HCD-GTX88

SERVICE MANUAL

E Model
Australian Model

Ver. 1.0 2007. 06

- HCD-GTX88 is the tuner, deck, CD and amplifier section in MHC-GTX88.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CDM74KF-K6BD91UR-WOD//M
	Optical Pick-up Name	KSM-213DCP/C2NP
Tape Deck Section	Model Name Using Similar Machanism	HCD-GN1100D

SPECIFICATIONS

Amplifier section

Brazil model only

The following are measured at
AC 127 V or 220 V, 50/60 Hz

Front/Surround speaker
RMS output power: 205 W + 205 W
(at 8 Ω, 1 kHz, 10% THD)
Subwoofer
RMS output power: 130 W + 130 W
(at 6 Ω, 100 Hz, 10% THD)

Other models

The following are measured at
Mexican model: AC 127 V, 60 Hz
Other models: AC 120, 220, 240 V, 50/60 Hz

Front/Surround speaker
Power Output (rated): 175 W + 175 W
(at 8 Ω, 1 kHz, 1% THD)
RMS output power (reference):
255 W + 255 W
(per channel at 8 Ω, 1 kHz, 10% THD)
Subwoofer
RMS output power (reference):
130 W + 130 W
(at 6 Ω, 100 Hz, 10% THD)

Inputs
VIDEO (AUDIO IN) L/R:
Voltage 250 mV,
impedance 47 kilohms
AUDIO (AUDIO IN) L/R:
Voltage 450 mV,
impedance 47 kilohms
MIC: Sensitivity 1 mV,
impedance 10 kilohms
(USB) port: Type A
Outputs
PHONES: accepts headphones of 8 ohms or more

Disc player section

System: Compact disc and digital audio system
Laser: Semiconductor laser (λ=770 – 810 nm)
Emission duration: continuous
Laser Output: Max. 44.6 µW*
* 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.

– Continued on next page –

CD DECK RECEIVER

9-887-753-01
2007F04-1

Sony Corporation
Personal Audio Division
Published by Sony Techno Create Corporation

SONY®

Frequency response	20 Hz – 20 kHz
Wave length	770 – 810 nm
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 88 dB

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	
Brazil model:	87.5 – 108.0 MHz (100 kHz step)
Other models:	87.5 – 108.0 MHz (50 kHz step)
Antenna	FM lead antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
Latin American and Oceanian models:	530 – 1,710 kHz (with the interval set at 10 kHz) 531 – 1,710 kHz (with the interval set at 9 kHz)
Other models:	531 – 1,602 kHz (with the interval set at 9 kHz) 530 – 1,610 kHz (with the interval set at 10 kHz)
Antenna	AM loop antenna
Antenna terminals	External antenna terminal
Intermediate frequency	450 kHz

USB section

Supported bit rate	MP3 (MPEG 1 Audio Layer 3): 32 – 320 kbps, VBR
Sampling frequencies	MP3 (MPEG 1 Audio Layer 3): 32/44.1/48 kHz
Transfer speed	Full-Speed
Supported USB device	Mass Storage Class
Maximum current	500 mA

General

Power requirements	
Mexican model:	127 V AC, 60 Hz
Brazil model:	127 V or 220 V AC, 50/60 Hz, Adjustable with voltage selector
Oceanian model:	230 – 240 V AC, 50/60 Hz
Argentina model:	220 V AC, 50/60 Hz
Other models:	120 V, 220 V or 230 – 240 V AC, 50/60 Hz, adjustable with voltage selector
Power consumption	430 W
Dimensions (w/h/d) (Approx.)	281 × 361 × 417 mm
Mass (Approx.)	14.2 kg

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

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

Notes on Chip Component Replacement

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

Flexible Circuit Board Repairing

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

UNLEADED SOLDER

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

: LEAD FREE MARK

Unleaded solder has the following characteristics.

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

CAUTION

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

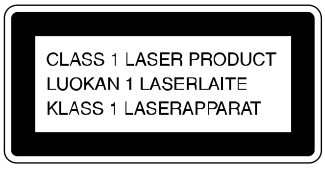
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

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

NOTES ON LASER DIODE EMISSION CHECK

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

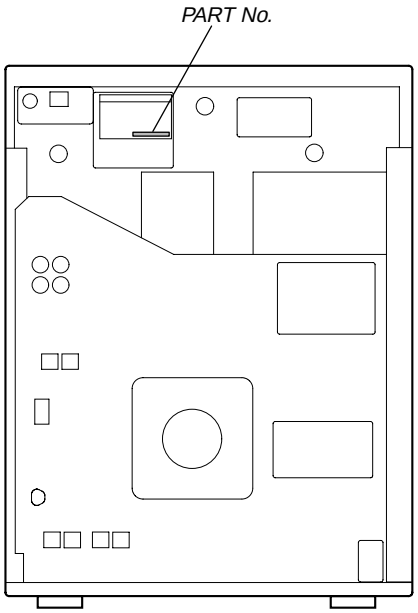
Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



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

MODEL IDENTIFICATION

– MODEL NUMBER LABEL –



MODEL	PARTS No.
GTX88: E2	3-113-126-0☐
GTX88: E51	3-198-009-0☐
GTX88: AUS	3-197-997-0☐
GTX88: AR	3-198-001-0☐

- Abbreviation
  E2 : 120V AC area in E model
  E51 : Chilean and Peruvian model
  AR : Argentina model
  AUS : Australian model

TABLE OF CONTENTS

1. GENERAL

Guide to parts and controls 6

2. DISASSEMBLY

2-1. Case (Top) 13
2-2. Loading Panel 13
2-3. Tuner Pack 14
2-4. CD Block Section 14
2-5. Front Panel Section 15
2-6. Tape Mechanism Deck, Mic Board, USB Connector Board 15
2-7. Panel Board, Function Board, Jog Board 16
2-8. CD-SW Board 16
2-9. Cover (CDM) 17
2-10. Back Panel Section 17
2-11. Power Board Section 18
2-12. Main Board 18
2-13. Subwoofer Board, Power Board 19
2-14. Power Transformer (T1200) 19
2-15. BD91 Board 20
2-16. Driver Board, SW Board, USB Board 20
2-17. Optical Pick-up 21
2-18. Sensor Board 21
2-19. Motor (TB) Board 22
2-20. Motor (LD) Board 22

3. TEST MODE 23

4. MECHANICAL ADJUSTMENTS 27

5. ELECTRICAL ADJUSTMENTS 28

6. DIAGRAMS

6-1. Block Diagram — RF/Servo Section — 31
6-2. Block Diagram — Tape/Tuner Section — 32
6-3. Block Diagram — Main Section — 33
6-4. Block Diagram — USB Section — 34
6-5. Block Diagram — AMP/Subwoofer Section — 35
6-6. Block Diagram — Display/Power Section — 36
6-7. Circuit Boards Location 37
6-8. Printed Wiring Board — BD91 Section — 40
6-9. Schematic Diagram — BD91 Section — 41
6-10. Printed Wiring Boards — Driver Section — 42
6-11. Schematic Diagram — Driver Section — 43
6-12. Schematic Diagram — Main Section (1/4) — 44
6-13. Schematic Diagram — Main Section (2/4) — 45
6-14. Schematic Diagram — Main Section (3/4) — 46
6-15. Schematic Diagram — Main Section (4/4) — 47
6-16. Printed Wiring Board — Main Section — 48
6-17. Printed Wiring Board — USB Connector Section — 49
6-18. Schematic Diagram — USB Connector Section — 49
6-19. Printed Wiring Board — USB Section — 50
6-20. Schematic Diagram — USB Section — 51
6-21. Printed Wiring Board — Effector Section — 52
6-22. Schematic Diagram — Effector Section — 53
6-23. Printed Wiring Board — Panel Section — 54
6-24. Schematic Diagram — Panel Section — 55
6-25. Printed Wiring Boards — Function Section — 56
6-26. Schematic Diagram — Function Section — 57
6-27. Printed Wiring Board — Power Amp Section — 58
6-28. Schematic Diagram — Power Amp Section — 59
6-29. Printed Wiring Board — Subwoofer Section — 60
6-30. Schematic Diagram — Subwoofer Section — 61
6-31. Printed Wiring Boards — Trans Section — 62
6-32. Schematic Diagram — Trans Section — 63

7. EXPLODED VIEWS

7-1. Main Section 78
7-2. Front Panel Section (1) 79
7-3. Front Panel Section (2) 80
7-4. Front Panel Section (3) 81
7-5. Chassis Section 82
7-6. CD Mechanism Section (1) 83
7-7. CD Mechanism Section (2) 84

8. ELECTRICAL PARTS LIST 85

SECTION 1
GENERAL

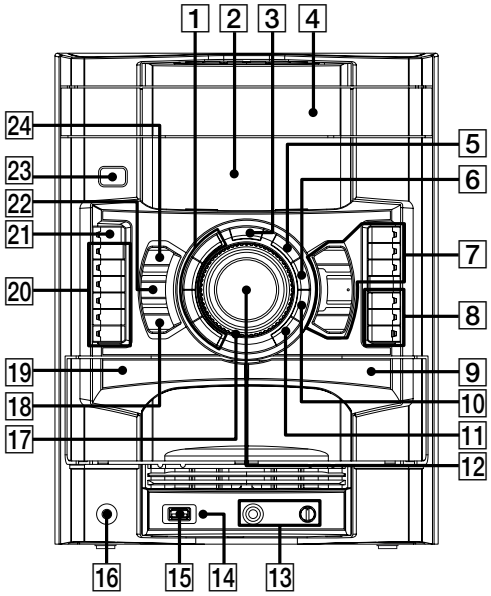
This section is extracted from instruction manual.

Guide to parts and controls

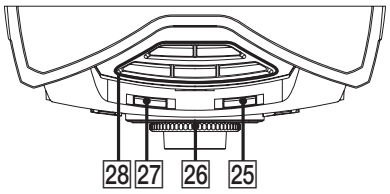
This manual mainly explains operations using the buttons on the unit, but the same operations can also be performed using the buttons on the remote having the same or similar names.

Unit

– Front view



– Top view



1 FLANGER (pages 35, 43, 48)
DELAY (pages 35, 43, 48)
CHORUS (pages 36, 43, 48)
SOUND FLASH (page 35)
Press to create a party atmosphere.

2 Display (pages 9, 38, 39, 48)

3 SURROUND SPEAKER MODE (MHC-GTX88 only) (page 34)
Press to select the sound system.

SURROUND (MHC-GTX77/MHC-GTX66 only) (page 34)
Press to select the surround effect.

4 Disc tray (pages 9, 17, 44, 48)

5 AMP MENU (page 38)
Press to change the spectrum analyser display or to adjust the brightness of the display.

6 RETURN (pages 17, 25)
Press to return to the parent folder.

7 ►II (play/pause) (pages 17, 22, 24, 30, 44)
Press to start or pause playback.

■ (stop) (pages 17, 23, 25, 28, 29, 30, 32, 44)
Press to stop playback or recording.

I◄◄ /►►I (go forward/go backward) (pages 17, 20, 23, 25, 27, 31, 48)
Press to select a track.

TUNING +/– (pages 28, 29)
Press to tune in a radio station.

🗀 +/– (pages 17, 20, 23, 25, 27, 31)
Press to select a folder.

◄◄/►► (rewind/fast forward) (page 30)
Press to fast forward or rewind.

8 CD- USB SYNC/REC 1 (page 22)
Press to record from a disc onto the connected optional USB device (Digital music player or USB storage media).

CD-TAPE SYNC (page 31)
TAPE REC PAUSE/START (page 31)
Press to record onto a tape.

9 PUSH OPEN/CLOSE ⏏ (Deck B) (page 30)
Press to insert or eject a tape.

Deck B (pages 30, 31, 37, 48)

10 ENTER (pages 23, 29, 33, 48)
Press to enter the selection.

11 ERASE (page 23)
Press to erase MP3 audio tracks or folders on the connected optional USB device (Digital music player or USB storage media).

12 MASTER VOLUME (pages 17, 24, 39, 43)
Turn to adjust the volume.

13 MIC (jack) (pages 36, 43, 52)
Connect an optional microphone.

MIC LEVEL (pages 32, 36, 43)
Turn to adjust the microphone volume.

Continued ⇨

14 REC/ERASE (indicator) (pages 23, 25)
Lights up when recording from a disc onto the connected optional USB device (Digital music player or USB storage media).
Lights up when erasing MP3 audio tracks from the connected optional USB device (Digital music player or USB storage media).

15 ⇐ (USB) port (pages 22, 23, 24, 41, 52)
Connect an optional USB device (Digital music player or USB storage media).

16 PHONES (jack) (pages 43, 52)
Connect the headphones.

17 Power illuminator (pages 35, 39)

18 PRESET EQ (page 33)
Press to select a preset sound effect.

19 ⏏ PUSH OPEN/CLOSE (Deck A) (page 30)
Press to insert or eject a tape.

Deck A (pages 30, 48)

20 Function buttons:
CD (pages 14, 17, 22, 29, 31, 38)
TUNER/BAND (pages 29, 38)
TAPE A/B (pages 30, 38)
AUDIO (pages 38, 41)
VIDEO (pages 38, 41)
USB (pages 23, 24, 26, 38)
Press to select a function.

21 I/⏻ (on/standby) (pages 13, 14, 29, 43, 48)
Press to turn the system on or off.

22 GROOVE (page 33)
Press to reinforce the bass.

23 IR Receptor (page 43)

24 EQ BAND/MEMORY (page 33)
Press to select a frequency band when adjusting the graphic equalizer.

25 DISPLAY (pages 38, 39, 40)
Press to change the information in the display.

26 OPERATION DIAL (pages 17, 25, 33, 35, 38)
Turn to select a track or folder.
Turn to select a setting.

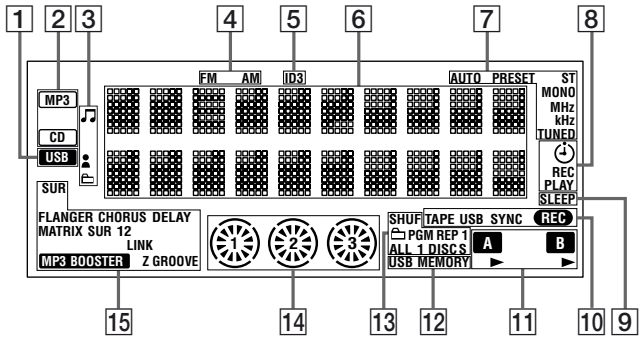
27 ILLUMINATION (page 39)
Press to change the power illuminator pattern.

28 DISC SKIP/EX-CHANGE (pages 14, 17, 18, 20)
Press to skip a disc.
Press to exchange other discs during playback.

⏏ OPEN/CLOSE (pages 14, 17, 44)
Press to load or eject a disc.

DISC 1 ~ 3 (pages 18, 20)
Press to select a disc.
Press to switch to CD function from other function.

– Display



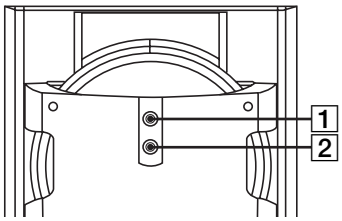
1 Lights up when the USB function is selected (page 24).
2 "MP3" lights up when an MP3 audio track is recognized. "CD" lights up when a disc is recognized.
3 Indicates the type of MP3 audio track information that displayed (page 39). "♫" lights up when a track name is displayed. "👤" lights up when an artist name is displayed. "🗀" lights up when a folder name is displayed.
4 Indicates the tuner band (page 28).
5 Lights up when the MP3 audio track contains ID3 tag information.
6 Displays the current status and information (page 39).
7 Indicators for the TUNER function (page 28).
8 Lights up when the Play Timer or Recording Timer is set (page 37).
9 Lights up when the Sleep Timer is activated (page 37).
10 Lights up during recording (pages 22, 31).
11 Indicators for the TAPE function (page 30).
"A" and "B" lights up when the system is turned on.
"▶" lights up when there is a tape in the deck.
12 Lights up when an optional USB device (Digital music player or USB storage media) is recognized (page 22).
13 Indicates the selected play mode (pages 19, 26).
14 Indicators for the disc tray (page 17).
"○" lights up when the disc is selected. "◌" lights up when there is a disc on the disc tray. "1", "2" and "3" light up when the system is turned on.
15 Indicates the activated sound effect (pages 33, 35).

Note

"LINK", "MATRIX SUR 1" and "MATRIX SUR 2" light up for MHC-GTX88 only.

Continued ⇨

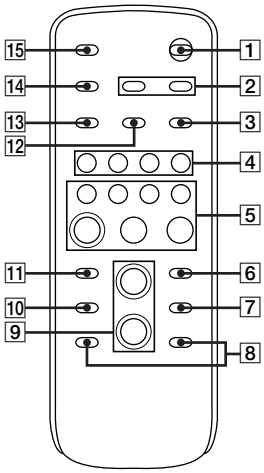
Subwoofer A (SS-WG88A)



1 SUBWOOFER ON/OFF (page 13)
Press to turn the subwoofer on or off.

2 SUBWOOFER LEVEL (page 13)
Turn to adjust the subwoofer level.

Remote



1 I/⏻ (on/standby) (pages 13, 16, 43)
Press to turn the system on or off.

2 CLOCK/TIMER SELECT (page 38)
CLOCK/TIMER SET (pages 16, 37)
Press to set the clock and the timers.

3 REPEAT/FM MODE (pages 21, 27, 29, 47)
Press to change the Repeat Play setting.
Press to select the FM monaural or stereo reception.

4 USB (page 24)
Press to select the USB function.

CD (page 17)
Press to select the CD function.

TUNER/BAND (page 28)
Press to select the TUNER function.
Press to select FM or AM band.

FUNCTION (pages 30, 41)
Press to select a function.

5 ⏮/⏭ (go forward/go backward) (pages 17, 20, 23, 25, 27, 31, 37, 48)
Press to select a track.

+/– (tuning) (pages 28, 29)
Press to tune in a radio station.

◀◀/▶▶ (rewind/fast forward) (pages 17, 25, 30)
Press to find a point in a track.

▶ (play) (pages 17, 24, 30, 44)
❚❚ (pause) (pages 17, 30)
■ (stop) (pages 17, 25, 28, 30, 32)
Press to start, pause or stop playback.

6 ENTER (pages 16, 23, 28, 33, 37)
Press to enter the selection.

7 DISC SKIP (pages 18, 20)
Press to skip a disc.

8 🗀 +/– (pages 17, 20, 23, 25, 27, 31)
Press to select a folder.

9 VOLUME +/–* (pages 17, 24, 39, 43)
Press to adjust the volume.

* The VOLUME + button has a tactile dot. Use the tactile dot as a reference when operating the system.

10 EQ (page 33)
Press to select a preset sound effect.

11 CLEAR (pages 21, 27)
Press to delete a pre-programmed track.

12 PLAY MODE/TUNING MODE (pages 19, 26, 28, 29, 44)
Press to select the play mode of CD or USB function.
Press to select the tuning mode.

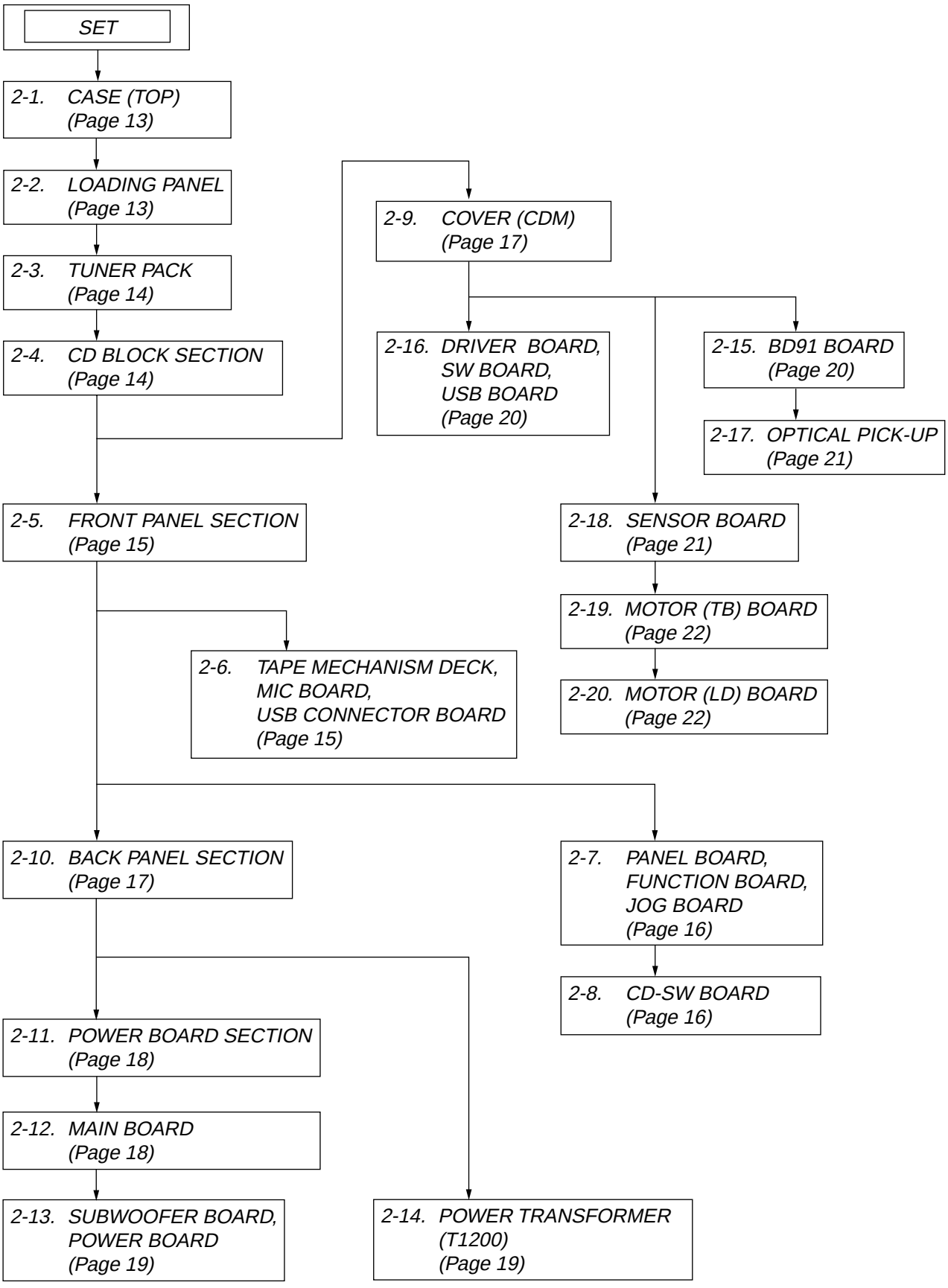
13 TUNER MEMORY (page 28)
Press to preset a radio station.

14 DISPLAY (pages 38, 39, 40)
Press to change the information on the display.

15 SLEEP (page 37)
Press to activate the Sleep Timer.

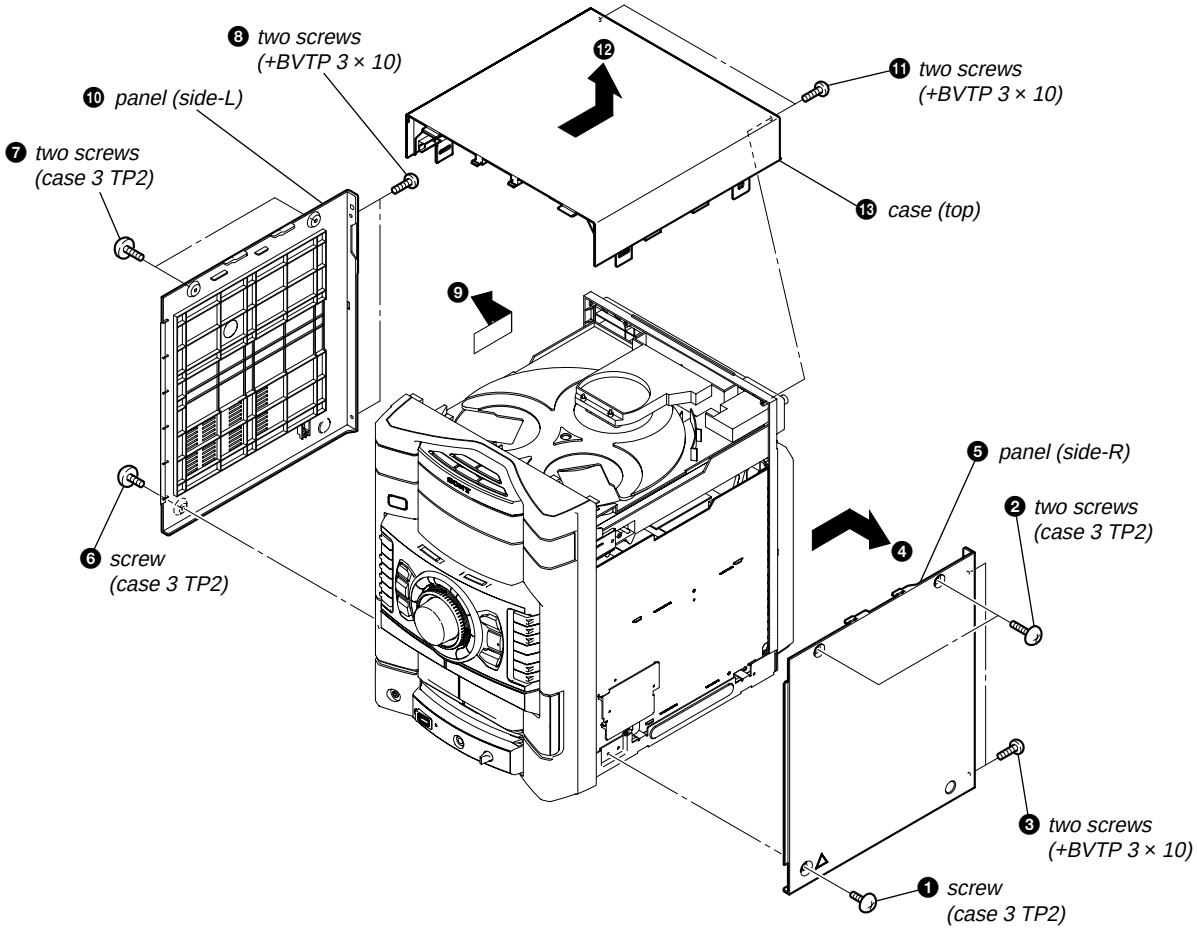
SECTION 2
DISASSEMBLY

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

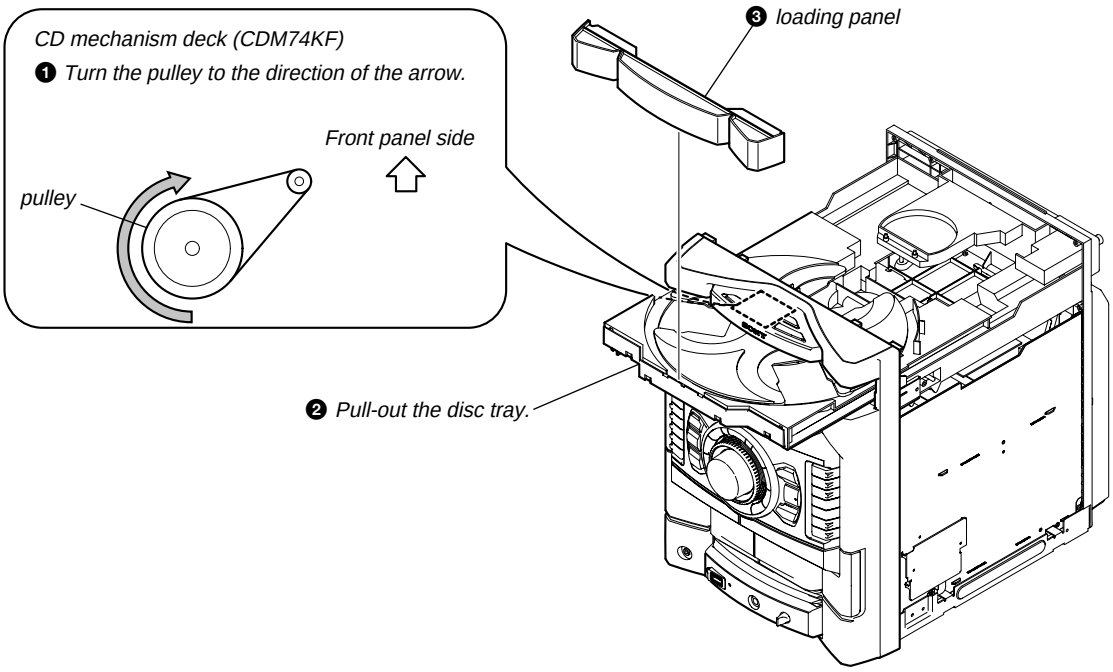


Note : Follow the disassembly procedure in the numerical order given.

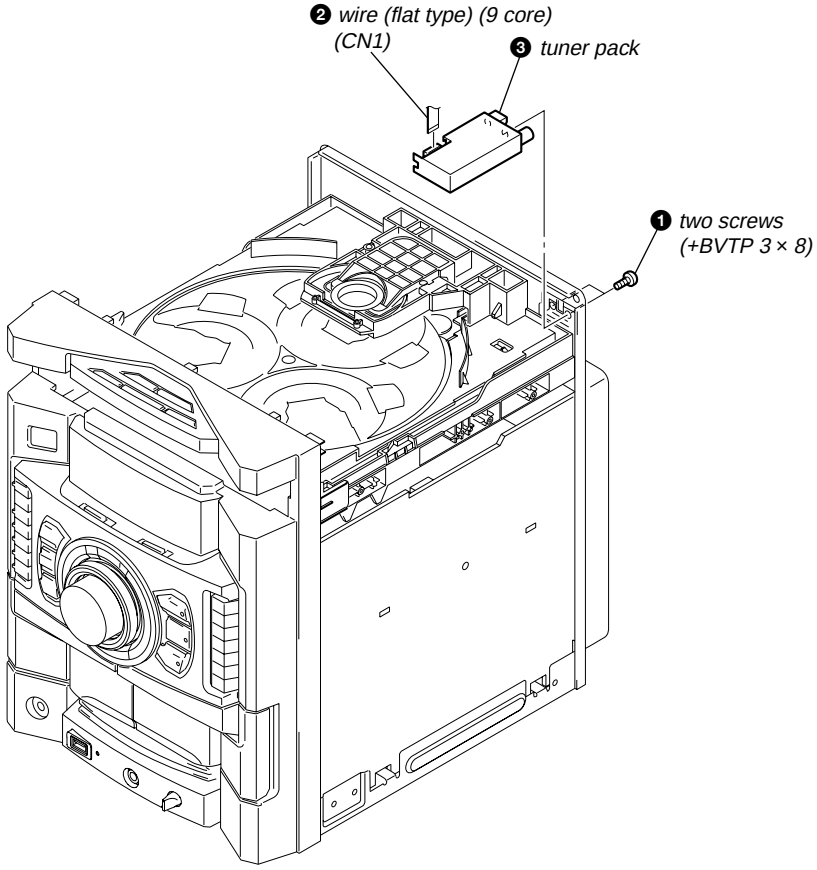
2-1. CASE (TOP)



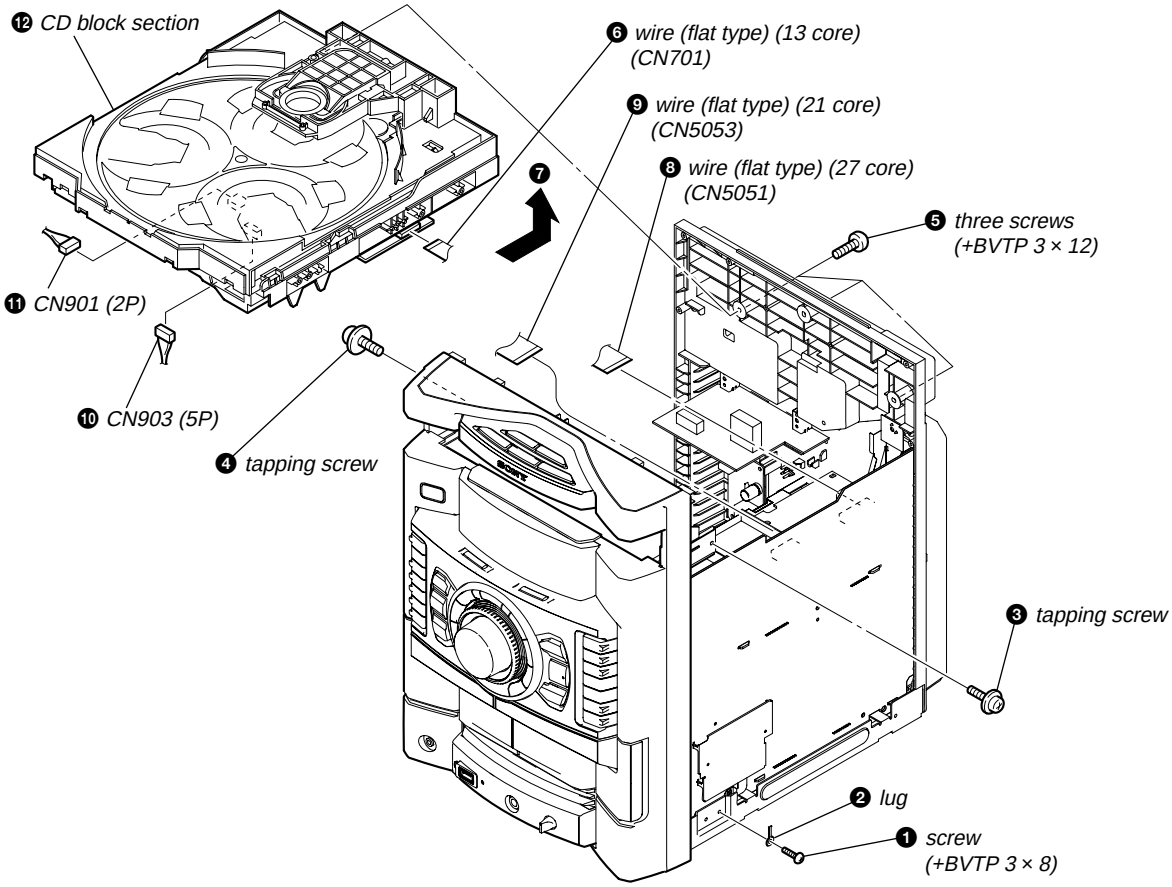
2-2. LOADING PANEL



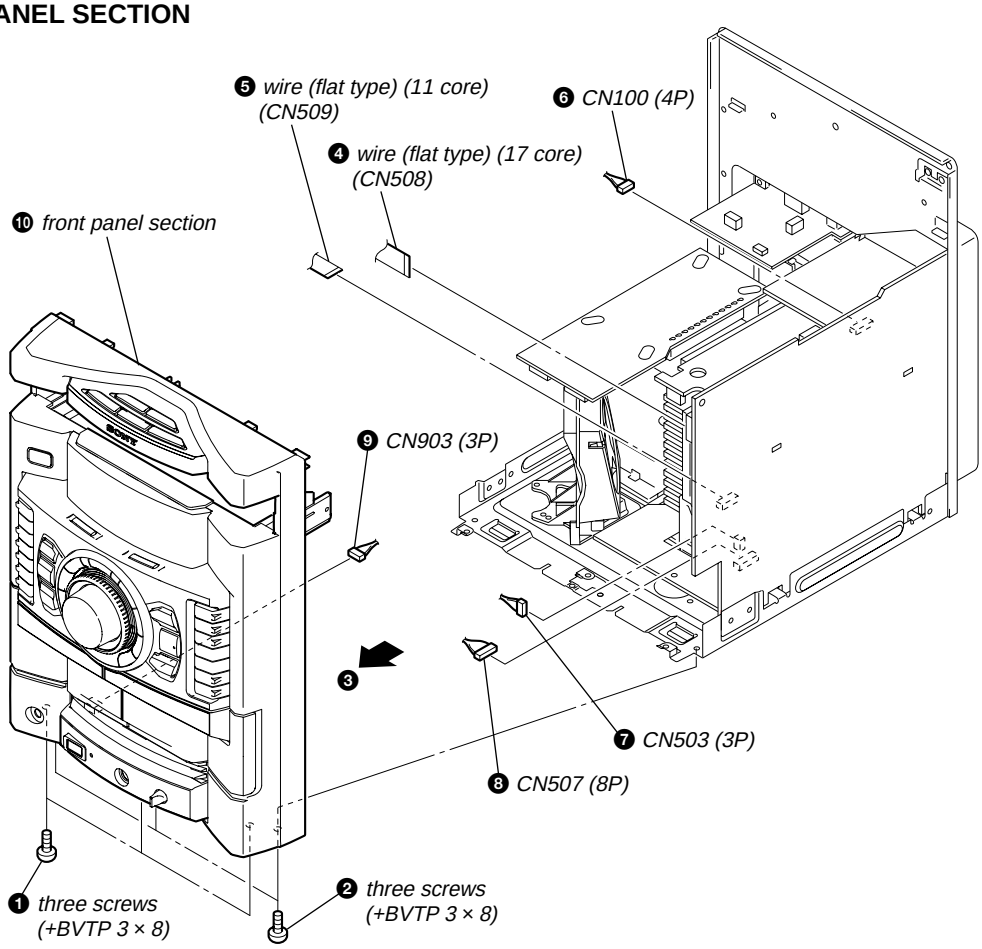
2-3. TUNER PACK



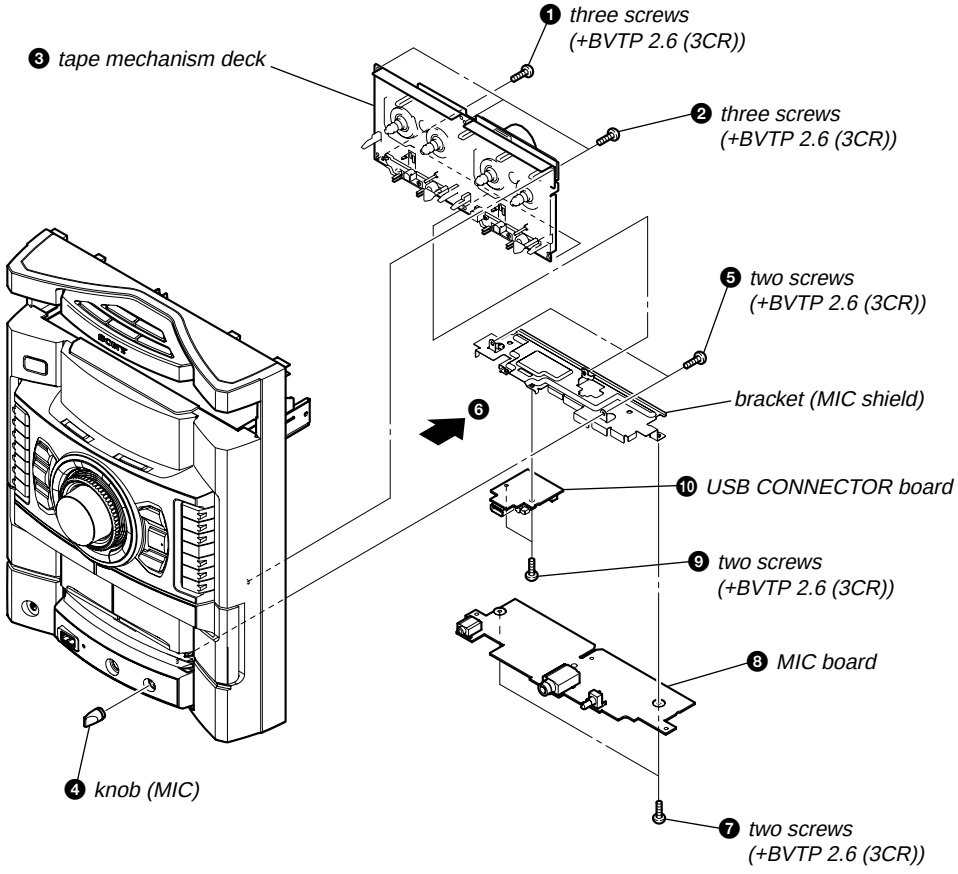
2-4. CD BLOCK SECTION



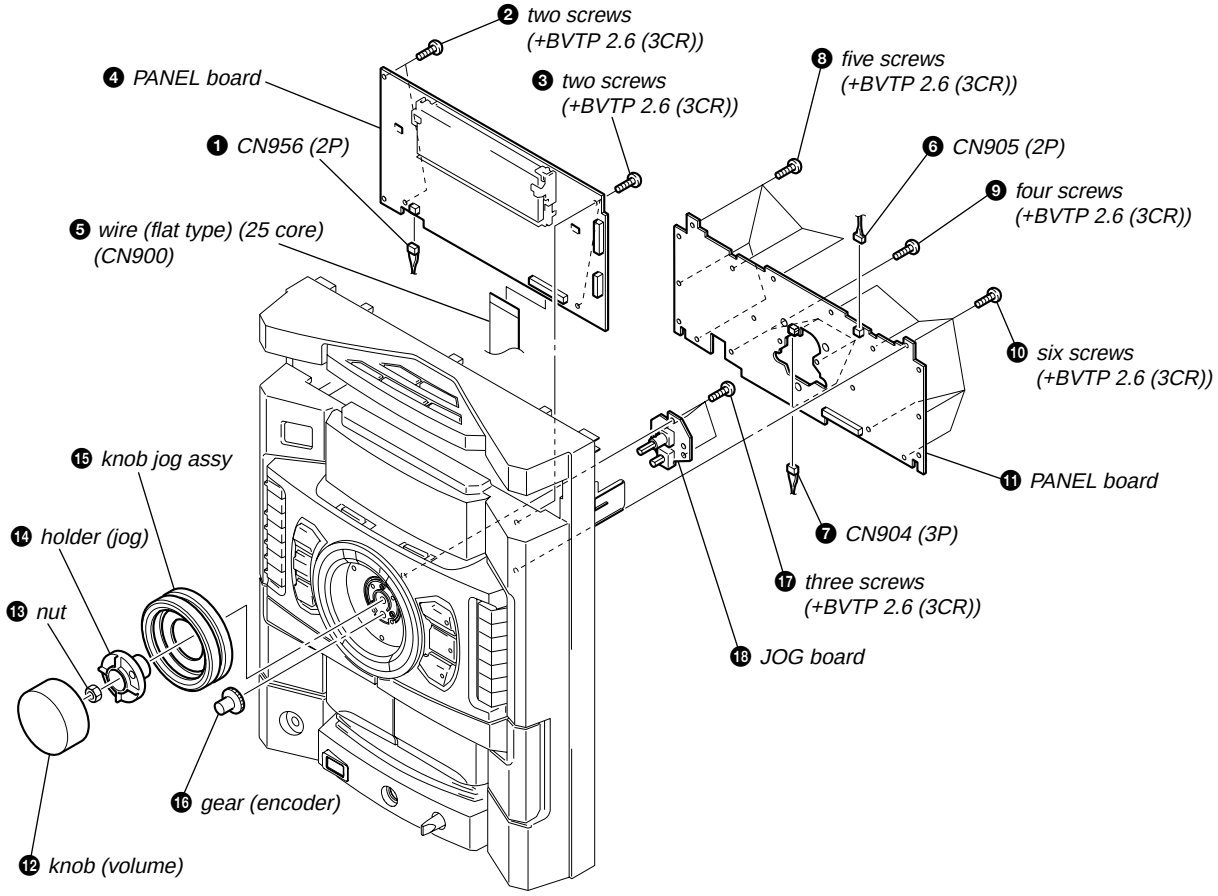
2-5. FRONT PANEL SECTION



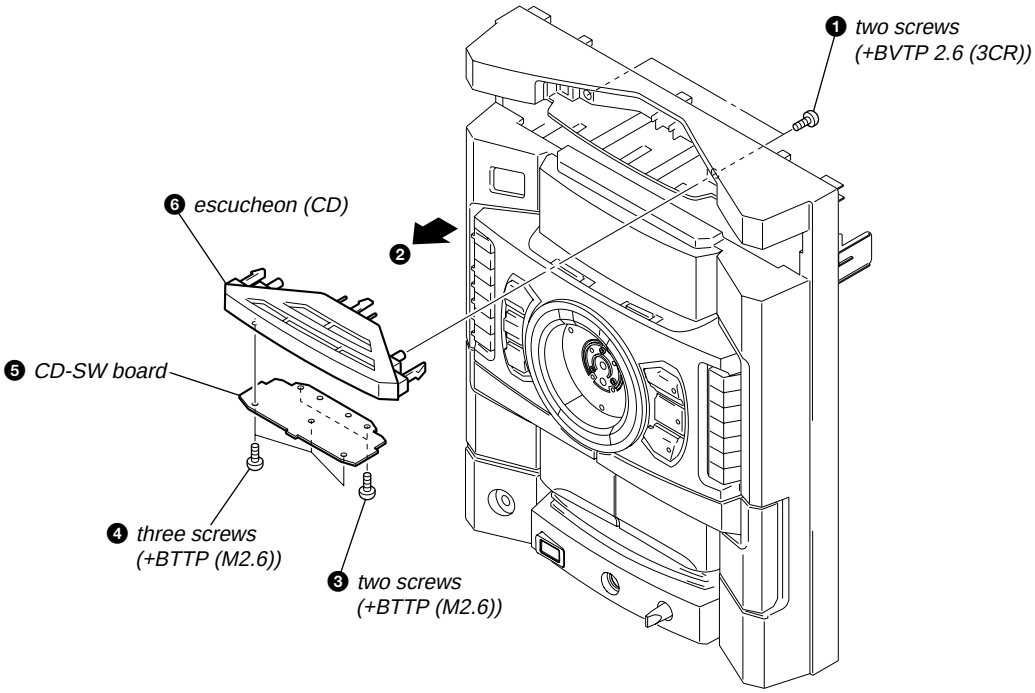
2-6. TAPE MECHANISM DECK, MIC BOARD, USB CONNECTOR BOARD



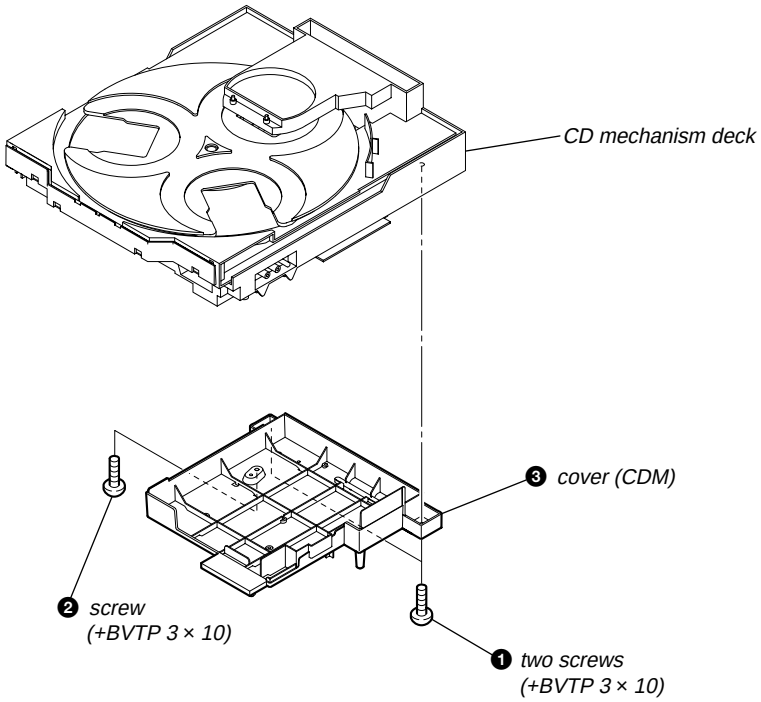
2-7. PANEL BOARD, FUNCTION BOARD, JOG BOARD



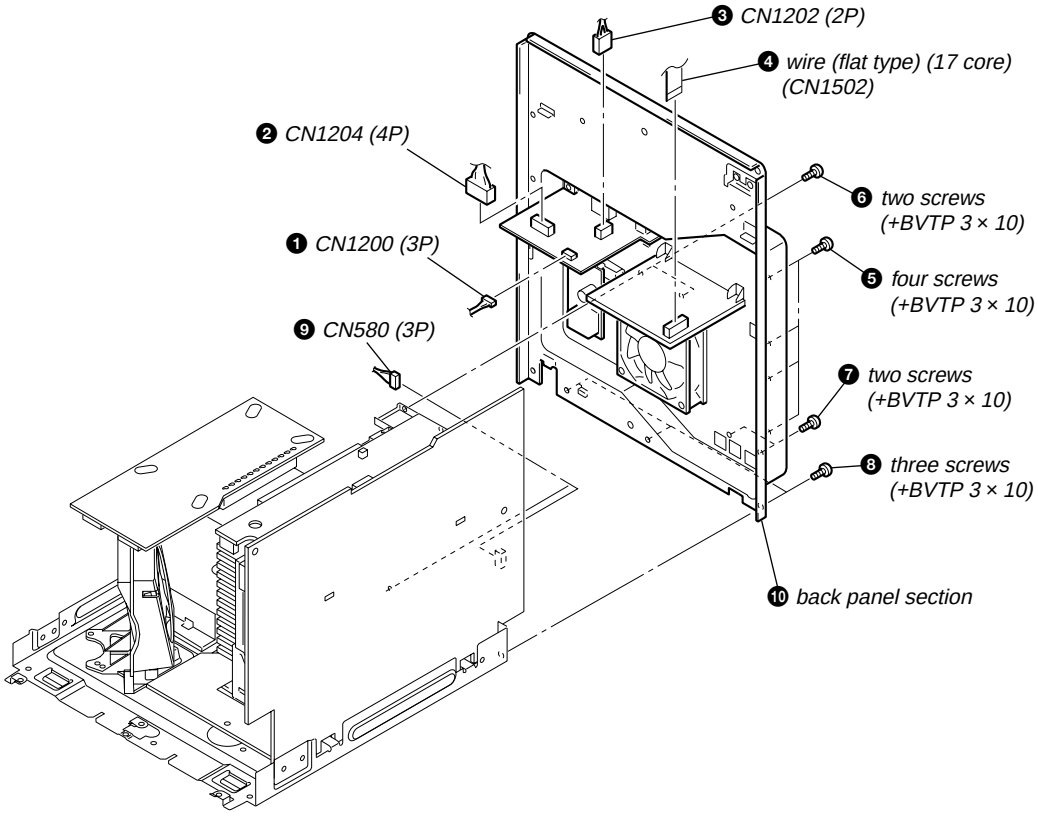
2-8. CD-SW BOARD



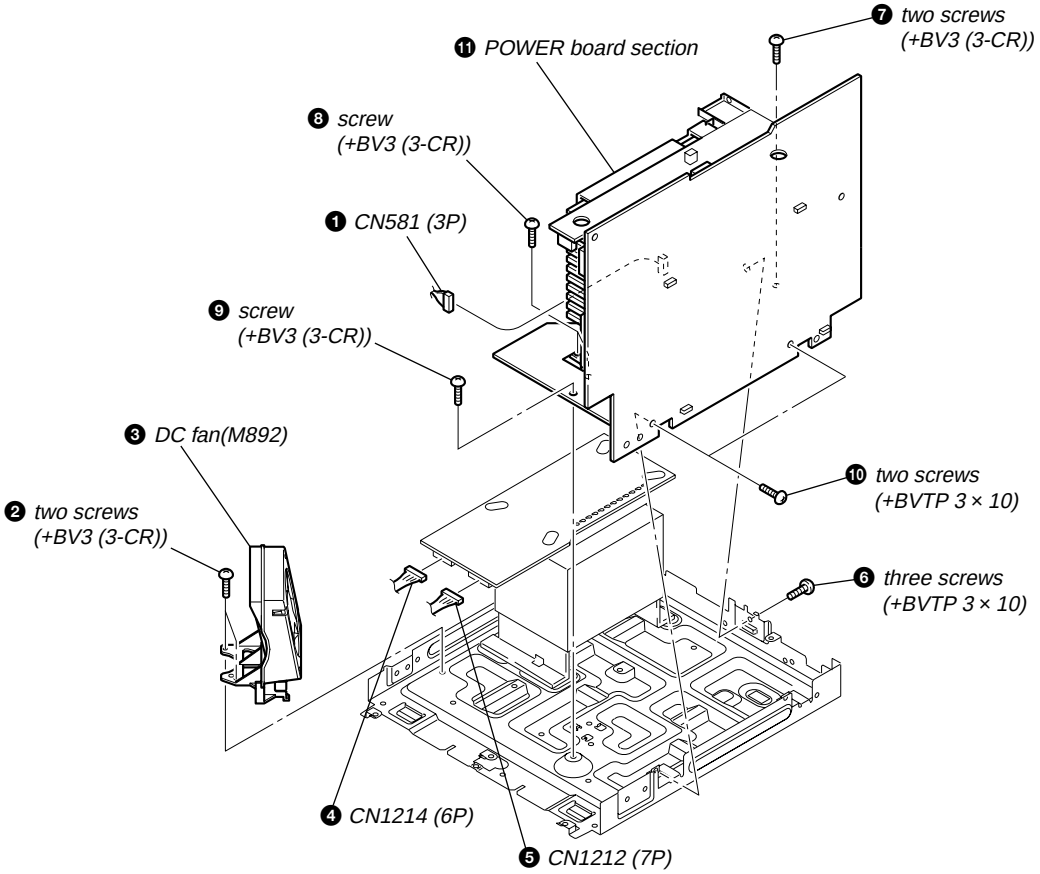
2-9. COVER (CDM)



