

SCD-C555ES

SERVICE MANUAL

Ver 1.0 2001.03

US Model
Canadian Model



Model Name Using Similar Mechanism	NEW
CD Mechanism Type	CDM59A
Optical Pick-up Type	KHM-230AAA/J1NP

SPECIFICATIONS

When a super audio CD is played

Playing frequency range	2 Hz to 100 kHz
Frequency response	2 Hz to 50 kHz (-3 dB)
Dynamic range	105 dB or more
Total harmonic distortion rate	0.0015 % or less
Wow and flutter	Value of measurable limit (± 0.001 % W. PEAK) or less

When a CD is played

Frequency response	2 Hz to 20 kHz
Dynamic range	99 dB or more
Total harmonic distortion rate	0.002 % or less
Wow and flutter	Value of measurable limit (± 0.001 % W. PEAK) or less

Output connector

	Jack type	Output level	Load impedance
ANALOG OUT	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms
DIGITAL (CD) OUT OPTICAL*	Square optical output connector	-18 dBm (Light emitting wave length: 660 nm)	
DIGITAL (CD) OUT COAXIAL*	Coaxial output connector	0.5 Vp-p	75 ohms
PHONES	Stereo phone jack	10 mW	32 ohms

*Output only the audio signals of the CD

General

Laser	Semiconductor laser ($\lambda = 780$ nm) Emission duration: continuous
Laser radiant power:	5.47 μ W at 650 nm *These output is the value measured at a distance of about 200mm from the objective lens surface on the optical pick-up.
Power requirements	120 V AC, 60 Hz
Power consumption	38 W
Dimensions (w/h/d)	430 \times 138 \times 409 mm (17 \times 5 1/2 \times 16 1/8 in.) incl. projecting parts
Mass (approx.)	11.0 kg (24 lbs 5 oz.)

Supplied accessories

- Audio connecting cord
phono jack \times 2 (Red and White) \leftrightarrow phono jack \times 2 (Red and White) (2)
phono jack \times 1 (Black) \leftrightarrow phono jack \times 1 (Black) (2)
- Monaural (2P) mini-plug cord (1) (Connecting cord for CONTROL A1 II) (supplied for Canadian models only)
- Remote commander (remote) RM-SC500 (1)
- R06 (size-AA) batteries (2)

Design and specifications are subject to change without notice.

SUPER AUDIO CD PLAYER

SONY®

9-873-872-11
2001C1600-1
© 2001.3

Sony Corporation
Audio Entertainment Group
General Engineering Dept.

TABLE OF CONTENTS

1. SERVICING NOTES (1) 3

2. GENERAL 4

3. DISASSEMBLY

3-1. Case 6

3-2. Front Panel Section 6

3-3. Main Board 7

3-4. Audio Board 7

3-5. D-Power, I/O Board 8

3-6. CD Mechanism Deck (CDM59-DVBU5) 8

3-7. Optical Pick-Up Block (KHM-230AAA/J1NP) 9

3-8. Table Assy 9

3-9. Tray, Sensor Board 10

3-10. Loading Motor Board 10

3-11. Adjusting Phase of Swing Gear and Gear (U/D) 11

4. DIAGRAMS

4-1. Block Diagrams 13

- RF/Servo Section 13
- Main Section-1 14
- Main Section-2 15
- Audio Section 16
- Display/Power Section 17

4-2. Schematic Diagram RF Section 18

4-3. Printed Wiring Board RF Section 19

4-4. Printed Wiring Board Main Section (Side A) 20

4-5. Printed Wiring Board Main Section (Side B) 21

4-6. Schematic Diagram Main Section (1/5) 22

4-7. Schematic Diagram Main Section (2/5) 23

4-8. Schematic Diagram Main Section (3/5) 24

4-9. Schematic Diagram Main Section (4/5) 25

4-10. Schematic Diagram Main Section (5/5) 26

4-11. Schematic Diagram Audio Section (1/2) 27

4-12. Schematic Diagram Audio Section (2/2) 28

4-13. Schematic Diagram D-Power Section 29

4-14. Printed Wiring Board Audio Section 30

4-15. Printed Wiring Board In Out/D-Power Section 31

4-16. Schematic Diagram In Out Section 31

4-17. Schematic Diagram Display Section 32

4-18. Printed Wiring Board Display Section 33

4-19. Schematic Diagram HP Section 34

4-20. Printed Wiring Board HP Section 35

4-21. Schematic Diagram Sensor Section 36

4-22. Printed Wiring Board Sensor Section 37

4-23. Schematic Diagram Power Section 38

4-24. Printed Wiring Board Power Section 39

4-25. IC Block Diagrams 40

4-26. IC Pin Function Description 44

5. SERVICING NOTES (2) 57

6. TEST MODE 58

7. EXPLODED VIEWS

7-1. Case Section 74

7-2. Front Panel Section 75

7-3. Main Chassis Section 76

7-4. CD Mechanism (CDM59-DVBU5) -1 Section 77

7-5. CD Mechanism (CDM59-DVBU5) -2 Section 78

8. ELECTRICAL PARTS LIST 79

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

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

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

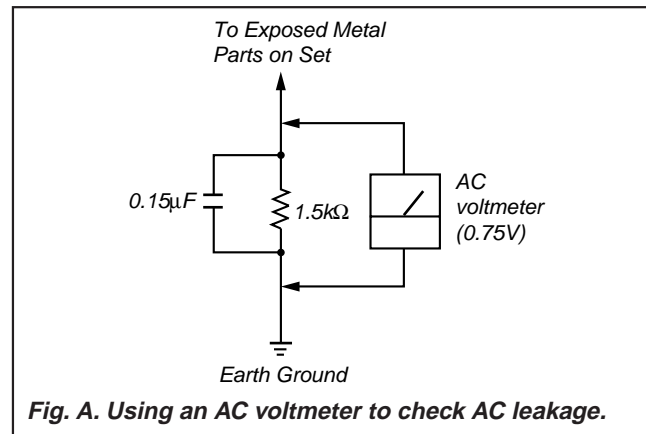


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING !!

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

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

SECTION 1 SERVICING NOTES (1)

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. The emission check enables continuous checking of the S curve.

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.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

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

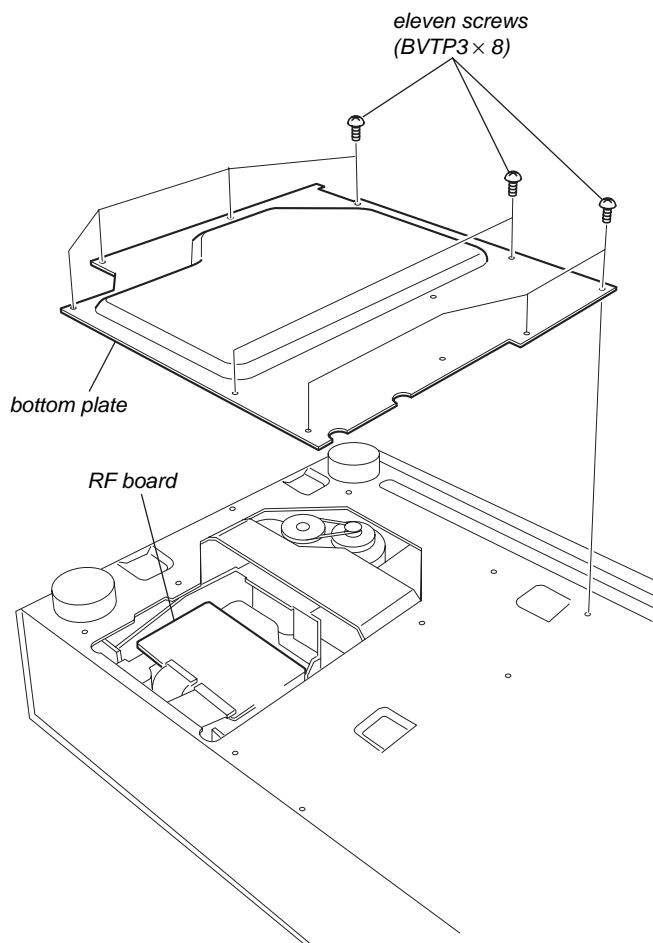
Notes on chip component replacement

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

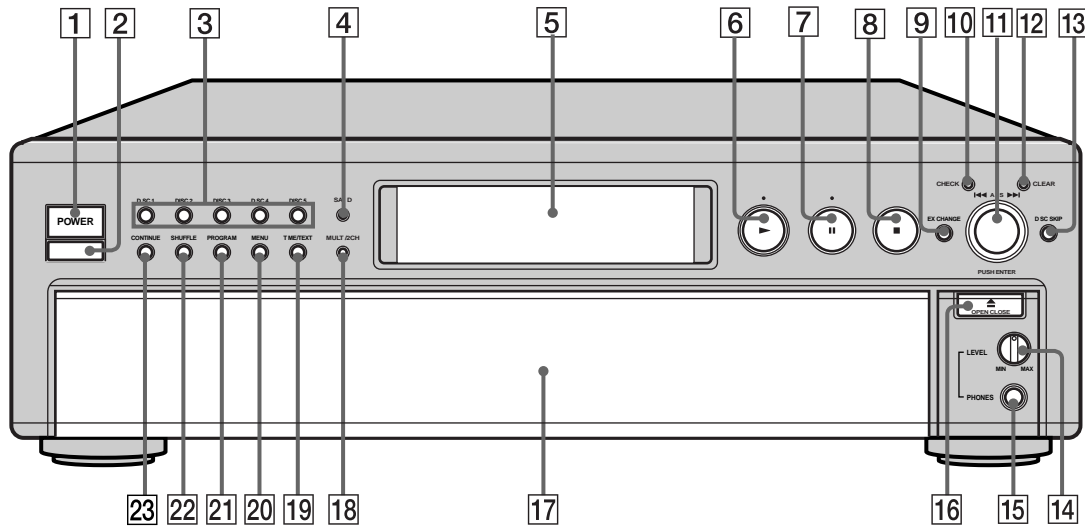
Flexible Circuit Board Repairing

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

When the bottom plate is removed, the RF board can be checked.

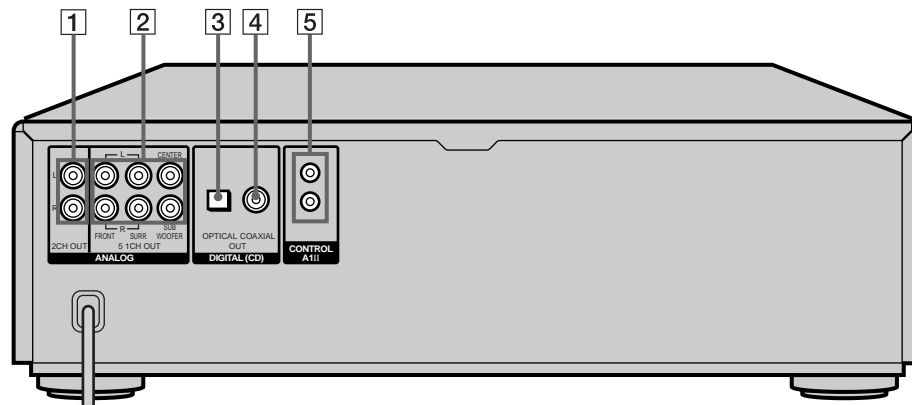


Front Panel Parts Descriptions



- 1 POWER switch (14)**
Press to turn on/off the player.
- 2 Remote sensor (4)**
- 3 DISC 1-5 button (14)**
Press to select the disc.
- 4 SACD/CD button (with an LED) (14)**
Each time you press the button while the Hybrid disc (page 13) is loaded, the layer changes between an HD (SACD) layer (the LED turns on) and CD layer (the LED turns off).
- 5 Display window (15)**
Shows various information.
- 6 ► button (14)**
Press to start play.
► indicator
Lights up during playback.
- 7 || button (14)**
Press to pause play.
|| indicator
Lights up during pause.
- 8 ■ button (14)**
Press to stop play.
- 9 EX-CHANGE button (18)**
Press to replace discs while playing a disc.
- 10 CHECK button (23)**
Press to check the programmed order.
- 11 ◀◀AMS▶▶ dial (AMS: Automatic Music Sensor) (7, 14)**
When you turn the ◀◀AMS▶▶ dial counterclockwise by one click, you go back to the preceding track; when you turn the ◀◀AMS▶▶ dial clockwise by one click, you go to the succeeding track.
- 12 CLEAR button (23)**
Press to delete a programmed track number.
- 13 DISC SKIP button (14)**
Press to select the disc.
- 14 PHONES LEVEL control**
Adjust the headphones volume.
- 15 PHONES jack**
Connect the headphones.
During playback of a Multi-channel Super Audio CD, the same signal that is output from the ANALOG 5.1CH FRONT L/R jacks is output from the PHONES jack.
- 16 ≡ OPEN/CLOSE button (14)**
Press to open/close the disc tray.
- 17 Disc tray (14)**
Press ≡ OPEN/CLOSE to open/close the disc tray.
- 18 MULTI/2CH button (with an LED) (14)**
Press to select the playback area when the 2 channel + Multi-channel Super Audio CD is loaded. When you select the Multi-channel playback area (page 13), the LED turns on.
- 19 TIME/TEXT button (16)**
Each time you press the button, the playing time of the track, the total remaining time on the disc, or TEXT information appears in the display.
- 20 MENU button (7)**
Press to enter the menu.
- 21 PROGRAM button (23)**
Press to select Program Play.
- 22 SHUFFLE button (22)**
Press to select Shuffle Play.
- 23 CONTINUE button (14)**
Press to resume normal play from Shuffle Play or Program Play.

Rear Panel Parts Descriptions

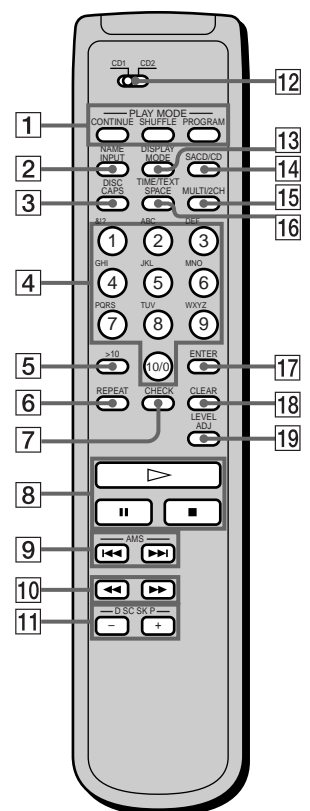


- 1 ANALOG 2CH OUT L/R jacks (6)**
Connect to an audio component (stereo/2 channel) using the audio connecting cord.
- 2 ANALOG 5.1CH OUT jacks (5)**
Connect to an amplifier equipped with the 5.1CH input jacks (Multi-channel amplifier, AV amplifier, etc.) using the audio connecting cords.
- 3 DIGITAL (CD) OUT OPTICAL connector (7)**
Connect to an audio component using an optical digital cable.
- 4 DIGITAL (CD) OUT COAXIAL connector (7)**
Connect to an audio component using the coaxial digital cable.
- 5 CONTROL A1 II jacks (7, 31)**
Connect to a Sony audio component using the monaural (2P) mini-plug cord.

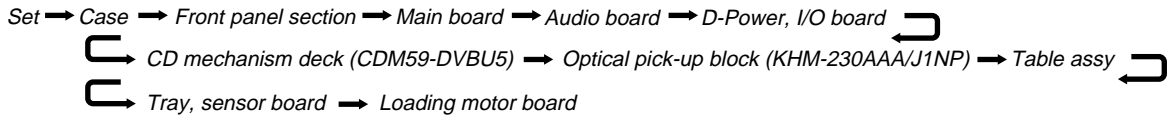
Note
Only the audio signals of the CD can be output from the DIGITAL (CD) OUT connectors shown in **3** and **4**. Those of the Super Audio CD cannot be output through DIGITAL (CD) OUT.

Remote Parts Descriptions

- 1 CONTINUE button (14)**
Press to resume normal play from Shuffle Play or Program Play.
- SHUFFLE button (22)**
Press to select Shuffle Play.
- PROGRAM button (23)**
Press to select Program Play.
- 2 NAME INPUT button (29)**
Press to enter the name input mode.
- 3 DISC/CAPS button (19, 29)**
Press to select the disc.
Press to select the capital letter in name input mode.
- 4 Number buttons (19)**
Press to enter the track numbers.
- 5 >10 button (19)**
Press to locate a track numbered over 10.
- 6 REPEAT button (21)**
Press repeatedly to play all tracks or only one track on the disc.
- 7 CHECK button (23)**
Press to check the programmed order.
- 8 ▷ button (14)**
Press to start play.
- || button (14)**
Press to pause play.
- button (14)**
Press to stop play.
- 9 AMS ◀▶/▶▶ (AMS: Automatic Music Sensor) buttons (19)**
Press to locate a specific track.
- 10 ◀▶/▶▶ buttons (20)**
Press to locate a portion you want to play within a track.
- 11 DISC SKIP +/- buttons (14)**
Press to select the disc.
- 12 CD1/2 (COMMAND MODE) switch (7)**
Select the command mode.
- 13 DISPLAY MODE button (16)**
Press to turn off the information.
- 14 SACD/CD button (14)**
Each time you press the button while the Hybrid disc (page 13) is loaded, the layer changes between an HD layer (the SACD/CD LED turns on) and CD layer (the SACD/CD LED turns off).
- 15 MULTI/2CH button (14)**
Press to select the playback area when the 2 channel + Multi-channel Super Audio CD is loaded. When you select the Multi-channel playback area (page 13), the MULTI/2CH LED turns on.
- 16 TIME/TEXT/SPACE button (16, 30)**
Each time you press the button, the playing time of the track, the total remaining time on the disc, or TEXT information appears in the display.
Press to insert a space in name input mode.
- 17 ENTER button (29)**
Press to decide the selection.
- 18 CLEAR button (23)**
Press to delete a programmed track number.
- 19 LEVEL ADJ button (26)**
Press to adjust the output level balance for the Multi-channel management function (page 24).

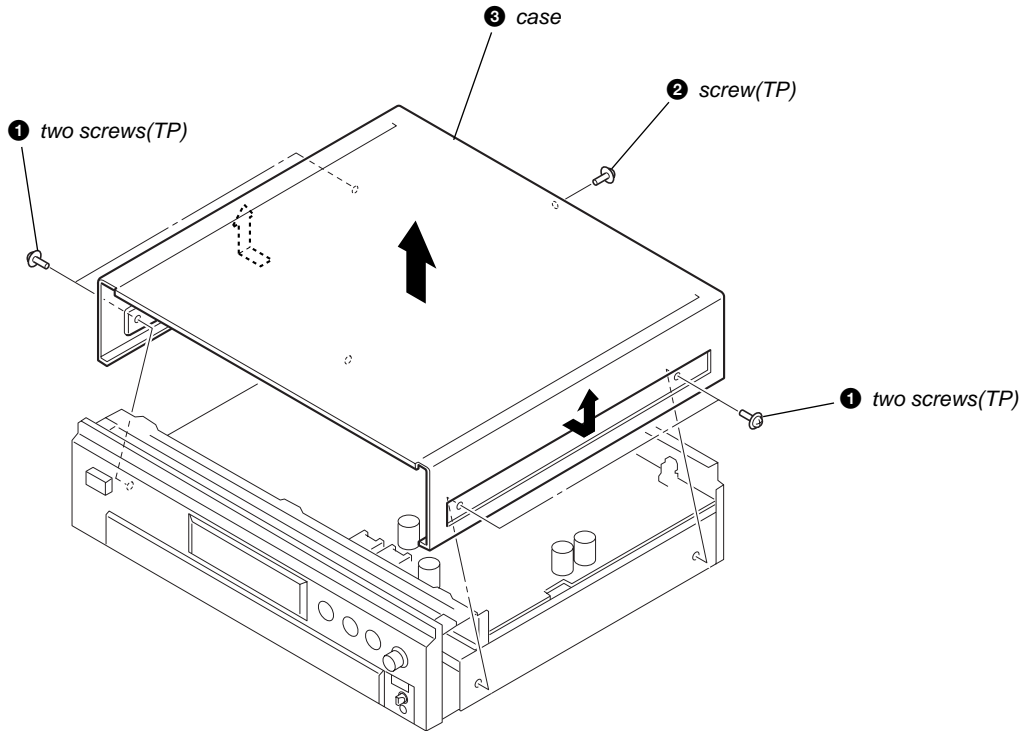


SECTION 3 DISASSEMBLY

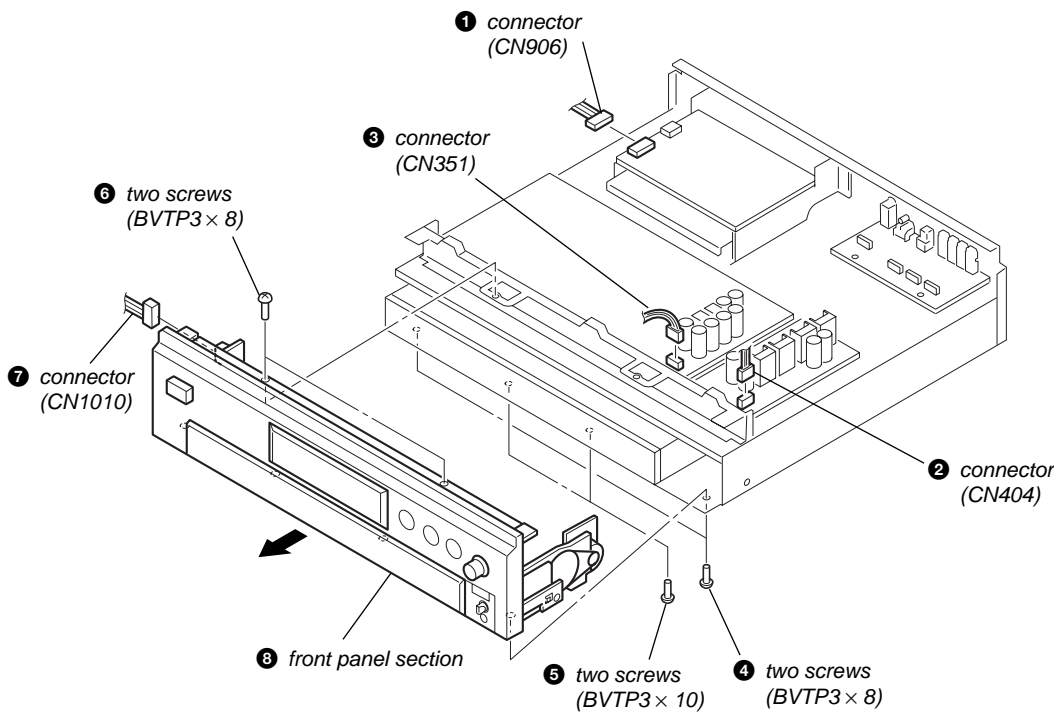


Note : Follow the disassembly procedure in the numerical order given.

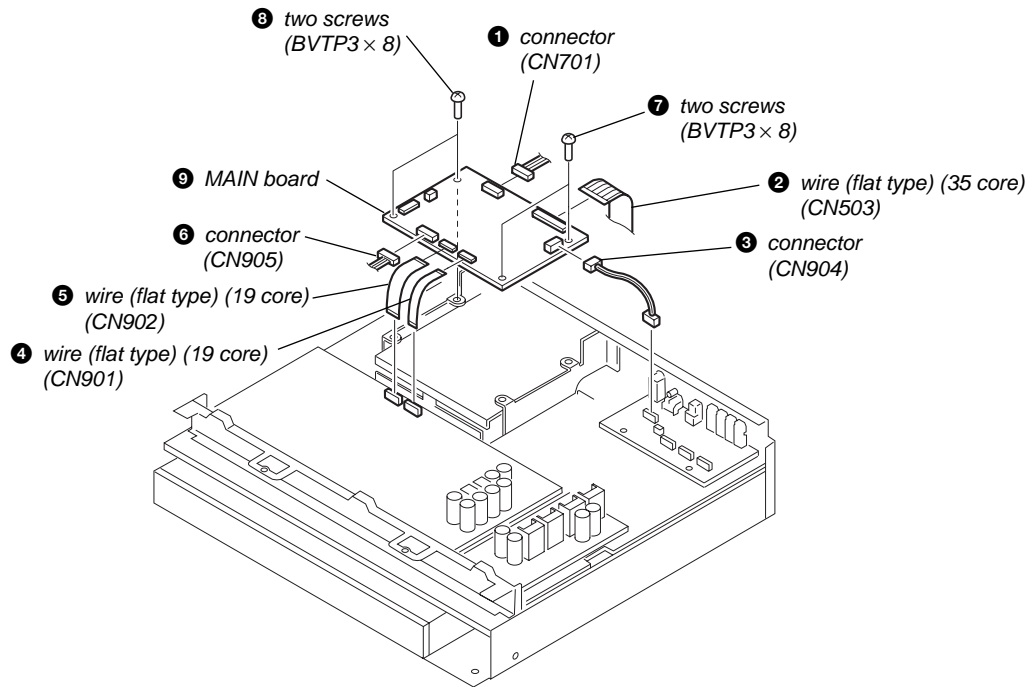
3-1. CASE



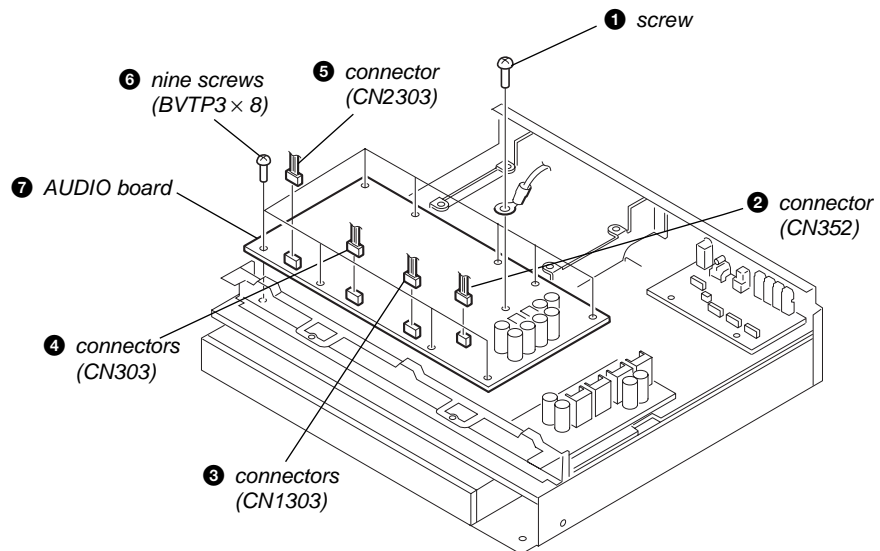
3-2. FRONT PANEL SECTION



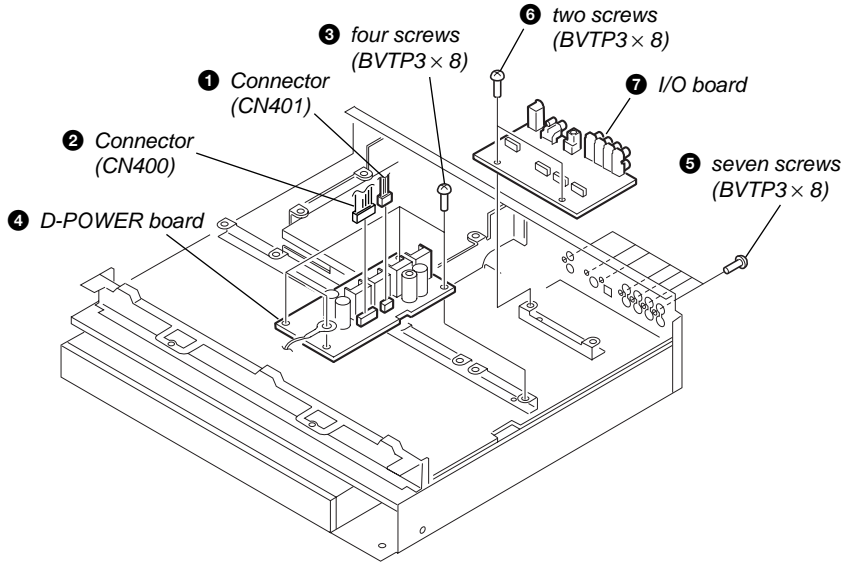
3-3. MAIN BOARD



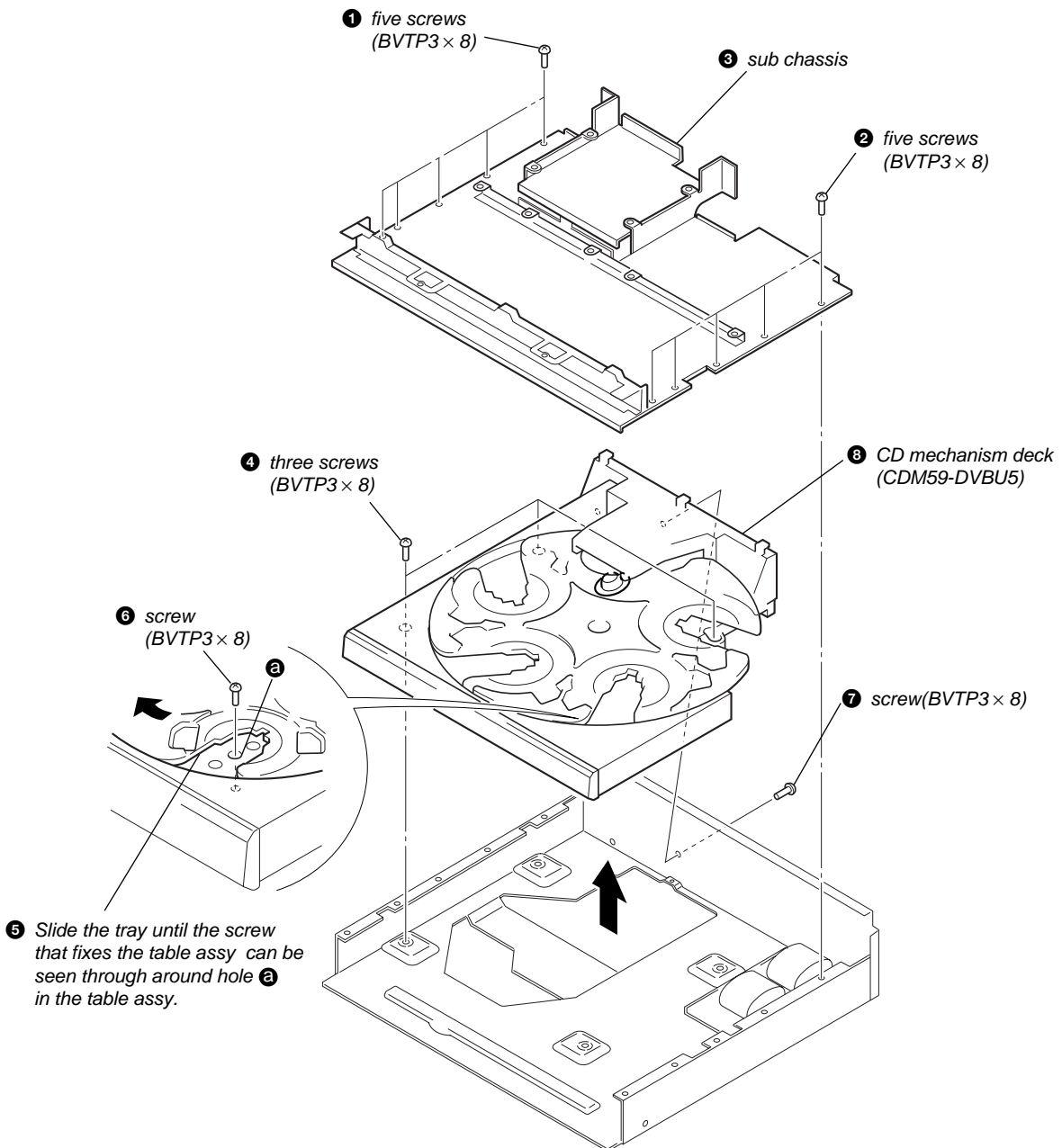
3-4. AUDIO BOARD



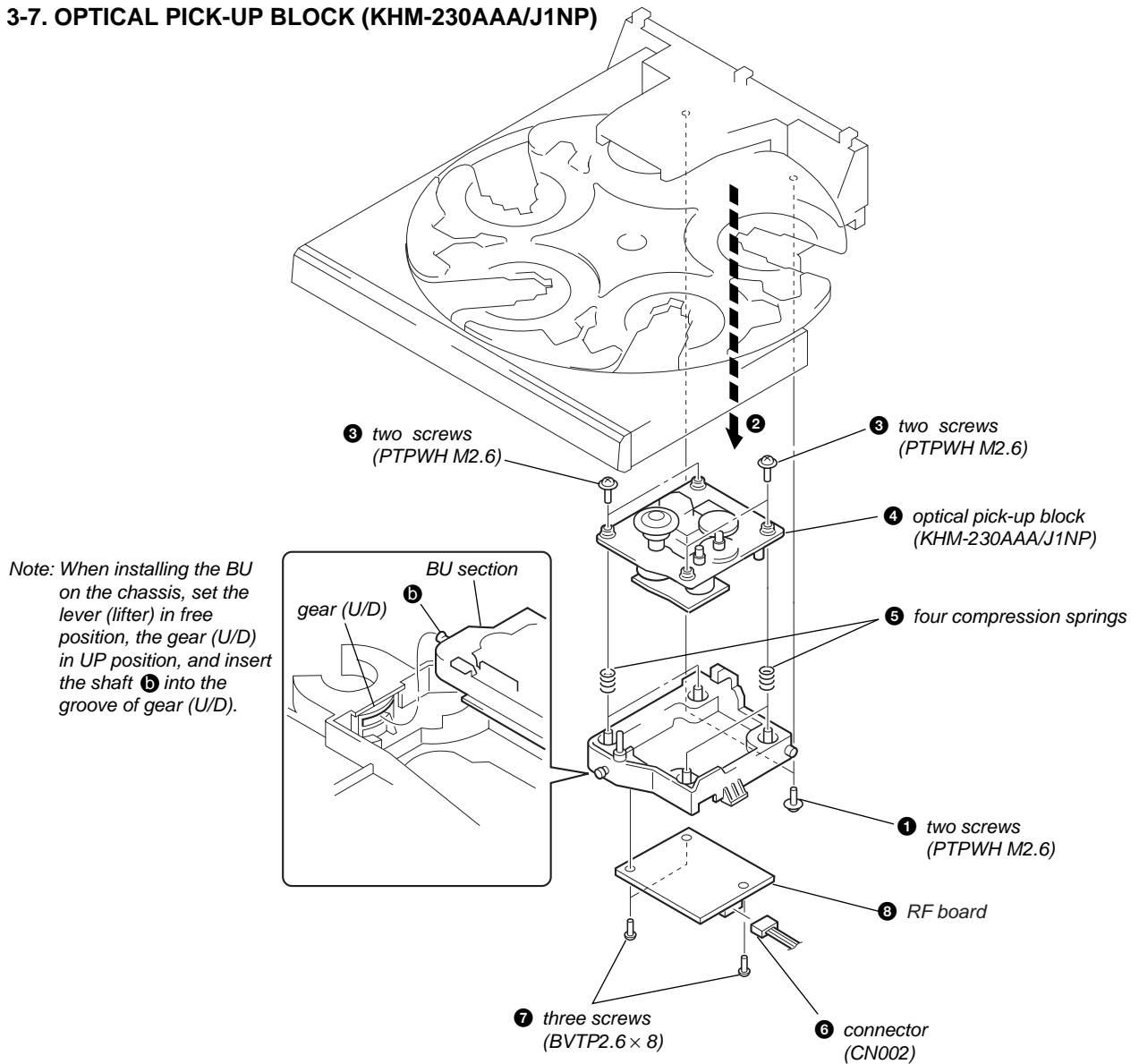
3-5. D-POWER, I/O BOARD



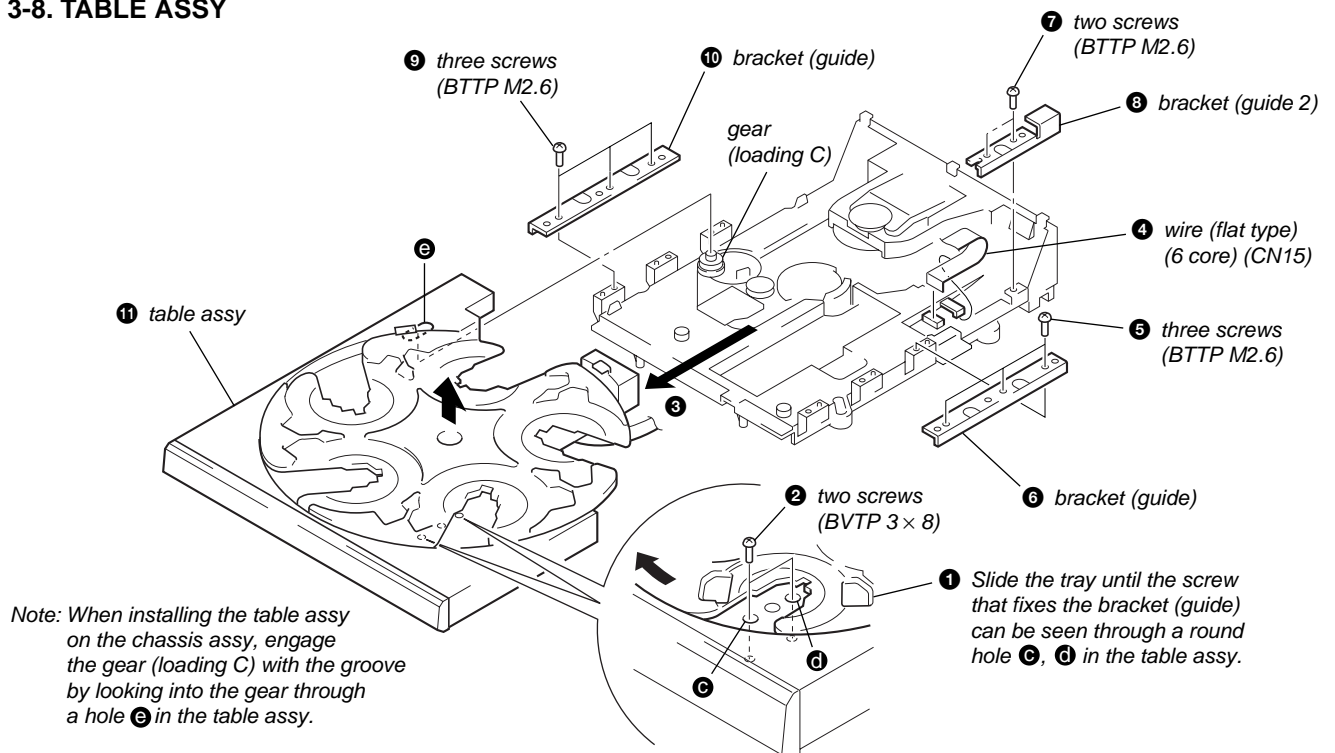
3-6. CD MECHANISM DECK (CDM59-DVBU5)



