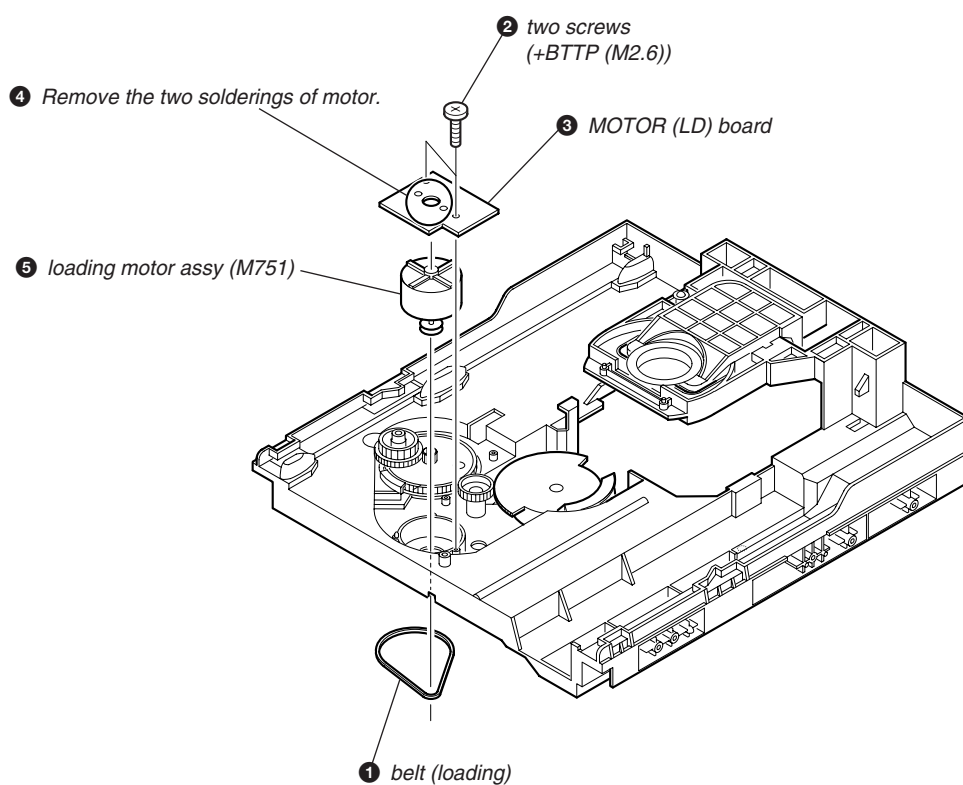
3-16. SENSOR BOARD



3-17. MOTOR (TB) BOARD



3-18. 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.

[TV/SAT Function Change]

- Change of function TV or SAT (also the input level changes).

Procedure:

- Press the **[I/⏻]** button to turn the power ON.
- Press two buttons of **[TV/SAT]** and **[I/⏻]** simultaneously, and the message changes to "SAT" or "TV", 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.

[Progressive Change]

Procedure:

- Press the **[I/⏻]** button to turn the power ON.
- Press two buttons of **[DVD]** and **[DISPLAY]** simultaneously.

[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: Input → TV
EQ → FLAT
Mode → MUSIC
VACS → OFF

- 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.
- When **[VOLUME]** control knob is turned clockwise even slightly, the sound volume increases to its maximum and the message "VOLUME MAX" is displayed for two seconds, then the display returns to the original display.
- When **[VOLUME]** control knob is tuned counter-clockwise even slightly, the sound volume decreases to its minimum and the message "VOLUME MIN" is displayed for two seconds, then the display returns to the original display.
- 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

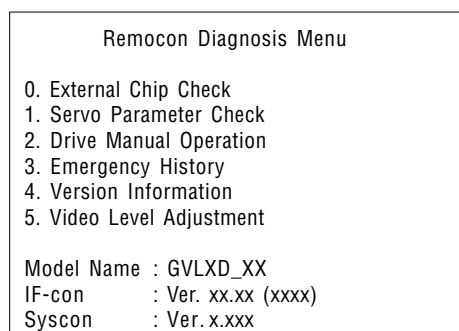
The Mirror Time and IOP measurement allows you to make diagnosis and adjustment simply by using the remote commander and monitor TV. The instructions, diagnosis results, etc. are given on the on screen display (OSD).

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.

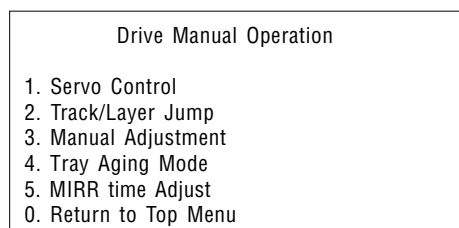
The Test Mode starts, then the menu shown below will be displayed on the TV screen.



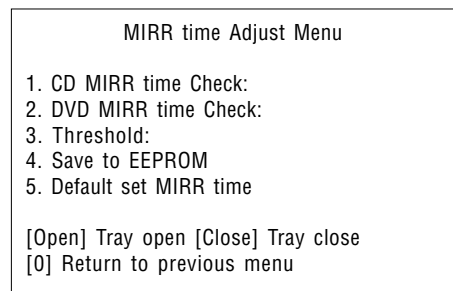
The menu above is the Remocon Diagnosis Menu screen which consists of six main function. At the bottom of the menu screen, the model name and IF-con version. To enter Mirror Time Adjustment menu, press button  on the remote commander to enter Drive Manual Operation menu. To exit from the Test Mode, press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

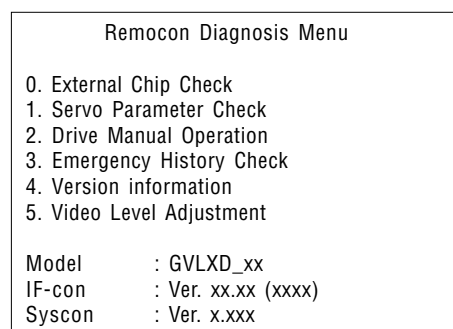
[0] Return to previous menu

Press  button to return to previous menu.

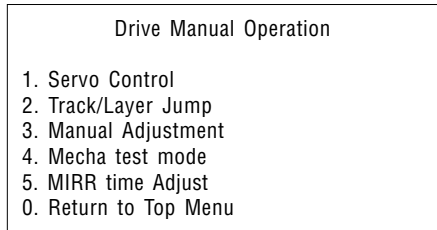
4-4-1. EXECUTING MIRROR TIME ADJUSTMENT

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

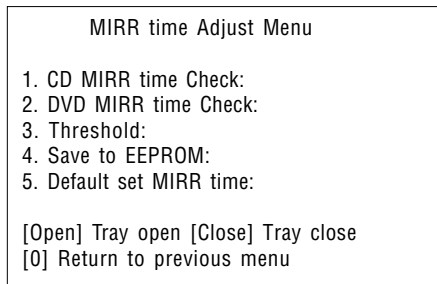
- (1) In standby mode, press three buttons ,  and  simultaneously.
- (2) Select "2. Drive Manual Operation".



- (3) Select "5. MIRR time Adjust".

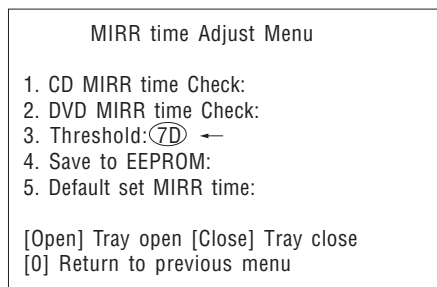


- (4) Select "5. Default set MIRR time".



- (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.

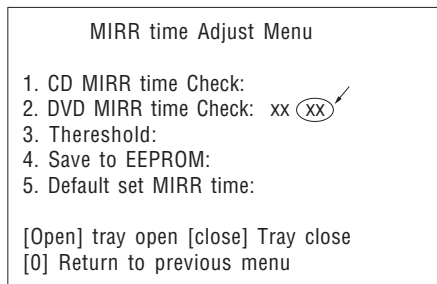
- (8) Insert Test Disc HLX-504 into tray.

- (9) Push button to close tray.

- (10) Push "2. DVD MIRR time Check".

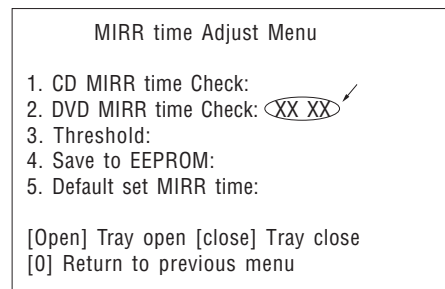
- (11) Wait for HEX number to display.

- (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.

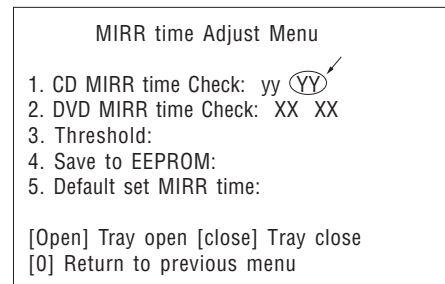
- (16) Take out HLX-504 and insert Test Disc YEDS-18 into tray.

- (17) Push button to close tray.

- (18) Push "1. CD MIRR time check".

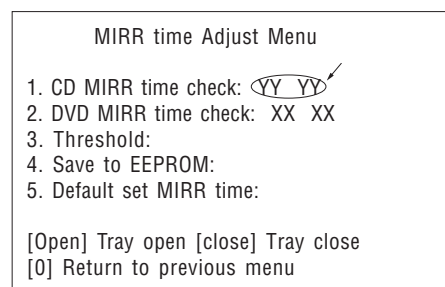
- (19) Wait for HEX number to display.

- (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) Substract 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

Checking Location: DMB10 board (Side A)

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

- 1) MIRROR TIME ADJUSTMENT (See page 22)
- 2) EXECUTING IOP MEASUREMENT (See page 24)

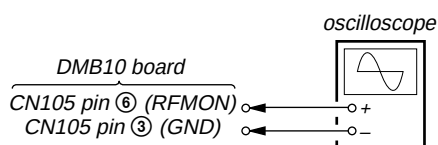
[TEST DISC LIST]

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]

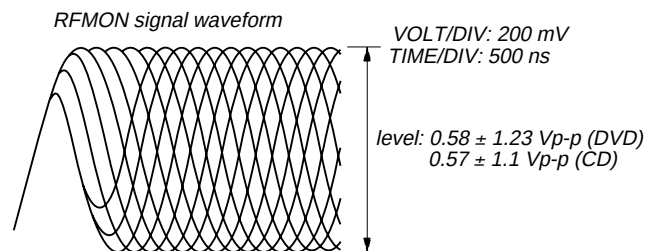
Connection:



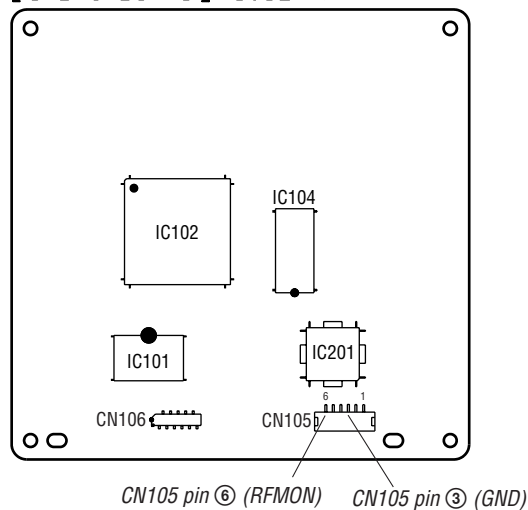
Procedure:

1. Connect an oscilloscope to CN105 pin ⑥ (RFMON) and CN105 pin ③ (GND) on the DMB10 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.



【DMB10 BOARD】(SIDE A)

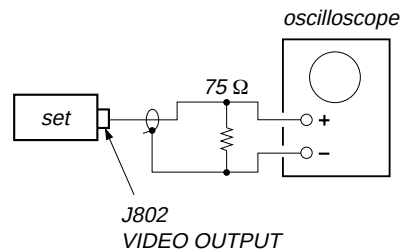


VIDEO SECTION

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

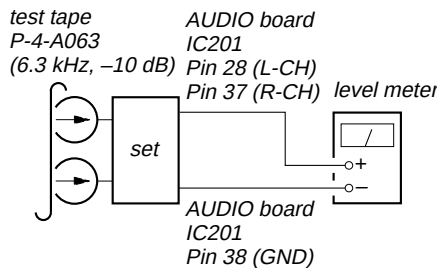
DECK A

DECK B

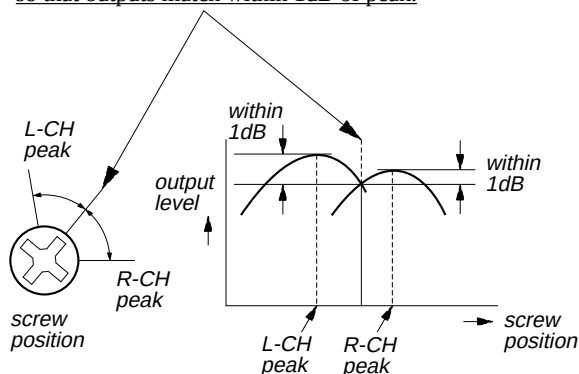
Note: Perform this adjustments for both decks

Procedure:

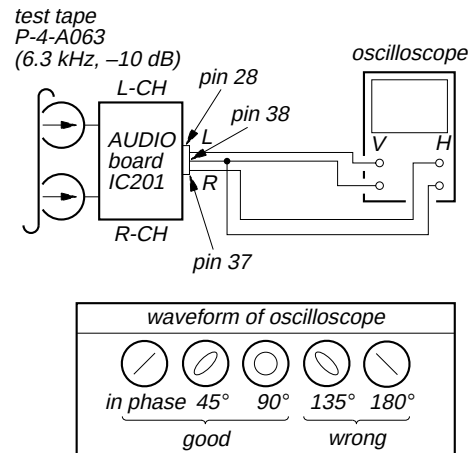
1. Mode: Playback



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.



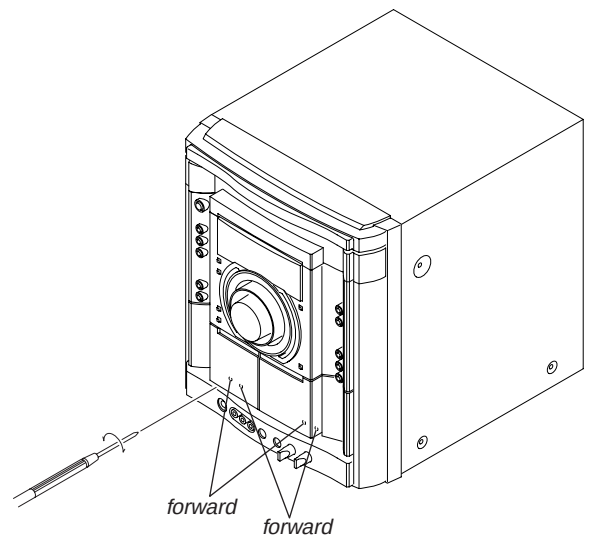
3. Mode: Playback



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

• IC PIN Descriptions

IC101 M30392MEP-A00FPU (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 2/3	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

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)

HCD-GNZ7D/GNZ8D/GNZ9D

DMB10 BOARD IC102 CXD9804R

(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	USBVSS	—	Terminal Ground
44	USBP	I	USB port DPLUS analog pin (not used)
45	USBM	I	USB port DMINUS analog pin (not used)
46	USBVDD3	—	Power Supply (+3.3V)
47	SPFGG	I	Motor Hall sensor input

Pin No.	Pin Name	I/O	Description
48	AN0	I	Not Used
49	AN1	I	Not Used
50	AN2	I	Not Used
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)

HCD-GNZ7D/GNZ8D/GNZ9D

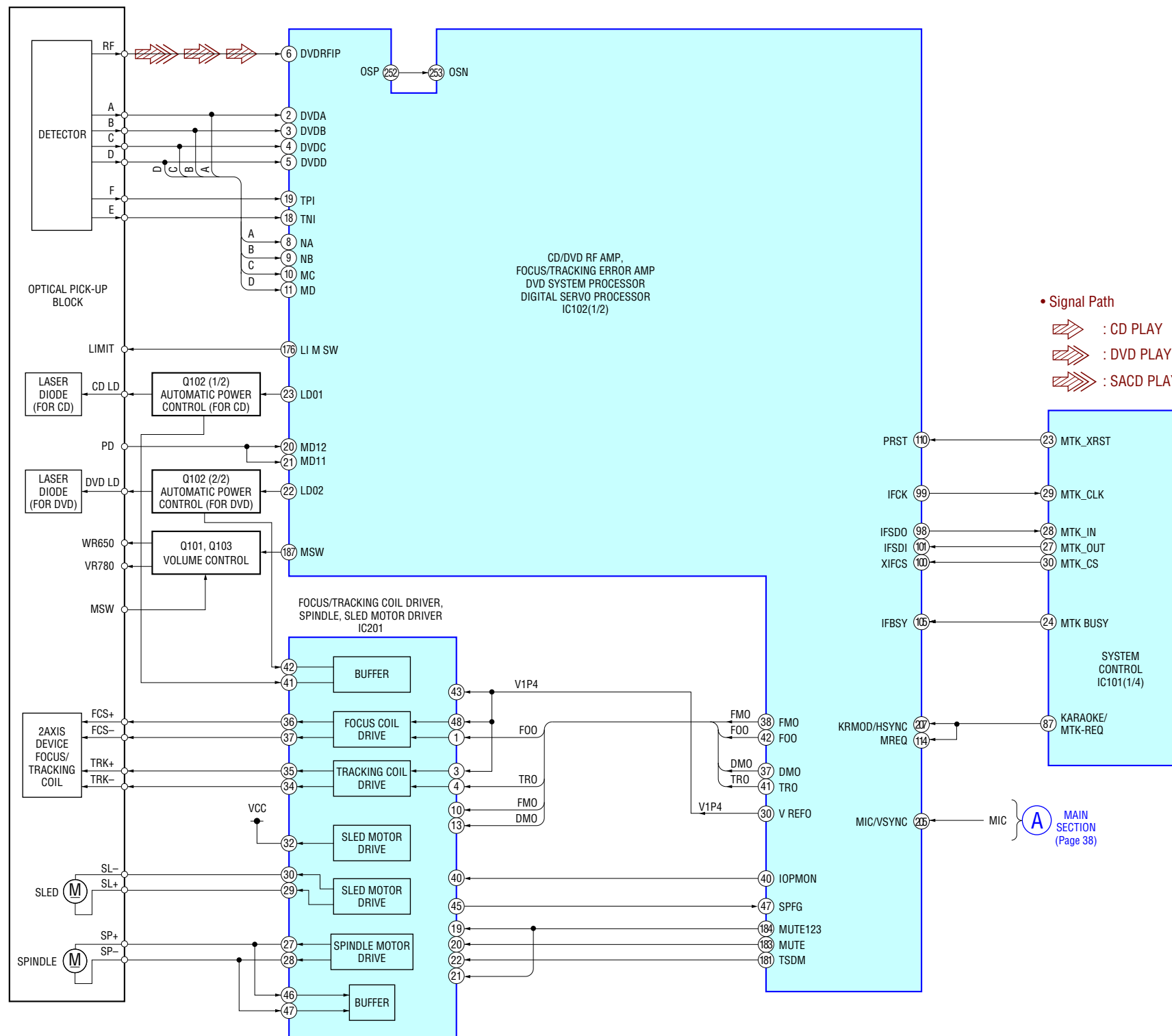
Pin No.	Pin Name	I/O	Description
114	MREQ	I	DQM signal input
115	RD7	I	Data bus 7 from SD-RAM (IC104)
116	DVSS	—	Terminal Ground
117, 118	RD 6, 5	I	Data bus 6, 5 from SD-RAM (IC104)
119	DVSS	—	Terminal Ground
120, 121	RD 4, 3	I	Data bus 4, 3 from SD-RAM (IC104)
122	DVDD18	—	Power Supply (+1.8V)
123 to 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
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	BA0	O	BA0 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	RVREF	I	Reference voltage
154	RCLKB	I	Dram clock
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
169	RGB	O	RGB control signal output
170	XSMRST	—	Not Used
171	WODE	O	SI signal output to VIDEO AMP (IC201)
172	NT	—	Not Used
173	DVDD18	—	Power Supply (+1.8V)
174	EUR	—	Not Used
175	DVSS	—	Terminal Ground
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	VCLK	—	Not Used
179	CKSW	I	CKSW signal input
180	IO3	—	Not Used
181	TSDM	O	TSDM signal output to Motor driver (IC201)
182	DVDD3	—	Power Supply (+3.3V)
183	MUTE	O	MUTE signal output to Motor driver (IC201)
184	MUTE123	O	MUTE signal output to Motor driver (IC201)
185	REW	O	REV signal output to Motor driver (IC201)
186	FWD	O	FWD signal output to Motor driver (IC201)
187	MSW	O	Volume control signal output to Optical pick-up
188	DSEL	O	Select signal output
189	DAVCC	—	Power Supply (+3.3V)
190	VREF	I	Bandgap reference voltage (not used)
191	FS	O	Full scale adjustment (pull down)
192	YUV0	—	Not Used
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	—	Not Used
206	VOICE/YUV7	—	Not Used
207	KRMOB/HSYN	—	Not Used
208	SMSCK	—	Not Used
209	SPDATA/SMSDI	I	Audio data of SPDIF input
210	SMSDO	—	Not Used
211	XSMCS	—	Not Used
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	—	Not Used
221	DVDD18	—	Power Supply (+1.8V)
222	ASDATA4	O	Audio serial data (not used)
223	DVSS	—	Terminal Ground
224	DWIDE	—	Not Used
225	SDPIF	—	SPDIF output (not used)
226	RFGND18	—	Terminal Ground

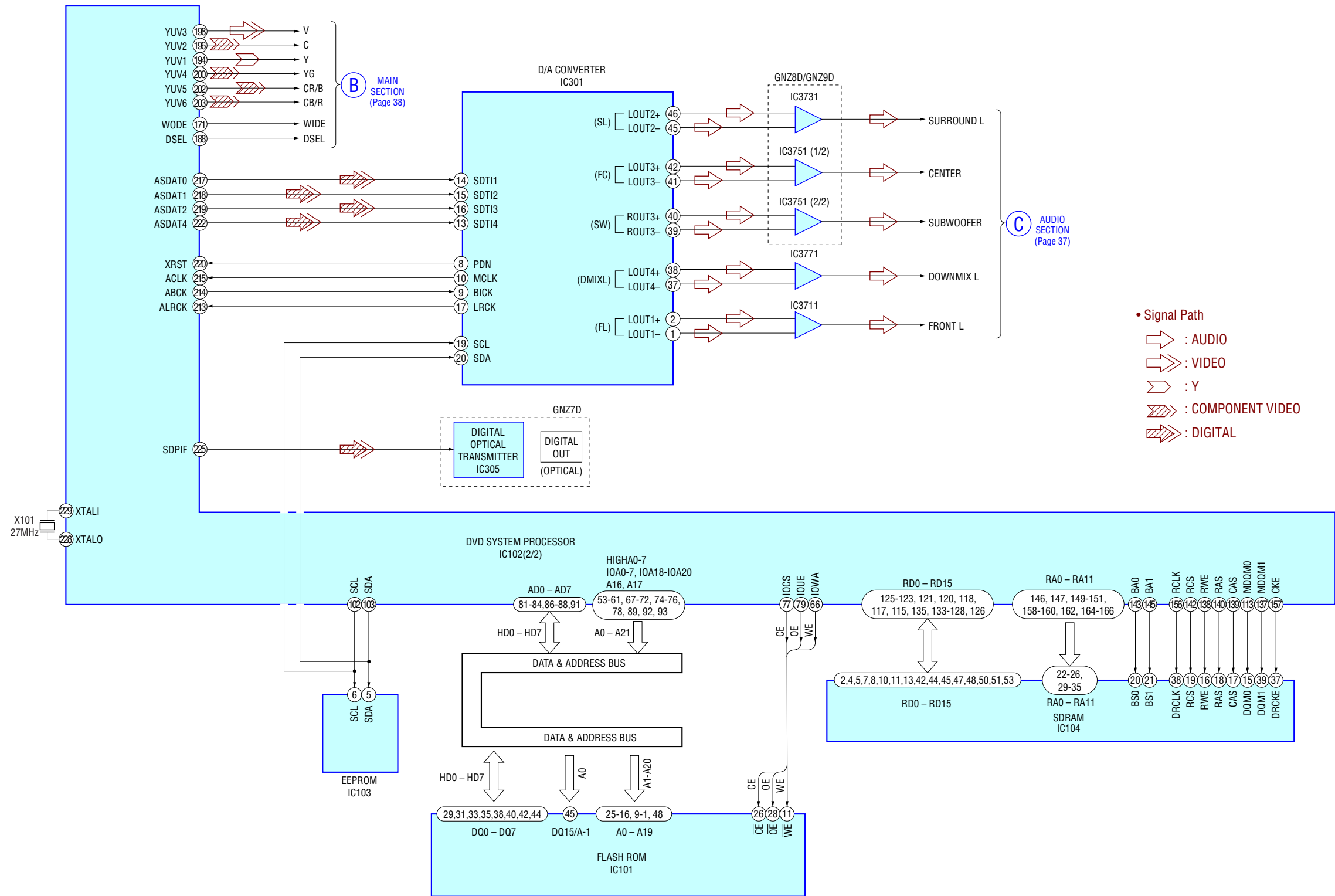
HCD-GNZ7D/GNZ8D/GNZ9D

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	PLLSS	—	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	VCM	I	SACD-Common mode Reference
241	VSS	—	Terminal Ground
242	VREEP	I	SACD-TOP Reference
243	VREEN	I	SACD-Bottom Reference
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	CEQP	O	EQ offset loop capacitance (not used)
251	CEQN	O	EQ offset loop capacitance (not used)
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)

7-1. BLOCK DIAGRAM — RF/SERVO SECTION —



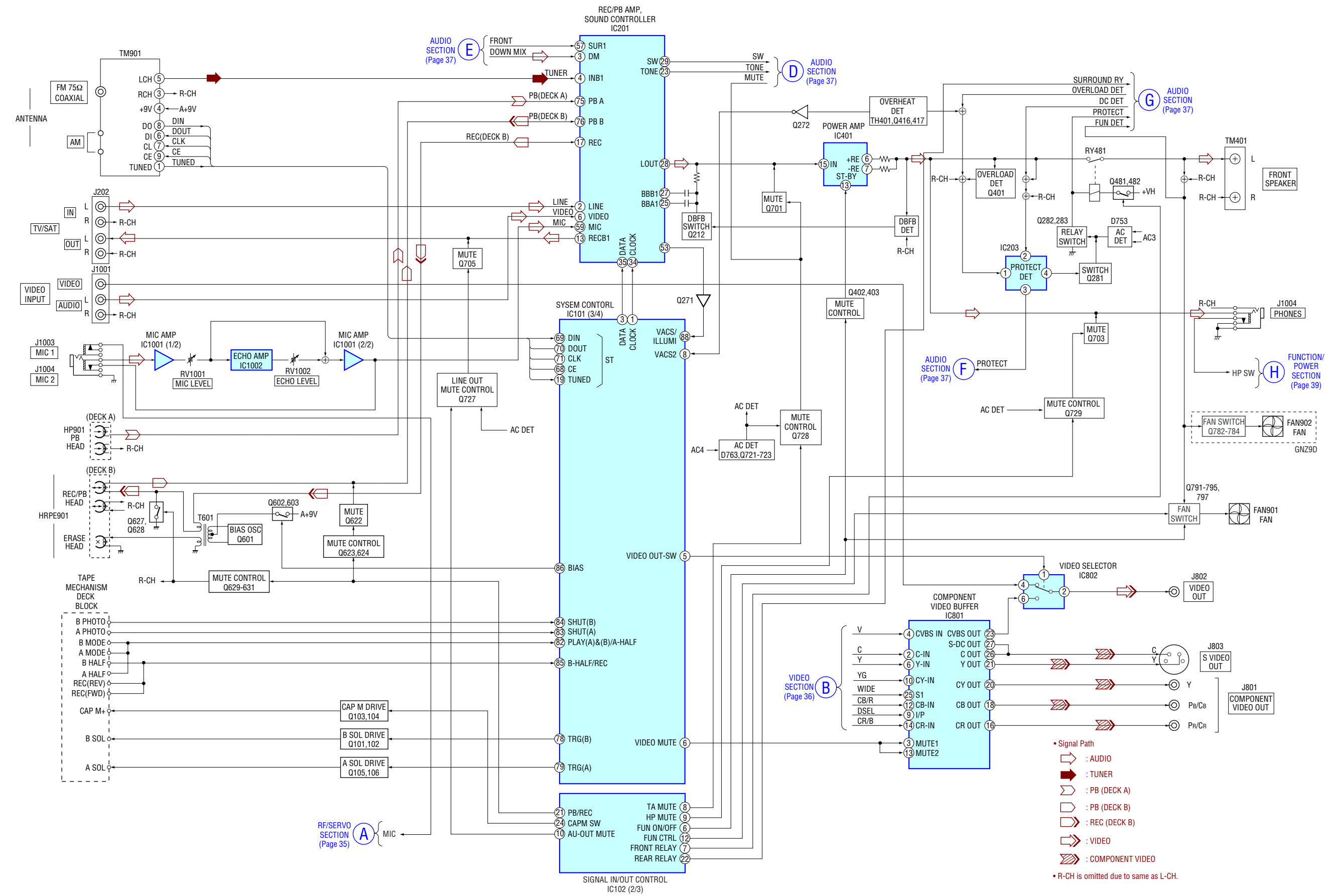
7-2. BLOCK DIAGRAM — VIDEO SECTION —



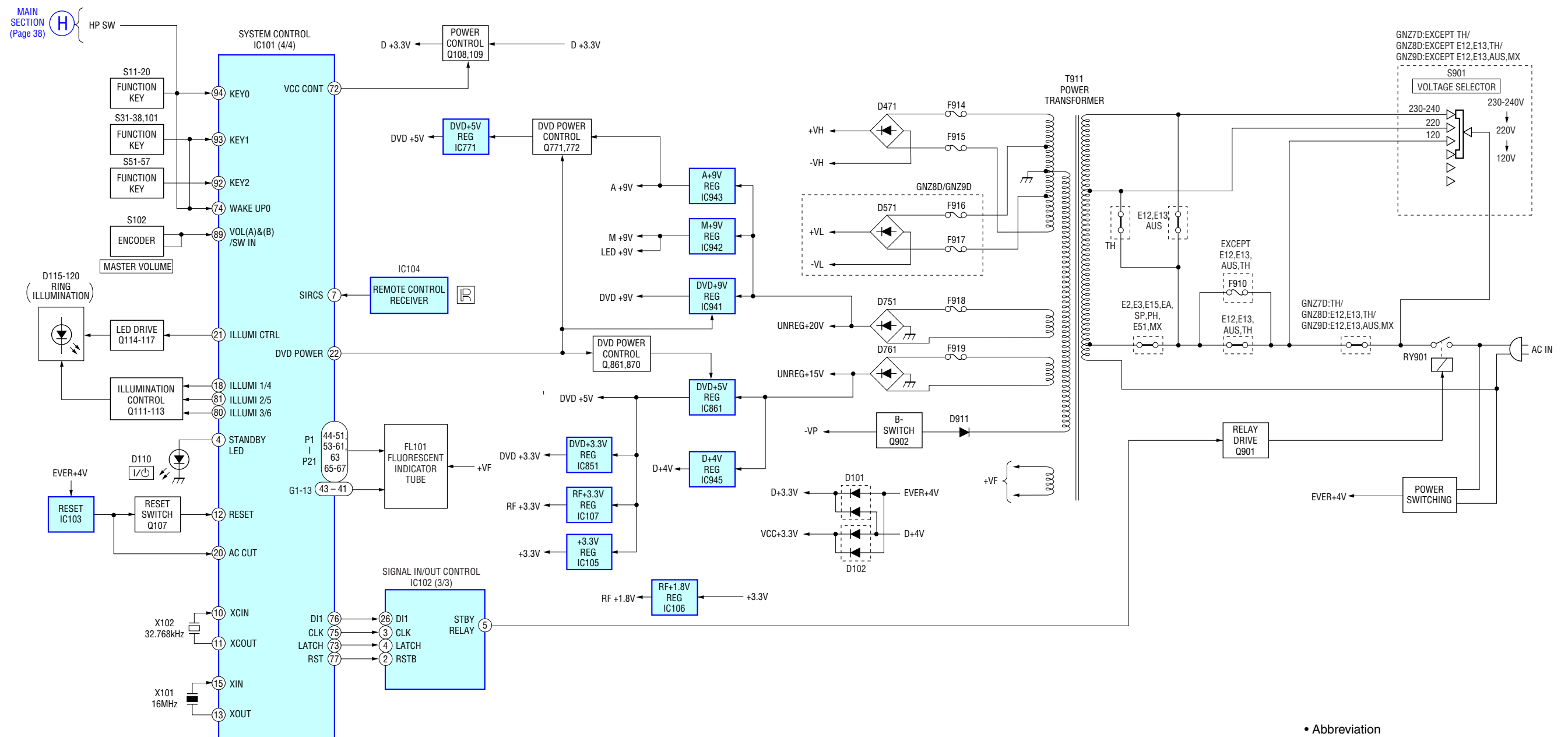
37



7-4. BLOCK DIAGRAM — MAIN SECTION —



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



- Abbreviation
- | | |
|-----|--------------------------------|
| E2 | : 120 V AC area in E model |
| 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 |
| E51 | : Chilean and Peruvian model |
| AUS | : Australian model |
| EA | : Saudi arabia model |
| PH | : Phillipine model |
| SP | : Singapore model |
| MX | : Mexican model |
| TH | : Thai model |

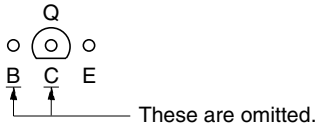
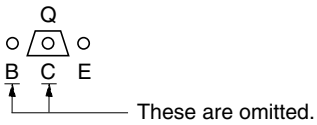
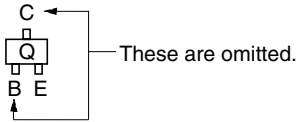
• Note For Printed Wiring Boards And Schematic Diagrams

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.

