

CX-JN66

SERVICE MANUAL

Ver 1.0 2004.03

*E Model
Australian Model*



CX-JN66 is the amplifier, CD player, tape deck and tuner section in JAX-N66/PK66.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CDM74-F1BD81
	Base Unit Name	BU-F1BD81A
	Optical Pick-up Name	KSM-215DCP
Tape deck Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	CWM43FR34

SPECIFICATIONS

Amplifier section

The following measured at AC 120, 127, 220, 240 V
50/60 Hz
DIN power output (rated): 96 + 96 watts (6 ohms at
1 kHz, DIN)
Continuous RMS power output (reference):
120 + 120 watts (6 ohms at
1 kHz, 10% THD)
Inputs
VIDEO/MD IN (phono jacks):
voltage 450/250 mV,
impedance 47 kilohms
Outputs
PHONES (stereo mini jack):
accepts headphones of
8 ohms or more
SPEAKER:
accepts impedance of 6 to
16 ohms

CD player section

System Compact disc and digital
audio system
Laser Semiconductor laser
($\lambda=780$ nm)
Emission duration:
continuous
Frequency response 2 Hz – 20 kHz (± 0.5 dB)
Wavelength 770 – 810 nm
Signal-to-noise ratio More than 90 dB
Dynamic range More than 90 dB

Tape deck section

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

Tuner section

FM stereo, FM/AM superheterodyne tuner
FM tuner section
Tuning range 87.5 – 108.0 MHz
(50-kHz step)
Antenna FM lead antenna
Antenna terminals 75 ohms unbalanced
Intermediate frequency 10.7 MHz
AM tuner section
Tuning range 530 – 1,710 kHz
(with the tuning interval
set at 10 kHz)
2 Band type: 531 – 1,602 kHz
(with the tuning interval
set at 9 kHz)

3 Band type:
Middle Eastern models:
MW: 531 – 1,602 kHz
(with the tuning interval
set at 9 kHz)
SW: 5.95 – 17.90 MHz
(with the tuning interval
set at 5 kHz)
Other models:
MW: 531 – 1,602 kHz
(with the tuning interval
set at 9 kHz)
530 – 1,710 kHz
(with the tuning interval
set at 10 kHz)
SW: 5.95 – 17.90 MHz
(with the tuning interval
set at 5 kHz)
Antenna AM loop antenna
Antenna terminals External antenna terminal
Intermediate frequency 450 kHz

– Continued on next page –

COMPACT DISC DECK RECEIVER



General

Power requirements	
Australian models:	230 – 240 V AC, 50/60 Hz
Mexican models:	127 V AC, 60 Hz
Other models:	120 V, 220 V or 230 – 240 V AC, 50/60 Hz
	Adjustable with voltage selector
Power consumption	180 watts
Dimensions (w/h/d) incl. projecting parts and controls	
Amplifier/Tuner/Tape/CD section:	
	Approx. 280 × 325 × 425 mm
Mass	Approx. 9.9 kg

Design and specifications are subject to change without notice.

Notes on chip component replacement

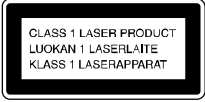
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the 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.



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

DANGER

INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. AVOID DIRECT EXPOSURE TO BEAM.

DANGER

RADIATION DE LESER INVISIBLE LORS D'OUVERTURE. AVEC L'ENCLenchement DE SECURITE ANNULÉ. EVITER L'EXPOSITION DIRECTE AU RAYON.

UNLEADED SOLDER

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

 : LEAD FREE MARK

Unleaded solder has the following characteristics.

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

SAFETY-RELATED COMPONENT WARNING!!

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

TABLE OF CONTENTS

1. SERVICING NOTES	4	7. EXPLODED VIEWS	
2. GENERAL		7-1. Case Section	54
Location of Controls	7	7-2. Tape Mechanism Deck Section (CWM43FR34)	55
3. DISASSEMBLY		7-3. PANEL Board Section	56
3-1. Disassembly Flow	9	7-4. Cassette Box Section	57
3-2. Case (Side-L/R)	10	7-5. Front Panel Section	58
3-3. Case (Top)	10	7-6. Back Panel Section	59
3-4. Tray Panel	11	7-7. Chassis Section	60
3-5. CD Mechanism Deck (CDM74-F1BD81)	11	7-8. CD Mechanism Deck Section-1 (CDM74-F1BD81)	61
3-6. Front Panel Block	12	7-9. CD Mechanism Deck Section-2 (CDM74-F1BD81)	62
3-7. Back Panel Section	12	7-10. CD Mechanism Deck Section-3 (CDM74-F1BD81)	63
3-8. MAIN Board	13	7-11. Base Unit Section (BU-F1BD81A)	64
3-9. Tape Mechanism Deck (CWM43FR34)	13	8. ELECTRICAL PARTS LIST	65
3-10. Table Assy	14		
3-11. MOTOR (TB) Board	14		
3-12. MOTOR (LD) Board	15		
3-13. Base Unit (BU-F1BD81A)	15		
3-14. Motor Gear Assy (Sled) (M102), CD Board	16		
3-15. Optical Pick-up (KSM-215DCP)	16		
4. TEST MODE	17		
5. ELECTRICAL ADJUSTMENTS			
CD Section	21		
6. DIAGRAMS			
6-1. Block Diagram – SERVO Section –	22		
6-2. Block Diagram – MAIN Section –	23		
6-3. Block Diagram			
– PANEL/POWER SUPPLY Section –	24		
6-4. Note for Printed Wiring Boards and			
Schematic Diagrams	25		
6-5. Printed Wiring Board – CD Board –	26		
6-6. Schematic Diagram – CD Board –	27		
6-7. Printed Wiring Boards – CHANGER Section –	28		
6-8. Schematic Diagram – CHANGER Section –	29		
6-9. Printed Wiring Board			
– CDMP3 CONNECT Board –	30		
6-10. Schematic Diagram			
– CDMP3 CONNECT Board –	31		
6-11. Schematic Diagram – MAIN Section (1/4) –	32		
6-12. Schematic Diagram – MAIN Section (2/4) –	33		
6-13. Schematic Diagram – MAIN Section (3/4) –	34		
6-14. Schematic Diagram – MAIN Section (4/4) –	35		
6-15. Printed Wiring Boards – MAIN Section –	36		
6-16. Printed Wiring Board – PANEL Section –	37		
6-17. Schematic Diagram – PANEL Section (1/2) –	38		
6-18. Schematic Diagram – PANEL Section (2/2) –	39		
6-19. Printed Wiring Board – POWER AMP Section –	40		
6-20. Schematic Diagram – POWER AMP Section –	41		
6-21. Printed Wiring Boards – TRANS Section –	42		
6-22. Schematic Diagram – TRANS Section –	43		

SECTION 1
SERVICING NOTES

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

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

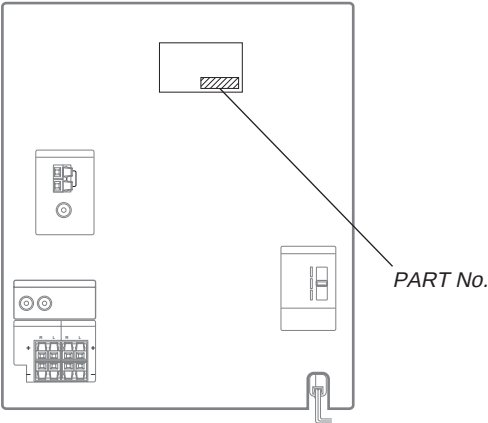
NOTES ON LASER DIODE EMISSION CHECK

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

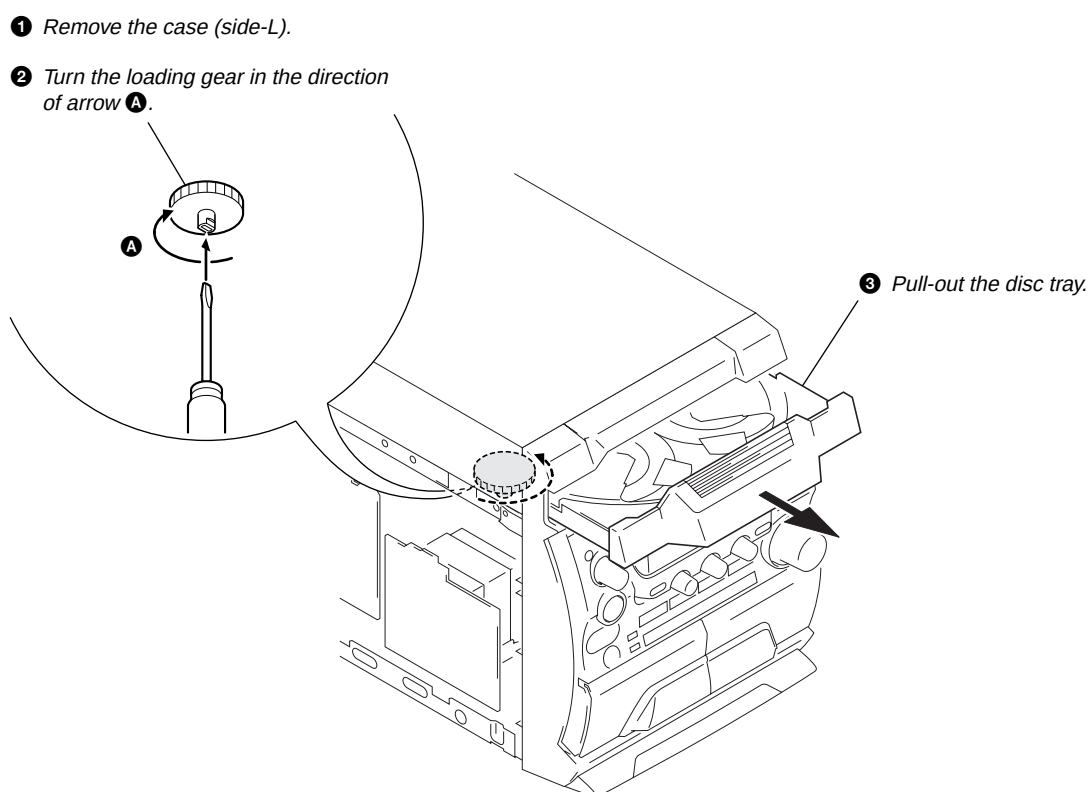
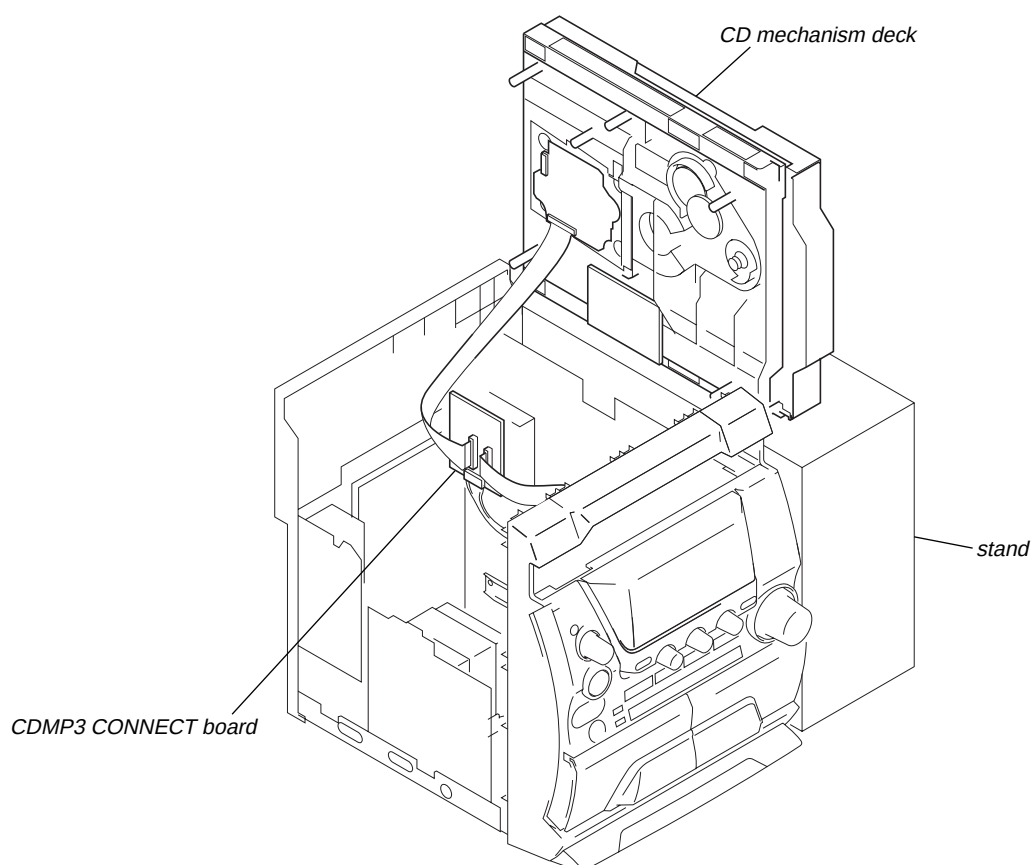
LASER DIODE AND FOCUS SEARCH OPERATION
CHECK

Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveforms is output three times.

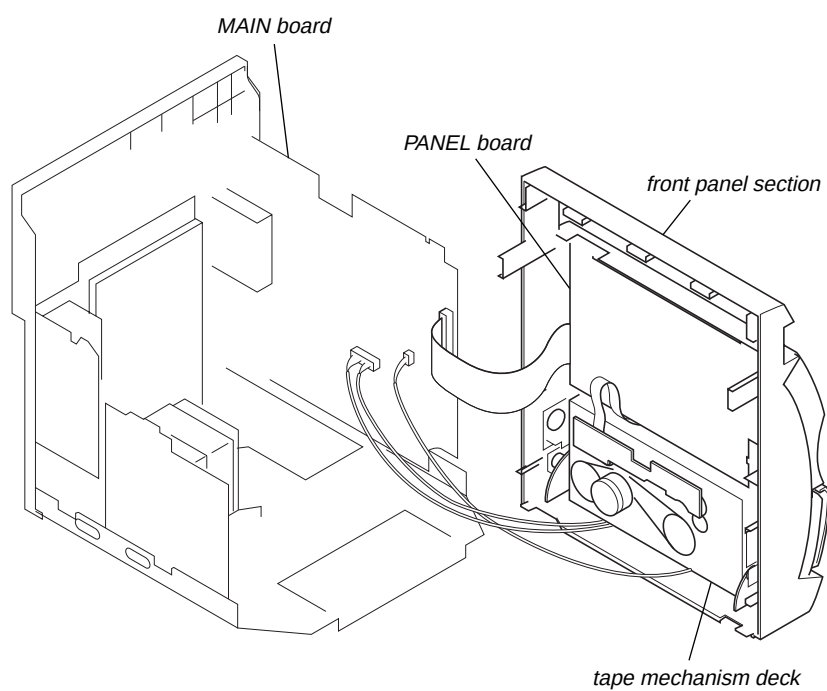
• MODEL IDENTIFICATION
– Rear View –



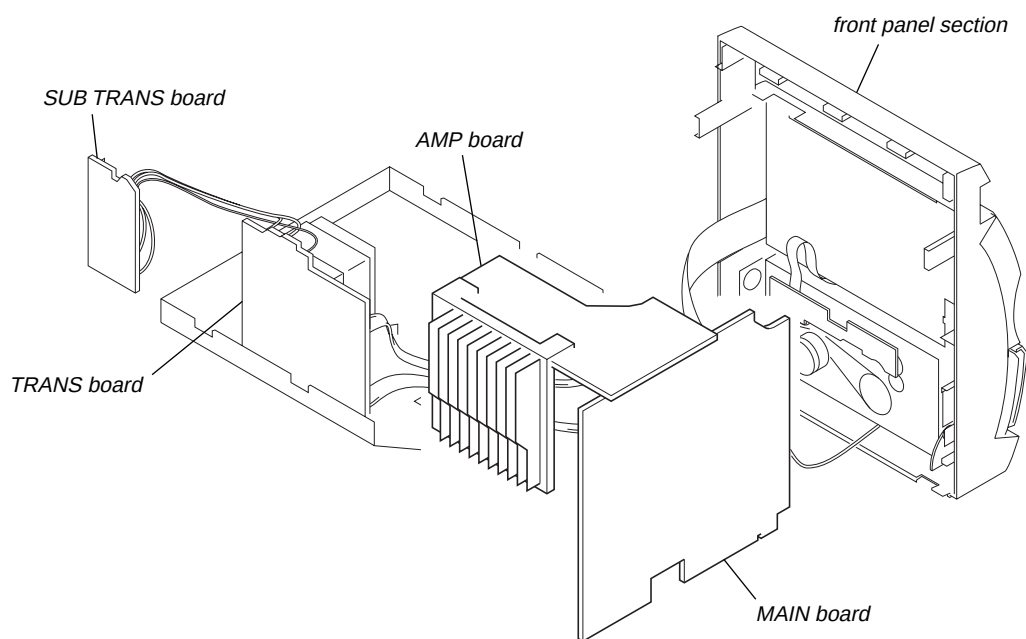
MODEL	PART No.
Chilean and Peruvian models	4-252-997-0□
Middle and Near East models	4-253-000-0□
Mexican model	4-255-501-0□
Australian model	4-255-526-0□
Singapore model	4-255-527-0□
Taiwan model	4-255-529-0□

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF.**SERVICE POSITION
– CD MECHANISM DECK –**

– FRONT PANEL SECTION –



– AMP BOARD –



SECTION 2 GENERAL

This section is extracted from instruction manual.

• LOCATION OF CONTROLS

Main unit

ALPHABETICAL ORDER

A – N

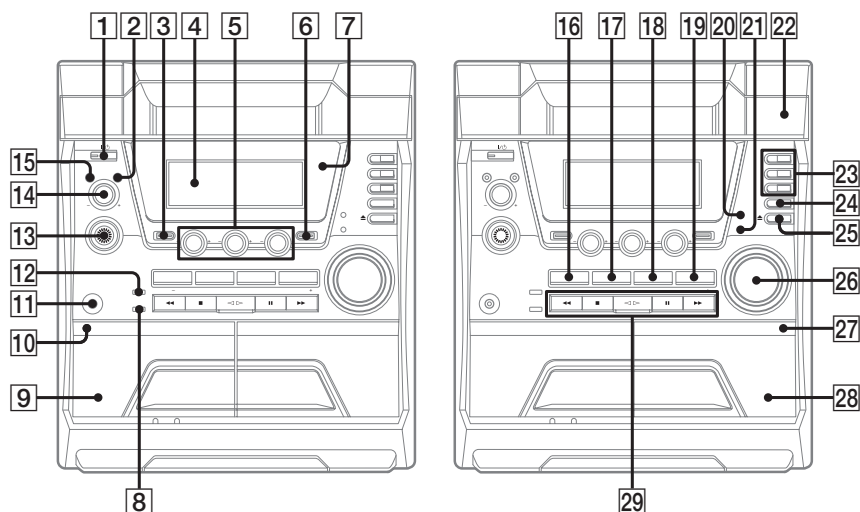
ALBUM + [29]
ALBUM – [29]
BASS control [5]
CD [16]
CD SYNC [12]
Deck A [9]
Deck B [28]
DISC 1 – 3 [23]
DISC SKIP/EX-CHANGE [24]
Disc tray [22]
DISPLAY [15]
Display window [4]
ENTER [2]
i-Bass [13]
MIDDLE control [5]

O – Z

Operation Dial
(AMS/TUNING) [14]
P FILE [6]
PHONES jack [11]
PLAY MODE [20]
PRESET EQ [3]
REC PAUSE/START [8]
Remote sensor [7]
SURROUND [21]
TAPE A/B [18]
TREBLE control [5]
TUNER/BAND [17]
TUNING MODE [20]
VIDEO/MD [19]
VOLUME control [26]

BUTTON DESCRIPTIONS

I/⏻ (power) [1]
▲ PUSH (deck A) (eject) [10]
▲ (eject) [25]
PUSH ▲ (deck B) (eject) [27]
◀◀ (rewind) [29]
■ (stop) [29]
▶▶ (play) [29]
▶▶ (fast forward) [29]



Remote control

ALPHABETICAL ORDER

A – E

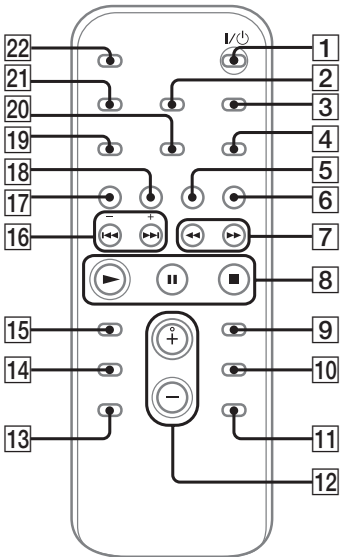
- ALBUM + 11
- ALBUM – 13
- CD 18
- CLEAR 15
- CLOCK/TIMER SELECT 2
- CLOCK/TIMER SET 3
- DISC SKIP 10
- DISPLAY 21
- ENTER 9
- EQ 14

F – Z

- FM MODE 4
- FUNCTION 6
- PLAY MODE 20
- REPEAT 4
- SLEEP 22
- TAPE 17
- TUNER BAND 5
- TUNER MEMORY 19
- TUNING MODE 20
- VOLUME +/- 12

BUTTON DESCRIPTIONS

- I/⏻ (power) 1
- ◀◀/▶▶ (rewind/fast forward) 7
- ▶ (play) 8
- ⏸ (pause) 8
- (stop) 8
- /+ (tuning) 16
- ◀◀/▶▶ (go back/go forward) 16



Setting the clock

Use buttons on the remote for the operation.

- 1 Press I/⏻ to turn on the system.
- 2 Press CLOCK/TIMER SET.
- 3 Press ◀◀ or ▶▶ repeatedly to set the hour.
- 4 Press ENTER.
- 5 Press ◀◀ or ▶▶ repeatedly to set the minute.
- 6 Press ENTER.

The clock starts working.

To adjust the clock

- 1 Press CLOCK/TIMER SET.
- 2 Press ◀◀ or ▶▶ repeatedly to select "CLOCK SET", then press ENTER.
- 3 Do the same procedures as step 3 to 6 above.

Notes

- The clock settings are canceled when you disconnect the power cord or if a power failure occurs.
- You cannot set the clock in Power Saving Mode.

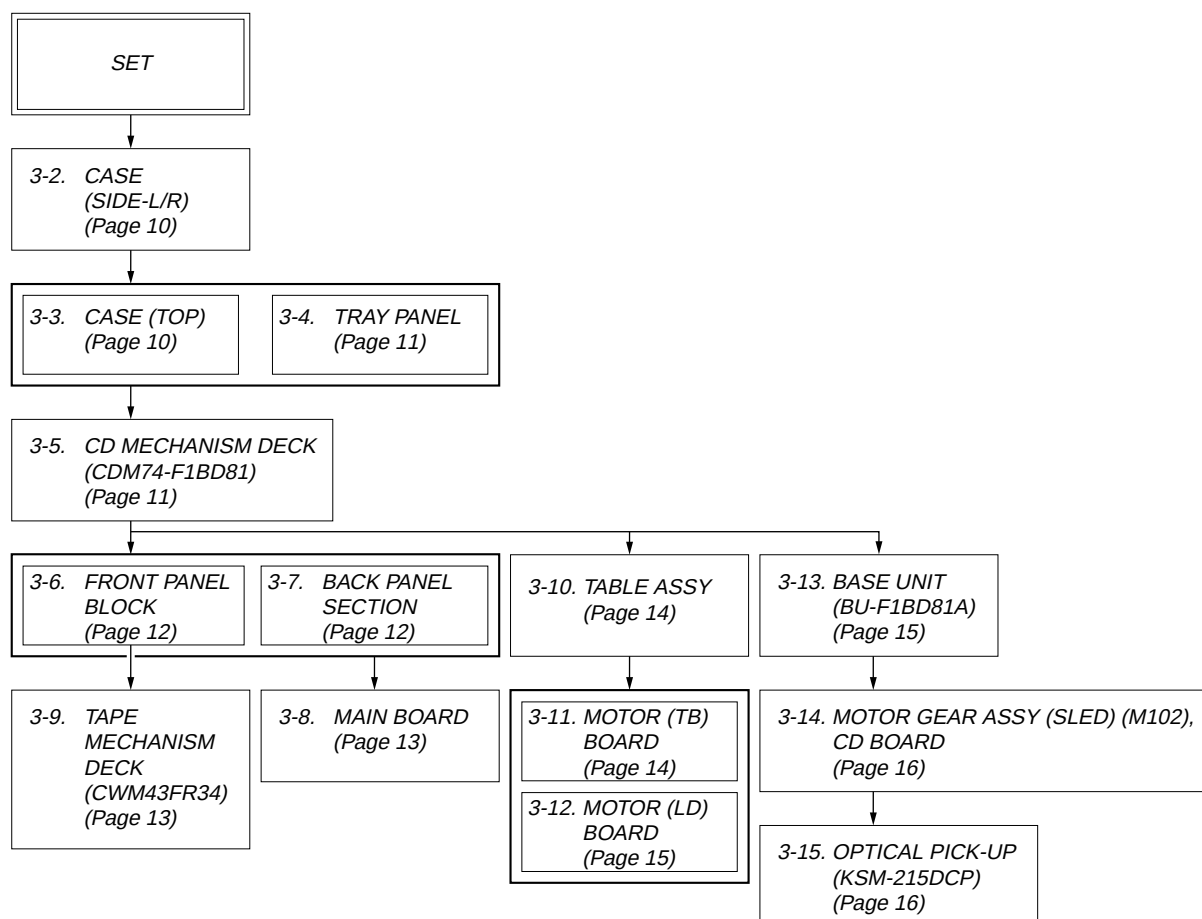
SECTION 3 DISASSEMBLY

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

3-1. DISASSEMBLY FLOW

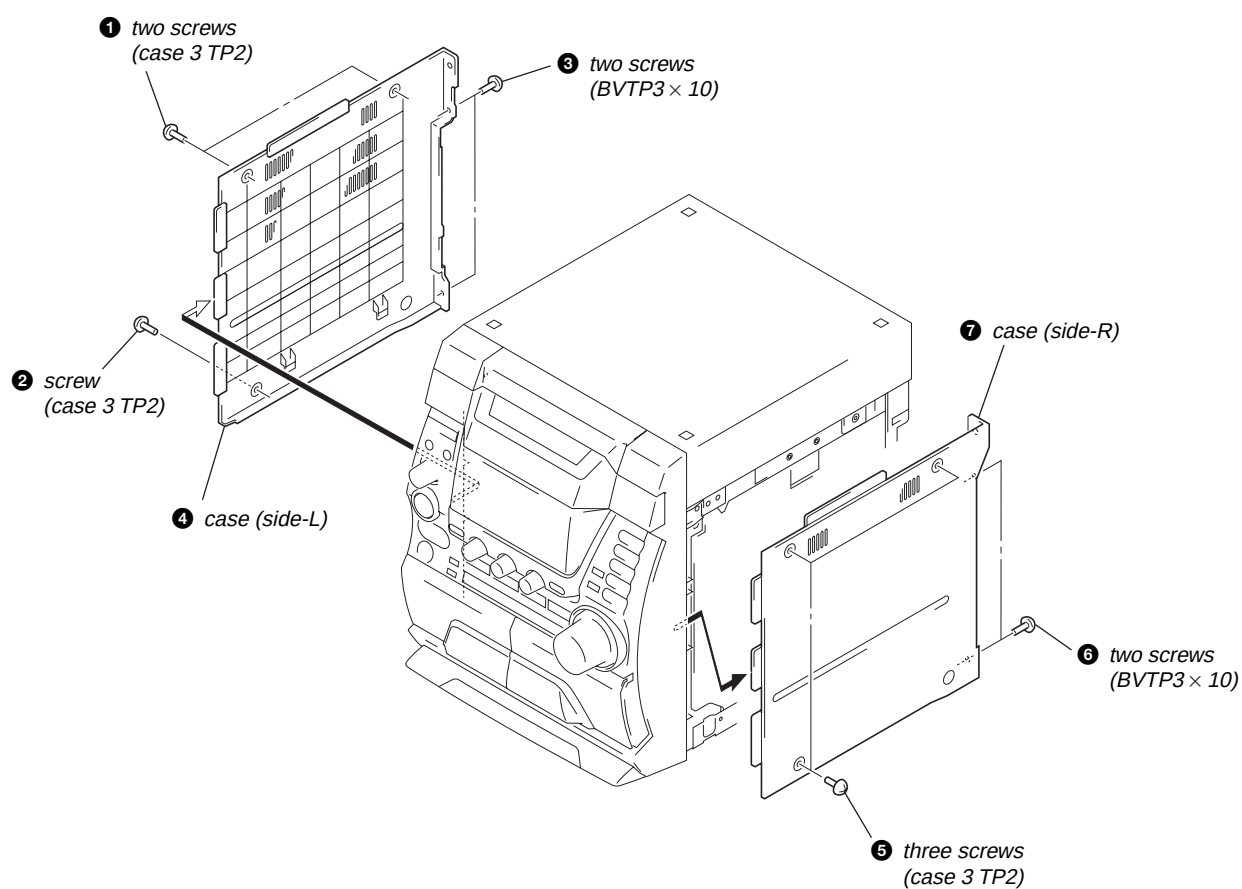
Note 1: The process described in  can be performed in any order.

Note 2: Without completing the process described in , the next process can not be performed.

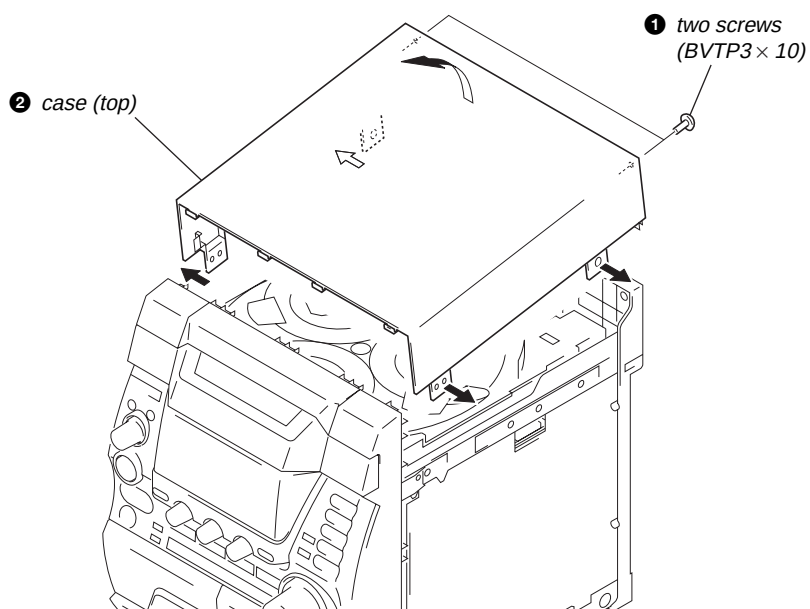


Note: Follow the disassembly procedure in the numerical order given.

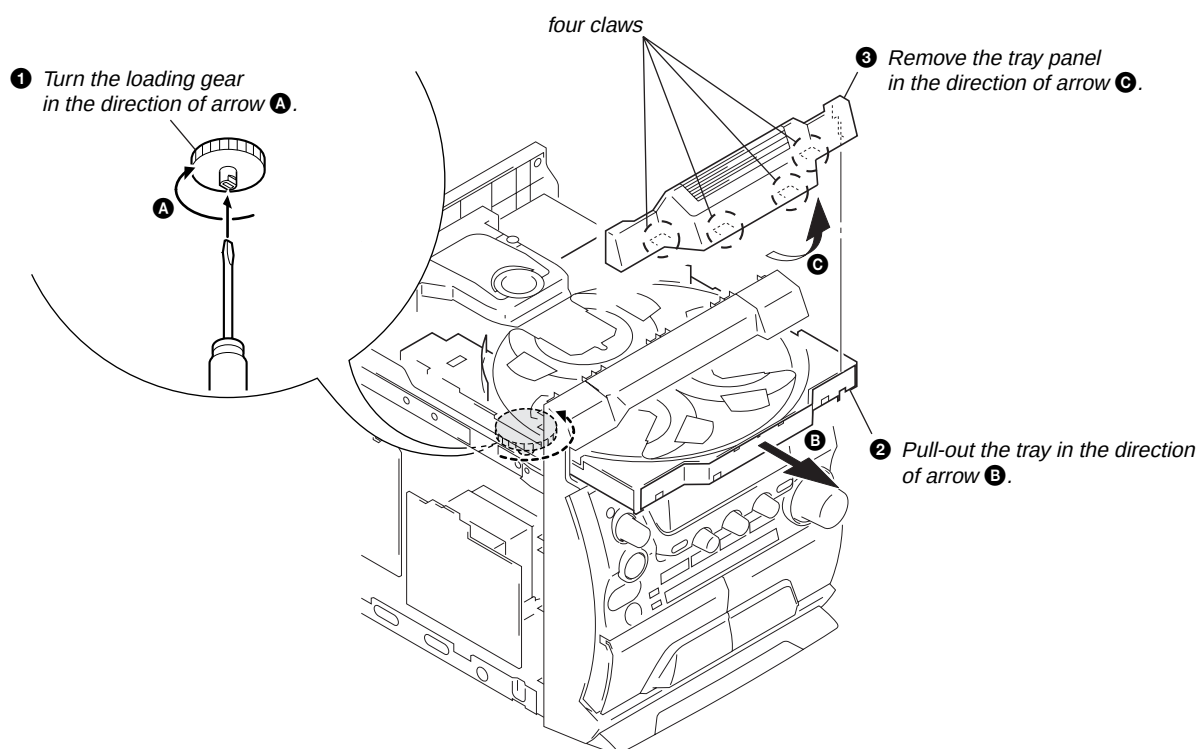
3-2. CASE (SIDE-L/R)



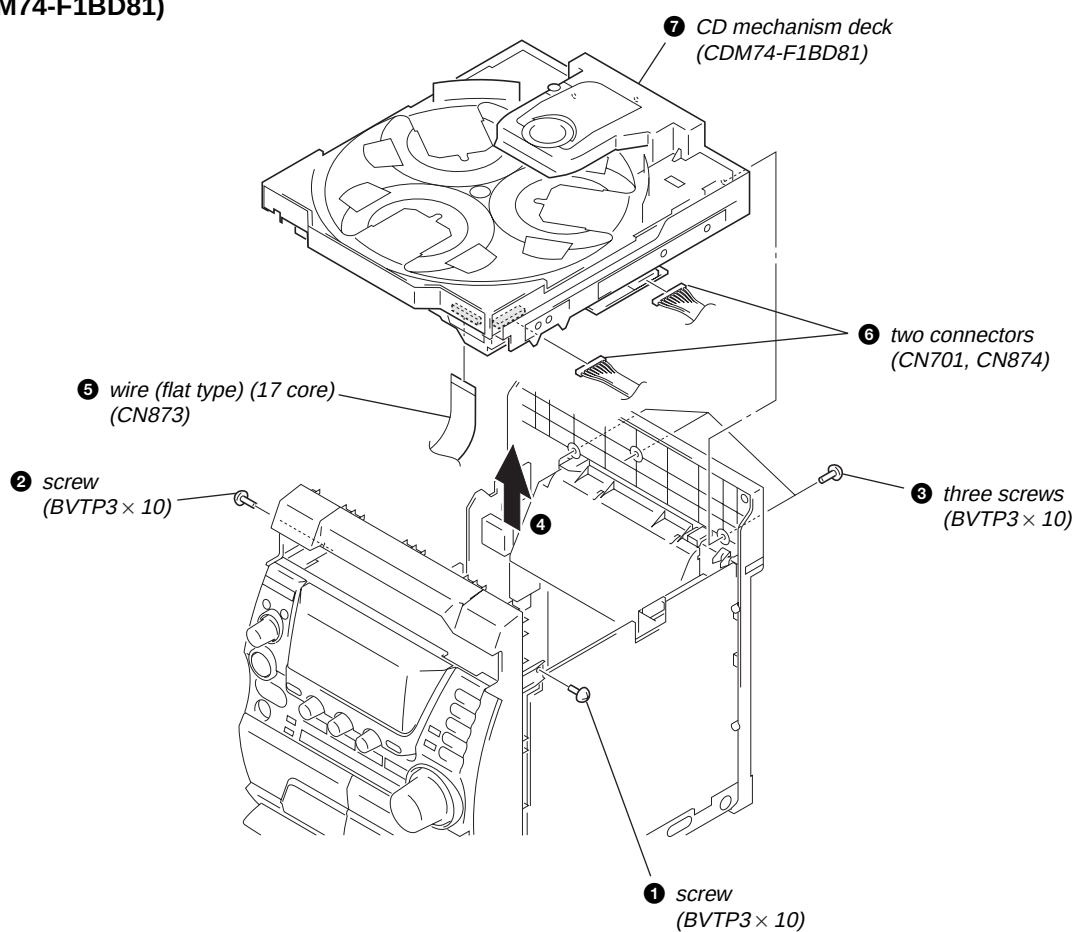
3-3. CASE (TOP)



