

HCD-GN880

SERVICE MANUAL

Ver 1.0 2004.04

*E Model
Australian Model*



- HCD-GN880 is the Amplifier, CD player, tape deck and tuner section in MHC-GN880.

CD Section	Model Name Using Similar Mechanism	HCD-GX450
	CD Mechanism Type	CDM74-F1BD81
	Base Unit Name	BU-F1BD81A
	Optical Pick-up Name	KSM-215DCP/C2NP
TAPE Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	CWM43RR35

SPECIFICATIONS

Amplifier section

The following are measured at

Mexican model: AC 127 V, 60 Hz
Other models: AC 120, 220, 240 V, 50/60 Hz
DIN power output (rated) 180 + 180 watts
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference)
225 + 225 watts
(6 ohms at 1 kHz, 10% THD)

Inputs

VIDEO/MD (AUDIO) IN (phono jacks):
voltage 250/450 mV, impedance 47
kiloohms

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

GAME (AUDIO) IN (phono jack):
voltage 250 mV, impedance 47 kiloohms
sensitivity 1 mV, impedance 10 kiloohms

MIC (phone jack):

Outputs

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

PHONES (stereo mini jack): accepts headphones of 8 ohms or
more

FRONT SPEAKER:

Use only the supplied speaker
SS-GN880

SURROUND SPEAKER:

Use only the supplied speaker SS-RS880

SUBWOOFER OUT:

Use only the supplied subwoofer SS-WG880

Disc player section

System

Compact disc and digital audio system

Laser

Semiconductor laser

($\lambda=780$ nm)

Emission duration: continuous

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.

2 Hz – 20 kHz (± 0.5 dB)

780 – 790 nm

More than 90 dB

More than 90 dB

OPTICAL CD DIGITAL OUT

Wave length

660 nm

Output Level

-18 dBm

– Continued on next page –

Mini Hi-Fi COMPONENT SYSTEM

9-877-802-01
2004D02-1
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Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

SONY®

HCD-GN880

Tape deck section

Recording system 4-track 2-channel stereo
Frequency response 50 – 13,000 Hz (± 3 dB), using Sony TYPE I tape

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range 87.5 – 108.0 MHz
Antenna FM lead antenna
Antenna terminals 75 ohm unbalanced
Intermediate frequency 10.7 MHz

AM tuner section

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

General

Power requirements

Australian model: 230 – 240 V AC, 50/60 Hz
Mexican model: 127 V AC, 60 Hz
Other models: 120 V, 220 V or 230 – 240 V AC, 50/60 Hz
Adjustable with voltage selector

Power consumption 350 watts

Dimensions (w/h/d) (Approx.) 280 x 360 x 394.5 mm

Mass (Approx.) 14.4 kg

Supplied accessories: Remote Commander (1)
Batteries (2)
AM loop antenna (1)
FM lead antenna (1)
Front speaker pads (8)
Surround speaker pads (8)
Subwoofer pads (4)

Design and specifications are subject to change without notice.

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.

CAUTION

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

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

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

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK Δ OR DOTTED LINE WITH MARK Δ 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.

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SECTION 1 SERVICING NOTES

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.

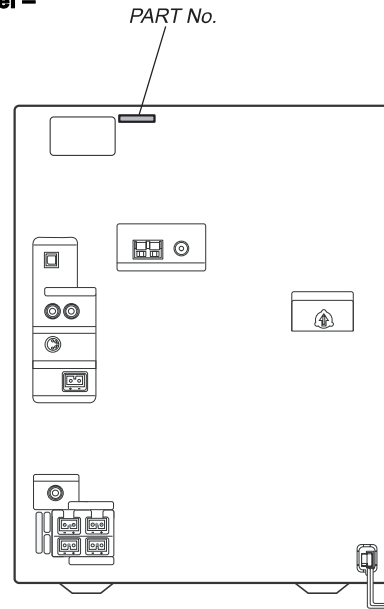
NOTES ON LASER DIODE EMISSION CHECK

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 pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the "S curve check" in "CD section adjustment" and check that the S curve waveform is output several times.

**• MODEL IDENTIFICATION
- Back Panel -**



MODEL	PART No.
E2, E3models	4-252-723-0□
AUS model	4-252-723-1□
E51 model	4-252-723-2□
Mexican model	4-252-723-3□

- Abbreviation
 - E2 : 120 V AC Area in E model
 - E3 : 240 V AC Area in E model
 - E51 : Chilean and Peruvian model
 - AUS : Australian model

SECTION 2
GENERAL

This section is extracted from instruction manual.

LOCATING THE CONTROLS

List of button locations and reference pages

Main unit

ALPHABETICAL ORDER

A - D

- ALBUM 16
- AMP MENU 38
- CD 36
- CD SYNC 14
- Deck A 27
- Deck B 20
- DIRECTION 11
- DISC 1 ~ 3 3
- Disc tray 42
- DISPLAY 40
- Display 5

E - L

- EFFECT ON/OFF 37
- ENTER 21
- EQ EDIT 8
- EX-CHANGE/DISC SKIP 4
- FM MODE 10
- GAME 30
- GAME INPUT (jacks) 26
- GAME MIXING 34
- GROOVE 29
- ILLUMINATION 28

M - R

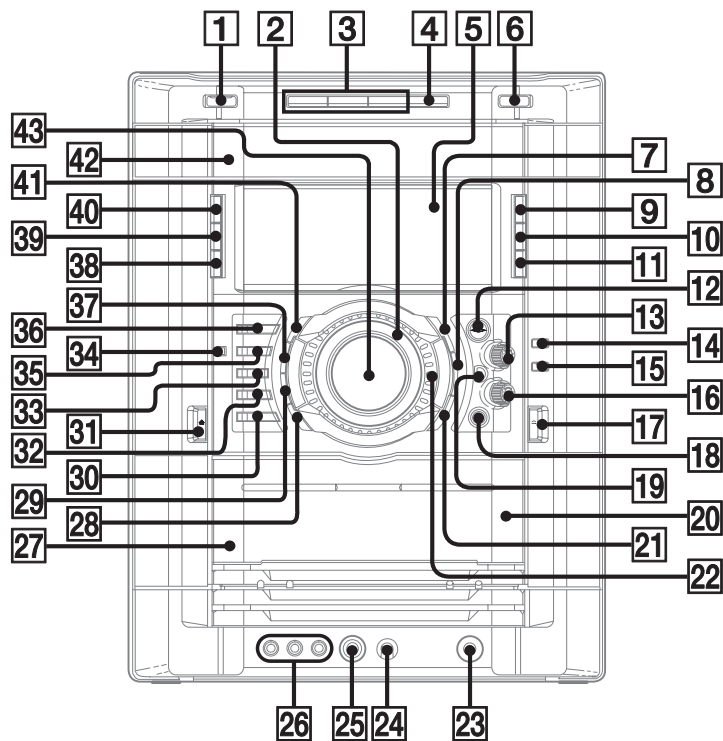
- MIC (jack) 25
- MIC LEVEL 24
- MULTI JOG 22
- P FILE MEMORY 7
- PHONES (jack) 23
- PLAY MODE 9
- Power illuminator 2
- REC PAUSE/START 15
- REPEAT 10

S - Z

- SLEEP 39
- SURR SPEAKER MODE 41
- TAPE A/B 33
- TUNER/BAND 35
- TUNER MEMORY 11
- TUNING MODE 9
- VIDEO/MD 32
- VOLUME 43

SYMBOLS

- I/⏻ (power) 1
- ▲ OPEN/CLOSE 6
- ▶▶▶▶ (play) 12
- ◀◀▶▶▶▶ (go backward/fast forward) 13
- ◀◀▶▶▶▶ (rewind/fast forward) 16
- ⏸ (pause) 19
- (stop) 18
- ▲ A (Eject A) 31
- ▲ B (Eject B) 17



This section is extracted from instruction manual.

Remote control

ALPHABETICAL ORDER

A - E

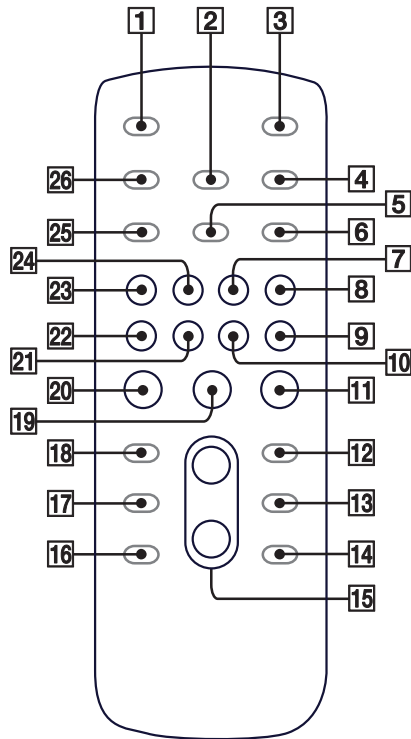
- ALBUM + **14**
- ALBUM - **16**
- CD **24**
- CLEAR **18**
- CLOCK/TIMER SELECT **2**
- CLOCK/TIMER SET **4**
- DISC SKIP **13**
- DISPLAY **26**
- ENTER **12**
- EQ **17**

F - Z

- FM MODE **6**
- FUNCTION **8**
- PLAY MODE **5**
- REPEAT **6**
- SLEEP **1**
- TAPE **23**
- TUNER/BAND **7**
- TUNER MEMORY **25**
- TUNING MODE **5**
- VOLUME +/- **15**

SYMBOLS

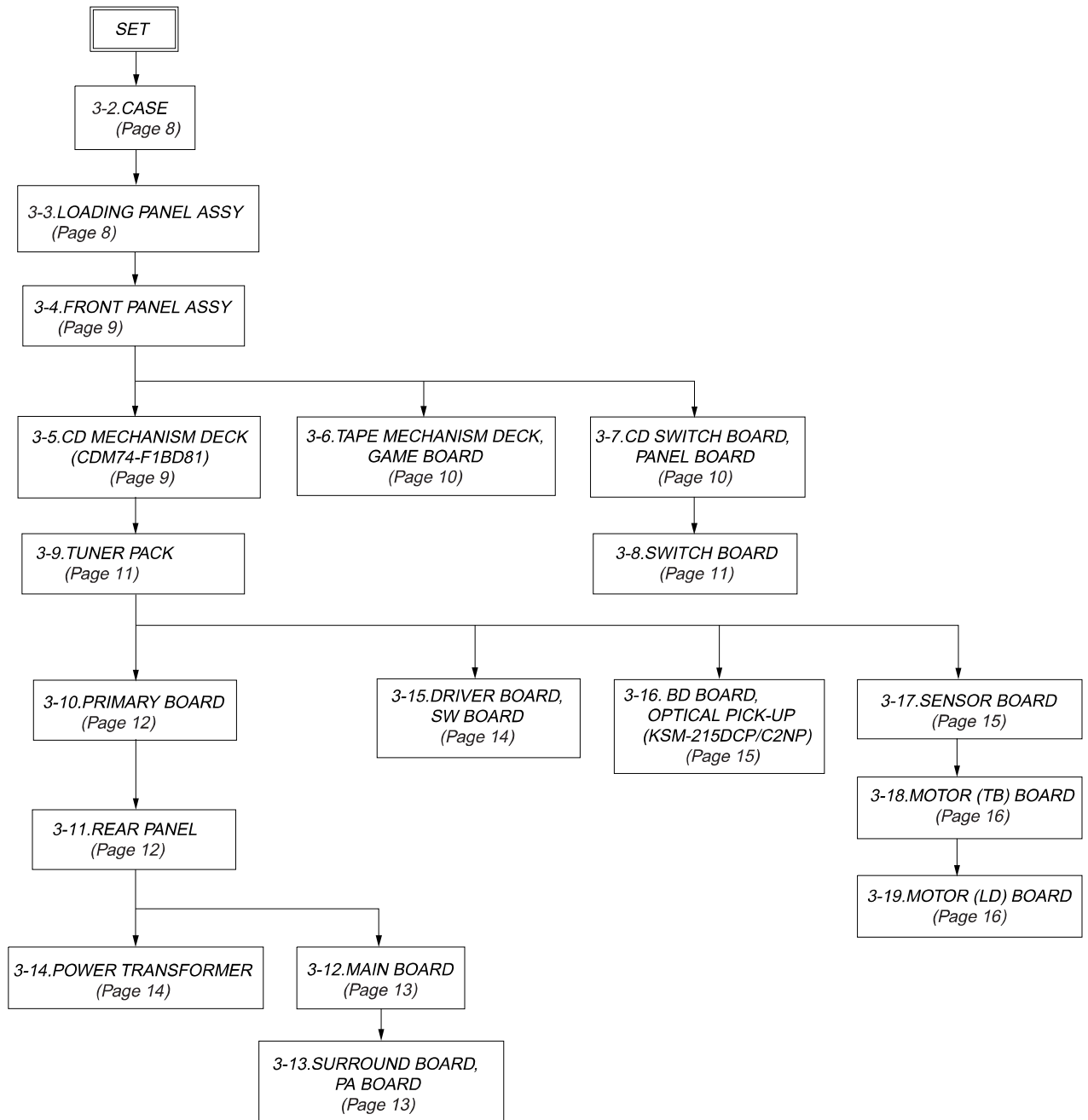
- I/O (power) **3**
- (stop) **11**
- || (pause) **19**
- ▶ (play) **20**
- ◀◀ (go backward) **22**
- ▶▶+ (go forward) **21**
- ◀◀ (rewind) **10**
- ▶▶ (fast forward) **9**



SECTION 3 DISASSEMBLY

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

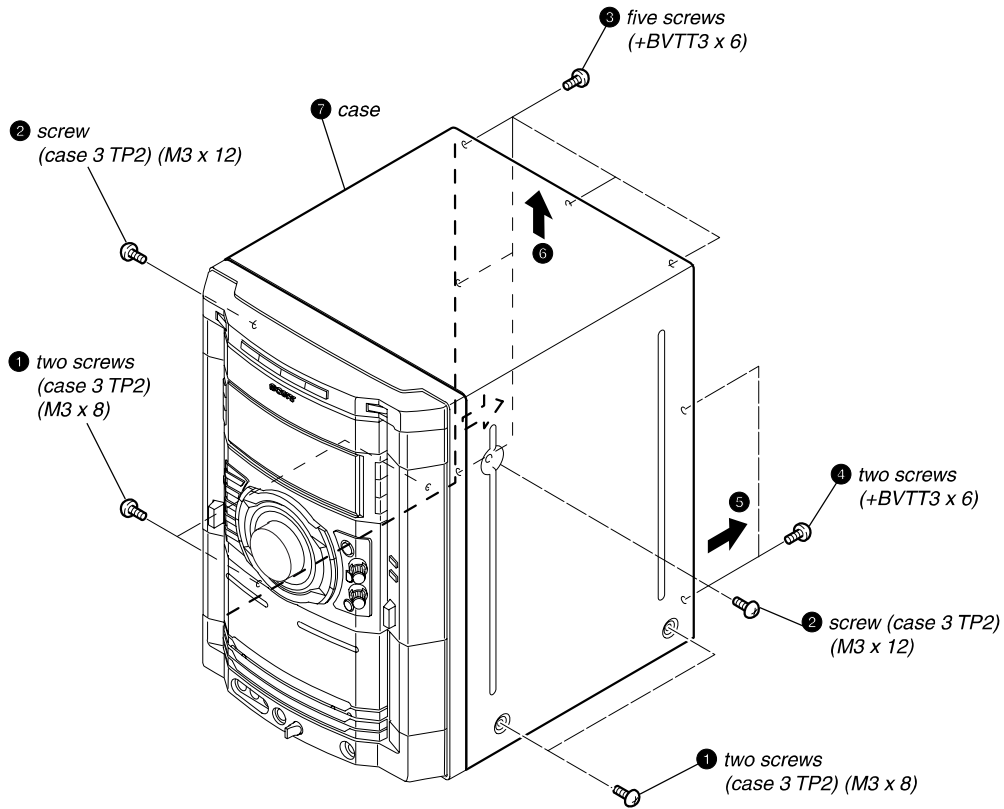
3-1. DISASSEMBLY FLOW



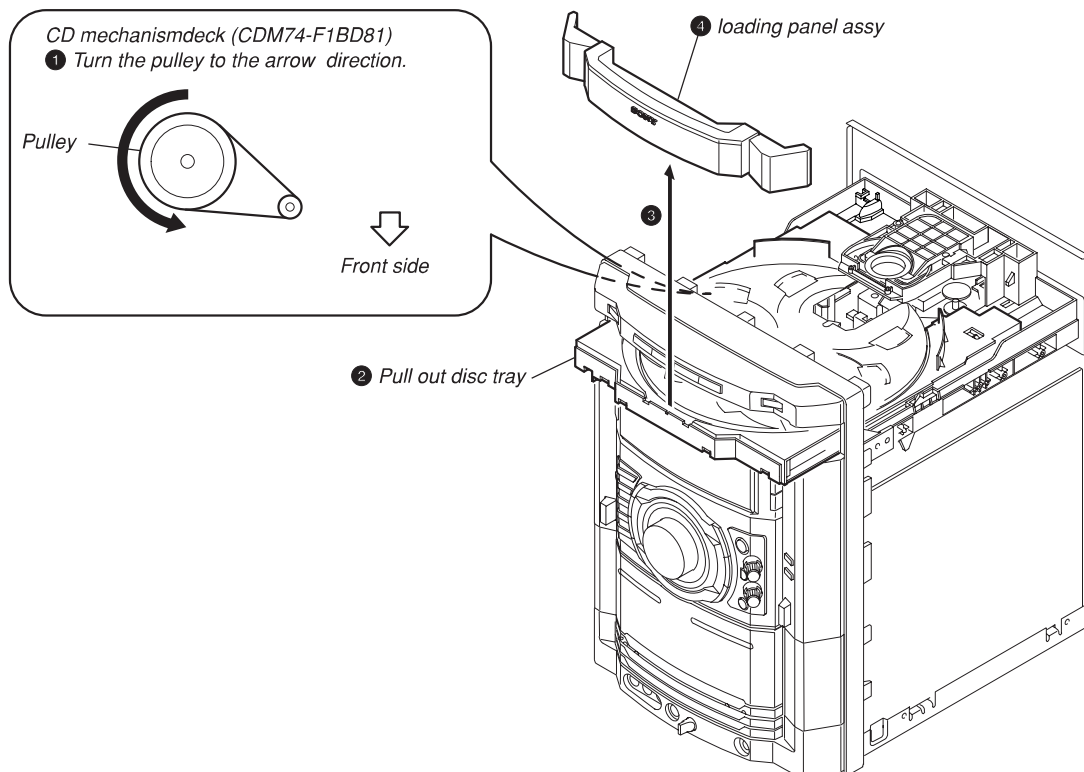
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Note: Follow the disassembly procedure in the numerical order given.

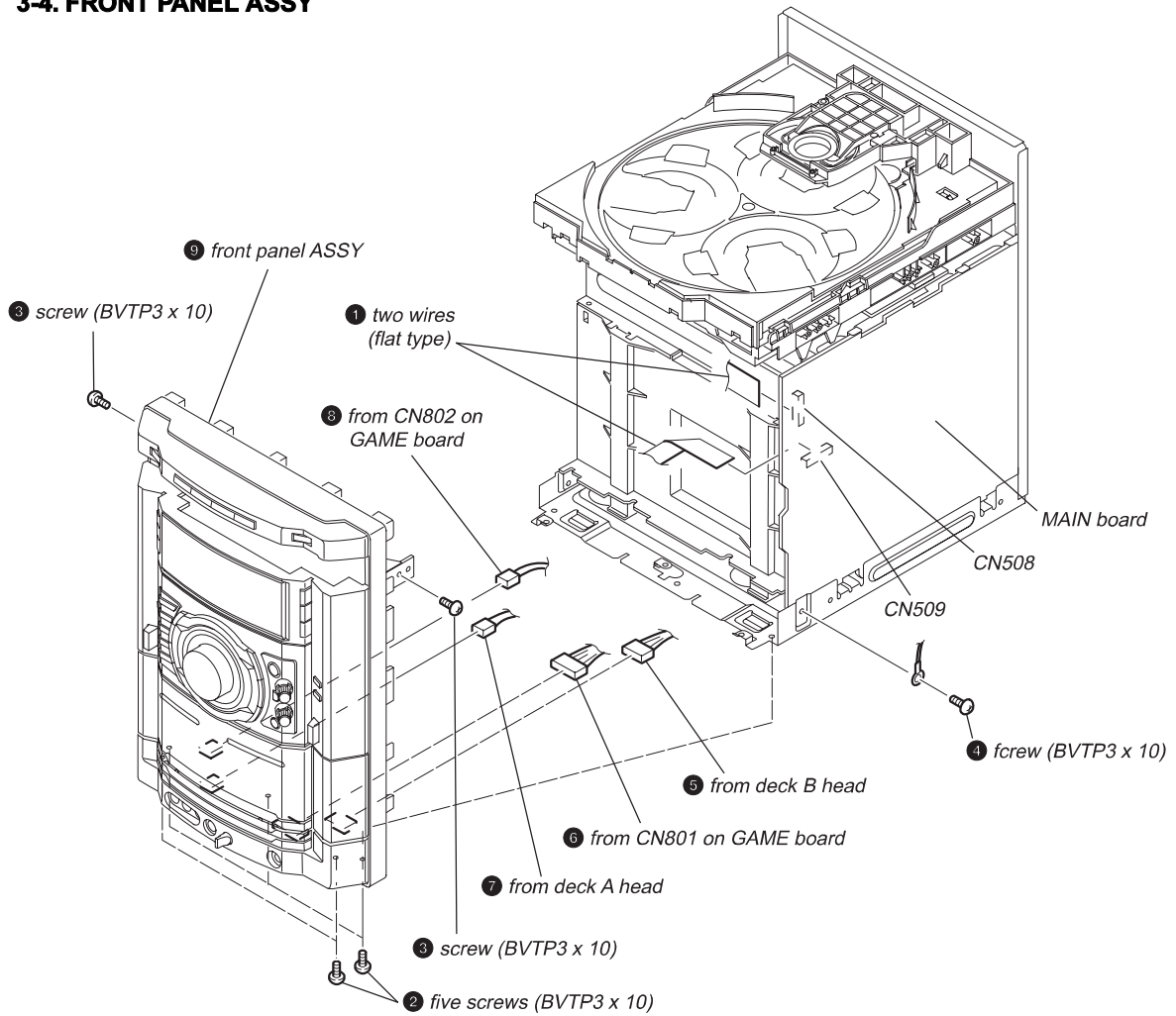
3-2. CASE



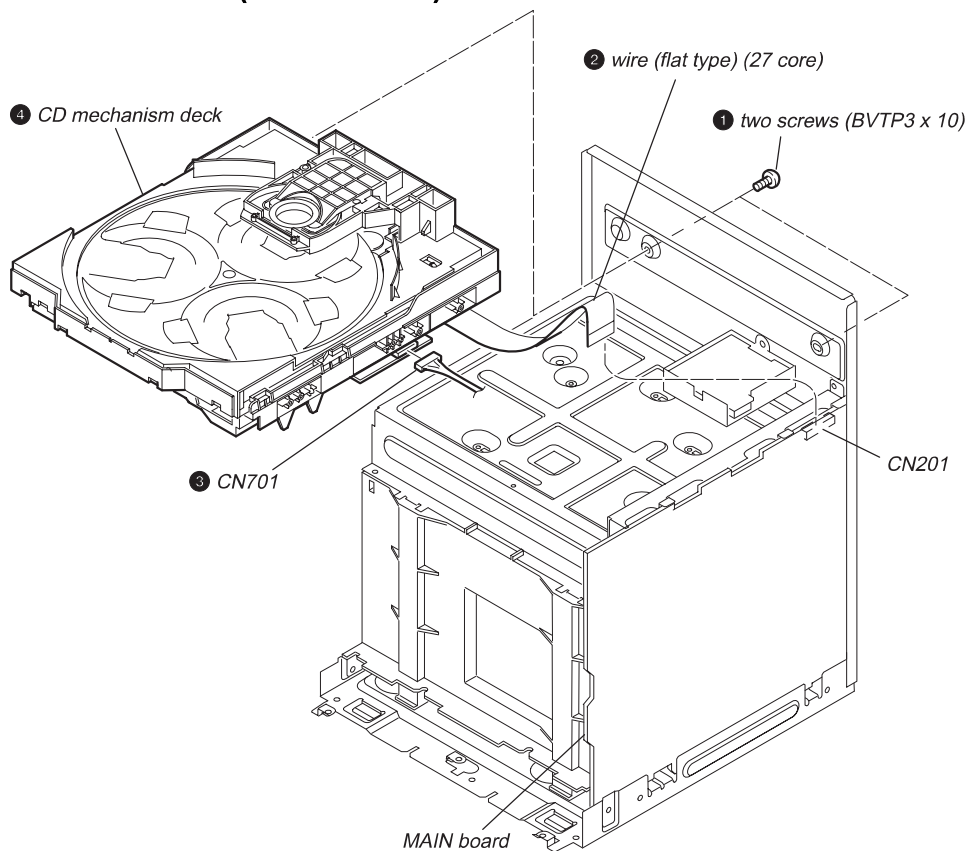
3-3. LOADING PANEL ASSY



3-4. FRONT PANEL ASSY

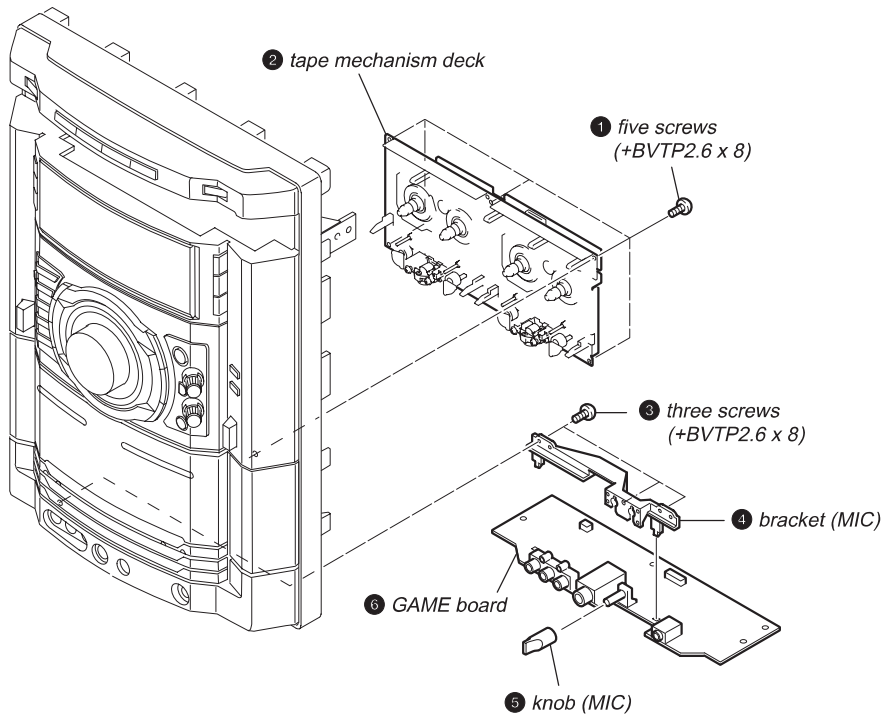


3-5. CD MECHANISM DECK (CDM74-F1BD81)

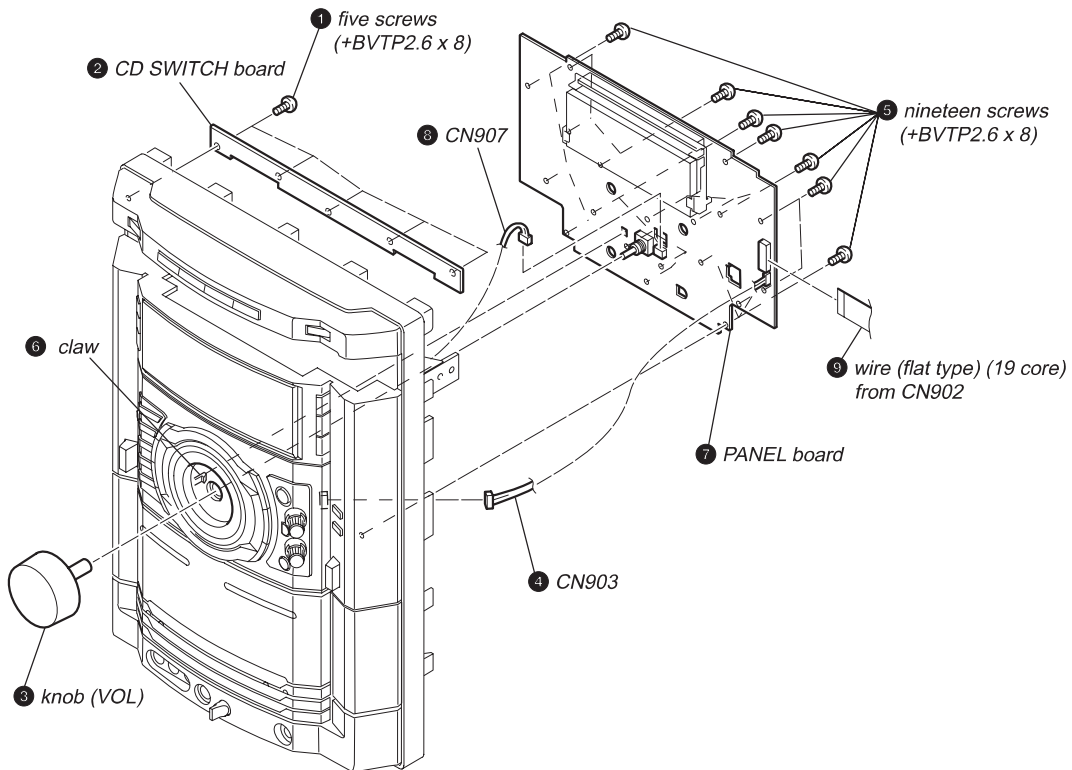


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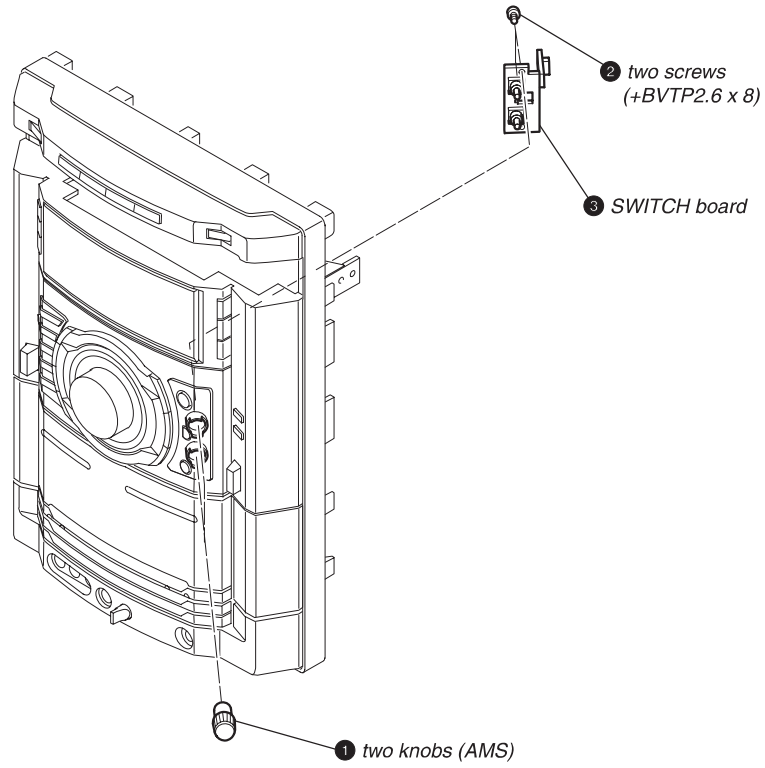
3-6. TAPE MECHANISM DECK, GAME BOARD



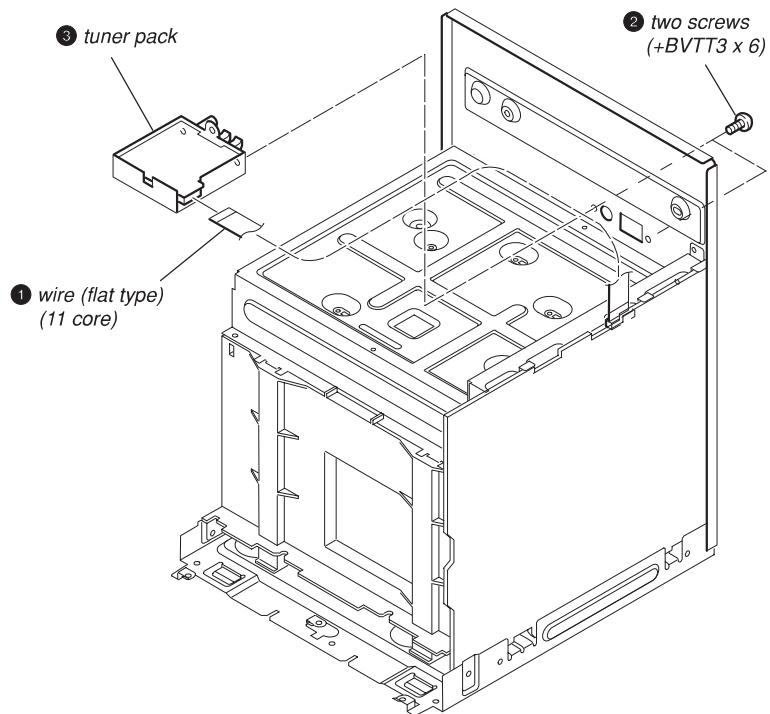
3-7. CD SWITCH BOARD, PANEL BOARD



3-8. SWITCH BOARD

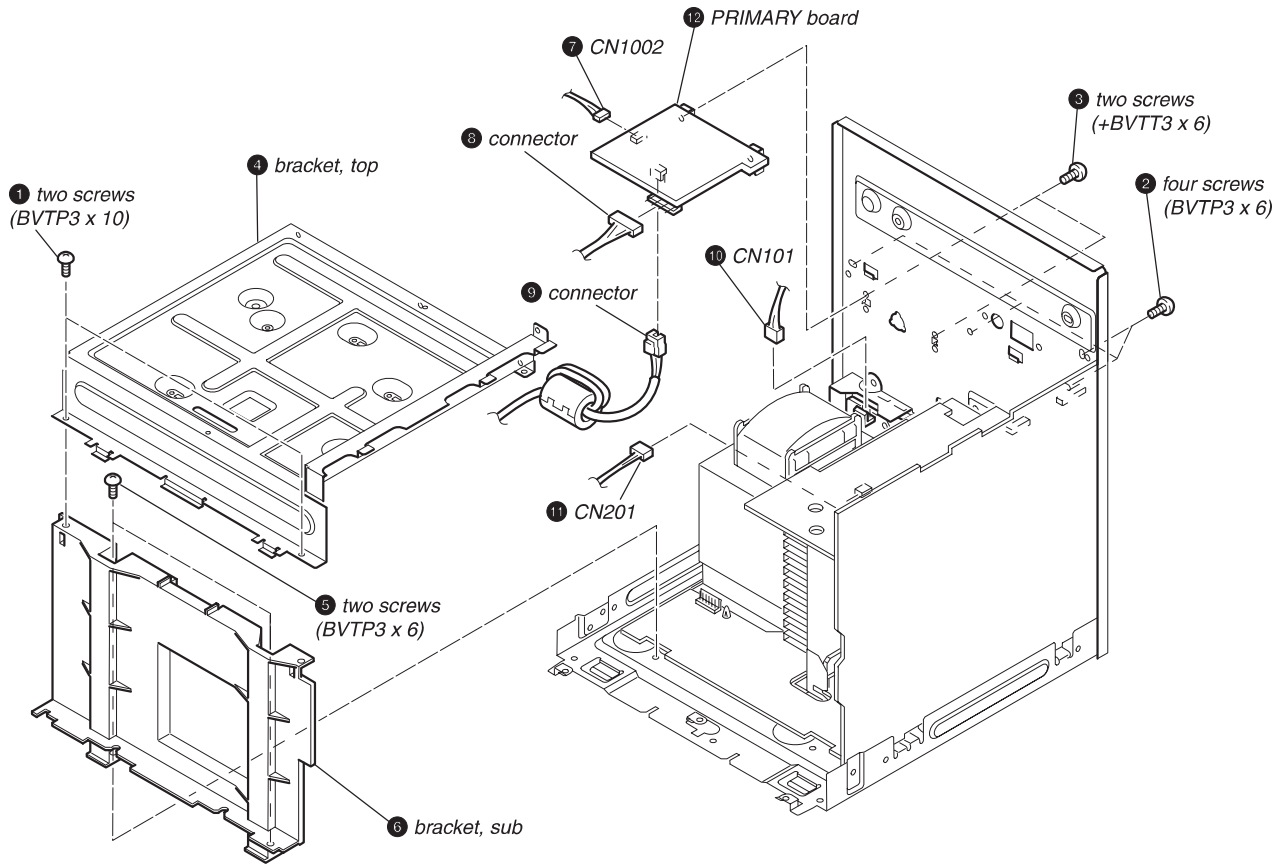


3-9. TUNER PACK

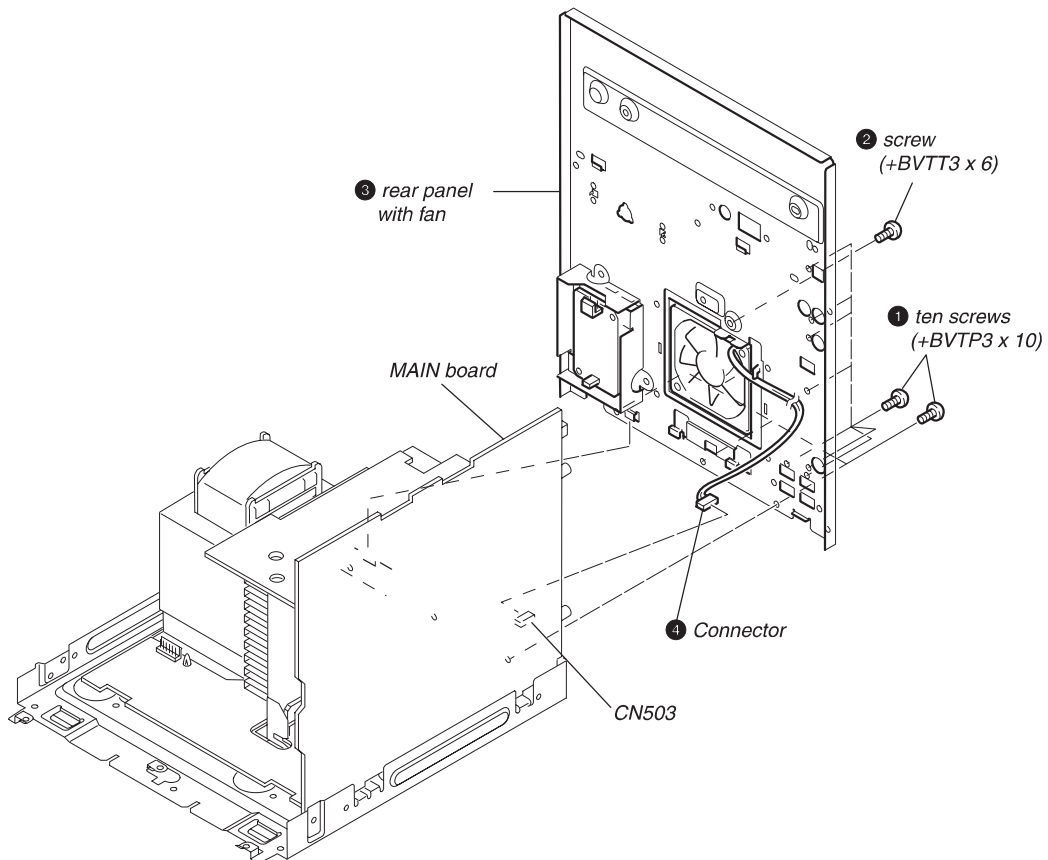


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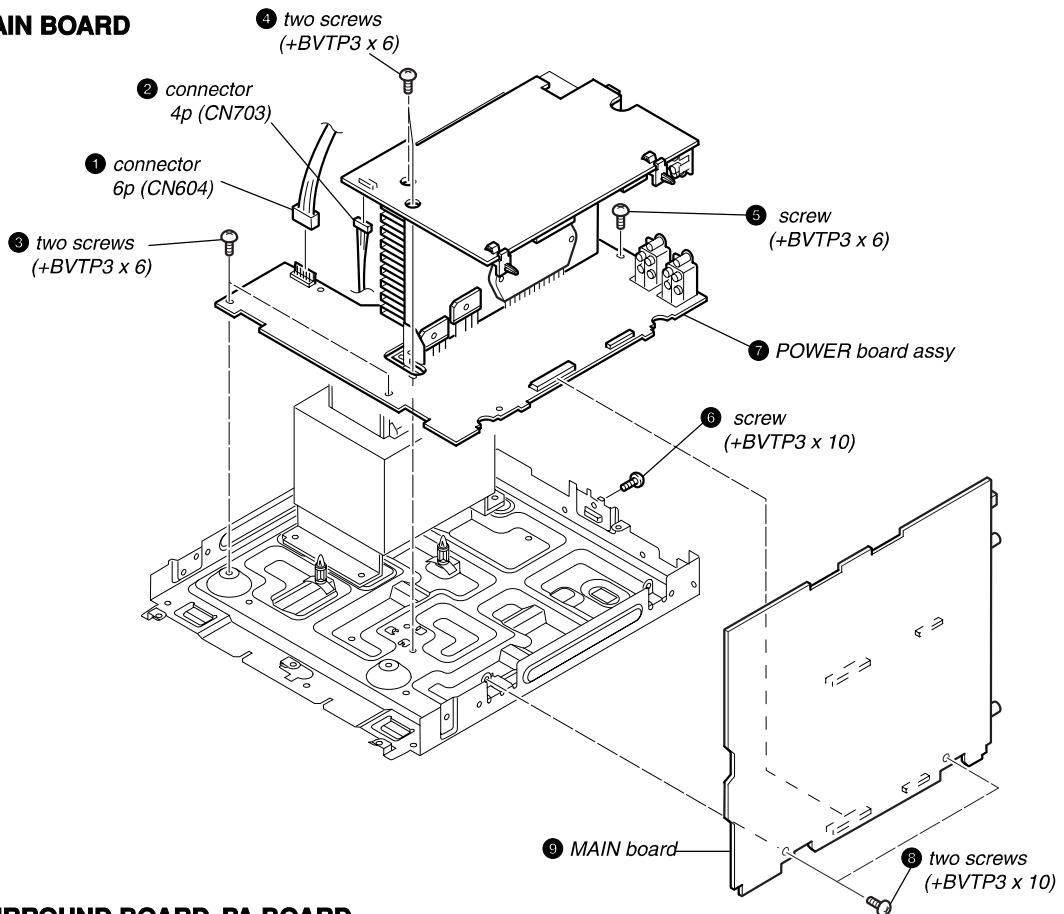
3-10. PRIMARY BOARD



