

HCD-ZX66i/ZX99i

SERVICE MANUAL

Ver. 1.0 2009.02

US Model
HCD-ZX66i/ZX99i

Canadian Model
HCD-ZX66i



Photo: HCD-ZX99i

- HCD-ZX66i/ZX99i are the tuner, iPod, CD and amplifier section in LBT-ZX66i/ZX99i.

CD Section	Model Name Using Similar Mechanism	HCD-ZX9
	CD Mechanism Type	CDM79B-F1BD81
	Base Unit Name	BU-F1BD81A
	Optical Pick-up Name	KSM-215DCP/C2NP

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

HCD-ZX99i:

With 6-ohm loads, both channels driven, from 120 Hz – 10 kHz; rates 200 watts per channel minimum RMS power, with no more than 0.7 % total harmonic distortion from 250 miliwatts to rated output.

HCD-ZX66i US model:

With 6-ohm loads, per channel driven, from 120 Hz – 10 kHz; rates 220 watts per channel minimum RMS power, with no more than 0.7 % total harmonic distortion from 250 miliwatts to rated output.

Amplifier section

HCD-ZX99i:

The following are measured at

AC 120 V, 60 Hz

Front/Surround speaker

Power output (rated):

270 W + 270 W (at 6 Ω, 1 kHz, 10 % THD)

RMS output power (reference):

180 W × 2 + 180 W × 2 (6 Ω at 1 kHz, 10 % THD)

HCD-ZX66i

The following are measured at

AC 120 V, 60 Hz

Front speaker

Power output (rated):

280 W (at 6 Ω, 1 kHz, 10 % THD)

RMS output power (reference):

210 W × 2 (6 Ω at 1 kHz, 10 % THD)

Inputs

PHONO IN L/R:

Sensitivity 3 mV, impedance 47 kilohms

MIC 1/MIC 2:

Sensitivity 1 mV, impedance 10 kilohms

GAME INPUT AUDIO L/R:

Sensitivity 250 mV, impedance 47 kilohms

GAME INPUT VIDEO:

1 Vp-p, 75 Ω

PC IN L/R:

Sensitivity 250 mV, impedance 47 kilohms

Outputs

PHONES:

accepts headphones of 8 Ω or more

VIDEO OUT:

max. output level 1 Vp-p, load impedance 75 ohms

– Continued on next page –

COMPONENT Hi-Fi STEREO SYSTEM

9-889-432-01

2009B04-1

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Sony Corporation

Audio&Video Business Group

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SONY®

Disc player section

System Compact disc and digital audio system

Laser Semiconductor laser
($\lambda = 780$ nm)
Emission duration: continuous

Laser Output Max. 44.6 μ W*
* This output is the value measured at a distance of 200 mm
from the objective lens surface on the Optical Pick-up Block
with 7 mm aperture.

Frequency response 2 Hz - 20 kHz (± 1.0 dB)

Wave length 780 - 790 nm

Signal-to-noise ratio More than 90 dB

Dynamic range More than 90 dB

CD DIGITAL OUT OPTICAL:
Wave length 660 nm, output level
-18 dBm

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range 87.5 - 108.0 MHz (100 kHz step)

Antenna FM lead antenna

Antenna terminals 75 ohms unbalanced

Intermediate frequency 10.7 MHz

AM tuner section

Tuning range 530 - 1,710 kHz (with the interval set at 10 kHz)
531 - 1,710 kHz (with the interval set at 9 kHz)

Antenna AM loop antenna

Antenna terminals External antenna terminal

Intermediate frequency 450 kHz

iPod section

DC 5 V 500 mA MAX

General

Power requirements 120 V AC, 60 Hz

Power consumption

HCD-ZX99i (US model):

400 W

HCD-ZX66i (US model):

230 W

HCD-ZX66i (Canadian model):

240 VA

Dimensions (w/h/d) (Approx.)

HCD-ZX99i/HCD-ZX66i:

361.4 × 435.5 × 454.6 mm

(14 1/4 × 17 1/4 × 18 inches)

Mass (Approx.)

HCD-ZX99i: 19.0 kg (41 lb 15 oz)

HCD-ZX66i: 14.6 kg (32 lb 4 oz)

Supplied accessories

Remote Commander (1)

R6 (size AA) batteries (2)

AM loop antenna (1)

FM lead antenna (1)

Speaker pads:

•HCD-ZX99i only (16)

•HCD-ZX66i only (8)

Speaker cords:

•HCD-ZX99i only

-grey (10 m) (39 3/8 ft) (2)

-white (3 m) (11 7/8 ft) (2)

•HCD-ZX66i only

-3 m (11 7/8 ft) (2)

Design and specifications are subject to change without notice.

- Standby power consumption: 0.5 W
- Halogenated flame retardants are not used in the certain printed wiring boards.

SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle 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.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE \triangle SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR 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)

: 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 break-down 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 pickup block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

SAFETY CHECK-OUT (US MODEL)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage.

Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

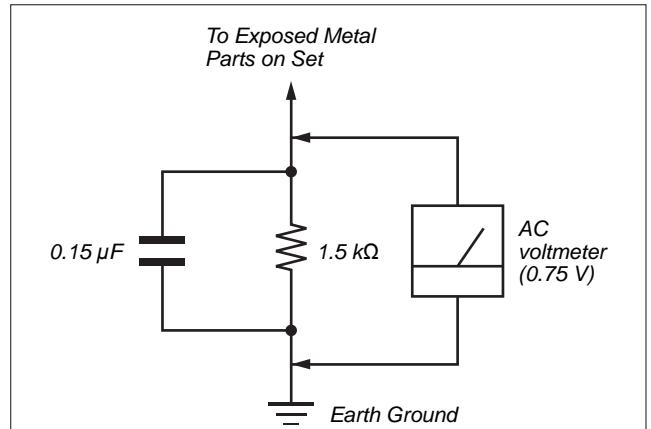


Fig. A. Using an AC voltmeter to check AC leakage.

Note on DualDiscs

A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side. However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.

Music discs encoded with copyright protection technologies

This product is designed to play back discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

Note on Multi Session disc

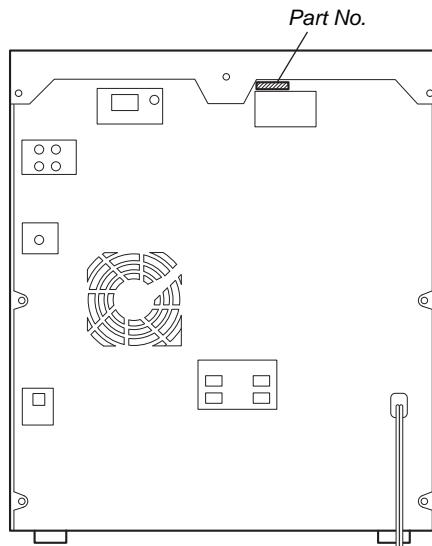
When you play back Multi Session discs with different formats for each session, the format of the first session is recognized as the disc type. Tracks in the second and subsequent sessions are played back if they are the same formats as the first session.

MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

MODEL IDENTIFICATION

-Back Panel-



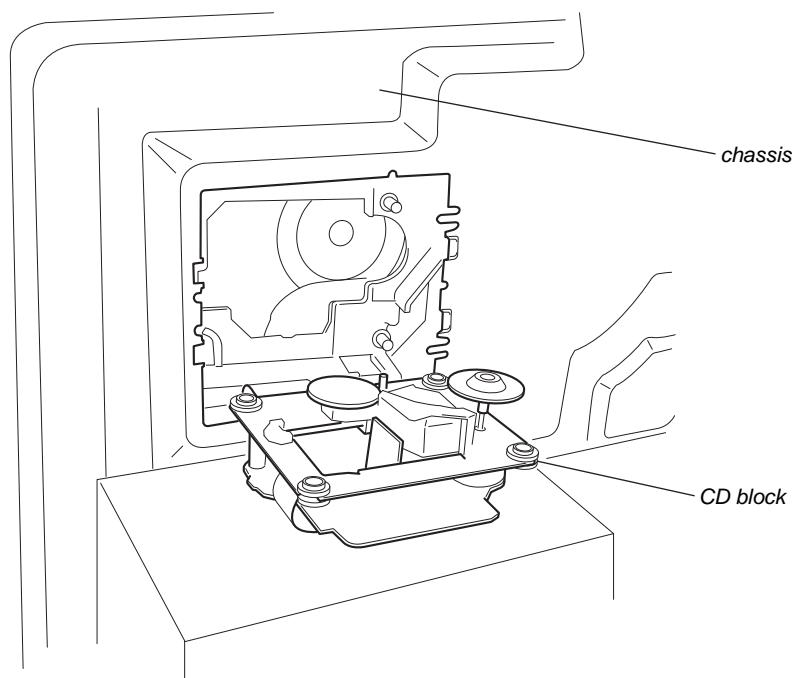
Model	Part No.
HCD-ZX99i: US	2-649-004-4
HCD-ZX66i: US	2-649-004-5
HCD-ZX66i: Canadian	2-649-004-6

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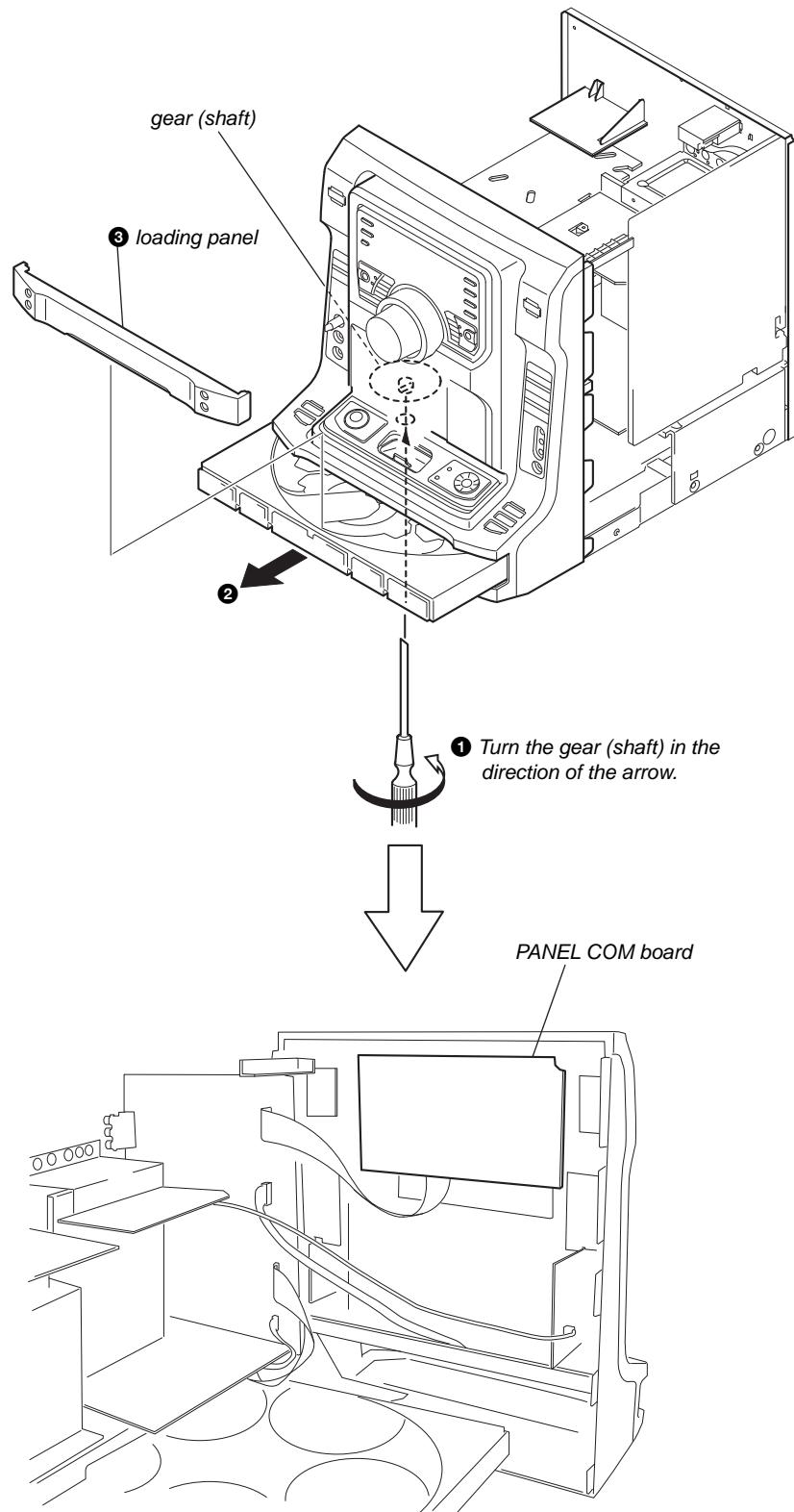
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SECTION 1
SERVICE NOTE

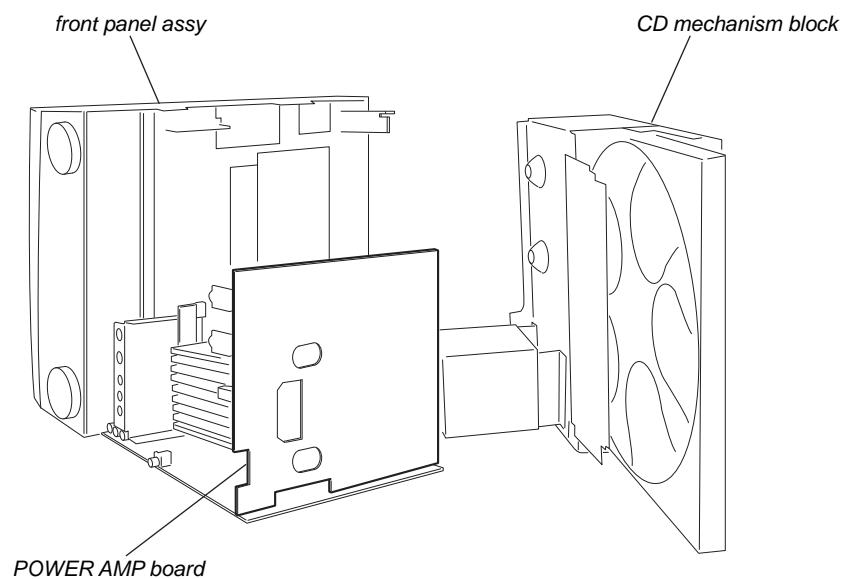
1-1. SERVICE POSITION OF CD BU BLOCK



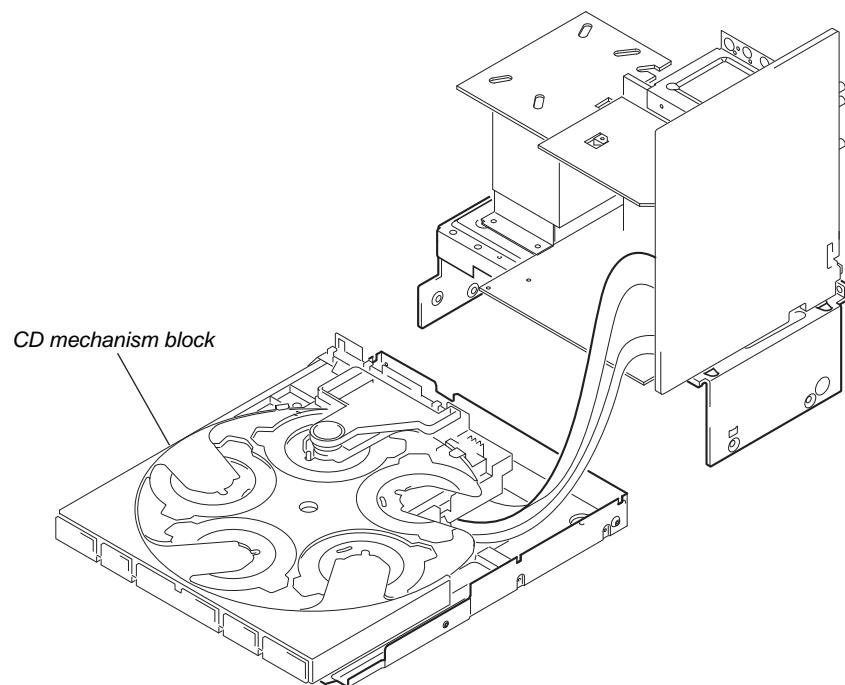
1-2. SERVICE POSITION OF PANEL COM BOARD



1-3. SERVICE POSITION OF POWER AMP BOARD



1-4. SERVICE POSITION OF CD CHANGER



SECTION 2

GENERAL

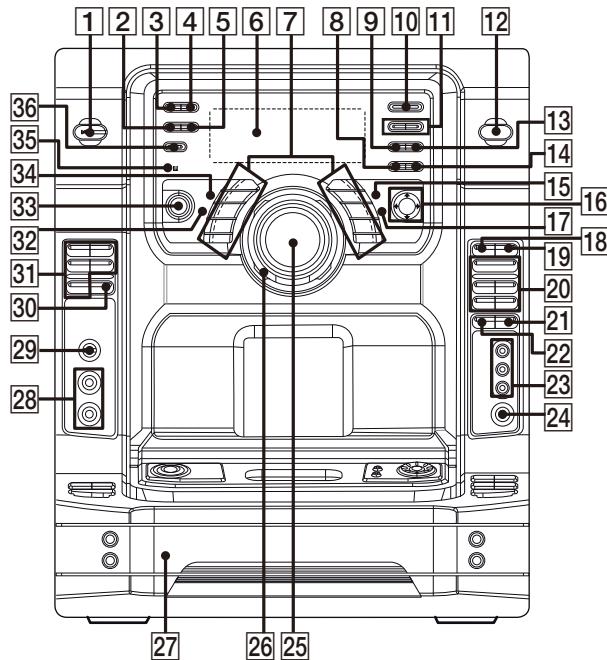
This section is extracted
from instruction manual.

Guide to parts and controls

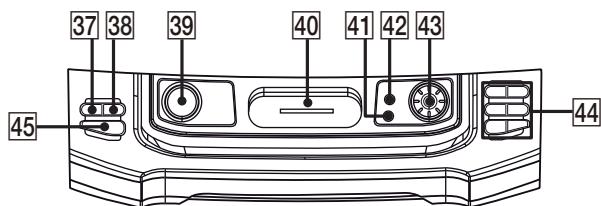
This manual mainly explains operations using the buttons on the unit, but the same operations can also be performed using the buttons on the remote having the same or similar names.

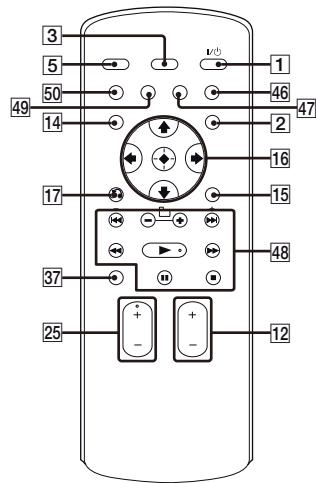
Unit

– Front view



– Top view



Remote RM-AMU008

- [1] I/O (on/standby) (pages 13, 14, 16, 20, 34, 37)**
Press to turn the system on or off.
- [2] TIMER MENU (pages 16, 32)**
Press to set the clock and the timers.
- [3] DISPLAY (pages 16, 21, 27, 28)**
Press to change the information in the display.
- [4] ILLUMINATION (page 26)**
Press to select the power illuminator.
- [5] SLEEP (page 32)**
Press to set the Sleep Timer.
- [6] Display (pages 10, 26, 28, 37)**
- [7] Preset Effect buttons (SALSA/REGGAE/POP/SAMBA/TANGO/ROCK/JAZZ/DANCE/MOVIE/GAME) (page 22)**
Press to select preset effect.
- [8] AMP MENU (pages 23, 27, 31)**
Press to display the menu to operate the system.

- [9] FM MODE (pages 20, 37)**
Press to select the FM monaural or stereo reception.
- [10] TUNER/BAND (page 19)**
Press to select AM or FM band.
- [11] TUNING +/- (pages 19, 30)**
Press to tune in a radio station.
- [12] Unit: FUNCTION (pages 14, 17, 22, 29)
Remote: FUNCTION +/- (pages 17, 19, 22, 29)**
Press to select a function.
- [13] TUNING MODE (pages 19, 31, 37)**
Press to select the tuning mode.
- [14] TUNER MEMORY (page 30)**
Press to preset a radio station.
- [15] TOOL MENU (page 21)**
Press to return to previous menu of the iPod.
- [16] $\uparrow/\downarrow/\leftarrow/\rightarrow$ (pages 16, 21, 23, 27, 31, 32)**
Push to select the menu items of the system and iPod.

Unit: ENTER (pages 16, 21, 23, 27, 29, 30, 31, 32)
Remote: \oplus (pages 16, 21, 29, 30, 32)
Press to enter the settings.
- [17] Unit: RETURN (page 21)
Remote: $\text{REW} \text{ RETURN}$ (page 21)**
Press to return to previous menu of the iPod.
- [18] iPod (page 20)**
Press to select iPod function.
- [19] PHONO (page 22)**
Press to select PHONO function.

Continued

7^{US}

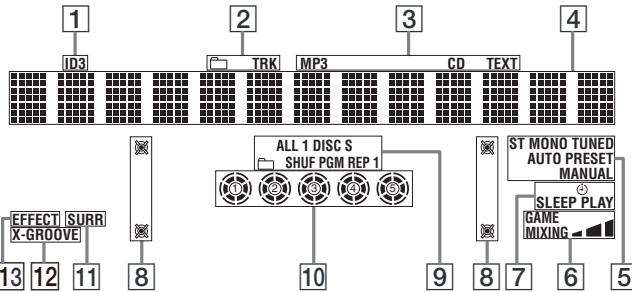
- [20]** Operation buttons for iPod function:
▶■ (play/pause) (pages 20, 21)
 Press to start or pause playback.
- ◀◀/▶▶ (rewind/fast forward) (page 21)**
 Press to find a point in a track.
- ◀◀◀/▶▶▶ (go backward/go forward) (page 21)**
 Press to select a track.
- [21] GAME MIXING (page 26)**
 Press to select the level of the GAME input.
- [22] GAME (pages 22, 25)**
 Press to select the GAME function.
- [23] GAME INPUT VIDEO jack (pages 13, 22)**
GAME INPUT AUDIO L/R jacks (pages 13, 22)
 Connect to an optional video game player.
- [24] PHONES jack (pages 34, 39)**
 Connect the headphones.
- [25] Unit: VOLUME +/– (pages 17, 19, 20, 22, 32, 34)**
 Turn to adjust the volume.
 Remote: VOLUME +*/- (pages 17, 19, 20, 22, 32, 34)
 Press to adjust the volume.
- [26] Power illuminator (page 26)**
- [27] Disc tray (pages 10, 14, 17, 35, 37)**
- [28] MIC 1/MIC 2 jack (pages 32, 34, 39)**
 Connect an optional microphone.
- [29] MIC LEVEL (pages 32, 34)**
 Turn to adjust the microphone volume.
- [30] PLAY MODE (pages 18, 36, 37)**
 Press to select the play mode of CD function.
- [31] DISC 1 ~ 5 (pages 17, 29)**
 Press to select a disc.
 Press to switch to CD function from other function.
- [32] USER EQ (page 31)**
 Press to select the preset user equalizer.
- [33] X-GROOVE (page 22)**
 Press to reinforce the bass.
- [34] SURROUND (page 22)**
 Press to select the surround effect.
- [35] IR Receptor (page 35)**
- [36] EFFECT ON/OFF (page 22)**
 Press to activate or deactivate the preset effect.
- [37] DISC SKIP (pages 14, 17, 29)**
 Press to select next disc.
- [38] EX-CHANGE (page 17)**
 Press to exchange other discs during playback.
- [39] (LBT-ZX99i only)**
SOUND FLASH (page 24)
 Press and hold to select “SOUND FLASH” effect.
- [40] iPod connector (pages 13, 20)**
 Place an optional iPod on the connector to listen to audio contents stored in the iPod.

- 41** (LBT-ZX99i only)
MODE (page 23)
When X-ROUND is set to on, press to select X-ROUND mode.
(LBT-ZX99i only)
SPEAKERS (page 25)
When X-ROUND is set to off, press to select speaker setting.
- 42** (LBT-ZX99i only)
X-ROUND ON/OFF (pages 23, 25)
Press to activate or deactivate X-ROUND mode.
- 43** (LBT-ZX99i only)
JOG (page 24)
Turn to select X-ROUND setting.
Turn to select SOUND FLASH speed.
- 44** Operation buttons for CD function:
□ +/– (pages 17, 29)
Press to select a folder of MP3 files.
◀◀/▶▶ (rewind/fast forward) (page 17)
Press to fast forward or rewind.
◀◀/▶▶ (go backward/go forward) (page 17)
Press to select a track.
▶▶■ (play/pause) (pages 17, 27, 29, 35)
Press to start or pause playback.
■ (stop) (pages 17, 19)
Press to stop playback.
- 45** ▲ OPEN/CLOSE (pages 14, 17, 35)
Press to open or close the disc tray.
- 46** EQ (pages 22, 31)
Press to select a preset sound effect.
- 47** CLEAR (page 30)
Press to delete the last step from the program list.
- 48** Operation buttons on remote:
+/- (tuning) (pages 19, 30)
Press to tune in a radio station.
□ +/- (pages 17, 29)
Press to select a folder of MP3 files.
◀◀/▶▶ (go backward/go forward) (pages 17, 21)
Press to select a track.
◀◀/▶▶ (rewind/fast forward) (pages 17, 21)
Press to fast forward or rewind.
▶▶* (play) (pages 17, 20, 29, 35)
Press to start playback.
■ (pause) (pages 17, 21)
Press to pause playback.
■ (stop) (pages 17, 19)
Press to stop playback.
- 49** REPEAT/FM MODE (pages 17, 37)
Press to change the Repeat Play setting of CD function.
Press to select the FM monaural or stereo reception.
- 50** PLAY MODE/TUNING MODE (pages 18, 19, 29, 31, 36, 37)
Press to select the play mode of CD function.
Press to select the tuning mode.

* The VOLUME + and ▶▶ buttons have tactile dots. Use the tactile dots as references when operating the system.

Continued ➞

9 

- Display

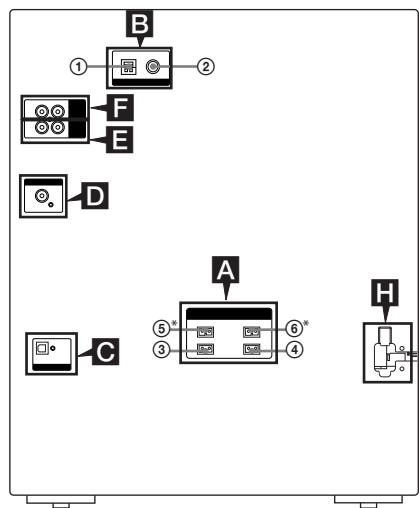
- 1** Lights up when the MP3 file contains ID3 tag information.
- 2** "TRK" lights up when a file name is displayed. "□" lights up when a folder name is displayed.
- 3** Indicates the type of disc or file that the system recognized.
- 4** Displays the current status and information (page 28).
- 5** Indicators for the TUNER function (pages 19, 30).
- 6** Indicators for the level of the Game Mixing (page 26).
- 7** Lights up when the timer is set (page 32).
- 8** (LBT-ZX99i only)
Lights up according to the speaker system setting.
- 9** Indicates the selected play mode for CD function (pages 18, 28).
- 10** Indicators for the disc tray (page 17). "○" lights up when the disc is selected. "□" lights up when there is a disc on the disc tray. "1", "2", "3", "4" and "5" light up when the system is turned on.
- 11** Lights up when the surround effect is activated (page 22).
- 12** Lights up when the X-GROOVE effect is activated (page 22).
- 13** Lights up when the sound effect is activated (page 22).

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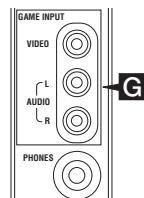
Getting Started

Hooking up the system

– Rear panel



– Front panel



- ① To AM loop antenna
- ② To FM lead antenna
- ③ To front speaker (right)
- ④ To front speaker (left)
- ⑤ To surround speaker (right)
- ⑥ To surround speaker (left)

* LBT-ZX99i only.

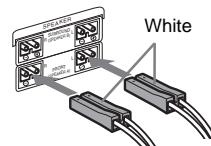
A Speakers

The speaker connectors are color-coded with their respective speaker terminals on the unit.

Front speakers

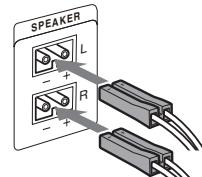
(LBT-ZX99i only)

Connect the speaker cords to the SPEAKER FRONT (SPEAKER A) terminals.



(LBT-ZX66i only)

Connect the speaker cords to the SPEAKER terminals.

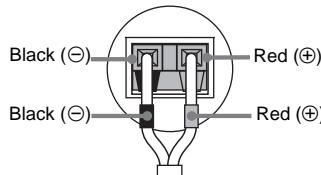


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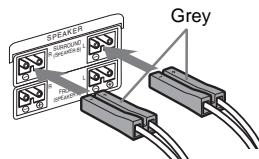
11 US

Tip

Connect the speaker cords to the terminals on the front speakers.

**Surround speakers
(LBT-ZX99i only)**

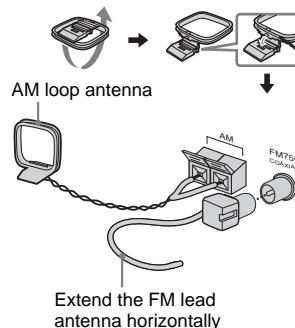
Connect the speaker cords to the SPEAKER SURROUND (SPEAKER B) terminals and to the terminals on the speakers as shown in the tip above.

**Notes**

- Be sure to use only the supplied speakers.
- Be sure to connect the speakers securely and correctly. When connecting speaker cords, insert the connector straight into the terminals.

B Antennas

Find a location and an orientation that provide good reception, and then set up the antennas.

**Note**

Keep the antennas away from the speaker cords and the power cord to avoid picking up noise.

C CD DIGITAL OUT jack

Use a digital optical cable (square, not supplied) to connect the digital input of the optional MD deck to this jack. You can then record digital audio from this system.

Note

There is no digital audio output from this jack during playback of MP3 files.

D VIDEO OUT jack

Use a video cable (not supplied) to connect the video input of TV to this jack.

E PHONO IN L/R jacks

Use an audio cord (not supplied) to connect the audio output of the turntable to these jacks. You can then output audio through this system.

F PC IN L/R jacks

Use an audio cord (not supplied) to connect the audio output of the computer to these jacks. You can then output audio through this system.

G GAME INPUT jacks

GAME INPUT VIDEO jack

Use a video cable (not supplied) to connect the video output of the optional video game player to this jack. You can then output video through this system.

Note

The video game player image may appear on the TV screen even if the system is turned off.

GAME INPUT AUDIO L/R jacks

Use an audio cord (not supplied) to connect the audio output of the optional video game player to these jacks. You can then output audio through this system.

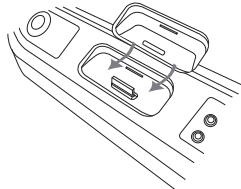
H Power

Connect the power cord to a wall outlet. The demonstration appears in the display. When you press **I/Off**, the system turns on and the demonstration automatically ends.

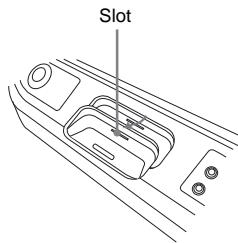
Using the iPod

Insert the iPod Dock Adapter (not supplied) into the iPod connector before use.

Use a Dock Adapter supplied with your iPod. Otherwise, a compatible Dock Adapter will need to be purchased separately from Apple Inc.

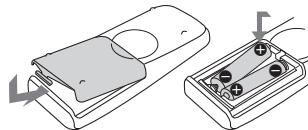


To remove the iPod Dock Adapter, pull it up with your fingernail or a flat object using the slot inside the adapter.



Using the remote

Slide and remove the battery compartment lid, and insert the two supplied R6 (size AA) batteries, **±** side first, matching the polarities shown below.

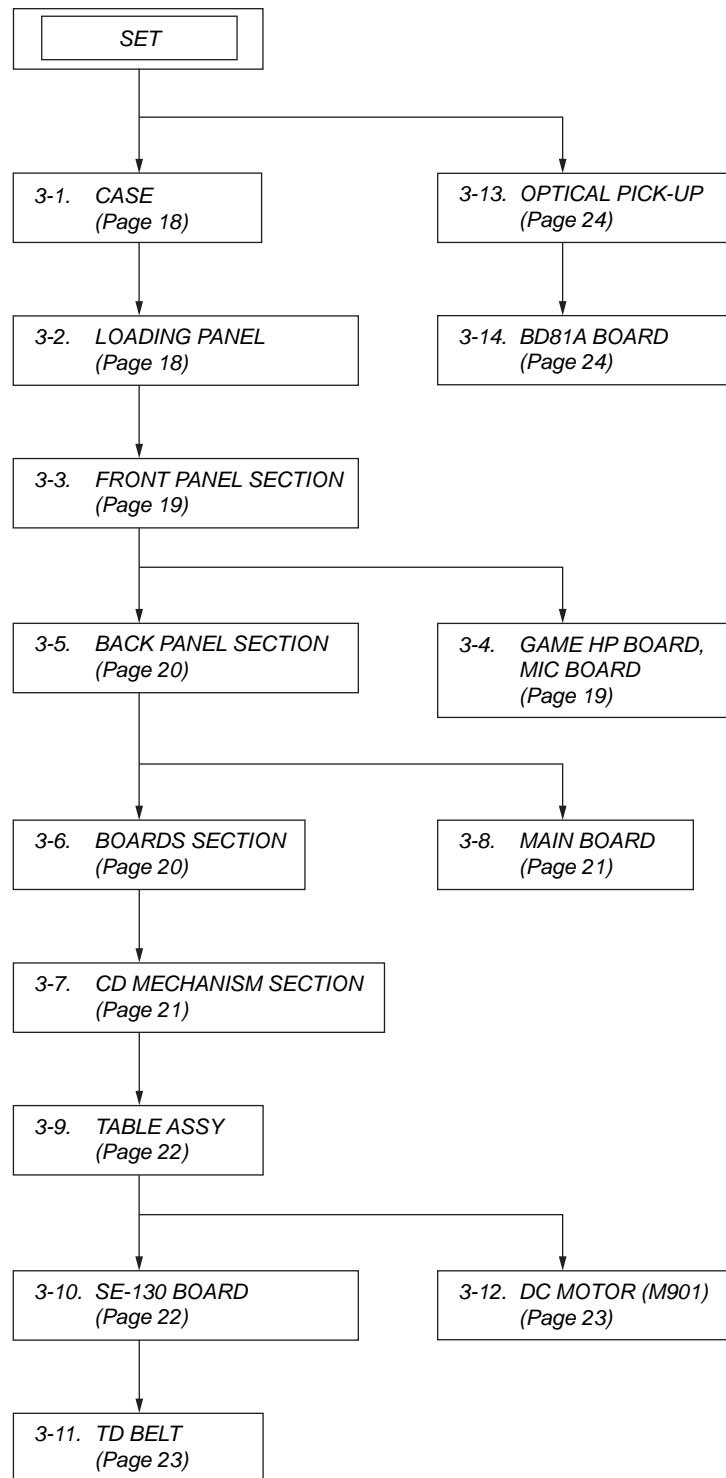


Notes

- If you do not use the remote for a long period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.
- With normal use, the batteries should last for about six months. When the remote no longer operates the system, replace both batteries with new ones.
- Batteries installed devices shall not be exposed to excessive heat such as sunshine, fire or the like.

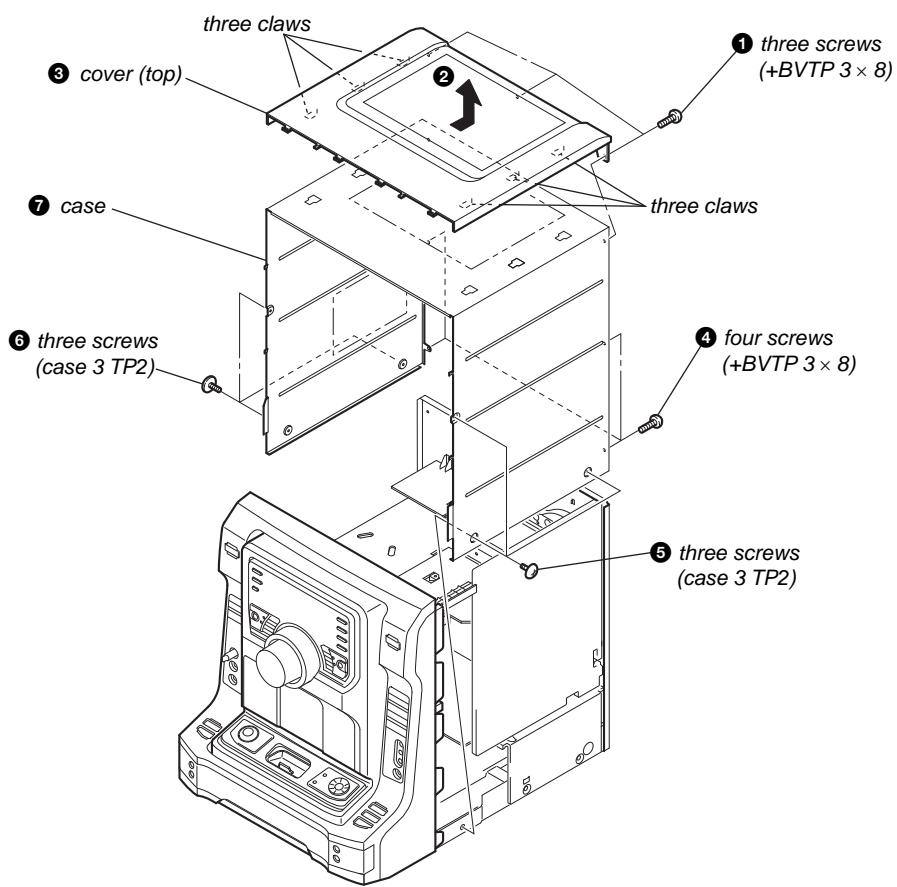
SECTION 3 DISASSEMBLY

- This set can be disassembled in the order shown below.

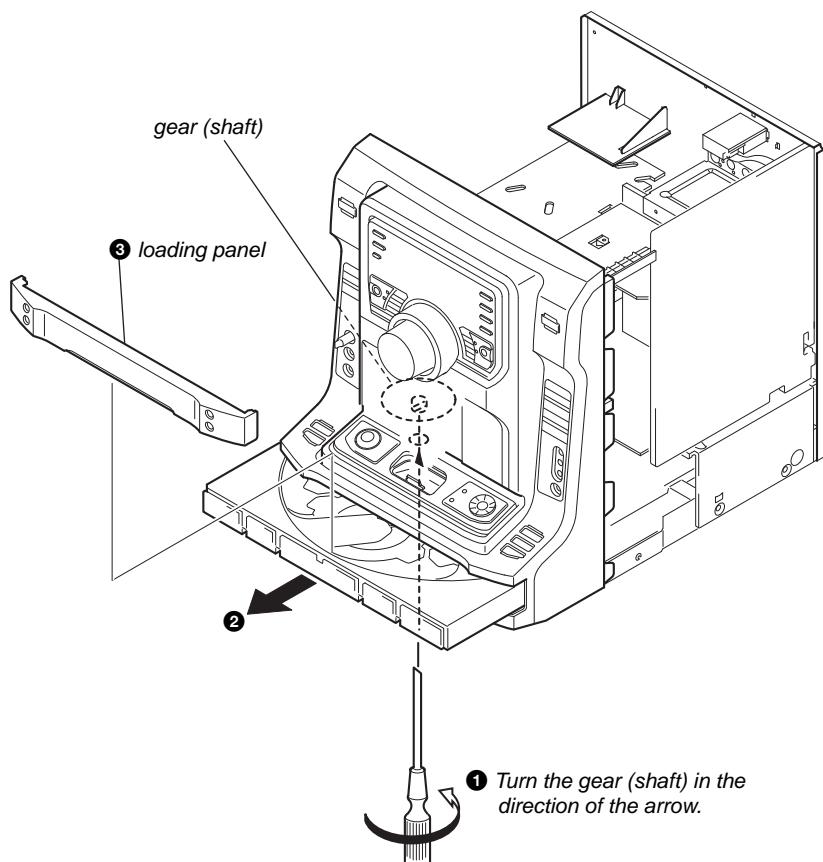


Note: Follow the disassembly procedure in the numerical order shown below.

