

# HCD-ZT4

## SERVICE MANUAL

US Model

Ver. 1.0 2008.06



- HCD-ZT4 is the amplifier, USB, CD player, tape deck and tuner section in LBT-ZT4.

CD Section	Model Name Using Similar Mechanism	NEW
	Mechanism Type	CDM88A-K6BD93-WOD
	Optical Pick-up Block Name	KSM-213DCP
Tape deck Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	TCM-J1 or CS-21SC-900TP

### SPECIFICATIONS

#### AUDIO POWER SPECIFICATION

##### POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 6 ohm loads, both channels driven, from 120 Hz – 10 kHz; rated 110 watts per channel minimum RMS power, with no more than 0.7% total harmonic distortion from 250 miliwatts to rated output.

#### Amplifier section

The following are measured at AC 120 V

60 Hz

Front speaker

RMS output power (reference):  
180 W + 180 W (per channel at 6 Ω,  
1 kHz, 10% THD)

Subwoofer

RMS output power (reference): 180 W  
(at 6 Ω, 100 Hz, 10% THD)

#### Inputs

AUDIO INPUT: sensitivity  
800 mV, impedance 47 kilohms  
MIC: sensitivity 1 mV, impedance  
10 kilohms  
↔ (USB) port: Type A  
DMPORT

#### Outputs

PHONES: accepts headphones of 8 Ω or  
more  
FRONT SPEAKER: accepts impedance of  
6 Ω  
SUBWOOFER: accepts impedance of 6 Ω

#### USB section

Supported bit rate

MP3 (MPEG 1 Audio Layer-3):  
32 – 320 kbps, VBR  
WMA: 32 – 192 kbps, VBR  
AAC: 48 – 320 kbps

Sampling frequencies

MP3 (MPEG 1 Audio Layer-3):  
32/44.1/48 kHz  
WMA: 44.1 kHz  
AAC: 44.1 kHz

Transfer speed

Full-Speed

Supported USB device

Mass Storage Class

Maximum current

500 mA

#### CD player section

System: Compact disc and digital audio system

Laser Diode Properties

Emission Duration: Continuous  
Laser Output\*: Less than 44.6 μW  
\* This output is the value measurement  
at a distance of 200 mm from the  
objective lens surface on the Optical  
Pick-up Block with 7 mm aperture.

Frequency response: 20 Hz – 20 kHz

Signal-to-noise ratio: More than 90 dB

Dynamic range: More than 88 dB

#### Tape deck section

Recording system: 4-track 2-channel, stereo

#### Tuner section

FM stereo, FM/AM superheterodyne tuner

#### FM tuner section

Tuning range:

87.5 – 108.0 MHz (100 kHz step)

Antenna: FM lead antenna

Antenna terminals: 75 ohms unbalanced

Intermediate frequency: 10.7 MHz

#### AM tuner section

Tuning range

530 – 1,710 kHz (with 10 kHz tuning interval)

531 – 1,710 kHz (with 9 kHz tuning interval)

Antenna: AM loop antenna, external antenna terminal

Intermediate frequency: 450 kHz

#### General

Power requirements

AC 120 V, 60 Hz

Power consumption

225 W

Dimensions (w/h/d) (excl. speakers)

Approx. 231 × 361 × 437.5 mm  
(9 1/8 × 14 1/4 × 17 1/4 inch)

Mass (excl. speakers)

10.0 kg (22 lb 1 oz)

Design and specifications are subject to change without notice.

## COMPACT DISC DECK RECEIVER

9-889-196-01

2008F05-1

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Sony Corporation

Audio Business Group

Published by Sony Techno Create Corporation

# 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.

### CAUTION

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

## SAFETY CHECK-OUT

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

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

Check leakage as described below.

## LEAKAGE TEST

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

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

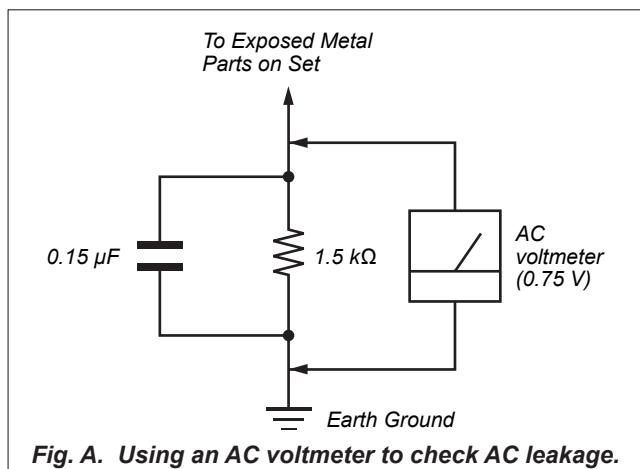


Fig. A. Using an AC voltmeter to check AC leakage.

## SAFETY-RELATED COMPONENT WARNING!

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

## TABLE OF CONTENTS

<b>1. SERVICING NOTES .....</b>	<b>4</b>	
<b>2. GENERAL .....</b>	<b>8</b>	
<b>3. DISASSEMBLY</b>		
3-1. Disassembly Flow.....	10	
3-2. Side-L/R Case.....	11	
3-3. Top Panel Block.....	11	
3-4. Tape Mechanism Deck.....	12	
3-5. Front Panel Block .....	12	
3-6. DC FAN (M102), Back Panel.....	13	
3-7. MAIN Board.....	13	
3-8. CD Mechanism Block.....	14	
3-9. DC Fan (M101), POWERAMP Board .....	14	
3-10. Base Unit.....	15	
3-11. OP Base Assy (KSM-213D) .....	15	
3-12. Belt (DLM3A) .....	16	
<b>4. TEST MODE .....</b>	<b>17</b>	
<b>5. MECHANICAL ADJUSTMENTS .....</b>	<b>20</b>	
<b>6. ELECTRICAL ADJUSTMENTS .....</b>	<b>21</b>	
<b>7. DIAGRAMS</b>		
7-1. Block Diagram - CD SERVO, USB Section - .....	23	
7-2. Block Diagram - MAIN Section -.....	24	
7-3. Block Diagram - AMP Section - .....	25	
7-4. Block Diagram - PANEL, POWER SUPPLY Section - .....	26	
7-5. Schematic Diagram - CD Board (1/2) - .....	28	
7-6. Schematic Diagram - CD Board (2/2) - .....	29	
7-7. Printed Wiring Board - CD Board - .....	30	
7-8. Printed Wiring Board - TC Board -.....	31	
7-9. Schematic Diagram - TC Board - .....	31	
<b>8. EXPLODED VIEWS</b>		
8-1. Case Section.....	58	
8-2. Loading Panel Section .....	59	
8-3. DISPLAY Board Section .....	60	
8-4. Front Panel Section.....	61	
8-5. Meter Display Assy.....	62	
8-6. Top Panel Section .....	63	
8-7. Back Panel Section .....	64	
8-8. MAIN Board Section.....	65	
8-9. Chassis Section .....	66	
8-10. CD Mechanism Section (CDM88A-K6BD93-WOD) .....	67	
<b>9. ELECTRICAL PARTS LIST .....</b>	<b>68</b>	

## **SECTION 1 SERVICING NOTES**

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

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

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

### **NOTES ON LASER DIODE EMISSION CHECK**

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

### **UNLEADED SOLDER**

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

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

#### **LF : LEAD FREE MARK**

Unleaded solder has the following characteristics.

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

### **RELEASING THE DISC TRAY LOCK**

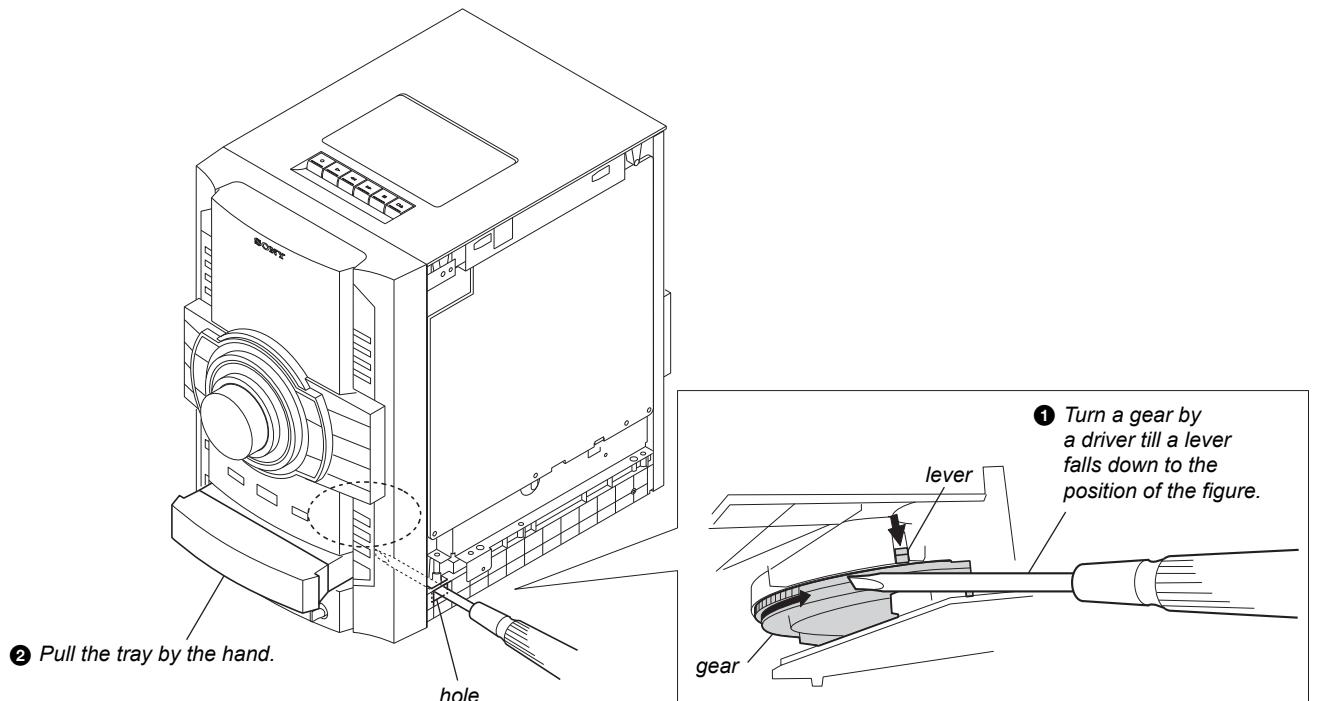
The disc tray lock function for the antitheft of an demonstration disc in the store is equipped.

#### **Releasing Procedure:**

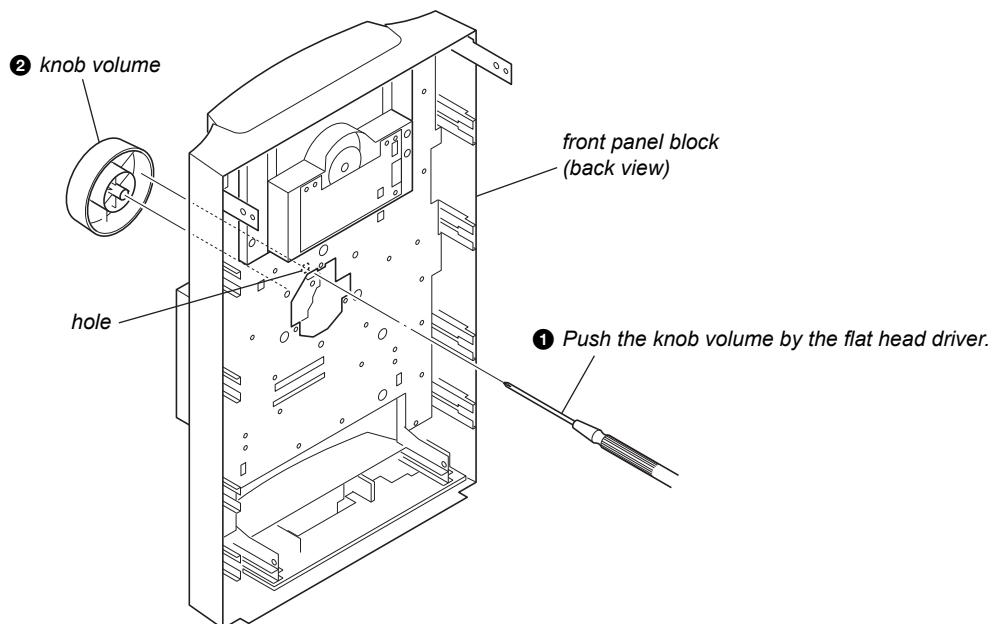
1. Press [I/Off] button to turn the power on.
2. Press the [CD] button to select CD function.
3. While pressing the [■] button, press the [▲] button for more 5 seconds).
4. The message “UNLOCKED” is displayed and the disc tray is unlocked.

**Note:** When “LOCKED” is displayed, the slot lock is not released by turning power on/off with the [I/Off] button.

## HOW TO OPEN THE TRAY WHEN POWER SWITCH TURN OFF

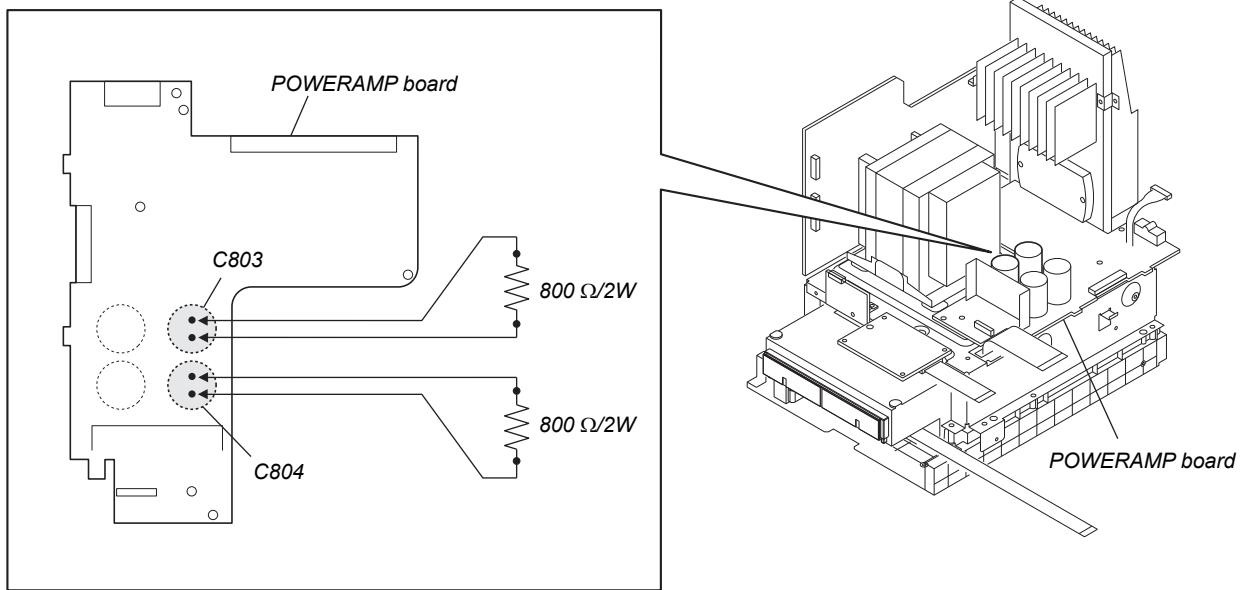


## HOW TO REMOVE THE KNOB VOLUME

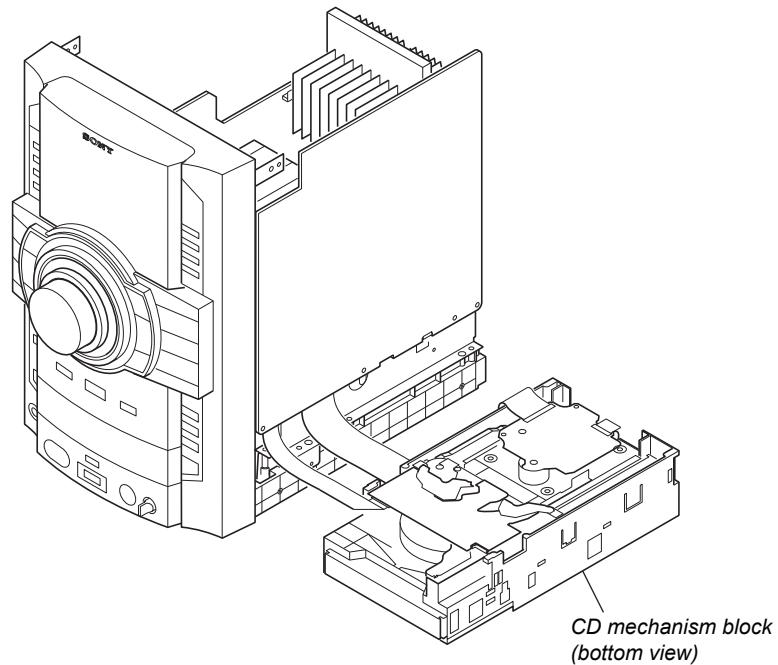


## CAPACITOR DISCHARGE FOR ELECTRIC SHOCK PREVENTION

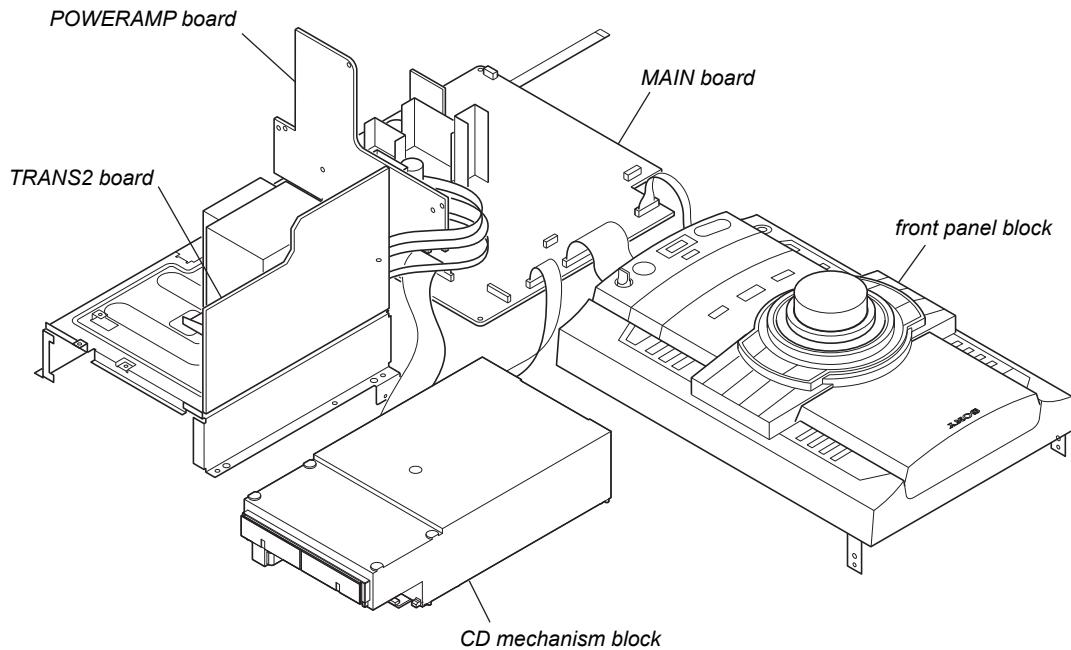
In checking the MAIN board, make a capacitor discharge of C803 and C804 for electric shock prevention.



## CD MECHANISM BLOCK SERVICE POSITION



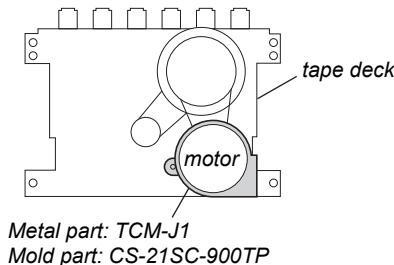
## POWERAMP BOARD SERVICE POSITION



## HOW TO DISTINGUISH TAPE MECHANISM DECK

Two kinds of tape mechanism decks installed by this set exist.

Please do the repair exchange after confirming which tape mechanism deck set of the repair according to how to distinguish the figure below.



Tape Deck Name	Tape Deck Part No.	Belt Part No.
TCM-J1	A-1527-851-A	2-670-389-01 BELT (1) 3-214-817-01 BELT (FR)
CS-21SC-900TP	1-797-575-11	2-688-621-01 BELT (R/F) 2-688-622-01 BELT (MAIN)

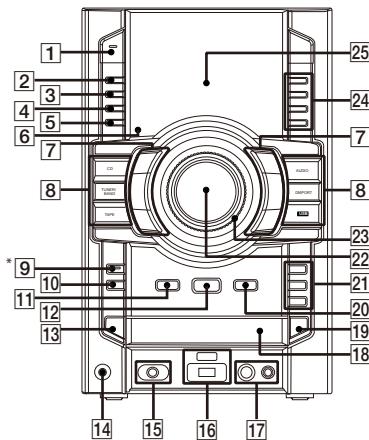
This section is extracted  
from instruction manual.

### Guide to parts and controls

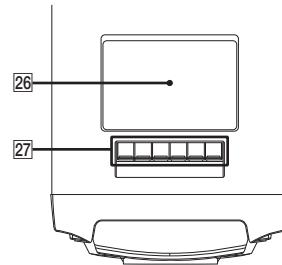
This manual mainly explains operations using the remote, but the same operations can also be performed using the buttons on the unit having the same or similar names.

#### Unit

##### Front view



##### Top view



**1** **V/○ (on/standby)**  
Press to turn on the system.  
The STANDBY indicator lights up when the system is turned off.

**2** **DISPLAY**  
Press to change the information on the display.

**3** **METER MODE**  
Press to select the preset meter display.

**4** **OPTIONS**  
Press to change the display, USB and MP3 BOOSTER+ settings.

**5** **ERASE**  
Press to erase audio files and folders from the connected optional USB device.

**6** **Remote sensor**

**7** **File icon +/-(select folder)**  
Press to select a folder.

**◀◀/▶▶ (rewind/fast forward)**  
Press to find a point in a track.

**▶▶/⏸ (play/pause)**  
Press to start or pause playback.

**⏸ (stop)**  
Press to stop playback.

**TUNING +/-**  
Press to tune in the station you want.

**◀◀/▶▶ (go back/go forward)**  
Press to select a track or file.

**8** **CD**  
Press to select the CD function.

**9** **TUNER/BAND**  
Press to select the TUNER function.  
Press to select the FM or AM band.

**10** **TAPE**  
Press to select the TAPE function.

**11** **AUDIO**  
Press to select the AUDIO function.

**12** **USB**  
Press to select the USB function.

**13** **DMPORT**  
Press to select the DMPORT function.

**14** **SUBWOOFER**  
Press to turn on and off the subwoofer.  
The SUBWOOFER indicator lights up when the subwoofer is turned on.

**15** **REC TIMER**  
Press to set the Recording Timer.

**16** **RETURN**  
Press to return to the parent folder.  
Press to exit search mode.

**17** **ENTER**  
Press to enter the settings.

**18** **DISC SKIP/EX-CHANGE**  
Press to select a disc. Press to exchange a disc while playing.

**19** **REC TO USB**  
Press to transfer onto the connected optional USB device.

**20** **DISC 1 – 3**  
Press to select a disc. Press to switch to the CD function from other function.

**21** **◀◀/▶▶ (rewind/fast forward)**  
Press to rewind/fast forward a tape.

**22** **MASTER VOLUME**  
Turn to adjust the volume.

**23** **OPERATION DIAL**  
Turn to select a setting in the OPTIONS menu.

**24** **PRESET EQ**  
Turn to select a track, file or folder.

**25** **GROOVE, SURROUND**  
Press to select a sound effect.

**26** **EQ BAND**  
Press to select the frequency band.

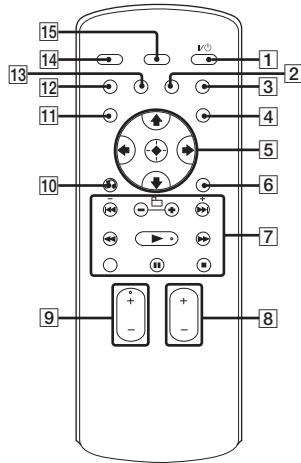
**27** **● (record)**  
Press to record onto a tape.

**28** **▶ (play)**  
Press to start tape playback.

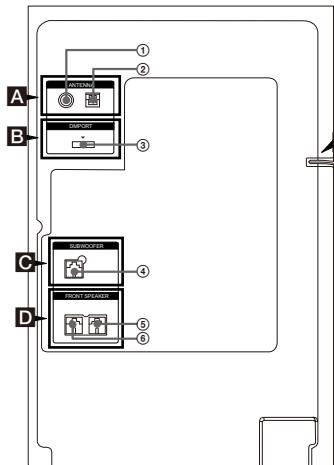
\* The ▶ button has a tactile dot. Use the tactile dot as a reference when operating the system.

**29** **▶▶/⏸ (stop/eject)**  
Press to stop tape playback.

**30** **⏸ (pause)**  
Press to insert or eject a tape.

**Remote RM-AMU008**

- 1** **I/O (on/standby)**  
Press to turn on the system.
- 2** **CLEAR**  
Press to delete the last step from the program list.
- 3** **EQ**  
Press to select a sound effect.
- 4** **TIMER MENU**  
Press to set the clock and the timers.
- 5** **▲/▼/▶/◀**  
Press to select the settings.
- 6** **+**  
Press to enter the selection.
- 7** **TOOL MENU**  
Press to select the menu of the component connected to the DIGITAL MEDIA PORT adapter.
- 8** **▼/▶/◀/▶**  
Press to select a track or file.
- 9** **+/- (select folder)**  
Press to select a folder.
- 10** **+/- (tuning)**  
Press to tune in the station you want.
- 11** **◀◀/▶▶ (rewind/fast forward)**  
Press to find a point in a track or file.
- 12** **▶ (play)**  
Press to start playback.
- 13** **DISC SKIP**  
Press to select a disc.
- 14** **■ (pause)**  
Press to pause playback.
- 15** **■ (stop)**  
Press to stop playback.
- 16** **FUNCTION +/-**  
Press to select a function.
- 17** **VOLUME +/-\***  
Press to adjust the volume.  
\* The VOLUME + button has a tactile dot. Use the tactile dot as a reference when operating the system.
- 18** **RETURN**  
Press to return to the parent folder.  
Press to exit search mode.
- 19** **TUNER MEMORY**  
Press to preset the radio station.
- 20** **PLAY MODE/TUNING MODE**  
Press to select the play mode of an AUDIO CD, MP3 disc or an optional USB device.
- 21** **SLEEP**  
Press to set the Sleep Timer.
- 22** **REPEAT/FM MODE**  
Press to listen to a disc, an USB device, a single track or file repeatedly.  
Press to select the FM reception mode (monaural or stereo).
- 23** **DISPLAY**  
Press to change the information on the display.

**Getting Started****Hooking up the system securely**

- ① To FM lead antenna
- ② To AM loop antenna
- ③ To DIGITAL MEDIA PORT adapter
- ④ To subwoofer
- ⑤ To front speaker (left)
- ⑥ To front speaker (right)

**A Antennas**

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



Extend the FM lead antenna horizontally

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

**B DMPORT (DIGITAL MEDIA PORT)**

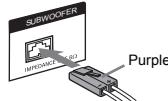
Connect the DIGITAL MEDIA PORT adapter. You need to connect the DIGITAL MEDIA PORT adapter to an optional audio device (portable audio player, etc.).

**Notes**

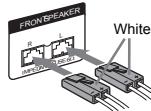
- The DIGITAL MEDIA PORT adapters are available for purchase depending on the area.
- Do not connect an adapter other than the DIGITAL MEDIA PORT adapter.
- When connecting the DIGITAL MEDIA PORT adapter, be sure the connector is inserted with the arrow mark facing towards the arrow mark on the DMPORT jack.
- Do not connect or disconnect the DIGITAL MEDIA PORT adapter to/from the DMPORT jack while the system is turned on.
- When using a DIGITAL MEDIA PORT adapter that has video output function, connect the video output of the adapter directly to the TV.

**C Subwoofer**

Be sure to insert the connector straight into the terminals.

**D Front speakers**

Be sure to insert the connector straight into the terminals.

**E Power**

Connect the power cord to a wall socket. The demonstration appears in the display. If the plug does not fit the wall socket, detach the supplied plug adaptor (only for models equipped with an adaptor).

**When carrying this system**

Use the buttons on the unit for this operation.

- 1 Remove all discs to protect the CD mechanism.
- 2 Press CD to select the CD function.
- 3 Hold down DISC SKIP/EX-CHANGE, and press I/O until "STANDBY" appears.
- 4 After "MECHA LOCK" appears, unplug the power cord.

**Speaker pads**

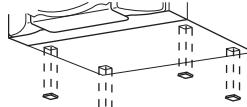
Attach the supplied speaker pads to the bottom of the front speakers and subwoofer to prevent slipping.

Front speakers:

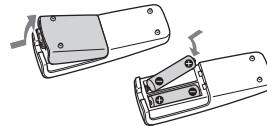
4 pads for each speaker

Subwoofer:

4 pads

**To use the remote**

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

**Notes**

- With normal use, the batteries should last for about six months.
- Do not mix an old battery with a new one or mix different types of batteries.
- If you do not use the remote for a long period of time, remove the batteries to avoid damage from battery leakage and corrosion.

**Setting the clock**

You cannot set the clock in Power Saving Mode.  
Use the buttons on the remote for this operation.

**1 Press I/O to turn on the system.**

- 2 Press TIMER MENU (RM-AMU008). If "PLAY SET" appears on the display, press **▲/▼**.
- (RM-AMU008) repeatedly to select "CLOCK SET" and then press **⊕** (RM-AMU008).

**3 Press**

- ▲/▼(RM-AMU008) repeatedly to set the hour, and then press **⊕** (RM-AMU008).**

**4 Use the same procedure to set the minutes.**

The clock settings are lost when you disconnect the power cord or if a power failure occurs.

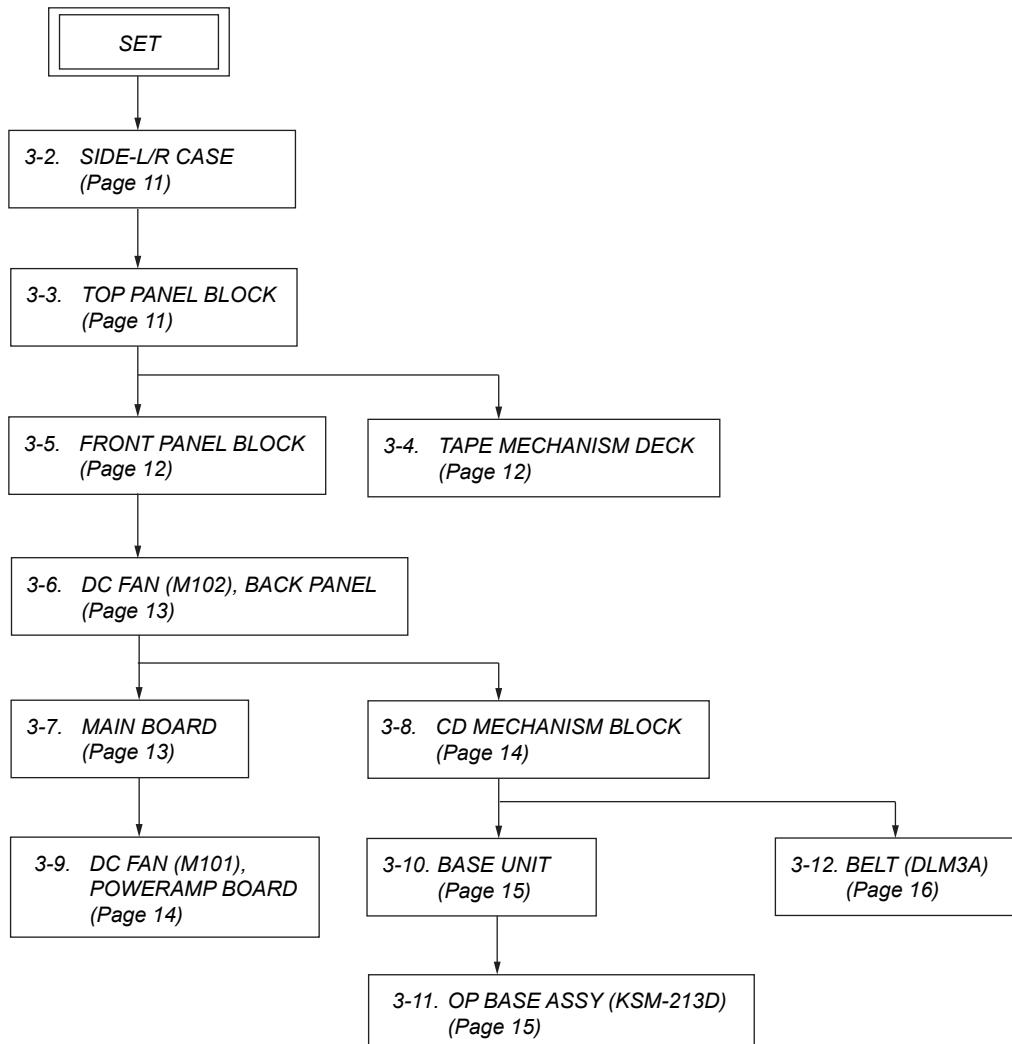
**To display the clock when the system is turned off**

Press DISPLAY repeatedly until the clock is displayed. The clock is displayed for about 8 seconds.

## SECTION 3 DISASSEMBLY

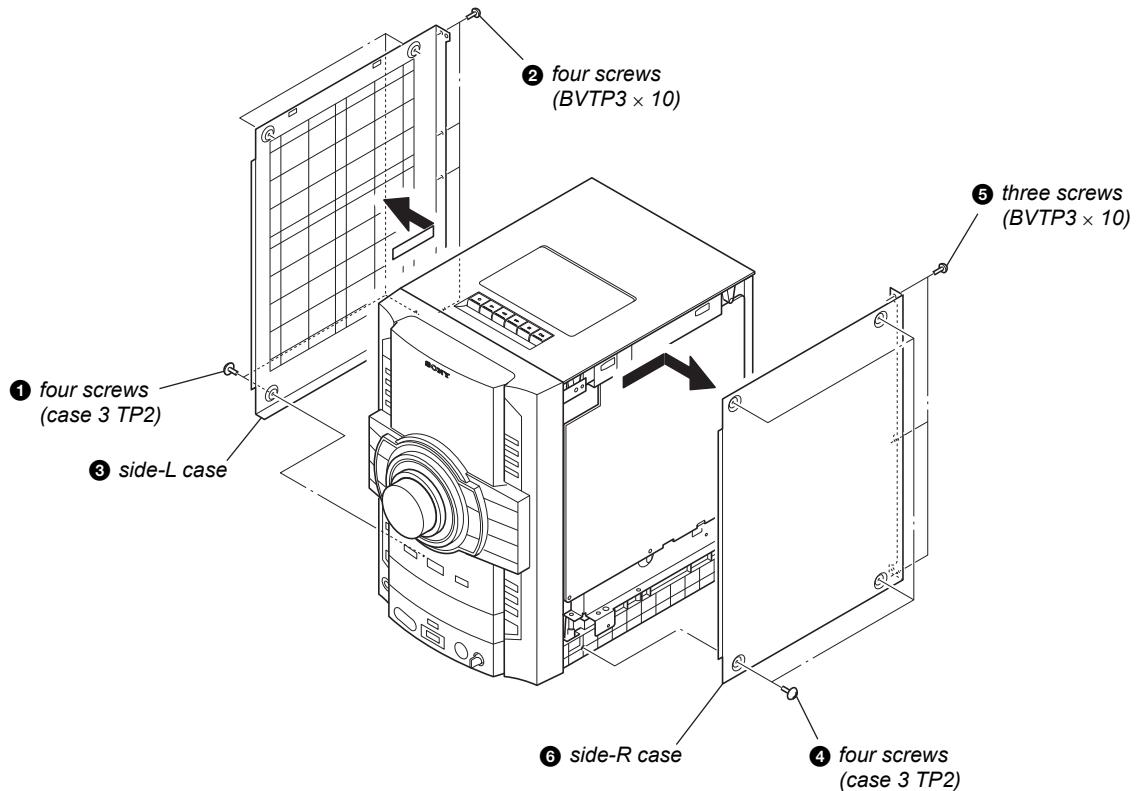
- This set can be disassembled in the order shown below.

### 3-1. DISASSEMBLY FLOW

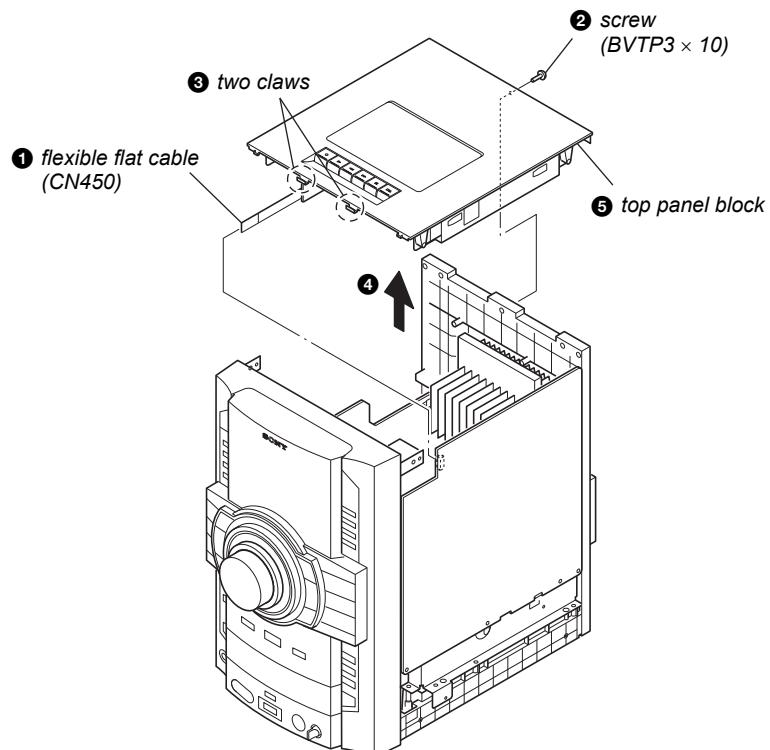


**Note:** Follow the disassembly procedure in the numerical order given.

### 3-2. SIDE-L/R CASE

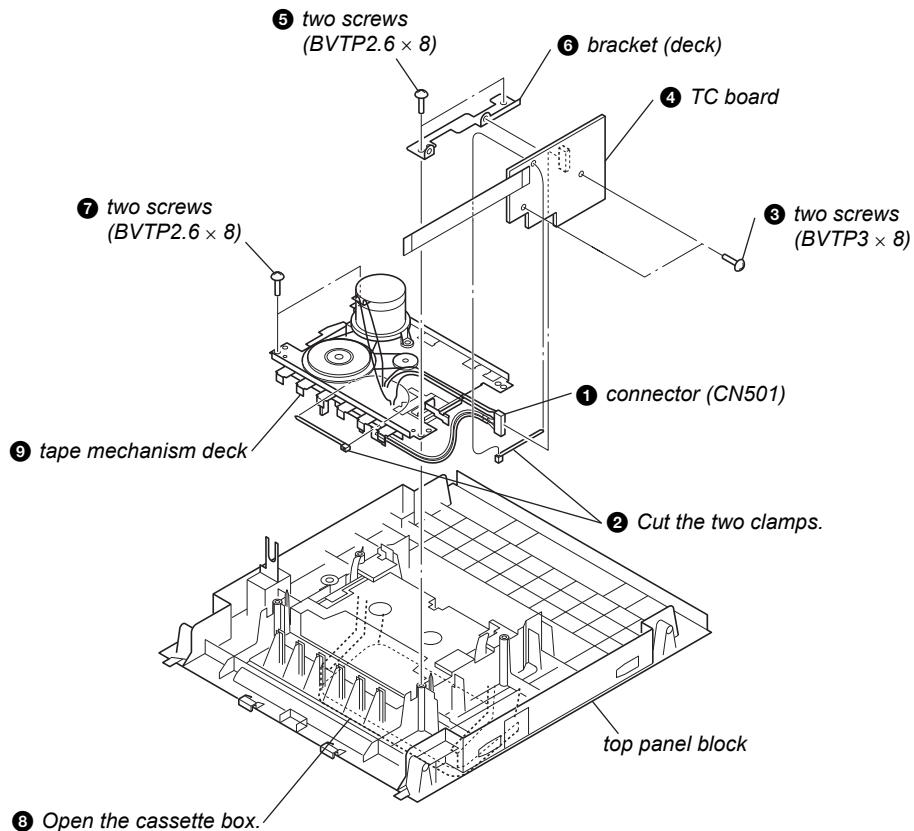


### 3-3. TOP PANEL BLOCK

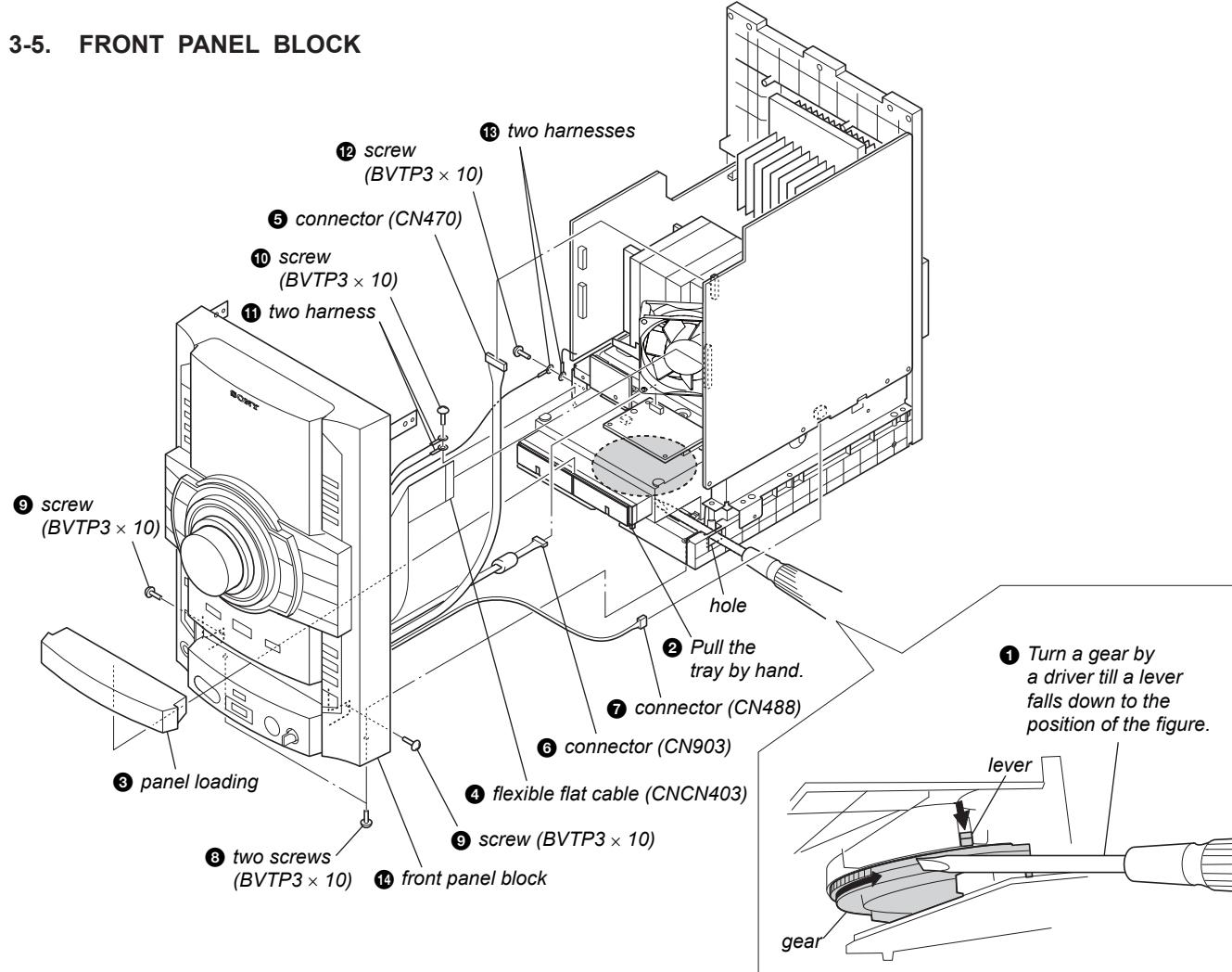


## 3-4. TAPE MECHANISM DECK

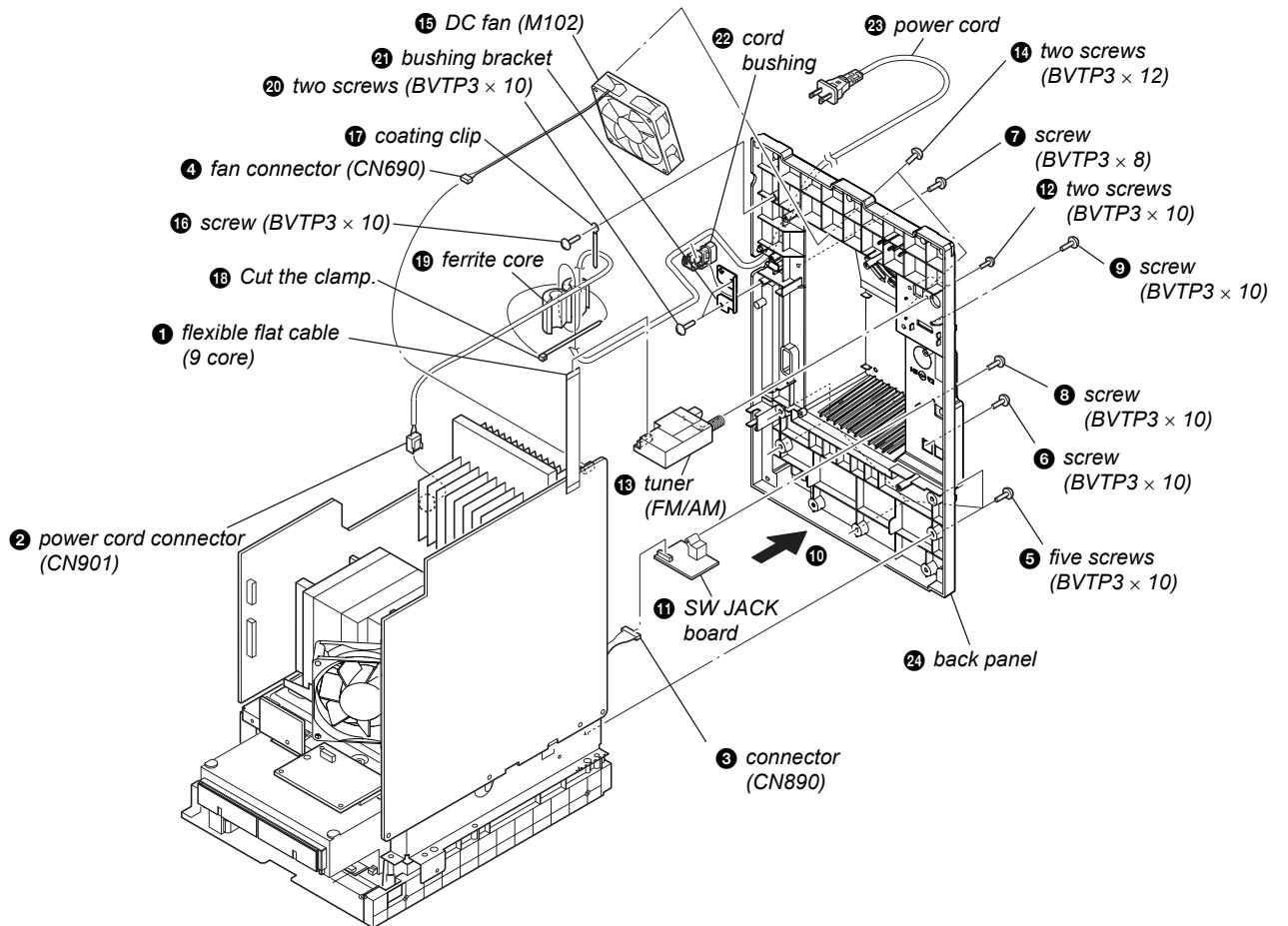
**Note:** This illustration is seeing top panel block from inside.