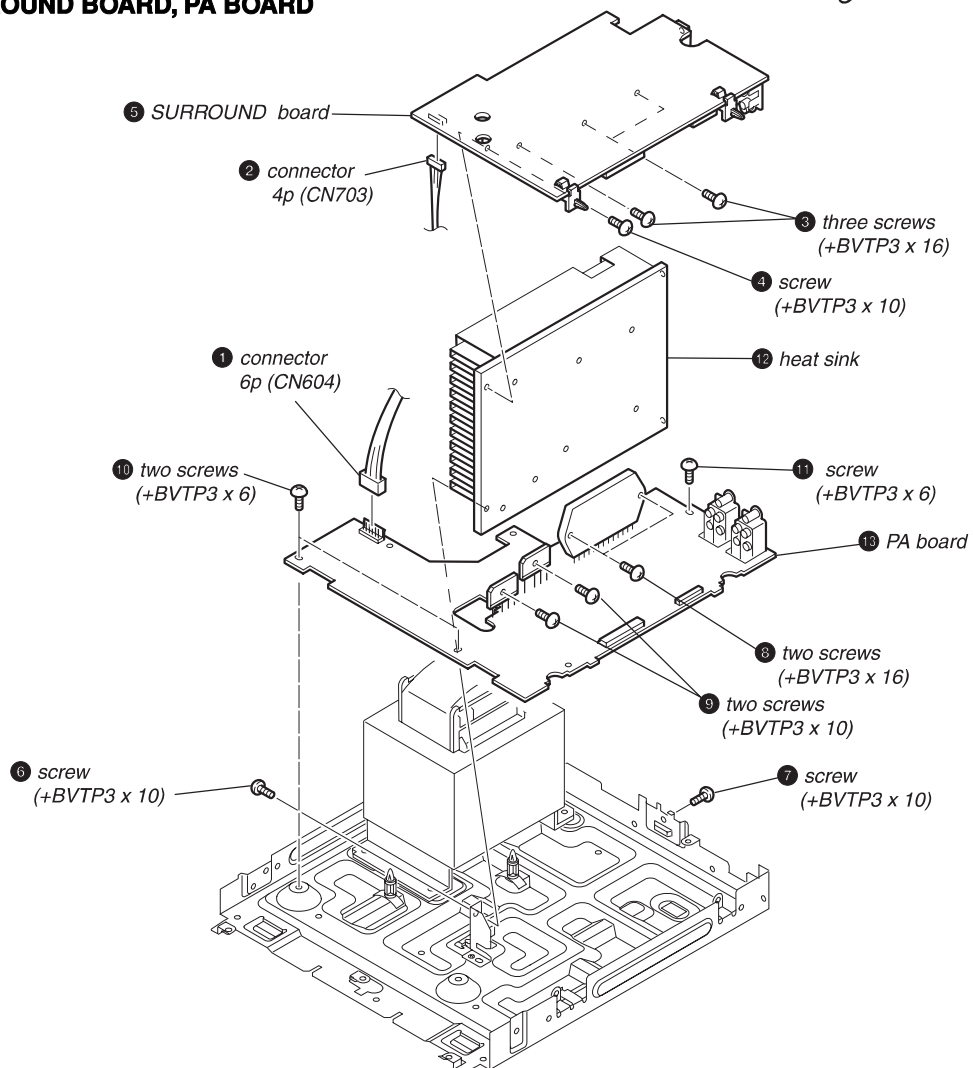
3-11. REAR PANEL



3-12. MAIN BOARD

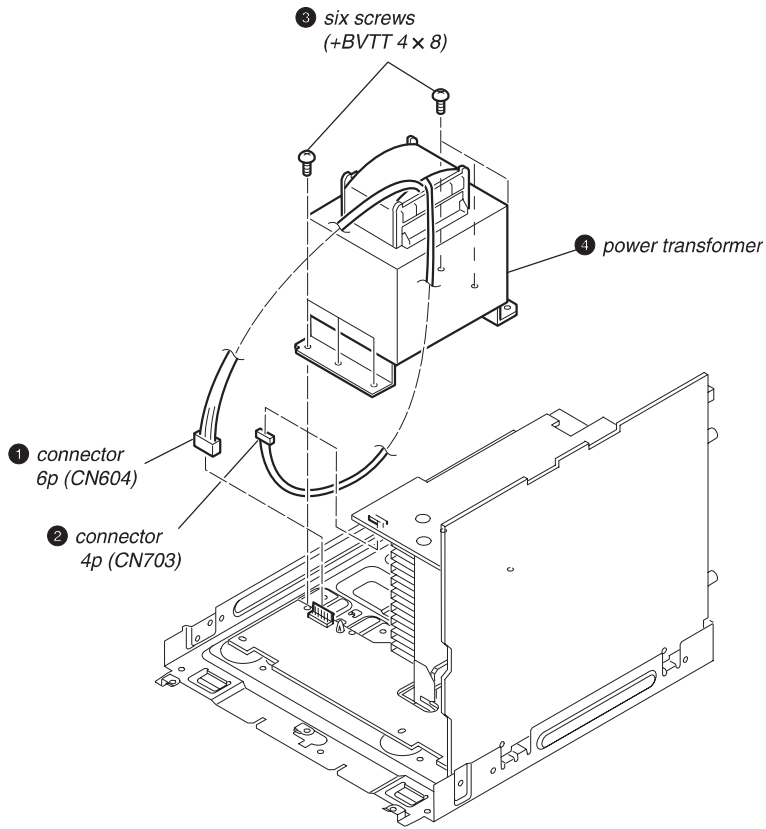


3-13. SURROUND BOARD, PA BOARD

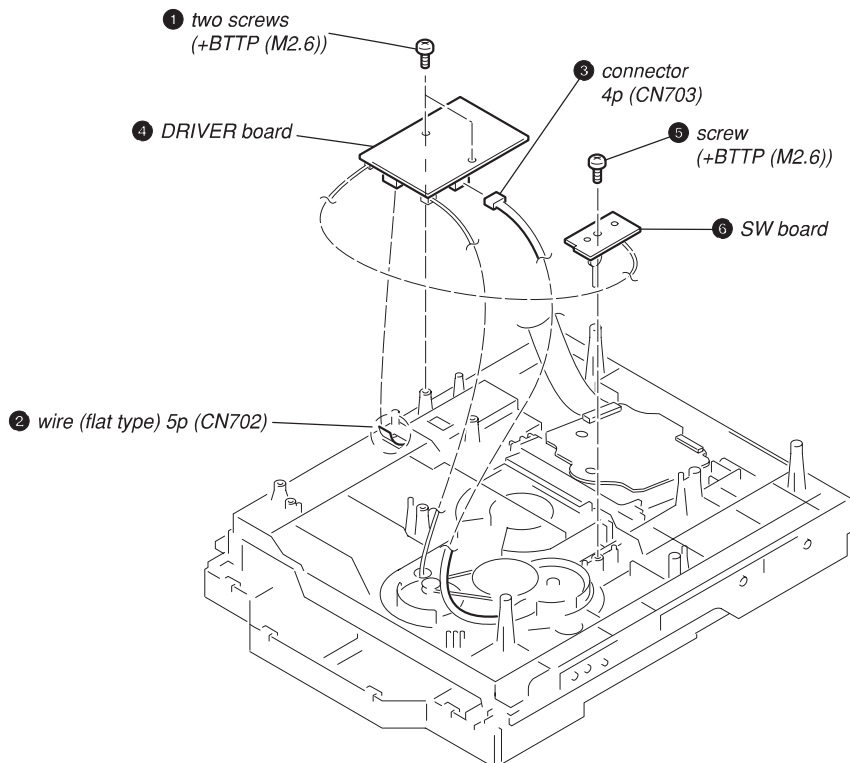


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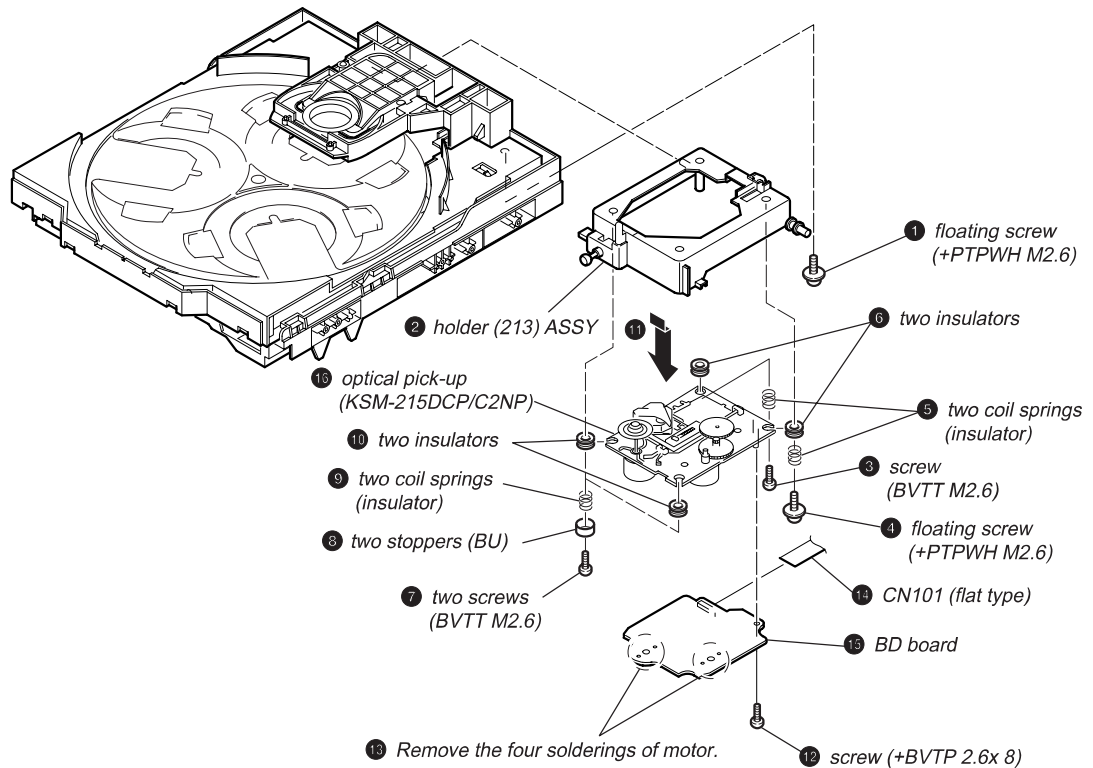
3-14. POWER TRANSFORMER



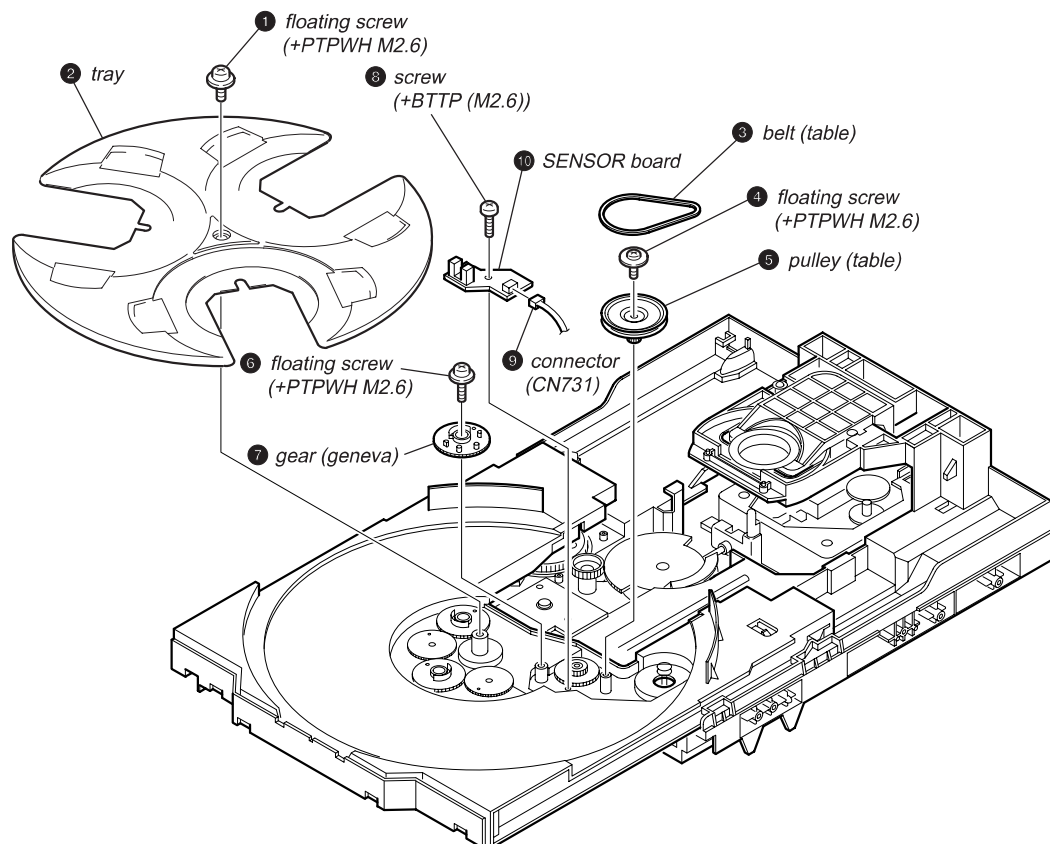
3-15. DRIVER BOARD, SW BOARD



3-16. BD BAORD, OPTICAL PICK-UP (KSM-215DCP/C2NP)

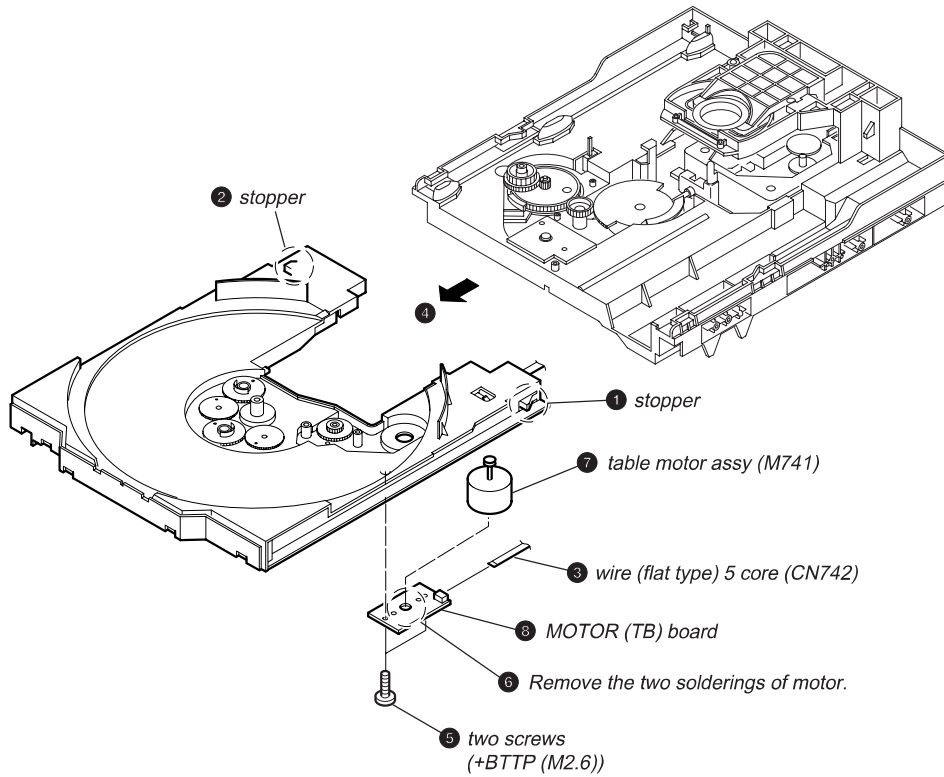


3-17. SENSOR BOARD

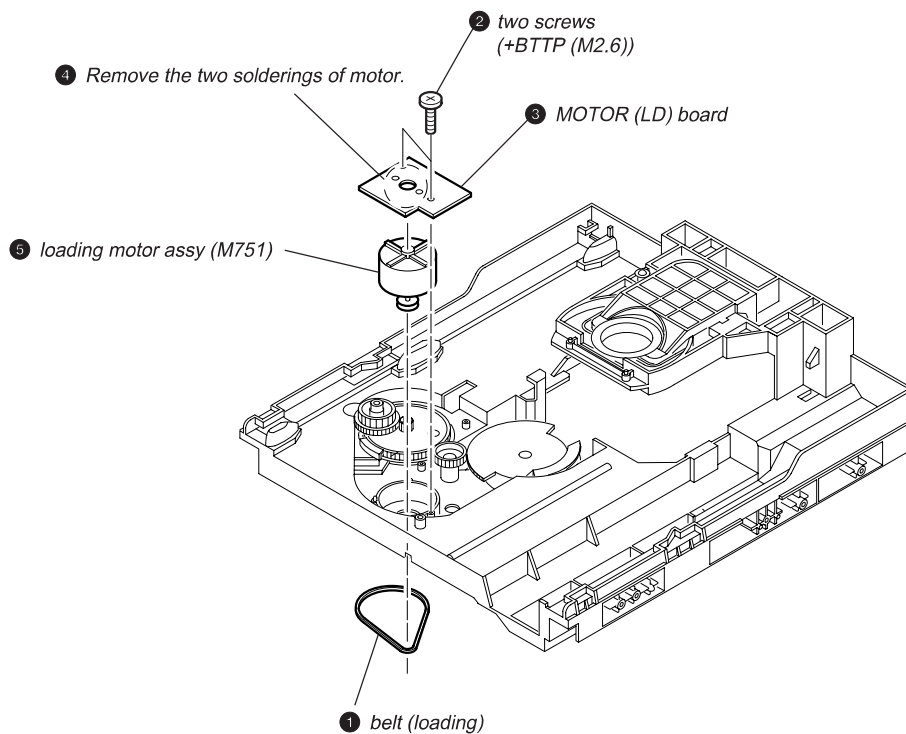


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3-18. MOTOR (TB) BOARD



3-19. MOTOR (LD) BOARD



SECTION 4 TEST MODE

[GC TEST MODE]

- This mode is used to check the fluorescent indicator tube, LED, model, destination, software version, volume, key jog, encoder and VACS level.

Procedure:

- Press button, button and button simultaneously.
- All LEDs and segments in fluorescent indicator tube are lighted up.
- When you want to enter the software version display mode, press button. The model and destination are displayed.
- Each time button is pressed, the display changes from MC version, GC version, CD version, CDDM version, CDMA version, CDMB version, BDA version, BDB version, ST version, TA version, TM version and TC version in this order, and returns to the MC version display.
- When button is pressed while the version numbers are being displayed except model and destination, the date of the software creation appear. When button is pressed again, the display returns to the software version display. When 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.
- Press button, the key check mode is activated.
- In the key check mode, the fluorescent indicator tube displays "K 0 J 0 V 0 E 0".
Each time a button is pressed, "K" value increases. However, once a button has been pressed, it is no longer taken into account.
"J" value increases in the manner of 0,1, 2, 3 ... if knob is turned clockwise, or it decreases in the manner of 0, 9, 8, 7 ... if knob is turned counter-clockwise.
"V" value increases in the manner of 0,1, 2, 3 ... if knob is turned clockwise, or it decreases in the manner of 0, 9, 8, 7 ... if knob is turned counter-clockwise.
"E" value increases in the manner of 0,1, 2, 3 ... if knob is turned clockwise, or it decreases in the manner of 0, 9, 8, 7 ... if knob is turned counter-clockwise.
- When button is pressed after all LEDs and segments in fluorescent indicator tube light up, the fluorescent indicator tube displays "VACS A+B APCC". A is VACS level which is trigger by signal level, B is VACS level which is trigger by temperature and CC is VACS level which is trigger by APVACS (Abuse Protection VACS).
- When button is pressed after all LEDs and segments in fluorescent indicator tube light up, alternate segments in fluorescent indicator tube would light up. If you press button again, another half of alternate segments in fluorescent indicator tube would light up. Pressing button again would case all segments lights up.
- To release 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, Tuner, and Tape.

Procedure:

* To enter MC Test Mode

- Press button, button and button simultaneously.
- The CD ring indicators TAPE A and TAPE B indicators flash on the fluorescent indicator tube. The function is changed to VIDEO.

* Check of Amplifier

- Press button repeatedly until a message "GEQ MAX" appears on the fluorescent indicator tube. GEQ increases to its maximum.
- Press button repeatedly until a message "GEQ MIN" appears on the fluorescent indicator tube. GEQ increases to its minimum.
- Press button repeatedly until a message "GEQ FLAT" appears on the fluorescent indicator tube. GEQ set to flat.
- When the knob is turned clockwise even slightly, the sound volume increases to its maximum and a message "VOLUME MAX" appears.
- When the knob is turned counter-clockwise even slightly, the sound volume decreases to its minimum and a message "VOLUME MIN" appears.

* Tape function

- When a tape is inserted in Deck B and recording is started, the function is changed to VIDEO automatically. When button is pressed during recording in function, ALC (Automatic Logic Control) is turned on.
- During recording, turn knob to counter clockwise rotation will change the function to TAPE B and rewind Tape B until the recording start position and playback of Tape B is started. If the button is pressed for a pause and pressed again to resume recording during recording time, when tape deck B is rewind, tape deck B will be rewind until the position where the pause is applied.

* AMS Test Mode

- Select the function "TAPE A" or "TAPE B".
- Select Loop or Relay direction mode by pressing the button. Insert a test tape AMS-110A or AMS-120 to selected tape deck.
- Press the button to enter the AMS test mode.
- After the test tape is rewind to the beginning of the tape, the AMS+ is checked, and the mechanism is shut off after detecting the AMS signal twice.
- Then the AMS- is checked and the mechanism is shut off after detecting the AMS signal twice.
- When the check is complete, a message of either OK or NG appears.

* To release MC Test mode.

- To release this mode, press button.
- 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:



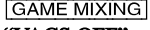
- Press button, button, and button simultaneously.
- The fluorescent indicator tube becomes blank for a while, and the set is reset.

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[VACS ON/OFF]

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






Procedure:

1. Press  button to turn the set ON.
2. Press  button and  button simultaneously. The message “VACS OFF” or “VACS ON” appears.

[TUNER STEP CHANGE]

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







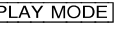

Procedure:

1. Press  button to turn the set ON.
2. Press  button to select the “AM”.
3. Press  button to turn the set OFF.
4. Press  button and  button simultaneously. The system will turn ON automatically. The message “AM 9k STEP” or “AM 10k STEP” appears 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:


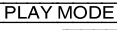





1. Press  button to turn the set ON.
2. Select CD function.
3. Press ,  button, and  button simultaneously.
4. The CD service mode is activated. The message “SERVICE MODE” appears.
5. With the CD in stop status, turn  knob to clockwise rotation to move the optical pick-up to outside track, or turn  knob to counterclockwise rotation to move to inside track. The message “SLED OUT” or “SLED IN” appears.
6. To turn on or off the laser, press  button. The message “LASER ON” or “LASER OFF” appears on the fluorescent indicator tube.
7. To release this mode, press  button.

[AGING MODE]

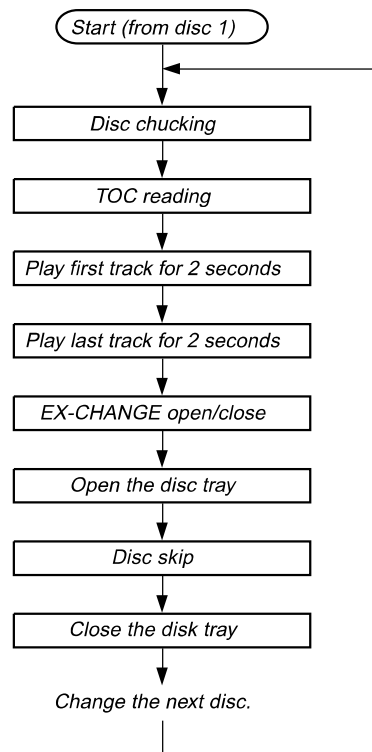
This mode can be used for operation check of CD section.

- If an error occurs, the aging operation would stops and the status is displayed.
- If there are no error occurs, the aging operation would continues repeatedly.

Procedure:

1. Press  button to turn the set ON
2. Select CD function.
3. Load three discs on the disc tray.
4. Press  button to select the “ALL DISCS” mode, and press the  button to select “REPEAT OFF” mode.
5. Press ,  button, and  button simultaneously.
6. Aging operation is started.
7. To release this mode, press  button or disconnect the power cord to turn the power OFF.

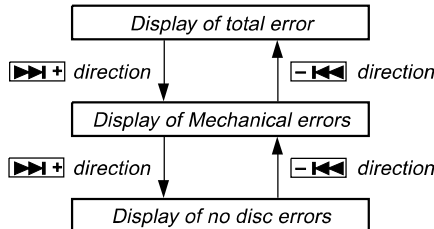
Aging mode sequence:



• **Display when an error occurred (CD Error Code Mode)**

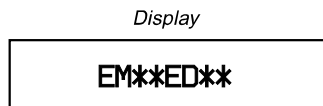
Procedure:

1. Press **[]** button, **[ENTER]** button and **[DISC 1]** button simultaneously to enter the error code display mode.
2. The fluorescent indicator tube displays the number of total error.
3. Each time **[◀▶]** knob is rotated, display change as below.



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

1) Display of total error



EM**: The number of mechanical errors.

ED**: The number of no disc errors after chucking the disc.

2) Display of mechanical errors



M*: The number of mechanical error ("00" is latest one)

(Rotate **[◀▶]** knob in the direction of either 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

3) Display of no disc errors



D*: The number of mechanical error ("00" is latest one)

(Rotate **[◀▶]** knob in the direction of either to display next error)

\$\$: Error type

- 01: Focus error
- 02: GFS error
- 03: Setup error

%%: Not used

&&:

- 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)

[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:

1. Press **[I/O]** button to turn the set ON.
2. Select CD function.
3. Press **[]** button, **[EQ EDIT]** button and **[CD]** button simultaneously to enter the CD repeat 5 limit off mode and the fluorescent indicator tube displays "LIMIT OFF".
4. To release 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:




1. Press **[I/O]** button to turn the set ON.
2. Select CD function.
3. Press **[]** button, **[ENTER]** button and **[GAME]** button simultaneously. The set will power off automatically.
4. After the "STANDBY" blinking display finish, a message "LOCK" is displayed on the fluorescent indicator tube and the CD ship mode is set.

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[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:

1. Press  button to turn the set ON.
2. Select CD function.
3. Press  button and  button simultaneously. The set will power off automatically.
4. After the "STANDBY" blinking display finish, a message "LOCK" is displayed on the fluorescent indicator tube and the CD ship mode is set.


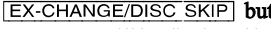
[CD POWER MANAGE]

- 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:

1. Press  button to turn the set ON.
2. Select CD function.
3. Press  button to turn the set OFF.
4. Press  button and  button simultaneously. The set will power on automatically.
5. 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 trays. When this mode is activated, the disc tray will not open when  button or  button is pressed. The message "LOCKED" will be displayed in the will be displayed on the fluorescent indicator tube.




Procedure:

1. Press  button to turn the set ON.
2. Select CD function.
3. Press  button and  button simultaneously and hold down until "LOCKED" or "UNLOCKED" displayed on the fluorescent indicator tube (around 5 seconds).

[VIDEO/MD SWITCHING]

- This mode let you switch from VIDEO to MD and vice-versa.

Procedure:

1. Press  button to turn the set ON.
2. Select VIDEO function.
3. Press  button and  button simultaneously. The function will change to MD. Press the same buttons again to change from MD to VIDEO.

SECTION 5 MECHANICAL ADJUSTMENTS

Precaution

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

Torque Measurement

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

SECTION 6 ELECTRICAL ADJUSTMENTS

DECK SECTION

0 dB=0.775 V

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

- Test Tape

Tape	Signal	Used for
P-4-A100	10 kHz, -10 dB	Azimuth Adjustment

RECORD/PLAYBACK HEAD AZIMUTH ADJUSTMENT

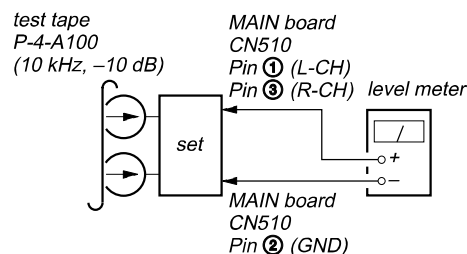
DECK A

DECK B

Note: Perform this adjustments for both decks

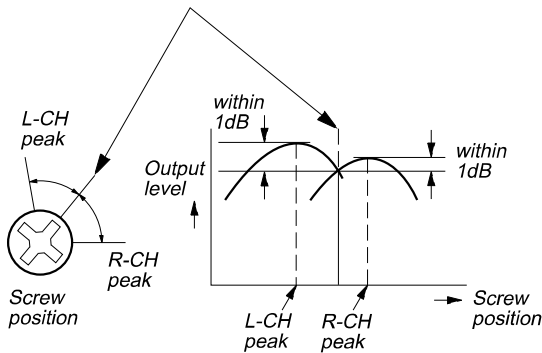
Procedure:

1. Mode: Playback

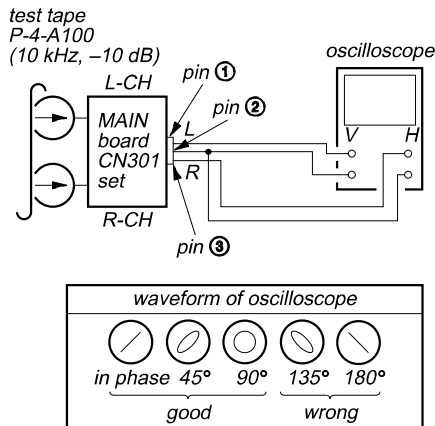


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- Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.

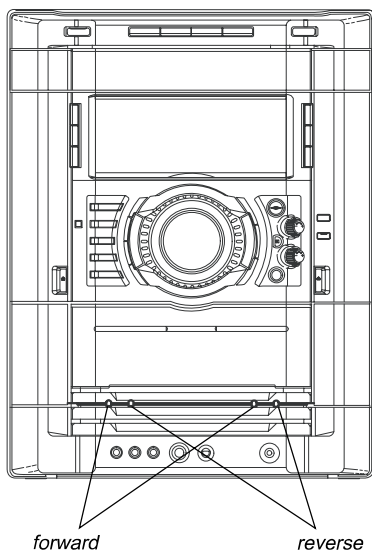


- Mode: Playback



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

Adjustment Location: Playback Head (Deck A).
Record/Playback/Erase Head (Deck B).



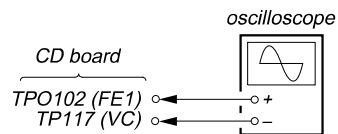
CD SECTION

Note:

- CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
- Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
- Use an oscilloscope with more than 10MW impedance.
- 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

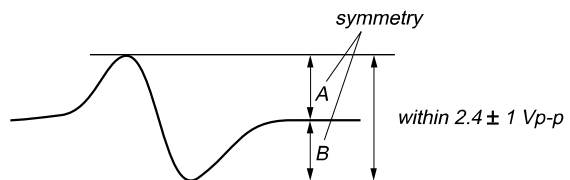
Connection:



Procedure:

- Connect an oscilloscope to test point TPO102 (FE1) and TP117 (VC) on the CD board.
- Turn the power on.
- Put the disc (YEDS-18) in and turned power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out)
- Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within $2.4 \pm 1 V_{p-p}$.

S-curve waveform



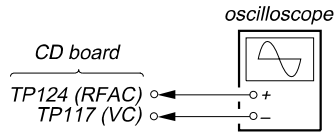
Note:

- 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.

Checking Location: CD board (SIDE B)
(See page 24.)

RFAC Level Check

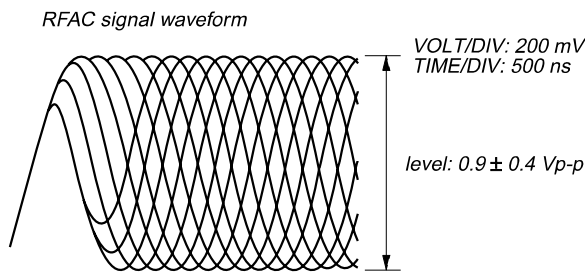
Connection:



Procedure:

1. Connect an oscilloscope to test point TP124 (RFAC) and TP 117(VC) on the CD board.
2. Turn the power on.
3. Put the disc (YEDS-18) in to playback the number five track.
4. Confirm that oscilloscope waveform is clear and check RFAC signal level is correct or not.

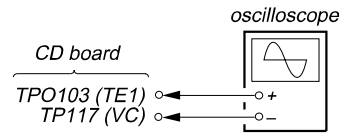
Note: A clear RFAC signal waveform means that the shape “◊” can be clearly distinguished at the center of the waveform.



Checking Location: CD board (SIDE B)
(See page 24.)

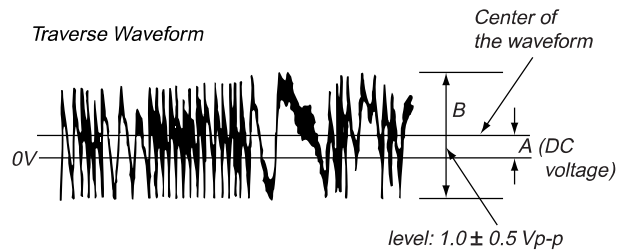
E-F Balance Check

Connection:



Procedure:

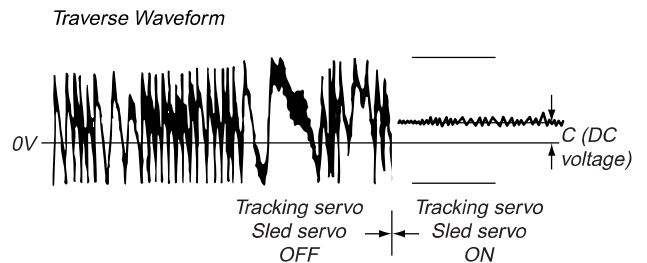
1. Connect an oscilloscope to test point TPO103 (TE1) and TP117 (VC) on the CD board.
2. Turn the power on.
3. Select the function “CD”.
4. Press three buttons of [ENTER], [▶▶], and [SURROUND MODE] simultaneously to set the CD service mode.
5. Put the disc (YEDS-18) in to playback the number five track.
6. Press the [◀◀] button. The message “TRAVERSE” is displayed. (The tracking servo and the sledding servo are turned OFF)
7. Check the level B of the oscilloscope's waveform and the A (DC voltage) of the center of the Traverse waveform.
Confirm the following :
 $A/B \times 100 = \text{less than } \pm 22\%$



8. Press the [◀◀] button. The message “TRAVERSE” is displayed. (The tracking servo and sledding servo are turned ON)
Confirm the C (DC voltage) is almost equal to the A (DC voltage) is step 5.
9. To exit from this mode, perform as follows.
 - 1) Move the optical pick-up to the most inside track.
 - 2) Press three buttons of [■], [CLEAR], and [DISPLAY] simultaneously. (cold reset)

Notes:

- Always move the optical pick-up to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
- Do not run the sled motor excessively, otherwise the gear can be chipped.