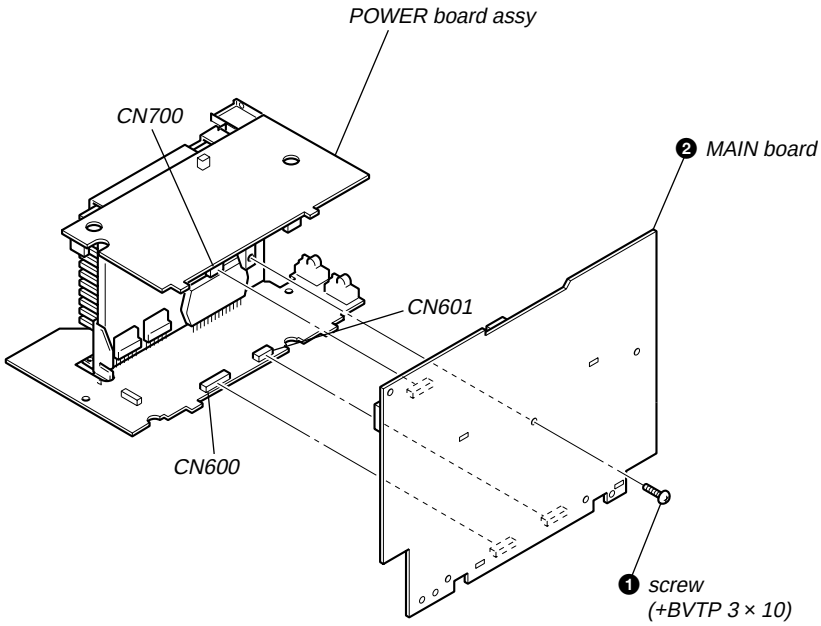
2-10. BACK PANEL SECTION



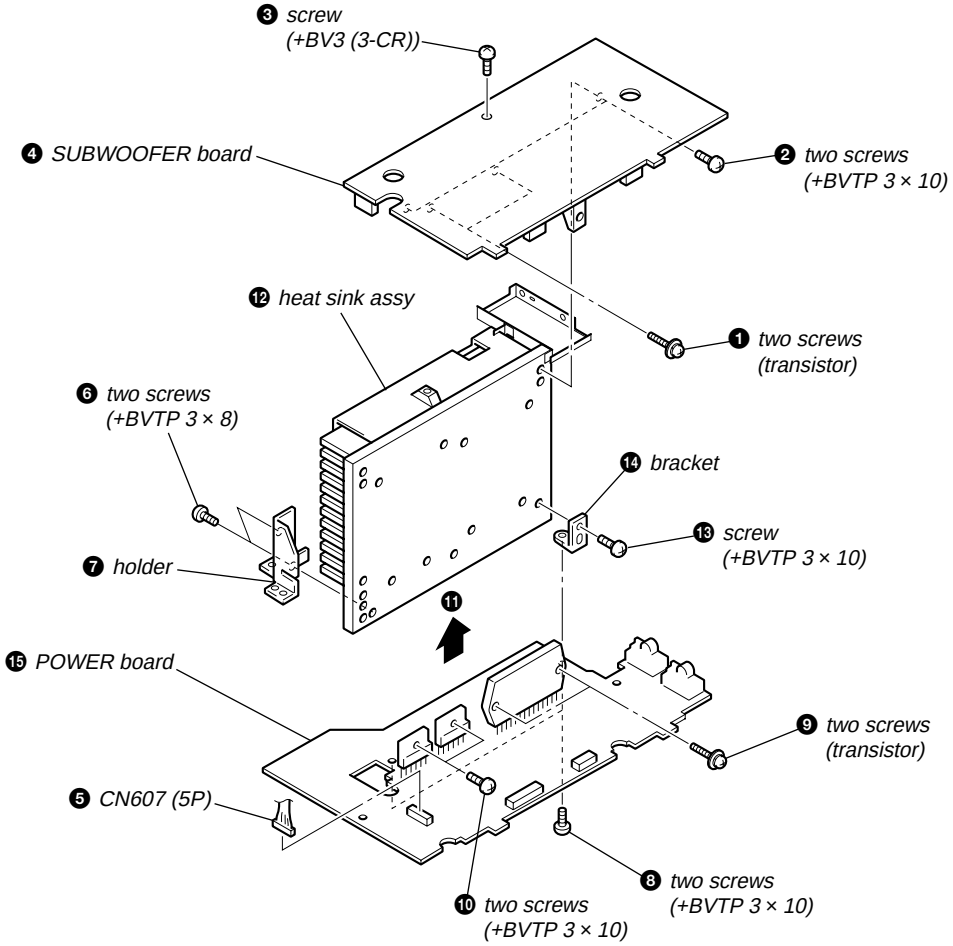
2-11. POWER BOARD SECTION



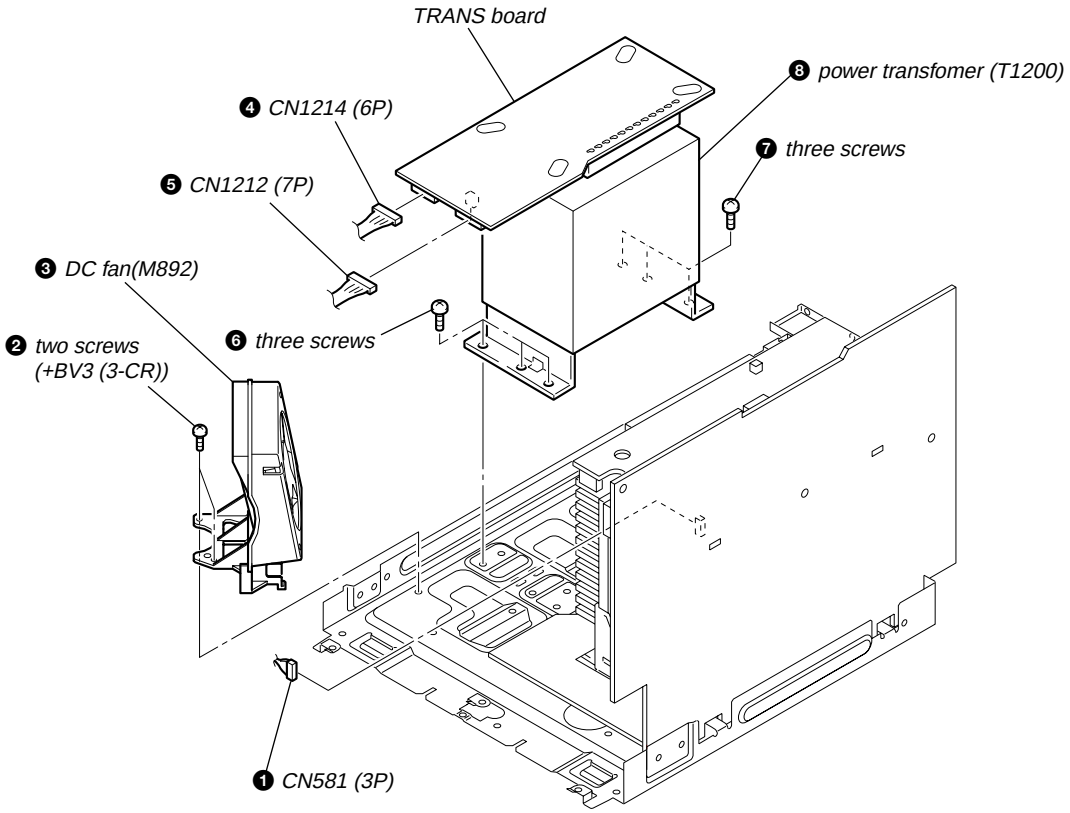
2-12. MAIN BOARD



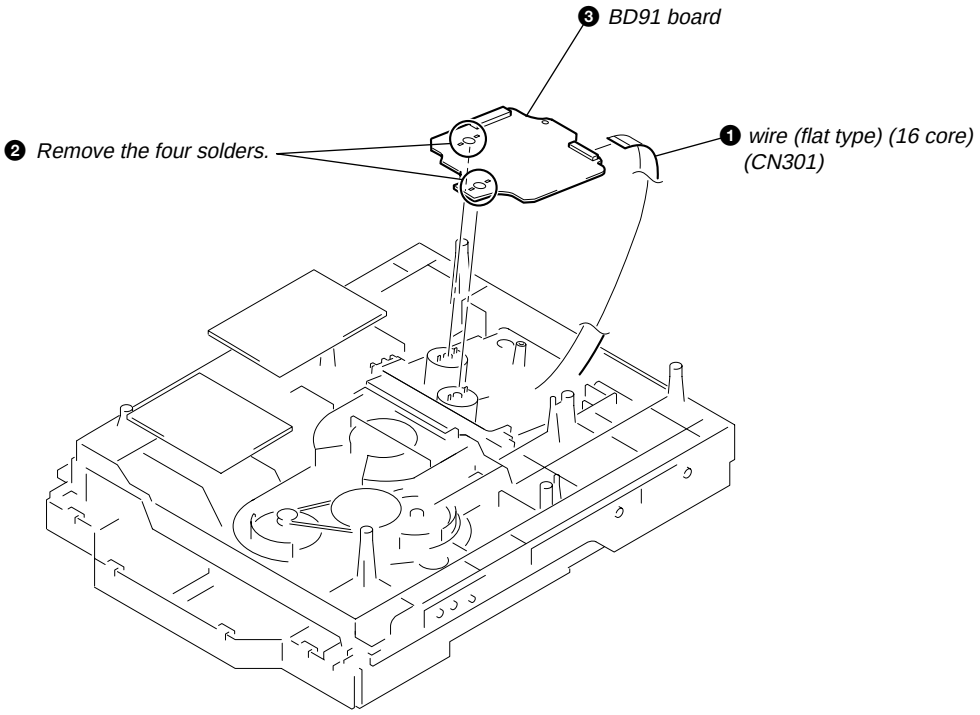
2-13. SUBWOOFER BOARD, POWER BOARD



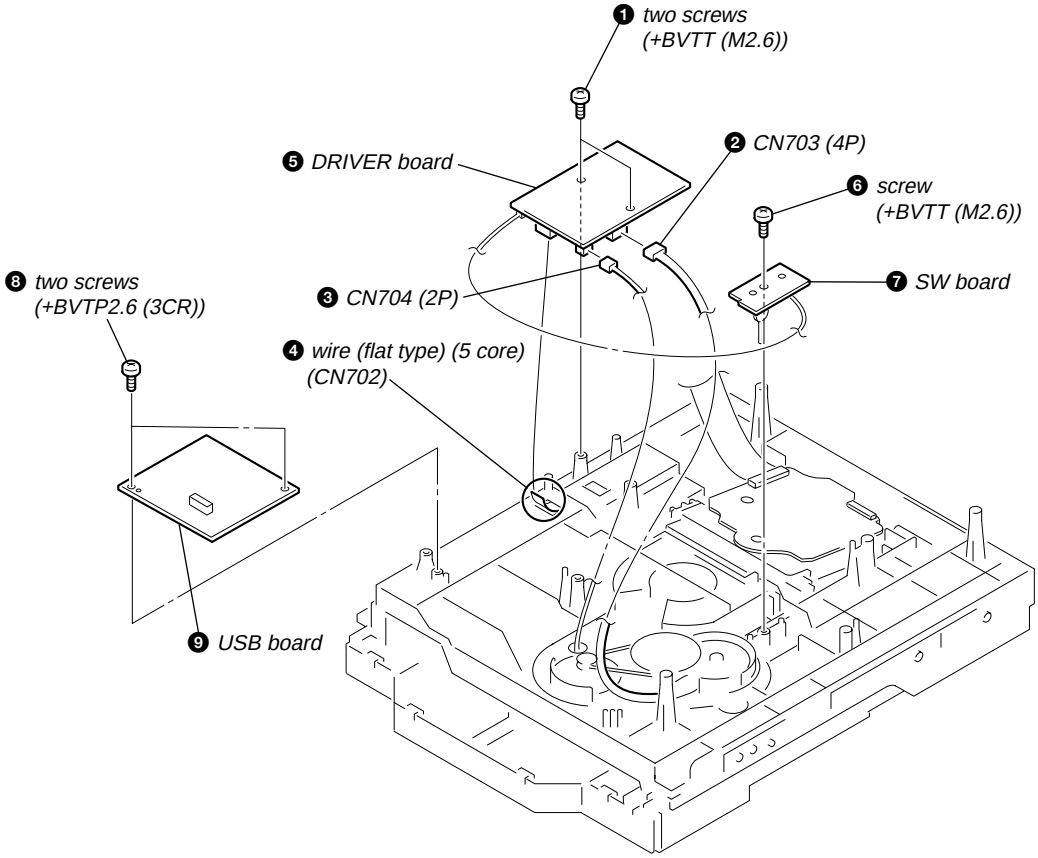
2-14. POWER TRANSFORMER (T1200)



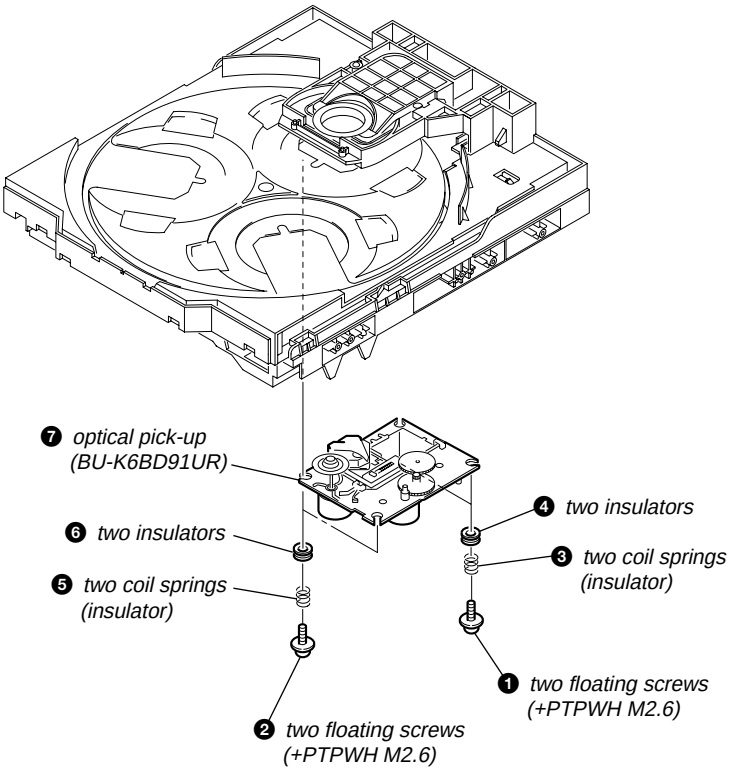
2-15. BD91 BOARD



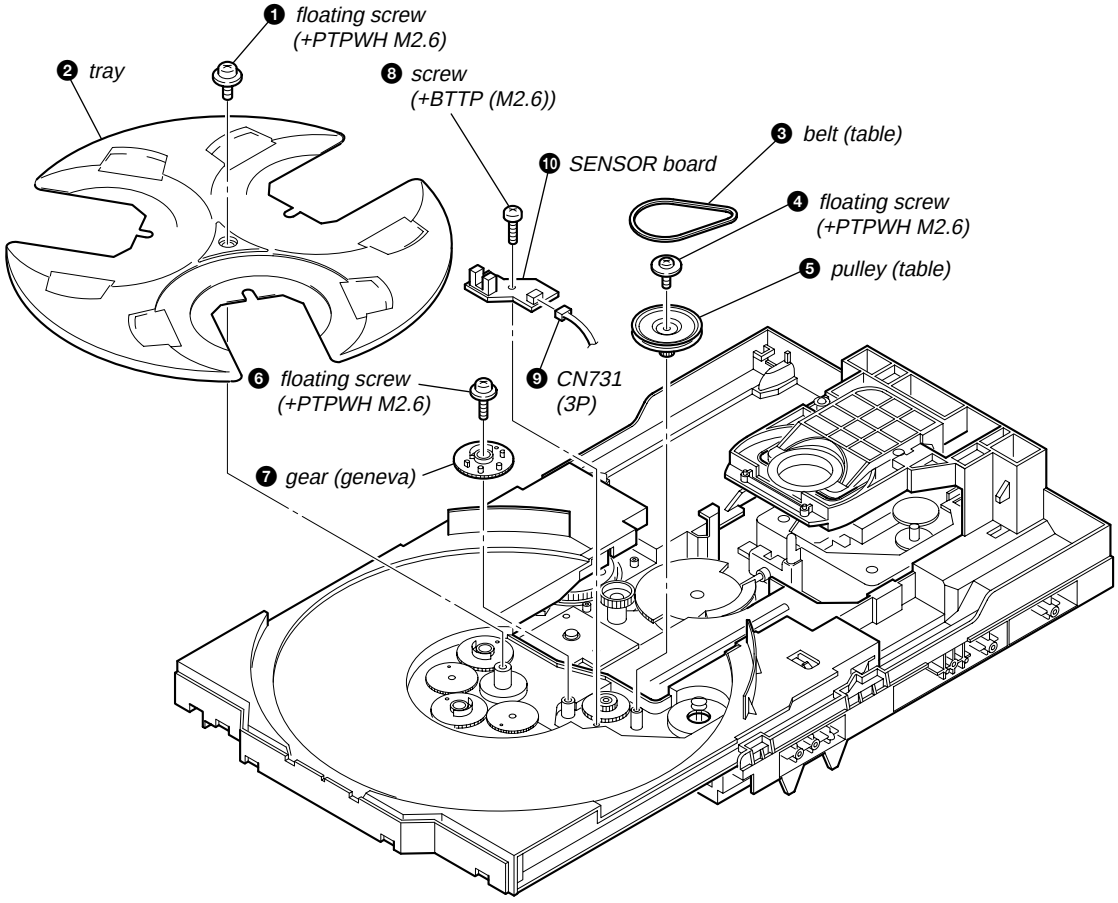
2-16. DRIVER BOARD, SW BOARD, USB BOARD



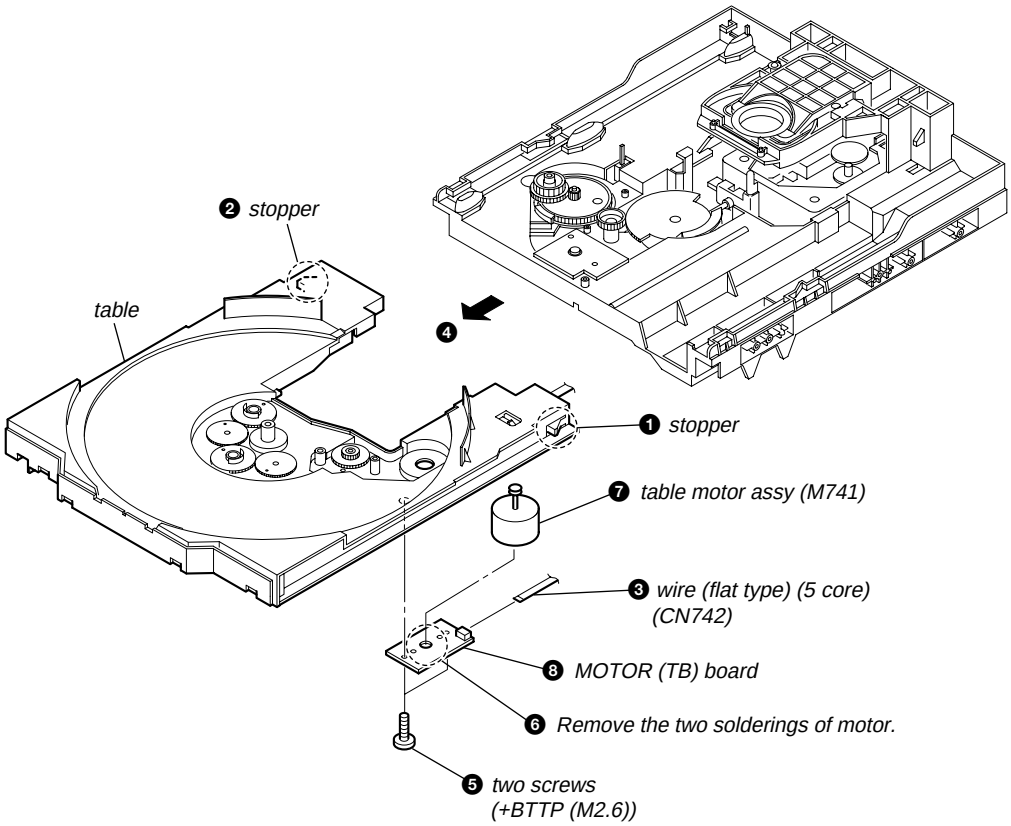
2-17. OPTICAL PICK-UP



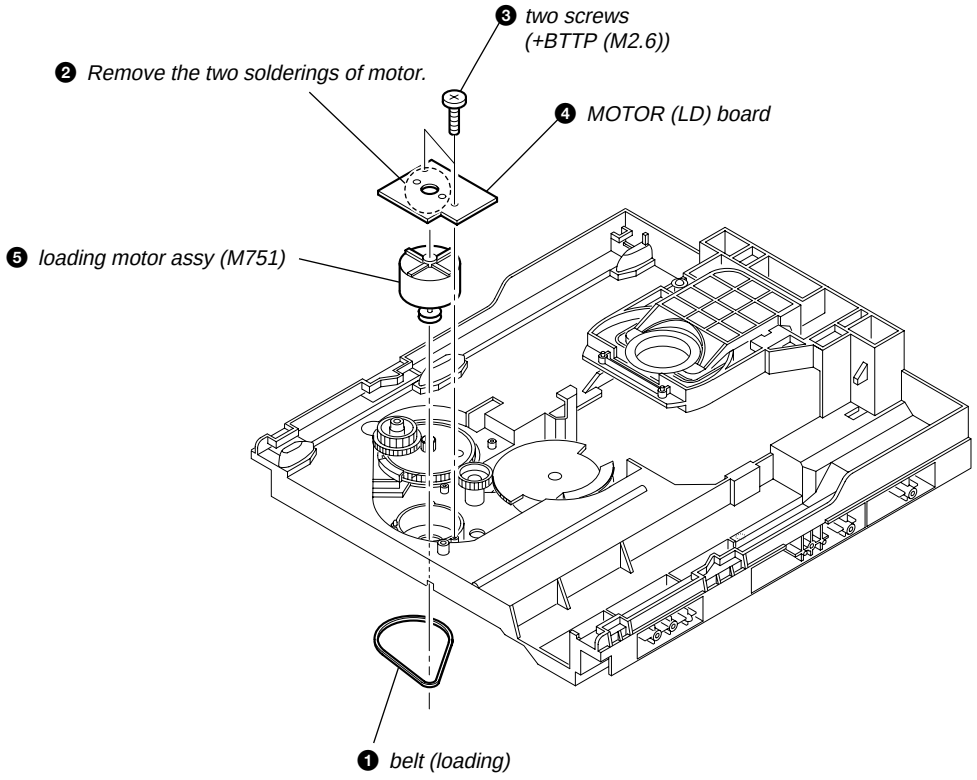
2-18. SENSOR BOARD



2-19. MOTOR (TB) BOARD



2-20. MOTOR (LD) BOARD



SECTION 3
TEST MODE

[GC TEST MODE]

- This mode is used to check the fluorescent indicator tube, LEDs, buttons, MASTER VOLUME knob, OPERATION DIAL knob, model, destination, software version.

Procedure:

1. Press ■ button, ENTER button and DISC 2 button simultaneously.
2. All LEDs and segments in fluorescent indicator tube are lighted up.
   All LEDs are lighted up in red color except for ►II LED where the LED is lighted up in green color.
3. When you want to enter to the model version and destination display mode, press DISC 1 button. The model information appears on the fluorescent indicator tube.
4. Each time DISC 1 button is pressed, the display changes to display software version and date of the software creation. The sequence is MC version, GC version, SYS version, CD version, CDDM version, CDMA version, CDMB version, BDA version, BDB version, ST version, TC version, TA version, TM version, MM1 version and MM2 version in this order, and returns to the model version display.
5. Press DISC 2 button, the key check mode is activated.
6. In the key check mode, the fluorescent indicator tube displays "K 0 J0 V0".
   Turn the OPERATIONAL DIAL clockwise; "J" value increases by one. Turn the OPERATIONAL DIAL counterclockwise; "J" value decreases by one. Each time a button is pressed, "K" value increases. Press other keys on main unit to check whether the key is detected. However, once a button has been pressed, it is no longer taken into account.
   "V" value increases in the manner of 0, 1, 2, 3 ... if MASTER VOLUME knob is turned clockwise, or it decreases in the manner of 0, 9, 8, 7 ... if MASTER VOLUME knob is turned counterclockwise.
7. When DISC SKIP/EX-CHANGE button is pressed after all LEDs and segments in fluorescent indicator tube light up, alternate segments in fluorescent indicator tube and LED would light up. If you press DISC SKIP/EX-CHANGE button again, another half of alternate segments in fluorescent indicator tube and LEDs would light up. Pressing DISC SKIP/EX-CHANGE button again would cause all LED and segments lights up.
8. To release from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

[MC TEST MODE]

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

Procedure:

- To enter MC Test Mode

1. Press ■ button, ENTER button and DISC 3 button simultaneously.
2. The CD ring indicators and TAPE A and B indicators flash on the fluorescent indicator tube. The function is changed to VIDEO.

∗ Check of Amplifier

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

∗ Tape function

1. Insert a tape in dack B. The function is changed to VIDEO automatically when the recording is started by pressing CD-TAPE SYNC then press TAPE REC PAUSE/START button. During recording the ALC (Automatic Logic Control) is turned on.
2. During recording, press ◄◄ button will stop the recording and the function is changed to TAPE B and rewind the tape in Deck B until the recording start position and playback of the tape in Deck B is started. If the TAPE REC PAUSE/ START button is pressed for a pause and pressed again to resume recording during recording time, when the tape is rewind, the tape will be rewind until the position where the pause is applied.

∗ To release from MC Test mode

1. To release from this mode, press I/⏻ button.
2. The cold reset is enforced at the same time.

[COLD RESET]

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

Procedure:

1. Press I/⏻ button to turn on the system.
2. Press ■ button, ENTER button and I/⏻ button simultaneously.
3. The message "COLD RESET" appears on the fluorescent indicator tube. Then, the fluorescent indicator tube becomes blank for while, and the set is reset.

[VACS ON/OFF]

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

Procedure:

1. Press I/⏻ button to turn on the system.
2. Press ■ button and ILLUMINATION button simultaneously. The message "VACS OFF" or "VACS ON" appears on the fluorescent indicator tube.

[TUNER STEP CHANGE]

- The step interval of AM channels can be toggled between 9 kHz and 10 kHz.
  This mode is not available for Saudi Arabia model.

Procedure:

1. Press I/⏻ button to turn on the system.
2. Press TUNER/BAND button repeatedly to select the "AM".
3. Press I/⏻ button to turn off the system.
4. Press ENTER button and I/⏻ button simultaneously. The system will turn on automatically. The message "AM 9K STEP" or "AM 10K STEP" appears on the fluorescent indicator tube and thus the channel step is changed.

[CD SERVICE MODE]

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

Procedure:

1. Press [I/⏻] button to turn on the system.
2. Select CD function.
3. Press [■] button, [ENTER] button and [OPEN/CLOSE] button simultaneously.
4. The CD service mode is activated. The message “SERVICE MODE” appears on the fluorescent indicator tube.
5. With the CD in stop status, press [▶▶] to move the optical pick-up to outside track, or turn [◀◀] to move to inside track. The message “SLED OUT” or “SLED IN” appears on the fluorescent indicator tube.
6. To turn on or off the laser, press [FLANGER] button. The message “LD ON” or “LD OFF” appears on the fluorescent indicator tube.
7. To release from this mode, press [I/⏻] button to turn off the system.

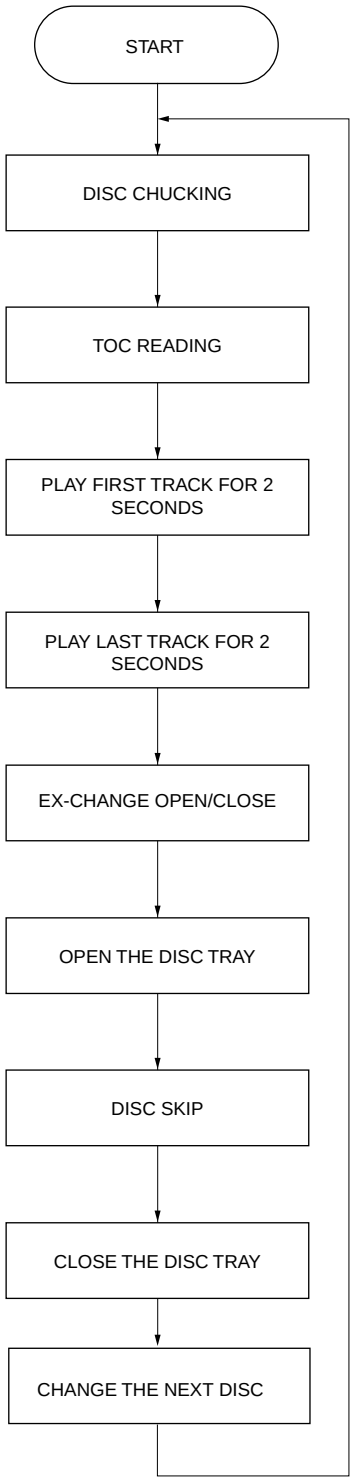
[CD AGING MODE]

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

Procedure:

1. Press [I/⏻] button to turn on the system.
2. Select CD function.
3. Load three discs on disc tray.
4. Press [PLAY MODE/TUNING MODE] button on the remote control repeatedly to select the “ALL DISCS” mode, and press the [REPEAT/FM MODE] button on the remode control repeatedly to select repeat mode off.
5. Press [■] button, [ENTER] button and [DISC SKIP/EX-CHANGE] button simultaneously.
6. Aging operation is started.
7. To release from this mode, press [I/⏻] button or disconnect the power cord to turn the power OFF.

• Aging mode sequence:

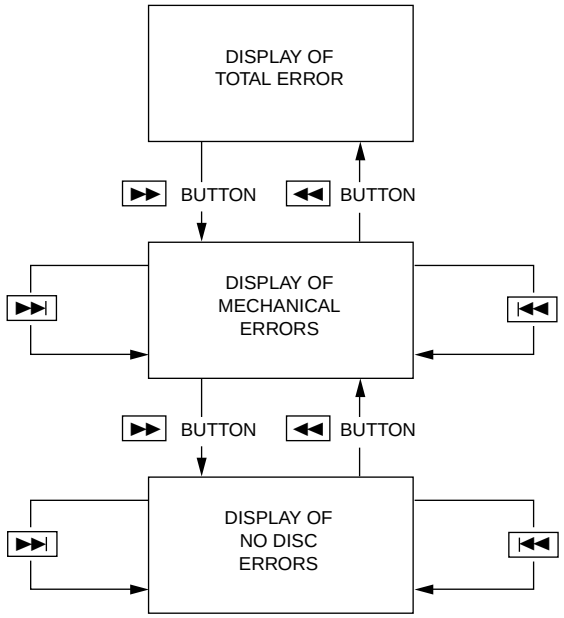


[CD ERROR CODE MODE]

• Display the CD error code when an error occurred.

Procedure:

1. Press ■ button, ENTER button and DISC 1 button simultaneously to enter the error code display mode.
2. The fluorescent indicator tube display the number of total error.
3. Each time ◀◀ button and ▶▶ button are turned, display change as below.



4. To clear the error record, operate the cold reset. (Refer to the "MC COLD RESET".)
5. To release from this mode, press the I/⏻ button or disconnect the power OFF.

• Display of total error

```
Em**Ed**
```

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

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

```
M*$$%%&&0–
000
```

M* : The number of history error for mechanical. ("0" is latest one) (Turn ▶▶I button to display next error.)
$$: Mechanical errors occur in the operation.
FF : Mechanical error during normal operation.
Other: Mechanical error during initializing operation.
%% : The process when trouble occurs
01 : Process ejecting DISC
02 : Process waiting for inserting DISC
03 : Process sending request to insert a disc to upper layer.
04 : Process sending request to eject a disc to upper layer.
05 : Process pulling a DISC in.
06 : Chucking process
07 : Re-chucking process
08 : Process cancelling chucking
&& : The operation when trouble occurs
00 : Waiting for operation.
10/11/12/13: During eject operation
20 : While pulling a disc in
30 : While cancelling chucking
40/41/42/43: During eject operation due to error.
0000 : Not used (Value is fixed to 0000).

• Display of BD error. It is shown with "D" and 11 digits number.

```
D*$$%%&&#–
#00
```

D* : The number of error history ("0" is latest one) (Press ▶▶I button to display next error.)
$$: The detail of trouble
01 : Can not focus
02 : GFS error
03 : Start-up time over
04 : Continuously out of focus
05 : Q code is not input for certain time
06 : Tracking on is impossible
07 : Blank disc
%% : The process when trouble occurs
01 : While SHIP process is performed
02 : While POWER OFF is processed
03 : While INITIALIZE (POWER ON) is processed.
04 : While oscillation stops
05 : From stopping oscillation to start oscillation
06 : During stop
07 : During STOP operation
08 : While start-up is processed
09 : While TOC reading is processed
0a : During search operation
0b : During PLAY operation
0c : During pause operation
0d : During PLAY manual search operation
0e : During PAUSE manual search operation
&& : Processing operation when trouble occurs
Show each STEP mentioned in %% digits.
: Disc speed when trouble occurs.
01 : x1 speed
02 : x2 speed (for models which support x2 speed)
04 : x4 speed
00 : Not used (value is fixed to 00).

[CD REPEAT 5 LIMIT OFF MODE]

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

Procedure:

1. Press I/⏻ button to turn on the system.
2. Select CD function.
3. Press ■ button, CD button and DISC 1 button simultaneously to enter the CD repeat 5 limit off mode and the fluorescent indicator tube displays “LIMIT OFF”.

- To release from this mode, operate the cold reset. (Refer to the “MC COLD RESET”.)

[CD SHIP MODE (WITH MEMORY CLEAR)]

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

Procedure:

1. Press I/⏻ button to turn on the system.
2. Select CD function.
3. Press ■ button, SOUND FLASH button and I/⏻ button simultaneously. The system will turn off automatically.
4. After the “STANDBY” blinking display finishes, a message “MECHA LOCK” is displayed on the fluorescent indicator tube and the CD ship mode is set.
5. The Memory is clear after AC Power OFF.

[CD SHIP MODE (WITHOUT MEMORY CLEAR)]

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

Procedure:

1. Press I/⏻ button to turn on the system.
2. Select CD function.
3. Press CD button and I/⏻ button button simultaneously. The system will turn off automatically.
4. After the “STANDBY” blinking display finishes, a message “MECHA LOCK” is displayed on the fluorescent indicator tube and the CD ship mode is set.

[CD/USB POWER MANAGE]

- This mode let you switch on or off power supply to the BU and USB Micom during TUNER function.

- When CD and USB POWER is set to OFF, the power supply to the BU and USB Micom is cut off during TUNER function. It will increase the time taken to access CD and USB when function change from TUNER to CD or USB but it will improve tuner reception.

- When CD and USB POWER is set to ON, the power supply to the BU and USB Micom is not cut off during TUNER function. It will reduce the time taken to access CD or USB when function change from TUNER to CD or USB but it will decrease tuner reception performance.

Procedure:

1. Press I/⏻ button to turn on the system.
2. Select CD section.
3. Press I/⏻ button to turn off the system.
4. When demonstration appear, press ■ button and I/⏻ button simultaneously. The set will power on automatically.
5. The message “CD/USB POWER ON” or “CD/USB POWER OFF” will be displayed on the fluorescent indicator tube.

[CD TRAY LOCK MODE]

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

Procedure:

1. Press I/⏻ button to turn on the system.
2. Select CD function.
3. Press ■ button, OPEN/CLOSE button simultaneously and hold down until “LOCKED” or “UNLOCKED” displayed on the fluorescent indicator tube (around 5 seconds).

[TCM OFFLINE MODE]

- This mode is used to prevent the system from turning off automatically when TCM is not connected. Therefore, measurements can be done even when TCM is not connected during production.

Procedure:

1. When the system is turned off, press EQ BAND/MEMORY button, TAPE A/B button and I/⏻ button simultaneously. The system will turn on automatically.
2. The message “TCM OFFLINE” will be displayed on the fluorescent indicator tube.

- To release from TCM Offline Mode, perform “COLD RESET” or turn off the power supply.

[VACS DISPLAY]

• This mode is used to check the VACS level.

Procedure:

1. Press I/⏻ button to turn on the system.
2. Press ■ button, CHORUS button and DISC SKIP/EX-CHANGE button simultaneously.
3. The VACS Level Display, the fluorescent indicator tube displays “VATB F APC”. “V” represent VACS, A represent VACS level which is triggered by signal level, “T” represent Thermal VACS NEO, B represent VACS level which is triggered by temperature, “F” represent FAN is triggered by software to turn in to high speed, “AP” represent APVACS (Abuse Protection VACS) and “C” represent APVACS level which is triggered.

SECTION 4
MECHANICAL ADJUSTMENTS

[ERROR MESSAGE]

1. GC error message

• Display

Display on fluorescent indicator tube,

GC ERR01

When “GC ERR01” message appears, all LEDs lights up and set becomes hang.
Set does not respond to any main unit keys or remote controller keys.

• What to do

1. Please check the model resistor value and replace with correct parts.
2. Plug in the set. The error message shall not be appear.

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.

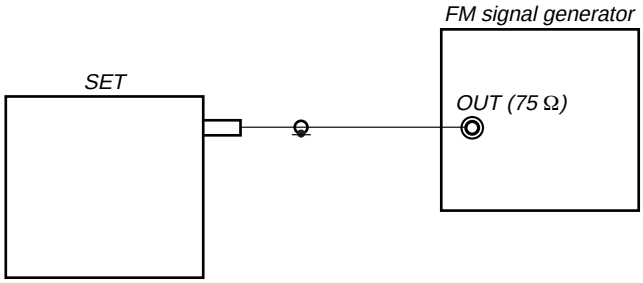
Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	2.9m N • m to 6.9m N • m 30 to 70 g • cm (0.42 – 0.97 oz • inch)
FWD back tension	CQ-102C	0.15m N • m to 0.59m N • m 2 to 6 g • cm (0.03 – 0.08 oz • inch)
REV	CQ-102RC	2.9m N • m to 6.9m N • m 30 to 70 g • cm (0.42 – 0.97 oz • inch)
REV back tension	CQ-102RC	0.15m N • m to 0.59m N • m 2 to 6 g • cm (0.03 – 0.08 oz • inch)
FF/REW	CQ-201B	4.8m N • m to 16.7m N • m 49 to 170 g • cm (0.68 – 2.36 oz • inch)

SECTION 5
ELECTRICAL ADJUSTMENTS

TUNER SECTION 0 dB = 1 µV

[FM Tune Level Check]



Procedure:

1. Turn the power on.
2. Input the following signal from Signal Generator to FM antenna input directly.

* Carrier Freq : A = 87.5 MHz, B = 98 MHz, C = 108 MHz
Deviation : 75 kHz
Modulation : 1 kHz
ANT input : 35 dBu (EMF)

Note: Please use 75 ohm "coaxial cable" to connect SG and the set. You cannot use video cable for checking.
Please use SG whose output impedance is 75 ohm.

3. Set to FM tuner function and tune A, B and C signals.
4. Confirm "TUNED" is lit on the display for A, B and C signals.

The mark of "TUNED" means "The selected station signal is received in good condition."

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

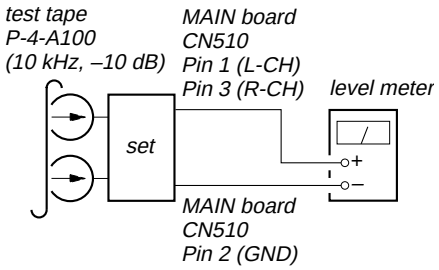
[RECORD/PLAYBACK HEAD AZIMUTH ADJUST-MENT]

DECK A **DECK B**

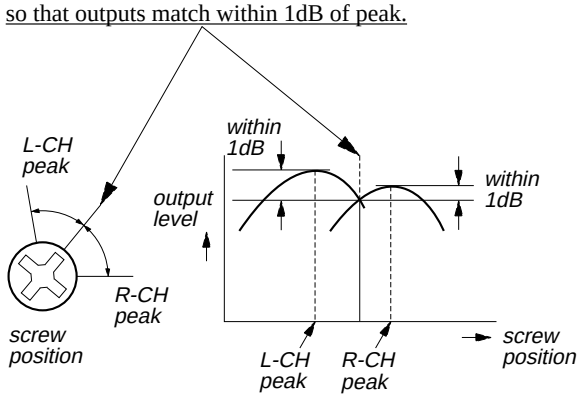
Note: Perform this adjustments for both decks

Procedure:

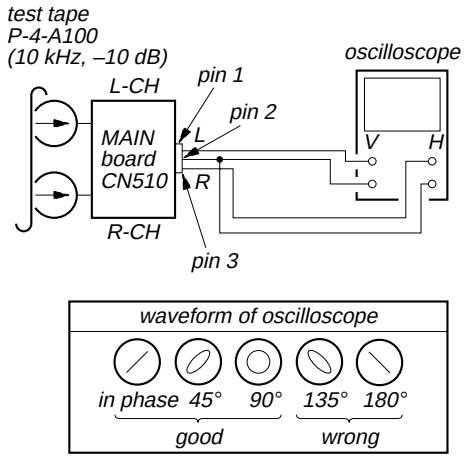
1. Mode: Playback



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

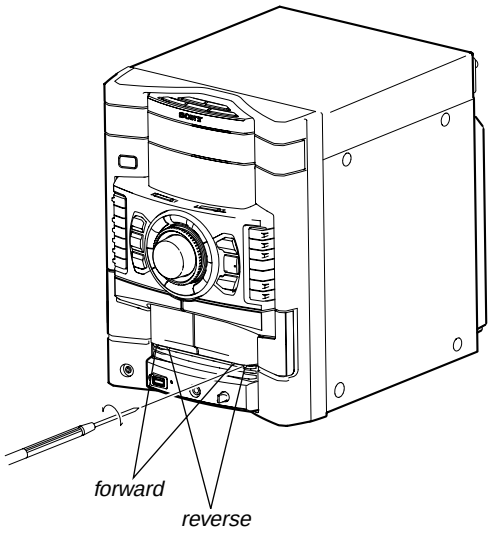


3. Mode: Playback



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

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



CD SECTION

[TEST DISC LIST]

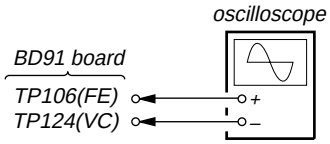
Use the following test disc on test mode.

• CD: YEDS-18 (PART No. 3-702-101-01)
or
PATD-012 (PART No. 4-225-203-01)

Note:

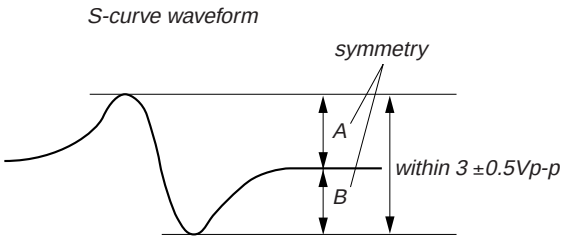
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MW impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal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

[S-CURVE CHECK]



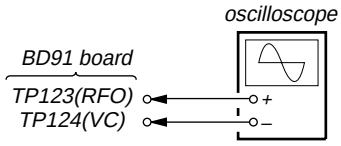
Procedure :

1. Connect an oscilloscope to TP106 (FE) and TP124 (VC).
2. Turn the power on.
3. Load a disc (YEDS-18) and actuate the focus search. (In consequence of open and close the disc tray, actuate the focus search)
4. Confirm that the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3 ± 0.5 Vp-p.



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

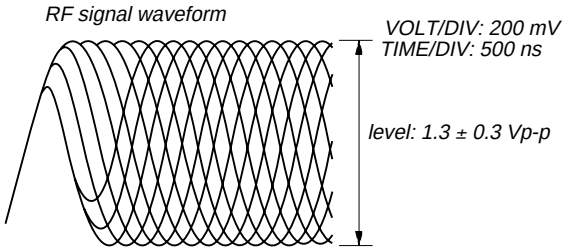
[RF LEVEL CHECK]



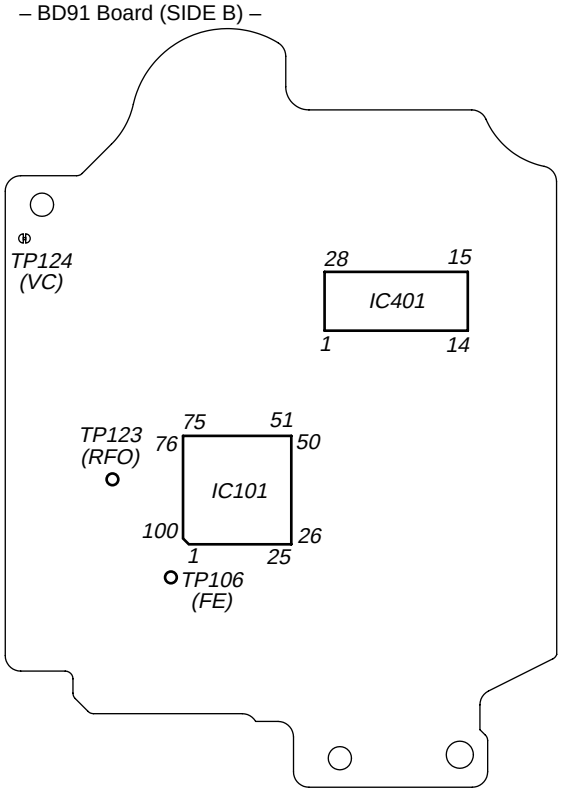
Procedure :

1. Connect an oscilloscope to TP123 (RFO) and TP124 (VC).
2. Turn the power on.
3. Load a disc (YEDS-18) and playback.
4. Confirm that oscilloscope waveform is clear and check if RF signal level is correct or not.