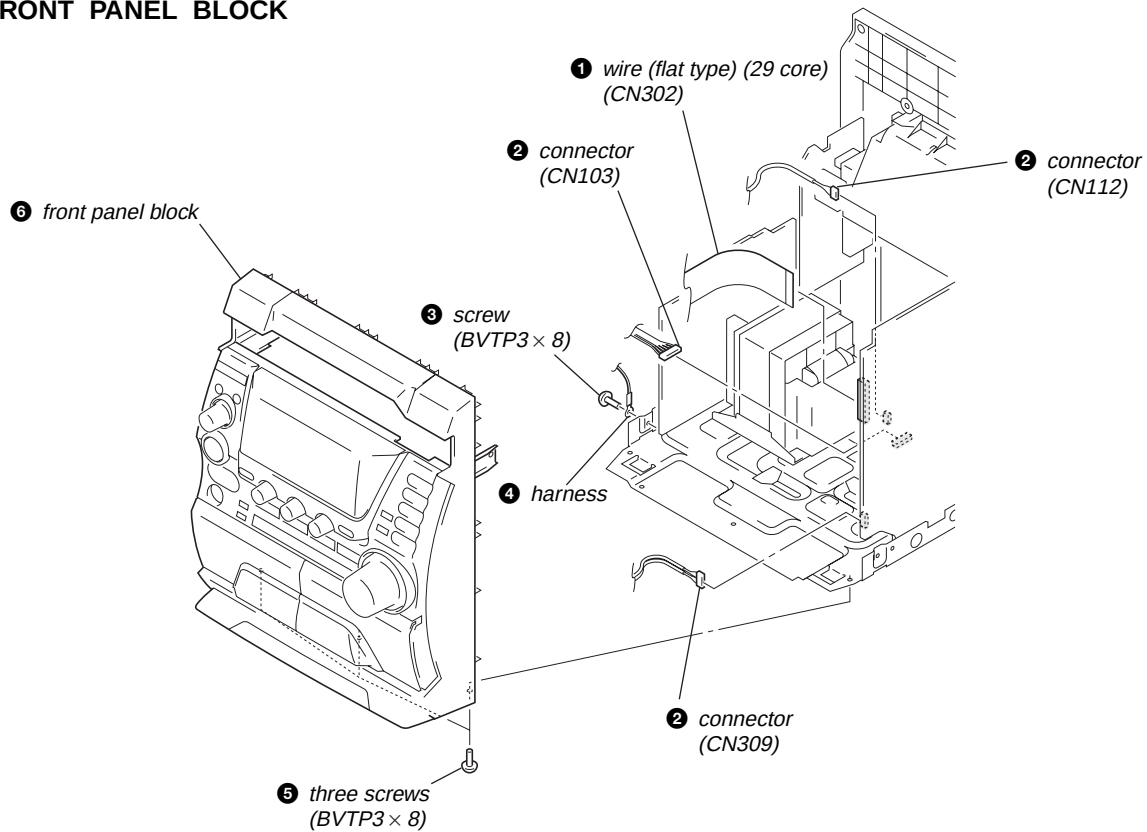
3-4. TRAY PANEL



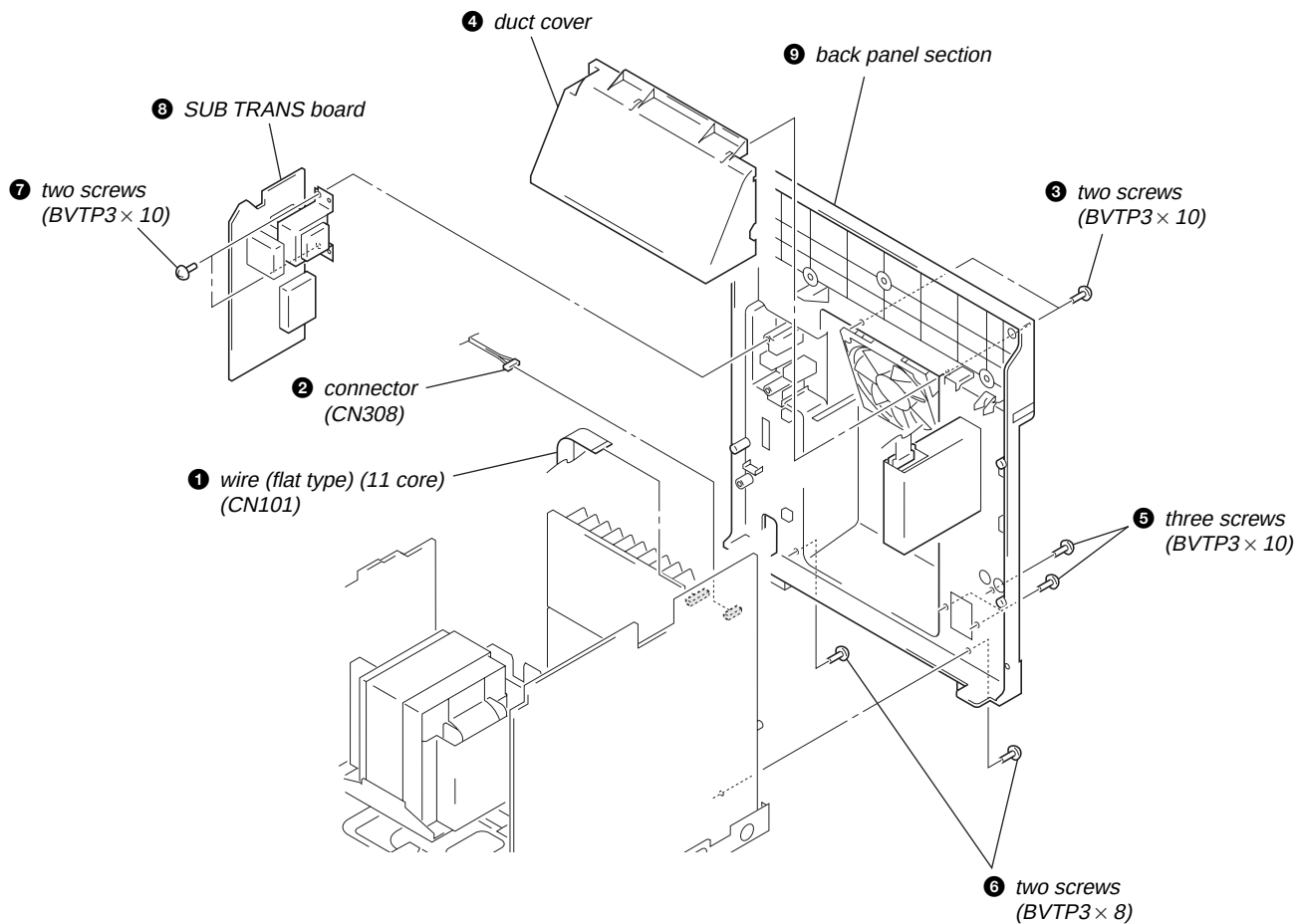
3-5. CD MECHANISM DECK (CDM74-F1BD81)



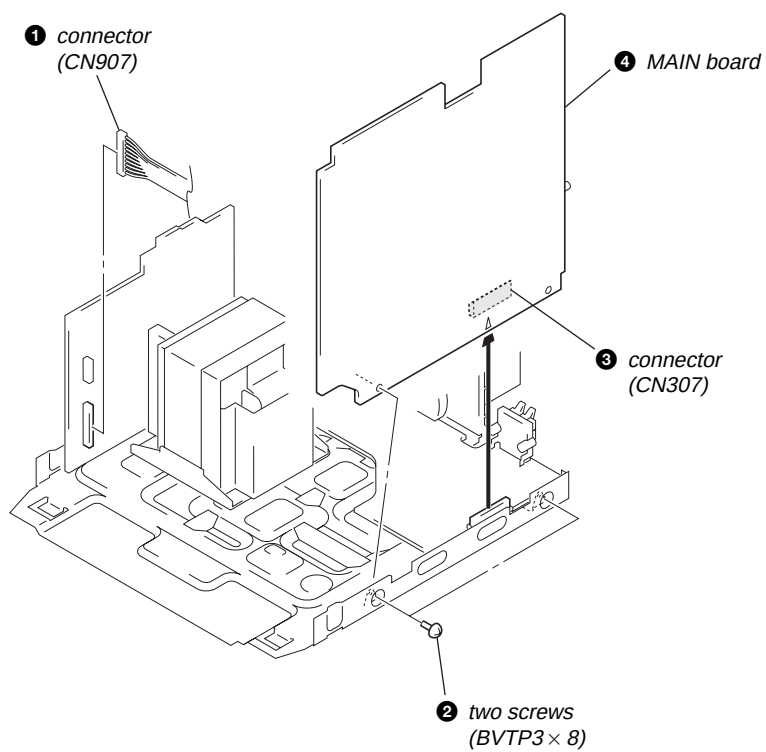
3-6. FRONT PANEL BLOCK



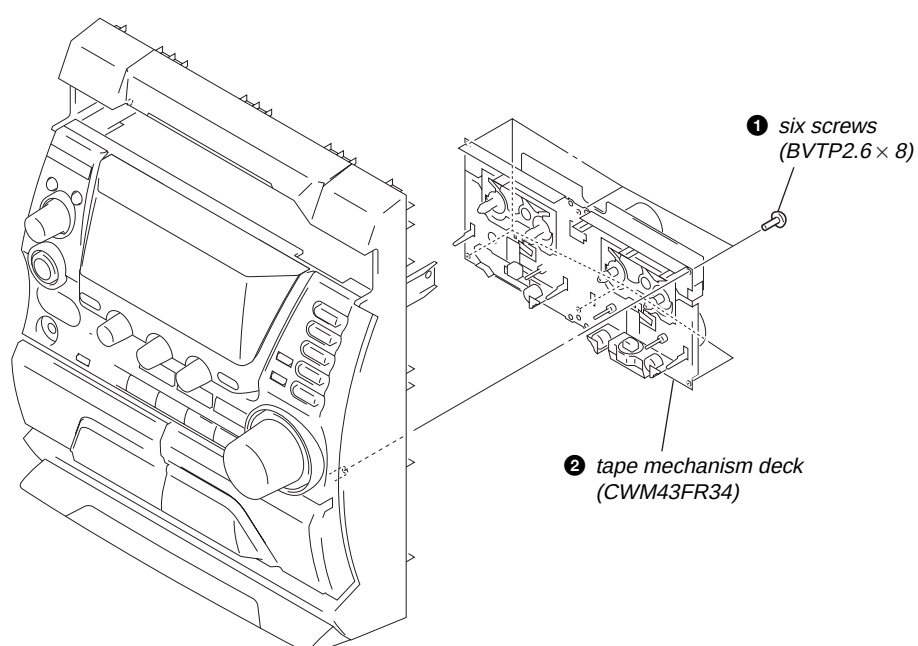
3-7. BACK PANEL SECTION



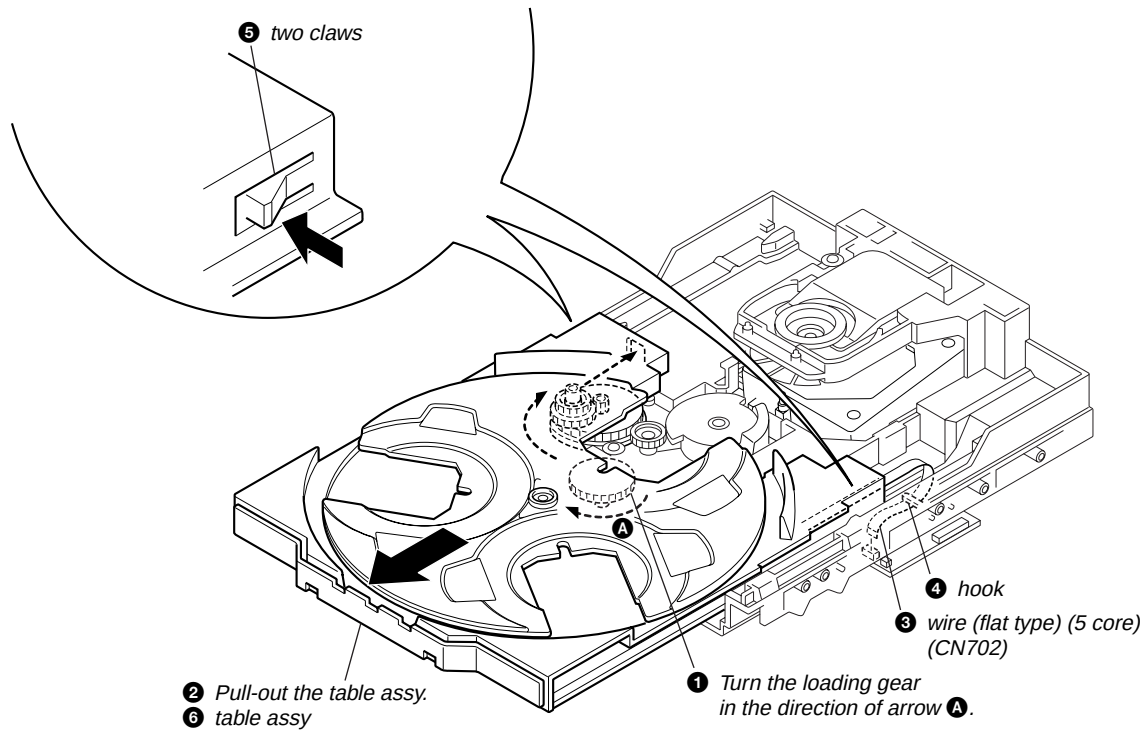
3-8. MAIN BOARD



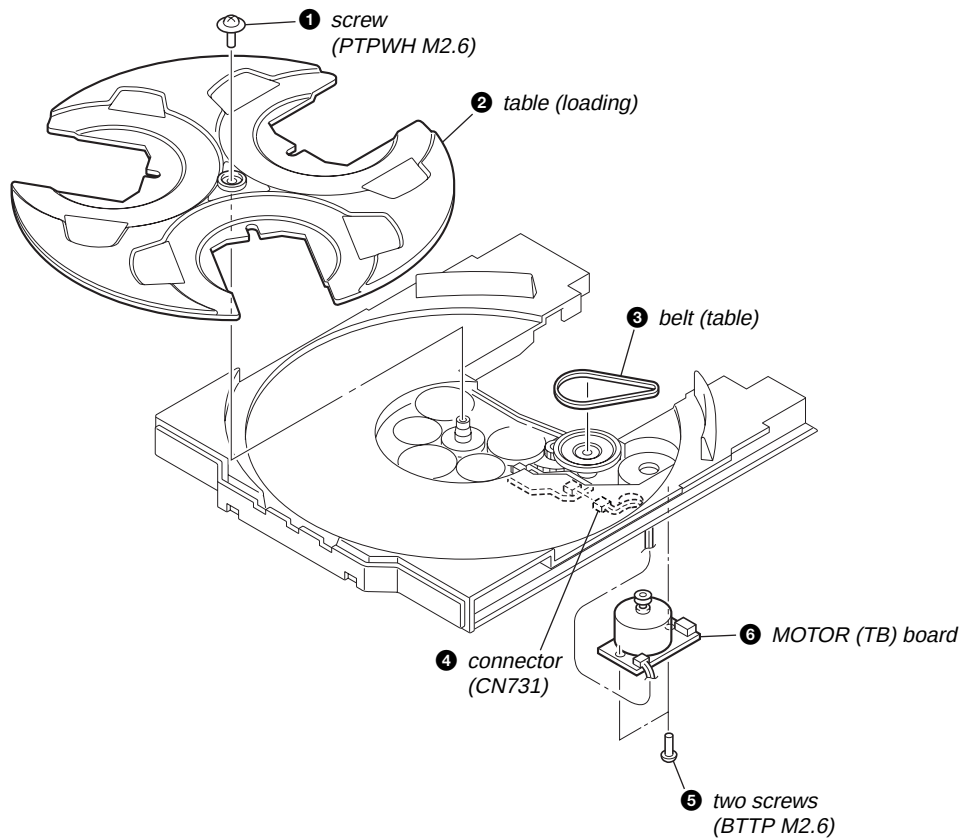
3-9. TAPE MECHANISM DECK (CWM43FR34)



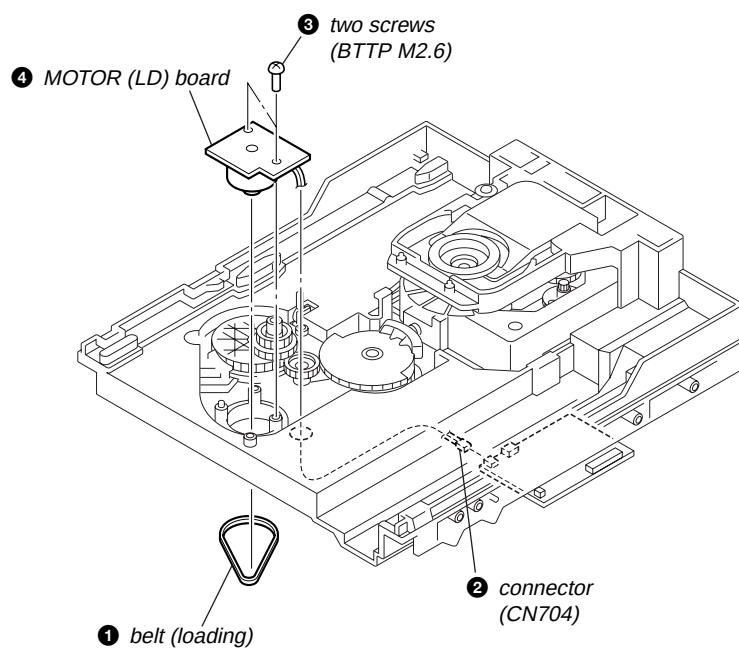
3-10. TABLE ASSY



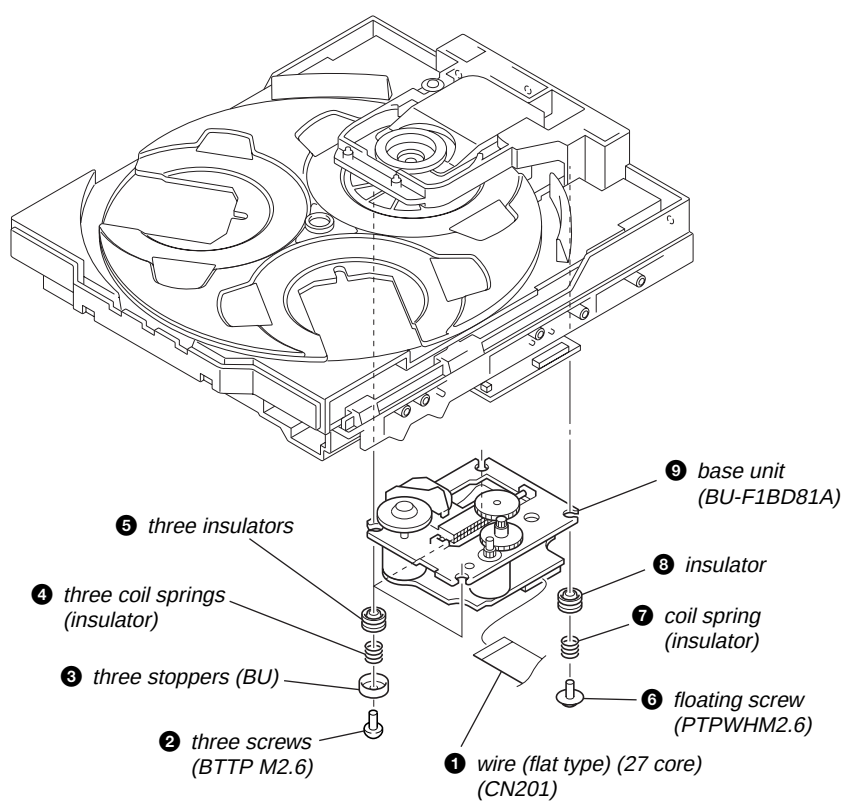
3-11. MOTOR (TB) BOARD



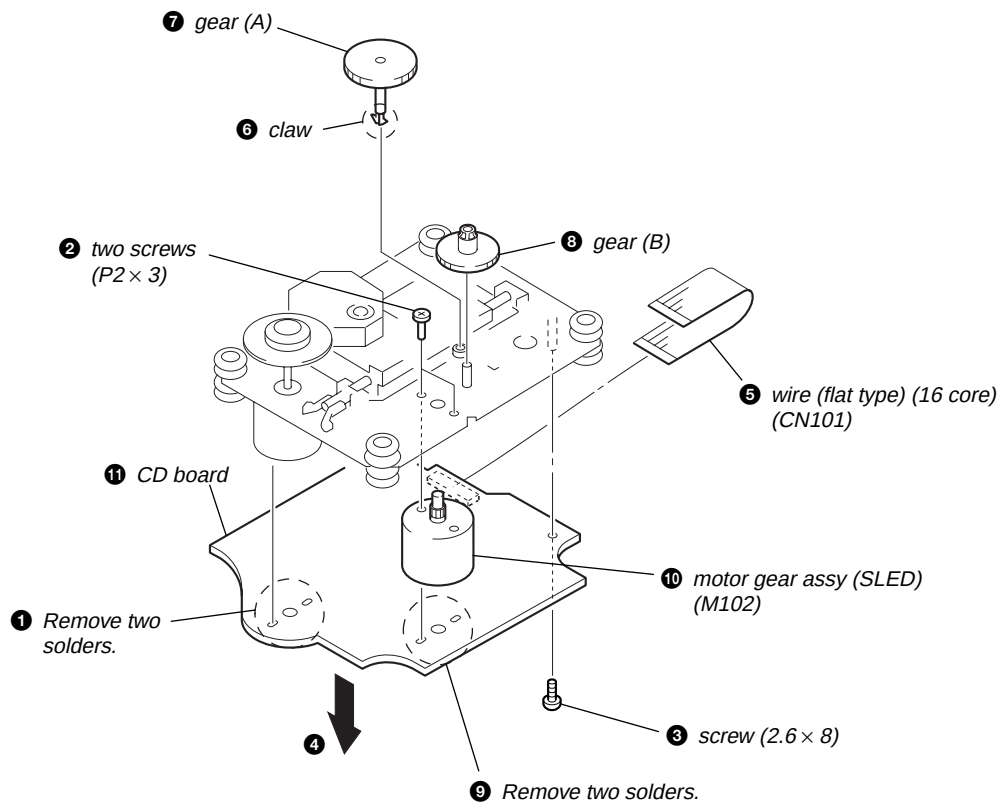
3-12. MOTOR (LD) BOARD



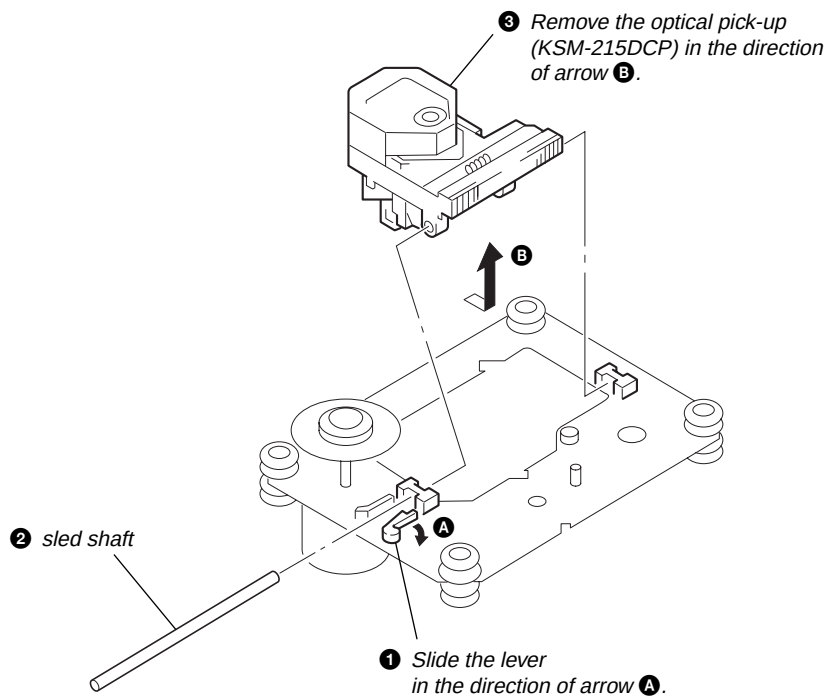
3-13. BASE UNIT (BU-F1BD81A)



3-14. MOTOR GEAR ASSY (SLED) (M102), CD BOARD



3-15. OPTICAL PICK-UP (KSM-215DCP)



SECTION 4

TEST MODE

MC COLD RESET

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

Procedure:

1. Press the **I/⏻** button to turn the power ON.
2. Press three buttons of **■**, **P FILE** and **DISC 1** simultaneously.
3. The message "COLD RESET" is displayed on the fluorescent indicator tube momentarily, then becomes standby states.

TUNER STEP CHANGE-OVER

- A step of AM channels can be changed over between 9 kHz and 10 kHz.

Procedure:

1. Press the **I/⏻** button to turn the power ON.
2. Press the **TUNER/BAND** button to select "AM".
3. Press the **I/⏻** button to turn the power OFF.
4. Press two buttons of **PLAY MODE/TUNING MODE** and **I/⏻** simultaneously.
5. The message "AM 9K STEP" or "AM 10K STEP" is displayed on the fluorescent indicator tube, and thus the channel step is changed over.

CD SHIP (LOCK) MODE

- 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 the **I/⏻** button to turn the power ON.
2. Press the **CD** button to select "CD".
3. Press two buttons of **CD** and **POWER** simultaneously.
4. The message "LOCK" is displayed on the fluorescent indicator tube, and the CD ship mode is set.

CD SHIP (LOCK) MODE & COLD RESET

- This mode is used to perform CD chip (lock) mode and cold reset simultaneously.

Procedure:

1. Press the **I/⏻** button to turn the power ON.
2. Press the **CD** button to select "CD".
3. Press three buttons of **■**, **CD** and **DISPLAY** simultaneously.
4. The message "COLD RESET" is displayed on the fluorescent indicator tube momentarily, then becomes standby states.

CHANGE-OVER FUNCTION OF MD/VIDEO

- This mode is used to enable function of external input to change over between MD and VIDEO.

Procedure:

1. Press the **I/⏻** button to turn the power ON.
2. Press two buttons of **VIDEO (MD)** and **I/⏻** simultaneously.
3. The message "MD" or "VIDEO" is displayed on the fluorescent indicator tube, and the function of external input is changed over.

CD TRAY LOCK MODE

- This mode is used to unable to take sample disc out of tray in the shop.

Procedure:

1. Press the **I/⏻** button to turn the power ON.
2. Press the **CD** button to select "CD".
3. Set disc on the CD tray, press two buttons of **■** and **▲** for 5 seconds.
4. The message "LOCKED" is displayed on the fluorescent indicator tube and the CD tray is locked. (Even if pressing the **▲** button, the message "LOCKED" is displayed on the fluorescent indicator tube and the CD tray is locked)
5. To release from this mode, press two buttons of **■** and **▲** for 5 seconds.
6. The message "UNLOCKED" is displayed on the fluorescent indicator tube and the CD tray is unlocked.

AMP TEST MODE

- This mode is used to display the parameter of amplifier IC and display the VACS status.

Procedure:

1. Press the **I/⏻** button to turn the power ON.
2. Press three buttons of **■**, **P FILE** and **PLAY MODE/TUNING MODE** simultaneously.
3. When the AMP test mode is activated, the message "AMP TEST IN" is displayed on the fluorescent indicator tube momentarily, then amplifier adjustment mode is displayed on the fluorescent indicator tube.
4. Press the **DISPLAY** button to changed over between VACS status display mode and the amplifier IC parameter display mode.
5. In the amplifier IC parameter display mode, press the **i-BASS** button to changed over DBFB ON/OFF, and when it is ON, the character "D" is displayed on the fluorescent indicator tube.
6. In the amplifier IC parameter display mode, press the **SURROUND** button to changed over surround ON/OFF, and when it is ON, the character "S" is displayed on the fluorescent indicator tube.
7. In the amplifier IC parameter display mode, turn each knob of **BASS**, **MIDDLE** and **TREBLE** causes respective parameters to be changed, as well as change-over of the display on the fluorescent indicator tube.

AGING MODE

- This mode can be used for operation check of CD section and tape deck section.
CD section and tape deck section work in parallel.

If an error occurred:

The aging operation stops only an error occurred sections and display then status.

If no error occurs:

The aging operation continues repeatedly.

Procedure:

- Press the **I/⏻** button to turn the power ON.
- Press the **CD** button to select "CD".
- Set disc on the CD tray and set tape into the deck.
- Press three buttons of **■**, **P FILE** and **DISC SKIP/EX-CHANGE** simultaneously.
- Aging operations of CD and tape are started at the same time.
- To release from this mode, press the **I/⏻** button to turn the power OFF and press the function buttons.

1. Display at the Aging Mode

Display operating state of CD section and tape deck section alternately.

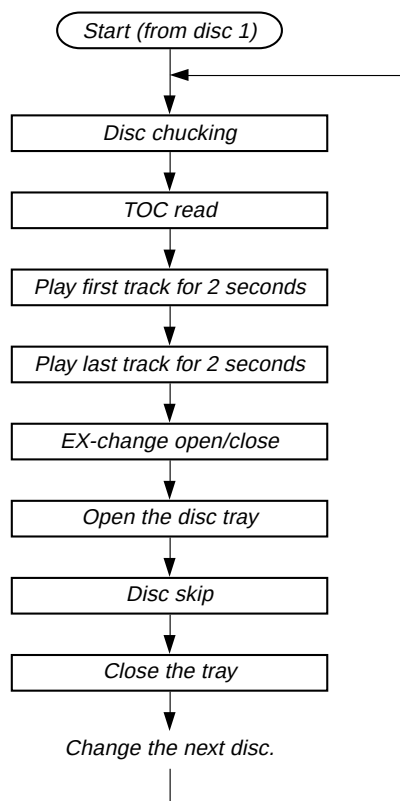
If an error occurred, stop display which that section.

2. CD Section

The sequence during the aging mode is following as below.

Display at the aging mode is the same as the normal operation.

Aging mode sequence (CD section) :

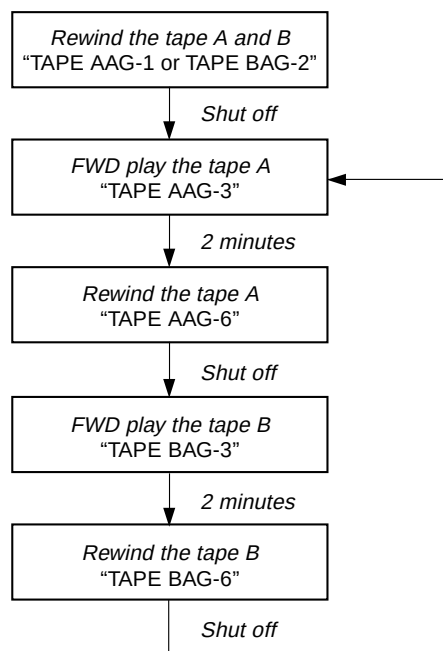


3. Tape Deck Section

The sequence during the aging mode is following as below.

If an error occurred, stop display that step.

Aging mode sequence (tape deck section) :



Note: "TAPE *AG-*" is display of each step.

PANEL TEST MODE

- This mode is used to check the fluorescent indicator tube, LEDs and buttons.

Procedure:

- Press the **I/⏻** button to turn the power ON.
- Press three buttons of **■**, **P FILE** and **ENTER** simultaneously.
- Fluorescent indicator tube and LEDs are all turned ON.
- Press two buttons of **II** and **ENTER** simultaneously, mode is changed over.
- In the key check mode, press each key, the defined key number of every each key list is displayed on the fluorescent indicator tube.
- In the key count check mode, "KEYCNT 0" is displayed on the fluorescent indicator tube. Each time a key is pressed, "K" value increases. However, once a key is pressed, it is no longer taken into account.
- In the headphone input check mode, connect the headphone, the message "H_P ON" is displayed on the fluorescent indicator tube, and disconnect the headphone, the message "H_P OFF" is displayed on the fluorescent indicator tube.
- In the volume check mode, "VOLUME FLAT" is displayed on the fluorescent indicator tube. Turn the **VOLUME** knob clockwise, the message "VOLUME UP" is displayed on the fluorescent indicator tube momentarily and turn the **VOLUME** knob counterclockwise, the message "VOLUME DOWN" is displayed on the fluorescent indicator tube momentarily.

MC TEST MODE

- This mode is used to check operations of microprocessor.

Procedure:

- Press the **I/⏻** button to turn the power ON.
- Press three buttons of **■**, **[P FILE]** and **[DISC 3]** simultaneously.
- When the MC test mode is activated, VACS level is displayed on the fluorescent indicator tube momentarily.
- Turn the **[AMS/TUNING]** knob clockwise, the message "ALL EQ MAX" is displayed on the fluorescent indicator tube momentarily and turn the **[AMS/TUNING]** knob counterclockwise, the message "ALL EQ MIN" is displayed on the fluorescent indicator tube momentarily.
- Press the **[PRESET EQ]** button, the message "ALL EQ FLAT" is displayed on the fluorescent indicator tube momentarily.
- Turn the **[VOLUME]** knob clockwise, the message "VOLUME MAX" is displayed on the fluorescent indicator tube momentarily and turn the **[VOLUME]** knob counterclockwise, the message "VOLUME MIN" is displayed on the fluorescent indicator tube momentarily.
- Press the **[i-BASS]** button to changed over VACS ON/OFF.
- When the **[REC PAUSE/START]** button is pressed twice with a tape set in the deck-B, the function is switched "MD" or "VIDEO" and recording starts. When the **[◀▶]** or **[▶▶]** button is pressed during recording, the tape is rewound back to the beginning of recording, the function is switched to "TAPE B", then playback starts.
- When the **[CD SYNC]** key is pressed with the test tape (AMS-100, AMS-110A) in the deck, number of space between tunes is counted, then if AMS-110A is set, "OK" is displayed on the fluorescent indicator tube and if AMS-100 is set, "NG" is displayed on the fluorescent indicator tube.
- Press the **I/⏻** button to release from this mode, then cold reset is performed.

VERSION DISPLAY MODE

- This mode is used to check the model, destination and software version.

Procedure:

- Press the **I/⏻** button to turn the power ON.
- Press three buttons of **■**, **[P FILE]** and **[DISC 2]** simultaneously.
- When this mode is activated, model and destination is displayed on the fluorescent indicator tube.
- Press the **[DISPLAY]** button to changed over between software version and year, month, day of the software creation display mode and model and destination display mode.
- To release from this mode, press three buttons of **■**, **[P FILE]** and **[DISC 2]** simultaneously.

CD ERROR CODE DISPLAY MODE

- This mode can be used for error code display of CD section.

Procedure:

- Press the **I/⏻** button to turn the power ON.
- Press the **[CD]** key to select "CD".
- Press three buttons of **■**, **[CD]** and **[DISC 1]** simultaneously.
- When this mode is activated, mechanism deck error code is displayed on the fluorescent indicator tube.
- Press the **[i-BASS]** button to changed over between optical pick-up error code display mode and mechanism deck error code mode.
- Turn the **[AMS/TUNING]** knob to change over display of error history.

1. Mechanism Deck Error Code Mode

- When this mode is entered, mechanism deck error code is displayed with the 10-character format on the fluorescent indicator tube.

The first digit from the left indicates:

The first digit from the left indicates which mode the error history is. In the mechanism deck error code mode, "M" is displayed on the fluorescent indicator tube.

The second digit from the left indicates:

(Error history No. display)

The second digit from the left indicates which order the error history is. "1" indicates the latest error history, and each time the number increases by one, the error history goes back to one-previous error.

The third and 4th digit from the left indicates:

(Error status display)

The third and 4th digit from the left indicates which error status is indicated.

Display	Status
0 0	No error
0 8	Table operation time-out (Table does not move to the target position within the specified time)
1 6	In the chucking down operation, the operation was retried by the maximum number of times but the operation could not be completed
1 7	In the chucking up and down operation, the reverse recovery processing was attempted but it could not be recovered
1 8	In the chucking up operation, the operation was retried by the maximum number of times but the operation could not be completed
2 0	Loading operation time-out (Table does not move to the target position within the specified time)
2 2	As the chuck was in the ex-open status at the initialization, the closing was attempted but could not be completed

The 5th and 6th digit from the left indicates:

(Present status display)

The 5th and 6th digit from the left indicates which operating status when an error occurred is indicated.

Display	Status
0 1	Open completion status
0 2	From open status, the movement to chucking down position is under way
0 3	From chucking down position, the open operation is under way
0 4	Chucking down completion status
1 0	The chucking down operation is under way
1 1	The chucking up operation is under way
1 2	Close completion status
1 3	From close status, the ex-open operation is under way
1 4	From ex-open status, the close operation is under way
1 8	Ex-pen completion status

The 7th and 8th digit from the left indicates:**(Motor status display)**

The 7th and 8th digit from the left indicates which motor output status when an error occurred is indicated.

Display	Status
× 0	No table motor output
× 1	Table motor forward output
× 2	Table motor backward output
× 3	Table motor break output
0 ×	No loading motor output
1 ×	Loading motor forward output
2 ×	Loading motor backward output
3 ×	Loading motor break output

The 9th and 10 th digit from the left indicates:**(Tray status display)**

The 9th and 10th digit from the left indicates which target processing when an error occurred is indicated.

Display	Status
0 1	Open operation
1 2	Close operation
1 8	Ex-open operation

2. Optical Pick-up Error Code Mode

- When this mode is entered, optical pick-up error code is displayed with the 8-character format on the fluorescent indicator tube.

The first digit from the left indicates:

The first digit from the left indicates which mode the error history is. In the optical pick-up error code mode, “D” is displayed on the fluorescent indicator tube.

The second digit from the left indicates:**(Error history No. display)**

The second digit from the left indicates which order the error history is. “1” indicates the latest error history, and each time the number increases by one, the error history goes back to one-previous error.