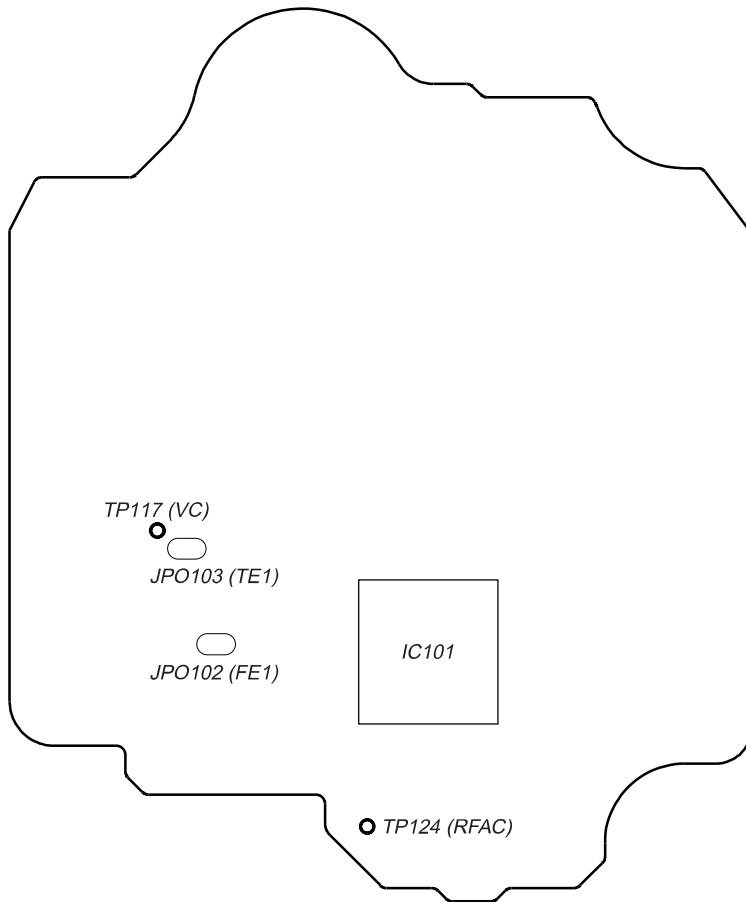


Checking Location: CD board (SIDE B) (See page 24.)

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Checking Location:



– CD BOARD (SIDE B) –
















SECTION 7 DIAGRAMS

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 $1/4\text{W}$ or less unless otherwise specified.
- % : indicates tolerance.
- Δ : internal component.
-  : nonflammable resistor.
-  : fusible resistor.

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



-  : panel designation.
-  : B+ Line.
-  : B- Line.
-  : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark: TUNER (FM/AM)
() : CD PLAY
< > : TAPE PLAY
[] : TAPE REC
* : Impossible to measure
- Voltages are taken with a VOM (Input impedance $10\text{M}\Omega$). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Signal path.
 -  : TUNER (FM/AM)
 -  : TAPE PLAY (DECK A)
 -  : TAPE PLAY (DECK B)
 -  : RECORD
 -  : CD PLAY (ANALOG OUT)
 -  : CD PLAY (DIGITAL OUT)
 -  : GAME IN (AUDIO)
 -  : GAME IN (VIDEO)
 -  : MIC INPUT

• Abbreviation

- AUS : Australian model
- E2 : 120V AC Area in E model
- E3 : 240V AC Area in E model
- E51 : Chilean and Peruvian model
- MX : Mexican model

Note on Printed Wiring Boards:

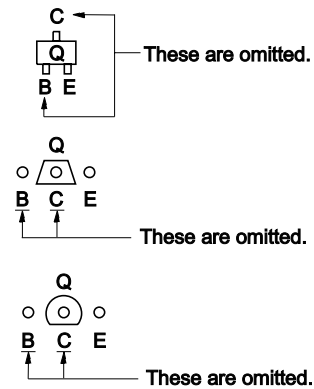
Note:

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

Caution:

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

• Indication of transistor.

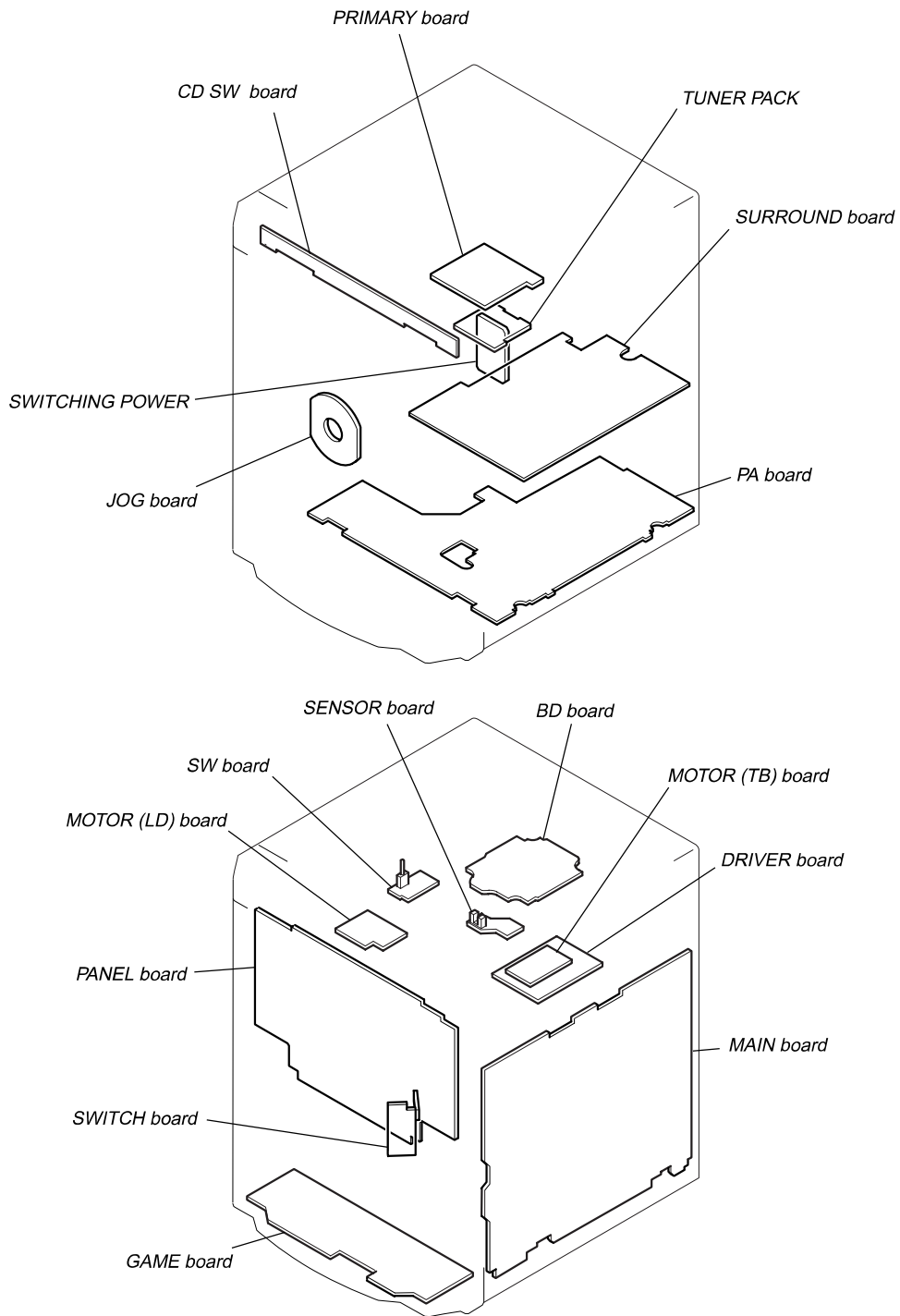


• Abbreviation

- AUS : Australian model
- E2 : 120V AC Area in E model
- E3 : 240V AC Area in E model
- E51 : Chilean and Peruvian model
- MX : Mexican model

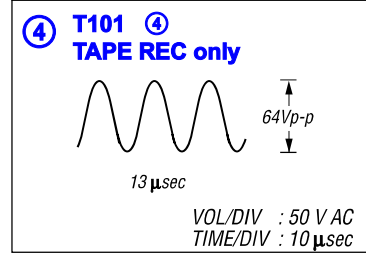
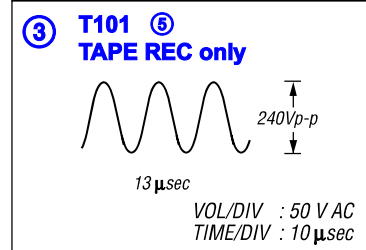
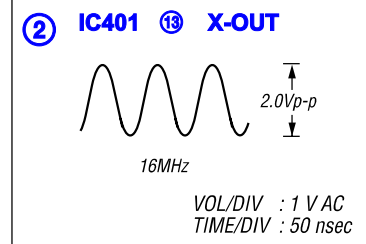
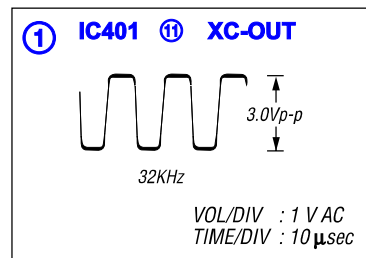
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7-1. CIRCUIT BOARD LOCATION

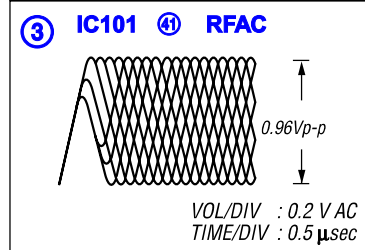
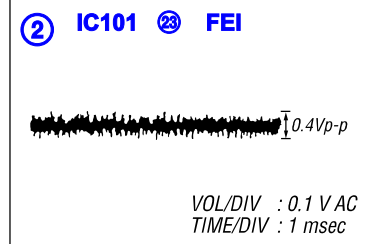
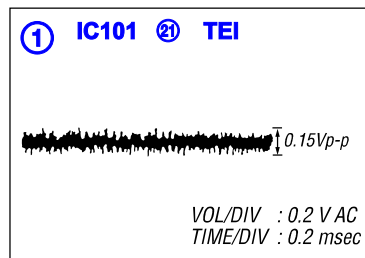


• WAVEFORMS

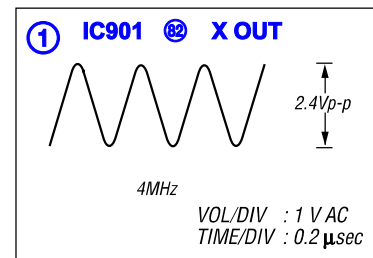
– MAIN BOARD –



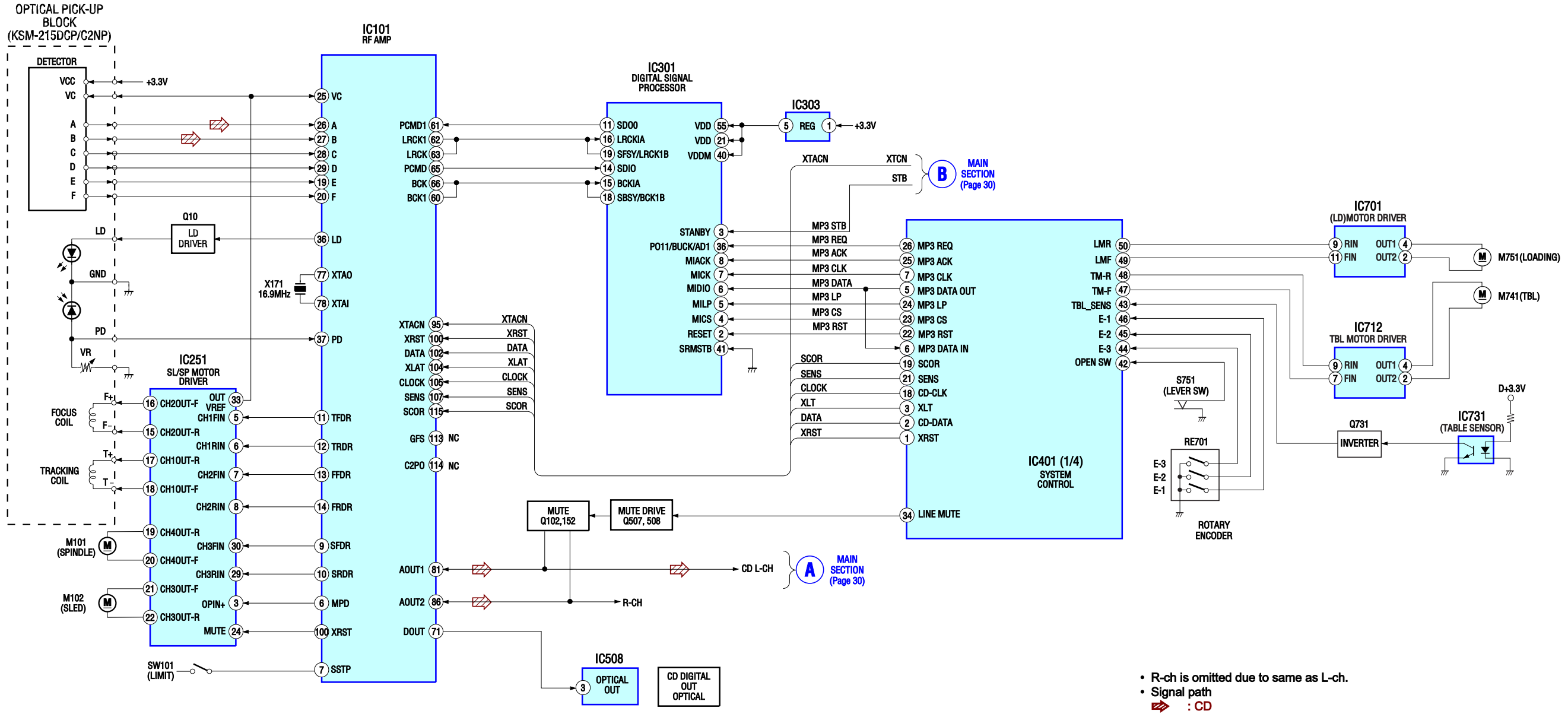
– BD BOARD –



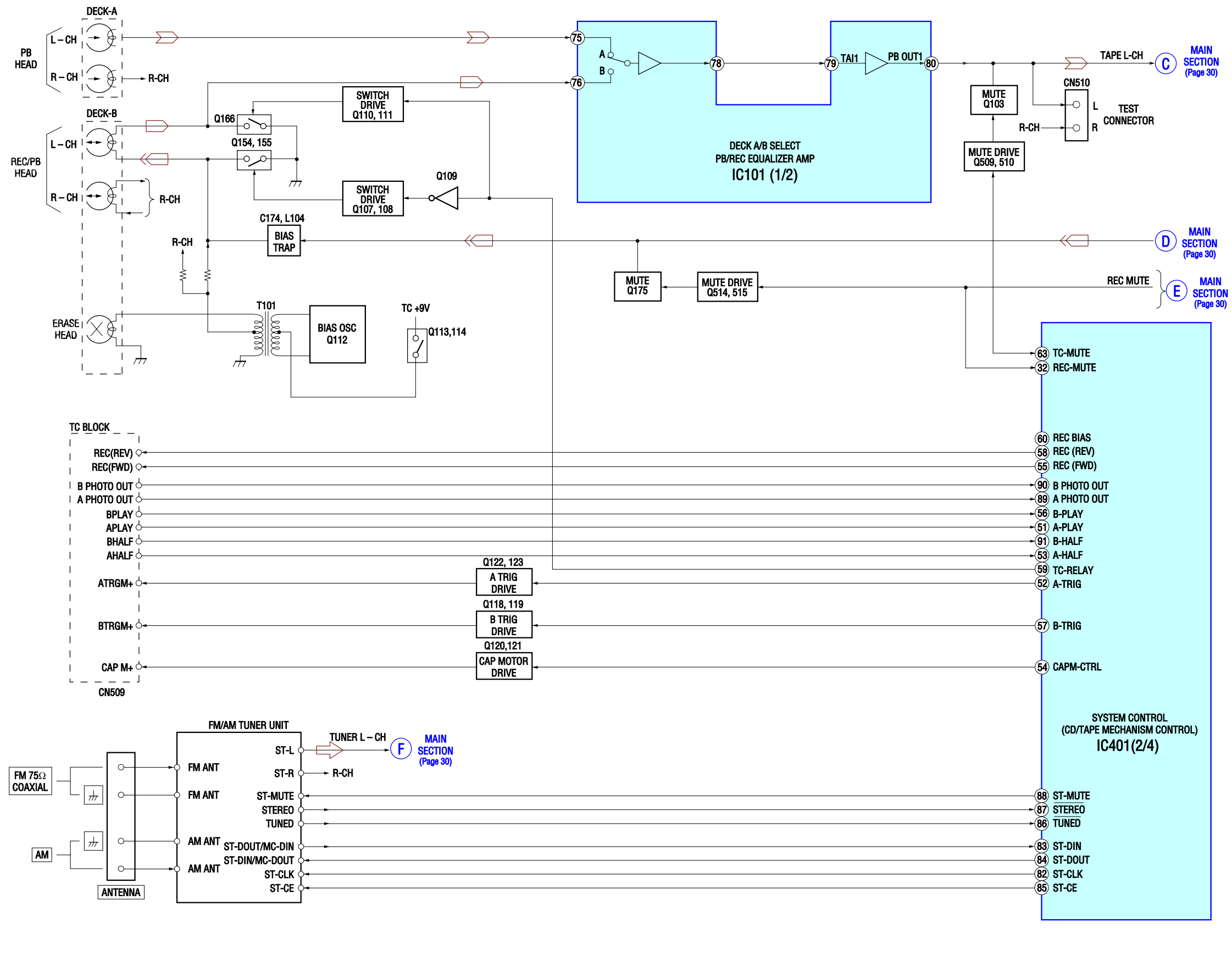
– PANEL BOARD –



7-2. BLOCK DIAGRAM - CD SECTION -

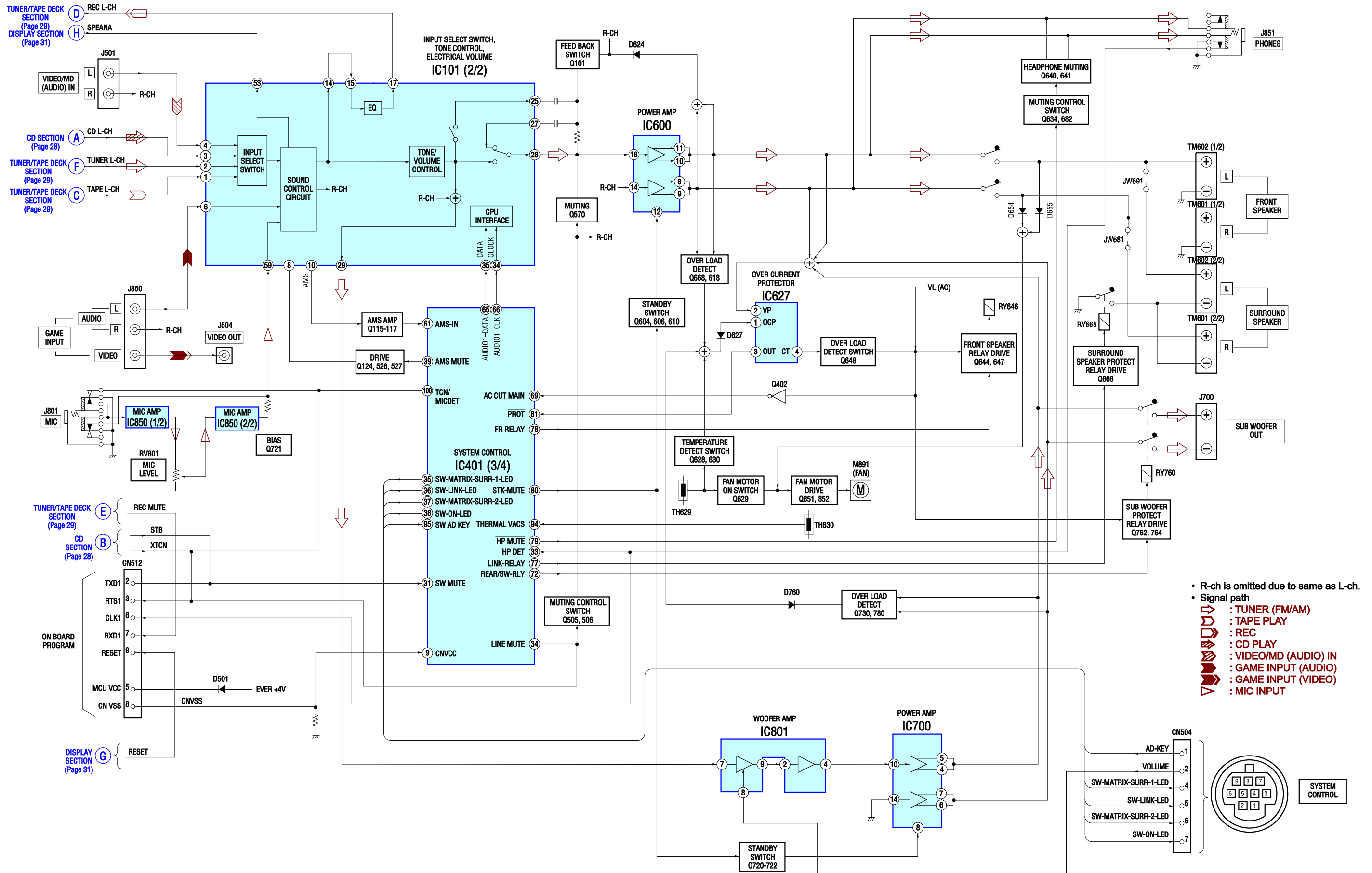


7-3. BLOCK DIAGRAM -TUNER/TAPE SECTION-

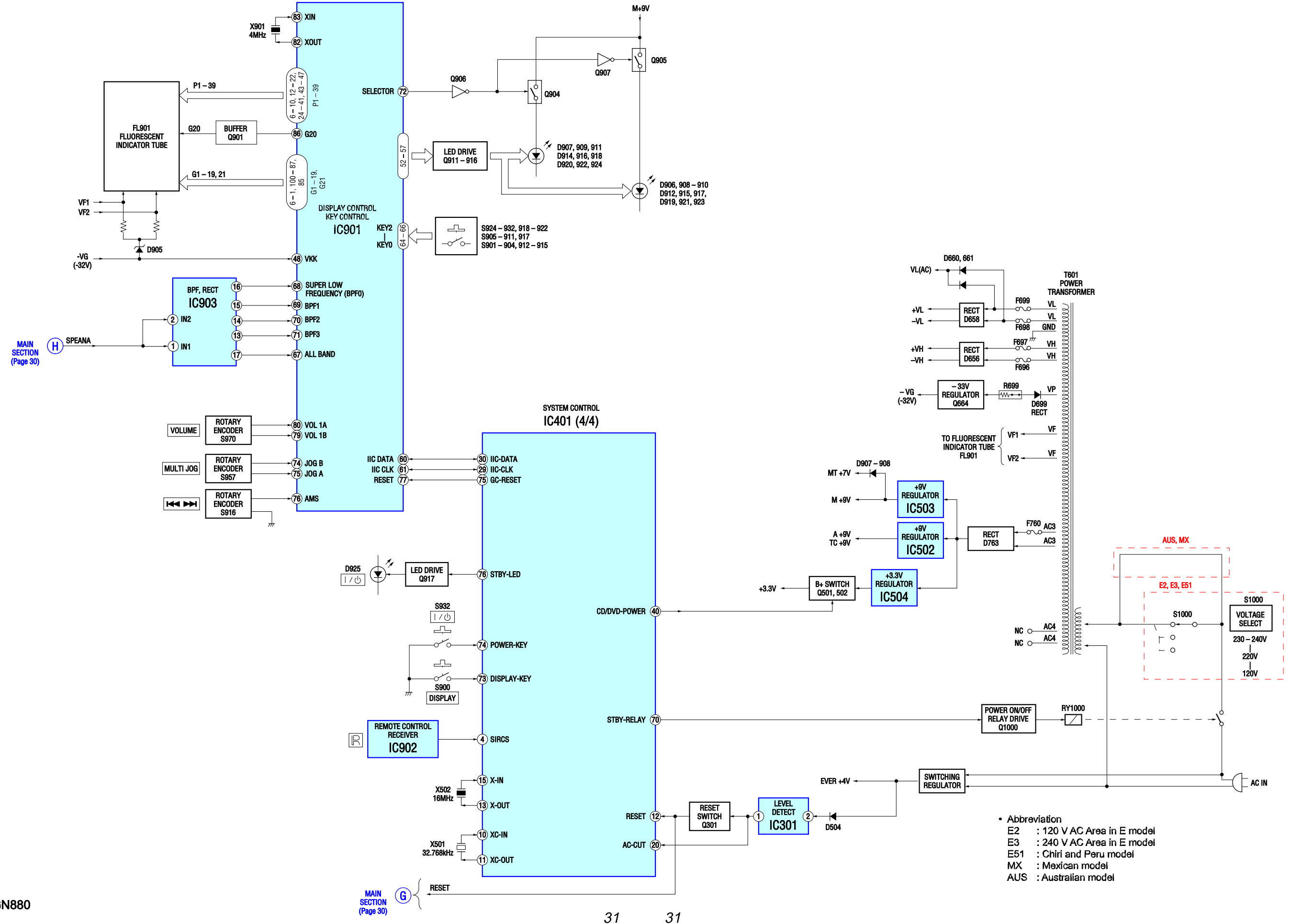


- R-ch is omitted due to same as L-ch.
- Signal path
 - ➡ : TUNER (FM/AM)
 - ➡ : PLAYBACK (DECK A)
 - ➡ : PLAYBACK (DECK B)
 - ➡ : RECORD

7-4. BLOCK DIAGRAM - MAIN SECTION -

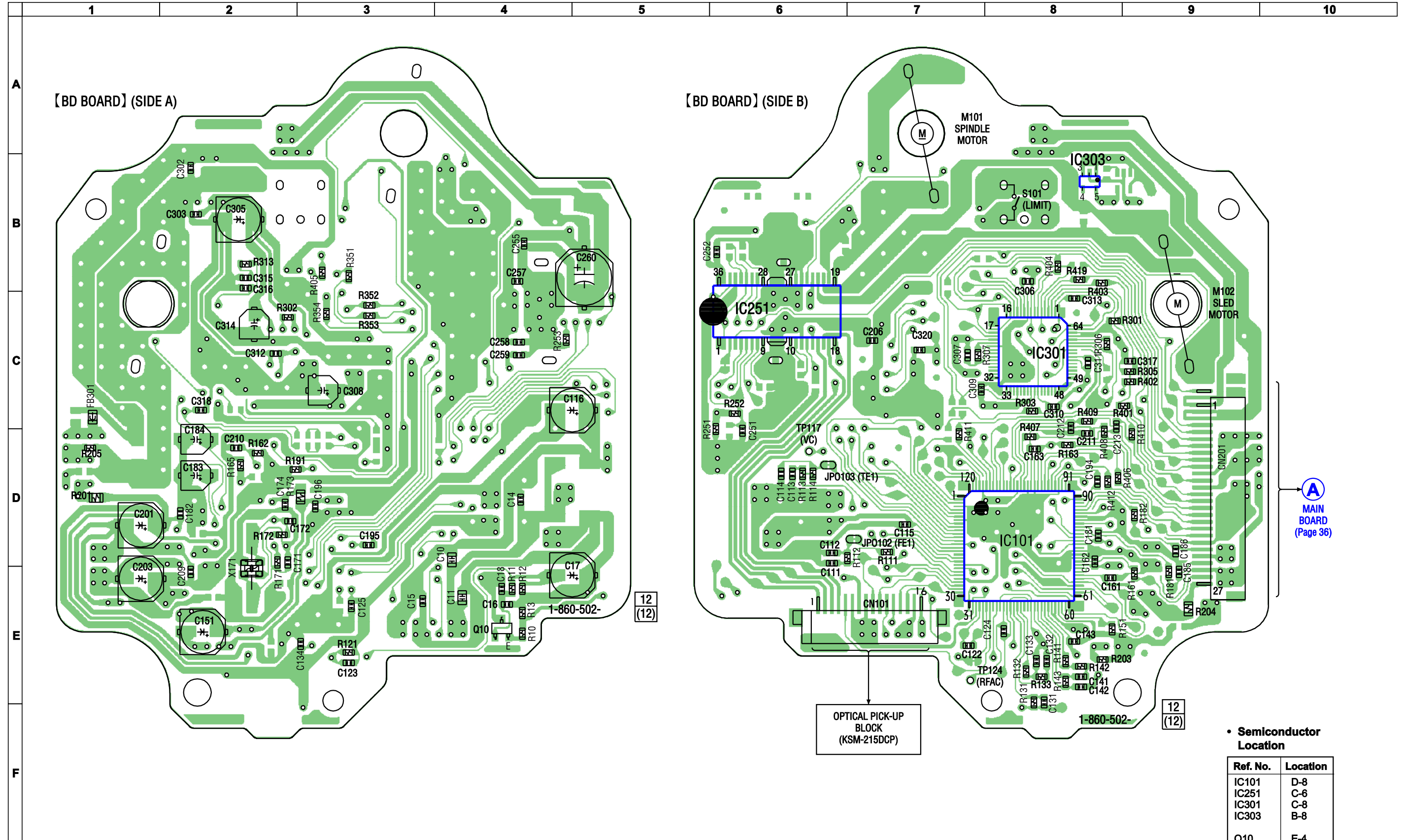


7-5. BLOCK DIAGRAM - DISPLAY/POWER SECTION -



- Abbreviation
- E2 : 120 V AC Area in E model
- E3 : 240 V AC Area in E model
- E51 : Chiri and Peru model
- MX : Mexican model
- AUS : Australian model

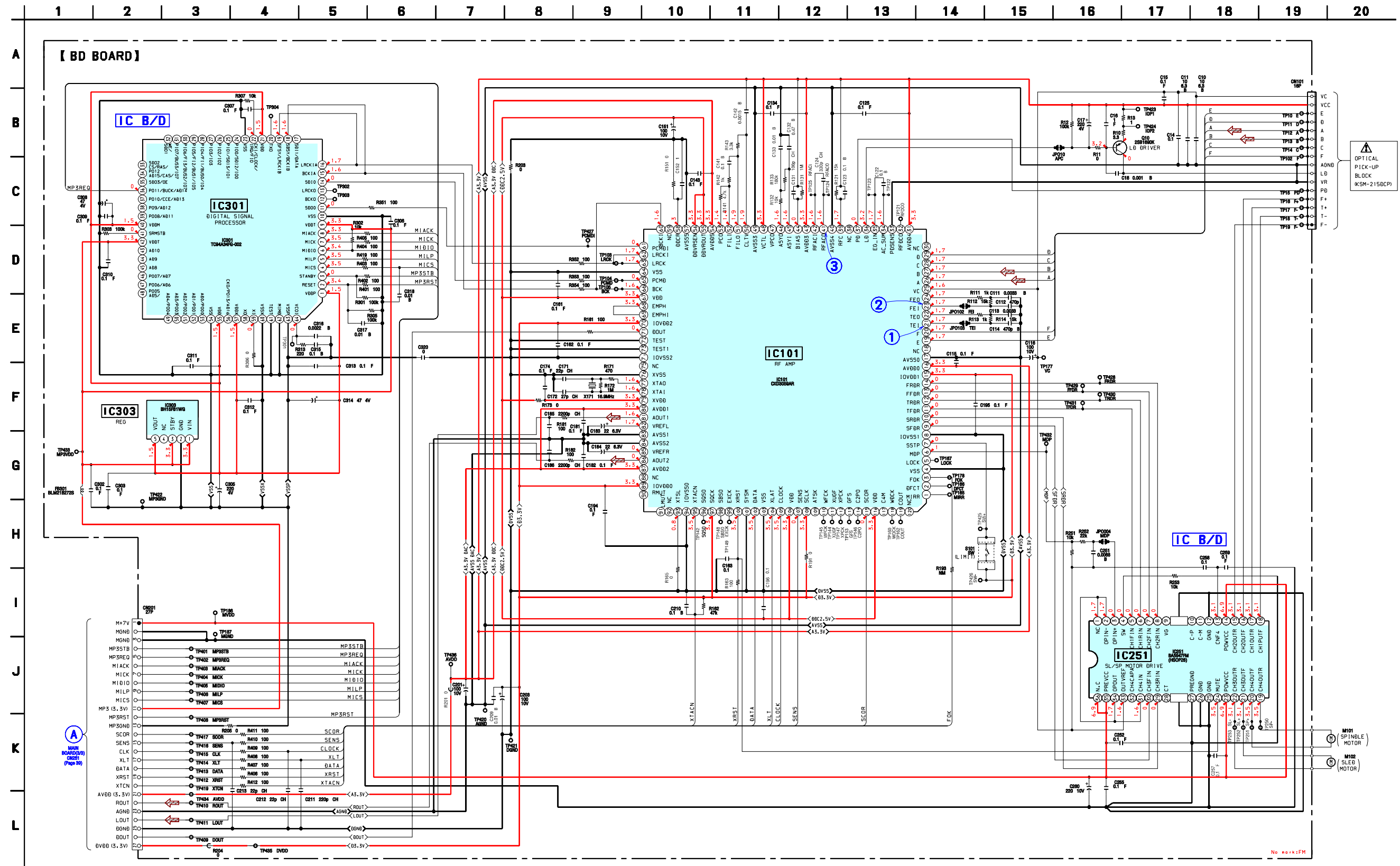
7-6. PRINTED WIRING BOARD – BD SECTION – • See page 26 for Circuit Boards Location.



• Semiconductor Location

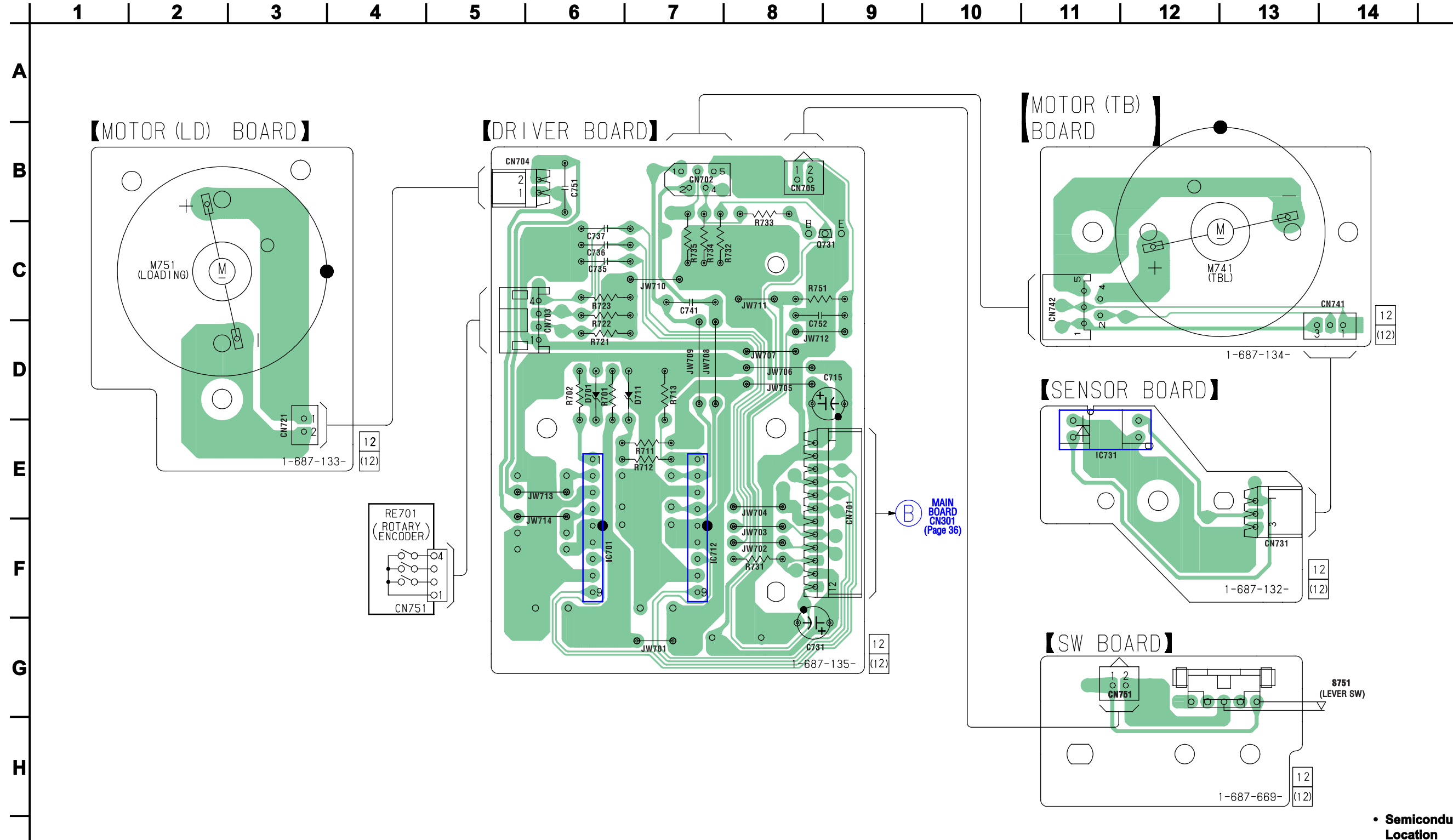
Ref. No.	Location
IC101	D-8
IC251	C-6
IC301	C-8
IC303	B-8
Q10	E-4

7-7. SCHEMATIC DIAGRAM – BD BOARD – • See page 52 for IC Pin Function Description.