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

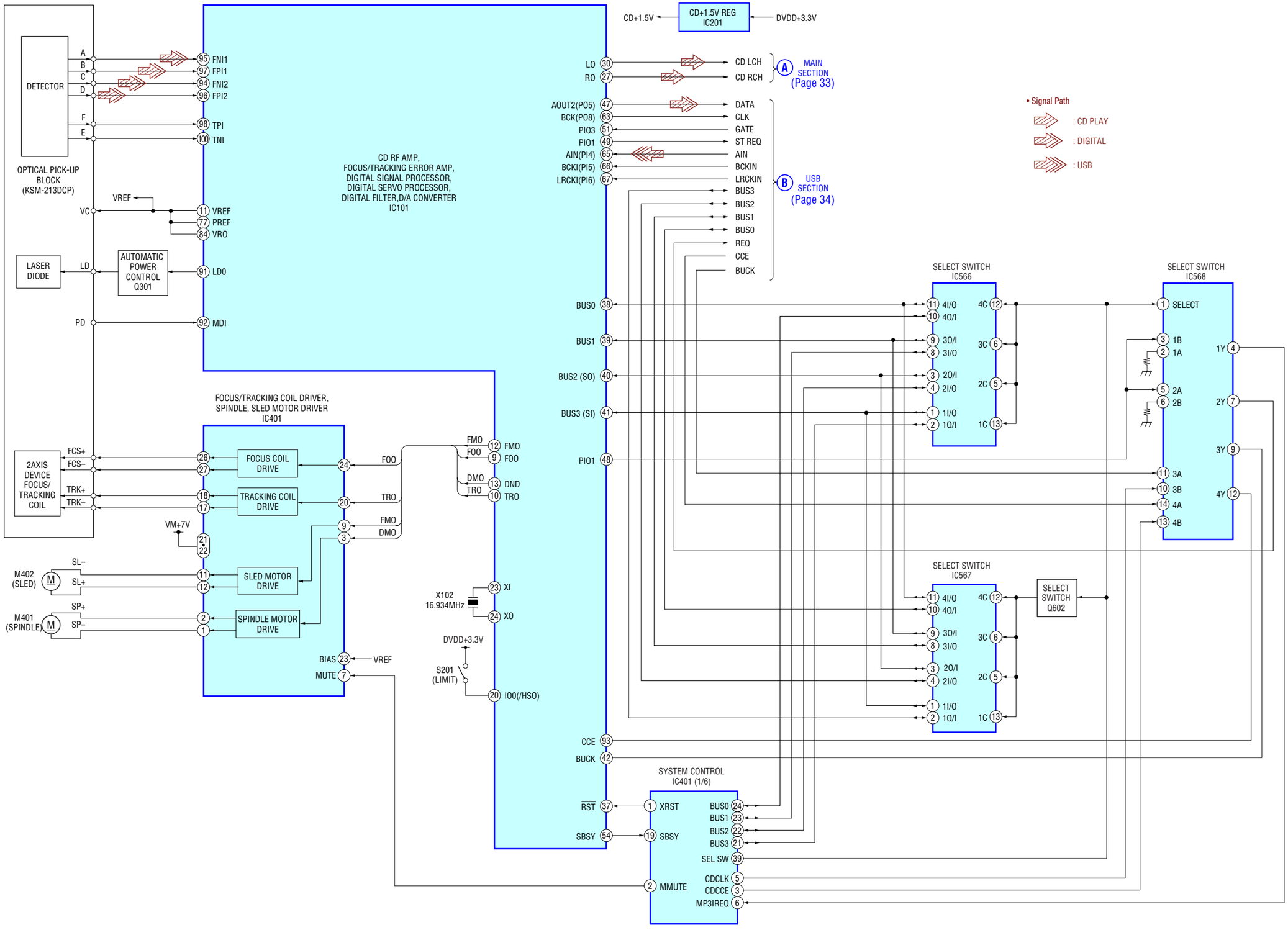


Connecting Location: CD board

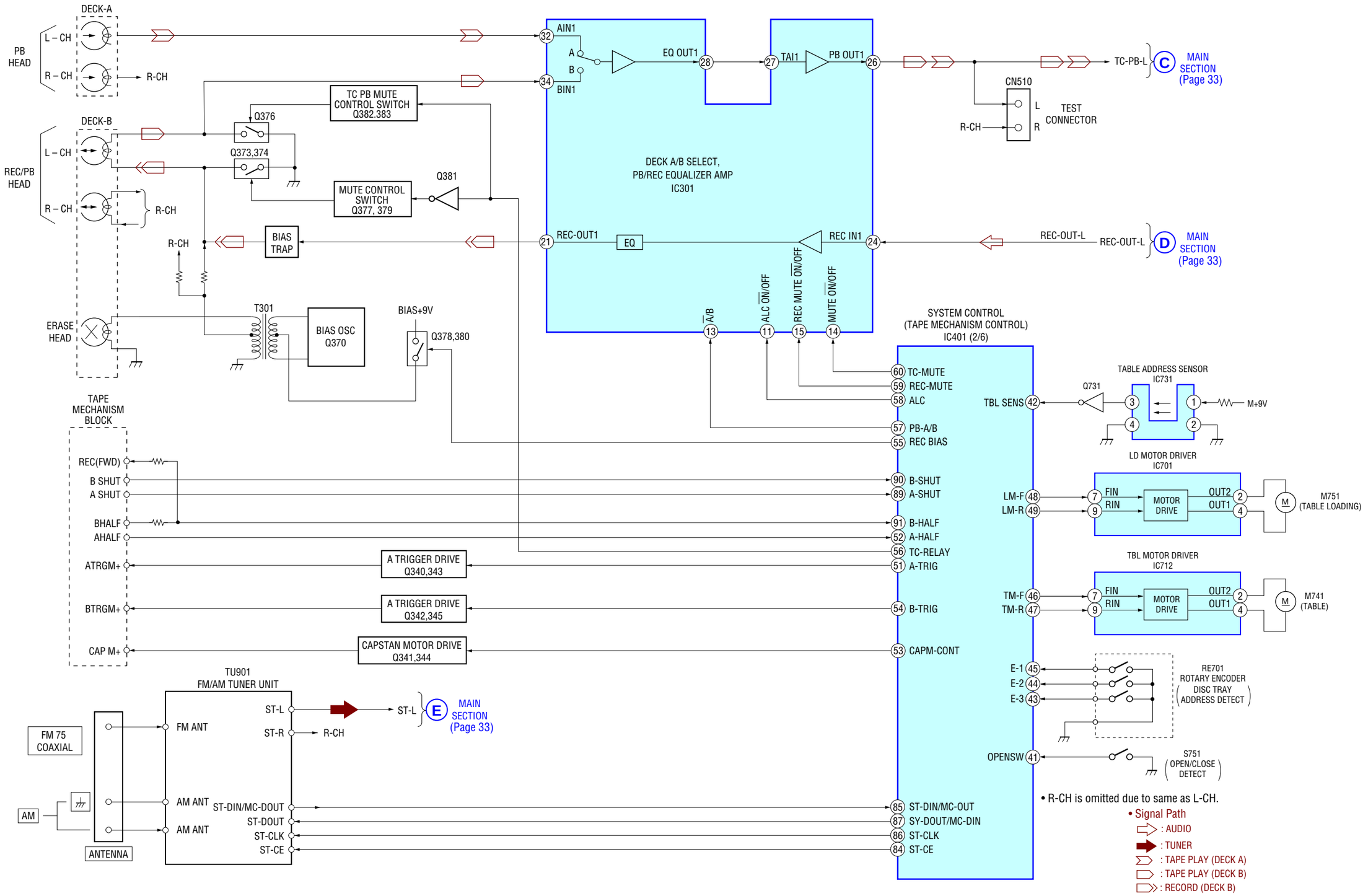


SECTION 6
DIAGRAMS

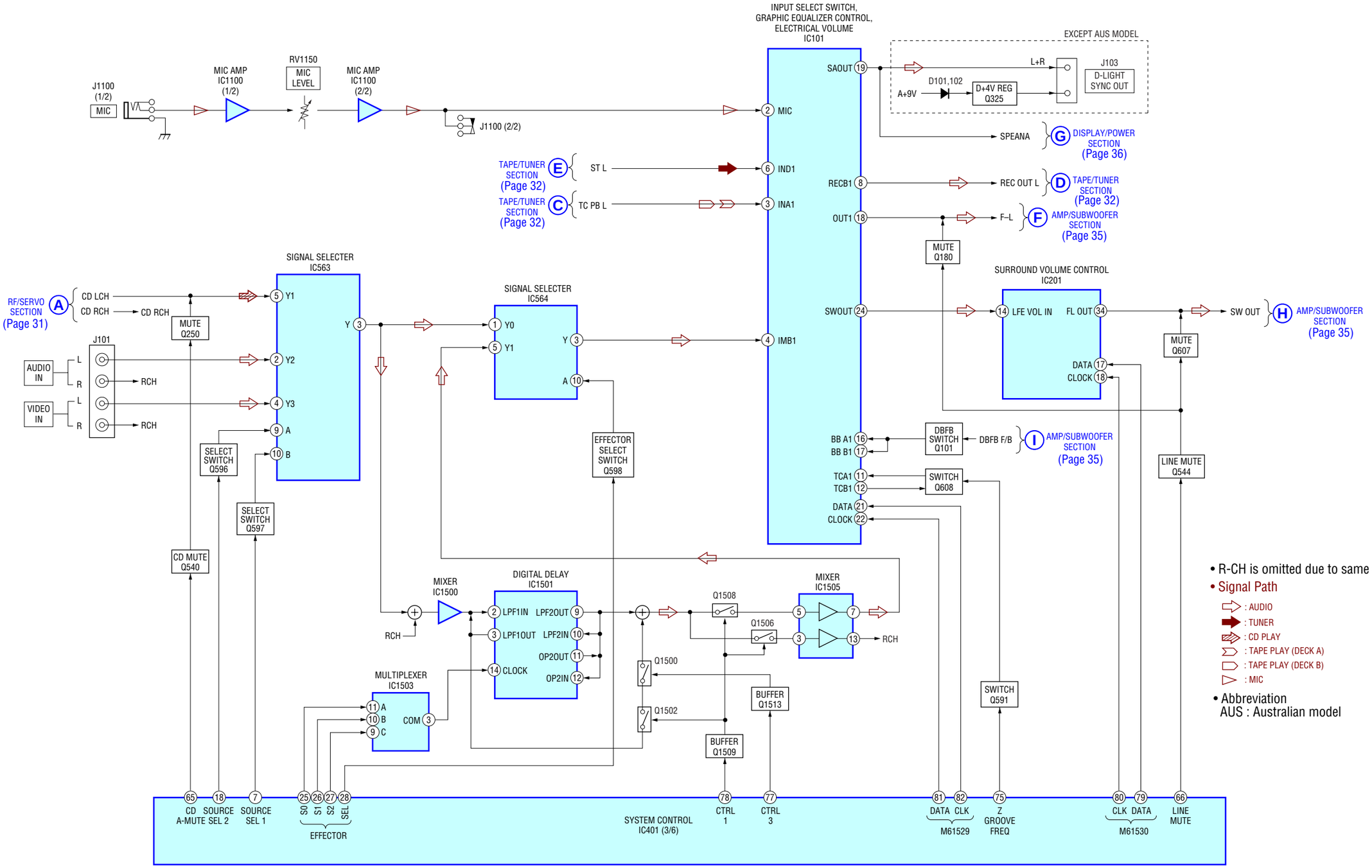
6-1. BLOCK DIAGRAM — RF/SERVO SECTION —



6-2. BLOCK DIAGRAM — TAPE/TUNER SECTION —

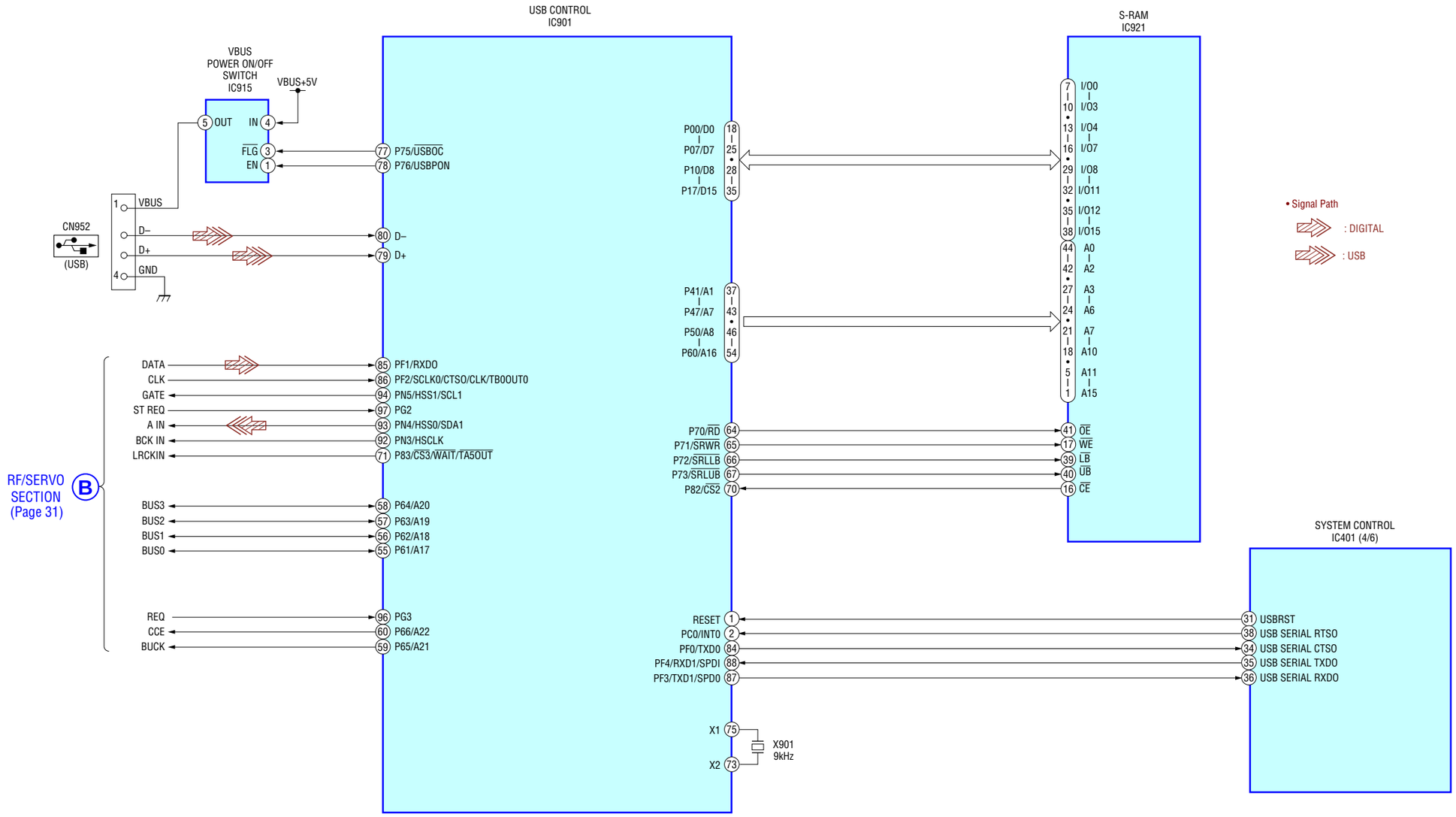


6-3. BLOCK DIAGRAM — MAIN SECTION —

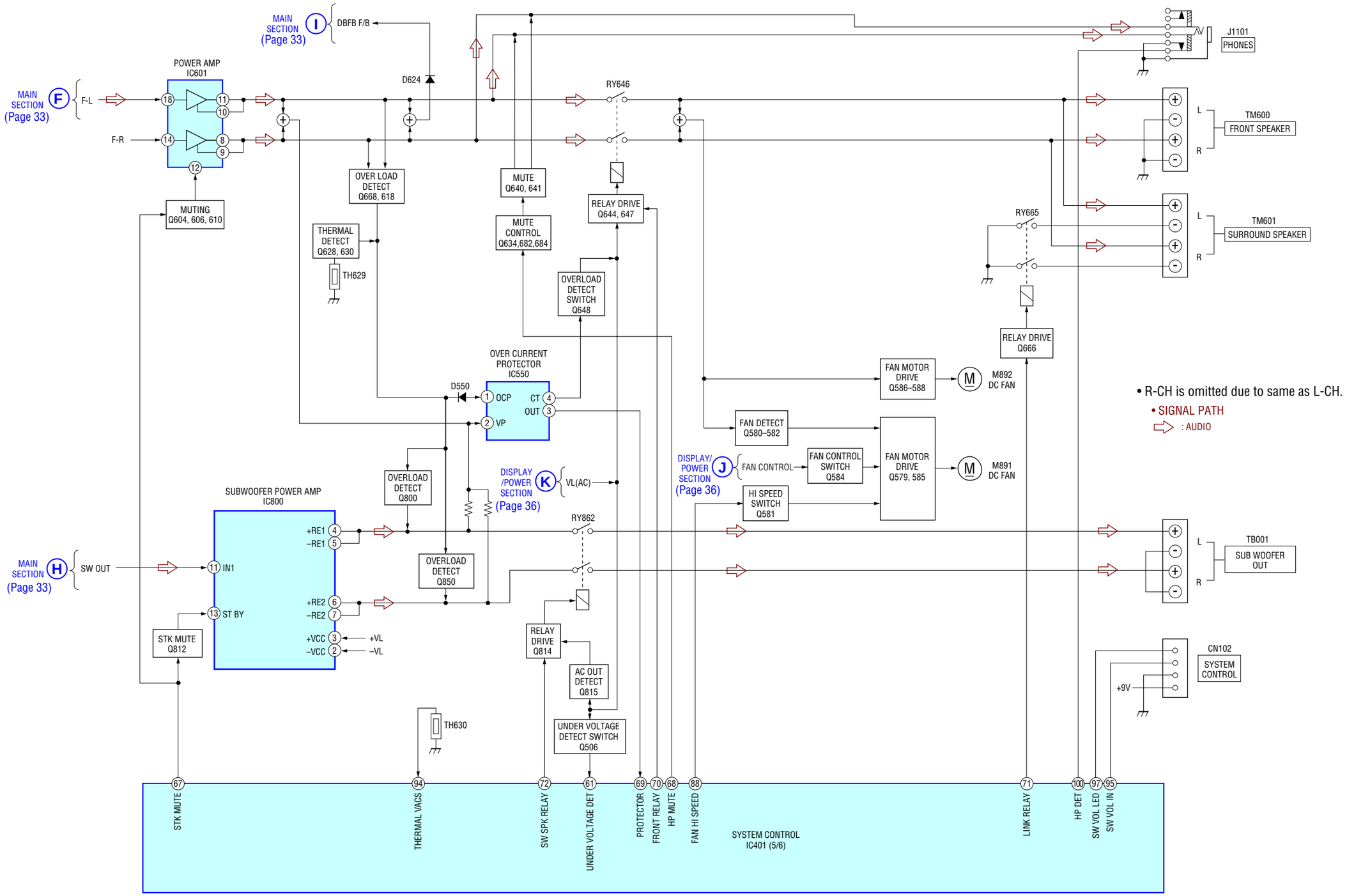


- R-CH is omitted due to same as L-CH.
- Signal Path
  - : AUDIO
  - : TUNER
  - : CD PLAY
  - : TAPE PLAY (DECK A)
  - : TAPE PLAY (DECK B)
  - : MIC
- Abbreviation
  AUS : Australian model

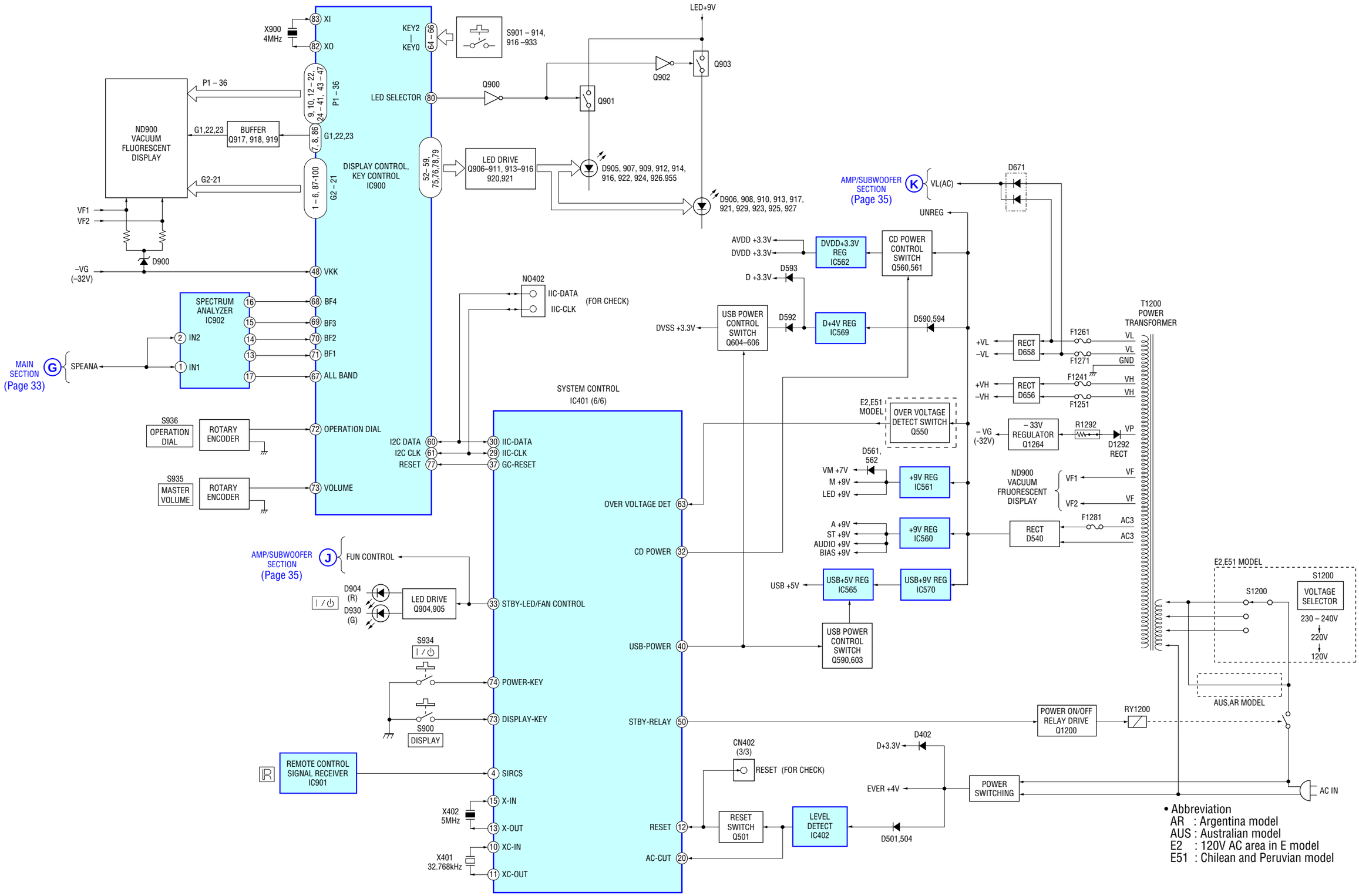
6-4. BLOCK DIAGRAM — USB SECTION —



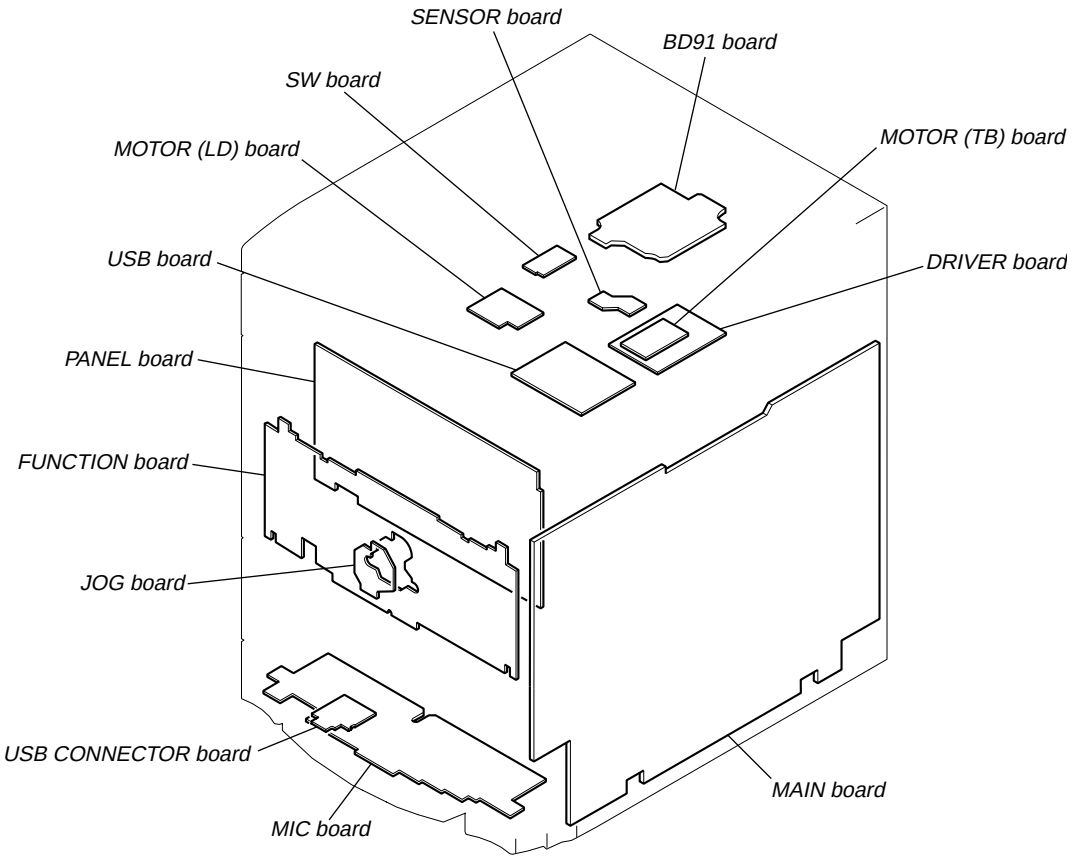
6-5. BLOCK DIAGRAM — AMP/SUBWOOFER SECTION —

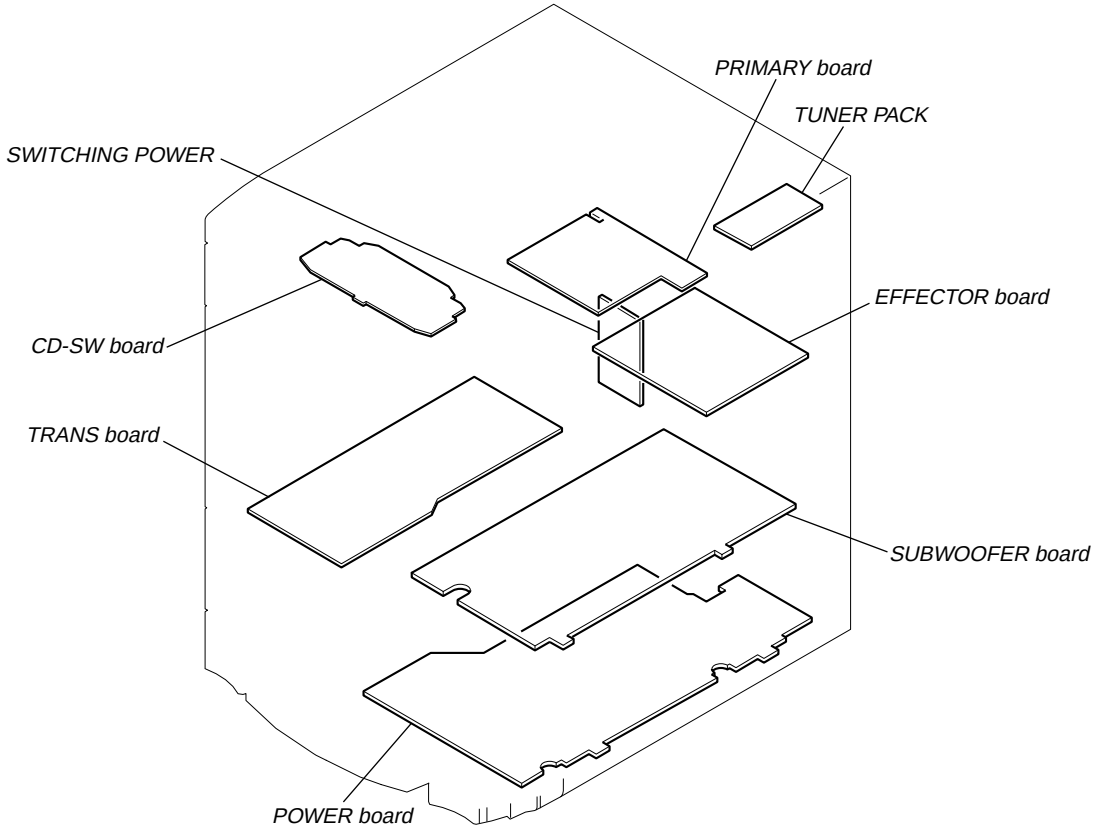


6-6. BLOCK DIAGRAM — DISPLAY/POWER SECTION —



6-7. CIRCUIT BOARDS LOCATION





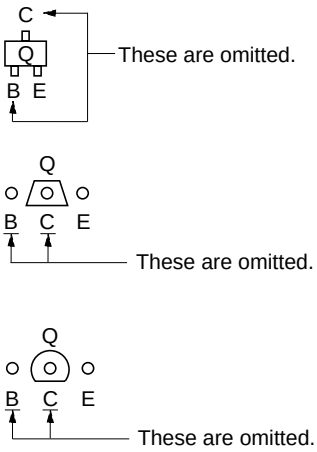
• Note For Printed Wiring Boards And Schematic Diagrams

Note on Printed Wiring Board:

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

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

- Indication of transistor.



UNLEADED SOLDER

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

: LEAD FREE MARK

Unleaded solder has the following characteristics.

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

Note on Schematic Diagram:

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

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

- ▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- BD91 and Driver sections.
  no mark : CD PLAY
- Except BD91 and Driver sections.
  no mark : FM
  ( ) : CD PLAY
  < > : TAPE PLAY
  [ ] : TAPE REC
  ✻ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : AUDIO
  : TUNER
  : TAPE PLAY (DECK A)
  : TAPE PLAY (DECK B)
  : TAPE REC (DECK B)
  : MIC
  : CD PLAY
  : DIGITAL
  : USB
- Abbreviation
  AR : Argentina model
  AUS : Australian model
  E2 : 120V AC area in E model
  E51 : Chilean and Peruvian model

• Waveforms

— BD91 BOARD — (CD PLAY)

① IC101 ⑤ (FEI)

100 mV/DIV, 5 msec/DIV

② IC101 ⑥ (TEI)

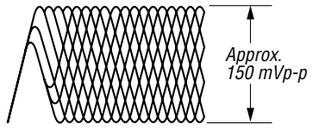
100 mV/DIV, 0.2 msec/DIV

③ IC101 ㉔ (XO)

16.934 MHz

1 V/DIV, 0.1 µsec/DIV

④ IC101 ㉟(FNI1(A))



50 mV/DIV, 0.1 µsec/DIV

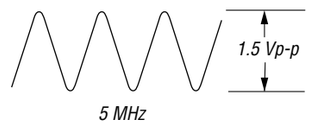
— MAIN BOARD —

① IC401 ⑩ (XC-IN)

32.768 kHz

0.5 V/DIV, 0.1 µsec/DIV

② IC401 ⑮ (X IN)

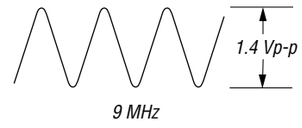


5 MHz

1 V/DIV, 0.1 µsec/DIV

— USB BOARD —

① IC901 ㉕ (X1)



9 MHz

1 V/DIV, 0.1 µsec/DIV

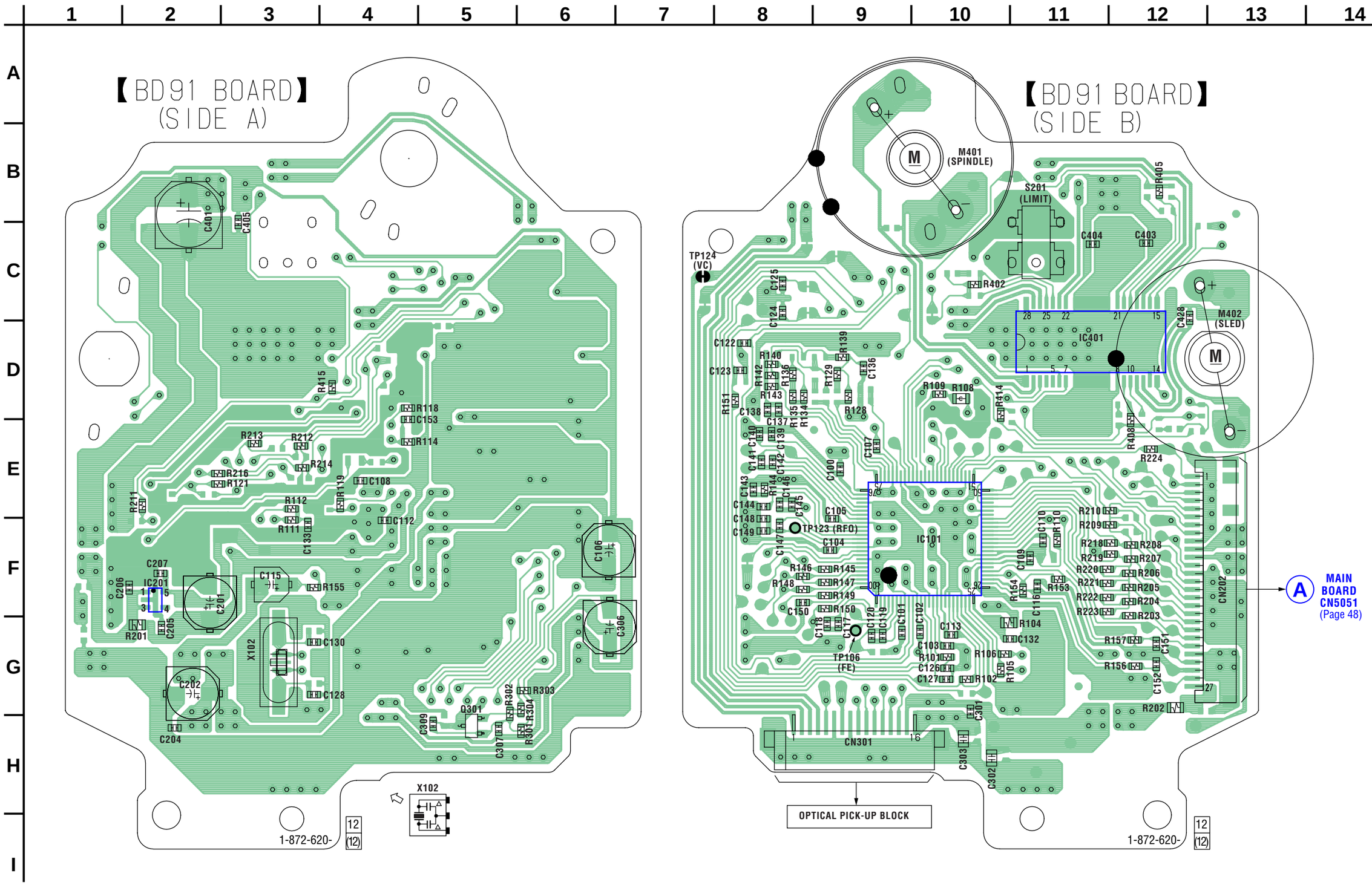
— PANEL BOARD —

① **IC900 ㉜ XO**

4MHz

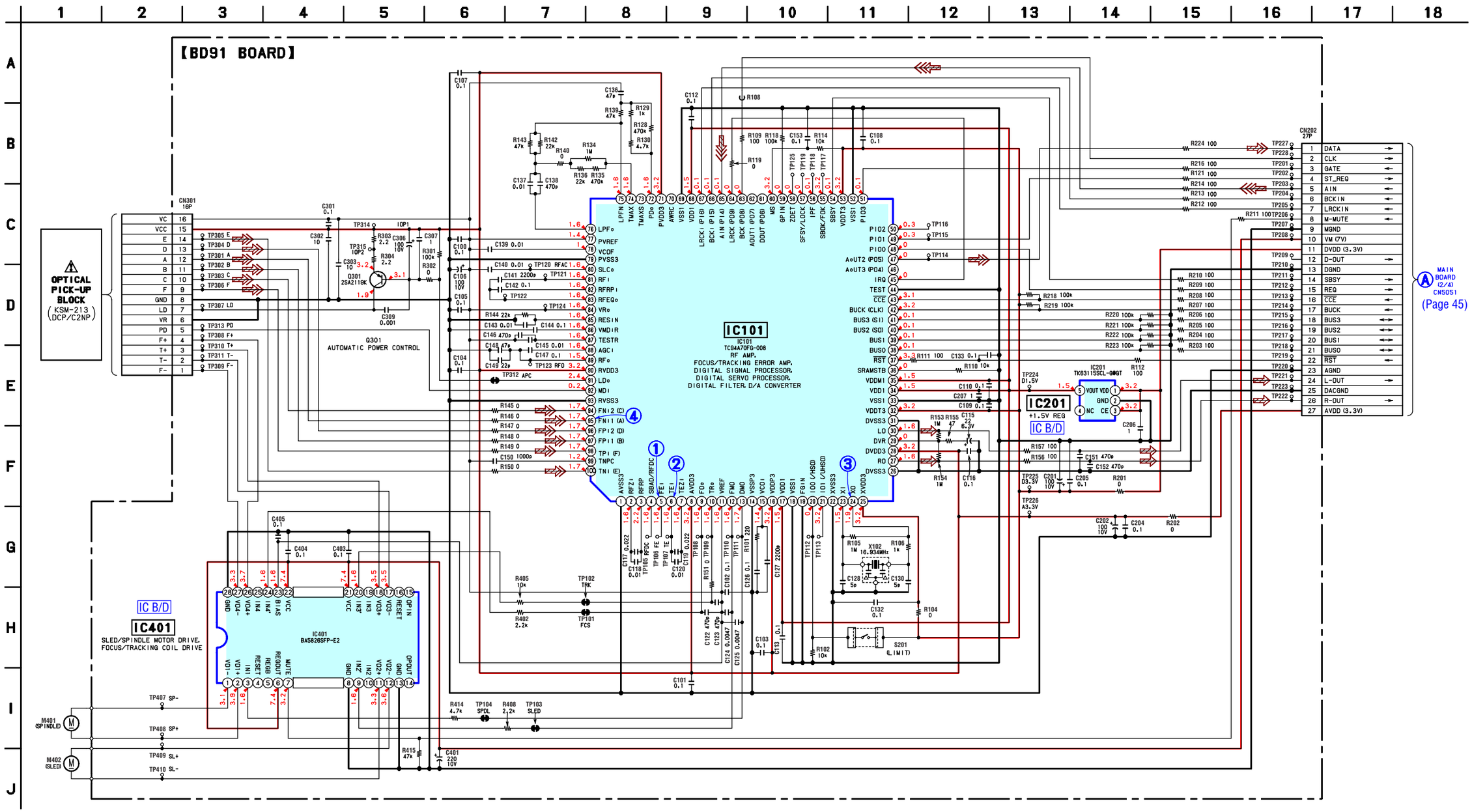
1V/DIV, 0.2 µsec/DIV

6-8. PRINTED WIRING BOARD — BD91 SECTION — • Refer to page 37 for Circuit Boards Location. : Uses unleaded solder.

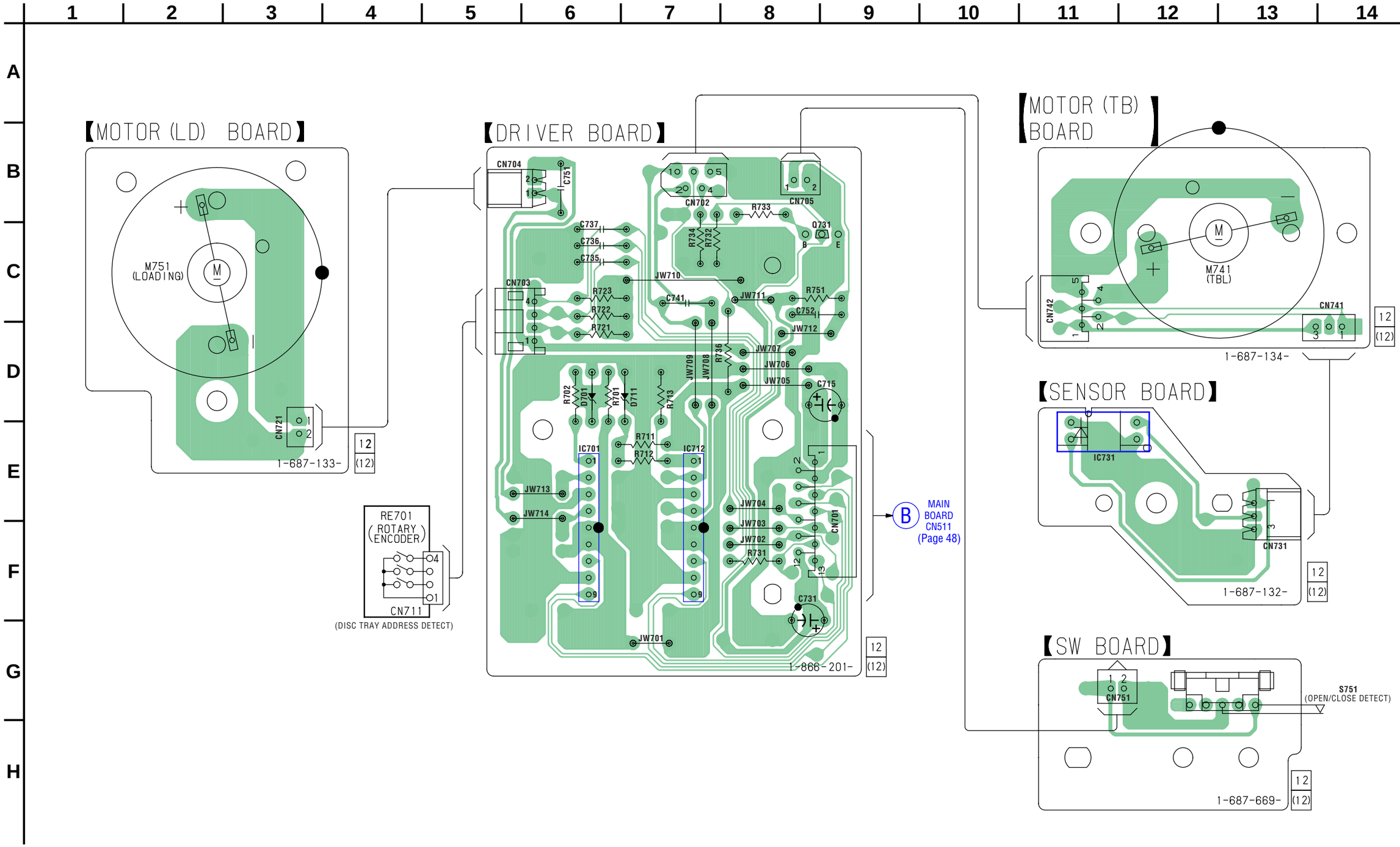


• Refer to page 39 for Waveforms.
• Refer to page 64 IC Block Diagrams.
• Refer to page 70 for IC Pin Description of IC101.

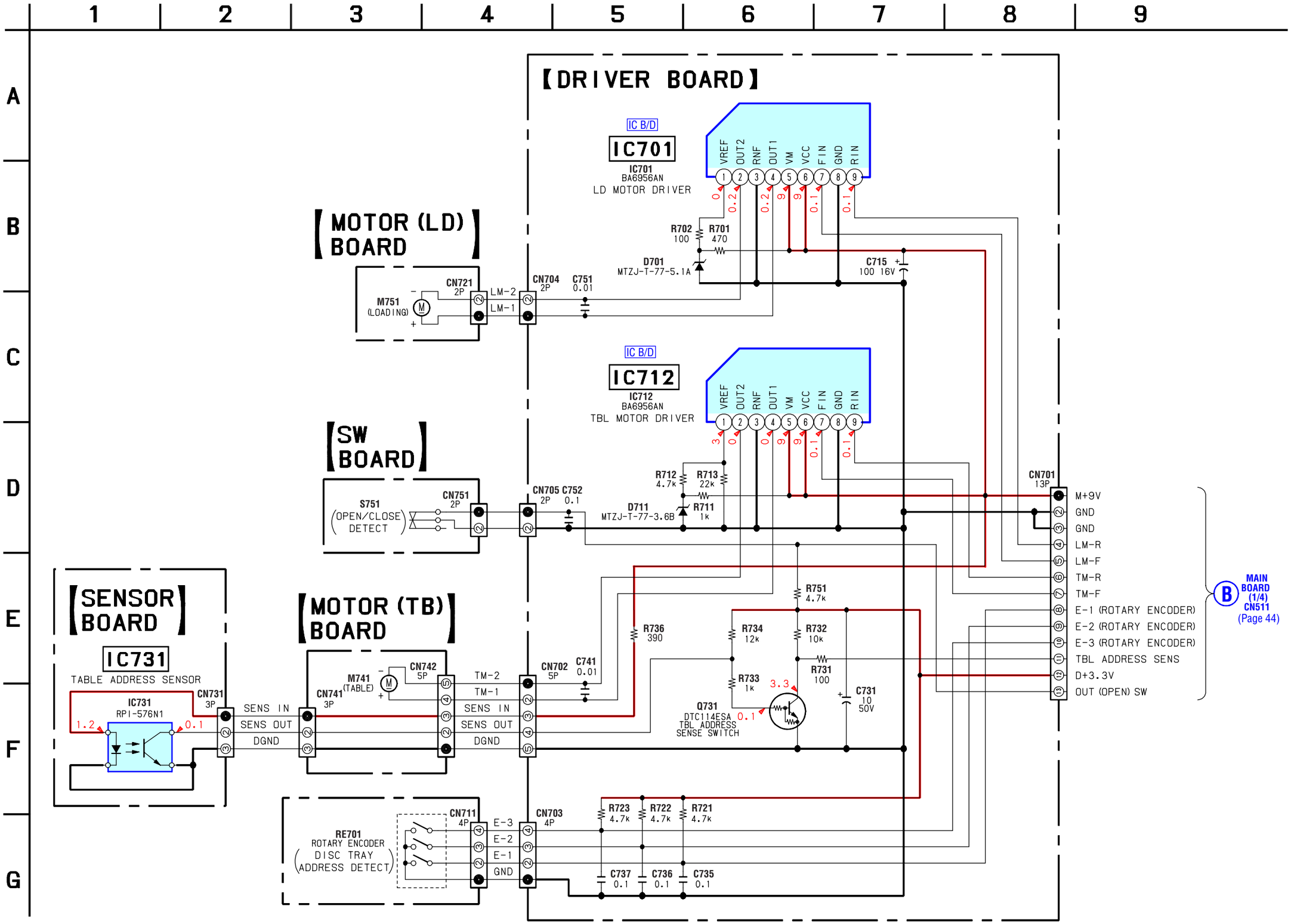
6-9. SCHEMATIC DIAGRAM — BD91 SECTION —



6-10. PRINTED WIRING BOARDS — DRIVER SECTION — • Refer to page 37 for Circuit Boards Location. : Uses unleaded solder.

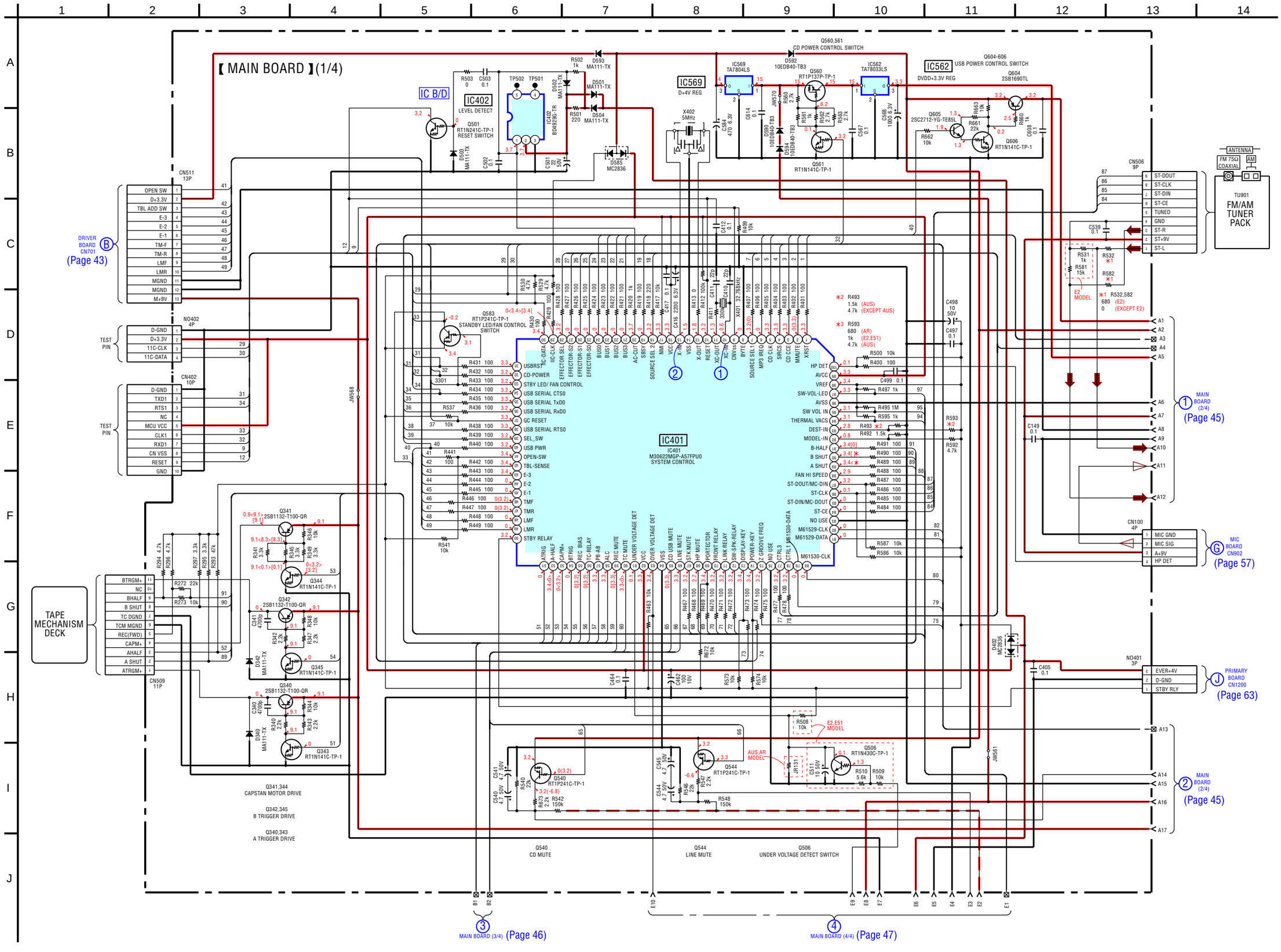


6-11. SCHEMATIC DIAGRAM — DRIVER SECTION — • Refer to page 64 for IC Block Diagrams.