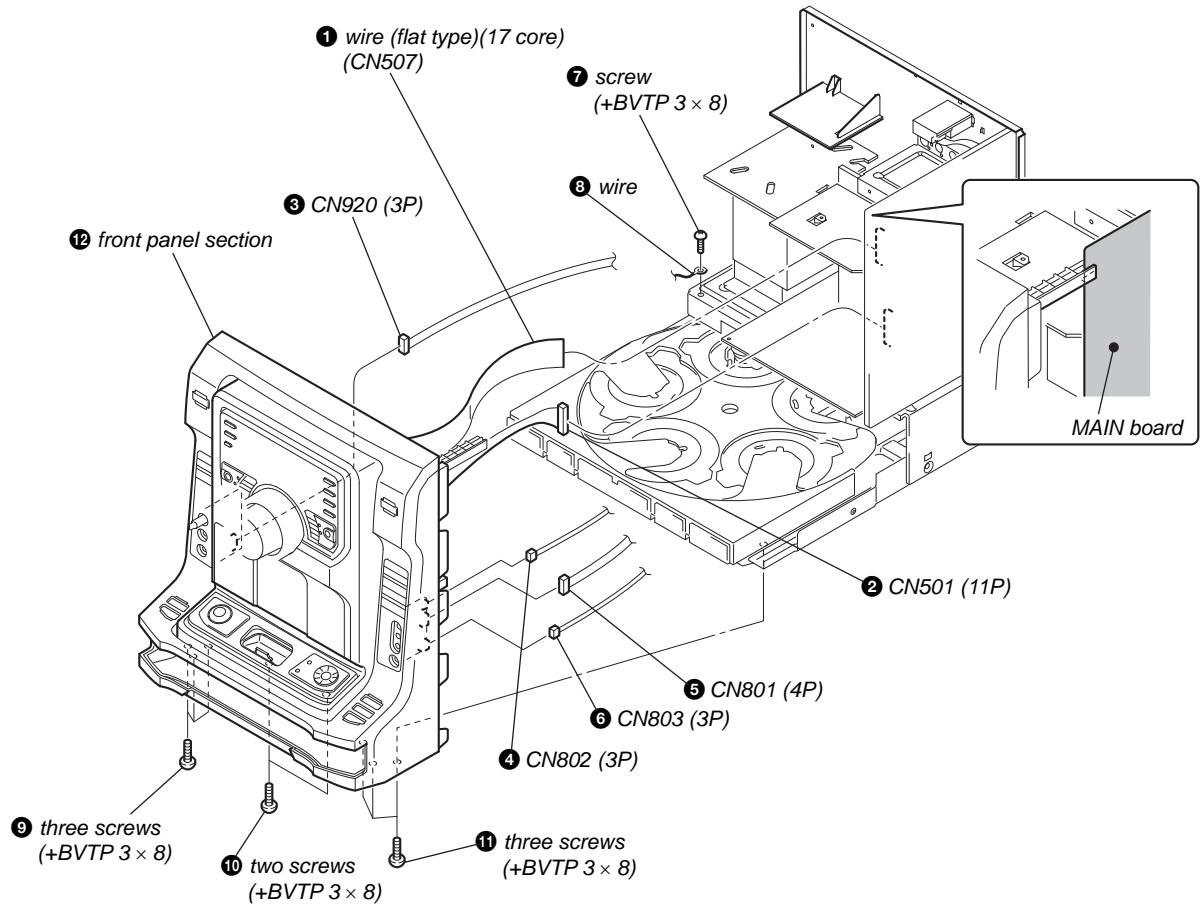
3-1. CASE



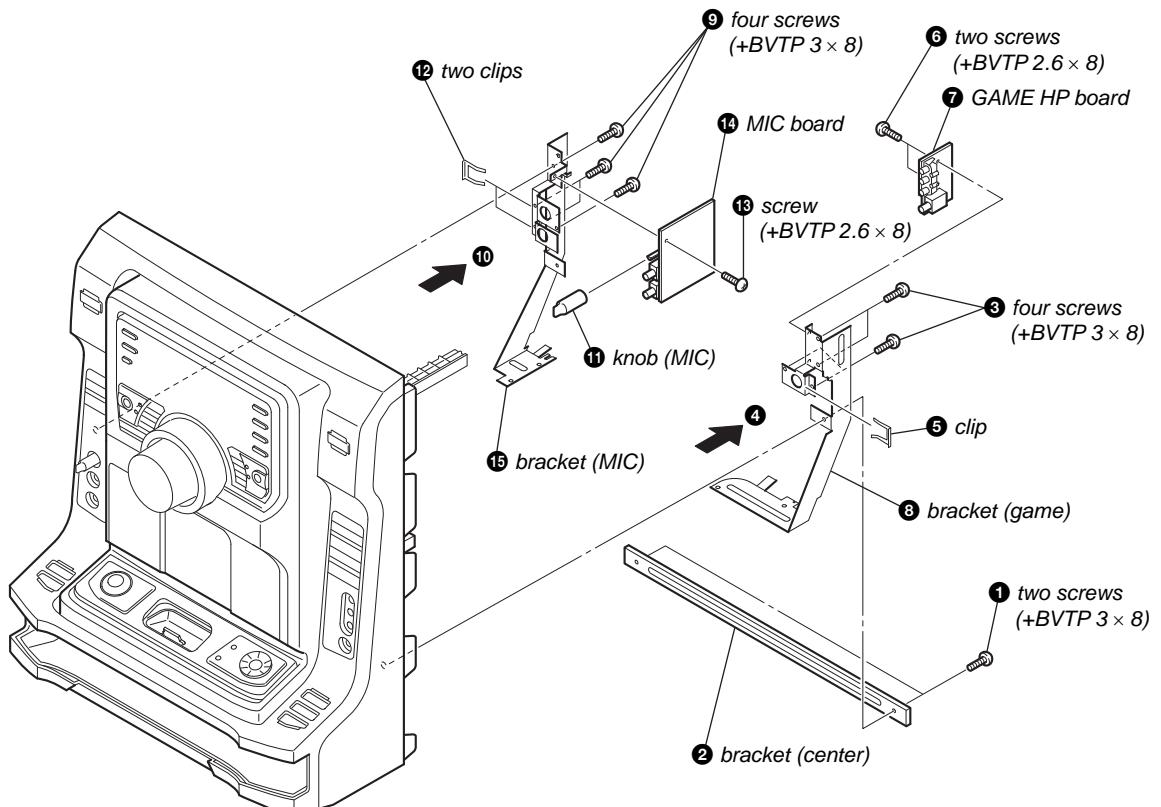
3-2. LOADING PANEL



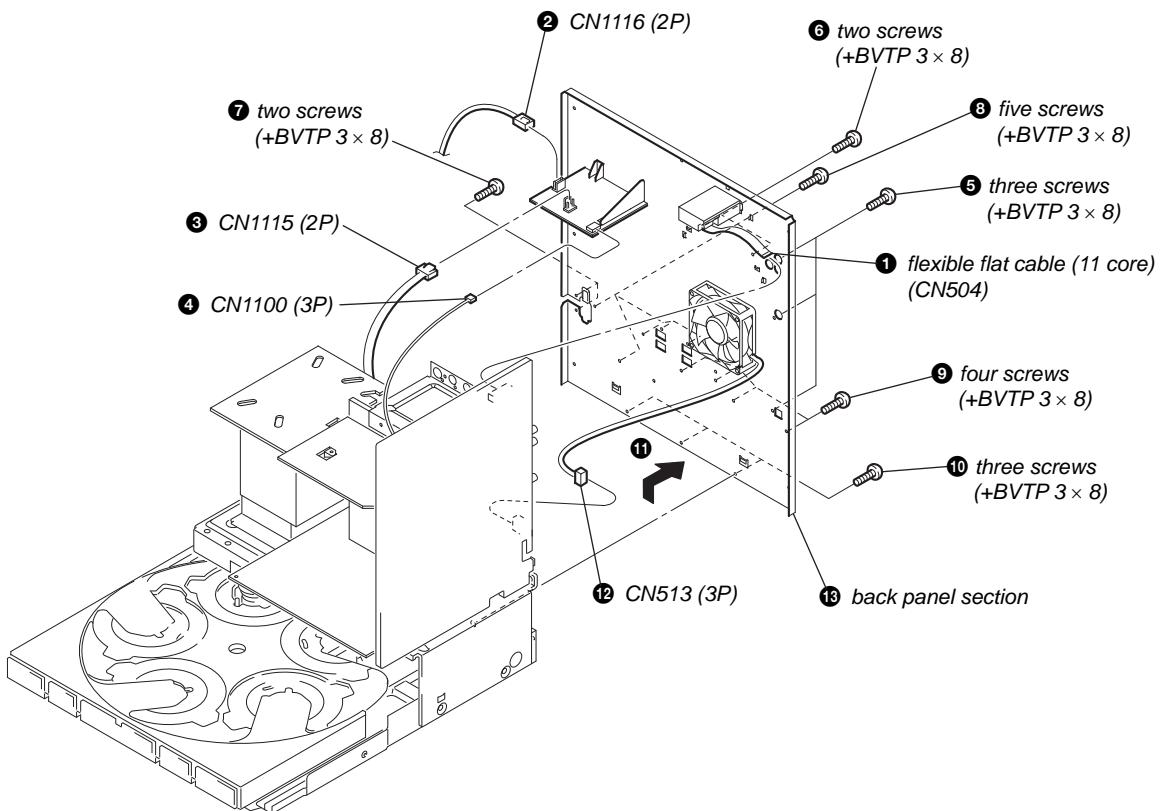
3-3. FRONT PANEL SECTION



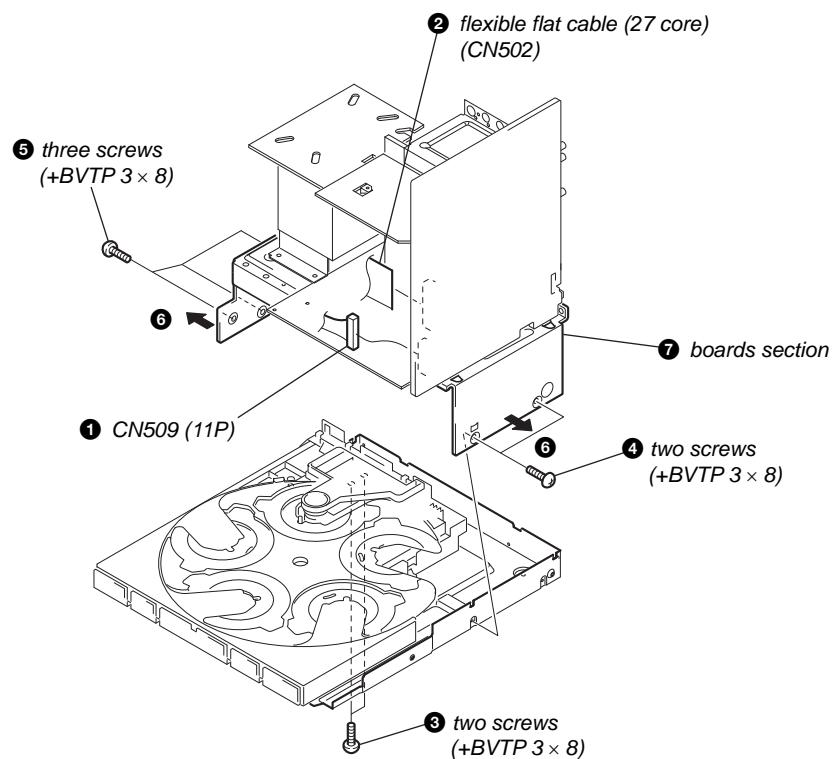
3-4. GAME HP BOARD, MIC BOARD



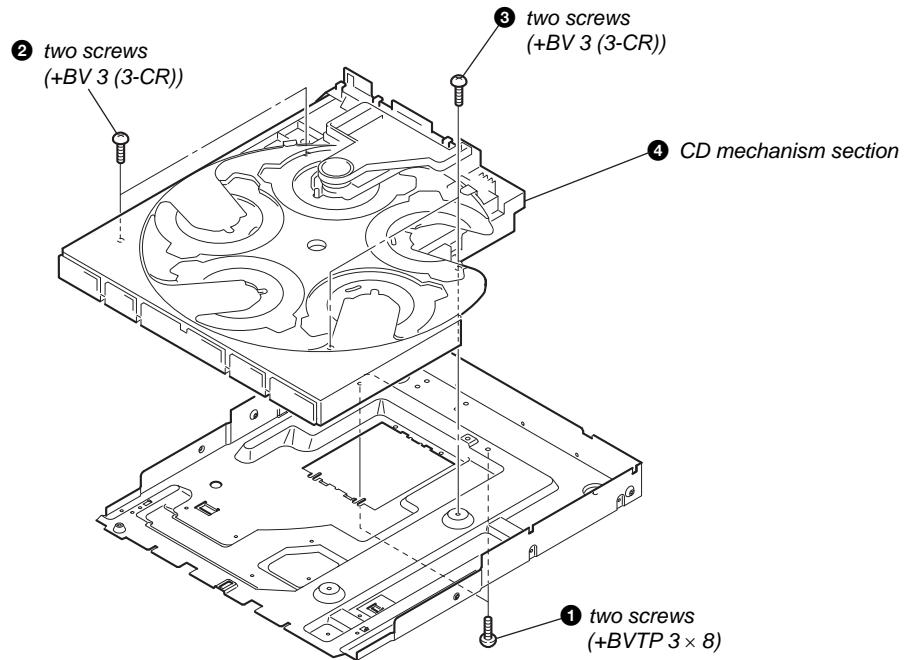
3-5. BACK PANEL SECTION



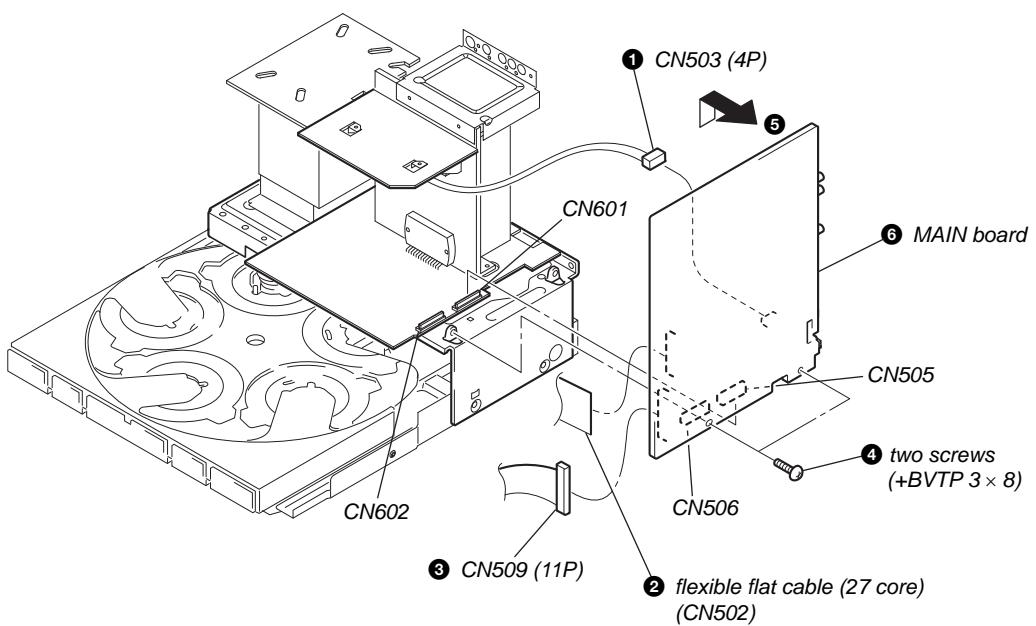
3-6. BOARDS SECTION



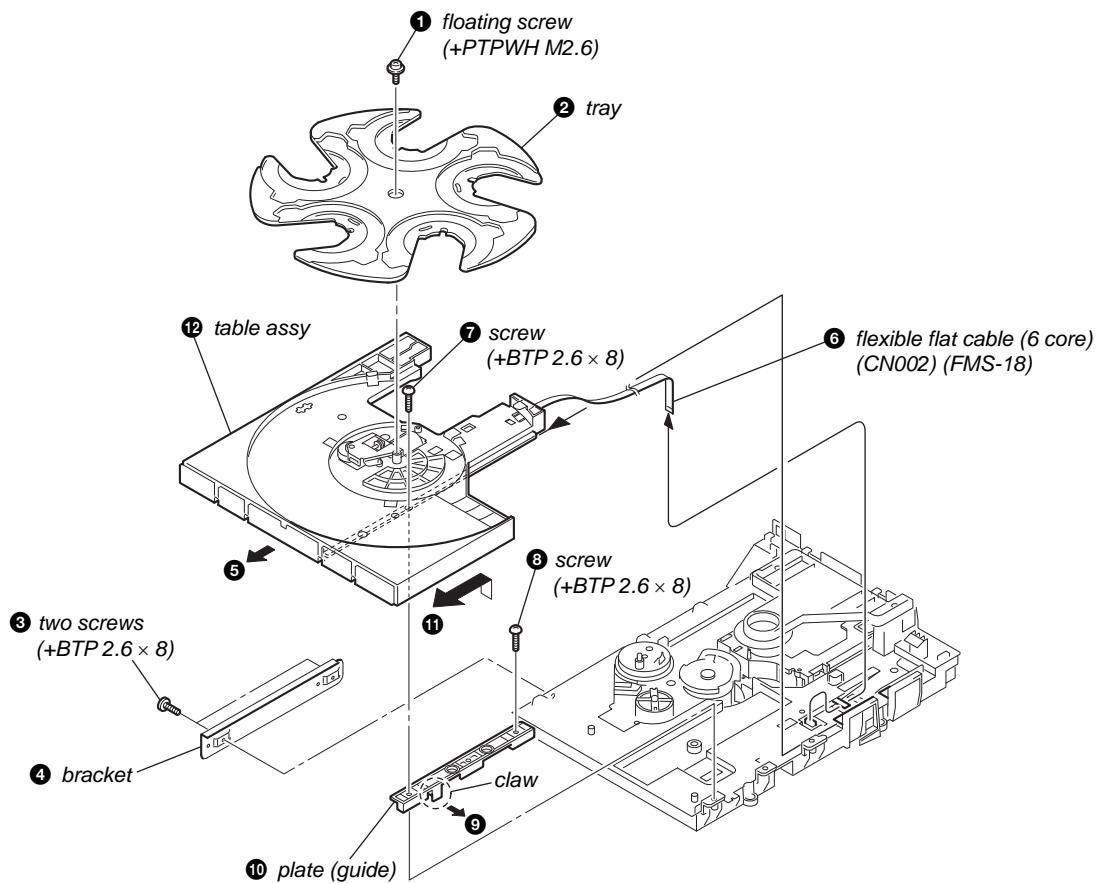
3-7. CD MECHANISM SECTION



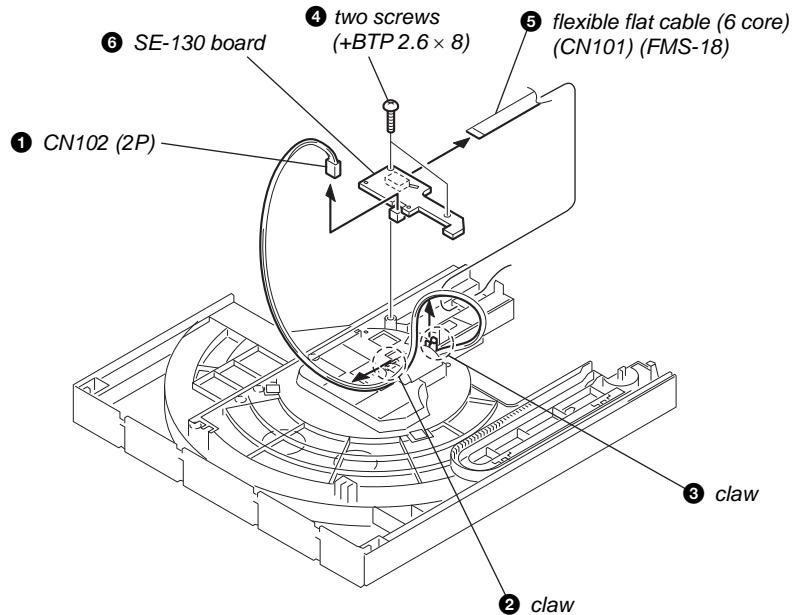
3-8. MAIN BOARD



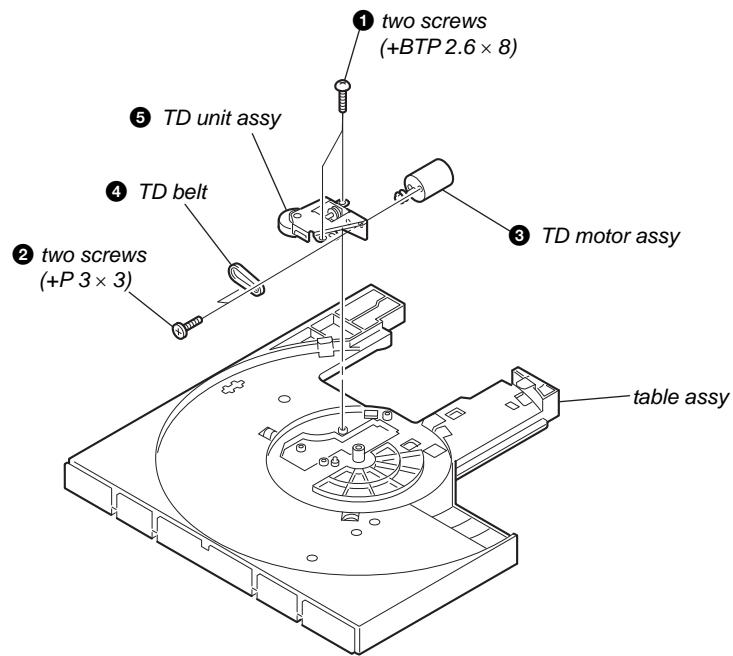
3-9. TABLE ASSY



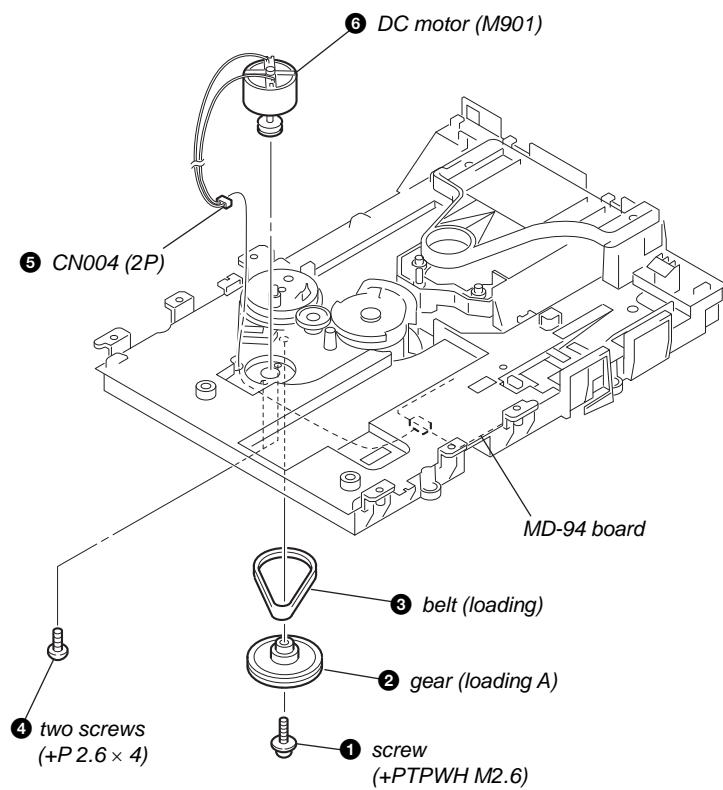
3-10. SE-130 BOARD



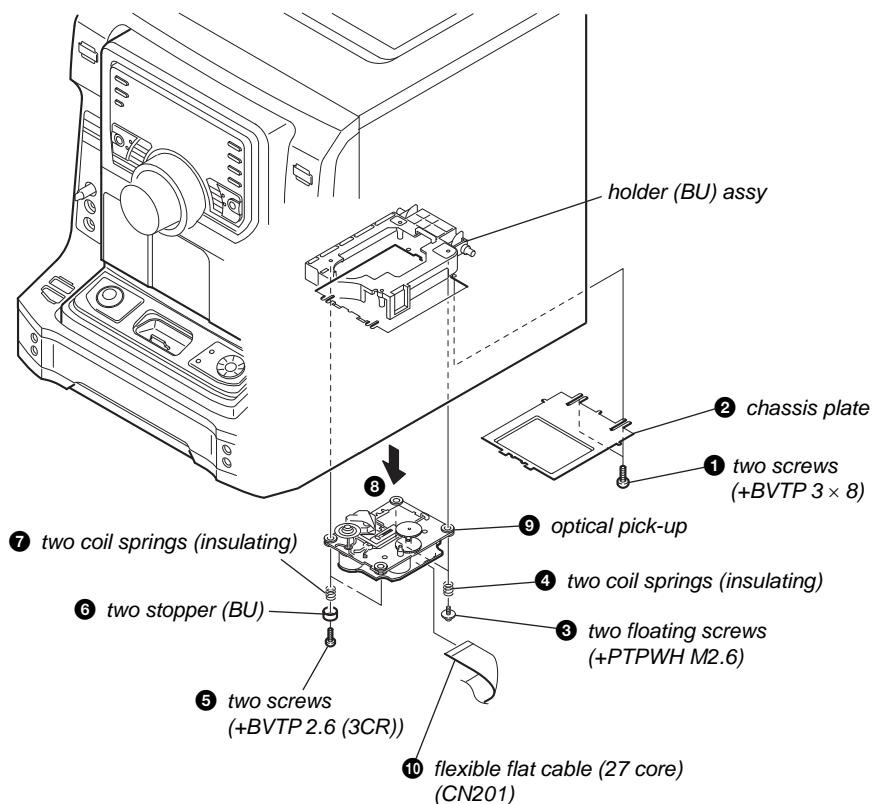
3-11. TD BELT



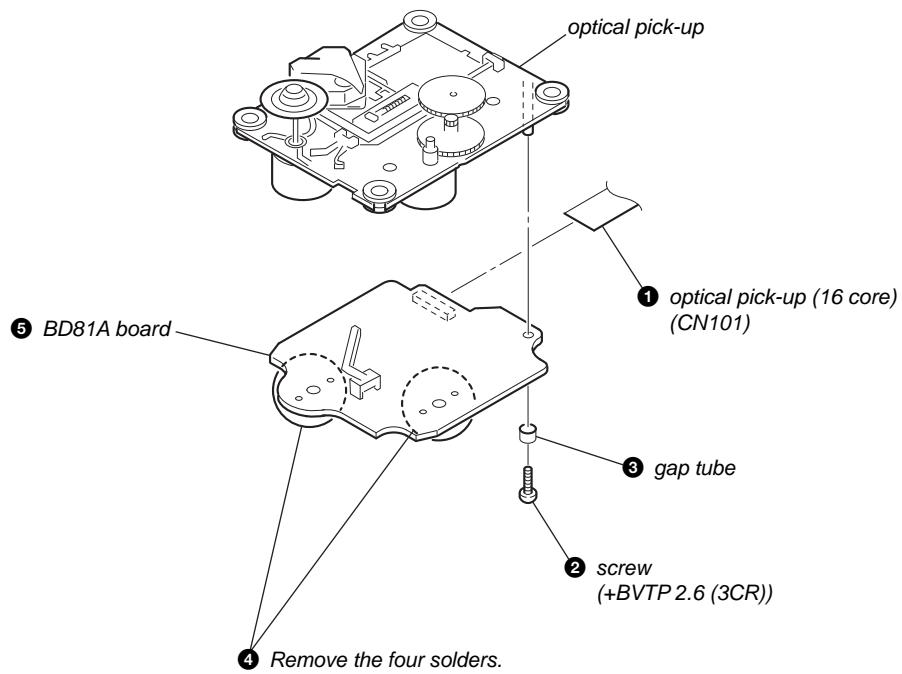
3-12. DC MOTOR (M901)



3-13. OPTICAL PICK-UP



3-14. BD81A BOARD



SECTION 4

TEST MODE

[GC TEST MODE]

- This mode is used to check the fluorescent indicator tube, LEDs, keys, JOG, VOLUME jog, model, destination and software version.

Procedure:

1. Press [▶▶] (iPod) button, [TUNING MODE] button and [DISC 2] button simultaneously.
2. All segments in fluorescent indicator tube and the LEDs are lighted up.
3. When you want to enter to the model version and destination display mode, press [DISC 1] button. The model information appears on the fluorescent indicator tube.
4. Each time [DISC 1] button is pressed, the display changes to display software version of the software creation. The sequence is MC, GC, SYS, CD, CDDM, CDMA, CDMB, BDA, BDB, ST, TA, TM, and iPod in this order, and returns to the MC version display.
5. When [DISC 3] button is pressed while the software version is being displayed, the date of the software creation appears. When [DISC 3] button is pressed again, the display returns to the software version display. When [DISC 1] button is pressed while the date of the software creation is being displayed, the date of the software creation is displayed in the same order of software version display.
6. Press [DISC 2] button, the key check mode is activated.
7. In the key check mode, the fluorescent indicator tube displays "K 0 J0 V0". Turn the [JOG] clockwise; "J" value increases by one. Turn the [JOG] counterclockwise; "J" value decreases by one. Each time a button is pressed, "K" value increases. Press their keys on main unit to check whether the key is detected. However, once a button has been pressed, it is no longer taken into account.
8. "V" value increases in the manner of 0, 1, 2, 3 ... if [VOLUME] knob is turned clockwise, or it decreases in the manner of 0, 9, 8, 7 ... if [VOLUME] knob is turned counterclockwise.
9. When [EX-CHANGE] button is pressed after all segments in fluorescent indicator tube and the LEDs light up, alternate segments in fluorescent indicator tube would light up. If you press [EX-CHANGE] button again, another half of alternate segments in fluorescent indicator tube would light up. Press [EX-CHANGE] button again would cause all segments lights up.
10. To release from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

[MC TEST MODE]

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

Procedure:

- To enter MC Test Mode
- 1. Press [▶▶] (iPod) button, [TUNING MODE] button and [DISC 3] button simultaneously.
- 2. The CD ring indicators and speaker indicators flash on the fluorescent indicator tube. The function is changed to PHONO.
- Check of Amplifier
- 1. Press [▲] button and a message "GEQ MAX" appears on the fluorescent indicator tube. GEQ increases to its maximum.
- 2. Press [▼] button and a message "GEQ MIN" appears on the fluorescent indicator tube. GEQ decreases to its minimum.
- 3. Press either [◀] button or [▶] button and a message "GEQ FLAT" appears on the fluorescent indicator tube. GEQ is set to flat.

4. When the [VOLUME] knob is turned clockwise even slightly, the sound volume increases to its maximum and a message "VOLUME MAX" appears on the fluorescent indicator tube.
5. When the [VOLUME] knob is turned counterclockwise even slightly, the sound volume decreases to its minimum and a message "VOLUME MIN" appears on the fluorescent indicator tube.
- To release from MC Test mode
1. To release from this mode, press [I / ⌂] button.
2. The cold reset is enforced at the same time.

[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:

1. Press [▶▶] (iPod) button, [TUNING MODE] button, and [I / ⌂] button simultaneously.
2. The fluorescent indicator tube becomes blank for a while, and the set is reset.

[VACS ON/OFF]

- This mode is used to switch ON and OFF the VACS (Variable Attenuation Control System).

Procedure:

1. Press [I / ⌂] button to turn the set ON.
2. Press [AMP MENU] button and [I / ⌂] button simultaneously. The message "VACS OFF" or "VACS ON" appears on the fluorescent indicator tube.

[TUNER STEP CHANGE]

- The step interval of AM channels can be toggled between 9 kHz and 10 kHz.

Procedure:

1. Press [I / ⌂] button to turn the set ON.
2. Press [TUNER/BAND] button to select the "AM".
3. Press [I / ⌂] button to turn the set OFF.
4. Press [TUNING MODE] button and [I / ⌂] button simultaneously. The system will turn ON automatically. The message "AM 9k STEP" or "AM 10k STEP" appears on the fluorescent indicator tube and thus the channel step is changed.

[CD SERVICE MODE]

- This mode let you move the CD sled motor freely. Use this mode when you want to clean the optical pick-up.

Procedure:

1. Press [I / ⌂] button to turn the set ON.
2. Select CD function.
3. Press [▶▶] (iPod) button, [TUNING MODE] button, and [DISC 5] button simultaneously.
4. The CD service mode is activated. The message "SERVICE MODE" appears on the fluorescent indicator tube.
5. With the CD in stop status, press [▶▶] (CD) to move the optical pick-up to outside track, or turn [◀◀] (CD) to move to inside track. The message "SLED OUT" or "SLED IN" appears on the fluorescent indicator tube.
6. To turn on or off the laser, press [PLAY MODE] button. The message "LD ON" or "LD OFF" appears on the fluorescent indicator tube.
7. To release from this mode, press [I / ⌂] button.

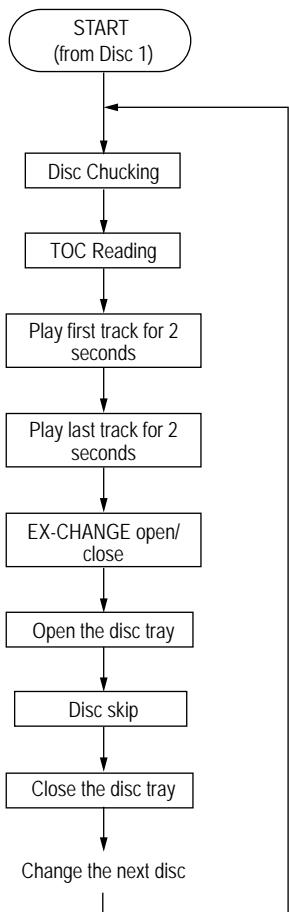
[CD AGING MODE]

- This mode can be used for operation check of CD section. If an error occurs, the aging operation would stops and the status is displayed.
- If there were no error occurs, the aging operation would continue repeatedly.

Procedure:

- Press [I / O] button to turn the set ON.
- Select CD function.
- Load 5 discs on the disc tray.
- Press [PLAY MODE] button repeatedly to select the "ALL DISCS" mode, and press the [REPEAT] button on the remote repeatedly to select repeat mode off.
- Press [▶▶] (iPod) button, [TUNING MODE] button and [DISC SKIP] button simultaneously.
- Aging operation is started.
- To release from this mode, press [I / O] button or disconnect the power cord to turn the power OFF.

Aging mode sequence:

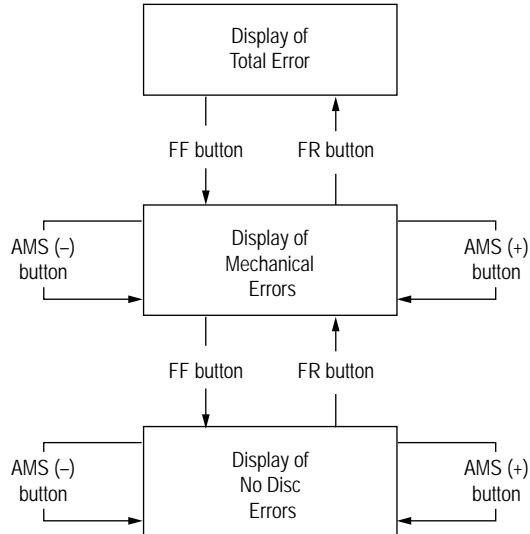


[CD ERROR CODE MODE]

- Display the CD error code when an error occurred

Procedure:

- Press [▶▶] (iPod) button, [TUNING MODE] button and [DISC SKIP] button simultaneously to enter the error code display mode.
- The fluorescent indicator tube displays the number of total error.
- Each time CD buttons is pressed, display change as below.



- To clear the error record, operate the cold reset. (Refer to the "MC COLD RESET")
- To release from this mode, press the [I / O] button or disconnect the power plug to turn the power OFF.

2. Display of total error

Em**Ed**

Em**: The number of times for CDM (mechanical) errors.
Ed**: The number of times for BD error (after chucking the disc).

- Display of CDM (mechanical) errors. It is show with "M" and 11 digit number.

M\$\$\$%&�

M*: The number of history error for mechanical ("0" is latest one)
(Press [▶▶] (CD) button to display next error)

\$\$: Not used

%%: Loading related error (Second figure is not used)

D: Stop by the problem other than mechanical problem while closing.

E: Stop by the problem other than mechanical problem while opening.

C: Stop by the problem other than mechanical problem while chucking up.

F: Stop by the problem other than mechanical problem while chucking down.

- &&: Emerging error
 01: Stop while chucking up.
 02: Stop while chucking up.
 03: Time-out of EX-CHANGE open.
 05: Time-out of EX-CHANGE close.
 ##: Not used (value is fixed to 00)
 00: Not used (value is fixed to 00)

- Display of BD errors. It is shown with “D” and 11 digits number.

D*%%&�

- D*: The number of error history (“0” is latest one)
 (Press [▶▶] (CD) button to display next error)
 \$\$: The detail of trouble
 01: Focus error
 02: GFS error
 03: Setup error

%%: Not Used

- &&: Processing operation when trouble occurs
 00: No disc judgment without chucking retry.
 01: No disc judgment after chucking retry.

- ##: The state when judged as no disc
 01: Stop
 02: Setup
 03: TOC reading
 04: Access
 05: Playback
 06: Pause
 07: Manual search (Play)
 08: Manual search (Pause)

00: Not used (value is fixed to 00)

[CD REPEAT 5 LIMIT OFF MODE]

- The number of repeat for CD playback is 5 times when the repeat mode is “REPEAT ALL”. This mode enables CD to repeat playback for limitless times.

Procedure:

- Press [I / ⌂] button to turn the set ON.
- Select CD function.
- Press [▶▶] (iPod) button, [TUNING MODE] button and [EX-CHANGE] button simultaneously to enter the CD repeat 5 limit off mode and the fluorescent indicator tube displays “LIMIT OFF”.
- To release from this mode, operate the cold reset. (Refer to the “MC COLD RESET”)

[CD SHIP MODE (WITH MEMORY CLEAR)]

- This mode moves the optical pick-up to the position durable to vibration and clears all data including preset data stored in the RAM to initial conditions. Use this mode when returning the set to the customer after repair.

Procedure:

- Press [I / ⌂] button to turn the set ON.
- Select CD function.
- Press [EX-CHANGE] button and [I / ⌂] button simultaneously. The set will power off automatically.
- After the “STANDBY” blinking display finishes, a message “MECHA LOCK” is displayed on the fluorescent indicator

tube and the CD ship mode is set.

- Then AC power OFF.

[CD SHIP MODE (WITHOUT MEMORY CLEAR)]

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

Procedure:

- Press [I / ⌂] button to turn the set ON.
- Select CD function.
- Press [DISC SKIP] button and [I / ⌂] button simultaneously. The set will power off automatically.
- After the “STANDBY” blinking display finishes, a message “MECHA LOCK” is displayed on the fluorescent indicator tube and the CD ship mode is set.
- The AC power OFF.

[CD POWER MANAGE]

- This mode let you switch on or off power supply to the BU during TUNER function.
- When CD POWER is set to OFF, the power supply to the BU is cut off during TUNER function. It will increase the time taken to access CD when function change from TUNER to CD but it will improve tuner reception.
- When CD POWER is set to ON, the power supply to the BU is not cut off during TUNER function. It will reduce the time taken to access CD when function change from TUNER to CD but it will decrease tuner reception performance.

Procedure:

- Press [I / ⌂] button to turn the set ON.
- Select CD function.
- Press [I / ⌂] button to turn the set OFF.
- When demonstration appear, press [■] (CD) button and [I / ⌂] button simultaneously. The set will power on automatically.
- The message “CD POWER ON” or “CD POWER OFF” will be displayed on the fluorescent indicator tube.

[CD TRAY LOCK MODE]

- This mode let you lock the disc tray. When this mode is activated, the disc tray will not open when [OPEN/CLOSE] button or [EX-CHANGE] button is pressed. The message “LOCKED” will be displayed on the fluorescent indicator tube.

Procedure:

- Press [I / ⌂] button to turn the set ON.
- Select CD function.
- Press and hold [■] (CD) button and [▲ OPEN/CLOSE] button simultaneously until “LOCKED” or “UNLOCKED” displayed on the fluorescent indicator tube (around 5 seconds).

[VACS DISPLAY]

- This mode is used to check the VACS level.

Procedure:

- Press [I / ⌂] button to turn on the system.
- Press [▶▶] (iPod) button, [TUNER MEMORY] button and [DISC 3] button simultaneously.
- During the VACS Level Display Mode, the fluorescent indicator tube displays “VACSx APy”. “x” represent VACS level which is triggered by signal level, and “y” represent APVACS (Abuse Protection VACS) level which is triggered.

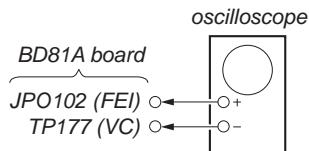
SECTION 5

ELECTRICAL ADJUSTMENTS

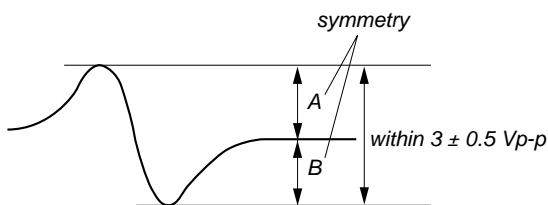
CD SECTION

Note:

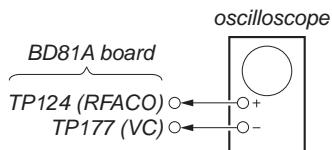
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than $10M\Omega$ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S-Curve Check

Procedure:

1. Connect oscilloscope to JPO102 (FEI) and TP177 (VC).
2. Press the $[I / \odot]$ button to turn the power ON.
3. Load a disc (YEDS-18) and actuate the focus search. (In consequence of open and close the disc tray, actuate the focus search)
4. Confirm that the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within $3 \pm 0.5 V_{p-p}$.

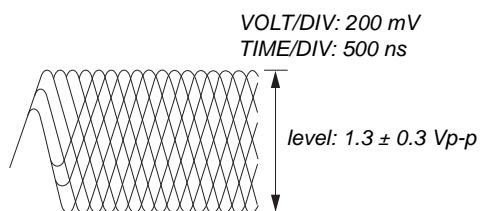
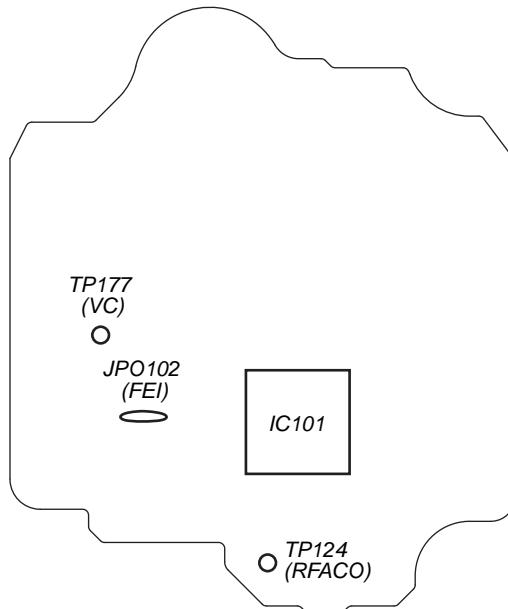
S-curve waveform


- Note:**
- Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
 - Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

Procedure:

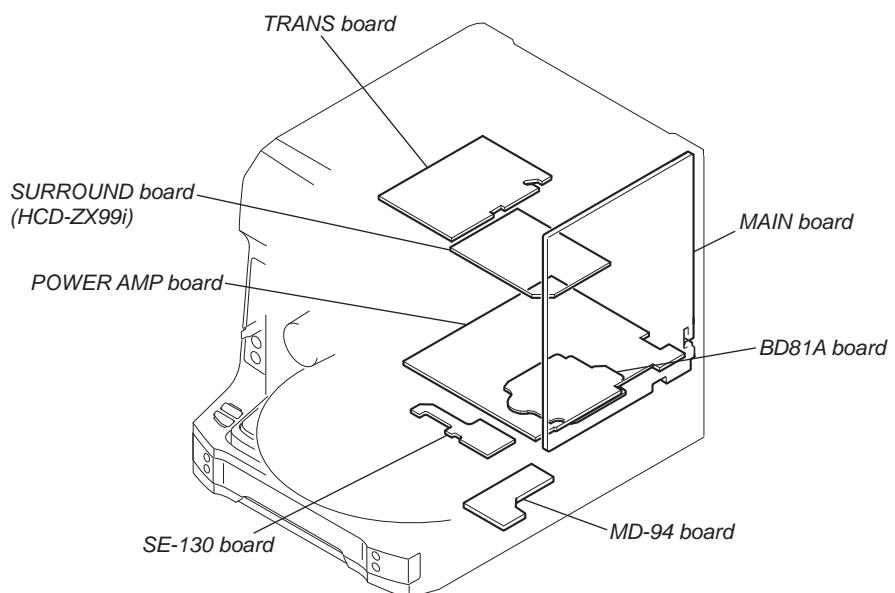
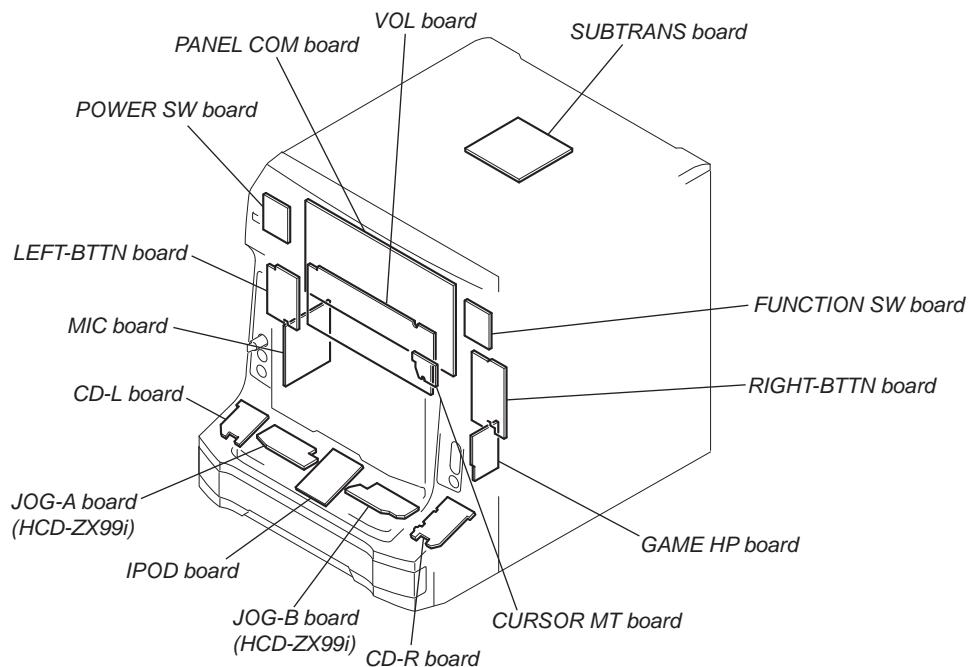
1. Connect oscilloscope to TP124 (RFACO) and TP177 (VC).
2. Press the $[I / \odot]$ button to turn the power ON.
3. Load a disc (YEDS-18) and playback.
4. Confirm that oscilloscope waveform is clear and check RFAC signal level is correct or not.

Note: Clear RF signal waveform means that the shape “◊” can be clearly distinguished at the center of the waveform.


Checking Location:
【BD81A BOARD】(SIDE B)


SECTION 6 DIAGRAMS

- Circuit Boards Location



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For Printed Wiring Boards.

Note:

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

Caution:

Pattern face side: Parts on the pattern face side seen from
(SIDE B) the pattern face are indicated.
Parts face side: Parts on the parts face side seen from
(SIDE A) the parts face are indicated.

For Schematic Diagrams.