7-8. PRINTED WIRING BOARD – CD MECHANISM BOARD –

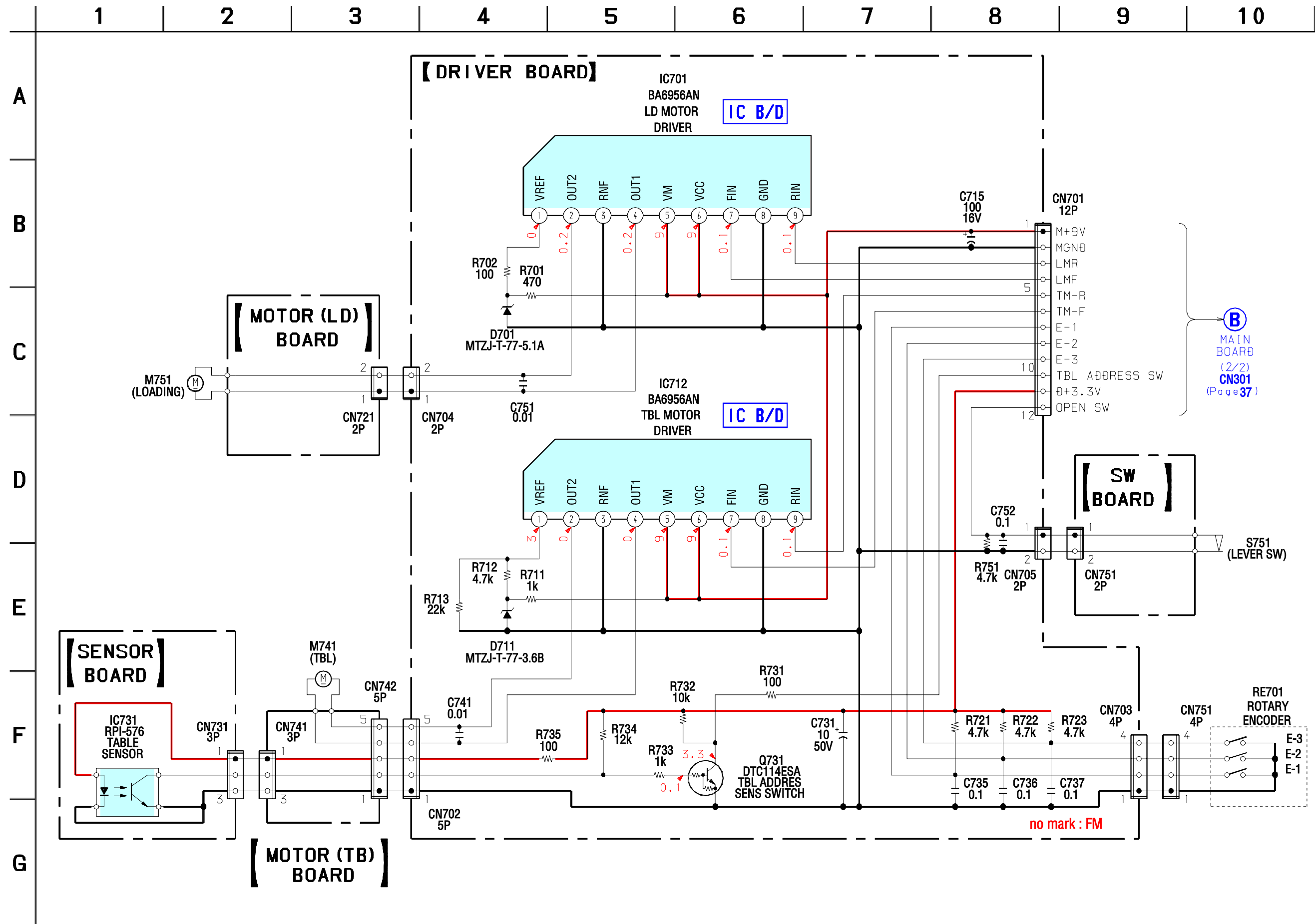
• See page 26 for Circuit Boards Location.



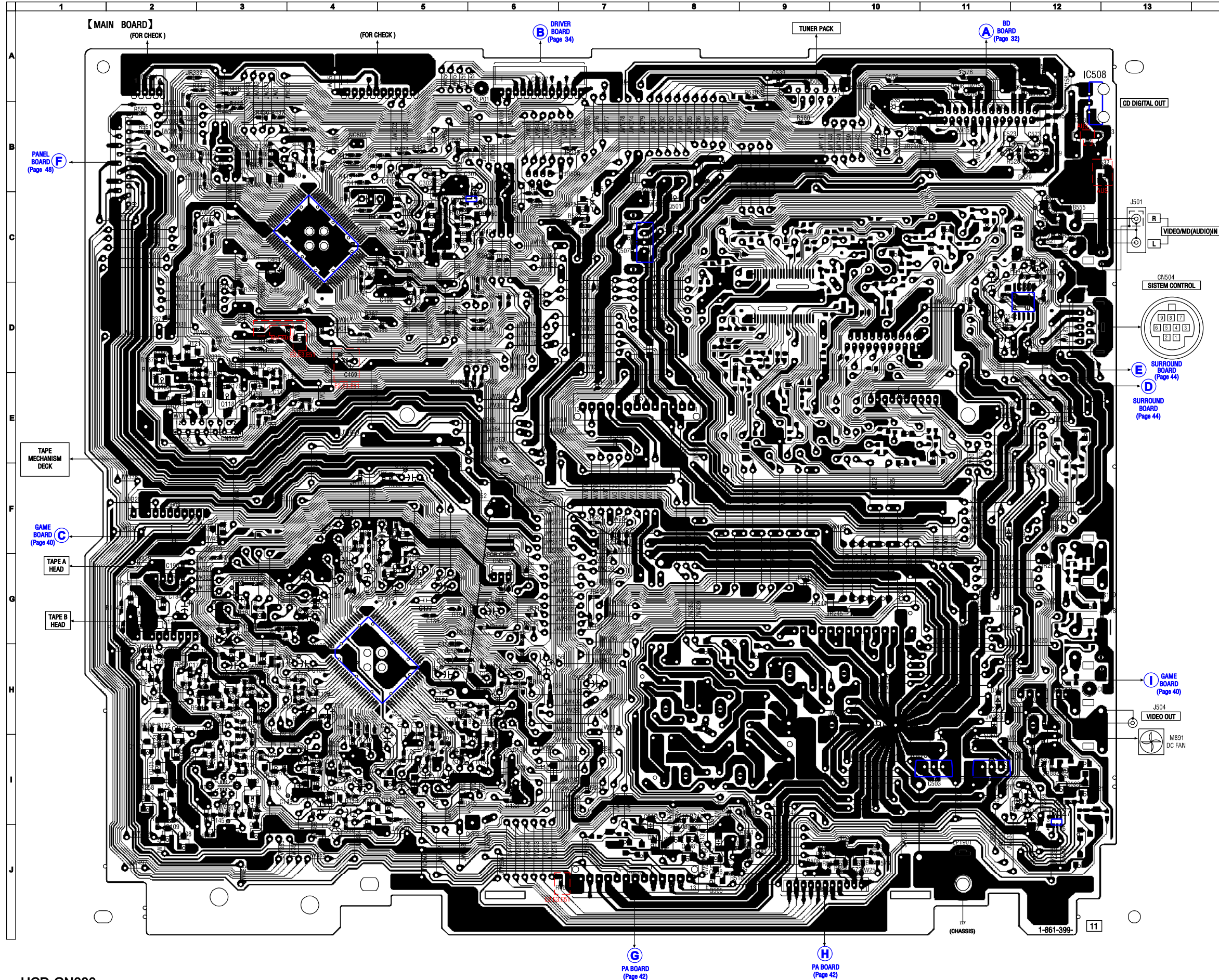
• Semiconductor Location

Ref. No.	Location
D701	D-6
D711	D-7
IC701	F-6
IC712	F-7
IC731	E-11
Q731	C-9

7-9. SCHEMATIC DIAGRAM – CD MECHANISM BOARD –



7-10. PRINTED WIRING BOARD – MAIN BOARD – • See page 26 for Circuit Boards Location.

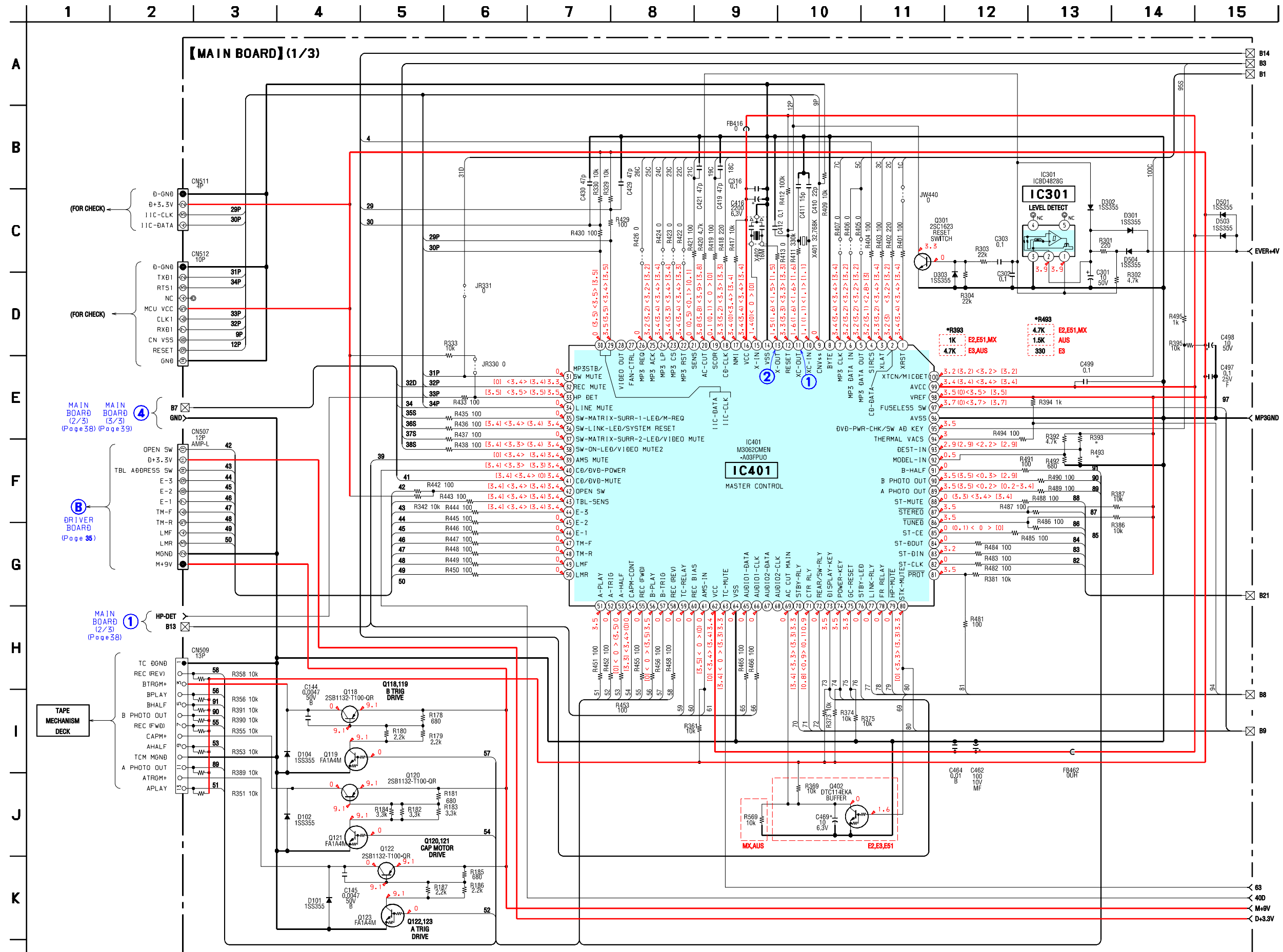


• Semiconductor Location

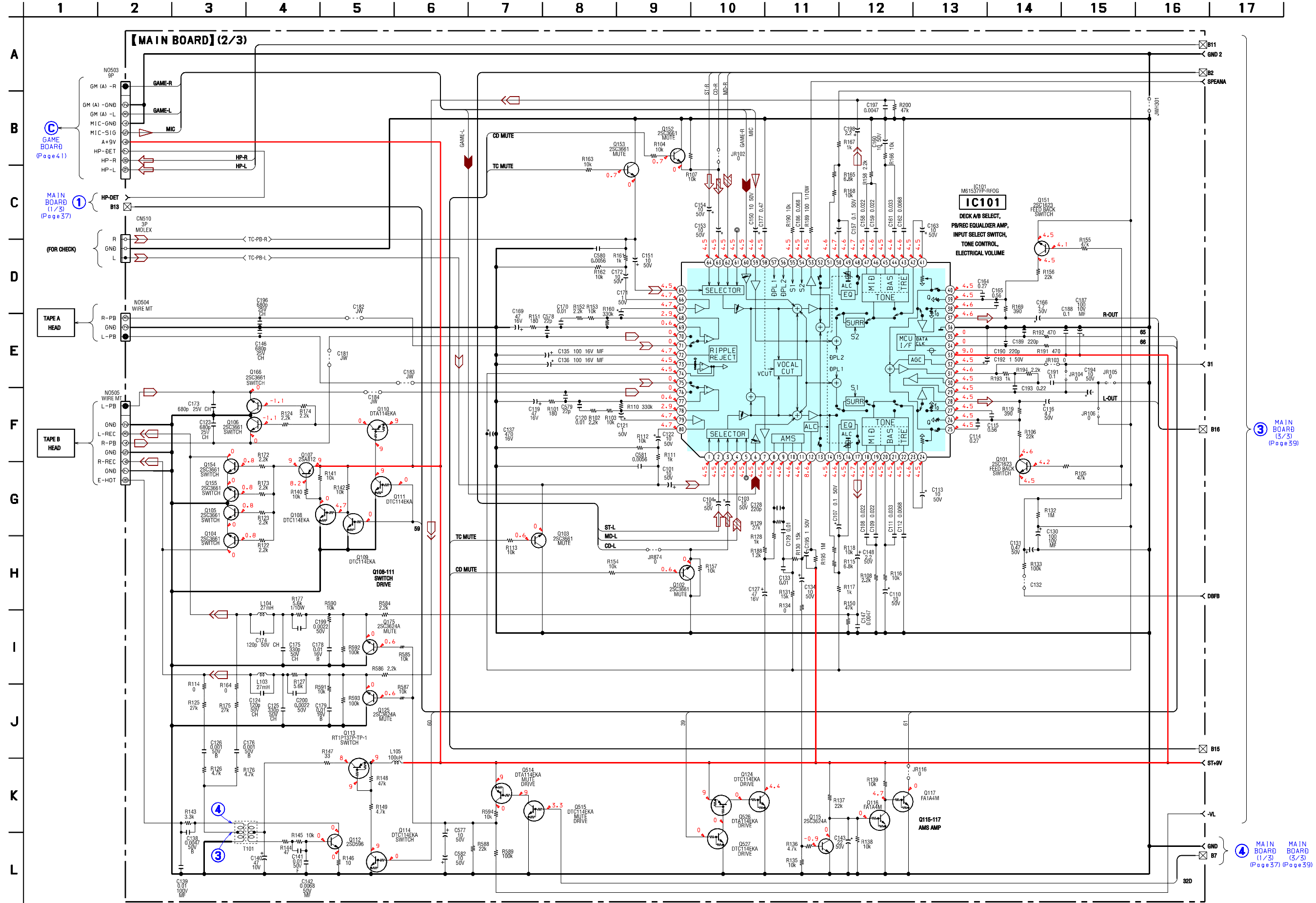
Ref. No.	Location	Ref. No.	Location
D101	E-2	Q114	J-3
D102	E-2	Q115	I-4
D104	E-3	Q116	I-3
D301	C-5	Q117	I-4
D302	C-5	Q118	E-3
D303	C-5	Q119	D-3
D501	C-5	Q120	E-3
D502	C-7	Q121	D-2
D503	C-6	Q122	E-2
D504	C-5	Q123	D-2
D507	H-11	Q124	H-3
D508	H-11	Q125	H-3
D509	F-11	Q151	I-6
D511	I-12	Q152	G-5
D627	I-12	Q153	F-5
		Q154	H-2
		Q155	I-2
IC101	H-4	Q166	G-2
IC301	C-6	Q175	H-3
IC401	C-4	Q301	C-5
IC502	I-11	Q402	D-4
IC503	I-11	Q501	C-8
IC504	C-8	Q502	C-7
IC508	A-12	Q505	J-8
IC627	I-12	Q506	J-8
IC801	D-12	Q507	J-8
		Q508	J-8
Q101	I-5	Q509	J-8
Q102	G-3	Q510	J-8
Q103	G-3	Q514	I-5
Q104	H-2	Q515	I-4
Q105	I-2	Q520	J-10
Q106	G-2	Q521	I-12
Q107	I-2	Q523	I-12
Q108	J-2	Q524	I-12
Q109	J-2	Q525	C-7
Q110	I-2	Q526	H-3
Q111	I-2	Q527	F-3
Q112	I-3	Q570	J-10
Q113	I-3		

7-11. SCHEMATIC DIAGRAM - MAIN BOARD (1/3) -

• See page 56 for IC Pin Function Description.



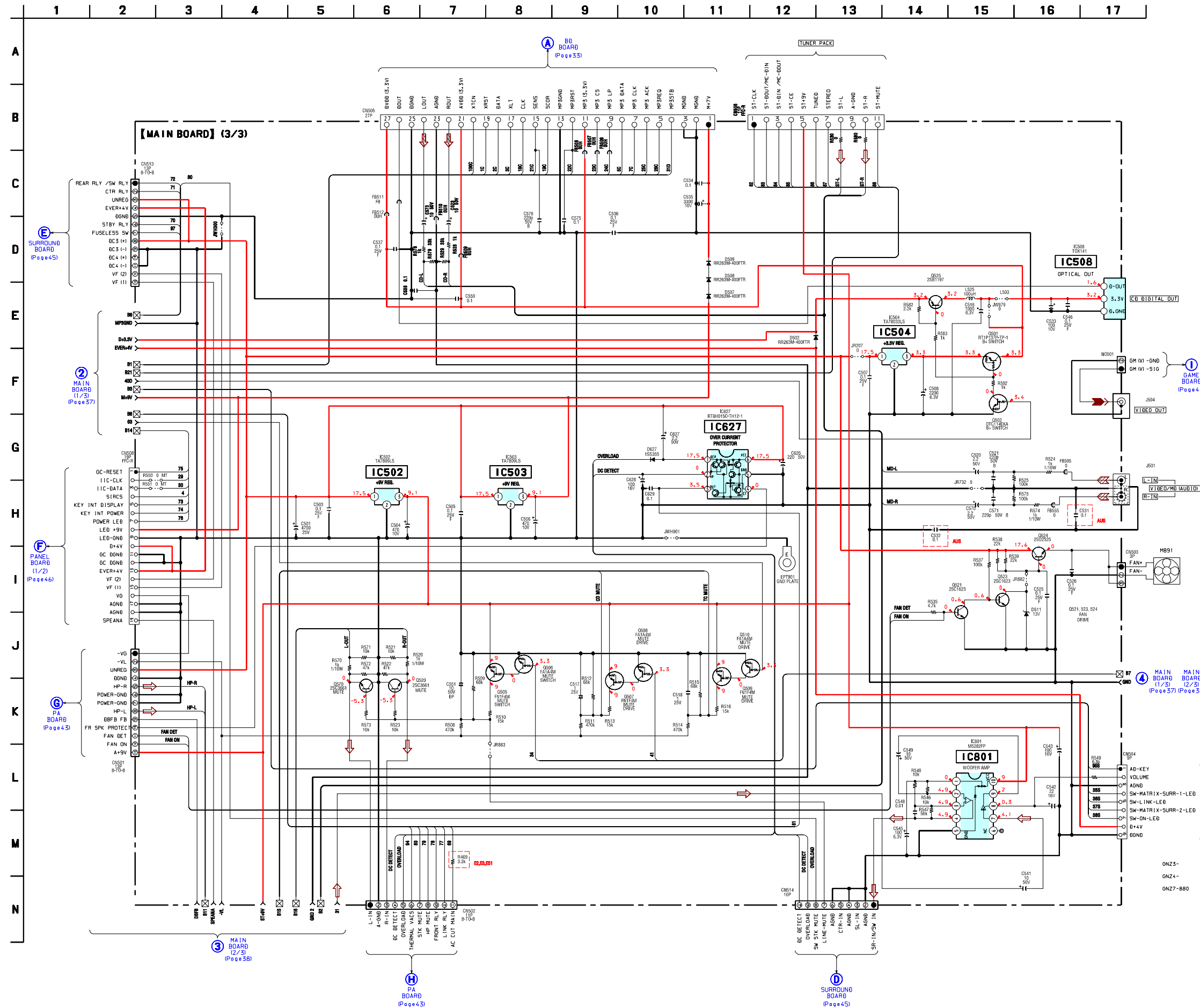
7-12. SCHEMATIC DIAGRAM - MAIN BOARD (2/3) -



③ MAIN BOARD (3/3) (Page 39)

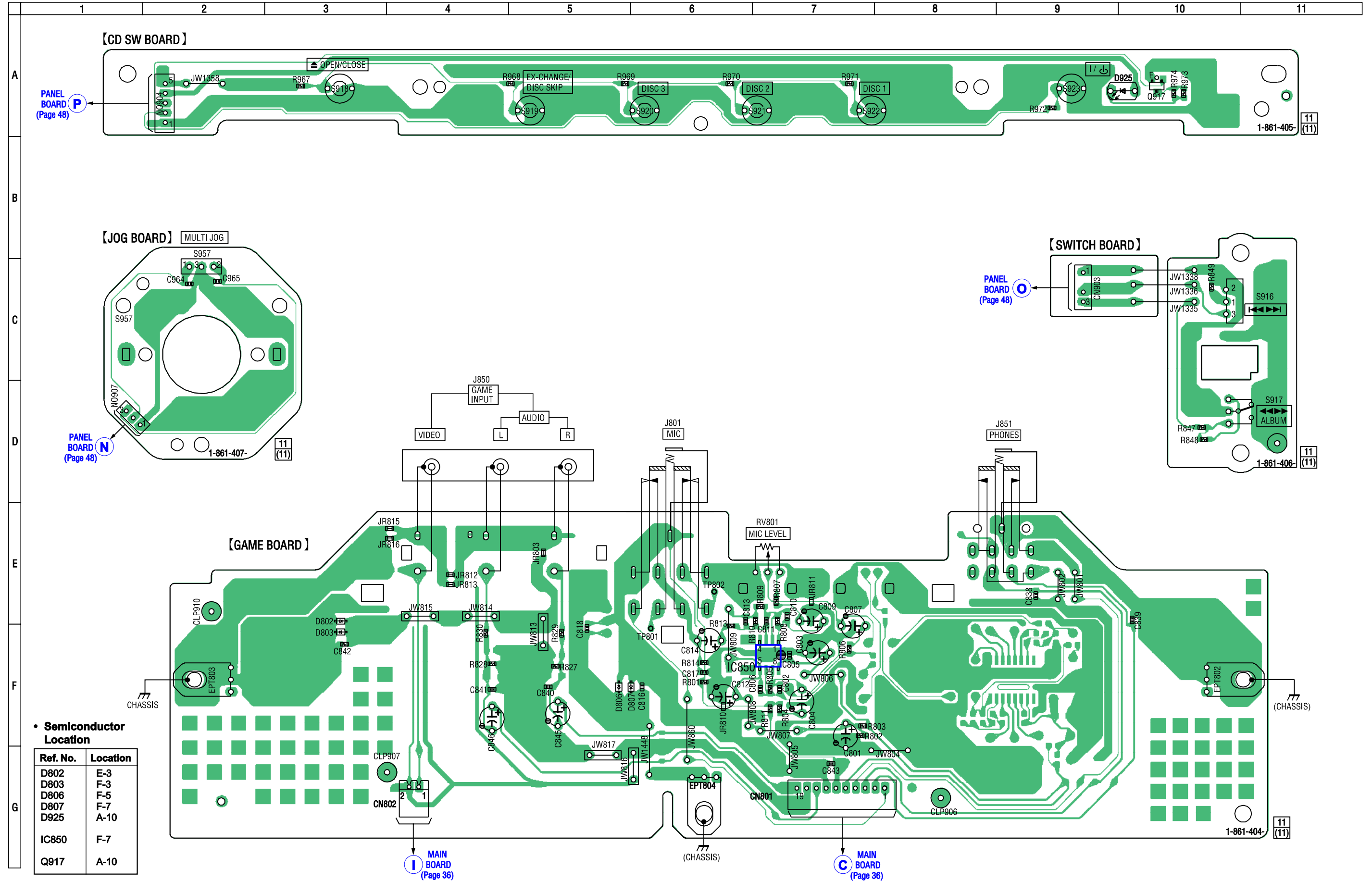
④ MAIN BOARD (1/3) (Page 37) MAIN BOARD (3/3) (Page 39)

7-13. SCHEMATIC DIAGRAM – MAIN BOARD (3/3)–

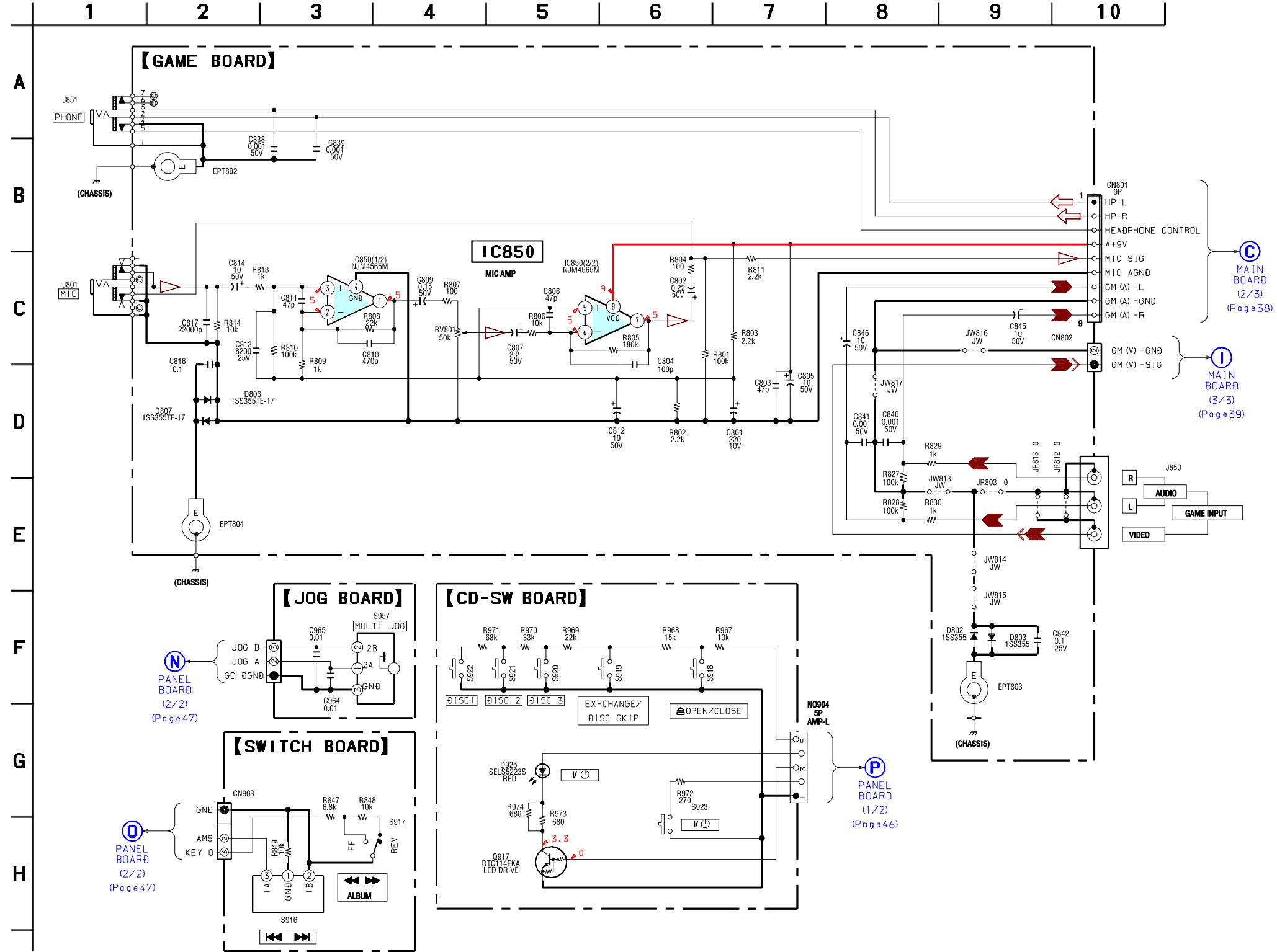


7-14. PRINTED WIRING BOARD – GAME, CD SWITCH BOARD –

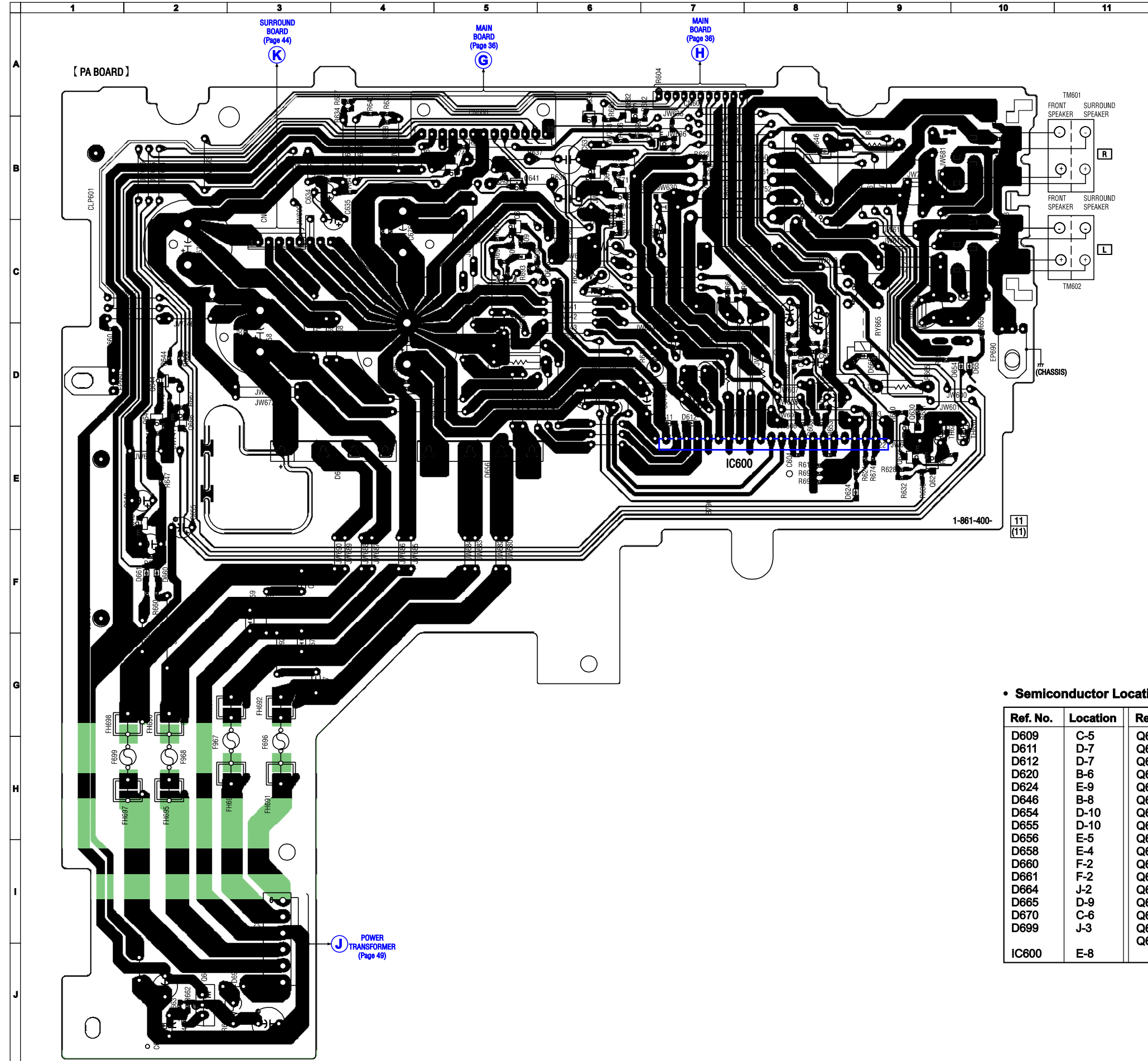
• See page 26 for Circuit Boards Location.



7-15. SCHEMATIC DIAGRAM - GAME, CD SWITCH BOARD -



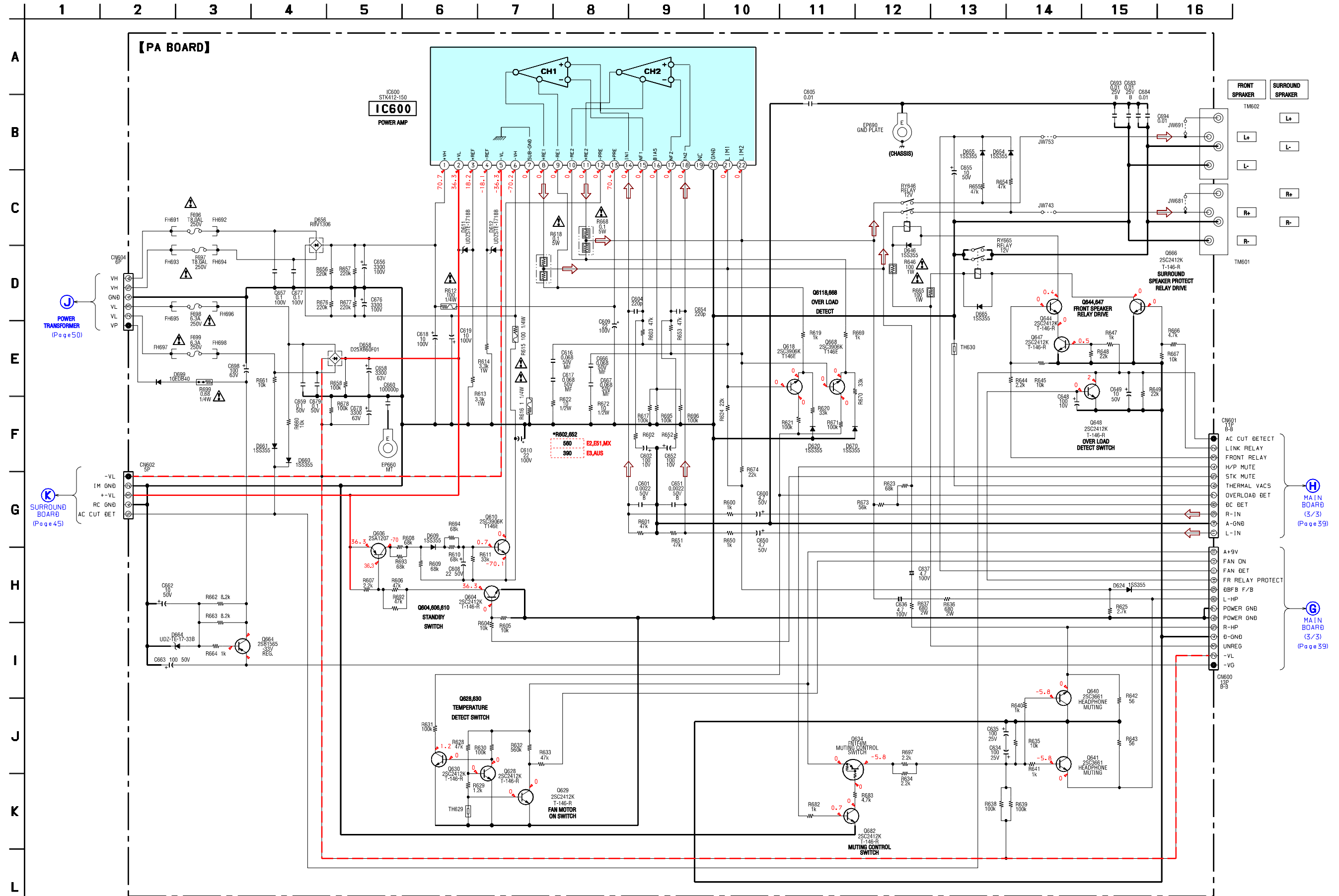
7-16. PRINTED WIRING BOARD – PA BOARD – • See page 26 for Circuit Boards Location.



• Semiconductor Location

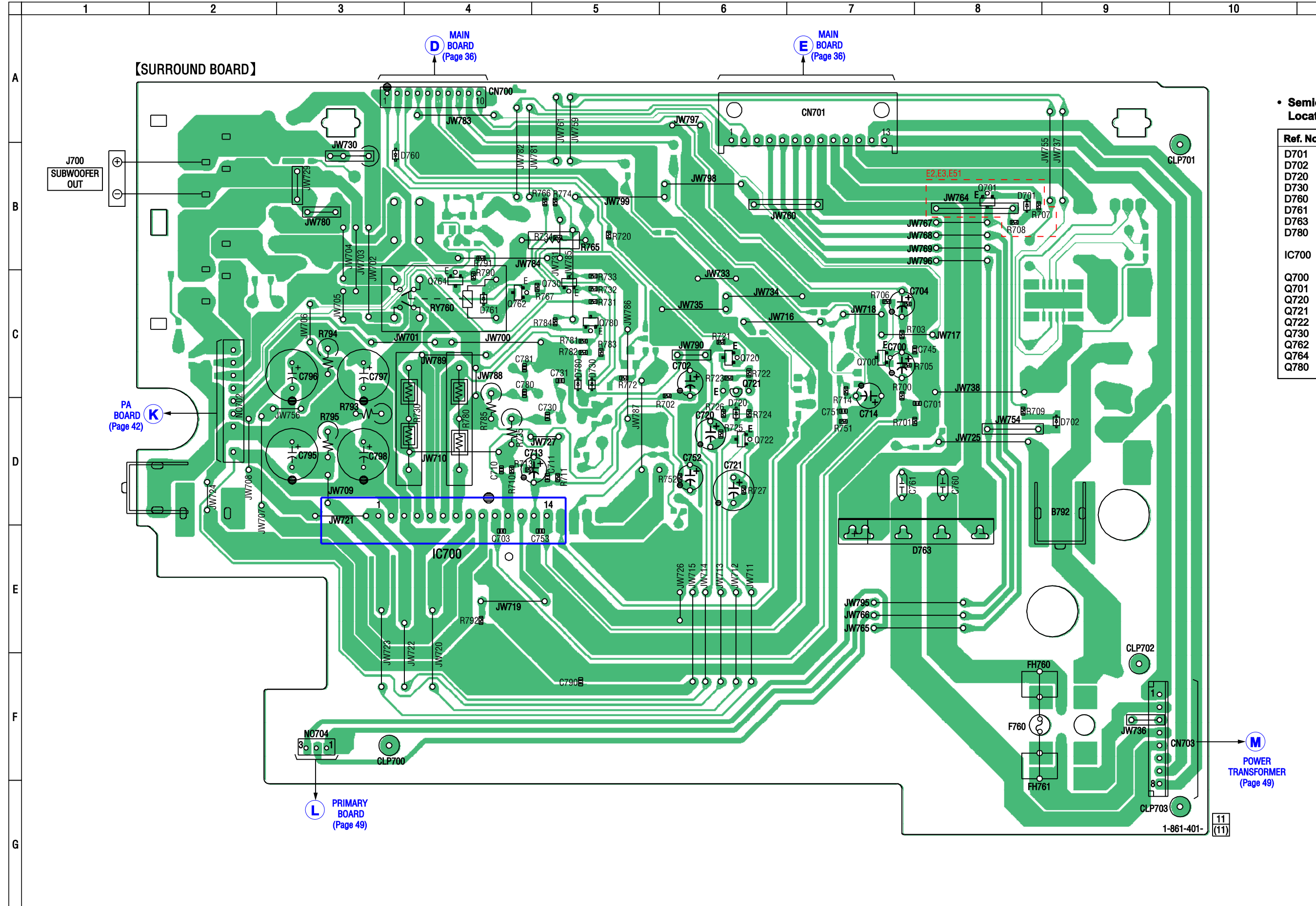
Ref. No.	Location	Ref. No.	Location
D609	C-5	Q604	B-7
D611	D-7	Q606	C-6
D612	D-7	Q610	C-5
D620	B-6	Q618	B-6
D624	E-9	Q628	E-9
D646	B-8	Q629	E-9
D654	D-10	Q630	D-9
D655	D-10	Q634	B-6
D656	E-5	Q640	B-5
D658	E-4	Q641	B-5
D660	F-2	Q644	D-2
D661	F-2	Q647	D-2
D664	J-2	Q648	E-2
D665	D-9	Q664	J-2
D670	C-6	Q666	D-2
D699	J-3	Q668	B-6
		Q682	A-6
IC600	E-8		

7-17. SCHEMATIC DIAGRAM - PA BOARD -



7-18. PRINTED WIRING BOARD – SURROUND BOARD –

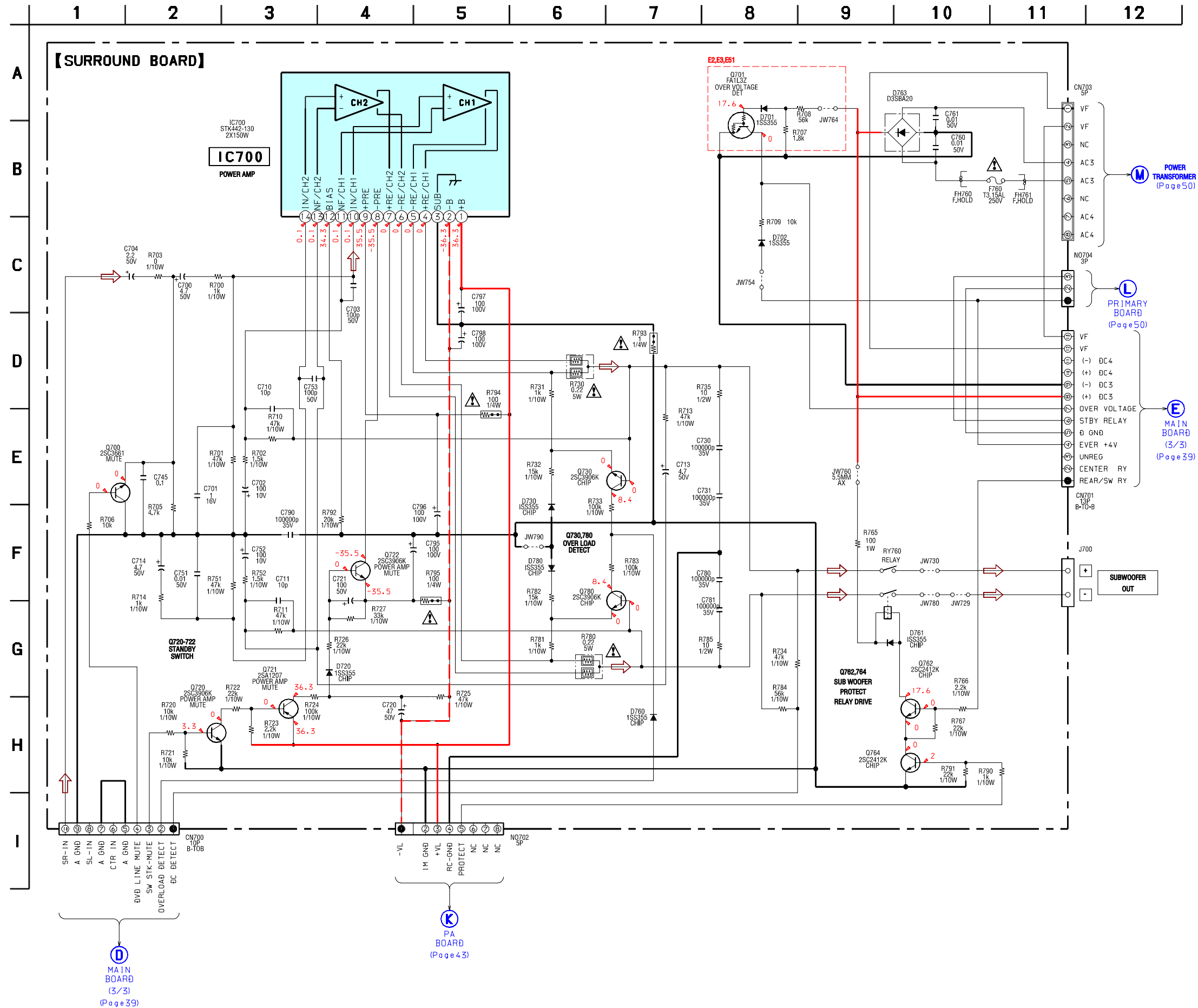
• See page 26 for Circuit Boards Location.