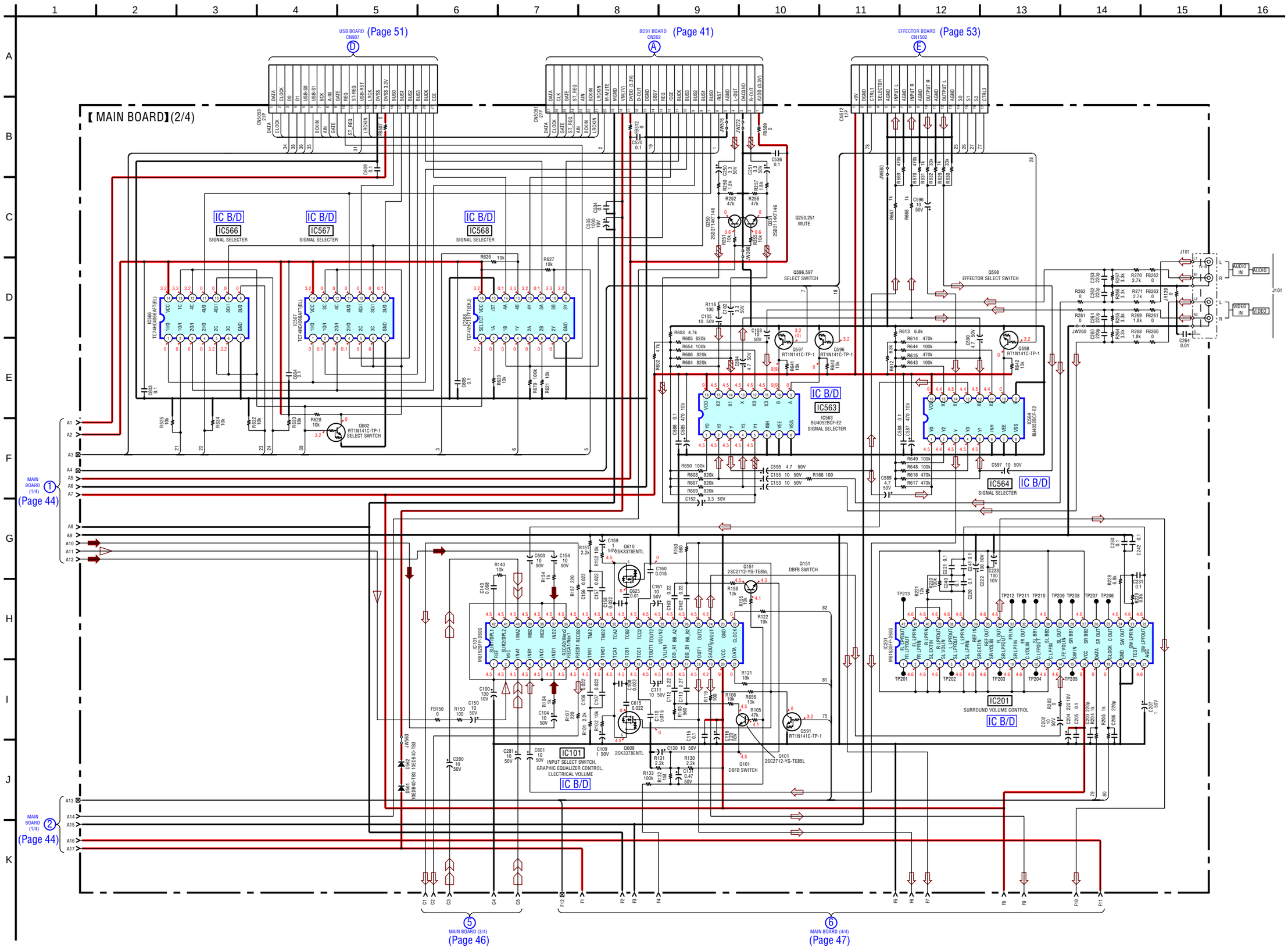


6-12. SCHEMATIC DIAGRAM — MAIN SECTION (1/4) —

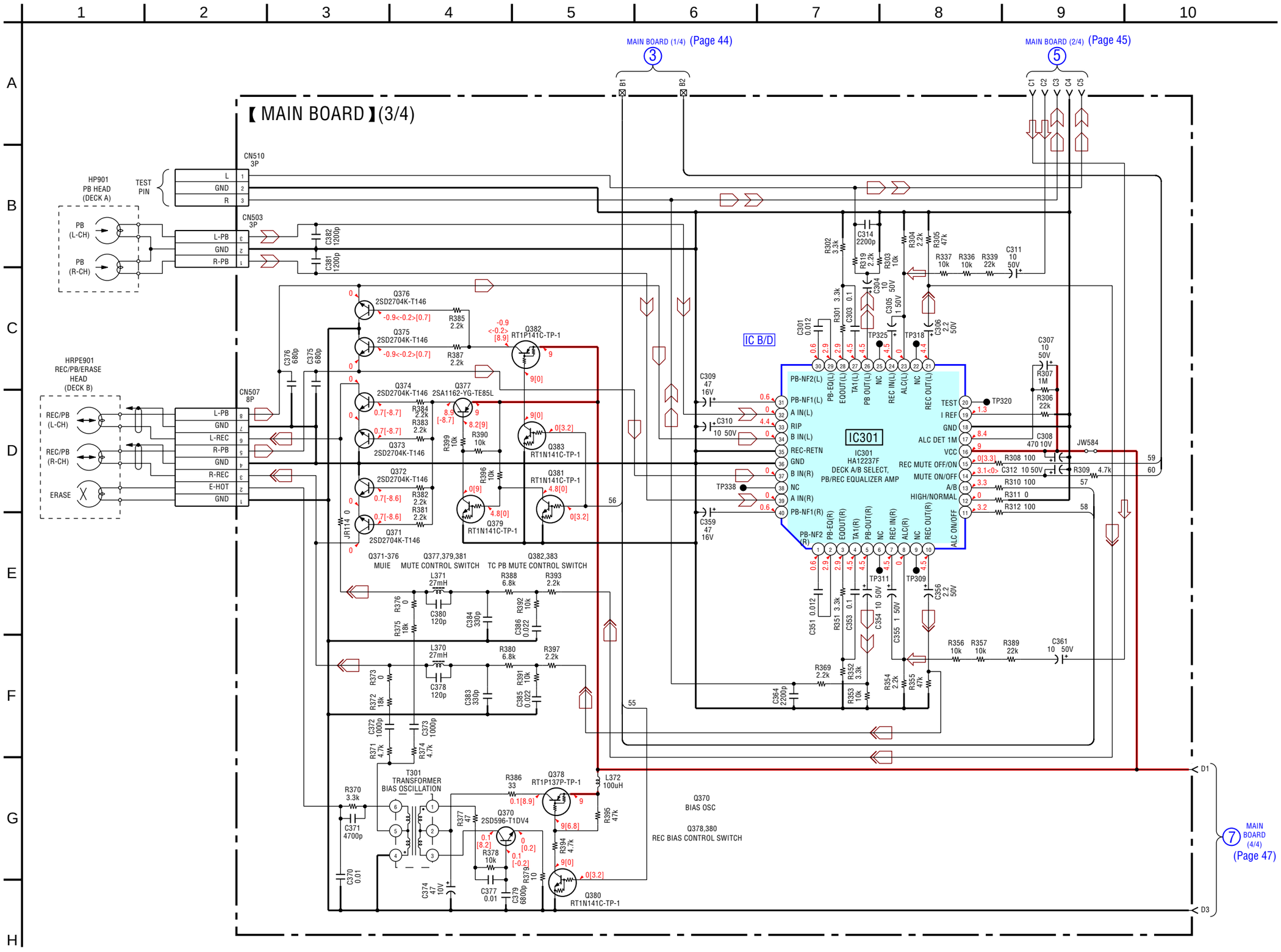
- Refer to page 39 for Waveforms.
- Refer to page 64 IC Block Diagrams.
- Refer to page 72 for IC Pin Description of IC401.



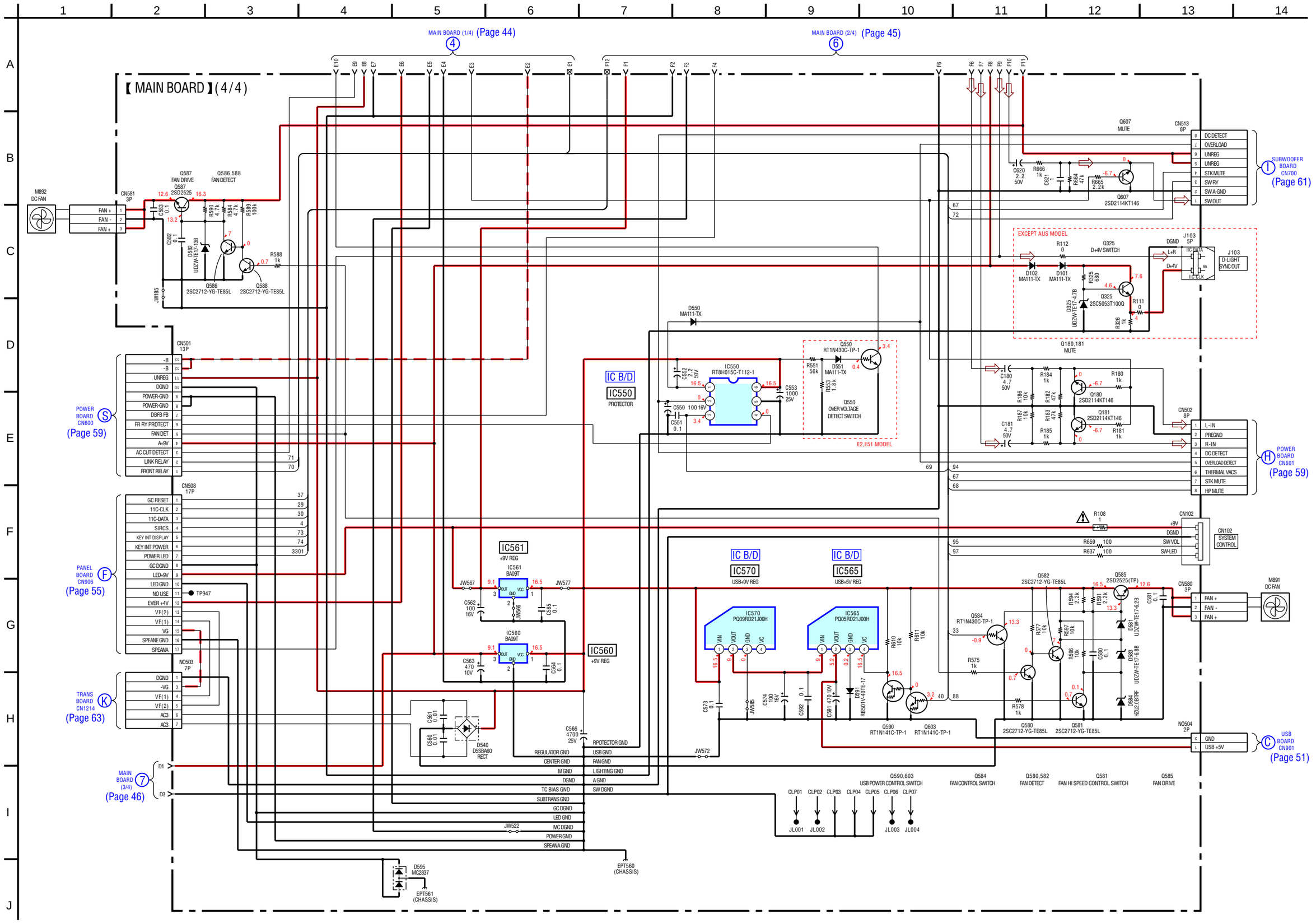
6-13. SCHEMATIC DIAGRAM — MAIN SECTION (2/4) — • Refer to page 64 for IC Block Diagrams.



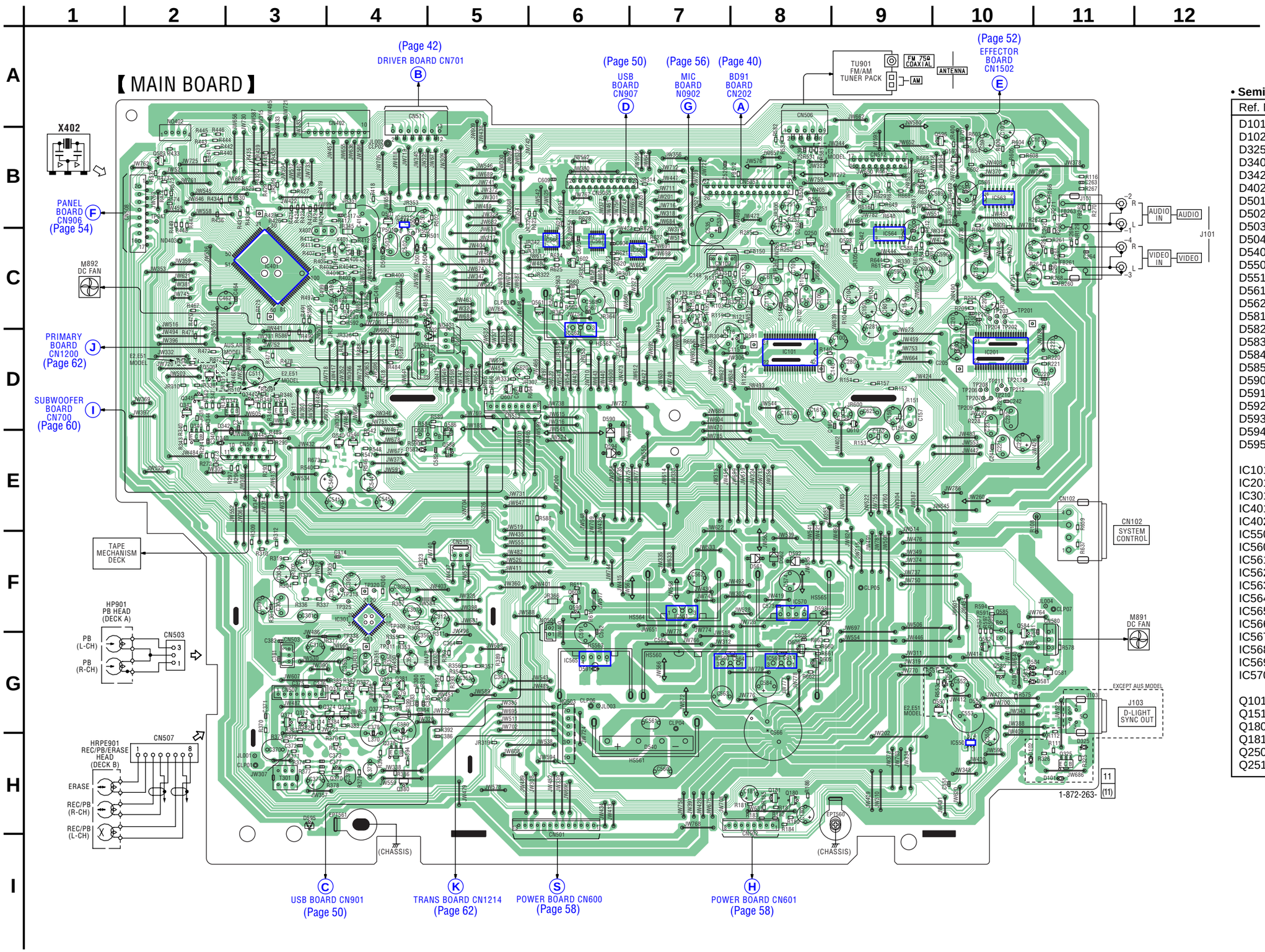
6-14. SCHEMATIC DIAGRAM — MAIN SECTION (3/4) — • Refer to page 67 for IC Block Diagrams.



6-15. SCHEMATIC DIAGRAM — MAIN SECTION (4/4) — • Refer to page 67 for IC Block Diagrams.



6-16. PRINTED WIRING BOARD — MAIN SECTION — • Refer to page 37 for Circuit Boards Location. : Uses unleaded solder.

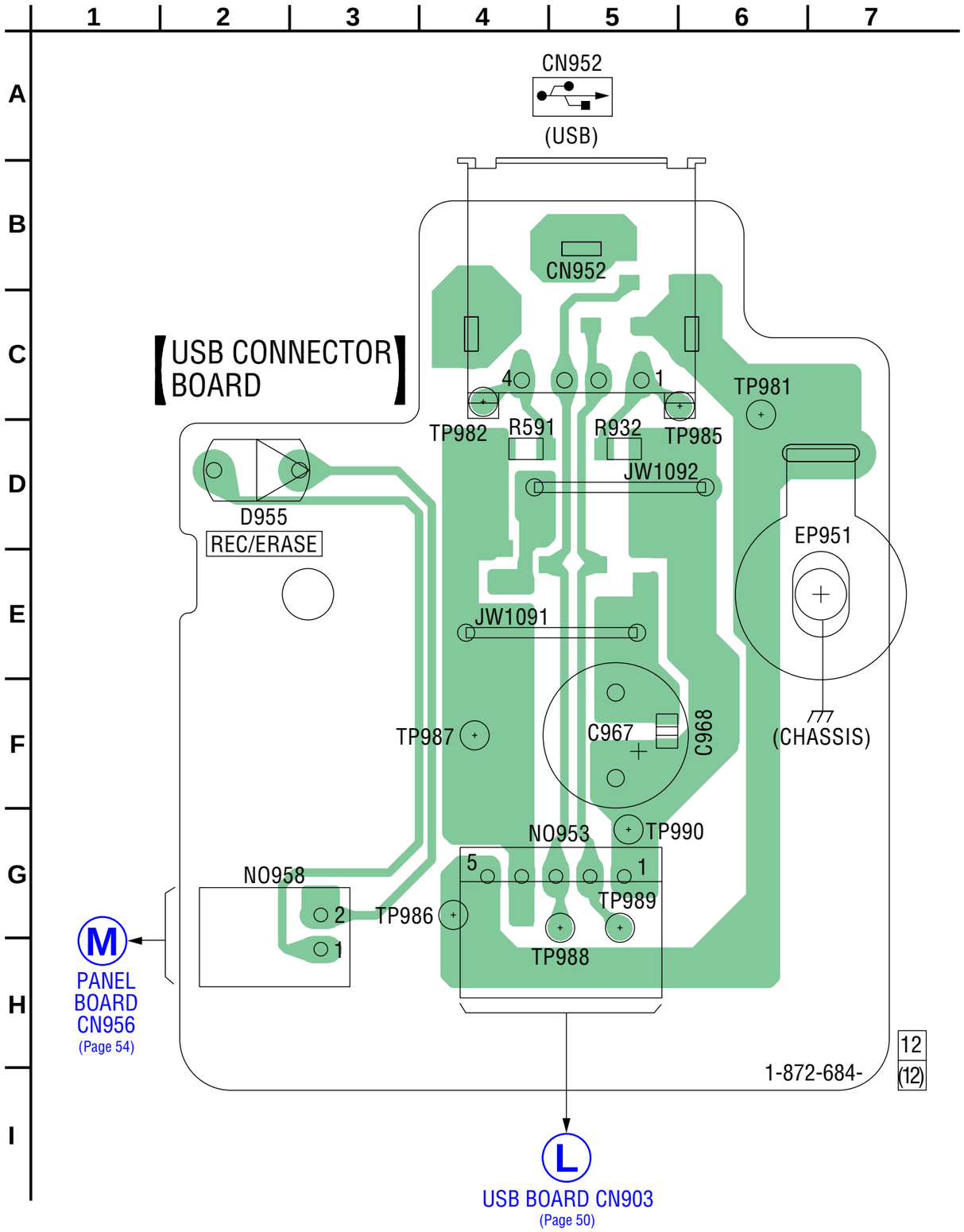


• **Semiconductor Location**

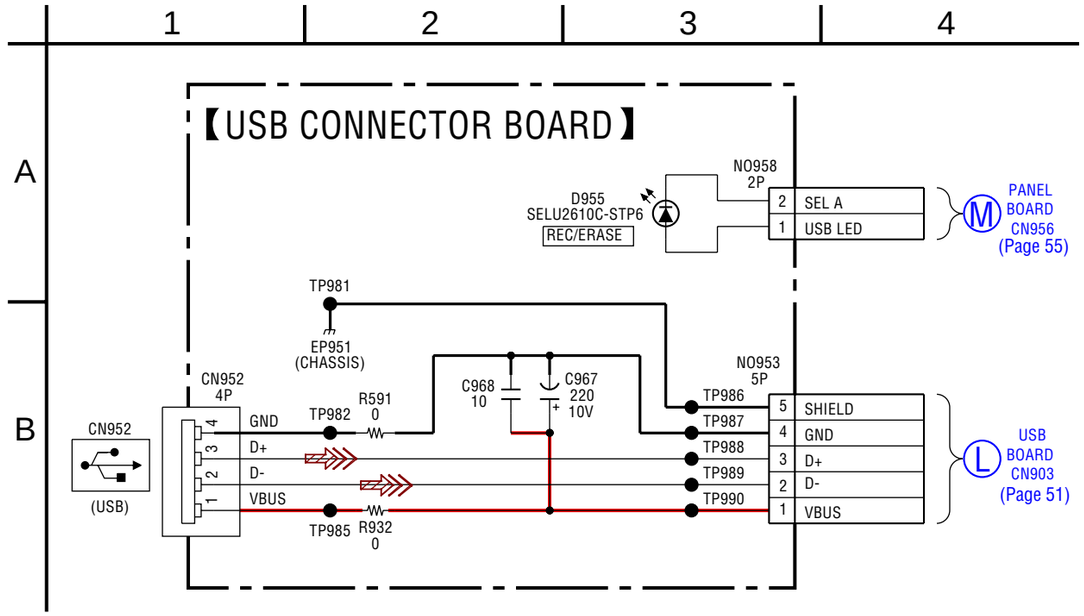
Ref. No.	Location	Ref. No.	Location
D101	H-11	Q325	H-11
D102	H-10	Q340	E-2
D325	G-11	Q341	D-3
D340	E-2	Q342	D-3
D342	D-3	Q343	D-2
D402	D-5	Q344	D-3
D501	C-4	Q345	D-2
D502	B-4	Q370	H-4
D503	C-4	Q371	G-3
D504	C-4	Q372	G-3
D540	H-7	Q373	G-4
D550	G-10	Q374	G-3
D551	G-10	Q375	G-4
D561	F-8	Q376	G-4
D562	F-8	Q377	G-4
D581	G-10	Q378	H-4
D582	E-4	Q379	G-4
D583	G-10	Q380	H-4
D584	G-10	Q381	G-4
D585	C-4	Q382	G-4
D590	D-6	Q383	G-4
D591	G-6	Q501	B-4
D592	F-8	Q506	D-2
D593	F-8	Q540	E-4
D594	E-6	Q544	E-4
D595	H-3	Q550	G-10
		Q560	C-6
IC101	D-8	Q561	C-6
IC201	D-10	Q580	G-10
IC301	F-4	Q581	G-11
IC401	C-3	Q582	G-10
IC402	B-4	Q583	B-2
IC550	G-10	Q584	F-10
IC560	G-7	Q585	F-10
IC561	F-7	Q586	E-5
IC562	D-6	Q587	E-4
IC563	B-10	Q588	E-5
IC564	C-9	Q590	F-6
IC565	G-6	Q591	D-8
IC566	C-6	Q596	B-10
IC567	C-6	Q597	B-10
IC568	C-7	Q598	C-9
IC569	G-8	Q602	C-6
IC570	F-8	Q603	F-6
		Q604	F-8
Q101	C-7	Q605	G-8
Q151	C-7	Q606	G-8
Q180	H-8	Q607	D-5
Q181	H-8	Q608	C-8
Q250	C-8	Q610	D-9
Q251	B-8		

6-17. PRINTED WIRING BOARD — USB CONNECTOR SECTION —

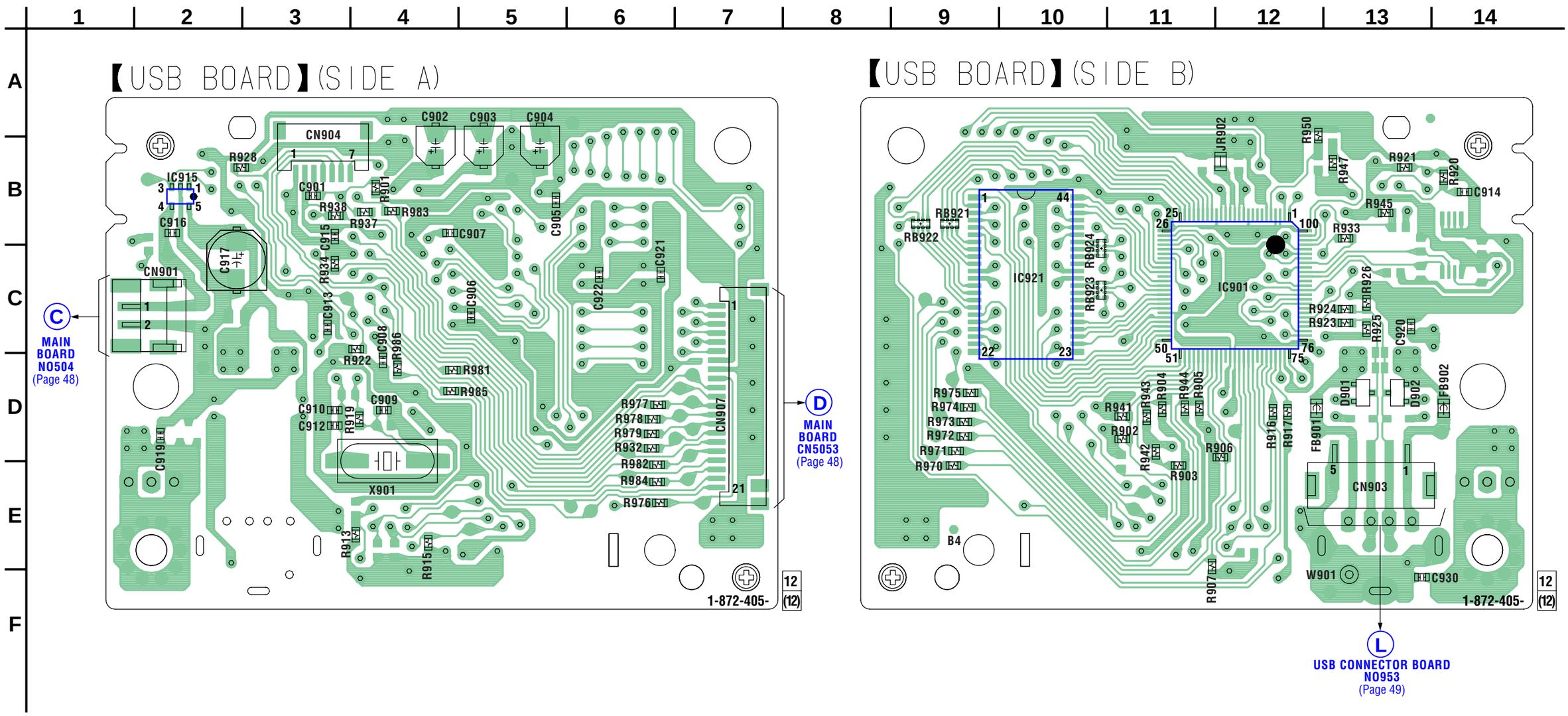
• Refer to page 37 for Circuit Boards Location. : Uses unleaded solder.



6-18. SCHEMATIC DIAGRAM — USB CONNECTOR SECTION —



6-19. PRINTED WIRING BOARD — USB SECTION — • Refer to page 37 for Circuit Boards Location. : Uses unleaded solder.

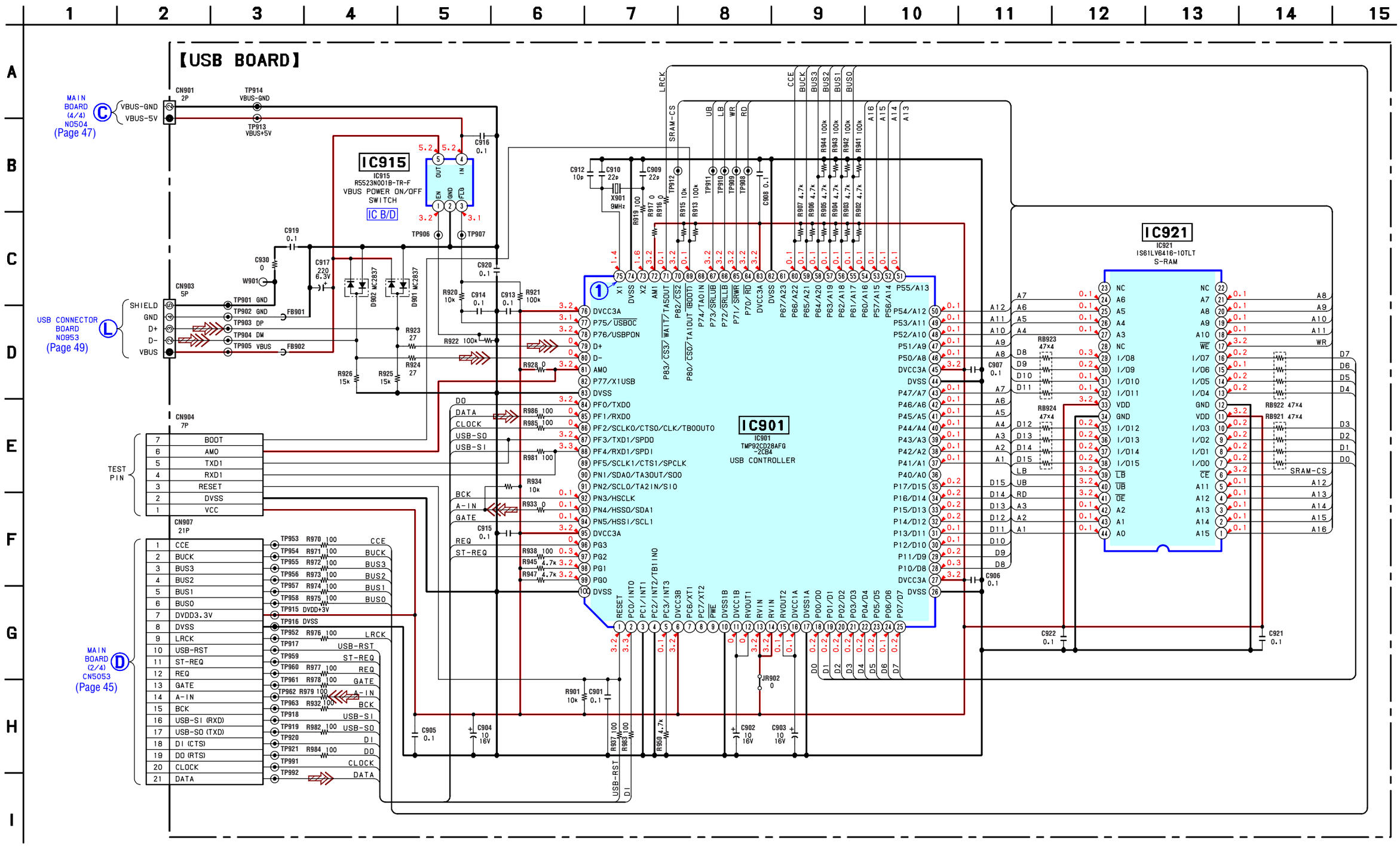


- **Semiconductor Location**

Ref. No.	Location
D901	D-13
D902	D-13
IC901	C-12
IC915	B-2
IC921	C-10

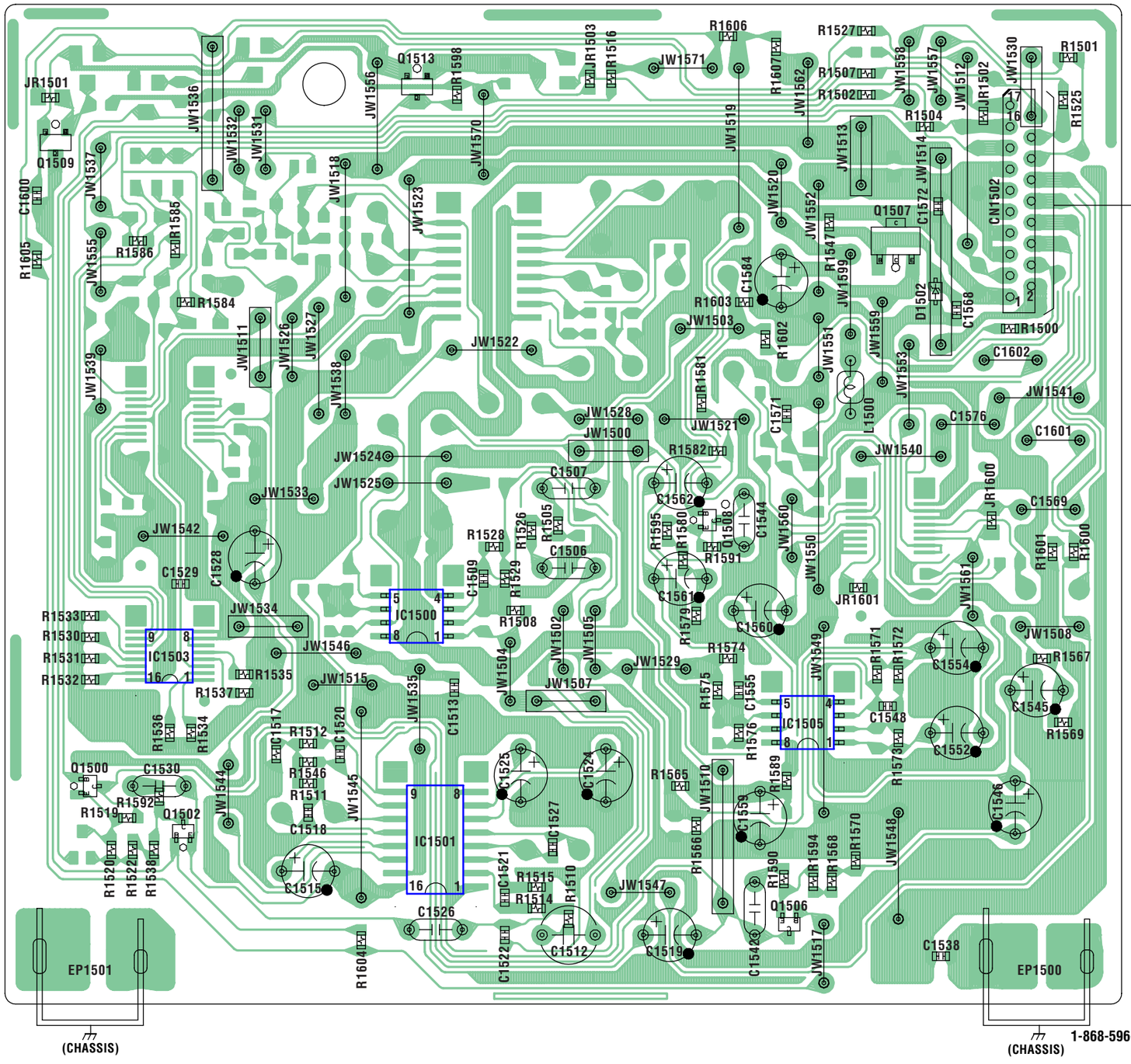
• Refer to page 39 for Waveforms.
• Refer to page 68 IC Block Diagrams.
• Refer to page 75 for IC Pin Description of IC901.

6-20. SCHEMATIC DIAGRAM — USB SECTION —



6-21. PRINTED WIRING BOARD — EFFECTOR SECTION — • Refer to page 37 for Circuit Boards Location. : Uses unleaded solder.

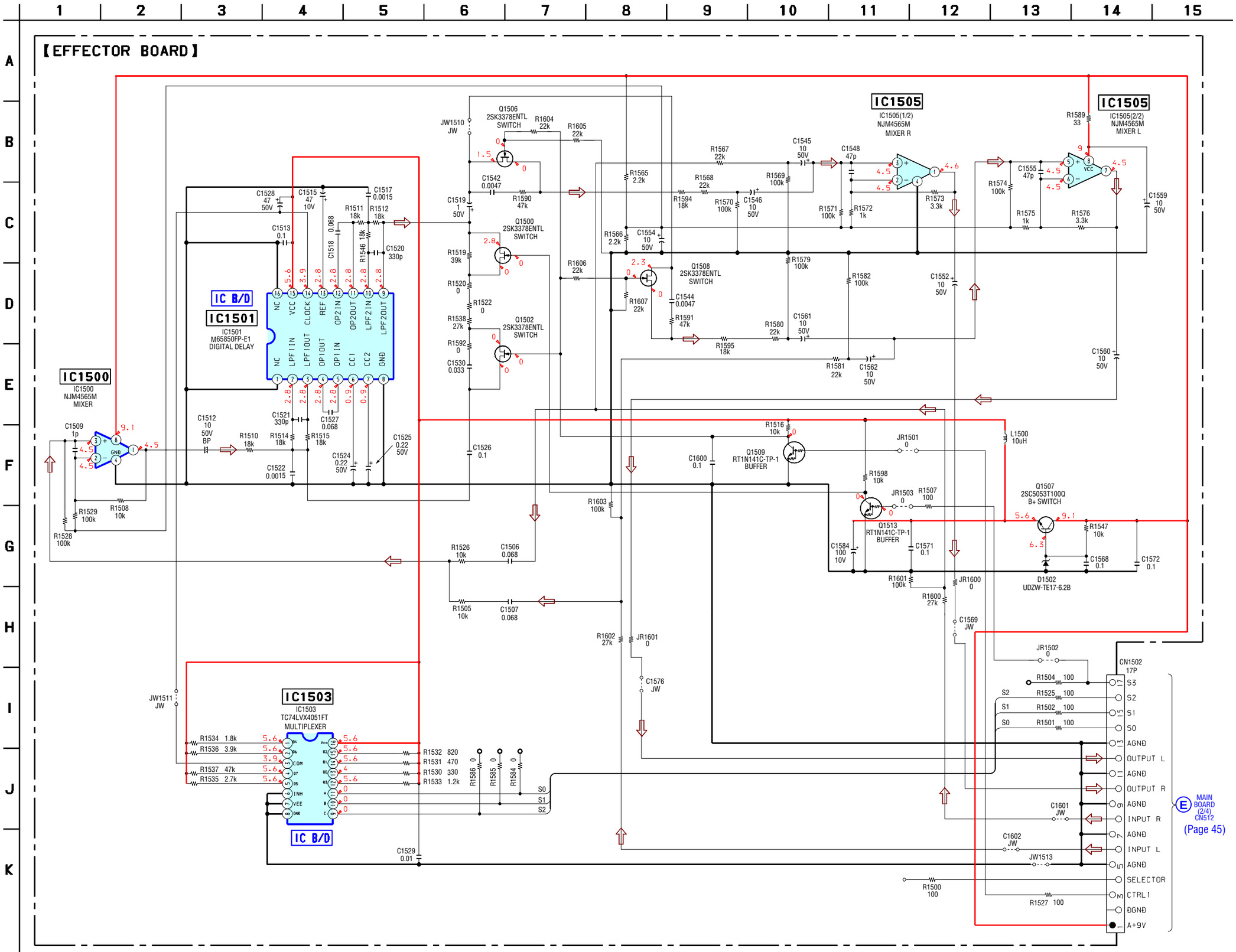
【EFFECTOR BOARD】



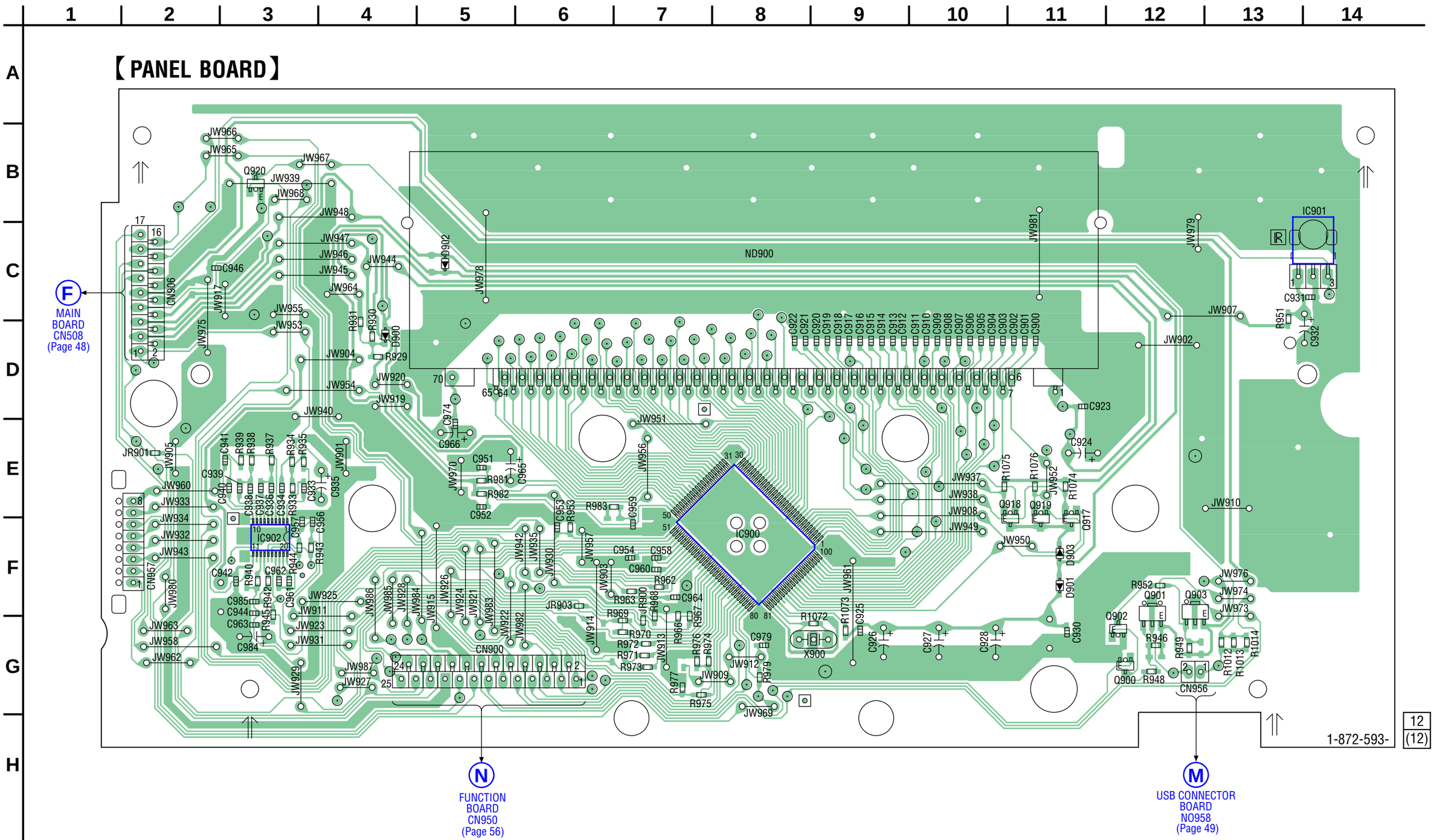
• **Semiconductor Location**

Ref. No.	Location
D1502	C-8
IC1500	F-4
IC1501	H-4
IC1503	F-2
IC1505	G-7
Q1500	G-2
Q1502	H-2
Q1506	H-7
Q1507	C-8
Q1508	E-7
Q1509	B-1
Q1513	B-4

6-22. SCHEMATIC DIAGRAM — EFFECTOR SECTION — • Refer to page 68 for IC Block Diagrams.



6-23. PRINTED WIRING BOARD — PANEL SECTION — • Refer to page 37 for Circuit Boards Location. : Uses unleaded solder.

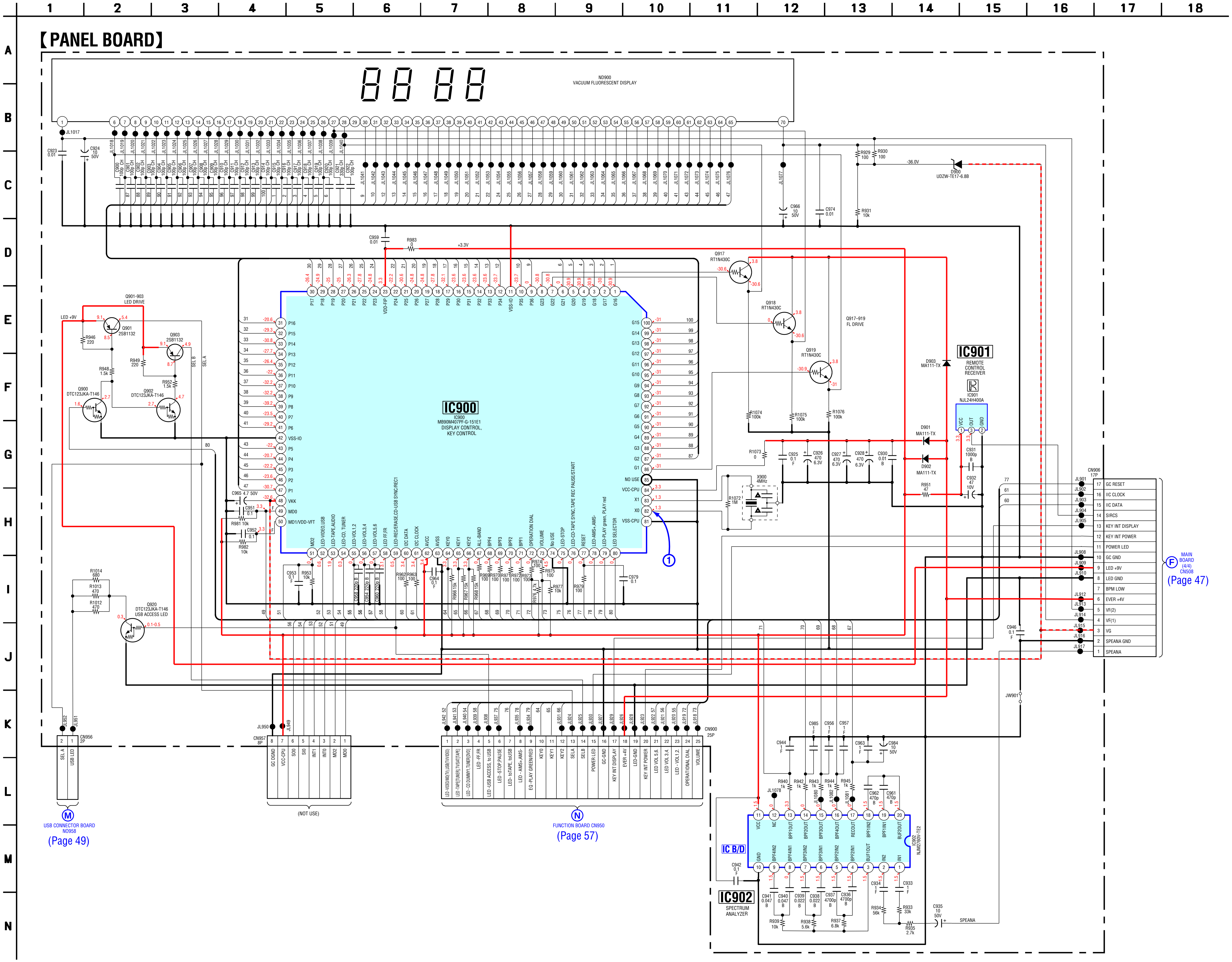


• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D900	D-4	Q900	G-12
D901	F-11	Q901	F-12
D902	C-5	Q902	G-12
D903	F-11	Q903	F-12
		Q917	E-11
IC900	F-8	Q918	E-11
IC901	B-14	Q919	E-11
IC902	F-3	Q920	B-3

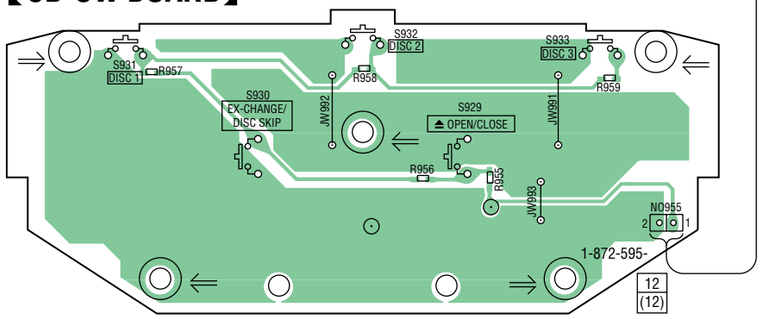
- Refer to page 39 for Waveforms.
- Refer to page 69 IC Block Diagrams.
- Refer to page 77 for IC Pin Description of IC900.

6-24. SCHEMATIC DIAGRAM — PANEL SECTION —

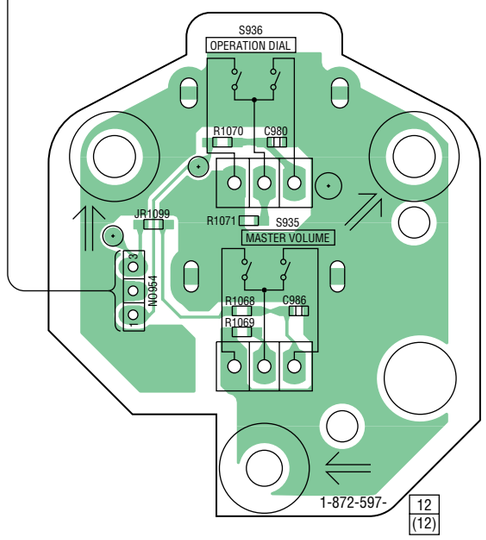

【PANEL BOARD】
ND900
VACUUM FLUORESCENT DISPLAY
IC900
IC900
MB90M407PF-G-151E1
DISPLAY CONTROL,
KEY CONTROL
IC901
REMOTE
CONTROL
RECEIVER
IC901
NJL24H400A
IC902
SPECTRUM
ANALYZER
IC B/D
Q901-903
LED DRIVE
Q917-919
FL DRIVE
Q920
DTC123JKA-T146
USB ACCESS LED
X900
4MHz
CN906
17P
CN956
2P
CN957
8P
(NOT USE)
CN900
25P
MAIN
BOARD
(4/4)
CN508
(Page 47)
USB CONNECTOR BOARD
N0958
(Page 49)
FUNCTION BOARD CN950
(Page 57)
GC RESET
IIC CLOCK
IIC DATA
SIRCS
KEY INT DISPLAY
KEY INT POWER
POWER LED
GC GND
LED +9V
LED GND
BPM LOW
EVER +4V
VF(2)
VF(1)
VG
SPEANA GND
SPEANA

6-25. PRINTED WIRING BOARDS — FUNCTION SECTION — • Refer to page 37 for Circuit Boards Location. : Uses unleaded solder.