The third and 4th digit from the left indicates:**(Error status display)**

The third and 4th digit from the left indicates which error status is indicated.

Display	Status
0 1	Not focused (TOC read without a disc)
0 2	GFS NG (TOC read with a disc chucked)
0 3	Start operation time-over
0 4	Defocused continuously (Defocused during TOC reading)
0 5	Q code not entered for specified time
0 6	Tracking not turned ON
0 7	Blank disc (Blank disc TOC read)

The 5th and 6th digit from the left indicates:**(Error step display)**

The 5th and 6th digit from the left indicates which processing when a trouble occurred

Display	Contents
0 1	Power OFF in progress
0 2	Initialize in progress
0 3	Oscillation stopping
0 4	From oscillation stop, oscillation starting
0 5	Stopping
0 6	Stop operation is under way
0 7	Start operation in progress
0 8	TOC read in progress
0 9	Search operation is under way
0 A	Playback operation is under way
0 B	Pause operation is under way
0 C	Playback manual search operation is under way
0 D	Pause manual search operation is under way
0 E	—

The 7th and 8th digit from the left indicates:

The 7th and 8th digit from the left indicates which operation in progress when a trouble occurred. (Step of each processing of the 5th and 6th digits is indicated)

5 REPEAT LIMIT CANCEL MODE

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

Procedure:

- Press the  button to turn the power ON.
- Press the  button to select “CD”.
- Press three buttons of ,  and  simultaneously.
- The message “LIMIT OFF” is displayed on the fluorescent indicator tube momentarily, CD repeat 5 limit is cancelled.

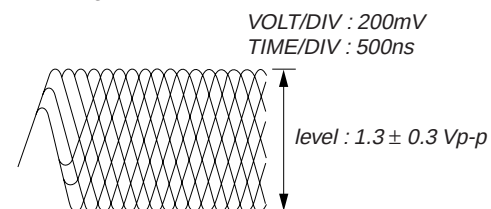
SECTION 5 ELECTRICAL ADJUSTMENTS

CD SECTION

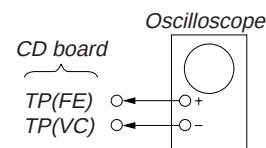
Note:

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

RF signal waveform



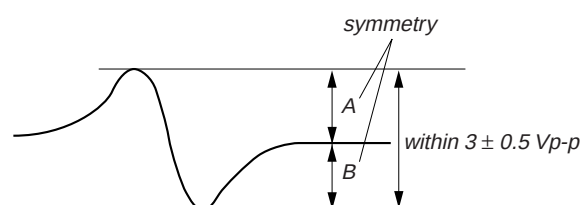
S-CURVE CHECK



Procedure :

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

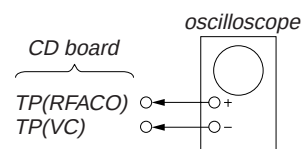
S-curve waveform



- 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.

Connecting Location: CD board

RFAC LEVEL CHECK



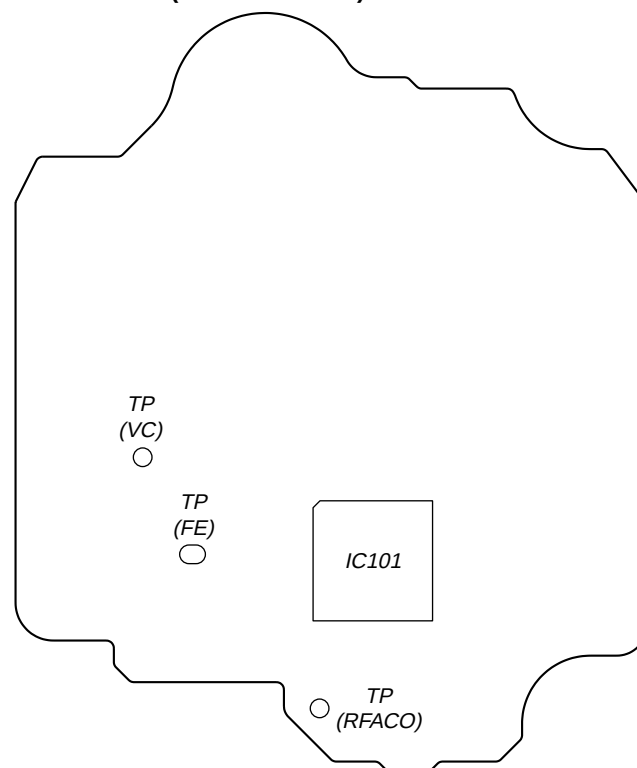
Procedure :

1. Connect an oscilloscope to TP (RFACO) and TP (VC) on the CD board.
2. Press the  button to turn the power ON.
3. Load a disc (YEDS-18) and playback.
4. Confirm that oscilloscope waveform is clear and check if RFAC signal level is correct or not.

Note: Clear RFAC signal waveform means that the shape “ $\diamond$ ” can be clearly distinguished at the center of the waveform.

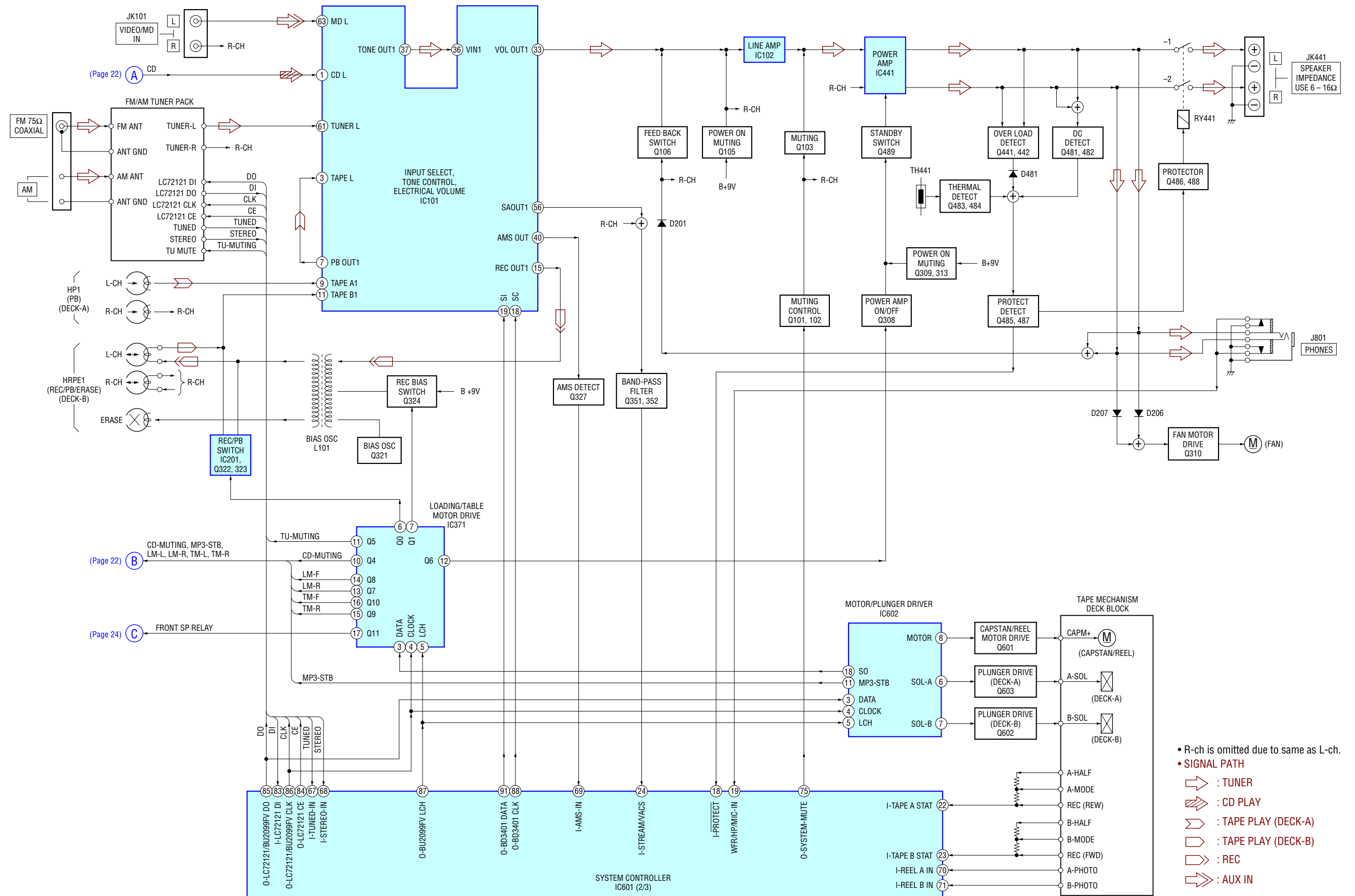
Connecting Location: CD board

– CD BOARD (Conductor Side) –

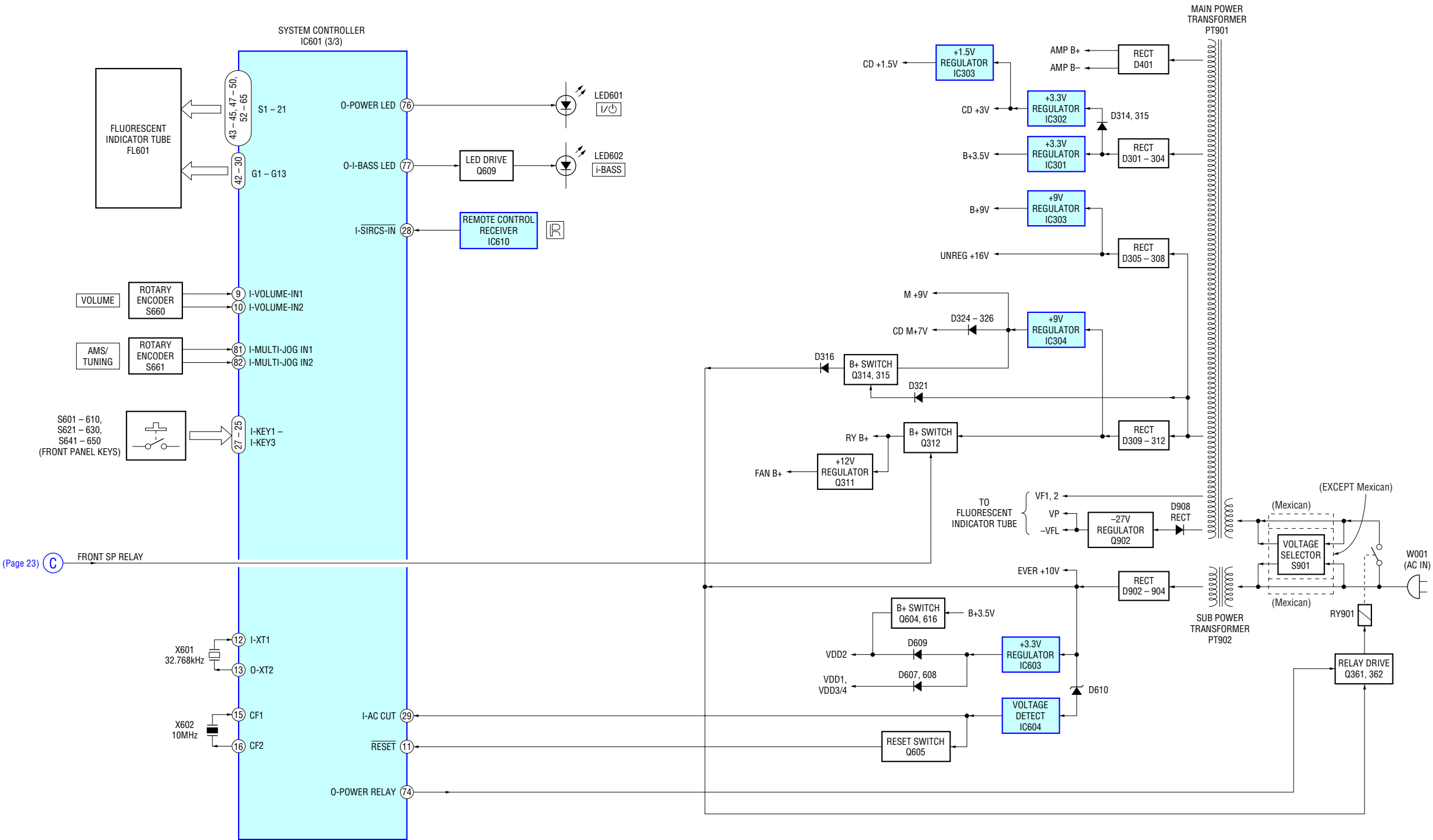


[illegible]

6-2. BLOCK DIAGRAM – MAIN Section –



6-3. BLOCK DIAGRAM – PANEL/POWER SUPPLY Section –

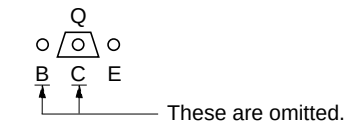
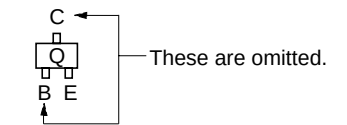


(Page 23) C FRONT SP RELAY

6-4. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Board:

- — : parts extracted from the component side.
- ○ : parts extracted from the conductor side.
- : Pattern from the side which enables seeing.
(The other layers' patterns are not indicated.)
- Indication of transistor.



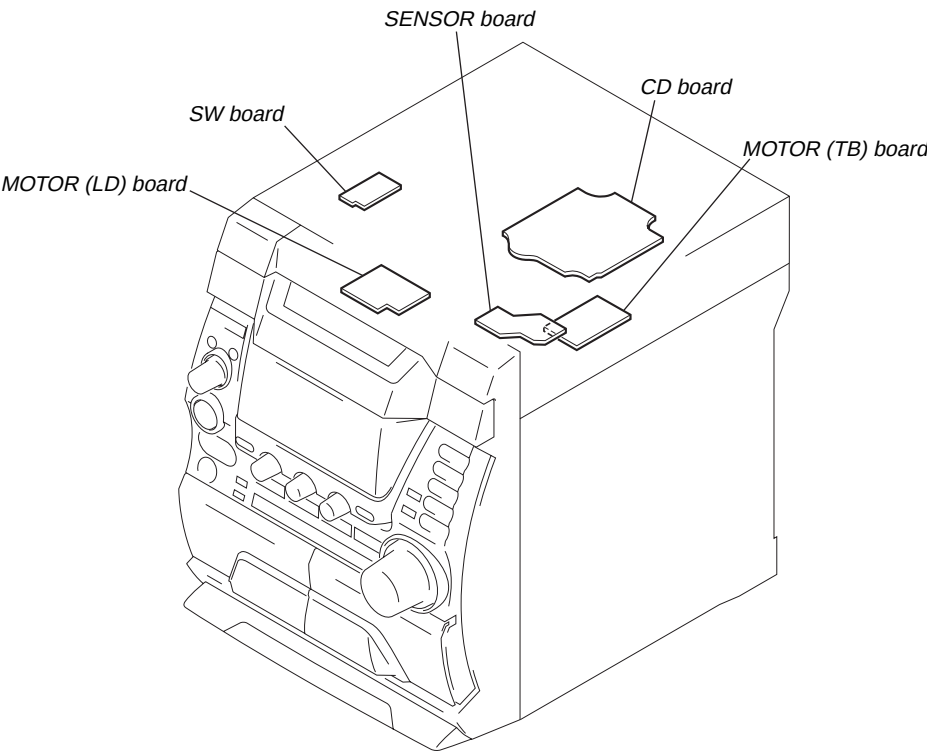
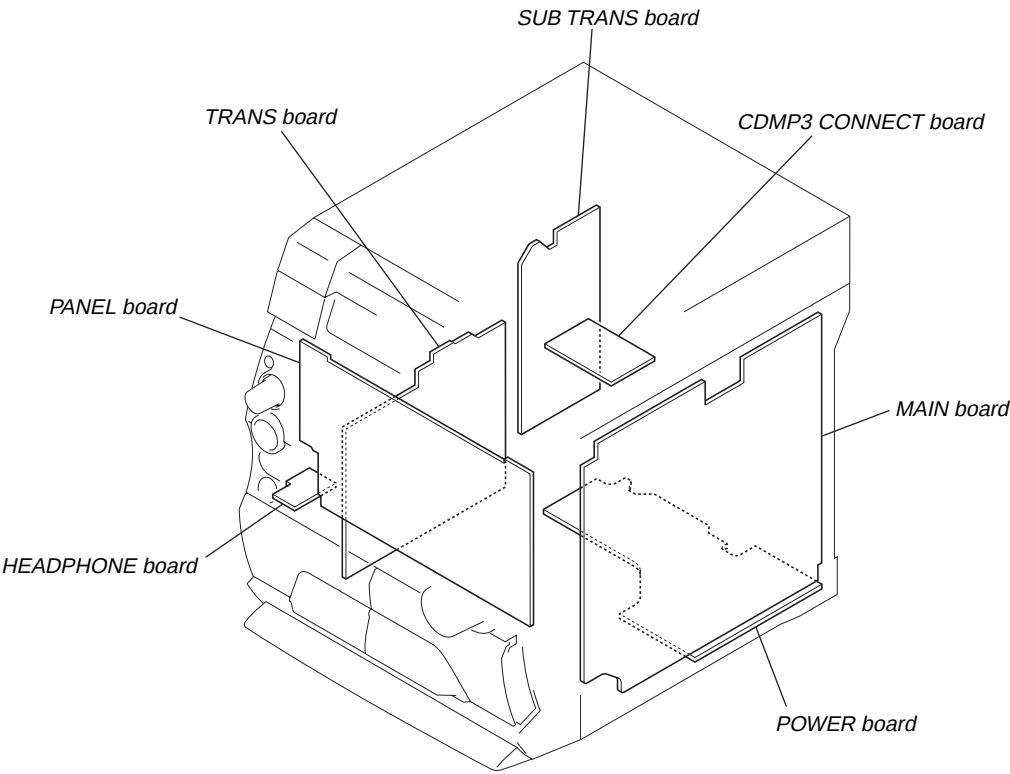
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- $\triangle$: internal component.
- $\square$: nonflammable resistor.
- $\square$: fusible resistor.
- $\square$: panel designation.

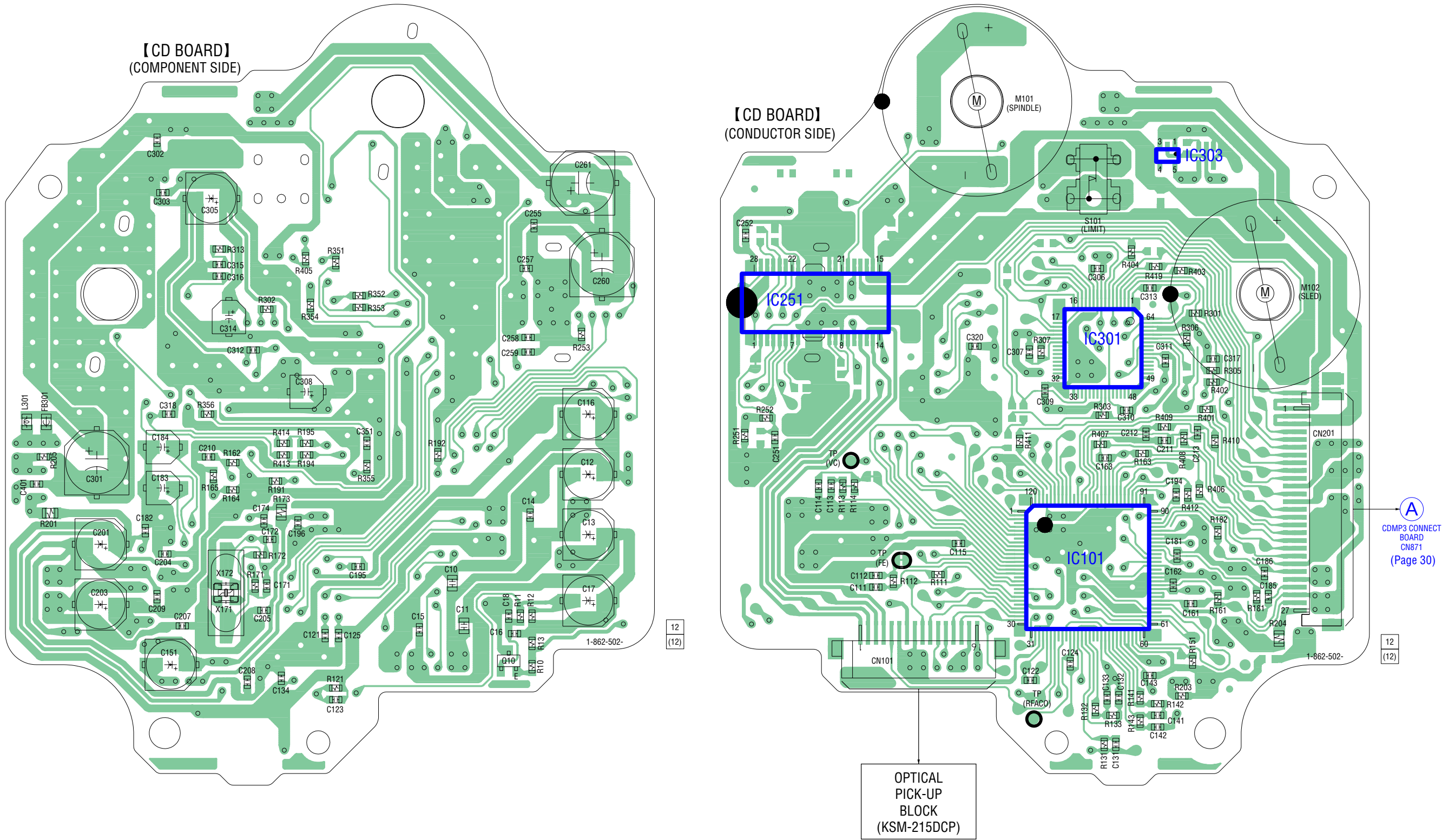
Note: The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety. Replace only with part number specified.

- : B+ Line.
- : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
 - BD Section —
no mark : CD PLAY
 - Other Sections —
no mark : FM
 - () : TAPE PLAY
 - << >> : TAPE REC
 - [] : CD PLAY
 - * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 - $\Rightarrow$: TUNER (FM/AM)
 - $\Rightarrow$: TAPE PLAY (DECK A)
 - $\Rightarrow$: TAPE PLAY (DECK B)
 - $\Rightarrow$: REC
 - $\Rightarrow$: CD PLAY
 - $\Rightarrow$: AUX IN
- Abbreviation
 - AUS : Australian model
 - E51 : Chilean and Peruvian models
 - MX : Mexican model
 - SP : Singapore model
 - TW : Taiwan model

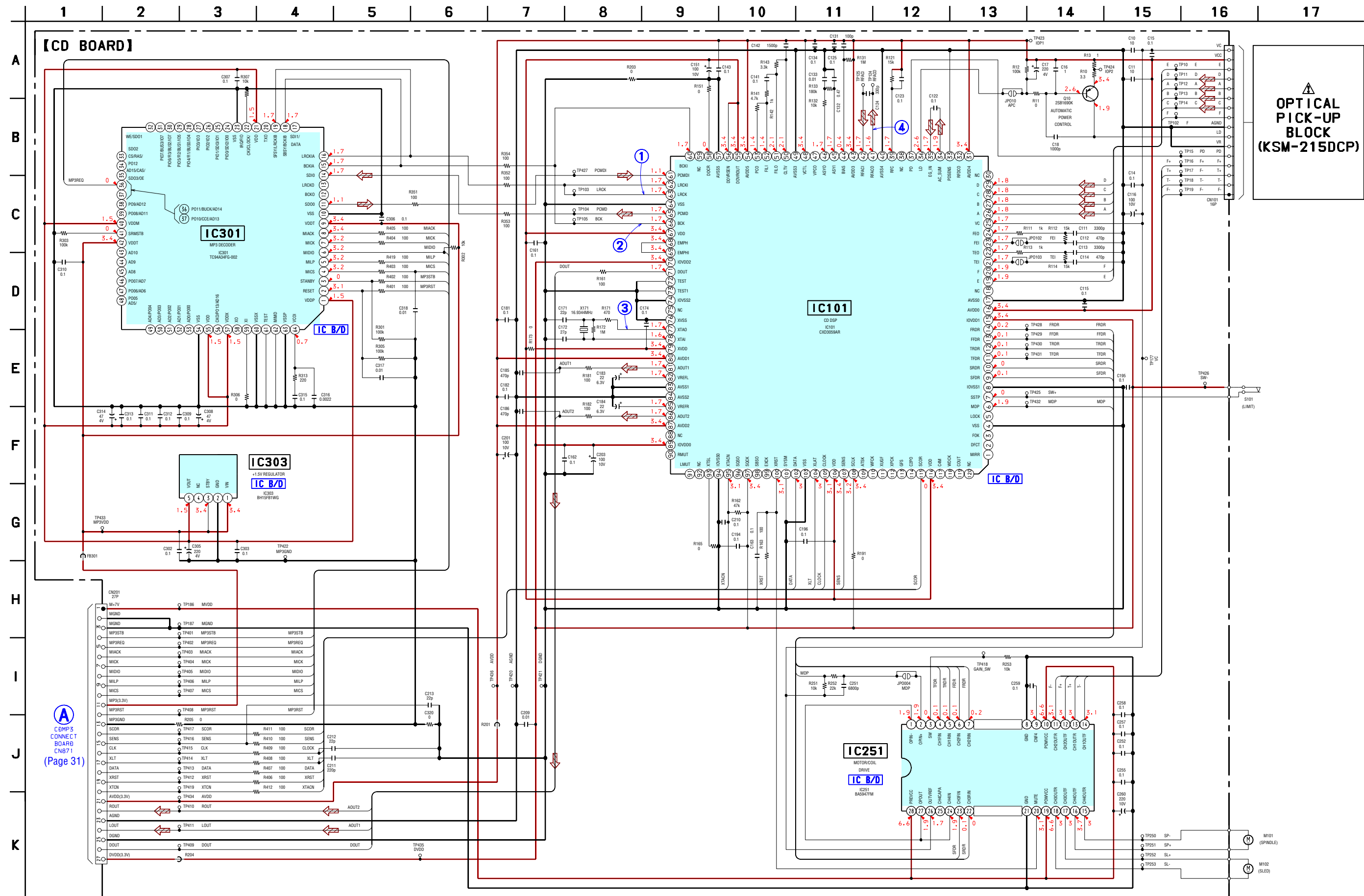
• Circuit Boards Location



6-5. PRINTED WIRING BOARD – CD Board – • See page 25 for Circuit Boards Location. :Uses unleaded solder.

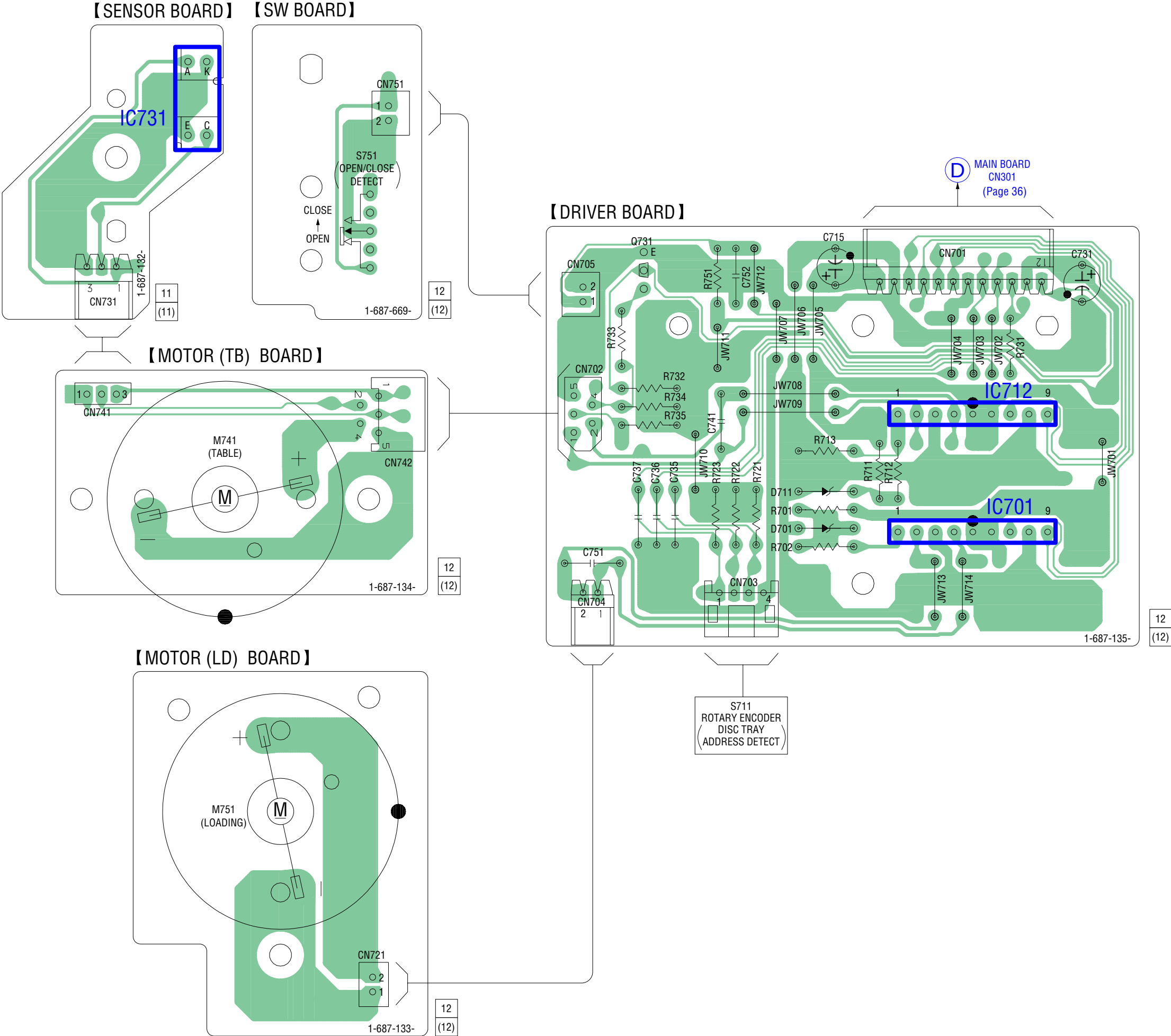


6-6. SCHEMATIC DIAGRAM – CD Board – • See page 44 for IC Block Diagrams. • See page 44 for Waveforms.

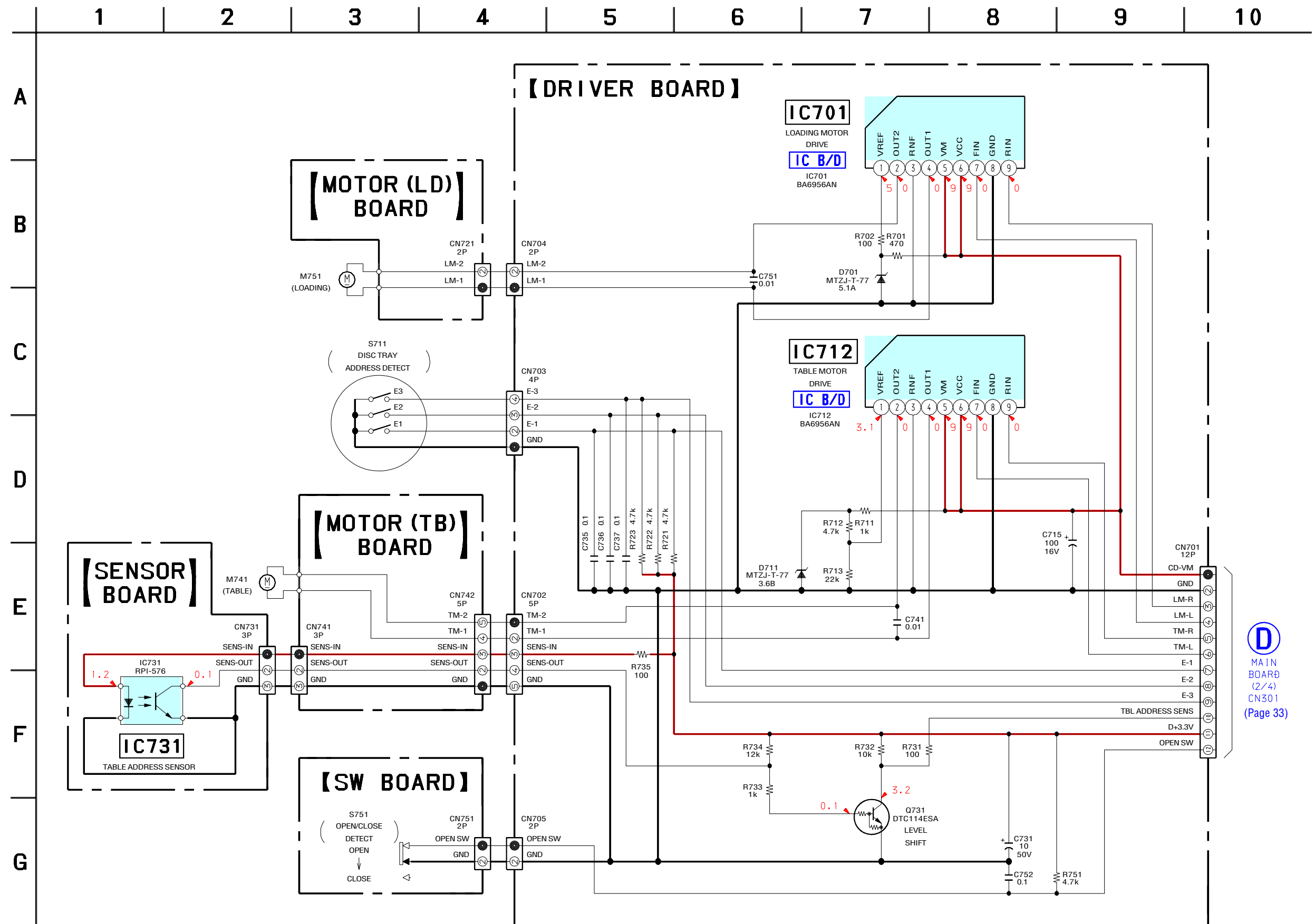


The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

6-7. PRINTED WIRING BOARDS – CHANGER Section – • See page 25 for Circuit Boards Location. :Uses unleaded solder.