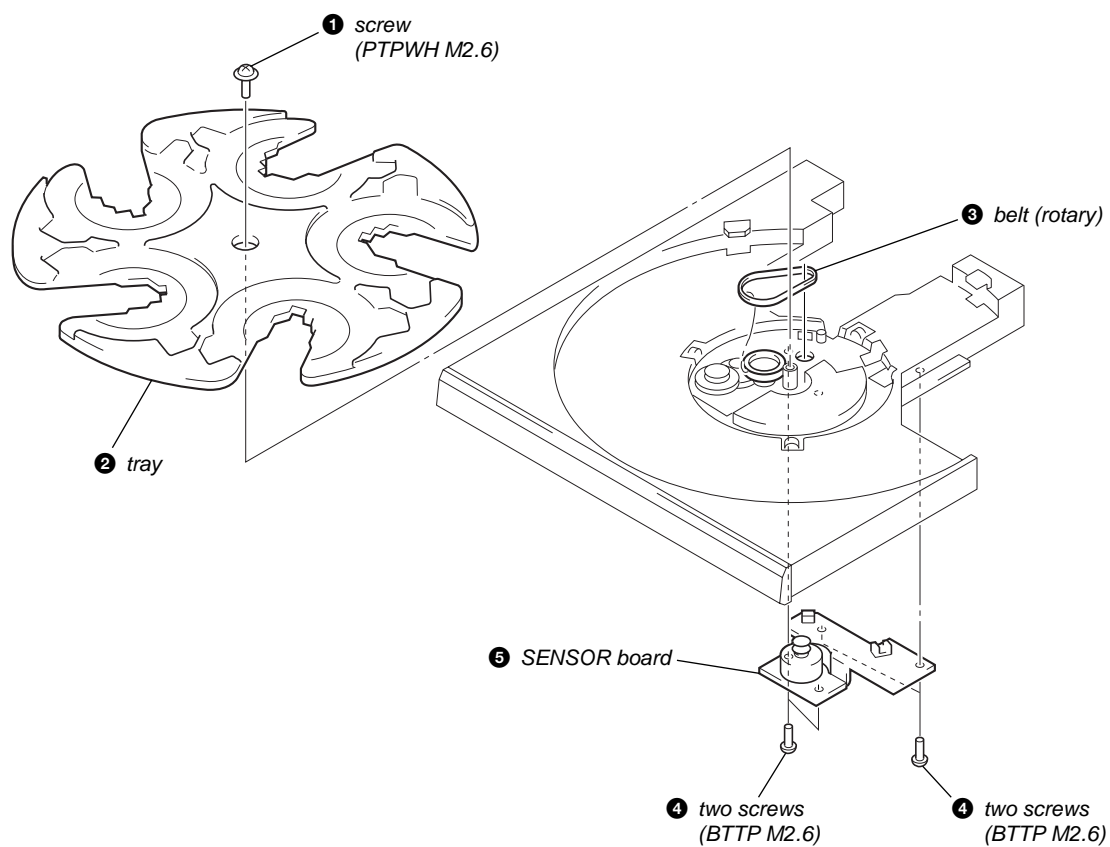
3-7. OPTICAL PICK-UP BLOCK (KHM-230AAA/J1NP)



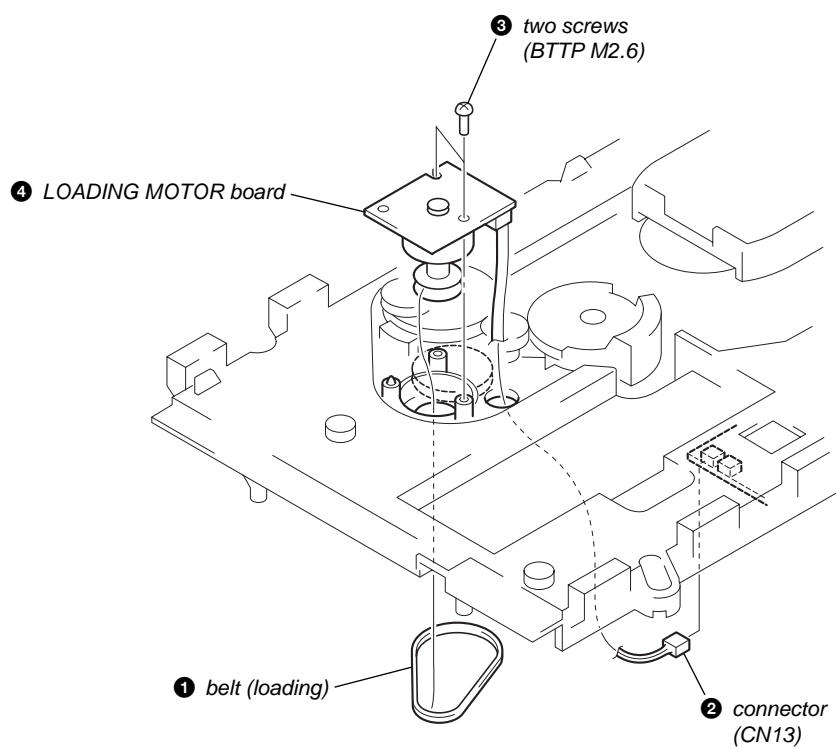
3-8. TABLE ASSY



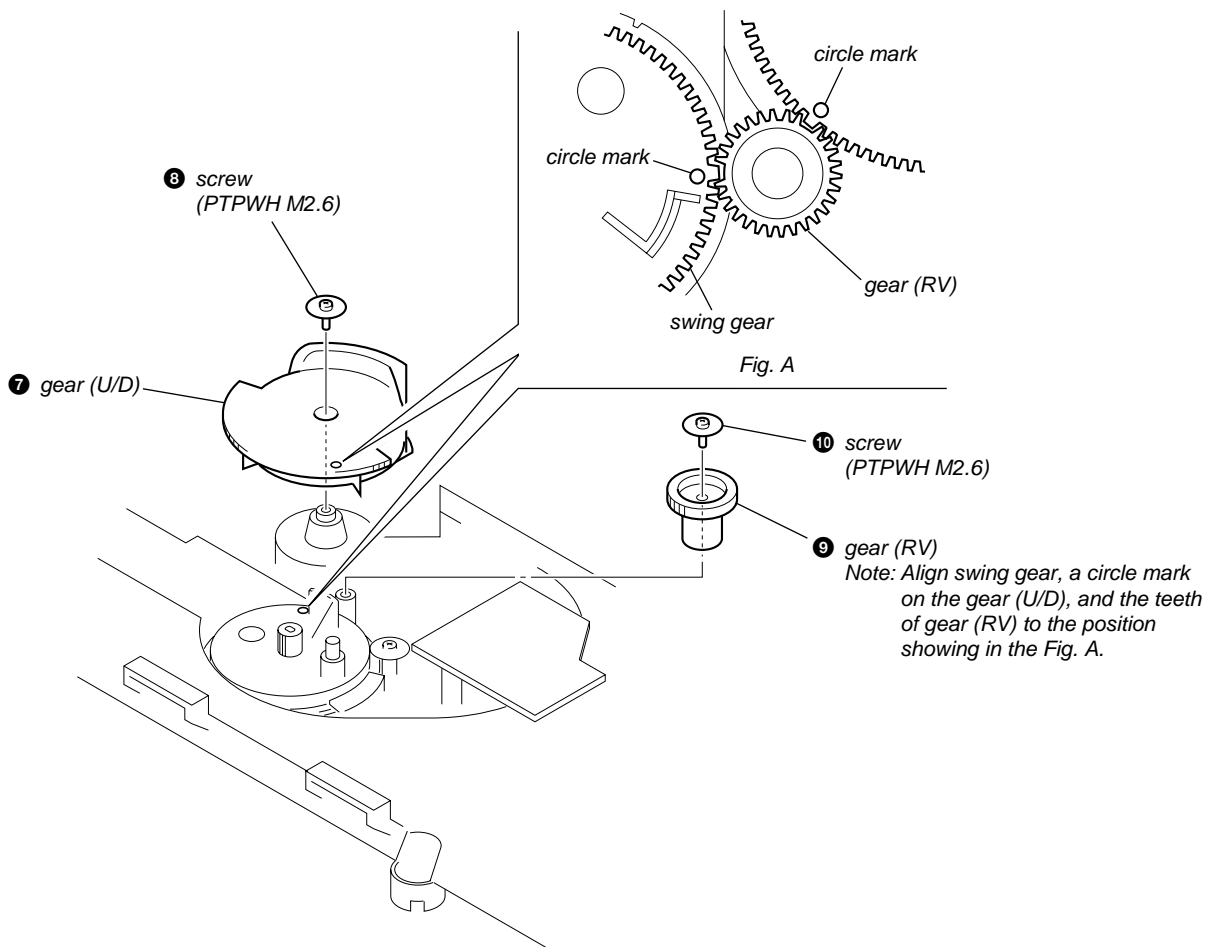
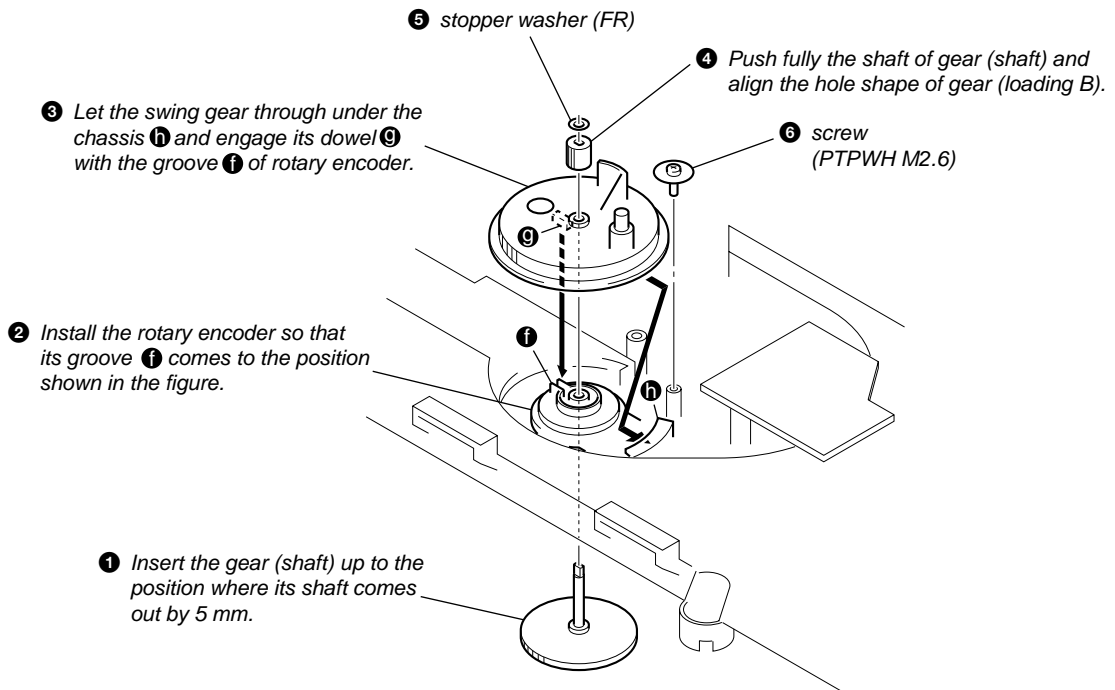
3-9. TRAY, SENSOR BOARD



3-10. LOADING MOTOR BOARD



3-11. ADJUSTING PHASE OF SWING GEAR AND GEAR (U/D)



SECTION 4 DIAGRAMS

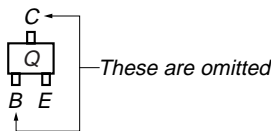
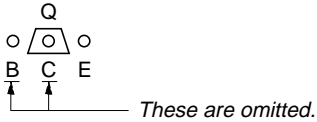
NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Board:

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : Pattern from the side which enables seeing.

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

- Indication of transistor



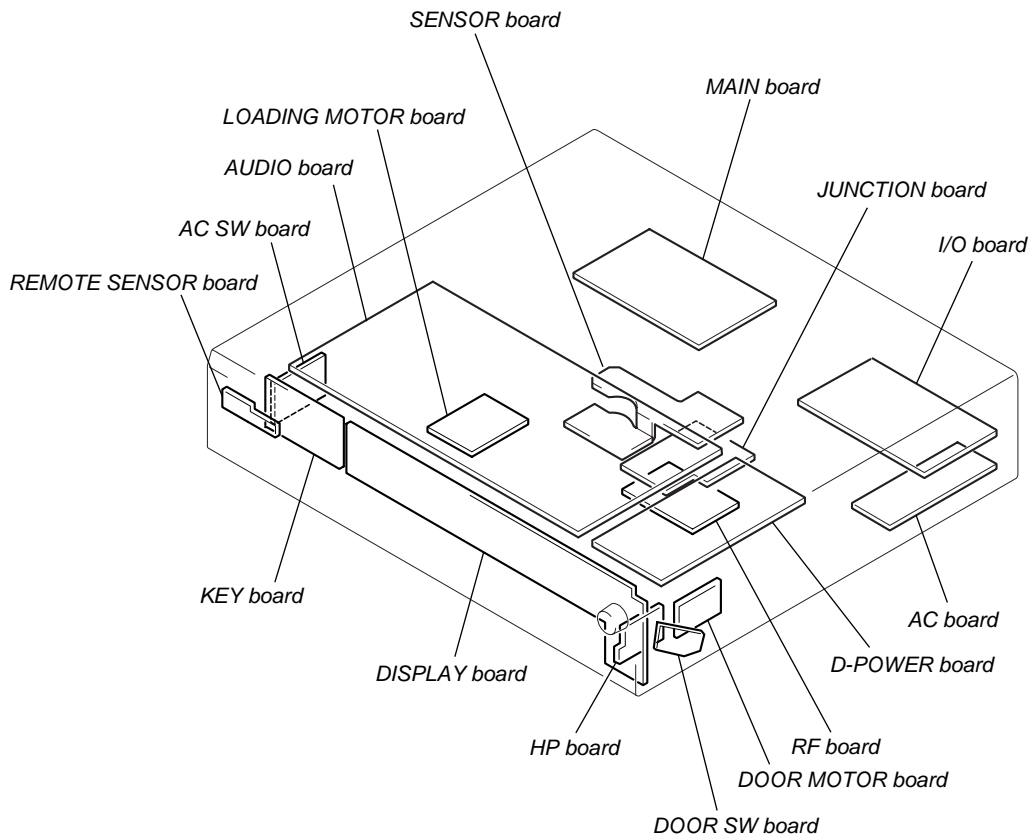
Note on Schematic Diagram:

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

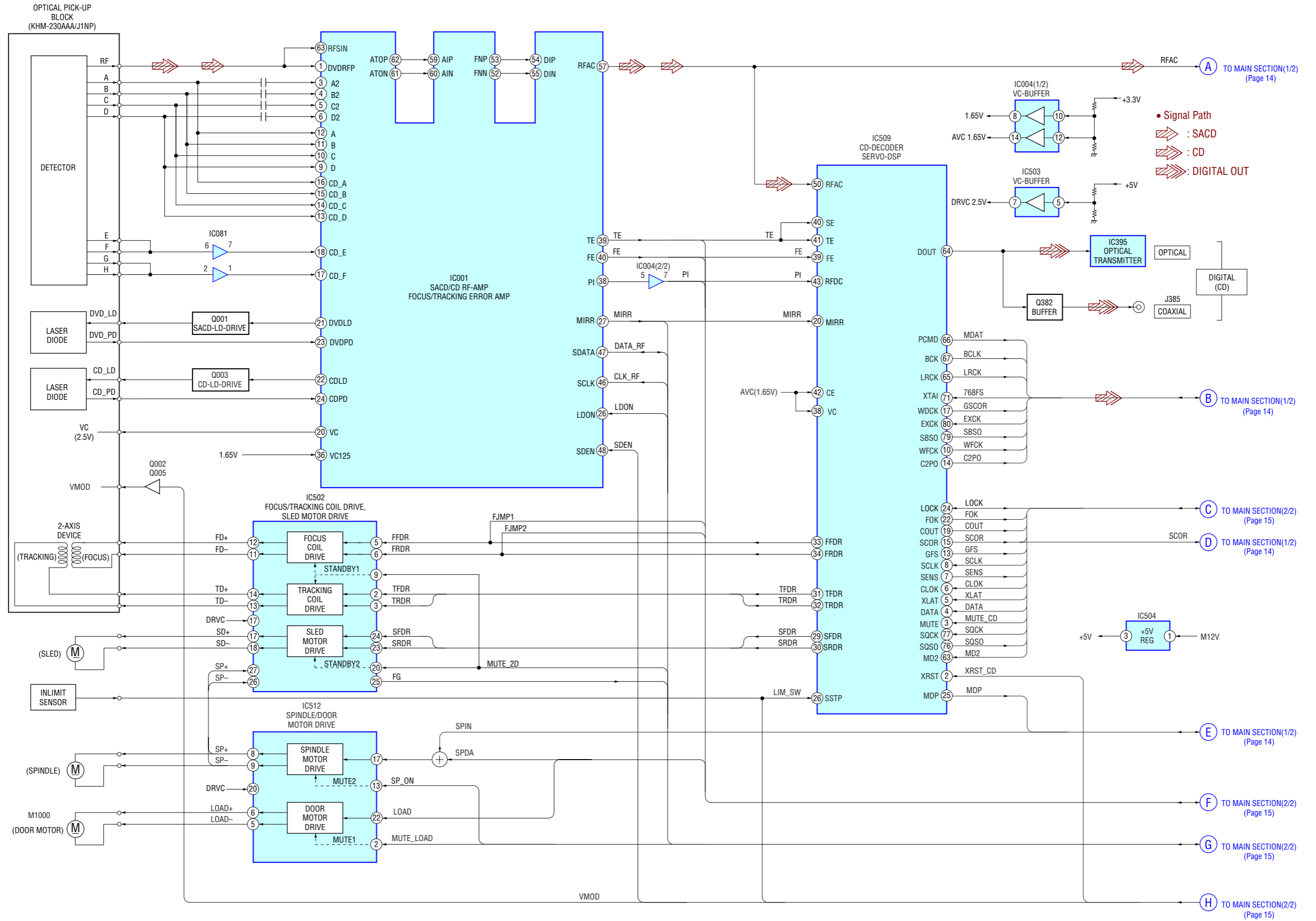
<p>Note: The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.</p>	<p>Note: Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
--	---

- : B+ Line.
- : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
 no mark : CD PLAY
- 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.
 : SACD
 : CD
 : DIGITAL OUT

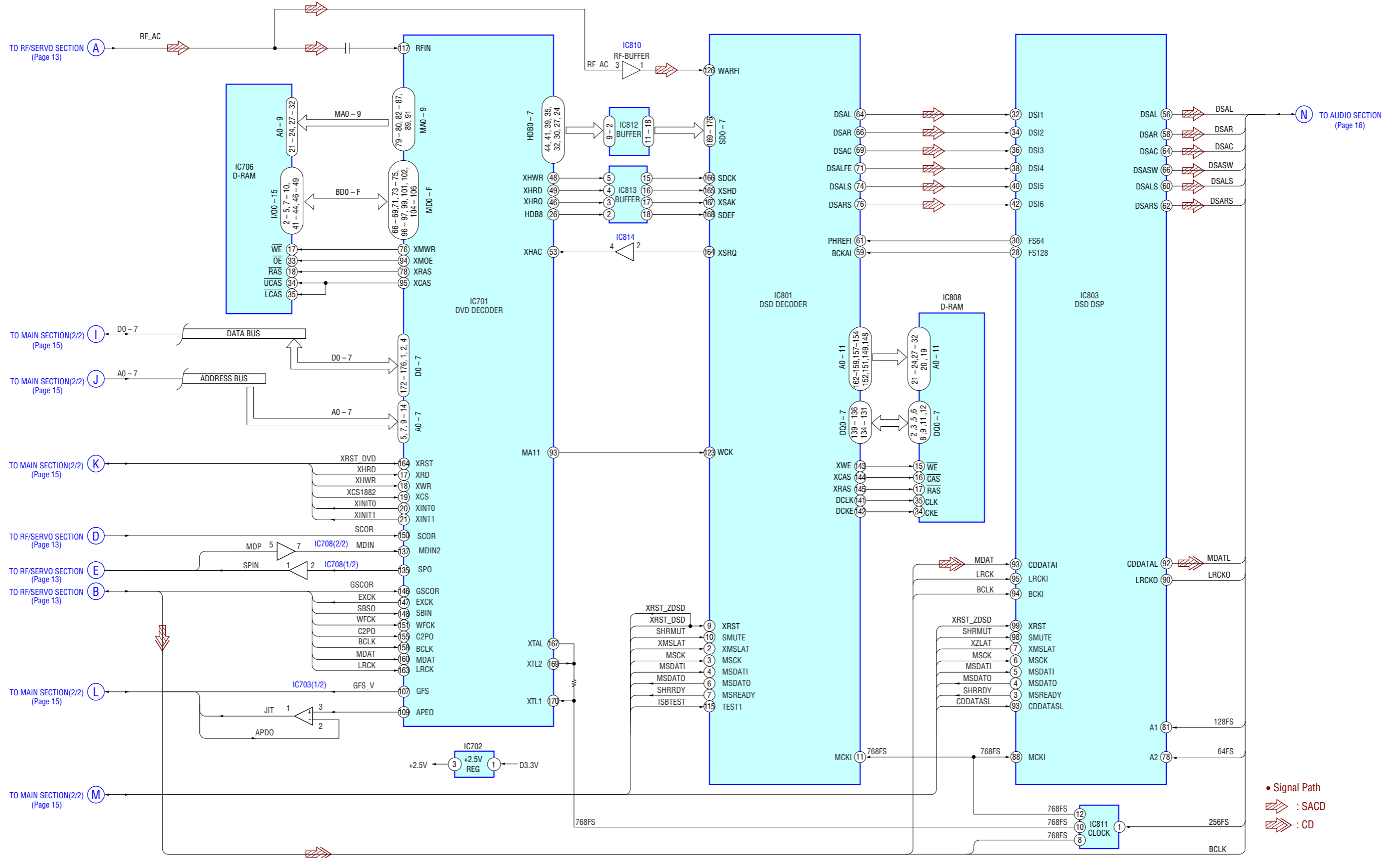
• **Circuit Boards Location**



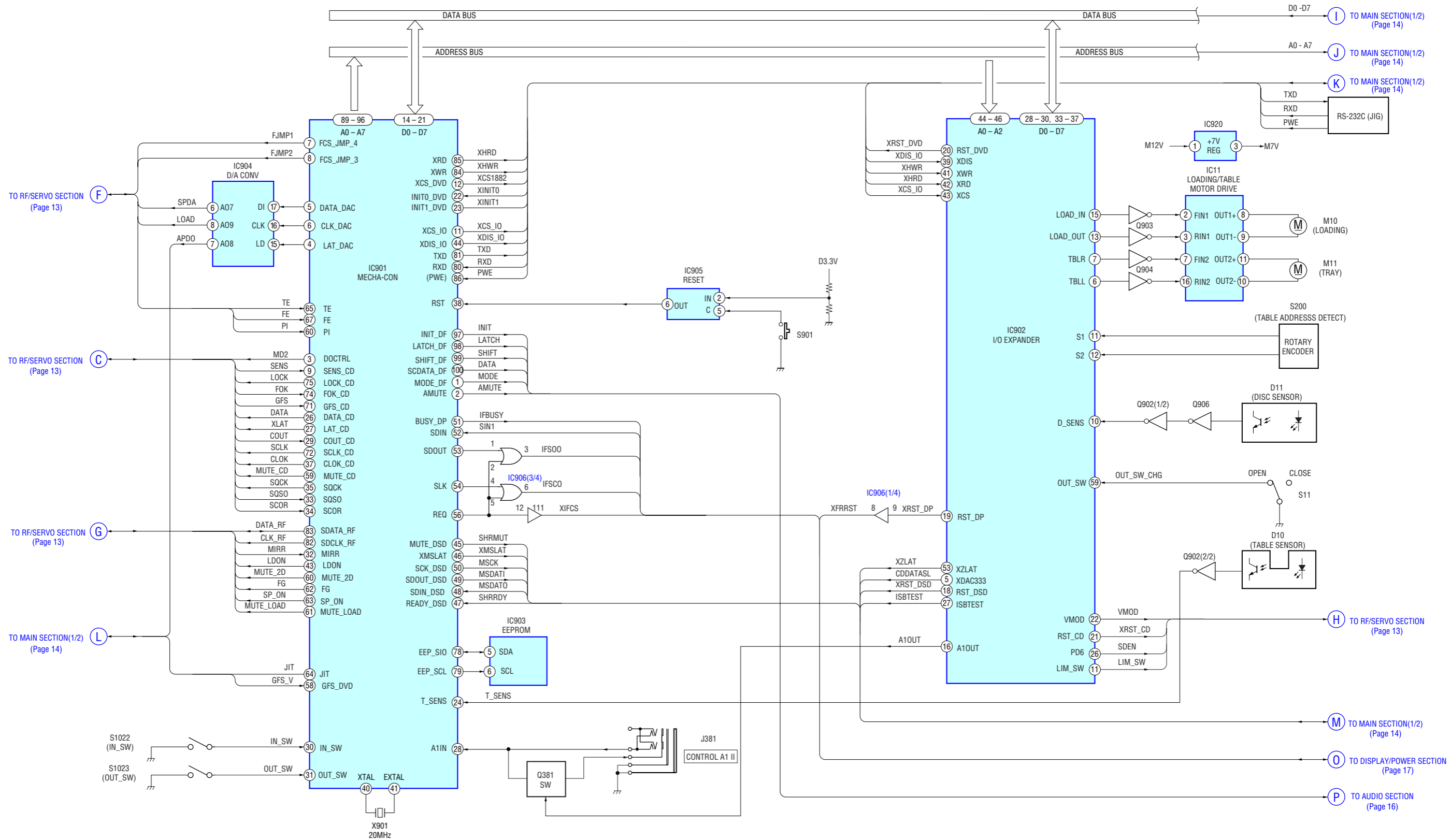
4-1. BLOCK DIAGRAMS
RF/SERVO SECTION



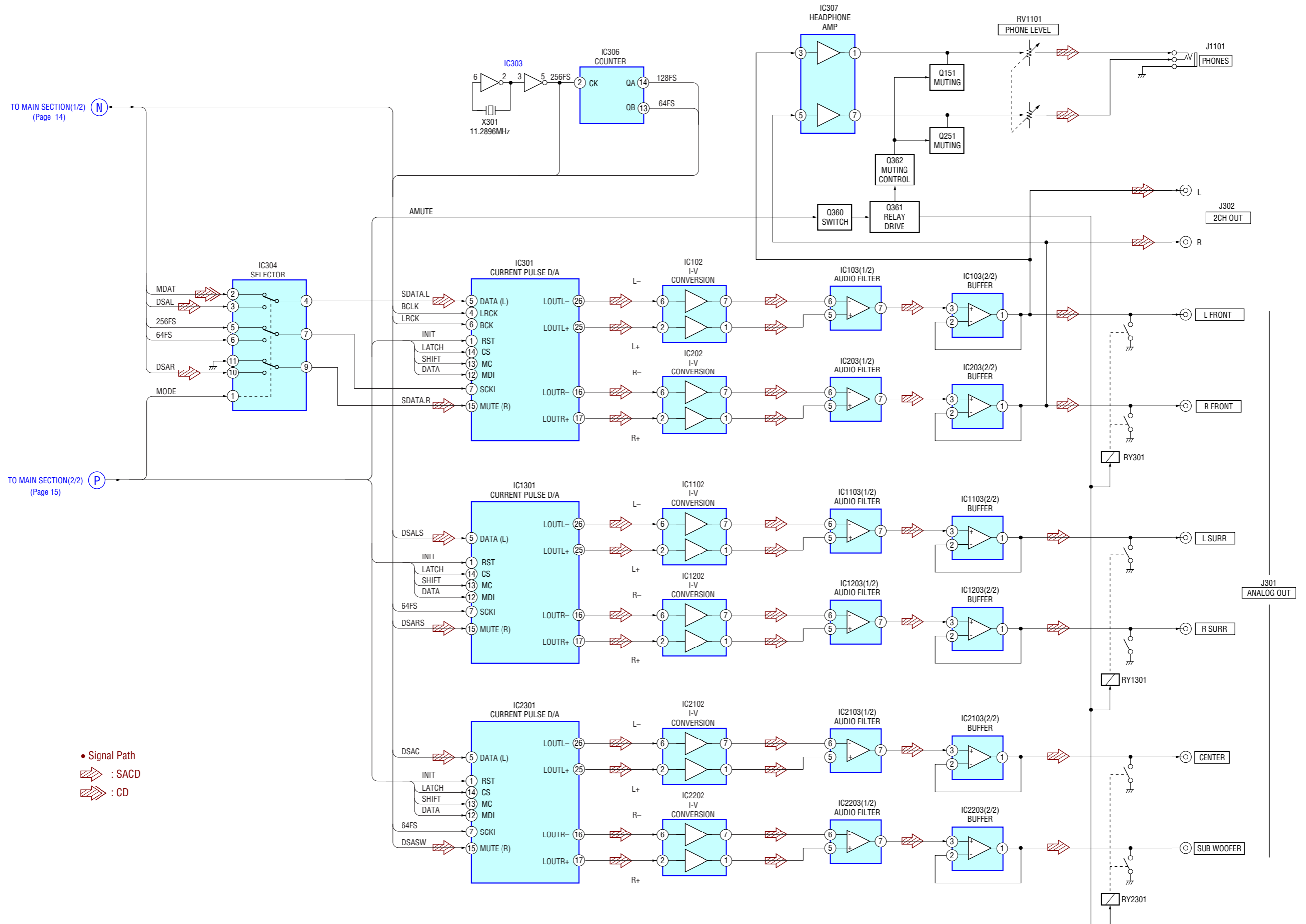
MAIN SECTION-1



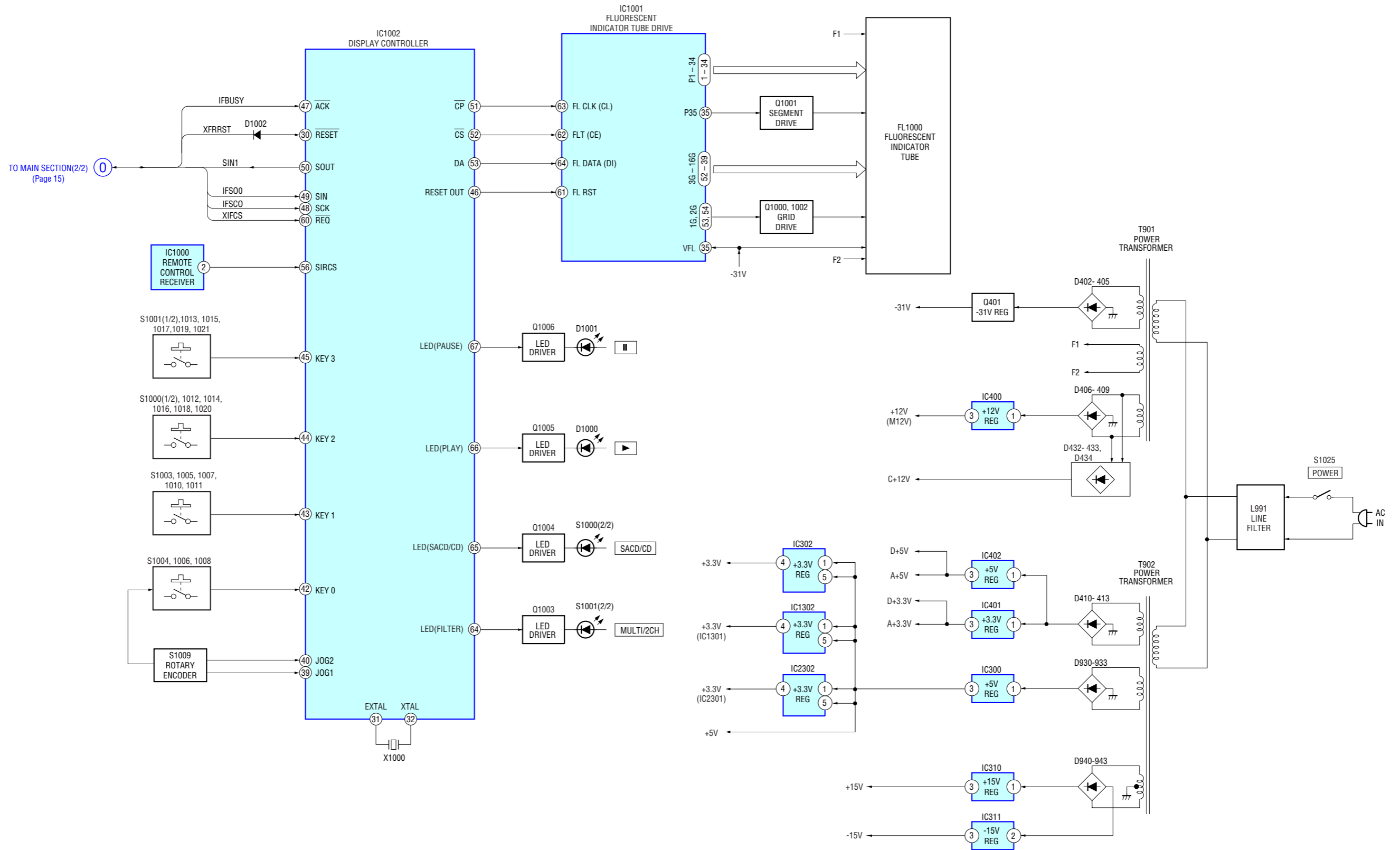
MAIN SECTION-2

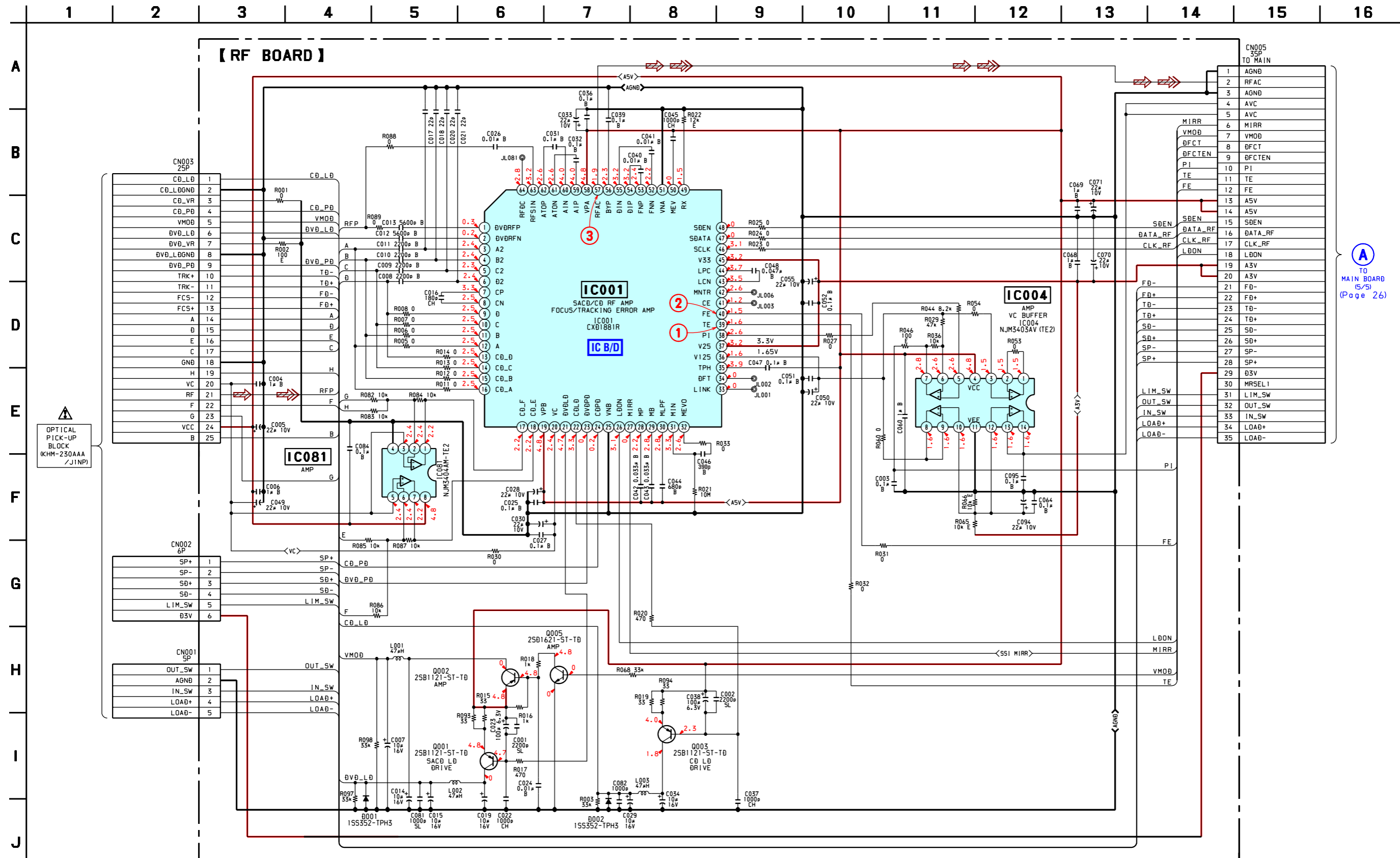


AUDIO SECTION



DISPLAY/POWER SECTION

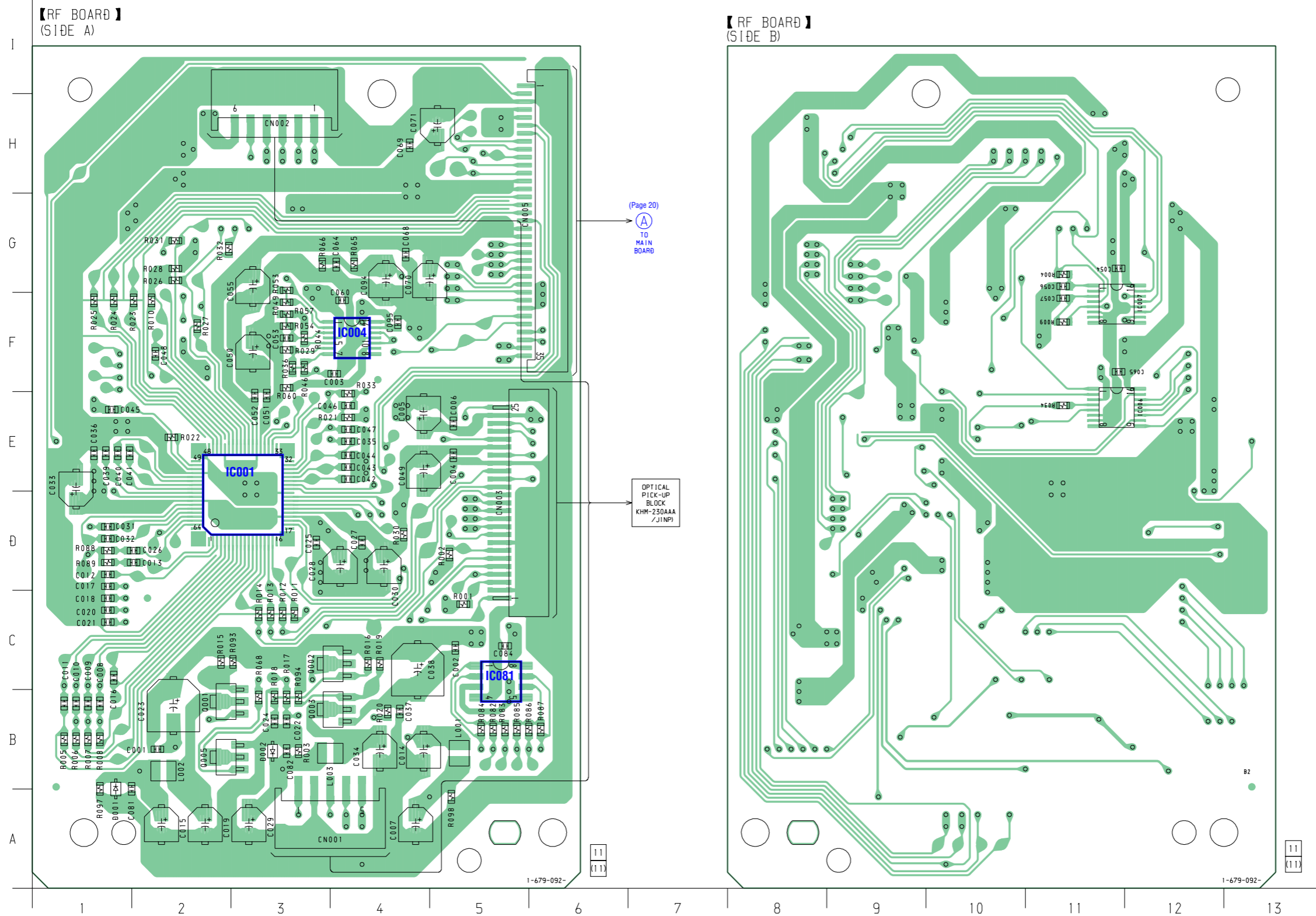




A
TO MAIN BOARD (5/5)
(Page 26)

4-3. PRINTED WIRING BOARD RF SECTION • Refer to page 12 for Circuit Board Location.