Note:

- 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 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

Note:

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

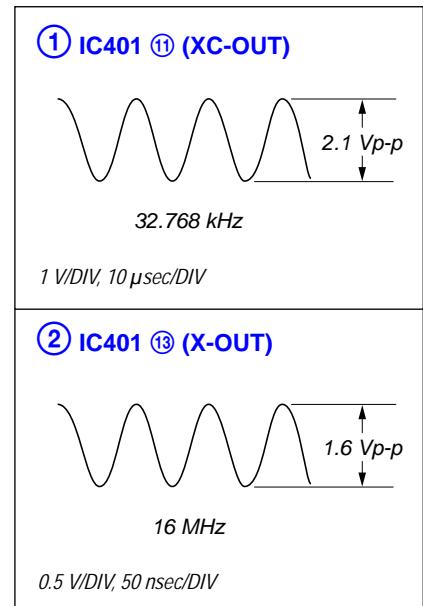
Note:

Les composants identifiés par une marque sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

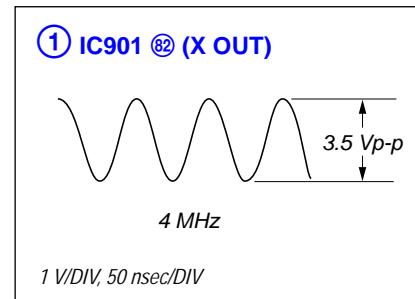
- : B+ Line.
- : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- < >: CD PLAY
- * : Impossible to measure
- Voltages are taken with VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 - : TUNER (FM/AM)
 - : VIDEO
 - : CD (ANALOG OUT)
 - : CD (DIGITAL OUT)
 - : MIC

• Waveforms

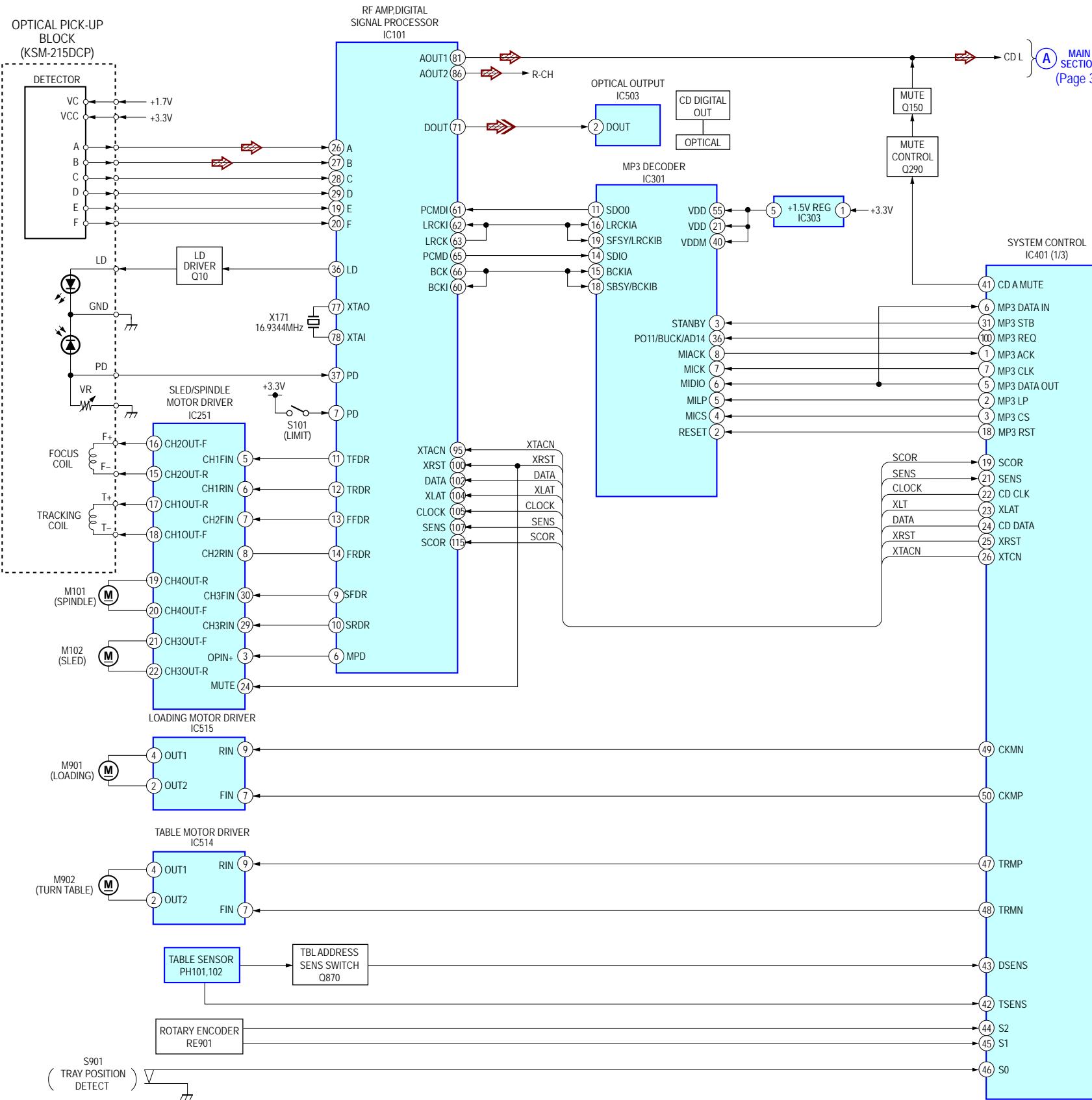
– MAIN Board –



– PANEL COM Board –



6-1. BLOCK DIAGRAM – CD SERVO Section –



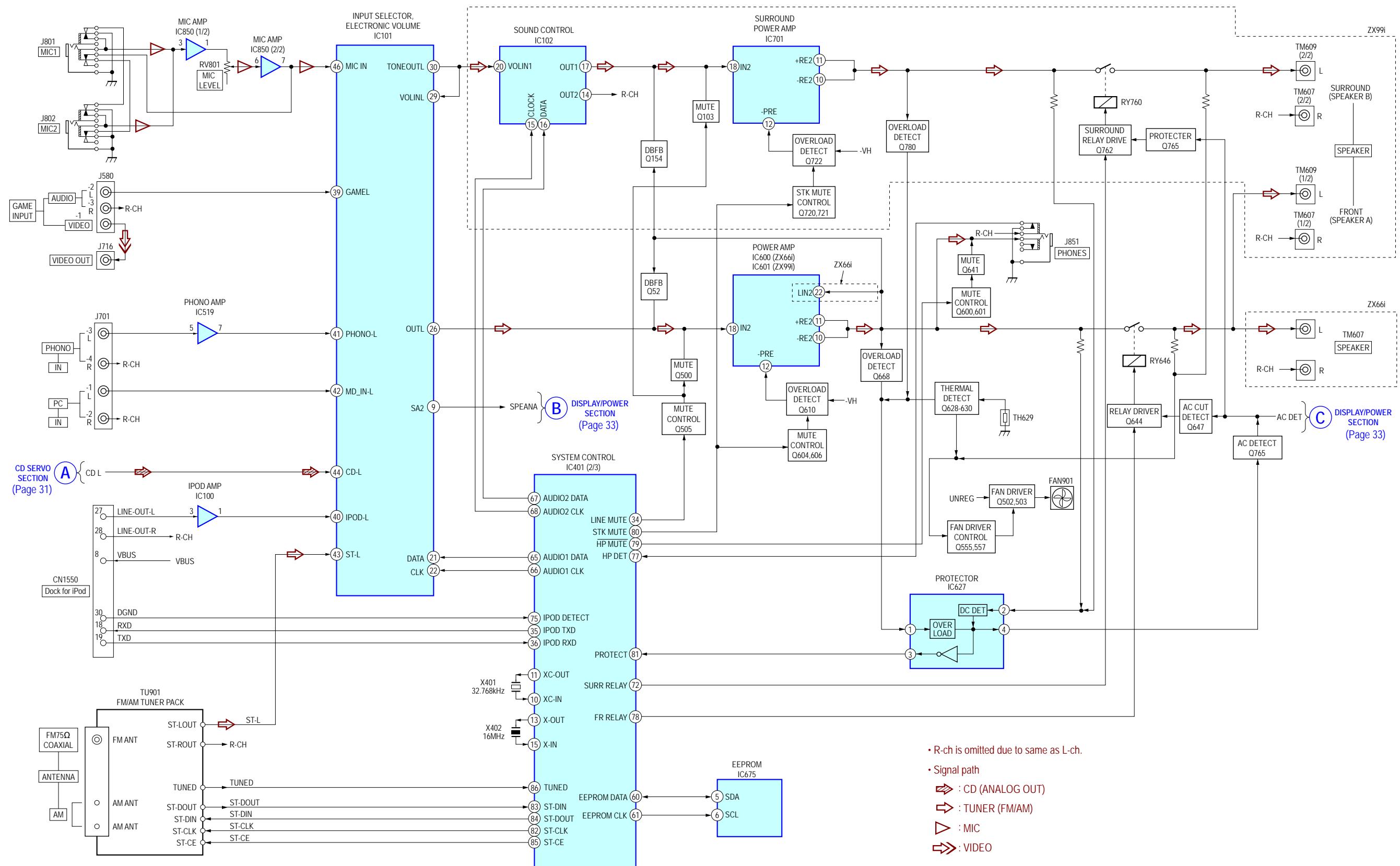
• R-ch is omitted due to same as L-ch.

• Signal path

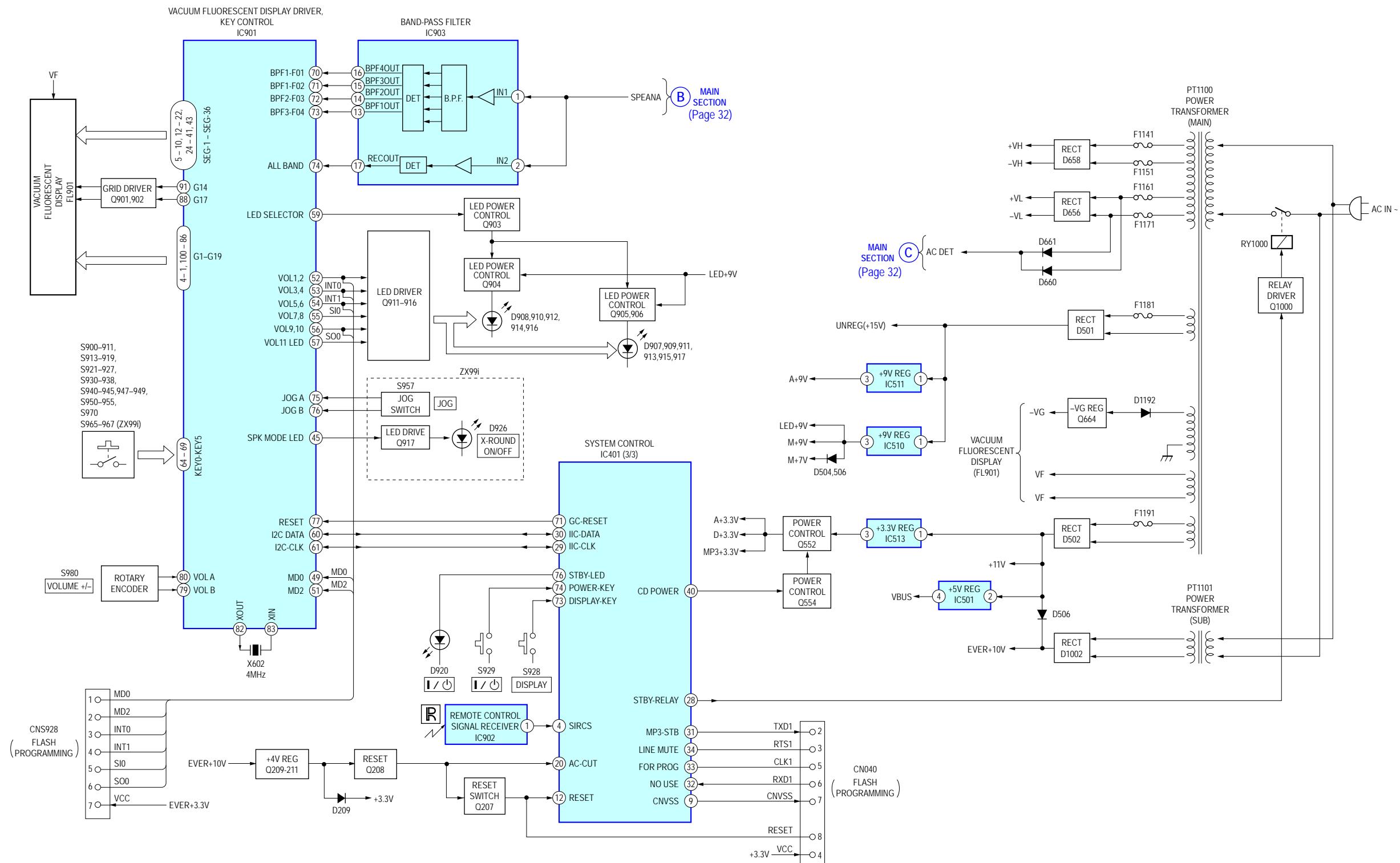
⇒ : CD (ANALOG OUT)

⇒ : CD (DIGITAL OUT)

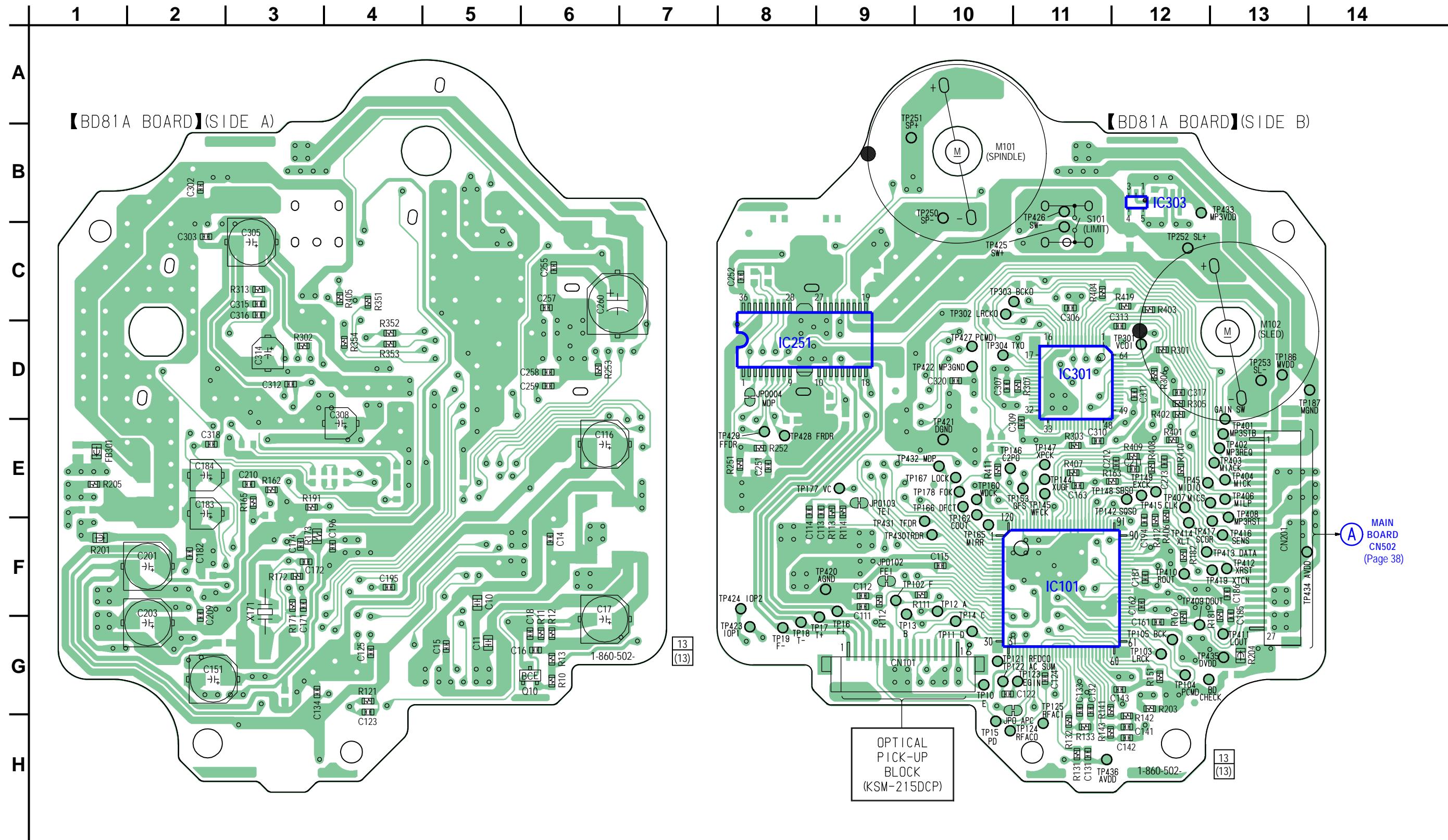
6-2. BLOCK DIAGRAM – MAIN Section –



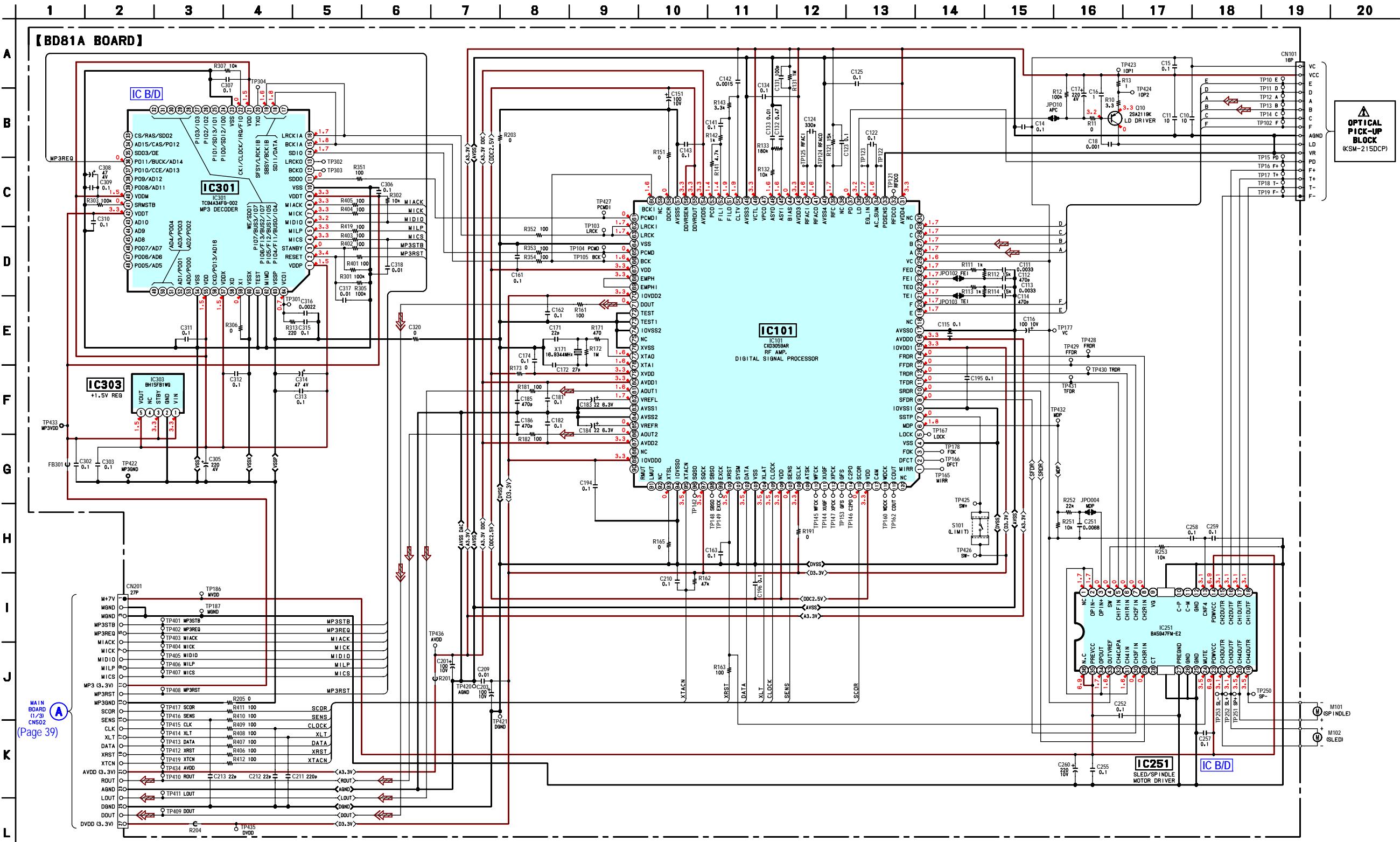
6-3. BLOCK DIAGRAM – DISPLAY/POWER Section –

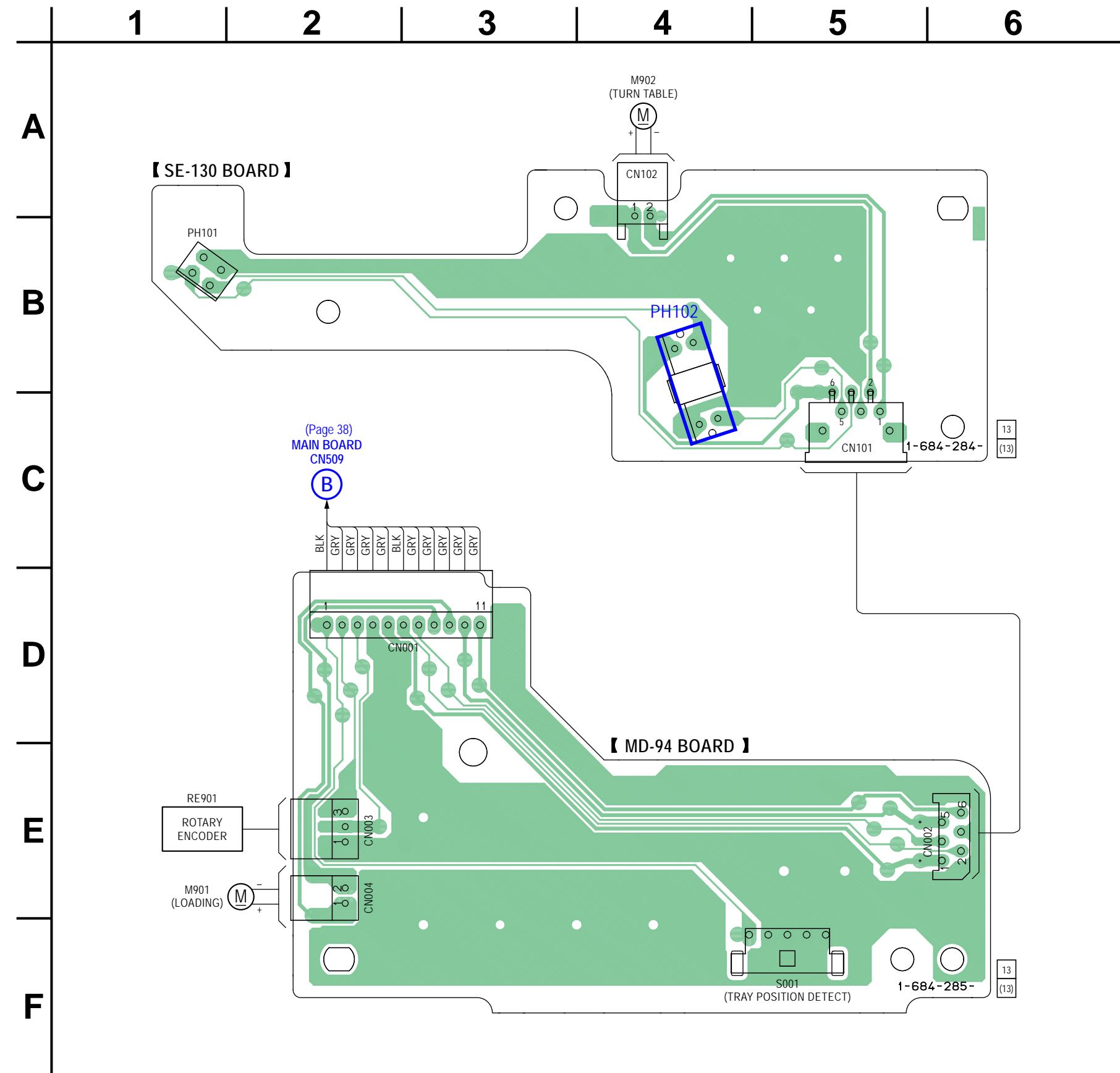


6-4. PRINTED WIRING BOARD - BD Section - • See page 29 for Circuit Boards Location. • : Uses unleaded solder.

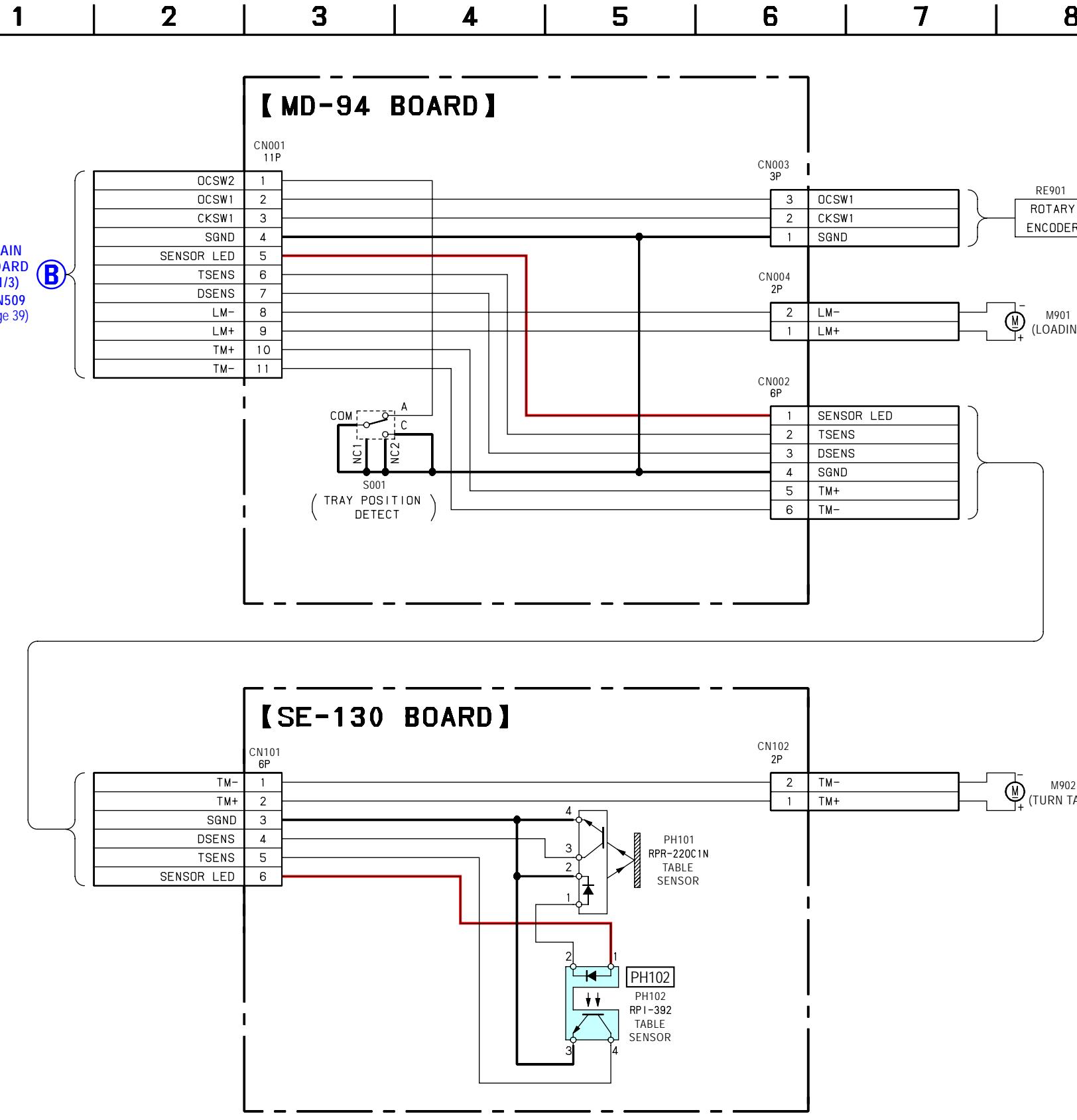


6-5. SCHEMATIC DIAGRAM – BD Section – • See page 60 for IC Block Diagrams. • See page 65 for IC Pin Function Descriptions.

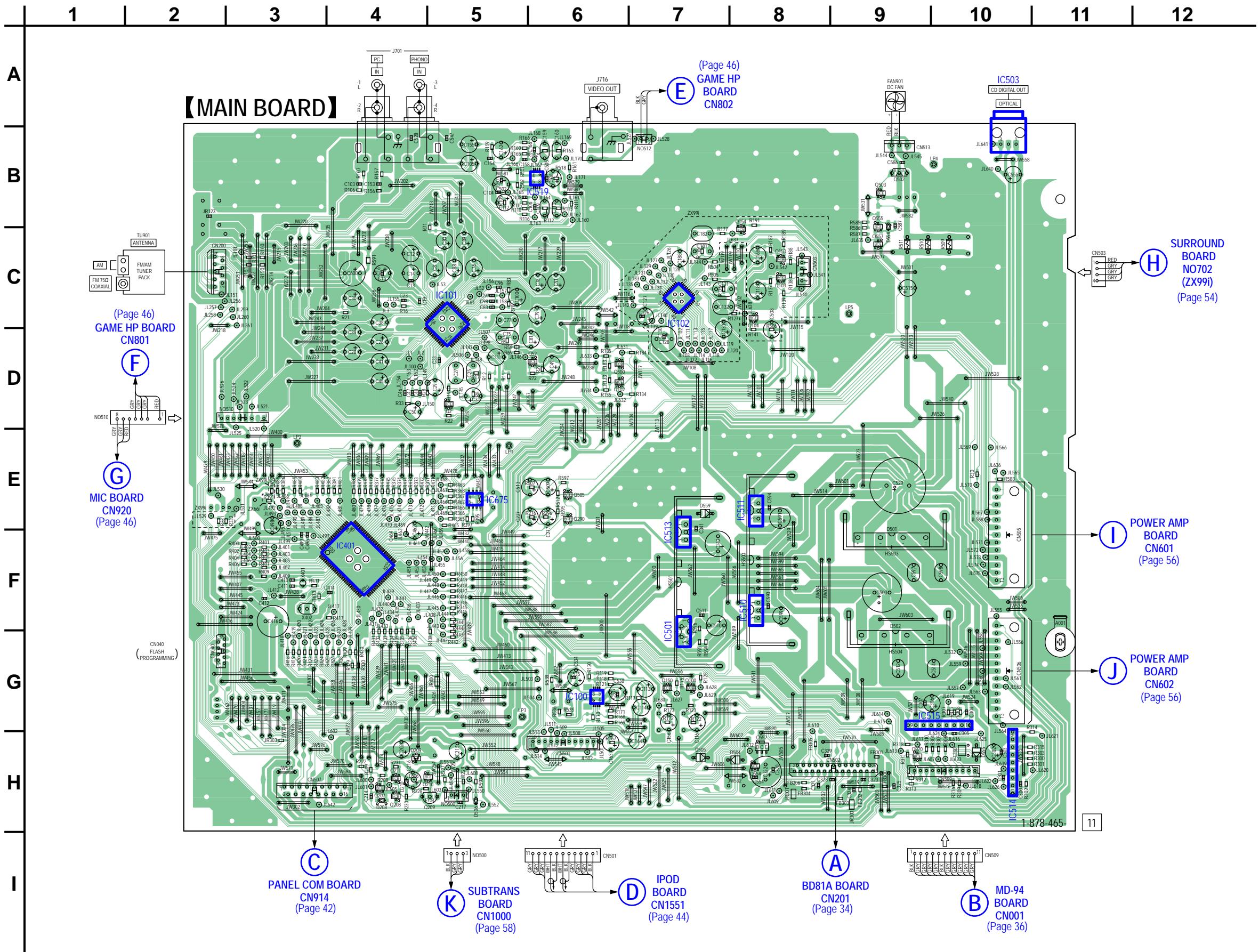


6-6. PRINTED WIRING BOARDS – LOADING Section – • See page 29 for Circuit Boards Location. •  : Uses unleaded solder.

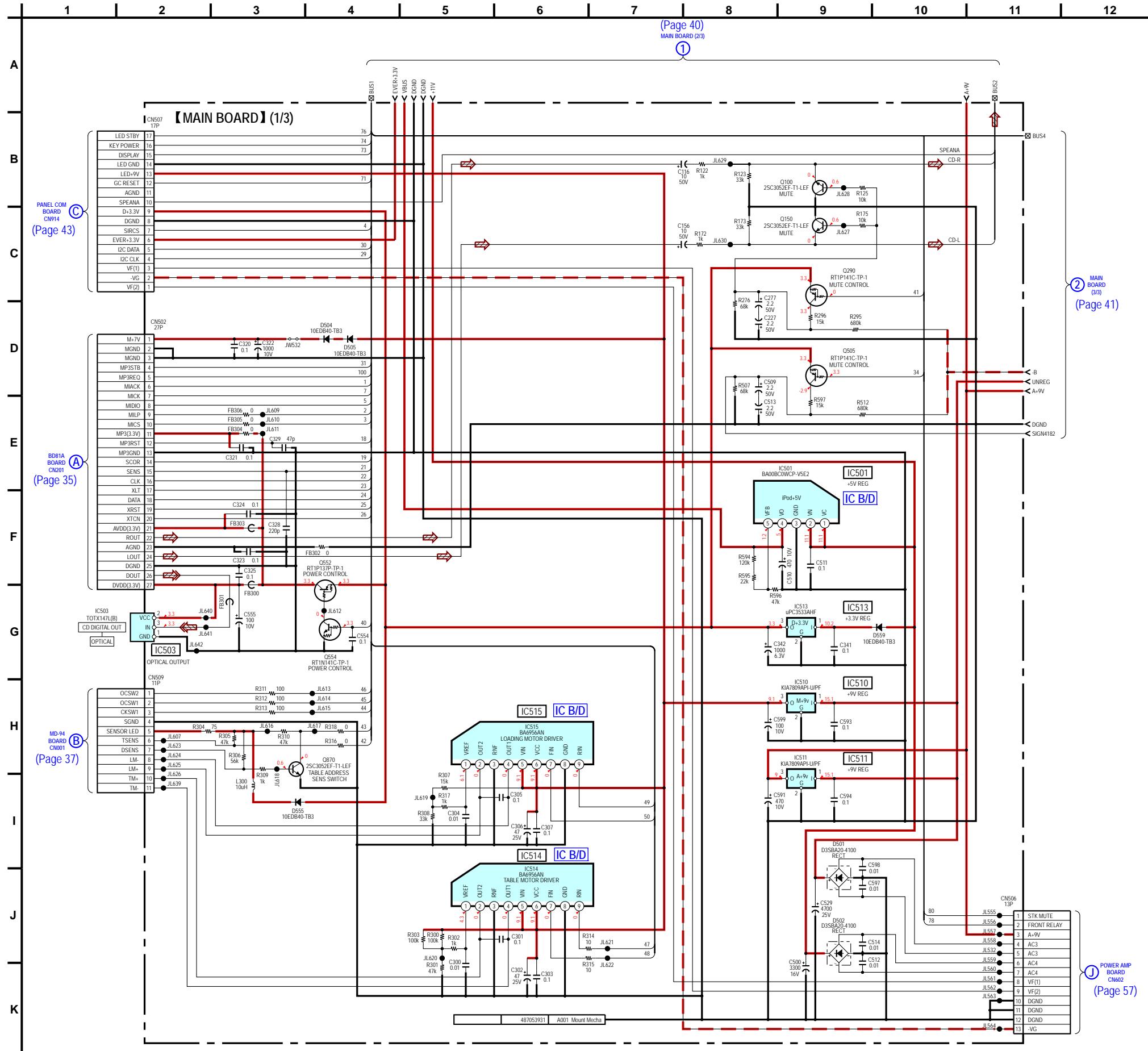
6-7. SCHEMATIC DIAGRAM – LOADING Section –



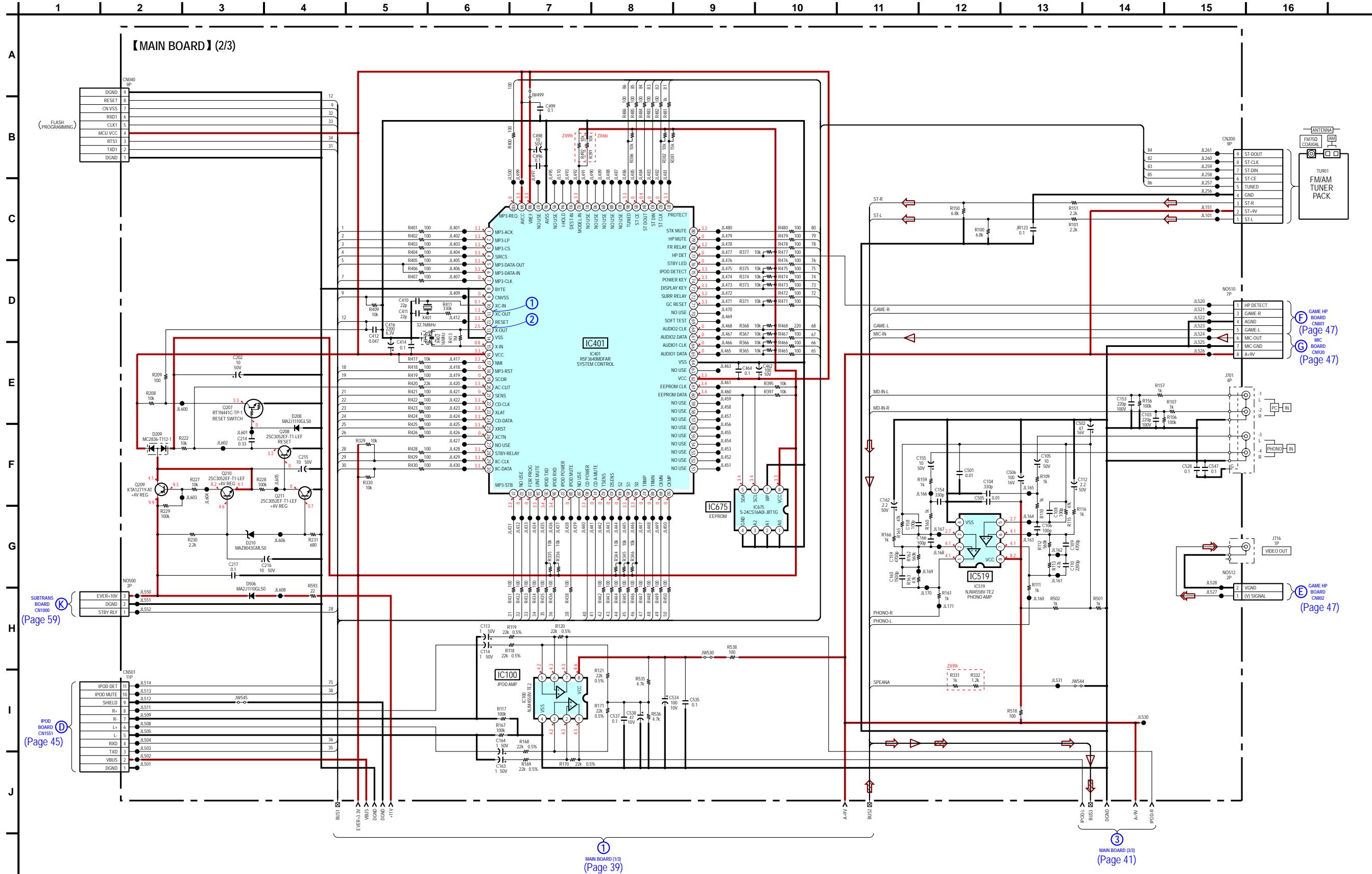
6-8. PRINTED WIRING BOARD - MAIN Section - • See page 29 for Circuit Boards Location. • : Uses unleaded solder.



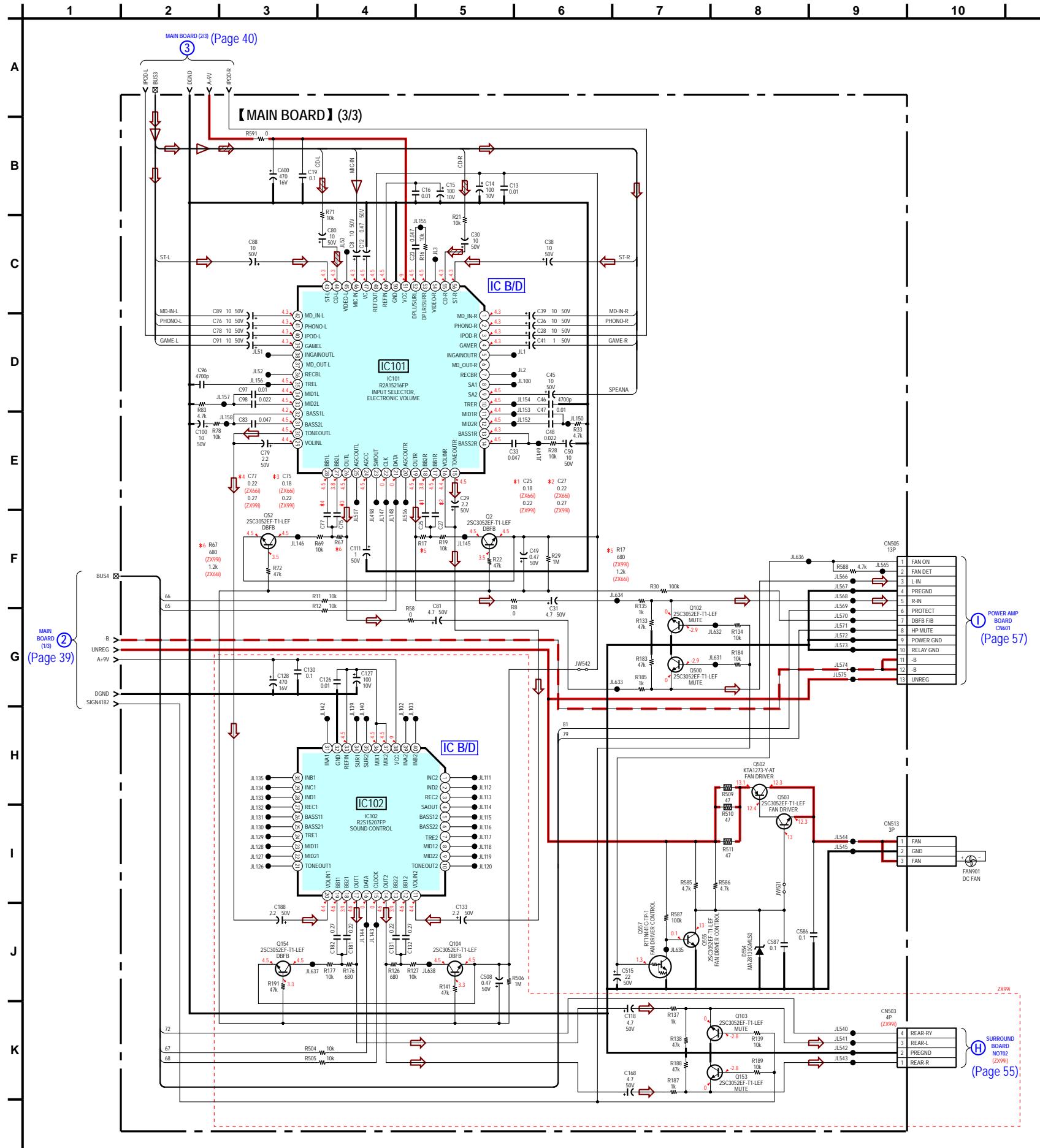
6-9. SCHEMATIC DIAGRAM – MAIN Section (1/3) – • See page 60 for IC Block Diagrams.



• See page 30 for Waveforms • See page 68 for IC Pin Function Description



• See page 61 for IC Block Diagrams.