6-8. SCHEMATIC DIAGRAM – CHANGER Section –

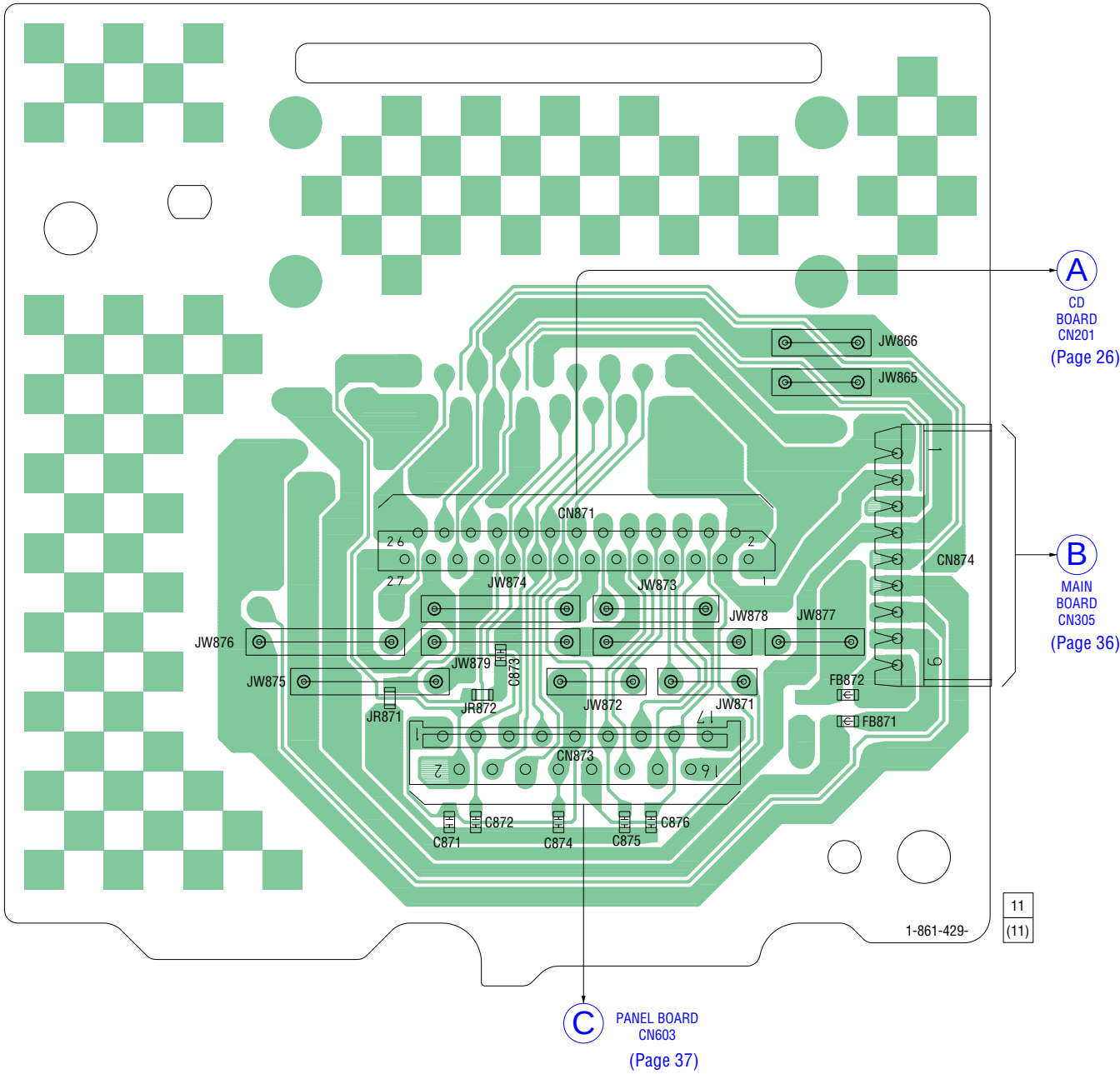


D
MAIN
BOARD
(2/4)
CN301
(Page 33)

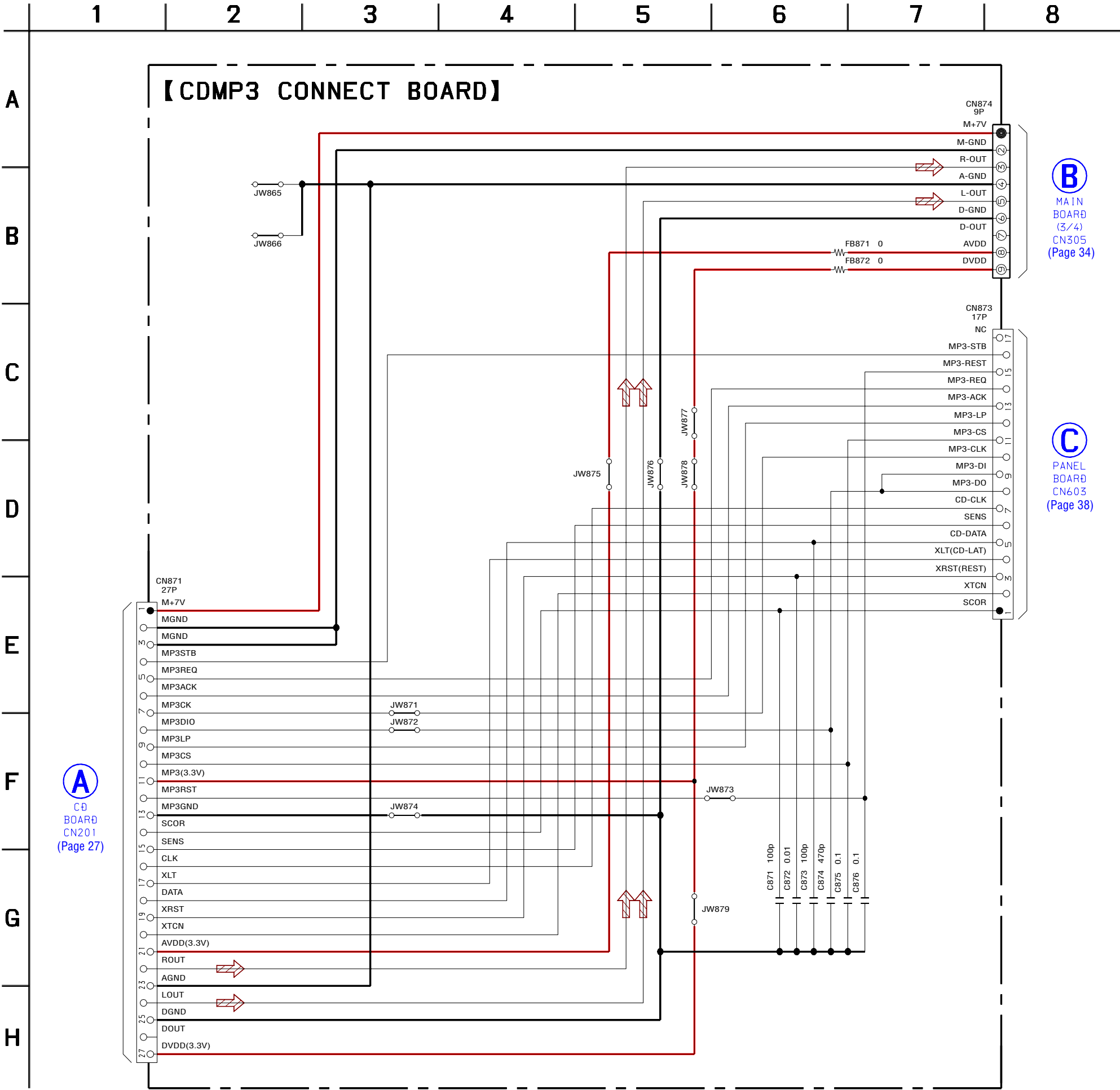
6-9. PRINTED WIRING BOARD – CDMP3 CONNECT Board – • See page 25 for Circuit Boards Location.

 :Uses unleaded solder.

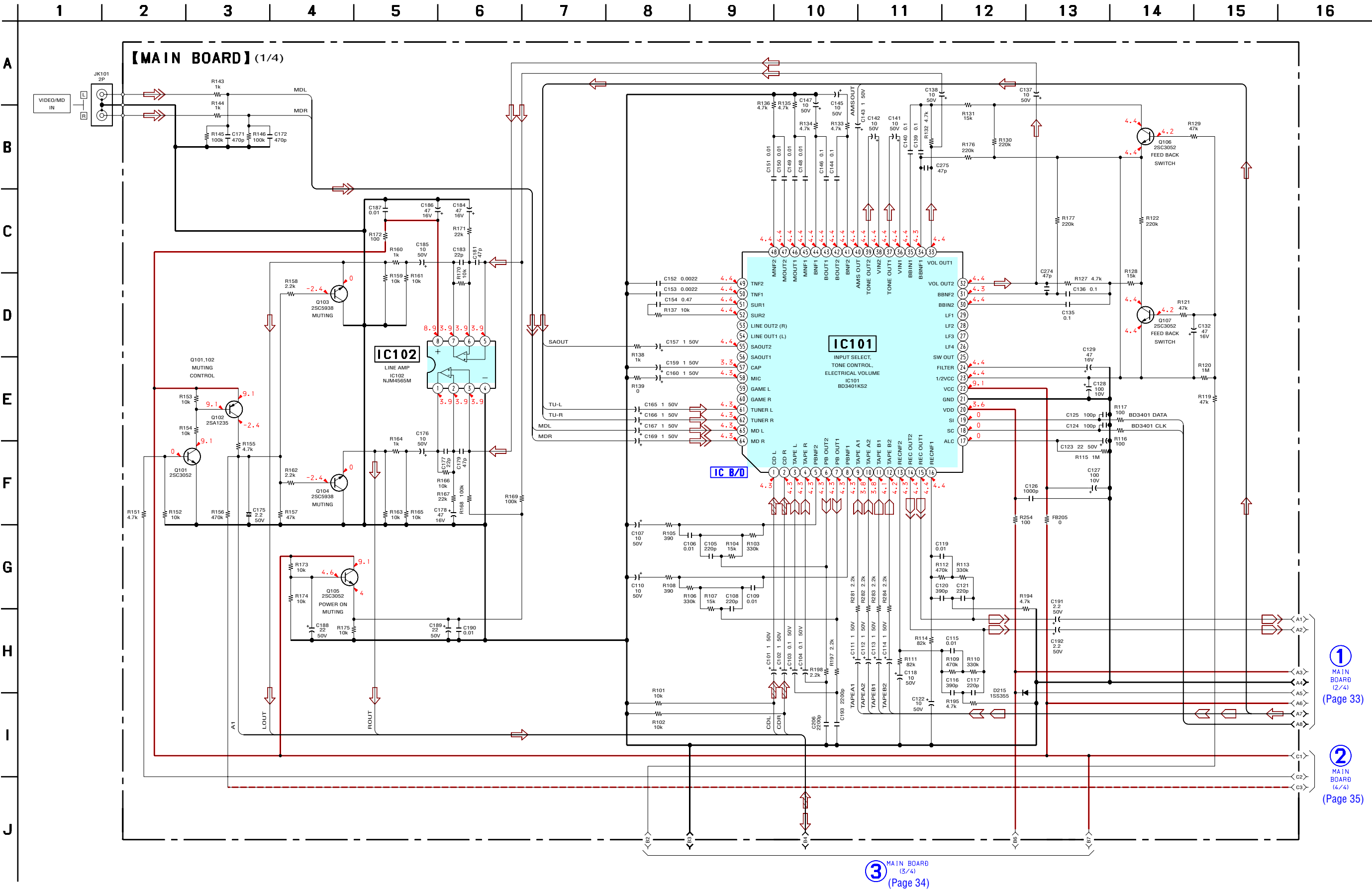
【CDMP3 CONNECT BOARD】



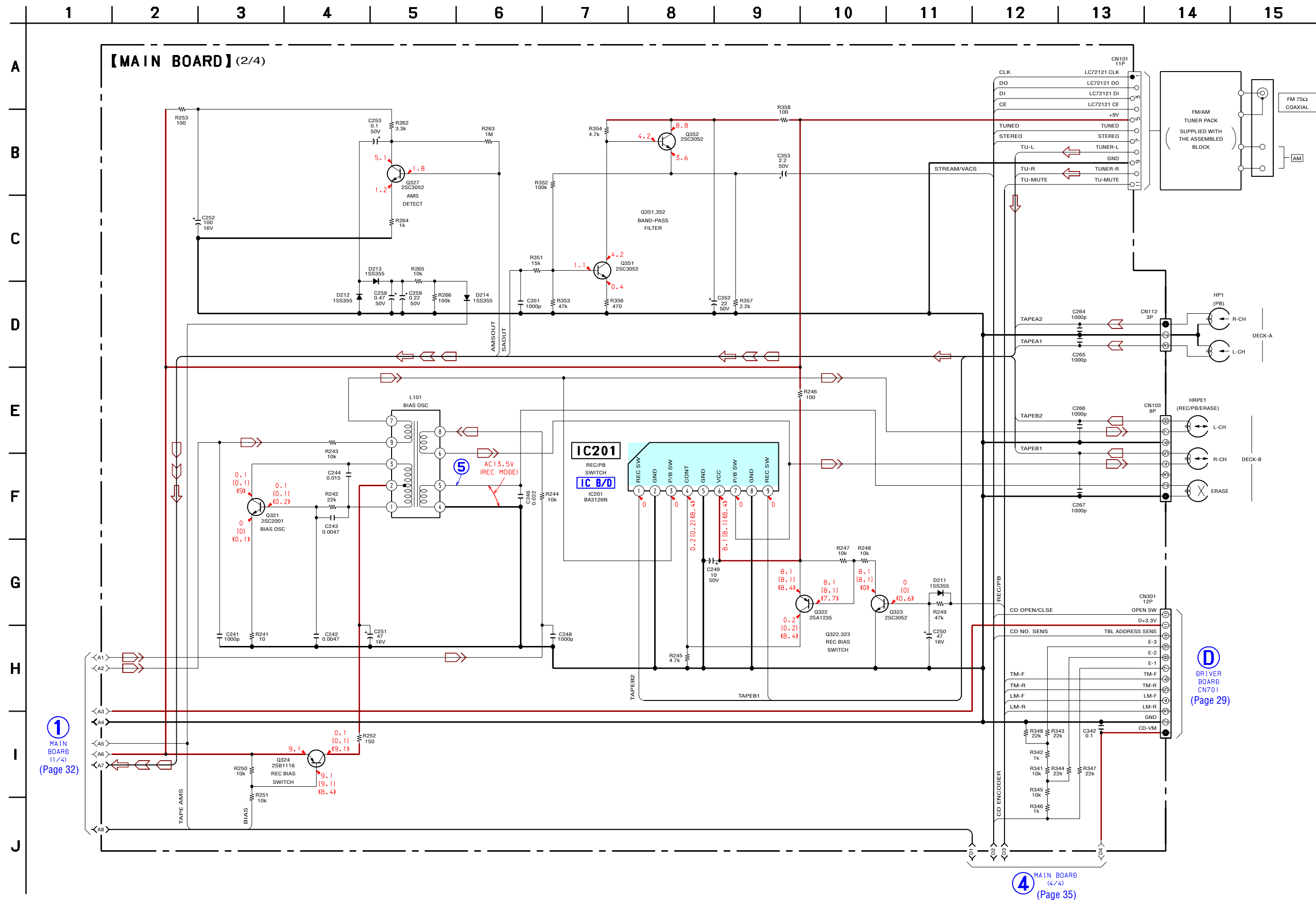
6-10. SCHEMATIC DIAGRAM – CDMP3 CONNECT Board –



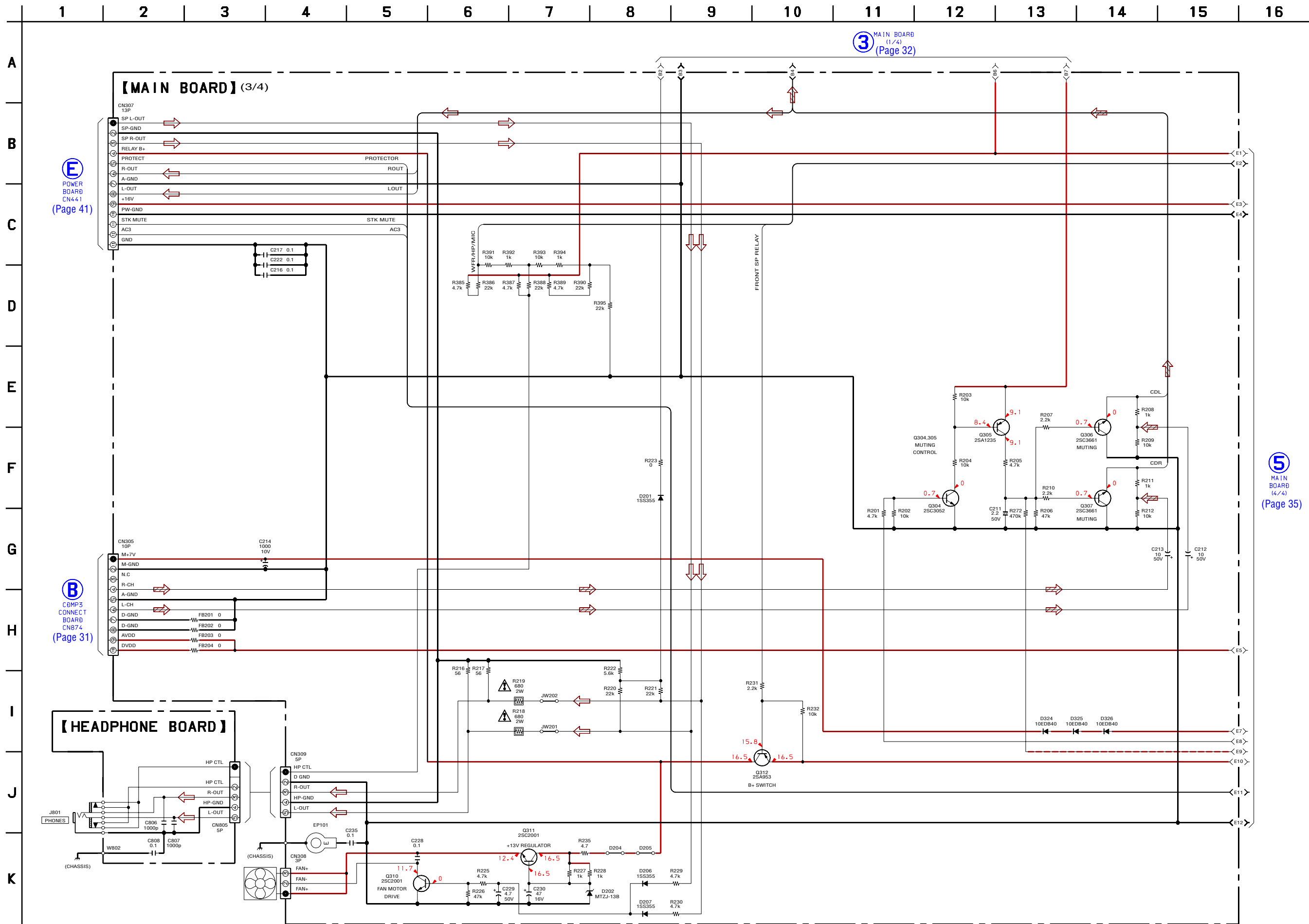
6-11. SCHEMATIC DIAGRAM – MAIN Section (1/4) – • See page 44 for IC Block Diagram.



6-12. SCHEMATIC DIAGRAM – MAIN Section (2/4) – • See page 44 for IC Block Diagram. • See page 44 for Waveform.



6-13. SCHEMATIC DIAGRAM – MAIN Section (3/4) –



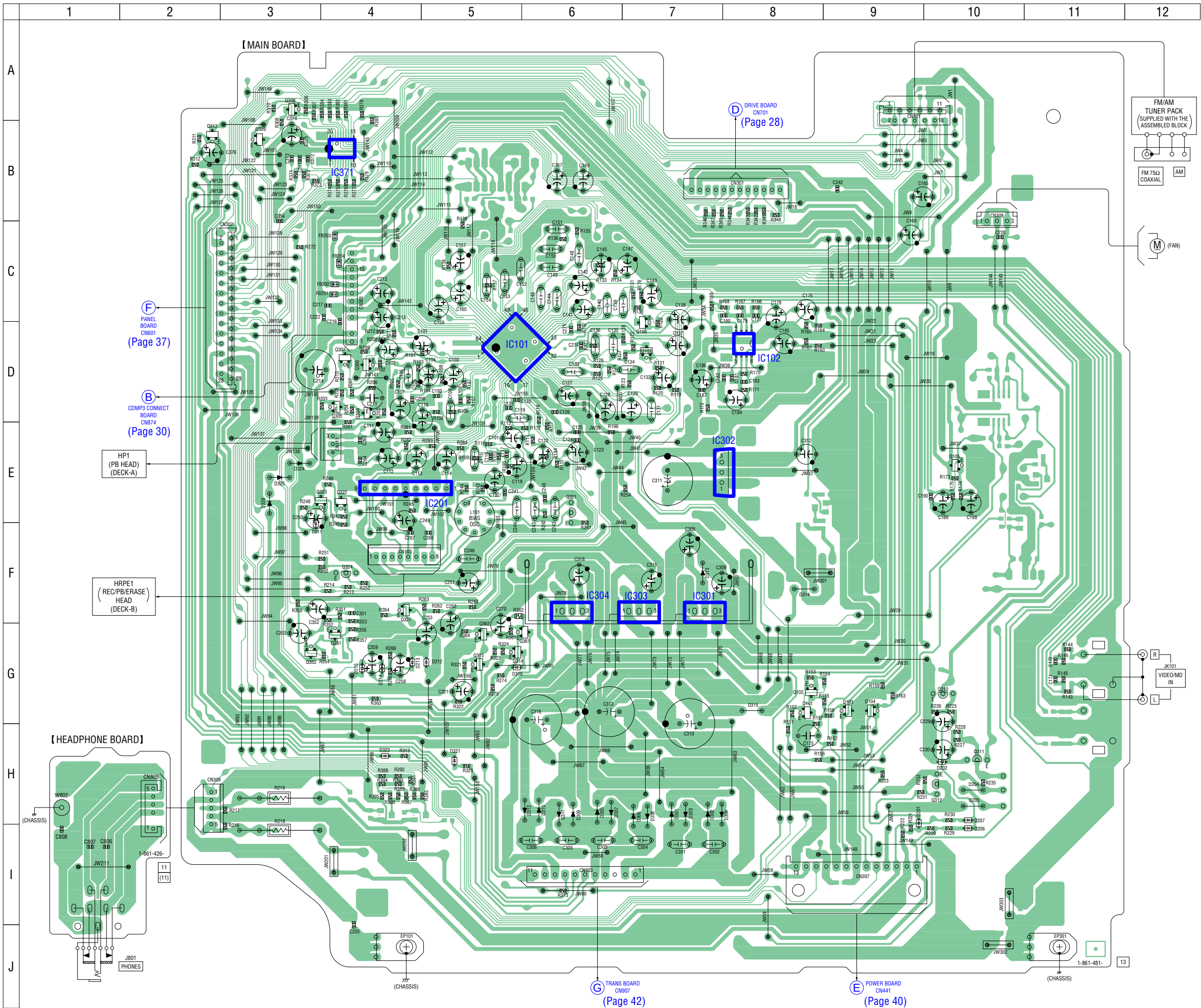
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.



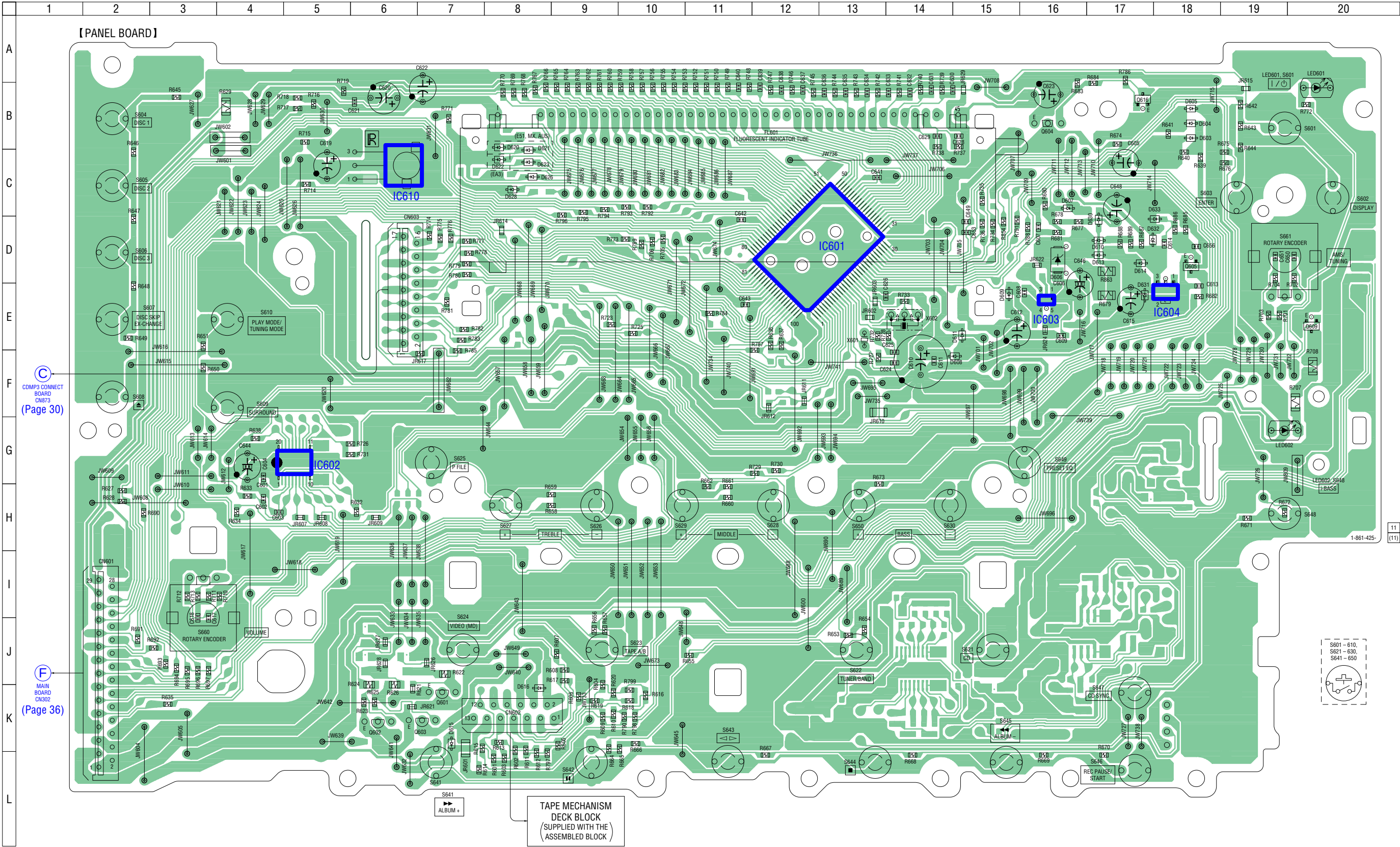
6-15. PRINTED WIRING BOARDS – MAIN Section – • See page 25 for Circuit Boards Location. :Uses unleaded solder.

• Semiconductor Location

Ref. No.	Location
D201	H-9
D202	H-10
D206	I-10
D207	H-10
D211	F-3
D212	G-5
D213	G-4
D214	G-4
D215	G-4
D301	H-7
D302	H-7
D303	H-7
D304	H-7
D305	H-6
D306	H-7
D307	H-6
D308	H-7
D309	H-6
D310	H-6
D311	H-6
D312	H-6
D313	F-7
D316	G-5
D321	H-5
D322	H-4
D324	E-3
D325	E-3
D326	E-3
IC101	D-5
IC102	D-8
IC201	E-4
IC301	F-7
IC302	E-8
IC303	F-7
IC304	F-6
IC371	B-4
Q101	G-8
Q102	G-8
Q103	G-9
Q104	G-9
Q105	E-10
Q106	D-7
Q107	D-7
Q304	D-4
Q305	D-4
Q306	D-4
Q307	D-4
Q308	A-3
Q309	B-3
Q310	G-10
Q311	H-10
Q312	H-10
Q313	B-2
Q314	G-5
Q315	G-5
Q321	E-6
Q322	E-4
Q323	E-4
Q324	F-4
Q327	F-4
Q351	G-4
Q352	G-3
Q361	G-6
Q362	G-5



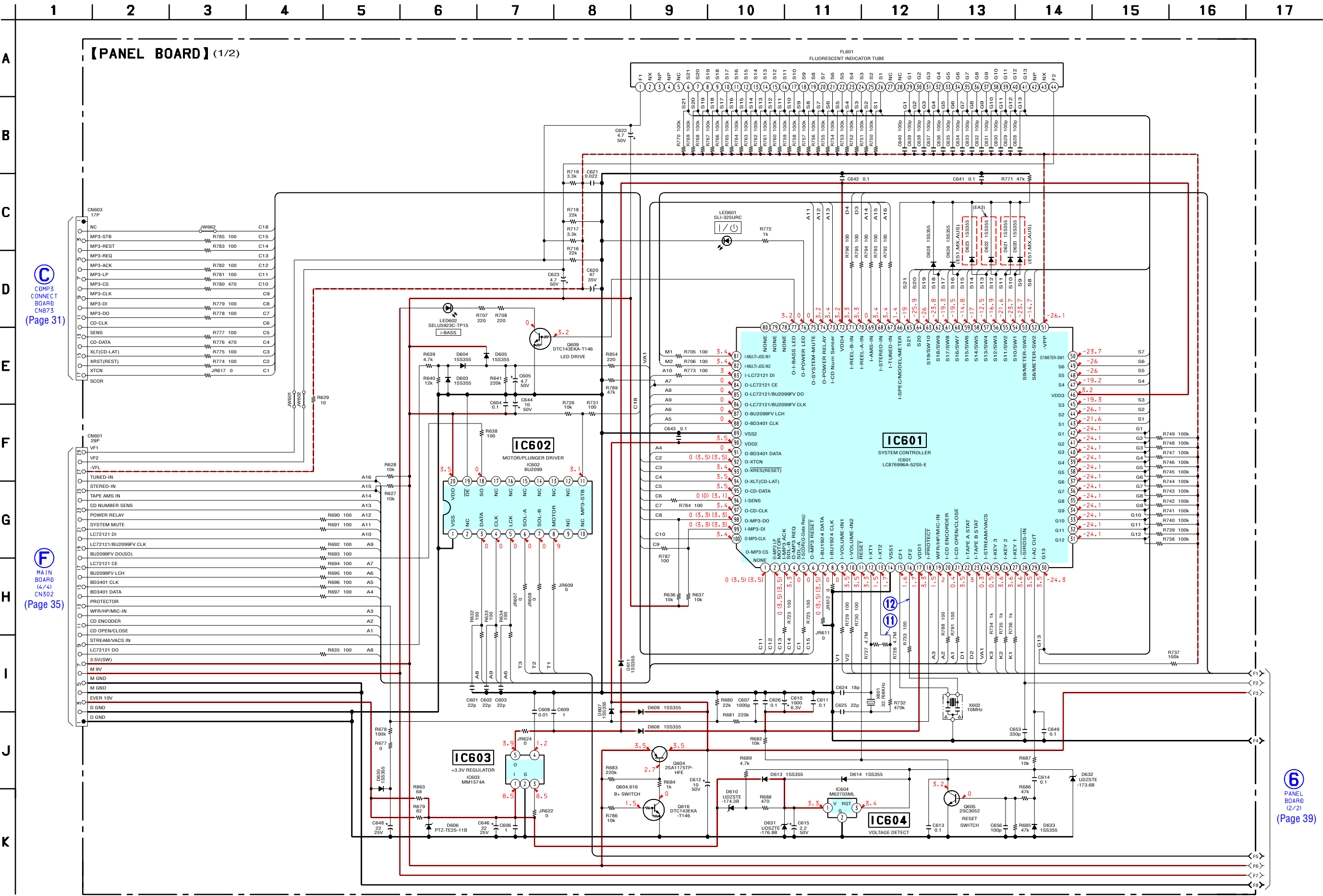
6-16. PRINTED WIRING BOARD – PANEL Section – • See page 25 for Circuit Boards Location.  :Uses unleaded solder.



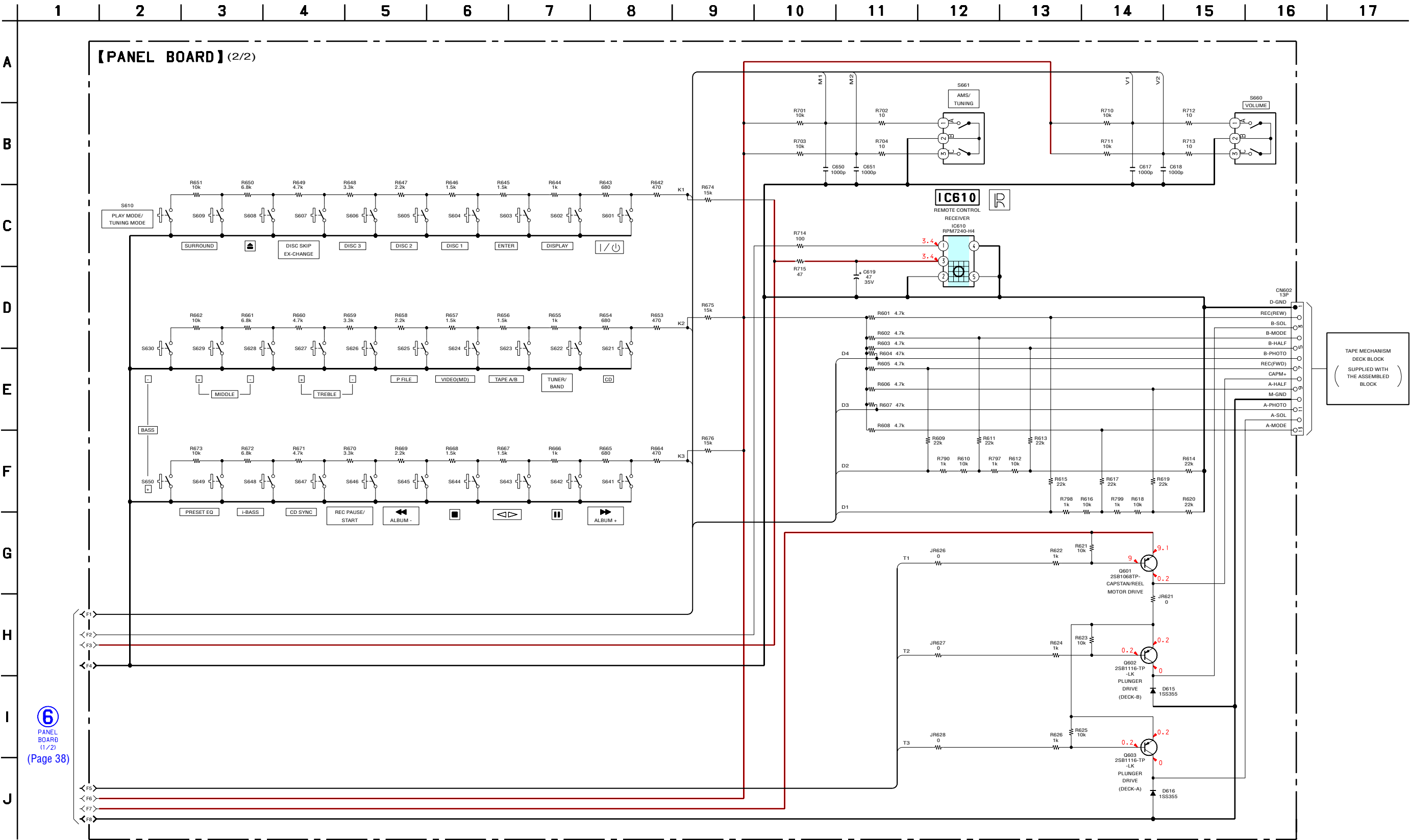
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D603	B-18	D613	D-17	D627	C-7	IC603	E-16	Q603	K-7
D604	B-18	D614	D-17	D628	C-8	IC604	E-18	Q604	B-16
D605	B-18	D615	K-7	D630	D-17	IC610	C-6	Q605	D-18
D606	D-16	D616	K-8	D631	E-17			Q609	E-20
D607	C-16	D620	B-8	D632	D-17	LED601	B-20	Q616	B-17
D608	F-15	D621	C-8	D633	D-18	LED602	G-19		
D609	E-15	D622	C-8						
D610	D-17	D623	C-8	IC601	D-13	Q601	K-7		
D611	E-15	D626	C-8	IC602	G-5	Q602	K-6		

6-17. SCHEMATIC DIAGRAM – PANEL Section (1/2) – • See page 44 for Waveforms. • See page 50 for IC Pin Function Description.