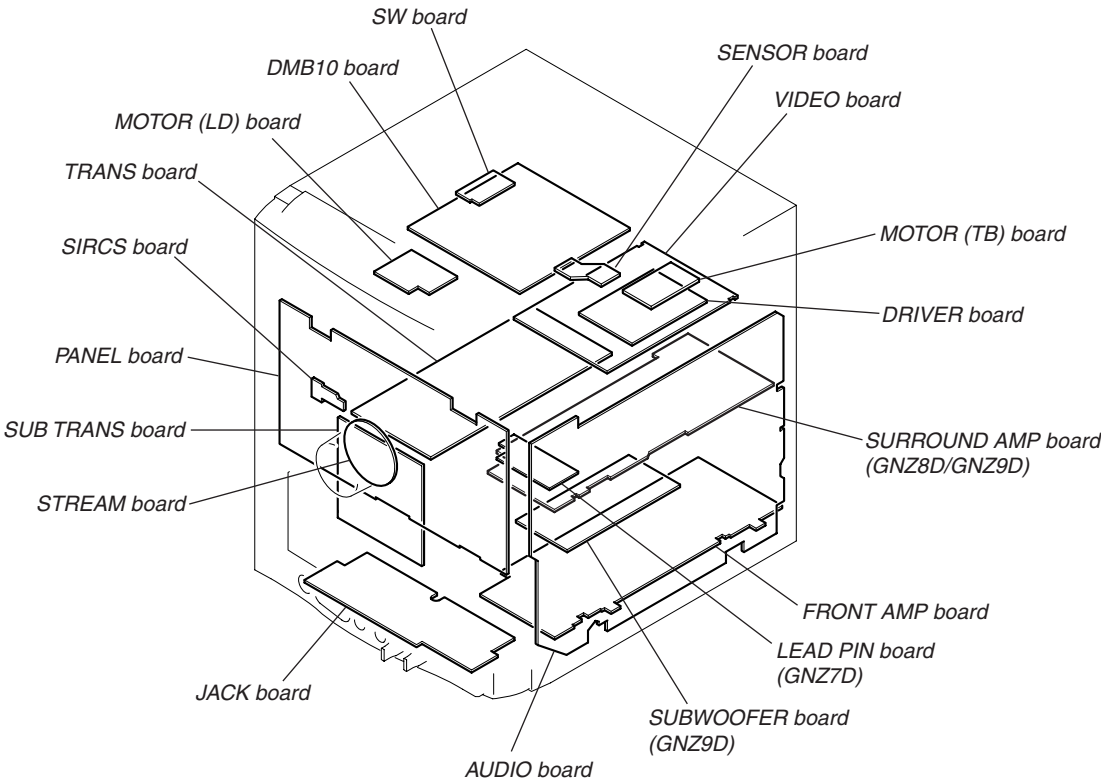
Note on Schematic Diagram:

- 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 $\frac{1}{4} \text{ W}$ 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
E2 : 120 V AC area in E model
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
E51 : Chilean and Peruvian model
AUS : Australian model
EA : Saudi arabia model
PH : Philippine model
SP : Singapore model
MX : Mexican model
TH : Thai model

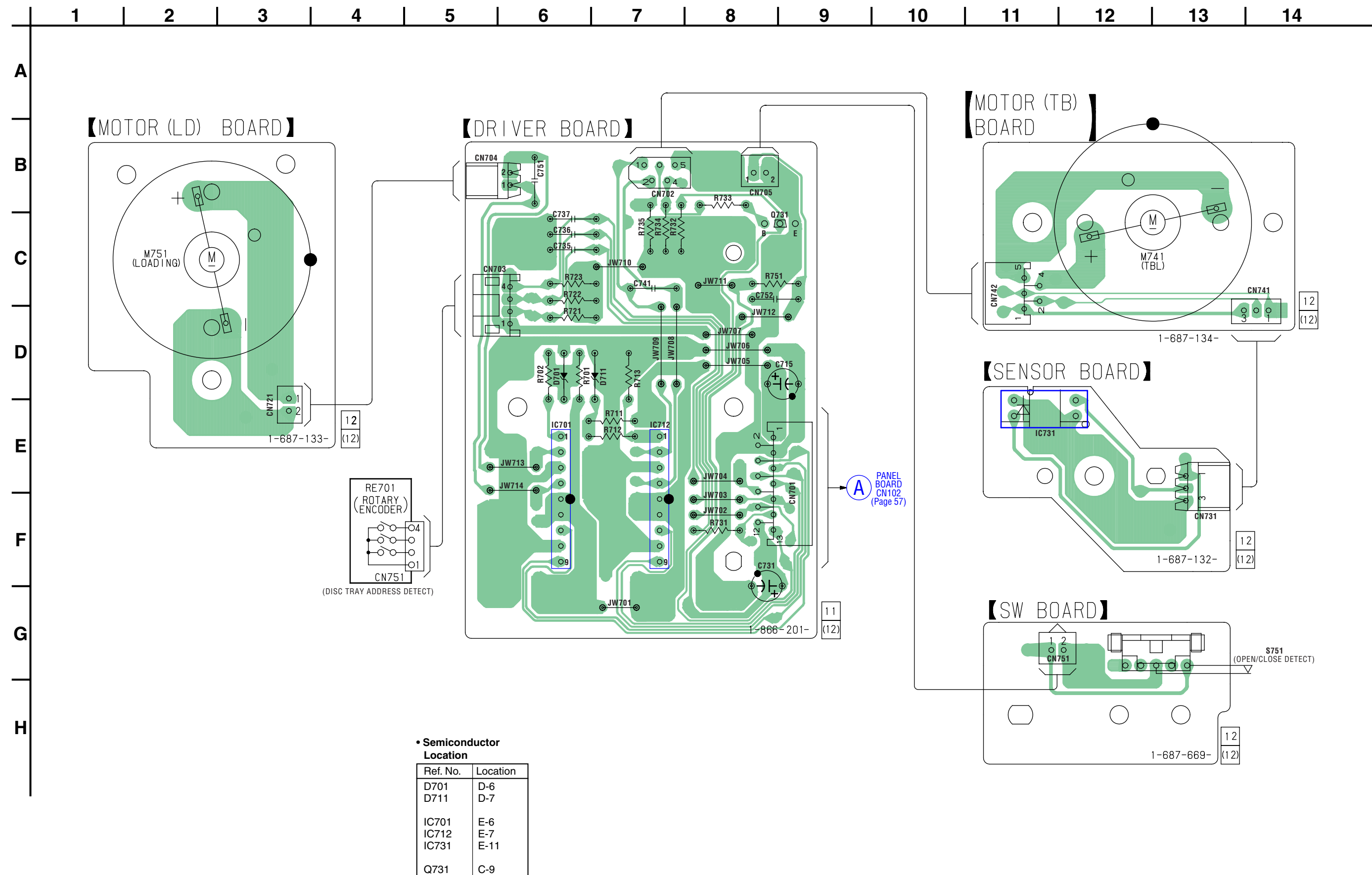
• Circuit Boards Location



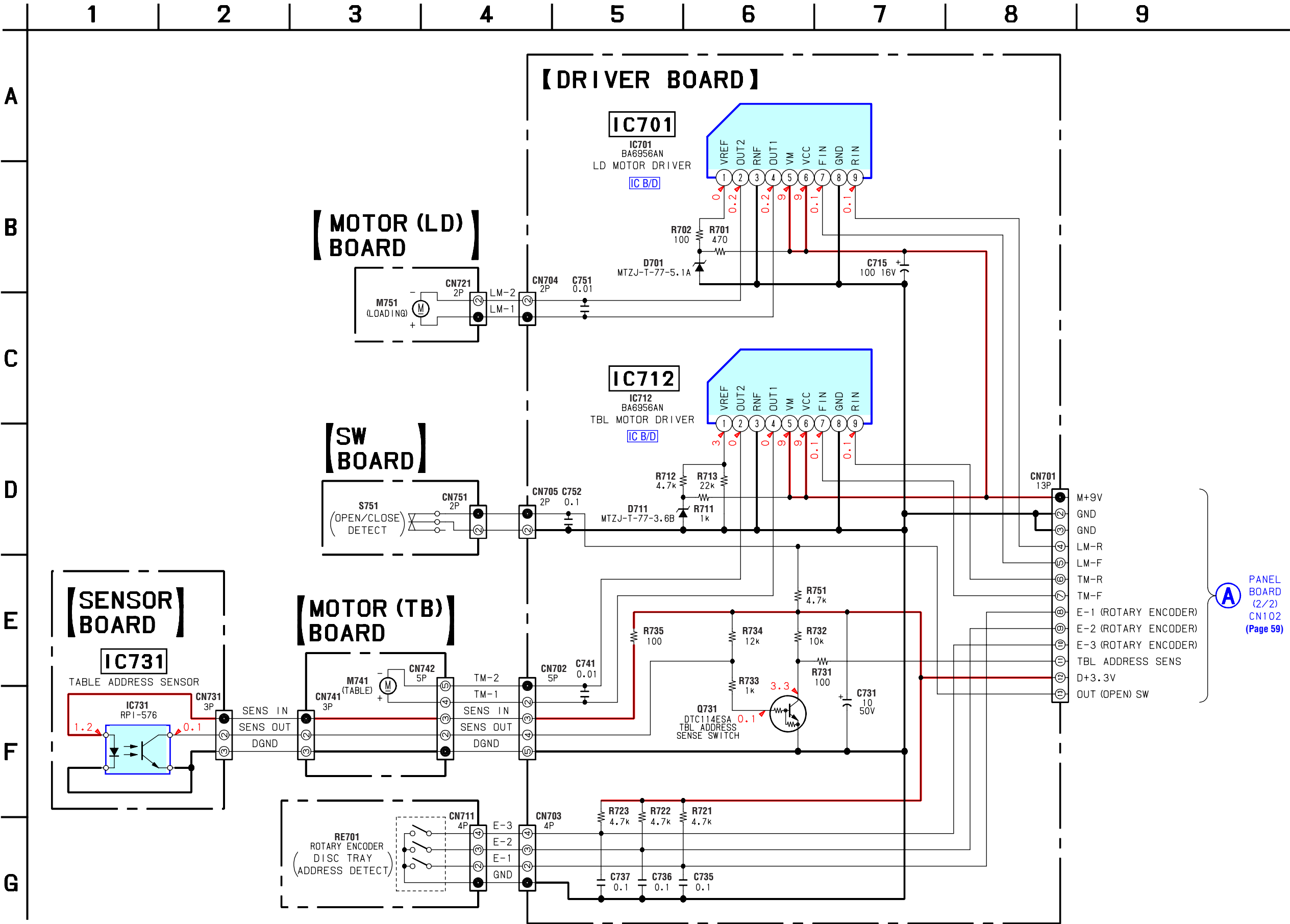
7-6. PRINTED WIRING BOARDS — DRIVER SECTION —

• Refer to page 40 for Circuit Boards Location.

⏏ : Uses unleaded solder.

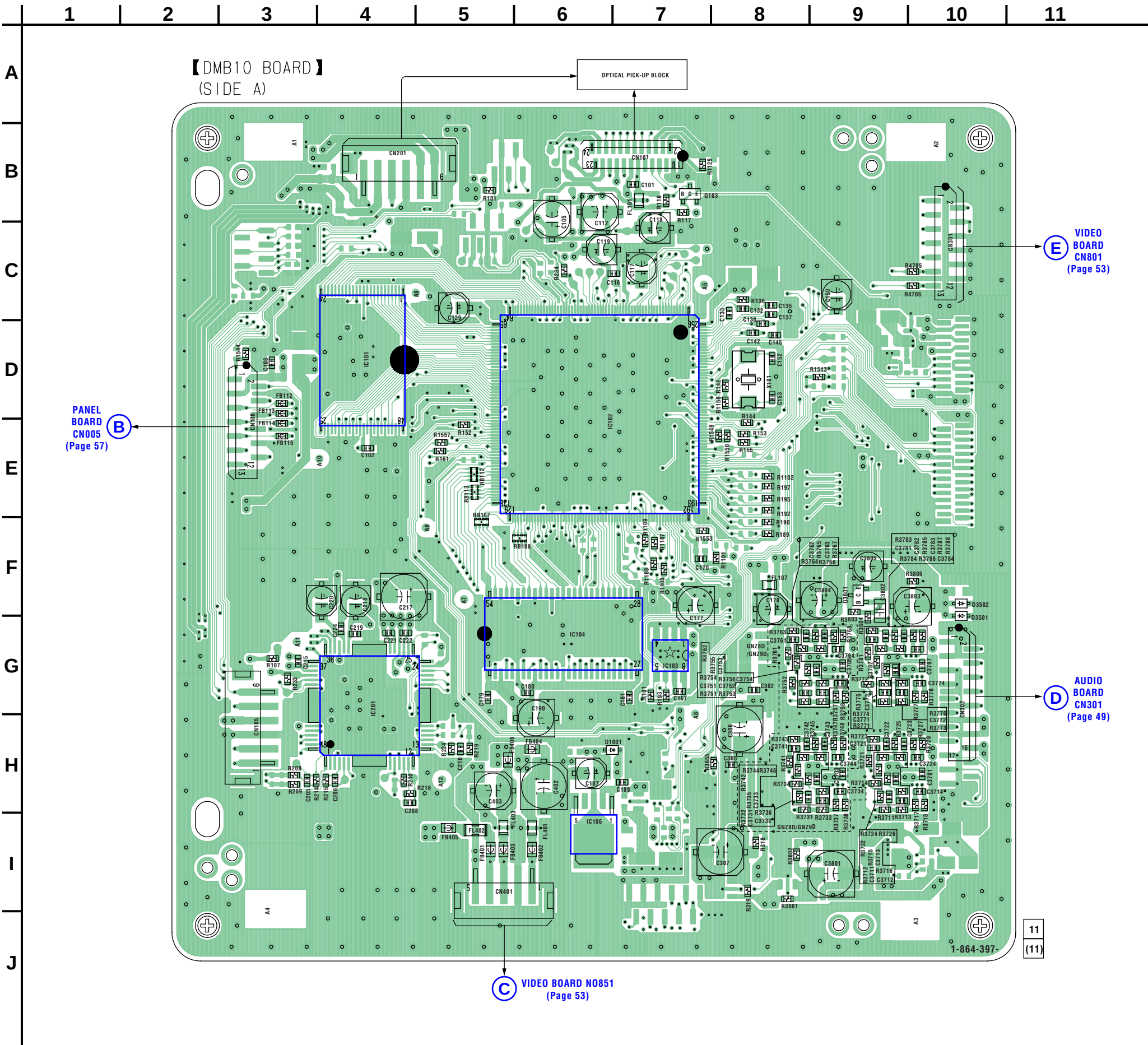


7-7. SCHEMATIC DIAGRAM — DRIVER SECTION — • See page 70 for IC Block Diagrams.



7-8. PRINTED WIRING BOARD — DMB10 SECTION (SIDE A) — • Refer to page 40 for Circuit Boards Location. : Uses unleaded solder.

☆ New part of EEP ROM (IC103) on the DMB10 board cannot be used. Therefore, if the mounted DMB10 board (A-1095-784-A, etc.) is replaced, exchange new EEP ROM (IC103) with that used before the replacement.

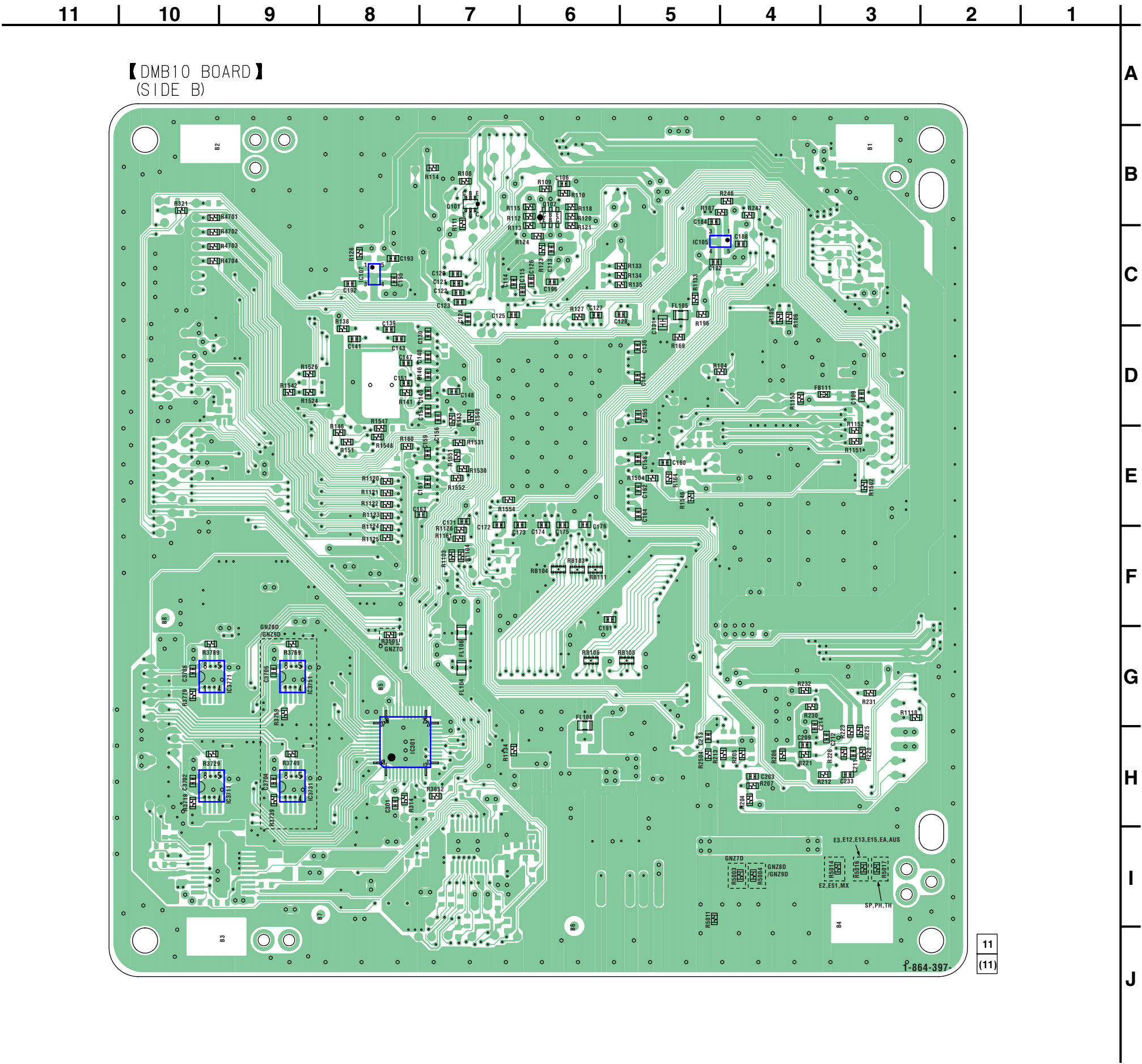


• Semiconductor Location

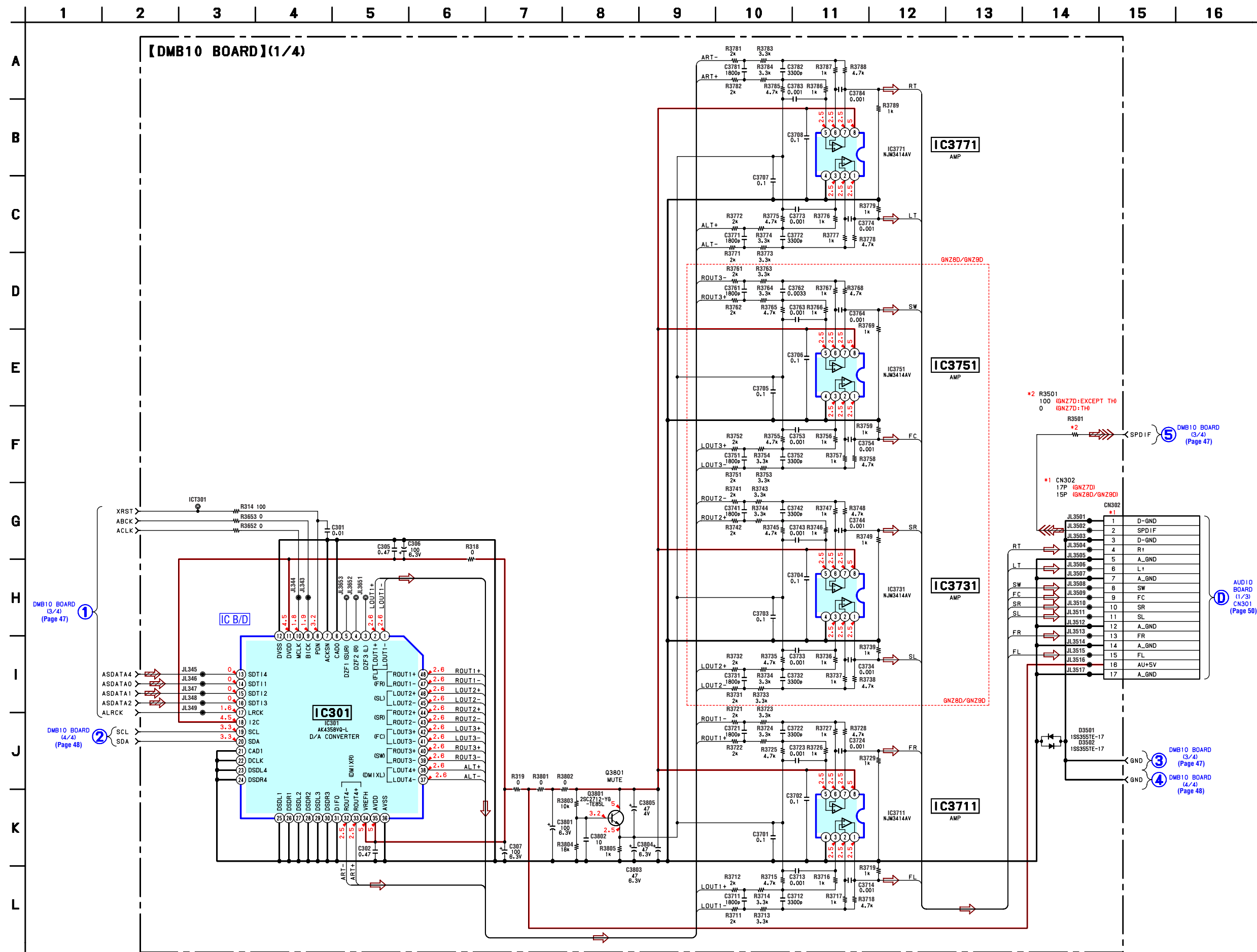
Ref. No.	Location
D1001	H-6
D3501	F-10
D3502	F-10
IC101	D-4
IC102	E-6
IC103	G-7
IC104	G-6
(IC105)	C-5
IC106	I-6
(IC107)	C-8
IC201	G-4
(IC301)	H-8
(IC3711)	H-10
(IC3731)	H-9
(IC3751)	G-9
(IC3771)	G-10
(Q101)	B-7
(Q102)	B-6
Q103	B-7
Q3801	F-9

(): SIDE B

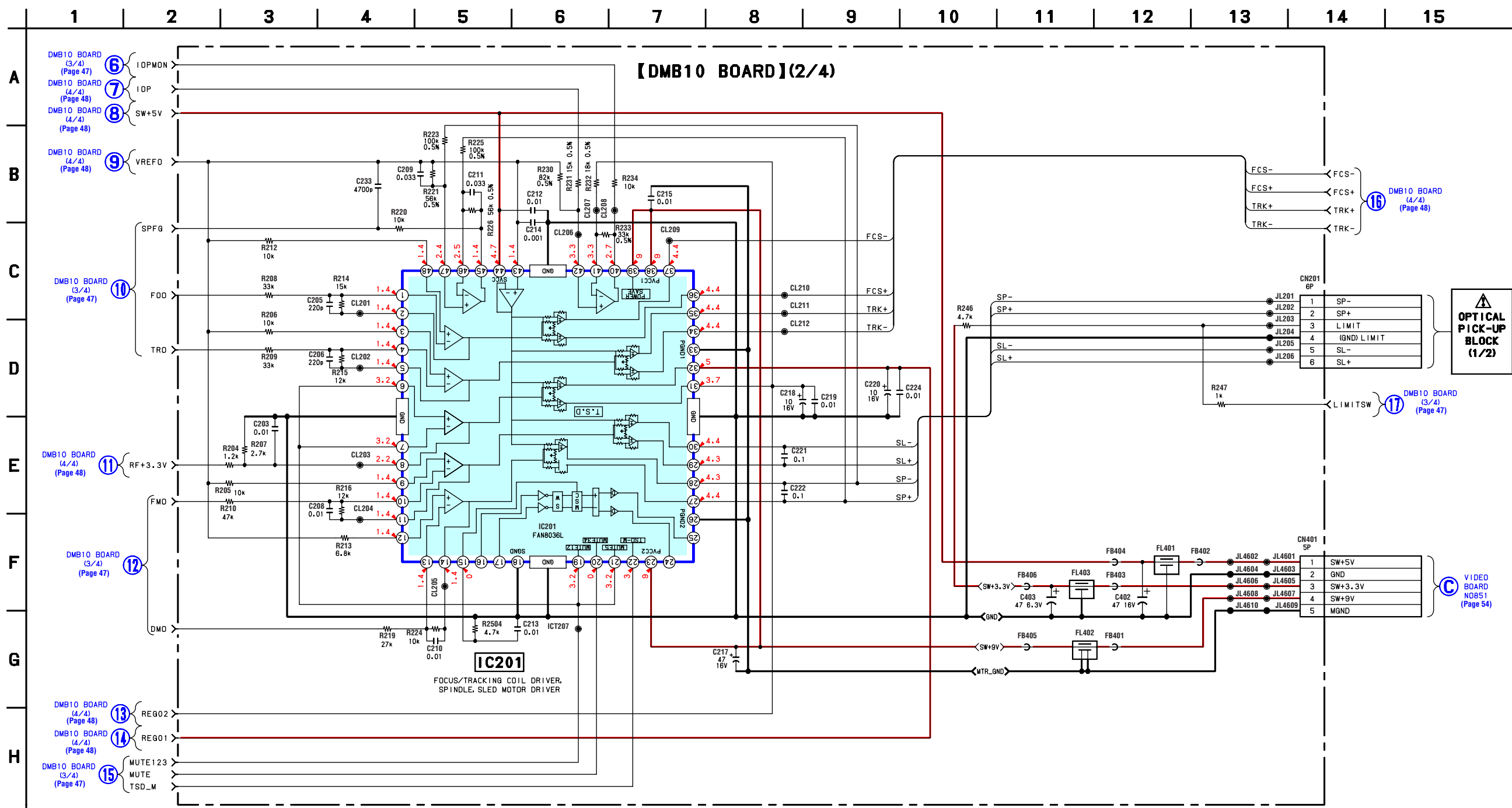
7-9. PRINTED WIRING BOARD — DMB10 SECTION (SIDE B) — • Refer to page 40 for Circuit Boards Location. : Uses unleaded solder.



7-10. SCHEMATIC DIAGRAM — DMB10 SECTION (1/4) — • See page 70 for IC Block Diagrams.



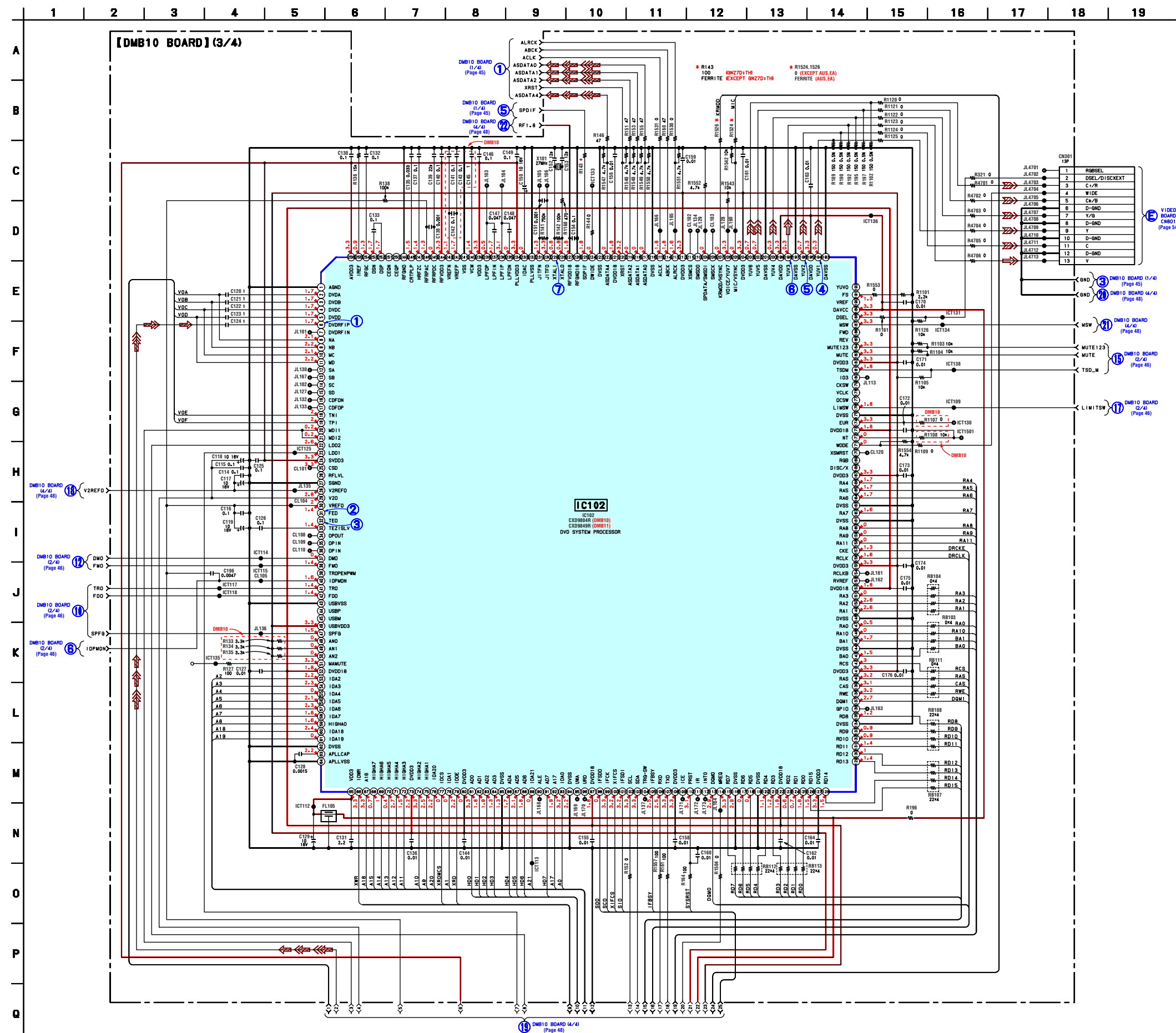
7-11. SCHEMATIC DIAGRAM — DMB10 SECTION (2/4) —



7-12. SCHEMATIC DIAGRAM — DMB10 SECTION (3/4) —

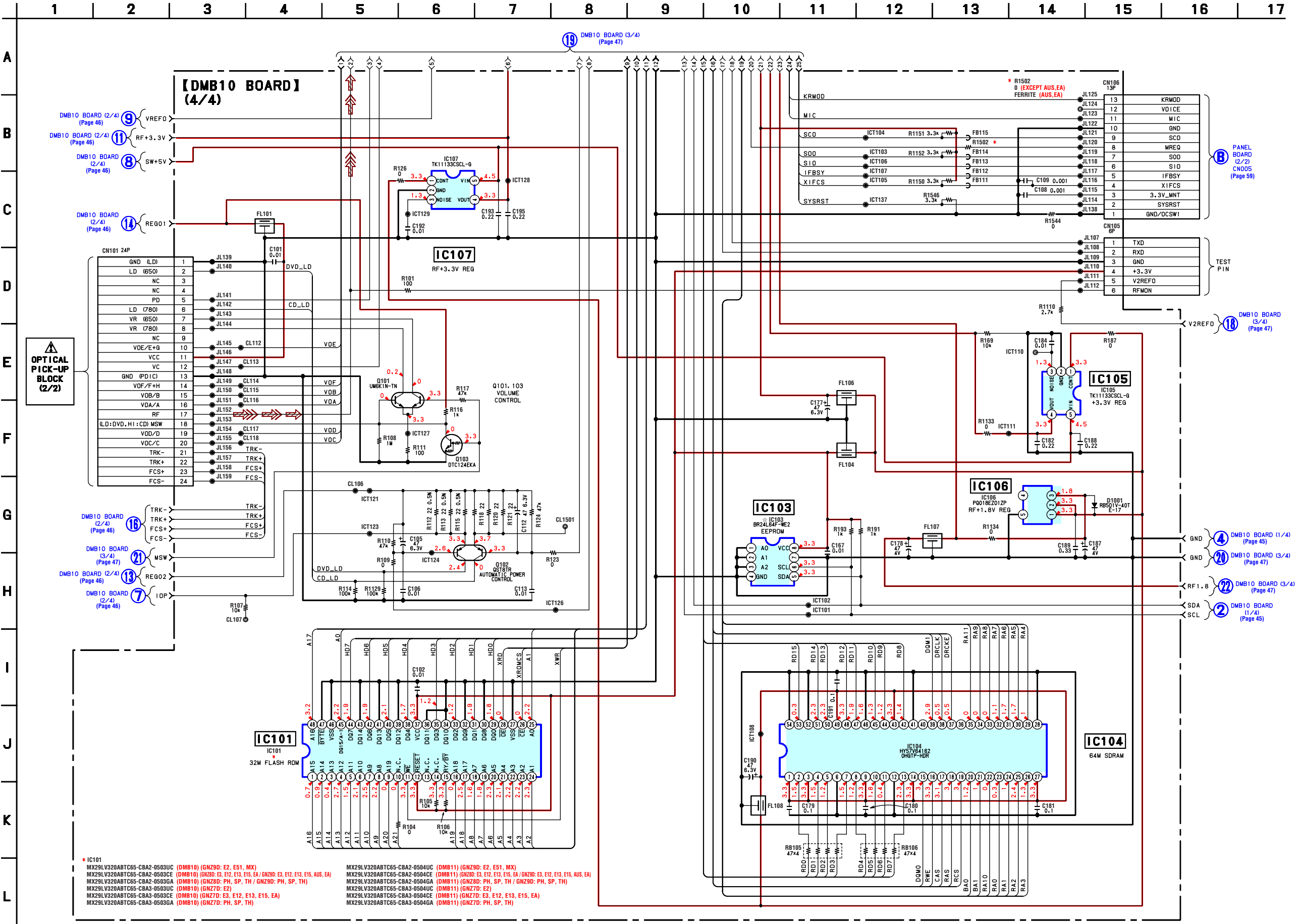
- See page 69 for Waveforms.

- See page 30 for IC Pin Function Description.

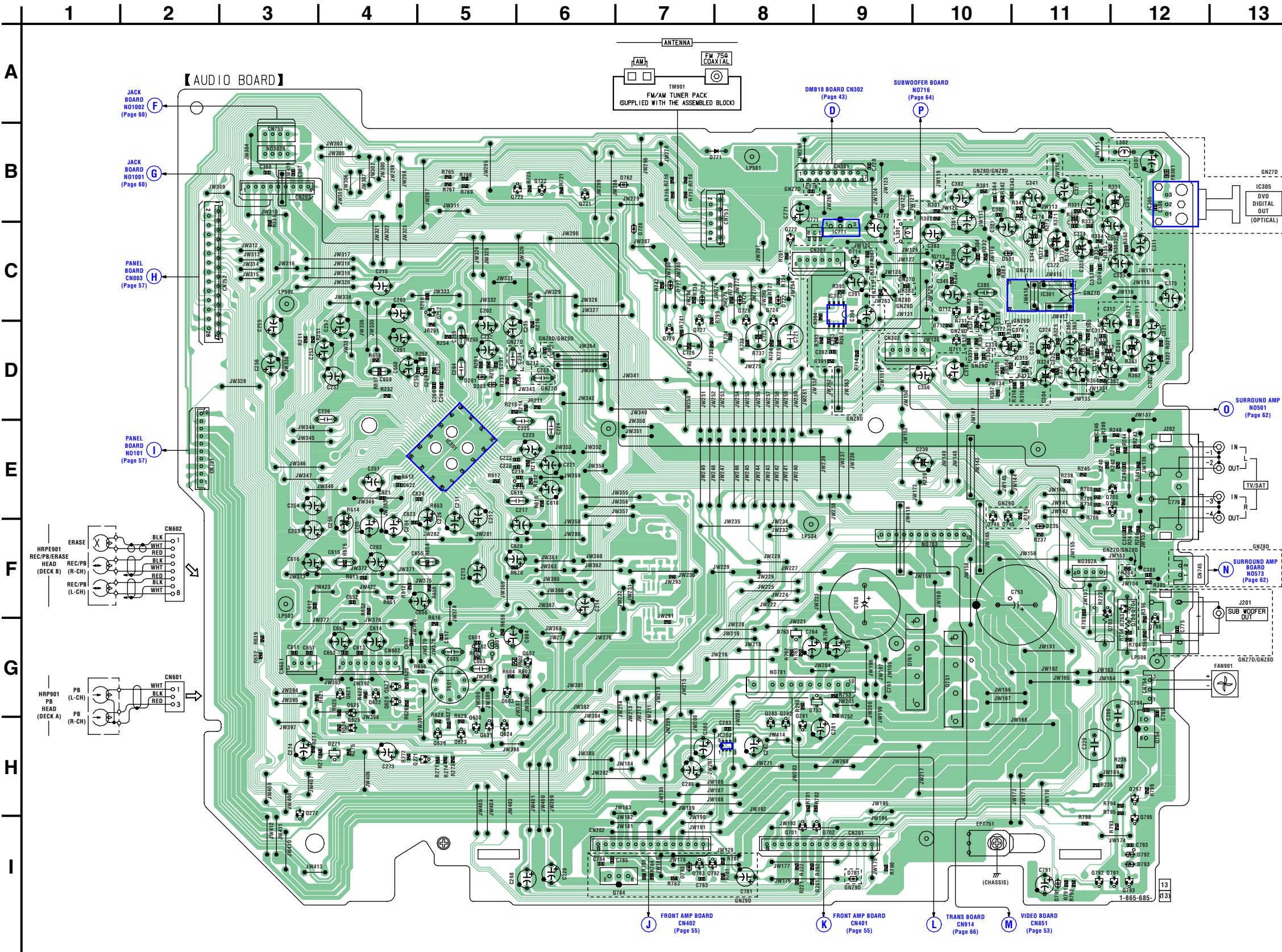


7-13. SCHEMATIC DIAGRAM — DMB10 SECTION (4/4) —

☆ New part of EEP ROM (IC103) on the DMB10 board or DMB11 board cannot be used. Therefore, if the mounted DMB10 board (A-1095-784-A, etc.) is replaced, exchange new EEP ROM (IC103) with that used before the replacement.