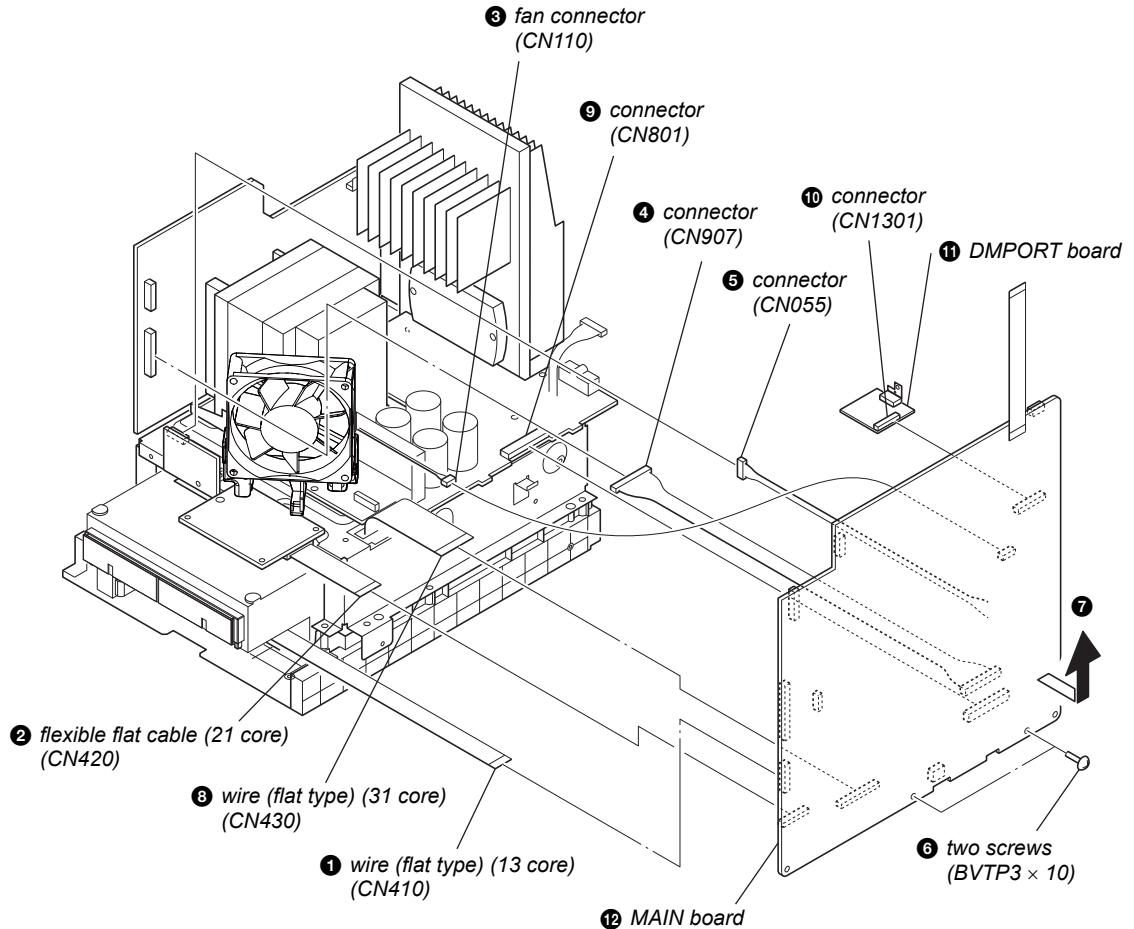
## 3-5. FRONT PANEL BLOCK



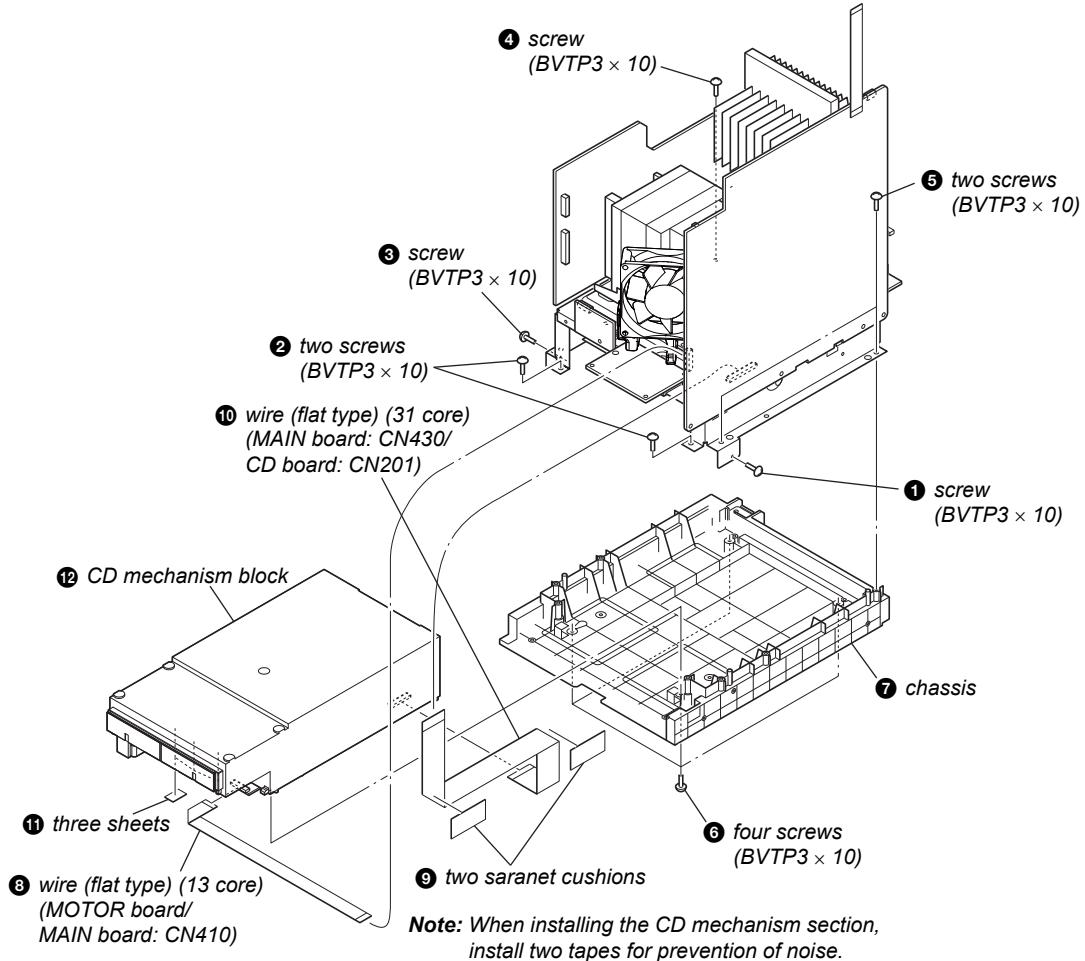
### 3-6. DC FAN (M102), BACK PANEL



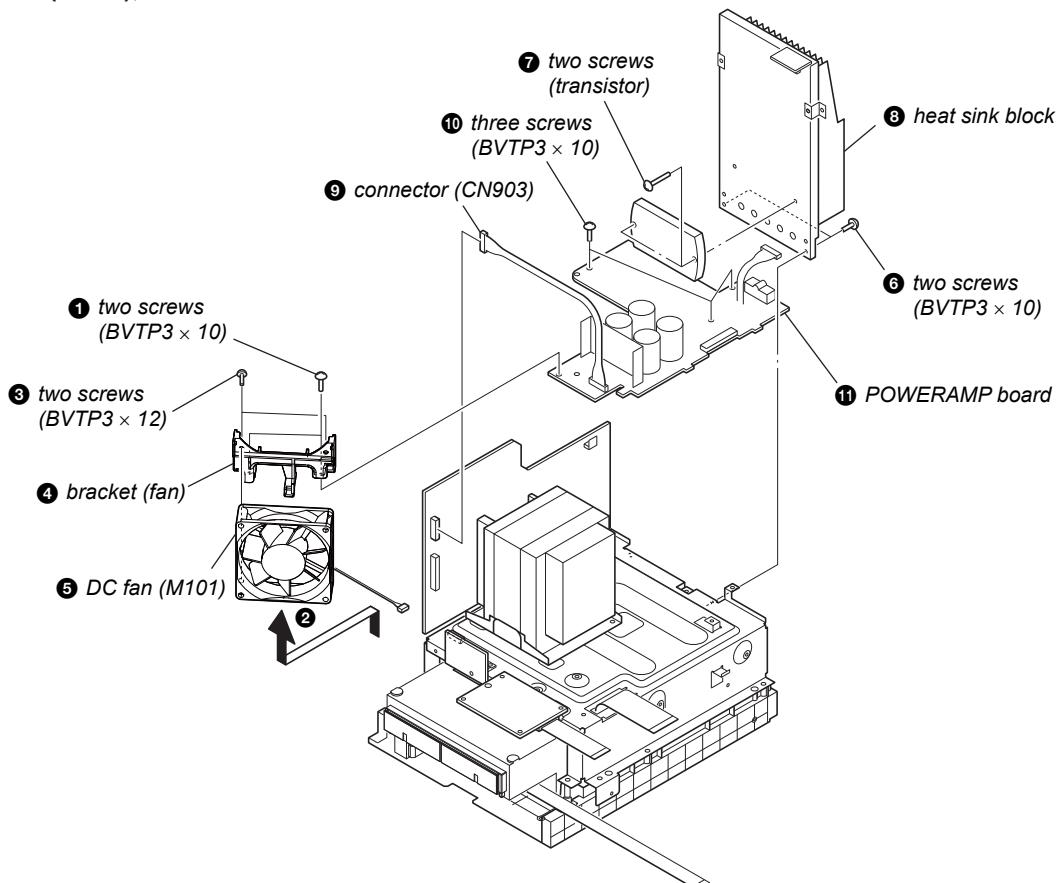
### 3-7. MAIN BOARD



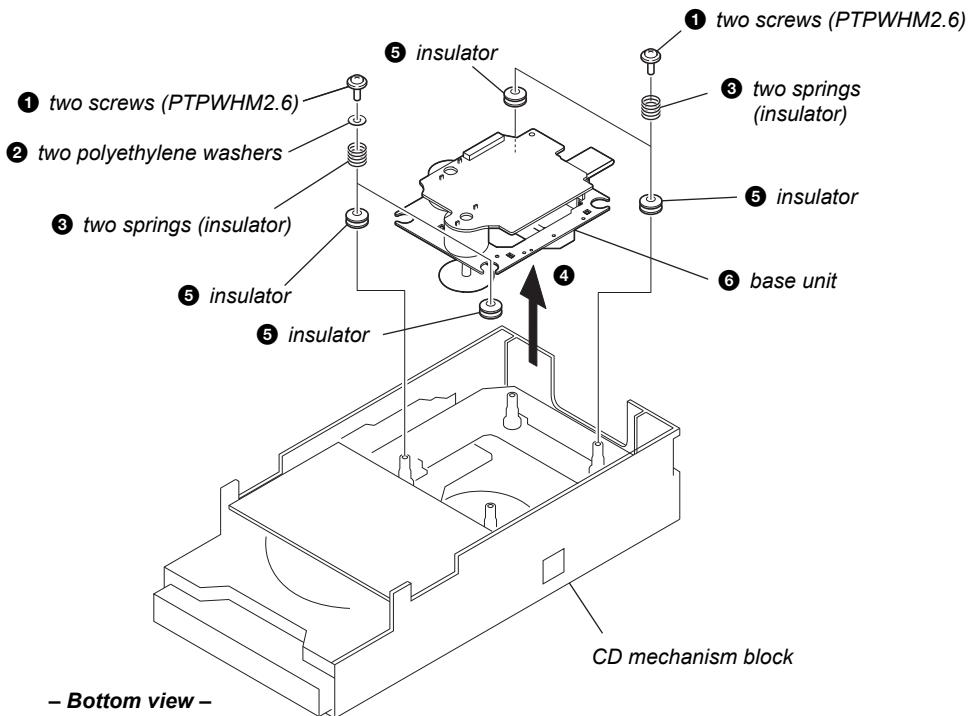
## 3-8. CD MECHANISM BLOCK



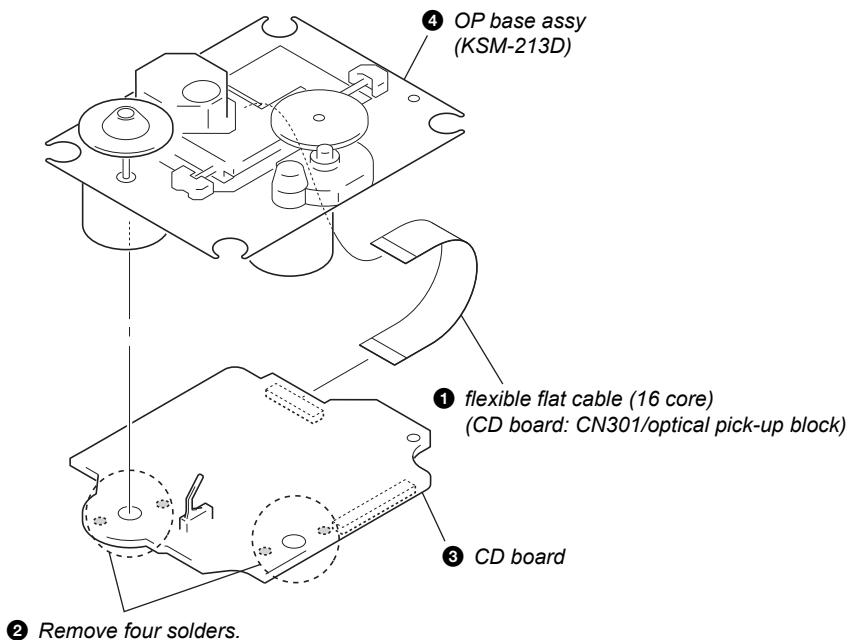
## 3-9. DC FAN (M101), POWERAMP BOARD



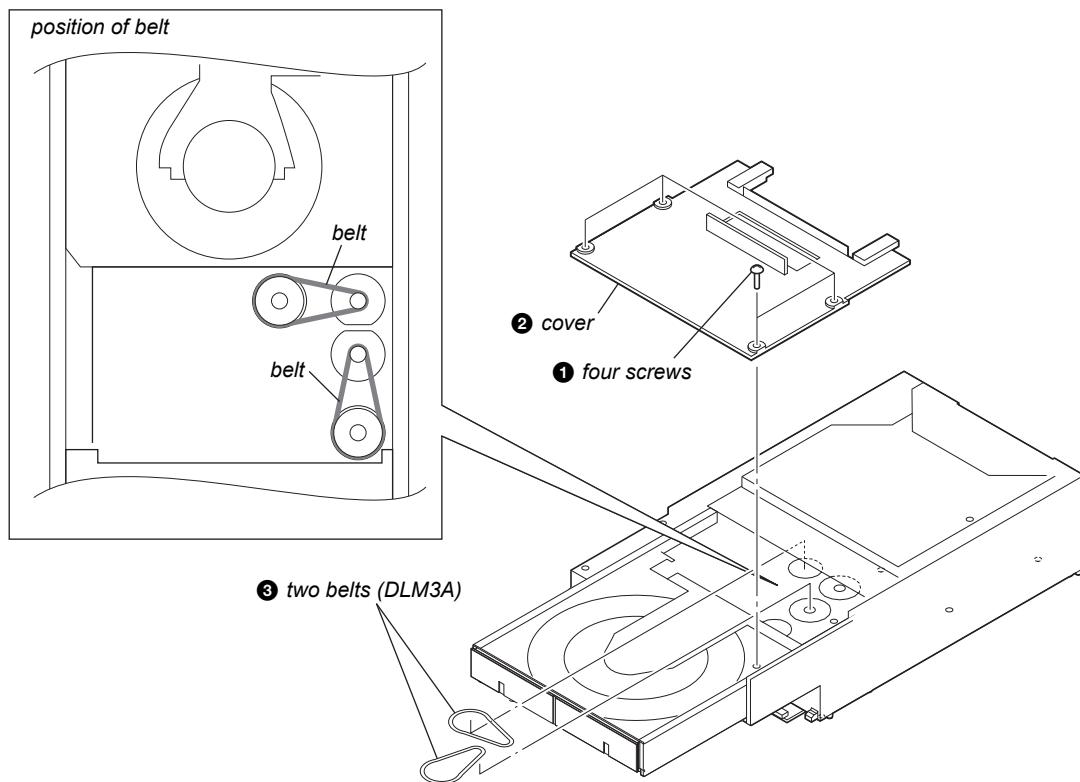
### 3-10. BASE UNIT



### 3-11. OP BASE ASSY (KSM-213D)



## 3-12. BELT (DLM3A)



## SECTION 4

### TEST MODE

#### PANEL TEST MODE

This mode is used to check the fluorescent indicator tube, LEDs, keys, [MASTER VOLUME] jog, [OPERATION DIAL] jog, model, destination and software version.

##### **Procedure:**

1. Press [■] button, [METER MODE] button and [DISC 2] button simultaneously.
2. All LEDs and segments in fluorescent indicator tube are lighted up. The POWER LED is lighted up in red color if the system is turned off and POWER LED is turn off if the system is turned on.
3. When you want to enter to the software version display mode, press [DISC 1] button. The model information appears on the fluorescent indicator tube. The message “GSL 2RS” appears on the fluorescent indicator tude. Press [DISC 1] button again to view the destination information.
4. During the destination information display, press [DISC 1] button. Each time [DISC 1] button is pressed, the fluorescent indicator tube shows the version of each category software in the following sequence: SC, GC, SYS, CD, CDDM, CDMA, CDMB, BDA, BDB, ST, TC, TA, TM, MM1, MM2 (USB Micro computer) , MTR (METER) and return back to model information display.
5. When [DISC 3] button is pressed while the version numbers are being displayed except model and destination, the date of the software creation appears. When [DISC 3] button is pressed again, the display returns to the software version display. When [DISC 1] button is pressed while the date of the software creation is being displayed, the date of the software creation is displayed in the same order of software version display.
6. Press [DISC 2] button, the key check mode is activated.
7. In the key check mode, the fluorescent indicator tube displays “K 0 J0 V0”.  
Each time a button is pressed, “K” value increases. 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.  
“J” value increases in the manner of 0,1, 2, 3 ... if [OPERATION DIAL] knob is turned clockwise, or it decreases in the manner of 0, 9, 8,7 ... if [OPERATION DIAL] knob is turned counterclockwise.
8. 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 LEDs 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 segments in fluorescent indicator tube and LEDs light up.
9. To release from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

#### COMMON TEST MODE

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

##### **To enter Common Test Mode**

##### **Procedure:**

1. Press [■] button, [METER MODE] button and [DISC 3] button simultaneously.
2. The CD ring indicators flash on the fluorescent indicator tube. The function is changed to AUDIO and the volume is changed to VOLUME MIN.

#### Check of Amplifier

##### **Procedure:**

1. Press [EQ BAND] button repeatedly until a message “GEQ MAX” appears on the fluorescent indicator tube. GEQ increases to its maximum.
2. Press [EQ BAND] button repeatedly until a message “GEQ MIN” appears on the fluorescent indicator tube. GEQ decreases to its minimum.
3. Press [EQ BAND] 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 counterclockwise even slightly, the sound volume decreases to its minimum and a message “VOLUME MIN” appears on the fluorescent indicator tube.

#### Tape function

When a tape is inserted in deck and recording is started, the function is changed to AUDIO.

#### To release from Common Test mode

##### **Procedure:**

1. To release from this mode, press [ $\text{I}/\text{O}$ ] 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 EEPROM to initial conditions. Execute this mode when returning the set to the customer.

##### **Procedure:**

1. Press [ $\text{I}/\text{O}$ ] button to turn on the system.
2. Press [■] button, [ENTER] button, and [ $\text{I}/\text{O}$ ] button simultaneously.
3. “COLD RESET” appears on the fluorescent indicator tube. After that, the fluorescent indicator tube becomes blank for a while, and the system is reset.

#### VACS ON/OFF

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

##### **Procedure:**

1. Press [ $\text{I}/\text{O}$ ] button to turn on the system.
2. Press [■] button, [DISC 2], and [DISPLAY] 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 Arabian, European and Russian models.

### Procedure:

1. Press [ $I/\odot$ ] button to turn on the system.
2. Press [TUNER/BAND] button repeatedly to select the “AM”.
3. Press [ $I/\odot$ ] button to turn off the system.
4. Press [ENTER] button and [ $I/\odot$ ] button simultaneously. The system turns 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 [ $I/\odot$ ] button to turn on the system.
2. Press [CD] button to select CD function.
3. Press [ $\blacksquare$ ] button, [METER MODE] 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 disc in stop status, press [ $\blacktriangleright\blacktriangleright$ ] to move the optical pick-up to outside track, or press [ $\blacktriangleleft\blacktriangleleft$ ] 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 [ $\blacktriangleright\blacktriangleright\blacktriangleright$ ] button. The message “LD ON” or “LD OFF” appears on the fluorescent indicator tube.
7. To release from this mode, press [ $I/\odot$ ] button.

## CD AGING MODE

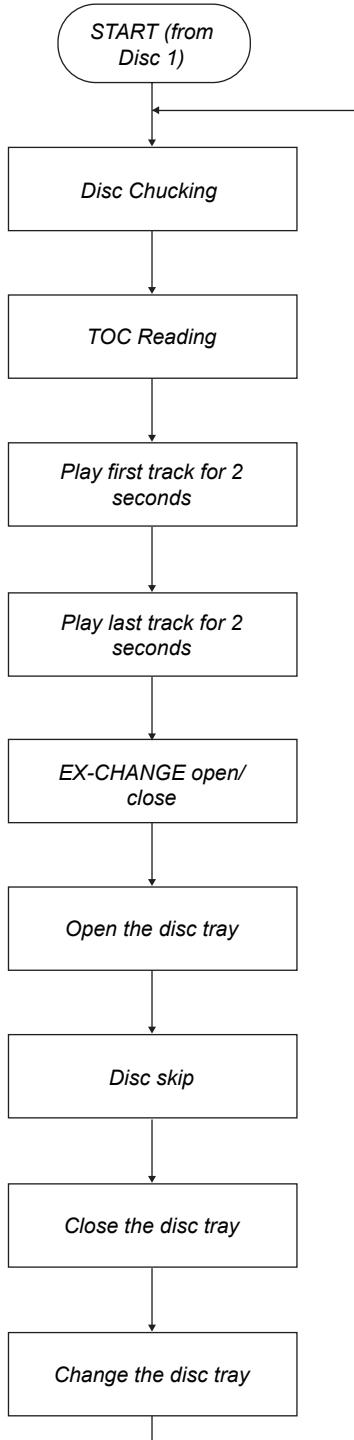
This mode can be used for operation check of CD section.

If an error occurs, the aging operation would stops and the status is displayed. If there were no error occurs, the aging operation would continue repeatedly.

### Procedure:

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

- Aging mode sequence:

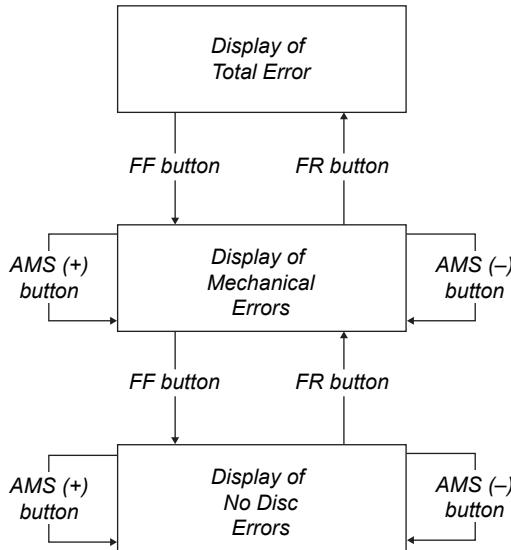


## CD ERROR CODE MODE

Display the CD error code when an error occurred

### Procedure:

1. Press [ $\blacksquare$ ] button, [METER MODE] button and [DISC 1] button simultaneously to enter the error code display mode.
2. The fluorescent indicator tube displays the number of total error.
3. Each time [ $\blacktriangleleft\blacktriangleleft$ ] or [ $\blacktriangleright\blacktriangleright$ ] button is pressed, display change as below.



4. To clear the error record, operate the cold reset. (Refer to the "COLD RESET")
5. To release from this mode, press the [I/Ø] button or disconnect the power plug to turn off the system.
- Display of total error

EM\*\*ED\*\*

EM\*\*: The number of mechanical errors.

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

- Display of mechanical errors

M\*

M\* : The number of mechanical error ("0" is latest one)  
(Press [▶▶◀] button to display the next error)

- Display of no disc errore

D\*\*\*%##00

D\* : The number of no disc error ("0" is latest one)  
(Press [▶▶◀] button to display next error)

\$\$ : Error type

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

%% : Not used

&& :  
00 : No disc judgment without chucking retry.  
01 : No disc judgment after chucking retry.

## : The state when judged as no disc

01 : Stop  
02 : Setup  
03 : TOC reading  
04 : Access  
05 : Playback  
06 : Pause  
07 : Manual search (Play)  
08 : Manual search (Pause)

## CD REPEATS 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/Ø] 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".
4. To release from this mode, operate the cold reset. (Refer to the "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 EEPROM to initial conditions during the next AC-In. Use this mode when returning the set to the customer after repair.

### Procedure:

1. Press [I/Ø] button to turn on the system.
2. Select CD function.
3. Press [■] button, [DISC 1] button and [I/Ø] button simultaneously. The system turns 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 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/Ø] button to turn on the system.
2. Select CD function.
3. Press [DISC SKIP/EX-CHANGE] button and [I/Ø] button simultaneously. The system turns 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 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/Ø] button to turn on the system.
2. Select CD function.
3. Press [■] button and [OPEN/CLOSE] button simultaneously and hold down until "LOCKED" or "UNLOCKED" displayed on the fluorescent indicator tube (around 5 seconds).

## FACTORY PRESET

This mode is use to load all the factory use preset frequencies into FM 1-FM 20 and AM 1-AM 10. Originally, frequency of FM 1-FM 20 and AM 1-AM10 are set to the minimum frequency.

### Procedure:

1. Press [I/Ø] button to turn on the system.
2. Press [TUNER/BAND] button, [■] button, and [DISC 1] button simultaneously and the message "FACTORY" appears on the fluorescent indicator tube. The function is changed to TUNER automatically.

## SECTION 5

### MECHANICAL ADJUSTMENTS

**VACS DISPLAY**

This mode is used to check the VACS level.

**Procedure:**

1. Press [I/O] button to turn on the system.
2. Press [ERASE] button, [■] button and [ENTER] button simultaneously.
3. The fluorescent indicator tube displays "VACSA". "A" represents Conventional VACS (Triggered by signal level)
4. To release from this mode, do the step 2 again.

**METER SWITCH TOUCH COUNT DISPLAY**

This mode is used to display the total count of meter pointer touch initial switch and max switch.

**Procedure:**

1. Press [I/O] button to turn on the system.
2. Press [■] button, [ENTER] button and [DISPLAY] button simultaneously.
3. The fluorescent indicator tube displays "IxxxxxMyyyyy". "I" represents the Initial Switch touch.  
"xxxxx" represents the total count of Initial Switch touch.  
(Maximum Value of "xxxxx" = 65535)  
"M" represents the Max Switch touch.  
"yyyyy" represents the total count of Max Switch touch.  
(Maximum Value of "yyyyy" = 65535)
4. To release from this mode, do the step 2 again. The fluorescent indicator tube displays "MODE OUT".

**METER TEST MODE**

This mode is used to check the meter device.

**Procedure:**

1. Press [I/O] button to turn on the system.
2. Press [■] button, [ENTER] button and [METER MODE] button simultaneously and the message "TST MODE IN" appears on the fluorescent indicator tube.
3. Meter Backlight LEDs, Meter Pointer LEDs, Power Illuminator LEDs and fluorescent indicator tube are lighted up.
4. When you want to perform count total step from Initial Switch to Max Switch operation mode, press [▶▶] button. The meter pointer will move from Initial Switch to Max Switch and finally move back to the middle position. The total step count information appears on the fluorescent indicator tube. "xxx STP yy" is shown.  
"xxx" represents the total step.  
(Value of "xxx" should between 430 steps to 470 steps)  
"yy" represents the status of total step count.  
(If total step between 430 steps to 470 steps, "yy" is OK, Else "yy" is NG)
5. When you want to perform count total step from Max Switch to Initial Switch operation mode, press [◀◀] button. The meter pointer will move from Max Switch to Initial Switch and finally move back to the middle position. The total step count information appears on the fluorescent indicator tube. "xxx STP yy" is shown.  
"xxx" represents the total step.  
(Value of "xxx" should between 430 steps to 470 steps)  
"yy" represents the status of total step count.  
(If total step between 430 steps to 470 steps, "yy" is OK, else "yy" is NG).
6. To release from this mode, do the step 2 again. The fluorescent indicator tube displays "TST MODE OUT".

**PRECAUTION**

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

record/playback head	pinch roller
erase head	rubber belts
capstan	idle
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head magnetizer close to the erase head.)
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-102AS	2.0 – 8.0 mN • m (20 to 80 g • cm) (0.28 – 1.12 oz • inch)
FWD Back Tension	CQ-102C	0.15 – 0.6 mN • m (1.5 to 6 g • cm) (0.021 – 0.083 oz • inch)
FF	CQ-201AS	5 – 17.7 mN • m (50 to 177 g • cm) (0.7 – 2.48 oz • inch)
REV	CQ-201B	5 – 17.7 mN • m (50 to 177 g • cm) (0.7 – 2.48 oz • inch)

**• Tape Tension Measurement**

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 80 g (more than 2.82 oz)

## SECTION 6 ELECTRICAL ADJUSTMENTS

**DECK SECTION****0 dB = 0.775V**

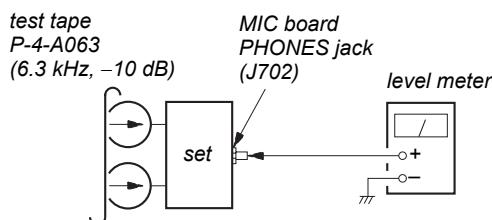
- Demagnetize the record/playback head with a head demagnetizer.
- Do not use a magnetized screwdriver for the adjustments.

**TEST TAPE**

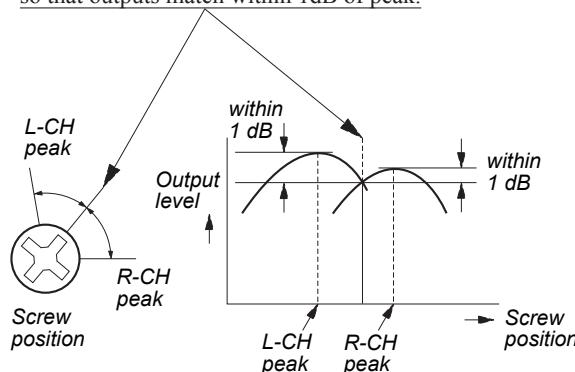
Tape	Signal	Used for
P-4-A063	6.3 kHz, -10 dB	Azimuth Adjustment

**RECORD/PLAYBACK HEAD AZIMUTH ADJUSTMENT****Procedure:**

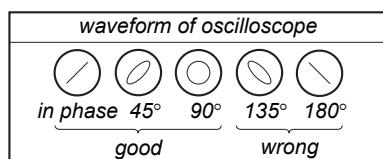
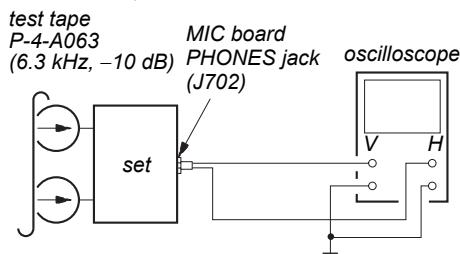
- Mode: Playback



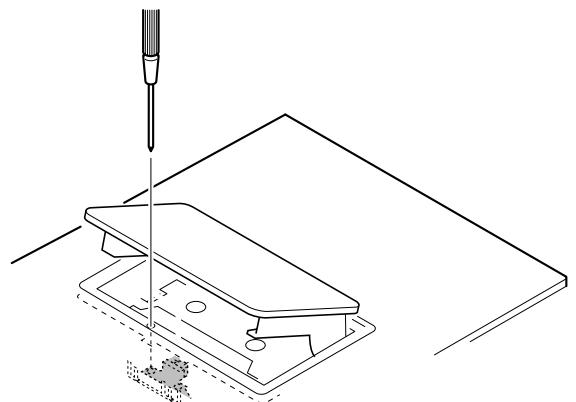
- Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.



- Mode: Playback



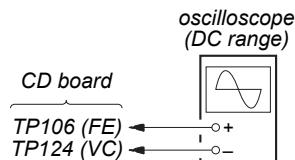
- After the adjustments, apply suitable locking compound to the parts adjusted.

**Adjustment Location: Record/Playback/Erase Head****CD SECTION****Note:**

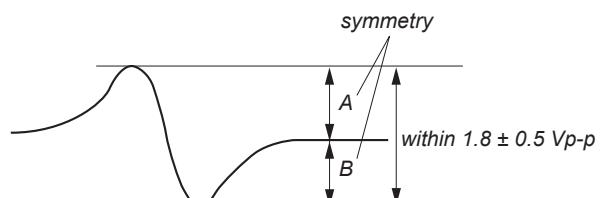
- CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
- Use YEDS-18 (PART No. 3-702-101-01) unless otherwise indicated.
- Use an oscilloscope with more than  $10M\Omega$  impedance.
- Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

**TEST DISC LIST**

Use the following test disc on electrical checks.  
YEDS-18 (PART No. 3-702-101-01) or  
PATD-012 (PART No. 4-225-203-01)

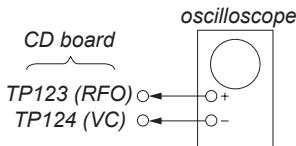
**S-CURVE CHECK****Procedure:**

- Connect an oscilloscope to TP106 (FE) and TP124 (VC).
- Turn the power ON.
- Load a disc (YEDS-18) and actuate the focus search. (In consequence of open and close the disc tray, actuate the focus search)
- Confirm that the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within  $1.8 \pm 0.5 V_{p-p}$ .

**S-curve waveform****Note:**

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

## RF LEVEL CHECK

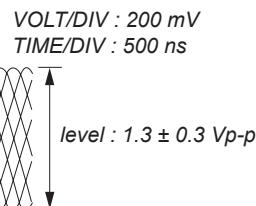


### Procedure:

1. Connect 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.

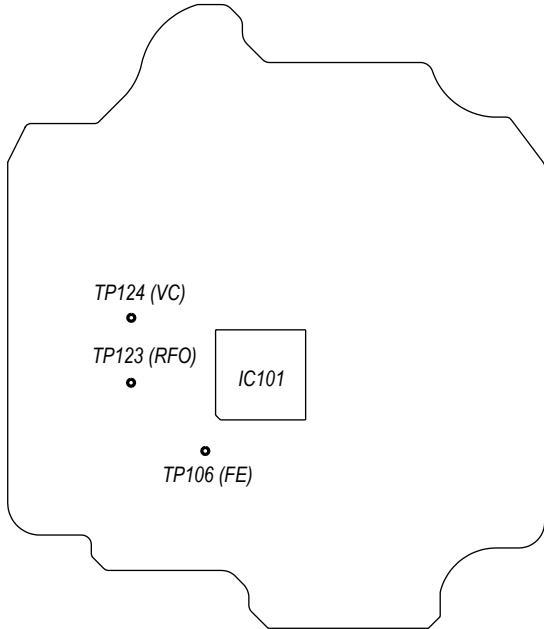
**Note:** Clear RF signal waveform means that the shape “◊” can be clearly distinguished at the center of the waveform.

*RF signal waveform*



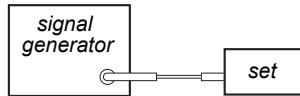
## Connecting Location: CD board

### - CD Board (Conductor Side) -



## TUNER SECTION

### FM TUNE LEVEL CHECK



### Procedure:

1. Turn on the set.
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)

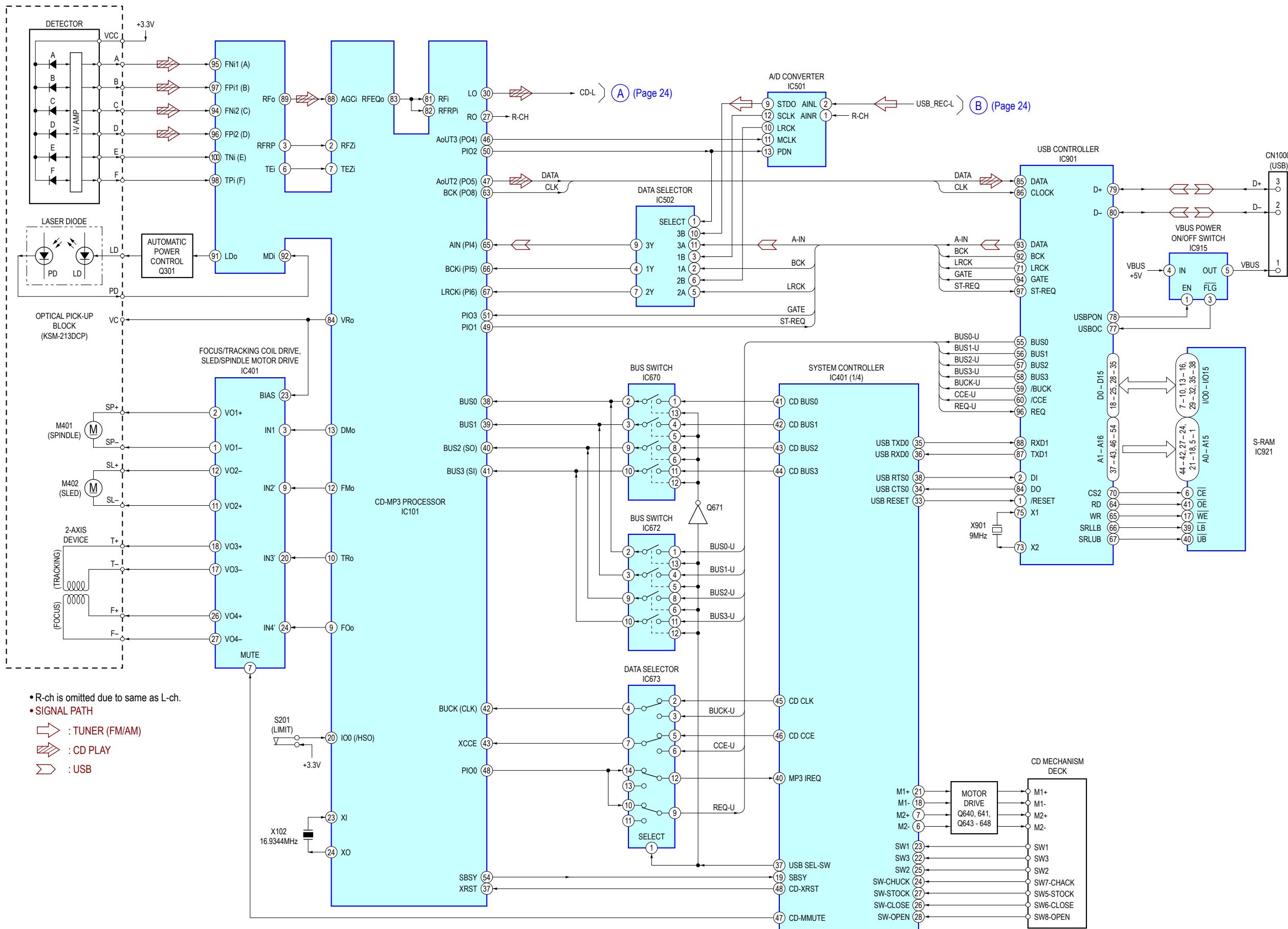
**Note:** Use 75 ohm coaxial cable to connect signal generator and the set.  
You cannot use video cable for checking.  
Use signal generator whose output impedance is 75 ohm.

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.

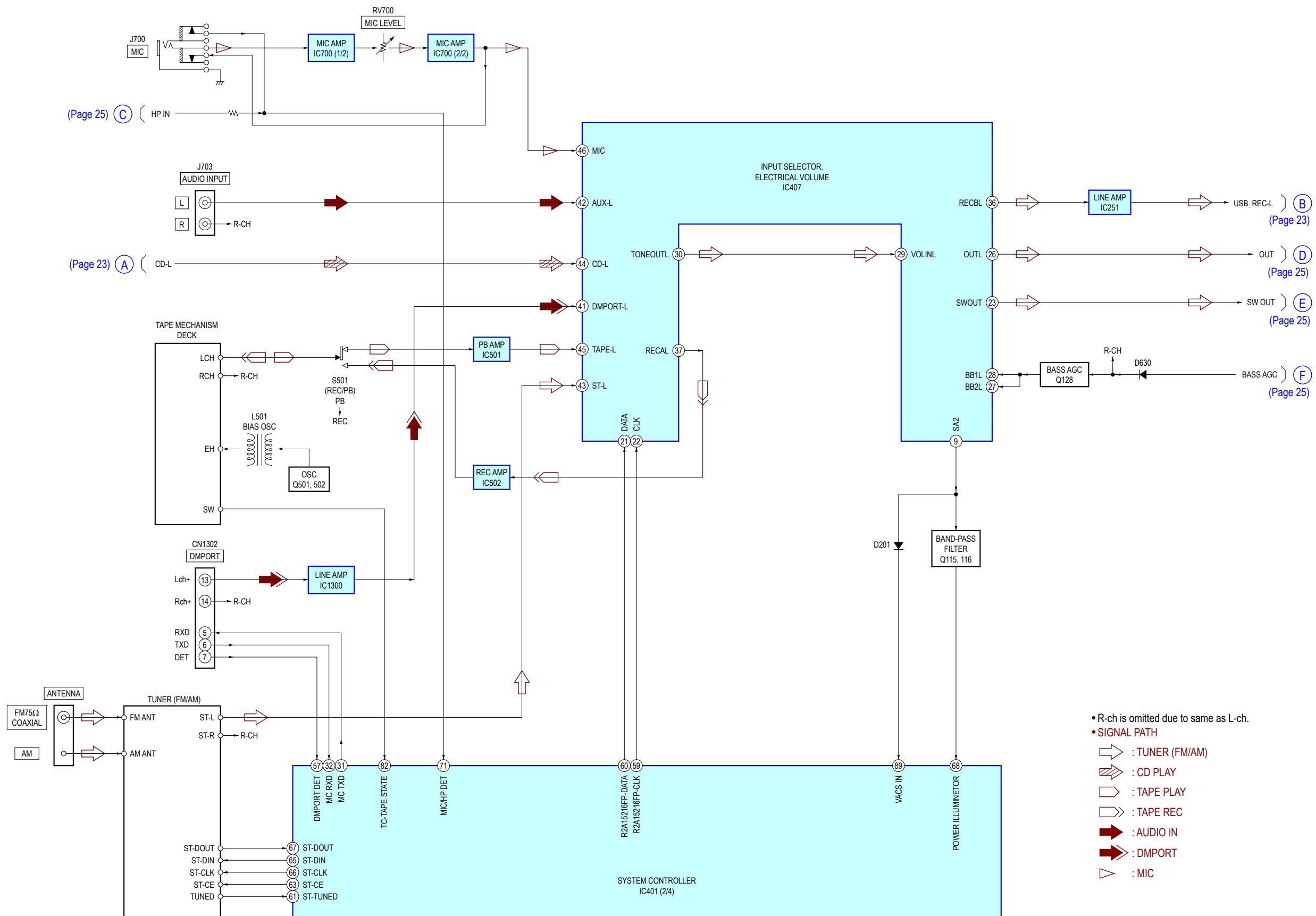
When the selected station signal is received in good condition, “TUNED” is displayed.