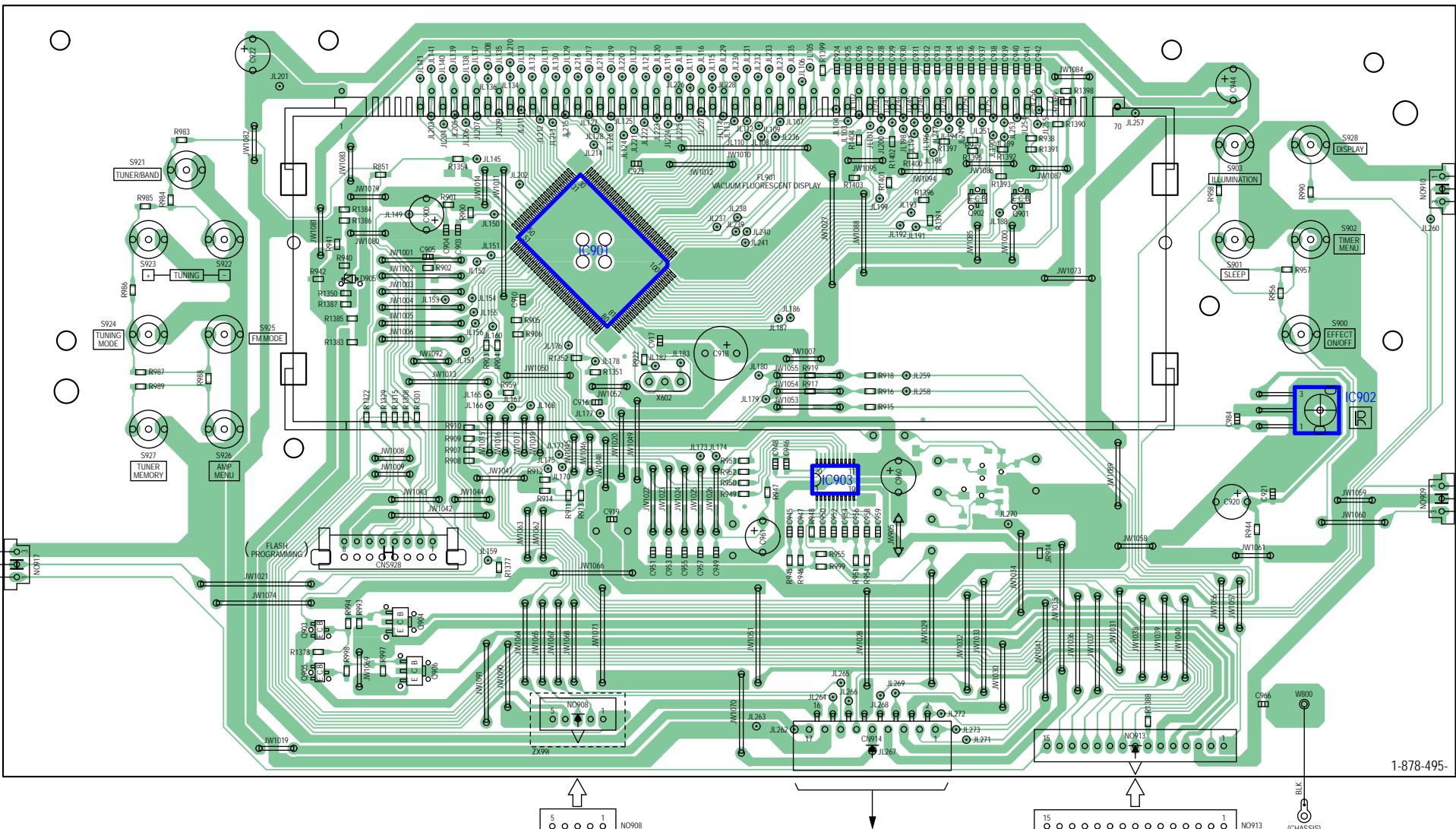


6-12. PRINTED WIRING BOARDS – PANEL Section – • See page 29 for Circuit Boards Location. • : Uses unleaded solder.

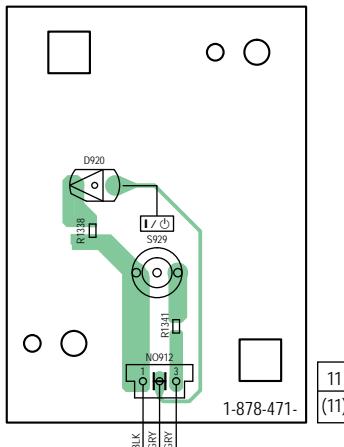
1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14

A

【PANEL COM BOARD】



【POWER SW BOARD】



N
JOG-A BOARD
CN922
(ZX99i)
(Page 50)

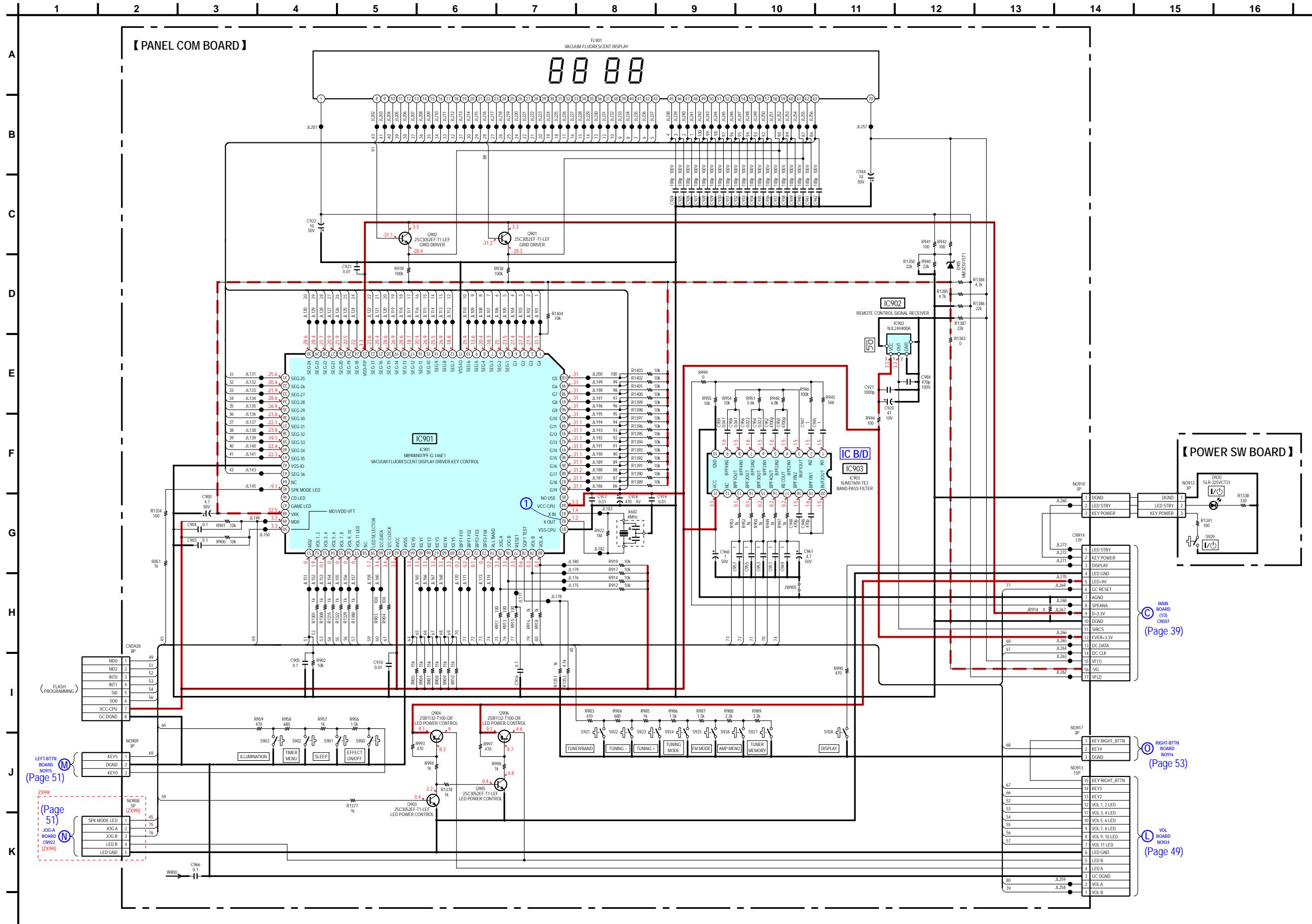
C
MAIN BOARD
CN507
(Page 38)

L
VOL BOARD
NO924
(Page 48)

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D905	C-5	Q901	C-9
D920	B-13	Q902	C-9
IC901	C-6	Q903	F-4
IC902	D-11	Q904	F-5
IC903	E-8	Q905	F-4
		Q906	F-5

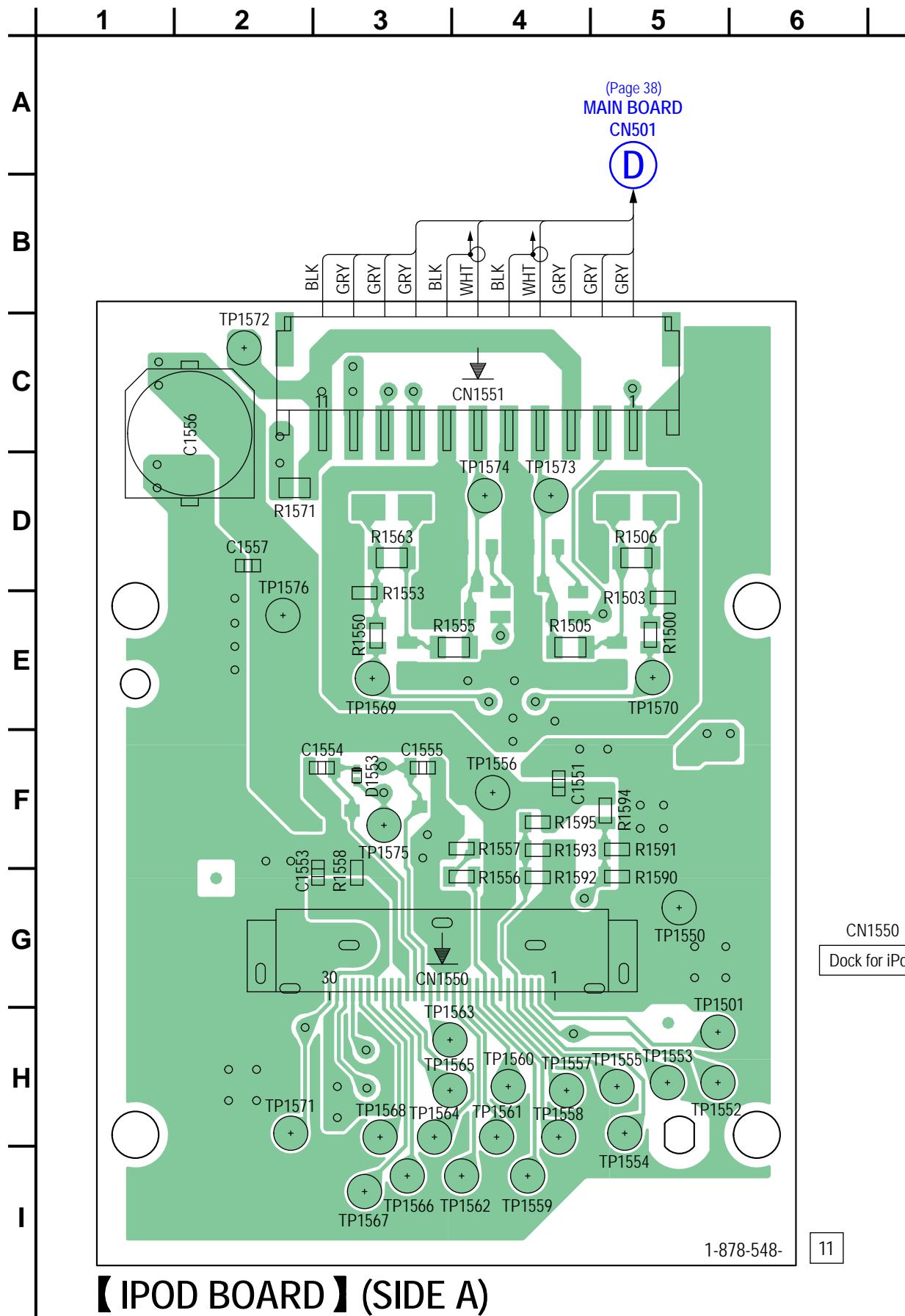
6-13. SCHEMATIC DIAGRAM – PANEL Section – • See page 30 for Waveforms. • See page 62 for IC Block Diagrams. • See page 70 for IC Pin Function Descriptions.



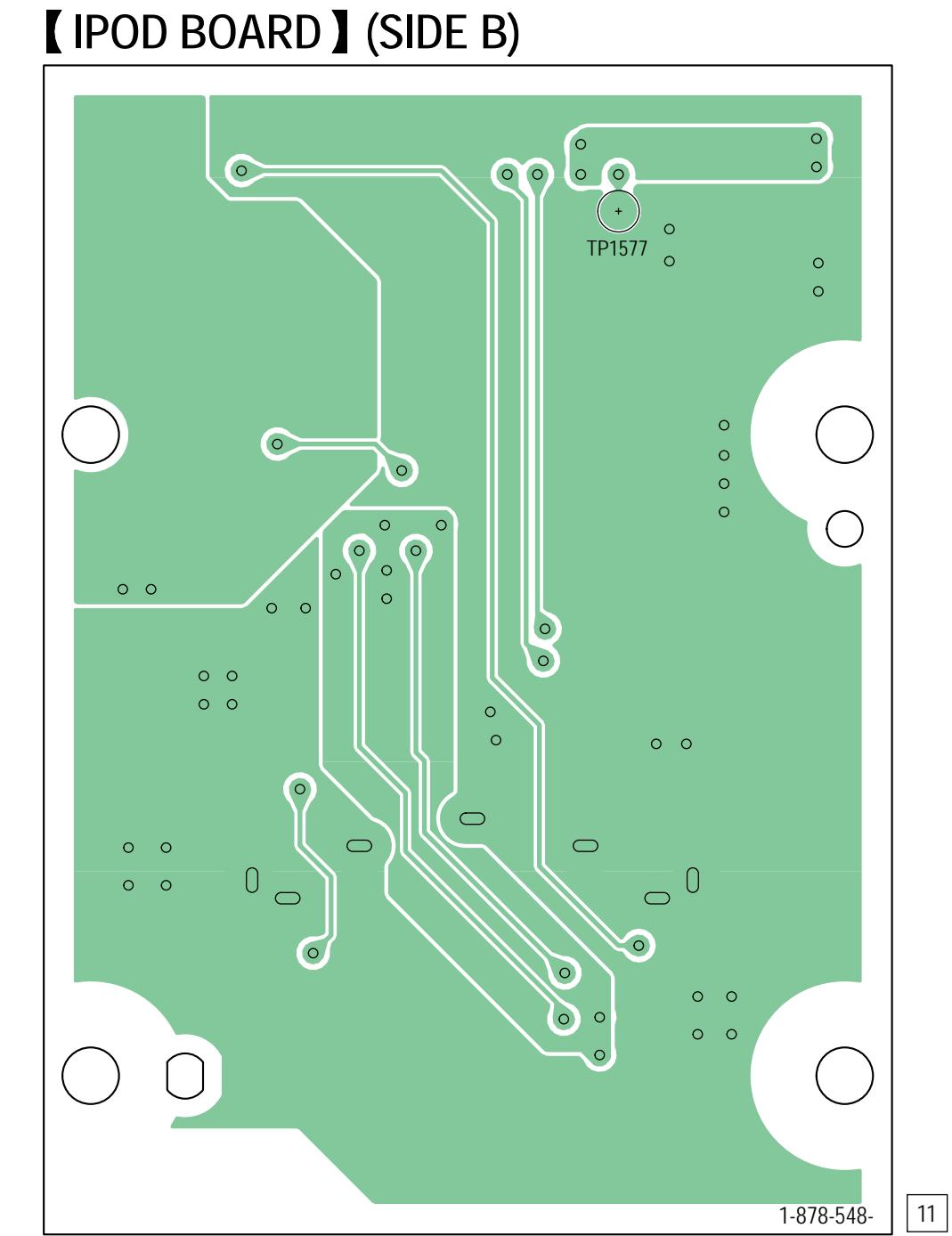
6-14. PRINTED WIRING BOARD – IPOD Section – • See page 29 for Circuit Boards Location. • : Uses unleaded solder.

ge 29 for Circuit Boards Location. • : Uses unleaded solder.

ge 29 for Circuit Boards Location. • : Uses unleaded solder.

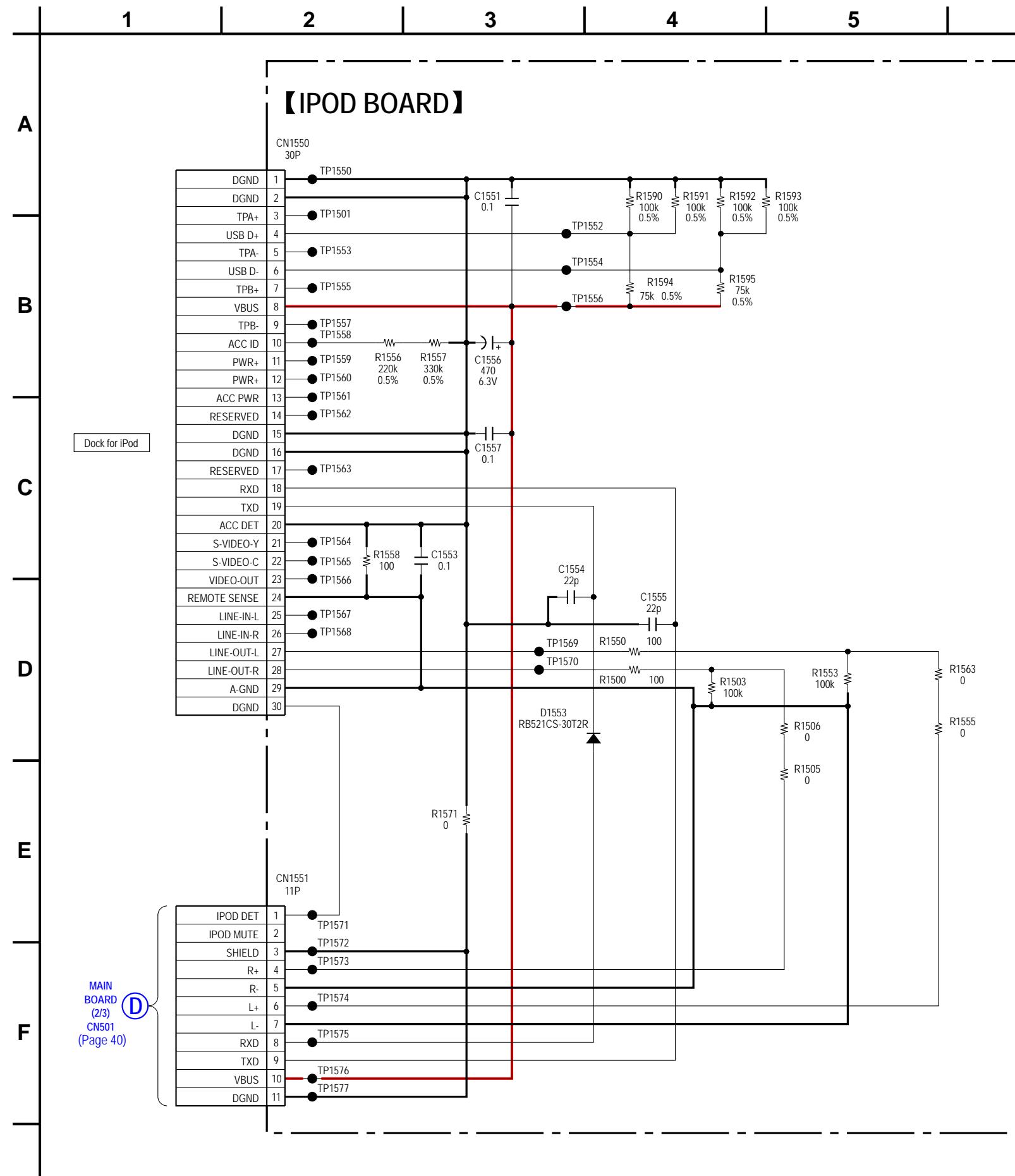


【 IPOD BOARD 】(SIDE A)

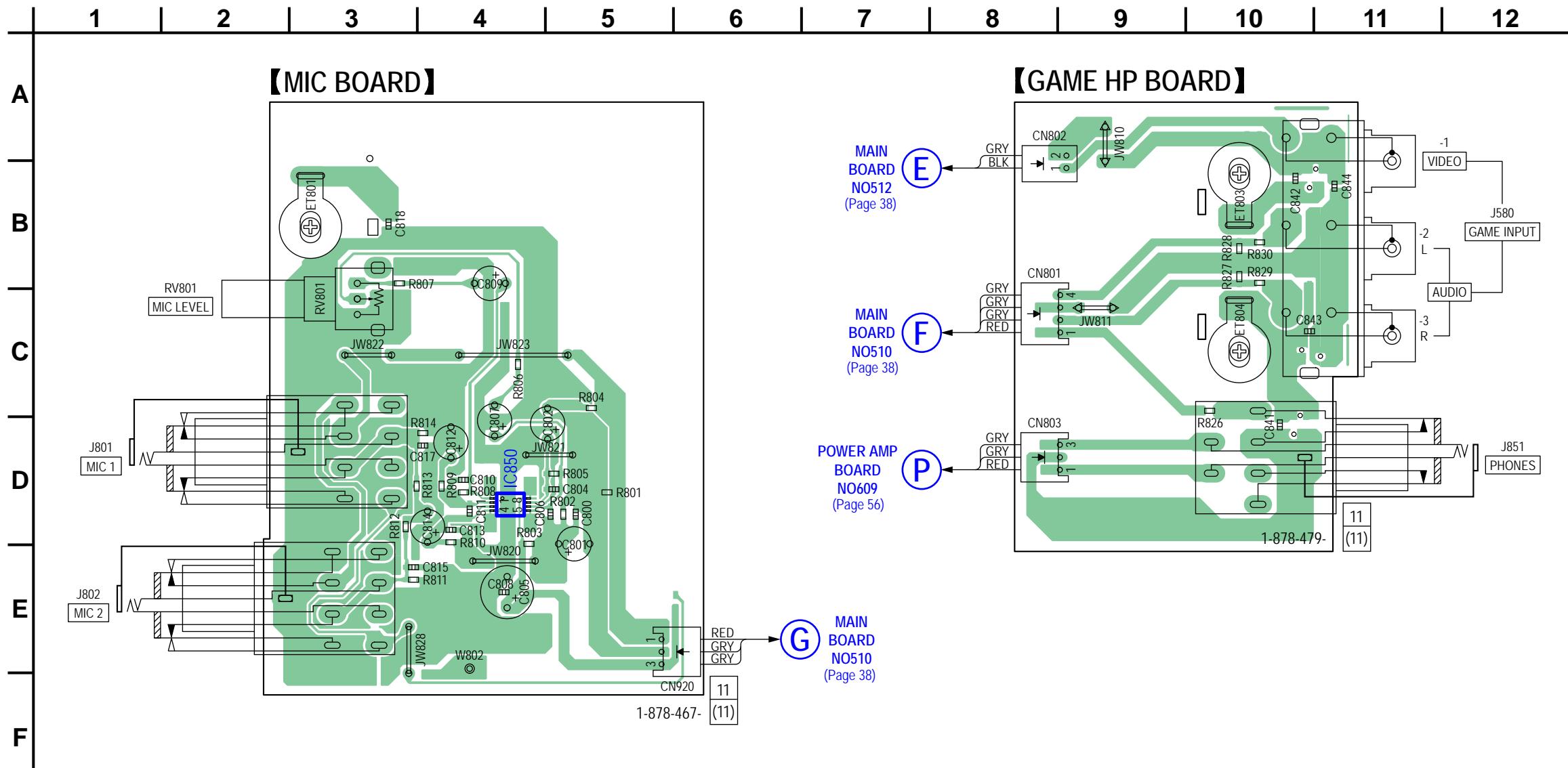


【 IPOD BOARD 】(SIDE B)

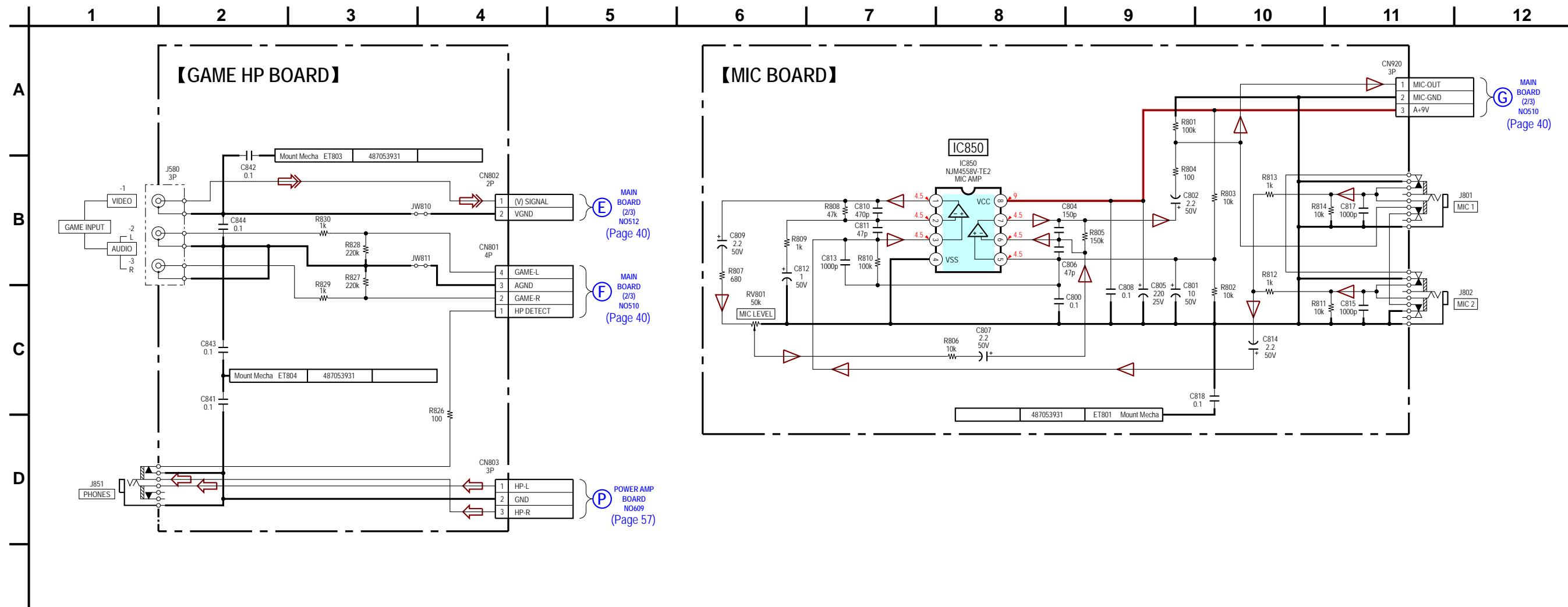
6-15. SCHEMATIC DIAGRAM – IPOD Section –



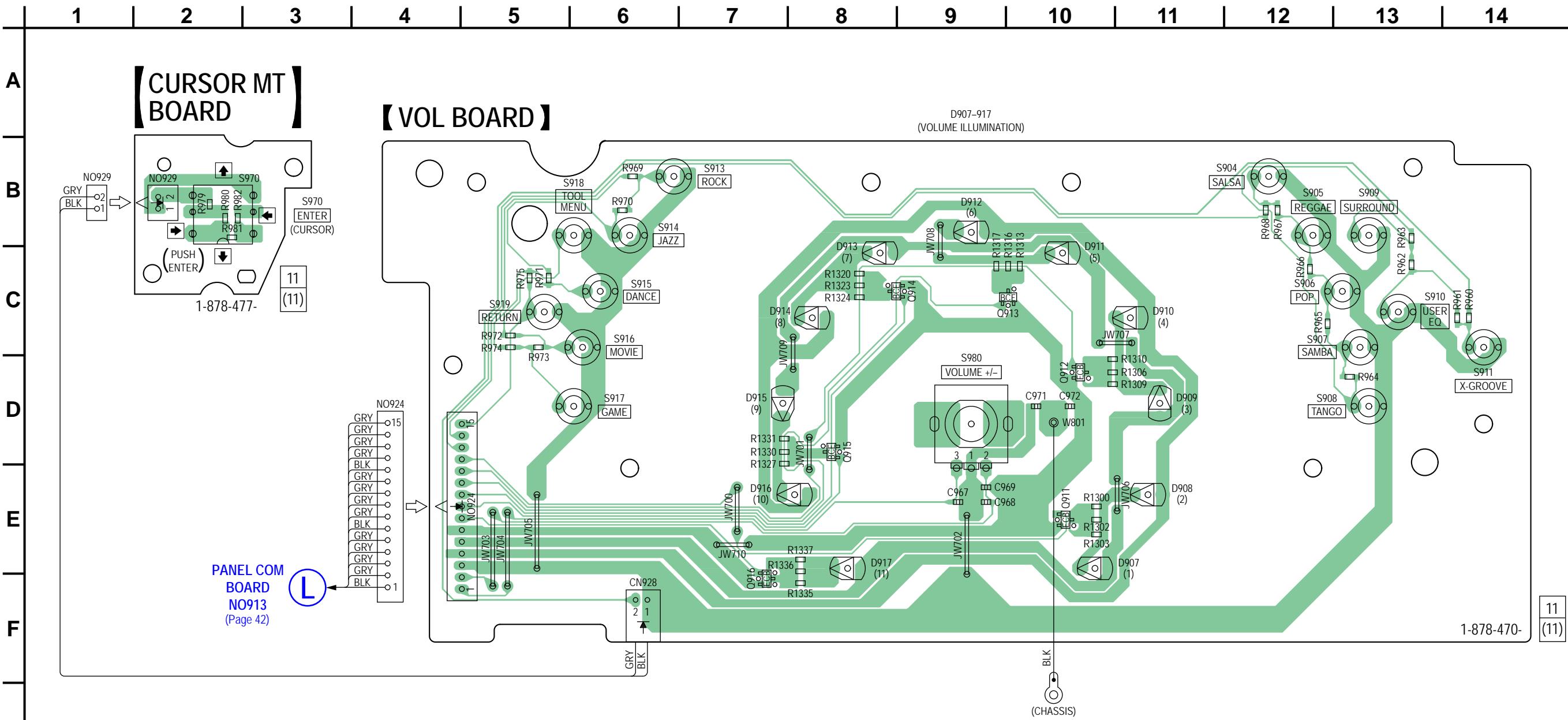
6-16. PRINTED WIRING BOARDS – JACK Section – • See page 29 for Circuit Boards Location. •  : Uses unleaded solder.



6-17. SCHEMATIC DIAGRAM – JACK Section –



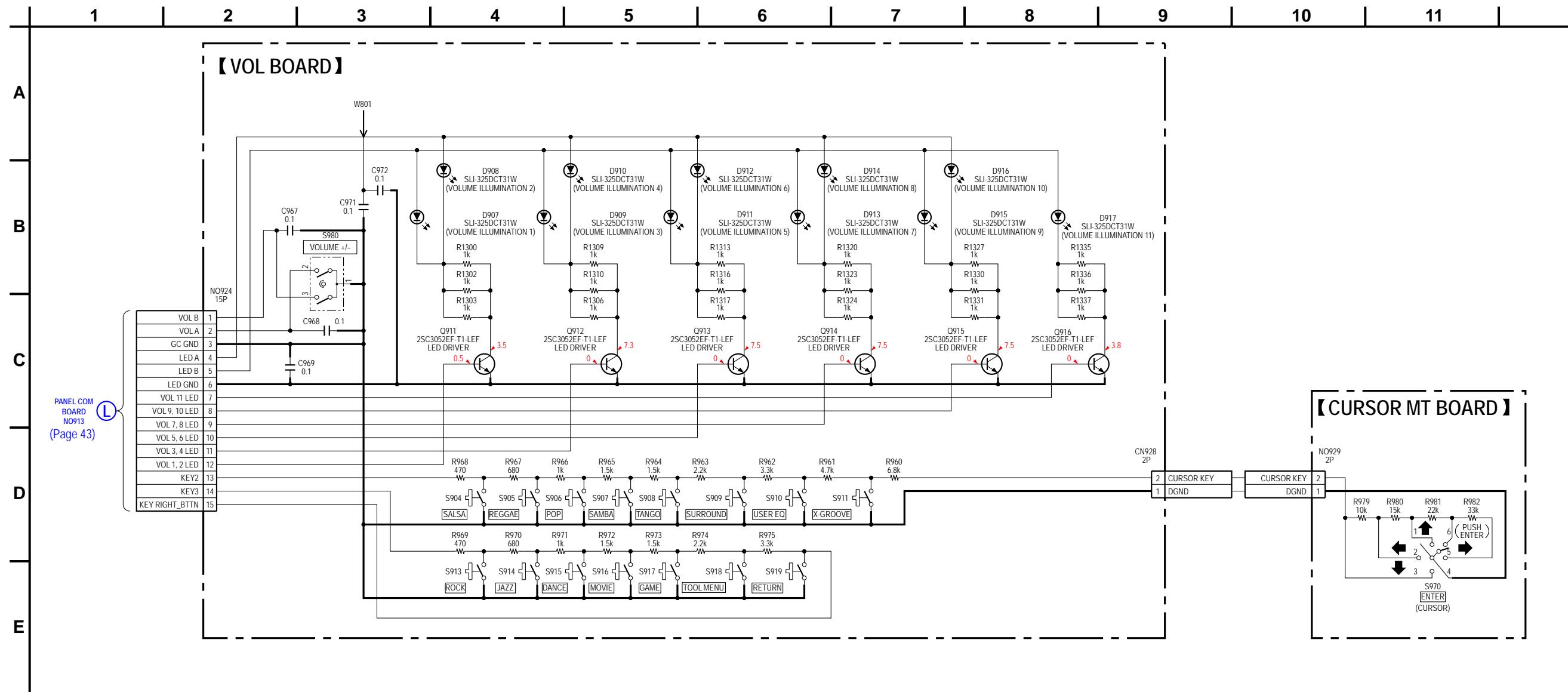
6-18. PRINTED WIRING BOARDS – VOLUME Section – • See page 29 for Circuit Boards Location. •  : Uses unleaded solder.



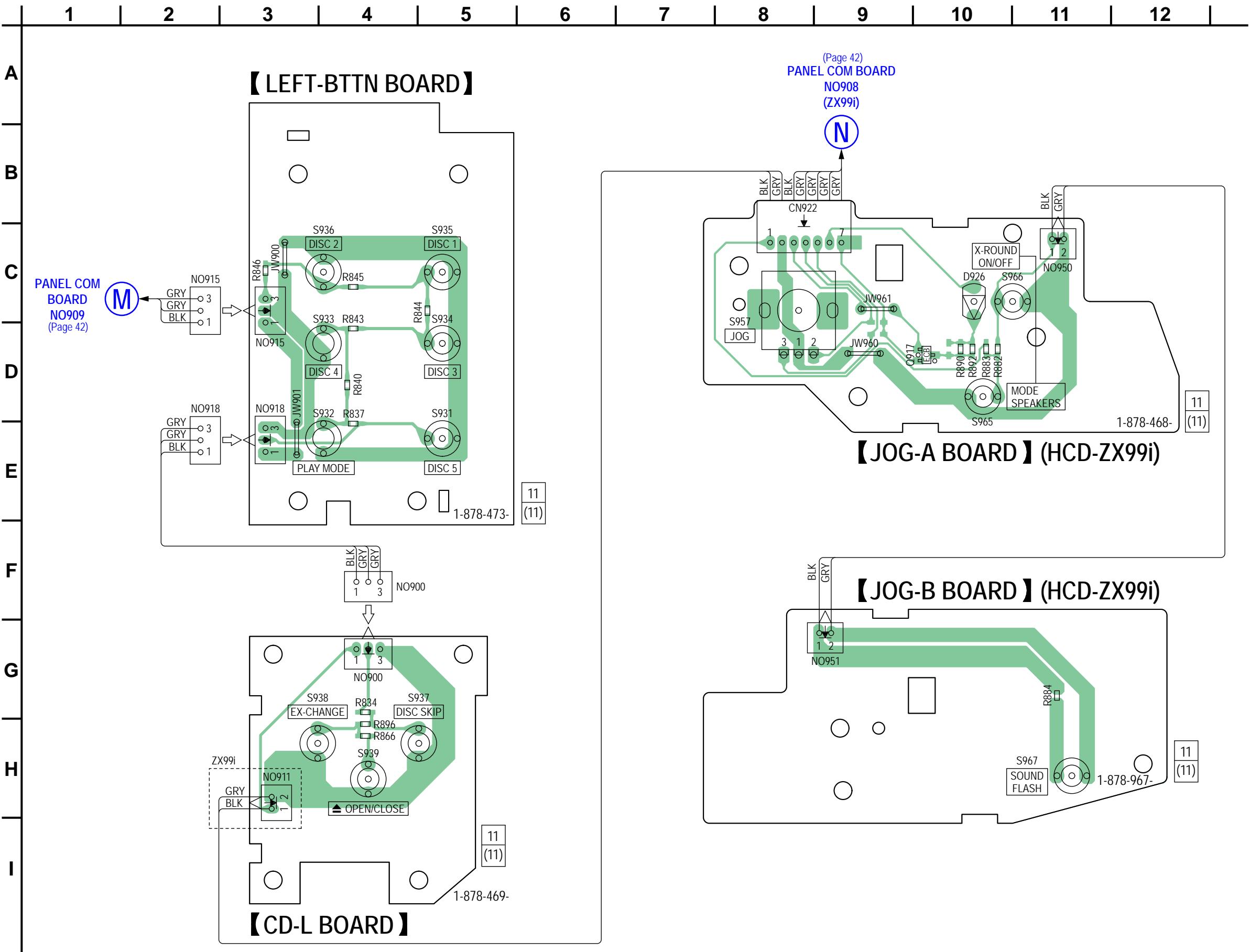
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D907	E-10	D916	E-8
D908	E-11	D917	E-8
D909	D-11		
D910	C-11	Q911	E-10
D911	C-10	Q912	D-10
D912	B-9	Q913	C-10
D913	C-8	Q914	C-8
D914	C-8	Q915	D-8
D915	D-7	Q916	F-7

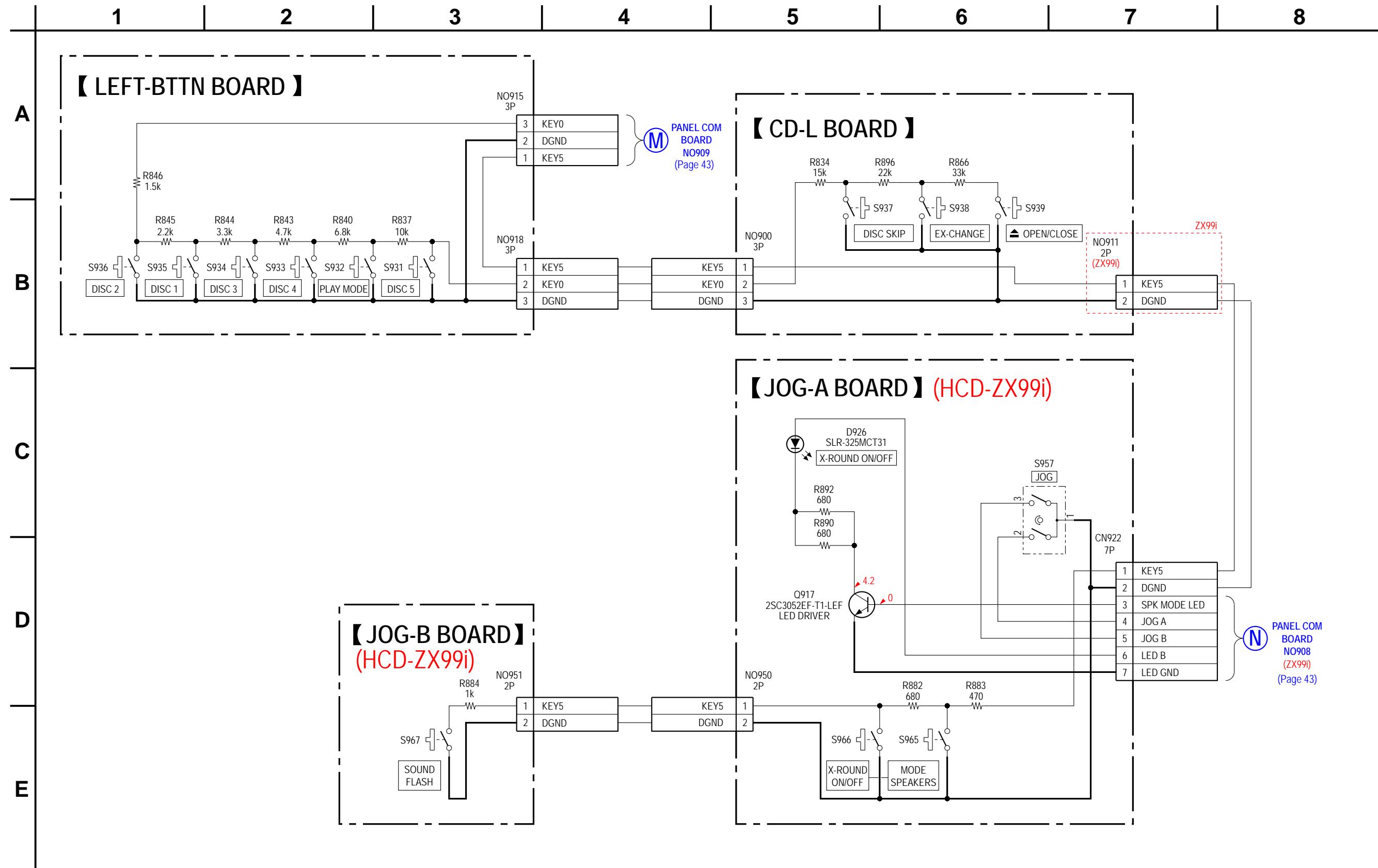
6-19. SCHEMATIC DIAGRAM – VOLUME Section –

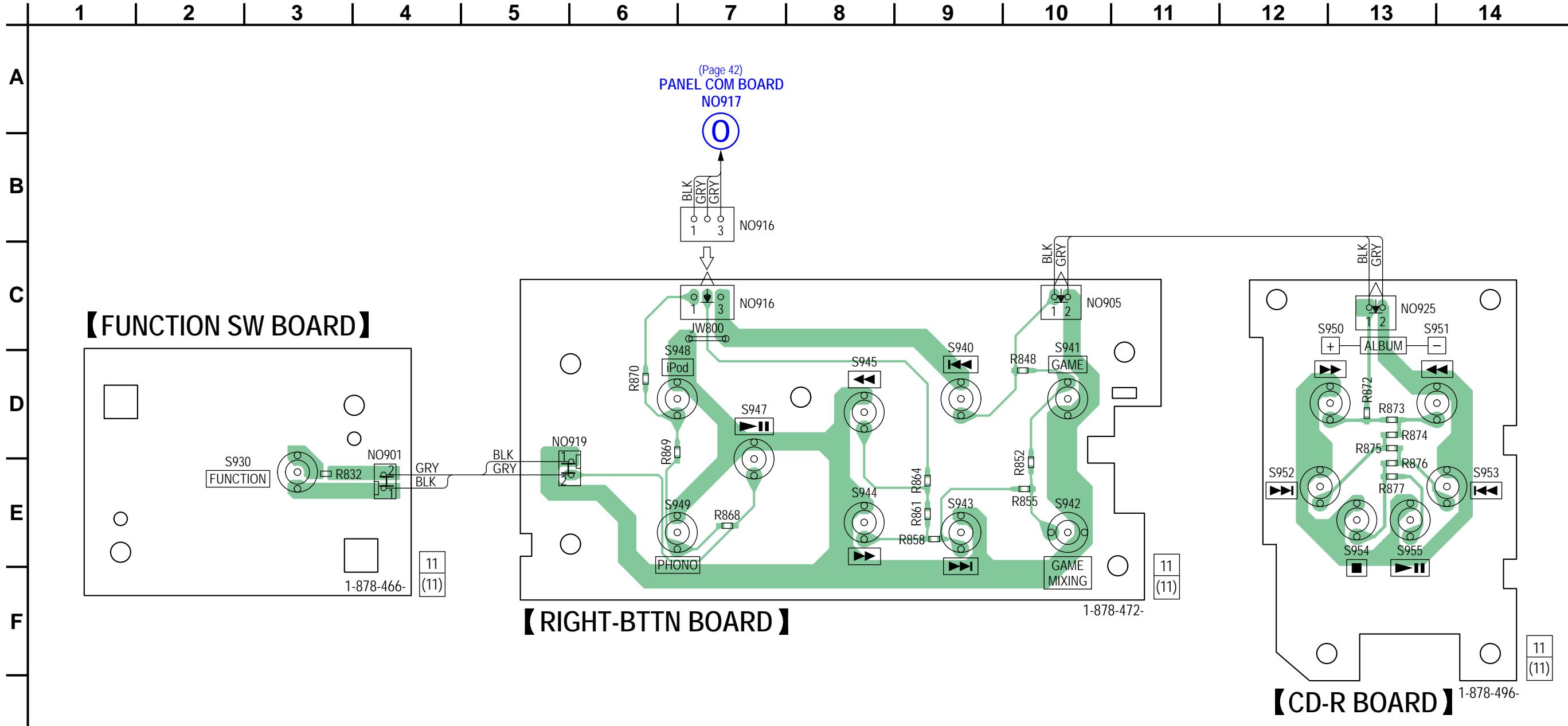


6-20. PRINTED WIRING BOARDS – LEFT BUTTON Section – • See page 29 for Circuit Boards Location. • : Uses unleaded solder.