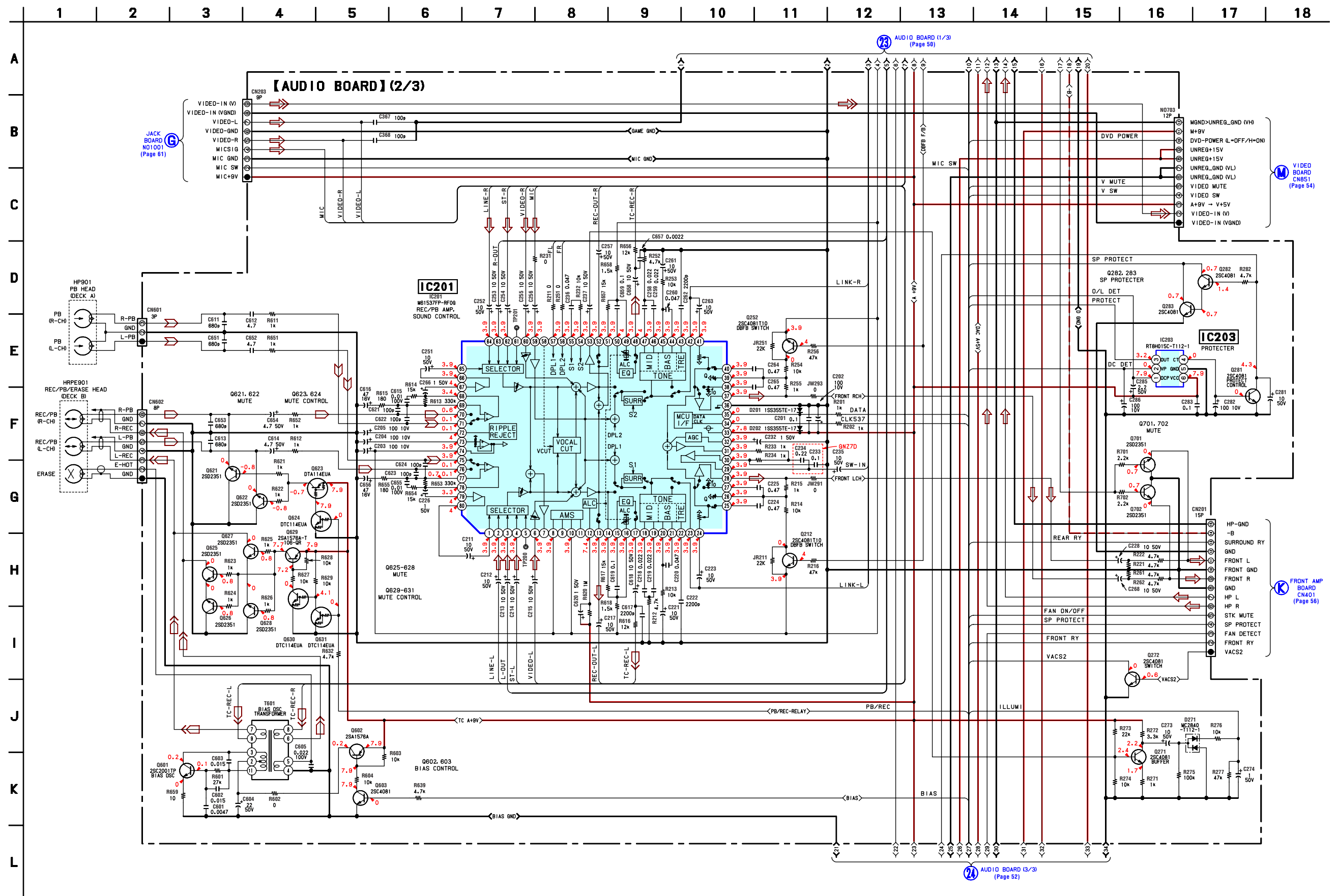
7-14. PRINTED WIRING BOARD — AUDIO SECTION — • Refer to page 40 for Circuit Boards Location.  : Uses unleaded solder.



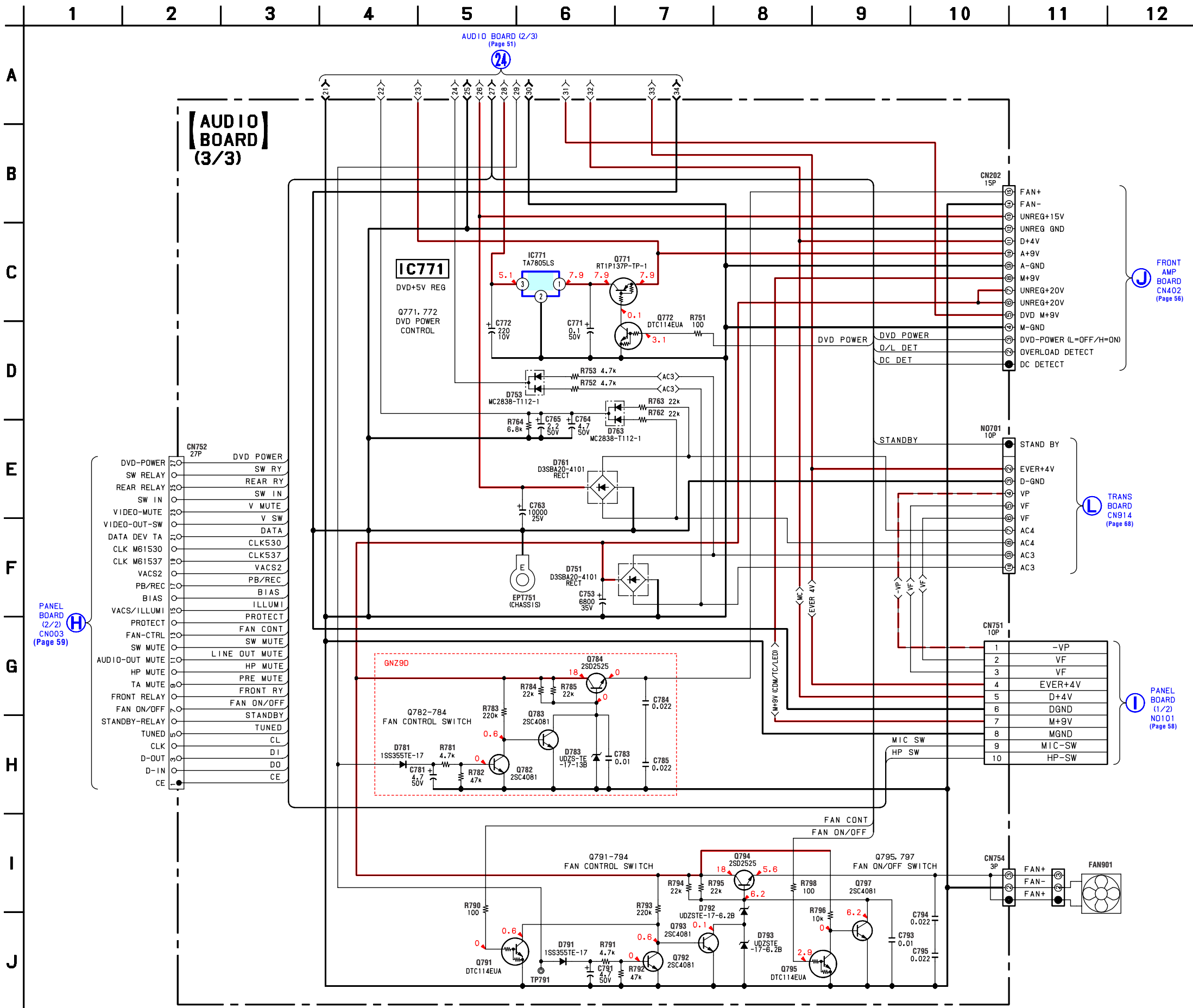
Semiconductor Location			
Ref. No.	Location	Ref. No.	Location
D201	D-5	Q623	H-5
D202	D-5	Q624	H-5
D235	F-11	Q625	G-4
D271	H-4	Q626	H-4
D301	C-10	Q627	G-4
D722	C-8	Q628	G-4
D725	C-7	Q629	H-5
D726	C-8	Q630	H-5
D727	C-7	Q631	H-5
D728	C-7	Q701	I-8
D751	G-10	Q702	I-9
D753	G-9	Q703	G-11
D761	G-9	Q704	F-12
D762	B-7	Q705	E-11
D763	G-8	Q706	E-11
D771	B-8	Q711	D-10
D781	I-9	Q712	C-10
D783	I-7	Q713	C-10
D791	I-11	Q714	C-9
D792	I-12	Q721	B-6
D793	I-12	Q722	B-6
		Q723	B-5
		Q724	C-8
IC201	E-5	Q727	D-7
IC203	H-8	Q728	C-8
IC301	C-11	Q729	D-7
IC303	C-9	Q745	F-10
IC305	B-12	Q746	F-10
IC771	C-9	Q771	C-8
		Q772	C-8
Q212	D-6	Q782	I-7
Q252	C-5	Q783	I-7
Q271	H-5	Q784	I-7
Q272	H-3	Q791	I-12
Q281	H-8	Q792	I-11
Q282	H-8	Q793	I-12
Q283	H-8	Q794	H-12
Q601	G-5	Q795	I-12
Q602	G-6	Q796	G-12
Q603	G-5	Q797	H-12
Q621	G-4		
Q622	G-4		



7-16. SCHEMATIC DIAGRAM — AUDIO SECTION (2/3) —

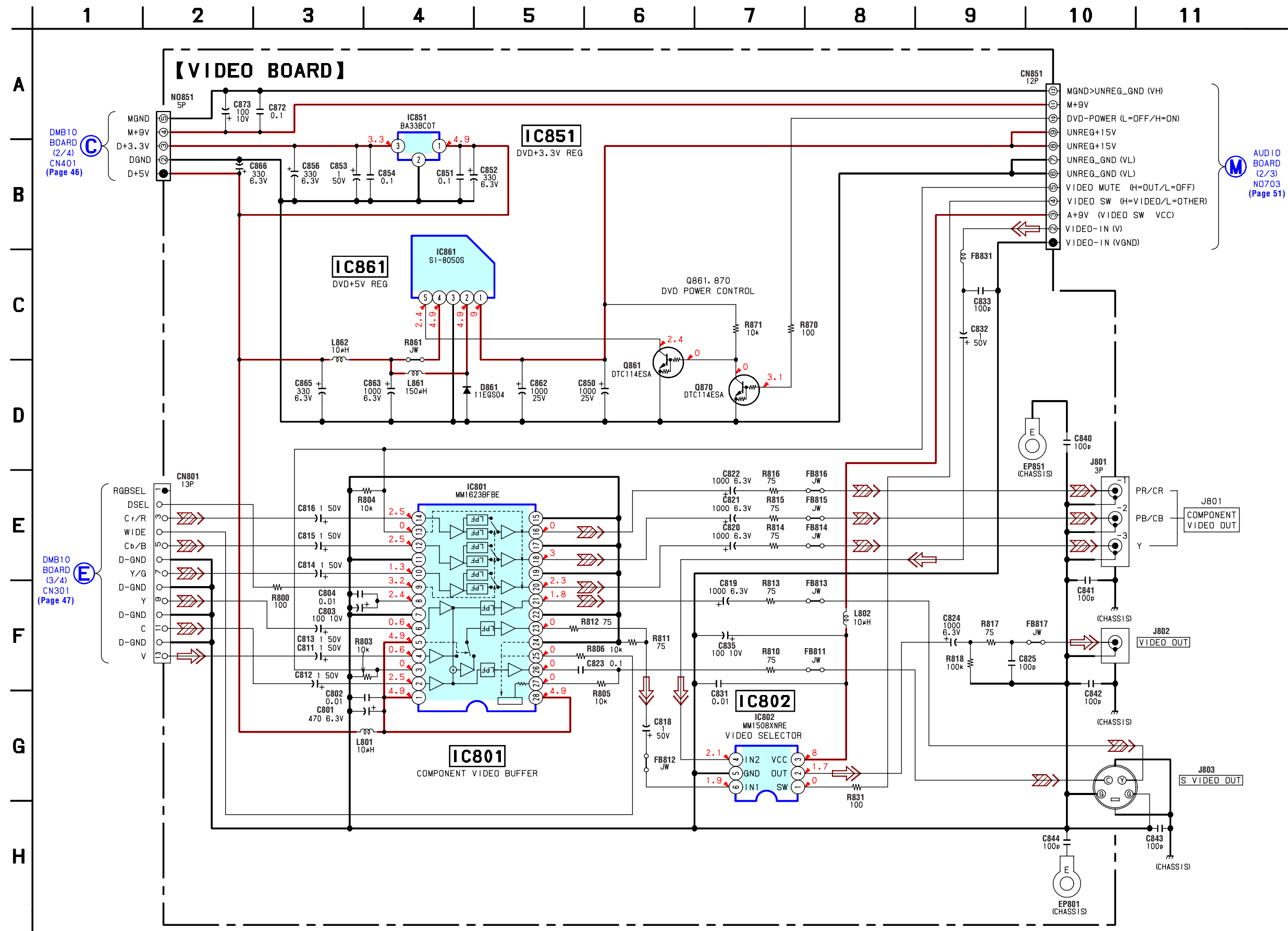


7-17. SCHEMATIC DIAGRAM — AUDIO SECTION (3/3) —

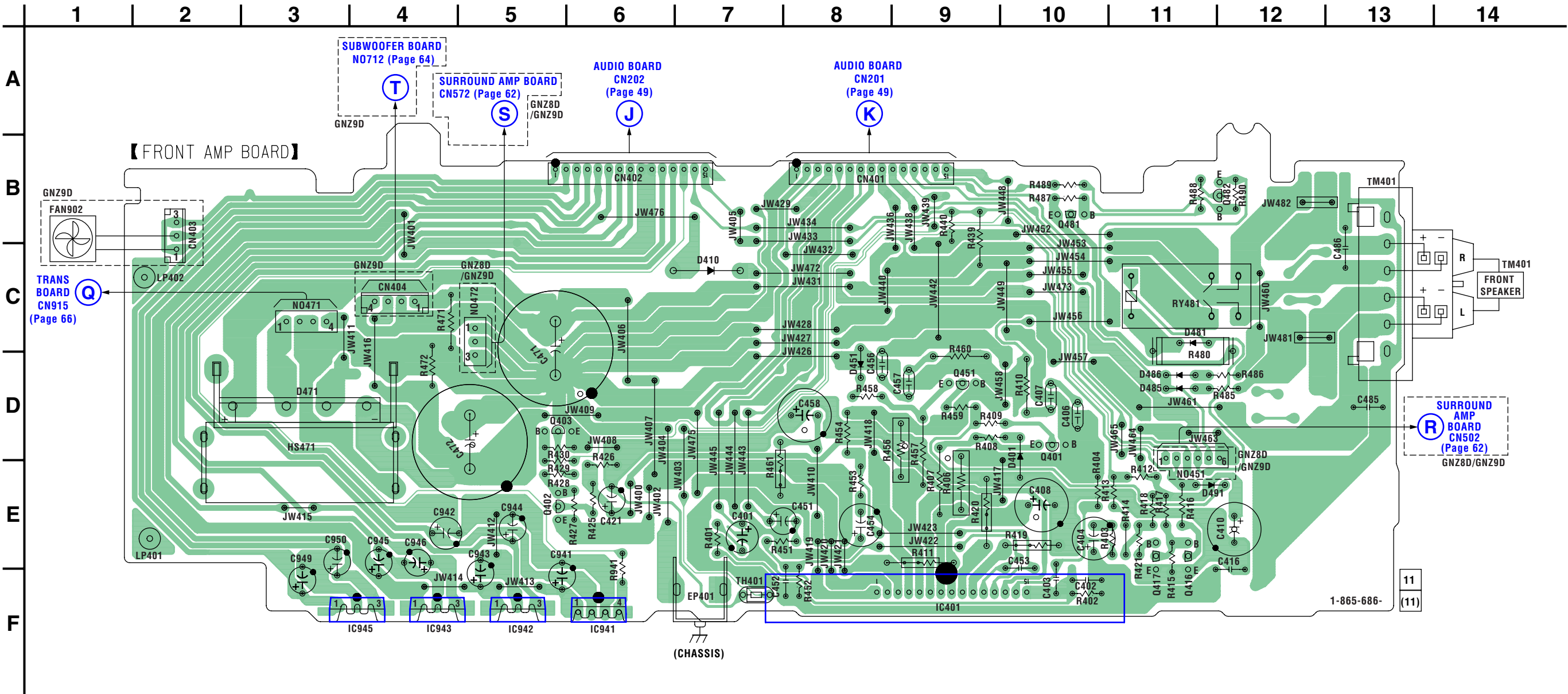




7-19. SCHEMATIC DIAGRAM — VIDEO SECTION —



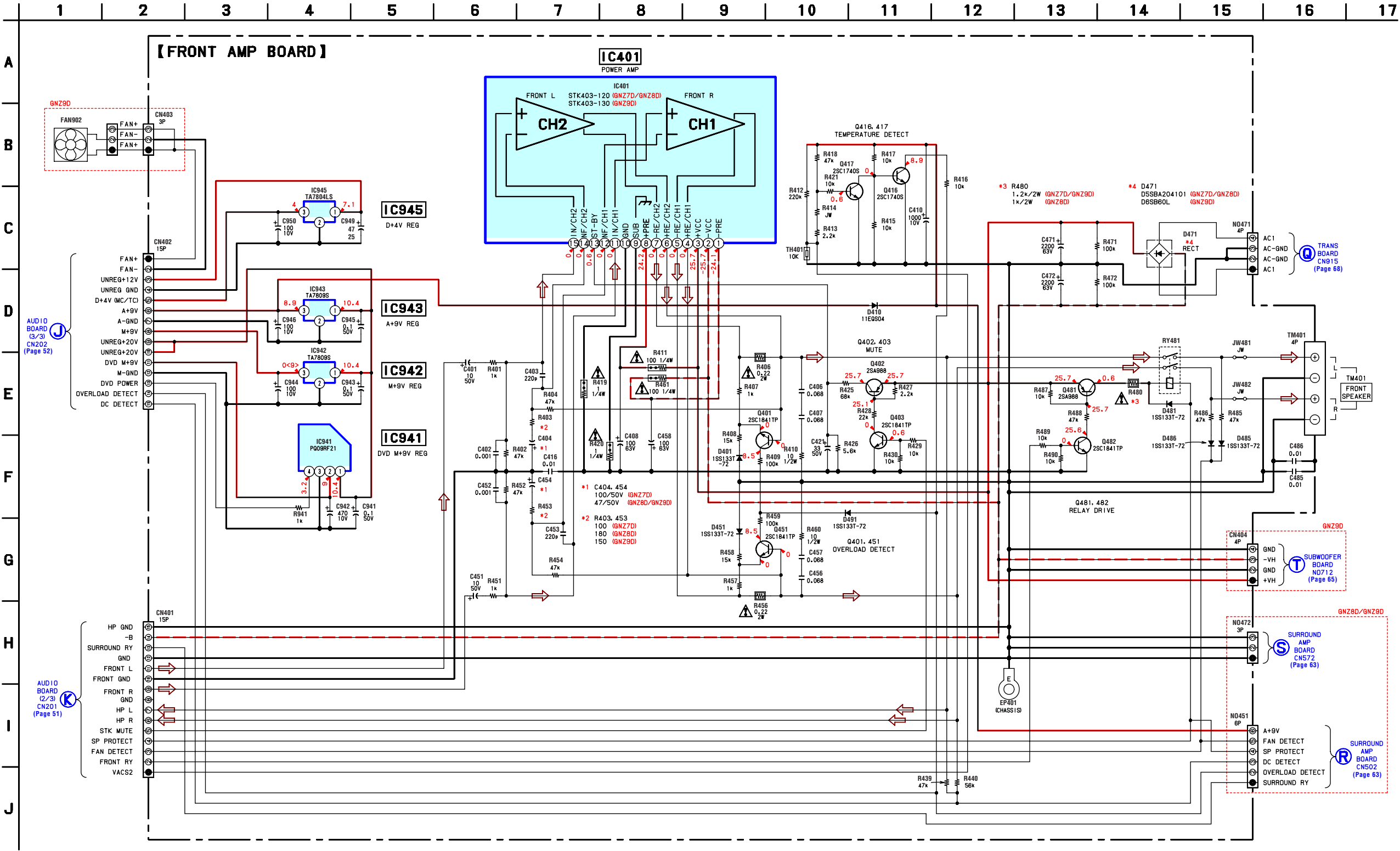
7-20. PRINTED WIRING BOARD — FRONT AMP SECTION — • Refer to page 40 for Circuit Boards Location.  : Uses unleaded solder.



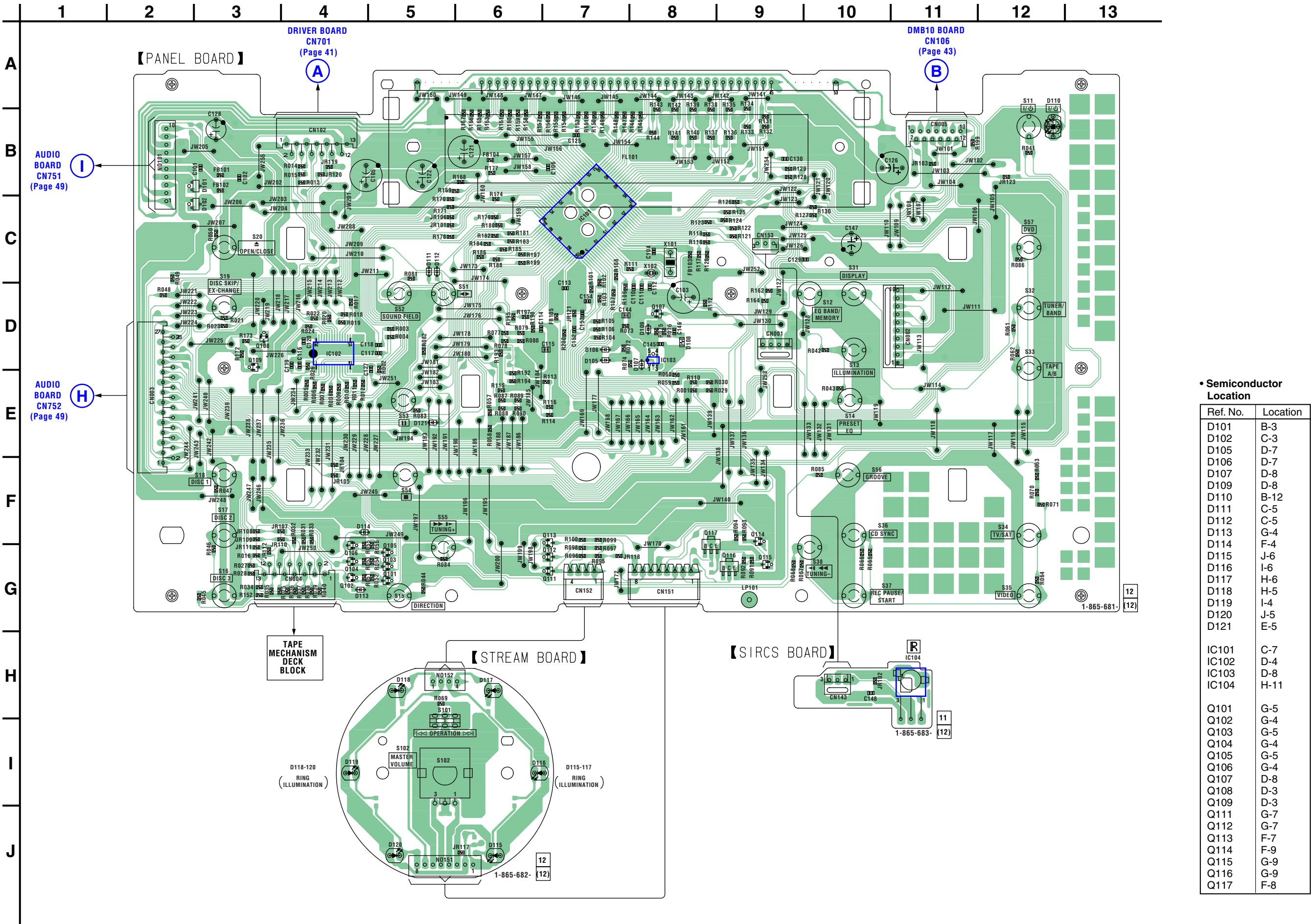
• Semiconductor Location

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	E-11
		Q451	D-9
IC401	F-9	Q481	B-10
IC941	F-6	Q482	B-12
IC942	F-5		

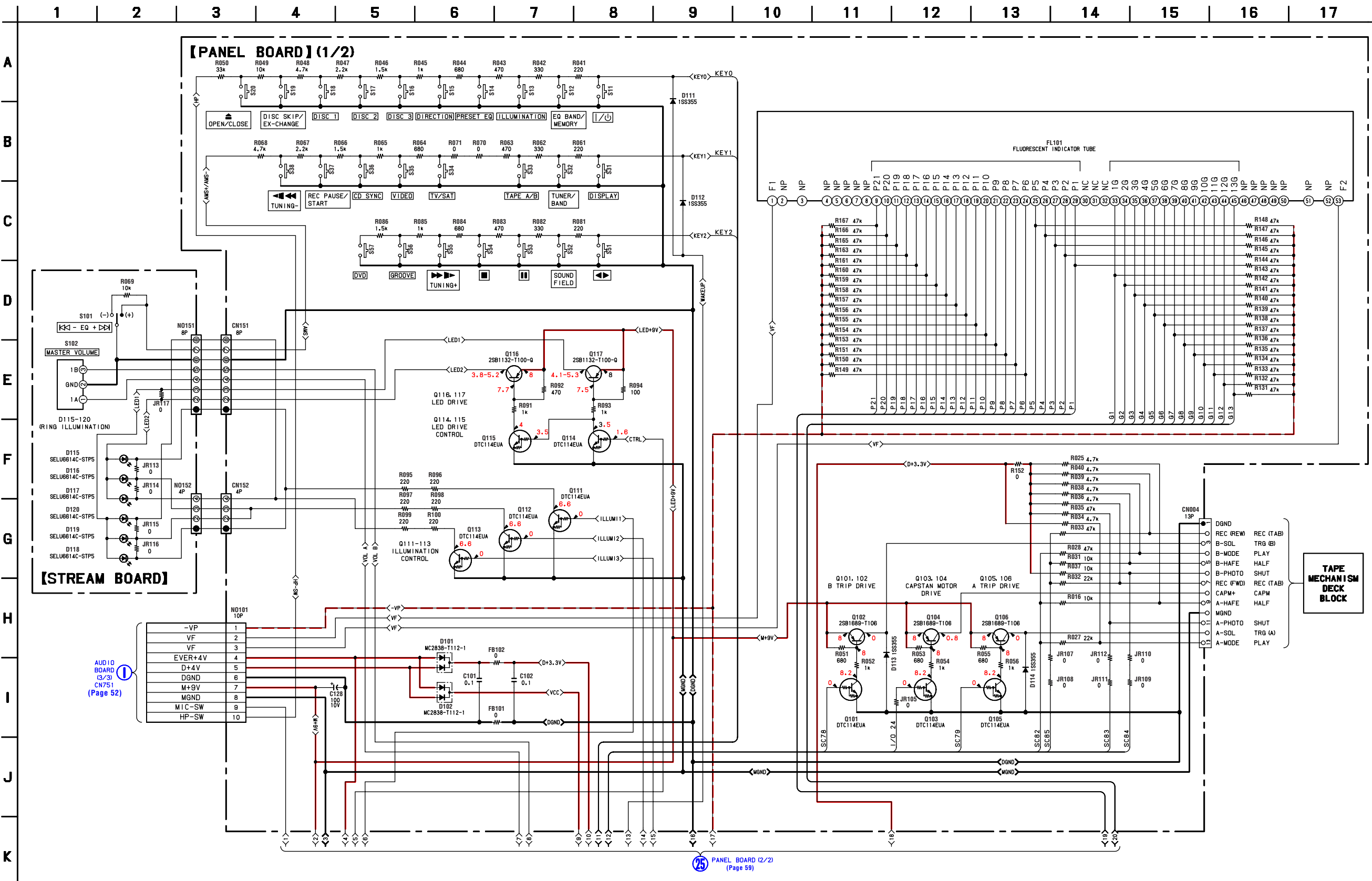
7-21. SCHEMATIC DIAGRAM — FRONT AMP SECTION —



7-22. PRINTED WIRING BOARDS — PANEL SECTION — • Refer to page 40 for Circuit Boards Location.  : Uses unleaded solder.



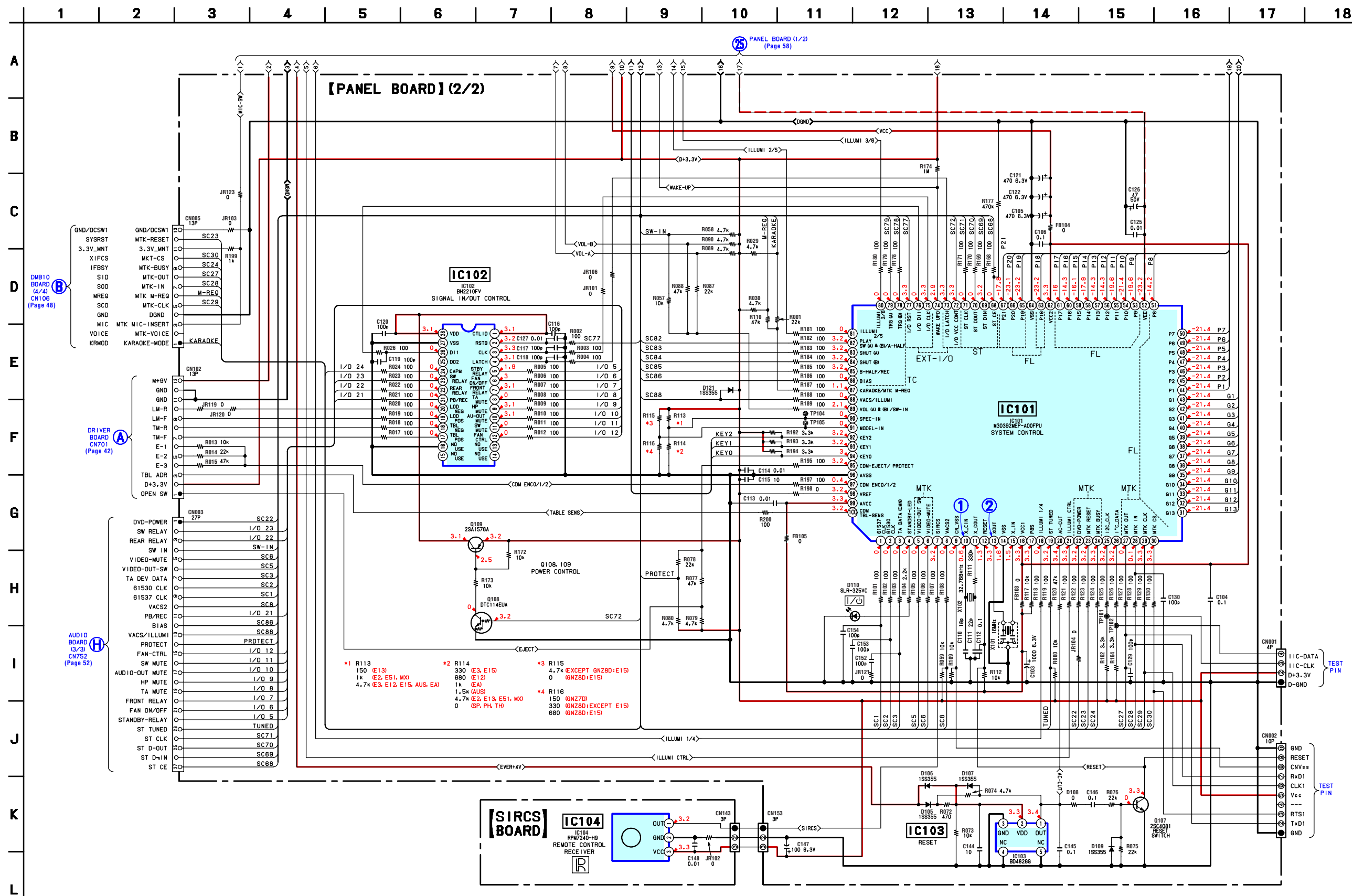
7-23. SCHEMATIC DIAGRAM — PANEL SECTION (1/2) —



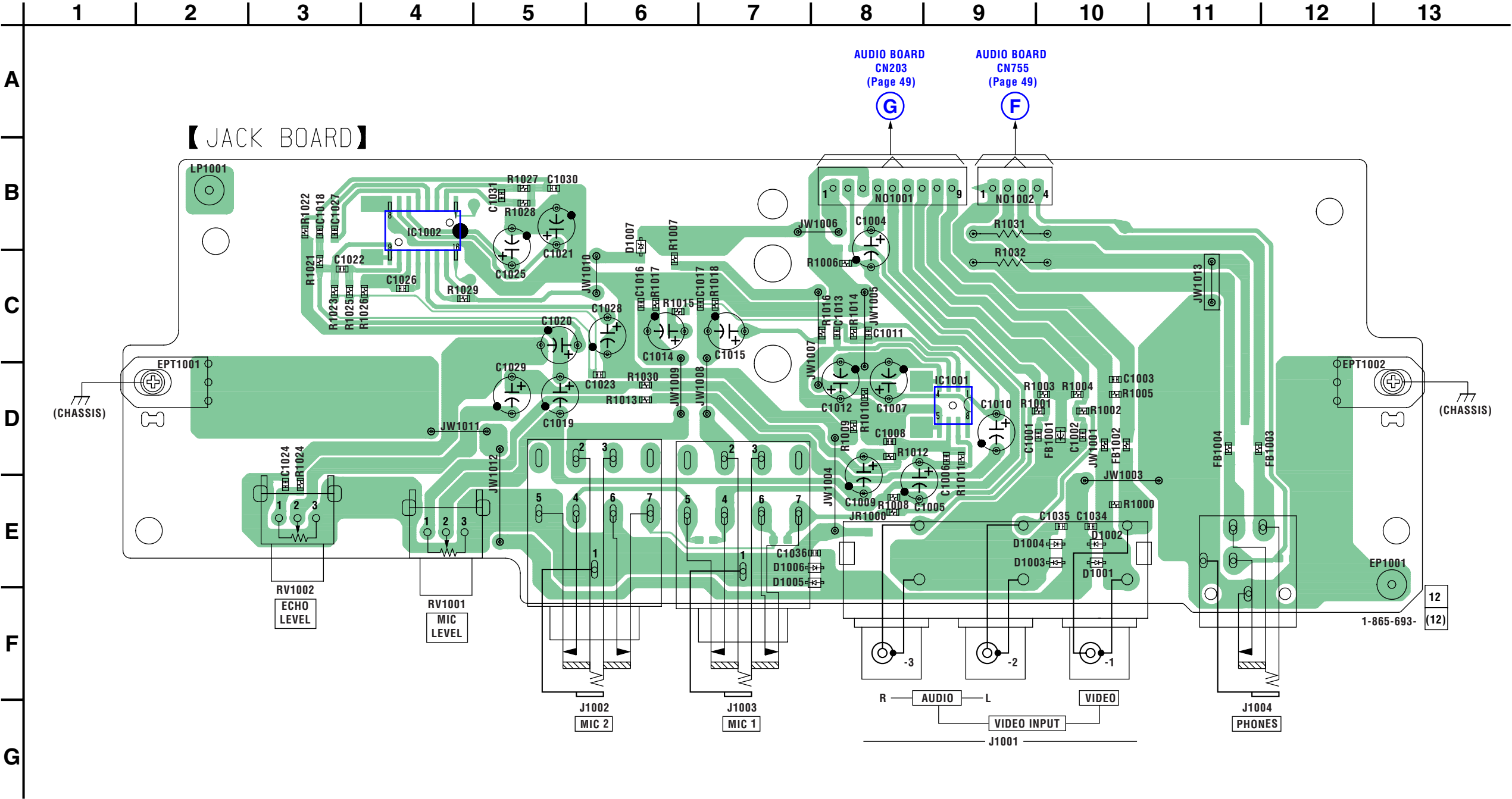
7-24. SCHEMATIC DIAGRAM — PANEL SECTION (2/2) —

- See page 69 for waveforms.

- See page 28, 29 for IC Pin Function Description.



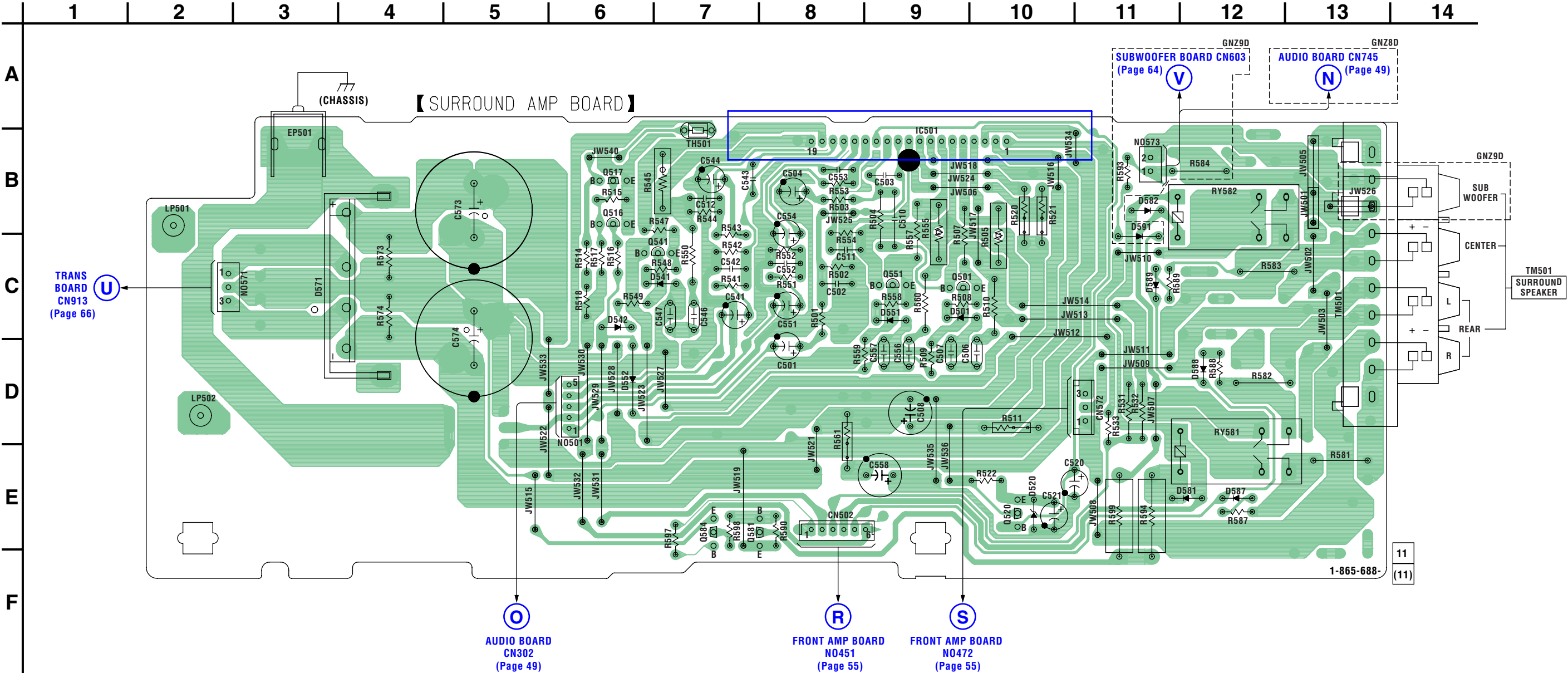
7-25. PRINTED WIRING BOARD — JACK SECTION — • Refer to page 40 for Circuit Boards Location.  : Uses unleaded solder.