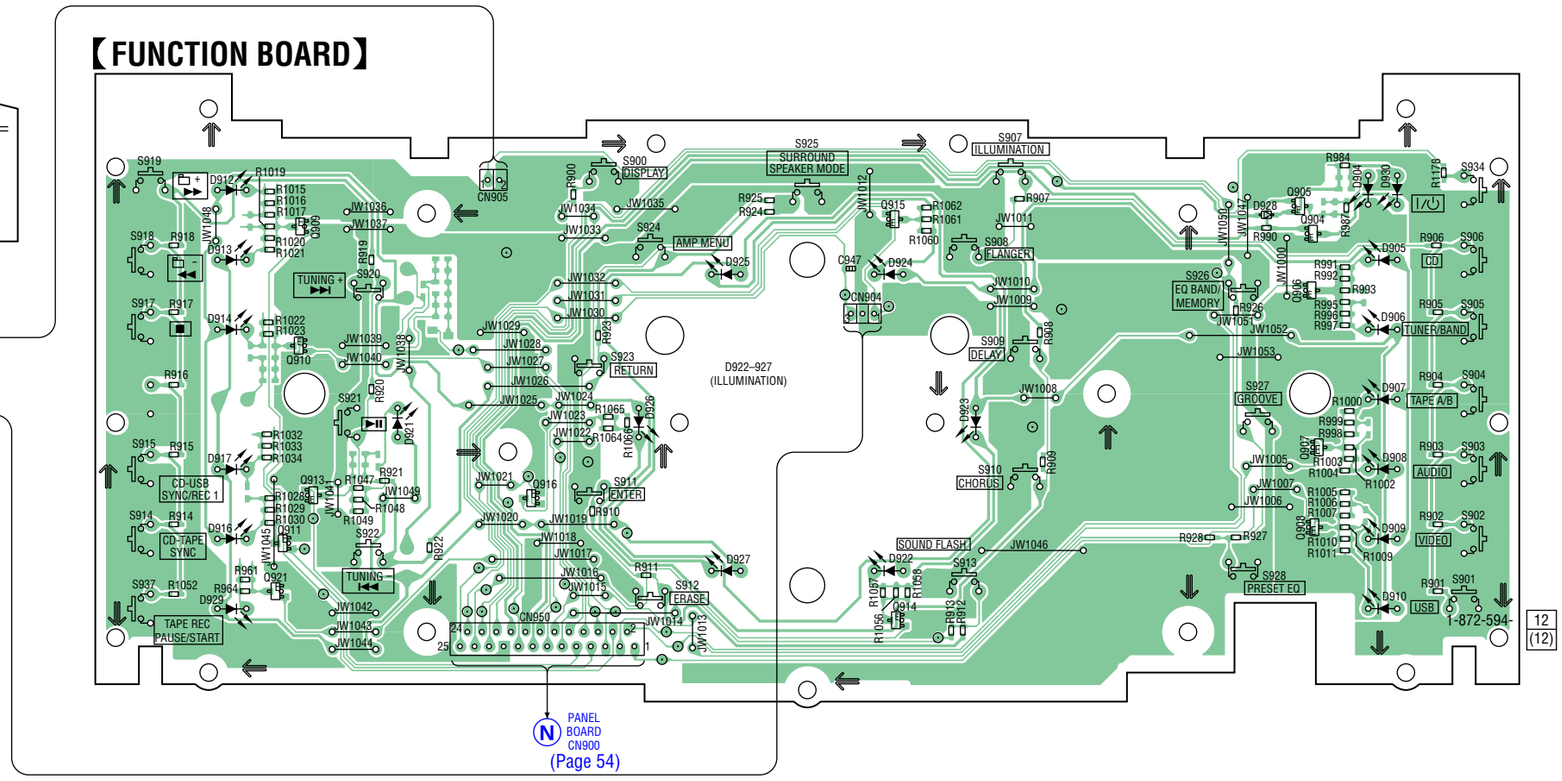
【CD-SW BOARD】



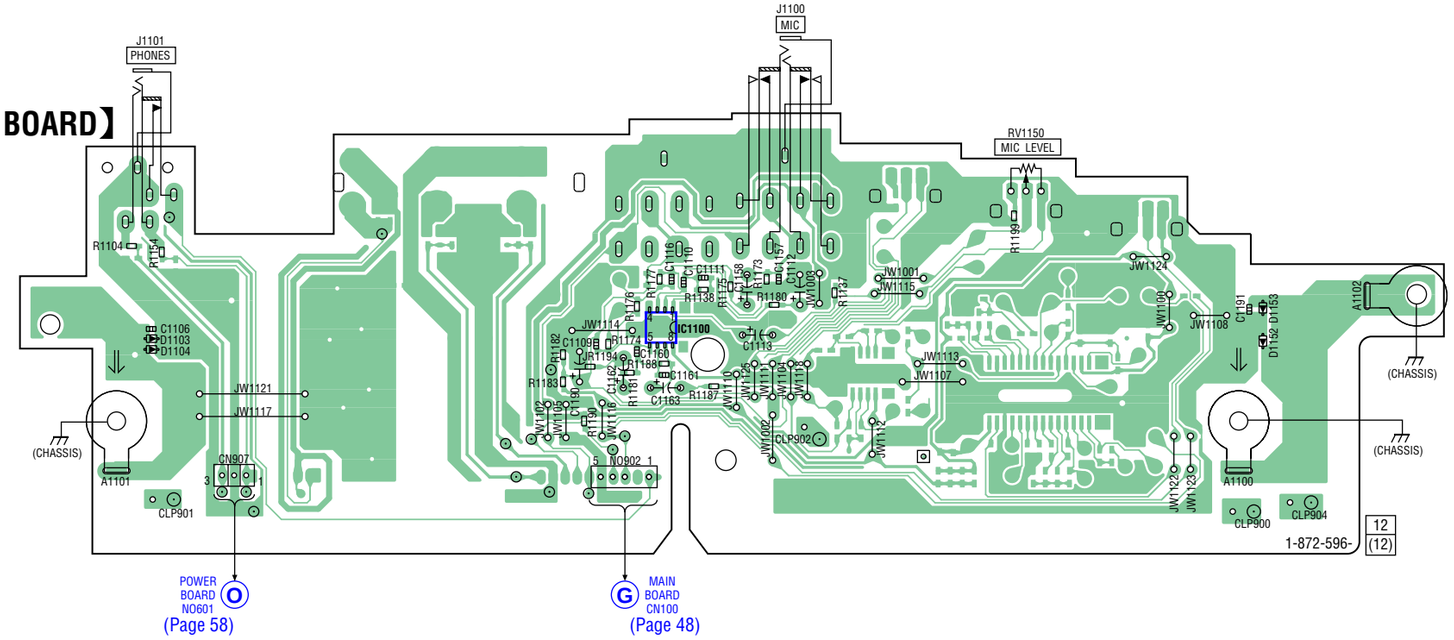
【JOG BOARD】



【FUNCTION BOARD】



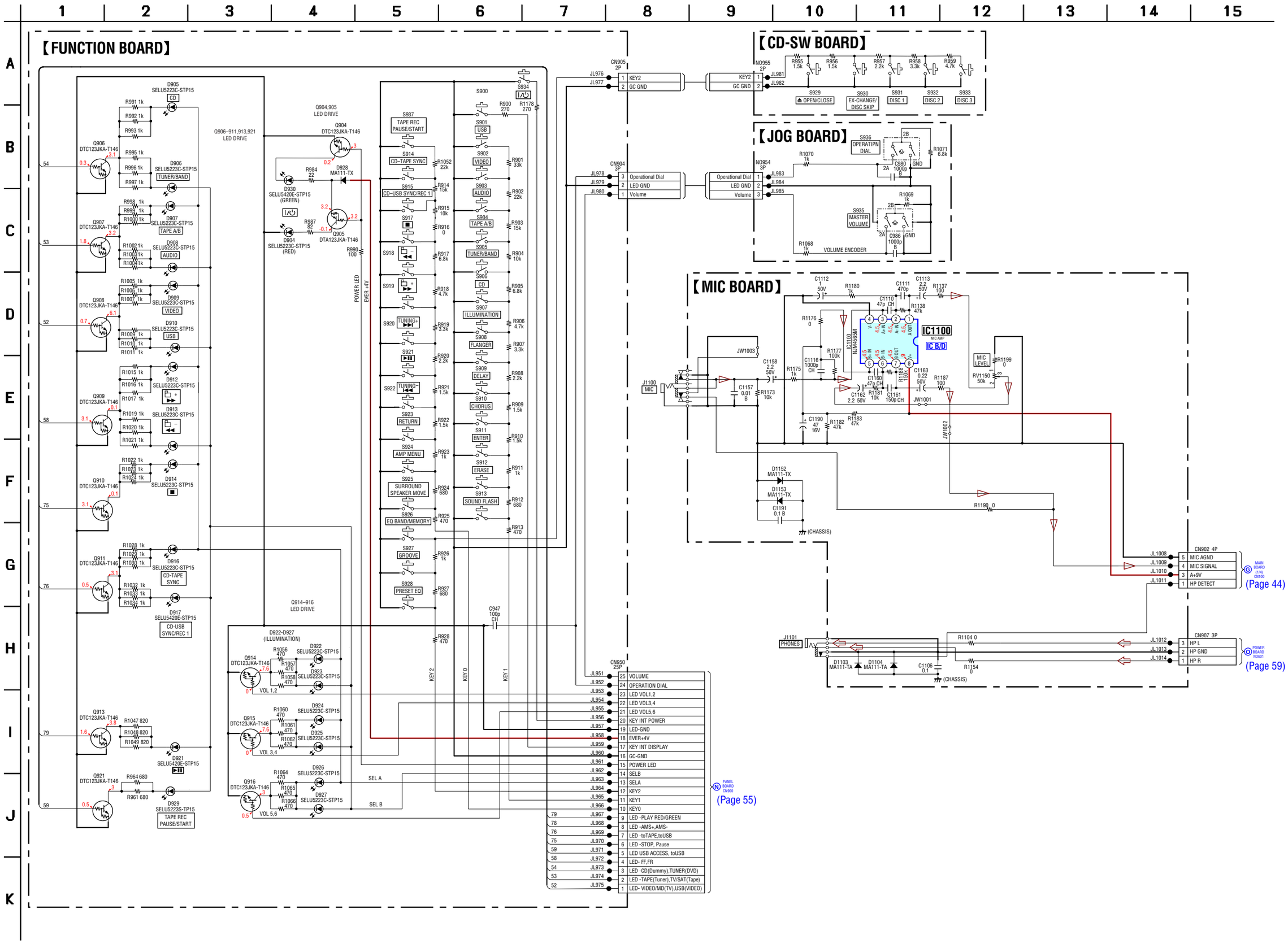
【MIC BOARD】



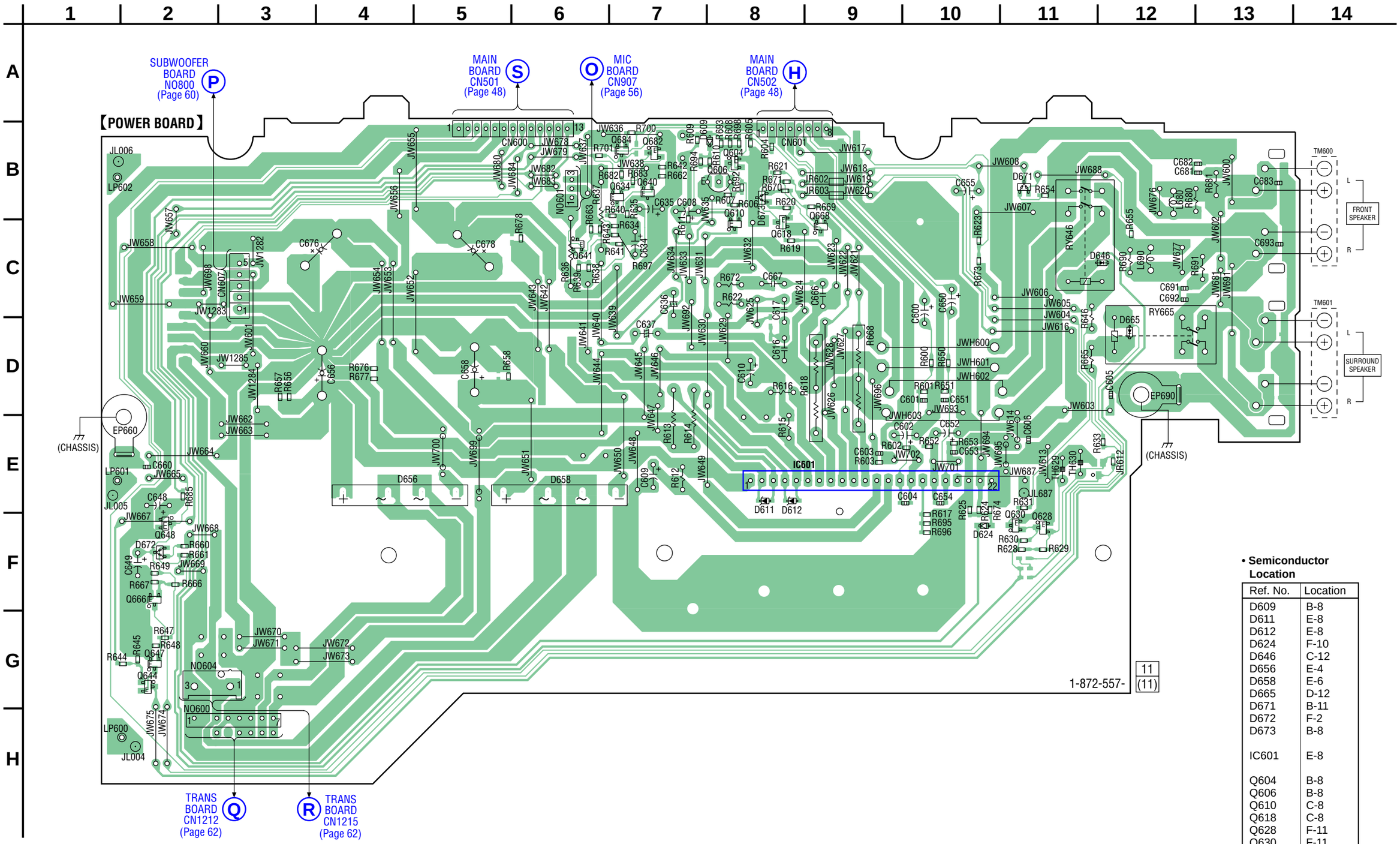
• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D904	B-13	D930	B-14
D905	B-14	D1103	H-6
D906	C-14	D1104	H-6
D907	C-14	D1152	H-13
D908	D-14	D1153	H-13
D909	D-14		
D910	D-14	IC1100	H-9
D912	B-6		
D913	B-6	Q904	B-13
D914	C-6	Q905	B-13
D916	D-6	Q906	C-13
D917	D-6	Q907	D-13
D921	C-7	Q908	D-13
D922	D-10	Q909	B-7
D923	C-11	Q910	C-7
D924	B-10	Q911	D-7
D925	B-9	Q913	D-7
D926	C-9	Q914	E-10
D927	D-9	Q915	B-10
D928	B-13	Q916	D-8
D929	D-6	Q921	D-7

6-26. SCHEMATIC DIAGRAM — FUNCTION SECTION — • Refer to page 69 for IC Block Diagrams.



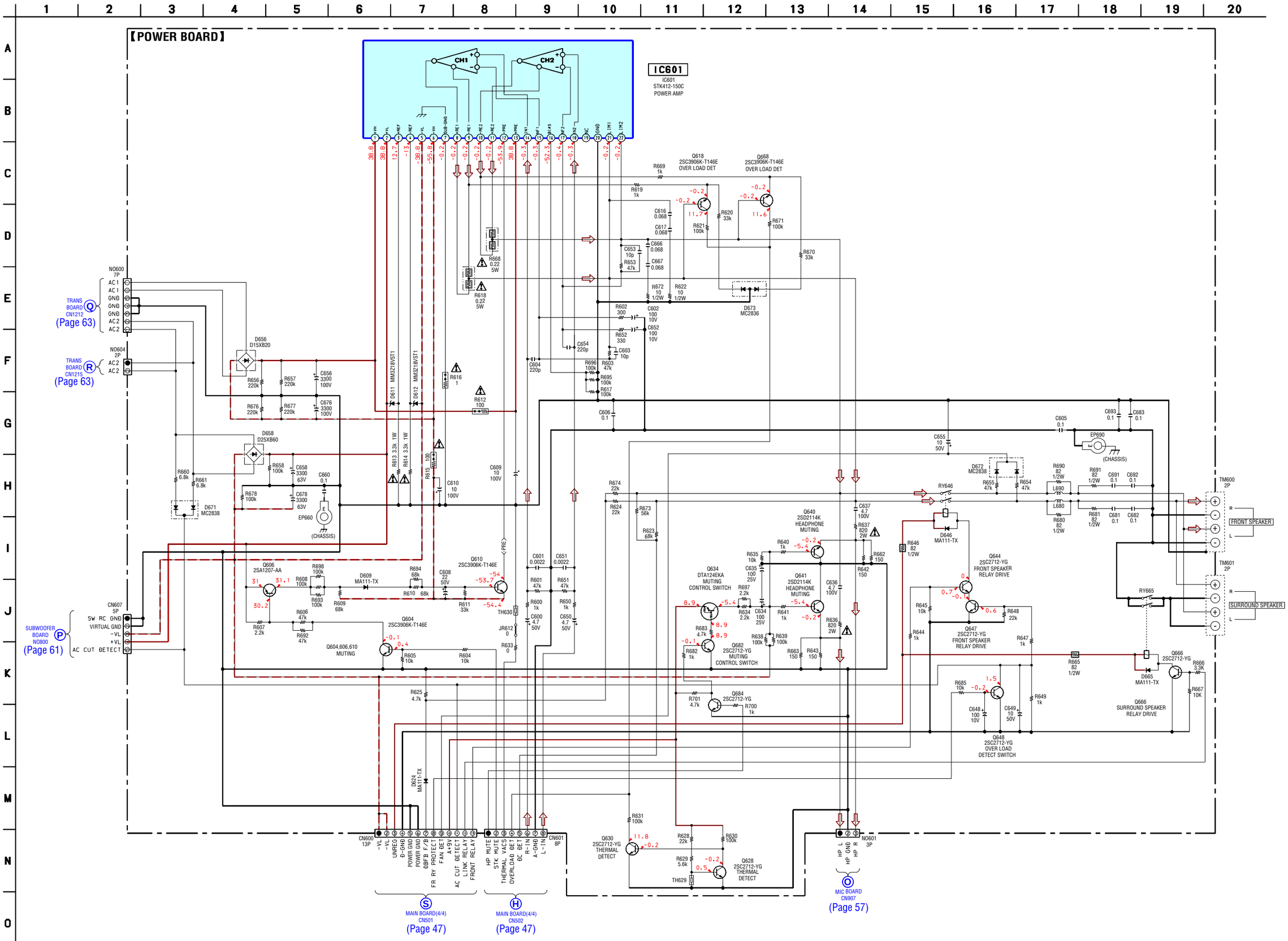
6-27. PRINTED WIRING BOARD — POWER AMP SECTION — • Refer to page 37 for Circuit Boards Location. : Uses unleaded solder.



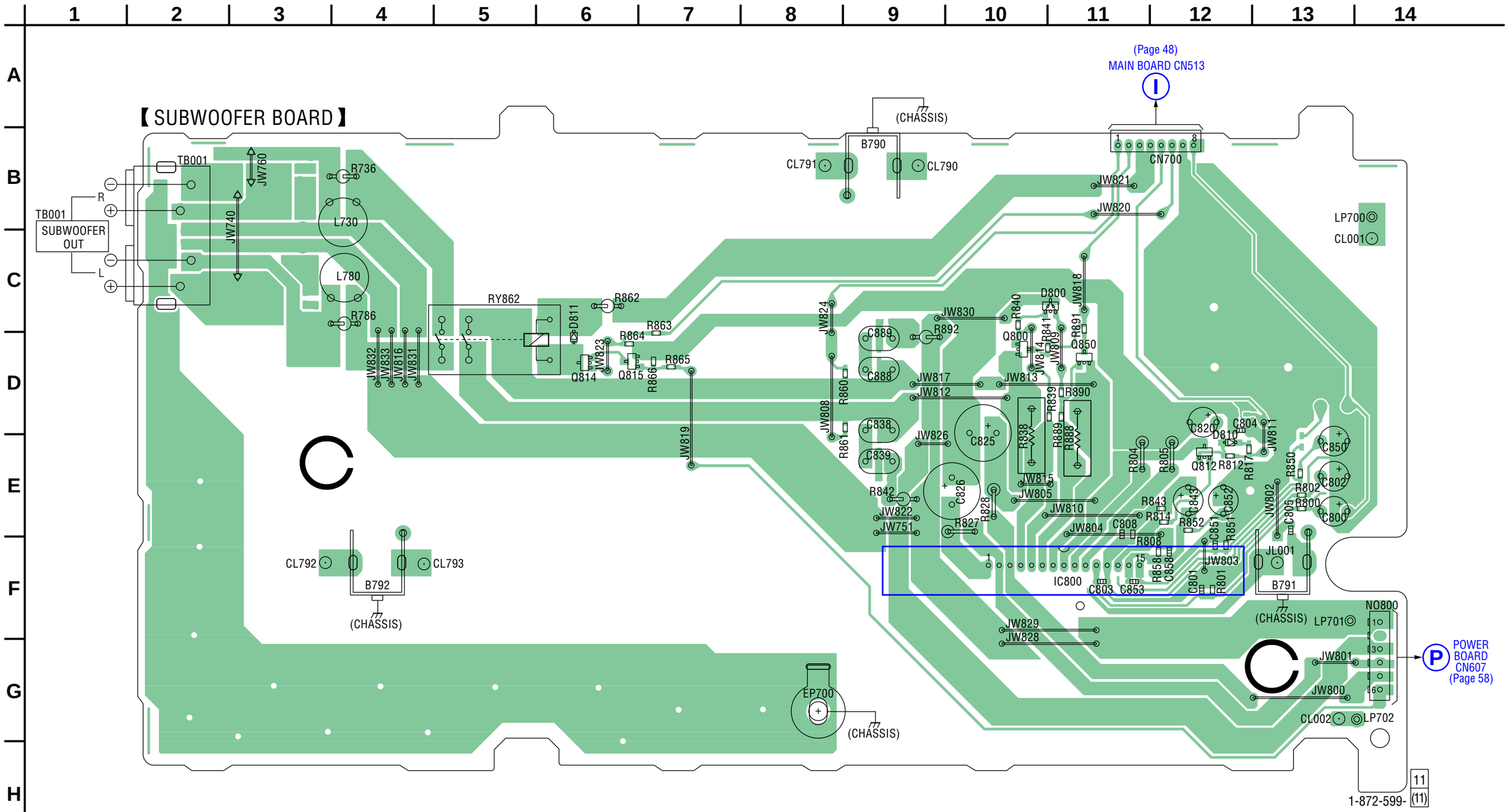
- **Semiconductor Location**

Ref. No.	Location
D609	B-8
D611	E-8
D612	E-8
D624	F-10
D646	C-12
D656	E-4
D658	E-6
D665	D-12
D671	B-11
D672	F-2
D673	B-8
IC601	E-8
Q604	B-8
Q606	B-8
Q610	C-8
Q618	C-8
Q628	F-11
Q630	F-11
Q634	B-7
Q640	B-7
Q641	C-6
Q644	G-2
Q647	G-2
Q648	F-2
Q666	H-2
Q668	C-9
Q682	B-7
Q684	B-7

6-28. SCHEMATIC DIAGRAM — POWER AMP SECTION —



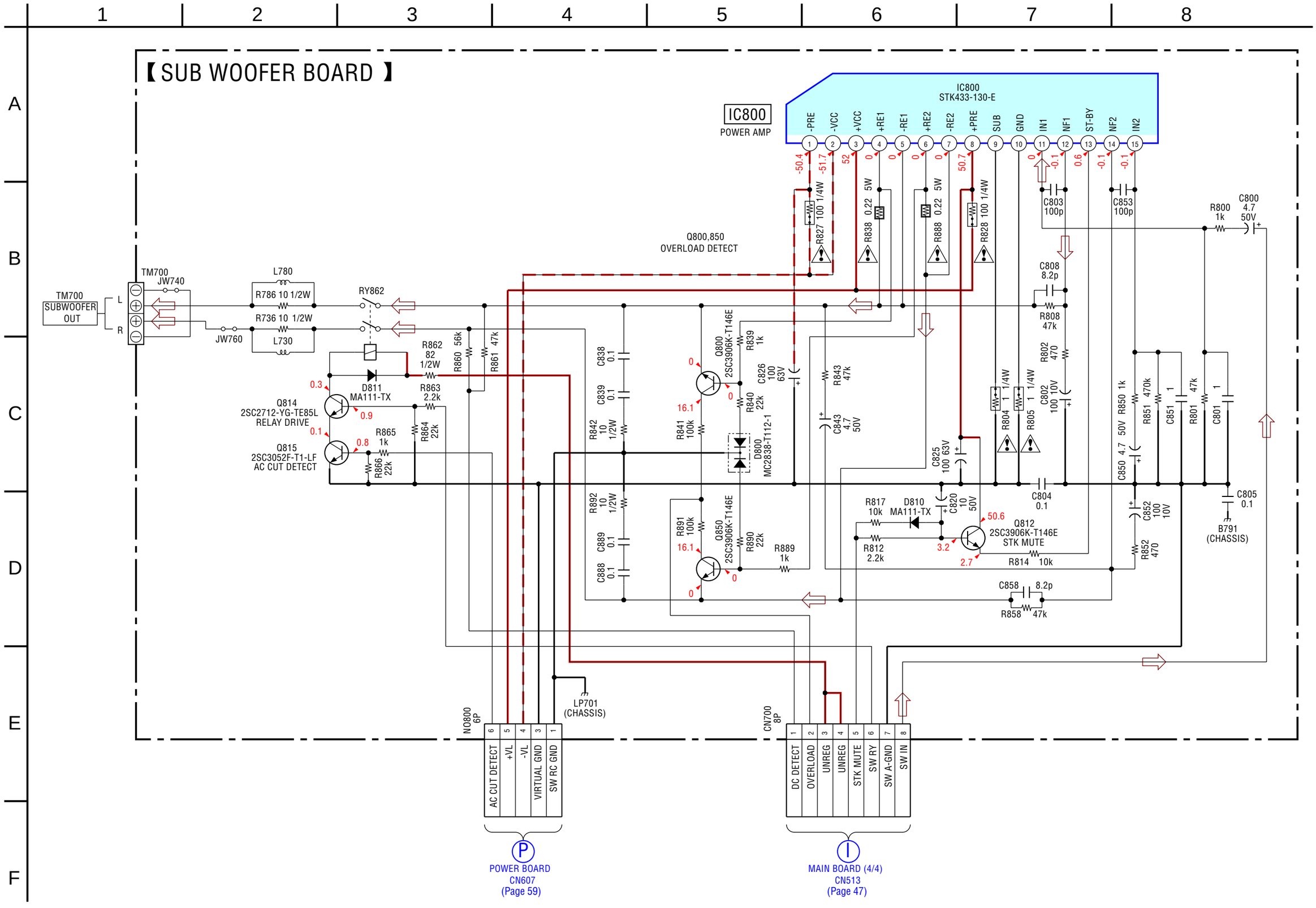
6-29. PRINTED WIRING BOARD — SUBWOOFER SECTION — • Refer to page 37 for Circuit Boards Location. : Uses unleaded solder.



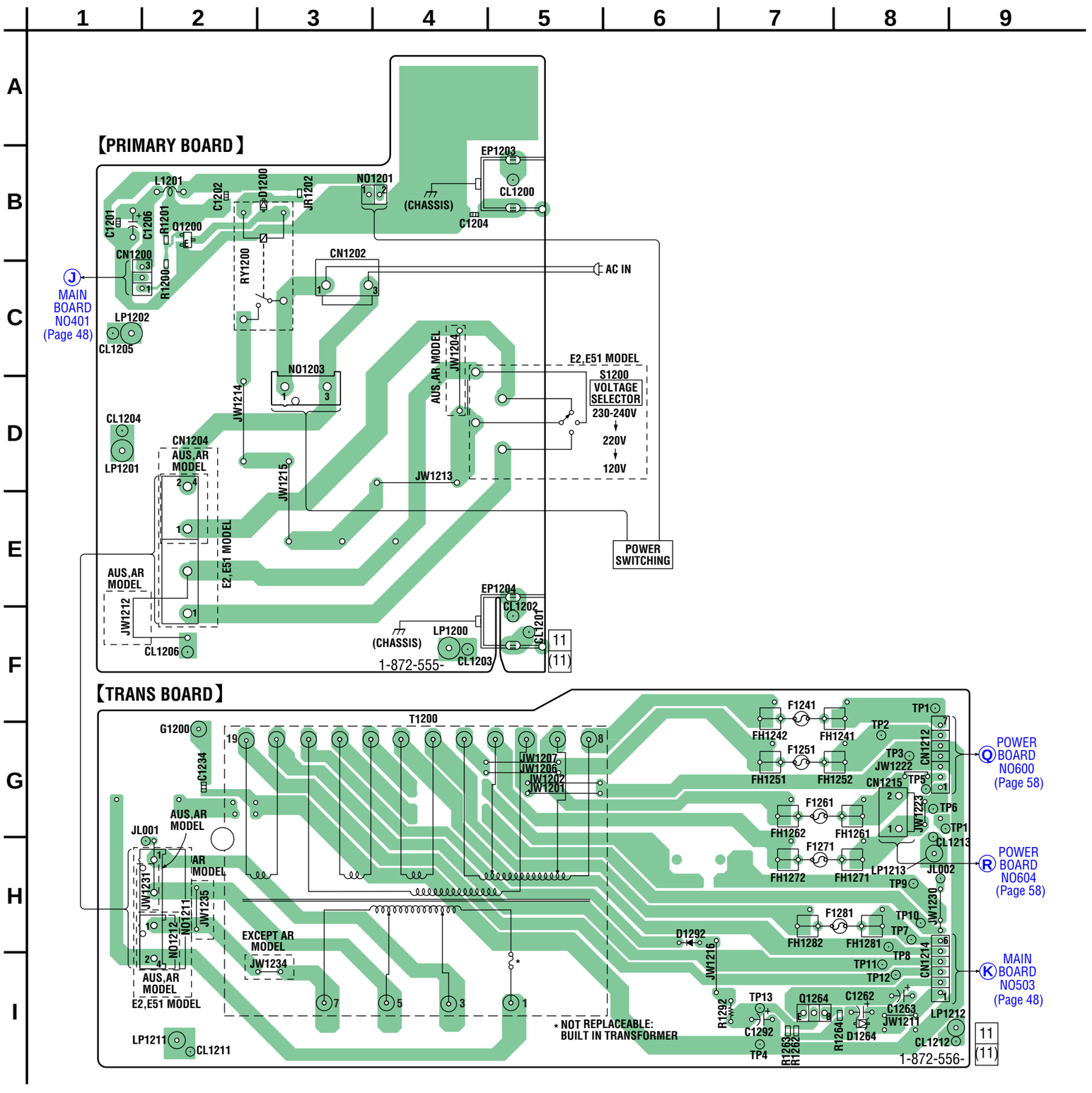
• **Semiconductor Location**

Ref. No.	Location
D800	C-11
D810	E-12
D811	D-6
IC800	F-11
Q800	D-10
Q812	E-12
Q814	D-6
Q815	D-6
Q850	D-11

6-30. SCHEMATIC DIAGRAM — SUBWOOFER SECTION —



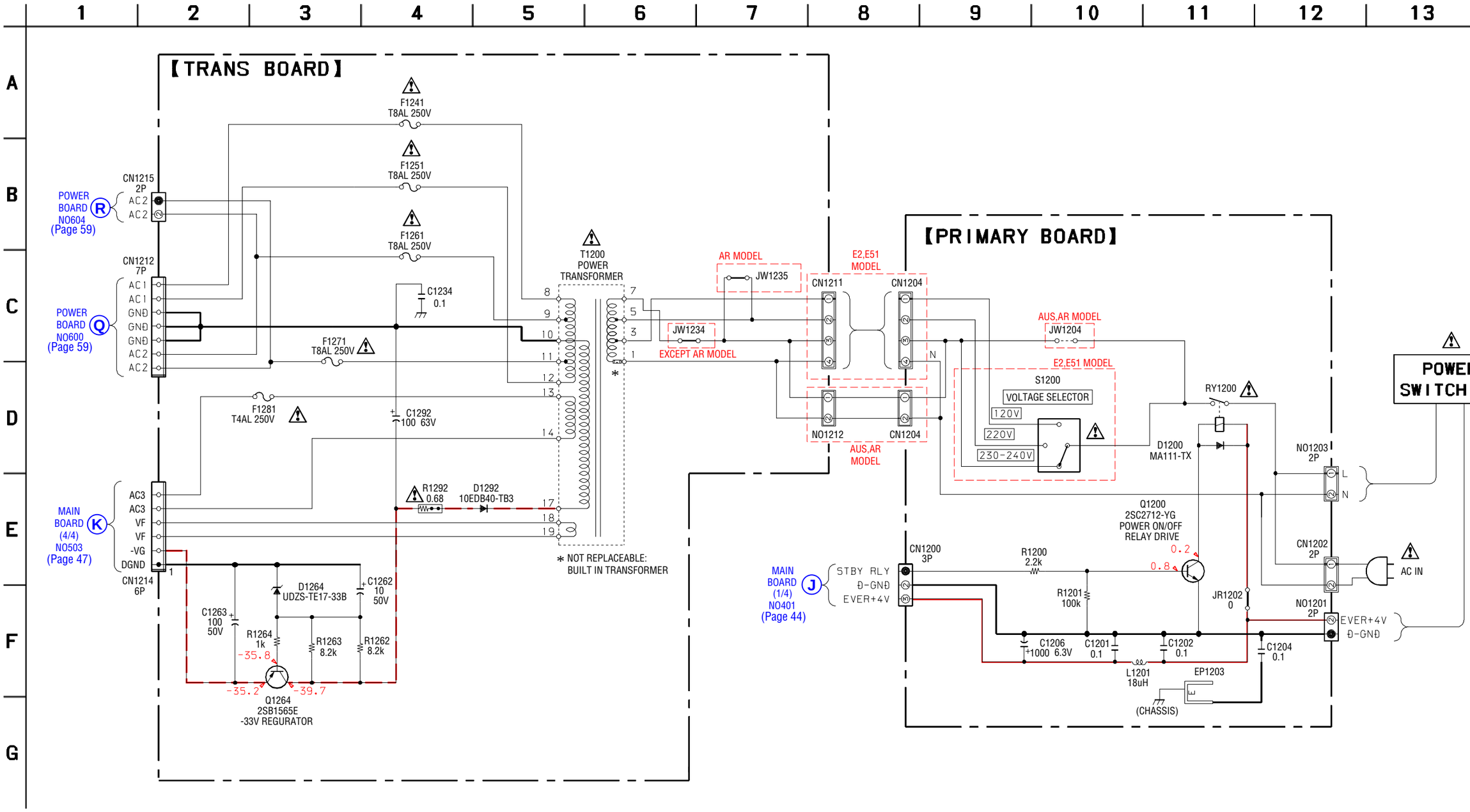
6-31. PRINTED WIRING BOARDS — TRANS SECTION — • Refer to page 37 for Circuit Boards Location. : Uses unleaded solder.



• **Semiconductor Location**

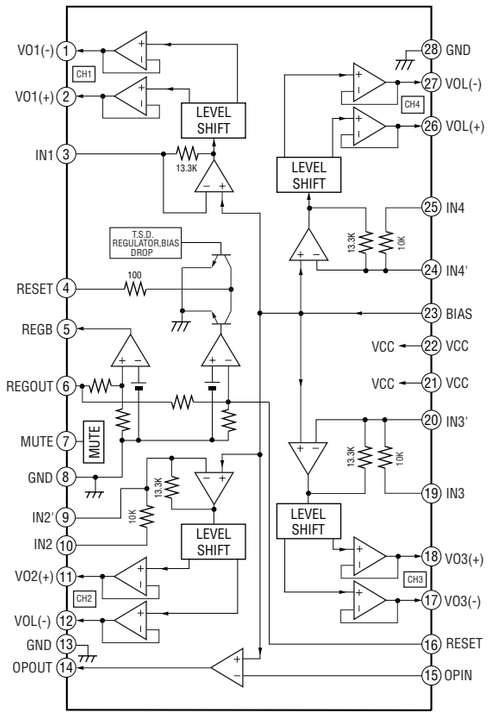
Ref. No.	Location
D1200	B-3
D1264	I-8
D1292	H-6
Q1200	B-2
Q1264	I-7

6-32. SCHEMATIC DIAGRAM — TRANS SECTION —

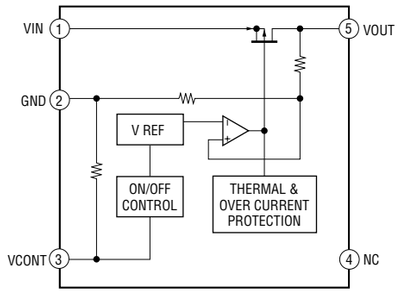


• IC BLOCK DIAGRAMS

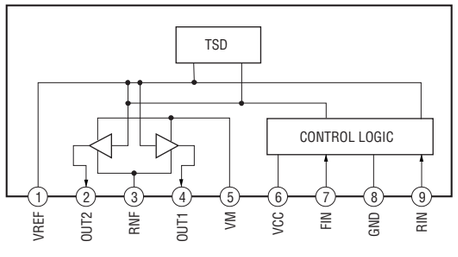
IC401 BA5826SFP-E2 (BD91 Board)



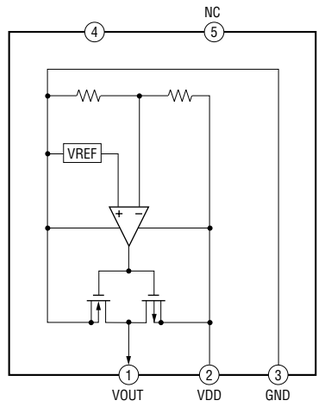
IC201 TK63115SCL-G@GT (BD91 Board)



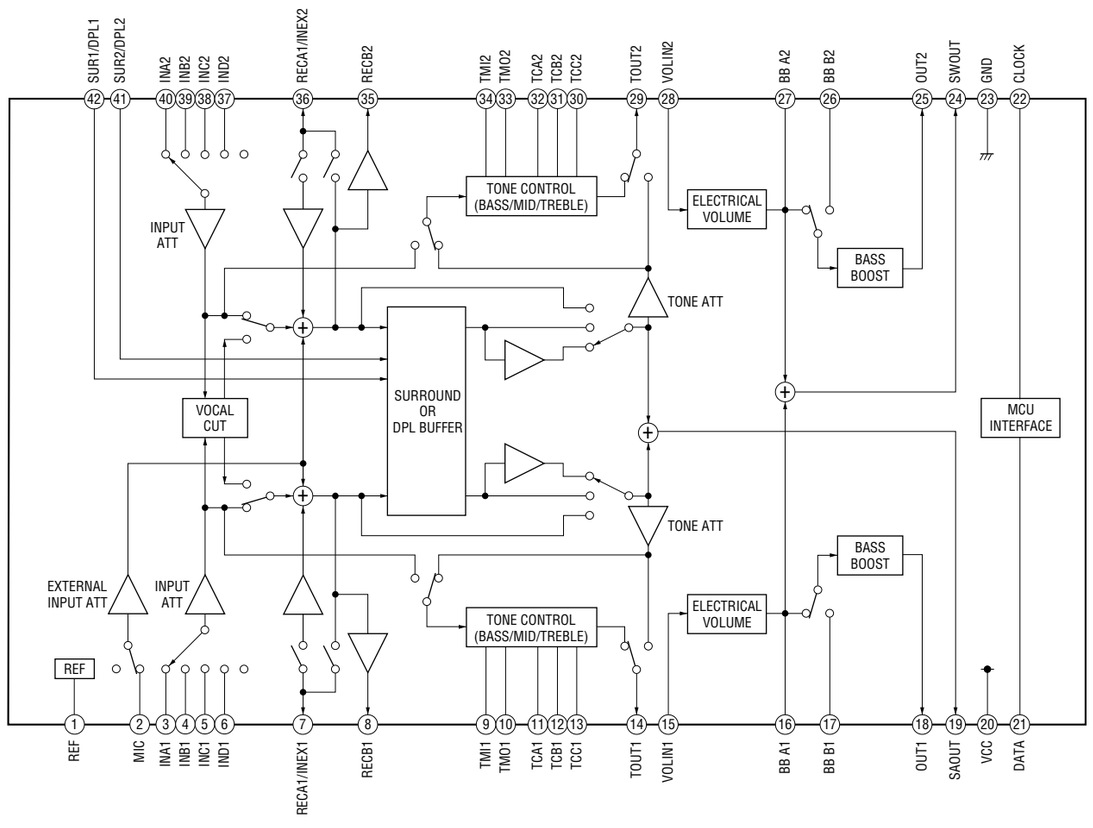
IC701 BA6956AN (DRIVER Board)
IC712 BA6956AN (DRIVER Board)



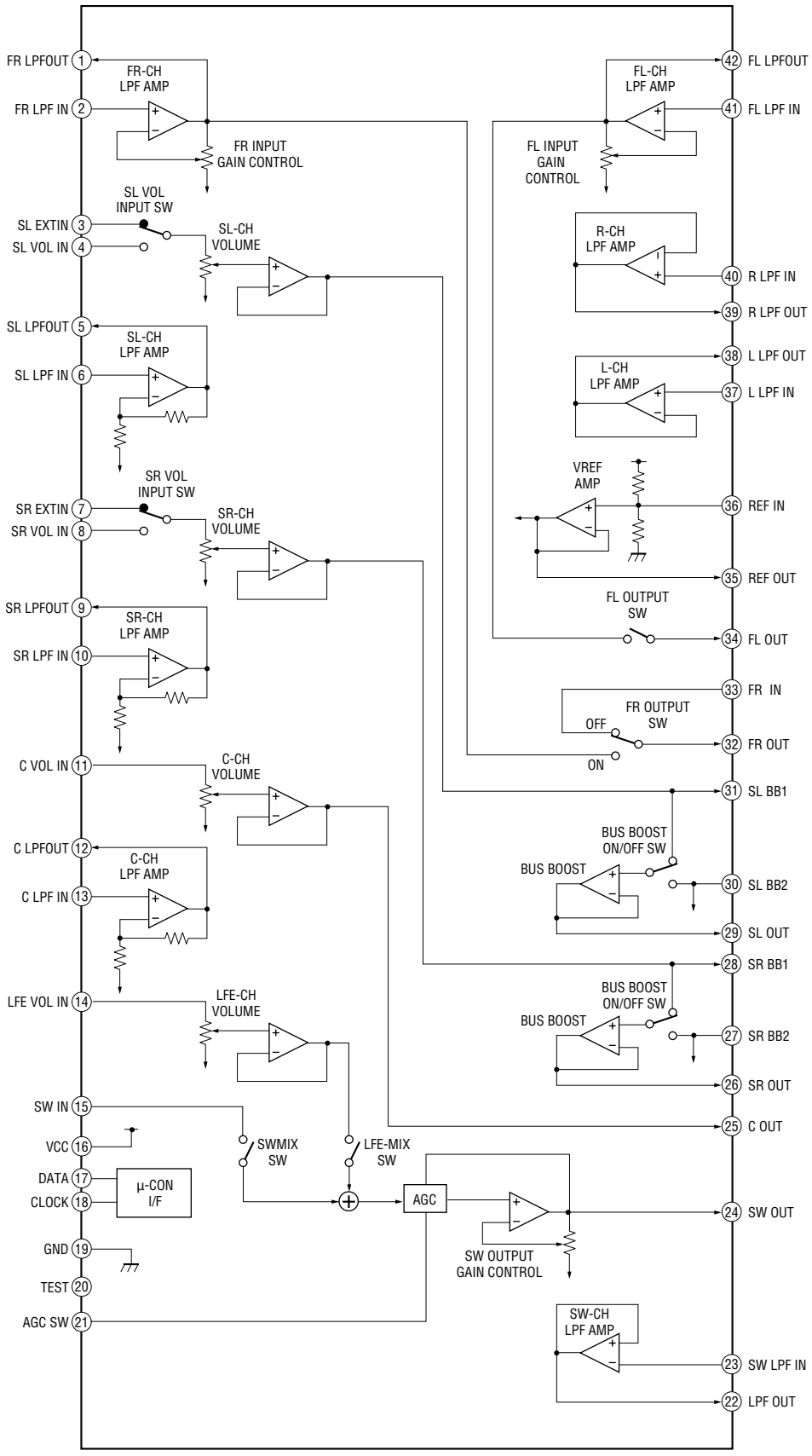
IC402 BD4929G-TR (MAIN Board (1/4))



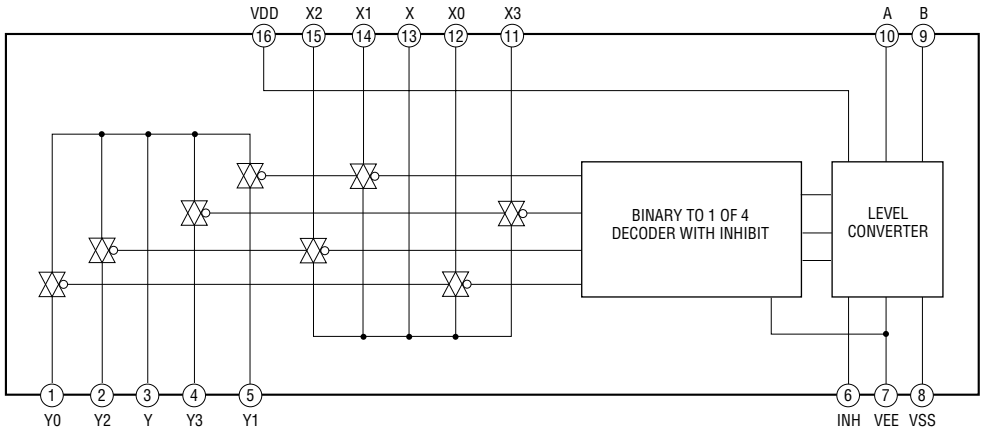
IC101 M61529FP-D60G (MAIN Board (2/4))



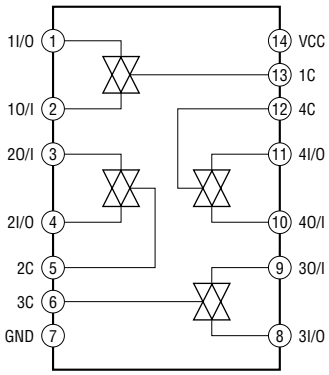
IC201 M61530FP-D60G (MAIN Board (2/4))



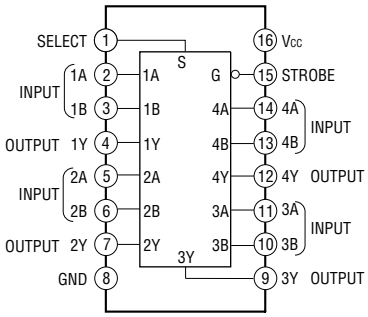
IC563 BU4052BCF-E2 (MAIN Board (2/4))
IC564 BU4052BCF-E2 (MAIN Board (2/4))



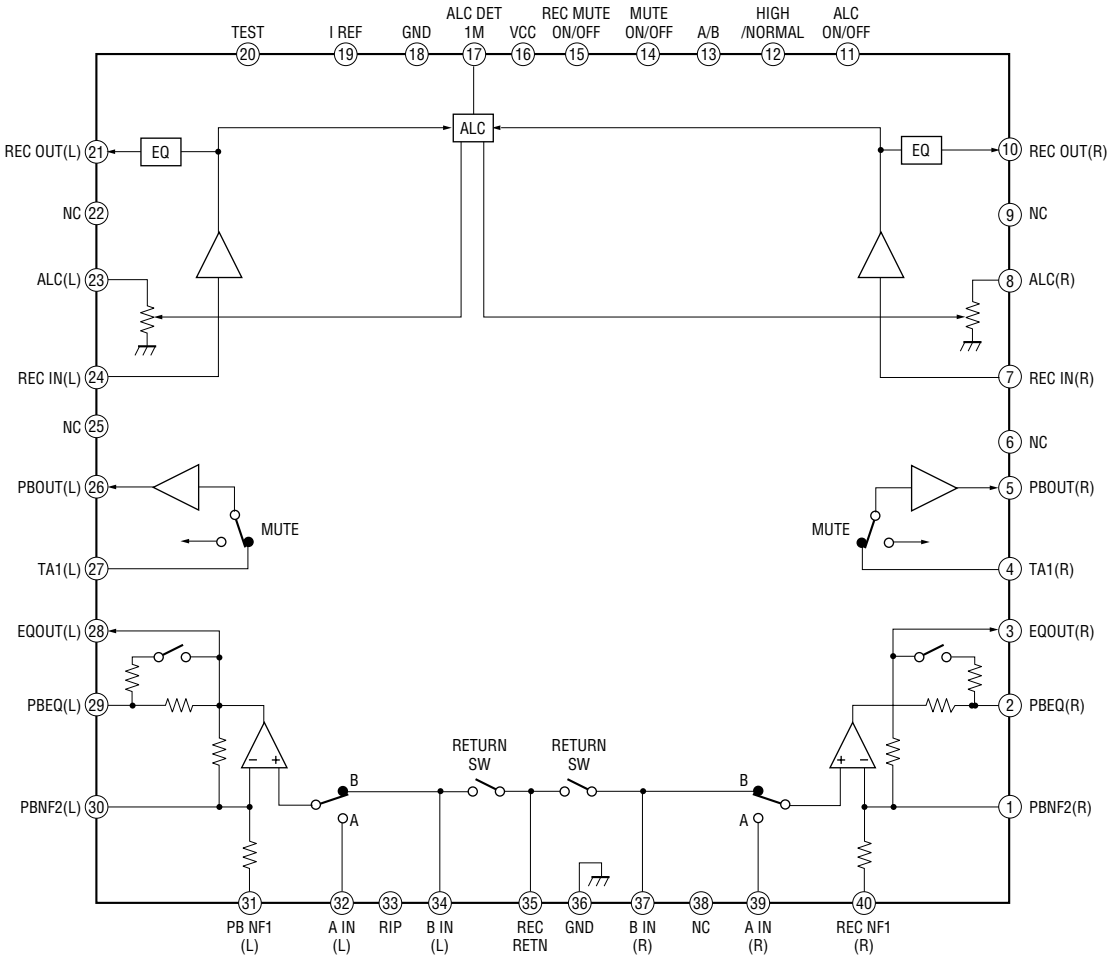
IC566 TC74HC4066AFT(EL) (MAIN Board (2/4))
IC567 TC74HC4066AFT(EL) (MAIN Board (2/4))



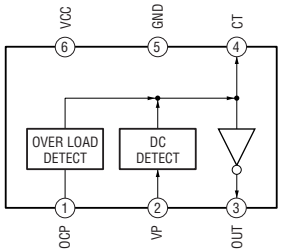
IC568 TC74VHC157FT(EKJ) (MAIN Board (2/4))



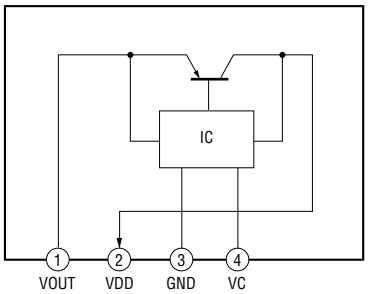
IC301 HA12237F (MAIN Board (3/4))



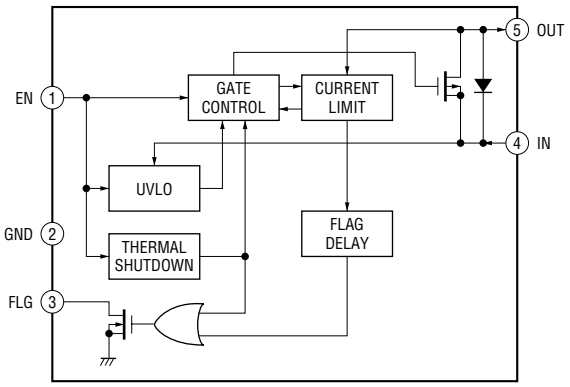
IC550 RT8H015C-T112-1 (MAIN Board (4/4))



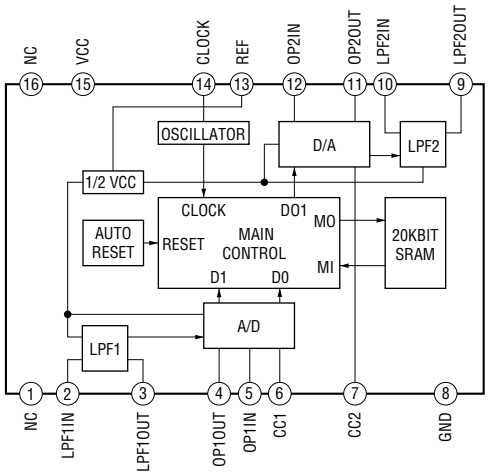
IC565 PQ05RD21J00H (MAIN Board (4/4))
IC570 PQ09RD21J00H (MAIN Board (4/4))



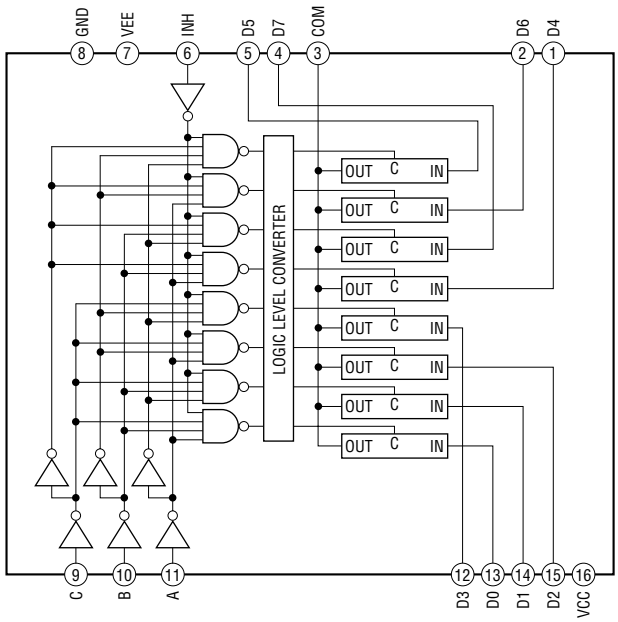
IC915 R5523N001B-TR-F (USB Board)



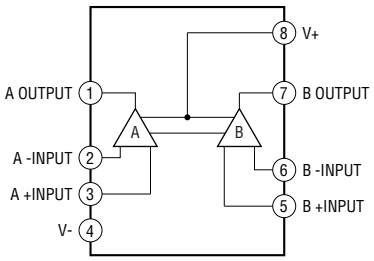
IC1501 M65850FP-E1 (EFFECTOR Board)