## SECTION 7 DIAGRAMS

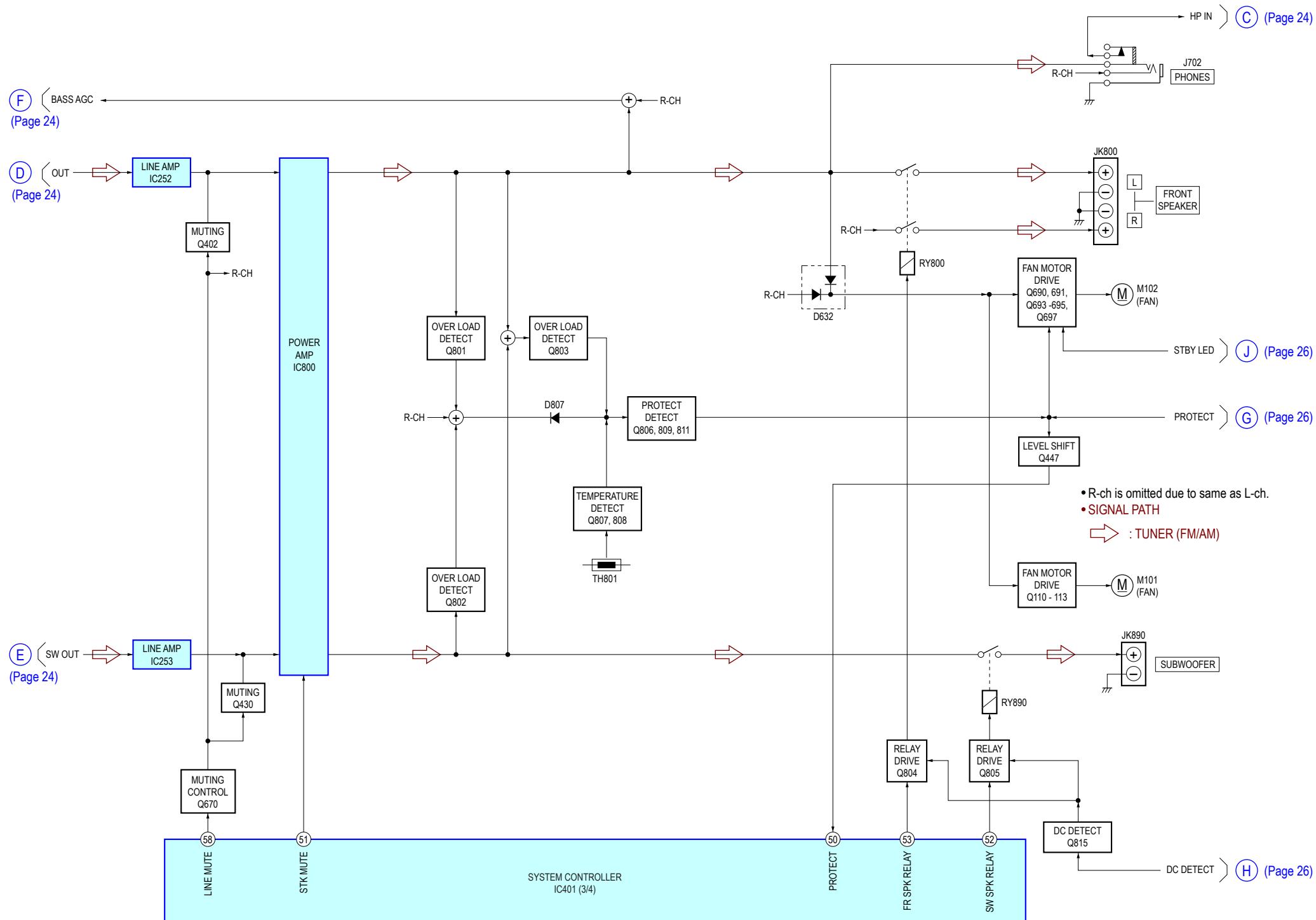
### 7-1. BLOCK DIAGRAM - CD SERVO, USB Section -



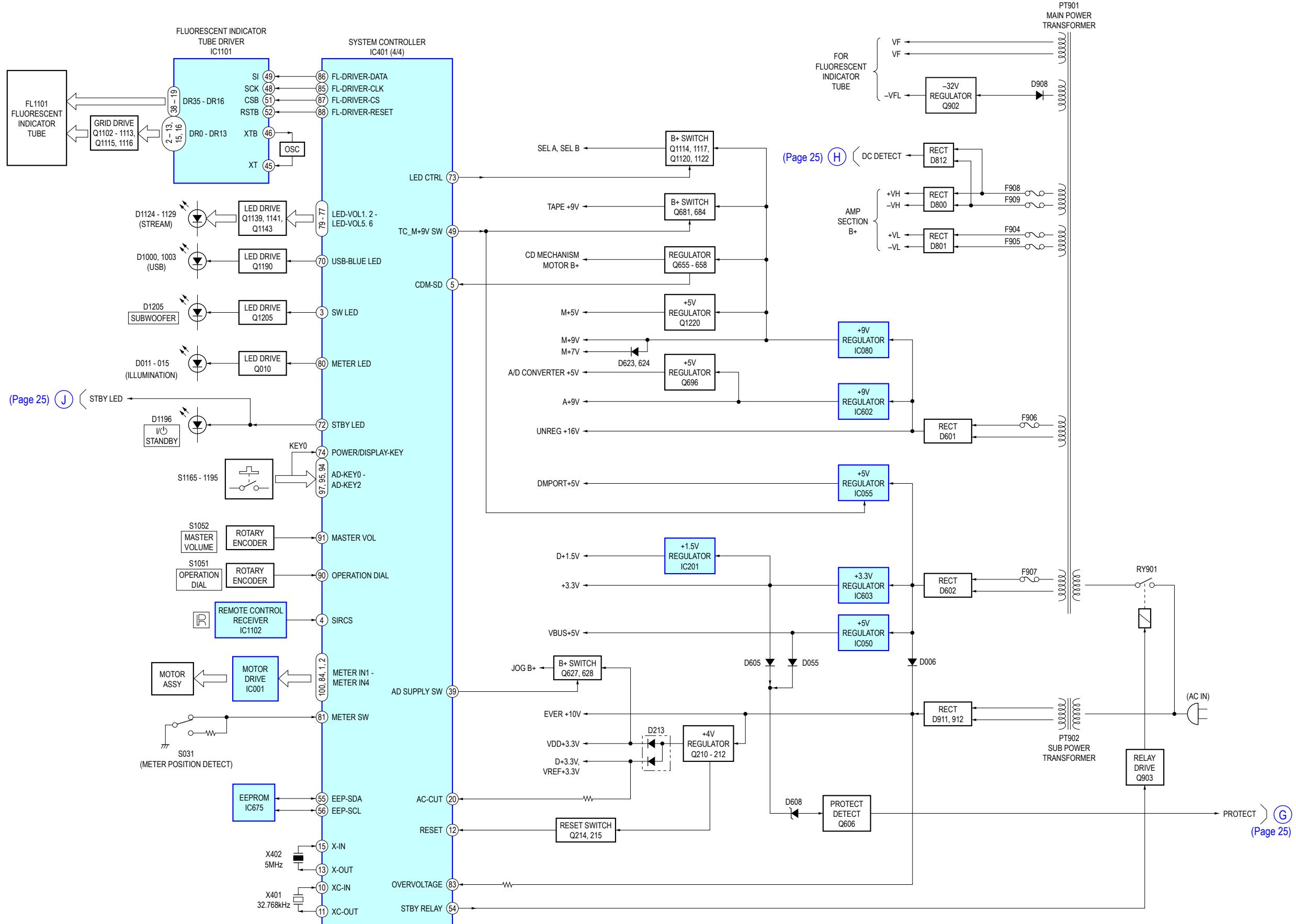
## 7-2. BLOCK DIAGRAM - MAIN Section -



### **7-3. BLOCK DIAGRAM - AMP Section -**



## 7-4. BLOCK DIAGRAM - PANEL, POWER SUPPLY Section -



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

**For Printed Wiring Boards.**

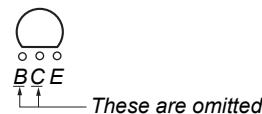
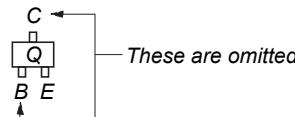
Note:

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

**Caution:**

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

- Indication of transistor.



**For Schematic Diagrams.**

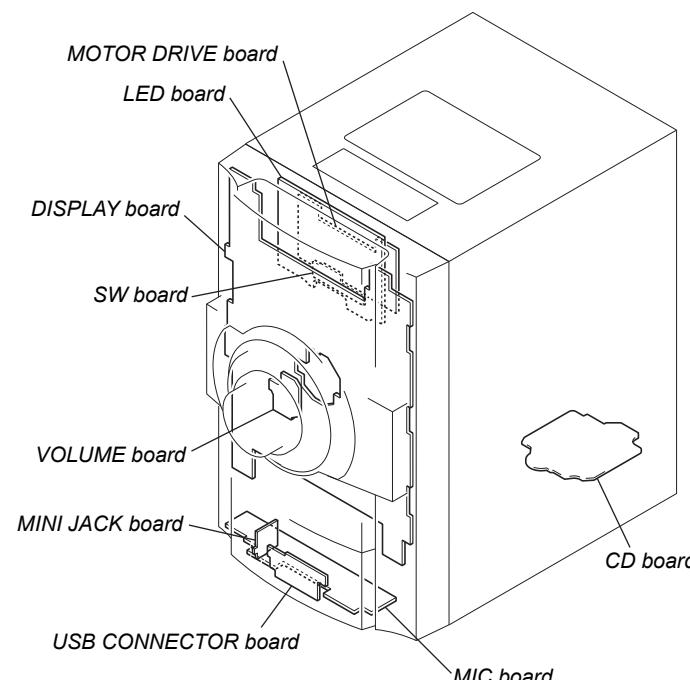
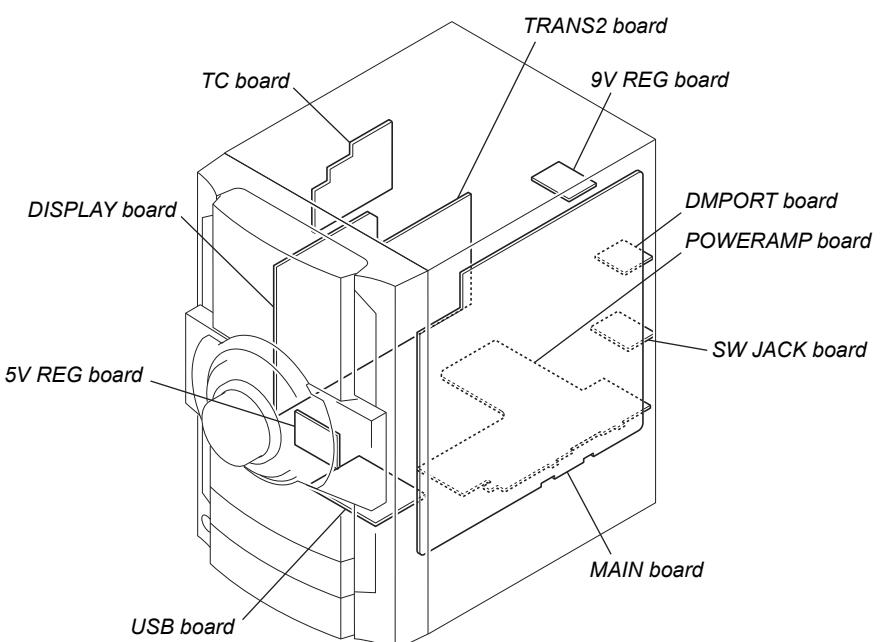
Note:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. (p: pF)  
50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and 1/4 W or less unless otherwise specified.
- : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

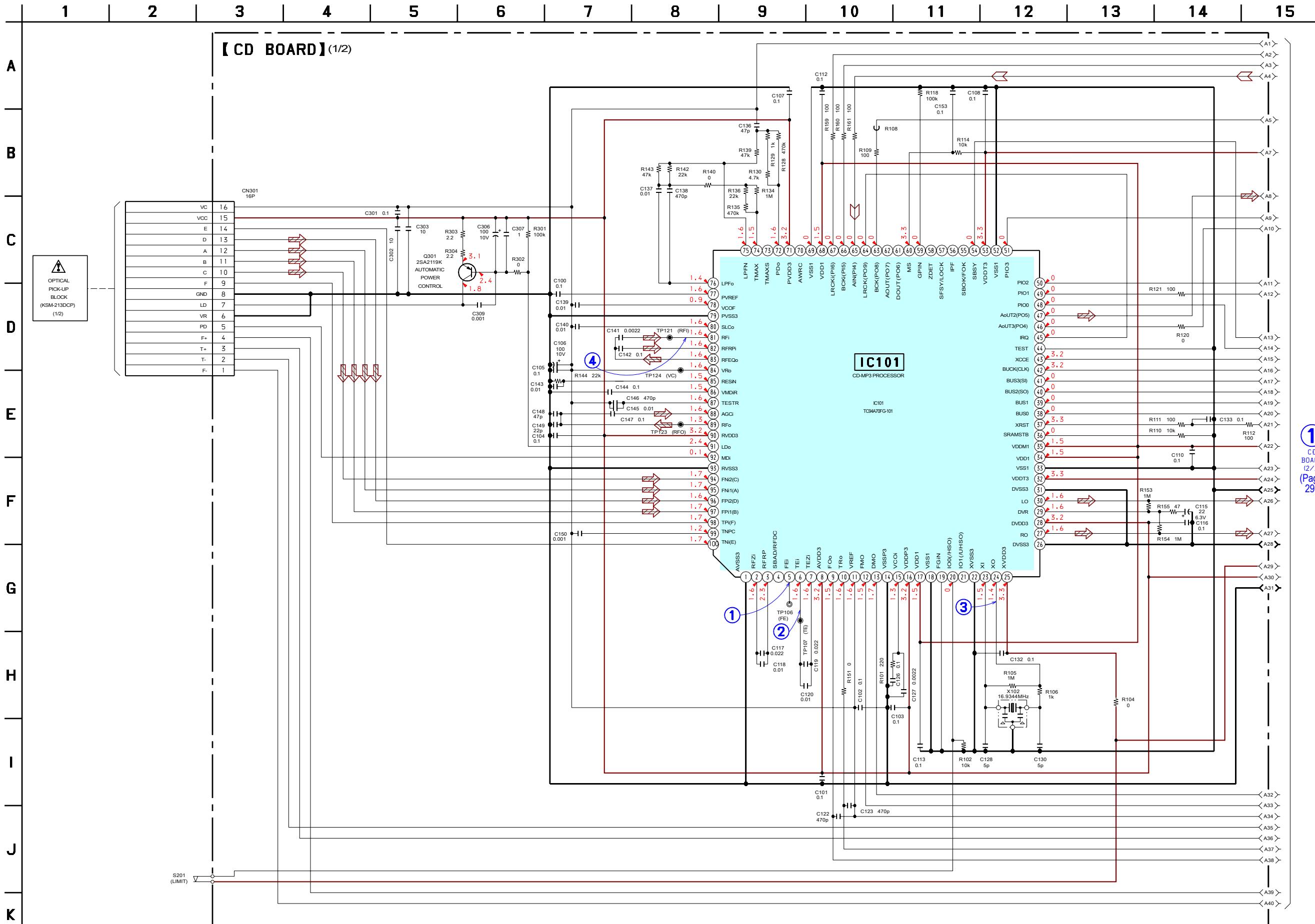
The components identified by mark or dotted line with mark are critical for safety.  
Replace only with part number specified.

- : B+ Line.
- : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- CD Board –  
no mark: CD PLAY
- TC Board –  
no mark: TAPE PLAY  
( ) : TAPE REC
- Other Boards –  
no mark: TUNER (FM/AM)  
( ) : CD PLAY  
<> : TAPE PLAY  
{ } : TAPE REC
- Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ).  
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.  
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path:  
 : TUNER (AM/FM)  
 : CD PLAY  
 : USB  
 : TAPE PLAY  
 : TAPE REC  
 : AUDIO IN  
 : DMPORT  
 : MIC

**• Circuit Boards Location**

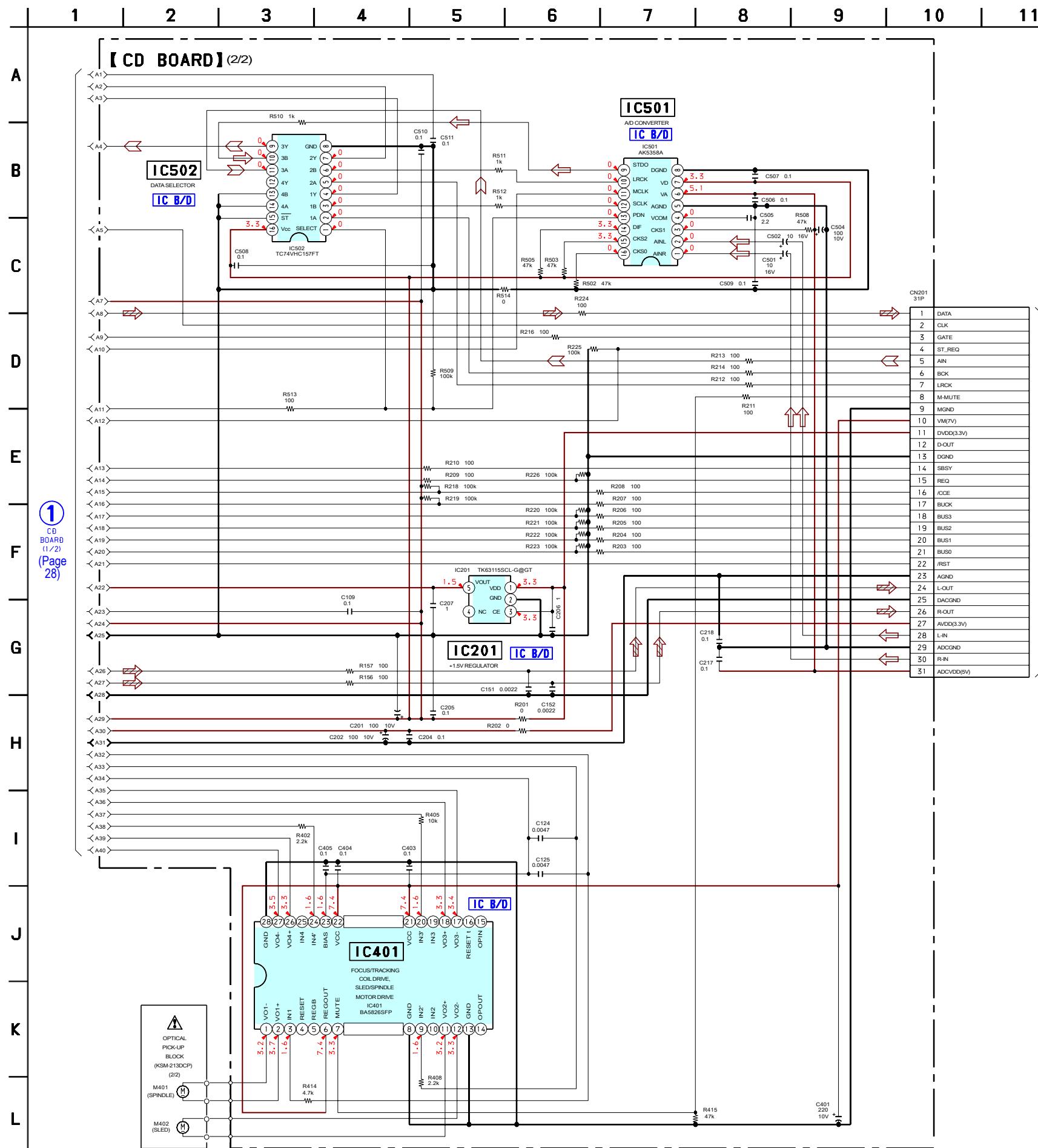


## 7-5. SCHEMATIC DIAGRAM - CD Board (1/2) - • See page 34 for waveforms. • See page 52 for IC Pin Function Description.

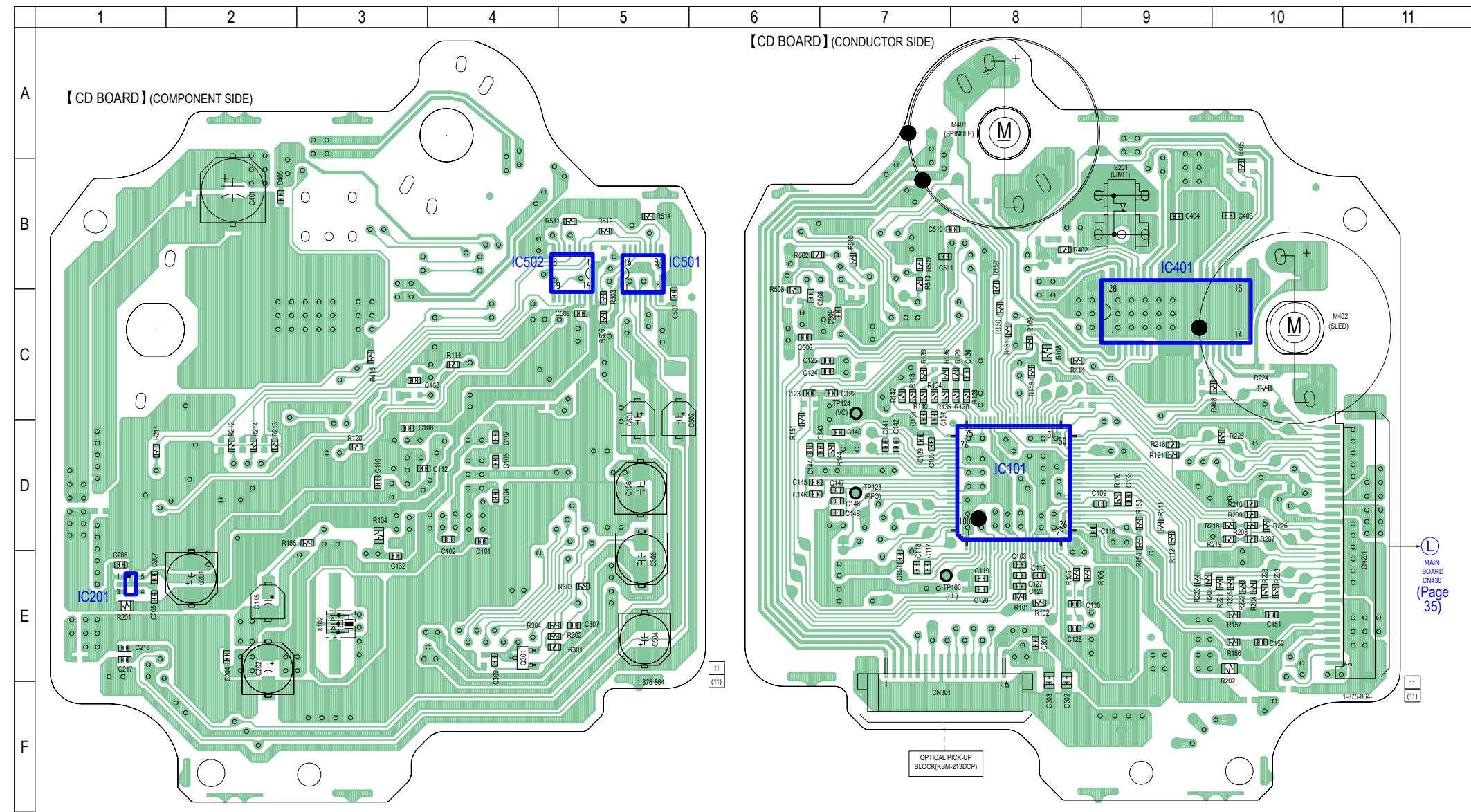


1  
CD  
BOARD  
(2/2)  
(Page  
29)

## 7-6. SCHEMATIC DIAGRAM - CD Board (2/2) - • See page 50 for IC Block Diagrams.



7-7. PRINTED WIRING BOARD - CD Board - • See page 27 for Circuit Boards Location. •  : Uses unleaded solder.

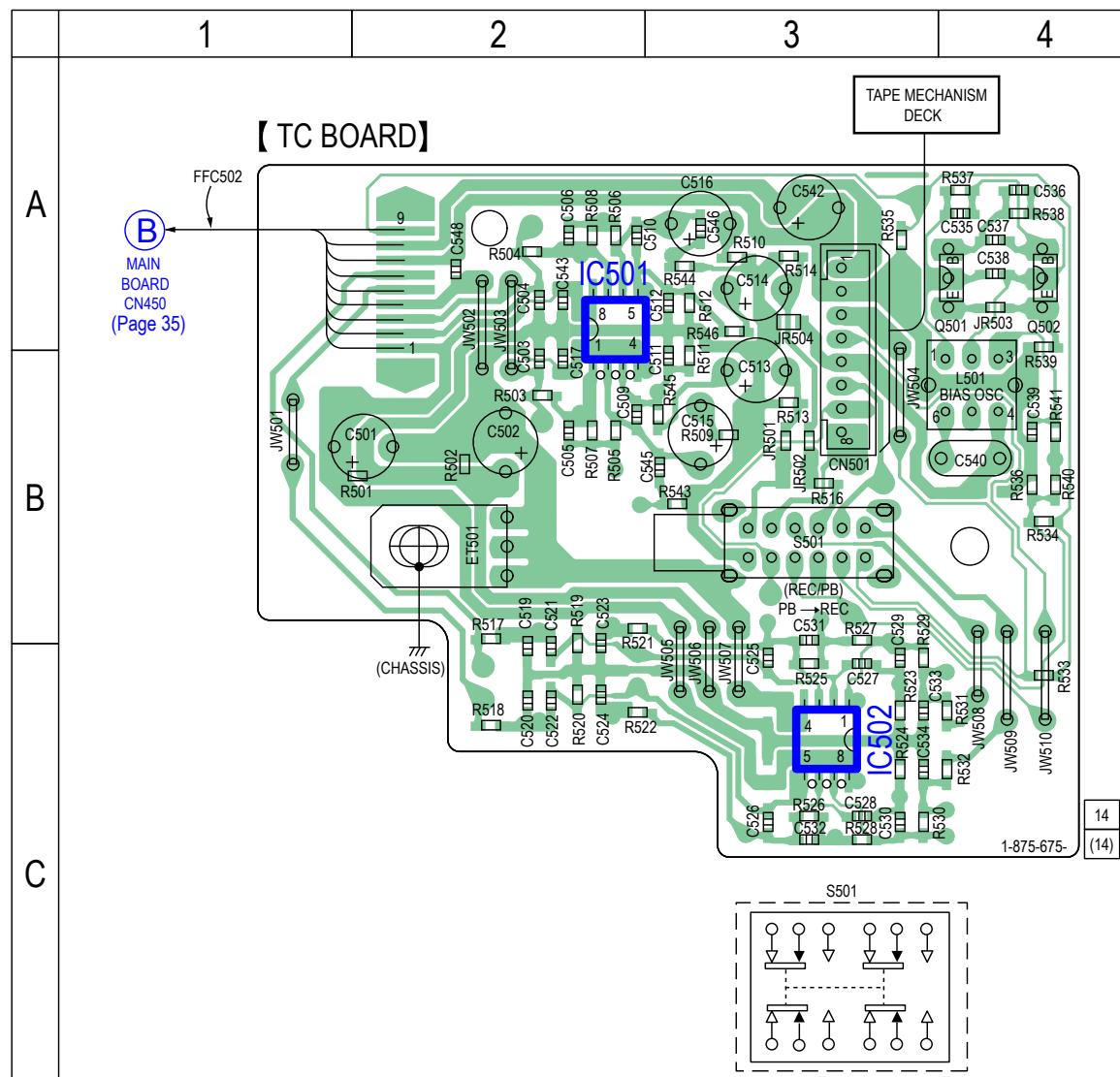


• Semiconductor Location

Ref. No.	Location
IC101	D-8
IC201	E-1
IC401	C-9
IC501	B-5
IC502	B-5
Q301	E-4

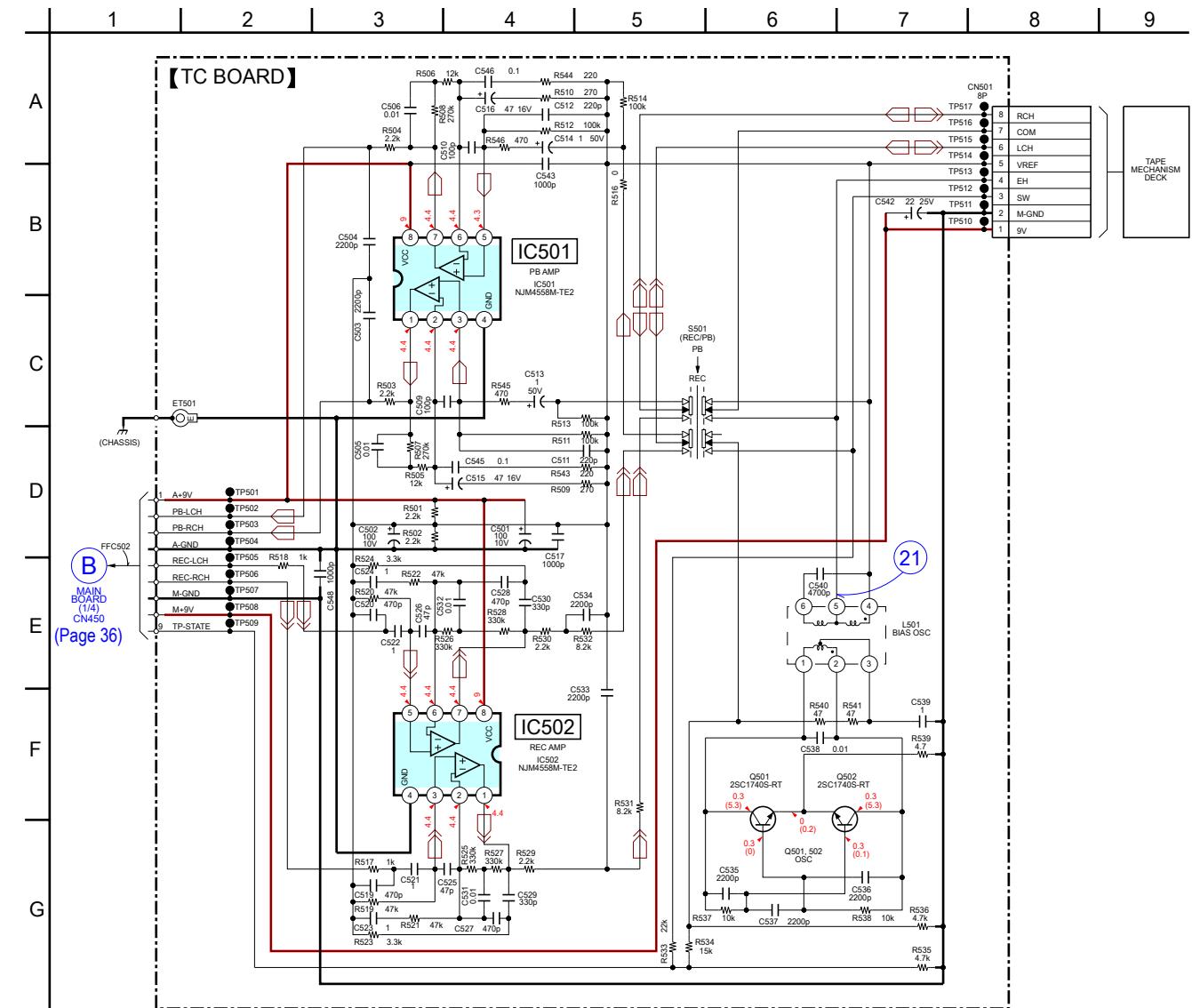
## **7-8. PRINTED WIRING BOARD - TC Board -**

- See page 27 for Circuit Boards Location.
-  : Uses unleaded solder.

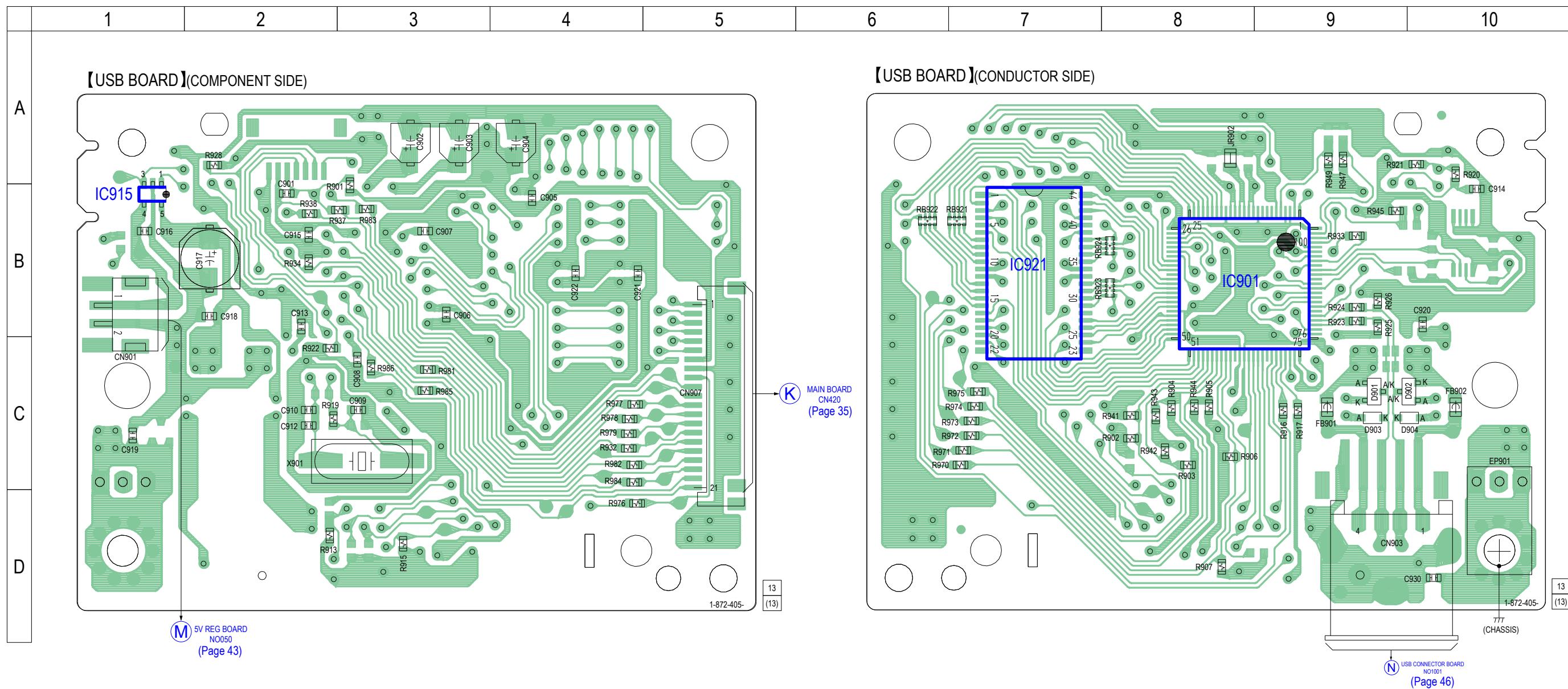


**7-9. SCHEMATIC DIAGRAM - TC Board - • See page 34 for Waveforms.**

• See page 27 for Circuit Boards Location. •  : Uses unleaded solder.



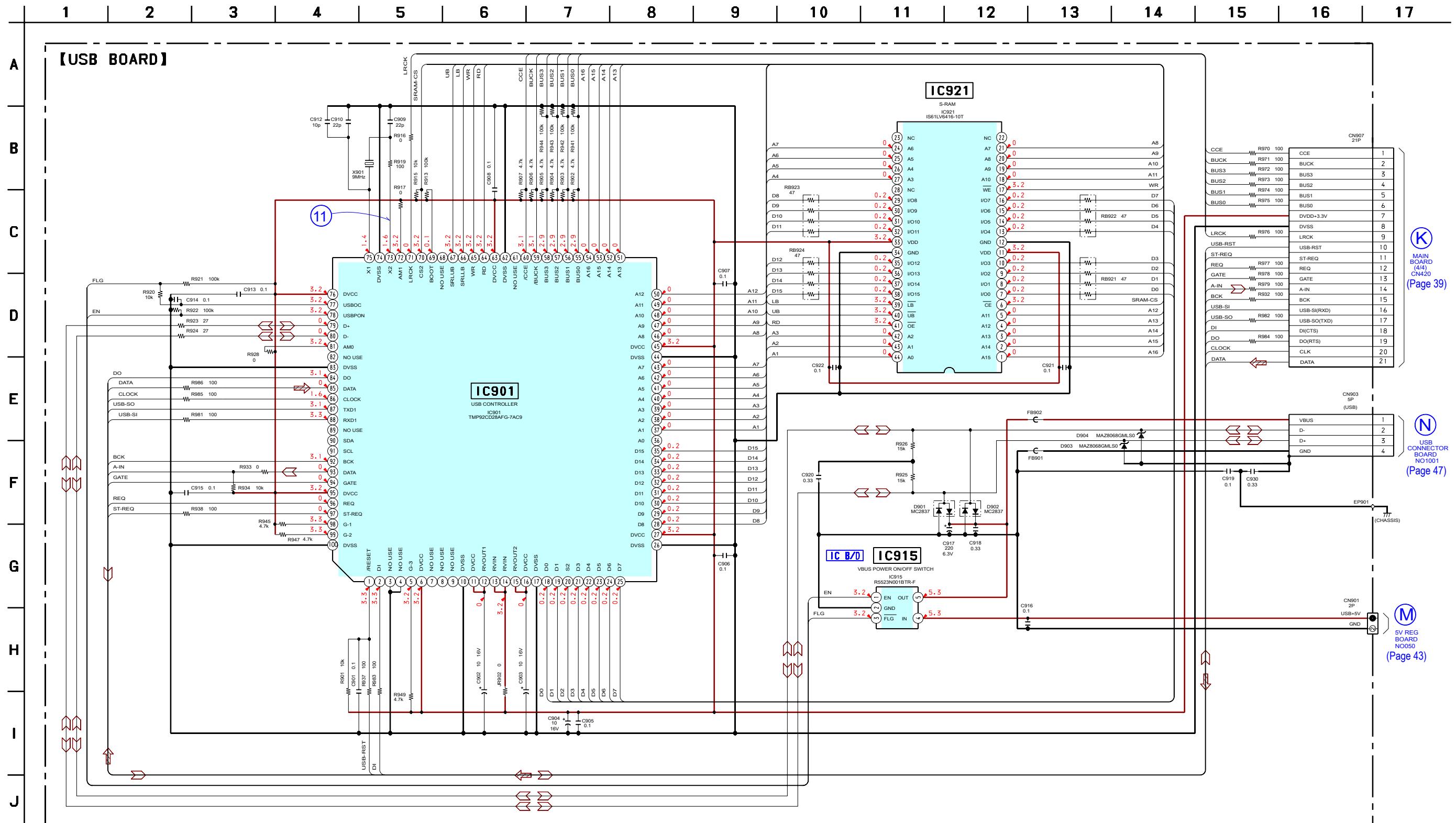
7-10. PRINTED WIRING BOARD - USB Board - • See page 27 for Circuit Boards Location. •  : Uses unleaded solder.



• Semiconductor Location

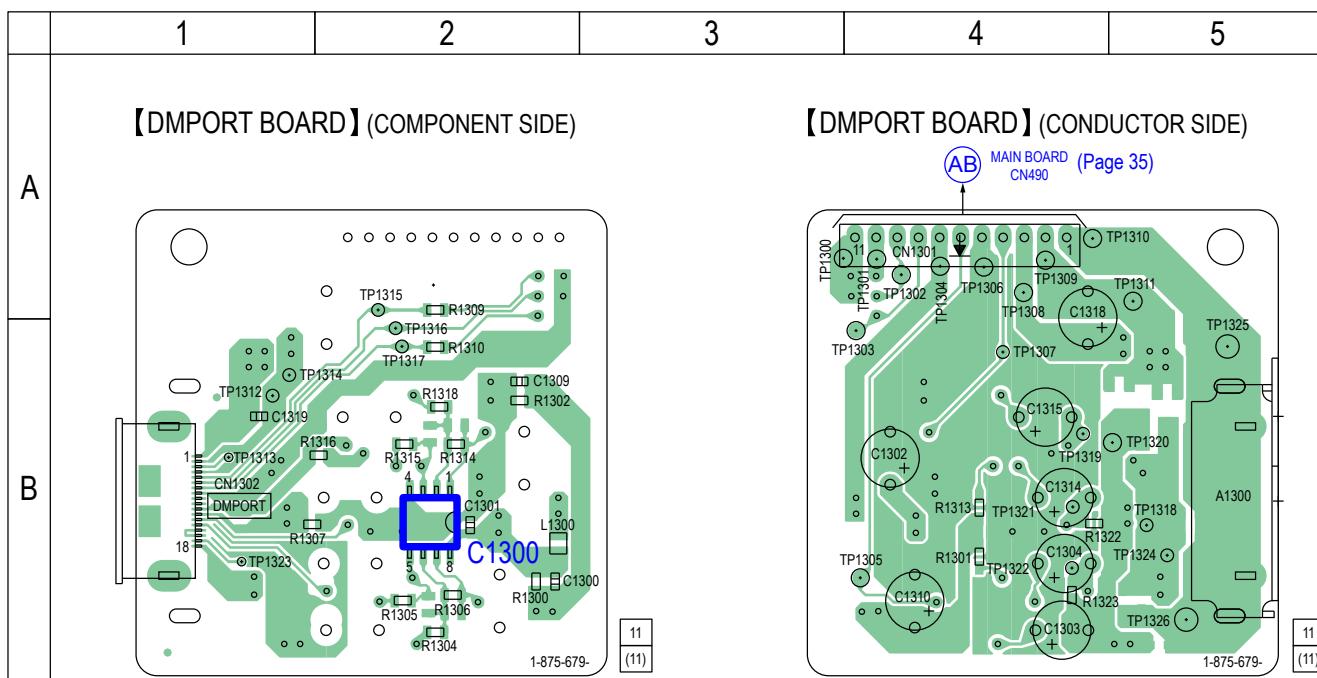
Ref. No.	Location
D901	C-9
D902	C-10
D903	C-9
D904	C-10
IC901	B-8
IC915	B-1
IC921	B-7

7-11. SCHEMATIC DIAGRAM - USB Board - • See page 34 for Waveforms. • See page 50 for IC Block Diagrams. • See page 52 for IC Pin Function Description.