6-18. SCHEMATIC DIAGRAM – PANEL Section (2/2) –

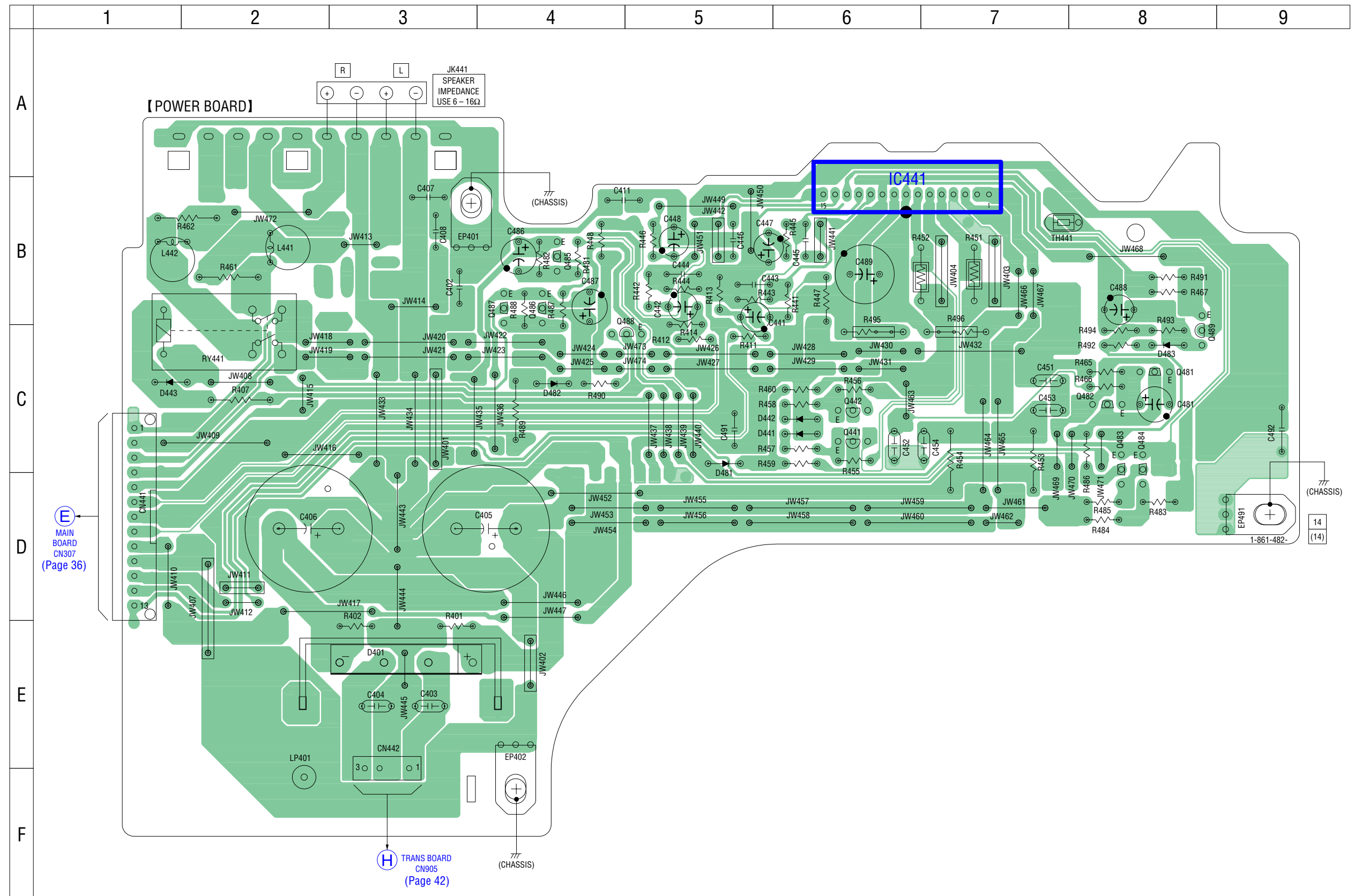


6
PANEL BOARD (1/2)
(Page 38)

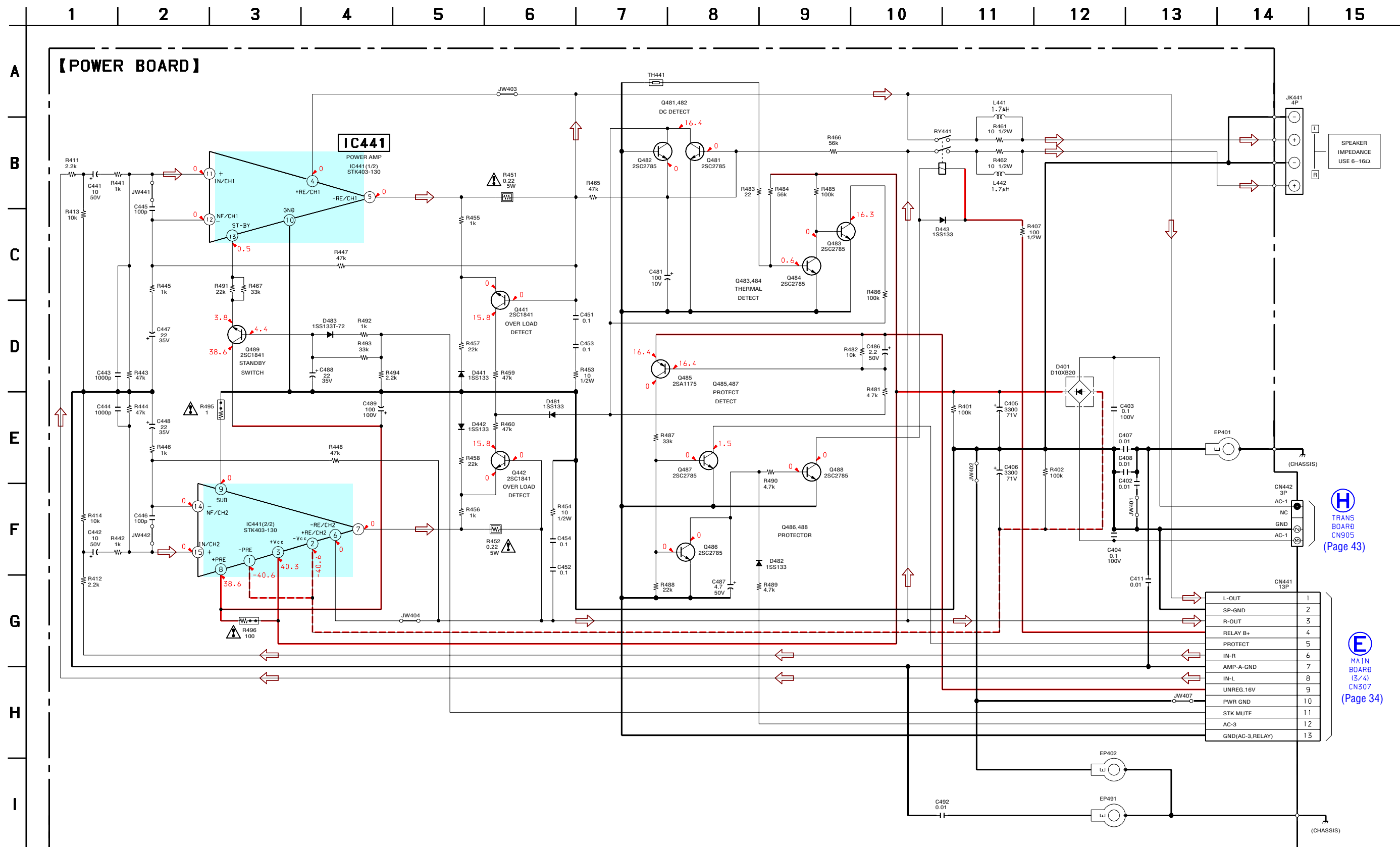
6-19. PRINTED WIRING BOARD – POWER AMP Section – • See page 25 for Circuit Boards Location. :Uses unleaded solder.

- **Semiconductor Location**

Ref. No.	Location
D401	E-3
D441	C-6
D442	C-6
D443	C-1
D481	C-5
D482	C-4
D483	C-8
IC441	B-6
Q441	C-6
Q442	C-6
Q481	C-8
Q482	C-8
Q483	C-8
Q484	C-8
Q485	B-4
Q486	B-4
Q487	B-4
Q488	C-5
Q489	C-8

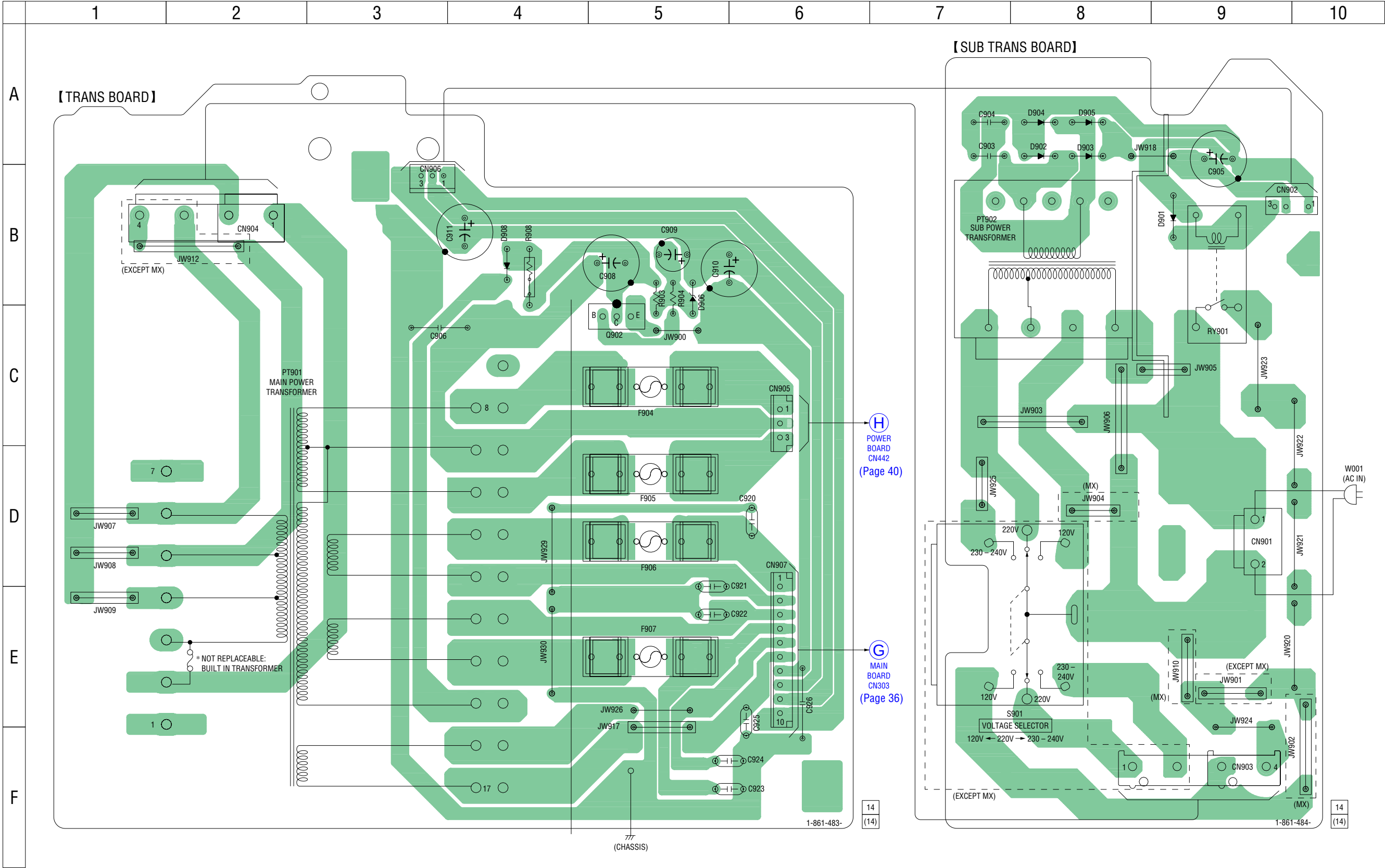


6-20. SCHEMATIC DIAGRAM – POWER AMP Section –



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

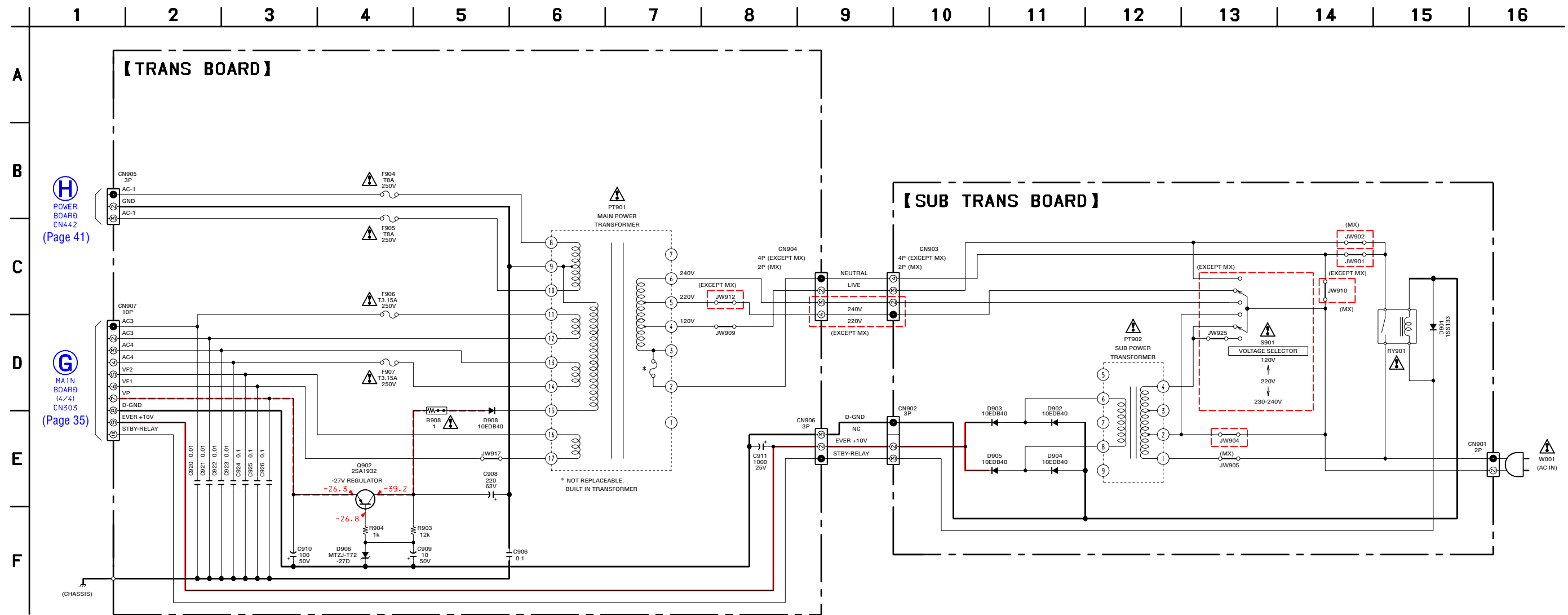
6-21. PRINTED WIRING BOARDS – TRANS Section – • See page 25 for Circuit Boards Location. :Uses unleaded solder.



• Semiconductor Location

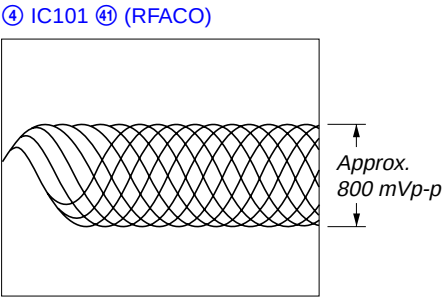
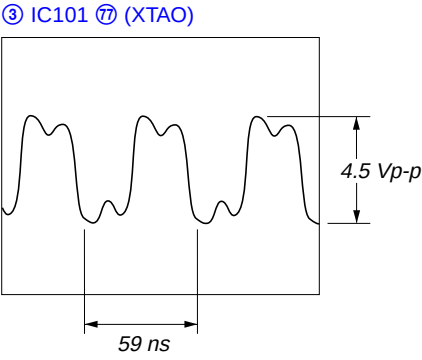
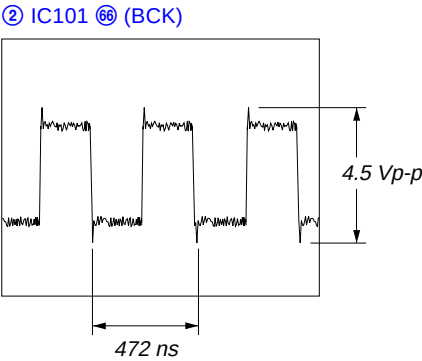
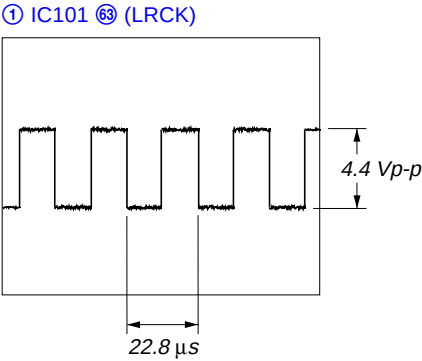
Ref. No.	Location
D901	B-9
D902	A-8
D903	A-8
D904	A-8
D905	A-8
D906	B-5
D908	B-4
Q902	C-5

6-22. SCHEMATIC DIAGRAM – TRANS Section –

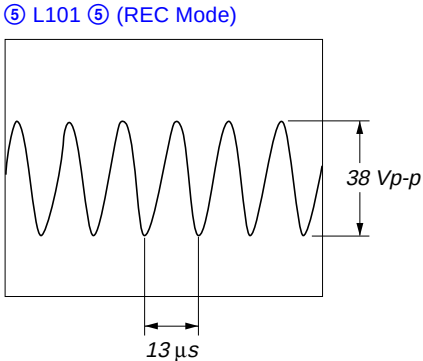


The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety.
Replace only with part number specified.

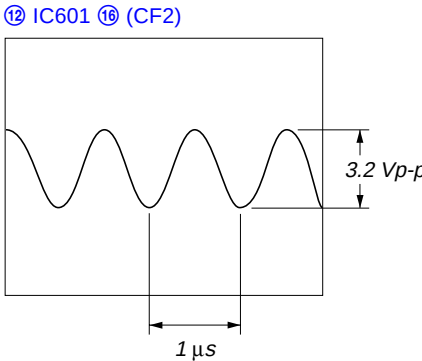
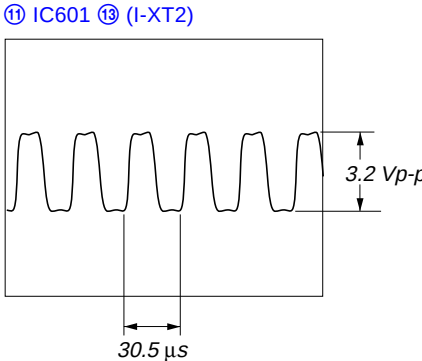
• Waveforms
– CD Board –



– MAIN Board –

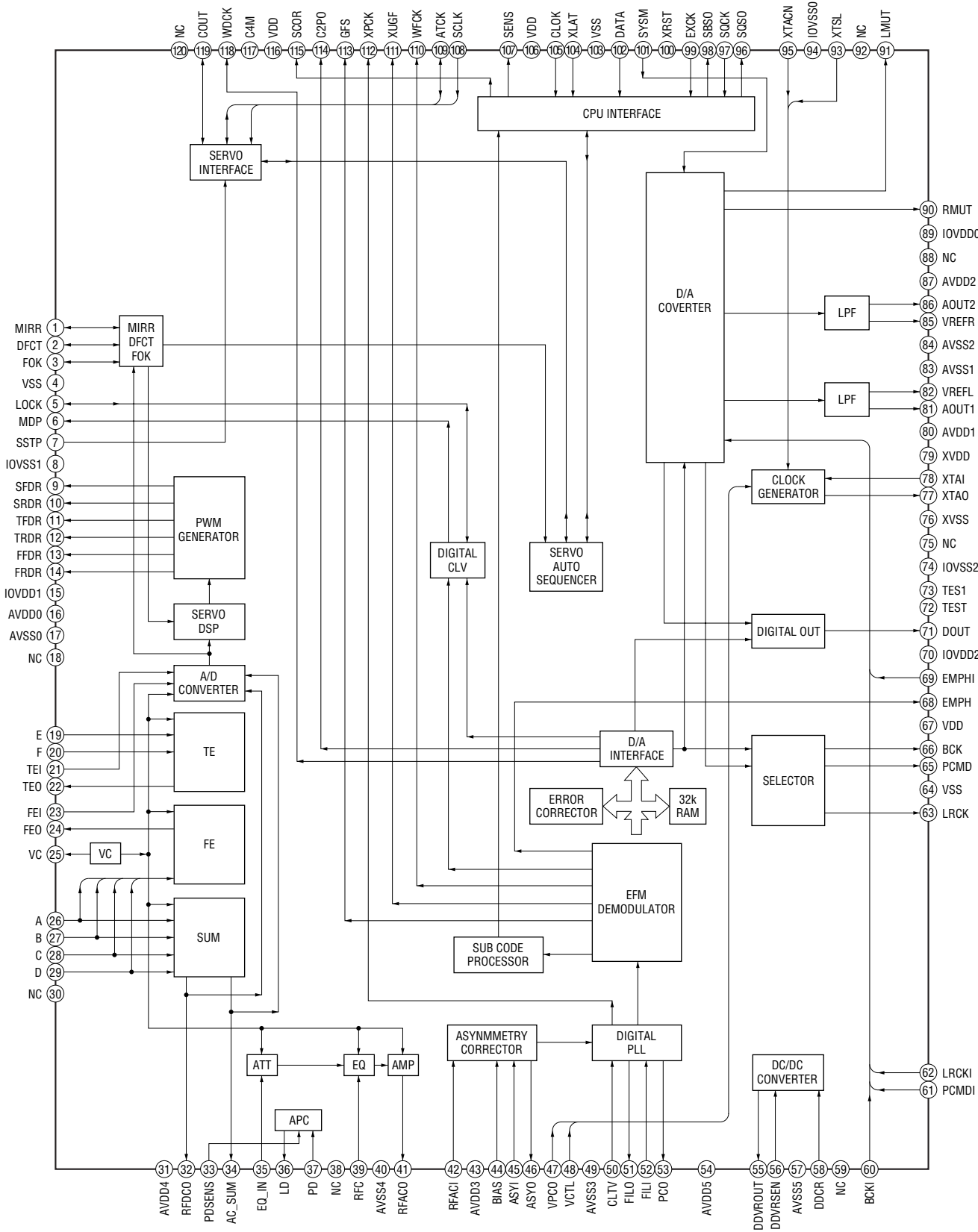


– PANEL Board –

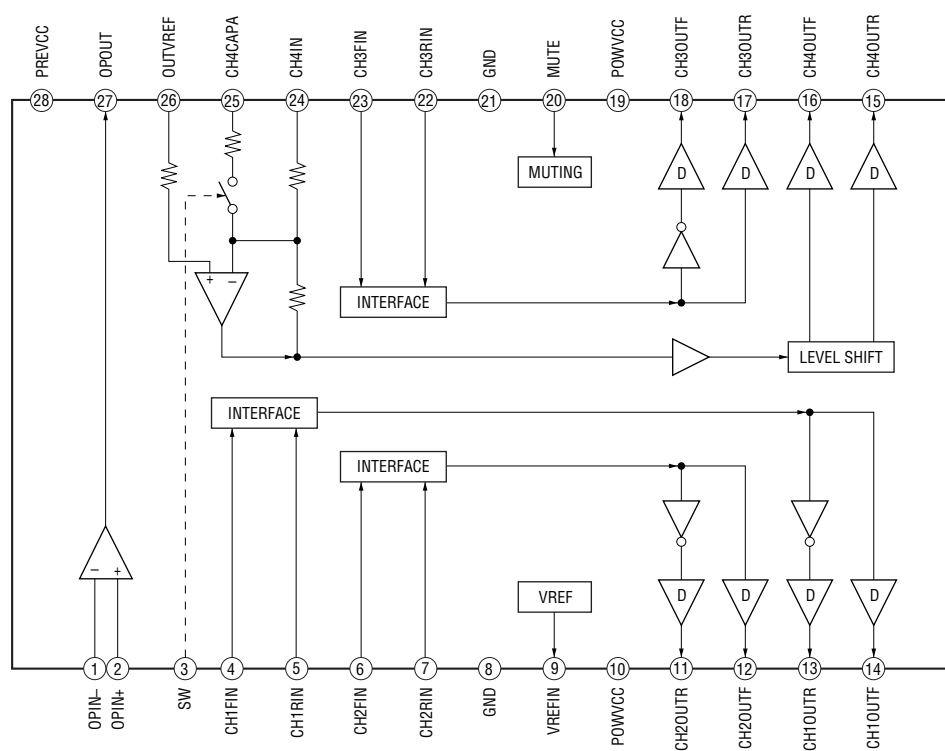


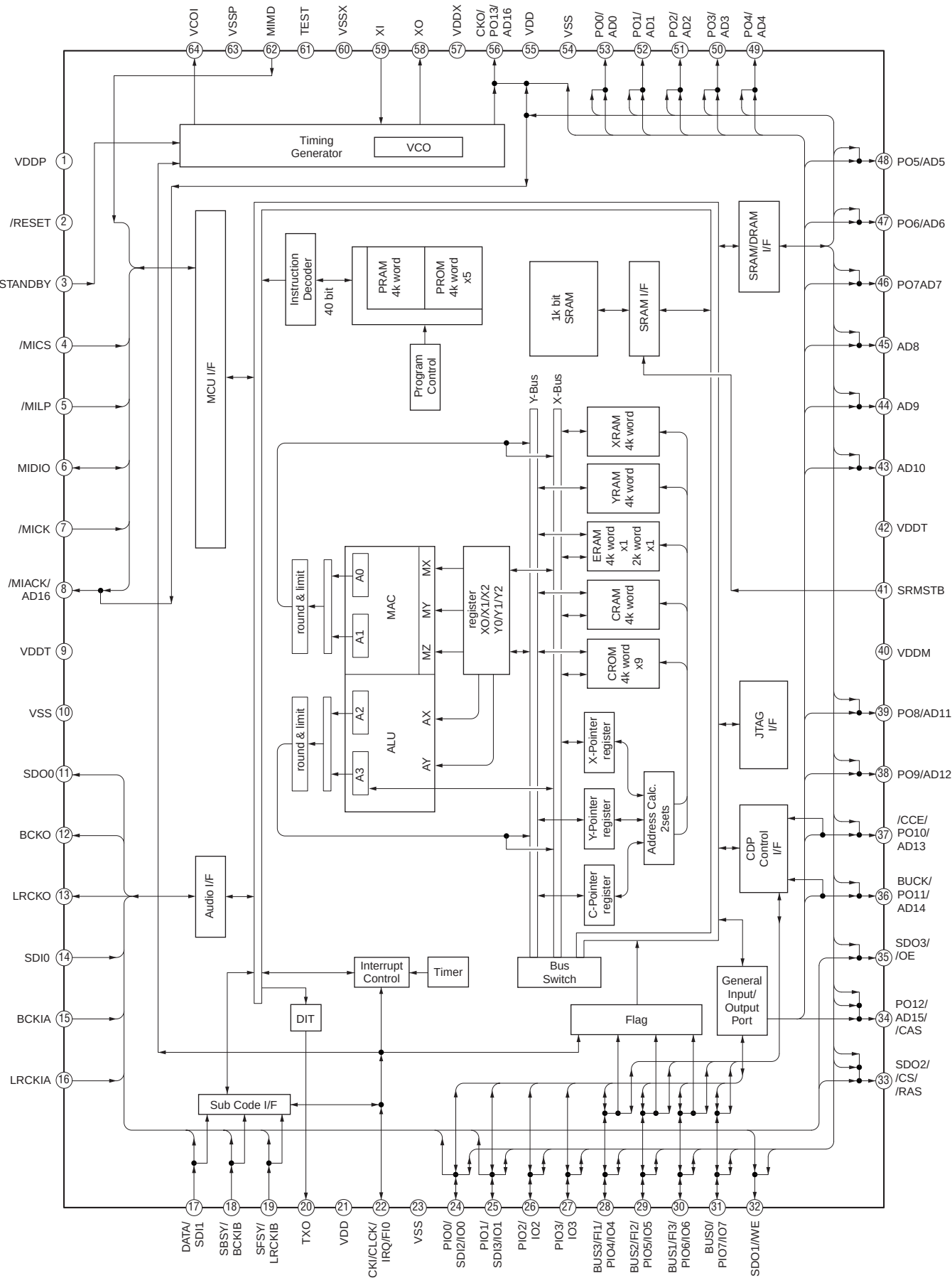
• IC Block Diagrams
– CD Board –

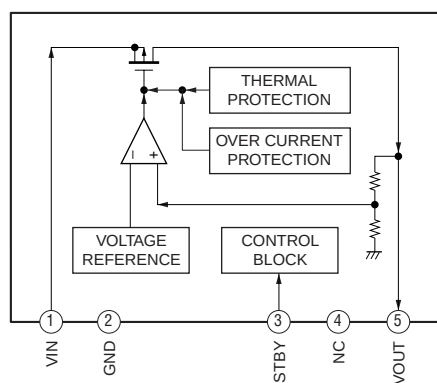
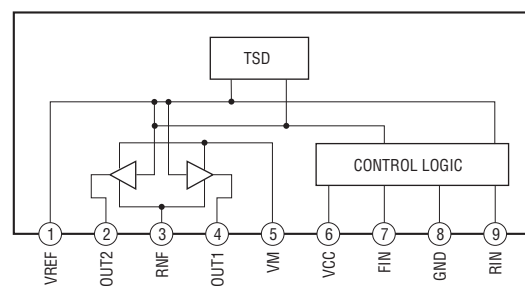
IC101 CXD3059AR



IC251 BA5947FM

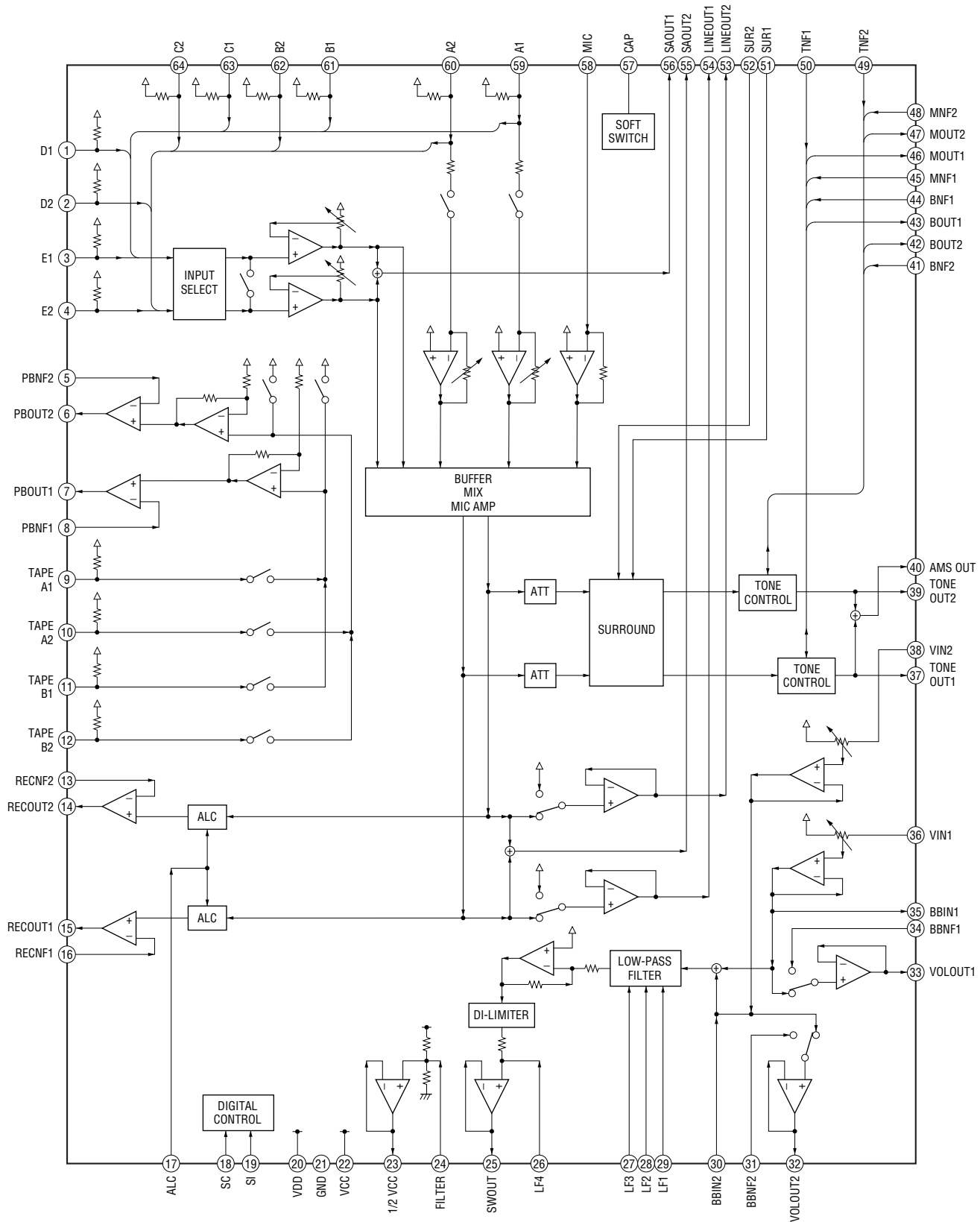




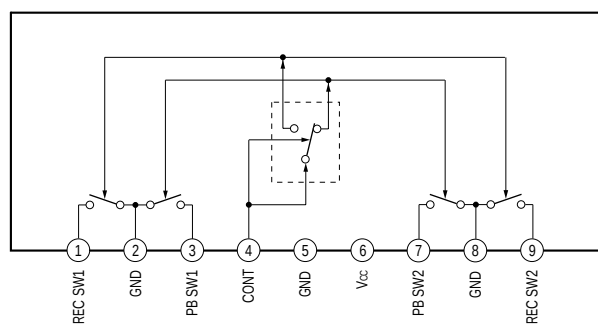
IC303 BH15FB1WG**– DRIVER Board –****IC701, 712 BA6956AN**

– MAIN Board –

IC101 BD3401KS2



IC201 BA3126N



• IC Pin Function Description

MAIN BOARD IC371 BU2099FV (LOADING/TABLE MOTOR DRIVER)

Pin No.	Pin Name	I/O	Description
1	VSS	—	Ground terminal
2	N.C.	—	Not used
3	DATA	I	Serial data input from the motor/plunger driver
4	CLOCK	I	Serial data transfer clock signal input from the system controller
5	LCH	I	Latch pulse signal input from the system controller
6	Q0	O	Recording/playback selection signal output terminal
7	BIAS	O	Recording bias control signal output terminal
8, 9	Q2, Q3	O	Not used
10	Q4	O	CD muting on/off control signal output terminal
11	Q5	O	Tuner muting on/off control signal output to the FM/AM tuner pack
12	Q6	O	Power amplifier on/off control signal output terminal
13	Q7	O	Loading motor drive signal output terminal
14	Q8	O	Loading motor drive signal output terminal
15	Q9	O	Table motor drive signal output terminal
16	Q10	O	Table motor drive signal output terminal
17	Q11	O	Front speaker on/off relay drive control signal output terminal
18	SO	O	Serial data output terminal Not used
19	OE	—	Not used
20	VDD	—	Power supply terminal (+3.3V)

PANEL BOARD IC601 LC876996A-52S5-E (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	O-MP3 CS	O	Chip select signal output to the MP3 decoder
2	O-MP3 LP	O	Latch pulse signal output to the MP3 decoder
3	I-MP3 ACK	I	Acknowledge signal input from the MP3 decoder
4	I-MP3 REQ	I	Request signal input from the MP3 decoder
5	I-SCOR (Q-DATA REQ)	I	Subcode Q data request signal input from the CD DSP
6	O-MP3 RESET	O	Reset signal output to the MP3 decoder “L”: reset
7	I-BU1924 DATA	I	RDS serial data input from the FM/AM tuner pack Not used
8	I-BU1924 CLK	I	RDS serial data transfer clock signal input from the FM/AM tuner pack Not used
9	I-VOLUME-IN1	I	Jog dial pulse input terminal (VOLUME)
10	I-VOLUME-IN2	I	Jog dial pulse input terminal (VOLUME)
11	RESET	I	System reset signal input terminal “L”: reset For several hundreds msec. after the power supply rises, “L” is input, then it changes to “H”
12	I-XT1	I	System clock input terminal (32.768 kHz)
13	O-XT2	O	System clock output terminal (32.768 kHz)
14	VSS1	—	Ground terminal
15	CF1	I	System clock input terminal (10 MHz)
16	CF2	O	System clock output terminal (10 MHz)
17	VDD1	—	Power supply terminal (+3.3V)
18	I-PROTECT	I	Protect signal input from the amplifier circuit
19	WFR/HP/MIC-IN	I	Headphone detection signal input from the electrical volume
20	I-CD ENCODER	I	Disc tray address detection signal input terminal
21	I-CD OPEN/CLOSE	I	Disc tray open/close detection signal input terminal
22	I-TAPE A STAT	I	Deck-A cassette detection signal, deck-A mode detection signal and recording (reverse direction) detection signal input terminal (A/D input)
23	I-TAPE B STAT	I	Deck-B cassette detection signal, deck-B mode detection signal and recording (forward direction) detection signal input terminal (A/D input)
24	I-STREAM/VACS	I	VACS/stream signal input terminal (A/D input)
25 to 27	I-KEY3 to I-KEY1	I	Front panel key input terminal (A/D input)
28	I-SIRCS IN	I	Remote control signal input terminal
29	I-AC CUT	I	AC detection signal input terminal “L”: AC off
30 to 42	G13 to G1	O	Grid drive signal output to the fluorescent indicator tube
43 to 45	S1 to S3	O	Segment drive signal output to the fluorescent indicator tube
46	VDD3	—	Power supply terminal (+3.3V)
47 to 50	S4 to S7	O	Segment drive signal output to the fluorescent indicator tube
51	–VPP	—	Power supply terminal (–27V)
52 to 65	S8 to S21	O	Segment drive signal output to the fluorescent indicator tube
66	I-SPEC/ MODEL/METER	I	Destination setting signal, model setting signal and VACS/stream gain control signal input terminal
67	I-TUNED-IN	I	Tuning detection signal input from the FM/AM tuner pack “L”: tuned
68	I-STEREO-IN	I	FM stereo detection signal input from the FM/AM tuner pack “L”: stereo
69	I-AMS-IN	I	Auto music sensor detection signal input from the electrical volume “L”: music is present, “H”: music is not present
70	I-REEL-A-IN	I	Deck-A tape reel rotating detection signal input terminal
71	I-REEL-B-IN	I	Deck-B tape reel rotating detection signal input terminal

Pin No.	Pin Name	I/O	Description
72	VDD4	—	Power supply terminal (+3.3V)
73	I-CD NUM SENSOR	I	CD table address detection signal input terminal
74	O-POWER RELAY	O	Power on/off control signal output terminal “H”: power on
75	O-SYSTEM-MUTE	O	System muting on/off control signal output terminal “H”: muting on
76	O-POWER LED	O	LED drive signal output of the I/⏻ (power) indicator “H”: LED on
77	O-I-BASS LED	O	LED drive signal output of the i-BASS indicator “H”: LED on
78 to 80	NONE	O	Not used
81	I-MULTI-JOG IN1	I	Jog dial pulse input terminal (MULTI JOG)
82	I-MULTI-JOG IN2	I	Jog dial pulse input terminal (MULTI JOG)
83	I-LC72121 DI	I	Serial data input from the FM/AM tuner pack
84	O-LC72121 CE	O	Chip enable signal output to the FM/AM tuner pack
85	O-LC72121/ BU2099FV DO	O	Serial data output to the FM/AM tuner pack and motor/plunger drive
86	O-LC72121/ BU2099FV CLK	O	Serial data transfer clock signal output to the FM/AM tuner pack, loading/table motor driver and motor/plunger driver
87	O-BU2099FV LCH	O	Latch pulse signal output to the loading/table motor driver and motor/plunger driver
88	O-BU3401 CLK	O	Serial data transfer clock signal output to the electrical volume
89	VSS2	—	Ground terminal
90	VDD2	—	Power supply terminal (+3.3V)
91	O-BU3401 DATA	O	Serial data output to the electrical volume
92	O-XTCN	O	Oscillator control signal output to the CD DSP
93	O-X-RES (RESET)	O	Reset signal output to the CD DSP and motor/coil driver “L”: reset
94	O-XLT (CD-LAT)	O	Latch pulse signal output to the CD DSP
95	O-CD-DATA	O	Serial data output to the CD DSP
96	I-SENS	I	Serial data input from the CD DSP
97	O-CD-CLK	O	Serial data transfer clock signal output to the CD DSP
98	O-MP3-DO	O	Serial data output to the MP3 decoder
99	I-MP3-DI	I	Serial data input from the MP3 decoder
100	O-MP3-CLK	O	Serial data transfer clock signal output to the MP3 decoder