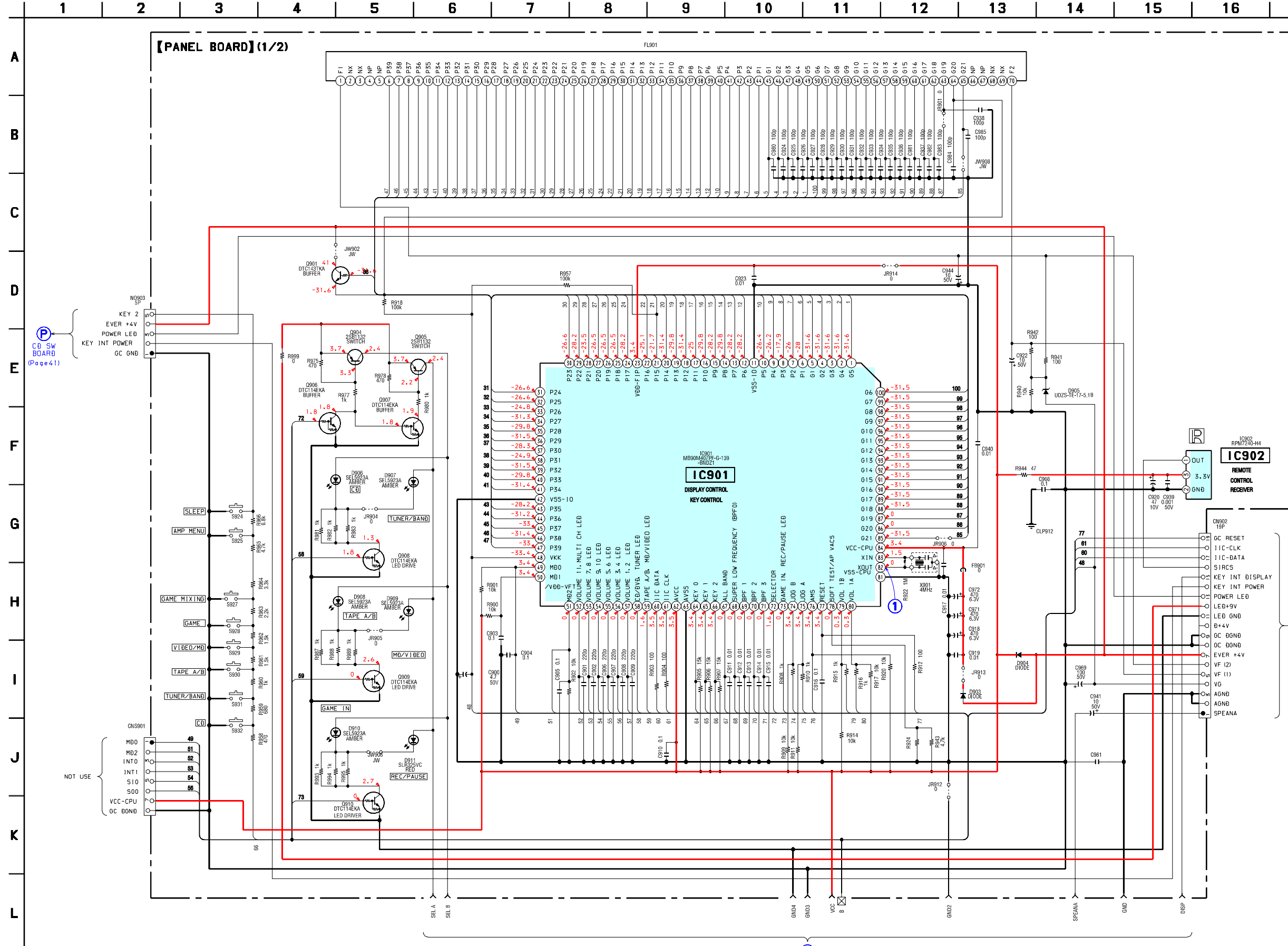
• Semiconductor Location

Ref. No.	Location
D701	B-8
D702	D-9
D720	D-6
D730	C-5
D760	B-3
D761	C-4
D763	E-8
D780	C-5
IC700	D-4
Q700	C-7
Q701	B-8
Q720	C-6
Q721	C-6
Q722	D-6
Q730	C-5
Q762	C-4
Q764	C-4
Q780	C-5

7-19. SCHEMATIC DIAGRAM - SURROUND BOARD -



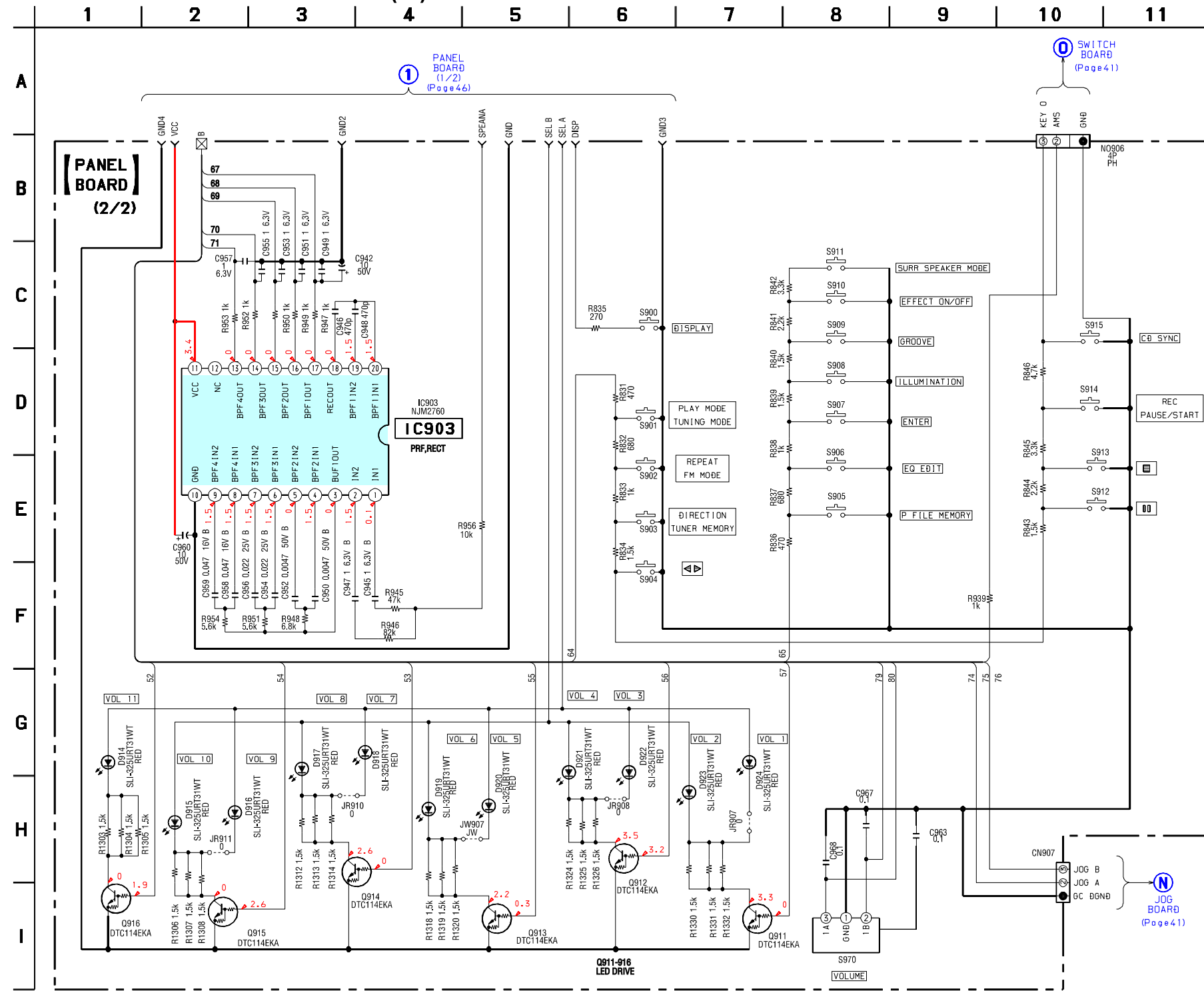
7-20. SCHEMATIC DIAGRAM - PANEL BOARD (1/2) - See page 52 for IC Pin Function Description.



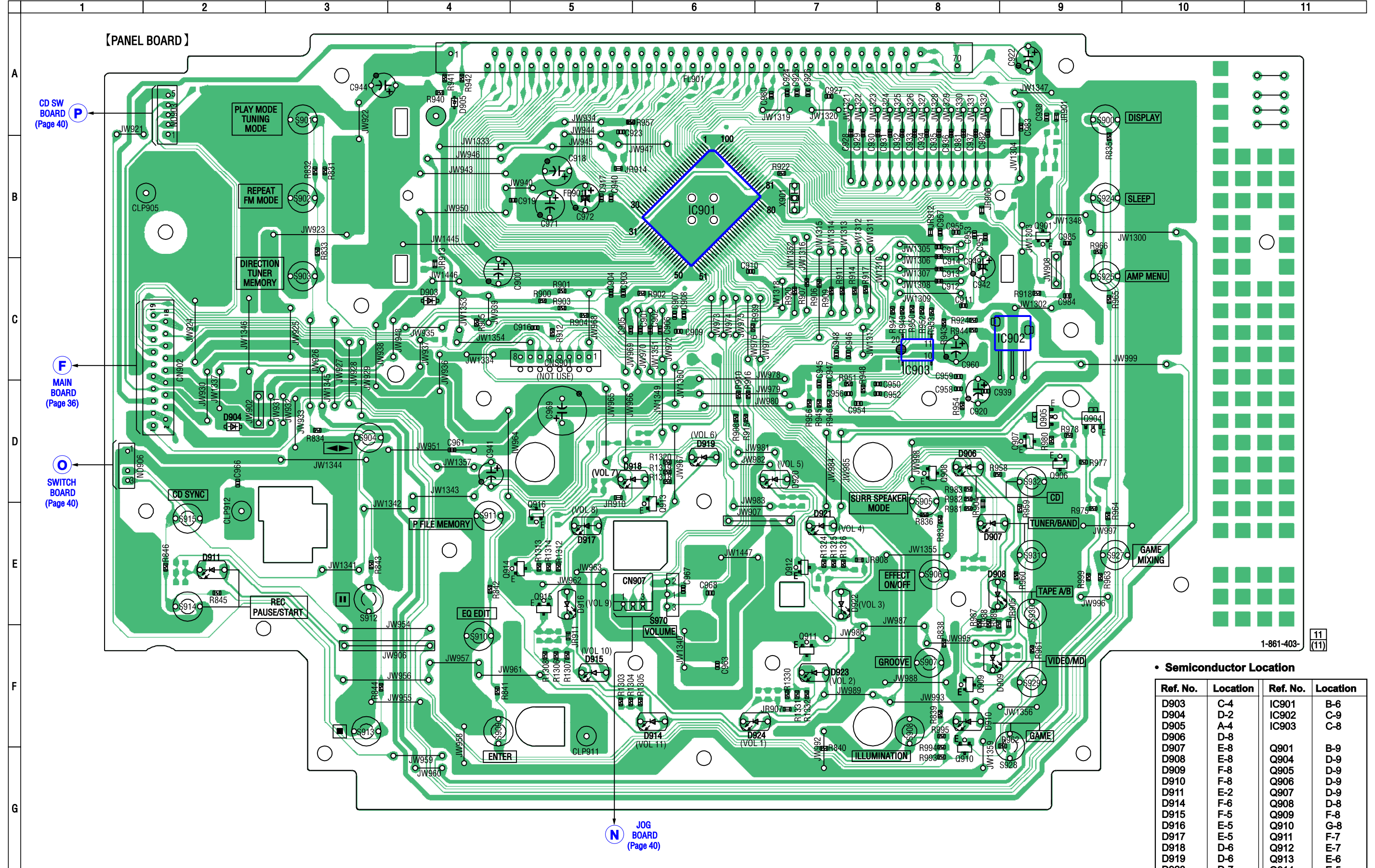
1 PANEL BOARD (2/2)

F MAIN BOARD (3/3) (Page 39)

7-21. SCHEMATIC DIAGRAM - PANEL BOARD (2/2) -



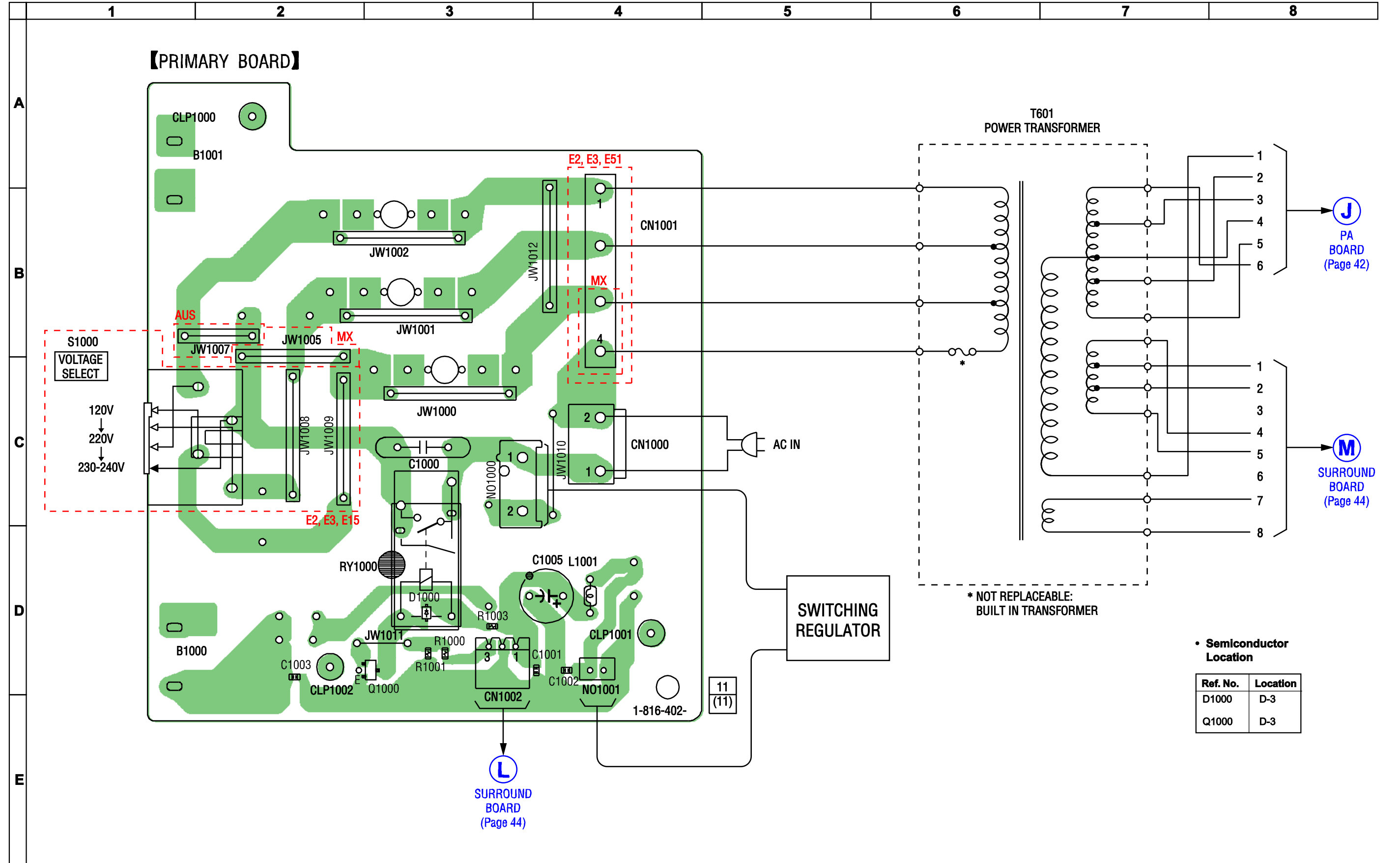
7-22. PRINTED WIRING BOARD – PANEL BOARD – • See page 26 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D903	C-4	IC901	B-6
D904	D-2	IC902	C-9
D905	A-4	IC903	C-8
D906	D-8		
D907	E-8	Q901	B-9
D908	E-8	Q904	D-9
D909	F-8	Q905	D-9
D910	F-8	Q906	D-9
D911	E-2	Q907	D-9
D914	F-6	Q908	D-8
D915	F-5	Q909	F-8
D916	E-5	Q910	G-8
D917	E-5	Q911	F-7
D918	D-6	Q912	E-7
D919	D-6	Q913	E-6
D920	D-7	Q914	E-5
D921	E-7	Q915	E-5
D922	E-7	Q916	E-5
D923	F-7		
D924	F-6		

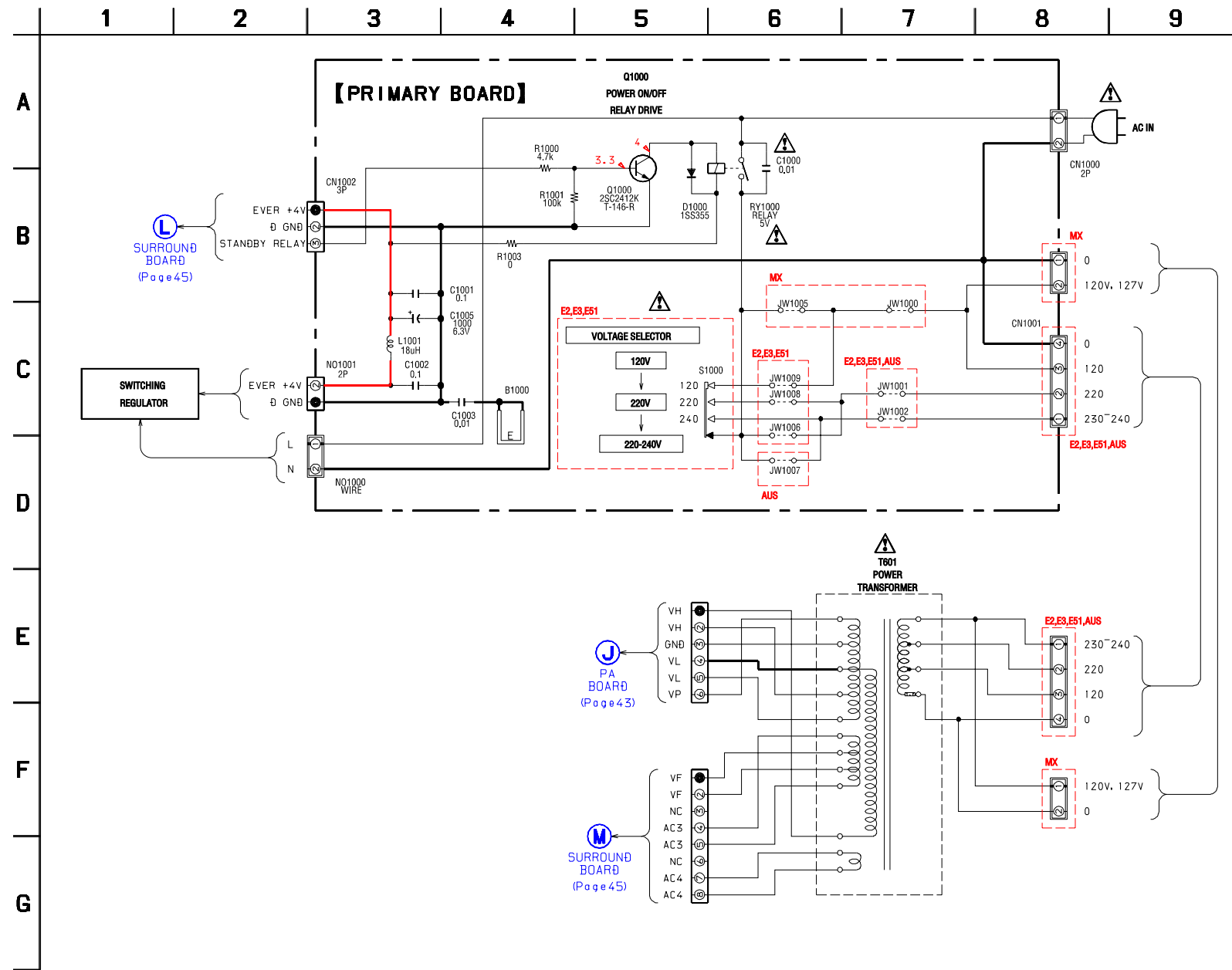
7-23. PRINTED WIRING BOARD – PRIMARY BOARD – • See page 26 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location
D1000	D-3
Q1000	D-3

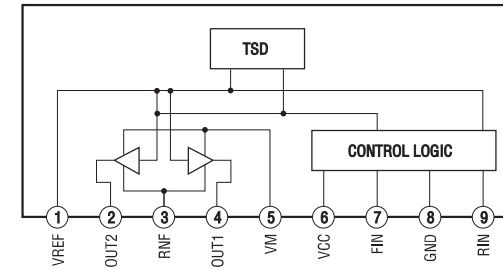
7-24. SCHEMATIC DIAGRAM – PRIMARY BOARD –



7-25. IC Block Diagram

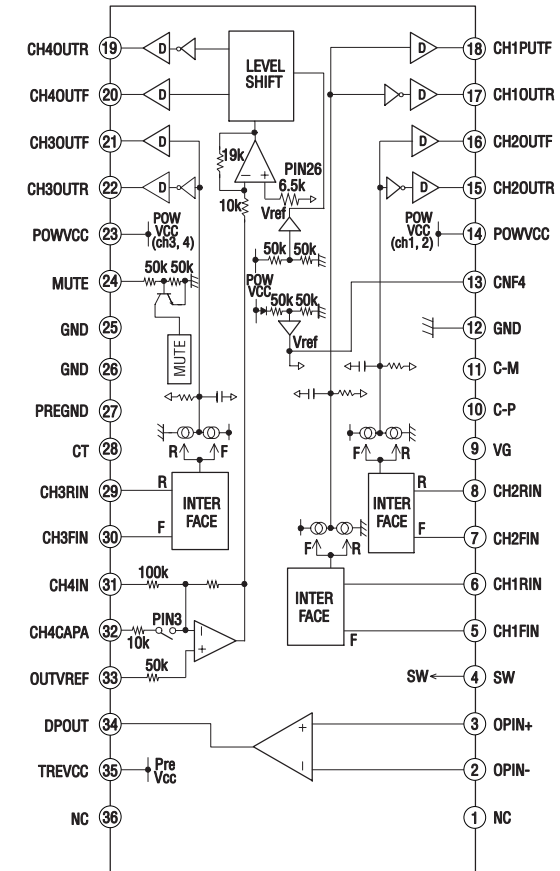
– DRIVER Board –

IC701, 712 BA6956AN



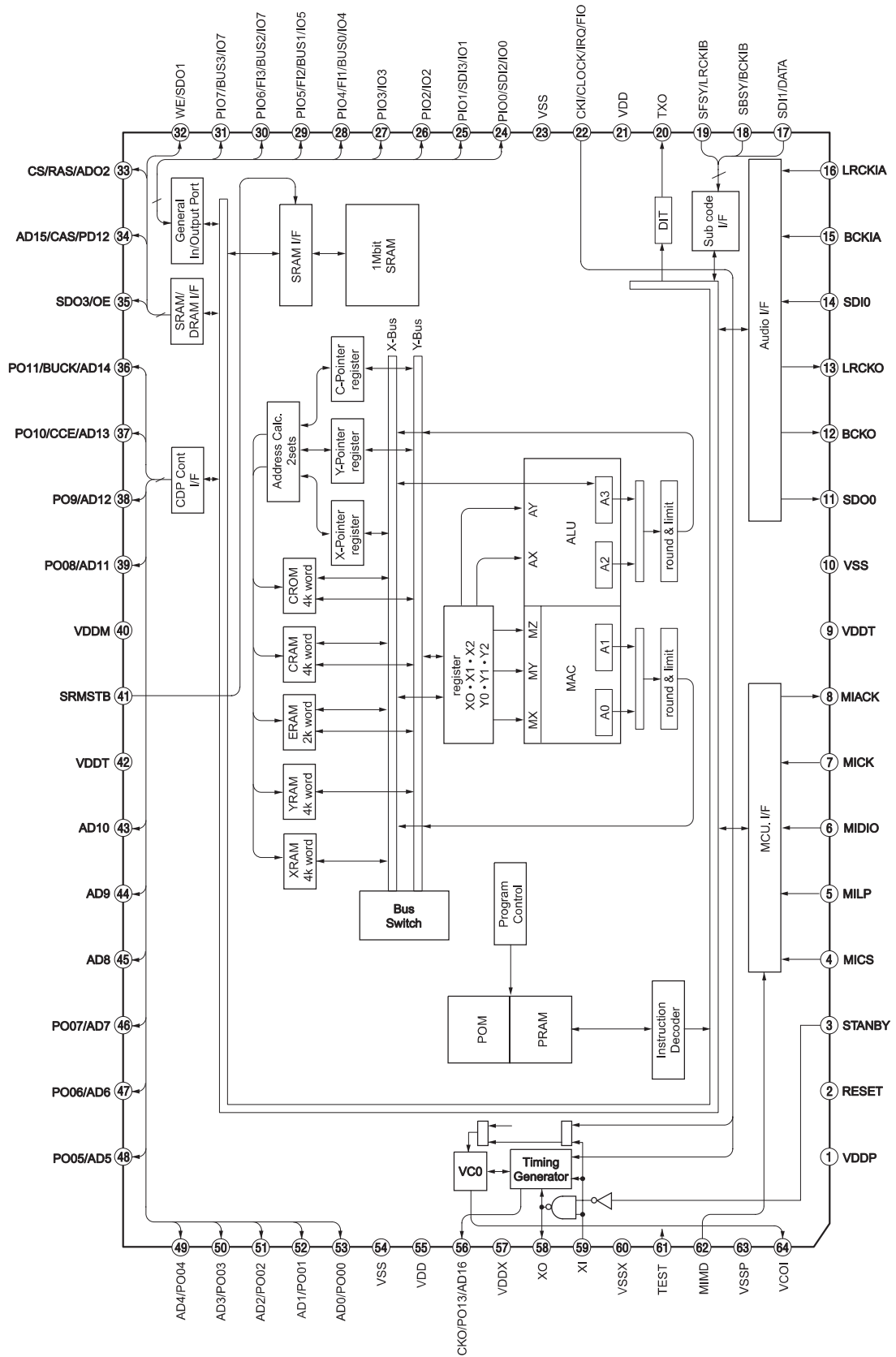
– BD Board –

IC251 BA5947FM



- BD Board -

IC301 TC94A34FG-002



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7-26. IC Pin Function Descriptions

• IC101 CXD3059AR (RF AMP) (BD BOARD)

Pin No.	Pin Name	I/O	Description
1	MIRR	I/O	Mirror signal input/output(Not used)
2	DFCT	I/O	Defect signal input/output (Not used)
3	FOK	I/O	Focus OK signal input/output (Not used)
4	VSS	—	Internal digital ground
5	LOCK	I/O	Not used
6	MDP	O	Spindle motor servo control output
7	SSTP	I	Disk innermost detection signal input
8	IOVSS1	—	I/O digital ground
9	SFDR	O	Sled drive output
10	SFDR	O	Sled drive output
11	TFDR	O	Tracking drive output
12	TRDR	O	Tracking drive output
13	FFDR	O	Focus drive output
14	FFDR	O	Focus drive output
15	IOVDD1	—	I/O digital power supply
16	AVDD0	—	Analog power supply
17	AVSS0	—	Analog ground
18	NC	—	Not used
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	FEO	O	Focus error signal output
25	VC	I/O	Center voltage output from RF amplifier block
26	A	I	A signal input
27	B	I	B signal input
28	C	I	C signal input
29	D	I	D signal input A
30	NC	—	Not used
31	AVDD4	—	Analog power supply
32	RFDCO	O	RFDC signal output (Not used)
33	PDSSENS	I	Reference voltage pin
34	AC_SUM	O	RFAC summing amplifier output
35	EQ_IN	I	Equalizer circuit input
36	LD	O	APC output
37	PD	I	APC input
38	NC	—	Not used
39	RFC	I	Equalizer cut-off frequency adjustment pin
40	AVSS4	—	Analog ground
41	RFACO	O	RFAC signal output
42	RFACI	I	RFAC signal input or EFM signal input
43	AVDD3	—	Analog power supply
44	BIAS	I	Asymmetry circuit constant current input
45	ASYI	I	Asymmetry comparator voltage input
46	ASYO	O	EFM full-swing output
47	VPCO	O	Not used
48	VCTL	I	Wide-band EFM PLL VCO2 control voltage input

Pin No.	Pin Name	I/O	Description
49	AVSS3	—	Analog ground
50	CLTV	I	Multiplier VCO1 control voltage input
51	FILO	O	Master PLL (slave = digital PLL) filter output
52	FILI	I	Master PLL filter input
53	PCO	O	Master PLL charge pump output
54	AVDD5	—	Analog power supply
55	DDVROUT	O	DC/DC converter output
56	DDVRSEN	I	DC/DC converter output voltage monitor input
57	AVSS5	—	Analog ground
58	DDCR	I	DC/DC converter reset input
59	NC	—	Not used
60	BCKI	I	D/A interface bit clock input
61	PCMDI	I	D/A interface serial data input (2's COMP, MSB first)
62	LRCKI	I	D/A interface LR clock input
63	LRCK	O	D/A interface LR clock output $f = F_s$
64	VSS	—	Internal digital ground
65	PCMD	O	D/A interface serial data output (2's COMP, MSB first)
66	BCK	O	D/A interface bit clock output
67	VDD	—	Internal digital power supply
68	EMPH	O	High when the playback disc has emphasis, low it has not
69	EMPHI	I	High when de-emphasis is ON, low when input OFF
70	IOVDD2	—	I/O digital power supply
71	DOUT	O	Digital Out output
72	TEST	I	Test pin Normally ground
73	TES1	I	Test pin Normally ground
74	IOVss2	—	I/O digital ground
75	NC	—	Not used
76	XVSS	—	Master clock ground
77	XTAO	O	Crystal oscillation circuit output
78	XTAI	I	Crystal oscillation circuit input
79	XVDD	—	Master clock power supply
80	AVDD1	—	Analog power supply
81	AOUT1	O	Lch analog output
82	VREFL	O	Lch reference voltage
83	AVSS1	—	Analog ground
84	AVSS2	—	Analog ground
85	VREFR	O	Rch reference voltage
86	AOUT2	O	Rch analog output
87	AVDD2	—	Analog power supply
88	NC	—	Not used
89	IOVDD0	—	I/O digital power supply
90	RMUT	O	Rch "0" detection flag (Not used)
91	LMUT	O	Lch "0" detection flag (Not used)
92	NC	—	Not used
93	XTSL	I	Crystal selection input (Not used)
94	IOVSS0	—	I/O digital ground
95	XTACN	I	Oscillation circuit control Self-oscillation when high, oscillation stop when low
96	SQSO	O	Subcode Q 80-bit and PCM peak and level data output (Not used)
97	SQCK	I	SQSO readout clock input

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Pin No	Pin Name	I/O	Description
98	SBSO	O	Subcode P to W serial output (Not used)
99	EXCK	I	SBSO readout clock input (Not used)
100	XRST	I	System reset input
101	SYSM	I	Mute input
102	D ATA	I	Serial data input from CPU
103	VSS	—	Internal digital ground
104	XLAT	I	Latch input from CPU
105	CLOCK	I	Serial data transfer clock input from CPU
106	VDD	—	Sled drive output Internal digital power supply Tracking drive output
107	SENS	O	SENS output to CPU
108	SCLK	I	SENS serial data readout clock input
109	ATSK	I/O	Anti-shock input/output (Not used)
110	WFCK	O	WFCK output (Not used)
111	XUGF	O	XUGF output (Not used)
112	XPCK	O	XPCK output (Not used)
113	GFS	O	GFS output (Not used)
114	C2PO	O	C2PO output (Not used)
115	SCOR	O	High output when the subcode sync, S0 or S1, is detected
116	VDD	—	Internal digital power supply
117	C4M	O	4 2336MHz output (Not used)
118	WDCK	O	Word clock output $f = 2F_s$ (Not used)
119	COUT	I/O	Track number count signal input/output (Not used)
120	NC	—	Not used

• IC901 MB90M407PF-G-139-BNDE1 DISPLAY CONTROL (PANEL Board)

Pin No.	Pin Name	I/O	Description
1 to 5	G5 to G1	O	FLD grid output
6 to 10	P1 to P5	O	FLD segment output
11	VSS-IO	—	Ground
12 to 22	P6 to P16	O	FLD segment output
23	VDD-FIP	—	Power supply (+3.3V)
24 to 41	P17 to P34	O	FLD segment output
42	VSS-IO	—	Ground
43 to 47	P35 to P39	O	FLD segment output
48	VKK	—	Power supply (-35V)
49	MD0	I	Not used (pull up with resistor)
50	MD1/VDD-VFT	I	Not used (pull up with resistor)
51	MD2	I	Not used (pull down with resistor)
52	VOLUME11,MULTI CH LED	O	LED drive signal output
53	VOLUME7,8 LED	O	LED drive signal output
54	VOLUME9,10 LED	O	LED drive signal output
55	VOLUME5,6 LED	O	LED drive signal output
56	VOLUME3,4 LED	O	LED drive signal output
57	VOLUME1,2 LED	O	LED drive signal output
58	CD/DVD,TUNER LED	O	LED drive signal output
59	TAPE A/B,MD/VIDEO LED	O	LED drive signal output
60	IIC-DATA	O	IIC serial data output
61	IIC-CLOCK	O	IIC clock signal output
62	AVCC	—	Power supply (+3.3V)
63	AVSS	—	Ground
64 to 66	KEY0 to KEY2	I	Key input (A/D)
67	ALL BAND	I	L+R signal input
68	SUPER LOW FREQUENCY (BPF 0)	I	Spectrum analyzer BPF signal input
69 to 71	BPF3 to BPF1	I	Spectrum analyzer BPF signal input
72	SELECTOR	O	LED group select signal output
73	GAME IN, REC/PAUSE LED	O	LED drive signal output
74, 75	JOG B, JOG A	I	JOG dial encoder signal B/A input
76	AMS	I	AMS dial signal input
77	RESET	I	Reset input
78	SOFT TEST	O	Not used (open)
79	VOL 1B	I	Volume encoder signal B input
80	VOL 1A	I	Volume encoder signal A input
81	VSS-CPU	—	Ground
82	XOUT	O	Crystal oscillator output (4MHz)
83	XIN	I	Crystal oscillator input (4MHz)
84	VCC-CPU	—	Power supply (+3.3V)
85 to 100	G21 to G6	O	FLD grid output

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• IC401 M3062CMEN-A03FPUO SYSTEM CONTOL (MAIN Board)