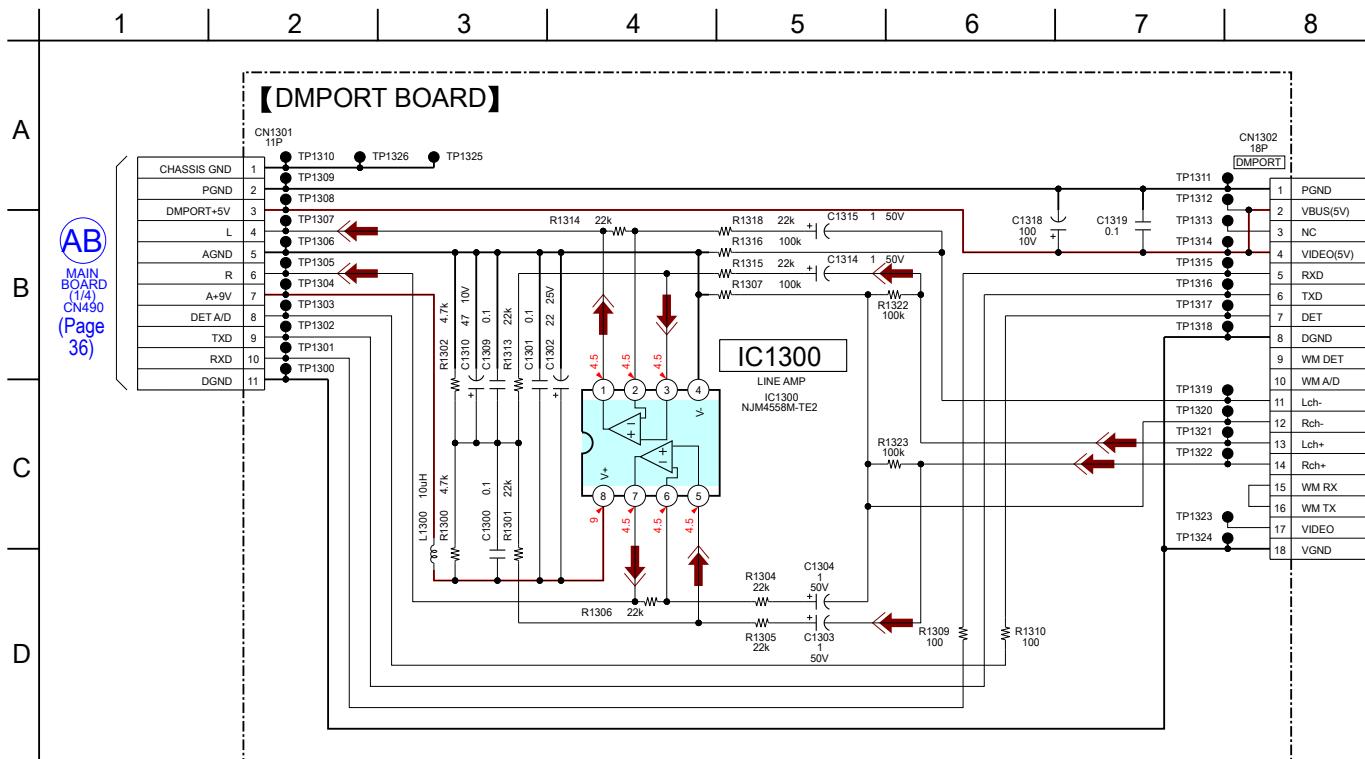


## 7-12. PRINTED WIRING BOARD - DMPORT Board -

• See page 27 for Circuit Boards Location. •  : Uses unleaded solder.



## 7-13. SCHEMATIC DIAGRAM - DMPORT Board -



## • Waveforms

## - CD Board -

- ① IC101 ⑤ (FEI)  
(CD play mode)



Approx.  
400 mVp-p

- 200 mV/DIV, 500 ns/DIV  
② IC101 ⑥ (TEI)  
(CD play mode)



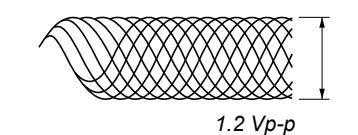
Approx.  
500 mVp-p

- 200 mV/DIV, 500 ns/DIV  
③ IC101 ⑪ (XO)  
(CD play mode)



3.2 Vp-p  
1 V/DIV, 20 ns/DIV

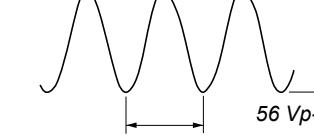
- ④ IC101 ⑧ (RFI)  
(CD play mode)



1.2 Vp-p  
500 mV/DIV, 500 ns/DIV

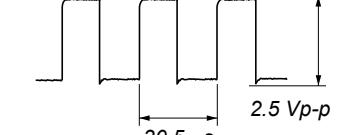
## - TC Board -

- ② L501 ⑤ (TAPE REC mode)



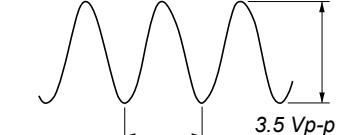
10 V/DIV, 5 μs/DIV

- ③ IC401 ⑪ (XC-OUT)



1 V/DIV, 20 μs/DIV

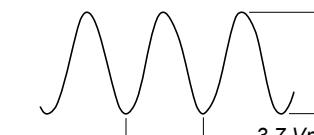
- ③ IC401 ⑬ (X-OUT)



1 V/DIV, 100 ns/DIV

## - USB Board -

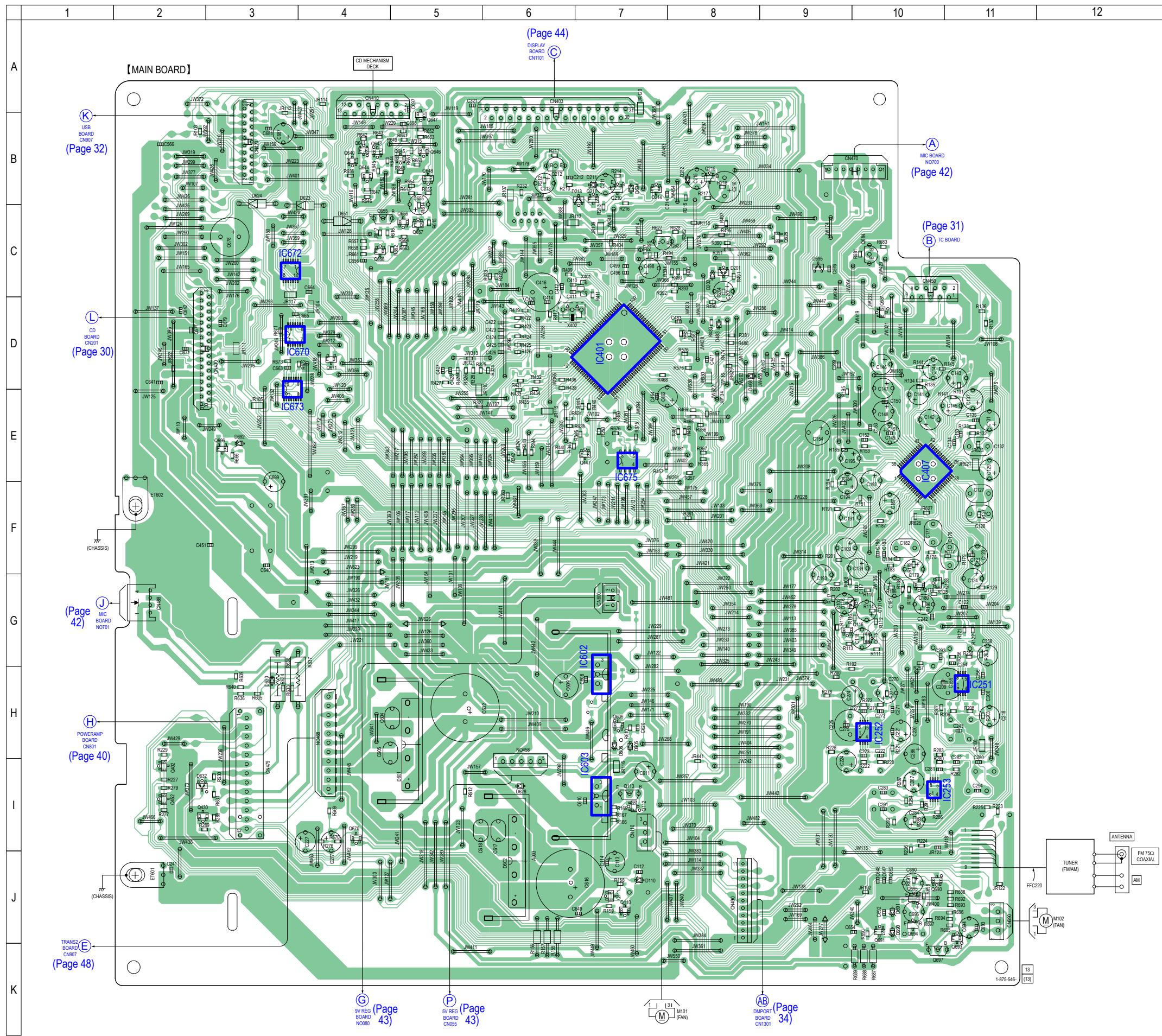
- ⑪ IC901 ⑦ (X2)



3.7 Vp-p  
1 V/DIV, 50 ns/DIV

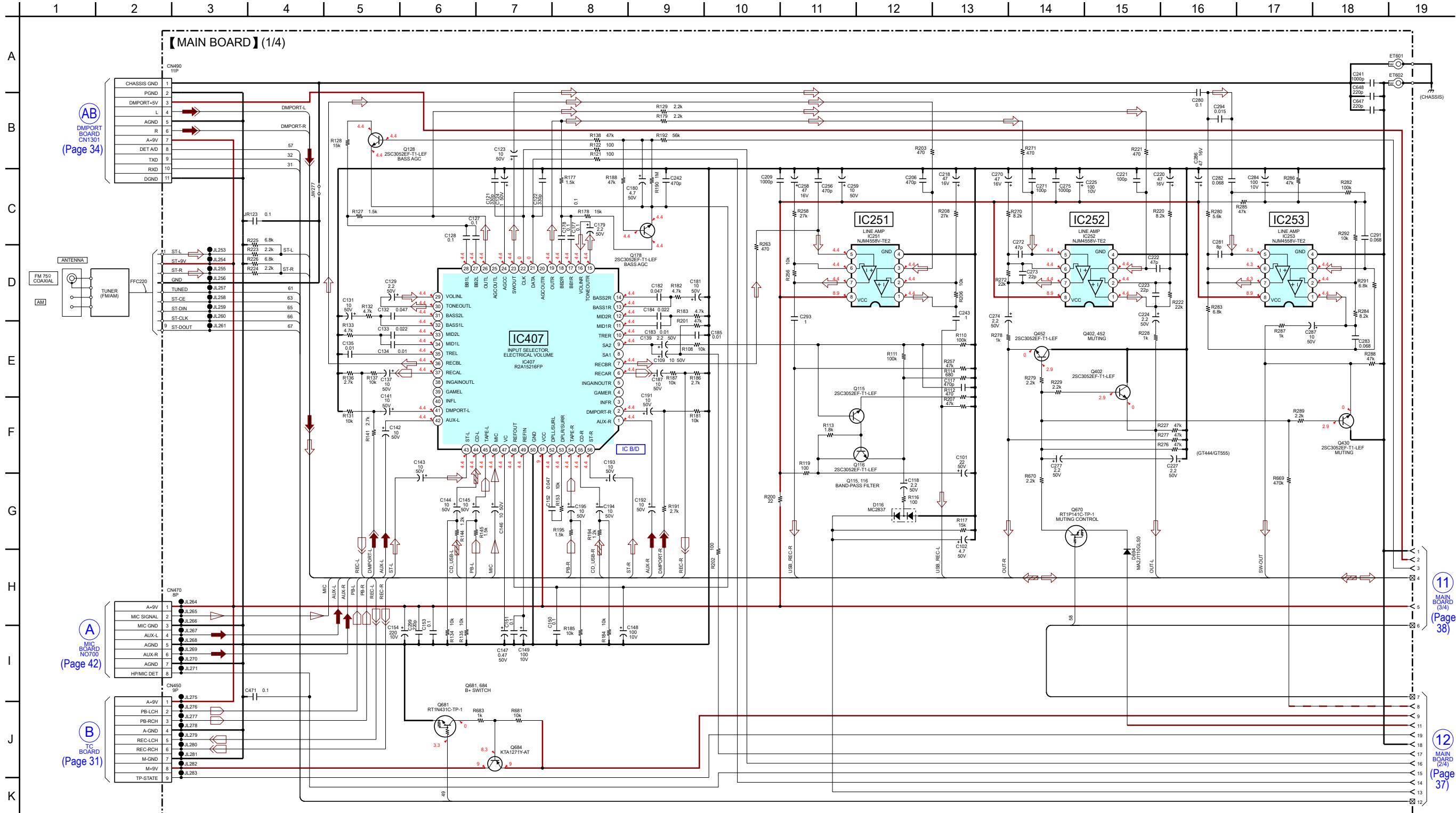
7-14. PRINTED WIRING BOARD - MAIN Board - • See page 27 for Circuit Boards Location. •  : Uses unleaded solder.

-  : Uses



• Semiconductor Location			
Ref. No.	Location	Ref. No.	Location
D110	J-7	Q113	I-7
D116	G-9	Q115	G-10
D201	C-8	Q116	G-9
D202	C-8	Q128	G-10
D211	B-7	Q178	G-10
D212	B-8	Q210	B-7
D213	B-7	Q211	B-7
D468	D-8	Q212	B-6
D483	D-8	Q214	B-7
D601	H-5	Q215	B-8
D602	J-6	Q402	I-2
D605	H-7	Q430	I-2
D608	H-7	Q447	E-7
D623	C-4	Q452	I-2
D624	B-3	Q606	H-7
D628	I-6	Q627	C-7
D630	H-3	Q628	C-9
D632	I-2	Q640	B-4
D651	C-4	Q641	B-4
D690	J-10	Q643	B-4
D691	J-10	Q644	B-4
D692	E-3	Q645	B-5
D694	B-7	Q646	B-5
D695	C-9	Q647	B-5
		Q648	B-5
IC251	H-11	Q655	C-4
IC252	H-10	Q656	C-5
IC253	I-10	Q657	C-5
IC401	D-7	Q658	C-4
IC407	E-10	Q670	I-4
IC602	H-7	Q671	D-4
IC603	I-7	Q681	D-10
IC670	D-3	Q684	C-10
IC672	C-3	Q690	J-10
IC673	D-3	Q691	J-10
IC675	E-7	Q693	J-11
		Q694	J-10
Q110	J-7	Q695	J-10
Q111	J-7	Q696	E-3
Q112	I-7	Q697	K-10

## 7-15. SCHEMATIC DIAGRAM - MAIN Board (1/4) - • See page 50 for IC Block Diagrams.

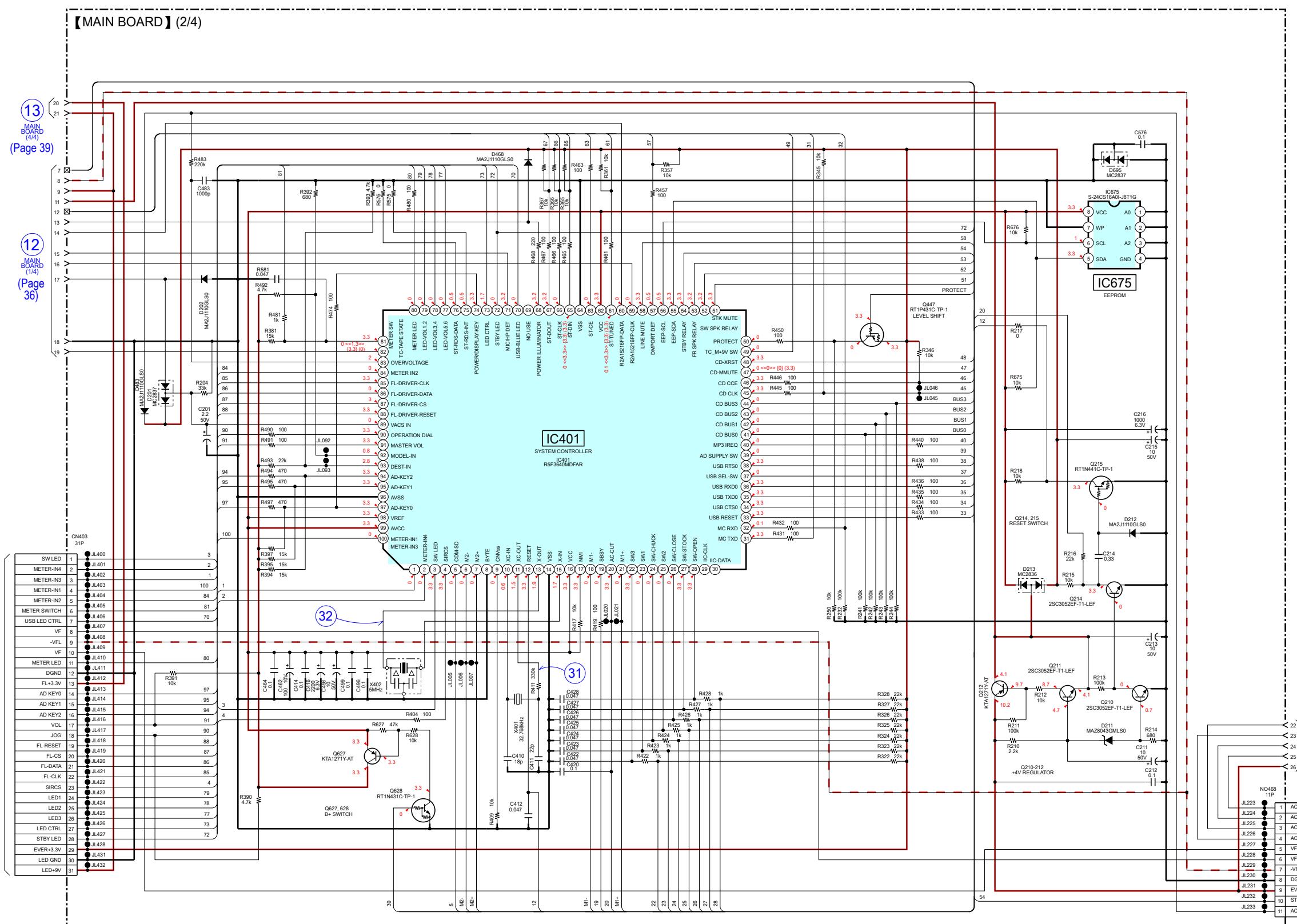


7-16. SCHEMATIC DIAGRAM - MAIN Board (2/4) - • See page 34 for Waveforms. • See page 52 for IC Pin Function Description

MAIN  
BOARD  
(4/4)  
(Page 39)

12  
13  
14  
15  
16  
17

C  
DISPLAY  
BOARD  
CN1101  
(Page  
45)

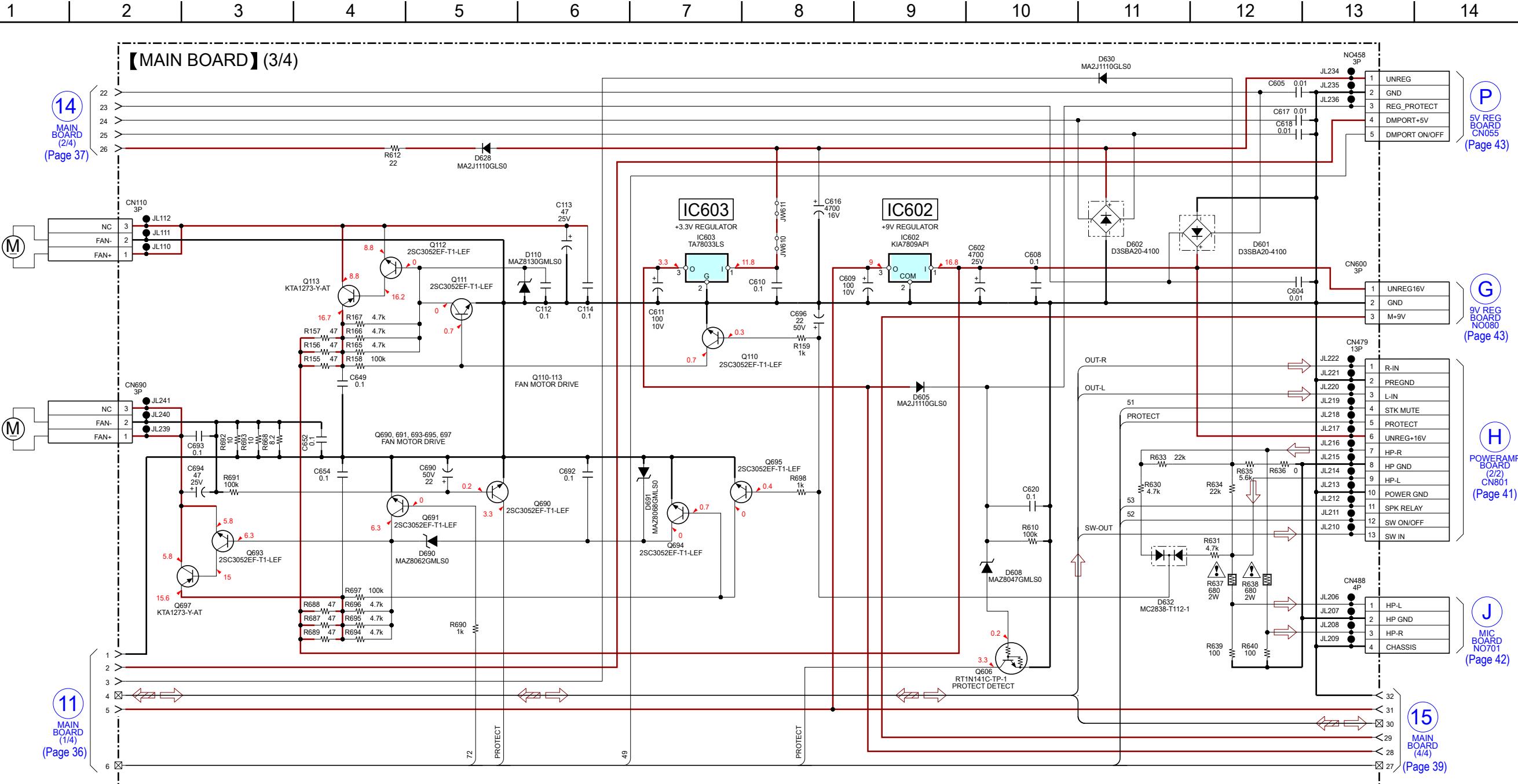


E  
TRANS2  
BOARD  
CN907  
(Page  
49)

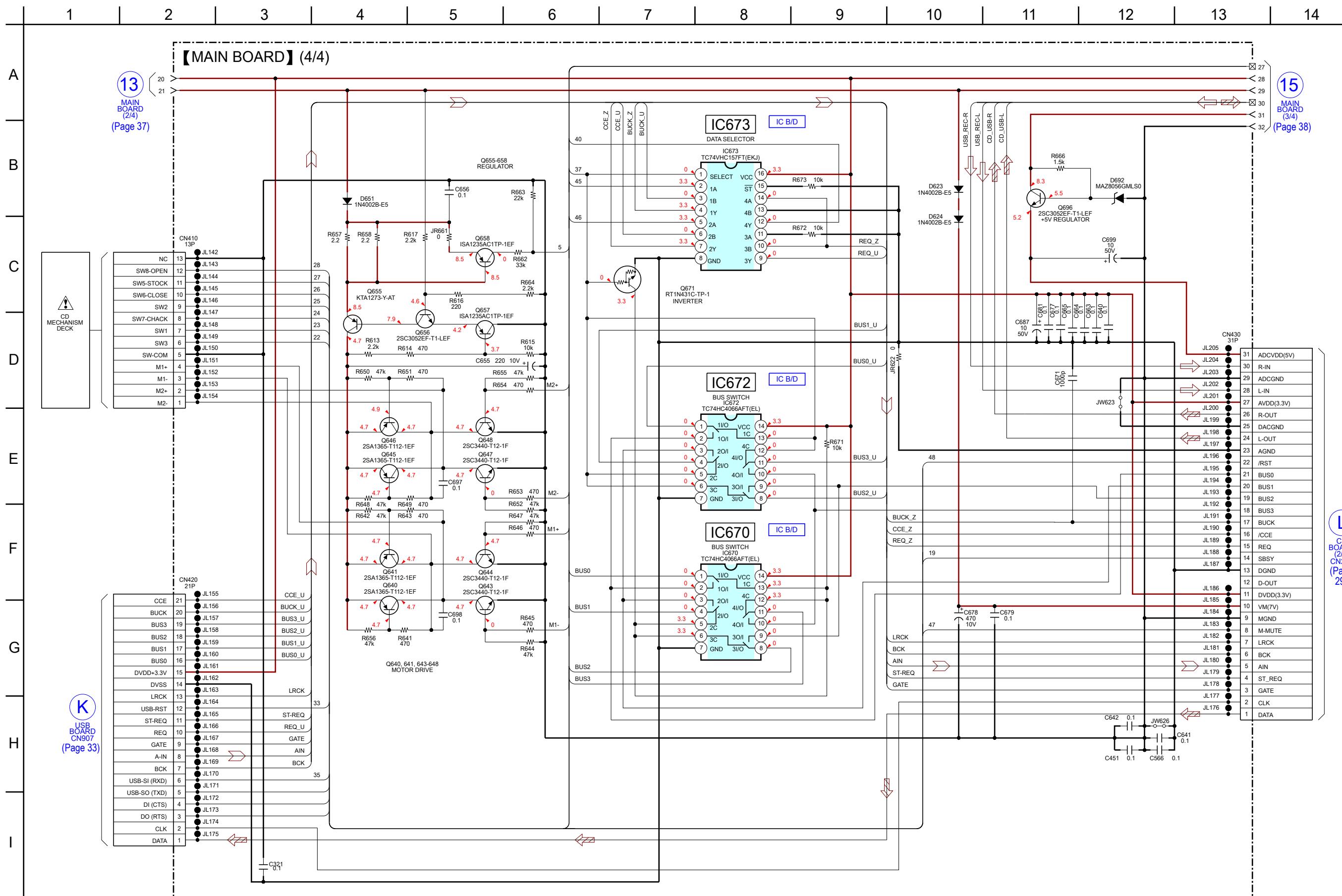
14  
MAIN  
BOARD  
(3/4)  
(Page  
80)

14  
MAIN  
BOARD  
(3/4)  
(Page  
80)

## 7-17. SCHEMATIC DIAGRAM - MAIN Board (3/4) -



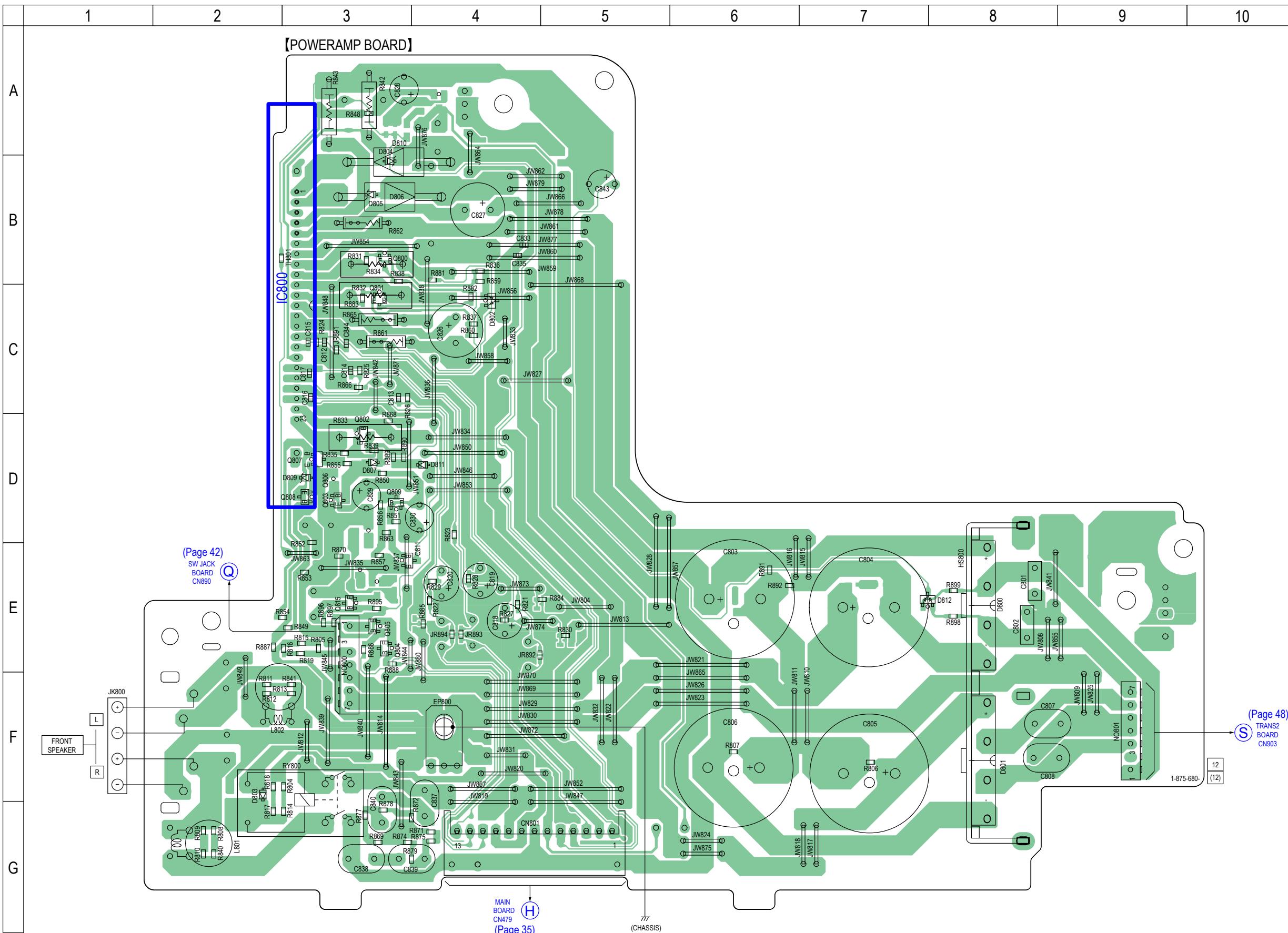
## 7-18. SCHEMATIC DIAGRAM - MAIN Board (4/4) - • See page 50 for IC Block Diagrams.



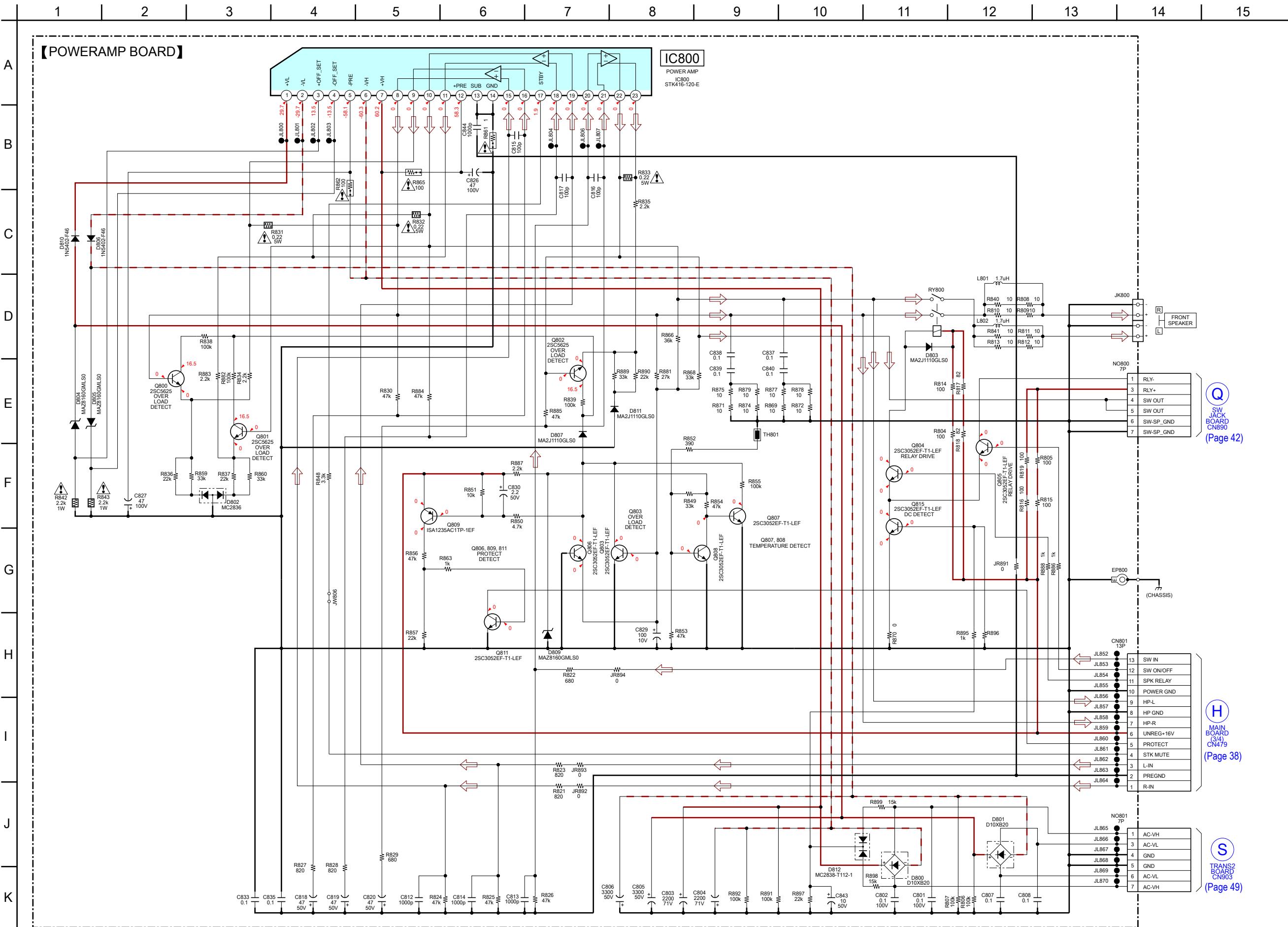
7-19. PRINTED WIRING BOARD - POWERAMP Board - • See page 27 for Circuit Boards Location. •  : Uses unleaded solder.

## • Semiconductor Location

Ref. No.	Location
D800	E-8
D801	F-8
D802	C-4
D803	F-2
D804	B-3
D805	B-3
D806	B-3
D807	D-3
D809	D-3
D810	B-3
D811	D-4
D812	E-7
IC800	C-3
Q800	B-3
Q801	C-3
Q802	D-3
Q803	D-3
Q804	E-3
Q805	E-3
Q806	D-3
Q807	D-3
Q808	D-3
Q809	D-3
Q811	E-3
Q815	E-3

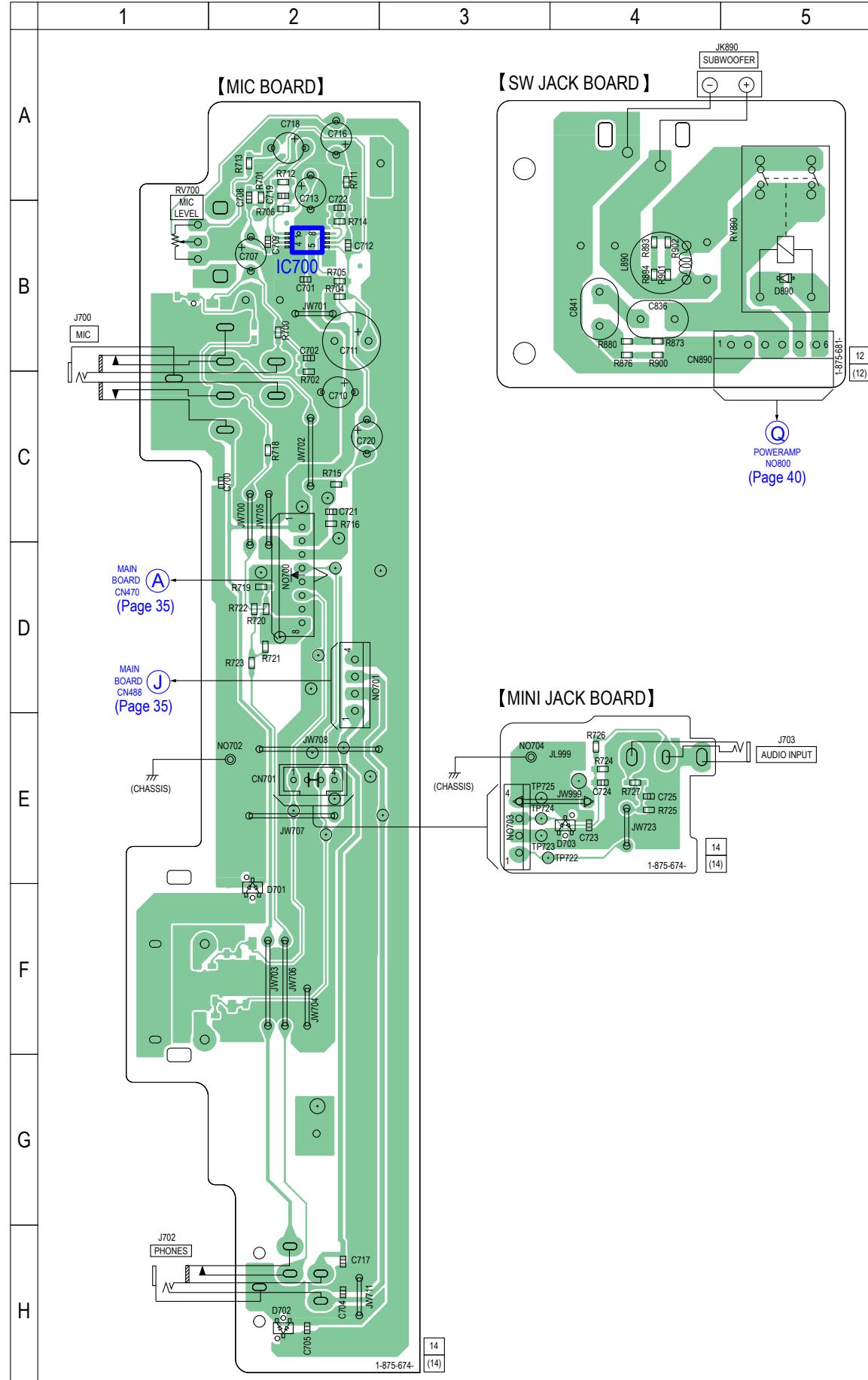


## 7-20. SCHEMATIC DIAGRAM - POWERAMP Board -

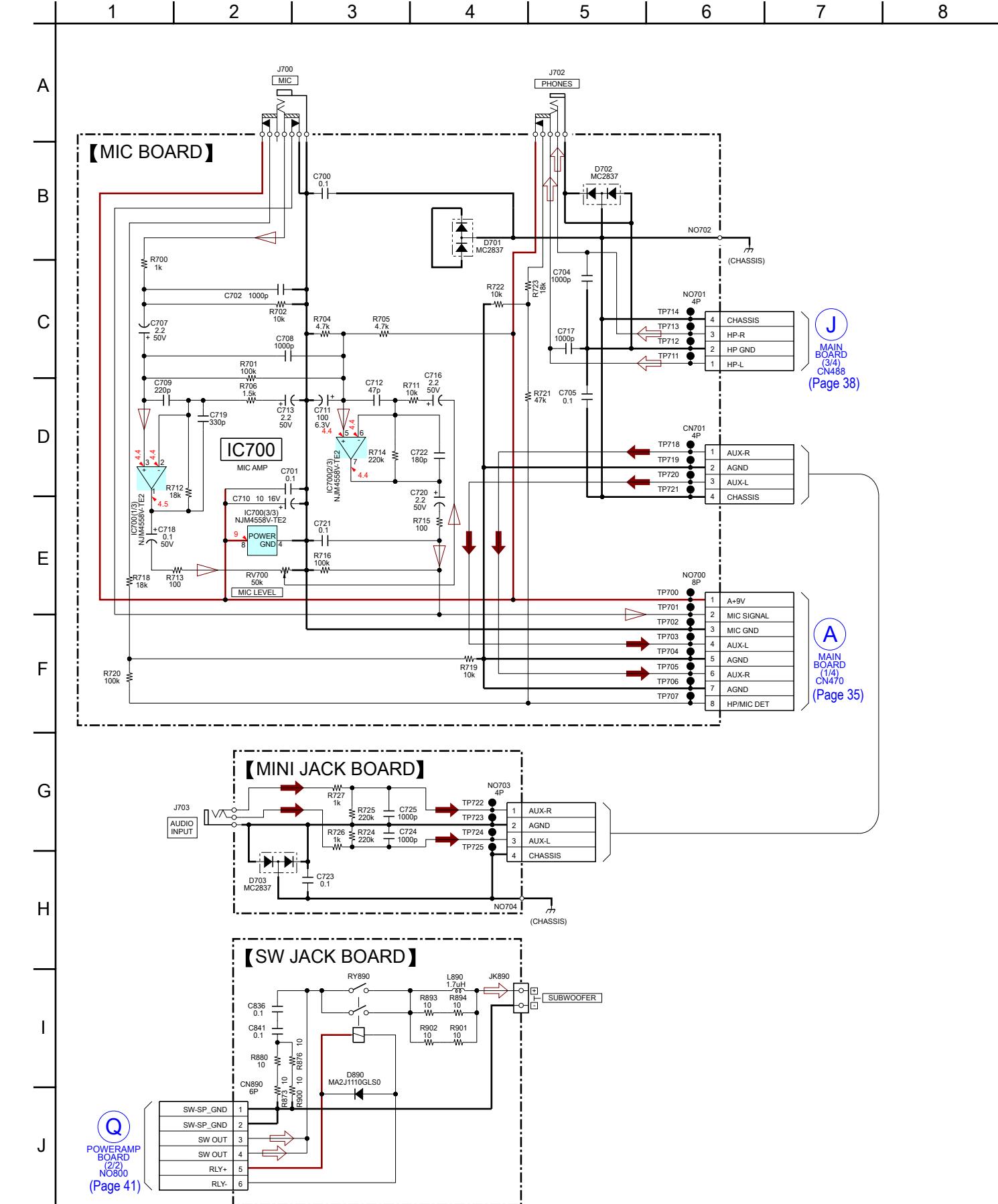


## **7-21. PRINTED WIRING BOARDS - JACK Section**

- See page 27 for Circuit Boards Location. •  : Uses unleaded solder

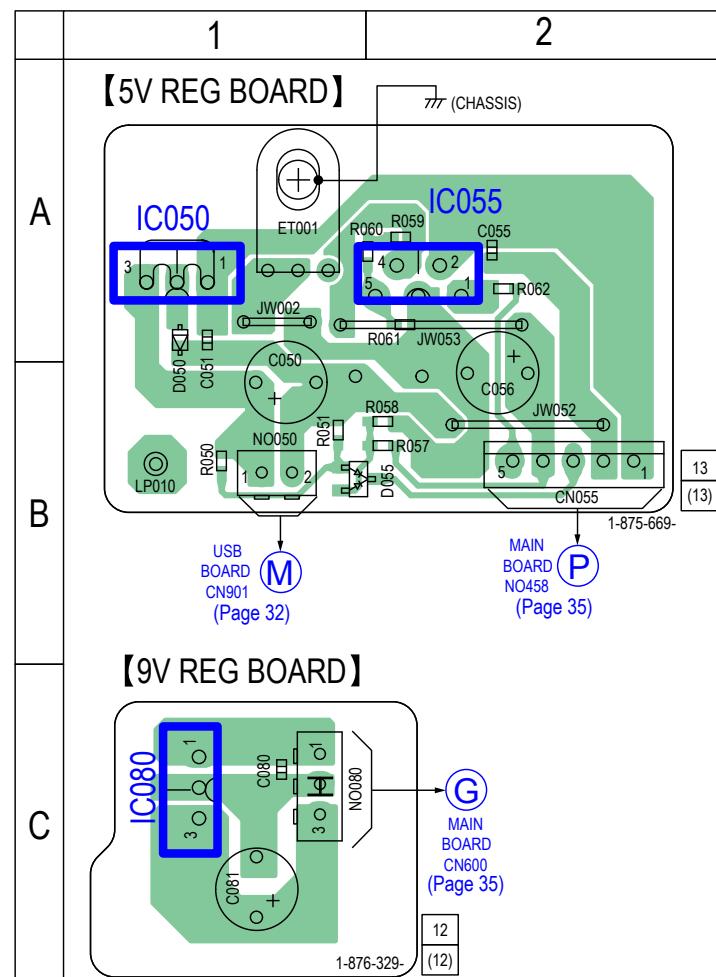
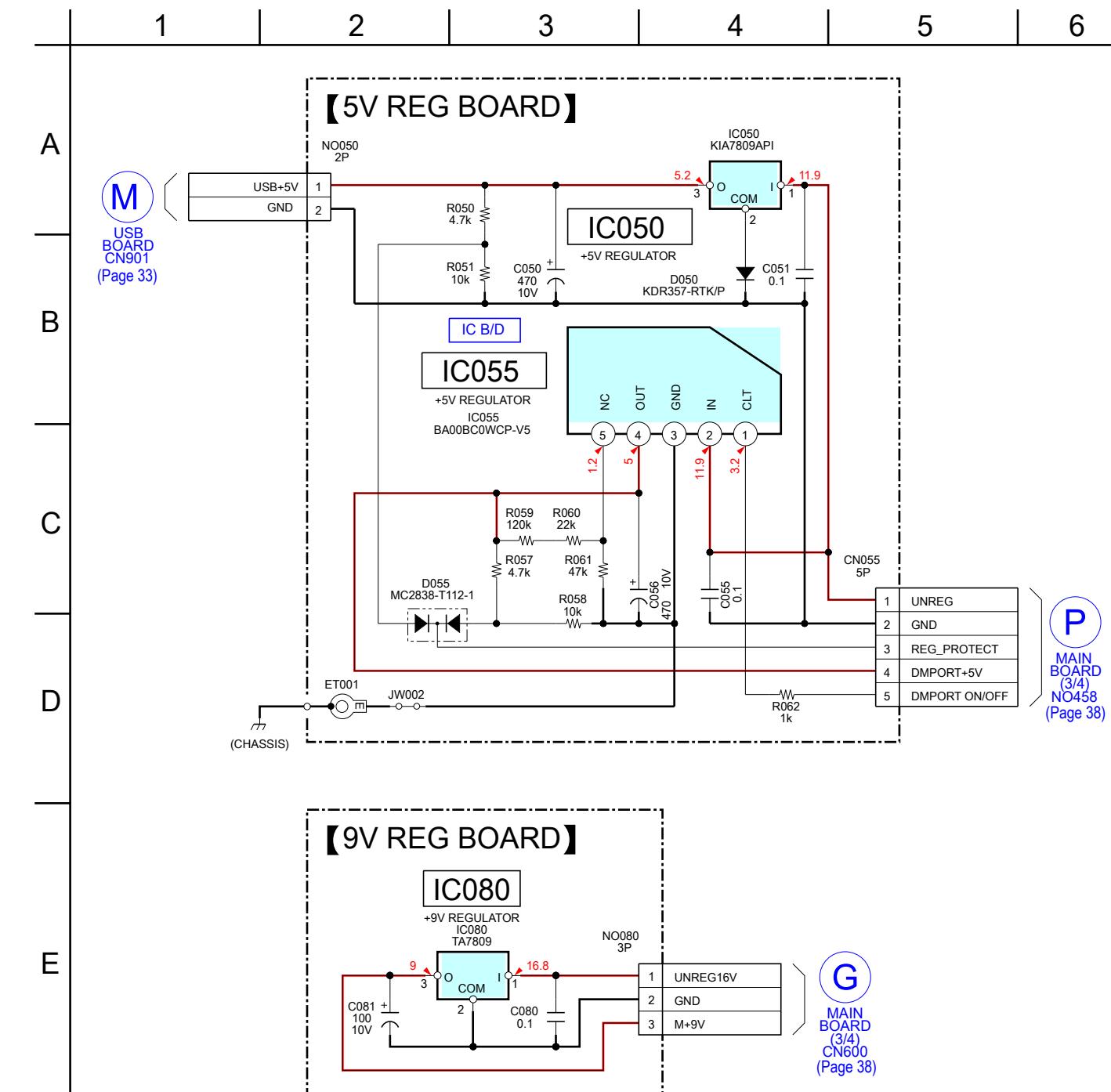


## 7-22. SCHEMATIC DIAGRAM - JACK Section



**7-23. PRINTED WIRING BOARDS - REG Section -**

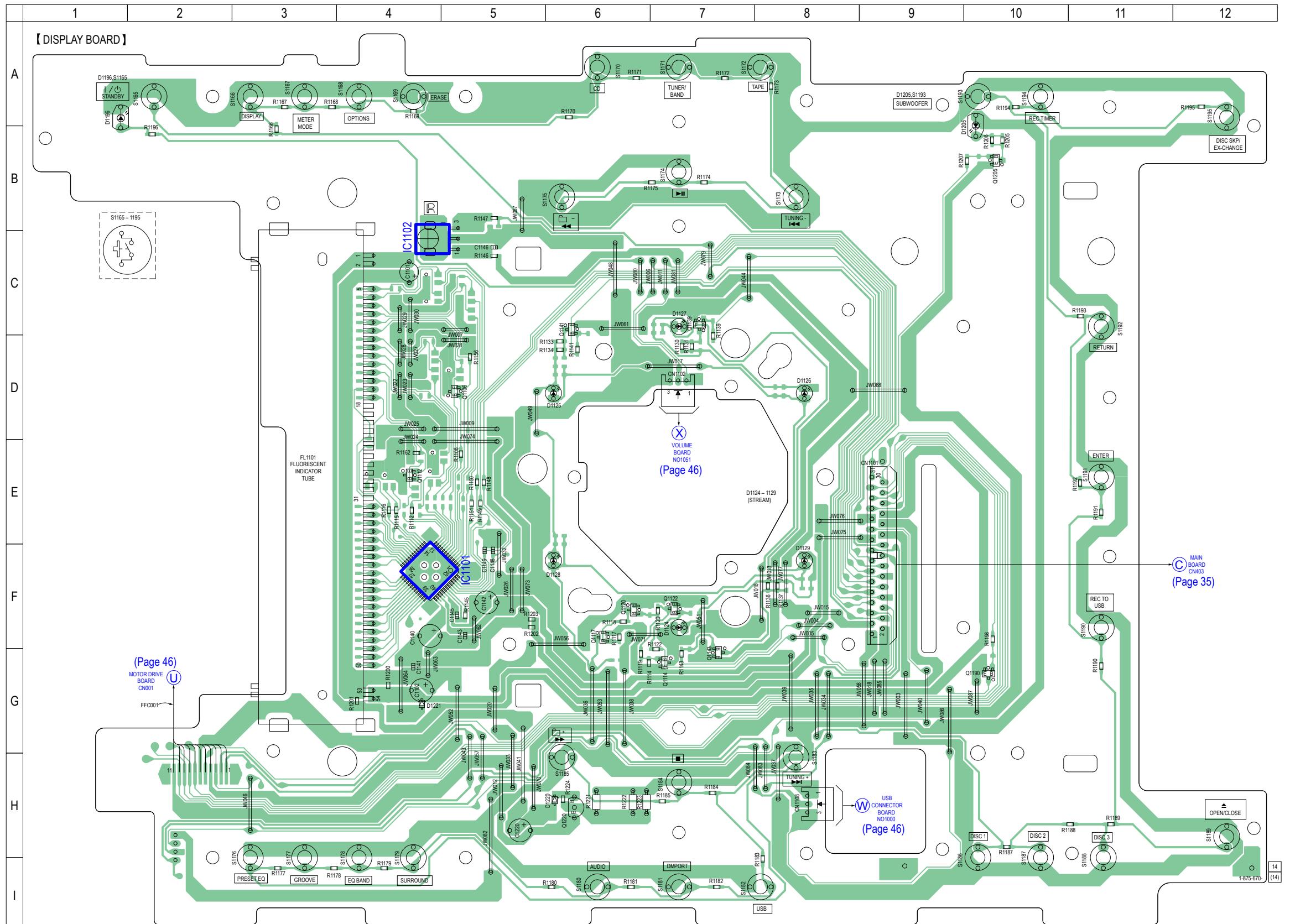
• See page 27 for Circuit Boards Location. •  : Uses unleaded solder.