There are a few cases that the part printed on this diagram isn't mounted in this model.



• Semiconductor Location

Ref. No.	Location
D001	A-1
D002	B-3
IC001	E-3
IC004	F-4
IC081	C-5
Q001	B-2
Q002	C-3
Q003	B-3
Q005	B-2

SCD-C555ES

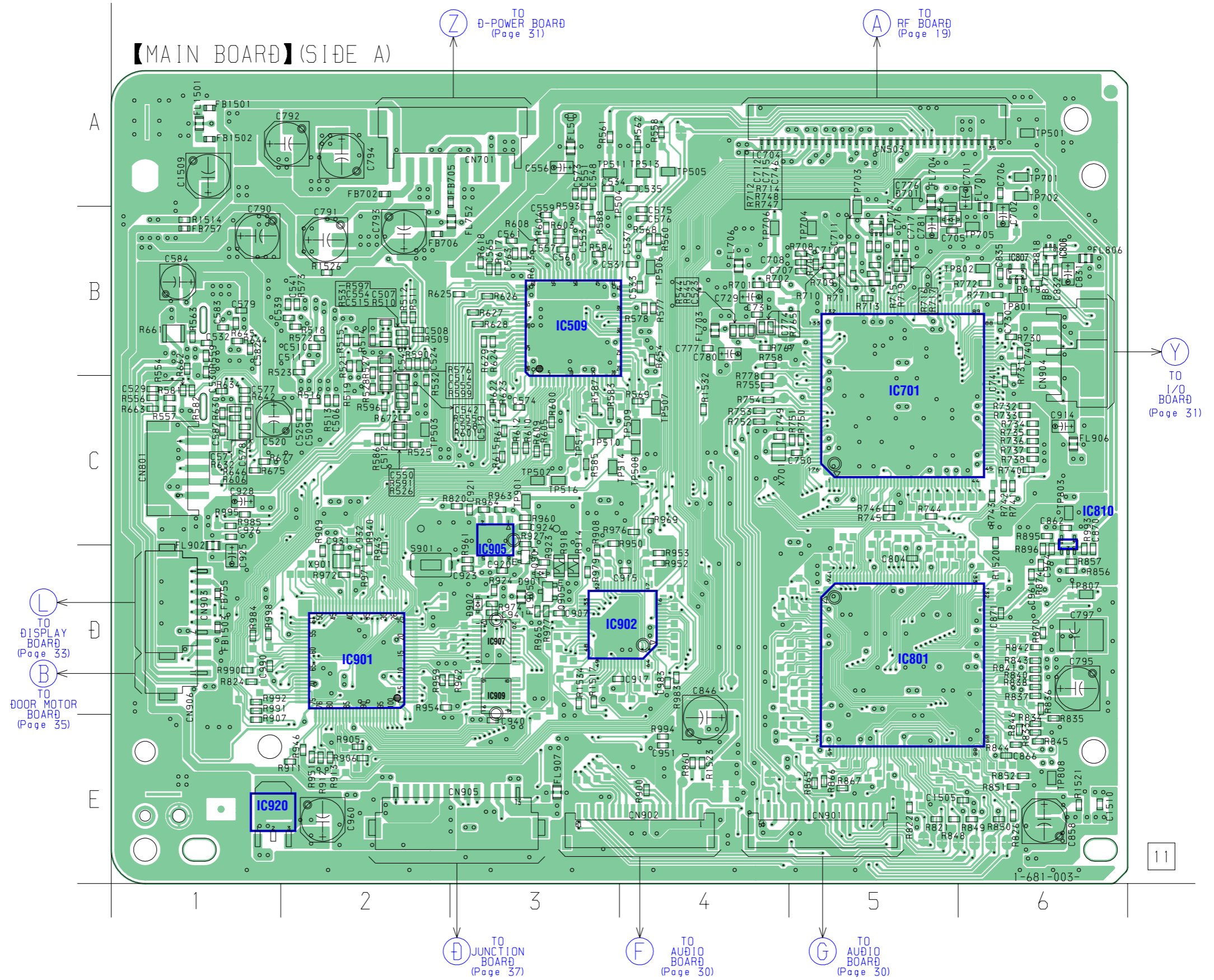
4-4. PRINTED WIRING BOARD MAIN SECTION (SIDE A)

• Refer to page 12 for Circuit Board Location.

There are a few cases that the part printed on this diagram isn't mounted in this model.

• Semiconductor Location

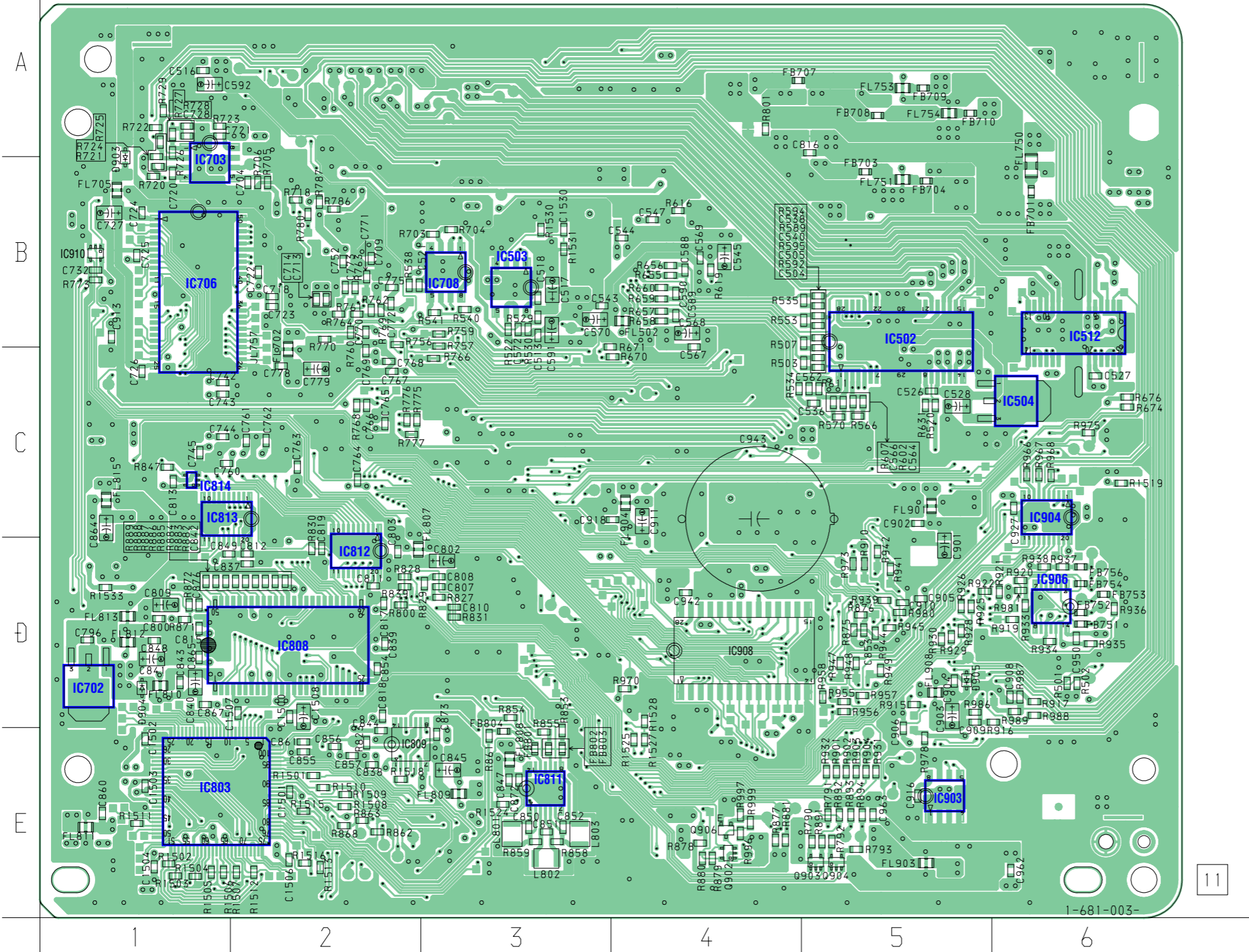
Ref. No.	Location
IC509	B-3
IC701	C-5
IC801	D-5
IC810	C-6
IC901	D-2
IC902	D-4
IC905	C-3
IC920	E-1



4-5. PRINTED WIRING BOARD MAIN SECTION (SIDE B) • Refer to page 12 for Circuit Board Location.

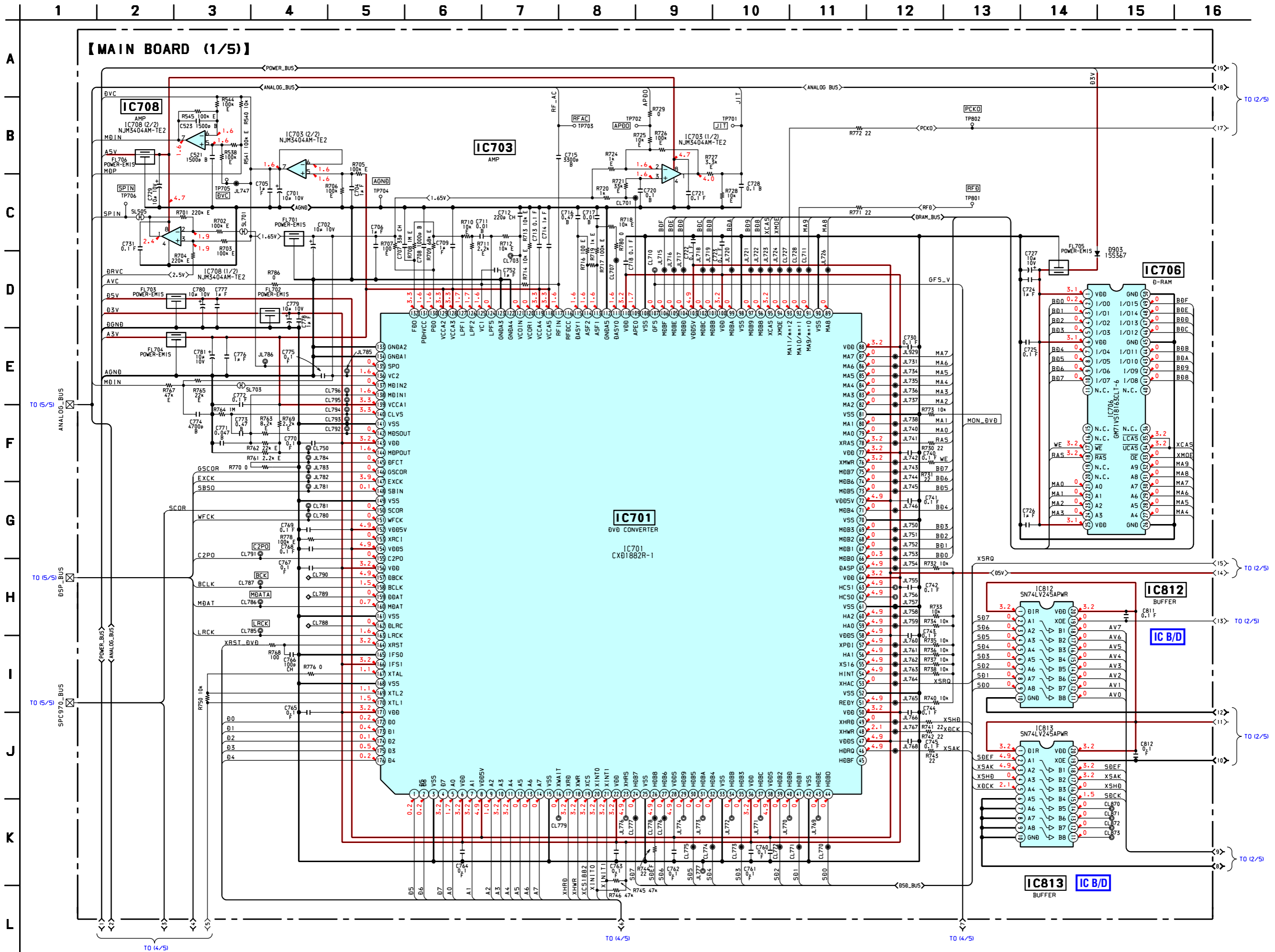
There are a few cases that the part printed on this diagram isn't mounted in this model.

【 MAIN BOARD 】 (SIDE B)

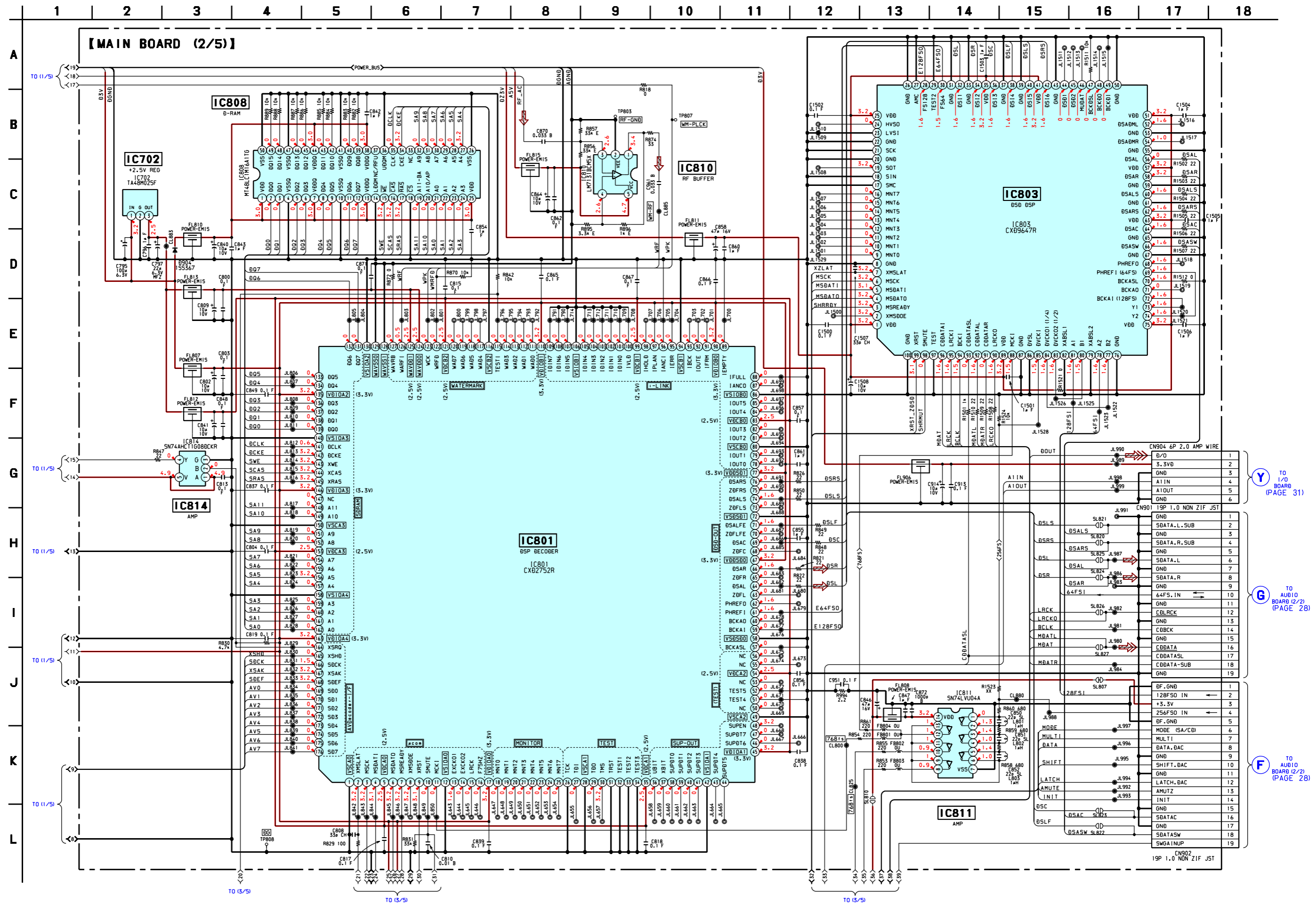


• Semiconductor Location

Ref. No.	Location
D903	B-1
D904	D-1
D905	D-5
IC502	B-5
IC503	B-3
IC504	C-6
IC702	B-6
IC703	D-1
IC706	B-1
IC708	B-3
IC803	E-1
IC808	D-2
IC811	E-3
IC812	D-2
IC813	C-1
IC814	C-1
IC903	E-5
IC904	C-6
IC906	D-6
Q902	E-4
Q903	E-5
Q904	E-5
Q906	E-4



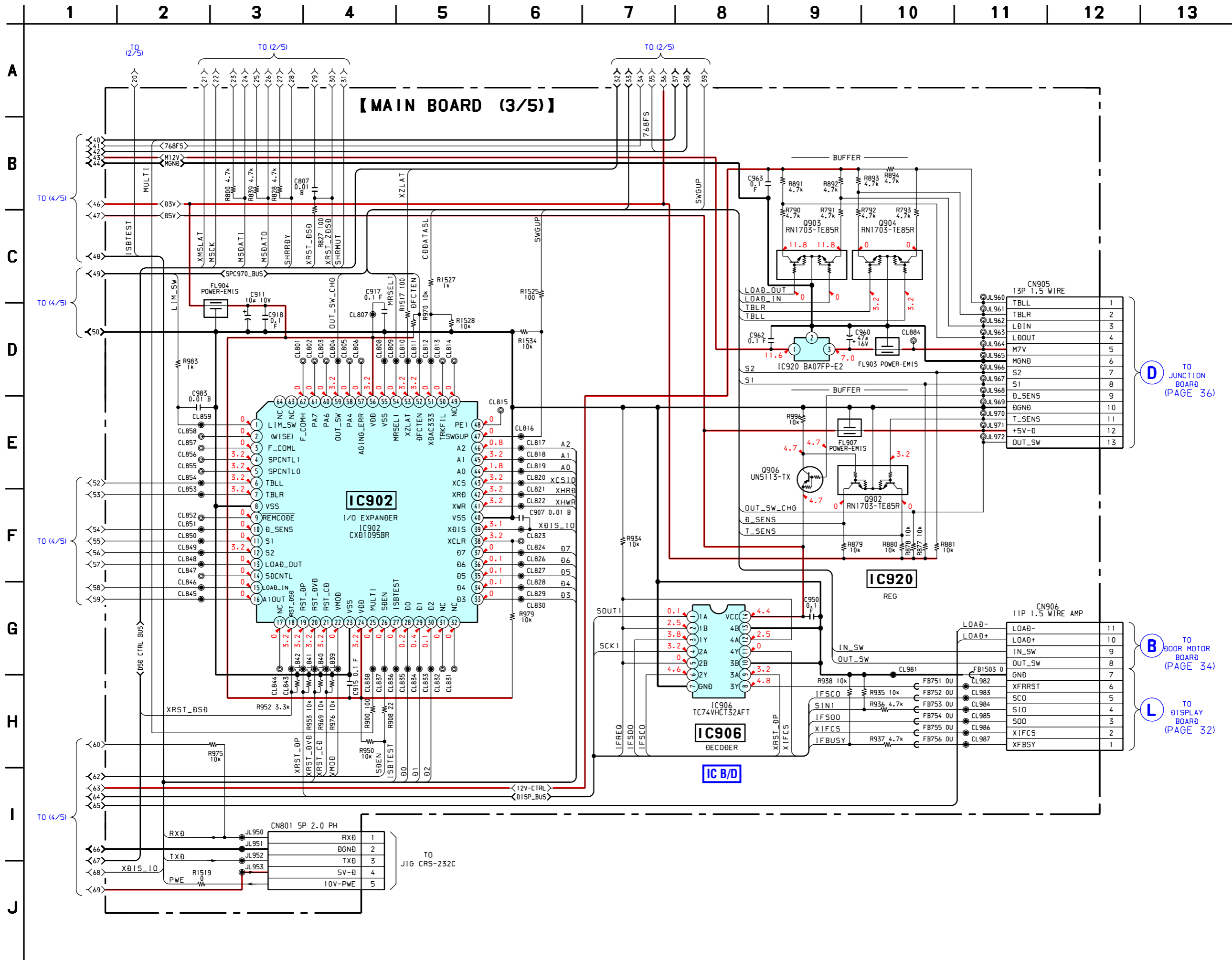
4-7. SCHEMATIC DIAGRAM MAIN SECTION (2/5) • Refer to page 40 for Waveforms. • Refer to page 41 for IC Block Diagrams. • Refer to page 46 for IC Pin Function.



Y TO I/O BOARD (PAGE 31)

G TO AUDIO BOARD (2/2) (PAGE 28)

F TO AUDIO BOARD (2/2) (PAGE 28)

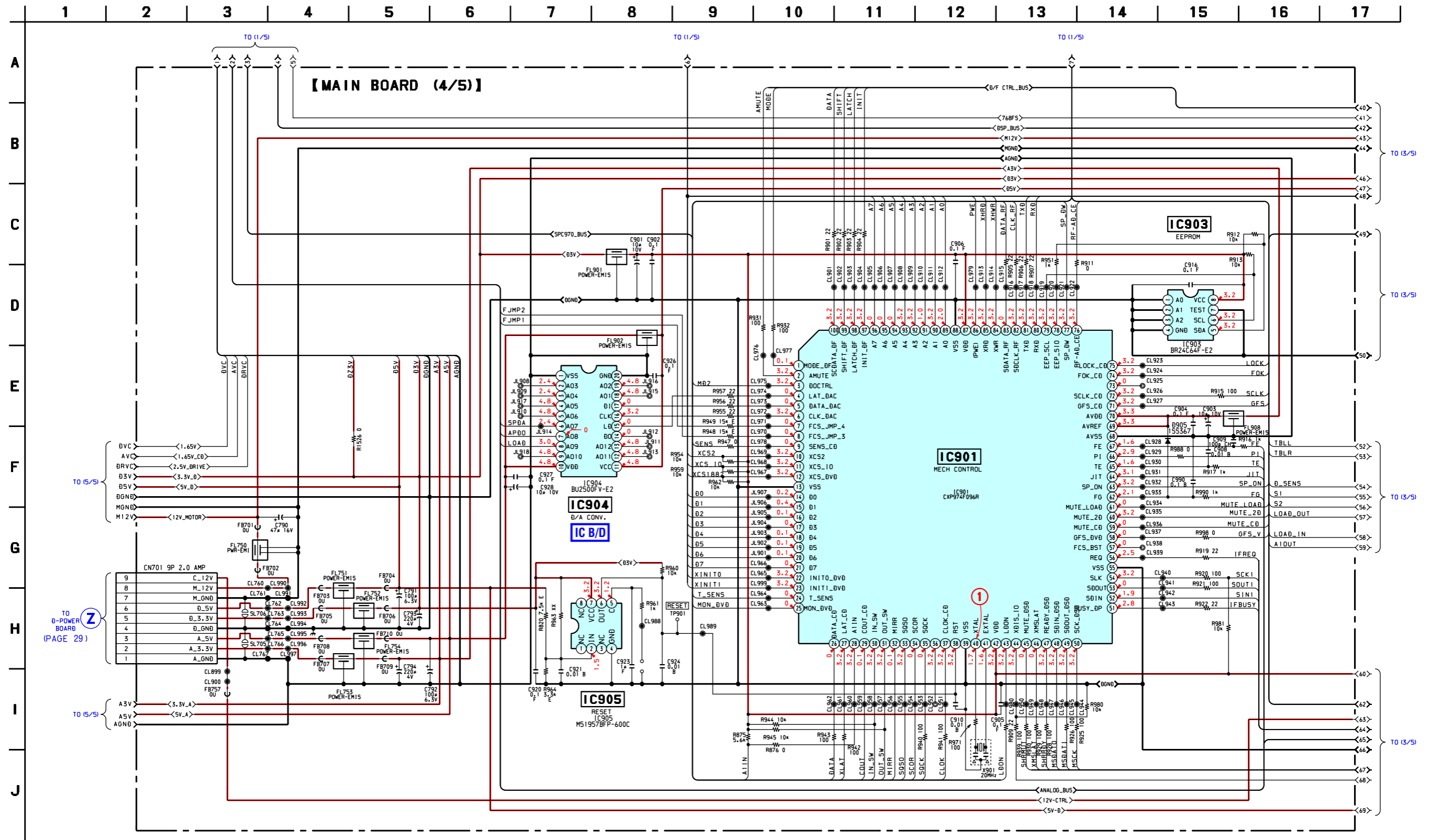


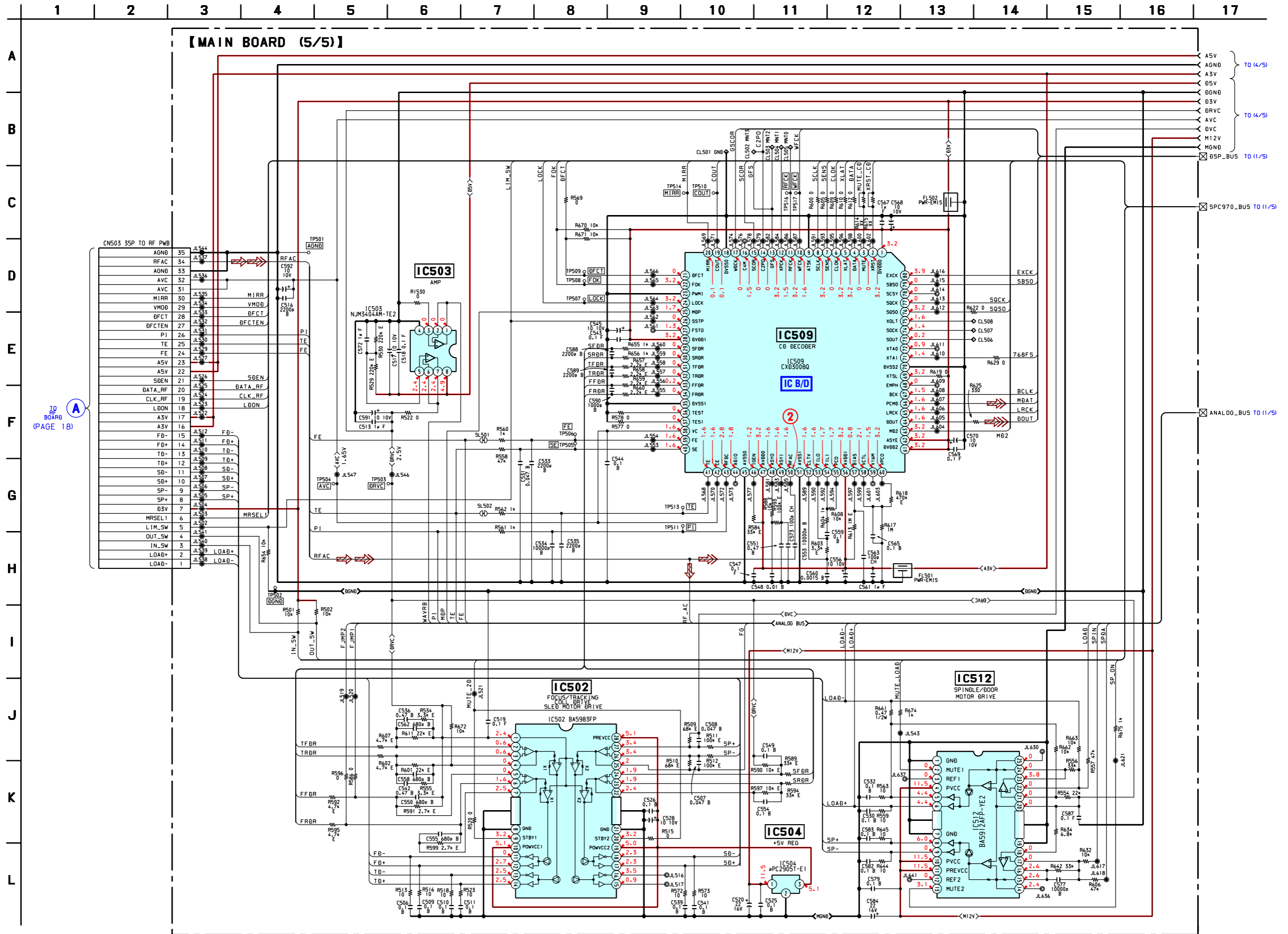
D TO JUNCTION BOARD (PAGE 36)

B TO MOTOR BOARD (PAGE 34)

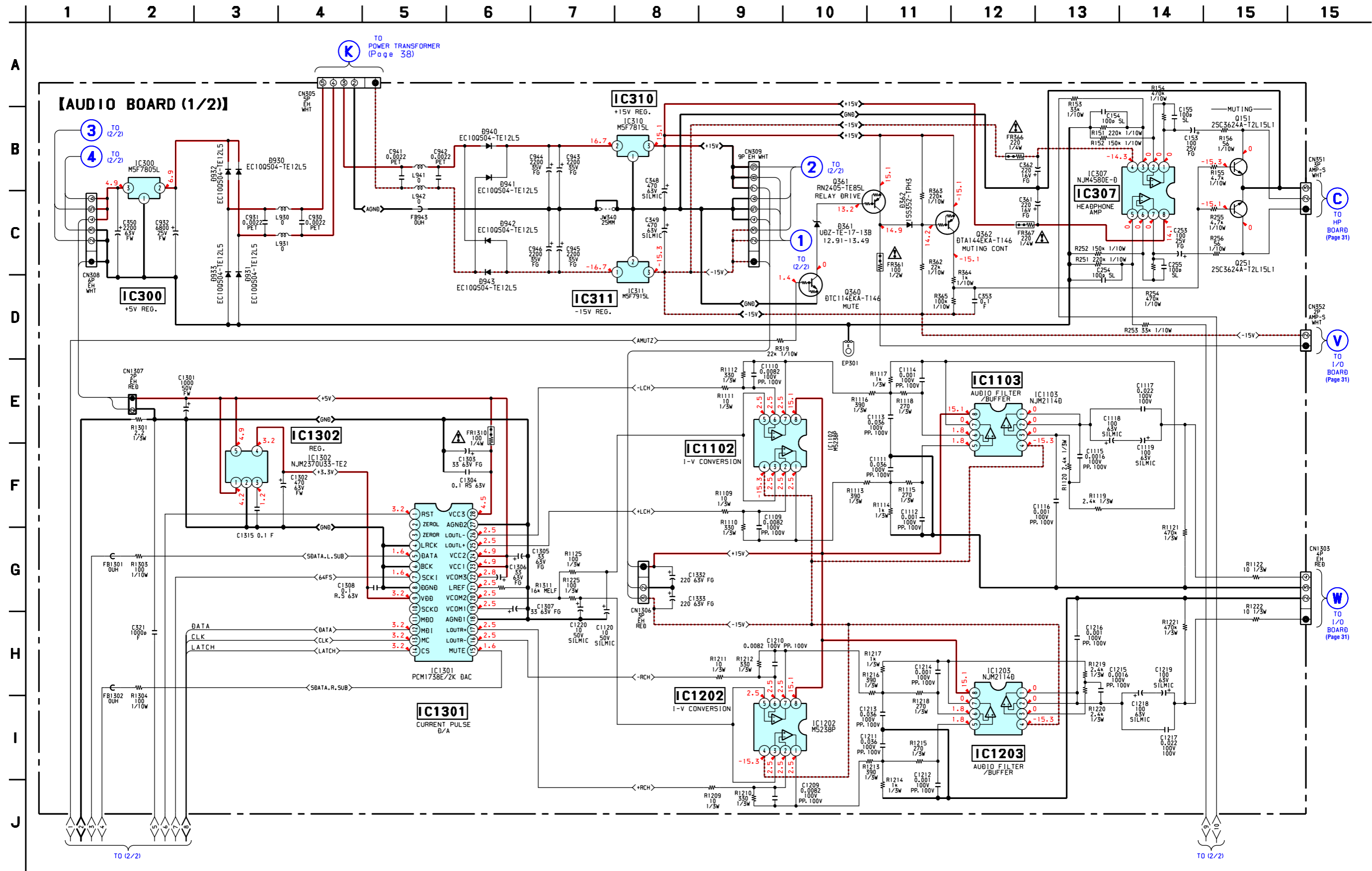
L TO DISPLAY BOARD (PAGE 32)

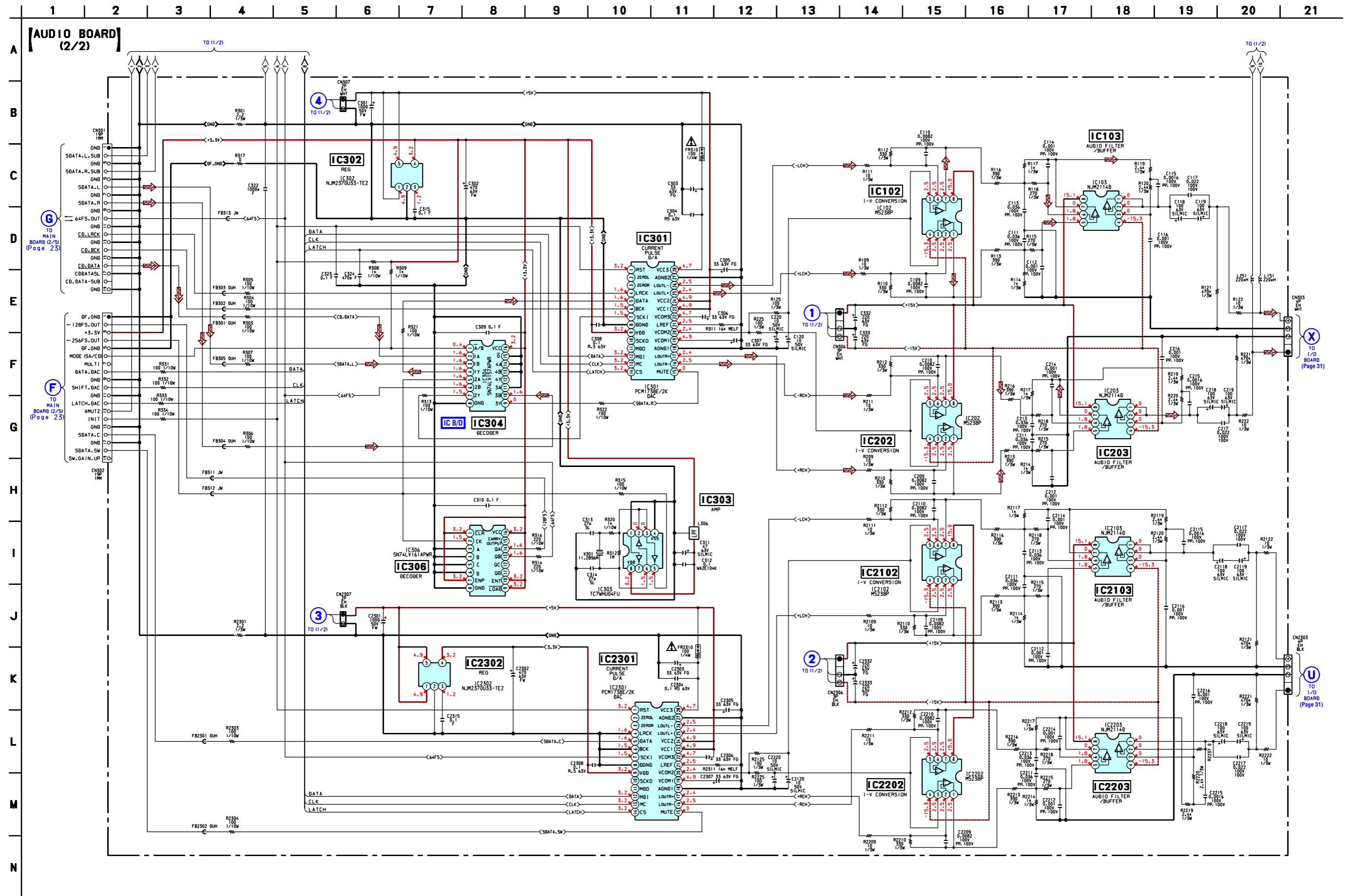
4-9. SCHEMATIC DIAGRAM MAIN SECTION (4/5) • Refer to page 40 for Waveform. • Refer to page 42 for IC Block Diagrams.