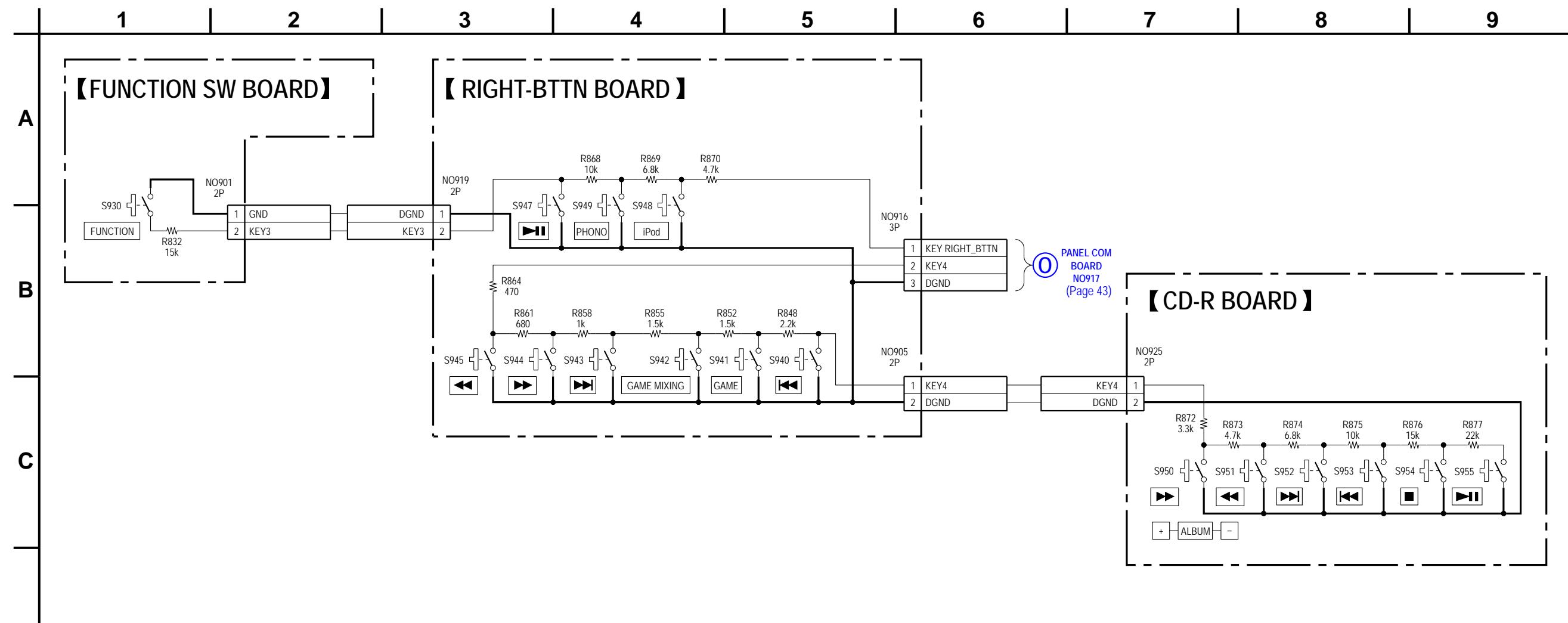


6-21. SCHEMATIC DIAGRAM – LEFT BUTTON Section –

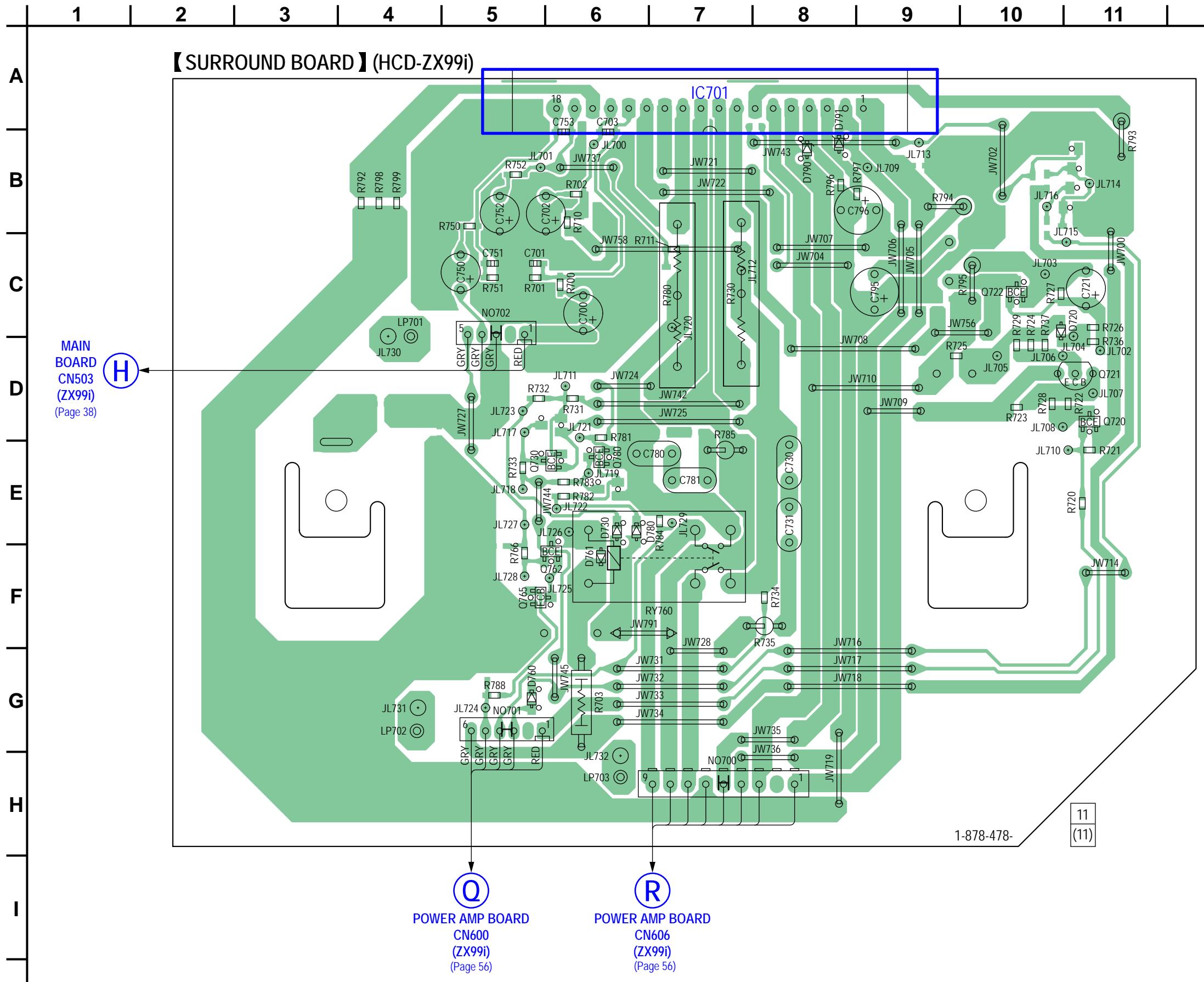


6-22. PRINTED WIRING BOARDS - RIGHT BUTTON Section - • See page 29 for Circuit Boards Location. •  : Uses unleaded solder.

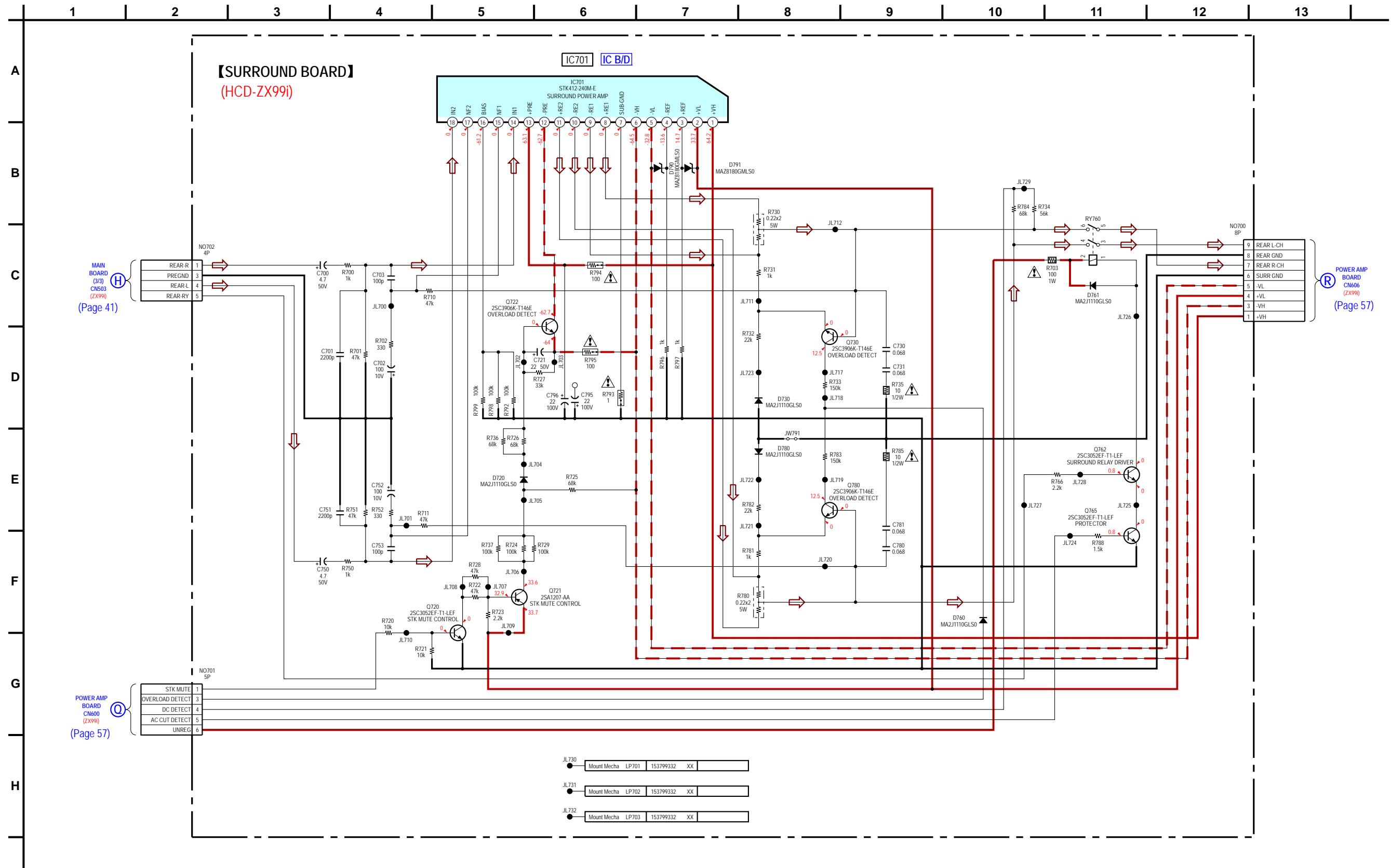
6-23. SCHEMATIC DIAGRAM – RIGHT BUTTON Section –



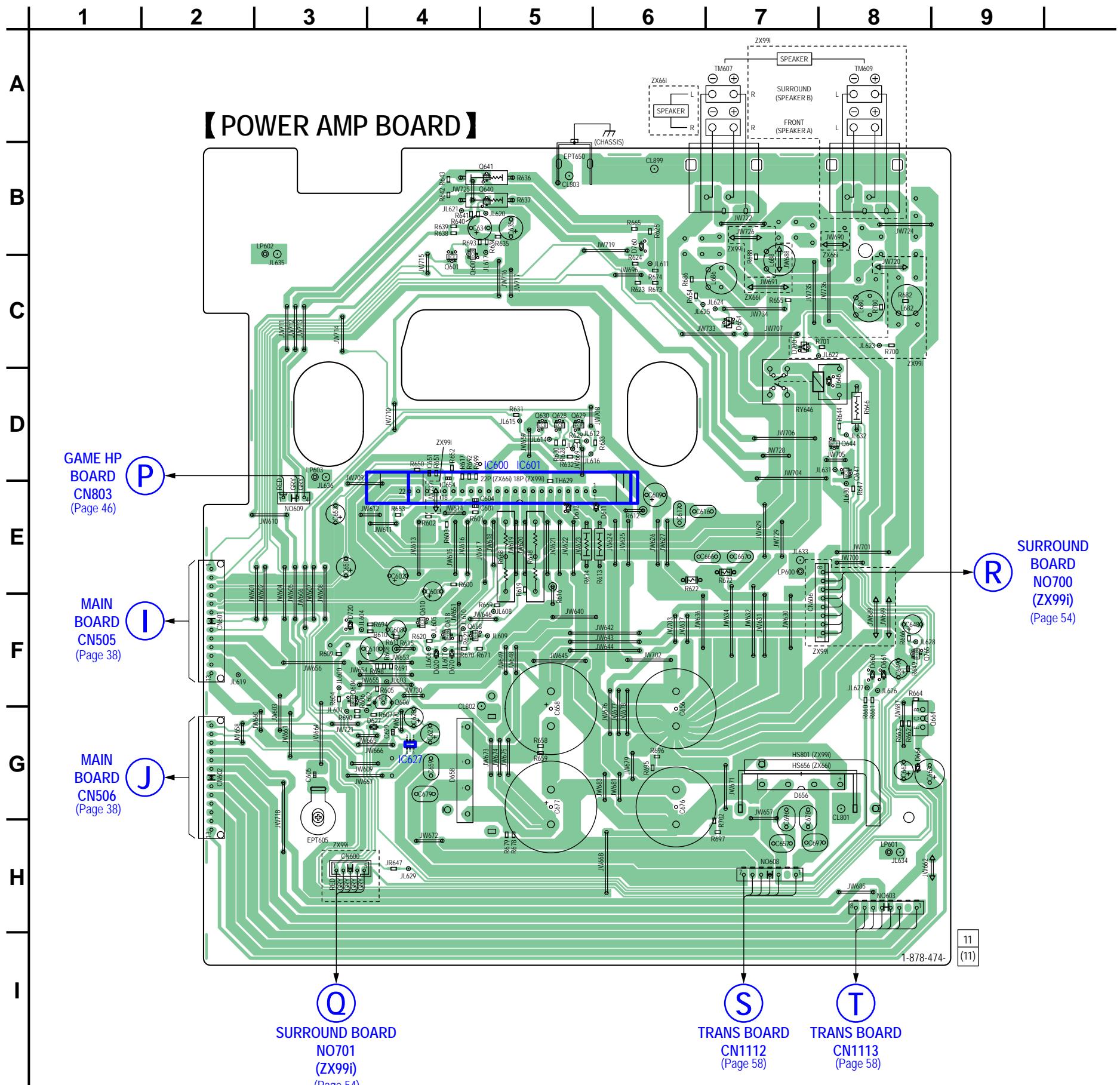
6-24. PRINTED WIRING BOARD – SURROUND Section (HCD-ZX99i) – • See page 29 for Circuit Boards Location. • : Uses unleaded solder.



6-25. SCHEMATIC DIAGRAM – SURROUND Section (HCD-ZX99i) – • See page 63 for IC Block Diagrams.



6-26. PRINTED WIRING BOARD – POWER AMP Section – • See page 29 for Circuit Boards Location. •  : Uses unleaded solder.

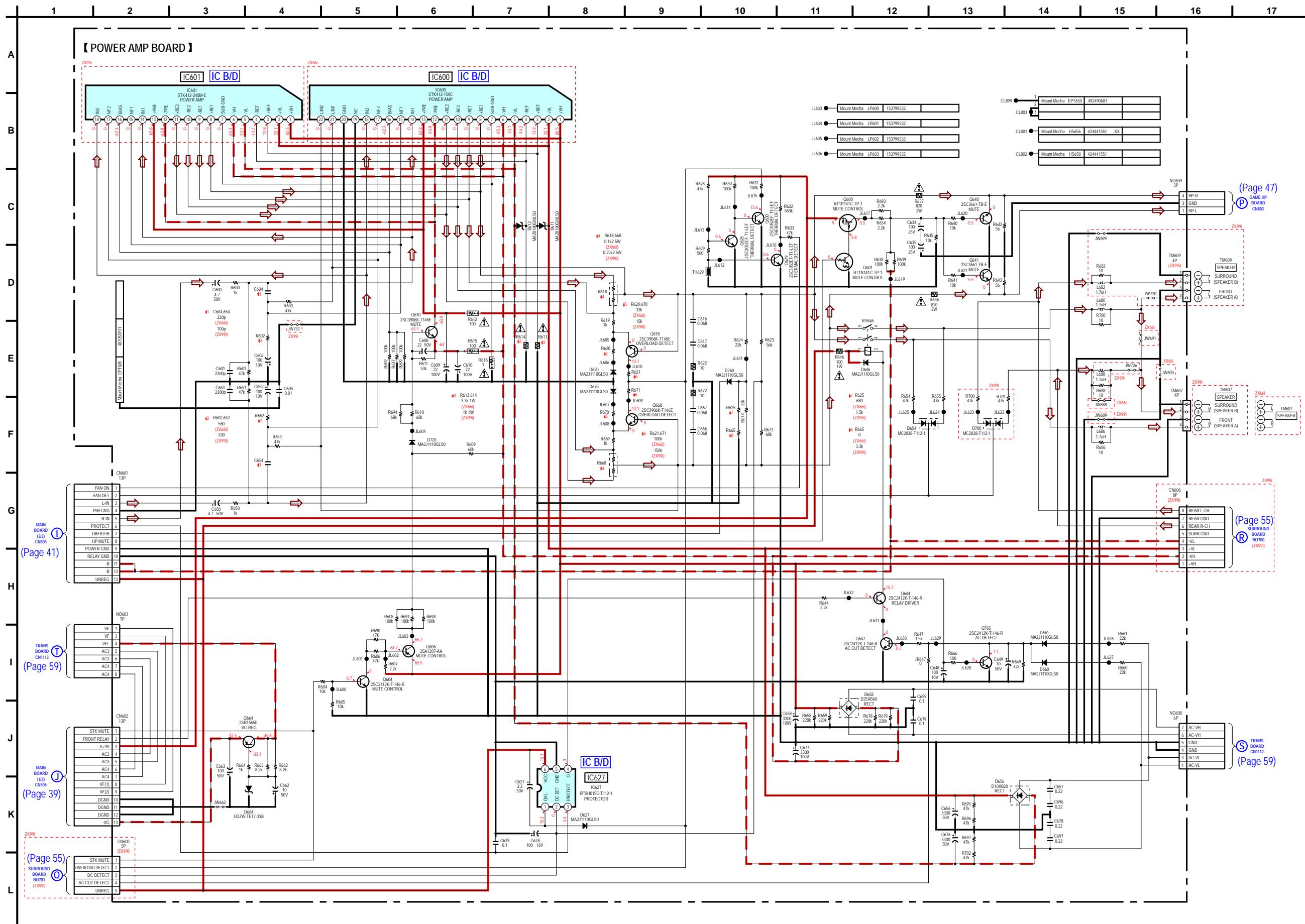


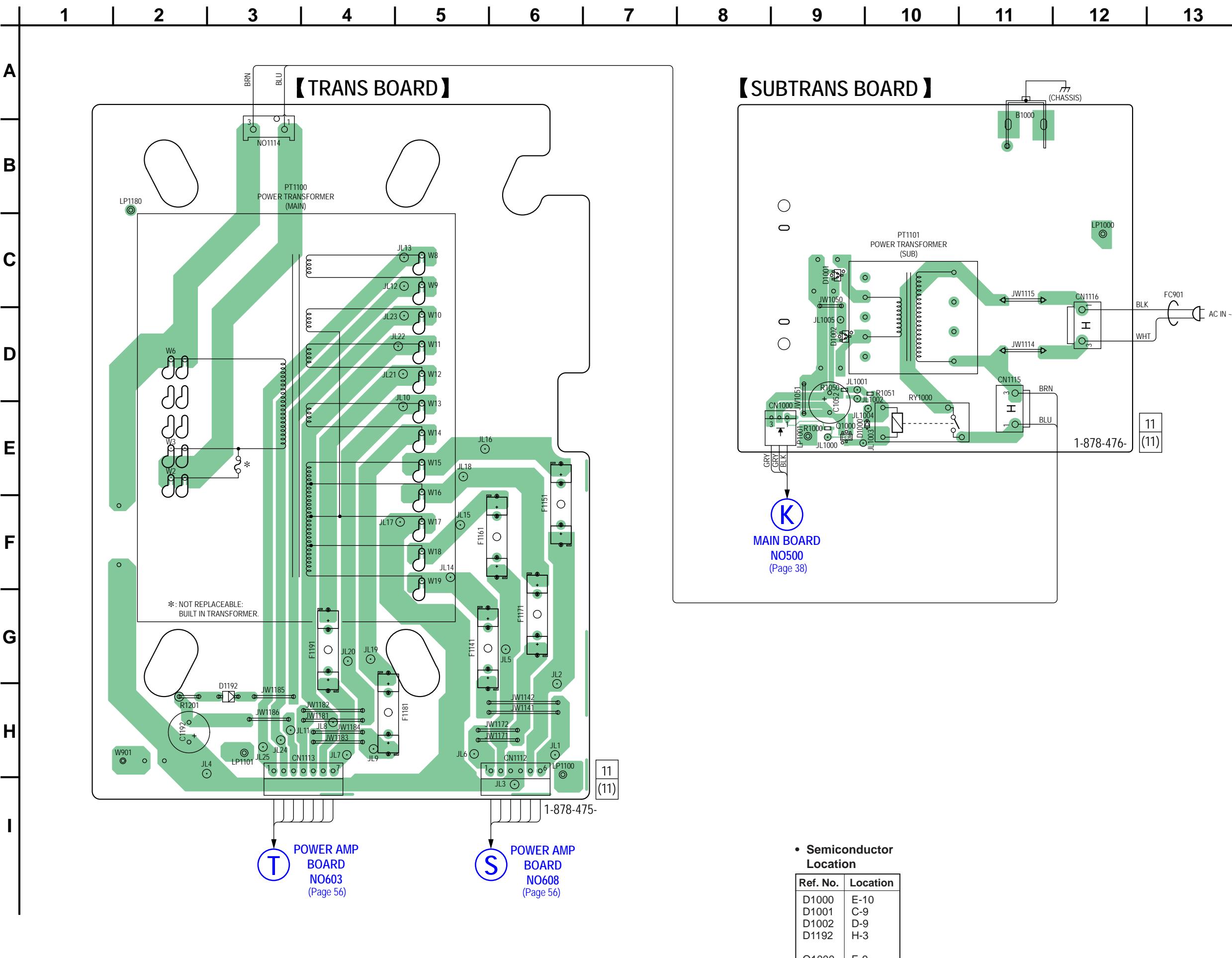
• Semiconductor Location

Ref. No.	Location
D611	E-6
D612	E-5
D620	F-4
D627	G-4
D646	D-8
D654	C-7
D656	G-7
D658	G-4
D660	F-8
D661	F-8
D664	G-8
D670	F-4
(D700)	C-7
D720	F-3
D760	B-6
<IC600>	D-5
(IC601)	D-5
IC627	G-4
Q600	B-4
Q601	C-4
Q604	F-3
Q606	F-4
Q610	F-4
Q618	F-4
Q628	D-5
Q629	D-5
Q630	D-5
Q640	B-5
Q641	B-5
Q644	D-8
Q647	D-8
Q664	G-8
Q668	F-4
Q765	F-8

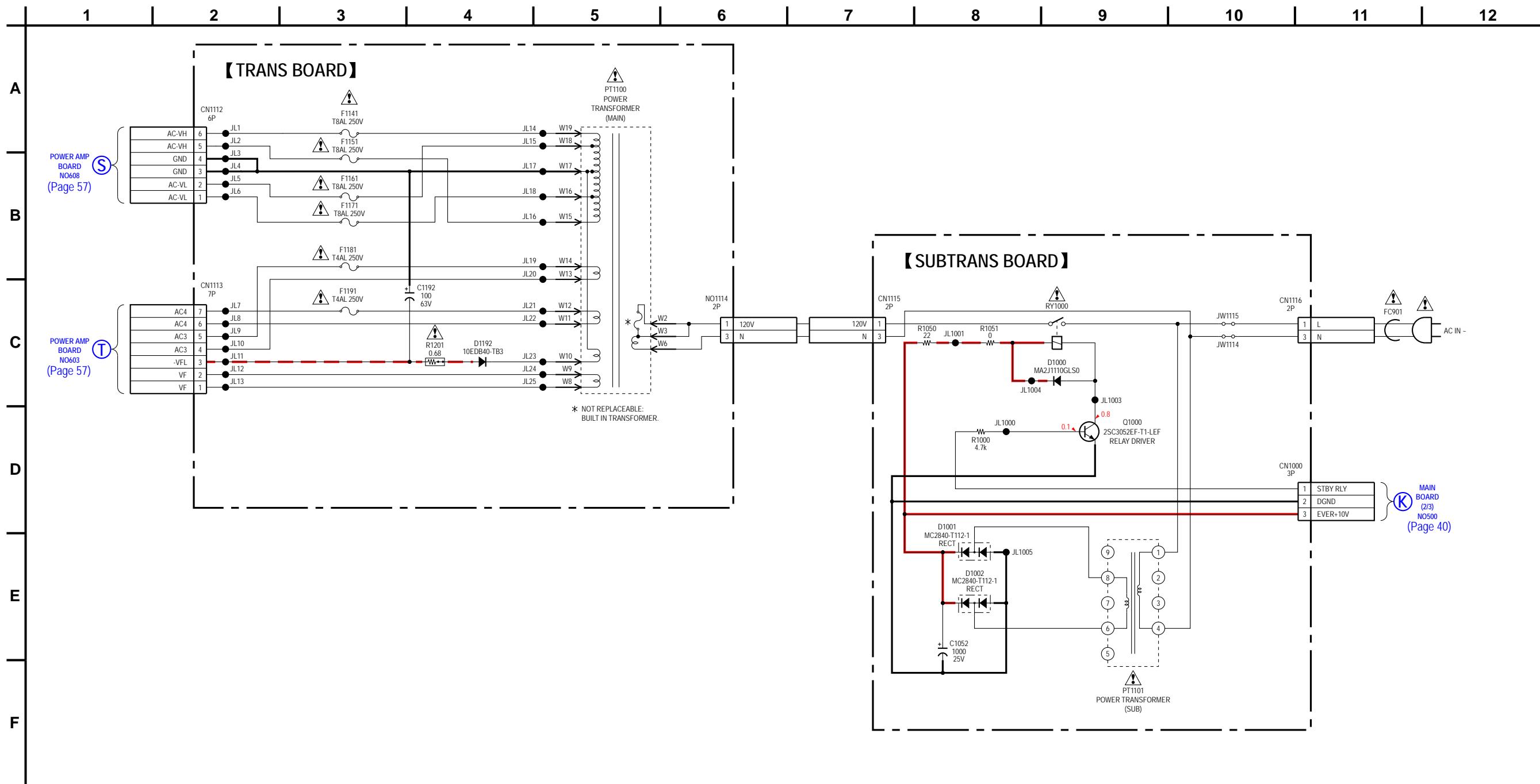
() : HCD-ZX99i only
< > : HCD-ZX66i only

6-27. SCHEMATIC DIAGRAM – POWER AMP Section – • See page 63 for IC Block Diagrams.



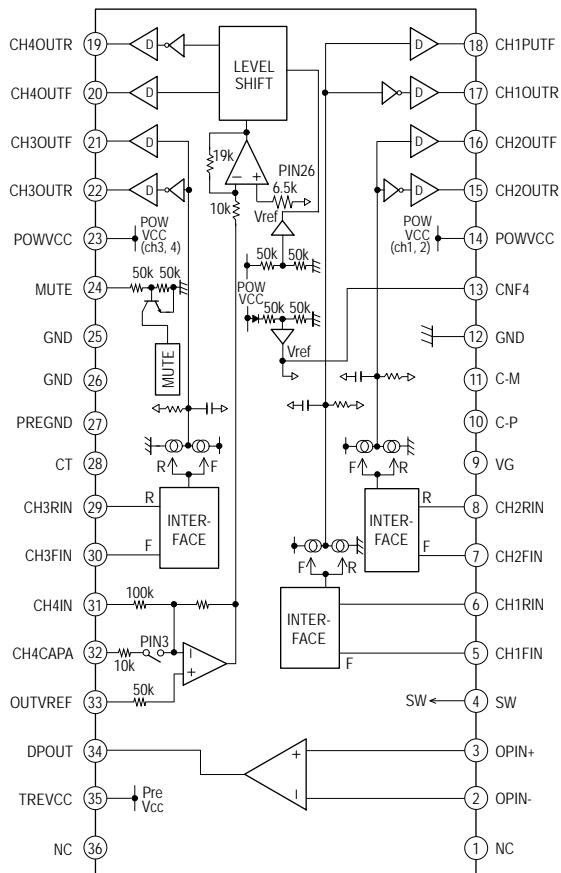
6-28. PRINTED WIRING BOARDS - TRANSFORMER Section - • See page 29 for Circuit Boards Location. •  : Uses unleaded solder.

6-29. SCHEMATIC DIAGRAM – TRANSFORMER Section –

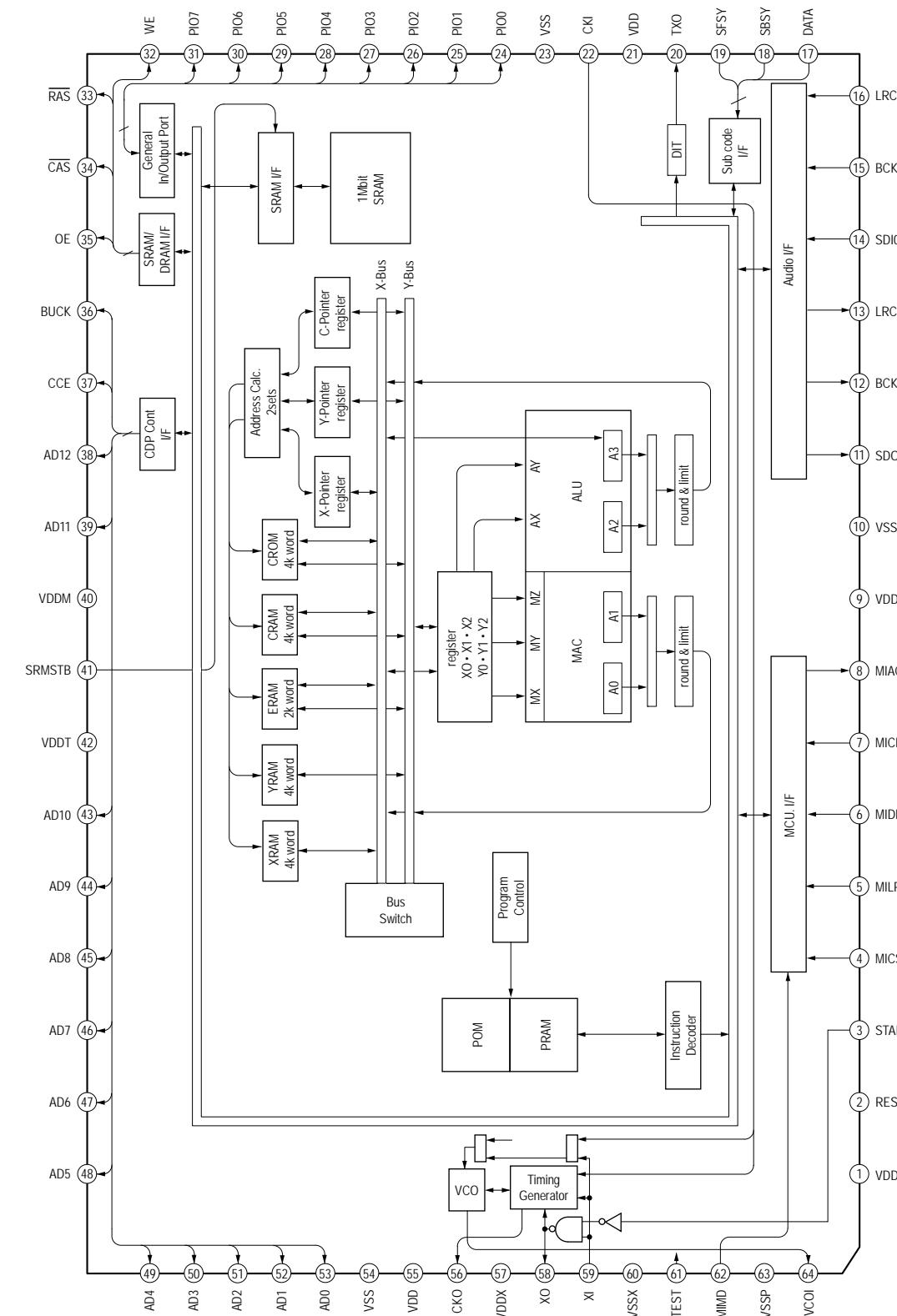


- IC Block Diagrams

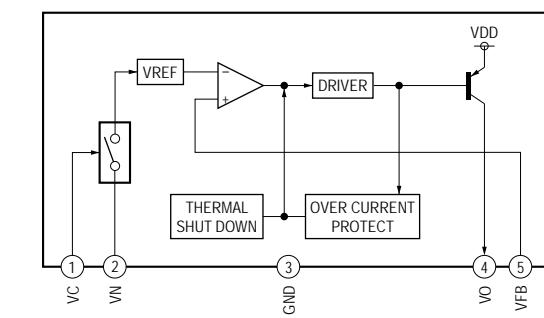
IC251 BA5947FM-E2 (BD81A Board)



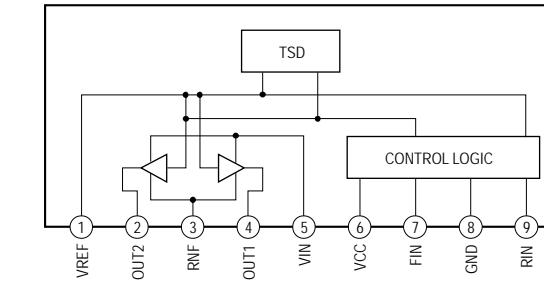
IC301 TC94A34FG-002 (BD81A Board)



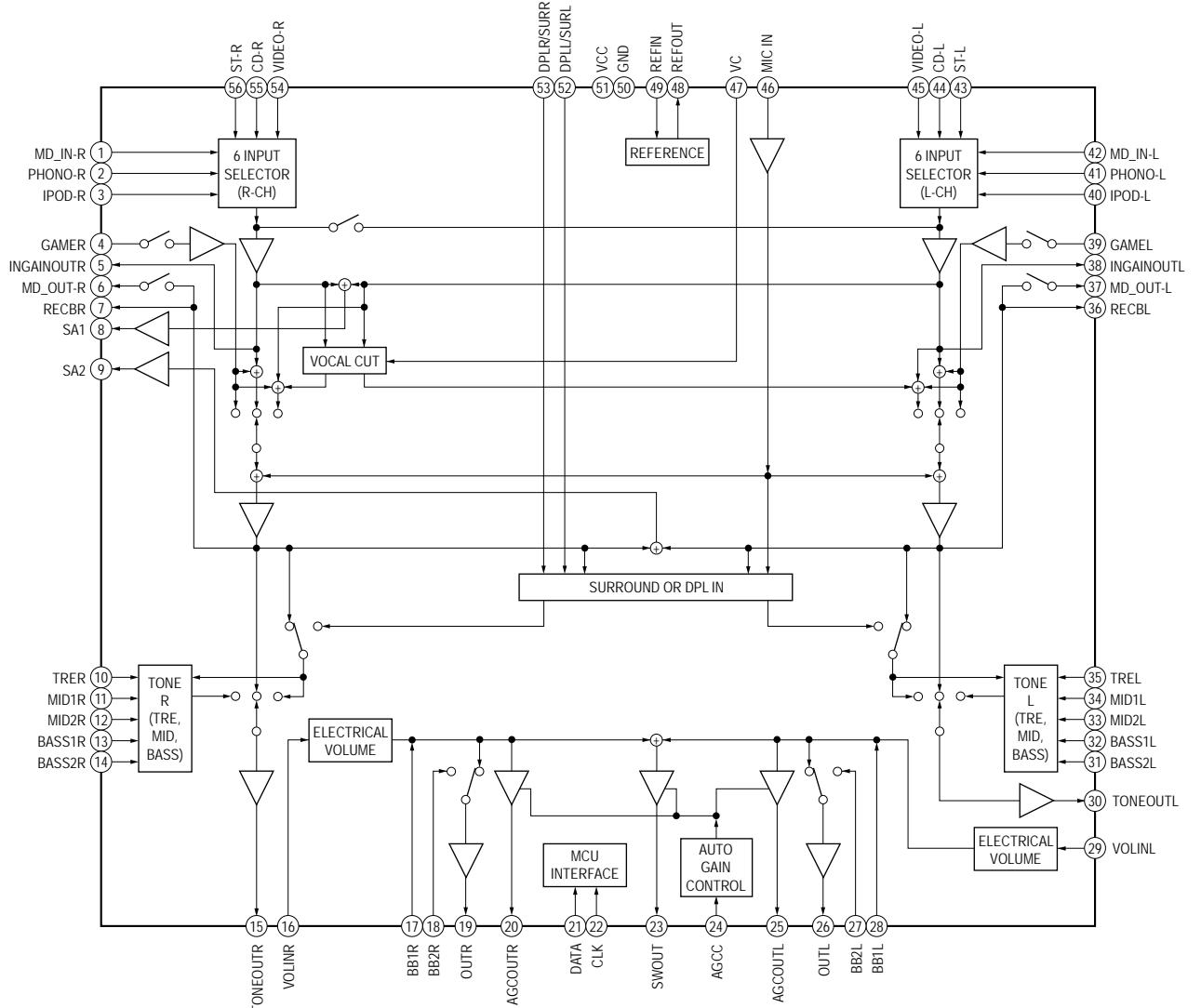
IC501 BA00BC0WCP-V5E2 (MAIN Board (1/3))



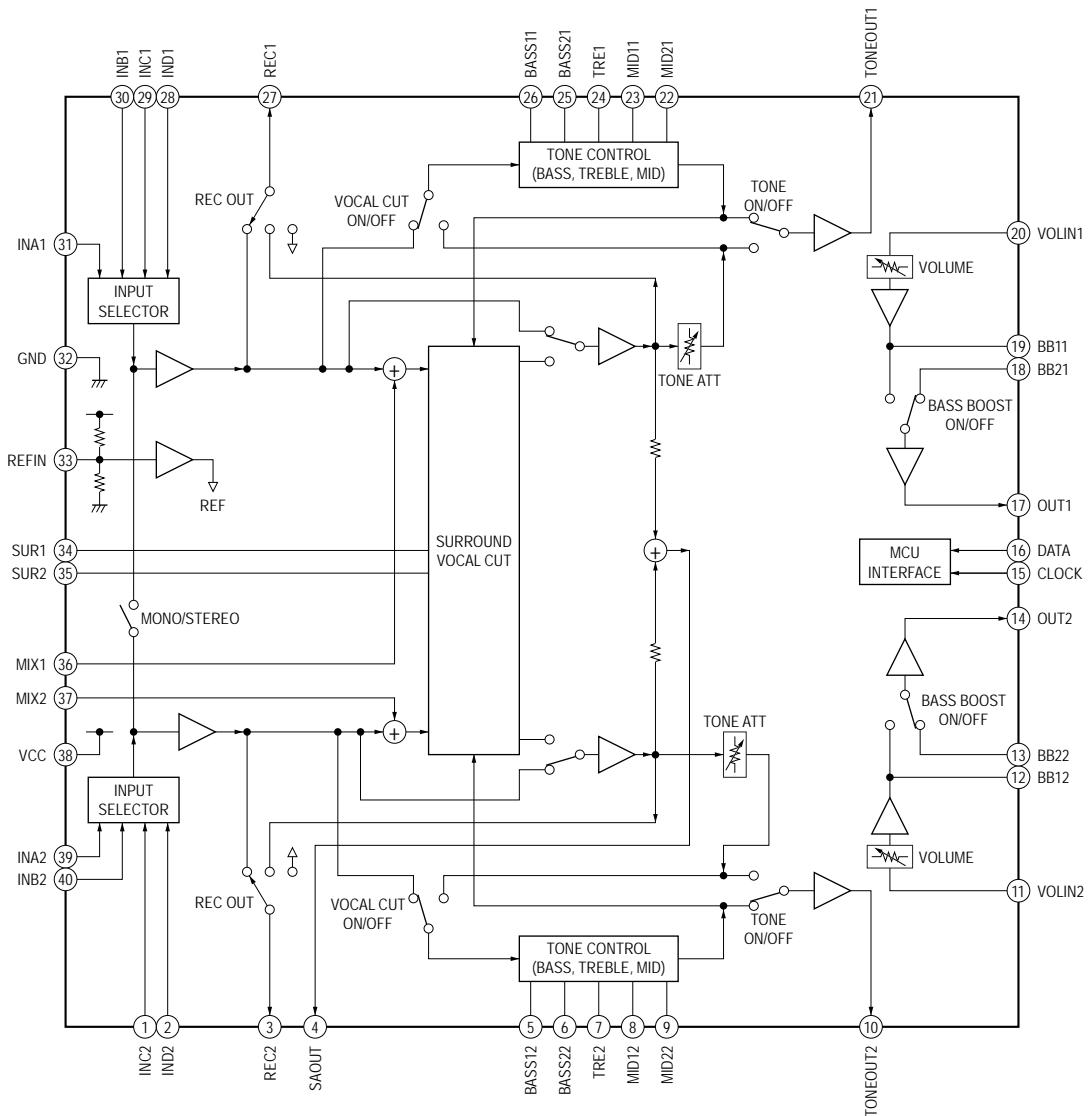
IC514 BA6956AN (MAIN Board (1/3))
IC515 BA6956AN (MAIN Board (1/3))



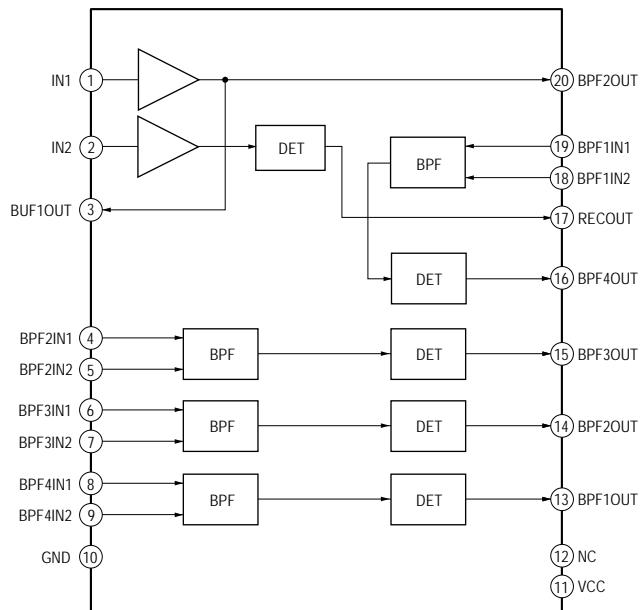
IC101 R2A15216FP (MAIN Board (3/3))