**7-24. SCHEMATIC DIAGRAM - REG Section -** • See page 50 for IC Block Diagrams.

7-25. PRINTED WIRING BOARD - DISPLAY Board - • See page 27 for Circuit Boards Location. •  : Uses unleaded solder.

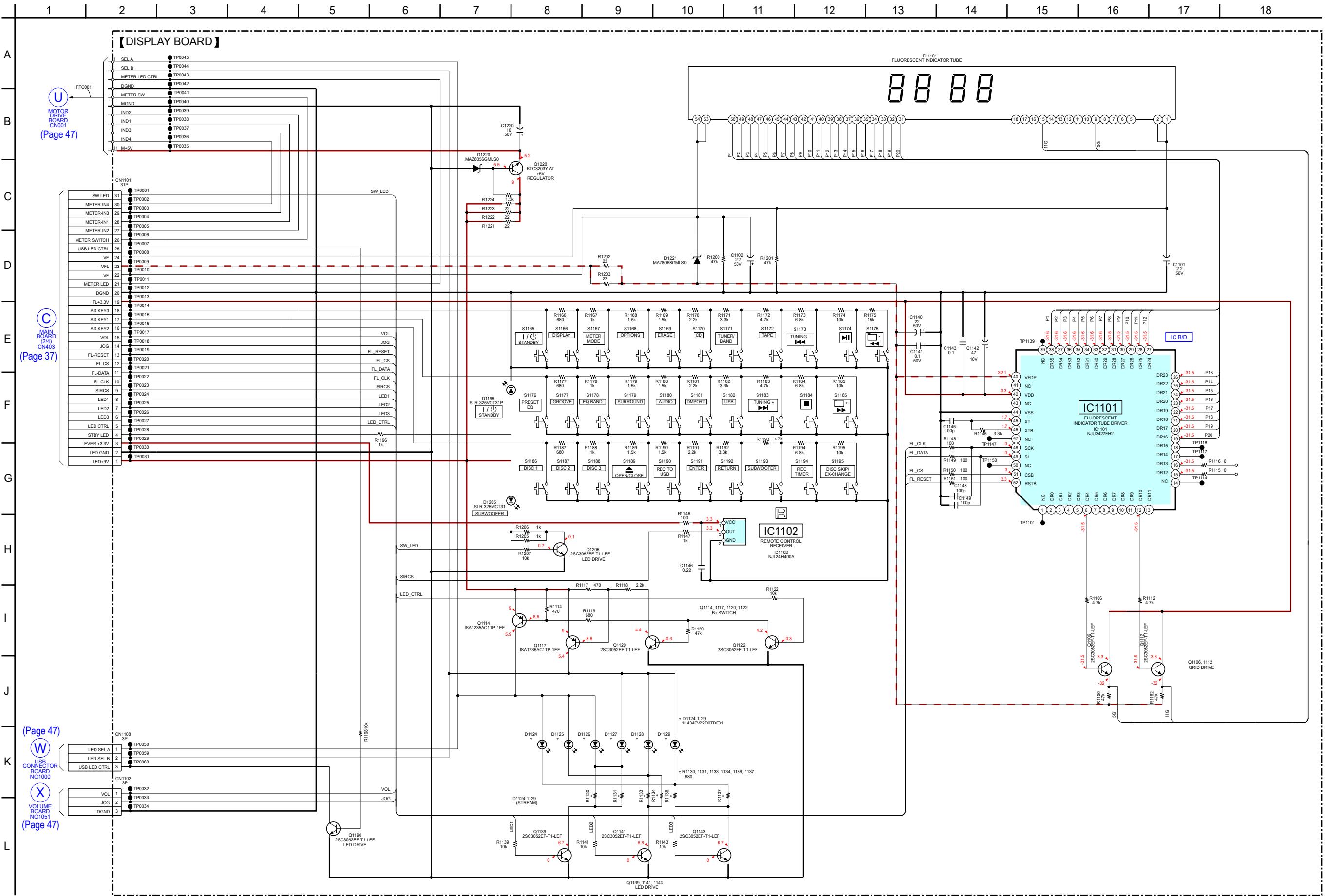
- Semiconductor Location

Ref. No.	Location
D1124	F-7
D1125	D-6
D1126	D-8
D1127	C-7
D1128	F-6
D1129	F-8
D1196	A-1
D1205	A-10
D1220	H-6
D1221	G-4
IC1101	F-4
IC1102	C-4
Q1106	D-5
Q1112	E-4
Q1114	G-7
Q1117	F-6
Q1120	F-6
Q1122	F-7
Q1139	C-7
Q1141	C-6
Q1143	G-7
Q1190	G-10
Q1205	B-10
Q1220	H-6



7-26. SCHEMATIC DIAGRAM - DISPLAY Board - • See page 50 for IC Block Diagrams

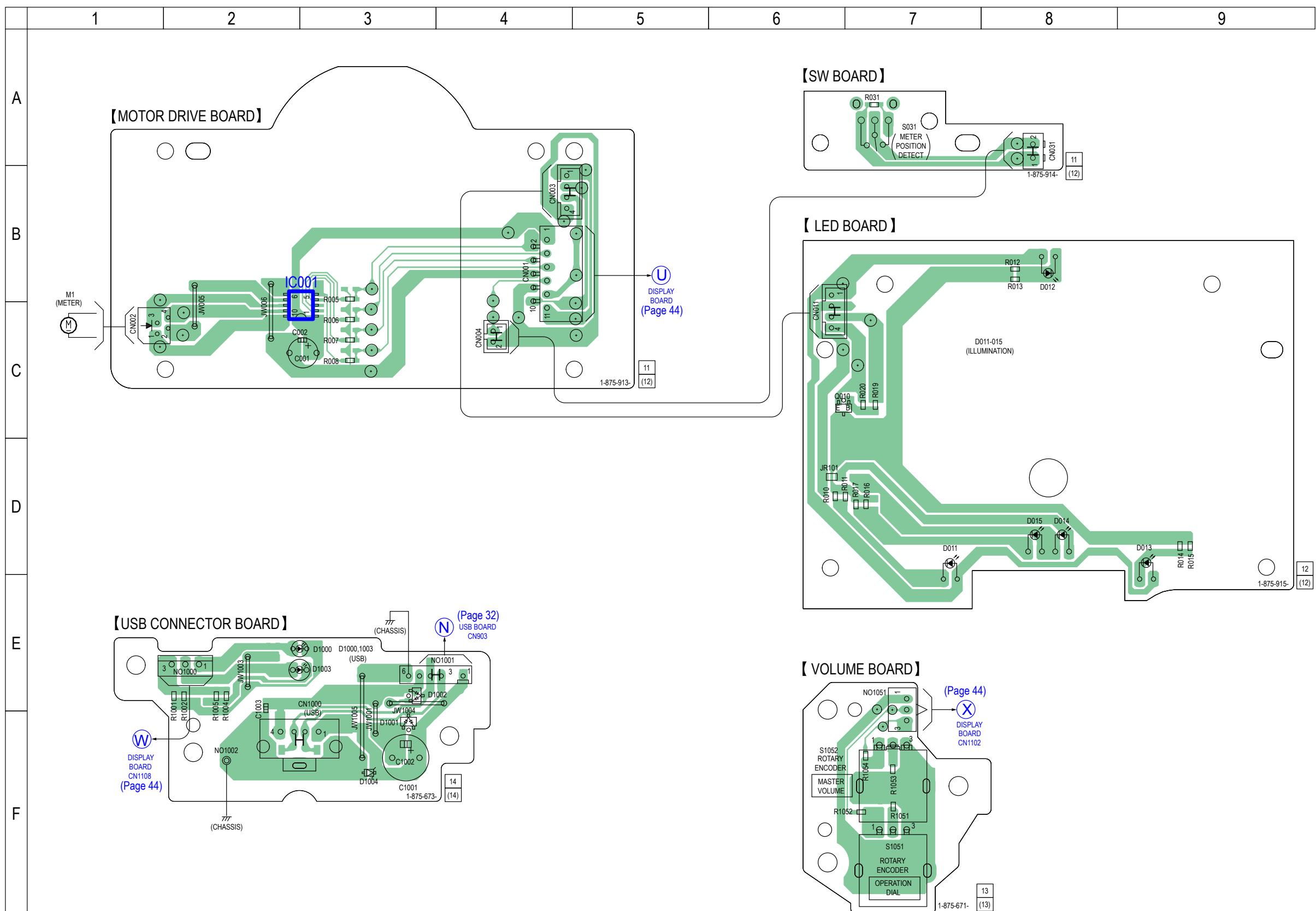
- See page 50 for IC Block Diagrams



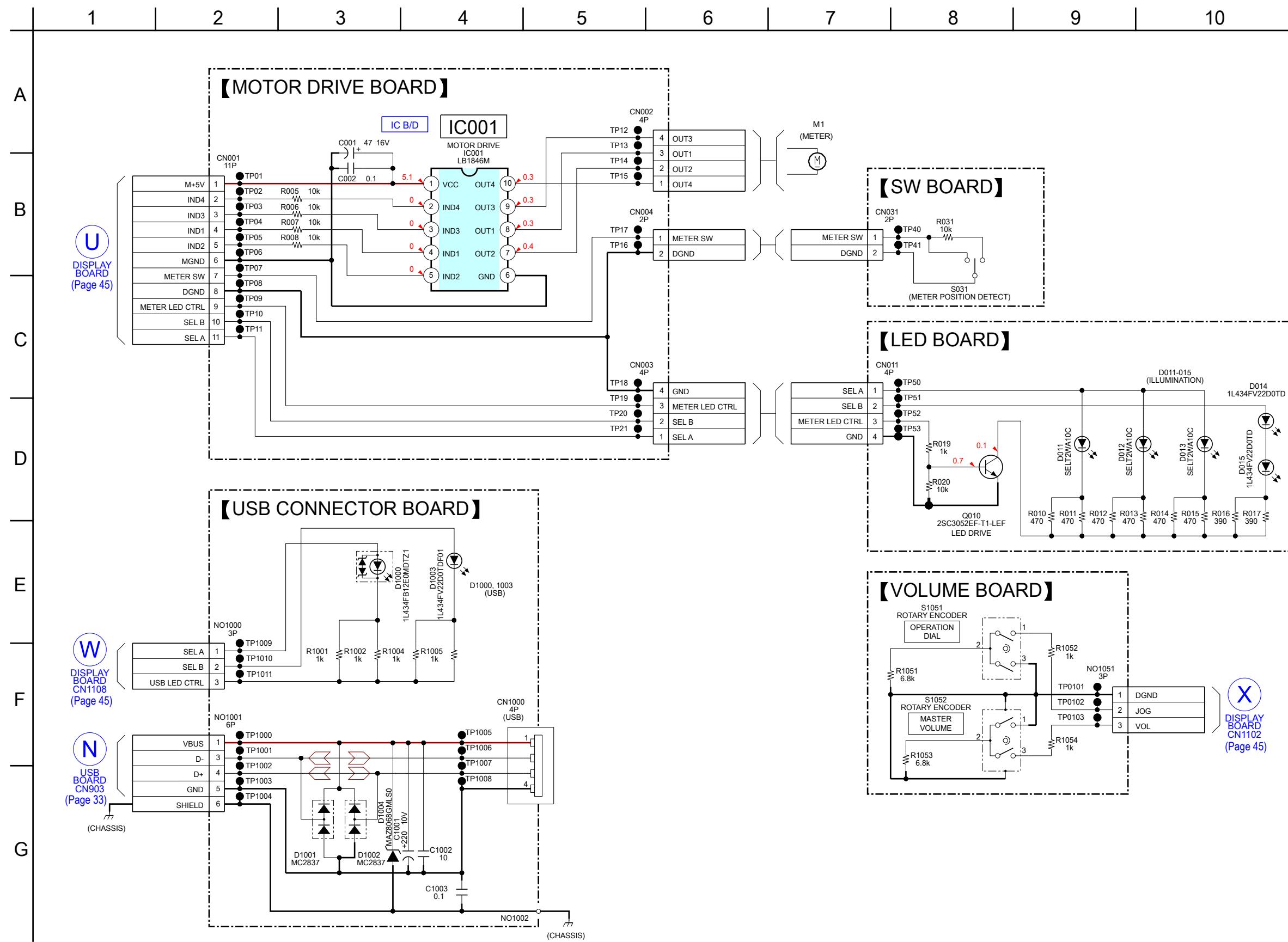
7-27. PRINTED WIRING BOARDS - PANEL Section - • See page 27 for Circuit Boards Location. •  : Uses unleaded solder.

• Semiconductor Location

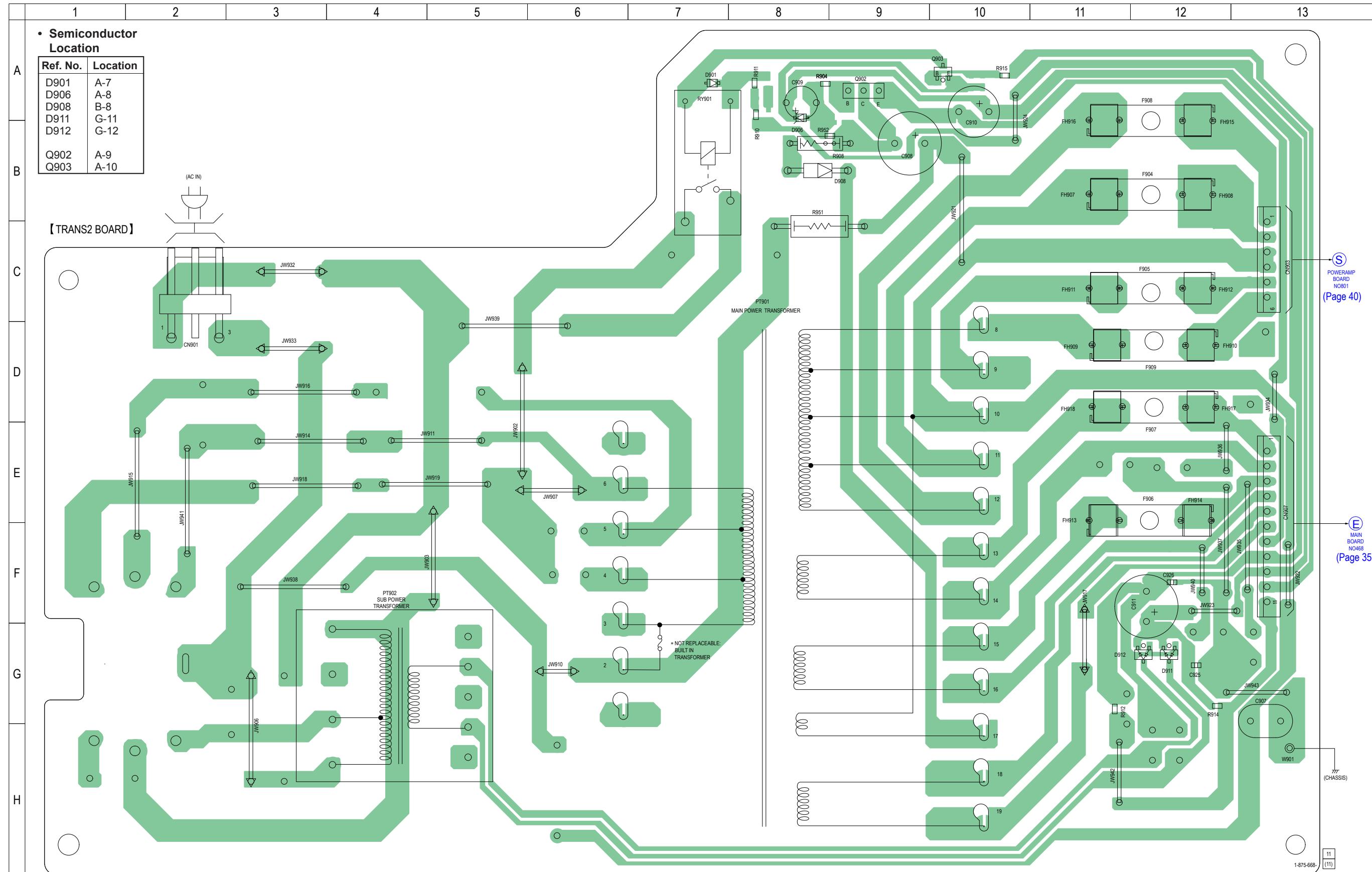
Ref. No.	Location
D011	D-7
D012	B-8
D013	D-9
D014	D-8
D015	D-8
D1000	E-2
D1001	F-3
D1002	E-3
D1003	E-2
D1004	F-3
IC001	C-3
Q010	C-6



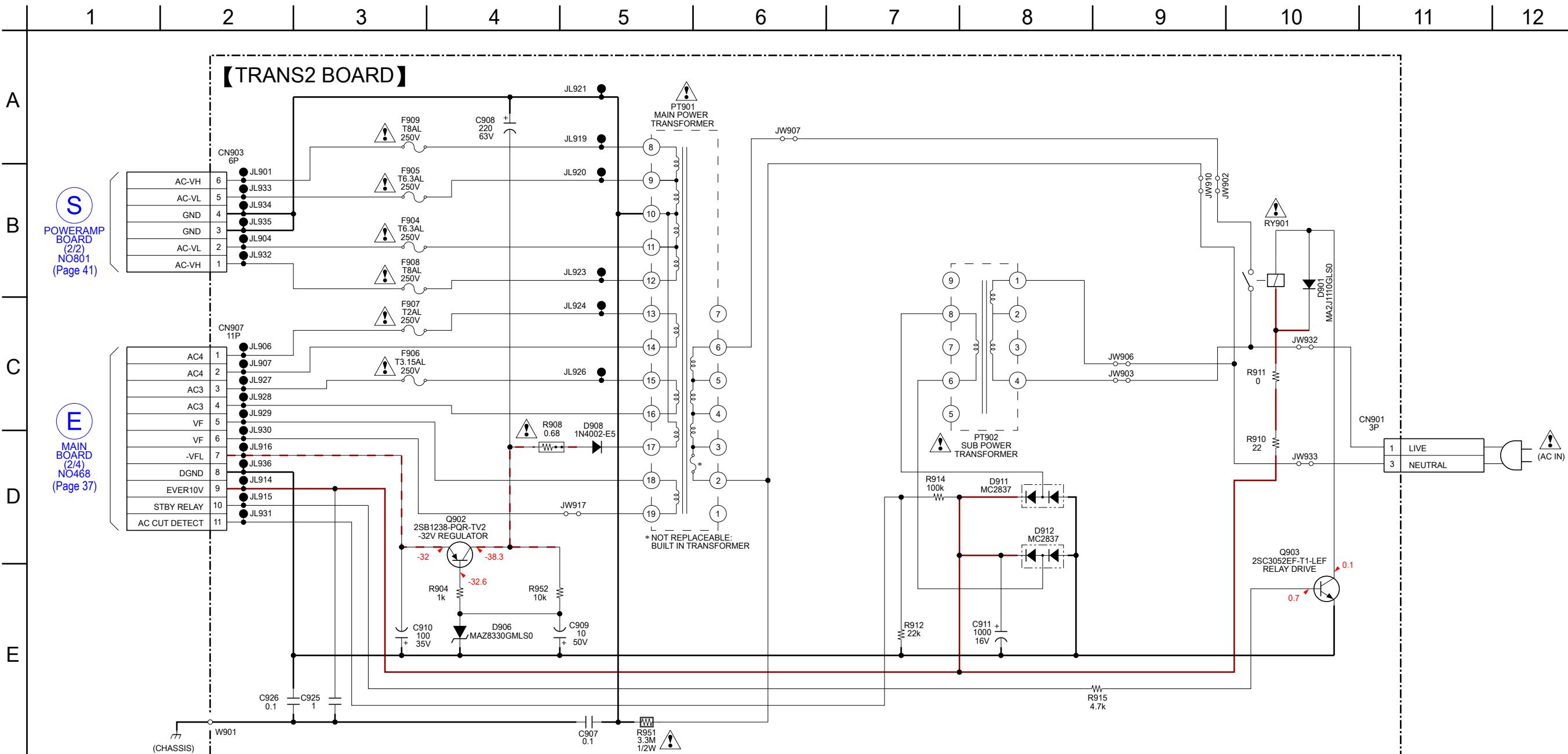
## 7-28. SCHEMATIC DIAGRAM - PANEL Section - • See page 50 for IC Block Diagrams.



**7-29. PRINTED WIRING BOARD - TRANS2 Board - • See page 27 for Circuit Boards Location. •  : Uses unleaded solder.**



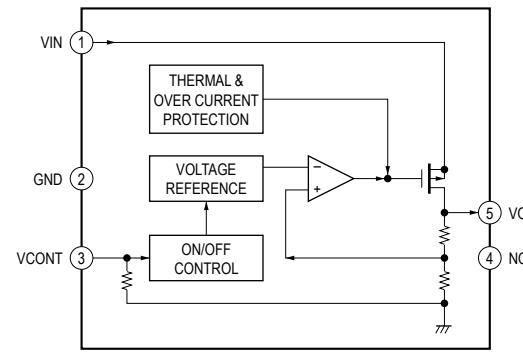
## 7-30. SCHEMATIC DIAGRAM - TRANS2 Board -



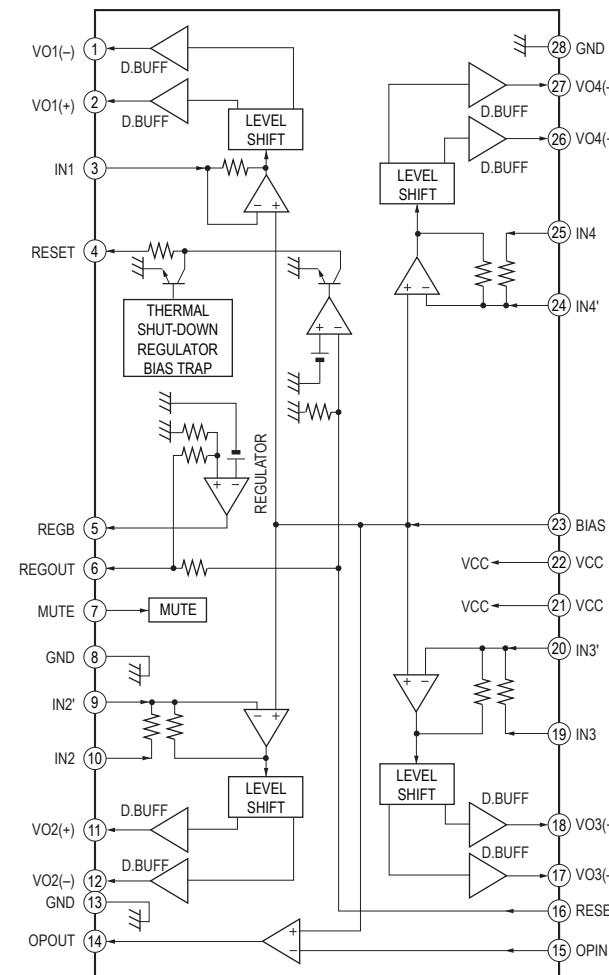
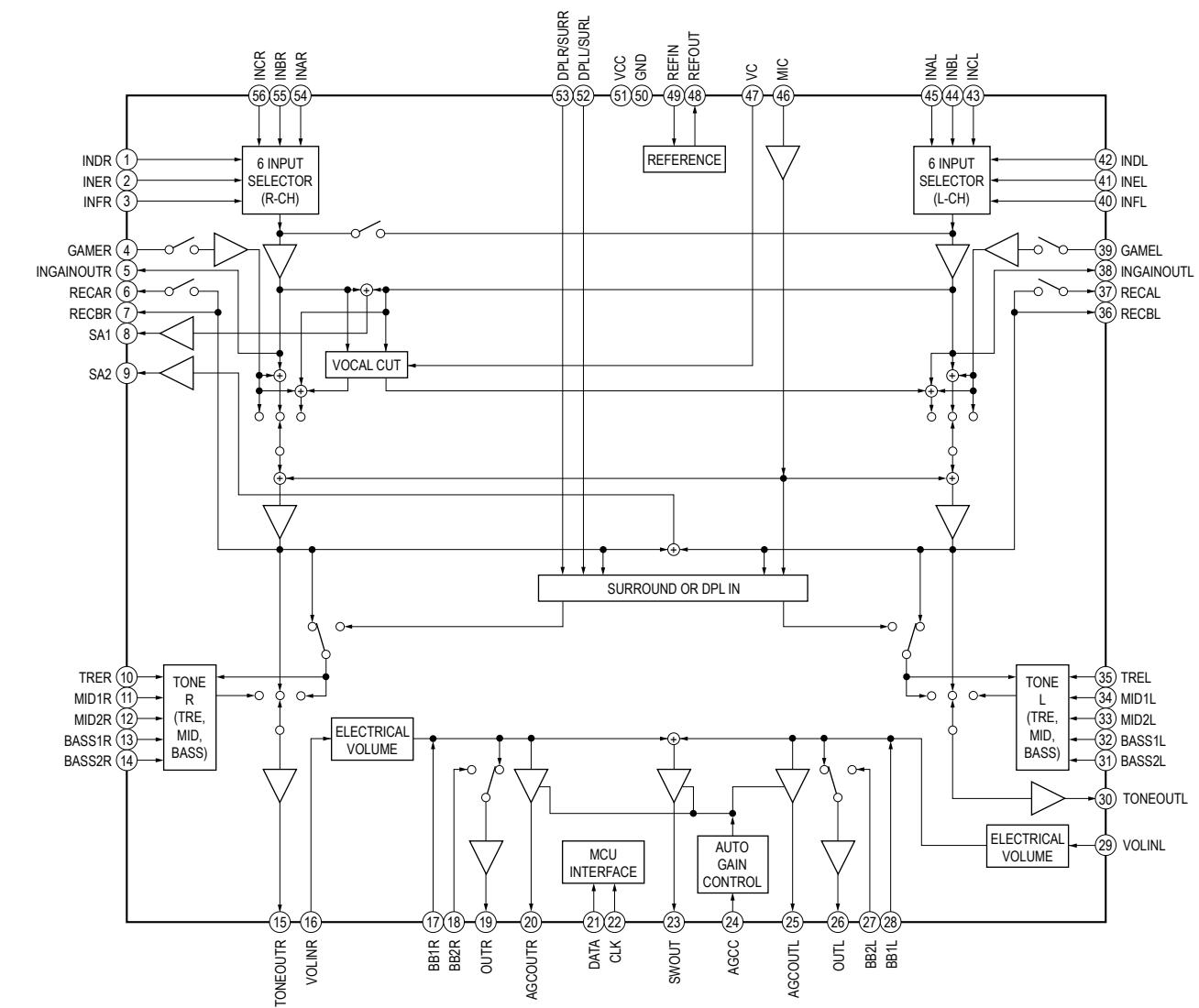
## • IC Block Diagrams

## – CD Board –

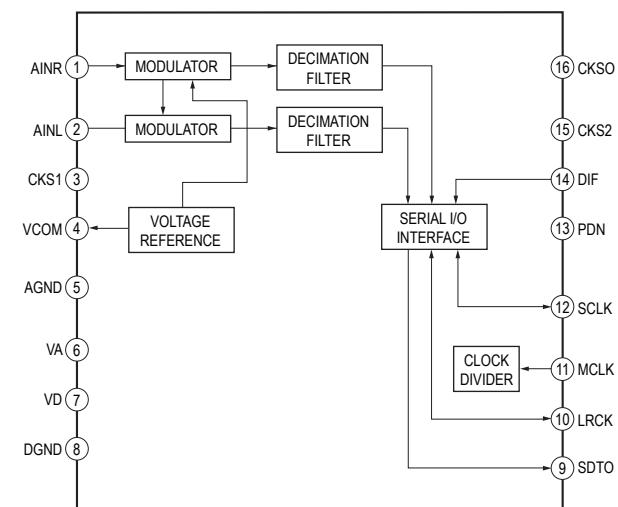
IC201 TK63115SCL-G@GT



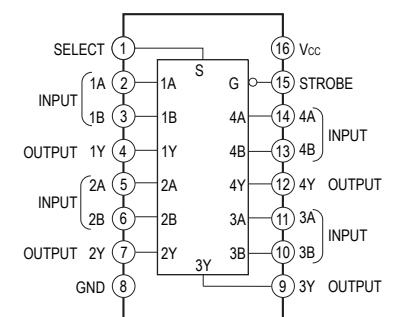
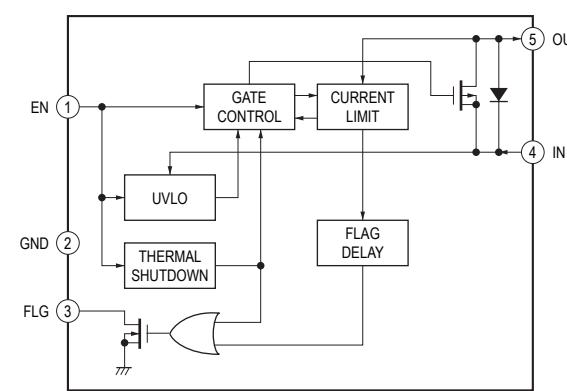
IC401 BA5826SFP-E2

– MAIN Board –  
IC407 R2A15216FP

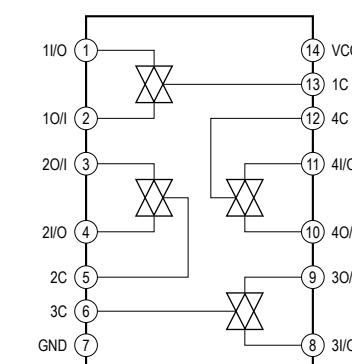
IC501 AK5358AET-E2



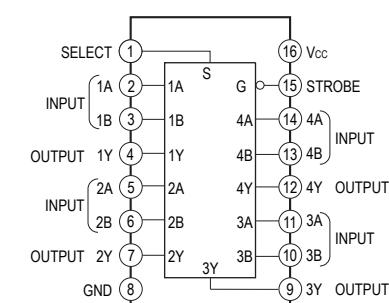
IC502 TC74VHC157FT (EKJ)

– USB Board –  
IC915 R5523N001B-TR-F

IC670, 672 TC74HC4066AFT (EL)

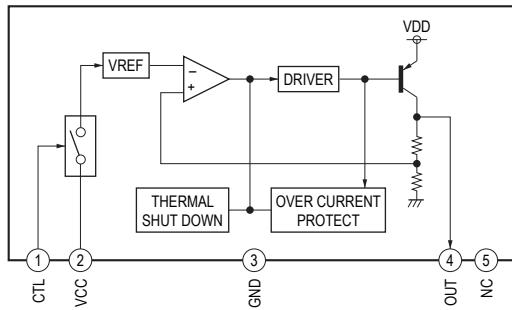


IC673 TC74VHC157FT (EKJ)



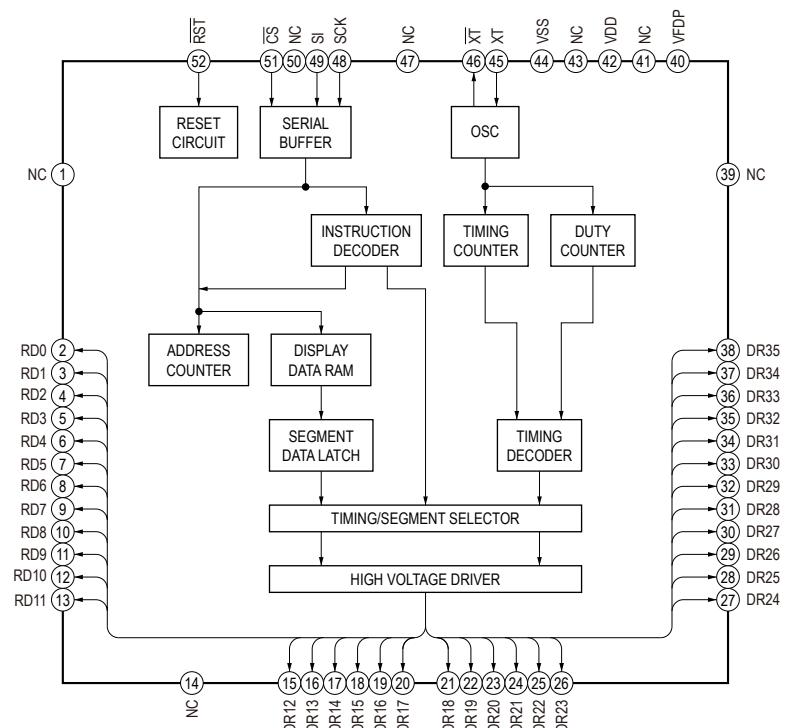
## - 5V REG Board -

IC055 BA00BC0WCP-V5E2



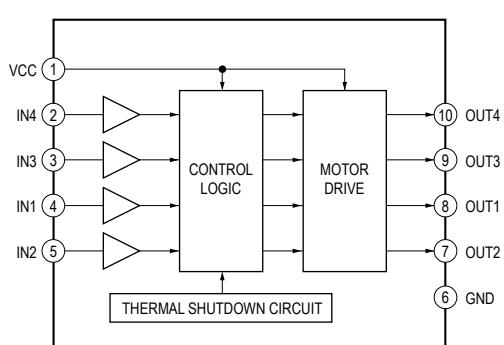
## - DISPLAY Board -

IC1101 NJU3427FH2



## - MOTOR DRIVE Board -

IC001 LB1846M



- IC Pin Function Description

## CD BOARD IC101 TC94A70FG-101 (CD-MP3 PROCESSOR)

Pin No.	Pin Name	I/O	Description
1	AVSS3	-	Ground terminal
2	RFZi	I	RF ripple zero crossing signal input terminal
3	RFRP	O	RF ripple signal output terminal
4	SBAD/RFDC	O	Sub beam addition signal or RF peak detection signal output terminal Not used
5	FEi	O	Focus error signal output terminal Not used
6	TEi	O	Tracking error signal output terminal
7	TEZi	I	Tracking error zero crossing signal input terminal
8	AVDD3	-	Power supply terminal (+3.3 V)
9	FOo	O	Focus coil drive signal output terminal
10	TRo	O	Tracking coil drive signal output terminal
11	VREF	I	Reference voltage (+1.65V) input terminal
12	FMO	O	Sled motor drive signal output terminal
13	DMO	O	Spindle motor drive signal output terminal
14	VSSP3	-	Ground terminal
15	VCOi	I	VCO control voltage input terminal
16	VDDP3	-	Power supply terminal (+3.3 V)
17	VDD1	-	Power supply terminal (+1.5 V)
18	VSS1	-	Ground terminal
19	FGiN	I	FG signal input terminal Not used
20	IO0 (/HSO)	I	Disc inner position detection signal input terminal
21	IO1 (/UHSO)	O	Not used
22	XVSS3	-	Ground terminal
23	XI	I	System clock input terminal (16.9344 MHz)
24	XO	O	System clock output terminal (16.9344 MHz)
25	XVDD3	-	Power supply terminal (+3.3 V)
26	DVSS3	-	Ground terminal
27	RO	O	Analog audio (R-ch) signal output terminal
28	DVDD3	-	Power supply terminal (+3.3 V)
29	DVR	O	Reference voltage (+1.65V) output terminal
30	LO	O	Analog audio (L-ch) signal output terminal
31	DVSS3	-	Ground terminal
32	VDDT3	-	Power supply terminal (+3.3 V)
33	VSS1	-	Ground terminal
34	VDD1	-	Power supply terminal (+1.5 V)
35	VDDM1	-	Power supply terminal (+1.5 V)
36	SRAMSTB	I	S-RAM standby mode control signal input terminal Fixed at "L" in this set
37	XRST	I	Reset signal input from the system controller "L": reset
38, 39	BUS0, BUS1	I	Serial data input from the system controller or USB controller
40	BUS2 (SO)	I	Serial data input from the system controller or USB controller
41	BUS3 (SI)	I	Serial data input 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	XCCE	I	Chip enable signal input from the system controller or USB controller
44	TEST	I	Setting terminal for test mode Normally fixed at "L"
45	IRQ	I	Interrupt request signal input terminal
46	AoUT3 (PO4)	O	Clock signal output to the A/D converter
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	Request signal output to the USB controller
50	PIO2	O	Data selection signal output to the data selector/reset signal output to the A/D converter
51	PIO3	I	Gate signal input from the USB controller
52	VSS1	-	Ground terminal
53	VDDT3	-	Power supply terminal (+3.3 V)
54	SBSY	O	Subcode block sync signal output to the system controller

Pin No.	Pin Name	I/O	Description
55	SBOK/FOK	O	Not used
56	IPF	O	Not used
57	SFSY/LOCK	O	Not used
58	ZDET	O	Zero detection signal output terminal Not used
59	GPIN	I	Not used
60	MS	I	Microcomputer interface mode selection signal input terminal Fixed at "H" in this set
61	DOUT (PO6)	O	Digital audio data output terminal Not used
62	AOUT (PO7)	O	Audio data output terminal Not used
63	BCK (PO8)	O	Bit clock signal output to the USB controller
64	LRCK (PO9)	O	L/R sampling clock signal output terminal
65	AIN (PI4)	I	Digital audio data input from USB controller or A/D converter
66	BCKi (PI5)	I	Bit clock signal input from the USB controller or A/D converter
67	LRCKi (PI6)	I	L/R sampling clock signal input from the USB controller or A/D converter
68	VDD1	-	Power supply terminal (+1.5 V)
69	VSS1	-	Ground terminal
70	AWRC	-	Not used
71	PVDD3	-	Power supply terminal (+3.3 V)
72	PDo	O	Phase error margin signal between EFM signal and PLCK signal output terminal
73	TMAXS	O	TMAX detection signal output terminal Not used
74	TMAX	O	TMAX detection signal output terminal
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 (+1.65V) input terminal
78	VCOF	O	VCO filter output terminal
79	PVSS3	-	Ground terminal
80	SLCo	O	EFM slice level output terminal
81	RFi	I	RF signal input terminal
82	RFRPi	I	RF ripple signal input terminal
83	RFEQo	O	EFM slice level output terminal
84	VRo	O	Reference voltage (+1.65V) output terminal
85	RESiN	O	External resistor connection terminal
86	VMDiR	O	Reference voltage (+1.65V) output terminal 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 terminal
89	RFo	O	RF signal generation amplification output terminal
90	RVDD3	-	Power supply terminal (+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 terminal
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 terminal
100	TNi (E)	I	Sub beam (E) input from the optical pick-up block

## USB BOARD IC901 TMP92CD28AFG-7AC9 (USB CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	/RESET	I	Reset signal input from the system controller "L": reset
2	DI	I	Ready to send signal input from the system controller
3, 4	NO USE	O	Not used
5	G-3	I	Function selection signal input terminal Fixed at "L" in this set
6	DVCC	-	Power supply terminal (+3.3 V)
7 to 9	NO USE	O	Not used
10	DVSS	-	Ground terminal
11	DVCC	-	Power supply terminal (+3.3 V)
12	RVOUT1	O	Reference voltage (+3.3 V) output terminal
13, 14	RVIN	I	Reference voltage (+3.3 V) input terminal
15	RVOUT2	O	Reference voltage (+3.3 V) output terminal
16	DVCC	-	Power supply terminal (+3.3 V)
17	DVSS	-	Ground terminal
18 to 25	D0 to D7	I/O	Two-way data bus with the S-RAM
26	DVSS	-	Ground terminal
27	DVCC	-	Power supply terminal (+3.3 V)
28 to 35	D8 to D15	I/O	Two-way data bus with the S-RAM
36	A0	O	Address signal output terminal Not used
37 to 43	A1 to A7	O	Address signal output to the S-RAM
44	DVSS	-	Ground terminal
45	DVCC	-	Power supply terminal (+3.3 V)
46 to 54	A8 to A16	O	Address signal output to the S-RAM
55 to 58	BUS0 to BUS3	O	Serial data output to the CD-MP3 processor
59	/BUCK	O	Serial data transfer clock signal output to the CD-MP3 processor
60	/CCE	O	Chip enable signal output to the CD-MP3 processor
61	NO USE	O	Not used
62	DVSS	-	Ground terminal
63	DVCC	-	Power supply terminal (+3.3 V)
64	RD	O	Output enable signal output to the S-RAM
65	WR	O	Write enable signal output to the S-RAM
66	SRLLB	O	Lower-byte control signal output to the S-RAM
67	SRLUB	O	Upper-byte control signal output to the S-RAM
68	NO USE	O	Not used
69	BOOT	I	Boot mode selection signal input terminal "L": boot mode
70	CS2	O	Chip select signal output to the S-RAM
71	LRCK	O	L/R sampling clock signal output to the CD-MP3 processor
72	AM1	I	Function mode selection signal input terminal Fixed at "H" in this set
73	X2	O	System clock output terminal (9 MHz)
74	DVSS	-	Ground terminal
75	X1	I	System clock input terminal (9 MHz)
76	DVCC	-	Power supply terminal (+3.3 V)
77	USBOC	I	Over current detection signal input terminal
78	USBPON	O	USB VBUS power on/off control signal output terminal "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 terminal Fixed at "H" in this set
82	NO USE	O	Not used
83	DVSS	-	Ground terminal
84	DO	O	Clear to send signal output to the system controller
85	DATA	I	Audio data input from the CD-MP3 processor
86	CLOCK	I	Audio data transfer clock signal input from CD-MP3 processor
87	TXD1	O	Serial data output to the system controller
88	RXD1	I	Serial data input from the system controller
89	NO USE	O	Not used
90	SDA	I/O	Two-way EEPROM IIC data bus terminal Not used