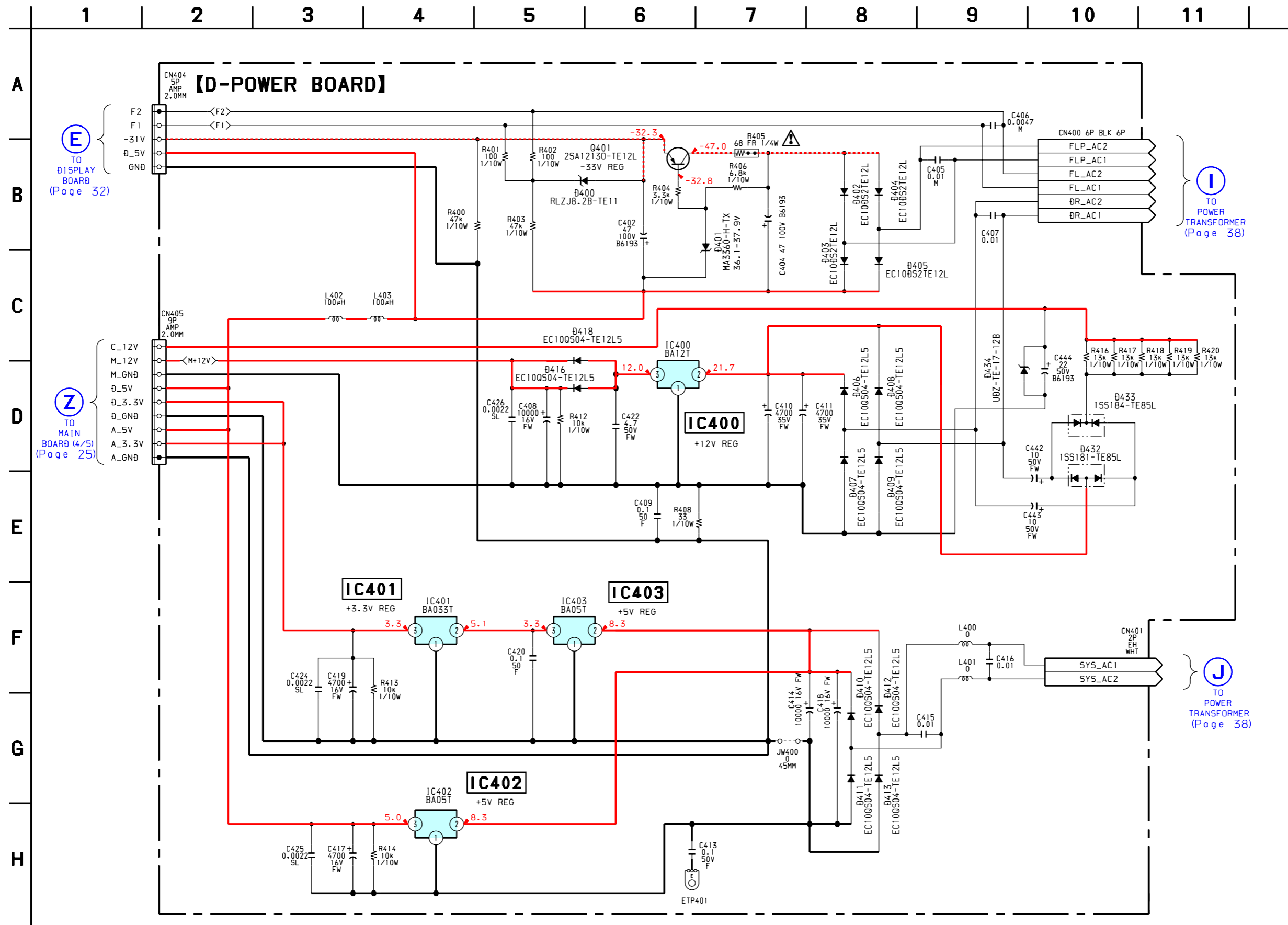


4-11. SCHEMATIC DIAGRAM AUDIO SECTION (1/2) • Refer to page 40 for Waveforms. • Refer to page 44, 45 for IC Block Diagrams.

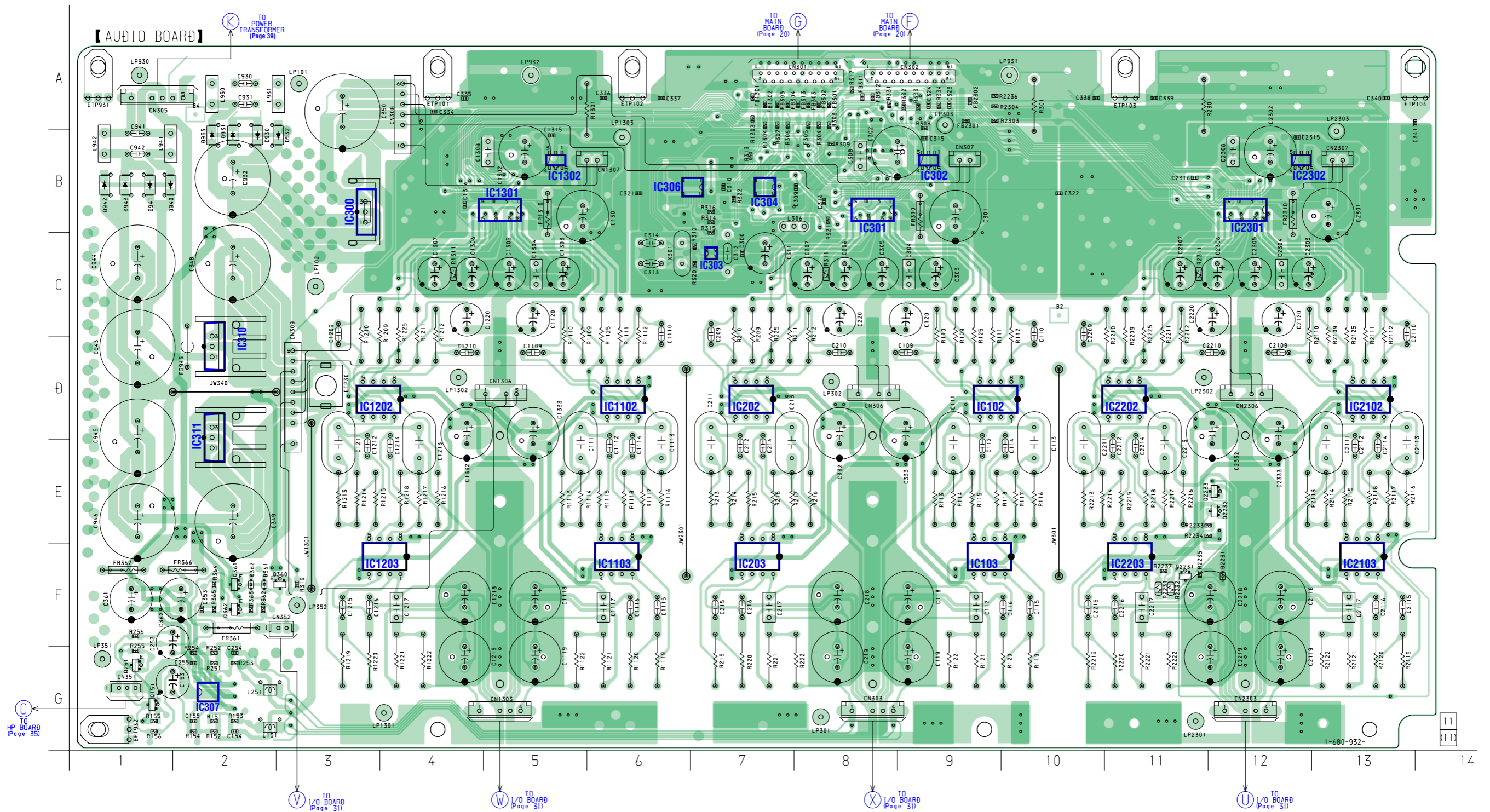




4-13. SCHEMATIC DIAGRAM D-POWER SECTION



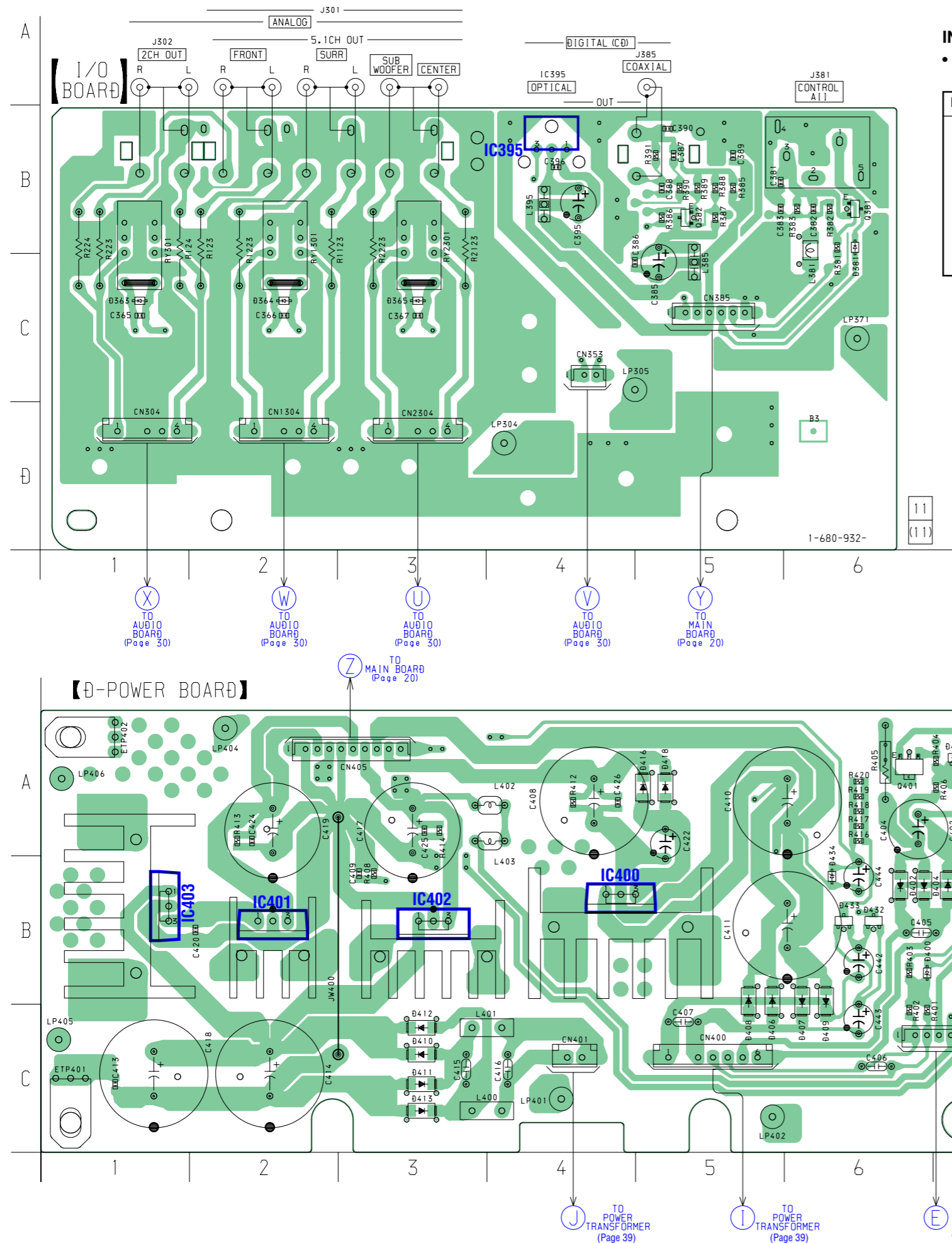
There are a few cases that the part printed on this diagram isn't mounted in this model.



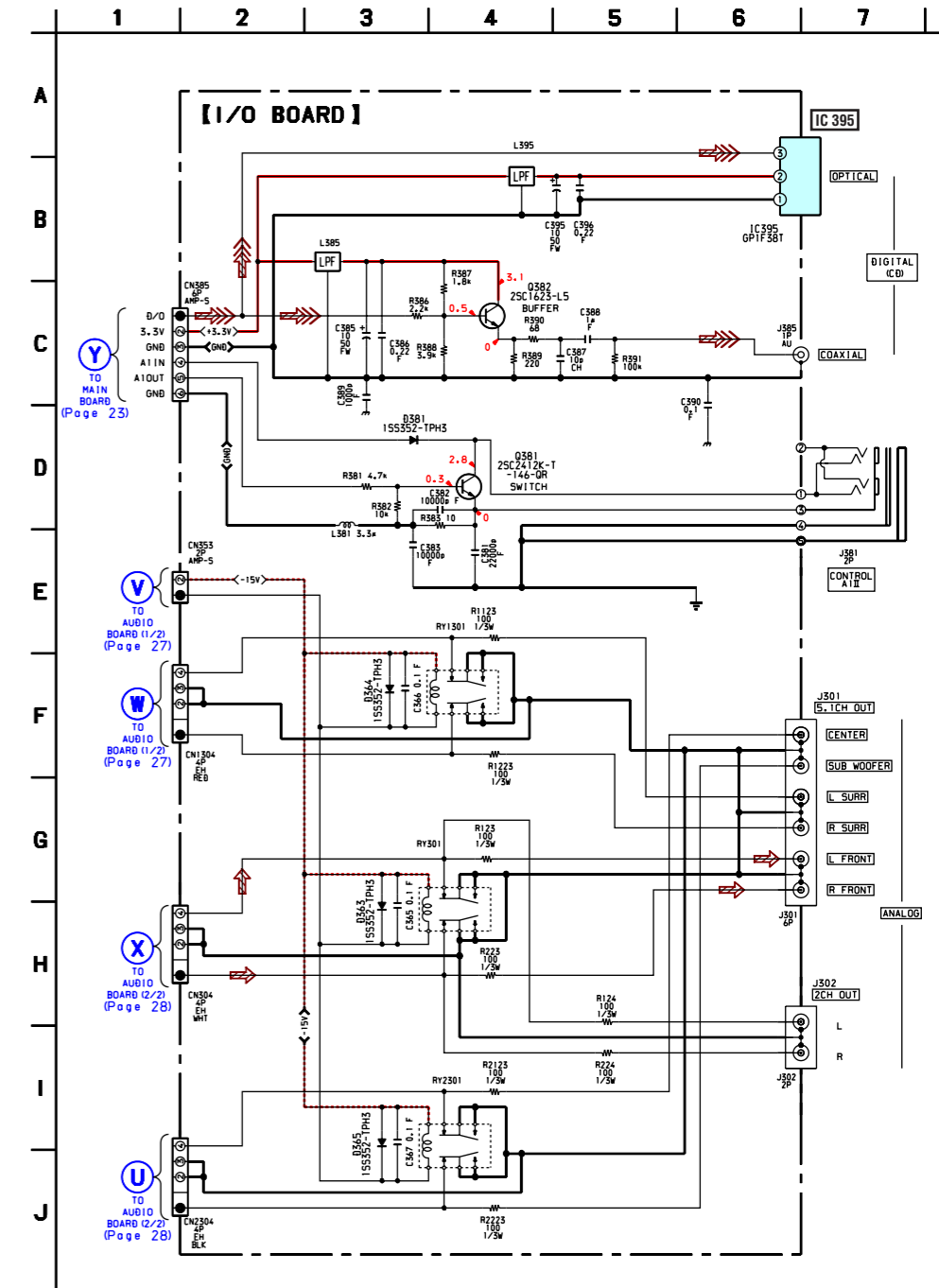
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D361	F-2	IC102	D-9	IC310	D-2	IC2203	F-11
D362	F-2	IC103	F-9	IC311	D-2	IC2301	B-12
D930	B-2	IC202	D-7	IC1102	D-6	IC2302	B-12
D931	B-2	IC203	F-7	IC1103	F-6		
D932	B-3	IC300	B-3	IC1202	D-3	Q151	G-1
D933	B-2	IC301	B-8	IC1203	F-4	Q251	G-1
D940	B-1	IC302	B-9	IC1301	B-5	Q360	F-3
D941	B-1	IC303	C-7	IC1302	B-5	Q361	F-2
D942	B-1	IC304	B-7	IC2102	D-13	Q362	F-2
D943	B-1	IC306	B-7	IC2103	F-13		
		IC307	G-2	IC2202	D-11		

4-15. PRINTED WIRING BOARD IN OUT/D-POWER SECTION • Refer to page 12 for Circuit Board Location.

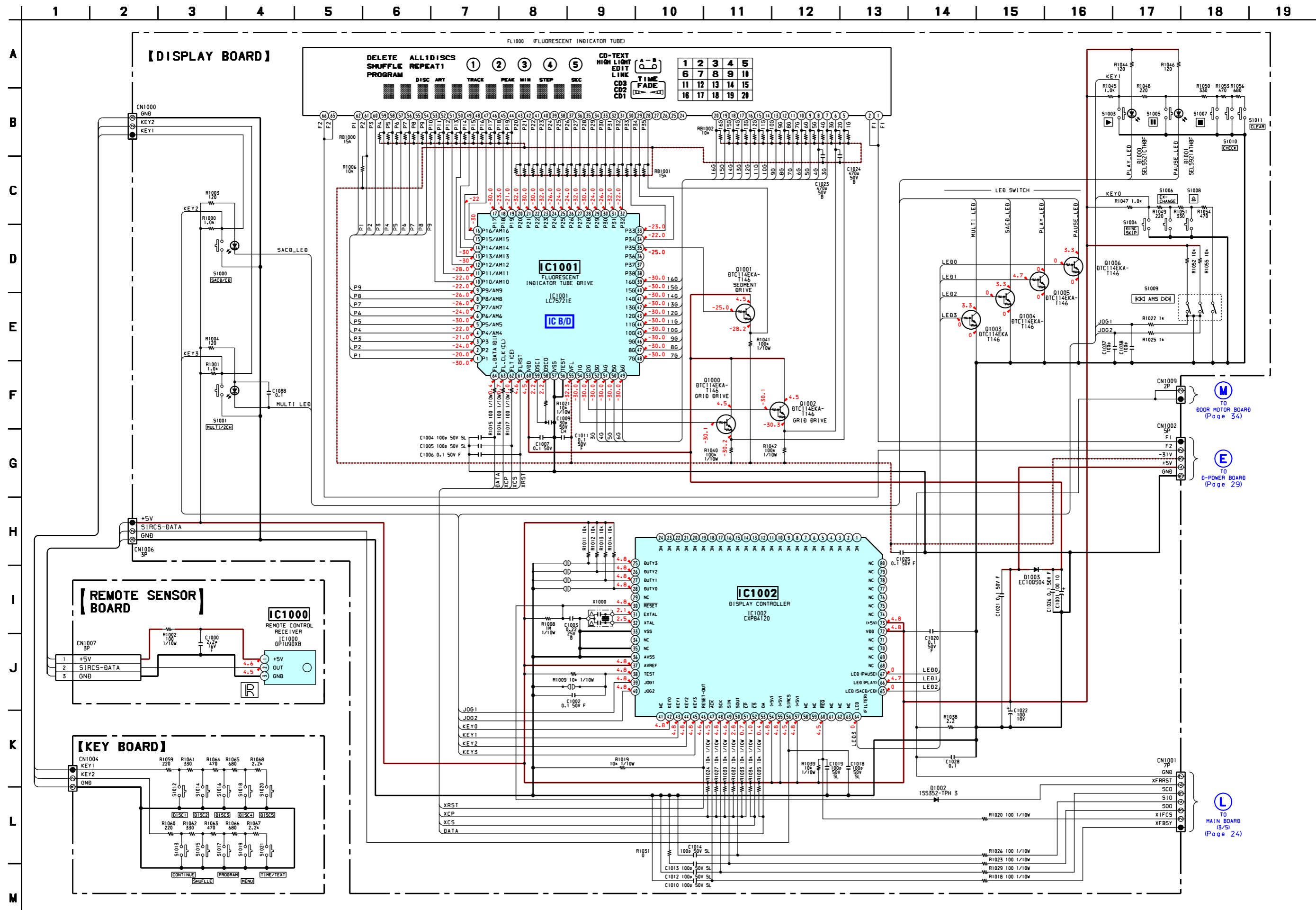


4-16. SCHEMATIC DIAGRAM IN OUT SECTION

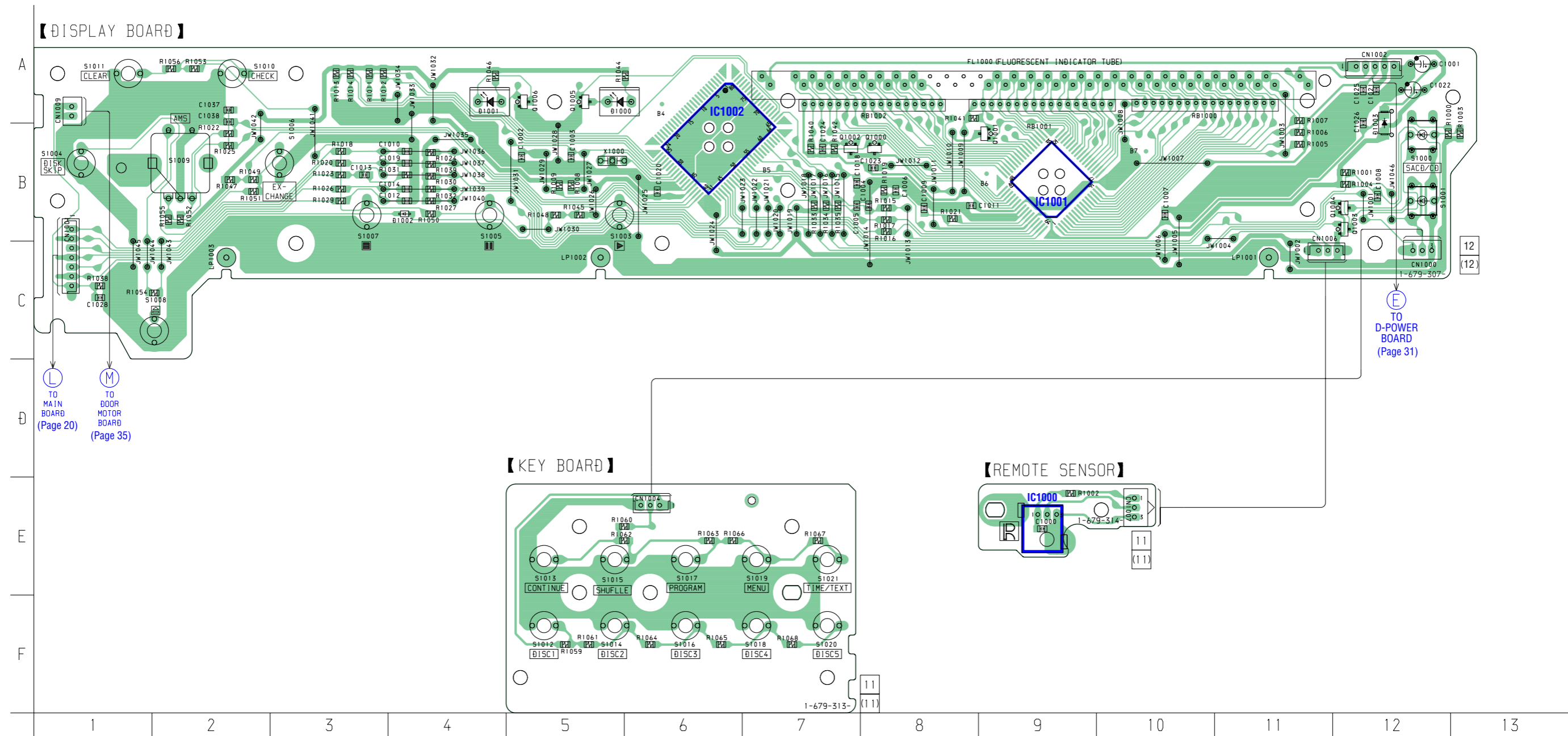


D-POWER BOARD
 • Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D400	B-6	D411	C-3	IC402	B-3
D401	A-7	D412	C-3	IC403	B-1
D402	B-6	D413	C-3		
D403	B-7	D416	A-5	Q401	A-6
D404	B-6	D418	A-5		
D405	B-7	D432	B-6		
D406	C-5	D433	B-6		
D407	C-6	D434	B-6		
D408	C-5				
D409	C-6	IC400	B-4		
D410	C-6	IC401	B-2		
D411	C-3				

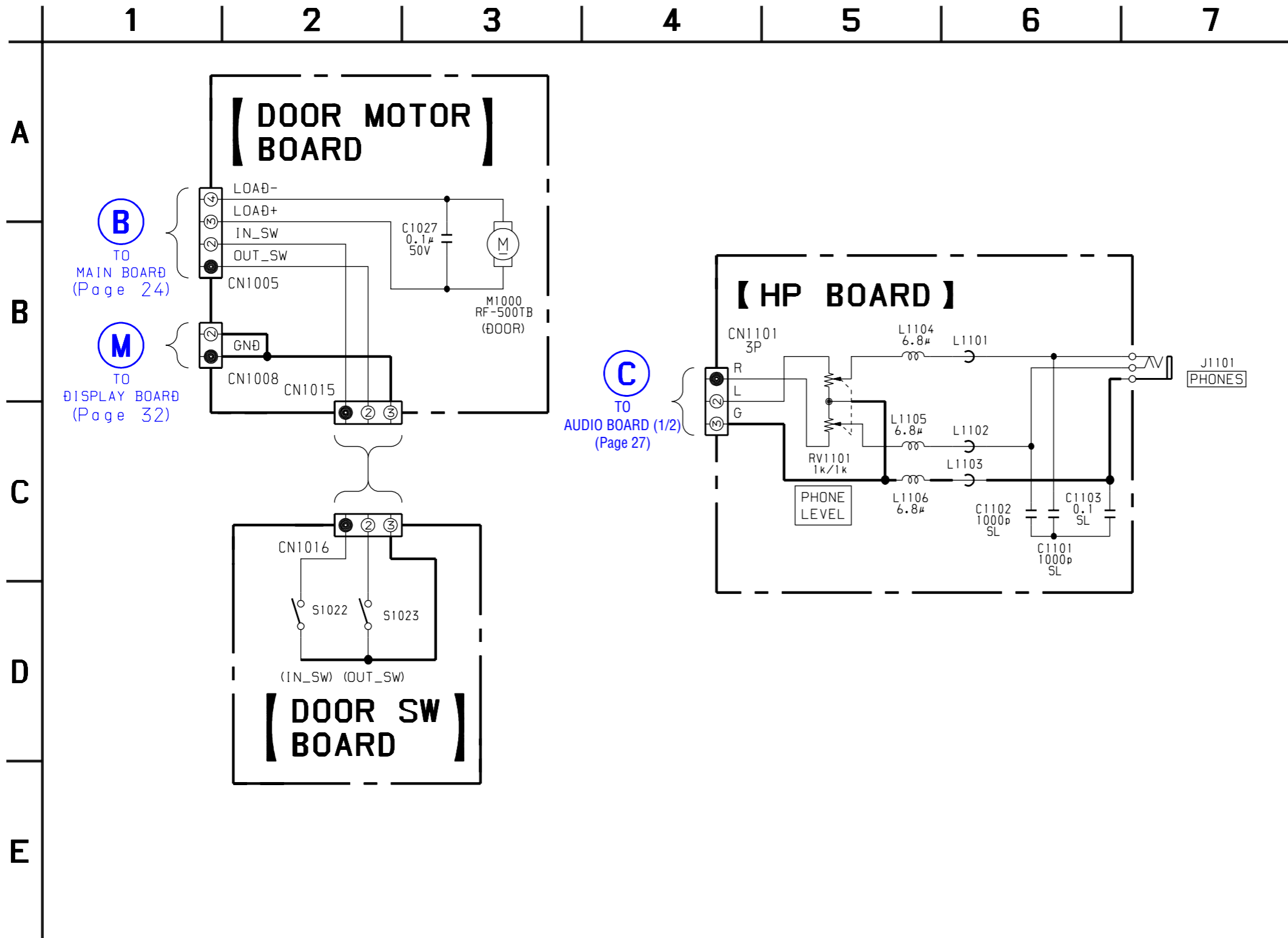


4-18. PRINTED WIRING BOARD DISPLAY SECTION • Refer to page 12 for Circuit Board Location.



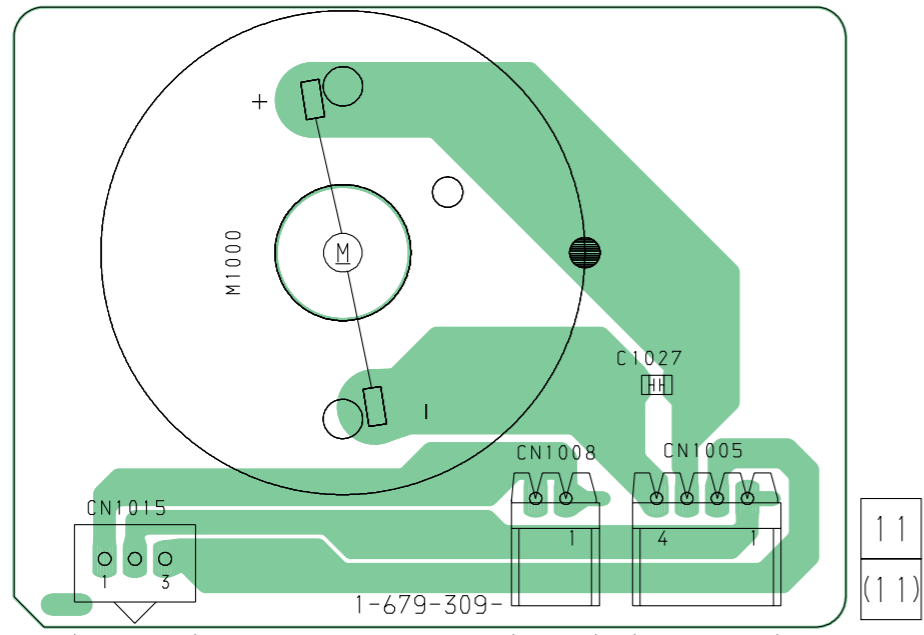
• Semiconductor Location

Ref. No.	Location
D1000	A-5
D1001	A-4
D1002	B-4
D1003	B-12
IC1001	B-9
IC1002	B-6
Q1000	B-8
Q1001	B-9
Q1002	B-7
Q1004	B-12
Q1005	A-5
Q1006	A-5



4-20. PRINTED WIRING BOARD HP SECTION • Refer to page 12 for Circuit Board Location.