Pin No.	Pin Name	I/O	Description
1	XRST	O	CD reset signal output
2	CD-DATA	O	CD data output
3	XLAT	O	CD latch signal output
4	SIRCS	I	SIRCS input
5	MP3 DATA OUT	O	Serial data output
6	MP3 DATA IN	I	Serial data input
7	MP3 CLK	O	Serial clock output
8	BYTE	I	Not used (connected to ground)
9	CNVSS	—	Not used (Connected to ground with resistor)
10	XC-IN	I	Sub clock input (32.768KHz)
11	XC-OUT	O	Sub clock output (32.768KHz)
12	RESET	I	System reset input
13	X-OUT	O	Main system clock output (16MHz)
14	VSS	—	Ground
15	X-IN	I	Main system clock input (16MHz)
16	VCC	—	Power supply (+5V)
17	NMI	I	Not used (Pull up with resistor)
18	CD-CLK	O	CD data clock output
19	SCOR	I	Subcode sync (S0+S1) detection signal input
20	AC-CUT	I	AC cut check signal input
21	SENS	I	SENS signal input from CXD3059AR
22	MP3 RST	O	MP3 reset signal output
23	MP3 CS	O	MP3 chip select signal output
24	MP3 LP	O	MP3 latch pules output
25	MP3 ACK	I	MP3 acknowledge signal input
26	MP3 REQ	I	Interrupt request signal input
27	FAN CTL	O	FAN moter control signal output
28	VIDEO OUT	O	Not used
29	IIC-CLK	I	IIC serial data clock input
30	IIC-DATA	I	IIC serial data input
31	SW-MUTE	O	Subwoofer mute signal output
32	REC MUTE	O	REC mute signal output
33	HP DETECT	I	Headphone detect input
34	LINE-MUTE	O	TA LINE mute signal output
35	MATRIX-SURR-1-LED	O	Subwoofer LED drive signal output
36	SW-LINE-LED	O	Subwoofer LED drive signal output
37	MATRIX-SURR-2-LED	O	Subwoofer LED drive signal output
38	SW-ON-LED/VIDEO MUTE	O	Subwoofer LED drive signal output
39	AMS MUTE	O	AMS mute signal output
40	CD/DVD-POWER	O	CD power on/off signal output
41	CD/DVD-MUTE	O	CD mute signal output
42	OPEN SW	I	Lever switch signal input
43	TBL-SENS	I	Table sensor signal input
44	E-3	I	Disc tray status detection signal input
45	E-2	I	Disc tray status detection signal input
46	E-1	I	Disc tray status detection signal input
47	TM-F	O	Table motor control signal output
48	TM-R	O	Table motor control signal output
49	LMF	O	Loading motor control signal output
50	LMR	O	Loading motor control signal output

Pin No.	Pin Name	I/O	Description
51	A-PLAY	I	TCM-A play switch input
52	A-TRIG	O	TCM-A trigger output
53	A-HALF	I	A deck half detection signal input
54	CAPM-CONT	O	Capstan motor REV/FWD/STOP control signal output
55	REC (FWD)	O	Record tab switch for SIDE A signal output
56	B-PLAY	I	TCM-B play switch input
57	B-TRIG	O	TCM-B Trigger output
58	REC (REV)	O	Record tab switch for SIDE B signal output
59	TC-RELAY	O	REC/PB selection signal output
60	REC BIAS	O	Bias on/off signal output
61	AMS-IN	I	AMS signal input
62	VCC	—	Power supply (+3.3V)
63	TC-MUTE	O	TC line mute signal output
64	VSS	—	Ground
65	AUDIO1-DATA	O	Serial data output to Audio EQIC
66	AUDIO1-CLK	O	Serial data clock output to Audio EQIC
67	AUDIO2-DATA	O	Serial data output to Audio EQIC
68	AUDIO2-CLK	O	Serial data clock output to Audio EQIC
69	AC-CUT-MAIN	I	AC cut check signal input
70	STBY-RELEY	O	Reley drive signal output
71	CTR-RLY	O	Not used
72	REAR SW-RELAY	O	Subwoofer relay control signal output
73	DISPLAY-KEY	I	DISPLAY key signal input
74	POWER-KEY	I	Power key signal input
75	GC-RESET	O	GC reset signal output
76	STBY-LED	O	Standby LED drive signal output
77	LINK-RLY	O	Surround speaker relay driver signal output
78	FR-RELAY	O	Front speaker relay driver signal output
79	$\overline{\text{HP-MUTE}}$	O	Headphone mute signal output
80	STK-MUTE	O	Mute signal output to power IC
81	$\overline{\text{PROT}}$	I	Speaker protection signal input
82	ST-CLK	O	Tuner clock signal output
83	ST-DIN	I	Tuner data input
84	ST-DOUT	O	Tuner data output
85	ST-CE	O	Tuner chip enable signal output
86	$\overline{\text{TUNED}}$	I	Tuned signal input
87	$\overline{\text{STEREO}}$	I	Stereo signal input
88	ST-MUTE	O	Tuner mute signal output
89	A-PHOTO OUT	I	TCM-A reel pulse input
90	B-PHOTO OUT	I	TCM-B reel pulse input
91	B-HALF	I	B deck half detection input
92	MODEL-IN	I	Model input
93	DEST-IN	I	Destination input
94	$\overline{\text{THER MAL VACS IN}}$	I	VACS signal input
95	DVD-PWR-CHK/SW AO KEY	I	Subwoofer ON/OFF and SURROUND SPEAKER MODE key input
96	AVSS	—	Ground
97	FUSELESS SW	I	Over-voltage protection detection input termnal
98	VREF	I	Reference voltage input
99	AVCC	—	Power supply (+3.3V)
100	XTCN/MIC DET	O	Oscillation circuit control signal output

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SECTION 8 EXPLODED VIEWS

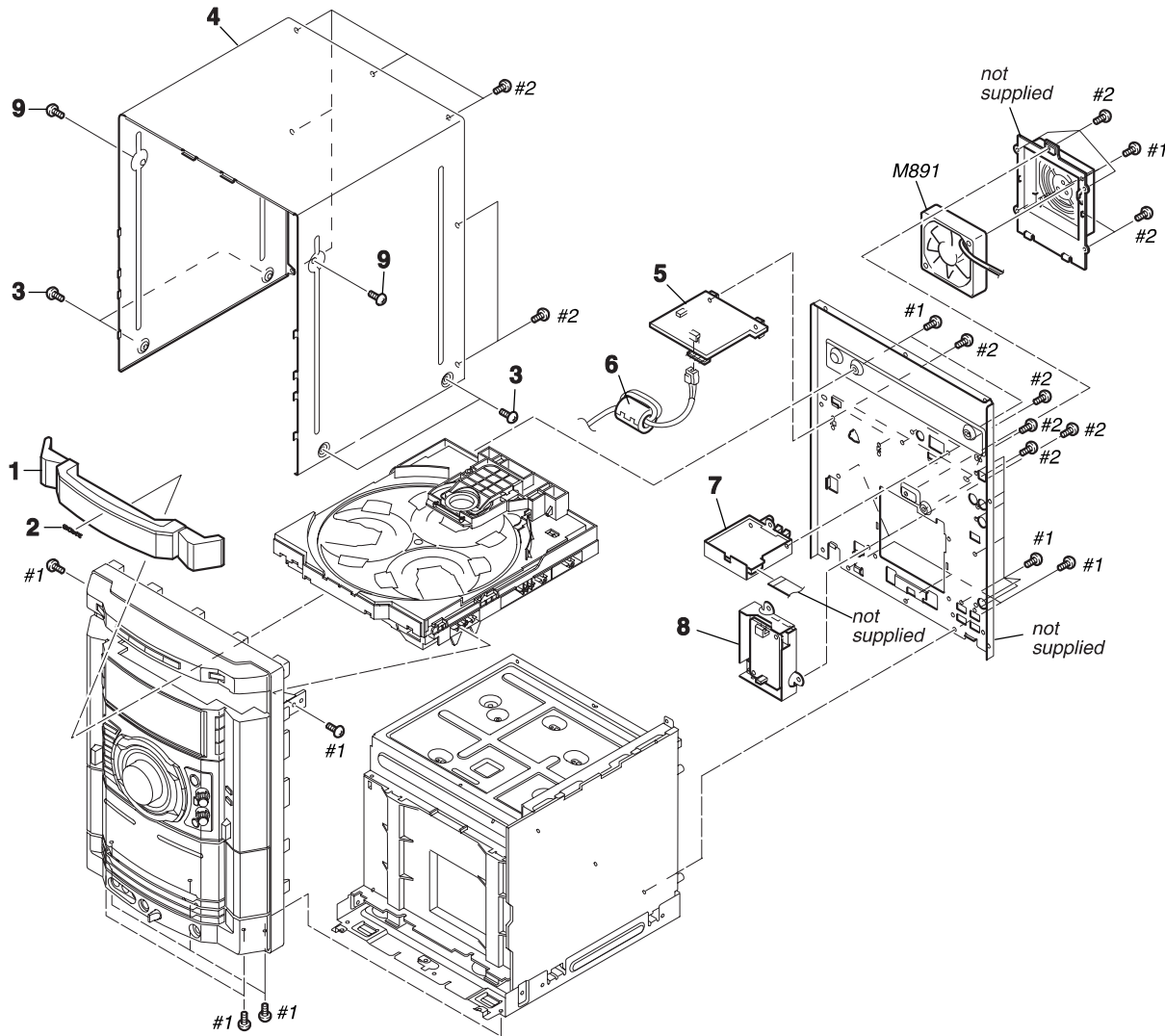
NOTE:

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

- Hardware (# mark) list and accessories are given in the last of this parts list.
- Abbreviation
 AUS : Australian model
 E2 : 120V AC Area in E model
 E3 : 240V AC Area in E model
 E51 : Chilean and Peruvian model
 MX : Mexican model

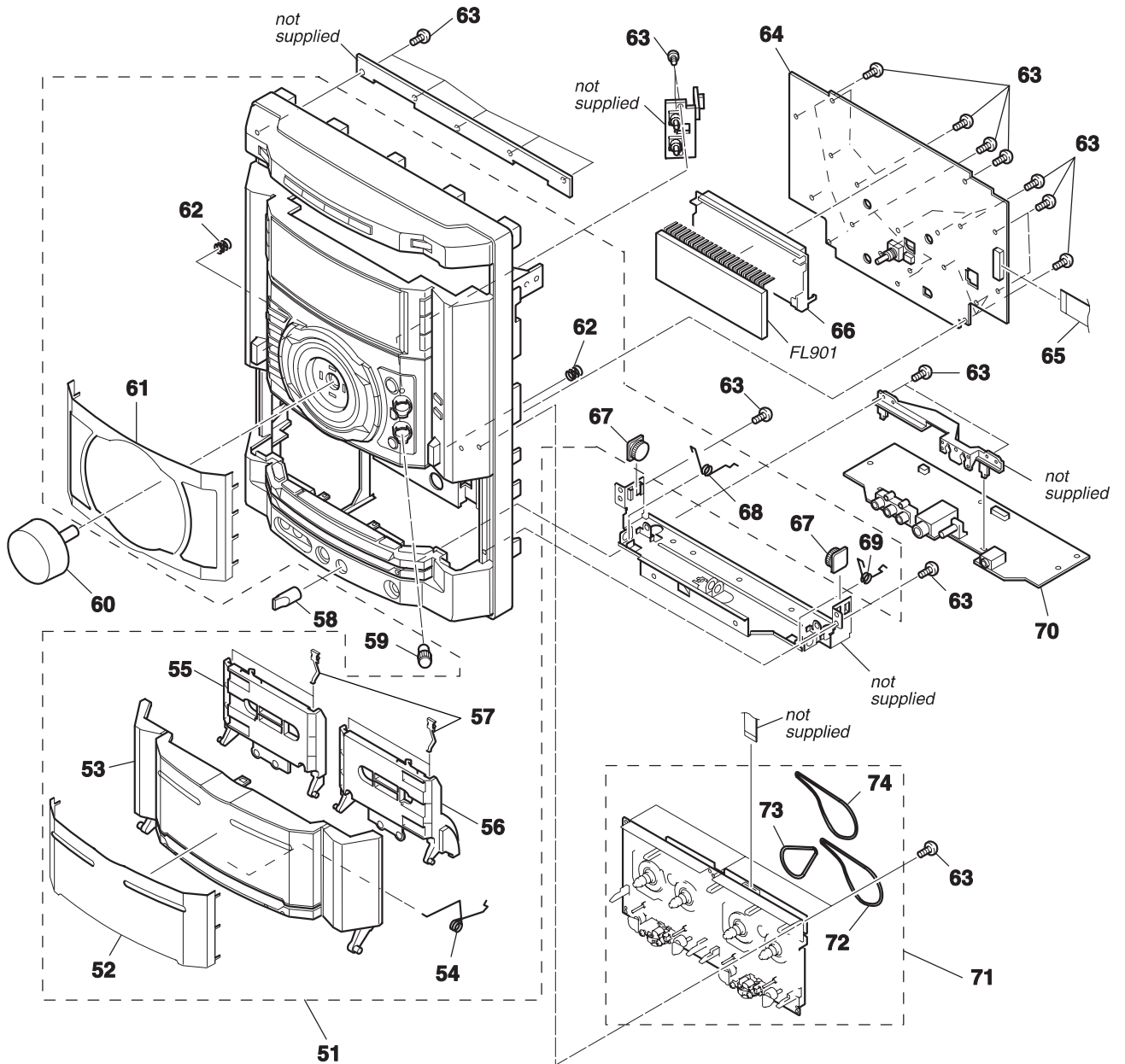
The components identified by mark Δ or dotted line with mark Δ are critical for safety.
 Replace only with part number specified.

8-1. CASE, REAR PANEL SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	X-4956-227-1	LOADING PANEL ASSY		6	1-500-497-11	FILTER, CLAMP (FERRITE CORE)	
2	4-963-404-21	EMBLEM (5-A), SONY		7	1-693-603-11	TUNER (FM/AM)	
3	3-363-099-02	SCREW (CASE 3 TP2) (M3x8)		Δ 8	1-468-737-21	POWER, SWITCHING	
4	4-231-828-71	CASE		9	3-363-099-32	SCREW (CASE 3 TP2) (M3 x12)	
5	A-4750-964-A	PRIMARY BOARD, COMPLETE (E2, E3, E51)		M891	1-787-099-21	FAN, DC	
5	A-4753-137-A	PRIMARY BOARD, COMPLETE (MX)		#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3 (E2)	
5	A-4753-146-A	PRIMARY BOARD, COMPLETE (AUS)		#2	7-685-871-01	SCREW +BVTT 3X6 (S)	

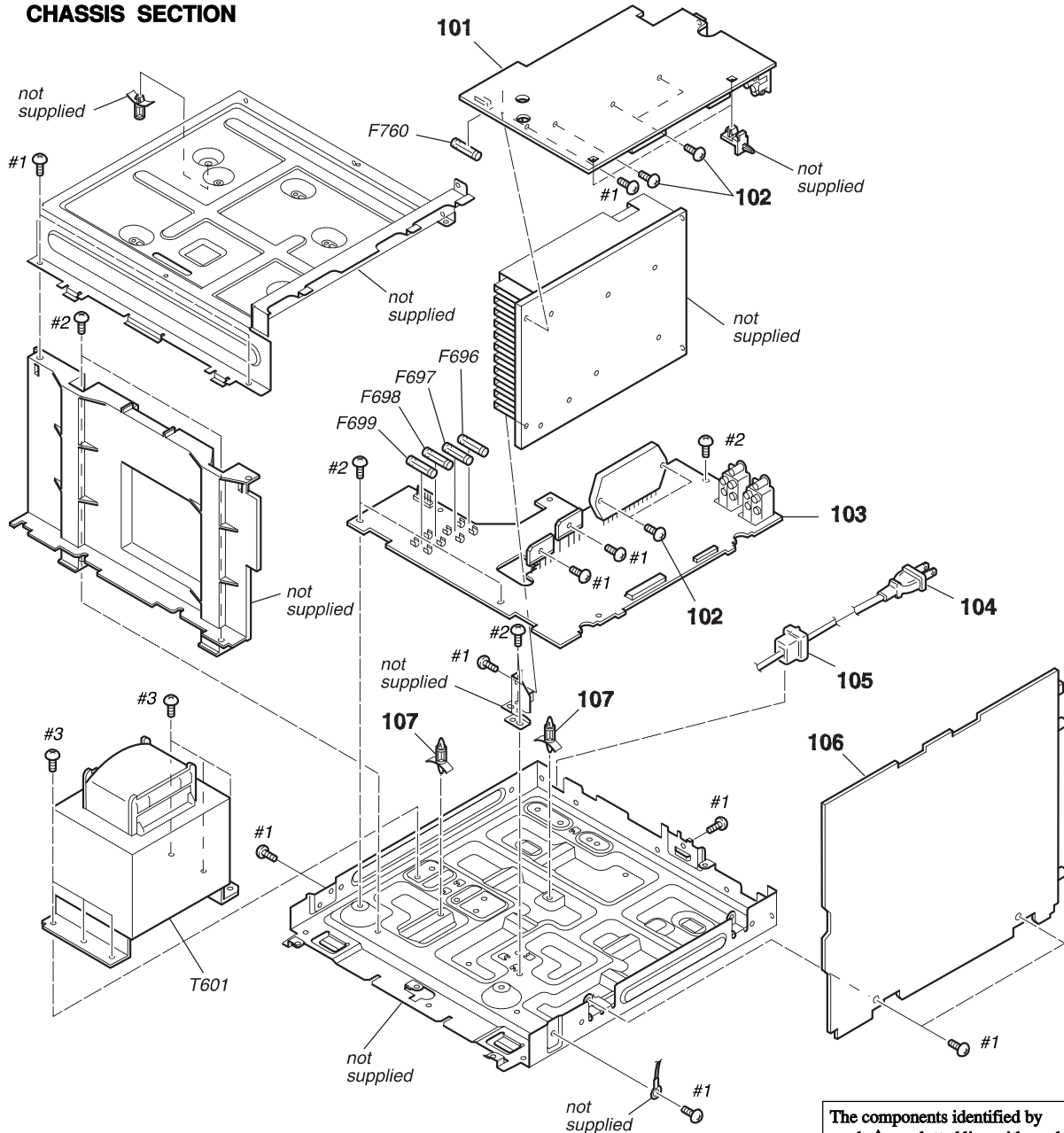
8-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
51	X-4956-225-1	FRONT PANEL ASSY		64	A-4750-973-A	PANEL BOARD, COMPLETE (E2, E3, E51, AUS)	
52	4-252-592-01	COVER AL-TC		65	1-773-109-11	WIRE (FLAT TYPE) (19 CORE)	
53	4-252-577-01	LID TC		66	4-231-581-01	HOLDER (FL)	
54	4-252-595-01	SPRING LID		67	4-224-104-11	DAMPER	
55	4-252-578-01	HOLDER TC-L		68	4-252-597-01	SPRING L	
56	4-252-579-01	HOLDER TC-R		69	4-252-598-01	SPRING R	
57	4-959-229-11	DETENT, CASSETTE		70	A-4750-976-A	GAME BOARD, COMPLETE	
58	4-224-578-21	KNOB (MIC)		71	1-796-487-61	DECK, MECHANICAL	
59	4-252-571-01	KNOB AMS		72	4-243-608-01	BELT (BR)	
60	4-252-575-01	KNOB VOL		73	4-243-609-01	BELT (AF)	
61	4-252-590-11	COVER AL-STR		74	4-243-610-01	BELT (AL)	
62	4-244-092-01	SPRING (EJECT)		FL901	1-518-981-11	VACUUM FLUORESCENT DISPLAY	
63	4-951-620-01	SCREW (2.6X8), +BVTP					
64	A-1056-930-A	PANEL BOARD, COMPLETE (MX)					

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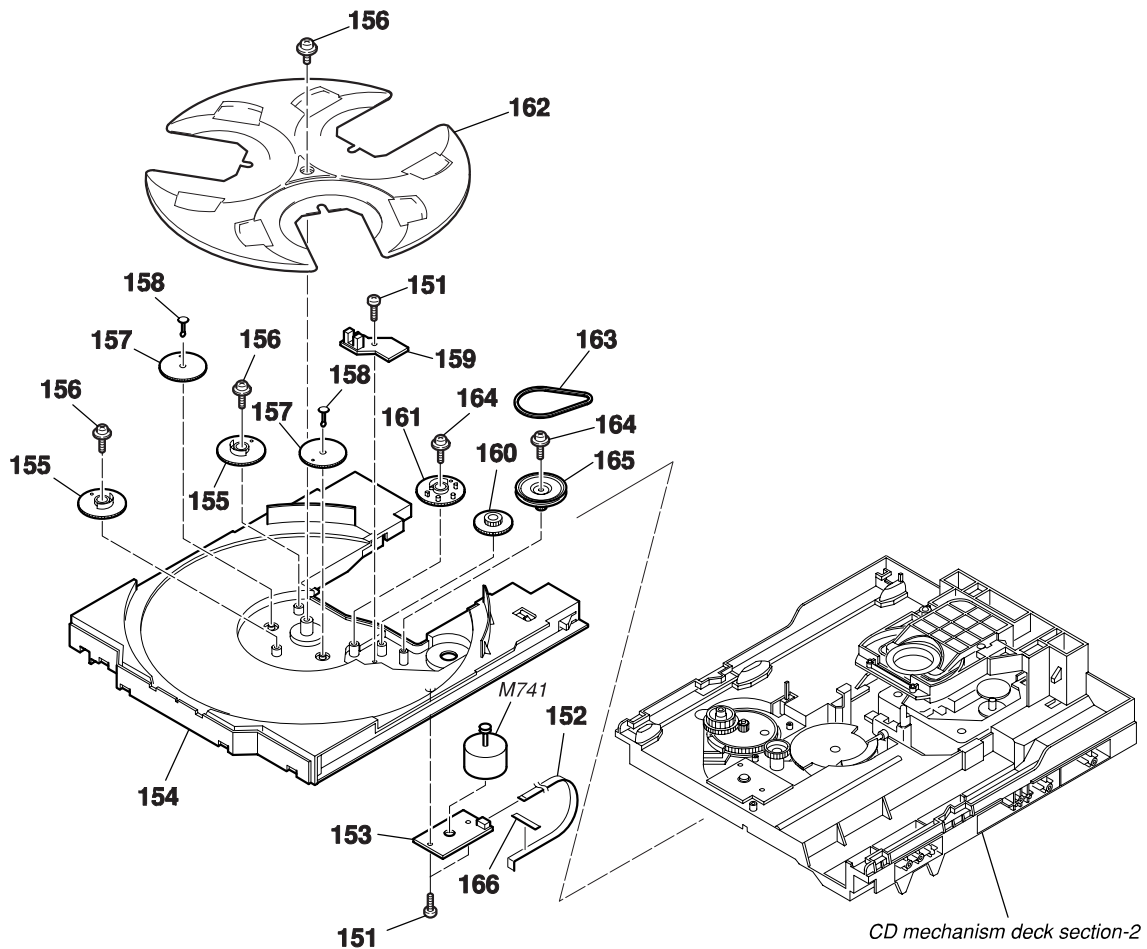
8-3. CHASSIS SECTION



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

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
101	A-1053-567-A	SURROUND BOARD, COMPLETE (MX)		106	A-4753-153-A	MAIN BOARD, COMPLETE (E51)	
101	A-4751-013-A	SURROUND BOARD, COMPLETE (E2, E3, E51)		106	A-4753-156-A	MAIN BOARD, COMPLETE (MX)	
101	A-4753-163-A	SURROUND BOARD, COMPLETE (AUS)		107	4-924-098-01	HOLDER, PC BOARD	
102	3-905-609-31	SCREW (TRANSISTOR)		Δ F696	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8.0AL/250V)	
103	A-1055-329-A	PA BOARD, COMPLETE (E3)		Δ F697	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8.0AL/250V)	
103	A-4751-012-A	PA BOARD, COMPLETE (E2, E51, MX)		Δ F698	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (6.3A/250V)	
103	A-4753-161-A	PA BOARD, COMPLETE (AUS)		Δ F699	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (6.3A/250V)	
Δ 104	1-777-071-53	CORD, POWER (E51)		Δ F760	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15AL/250V)	
Δ 104	1-827-226-11	CORD, POWER (E2, E3, MX)		Δ T601	1-443-202-11	POWER TRANSFORMER (E2, E3, E51, AUS)	
Δ 104	1-827-295-22	CORD, POWER (AUS)		Δ T601	1-443-202-21	POWER TRANSFORMER (MX)	
* 105	3-703-244-00	BUSHING (2104), CORD (E51, AUS)		#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
105	3-703-571-11	BUSHING (S) (4516), CORD (E2, E3, MX)		#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
106	A-4751-003-A	MAIN BOARD, COMPLETE (E2)		#3	7-685-881-09	SCREW +BVTT 4X8 (S)	
106	A-4753-142-A	MAIN BOARD, COMPLETE (E3)					
106	A-4753-148-A	MAIN BOARD, COMPLETE (AUS)					

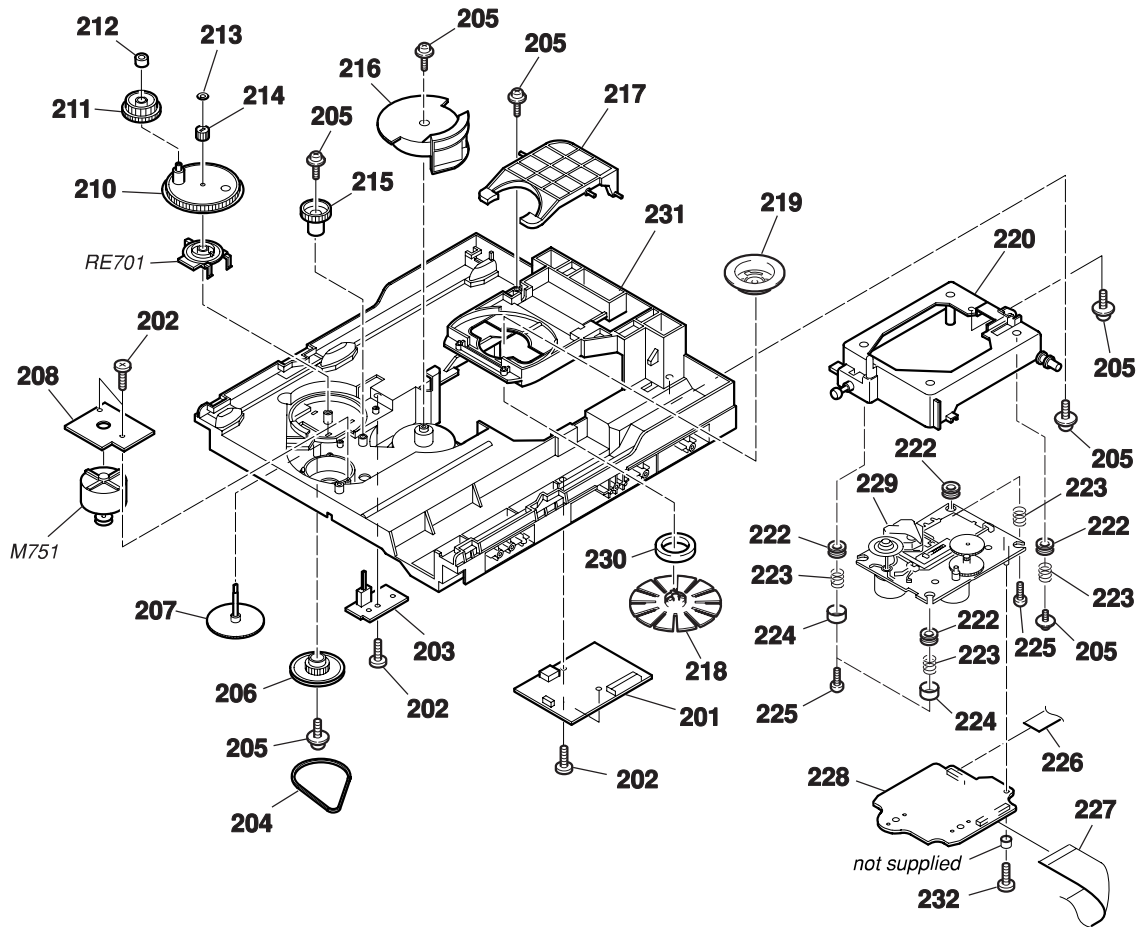
**8-4. CD MECHANISM DECK SECTION-1
(CDM74-F1BD81)**



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
151	4-218-253-32	SCREW (M2.6), +BTTP		160	4-243-820-01	GEAR (TABLE)	
152	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)		161	4-243-819-01	GEAR (GENEVA)	
153	1-687-134-12	MOTOR (TB) BOARD		162	4-243-816-01	TRAY	
154	4-243-815-01	TABLE (LOADING)		163	4-243-823-01	BELT (TABLE)	
155	4-245-571-02	GEAR (STOPPER)		164	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
156	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING		165	4-243-821-01	PULLEY (TABLE)	
157	4-245-570-01	GEAR (JOINT)		166	3-231-598-01	SHEET (BA)	
158	4-245-572-01	BUSHING (GEAR)		M741	A-4723-963-A	MOTOR ASSY, TABLE	
159	1-687-132-12	SENSOR BOARD					

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8-5. CD MECHANISM DECK SECTION-2 (CDM74-F1BD81)



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

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
201	1-678-135-12	DRIVER BOARD		218	X-4955-774-1	PULLEY (SM) ASSY, CHUCKING	
202	4-218-253-32	SCREW (M2.6), +BTTP		219	4-221-688-01	PULLEY (B), CHUCKING	
203	1-687-669-12	SW BOARD		220	X-4955-536-1	HOLDER (213) ASSY	
204	4-244-034-01	BELT (LOADING)		222	4-227-549-11	INSULATOR	
205	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING		223	4-227-045-11	SPRING (INSULATOR), COIL	
206	4-225-844-01	GEAR (LOADING A)		224	4-231-151-01	STOPPER (BU)	
207	4-224-613-01	GEAR (SHAFT)		225	4-218-253-22	SCREW (M2.6), +BTTP	
208	1-687-133-12	MOTOR (LD) BOARD		226	1-827-992-11	WIRE (FLAT TYPE) (16 CORE)	
210	4-244-108-01	GEAR, SWING		227	1-775-248-11	WIRE (FLAT TYPE) (27 CORE)	
211	4-224-609-01	GEAR (LOADING C)		228	A-4751-045-A	BD BOARD, COMPLETE	
212	4-224-608-01	COLLAR, SWING		Δ 229	8-820-244-01	OPTICAL PICK-UP (KSM-215DCP/C2NP)	
213	3-016-533-01	WASHER (FR), STOPPER		230	1-471-035-11	MAGNET ASSY	
214	4-224-611-01	GEAR (LOADING B)		231	4-243-817-01	CHASSIS	
215	4-224-606-01	GEAR (RV)		232	4-951-620-01	SCREW (2.6X8), +BVTP	
216	4-243-818-01	GEAR (U/D)		M751	A-4737-553-A	MOTOR ASSY, LOADING	
217	4-243-822-02	LEVER (LIFTER)		RE701	1-477-680-12	ENCODER, ROTARY	

**SECTION 9
ELECTRICAL PARTS LIST**

BD

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, -X mean standardized parts, so they may have some difference from the original one.
- Items marked “**” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
uF: μF
- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable

- COILS
uH: μH
- SEMICONDUCTORS
In each case, u: μ, for example:
uA...: μA... , uPA... , μPA... ,
uPB... , μPB... , uPC... , μPC... ,
uPD... , μPD...
- Abbreviation
AUS : Australian model
E2 : 120V AC Area in E model
E3 : 240V AC Area in E model
E51 : Chilean and Peruvian model
MX : Mexican model

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

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

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
	A-4751-045-A	BD BOARD, COMPLETE *****		C196	1-164-360-11	CERAMIC CHIP 0.1uF	16V
		< CAPACITOR >		C201	1-128-995-21	ELECT CHIP 100uF 20%	10V
C10	1-165-989-11	CERAMIC CHIP 10uF 10%	6.3V	C203	1-128-995-21	ELECT CHIP 100uF 20%	10V
C11	1-165-989-11	CERAMIC CHIP 10uF 10%	6.3V	C209	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C14	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C210	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C15	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C211	1-164-230-11	CERAMIC CHIP 220PF 5%	50V
C16	1-115-156-11	CERAMIC CHIP 1uF	10V	C212	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C17	1-126-246-11	ELECT CHIP 220uF 20%	4V	C213	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C18	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	C251	1-162-969-11	CERAMIC CHIP 0.0068uF 10%	25V
C111	1-162-967-11	CERAMIC CHIP 0.0033uF 10%	50V	C252	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C112	1-164-315-11	CERAMIC CHIP 470PF 5%	50V	C255	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C113	1-162-967-11	CERAMIC CHIP 0.0033uF 10%	50V	C257	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C114	1-164-315-11	CERAMIC CHIP 470PF 5%	50V	C258	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C115	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C259	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C116	1-128-995-21	ELECT CHIP 100uF 20%	10V	C260	1-128-394-11	ELECT CHIP 220uF 20%	10V
C122	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C302	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C123	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C303	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C124	1-162-959-11	CERAMIC CHIP 330PF 5%	50V	C305	1-126-246-11	ELECT CHIP 220uF 20%	4V
C125	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C306	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C131	1-162-927-11	CERAMIC CHIP 100PF 5%	50V	C307	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C132	1-117-863-11	CERAMIC CHIP 0.47uF 10%	6.3V	C308	1-126-208-21	ELECT CHIP 47uF 20%	4V
C133	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C309	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C134	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C310	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C141	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C311	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C142	1-162-965-11	CERAMIC CHIP 0.0015uF 10%	50V	C312	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C143	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C313	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C151	1-128-995-21	ELECT CHIP 100uF 20%	10V	C314	1-126-208-21	ELECT CHIP 47uF 20%	4V
C161	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C315	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C162	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C316	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C163	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C317	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C171	1-162-919-11	CERAMIC CHIP 22PF 5%	50V	C318	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C172	1-162-920-11	CERAMIC CHIP 27PF 5%	50V	C320	1-216-864-11	SHORT CHIP 0	
C174	1-164-360-11	CERAMIC CHIP 0.1uF	16V			< CONNECTOR >	
C181	1-164-360-11	CERAMIC CHIP 0.1uF	16V	CN101	1-770-425-11	CONNECTOR, FFC/FPC 16P	
C182	1-164-360-11	CERAMIC CHIP 0.1uF	16V	CN201	1-818-350-11	CONNECTOR (FFC) 27P	
C183	1-124-778-00	ELECT CHIP 22uF 20%	6.3V			< FERRITE BEAD >	
C184	1-124-778-00	ELECT CHIP 22uF 20%	6.3V	FB301	1-500-445-21	FERRITE, EMI (SMD) (2012)	
C185	1-164-315-11	CERAMIC CHIP 470PF 5%	50V				
C186	1-164-315-11	CERAMIC CHIP 470PF 5%	50V				
C194	1-164-360-11	CERAMIC CHIP 0.1uF	16V				
C195	1-164-360-11	CERAMIC CHIP 0.1uF	16V				

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BD	CD SW	DRIVER
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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
		< IC >					
IC101	8-752-425-12	IC CXD3059AR		R404	1-216-809-11	METAL CHIP 100 5%	1/10W
IC251	6-705-808-01	IC BA5947FM		R405	1-216-809-11	METAL CHIP 100 5%	1/10W
IC301	6-705-365-01	IC TC94A34FG-002		R406	1-216-809-11	METAL CHIP 100 5%	1/10W
IC303	6-705-807-01	IC BH15FB1WG					
		< TRANSISTOR >		R407	1-216-809-11	METAL CHIP 100 5%	1/10W
Q10	6-550-363-01	TRANSISTOR 2SB1690KT146		R408	1-216-809-11	METAL CHIP 100 5%	1/10W
		< RESISTOR >		R409	1-216-809-11	METAL CHIP 100 5%	1/10W
R10	1-216-791-11	METAL CHIP 3.3	5% 1/10W	R410	1-216-809-11	METAL CHIP 100 5%	1/10W
R11	1-216-864-11	SHORT CHIP 0		R411	1-216-809-11	METAL CHIP 100 5%	1/10W
R12	1-216-845-11	METAL CHIP 100K	5% 1/10W				
R13	1-218-446-11	METAL CHIP 1	5% 1/10W	R412	1-216-809-11	METAL CHIP 100 5%	1/10W
R111	1-216-821-11	METAL CHIP 1K	5% 1/10W	R419	1-216-809-11	METAL CHIP 100 5%	1/10W
		< SWITCH >					
R112	1-216-835-11	METAL CHIP 15K	5% 1/10W	S101	1-771-853-11	SWITCH, DETECTION (LIMIT)	
R113	1-216-821-11	METAL CHIP 1K	5% 1/10W				
R114	1-216-835-11	METAL CHIP 15K	5% 1/10W				
R121	1-216-835-11	METAL CHIP 15K	5% 1/10W				
R131	1-216-857-11	METAL CHIP 1M	5% 1/10W				
		< DIODE >		X171	1-767-408-21	VIBRATOR, CRYSTAL (16.9MHz)	
R132	1-216-833-11	METAL CHIP 10K	5% 1/10W	*****			
R133	1-216-848-11	METAL CHIP 180K	5% 1/10W				
R141	1-216-829-11	METAL CHIP 4.7K	5% 1/10W				
R142	1-216-821-11	METAL CHIP 1K	5% 1/10W				
R143	1-216-827-11	METAL CHIP 3.3K	5% 1/10W				
		< VIBRATOR >					
R151	1-216-864-11	SHORT CHIP 0					
R161	1-216-809-11	METAL CHIP 100	5% 1/10W				
R162	1-216-841-11	METAL CHIP 47K	5% 1/10W				
R163	1-216-809-11	METAL CHIP 100	5% 1/10W				
R165	1-216-864-11	SHORT CHIP 0					
		< RESISTOR >					
R171	1-216-817-11	METAL CHIP 470	5% 1/10W				
R172	1-216-857-11	METAL CHIP 1M	5% 1/10W				
R173	1-216-295-91	SHORT CHIP 0					
R181	1-216-809-11	METAL CHIP 100	5% 1/10W				
R182	1-216-809-11	METAL CHIP 100	5% 1/10W				
R191	1-216-864-11	SHORT CHIP 0					
R201	1-500-445-21	FERRITE, EMI (SMD) (2012)					
R203	1-216-864-11	SHORT CHIP 0					
R204	1-500-445-21	FERRITE, EMI (SMD) (2012)					
R205	1-216-864-11	SHORT CHIP 0					
R251	1-216-833-11	METAL CHIP 10K	5% 1/10W				
R252	1-216-837-11	METAL CHIP 22K	5% 1/10W				
R253	1-216-833-11	METAL CHIP 10K	5% 1/10W				
R301	1-216-845-11	METAL CHIP 100K	5% 1/10W				
R302	1-216-833-11	METAL CHIP 10K	5% 1/10W				
R303	1-216-845-11	METAL CHIP 100K	5% 1/10W				
R305	1-216-845-11	METAL CHIP 100K	5% 1/10W				
R306	1-216-864-11	SHORT CHIP 0					
R307	1-216-833-11	METAL CHIP 10K	5% 1/10W				
R313	1-216-813-11	METAL CHIP 220	5% 1/10W				
R351	1-216-809-11	METAL CHIP 100	5% 1/10W				
R352	1-216-809-11	METAL CHIP 100	5% 1/10W				
R353	1-216-809-11	METAL CHIP 100	5% 1/10W				
R354	1-216-809-11	METAL CHIP 100	5% 1/10W				
R401	1-216-809-11	METAL CHIP 100	5% 1/10W				
R402	1-216-809-11	METAL CHIP 100	5% 1/10W				
R403	1-216-809-11	METAL CHIP 100	5% 1/10W				
		< CAPACITOR >					
				C715	1-126-933-11	ELECT 100uF 20%	16V
				C731	1-126-964-11	ELECT 10uF 20%	50V
				C735	1-164-159-11	CERAMIC 0.1uF	50V
				C736	1-164-159-11	CERAMIC 0.1uF	50V
				C737	1-164-159-11	CERAMIC 0.1uF	50V
				C741	1-162-306-11	CERAMIC 0.01uF 20%	16V
				C751	1-162-306-11	CERAMIC 0.01uF 20%	16V