PANEL BOARD IC602 BU2099FV (MOTOR/PLUNGER DRIVER)

Pin No.	Pin Name	I/O	Description
1	VSS	—	Ground terminal
2	NC	—	Not used
3	DATA	I	Serial data input from the system controller
4	CLOCK	I	Serial data transfer clock signal input from the system controller
5	LCH	I	Latch pulse signal input from the system controller
6	SOL-A	O	Deck-A side trigger plunger drive signal output terminal
7	SOL-B	O	Deck-B side trigger plunger drive signal output terminal
8	MOTOR	O	Capstan/reel motor drive signal output terminal
9, 10	NC	—	Not used
11	MP3-STB	O	Standby signal output to the MP3 decoder
12 to 17	NC	—	Not used
18	SO	O	Serial data output to the loading/table motor driver
19	$\overline{\text{OE}}$	—	Not used
20	VDD	—	Power supply terminal (+3.3V)

SECTION 7

EXPLODED VIEWS

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) . . . (RED)

↑
Parts Color

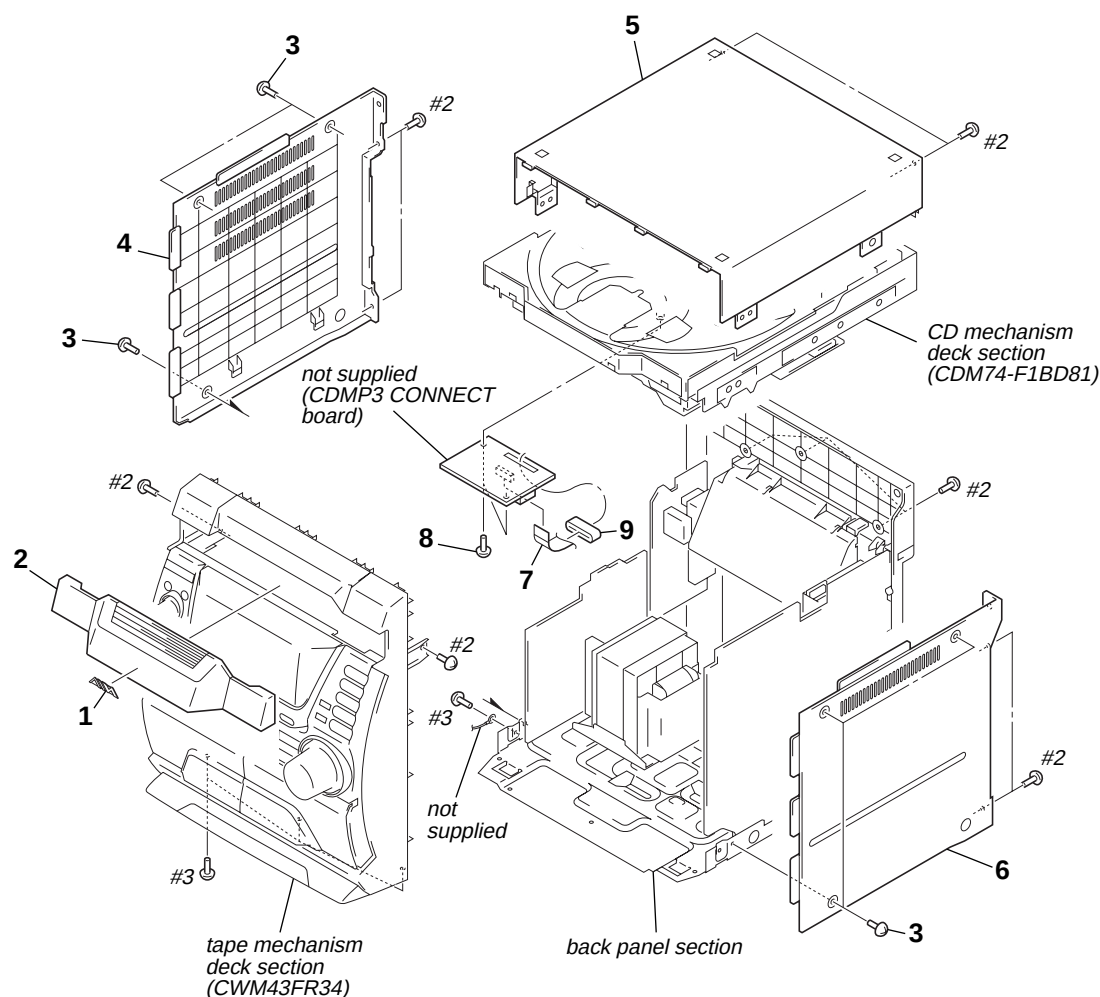
↑
Cabinet's Color

- 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.
- Abbreviation
AUS : Australian model
E51 : Chilean and Peruvian models
MX : Mexican model

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

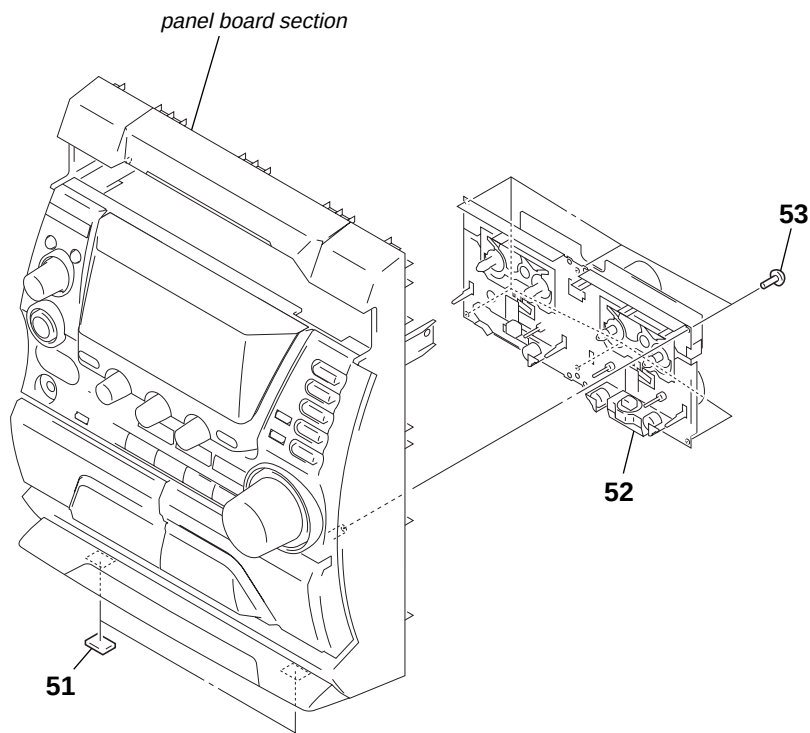
SP : Singapore model
TW : Taiwan model

7-1. CASE SECTION



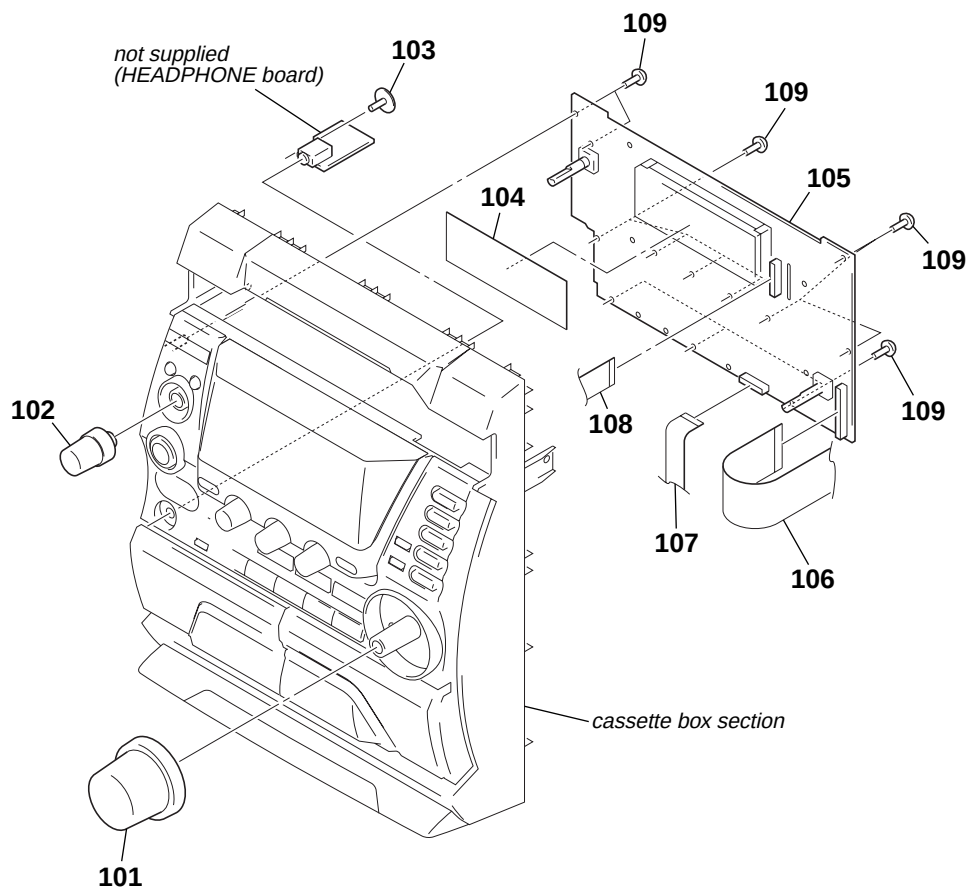
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-245-158-01	EMBLEM		7	1-775-251-11	WIRE (FLAT TYPE) (27 CORE)	
2	4-252-696-01	PANEL, TRAY		8	4-951-620-01	SCREW (2.6X8), +BVTP	
3	3-363-099-32	SCREW (CASE 3 TP2)		9	1-469-854-11	CORE, FERRITE	
4	4-245-183-91	CASE (SIDE-L)		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
5	4-244-849-91	CASE (TOP)		#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
6	4-245-184-91	CASE (SIDE-R)					

7-2. TAPE MECHANISM DECK SECTION
(CWM43FR34)



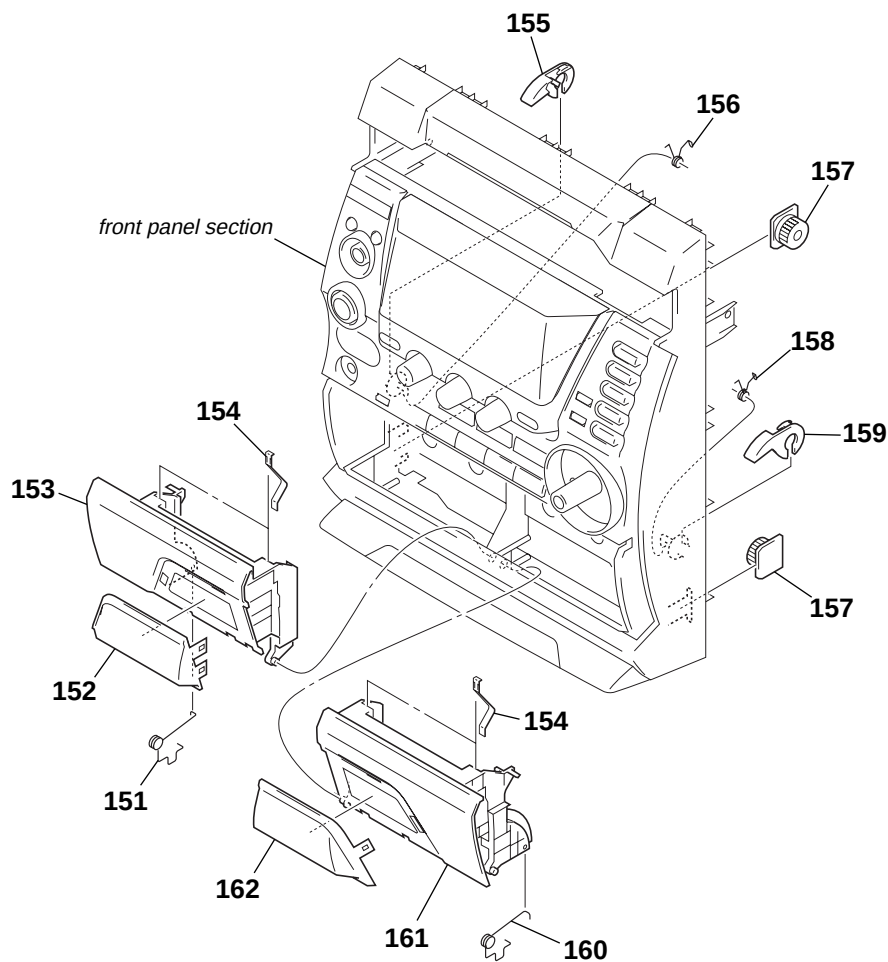
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
51	4-225-252-01	CUSHION (FOOT)		53	4-951-620-01	SCREW (2.6X8), +BVTP	
52	1-796-486-71	DECK, MECHANICAL (CWM43FR34)					

7-3. PANEL BOARD SECTION



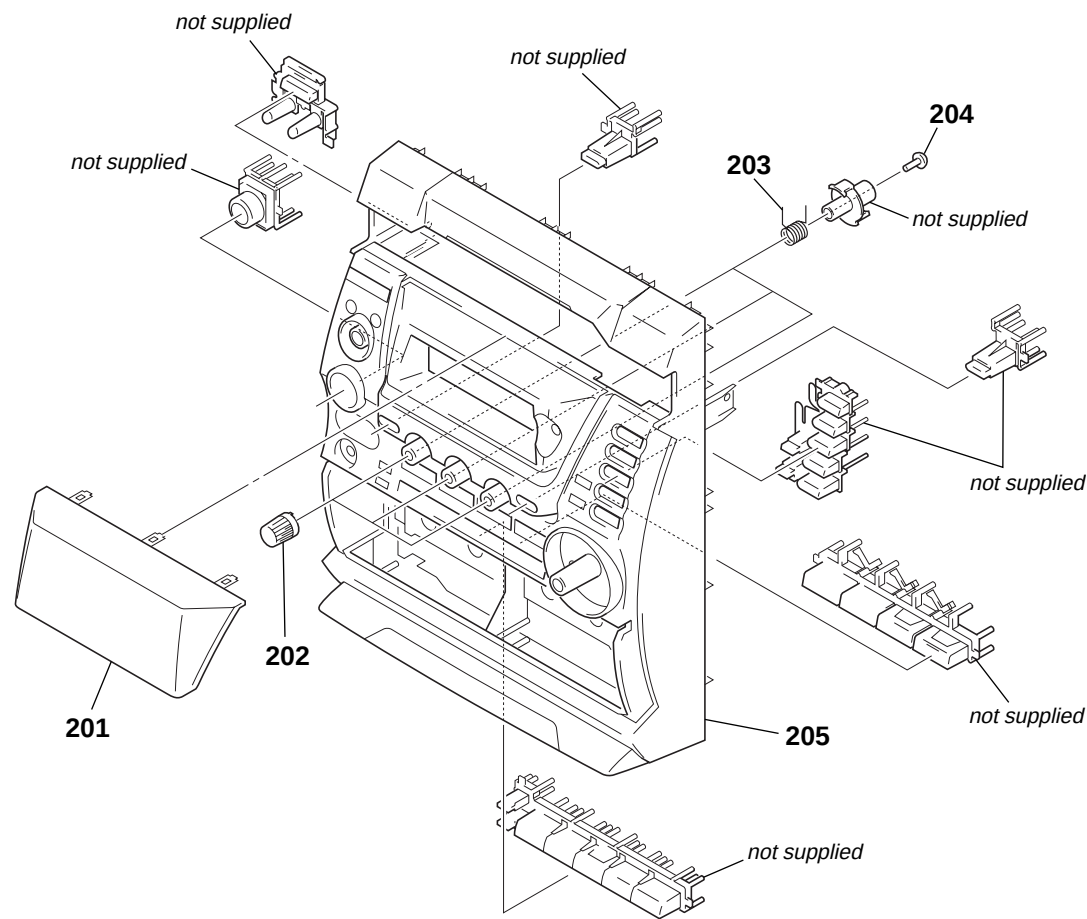
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	4-252-707-01	KNOB (VOL), PLATING ROTARY		105	A-4750-705-A	PANEL BOARD, COMPLETE (E, SP, TW)	
102	4-252-709-01	KNOB (AMS), PLATING ROTARY		105	A-4752-938-A	PANEL BOARD, COMPLETE (AUS)	
103	3-229-336-01	SCREW, +BVWH TAPPING (EXCEPT E51)		106	1-773-288-11	WIRE (FLAT TYPE) (29 CORE)	
103	3-229-336-11	SCREW, +BVWH TAPPING (E51)		107	1-827-145-11	WIRE (FLAT TYPE) (13 CORE)	
104	4-252-718-01	SHEET, FL		108	1-773-048-11	WIRE (FLAT TYPE) (17 CORE)	
105	A-4750-653-A	PANEL BOARD, COMPLETE (E51, MX)		109	4-951-620-01	SCREW (2.6X8), +BVTP	

7-4. CASSETTE BOX SECTION



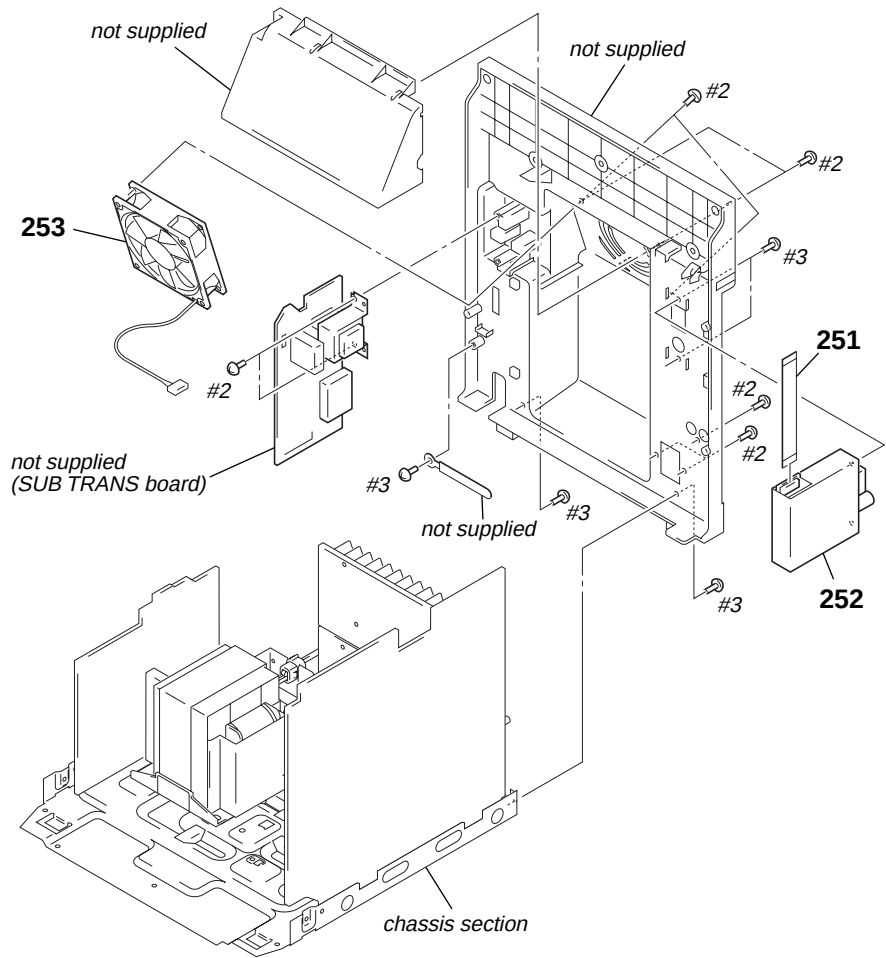
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	4-252-715-01	SPRING (BOX CASS L), TORSION		157	4-224-104-41	DAMPER	
152	4-252-698-01	WINDOW (L), CASSETTE		158	4-231-841-01	SPRING (HEART CAM-B)	
153	4-252-695-01	BOX (L), CASSETTE		159	4-231-825-01	CAM (B), HEART	
154	4-238-631-01	TAPE SPRING		160	4-252-716-01	SPRING (BOX CASS R), TORSION	
155	4-231-824-01	CAM (A), HEART		161	4-252-694-01	BOX (R), CASSETTE	
156	4-231-836-01	SPRING (HEART CAM-A)		162	4-252-699-01	WINDOW (R), CASSETTE	

7-5. FRONT PANEL SECTION



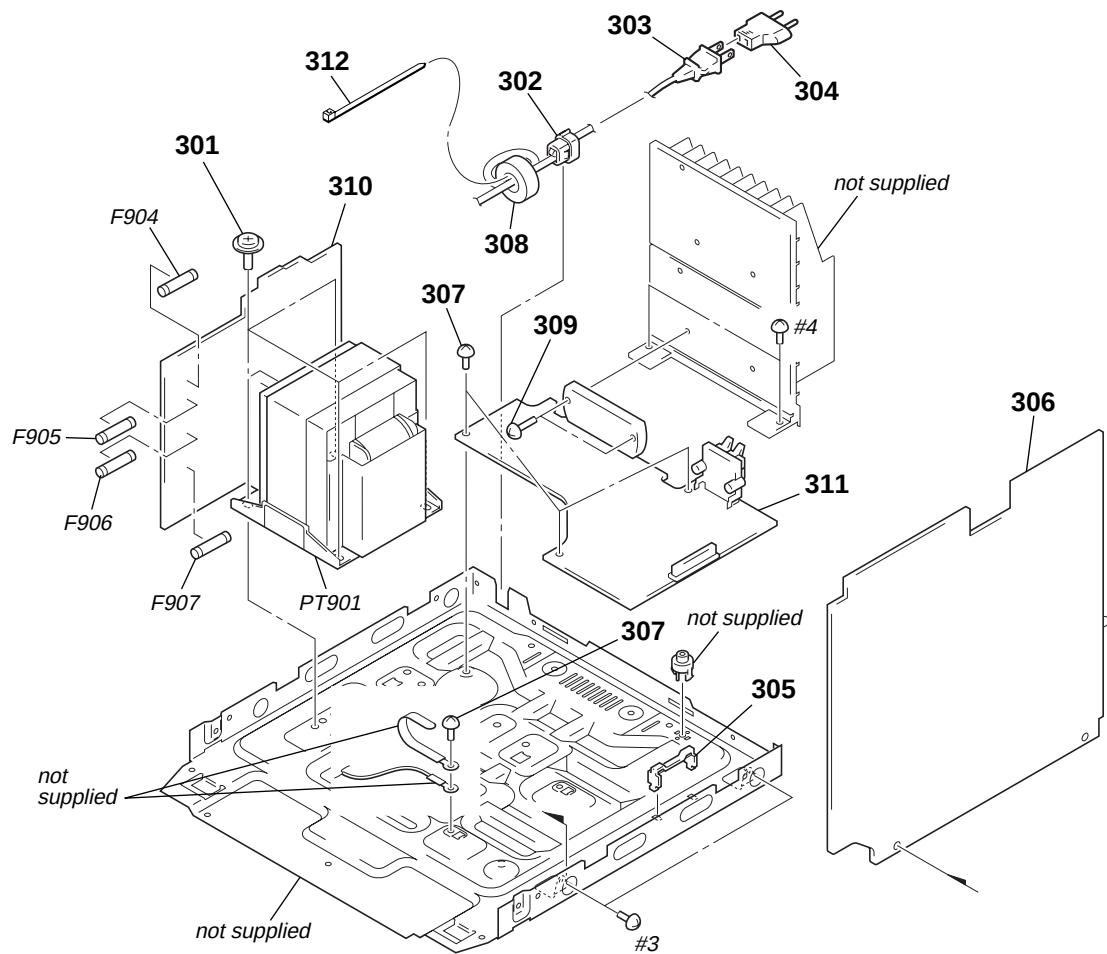
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	4-252-697-01	WINDOW, DISPLAY (E51, MX)		203	4-252-717-01	SPRING (BASS), TORSION	
201	4-252-697-41	WINDOW, DISPLAY (EXCEPT E51, MX)		204	4-218-253-31	+BTTP M2.6	
202	4-252-710-01	KNOB (BASS), PLATING ROTARY		205	4-252-693-01	PANEL, FRONT	

7-6. BACK PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	1-769-940-11	WIRE (FLAT TYPE) (11 CORE)		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
252	1-693-615-11	TUNER (FM/AM)		#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
253	1-763-117-13	FAN, DC					

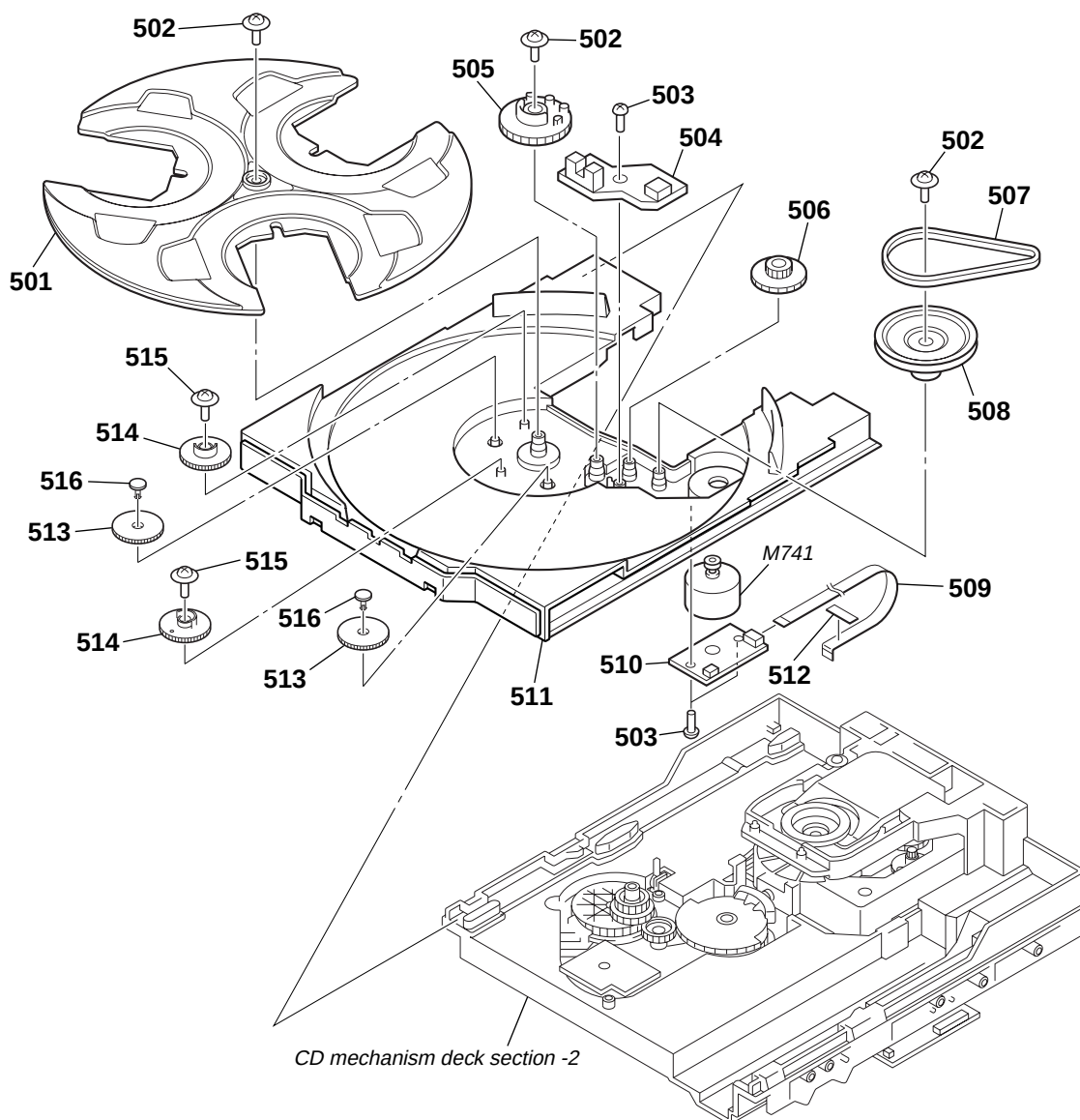
7-7. CHASSIS SECTION



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

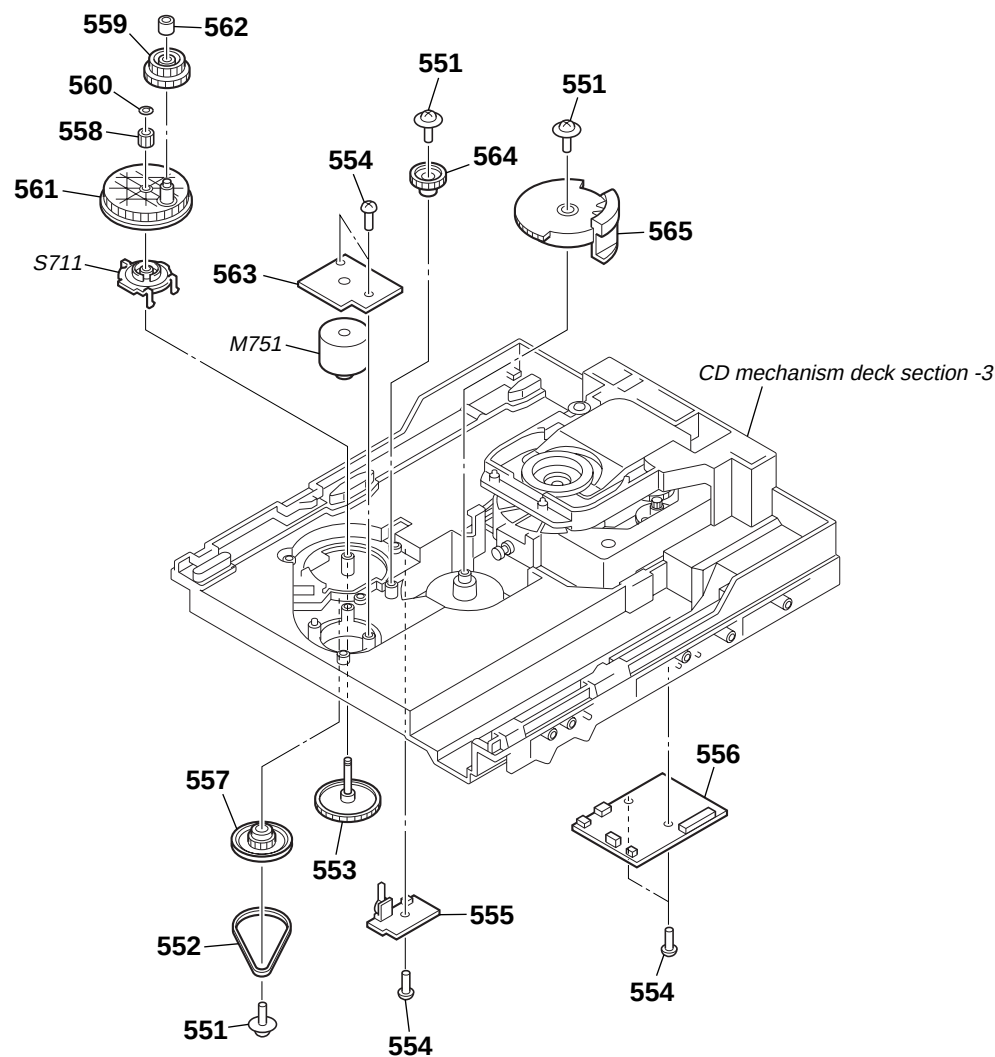
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	4-900-386-01	SCREW		309	3-905-609-41	SCREW (TRANSISTOR)	
302	3-703-244-00	BUSHING (2104), CORD (EXCEPT MX)		310	A-4750-672-A	TRANS BOARD, COMPLETE (EXCEPT MX)	
* 302	3-703-571-12	BUSHING (S) (4516), CORD (MX)		310	A-4752-926-A	TRANS BOARD, COMPLETE (MX)	
Δ 303	1-696-848-12	CORD, POWER (AUS)		311	A-4750-674-A	POWER BOARD, COMPLETE (E51, TW, AUS)	
Δ 303	1-777-071-83	CORD, POWER (E51, SP)		311	A-4750-710-A	POWER BOARD, COMPLETE (E, SP)	
Δ 303	1-827-226-11	CORD, POWER (E, MX)		312	4-059-585-01	TIE, CABLE	
Δ 303	1-827-597-31	CORD, POWER (TW)		Δ F904	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (8A/250V)	
304	1-569-007-12	ADAPTOR, CONVERSION 2P (E)		Δ F905	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (8A/250V)	
304	1-569-008-32	ADAPTOR, CONVERSION (E51, SP)		Δ F906	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15A/250V)	
305	4-988-533-01	HOLDER, PWB		Δ F907	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15A/250V)	
306	A-4750-668-A	MAIN BOARD, COMPLETE (E51, MX)		Δ PT901	1-443-237-11	TRANSFORMER, POWER (EXCEPT MX)	
306	A-4750-707-A	MAIN BOARD, COMPLETE (E, SP)		Δ PT901	1-443-284-11	TRANSFORMER, POWER (MX)	
306	A-4752-940-A	MAIN BOARD, COMPLETE (AUS)		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3 (E51)	
306	A-4752-955-A	MAIN BOARD, COMPLETE (TW)		#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
307	4-242-539-01	BVIT3B+3-8R W/O SLOT		#4	7-685-881-09	SCREW +BVTT 4X8 (S)	
308	1-400-285-11	F-BEAD, E2515MRT					

7-8. CD MECHANISM DECK SECTION-1 (CDM74-F1BD81)



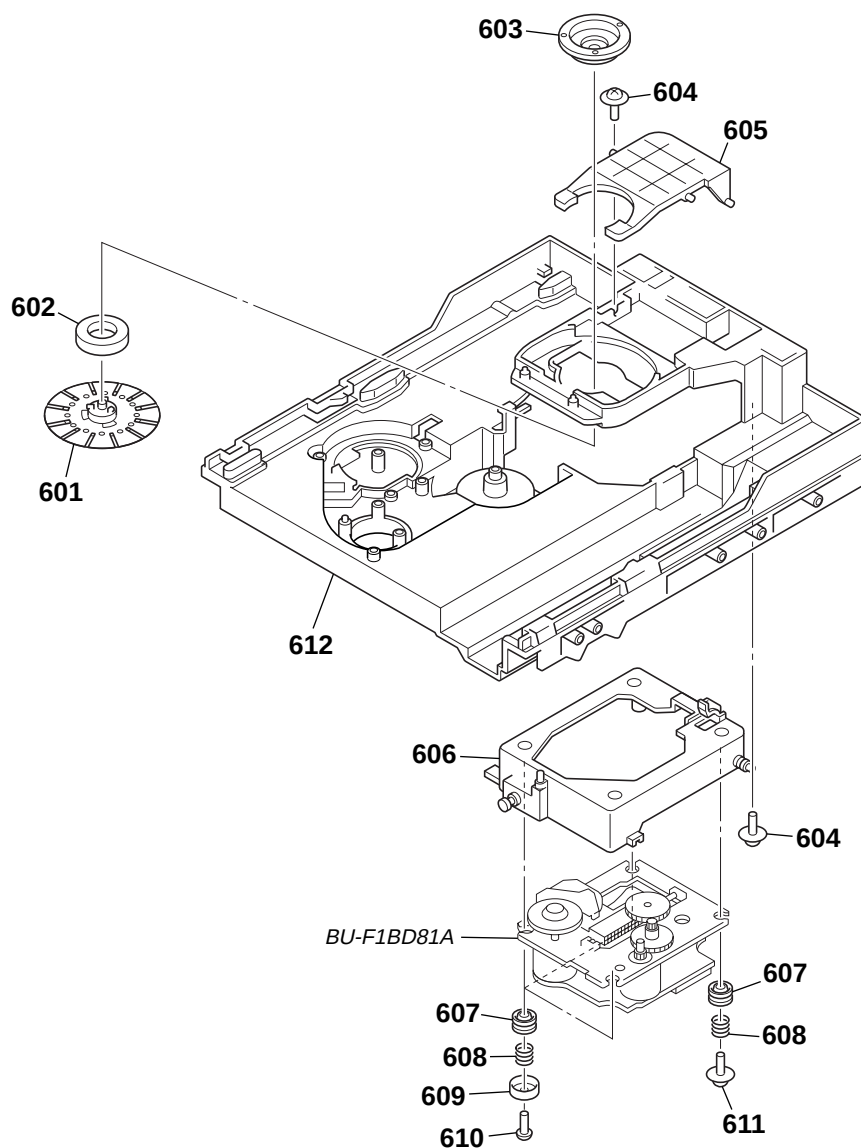
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
501	4-243-815-01	TABLE (LOADING)		510	1-687-134-12	MOTOR (TB) BOARD	
502	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING		511	4-243-816-01	TRAY	
503	4-218-253-21	SCREW (M2.6), +BTTP		512	3-321-598-01	SHEET (BA)	
504	1-687-132-12	SENSOR BOARD		513	4-245-570-01	GEAR (JOINT)	
505	4-243-819-01	GEAR (GENEVA)		514	4-245-571-02	GEAR (STOPPER)	
506	4-243-820-01	GEAR (TABLE)		515	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
507	4-243-823-01	BELT (TABLE)		516	4-245-572-01	BUSHING (GEAR)	
508	4-243-821-01	PULLEY (TABLE)		M741	A-4723-963-A	MOTOR ASSY, TABLE	
509	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)					