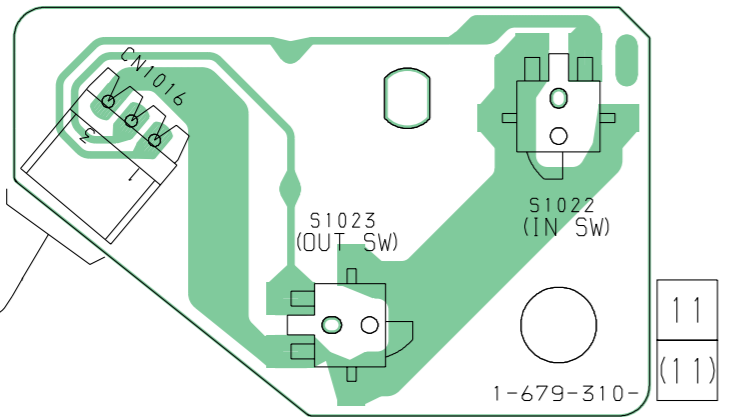
【 DOOR MOTOR BOARD 】



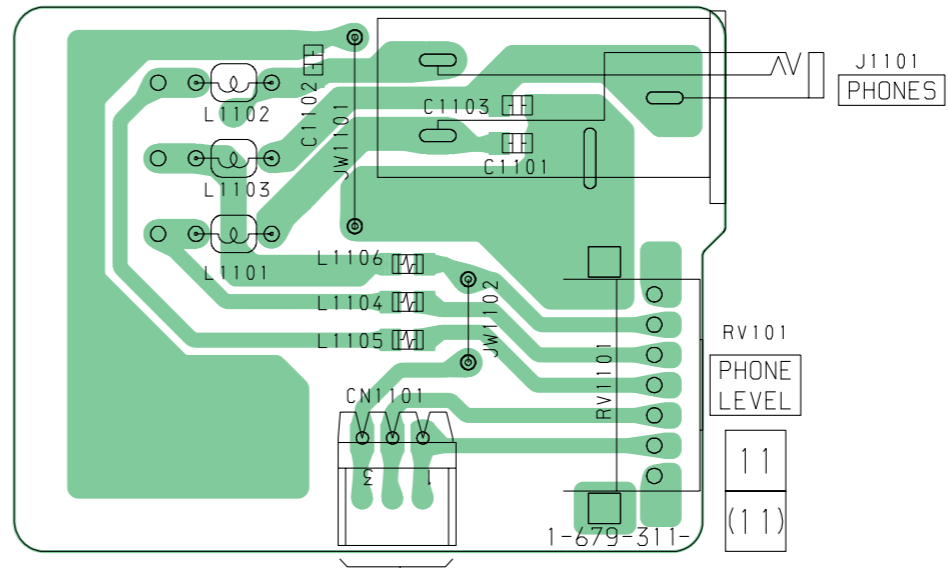
M
 TO
 DISPLAY
 BOARD
 (Page 33)

B
 TO
 MAIN
 BOARD
 (Page 20)

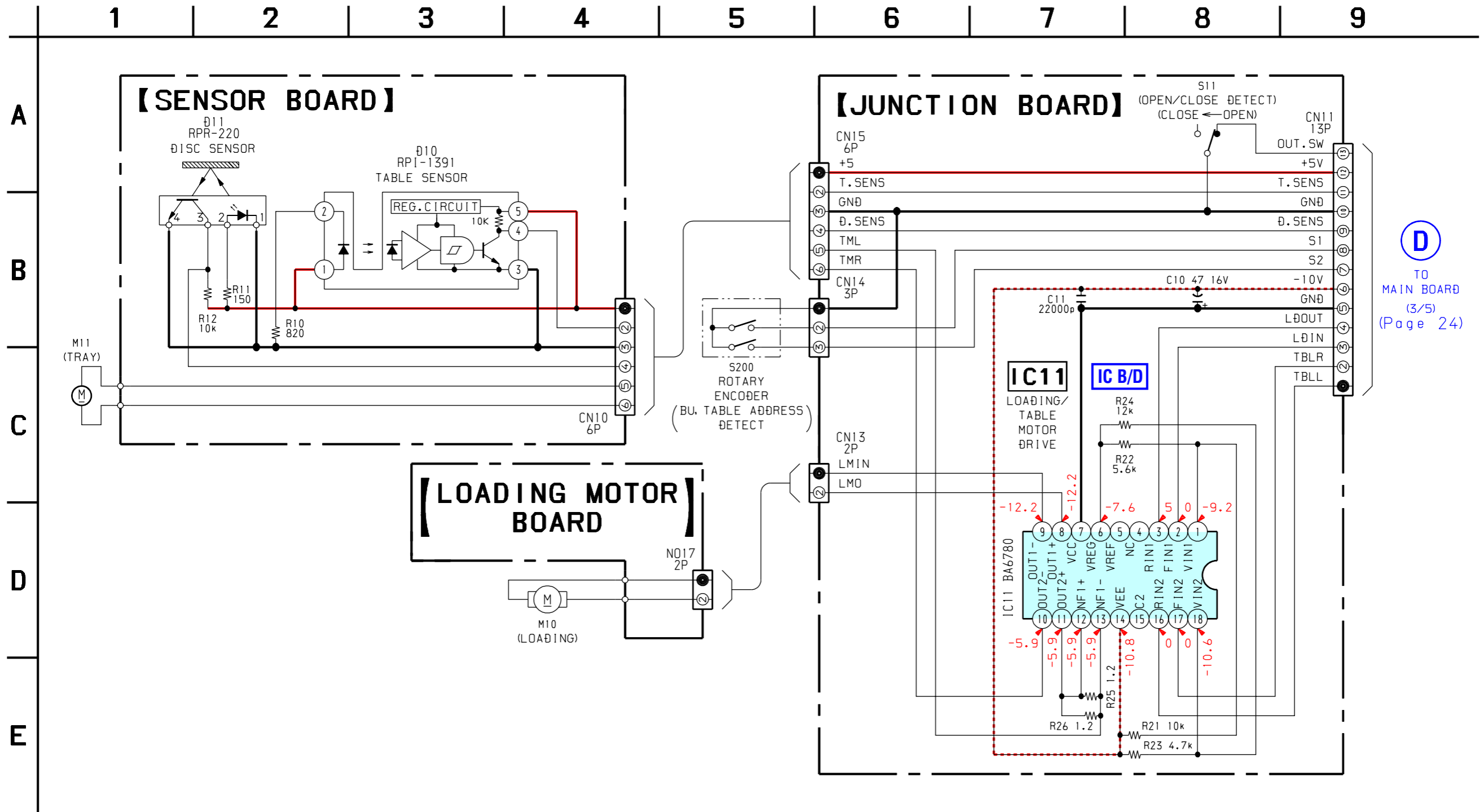
【 DOOR SW BOARD 】



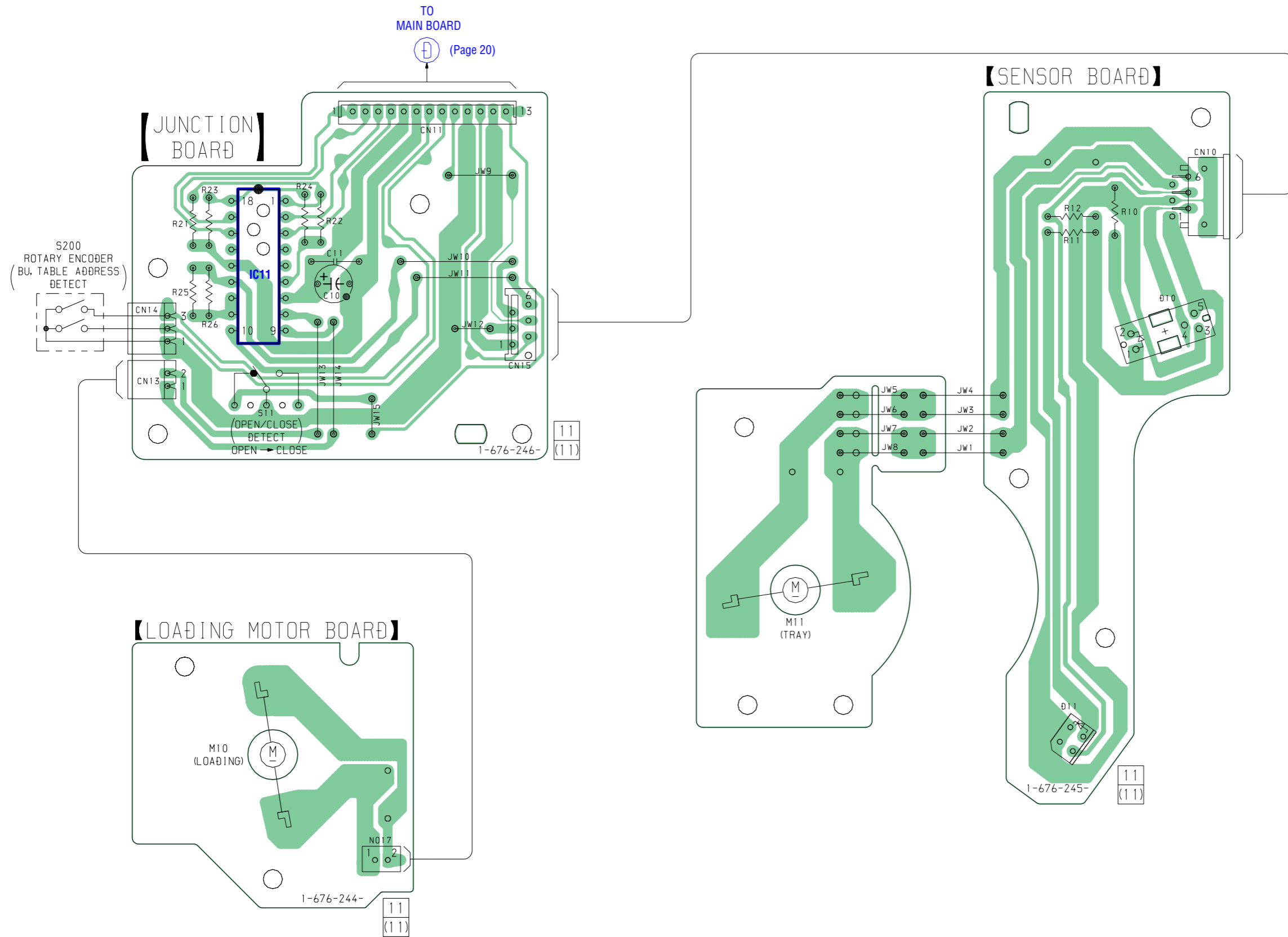
【 HP BOARD 】

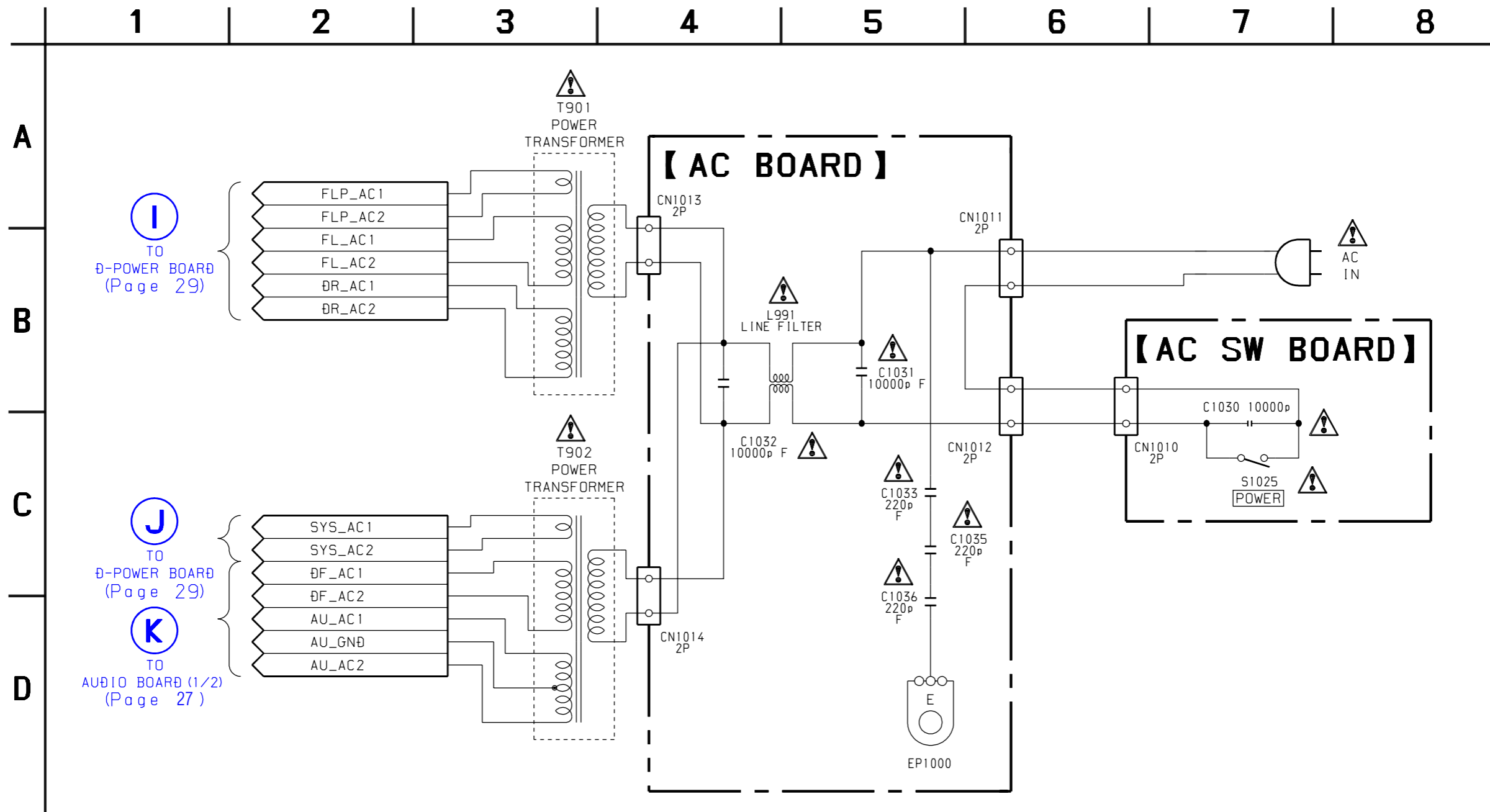


C
 TO
 AUDIO
 BOARD
 (Page 30)



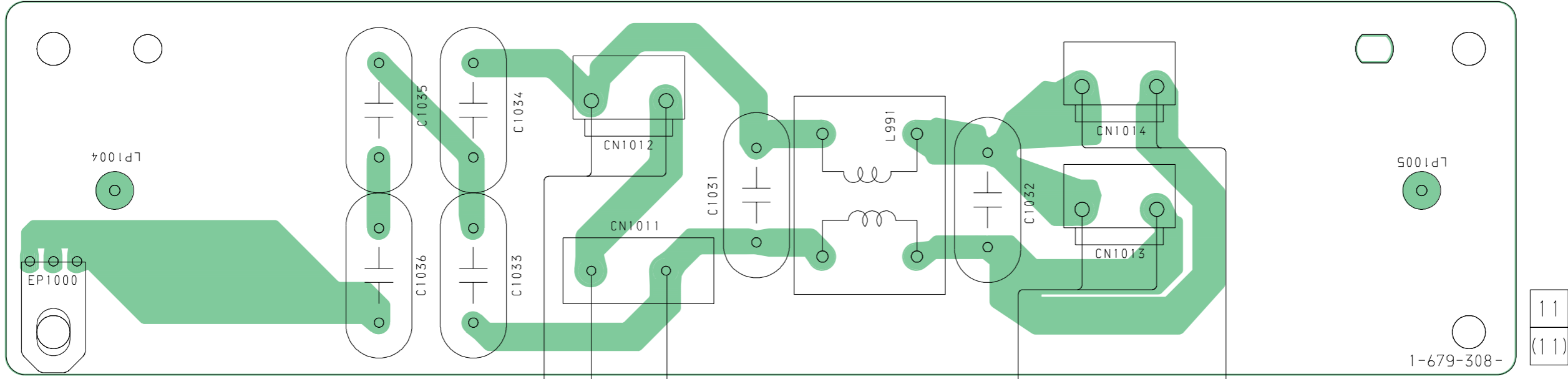
4-22. PRINTED WIRING BOARD SENSOR SECTION • Refer to page 12 for Circuit Board Location.



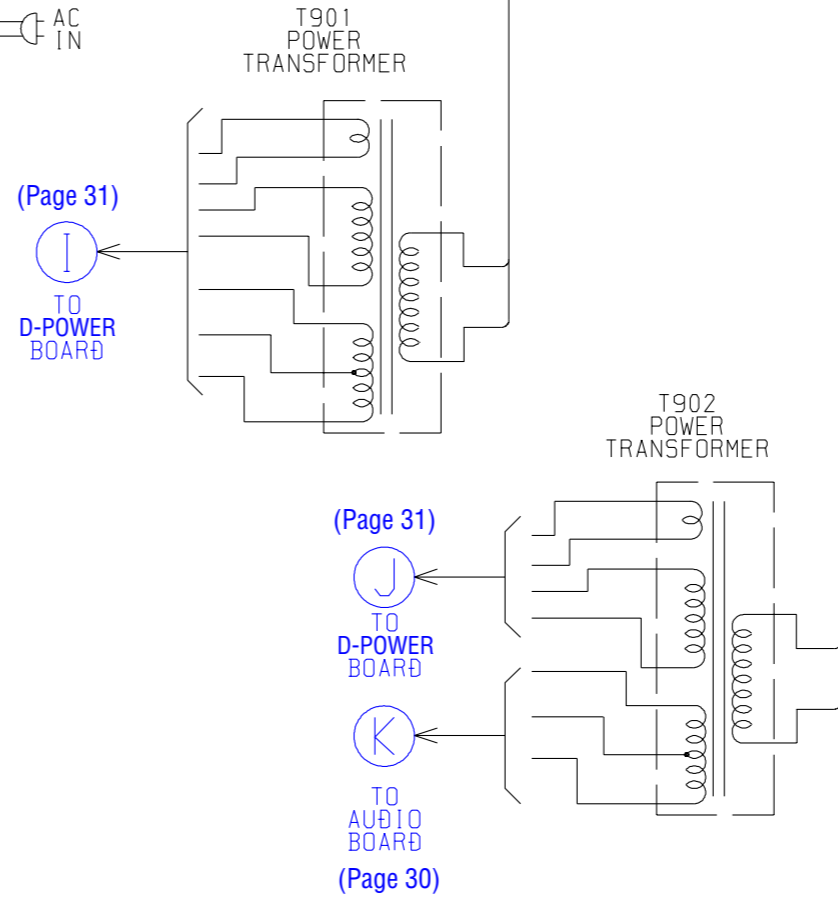
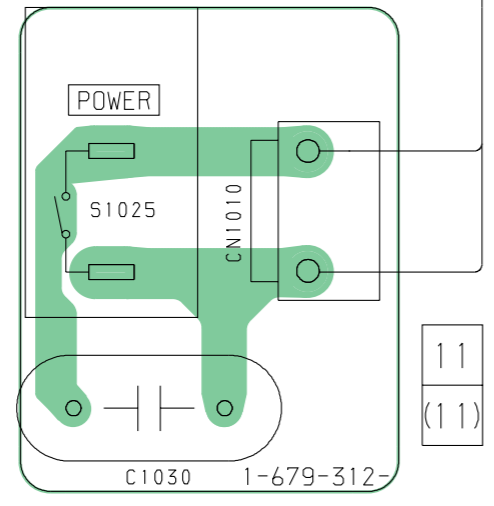


4-24. PRINTED WIRING BOARD POWER SECTION • Refer to page 12 for Circuit Board Location.

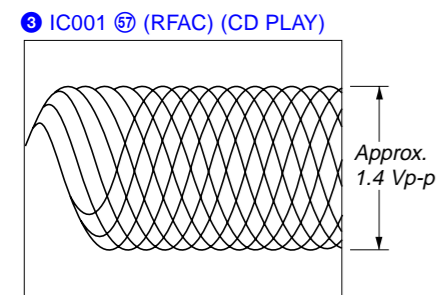
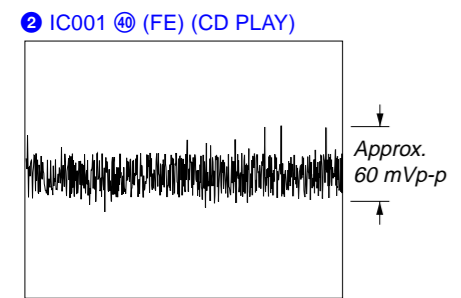
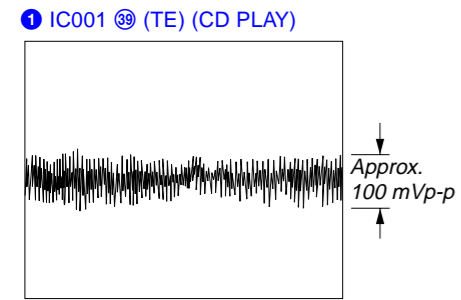
【 AC BOARD 】



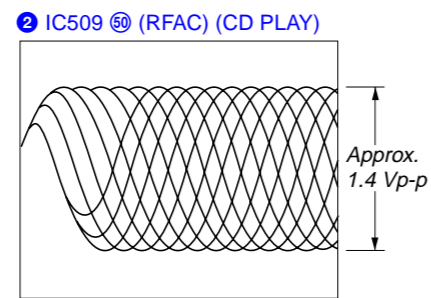
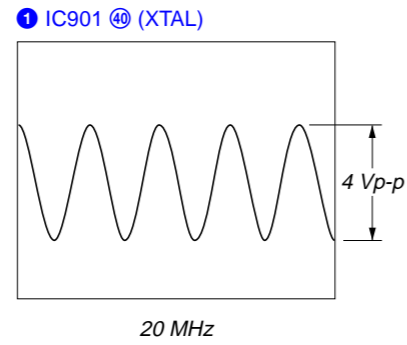
【 AC SW BOARD 】



• Waveforms
– RF Board –

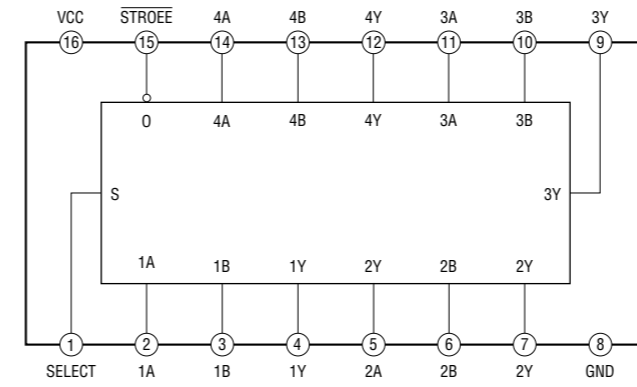


– MAIN Board –

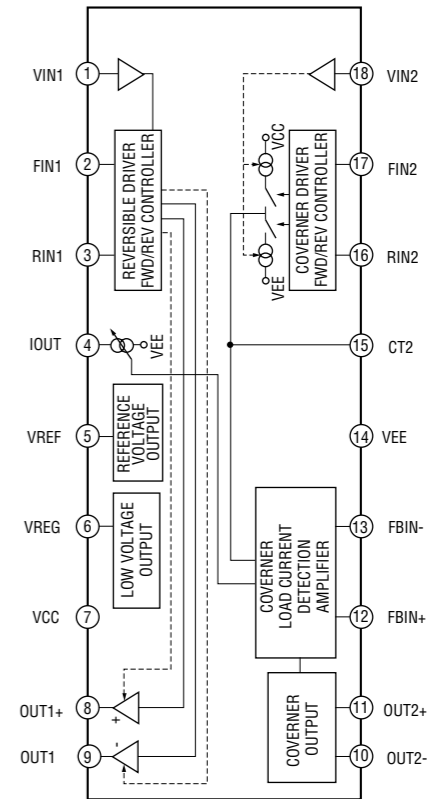


4-25. IC BLOCK DIAGRAMS

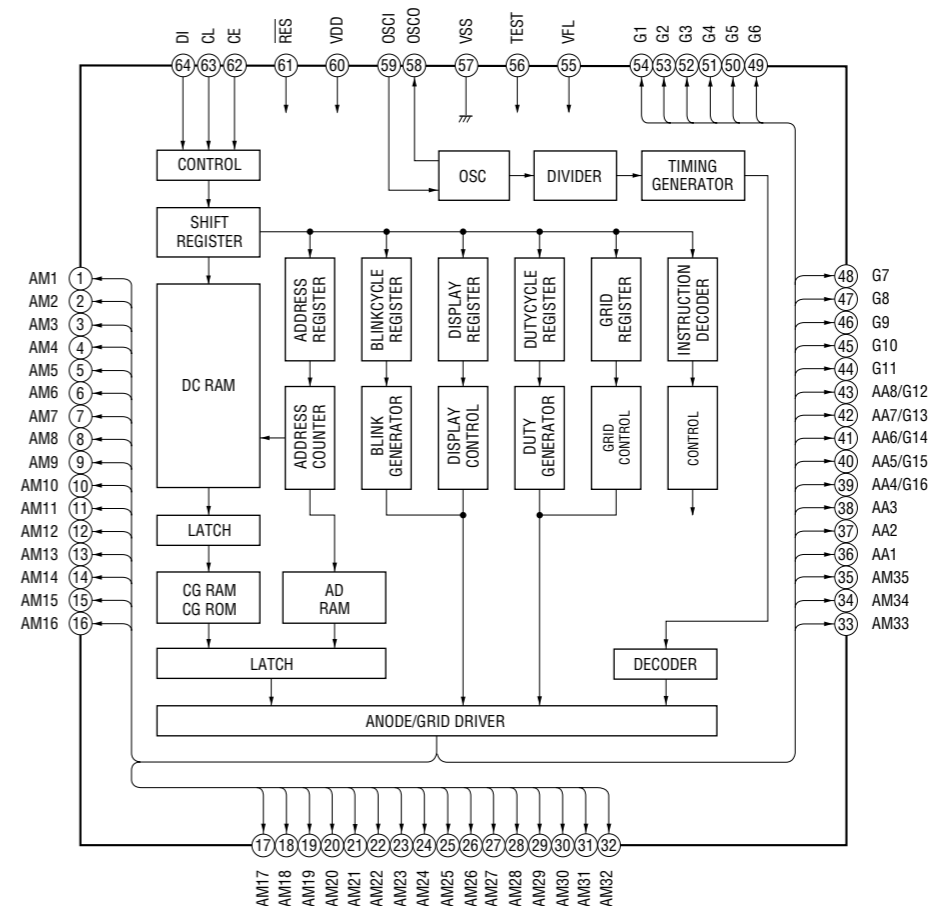
IC304 SN74LV157APWR (AUDIO BOARD)



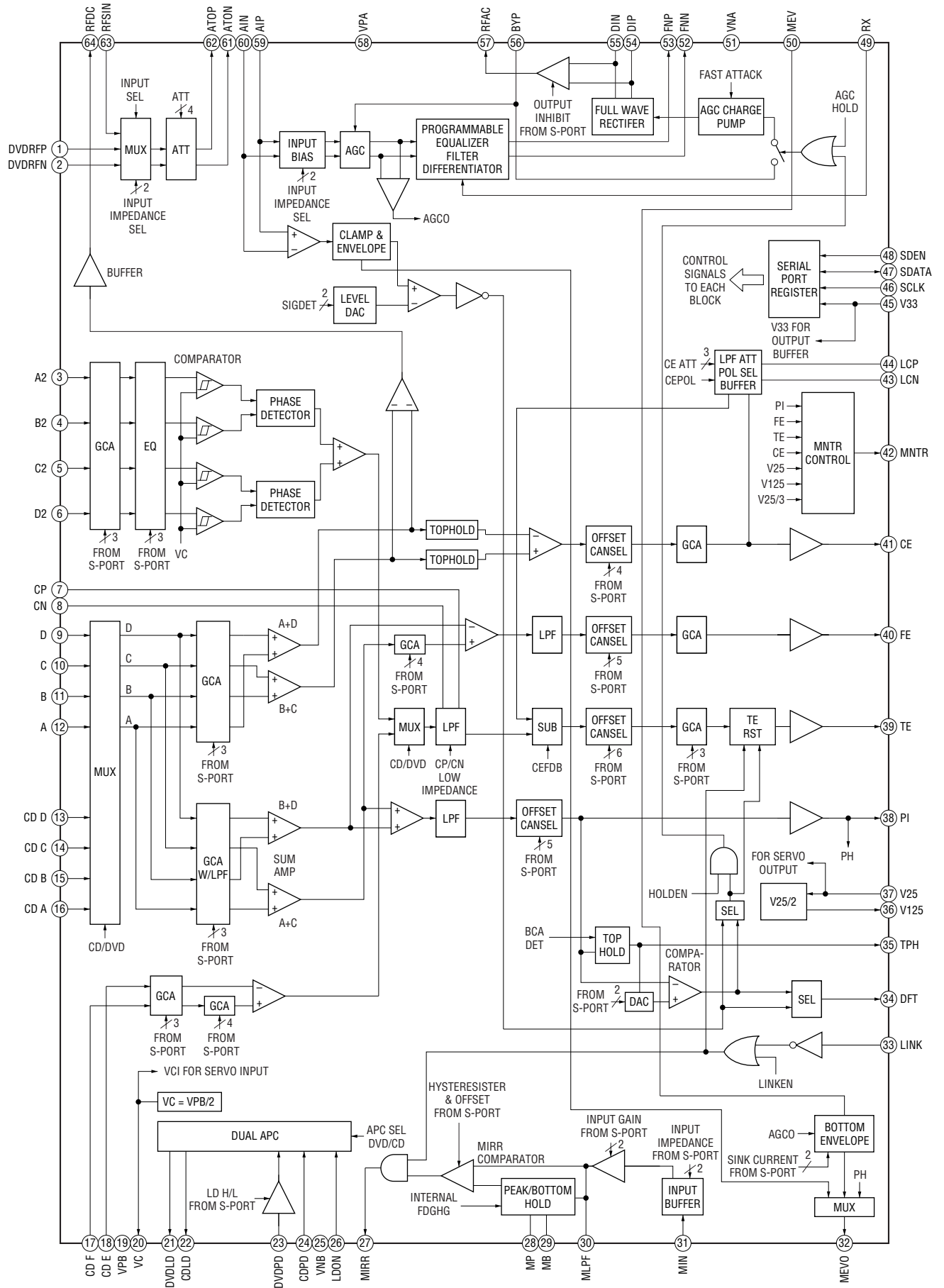
IC11 BA6780 (JUNCTION BOARD)

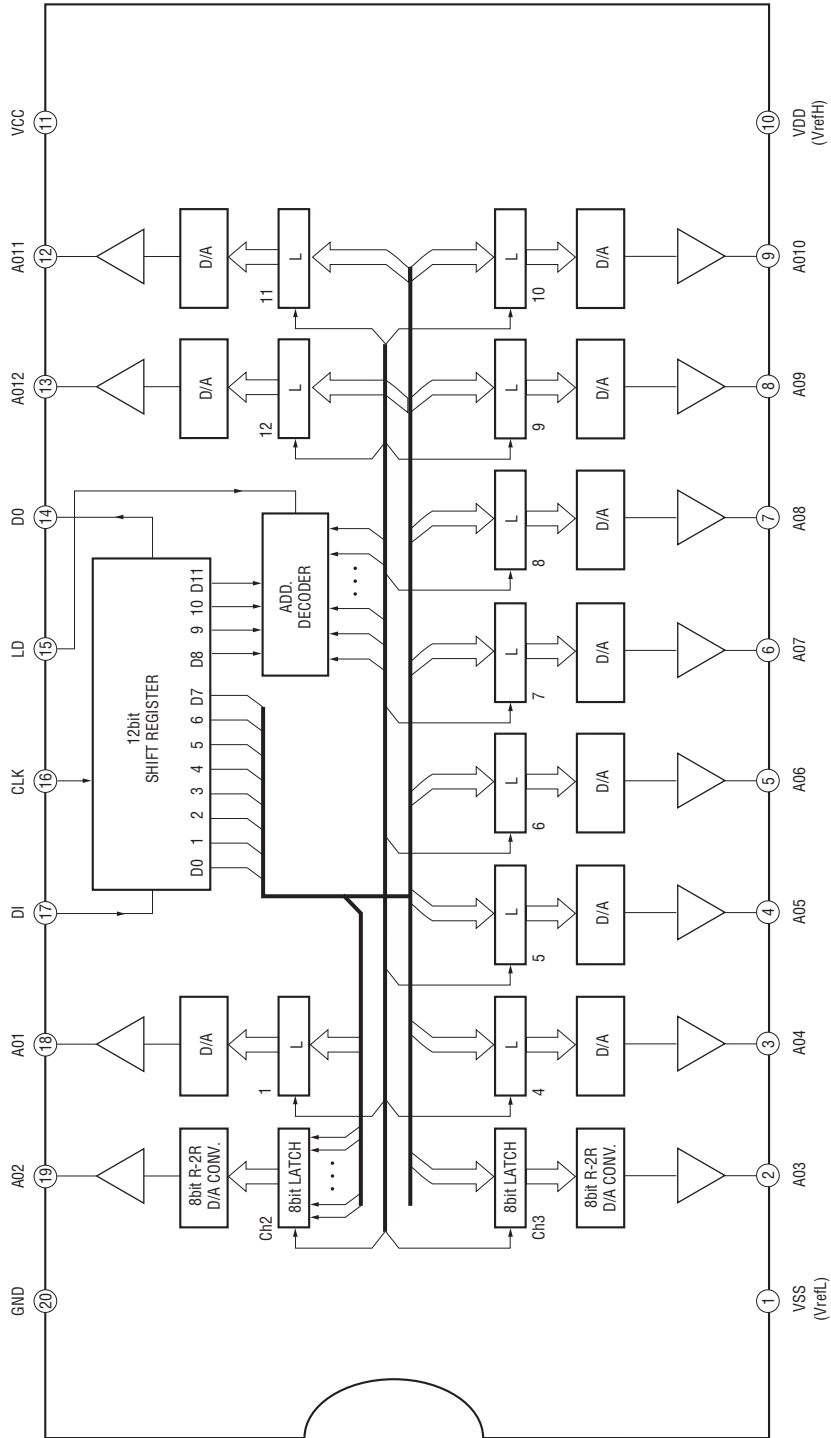


IC1001 LC75721E (DISPLAY BOARD)

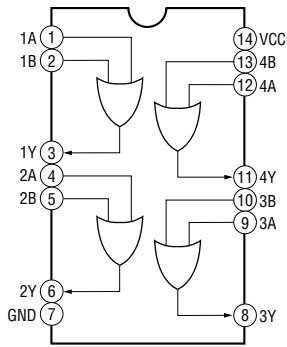


IC001 CXD1881R (RF BOARD)

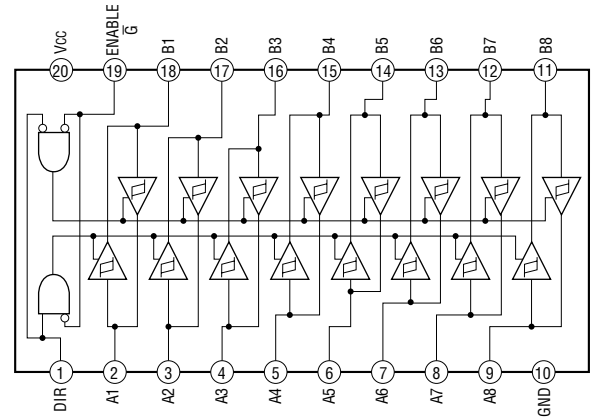




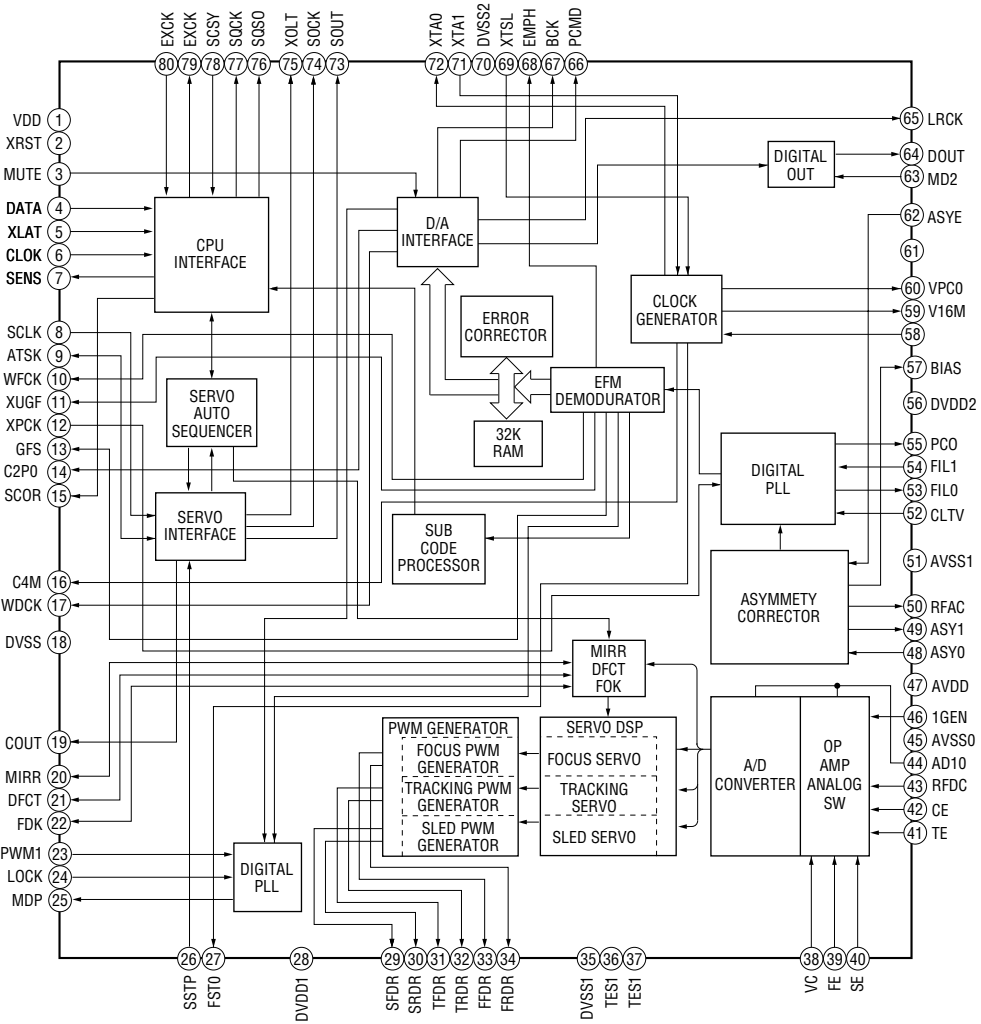
IC906 TC74VHCT32AFT (MAIN BOARD)



IC812, IC813 SN74LV245PWR (MAIN BOARD)



IC509 CXD3008Q (MAIN BOARD)



4-26. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC701 CXD1882R (DVD DECODER)

Pin No.	Pin Name	I/O	Description
1, 2	D5, D6	I/O	Two-way data bus with the CPU (IC901) and expander (IC902)
3	VSS	—	Ground terminal (digital system)
4	D7	I/O	Two-way data bus with the CPU (IC901) and expander (IC902)
5	A0	I	Address signal input from the CPU (IC901)
6	VDD	—	Power supply terminal (+3.3V) (digital system)
7	A1	I	Address signal input from the CPU (IC901)
8	VDD5V	—	Power supply terminal (+5V)
9 to 14	A2 to A7	I	Address signal input from the CPU (IC901)
15	VSS	—	Ground terminal (digital system)
16	XWAIT	O	Wait signal output terminal Not used (open)
17	XRD	I	Read strobe signal input from the CPU (IC901)
18	XWR	I	Write strobe signal input from the CPU (IC901)
19	XCS	I	Chip select signal input from the CPU (IC901)
20, 21	XINT0, XINT1	O	Interrupt signal output to the CPU (IC901)
22	VDD	—	Power supply terminal (+3.3V) (digital system)
23	XHRS	I	Not used (open)
24	HDB7	O	Stream data signal output to the DSD decoder (IC801)
25	VSS	—	Ground terminal (digital system)
26	HDB8	O	Error flag signal output to the DSD decoder (IC801)
27	HDB6	O	Stream data signal output to the DSD decoder (IC801)
28	VDDS	—	Power supply terminal (+5V) (digital system)
29	HDB9	O	Not used (open)
30	HDB5	O	Stream data signal output to the DSD decoder (IC801)
31	HDBA	O	Not used (open)
32	HDB4	O	Stream data signal output to the DSD decoder (IC801)
33	VSS	—	Ground terminal (digital system)
34	HDBB	O	Not used (open)
35	HDB3	O	Stream data signal output to the DSD decoder (IC801)
36	VDD	—	Power supply terminal (+3.3V) (digital system)
37	HDBC	O	Not used (open)
38	VDDS	—	Power supply terminal (+5V) (digital system)
39	HDB2	O	Stream data signal output to the DSD decoder (IC801)
40	HDBD	O	Not used (open)
41	HDB1	O	Stream data signal output to the DSD decoder (IC801)
42	VSS	—	Ground terminal (digital system)
43	HDBE	O	Not used (open)
44	HDB0	O	Stream data signal output to the DSD decoder (IC801)
45	HDBF	O	Not used (open)
46	XACK	O	Serial data transfer acknowledge signal output to the DSD decoder (IC801)
47	VDDS	—	Power supply terminal (+5V) (digital system)
48	DCK	O	Serial data transfer clock signal output to the DSD decoder (IC801)
49	XSHDR0	O	Header flag signal output to the DSD decoder (IC801)
50	VDD	—	Power supply terminal (+3.3V) (digital system)
51	REDY	O	Not used (pull up)
52	VSS	—	Ground terminal (digital system)
53	REQUEST	I	Serial data transfer request signal input from the DSD decoder (IC801)
54	HINT	O	Not used (pull up)
55	XS16	O	Not used (pull up)
56	HA1	I	Not used (fixed at "H")
57	XPDI	I/O	Not used (pull up)
58	VDDS	—	Power supply terminal (+5V) (digital system)
59, 60	HA0, HA2	I	Not used (fixed at "H")