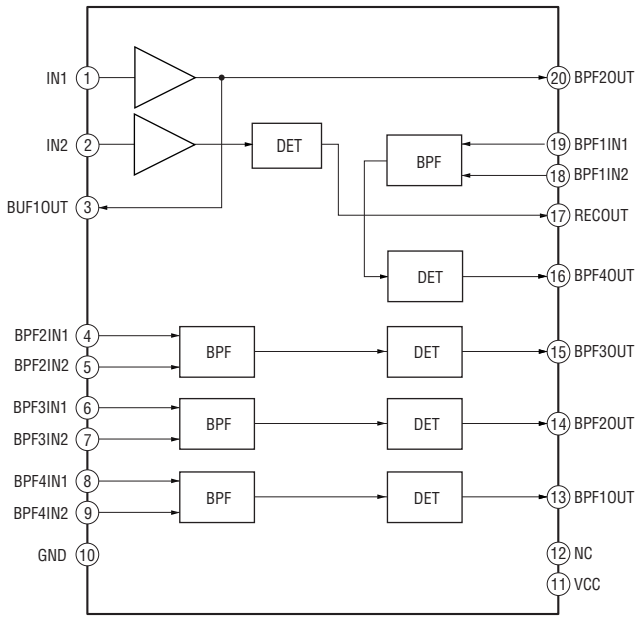
IC1503 TC74LVX4051FT (EFFECTOR Board)



IC1100 NJM4565M (MIC Board)



IC902 NJM2760V-TE2 (PANEL Board)



• IC PIN DESCRIPTIONS

IC101 TC94A70FG-008 (S, D) (RF AMP, FOCUS/TRACKING ERROR AMP, DIGITAL SIGNAL PROCESSOR, DIGITAL SERVO PROCESSOR, DIGITAL FILTER, D/A CONVERTER) (BD91 BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	AVSS3	—	Ground pin
2	RFZi	I	RF ripple zero crossing signal input
3	RFRP	O	RF ripple signal output
4	SBAD/RFDC	O	Sub beam addition signal or RF peak detection signal output Not used in this set. (Open)
5	FEi	O	Focus error signal output Not used in this set. (Open)
6	TEi	O	Tracking error signal output
7	TEZi	I	Tracking error zero crossing signal input
8	AVDD3	—	Power supply pin (+3.3 V)
9	FOo	O	Focus coil drive signal output
10	TRo	O	Tracking coil drive signal output
11	VREF	I	Reference voltage (+1.65 V) input
12	FMO	O	Sled motor drive signal output
13	DMO	O	Spindle motor drive signal output
14	VSSP3	—	Ground pin
15	VCOi	I	VCO control voltage input
16	VDDP3	—	Power supply pin (+3.3 V)
17	VDD1	—	Power supply pin (+1.5 V)
18	VSS1	—	Ground pin
19	FGiN	I	FG signal input Not used. (Connected to ground.)
20	IO0 (/HSO)	I	Disc inner position detection signal input
21	IO1 (/UHSO)	O	Not used in this set. (Open)
22	XVSS3	—	Ground pin
23	XI	I	System clock input (16.9344 MHz)
24	XO	O	System clock output (16.9344 MHz)
25	XVDD3	—	Power supply pin (+3.3 V)
26	DVSS3	—	Ground pin
27	RO	O	Analog audio (R-ch) signal output
28	DVDD3	—	Power supply pin (+3.3 V)
29	DVR	O	Reference voltage (+1.65 V) output
30	LO	O	Analog audio (L-ch) signal output
31	DVSS3	—	Ground pin
32	VDDT3	—	Power supply pin (+3.3 V)
33	VSS1	—	Ground pin
34	VDD1	—	Power supply pin (+1.5 V)
35	VDDM1	—	Power supply pin (+1.5 V)
36	SRAMSTB	I	S-RAM standby mode control signal input Fixed at “L” in this set.
37	$\overline{\text{RST}}$	I	Reset signal input from the system controller “L”: reset
38, 39	BUS0, BUS1	I/O	Serial data input/output from the system controller or USB controller
40	BUS2 (SO)	I/O	Serial data input/output from the system controller or USB controller
41	BUS3 (SI)	I/O	Serial data input/output from the system controller or USB controller
42	BUCK (CLK)	I	Serial data transfer clock signal input from the system controller or USB controller
43	$\overline{\text{CCE}}$	I	Chip enable signal input from the system controller or USB controller
44	TEST	I	Setting pin for test mode Normally fixed at “L”
45	IRQ	I	Interrupt request signal input
46	AoUT3 (PO4)	O	Request signal output to the USB controller Not used in this set. (Open)
47	AoUT2 (PO5)	O	Audio data output to the USB controller
48	PIO0	O	Request signal output to the system controller or USB controller
49	PIO1	O	ST REQ signal output
50	PIO2	O	Not used in this set. (Open)

Pin No.	Pin Name	I/O	Pin Description
51	PIO3	I	Gate signal input from the USB controller
52	VSS1	—	Ground pin
53	VDDT3	—	Power supply pin (+3.3 V)
54	SBSY	O	Subcode block sync signal output to the system controller
55	SBOK/FOK	O	Not used in this set. (Open)
56	IPF	O	Not used in this set. (Open)
57	SFSY/LOCK	O	Not used in this set. (Open)
58	ZDET	O	Zero detection signal output Not used in this set. (Open)
59	GPIN	I	Not used. (Connected to ground.)
60	MS	I	Microcomputer interface mode selection signal input Fixed at “H” in this set.
61	DOUT (PO6)	O	Digital audio data output Not used in this set. (Open)
62	AOUT1 (PO7)	O	Audio data output Not used in this set. (Open)
63	BCK (PO8)	O	Bit clock signal output to the USB controller
64	LRCK (PO9)	O	L/R sampling clock signal output
65	AIN (PI4)	I	Digital audio data input from the USB controller
66	BCKi (PI5)	I	Bit clock signal input from the USB controller
67	LRCKi (PI6)	I	L/R sampling clock signal input from the USB controller
68	VDD1	—	Power supply pin (+1.5 V)
69	VSS	—	Ground pin
70	AWRC	—	Not used in this set. (Open)
71	PVDD3	—	Power supply pin (+3.3 V)
72	PDO	O	Phase error margin signal between EFM signal and PLCK signal output
73	TMAXS	O	TMAX detection signal output Not used in this set. (Open)
74	TMAX	O	TMAX detection signal output
75	LPFN	I	Inverted signal input from the operation amplifier for PLL loop filter
76	LPFo	O	Signal output from the operation amplifier for PLL loop filter
77	PVREF	I	Reference voltage (+1.65 V) input
78	VCOF	O	VCO filter output
79	PVSS3	—	Ground pin
80	SLCo	O	EFM slice level output
81	RFi	I	RF signal input
82	RFRPi	I	RF ripple signal input
83	RFEQo	O	EFM slice level output
84	VRo	O	Reference voltage (+1.65 V) output
85	RESiN	O	External resistor connection pin
86	VMDiR	O	Reference voltage (+1.65 V) output for automatic power control circuit
87	TESTR	O	Low-pass filter terminal for RFEQO offset correction
88	AGCi	I	RF signal amplitude adjustment amplification input
89	RFo	O	RF signal generation amplification output
90	RVDD3	—	Power supply pin (+3.3 V)
91	LDo	O	Laser diode on/off control signal output to the automatic power control circuit “H”: laser diode on
92	MDi	I	Light amount monitor input from the laser diode of optical pick-up block
93	RVSS3	—	Ground pin
94	FNi2 (C)	I	Main beam (C) input from the optical pick-up block
95	FNi1 (A)	I	Main beam (A) input from the optical pick-up block
96	FPi2 (D)	I	Main beam (D) input from the optical pick-up block
97	FPi1 (B)	I	Main beam (B) input from the optical pick-up block
98	TPi (F)	I	Sub beam (F) input from the optical pick-up block
99	TNPC	O	External capacitor connection pin
100	TNi (E)	I	Sub beam (E) input from the optical pick-up block

IC401 M30622MEP-A75FPU0 (SYSTEM CONTROL) (MAIN BOARD (1/4))

Pin No.	Pin Name	I/O	Pin Description
1	XRST	O	Reset signal output to the digital signal processor "L":reset
2	MMUTE	O	Control port for the digital signal processor motor driver mute
3	CD CCE	O	Chip enable contor port to the digital signal processor
4	SIRCS	I	Remote control signal input
5	CD CLK	O	Serial date transfer clock signal output to the digital signal processor
6	MP3 IREQ	I	Digital signal decoder request pin to master control
7	SOURCE SEL1	O	Select function input for effector mode (CD/USB/Video in: "L", Tuner/Tape/Audio in: "H")
8	BYTE	—	Ground pin
9	CNVss	—	Ground pin
10	XC IN	I	Sub system clock input (32.768 kHz)
11	XC OUT	O	Sub system clock output (32.768 kHz)
12	RESET	I	System reset signal input from the reset signal IC "L": reset After the power supply rises, "L" is input for several hundreds msec and then change to "H".
13	X OUT	O	Main system clock output (5 MHz)
14	VSS	—	Ground pin
15	X IN	I	Main system clock input (5 MHz)
16	VCC	—	Power supply pin (+3.3 V)
17	NMI	I	Non-maskable interrupt input
18	SOURCE SEL2	O	Select function input for effector mode (CD/USB/Tuner/Tape: "H", Audio in/Video in: "L")
19	SBSY	I	Subcode sync detection signal input from the digital signal processor
20	AC CUT	I	AC off detection signal input from the reset signal IC "L": AC Cut detected
21	BUS3	I/O	Data bus line for CD communication with master control
22	BUS2	I/O	Data bus line for CD communication with master control
23	BUS1	I/O	Data bus line for CD communication with master control
24	BUS0	I/O	Data bus line for CD communication with master control
25	EFFECTOR S0	O	Effector circuitry delay time selection bit 0 signal output
26	EFFECTOR S1	O	Effector circuitry delay time selection bit 1 signal output
27	EFFECTOR S2	O	Effector circuitry delay time selection bit 3 signal output
28	EFFECTOR SEL	O	Effector circuity bypass control signal output "H": bypass
29	IIC CLK	I/O	Clock signal for IIC communication between Master controller and Display controller
30	IIC DATA	I/O	Data signal for IIC communication between Master controller and Display controller
31	USBRST	O	Reset signal output to USB control IC "L": reset
32	CD POWER	O	Power on/off control signal output to BU section "H": power on
33	STBY LED/FAN CONTROL	O	LED drive signal output of power indicator and fan on/off control port
34	USB SERIAL CTS0	I	Serial send control signal input from USB IC
35	USB SERIAL TXD0	O	UART serial transmission data line signal output to USB IC
36	USB SERIAL RXD0	I	UART serial reception data line signal output from USB IC
37	GC RESET	O	Reset signal output to display control IC "L": reset
38	USB SERIAL RTS0	O	Serial receive control output from USB IC
39	SEL SW	O	USB and CD control switch CD (H)/USB (L)
40	USB PWR	O	Power on/off control signal output to USB section Power On: H
41	OPEN SW	I	Eject detection signal input from the CD mechanism
42	TBL SENSE	I	Disc tray position detection signal input from the CD mechanism
43	E-3	I	Disc tray status detection signal input from the CD mechanism
44	E-2	I	Disc tray status detection signal input from the CD mechanism
45	E-1	I	Disc tray status detection signal input from the CD mechanism
46	TMF	O	CD mechanism turning motor control signal output
47	TMR	O	CD mechanism turning motor control signal output
48	LMF	O	CD mechanism loading motor control signal output

Pin No.	Pin Name	I/O	Pin Description
49	LMR	O	CD mechanism loading motor control signal output
50	STBY RELAY	O	Main power on/off control signal output "H": power on
51	ATRIG	O	Deck A side trigger plunger drive signal output "H": plunger on
52	A HALF	I	Deck A cassette detection signal input "H": cassette detected
53	CAPM+	O	Capstan motor drive signal output
54	B TRIG	O	Deck B side trigger plunger drive signal output "H": plunger on
55	REC BIAS	O	Recording bias on/off control signal output "H": bias on
56	TC RELAY	O	Recording/playback selection signal output "H": recording, "L": playback
57	PB A/B	O	Deck A/B playback selection signal output "H": Deck A, "L": Deck B
58	ALC	O	Automatic limiter control signal output "H": limiter ON
59	REC MUTE	O	Recording muting on/off control signal output "L": muting on
60	TC MUTE	O	Tape playback muting on/off control signal output "H": muting on
61	UNDER VOLTAGE DET	I	Under-voltage protection detection signal input "H": under-voltage detected
62	VCC	—	Power supply pin (+3.3 V)
63	OVER VOLTAGE DET	I	Over-voltage protection detection signal input "L": over-voltage detected
64	VSS	—	Ground pin
65	CD USB MUTE	O	CD and USB analog muting on/off control signal output "L": muting on
66	LINE MUTE	O	Line muting on/off control signal output "L": muting on
67	STK MUTE	O	Power amplifier and sub woofer amplifier on/off control signal output "H": amplifier on
68	HP MUTE	O	Headphone muting on/off control signal output "L": muting on
69	PROTECTOR	I	Speaker protect detection signal input from speaker protect circuit "L": protector on
70	FRONT RELAY	O	Relay drive signal output for the front speakers "H": relay on
71	LINK RELAY	O	Surround speaker mode control signal output "H": link, "L": matrix surround 1/2
72	SW SPK RELAY	O	Relay drive signal output for the passive sub woofer output "H": relay on
73	DISPLAY KEY	I	DISPLAY key press detection signal input (Interrupt input)
74	POWER KEY	I	POWER key press detection signal input (Interrupt input)
75	Z GROOVE FREQ	O	Selector port to turn the Z-groove frequency response circuity
76	NO USE	I	Not used in this set. (Connected to ground.)
77	CTRL 3	O	Effector circuity mode control 3 signal output "H": Chorus/Effector Off, "L": Flanger/Delay.
78	CTRL 1	O	Effector circuity mode control 1 signal output "H": Delay/Effector Off, "H": Flanger/Chorus.
79	M61530 DATA	O	Serial data signal output to 4-ch volume IC
80	M61530 CLK	O	Serial data transfer clock signal output to 4-ch volume IC
81	M61529 DATA	O	Serial data signal output to audio signal processor
82	M61529 CLK	O	Serial data transfer clock signal output to audio signal processor
83	NO USE	I	Not used in this set. (Connected to ground.)
84	ST CE	O	PLL chip enable signal output to the tuner unit
85	ST DIN/MC DOUT	I	PLL serial data signal input from the tuner unit
86	ST CLK	O	PLL serial data transfer clock signal output to the tuner unit
87	ST DOUT/MC DIN	O	PLL serial data signal output to the tuner unit
88	FAN HI SPEED	O	Fan high speed control signal output for Themal VACS "L": Fan high speed on.
89	A SHUT	I	Shut off detection signal input from deck A side reel pulse detector (A/D input)
90	B SHUT	I	Shut off detection signal input from deck A side reel pulse detector (A/D input)
91	B HALF	I	Deck B cassette detection, forward side recording tab detection and reverse side recording tab detection signal input (A/D input)
92	MODEL IN	I	Model setting pin (A/D input)
93	DEST IN	I	Destination setting pin (A/D input)
94	THERMA VACS	I	Temperature detection signal input from thermistor (A/D input)
95	SW VOL IN	I	Subwoofer volume level detection signal input from subwoofer volume jog (A/D input)
96	AVSS	I	Ground pin (for A/D conversion)

Pin No.	Pin Name	I/O	Pin Description
97	SW ON LED	O	LED drive signal output of SUB WOOFER ON indicator on sub woofer “H”: LED ON
98	VREF	I	A/D Converter reference voltage input (+3.3 V)
99	AVCC	—	Power supply pin (+3.3 V) (for A/D conversion)
100	HP DET	I	Headphone connection detection signal input “H”: headphone connected

IC901 TMP92CD28AFG-2CB4 (USB CONTROLLER) (USB BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	RESET	I	Reset signal input from the system controller "L": reset
2	PC0/INT0	I	Ready to send signal input from the system controller
3	PC1/INT1	O	Not used in this set. Connected to ground.
4	PC2/INT2/TB1IN0	O	Not used in this set. Connected to ground.
5	PC3/INT3	I	Function selection signal input Fixed at "L" in this set.
6	DVCC3B	—	Power supply pin (+3.3 V)
7	PC6/XT1	O	Not used in this set. (Open)
8	PC7/XT2	O	Not used in this set. (Open)
9	$\overline{\text{PWE}}$	O	Not used in this set. (Open)
10	DVSS1B	—	Ground pin
11	DVCC1B	—	Power supply pin (+3.3 V)
12	RVOUT1	O	Reference voltage (+3.3 V) output pin
13, 14	RVIN	I	Reference voltage (+3.3 V) input pin
15	RVOUT2	O	Reference voltage (+3.3 V) output pin
16	DVCC1A	—	Power supply pin (+3.3 V)
17	DVSS1A	—	Ground pin
18 to 25	P00/D0 to P07/D7	I/O	Two-way data bus with the S-RAM
26	DVSS	—	Ground pin
27	DVCC3A	—	Power supply pin (+3.3 V)
28 to 35	P10/D8 to P17/D15	I/O	Two-way data bus with the S-RAM
36	P40/A0	O	Address signal output pin Not used in this set. (Open)
37 to 43	P41/A1 to P47/A7	O	Address signal output to the S-RAM
44	DVSS	—	Ground pin
45	DVCC3A	—	Power supply pin (+3.3 V)
46 to 54	P50/A8 to P60/A16	O	Address signal output to the S-RAM
55 to 58	P61/A17 to P64/A20	O	Serial data output to the CD-MP3 processor
59	P65/A21	O	Serial data transfer clock signal output to the CD-MP3 processor
60	P66/A22	O	Chip enable signal output to the CD-MP3 processor
61	P67/A23	O	Not used in this set. (Open)
62	DVSS	—	Ground pin
63	DVCC3A	—	Power supply pin (+3.3 V)
64	P70/$\overline{\text{RD}}$	O	Output enable signal output to the S-RAM
65	P71/$\overline{\text{SRWR}}$	O	Write enable signal output to the S-RAM
66	P72/$\overline{\text{SRLLB}}$	O	Lower-byte control signal output to the S-RAM
67	P73/$\overline{\text{SRLUB}}$	O	Upper-byte control signal output to the S-RAM
68	P74/TA0IN	O	Not used in this set. (Open)
69	P80/$\overline{\text{CS0}}$/TA1OUT ($\overline{\text{BOOT}}$)	I	Boot mode selection signal input "L": boot mode
70	P82/$\overline{\text{CS2}}$	I	Chip select signal output to the S-RAM
71	P83/$\overline{\text{CS3}}$/$\overline{\text{WAIT}}$/TA5OUT	O	L/R sampling clock signal output to the CD-MP3 processor
72	AM1	I	Function mode selection signal input Fixed at "H" in this set.
73	X2	O	System clock output (9 MHz)
74	DVSS	—	Ground pin
75	X1	I	System clock input (9 MHz)
76	DVCC3A	—	Power supply pin (+3.3 V)
77	P75/$\overline{\text{USBOC}}$	I	Over current detection signal input
78	P76/USBPON	O	USB VBUS power on/off control signal output "H": power on
79	D+	I/O	Two-way data (positive) bus with the USB connector
80	D–	I/O	Two-way data (negative) bus with the USB connector
81	AM0	I	Function mode selection signal input Fixed at "H" in this set.
82	P77/X1USB	O	Not used in this set. (Open)
83	DVSS	—	Ground pin
84	PF0/TXD0	O	Clear to send signal output to the system controller

Pin No.	Pin Name	I/O	Pin Description
85	PF1/RXD0	O	Serial data signal output
86	PF2/SCLK0/CTS0/ CLK/TB0OUT0	O	Serial data transfer clock signal output
87	PF3/TXD1/SPDO	O	Serial data signal output to the system controller
88	PF4/RXD1/SPDI	I	Serial data signal input from the system controller
89	PF5/SCLK1/CTS1/SPCLK	O	Not used in this set. (Open)
90	PN1/SDA0/TA3OUT/SO0	I/O	Two-way EEPROM IIC data bus Not used in this set.
91	PN2/SCL0/TA2IN/SI0	I/O	Two-way EEPROM IIC clock bus Not used in this set.
92	PN3/HCLK	O	Bit clock signal output to the CD-MP3 processor
93	PN4/HSSO/SDA1	O	Audio data output to the CD-MP3 processor
94	PN5/HSSI/SCL1	O	Gate signal output to the CD-MP3 processor
95	DVCC3A	—	Power supply pin (+3.3 V)
96	PG	I	Request signal input from the CD-MP3 processor
97	PG	I	Request signal input from the CD-MP3 processor
98, 99	PG1, PG0	I	Function selection signal input Fixed at “L” in this set.
100	DVSS	—	Ground pin

IC900 MB90M407PF-G-151E1 (DISPLAY CONTROL, KEY CONTROL) (PANEL BOARD)

Pin No.	Pin Name	I/O	Pin Description
1 to 8	G16 to G23	O	Grid drive signal output to the vacuum fluorescent display
9, 10	P35, P36	O	Segment drive signal output to the vacuum fluorescent display
11	VSS-IO	—	Ground pin (for I/O port)
12 to 22	P34 to P24	O	Segment drive signal output to the vacuum fluorescent display
23	VDD-FIP	—	Power supply pin (+3.3 V) (for vacuum fluorescent display)
24 to 41	P23 to P6	O	Segment drive signal output to the vacuum fluorescent display
42	VSS-IO	—	Ground pin (for I/O port)
43 to 47	P5 to P1	O	Segment drive signal output to the vacuum fluorescent display
48	VKK	—	Power supply pin (+3.3 V) (for vacuum fluorescent display)
49 to 51	MD0 to MD2	I	Setting pin for the CPU operational mode
52	LED-VIDEO, USB	O	Dynamic LED drive signal output of the VIDEO and USB indicator (“H”: LED on)
53	LED-TAPE, AUDIO	O	Dynamic LED drive signal output of the TAPE and AUDIO indicator (“H”: LED on)
54	LED-CD, TUNER	O	Dynamic LED drive signal output of the CD and TUNER indicator (“H”: LED on)
55	LED-VOL1, 2	O	Dynamic LED drive signal output of the (VOL1) and (VOL2) indicator (“H”: LED on)
56	LED-VOL3, 4	O	Dynamic LED drive signal output of the VOL3 1st and VOL4 indicator (“H”: LED on)
57	LED-VOL5, 6	O	Dynamic LED drive signal output of the VOL5 3rd and VOL6 indicator (“H”: LED on)
58	LED-FF, FR	O	Dynamic LED drive signal output of the FF and FR indicator (“H”: LED on)
59	LED-REC/ERASE, CD-USB SYNC/REC 1	O	Dynamic LED drive signal output of the REC/ERASE and CD-USB SYNC/REC 1 (“H”: LED on)
60	12C-DATA	I/O	Clock signal for IIC communication between Master Control controller and Display Control controller
61	12C-CLOCK	I/O	Data signal for IIC communication between Master Control controller and Display Control controller
62	AVCC	—	Power supply pin (+3.3 V) (for A/D conversion)
63	AVSS	—	Ground pin (for A/D conversion)
64 to 66	KEY0 to KEY2	I	Key input (A/D input)
67	ALL-BAND	I	Spectrum analyzer drive signal input from the spectrum analyzer band-pass filter (A/D input)
68 to 71	BPF4 to BPF1	I	Spectrum analyzer drive signal input from the spectrum analyzer band-pass filter (A/D input)
72	ORERATION DIAL	I	Jog dial pulse input from ORERATION DIAL encoder
73	VOLUME	I	Jog dial pulse input from the VOLUME encoder
74	NO USE	—	Not used. (GND)
75	LED-STOP	O	Dynamic LED drive signal output of the STOP indicator (“H”: LED on)
76	LED-CD-TAPE SYNC, TAPE REC PAUSE/START	O	Dynamic LED drive signal output of the CD-TAPE SYNC and TAPE REC PAUSE/START indicator (“H”: LED on)
77	RESET	I	System reset signal input from the Master Control controller (“L”: reset)
78	LED-AMS +, AMS –	O	Dynamic LED drive signal output of AMS + and AMS – indicator (“H”: LED on) Not used in this set.
79	LED-PLAY	O	Dynamic LED drive signal output of PLAY and PAUSE indicator (“H”: LED on)
80	LED selector	O	Dynamic LED drive select signal output
81	VSS-CPU	—	Ground pin (for CPU)
82	XO	O	System clock output (4 MHz)
83	XI	I	System clock input (4 MHz)
84	VCC-CPU	—	Power supply pin (+3.3 V) (for CPU)
85	NO USE	—	Not used. (GND)
86 to 100	G1 to 15	O	Grid drive signal output to the vacuum fluorescent display

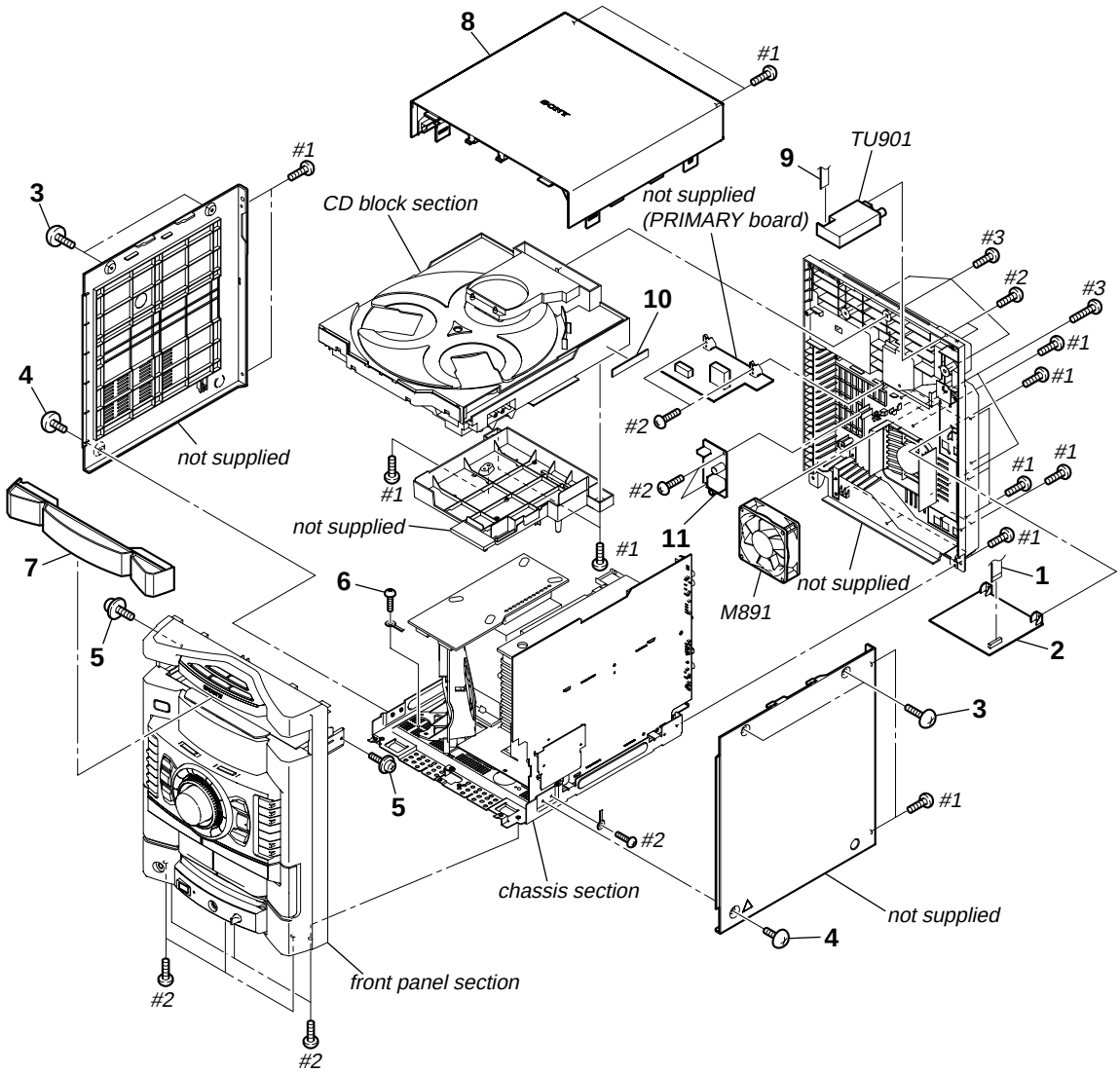
SECTION 7
EXPLODED VIEWS

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

- Abbreviation
  AR : Argentina model
  AUS : Australian model
  E2 : 120V AC area in E model
  E51 : Chilean and Peruvian model

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

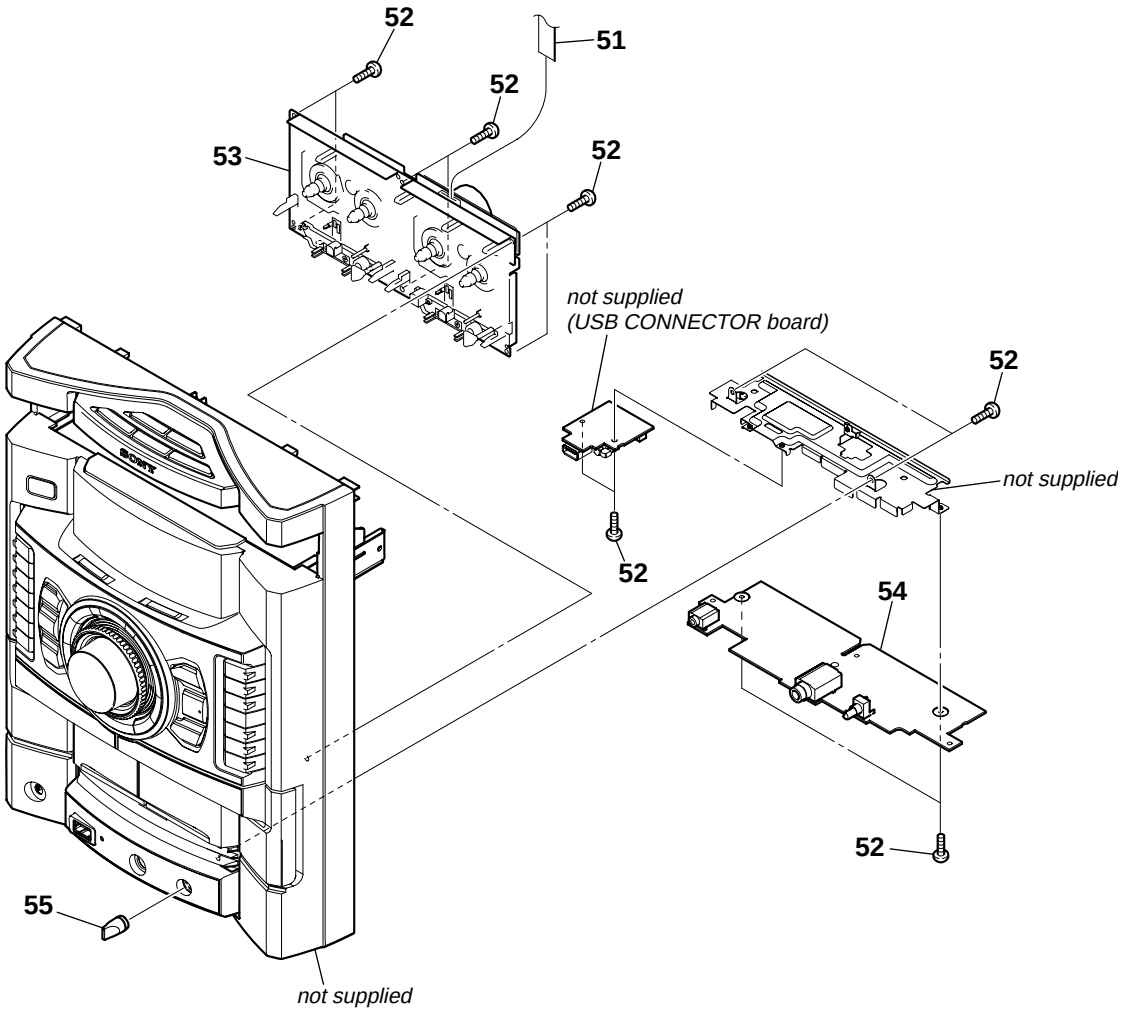
7-1. MAIN SECTION



Ref. No.	Part No.	Description	Remark
1	1-823-718-11	WIRE (FLAT TYPE) (17 CORE)	
2	A-1249-256-A	EFFECTOR BOARD, COMPLETE	
3	3-363-099-32	SCREW (CASE 3 TP2)	
4	3-363-099-02	SCREW (CASE 3 TP2)	
5	3-703-136-12	SCREW, TAPPING	
6	3-077-331-21	+BV 3 (3-CR)	
7	2-895-478-11	PANEL, LOADING (EXCEPT AUS)	
7	2-895-478-41	PANEL, LOADING (AUS)	
8	2-342-117-31	CASE (TOP)	

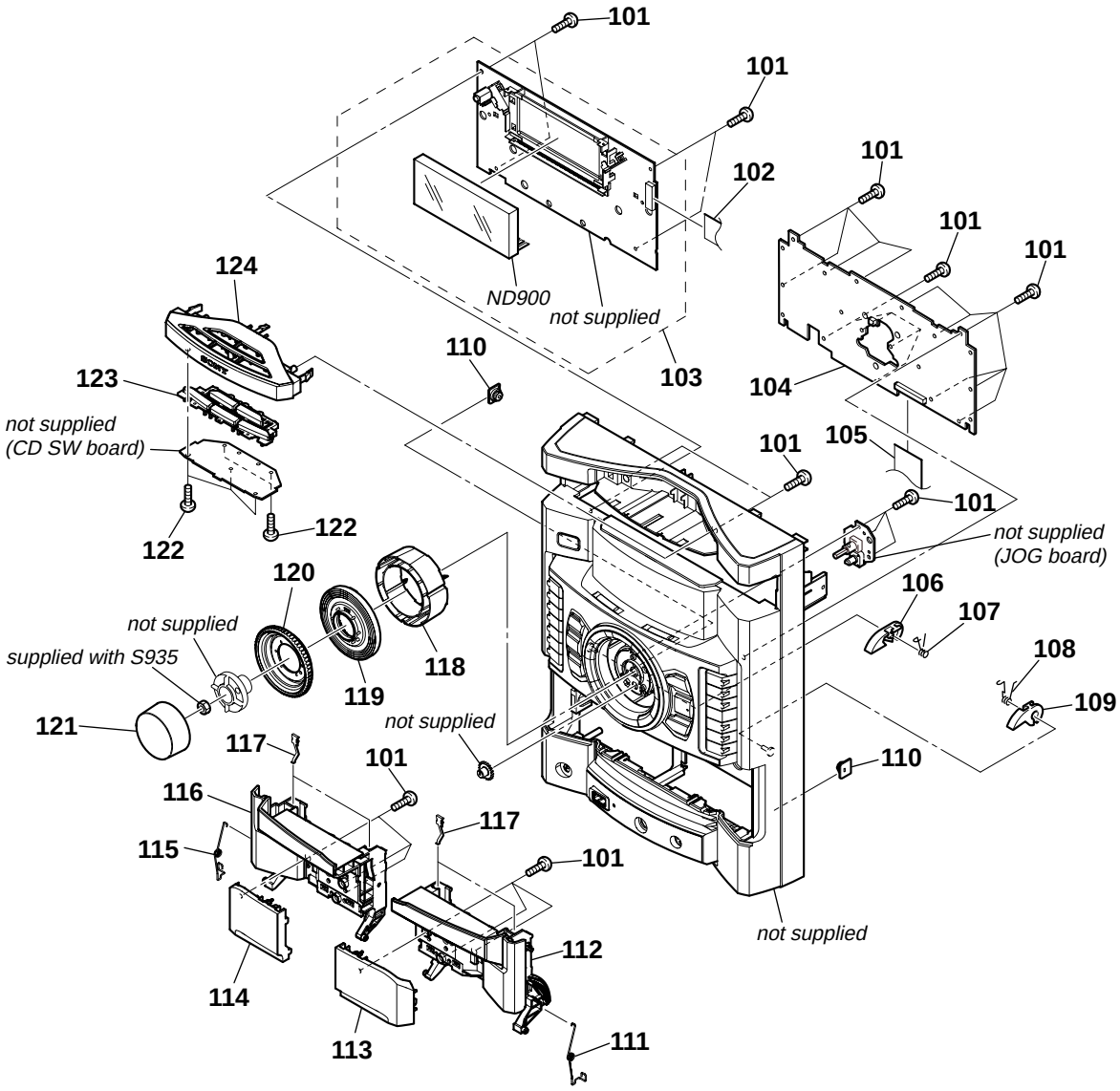
Ref. No.	Part No.	Description	Remark
9	1-828-956-11	WIRE (FLAT TYPE) (9 CORE)	
10	3-378-109-12	CUSHION, SARANET	
⚠11	1-468-737-51	SWITCHING, POWER (EXCEPT AUS)	
⚠11	1-468-737-71	SWITCHING, POWER (AUS)	
M891	1-763-372-11	FAN, DC	
TU901	1-693-734-11	TUNER (FM/AM) (ANTENNA)	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
#2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#3	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	

7-2. FRONT PANEL SECTION (1)



Ref. No.	Part No.	Description	Remark
51	1-828-964-11	WIRE (FLAT TYPE) (11 CORE)	
52	3-087-053-01	+BVTP 2.6 (3CR)	
53	1-417-656-11	DECK, MECHA	
54	A-1249-247-A	MIC BOARD, COMPLETE	
55	2-895-507-01	KNOB (MIC)	

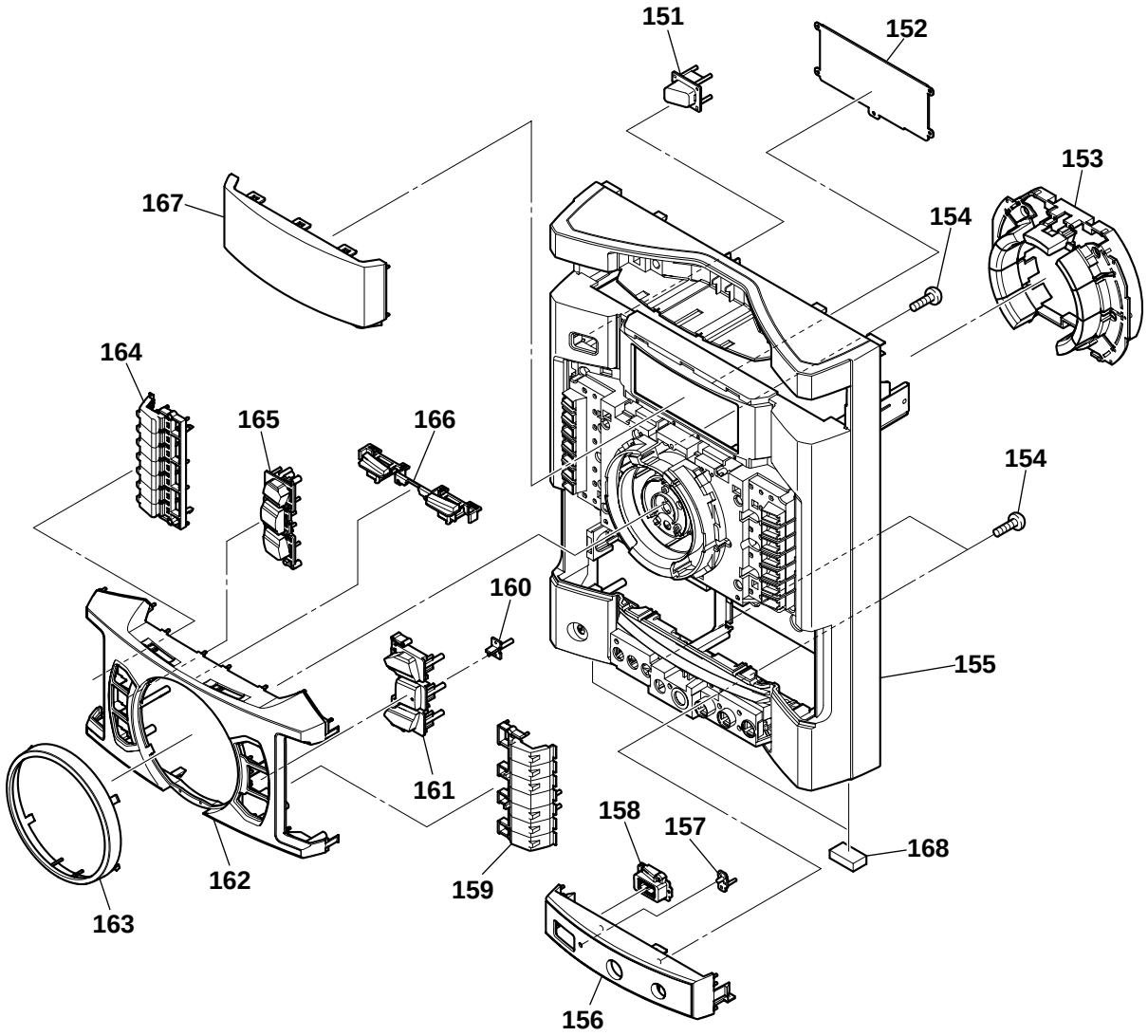
7-3. FRONT PANEL SECTION (2)



Ref. No.	Part No.	Description	Remark
101	3-087-053-01	+BVTP 2.6 (3CR)	
102	1-828-992-11	WIRE (FLAT TYPE) (17 CORE)	
103	A-1249-243-A	PANEL BOARD, COMPLETE	
104	A-1249-245-A	FUNCTION BOARD, COMPLETE	
105	1-829-032-11	WIRE (FLAT TYPE) (25 CORE)	
106	4-231-824-01	CAM (A), HEART	
107	4-231-836-01	SPRING (HEART CAM-A)	
108	4-231-841-01	SPRING (HEART CAM-B)	
109	4-231-825-01	CAM (B), HEART	
110	4-224-104-11	DAMPER	
111	2-897-474-01	SPRING (R)	
112	2-895-503-01	HOLDER (TC-R)	
113	2-895-505-11	ESCUTCHEON (TC-B)	

Ref. No.	Part No.	Description	Remark
114	2-895-504-11	ESCUTCHEON (TC-A)	
115	2-897-473-01	SPRING (L)	
116	2-895-502-01	HOLDER (TC-L)	
117	2-669-613-01	SPRING, DETENT	
118	2-895-494-01	REFLECTOR (VOLUME)	
119	2-895-492-01	INDICATOR (JOG)	
120	2-895-491-01	KNOB (JOG-P)	
121	2-895-490-01	KNOB (VOLUME)	
122	4-218-253-32	SCREW (M2.6), +BTTP	
123	2-895-481-01	BUTTON (DISC)	
124	2-895-479-01	ESCUTCHEON (CD)	
ND900	1-519-947-11	VACUUM FLUORESCENT DISPLAY	

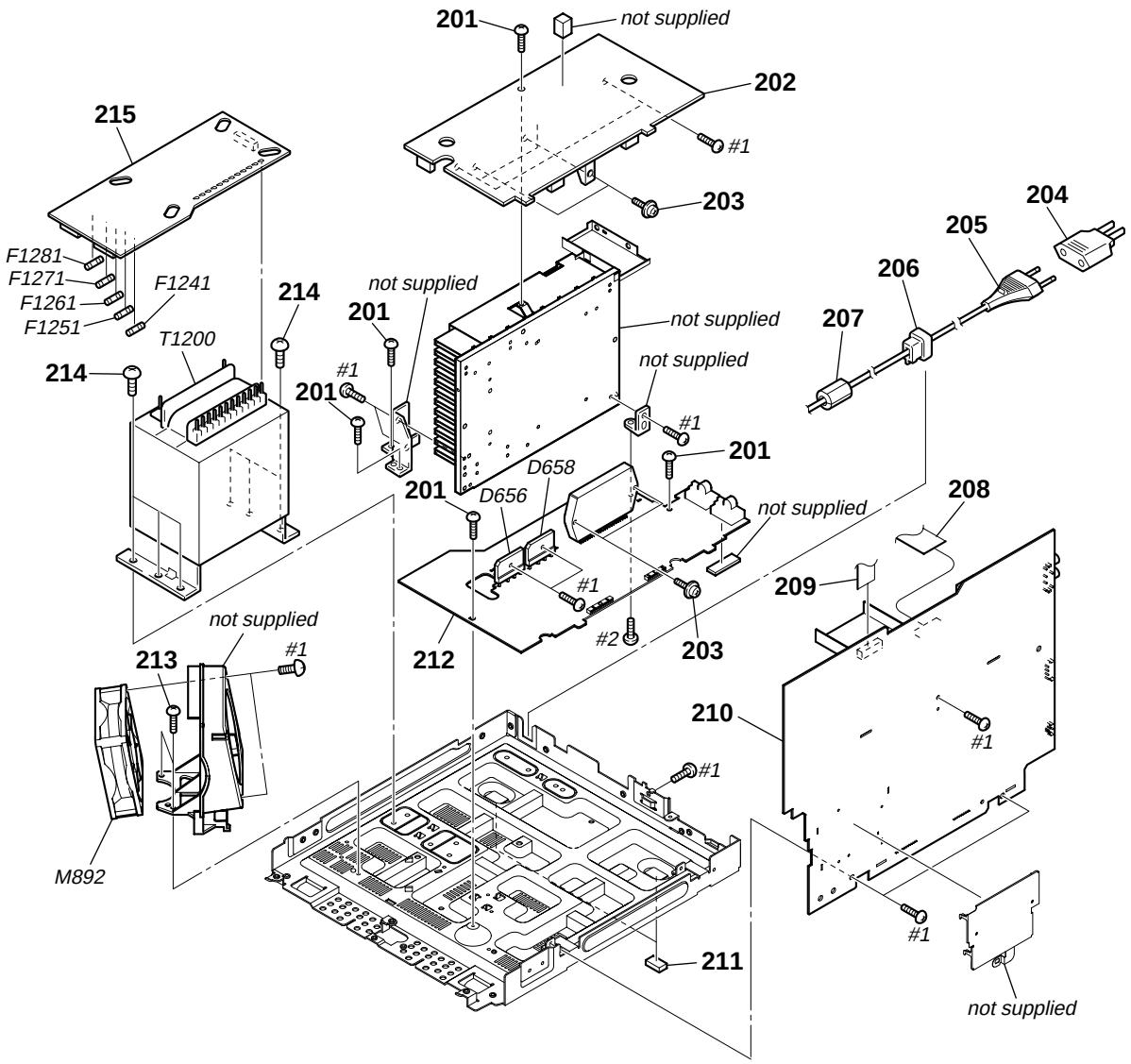
7-4. FRONT PANEL SECTION (3)



Ref. No.	Part No.	Description	Remark
151	2-895-499-01	WINDOW (REMOTE)	
152	2-895-498-01	FILTER (FL)	
153	2-895-496-11	BUTTON (EQ)	
154	3-087-053-01	+BVTP 2.6 (3CR)	
155	2-895-476-11	PANEL, FRONT	
156	2-895-506-11	ESCUTCHEON (MIC)	
157	2-895-508-01	INDICATOR (USB)	
158	2-895-477-01	BRACKET (USB)	
159	2-895-484-11	BUTTON (STOP)	
160	2-895-487-01	INDICATOR (PLAY)	

Ref. No.	Part No.	Description	Remark
161	2-895-486-11	BUTTON (PLAY)	
162	2-895-482-01	ESCUTCHEON (STR)	
163	2-895-489-01	RING (VOLUME)	
164	2-895-483-11	BUTTON (POWER)	
165	2-895-485-01	BUTTON (GROOVE)	
166	2-895-488-01	BUTTON (ILLUMINATION)	
167	2-895-497-01	WINDOW (FL) (EXCEPT AUS)	
167	2-895-497-11	WINDOW (FL) (AUS)	
168	4-225-252-21	CUSHION (FOOT)	

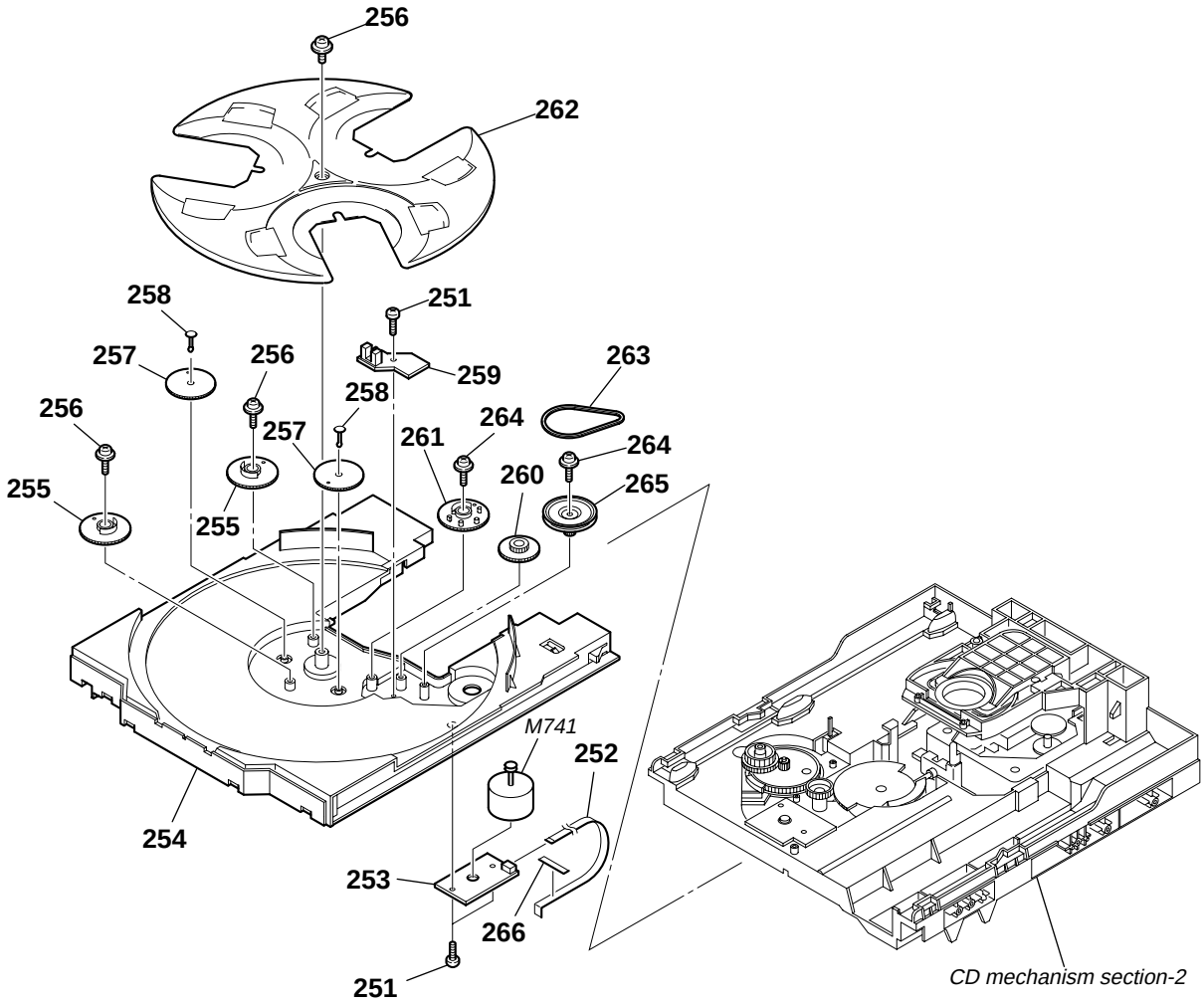
7-5. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
201	3-077-331-21	+BV 3 (3-CR)	
202	A-1249-251-A	SUBWOOFER BOARD, COMPLETE (E2)	
202	A-1276-570-A	SUBWOOFER BOARD, COMPLETE (E51)	
202	A-1276-585-A	SUBWOOFER BOARD, COMPLETE (AR)	
202	A-1276-615-A	SUBWOOFER BOARD, COMPLETE (AUS)	
203	3-905-609-31	SCREW (TRANSISTOR)	
⚠204	1-569-008-21	ADAPTOR, CONVERSION (E2,E51)	
⚠205	1-775-790-71	CORD, POWER (AUS)	
⚠205	1-777-071-83	CORD, POWER (E2,E51)	
⚠205	1-829-387-11	CORD, POWER (AR)	
206	3-703-244-21	BUSHING (2104), CORD	
207	1-457-369-11	CORE, FERRITE (EXCEPT AUS)	
207	1-500-497-11	FILTER, CLAMP (FERRITE CORE) (AUS)	
208	1-828-632-11	WIRE (FLAT TYPE) (21 CORE)	
209	1-828-973-11	WIRE (FLAT TYPE) (13 CORE)	
210	A-1249-237-A	MAIN BOARD, COMPLETE (E2)	
210	A-1276-581-A	MAIN BOARD, COMPLETE (AR)	
210	A-1276-610-A	MAIN BOARD, COMPLETE (AUS)	
210	A-1314-128-A	MAIN BOARD, COMPLETE (E51)	
211	4-225-252-21	CUSHION (FOOT)	