• Semiconductor Location

Ref. No.	Location
D1001	E-10
D1002	E-10
D1003	E-10
D1004	E-10
D1005	E-7
D1006	E-7
D1007	B-6
IC1001	D-9
IC1002	B-4

7-27. PRINTED WIRING BOARD — SURROUND AMP SECTION — (HCD-GNZ8D/GNZ9D) • Refer to page 40 for Circuit Boards Location.  : Uses unleaded solder.



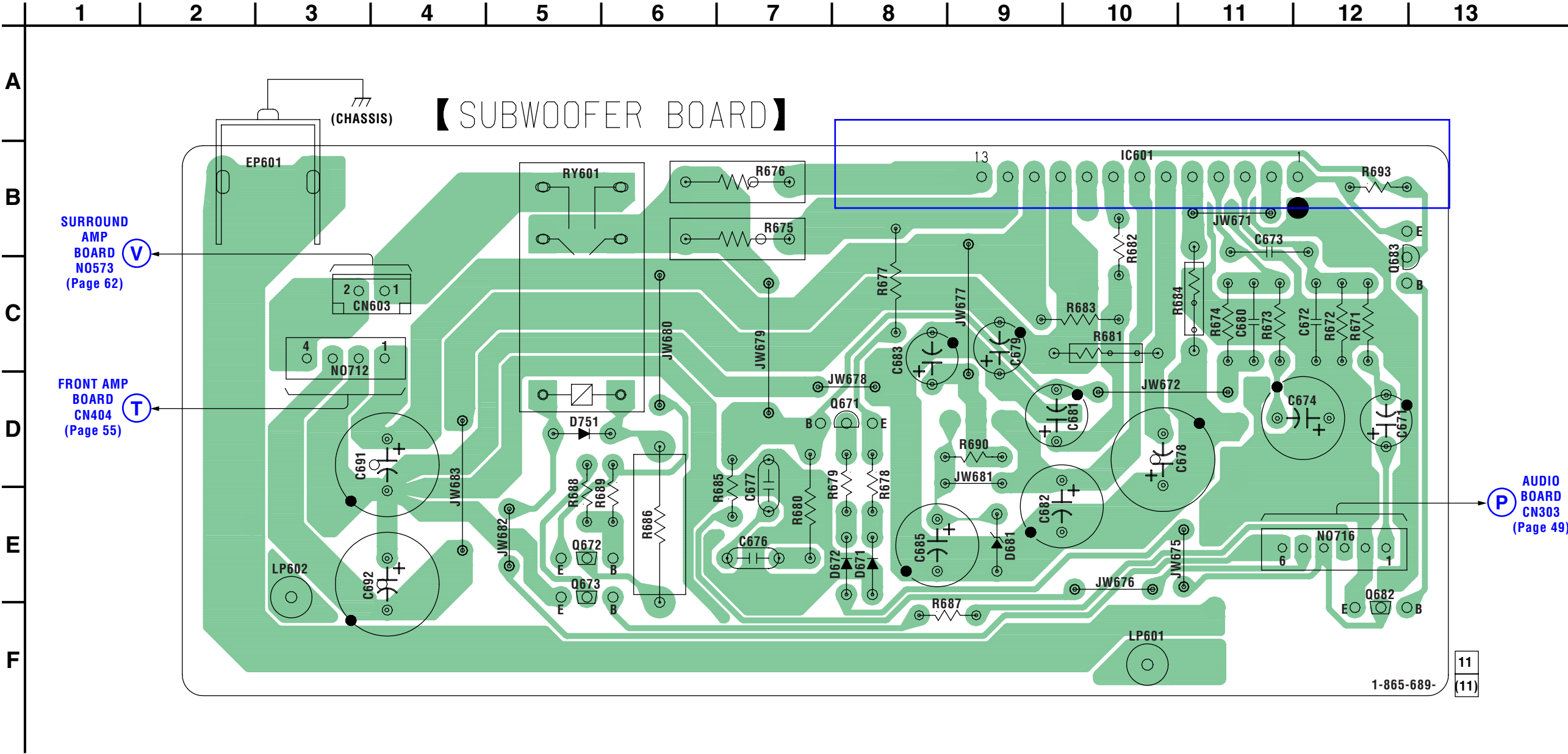
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D501	C-9	D591	B-11
D520	E-10		
D541	C-7	IC501	B-9
D542	C-6		
D551	C-9	Q501	C-9
D552	D-6	Q516	B-6
D571	C-3	Q517	B-6
D581	E-12	Q520	E-10
D582	B-11	Q541	C-7
D587	E-12	Q551	C-9
D588	D-12	Q581	E-7
D589	C-11	Q584	E-7

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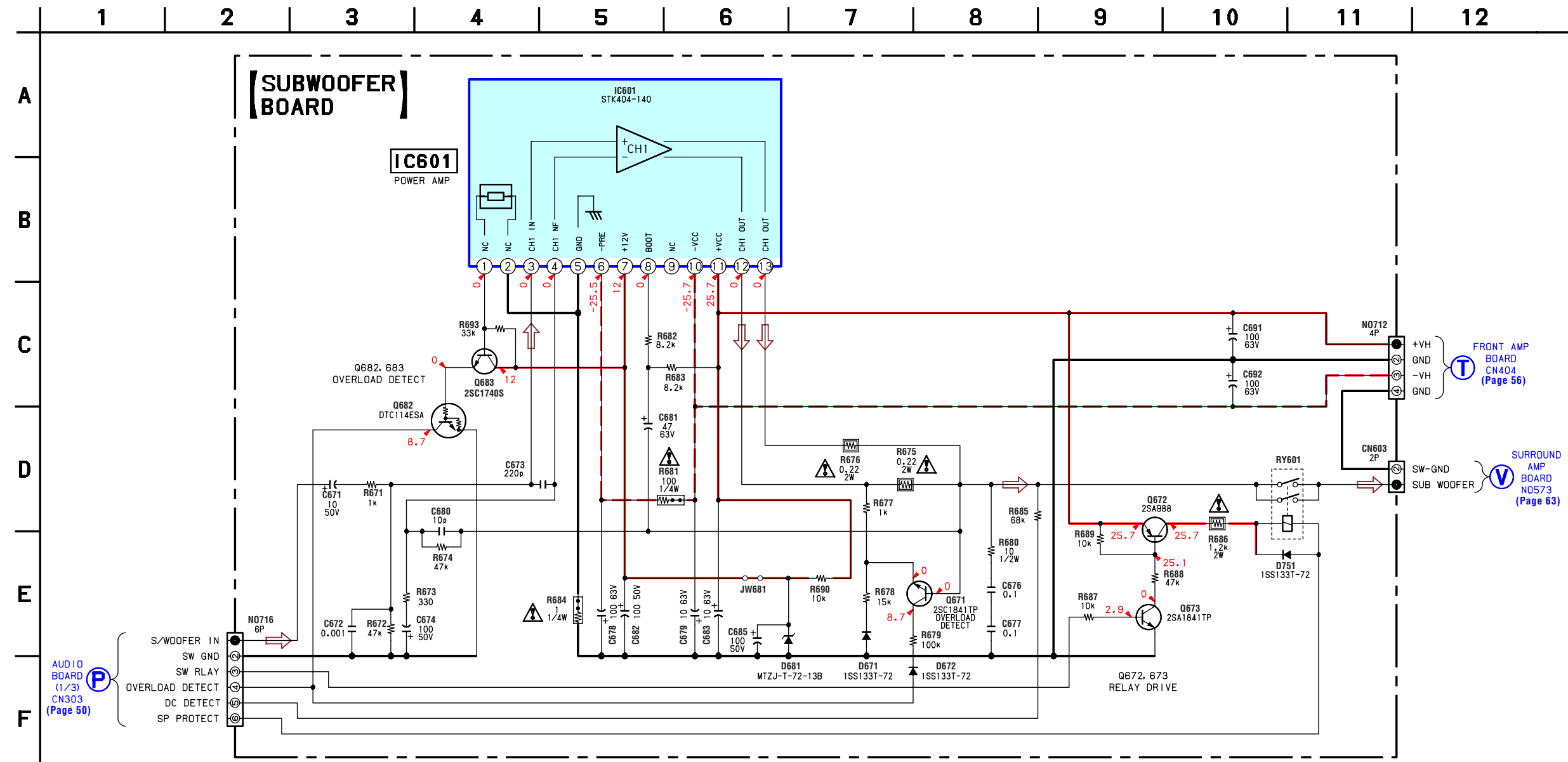
7-29. PRINTED WIRING BOARD — SUBWOOFER SECTION — (HCD-GNZ9D) • Refer to page 40 for Circuit Boards Location.  : Uses unleaded solder.



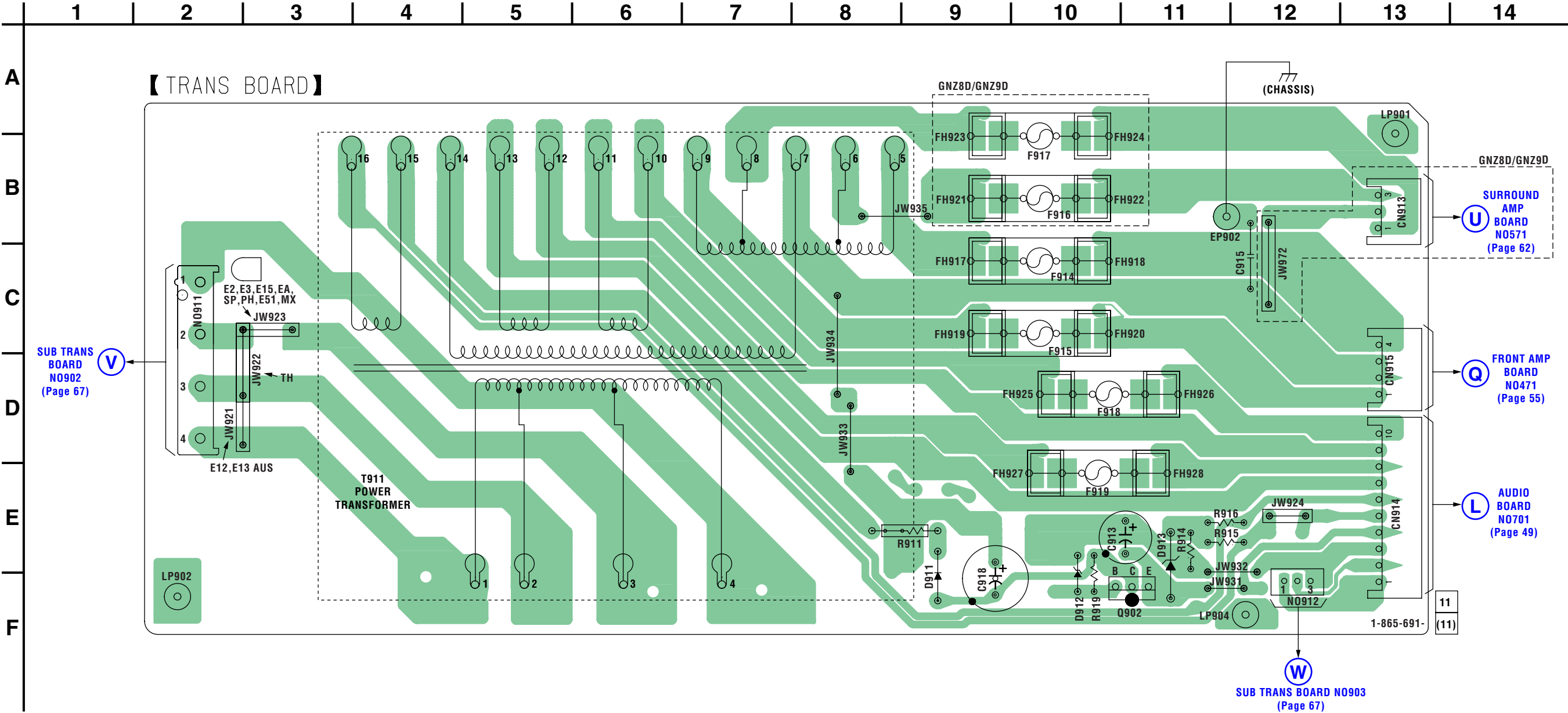
• Semiconductor Location

Ref. No.	Location
D671	E-8
D672	E-8
D681	E-9
D751	D-5
IC601	B-10
Q671	D-8
Q672	E-5
Q673	E-5
Q682	E-12
Q683	C-12

7-30. SCHEMATIC DIAGRAM — SUBWOOFER SECTION — (HCD-GNZ9D)



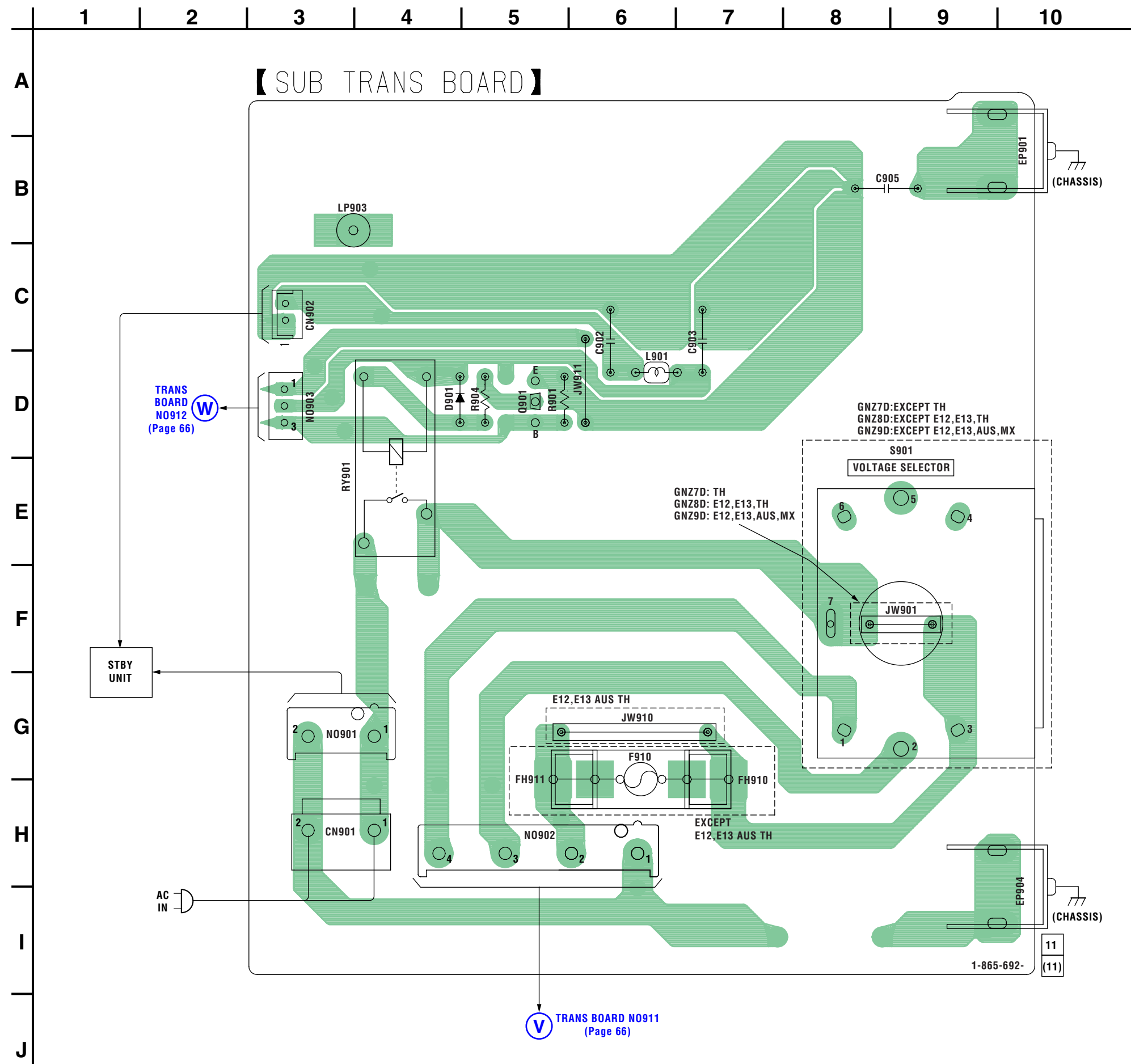
7-31. PRINTED WIRING BOARD — TRANS SECTION — • Refer to page 40 for Circuit Boards Location.  : Uses unleaded solder.



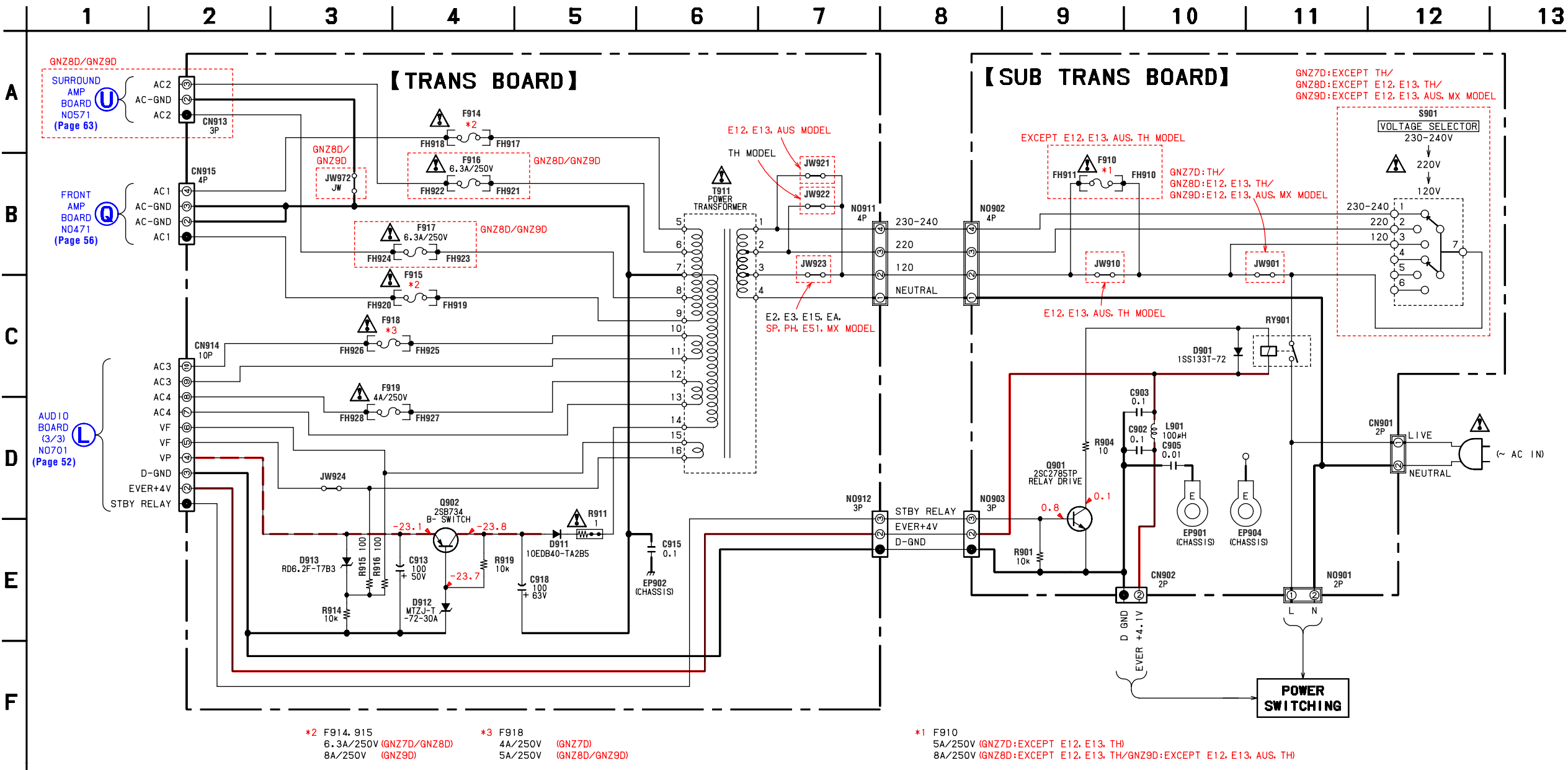
7-32. PRINTED WIRING BOARD — SUB TRANS SECTION —

• Refer to page 40 for Circuit Boards Location.

LF : Uses unleaded solder.

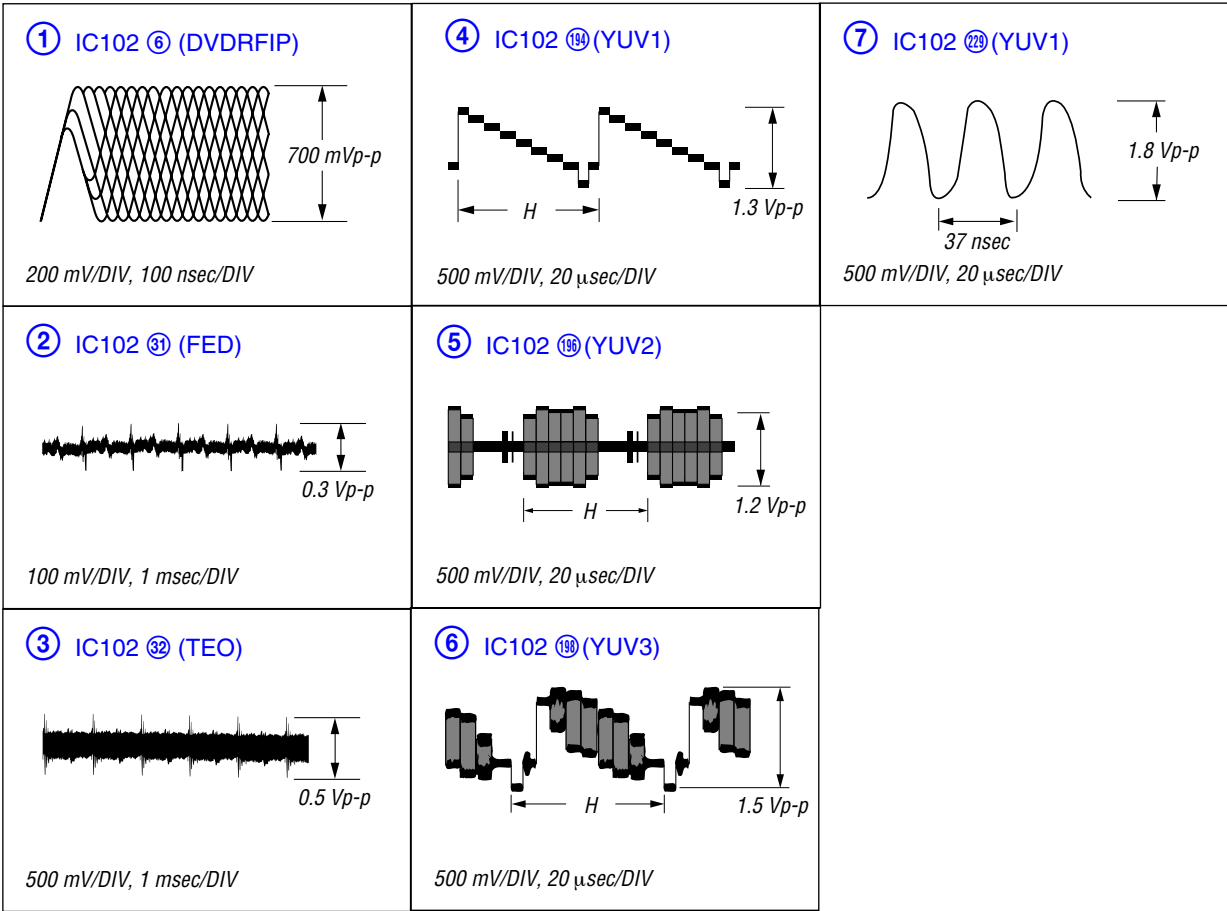


7-33. SCHEMATIC DIAGRAM — POWER SECTION —

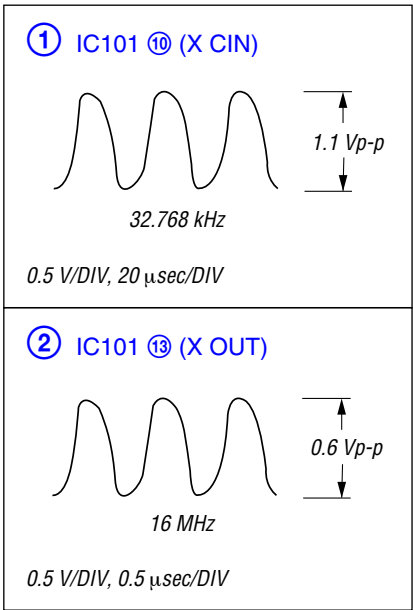


• Waveforms

– DMB10 BOARD –



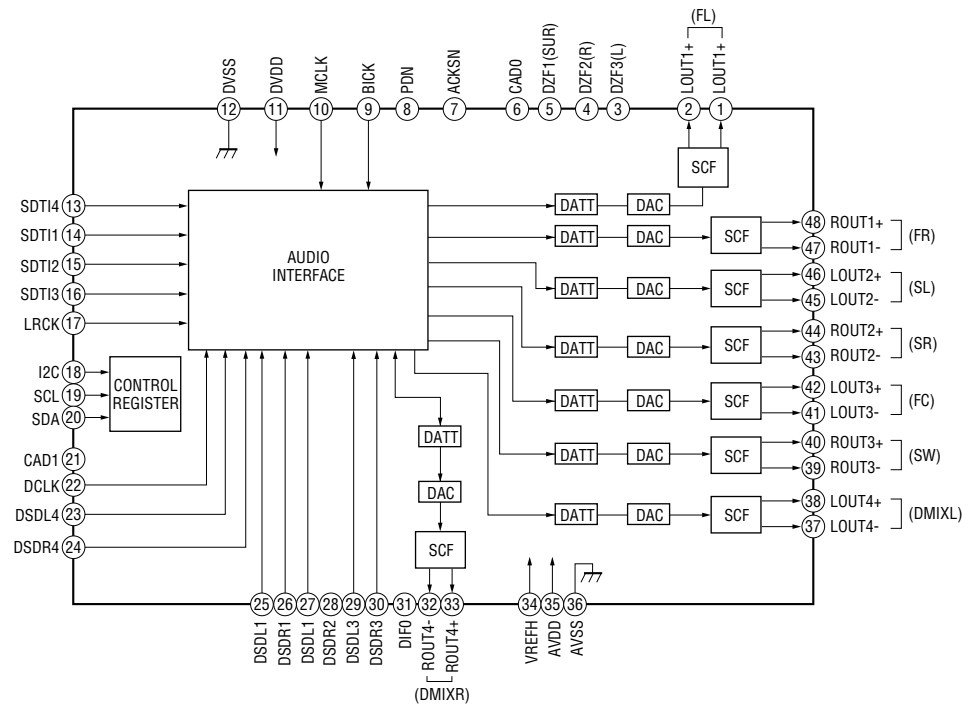
– PANEL BOARD –



• IC Block Diagram

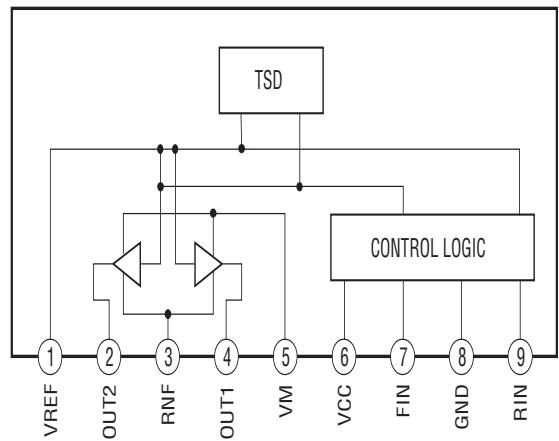
– DMB10 BOARD (1/4) –

IC301 AK4358VQ-L



– DRIVER BOARD –

IC701 BA6956AN
IC712 BA6956AN



SECTION 8 EXPLODED VIEWS

NOTE:

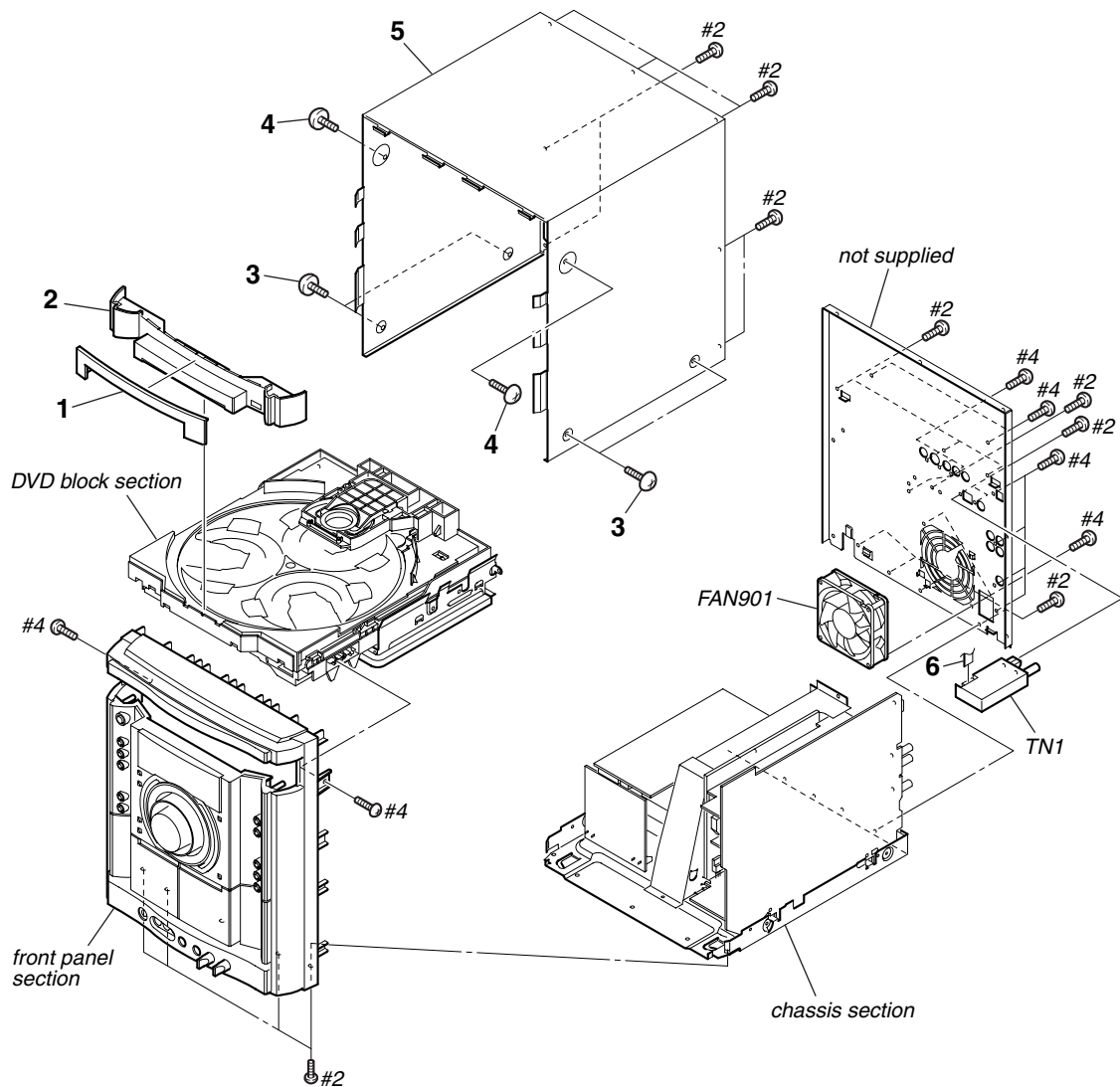
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference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

• Abbreviation

E2 : 120 V AC area in E model
 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
 E51 : Chilean and Peruvian model
 AUS : Australian model
 EA : Saudi Arabia model
 PH : Philippine model
 SP : Singapore model
 MX : Mexican model
 TH : Thai model

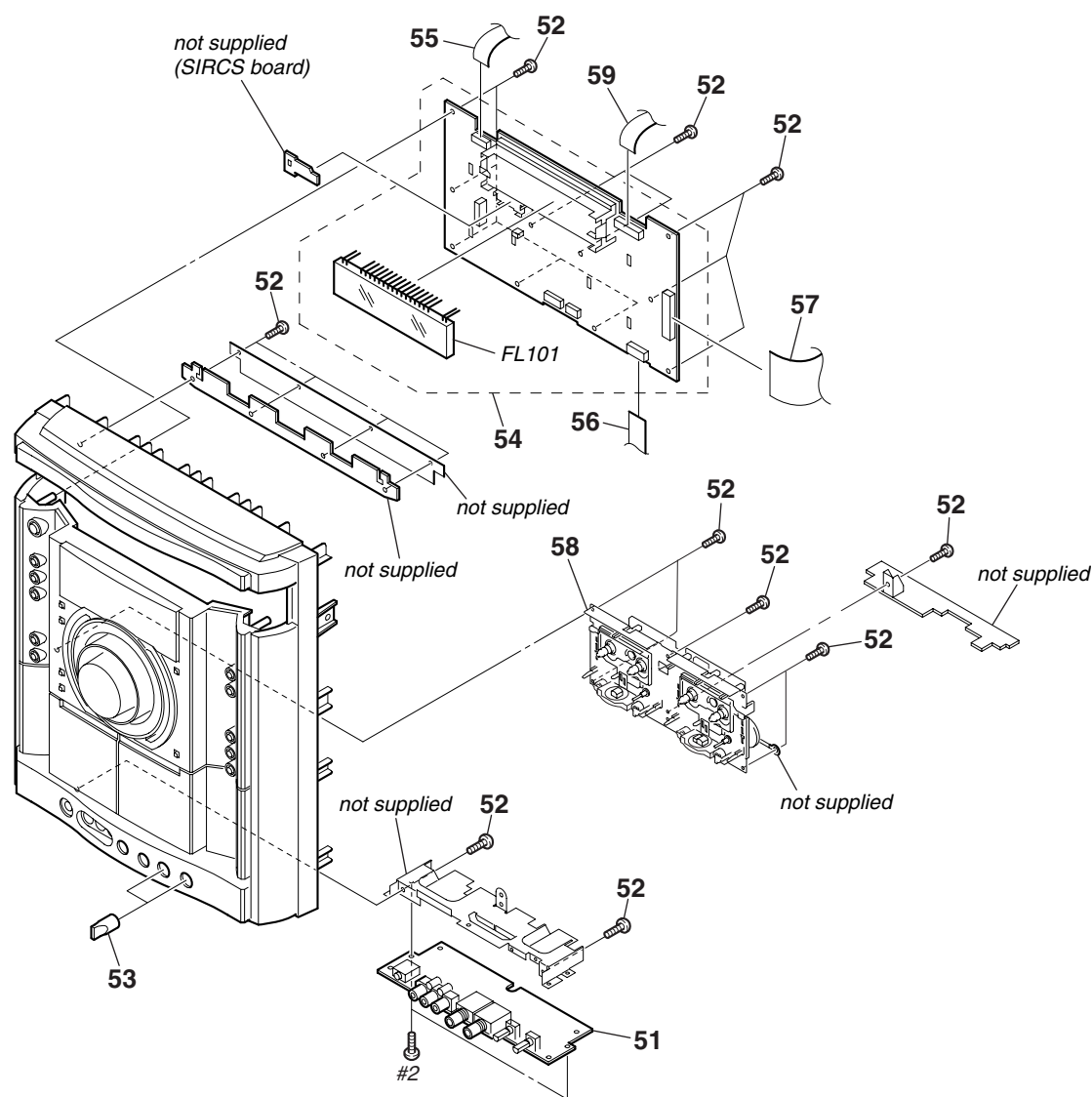
The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety. Replace only with part number specified.