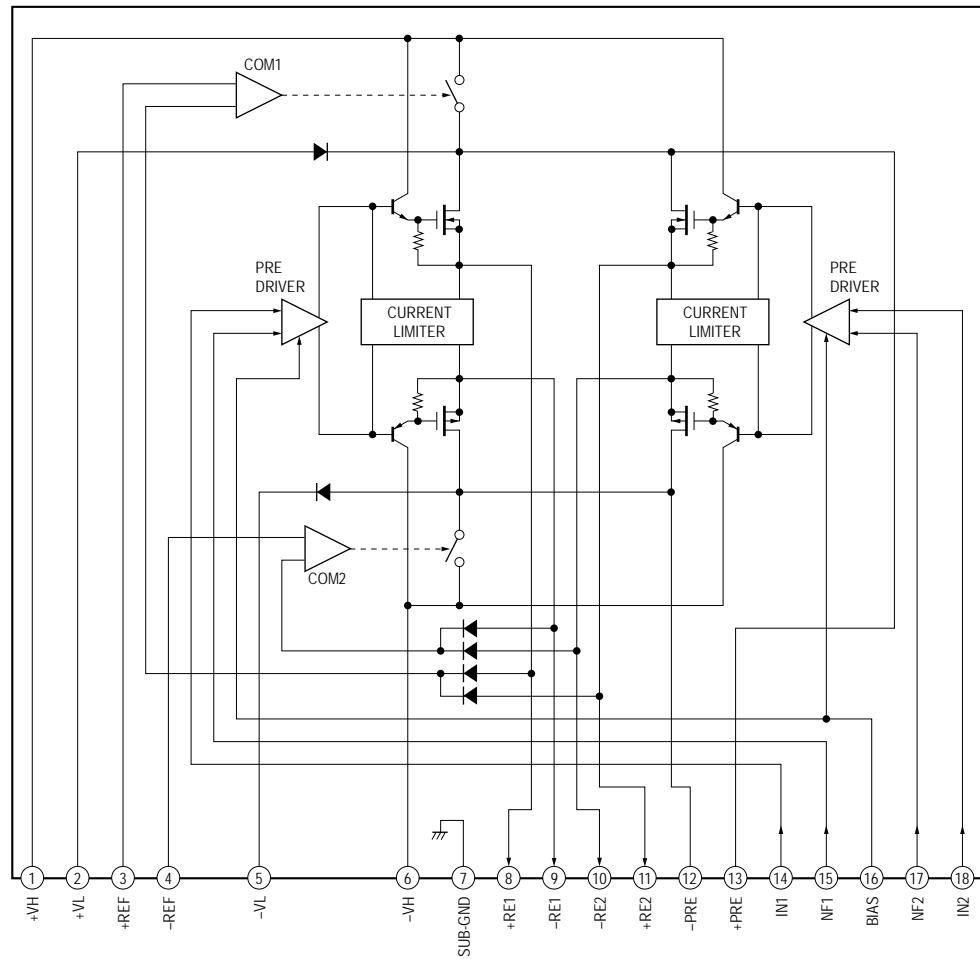
IC102 R2S15207FP (MAIN Board (3/3))



IC903 NJM2760V-TE2 (PANEL COM Board)

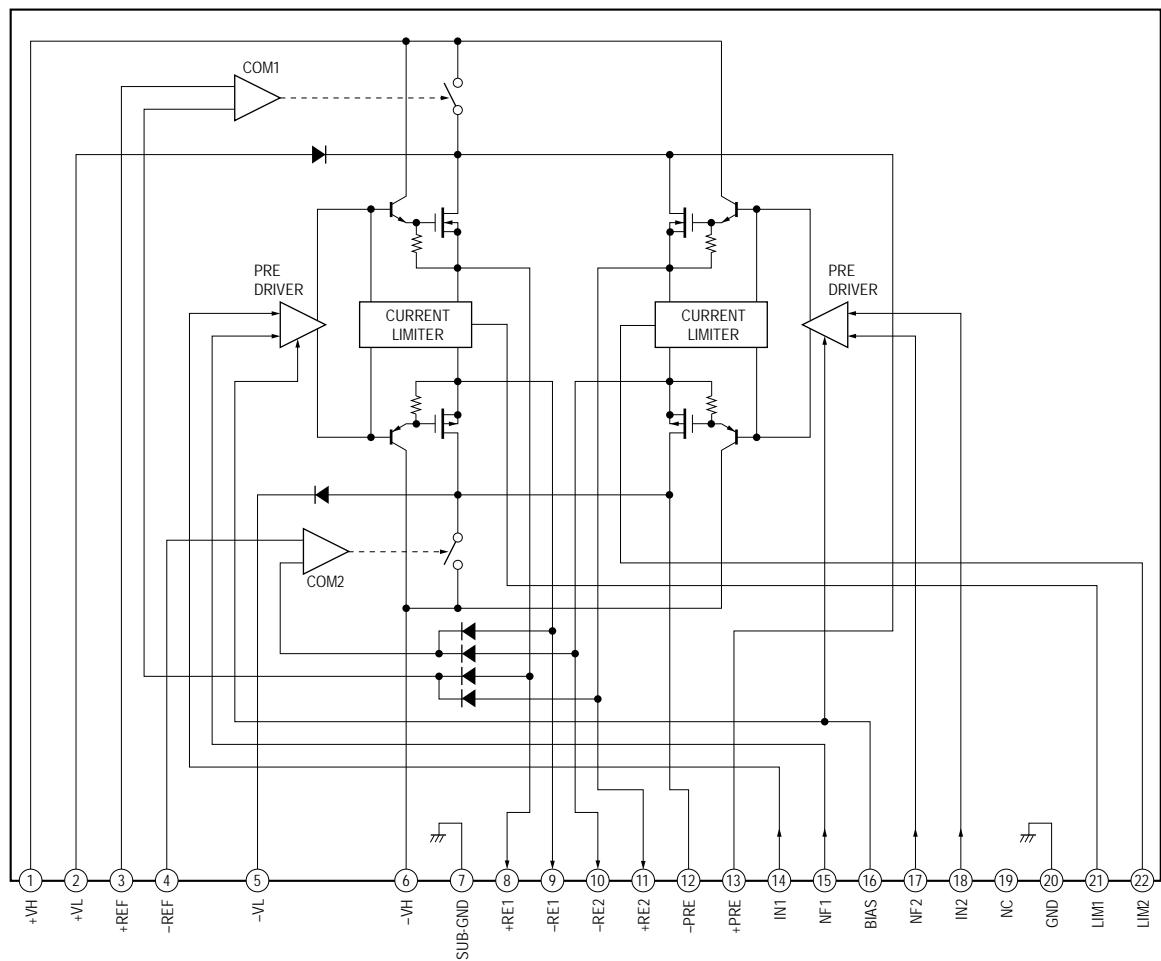


IC701 STK412-240M-E (SURROUND Board) (HCD-ZX99i only)
IC601 STK412-240M-E (POWER AMP Board) (HCD-ZX99i only)

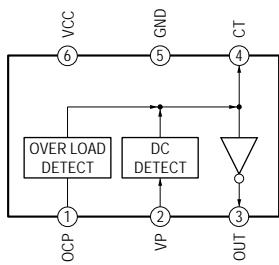


HCD-ZX66i/ZX99i

IC600 STK412-150C (POWER AMP Board) (HCD-ZX66i only)



IC627 RT8H015C-T112-1 (POWER AMP Board)



• IC Pin Function Descriptions

BD81A BOARD IC101 CXD3059AR (RF AMP, DIGITAL SIGNAL PROCESSOR)

Pin No.	Pin Name	I/O	Description
1	MIRR	I/O	Mirror signal input/output (Not used in this set)
2	DFCT	I/O	Defect signal input/output (Not used in this set)
3	FOK	I/O	Focus OK signal input/output (Not used in this set)
4	VSS	—	Ground
5	LOCK	I/O	Lock signal input/output (Not used in this set)
6	MDP	O	Spindle motor servo control signal output
7	SSTP	I	Disc most inner detection signal input
8	IOVSS1	—	Digital ground
9	SFDR	O	Sled drive signal output (FWD direction)
10	SRDR	O	Sled drive signal output (REV direction)
11	TFDR	O	Tracking drive signal output (FWD direction)
12	TRDR	O	Tracking drive signal output (REV direction)
13	FFDR	O	Focus drive signal output (FWD direction)
14	FRDR	O	Focus drive signal output (REV direction)
15	IOVDD1	—	Digital power supply pin (+3.3 V)
16	AVDD0	—	Analog power supply pin (+3.3 V)
17	AVSS0	—	Analog ground
18	NC	—	Not used. (Open)
19	E	I	E signal input
20	F	I	F signal input
21	TEI	I	Tracking error signal input
22	TEO	O	Tracking error signal output
23	FEI	I	Focus error signal input
24	FE0	O	Focus error signal output
25	VC	I/O	VC voltage output/Center voltage input
26	A	I	A signal input
27	B	I	B signal input
28	C	I	C signal input
29	D	I	D signal input
30	NC	—	Not used. (Open)
31	AVDD4	—	Analog power supply pin (+3.3 V)
32	RFDCO	I/O	RFDC signal input/output (Not used in this set)
33	PDSENS	I	Reference voltage input (Fixed at L in this set)
34	AC_SUM	O	RFAC summing amplifier signal output
35	EQ_IN	I	Equalizer circuit signal input
36	LD	O	APC amplifier signal output
37	PD	I	APC amplifier signal input
38	NC	—	Not used. (Open)
39	RFC	I	EQ cut off frequency adjustment input
40	AVSS4	—	Analog ground
41	RFACO	O	RFAC signal output
42	RFACI	I	RFAC signal input
43	AVDD3	—	Analog power supply pin (+3.3 V)
44	BIAS	I	Asymmetry circuit constant current input
45	ASYI	I	Asymmetry compare voltage input
46	ASYO	O	EFM full swing signal output
47	VPCO	O	Charge pump output (Not used in this set)
48	VCTL	I	VCO2 control voltage input
49	AVSS3	—	Analog ground
50	CLTV	I	VCO1 control voltage input
51	FILO	O	Filter signal output
52	FILI	I	Filter signal input
53	PCO	O	Charge pump output
54	AVDD5	—	Analog power supply pin (+3.3 V)

Pin No.	Pin Name	I/O	Description
55	DDVROUT	O	DC/DC converter output
56	DDVRSEN	I	DC/DC converter output voltage monitor signal input
57	AVSS5	—	Analog ground
58	DDCR	I	Reset signal input
59	NC	—	Not used. (Open)
60	BCKI	I	D/A interface bit clock signal input
61	PCMDI	I	D/A interface serial data signal input
62	LRCKI	I	D/A interface LR clock signal input
63	LRCK	O	D/A interface LR clock signal output
64	VSS	—	Ground
65	PCMD	O	D/A interface serial data signal output
66	BCK	O	D/A interface bit clock signal output
67	VDD	—	Power supply pin (+3.3 V)
68	EMPH	O	Not used. (Connect to EMPHI)
69	EMPHI	I	Not used. (Connect to EMPH)
70	IOVDD2	—	Digital power supply pin (+3.3 V)
71	DOUT	—	Digital out signal output
72, 73	TEST	I	Test pin (Normally, fixed at L)
74	IOVSS2	—	Digital ground
75	NC	—	Not used. (Open)
76	XVSS	—	Ground
77	XTAO	O	Master clock signal output (16.9344 MHz)
78	XTAI	I	Master clock signal input (16.9344 MHz)
79	XVDD	—	Power supply pin (+3.3 V)
80	AVDD1	—	Analog power supply pin (+3.3 V)
81	AOUT1	O	L channel analog signal output
82	VREFL	O	L channel reference voltage output
83, 84	AVSS1, AVSS2	—	Analog ground
85	VREFR	O	R channel reference voltage output
86	AOUT2	O	R channel analog signal output
87	AVDD2	—	Analog power supply pin (+3.3 V)
88	NC	—	Not used. (Open)
89	IOVDD0	—	Digital power supply pin (+3.3 V)
90	RMUT	O	R channel "0" detection flag output (Not used in this set)
91	LMUT	O	L channel "0" detection flag output (Not used in this set)
92	NC	—	Not used. (Open)
93	XTSL	I	Sub clock signal input (Fixed at L in this set)
94	IOVSS0	—	Digital ground
95	XTACN	I	Oscillation circuit control signal input
96	SQSO	O	Sub 80 bit, PCM peak and level data signal output (Not used in this set)
97	SQCK	I	Clock signal input
98	SBSO	O	Sub P-W serial data signal output (Not used in this set)
99	EXCK	I	Clock signal input (Not used in this set)
100	XRST	I	System reset signal input
101	SYSM	I	Mute signal input (Fixed at L in this set)
102	DATA	I	Serial data signal input
103	VSS	—	Ground
104	XLAT	I	Latch signal input
105	CLOK	I	Serial data transfer clock signal input
106	VDD	—	Power supply pin (+3.3 V)
107	SENS	O	SENS signal output
108	SCLK	I	Clock signal input (Fixed at H in this set)
109	ATSK	I/O	Input/output for anti-shock (Not used in this set)
110	WFCK	O	WFCK signal output (Not used in this set)
111	XUGF	O	XUGF signal output (Not used in this set)
112	XPCK	O	XPCK signal output (Not used in this set)

Pin No.	Pin Name	I/O	Description
113	GFS	O	GFS signal output (Not used in this set)
114	C2PO	O	C2PO signal output (Not used in this set)
115	SCOR	O	Sub code sync signal output
116	VDD	—	Power supply pin (+3.3 V)
117	C4M	O	4.2366 MHz signal output (Not used in this set)
118	WDCK	O	Word clock signal output (Not used in this set)
119	COUT	I/O	Track count signal input/output (Not used in this set)
120	NC	—	Not used. (Open)

MAIN BOARD (2/3) IC401 R5F3640MDFAR (SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Description
1	MP3-ACK	I	Acknowledgement input signal from MP3 decoder IC (L: acknowledged)
2	MP3-LP	O	Latch output signal to MP3 decoder IC (L: enable)
3	MP3-CS	O	Chip select output signal to MP3 decoder IC (L: enable)
4	SIRCS	I	Remote control signal input
5	MP3-DATA-OUT	O	Serial data output signal to MP3 decoder IC
6	MP3-DATA-IN	I	Serial data input signal from MP3 decoder IC
7	MP3-CLK	O	Serial data transfer clock signal to MP3 decoder IC
8	BYTE	—	Ground
9	CNVSS	—	Ground
10	XC-IN	I	Sub system clock input terminal (32.768 kHz)
11	XC-OUT	O	Sub system clock output terminal (32.768 kHz)
12	RESET	I	System reset signal input from the reset signal IC (L: reset). After the power supply rises,L is input for several hundreds msec and then change to H.
13	X-OUT	O	Main system clock output terminal (16 MHz)
14	VSS	—	Ground
15	X-IN	I	Main system clock input terminal (16 MHz)
16	VCC	—	Power supply terminal (+3.3 V)
17	NMI	I	Non-maskable interrupt input terminal
18	MP3-RST	O	Reset signal output to MP3 decoder IC
19	SCOR	I	Subcode sync (S0+S1) detection signal input from the digital signal processor
20	AC-CUT	I	AC off detection signal input from the reset signal IC (L: AC cut detected)
21	SENS	I	Internal status detection monitor input from the digital signal processor
22	CD-CLK	O	Serial data transfer clock signal output to the digital signal processor
23	XLAT	O	Serial data latch pulse output to the digital signal processor
24	CD-DATA	O	Serial data output to the digital signal processor
25	XRST	O	Reset signal output to the digital signal processor and the motor/coil driver (L: reset)
26	XCTN	O	BD DSP Oscillation on/off control signal output (H: on)
27	NO USE	I	Not Used. (Open)
28	STBY-RELAY	O	Main power on/off control signal output (H: power on)
29	IIC-CLK	I/O	Clock signal for IIC communication between master control controller and display Control controller
30	IIC-DATA	I/O	Data signal for IIC communication between master control controller and display Control controller
31	MP3-STB	O	Standby mode signal output MP3 decoder IC (L: standby mode)
32	NO USE	I	Not Used. (Open)
33	FOR PROG	I	Not Used. (Open)
34	LINE MUTE	O	Line muting on/off control signal (H: muting on)
35	IPOD TXD	O	Serial data output to the iPod
36	IPOD RXD	I	Serial data receive from the iPod
37	IPOD POWER	O	iPod power control (L: OFF, H: ON) (Not used in this set)
38	IPOD MUTE	O	iPod muting control (L: MUTE)
39	NO USE	I	Not Used. (Open)
40	CD POWER	O	Power on/off control signal output to BU section (H: power on)
41	CD A-MUTE	O	CD analog signal muting on/off control signal output (H: power on)
42	TSENS	I	Disc tray position detection signal input from CDM
43	DSENS	I	Disc existence detection signal input from CDM
44	S2	I	Disc tray status detection signal input from CDM
45	S1	I	Disc tray status detection signal input from CDM
46	S0	I	Disc tray status detection signal input from CDM
47	TRMP	O	CDM turning motor control signal output
48	TRMN	O	CDM turning motor control signal output
49	CKMN	O	CDM loading motor control signal output
50	CKMP	O	CDM loading motor control signal output
51 to 59	NO USE	I	Not Used. (Open)
60	EEPROM DATA	I/O	EEPROM data signal input/output

Pin No.	Pin Name	I/O	Description
61	EEPROM CLK	I/O	EEPROM clock signal input/output
62	VCC	—	Power supply terminal (+3.3 V)
63	NO USE	I	Not Used. (Open)
64	VSS	—	Ground terminal
65	AUDIO1 DATA	O	Serial data output to audio signal processor
66	AUDIO1 CLK	O	Serial data transfer clock signal output to audio signal processor
67	AUDIO2 DATA	O	Serial data output to 4-ch volume IC
68	AUDIO2 CLK	O	Serial data transfer clock signal output to 4-ch volume IC
69	SOFT TEST	O	Soft test signal output
70	NO USE	I	Not Used. (Open)
71	GC RESET	O	Reset signal output to Display Control IC (L: reset)
72	SURR RELAY	O	Relay drive signal output for the surround speakers (H: relay on)
73	DISPLAY KEY	I	Display key press detection signal (Interrupt input)
74	POWER KEY	I	Power key press detection signal (Interrupt input)
75	IPOD DETECT	I	iPod plug in detection (L: connected, H: disconnected)
76	STBY LED	O	LED drive signal output of POWER indicator (H: LED on)
77	HP DET	I	Headphone connection detection signal input (H: headphone connected)
78	FR RELAY	O	Relay drive signal output for the front speakers (H: relay on)
79	HP MUTE	O	Headphone muting on/off control signal (L: muting on)
80	STK MUTE	O	Power amplifier and sub woofer amplifier on/off control signal output (H: amplifier on)
81	PROTECT	I	Speaker protect detection signal input from speaker protect circuit (L: protector on)
82	ST CLK	O	PLL serial data transfer clock signal output to the tuner unit
83	ST DIN	I	PLL serial data input from the tuner unit
84	ST DOUT	O	PLL serial data output to the tuner unit
85	ST CE	O	PLL chip enable signal output to the tuner unit
86	TUNED	I	Tuning detection signal input from the tuner unit (L: tuned)
87 to 91	NO USE	I	Not Used. (Open)
92	MODEL-IN	I	Model setting terminal (L: HCD-ZX66i, H: HCD-ZX99i)
93	DEST-IN	I	Not Used. (Open)
94	I-HOLD	I	Not Used. (Open)
95	NO USE	I	Not Used. (Open)
96	AVSS	—	Ground terminal (for A/D conversion)
97	NO USE	I	Not Used. (Open)
98	VREF	I	A/D Converter reference voltage input terminal (+3.3 V)
99	AVCC	—	Power supply terminal (+3.3 V) (for A/D conversion)
100	MP3-REQ	I	Request signal from MP3 decoder IC

PANEL COM BOARD IC901 MB90M407PF-G-146E1 (VACUUM FLUORESCENT DISPLAY DRIVER, KEY CONTROL)

Pin No.	Pin Name	I/O	Description
1 to 4	G4 to G1	O	Grid drive signal output for the vacuum fluorescent display
5 to 10	SEG-1 to SEG-6	O	Segment drive signal output for the vacuum fluorescent display
11	VSS-IO	—	Ground (for I/O port)
12 to 22	SEG-7 to SEG-17	O	Segment drive signal output for the vacuum fluorescent display
23	VDD-FIP	—	Power supply pin (+3.3 V) (for the vacuum fluorescent display)
24 to 41	SEG-18 to SEG-35	O	Segment drive signal output for the vacuum fluorescent display
42	VSS-IO	—	Ground (for I/O port)
43	SEG-36	O	Segment drive signal output for the vacuum fluorescent display
44	NC	O	Not used. (Open)
45	SPK MODE LED	O	Dynamic LED drive signal output of the X-ROUND indicator (H: LED on)
46	CD LED	O	Not used. (Open)
47	GAME LED	O	Not used. (Open)
48	VKK	—	Power supply pin (-33 V) (for the vacuum fluorescent display)
49	MDO	I	Setting pin for the CPU operational mode
50	MD1/VDD-VFT	I	Setting pin for the CPU operational mode
51	MD2	I	Setting pin for the CPU operational mode
52	VOL 1, 2	O	Dynamic LED drive signal output of the ILLUMINATION 1, 2 indicators (H: LED on)
53	VOL 3, 4	O	Dynamic LED drive signal output of the ILLUMINATION 3, 4 indicators (H: LED on)
54	VOL 5, 6	O	Dynamic LED drive signal output of the ILLUMINATION 5, 6 indicators (H: LED on)
55	VOL 7, 8	O	Dynamic LED drive signal output of the ILLUMINATION 7, 8 indicators (H: LED on)
56	VOL 9, 10	O	Dynamic LED drive signal output of the ILLUMINATION 9, 10 indicators (H: LED on)
57	VOL 11 LED	O	Dynamic LED drive signal output of the ILLUMINATION 11 indicator (H: LED on)
58	NC	O	Not used. (Open)
59	LED SELECTOR	O	Dynamic LED drive select signal output
60	I2C DATA	I/O	Data input/output with I2C communication between the system control IC and display control IC
61	I2C CLOCK	I/O	Clock signal input/output with I2C communication between the system control IC and display control IC
62	AVCC	—	Power supply pin (+3.3 V) (for A/D conversion)
63	AVSS	—	Ground (for A/D conversion)
64 to 69	KEY0 to KEY5	I	Key signal input (A/D input)
70	BPF1-F01	I	Spectrum analyzer drive signal input from the spectrum analyzer band-pass filter IC (A/D input)
71	BPF1-F02	I	Spectrum analyzer drive signal input from the spectrum analyzer band-pass filter IC (A/D input)
72	BPF1-F03	I	Spectrum analyzer drive signal input from the spectrum analyzer band-pass filter IC (A/D input)
73	BPF1-F04	I	Spectrum analyzer drive signal input from the spectrum analyzer band-pass filter IC (A/D input)
74	ALL BAND	I	Spectrum analyzer drive signal input from the spectrum analyzer band-pass filter IC (A/D input)
75	JOG A	I	JOG dial pulse signal input from X-ROUND JOG rotary encoder (A phase input) (HCD-ZX99i)
76	JOG B	I	JOG dial pulse signal input from X-ROUND JOG rotary encoder (B phase input) (HCD-ZX99i)
77	RESET	I	System reset signal input from the system control IC (L: reset)
78	SOFT TEST	O	Output for the software test point
79	VOL B	I	JOG dial pulse signal input from VOLUME rotary encoder (B phase input)
80	VOL A	I	JOG dial pulse signal input from VOLUME rotary encoder (A phase input)
81	VSS-CPU	—	Ground (for CPU)
82	X OUT	O	System clock signal output (4 MHz)
83	X IN	I	System clock signal input (4 MHz)
84	VCC-CPU	—	Power supply pin (+3.3 V) (for CPU)
85	NO USE	O	Not used. (Open)
86 to 100	G19 to G5	O	Grid drive signal output for the vacuum fluorescent display

SECTION 7 EXPLODED VIEWS

Note:

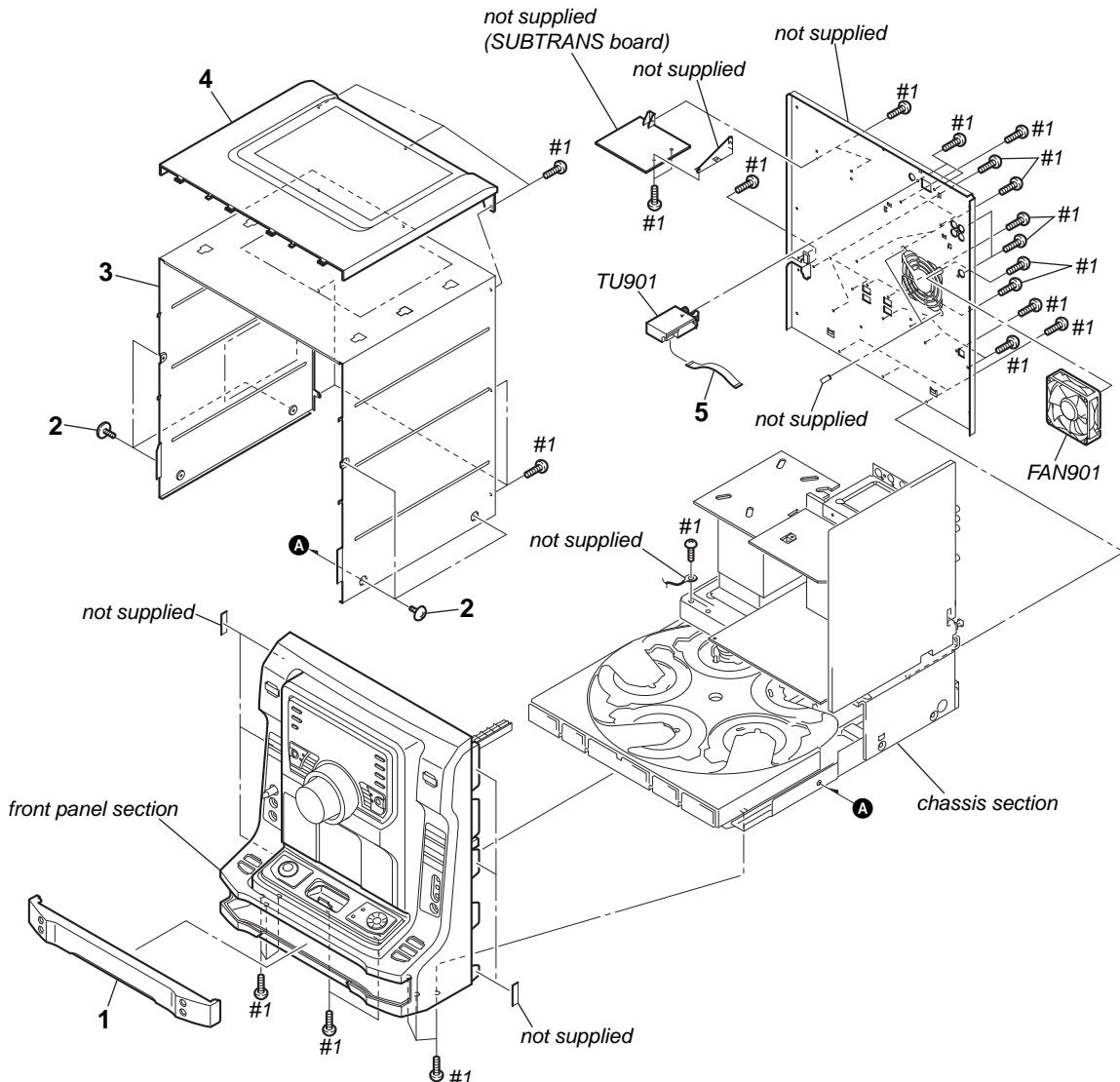
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- XX and -X mean standardized parts, so they may have some difference from the original one.

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

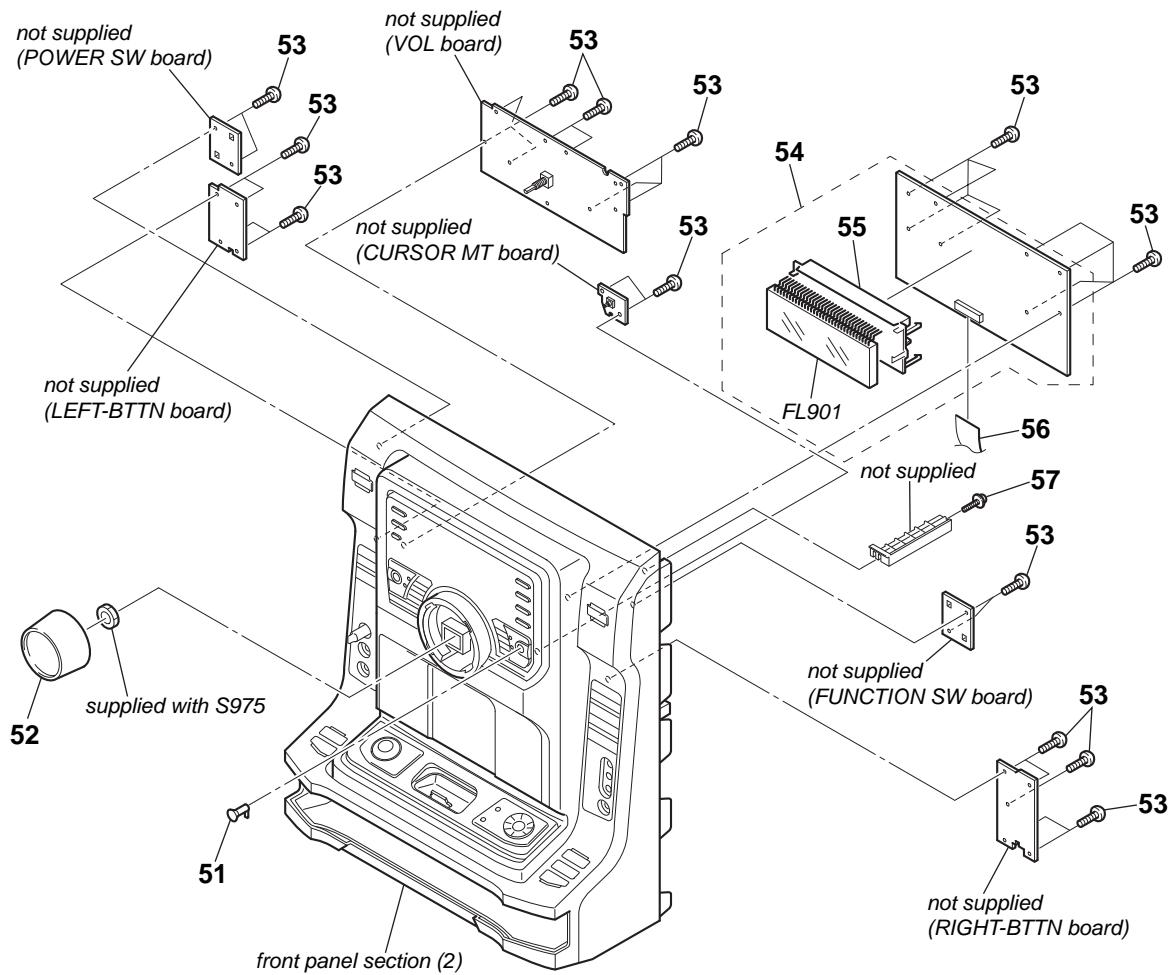
Les composants identifiés par une marque \triangle sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. BACK PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-252-686-31	PANEL, LOADING (ZX99i)		5	1-828-964-11	WIRE (FLAT TYPE) (11 CORE)	
1	4-252-686-41	PANEL, LOADING (ZX66i)		FAN901	1-763-372-11	FAN, DC	
2	3-363-099-02	SCREW (CASE 3 TP2)		TU901	1-693-762-21	TUNER (FM/AM) (ANTENNA)	
3	4-237-661-51	CASE		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
4	4-252-685-01	COVER (TOP)					

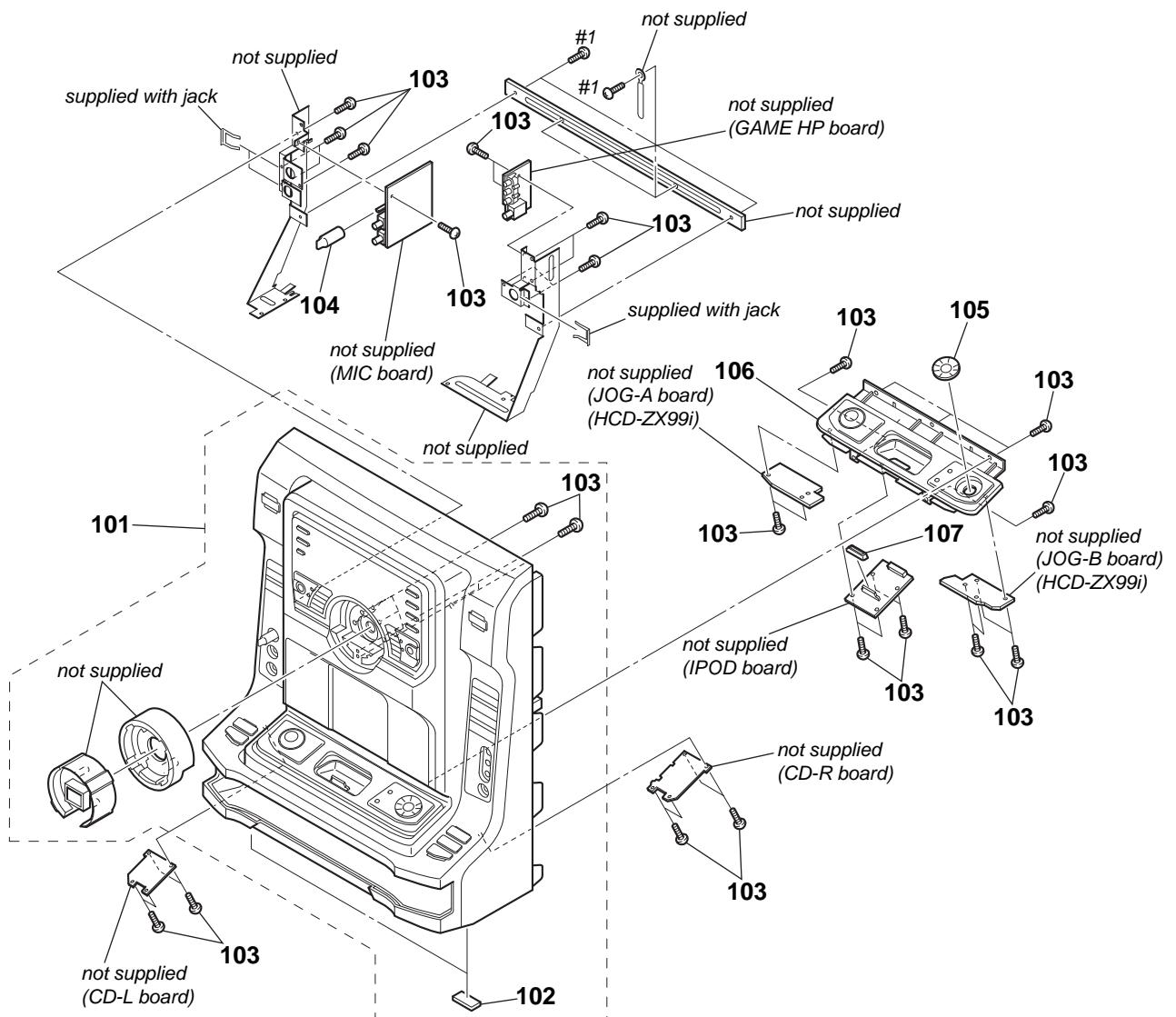
7-2. FRONT PANEL SECTION (1)



Note: If the wire (flat type) was replaced, fold it some as the wire (flat type) before replacement.

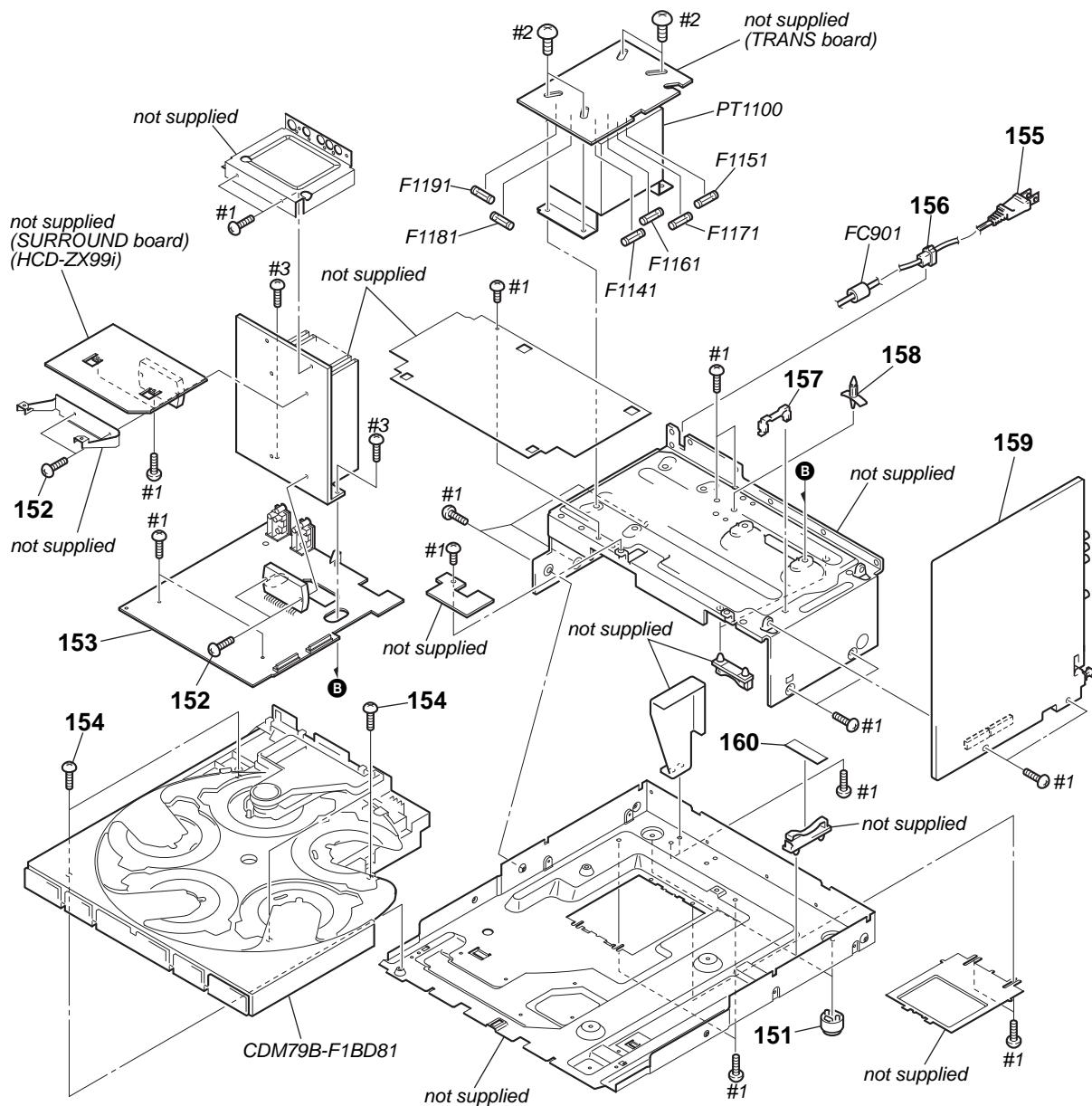
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-252-682-01	KNOB (ENTER)		55	4-253-178-01	HOLDER, FL	
52	4-252-684-01	KNOB (VOLUME)		56	1-828-996-51	WIRE (FLAT TYPE) (17 CORE)	
53	3-087-053-01	+BVTP 2.6 (3CR)		57	4-933-134-51	SCREW (+PTPWH 2.6X8)	
	A-1616-806-A	PANEL COM BOARD, COMPLETE		FL901	1-483-081-11	VACUUM FLUORESCENT DISPLAY	

7-3. FRONT PANEL SECTION (2)



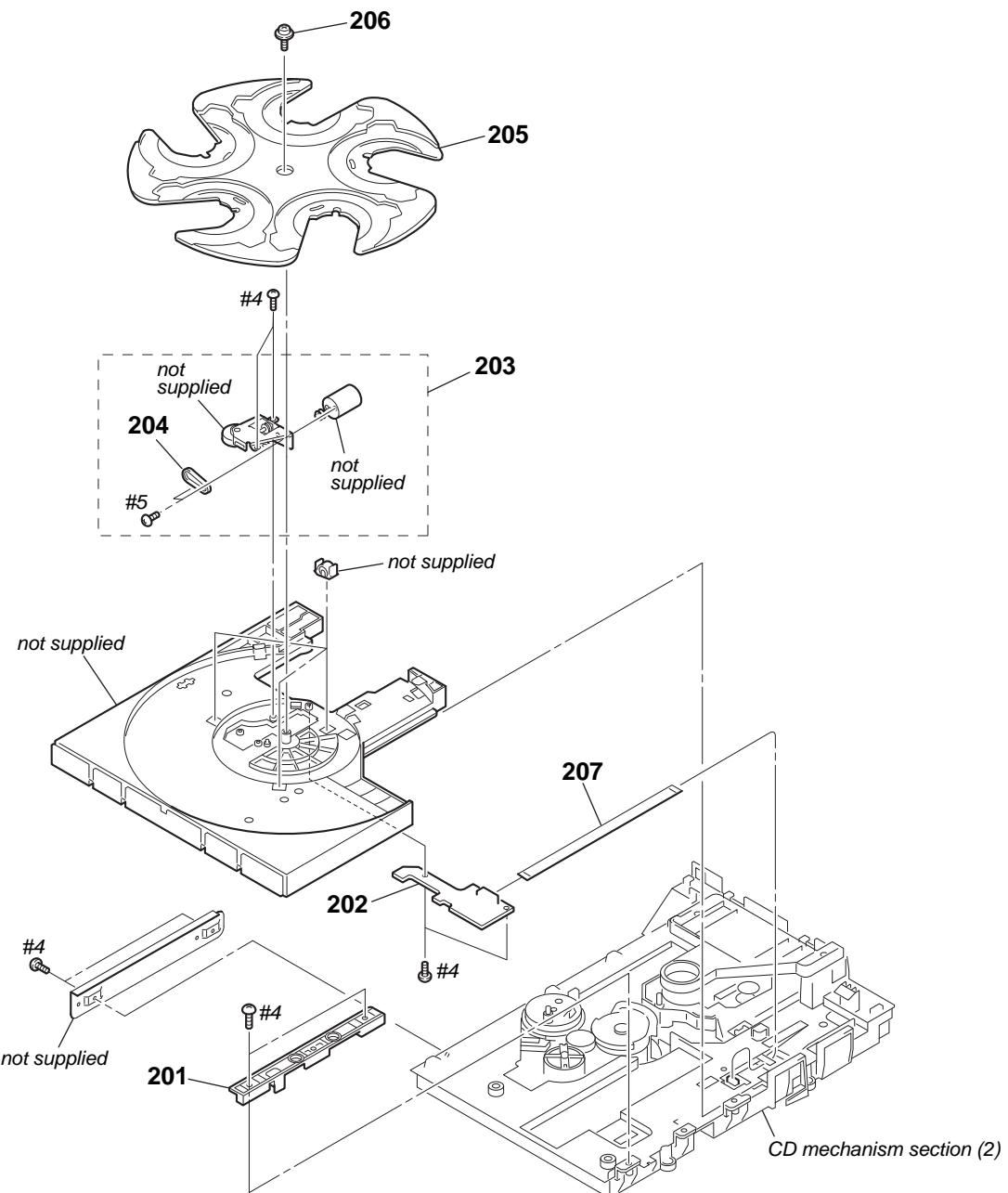
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	X-2342-757-1	FRONT PANEL ASSY (ZX99i) (ZX99i)		105	4-252-683-01	KNOB (JOG) (ZX99i)	
101	X-2345-118-1	FRONT PANEL ASSY (ZX66i) (ZX66i)		106	X-2342-758-1	BRACKET CD ASSY (ZX99i) (ZX99i)	
102	4-225-252-21	CUSHION (FOOT)		106	X-2342-774-1	BRACKET CD ASSY (ZX66i) (ZX66i)	
103	3-087-053-01	+BVTP 2.6 (3CR)		107	3-277-576-01	ESCUTCHEON	
104	4-237-635-11	KNOB (MIC)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