Pin No.	Pin Name	I/O	Description
61	VSS	—	Ground terminal (digital system)
62, 63	HCS0, HCS1	I	Not used (open)
64	VDD	—	Power supply terminal (+3.3V) (digital system)
65	DASP	I/O	Not used (pull up)
66 to 69	MDB0 to MDB3	I/O	Two-way data bus with the D-RAM (IC706)
70	VSS	—	Ground terminal (digital system)
71	MDB4	I/O	Two-way data bus with the D-RAM (IC706)
72	VDD5V	—	Power supply terminal (+5V)
73 to 75	MDB5 to MDB7	I/O	Two-way data bus with the D-RAM (IC706)
76	XMWR	O	Write enable signal output to the D-RAM (IC706)
77	VDD	—	Power supply terminal (+3.3V) (digital system)
78	XRAS	O	Row address strobe signal output to the D-RAM (IC706)
79, 80	MA0, MA1	O	Address signal output to the D-RAM (IC706)
81	VSS	—	Ground terminal (digital system)
82 to 87	MA2 to MA7	O	Address signal output to the D-RAM (IC706)
88	VDD	—	Power supply terminal (+3.3V) (digital system)
89	MA8	O	Address signal output to the D-RAM (IC706)
90	VSS	—	Ground terminal (digital system)
91	MA9/MNT0	O	Address signal output to the D-RAM (IC706)
92	MA10/MNT1	O	RF data signal output terminal for disc mark detection
93	MA11/MNT2	O	Clock signal output terminal for disc mark detection Monitor signal output to the CPU (IC901)
94	XMOE	O	Output enable signal output to the D-RAM (IC706)
95	XCAS	O	Column address strobe signal output to the D-RAM (IC706)
96, 97	MDB8, MDB9	I/O	Two-way data bus with the D-RAM (IC706)
98	VSS	—	Ground terminal (digital system)
99	MDBA	I/O	Two-way data bus with the D-RAM (IC706)
100	VDD	—	Power supply terminal (+3.3V) (digital system)
101, 102	MDBB, MDBC	I/O	Two-way data bus with the D-RAM (IC706)
103	VDD5V	—	Power supply terminal (+5V)
104 to 106	MDBD to MDBF	I/O	Two-way data bus with the D-RAM (IC706)
107	GFS	O	Guard frame sync signal output to the CPU (IC901)
108	VSS	—	Ground terminal (digital system)
109	APEO	O	Absolute phase error signal output
110	VDD	—	Power supply terminal (+3.3V) (digital system)
111	DASYO	O	RF binary signal output
112	GND A5	—	Ground terminal (analog system)
113, 114	ASF1, AFS2	—	Filter connected terminal for selection the constant asymmetry compensation
115	DASYI	I	Analog signal input after integrated from the RF binary signal
116	RFDC	I	Input terminal for adjusting DC cut high-pass filter for RF signal
117	RF IN	I	RF signal input from the CXD1881R (IC001)
118, 119	VCCA5, VCCA4	—	Power supply terminal (+3.3V) (analog system)
120	VCOR1	—	VCO oscillating range setting resistor connected terminal
121	VCOIN	I	VCO input terminal
122, 123	GND A4, GND A3	—	Ground terminal (analog system)
124	LPF5	O	Signal output from the operation amplifier from PLL loop filter
125	VC1	I	Middle point voltage (+1.65V) input terminal
126, 127	LPF2, LPF1	I	Inverted signal input to the operation amplifier from PLL loop filter
128, 129	VCCA3, VCCA2	—	Power supply terminal (+3.3V) (analog system)
130	PDO	O	Signal output from the charge pump for phase comparator
131	PDHVCC	I	Middle point voltage input terminal for RF PLL

Pin No.	Pin Name	I/O	Description
132	FDO	O	Signal output from the charge pump for frequency comparator
133, 134	GND A2, GND A1	—	Ground terminal (analog system)
135	SPO	O	Spindle motor (M3) control signal output to the BA5912AFP (IC512)
136	VC2	I	Middle point voltage (+1.65V) input terminal
137	MDIN2	I	Spindle motor (M3) control signal input from the CXD3008Q (IC509)
138	MDIN1	I	MDP input terminal
139	VCCA1	—	Power supply terminal (+3.3V) (analog system)
140	CLVS	O	Control signal output for selection the spindle control filter at CLVS
141	VSS	—	Ground terminal (digital system)
142	MDSOUT	O	Frequency error output terminal of internal CLV circuit
143	VDD	—	Power supply terminal (+3.3V) (digital system)
144	MDPOUT	O	Phase error output terminal of internal CLV circuit
145	DEFECT	I	Defect signal input terminal Not used (fixed at “L”)
146	GSCOR	I	Guard subcode sync OR signal input from the CXD3008Q (IC509)
147	EXCK	O	Subcode serial data reading clock signal output to the CXD3008Q (IC509)
148	SBIN	I	Subcode serial data input from the CXD3008Q (IC509)
149	VSS	—	Ground terminal (digital system)
150	SCOR	I	Subcode sync OR signal input from the CXD3008Q (IC509)
151	WFCK	I	Write frame clock signal input from the CXD3008Q (IC509)
152	VDD5V	—	Power supply terminal (+5V)
153	XRCI	I	RAM overflow signal input terminal Not used (fixed at “L”)
154	VDDS	—	Power supply terminal (+5V) (digital system)
155	C2PO	I	C2 pointer signal input from the CXD3008Q (IC509)
156	VDD	—	Power supply terminal (+3.3V) (digital system)
157	DBCK	O	Bit clock signal (2.8224 MHz) output terminal Not used (open)
158	BCLK	I	Bit clock signal (2.8224 MHz) input from the CXD3008Q (IC509)
159	DDAT	O	PCM data output terminal Not used (open)
160	MDAT	I	Serial data input from the CXD3008Q (IC509)
161	VSS	—	Ground terminal (digital system)
162	DLRC	O	L/R sampling clock signal (44.1 kHz) output terminal Not used (open)
163	LRCK	I	L/R sampling clock signal (44.1 kHz) input from the CXD3008Q (IC509)
164	XRST	I	Reset signal input from the expander (IC902) “L”: reset
165	IFS0	I	Interface select signal input terminal Fixed at “L” in this set
166	IFS1	I	Interface select signal input terminal Fixed at “H” in this set
167	XTAL	I	33.86688 MHz clock signal input terminal
168	VSS	—	Ground terminal (digital system)
169	XTA2	O	System clock output terminal (33.86688 MHz)
170	XTA1	I	System clock input terminal (33.86688 MHz)
171	VDD	—	Power supply terminal (+3.3V) (digital system)
172 to 176	D0 to D4	I/O	Two-way data bus with the CPU (IC901) and expander (IC902)

• MAIN BOARD IC801 CXD2752R (DSP DECODER)

Pin No.	Pin Name	I/O	Description
1	VSC	—	Ground terminal for core.
2	XMSLAT	I	Latch input terminal for microcomputer serial communication. Latches address and data at falling this signal.
3	MSCK	I	Shift clock input terminal for microcomputer serial communication. Reads and shifts serial input data at the rise-up of the clock that is input into this terminal. When reading out, read data changes at falling of clock that inputs into this terminal.
4	MSDATI	I	Data input terminal for microcomputer serial communication. Inputs data and address with serial from microcomputer.
5	VDC	—	Power terminal for core. Supply +2.5 V.
6	MSDATO	O	Date output terminal for microcomputer serial communication. Hi-Z excluding output.
7	MSREADY	O	Output ready flag for microcomputer serial communication. When completing, outputs "L". Open drain.
8	XMSDOE	O	Output enable terminal for microcomputer serial communication. When using tri-state buffer externally, activates by this terminal. When outputs "MSDATO", "L" is shown.
9	XRST	I	Reset terminal. Resets entire IC on "L". Clock that is output from EXCK01, EXCK02 and LRCK of output terminal, doesn't stop in resetting.
10	SMUTE	I	Soft mute terminal. Soft-mutes audio output with "H" and releases it with "L".
11	MCKI	I	Master clock input terminal. Inputs clock with 768 Fs (33.8688 MHz).
12	VSIO	—	Ground terminal for input and output.
13	EXCKO1	O	External output clock terminal 1. Upon setting, outputs 768 Fs, 512 Fs, 256 Fs and 128Fs.
14	EXCKO2	O	External output clock terminal 2. Upon setting, outputs 768 Fs, 512 Fs, 256 Fs and 128Fs.
15	LRCK	O	1Fs(44.1kHz) clock output terminal.
16	FRAME	O	Frame signal output terminal.
17	VDIO	—	Power terminal for input and output. Supply +3.3 V.
18	MNT0	O	Monitor output terminal. Upon setting of microcomputer, outputs a part of internal operation.
19	MNT1	O	Monitor output terminal. Upon setting of microcomputer, outputs a part of internal operation.
20	MNT2	O	Monitor output terminal. Upon setting of microcomputer, outputs a part of internal operation.
21	MNT3	O	Monitor output terminal. Upon setting of microcomputer, outputs a part of internal operation.
22	TESTO	O	Output terminal for testing. Keep open.
23	TESTO	O	Output terminal for testing. Keep open.
24	TESTO	O	Output terminal for testing. Keep open.
25	TESTO	O	Output terminal for testing. Keep open.
26	TCK	I	Clock input terminal for testing. Fix "L".
27	TDI	Ipu	Input terminal for testing (pull-up). Keep open.
28	VSC	—	Ground terminal for core.
29	TDO	O	Output terminal for testing. Keep open.
30	TMS	Ipu	Input terminal for testing (pull-up). Keep open.
31	TRST	Ipu	Reset terminal for testing (pull-up). Input "power-on" reset signal or fix "L".
32	TEST1	I	Input terminal for testing. Fix "L".
33	TEST2	I	Input terminal for testing. Fix "L".
34	TEST3	I	Input terminal for testing. Fix "L".
35	VDC	—	Power terminal for core. Supply +2.5 V.
36	TESTO	O	Output terminal for testing. Keep open.
37	XBIT	O	Monitor terminal for DST related. Nothing is connected. For details, refer to part 3 DST_X_Bit of SACD format book.
38	SUPDT0	O	Output terminal for supplementary data (LSB).
39	SUPDT1	O	Output terminal for supplementary data.
40	SUPDT2	O	Output terminal for supplementary data.
41	SUPDT3	O	Output terminal for supplementary data.
42	VSIO	—	Ground terminal for input and output.
43	SUPDT4	O	Output terminal for supplementary data.
44	SUPDT5	O	Output terminal for supplementary data.
45	VDIO	—	Power terminal for input and output. Supply +3.3 V.
46	SUPDT6	O	Output terminal for supplementary data.

Pin No.	Pin Name	I/O	Description
47	SUPDT7	O	Output terminal for supplementary data (MSB).
48	XSUPAK	O	Output terminal for supplementary data acknowledge.
49	VSC	—	Ground terminal for core.
50	TESTO	O	Output terminal for testing. Keep open.
51	TESTI	I	Input terminal for testing. Fix "L".
52	TESTI	I	Input terminal for testing. Fix "L".
53	TESTO	O	Output terminal for testing. Keep open.
54	VDC	—	Power terminal for core. Supply +2.5 V.
55	TESTO	O	Output terminal for testing. Keep open.
56	TESTO	O	Output terminal for testing. Keep open.
57	BCKASL	I	Bit clock input/output selection terminal for DSD data output. "L" is input (slave) and "H" is output (Master).
58	VSDSD	—	Ground terminal for DSD data output.
59	BCKAI	I	Bit clock input terminal for DSD data output. When BCKASL is "L", input bit clock into this terminal.
60	BCKAO	O	Bit clock output terminal for DSD data output. When BCKASL is "H", bit clock is output from this terminal.
61	PHREFI	I	Phase reference signal input terminal for DSD output phase modulation.
62	PHREFO	O	Phase reference signal output terminal for DSD output phase modulation.
63	ZDFL	O	Zero data detection flag in channel R (when setting microcomputer). When no sound data keeps for 300 msec, this flag changes to "H".
64	DSAL	O	Output terminal for DSD data in channel L.
65	ZDFR	O	Zero data detection flag in channel L (when setting microcomputer). When no sound data keeps for 300 msec, this flag changes to "H".
66	DSAR	O	Output terminal for DSD data in channel R.
67	VDDSD	—	Power terminal for DSD data output. Supply a +3.3 V that is separated from other digital power source.
68	ZDFC	O	Zero data detection flag in channel C (when setting microcomputer). When no sound data keeps for 300 msec, this flag changes to "H".
69	DSAC	O	DSD data output terminal in channel C.
70	ZDFLFE	O	Zero data detection flag in channel LFE (when setting microcomputer). When no sound data keeps for 300 msec, this flag changes to "H".
71	DSALFE	O	DSD data output terminal in channel LFE.
72	VSDSD	—	Ground terminal for DSD data output.
73	ZDFLS	O	Zero data detection flag in channel LS (when setting microcomputer). When no sound data keeps for 300 msec, this flag changes to "H".
74	DSALS	O	DSD data output terminal in channel LS.
75	ZDFRS	O	Zero data detection flag in channel RS (when setting microcomputer). When no sound data keeps for 300 msec, this flag changes to "H".
76	DSARS	O	DSD data output terminal in channel RS.
77	VDDSD	—	Power terminal for DSD data output. Supply a +3.3 V that is separated from other digital power source.
78	TESTO	O	Output terminal for testing. Keep open.
79	TESTO	O	Output terminal for testing. Keep open.
80	VSC	—	Ground terminal for core.
81	TESTO	O	Output terminal for testing. Keep open.
82	TESTO	O	Output terminal for testing. Keep open.
83	VDC	—	Power terminal for core. Supply +2.5 V.
84	TESTO	O	Output terminal for testing. Keep open.
85	TESTO	O	Output terminal for testing. Keep open.
86	VSIO	—	Ground terminal for input and output.
87	TESTO	O	Output terminal for testing. Keep open.
88	TESTI	I	Input terminal for testing. Fix "L".
89	TESTI	I	Input terminal for testing. Fix "L".
90	VDIO	—	Power terminal for input and output. Supply +3.3 V.
91	TESTO	O	Output terminal for testing. Keep open.
92	TESTO	O	Output terminal for testing. Keep open.
93	TESTO	O	Output terminal for testing. Keep open.

Pin No.	Pin Name	I/O	Description
94	VSC	—	Ground terminal for core.
95	TESTI	I	Input terminal for testing. Fix “H”.
96	TESTI	I	Input terminal for testing. Fix “L”.
97	TESTI	Ipu	Input terminal for testing. Fix “H”.
98	TESTO	O	Input terminal for testing. Keep open.
99	VDC	—	Power terminal for core. Supply +2.5 V.
100	TESTI	I	Input terminal for testing. Fix “L”.
101	TESTI	I	Input terminal for testing. Fix “L”.
102	TESTI	I	Input terminal for testing. Fix “L”.
103	TESTI	I	Input terminal for testing. Fix “L”.
104	TESTI	I	Input terminal for testing. Fix “L”.
105	TESTI	I	Input terminal for testing. Fix “L”.
106	VSIO	—	Ground terminal for input and output.
107	TESTI	I	Input terminal for testing. Fix “L”.
108	TESTI	I	Input terminal for testing. Fix “L”.
109	TESTI	I	Input terminal for testing. Fix “L”.
110	VDIO	—	Power terminal for input and output. Supply +3.3 V.
111	WAD0	I	External A/D data input terminal for PSP physical disc marking detection (LSB). This terminal is not used for internal A/D but is used only for connecting A/D to outside.
112	WAD1	I	External A/D data input terminal for PSP physical disc marking detection.
113	WAD2	I	External A/D data input terminal for PSP physical disc marking detection.
114	WAD3	I	External A/D data input terminal for PSP physical disc marking detection.
115	VSIO	—	Ground terminal for input and output.
116	VSC	—	Ground terminal for core.
117	WAD4	I	External A/D data input terminal for PSP physical disc marking detection.
118	WAD5	I	External A/D data input terminal for PSP physical disc marking detection.
119	WAD6	I	External A/D data input terminal for PSP physical disc marking detection.
120	WAD7	I	External A/D data input terminal for PSP physical disc marking detection (MSB).
121	VDC	I	Power terminal for core. Supply +2.5 V.
122	TESTI	I	Input terminal for testing. Fix “L”.
123	WCK	I	Operation clock for PSP physical disc marking detection. Input PLL clock that supports 1T of RF.
124	WAVDD	—	A/D power terminal for PSP physical disc marking detection. Supply +2.5 V that is separated from other digital power source.
125	WAVDD	—	A/D power terminal for PSP physical disc marking detection. Supply +2.5 V that is separated from other digital power source.
126	WARFI	Ai	Analog RF signal input terminal for PSP physical disc marking detection. Full scale is 2.5 V.
127	WAVRB	Ai	A/D bottom reference terminal for PSP physical disc marking detection. Voltage that is input into this terminal, becomes a full scale at ground side of A/D.
128	WAVSS	—	A/D ground terminal for PSP physical disc marking detection.
129	WAVSS	—	A/D ground terminal for PSP physical disc marking detection.
130	VSIO	—	Ground terminal for input and output.
131	DQ7	I/O	Input and output terminal for SDRAM data (MSB).
132	DQ6	I/O	Input and output terminal for SDRAM data.
133	DQ5	I/O	Input and output terminal for SDRAM data.
134	DQ4	I/O	Input and output terminal for SDRAM data.
135	VDIO	—	Power terminal for input and output. Supply +3.3 V.
136	DQ3	I/O	Input and output terminal for SDRAM data.
137	DQ2	I/O	Input and output terminal for SDRAM data.
138	DQ1	I/O	Input and output terminal for SDRAM data.
139	DQ0	I/O	Input and output terminal for SDRAM data.
140	VSIO	—	Ground terminal for input and output.
141	DCLK	O	Clock output terminal for SDRAM.
142	DCKE	O	Clock enable output terminal for SDRAM.

Pin No.	Pin Name	I/O	Description
143	XWE	O	Write enable output terminal for SDRAM. Connect it to XWE terminal of DRAM.
144	XCAS	O	Column address strobe output terminal for SDRAM. Connect it to CAS terminal of SDRAM.
145	XRAS	O	Row address strobe output terminal for SDRAM. Connect it to RAS terminal of SDRAM.
146	VDIO	—	Power terminal for input and output. Supply +3.3 V.
147	TESTO	O	Keep open.
148	A11	O	Address output terminal for SDRAM. $\hat{A}iMSB\hat{A}j$.
149	A10	O	Address output terminal for SDRAM.
150	VSC	—	Ground terminal for core.
151	A9	O	Address output terminal for SDRAM.
152	A8	O	Address output terminal for SDRAM.
153	VDC	—	Power terminal for core. Supply +2.5 V.
154	A7	O	Address output terminal for SDRAM.
155	A6	O	Address output terminal for SDRAM.
156	A5	O	Address output terminal for SDRAM.
157	A4	O	Address output terminal for SDRAM.
158	VSIO	—	Ground terminal for input and output.
159	A3	O	Address output terminal for SDRAM.
160	A2	O	Address output terminal for SDRAM.
161	A1	O	Address output terminal for SDRAM.
162	A0	O	Address output terminal for SDRAM. (LSB).
163	VDIO	—	Power terminal for input and output. Supply +3.3 V.
164	XSRQ	O	Data request output terminal that inputs into front end processor.
165	XSHD	I	Input terminal for header flag that is output from front end processor.
166	SDCK	I	Input terminal for data transmission clock that is output from front end processor.
167	XSAK	I	Input terminal for data effective flag that is output from front end processor.
168	SDEF	I	Input terminal for error flag that is output from front end processor.
169	SD0	I	Input terminal for stream data that is output from front end processor (LSB).
170	SD1	I	Input terminal for stream data that is output from front end processor.
171	SD2	I	Input terminal for stream data that is output from front end processor.
172	SD3	I	Input terminal for stream data that is output from front end processor.
173	SD4	I	Input terminal for stream data that is output from front end processor.
174	SD5	I	Input terminal for stream data that is output from front end processor.
175	SD6	I	Input terminal for stream data that is output from front end processor.
176	SD7	I	Input terminal for stream data that is output from front end processor (MSB).

• MAIN BOARD IC803 CXD9647 (DSD DSP)

Pin No.	Pin Name	I/O	Description
1	VDD	—	Power terminal. Supply +3.3 V.
2	XMSDOE	O	Output enable terminal for microcomputer serial communication. When using tri-state buffer externally, activates by this terminal. When outputs “MSDATO”, “L” is shown.
3	MSREADY	O	Output ready flag for microcomputer serial communication. When completing, outputs “L”. Open drain.
4	MSDATO	O	Data output terminal for microcomputer serial communication. Hi-Z except for output.
5	MSDATI	I	Data input terminal for microcomputer serial communication. Inputs data and address with serial from microcomputer.
6	MSCK	I	Shift clock input terminal for microcomputer serial communication. Imports and shifts serial input data by setting up clock that inputs into this terminal. When reading out, read data change by falling of clock that inputs into this terminal.
7	XMSLAT	I	Latch input terminal for microcomputer serial communication. Latches address and data at falling this signal.
8	GND	—	Ground terminal
9	TESTO	O	Output terminal for testing. Keep open.
10	TESTO	O	Output terminal for testing. Keep open.
11	TESTO	O	Output terminal for testing. Keep open.
12	TESTO	O	Output terminal for testing. Keep open.
13	TESTO	O	Output terminal for testing. Keep open.
14	TESTO	O	Output terminal for testing. Keep open.
15	TESTO	O	Output terminal for testing. Keep open.
16	TESTO	O	Output terminal for testing. Keep open.
17	TESTI	Ipd	Input terminal for testing (pull down). Keep open or fix “L”.
18	TESTI	Ipd	Input terminal for testing (pull down). Keep open or fix “L”.
19	TESTO	O	Output terminal for testing. Keep open.
20	GND	—	Ground terminal
21	TESTI	Ipd	Input terminal for testing (pull down). Keep open or fix “L”.
22	GND	—	Ground terminal
23	TESTI	I	Input terminal for testing. Fix “L”.
24	TESTO	O	Output terminal for testing. Keep open.
25	VDD	—	Power terminal. Supply +3.3 V.
26	GND	—	Ground terminal
27	TESTI	Ipd	Input terminal for testing (pull down). Keep open or fix “L”.
28	FS128	O	Bit clock output terminal for DSD data phase modulation input. Outputs 128 Fs.
29	TESTI	Ipd	Input terminal for testing (pull down). Keep open or fix “L”.
30	FS64	O	Bit clock output terminal for DSD data normal input or phase reference signal output terminal for phase modulation input. Outputs 64 Fs.
31	GND	—	Ground terminal
32	DSI1	I	DSD data input terminal 1
33	GND	—	Ground terminal
34	DSI2	I	DSD data input terminal 2
35	VDD	—	Power terminal. Supply +3.3 V.
36	DSI3	I	DSD data input terminal 3
37	GND	—	Ground terminal
38	DSI4	I	DSD data input terminal 4
39	GND	—	Ground terminal
40	DSI5	I	DSD data input terminal 5
41	VDD	—	Power terminal. Supply +3.3 V.
42	DSI6	I	DSD data input terminal 6
43	GND	—	Ground terminal
44	TESTO	O	Output terminal for testing. Keep open.
45	TESTO	O	Output terminal for testing. Keep open.
46	TESTO	O	Output terminal for testing. Keep open.
47	TESTI	I	Input terminal for testing. Fix “L”.
48	TESTO	O	Output terminal for testing. Keep open.

Ipd : Pull down input

Pin No.	Pin Name	I/O	Description
49	TESTI	I	Input terminal for testing. Fix "L".
50	GND	—	Ground terminal
51	VDD	—	Power terminal. Supply +3.3.V.
52	TESTO	O	Output terminal for testing. Keep open.
53	GND	—	Ground terminal
54	TESTO	O	Output terminal for testing. Keep open.
55	GND	—	Ground terminal
56	DSAL	O	Channel L DSD data output terminal
57	VDD	—	Power terminal. Supply +3.3.V.
58	DSAR	O	Channel R DSD data output terminal
59	GND	—	Ground terminal
60	DSALS	O	Channel LS DSD data output terminal
61	GND	—	Ground terminal
62	DSARS	O	Channel RS DSD data output terminal
63	VDD	—	Power terminal. Supply +3.3 V.
64	DSAC	O	Channel C DSD data output terminal
65	GND	—	Ground terminal
66	DSASW	O	Channel SW DSD data output terminal
67	GND	—	Ground terminal
68	PHREFO	O	Phase reference signal input terminal for DSD output phase modulation
69	PHREFI	I	Phase reference signal output terminal for DSD output phase modulation
70	BCKASL	I	Bit clock input/output selection terminal for DSD data output. "L" is input (slave) and "H" is output (Master).
71	BCKAO	O	Bit clock output terminal for DSD data output. When BCKASL is "H", bit clock is output from this terminal.
72	BCKAI	I	Bit clock input terminal for DSD data output. When BCKASL is "L", input bit clock into this terminal.
73	TESTO	O	Output terminal for testing. Keep open.
74	TESTO	O	Output terminal for testing. Keep open.
75	VDD	—	Power terminal. Supply +3.3 V.
76	GND	—	Ground terminal
77	TESTI	I	Input terminal for testing. Fix "L".
78	TESTI	I	Input terminal for testing. Fix "L".
79	TESTI	I	Input terminal for testing. Fix "L".
80	TESTI	I	Input terminal for testing. Fix "L".
81	TESTI	I	Input terminal for testing. Fix "L".
82	TESTI	I	Input terminal for testing. Fix "L".
83	TESTO	O	Output terminal for testing. Keep open.
84	TESTO	O	Output terminal for testing. Keep open.
85	TESTI	I	Input terminal for testing. Fix "L".
86	TESTI	I	Input terminal for testing. Fix "L".
87	GND	—	Ground terminal
88	MCKI	I	Master clock input terminal. Inputs clock with 768 Fs (33.8688 MHz).
89	VDD	—	Power terminal. Supply +3.3 V.
90	TESTO	O	Output terminal for testing. Keep open.
91	TESTO	O	Output terminal for testing. Keep open.
92	TESTO	O	Output terminal for testing. Keep open.
93	TESTI	I	Input terminal for testing. Fix "L".
94	TESTI	I	Input terminal for testing. Fix "L".
95	TESTI	I	Input terminal for testing. Fix "L".
96	TESTI	I	Input terminal for testing. Fix "L".
97	TESTI	Ipd	Input terminal for testing (pull down). Keep open or fix "L".
98	SMUTE	I	Soft mute terminal. Soft-mutes audio output with "H" and releases it with "L".
99	XRST	I	Reset terminal. Resets entire IC on "L". Clock that is output from FS128 and FS64 of output terminal, doesn't stop in resetting.
100	GND	—	Ground terminal

• MAIN BOARD IC901 CXP974F096R (MECHA CONTROL)

Pin No.	Pin Name	I/O	Description
1	MODE_DF	O	SACD/CD mode select signal "L" : CD mode "H" : SACD mode
2	AMUTE	O	Analog mute "L" : muting
3	DOCTRL	O	Digital out control "L" : digital out off "H" : digital out on
4	LAT_DAC	O	DAC latch
5	DATA_DAC	O	DAC data
6	CLK_DAC	O	DAC clock
7	FCS_JMP_1	O	Focus jump 1
8	FCS_JMP_2	O	Focus jump 2
9	SENS_CD	I	CD DSP Internal status (SENSE) signal
10	XCS2	O	SRAM chip select (not used)
11	XCS_IO	O	IO Expander chip select
12	XCS_DVD	O	DVD-Decoder chip select
13	VSS	—	Ground terminal (digital system)
14	D0	I/O	Parallel data bus
15	D1	I/O	Parallel data bus
16	D2	I/O	Parallel data bus
17	D3	I/O	Parallel data bus
18	D4	I/O	Parallel data bus
19	D5	I/O	Parallel data bus
20	D6	I/O	Parallel data bus
21	D7	I/O	Parallel data bus
22	INT0_DVD	I	DVD-Decoder interrupt
23	INT1_DVD	I	DVD-Decoder interrupt
24	T_SENS	I	Changer table slit sensor interrupt
25	MON_DVD	I	DVD decoder monitor (not used)
26	DATA_CD	O	CD DSP data
27	XLAT_CD	O	CD DSP latch
28	A1IN	I	Control A1 input interrupt
29	COUT_CD	I	CD-DSP COUT signal
30	IN_SW	I	Tray (CHANGER panel) IN SW "L" : loading in
31	OUT_SW	I	Tray (CHANGER panel) OUT SW "L" : loading out
32	MIRR	I	MIRR signal
33	SQSO	I	CD-DSP sub Q signal input
34	SCOR	I	SCOR
35	SQCK	O	CD-DSP sub Q read clock
36	PF6	—	Not used
37	CLOK_CD	O	CD DSP clock
38	XRST	I	Reset input
39	VSS	—	Ground terminal
40	XTAL	I	System clock input (20MHz)
41	XEXTAL	O	System clock output (20MHz)
42	VDD	—	Power supply terminal (+3.3V)(digital system)
43	LDON	O	Laser diode on/off control signal "L" : laser diode off, "H" : laser diode on
44	XDIS_IO	O	IO Expander reset signal
45	MUTE_DSD	O	DSD Decoder mute "H" : muting
46	XMSLAT	O	DSD Decoder serial latch
47	READY_DSD	I	DSD Decoder Ready signal "L" : ready
48	SDIN_DSD	I	DSD Decoder serial in
49	SDOUT_DSD	O	DSD Decoder serial out
50	SCK_DSD	O	DSD Decoder serial clock
51	BUSY_DP	I	Display controller BUSY signal

Pin No.	Pin Name	I/O	Description
52	SDIN	I	Display controller serial input
53	SDOUT	O	Display controller serial output
54	SLK	O	Display controller serial clock
55	VSS	—	Ground terminal
56	REQ	O	Display controller request signal
57	FCS_BST	O	Focus boost (not used)
58	GFS_DVD	I	DVD Decoder Guard Frame Sync
59	MUTE_CD	O	CD DSP MUTE "H" : muting
60	MUTE_2D	O	Two-axes driver, two-axes mute "L" : muting
61	MUTE_LOAD	O	Spindle driver, Loading mute "L" : muting
62	FG	I	Frequency generator
63	SP_ON	O	Spindle driver, Spindle mute "L" : muting
64	JIT	I	Jitter signal input
65	TE	I	Tracking Error
66	PI	I	Pull in signal
67	FE	I	Focus Error
68	AVSS	—	Ground terminal (or A/D converter)
69	AVREF	I	Reference voltage input terminal (for A/D converter)
70	AVDD	—	Power supply terminal (+3.3V)(for A/D converter)
71	GFS_CD	I	CD DSP Guard Frame Sync signal input
72	SCLK_CD	O	CD DSP SENS serial data read clock
73	PK2	—	Not used
74	FOK_CD	I/O	CD DSP FOK (SACD:OUT /CD:IN)
75	LOCK_CD	I/O	CD DSP LOCK (SACD:OUT /CD:IN)
76	RF_AD_CE	O	RF_AD Chip Enable (not used)
77	SP_DW	O	DFCT select SW (not used)
78	EEP_SIO	I/O	EEPROM Data
79	EEP_SCL	O	EEPROM Clock
80	RXD	I	RS232C serial data input
81	TXD	O	RS232C serial data output
82	SDCLK_RF	O	RF_AMP clock signal
83	SDATA_RF	I/O	RF_AMP data
84	XWR	O	Write signal
85	XRD	O	Read signal
86	NC	—	Non-connection
87	VDD	—	Power supply terminal
88	VSS	—	Ground terminal
89	A0	O	Parallel address bus
90	A1	O	Parallel address bus
91	A2	O	Parallel address bus
92	A3	O	Parallel address bus
93	A4	O	Parallel address bus
94	A5	O	Parallel address bus
95	A6	O	Parallel address bus
96	A7	O	Parallel address bus
97	INIT_DF	O	Digifil INIT
98	LATCH_DF	O	Digifil LATCH
99	SHIFT_DF	O	Digifil SHIFT
100	SCDATA_DF	O	Digifil SCDATA

• MAIN BOARD IC902 CXD1095BR (I/O EXPANDER1)

Pin No.	Pin Name	I/O	Description
1	LIM_SW	I	Limit SW for sled
2	(WISE)	I	Direction of rotation (not used)
3	F_COML	I	Focus jump L signal (not used)
4	SPCNTL1	O	Spindle control 1 (not used)
5	SPCNTL2	O	Spindle control 0 (not used)
6	TBLL	O	TABLE MOTOR - L DIRECTION
7	TBLR	O	TABLE MOTOR - R DIRECTION
8	Vss	—	Ground terminal
9	REMCODE	—	Remote control code input (not used)
10	D_SENS	I	DISC SENSOR
11	S1	I	Tray position sensor 1
12	S2	I	Tray position sensor 2
13	LOAD_OUT	O	Loading motor drive signal (loading out direction) output terminal
14	SDCNTL	—	Sled control (not used)
15	LOAD_IN	O	Loading motor drive signal (loading in direction) output terminal
16	A1OUT	O	Control A1 signal output
17	NC	—	NC
18	RST_DSD	O	Reset Signal for DSD "L" : reset
19	RST_DP	O	Reset Signal for DISPLAY uCOM "L" : reset
20	RST_DVD	O	Reset Signal for DVD decoder "L" : reset
21	RST_CD	O	Reset Signal for CD DSP "L" : reset
22	VMOD	O	Power on/off control signal output for modulation circuit on optical pick-up block "L" : off "H" : on
23	Vss	—	Ground terminal
24	Vdd	—	Power supply terminal (+3.3V)
25	MULTI	O	MULTI/2CH SW for AUDIO board "L" : 2ch , "H" : multi
26	SDEN	O	RF_AMP Serial Enable signal (SEN_RF)
27	ISBTEST	O	For IC testing
28	D0	I/O	Data bus
29	D1	I/O	Data bus
30	D2	I/O	Data bus
31	NC	—	NC
32	NC	—	NC
33	D3	I/O	Data bus
34	D4	I/O	Data bus
35	D5	I/O	Data bus
36	D6	I/O	Data bus
37	D7	I/O	Data bus
38	XCLR	I	Clear signal input terminal (fixed at "H")
39	XDIS	I	Reset signal input "L" : reset
40	Vss	—	Ground terminal (digital system)
41	XWR	I	Write strobe signal input
42	XRD	I	Read strobe signal input
43	XCS	I	Chip select signal
44	A0	I	Address bus
45	A1	I	Address bus
46	A2	I	Address bus
47	SWGUP	O	Sub Woofer Gain Up (H: GainUP, L: Normal) "L" fixed
48	PE1	O	Not used
49	NC	—	NC
50	TRKFIL	O	Tracking filter (not used)
51	XDAC333	I	Judges AUDIO board (fix "L")

SCD-C555ES

Pin No.	Pin Name	I/O	Description
52	DFCTEN	O	DFCT SW signal (not used)
53	XZLAT	O	DSD DSP latch signal
54	MRSEL1	O	CD/SACD CHANGE (not used)
55	Vss	—	Ground terminal
56	Vdd	—	Power supply terminal
57	AGING_ERR	O	DEBUG FLAG
58	PA4	I	Not used
59	OUT_SW	I	TRAY OUT SENSOR
60	PA6	I	Not used
61	PA7	I	Not used
62	F_COMPH	I	Focus jump H signal (not used)
63	NC	—	NC
64	NC	—	NC

SECTION 5 SERVICING NOTES (2)

Cleaning of Optical Pick-up Lens

In cleaning the lens of optical pick-up, use the air blower.

Never use a cotton swab for cleaning the lens of optical pick-up, which otherwise causes a trouble.

Resetting Operation at Power ON

If the power is turned on with a disc loaded in the set, a sequence of operation as shown below will be performed.