Ref. No.	Part No.	Description	Remarks
C752	1-164-159-11	CERAMIC 0.1uF	50V
< CONNECTOR >			
CN701	1-785-338-11	PIN, CONNECTOR (LIGHT ANGLE) 12P	
CN702	1-784-766-11	CONNECTOR, FFC 5P	
* CN703	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P	
CN704	1-785-328-11	PIN, CONNECTOR (LIGHT ANGRE) 2P	
< DIODE >			
D701	8-719-947-16	DIODE MTZJ-T-72-5.1A	
D711	8-719-983-66	DIODE MTZJ-T-72-3.6B	
< IC >			
IC701	8-759-598-69	IC BA6956AN	
IC712	8-759-598-69	IC BA6956AN	
< TRANSISTOR >			
Q731	8-729-029-66	TRANSISTOR DTC114ESA	
< RESISTOR >			
R701	1-249-413-11	CARBON 470 5%	1/4W
R702	1-247-807-31	CARBON 100 5%	1/4W
R711	1-247-831-91	CARBON 1K 5%	1/4W
R712	1-247-847-91	CARBON 4.7K 5%	1/4W
R713	1-247-863-91	CARBON 22K 5%	1/4W
R721	1-247-847-91	CARBON 4.7K 5%	1/4W
R722	1-247-847-91	CARBON 4.7K 5%	1/4W
R723	1-247-847-91	CARBON 4.7K 5%	1/4W
R731	1-247-807-31	CARBON 100 5%	1/4W
R732	1-249-429-11	CARBON 10K 5%	1/4W
R733	1-247-831-91	CARBON 1K 5%	1/4W
R734	1-249-430-11	CARBON 12K 5%	1/4W
R735	1-247-807-31	CARBON 100 5%	1/4W
R751	1-247-847-91	CARBON 4.7K 5%	1/4W

A-4750-976-A GAME BOARD, COMPLETE			

< CAPACITOR >			
C801	1-126-176-11	ELECT 220uF 20%	10V
C802	1-124-464-11	ELECT 0.22uF 20%	50V
C803	1-162-923-11	CERAMIC CHIP 47PF 5%	50V
C804	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C805	1-124-261-00	ELECT 10uF 20%	50V
C806	1-162-923-11	CERAMIC CHIP 47PF 5%	50V
C807	1-124-257-00	ELECT 2.2uF 20%	50V
C809	1-124-250-11	ELECT 0.15uF 20%	50V
C810	1-162-962-11	CERAMIC CHIP 470PF 10%	50V
C811	1-162-923-11	CERAMIC CHIP 47PF 5%	50V
C812	1-124-261-00	ELECT 10uF 20%	50V
C813	1-164-174-11	CERAMIC CHIP 0.0082uF 10%	25V
C814	1-124-261-00	ELECT 10uF 20%	50V
C816	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C817	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V
C838	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C839	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C840	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V

Ref. No.	Part No.	Description	Remarks
C841	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C842	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C845	1-124-261-00	ELECT 10uF 20%	50V
C846	1-124-261-00	ELECT 10uF 20%	50V
< CONNECTOR >			
* CN801	1-564-725-11	PIN, CONNECTOR (SMALL TYPE) 9P	
CN802	1-785-328-11	PIN, CONNECTOR (LIGHT ANGRE) 2P	
< DIODE >			
D802	8-719-988-61	DIODE 1SS355TE-17	
D803	8-719-988-61	DIODE 1SS355TE-17	
D806	8-719-988-61	DIODE 1SS355TE-17	
D807	8-719-988-61	DIODE 1SS355TE-17	
< EARTH TERMINAL >			
EPT802	1-537-738-21	TERMINAL, GROUND	
EPT803	1-537-738-21	TERMINAL, GROUND	
EPT804	1-537-738-21	TERMINAL, GROUND	
< IC >			
IC850	8-759-710-97	IC NJM4565M-D	
< JACK >			
J801	1-817-629-11	JACK (LARGE TYPE) (MIC)	
J850	1-764-592-11	JACK 3P (GAME INPUT)	
J851	1-794-702-11	JACK, HEADPHONE (PHONSE)	
< SHORT >			
JR803	1-216-864-11	SHORT CHIP	0
JR810	1-216-864-11	SHORT CHIP	0
JR811	1-216-864-11	SHORT CHIP	0
JR812	1-216-864-11	SHORT CHIP	0
JR813	1-216-864-11	SHORT CHIP	0
< RESISTOR >			
R801	1-216-845-11	METAL CHIP 100K 5%	1/10W
R802	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R803	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R804	1-216-809-11	METAL CHIP 100 5%	1/10W
R805	1-216-848-11	METAL CHIP 180K 5%	1/10W
R806	1-216-833-11	METAL CHIP 10K 5%	1/10W
R807	1-216-809-11	METAL CHIP 100 5%	1/10W
R808	1-216-837-11	METAL CHIP 22K 5%	1/10W
R809	1-216-821-11	METAL CHIP 1K 5%	1/10W
R810	1-216-845-11	METAL CHIP 100K 5%	1/10W
R811	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R813	1-216-821-11	METAL CHIP 1K 5%	1/10W
R814	1-216-833-11	METAL CHIP 10K 5%	1/10W
R827	1-216-845-11	METAL CHIP 100K 5%	1/10W
R828	1-216-845-11	METAL CHIP 100K 5%	1/10W
R829	1-216-821-11	METAL CHIP 1K 5%	1/10W
R830	1-216-821-11	METAL CHIP 1K 5%	1/10W
< VARIABLE RESISTOR >			
RV801	1-227-452-11	RES, VAR, CARBON	50K (MIC LEVEL)

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JOG **MAIN**

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
		JOG BOARD *****		C143	1-128-131-11	ELECT	22uF 20% 50V
		< CAPACITOR >		C144	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C964	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C145	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C965	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C146	1-115-412-11	CERAMIC CHIP	680PF 5% 25V
		< SWITCH >		C147	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
S957	1-478-662-11	ENCODER, ROTARY (MULTI JOG)		C148	1-124-257-00	ELECT	2.2uF 20% 50V
*****				C150	1-126-964-11	ELECT	10uF 20% 50V
A-4751-003-A	MAIN BOARD, COMPLETE (E2)			C151	1-126-964-11	ELECT	10uF 20% 50V
A-4753-142-A	MAIN BOARD, COMPLETE (E3)			C153	1-126-964-11	ELECT	10uF 20% 50V
A-4753-148-A	MAIN BOARD, COMPLETE (AUS)			C154	1-126-964-11	ELECT	10uF 20% 50V
A-4753-153-A	MAIN BOARD, COMPLETE (E51)			C155	1-126-964-11	ELECT	10uF 20% 50V
A-4753-156-A	MAIN BOARD, COMPLETE (MX)			C156	1-126-964-11	ELECT	10uF 20% 50V
*****				C157	1-136-497-81	FILM	0.1uF 5% 50V
7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3			C158	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
		< CAPACITOR >		C159	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C101	1-124-261-00	ELECT	10uF 20% 50V	C160	1-126-964-11	ELECT	10uF 20% 50V
C103	1-124-261-00	ELECT	10uF 20% 50V	C161	1-100-436-91	CERAMIC CHIP	0.033uF 10% 25V
C104	1-124-261-00	ELECT	10uF 20% 50V	C162	1-162-969-11	CERAMIC CHIP	0.0068uF 10% 25V
C105	1-126-964-11	ELECT	10uF 20% 50V	C163	1-126-964-11	ELECT	10uF 20% 50V
C106	1-126-964-11	ELECT	10uF 20% 50V	C164	1-136-170-00	FILM	0.27uF 5% 50V
C107	1-136-497-81	FILM	0.1uF 5% 50V	C165	1-137-195-11	FILM	0.56uF 5% 50V
C108	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V	C166	1-126-963-11	ELECT	4.7uF 20% 50V
C109	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V	C169	1-126-947-11	ELECT	47uF 20% 35V
C110	1-126-964-11	ELECT	10uF 20% 50V	C170	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C111	1-100-436-91	CERAMIC CHIP	0.033uF 10% 25V	C171	1-126-960-11	ELECT	1uF 20% 50V
C112	1-162-969-11	CERAMIC CHIP	0.0068uF 10% 25V	C172	1-126-964-11	ELECT	10uF 20% 50V
C113	1-126-964-11	ELECT	10uF 20% 50V	C173	1-115-412-11	CERAMIC CHIP	680PF 5% 25V
C114	1-136-170-00	FILM	0.27uF 5% 50V	C174	1-162-928-11	CERAMIC CHIP	120PF 5% 50V
C115	1-137-195-11	FILM	0.56uF 5% 50V	C175	1-162-959-11	CERAMIC CHIP	330PF 5% 50V
C116	1-126-963-11	ELECT	4.7uF 20% 50V	C176	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C119	1-124-589-11	ELECT	47uF 20% 16V	C177	1-137-194-81	FILM	0.47uF 5% 50V
C120	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C178	1-107-726-91	CERAMIC CHIP	0.01uF 10% 16V
C121	1-126-160-11	ELECT	1uF 20% 50V	C179	1-107-726-91	CERAMIC CHIP	0.01uF 10% 16V
C122	1-124-261-00	ELECT	10uF 20% 50V	C186	1-110-563-11	CERAMIC CHIP	0.068uF 10% 16V
C123	1-115-412-11	CERAMIC CHIP	680PF 5% 25V	C187	1-104-658-91	ELECT	100uF 20% 10V
C124	1-162-928-11	CERAMIC CHIP	120PF 5% 50V	C188	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C125	1-162-959-11	CERAMIC CHIP	330PF 5% 50V	C189	1-162-957-11	CERAMIC CHIP	220PF 5% 50V
C126	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C190	1-162-957-11	CERAMIC CHIP	220PF 5% 50V
C127	1-126-947-11	ELECT	47uF 20% 35V	C191	1-216-845-11	METAL CHIP	100K 5% 1/10W
C128	1-162-960-11	CERAMIC CHIP	220PF 10% 50V	C192	1-126-960-11	ELECT	1uF 20% 50V
C129	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C193	1-216-834-11	METAL CHIP	12K 5% 1/10W
C130	1-104-658-91	ELECT	100uF 20% 10V	C194	1-126-964-11	ELECT	10uF 20% 50V
C131	1-126-959-11	ELECT	0.47uF 20% 50V	C195	1-126-160-11	ELECT	1uF 20% 50V
C133	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C196	1-115-412-11	CERAMIC CHIP	680PF 5% 25V
C134	1-124-261-00	ELECT	10uF 20% 50V	C197	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C135	1-126-933-11	ELECT	100uF 20% 16V	C198	1-126-961-11	ELECT	2.2uF 20% 50V
C136	1-126-933-11	ELECT	100uF 20% 16V	C199	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V
C137	1-126-935-11	ELECT	470uF 20% 16V	C200	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V
C138	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V	C301	1-126-964-11	ELECT	10uF 20% 50V
C139	1-137-150-11	FILM	0.01uF 5% 100V	C302	1-136-497-81	FILM	0.1uF 5% 50V
C140	1-126-947-11	ELECT	47uF 20% 35V	C303	1-136-497-81	FILM	0.1uF 5% 50V
C141	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C316	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C142	1-130-481-00	MYLAR	0.0068uF 5% 50V	C410	1-162-919-11	CERAMIC CHIP	22PF 5% 50V
				C411	1-162-917-11	CERAMIC CHIP	15PF 5% 50V
				C412	1-164-156-11	CERAMIC CHIP	0.1uF 25V
				C416	1-104-656-11	ELECT	2200uF 20% 6.3V
				C419	1-162-923-11	CERAMIC CHIP	47PF 5% 50V

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C421	1-162-923-11	CERAMIC CHIP	47PF 5% 50V	C629	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C429	1-162-923-11	CERAMIC CHIP	47PF 5% 50V			< CONNECTOR >	
C430	1-162-923-11	CERAMIC CHIP	47PF 5% 50V	CN501	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P	
C462	1-104-658-91	ELECT	100uF 20% 10V	CN502	1-573-843-11	CONNECTOR, BOARD TO BOARD 11P	
C464	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	CN503	1-564-506-11	PLUG, CONNECTOR 3P	
C469	1-126-157-11	ELECT	10uF 20% 16V (E2, E3, E51)	CN504	1-816-304-11	SOCKET, DIN 9P (SYSTEM CONTROL)	
C497	1-164-156-11	CERAMIC CHIP	0.1uF 25V	CN505	1-779-564-21	CONNECTOR, FFC (LIF (NON-ZIF)) 27P	
C498	1-126-964-11	ELECT	10uF 20% 50V	CN506	1-569-906-11	SOCKET, CONNECTOR 11P	
C499	1-164-156-11	CERAMIC CHIP	0.1uF 25V	CN507	1-785-338-11	PIN, CONNECTOR (LIGHT ANGLE) 12P	
C501	1-128-548-11	ELECT	4700uF 20% 25V	* CN508	1-569-935-11	SOCKET, CONNECTOR 19P	
C503	1-164-156-11	CERAMIC CHIP	0.1uF 25V	* CN509	1-569-930-11	SOCKET, CONNECTOR 13P	
C504	1-126-926-11	ELECT	1000uF 20% 10V	* CN510	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P	
C505	1-164-156-11	CERAMIC CHIP	0.1uF 25V	CN512	1-785-336-11	PIN, CONNECTOR (LIGHT ANGLE) 10P	
C506	1-126-925-91	ELECT	470uF 20% 10V	CN513	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P	
C507	1-164-156-11	CERAMIC CHIP	0.1uF 25V	CN514	1-766-715-21	CONNECTOR, BOARD TO BOARD 10P	
C508	1-104-656-11	ELECT	2200uF 20% 6.3V			< DIODE >	
C517	1-125-827-91	CERAMIC CHIP	1uF 10% 25V	D101	8-719-988-61	DIODE 1SS355TE-17	
C518	1-125-827-91	CERAMIC CHIP	1uF 10% 25V	D102	8-719-988-61	DIODE 1SS355TE-17	
C520	1-126-961-11	ELECT	2.2uF 20% 50V	D104	8-719-988-61	DIODE 1SS355TE-17	
C521	1-162-960-11	CERAMIC CHIP	220PF 10% 50V	D105	8-719-988-61	DIODE 1SS355TE-17	
C523	1-126-964-11	ELECT	10uF 20% 50V	D301	8-719-988-61	DIODE 1SS355TE-17	
C525	1-164-156-11	CERAMIC CHIP	0.1uF 25V	D302	8-719-988-61	DIODE 1SS355TE-17	
C526	1-164-156-11	CERAMIC CHIP	0.1uF 25V	D303	8-719-988-61	DIODE 1SS355TE-17	
C531	1-164-156-11	CERAMIC CHIP	0.1uF 25V (AUS)	D501	8-719-988-61	DIODE 1SS355TE-17	
C532	1-164-156-11	CERAMIC CHIP	0.1uF 25V (AUS)	D502	6-500-508-01	DIODE RR263M-400FTR	
C532	1-164-360-11	CERAMIC CHIP	0.1uF 16V	D503	8-719-988-61	DIODE 1SS355TE-17	
C533	1-104-658-91	ELECT	100uF 20% 10V	D504	8-719-988-61	DIODE 1SS355TE-17	
C534	1-164-156-11	CERAMIC CHIP	0.1uF 25V	D507	6-500-508-01	DIODE RR263M-400FTR	
C535	1-126-928-11	ELECT	3300uF 20% 10V	D508	6-500-508-01	DIODE RR263M-400FTR	
C536	1-164-156-11	CERAMIC CHIP	0.1uF 25V	D509	6-500-508-01	DIODE RR263M-400FTR	
C537	1-164-156-11	CERAMIC CHIP	0.1uF 25V	D511	8-719-977-40	DIODE DTZ13B	
C538	1-164-156-11	CERAMIC CHIP	0.1uF 25V	D627	8-719-988-61	DIODE 1SS355TE-17	
C541	1-124-261-00	ELECT	10uF 20% 50V			< FERRITE BEAD >	
C542	1-124-234-00	ELECT	22uF 20% 16V	FB416	1-216-864-11	SHORT CHIP 0	
C543	1-125-972-91	ELECT	100uF 20% 16V	FB462	1-414-864-11	FERRITE, EMI (SMD) (1608)	
C545	1-124-584-00	ELECT	100uF 20% 6.3V	FB505	1-216-864-11	SHORT CHIP 0	
C546	1-164-156-11	CERAMIC CHIP	0.1uF 25V (AUS)	FB506	1-414-235-22	INDUCTOR, FERRITE BEAD	
C548	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	FB507	1-414-235-22	INDUCTOR, FERRITE BEAD	
C549	1-126-964-11	ELECT	10uF 20% 50V	FB508	1-414-235-22	INDUCTOR, FERRITE BEAD	
C550	1-164-156-11	CERAMIC CHIP	0.1uF 25V	FB509	1-414-235-22	INDUCTOR, FERRITE BEAD	
C551	1-107-714-11	ELECT	10uF 20% 50V	FB510	1-414-235-22	INDUCTOR, FERRITE BEAD	
C570	1-126-961-11	ELECT	2.2uF 20% 50V	FB511	1-414-235-22	INDUCTOR, FERRITE BEAD (E2, E3, E51, MX)	
C571	1-162-960-11	CERAMIC CHIP	220PF 10% 50V	FB511	1-500-284-21	INDUCTOR, FERRITE BEAD (AUS)	
C573	1-126-964-11	ELECT	10uF 20% 50V	FB512	1-500-284-21	INDUCTOR, FERRITE BEAD	
C575	1-164-156-11	CERAMIC CHIP	0.1uF 25V	FB555	1-216-864-11	SHORT CHIP 0	
C576	1-162-960-11	CERAMIC CHIP	220PF 10% 50V			< IC >	
C577	1-126-157-11	ELECT	10uF 20% 16V	IC101	6-705-667-01	IC M61537FP-RF0G	
C578	1-162-919-11	CERAMIC CHIP	22PF 5% 50V	IC301	6-705-809-01	IC BD4929G-TR	
C579	1-162-919-11	CERAMIC CHIP	22PF 5% 50V	IC401	6-803-975-01	IC M3062CMEN-A03FPU0	
C580	1-164-172-11	CERAMIC CHIP	0.0056uF 10% 25V	IC502	8-759-394-36	IC BA09T	
C581	1-164-172-11	CERAMIC CHIP	0.0056uF 10% 25V	IC503	6-703-550-01	IC TA7809LS	
C582	1-126-157-11	ELECT	10uF 20% 16V	IC504	6-702-771-01	IC TA78033LS	
C626	1-126-969-11	ELECT	220uF 20% 50V	IC508	6-600-012-01	IC TOTX141L (CD DIGITAL OUT)	
C627	1-126-961-11	ELECT	2.2uF 20% 50V				
C628	1-126-933-11	ELECT	100uF 20% 16V				

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MAIN

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
IC627	6-703-610-01	IC RT8H015C-T112-1		JR879	1-216-864-11	SHORT CHIP	0
IC801	8-759-095-35	IC M5282FP-T1		JR882	1-216-864-11	SHORT CHIP	0
		< JACK >		JR883	1-216-864-11	SHORT CHIP	0
J501	1-770-272-11	JACK, PIN 2P (VIDEO/MD (AUDIO))				< COIL >	
J504	1-774-227-11	JACK, PIN 1P (VIDEO OUT)		L103	1-410-780-11	INDUCTOR	27mH
		< SHORT >		L104	1-410-780-11	INDUCTOR	27mH
JR102	1-216-864-11	SHORT CHIP	0	L105	1-414-189-31	INDUCTOR	100uH
JR104	1-216-864-11	SHORT CHIP	0			< TRANSISTOR >	
JR106	1-216-296-11	SHORT CHIP	0	Q101	8-729-120-28	TRANSISTOR	2SC1623-L5L6
JR106	1-216-864-11	SHORT CHIP	0	Q102	8-729-802-80	TRANSISTOR	2SC3661
JR108	1-216-864-11	SHORT CHIP	0	Q103	8-729-802-80	TRANSISTOR	2SC3661
JR109	1-216-864-11	SHORT CHIP	0	Q104	8-729-802-80	TRANSISTOR	2SC3661
JR110	1-216-864-11	SHORT CHIP	0	Q105	8-729-802-80	TRANSISTOR	2SC3661
JR111	1-216-864-11	SHORT CHIP	0	Q106	8-729-802-80	TRANSISTOR	2SC3661
JR112	1-216-864-11	SHORT CHIP	0	Q107	8-729-216-22	TRANSISTOR	2SA1162-G
JR113	1-216-864-11	SHORT CHIP	0	Q108	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR114	1-216-864-11	SHORT CHIP	0	Q109	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR115	1-216-864-11	SHORT CHIP	0	Q110	8-729-027-23	TRANSISTOR	DTA114EKA-T146
JR116	1-216-296-11	SHORT CHIP	0	Q111	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR117	1-216-864-11	SHORT CHIP	0	Q112	8-729-141-75	TRANSISTOR	2SD596DV345
JR118	1-216-864-11	SHORT CHIP	0	Q113	6-550-185-01	TRANSISTOR	RT1P137P-TP-1
JR119	1-216-864-11	SHORT CHIP	0	Q114	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR120	1-216-864-11	SHORT CHIP	0	Q115	8-729-141-73	TRANSISTOR	2SC3624A-T1L15L16
JR121	1-216-864-11	SHORT CHIP	0	Q116	8-729-113-13	TRANSISTOR	FA1A4M-L33
JR122	1-216-864-11	SHORT CHIP	0	Q117	8-729-113-13	TRANSISTOR	FA1A4M-L33
JR207	1-216-296-11	SHORT CHIP	0	Q118	8-729-903-46	TRANSISTOR	2SB1132-P
JR231	1-216-864-11	SHORT CHIP	0	Q119	8-729-113-13	TRANSISTOR	FA1A4M-L33
JR233	1-216-864-11	SHORT CHIP	0	Q120	8-729-903-46	TRANSISTOR	2SB1132-P
JR234	1-216-864-11	SHORT CHIP	0	Q121	8-729-113-13	TRANSISTOR	FA1A4M-L33
JR236	1-216-864-11	SHORT CHIP	0	Q122	8-729-903-46	TRANSISTOR	2SB1132-P
JR237	1-216-864-11	SHORT CHIP	0	Q123	8-729-113-13	TRANSISTOR	FA1A4M-L33
JR238	1-216-864-11	SHORT CHIP	0	Q124	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR240	1-216-864-11	SHORT CHIP	0	Q125	8-729-141-73	TRANSISTOR	2SC3624A-T1L15L16
JR241	1-216-864-11	SHORT CHIP	0	Q151	8-729-120-28	TRANSISTOR	2SC1623-L5L6
JR243	1-216-864-11	SHORT CHIP	0	Q152	8-729-802-80	TRANSISTOR	2SC3661
JR244	1-216-296-11	SHORT CHIP	0	Q153	8-729-802-80	TRANSISTOR	2SC3661
JR245	1-216-864-11	SHORT CHIP	0	Q154	8-729-802-80	TRANSISTOR	2SC3661
JR246	1-216-864-11	SHORT CHIP	0	Q155	8-729-802-80	TRANSISTOR	2SC3661
JR247	1-216-864-11	SHORT CHIP	0	Q166	8-729-802-80	TRANSISTOR	2SC3661
JR248	1-216-864-11	SHORT CHIP	0	Q175	8-729-141-73	TRANSISTOR	2SC3624A-T1L15L16
JR249	1-216-864-11	SHORT CHIP	0	Q301	8-729-120-28	TRANSISTOR	2SC1623-L5L6
JR251	1-216-864-11	SHORT CHIP	0	Q402	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (E2, E3, E51)
JR252	1-216-864-11	SHORT CHIP	0	Q501	6-550-185-01	TRANSISTOR	RT1P137P-TP-1
JR253	1-216-864-11	SHORT CHIP	0	Q502	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR254	1-216-864-11	SHORT CHIP	0	Q505	8-729-113-69	TRANSISTOR	FN1F4M-M32
JR256	1-216-296-11	SHORT CHIP	0	Q506	8-729-113-13	TRANSISTOR	FA1A4M-L33
JR257	1-216-864-11	SHORT CHIP	0	Q507	8-729-113-69	TRANSISTOR	FN1F4M-M32
JR258	1-216-296-11	SHORT CHIP	0	Q508	8-729-113-13	TRANSISTOR	FA1A4M-L33
JR259	1-216-864-11	SHORT CHIP	0	Q509	8-729-113-69	TRANSISTOR	FN1F4M-M32
JR260	1-216-296-11	SHORT CHIP	0	Q510	8-729-113-13	TRANSISTOR	FA1A4M-L33
JR330	1-216-296-11	SHORT CHIP	0	Q514	8-729-027-23	TRANSISTOR	DTA114EKA-T146
JR331	1-216-864-11	SHORT CHIP	0	Q515	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR333	1-216-864-11	SHORT CHIP	0	Q520	8-729-802-80	TRANSISTOR	2SC3661
JR503	1-216-864-11	SHORT CHIP	0	Q521	8-729-120-28	TRANSISTOR	2SC1623-L5L6
JR732	1-216-864-11	SHORT CHIP	0	Q523	8-729-120-28	TRANSISTOR	2SC1623-L5L6
JR874	1-216-864-11	SHORT CHIP	0	Q524	8-729-026-68	TRANSISTOR	2SD2525 (TP)

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
Q526	8-729-027-23	TRANSISTOR	DTA114EKA-T146	R155	1-216-841-11	METAL CHIP	47K 5% 1/10W
Q527	8-729-027-43	TRANSISTOR	DTC114EKA-T146	R156	1-216-837-11	METAL CHIP	22K 5% 1/10W
Q570	8-729-802-80	TRANSISTOR	2SC3661	R157	1-216-833-11	METAL CHIP	10K 5% 1/10W
		< RESISTOR >		R158	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R101	1-216-812-11	METAL CHIP	180 5% 1/10W	R159	1-216-821-11	METAL CHIP	1K 5% 1/10W
R102	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R160	1-216-851-11	METAL CHIP	330K 5% 1/10W
R103	1-216-833-11	METAL CHIP	10K 5% 1/10W	R161	1-216-821-11	METAL CHIP	1K 5% 1/10W
R104	1-216-833-11	METAL CHIP	10K 5% 1/10W	R162	1-216-833-11	METAL CHIP	10K 5% 1/10W
R105	1-216-841-11	METAL CHIP	47K 5% 1/10W	R163	1-216-833-11	METAL CHIP	10K 5% 1/10W
R106	1-216-837-11	METAL CHIP	22K 5% 1/10W	R164	1-216-864-11	SHORT CHIP	0
R107	1-216-833-11	METAL CHIP	10K 5% 1/10W	R165	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W
R108	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R166	1-216-833-11	METAL CHIP	10K 5% 1/10W
R109	1-216-821-11	METAL CHIP	1K 5% 1/10W	R167	1-216-821-11	METAL CHIP	1K 5% 1/10W
R110	1-216-851-11	METAL CHIP	330K 5% 1/10W	R168	1-216-833-11	METAL CHIP	10K 5% 1/10W
R111	1-216-821-11	METAL CHIP	1K 5% 1/10W	R169	1-216-816-11	METAL CHIP	390 5% 1/10W
R112	1-216-833-11	METAL CHIP	10K 5% 1/10W	R172	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R113	1-216-833-11	METAL CHIP	10K 5% 1/10W	R173	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R114	1-216-864-11	SHORT CHIP	0	R174	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R115	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W	R175	1-216-838-11	METAL CHIP	27K 5% 1/10W
R116	1-216-833-11	METAL CHIP	10K 5% 1/10W	R176	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R117	1-216-821-11	METAL CHIP	1K 5% 1/10W	R177	1-216-830-11	METAL CHIP	5.6K 5% 1/10W
R118	1-216-833-11	METAL CHIP	10K 5% 1/10W	R178	1-216-819-11	METAL CHIP	680 5% 1/10W
R119	1-216-816-11	METAL CHIP	390 5% 1/10W	R179	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R122	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R180	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R123	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R181	1-216-819-11	METAL CHIP	680 5% 1/10W
R124	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R182	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R125	1-216-838-11	METAL CHIP	27K 5% 1/10W	R183	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R126	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R184	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R127	1-216-830-11	METAL CHIP	5.6K 5% 1/10W	R185	1-216-819-11	METAL CHIP	680 5% 1/10W
R128	1-216-821-11	METAL CHIP	1K 5% 1/10W	R186	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R129	1-216-838-11	METAL CHIP	27K 5% 1/10W	R187	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R130	1-216-835-11	METAL CHIP	15K 5% 1/10W	R188	1-216-822-11	METAL CHIP	1.2K 5% 1/10W
R131	1-216-835-11	METAL CHIP	15K 5% 1/10W	R189	1-216-809-11	METAL CHIP	100 5% 1/10W
R132	1-216-857-11	METAL CHIP	1M 5% 1/10W	R190	1-216-833-11	METAL CHIP	10K 5% 1/10W
R133	1-216-845-11	METAL CHIP	100K 5% 1/10W	R191	1-216-817-11	METAL CHIP	470 5% 1/10W
R134	1-216-864-11	SHORT CHIP	0	R192	1-216-817-11	METAL CHIP	470 5% 1/10W
R135	1-216-833-11	METAL CHIP	10K 5% 1/10W	R193	1-164-156-11	CERAMIC CHIP	0.1uF 25V
R136	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R194	1-164-156-11	CERAMIC CHIP	0.1uF 25V
R137	1-216-837-11	METAL CHIP	22K 5% 1/10W	R195	1-216-857-11	METAL CHIP	1M 5% 1/10W
R138	1-216-833-11	METAL CHIP	10K 5% 1/10W	R200	1-216-841-11	METAL CHIP	47K 5% 1/10W
R139	1-216-833-11	METAL CHIP	10K 5% 1/10W	R301	1-216-813-11	METAL CHIP	220 5% 1/10W
R140	1-216-833-11	METAL CHIP	10K 5% 1/10W	R302	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R141	1-216-833-11	METAL CHIP	10K 5% 1/10W	R303	1-216-837-11	METAL CHIP	22K 5% 1/10W
R142	1-216-833-11	METAL CHIP	10K 5% 1/10W	R304	1-216-837-11	METAL CHIP	22K 5% 1/10W
R143	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R329	1-216-833-11	METAL CHIP	10K 5% 1/10W
R144	1-216-805-11	METAL CHIP	47 5% 1/10W	R330	1-216-833-11	METAL CHIP	10K 5% 1/10W
R145	1-216-833-11	METAL CHIP	10K 5% 1/10W	R333	1-216-833-11	METAL CHIP	10K 5% 1/10W
R146	1-216-797-11	METAL CHIP	10 5% 1/10W	R342	1-216-833-11	METAL CHIP	10K 5% 1/10W
R147	1-216-803-11	METAL CHIP	33 5% 1/10W	R351	1-216-833-11	METAL CHIP	10K 5% 1/10W
R148	1-216-841-11	METAL CHIP	47K 5% 1/10W	R353	1-216-833-11	METAL CHIP	10K 5% 1/10W
R149	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R355	1-216-833-11	METAL CHIP	10K 5% 1/10W
R150	1-216-841-11	METAL CHIP	47K 5% 1/10W	R356	1-216-833-11	METAL CHIP	10K 5% 1/10W
R151	1-216-812-11	METAL CHIP	180 5% 1/10W	R358	1-216-833-11	METAL CHIP	10K 5% 1/10W
R152	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R361	1-216-833-11	METAL CHIP	10K 5% 1/10W
R153	1-216-833-11	METAL CHIP	10K 5% 1/10W	R369	1-216-833-11	METAL CHIP	10K 5% 1/10W
R154	1-216-833-11	METAL CHIP	10K 5% 1/10W	R373	1-216-833-11	METAL CHIP	10K 5% 1/10W
				R374	1-216-833-11	METAL CHIP	10K 5% 1/10W

(E2, E3, E51)

HCD-GN880

MAIN

Ref. No.	Part No.	Description			Remarks	Ref. No.	Part No.	Description			Remarks
R375	1-216-833-11	METAL CHIP	10K	5%	1/10W	R466	1-216-809-11	METAL CHIP	100	5%	1/10W
R381	1-216-833-11	METAL CHIP	10K	5%	1/10W	R467	1-216-809-11	METAL CHIP	100	5%	1/10W
R386	1-216-833-11	METAL CHIP	10K	5%	1/10W	R468	1-216-809-11	METAL CHIP	100	5%	1/10W
R387	1-216-833-11	METAL CHIP	10K	5%	1/10W	R469	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R389	1-216-833-11	METAL CHIP	10K	5%	1/10W						(E2, E3, E51)
R390	1-216-833-11	METAL CHIP	10K	5%	1/10W	R481	1-216-809-11	METAL CHIP	100	5%	1/10W
R391	1-216-833-11	METAL CHIP	10K	5%	1/10W	R482	1-216-809-11	METAL CHIP	100	5%	1/10W
R392	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R483	1-216-809-11	METAL CHIP	100	5%	1/10W
R393	1-216-821-11	METAL CHIP	1K	5%	1/10W	R484	1-216-809-11	METAL CHIP	100	5%	1/10W
					(E2, E51, MX)	R485	1-216-809-11	METAL CHIP	100	5%	1/10W
R393	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R486	1-216-809-11	METAL CHIP	100	5%	1/10W
					(E3, AUS)	R487	1-216-809-11	METAL CHIP	100	5%	1/10W
R394	1-216-821-11	METAL CHIP	1K	5%	1/10W	R488	1-216-809-11	METAL CHIP	100	5%	1/10W
R395	1-216-833-11	METAL CHIP	10K	5%	1/10W	R489	1-216-809-11	METAL CHIP	100	5%	1/10W
R401	1-216-809-11	METAL CHIP	100	5%	1/10W	R490	1-216-809-11	METAL CHIP	100	5%	1/10W
R402	1-216-813-11	METAL CHIP	220	5%	1/10W	R491	1-216-809-11	METAL CHIP	100	5%	1/10W
R403	1-216-809-11	METAL CHIP	100	5%	1/10W						
R404	1-216-809-11	METAL CHIP	100	5%	1/10W	R492	1-216-819-11	METAL CHIP	680	5%	1/10W
R405	1-216-864-11	SHORT CHIP	0			R493	1-216-815-11	METAL CHIP	330	5%	1/10W
R406	1-216-864-11	SHORT CHIP	0								(E3)
R407	1-216-864-11	SHORT CHIP	0			R493	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R409	1-216-833-11	METAL CHIP	10K	5%	1/10W						(AUS)
R411	1-216-851-11	METAL CHIP	330K	5%	1/10W	R493	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
											(E2, E51, MX)
R412	1-216-845-11	METAL CHIP	100K	5%	1/10W	R494	1-216-809-11	METAL CHIP	100	5%	1/10W
R413	1-216-864-11	SHORT CHIP	0			R495	1-216-821-11	METAL CHIP	1K	5%	1/10W
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W	R502	1-216-821-11	METAL CHIP	1K	5%	1/10W
R418	1-216-813-11	METAL CHIP	220	5%	1/10W	R508	1-216-853-11	METAL CHIP	470K	5%	1/10W
R419	1-216-809-11	METAL CHIP	100	5%	1/10W	R509	1-216-843-11	METAL CHIP	68K	5%	1/10W
R420	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R510	1-216-835-11	METAL CHIP	15K	5%	1/10W
R421	1-216-809-11	METAL CHIP	100	5%	1/10W	R511	1-216-853-11	METAL CHIP	470K	5%	1/10W
R422	1-216-864-11	SHORT CHIP	0			R512	1-216-843-11	METAL CHIP	68K	5%	1/10W
R423	1-216-864-11	SHORT CHIP	0			R513	1-216-835-11	METAL CHIP	15K	5%	1/10W
R424	1-216-864-11	SHORT CHIP	0			R514	1-216-853-11	METAL CHIP	470K	5%	1/10W
R426	1-216-864-11	SHORT CHIP	0			R515	1-216-843-11	METAL CHIP	68K	5%	1/10W
R428	1-216-809-11	METAL CHIP	100	5%	1/10W	R516	1-216-835-11	METAL CHIP	15K	5%	1/10W
R429	1-216-809-11	METAL CHIP	100	5%	1/10W	R520	1-216-821-11	METAL CHIP	1K	5%	1/10W
R430	1-216-809-11	METAL CHIP	100	5%	1/10W	R521	1-216-833-11	METAL CHIP	10K	5%	1/10W
R433	1-216-809-11	METAL CHIP	100	5%	1/10W	R522	1-216-841-11	METAL CHIP	47K	5%	1/10W
R435	1-216-809-11	METAL CHIP	100	5%	1/10W	R523	1-216-833-11	METAL CHIP	10K	5%	1/10W
R436	1-216-809-11	METAL CHIP	100	5%	1/10W	R524	1-216-821-11	METAL CHIP	1K	5%	1/10W
R437	1-216-809-11	METAL CHIP	100	5%	1/10W	R525	1-216-845-11	METAL CHIP	100K	5%	1/10W
R438	1-216-809-11	METAL CHIP	100	5%	1/10W	R528	1-216-821-11	METAL CHIP	1K	5%	1/10W
R442	1-216-809-11	METAL CHIP	100	5%	1/10W	R529	1-216-839-11	METAL CHIP	33K	5%	1/10W
R443	1-216-809-11	METAL CHIP	100	5%	1/10W	R530	1-216-864-11	SHORT CHIP	0		
R444	1-216-809-11	METAL CHIP	100	5%	1/10W	R535	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R445	1-216-809-11	METAL CHIP	100	5%	1/10W	R537	1-216-845-11	METAL CHIP	100K	5%	1/10W
R446	1-216-809-11	METAL CHIP	100	5%	1/10W	R538	1-216-837-11	METAL CHIP	22K	5%	1/10W
R447	1-216-809-11	METAL CHIP	100	5%	1/10W	R539	1-216-837-11	METAL CHIP	22K	5%	1/10W
R448	1-216-809-11	METAL CHIP	100	5%	1/10W	R546	1-216-833-11	METAL CHIP	10K	5%	1/10W
R449	1-216-809-11	METAL CHIP	100	5%	1/10W	R547	1-216-842-11	METAL CHIP	56K	5%	1/10W
R450	1-216-809-11	METAL CHIP	100	5%	1/10W	R548	1-216-833-11	METAL CHIP	10K	5%	1/10W
R451	1-216-809-11	METAL CHIP	100	5%	1/10W	R549	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R452	1-216-809-11	METAL CHIP	100	5%	1/10W	R550	1-216-864-11	SHORT CHIP	0		
R453	1-216-809-11	METAL CHIP	100	5%	1/10W	R551	1-216-864-11	SHORT CHIP	0		
R455	1-216-809-11	METAL CHIP	100	5%	1/10W	R569	1-216-833-11	METAL CHIP	10K	5%	1/10W
R456	1-216-809-11	METAL CHIP	100	5%	1/10W						(MX, AUS)
R458	1-216-809-11	METAL CHIP	100	5%	1/10W	R570	1-216-821-11	METAL CHIP	1K	5%	1/10W
R465	1-216-809-11	METAL CHIP	100	5%	1/10W	R571	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R572	1-216-841-11	METAL CHIP	47K	5%	1/10W