7-9. CD MECHANISM DECK SECTION-2
(CDM74-F1BD81)



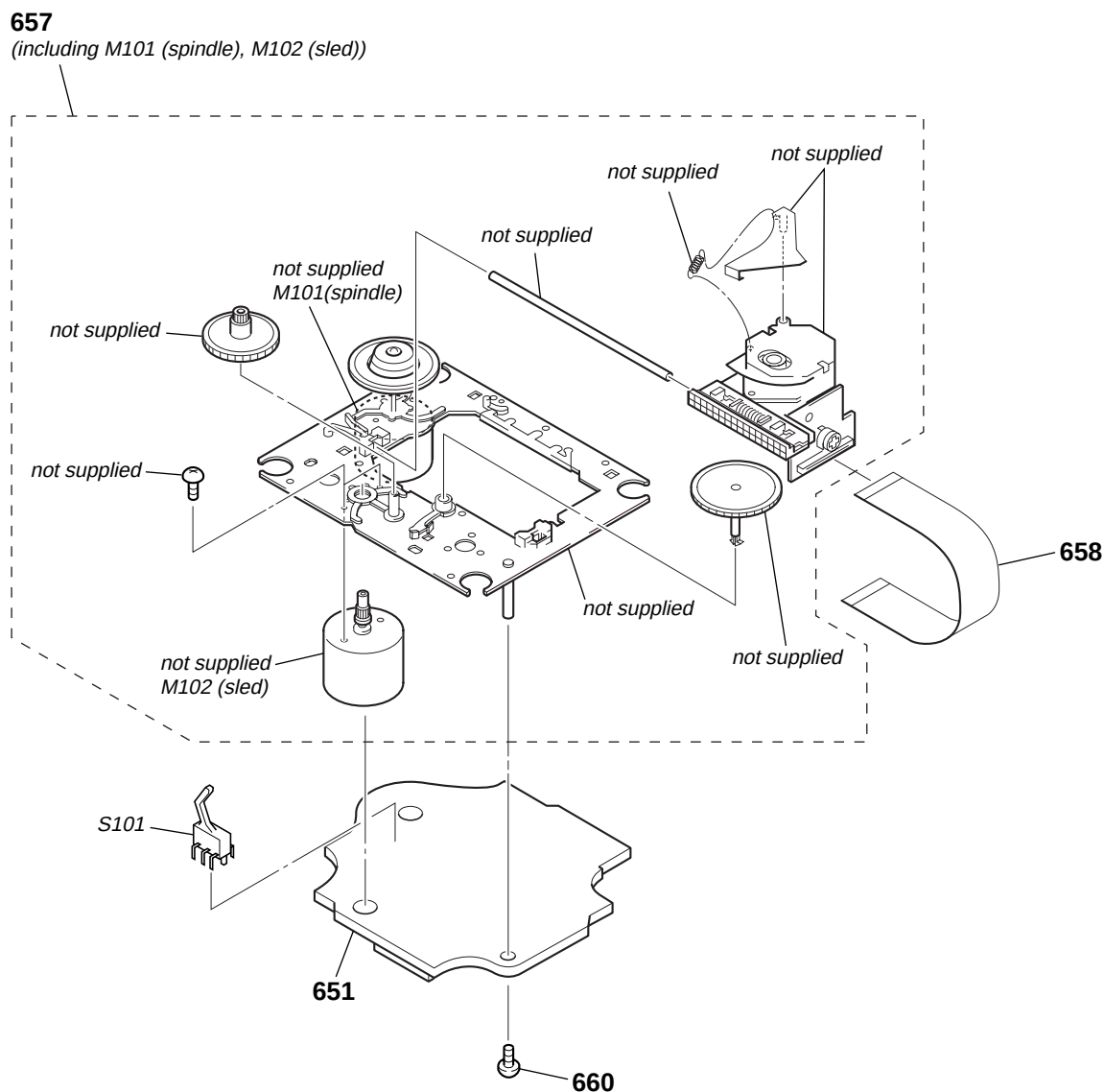
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
551	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING		560	3-016-533-11	WASHER (FR), STOPPER	
552	4-244-034-01	BELT (LOADING)		561	4-244-108-01	GEAR, SWING	
553	4-224-613-01	GEAR (SHAFT)		562	4-224-608-01	COLLAR, SWING	
554	4-218-253-31	SCREW (M2.6), +BTTP		563	1-687-133-12	MOTOR (LD) BOARD	
555	1-687-669-12	SW BOARD		564	4-224-606-01	GEAR (RV)	
556	1-687-135-12	DRIVER BOARD		565	4-243-818-01	GEAR (U/D)	
557	4-225-844-01	GEAR (LOADING A)		M751	A-4736-655-A	MOTOR ASSY, LOADING	
558	4-224-611-01	GEAR (LOADING B)		S711	1-477-680-12	ENCODER, ROTARY	
559	4-224-609-01	GEAR (LOADING C)				(DISC TRAY ADDRESS DETECT)	

7-10. CD MECHANISM DECK SECTION-3 (CDM74-F1BD81)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
601	X-4955-707-2	PULLEY (A5) ASSY, CHUCKING		607	4-227-549-11	INSULATOR	
602	1-471-035-11	MAGNET ASSY		608	4-227-045-31	SPRING (INSULATOR), COIL	
603	4-231-189-01	PULLEY (B), CHUCKING		609	4-231-151-01	STOPPER (BU)	
604	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING		610	4-218-253-31	SCREW (M2.6), +BTTP	
605	4-243-822-02	LEVER (LIFTER)		611	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
606	X-4955-536-1	HOLDER (213) ASSY		612	4-243-817-01	CHASSIS	

7-11. BASE UNIT SECTION (BU-F1BD81A)



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
651	A-4751-431-A	CD BOARD, COMPLETE		660	4-951-620-01	SCREW (2.6X8), +BVTP	
△ 657	8-820-244-11	OPTICAL PICK-UP KSM-215DCP/C2NP		S101	1-771-853-11	SWITCH, DETECTION (LIMIT)	
658	1-827-992-11	WIRE (FLAT TYPE) (16 CORE)					

SECTION 8

ELECTRICAL PARTS LIST

CD

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable
- Abbreviation
AUS : Australian model SP : Singapore model
E51 : Chilean and Peruvian models TW : Taiwan model
MX : Mexican model

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

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

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

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
	A-4751-431-A	CD BOARD, COMPLETE											
		*****					C201	1-128-995-21	ELECT CHIP	100uF	20%	10V	
							C203	1-128-995-21	ELECT CHIP	100uF	20%	10V	
		< CAPACITOR/SHORT >					C209	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
							C210	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C10	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V		C211	1-164-230-11	CERAMIC CHIP	220PF	5%	50V	
C11	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V								
C14	1-164-360-11	CERAMIC CHIP	0.1uF		16V		C212	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	
C15	1-164-360-11	CERAMIC CHIP	0.1uF		16V		C213	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	
C16	1-115-156-11	CERAMIC CHIP	1uF		10V		C251	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V	
							C252	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C17	1-126-246-11	ELECT CHIP	220uF	20%	4V		C255	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C18	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V								
C111	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V		C257	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C112	1-164-315-11	CERAMIC CHIP	470PF	5%	50V		C258	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C113	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V		C259	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
							C260	1-128-394-11	ELECT CHIP	220uF	20%	10V	
C114	1-164-315-11	CERAMIC CHIP	470PF	5%	50V		C302	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C115	1-164-360-11	CERAMIC CHIP	0.1uF		16V								
C116	1-128-995-21	ELECT CHIP	100uF	20%	10V		C303	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C122	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C305	1-126-246-11	ELECT CHIP	220uF	20%	4V	
C123	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C306	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
							C307	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C124	1-162-959-11	CERAMIC CHIP	330PF	5%	50V		C308	1-126-208-21	ELECT CHIP	47uF	20%	4V	
C125	1-164-360-11	CERAMIC CHIP	0.1uF		16V								
C131	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		C309	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C132	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V		C310	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C133	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C311	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
							C312	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C134	1-164-360-11	CERAMIC CHIP	0.1uF		16V		C313	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C141	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V								
C142	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V		C314	1-126-208-21	ELECT CHIP	47uF	20%	4V	
C143	1-164-360-11	CERAMIC CHIP	0.1uF		16V		C315	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C151	1-128-995-21	ELECT CHIP	100uF	20%	10V		C316	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
							C317	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C161	1-164-360-11	CERAMIC CHIP	0.1uF		16V		C318	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C162	1-164-360-11	CERAMIC CHIP	0.1uF		16V								
C163	1-164-360-11	CERAMIC CHIP	0.1uF		16V		C320	1-216-864-11	SHORT CHIP	0			
C171	1-162-919-11	CERAMIC CHIP	22PF	5%	50V								
C172	1-162-920-11	CERAMIC CHIP	27PF	5%	50V								
C174	1-164-360-11	CERAMIC CHIP	0.1uF		16V		CN101	1-770-425-11	CONNECTOR, FFC/FPC 16P				
C181	1-164-360-11	CERAMIC CHIP	0.1uF		16V		CN201	1-818-350-11	CONNECTOR (FFC) 27P				
C182	1-164-360-11	CERAMIC CHIP	0.1uF		16V								
C183	1-124-778-00	ELECT CHIP	22uF	20%	6.3V								
C184	1-124-778-00	ELECT CHIP	22uF	20%	6.3V								
C185	1-164-315-11	CERAMIC CHIP	470PF	5%	50V		FB301	1-500-445-21	FERRITE, EMI (SMD) (2012)				
C186	1-164-315-11	CERAMIC CHIP	470PF	5%	50V								
C194	1-164-360-11	CERAMIC CHIP	0.1uF		16V								
C195	1-164-360-11	CERAMIC CHIP	0.1uF		16V								
C196	1-164-360-11	CERAMIC CHIP	0.1uF		16V		IC101	8-752-425-12	IC CXD3059AR				
							IC251	6-705-808-01	IC BA5947FM				

CD

CDMP3 CONNECT

DRIVER

Ref. No.	Part No.	Description	Remark		
IC301	6-705-365-01	IC TC94A34FG-002			
IC303	6-705-807-01	IC BH15FB1WG			
< TRANSISTOR >					
Q10	6-550-363-01	TRANSISTOR	2SB1690KT146		
< RESISTOR >					
R10	1-216-791-11	METAL CHIP	3.3	5%	1/10W
R11	1-216-864-11	SHORT CHIP	0		
R12	1-216-845-11	METAL CHIP	100K	5%	1/10W
R13	1-218-446-11	METAL CHIP	1	5%	1/10W
R111	1-216-821-11	METAL CHIP	1K	5%	1/10W
R112	1-216-835-11	METAL CHIP	15K	5%	1/10W
R113	1-216-821-11	METAL CHIP	1K	5%	1/10W
R114	1-216-835-11	METAL CHIP	15K	5%	1/10W
R121	1-216-835-11	METAL CHIP	15K	5%	1/10W
R131	1-216-857-11	METAL CHIP	1M	5%	1/10W
R132	1-216-833-11	METAL CHIP	10K	5%	1/10W
R133	1-216-848-11	METAL CHIP	180K	5%	1/10W
R141	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R142	1-216-821-11	METAL CHIP	1K	5%	1/10W
R143	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R151	1-216-864-11	SHORT CHIP	0		
R161	1-216-809-11	METAL CHIP	100	5%	1/10W
R162	1-216-841-11	METAL CHIP	47K	5%	1/10W
R163	1-216-809-11	METAL CHIP	100	5%	1/10W
R165	1-216-864-11	SHORT CHIP	0		
R171	1-216-817-11	METAL CHIP	470	5%	1/10W
R172	1-216-857-11	METAL CHIP	1M	5%	1/10W
R173	1-216-295-00	SHORT CHIP	0		
R181	1-216-809-11	METAL CHIP	100	5%	1/10W
R182	1-216-809-11	METAL CHIP	100	5%	1/10W
R191	1-216-864-11	SHORT CHIP	0		
R201	1-500-445-21	FERRITE, EMI (SMD) (2012)			
R203	1-216-864-11	SHORT CHIP	0		
R204	1-500-445-21	FERRITE, EMI (SMD) (2012)			
R205	1-216-864-11	SHORT CHIP	0		
R251	1-216-833-11	METAL CHIP	10K	5%	1/10W
R252	1-216-837-11	METAL CHIP	22K	5%	1/10W
R253	1-216-833-11	METAL CHIP	10K	5%	1/10W
R301	1-216-845-11	METAL CHIP	100K	5%	1/10W
R302	1-216-833-11	METAL CHIP	10K	5%	1/10W
R303	1-216-845-11	METAL CHIP	100K	5%	1/10W
R305	1-216-845-11	METAL CHIP	100K	5%	1/10W
R306	1-216-864-11	SHORT CHIP	0		
R307	1-216-833-11	METAL CHIP	10K	5%	1/10W
R313	1-216-813-11	METAL CHIP	220	5%	1/10W
R351	1-216-809-11	METAL CHIP	100	5%	1/10W
R352	1-216-809-11	METAL CHIP	100	5%	1/10W
R353	1-216-809-11	METAL CHIP	100	5%	1/10W
R354	1-216-809-11	METAL CHIP	100	5%	1/10W
R401	1-216-809-11	METAL CHIP	100	5%	1/10W
R402	1-216-809-11	METAL CHIP	100	5%	1/10W
R403	1-216-809-11	METAL CHIP	100	5%	1/10W
R404	1-216-809-11	METAL CHIP	100	5%	1/10W
R405	1-216-809-11	METAL CHIP	100	5%	1/10W
R406	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description	Remark		
R407	1-216-809-11	METAL CHIP	100	5%	1/10W
R408	1-216-809-11	METAL CHIP	100	5%	1/10W
R409	1-216-809-11	METAL CHIP	100	5%	1/10W
R410	1-216-809-11	METAL CHIP	100	5%	1/10W
R411	1-216-809-11	METAL CHIP	100	5%	1/10W
R412	1-216-809-11	METAL CHIP	100	5%	1/10W
R419	1-216-809-11	METAL CHIP	100	5%	1/10W
< VIBRATOR >					
X171	1-767-408-21	VIBRATOR, CRYSTAL (16.9344MHz)			

CDMP3 CONNECT BOARD					

< CAPACITOR >					
C871	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C872	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C873	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C874	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C875	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C876	1-164-156-11	CERAMIC CHIP	0.1uF		25V
< CONNECTOR >					
CN871	1-779-295-11	CONNECTOR, FFC (LIF (NON-ZIF)) 27P			
CN873	1-784-778-11	CONNECTOR, FFC 17P			
* CN874	1-564-725-11	PIN, CONNECTOR (SMALL TYPE) 9P			
< SHORT >					
FB871	1-216-864-11	SHORT CHIP	0		
FB872	1-216-864-11	SHORT CHIP	0		
JR871	1-216-864-11	SHORT CHIP	0		
JR872	1-216-864-11	SHORT CHIP	0		

1-687-135-12 DRIVER BOARD					

< CAPACITOR >					
C715	1-126-933-11	ELECT	100uF	20%	16V
C731	1-126-964-11	ELECT	10uF	20%	50V
C735	1-164-159-21	CERAMIC	0.1uF		50V
C736	1-164-159-21	CERAMIC	0.1uF		50V
C737	1-164-159-21	CERAMIC	0.1uF		50V
C741	1-162-306-11	CERAMIC	0.01uF	20%	16V
C751	1-162-306-11	CERAMIC	0.01uF	20%	16V
C752	1-164-159-21	CERAMIC	0.1uF		50V
< CONNECTOR >					
CN701	1-785-338-11	PIN, CONNECTOR (LIGHT ANGLE) 12P			
CN702	1-784-766-11	CONNECTOR, FFC 5P			
* CN703	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P			
CN704	1-785-328-11	PIN, CONNECTOR (LIGHT ANGRE) 2P			
< DIODE >					
D701	8-719-921-42	DIODE MTZJ-5.1A			
D711	8-719-109-69	DIODE RD3.6ESB2			

DRIVER

HEADPHONE

MAIN

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
< IC >						C115	1-131-679-31	FILM	0.01uF	5%	50V
IC701	8-759-598-69	IC BA6956AN				C116	1-164-392-11	CERAMIC CHIP	390PF	5%	50V
IC712	8-759-598-69	IC BA6956AN				C117	1-164-816-11	CERAMIC CHIP	220PF	2%	50V
< TRANSISTOR >						C118	1-126-964-11	ELECT	10uF	20%	50V
Q731	8-729-029-66	TRANSISTOR	DTC114ESA			C119	1-131-679-31	FILM	0.01uF	5%	50V
< RESISTOR >						C120	1-164-392-11	CERAMIC CHIP	390PF	5%	50V
R701	1-249-413-11	CARBON	470	5%	1/4W	C121	1-164-816-11	CERAMIC CHIP	220PF	2%	50V
R702	1-247-807-31	CARBON	100	5%	1/4W	C122	1-126-964-11	ELECT	10uF	20%	50V
R711	1-249-417-11	CARBON	1K	5%	1/4W	C123	1-126-965-11	ELECT	22uF	20%	50V
R712	1-249-425-11	CARBON	4.7K	5%	1/4W	C124	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
R713	1-249-433-11	CARBON	22K	5%	1/4W	C125	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
R721	1-249-425-11	CARBON	4.7K	5%	1/4W	C126	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
R722	1-249-425-11	CARBON	4.7K	5%	1/4W	C127	1-104-665-11	ELECT	100uF	20%	25V
R723	1-249-425-11	CARBON	4.7K	5%	1/4W	C128	1-104-665-11	ELECT	100uF	20%	25V
R731	1-247-807-31	CARBON	100	5%	1/4W	C129	1-126-947-11	ELECT	47uF	20%	35V
R732	1-249-429-11	CARBON	10K	5%	1/4W	C132	1-126-947-11	ELECT	47uF	20%	35V
R733	1-249-417-11	CARBON	1K	5%	1/4W	C135	1-136-165-00	FILM	0.1uF	5%	50V
R734	1-249-430-11	CARBON	12K	5%	1/4W	C136	1-136-165-00	FILM	0.1uF	5%	50V
R735	1-247-807-31	CARBON	100	5%	1/4W	C137	1-126-964-11	ELECT	10uF	20%	50V
R751	1-249-425-11	CARBON	4.7K	5%	1/4W	C138	1-126-964-11	ELECT	10uF	20%	50V
*****						C139	1-136-165-00	FILM	0.1uF	5%	50V
HEADPHONE BOARD						C140	1-136-165-00	FILM	0.1uF	5%	50V
*****						C141	1-126-964-11	ELECT	10uF	20%	50V
< CAPACITOR >						C142	1-126-964-11	ELECT	10uF	20%	50V
C806	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C143	1-126-960-11	ELECT	1uF	20%	50V
C807	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C144	1-136-165-00	FILM	0.1uF	5%	50V
C808	1-164-156-11	CERAMIC CHIP	0.1uF		25V	C145	1-126-964-11	ELECT	10uF	20%	50V
< JACK >						C146	1-136-165-00	FILM	0.1uF	5%	50V
J801	1-793-829-11	JACK, HEADPHONE (PHONES)				C147	1-126-964-11	ELECT	10uF	20%	50V
*****						C148	1-126-964-11	ELECT	10uF	20%	50V
A-4750-668-A MAIN BOARD, COMPLETE (E51, MX)						C149	1-131-679-31	FILM	0.01uF	5%	50V
A-4750-707-A MAIN BOARD, COMPLETE (E, SP)						C150	1-131-679-31	FILM	0.01uF	5%	50V
A-4752-940-A MAIN BOARD, COMPLETE (AUS)						C152	1-130-475-00	MYLAR	0.0022uF	5%	50V
A-4752-955-A MAIN BOARD, COMPLETE (TW)						C153	1-130-475-00	MYLAR	0.0022uF	5%	50V
*****						C154	1-131-700-31	FILM	0.47uF	5%	50V
7-685-872-09 SCREW +BVTT 3X8 (S)						C157	1-126-960-11	ELECT	1uF	20%	50V
< CAPACITOR >						C159	1-126-960-11	ELECT	1uF	20%	50V
C101	1-126-960-11	ELECT	1uF	20%	50V	C160	1-126-960-11	ELECT	1uF	20%	50V
C102	1-126-960-11	ELECT	1uF	20%	50V	C165	1-126-960-11	ELECT	1uF	20%	50V
C103	1-126-956-11	ELECT	0.1uF	20%	50V	C166	1-126-960-11	ELECT	1uF	20%	50V
C104	1-126-956-11	ELECT	0.1uF	20%	50V	C167	1-126-960-11	ELECT	1uF	20%	50V
C105	1-164-816-11	CERAMIC CHIP	220PF	2%	50V	C169	1-126-960-11	ELECT	1uF	20%	50V
C106	1-131-679-31	FILM	0.01uF	5%	50V	C171	1-164-362-11	CERAMIC CHIP	470PF	5%	50V
C107	1-126-964-11	ELECT	10uF	20%	50V	C172	1-164-362-11	CERAMIC CHIP	470PF	5%	50V
C108	1-164-816-11	CERAMIC CHIP	220PF	2%	50V	C175	1-109-953-11	ELECT	2.2uF	20%	50V
C109	1-131-679-31	FILM	0.01uF	5%	50V	C176	1-126-964-11	ELECT	10uF	20%	50V
C110	1-126-964-11	ELECT	10uF	20%	50V	C177	1-162-945-11	CERAMIC CHIP	22PF	5%	50V
C111	1-126-960-11	ELECT	1uF	20%	50V	C178	1-126-947-11	ELECT	47uF	20%	35V
C112	1-126-960-11	ELECT	1uF	20%	50V	C179	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C113	1-126-960-11	ELECT	1uF	20%	50V	C181	1-162-949-11	CERAMIC CHIP	47PF	5%	50V
C114	1-126-960-11	ELECT	1uF	20%	50V	C183	1-162-945-11	CERAMIC CHIP	22PF	5%	50V
						C184	1-126-947-11	ELECT	47uF	20%	35V
						C185	1-126-964-11	ELECT	10uF	20%	50V
						C186	1-126-947-11	ELECT	47uF	20%	35V
						C187	1-162-974-11	CERAMIC CHIP	0.01uF		50V
						C188	1-126-965-11	ELECT	22uF	20%	50V

MAIN

Ref. No.	Part No.	Description	Remark
C189	1-126-965-11	ELECT 22uF 20%	50V
C190	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C191	1-126-961-11	ELECT 2.2uF 20%	50V
C192	1-126-961-11	ELECT 2.2uF 20%	50V
C193	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C206	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C211	1-109-953-11	ELECT 2.2uF 20%	50V
C212	1-126-964-11	ELECT 10uF 20%	50V
C213	1-126-964-11	ELECT 10uF 20%	50V
C214	1-126-926-11	ELECT 1000uF 20%	10V
C216	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C217	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C222	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C228	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C229	1-126-963-11	ELECT 4.7uF 20%	50V
C230	1-126-947-11	ELECT 47uF 20%	35V
C235	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C241	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C242	1-130-479-00	MYLAR 0.0047uF 5%	50V
C243	1-130-479-00	MYLAR 0.0047uF 5%	50V
C244	1-131-681-31	FILM 0.015uF 5%	50V
C246	1-136-157-00	FILM 0.022uF 5%	50V
C248	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C249	1-126-964-11	ELECT 10uF 20%	50V
C250	1-126-947-11	ELECT 47uF 20%	35V
C251	1-126-947-11	ELECT 47uF 20%	35V
C252	1-126-933-11	ELECT 100uF 20%	16V
C253	1-126-956-11	ELECT 0.1uF 20%	50V
C258	1-126-959-11	ELECT 0.47uF 20%	50V
C259	1-126-957-11	ELECT 0.22uF 20%	50V
C264	1-162-971-11	CERAMIC CHIP 0.001uF 10%	50V
C265	1-162-971-11	CERAMIC CHIP 0.001uF 10%	50V
C266	1-162-971-11	CERAMIC CHIP 0.001uF 10%	50V
C267	1-162-971-11	CERAMIC CHIP 0.001uF 10%	50V
C270	1-126-964-11	ELECT 10uF 20%	50V
C274	1-162-949-11	CERAMIC CHIP 47PF 5%	50V
C275	1-162-949-11	CERAMIC CHIP 47PF 5%	50V
C301	1-136-165-00	FILM 0.1uF 5%	50V
C302	1-136-165-00	FILM 0.1uF 5%	50V
C303	1-136-165-00	FILM 0.1uF 5%	50V
C304	1-136-165-00	FILM 0.1uF 5%	50V
C305	1-136-165-00	FILM 0.1uF 5%	50V
C306	1-136-165-00	FILM 0.1uF 5%	50V
C308	1-126-965-11	ELECT 22uF 20%	50V
C309	1-126-965-11	ELECT 22uF 20%	50V
C310	1-126-936-11	ELECT 3300uF 20%	16V
C311	1-126-964-11	ELECT 10uF 20%	50V
C312	1-126-964-11	ELECT 10uF 20%	50V
C313	1-126-943-11	ELECT 2200uF 20%	25V
C315	1-126-933-11	ELECT 100uF 20%	16V
C316	1-126-943-11	ELECT 2200uF 20%	25V
C318	1-126-933-11	ELECT 100uF 20%	16V
C321	1-126-961-11	ELECT 2.2uF 20%	50V
C342	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C351	1-164-357-11	CERAMIC CHIP 0.001uF 5%	50V
C352	1-126-965-11	ELECT 22uF 20%	50V
C353	1-126-961-11	ELECT 2.2uF 20%	50V
C354	1-164-156-11	CERAMIC CHIP 0.1uF	25V

Ref. No.	Part No.	Description	Remark
C371	1-164-362-11	CERAMIC CHIP 470PF 5%	50V
C372	1-162-953-11	CERAMIC CHIP 100PF 5%	50V
C373	1-162-953-11	CERAMIC CHIP 100PF 5%	50V
C374	1-126-947-11	ELECT 47uF 20%	35V
C375	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C376	1-126-961-11	ELECT 2.2uF 20%	50V
< CONNECTOR >			
CN101	1-568-830-11	CONNECTOR, FFC 11P	
* CN103	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
* CN112	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
* CN301	1-568-950-11	PIN, CONNECTOR 12P	
CN302	1-568-844-11	CONNECTOR, FFC 29P	
CN307	1-778-982-21	CONNECTOR, BOARD TO BOARD 13P	
CN308	1-564-506-11	PLUG, CONNECTOR 3P	
CN309	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P	
< DIODE >			
D201	8-719-988-61	DIODE 1SS355TE-17	
D202	8-719-083-63	DIODE UDZSTE-1713B	
D206	8-719-988-61	DIODE 1SS355TE-17	
D207	8-719-988-61	DIODE 1SS355TE-17	
D211	8-719-988-61	DIODE 1SS355TE-17	
D212	8-719-988-61	DIODE 1SS355TE-17	
D213	8-719-988-61	DIODE 1SS355TE-17	
D214	8-719-988-61	DIODE 1SS355TE-17	
D215	8-719-988-61	DIODE 1SS355TE-17	
D301	6-500-522-31	DIODE 10EDB40-TB5	
D302	6-500-522-31	DIODE 10EDB40-TB5	
D303	6-500-522-31	DIODE 10EDB40-TB5	
D304	6-500-522-31	DIODE 10EDB40-TB5	
D305	6-500-522-31	DIODE 10EDB40-TB5	
D306	6-500-522-31	DIODE 10EDB40-TB5	
D307	6-500-522-31	DIODE 10EDB40-TB5	
D308	6-500-522-31	DIODE 10EDB40-TB5	
D309	6-500-522-31	DIODE 10EDB40-TB5	
D310	6-500-522-31	DIODE 10EDB40-TB5	
D311	6-500-522-31	DIODE 10EDB40-TB5	
D312	6-500-522-31	DIODE 10EDB40-TB5	
D313	8-719-085-36	DIODE 11EQS04-TB5	
D316	8-719-988-61	DIODE 1SS355TE-17	
D321	8-719-988-61	DIODE 1SS355TE-17	
D322	8-719-988-61	DIODE 1SS355TE-17	
D324	6-500-522-31	DIODE 10EDB40-TB5	
D325	6-500-522-31	DIODE 10EDB40-TB5	
D326	6-500-522-21	DIODE 10EDB40-TB3	
< EARTH TERMINAL >			
EP101	1-537-771-21	TERMINAL BOARD, GROUND	
EP301	1-537-771-21	TERMINAL BOARD, GROUND	
< SHORT >			
FB201	1-216-864-11	SHORT CHIP 0	
FB202	1-216-864-11	SHORT CHIP 0	
FB203	1-216-864-11	SHORT CHIP 0	
FB204	1-216-864-11	SHORT CHIP 0	

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description			Remark
< IC >						R110	1-216-851-11	METAL CHIP	330K	5%	1/10W
IC101	6-705-852-01	IC BD3401KS2				R111	1-216-844-11	METAL CHIP	82K	5%	1/10W
IC102	8-759-710-97	IC NJM4565M-D				R112	1-216-853-11	METAL CHIP	470K	5%	1/10W
IC201	8-759-508-69	IC BA3126N				R113	1-216-851-11	METAL CHIP	330K	5%	1/10W
IC301	6-702-771-01	IC TA78033LS				R114	1-216-844-11	METAL CHIP	82K	5%	1/10W
IC302	6-702-771-01	IC TA78033LS				R115	1-216-857-11	METAL CHIP	1M	5%	1/10W
IC303	8-759-701-59	IC NJM78M09FA				R116	1-216-809-11	METAL CHIP	100	5%	1/10W
IC304	8-759-701-59	IC NJM78M09FA				R117	1-216-809-11	METAL CHIP	100	5%	1/10W
IC371	6-704-046-01	IC BU2099FV				R119	1-216-841-11	METAL CHIP	47K	5%	1/10W
< JACK >						R120	1-216-857-11	METAL CHIP	1M	5%	1/10W
JK101	1-774-822-21	JACK, PIN 2P (VIDEO/MD IN) (TW, AUS)				R121	1-216-841-11	METAL CHIP	47K	5%	1/10W
JK101	1-785-868-11	JACK, PIN 2P (VIDEO/MD IN) (E, E51, MX, SP)				R122	1-216-849-11	METAL CHIP	220K	5%	1/10W
< COIL >						R127	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
L101	1-437-220-11	TRANSFORMER, BIAS OSCILLATION				R128	1-216-835-11	METAL CHIP	15K	5%	1/10W
< TRANSISTOR >						R129	1-216-841-11	METAL CHIP	47K	5%	1/10W
Q101	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R130	1-216-849-11	METAL CHIP	220K	5%	1/10W
Q102	6-550-580-01	TRANSISTOR	2SA1235TP-1F			R131	1-216-835-11	METAL CHIP	15K	5%	1/10W
Q103	8-729-802-80	TRANSISTOR	2SC3661			R132	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
Q104	8-729-802-80	TRANSISTOR	2SC3661			R133	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
Q105	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R134	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
Q106	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R135	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
Q107	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R136	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
Q304	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R137	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q305	6-550-580-01	TRANSISTOR	2SA1235TP-1F			R138	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q306	8-729-802-80	TRANSISTOR	2SC3661			R139	1-216-864-11	SHORT CHIP	0		
Q307	8-729-802-80	TRANSISTOR	2SC3661			R143	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q308	6-550-580-01	TRANSISTOR	2SA1235TP-1F			R144	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q309	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R145	1-216-845-11	METAL CHIP	100K	5%	1/10W
Q310	8-729-142-46	TRANSISTOR	2SC2001-LK			R146	1-216-845-11	METAL CHIP	100K	5%	1/10W
Q311	8-729-142-46	TRANSISTOR	2SC2001-LK			R151	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
Q312	8-729-041-19	TRANSISTOR	2SA953-T-K			R152	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q313	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R153	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q314	6-550-580-01	TRANSISTOR	2SA1235TP-1F			R154	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q315	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R155	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
Q321	8-729-142-46	TRANSISTOR	2SC2001-LK			R156	1-216-853-11	METAL CHIP	470K	5%	1/10W
Q322	6-550-580-01	TRANSISTOR	2SA1235TP-1F			R157	1-216-841-11	METAL CHIP	47K	5%	1/10W
Q323	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R158	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
Q324	8-729-140-04	TRANSISTOR	2SB1116A-L			R159	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q327	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R160	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q351	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R161	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q352	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R162	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
Q361	6-550-580-01	TRANSISTOR	2SA1235TP-1F			R163	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q362	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R164	1-216-821-11	METAL CHIP	1K	5%	1/10W
< RESISTOR >						R165	1-216-833-11	METAL CHIP	10K	5%	1/10W
R101	1-216-833-11	METAL CHIP	10K	5%	1/10W	R166	1-216-833-11	METAL CHIP	10K	5%	1/10W
R102	1-216-833-11	METAL CHIP	10K	5%	1/10W	R167	1-216-833-11	METAL CHIP	10K	5%	1/10W
R103	1-216-851-11	METAL CHIP	330K	5%	1/10W	R172	1-216-809-11	METAL CHIP	100	5%	1/10W
R104	1-216-835-11	METAL CHIP	15K	5%	1/10W	R173	1-216-833-11	METAL CHIP	10K	5%	1/10W
R105	1-216-816-11	METAL CHIP	390	5%	1/10W	R174	1-216-833-11	METAL CHIP	10K	5%	1/10W
R106	1-216-851-11	METAL CHIP	330K	5%	1/10W	R175	1-216-833-11	METAL CHIP	10K	5%	1/10W
R107	1-216-835-11	METAL CHIP	15K	5%	1/10W	R176	1-216-849-11	METAL CHIP	220K	5%	1/10W
R108	1-216-816-11	METAL CHIP	390	5%	1/10W	R177	1-216-849-11	METAL CHIP	220K	5%	1/10W
R109	1-216-853-11	METAL CHIP	470K	5%	1/10W	R194	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

MAIN

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R195	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R282	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R196	1-216-864-11	SHORT CHIP	0			R283	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R197	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R284	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R198	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R306	1-216-833-11	METAL CHIP	10K	5%	1/10W
R201	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R307	1-216-833-11	METAL CHIP	10K	5%	1/10W
R202	1-216-833-11	METAL CHIP	10K	5%	1/10W	R308	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R203	1-216-833-11	METAL CHIP	10K	5%	1/10W	R310	1-216-833-11	METAL CHIP	10K	5%	1/10W
R204	1-216-833-11	METAL CHIP	10K	5%	1/10W	R311	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R205	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R312	1-126-964-11	ELECT	10uF	20%	50V
R206	1-216-841-11	METAL CHIP	47K	5%	1/10W	R312	1-216-837-11	METAL CHIP	22K	5%	1/10W
R207	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R313	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R208	1-216-821-11	METAL CHIP	1K	5%	1/10W	R321	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R209	1-216-833-11	METAL CHIP	10K	5%	1/10W	R322	1-216-837-11	METAL CHIP	22K	5%	1/10W
R210	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R323	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R211	1-216-821-11	METAL CHIP	1K	5%	1/10W	R324	1-216-833-11	METAL CHIP	10K	5%	1/10W
R212	1-216-833-11	METAL CHIP	10K	5%	1/10W	R325	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R213	1-216-821-11	METAL CHIP	1K	5%	1/10W	R341	1-216-833-11	METAL CHIP	10K	5%	1/10W
R214	1-216-821-11	METAL CHIP	1K	5%	1/10W	R342	1-216-821-11	METAL CHIP	1K	5%	1/10W
R216	1-216-806-11	METAL CHIP	56	5%	1/10W	R343	1-216-837-11	METAL CHIP	22K	5%	1/10W
R217	1-216-806-11	METAL CHIP	56	5%	1/10W	R344	1-216-837-11	METAL CHIP	22K	5%	1/10W
△ R218	1-215-891-11	METAL OXIDE	680	5%	2W F	R345	1-216-833-11	METAL CHIP	10K	5%	1/10W
△ R219	1-215-891-11	METAL OXIDE	680	5%	2W F	R346	1-216-821-11	METAL CHIP	1K	5%	1/10W
R220	1-216-837-11	METAL CHIP	22K	5%	1/10W	R347	1-216-837-11	METAL CHIP	22K	5%	1/10W
R221	1-216-837-11	METAL CHIP	22K	5%	1/10W	R348	1-216-837-11	METAL CHIP	22K	5%	1/10W
R222	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	R351	1-216-835-11	METAL CHIP	15K	5%	1/10W
R223	1-216-864-11	SHORT CHIP	0			R352	1-216-845-11	METAL CHIP	100K	5%	1/10W
R225	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R353	1-216-841-11	METAL CHIP	47K	5%	1/10W
R226	1-216-841-11	METAL CHIP	47K	5%	1/10W	R354	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R227	1-216-821-11	METAL CHIP	1K	5%	1/10W	R356	1-216-817-11	METAL CHIP	470	5%	1/10W
R228	1-216-821-11	METAL CHIP	1K	5%	1/10W	R357	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R229	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R358	1-216-809-11	METAL CHIP	100	5%	1/10W
R230	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R361	1-216-833-11	METAL CHIP	10K	5%	1/10W
R231	1-216-833-11	METAL CHIP	10K	5%	1/10W	R362	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R232	1-216-833-11	METAL CHIP	10K	5%	1/10W	R363	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R235	1-216-793-11	METAL CHIP	4.7	5%	1/10W	R364	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R241	1-216-797-11	METAL CHIP	10	5%	1/10W	R371	1-216-809-11	METAL CHIP	100	5%	1/10W
R242	1-216-837-11	METAL CHIP	22K	5%	1/10W	R372	1-216-809-11	METAL CHIP	100	5%	1/10W
R243	1-216-833-11	METAL CHIP	10K	5%	1/10W	R373	1-216-809-11	METAL CHIP	100	5%	1/10W
R244	1-216-833-11	METAL CHIP	10K	5%	1/10W	R374	1-216-833-11	METAL CHIP	10K	5%	1/10W
R245	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R375	1-216-833-11	METAL CHIP	10K	5%	1/10W
R246	1-216-809-11	METAL CHIP	100	5%	1/10W	R376	1-216-833-11	METAL CHIP	10K	5%	1/10W
R247	1-216-833-11	METAL CHIP	10K	5%	1/10W	R377	1-216-833-11	METAL CHIP	10K	5%	1/10W
R248	1-216-833-11	METAL CHIP	10K	5%	1/10W	R378	1-216-833-11	METAL CHIP	10K	5%	1/10W
R249	1-216-841-11	METAL CHIP	47K	5%	1/10W	R379	1-216-833-11	METAL CHIP	10K	5%	1/10W
R250	1-216-833-11	METAL CHIP	10K	5%	1/10W	R380	1-216-833-11	METAL CHIP	10K	5%	1/10W
R251	1-216-833-11	METAL CHIP	10K	5%	1/10W	R381	1-216-833-11	METAL CHIP	10K	5%	1/10W
R252	1-216-811-11	METAL CHIP	150	5%	1/10W	R382	1-216-833-11	METAL CHIP	10K	5%	1/10W
R253	1-216-809-11	METAL CHIP	100	5%	1/10W	R383	1-216-833-11	METAL CHIP	10K	5%	1/10W
R262	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R384	1-216-833-11	METAL CHIP	10K	5%	1/10W
R263	1-216-857-11	METAL CHIP	1M	5%	1/10W	R385	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R264	1-216-821-11	METAL CHIP	1K	5%	1/10W	R386	1-216-837-11	METAL CHIP	22K	5%	1/10W
R265	1-216-833-11	METAL CHIP	10K	5%	1/10W	R387	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R266	1-216-845-11	METAL CHIP	100K	5%	1/10W	R388	1-216-837-11	METAL CHIP	22K	5%	1/10W
R272	1-216-853-11	METAL CHIP	470K	5%	1/10W	R389	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R273	1-216-864-11	SHORT CHIP	0			R390	1-216-837-11	METAL CHIP	22K	5%	1/10W
R274	1-216-864-11	SHORT CHIP	0			R391	1-216-833-11	METAL CHIP	10K	5%	1/10W
R275	1-216-864-11	SHORT CHIP	0			R392	1-216-821-11	METAL CHIP	1K	5%	1/10W
R281	1-216-825-11	METAL CHIP	2.2K	5%	1/10W						