Pin No.	Pin Name	I/O	Description
91	SCL	I/O	Two-way EEPROM IIC clock bus terminal Not used
92	BCK	O	Bit clock signal output to the CD-MP3 processor
93	DATA	O	Audio data output to the CD-MP3 processor
94	GATE	O	Gate signal output to the CD-MP3 processor
95	DVCC	-	Power supply terminal (+3.3 V)
96	REQ	I	Request signal input from the CD-MP3 processor
97	ST-REQ	I	Request signal input from the CD-MP3 processor
98, 99	G-1, G-2	I	Function selection signal input terminal Fixed at "L" in this set
100	DVSS	-	Ground terminal

## MAIN BOARD IC401 R5F3640MDFAR (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1, 2	METER-IN3, METER-IN4	O	Meter motor drive signal output to the motor drive
3	SW LED	O	LED drive signal output terminal for SUBWOOFER indicator
4	SIRCS	I	SIRCS signal input from the remote control receiver
5	CDM-SD	I	CD mechanism deck protector detection signal input signal "H": protector on
6, 7	M2-, M2+	O	Disc change and mode change motor drive signal output terminal
8	BYTE	I	External data bus width selection signal input terminal
9	CN Vss	I	Processor mode switch input terminal (for test)
10	XC-IN	I	Sub system clock input terminal (32.768 kHz)
11	XC-OUT	O	Sub system clock output terminal (32.768 kHz)
12	RESET	I	System reset signal input from the reset switch "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H"
13	X-OUT	O	Main system clock output terminal (5 MHz)
14	VSS	-	Ground terminal
15	X-IN	I	Main system clock input terminal (5 MHz)
16	VCC	-	Power supply terminal (+3.3V)
17	NMI	I	Non-maskable interrupt signal input terminal Not used
18	M1-	O	Tray/drawer transportation motor drive signal output terminal
19	SBSY	I	Subcode block sync signal input from the CD-MP3 processor
20	AC-CUT	I	AC cut on/off detection signal input terminal "L": AC cut on
21	M1+	O	Tray/drawer transportation motor drive signal output terminal
22, 23	SW3, SW1	I	Disc change and mode change detection signal input from CD mechanism deck
24	SW-CHUCK	I	Tray chuck position detection signal from CD mechanism deck
25	SW2	I	Disc change and mode change detection signal input from CD mechanism deck
26	SW-CLOSE	I	Drawer close position detection signal input from CD mechanism deck
27	SW-STOCK	I	Tray stock position detection signal from CD mechanism deck
28	SW-OPEN	I	Drawer open position detection signal input from CD mechanism deck
29	IIC-CLK	I/O	Serial data transfer clock signal output terminal Not used
30	IIC-DATA	I/O	Serial data output terminal Not used
31	MC TXD	O	Serial data output to the DMPORT connector
32	MC RXD	I	Serial data input from the DMPORT connector
33	USB RESET	O	Reset signal output to the USB controller
34	USB CTS0	I	Clear to send signal input from USB controller
35	USB TXD0	O	Serial data output to the USB controller
36	USB RXD0	I	Serial data input from the USB controller
37	USB SEL-SW	O	Bus selection signal output terminal
38	USB RTS0	O	Ready to send signal to USB controller
39	AD SUPPLY SW	O	Power on/off control signal output terminal for the jog dial
40	MP3 IREQ	I	Request signal input from the CD-MP3 processor
41 to 44	CD BUS0 to CD BUS3	I/O	Serial data output to the CD-MP3 processor
45	CD BUCK	O	Serial data transfer clock signal output to the CD-MP3 processor
46	CD CCE	O	Chip enable signal output to the CD-MP3 processor
47	CD-MMUTE	O	Muting signal output to the coil/motor driver
48	CD-XRST	O	Reset signal output to the CD-MP3 processor
49	TC_+9V SW	O	Power on/off control signal output terminal for the tape section
50	PROTECT	I	Speaker protect detection signal input from speaker protect circuit "H": protector on
51	STK MUTE	O	Power amplifier on/off control signal output terminal "H": amplifier on
52	SW SPK RELAY	O	Relay drive signal output terminal for the subwoofer "H": relay on
53	FR SPK RELAY	O	Relay drive signal output terminal for the front speakers "H": relay on
54	STBY RELAY	O	Main power on/off control signal output terminal "H": power on
55	EEP-DATA	I/O	Two-way IIC data bus with the EEPROM
56	EEP-SCL	I/O	Two-way IIC clock bus with the EEPROM
57	DMPORT DET	I	DMPORT adaptor connection detection signal input terminal
58	LINE MUTE	O	Line muting on/off control signal output terminal "L": muting on
59	R2A15216FP-CLK	O	Serial data transfer clock signal output to the electrical volume
60	R2A15216FP-DATA	O	Serial data output to the electrical volume

Pin No.	Pin Name	I/O	Description
61	ST-TUNED	O	Tuned detection input from the tuner (FM/AM)
62	VCC	-	Power supply terminal (+3.3V)
63	ST-CE	O	PLL chip enable signal output to the tuner (FM/AM)
64	VSS	-	Ground terminal
65	ST-DIN	O	PLL serial data output to the tuner (FM/AM)
66	ST-CLK	O	PLL serial data transfer clock signal output to the tuner (FM/AM)
67	ST-DOUT	I	PLL serial data input from the tuner (FM/AM)
68	POWER ILLUMINATOR	I	Spectrum analyzer drive signal input from the electrical volume
69	NO USE	-	Not used
70	USB-BLUE LED	O	LED drive signal output terminal for the USB indicator "H": LED on
71	MIC/HP DET	I	Headphone/microphone connection detection signal input terminal (A/D input)
72	STBY LED	O	LED drive signal output terminal for STANDBY indicator "H": LED on
73	LED CTRL	O	Dynamic LED drive select signal output terminal
74	POWER/DISPLAY-KEY	I	POWER & DISPLAY key press detection signal input terminal (Interrupt input)
75	ST-RDS-INT	I	RDS data transfer clock signal input terminal Not used
76	ST-RDS-DATA	I	RDS data input terminal Not used
77 to 79	LED-VOL5. 6 to LED-VOL1. 2	O	Dynamic LED drive signal output to the motor drive "H": LED on
80	METER LED	O	Dynamic LED drive signal output to the motor drive "H": LED on
81	METER SW	I	Meter position detection signal input terminal (A/D input)
82	TC TAPE-STATE	I	Tape playback/recording/stop status detection signal input terminal (A/D input)
83	OVERVOLTAGE	I	Over-voltage protection detection signal input terminal "L": over-voltage detected
84	METER-IN2	O	Meter motor drive signal output to the motor drive
85	FL-DRIVER-CLK	O	Serial data transfer clock signal output to the fluorescent indicator tube driver
86	FL-DRIVER-DATA	O	Serial data output to the fluorescent indicator tube driver
87	FL-DRIVER-CS	O	Chip select signal output to the fluorescent indicator tube driver
88	FL-DRIVER-RESET	O	Reset signal output to the fluorescent indicator tube driver
89	VACS IN	I	VACS level detection signal input terminal (A/D input)
90	OPERATION DIAL	I	Jog dial pulse input from the OPERATION DIAL encoder (A/D input)
91	MASTER VOL	I	Jog dial pulse input from the MASTER VOLUME encoder (A/D input)
92	MODEL-IN	I	Model setting terminal (A/D input)
93	DEST-IN	I	Destination setting terminal (A/D input)
94, 95	AD-KEY-2, AD-KEY-1	I	Key input terminal (A/D input)
96	AVSS	I	Ground terminal (for A/D conversion)
97	AD-KEY-0	I	Key input terminal (A/D input)
98	VREF	I	A/D Converter reference voltage input terminal (+3.3V)
99	AVCC	-	Power supply terminal (+3.3V) (for A/D conversion)
100	METER-IN1	O	Meter motor drive signal output to the motor drive

## SECTION 8 EXPLODED VIEWS

**Note:**

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- The mechanical parts with no reference number in the exploded views are not supplied.

- Color Indication of Appearance Parts Example:

KNOB, BALANCE (WHITE) . . . (RED)

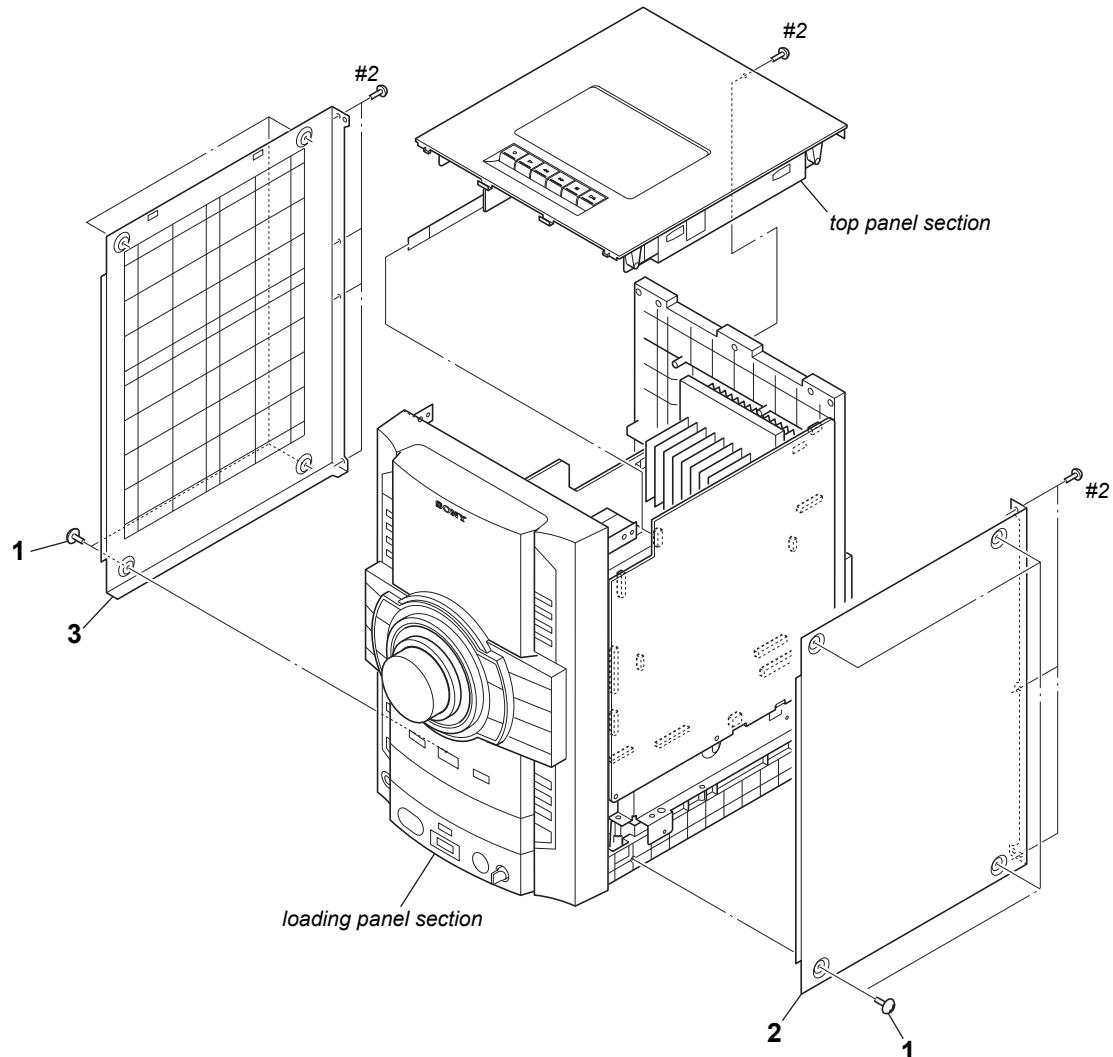
↑  
Parts Color Cabinet's Color

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

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

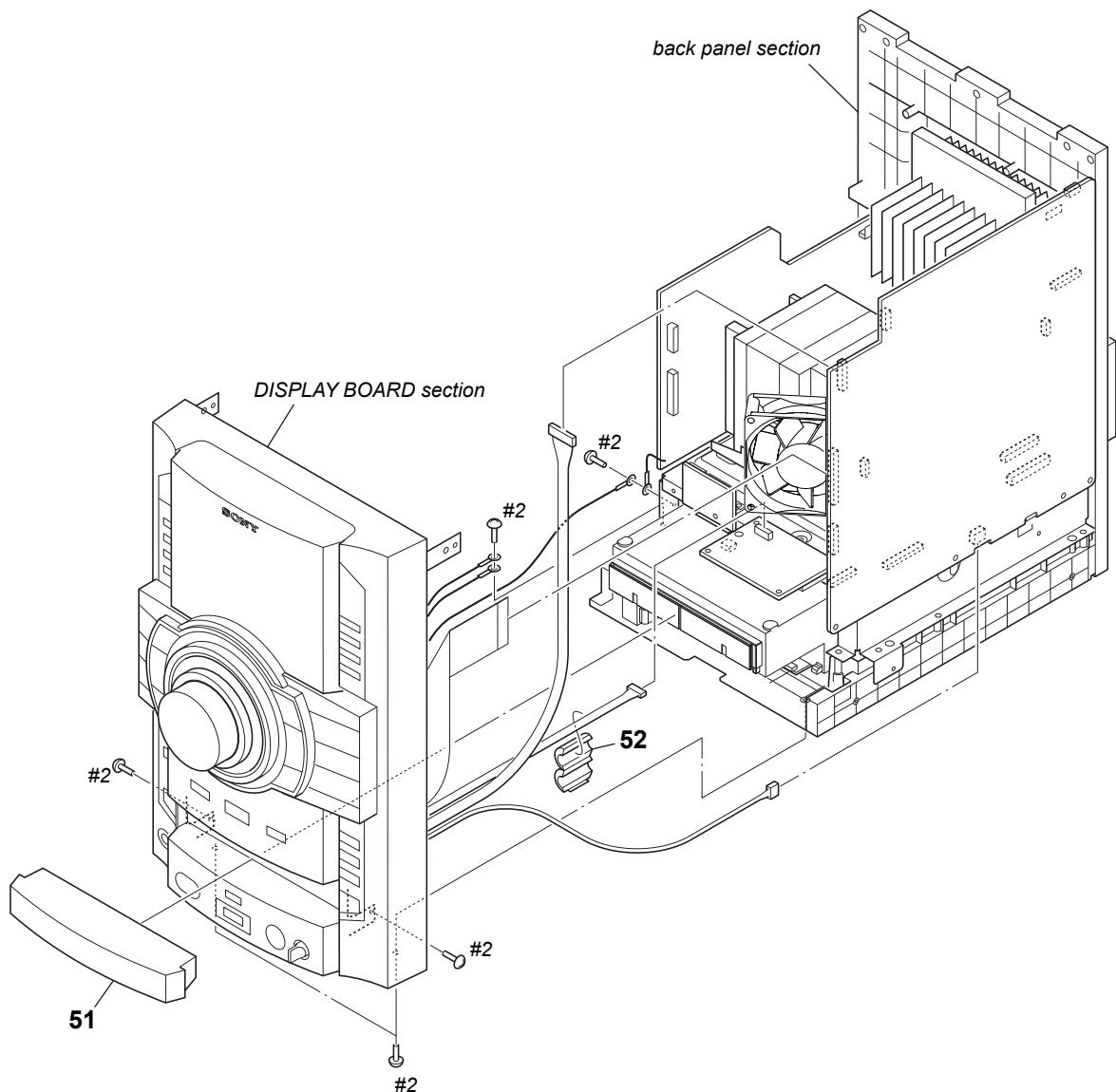
Replace only with part number specified.

### 8-1. CASE SECTION



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
1	3-363-099-32	SCREW (CASE 3 TP2)		3	3-283-218-11	CASE, SIDE-L	
2	3-283-219-11	CASE, SIDE-R		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	

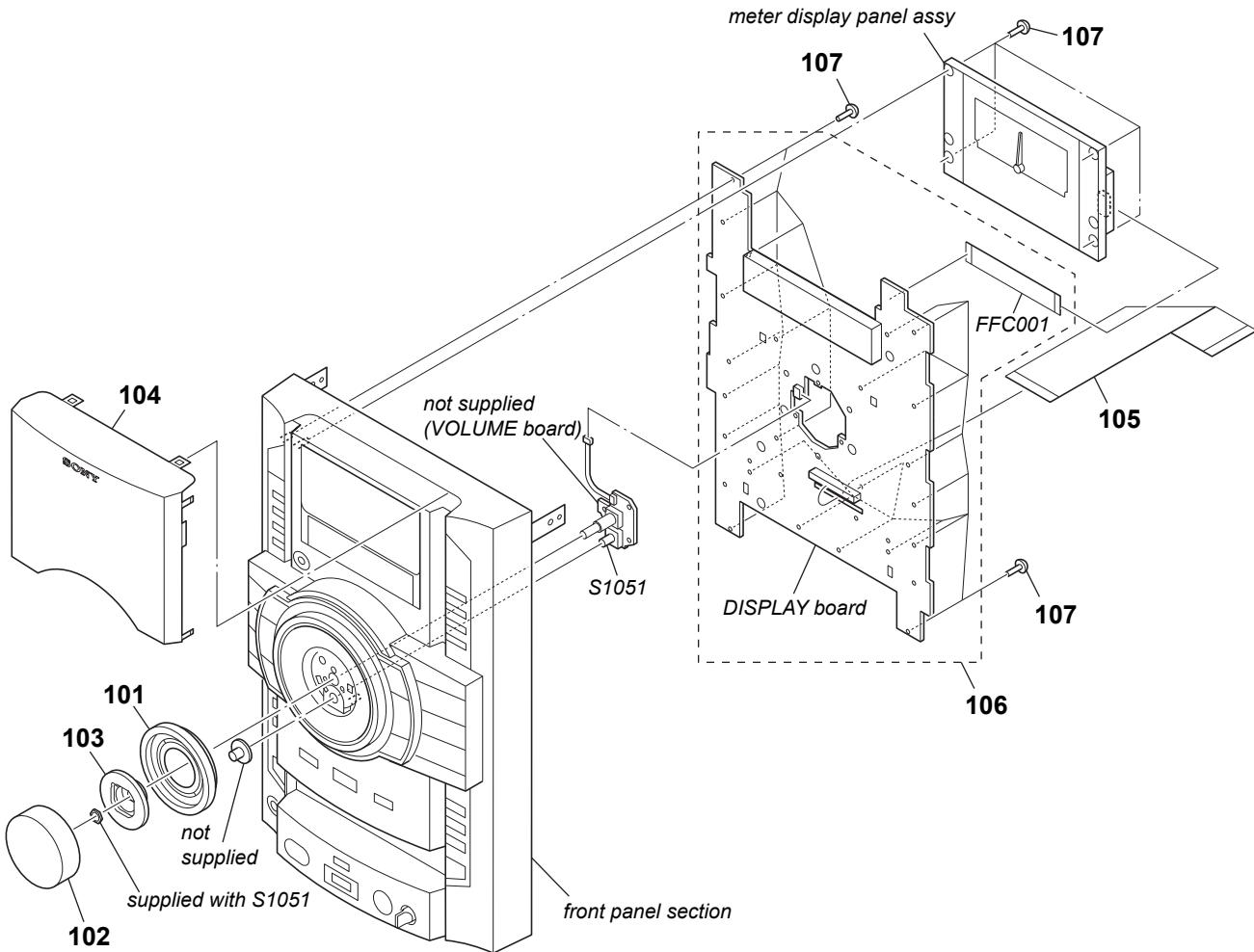
## 8-2. LOADING PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-283-215-81	PANEL, LOADING	
52	1-543-793-11	FILTER, CLAMP (FERRITE CORE)	

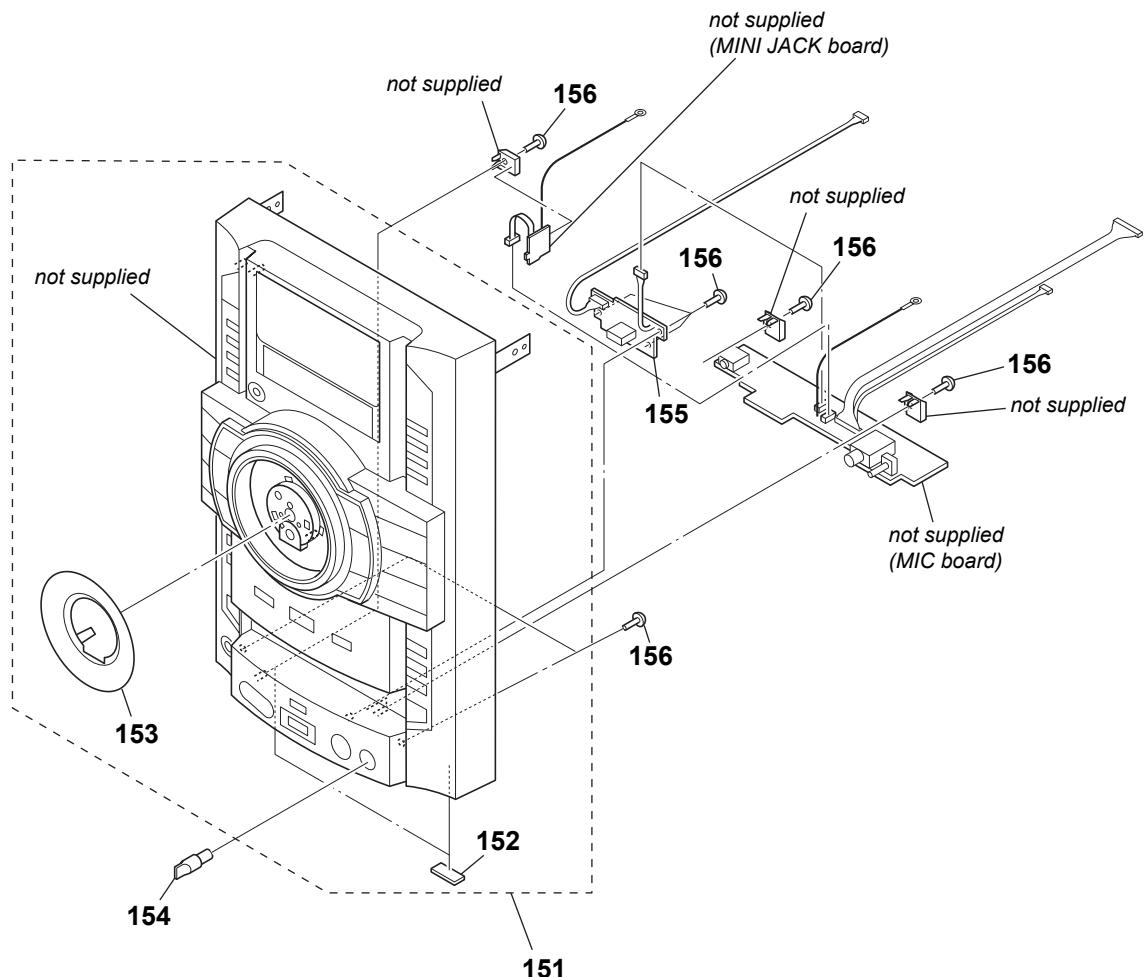
Ref. No.	Part No.	Description	Remark
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	

## 8-3. DISPLAY BOARD SECTION



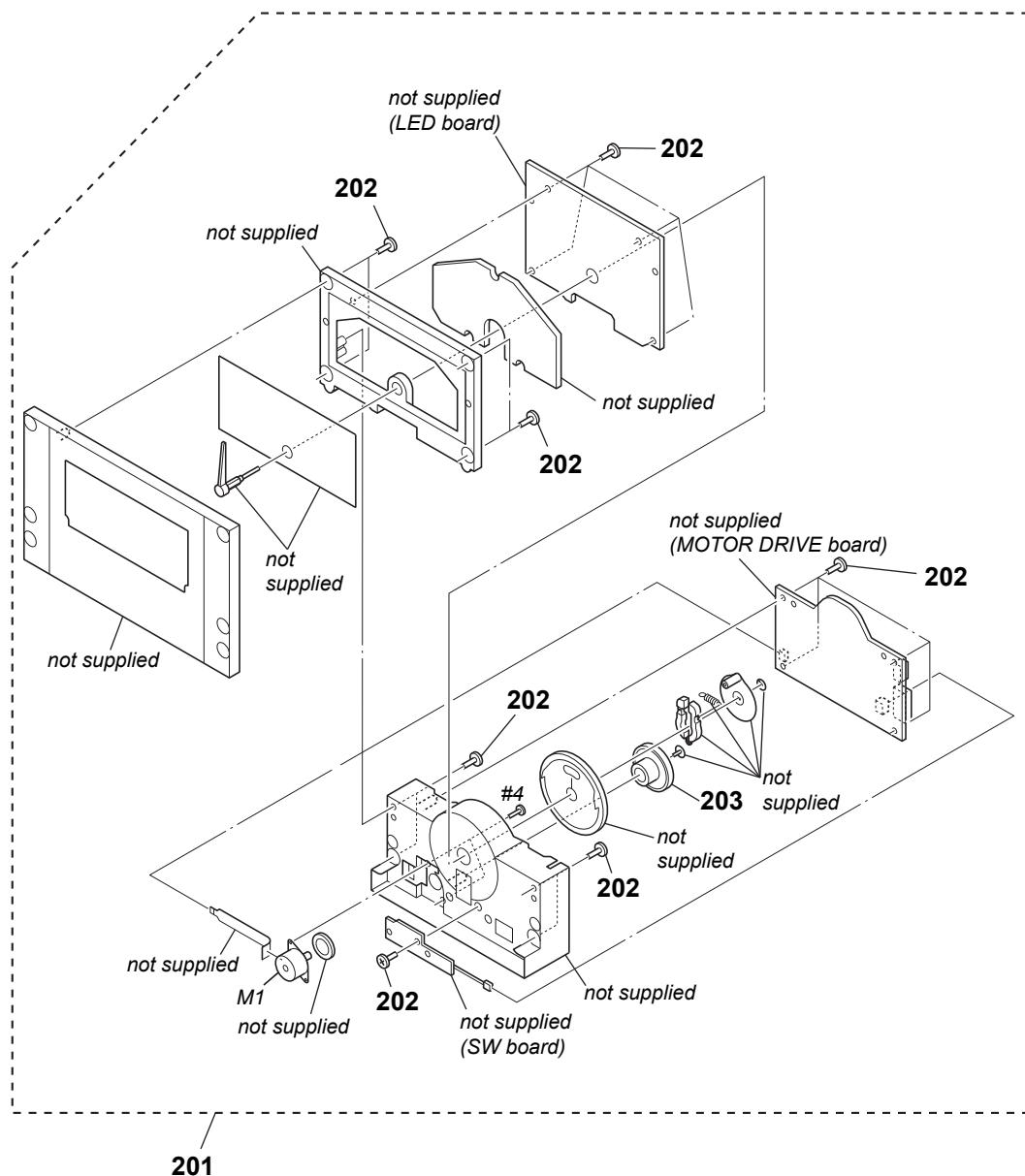
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-283-207-01	KNOB JOG		106	A-1444-627-A	DISPLAY BOARD, COMPLETE	
102	3-283-205-01	KNOB VOLUME		107	3-087-053-01	+BVTP2.6 (3CR)	
103	3-283-206-01	HOLDER JOG		FFC001	1-833-945-21	CABLE, FLEXIBLE FLAT (11 CORE)	
104	3-283-193-11	WINDOW FL		S1051	1-478-133-11	ENCODER, ROTARY (OPERATION DIAL)	
105	1-835-362-21	WIRE (FLAT TYPE) (31 CORE)					

## 8-4. FRONT PANEL SECTION



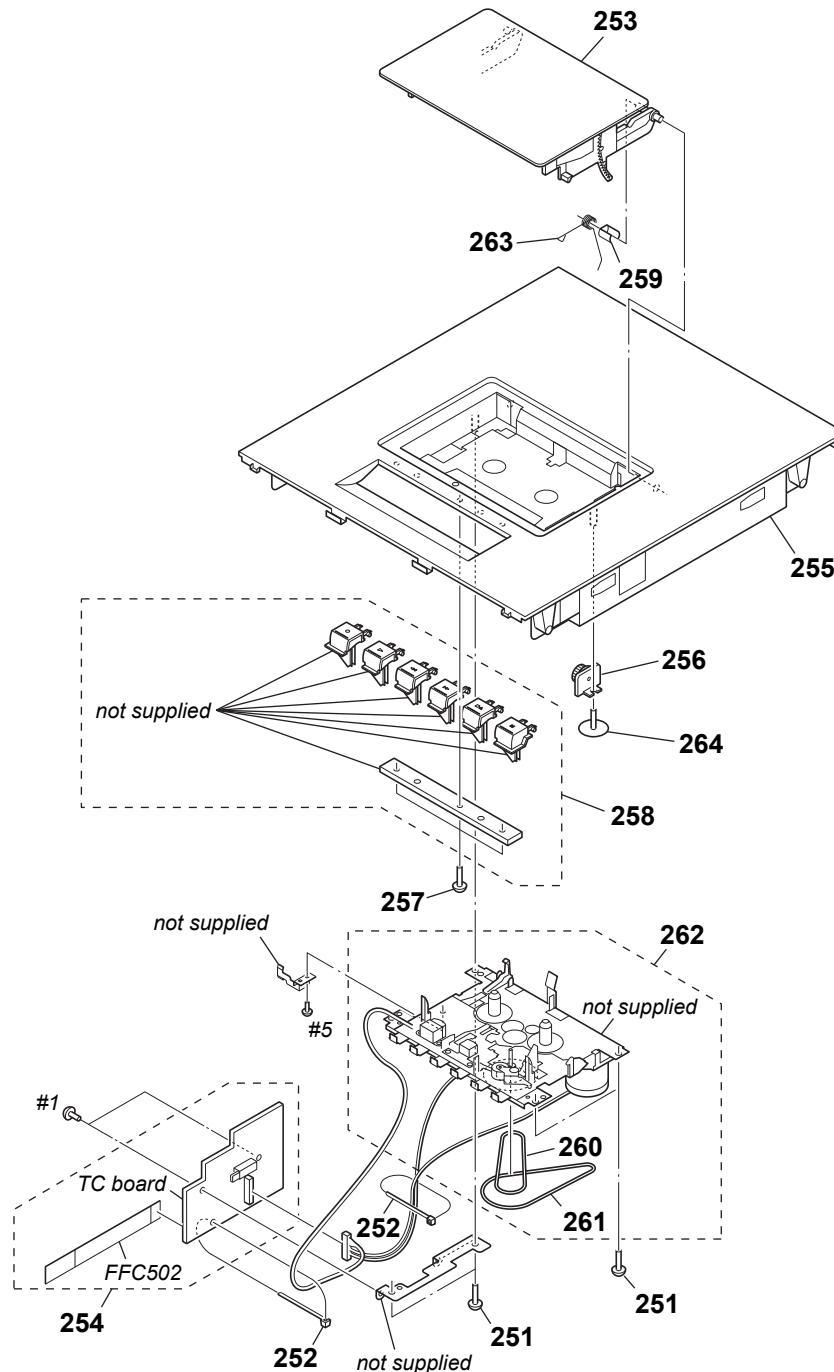
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
151	X-2188-450-2	FRONT PANEL ASSY		155	A-1444-543-A	USB CONNECTOR BOARD, COMPLETE	
152	4-225-252-01	CUSHION (FOOT)		156	3-087-053-01	+BVTP2.6 (3CR)	
153	3-283-208-01	INDICATOR JOG					
154	2-638-220-11	KNOB (MIC)					

## 8-5. METER DISPLAY ASSY



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	A-1433-635-B	METER DISPLAY ASSY (GSL)		M1	A-1486-925-A	MOTOR ASSY (METER)	
202	4-218-253-62	SCREW (M2.6), +BTTP		#4	7-685-853-04	SCREW +BVTT 2X6 (S)	
203	4-245-572-01	BUSHING (GEAR)					

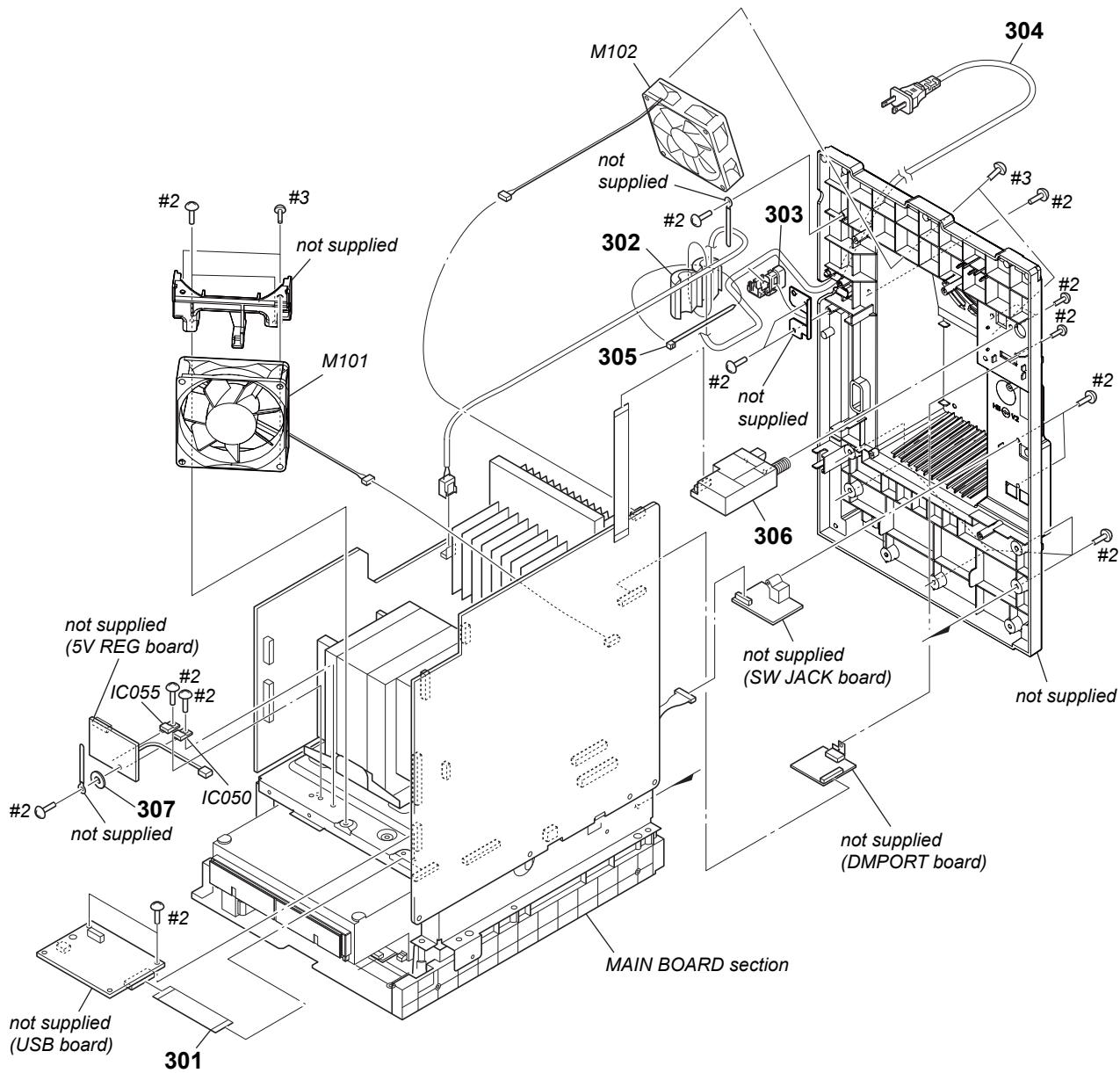
## 8-6. TOP PANEL SECTION



**Note:** When you exchange Ref. No. 260, 261 or 262, Please refer to "HOW TO DISTINGUISH TAPE MECHANISM DECK" of the service note (6 page).

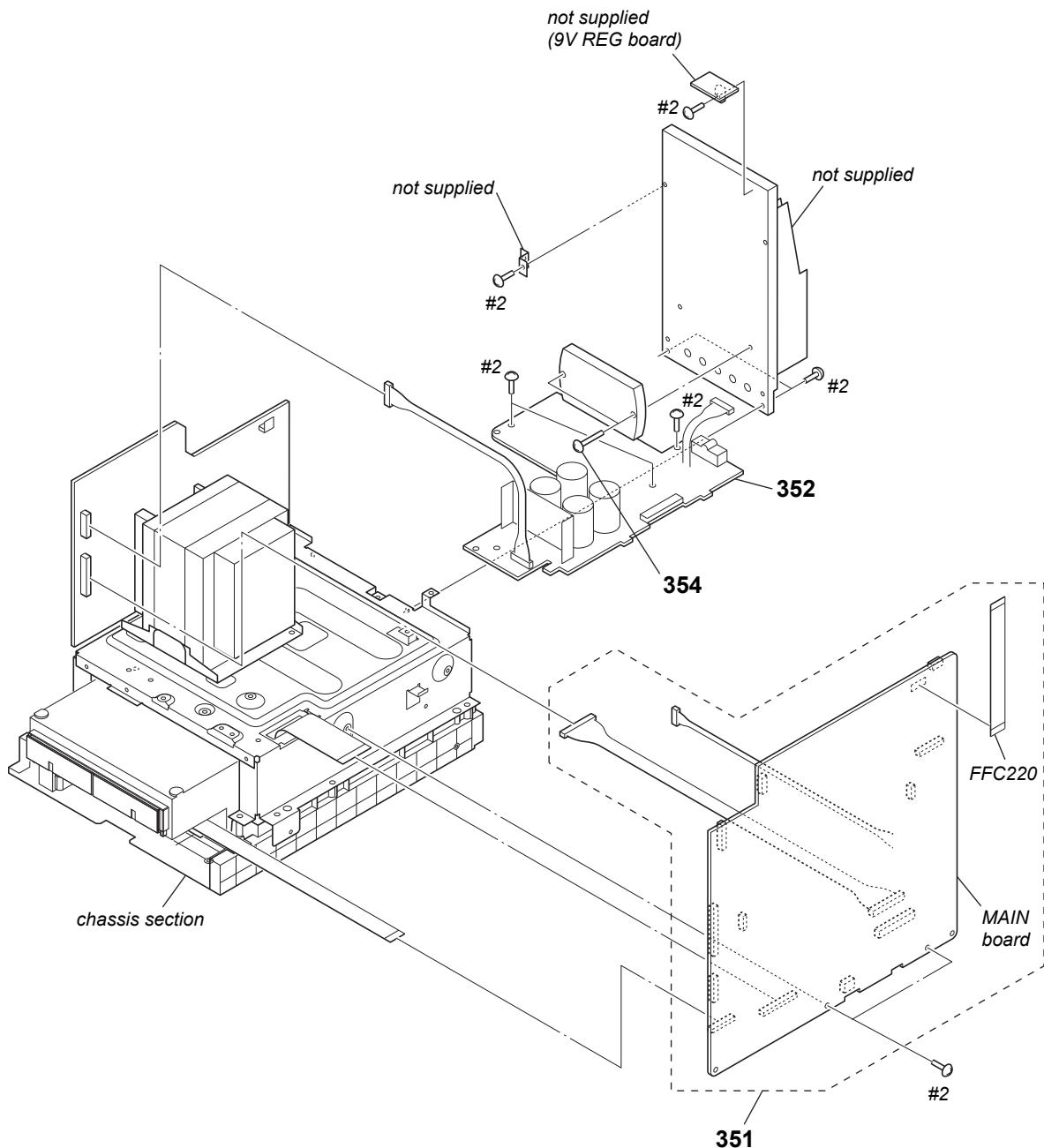
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	3-087-053-01	+BVTP2.6 (3CR)		260	3-214-817-01	BELT (FR) (for TCM-J1)	
252	3-701-748-00	CLAMP		261	2-670-389-01	BELT (1) (for TCM-J1)	
253	2-649-131-21	BOX, CASSETTE		261	2-688-622-01	BELT (MAIN) (for CS-21SC-900TP)	
254	A-1444-545-A	TC BOARD, COMPLETE		262	1-797-575-11	DECK, MECHANICAL (CS-21SC-900TP)	
255	3-283-217-11	CASE, TOP		262	A-1527-851-A	TCM-J1 (Tape mechanism deck)	
256	3-047-468-01	DAMPER		263	2-649-152-02	SPRING (CASS)	
257	3-252-827-01	SCREW (B2.6), (+) BV TAPPING		264	3-921-725-01	SCREW (2.6X10), +PWH	
258	2-649-132-21	BUTTON (CASS) (●, ▶, ◀, ▷, ■△, □)		FFC502	1-832-432-21	CABLE, FLEXIBLE FLAT (9 CORE)	
259	3-917-753-41	CUSHION (SP)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
260	2-688-621-01	BELT (R/F) (for CS-21SC-900TP)		#5	7-685-850-04	SCREW +BVTT 2X3 (S)	

## 8-7. BACK PANEL SECTION



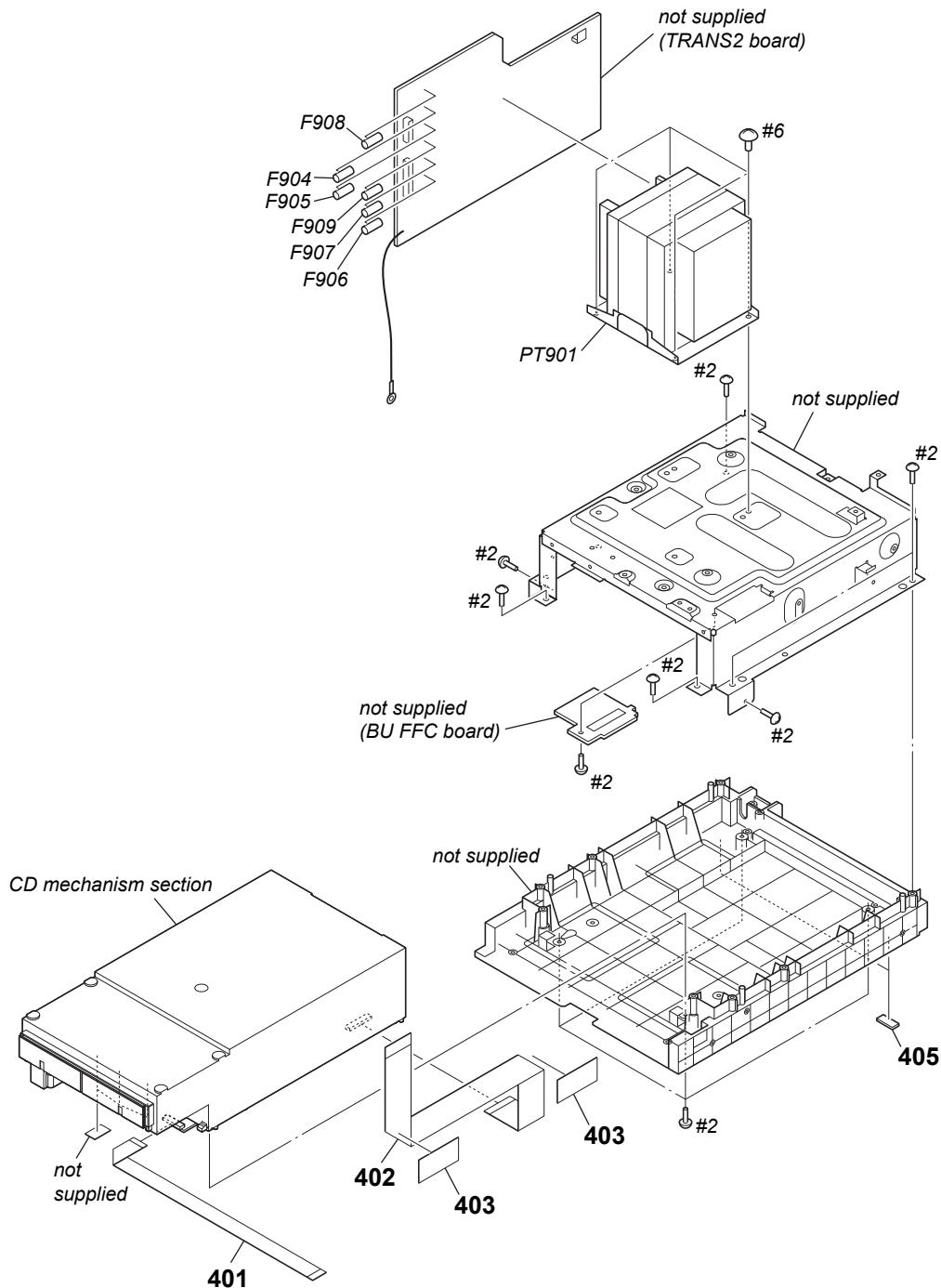
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	1-832-613-21	CABLE, FLEXIBLE FLAT (21 CORE)		IC050	6-703-547-01	IC TA7805LS	
302	1-457-369-12	CORE, FERRITE		IC055	6-710-643-01	IC BA00BC0WCP-V5E2	
303	3-703-244-00	BUSHING (2104), CORD		M101	1-763-372-11	FAN, DC	
304	1-834-965-21	CORD, POWER		M102	1-763-372-11	FAN, DC	
305	3-655-653-11	BAND (TAITON), BINDING		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
306	1-693-762-21	TUNER (FM/AM)		#3	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	
307	4-949-302-71	WASHER					