MAIN

MOTOR (LD)

MOTOR (TB)

PA

Ref. No.	Part No.	Description	Remarks
R573	1-216-833-11	METAL CHIP 10K 5%	1/10W
R574	1-216-821-11	METAL CHIP 1K 5%	1/10W
R575	1-216-845-11	METAL CHIP 100K 5%	1/10W
R578	1-216-821-11	METAL CHIP 1K 5%	1/10W
R579	1-216-839-11	METAL CHIP 33K 5%	1/10W
R580	1-216-864-11	SHORT CHIP 0	
R584	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R585	1-216-833-11	METAL CHIP 10K 5%	1/10W
R586	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R587	1-216-833-11	METAL CHIP 10K 5%	1/10W
R588	1-216-837-11	METAL CHIP 22K 5%	1/10W
R589	1-216-845-11	METAL CHIP 100K 5%	1/10W
R590	1-216-833-11	METAL CHIP 10K 5%	1/10W
R591	1-216-833-11	METAL CHIP 10K 5%	1/10W
R592	1-216-845-11	METAL CHIP 100K 5%	1/10W
R593	1-216-845-11	METAL CHIP 100K 5%	1/10W
R594	1-216-833-11	METAL CHIP 10K 5%	1/10W
		< TRANSFORMER >	
T101	1-433-372-11	TRANSFORMER, BIAS OSCILLATION	
		< VIBRATOR >	
X401	1-760-252-12	VIBRATOR, CRYSTAL (32.768kHz)	
X402	1-781-107-21	VIBRATOR, CERAMIC (16MHz)	

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

	1-687-134-12	MOTOR (TB) BOARD	*****
		< CONNECTOR >	
CN742	1-784-727-11	CONNECTOR, FFC 5P	

	A-1055-329-A	PA BOARD, COMPLETE (E3)	
	A-4751-012-A	PA BOARD, COMPLETE (E2, E51, MX)	
	A-4753-161-A	PA BOARD, COMPLETE (AUS)	*****
	1-533-217-41	HOLDER, FUSE	
		< CAPACITOR >	
C600	1-126-963-11	ELECT 4.7uF 20%	50V
C601	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C602	1-104-658-91	ELECT 100uF 20%	10V
C604	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
C605	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C608	1-126-965-91	ELECT 22uF 20%	50V
C609	1-128-560-11	ELECT 22uF 20%	100V
C610	1-128-560-11	ELECT 22uF 20%	100V
C616	1-136-495-11	FILM 0.068uF 5%	50V
C617	1-136-495-11	FILM 0.068uF 5%	50V
C618	1-128-582-11	ELECT 10uF 20%	100V
C619	1-128-582-11	ELECT 10uF 20%	100V
C634	1-104-665-11	ELECT 100uF 20%	25V

Ref. No.	Part No.	Description	Remarks
C635	1-104-665-11	ELECT 100uF 20%	25V
C636	1-107-721-11	ELECT 4.7uF 20%	100V
C637	1-107-721-11	ELECT 4.7uF 20%	100V
C648	1-104-658-91	ELECT 100uF 20%	10V
C649	1-126-964-11	ELECT 10uF 20%	50V
C650	1-126-963-11	ELECT 4.7uF 20%	50V
C651	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C652	1-104-658-91	ELECT 100uF 20%	10V
C654	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
C655	1-126-964-11	ELECT 10uF 20%	50V
C656	1-127-815-11	ELECT 3300uF 20%	100V
C657	1-130-777-00	MYLAR 0.1uF 5%	100V
C658	1-127-812-11	ELECT 3300uF 20%	63V
C659	1-136-497-81	FILM 0.1uF 5%	50V
C660	1-131-992-91	CERAMIC CHIP 100000PF	35V
C662	1-126-964-11	ELECT 10uF 20%	50V
C663	1-126-968-11	ELECT 100uF 20%	50V
C666	1-136-495-11	FILM 0.068uF 5%	50V
C667	1-136-495-11	FILM 0.068uF 5%	50V
C676	1-127-815-11	ELECT 3300uF 20%	100V
C677	1-130-777-00	MYLAR 0.1uF 5%	100V
C678	1-127-812-11	ELECT 3300uF 20%	63V
C679	1-136-497-81	FILM 0.1uF 5%	50V
C683	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C684	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C693	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C694	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C698	1-128-576-11	ELECT 100uF 20%	63V
		< CONNECTOR >	
CN600	1-778-982-11	CONNECTOR, BOARD TO BOARD 13P	
CN601	1-573-825-11	CONNECTOR, BOARD TO BOARD 11P	
* CN602	1-564-508-11	PLUG, CONNECTOR 5P	
* CN604	1-564-243-11	PIN, CONNECTOR (3.96mm PITCH) 6P	
		< DIODE >	
D609	8-719-988-61	DIODE 1SS355TE-17	
D611	8-719-083-66	DIODE UDZSTE-1718B	
D612	8-719-083-66	DIODE UDZSTE-1718B	
D620	8-719-988-61	DIODE 1SS355TE-17	
D624	8-719-988-61	DIODE 1SS355TE-17	
D646	8-719-988-61	DIODE 1SS355TE-17	
D654	8-719-988-61	DIODE 1SS355TE-17	
D655	8-719-988-61	DIODE 1SS355TE-17	
D656	8-719-066-42	DIODE RBV1306	
D658	8-719-073-31	DIODE D25XB60F01	
D660	8-719-988-61	DIODE 1SS355TE-17	
D661	8-719-988-61	DIODE 1SS355TE-17	
D664	8-719-083-87	DIODE UDZSTE-1733B	
D665	8-719-988-61	DIODE 1SS355TE-17	
D670	8-719-988-61	DIODE 1SS355TE-17	
D699	6-500-522-21	DIODE 10EDB40-TB3	
		< EARTH TERMINAL >	
EP660	1-537-738-21	TERMINAL, GROUND	
EP690	1-537-738-21	TERMINAL, GROUND	

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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
		< IC >					
IC600	8-749-017-06	IC STK412-150		R625	1-216-826-11	METAL CHIP	2.7K 5% 1/10W
		< SHORT >		R628	1-216-841-11	METAL CHIP	47K 5% 1/10W
JR600	1-216-296-11	SHORT CHIP	0	R629	1-216-822-11	METAL CHIP	1.2K 5% 1/10W
JR601	1-216-296-11	SHORT CHIP	0	R630	1-216-845-11	METAL CHIP	100K 5% 1/10W
JR602	1-216-296-11	SHORT CHIP	0				
JR603	1-216-296-11	SHORT CHIP	0	R631	1-216-845-11	METAL CHIP	100K 5% 1/10W
		< TRANSISTOR >		R632	1-216-854-11	METAL CHIP	560K 5% 1/10W
Q604	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R633	1-216-841-11	METAL CHIP	47K 5% 1/10W
Q606	8-729-821-00	TRANSISTOR	2SA1207	R634	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
Q610	8-729-924-99	TRANSISTOR	2SC3722K-E	R635	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q618	8-729-924-99	TRANSISTOR	2SC3722K-E				
Q628	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R636	1-215-891-11	METAL OXIDE	680 5% 2W
				R637	1-215-891-11	METAL OXIDE	680 5% 2W
Q629	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R638	1-216-845-11	METAL CHIP	100K 5% 1/10W
Q630	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R639	1-216-845-11	METAL CHIP	100K 5% 1/10W
Q634	8-729-113-69	TRANSISTOR	FN1F4M-M32	R640	1-216-821-11	METAL CHIP	1K 5% 1/10W
Q640	8-729-802-80	TRANSISTOR	2SC3661				
Q641	8-729-802-80	TRANSISTOR	2SC3661	R641	1-216-821-11	METAL CHIP	1K 5% 1/10W
				R642	1-216-806-11	METAL CHIP	56 5% 1/10W
Q644	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R643	1-216-806-11	METAL CHIP	56 5% 1/10W
Q647	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R644	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
Q648	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R645	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q664	8-729-024-93	TRANSISTOR	2SB1565E				
Q666	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	△ R646	1-215-863-11	METAL OXIDE	100 5% 1W
				R647	1-216-821-11	METAL CHIP	1K 5% 1/10W
Q668	8-729-924-99	TRANSISTOR	2SC3722K-E	R648	1-216-837-11	METAL CHIP	22K 5% 1/10W
Q682	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R649	1-216-837-11	METAL CHIP	22K 5% 1/10W
		< RESISTOR >		R650	1-216-821-11	METAL CHIP	1K 5% 1/10W
R600	1-216-821-11	METAL CHIP	1K 5% 1/10W				
R601	1-216-841-11	METAL CHIP	47K 5% 1/10W	R651	1-216-841-11	METAL CHIP	47K 5% 1/10W
R602	1-216-816-11	METAL CHIP	390 5% 1/10W	R652	1-216-816-11	METAL CHIP	390 5% 1/10W
			(E3, AUS)				(E3, AUS)
R602	1-216-818-11	METAL CHIP	560 5% 1/10W	R652	1-216-818-11	METAL CHIP	560 5% 1/10W
			(E2, E51, MX)				(E2, E51, MX)
R603	1-216-841-11	METAL CHIP	47K 5% 1/10W	R653	1-216-841-11	METAL CHIP	47K 5% 1/10W
				R654	1-216-841-11	METAL CHIP	47K 5% 1/10W
R604	1-216-833-11	METAL CHIP	10K 5% 1/10W				
R605	1-216-833-11	METAL CHIP	10K 5% 1/10W	R655	1-216-841-11	METAL CHIP	47K 5% 1/10W
R606	1-216-841-11	METAL CHIP	47K 5% 1/10W	R656	1-216-849-11	METAL CHIP	220K 5% 1/10W
R607	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R657	1-216-849-11	METAL CHIP	220K 5% 1/10W
R608	1-216-843-11	METAL CHIP	68K 5% 1/10W	R658	1-216-845-11	METAL CHIP	100K 5% 1/10W
				R660	1-216-833-11	METAL CHIP	10K 5% 1/10W
R609	1-216-843-11	METAL CHIP	68K 5% 1/10W	R661	1-216-833-11	METAL CHIP	10K 5% 1/10W
R610	1-216-843-11	METAL CHIP	68K 5% 1/10W	R662	1-216-832-11	METAL CHIP	8.2K 5% 1/10W
R611	1-216-839-11	METAL CHIP	33K 5% 1/10W	R663	1-216-832-11	METAL CHIP	8.2K 5% 1/10W
△ R612	1-245-605-51	FUSIBLE	100 5% 1/4W	R664	1-216-821-11	METAL CHIP	1K 5% 1/10W
R613	1-215-872-11	METAL OXIDE	3.3K 5% 1W	△ R665	1-215-863-11	METAL OXIDE	100 5% 1W
R614	1-215-872-11	METAL OXIDE	3.3K 5% 1W	R666	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
△ R615	1-245-605-51	FUSIBLE	100 5% 1/4W	R667	1-216-833-11	METAL CHIP	10K 5% 1/10W
△ R616	1-217-637-00	FUSIBLE	1 5% 1/4W	△ R668	1-234-798-11	ENCAPSULATED COMPONENT	
R617	1-216-845-11	METAL CHIP	100K 5% 1/10W	R669	1-216-821-11	METAL CHIP	1K 5% 1/10W
△ R618	1-234-798-11	ENCAPSULATED COMPONENT		R670	1-216-839-11	METAL CHIP	33K 5% 1/10W
R619	1-216-821-11	METAL CHIP	1K 5% 1/10W	R671	1-216-845-11	METAL CHIP	100K 5% 1/10W
R620	1-216-839-11	METAL CHIP	33K 5% 1/10W	R672	1-249-625-31	CARBON	10 5% 1/2W
R621	1-216-845-11	METAL CHIP	100K 5% 1/10W	R673	1-216-842-11	METAL CHIP	56K 5% 1/10W
R622	1-249-625-31	CARBON	10 5% 1/2W	R674	1-216-837-11	METAL CHIP	22K 5% 1/10W
R623	1-216-843-11	METAL CHIP	68K 5% 1/10W	R676	1-216-849-11	METAL CHIP	220K 5% 1/10W
R624	1-216-837-11	METAL CHIP	22K 5% 1/10W	R677	1-216-849-11	METAL CHIP	220K 5% 1/10W
				R678	1-216-845-11	METAL CHIP	100K 5% 1/10W
				R682	1-216-821-11	METAL CHIP	1K 5% 1/10W
				R683	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
				R692	1-216-841-11	METAL CHIP	47K 5% 1/10W
				R693	1-216-843-11	METAL CHIP	68K 5% 1/10W
				R694	1-216-843-11	METAL CHIP	68K 5% 1/10W

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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R695	1-216-845-11	METAL CHIP	100K 5% 1/10W	C932	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
R696	1-216-845-11	METAL CHIP	100K 5% 1/10W	C933	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
R697	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	C934	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
△ R699	1-219-124-11	FUSIBLE	0.68 5% 1/4W	C935	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
		< RELAY >		C936	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
RY646	1-755-372-11	RELAY		C937	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
RY665	1-755-372-11	RELAY		C938	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
		< THERMISTOR >		C939	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
TH629	1-807-796-11	THERMISTOR		C940	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
TH630	1-807-796-11	THERMISTOR		C941	1-124-261-00	ELECT	10uF 20% 50V
		< TERMINAL >		C942	1-124-261-00	ELECT	10uF 20% 50V
TM601	1-816-048-11	TERMINAL BOARD		C944	1-124-261-00	ELECT	10uF 20% 50V
		(FRONT/SURROUND SPEAKER R)		C945	1-125-837-91	CERAMIC CHIP	1uF 10% 6.3V
TM602	1-816-048-11	TERMINAL BOARD		C946	1-164-315-11	CERAMIC CHIP	470PF 5% 50V
		(FRONT/SURROUND SPEAKER L)		C947	1-125-837-91	CERAMIC CHIP	1uF 10% 6.3V

	A-1056-930-A	PANEL BOARD, COMPLETE (MX)		C948	1-164-315-11	CERAMIC CHIP	470PF 5% 50V
	A-4750-973-A	PANEL BOARD, COMPLETE (E2, E3, E51, AUS)		C949	1-125-837-91	CERAMIC CHIP	1uF 10% 6.3V
		*****		C950	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
	4-231-581-01	HOLDER (FL)		C951	1-125-837-91	CERAMIC CHIP	1uF 10% 6.3V
		< CAPACITOR >		C952	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C900	1-126-163-11	ELECT	4.7uF 20% 50V	C953	1-125-837-91	CERAMIC CHIP	1uF 10% 6.3V
C901	1-164-230-11	CERAMIC CHIP	220PF 5% 50V	C954	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C902	1-164-230-11	CERAMIC CHIP	220PF 5% 50V	C955	1-125-837-91	CERAMIC CHIP	1uF 10% 6.3V
C903	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C956	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C904	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C957	1-125-837-91	CERAMIC CHIP	1uF 10% 6.3V
C905	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C958	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C906	1-164-230-11	CERAMIC CHIP	220PF 5% 50V	C959	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C907	1-164-230-11	CERAMIC CHIP	220PF 5% 50V	C960	1-124-261-00	ELECT	10uF 20% 50V
C908	1-164-230-11	CERAMIC CHIP	220PF 5% 50V	C961	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C909	1-164-230-11	CERAMIC CHIP	220PF 5% 50V	C963	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C910	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C966	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C911	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C967	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C912	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C968	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C913	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C969	1-126-968-11	ELECT	100uF 20% 50V
C914	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C971	1-119-941-91	ELECT	470uF 20% 6.3V
C915	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C972	1-119-941-91	ELECT	470uF 20% 6.3V
C916	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C980	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C917	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C981	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C918	1-119-941-91	ELECT	470uF 20% 6.3V	C982	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C919	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C983	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C920	1-124-589-11	ELECT	47uF 20% 16V	C984	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C922	1-124-261-00	ELECT	10uF 20% 50V	C985	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C923	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V			< CONNECTOR >	
C924	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	* CN902	1-568-862-11	SOCKET, CONNECTOR 19P	
C925	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	CN907	1-785-329-11	PIN, CONNECTOR (LIGHT ANGLE) 3P	
C926	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	CNS901	1-770-401-11	HOUSING, CONNECTOR (PC BOARD) 8P	
C927	1-162-927-11	CERAMIC CHIP	100PF 5% 50V			< DIODE >	
C928	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	D903	6-500-508-01	DIODE RR263M-400FTR	
C929	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	D904	6-500-508-01	DIODE RR263M-400FTR	
C930	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	D905	8-719-069-54	DIODE UDZSTE-175.1B	
C931	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	D906	8-719-057-97	DIODE SEL5923A-TP15 (CD)	
				D907	8-719-057-97	DIODE SEL5923A-TP15 (TUNER/BAND)	
				D908	8-719-057-97	DIODE SEL5923A-TP15 (TAPE A/B)	
				D909	8-719-057-97	DIODE SEL5923A-TP15 (VIDEO/MD)	
				D910	8-719-057-97	DIODE SEL5923A-TP15 (GAME)	
				D911	8-719-063-93	DIODE SLR325VC-N-T32 (REC PAUSE/START)	

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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
D914	6-500-529-01	DIODE SLI-325URT31W (VOL 11)		R836	1-216-817-11	METAL CHIP 470	5% 1/10W
D915	6-500-529-01	DIODE SLI-325URT31W (VOL 10)		R837	1-216-819-11	METAL CHIP 680	5% 1/10W
D916	6-500-529-01	DIODE SLI-325URT31W (VOL 9)		R838	1-216-821-11	METAL CHIP 1K	5% 1/10W
D917	6-500-529-01	DIODE SLI-325URT31W (VOL 8)		R839	1-216-823-11	METAL CHIP 1.5K	5% 1/10W
D918	6-500-529-01	DIODE SLI-325URT31W (VOL 7)		R840	1-216-823-11	METAL CHIP 1.5K	5% 1/10W
D919	6-500-529-01	DIODE SLI-325URT31W (VOL 6)		R841	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
D920	6-500-529-01	DIODE SLI-325URT31W (VOL 5)		R842	1-216-827-11	METAL CHIP 3.3K	5% 1/10W
D921	6-500-529-01	DIODE SLI-325URT31W (VOL 4)		R843	1-216-823-11	METAL CHIP 1.5K	5% 1/10W
D922	6-500-529-01	DIODE SLI-325URT31W (VOL 3)		R844	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
D923	6-500-529-01	DIODE SLI-325URT31W (VOL 2)		R845	1-216-827-11	METAL CHIP 3.3K	5% 1/10W
D924	6-500-529-01	DIODE SLI-325URT31W (VOL 1)		R846	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
		< FERRITE BEAD >		R900	1-216-833-11	METAL CHIP 10K	5% 1/10W
FB901	1-216-864-11	SHORT CHIP 0		R901	1-216-833-11	METAL CHIP 10K	5% 1/10W
		< FILTER >		R902	1-216-833-11	METAL CHIP 10K	5% 1/10W
FL901	1-518-981-11	VACUUM FLUORESCENT DISPLAYS		R903	1-216-809-11	METAL CHIP 100	5% 1/10W
		< IC >		R904	1-216-809-11	METAL CHIP 100	5% 1/10W
IC901	6-803-971-01	IC MB90M407PF-G-139-BNDE1		R905	1-216-835-11	METAL CHIP 15K	5% 1/10W
IC902	6-600-174-01	IC RPM7240-H4		R906	1-216-835-11	METAL CHIP 15K	5% 1/10W
IC903	6-705-678-01	IC NJM2760V-TE2		R907	1-216-835-11	METAL CHIP 15K	5% 1/10W
		< SHORT >		R908	1-216-821-11	METAL CHIP 1K	5% 1/10W
JR901	1-216-864-11	SHORT CHIP 0		R909	1-216-833-11	METAL CHIP 10K	5% 1/10W
JR904	1-216-864-11	SHORT CHIP 0		R910	1-216-821-11	METAL CHIP 1K	5% 1/10W
JR905	1-216-864-11	SHORT CHIP 0		R911	1-216-833-11	METAL CHIP 10K	5% 1/10W
JR906	1-216-864-11	SHORT CHIP 0		R912	1-216-809-11	METAL CHIP 100	5% 1/10W
JR907	1-216-864-11	SHORT CHIP 0		R914	1-216-833-11	METAL CHIP 10K	5% 1/10W
JR908	1-216-864-11	SHORT CHIP 0		R915	1-216-821-11	METAL CHIP 1K	5% 1/10W
JR910	1-216-864-11	SHORT CHIP 0		R916	1-216-821-11	METAL CHIP 1K	5% 1/10W
JR911	1-216-864-11	SHORT CHIP 0		R917	1-216-833-11	METAL CHIP 10K	5% 1/10W
JR913	1-216-864-11	SHORT CHIP 0		R918	1-216-845-11	METAL CHIP 100K	5% 1/10W
JR914	1-216-864-11	SHORT CHIP 0		R920	1-216-833-11	METAL CHIP 10K	5% 1/10W
		< TRANSISTOR >		R922	1-216-857-11	METAL CHIP 1M	5% 1/10W
Q901	8-729-027-56	TRANSISTOR DTC143TKA-T146		R924	1-216-821-11	METAL CHIP 1K	5% 1/10W
Q904	8-729-106-60	TRANSISTOR 2SB1115A-YQ		R924	1-216-864-11	SHORT CHIP 0 (E2, E3, E51, AUS)	(MX)
Q905	8-729-106-60	TRANSISTOR 2SB1115A-YQ		R939	1-216-821-11	METAL CHIP 1K	5% 1/10W
Q906	8-729-027-43	TRANSISTOR DTC114EKA-T146		R940	1-216-833-11	METAL CHIP 10K	5% 1/10W
Q907	8-729-027-43	TRANSISTOR DTC114EKA-T146		R941	1-216-809-11	METAL CHIP 100	5% 1/10W
Q908	8-729-027-43	TRANSISTOR DTC114EKA-T146		R942	1-216-809-11	METAL CHIP 100	5% 1/10W
Q909	8-729-027-43	TRANSISTOR DTC114EKA-T146		R943	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
Q910	8-729-027-43	TRANSISTOR DTC114EKA-T146		R944	1-216-805-11	METAL CHIP 47	5% 1/10W
Q911	8-729-027-43	TRANSISTOR DTC114EKA-T146		R945	1-216-841-11	METAL CHIP 47K	5% 1/10W
Q912	8-729-027-43	TRANSISTOR DTC114EKA-T146		R946	1-216-844-11	METAL CHIP 82K	5% 1/10W
Q913	8-729-027-43	TRANSISTOR DTC114EKA-T146		R947	1-216-821-11	METAL CHIP 1K	5% 1/10W
Q914	8-729-027-43	TRANSISTOR DTC114EKA-T146		R948	1-218-867-11	METAL CHIP 6.8K	0.5% 1/10W
Q915	8-729-027-43	TRANSISTOR DTC114EKA-T146		R949	1-216-821-11	METAL CHIP 1K	5% 1/10W
Q916	8-729-027-43	TRANSISTOR DTC114EKA-T146		R950	1-216-821-11	METAL CHIP 1K	5% 1/10W
		< RESISTOR >		R951	1-216-830-11	METAL CHIP 5.6K	5% 1/10W
R831	1-216-817-11	METAL CHIP 470	5% 1/10W	R952	1-216-821-11	METAL CHIP 1K	5% 1/10W
R832	1-216-819-11	METAL CHIP 680	5% 1/10W	R953	1-216-821-11	METAL CHIP 1K	5% 1/10W
R833	1-216-821-11	METAL CHIP 1K	5% 1/10W	R954	1-216-833-11	METAL CHIP 10K	5% 1/10W
R834	1-216-823-11	METAL CHIP 1.5K	5% 1/10W	R956	1-216-833-11	METAL CHIP 10K	5% 1/10W
R835	1-216-814-11	METAL CHIP 270	5% 1/10W	R957	1-216-845-11	METAL CHIP 100K	5% 1/10W
				R958	1-216-817-11	METAL CHIP 470	5% 1/10W
				R959	1-216-819-11	METAL CHIP 680	5% 1/10W
				R960	1-216-821-11	METAL CHIP 1K	5% 1/10W
				R961	1-216-823-11	METAL CHIP 1.5K	5% 1/10W
				R962	1-216-823-11	METAL CHIP 1.5K	5% 1/10W
				R963	1-216-825-11	METAL CHIP 2.2K	5% 1/10W

PANEL

PRIMARY

SENSOR

Ref. No.	Part No.	Description	Remarks
R964	1-216-827-11	METAL CHIP 3.3K 5%	1/10W
R965	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R966	1-218-867-11	METAL CHIP 6.8K 0.5%	1/10W
R975	1-216-817-11	METAL CHIP 470 5%	1/10W
R977	1-216-821-11	METAL CHIP 1K 5%	1/10W
R978	1-216-817-11	METAL CHIP 470 5%	1/10W
R980	1-216-821-11	METAL CHIP 1K 5%	1/10W
R981	1-216-821-11	METAL CHIP 1K 5%	1/10W
R982	1-216-821-11	METAL CHIP 1K 5%	1/10W
R983	1-216-821-11	METAL CHIP 1K 5%	1/10W
R987	1-216-821-11	METAL CHIP 1K 5%	1/10W
R988	1-216-821-11	METAL CHIP 1K 5%	1/10W
R989	1-216-821-11	METAL CHIP 1K 5%	1/10W
R993	1-216-821-11	METAL CHIP 1K 5%	1/10W
R994	1-216-821-11	METAL CHIP 1K 5%	1/10W
R995	1-216-821-11	METAL CHIP 1K 5%	1/10W
R999	1-216-864-11	SHORT CHIP 0	
R1303	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1304	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1305	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1306	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1307	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1308	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1312	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1313	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1314	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1318	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1319	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1320	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1324	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1325	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1326	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1330	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1331	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R1332	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
< SWITCH >			
S900	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)	
S901	1-762-875-21	SWITCH, KEYBOARD (PLAY MODE, TUNING MODE)	
S902	1-762-875-21	SWITCH, KEYBOARD (REPEAT, FM MODE)	
S903	1-762-875-21	SWITCH, KEYBOARD (DIRECTION, TUNER MEMORY)	
S904	1-762-875-21	SWITCH, KEYBOARD (◀▶)	
S905	1-762-875-21	SWITCH, KEYBOARD (SURR SPEAKER MODE)	
S906	1-762-875-21	SWITCH, KEYBOARD (EFFECT ON/OFF)	
S907	1-762-875-21	SWITCH, KEYBOARD (GROOVE)	
S908	1-762-875-21	SWITCH, KEYBOARD (ILLUMINATION)	
S909	1-762-875-21	SWITCH, KEYBOARD (ENTER)	
S910	1-762-875-21	SWITCH, KEYBOARD (EQ EDIT)	
S911	1-762-875-21	SWITCH, KEYBOARD (P FILE MEMORY)	
S912	1-762-875-21	SWITCH, KEYBOARD (■)	
S913	1-762-875-21	SWITCH, KEYBOARD (■)	
S914	1-762-875-21	SWITCH, KEYBOARD (REC PAUSE/START)	
S915	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)	
S924	1-762-875-21	SWITCH, KEYBOARD (SLEEP)	
S925	1-762-875-21	SWITCH, KEYBOARD (AMP MENU)	
S927	1-762-875-21	SWITCH, KEYBOARD (GAME MIXING)	

Ref. No.	Part No.	Description	Remarks
S928	1-762-875-21	SWITCH, KEYBOARD (GAME)	
S929	1-762-875-21	SWITCH, KEYBOARD (VIDEO/MD)	
S930	1-762-875-21	SWITCH, KEYBOARD (TAPE A/B)	
S931	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)	
S932	1-762-875-21	SWITCH, KEYBOARD (CD)	
S970	1-418-725-51	ENCODER, ROTARY (12 TYPE) (VOLUME)	
< VIBRATOR >			
X901	1-781-282-51	VIBRATOR, CERAMIC (4MHz)	

A-4750-964-A	PRIMARY BOARD, COMPLETE (E2, E3, E51)		
A-4753-137-A	PRIMARY BOARD, COMPLETE (MX)		
A-4753-146-A	PRIMARY BOARD, COMPLETE (AUS)		

< CAPACITOR >			
△C1000	1-113-925-11	CERAMIC 0.01uF 20%	250V
C1001	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C1002	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C1003	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C1005	1-126-916-11	ELECT 1000uF 20%	6.3V
< CONNECTOR >			
CN1000	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P	
* CN1001	1-566-664-11	PIN, CONNECTOR (3.96mm PITCH) 4P (E2, E3, E51, AUS)	
* CN1001	1-568-226-11	PIN, CONNECTOR (3.96mm PITCH) 2P (MX)	
CN1002	1-785-329-11	PIN, CONNECTOR (LIGHT ANGLE) 3P	
< DIODE >			
D1000	8-719-988-61	DIODE 1SS355TE-17	
< COIL >			
L1001	1-410-666-31	INDUCTOR 18uH	
< TRANSISTOR >			
Q1000	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
< RESISTOR >			
R1000	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R1001	1-216-845-11	METAL CHIP 100K 5%	1/10W
R1003	1-216-864-11	SHORT CHIP 0	
< RELAY >			
△RY1000	1-755-299-11	RELAY	
< SWITCH >			
△S1000	1-771-291-31	SWITCH, POWER (VOLTAGE SELECTOR) (E2, E3, E51)	

1-687-132-12	SENSOR BOARD		

< CONNECTOR >			
CN731	1-785-329-21	PIN, CONNECTOR (LIGHT ANGLE) 3P	

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

HCD-GN880

SENSOR

SURROUND

Ref. No.	Part No.	Description	Remarks
		< IC >	
IC731	6-600-022-01	IC RPI-576	

	A-1053-567-A	SURROUND BOARD, COMPLETE (MX)	
	A-4751-013-A	SURROUND BOARD, COMPLETE (E2, E3, E51)	
	A-4753-163-A	SURROUND BOARD, COMPLETE (AUS)	

	1-533-217-41	HOLDER, FUSE	
		< CAPACITOR >	
C700	1-126-963-11	ELECT 4.7uF	20% 50V
C701	1-100-717-91	CERAMIC CHIP 1uF	16V
C702	1-104-658-91	ELECT 100uF	20% 10V
C703	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
C704	1-124-257-00	ELECT 2.2uF	20% 50V
C710	1-162-915-11	CERAMIC CHIP 10PF	0.5PF 50V
C711	1-162-915-11	CERAMIC CHIP 10PF	0.5PF 50V
C713	1-126-963-11	ELECT 4.7uF	20% 50V
C714	1-126-963-11	ELECT 4.7uF	20% 50V
C720	1-126-967-11	ELECT 47uF	20% 50V
C721	1-126-968-11	ELECT 100uF	20% 50V
C730	1-131-992-91	CERAMIC CHIP 100000PF	35V
C731	1-131-992-91	CERAMIC CHIP 100000PF	35V
C745	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C751	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C752	1-104-658-91	ELECT 100uF	20% 10V
C753	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
C760	1-130-483-00	MYLAR 0.01uF	5% 50V
C761	1-130-483-00	MYLAR 0.01uF	5% 50V
C780	1-131-992-91	CERAMIC CHIP 100000PF	35V
C781	1-131-992-91	CERAMIC CHIP 100000PF	35V
C790	1-131-992-91	CERAMIC CHIP 100000PF	35V
C795	1-128-563-11	ELECT 100uF	20% 100V
C796	1-128-563-11	ELECT 100uF	20% 100V
C797	1-128-563-11	ELECT 100uF	20% 100V
C798	1-128-563-11	ELECT 100uF	20% 100V
		< CONNECTOR >	
* CN700	1-766-719-11	CONNECTOR, BOARD TO BOARD 10P	
CN701	1-778-982-11	CONNECTOR, BOARD TO BOARD 13P	
* CN703	1-564-508-11	PLUG, CONNECTOR 5P	
		< DIODE >	
D701	8-719-988-61	DIODE 1SS355TE-17 (E2, E3, E51)	
D702	8-719-988-61	DIODE 1SS355TE-17	
D720	8-719-988-61	DIODE 1SS355TE-17	
D730	8-719-988-61	DIODE 1SS355TE-17	
D760	8-719-988-61	DIODE 1SS355TE-17	
D761	8-719-988-61	DIODE 1SS355TE-17	
D763	8-719-500-56	DIODE D3SBA20	
D780	8-719-988-61	DIODE 1SS355TE-17	
		< IC >	
IC700	8-749-017-16	IC STK442-130M	

Ref. No.	Part No.	Description	Remarks
		< JACK >	
J700	1-780-127-11	TERMINAL BOARD (SUBWOOFER OUT)	
		< TRANSISTOR >	
Q700	8-729-802-80	TRANSISTOR 2SC3661	
Q701	8-729-014-97	TRANSISTOR FA1L3Z-T1B (E2, E3, E51)	
Q720	8-729-924-99	TRANSISTOR 2SC3722K-E	
Q721	8-729-821-00	TRANSISTOR 2SA1207	
Q722	8-729-924-99	TRANSISTOR 2SC3722K-E	
Q730	8-729-924-99	TRANSISTOR 2SC3722K-E	
Q762	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q764	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q780	8-729-924-99	TRANSISTOR 2SC3722K-E	
		< RESISTOR >	
R700	1-216-821-11	METAL CHIP 1K	5% 1/10W
R701	1-216-841-11	METAL CHIP 47K	5% 1/10W
R702	1-216-823-11	METAL CHIP 1.5K	5% 1/10W
R703	1-216-864-11	SHORT CHIP 0	
R705	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
R706	1-216-833-11	METAL CHIP 10K	5% 1/10W
R707	1-216-824-11	METAL CHIP 1.8K	5% 1/10W (E2, E3, E51)
R708	1-216-842-11	METAL CHIP 56K	5% 1/10W (E2, E3, E51)
R709	1-216-833-11	METAL CHIP 10K	5% 1/10W
R710	1-216-841-11	METAL CHIP 47K	5% 1/10W
R711	1-216-841-11	METAL CHIP 47K	5% 1/10W
R713	1-216-841-11	METAL CHIP 47K	5% 1/10W
R714	1-216-821-11	METAL CHIP 1K	5% 1/10W
R720	1-216-833-11	METAL CHIP 10K	5% 1/10W
R721	1-216-833-11	METAL CHIP 10K	5% 1/10W
R722	1-216-837-11	METAL CHIP 22K	5% 1/10W
R723	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R724	1-216-845-11	METAL CHIP 100K	5% 1/10W
R725	1-216-841-11	METAL CHIP 47K	5% 1/10W
R726	1-216-837-11	METAL CHIP 22K	5% 1/10W
R727	1-216-839-11	METAL CHIP 33K	5% 1/10W
△ R730	1-234-499-21	ENCAPSULATED COMPONENT	
R731	1-216-821-11	METAL CHIP 1K	5% 1/10W
R732	1-216-835-11	METAL CHIP 15K	5% 1/10W
R733	1-216-845-11	METAL CHIP 100K	5% 1/10W
R734	1-216-841-11	METAL CHIP 47K	5% 1/10W
R735	1-249-625-31	CARBON 10	5% 1/2W
R751	1-216-841-11	METAL CHIP 47K	5% 1/10W
R752	1-216-823-11	METAL CHIP 1.5K	5% 1/10W
R765	1-215-863-11	METAL OXIDE 100	5% 1W
R766	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R767	1-216-837-11	METAL CHIP 22K	5% 1/10W
△ R780	1-234-499-21	ENCAPSULATED COMPONENT	
R781	1-216-821-11	METAL CHIP 1K	5% 1/10W
R782	1-216-835-11	METAL CHIP 15K	5% 1/10W
R783	1-216-845-11	METAL CHIP 100K	5% 1/10W
R784	1-216-842-11	METAL CHIP 56K	5% 1/10W
R785	1-249-625-31	CARBON 10	5% 1/2W
R790	1-216-821-11	METAL CHIP 1K	5% 1/10W
R791	1-216-837-11	METAL CHIP 22K	5% 1/10W

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SURROUND

SW

SWITCH

Ref. No.	Part No.	Description	Remarks
R792	1-218-292-11	METAL CHIP 20K 5%	1/10W
△ R793	1-217-637-00	FUSIBLE 1 5%	1/4W
△ R794	1-245-605-51	FUSIBLE 100 5%	1/4W
△ R795	1-245-605-51	FUSIBLE 100 5%	1/4W
< RELAY >			
RY760	1-755-372-11	RELAY	

	1-687-669-12	SW BOARD	*****
S751	1-786-514-11	SWITCH, LEVER (SLIDE) (LEVER SW)	

		SWITCH BOARD	*****
< CONNECTOR >			
CN903	1-779-978-11	PIN, CONNECTOR 3P	
< RESISTOR >			
R847	1-218-867-11	METAL CHIP 6.8K 0.5%	1/10W
R848	1-216-833-11	METAL CHIP 10K 5%	1/10W
R849	1-216-833-11	METAL CHIP 10K 5%	1/10W
< SWITCH >			
S916	1-478-547-11	ENCODER, ROTARY (I◀◀ ▶▶I)	
S917	1-771-963-11	SWITCH, ROTARY (◀◀ ▶▶,ALBUM)	

		MISCELLANEOUS	*****
△	1-569-008-21	ADAPTOR, CONVERSION 2P (E51)	
△	1-569-007-11	ADAPTOR, CONVERSION 2P (E3)	
6	1-500-497-11	FILTER, CLAMP (FERRITE CORE)	
7	1-693-603-11	TUNER (FM/AM)	
△ 8	1-468-737-21	POWER, SWITCHING	
65	1-773-109-11	WIRE (FLAT TYPE) (19 CORE)	
71	1-796-487-51	DECK, MECHANICAL (E3, E51, MX, AUS)	
71	1-796-487-61	DECK, MECHANICAL (E2)	
△ 104	1-777-071-53	CORD, POWER (E51)	
△ 104	1-827-226-11	CORD, POWER (E2, E3, MX)	
△ 104	1-827-295-22	CORD, POWER (AUS)	
152	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)	
226	1-827-992-11	WIRE (FLAT TYPE) (16 CORE)	
227	1-775-248-11	WIRE (FLAT TYPE) (27 CORE)	
△ 229	8-820-244-01	OPTICAL PICK-UP (KSM-215DCP/C2NP)	
230	1-471-035-11	MAGNET ASSY	
△ F696	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8.0AL/250V)	
△ F697	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8.0AL/250V)	
△ F698	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (6.3A/250V)	
△ F699	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (6.3A/250V)	
△ F760	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15AL/250V)	
FL901	1-518-981-11	VACUUM FLUORESCENT DISPLAY	
M741	A-4723-963-A	MOTOR ASSY, TABLE	
M751	A-4737-553-A	MOTOR ASSY, LOADING	
M891	1-787-099-21	FAN, DC	

Ref. No.	Part No.	Description	Remarks
RE701	1-477-680-12	ENCODER, ROTARY	
△ T601	1-443-202-11	POWER TRANSFORMER (E2, E3, E51, AUS)	
△ T601	1-443-202-21	POWER TRANSFORMER (MX)	

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