8-1. MAIN SECTION



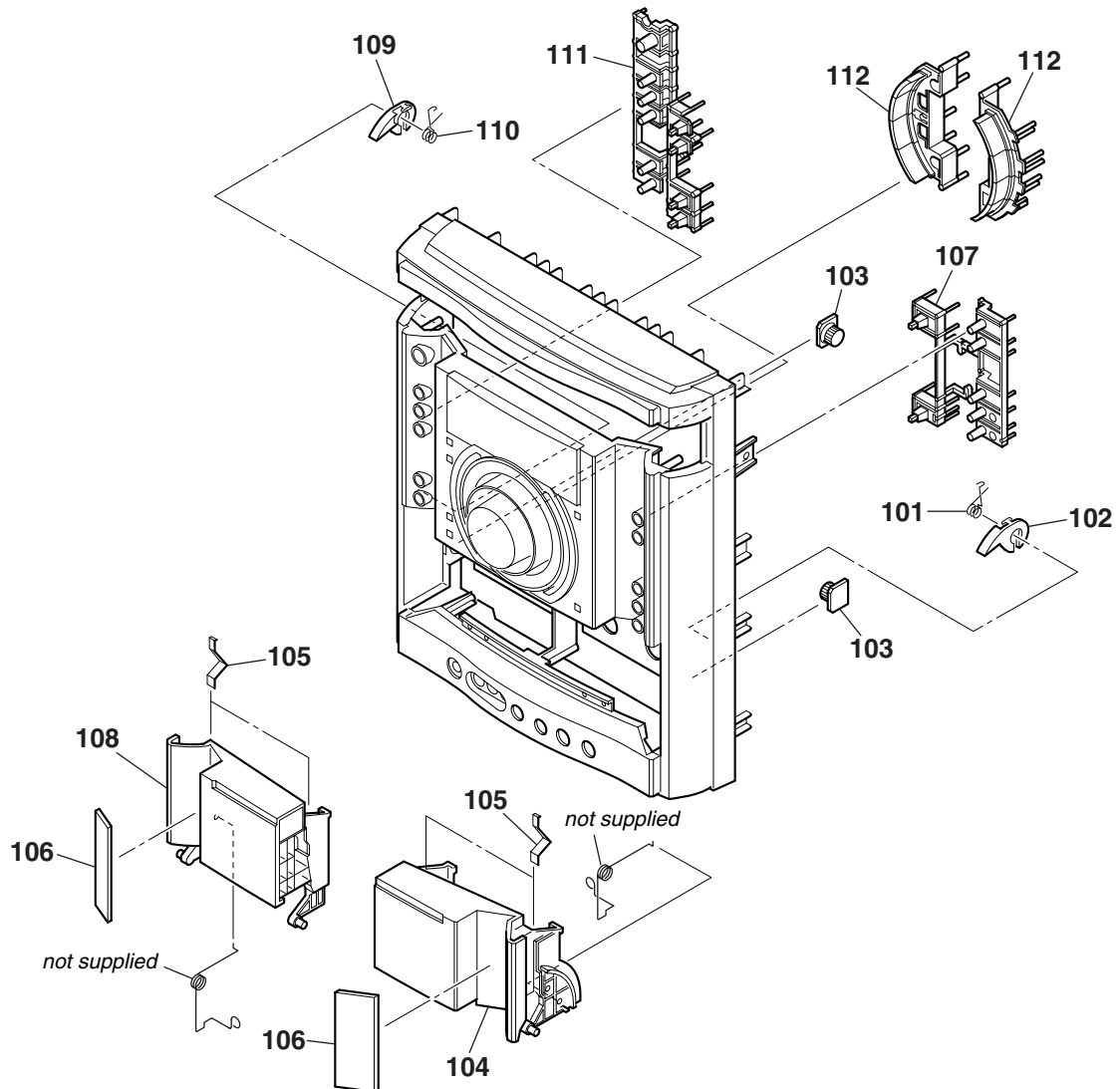
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	2-582-718-01	ESCUTCHEON (LOADING) (GNZ8D/GNZ9D:EXCEPT E51,E2,MX)		3	3-363-099-02	SCREW (CASE 3 TP2)	
1	2-582-718-11	ESCUTCHEON (LOADING) (GNZ9D:E51,E2,MX)		4	3-363-099-32	SCREW (CASE 3 TP2)	
1	2-582-718-21	ESCUTCHEON (LOADING) (GNZ7D:E13)		5	4-248-760-41	CASE, CABINET STEEL	
1	2-582-718-31	ESCUTCHEON (LOADING) (GNZ7D:EXCEPT E13)		6	1-828-956-11	WIRE (FLAT TYPE) (9 CORE)	
2	2-582-709-01	PANEL, LOADING (GNZ9D:EXCEPT E2,E51,MX)		FAN901	1-763-072-11	FAN, DC	
2	2-582-709-11	PANEL, LOADING (GNZ8D)		TN1	1-693-671-11	TUNER (TM-10E)	
2	2-582-709-21	PANEL, LOADING (GNZ7D:EXCEPT E2)		#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
2	2-582-709-31	PANEL, LOADING (GNZ9D:E2,E51,MX)		#4	7-685-647-79	SCREW +BVTP 3X10 TYPE2 TT (B)	
2	2-582-709-41	PANEL, LOADING (GNZ7D:E2)					

8-2. FRONT PANEL SECTION (1)



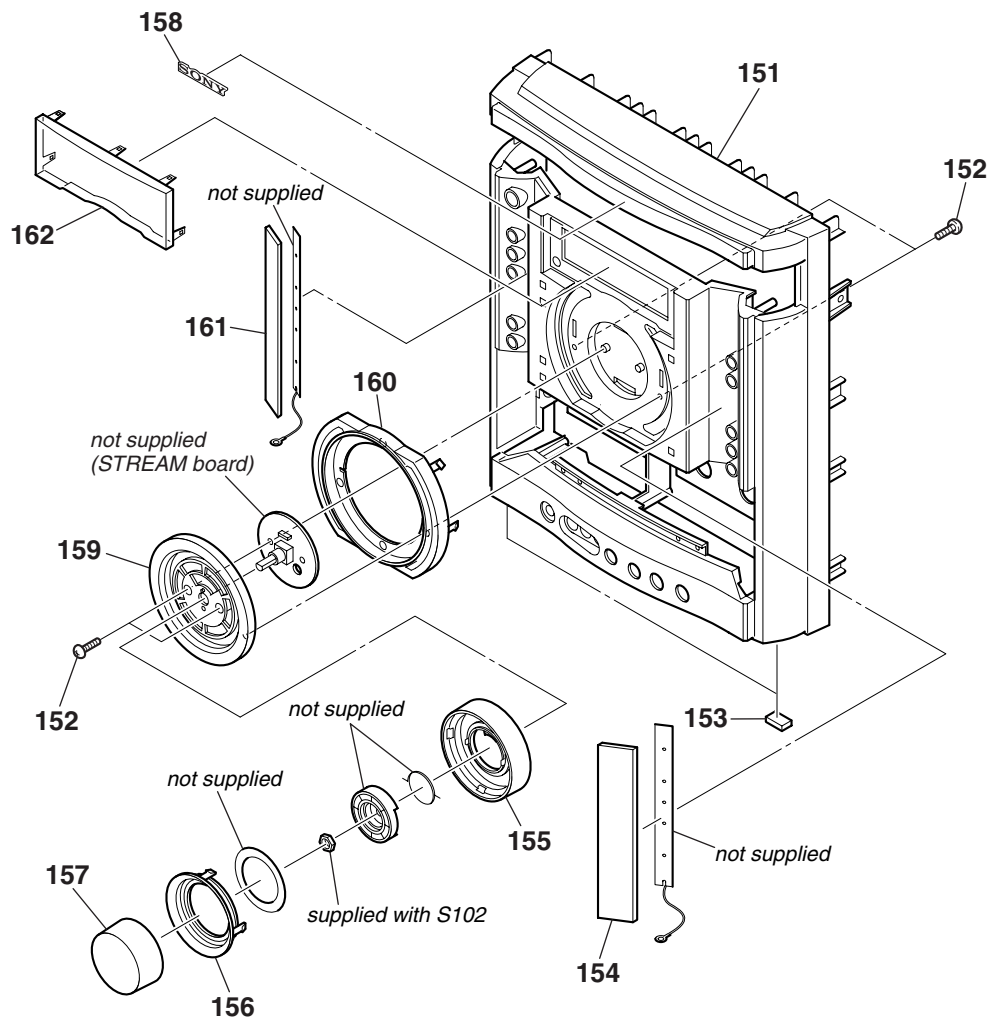
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	A-1095-805-A	JACK BOARD, COMPLETE (EXCEPT TH)		56	1-828-971-11	WIRE (FLAT TYPE) (13 CORE)	
51	A-1111-503-A	JACK BOARD, COMPLETE (TH)		57	1-829-041-11	WIRE (FLAT TYPE) (27 CORE)	
52	3-087-053-01	+BVTP 2.6 (3CR)		58	1-797-246-11	DECK, MECHANISM	
53	4-238-628-12	KNOB (MIC)		59	1-828-332-11	WIRE (FLAT TYPE) (13 CORE)	
54	A-1095-804-A	PANEL BOARD, COMPLETE (EXCEPT TH)		FL101	1-519-811-11	INDICATOR TUBE, FLUORESCENT	
54	A-1111-502-A	PANEL BOARD, COMPLETE (TH)		#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
55	1-828-977-11	WIRE (FLAT TYPE) (13 CORE)					

8-3. FRONT PANEL SECTION (2)



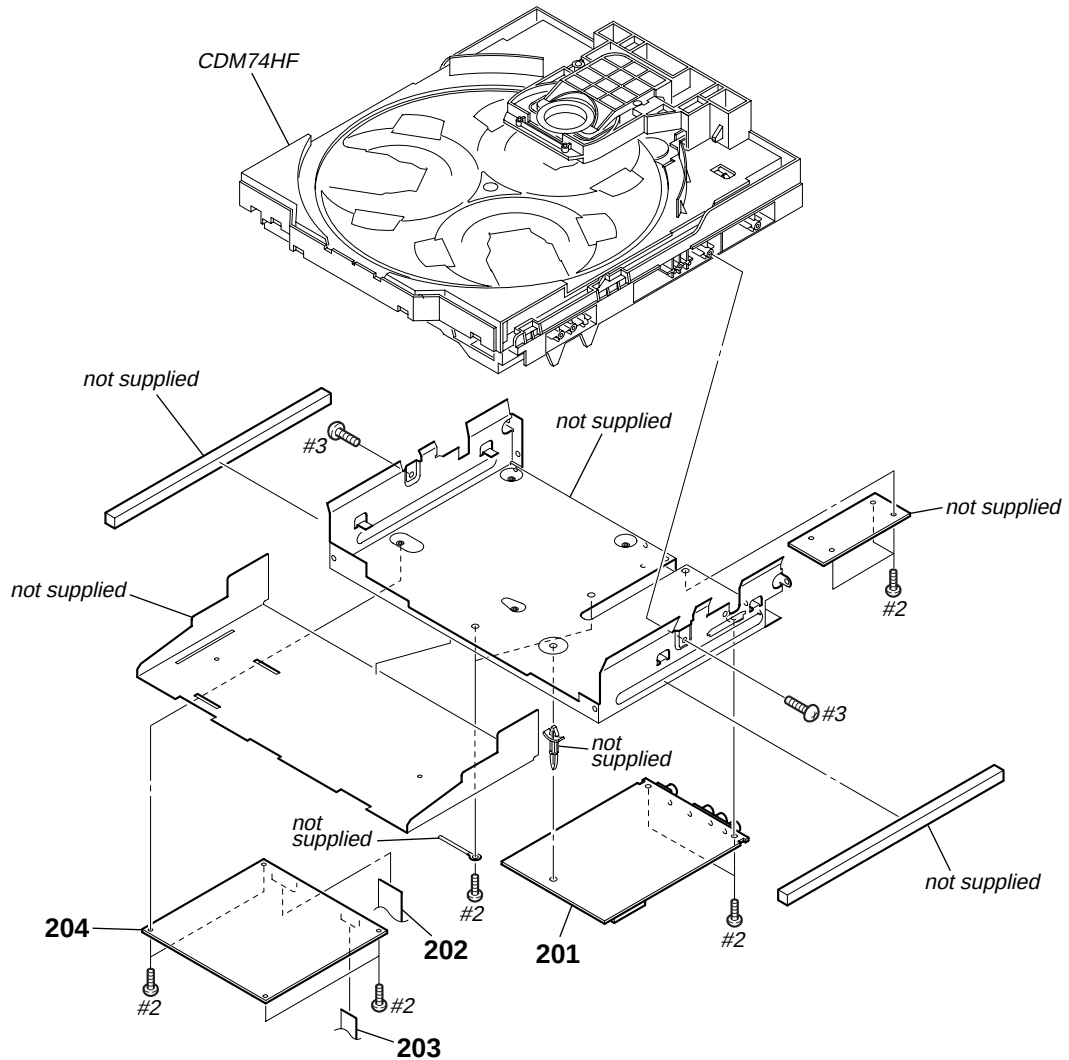
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	4-231-836-01	SPRING (HEART CAM-A)		107	2-582-711-01	BUTTON (DISC)	
102	4-231-824-01	CAM (A), HEART		108	2-582-707-01	LID (A), CASSETTE	
103	4-224-104-41	DAMPER		109	4-231-825-01	CAM (B), HEART	
104	2-582-708-01	LID (B), CASSETTE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

8-4. FRONT PANEL SECTION (3)



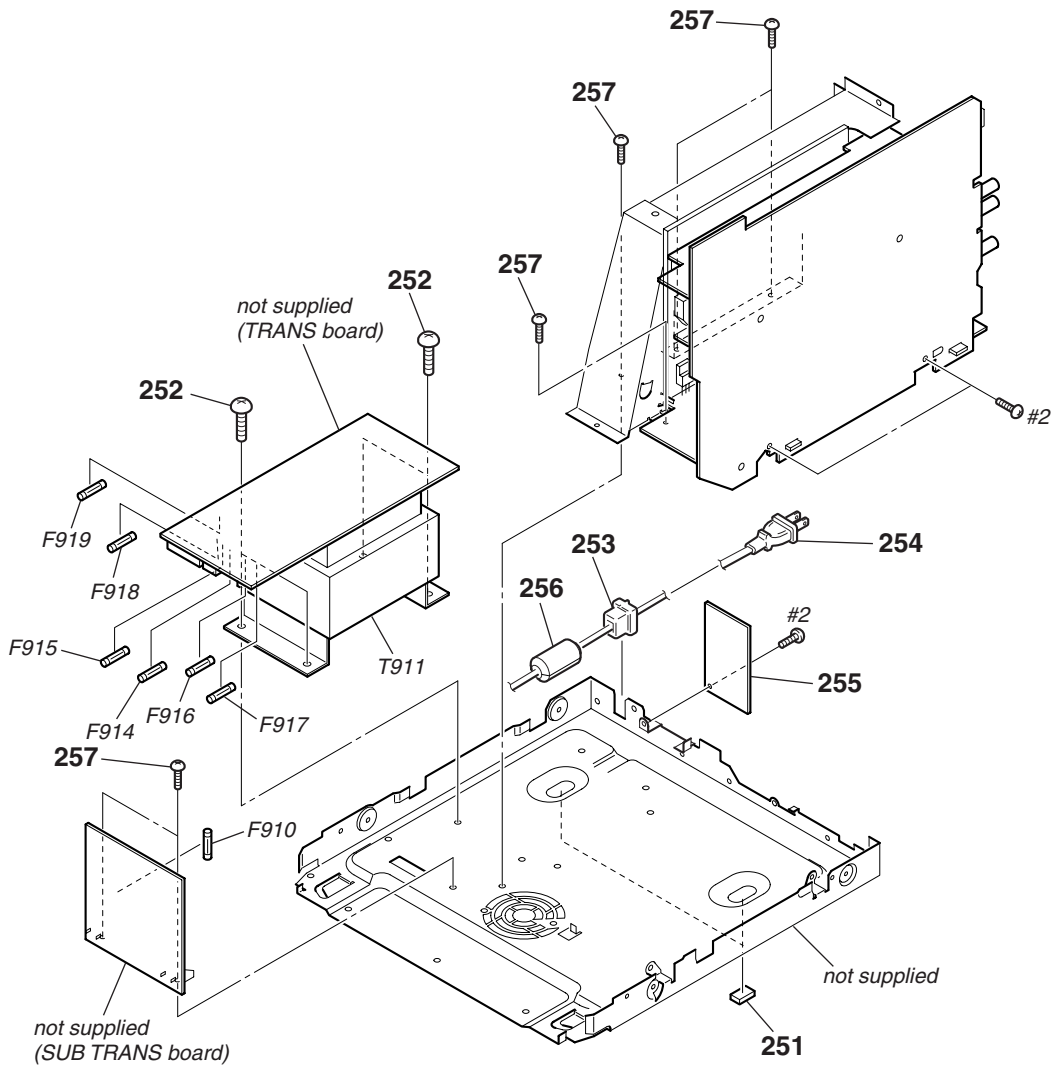
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	2-582-706-01	PANEL, FRONT		157	2-590-671-01	KNOB (VOL) (EXCEPT MX)	
152	3-087-053-01	+BVTP 2.6 (3CR)		158	3-038-018-01	EMBLEM, SONY	
153	4-233-980-01	RUBBER, FOOT		159	2-582-716-01	ESCUTCHEON (JOG)	
154	2-582-719-01	ESCUTCHEON (PANEL)		160	2-582-717-01	ORNAMENT (PLAY)	
155	2-582-715-01	RING (JOG)		161	2-582-719-11	ESCUTCHEON (PANEL)	
156	2-582-714-01	INDICATOR (JOG)		162	2-582-721-01	WINDOW, INDICATION	
157	2-582-713-01	KNOB (VOL) (MX)					

8-5. DVD BLOCK SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	A-1095-819-A	VIDEO BOARD, COMPLETE (EXCEPT TH)		204	A-1095-790-A	DMB10 BOARD, COMPLETE	
201	A-1111-533-A	VIDEO BOARD, COMPLETE (TH)				(GNZ7D:E3,E12,E13,E15)	
202	1-828-344-11	WIRE (FLAT TYPE) (15 CORE) (GNZ8D/GNZ9D)		204	A-1095-791-A	DMB10 BOARD, COMPLETE (GNZ7D:E2)	
202	1-828-354-11	WIRE (FLAT TYPE) (17 CORE) (GNZ7D)		204	A-1111-492-A	DMB10 BOARD, COMPLETE (GNZ9D:TH)	
203	1-828-330-11	WIRE (FLAT TYPE) (13 CORE)		204	A-1111-493-A	DMB10 BOARD, COMPLETE (GNZ8D:TH)	
				204	A-1111-494-A	DMB10 BOARD, COMPLETE (GNZ7D:TH)	
204	A-1095-784-A	DMB10 BOARD, COMPLETE (GNZ9D:SP,PH)		204	A-1134-215-A	DMB10 BOARD, COMPLETE (GNZ9D:AUS,EA)	
204	A-1095-785-A	DMB10 BOARD, COMPLETE		204	A-1134-216-A	DMB10 BOARD, COMPLETE (GNZ8D:EA)	
		(GNZ9D:E3,E12,E13,E15)		204	A-1134-217-A	DMB10 BOARD, COMPLETE (GNZ7D:EA)	
204	A-1095-786-A	DMB10 BOARD, COMPLETE (GNZ9D:E2,E51,MX)		#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
204	A-1095-787-A	DMB10 BOARD, COMPLETE (GNZ8D:SP,PH)		#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT (B)	
204	A-1095-788-A	DMB10 BOARD, COMPLETE					
		(GNZ8D:E3,E12,E13,E15)					
204	A-1095-789-A	DMB10 BOARD, COMPLETE (GNZ7D:SP,PH)					

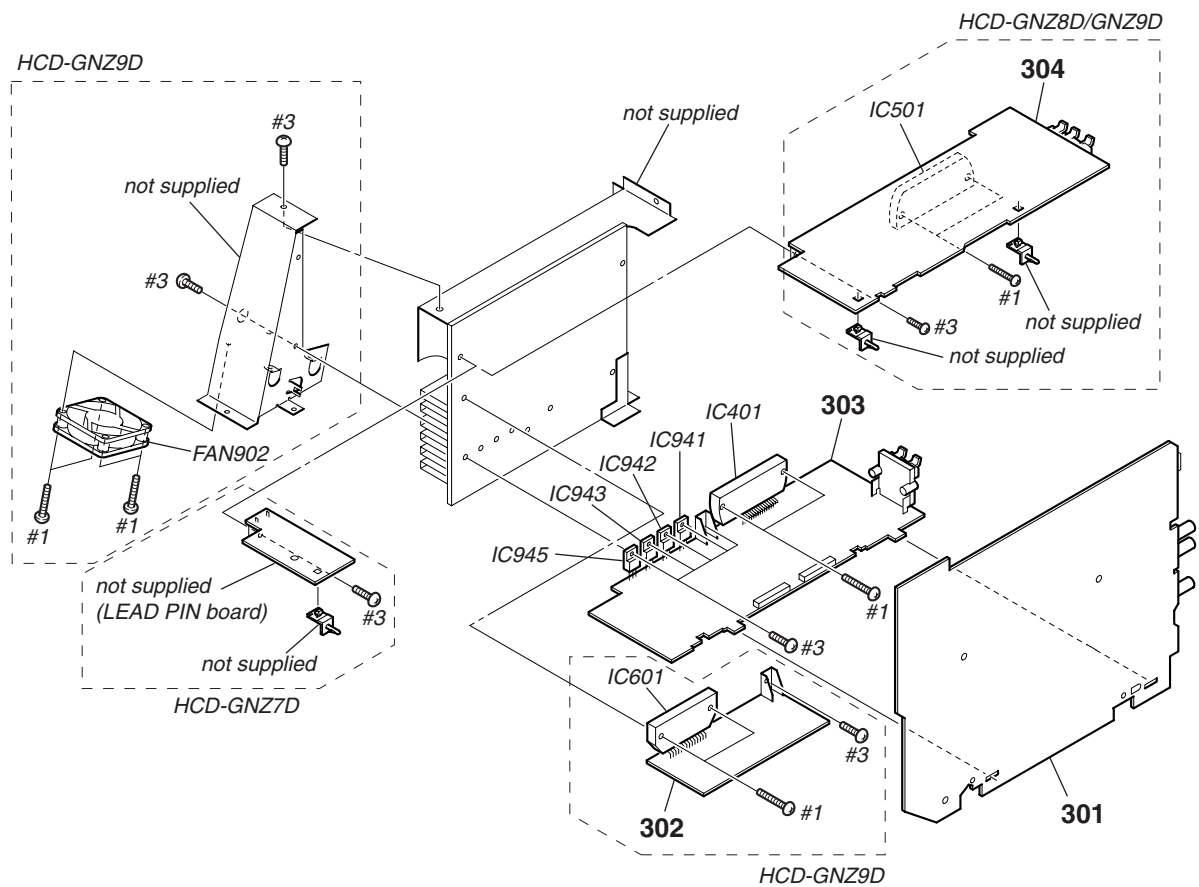
8-6. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
251	4-233-980-01	RUBBER, FOOT	
252	4-900-386-01	SCREW	
253	3-703-244-00	BUSHING (2104), CORD	
		(EXCEPT E2,E3,E15,MX)	
* 253	3-703-571-12	BUSHING (S) (4516), CORD (E2,E3,E15,MX)	
△ 254	1-696-847-22	CORD, POWER (AUS)	
△ 254	1-777-071-23	CORD, POWER (E12,E13,E51,EA,SP,PH)	
△ 254	1-824-818-21	CORD, POWER (WITH CONNECTOR) (TH)	
△ 254	1-827-226-11	CORD, POWER (E2,E3,E15,MX)	
△ 255	1-468-737-21	POWER, SWITCHING	
256	1-500-386-11	FILTER, CLAMP (FERRITE CORE) (AUS,EA)	
257	2-630-050-01	+BVT 3X6 (SUMITITE)	
△ F910	1-532-505-32	FUSE (5A/250V)	
		(GNZ7D:EXCEPT E12,E13,TH)	
△ F910	1-533-949-33	FUSE, CYLINDRICAL (TIME LUG) (8A/250V)	
		(GNZ8D:EXCEPT E12,E13,TH/	
		GNZ9D:EXCEPT E12,E13,AUS,TH)	
△ F914	1-532-506-33	FUSE (6.3A/250V) (GNZ7D/GNZ8D)	

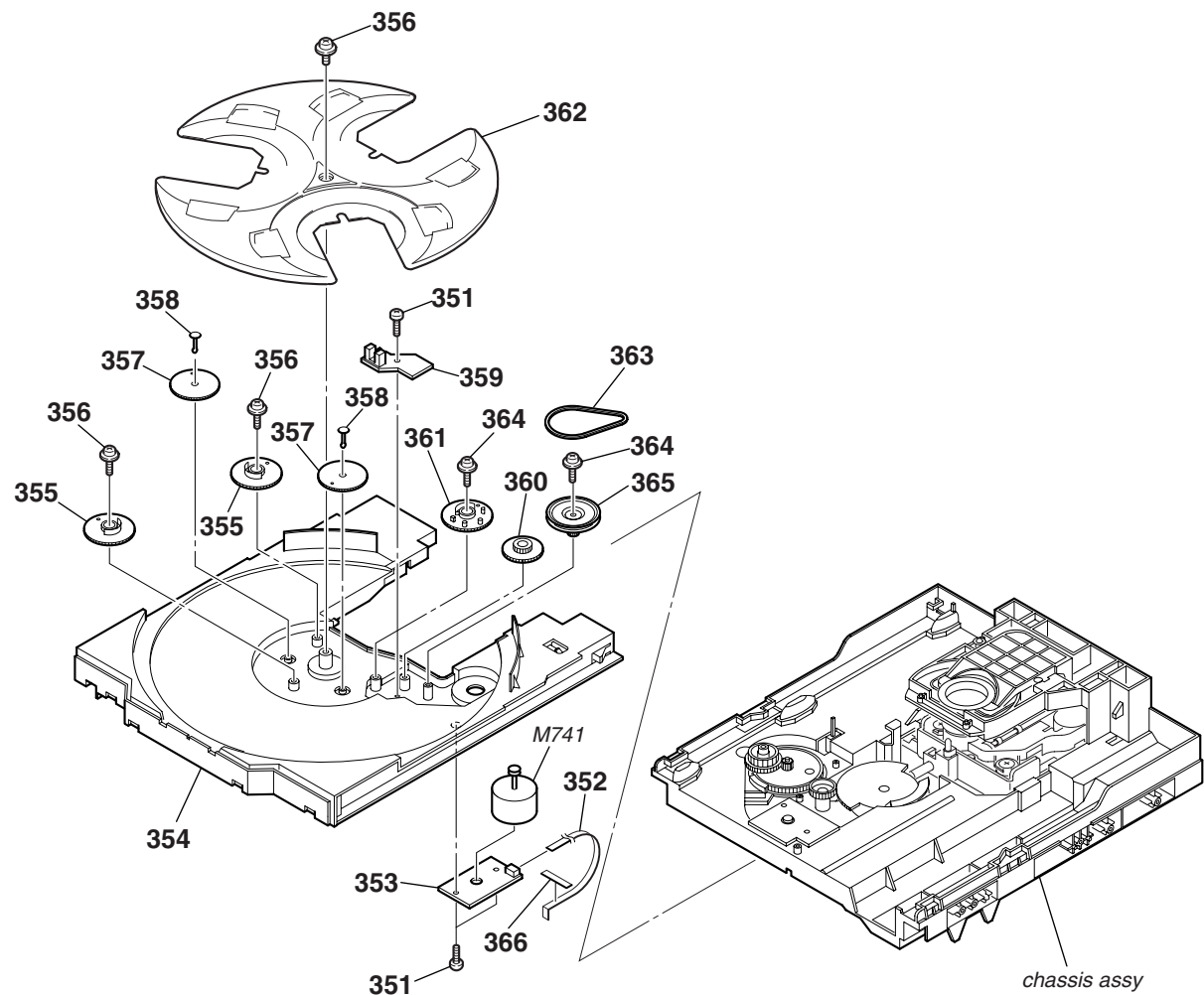
Ref. No.	Part No.	Description	Remark
△ F914	1-533-949-33	FUSE, CYLINDRICAL (TIME LUG) (8A/250V)	
		(GNZ9D)	
△ F915	1-532-506-33	FUSE (6.3A/250V) (GNZ7D/GNZ8D)	
△ F915	1-533-949-33	FUSE, CYLINDRICAL (TIME LUG) (8A/250V)	
		(GNZ9D)	
△ F916	1-532-506-33	FUSE (6.3A/250V) (GNZ8D/GNZ9D)	
△ F917	1-532-506-33	FUSE (6.3A/250V) (GNZ8D/GNZ9D)	
△ F918	1-532-504-33	FUSE (4A/250V) (GNZ7D)	
△ F918	1-532-505-33	FUSE (5A/250V) (GNZ8D/GNZ9D)	
△ F919	1-532-504-33	FUSE (4A/250V)	
△ T911	1-443-174-11	TRANSFORMER, POWER (GNZ7D:EXCEPT EA)	
△ T911	1-443-175-11	TRANSFORMER, POWER (GNZ7D:EA)	
△ T911	1-443-352-11	TRANSFORMER, POWER (GNZ8D:EXCEPT EA)	
△ T911	1-443-362-11	TRANSFORMER, POWER (GNZ8D:EA)	
△ T911	1-443-690-11	TRANSFORMER, POWER	
		(GNZ9D:EXCEPT EA,MX)	
△ T911	1-443-691-11	TRANSFORMER, POWER (GNZ9D:EA,MX)	
#2	7-685-871-01	SCREW +BVT 3X6 (S)	

8-7. AUDIO BOARD SECTION



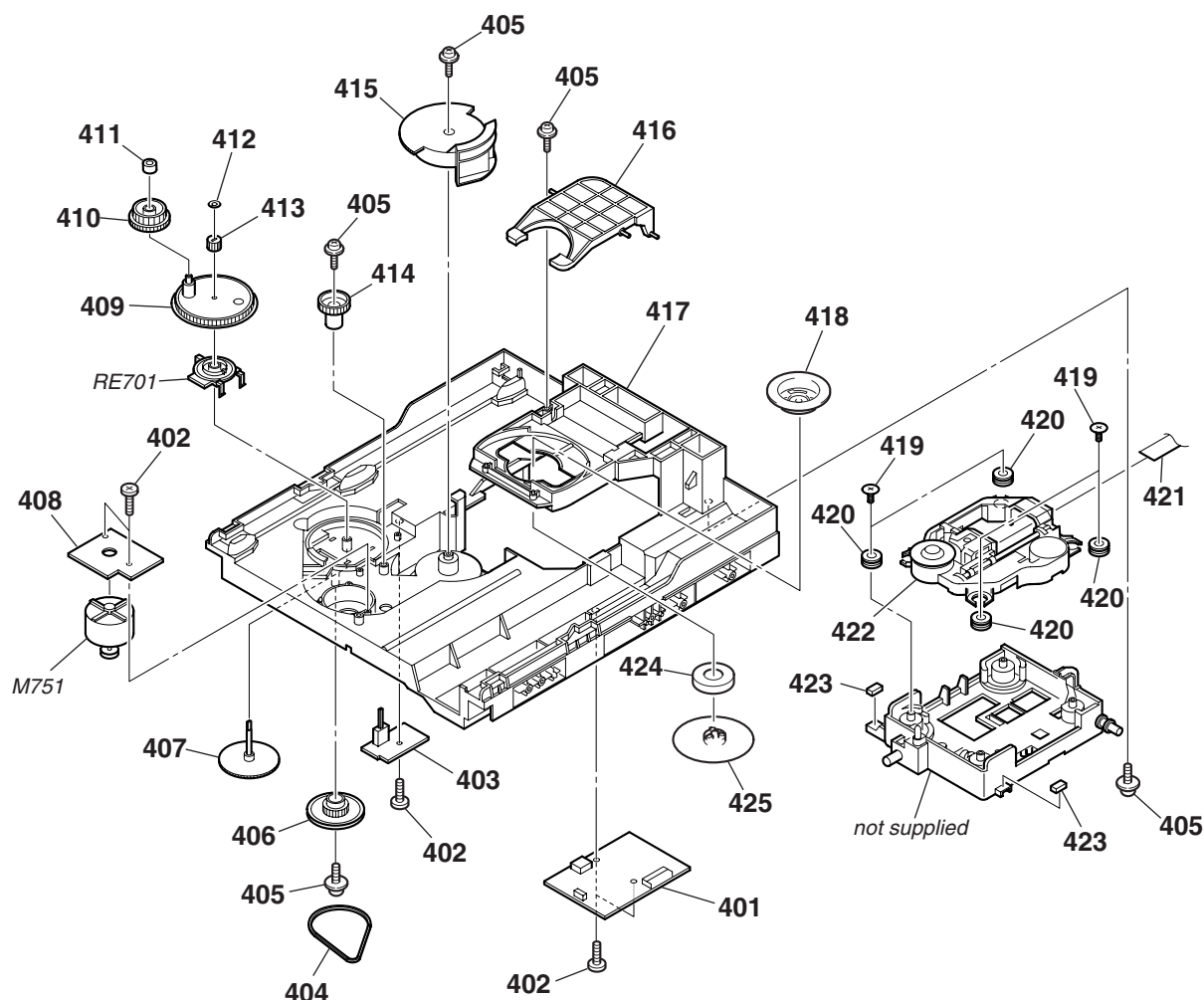
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	A-1095-768-A	AUDIO BOARD, COMPLETE (GNZ9D:EXCEPT E2,TH)		303	A-1111-485-A	FRONT AMP BOARD, COMPLETE (GNZ7D:TH)	
301	A-1095-769-A	AUDIO BOARD, COMPLETE (GNZ8D:EXCEPT TH)		304	A-1095-774-A	SURROUND AMP BOARD, COMPLETE (GNZ9D:EXCEPT TH)	
301	A-1095-770-A	AUDIO BOARD, COMPLETE (GNZ7D:EXCEPT E2,TH)		304	A-1095-775-A	SURROUND AMP BOARD, COMPLETE (GNZ8D:EXCEPT TH)	
301	A-1111-480-A	AUDIO BOARD, COMPLETE (GNZ9D:TH)		304	A-1111-486-A	SURROUND AMP BOARD, COMPLETE (GNZ9D:TH)	
301	A-1111-481-A	AUDIO BOARD, COMPLETE (GNZ8D:TH)		304	A-1111-487-A	SURROUND AMP BOARD, COMPLETE (GNZ8D:TH)	
301	A-1111-482-A	AUDIO BOARD, COMPLETE (GNZ7D:TH)					
301	A-1122-987-A	AUDIO BOARD, COMPLETE (GNZ9D:E2)		FAN902	1-787-336-11	FAN, DC (GNZ9D)	
301	A-1122-988-A	AUDIO BOARD, COMPLETE (GNZ7D:E2)		IC401	6-600-221-01	IC STK403-130 (GNZ9D)	
302	A-1095-778-A	SUBWOOFER BOARD, COMPLETE (GNZ9D:EXCEPT TH)		IC401	6-705-853-01	IC STK403-120 (GNZ7D/GNZ8D)	
302	A-1111-488-A	SUBWOOFER BOARD, COMPLETE (GNZ9D:TH)		IC501	6-707-960-01	IC STK433-270 (GNZ8D/GNZ9D)	
				IC601	6-600-182-01	IC STK404-140S (GNZ9D)	
303	A-1095-771-A	FRONT AMP BOARD, COMPLETE (GNZ9D:EXCEPT TH)		IC941	8-759-198-03	IC PQ09RF21J00H	
303	A-1095-772-A	FRONT AMP BOARD, COMPLETE (GNZ8D:EXCEPT TH)		IC942	8-759-701-59	IC NJM78M09FA	
303	A-1095-773-A	FRONT AMP BOARD, COMPLETE (GNZ7D:EXCEPT TH)		IC943	8-759-701-59	IC NJM78M09FA	
303	A-1111-483-A	FRONT AMP BOARD, COMPLETE (GNZ9D:TH)		IC945	6-703-546-01	IC TA7804LS	
303	A-1111-484-A	FRONT AMP BOARD, COMPLETE (GNZ8D:TH)		#1	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
				#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT (B)	

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	4-243-815-01	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-4723-963-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		416	2-541-918-01	LIFTER (H), LEVER	
402	4-218-253-52	SCREW (M2.6), +BTTP		417	4-243-817-41	CHASSIS	
403	1-687-669-12	SW BOARD		418	2-345-983-01	PULLEY B (310), CHUCKING	
404	4-244-034-01	BELT (LOADING)		419	3-087-599-01	INSULATOR SCREW	
405	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING		420	3-088-372-01	INSULATOR	
406	4-225-844-01	GEAR (LOADING A)		421	1-828-771-11	WIRE (FLAT TYPE) (24 CORE)	
407	4-224-613-01	GEAR (SHAFT)		△422	8-820-291-02	OPTICAL PICK-UP (KHM-310CAB/C2RP)	
408	1-687-133-12	MOTOR (LD) BOARD		423	4-250-098-11	CUSHION	
409	4-244-108-01	GEAR, SWING		424	4-251-923-01	YOKE (310)	
410	4-224-609-01	GEAR (LOADING C)		425	2-345-982-01	PULLEY A (310), CHUCKING	
411	4-224-608-01	COLLAR, SWING		M751	A-4736-655-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)					
414	4-224-606-01	GEAR (RV)					
415	4-243-818-01	GEAR (U/D)					

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.