## 8-8. MAIN BOARD SECTION



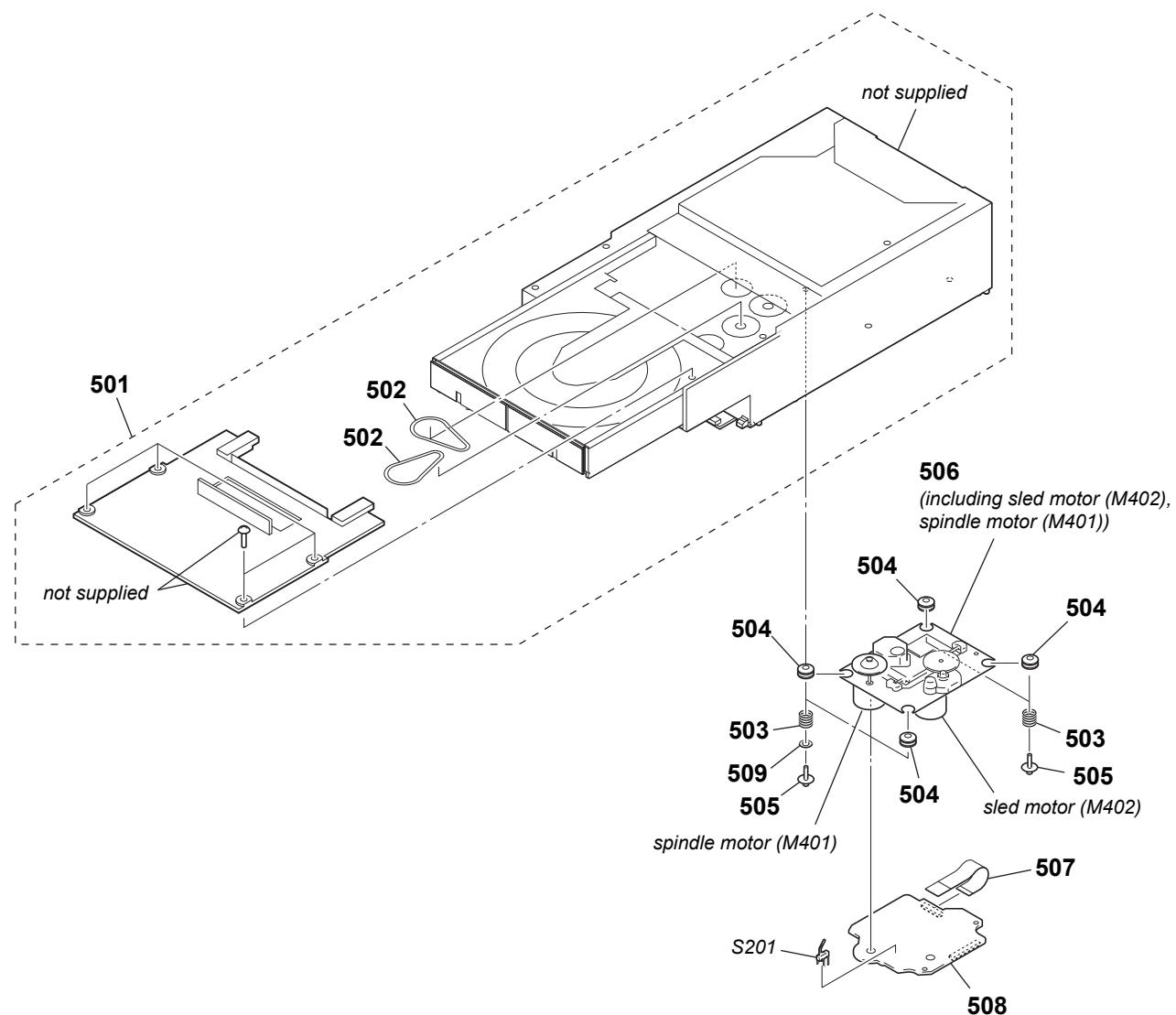
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
351	A-1444-635-A	MAIN BOARD, COMPLETE		FFC220	1-835-392-21	WIRE (FLAT TYPE) (9 CORE)	
352	A-1444-632-A	POWERAMP BOARD, COMPLETE		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
354	3-905-609-31	SCREW (TRANSISTOR)					

## 8-9. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
401	1-835-352-21	WIRE (FLAT TYPE) (13 CORE)		△ F907	1-532-388-33	FUSE (T2AL/250V)	
402	1-835-351-21	WIRE (FLAT TYPE) (31 CORE)		△ F908	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
403	3-831-441-11	CUSHION, SARANET		△ F909	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)	
405	4-225-252-01	CUSHION (FOOT)		△ PT901	1-445-392-11	POWER TRANSFORMER	
△ F904	1-532-506-33	FUSE (T6.3AL/250V)		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
△ F905	1-532-506-33	FUSE (T6.3AL/250V)		#6	7-685-880-09	SCREW +BVTT 4X6 (S)	
△ F906	1-532-465-33	FUSE (T3.15AL/250V)					

**8-10. CD MECHANISM SECTION  
(CDM88A-K6BD93-WOD)**



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
501	1-797-193-31	MECHANICAL, CD (DLM3A)		506	A-4735-357-A	BASE ASSY, OP (KSM-213D)	
502	2-632-062-11	BELT (DLM3A)		507	1-834-268-21	WIRE (FLAT TYPE) (16 CORE)	
503	4-227-045-31	SPRING (INSULATOR), COIL		508	A-1449-298-A	CD BOARD, COMPLETE	
504	4-227-549-31	INSULATOR		509	2-584-656-01	WASHER, POLYETHYLENE	
505	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING		S201	1-771-853-11	SWITCH, DETECTION (LIMIT)	

## SECTION 9

### ELECTRICAL PARTS LIST

**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.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS  
uF:  $\mu$ F
- COILS  
uH:  $\mu$ H

- RESISTORS  
All resistors are in ohms.  
METAL: Metal-film resistor.  
METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable
- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA... :  $\mu$ A..., uPA... ,  $\mu$ PA... ,  
uPB... :  $\mu$ PB..., uPC... ,  $\mu$ PC... ,  
uPD... :  $\mu$ PD... .

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

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

Ref. No.	Part No.	Description					Remark	Ref. No.	Part No.	Description					Remark
		5V REG BOARD							A-1439-298-A	CD BOARD, COMPLETE					
*****															
		< CAPACITOR >								< CAPACITOR >					
C050	1-126-925-91	ELECT	470uF	20%	10V			C100	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
C051	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V			C101	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
C055	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V			C102	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
C056	1-126-925-91	ELECT	470uF	20%	10V			C103	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
		< CONNECTOR >						C104	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
* CN055	1-564-508-11	PLUG, CONNECTOR 5P						C105	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
		< DIODE >						C106	1-128-995-21	ELECT CHIP	100uF	20%	10V		
D050	6-501-387-01	DIODE KDR357-RTK/P						C107	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
D055	6-500-335-01	DIODE MC2838-T112-1						C108	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
		< GROUND TERMINAL >						C109	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
ET001	1-537-771-21	TERMINAL BOARD, GROUND						C110	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
		< RESISTOR >						C112	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
R050	1-216-829-11	METAL CHIP	4.7K	5%	1/10W			C113	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
R051	1-216-833-11	METAL CHIP	10K	5%	1/10W			C115	1-124-778-00	ELECT CHIP	22uF	20%	6.3V		
R057	1-216-829-11	METAL CHIP	4.7K	5%	1/10W			C116	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
R058	1-216-833-11	METAL CHIP	10K	5%	1/10W			C117	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V		
R059	1-216-846-11	METAL CHIP	120K	5%	1/10W			C118	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
		< 9V REG BOARD >						C119	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V		
R060	1-216-837-11	METAL CHIP	22K	5%	1/10W			C120	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
R061	1-216-841-11	METAL CHIP	47K	5%	1/10W			C122	1-164-315-11	CERAMIC CHIP	470PF	5%	50V		
R062	1-216-821-11	METAL CHIP	1K	5%	1/10W			C123	1-164-315-11	CERAMIC CHIP	470PF	5%	50V		
		< CAPACITOR >						C124	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V		
C080	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V			C125	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V		
C081	1-104-658-91	ELECT	100uF	20%	10V			C126	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		
		< IC >						C127	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V		
IC080	6-703-550-01	IC TA7809LS						C128	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V		
		< 9V REG BOARD >						C130	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V		
		< CAPACITOR >						C132	1-164-360-11	CERAMIC CHIP	0.1uF		16V		
		< CERAMIC CHIP >						C133	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		
		< CERAMIC CHIP >						C136	1-162-923-11	CERAMIC CHIP	47PF	5%	50V		
		< CERAMIC CHIP >						C137	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
		< CERAMIC CHIP >						C138	1-164-315-11	CERAMIC CHIP	470PF	5%	50V		
		< CERAMIC CHIP >						C139	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
		< CERAMIC CHIP >						C140	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
		< CERAMIC CHIP >						C141	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V		
		< CERAMIC CHIP >						C142	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		
		< CERAMIC CHIP >						C143	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
		< CERAMIC CHIP >						C144	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		
		< CERAMIC CHIP >						C145	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
		< CERAMIC CHIP >						C146	1-164-315-11	CERAMIC CHIP	470PF	5%	50V		
		< CERAMIC CHIP >						C147	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description		Remark
C148	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	R114	1-216-833-11	METAL CHIP	10K	5% 1/10W
C149	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	R118	1-216-845-11	METAL CHIP	100K	5% 1/10W
C150	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	R120	1-216-864-11	SHORT CHIP	0	
C151	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	R121	1-216-809-11	METAL CHIP	100	5% 1/10W
C152	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	R128	1-216-853-11	METAL CHIP	470K	5% 1/10W
C153	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R129	1-216-821-11	METAL CHIP	1K	5% 1/10W
C201	1-128-995-21	ELECT CHIP	100uF	20%	10V	R130	1-216-829-11	METAL CHIP	4.7K	5% 1/10W
C202	1-128-995-21	ELECT CHIP	100uF	20%	10V	R134	1-216-857-11	METAL CHIP	1M	5% 1/10W
C204	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R135	1-216-853-11	METAL CHIP	470K	5% 1/10W
C205	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R136	1-216-837-11	METAL CHIP	22K	5% 1/10W
C206	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	R139	1-216-841-11	METAL CHIP	47K	5% 1/10W
C207	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	R140	1-216-864-11	SHORT CHIP	0	
C217	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R142	1-216-837-11	METAL CHIP	22K	5% 1/10W
C218	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R143	1-216-841-11	METAL CHIP	47K	5% 1/10W
C201	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R144	1-216-837-11	METAL CHIP	22K	5% 1/10W
C301	1-137-710-91	CERAMIC CHIP	10uF	20%	6.3V	R151	1-216-864-11	SHORT CHIP	0	
C303	1-137-710-91	CERAMIC CHIP	10uF	20%	6.3V	R153	1-216-857-11	METAL CHIP	1M	5% 1/10W
C306	1-128-995-21	ELECT CHIP	100uF	20%	10V	R154	1-216-857-11	METAL CHIP	1M	5% 1/10W
C307	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	R155	1-216-805-11	METAL CHIP	47	5% 1/10W
C309	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	R156	1-216-809-11	METAL CHIP	100	5% 1/10W
C401	1-128-394-11	ELECT CHIP	220uF	20%	10V	R157	1-216-809-11	METAL CHIP	100	5% 1/10W
C403	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R159	1-216-809-11	METAL CHIP	100	5% 1/10W
C404	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R160	1-216-809-11	METAL CHIP	100	5% 1/10W
C405	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R161	1-216-809-11	METAL CHIP	100	5% 1/10W
C501	1-124-779-00	ELECT CHIP	10uF	20%	16V	R201	1-216-295-91	SHORT CHIP	0	
C502	1-124-779-00	ELECT CHIP	10uF	20%	16V	R202	1-216-295-91	SHORT CHIP	0	
C504	1-128-995-21	ELECT CHIP	100uF	20%	10V	R203	1-216-809-11	METAL CHIP	100	5% 1/10W
C505	1-165-884-11	CERAMIC CHIP	2.2uF	10%	6.3V	R204	1-216-809-11	METAL CHIP	100	5% 1/10W
C506	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R205	1-216-809-11	METAL CHIP	100	5% 1/10W
C507	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R206	1-216-809-11	METAL CHIP	100	5% 1/10W
C508	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R207	1-216-809-11	METAL CHIP	100	5% 1/10W
C509	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R208	1-216-809-11	METAL CHIP	100	5% 1/10W
C510	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R209	1-216-809-11	METAL CHIP	100	5% 1/10W
C511	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R210	1-216-809-11	METAL CHIP	100	5% 1/10W
< CONNECTOR >						R211	1-216-809-11	METAL CHIP	100	5% 1/10W
CN201	1-784-879-51	CONNECTOR, FFC (LIF (NON-ZIF)) 31P				R212	1-216-809-11	METAL CHIP	100	5% 1/10W
CN301	1-770-425-51	CONNECTOR, FFC/FPC 16P				R213	1-216-809-11	METAL CHIP	100	5% 1/10W
< IC >						R214	1-216-809-11	METAL CHIP	100	5% 1/10W
< IC101 >						R216	1-216-809-11	METAL CHIP	100	5% 1/10W
IC101	6-712-082-01	IC TC94A70FG-101				R218	1-216-845-11	METAL CHIP	100K	5% 1/10W
IC201	6-710-808-01	IC TK63115SCL-G@GT				R219	1-216-845-11	METAL CHIP	100K	5% 1/10W
IC401	6-710-637-01	IC BA5826SFP-E2				R220	1-216-845-11	METAL CHIP	100K	5% 1/10W
IC501	6-710-840-01	IC AK5358AET-E2				R221	1-216-845-11	METAL CHIP	100K	5% 1/10W
IC502	6-707-870-01	IC TC74VHC157FT (EKJ)				R222	1-216-845-11	METAL CHIP	100K	5% 1/10W
< TRANSISTOR >						R223	1-216-845-11	METAL CHIP	100K	5% 1/10W
Q301	6-551-120-01	TRANSISTOR	2SA2119K			R224	1-216-809-11	METAL CHIP	100	5% 1/10W
< RESISTOR/FERRITE BEAD >						R225	1-216-845-11	METAL CHIP	100K	5% 1/10W
R101	1-216-813-11	METAL CHIP	220	5%	1/10W	R226	1-216-845-11	METAL CHIP	100K	5% 1/10W
R102	1-216-833-11	METAL CHIP	10K	5%	1/10W	R301	1-216-845-11	METAL CHIP	100K	5% 1/10W
R104	1-216-295-91	SHORT CHIP	0			R302	1-216-864-11	SHORT CHIP	0	
R105	1-216-857-11	METAL CHIP	1M	5%	1/10W	R303	1-216-789-11	METAL CHIP	2.2	5% 1/10W
R106	1-216-821-11	METAL CHIP	1K	5%	1/10W	R304	1-216-789-11	METAL CHIP	2.2	5% 1/10W
R108	1-500-445-21	FERRITE, EMI (SMD) (2012)				R402	1-216-825-11	METAL CHIP	2.2K	5% 1/10W
R109	1-216-809-11	METAL CHIP	100	5%	1/10W	R405	1-216-833-11	METAL CHIP	10K	5% 1/10W
R110	1-216-833-11	METAL CHIP	10K	5%	1/10W	R408	1-216-825-11	METAL CHIP	2.2K	5% 1/10W
R111	1-216-809-11	METAL CHIP	100	5%	1/10W	R414	1-216-829-11	METAL CHIP	4.7K	5% 1/10W
R112	1-216-809-11	METAL CHIP	100	5%	1/10W	R415	1-216-841-11	METAL CHIP	47K	5% 1/10W
< R502 >						R502	1-216-841-11	METAL CHIP	47K	5% 1/10W
< R503 >						R503	1-216-841-11	METAL CHIP	47K	5% 1/10W
< R505 >						R505	1-216-841-11	METAL CHIP	47K	5% 1/10W

**CD DISPLAY**

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R508	1-216-841-11	METAL CHIP	47K	5%	1/10W	Q1139	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
R509	1-216-845-11	METAL CHIP	100K	5%	1/10W	Q1141	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
R510	1-216-821-11	METAL CHIP	1K	5%	1/10W	Q1143	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
R511	1-216-821-11	METAL CHIP	1K	5%	1/10W	Q1190	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
R512	1-216-821-11	METAL CHIP	1K	5%	1/10W	Q1205	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
R513	1-216-809-11	METAL CHIP	100	5%	1/10W	Q1220	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
R514	1-216-864-11	SHORT CHIP	0					< RESISTOR >			
		< VIBRATOR >						< VIBRATOR >			
X102	1-795-101-21	VIBRATOR, CERAMIC (16.9344MHz)				R1106	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		*****				R1112	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		A-1444-627-A			DISPLAY BOARD, COMPLETE	R1114	1-216-817-11	METAL CHIP	470	5%	1/10W
		*****				R1115	1-216-864-11	SHORT CHIP	0		
		< CAPACITOR >				R1116	1-216-864-11	SHORT CHIP	0		
C1101	1-124-257-00	ELECT	2.2uF	20%	50V	R1117	1-216-817-11	METAL CHIP	470	5%	1/10W
C1102	1-126-961-11	ELECT	2.2uF	20%	50V	R1118	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
C1140	1-126-965-91	ELECT	22uF	20%	50V	R1119	1-216-819-11	METAL CHIP	680	5%	1/10W
C1141	1-165-621-91	CERAMIC CHIP	0.1uF		50V	R1120	1-216-841-11	METAL CHIP	47K	5%	1/10W
C1142	1-126-947-11	ELECT	47uF	20%	35V	R1122	1-216-833-11	METAL CHIP	10K	5%	1/10W
C1143	1-164-156-11	CERAMIC CHIP	0.1uF		25V	R1130	1-216-819-11	METAL CHIP	680	5%	1/10W
C1145	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	R1131	1-216-819-11	METAL CHIP	680	5%	1/10W
C1146	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V	R1133	1-216-819-11	METAL CHIP	680	5%	1/10W
C1148	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	R1134	1-216-819-11	METAL CHIP	680	5%	1/10W
C1149	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	R1136	1-216-819-11	METAL CHIP	680	5%	1/10W
C1220	1-126-964-11	ELECT	10uF	20%	50V	R1137	1-216-819-11	METAL CHIP	680	5%	1/10W
		< CONNECTOR >				R1139	1-216-833-11	METAL CHIP	10K	5%	1/10W
CN1101	1-784-792-11	CONNECTOR, FFC 31P				R1141	1-216-833-11	METAL CHIP	10K	5%	1/10W
CN1102	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P				R1143	1-216-833-11	METAL CHIP	10K	5%	1/10W
CN1104	1-833-945-21	CABLE, FLEXIBLE FLAT (11 CORE)				R1145	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
CN1108	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P				R1146	1-216-809-11	METAL CHIP	100	5%	1/10W
		< DIODE >				R1147	1-216-821-11	METAL CHIP	1K	5%	1/10W
D1124	6-502-401-11	LED	1L434FA22E0TDT01 (STREAM)			R1148	1-216-809-11	METAL CHIP	100	5%	1/10W
D1125	6-502-401-11	LED	1L434FA22E0TDT01 (STREAM)			R1149	1-216-809-11	METAL CHIP	100	5%	1/10W
D1126	6-502-401-11	LED	1L434FA22E0TDT01 (STREAM)			R1150	1-216-809-11	METAL CHIP	100	5%	1/10W
D1127	6-502-401-11	LED	1L434FA22E0TDT01 (STREAM)			R1151	1-216-809-11	METAL CHIP	100	5%	1/10W
D1128	6-502-401-11	LED	1L434FA22E0TDT01 (STREAM)			R1156	1-216-841-11	METAL CHIP	47K	5%	1/10W
D1129	6-502-401-11	LED	1L434FA22E0TDT01 (STREAM)			R1162	1-216-841-11	METAL CHIP	47K	5%	1/10W
D1196	6-501-483-01	LED	SLR-325VCT31P (I/U, STANDBY)			R1166	1-216-819-11	METAL CHIP	680	5%	1/10W
D1205	8-719-060-27	LED	SLR-325MCT31 (SUBWOOFER)			R1167	1-216-821-11	METAL CHIP	1K	5%	1/10W
D1220	6-501-734-01	DIODE	MAZ8056GMLS0			R1168	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
D1221	6-501-743-01	DIODE	MAZ8068GMLS0			R1169	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
		< FLUORESCENT INDICATOR TUBE >				R1170	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
FL1101	1-519-995-11	VACUUM FLUORESCENT DISPLAYS				R1171	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
		< IC >				R1172	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
IC1101	6-709-115-11	IC	NJU3427FH2			R1173	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
IC1102	6-600-349-31	IC	NJL24H400A			R1174	1-216-833-11	METAL CHIP	10K	5%	1/10W
		< TRANSISTOR >				R1175	1-216-835-11	METAL CHIP	15K	5%	1/10W
		< TRANSISTOR >				R1177	1-216-819-11	METAL CHIP	680	5%	1/10W
		< TRANSISTOR >				R1178	1-216-821-11	METAL CHIP	1K	5%	1/10W
		< IC >				R1179	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
		< IC >				R1180	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
		< TRANSISTOR >				R1181	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
		< TRANSISTOR >				R1182	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
		< TRANSISTOR >				R1183	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		< TRANSISTOR >				R1184	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
Q1106	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF			R1185	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q1112	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF			R1187	1-216-819-11	METAL CHIP	680	5%	1/10W
Q1114	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF			R1188	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q1117	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF			R1189	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
Q1120	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF			R1190	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
Q1122	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF			R1191	1-216-825-11	METAL CHIP	2.2K	5%	1/10W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R1192	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	C1309	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
R1193	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C1310	1-126-947-11	ELECT	47uF	20%	35V
R1194	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W	C1314	1-126-960-11	ELECT	1uF	20%	50V
R1195	1-216-833-11	METAL CHIP	10K	5%	1/10W	C1315	1-126-960-11	ELECT	1uF	20%	50V
R1196	1-216-821-11	METAL CHIP	1K	5%	1/10W	C1318	1-104-662-91	ELECT	100uF	20%	10V
R1198	1-216-833-11	METAL CHIP	10K	5%	1/10W	C1319	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
R1200	1-216-841-11	METAL CHIP	47K	5%	1/10W						< CONNECTOR >
R1201	1-216-841-11	METAL CHIP	47K	5%	1/10W	CN1301	1-573-825-11	CONNECTOR, BOARD TO BOARD 11P			
R1202	1-216-801-11	METAL CHIP	22	5%	1/10W	CN1302	1-817-615-21	CONNECTOR, SQUARE TYPE (RECE) (DMPORT)			
R1203	1-216-801-11	METAL CHIP	22	5%	1/10W						< IC >
R1205	1-216-821-11	METAL CHIP	1K	5%	1/10W	IC1300	8-759-100-96	IC uPC4558G2			
R1206	1-216-821-11	METAL CHIP	1K	5%	1/10W						< COIL >
R1207	1-216-833-11	METAL CHIP	10K	5%	1/10W	L1300	1-469-555-21	INDUCTOR	10uH		
											< RESISTOR >
S1165	1-762-875-21	SWITCH, KEYBOARD (I/O, STANDBY)				R1300	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
S1166	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)				R1301	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
S1167	1-762-875-21	SWITCH, KEYBOARD (METER MODE)				R1302	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
S1168	1-762-875-21	SWITCH, KEYBOARD (OPTIONS)				R1304	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
S1169	1-762-875-21	SWITCH, KEYBOARD (ERASE)				R1305	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
S1170	1-762-875-21	SWITCH, KEYBOARD (CD)				R1306	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
S1171	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)				R1307	1-216-845-11	METAL CHIP	100K	5%	1/10W
S1172	1-762-875-21	SWITCH, KEYBOARD (TAPE)				R1309	1-216-809-11	METAL CHIP	100	5%	1/10W
S1173	1-762-875-21	SWITCH, KEYBOARD (TUNING-, ▲▼)				R1310	1-216-809-11	METAL CHIP	100	5%	1/10W
S1174	1-762-875-21	SWITCH, KEYBOARD (▶◀)				R1313	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
S1175	1-762-875-21	SWITCH, KEYBOARD (FOLDER-, ▲▼)				R1314	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
S1176	1-762-875-21	SWITCH, KEYBOARD (PRESET EQ)				R1315	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
S1177	1-762-875-21	SWITCH, KEYBOARD (GROOVE)				R1316	1-216-845-11	METAL CHIP	100K	5%	1/10W
S1178	1-762-875-21	SWITCH, KEYBOARD (EQ BAND)				R1318	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
S1179	1-762-875-21	SWITCH, KEYBOARD (SURROUND)				R1322	1-216-845-11	METAL CHIP	100K	5%	1/10W
S1180	1-762-875-21	SWITCH, KEYBOARD (AUDIO)				R1323	1-216-845-11	METAL CHIP	100K	5%	1/10W
S1181	1-762-875-21	SWITCH, KEYBOARD (DMPORT)									*****
S1182	1-762-875-21	SWITCH, KEYBOARD (USB)									LED BOARD
S1183	1-762-875-21	SWITCH, KEYBOARD (TUNING+, ▶◀)									*****
S1184	1-762-875-21	SWITCH, KEYBOARD (■)									
S1185	1-762-875-21	SWITCH, KEYBOARD (FOLDER+, ▶◀)									< LED >
S1186	1-762-875-21	SWITCH, KEYBOARD (DISC 1)				D011	6-502-522-01	LED SELT2WA10C-2TP8 (ILLUMINATION)			
S1187	1-762-875-21	SWITCH, KEYBOARD (DISC 2)				D012	6-502-522-01	LED SELT2WA10C-2TP8 (ILLUMINATION)			
S1188	1-762-875-21	SWITCH, KEYBOARD (DISC 3)				D013	6-502-522-01	LED SELT2WA10C-2TP8 (ILLUMINATION)			
S1189	1-762-875-21	SWITCH, KEYBOARD (▲, OPEN/CLOSE)				D014	6-501-691-51	LED 1L434FV22D0TDE01 (ILLUMINATION)			
S1190	1-762-875-21	SWITCH, KEYBOARD (REC TO USB)				D015	6-501-691-51	LED 1L434FV22D0TDE01 (ILLUMINATION)			
S1191	1-762-875-21	SWITCH, KEYBOARD (ENTER)									< JUMPER RESISTOR >
S1192	1-762-875-21	SWITCH, KEYBOARD (RETURN)				JR101	1-216-295-91	SHORT CHIP	0		
S1193	1-762-875-21	SWITCH, KEYBOARD (SUBWOOFER)									< TRANSISTOR >
S1194	1-762-875-21	SWITCH, KEYBOARD (REC TIMER)				Q010	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
S1195	1-762-875-21	SWITCH, KEYBOARD (DISC/EX-CHANGE)									< RESISTOR >
						R010	1-216-817-11	METAL CHIP	470	5%	1/10W
						R011	1-216-817-11	METAL CHIP	470	5%	1/10W
						R012	1-216-817-11	METAL CHIP	470	5%	1/10W
						R013	1-216-817-11	METAL CHIP	470	5%	1/10W
						R014	1-216-817-11	METAL CHIP	470	5%	1/10W

LED	MAIN
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Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark		
R015	1-216-817-11	METAL CHIP	470	5%	1/10W	C194	1-126-964-11	ELECT	10uF	20%	50V
R016	1-216-816-11	METAL CHIP	390	5%	1/10W	C195	1-126-964-11	ELECT	10uF	20%	50V
R017	1-216-816-11	METAL CHIP	390	5%	1/10W	C201	1-126-961-11	ELECT	2.2uF	20%	50V
R019	1-216-821-11	METAL CHIP	1K	5%	1/10W	C206	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
R020	1-216-833-11	METAL CHIP	10K	5%	1/10W	C211	1-126-964-11	ELECT	10uF	20%	50V
*****											
A-1444-635-A MAIN BOARD, COMPLETE					C212 1-164-156-11 CERAMIC CHIP 0.1uF 25V						
*****											
7-685-646-79 SCREW +BVTP 3X8 TYPE2 IT-3					C213 1-126-964-11 ELECT 10uF 20% 50V						
< CAPACITOR >											
C101	1-126-965-91	ELECT	22uF	20%	50V	C214	1-128-934-11	CERAMIC CHIP	0.33uF	20%	10V
C102	1-126-963-11	ELECT	4.7uF	20%	50V	C215	1-126-964-11	ELECT	10uF	20%	50V
C109	1-126-964-11	ELECT	10uF	20%	50V	C216	1-126-916-11	ELECT	1000uF	20%	6.3V
C112	1-164-156-11	CERAMIC CHIP	0.1uF	25V	C218	1-126-947-11	ELECT	47uF	20%	35V	
C113	1-126-947-11	ELECT	47uF	20%	35V	C220 1-126-947-11 ELECT 47uF 20% 35V					
C114	1-164-156-11	CERAMIC CHIP	0.1uF	25V	C221 1-162-927-11 CERAMIC CHIP 100PF 5% 50V						
C117	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	C222 1-162-923-11 CERAMIC CHIP 47PF 5% 50V					
C118	1-126-961-11	ELECT	2.2uF	20%	50V	C223 1-162-919-11 CERAMIC CHIP 22PF 5% 50V					
C121	1-162-961-11	CERAMIC CHIP	330PF	10%	50V	C224 1-126-961-11 ELECT 2.2uF 20% 50V					
C122	1-162-961-11	CERAMIC CHIP	330PF	10%	50V	C225 1-104-658-91 ELECT 100uF 20% 10V					
C123	1-126-964-11	ELECT	10uF	20%	50V	C227 1-126-961-11 ELECT 2.2uF 20% 50V					
C124	1-126-960-11	ELECT	1uF	20%	50V	C241 1-162-964-11 CERAMIC CHIP 0.001uF 10% 50V					
C127	1-136-165-00	MYLAR	0.1uF	5%	50V	C242 1-162-962-11 CERAMIC CHIP 470PF 10% 50V					
C128	1-136-166-00	MYLAR	0.12uF	5%	50V	C243 1-100-717-91 CERAMIC CHIP 1uF 16V					
C129	1-126-961-11	ELECT	2.2uF	20%	50V	C256 1-162-962-11 CERAMIC CHIP 470PF 10% 50V					
C131	1-126-964-11	ELECT	10uF	20%	50V	C258 1-126-947-11 ELECT 47uF 20% 35V					
C132	1-130-491-00	MYLAR	0.047uF	5%	50V	C259 1-126-964-11 ELECT 10uF 20% 50V					
C133	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	C270 1-126-947-11 ELECT 47uF 20% 35V					
C134	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C271 1-162-927-11 CERAMIC CHIP 100PF 5% 50V					
C135	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	C272 1-162-923-11 CERAMIC CHIP 47PF 5% 50V					
C137	1-126-964-11	ELECT	10uF	20%	50V	C273 1-162-919-11 CERAMIC CHIP 22PF 5% 50V					
C139	1-126-961-11	ELECT	2.2uF	20%	50V	C274 1-126-961-11 ELECT 2.2uF 20% 50V					
C141	1-126-964-11	ELECT	10uF	20%	50V	C275 1-162-964-11 CERAMIC CHIP 0.001uF 10% 50V					
C142	1-126-964-11	ELECT	10uF	20%	50V	C277 1-126-961-11 ELECT 2.2uF 20% 50V					
C143	1-126-964-11	ELECT	10uF	20%	50V	C280 1-100-566-91 CERAMIC CHIP 0.1uF 10% 25V					
C144	1-126-964-11	ELECT	10uF	20%	50V	C281 1-162-913-11 CERAMIC CHIP 8PF 0.5PF 50V					
C145	1-126-964-11	ELECT	10uF	20%	50V	C282 1-110-563-11 CERAMIC CHIP 0.068uF 10% 16V					
C146	1-126-964-11	ELECT	10uF	20%	50V	C283 1-110-563-11 CERAMIC CHIP 0.068uF 10% 16V					
C147	1-126-959-11	ELECT	0.47uF	20%	50V	C284 1-104-658-91 ELECT 100uF 20% 10V					
C148	1-104-658-91	ELECT	100uF	20%	10V	C286 1-126-947-11 ELECT 47uF 20% 35V					
C149	1-104-658-91	ELECT	100uF	20%	10V	C287 1-126-964-11 ELECT 10uF 20% 50V					
C150	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	C291 1-110-563-11 CERAMIC CHIP 0.068uF 10% 16V					
C151	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	C293 1-100-717-91 CERAMIC CHIP 1uF 16V					
C152	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V	C294 1-164-245-11 CERAMIC CHIP 0.015uF 10% 25V					
C153	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	C299 1-162-960-11 CERAMIC CHIP 220PF 10% 50V					
C154	1-126-923-91	ELECT	220uF	20%	10V	C321 1-162-964-11 CERAMIC CHIP 0.001uF 10% 50V					
C177	1-136-166-00	MYLAR	0.12uF	5%	50V	C410 1-162-918-11 CERAMIC CHIP 18PF 5% 50V					
C178	1-136-165-00	MYLAR	0.1uF	5%	50V	C411 1-162-919-11 CERAMIC CHIP 22PF 5% 50V					
C179	1-126-961-11	ELECT	2.2uF	20%	50V	C412 1-165-176-11 CERAMIC CHIP 0.047uF 10% 16V					
C180	1-126-963-11	ELECT	4.7uF	20%	50V	C414 1-100-597-91 CERAMIC CHIP 0.1uF 10% 25V					
C181	1-126-964-11	ELECT	10uF	20%	50V	C416 1-104-656-11 ELECT 2200uF 20% 6.3V					
C182	1-130-491-00	MYLAR	0.047uF	5%	50V	C420 1-100-597-91 CERAMIC CHIP 0.1uF 10% 25V					
C183	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C422 1-165-176-11 CERAMIC CHIP 0.047uF 10% 16V					
C184	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	C423 1-165-176-11 CERAMIC CHIP 0.047uF 10% 16V					
C185	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	C424 1-165-176-11 CERAMIC CHIP 0.047uF 10% 16V					
C187	1-126-964-11	ELECT	10uF	20%	50V	C425 1-165-176-11 CERAMIC CHIP 0.047uF 10% 16V					
C191	1-126-964-11	ELECT	10uF	20%	50V	C426 1-165-176-11 CERAMIC CHIP 0.047uF 10% 16V					
C192	1-126-964-11	ELECT	10uF	20%	50V	C427 1-165-176-11 CERAMIC CHIP 0.047uF 10% 16V					
C193	1-126-964-11	ELECT	10uF	20%	50V	C428 1-165-176-11 CERAMIC CHIP 0.047uF 10% 16V					
C187	1-126-964-11	ELECT	10uF	20%	50V	C451 1-100-597-91 CERAMIC CHIP 0.1uF 10% 25V					
C191	1-126-964-11	ELECT	10uF	20%	50V	C462 1-104-658-91 ELECT 100uF 20% 10V					
C192	1-126-964-11	ELECT	10uF	20%	50V	C464 1-100-597-91 CERAMIC CHIP 0.1uF 10% 25V					
C193	1-126-964-11	ELECT	10uF	20%	50V	C471 1-100-597-91 CERAMIC CHIP 0.1uF 10% 25V					

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C483	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V			< DIODE >			
C496	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	D110	6-501-772-01	DIODE	MAZ8130GMLS0		
C498	1-126-964-11	ELECT	10uF	20%	50V	D116	6-501-579-01	DIODE	MC2837		
C499	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	D201	6-501-579-01	DIODE	MC2837		
C566	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	D202	6-501-817-01	DIODE	MA2J1110GLS0		
C576	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	D211	6-501-722-01	DIODE	MAZ8043GMLS0		
C602	1-128-548-11	ELECT	4700uF	20%	25V	D212	6-501-817-01	DIODE	MA2J1110GLS0		
C604	1-130-483-00	MYLAR	0.01uF	5%	50V	D213	6-500-334-01	DIODE	MC2836-T112-1		
C605	1-130-483-00	MYLAR	0.01uF	5%	50V	D468	6-501-817-01	DIODE	MA2J1110GLS0		
C608	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	D483	6-501-817-01	DIODE	MA2J1110GLS0		
C609	1-104-658-91	ELECT	100uF	20%	10V	D601	6-500-385-01	DIODE	D3SBA20-4100		
C610	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	D602	6-500-385-01	DIODE	D3SBA20-4100		
C611	1-104-658-91	ELECT	100uF	20%	10V	D605	6-501-817-01	DIODE	MA2J1110GLS0		
C616	1-126-937-11	ELECT	4700uF	20%	16V	D608	6-501-726-01	DIODE	MAZ8047GMLS0		
C617	1-130-483-00	MYLAR	0.01uF	5%	50V	D623	6-501-582-01	DIODE	1N4002-B5		
C618	1-130-483-00	MYLAR	0.01uF	5%	50V	D624	6-501-582-01	DIODE	1N4002-B5		
C620	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	D628	6-501-817-01	DIODE	MA2J1110GLS0		
C640	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	D630	6-501-817-01	DIODE	MA2J1110GLS0		
C641	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	D632	6-500-335-01	DIODE	MC2838-T112-1		
C642	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	D651	6-501-582-01	DIODE	1N4002-B5		
C647	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	D690	6-501-738-01	DIODE	MAZ8062GMLS0		
C648	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	D691	6-501-743-01	DIODE	MAZ8068GMLS0		
C649	1-164-156-11	CERAMIC CHIP	0.1uF		25V	D692	6-501-734-01	DIODE	MAZ8056GMLS0		
C652	1-164-156-11	CERAMIC CHIP	0.1uF		25V	D694	6-501-817-01	DIODE	MA2J1110GLS0		
C654	1-164-156-11	CERAMIC CHIP	0.1uF		25V	D695	6-501-579-01	DIODE	MC2837		
C655	1-126-923-91	ELECT	220uF	20%	10V			< GROUND TERMINAL >			
C656	1-164-156-11	CERAMIC CHIP	0.1uF		25V	ET601	1-537-771-21	TERMINAL BOARD, GROUND			
C663	1-164-156-11	CERAMIC CHIP	0.1uF		25V	ET602	1-537-771-21	TERMINAL BOARD, GROUND			
C664	1-164-156-11	CERAMIC CHIP	0.1uF		25V			< FLEXIBLE FLAT CABLE >			
C665	1-164-156-11	CERAMIC CHIP	0.1uF		25V	FFC220	1-835-392-21	WIRE (FLAT TYPE) (9 CORE)			
C671	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V			< IC >			
C677	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	IC251	8-759-278-58	IC	NJM4558V-TE2		
C678	1-126-925-91	ELECT	470uF	20%	10V	IC252	8-759-278-58	IC	NJM4558V-TE2		
C679	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	IC253	8-759-278-58	IC	NJM4558V-TE2		
C681	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	IC401	A-1553-565-A	IC	R5F3640MDFAR (for SERVICE)		
C687	1-126-964-11	ELECT	10uF	20%	50V	IC407	6-712-027-01	IC	R2A15216FP		
C690	1-126-965-91	ELECT	22uF	20%	50V	IC602	6-703-550-01	IC	TA7809LS		
C692	1-164-156-11	CERAMIC CHIP	0.1uF		25V	IC603	6-702-771-01	IC	TA78033LS		
C693	1-164-156-11	CERAMIC CHIP	0.1uF		25V	IC670	8-759-523-03	IC	TC74HC4066AFT (EL)		
C694	1-126-947-11	ELECT	47uF	20%	35V	IC672	8-759-523-03	IC	TC74HC4066AFT (EL)		
C696	1-126-965-91	ELECT	22uF	20%	50V	IC673	6-707-870-01	IC	TC74VHC157FT (EKJ)		
C697	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V	IC675	6-709-450-01	IC	S-24CS16A0I-J8T1G		
C698	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V			< CONNECTOR >			
C699	1-124-261-00	ELECT	10uF	20%	25V			< JUMPER RESISTOR/CAPACITOR >			
CN110	1-564-506-11	PLUG, CONNECTOR 3P				JR102	1-216-864-11	SHORT CHIP			0
CN403	1-784-792-11	CONNECTOR, FFC 31P				JR103	1-216-864-11	SHORT CHIP			0
CN410	1-784-774-11	CONNECTOR, FFC 13P				JR104	1-216-296-11	SHORT CHIP			0
CN420	1-779-289-11	CONNECTOR, FFC (LIF (NON-ZIF)) 21P				JR105	1-216-296-11	SHORT CHIP			0
CN430	1-779-299-11	CONNECTOR, FFC (LIF (NON-ZIF)) 31P				JR106	1-216-296-11	SHORT CHIP			0
CN450	1-784-770-11	CONNECTOR, FFC 9P				JR107	1-216-296-11	SHORT CHIP			0
* CN470	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P				JR109	1-216-296-11	SHORT CHIP			0
* CN479	1-573-094-11	SOCKET, CONNECTOR 13P				JR110	1-216-296-11	SHORT CHIP			0
* CN488	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P				JR111	1-216-296-11	SHORT CHIP			0
CN490	1-573-843-11	CONNECTOR, BOARD TO BOARD 11P				JR112	1-216-864-11	SHORT CHIP			0
CN600	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P				JR113	1-216-296-11	SHORT CHIP			0
CN690	1-564-506-11	PLUG, CONNECTOR 3P				JR114	1-216-864-11	SHORT CHIP			0

## MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
JR115	1-216-296-11	SHORT CHIP	0	Q690	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF
JR116	1-216-296-11	SHORT CHIP	0	Q691	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF
JR117	1-216-296-11	SHORT CHIP	0	Q693	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF
JR118	1-216-864-11	SHORT CHIP	0	Q694	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF
JR119	1-216-296-11	SHORT CHIP	0	Q695	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF
JR120	1-216-296-11	SHORT CHIP	0	Q696	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF
JR121	1-216-864-11	SHORT CHIP	0	Q697	8-729-040-76	TRANSISTOR	KTA1273-Y-AT
JR122	1-216-864-11	SHORT CHIP	0	< RESISTOR/CAPACITOR >			
JR123	1-100-597-91	CERAMIC CHIP	0.1uF 10% 25V	R108	1-216-833-11	METAL CHIP	10K 5% 1/10W
JR362	1-216-296-11	SHORT CHIP	0	R110	1-216-845-11	METAL CHIP	100K 5% 1/10W
JR363	1-216-864-11	SHORT CHIP	0	R111	1-216-845-11	METAL CHIP	100K 5% 1/10W
JR441	1-216-864-11	SHORT CHIP	0	R112	1-216-817-11	METAL CHIP	470 5% 1/10W
JR621	1-216-296-11	SHORT CHIP	0	R113	1-216-824-11	METAL CHIP	1.8K 5% 1/10W
JR622	1-216-864-11	SHORT CHIP	0	R114	1-216-819-11	METAL CHIP	680 5% 1/10W
JR623	1-216-864-11	SHORT CHIP	0	R116	1-216-809-11	METAL CHIP	100 5% 1/10W
JR624	1-216-864-11	SHORT CHIP	0	R117	1-216-835-11	METAL CHIP	15K 5% 1/10W
JR626	1-216-864-11	SHORT CHIP	0	R119	1-216-809-11	METAL CHIP	100 5% 1/10W
JR627	1-216-864-11	SHORT CHIP	0	R121	1-216-821-11	METAL CHIP	1K 5% 1/10W
JR628	1-216-864-11	SHORT CHIP	0	R122	1-216-821-11	METAL CHIP	1K 5% 1/10W
JR629	1-216-864-11	SHORT CHIP	0	R127	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
JR630	1-216-296-11	SHORT CHIP	0	R128	1-216-835-11	METAL CHIP	15K 5% 1/10W
JR661	1-216-864-11	SHORT CHIP	0	R129	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
< TRANSISTOR >					R131	1-216-833-11	METAL CHIP 10K 5% 1/10W
Q110	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R132	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
Q111	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R133	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
Q112	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R134	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q113	8-729-040-76	TRANSISTOR	KTA1273-Y-AT	R135	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q115	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R136	1-216-826-11	METAL CHIP	2.7K 5% 1/10W
Q116	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R137	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q128	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R138	1-216-841-11	METAL CHIP	47K 5% 1/10W
Q178	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R141	1-216-826-11	METAL CHIP	2.7K 5% 1/10W
Q210	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R144	1-216-822-11	METAL CHIP	1.2K 5% 1/10W
Q211	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R145	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
Q212	8-729-037-13	TRANSISTOR	KTA1271Y	R153	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q214	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R155	1-249-401-11	CARBON	47 5% 1/4W
Q215	8-729-038-28	TRANSISTOR	RT1N441C-TP-1	R156	1-249-401-11	CARBON	47 5% 1/4W
Q402	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R157	1-249-401-11	CARBON	47 5% 1/4W
Q430	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R158	1-216-845-11	METAL CHIP	100K 5% 1/10W
Q447	6-551-681-01	TRANSISTOR	RT1P431C-TP-1	R159	1-216-821-11	METAL CHIP	1K 5% 1/10W
Q452	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R165	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
Q606	8-729-027-43	TRANSISTOR	DTC114EKA-T146	R166	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
Q627	8-729-037-13	TRANSISTOR	KTA1271Y	R167	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
Q628	6-551-276-01	TRANSISTOR	RT1N431C-TP-1	R177	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
Q640	8-729-024-43	TRANSISTOR	2SA1365-T112-1EF	R178	1-216-835-11	METAL CHIP	15K 5% 1/10W
Q641	8-729-024-43	TRANSISTOR	2SA1365-T112-1EF	R179	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
Q643	8-729-047-62	TRANSISTOR	2SC3440-T12-1F	R181	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q644	8-729-047-62	TRANSISTOR	2SC3440-T12-1F	R182	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
Q645	8-729-024-43	TRANSISTOR	2SA1365-T112-1EF	R183	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
Q646	8-729-024-43	TRANSISTOR	2SA1365-T112-1EF	R184	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q647	8-729-047-62	TRANSISTOR	2SC3440-T12-1F	R185	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q648	8-729-047-62	TRANSISTOR	2SC3440-T12-1F	R186	1-216-826-11	METAL CHIP	2.7K 5% 1/10W
Q655	8-729-040-76	TRANSISTOR	KTA1273-Y-AT	R187	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q656	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R188	1-216-841-11	METAL CHIP	47K 5% 1/10W
Q657	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF	R190	1-216-857-11	METAL CHIP	1M 5% 1/10W
Q658	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF	R191	1-216-826-11	METAL CHIP	2.7K 5% 1/10W
Q670	8-729-027-23	TRANSISTOR	DTA114EKA-T146	R192	1-216-842-11	METAL CHIP	56K 5% 1/10W
Q671	6-551-276-01	TRANSISTOR	RT1N431C-TP-1	R194	1-216-822-11	METAL CHIP	1.2K 5% 1/10W
Q681	6-551-276-01	TRANSISTOR	RT1N431C-TP-1	R195	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
Q684	8-729-037-13	TRANSISTOR	KTA1271Y	R200	1-216-801-11	METAL CHIP	22 5% 1/10W