(The operation varies depending on the type of disc) Condition: continue mode

(1) CD

1. Sled reverse move (sled in)
2. Disc detect
3. IC setting for CD
4. Servo error signal offset auto adjustment
5. Spindle kick for LD on
6. LD on
7. Focus search
8. Focus servo on
9. Spindle kick
10. Spindle servo on
11. E-F balance auto adjustment
12. Tracking & sled servo on
13. Focus bias auto adjustment
14. Focus servo gain auto adjustment
15. Tracking servo gain auto adjustment
16. Jump to lead-in area
17. Read TOC
18. Stop

(2) SACD (single layer)

1. Sled reverse move (sled in)
2. Disc detect
3. IC setting for SACD
4. Servo error signal offset auto adjustment
5. Spindle kick for LD on
6. LD on
7. Focus search
8. Focus servo on
9. Spindle kick
10. Spindle servo on
11. E-F balance auto adjustment
12. Tracking & sled servo on
13. Focus bias auto adjustment
14. Focus servo gain auto adjustment
15. Tracking servo gain auto adjustment
16. Jump to lead-in area
17. Read TOC
18. Stop

(3) SACD (dual layer)

1. Sled reverse move (sled in)
2. Disc detect
3. IC setting for SACD
4. Servo error signal offset auto adjustment
5. Spindle kick for LD on
6. LD on
7. Focus search
8. Focus servo on (layer 0)
9. Spindle kick
10. Spindle servo on
11. E-F balance auto adjustment (layer 0)
12. Tracking & sled servo on (layer 0)
13. Focus bias auto adjustment (layer 0)
14. Focus servo gain auto adjustment (layer 0)
15. Tracking servo gain auto adjustment (layer 0)
16. Jump to lead-in area
17. Read TOC
18. Focus jump (layer 0→layer 1)
19. E-F balance auto adjustment (layer 1)
20. Tracking & sled servo on (layer 1)
21. Focus bias auto adjustment (layer 1)
22. Focus servo gain auto adjustment (layer 1)
23. Tracking servo gain auto adjustment (layer 1)
24. Focus Jump (layer 1→layer 0)
25. Stop

SECTION 6 TEST MODE

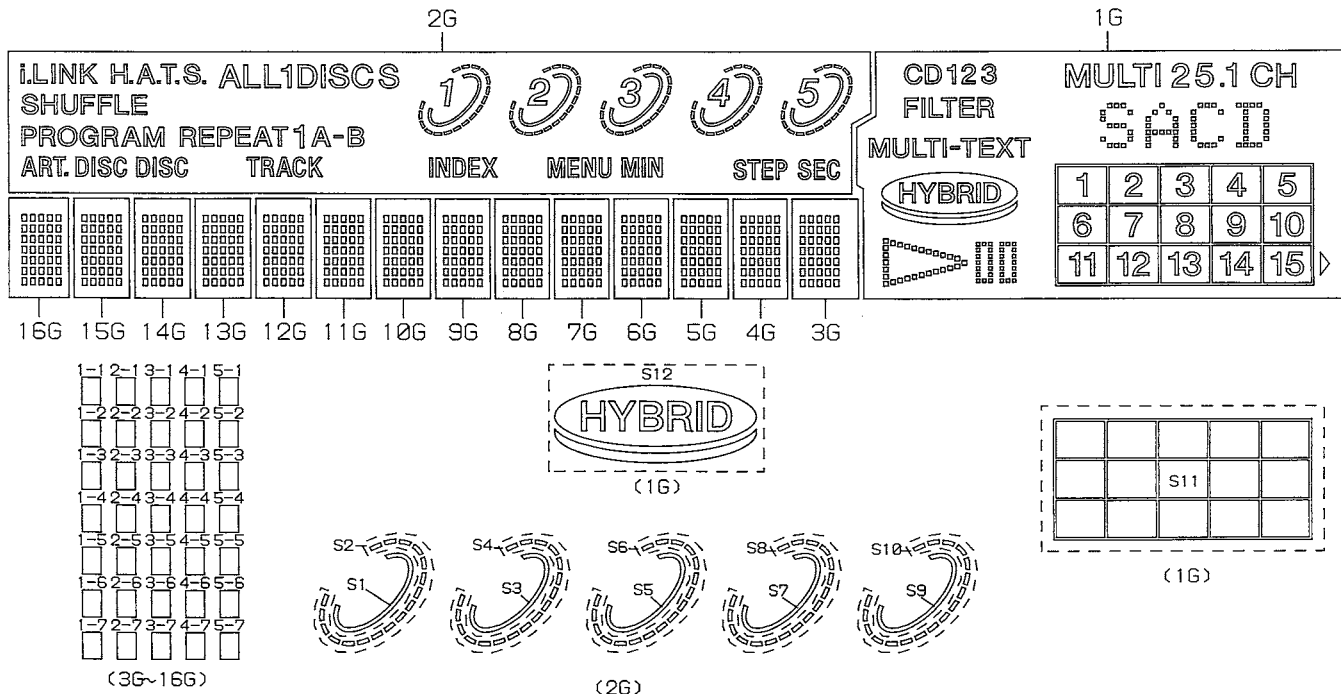
FLUORESCENT INDICATOR TUBE MODE

Note: Set the [CD1/CD2] switch on the remote commander to CD1.

Procedure:

1. While shorting the Test Land and the GND side of C1002 (Display board) with tweezers, press the [POWER] button and turn on the main power. The following operations will be executed automatically.
 - ① Grid of all segments lights up sequentially starting from 1G to 16G.
 - ② The vertical line (total 5 lines) of all grids lights up sequentially in the range of 3G to 16G starting from the left.
 - ③ The horizontal line of (total 7 lines) of all grids lights up sequentially in the range of 3G to 16G starting from the top.
 - ④ Grids from 5G to 6G go off.
2. With the machine in the status that is set in step 1-④, press any on the remote commander. The grids 1G and 2G go off and then the machine enters the key check standby state. (When the [EJECT] key or the [STOP] key is pressed, the reception check is canceled.)

3. After the key check is completed, turn JOG clockwise to turn on the calendar segments sequentially. When the segment "15" is confirmed, turn JOG counter-clockwise that turns off the calendar segment. When the segment "1" is confirmed, this is the end of check.
4. After all the checks are completed, confirm to see that the display "!!%TEST-END!!%" appears. The message indicates that the check is ended normally.
5. Press the [POWER] button to turn off the main power and disconnect the power plug from the wall outlet.



This set automatically executes self-diagnosis and various checks by entering the test mode.

Note: This set automatically makes various adjustments according to the type of disc, thereby not requiring adjustment of the set when parts were replaced. However, be sure to execute 6-1. IC AND FLUORESCENT DISPLAY TUBE CHECK, 6-2. AUTO CHECK and 6-8. WAVEFORMS CHECK.

Disc for Test Mode

Various checks of this set require the following discs.

Model	Type *1	Category	Application
MODEL SATD-S5 (J-2501-215-A) SATD-S4 (J-2501-184-A)	SL	12 cm disc Reference disc	Adjusted value check, Operation check, Optical waveform check
Not specified	DL	12 cm disc	Operation check
PATD-012 (4-225-203-01) YEDS-18 (3-702-101-01)	CD	12 cm disc Reference disc	Adjusted value check, Operation check, Optical waveform check
Not specified	HYBRID	12 cm disc	Operation check

*1 SL: Single Layer
DL: Dual Layer

Setting Method of Test Mode

Turn the **POWER** switch on while pressing the **◀◀AMS▶▶** dial and the **TIME/TEXT** button. Release the **TIME/TEXT** button and the **◀◀AMS▶▶** dial in this order when “TEST MODE Menu” is displayed on the fluorescent display tube. (If the **◀◀AMS▶▶** dial is released first, the test mode becomes active but “TEST MODE Menu” is not displayed)

Test Mode Command List

The contents of test mode are as follows.

Note: Wrong operation in the test mode causes a trouble, thus requiring extreme care.

LINE command (1X): Use mainly for a manufacturing line.

No.	Name	Description	Remarks
05	DSP MON1	XUGF, XPCK, C2PO outputted from IC509 (CD DSP)	Not used for the servicing
06	DSP MON2	MNT0, MNT1, MNT2, MNT3 outputted from IC509 (CD DSP)	Not used for the servicing
07	DSP MON3	RFCK, XPCK, XROF, GTOP outputted from IC509 (CD DSP)	Electrical measurement, CD CLV jitter measurement

STANDARD command (1X): Use when the servo is applied by manual operation.

No.	Name	Description	Remarks
12	LD ON/OFF	The laser diode is turned on or off	On or off are switched alternately
13	SPIN ON/OFF	The spindle motor is rotated with the regulated voltage	On or off are switched alternately
14	FSRV ON/OFF	The focus servo is turned on or off	On or off are switched alternately
15	TSRV ON/OFF	The tracking servo is turned on or off	On or off are switched alternately
16	CLV ON/OFF	The spindle SLV servo is turned on or off Focus and tracking servos must be already turned on	On or off are switched alternately
17	SSRV ON/OFF	The sled servo is turned on or off Focus, tracking and spindle servos must be already turned on	On or off are switched alternately
18	ALL SRV ON	All servos are turned on	
19	ALL SRV OFF	All servos are turned off	Stop command in the test mode

OPEN/CLOSE key in the TEST mode.

The **OPEN/CLOSE** key is disabled immediately after the machine enters the TEST mode. Be sure to turn the **◀◀AMS▶▶** dial to select 59 Table Init and push **◀◀AMS▶▶** once. When initial-ization of the table is completed, the message INITAIL OK appears several seconds on the FL display. After this, the **OPEN/CLOSE** key is enabled and disc can be inserted and ejected.

When the command 59 Table Init is executed, the same operations of the POWER ON to the disc chucking in the normal operations as described below are performed. However, it presumes that the door and the tray are closed depending on the stop status. 59 Table Init → BU DOWN (disc unchucking) → Table rotates (disc search) → BU UP (disc chucking) at the disc that is found first of all.

When there are no discs, BU UP is executed at the DISC1 position.

Releasing Method of Test Mode

To release the test mode, turn the **POWER** switch off.

Selection/Entry of Test Mode

To select and enter the “TEST MODE Menu”, operate as follows.

1. Rotate the **◀◀AMS▶▶** dial to select the menu, and press the **◀◀AMS▶▶** dial to enter.
2. The test is switched on or off alternately each time the **◀◀AMS▶▶** dial is pressed.
3. To return to the previous step, rotate the **◀◀AMS▶▶** dial to select the desired item, and press the **◀◀AMS▶▶** dial to enter.

SCD-C555ES

FOCUS command (2X): Focus related. (All servos must be already turned on (except command 21))

No.	Name	Description	Remarks
21	FSRCH ON/OFF	The continuous vertical motion of the optical pick-up lens is turned on or off	Avoid a long-time use
22	F-BIAS UP	Increase focus bias	Focus bias value
23	F-BIAS DOWN	Decrease focus bias	Focus bias value
24	ADJ FCSBIAS	The focus bias is adjusted automatically Both + and - directions are searched to search for best jitter point	
25	FGAIN UP/DW	The focus servo gain is switched between normal and down	Normal or down are switched alternately
26	FJMP UP/DWN	Focus jump is executed UP: layer 0→1, DOWN: layer 1→0	Valid only for DL
27	FOCUS AGC	The focus servo gain is adjusted automatically	
28	DISP FBdata	The focus bias adjusted value is displayed	Hexadecimal display 9 bit data

Note: On or off and up or down are switched alternately

OFFSET (PI, FE, TE) command (3X): Adjusts the offset of PI, FE and TE signals.

No.	Name	Description	Remarks
31	PI/FE OFSET	Adjusts the offset of PI, FE and TE signals This adjustment must be executed after 61 DISC DETECT	TE offset adjustment is executed for the CD only

TRACKING command (4X): Tracking servo related.

No.	Name	Description	Remarks
41	TGAIN NM/UP	The tracking servo gain is switched between normal and up	Normal or up are switched alternately
44	ADJ TRK DSP	The traverse AGC and E-F balance adjustment is performed	
45	TRACKING AGC	The tracking servo gain is adjusted automatically	

SEARCH command (5X): Track search related. (Nos. 51 through 53 are not used for the servicing.)

No.	Name	Description	Remarks
51	1-TRCK JUMP	One-track jump is performed	
52	M-TRCK MOVE	M-track movement is performed	
53	FINE SEARCH	Fine search is performed	
58	CDM Check	Measurement of table rotation hours, tray open/close hours and panel door open close hours	
59	Table Init	Initializes the table.	After this command, the OPEN/CLOSE key is enabled.

DISC DETECT command (6X): Disc type check related.

No.	Name	Description	Remarks
61	DISC DETECT	Disc type check is executed Display after judgment DSKMOD CD: Judged as CD DSKMOD SL: Judged as SACD (SL) DSKMOD DL: Judged as SACD (DL) DSKMOD HLHD: Judged as HYBRID HD DSKMOD CDRW: Judged as CD-RW	Refer to how to apply servo by manual operation (62 page)
62	SET DISC CD	Enter disc type CD setting	CD forced setting
63	SET DISC SL	Enter disc type SL setting	SL forced setting
64	SET DISC DD	Enter disc type DD setting	DD forced setting
65	SET DISC HH	Enter disc type HYBRID HD setting	HD forced setting
66	SET DISC HC	Enter disc type HYBRID CD setting	CD forced setting

TOOLS command (8X): Performs aging, reads adjusting parameters, etc.

No.	Name	Description	Remarks
81	VERSION	Firmware version is displayed	Example: Ver 1.00
83	TRAY AGING	Tray open-close aging is performed Not used for the servicing	Number of times and eccentricity measurement Not used in this set.
84	JITTER	Jitter measurement	Not used for the servicing
85	ERROR RATE	Error rate measurement CD: C1, C2 SACD: PO, PI1, PI2	Error rate Not used for the servicing
86	ALL SRV ON	Apply all servos Full automatic measurement including PI, FE and TE offset adjustment is performed	Use when applying the servo by manual operation Refer to STANDARD command (54 page)
87	DISP ADJ DT	Automatic adjusting parameters are displayed The offset adjusted values are scroll-displayed in order of RF, VC, FE and TE	Refer to auto check items (59 page) Refer to auto check items (59 page)
8d	Set Up Init	Set to factory shipping mode PLAY, REPEAT, DIGIFIL, etc. are initialized	Set when repair completed Refer to 6-7. SHIPPING MODE (64 page)
8F	49 TRCK JIT	Used for jitter measurement of 49th music on SACD-S4	For manufacturing line Not used for the servicing

QA command (9X)

No.	Name	Description	Remarks
92	SET CHECK	The set is checked	Refer to 6-2. AUTO CHECK (59 page)
94	SET AGING	The set aging is performed Repeat by the specified number of times or until an error occurred	Refer to 6-6. AGING MODE (64 page)
95	DISPLAY ERROR	The content of error recorded to the set is read and displayed (Error recording) Only one item is recorded	
96	D-OUT OnOff	Digital out of CD is turned on or off	Not used in this set.
98	APDO JITTER		Not used for the servicing
9C	BU DENCHO	The content of error recorded to the set is read, and then the S curve waveform, traverse waveform, and RF waveform can be checked successively	Refer to 6-8.WAVEFORMS CHECK (66page)
9D	P-ON HOUR	Approximate cumulative power supplying time is displayed (Initialized by 8d command)	In unit of 1 hour
9E	RFD OUT	RFD output is turned on or off SACD jitter measuring mode	Not used for the servicing

How to Apply Servo by Manual Operation

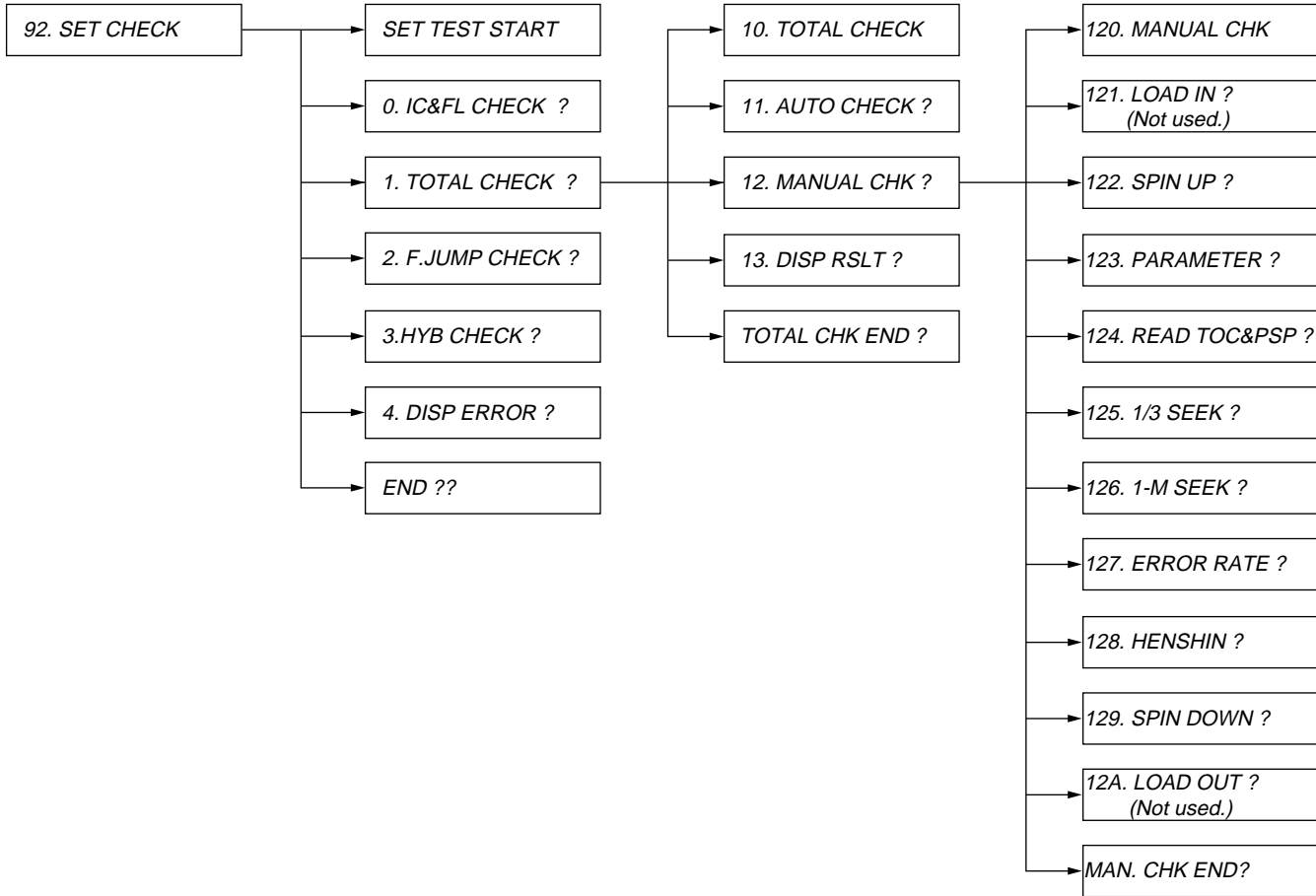
In analyzing failures of the set, the servo may be applied by manual operation. To apply servo in the test mode, use the following method.

1. After setting the test mode, rotate the $\lll \lll \text{AMS} \ggg \ggg$ dial to select a command, and press the $\lll \lll \text{AMS} \ggg \ggg$ dial to enter.
2. "61 DISC DETECT" (Disc type check) → "86 ALL SRV ON" (All servos on + auto adjustment)
3. If applying servo while checking the condition one by one, "61 DISC DETECT" (Disc type check) → "31 PI/FE OFFSET" (Offset automatic adjustment) → "14 FSRV ON/OFF" (Focus servo on) → "16 CLV ON/OFF" (CLV servo on) → "44 ADJ TRK DSP" (E-F balance adjustment) → "15 TSRV ON/OFF" (Tracking servo on) → "17 SSRV ON/OFF" (Sled servo on) → "24 ADJ FCSBIAS" (Focus bias adjustment) → "27 FOCUS AGC" (Focus auto gain adjustment) → "45 TRACKING AGC" (Tracking auto gain adjustment).

Note: 1. On and off are alternately switched in the same command.

2. For a stop, select "19 ALL SRV OFF" and press the $\lll \lll \text{AMS} \ggg \ggg$ dial.

Set Check



Press the **AMS** dial when No.□□□□□ □□□□□*1 is displayed, and a checking for that display will start or the lower layer will be selected. For the selection on the same layer, rotate the **AMS** dial. It is looped on the same layer, and when “END?” is displayed, press the **AMS** dial to return to the upper layer.

*1 □ denotes a displayed character.

Manual Check Method

In the “12. MANUAL CHK”, individual checks (121. LOAD IN to 12A. LOAD OUT) are possible.

Example: If 124. READ TOC of 12. MANUAL CHECK is to be checked.

Setting Method:

1. After setting the test mode, rotate the **AMS** dial to select “92. SET CHECK” and press the **AMS** dial to enter.
2. When “SET TEST START” is displayed, rotate the **AMS** dial clockwise by 2 clicks to select “1. TOTAL CHECK?” and press the **AMS** dial to enter.
3. When “10. TOTAL CHECK” is displayed, rotate the **AMS** dial clockwise by 2 clicks to select “12. MANUAL CHK?” and press the **AMS** dial to enter.
4. When “120. MANUAL CHK” is displayed, rotate the **AMS** dial clockwise by 4 clicks to select “124. READ TOC&PSP?” and press the **AMS** dial to enter.
5. A checking will start automatically.

Note: In making a check, the disc must be loaded. Immediately when a check started, the tray is drawn into the set. Also, the tray can be opened/closed even during the set check mode.

6-1. IC AND FLUORESCENT DISPLAY TUBE CHECK (SELF-DIAGNOSIS)

The communication between microcomputer and main ICs (self-diagnosis) and the fluorescent display tube all lit are checked.

Checking Method:

1. After setting the test mode, rotate the **◀◀AMS▶▶** dial to select "92. SET CHECK" and press the **◀◀AMS▶▶** dial to enter.
2. When "SET TEST START" is displayed, rotate the **◀◀AMS▶▶** dial clockwise by 1 click to select "0. IC&FL CHECK?" and press the **◀◀AMS▶▶** dial to enter.
3. A checking will start automatically, and "0. IC&FL CHECK" will be displayed. (Checking time is about 3 seconds)
4. After IC communication check, all segments of fluorescent display tube will be lit. At this time, check visually for a skipped character.
5. At successful completion of check, "0. IC CHECK OK" is displayed. In this case, no error exists in the IC interface. Proceed to 6-2. AUTO CHECK.

Note: The check mentioned above tests the communication from micro-computer to main ICs. Even if the check successfully finished, the IC to be checked is not always normal. Consider it for reference only.

6. In case of an IC communication error, the following display will be given during the checking. Possible causes of error are as listed below.

Error display	Causes (typical example)
DVD DEC. ERROR	<ol style="list-style-type: none"> 1. IC701 (SACD decoder) is faulty 2. IC701 pin ⑮(XRST) does not go "H" <ul style="list-style-type: none"> • IC901 pin ④④ (XDIS) does not go "H" • IC902 (expander) is faulty 3. 768fs (33.86688 MHz) is not present to IC701 pin ⑩(XTAL) <ul style="list-style-type: none"> • IC811 (3-multiplying circuit) is faulty • Clock signal 256fs is not sent from AUDIO board (CN902 pin ④) • CN902 pin ①,⑤ (DFGND) and pin ③ (3.3V-D) are open or shorted • CN902 and FFC connection is loose, or FFC is disconnected
DVD DRAM ERR	<ol style="list-style-type: none"> 1. IC706 (D-RAM) is faulty 2. IC701 pin ⑮(XRST) does not go "H" <ul style="list-style-type: none"> • IC901 pin ④④ (XDIS) does not go "H" • IC902 (expander) is faulty 3. Faulty communication line between IC701 and IC706 <ul style="list-style-type: none"> • Data line, address line, WE, etc. 4. D903 (1SS367) is faulty
CD DSP ERROR	<ol style="list-style-type: none"> 1. IC509 (CD DSP) is faulty 2. 768fs (33.86688 MHz) is not present to IC509 pin ⑦(XTAL) Same as cause 3 of DVD DEC. ERROR 3. IC509 pin ② (XRST) does not go "H" <ul style="list-style-type: none"> • IC901 pin ④④ (XDIS) does not go "H" • IC902 (expander) is faulty
EEPROM ERROR	<ol style="list-style-type: none"> 1. IC903 (EEPROM) is faulty

Error display	Causes (typical example)
PRAWN DRAM ERR *1	<ol style="list-style-type: none"> 1. IC808 (D-RAM) is faulty 2. IC801 (DSD decoder) is faulty 3. 768fs (33.86688 MHz) is not present to IC801 pin ⑩ (MCKI) Same as cause 3 of DVD DEC. ERROR 4. IC801 pin ⑨ (XRST) does not go "H" <ul style="list-style-type: none"> • IC901 pin ④④ (XDIS) does not go "H" • IC902 (expander) is faulty 5. Faulty communication line between IC801 and IC808 <ul style="list-style-type: none"> • Data line, address line, WE, etc. 6. D904 (1SS367) is faulty D+3.3V is not present to IC808
RF AMP ERROR	<ol style="list-style-type: none"> 1. IC001 (RF AMP) is faulty 2. Loose connection between CN503 on MAIN board and CN001 on RF board, or FFC disconnection CN503 pin ⑲ (CLK RF), pin ⑳ (DATA RF) and pin ㉑ (SDEN) must be checked

*1 DSD decoder is also checked.

Causes Common to Each IC:

1. Faulty communication line between microcomputer and each IC.
Disconnected patterns, floating series resistors, bridge, etc.
2. Faulty IC supply voltage.
Particularly, check D+3.3V voltage. (D+5V for display microcomputer)
3. Faulty microcomputer communication port to each IC

Note: In case of more than two errors, the error display is switched over one after another, thus making the reading difficult. In such a case, press again the **◀◀AMS▶▶** dial to make a recheck for error reading.

6-2. AUTO CHECK (AUTOMATIC VARIOUS MEASUREMENTS)

The auto check is performed to check if the set operates stably. Though a checking is made automatically, whether the measured data are within the specification is evaluated by the service person. The auto check results in NG immediately, if the check itself causes an error.

Setting Method of Auto Check Mode:

1. After setting the test mode, rotate the [◀◀ AMS ▶▶] dial to select “92. SET CHECK” and press the [◀◀ AMS ▶▶] dial to enter.
2. When “SET TEST START” is displayed, rotate the [◀◀ AMS ▶▶] dial clockwise by 2 clicks to select “1. TOTAL CHECK?” and press the [◀◀ AMS ▶▶] dial to enter.
3. When “10. TOTAL CHECK” is displayed, rotate the [◀◀ AMS ▶▶] dial clockwise by 1 click to select “11. AUTO CHECK?”.

CD and SACD (SL) Disc Operation Check

Checking method:

1. Press the [OPEN/CLOSE] button to open the tray and place the test disc *1. The [OPEN/CLOSE] key is disabled immediately after the machine enters the TEST mode. Be sure to initialize the table.
2. Press the [◀◀ AMS ▶▶] dial, and the following check will be performed automatically.
3. Finally, the test disc will be ejected and the auto check will finish.
4. “AUTO CHECK OK” will be displayed at successful completion of auto check.
5. Recheck is enabled if the [◀◀ AMS ▶▶] dial is pressed in step 4. (Also, use this operation when exchanging the test disc)
6. In case of an error during the checking, the check is interrupted automatically and the error is displayed. (Error display example: “DISC DETECT ERROR”) After error display, “CONT?STOP (J/S)” is displayed. In this case, if the [◀◀ AMS ▶▶] dial is pressed, the check where the error occurred is skipped and you can proceed to the next check. Also, [] if button is pressed, the check finishes and “AUTO CHECK NG” is displayed when even one NG item exists.

*1 Use PATD-012 or YEDS-18 for CD, and SATD-S5 or SATD-S4 for SACD (SL). Using another disc will result in a checking failure.

Check Items:

Items	Description	Remarks
LOAD IN TIME (msec)	Time until a disc is chucked from the state where loading tray is out	Loading in switch H→L
SPIN UP TIME (msec)	Time from spindle kick to PLL lock	Lock signal L→H
RF/VC/FE/TE (ORG)	Offset values before RF (PI), VC, FE, TE signal offset adjustment RF (8 bit data in hex notation) VC, FE, TE (9 bit data in hex notation)	At offset 0 RF: A0h VC, FE, TE: 00h
RF/VC/FE/TE (ADJ)	Offset values after RF (PI), VC, FE, TE signal offset adjustment (Less than ORG value if offset correction is normal) RF (8 bit data in hex notation) VC, FE, TE (9 bit data in hex notation)	VC offset is not adjusted (Measurement only) Also, for SACD, the TE offset is not measured and adjusted
PI/TRVS PP (ORG/ADJ)	PI (ORG): PI value at disc type check (decimal data) PI (ADJ): PI value after PI offset adjustment (read value at microcomputer A/D) (decimal data) TRVS PP (ORG): Traverse level before level correction (AGC) (decimal data) TRVS PP (ADJ): Traverse level after level correction (AGC) (decimal data)	PI level conversion Read value × 12.9mV Traverse level conversion Read value × 12.9mV 12.9mV=3.3V ÷ 256 (8 bit)
PIOR/CCR/TRCR	PIOR: Set value of PI offset coarse adjusting register CCR: Set value of FE offset coarse adjusting register TRCR: Set value of TE offset coarse adjusting register	Registers in RF amplifier
FOCUS/TRK GAIN	Auto gain adjusted values of focus and tracking servos (8 bit data in hex notation)	Reference: 30h
FBIAS/TRVSC/TRCR2/CFR	FBIAS: Focus bias set value (9 bit data in hex notation) TRVSC: Traverse center value (9 bit data in hex notation) TRCR2: Set value of E-F balance coarse adjusting register CFR: Set value of traverse level adjusting register	TRCR2 adjusts the E-F gain balance and used for CD only (Fixed to 06 for SACD) TRCR2 and CFR are registers in RF amplifier
MIN JITTER AT F.BIAS	Minimum jitter value in focus bias adjustment (CD only)	Correlative with RF jitter
READ TOC TIME (msec)	Time required for TOC reading	
PSP AMPLITUDE		SACD only
1/3 SEEK TIME F) AVE/MIN/MAX (msec): R) AVE/MIN/MAX (msec):	Seek time between 1/3LBA and 2/3LBA of the disc 1/3LBA→2/3LBA average/minimum/maximum 2/3LBA→1/3LBA average/minimum/maximum	LBA: Absolute address
1/MAX SEEK TIME F) AVE/MIN/MAX (msec): R) AVE/MIN/MAX (msec):	Seek time between most inward track (0LBA) and most outward track max LBA most inward→most outward average/minimum/maximum most outwar→most inward average/minimum/maximum	
ERROR RATE	Error rate measurement For CD: Average value/Maximum value of C1 and C2 For SACD: Average value/Maximum value of PO, P1 and P2	Measure for 10 sec at track No.5 For the SACD, 160 block data except the data under tracking jump

Items	Description	Remarks
HENSIN	Eccentricity measurement Eccentricity (actual eccentric amount) of disc, disc pulley total	For the CD only are measured • Read by dividing by 10 • 0 may be displayed if eccentricity is small (10um or less) (Due to measurement reason)
SPIN DOWN TIME (msec)	Time from spindle brake application to rotation stop	FG (IC901 pin ②) monitoring
LOAD OUT TIME (msec)	Time until loading table comes out from the state where a disc is in chuck	Loading out switch H→L

Measured Data Reading Method:

To judge the check result, the measured data must be read.

- When "AUTO CHECK OK" is displayed, rotate the $\lll \lll \text{AMS} \ggg \ggg$ dial clockwise by 2 clicks.
- When "13. DISP RSLT?" is displayed, press the $\lll \lll \text{AMS} \ggg \ggg$ dial to enter.
- "PLEASE WAIT" will be displayed and in several seconds, "13. DISP RESULT" will be displayed.
- Rotate the $\lll \lll \text{AMS} \ggg \ggg$ dial clockwise by 1 click, and the "LOAD IN" will be displayed.
- Press the $\lll \lll \text{AMS} \ggg \ggg$ dial to enter. The LOAD IN TIME measured value will be displayed.
- Compare the displayed value with the following specified value.
- Hence, repeat step 4 to 6 (display is variable) and read the measured data respectively.
- Compare the measured data with the specified value to check for NG item.

Note: Blank display of measured value means that an error occurred during the checking or no measurement was taken place.

Specified Value:

(1) SACD (Use the test disc SATD-S5 or SATD-S4)

Note: Measured values in check items are typical ones.

Check items	Specified value
LOAD IN TIME (msec) :	Not displayed in this set.
SPIN UP TIME (msec) : 1652	3000 msec or less
RF/VC/FE/TE AVRG (ORG) : 98, C, 1DE, 0	RF: 80-9E, VC: 1F1-10, FE: 1B8-42, TE: 1BB-5C
RF/VC/FE/TE AVRG (ADJ) : 9F, C, 4, 0	RF: 98-A5, VC : 1F1-10, FE: 1F1-10, TE: 1F1-10
PI/TRVS PP (ORG/ADJ) : 81, 131, 78, 105	PI ORG: 70-89, PI ADJ: 122-135, TRVS ORG: 68-114, TRVS ADJ: 55-100
PIOR/CCR/TRCR : 1A, 31, 1F	No specified value given
FOCUS/TRK GAIN : 2E, 24	FOCUS: 10-40, TRK: 10-40
FBIAS/TRVSC/TRCR2/CFR : 2,13, 6, 60	F.BIAS: 1D0-4F, TRVSC: 1D0-30 TRCR2, CFR: no specified value given
READ TOC TIME (msec) : 1283	2200 msec or less
PSP AMPLITUDE : 1666	1300 or above
1/3 SEEK TIME F) AVE/MIN/MAX (msec) : 967, 928, 990 R) AVE/MIN/MAX (msec) : 974, 933, 993	AVE: 1100 msec or less, MAX: 1300 msec or less AVE: 1100 msec or less, MAX: 1300 msec or less
1/MAX SEEK TIME F) AVE/MIN/MAX (msec) : 1958, 1938, 1968 R) AVE/MIN/MAX (msec) : 1915, 1909, 1935	AVE: 2200 msec or less, MAX: 2500 msec or less AVE: 2200 msec or less, MAX: 2500 msec or less
ERROR RATE PO MAX/AVE FRAME : 0, 0 PO MAX/AVE NUM : 160, 3 PI1 MAX/AVE FRAME : 0, 0 PI1 MAX/AVE NUM : 242, 17 PI2 MAX/AVE FRAME : 0, 0 PI2 MAX/AVE NUM : 128, 2	No specified value given MAX: 1000 or less, AVE: 100 or less No specified value given MAX: 1000 or less, AVE: 100 or less No specified value given MAX: 1000 or less, AVE: 100 or less
SPIN DOWN TIME (msec) : 1342	2500 msec or less
LOAD OUT TIME (msec) :	Not displayed in this set.

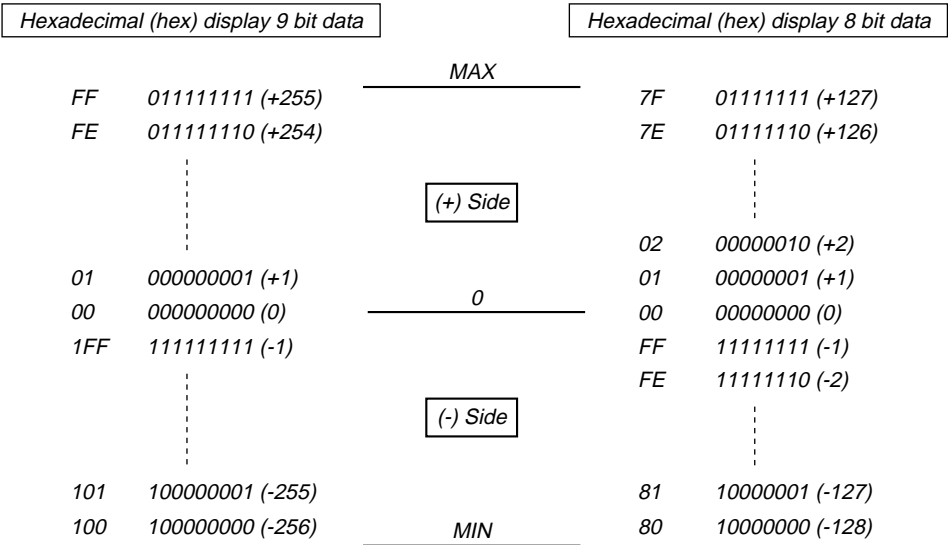
* Items are not used in the SATD-S5.

(2) CD (Use the test disc PATD-012 or YEDS-18)

Note: Measured values in check items are typical ones.

Check items	Specified value
LOAD IN TIME (msec) :	Not displayed in this set.
SPIN UP TIME (msec) : 1372	2500 msec or less
RF/VC/FE/TE AVRГ (ORG) : 98, C, 1D6, 4	RF: 80-9B, VC: 1F1-10, FE: 1B8-42, TE: 1BB-5C
RF/VC/FE/TE AVRГ (ADJ) : 9F, A, 1FF, 4	RF: 98-A5, VC: 1F1-10, FE: 1F1-10, TE: 1F1-10
PI/TRVS PP(ORG/ADJ) : 81, 131, 95, 92	PI ORG: 70-89, PI ADJ: 122-135, TRVS ORG: 70-120, TRVS-ADJ: 70-120
PIOR/CCR/TRCR : 1A, 11, 1F	No specified value given
FOCUS/TRK GAIN : 2E, 2D	FOCUS: 20-40, TRK: 20-40
FBIAS/TRVSC/TRCR2/CFR : 0, 10, 5, A0	F.BIAS: 1E0-30, TRVSC: 1F0-10 TRCR2, CFR: no specified value given
MIN JITTER AT F.BIAS : 94	200 or less
READ TOC TIME (msec) : 1410	2500 msec or less
1/3 SEEK TIME	
F) AVE/MIN/MAX (msec) : 824, 804, 850	AVE: 1000 msec or less, MAX: 1200 msec or less
R) AVE/MIN/MAX (msec) : 850, 833, 860	AVE: 1000 msec or less, MAX: 1200 msec or less
1/MAX SEEK TIME	
F) AVE/MIN/MAX (msec) : 2086, 1999, 2151	AVE: 2300 msec or less, MAX: 2500 msec or less
R) AVE/MIN/MAX (msec) : 1805, 1793, 1835	AVE: 2300 msec or less, MAX: 2500 msec or less
ERROR RATE	
C1 MAX/AVE : 3, 0	C1 MAX: 15 or less
C2 MAX/AVE : 0, 0	C2 MAX: 0
HENSHIN RYOU (1/10um) : 89	800 or less (100 um or less)
SPIN DOWN TIME (msec) : 1272	2000 msec or less
LOAD OUT TIME (msec) :	Not displayed in this set.

Note: RF, VC, FE, TE, FBIAS and TRVSC measured values are hexadecimal data with positive and negative signs. When comparing the measured value with the specified value, refer to the following.



6-3. SACD (DL) DISC OPERATION CHECK

(• Perform as necessary)

The stability of the set can be checked by repeating the combined operation of focus jump (layer 0→1, layer 1→0) and access to the most inward track↔most outward track by the set number of times or until an error occurs using the dual layer HD disc, DL disc.

A set of operation including an access to the layer 0 (most inward track)→layer 0 (most outward track)→focus jump (layer 0→1)→layer 1 (most outward track)→layer 1 (most inward track)→focus jump (layer 1→0) is carried out repeatedly by the set number of times.