• SEMICONDUCTORSIn 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

E2 : 120 V AC area in E model
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
E51 : Chilean and Peruvian model
AUS : Australian model
EA : Saudi Arabia model
PH : Philippine model
SP : Singapore model
MX : Mexican model
TH : Thai model

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
	A-1095-768-A	AUDIO BOARD, COMPLETE (GNZ9D:EXCEPT E2,TH)				C240	1-162-927-11	CERAMIC CHIP 100PF 5%			50V
	A-1095-769-A	AUDIO BOARD, COMPLETE (GNZ8D:EXCEPT TH)				C241	1-162-964-11	CERAMIC CHIP 0.001uF 10%			50V
	A-1095-770-A	AUDIO BOARD, COMPLETE (GNZ7D:EXCEPT E2,TH)				C245	1-162-927-11	CERAMIC CHIP 100PF 5%			50V
	A-1111-480-A	AUDIO BOARD, COMPLETE (GNZ9D:TH)				C246	1-162-964-11	CERAMIC CHIP 0.001uF 10%			50V
	A-1111-481-A	AUDIO BOARD, COMPLETE (GNZ8D:TH)				C251	1-126-964-11	ELECT 10uF 20%			50V
	A-1111-482-A	AUDIO BOARD, COMPLETE (GNZ7D:TH)				C252	1-126-964-11	ELECT 10uF 20%			50V
	A-1122-987-A	AUDIO BOARD, COMPLETE (GNZ9D:E2)									
	A-1122-988-A	AUDIO BOARD, COMPLETE (GNZ7D:E2)				C253	1-126-964-11	ELECT 10uF 20%			50V
		*****				C254	1-126-964-11	ELECT 10uF 20%			50V
		< CAPACITOR >				C255	1-126-964-11	ELECT 10uF 20%			50V
						C256	1-126-964-11	ELECT 10uF 20%			50V
						C257	1-126-964-11	ELECT 10uF 20%			50V
C201	1-164-156-11	CERAMIC CHIP 0.1uF			25V						
C202	1-104-658-11	ELECT 100uF 20%			10V	C258	1-164-227-11	CERAMIC CHIP 0.022uF 10%			25V
C203	1-104-658-11	ELECT 100uF 20%			10V	C259	1-164-227-11	CERAMIC CHIP 0.022uF 10%			25V
C204	1-104-658-11	ELECT 100uF 20%			10V	C260	1-165-176-11	CERAMIC CHIP 0.047uF 10%			16V
C205	1-104-658-11	ELECT 100uF 20%			10V	C261	1-126-964-11	ELECT 10uF 20%			50V
						C262	1-162-966-11	CERAMIC CHIP 0.0022uF 10%			50V
C211	1-126-964-11	ELECT 10uF 20%			50V						
C212	1-126-964-11	ELECT 10uF 20%			50V	C263	1-126-964-11	ELECT 10uF 20%			50V
C213	1-126-964-11	ELECT 10uF 20%			50V	C264	1-137-194-81	FILM 0.47uF 5%			50V
C214	1-126-964-11	ELECT 10uF 20%			50V	C265	1-137-194-81	FILM 0.47uF 5%			50V
C215	1-126-964-11	ELECT 10uF 20%			50V	C266	1-126-960-11	ELECT 1uF 20%			50V
						C268	1-126-964-11	ELECT 10uF 20%			50V
C217	1-126-964-11	ELECT 10uF 20%			50V						
C218	1-164-227-11	CERAMIC CHIP 0.022uF 10%			25V	C269	1-110-518-11	ELECT 10uF 20%			100V
C219	1-164-227-11	CERAMIC CHIP 0.022uF 10%			25V	C273	1-126-964-11	ELECT 10uF 20%			50V
C220	1-165-176-11	CERAMIC CHIP 0.047uF 10%			16V	C274	1-126-960-11	ELECT 1uF 20%			50V
C221	1-126-964-11	ELECT 10uF 20%			50V	C281	1-126-964-11	ELECT 10uF 20%			50V
						C282	1-104-658-11	ELECT 100uF 20%			10V
C222	1-162-966-11	CERAMIC CHIP 0.0022uF 10%			50V						
C223	1-126-964-11	ELECT 10uF 20%			50V	C283	1-164-156-11	CERAMIC CHIP 0.1uF			25V
C224	1-137-194-81	FILM 0.47uF 5%			50V	C285	1-126-961-11	ELECT 2.2uF 20%			50V
C225	1-137-194-81	FILM 0.47uF 5%			50V	C286	1-104-658-11	ELECT 100uF 20%			10V
C226	1-126-960-11	ELECT 1uF 20%			50V	C301	1-104-658-11	ELECT 100uF 20%			10V
											(GNZ8D/GNZ9D)
C228	1-126-964-11	ELECT 10uF 20%			50V	C302	1-164-156-11	CERAMIC CHIP 0.1uF			25V
C229	1-110-518-11	ELECT 10uF 20%			100V						(GNZ8D/GNZ9D)
C232	1-126-960-11	ELECT 1uF 20%			50V	C303	1-104-658-11	ELECT 100uF 20%			10V
C233	1-136-497-81	FILM 0.1uF 5%			50V						(GNZ8D/GNZ9D)
					(GNZ7D)	C304	1-104-658-11	ELECT 100uF 20%			10V
C234	1-137-190-11	FILM 0.22uF 5%			50V						(GNZ8D/GNZ9D)
					(GNZ7D)	C306	1-164-156-11	CERAMIC CHIP 0.1uF			25V
											(GNZ7D)
C235	1-126-964-11	ELECT 10uF 20%			50V	C307	1-126-923-11	ELECT 220uF 20%			10V
C236	1-130-491-00	MYLAR 0.047uF 5%			50V						(GNZ7D)
C237	1-126-964-11	ELECT 10uF 20%			50V	C311	1-126-964-11	ELECT 10uF 20%			50V
C239	1-126-959-11	ELECT 0.47uF 20%			50V						
						C312	1-126-964-11	ELECT 10uF 20%			50V

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C313	1-162-960-11	CERAMIC CHIP	220PF	10%	50V (GNZ8D/GNZ9D)	C372	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (GNZ8D/GNZ9D)
C314	1-162-960-11	CERAMIC CHIP	220PF	10%	50V (GNZ8D/GNZ9D)	C373	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)
C315	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V (GNZ8D/GNZ9D)	C374	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (GNZ8D/GNZ9D)
C316	1-126-964-11	ELECT	10uF	20%	50V	C375	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)
C321	1-126-964-11	ELECT	10uF	20%	50V	C376	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V (GNZ9D)
C322	1-126-964-11	ELECT	10uF	20%	50V	C377	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V (GNZ9D)
C323	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V (GNZ8D/GNZ9D)	C378	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)
C323	1-216-864-11	SHORT CHIP	0 (GNZ7D)			C381	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)
C324	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (GNZ8D/GNZ9D)	C382	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)
C325	1-126-964-11	ELECT	10uF	20%	50V	C383	1-126-960-11	ELECT	1uF	20%	50V (GNZ8D/GNZ9D)
C331	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)	C384	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V (GNZ8D/GNZ9D)
C332	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (GNZ8D/GNZ9D)	C385	1-136-497-81	FILM	0.1uF	5%	50V (GNZ8D/GNZ9D)
C333	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)	C386	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)
C334	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (GNZ8D/GNZ9D)	C388	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (GNZ7D/GNZ8D)
C335	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)	C391	1-126-964-11	ELECT	10uF	20%	50V (GNZ9D)
C336	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V (GNZ9D)	C392	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V (GNZ9D)
C337	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V (GNZ9D)	C393	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V (GNZ9D)
C338	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)	C394	1-104-658-11	ELECT	100uF	20%	10V (GNZ9D)
C341	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)	C601	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C342	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (GNZ8D/GNZ9D)	C602	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C343	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)	C603	1-136-155-00	FILM	0.015uF	5%	50V
C344	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (GNZ8D/GNZ9D)	C604	1-126-965-11	ELECT	22uF	20%	50V
C345	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)	C605	1-106-375-12	MYLAR	0.022uF	5%	200V
C351	1-126-964-11	ELECT	10uF	20%	50V	C611	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C352	1-126-964-11	ELECT	10uF	20%	50V	C612	1-100-670-11	CERAMIC CHIP	4.7uF	20%	16V
C353	1-162-960-11	CERAMIC CHIP	220PF	10%	50V (GNZ8D/GNZ9D)	C613	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C354	1-162-960-11	CERAMIC CHIP	220PF	10%	50V (GNZ8D/GNZ9D)	C614	1-126-963-11	ELECT	4.7uF	20%	50V
C356	1-126-964-11	ELECT	10uF	20%	50V	C615	1-137-150-11	FILM	0.01uF	5%	100V
C361	1-126-964-11	ELECT	10uF	20%	50V	C616	1-126-947-11	ELECT	47uF	20%	35V
C362	1-126-964-11	ELECT	10uF	20%	50V	C617	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C363	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V (GNZ8D/GNZ9D)	C618	1-126-964-11	ELECT	10uF	20%	50V
C363	1-216-864-11	SHORT CHIP	0 (GNZ7D)			C619	1-136-497-81	FILM	0.1uF	5%	50V
C364	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (GNZ8D/GNZ9D)	C620	1-126-960-11	ELECT	1uF	20%	50V
C365	1-126-964-11	ELECT	10uF	20%	50V	C621	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C366	1-162-927-11	CERAMIC CHIP	100PF	5%	50V (GNZ8D/GNZ9D)	C622	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C367	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	C623	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C368	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	C624	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C371	1-126-964-11	ELECT	10uF	20%	50V (GNZ8D/GNZ9D)	C651	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
						C652	1-100-670-11	CERAMIC CHIP	4.7uF	20%	16V
						C653	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
						C654	1-126-963-11	ELECT	4.7uF	20%	50V
						C655	1-137-150-11	FILM	0.01uF	5%	100V

HCD-GNZ7D/GNZ8D/GNZ9D

AUDIO

Ref. No.	Part No.	Description	Remark		
C656	1-126-947-11	ELECT	47uF	20%	35V
C657	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C658	1-126-964-11	ELECT	10uF	20%	50V
C659	1-136-497-81	FILM	0.1uF	5%	50V
C721	1-107-696-11	ELECT	47uF	20%	16V
C725	1-107-696-11	ELECT	47uF	20%	16V
C726	1-107-696-11	ELECT	47uF	20%	16V
C728	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C753	1-119-939-51	ELECT	6800uF	20%	35V
C763	1-111-235-61	ELECT	10000uF	20%	25V
C764	1-126-963-11	ELECT	4.7uF	20%	50V
C765	1-126-961-11	ELECT	2.2uF	20%	50V
C771	1-126-956-11	ELECT	0.1uF	20%	50V
C772	1-126-923-11	ELECT	220uF	20%	10V
C775	1-216-864-11	SHORT CHIP	0 (GNZ7D/GNZ8D)		
C776	1-216-864-11	SHORT CHIP	0		
C778	1-164-156-11	CERAMIC CHIP	0.1uF		25V (GNZ7D)
C781	1-126-963-11	ELECT	4.7uF	20%	50V (GNZ9D)
C783	1-162-974-11	CERAMIC CHIP	0.01uF		50V (GNZ9D)
C784	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V (GNZ9D)
C785	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V (GNZ9D)
C791	1-126-963-11	ELECT	4.7uF	20%	50V
C793	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C794	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C795	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
< CONNECTOR >					
CN201	1-573-847-11	CONNECTOR, BOARD TO BOARD 15P			
CN202	1-573-847-11	CONNECTOR, BOARD TO BOARD 15P			
CN203	1-785-321-11	PIN, CONNECTOR (STRAIGHT) 9P			
CN301	1-779-283-11	CONNECTOR, FFC (LIF(NON-ZIF)) 15P			(GNZ8D/GNZ9D)
CN301	1-779-285-11	CONNECTOR, FFC (LIF(NON-ZIF)) 17P			(GNZ7D)
CN302	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			(GNZ8D/GNZ9D)
* CN303	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P (GNZ9D)			
* CN601	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P			
* CN602	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P			
* CN745	1-564-517-11	PLUG, CONNECTOR 2P (GNZ9D)			
CN751	1-785-322-11	PIN, CONNECTOR (STRAIGHT) 10P			
CN752	1-784-788-11	CONNECTOR, FFC 27P			
CN753	1-568-828-11	CONNECTOR, FFC 9P			
* CN754	1-564-518-11	PLUG, CONNECTOR 3P			
* CN755	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P			
< DIODE >					
D201	8-719-988-61	DIODE	1SS355TE-17		
D202	8-719-988-61	DIODE	1SS355TE-17		
D235	8-719-988-61	DIODE	1SS355TE-17		
D271	6-500-848-01	DIODE	MC2840-T112-1		
D301	8-719-988-61	DIODE	1SS355TE-17 (GNZ8D/GNZ9D)		
D722	8-719-988-61	DIODE	1SS355TE-17		
D725	8-719-988-61	DIODE	1SS355TE-17		

Ref. No.	Part No.	Description	Remark		
D726	8-719-988-61	DIODE	1SS355TE-17		
D727	8-719-988-61	DIODE	1SS355TE-17		
D728	8-719-988-61	DIODE	1SS355TE-17		
D751	8-719-028-23	DIODE	D3SBA20-4101		
D753	6-500-335-01	DIODE	MC2838-T112-1		
D761	8-719-028-23	DIODE	D3SBA20-4101		
D762	8-719-988-61	DIODE	1SS355TE-17		
D763	6-500-335-01	DIODE	MC2838-T112-1		
D771	6-500-522-21	DIODE	10EDB40-TB3		
D781	8-719-988-61	DIODE	1SS355TE-17 (GNZ9D)		
D783	8-719-083-63	DIODE	UDZSTE-1713B (GNZ9D)		
D791	8-719-988-61	DIODE	1SS355TE-17		
D792	8-719-069-56	DIODE	UDZSTE-176.2B		
D793	8-719-069-56	DIODE	UDZSTE-176.2B		
< GROUND TERMINAL >					
EPT751	1-537-771-21	TERMINAL BOARD, GROUND			
< FERRITE BEAD >					
FB301	1-216-295-11	SHORT CHIP	0 (GNZ7D:EXCEPT TH)		
FB301	1-500-445-21	FERRITE, EMI (SMD) (2012) (GNZ7D:TH)			
< IC >					
IC201	6-705-667-01	IC	M61537FP-RF0G		
IC203	6-703-610-01	IC	RT8H015C-T112-1		
IC301	6-703-651-11	IC	M61530FP-D60G (GNZ8D/GNZ9D)		
IC303	8-759-710-97	IC	NJM4565M-D (GNZ9D)		
IC305	8-749-019-25	IC	TOTX141 (DVD DIGITAL OUT) (GNZ7D)		
IC771	6-703-547-01	IC	TA7805LS		
< JACK >					
J201	1-774-785-11	JACK, PIN 1P (SUB WOOFER OUT)			(GNZ7D/GNZ8D)
J202	1-816-918-11	JACK, PIN 4P (TV/SAT)			
< JUMPER RESISTOR >					
JR211	1-216-837-11	METAL CHIP	22K	5%	1/10W
JR221	1-216-864-11	SHORT CHIP	0		
JR251	1-216-837-11	METAL CHIP	22K	5%	1/10W
JR261	1-216-864-11	SHORT CHIP	0		
JR304	1-216-864-11	SHORT CHIP	0		
JR305	1-216-864-11	SHORT CHIP	0		
JR382	1-216-864-11	SHORT CHIP	0 (GNZ7D)		
JW291	1-216-864-11	SHORT CHIP	0		
JW293	1-216-864-11	SHORT CHIP	0		
JW415	1-216-864-11	SHORT CHIP	0 (GNZ7D)		
JW416	1-216-864-11	SHORT CHIP	0 (GNZ7D)		
JW417	1-216-864-11	SHORT CHIP	0 (GNZ7D)		
< COIL >					
L301	1-412-064-11	INDUCTOR	100uH (GNZ8D/GNZ9D)		
L302	1-408-619-31	INDUCTOR	220uH (GNZ7D)		
< TRANSISTOR >					
Q212	8-729-905-35	TRANSISTOR	2SC4081-R		
Q252	8-729-905-35	TRANSISTOR	2SC4081-R		

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HCD-GNZ7D/GNZ8D/GNZ9D

AUDIO

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R318	1-216-857-11	METAL CHIP	1M	5%	1/10W (GNZ8D/GNZ9D)	R377	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GNZ8D/GNZ9D)
R321	1-216-864-11	SHORT CHIP	0			R378	1-216-845-11	METAL CHIP	100K	5%	1/10W (GNZ8D/GNZ9D)
R322	1-216-845-11	METAL CHIP	100K	5%	1/10W	R381	1-216-841-11	METAL CHIP	47K	5%	1/10W (GNZ8D/GNZ9D)
R323	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R382	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D)
R324	1-216-841-11	METAL CHIP	47K	5%	1/10W (GNZ8D/GNZ9D)	R382	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W (GNZ9D)
R325	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GNZ8D/GNZ9D)	R383	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D)
R331	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GNZ8D/GNZ9D)	R383	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W (GNZ9D)
R332	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GNZ8D/GNZ9D)	R384	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GNZ7D/GNZ8D)
R333	1-216-833-11	METAL CHIP	10K	5%	1/10W (GNZ8D/GNZ9D)	R385	1-216-845-11	METAL CHIP	100K	5%	1/10W (GNZ7D/GNZ8D)
R334	1-216-841-11	METAL CHIP	47K	5%	1/10W (GNZ8D/GNZ9D)	R387	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GNZ9D)
R335	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GNZ9D)	R391	1-216-841-11	METAL CHIP	47K	5%	1/10W (GNZ9D)
R337	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GNZ8D/GNZ9D)	R392	1-216-833-11	METAL CHIP	10K	5%	1/10W (GNZ9D)
R338	1-216-845-11	METAL CHIP	100K	5%	1/10W (GNZ8D/GNZ9D)	R393	1-216-837-11	METAL CHIP	22K	5%	1/10W (GNZ9D)
R341	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GNZ8D/GNZ9D)	R394	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (GNZ9D)
R342	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GNZ8D/GNZ9D)	R395	1-216-833-11	METAL CHIP	10K	5%	1/10W (GNZ9D)
R343	1-216-833-11	METAL CHIP	10K	5%	1/10W (GNZ8D/GNZ9D)	R396	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ7D/GNZ8D)
R347	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GNZ8D/GNZ9D)	R397	1-216-841-11	METAL CHIP	47K	5%	1/10W (GNZ9D)
R348	1-216-845-11	METAL CHIP	100K	5%	1/10W (GNZ8D/GNZ9D)	R601	1-216-838-11	METAL CHIP	27K	5%	1/10W
R351	1-216-864-11	SHORT CHIP	0			R602	1-216-295-11	SHORT CHIP	0		
R352	1-216-845-11	METAL CHIP	100K	5%	1/10W	R603	1-216-833-11	METAL CHIP	10K	5%	1/10W
R353	1-216-817-11	METAL CHIP	470	5%	1/10W (GNZ8D/GNZ9D)	R604	1-216-833-11	METAL CHIP	10K	5%	1/10W
R353	1-216-864-11	SHORT CHIP	0	(GNZ7D)		R611	1-216-821-11	METAL CHIP	1K	5%	1/10W
R354	1-216-841-11	METAL CHIP	47K	5%	1/10W (GNZ8D/GNZ9D)	R612	1-216-821-11	METAL CHIP	1K	5%	1/10W
R355	1-216-833-11	METAL CHIP	10K	5%	1/10W (GNZ8D/GNZ9D)	R613	1-216-851-11	METAL CHIP	330K	5%	1/10W
R355	1-216-864-11	SHORT CHIP	0	(GNZ7D)		R614	1-216-835-11	METAL CHIP	15K	5%	1/10W
R357	1-216-864-11	SHORT CHIP	0			R615	1-216-812-11	METAL CHIP	180	5%	1/10W
R361	1-216-864-11	SHORT CHIP	0			R616	1-216-834-11	METAL CHIP	12K	5%	1/10W
R362	1-216-845-11	METAL CHIP	100K	5%	1/10W	R617	1-216-835-11	METAL CHIP	15K	5%	1/10W
R363	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R618	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R364	1-216-841-11	METAL CHIP	47K	5%	1/10W (GNZ8D/GNZ9D)	R620	1-216-857-11	METAL CHIP	1M	5%	1/10W
R365	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GNZ8D/GNZ9D)	R621	1-216-821-11	METAL CHIP	1K	5%	1/10W
R371	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GNZ8D/GNZ9D)	R622	1-216-821-11	METAL CHIP	1K	5%	1/10W
R372	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GNZ8D/GNZ9D)	R623	1-216-821-11	METAL CHIP	1K	5%	1/10W
R373	1-216-833-11	METAL CHIP	10K	5%	1/10W (GNZ8D/GNZ9D)	R624	1-216-821-11	METAL CHIP	1K	5%	1/10W
R374	1-216-841-11	METAL CHIP	47K	5%	1/10W (GNZ8D/GNZ9D)	R625	1-216-821-11	METAL CHIP	1K	5%	1/10W
R375	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (GNZ9D)	R626	1-216-821-11	METAL CHIP	1K	5%	1/10W
						R627	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R628	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R629	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R632	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
						R639	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
						R651	1-216-821-11	METAL CHIP	1K	5%	1/10W
						R652	1-216-821-11	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark	
R653	1-216-851-11	METAL CHIP	330K	5%	1/10W		R781	1-216-829-11	METAL CHIP	4.7K	5%	1/10W		
R654	1-216-835-11	METAL CHIP	15K	5%	1/10W								(GNZ9D)	
R655	1-216-812-11	METAL CHIP	180	5%	1/10W		R782	1-216-841-11	METAL CHIP	47K	5%	1/10W	(GNZ9D)	
							R783	1-216-849-11	METAL CHIP	220K	5%	1/10W	(GNZ9D)	
R656	1-216-834-11	METAL CHIP	12K	5%	1/10W		R784	1-216-837-11	METAL CHIP	22K	5%	1/10W	(GNZ9D)	
R657	1-216-835-11	METAL CHIP	15K	5%	1/10W									
R658	1-216-823-11	METAL CHIP	1.5K	5%	1/10W									
R659	1-216-797-11	METAL CHIP	10	5%	1/10W									
R701	1-216-825-11	METAL CHIP	2.2K	5%	1/10W		R785	1-216-837-11	METAL CHIP	22K	5%	1/10W	(GNZ9D)	
							R790	1-216-809-11	METAL CHIP	100	5%	1/10W		
R702	1-216-825-11	METAL CHIP	2.2K	5%	1/10W		R791	1-216-829-11	METAL CHIP	4.7K	5%	1/10W		
R703	1-216-821-11	METAL CHIP	1K	5%	1/10W		R792	1-216-841-11	METAL CHIP	47K	5%	1/10W		
R704	1-216-821-11	METAL CHIP	1K	5%	1/10W		R793	1-216-849-11	METAL CHIP	220K	5%	1/10W		
R705	1-216-821-11	METAL CHIP	1K	5%	1/10W									
R706	1-216-821-11	METAL CHIP	1K	5%	1/10W		R794	1-216-837-11	METAL CHIP	22K	5%	1/10W		
							R795	1-216-837-11	METAL CHIP	22K	5%	1/10W		
R711	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	(GNZ8D/GNZ9D)	R796	1-216-833-11	METAL CHIP	10K	5%	1/10W		
R712	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	(GNZ8D/GNZ9D)	R798	1-216-809-11	METAL CHIP	100	5%	1/10W		
R713	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	(GNZ8D/GNZ9D)	R799	1-216-833-11	METAL CHIP	10K	5%	1/10W		
R714	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	(GNZ9D)	< TRANSFORMER >							
R715	1-216-821-11	METAL CHIP	1K	5%	1/10W	(E2)	T601	1-437-220-11	TRANSFORMER, BIAS OSCILLATION					

R715	1-216-864-11	SHORT CHIP	0 (EXCEPT E2)				A-1095-784-A	DMB10 BOARD, COMPLETE (GNZ9D:PH,SP)						
R716	1-216-837-11	METAL CHIP	22K	5%	1/10W	(E2)	A-1095-785-A	DMB10 BOARD, COMPLETE						
								(GNZ9D:E3,E12,E13,E15)						
R717	1-216-821-11	METAL CHIP	1K	5%	1/10W	(E2)	A-1095-786-A	DMB10 BOARD, COMPLETE (GNZ9D:E2,E51,MX)						
							A-1095-787-A	DMB10 BOARD, COMPLETE (GNZ8D:PH,SP)						
R717	1-216-864-11	SHORT CHIP	0 (EXCEPT E2)				A-1095-788-A	DMB10 BOARD, COMPLETE						
R718	1-216-837-11	METAL CHIP	22K	5%	1/10W	(E2)		(GNZ8D:E3,E12,E13,E15)						
							A-1095-789-A	DMB10 BOARD, COMPLETE (GNZ7D:PH,SP)						
R721	1-216-821-11	METAL CHIP	1K	5%	1/10W		A-1095-790-A	DMB10 BOARD, COMPLETE						
R723	1-216-821-11	METAL CHIP	1K	5%	1/10W			(GNZ7D:E3,E12,E13,E15)						
R724	1-216-833-11	METAL CHIP	10K	5%	1/10W		A-1095-791-A	DMB10 BOARD, COMPLETE (GNZ7D:E2)						
R725	1-216-833-11	METAL CHIP	10K	5%	1/10W		A-1111-492-A	DMB10 BOARD, COMPLETE (GNZ9D:TH)						
R726	1-216-821-11	METAL CHIP	1K	5%	1/10W		A-1111-493-A	DMB10 BOARD, COMPLETE (GNZ8D:TH)						

R727	1-216-841-11	METAL CHIP	47K	5%	1/10W		A-1111-494-A	DMB10 BOARD, COMPLETE (GNZ7D:TH)						
R734	1-216-833-11	METAL CHIP	10K	5%	1/10W		A-1134-215-A	DMB10 BOARD, COMPLETE (GNZ9D:AUS,EA)						
R735	1-216-864-11	SHORT CHIP	0				A-1134-216-A	DMB10 BOARD, COMPLETE (GNZ8D:EA)						
R736	1-216-841-11	METAL CHIP	47K	5%	1/10W		A-1134-217-A	DMB10 BOARD, COMPLETE (GNZ7D:EA)						
R737	1-216-833-11	METAL CHIP	10K	5%	1/10W			< CAPACITOR >						
R738	1-216-864-11	SHORT CHIP	0											
R739	1-216-841-11	METAL CHIP	47K	5%	1/10W		C101	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
R740	1-216-833-11	METAL CHIP	10K	5%	1/10W		C102	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
R741	1-216-864-11	SHORT CHIP	0				C105	1-126-205-11	ELECT CHIP	47uF	20%	6.3V		
R742	1-216-841-11	METAL CHIP	47K	5%	1/10W		C106	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
							C108	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		
R745	1-216-821-11	METAL CHIP	1K	5%	1/10W	(GNZ9D)								
R751	1-216-809-11	METAL CHIP	100	5%	1/10W		C109	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		
R752	1-216-829-11	METAL CHIP	4.7K	5%	1/10W		C112	1-126-205-11	ELECT CHIP	47uF	20%	6.3V		
R753	1-216-829-11	METAL CHIP	4.7K	5%	1/10W		C113	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
R762	1-216-837-11	METAL CHIP	22K	5%	1/10W		C114	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		
							C115	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		
R763	1-216-837-11	METAL CHIP	22K	5%	1/10W		C116	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		
R764	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W		C117	1-124-779-00	ELECT CHIP	10uF	20%	16V		
R765	1-216-809-11	METAL CHIP	100	5%	1/10W		C118	1-124-779-00	ELECT CHIP	10uF	20%	16V		
R767	1-216-809-11	METAL CHIP	100	5%	1/10W		C119	1-124-779-00	ELECT CHIP	10uF	20%	16V		
R768	1-216-809-11	METAL CHIP	100	5%	1/10W		C120	1-165-908-11	CERAMIC CHIP	1uF	10%	10V		
R769	1-216-809-11	METAL CHIP	100	5%	1/10W		C121	1-165-908-11	CERAMIC CHIP	1uF	10%	10V		

☆ New part of EEP ROM (IC103) on the DMB10 board or DMB11 board cannot be used. Therefore, if the mounted DMB10 board (A-1095-784-A, etc.) is replaced, exchange new EEP ROM (IC103) with that used before the replacement.

HCD-GNZ7D/GNZ8D/GNZ9D

Ver. 1.1

DMB10

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C122	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	C188	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C123	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	C189	1-128-934-11	CERAMIC CHIP	0.33uF	20%	10V
C124	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	C190	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C125	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C191	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C126	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C192	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C127	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C193	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C128	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V	C195	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C129	1-124-779-00	ELECT CHIP	10uF	20%	16V	C196	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C130	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C203	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C131	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V	C205	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C132	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C206	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C133	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C208	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C135	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V	C209	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C136	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C210	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C137	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C211	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C138	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C212	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C139	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	C213	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C140	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C214	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C141	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C215	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C142	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (DMB10)	C217	1-126-204-11	ELECT CHIP	47uF	20%	16V
C143	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (DMB10)	C218	1-124-779-00	ELECT CHIP	10uF	20%	16V
C144	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C219	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C145	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (DMB10)	C220	1-124-779-00	ELECT CHIP	10uF	20%	16V
C146	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C221	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C147	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V	C222	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C148	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V	C224	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C149	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C233	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C150	1-124-779-00	ELECT CHIP	10uF	20%	16V	C301	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C151	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	C302	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C152	1-162-916-11	CERAMIC CHIP	12PF	5%	50V	C305	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C153	1-162-916-11	CERAMIC CHIP	12PF	5%	50V	C306	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C154	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C307	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C155	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C402	1-126-204-11	ELECT CHIP	47uF	20%	16V
C156	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C403	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C158	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3701	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C159	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3702	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C160	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3703	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (GNZ8D/GNZ9D)
C161	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3704	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (GNZ8D/GNZ9D)
C162	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3705	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (GNZ8D/GNZ9D)
C163	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3706	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (GNZ8D/GNZ9D)
C164	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3707	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C167	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3708	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C170	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3711	1-162-977-11	CERAMIC CHIP	0.0018uF	10%	50V
C171	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3712	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C172	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3713	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C173	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3714	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C174	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3721	1-162-977-11	CERAMIC CHIP	0.0018uF	10%	50V
C175	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3722	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C176	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3723	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C177	1-126-205-11	ELECT CHIP	47uF	20%	6.3V	C3724	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C178	1-126-208-21	ELECT CHIP	47uF	20%	4V	C3731	1-162-977-11	CERAMIC CHIP	0.0018uF	10%	50V (GNZ8D/GNZ9D)
C179	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3732	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V (GNZ8D/GNZ9D)
C180	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3733	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (GNZ8D/GNZ9D)
C181	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3734	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (GNZ8D/GNZ9D)
C182	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V						
C184	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C187	1-126-208-21	ELECT CHIP	47uF	20%	4V						

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C3741	1-162-977-11	CERAMIC CHIP	0.0018uF 10% 50V (GNZ8D/GNZ9D)	FB402	1-469-324-21	FERRITE, EMI (SMD) (2012)	
C3742	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V (GNZ8D/GNZ9D)	FB403	1-469-324-21	FERRITE, EMI (SMD) (2012)	
C3743	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (GNZ8D/GNZ9D)	FB404	1-469-324-21	FERRITE, EMI (SMD) (2012)	
C3744	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (GNZ8D/GNZ9D)	FB405	1-469-324-21	FERRITE, EMI (SMD) (2012)	
C3751	1-162-977-11	CERAMIC CHIP	0.0018uF 10% 50V (GNZ8D/GNZ9D)	FB406	1-469-324-21	FERRITE, EMI (SMD) (2012)	
C3752	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V (GNZ8D/GNZ9D)	< FILTER >			
C3753	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (GNZ8D/GNZ9D)	FL101	1-234-177-21	FILTER, CHIP EMI	
C3754	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (GNZ8D/GNZ9D)	FL104	1-234-177-21	FILTER, CHIP EMI	
C3761	1-162-977-11	CERAMIC CHIP	0.0018uF 10% 50V (GNZ8D/GNZ9D)	FL105	1-234-177-21	FILTER, CHIP EMI	
C3762	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V (GNZ8D/GNZ9D)	FL106	1-234-177-21	FILTER, CHIP EMI	
C3763	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (GNZ8D/GNZ9D)	FL107	1-234-177-21	FILTER, CHIP EMI	
C3764	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (GNZ8D/GNZ9D)	FL108	1-234-177-21	FILTER, CHIP EMI	
C3771	1-162-977-11	CERAMIC CHIP	0.0018uF 10% 50V	FL401	1-234-177-21	FILTER, CHIP EMI	
C3772	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V	FL402	1-233-893-21	FILTER, CHIP EMI	
C3773	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	FL403	1-234-177-21	FILTER, CHIP EMI	
C3774	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	< IC >			
C3781	1-162-977-11	CERAMIC CHIP	0.0018uF 10% 50V	IC101	6-805-743-01	IC MX29LV320ABTC65-CBA2-0503UC (DMB10) (GNZ9D:E2,E51,MX)	
C3782	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V	IC101	6-805-744-01	IC MX29LV320ABTC65-CBA2-0503CE (DMB10) (GNZ8D:E3,E12,E13,E15,EA/ GNZ9D:E3,E12,E13,E15,AUS,EA)	
C3783	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	IC101	6-805-745-01	IC MX29LV320ABTC65-CBA2-0503GA (DMB10) (GNZ8D:PH,SP,TH/GNZ9D:PH,SP,TH)	
C3784	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	IC101	6-805-761-01	IC MX29LV320ABTC65-CBA3-0503UC (DMB10) (GNZ7D:E2)	
C3801	1-126-206-11	ELECT CHIP	100uF 20% 6.3V	IC101	6-805-762-01	IC MX29LV320ABTC65-CBA3-0503CE (DMB10) (GNZ7D:E3,E12,E13,E15,EA)	
C3802	1-117-370-11	CERAMIC CHIP	10uF 10V	IC101	6-805-763-01	IC MX29LV320ABTC65-CBA3-0503GA (DMB10) (GNZ7D:PH,SP,TH)	
C3803	1-126-205-11	ELECT CHIP	47uF 20% 6.3V	IC101	6-805-774-01	IC MX29LV320ABTC65-CBA2-0504UC (DMB11) (GNZ9D:E2,E51,MX)	
C3804	1-126-205-11	ELECT CHIP	47uF 20% 6.3V	IC101	6-805-775-01	IC MX29LV320ABTC65-CBA2-0504CE (DMB11) (GNZ8D:E3,E12,E13,E15,EA/ GNZ9D:E3,E12,E13,E15,AUS,EA)	
C3805	1-126-208-21	ELECT CHIP	47uF 20% 4V	IC101	6-805-776-01	IC MX29LV320ABTC65-CBA2-0504GA (DMB11) (GNZ8D:PH,SP,TH/GNZ9D:PH,SP,TH)	
< CONNECTOR >				IC101	6-805-779-01	IC MX29LV320ABTC65-CBA3-0504UC (DMB11) (GNZ7D:E2)	
CN101	1-815-763-32	CONNECTOR, FFC/FPC 24P		IC101	6-805-780-01	IC MX29LV320ABTC65-CBA3-0504CE (DMB11) (GNZ7D:E3,E12,E13,E15,EA)	
* CN105	1-770-470-21	PIN, CONNECTOR (PC BOARD) 6P		IC101	6-805-781-01	IC MX29LV320ABTC65-CBA3-0504GA (DMB11) (GNZ7D:PH,SP,TH)	
CN106	1-793-989-21	CONNECTOR, FFC/FPC 13P		IC102	6-706-727-01	IC CXD9804R (DMB10)	
* CN201	1-770-470-21	PIN, CONNECTOR (PC BOARD) 6P		IC102	6-707-535-01	IC CXD9849R (DMB11)	
CN301	1-793-989-21	CONNECTOR, FFC/FPC 13P		☆ IC103	(Not supplied)	IC BR24L64F-WE2	
CN302	1-784-374-21	CONNECTOR, FFC/FPC 15P (GNZ8D/GNZ9D)		IC104	6-705-929-01	IC K4S641632H-UC75T	
CN302	1-784-376-11	CONNECTOR, FFC/FPC 17P (GNZ7D)		IC105	6-702-302-01	IC TK11133CSCL-G	
CN401	1-779-993-11	PIN, CONNECTOR (PWB) 5P		IC106	6-708-153-01	IC PQ018EN01ZPH	
< DIODE >				IC107	6-702-302-01	IC TK11133CSCL-G	
D1001	8-719-058-24	DIODE RB501V-40TE-17		IC201	6-704-524-01	IC FAN8036L	
D3501	6-501-193-01	DIODE 1SS355WTE-17		IC301	6-704-222-01	IC AK4358VQ-L	
D3502	6-501-193-01	DIODE 1SS355WTE-17		IC3711	8-759-359-49	IC NJM3414AV(Te2)	
< FERRITE BEAD >				IC3731	8-759-359-49	IC NJM3414AV(Te2) (GNZ8D/GNZ9D)	
FB111	1-414-226-21	INDUCTOR, FERRITE BEAD		IC3751	8-759-359-49	IC NJM3414AV(Te2) (GNZ8D/GNZ9D)	
FB112	1-414-226-21	INDUCTOR, FERRITE BEAD		IC3771	8-759-359-49	IC NJM3414AV(Te2)	
FB113	1-414-226-21	INDUCTOR, FERRITE BEAD		< TRANSISTOR >			
FB114	1-414-226-21	INDUCTOR, FERRITE BEAD		Q101	6-550-008-01	TRANSISTOR UM6K1N-TN	
FB115	1-414-226-21	INDUCTOR, FERRITE BEAD		Q102	6-550-653-01	TRANSISTOR QST8TR	
FB401	1-469-324-21	FERRITE, EMI (SMD) (2012)					

☆ New part of EEP ROM (IC103) on the DMB10 board or DMB11 board cannot be used. Therefore, if the mounted DMB10 board (A-1095-784-A, etc.) is replaced, exchange new EEP ROM (IC103) with that used before the replacement.