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark		
R201	1-216-841-11	METAL CHIP	47K	5%	1/10W	R328	1-216-837-11	METAL CHIP	22K	5%	1/10W
R202	1-216-809-11	METAL CHIP	100	5%	1/10W	R345	1-216-833-11	METAL CHIP	10K	5%	1/10W
R203	1-216-817-11	METAL CHIP	470	5%	1/10W	R346	1-216-833-11	METAL CHIP	10K	5%	1/10W
R204	1-216-839-11	METAL CHIP	33K	5%	1/10W	R357	1-216-833-11	METAL CHIP	10K	5%	1/10W
R206	1-216-833-11	METAL CHIP	10K	5%	1/10W	R361	1-216-833-11	METAL CHIP	10K	5%	1/10W
R207	1-216-841-11	METAL CHIP	47K	5%	1/10W	R365	1-216-833-11	METAL CHIP	10K	5%	1/10W
R208	1-216-838-11	METAL CHIP	27K	5%	1/10W	R366	1-216-833-11	METAL CHIP	10K	5%	1/10W
R210	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R367	1-216-833-11	METAL CHIP	10K	5%	1/10W
R211	1-216-845-11	METAL CHIP	100K	5%	1/10W	R381	1-216-835-11	METAL CHIP	15K	5%	1/10W
R212	1-216-833-11	METAL CHIP	10K	5%	1/10W	R390	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R213	1-216-845-11	METAL CHIP	100K	5%	1/10W	R391	1-216-833-11	METAL CHIP	10K	5%	1/10W
R214	1-216-819-11	METAL CHIP	680	5%	1/10W	R392	1-216-819-11	METAL CHIP	680	5%	1/10W
R215	1-216-833-11	METAL CHIP	10K	5%	1/10W	R393	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R216	1-216-837-11	METAL CHIP	22K	5%	1/10W	R394	1-216-835-11	METAL CHIP	15K	5%	1/10W
R217	1-216-864-11	SHORT CHIP	0			R395	1-216-835-11	METAL CHIP	15K	5%	1/10W
R218	1-216-833-11	METAL CHIP	10K	5%	1/10W	R397	1-216-835-11	METAL CHIP	15K	5%	1/10W
R220	1-216-832-11	METAL CHIP	8.2K	5%	1/10W	R404	1-216-809-11	METAL CHIP	100	5%	1/10W
R221	1-216-817-11	METAL CHIP	470	5%	1/10W	R409	1-216-833-11	METAL CHIP	10K	5%	1/10W
R222	1-216-837-11	METAL CHIP	22K	5%	1/10W	R411	1-216-851-11	METAL CHIP	330K	5%	1/10W
R223	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R224	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R419	1-216-809-11	METAL CHIP	100	5%	1/10W
R225	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W	R422	1-216-821-11	METAL CHIP	1K	5%	1/10W
R226	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W	R423	1-216-821-11	METAL CHIP	1K	5%	1/10W
R227	1-216-841-11	METAL CHIP	47K	5%	1/10W	R424	1-216-821-11	METAL CHIP	1K	5%	1/10W
R228	1-216-821-11	METAL CHIP	1K	5%	1/10W	R425	1-216-821-11	METAL CHIP	1K	5%	1/10W
R229	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R426	1-216-821-11	METAL CHIP	1K	5%	1/10W
R232	1-216-845-11	METAL CHIP	100K	5%	1/10W	R427	1-216-821-11	METAL CHIP	1K	5%	1/10W
R241	1-216-845-11	METAL CHIP	100K	5%	1/10W	R428	1-216-821-11	METAL CHIP	1K	5%	1/10W
R242	1-216-845-11	METAL CHIP	100K	5%	1/10W	R431	1-216-809-11	METAL CHIP	100	5%	1/10W
R243	1-216-845-11	METAL CHIP	100K	5%	1/10W	R432	1-216-809-11	METAL CHIP	100	5%	1/10W
R244	1-216-845-11	METAL CHIP	100K	5%	1/10W	R433	1-216-809-11	METAL CHIP	100	5%	1/10W
R250	1-216-833-11	METAL CHIP	10K	5%	1/10W	R434	1-216-809-11	METAL CHIP	100	5%	1/10W
R256	1-216-833-11	METAL CHIP	10K	5%	1/10W	R435	1-216-809-11	METAL CHIP	100	5%	1/10W
R257	1-216-841-11	METAL CHIP	47K	5%	1/10W	R436	1-216-809-11	METAL CHIP	100	5%	1/10W
R258	1-216-838-11	METAL CHIP	27K	5%	1/10W	R438	1-216-809-11	METAL CHIP	100	5%	1/10W
R263	1-216-817-11	METAL CHIP	470	5%	1/10W	R440	1-216-809-11	METAL CHIP	100	5%	1/10W
R270	1-216-832-11	METAL CHIP	8.2K	5%	1/10W	R445	1-216-809-11	METAL CHIP	100	5%	1/10W
R271	1-216-817-11	METAL CHIP	470	5%	1/10W	R446	1-216-809-11	METAL CHIP	100	5%	1/10W
R272	1-216-837-11	METAL CHIP	22K	5%	1/10W	R450	1-216-809-11	METAL CHIP	100	5%	1/10W
R276	1-216-841-11	METAL CHIP	47K	5%	1/10W	R457	1-216-809-11	METAL CHIP	100	5%	1/10W
R277	1-216-841-11	METAL CHIP	47K	5%	1/10W	R461	1-216-809-11	METAL CHIP	100	5%	1/10W
R278	1-216-821-11	METAL CHIP	1K	5%	1/10W	R463	1-216-809-11	METAL CHIP	100	5%	1/10W
R279	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R465	1-216-809-11	METAL CHIP	100	5%	1/10W
R280	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	R466	1-216-809-11	METAL CHIP	100	5%	1/10W
R282	1-216-845-11	METAL CHIP	100K	5%	1/10W	R467	1-216-809-11	METAL CHIP	100	5%	1/10W
R283	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W	R468	1-216-813-11	METAL CHIP	220	5%	1/10W
R284	1-216-832-11	METAL CHIP	8.2K	5%	1/10W	R474	1-216-809-11	METAL CHIP	100	5%	1/10W
R285	1-216-841-11	METAL CHIP	47K	5%	1/10W	R480	1-216-809-11	METAL CHIP	100	5%	1/10W
R286	1-216-841-11	METAL CHIP	47K	5%	1/10W	R481	1-216-821-11	METAL CHIP	1K	5%	1/10W
R287	1-216-821-11	METAL CHIP	1K	5%	1/10W	R483	1-216-849-11	METAL CHIP	220K	5%	1/10W
R288	1-216-841-11	METAL CHIP	47K	5%	1/10W	R490	1-216-809-11	METAL CHIP	100	5%	1/10W
R289	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R491	1-216-809-11	METAL CHIP	100	5%	1/10W
R291	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W	R492	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R292	1-216-833-11	METAL CHIP	10K	5%	1/10W	R493	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R322	1-216-837-11	METAL CHIP	22K	5%	1/10W	R494	1-216-817-11	METAL CHIP	470	5%	1/10W
R323	1-216-837-11	METAL CHIP	22K	5%	1/10W	R495	1-216-817-11	METAL CHIP	470	5%	1/10W
R324	1-216-837-11	METAL CHIP	22K	5%	1/10W	R497	1-216-817-11	METAL CHIP	470	5%	1/10W
R325	1-216-837-11	METAL CHIP	22K	5%	1/10W	R575	1-216-864-11	SHORT CHIP	0		
R326	1-216-837-11	METAL CHIP	22K	5%	1/10W	R576	1-216-864-11	SHORT CHIP	0		
R327	1-216-837-11	METAL CHIP	22K	5%	1/10W	R581	1-100-756-91	CERAMIC CHIP	0.047uF		50V

MAIN	MIC
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Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R610	1-216-845-11	METAL CHIP	100K	5%	1/10W	R696	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R612	1-216-801-11	METAL CHIP	22	5%	1/10W	R697	1-216-845-11	METAL CHIP	100K	5%	1/10W
R613	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R698	1-216-821-11	METAL CHIP	1K	5%	1/10W
R614	1-216-817-11	METAL CHIP	470	5%	1/10W				< VIBRATOR >		
R615	1-216-833-11	METAL CHIP	10K	5%	1/10W	X401	1-814-067-11	OSCILLATOR, CRYSTAL (32.768kHz)			
R616	1-216-813-11	METAL CHIP	220	5%	1/10W	X402	1-795-058-21	VIBRATOR, CERAMIC (5MHz)			
R617	1-216-825-11	METAL CHIP	2.2K	5%	1/10W				*****		
R627	1-216-841-11	METAL CHIP	47K	5%	1/10W				MIC BOARD		
R628	1-216-833-11	METAL CHIP	10K	5%	1/10W				*****		
R630	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C700	1-164-156-11	CERAMIC CHIP	0.1uF		25V
R631	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C701	1-164-156-11	CERAMIC CHIP	0.1uF		25V
R633	1-216-837-11	METAL CHIP	22K	5%	1/10W	C702	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
R634	1-216-837-11	METAL CHIP	22K	5%	1/10W	C704	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
R635	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	C705	1-164-156-11	CERAMIC CHIP	0.1uF		25V
R636	1-216-864-11	SHORT CHIP	0			C707	1-126-961-11	ELECT	2.2uF	20%	50V
△ R637	1-215-891-51	METAL OXIDE	680	5%	2W F	C708	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
△ R638	1-215-891-51	METAL OXIDE	680	5%	2W F	C710	1-126-157-11	ELECT	10uF	20%	16V
R639	1-216-809-11	METAL CHIP	100	5%	1/10W	C711	1-124-584-00	ELECT	100uF	20%	6.3V
R640	1-216-809-11	METAL CHIP	100	5%	1/10W	C712	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
R641	1-216-817-11	METAL CHIP	470	5%	1/10W	C713	1-126-961-11	ELECT	2.2uF	20%	50V
R642	1-216-841-11	METAL CHIP	47K	5%	1/10W	C716	1-124-257-00	ELECT	2.2uF	20%	50V
R643	1-216-817-11	METAL CHIP	470	5%	1/10W	C717	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
R644	1-216-841-11	METAL CHIP	47K	5%	1/10W	C718	1-124-463-00	ELECT	0.1uF	20%	50V
R645	1-216-817-11	METAL CHIP	470	5%	1/10W	C719	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
R646	1-216-817-11	METAL CHIP	470	5%	1/10W	C720	1-124-257-00	ELECT	2.2uF	20%	50V
R647	1-216-841-11	METAL CHIP	47K	5%	1/10W	C721	1-164-156-11	CERAMIC CHIP	0.1uF		25V
R648	1-216-841-11	METAL CHIP	47K	5%	1/10W	C722	1-164-218-11	CERAMIC CHIP	180PF	5%	50V
R650	1-216-841-11	METAL CHIP	47K	5%	1/10W				< CONNECTOR >		
R651	1-216-817-11	METAL CHIP	470	5%	1/10W	CN701	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P			
R652	1-216-841-11	METAL CHIP	47K	5%	1/10W				< DIODE >		
R653	1-216-817-11	METAL CHIP	470	5%	1/10W	D701	6-501-579-01	DIODE MC2837			
R654	1-216-817-11	METAL CHIP	470	5%	1/10W	D702	6-501-579-01	DIODE MC2837			
R655	1-216-841-11	METAL CHIP	47K	5%	1/10W				< IC >		
R656	1-216-841-11	METAL CHIP	47K	5%	1/10W	IC700	8-759-278-58	IC NJM4558V-TE2			
R657	1-216-789-11	METAL CHIP	2.2	5%	1/10W				< JACK >		
R658	1-216-789-11	METAL CHIP	2.2	5%	1/10W						
R662	1-216-839-11	METAL CHIP	33K	5%	1/10W						
R663	1-216-837-11	METAL CHIP	22K	5%	1/10W						
R664	1-216-825-11	METAL CHIP	2.2K	5%	1/10W						
R666	1-216-823-11	METAL CHIP	1.5K	5%	1/10W						
R668	1-216-796-11	METAL CHIP	8.2	5%	1/10W						
R669	1-216-853-11	METAL CHIP	470K	5%	1/10W						
R670	1-216-825-11	METAL CHIP	2.2K	5%	1/10W						
R671	1-216-833-11	METAL CHIP	10K	5%	1/10W	J700	1-817-629-11	JACK (LARGE TYPE) (MIC)			
R672	1-216-833-11	METAL CHIP	10K	5%	1/10W	J702	1-794-702-11	JACK, HEADPHONE (PHONES)			
R673	1-216-833-11	METAL CHIP	10K	5%	1/10W				< RESISTOR >		
R675	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R676	1-216-833-11	METAL CHIP	10K	5%	1/10W	R700	1-216-821-11	METAL CHIP	1K	5%	1/10W
R681	1-216-833-11	METAL CHIP	10K	5%	1/10W	R701	1-216-845-11	METAL CHIP	100K	5%	1/10W
R683	1-216-821-11	METAL CHIP	1K	5%	1/10W	R702	1-216-833-11	METAL CHIP	10K	5%	1/10W
R687	1-249-401-11	CARBON	47	5%	1/4W	R704	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R688	1-249-401-11	CARBON	47	5%	1/4W	R705	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R689	1-249-401-11	CARBON	47	5%	1/4W	R706	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R690	1-216-821-11	METAL CHIP	1K	5%	1/10W	R711	1-216-833-11	METAL CHIP	10K	5%	1/10W
R691	1-216-845-11	METAL CHIP	100K	5%	1/10W	R712	1-216-836-11	METAL CHIP	18K	5%	1/10W
R692	1-216-797-11	METAL CHIP	10	5%	1/10W	R713	1-216-809-11	METAL CHIP	100	5%	1/10W
R693	1-216-797-11	METAL CHIP	10	5%	1/10W	R714	1-216-849-11	METAL CHIP	220K	5%	1/10W
R694	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R715	1-216-809-11	METAL CHIP	100	5%	1/10W
R695	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R716	1-216-845-11	METAL CHIP	100K	5%	1/10W

			MIC	MINI JACK	MOTOR DRIVE	POWERAMP	
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R718	1-216-836-11	METAL CHIP	18K 5% 1/10W	A-1444-632-A	POWERAMP BOARD, COMPLETE	*****	
R719	1-216-833-11	METAL CHIP	10K 5% 1/10W				
R720	1-216-845-11	METAL CHIP	100K 5% 1/10W		7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
R721	1-216-841-11	METAL CHIP	47K 5% 1/10W			< CAPACITOR >	
R722	1-216-833-11	METAL CHIP	10K 5% 1/10W				
R723	1-216-836-11	METAL CHIP	18K 5% 1/10W	C801	1-137-749-11	MYLAR 0.1uF	100V
			< VARIABLE RESISTOR >	C802	1-137-749-11	MYLAR 0.1uF	100V
RV700	1-223-983-11	RES, VAR, CARBON 50K (MIC LEVEL)	*****	C803	1-137-841-11	ELECT (BLOCK) 2200uF	20% 71V
				C804	1-137-841-11	ELECT (BLOCK) 2200uF	20% 71V
				C805	1-135-515-21	ELECT 3300uF	20% 50V
			MINI JACK BOARD	C806	1-135-515-21	ELECT 3300uF	20% 50V
			*****	C807	1-136-497-81	FILM 0.1uF	5% 50V
			< CAPACITOR >	C808	1-136-497-81	FILM 0.1uF	5% 50V
C723	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C812	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
C724	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C813	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
C725	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C814	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
			< DIODE >	C815	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
D703	6-501-579-01	DIODE MC2837		C816	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
			< JACK >	C817	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
J703	1-566-822-51	JACK (AUDIO INPUT)		C818	1-126-967-11	ELECT 47uF	20% 50V
			< RESISTOR >	C819	1-126-967-11	ELECT 47uF	20% 50V
R724	1-216-849-11	METAL CHIP	220K 5% 1/10W	C820	1-126-967-11	ELECT 47uF	20% 50V
R725	1-216-849-11	METAL CHIP	220K 5% 1/10W	C826	1-128-562-11	ELECT 47uF	20% 100V
R726	1-216-821-11	METAL CHIP	1K 5% 1/10W	C827	1-128-562-11	ELECT 47uF	20% 100V
R727	1-216-821-11	METAL CHIP	1K 5% 1/10W	C829	1-104-658-91	ELECT 100uF	20% 10V
			*****	C830	1-126-961-11	ELECT 2.2uF	20% 50V
			MOTOR DRIVE BOARD	C833	1-100-566-91	CERAMIC CHIP 0.1uF	10% 25V
			*****	C835	1-100-566-91	CERAMIC CHIP 0.1uF	10% 25V
			< CAPACITOR >	C837	1-136-497-81	FILM 0.1uF	5% 50V
C001	1-126-947-11	ELECT	47uF 20% 35V	C838	1-136-497-81	FILM 0.1uF	5% 50V
C002	1-100-566-91	CERAMIC CHIP	0.1uF 10% 25V				
			< CONNECTOR >				
CN001	1-568-854-11	CONNECTOR, FFC 11P					
CN002	(Not supplied)	CONNECTOR, FFC/FPC (LIF) 4P					
CN003	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P					
CN004	1-564-704-41	PIN, CONNECTOR (SMALL TYPE) 2P					
			< IC >	D800	6-500-360-01	DIODE D10XB20	
IC001	6-711-976-01	IC LB1846M		D801	6-500-360-01	DIODE D10XB20	
			< RESISTOR >	D802	6-500-334-01	DIODE MC2836-T112-1	
R005	1-216-833-11	METAL CHIP	10K 5% 1/10W	D803	6-501-817-01	DIODE MA2J1110GLS0	
R006	1-216-833-11	METAL CHIP	10K 5% 1/10W	D804	6-501-778-01	DIODE MAZ8160GMLS0	
R007	1-216-833-11	METAL CHIP	10K 5% 1/10W	D805	6-501-778-01	DIODE MAZ8160GMLS0	
R008	1-216-833-11	METAL CHIP	10K 5% 1/10W	D806	6-501-046-01	DIODE 1N5402-F46	
				D807	6-501-817-01	DIODE MA2J1110GLS0	
				D809	6-501-756-01	DIODE MAZ8091GMLS0	
				D810	6-501-046-01	DIODE 1N5402-F46	
							< EARTH TERMINAL >
				EP800	1-537-771-21	TERMINAL BOARD, GROUND	
							< IC >
				IC800	6-600-675-01	IC STK416-120-E	

**POWERAMP**

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>		<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>		<u>Remark</u>
		< JACK >			R836	1-216-837-11	METAL CHIP	22K	5% 1/10W
JK800	1-820-067-11	TERMINAL BOARD (SPEAKER)			R837	1-216-837-11	METAL CHIP	22K	5% 1/10W
		< JUMPER RESISTOR >			R838	1-216-845-11	METAL CHIP	100K	5% 1/10W
JR891	1-216-864-11	SHORT CHIP	0		R839	1-216-845-11	METAL CHIP	100K	5% 1/10W
JR892	1-216-864-11	SHORT CHIP	0		R840	1-216-797-11	METAL CHIP	10	5% 1/10W
JR893	1-216-864-11	SHORT CHIP	0		R841	1-216-797-11	METAL CHIP	10	5% 1/10W
JR894	1-216-864-11	SHORT CHIP	0		△ R842	1-215-871-51	METAL OXIDE	2.2K	5% 1W F
		< COIL >			△ R843	1-215-871-51	METAL OXIDE	2.2K	5% 1W F
L801	1-422-009-13	COIL, AIR-CORE			R848	1-216-827-11	METAL CHIP	3.3K	5% 1/10W
L802	1-422-009-13	COIL, AIR-CORE			R849	1-216-839-11	METAL CHIP	33K	5% 1/10W
		< TRANSISTOR >			R850	1-216-829-11	METAL CHIP	4.7K	5% 1/10W
Q800	6-551-268-01	TRANSISTOR	2SC5625		R851	1-216-833-11	METAL CHIP	10K	5% 1/10W
Q801	6-551-268-01	TRANSISTOR	2SC5625		R852	1-216-816-11	METAL CHIP	390	5% 1/10W
Q802	6-551-268-01	TRANSISTOR	2SC5625		R853	1-216-841-11	METAL CHIP	47K	5% 1/10W
Q803	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		R854	1-216-841-11	METAL CHIP	47K	5% 1/10W
Q804	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		R855	1-216-845-11	METAL CHIP	100K	5% 1/10W
Q805	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		R856	1-216-841-11	METAL CHIP	47K	5% 1/10W
Q806	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		R857	1-216-837-11	METAL CHIP	22K	5% 1/10W
Q807	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		R859	1-216-839-11	METAL CHIP	33K	5% 1/10W
Q808	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		R860	1-216-839-11	METAL CHIP	33K	5% 1/10W
Q809	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF		△ R861	1-217-637-11	FUSIBLE	1	5% 1/4W F
		< RESISTOR >			△ R862	1-212-881-61	FUSIBLE	100	5% 1/4W F
Q811	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		R863	1-216-821-11	METAL CHIP	1K	5% 1/10W
Q815	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		△ R865	1-212-881-61	FUSIBLE	100	5% 1/4W F
		< RESISTOR >			R866	1-202-926-11	METAL CHIP	36K	5% 1/10W
R804	1-216-809-11	METAL CHIP	100	5% 1/10W	R868	1-216-839-11	METAL CHIP	33K	5% 1/10W
R805	1-216-809-11	METAL CHIP	100	5% 1/10W	R869	1-216-797-11	METAL CHIP	10	5% 1/10W
R806	1-216-845-11	METAL CHIP	100K	5% 1/10W	R870	1-216-864-11	SHORT CHIP	0	
R807	1-216-845-11	METAL CHIP	100K	5% 1/10W	R871	1-216-797-11	METAL CHIP	10	5% 1/10W
R808	1-216-797-11	METAL CHIP	10	5% 1/10W	R872	1-216-797-11	METAL CHIP	10	5% 1/10W
R809	1-216-797-11	METAL CHIP	10	5% 1/10W	R874	1-216-797-11	METAL CHIP	10	5% 1/10W
R810	1-216-797-11	METAL CHIP	10	5% 1/10W	R875	1-216-797-11	METAL CHIP	10	5% 1/10W
R811	1-216-797-11	METAL CHIP	10	5% 1/10W	R877	1-216-797-11	METAL CHIP	10	5% 1/10W
R812	1-216-797-11	METAL CHIP	10	5% 1/10W	R878	1-216-797-11	METAL CHIP	10	5% 1/10W
R813	1-216-797-11	METAL CHIP	10	5% 1/10W	R879	1-216-797-11	METAL CHIP	10	5% 1/10W
R814	1-216-809-11	METAL CHIP	100	5% 1/10W	R881	1-216-838-11	METAL CHIP	27K	5% 1/10W
R815	1-216-809-11	METAL CHIP	100	5% 1/10W	R882	1-216-845-11	METAL CHIP	100K	5% 1/10W
R816	1-216-809-11	METAL CHIP	100	5% 1/10W	R883	1-216-825-11	METAL CHIP	2.2K	5% 1/10W
R817	1-216-808-11	METAL CHIP	82	5% 1/10W	R884	1-216-841-11	METAL CHIP	47K	5% 1/10W
R818	1-216-808-11	METAL CHIP	82	5% 1/10W	R885	1-216-841-11	METAL CHIP	47K	5% 1/10W
R819	1-216-809-11	METAL CHIP	100	5% 1/10W	R886	1-216-821-11	METAL CHIP	1K	5% 1/10W
R821	1-216-820-11	METAL CHIP	820	5% 1/10W	R887	1-216-825-11	METAL CHIP	2.2K	5% 1/10W
R822	1-216-819-11	METAL CHIP	680	5% 1/10W	R888	1-216-821-11	METAL CHIP	1K	5% 1/10W
R823	1-216-820-11	METAL CHIP	820	5% 1/10W	R889	1-216-839-11	METAL CHIP	33K	5% 1/10W
R824	1-216-841-11	METAL CHIP	47K	5% 1/10W	R890	1-216-837-11	METAL CHIP	22K	5% 1/10W
R825	1-216-841-11	METAL CHIP	47K	5% 1/10W	R891	1-216-845-11	METAL CHIP	100K	5% 1/10W
R826	1-216-841-11	METAL CHIP	47K	5% 1/10W	R892	1-216-845-11	METAL CHIP	100K	5% 1/10W
R827	1-216-820-11	METAL CHIP	820	5% 1/10W	R893	1-216-821-11	METAL CHIP	1K	5% 1/10W
R828	1-216-820-11	METAL CHIP	820	5% 1/10W	R894	1-216-837-11	METAL CHIP	22K	5% 1/10W
R829	1-216-819-11	METAL CHIP	680	5% 1/10W	R895	1-216-837-11	METAL CHIP	22K	5% 1/10W
R830	1-216-841-11	METAL CHIP	47K	5% 1/10W	R896	1-216-837-11	METAL CHIP	22K	5% 1/10W
△ R831	1-220-893-11	METAL	0.22	10% 5W F	R897	1-216-837-11	METAL CHIP	22K	5% 1/10W
△ R832	1-220-893-11	METAL	0.22	10% 5W F	R898	1-216-835-11	METAL CHIP	15K	5% 1/10W
△ R833	1-220-893-11	METAL	0.22	10% 5W F	R899	1-216-835-11	METAL CHIP	15K	5% 1/10W
R834	1-216-825-11	METAL CHIP	2.2K	5% 1/10W	< RELAY >				
RY800	1-755-307-21	RELAY			< THERMISTOR >				
TH801	1-804-045-11	THERMISTOR			*****				
R835	1-216-825-11	METAL CHIP	2.2K	5% 1/10W	*****				

SW	SW JACK	TC
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Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
		SW BOARD				C513	1-126-960-11	ELECT	1uF	20%	50V
		*****				C514	1-126-960-11	ELECT	1uF	20%	50V
		< RESISTOR >				C515	1-126-947-11	ELECT	47uF	20%	35V
						C516	1-126-947-11	ELECT	47uF	20%	35V
						C517	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
R031	1-216-833-11	METAL CHIP	10K	5%	1/10W	C519	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
		< SWITCH >				C520	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
S031	1-786-084-11	SWITCH, DETECTION			(MATER POSITION DETECT)	C521	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
		*****				C522	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
		SW JACK BOARD				C523	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
		*****				C524	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
		< CAPACITOR >				C525	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C526	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
						C527	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
						C528	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
						C529	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
						C530	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
						C531	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
						C532	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
						C533	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
* CN890	1-564-521-11	PLUG, CONNECTOR 6P				C534	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
		< DIODE >				C535	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
D890	6-501-817-01	DIODE MA2J110GLS0				C536	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
		< JACK >				C537	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
						C538	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
JK890	1-780-473-21	TERMINAL BOARD (SPEAKER) 1P			(SUBWOOFER)	C539	1-115-156-11	CERAMIC CHIP	1uF	10V	
		< COIL >				C540	1-137-391-11	MYLAR	0.0047uF	5%	100V
L890	1-422-009-13	COIL, AIR-CORE				C542	1-104-662-91	ELECT	22uF	20%	25V
		< RESISTOR >				C543	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
						C545	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
						C546	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
						C548	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
								< CONNECTOR >			
R873	1-216-797-11	METAL CHIP	10	5%	1/10W	CN501	1-815-449-11	PIN, CONNECTOR (PWB) 8P			
R876	1-216-797-11	METAL CHIP	10	5%	1/10W			< GROUND TERMINAL >			
R880	1-216-797-11	METAL CHIP	10	5%	1/10W	ET501	1-537-771-21	TERMINAL BOARD, GROUND			
R893	1-216-797-11	METAL CHIP	10	5%	1/10W			< FLEXIBLE FLAT CABLE >			
R894	1-216-797-11	METAL CHIP	10	5%	1/10W	FFC502	1-832-432-21	CABLE, FLEXIBLE FLAT (9 CORE)			
R900	1-216-797-11	METAL CHIP	10	5%	1/10W			< IC >			
R901	1-216-797-11	METAL CHIP	10	5%	1/10W	IC501	8-759-100-96	IC uPC4558G2			
R902	1-216-797-11	METAL CHIP	10	5%	1/10W	IC502	8-759-100-96	IC uPC4558G2			
								< JUMPER RESISTOR >			
						JR501	1-216-864-11	SHORT CHIP	0		
						JR502	1-216-864-11	SHORT CHIP	0		
						JR503	1-216-864-11	SHORT CHIP	0		
						JR504	1-216-295-91	SHORT CHIP	0		
								< COIL >			
						L501	1-456-094-11	TRANSFORMER, BIAS OSCILLATION			
								< TRANSISTOR >			
						Q501	8-729-119-78	TRANSISTOR	2SC2785-HFE		
						Q502	8-729-119-78	TRANSISTOR	2SC2785-HFE		

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark						
< RESISTOR >																	
R501	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	C926	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V						
R502	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	< CONNECTOR >											
R503	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	CN901	1-691-961-11	PIN, CONNECTOR (PC BOARD) 3P									
R504	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	CN903	1-819-134-11	PIN, CONNECTOR 6P									
R505	1-216-834-11	METAL CHIP	12K	5%	1/10W	CN907	1-819-139-11	PIN, CONNECTOR 11P									
R506	1-216-834-11	METAL CHIP	12K	5%	1/10W	< DIODE >											
R507	1-216-850-11	METAL CHIP	270K	5%	1/10W	D901	6-501-817-01	DIODE	MA2J1110GLS0								
R508	1-216-850-11	METAL CHIP	270K	5%	1/10W	D906	6-501-796-01	DIODE	MAZ8330GMLS0								
R509	1-216-814-11	METAL CHIP	270	5%	1/10W	D908	6-501-582-01	DIODE	1N4002-B5								
R510	1-216-814-11	METAL CHIP	270	5%	1/10W	D911	6-501-579-01	DIODE	MC2837								
R511	1-216-845-11	METAL CHIP	100K	5%	1/10W	D912	6-501-579-01	DIODE	MC2837								
R512	1-216-845-11	METAL CHIP	100K	5%	1/10W	< FUSE HOLDER >											
R513	1-216-845-11	METAL CHIP	100K	5%	1/10W	FH907	1-533-217-31	FUSE HOLDER									
R514	1-216-845-11	METAL CHIP	100K	5%	1/10W	FH908	1-533-217-31	FUSE HOLDER									
R516	1-216-864-11	SHORT CHIP	0			FH909	1-533-217-31	FUSE HOLDER									
R517	1-216-821-11	METAL CHIP	1K	5%	1/10W	FH910	1-533-217-31	FUSE HOLDER									
R518	1-216-821-11	METAL CHIP	1K	5%	1/10W	FH911	1-533-217-31	FUSE HOLDER									
R519	1-216-841-11	METAL CHIP	47K	5%	1/10W	FH912	1-533-217-31	FUSE HOLDER									
R520	1-216-841-11	METAL CHIP	47K	5%	1/10W	FH913	1-533-217-31	FUSE HOLDER									
R521	1-216-841-11	METAL CHIP	47K	5%	1/10W	FH914	1-533-217-31	FUSE HOLDER									
R522	1-216-841-11	METAL CHIP	47K	5%	1/10W	FH915	1-533-217-31	FUSE HOLDER									
R523	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	FH916	1-533-217-31	FUSE HOLDER									
R524	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	FH917	1-533-217-31	FUSE HOLDER									
R525	1-216-851-11	METAL CHIP	330K	5%	1/10W	FH918	1-533-217-31	FUSE HOLDER									
R526	1-216-851-11	METAL CHIP	330K	5%	1/10W	< TRANSFORMER >											
R527	1-216-851-11	METAL CHIP	330K	5%	1/10W	△ PT902	POWER TRANSFORMER			< TRANSISTOR >							
R528	1-216-851-11	METAL CHIP	330K	5%	1/10W												
R529	1-216-825-11	METAL CHIP	2.2K	5%	1/10W												
R530	1-216-825-11	METAL CHIP	2.2K	5%	1/10W												
R531	1-216-832-11	METAL CHIP	8.2K	5%	1/10W												
R532	1-216-832-11	METAL CHIP	8.2K	5%	1/10W	Q902 Q903	< RESISTOR >										
R533	1-216-837-11	METAL CHIP	22K	5%	1/10W		8-729-048-66	TRANSISTOR	2SB1238-PQR-TV2								
R534	1-216-835-11	METAL CHIP	15K	5%	1/10W		8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF								
R535	1-216-829-11	METAL CHIP	4.7K	5%	1/10W												
R536	1-216-829-11	METAL CHIP	4.7K	5%	1/10W												
R537	1-216-833-11	METAL CHIP	10K	5%	1/10W	△ R908 R910 R911 R912	R904	1-216-821-11	METAL CHIP	1K	5%	1/10W					
R538	1-216-833-11	METAL CHIP	10K	5%	1/10W		R914	1-219-124-11	FUSIBLE	0.68	5%	1/4W					
R539	1-216-793-11	METAL CHIP	4.7	5%	1/10W		R915	1-216-801-11	METAL CHIP	22	5%	1/10W					
R540	1-216-805-11	METAL CHIP	47	5%	1/10W		R911	1-216-864-11	SHORT CHIP	0							
R541	1-216-805-11	METAL CHIP	47	5%	1/10W		R912	1-216-837-11	METAL CHIP	22K	5%	1/10W					
R543	1-216-813-11	METAL CHIP	220	5%	1/10W	△ R951 R952	R914	1-216-845-11	METAL CHIP	100K	5%	1/10W					
R544	1-216-813-11	METAL CHIP	220	5%	1/10W		R915	1-216-829-11	METAL CHIP	4.7K	5%	1/10W					
R545	1-216-817-11	METAL CHIP	470	5%	1/10W		R951	1-219-237-51	SOLID	3.3M	20%	1/2W					
R546	1-216-817-11	METAL CHIP	470	5%	1/10W		R952	1-216-833-11	METAL CHIP	10K	5%	1/10W					
< SWITCH >																	
< RELAY >																	
S501	1-762-369-11	SWITCH, SLIDE (REC/PB)				△ RY901	1-755-276-11	RELAY, POWER									
*****																	
TRANS2 BOARD						USB BOARD											
*****																	
< CAPACITOR >																	
C907	1-136-497-81	FILM	0.1uF	5%	50V	C901	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C908	1-126-969-11	ELECT	220uF	20%	50V	C902	1-124-779-00	ELECT CHIP	10uF	20%	16V						
C909	1-126-964-11	ELECT	10uF	20%	50V	C903	1-124-779-00	ELECT CHIP	10uF	20%	16V						
C910	1-126-948-11	ELECT	100uF	20%	35V	C904	1-124-779-00	ELECT CHIP	10uF	20%	16V						
C911	1-115-466-91	ELECT	1000uF	20%	16V	C905	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C925	1-100-717-91	CERAMIC CHIP	1uF		16V	C906	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						

USB

USB CONNECTOR

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C907	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	R923	1-216-802-11	METAL CHIP	27	5%	1/10W
C908	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	R924	1-216-802-11	METAL CHIP	27	5%	1/10W
C909	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	R925	1-216-835-11	METAL CHIP	15K	5%	1/10W
C910	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	R926	1-216-835-11	METAL CHIP	15K	5%	1/10W
C912	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V	R928	1-216-864-11	SHORT CHIP	0		
C913	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	R932	1-216-809-11	METAL CHIP	100	5%	1/10W
C914	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	R933	1-216-864-11	SHORT CHIP	0		
C915	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	R934	1-216-833-11	METAL CHIP	10K	5%	1/10W
C916	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	R937	1-216-809-11	METAL CHIP	100	5%	1/10W
C917	1-100-354-21	ELECT CHIP	220uF	20%	6.3V	R938	1-216-809-11	METAL CHIP	100	5%	1/10W
C918	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R941	1-216-845-11	METAL CHIP	100K	5%	1/10W
C919	1-164-360-11	CERAMIC CHIP	0.1uF		16V	R942	1-216-845-11	METAL CHIP	100K	5%	1/10W
C920	1-165-112-11	CERAMIC CHIP	0.33uF		16V	R943	1-216-845-11	METAL CHIP	100K	5%	1/10W
C921	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	R944	1-216-845-11	METAL CHIP	100K	5%	1/10W
C922	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	R945	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
C930	1-165-112-11	CERAMIC CHIP	0.33uF		16V	R947	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		< CONNECTOR >				R949	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
CN901	1-770-160-21	PIN, CONNECTOR (PC BOARD) 2P				R970	1-216-809-11	METAL CHIP	100	5%	1/10W
CN903	1-779-993-11	PIN, CONNECTOR (PWB) 5P				R971	1-216-809-11	METAL CHIP	100	5%	1/10W
CN907	1-784-833-51	CONNECTOR, FFC (LIF (NON-ZIF)) 21P				R972	1-216-809-11	METAL CHIP	100	5%	1/10W
		< DIODE >				R973	1-216-809-11	METAL CHIP	100	5%	1/10W
D901	6-501-579-01	DIODE MC2837				R974	1-216-809-11	METAL CHIP	100	5%	1/10W
D902	6-501-579-01	DIODE MC2837				R975	1-216-809-11	METAL CHIP	100	5%	1/10W
D903	6-501-743-01	DIODE MAZ8068GMLS0				R976	1-216-809-11	METAL CHIP	100	5%	1/10W
D904	6-501-743-01	DIODE MAZ8068GMLS0				R977	1-216-809-11	METAL CHIP	100	5%	1/10W
		< GROUND TERMINAL >				R978	1-216-809-11	METAL CHIP	100	5%	1/10W
EP901	1-537-771-21	TERMINAL BOARD, GROUND				R979	1-216-809-11	METAL CHIP	100	5%	1/10W
		< FERRITE BEAD >				R981	1-216-809-11	METAL CHIP	100	5%	1/10W
FB901	1-414-233-22	INDUCTOR, FERRITE BEAD				R982	1-216-809-11	METAL CHIP	100	5%	1/10W
FB902	1-414-233-22	INDUCTOR, FERRITE BEAD				R983	1-216-809-11	METAL CHIP	100	5%	1/10W
		< COMPOSITION CIRCUIT BLOCK >				R984	1-216-809-11	METAL CHIP	100	5%	1/10W
		< IC >				R985	1-216-809-11	METAL CHIP	100	5%	1/10W
		< RESISTOR >				R986	1-216-809-11	METAL CHIP	100	5%	1/10W
IC901	6-808-190-01	IC TMP92CD28AFG-7AC9				RB921	1-234-944-21	RES, NETWORK 47 (1005X4)			
IC915	6-710-887-01	IC R5523N001B-TR-F				RB922	1-234-944-21	RES, NETWORK 47 (1005X4)			
IC921	6-704-832-01	IC IS61LV6416-10TLT				RB923	1-234-944-21	RES, NETWORK 47 (1005X4)			
		< JUMPER RESISTOR >				RB924	1-234-944-21	RES, NETWORK 47 (1005X4)			
JR902	1-216-295-91	SHORT CHIP	0				< VIBRATOR >				
		< RESISTOR >				X901	1-813-931-21	VIBRATOR, CRYSTAL (9MHz)			
R901	1-216-833-11	METAL CHIP	10K	5%	1/10W		*****				
R902	1-216-829-11	METAL CHIP	4.7K	5%	1/10W		< CAPACITOR >				
R903	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C1001	1-126-176-11	ELECT	220uF	20%	10V
R904	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C1002	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
R905	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C1003	1-164-156-11	CERAMIC CHIP	0.1uF		25V
R906	1-216-829-11	METAL CHIP	4.7K	5%	1/10W		< CONNECTOR >				
R907	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	CN1000	1-819-866-11	CONNECTOR, USB (A) (USB)			
R913	1-216-845-11	METAL CHIP	100K	5%	1/10W		< DIODE >				
R915	1-216-833-11	METAL CHIP	10K	5%	1/10W	R917	1-216-864-11	SHORT CHIP	0		
R916	1-216-864-11	SHORT CHIP	0			R919	1-216-809-11	METAL CHIP	100	5%	1/10W
		< RESISTOR >				D1000	6-502-517-01	LED 1L434FB12E0MDTZ1 (USB)			
		< CAPACITOR >				D1001	6-501-579-01	DIODE MC2837			
		< RESISTOR >				D1002	6-501-579-01	DIODE MC2837			
		< CONNECTOR >				D1003	6-501-691-01	LED 1L434FV22D0TDF01 (USB)			
		< DIODE >				D1004	6-501-743-01	DIODE MAZ8068GMLS0			

**USB CONNECTOR    VOLUME**

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>					<u>Remark</u>
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## &lt; RESISTOR &gt;

R1001	1-216-821-11	METAL CHIP	1K	5%	1/10W		
R1002	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		

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## VOLUME BOARD

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## &lt; RESISTOR &gt;

R1051	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W		
R1052	1-216-821-11	METAL CHIP	1K	5%	1/10W		
R1053	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W		
R1054	1-216-821-11	METAL CHIP	1K	5%	1/10W		

## &lt; ROTARY ENCODER &gt;

S1051	1-478-133-11	ENCODER, ROTARY (OPERATION DIAL)					
S1052	1-418-725-51	ENCODER, ROTARY (12 TYPE)					
							(MASTER VOLUME)

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## MISCELLANEOUS

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52	1-543-793-11	FILTER, CLAMP (FERRITE CORE)					
105	1-835-362-21	WIRE (FLAT TYPE) (31 CORE)					
201	A-1433-635-B	METER DISPLAY ASSY (GSL)					
262	1-797-575-11	DECK, MECHANICAL (CS-21SC-900TP)					
262	A-1527-851-A	TCM-J1 (Tape mechanism deck)					
301	1-832-613-21	CABLE, FLEXIBLE FLAT (21 CORE)					
302	1-457-369-12	CORE, FERRITE					
△ 304	1-834-965-21	CORD, POWER					
306	1-693-762-21	TUNER (FM/AM)					
401	1-835-352-21	WIRE (FLAT TYPE) (13 CORE)					
402	1-835-351-21	WIRE (FLAT TYPE) (31 CORE)					
501	1-797-193-12	MECHANICAL, CD (DLM3A)					
△ 506	A-4735-357-A	BASE ASSY, OP (KSM-213D)					
507	1-834-268-21	WIRE (FLAT TYPE) (16 CORE)					
△ F904	1-532-506-33	FUSE (T6.3AL/250V)					
△ F905	1-532-506-33	FUSE (T6.3AL/250V)					
△ F906	1-532-465-33	FUSE (T3.15AL/250V)					
△ F907	1-532-388-33	FUSE (T2AL/250V)					
△ F908	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)					
△ F909	1-533-949-33	FUSE, CYLINDRICAL (TIME LAG) (T8AL/250V)					
IC050	6-703-547-01	IC TA7805LS					
IC055	6-710-643-01	IC BA00BC0WCP-V5E2					
M1	A-1486-925-A	MOTOR ASSY (METER)					
M101	1-763-372-11	FAN, DC					
M102	1-763-372-11	FAN, DC					
△ PT901	1-445-392-11	POWER TRANSFORMER					
S201	1-771-853-11	SWITCH, DETECTION (LIMIT)					

MEMO

## REVISION HISTORY

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

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