Ref. No.	Part No.	Description	Remark
212	A-1249-259-A	POWER BOARD, COMPLETE (E2)	
212	A-1276-573-A	POWER BOARD, COMPLETE (E51)	
212	A-1276-588-A	POWER BOARD, COMPLETE (AR)	
212	A-1276-618-A	POWER BOARD, COMPLETE (AUS)	
213	3-077-331-01	+BV 3 (3-CR)	
214	4-900-386-01	SCREW	
215	A-1249-262-A	TRANS BOARD, COMPLETE (E2,E51)	
215	A-1314-147-A	TRANS BOARD, COMPLETE (AR)	
215	A-1314-148-A	TRANS BOARD, COMPLETE (AUS)	
D656	6-500-249-01	DIODE D15XB20	
D658	8-719-073-32	DIODE D25XB60	
⚠F1241	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
⚠F1251	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
⚠F1261	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
⚠F1271	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
⚠F1281	1-532-504-33	FUSE (T4AL/250V)	
M892	1-763-372-11	FAN, DC	
⚠T1200	1-445-185-11	TRANSFORMER, POWER	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
#2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

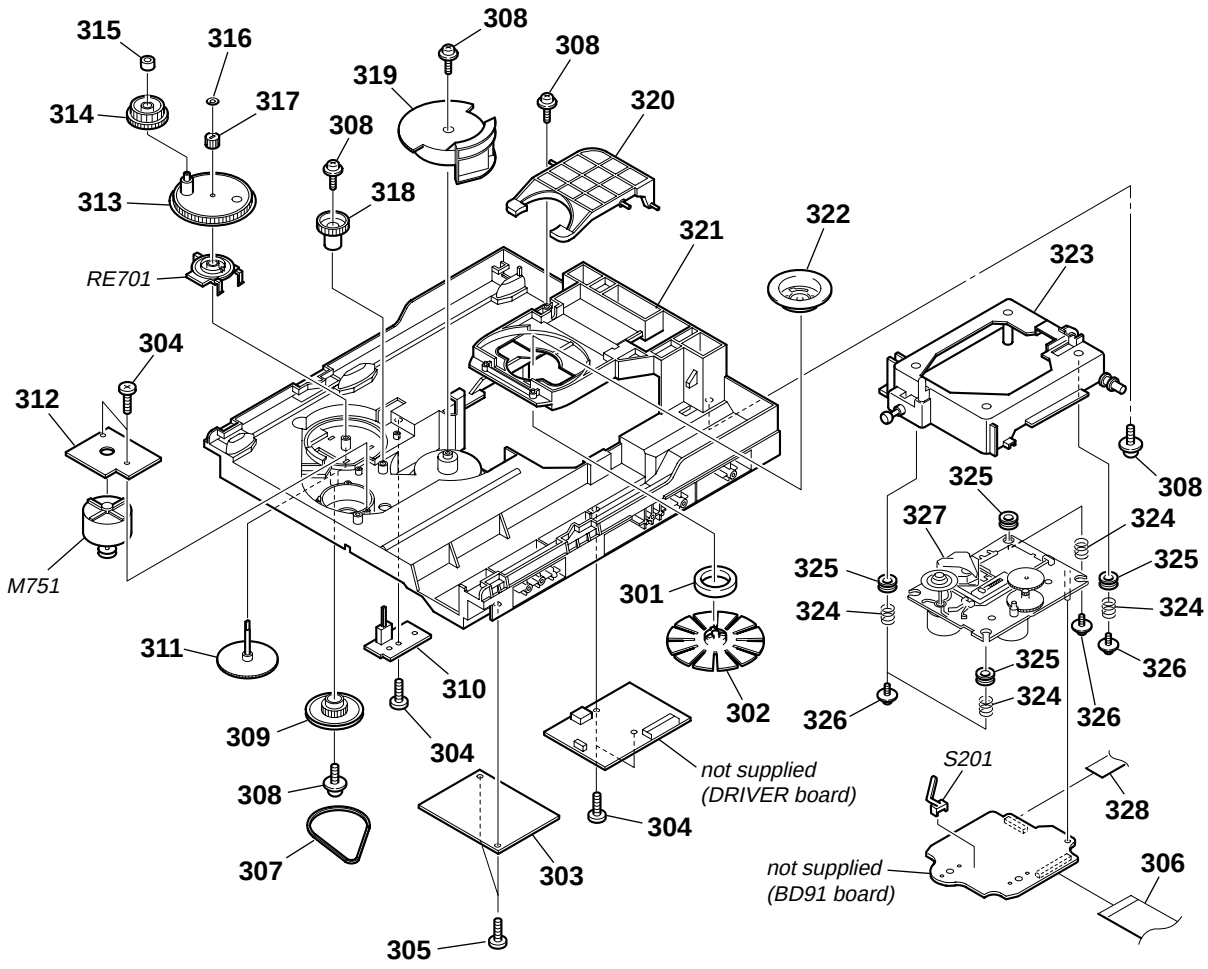
7-6. CD MECHANISM SECTION (1)
(CDM74KF-K6BD91UR-WOD)



Ref. No.	Part No.	Description	Remark
251	4-218-253-42	SCREW (M2.6), +BTTP	
252	1-828-938-11	WIRE (FLAT TYPE) (5 CORE)	
253	1-687-134-12	MOTOR (TB) BOARD	
254	4-243-815-11	TABLE (LOADING)	
255	4-245-571-02	GEAR (STOPPER)	
256	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING	
257	4-245-570-01	GEAR (JOINT)	
258	4-245-572-01	BUSHING (GEAR)	
259	1-687-132-12	SENSOR BOARD	

Ref. No.	Part No.	Description	Remark
260	4-243-820-01	GEAR (TABLE)	
261	4-243-819-01	GEAR (GENEVA)	
262	4-243-816-11	TRAY	
263	4-243-823-01	BELT (TABLE)	
264	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
265	4-243-821-01	PULLEY (TABLE)	
266	3-231-598-01	SHEET (BA)	
M741	A-1108-965-A	MOTOR ASSY, TABLE (TABLE)	

7-7. CD MECHANISM SECTION (2)
(CDM74KF-K6BD91UR-WOD)



Ref. No.	Part No.	Description	Remark
301	1-471-035-11	MAGNET ASSY	
302	X-4955-774-2	PULLEY (SM) ASSY, CHUCKING	
303	A-1252-157-A	USB BOARD, COMPLETE	
304	4-218-253-52	SCREW (M2.6), +BTTP	
305	3-087-053-01	+BVTP 2.6 (3CR)	
306	1-824-048-12	WIRE (FLAT TYPE) (27 CORE)	
307	4-244-034-01	BELT (LOADING)	
308	4-218-252-52	SCREW (+PTPWH M2.6), FLOATING	
309	4-225-844-01	GEAR (LOADING A)	
310	1-687-669-12	SW BOARD	
311	4-224-613-11	GEAR (SHAFT)	
312	1-687-133-12	MOTOR (LD) BOARD	
313	4-244-108-01	GEAR, SWING	
314	4-224-609-01	GEAR (LOADING C)	
315	4-224-608-01	COLLAR, SWING	
316	3-016-533-11	WASHER (FR), STOPPER	

Ref. No.	Part No.	Description	Remark
317	4-224-611-01	GEAR (LOADING B)	
318	4-224-606-01	GEAR (RV)	
319	4-243-818-01	GEAR (U/D)	
320	4-243-822-02	LEVER (LIFTER)	
321	4-243-817-22	CHASSIS	
322	4-221-688-01	PULLEY (B), CHUCKING	
323	X-2179-682-1	HOLDER (213) ASSY	
324	4-227-045-11	SPRING (INSULATOR), COIL	
325	4-227-549-11	INSULATOR	
326	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
⚠327	A-4735-357-A	BASE ASSY, OP	
328	1-834-268-11	WIRE (FLAT TYPE) (16 CORE)	
M751	A-4737-553-A	MOTOR ASSY, LOADING (LOADING)	
RE701	1-477-680-12	ENCODER, ROTARY (DISC TRAY ADDRESS DETECT)	
S201	1-771-853-11	SWITCH, DETECTION (LIMIT)	

SECTION 8
ELECTRICAL PARTS LIST

BD91

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

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

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

- Abbreviation
  AR : Argentina model
  AUS : Australian model
  E2 : 120V AC area in E model
  E51 : Chilean and Peruvian model

Ref. No.	Part No.	Description			Remark
		BD91 BOARD			
		**********			
		< CAPACITOR >			
C100	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C101	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C102	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C103	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C104	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C105	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C106	1-128-995-21	ELECT CHIP	100uF	20%	10V
C107	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C108	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C109	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C110	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C112	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C113	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C115	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C116	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C117	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C118	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C119	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C120	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C122	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C123	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C124	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C125	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C126	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C127	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C128	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C130	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C132	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C133	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C136	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C137	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C138	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C139	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C140	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C141	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C142	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C143	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C144	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C145	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C146	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C147	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C148	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C149	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C150	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C151	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C152	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C153	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C201	1-128-995-21	ELECT CHIP	100uF	20%	10V
C202	1-128-995-21	ELECT CHIP	100uF	20%	10V
C204	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C205	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C206	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C207	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C301	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C302	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C303	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C306	1-128-995-21	ELECT CHIP	100uF	20%	10V
C307	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C309	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C401	1-128-394-11	ELECT CHIP	220uF	20%	10V
C403	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C404	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C405	1-164-360-11	CERAMIC CHIP	0.1uF		16V
		< CONNECTOR >			
CN202	1-784-835-51	CONNECTOR, FFC (LIF(NON-ZIF)) 27P			
CN301	1-770-425-51	CONNECTOR, FFC/FPC 16P			
		< IC >			
IC101	6-710-827-01	IC TC94A70FG-008(S,D)			
IC201	6-710-808-01	IC TK63115SCL-G@GT			
IC401	6-710-637-01	IC BA5826SFP-E2			
		< TRANSISTOR >			
Q301	6-551-120-01	TRANSISTOR 2SA2119K			
		< RESISTOR >			
R101	1-216-813-11	METAL CHIP	220	5%	1/10W
R102	1-216-833-11	METAL CHIP	10K	5%	1/10W
R104	1-216-295-11	SHORT CHIP	0		
R105	1-216-857-11	METAL CHIP	1M	5%	1/10W
R106	1-216-821-11	METAL CHIP	1K	5%	1/10W
R108	1-500-445-21	FERRITE, EMI (SMD) (2012)			
R109	1-216-809-11	METAL CHIP	100	5%	1/10W

BD91 **CD-SW** **DRIVER**

Ref. No.	Part No.	Description			Remark
R110	1-216-833-11	METAL CHIP	10K	5%	1/10W
R111	1-216-809-11	METAL CHIP	100	5%	1/10W
R112	1-216-809-11	METAL CHIP	100	5%	1/10W
R114	1-216-833-11	METAL CHIP	10K	5%	1/10W
R118	1-216-845-11	METAL CHIP	100K	5%	1/10W
R119	1-216-864-11	SHORT CHIP	0		
R121	1-216-809-11	METAL CHIP	100	5%	1/10W
R128	1-216-853-11	METAL CHIP	470K	5%	1/10W
R129	1-216-821-11	METAL CHIP	1K	5%	1/10W
R130	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R134	1-216-857-11	METAL CHIP	1M	5%	1/10W
R135	1-216-853-11	METAL CHIP	470K	5%	1/10W
R136	1-216-837-11	METAL CHIP	22K	5%	1/10W
R139	1-216-841-11	METAL CHIP	47K	5%	1/10W
R140	1-216-864-11	SHORT CHIP	0		
R142	1-216-837-11	METAL CHIP	22K	5%	1/10W
R143	1-216-841-11	METAL CHIP	47K	5%	1/10W
R144	1-216-837-11	METAL CHIP	22K	5%	1/10W
R145	1-216-864-11	SHORT CHIP	0		
R146	1-216-864-11	SHORT CHIP	0		
R147	1-216-864-11	SHORT CHIP	0		
R148	1-216-864-11	SHORT CHIP	0		
R149	1-216-864-11	SHORT CHIP	0		
R150	1-216-864-11	SHORT CHIP	0		
R151	1-216-864-11	SHORT CHIP	0		
R153	1-216-857-11	METAL CHIP	1M	5%	1/10W
R154	1-216-857-11	METAL CHIP	1M	5%	1/10W
R155	1-216-805-11	METAL CHIP	47	5%	1/10W
R156	1-216-809-11	METAL CHIP	100	5%	1/10W
R157	1-216-809-11	METAL CHIP	100	5%	1/10W
R201	1-216-295-11	SHORT CHIP	0		
R202	1-216-295-11	SHORT CHIP	0		
R203	1-216-809-11	METAL CHIP	100	5%	1/10W
R204	1-216-809-11	METAL CHIP	100	5%	1/10W
R205	1-216-809-11	METAL CHIP	100	5%	1/10W
R206	1-216-809-11	METAL CHIP	100	5%	1/10W
R207	1-216-809-11	METAL CHIP	100	5%	1/10W
R208	1-216-809-11	METAL CHIP	100	5%	1/10W
R209	1-216-809-11	METAL CHIP	100	5%	1/10W
R210	1-216-809-11	METAL CHIP	100	5%	1/10W
R211	1-216-809-11	METAL CHIP	100	5%	1/10W
R212	1-216-809-11	METAL CHIP	100	5%	1/10W
R213	1-216-809-11	METAL CHIP	100	5%	1/10W
R214	1-216-809-11	METAL CHIP	100	5%	1/10W
R216	1-216-809-11	METAL CHIP	100	5%	1/10W
R218	1-216-845-11	METAL CHIP	100K	5%	1/10W
R219	1-216-845-11	METAL CHIP	100K	5%	1/10W
R220	1-216-845-11	METAL CHIP	100K	5%	1/10W
R221	1-216-845-11	METAL CHIP	100K	5%	1/10W
R222	1-216-845-11	METAL CHIP	100K	5%	1/10W
R223	1-216-845-11	METAL CHIP	100K	5%	1/10W
R224	1-216-809-11	METAL CHIP	100	5%	1/10W
R301	1-216-845-11	METAL CHIP	100K	5%	1/10W
R302	1-216-864-11	SHORT CHIP	0		
R303	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R304	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R402	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R405	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R408	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R414	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R415	1-216-841-11	METAL CHIP	47K	5%	1/10W
		< VIBRATOR >			
X102	1-795-101-21	VIBRATOR, CERAMIC (16.934MHz)			
**********					
		CD-SW BOARD			
		**********			
		< RESISTOR >			
R955	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R956	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R957	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R958	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R959	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		< SWITCH >			
S929	1-762-875-21	SWITCH, KEYBOARD (⏏ OPEN/CLOSE)			
S930	1-762-875-21	SWITCH, KEYBOARD (EX-CHANGE/DISC SKIP)			
S931	1-762-875-21	SWITCH, KEYBOARD (DISC 1)			
S932	1-762-875-21	SWITCH, KEYBOARD (DISC 2)			
S933	1-762-875-21	SWITCH, KEYBOARD (DISC 3)			
**********					
		DRIVER BOARD			
		**********			
		< 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
C752	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
CN701	1-784-735-11	CONNECTOR, FFC 13P			
CN702	1-784-766-11	CONNECTOR, FFC 5P			
* CN703	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P			
CN704	1-785-328-11	PIN, CONNECTOR (LIGHT ANGLE) 2P			
		< DIODE >			
D701	8-719-947-16	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

Ref. No.	Part No.	Description			Remark
R711	1-247-831-11	CARBON	1K	5%	1/4W
R712	1-247-847-11	CARBON	4.7K	5%	1/4W
R713	1-247-863-11	CARBON	22K	5%	1/4W
R721	1-247-847-11	CARBON	4.7K	5%	1/4W
R722	1-247-847-11	CARBON	4.7K	5%	1/4W
R723	1-247-847-11	CARBON	4.7K	5%	1/4W
R731	1-247-807-31	CARBON	100	5%	1/4W
R732	1-249-429-11	CARBON	10K	5%	1/4W
R733	1-247-831-11	CARBON	1K	5%	1/4W
R734	1-249-430-11	CARBON	12K	5%	1/4W
R736	1-249-412-11	CARBON	390	5%	1/4W
R751	1-247-847-11	CARBON	4.7K	5%	1/4W

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A-1249-256-A EFFECTOR BOARD, COMPLETE
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< CAPACITOR >

C1506	1-136-495-11	FILM	0.068uF	5%	50V
C1507	1-136-495-11	FILM	0.068uF	5%	50V
C1509	1-162-905-11	CERAMIC CHIP	1PF	0.25PF	50V
C1512	1-107-714-11	ELECT	10uF	20%	50V
C1513	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C1515	1-126-947-11	ELECT	47uF	20%	35V
C1517	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C1518	1-110-563-11	CERAMIC CHIP	0.068uF	10%	16V
C1519	1-126-960-11	ELECT	1uF	20%	50V
C1520	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C1521	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C1522	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C1524	1-126-957-11	ELECT	0.22uF	20%	50V
C1525	1-126-957-11	ELECT	0.22uF	20%	50V
C1526	1-136-497-81	FILM	0.1uF	5%	50V
C1527	1-110-563-11	CERAMIC CHIP	0.068uF	10%	16V
C1528	1-126-967-11	ELECT	47uF	20%	50V
C1529	1-107-726-11	CERAMIC CHIP	0.01uF	10%	16V
C1530	1-136-159-00	FILM	0.033uF	5%	50V
C1542	1-130-479-00	MYLAR	0.0047uF	5%	50V
C1544	1-130-479-00	MYLAR	0.0047uF	5%	50V
C1545	1-126-964-11	ELECT	10uF	20%	50V
C1546	1-126-964-11	ELECT	10uF	20%	50V
C1548	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C1552	1-126-964-11	ELECT	10uF	20%	50V
C1554	1-126-964-11	ELECT	10uF	20%	50V
C1555	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C1559	1-126-964-11	ELECT	10uF	20%	50V
C1560	1-126-964-11	ELECT	10uF	20%	50V
C1561	1-126-964-11	ELECT	10uF	20%	50V
C1562	1-126-964-11	ELECT	10uF	20%	50V
C1568	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C1571	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C1572	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C1584	1-104-658-11	ELECT	100uF	20%	10V
C1600	1-164-156-11	CERAMIC CHIP	0.1uF		25V

< CONNECTOR >

CN1502	1-793-600-11	CONNECTOR, FPC/FFC 17P			

Ref. No.	Part No.	Description			Remark

< DIODE >

D1502	6-501-169-01	DIODE UDZW-TE17-6.2B			

< IC >

IC1500	8-759-710-97	IC NJM4565M-D			
IC1501	8-759-496-41	IC M65850FP-E1			
IC1503	6-709-217-01	IC TC74LVX4051FT			
IC1505	8-759-710-97	IC NJM4565M-D			

< JUMPER RESISTOR >

JR1501	1-216-864-11	SHORT CHIP	0		
JR1502	1-216-864-11	SHORT CHIP	0		
JR1503	1-216-864-11	SHORT CHIP	0		
JR1600	1-216-864-11	SHORT CHIP	0		
JR1601	1-216-864-11	SHORT CHIP	0		

< COIL >

L1500	1-414-183-41	INDUCTOR	10uH		

< TRANSISTOR >

Q1500	8-729-055-10	FET 2SK3378ENTL			
Q1502	8-729-055-10	FET 2SK3378ENTL			
Q1506	8-729-055-10	FET 2SK3378ENTL			
Q1507	8-729-056-46	TRANSISTOR 2SC5053T100Q			
Q1508	8-729-055-10	FET 2SK3378ENTL			
Q1509	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q1513	8-729-027-43	TRANSISTOR DTC114EKA-T146			

< RESISTOR >

R1500	1-216-809-11	METAL CHIP	100	5%	1/10W
R1501	1-216-809-11	METAL CHIP	100	5%	1/10W
R1502	1-216-809-11	METAL CHIP	100	5%	1/10W
R1504	1-216-809-11	METAL CHIP	100	5%	1/10W
R1505	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1507	1-216-809-11	METAL CHIP	100	5%	1/10W
R1508	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1510	1-216-836-11	METAL CHIP	18K	5%	1/10W
R1511	1-216-836-11	METAL CHIP	18K	5%	1/10W
R1512	1-216-836-11	METAL CHIP	18K	5%	1/10W
R1514	1-216-836-11	METAL CHIP	18K	5%	1/10W
R1515	1-216-836-11	METAL CHIP	18K	5%	1/10W
R1516	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1519	1-216-840-11	METAL CHIP	39K	5%	1/10W
R1520	1-216-864-11	SHORT CHIP	0		
R1522	1-216-864-11	SHORT CHIP	0		
R1525	1-216-809-11	METAL CHIP	100	5%	1/10W
R1526	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1527	1-216-809-11	METAL CHIP	100	5%	1/10W
R1528	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1529	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1530	1-216-815-11	METAL CHIP	330	5%	1/10W
R1531	1-216-817-11	METAL CHIP	470	5%	1/10W
R1532	1-216-820-11	METAL CHIP	820	5%	1/10W
R1533	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R1534	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R1535	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R1536	1-216-828-11	METAL CHIP	3.9K	5%	1/10W

EFFECTOR **FUNCTION**

Ref. No.	Part No.	Description			Remark
R1537	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1538	1-216-838-11	METAL CHIP	27K	5%	1/10W
R1546	1-216-836-11	METAL CHIP	18K	5%	1/10W
R1547	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1565	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R1566	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R1567	1-216-837-11	METAL CHIP	22K	5%	1/10W
R1568	1-216-837-11	METAL CHIP	22K	5%	1/10W
R1569	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1570	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1571	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1572	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1573	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R1574	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1575	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1576	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R1579	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1580	1-216-837-11	METAL CHIP	22K	5%	1/10W
R1581	1-216-837-11	METAL CHIP	22K	5%	1/10W
R1582	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1584	1-216-864-11	SHORT CHIP	0		
R1585	1-216-864-11	SHORT CHIP	0		
R1586	1-216-864-11	SHORT CHIP	0		
R1589	1-216-803-11	METAL CHIP	33	5%	1/10W
R1590	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1591	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1592	1-216-864-11	SHORT CHIP	0		
R1594	1-216-836-11	METAL CHIP	18K	5%	1/10W
R1595	1-216-836-11	METAL CHIP	18K	5%	1/10W
R1598	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1600	1-216-838-11	METAL CHIP	27K	5%	1/10W
R1601	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1602	1-216-838-11	METAL CHIP	27K	5%	1/10W
R1603	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1604	1-216-837-11	METAL CHIP	22K	5%	1/10W
R1605	1-216-837-11	METAL CHIP	22K	5%	1/10W
R1606	1-216-837-11	METAL CHIP	22K	5%	1/10W
R1607	1-216-837-11	METAL CHIP	22K	5%	1/10W

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	A-1249-245-A	FUNCTION BOARD, COMPLETE			
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		< CAPACITOR >			
C947	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
CN904	1-785-329-11	PIN, CONNECTOR (LIGHT ANGLE) 3P			
CN905	1-785-328-11	PIN, CONNECTOR (LIGHT ANGLE) 2P			
CN950	1-784-747-11	CONNECTOR, FFC 25P			
		< DIODE >			
D904	6-500-809-01	LED SELU5223C-STP15 (I/⏻)			
D905	6-500-809-01	LED SELU5223C-STP15 (CD)			
D906	6-500-809-01	LED SELU5223C-STP15 (TUNER/BAND)			
D907	6-500-809-01	LED SELU5223C-STP15 (TAPE A/B)			
D908	6-500-809-01	LED SELU5223C-STP15 (AUDIO)			
D909	6-500-809-01	LED SELU5223C-STP15 (VIDEO)			
D910	6-500-809-01	LED SELU5223C-STP15 (USB)			
D912	6-500-809-01	LED SELU5223C-STP15 (▶▶)			
D913	6-500-809-01	LED SELU5223C-STP15 (◀◀)			
D914	6-500-809-01	LED SELU5223C-STP15 (■)			
D916	6-500-809-01	LED SELU5223C-STP15 (CD-TAPE SYNC)			
D917	6-500-809-01	LED SELU5223C-STP15 (CD-USB SYNC/REC 1)			
D921	6-501-228-01	LED SELU5420E-STP15 (▶II)			
D922	6-500-809-01	LED SELU5223C-STP15 (ILLUMINATION)			
D923	6-500-809-01	LED SELU5223C-STP15 (ILLUMINATION)			
D924	6-500-809-01	LED SELU5223C-STP15 (ILLUMINATION)			
D925	6-500-809-01	LED SELU5223C-STP15 (ILLUMINATION)			
D926	6-500-809-01	LED SELU5223C-STP15 (ILLUMINATION)			
D927	6-500-809-01	LED SELU5223C-STP15 (ILLUMINATION)			
D928	8-719-404-50	DIODE MA111-TX			
D929	6-500-809-01	LED SELU5223C-STP15 (TAPE REC PAUSE/START)			
D930	6-501-228-01	LED SELU5420E-STP15 (I/⏻)			
		< TRANSISTOR >			
Q904	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q905	8-729-027-29	TRANSISTOR DTA123JKA-T146			
Q906	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q907	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q908	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q909	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q910	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q911	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q913	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q914	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q915	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q916	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q921	8-729-027-50	TRANSISTOR DTC123JKA-T146			
		< RESISTOR >			
R900	1-216-814-11	METAL CHIP	270	5%	1/10W
R901	1-216-839-11	METAL CHIP	33K	5%	1/10W
R902	1-216-837-11	METAL CHIP	22K	5%	1/10W
R903	1-216-835-11	METAL CHIP	15K	5%	1/10W
R904	1-216-833-11	METAL CHIP	10K	5%	1/10W
R905	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R906	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R907	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R908	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R909	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R910	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R911	1-216-821-11	METAL CHIP	1K	5%	1/10W
R912	1-216-819-11	METAL CHIP	680	5%	1/10W
R913	1-216-817-11	METAL CHIP	470	5%	1/10W
R914	1-216-835-11	METAL CHIP	15K	5%	1/10W
R915	1-216-833-11	METAL CHIP	10K	5%	1/10W
R916	1-216-864-11	SHORT CHIP	0		
R917	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R918	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R919	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R920	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R921	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R922	1-216-823-11	METAL CHIP	1.5K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R923	1-216-821-11	METAL CHIP	1K	5%	1/10W
R924	1-216-819-11	METAL CHIP	680	5%	1/10W
R925	1-216-817-11	METAL CHIP	470	5%	1/10W
R926	1-216-821-11	METAL CHIP	1K	5%	1/10W
R927	1-216-819-11	METAL CHIP	680	5%	1/10W
R928	1-216-817-11	METAL CHIP	470	5%	1/10W
R961	1-216-819-11	METAL CHIP	680	5%	1/10W
R964	1-216-819-11	METAL CHIP	680	5%	1/10W
R984	1-216-801-11	METAL CHIP	22	5%	1/10W
R987	1-216-808-11	METAL CHIP	82	5%	1/10W
R990	1-216-809-11	METAL CHIP	100	5%	1/10W
R991	1-216-821-11	METAL CHIP	1K	5%	1/10W
R992	1-216-821-11	METAL CHIP	1K	5%	1/10W
R993	1-216-821-11	METAL CHIP	1K	5%	1/10W
R995	1-216-821-11	METAL CHIP	1K	5%	1/10W
R996	1-216-821-11	METAL CHIP	1K	5%	1/10W
R997	1-216-821-11	METAL CHIP	1K	5%	1/10W
R998	1-216-821-11	METAL CHIP	1K	5%	1/10W
R999	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1000	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1002	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1003	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1004	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1005	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1006	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1007	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1009	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1010	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1011	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1015	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1016	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1017	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1019	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1020	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1021	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1022	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1023	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1024	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1028	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1029	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1030	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1032	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1033	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1034	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1047	1-216-820-11	METAL CHIP	820	5%	1/10W
R1048	1-216-820-11	METAL CHIP	820	5%	1/10W
R1049	1-216-820-11	METAL CHIP	820	5%	1/10W
R1052	1-216-837-11	METAL CHIP	22K	5%	1/10W
R1056	1-216-817-11	METAL CHIP	470	5%	1/10W
R1057	1-216-817-11	METAL CHIP	470	5%	1/10W
R1058	1-216-817-11	METAL CHIP	470	5%	1/10W
R1060	1-216-817-11	METAL CHIP	470	5%	1/10W
R1061	1-216-817-11	METAL CHIP	470	5%	1/10W
R1062	1-216-817-11	METAL CHIP	470	5%	1/10W
R1064	1-216-817-11	METAL CHIP	470	5%	1/10W
R1065	1-216-817-11	METAL CHIP	470	5%	1/10W
R1066	1-216-817-11	METAL CHIP	470	5%	1/10W
R1178	1-216-814-11	METAL CHIP	270	5%	1/10W

Ref. No.	Part No.	Description			Remark
		< SWITCH >			
S900	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)			
S901	1-762-875-21	SWITCH, KEYBOARD (USB)			
S902	1-762-875-21	SWITCH, KEYBOARD (VIDEO)			
S903	1-762-875-21	SWITCH, KEYBOARD (AUDIO)			
S904	1-762-875-21	SWITCH, KEYBOARD (TAPE A/B)			
S905	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)			
S906	1-762-875-21	SWITCH, KEYBOARD (CD)			
S907	1-762-875-21	SWITCH, KEYBOARD (ILLUMINATION)			
S908	1-762-875-21	SWITCH, KEYBOARD (FLANGER)			
S909	1-762-875-21	SWITCH, KEYBOARD (DELAY)			
S910	1-762-875-21	SWITCH, KEYBOARD (CHORUS)			
S911	1-762-875-21	SWITCH, KEYBOARD (ENTER)			
S912	1-762-875-21	SWITCH, KEYBOARD (ERASE)			
S913	1-762-875-21	SWITCH, KEYBOARD (SOUND FLASH)			
S914	1-762-875-21	SWITCH, KEYBOARD (CD-TAPE SYNC)			
S915	1-762-875-21	SWITCH, KEYBOARD (CD-USB SYNC/REC 1)			
S917	1-762-875-21	SWITCH, KEYBOARD (■)			
S918	1-762-875-21	SWITCH, KEYBOARD (◀◀)			
S919	1-762-875-21	SWITCH, KEYBOARD (▶▶)			
S920	1-762-875-21	SWITCH, KEYBOARD (▶▶I)			
S921	1-762-875-21	SWITCH, KEYBOARD (▶II)			
S922	1-762-875-21	SWITCH, KEYBOARD (I◀◀)			
S923	1-762-875-21	SWITCH, KEYBOARD (RETURN)			
S924	1-762-875-21	SWITCH, KEYBOARD (AMP MENU)			
S925	1-762-875-21	SWITCH, KEYBOARD (SURROUND SPEAKER MODE)			
S926	1-762-875-21	SWITCH, KEYBOARD (EQ BAND/MEMORY)			
S927	1-762-875-21	SWITCH, KEYBOARD (GROOVE)			
S928	1-762-875-21	SWITCH, KEYBOARD (PRESET EQ)			
S934	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			
S937	1-762-875-21	SWITCH, KEYBOARD (TAPE REC PAUSE/START)			
**********					
		JOG BOARD **********			
		< CAPACITOR >			
C980	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C986	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
		< JUMPER RESISTOR >			
JR1099	1-216-864-11	SHORT CHIP	0		
		< RESISTOR >			
R1068	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1069	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R1070	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1071	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
		< ROTARY ENCODER >			
S935	1-418-725-51	ENCODER, ROTARY (12 TYPE) (MASTER VOLUME)			
S936	1-478-133-11	ENCODER, ROTARY (OPERATION DIAL)			
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MAIN

Ref. No.	Part No.	Description			Remark
	A-1249-237-A	MAIN BOARD, COMPLETE (E2)			
	A-1276-581-A	MAIN BOARD, COMPLETE (AR)			
	A-1276-610-A	MAIN BOARD, COMPLETE (AUS)			
	A-1314-128-A	MAIN BOARD, COMPLETE (E51)			
		**********			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3			
		< CAPACITOR >			
C100	1-104-658-11	ELECT	100uF	20%	10V
C102	1-126-962-11	ELECT	3.3uF	20%	50V
C103	1-126-964-11	ELECT	10uF	20%	50V
C104	1-126-964-11	ELECT	10uF	20%	50V
C105	1-126-964-11	ELECT	10uF	20%	50V
C106	1-130-487-00	MYLAR	0.022uF	5%	50V
C107	1-130-487-00	MYLAR	0.022uF	5%	50V
C108	1-130-487-00	MYLAR	0.022uF	5%	50V
C109	1-126-960-11	ELECT	1uF	20%	50V
C110	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C111	1-126-964-11	ELECT	10uF	20%	50V
C112	1-137-190-11	FILM	0.22uF	5%	50V
C113	1-136-170-00	FILM	0.27uF	5%	50V
C115	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C116	1-126-923-11	ELECT	220uF	20%	10V
C130	1-126-964-11	ELECT	10uF	20%	50V
C131	1-126-959-11	ELECT	0.47uF	20%	50V
C140	1-130-493-00	MYLAR	0.068uF	5%	50V
C149	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C150	1-126-964-11	ELECT	10uF	20%	50V
C152	1-126-962-11	ELECT	3.3uF	20%	50V
C153	1-126-964-11	ELECT	10uF	20%	50V
C154	1-126-964-11	ELECT	10uF	20%	50V
C155	1-126-964-11	ELECT	10uF	20%	50V
C156	1-130-487-00	MYLAR	0.022uF	5%	50V
C157	1-130-487-00	MYLAR	0.022uF	5%	50V
C158	1-130-487-00	MYLAR	0.022uF	5%	50V
C159	1-126-960-11	ELECT	1uF	20%	50V
C160	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C161	1-126-964-11	ELECT	10uF	20%	50V
C162	1-136-170-00	FILM	0.27uF	5%	50V
C163	1-137-190-11	FILM	0.22uF	5%	50V
C180	1-126-963-11	ELECT	4.7uF	20%	50V
C181	1-126-963-11	ELECT	4.7uF	20%	50V
C202	1-126-964-11	ELECT	10uF	20%	50V
C203	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C204	1-126-923-11	ELECT	220uF	20%	10V
C205	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C206	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C207	1-126-960-11	ELECT	1uF	20%	50V
C220	1-136-497-81	FILM	0.1uF	5%	50V
C221	1-136-497-81	FILM	0.1uF	5%	50V
C222	1-104-658-11	ELECT	100uF	20%	10V
C223	1-104-658-11	ELECT	100uF	20%	10V
C230	1-136-497-81	FILM	0.1uF	5%	50V
C231	1-136-497-81	FILM	0.1uF	5%	50V
C240	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C241	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C242	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C250	1-126-962-11	ELECT	3.3uF	20%	50V
C251	1-126-962-11	ELECT	3.3uF	20%	50V
C260	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C261	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C262	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C263	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C264	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C280	1-126-964-11	ELECT	10uF	20%	50V
C281	1-126-964-11	ELECT	10uF	20%	50V
C301	1-136-967-11	FILM	0.012uF	5%	100V
C303	1-136-497-81	FILM	0.1uF	5%	50V
C304	1-126-964-11	ELECT	10uF	20%	50V
C305	1-112-096-11	ELECT	1uF	20%	50V
C306	1-126-961-11	ELECT	2.2uF	20%	50V
C307	1-126-964-11	ELECT	10uF	20%	50V
C308	1-126-925-11	ELECT	470uF	20%	10V
C309	1-126-947-11	ELECT	47uF	20%	35V
C310	1-126-964-11	ELECT	10uF	20%	50V
C311	1-126-964-11	ELECT	10uF	20%	50V
C312	1-126-964-11	ELECT	10uF	20%	50V
C314	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C340	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C341	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C351	1-136-967-11	FILM	0.012uF	5%	100V
C353	1-136-497-81	FILM	0.1uF	5%	50V
C354	1-126-964-11	ELECT	10uF	20%	50V
C355	1-112-096-11	ELECT	1uF	20%	50V
C356	1-126-961-11	ELECT	2.2uF	20%	50V
C359	1-126-947-11	ELECT	47uF	20%	35V
C361	1-126-964-11	ELECT	10uF	20%	50V
C364	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C370	1-137-150-11	FILM	0.01uF	5%	100V
C371	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C372	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C373	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C374	1-126-947-11	ELECT	47uF	20%	35V
C375	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C376	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C377	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C378	1-162-928-11	CERAMIC CHIP	120PF	5%	50V
C379	1-130-481-00	MYLAR	0.0068uF	5%	50V
C380	1-162-928-11	CERAMIC CHIP	120PF	5%	50V
C381	1-164-670-11	CERAMIC CHIP	0.0012uF	5%	16V
C382	1-164-670-11	CERAMIC CHIP	0.0012uF	5%	16V
C383	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C384	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C385	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C386	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C405	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C410	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C411	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C412	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C416	1-104-656-11	ELECT	2200uF	20%	6.3V
C417	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V
C462	1-104-658-11	ELECT	100uF	20%	10V
C464	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C497	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C498	1-126-964-11	ELECT	10uF	20%	50V
C499	1-164-156-11	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description			Remark
C501	1-126-965-11	ELECT	22uF	20%	50V
C502	1-136-497-81	FILM	0.1uF	5%	50V
C503	1-136-497-81	FILM	0.1uF	5%	50V
C511	1-126-964-11	ELECT	10uF	20%	50V (E2,E51)
C520	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C534	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C535	1-126-926-11	ELECT	1000uF	20%	10V
C536	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C539	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C540	1-126-963-11	ELECT	4.7uF	20%	50V
C541	1-126-963-11	ELECT	4.7uF	20%	50V
C544	1-126-963-11	ELECT	4.7uF	20%	50V
C545	1-126-963-11	ELECT	4.7uF	20%	50V
C550	1-126-933-11	ELECT	100uF	20%	16V
C551	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C552	1-126-961-11	ELECT	2.2uF	20%	50V
C553	1-126-942-61	ELECT	1000uF	20%	25V
C560	1-130-483-00	MYLAR	0.01uF	5%	50V
C561	1-130-483-00	MYLAR	0.01uF	5%	50V
C562	1-126-933-11	ELECT	100uF	20%	16V
C563	1-126-925-11	ELECT	470uF	20%	10V
C564	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V
C565	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V
C566	1-128-548-11	ELECT	4700uF	20%	25V
C567	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V
C568	1-126-916-11	ELECT	1000uF	20%	6.3V
C573	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V
C574	1-126-933-11	ELECT	100uF	20%	16V
C580	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C581	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C582	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C583	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C584	1-104-655-11	ELECT	470uF	20%	6.3V
C585	1-126-925-11	ELECT	470uF	20%	10V
C586	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C587	1-126-925-11	ELECT	470uF	20%	10V
C588	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C589	1-126-963-11	ELECT	4.7uF	20%	50V
C590	1-126-963-11	ELECT	4.7uF	20%	50V
C591	1-126-925-11	ELECT	470uF	20%	10V
C592	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V
C594	1-126-963-11	ELECT	4.7uF	20%	50V
C595	1-126-963-11	ELECT	4.7uF	20%	50V
C596	1-126-964-11	ELECT	10uF	20%	50V
C597	1-126-964-11	ELECT	10uF	20%	50V
C600	1-126-964-11	ELECT	10uF	20%	50V
C601	1-126-964-11	ELECT	10uF	20%	50V
C603	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C604	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C605	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C608	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V
C609	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C614	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V
C615	1-130-483-00	MYLAR	0.01uF	5%	50V
C620	1-126-961-11	ELECT	2.2uF	20%	50V
C621	1-100-717-11	CERAMIC CHIP	1uF		16V
C625	1-130-483-00	MYLAR	0.01uF	5%	50V

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
CN100	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P	
CN102	1-820-049-11	CONNECTOR (SUBWOOFER)	(SYSTEM CONTROL)
CN501	1-573-845-11	CONNECTOR, BOARD TO BOARD 13P	
* CN502	1-774-876-21	CONNECTOR, BOARD TO BOARD 8P	
CN503	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CN506	1-568-828-11	CONNECTOR, FFC 9P	
* CN507	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
CN508	1-784-778-11	CONNECTOR, FFC 17P	
CN509	1-568-830-11	CONNECTOR, FFC 11P	
CN511	1-784-774-11	CONNECTOR, FFC 13P	
CN512	1-793-600-11	CONNECTOR, FPC/FFC 17P	
* CN513	1-774-876-21	CONNECTOR, BOARD TO BOARD 8P	
* CN580	1-564-506-11	PLUG, CONNECTOR 3P	
* CN581	1-564-506-11	PLUG, CONNECTOR 3P	
CN5051	1-819-027-11	CONNECTOR, FPC/FFC 27P	
CN5053	1-815-149-11	CONNECTOR, FPC/FFC (1mm PITCH) 21P	
		< DIODE >	
D101	8-719-404-50	DIODE MA111-TX (EXCEPT AUS)	
D102	8-719-404-50	DIODE MA111-TX (EXCEPT AUS)	
D325	6-501-166-01	DIODE UDZW-TE17-4.7B (EXCEPT AUS)	
D340	8-719-404-50	DIODE MA111-TX	
D342	8-719-404-50	DIODE MA111-TX	
D402	6-500-334-01	DIODE MC2836-T112-1	
D501	8-719-404-50	DIODE MA111-TX	
D502	8-719-404-50	DIODE MA111-TX	
D503	8-719-404-50	DIODE MA111-TX	
D504	8-719-404-50	DIODE MA111-TX	
* D540	8-719-500-62	DIODE D5SBA60	
D550	8-719-404-50	DIODE MA111-TX	
D551	8-719-404-50	DIODE MA111-TX (E2,E51)	
D561	6-500-522-21	DIODE 10EDB40-TB3	
D562	6-500-522-21	DIODE 10EDB40-TB3	
D581	6-501-169-01	DIODE UDZW-TE17-6.2B	
D582	6-501-177-01	DIODE UDZW-TE17-13B	
D583	6-501-170-01	DIODE UDZW-TE17-6.8B	
D584	8-719-071-54	DIODE HZU2.0BTRF	
D585	6-500-334-01	DIODE MC2836-T112-1	
D590	6-500-522-21	DIODE 10EDB40-TB3	
D591	8-719-058-24	DIODE RB501V-40TE-17	
D592	6-500-522-21	DIODE 10EDB40-TB3	
D593	8-719-404-50	DIODE MA111-TX	
D594	6-500-522-21	DIODE 10EDB40-TB3	
D595	6-501-579-01	DIODE MC2837	
		< JUMPER RESISTOR >	
FB150	1-216-864-11	SHORT CHIP 0	
FB260	1-216-864-11	SHORT CHIP 0	
FB261	1-216-864-11	SHORT CHIP 0	
FB262	1-216-864-11	SHORT CHIP 0	
FB263	1-216-864-11	SHORT CHIP 0	
FB507	1-216-864-11	SHORT CHIP 0	
FB509	1-216-864-11	SHORT CHIP 0	
FB512	1-216-864-11	SHORT CHIP 0	

MAIN

Ref. No.	Part No.	Description	Remark
		< IC >	
IC101	6-703-650-11	IC M61529FP-D60G	
IC201	6-703-651-11	IC M61530FP-D60G	
IC301	6-702-130-01	IC HA12237F	
IC401	6-807-328-01	IC M30622MGP-A57FPU0	
IC402	6-705-809-01	IC BD4929G-TR	
IC550	6-703-610-01	IC RT8H015C-T112-1	
IC560	8-759-394-36	IC BA09T	
IC561	8-759-394-36	IC BA09T	
IC562	6-702-771-01	IC TA78033LS	
IC563	8-759-525-25	IC BU4052BCF-E2	
IC564	8-759-525-25	IC BU4052BCF-E2	
IC565	6-700-898-01	IC PQ05RD21J00H	
IC566	8-759-523-03	IC TC74HC4066AFT(EL)	
IC567	8-759-523-03	IC TC74HC4066AFT(EL)	
IC568	6-707-870-01	IC TC74VHC157FT(EKJ)	
IC569	6-703-546-01	IC TA7804LS	
IC570	8-759-653-07	IC PQ09RD21J00H	
		< JACK >	
J101	1-794-981-11	JACK, PIN 4P (AUDIO IN/VIDEO IN)	
		< CONNECTOR >	
J103	1-820-048-11	CONNECTOR (LIGHTING) (D-LIGHT SYNC OUT) (EXCEPT AUS)	
		< JUMPER RESISTOR >	
JR114	1-216-864-11	SHORT CHIP 0	
JR129	1-216-864-11	SHORT CHIP 0	
JR131	1-216-864-11	SHORT CHIP 0 (AUS,AR)	
JR300	1-216-864-11	SHORT CHIP 0	
JR301	1-216-864-11	SHORT CHIP 0	
JR304	1-216-864-11	SHORT CHIP 0	
JR305	1-216-864-11	SHORT CHIP 0	
JR307	1-216-864-11	SHORT CHIP 0	
JR309	1-216-864-11	SHORT CHIP 0	
JR310	1-216-864-11	SHORT CHIP 0	
JR313	1-216-864-11	SHORT CHIP 0	
JR314	1-216-864-11	SHORT CHIP 0	
JR316	1-216-864-11	SHORT CHIP 0	
JR317	1-216-864-11	SHORT CHIP 0	
JR318	1-216-864-11	SHORT CHIP 0	
JR319	1-216-864-11	SHORT CHIP 0	
JR320	1-216-864-11	SHORT CHIP 0	
JR322	1-216-864-11	SHORT CHIP 0	
JR323	1-216-864-11	SHORT CHIP 0	
JR329	1-216-296-11	SHORT CHIP 0	
JR330	1-216-864-11	SHORT CHIP 0	
JR333	1-216-864-11	SHORT CHIP 0	
JR335	1-216-864-11	SHORT CHIP 0	
JR336	1-216-864-11	SHORT CHIP 0	
JR337	1-216-864-11	SHORT CHIP 0	
JR338	1-216-864-11	SHORT CHIP 0	
JR339	1-216-864-11	SHORT CHIP 0	
JR342	1-216-864-11	SHORT CHIP 0	
JR344	1-216-296-11	SHORT CHIP 0	
JR345	1-216-296-11	SHORT CHIP 0	
JR347	1-216-296-11	SHORT CHIP 0	
JR349	1-216-296-11	SHORT CHIP 0	
JR351	1-216-296-11	SHORT CHIP 0	
JR353	1-216-296-11	SHORT CHIP 0	
JR354	1-216-296-11	SHORT CHIP 0	
JR358	1-216-296-11	SHORT CHIP 0	
JR359	1-216-296-11	SHORT CHIP 0	
JR363	1-216-296-11	SHORT CHIP 0	
JR364	1-216-296-11	SHORT CHIP 0	
JR366	1-216-296-11	SHORT CHIP 0	
JR367	1-216-296-11	SHORT CHIP 0	
JR400	1-216-864-11	SHORT CHIP 0	
JR600	1-216-864-11	SHORT CHIP 0	
		< COIL >	
L370	1-410-780-11	INDUCTOR 27mH	
L371	1-410-780-11	INDUCTOR 27mH	
L372	1-414-189-31	INDUCTOR 100uH	
		< TRANSISTOR >	
Q101	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q151	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q180	8-729-023-22	TRANSISTOR 2SD2114K	
Q181	8-729-023-22	TRANSISTOR 2SD2114K	
Q250	8-729-023-22	TRANSISTOR 2SD2114K	
Q251	8-729-023-22	TRANSISTOR 2SD2114K	
Q325	8-729-056-46	TRANSISTOR 2SC5053T100Q (EXCEPT AUS)	
Q340	8-729-920-79	TRANSISTOR 2SB1132-T100-QR	
Q341	8-729-920-79	TRANSISTOR 2SB1132-T100-QR	
Q342	8-729-920-79	TRANSISTOR 2SB1132-T100-QR	
Q343	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q344	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q345	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q370	8-729-141-75	TRANSISTOR 2SD596DV345	
Q371	6-551-287-01	TRANSISTOR 2SD2704K-T146	
Q372	6-551-287-01	TRANSISTOR 2SD2704K-T146	
Q373	6-551-287-01	TRANSISTOR 2SD2704K-T146	
Q374	6-551-287-01	TRANSISTOR 2SD2704K-T146	
Q375	6-551-287-01	TRANSISTOR 2SD2704K-T146	
Q376	6-551-287-01	TRANSISTOR 2SD2704K-T146	
Q377	8-729-216-22	TRANSISTOR 2SA1162-G	
Q378	6-550-185-01	TRANSISTOR RT1P137P-TP-1	
Q379	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q380	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q381	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q382	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q383	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q501	8-729-027-52	TRANSISTOR DTC124EKA-T146	
Q506	8-729-027-56	TRANSISTOR DTC143TKA-T146 (E2,E51)	
Q540	8-729-027-31	TRANSISTOR DTA124EKA-T146	
Q544	8-729-027-31	TRANSISTOR DTA124EKA-T146	
Q550	8-729-027-56	TRANSISTOR DTC143TKA-T146 (E2,E51)	
Q560	6-550-185-01	TRANSISTOR RT1P137P-TP-1	
Q561	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q580	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q581	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q582	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q583	8-729-027-31	TRANSISTOR DTA124EKA-T146	