7-4. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	4-965-822-01	FOOT		△ F1141	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
152	3-905-609-41	SCREW (TRANSISTOR)		△ F1151	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
153	A-1616-816-A	POWER AMP BOARD, COMPLETE (ZX99i)		△ F1161	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
153	A-1616-833-A	POWER AMP BOARD, COMPLETE (ZX66i)		△ F1171	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
154	3-077-331-01	+BV3 (3-CR)		△ F1181	1-532-504-33	FUSE (T4AL/250V)	
△ 155	1-783-820-11	CORD, POWER		△ F1191	1-532-504-33	FUSE (T4AL/250V)	
156	3-703-244-00	BUSHING (2104), CORD		△ FC901	1-500-497-11	FILTER, CLAMP (FERRITE CORE)	
* 157	4-988-533-01	HOLDER, PWB		△ PT1100	1-445-589-11	TRANSFORMER, POWER (MAIN) (ZX66i)	
* 158	4-954-051-41	HOLDER, PC BOARD		△ PT1100	1-445-590-11	TRANSFORMER, POWER (MAIN) (ZX99i)	
159	A-1616-802-A	MAIN BOARD, COMPLETE (ZX99i)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
159	A-1616-827-A	MAIN BOARD, COMPLETE (ZX66i)		#2	7-685-881-09	SCREW +BVTP 4X8 (S)	
* 160	3-378-433-01	CUSHION, SARANET		#3	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	

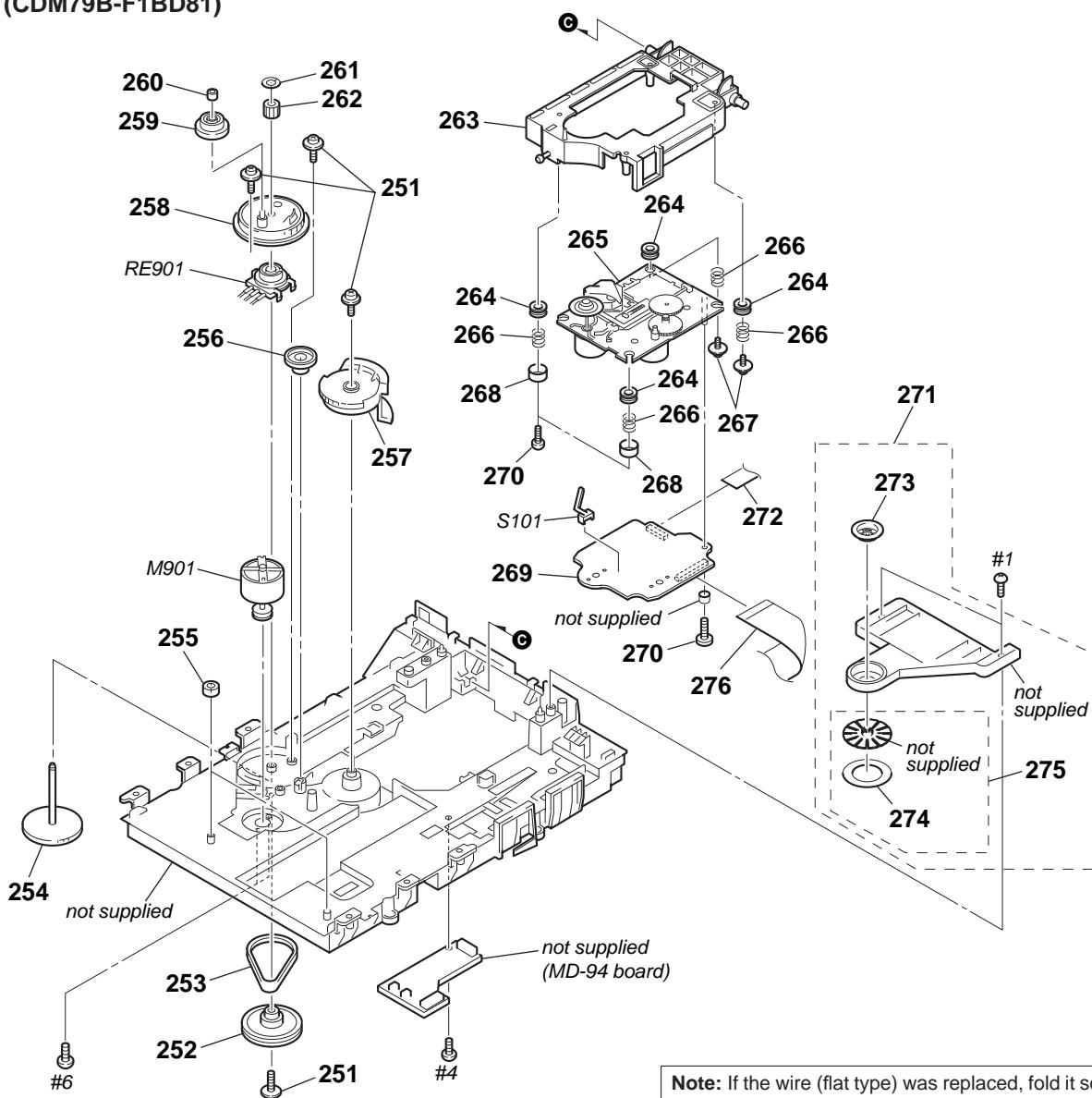
7-5. CD MECHANISM SECTION (1)
(CDM79B-F1BD81)



Note: If the wire (flat type) was replaced, fold it some as the wire (flat type) before replacement.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-074-737-01	PLATE (GUIDE)		206	4-218-252-52	SCREW (+PTPWH M2.6), FLOATING	
202	A-6060-642-A	SE-130 BOARD, COMPLETE		207	1-823-921-11	FMS-18	
203	A-6060-640-A	UNIT ASSY, TD		#4	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
204	3-074-725-01	BELT, TD		#5	7-682-544-04	SCREW +P 3X3	
205	3-074-717-21	TRAY					

7-6. CD MECHANISM SECTION (2) (CDM79B-F1BD81)



Note: If the wire (flat type) was replaced, fold it some as the wire (flat type) before replacement.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	4-218-252-52	SCREW (+PTPWH M2.6), FLOATING		267	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
252	3-074-744-01	GEAR (LOADING A)		268	4-231-151-01	STOPPER (BU)	
253	3-074-745-01	BELT (LOADING)		269	A-4751-045-A	BD81A BOARD, COMPLETE	
254	3-074-742-01	GEAR (SHAFT)		270	3-087-053-01	+BVTP 2.6 (3CR)	
255	4-951-619-11	CUSHION (A)		271	A-4713-281-A	CHUCK ASSY	
256	3-074-735-01	GEAR (IDLER)		272	1-832-404-21	CABLE, FLEXIBLE FLAT (16 CORE)	
257	3-074-736-01	GEAR (CHUCK)		273	1-452-925-21	MAGNET ASSY	
258	3-074-741-01	GEAR (LOADING B)		274	4-231-777-02	SHEET (KH2)	
259	3-074-738-01	GEAR (SWING)		275	X-4953-195-3	PULLEY (AT) ASSY	
260	3-074-739-01	COLLAR (SWING)		276	1-828-664-11	WIRE (FLAT TYPE) (27 CORE)	
261	3-016-533-11	WASHER (FR), STOPPER		M901	X-3952-411-1	MOTOR ASSY, LOADING (LOADING)	
262	3-074-740-01	GEAR (LOADING C)		RE901	1-418-746-11	ENCODER, ROTARY	
263	X-4956-104-A	HOLDER (BU) ASSY		S101	1-771-853-11	SWITCH, DETECTION (LIMIT)	
264	4-227-549-11	INSULATOR		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
△ 265	8-820-244-02	OPTICAL PICK-UP (KSM-215DCP/C2NP)		#4	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
266	4-227-045-11	SPRING (INSULATOR), COIL		#6	7-621-259-25	SCREW +P 2.6X4	

SECTION 8

ELECTRICAL PARTS LIST

BD81A

Note:

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

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

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.

Replace only with part number specified.

Les composants identifiés par une marque \triangle sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

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

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark			
	A-4751-045-A	BD81A BOARD, COMPLETE					C203	1-128-995-21	ELECT CHIP	100uF	20%	10V		

< CAPACITOR >														
C10	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V	C209	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V			
C11	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V	C210	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V			
C14	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C211	1-164-230-11	CERAMIC CHIP	220PF	5%	50V			
C15	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C212	1-162-919-11	CERAMIC CHIP	22PF	5%	50V			
C16	1-115-156-11	CERAMIC CHIP	1uF		10V	C213	1-162-919-11	CERAMIC CHIP	22PF	5%	50V			
C17	1-126-210-21	ELECT CHIP	220uF	20%	4V	C251	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V			
C18	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C252	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C111	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V	C255	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C112	1-164-315-11	CERAMIC CHIP	470PF	5%	50V	C257	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C113	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V	C258	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C114	1-164-315-11	CERAMIC CHIP	470PF	5%	50V	C259	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C115	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C260	1-128-394-11	ELECT CHIP	220uF	20%	10V			
C116	1-128-995-21	ELECT CHIP	100uF	20%	10V	C302	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C122	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C303	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C123	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C305	1-126-210-21	ELECT CHIP	220uF	20%	4V			
C124	1-162-959-11	CERAMIC CHIP	330PF	5%	50V	C306	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C125	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C307	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C131	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	C308	1-126-208-21	ELECT CHIP	47uF	20%	4V			
C132	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V	C309	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C133	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C310	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C134	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C311	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C141	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C312	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C142	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V	C313	1-164-360-11	CERAMIC CHIP	0.1uF	16V				
C143	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C314	1-126-208-21	ELECT CHIP	47uF	20%	4V			
C151	1-128-995-21	ELECT CHIP	100uF	20%	10V	C315	1-107-826-11	CERAMIC CHIP	0.1uF	16V				
C161	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C316	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V			
C162	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C317	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V			
C163	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C318	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V			
C171	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	C320	1-216-864-11	SHORT CHIP	0					
C172	1-162-920-11	CERAMIC CHIP	27PF	5%	50V	< CONNECTOR >								
C174	1-164-360-11	CERAMIC CHIP	0.1uF		16V	CN101	1-770-425-51	CONNECTOR, FFC/FPC 16P						
C181	1-164-360-11	CERAMIC CHIP	0.1uF		16V	CN201	1-784-835-51	CONNECTOR, FFC (LIF(NON-ZIF)) 27P						
C182	1-164-360-11	CERAMIC CHIP	0.1uF		16V	< FERRITE BEAD >								
C183	1-124-778-00	ELECT CHIP	22uF	20%	6.3V	FB301	1-500-445-21	FERRITE, EMI (SMD) (2012)						
C184	1-124-778-00	ELECT CHIP	22uF	20%	6.3V	< IC >								
C185	1-164-315-11	CERAMIC CHIP	470PF	5%	50V	IC101	8-752-425-12	IC CXD3059AR						
C186	1-164-315-11	CERAMIC CHIP	470PF	5%	50V	IC251	6-705-808-01	IC BA5947FM-E2						
C194	1-164-360-11	CERAMIC CHIP	0.1uF		16V	IC301	6-705-365-01	IC TC94A34FG-002						
C195	1-164-360-11	CERAMIC CHIP	0.1uF		16V	IC303	6-705-807-01	IC BH15FB1WG						
C196	1-164-360-11	CERAMIC CHIP	0.1uF		16V									
C201	1-128-995-21	ELECT CHIP	100uF	20%	10V									

HCD-ZX66i/ZX99i

BD81A **CD-L** **CD-R** **CURSOR MT**

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark														
< TRANSISTOR >																									
Q10	6-551-120-01	TRANSISTOR	2SA2119K			R412	1-216-809-11	METAL CHIP	100	5%	1/10W														
< RESISTOR >																									
R10	1-216-791-11	METAL CHIP	3.3	5%	1/10W	R419	1-216-809-11	METAL CHIP	100	5%	1/10W														
R11	1-216-864-11	SHORT CHIP	0			< VIBRATOR >																			
R12	1-216-845-11	METAL CHIP	100K	5%	1/10W	X171	1-767-408-21	VIBRATOR, CRYSTAL (16.934MHz)																	
R13	1-218-446-11	METAL CHIP	1	5%	1/10W	*****																			
R111	1-216-821-11	METAL CHIP	1K	5%	1/10W	CD-L BOARD																			
R112	1-216-835-11	METAL CHIP	15K	5%	1/10W	*****																			
R113	1-216-821-11	METAL CHIP	1K	5%	1/10W	R834	1-216-835-11	METAL CHIP	15K	5%	1/10W	< RESISTOR >													
R114	1-216-835-11	METAL CHIP	15K	5%	1/10W	R866	1-216-839-11	METAL CHIP	33K	5%	1/10W	*****													
R121	1-216-835-11	METAL CHIP	15K	5%	1/10W	R896	1-216-837-11	METAL CHIP	22K	5%	1/10W	< SWITCH >													
R131	1-216-857-11	METAL CHIP	1M	5%	1/10W	S937	1-762-875-21	SWITCH, KEYBOARD (DISC SKIP)				*****													
R132	1-216-833-11	METAL CHIP	10K	5%	1/10W	S938	1-762-875-21	SWITCH, KEYBOARD (EX-CHANGE)				*****													
R133	1-216-848-11	METAL CHIP	180K	5%	1/10W	S939	1-762-875-21	SWITCH, KEYBOARD (Δ OPEN/CLOSE)				*****													
R141	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	*****													CD-R BOARD						
R142	1-216-821-11	METAL CHIP	1K	5%	1/10W	*****													< RESISTOR >						
R143	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R872	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	*****													
R151	1-216-864-11	SHORT CHIP	0			R873	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	*****													
R161	1-216-809-11	METAL CHIP	100	5%	1/10W	R874	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W	< SWITCH >													
R162	1-216-841-11	METAL CHIP	47K	5%	1/10W	R875	1-216-833-11	METAL CHIP	10K	5%	1/10W	*****													
R163	1-216-809-11	METAL CHIP	100	5%	1/10W	R876	1-216-835-11	METAL CHIP	15K	5%	1/10W	*****													
R165	1-216-864-11	SHORT CHIP	0			R877	1-216-837-11	METAL CHIP	22K	5%	1/10W	*****													
R171	1-216-817-11	METAL CHIP	470	5%	1/10W	< SWITCH >													CD-R BOARD						
R172	1-216-857-11	METAL CHIP	1M	5%	1/10W	S950	1-762-875-21	SWITCH, KEYBOARD (ALBUM +/ $\blacktriangleright\blacktriangleright$)				*****													
R173	1-216-295-11	SHORT CHIP	0			S951	1-762-875-21	SWITCH, KEYBOARD (ALBUM -/ $\blacktriangleleft\blacktriangleleft$)				*****													
R181	1-216-809-11	METAL CHIP	100	5%	1/10W	S952	1-762-875-21	SWITCH, KEYBOARD ($\blacktriangleright\blacktriangleright$)				*****													
R182	1-216-809-11	METAL CHIP	100	5%	1/10W	S953	1-762-875-21	SWITCH, KEYBOARD ($\blacktriangleleft\blacktriangleleft$)				*****													
R191	1-216-864-11	SHORT CHIP	0			S954	1-762-875-21	SWITCH, KEYBOARD ($\blacksquare\blacksquare$)				*****													
R201	1-500-445-21	FERRITE, EMI (SMD) (2012)				S955	1-762-875-21	SWITCH, KEYBOARD ($\blacktriangleright\blacksquare\blacksquare$)				*****													
R203	1-216-864-11	SHORT CHIP	0			< RESISTOR >													CURSOR MT BOARD						
R204	1-500-445-21	FERRITE, EMI (SMD) (2012)				*****													< RESISTOR >						
R205	1-216-864-11	SHORT CHIP	0			R979	1-216-833-11	METAL CHIP	10K	5%	1/10W	*****													
R251	1-216-833-11	METAL CHIP	10K	5%	1/10W	R980	1-216-835-11	METAL CHIP	15K	5%	1/10W	< SWITCH >													
R252	1-216-837-11	METAL CHIP	22K	5%	1/10W	R981	1-216-837-11	METAL CHIP	22K	5%	1/10W	*****													
R253	1-216-833-11	METAL CHIP	10K	5%	1/10W	R982	1-216-839-11	METAL CHIP	33K	5%	1/10W	*****													
R301	1-216-845-11	METAL CHIP	100K	5%	1/10W	< SWITCH >													CURSOR MT BOARD						
R302	1-216-833-11	METAL CHIP	10K	5%	1/10W	*****													< RESISTOR >						
R303	1-216-845-11	METAL CHIP	100K	5%	1/10W	*****													< SWITCH >						
R305	1-216-845-11	METAL CHIP	100K	5%	1/10W	S970	1-771-879-11	SWITCH, TACTILE (ENTER (CURSOR))				*****													
R306	1-216-864-11	SHORT CHIP	0			< RESISTOR >													< RESISTOR >						
R307	1-216-833-11	METAL CHIP	10K	5%	1/10W	*****													< SWITCH >						
R313	1-216-813-11	METAL CHIP	220	5%	1/10W	*****													< RESISTOR >						
R351	1-216-809-11	METAL CHIP	100	5%	1/10W	*****													< RESISTOR >						
R352	1-216-809-11	METAL CHIP	100	5%	1/10W	*****													< RESISTOR >						
R353	1-216-809-11	METAL CHIP	100	5%	1/10W	*****													< RESISTOR >						
R354	1-216-809-11	METAL CHIP	100	5%	1/10W	*****													< RESISTOR >						
R401	1-216-809-11	METAL CHIP	100	5%	1/10W	*****													< RESISTOR >						
R402	1-216-809-11	METAL CHIP	100	5%	1/10W	*****													< RESISTOR >						
R403	1-216-809-11	METAL CHIP	100	5%	1/10W	*****													< RESISTOR >						
R404	1-216-809-11	METAL CHIP	100	5%	1/10W	*****													< RESISTOR >						
R405	1-216-809-11	METAL CHIP	100	5%	1/10W	*****													< RESISTOR >						
R406	1-216-809-11	METAL CHIP	100	5%	1/10W	*****													< RESISTOR >						
R407	1-216-809-11	METAL CHIP	100	5%</td																					

FUNCTION SW	GAME HP	IPOD	JOG-A	JOG-B	LEFT-BTTN
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Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
		FUNCTION SW BOARD				R1553	1-216-845-11	METAL CHIP	100K	5%	1/10W
		*****				R1555	1-216-295-11	SHORT CHIP	0		
		< RESISTOR >				R1556	1-218-903-11	METAL CHIP	220K	0.5%	1/10W
						R1557	1-218-907-11	METAL CHIP	330K	0.5%	1/10W
						R1558	1-216-809-11	METAL CHIP	100	5%	1/10W
R832	1-216-835-11	METAL CHIP	15K	5%	1/10W	R1563	1-216-295-11	SHORT CHIP	0		
		< SWITCH >				R1571	1-216-295-11	SHORT CHIP	0		
S930	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)				R1590	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
		*****				R1591	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
		GAME HP BOARD				R1592	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
		*****				R1593	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
		< CAPACITOR >				R1594	1-218-892-11	METAL CHIP	75K	0.5%	1/10W
C841	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	R1595	1-218-892-11	METAL CHIP	75K	0.5%	1/10W
C842	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C843	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C844	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
		< CONNECTOR >									
CN801	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P									
CN802	1-785-328-11	PIN, CONNECTOR (LIGHT ANGLE) 2P									
CN803	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P									
		< JACK >									
J580	1-764-592-11	JACK, PIN 3P (GAME INPUT VIDEO,AUDIO)									
J851	1-770-226-11	JACK (LARGE TYPE) (PHONES)									
		< RESISTOR >									
R826	1-216-809-11	METAL CHIP	100	5%	1/10W	R882	1-216-819-11	METAL CHIP	680	5%	1/10W
R827	1-216-849-11	METAL CHIP	220K	5%	1/10W	R883	1-216-817-11	METAL CHIP	470	5%	1/10W
R828	1-216-849-11	METAL CHIP	220K	5%	1/10W	R890	1-216-819-11	METAL CHIP	680	5%	1/10W
R829	1-216-821-11	METAL CHIP	1K	5%	1/10W	R892	1-216-819-11	METAL CHIP	680	5%	1/10W
R830	1-216-821-11	METAL CHIP	1K	5%	1/10W						
		< SWITCH >									
		IPOD BOARD				S957	1-478-133-11	ENCODER, ROTARY (JOG)			
		*****				S965	1-762-875-21	SWITCH, KEYBOARD (MODE SPEAKERS)			
		< CAPACITOR >				S966	1-762-875-21	SWITCH, KEYBOARD (X-ROUND ON/OFF)			
C1551	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C1553	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C1554	1-162-919-11	CERAMIC CHIP	22PF	5%	50V						
C1555	1-162-919-11	CERAMIC CHIP	22PF	5%	50V						
C1556	1-128-392-11	ELECT CHIP	470uF	20%	6.3V	R884	1-216-821-11	METAL CHIP	1K	5%	1/10W
C1557	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
		< CONNECTOR >									
CN1550	1-820-701-11	PIN, CONNECTOR 30P (Dock for iPod)				S967	1-762-875-21	SWITCH, KEYBOARD (SOUND FLASH)			
CN1551	1-821-589-21	PIN, CONNECTOR (PC BOARD) 11P									
		< DIODE >									
D1553	6-501-568-01	DIODE RB521CS-30T2R									
		< RESISTOR >									
R1500	1-216-809-11	METAL CHIP	100	5%	1/10W	R837	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1503	1-216-845-11	METAL CHIP	100K	5%	1/10W	R840	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R1505	1-216-295-11	SHORT CHIP	0			R843	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1506	1-216-295-11	SHORT CHIP	0			R844	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R1550	1-216-809-11	METAL CHIP	100	5%	1/10W	R845	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
		< RESISTOR >				R846	1-216-823-11	METAL CHIP	1.5K	5%	1/10W

HCD-ZX66i/ZX99i

LEFT-BTTN | **MAIN**

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
< SWITCH >											
S931	1-762-875-21	SWITCH, KEYBOARD (DISC 5)				C89	1-126-964-11	ELECT	10uF	20%	50V
S932	1-762-875-21	SWITCH, KEYBOARD (PLAY MODE)				C91	1-126-964-11	ELECT	10uF	20%	50V
S933	1-762-875-21	SWITCH, KEYBOARD (DISC 4)				C96	1-114-573-11	CERAMIC CHIP	0.0047uF	5%	50V
S934	1-762-875-21	SWITCH, KEYBOARD (DISC 3)				C97	1-107-726-11	CERAMIC CHIP	0.01uF	10%	16V
S935	1-762-875-21	SWITCH, KEYBOARD (DISC 1)				C98	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
S936	1-762-875-21	SWITCH, KEYBOARD (DISC 2)				C100	1-126-964-11	ELECT	10uF	20%	50V

A-1616-802-A		MAIN BOARD, COMPLETE (ZX99i)				C103	1-100-153-11	CERAMIC CHIP	220PF	5%	100V
A-1616-827-A		MAIN BOARD, COMPLETE (ZX66i)				C104	1-162-961-11	CERAMIC CHIP	330PF	10%	50V

7-685-646-79		SCREW +BVTP 3X8 TYPE2 IT-3				C105	1-126-964-11	ELECT	10uF	20%	50V
< CAPACITOR >											
C8	1-126-964-11	ELECT	10uF	20%	50V	C106	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C12	1-126-959-11	ELECT	0.47uF	20%	50V	C108	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C13	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C109	1-130-479-00	MYLAR	0.0047uF	5%	50V
C14	1-104-658-11	ELECT	100uF	20%	10V	C110	1-130-473-00	MYLAR	0.0015uF	5%	50V
C15	1-104-658-11	ELECT	100uF	20%	10V	C111	1-126-960-11	ELECT	1uF	20%	50V
C16	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C112	1-126-961-11	ELECT	2.2uF	20%	50V
C19	1-100-597-11	CERAMIC CHIP	0.1uF	10%	25V	C113	1-126-960-11	ELECT	1uF	20%	50V
C23	1-100-756-11	CERAMIC CHIP	0.047uF	10%	50V	C114	1-126-960-11	ELECT	1uF	20%	50V
C25	1-137-189-11	FILM	0.18uF	5%	50V	C116	1-126-964-11	ELECT	10uF	20%	50V
(ZX66i)						C118	1-126-963-11	ELECT	4.7uF	20%	50V
C25	1-137-190-11	FILM	0.22uF	5%	50V	C126	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
(ZX99i)						C127	1-104-658-11	ELECT	100uF	20%	10V
C26	1-126-964-11	ELECT	10uF	20%	50V	C128	1-126-935-11	ELECT	470uF	20%	16V
C27	1-137-190-11	FILM	0.22uF	5%	50V	(ZX99i)					
(ZX66i)						C130	1-100-597-11	CERAMIC CHIP	0.1uF	10%	25V
C27	1-136-170-00	FILM	0.27uF	5%	50V	(ZX99i)					
C28	1-126-964-11	ELECT	10uF	20%	50V	C131	1-137-190-11	FILM	0.22uF	5%	50V
C29	1-126-961-11	ELECT	2.2uF	20%	50V	(ZX99i)					
C30	1-126-964-11	ELECT	10uF	20%	50V	C132	1-136-170-00	FILM	0.27uF	5%	50V
C31	1-126-963-11	ELECT	4.7uF	20%	50V	(ZX99i)					
C33	1-164-361-11	CERAMIC CHIP	0.047uF		25V	C133	1-126-961-11	ELECT	2.2uF	20%	50V
C38	1-126-964-11	ELECT	10uF	20%	50V	(ZX99i)					
C39	1-126-964-11	ELECT	10uF	20%	50V	C153	1-100-153-11	CERAMIC CHIP	220PF	5%	100V
C41	1-126-960-11	ELECT	1uF	20%	50V	C154	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C45	1-126-964-11	ELECT	10uF	20%	50V	C155	1-126-964-11	ELECT	10uF	20%	50V
C46	1-114-573-11	CERAMIC CHIP	0.0047uF	5%	50V	C156	1-126-964-11	ELECT	10uF	20%	50V
C47	1-107-726-11	CERAMIC CHIP	0.01uF	10%	16V	C158	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C48	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	C159	1-130-479-00	MYLAR	0.0047uF	5%	50V
C49	1-126-959-11	ELECT	0.47uF	20%	50V	C160	1-130-473-00	MYLAR	0.0015uF	5%	50V
C50	1-126-964-11	ELECT	10uF	20%	50V	C162	1-126-961-11	ELECT	2.2uF	20%	50V
C75	1-137-189-11	FILM	0.18uF	5%	50V	C163	1-126-960-11	ELECT	1uF	20%	50V
(ZX66i)						C164	1-126-960-11	ELECT	1uF	20%	50V
C75	1-137-190-11	FILM	0.22uF	5%	50V	C166	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
(ZX99i)						C168	1-126-963-11	ELECT	4.7uF	20%	50V
C76	1-126-964-11	ELECT	10uF	20%	50V	(ZX99i)					
C77	1-137-190-11	FILM	0.22uF	5%	50V	C188	1-126-961-11	ELECT	2.2uF	20%	50V
(ZX66i)						(ZX99i)					
C77	1-136-170-00	FILM	0.27uF	5%	50V	C202	1-126-964-11	ELECT	10uF	20%	50V
(ZX99i)						C214	1-128-934-11	CERAMIC CHIP	0.33uF	20%	10V
C78	1-126-964-11	ELECT	10uF	20%	50V	C215	1-126-964-11	ELECT	10uF	20%	50V
C79	1-126-961-11	ELECT	2.2uF	20%	50V	C216	1-126-964-11	ELECT	10uF	20%	50V
C80	1-126-964-11	ELECT	10uF	20%	50V	C217	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C81	1-126-963-11	ELECT	4.7uF	20%	50V	C227	1-126-961-11	ELECT	2.2uF	20%	50V
C83	1-164-361-11	CERAMIC CHIP	0.047uF		25V	C277	1-126-961-11	ELECT	2.2uF	20%	50V
C88	1-126-964-11	ELECT	10uF	20%	50V	C300	1-107-726-11	CERAMIC CHIP	0.01uF	10%	16V
(ZX66i)						C301	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark	
C302	1-126-947-11	ELECT	47uF	20%	35V			< CONNECTOR >		
C303	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V					
C304	1-107-726-11	CERAMIC CHIP	0.01uF	10%	16V	CN040	1-779-277-11	CONNECTOR, FFC (LIF(NON-ZIF)) 9P		
C305	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	CN200	1-784-770-11	CONNECTOR, FFC 9P		
C306	1-126-947-11	ELECT	47uF	20%	35V	*	CN501	1-564-713-11	PIN, CONNECTOR (SMALL TYPE) 11P	
							CN502	1-779-295-11	CONNECTOR, FFC (LIF(NON-ZIF)) 27P	
C307	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		CN503	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P (ZX99i)	
C320	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V					
C321	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	CN505	1-778-982-11	CONNECTOR, BOARD TO BOARD 13P		
C322	1-126-926-11	ELECT	1000uF	20%	10V	CN506	1-778-982-11	CONNECTOR, BOARD TO BOARD 13P		
C323	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	CN507	1-784-778-11	CONNECTOR, FFC 17P		
							CN509	1-785-323-11	PIN, CONNECTOR (STRAIGHT) 11P	
C324	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	*	CN513	1-564-506-11	PLUG, CONNECTOR 3P	
C325	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V					
C328	1-162-957-11	CERAMIC CHIP	220PF	5%	50V			< DIODE >		
C329	1-162-949-11	CERAMIC CHIP	47PF	5%	50V					
C341	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V	D208	6-501-817-01	DIODE MA2J1110GLS0		
						D209	6-500-334-01	DIODE MC2836-T112-1		
C342	1-126-916-11	ELECT	1000uF	20%	6.3V	D210	6-501-722-01	DIODE MAZ8043GMLS0		
C410	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	D501	6-500-385-01	DIODE D3SBA20-4100		
C411	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	D502	6-500-385-01	DIODE D3SBA20-4100		
C412	1-100-756-11	CERAMIC CHIP	0.047uF	10%	50V					
C414	1-100-597-11	CERAMIC CHIP	0.1uF	10%	25V	D504	6-500-522-21	DIODE 10EDB40-TB3		
						D505	6-500-522-21	DIODE 10EDB40-TB3		
C416	1-104-656-11	ELECT	2200uF	20%	6.3V	D506	6-501-817-01	DIODE MA2J1110GLS0		
C462	1-104-658-11	ELECT	100uF	20%	10V	D554	6-501-772-01	DIODE MAZ8130GMLS0		
C464	1-100-597-11	CERAMIC CHIP	0.1uF	10%	25V	D555	6-500-522-21	DIODE 10EDB40-TB3		
C496	1-100-597-11	CERAMIC CHIP	0.1uF	10%	25V	D559	6-500-522-21	DIODE 10EDB40-TB3		
C498	1-126-964-11	ELECT	10uF	20%	50V					
C499	1-100-597-11	CERAMIC CHIP	0.1uF	10%	25V			< FERRITE BEAD >		
C500	1-126-936-11	ELECT	3300uF	20%	16V					
C501	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	FB300	1-500-283-11	INDUCTOR, FERRITE BEAD		
C502	1-126-947-11	ELECT	47uF	20%	35V	FB301	1-414-229-11	INDUCTOR, FERRITE BEAD		
C505	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	FB302	1-216-864-11	SHORT CHIP 0		
						FB303	1-500-283-11	INDUCTOR, FERRITE BEAD		
C506	1-126-933-11	ELECT	100uF	20%	16V	FB304	1-216-864-11	SHORT CHIP 0		
C508	1-126-959-11	ELECT	0.47uF	20%	50V					
						FB305	1-216-864-11	SHORT CHIP 0		
C509	1-126-961-11	ELECT	2.2uF	20%	50V	FB306	1-216-864-11	SHORT CHIP 0		
C510	1-126-925-11	ELECT	470uF	20%	10V					
C511	1-100-597-11	CERAMIC CHIP	0.1uF	10%	25V					
C512	1-130-483-00	MYLAR	0.01uF	5%	50V	IC100	8-759-278-58	IC NJM4558V-TE2		
C513	1-126-961-11	ELECT	2.2uF	20%	50V	IC101	6-712-027-01	IC R2A15216FP		
C514	1-130-483-00	MYLAR	0.01uF	5%	50V	IC102	6-709-331-01	IC R2S15207FP (ZX99i)		
C515	1-126-965-11	ELECT	22uF	20%	50V	IC401	(Not supplied)	IC R5F3640MDFAR		
C528	1-164-156-11	CERAMIC CHIP	0.1uF		25V	IC501	6-710-643-01	IC BA00BC0WCP-V5E2		
C529	1-128-548-11	ELECT	4700uF	20%	25V	IC503	6-600-461-01	IC TOTX147L(B) (CD DIGITAL OUT OPTICAL)		
C534	1-104-658-11	ELECT	100uF	20%	10V	IC510	6-713-032-01	IC KIA7809API-U/PF		
C535	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	IC511	6-713-032-01	IC KIA7809API-U/PF		
C537	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	IC513	6-701-761-01	IC uPC3533AHF		
C538	1-126-947-11	ELECT	47uF	20%	35V	IC514	8-759-598-69	IC BA6956AN		
C547	1-164-156-11	CERAMIC CHIP	0.1uF		25V	IC515	8-759-598-69	IC BA6956AN		
C554	1-164-156-11	CERAMIC CHIP	0.1uF		25V	IC519	8-759-278-58	IC NJM4558V-TE2		
C555	1-104-658-11	ELECT	100uF	20%	10V	IC675	6-709-450-01	IC S-24CS16A0I-J8T1G		
C586	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V					
C587	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V					
C591	1-126-925-11	ELECT	470uF	20%	10V			< JACK >		
C593	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V	J701	1-794-981-11	JACK, PIN 4P (PC IN,PHONO IN)		
C594	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V	J716	1-794-970-11	JACK, PIN 1P (VIDEO OUT)		
C597	1-130-483-00	MYLAR	0.01uF	5%	50V					
C598	1-130-483-00	MYLAR	0.01uF	5%	50V					
C599	1-104-658-11	ELECT	100uF	20%	10V	JR123	1-100-597-11	CERAMIC CHIP 0.1uF	10%	25V
C600	1-126-935-11	ELECT	470uF	20%	16V	JR300	1-216-296-11	SHORT CHIP 0		
						JR301	1-216-296-11	SHORT CHIP 0		
						JR303	1-216-864-11	SHORT CHIP 0		
						JR400	1-216-296-11	SHORT CHIP 0		

HCD-ZX66i/ZX99i

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark		
< COIL >									
L300	1-412-058-11	INDUCTOR	10uH	R110	1-216-821-11	METAL CHIP	1K 5% 1/10W		
< TRANSISTOR >									
Q2	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R111	1-216-821-11	METAL CHIP	1K 5% 1/10W		
Q52	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R112	1-216-854-11	METAL CHIP	560K 5% 1/10W		
Q100	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R113	1-216-841-11	METAL CHIP	47K 5% 1/10W		
Q102	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R115	1-216-841-11	METAL CHIP	47K 5% 1/10W		
Q103	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF (ZX99i)	R116	1-216-821-11	METAL CHIP	1K 5% 1/10W		
Q104	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF (ZX99i)	R117	1-216-845-11	METAL CHIP	100K 5% 1/10W		
Q150	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R118	1-218-879-11	METAL CHIP	22K 0.5% 1/10W		
Q153	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF (ZX99i)	R119	1-218-879-11	METAL CHIP	22K 0.5% 1/10W		
Q154	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF (ZX99i)	R120	1-218-879-11	METAL CHIP	22K 0.5% 1/10W		
Q207	8-729-038-28	TRANSISTOR	RT1N441C-TP-1	R121	1-218-879-11	METAL CHIP	22K 0.5% 1/10W		
Q208	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R122	1-216-821-11	METAL CHIP	1K 5% 1/10W		
Q209	8-729-037-13	TRANSISTOR	KTA1271Y	R123	1-216-839-11	METAL CHIP	33K 5% 1/10W		
Q210	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R125	1-216-833-11	METAL CHIP	10K 5% 1/10W		
Q211	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R126	1-216-819-11	METAL CHIP	680 5% 1/10W		
Q290	8-729-027-23	TRANSISTOR	DTA114EKA-T146	(ZX99i)					
Q500	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R127	1-216-833-11	METAL CHIP	10K 5% 1/10W		
Q502	8-729-040-76	TRANSISTOR	KTA1273-Y-AT	R133	1-216-841-11	METAL CHIP	47K 5% 1/10W		
Q503	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R134	1-216-833-11	METAL CHIP	10K 5% 1/10W		
Q505	8-729-027-23	TRANSISTOR	DTA114EKA-T146	R135	1-216-821-11	METAL CHIP	1K 5% 1/10W		
Q552	6-550-185-01	TRANSISTOR	RT1P137P-TP-1	R137	1-216-821-11	METAL CHIP	1K 5% 1/10W		
Q554	8-729-027-43	TRANSISTOR	DTC114EKA-T146	R138	1-216-841-11	METAL CHIP	47K 5% 1/10W		
Q555	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R139	1-216-833-11	METAL CHIP	10K 5% 1/10W		
Q557	8-729-038-28	TRANSISTOR	RT1N441C-TP-1	R141	1-216-841-11	METAL CHIP	47K 5% 1/10W		
Q870	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R150	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W		
< RESISTOR >									
R8	1-216-864-11	SHORT CHIP	0	R156	1-216-845-11	METAL CHIP	100K 5% 1/10W		
R11	1-216-833-11	METAL CHIP	10K 5% 1/10W	R157	1-216-821-11	METAL CHIP	1K 5% 1/10W		
R12	1-216-833-11	METAL CHIP	10K 5% 1/10W	R159	1-216-821-11	METAL CHIP	1K 5% 1/10W		
R16	1-216-833-11	METAL CHIP	10K 5% 1/10W	R160	1-216-821-11	METAL CHIP	1K 5% 1/10W		
R17	1-216-819-11	METAL CHIP	680 5% 1/10W	R161	1-216-821-11	METAL CHIP	1K 5% 1/10W		
(ZX99i)				R162	1-216-854-11	METAL CHIP	560K 5% 1/10W		
R17	1-216-822-11	METAL CHIP	1.2K 5% 1/10W	R163	1-216-841-11	METAL CHIP	47K 5% 1/10W		
(ZX66i)				R165	1-216-841-11	METAL CHIP	47K 5% 1/10W		
R19	1-216-833-11	METAL CHIP	10K 5% 1/10W	R166	1-216-821-11	METAL CHIP	1K 5% 1/10W		
R21	1-216-833-11	METAL CHIP	10K 5% 1/10W	R167	1-216-845-11	METAL CHIP	100K 5% 1/10W		
R22	1-216-841-11	METAL CHIP	47K 5% 1/10W	R168	1-218-879-11	METAL CHIP	22K 0.5% 1/10W		
R28	1-216-833-11	METAL CHIP	10K 5% 1/10W	R169	1-218-879-11	METAL CHIP	22K 0.5% 1/10W		
R29	1-216-857-11	METAL CHIP	1M 5% 1/10W	R170	1-218-879-11	METAL CHIP	22K 0.5% 1/10W		
R30	1-216-845-11	METAL CHIP	100K 5% 1/10W	R171	1-218-879-11	METAL CHIP	22K 0.5% 1/10W		
R33	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R172	1-216-821-11	METAL CHIP	1K 5% 1/10W		
R58	1-216-864-11	SHORT CHIP	0	R173	1-216-839-11	METAL CHIP	33K 5% 1/10W		
R67	1-216-819-11	METAL CHIP	680 5% 1/10W	R175	1-216-833-11	METAL CHIP	10K 5% 1/10W		
(ZX99i)				R176	1-216-819-11	METAL CHIP	680 5% 1/10W		
(ZX99i)				R177	1-216-833-11	METAL CHIP	10K 5% 1/10W		
R67	1-216-822-11	METAL CHIP	1.2K 5% 1/10W	R183	1-216-841-11	METAL CHIP	47K 5% 1/10W		
(ZX66i)				R184	1-216-833-11	METAL CHIP	10K 5% 1/10W		
R69	1-216-833-11	METAL CHIP	10K 5% 1/10W	R185	1-216-821-11	METAL CHIP	1K 5% 1/10W		
R71	1-216-833-11	METAL CHIP	10K 5% 1/10W	R187	1-216-821-11	METAL CHIP	1K 5% 1/10W		
R72	1-216-841-11	METAL CHIP	47K 5% 1/10W	(ZX99i)					
R78	1-216-833-11	METAL CHIP	10K 5% 1/10W	R188	1-216-841-11	METAL CHIP	47K 5% 1/10W		
R83	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	(ZX99i)					
R100	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W	R189	1-216-833-11	METAL CHIP	10K 5% 1/10W		
R101	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	(ZX99i)					
R106	1-216-845-11	METAL CHIP	100K 5% 1/10W	(ZX99i)					
R107	1-216-821-11	METAL CHIP	1K 5% 1/10W	(ZX99i)					
R109	1-216-821-11	METAL CHIP	1K 5% 1/10W						