HCD-GNZ7D/GNZ8D/GNZ9D

Ver. 1.1

DMB10

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
Q103	8-729-901-00	TRANSISTOR	DTC124EK			R206	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q3801	8-729-230-49	TRANSISTOR	2SC2712-YG			R207	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
		< RESISTOR >				R208	1-216-839-11	METAL CHIP	33K	5%	1/10W
R101	1-216-809-11	METAL CHIP	100	5%	1/10W	R209	1-216-839-11	METAL CHIP	33K	5%	1/10W
R104	1-216-864-11	SHORT CHIP	0			R210	1-216-841-11	METAL CHIP	47K	5%	1/10W
R105	1-216-833-11	METAL CHIP	10K	5%	1/10W	R212	1-216-833-11	METAL CHIP	10K	5%	1/10W
R106	1-216-833-11	METAL CHIP	10K	5%	1/10W	R213	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R107	1-216-833-11	METAL CHIP	10K	5%	1/10W	R214	1-216-835-11	METAL CHIP	15K	5%	1/10W
R108	1-216-857-11	METAL CHIP	1M	5%	1/10W	R215	1-216-834-11	METAL CHIP	12K	5%	1/10W
R109	1-216-864-11	SHORT CHIP	0			R216	1-216-834-11	METAL CHIP	12K	5%	1/10W
R110	1-216-841-11	METAL CHIP	47K	5%	1/10W	R219	1-216-838-11	METAL CHIP	27K	5%	1/10W
R111	1-216-809-11	METAL CHIP	100	5%	1/10W	R220	1-216-833-11	METAL CHIP	10K	5%	1/10W
R112	1-211-977-11	METAL CHIP	22	0.5%	1/10W	R221	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R113	1-211-977-11	METAL CHIP	22	0.5%	1/10W	R223	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R114	1-216-845-11	METAL CHIP	100K	5%	1/10W	R224	1-216-833-11	METAL CHIP	10K	5%	1/10W
R115	1-211-977-11	METAL CHIP	22	0.5%	1/10W	R225	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R116	1-216-821-11	METAL CHIP	1K	5%	1/10W	R226	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R117	1-216-841-11	METAL CHIP	47K	5%	1/10W	R230	1-218-893-11	METAL CHIP	82K	0.5%	1/10W
R118	1-216-801-11	METAL CHIP	22	5%	1/10W	R231	1-218-875-11	METAL CHIP	15K	0.5%	1/10W
R120	1-216-801-11	METAL CHIP	22	5%	1/10W	R232	1-218-877-11	METAL CHIP	18K	0.5%	1/10W
R121	1-216-801-11	METAL CHIP	22	5%	1/10W	R233	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R123	1-216-864-11	SHORT CHIP	0			R234	1-216-833-11	METAL CHIP	10K	5%	1/10W
R124	1-216-841-11	METAL CHIP	47K	5%	1/10W	R246	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R126	1-216-864-11	SHORT CHIP	0			R247	1-216-821-11	METAL CHIP	1K	5%	1/10W
R127	1-216-809-11	METAL CHIP	100	5%	1/10W	R314	1-216-809-11	METAL CHIP	100	5%	1/10W
R133	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (DMB10)	R318	1-216-864-11	SHORT CHIP	0		
R134	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (DMB10)	R319	1-216-864-11	SHORT CHIP	0		
R135	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (DMB10)	R321	1-216-864-11	SHORT CHIP	0		
R136	1-216-835-11	METAL CHIP	15K	5%	1/10W	R1101	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R138	1-216-845-11	METAL CHIP	100K	5%	1/10W	R1102	1-218-827-11	METAL CHIP	150	0.5%	1/10W
R141	1-218-916-11	METAL CHIP	750K	0.5%	1/10W	R1103	1-216-833-11	METAL CHIP	10K	5%	1/10W
R142	1-216-845-11	METAL CHIP	100K	5%	1/10W	R1104	1-216-833-11	METAL CHIP	10K	5%	1/10W
R143	1-216-809-11	METAL CHIP	100	5%	1/10W (GNZ7D:TH)	R1105	1-216-833-11	METAL CHIP	10K	5%	1/10W
R143	1-469-116-21	FERRITE, EMI (SMD) (1608)			(GNZ7D:EXCEPT TH)	R1107	1-216-864-11	SHORT CHIP	0 (DMB10)		
R144	1-216-864-11	SHORT CHIP	0			R1108	1-216-833-11	METAL CHIP	10K	5%	1/10W (DMB10)
R146	1-216-805-11	METAL CHIP	47	5%	1/10W	R1109	1-216-864-11	SHORT CHIP	0		
R151	1-216-805-11	METAL CHIP	47	5%	1/10W	R1110	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R152	1-216-864-11	SHORT CHIP	0			R1120	1-216-864-11	SHORT CHIP	0		
R153	1-216-805-11	METAL CHIP	47	5%	1/10W	R1121	1-216-864-11	SHORT CHIP	0		
R155	1-216-805-11	METAL CHIP	47	5%	1/10W	R1122	1-216-864-11	SHORT CHIP	0		
R160	1-216-805-11	METAL CHIP	47	5%	1/10W	R1123	1-216-864-11	SHORT CHIP	0		
R161	1-216-809-11	METAL CHIP	100	5%	1/10W	R1124	1-216-864-11	SHORT CHIP	0		
R164	1-216-809-11	METAL CHIP	100	5%	1/10W	R1125	1-216-864-11	SHORT CHIP	0		
R169	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1126	1-216-833-11	METAL CHIP	10K	5%	1/10W
R187	1-216-864-11	SHORT CHIP	0			R1129	1-216-845-11	METAL CHIP	100K	5%	1/10W
R189	1-218-827-11	METAL CHIP	150	0.5%	1/10W	R1133	1-216-864-11	SHORT CHIP	0		
R190	1-218-827-11	METAL CHIP	150	0.5%	1/10W	R1134	1-216-864-11	SHORT CHIP	0		
R191	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1150	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R192	1-218-827-11	METAL CHIP	150	0.5%	1/10W	R1151	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R193	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1152	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R195	1-218-827-11	METAL CHIP	150	0.5%	1/10W	R1161	1-216-864-11	SHORT CHIP	0		
R196	1-216-864-11	SHORT CHIP	0			R1168	1-216-817-11	METAL CHIP	470	5%	1/10W
R197	1-218-827-11	METAL CHIP	150	0.5%	1/10W	R1502	1-216-864-11	SHORT CHIP	0 (EXCEPT AUS,EA)		
R204	1-216-822-11	METAL CHIP	1.2K	5%	1/10W	R1502	1-469-116-21	FERRITE, EMI (SMD) (1608) (AUS,EA)			
R205	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1504	1-216-864-11	SHORT CHIP	0		
						R1524	1-216-864-11	SHORT CHIP	0 (EXCEPT AUS,EA)		
						R1524	1-469-116-21	FERRITE, EMI (SMD) (1608) (AUS,EA)			
						R1526	1-216-864-11	SHORT CHIP	0 (EXCEPT AUS,EA)		
						R1526	1-469-116-21	FERRITE, EMI (SMD) (1608) (AUS,EA)			
						R1530	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R1531	1-216-864-11	SHORT CHIP	0			R3744	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (GNZ8D/GNZ9D)
R1540	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3745	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GNZ8D/GNZ9D)
R1542	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3746	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D/GNZ9D)
R1543	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3747	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D/GNZ9D)
R1544	1-216-864-11	SHORT CHIP	0			R3748	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GNZ8D/GNZ9D)
R1546	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3749	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D/GNZ9D)
R1547	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3751	1-218-271-11	METAL CHIP	2K	5%	1/10W (GNZ8D/GNZ9D)
R1548	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3752	1-218-271-11	METAL CHIP	2K	5%	1/10W (GNZ8D/GNZ9D)
R1549	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3753	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (GNZ8D/GNZ9D)
R1550	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3754	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (GNZ8D/GNZ9D)
R1551	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3755	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GNZ8D/GNZ9D)
R1552	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3756	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D/GNZ9D)
R1553	1-216-864-11	SHORT CHIP	0			R3757	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D/GNZ9D)
R1554	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3758	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GNZ8D/GNZ9D)
R1557	1-216-809-11	METAL CHIP	100	5%	1/10W	R3759	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D/GNZ9D)
R2504	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3761	1-218-271-11	METAL CHIP	2K	5%	1/10W (GNZ8D/GNZ9D)
R3501	1-216-809-11	METAL CHIP	100	5%	1/10W (GNZ7D:EXCEPT TH)	R3762	1-218-271-11	METAL CHIP	2K	5%	1/10W (GNZ8D/GNZ9D)
R3501	1-216-864-11	SHORT CHIP	0 (GNZ7D:TH)			R3763	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (GNZ8D/GNZ9D)
R3652	1-216-864-11	SHORT CHIP	0			R3764	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (GNZ8D/GNZ9D)
R3653	1-216-864-11	SHORT CHIP	0			R3765	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GNZ8D/GNZ9D)
R3711	1-218-271-11	METAL CHIP	2K	5%	1/10W	R3766	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D/GNZ9D)
R3712	1-218-271-11	METAL CHIP	2K	5%	1/10W	R3767	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D/GNZ9D)
R3713	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3768	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GNZ8D/GNZ9D)
R3714	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3769	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D/GNZ9D)
R3715	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3771	1-218-271-11	METAL CHIP	2K	5%	1/10W
R3716	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3772	1-218-271-11	METAL CHIP	2K	5%	1/10W
R3717	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3773	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R3718	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3774	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R3719	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3775	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3721	1-218-271-11	METAL CHIP	2K	5%	1/10W	R3776	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3722	1-218-271-11	METAL CHIP	2K	5%	1/10W	R3777	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3723	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3778	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3724	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3779	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3725	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3781	1-218-271-11	METAL CHIP	2K	5%	1/10W
R3726	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3782	1-218-271-11	METAL CHIP	2K	5%	1/10W
R3727	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3783	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R3728	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3784	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R3729	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3785	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3731	1-218-271-11	METAL CHIP	2K	5%	1/10W (GNZ8D/GNZ9D)	R3786	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3732	1-218-271-11	METAL CHIP	2K	5%	1/10W (GNZ8D/GNZ9D)	R3787	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3733	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (GNZ8D/GNZ9D)						
R3734	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (GNZ8D/GNZ9D)						
R3735	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GNZ8D/GNZ9D)						
R3736	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D/GNZ9D)						
R3737	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D/GNZ9D)						
R3738	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GNZ8D/GNZ9D)						
R3739	1-216-821-11	METAL CHIP	1K	5%	1/10W (GNZ8D/GNZ9D)						
R3741	1-218-271-11	METAL CHIP	2K	5%	1/10W (GNZ8D/GNZ9D)						
R3742	1-218-271-11	METAL CHIP	2K	5%	1/10W (GNZ8D/GNZ9D)						
R3743	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (GNZ8D/GNZ9D)						

HCD-GNZ7D/GNZ8D/GNZ9D

Ver. 1.1

DMB10	DRIVER	FRONT AMP
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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		
R5003	1-216-864-11	SHORT CHIP	0 (GNZ7D)		
R5004	1-216-864-11	SHORT CHIP	0 (GNZ8D/GNZ9D)		
R5011	1-216-864-11	SHORT CHIP	0		
R5014	1-216-864-11	SHORT CHIP	0 (E2,E51,MX)		
R5016	1-216-864-11	SHORT CHIP	0 (E3,E12,E13,E15,AUS,EA)		
R5017	1-216-864-11	SHORT CHIP	0 (PH,SP,TH)		
< 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-1095-771-A	FRONT AMP BOARD, COMPLETE				
	(GNZ9D:EXCEPT TH)				
A-1095-772-A	FRONT AMP BOARD, COMPLETE				
	(GNZ8D:EXCEPT TH)				
A-1095-773-A	FRONT AMP BOARD, COMPLETE				
	(GNZ7D:EXCEPT TH)				
A-1111-483-A	FRONT AMP BOARD, COMPLETE (GNZ9D:TH)				
A-1111-484-A	FRONT AMP BOARD, COMPLETE (GNZ8D:TH)				
A-1111-485-A	FRONT AMP BOARD, COMPLETE (GNZ7D:TH)				

7-685-872-09	SCREW +BVTT 3X8 (S)				
< CAPACITOR >					
C401	1-126-964-11	ELECT	10uF	20%	50V
C402	1-162-294-31	CERAMIC	0.001uF	10%	50V
C403	1-162-286-31	CERAMIC	220PF	10%	50V
C404	1-126-967-11	ELECT	47uF	20%	50V
	(GNZ8D/GNZ9D)				
C404	1-126-968-11	ELECT	100uF	20%	50V
	(GNZ7D)				
C406	1-136-495-11	FILM	0.068uF	5%	50V
C407	1-136-495-11	FILM	0.068uF	5%	50V
C408	1-128-576-11	ELECT	100uF	20%	63V
C410	1-126-926-11	ELECT	1000uF	20%	10V
C416	1-162-306-11	CERAMIC	0.01uF	20%	16V
C421	1-126-966-11	ELECT	33uF	20%	50V
C451	1-126-964-11	ELECT	10uF	20%	50V
C452	1-162-294-31	CERAMIC	0.001uF	10%	50V
C453	1-162-286-31	CERAMIC	220PF	10%	50V
C454	1-126-967-11	ELECT	47uF	20%	50V
	(GNZ8D/GNZ9D)				
C454	1-126-968-11	ELECT	100uF	20%	50V
	(GNZ7D)				
C456	1-136-495-11	FILM	0.068uF	5%	50V
C457	1-136-495-11	FILM	0.068uF	5%	50V
C458	1-128-576-11	ELECT	100uF	20%	63V
C471	1-135-928-21	ELECT	2200uF	20%	63V
C472	1-135-928-21	ELECT	2200uF	20%	63V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C485	1-162-306-11	CERAMIC	0.01uF 20% 16V	R412	1-247-887-00	CARBON	220K 5% 1/4W
C486	1-162-306-11	CERAMIC	0.01uF 20% 16V	R413	1-249-421-11	CARBON	2.2K 5% 1/4W
C941	1-126-956-11	ELECT	0.1uF 20% 50V	R415	1-249-429-11	CARBON	10K 5% 1/4W
C942	1-126-925-11	ELECT	470uF 20% 10V				
C943	1-126-956-11	ELECT	0.1uF 20% 50V	R416	1-249-429-11	CARBON	10K 5% 1/4W
C944	1-104-658-11	ELECT	100uF 20% 10V	R417	1-249-429-11	CARBON	10K 5% 1/4W
C945	1-126-956-11	ELECT	0.1uF 20% 50V	R418	1-247-871-11	CARBON	47K 5% 1/4W
C946	1-104-658-11	ELECT	100uF 20% 10V	△R419	1-202-972-61	FUSIBLE	1 5% 1/4W F
C949	1-126-947-11	ELECT	47uF 20% 35V	△R420	1-202-972-61	FUSIBLE	1 5% 1/4W F
C950	1-104-658-11	ELECT	100uF 20% 10V				
< CONNECTOR >				R421	1-249-429-11	CARBON	10K 5% 1/4W
CN401	1-573-829-11	CONNECTOR, BOARD TO BOARD 15P		R425	1-249-439-11	CARBON	68K 5% 1/4W
CN402	1-573-829-11	CONNECTOR, BOARD TO BOARD 15P		R426	1-249-426-11	CARBON	5.6K 5% 1/4W
CN403	1-564-506-11	PLUG, CONNECTOR 3P (GNZ9D)		R427	1-249-421-11	CARBON	2.2K 5% 1/4W
CN404	1-564-507-11	PLUG, CONNECTOR 4P (GNZ9D)		R428	1-247-863-11	CARBON	22K 5% 1/4W
< DIODE >							
D401	8-719-991-33	DIODE 1SS133T-77		R429	1-249-429-11	CARBON	10K 5% 1/4W
D410	8-719-210-21	DIODE 11EQS04		R430	1-249-429-11	CARBON	10K 5% 1/4W
D451	8-719-991-33	DIODE 1SS133T-77		R439	1-247-871-11	CARBON	47K 5% 1/4W
D471	8-719-022-99	DIODE D6SB60L (GNZ9D)		R440	1-247-873-11	CARBON	56K 5% 1/4W
D471	8-719-510-68	DIODE D5SBA204101 (GNZ7D/GNZ8D)		R451	1-247-831-11	CARBON	1K 5% 1/4W
D481	8-719-991-33	DIODE 1SS133T-77					
D485	8-719-991-33	DIODE 1SS133T-77		R452	1-247-871-11	CARBON	47K 5% 1/4W
D486	8-719-991-33	DIODE 1SS133T-77		R453	1-247-807-31	CARBON	100 5% 1/4W
D491	8-719-991-33	DIODE 1SS133T-77					(GNZ7D)
< IC >				R453	1-249-407-11	CARBON	150 5% 1/4W
IC401	6-600-221-01	IC STK403-130 (GNZ9D)					(GNZ9D)
IC401	6-705-853-01	IC STK403-120 (GNZ7D/GNZ8D)		R453	1-249-408-11	CARBON	180 5% 1/4W
< TRANSISTOR >							(GNZ8D)
Q401	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA		R454	1-247-871-11	CARBON	47K 5% 1/4W
Q402	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		△R456	1-208-602-11	METAL	0.22X2 2W F
Q403	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA		R457	1-247-831-11	CARBON	1K 5% 1/4W
Q416	8-729-119-78	TRANSISTOR 2SC2785-HFE		R458	1-249-431-11	CARBON	15K 5% 1/4W
Q417	8-729-119-78	TRANSISTOR 2SC2785-HFE		R459	1-247-879-11	CARBON	100K 5% 1/4W
Q451	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA		R460	1-260-076-11	CARBON	10 5% 1/2W F
Q481	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		△R461	1-212-881-11	FUSIBLE	100 5% 1/4W F
Q482	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA		R471	1-247-879-11	CARBON	100K 5% 1/4W
< RESISTOR >				R472	1-247-879-11	CARBON	100K 5% 1/4W
R401	1-247-831-11	CARBON	1K 5% 1/4W	△R480	1-215-892-11	METAL OXIDE	1K 5% 2W F
R402	1-247-871-11	CARBON	47K 5% 1/4W				(GNZ8D)
R403	1-247-807-31	CARBON	100 5% 1/4W	△R480	1-216-457-00	METAL OXIDE	1.2K 5% 2W F
							(GNZ7D/GNZ9D)
R403	1-249-407-11	CARBON	150 5% 1/4W				
R403	1-249-408-11	CARBON	180 5% 1/4W				
R404	1-247-871-11	CARBON	47K 5% 1/4W	R485	1-247-871-11	CARBON	47K 5% 1/4W
△R406	1-208-602-11	METAL	0.22X2 2W F	R486	1-247-871-11	CARBON	47K 5% 1/4W
R407	1-247-831-11	CARBON	1K 5% 1/4W	R487	1-249-429-11	CARBON	10K 5% 1/4W
R408	1-249-431-11	CARBON	15K 5% 1/4W	R488	1-247-871-11	CARBON	47K 5% 1/4W
R409	1-247-879-11	CARBON	100K 5% 1/4W	R489	1-249-429-11	CARBON	10K 5% 1/4W
R410	1-260-076-11	CARBON	10 5% 1/2W F	R490	1-249-429-11	CARBON	10K 5% 1/4W
△R411	1-212-881-11	FUSIBLE	100 5% 1/4W F	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 10K	
< TERMINAL BOARD >							
				TM401	1-694-677-12	TERMINAL BOARD (4P) (FRONT SPEAKER)	

HCD-GNZ7D/GNZ8D/GNZ9D

JACK **MOTOR (LD)**

Ref. No.	Part No.	Description	Remark		
	A-1095-805-A	JACK BOARD, COMPLETE (EXCEPT TH)			
	A-1111-503-A	JACK BOARD, COMPLETE (TH)			

	< CAPACITOR >				
C1001	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C1002	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C1003	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C1004	1-126-791-11	ELECT	10uF	20%	35V
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
C1015	1-115-868-11	ELECT	0.22uF	20%	50V
C1016	1-107-726-11	CERAMIC CHIP	0.01uF	10%	16V
C1017	1-107-726-11	CERAMIC CHIP	0.01uF	10%	16V
C1018	1-131-664-11	CERAMIC CHIP	0.15uF	10%	10V
C1019	1-115-871-11	ELECT	1uF	20%	50V
C1020	1-115-871-11	ELECT	1uF	20%	50V
C1021	1-115-870-11	ELECT	0.47uF	20%	50V
C1022	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C1023	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C1024	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C1025	1-115-870-11	ELECT	0.47uF	20%	50V
C1026	1-110-563-11	CERAMIC CHIP	0.068uF	10%	16V
C1027	1-110-563-11	CERAMIC CHIP	0.068uF	10%	16V
C1028	1-126-785-11	ELECT	47uF	20%	10V
C1029	1-115-872-11	ELECT	2.2uF	20%	50V
C1030	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C1031	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C1034	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C1035	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C1036	1-164-360-11	CERAMIC CHIP	0.1uF		16V
	< DIODE >				
D1001	8-719-988-61	DIODE 1SS355TE-17			
D1002	8-719-988-61	DIODE 1SS355TE-17			
D1003	8-719-988-61	DIODE 1SS355TE-17			
D1004	8-719-988-61	DIODE 1SS355TE-17			
D1005	8-719-988-61	DIODE 1SS355TE-17			
D1006	8-719-988-61	DIODE 1SS355TE-17			
D1007	8-719-083-58	DIODE UDZSTE-173.9B			
	< GROUND TERMINAL >				
EPT1001	1-537-771-21	TERMINAL BOARD, GROUND			
EPT1002	1-537-771-21	TERMINAL BOARD, GROUND			
	< FERRITE BEAD >				
FB1001	1-469-869-21	INDUCTOR (EMI FERRITE) (2012)			
FB1002	1-216-295-11	SHORT CHIP	0		
FB1003	1-216-295-11	SHORT CHIP	0		
FB1004	1-216-295-11	SHORT CHIP	0		

Ref. No.	Part No.	Description	Remark			
< IC >						
IC1001	8-759-710-97	IC NJM4565M-D				
IC1002	8-759-496-41	IC M65850FP-E1				
< JACK >						
J1001	1-764-592-11	JACK, PIN 3P (VIDEO INPUT)				
J1002	1-770-226-11	JACK (LARGE TYPE) (MIC 2)				
J1003	1-770-226-11	JACK (LARGE TYPE) (MIC 1)				
J1004	1-794-702-11	JACK, HEADPHONE (PHONES)				
< JUMPER RESISTOR >						
JR1000	1-216-295-11	SHORT CHIP	0			
JW1001	1-216-295-11	SHORT CHIP	0			
< RESISTOR >						
R1000	1-218-285-11	METAL CHIP	75	5%	1/10W	
R1001	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R1002	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R1003	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R1004	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R1005	1-216-833-11	METAL CHIP	10K	5%	1/10W	
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	
R1016	1-216-835-11	METAL CHIP	15K	5%	1/10W	
R1017	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R1018	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R1021	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R1022	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R1023	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R1024	1-216-835-11	METAL CHIP	15K	5%	1/10W	
R1025	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R1026	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R1027	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R1028	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R1029	1-216-846-11	METAL CHIP	120K	5%	1/10W	
R1030	1-216-835-11	METAL CHIP	15K	5%	1/10W	
R1031	1-260-083-11	CARBON	47	5%	1/2W F	
R1032	1-260-083-11	CARBON	47	5%	1/2W F	
< VARIABLE RESISTOR >						
RV1001	1-223-983-11	RES, VAR, CARBON 50K (MIC LEVEL)				
RV1002	1-223-983-11	RES, VAR, CARBON 50K (ECHO LEVEL)				

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

Ref. No.	Part No.	Description	Remark
	1-687-134-12	MOTOR (TB) BOARD *****	
		< CONNECTOR >	
CN742	1-784-727-11	CONNECTOR, FFC 5P *****	
	A-1095-804-A	PANEL BOARD, COMPLETE (EXCEPT TH)	
	A-1111-502-A	PANEL BOARD, COMPLETE (TH) *****	
		< 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	
CN152	1-785-330-11	PIN, CONNECTOR (LIGHT ANGLE) 4P	
CN153	1-818-282-11	PIN, CONNECTOR (FOR PWB) 3P	
		< DIODE >	
D101	6-500-335-01	DIODE MC2838-T112-1	

Ref. No.	Part No.	Description	Remark
D102	6-500-335-01	DIODE MC2838-T112-1	
D105	8-719-988-61	DIODE 1SS355TE-17	
D106	8-719-988-61	DIODE 1SS355TE-17	
D107	8-719-988-61	DIODE 1SS355TE-17	
D108	1-216-295-11	SHORT CHIP 0	
D109	8-719-988-61	DIODE 1SS355TE-17	
D110	8-719-053-43	LED SLR-325VCT31 (I/C)	
D111	8-719-988-61	DIODE 1SS355TE-17	
D112	8-719-988-61	DIODE 1SS355TE-17	
D113	8-719-988-61	DIODE 1SS355TE-17	
D114	8-719-988-61	DIODE 1SS355TE-17	
D121	8-719-988-61	DIODE 1SS355TE-17	
		< JUMPER RESISTOR >	
FB101	1-216-295-11	SHORT CHIP 0	
FB102	1-216-295-11	SHORT CHIP 0	
FB103	1-216-295-11	SHORT CHIP 0	
FB104	1-216-295-11	SHORT CHIP 0	
FB105	1-216-295-11	SHORT CHIP 0	
		< FLUORESCENT INDICATOR >	
FL101	1-519-811-11	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC101	6-805-164-01	IC M30392MEP-A00FPU5	
IC102	6-707-095-01	IC BH2210FV-E2	
IC103	6-707-920-01	IC BD4828G-TR	
		< JUMPER RESISTOR >	
JR101	1-216-864-11	SHORT CHIP 0	
JR103	1-216-864-11	SHORT CHIP 0	
JR104	1-216-864-11	SHORT CHIP 0	
JR105	1-216-864-11	SHORT CHIP 0	
JR106	1-216-864-11	SHORT CHIP 0	
JR107	1-216-864-11	SHORT CHIP 0	
JR108	1-216-864-11	SHORT CHIP 0	
JR109	1-216-864-11	SHORT CHIP 0	
JR110	1-216-864-11	SHORT CHIP 0	
JR111	1-216-864-11	SHORT CHIP 0	
JR112	1-216-864-11	SHORT CHIP 0	
JR119	1-216-864-11	SHORT CHIP 0	
JR120	1-216-864-11	SHORT CHIP 0	
JR121	1-216-864-11	SHORT CHIP 0	
JR123	1-216-864-11	SHORT CHIP 0	
		< TRANSISTOR >	
Q101	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
Q102	6-550-044-01	TRANSISTOR 2SB1689-T106	
Q103	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
Q104	6-550-044-01	TRANSISTOR 2SB1689-T106	
Q105	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
Q106	6-550-044-01	TRANSISTOR 2SB1689-T106	
Q107	8-729-905-35	TRANSISTOR 2SC4081-R	
Q108	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
Q109	8-729-026-53	TRANSISTOR 2SA1576A-T106-QR	
Q111	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
Q112	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	
Q113	8-729-039-14	TRANSISTOR BCR133W-GEG-E6327	

HCD-GNZ7D/GNZ8D/GNZ9D

PANEL

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
Q114	8-729-039-14	TRANSISTOR	BCR133W-GEG-E6327			R052	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q115	8-729-039-14	TRANSISTOR	BCR133W-GEG-E6327			R053	1-216-819-11	METAL CHIP	680	5%	1/10W
Q116	8-729-106-60	TRANSISTOR	2SB1115A-YQ			R054	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q117	8-729-106-60	TRANSISTOR	2SB1115A-YQ			R055	1-216-819-11	METAL CHIP	680	5%	1/10W
		< RESISTOR >				R056	1-216-821-11	METAL CHIP	1K	5%	1/10W
R001	1-216-837-11	METAL CHIP	22K	5%	1/10W	R057	1-216-833-11	METAL CHIP	10K	5%	1/10W
R002	1-216-809-11	METAL CHIP	100	5%	1/10W	R058	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R003	1-216-809-11	METAL CHIP	100	5%	1/10W	R059	1-216-833-11	METAL CHIP	10K	5%	1/10W
R004	1-216-809-11	METAL CHIP	100	5%	1/10W	R060	1-216-833-11	METAL CHIP	10K	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	R061	1-216-813-11	METAL CHIP	220	5%	1/10W
R007	1-216-809-11	METAL CHIP	100	5%	1/10W	R062	1-216-815-11	METAL CHIP	330	5%	1/10W
R008	1-216-809-11	METAL CHIP	100	5%	1/10W	R063	1-216-817-11	METAL CHIP	470	5%	1/10W
R009	1-216-809-11	METAL CHIP	100	5%	1/10W	R064	1-216-819-11	METAL CHIP	680	5%	1/10W
R010	1-216-809-11	METAL CHIP	100	5%	1/10W	R065	1-216-821-11	METAL CHIP	1K	5%	1/10W
R011	1-216-809-11	METAL CHIP	100	5%	1/10W	R066	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R012	1-216-809-11	METAL CHIP	100	5%	1/10W	R067	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R013	1-216-833-11	METAL CHIP	10K	5%	1/10W	R068	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R014	1-216-837-11	METAL CHIP	22K	5%	1/10W	R070	1-216-864-11	SHORT CHIP	0		
R015	1-216-841-11	METAL CHIP	47K	5%	1/10W	R071	1-216-864-11	SHORT CHIP	0		
R016	1-216-833-11	METAL CHIP	10K	5%	1/10W	R072	1-216-817-11	METAL CHIP	470	5%	1/10W
R017	1-216-809-11	METAL CHIP	100	5%	1/10W	R073	1-216-833-11	METAL CHIP	10K	5%	1/10W
R018	1-216-809-11	METAL CHIP	100	5%	1/10W	R074	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R019	1-216-809-11	METAL CHIP	100	5%	1/10W	R075	1-216-837-11	METAL CHIP	22K	5%	1/10W
R020	1-216-809-11	METAL CHIP	100	5%	1/10W	R076	1-216-837-11	METAL CHIP	22K	5%	1/10W
R021	1-216-809-11	METAL CHIP	100	5%	1/10W	R077	1-216-841-11	METAL CHIP	47K	5%	1/10W
R022	1-216-809-11	METAL CHIP	100	5%	1/10W	R078	1-216-837-11	METAL CHIP	22K	5%	1/10W
R023	1-216-809-11	METAL CHIP	100	5%	1/10W	R079	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R024	1-216-809-11	METAL CHIP	100	5%	1/10W	R080	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R025	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R081	1-216-813-11	METAL CHIP	220	5%	1/10W
R026	1-216-809-11	METAL CHIP	100	5%	1/10W	R082	1-216-815-11	METAL CHIP	330	5%	1/10W
R027	1-216-837-11	METAL CHIP	22K	5%	1/10W	R083	1-216-817-11	METAL CHIP	470	5%	1/10W
R028	1-216-841-11	METAL CHIP	47K	5%	1/10W	R084	1-216-819-11	METAL CHIP	680	5%	1/10W
R029	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R085	1-216-821-11	METAL CHIP	1K	5%	1/10W
R030	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R086	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R031	1-216-833-11	METAL CHIP	10K	5%	1/10W	R087	1-216-837-11	METAL CHIP	22K	5%	1/10W
R032	1-216-837-11	METAL CHIP	22K	5%	1/10W	R088	1-216-841-11	METAL CHIP	47K	5%	1/10W
R033	1-216-841-11	METAL CHIP	47K	5%	1/10W	R089	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R034	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R090	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R035	1-216-841-11	METAL CHIP	47K	5%	1/10W	R091	1-216-821-11	METAL CHIP	1K	5%	1/10W
R036	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R092	1-216-817-11	METAL CHIP	470	5%	1/10W
R037	1-216-833-11	METAL CHIP	10K	5%	1/10W	R093	1-216-821-11	METAL CHIP	1K	5%	1/10W
R038	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R094	1-216-809-11	METAL CHIP	100	5%	1/10W
R039	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R095	1-216-813-11	METAL CHIP	220	5%	1/10W
R040	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R096	1-216-813-11	METAL CHIP	220	5%	1/10W
R041	1-216-813-11	METAL CHIP	220	5%	1/10W	R097	1-216-813-11	METAL CHIP	220	5%	1/10W
R042	1-216-815-11	METAL CHIP	330	5%	1/10W	R098	1-216-813-11	METAL CHIP	220	5%	1/10W
R043	1-216-817-11	METAL CHIP	470	5%	1/10W	R099	1-216-813-11	METAL CHIP	220	5%	1/10W
R044	1-216-819-11	METAL CHIP	680	5%	1/10W	R100	1-216-813-11	METAL CHIP	220	5%	1/10W
R045	1-216-821-11	METAL CHIP	1K	5%	1/10W	R101	1-216-809-11	METAL CHIP	100	5%	1/10W
R046	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	R102	1-216-809-11	METAL CHIP	100	5%	1/10W
R047	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R103	1-216-809-11	METAL CHIP	100	5%	1/10W
R048	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R104	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R049	1-216-833-11	METAL CHIP	10K	5%	1/10W	R105	1-216-809-11	METAL CHIP	100	5%	1/10W
R050	1-216-839-11	METAL CHIP	33K	5%	1/10W	R106	1-216-809-11	METAL CHIP	100	5%	1/10W
R051	1-216-819-11	METAL CHIP	680	5%	1/10W	R107	1-216-809-11	METAL CHIP	100	5%	1/10W
						R108	1-216-809-11	METAL CHIP	100	5%	1/10W
						R109	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R110	1-216-841-11	METAL CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R111	1-216-851-11	METAL CHIP	330K	5%	1/10W	R148	1-216-841-11	METAL CHIP	47K	5%	1/10W
R112	1-216-833-11	METAL CHIP	10K	5%	1/10W	R149	1-216-841-11	METAL CHIP	47K	5%	1/10W
R113	1-216-811-11	METAL CHIP	150	5%	1/10W	R150	1-216-841-11	METAL CHIP	47K	5%	1/10W
R113	1-216-821-11	METAL CHIP	1K	5%	1/10W (E13) (E2,E51,MX)	R151	1-216-841-11	METAL CHIP	47K	5%	1/10W
R113	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (E3,E12,E15,AUS,EA)	R152	1-216-864-11	SHORT CHIP	0		
R114	1-216-815-11	METAL CHIP	330	5%	1/10W (E3,E15)	R153	1-216-841-11	METAL CHIP	47K	5%	1/10W
R114	1-216-819-11	METAL CHIP	680	5%	1/10W (E12)	R154	1-216-841-11	METAL CHIP	47K	5%	1/10W
R114	1-216-821-11	METAL CHIP	1K	5%	1/10W (EA)	R155	1-216-841-11	METAL CHIP	47K	5%	1/10W
R114	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (AUS)	R156	1-216-841-11	METAL CHIP	47K	5%	1/10W
R114	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (E2,E13,E51,MX)	R157	1-216-841-11	METAL CHIP	47K	5%	1/10W
R114	1-216-864-11	SHORT CHIP	0 (SP,MY,PH,TH)			R158	1-216-841-11	METAL CHIP	47K	5%	1/10W
R115	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (EXCEPT GNZ8D:E15)	R159	1-216-841-11	METAL CHIP	47K	5%	1/10W
R115	1-216-864-11	SHORT CHIP	0 (GNZ8D:E15)			R160	1-216-841-11	METAL CHIP	47K	5%	1/10W
R116	1-216-811-11	METAL CHIP	150	5%	1/10W (GNZ7D)	R161	1-216-841-11	METAL CHIP	47K	5%	1/10W
R116	1-216-815-11	METAL CHIP	330	5%	1/10W (GNZ8D:EXCEPT E15)	R162	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R116	1-216-819-11	METAL CHIP	680	5%	1/10W (GNZ9D)	R163	1-216-841-11	METAL CHIP	47K	5%	1/10W
R117	1-216-833-11	METAL CHIP	10K	5%	1/10W	R164	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R118	1-216-809-11	METAL CHIP	100	5%	1/10W	R165	1-216-841-11	METAL CHIP	47K	5%	1/10W
R119	1-216-809-11	METAL CHIP	100	5%	1/10W	R166	1-216-841-11	METAL CHIP	47K	5%	1/10W
R120	1-216-841-11	METAL CHIP	47K	5%	1/10W	R167	1-216-841-11	METAL CHIP	47K	5%	1/10W
R121	1-216-809-11	METAL CHIP	100	5%	1/10W	R168	1-216-809-11	METAL CHIP	100	5%	1/10W
R122	1-216-809-11	METAL CHIP	100	5%	1/10W	R169	1-216-809-11	METAL CHIP	100	5%	1/10W
R123	1-216-809-11	METAL CHIP	100	5%	1/10W	R170	1-216-809-11	METAL CHIP	100	5%	1/10W
R124	1-216-809-11	METAL CHIP	100	5%	1/10W	R171	1-216-809-11	METAL CHIP	100	5%	1/10W
R125	1-216-809-11	METAL CHIP	100	5%	1/10W	R172	1-216-833-11	METAL CHIP	10K	5%	1/10W
R126	1-216-809-11	METAL CHIP	100	5%	1/10W	R173	1-216-833-11	METAL CHIP	10K	5%	1/10W
R127	1-216-809-11	METAL CHIP	100	5%	1/10W	R174	1-216-857-11	METAL CHIP	1M	5%	1/10W
R128	1-216-809-11	METAL CHIP	100	5%	1/10W	R177	1-216-853-11	METAL CHIP	470K	5%	1/10W
R129	1-216-809-11	METAL CHIP	100	5%	1/10W	R178	1-216-809-11	METAL CHIP	100	5%	1/10W
R130	1-216-809-11	METAL CHIP	100	5%	1/10W	R179	1-216-809-11	METAL CHIP	100	5%	1/10W
R131	1-216-841-11	METAL CHIP	47K	5%	1/10W	R180	1-216-809-11	METAL CHIP	100	5%	1/10W
R132	1-216-841-11	METAL CHIP	47K	5%	1/10W	R181	1-216-809-11	METAL CHIP	100	5%	1/10W
R133	1-216-841-11	METAL CHIP	47K	5%	1/10W	R182	1-216-809-11	METAL CHIP	100	5%	1/10W
R134	1-216-841-11	METAL CHIP	47K	5%	1/10W	R183	1-216-809-11	METAL CHIP	100	5%	1/10W
R135	1-216-841-11	METAL CHIP	47K	5%	1/10W	R184	1-216-809-11	METAL CHIP	100	5%	1/10W
R136	1-216-841-11	METAL CHIP	47K	5%	1/10W	R185	1-216-809-11	METAL CHIP	100	5%	1/10W
R137	1-216-841-11	METAL CHIP	47K	5%	1/10W	R186	1-216-809-11	METAL CHIP	100	5%	1/10W
R138	1-216-841-11	METAL CHIP	47K	5%	1/10W	R187	1-216-809-11	METAL CHIP	100	5%	1/10W
R139	1-216-841-11	METAL CHIP	47K	5%	1/10W	R188	1-216-809-11	METAL CHIP	100	5%	1/10W
R140	1-216-841-11	METAL CHIP	47K	5%	1/10W	R189	1-216-809-11	METAL CHIP	100	5%	1/10W
R141	1-216-841-11	METAL CHIP	47K	5%	1/10W	R192	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R142	1-216-841-11	METAL CHIP	47K	5%	1/10W	R193	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R143	1-216-841-11	METAL CHIP	47K	5%	1/10W	R194	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R144	1-216-841-11	METAL CHIP	47K	5%	1/10W	R195	1-216-809-11	METAL CHIP	100	5%	1/10W
R145	1-216-841-11	METAL CHIP	47K	5%	1/10W	R197	1-216-809-11	METAL CHIP	100	5%	1/10W
R146	1-216-841-11	METAL CHIP	47K	5%	1/10W	R198	1-216-864-11	SHORT CHIP	0		
R147	1-216-841-11	METAL CHIP	47K	5%	1/10W	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)			
						S13	1-762-875-21	SWITCH, KEYBOARD (ILLUMINATION)			
						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)			