Ref. No.	Part No.	Description			Remark
Q584	8-729-027-56	TRANSISTOR DTC143TKA-T146			
Q585	8-729-026-68	TRANSISTOR 2SD2525(TP)			
Q586	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q587	8-729-026-68	TRANSISTOR 2SD2525(TP)			
Q588	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q590	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q591	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q596	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q597	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q598	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q602	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q603	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q604	6-551-451-01	TRANSISTOR 2SB1690TL			
Q605	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q606	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q607	8-729-023-22	TRANSISTOR 2SD2114K			
Q608	8-729-055-10	FET 2SK3378ENTL			
Q610	8-729-055-10	FET 2SK3378ENTL			
		< RESISTOR >			
R101	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R102	1-216-833-11	METAL CHIP	10K	5%	1/10W
R103	1-216-818-11	METAL CHIP	560	5%	1/10W
R104	1-216-821-11	METAL CHIP	1K	5%	1/10W
R105	1-216-841-11	METAL CHIP	47K	5%	1/10W
R106	1-216-833-11	METAL CHIP	10K	5%	1/10W
R107	1-216-813-11	METAL CHIP	220	5%	1/10W
⚠R108	1-217-637-00	FUSIBLE	1	5%	1/4W F
R111	1-216-864-11	SHORT CHIP	0 (EXCEPT AUS)		
R112	1-216-864-11	SHORT CHIP	0 (EXCEPT AUS)		
R116	1-216-809-11	METAL CHIP	100	5%	1/10W
R119	1-216-809-11	METAL CHIP	100	5%	1/10W
R121	1-216-833-11	METAL CHIP	10K	5%	1/10W
R122	1-216-833-11	METAL CHIP	10K	5%	1/10W
R130	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R131	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R132	1-216-857-11	METAL CHIP	1M	5%	1/10W
R133	1-216-845-11	METAL CHIP	100K	5%	1/10W
R140	1-216-833-11	METAL CHIP	10K	5%	1/10W
R150	1-216-809-11	METAL CHIP	100	5%	1/10W
R151	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R152	1-216-833-11	METAL CHIP	10K	5%	1/10W
R153	1-216-818-11	METAL CHIP	560	5%	1/10W
R154	1-216-821-11	METAL CHIP	1K	5%	1/10W
R155	1-216-833-11	METAL CHIP	10K	5%	1/10W
R156	1-216-833-11	METAL CHIP	10K	5%	1/10W
R157	1-216-813-11	METAL CHIP	220	5%	1/10W
R166	1-216-809-11	METAL CHIP	100	5%	1/10W
R180	1-216-821-11	METAL CHIP	1K	5%	1/10W
R181	1-216-821-11	METAL CHIP	1K	5%	1/10W
R182	1-216-841-11	METAL CHIP	47K	5%	1/10W
R183	1-216-841-11	METAL CHIP	47K	5%	1/10W
R184	1-216-821-11	METAL CHIP	1K	5%	1/10W
R185	1-216-821-11	METAL CHIP	1K	5%	1/10W
R186	1-216-833-11	METAL CHIP	10K	5%	1/10W
R187	1-216-833-11	METAL CHIP	10K	5%	1/10W
R203	1-216-864-11	SHORT CHIP	0		
R204	1-216-821-11	METAL CHIP	1K	5%	1/10W
R205	1-216-821-11	METAL CHIP	1K	5%	1/10W
R220	1-216-845-11	METAL CHIP	100K	5%	1/10W
R221	1-216-834-11	METAL CHIP	12K	5%	1/10W
R228	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R229	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R250	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R251	1-216-833-11	METAL CHIP	10K	5%	1/10W
R252	1-216-841-11	METAL CHIP	47K	5%	1/10W
R255	1-216-833-11	METAL CHIP	10K	5%	1/10W
R256	1-216-841-11	METAL CHIP	47K	5%	1/10W
R257	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R261	1-216-864-11	SHORT CHIP	0		
R262	1-216-864-11	SHORT CHIP	0		
R264	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R265	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R266	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R267	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R268	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R269	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R270	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R271	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R272	1-216-837-11	METAL CHIP	22K	5%	1/10W
R273	1-216-833-11	METAL CHIP	10K	5%	1/10W
R293	1-216-841-11	METAL CHIP	47K	5%	1/10W
R294	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R295	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R296	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R297	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R301	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R302	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R303	1-216-833-11	METAL CHIP	10K	5%	1/10W
R304	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R305	1-216-841-11	METAL CHIP	47K	5%	1/10W
R306	1-216-837-11	METAL CHIP	22K	5%	1/10W
R307	1-216-857-11	METAL CHIP	1M	5%	1/10W
R308	1-216-809-11	METAL CHIP	100	5%	1/10W
R309	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R310	1-216-809-11	METAL CHIP	100	5%	1/10W
R311	1-216-864-11	SHORT CHIP	0		
R312	1-216-809-11	METAL CHIP	100	5%	1/10W
R319	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R325	1-216-819-11	METAL CHIP	680	5%	1/10W (EXCEPT AUS)
R326	1-216-821-11	METAL CHIP	1K	5%	1/10W (EXCEPT AUS)
R336	1-216-833-11	METAL CHIP	10K	5%	1/10W
R337	1-216-833-11	METAL CHIP	10K	5%	1/10W
R339	1-216-837-11	METAL CHIP	22K	5%	1/10W
R340	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R341	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R342	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R343	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R344	1-216-833-11	METAL CHIP	10K	5%	1/10W
R345	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R346	1-216-833-11	METAL CHIP	10K	5%	1/10W
R347	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R348	1-216-833-11	METAL CHIP	10K	5%	1/10W
R349	1-216-827-11	METAL CHIP	3.3K	5%	1/10W

MAIN

Ref. No.	Part No.	Description			Remark
R351	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R352	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R353	1-216-833-11	METAL CHIP	10K	5%	1/10W
R354	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R355	1-216-841-11	METAL CHIP	47K	5%	1/10W
R356	1-216-833-11	METAL CHIP	10K	5%	1/10W
R357	1-216-833-11	METAL CHIP	10K	5%	1/10W
R369	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R370	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R371	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R372	1-216-836-11	METAL CHIP	18K	5%	1/10W
R373	1-216-864-11	SHORT CHIP	0		
R374	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R375	1-216-836-11	METAL CHIP	18K	5%	1/10W
R376	1-216-864-11	SHORT CHIP	0		
R377	1-216-805-11	METAL CHIP	47	5%	1/10W
R378	1-216-833-11	METAL CHIP	10K	5%	1/10W
R379	1-216-797-11	METAL CHIP	10	5%	1/10W
R380	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R381	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R382	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R383	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R384	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R385	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R386	1-216-803-11	METAL CHIP	33	5%	1/10W
R387	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R388	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R389	1-216-837-11	METAL CHIP	22K	5%	1/10W
R390	1-216-833-11	METAL CHIP	10K	5%	1/10W
R391	1-216-833-11	METAL CHIP	10K	5%	1/10W
R392	1-216-833-11	METAL CHIP	10K	5%	1/10W
R393	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R394	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R395	1-216-841-11	METAL CHIP	47K	5%	1/10W
R396	1-216-833-11	METAL CHIP	10K	5%	1/10W
R397	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R399	1-216-833-11	METAL CHIP	10K	5%	1/10W
R400	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
R404	1-216-809-11	METAL CHIP	100	5%	1/10W
R405	1-216-809-11	METAL CHIP	100	5%	1/10W
R406	1-216-809-11	METAL CHIP	100	5%	1/10W
R407	1-216-809-11	METAL CHIP	100	5%	1/10W
R409	1-216-833-11	METAL CHIP	10K	5%	1/10W
R411	1-216-851-11	METAL CHIP	330K	5%	1/10W
R412	1-216-845-11	METAL CHIP	100K	5%	1/10W
R413	1-216-864-11	SHORT CHIP	0		
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-216-813-11	METAL CHIP	220	5%	1/10W
R419	1-216-809-11	METAL CHIP	100	5%	1/10W
R420	1-216-821-11	METAL CHIP	1K	5%	1/10W
R421	1-216-809-11	METAL CHIP	100	5%	1/10W
R422	1-216-809-11	METAL CHIP	100	5%	1/10W
R423	1-216-809-11	METAL CHIP	100	5%	1/10W
R424	1-216-809-11	METAL CHIP	100	5%	1/10W
R425	1-216-809-11	METAL CHIP	100	5%	1/10W
R426	1-216-809-11	METAL CHIP	100	5%	1/10W
R427	1-216-809-11	METAL CHIP	100	5%	1/10W
R428	1-216-809-11	METAL CHIP	100	5%	1/10W
R429	1-216-809-11	METAL CHIP	100	5%	1/10W
R430	1-216-809-11	METAL CHIP	100	5%	1/10W
R431	1-216-809-11	METAL CHIP	100	5%	1/10W
R432	1-216-809-11	METAL CHIP	100	5%	1/10W
R433	1-216-809-11	METAL CHIP	100	5%	1/10W
R434	1-216-809-11	METAL CHIP	100	5%	1/10W
R435	1-216-809-11	METAL CHIP	100	5%	1/10W
R436	1-216-809-11	METAL CHIP	100	5%	1/10W
R438	1-216-809-11	METAL CHIP	100	5%	1/10W
R439	1-216-809-11	METAL CHIP	100	5%	1/10W
R440	1-216-809-11	METAL CHIP	100	5%	1/10W
R441	1-216-809-11	METAL CHIP	100	5%	1/10W
R442	1-216-809-11	METAL CHIP	100	5%	1/10W
R443	1-216-809-11	METAL CHIP	100	5%	1/10W
R444	1-216-809-11	METAL CHIP	100	5%	1/10W
R445	1-216-809-11	METAL CHIP	100	5%	1/10W
R446	1-216-809-11	METAL CHIP	100	5%	1/10W
R447	1-216-809-11	METAL CHIP	100	5%	1/10W
R448	1-216-809-11	METAL CHIP	100	5%	1/10W
R449	1-216-809-11	METAL CHIP	100	5%	1/10W
R463	1-216-833-11	METAL CHIP	10K	5%	1/10W
R467	1-216-809-11	METAL CHIP	100	5%	1/10W
R468	1-216-809-11	METAL CHIP	100	5%	1/10W
R469	1-216-809-11	METAL CHIP	100	5%	1/10W
R470	1-216-809-11	METAL CHIP	100	5%	1/10W
R471	1-216-809-11	METAL CHIP	100	5%	1/10W
R472	1-216-809-11	METAL CHIP	100	5%	1/10W
R473	1-216-809-11	METAL CHIP	100	5%	1/10W
R474	1-216-809-11	METAL CHIP	100	5%	1/10W
R475	1-216-809-11	METAL CHIP	100	5%	1/10W
R477	1-216-809-11	METAL CHIP	100	5%	1/10W
R478	1-216-809-11	METAL CHIP	100	5%	1/10W
R484	1-216-809-11	METAL CHIP	100	5%	1/10W
R485	1-216-809-11	METAL CHIP	100	5%	1/10W
R486	1-216-809-11	METAL CHIP	100	5%	1/10W
R487	1-216-809-11	METAL CHIP	100	5%	1/10W
R488	1-216-809-11	METAL CHIP	100	5%	1/10W
R489	1-216-809-11	METAL CHIP	100	5%	1/10W
R490	1-216-809-11	METAL CHIP	100	5%	1/10W
R491	1-216-809-11	METAL CHIP	100	5%	1/10W
R492	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R493	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (AUS)
R493	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (EXCEPT AUS)
R495	1-216-821-11	METAL CHIP	1K	5%	1/10W
R497	1-216-821-11	METAL CHIP	1K	5%	1/10W
R500	1-216-833-11	METAL CHIP	10K	5%	1/10W
R501	1-216-813-11	METAL CHIP	220	5%	1/10W
R502	1-216-821-11	METAL CHIP	1K	5%	1/10W
R503	1-216-864-11	SHORT CHIP	0		
R508	1-216-833-11	METAL CHIP	10K	5%	1/10W (E2,E51)
R509	1-216-833-11	METAL CHIP	10K	5%	1/10W (E2,E51)

Ref. No.	Part No.	Description			Remark
R510	1-216-830-11	METAL CHIP	5.6K	5%	1/10W (E2,E51)
R529	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R530	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R531	1-216-835-11	METAL CHIP	15K	5%	1/10W (E2)
R532	1-216-819-11	METAL CHIP	680	5%	1/10W (E2)
R532	1-216-864-11	SHORT CHIP	0 (EXCEPT E2)		
R537	1-216-833-11	METAL CHIP	10K	5%	1/10W
R540	1-216-837-11	METAL CHIP	22K	5%	1/10W
R541	1-216-833-11	METAL CHIP	10K	5%	1/10W
R542	1-216-847-11	METAL CHIP	150K	5%	1/10W
R546	1-216-837-11	METAL CHIP	22K	5%	1/10W
R547	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R548	1-216-847-11	METAL CHIP	150K	5%	1/10W
R551	1-216-842-11	METAL CHIP	56K	5%	1/10W (E2,E51)
R553	1-216-824-11	METAL CHIP	1.8K	5%	1/10W (E2,E51)
R560	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R561	1-216-821-11	METAL CHIP	1K	5%	1/10W
R562	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R563	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R573	1-216-833-11	METAL CHIP	10K	5%	1/10W
R574	1-216-833-11	METAL CHIP	10K	5%	1/10W
R575	1-216-821-11	METAL CHIP	1K	5%	1/10W
R577	1-216-833-11	METAL CHIP	10K	5%	1/10W
R578	1-216-821-11	METAL CHIP	1K	5%	1/10W
R581	1-216-835-11	METAL CHIP	15K	5%	1/10W (E2)
R582	1-216-819-11	METAL CHIP	680	5%	1/10W (E2)
R582	1-216-864-11	SHORT CHIP	0 (EXCEPT E2)		
R584	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R586	1-216-833-11	METAL CHIP	10K	5%	1/10W
R587	1-216-833-11	METAL CHIP	10K	5%	1/10W
R588	1-216-821-11	METAL CHIP	1K	5%	1/10W
R589	1-216-845-11	METAL CHIP	100K	5%	1/10W
R590	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R591	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R592	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R593	1-216-819-11	METAL CHIP	680	5%	1/10W (AR)
R593	1-216-821-11	METAL CHIP	1K	5%	1/10W (E2,E51)
R593	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (AUS)
R594	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R595	1-216-857-11	METAL CHIP	1M	5%	1/10W
R596	1-216-833-11	METAL CHIP	10K	5%	1/10W
R597	1-216-833-11	METAL CHIP	10K	5%	1/10W
R602	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R603	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R604	1-218-917-11	METAL CHIP	820K	0.5%	1/10W
R605	1-218-917-11	METAL CHIP	820K	0.5%	1/10W
R606	1-218-917-11	METAL CHIP	820K	0.5%	1/10W
R607	1-218-917-11	METAL CHIP	820K	0.5%	1/10W
R608	1-218-917-11	METAL CHIP	820K	0.5%	1/10W
R609	1-218-917-11	METAL CHIP	820K	0.5%	1/10W
R610	1-216-833-11	METAL CHIP	10K	5%	1/10W
R611	1-216-833-11	METAL CHIP	10K	5%	1/10W
R612	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R613	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R614	1-216-853-11	METAL CHIP	470K	5%	1/10W
R615	1-216-853-11	METAL CHIP	470K	5%	1/10W
R616	1-216-853-11	METAL CHIP	470K	5%	1/10W
R617	1-216-853-11	METAL CHIP	470K	5%	1/10W
R620	1-216-833-11	METAL CHIP	10K	5%	1/10W
R621	1-216-833-11	METAL CHIP	10K	5%	1/10W
R622	1-216-833-11	METAL CHIP	10K	5%	1/10W
R623	1-216-833-11	METAL CHIP	10K	5%	1/10W
R624	1-216-833-11	METAL CHIP	10K	5%	1/10W
R625	1-216-833-11	METAL CHIP	10K	5%	1/10W
R626	1-216-833-11	METAL CHIP	10K	5%	1/10W
R627	1-216-833-11	METAL CHIP	10K	5%	1/10W
R628	1-216-833-11	METAL CHIP	10K	5%	1/10W
R629	1-216-821-11	METAL CHIP	1K	5%	1/10W
R630	1-216-839-11	METAL CHIP	33K	5%	1/10W
R631	1-216-821-11	METAL CHIP	1K	5%	1/10W
R632	1-216-839-11	METAL CHIP	33K	5%	1/10W
R637	1-216-809-11	METAL CHIP	100	5%	1/10W
R640	1-216-833-11	METAL CHIP	10K	5%	1/10W
R641	1-216-833-11	METAL CHIP	10K	5%	1/10W
R642	1-216-833-11	METAL CHIP	10K	5%	1/10W
R643	1-216-845-11	METAL CHIP	100K	5%	1/10W
R644	1-216-845-11	METAL CHIP	100K	5%	1/10W
R648	1-216-845-11	METAL CHIP	100K	5%	1/10W
R649	1-216-845-11	METAL CHIP	100K	5%	1/10W
R650	1-216-845-11	METAL CHIP	100K	5%	1/10W
R654	1-216-845-11	METAL CHIP	100K	5%	1/10W
R656	1-216-833-11	METAL CHIP	10K	5%	1/10W
R659	1-216-809-11	METAL CHIP	100	5%	1/10W
R660	1-216-821-11	METAL CHIP	1K	5%	1/10W
R661	1-216-837-11	METAL CHIP	22K	5%	1/10W
R662	1-216-833-11	METAL CHIP	10K	5%	1/10W
R663	1-216-833-11	METAL CHIP	10K	5%	1/10W
R664	1-216-841-11	METAL CHIP	47K	5%	1/10W
R665	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R666	1-216-821-11	METAL CHIP	1K	5%	1/10W
R667	1-216-821-11	METAL CHIP	1K	5%	1/10W
R668	1-216-821-11	METAL CHIP	1K	5%	1/10W
R669	1-216-853-11	METAL CHIP	470K	5%	1/10W
R670	1-216-853-11	METAL CHIP	470K	5%	1/10W
R672	1-216-833-11	METAL CHIP	10K	5%	1/10W
R673	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
		< TRANSFORMER >			
T301	1-433-372-11	TRANSFORMER, BIAS OSCILLATION			
		< VIBRATOR >			
X401	1-760-252-12	VIBRATOR, CRYSTAL (32.768kHz)			
X402	1-795-058-21	VIBRATOR, CERAMIC (5MHz)			

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MIC **MOTOR (LD)** **MOTOR (TB)** **PANEL**

Ref. No.	Part No.	Description			Remark
	A-1249-247-A	MIC BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1106	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C1110	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C1111	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C1112	1-126-160-11	ELECT	1uF	20%	50V
C1113	1-124-257-00	ELECT	2.2uF	20%	50V
C1116	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C1157	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1158	1-124-257-00	ELECT	2.2uF	20%	50V
C1160	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C1161	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C1162	1-124-257-00	ELECT	2.2uF	20%	50V
C1163	1-124-464-11	ELECT	0.22uF	20%	50V
C1190	1-124-589-11	ELECT	47uF	20%	16V
C1191	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V
		< CONNECTOR >			
CN907	1-785-329-11	PIN, CONNECTOR (LIGHT ANGLE) 3P			
		< DIODE >			
D1103	8-719-404-50	DIODE MA111-TX			
D1104	8-719-404-50	DIODE MA111-TX			
D1152	8-719-404-50	DIODE MA111-TX			
D1153	8-719-404-50	DIODE MA111-TX			
		< IC >			
IC1100	8-759-710-97	IC NJM4565M-D			
		< JACK >			
J1100	1-817-629-11	JACK (LARGE TYPE) (MIC)			
J1101	1-794-702-11	JACK, HEADPHONE (PHONES)			
		< RESISTOR >			
R1104	1-216-864-11	SHORT CHIP	0		
R1137	1-216-809-11	METAL CHIP	100	5%	1/10W
R1138	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1154	1-216-864-11	SHORT CHIP	0		
R1173	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1175	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1176	1-216-864-11	SHORT CHIP	0		
R1177	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1180	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1181	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1182	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1183	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1187	1-216-809-11	METAL CHIP	100	5%	1/10W
R1188	1-216-847-11	METAL CHIP	150K	5%	1/10W
R1190	1-216-864-11	SHORT CHIP	0		
R1199	1-216-864-11	SHORT CHIP	0		
		< VARIABLE RESISTOR >			
RV1150	1-227-452-11	RES, VAR, CARBON 50K (MIC LEVEL)			
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Ref. No.	Part No.	Description			Remark
	1-687-133-12	MOTOR (LD) BOARD			
		**********			
**********					
	1-687-134-12	MOTOR (TB) BOARD			
		**********			
		< CONNECTOR >			
CN742	1-784-727-11	CONNECTOR, FFC 5P			
**********					
	A-1249-243-A	PANEL BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C900	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C901	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C902	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C903	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C904	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C905	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C906	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C907	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C908	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C909	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C910	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C911	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C912	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C913	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C914	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C915	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C916	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C917	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C918	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C919	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C920	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C921	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C922	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C923	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C924	1-124-261-00	ELECT	10uF	20%	50V
C925	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C926	1-119-941-11	ELECT	470uF	20%	6.3V
C927	1-119-941-11	ELECT	470uF	20%	6.3V
C928	1-119-941-11	ELECT	470uF	20%	6.3V
C930	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C931	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C932	1-124-589-11	ELECT	47uF	20%	16V
C933	1-115-156-11	CERAMIC CHIP	1uF		10V
C934	1-115-156-11	CERAMIC CHIP	1uF		10V
C935	1-124-261-00	ELECT	10uF	20%	50V
C936	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C937	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C938	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C939	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C940	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C941	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C942	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C944	1-115-156-11	CERAMIC CHIP	1uF		10V
C946	1-164-156-11	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description			Remark
C951	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C952	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C953	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C954	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C956	1-115-156-11	CERAMIC CHIP	1uF		10V
C957	1-115-156-11	CERAMIC CHIP	1uF		10V
C958	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C959	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C960	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C961	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C962	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C963	1-115-156-11	CERAMIC CHIP	1uF		10V
C964	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C965	1-126-163-11	ELECT	4.7uF	20%	50V
C966	1-124-261-00	ELECT	10uF	20%	50V
C974	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C979	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C984	1-124-261-00	ELECT	10uF	20%	50V
C985	1-115-156-11	CERAMIC CHIP	1uF		10V
		< CONNECTOR >			
CN900	1-784-747-11	CONNECTOR, FFC 25P			
CN906	1-784-739-11	CONNECTOR, FFC 17P			
CN956	1-785-328-11	PIN, CONNECTOR (LIGHT ANGLE) 2P			
CN957	1-770-401-11	HOUSING, CONNECTOR (PC BOARD) 8P			
		< DIODE >			
D900	6-501-170-01	DIODE UDZW-TE17-6.8B			
D901	8-719-404-50	DIODE MA111-TX			
D902	8-719-404-50	DIODE MA111-TX			
D903	8-719-404-50	DIODE MA111-TX			
		< IC >			
IC900	6-807-323-01	IC MB90M407PF-G-151E1			
IC901	6-600-349-31	IC NJL24H400A (IR)			
IC902	6-705-678-01	IC NJM2760V-TE2			
		< JUMPER RESISTOR >			
JR900	1-216-864-11	SHORT CHIP	0		
JR901	1-216-864-11	SHORT CHIP	0		
JR903	1-216-864-11	SHORT CHIP	0		
		< VACUUM FLUORESCENT DISPLAY >			
ND900	1-519-947-11	VACUUM FLUORESCENT DISPLAY			
		< TRANSISTOR >			
Q900	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q901	8-729-106-60	TRANSISTOR 2SB1115A-YQ			
Q902	8-729-027-50	TRANSISTOR DTC123JKA-T146			
Q903	8-729-106-60	TRANSISTOR 2SB1115A-YQ			
Q917	8-729-027-56	TRANSISTOR DTC143TKA-T146			
Q918	8-729-027-56	TRANSISTOR DTC143TKA-T146			
Q919	8-729-027-56	TRANSISTOR DTC143TKA-T146			
Q920	8-729-027-50	TRANSISTOR DTC123JKA-T146			
		< RESISTOR >			
R929	1-216-809-11	METAL CHIP	100	5%	1/10W
R930	1-216-809-11	METAL CHIP	100	5%	1/10W
R931	1-216-833-11	METAL CHIP	10K	5%	1/10W
R933	1-216-839-11	METAL CHIP	33K	5%	1/10W
R934	1-216-842-11	METAL CHIP	56K	5%	1/10W
R935	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R937	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R938	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R939	1-216-833-11	METAL CHIP	10K	5%	1/10W
R940	1-216-821-11	METAL CHIP	1K	5%	1/10W
R942	1-216-821-11	METAL CHIP	1K	5%	1/10W
R943	1-216-821-11	METAL CHIP	1K	5%	1/10W
R944	1-216-821-11	METAL CHIP	1K	5%	1/10W
R945	1-216-821-11	METAL CHIP	1K	5%	1/10W
R946	1-216-813-11	METAL CHIP	220	5%	1/10W
R948	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R949	1-216-813-11	METAL CHIP	220	5%	1/10W
R951	1-216-805-11	METAL CHIP	47	5%	1/10W
R952	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R953	1-216-833-11	METAL CHIP	10K	5%	1/10W
R962	1-216-809-11	METAL CHIP	100	5%	1/10W
R963	1-216-809-11	METAL CHIP	100	5%	1/10W
R966	1-216-835-11	METAL CHIP	15K	5%	1/10W
R967	1-216-835-11	METAL CHIP	15K	5%	1/10W
R968	1-216-835-11	METAL CHIP	15K	5%	1/10W
R969	1-216-809-11	METAL CHIP	100	5%	1/10W
R970	1-216-809-11	METAL CHIP	100	5%	1/10W
R971	1-216-809-11	METAL CHIP	100	5%	1/10W
R972	1-216-809-11	METAL CHIP	100	5%	1/10W
R973	1-216-809-11	METAL CHIP	100	5%	1/10W
R974	1-216-809-11	METAL CHIP	100	5%	1/10W
R975	1-216-809-11	METAL CHIP	100	5%	1/10W
R976	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R977	1-216-833-11	METAL CHIP	10K	5%	1/10W
R979	1-216-809-11	METAL CHIP	100	5%	1/10W
R981	1-216-833-11	METAL CHIP	10K	5%	1/10W
R982	1-216-833-11	METAL CHIP	10K	5%	1/10W
R983	1-216-864-11	SHORT CHIP	0		
R1012	1-216-817-11	METAL CHIP	470	5%	1/10W
R1013	1-216-817-11	METAL CHIP	470	5%	1/10W
R1014	1-216-819-11	METAL CHIP	680	5%	1/10W
R1072	1-216-857-11	METAL CHIP	1M	5%	1/10W
R1073	1-216-864-11	SHORT CHIP	0		
R1074	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1075	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1076	1-216-845-11	METAL CHIP	100K	5%	1/10W
		< VIBRATOR >			
X900	1-781-282-51	VIBRATOR, CERAMIC (4MHz)			
**********					
	A-1249-259-A	POWER BOARD, COMPLETE (E2)			
	A-1276-573-A	POWER BOARD, COMPLETE (E51)			
	A-1276-588-A	POWER BOARD, COMPLETE (AR)			
	A-1276-618-A	POWER BOARD, COMPLETE (AUS)			
		**********			
		< CAPACITOR >			
C600	1-126-963-11	ELECT	4.7uF	20%	50V
C601	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C602	1-104-658-11	ELECT	100uF	20%	10V

POWER

Ref. No.	Part No.	Description			Remark
C603	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C604	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C605	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C606	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C608	1-126-965-11	ELECT	22uF	20%	50V
C609	1-128-582-11	ELECT	10uF	20%	100V
C610	1-128-582-11	ELECT	10uF	20%	100V
C616	1-136-495-11	FILM	0.068uF	5%	50V
C617	1-136-495-11	FILM	0.068uF	5%	50V
C634	1-104-665-11	ELECT	100uF	20%	25V
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	1-104-658-11	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	1-104-658-11	ELECT	100uF	20%	10V
C653	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
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(BLOCK)	3300uF	20%	100V
C658	1-127-812-11	ELECT(BLOCK)	3300uF	20%	63V
C660	1-164-156-11	CERAMIC CHIP	0.1uF		25V
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(BLOCK)	3300uF	20%	100V
C678	1-127-812-11	ELECT(BLOCK)	3300uF	20%	63V
C681	1-131-992-11	CERAMIC CHIP	0.1uF		35V
C682	1-131-992-11	CERAMIC CHIP	0.1uF		35V
C683	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C691	1-131-992-11	CERAMIC CHIP	0.1uF		35V
C692	1-131-992-11	CERAMIC CHIP	0.1uF		35V
C693	1-164-156-11	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
CN600	1-764-865-41	CONNECTOR, BOARD TO BOARD 13P			
CN601	1-784-031-41	CONNECTOR, BOARD TO BOARD 8P			
* CN607	1-564-508-11	PLUG, CONNECTOR 5P			
		< DIODE >			
D609	8-719-404-50	DIODE	MA111-TX		
D611	8-719-056-93	DIODE	UDZ-TE-17-18B		
D612	8-719-056-93	DIODE	UDZ-TE-17-18B		
D624	8-719-404-50	DIODE	MA111-TX		
D646	8-719-404-50	DIODE	MA111-TX		
D665	8-719-404-50	DIODE	MA111-TX		
D671	6-500-335-01	DIODE	MC2838-T112-1		
D672	6-500-335-01	DIODE	MC2838-T112-1		
D673	6-500-334-01	DIODE	MC2836-T112-1		
		< IC >			
IC601	6-600-642-01	IC	STK412-150C		
		< JUMPER RESISTOR >			
JR602	1-216-296-11	SHORT CHIP	0		
JR603	1-216-296-11	SHORT CHIP	0		
JR612	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
		< COIL >			
L680	1-420-872-52	COIL, AIR-CORE			
L690	1-420-872-52	COIL, AIR-CORE			
		< TRANSISTOR >			
Q604	8-729-924-99	TRANSISTOR	2SC3722K-E		
Q606	8-729-821-00	TRANSISTOR	2SA1207		
Q610	8-729-924-99	TRANSISTOR	2SC3722K-E		
Q618	8-729-924-99	TRANSISTOR	2SC3722K-E		
Q628	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q630	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q634	8-729-027-31	TRANSISTOR	DTA124EKA-T146		
Q640	8-729-023-22	TRANSISTOR	2SD2114K		
Q641	8-729-023-22	TRANSISTOR	2SD2114K		
Q644	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q647	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q648	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q666	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q668	8-729-924-99	TRANSISTOR	2SC3722K-E		
Q682	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q684	8-729-230-49	TRANSISTOR	2SC2712-YG		
		< RESISTOR >			
R600	1-216-821-11	METAL CHIP	1K	5%	1/10W
R601	1-216-841-11	METAL CHIP	47K	5%	1/10W
R602	1-216-815-11	METAL CHIP	330	5%	1/10W
R603	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
R606	1-216-841-11	METAL CHIP	47K	5%	1/10W
R607	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R608	1-216-845-11	METAL CHIP	100K	5%	1/10W
R609	1-216-843-11	METAL CHIP	68K	5%	1/10W
R610	1-216-843-11	METAL CHIP	68K	5%	1/10W
R611	1-216-839-11	METAL CHIP	33K	5%	1/10W
⚠R612	1-245-605-51	FUSIBLE	100	5%	1/4W F
⚠R613	1-215-872-11	METAL OXIDE	3.3K	5%	1W F
⚠R614	1-215-872-11	METAL OXIDE	3.3K	5%	1W F
⚠R615	1-245-605-51	FUSIBLE	100	5%	1/4W F
⚠R616	1-217-637-00	FUSIBLE	1	5%	1/4W F
R617	1-216-845-11	METAL CHIP	100K	5%	1/10W
⚠R618	1-234-798-11	ENCAPSULATED COMPONENT 0.22X2 5W			
R619	1-216-821-11	METAL CHIP	1K	5%	1/10W
R620	1-216-839-11	METAL CHIP	33K	5%	1/10W
R621	1-216-845-11	METAL CHIP	100K	5%	1/10W
R622	1-245-711-31	CARBON	10	5%	1/2W F
R623	1-216-843-11	METAL CHIP	68K	5%	1/10W
R624	1-216-837-11	METAL CHIP	22K	5%	1/10W
R625	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R628	1-216-837-11	METAL CHIP	22K	5%	1/10W
R629	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R630	1-216-845-11	METAL CHIP	100K	5%	1/10W
R631	1-216-845-11	METAL CHIP	100K	5%	1/10W
R633	1-216-864-11	SHORT CHIP	0		
R634	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R635	1-216-833-11	METAL CHIP	10K	5%	1/10W
⚠R636	1-216-456-00	METAL OXIDE	820	5%	2W F

Ref. No.	Part No.	Description			Remark
⚠R637	1-216-456-00	METAL OXIDE	820	5%	2W F
R638	1-216-845-11	METAL CHIP	100K	5%	1/10W
R639	1-216-845-11	METAL CHIP	100K	5%	1/10W
R640	1-216-821-11	METAL CHIP	1K	5%	1/10W
R641	1-216-821-11	METAL CHIP	1K	5%	1/10W
R642	1-216-811-11	METAL CHIP	150	5%	1/10W
R643	1-216-811-11	METAL CHIP	150	5%	1/10W
R644	1-216-821-11	METAL CHIP	1K	5%	1/10W
R645	1-216-833-11	METAL CHIP	10K	5%	1/10W
R646	1-260-086-31	CARBON	82	5%	1/2W F
R647	1-216-821-11	METAL CHIP	1K	5%	1/10W
R648	1-216-837-11	METAL CHIP	22K	5%	1/10W
R649	1-216-821-11	METAL CHIP	1K	5%	1/10W
R650	1-216-821-11	METAL CHIP	1K	5%	1/10W
R651	1-216-841-11	METAL CHIP	47K	5%	1/10W
R652	1-216-815-11	METAL CHIP	330	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
R655	1-216-841-11	METAL CHIP	47K	5%	1/10W
R656	1-216-849-11	METAL CHIP	220K	5%	1/10W
R657	1-216-849-11	METAL CHIP	220K	5%	1/10W
R658	1-216-845-11	METAL CHIP	100K	5%	1/10W
R660	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R661	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R662	1-216-811-11	METAL CHIP	150	5%	1/10W
R663	1-216-811-11	METAL CHIP	150	5%	1/10W
R665	1-260-086-31	CARBON	82	5%	1/2W F
R666	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R667	1-216-833-11	METAL CHIP	10K	5%	1/10W
⚠R668	1-234-798-11	ENCAPSULATED COMPONENT 0.22X2 5W			
R669	1-216-821-11	METAL CHIP	1K	5%	1/10W
R670	1-216-839-11	METAL CHIP	33K	5%	1/10W
R671	1-216-845-11	METAL CHIP	100K	5%	1/10W
R672	1-245-711-31	CARBON	10	5%	1/2W F
R673	1-216-842-11	METAL CHIP	56K	5%	1/10W
R674	1-216-837-11	METAL CHIP	22K	5%	1/10W
R676	1-216-849-11	METAL CHIP	220K	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
R680	1-260-086-31	CARBON	82	5%	1/2W F
R681	1-260-086-31	CARBON	82	5%	1/2W F
R682	1-216-821-11	METAL CHIP	1K	5%	1/10W
R683	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R685	1-216-833-11	METAL CHIP	10K	5%	1/10W
R690	1-260-086-31	CARBON	82	5%	1/2W F
R691	1-260-086-31	CARBON	82	5%	1/2W F
R692	1-216-841-11	METAL CHIP	47K	5%	1/10W
R693	1-216-845-11	METAL CHIP	100K	5%	1/10W
R694	1-216-843-11	METAL CHIP	68K	5%	1/10W
R695	1-216-845-11	METAL CHIP	100K	5%	1/10W
R696	1-216-845-11	METAL CHIP	100K	5%	1/10W
R697	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R698	1-216-845-11	METAL CHIP	100K	5%	1/10W
R700	1-216-821-11	METAL CHIP	1K	5%	1/10W
R701	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		< RELAY >			
RY646	1-755-500-11	RELAY			

Ref. No.	Part No.	Description			Remark
RY665	1-755-500-11	RELAY			
		< THERMISTOR >			
TH629	1-807-796-11	THERMISTOR			
TH630	1-807-796-11	THERMISTOR			
		< TERMINAL BOARD >			
TM600	1-820-067-11	TERMINAL BOARD (SPEAKER)			(FRONT SPEAKER)
TM601	1-820-067-11	TERMINAL BOARD (SPEAKER)			(SURROUND SPEAKER)
**********					
		PRIMARY BOARD			
		**********			
		< CAPACITOR >			
C1201	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C1202	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C1204	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C1206	1-126-916-11	ELECT	1000uF	20%	6.3V
		< CONNECTOR >			
CN1200	1-785-329-11	PIN, CONNECTOR (LIGHT ANGLE) 3P			
CN1202	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
CN1204	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			(AUS,AR)
CN1204	1-568-106-11	PIN, CONNECTOR (3.96mm PITCH) 4P			(E2,E51)
		< DIODE >			
D1200	8-719-404-50	DIODE MA111-TX			
		< JUMPER RESISTOR >			
JR1202	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L1201	1-410-666-31	INDUCTOR	18uH		
		< TRANSISTOR >			
Q1200	8-729-230-49	TRANSISTOR 2SC2712-YG			
		< RESISTOR >			
R1200	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R1201	1-216-845-11	METAL CHIP	100K	5%	1/10W
		< RELAY >			
⚠RY1200	1-755-299-11	RELAY			
		< SWITCH >			
⚠S1200	1-771-291-31	SWITCH, POWER (VOLTAGE SELECTOR)			(E2,E51)
**********					

SENSOR **SUBWOOFER** **SW**

Ref. No.	Part No.	Description			Remark
	1-687-132-12	SENSOR BOARD			
		**********			
		< CONNECTOR >			
CN731	1-785-329-21	PIN, CONNECTOR (LIGHT ANGLE) 3P			
		< IC >			
IC731	6-600-564-01	IC RPI-579N1			
**********					
	A-1249-251-A	SUBWOOFER BOARD, COMPLETE (E2)			
	A-1276-570-A	SUBWOOFER BOARD, COMPLETE (E51)			
	A-1276-585-A	SUBWOOFER BOARD, COMPLETE (AR)			
	A-1276-615-A	SUBWOOFER BOARD, COMPLETE (AUS)			
		**********			
		< CAPACITOR >			
C800	1-126-963-11	ELECT	4.7uF	20%	50V
C801	1-100-717-11	CERAMIC CHIP	1uF		16V
C802	1-104-658-11	ELECT	100uF	20%	10V
C803	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C804	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C805	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C808	1-131-749-11	CERAMIC CHIP	8.2PF		50V
C820	1-126-964-11	ELECT	10uF	20%	50V
C825	1-128-576-11	ELECT	100uF	20%	63V
C826	1-128-576-11	ELECT	100uF	20%	63V
C838	1-136-497-81	FILM	0.1uF	5%	50V
C839	1-136-497-81	FILM	0.1uF	5%	50V
C843	1-126-963-11	ELECT	4.7uF	20%	50V
C850	1-126-963-11	ELECT	4.7uF	20%	50V
C851	1-100-717-11	CERAMIC CHIP	1uF		16V
C852	1-104-658-11	ELECT	100uF	20%	10V
C853	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C858	1-131-749-11	CERAMIC CHIP	8.2PF		50V
C888	1-136-497-81	FILM	0.1uF	5%	50V
C889	1-136-497-81	FILM	0.1uF	5%	50V
		< CONNECTOR >			
CN700	1-784-031-41	CONNECTOR, BOARD TO BOARD 8P			
		< DIODE >			
D800	6-500-335-01	DIODE MC2838-T112-1			
D810	8-719-404-50	DIODE MA111-TX			
D811	8-719-404-50	DIODE MA111-TX			
		< IC >			
IC800	6-710-842-01	IC STK433-130-E			
		< COIL >			
L730	1-420-872-52	COIL, AIR-CORE			
L780	1-420-872-52	COIL, AIR-CORE			
		< TRANSISTOR >			
Q800	8-729-924-99	TRANSISTOR 2SC3722K-E			
Q812	8-729-924-99	TRANSISTOR 2SC3722K-E			
Q814	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q815	8-729-120-28	TRANSISTOR 2SC1623-L5L6			

Ref. No.	Part No.	Description			Remark
Q850	8-729-924-99	TRANSISTOR 2SC3722K-E			
		< RESISTOR >			
R736	1-245-711-31	CARBON	10	5%	1/2W F
R786	1-245-711-31	CARBON	10	5%	1/2W F
R800	1-216-821-11	METAL CHIP	1K	5%	1/10W
R801	1-216-841-11	METAL CHIP	47K	5%	1/10W
R802	1-216-817-11	METAL CHIP	470	5%	1/10W
⚠R804	1-217-637-00	FUSIBLE	1	5%	1/4W F
⚠R805	1-217-637-00	FUSIBLE	1	5%	1/4W F
R808	1-216-841-11	METAL CHIP	47K	5%	1/10W
R812	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R814	1-216-833-11	METAL CHIP	10K	5%	1/10W
R817	1-216-833-11	METAL CHIP	10K	5%	1/10W
⚠R827	1-245-605-51	FUSIBLE	100	5%	1/4W F
⚠R828	1-245-605-51	FUSIBLE	100	5%	1/4W F
⚠R838	1-220-893-11	METAL	0.22	10%	5W F
R839	1-216-821-11	METAL CHIP	1K	5%	1/10W
R840	1-216-837-11	METAL CHIP	22K	5%	1/10W
R841	1-216-845-11	METAL CHIP	100K	5%	1/10W
R842	1-245-711-31	CARBON	10	5%	1/2W F
R843	1-216-841-11	METAL CHIP	47K	5%	1/10W
R850	1-216-821-11	METAL CHIP	1K	5%	1/10W
R851	1-216-841-11	METAL CHIP	47K	5%	1/10W
R852	1-216-817-11	METAL CHIP	470	5%	1/10W
R858	1-216-841-11	METAL CHIP	47K	5%	1/10W
R860	1-216-842-11	METAL CHIP	56K	5%	1/10W
R861	1-216-841-11	METAL CHIP	47K	5%	1/10W
R862	1-260-086-31	CARBON	82	5%	1/2W F
R863	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R864	1-216-837-11	METAL CHIP	22K	5%	1/10W
R865	1-216-821-11	METAL CHIP	1K	5%	1/10W
R866	1-216-837-11	METAL CHIP	22K	5%	1/10W
⚠R888	1-220-893-11	METAL	0.22	10%	5W F
R889	1-216-821-11	METAL CHIP	1K	5%	1/10W
R890	1-216-837-11	METAL CHIP	22K	5%	1/10W
R891	1-216-845-11	METAL CHIP	100K	5%	1/10W
R892	1-245-711-31	CARBON	10	5%	1/2W F
		< RELAY >			
RY862	1-755-500-11	RELAY			
		< TERMINAL BOARD >			
TB001	1-820-067-11	TERMINAL BOARD (SPEAKER) (SUBWOOFER OUT)			
**********					
	1-687-669-12	SW BOARD			
		**********			
		< SWITCH >			
S751	1-786-514-11	SWITCH, LEVER (SLIDE) (OPEN/CLOSE DETECT)			
**********					

Ref. No.	Part No.	Description			Remark
	A-1249-262-A	TRANS BOARD, COMPLETE (E2,E51)			
	A-1314-147-A	TRANS BOARD, COMPLETE (AR)			
	A-1314-148-A	TRANS BOARD, COMPLETE (AUS)			
		**********			
	1-533-217-41	HOLDER, FUSE			
		< CAPACITOR >			
C1234	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C1262	1-126-964-11	ELECT	10uF	20%	50V
C1263	1-126-968-11	ELECT	100uF	20%	50V
C1292	1-128-576-11	ELECT	100uF	20%	63V
		< CONNECTOR >			
* CN1212	1-564-522-11	PLUG, CONNECTOR 7P			
* CN1214	1-564-521-11	PLUG, CONNECTOR 6P			
		< DIODE >			
D1264	8-719-083-87	DIODE UDZSTE-1733B			
D1292	6-500-522-21	DIODE 10EDB40-TB3			
		< TRANSISTOR >			
Q1264	8-729-024-93	TRANSISTOR 2SB1565E			
		< RESISTOR >			
R1262	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R1263	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R1264	1-216-821-11	METAL CHIP	1K	5%	1/10W
⚠R1292	1-219-124-11	FUSIBLE	0.68	5%	1/4W F
**********					
	A-1252-157-A	USB BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C901	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C902	1-124-779-00	ELECT CHIP	10uF	20%	16V
C903	1-124-779-00	ELECT CHIP	10uF	20%	16V
C904	1-124-779-00	ELECT CHIP	10uF	20%	16V
C905	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C906	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C907	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C908	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C909	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C910	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C912	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C913	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C914	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C915	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C916	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C917	1-100-354-21	ELECT CHIP	220uF	20%	6.3V
C919	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C920	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C921	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C922	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C930	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN901	1-770-160-21	PIN, CONNECTOR (PC BOARD) 2P			
CN903	1-779-993-11	PIN, CONNECTOR (PWB) 5P			
CN904	1-784-859-51	CONNECTOR, FFC (LIF(NON-ZIF)) 7P			
CN907	1-784-833-51	CONNECTOR, FFC (LIF(NON-ZIF)) 21P			
		< DIODE >			
D901	6-501-579-01	DIODE MC2837			
D902	6-501-579-01	DIODE MC2837			
		< FERRITE BEAD >			
FB901	1-469-152-11	FERRITE, EMI (SMD) (2012)			
FB902	1-469-152-11	FERRITE, EMI (SMD) (2012)			
		< IC >			
IC901	6-807-284-01	IC TMP92CD28AFG-2CB4			
IC915	6-710-887-01	IC R5523N001B-TR-F			
IC921	6-704-832-01	IC IS61LV6416-10TLT			
		< JUMPER RESISTOR >			
JR902	1-216-295-11	SHORT CHIP	0		
		< RESISTOR >			
R901	1-216-833-11	METAL CHIP	10K	5%	1/10W
R902	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R903	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R904	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R905	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R906	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R907	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R913	1-216-845-11	METAL CHIP	100K	5%	1/10W
R915	1-216-833-11	METAL CHIP	10K	5%	1/10W
R916	1-216-864-11	SHORT CHIP	0		
R917	1-216-864-11	SHORT CHIP	0		
R919	1-216-809-11	METAL CHIP	100	5%	1/10W
R920	1-216-833-11	METAL CHIP	10K	5%	1/10W
R921	1-216-845-11	METAL CHIP	100K	5%	1/10W
R922	1-216-845-11	METAL CHIP	100K	5%	1/10W
R923	1-216-802-11	METAL CHIP	27	5%	1/10W
R924	1-216-802-11	METAL CHIP	27	5%	1/10W
R925	1-216-835-11	METAL CHIP	15K	5%	1/10W
R926	1-216-835-11	METAL CHIP	15K	5%	1/10W
R928	1-216-864-11	SHORT CHIP	0		
R932	1-216-809-11	METAL CHIP	100	5%	1/10W
R933	1-216-864-11	SHORT CHIP	0		
R934	1-216-833-11	METAL CHIP	10K	5%	1/10W
R937	1-216-809-11	METAL CHIP	100	5%	1/10W
R938	1-216-809-11	METAL CHIP	100	5%	1/10W
R941	1-216-845-11	METAL CHIP	100K	5%	1/10W
R942	1-216-845-11	METAL CHIP	100K	5%	1/10W
R943	1-216-845-11	METAL CHIP	100K	5%	1/10W
R944	1-216-845-11	METAL CHIP	100K	5%	1/10W
R945	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R947	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R950	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R970	1-216-809-11	METAL CHIP	100	5%	1/10W
R971	1-216-809-11	METAL CHIP	100	5%	1/10W

USB **USB CONNECTOR**

Ref. No.	Part No.	Description			Remark
R972	1-216-809-11	METAL CHIP	100	5%	1/10W
R973	1-216-809-11	METAL CHIP	100	5%	1/10W
R974	1-216-809-11	METAL CHIP	100	5%	1/10W
R975	1-216-809-11	METAL CHIP	100	5%	1/10W
R976	1-216-809-11	METAL CHIP	100	5%	1/10W
R977	1-216-809-11	METAL CHIP	100	5%	1/10W
R978	1-216-809-11	METAL CHIP	100	5%	1/10W
R979	1-216-809-11	METAL CHIP	100	5%	1/10W
R981	1-216-809-11	METAL CHIP	100	5%	1/10W
R982	1-216-809-11	METAL CHIP	100	5%	1/10W
R983	1-216-809-11	METAL CHIP	100	5%	1/10W
R984	1-216-809-11	METAL CHIP	100	5%	1/10W
R985	1-216-809-11	METAL CHIP	100	5%	1/10W
R986	1-216-809-11	METAL CHIP	100	5%	1/10W
		< NETWORK RESISTOR >			
RB921	1-234-944-21	RES, NETWORK 47X4 (1005)			
RB922	1-234-944-21	RES, NETWORK 47X4 (1005)			
RB923	1-234-944-21	RES, NETWORK 47X4 (1005)			
RB924	1-234-944-21	RES, NETWORK 47X4 (1005)			
		< VIBRATOR >			
X901	1-813-931-21	VIBRATOR, CRYSTAL (9MHz)			
**********					
		USB CONNECTOR BOARD			
		**********			
		< CAPACITOR >			
C967	1-126-176-11	ELECT	220uF	20%	10V
C968	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
		< CONNECTOR >			
CN952	1-815-238-21	CONNECTOR, USB (A) (USB)			
		< DIODE >			
D955	6-501-444-01	LED SELU2610C-STP6 (REC/ERASE)			
		< RESISTOR >			
R591	1-216-295-11	SHORT CHIP	0		
R932	1-216-295-11	SHORT CHIP	0		
**********					

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
1	1-823-718-11	WIRE (FLAT TYPE) (17 CORE)	
9	1-828-956-11	WIRE (FLAT TYPE) (9 CORE)	
⚠11	1-468-737-51	SWITCHING, POWER (EXCEPT AUS)	
⚠11	1-468-737-71	SWITCHING, POWER (AUS)	
51	1-828-964-11	WIRE (FLAT TYPE) (11 CORE)	
53	1-417-656-11	DECK, MECHA	
102	1-828-992-11	WIRE (FLAT TYPE) (17 CORE)	
105	1-829-032-11	WIRE (FLAT TYPE) (25 CORE)	
⚠204	1-569-008-21	ADAPTOR, CONVERSION (E2,E51)	
⚠205	1-775-790-71	CORD, POWER (AUS)	
⚠205	1-777-071-83	CORD, POWER (E2,E51)	
⚠205	1-829-387-11	CORD, POWER (AR)	
207	1-457-369-11	CORE, FERRITE (EXCEPT AUS)	
207	1-500-497-11	FILTER, CLAMP (FERRITE CORE) (AUS)	
208	1-828-632-11	WIRE (FLAT TYPE) (21 CORE)	
209	1-828-973-11	WIRE (FLAT TYPE) (13 CORE)	
252	1-828-938-11	WIRE (FLAT TYPE) (5 CORE)	
301	1-471-035-11	MAGNET ASSY	
306	1-824-048-12	WIRE (FLAT TYPE) (27 CORE)	
⚠327	A-4735-357-A	BASE ASSY, OP	
328	1-834-268-11	WIRE (FLAT TYPE) (16 CORE)	
D656	6-500-249-01	DIODE D15XB20	
D658	8-719-073-32	DIODE D25XB60	
⚠F1241	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
⚠F1251	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
⚠F1261	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
⚠F1271	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
⚠F1281	1-532-504-33	FUSE (T4AL/250V)	
M741	A-1108-965-A	MOTOR ASSY, TABLE (TABLE)	
M751	A-4737-553-A	MOTOR ASSY, LOADING (LOADING)	
M891	1-763-372-11	FAN, DC	
M892	1-763-372-11	FAN, DC	
RE701	1-477-680-12	ENCODER, ROTARY (DISC TRAY ADDRESS DETECT)	
S201	1-771-853-11	SWITCH, DETECTION (LIMIT)	
⚠T1200	1-445-185-11	TRANSFORMER, POWER	
TU901	1-693-734-11	TUNER (FM/AM) (ANTENNA)	

MEMO

REVISION HISTORY

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

Ver.	Date	Description of Revision
1.0	2007. 06	New