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark
R191	1-216-841-11	METAL CHIP	47K	5% 1/10W (ZX99i)	R402	1-216-809-11	METAL CHIP	100	5% 1/10W
R208	1-216-833-11	METAL CHIP	10K	5% 1/10W	R403	1-216-809-11	METAL CHIP	100	5% 1/10W
R209	1-216-809-11	METAL CHIP	100	5% 1/10W	R404	1-216-809-11	METAL CHIP	100	5% 1/10W
R222	1-216-833-11	METAL CHIP	10K	5% 1/10W	R405	1-216-809-11	METAL CHIP	100	5% 1/10W
R227	1-216-833-11	METAL CHIP	10K	5% 1/10W	R406	1-216-809-11	METAL CHIP	100	5% 1/10W
R228	1-216-845-11	METAL CHIP	100K	5% 1/10W	R407	1-216-809-11	METAL CHIP	100	5% 1/10W
R229	1-216-845-11	METAL CHIP	100K	5% 1/10W	R409	1-216-833-11	METAL CHIP	10K	5% 1/10W
R230	1-216-825-11	METAL CHIP	2.2K	5% 1/10W	R411	1-216-851-11	METAL CHIP	330K	5% 1/10W
R231	1-216-819-11	METAL CHIP	680	5% 1/10W	R413	1-216-857-11	METAL CHIP	1M	5% 1/10W
R276	1-216-843-11	METAL CHIP	68K	5% 1/10W	R417	1-216-833-11	METAL CHIP	10K	5% 1/10W
R295	1-216-855-11	METAL CHIP	680K	5% 1/10W	R418	1-216-809-11	METAL CHIP	100	5% 1/10W
R296	1-216-835-11	METAL CHIP	15K	5% 1/10W	R419	1-216-809-11	METAL CHIP	100	5% 1/10W
R300	1-216-845-11	METAL CHIP	100K	5% 1/10W	R420	1-216-837-11	METAL CHIP	22K	5% 1/10W
R301	1-216-841-11	METAL CHIP	47K	5% 1/10W	R421	1-216-809-11	METAL CHIP	100	5% 1/10W
R302	1-216-821-11	METAL CHIP	1K	5% 1/10W	R422	1-216-809-11	METAL CHIP	100	5% 1/10W
R303	1-216-845-11	METAL CHIP	100K	5% 1/10W	R423	1-216-809-11	METAL CHIP	100	5% 1/10W
R304	1-218-285-11	METAL CHIP	75	5% 1/10W	R424	1-216-809-11	METAL CHIP	100	5% 1/10W
R305	1-216-841-11	METAL CHIP	47K	5% 1/10W	R425	1-216-809-11	METAL CHIP	100	5% 1/10W
R306	1-216-842-11	METAL CHIP	56K	5% 1/10W	R426	1-216-809-11	METAL CHIP	100	5% 1/10W
R307	1-216-835-11	METAL CHIP	15K	5% 1/10W	R428	1-216-809-11	METAL CHIP	100	5% 1/10W
R308	1-216-839-11	METAL CHIP	33K	5% 1/10W	R429	1-216-809-11	METAL CHIP	100	5% 1/10W
R309	1-216-821-11	METAL CHIP	1K	5% 1/10W	R430	1-216-809-11	METAL CHIP	100	5% 1/10W
R310	1-216-841-11	METAL CHIP	47K	5% 1/10W	R431	1-216-809-11	METAL CHIP	100	5% 1/10W
R311	1-216-809-11	METAL CHIP	100	5% 1/10W	R432	1-216-809-11	METAL CHIP	100	5% 1/10W
R312	1-216-809-11	METAL CHIP	100	5% 1/10W	R433	1-216-809-11	METAL CHIP	100	5% 1/10W
R313	1-216-809-11	METAL CHIP	100	5% 1/10W	R434	1-216-809-11	METAL CHIP	100	5% 1/10W
R314	1-216-797-11	METAL CHIP	10	5% 1/10W	R435	1-216-809-11	METAL CHIP	100	5% 1/10W
R315	1-216-797-11	METAL CHIP	10	5% 1/10W	R436	1-216-809-11	METAL CHIP	100	5% 1/10W
R316	1-216-864-11	SHORT CHIP	0		R438	1-216-809-11	METAL CHIP	100	5% 1/10W
R317	1-216-821-11	METAL CHIP	1K	5% 1/10W	R442	1-216-809-11	METAL CHIP	100	5% 1/10W
R318	1-216-864-11	SHORT CHIP	0		R443	1-216-809-11	METAL CHIP	100	5% 1/10W
R329	1-216-833-11	METAL CHIP	10K	5% 1/10W	R444	1-216-809-11	METAL CHIP	100	5% 1/10W
R330	1-216-833-11	METAL CHIP	10K	5% 1/10W	R445	1-216-809-11	METAL CHIP	100	5% 1/10W
R331	1-216-821-11	METAL CHIP	1K	5% 1/10W	R446	1-216-809-11	METAL CHIP	100	5% 1/10W
R332	1-216-822-11	METAL CHIP	1.2K	5% 1/10W (ZX99i)	R447	1-216-809-11	METAL CHIP	100	5% 1/10W
R335	1-216-833-11	METAL CHIP	10K	5% 1/10W	R448	1-216-809-11	METAL CHIP	100	5% 1/10W
R336	1-216-833-11	METAL CHIP	10K	5% 1/10W	R449	1-216-809-11	METAL CHIP	100	5% 1/10W
R344	1-216-833-11	METAL CHIP	10K	5% 1/10W	R450	1-216-809-11	METAL CHIP	100	5% 1/10W
R345	1-216-833-11	METAL CHIP	10K	5% 1/10W	R465	1-216-809-11	METAL CHIP	100	5% 1/10W
R346	1-216-833-11	METAL CHIP	10K	5% 1/10W	R466	1-216-809-11	METAL CHIP	100	5% 1/10W
R365	1-216-833-11	METAL CHIP	10K	5% 1/10W	R467	1-216-809-11	METAL CHIP	100	5% 1/10W
R366	1-216-833-11	METAL CHIP	10K	5% 1/10W	R468	1-216-813-11	METAL CHIP	220	5% 1/10W
R367	1-216-833-11	METAL CHIP	10K	5% 1/10W	R471	1-216-809-11	METAL CHIP	100	5% 1/10W
R368	1-216-833-11	METAL CHIP	10K	5% 1/10W	R472	1-216-809-11	METAL CHIP	100	5% 1/10W
R371	1-216-833-11	METAL CHIP	10K	5% 1/10W	R473	1-216-809-11	METAL CHIP	100	5% 1/10W
R373	1-216-833-11	METAL CHIP	10K	5% 1/10W	R474	1-216-809-11	METAL CHIP	100	5% 1/10W
R374	1-216-833-11	METAL CHIP	10K	5% 1/10W	R475	1-216-809-11	METAL CHIP	100	5% 1/10W
R375	1-216-833-11	METAL CHIP	10K	5% 1/10W	R476	1-216-809-11	METAL CHIP	100	5% 1/10W
R377	1-216-833-11	METAL CHIP	10K	5% 1/10W	R477	1-216-809-11	METAL CHIP	100	5% 1/10W
R381	1-216-835-11	METAL CHIP	15K	5% 1/10W	R478	1-216-809-11	METAL CHIP	100	5% 1/10W
R382	1-216-833-11	METAL CHIP	10K	5% 1/10W	R479	1-216-809-11	METAL CHIP	100	5% 1/10W
R386	1-216-833-11	METAL CHIP	10K	5% 1/10W	R480	1-216-809-11	METAL CHIP	100	5% 1/10W
R391	1-216-833-11	METAL CHIP	10K	5% 1/10W	R481	1-216-821-11	METAL CHIP	1K	5% 1/10W
				(ZX66i)	R482	1-216-809-11	METAL CHIP	100	5% 1/10W
R395	1-216-833-11	METAL CHIP	10K	5% 1/10W	R483	1-216-809-11	METAL CHIP	100	5% 1/10W
R397	1-216-833-11	METAL CHIP	10K	5% 1/10W	R484	1-216-809-11	METAL CHIP	100	5% 1/10W
R400	1-216-809-11	METAL CHIP	100	5% 1/10W	R485	1-216-809-11	METAL CHIP	100	5% 1/10W
R401	1-216-809-11	METAL CHIP	100	5% 1/10W	R486	1-216-809-11	METAL CHIP	100	5% 1/10W
				(ZX99i)	R492	1-216-833-11	METAL CHIP	10K	5% 1/10W
					R501	1-216-821-11	METAL CHIP	1K	5% 1/10W

HCD-ZX66i/ZX99i

MAIN **MD-94** **MIC** **PANEL COM**

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark						
R502	1-216-821-11	METAL CHIP	1K	5%	1/10W	C813	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V						
R504	1-216-833-11	METAL CHIP	10K	5%	1/10W (ZX99i)	C814	1-126-961-11	ELECT	2.2uF	20%	50V						
R505	1-216-833-11	METAL CHIP	10K	5%	1/10W (ZX99i)	C815	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						
R506	1-216-857-11	METAL CHIP	1M	5%	1/10W (ZX99i)	C817	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						
R507	1-216-843-11	METAL CHIP	68K	5%	1/10W	C818	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
< CONNECTOR >																	
R509	1-249-401-11	CARBON	47	5%	1/4W F	CN920	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P									
R510	1-249-401-11	CARBON	47	5%	1/4W F	< IC >											
R511	1-249-401-11	CARBON	47	5%	1/4W F	IC850	8-759-278-58	IC NJM4558V-TE2									
R512	1-216-855-11	METAL CHIP	680K	5%	1/10W	< JACK >											
R518	1-216-809-11	METAL CHIP	100	5%	1/10W	J801	1-770-226-11	JACK (LARGE TYPE) (MIC 1)									
R535	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	J802	1-770-226-11	JACK (LARGE TYPE) (MIC 2)									
R536	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	< RESISTOR >											
R538	1-216-809-11	METAL CHIP	100	5%	1/10W	R801	1-216-845-11	METAL CHIP	100K	5%	1/10W						
R585	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R802	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R586	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R803	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R587	1-216-845-11	METAL CHIP	100K	5%	1/10W	R804	1-216-809-11	METAL CHIP	100	5%	1/10W						
R588	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R805	1-216-847-11	METAL CHIP	150K	5%	1/10W						
R591	1-216-295-11	SHORT CHIP	0			R806	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R593	1-216-801-11	METAL CHIP	22	5%	1/10W	R807	1-216-819-11	METAL CHIP	680	5%	1/10W						
R594	1-216-846-11	METAL CHIP	120K	5%	1/10W	R808	1-216-841-11	METAL CHIP	47K	5%	1/10W						
R595	1-216-837-11	METAL CHIP	22K	5%	1/10W	R809	1-216-821-11	METAL CHIP	1K	5%	1/10W						
R596	1-216-841-11	METAL CHIP	47K	5%	1/10W	R810	1-216-845-11	METAL CHIP	100K	5%	1/10W						
R597	1-216-835-11	METAL CHIP	15K	5%	1/10W	R811	1-216-833-11	METAL CHIP	10K	5%	1/10W						
< VIBRATOR >																	
X401	1-814-067-11	OSCILLATOR, CRYSTAL (32.768kHz)															
X402	1-795-482-11	VIBRATOR, CERAMIC (16MHz)															

MD-94 BOARD																	

< CONNECTOR >																	

RV801 1-227-452-11 RES, VAR, CARBON 50K (MIC LEVEL)																	

A-1616-806-A PANEL COM BOARD, COMPLETE																	

4-253-178-01 HOLDER, FL																	
< VARIABLE RESISTOR >																	

< SWITCH >																	

S001 1-786-514-21 SWITCH, LEVER (SLIDE)																	
(TRAY POSITION DETECT)																	

MIC BOARD																	

< CAPACITOR >																	

C800	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C900	1-126-163-11	ELECT	4.7uF	20%	50V						
C801	1-126-964-11	ELECT	10uF	20%	50V	C903	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C802	1-126-961-11	ELECT	2.2uF	20%	50V	C904	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C804	1-164-217-11	CERAMIC CHIP	150PF	5%	50V	C905	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C805	1-104-666-11	ELECT	220uF	20%	25V	C910	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C806	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	C916	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C807	1-162-961-11	ELECT	2.2uF	20%	50V	C917	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C808	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C918	1-126-518-11	ELECT	470uF	20%	4V						
C809	1-126-961-11	ELECT	2.2uF	20%	50V	C919	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C810	1-164-315-11	CERAMIC CHIP	470PF	5%	50V	C920	1-126-947-11	ELECT	47uF	20%	35V						
C811	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	C921	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V						
C812	1-126-960-11	ELECT	1uF	20%	50V	C922	1-126-964-11	ELECT	10uF	20%	50V						
						C923	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
						C924	1-100-152-11	CERAMIC CHIP	100PF	5%	100V						
						C925	1-100-152-11	CERAMIC CHIP	100PF	5%	100V						
						C926	1-100-152-11	CERAMIC CHIP	100PF	5%	100V						
						C927	1-100-152-11	CERAMIC CHIP	100PF	5%	100V						
						C928	1-100-152-11	CERAMIC CHIP	100PF	5%	100V						
						C929	1-100-152-11	CERAMIC CHIP	100PF	5%	100V						

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark			
C930	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	< RESISTOR >			< RESISTOR >					
C931	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	R851	1-216-821-11	METAL CHIP	1K	5%	1/10W			
C932	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	R900	1-216-833-11	METAL CHIP	10K	5%	1/10W			
C933	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	R901	1-216-833-11	METAL CHIP	10K	5%	1/10W			
C934	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	R902	1-216-833-11	METAL CHIP	10K	5%	1/10W			
C935	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	R903	1-216-809-11	METAL CHIP	100	5%	1/10W			
C936	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	R904	1-216-809-11	METAL CHIP	100	5%	1/10W			
C937	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	R905	1-216-835-11	METAL CHIP	15K	5%	1/10W			
C938	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	R906	1-216-835-11	METAL CHIP	15K	5%	1/10W			
C939	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	R907	1-216-835-11	METAL CHIP	15K	5%	1/10W			
C940	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	R908	1-216-835-11	METAL CHIP	15K	5%	1/10W			
C941	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	R909	1-216-835-11	METAL CHIP	15K	5%	1/10W			
C942	1-100-152-11	CERAMIC CHIP 100PF			5% 100V	R910	1-216-835-11	METAL CHIP	15K	5%	1/10W			
C944	1-126-964-11	ELECT 10uF			20% 50V	R911	1-216-809-11	METAL CHIP	100	5%	1/10W			
C945	1-125-837-11	CERAMIC CHIP 1uF			10% 6.3V	R912	1-216-833-11	METAL CHIP	10K	5%	1/10W			
C946	1-164-315-11	CERAMIC CHIP 470PF			5% 50V	R913	1-216-809-11	METAL CHIP	100	5%	1/10W			
C947	1-125-837-11	CERAMIC CHIP 1uF			10% 6.3V	R914	1-216-833-11	METAL CHIP	10K	5%	1/10W			
C948	1-164-315-11	CERAMIC CHIP 470PF			5% 50V	R915	1-216-809-11	METAL CHIP	100	5%	1/10W			
C949	1-125-837-11	CERAMIC CHIP 1uF			10% 6.3V	R916	1-216-821-11	METAL CHIP	1K	5%	1/10W			
C950	1-162-968-11	CERAMIC CHIP 0.0047uF			10% 50V	R917	1-216-833-11	METAL CHIP	10K	5%	1/10W			
C951	1-125-837-11	CERAMIC CHIP 1uF			10% 6.3V	R918	1-216-821-11	METAL CHIP	1K	5%	1/10W			
C952	1-162-968-11	CERAMIC CHIP 0.0047uF			10% 50V	R919	1-216-833-11	METAL CHIP	10K	5%	1/10W			
C953	1-125-837-11	CERAMIC CHIP 1uF			10% 6.3V	R922	1-216-857-11	METAL CHIP	1M	5%	1/10W			
C954	1-164-227-11	CERAMIC CHIP 0.022uF			10% 25V	R938	1-216-845-11	METAL CHIP	100K	5%	1/10W			
C955	1-125-837-11	CERAMIC CHIP 1uF			10% 6.3V	R939	1-216-845-11	METAL CHIP	100K	5%	1/10W			
C956	1-164-227-11	CERAMIC CHIP 0.022uF			10% 25V	R940	1-216-837-11	METAL CHIP	22K	5%	1/10W			
C957	1-125-837-11	CERAMIC CHIP 1uF			10% 6.3V	R941	1-216-809-11	METAL CHIP	100	5%	1/10W			
C958	1-165-176-11	CERAMIC CHIP 0.047uF			10% 16V	R942	1-216-809-11	METAL CHIP	100	5%	1/10W			
C959	1-165-176-11	CERAMIC CHIP 0.047uF			10% 16V	R944	1-216-809-11	METAL CHIP	100	5%	1/10W			
C960	1-126-960-11	ELECT 1uF			20% 50V	R945	1-216-842-11	METAL CHIP	56K	5%	1/10W			
C961	1-126-963-11	ELECT 4.7uF			20% 50V	R946	1-216-845-11	METAL CHIP	100K	5%	1/10W			
C966	1-100-566-11	CERAMIC CHIP 0.1uF			10% 25V	R947	1-216-821-11	METAL CHIP	1K	5%	1/10W			
C984	1-100-155-11	CERAMIC CHIP 470PF			5% 100V	R948	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W			
< CONNECTOR >						R949	1-216-821-11	METAL CHIP	1K	5%	1/10W			
CN914	1-784-739-11	CONNECTOR, FFC 17P				R950	1-216-821-11	METAL CHIP	1K	5%	1/10W			
CNS928	1-770-401-11	HOUSING, CONNECTOR (PC BOARD) 8P				R951	1-216-830-11	METAL CHIP	5.6K	5%	1/10W			
< DIODE >						R952	1-216-821-11	METAL CHIP	1K	5%	1/10W			
D905	8-719-976-99	DIODE DTZ5.1B				R953	1-216-821-11	METAL CHIP	1K	5%	1/10W			
< VACUUM FLUORESCENT DISPLAY >						R954	1-216-833-11	METAL CHIP	10K	5%	1/10W			
FL901	1-483-081-11	VACUUM FLUORESCENT DISPLAY				R955	1-216-833-11	METAL CHIP	10K	5%	1/10W			
< IC >						R956	1-216-823-11	METAL CHIP	1.5K	5%	1/10W			
IC901	6-808-586-01	IC MB90M407PF-G-146E1				R957	1-216-821-11	METAL CHIP	1K	5%	1/10W			
IC902	6-600-349-31	IC NJL24H400A (IR)				R958	1-216-819-11	METAL CHIP	680	5%	1/10W			
IC903	6-705-678-01	IC NJM2760V-TE2				R959	1-216-817-11	METAL CHIP	470	5%	1/10W			
< JUMPER RESISTOR >						R983	1-216-817-11	METAL CHIP	470	5%	1/10W			
JR914	1-216-864-11	SHORT CHIP 0				R984	1-216-819-11	METAL CHIP	680	5%	1/10W			
< TRANSISTOR >						R985	1-216-821-11	METAL CHIP	1K	5%	1/10W			
Q901	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF				R986	1-216-823-11	METAL CHIP	1.5K	5%	1/10W			
Q902	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF				R987	1-216-823-11	METAL CHIP	1.5K	5%	1/10W			
Q903	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF				R988	1-216-825-11	METAL CHIP	2.2K	5%	1/10W			
Q904	8-729-920-79	TRANSISTOR 2SB1132-T100-QR				R989	1-216-827-11	METAL CHIP	3.3K	5%	1/10W			
Q905	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF				R990	1-216-817-11	METAL CHIP	470	5%	1/10W			
Q906	8-729-920-79	TRANSISTOR 2SB1132-T100-QR				R993	1-216-817-11	METAL CHIP	470	5%	1/10W			
						R994	1-216-821-11	METAL CHIP	1K	5%	1/10W			
						R997	1-216-817-11	METAL CHIP	470	5%	1/10W			
						R998	1-216-821-11	METAL CHIP	1K	5%	1/10W			
						R999	1-216-864-11	SHORT CHIP 0	0					
						R1301	1-216-821-11	METAL CHIP	1K	5%	1/10W			
						R1308	1-216-821-11	METAL CHIP	1K	5%	1/10W			
						R1315	1-216-821-11	METAL CHIP	1K	5%	1/10W			

HCD-ZX66i/ZX99i

PANEL COM | POWER AMP

Ref. No.	Part No.	Description	Remark		Ref. No.	Part No.	Description	Remark				
R1322	1-216-821-11	METAL CHIP	1K	5%	1/10W	C604	1-162-957-11	CERAMIC CHIP	220PF	5%	50V (ZX66i)	
R1329	1-216-821-11	METAL CHIP	1K	5%	1/10W	C605	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
R1350	1-216-837-11	METAL CHIP	22K	5%	1/10W	C608	1-126-965-11	ELECT	22uF	20%	50V	
R1351	1-216-821-11	METAL CHIP	1K	5%	1/10W	C609	1-128-560-11	ELECT	22uF	20%	100V	
R1352	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C610	1-128-560-11	ELECT	22uF	20%	100V	
R1354	1-216-809-11	METAL CHIP	100	5%	1/10W	C616	1-136-495-11	FILM	0.068uF	5%	50V	
R1377	1-216-821-11	METAL CHIP	1K	5%	1/10W	C617	1-136-495-11	FILM	0.068uF	5%	50V	
R1378	1-216-821-11	METAL CHIP	1K	5%	1/10W	C627	1-126-961-11	ELECT	2.2uF	20%	50V	
R1383	1-216-864-11	SHORT CHIP	0			C628	1-126-933-11	ELECT	100uF	20%	16V	
R1384	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C629	1-164-156-11	CERAMIC CHIP	0.1uF		25V	
R1385	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C634	1-104-665-11	ELECT	100uF	20%	25V	
R1386	1-216-837-11	METAL CHIP	22K	5%	1/10W	C635	1-104-665-11	ELECT	100uF	20%	25V	
R1387	1-216-837-11	METAL CHIP	22K	5%	1/10W	C648	1-104-658-11	ELECT	100uF	20%	10V	
R1388	1-216-821-11	METAL CHIP	1K	5%	1/10W	C649	1-126-964-11	ELECT	10uF	20%	50V	
R1389	1-216-833-11	METAL CHIP	10K	5%	1/10W	C650	1-126-963-11	ELECT	4.7uF	20%	50V	
R1390	1-216-833-11	METAL CHIP	10K	5%	1/10W	C651	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
R1391	1-216-833-11	METAL CHIP	10K	5%	1/10W	C652	1-104-658-11	ELECT	100uF	20%	10V	
R1392	1-216-833-11	METAL CHIP	10K	5%	1/10W	C654	1-162-953-11	CERAMIC CHIP	100PF	5%	50V	
R1393	1-216-833-11	METAL CHIP	10K	5%	1/10W					(ZX99i)		
R1394	1-216-833-11	METAL CHIP	10K	5%	1/10W	C654	1-162-957-11	CERAMIC CHIP	220PF	5%	50V	
R1395	1-216-833-11	METAL CHIP	10K	5%	1/10W	C655	1-127-811-11	ELECT(BLOCK)	3300uF	20%	50V	
R1396	1-216-833-11	METAL CHIP	10K	5%	1/10W	C657	1-137-190-11	FILM	0.22uF	5%	50V	
R1397	1-216-833-11	METAL CHIP	10K	5%	1/10W	C658	1-127-815-11	ELECT(BLOCK)	3300uF	20%	100V	
R1398	1-216-833-11	METAL CHIP	10K	5%	1/10W	C659	1-136-497-81	FILM	0.1uF	5%	50V	
R1399	1-216-833-11	METAL CHIP	10K	5%	1/10W	C662	1-126-964-11	ELECT	10uF	20%	50V	
R1400	1-216-833-11	METAL CHIP	10K	5%	1/10W	C663	1-126-968-11	ELECT	100uF	20%	50V	
R1401	1-216-833-11	METAL CHIP	10K	5%	1/10W	C666	1-136-495-11	FILM	0.068uF	5%	50V	
R1402	1-216-833-11	METAL CHIP	10K	5%	1/10W	C667	1-136-495-11	FILM	0.068uF	5%	50V	
R1403	1-216-833-11	METAL CHIP	10K	5%	1/10W	C676	1-127-811-11	ELECT(BLOCK)	3300uF	20%	50V	
R1404	1-216-833-11	METAL CHIP	10K	5%	1/10W	C677	1-127-815-11	ELECT(BLOCK)	3300uF	20%	100V	
		< SWITCH >				C678	1-137-190-11	FILM	0.22uF	5%	50V	
S900	1-762-875-21	SWITCH, KEYBOARD (EFFECT ON/OFF)				C679	1-136-497-81	FILM	0.1uF	5%	50V	
S901	1-762-875-21	SWITCH, KEYBOARD (SLEEP)				C696	1-137-190-11	FILM	0.22uF	5%	50V	
S902	1-762-875-21	SWITCH, KEYBOARD (TIMER MENU)				C697	1-137-190-11	FILM	0.22uF	5%	50V	
S903	1-762-875-21	SWITCH, KEYBOARD (ILLUMINATION)										
S921	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)										
		< CONNECTOR >										
S922	1-762-875-21	SWITCH, KEYBOARD (TUNING -)				CN600	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P (ZX99i)				
S923	1-762-875-21	SWITCH, KEYBOARD (TUNING +)				CN601	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P				
S924	1-762-875-21	SWITCH, KEYBOARD (TUNING MODE)				CN602	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P				
S925	1-762-875-21	SWITCH, KEYBOARD (FM MODE)				* CN606	1-564-511-11	PLUG, CONNECTOR 8P (ZX99i)				
S926	1-762-875-21	SWITCH, KEYBOARD (AMP MENU)										
		< DIODE >										
S927	1-762-875-21	SWITCH, KEYBOARD (TUNER MEMORY)				D611	6-501-782-01	DIODE MAZ8180GMLS0				
S928	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)				D612	6-501-782-01	DIODE MAZ8180GMLS0				
		< VIBRATOR >				D620	6-501-817-01	DIODE MA2J1110GLS0				
X602	1-781-282-51	VIBRATOR, CERAMIC (4MHz)				D627	6-501-817-01	DIODE MA2J1110GLS0				
		*****				D646	6-501-817-01	DIODE MA2J1110GLS0				
	A-1616-816-A	POWER AMP BOARD, COMPLETE (ZX99i)				D654	6-500-335-01	DIODE MC2838-T112-1				
	A-1616-833-A	POWER AMP BOARD, COMPLETE (ZX66i)				D656	6-500-360-01	DIODE D10XB20				
		*****				D658	8-719-073-32	DIODE D25XB60				
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3				D660	6-501-817-01	DIODE MA2J1110GLS0				
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3 (ZX99i)				D661	6-501-817-01	DIODE MA2J1110GLS0				
		< CAPACITOR >				D664	6-501-186-01	DIODE UDZW-TE17-33B				
		*****				D670	6-501-817-01	DIODE MA2J1110GLS0				
	C600	1-126-963-11	ELECT	4.7uF	20%	D700	6-500-335-01	DIODE MC2838-T112-1 (ZX99i)				
	C601	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	D720	6-501-817-01	DIODE MA2J1110GLS0			
	C602	1-104-658-11	ELECT	100uF	20%	D760	6-501-817-01	DIODE MA2J1110GLS0				
	C604	1-162-953-11	CERAMIC CHIP	100PF	5%							
					(ZX99i)							

POWER AMP

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
< IC >											
IC600	6-600-642-01	IC	STK412-150C	(ZX66i)		R618	1-234-499-21	ENCAPSULATED COMPONENT	0.22X2 5W		
IC601	6-600-169-01	IC	STK412-240M-E	(ZX99i)		R618	1-234-798-11	ENCAPSULATED COMPONENT	0.1X2 5W (ZX66i)		
IC627	6-703-610-01	IC	RT8H015C-T112-1			R619	1-216-821-11	METAL CHIP	1K	5%	1/10W
< JUMPER RESISTOR >											
JR647	1-216-864-11	SHORT CHIP	0			R620	1-216-839-11	METAL CHIP	33K	5%	1/10W (ZX66i)
< COIL >											
L680	1-420-872-52	COIL, AIR-CORE				R621	1-216-845-11	METAL CHIP	100K	5%	1/10W (ZX66i)
L682	1-420-872-52	COIL, AIR-CORE	(ZX99i)			R621	1-216-847-11	METAL CHIP	150K	5%	1/10W (ZX99i)
L686	1-420-872-52	COIL, AIR-CORE				R622	1-249-393-11	CARBON	10	5%	1/4W F
L688	1-420-872-52	COIL, AIR-CORE	(ZX99i)			R623	1-216-842-11	METAL CHIP	56K	5%	1/10W
< TRANSISTOR >											
Q600	8-729-027-23	TRANSISTOR	DTA114EKA-T146			R624	1-216-837-11	METAL CHIP	22K	5%	1/10W
Q601	8-729-027-43	TRANSISTOR	DTC114EKA-T146			R625	1-216-819-11	METAL CHIP	680	5%	1/10W (ZX66i)
Q604	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R			R625	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (ZX99i)
Q606	8-729-821-00	TRANSISTOR	2SA1207			R628	1-216-841-11	METAL CHIP	47K	5%	1/10W
Q610	8-729-924-99	TRANSISTOR	2SC3722K-E			R629	1-216-818-11	METAL CHIP	560	5%	1/10W
Q618	8-729-924-99	TRANSISTOR	2SC3722K-E			R630	1-216-845-11	METAL CHIP	100K	5%	1/10W
Q628	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF			R631	1-216-845-11	METAL CHIP	100K	5%	1/10W
Q629	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF			R632	1-216-854-11	METAL CHIP	560K	5%	1/10W
Q630	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF			R633	1-216-841-11	METAL CHIP	47K	5%	1/10W
Q640	8-729-802-80	TRANSISTOR	2SC3661			R634	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
Q641	8-729-802-80	TRANSISTOR	2SC3661			R635	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q644	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R			▲ R636	1-216-456-00	METAL OXIDE	820	5%	2W F
Q647	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R			▲ R637	1-216-456-00	METAL OXIDE	820	5%	2W F
Q664	8-729-024-93	TRANSISTOR	2SB1565E			R638	1-216-845-11	METAL CHIP	100K	5%	1/10W
Q668	8-729-924-99	TRANSISTOR	2SC3722K-E			R639	1-216-845-11	METAL CHIP	100K	5%	1/10W
Q765	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R			R640	1-216-833-11	METAL CHIP	10K	5%	1/10W
< RESISTOR >											
R600	1-216-821-11	METAL CHIP	1K	5%	1/10W	R641	1-216-833-11	METAL CHIP	10K	5%	1/10W
R601	1-216-841-11	METAL CHIP	47K	5%	1/10W	R642	1-216-806-11	METAL CHIP	56	5%	1/10W
R602	1-216-815-11	METAL CHIP	330	5%	1/10W (ZX99i)	R643	1-216-806-11	METAL CHIP	56	5%	1/10W
R602	1-216-818-11	METAL CHIP	560	5%	1/10W (ZX66i)	R644	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R603	1-216-841-11	METAL CHIP	47K	5%	1/10W	▲ R646	1-215-863-11	METAL OXIDE	100	5%	1W F
R604	1-216-833-11	METAL CHIP	10K	5%	1/10W	R647	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R605	1-216-833-11	METAL CHIP	10K	5%	1/10W	R649	1-216-841-11	METAL CHIP	47K	5%	1/10W
R606	1-216-841-11	METAL CHIP	47K	5%	1/10W	R650	1-216-821-11	METAL CHIP	1K	5%	1/10W
R607	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R651	1-216-841-11	METAL CHIP	47K	5%	1/10W
R608	1-216-845-11	METAL CHIP	100K	5%	1/10W	R652	1-216-815-11	METAL CHIP	330	5%	1/10W (ZX99i)
R609	1-216-843-11	METAL CHIP	68K	5%	1/10W	R653	1-216-841-11	METAL CHIP	47K	5%	1/10W
R610	1-216-843-11	METAL CHIP	68K	5%	1/10W	R654	1-216-841-11	METAL CHIP	47K	5%	1/10W
R611	1-216-839-11	METAL CHIP	33K	5%	1/10W	R655	1-216-841-11	METAL CHIP	47K	5%	1/10W
▲ R612	1-245-605-51	FUSIBLE	100	5%	1/4W F	R658	1-216-849-11	METAL CHIP	220K	5%	1/10W
▲ R613	1-215-869-11	METAL OXIDE	1K	5%	1W F (ZX99i)	R659	1-216-849-11	METAL CHIP	220K	5%	1/10W
▲ R613	1-215-872-11	METAL OXIDE	3.3K	5%	1W F (ZX66i)	R660	1-216-837-11	METAL CHIP	22K	5%	1/10W
▲ R614	1-215-869-11	METAL OXIDE	1K	5%	1W F (ZX99i)	R661	1-216-837-11	METAL CHIP	22K	5%	1/10W
▲ R614	1-215-872-11	METAL OXIDE	3.3K	5%	1W F (ZX66i)	R662	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
▲ R615	1-245-605-51	FUSIBLE	100	5%	1/4W F	R663	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
▲ R616	1-217-637-00	FUSIBLE	1	5%	1/4W F	R664	1-216-821-11	METAL CHIP	1K	5%	1/10W
R617	1-216-845-11	METAL CHIP	100K	5%	1/10W	R665	1-216-864-11	SHORT CHIP	0 (ZX66i)		
R617	1-216-845-11	METAL CHIP	100K	5%	1/10W	R666	1-216-809-11	METAL CHIP	100	5%	1/10W
R617	1-216-845-11	METAL CHIP	100K	5%	1/10W	R668	1-234-499-21	ENCAPSULATED COMPONENT	0.22X2 5W (ZX99i)		
R617	1-216-845-11	METAL CHIP	100K	5%	1/10W	R668	1-234-798-11	ENCAPSULATED COMPONENT	0.1X2 5W (ZX66i)		
R617	1-216-821-11	METAL CHIP	1K	5%	1/10W	R669	1-216-821-11	METAL CHIP	1K	5%	1/10W

HCD-ZX66i/ZX99i

POWER AMP **POWER SW** **RIGHT-BTTN** **SE-130**

SUBTRANS SURROUND

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>			<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>			<u>Remark</u>
		SUBTRANS BOARD						< IC >			
		*****						IC701 6-600-169-01 IC STK412-240M-E			
		< CAPACITOR >						< TRANSISTOR >			
C1052	1-126-942-61	ELECT	1000uF	20%	25V	Q720	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
		< CONNECTOR >				Q721	8-729-821-00	TRANSISTOR	2SA1207		
CN1000	1-785-329-11	PIN, CONNECTOR (LIGHT ANGLE) 3P				Q722	8-729-924-99	TRANSISTOR	2SC3722K-E		
CN1115	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P				Q730	8-729-924-99	TRANSISTOR	2SC3722K-E		
CN1116	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P				Q762	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
		< DIODE >				Q765	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
D1000	6-501-817-01	DIODE	MA2J1110GLS0			Q780	8-729-924-99	TRANSISTOR	2SC3722K-E		
D1001	6-500-848-01	DIODE	MC2840-T112-1					< RESISTOR >			
D1002	6-500-848-01	DIODE	MC2840-T112-1			R700	1-216-821-11	METAL CHIP	1K	5%	1/10W
		< TRANSFORMER >				R701	1-216-841-11	METAL CHIP	47K	5%	1/10W
▲ PT1101	1-445-514-11	TRANSFORMER, POWER (SUB)				R702	1-216-815-11	METAL CHIP	330	5%	1/10W
		< TRANSISTOR >				▲ R703	1-215-863-11	METAL OXIDE	100	5%	1W F
Q1000	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF			R710	1-216-841-11	METAL CHIP	47K	5%	1/10W
		< RESISTOR >				R711	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1000	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R720	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1050	1-216-801-11	METAL CHIP	22	5%	1/10W	R721	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1051	1-216-864-11	SHORT CHIP	0			R722	1-216-841-11	METAL CHIP	47K	5%	1/10W
		< RELAY >				R723	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
▲ RY1000	1-755-334-11	RELAY, AC POWER				R724	1-216-845-11	METAL CHIP	100K	5%	1/10W
		*****				R725	1-216-843-11	METAL CHIP	68K	5%	1/10W
		SURROUND BOARD (ZX99)				R726	1-216-843-11	METAL CHIP	68K	5%	1/10W
		*****				R727	1-216-839-11	METAL CHIP	33K	5%	1/10W
		< CAPACITOR >				R728	1-216-841-11	METAL CHIP	47K	5%	1/10W
C700	1-126-963-11	ELECT	4.7uF	20%	50V	R729	1-216-845-11	METAL CHIP	100K	5%	1/10W
C701	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	R730	1-234-499-21	ENCAPSULATED COMPONENT	0.22X2 5W		
C702	1-104-658-11	ELECT	100uF	20%	10V	R731	1-216-821-11	METAL CHIP	1K	5%	1/10W
C703	1-162-953-11	CERAMIC CHIP	100PF	5%	50V	R732	1-216-837-11	METAL CHIP	22K	5%	1/10W
C721	1-126-965-11	ELECT	22uF	20%	50V	R733	1-216-847-11	METAL CHIP	150K	5%	1/10W
C730	1-136-495-11	FILM	0.068uF	5%	50V	R734	1-216-842-11	METAL CHIP	56K	5%	1/10W
C731	1-136-495-11	FILM	0.068uF	5%	50V	▲ R735	1-245-711-31	CARBON	10	5%	1/2W F
C750	1-126-963-11	ELECT	4.7uF	20%	50V	R736	1-216-843-11	METAL CHIP	68K	5%	1/10W
C751	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	R737	1-216-845-11	METAL CHIP	100K	5%	1/10W
C752	1-104-658-11	ELECT	100uF	20%	10V	R750	1-216-821-11	METAL CHIP	1K	5%	1/10W
C753	1-162-953-11	CERAMIC CHIP	100PF	5%	50V	R751	1-216-841-11	METAL CHIP	47K	5%	1/10W
C780	1-136-495-11	FILM	0.068uF	5%	50V	R752	1-216-815-11	METAL CHIP	330	5%	1/10W
C781	1-136-495-11	FILM	0.068uF	5%	50V	R766	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
C795	1-128-560-11	ELECT	22uF	20%	100V	R780	1-234-499-21	ENCAPSULATED COMPONENT	0.22X2 5W		
C796	1-128-560-11	ELECT	22uF	20%	100V	R781	1-216-821-11	METAL CHIP	1K	5%	1/10W
		< DIODE >				R782	1-216-837-11	METAL CHIP	22K	5%	1/10W
D720	6-501-817-01	DIODE	MA2J1110GLS0			R783	1-216-847-11	METAL CHIP	150K	5%	1/10W
D730	6-501-817-01	DIODE	MA2J1110GLS0			R784	1-216-843-11	METAL CHIP	68K	5%	1/10W
D760	6-501-817-01	DIODE	MA2J1110GLS0			▲ R785	1-245-711-31	CARBON	10	5%	1/2W F
D761	6-501-817-01	DIODE	MA2J1110GLS0			R788	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
D780	6-501-817-01	DIODE	MA2J1110GLS0			R792	1-216-845-11	METAL CHIP	100K	5%	1/10W
D790	6-501-782-01	DIODE	MAZ8180GMLS0			▲ R793	1-217-637-00	FUSIBLE	1	5%	1/4W F
D791	6-501-782-01	DIODE	MAZ8180GMLS0			▲ R794	1-245-605-51	FUSIBLE	100	5%	1/4W F
		< DIODE >				▲ R795	1-245-605-51	FUSIBLE	100	5%	1/4W F
						R796	1-216-821-11	METAL CHIP	1K	5%	1/10W
						R797	1-216-821-11	METAL CHIP	1K	5%	1/10W
						R798	1-216-845-11	METAL CHIP	100K	5%	1/10W
						R799	1-216-845-11	METAL CHIP	100K	5%	1/10W

HCD-ZX66i/ZX99i

SURROUND **TRANS** **VOL**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< RELAY >				< TRANSISTOR >			
RY760	1-755-308-21	RELAY		Q911	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
*****				Q912	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
		TRANS BOARD		Q913	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
		*****		Q914	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
				Q915	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
1-533-217-41		HOLDER, FUSE		Q916	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
< CAPACITOR >				< RESISTOR >			
C1192	1-128-576-11	ELECT	100uF	R960	1-218-867-11	METAL CHIP	6.8K
			20%	R961	1-216-829-11	METAL CHIP	4.7K
		< CONNECTOR >		R962	1-216-827-11	METAL CHIP	3.3K
* CN1112	1-564-521-11	PLUG, CONNECTOR 6P		R963	1-216-825-11	METAL CHIP	2.2K
* CN1113	1-564-522-11	PLUG, CONNECTOR 7P		R964	1-216-823-11	METAL CHIP	1.5K
		< DIODE >		R965	1-216-823-11	METAL CHIP	1.5K
D1192	6-500-522-21	DIODE 10EDB40-TB3		R966	1-216-821-11	METAL CHIP	1K
		< RESISTOR >		R967	1-216-819-11	METAL CHIP	680
△ R1201	1-219-124-11	FUSIBLE	0.68	R968	1-216-817-11	METAL CHIP	470
			5%	R969	1-216-817-11	METAL CHIP	470
		VOL BOARD		R970	1-216-819-11	METAL CHIP	680
		*****		R971	1-216-821-11	METAL CHIP	1K
		< CAPACITOR >		R972	1-216-823-11	METAL CHIP	1.5K
C967	1-107-826-11	CERAMIC CHIP	0.1uF	R973	1-216-823-11	METAL CHIP	1.5K
C968	1-107-826-11	CERAMIC CHIP	0.1uF	R974	1-216-825-11	METAL CHIP	2.2K
C969	1-107-826-11	CERAMIC CHIP	0.1uF	R975	1-216-827-11	METAL CHIP	3.3K
C971	1-107-826-11	CERAMIC CHIP	0.1uF	R1300	1-216-821-11	METAL CHIP	1K
C972	1-107-826-11	CERAMIC CHIP	0.1uF	R1302	1-216-821-11	METAL CHIP	1K
		< CONNECTOR >		R1303	1-216-821-11	METAL CHIP	1K
CN928	1-785-328-11	PIN, CONNECTOR (LIGHT ANGLE) 2P		R1306	1-216-821-11	METAL CHIP	1K
		< DIODE >		R1309	1-216-821-11	METAL CHIP	1K
D907	6-500-424-01	LED SLI-325DCT31W		R1310	1-216-821-11	METAL CHIP	1K
		(VOLUME ILLUMINATION 1)		R1313	1-216-821-11	METAL CHIP	1K
D908	6-500-424-01	LED SLI-325DCT31W		R1316	1-216-821-11	METAL CHIP	1K
		(VOLUME ILLUMINATION 2)		R1317	1-216-821-11	METAL CHIP	1K
D909	6-500-424-01	LED SLI-325DCT31W		R1320	1-216-821-11	METAL CHIP	1K
		(VOLUME ILLUMINATION 3)		R1323	1-216-821-11	METAL CHIP	1K
D910	6-500-424-01	LED SLI-325DCT31W		R1324	1-216-821-11	METAL CHIP	1K
		(VOLUME ILLUMINATION 4)		R1327	1-216-821-11	METAL CHIP	1K
D911	6-500-424-01	LED SLI-325DCT31W		R1330	1-216-821-11	METAL CHIP	1K
		(VOLUME ILLUMINATION 5)		R1331	1-216-821-11	METAL CHIP	1K
D912	6-500-424-01	LED SLI-325DCT31W		R1335	1-216-821-11	METAL CHIP	1K
		(VOLUME ILLUMINATION 6)		R1336	1-216-821-11	METAL CHIP	1K
D913	6-500-424-01	LED SLI-325DCT31W		R1337	1-216-821-11	METAL CHIP	1K
		(VOLUME ILLUMINATION 7)		< SWITCH >			
D914	6-500-424-01	LED SLI-325DCT31W		S904	1-762-875-21	SWITCH, KEYBOARD (SALSA)	
		(VOLUME ILLUMINATION 8)		S905	1-762-875-21	SWITCH, KEYBOARD (REGGAE)	
D915	6-500-424-01	LED SLI-325DCT31W		S906	1-762-875-21	SWITCH, KEYBOARD (POP)	
		(VOLUME ILLUMINATION 9)		S907	1-762-875-21	SWITCH, KEYBOARD (SAMBA)	
D916	6-500-424-01	LED SLI-325DCT31W		S908	1-762-875-21	SWITCH, KEYBOARD (TANGO)	
		(VOLUME ILLUMINATION 10)		S909	1-762-875-21	SWITCH, KEYBOARD (SURROUND)	
D917	6-500-424-01	LED SLI-325DCT31W		S910	1-762-875-21	SWITCH, KEYBOARD (USER EQ)	
		(VOLUME ILLUMINATION 11)		S911	1-762-875-21	SWITCH, KEYBOARD (X-GROOVE)	
				S913	1-762-875-21	SWITCH, KEYBOARD (ROCK)	
				S914	1-762-875-21	SWITCH, KEYBOARD (JAZZ)	
				S915	1-762-875-21	SWITCH, KEYBOARD (DANCE)	
				S916	1-762-875-21	SWITCH, KEYBOARD (MOVIE)	
				S917	1-762-875-21	SWITCH, KEYBOARD (GAME)	
				S918	1-762-875-21	SWITCH, KEYBOARD (TOOL MENU)	
				S919	1-762-875-21	SWITCH, KEYBOARD (RETURN)	

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
S980	1-487-171-11	ENCODER, ROTARY (VOLUME +/-)	

MISCELLANEOUS			

5	1-828-964-11	WIRE (FLAT TYPE) (11 CORE)	
56	1-828-996-51	WIRE (FLAT TYPE) (17 CORE)	
△ 155	1-783-820-11	CORD, POWER	
207	1-823-921-11	FMS-18	
△ 265	8-820-244-02	OPTICAL PICK-UP (KSM-215DCP/C2NP)	
272	1-832-404-21	CABLE, FLEXIBLE FLAT (16 CORE)	
273	1-452-925-21	MAGNET ASSY	
276	1-828-664-11	WIRE (FLAT TYPE) (27 CORE)	
△ F1141	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
△ F1151	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
△ F1161	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
△ F1171	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
△ F1181	1-532-504-33	FUSE (T4AL/250V)	
△ F1191	1-532-504-33	FUSE (T4AL/250V)	
FAN901	1-763-372-11	FAN, DC	
△ FC901	1-500-497-11	FILTER, CLAMP (FERRITE CORE)	
M901	X-3952-411-1	MOTOR ASSY, LOADING (LOADING)	
△ PT1100	1-445-589-11	TRANSFORMER, POWER (MAIN) (ZX66i)	
△ PT1100	1-445-590-11	TRANSFORMER, POWER (MAIN) (ZX99i)	
RE901	1-418-746-11	ENCODER, ROTARY	
S101	1-771-853-11	SWITCH, DETECTION (LIMIT)	
TU901	1-693-762-21	TUNER (FM/AM) (ANTENNA)	

REVISION HISTORY

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

Also, clicking the version at the top of the revised page allows you to jump to the next revised page.