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

MAIN							MOTOR (LD)				MOTOR (TB)				PANEL					
Ref. No.	Part No.	Description			Remark		Ref. No.	Part No.	Description			Remark		Ref. No.	Part No.	Description			Remark	
R393	1-216-833-11	METAL CHIP	10K	5%	1/10W		C640	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		C641	1-164-156-11	CERAMIC CHIP	0.1uF	25V		
R394	1-216-821-11	METAL CHIP	1K	5%	1/10W		C642	1-164-156-11	CERAMIC CHIP	0.1uF		25V								
R395	1-216-837-11	METAL CHIP	22K	5%	1/10W															

	1-687-133-12	MOTOR (LD) BOARD			*****									C643	1-164-156-11	CERAMIC CHIP	0.1uF	25V		

	1-687-134-12	MOTOR (TB) BOARD			*****									C644	1-126-964-11	ELECT	10uF	20%	50V	
< CONNECTOR >																				
CN742	1-784-727-11	CONNECTOR, FFC 5P					< CONNECTOR >													

	A-4750-653-A	PANEL BOARD, COMPLETE (E51, MX)					CN601	1-568-844-11	CONNECTOR, FFC 29P											
	A-4750-705-A	PANEL BOARD, COMPLETE (E, SP, TW)					CN602	1-784-735-11	CONNECTOR, FFC 13P											
	A-4752-938-A	PANEL BOARD, COMPLETE (AUS)			*****		CN603	1-784-778-11	CONNECTOR, FFC 17P											
< CAPACITOR >																				
C601	1-162-919-11	CERAMIC CHIP	22PF	5%	50V									D603	8-719-988-61	DIODE	1SS355TE-17			
C602	1-162-919-11	CERAMIC CHIP	22PF	5%	50V									D604	8-719-988-61	DIODE	1SS355TE-17			
C603	1-162-919-11	CERAMIC CHIP	22PF	5%	50V									D605	8-719-988-61	DIODE	1SS355TE-17			
C604	1-164-156-11	CERAMIC CHIP	0.1uF		25V									* D606	6-500-486-01	DIODE	PTZ-TE25-11B			
C605	1-126-963-11	ELECT	4.7uF	20%	50V									D607	8-719-988-61	DIODE	1SS355TE-17			
C606	1-115-156-11	CERAMIC CHIP	1uF		10V									D608	8-719-988-61	DIODE	1SS355TE-17			
C607	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V									D609	8-719-988-61	DIODE	1SS355TE-17			
C608	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V									D610	8-719-056-78	DIODE	UDZ-TE-17-4.3B			
C609	1-115-156-11	CERAMIC CHIP	1uF		10V									D611	8-719-988-61	DIODE	1SS355TE-17			
C610	1-126-916-11	ELECT	1000uF	20%	6.3V									D613	8-719-988-61	DIODE	1SS355TE-17			
C611	1-164-156-11	CERAMIC CHIP	0.1uF		25V									D614	8-719-988-61	DIODE	1SS355TE-17			
C612	1-126-964-11	ELECT	10uF	20%	50V									D615	8-719-988-61	DIODE	1SS355TE-17			
C613	1-164-156-11	CERAMIC CHIP	0.1uF		25V									D616	8-719-988-61	DIODE	1SS355TE-17			
C614	1-164-156-11	CERAMIC CHIP	0.1uF		25V									D620	8-719-988-61	DIODE	1SS355TE-17 (E51, MX, AUS)			
C615	1-126-961-11	ELECT	2.2uF	20%	50V									D621	8-719-988-61	DIODE	1SS355TE-17 (E51, MX, AUS)			
C617	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V									D622	8-719-988-61	DIODE	1SS355TE-17 (E)			
C618	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V									D623	8-719-988-61	DIODE	1SS355TE-17 (E51, MX, AUS)			
C619	1-126-947-11	ELECT	47uF	20%	35V									D626	8-719-988-61	DIODE	1SS355TE-17			
C620	1-126-947-11	ELECT	47uF	20%	35V									D628	8-719-988-61	DIODE	1SS355TE-17			
C621	1-162-995-11	CERAMIC CHIP	0.022uF		50V									D630	8-719-988-61	DIODE	1SS355TE-17			
C622	1-126-963-11	ELECT	4.7uF	20%	50V									D631	8-719-978-33	DIODE	DTZ-TT11-6.8B			
C623	1-126-963-11	ELECT	4.7uF	20%	50V									D632	8-719-083-57	DIODE	UDZSTE-173.6B			
C624	1-162-918-11	CERAMIC CHIP	18PF	5%	50V									D633	8-719-988-61	DIODE	1SS355TE-17			
C625	1-162-919-11	CERAMIC CHIP	22PF	5%	50V									< FILTER >						
C626	1-164-156-11	CERAMIC CHIP	0.1uF		25V									FL601	1-518-977-11	INDICATOR TUBE, FLUORESCENT				
C628	1-162-927-11	CERAMIC CHIP	100PF	5%	50V									< IC >						
C629	1-162-927-11	CERAMIC CHIP	100PF	5%	50V									IC601	6-804-127-01	IC	LC876996A-52S5-E			
C630	1-162-927-11	CERAMIC CHIP	100PF	5%	50V									IC602	6-704-046-01	IC	BU2099FV			
C631	1-162-927-11	CERAMIC CHIP	100PF	5%	50V									IC603	6-704-045-01	IC	MM1574ANLE			
C632	1-162-927-11	CERAMIC CHIP	100PF	5%	50V									IC604	8-759-533-04	IC	M62703ML-E1			
C633	1-162-927-11	CERAMIC CHIP	100PF	5%	50V									IC610	6-600-174-01	IC	RPM7240-H4			
C634	1-162-927-11	CERAMIC CHIP	100PF	5%	50V									< SHORT >						
C635	1-162-927-11	CERAMIC CHIP	100PF	5%	50V									JR601	1-216-296-11	SHORT CHIP	0			
C636	1-162-927-11	CERAMIC CHIP	100PF	5%	50V									JR602	1-216-864-11	SHORT CHIP	0			
C637	1-162-927-11	CERAMIC CHIP	100PF	5%	50V									JR603	1-216-864-11	SHORT CHIP	0			
C638	1-162-927-11	CERAMIC CHIP	100PF	5%	50V									JR607	1-216-864-11	SHORT CHIP	0			
C639	1-162-927-11	CERAMIC CHIP	100PF	5%	50V															

PANEL

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
JR608	1-216-864-11	SHORT CHIP	0			R628	1-216-833-11	METAL CHIP	10K	5%	1/10W
JR609	1-216-864-11	SHORT CHIP	0			R629	1-216-150-11	RES-CHIP	10	5%	1/8W
JR610	1-216-296-11	SHORT CHIP	0			R632	1-216-809-11	METAL CHIP	100	5%	1/10W
JR611	1-216-864-11	SHORT CHIP	0			R633	1-216-809-11	METAL CHIP	100	5%	1/10W
JR612	1-216-864-11	SHORT CHIP	0			R634	1-216-809-11	METAL CHIP	100	5%	1/10W
JR614	1-216-864-11	SHORT CHIP	0			R635	1-216-809-11	METAL CHIP	100	5%	1/10W
JR615	1-216-864-11	SHORT CHIP	0			R636	1-216-833-11	METAL CHIP	10K	5%	1/10W
JR617	1-216-864-11	SHORT CHIP	0			R637	1-216-833-11	METAL CHIP	10K	5%	1/10W
JR621	1-216-864-11	SHORT CHIP	0			R638	1-216-809-11	METAL CHIP	100	5%	1/10W
JR622	1-216-864-11	SHORT CHIP	0			R639	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
JR624	1-216-864-11	SHORT CHIP	0			R640	1-216-834-11	METAL CHIP	12K	5%	1/10W
JR626	1-216-864-11	SHORT CHIP	0			R641	1-216-849-11	METAL CHIP	220K	5%	1/10W
JR627	1-216-864-11	SHORT CHIP	0			R642	1-216-817-11	METAL CHIP	470	5%	1/10W
JR628	1-216-864-11	SHORT CHIP	0			R643	1-216-819-11	METAL CHIP	680	5%	1/10W
JR629	1-216-864-11	SHORT CHIP	0			R644	1-216-821-11	METAL CHIP	1K	5%	1/10W
< LED >						R645	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
LED601	6-500-641-01	DIODE SLI-325URC (I/⬇)				R646	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
LED602	6-500-810-01	DIODE SELU5923C-STP15 (i-BASS)				R647	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
< TRANSISTOR >						R648	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
Q601	8-729-116-57	TRANSISTOR	2SB1068-K			R649	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
Q602	8-729-140-04	TRANSISTOR	2SB1116A-L			R650	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
Q603	8-729-140-04	TRANSISTOR	2SB1116A-L			R651	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q604	8-729-119-76	TRANSISTOR	2SA1175-HFE			R653	1-216-817-11	METAL CHIP	470	5%	1/10W
Q605	8-729-120-28	TRANSISTOR	2SC1623-L5L6			R654	1-216-819-11	METAL CHIP	680	5%	1/10W
Q609	8-729-027-55	TRANSISTOR	DTC143EKA-T146			R655	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q616	8-729-027-55	TRANSISTOR	DTC143EKA-T146			R656	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
< RESISTOR >						R657	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R601	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R658	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R602	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R659	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R603	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R660	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R604	1-216-841-11	METAL CHIP	47K	5%	1/10W	R661	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R605	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R662	1-216-833-11	METAL CHIP	10K	5%	1/10W
R606	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R664	1-216-817-11	METAL CHIP	470	5%	1/10W
R607	1-216-841-11	METAL CHIP	47K	5%	1/10W	R665	1-216-819-11	METAL CHIP	680	5%	1/10W
R608	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R666	1-216-821-11	METAL CHIP	1K	5%	1/10W
R609	1-216-837-11	METAL CHIP	22K	5%	1/10W	R667	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R610	1-216-833-11	METAL CHIP	10K	5%	1/10W	R668	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R611	1-216-837-11	METAL CHIP	22K	5%	1/10W	R669	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R612	1-216-833-11	METAL CHIP	10K	5%	1/10W	R670	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R613	1-216-837-11	METAL CHIP	22K	5%	1/10W	R671	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R614	1-216-837-11	METAL CHIP	22K	5%	1/10W	R672	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R615	1-216-837-11	METAL CHIP	22K	5%	1/10W	R673	1-216-833-11	METAL CHIP	10K	5%	1/10W
R616	1-216-833-11	METAL CHIP	10K	5%	1/10W	R674	1-216-835-11	METAL CHIP	15K	5%	1/10W
R617	1-216-837-11	METAL CHIP	22K	5%	1/10W	R675	1-216-835-11	METAL CHIP	15K	5%	1/10W
R618	1-216-833-11	METAL CHIP	10K	5%	1/10W	R676	1-216-835-11	METAL CHIP	15K	5%	1/10W
R619	1-216-837-11	METAL CHIP	22K	5%	1/10W	R677	1-216-864-11	SHORT CHIP	0		
R620	1-216-837-11	METAL CHIP	22K	5%	1/10W	R678	1-216-845-11	METAL CHIP	100K	5%	1/10W
R621	1-216-833-11	METAL CHIP	10K	5%	1/10W	R679	1-216-172-00	RES-CHIP	82	5%	1/8W
R622	1-216-049-11	RES-CHIP	1K	5%	1/10W	R680	1-216-838-11	METAL CHIP	27K	5%	1/10W
R623	1-216-833-11	METAL CHIP	10K	5%	1/10W	R681	1-216-849-11	METAL CHIP	220K	5%	1/10W
R624	1-216-049-11	RES-CHIP	1K	5%	1/10W	R682	1-216-833-11	METAL CHIP	10K	5%	1/10W
R625	1-216-833-11	METAL CHIP	10K	5%	1/10W	R683	1-216-849-11	METAL CHIP	220K	5%	1/10W
R626	1-216-049-11	RES-CHIP	1K	5%	1/10W	R684	1-216-821-11	METAL CHIP	1K	5%	1/10W
R627	1-216-833-11	METAL CHIP	10K	5%	1/10W	R685	1-216-841-11	METAL CHIP	47K	5%	1/10W
						R686	1-216-841-11	METAL CHIP	47K	5%	1/10W
						R687	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R688	1-216-817-11	METAL CHIP	470	5%	1/10W
						R689	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

PANEL

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R690	1-216-809-11	METAL CHIP	100	5%	1/10W	R755	1-216-845-11	METAL CHIP	100K	5%	1/10W
R691	1-216-809-11	METAL CHIP	100	5%	1/10W	R756	1-216-845-11	METAL CHIP	100K	5%	1/10W
R692	1-216-809-11	METAL CHIP	100	5%	1/10W	R757	1-216-845-11	METAL CHIP	100K	5%	1/10W
R693	1-216-809-11	METAL CHIP	100	5%	1/10W	R758	1-216-845-11	METAL CHIP	100K	5%	1/10W
R694	1-216-809-11	METAL CHIP	100	5%	1/10W	R759	1-216-845-11	METAL CHIP	100K	5%	1/10W
R695	1-216-809-11	METAL CHIP	100	5%	1/10W	R760	1-216-845-11	METAL CHIP	100K	5%	1/10W
R696	1-216-809-11	METAL CHIP	100	5%	1/10W	R761	1-216-845-11	METAL CHIP	100K	5%	1/10W
R697	1-216-809-11	METAL CHIP	100	5%	1/10W	R762	1-216-845-11	METAL CHIP	100K	5%	1/10W
R701	1-216-833-11	METAL CHIP	10K	5%	1/10W	R763	1-216-845-11	METAL CHIP	100K	5%	1/10W
R702	1-216-797-11	METAL CHIP	10	5%	1/10W	R764	1-216-845-11	METAL CHIP	100K	5%	1/10W
R703	1-216-833-11	METAL CHIP	10K	5%	1/10W	R765	1-216-845-11	METAL CHIP	100K	5%	1/10W
R704	1-216-797-11	METAL CHIP	10	5%	1/10W	R766	1-216-845-11	METAL CHIP	100K	5%	1/10W
R705	1-216-809-11	METAL CHIP	100	5%	1/10W	R767	1-216-845-11	METAL CHIP	100K	5%	1/10W
R706	1-216-809-11	METAL CHIP	100	5%	1/10W	R768	1-216-845-11	METAL CHIP	100K	5%	1/10W
R707	1-216-182-00	RES-CHIP	220	5%	1/8W	R769	1-216-845-11	METAL CHIP	100K	5%	1/10W
R708	1-216-182-00	RES-CHIP	220	5%	1/8W	R770	1-216-845-11	METAL CHIP	100K	5%	1/10W
R710	1-216-833-11	METAL CHIP	10K	5%	1/10W	R771	1-216-841-11	METAL CHIP	47K	5%	1/10W
R711	1-216-833-11	METAL CHIP	10K	5%	1/10W	R772	1-216-821-11	METAL CHIP	1K	5%	1/10W
R712	1-216-797-11	METAL CHIP	10	5%	1/10W	R773	1-216-809-11	METAL CHIP	100	5%	1/10W
R713	1-216-797-11	METAL CHIP	10	5%	1/10W	R774	1-216-809-11	METAL CHIP	100	5%	1/10W
R714	1-216-809-11	METAL CHIP	100	5%	1/10W	R775	1-216-809-11	METAL CHIP	100	5%	1/10W
R715	1-216-805-11	METAL CHIP	47	5%	1/10W	R776	1-216-817-11	METAL CHIP	470	5%	1/10W
R716	1-216-837-11	METAL CHIP	22K	5%	1/10W	R777	1-216-809-11	METAL CHIP	100	5%	1/10W
R717	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R778	1-216-809-11	METAL CHIP	100	5%	1/10W
R718	1-216-837-11	METAL CHIP	22K	5%	1/10W	R779	1-216-809-11	METAL CHIP	100	5%	1/10W
R719	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R780	1-216-817-11	METAL CHIP	470	5%	1/10W
R723	1-216-809-11	METAL CHIP	100	5%	1/10W	R781	1-216-809-11	METAL CHIP	100	5%	1/10W
R725	1-216-809-11	METAL CHIP	100	5%	1/10W	R782	1-216-809-11	METAL CHIP	100	5%	1/10W
R726	1-216-833-11	METAL CHIP	10K	5%	1/10W	R783	1-216-809-11	METAL CHIP	100	5%	1/10W
R727	1-220-397-11	METAL CHIP	4.7M	5%	1/10W	R784	1-216-809-11	METAL CHIP	100	5%	1/10W
R728	1-220-397-11	METAL CHIP	4.7M	5%	1/10W	R785	1-216-809-11	METAL CHIP	100	5%	1/10W
R729	1-216-809-11	METAL CHIP	100	5%	1/10W	R786	1-216-833-11	METAL CHIP	10K	5%	1/10W
R730	1-216-809-11	METAL CHIP	100	5%	1/10W	R787	1-216-809-11	METAL CHIP	100	5%	1/10W
R731	1-216-809-11	METAL CHIP	100	5%	1/10W	R788	1-216-809-11	METAL CHIP	100	5%	1/10W
R732	1-216-853-11	METAL CHIP	470K	5%	1/10W	R789	1-216-841-11	METAL CHIP	47K	5%	1/10W
R733	1-216-809-11	METAL CHIP	100	5%	1/10W	R790	1-216-821-11	METAL CHIP	1K	5%	1/10W
R734	1-216-821-11	METAL CHIP	1K	5%	1/10W	R791	1-216-809-11	METAL CHIP	100	5%	1/10W
R735	1-216-821-11	METAL CHIP	1K	5%	1/10W	R792	1-216-809-11	METAL CHIP	100	5%	1/10W
R736	1-216-821-11	METAL CHIP	1K	5%	1/10W	R793	1-216-809-11	METAL CHIP	100	5%	1/10W
R737	1-216-845-11	METAL CHIP	100K	5%	1/10W	R794	1-216-809-11	METAL CHIP	100	5%	1/10W
R738	1-216-845-11	METAL CHIP	100K	5%	1/10W	R795	1-216-809-11	METAL CHIP	100	5%	1/10W
R739	1-216-845-11	METAL CHIP	100K	5%	1/10W	R796	1-216-809-11	METAL CHIP	100	5%	1/10W
R740	1-216-845-11	METAL CHIP	100K	5%	1/10W	R797	1-216-821-11	METAL CHIP	1K	5%	1/10W
R741	1-216-845-11	METAL CHIP	100K	5%	1/10W	R798	1-216-821-11	METAL CHIP	1K	5%	1/10W
R742	1-216-845-11	METAL CHIP	100K	5%	1/10W	R799	1-216-821-11	METAL CHIP	1K	5%	1/10W
R743	1-216-845-11	METAL CHIP	100K	5%	1/10W	R854	1-216-813-11	METAL CHIP	220	5%	1/10W
R744	1-216-845-11	METAL CHIP	100K	5%	1/10W	R863	1-216-170-00	RES-CHIP	68	5%	1/8W
R745	1-216-845-11	METAL CHIP	100K	5%	1/10W	< SWITCH >					
R746	1-216-845-11	METAL CHIP	100K	5%	1/10W	S601	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			
R747	1-216-845-11	METAL CHIP	100K	5%	1/10W	S602	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)			
R748	1-216-845-11	METAL CHIP	100K	5%	1/10W	S603	1-762-875-21	SWITCH, KEYBOARD (ENTER)			
R749	1-216-845-11	METAL CHIP	100K	5%	1/10W	S604	1-762-875-21	SWITCH, KEYBOARD (DISC 1)			
R750	1-216-845-11	METAL CHIP	100K	5%	1/10W	S605	1-762-875-21	SWITCH, KEYBOARD (DISC 2)			
R751	1-216-845-11	METAL CHIP	100K	5%	1/10W	S606	1-762-875-21	SWITCH, KEYBOARD (DISC 3)			
R752	1-216-845-11	METAL CHIP	100K	5%	1/10W	S607	1-762-875-21	SWITCH, KEYBOARD (DISC SKIP, EX-CHANGE)			
R753	1-216-845-11	METAL CHIP	100K	5%	1/10W	S608	1-762-875-21	SWITCH, KEYBOARD (▲)			
R754	1-216-845-11	METAL CHIP	100K	5%	1/10W	S609	1-762-875-21	SWITCH, KEYBOARD (SURROUND)			

PANEL

POWER

Ref. No.	Part No.	Description	Remark
S610	1-762-875-21	SWITCH, KEYBOARD (PLAY MODE/TUNING MODE)	
S621	1-762-875-21	SWITCH, KEYBOARD (CD)	
S622	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)	
S623	1-762-875-21	SWITCH, KEYBOARD (TAPE A/B)	
S624	1-762-875-21	SWITCH, KEYBOARD (VIDEO (MD))	
S625	1-762-875-21	SWITCH, KEYBOARD (P FILE)	
S626	1-762-875-21	SWITCH, KEYBOARD (TREBLE -)	
S627	1-762-875-21	SWITCH, KEYBOARD (TREBLE +)	
S628	1-762-875-21	SWITCH, KEYBOARD (MIDDLE -)	
S629	1-762-875-21	SWITCH, KEYBOARD (MIDDLE +)	
S630	1-762-875-21	SWITCH, KEYBOARD (BASS -)	
S641	1-762-875-21	SWITCH, KEYBOARD (▶▶ ALBUM +))	
S642	1-762-875-21	SWITCH, KEYBOARD (■)	
S643	1-762-875-21	SWITCH, KEYBOARD (◁▷)	
S644	1-762-875-21	SWITCH, KEYBOARD (■)	
S645	1-762-875-21	SWITCH, KEYBOARD (◀◀ ALBUM -)	
S646	1-762-875-21	SWITCH, KEYBOARD (REC/PAUSE/START)	
S647	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)	
S648	1-762-875-21	SWITCH, KEYBOARD (i-BASS)	
S649	1-762-875-21	SWITCH, KEYBOARD (PRESET EQ)	
S650	1-762-875-21	SWITCH, KEYBOARD (BASS +)	
S660	1-786-417-11	SW, RTRY RE012307PVB30F (VOLUME)	
S661	1-786-418-11	SWITCH, ROTARY (ENCODER) (AMS/TUNING)	
< VIBRATOR >			
X601	1-760-252-12	VIBRATOR, CRYSTAL (32.768kHz)	
X602	1-795-004-21	VIBRATOR, CERAMIC (10MHz)	

A-4750-674-A		POWER BOARD, COMPLETE (E51, TW, AUS)	
A-4750-710-A		POWER BOARD, COMPLETE (E, SP)	

7-685-872-09		SCREW +BVT 3X8 (S)	
< CAPACITOR >			
C402	1-162-306-11	CERAMIC	0.01uF 20% 16V
C403	1-137-749-11	MYLAR	0.1uF 100V
C404	1-137-749-11	MYLAR	0.1uF 100V
C405	1-127-813-11	ELECT	3300uF 20% 71V
(E, MX, SP)			
C405	1-135-517-11	ELECT	3300uF 20% 71V
(E51, TW, AUS)			
C406	1-127-813-11	ELECT	3300uF 20% 71V
(E, MX, SP)			
C406	1-135-517-11	ELECT	3300uF 20% 71V
(E51, TW, AUS)			
C407	1-162-306-11	CERAMIC	0.01uF 20% 16V
C408	1-162-306-11	CERAMIC	0.01uF 20% 16V
C411	1-162-306-11	CERAMIC	0.01uF 20% 16V
C441	1-126-964-11	ELECT	10uF 20% 50V
C442	1-126-964-11	ELECT	10uF 20% 50V
C443	1-162-294-31	CERAMIC	0.001uF 10% 50V
C444	1-162-294-31	CERAMIC	0.001uF 10% 50V
C445	1-162-282-31	CERAMIC	100PF 10% 50V
C446	1-162-282-31	CERAMIC	100PF 10% 50V
C447	1-126-965-11	ELECT	22uF 20% 50V
C448	1-126-965-11	ELECT	22uF 20% 50V

Ref. No.	Part No.	Description	Remark
C451	1-136-497-81	FILM	0.1uF 5% 50V
C452	1-136-497-81	FILM	0.1uF 5% 50V
C453	1-136-497-81	FILM	0.1uF 5% 50V
C454	1-136-497-81	FILM	0.1uF 5% 50V
C481	1-104-665-11	ELECT	100uF 20% 25V
C486	1-126-961-11	ELECT	2.2uF 20% 50V
C487	1-126-963-11	ELECT	4.7uF 20% 50V
C488	1-126-965-11	ELECT	22uF 20% 50V
C489	1-128-563-11	ELECT	100uF 20% 100V
C492	1-162-306-11	CERAMIC	0.01uF 20% 16V
< CONNECTOR >			
CN441	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P	
< DIODE >			
D401	6-500-360-01	DIODE	D10XB20
D441	8-719-991-33	DIODE	1SS133T-77
D442	8-719-991-33	DIODE	1SS133T-77
D443	8-719-991-33	DIODE	1SS133T-77
D481	8-719-991-33	DIODE	1SS133T-77
D482	8-719-991-33	DIODE	1SS133T-77
D483	8-719-991-33	DIODE	1SS133T-77
< EARTH TERMINAL >			
EP401	1-537-771-21	TERMINAL BOARD, GROUND	
EP402	1-537-771-21	TERMINAL BOARD, GROUND	
EP491	1-537-771-21	TERMINAL BOARD, GROUND	
< IC >			
IC441	6-600-221-01	IC	STK403-130
< TERMINAL BOARD >			
JK441	1-694-884-11	TERMINAL BOARD (4P)	(SPEAKER IMPEDANCE USE 6-16Ω)
< COIL >			
L441	1-416-615-11	COIL, AIR-CORE	
L442	1-416-615-11	COIL, AIR-CORE	
< TRANSISTOR >			
Q441	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
Q442	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
Q481	8-729-119-79	TRANSISTOR	2SC2785-FEK
Q482	8-729-119-79	TRANSISTOR	2SC2785-FEK
Q483	8-729-119-79	TRANSISTOR	2SC2785-FEK
Q484	8-729-119-79	TRANSISTOR	2SC2785-FEK
Q485	8-729-119-76	TRANSISTOR	2SA1175-HFE
Q486	8-729-119-79	TRANSISTOR	2SC2785-FEK
Q487	8-729-119-79	TRANSISTOR	2SC2785-FEK
Q488	8-729-119-79	TRANSISTOR	2SC2785-FEK
Q489	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
< RESISTOR >			
R401	1-247-879-91	CARBON	100K 5% 1/4W
R402	1-247-879-91	CARBON	100K 5% 1/4W
R407	1-260-316-51	CARBON	100 5% 1/2W

POWER						SENSOR		SUB TRANS		SW		TRANS	
Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark		
R411	1-249-421-11	CARBON	2.2K	5%	1/4W			< IC >					
R412	1-249-421-11	CARBON	2.2K	5%	1/4W								
R413	1-249-429-11	CARBON	10K	5%	1/4W			IC731 (Not supplied) IC RPI-576					
R414	1-249-429-11	CARBON	10K	5%	1/4W			*****					
R441	1-247-831-91	CARBON	1K	5%	1/4W			SUB TRANS BOARD					
R442	1-247-831-91	CARBON	1K	5%	1/4W			*****					
R443	1-247-871-91	CARBON	47K	5%	1/4W			< CONNECTOR >					
R444	1-247-871-91	CARBON	47K	5%	1/4W								
R445	1-247-831-91	CARBON	1K	5%	1/4W			CN901 1-564-321-00 PIN, CONNECTOR (3.96mm PITCH) 2P					
R446	1-247-831-91	CARBON	1K	5%	1/4W			< DIODE >					
R447	1-247-871-91	CARBON	47K	5%	1/4W								
R448	1-247-871-91	CARBON	47K	5%	1/4W								
△ R451	1-217-156-00	METAL	0.22	10%	5W F			D901 8-719-991-33 DIODE 1SS133T-77					
△ R452	1-217-156-00	METAL	0.22	10%	5W F			D902 6-500-522-21 DIODE 10EDB40-TB3					
R453	1-260-076-11	CARBON	10	5%	1/2W			D903 6-500-522-21 DIODE 10EDB40-TB3					
R454	1-260-076-11	CARBON	10	5%	1/2W			D904 6-500-522-21 DIODE 10EDB40-TB3					
R455	1-247-831-91	CARBON	1K	5%	1/4W			D905 6-500-522-21 DIODE 10EDB40-TB3					
R456	1-247-831-91	CARBON	1K	5%	1/4W			< TRANSFORMER >					
R457	1-247-863-11	CARBON	22K	5%	1/4W			△ PT902 X-4956-294-1 TRANS ASSY, SUB (EXCEPT MX)					
R458	1-247-863-11	CARBON	22K	5%	1/4W			△ PT902 X-4956-322-1 SUB TRANS ASSY (MX)					
R459	1-247-871-91	CARBON	47K	5%	1/4W			< RELAY >					
R460	1-247-871-91	CARBON	47K	5%	1/4W								
R461	1-260-076-11	CARBON	10	5%	1/2W			△ RY901 1-755-276-21 RELAY, POWER					
R462	1-260-076-11	CARBON	10	5%	1/2W			< SWITCH >					
R465	1-247-871-91	CARBON	47K	5%	1/4W								
R466	1-247-873-91	CARBON	56K	5%	1/4W			△ S901 1-786-055-21 SELECTOR, VOLTAGE (VOLTAGE SELECT)					
R467	1-249-435-11	CARBON	33K	5%	1/4W			(EXCEPT MX)					
R481	1-247-847-91	CARBON	4.7K	5%	1/4W			*****					
R482	1-249-429-11	CARBON	10K	5%	1/4W			1-687-669-12 SW BOARD					
R483	1-249-397-11	CARBON	22	5%	1/4W			*****					
R484	1-247-873-91	CARBON	56K	5%	1/4W			< SWITCH >					
R485	1-247-879-91	CARBON	100K	5%	1/4W								
R486	1-247-879-91	CARBON	100K	5%	1/4W								
R487	1-249-435-11	CARBON	33K	5%	1/4W			S751 1-786-514-11 SWITCH, LEVER (SLIDE)					
R488	1-247-863-11	CARBON	22K	5%	1/4W			(OPEN/CLOSE DETECT)					
R489	1-247-847-91	CARBON	4.7K	5%	1/4W			*****					
R490	1-247-847-91	CARBON	4.7K	5%	1/4W								
R491	1-247-863-11	CARBON	22K	5%	1/4W			A-4750-672-A TRANS BOARD, COMPLETE (EXCEPT MX)					
R492	1-247-831-91	CARBON	1K	5%	1/4W			A-4752-926-A TRANS BOARD, COMPLETE (MX)					
R493	1-249-435-11	CARBON	33K	5%	1/4W			*****					
R494	1-249-421-11	CARBON	2.2K	5%	1/4W			1-533-233-11 FUSE HOLDER (EXCEPT MX)					
△ R495	1-202-972-61	FUSIBLE	1	5%	1/4W F			1-533-233-31 FUSE HOLDER (MX)					
△ R496	1-212-881-11	FUSIBLE	100	5%	1/4W F			< CAPACITOR >					
		< RELAY >											
RY441	1-755-373-11	RELAY						C906 1-164-159-11 CERAMIC 0.1uF 50V					
		< THERMISTOR >						C908 1-128-553-11 ELECT 220uF 20% 63V					
TH441	1-807-796-11	THERMISTOR						C909 1-126-964-11 ELECT 10uF 20% 50V					
		*****						C910 1-126-968-11 ELECT 100uF 20% 50V					
	1-687-132-12	SENSOR BOARD						C911 1-126-942-61 ELECT 1000uF 20% 25V					

		< CONNECTOR >						C920 1-131-679-31 FILM 0.01uF 5% 50V					
CN731	1-785-329-21	PIN, CONNECTOR (LIGHT ANGLE) 3P						C921 1-131-679-31 FILM 0.01uF 5% 50V					
								C922 1-131-679-31 FILM 0.01uF 5% 50V					
								C923 1-131-679-31 FILM 0.01uF 5% 50V					
								C924 1-136-165-00 FILM 0.1uF 5% 50V					
								C925 1-136-165-00 FILM 0.1uF 5% 50V					
								C926 1-164-159-11 CERAMIC 0.1uF 50V					

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

TRANS

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
CN904	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P (MX)	
CN904	1-568-106-11	PIN, CONNECTOR (3.96mm PITCH) 4P	(EXCEPT MX)
CN905	1-564-506-11	PLUG, CONNECTOR 3P	
* CN906	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
* CN907	1-764-333-11	PLUG, CONNECTOR 10P	
< DIODE >			
D906	8-719-983-79	DIODE MTZJ-T-72-27D	
D908	6-500-522-21	DIODE 10EDB40-TB3	
< TRANSISTOR >			
Q902	8-729-048-52	TRANSISTOR 2SA1932 (TP)	
< RESISTOR >			
R903	1-249-430-11	CARBON 12K 5% 1/4W	
R904	1-247-831-91	CARBON 1K 5% 1/4W	
△ R908	1-202-972-61	FUSIBLE 1 5% 1/4W F	

MISCELLANEOUS			

7	1-775-251-11	WIRE (FLAT TYPE) (27 CORE)	
9	1-469-854-11	CORE, FERRITE	
52	1-796-486-71	DECK, MECHANICAL (CWM43FR34)	
106	1-773-288-11	WIRE (FLAT TYPE) (29 CORE)	
107	1-827-145-11	WIRE (FLAT TYPE) (13 CORE)	
108	1-773-048-11	WIRE (FLAT TYPE) (17 CORE)	
251	1-769-940-11	WIRE (FLAT TYPE) (11CORE)	
252	1-693-615-11	TUNER (FM/AM)	
253	1-763-117-13	FAN, DC	
△ 303	1-696-848-12	CORD, POWER (AUS)	
△ 303	1-777-071-83	CORD, POWER (E51, SP)	
△ 303	1-827-226-11	CORD, POWER (MX)	
△ 303	1-827-226-21	CORD, POWER (E)	
△ 303	1-827-597-31	CORD, POWER (TW)	
304	1-569-007-12	ADAPTOR, CONVERSION 2P (E)	
304	1-569-008-32	ADAPTOR, CONVERSION (E51, SP)	
308	1-400-285-11	F-BEAD, E2515MRT	
509	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)	
602	1-471-035-11	MAGNET ASSY	
△ 657	8-820-244-11	OPTICAL PICK-UP KSM-215DCP/C2NP	
658	1-827-992-11	WIRE (FLAT TYPE) (16 CORE)	
△ F904	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (8A/250V)	
△ F905	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (8A/250V)	
△ F906	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15AL/250V)	
△ F907	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15AL/250V)	
M741	A-4723-963-A	MOTOR ASSY, TABLE	
M751	A-4736-655-A	MOTOR ASSY, LOADING	
△ PT901	1-443-237-11	TRANSFORMER, POWER (EXCEPT MX)	
△ PT901	1-443-284-11	TRANSFORMER, POWER (MX)	
S101	1-771-853-11	SWITCH, DETECTION (LIMIT)	
S711	1-477-680-12	ENCODER, ROTARY	(DISC TRAY ADDRESS DETECT)

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

MEMO

REVISION HISTORY

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