HCD-GNZ7D/GNZ8D/GNZ9D

- PANEL
- SENSOR
- SIRCS
- STREAM
- SUBWOOFER

Ref. No.	Part No.	Description	Remark
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 (TV/SAT)	
S35	1-762-875-21	SWITCH, KEYBOARD (VIDEO)	
S36	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)	
S37	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
< 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 >			
D115	6-500-665-01	LED SELU6614C-STP5 (RING ILLUMINATION)	
D116	6-500-665-01	LED SELU6614C-STP5 (RING ILLUMINATION)	
D117	6-500-665-01	LED SELU6614C-STP5 (RING ILLUMINATION)	
D118	6-500-665-01	LED SELU6614C-STP5 (RING ILLUMINATION)	
D119	6-500-665-01	LED SELU6614C-STP5 (RING ILLUMINATION)	

Ref. No.	Part No.	Description	Remark
D120	6-500-665-01	LED SELU6614C-STP5 (RING ILLUMINATION)	
< RESISTOR >			
R069	1-216-833-11	METAL CHIP 10K 5% 1/10W	
< SWITCH >			
S101	1-786-289-11	SWITCH, DETECTION (I◀◀ - EQ + ▶▶I)	
S102	1-418-725-41	ENCODER, ROTARY (12 TYPE)	(MASTER VOLUME)

A-1095-778-A	SUBWOOFER BOARD, COMPLETE	(GNZ9D:EXCEPT TH)	
A-1111-488-A	SUBWOOFER BOARD, COMPLETE (GNZ9D:TH)	*****	
< CAPACITOR >			
C671	1-126-964-11	ELECT 10uF 20% 50V	(GNZ9D)
C672	1-162-294-31	CERAMIC 0.001uF 10% 50V	(GNZ9D)
C673	1-162-286-31	CERAMIC 220PF 10% 50V	(GNZ9D)
C674	1-126-968-11	ELECT 100uF 20% 50V	(GNZ9D)
C676	1-136-497-81	FILM 0.1uF 5% 50V	(GNZ9D)
C677	1-136-497-81	FILM 0.1uF 5% 50V	(GNZ9D)
C678	1-128-576-11	ELECT 100uF 20% 63V	(GNZ9D)
C679	1-128-582-11	ELECT 10uF 20% 100V	(GNZ9D)
C680	1-162-199-31	CERAMIC 10PF 5% 50V	(GNZ9D)
C681	1-128-552-51	ELECT 47uF 20% 63V	(GNZ9D)
C682	1-126-968-11	ELECT 100uF 20% 50V	(GNZ9D)
C683	1-128-582-11	ELECT 10uF 20% 100V	(GNZ9D)
C685	1-126-968-11	ELECT 100uF 20% 50V	(GNZ9D)
C691	1-128-576-11	ELECT 100uF 20% 63V	(GNZ9D)
C692	1-128-576-11	ELECT 100uF 20% 63V	(GNZ9D)
< CONNECTOR >			
CN603	1-564-505-11	PLUG, CONNECTOR 2P (GNZ9D)	
< DIODE >			
D671	8-719-991-33	DIODE 1SS133T-77 (GNZ9D)	
D672	8-719-991-33	DIODE 1SS133T-77 (GNZ9D)	
D681	8-719-110-36	DIODE RD13ESB2 (GNZ9D)	
D751	8-719-991-33	DIODE 1SS133T-77 (GNZ9D)	
< IC >			
IC601	6-600-182-01	IC STK404-140S (GNZ9D)	

SUBWOOFER

SUB TRANS

SURROUND AMP

Ref. No.	Part No.	Description	Remark			
< TRANSISTOR >						
Q671	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA	(GNZ9D)		
Q672	8-729-140-82	TRANSISTOR	2SA988TP-PAFAEA	(GNZ9D)		
Q673	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA	(GNZ9D)		
Q682	8-729-029-66	TRANSISTOR	DTC114ESA	(GNZ9D)		
Q683	8-729-119-78	TRANSISTOR	2SC2785-HFE	(GNZ9D)		
< RESISTOR >						
R671	1-247-831-11	CARBON	1K	5%	1/4W	(GNZ9D)
R672	1-247-871-11	CARBON	47K	5%	1/4W	(GNZ9D)
R673	1-249-411-11	CARBON	330	5%	1/4W	(GNZ9D)
R674	1-247-871-11	CARBON	47K	5%	1/4W	(GNZ9D)
△ R675	1-208-602-11	METAL	0.22X2		2W F	(GNZ9D)
△ R676	1-208-602-11	METAL	0.22X2		2W F	(GNZ9D)
R677	1-247-831-11	CARBON	1K	5%	1/4W	(GNZ9D)
R678	1-249-431-11	CARBON	15K	5%	1/4W	(GNZ9D)
R679	1-247-879-11	CARBON	100K	5%	1/4W	(GNZ9D)
R680	1-260-076-11	CARBON	10	5%	1/2W F	(GNZ9D)
△ R681	1-212-881-11	FUSIBLE	100	5%	1/4W F	(GNZ9D)
R682	1-249-428-11	CARBON	8.2K	5%	1/4W	(GNZ9D)
R683	1-249-428-11	CARBON	8.2K	5%	1/4W	(GNZ9D)
△ R684	1-202-972-61	FUSIBLE	1	5%	1/4W F	(GNZ9D)
R685	1-249-439-11	CARBON	68K	5%	1/4W	(GNZ9D)
△ R686	1-216-457-00	METAL OXIDE	1.2K	5%	2W F	(GNZ9D)
R687	1-249-429-11	CARBON	10K	5%	1/4W	(GNZ9D)
R688	1-247-871-11	CARBON	47K	5%	1/4W	(GNZ9D)
R689	1-249-429-11	CARBON	10K	5%	1/4W	(GNZ9D)
R690	1-249-429-11	CARBON	10K	5%	1/4W	(GNZ9D)
R693	1-249-435-11	CARBON	33K	5%	1/4W	(GNZ9D)
< RELAY >						
RY601	1-515-920-11	RELAY (24V)	(GNZ9D)			

Ref. No.	Part No.	Description	Remark			
SUB TRANS BOARD						

1-533-217-41		HOLDER, FUSE (EXCEPT E12,E13,AUS,TH)				
< CAPACITOR >						
C902	1-164-159-11	CERAMIC	0.1uF		50V	
C903	1-164-159-11	CERAMIC	0.1uF		50V	
C905	1-162-306-11	CERAMIC	0.01uF	20%	16V	
< 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			
< 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)				
		(GNZ7D:EXCEPT TH/GNZ8D:EXCEPT E12,E13,TH/				
		GNZ9D:EXCEPT E12,E13,AUS,MX,TH)				

A-1095-774-A		SURROUND AMP BOARD, COMPLETE				
		(GNZ9D:EXCEPT TH)				
A-1095-775-A		SURROUND AMP BOARD, COMPLETE				
		(GNZ8D:EXCEPT TH)				
A-1111-486-A		SURROUND AMP BOARD, COMPLETE				
		(GNZ9D:TH)				
A-1111-487-A		SURROUND AMP BOARD, COMPLETE				
		(GNZ8D:TH)				

7-685-872-09		SCREW +BVTT 3X8 (S) (GNZ8D/GNZ9D)				
< CAPACITOR >						
C501	1-126-964-11	ELECT	10uF	20%	50V	
					(GNZ8D/GNZ9D)	
C502	1-162-294-31	CERAMIC	0.001uF	10%	50V	
					(GNZ8D/GNZ9D)	
C503	1-162-286-31	CERAMIC	220PF	10%	50V	
					(GNZ8D/GNZ9D)	
C504	1-126-964-11	ELECT	10uF	20%	50V	
					(GNZ8D/GNZ9D)	
C506	1-136-497-81	FILM	0.1uF	5%	50V	
					(GNZ8D/GNZ9D)	

HCD-GNZ7D/GNZ8D/GNZ9D

SURROUND AMP

Ref. No.	Part No.	Description	Remark
C507	1-136-497-81	FILM	0.1uF 5% 50V (GNZ8D/GNZ9D)
C508	1-126-968-11	ELECT	100uF 20% 50V (GNZ8D/GNZ9D)
C510	1-162-199-31	CERAMIC	10PF 5% 50V (GNZ8D/GNZ9D)
C511	1-162-199-31	CERAMIC	10PF 5% 50V (GNZ8D/GNZ9D)
C512	1-162-199-31	CERAMIC	10PF 5% 50V (GNZ8D/GNZ9D)
C520	1-126-933-11	ELECT	100uF 20% 16V (GNZ8D/GNZ9D)
C521	1-126-933-11	ELECT	100uF 20% 16V (GNZ8D/GNZ9D)
C541	1-126-964-11	ELECT	10uF 20% 50V (GNZ8D/GNZ9D)
C542	1-162-294-31	CERAMIC	0.001uF 10% 50V (GNZ8D/GNZ9D)
C543	1-162-286-31	CERAMIC	220PF 10% 50V (GNZ8D/GNZ9D)
C544	1-126-964-11	ELECT	10uF 20% 50V (GNZ8D/GNZ9D)
C546	1-136-497-81	FILM	0.1uF 5% 50V (GNZ8D/GNZ9D)
C547	1-136-497-81	FILM	0.1uF 5% 50V (GNZ8D/GNZ9D)
C551	1-126-964-11	ELECT	10uF 20% 50V (GNZ8D/GNZ9D)
C552	1-162-294-31	CERAMIC	0.001uF 10% 50V (GNZ8D/GNZ9D)
C553	1-162-286-31	CERAMIC	220PF 10% 50V (GNZ8D/GNZ9D)
C554	1-126-964-11	ELECT	10uF 20% 50V (GNZ8D/GNZ9D)
C556	1-136-497-81	FILM	0.1uF 5% 50V (GNZ8D/GNZ9D)
C557	1-136-497-81	FILM	0.1uF 5% 50V (GNZ8D/GNZ9D)
C558	1-126-968-11	ELECT	100uF 20% 50V (GNZ8D/GNZ9D)
C573	1-137-844-21	ELECT	2200uF 20% 42V (GNZ8D/GNZ9D)
C574	1-137-844-21	ELECT	2200uF 20% 42V (GNZ8D/GNZ9D)
< CONNECTOR >			
CN502	1-785-318-11	PIN, CONNECTOR (STRAIGHT) 6P	(GNZ8D/GNZ9D)
CN572	1-564-506-11	PLUG, CONNECTOR 3P	(GNZ8D/GNZ9D)
< DIODE >			
D501	8-719-991-33	DIODE 1SS133T-77	(GNZ8D/GNZ9D)
D520	8-719-109-85	DIODE RD5.1ESB2	(GNZ8D/GNZ9D)
D541	8-719-991-33	DIODE 1SS133T-77	(GNZ8D/GNZ9D)
D542	8-719-991-33	DIODE 1SS133T-77	(GNZ8D/GNZ9D)
D551	8-719-991-33	DIODE 1SS133T-77	(GNZ8D/GNZ9D)
D552	8-719-991-33	DIODE 1SS133T-77	(GNZ8D/GNZ9D)
D571	8-719-510-68	DIODE D5SBA204101	(GNZ8D/GNZ9D)
D581	8-719-991-33	DIODE 1SS133T-77	(GNZ8D/GNZ9D)
D582	8-719-991-33	DIODE 1SS133T-77	(GNZ8D/GNZ9D)
D587	8-719-991-33	DIODE 1SS133T-77	(GNZ8D/GNZ9D)

Ref. No.	Part No.	Description	Remark
D588	8-719-991-33	DIODE 1SS133T-77	(GNZ8D/GNZ9D)
D589	8-719-991-33	DIODE 1SS133T-77	(GNZ8D/GNZ9D)
D591	8-719-991-33	DIODE 1SS133T-77	(GNZ9D)
< IC >			
IC501	6-707-960-01	IC STK433-270	(GNZ8D/GNZ9D)
< TRANSISTOR >			
Q501	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	(GNZ8D/GNZ9D)
Q516	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	(GNZ8D/GNZ9D)
Q517	8-729-119-78	TRANSISTOR 2SC2785-HFE	(GNZ8D/GNZ9D)
Q520	8-729-119-78	TRANSISTOR 2SC2785-HFE	(GNZ8D/GNZ9D)
Q541	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	(GNZ8D/GNZ9D)
Q551	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	(GNZ8D/GNZ9D)
Q581	8-729-026-39	TRANSISTOR 2SA933AS-QT	(GNZ8D/GNZ9D)
Q584	8-729-029-66	TRANSISTOR DTC114ESA	(GNZ8D/GNZ9D)
< RESISTOR >			
R501	1-247-831-11	CARBON 1K	5% 1/4W (GNZ8D/GNZ9D)
R502	1-247-871-11	CARBON 47K	5% 1/4W (GNZ8D/GNZ9D)
R503	1-249-415-11	CARBON 680	5% 1/4W (GNZ9D)
R503	1-249-416-11	CARBON 820	5% 1/4W (GNZ8D)
R504	1-247-871-11	CARBON 47K	5% 1/4W (GNZ8D/GNZ9D)
△ R505	1-208-602-11	METAL 0.22X2	2W F (GNZ8D/GNZ9D)
R507	1-247-831-11	CARBON 1K	5% 1/4W (GNZ8D/GNZ9D)
R508	1-249-431-11	CARBON 15K	5% 1/4W (GNZ8D/GNZ9D)
R509	1-247-879-11	CARBON 100K	5% 1/4W (GNZ8D/GNZ9D)
△ R510	1-260-076-11	CARBON 10	5% 1/2W F (GNZ8D/GNZ9D)
△ R511	1-212-881-11	FUSIBLE 100	5% 1/4W F (GNZ8D/GNZ9D)
R514	1-249-427-11	CARBON 6.8K	5% 1/4W (GNZ8D/GNZ9D)
R515	1-249-429-11	CARBON 10K	5% 1/4W (GNZ8D/GNZ9D)
R516	1-249-429-11	CARBON 10K	5% 1/4W (GNZ8D/GNZ9D)
R517	1-249-429-11	CARBON 10K	5% 1/4W (GNZ8D/GNZ9D)
R518	1-249-429-11	CARBON 10K	5% 1/4W (GNZ8D/GNZ9D)
△ R520	1-202-972-61	FUSIBLE 1	5% 1/4W F (GNZ8D/GNZ9D)
△ R521	1-202-972-61	FUSIBLE 1	5% 1/4W F (GNZ8D/GNZ9D)
R522	1-249-429-11	CARBON 10K	5% 1/4W (GNZ8D/GNZ9D)
R531	1-247-871-11	CARBON 47K	5% 1/4W (GNZ8D/GNZ9D)

SURROUND AMP

SW

TRANS

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R532	1-247-873-11	CARBON	56K 5% 1/4W (GNZ8D/GNZ9D)	△ R594	1-216-455-11	METAL OXIDE 560 5% 2W F (GNZ9D)	
R533	1-249-439-11	CARBON	68K 5% 1/4W (GNZ8D/GNZ9D)	R597	1-247-831-11	CARBON 1K 5% 1/4W (GNZ8D/GNZ9D)	
R541	1-247-831-11	CARBON	1K 5% 1/4W (GNZ8D/GNZ9D)	R598	1-247-863-11	CARBON 22K 5% 1/4W (GNZ8D/GNZ9D)	
R542	1-247-871-11	CARBON	47K 5% 1/4W (GNZ8D/GNZ9D)	△ R599	1-215-888-00	METAL OXIDE 220 5% 2W F (GNZ8D)	
R543	1-249-416-11	CARBON	820 5% 1/4W (GNZ9D)	△ R599	1-216-455-11	METAL OXIDE 560 5% 2W F (GNZ9D)	
R543	1-247-831-11	CARBON	1K 5% 1/4W (GNZ8D)	< RELAY >			
R544	1-247-871-11	CARBON	47K 5% 1/4W (GNZ8D/GNZ9D)	RY581	1-515-920-11	RELAY (24V) (GNZ8D/GNZ9D)	
△ R545	1-208-602-11	METAL	0.22X2 2W F (GNZ8D/GNZ9D)	RY582	1-515-920-11	RELAY (24V) (GNZ8D/GNZ9D)	
R547	1-247-831-11	CARBON	1K 5% 1/4W (GNZ8D/GNZ9D)	< THERMISTOR >			
R548	1-249-431-11	CARBON	15K 5% 1/4W (GNZ8D/GNZ9D)	TH501	1-807-796-11	THERMISTOR 10K (GNZ8D/GNZ9D)	
R549	1-247-879-11	CARBON	100K 5% 1/4W (GNZ8D/GNZ9D)	< TERMINAL BOARD >			
△ R550	1-260-076-11	CARBON	10 5% 1/2W F (GNZ8D/GNZ9D)	TM501	1-694-674-22	TERMINAL BOARD (6P) (SURROUND SPEAKER) (GNZ8D)	
R551	1-247-831-11	CARBON	1K 5% 1/4W (GNZ8D/GNZ9D)	TM501	1-694-914-11	TERMINAL BOARD (8P) (SURROUND SPEAKER) (GNZ9D)	
R552	1-247-871-11	CARBON	47K 5% 1/4W (GNZ8D/GNZ9D)	*****			
R553	1-249-415-11	CARBON	680 5% 1/4W (GNZ9D)		1-687-669-12	SW BOARD *****	
R553	1-249-416-11	CARBON	820 5% 1/4W (GNZ8D)	< SWITCH >			
R554	1-247-871-11	CARBON	47K 5% 1/4W (GNZ8D/GNZ9D)	S751	1-786-514-11	SWITCH, LEVER (SLIDE) (OPEN/CLOSE DETECT)	
△ R555	1-208-602-11	METAL	0.22X2 2W F (GNZ8D/GNZ9D)	*****			
R557	1-247-831-11	CARBON	1K 5% 1/4W (GNZ8D/GNZ9D)			TRANS BOARD *****	
R558	1-249-431-11	CARBON	15K 5% 1/4W (GNZ8D/GNZ9D)		1-533-217-41	HOLDER, FUSE	
R559	1-247-879-11	CARBON	100K 5% 1/4W (GNZ8D/GNZ9D)	< CAPACITOR >			
△ R560	1-260-076-11	CARBON	10 5% 1/2W F (GNZ8D/GNZ9D)	C913	1-126-968-11	ELECT 100uF 20% 50V	
△ R561	1-212-881-11	FUSIBLE	100 5% 1/4W F (GNZ8D/GNZ9D)	C915	1-164-159-11	CERAMIC 0.1uF 50V	
R573	1-247-879-11	CARBON	100K 5% 1/4W (GNZ8D/GNZ9D)	C918	1-128-576-11	ELECT 100uF 20% 63V	
R574	1-247-879-11	CARBON	100K 5% 1/4W (GNZ8D/GNZ9D)	< CONNECTOR >			
R587	1-247-871-11	CARBON	47K 5% 1/4W (GNZ8D/GNZ9D)	* CN913	1-564-518-11	PLUG, CONNECTOR 3P (GNZ8D/GNZ9D)	
R588	1-247-871-11	CARBON	47K 5% 1/4W (GNZ8D/GNZ9D)	* CN914	1-564-525-11	PLUG, CONNECTOR 10P	
R589	1-247-871-11	CARBON	47K 5% 1/4W (GNZ8D/GNZ9D)	* CN915	1-564-519-11	PLUG, CONNECTOR 4P	
R590	1-249-429-11	CARBON	10K 5% 1/4W (GNZ8D/GNZ9D)	< DIODE >			
R593	1-247-871-11	CARBON	47K 5% 1/4W (GNZ9D)	D911	6-500-522-11	DIODE 10EDB40-TA2B5	
△ R594	1-215-888-00	METAL OXIDE	220 5% 2W F (GNZ8D)	D912	8-719-982-19	DIODE MTZJ-30A	
				D913	8-719-118-67	DIODE RD6.2F-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	

HCD-GNZ7D/GNZ8D/GNZ9D

TRANS VIDEO

Ref. No.	Part No.	Description	Remark		
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

A-1095-819-A		VIDEO BOARD, COMPLETE (EXCEPT TH)			
A-1111-533-A		VIDEO BOARD, COMPLETE (TH)			

< CAPACITOR >					
C801	1-104-655-11	ELECT	470uF	20%	6.3V
C802	1-162-306-11	CERAMIC	0.01uF	20%	16V
C803	1-104-658-11	ELECT	100uF	20%	10V
C804	1-162-306-11	CERAMIC	0.01uF	20%	16V
C811	1-126-960-11	ELECT	1uF	20%	50V
C812	1-126-960-11	ELECT	1uF	20%	50V
C813	1-126-960-11	ELECT	1uF	20%	50V
C814	1-126-960-11	ELECT	1uF	20%	50V
C815	1-126-960-11	ELECT	1uF	20%	50V
C816	1-126-960-11	ELECT	1uF	20%	50V
C818	1-126-960-11	ELECT	1uF	20%	50V
C819	1-126-916-11	ELECT	1000uF	20%	6.3V
C820	1-126-916-11	ELECT	1000uF	20%	6.3V
C821	1-126-916-11	ELECT	1000uF	20%	6.3V
C822	1-126-916-11	ELECT	1000uF	20%	6.3V
C823	1-164-159-11	CERAMIC	0.1uF		50V
C824	1-126-916-11	ELECT	1000uF	20%	6.3V
C825	1-162-282-31	CERAMIC	100PF	10%	50V
C831	1-162-306-11	CERAMIC	0.01uF	20%	16V
C832	1-126-960-11	ELECT	1uF	20%	50V
C833	1-162-282-31	CERAMIC	100PF	10%	50V
C835	1-104-658-11	ELECT	100uF	20%	10V
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
C843	1-162-282-31	CERAMIC	100PF	10%	50V
C844	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	1-779-281-11	CONNECTOR, FFC (LIF(NON-ZIF)) 13P			
* CN851	1-564-728-11	PIN, CONNECTOR (SMALL TYPE) 12P			
< DIODE >					
D861	8-719-210-21	DIODE	11EQS04		

Ref. No.	Part No.	Description	Remark			
< GROUND TERMINAL >						
EP801	1-537-771-21	TERMINAL BOARD, GROUND				
EP851	1-537-771-21	TERMINAL BOARD, GROUND				
< COIL >						
FB831	1-412-473-21	INDUCTOR (SMALL TYPE)				
< IC >						
IC801	6-705-602-01	IC	MM1623BFBE			
IC802	6-703-622-01	IC	MM1508XNRE			
IC851	6-705-463-01	IC	BA33BC0T			
IC861	8-759-474-09	IC	SI-8050S-LF1101			
< JACK >						
J801	1-817-449-11	JACK, PIN 3P (COMPONENT VIDEO OUT)				
J802	1-794-970-11	JACK, PIN 1P (VIDEO OUT)				
< CONNECTOR >						
J803	1-784-248-11	CONNECTOR (ROUND TYPE) (S VIDEO OUT)				
< COIL >						
L801	1-410-470-11	INDUCTOR	10uH			
L802	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 >						
R800	1-247-807-31	CARBON	100	5%	1/4W	
R803	1-249-429-11	CARBON	10K	5%	1/4W	
R804	1-249-429-11	CARBON	10K	5%	1/4W	
R805	1-249-429-11	CARBON	10K	5%	1/4W	
R806	1-249-429-11	CARBON	10K	5%	1/4W	
R810	1-247-804-11	CARBON	75	5%	1/4W	
R811	1-247-804-11	CARBON	75	5%	1/4W	
R812	1-247-804-11	CARBON	75	5%	1/4W	
R813	1-247-804-11	CARBON	75	5%	1/4W	
R814	1-247-804-11	CARBON	75	5%	1/4W	
R815	1-247-804-11	CARBON	75	5%	1/4W	
R816	1-247-804-11	CARBON	75	5%	1/4W	
R817	1-247-804-11	CARBON	75	5%	1/4W	
R818	1-247-879-11	CARBON	100K	5%	1/4W	
R831	1-247-807-31	CARBON	100	5%	1/4W	
R870	1-247-807-31	CARBON	100	5%	1/4W	
R871	1-249-429-11	CARBON	10K	5%	1/4W	

MISCELLANEOUS						

6	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				

Ref. No.	Part No.	Description	Remark
59	1-828-332-11	WIRE (FLAT TYPE) (13 CORE)	
202	1-828-344-11	WIRE (FLAT TYPE) (15 CORE) (GNZ8D/GNZ9D)	
202	1-828-354-11	WIRE (FLAT TYPE) (17 CORE) (GNZ7D)	
203	1-828-330-11	WIRE (FLAT TYPE) (13 CORE)	
△ 254	1-696-847-22	CORD, POWER (AUS)	
△ 254	1-777-071-23	CORD, POWER (E12,E13,E51,EA,SP,PH)	
△ 254	1-824-818-21	CORD, POWER (WITH CONNECTOR) (TH)	
△ 254	1-827-226-11	CORD, POWER (E2,E3,E15,MX)	
△ 255	1-468-737-21	POWER, SWITCHING	
256	1-500-386-11	FILTER, CLAMP (FERRITE CORE) (AUS,EA)	
352	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)	
421	1-828-771-11	WIRE (FLAT TYPE) (24 CORE)	
△ 422	8-820-291-02	OPTICAL PICK-UP (KHM-310CAB/C2RP)	
△ F910	1-532-505-32	FUSE (5A/250V) (GNZ7D:EXCEPT E12,E13,TH)	
△ F910	1-533-949-33	FUSE, CYLINDRICAL (TIME LUG) (8A/250V) (GNZ8D:EXCEPT E12,E13,TH/GNZ9D:EXCEPT E12,E13,AUS,TH)	
△ F914	1-532-506-33	FUSE (6.3A/250V) (GNZ7D/GNZ8D)	
△ F914	1-533-949-33	FUSE, CYLINDRICAL (TIME LUG) (8A/250V) (GNZ9D)	
△ F915	1-532-506-33	FUSE (6.3A/250V) (GNZ7D/GNZ8D)	
△ F915	1-533-949-33	FUSE, CYLINDRICAL (TIME LUG) (8A/250V) (GNZ9D)	
△ F916	1-532-506-33	FUSE (6.3A/250V) (GNZ8D/GNZ9D)	
△ F917	1-532-506-33	FUSE (6.3A/250V) (GNZ8D/GNZ9D)	
△ F918	1-532-504-33	FUSE (4A/250V) (GNZ7D)	
△ F918	1-532-505-33	FUSE (5A/250V) (GNZ8D/GNZ9D)	
△ F919	1-532-504-33	FUSE (4A/250V)	
FAN901	1-763-072-11	FAN, DC	
FAN902	1-787-336-11	FAN, DC (GNZ9D)	
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-4723-963-A	MOTOR ASSY, TABLE (TABLE)	
M751	A-4736-655-A	MOTOR ASSY, LOADING (LOADING)	
RE701	1-477-680-12	ENCODER, ROTARY (DISC TRAY ADDRESS DETECT)	
△ T911	1-443-174-11	TRANSFORMER, POWER (GNZ7D:EXCEPT EA)	
△ T911	1-443-175-11	TRANSFORMER, POWER (GNZ7D:EA)	
△ T911	1-443-352-11	TRANSFORMER, POWER (GNZ8D:EXCEPT EA)	
△ T911	1-443-362-11	TRANSFORMER, POWER (GNZ8D:EA)	
△ T911	1-443-690-11	TRANSFORMER, POWER (GNZ9D:EXCEPT EA,MX)	
△ T911	1-443-691-11	TRANSFORMER, POWER (GNZ9D:EA,MX)	
TN1	1-693-671-11	TUNER (TM-10E)	
ACCESSORIES			

△	1-770-019-51	ADAPTOR, CONVERSION PLUG (EA)	
△	1-785-072-12	ADAPTOR, CONVERSION (E3,E15)	
△	1-785-072-21	ADAPTOR, CONVERSION (E51,SP,MY,PH)	

MEMO

HCD-GNZ7D/GNZ8D/GNZ9D

SONY®

SERVICE MANUAL

Ver. 1.1 2005. 12

E Model
HCD-GNZ7D/GNZ8D/GNZ9D
Australian Model
HCD-GNZ9D

SUPPLEMENT-1

File this supplement with the service manual.

Subject: Board changed to DMB11 board from DMB10 board

The DMB10 board has been changed to the DMB11 board in production.
This service manual supplement-1 describes only the printed wiring board for the DMB11 board.

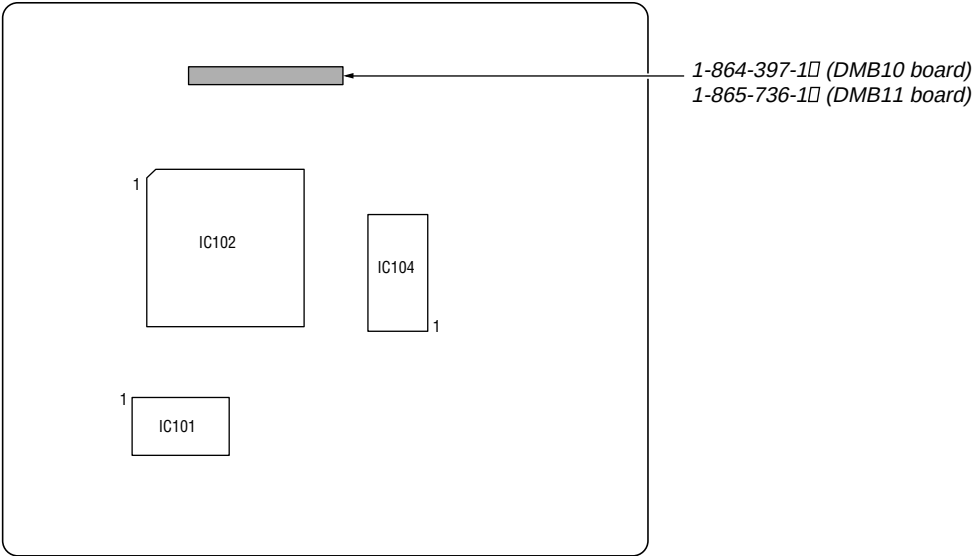
The schematic diagram and electrical parts list of the DMB11 board are added in the DMB10 section of the original service manual.

HCD-GNZ7D/GNZ8D/GNZ9D

HOW TO DISTINGNISH

Location of parts number on changed board.

【DMB10 BOARD】(SIDE A)
【DMB11 BOARD】(SIDE A)

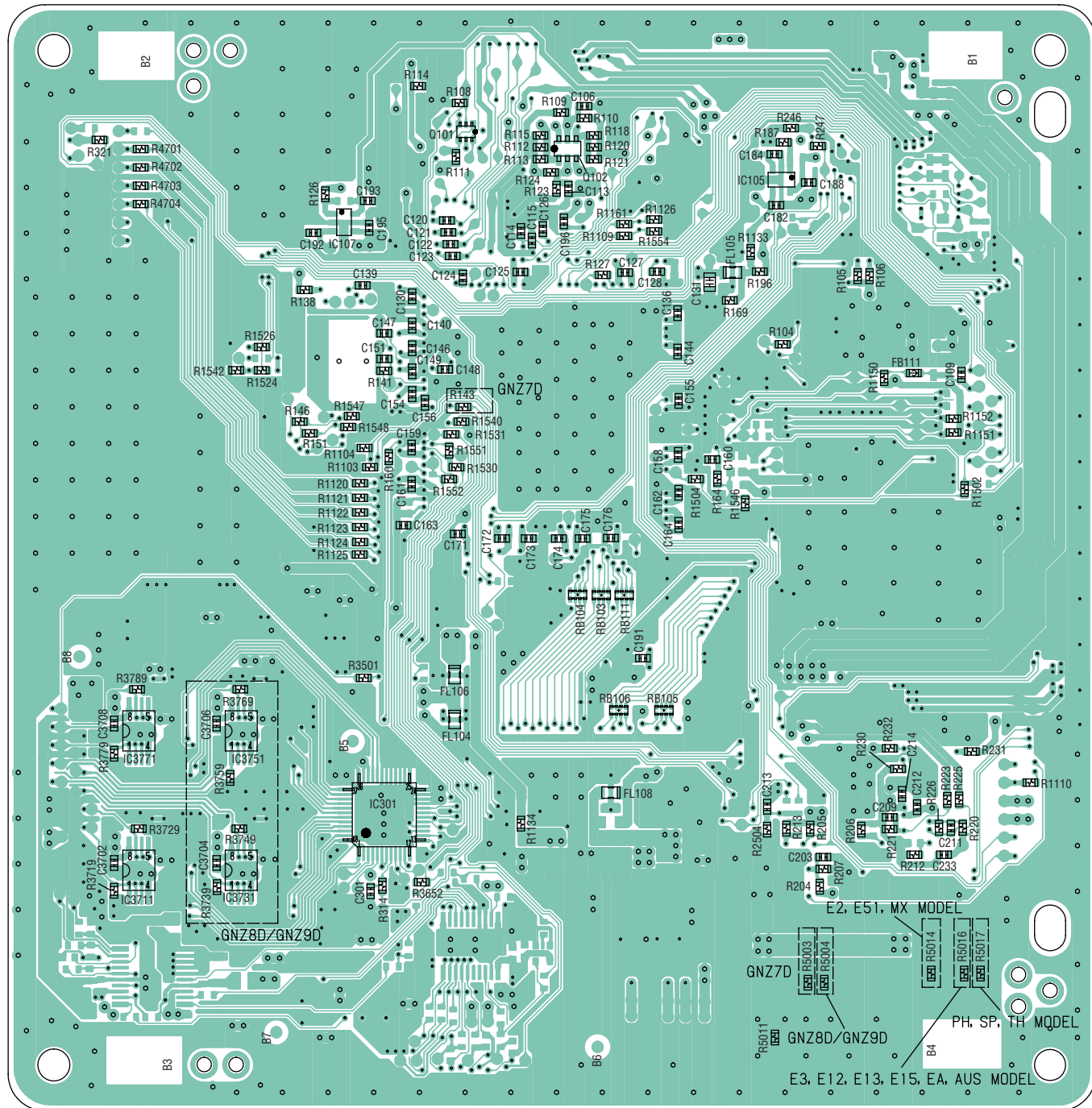


Ref. No.	Location
D1001	G-5
D3501	E-8
D3502	E-8
IC101	C-3
IC102	D-5
IC103	F-6
IC104	F-5
IC106	G-5
IC201	F-3
Q103	B-6
Q3801	E-8

HCD-GNZ7D/GNZ8D/GNZ9D



PRINTED WIRING BOARD — DMB11 SECTION (SIDE B) — : Uses unleaded solder.



1 1
(1 1)

Ref. No.	Location
IC105	B-4
IC107	C-7
IC301	G-6
IC3711	G-8
IC3731	G-7
IC3751	F-7
IC3771	F-8
Q101	B-6
Q102	B-5

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.

Also, clicking the version at the upper on the revised page allows you to jump to the next revised page.

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