Checking Method:

1. After setting the test mode, rotate the **◀◀AMS▶▶** dial to select “92. SET CHECK” and press the **◀◀AMS▶▶** dial to enter.
 2. When “SET TEST START” is displayed, rotate the **◀◀AMS▶▶** dial clockwise by 3 clicks to display “2. F.JMP CHECK?”.
 3. Press the **OPEN/CLOSE** button to open the tray, and place the DL disc.
 4. Press the **◀◀AMS▶▶** dial to load the tray into the set.
 5. “NOW SET UP” will be displayed and the DL disc setup will start. (It takes about ten and several seconds to set up the disc as two layers of layer 0 and layer 1 are adjusted)
 6. At the completion of setup, “F.JUMP TIMES” will be displayed.
 7. Rotate the **◀◀AMS▶▶** dial clockwise by 5 clicks to display “5”. (If 5 sets of operation is executed *1)
 8. Press the **◀◀AMS▶▶** dial, and the check will start.
 9. Immediately when the check finished, “UP MAX □□□□”→“UP AVE □□□□”→“DW MAX □□□□”→“DW AVE □□□□”→“F.JMP OK [TIMES]” will be displayed repeatedly. (□ denotes the measured value in msec)

UP MAX: Max time required for layer 0 (most inward track)→layer 0 (most outward track)→focus jump (layer 0→1)

UP AVE: Average time required for layer 0 (most inward track)→layer 0 (most outward track)→focus jump (layer 0→1)

DW MAX: Max time required for layer 1 (most outward track)→layer 1 (most inward track)→focus jump (layer 1→0)

DW AVE: Average time required for layer 1 (most outward track)→layer 1 (most inward track)→focus jump (layer 1→0)

Specified value: 7000 msec or less (if no error occurred)
If an error occurred due to defocusing during the checking, refer to the following error list. (64 page)
 10. Press the **OPEN/CLOSE** button, and the disc will be ejected and the check will finish. Also, if the **◀◀AMS▶▶** dial is pressed in step 9, “2. F.JUMP CHK OK” will be displayed. Then, if the **◀◀AMS▶▶** dial is again pressed, “2. F.JMP CHECK” will be displayed instantaneously and a recheck is enabled from the step 5 in the same manner.
- *1 Setting arbitrary number of times instead of 5 allows the checking to be repeated by the set number of times. Also, setting 0 (zero) allows the aging check to be repeated until an error occurs.

6-4. HYBRID DISC OPERATION CHECK

(• Perform as necessary)

This test checks the auto adjustment time required when the disc is switched between HD (SACD) layer and CD layer. This test is conducted to check the stability in switching from CD to SACD, or SACD to CD in the HYBRID disc.

A set of operation including CD layer stop state→HD layer auto adjustment→HD layer TOC reading→HD layer stop state→CD layer auto adjustment→CD layer TOC reading→CD layer stop state is repeated by the set number of times.

Checking Method:

1. After setting the test mode, rotate the **◀◀AMS▶▶** dial to select “92. SET CHECK” and press the **◀◀AMS▶▶** dial to enter.
 2. When “SET TEST START” is displayed, rotate the **◀◀AMS▶▶** dial clockwise by 4 clicks to display “3. HYB CHECK?”.
 3. Press the **OPEN/CLOSE** button to open the tray, and place the HYBRID disc.
 4. Press the **◀◀AMS▶▶** dial to load the tray into the set.
 5. “NOW SET UP” will be displayed and the HYBRID disc setup will start. (It takes about several seconds to set up the disc *1)
 6. At the completion of setup, “CHANGE TIMES?” will be displayed.
 7. Rotate the **◀◀AMS▶▶** dial clockwise by 5 clicks to display “5” (if 5 sets of operation is executed *2)
 8. Press the **◀◀AMS▶▶** dial, and “START” will be displayed and the check will start. During the check, the following will be displayed.

“CD→HD” display: Time from switching from CD layer to HD layer up to start of play is measured.

“HD→CD” display: Time from switching from HD layer to CD layer up to start of play is measured.
 9. Immediately when the check finished, “CD MAX □□□□”→“CD AVE □□□□”→“HD MAX □□□□”→“HD AVE □□□□” will be displayed repeatedly. (□ denotes the measured value in msec)
Specified value: 10000 msec or less (if no error occurred)
If an error occurred due to defocusing during the checking, refer to the following error list. (64 page)
 10. Press the **OPEN/CLOSE** button, and the disc will be ejected and the check will finish. Also, if the **◀◀AMS▶▶** dial is pressed in step 9, “HYB CHK OK” will be displayed. Then, if the **◀◀AMS▶▶** dial is again pressed, “HYBRID CHECK” will be displayed instantaneously and a recheck is enabled from the step 5 in the same manner.
- *1 “NOW SET UP” display may continue for several minutes and an error may be displayed depending on the discs. In this case, press the **◀◀AMS▶▶** dial again.
- *2 Setting arbitrary number of times instead of 5 allows the checking to be repeated by the set number of times. Also, setting 0 (zero) allows the aging check to be repeated until an error occurs

6-5. CDM59 and the Door Check

Measurement of table rotation hours, tray open/close hours and panel door open close hours can be executed together with CDM59.

Procedure

1. Enter the TEST mode. Turn the **◀◀AMS▶▶** dial and select 59 Table Init. Press **◀◀AMS▶▶** once (that enables the **OPEN/CLOSE** key.)
2. When the message INITIAL OK appears, press the **OPEN/CLOSE** key to eject the tray. Place a disc in the DISC1 of the table. (Be sure to place a disc in DISC1. If a disc is placed in any locations other than DISC1, the correct measurement cannot be executed. Therefore, be sure to place a disc in DISC by using the **DISC SKIP** key.)
3. Select 58 CDM Check by turning **◀◀AMS▶▶** and press **◀◀AMS▶▶** once.
4. Measurement starts automatically.
5. When the measurement is completed, the message DOOR OP □□.□ (□ is a decimal number) appears on the FL display.
6. Result of measurement can be check by turning **◀◀AMS▶▶**. If any measurement item does not meet specification, a message “ng” is displayed next to the measurement value.
7. When you want to repeat the test, press **◀◀AMS▶▶** again.
8. Press the **OPEN/CLOSE** key to terminate the test and remove the disc.
 - * 1. The measurement can be performed without placing a disc. However, the BU chucking time and unchucking time will be slightly different from the actual values.
 - * 2. When the machine enters this mode once, it cannot return to the normal test mode. If any other tests are desired, turn off the main power once and then back on again to enter the test mode.

Measurement items and specifications

Measurement item	Description	Specifications (unit: second)
RL	Time required for the table to make one complete rotation. (R: Clockwise rotation. L: Counter-clockwise rotation)	6.0 to 7.5
DOOR OP	Time required to open the panel door	<10.0
CLOSE	Time required to close the tray.	<2.3
BU UP	Time required for the BU block to perform chucking from the DOWN position	<1.3
EXOPEN	The XCHANGE OPEN time	<2.5
EXCLOSE	The EXCHANGE CLOSE time	<2.8
BU DOWN	Time required for the BU block to perform unchucking and going to the DOWN position	<0.9
OPEN	Time required to open the tray	<2.4
DOOR CL	Time required to close the panel door.	<10.0

If the panel door cannot be opened, the time-out error is triggered and the measurement is also stopped at this stage. Note that the tray can push the door forcibly as the software judges the door as it is in the OPEN state, if the door open/close detector switches (S1022 and S1023 on the DOOR SW board) have abnormality.

6-6 . AGING MODE

(• Perform as necessary)

6-6-1. The aging can be performed to the set in the test mode.

The aging can be continued by the set number of times or until an error occurs.

In the aging, the following operations are repeated.

Table turn→Disc chucking→Disc detect→Servo on→Auto adjustment→TOC reading→Play of first track for 5 second→Play of last track for 5 second→Play of first track for 5 second→Disc unchucking

Setting Method:

1. After setting the test mode, rotate the **◀◀AMS▶▶** dial to select "94. SET AGING" and press the **◀◀AMS▶▶** dial to enter.
2. When "AGING TIMES" is displayed, rotate the **◀◀AMS▶▶** dial to set the number of aging times. (For the number of times, every 10 times can be set. Setting 0 (zero) eliminates the count limitation where the aging is repeated until an error occurs)
Note: Do not perform unmanned overnight aging..
3. Press the **◀◀AMS▶▶** dial, and "AGING START" will be displayed instantaneously, then "DISC IN & JOG ON" will be displayed and the tray will come out automatically.
4. Place a disc (CD or the SACD SL disc) on the tray. In the case of SCD-C555ES, the multiple discs can be placed. Even when the discs (CD or the SACD SL disc) of different types are mixed, the aging test can be performed. Use the **DISC SKIP** key when placing a disc. When discs are placed in positions, turn the **◀◀AMS▶▶** dial.
5. The aging test starts.
6. At the completion of aging by the set number of times, the tray will come out automatically and the check will stop.
Typical time required for aging About 1 hour/100 times
"AGING SUCCESS!" will be displayed if no error occurred in the aging, or the error will be displayed if an error occurred. (Refer to the following error list)

Error List

An error occurring during the check in the aging mode of the test mode is displayed automatically (scroll display) immediately when the error occurred.

< How to view the error history >

1. Select "95 DISP ERROR" with the **◀◀AMS▶▶** key, and press the **◀◀AMS▶▶** key once.
2. The error that has occurred lastly in the set and the signal status (H = 1, L = 0) at that time are displayed on the FL display by scrolling. (Types of the errors and the signal status that can be checked, are the same as the error display of the aging mode.)
3. Press the **◀◀AMS▶▶** key once again to show the error history repeatedly.
4. When the error history is displayed with scrolling once, the mode returns to the normal test mode.

6-6-2. Aging Mode of the Panel Door Independently

1. Start up the unit in the normal operation mode.
2. While press the **STOP** key, turn the **◀◀AMS▶▶** dial and then press the **CONTINUE** key. (The program does not advance if these keys are not pressed in the above sequence.)
3. The panel door repeats opening and closing.
4. The messages "AP-B 000000" (during open) → "AP-C 000000" (during close) are repeated on the FL display. Number of times of open/close are displayed in decimal number in "000000" with OPEN/CLOSE as a set.
5. Press the **STOP** key to terminate the aging mode and to return to the normal mode.

6-7. SHIPPING MODE

The repaired set must be initialized, and for this purpose the set should be set to the shipping mode.

Setting Method:

1. After setting the test mode, rotate the **◀◀AMS▶▶** dial to select "8d Set Up Init" and press the **◀◀AMS▶▶** dial to enter.
2. "8D 00000000 00" will be displayed, and if the scroll starts in the left direction, the set initialization has completed
3. Press the **POWER** button to turn the power off.

Note: Take care not to leave the test disc in the set.

The following setups are established in the SHIPPING MODE

1. Initialization of EEPROM (IC903)
 - PLAY MODE ALL DISCS, CONTINUE
 - COMMAND MODE CD1
 - LAYER SELECT SACD
 - M/2CH SELECT MULTI
 - DIGITAL FILTER STD
 - 2ch SPK MODE 2ch DIRECT
 - Mch SPK MODE Mch DIRECT
 - Resetting the accumulated hours meter.
2. Chucking at the DISC1 position.

SCD-C555ES

Error display is as follows.

Error name, Disc type, IN SW (Sled in switch state), FOK (FOK signal state), LOCK (LOCK signal state), From (Displayed if effective), To (Displayed if effective), Aging times (Displayed in aging mode only)

Display example

ACCESS MOVE ERROR : SACDSL : IN SW 1 FOK 0 LOCK 0 : FROM 205663 : TO 2461601 : TIMES 5

(Error name) (Disc type) (Sled in switch, FOK, LOCK signal state) (Relative address) (Relative address)(Aging times)

Display Items List:

Display items	Description	Remarks
Error name	→Refer to the error display list	
IN SW	Sled in switch state when an error occurred 0: switch off Not limit in 1: switch on Limit in (Optical pick-up is at most inward track)	
FOK	FOK signal state when an error occurred FOK signal Is focus on? 0: FOK L (Focus off), 1: FOK H (Focus on)	
LOCK	LOCK signal state when an error occurred. LOCK signal Is PLL lock? 0: LOCK L Not lock, 1: LOCK H Lock	
From	Displayed if effective in the error item →Refer to the error display list	Disc PSN (relative address) is displayed in case of access error
To	Displayed if effective in the error item →Refer to the error display list	Disc PSN (relative address) is displayed in case of access error

Error Display List:

Error display	Error description	Main causes of errors
DISC DETECT ERROR	Disc type error MIRR measured time is displayed in From:	Optical pick-up, RF amplifier or CD DSP IC is faulty
OFFSET ADJUST ERROR	Offset adjustment error	Optical pick-up, RF amplifier or CD DSP IC is faulty
FCS SRV ON ERROR	Focus servo error An error code is displayed in From:	From:1 means focus search failed From:2 means defocusing
CLV SRV ON ERROR	CLV servo error	Defocusing
E-F BALANCE ERROR	E-F balance adjustment error	Defocusing
TRK SRV ON ERROR	Tracking servo error	Tracking servo on time out Optical pick-up, RF amplifier or CD DSP IC is faulty
SLD SRV ON ERROR	Sled servo error	Sled servo on time out
FOCUS BIAS ERROR	Focus bias adjustment failed An error code is displayed in From:	Defocusing during adjustment Description of display An error code is displayed in From From:1 means retry failed 3 times From:2 means abnormal value Optical pick-up, RF amplifier or CD DSP IC is faulty
FCS AGC ERROR	Error at focus gain automatic adjustment	Defocusing during adjustment Optical pick-up, RF amplifier or CD DSP IC is faulty
TRK AGC ERROR	Error at tracking gain automatic adjustment	Defocusing during adjustment Optical pick-up, RF amplifier or CD DSP IC is faulty
ACCESS 1TJ ERROR	Access Error at one-track jump Effective addresses (PSN) are displayed in From: and To:	Access failed Defocusing at access, etc
ACCESS FINE ERROR	Access Error at fine search Effective addresses (PSN) are displayed in From: and To:	Access failed Defocusing at access, etc
ACCESS MOVE ERROR	Access Error at M-track MOVE Effective addresses (PSN) are displayed in From: and To:	Access failed Defocusing at access, etc
WHILE PLAYING ERROR	Error during disc playing	Defocusing Focusing retry failed
FCS JUMP ERROR	Time out error at focus jump	Defocusing Focusing retry failed

System errors are as follows.

Note: This error is not saved in the set.

Display	Description
Toc Error *	Error during the time from auto adjustment to TOC reading, Different type of disc (Such as a DVD disc), Disc is dirty
Toc Error ****	Illegal SACD (Such as a pirated version)
Read Error	Music data read error (Error during disc playing)

6-8. WAVEFORMS CHECK

This set performs automatic adjustment for each disc, and therefore the set need not be adjusted when parts are replaced, but it requires checking following the description in this section, 6-1. IC AND FLUORESCENT DISPLAY TUBE CHECK and 6-2. AUTO CHECK.

For the check, the test mode is used. Wrong setting causes a trouble, thus requiring extreme care.

BU Electrical Adjustment Mode

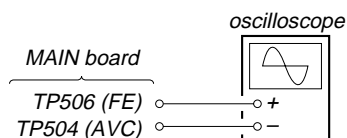
The BU electrical adjustment mode is used to check the S curve waveform, traverse waveform and RF waveform. After a disc is placed on the tray, each time the **AMS** dial is pressed, the check mode is switched in order for S curve waveform→traverse waveform→RF waveform.

Setting Method:

After setting the test mode, rotate the **AMS** dial to select "9C BU DENCHO" and press the **AMS** dial to enter. "BU MEASURE" will be displayed if the BU electrical adjustment mode becomes active.

S Curve Check

Connection:



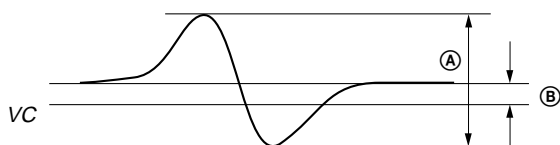
Checking Method:

1. After setting the BU electrical adjustment, place the test disc (PATD-012 or SATD-S5 or SATD-S4) on the tray and close the tray, then press the **AMS** dial.
2. At the completion of disc type check, "CD DETECT" will be displayed (for PATD-012 or YEDS-18).
Note: For the SATD-S5 or SATD-S4, "SACD DETECT" is displayed.
3. Press again the **AMS** dial, and the S curve waveform check mode will become active and "S-J1 MODE" will be displayed.
4. Connect an oscilloscope to the TP506 (FE) and TP504 (AVC) on the MAIN board.
5. Check that the level **A** and **B** of waveform on the oscilloscope satisfy the specification.

Specified Value:

Disc	A	B
SATD-S5 or SATD-S4	0.7 to 1.7 Vp-p	- 0.1 to +0.1V
PATD-012 or YEDS-18		

S curve waveform

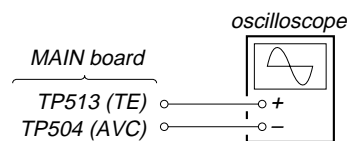


Note: For easier observation of this waveform, extend the sweep time and raise the brightness.

Checking and Connecting Location : See page 68.

Traverse Check

Connection:



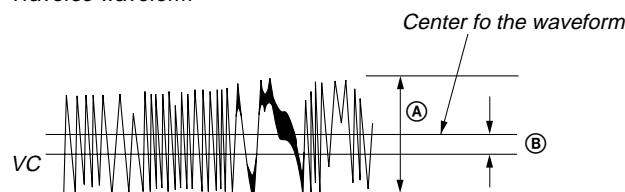
Checking Method:

1. Under the condition of S curve waveform check mode in step 5, press the **AMS** dial.
2. After "WAIT" is displayed, the traverse waveform check mode will become active and "TRAVERSE MODE" will be displayed.
3. Connect an oscilloscope to the TP513 (TE) and TP504 (AVC) on the MAIN board.
4. Check that the level **A** and **B** of waveform on the oscilloscope satisfy the specification.

Specified Value:

Disc	A	B
SATD-S5 or SATD-S4	0.9 to 1.5 Vp-p	- 0.1 to +0.1V
PATD-012 or YEDS-18		

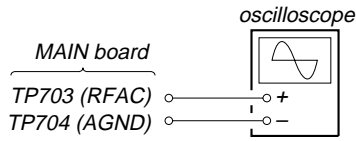
Traverse waveform



Checking and Connecting Location : See page 68.

RF Level Check

Connection:



Checking Method:

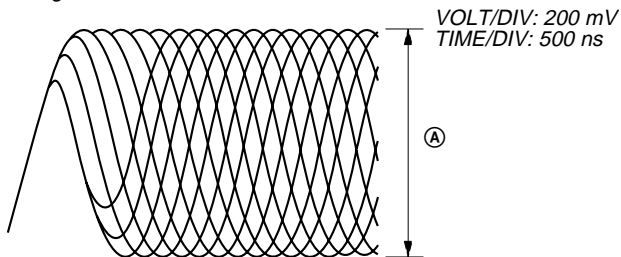
- Under the condition of traverse waveform check mode in step 4, press the **AMS** dial.
- Connect an oscilloscope to the TP703 (RFAC) and TP704 (AGND) on the MAIN board.
- After "WAIT" is displayed, the RF waveform check mode will become active and "PLAY 5th" will be displayed, and the 5th music on the disc will be played.
- Check that the RF waveform is clear and the level satisfies the specification.
- Press the **AMS** dial, and "GAISHU" will be displayed and the outward track of the disc will be played.
- Check that the RF waveform is clear and the level satisfies the specification.
- Press the **AMS** dial, and "NAISHU" will be displayed and the inward track of the disc will be played.
- Check that the RF waveform is clear and the level satisfies the specification.
- After checking, press the **AMS** dial, and the test is over when "BU MEASURE" is displayed.
- Press the **OPEN/CLOSE** button to open the tray, and remove the test disc.
- Using each type of disc, repeat from step 1 of S curve waveform check up to step 10 of RF level check.
- When the check is over, press the **POWER** button to turn the power off.

Note: Take care not to leave the test disc in the set.

Specified Value:

Disc	Ⓐ
SATD-S5 or SATD-S4	0.9 to 1.5 Vp-p
PATD-012 or YEDS-18	

RF signal waveform

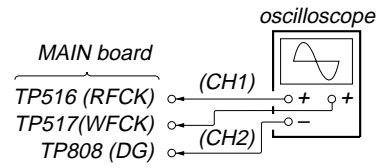


Note: Clear RF waveform refers to the waveform where \diamond shapes should be distinctively observed in the center.

Checking and Connecting Location : See page 68.

CLV Jitter Check (CD only)

Connection:



Checking Method:

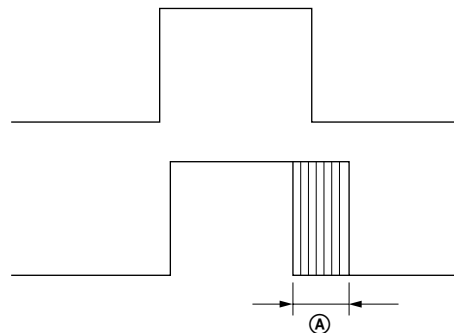
- Set the test mode.
- Connect an oscilloscope to the TP516 (RFCK) (CH1), TP517 (WFCK) (CH2) and TP808 (DG) (GND) on the MAIN board.
- Place the test disc PATD-012 or YEDS-18 on the tray, and close the tray.
- Rotate the **AMS** dial to select "61 DISC DETECT", and press the **AMS** dial to enter. Then, the disc type will be judged.
- Check that the disc type has been judged. (For the PATD-012, "DSKMOD CD" will be displayed. Refer to the test mode, DISC DETECT command (page 55))
- Rotate the **AMS** dial to select "86 ALL SRV ON", and press the **AMS** dial. Then, the disc will rotate, automatic adjustment will be carried out, and all servos will be turned on.
- Rotate the **AMS** dial to select "07 DSP MON3", and press the **AMS** dial to enter.
- Check that the value **Ⓐ** of waveform on the oscilloscope satisfies the specification.
- Rotate the **AMS** dial to select "19 ALL SRV OFF", and press the **AMS** dial. Then, all servos will be turned off and the disc rotation will stop.
- Press the **OPEN/CLOSE** button to open the tray, and remove the test disc.
- Press the **POWER** button to turn the power off.

Note: Take care not to leave the test disc in the set.

Specified Value:

Disc	Ⓐ
PATD-012 or YEDS-18	50 μ sec or less

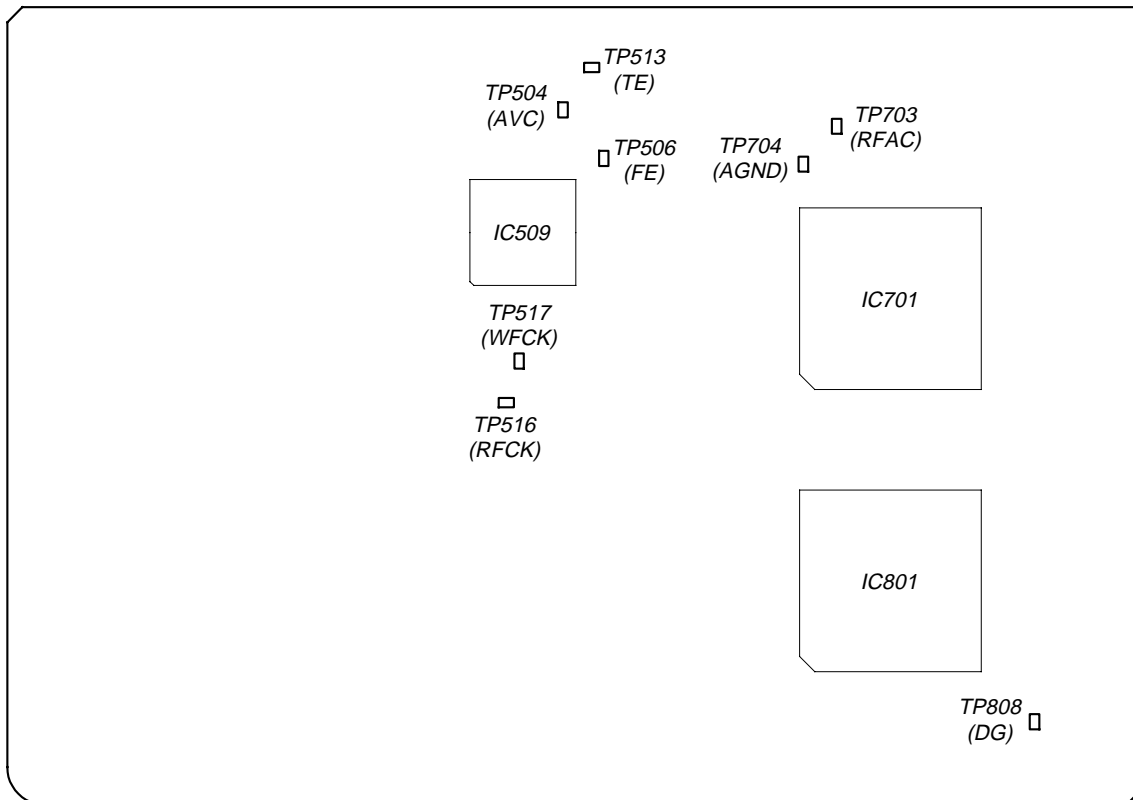
CLV jitter waveform



Checking and Connecting Location : See page 68.

Checking and Connecting Location:

– MAIN Board (Component Side) –



**SECTION 7
EXPLODED VIEWS**

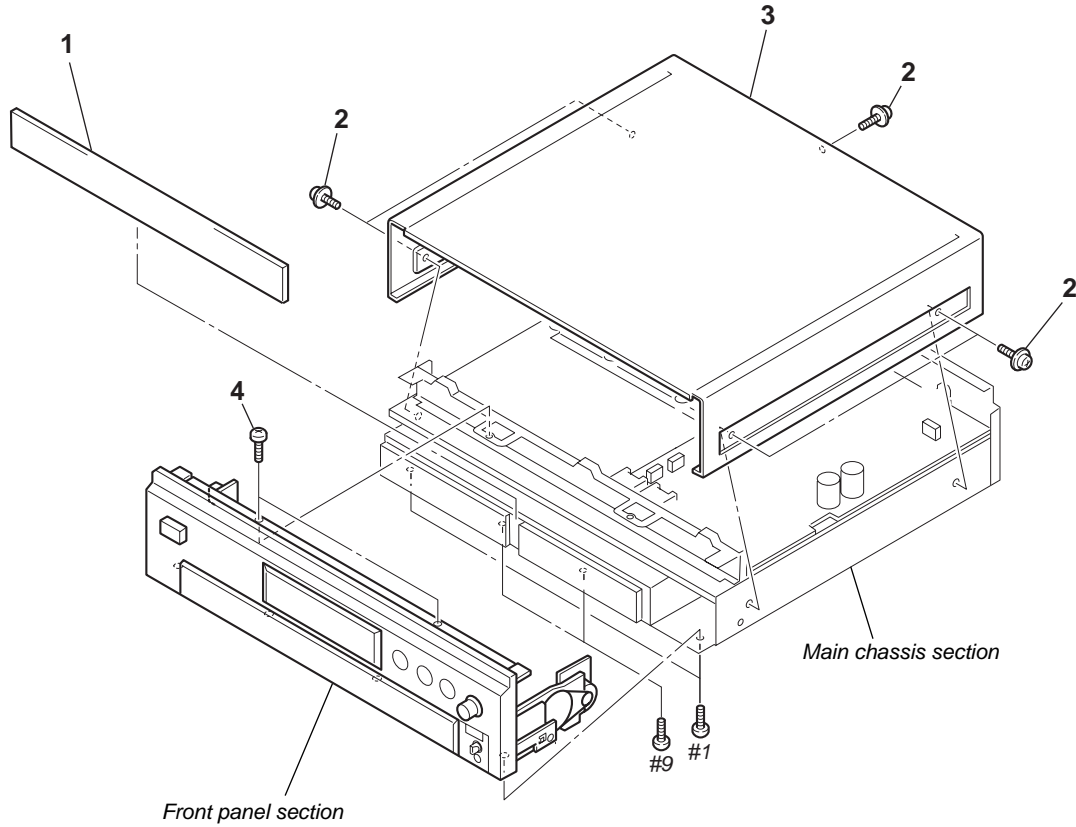
NOTE:

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

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

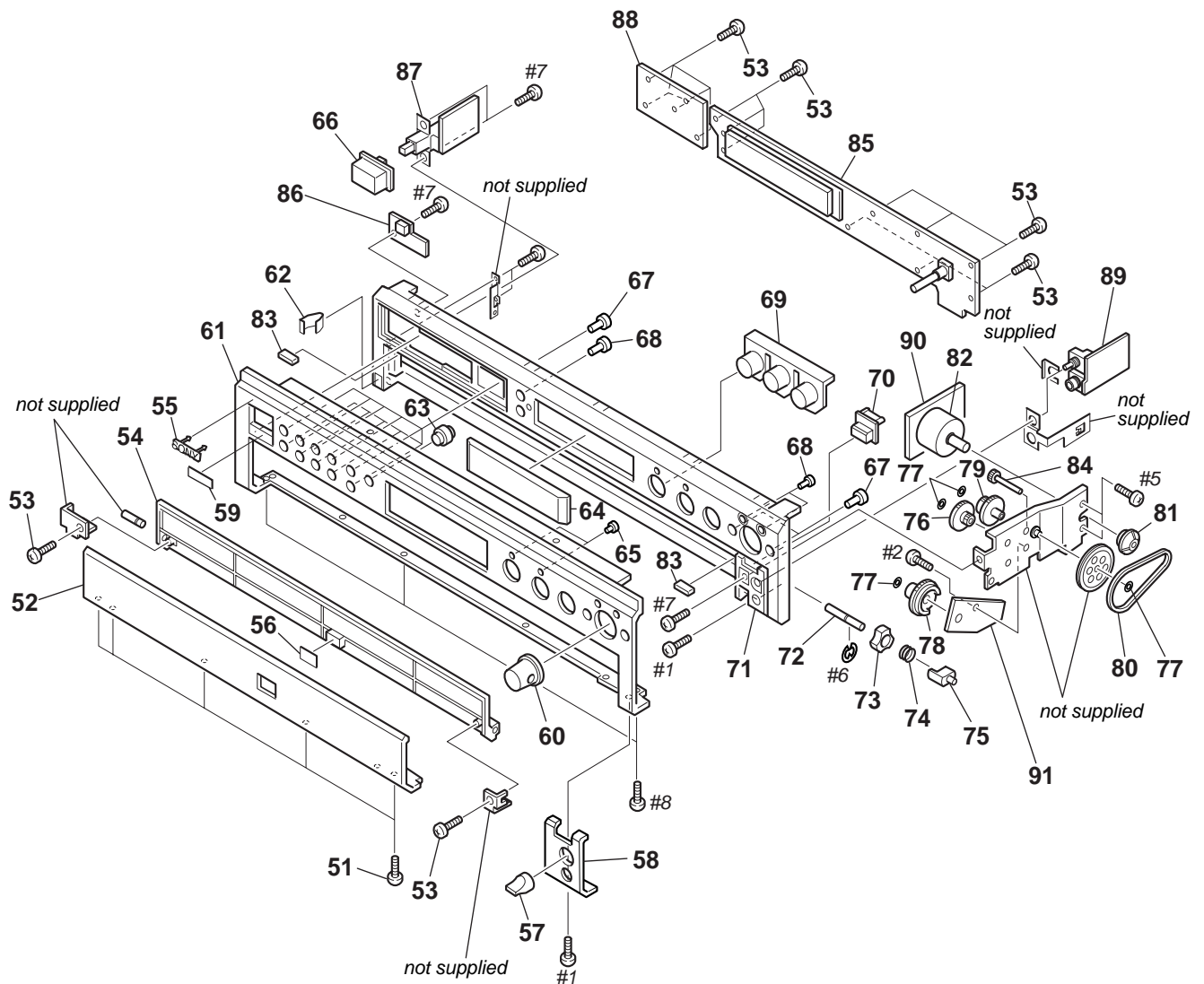
Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. CASE SECTION



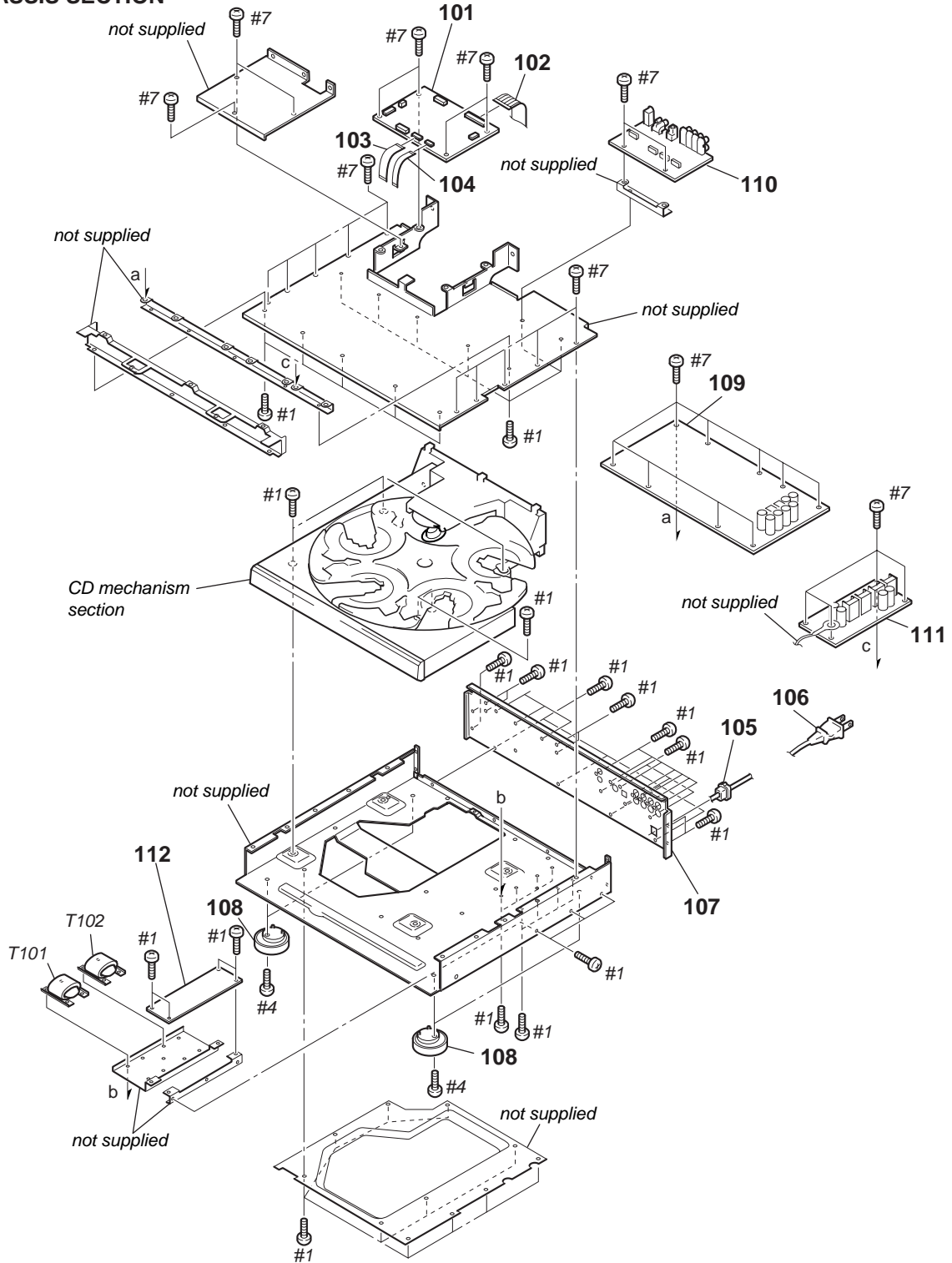
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>
1	4-230-713-01	PANEL, LOADING	
2	4-227-843-01	SCREW (TP), FLAT HEAD	
3	4-230-684-01	CASE	
4	4-929-074-01	SCREW (3X8)	

7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
51	4-929-074-01	SCREW (3X8)		72	4-230-703-01	SHAFT (LIMITTER)	
52	4-233-218-01	LID		73	4-230-701-01	GEAR (LIMITTER)	
53	4-951-620-01	SCREW (2.6X8), +BVTP		74	4-230-704-01	SPRING (LIMITTER)	
54	4-230-710-01	BASE, LID		75	4-230-702-01	LIMITTER	
55	4-942-568-41	EMBLEM (NO.5), SONY		76	4-230-699-01	GEAR (C)	
56	4-230-714-01	EMBLEM (SACD)		77	4-926-218-01	RING (DIA.2), RETAINING	
57	4-992-539-11	KNOB (VOL)		78	4-230-700-01	GEAR (D)	
58	4-230-720-01	ESCUTCHEON (H.P)		79	4-230-698-01	GEAR (B)	
59	4-230-636-11	PLATE (ROMOTE), INDICATION		80	4-230-712-01	BELT (DIA. 58)	
60	4-230-637-11	KNOB (AMS)		81	4-955-234-03	PULLEY (MOTOR CDM)	
61	4-230-717-12	PANEL, FRONT		82	1-541-632-11	MOTOR, DC	
62	4-230-709-01	SPRING (SHAFT L)		83	4-230-733-01	CUSHION (STOPPER)	
63	4-220-711-01	INDICATOR (FILTER)		84	X-4953-199-1	GEAR (A) ASSY	
64	4-230-721-01	WINDOW (FL)		85	A-4725-660-A	DISPLAY BOARD, COMPLETE	
65	4-230-638-01	INDICATOR (BUTTON PLAY)		86	1-679-314-11	REMOTE SENSOR BOARD	
66	4-923-520-01	KNOB, POWER		87	1-679-312-11	AC AW BOARD	
67	4-220-319-11	BUTTON (MODE)		88	1-679-313-11	KEY BOARD	
68	4-220-317-01	BUTTON (FILTER)		89	1-679-311-11	HP BOARD	
69	4-230-722-01	BUTTON (PLAY)		90	1-679-309-11	DOOR MOTOR BOARD	
70	4-230-723-01	BUTTON (OPEN/CLOSE)		91	1-679-310-11	DOOR SW BOARD	
71	4-230-718-01	BASE, PANEL					

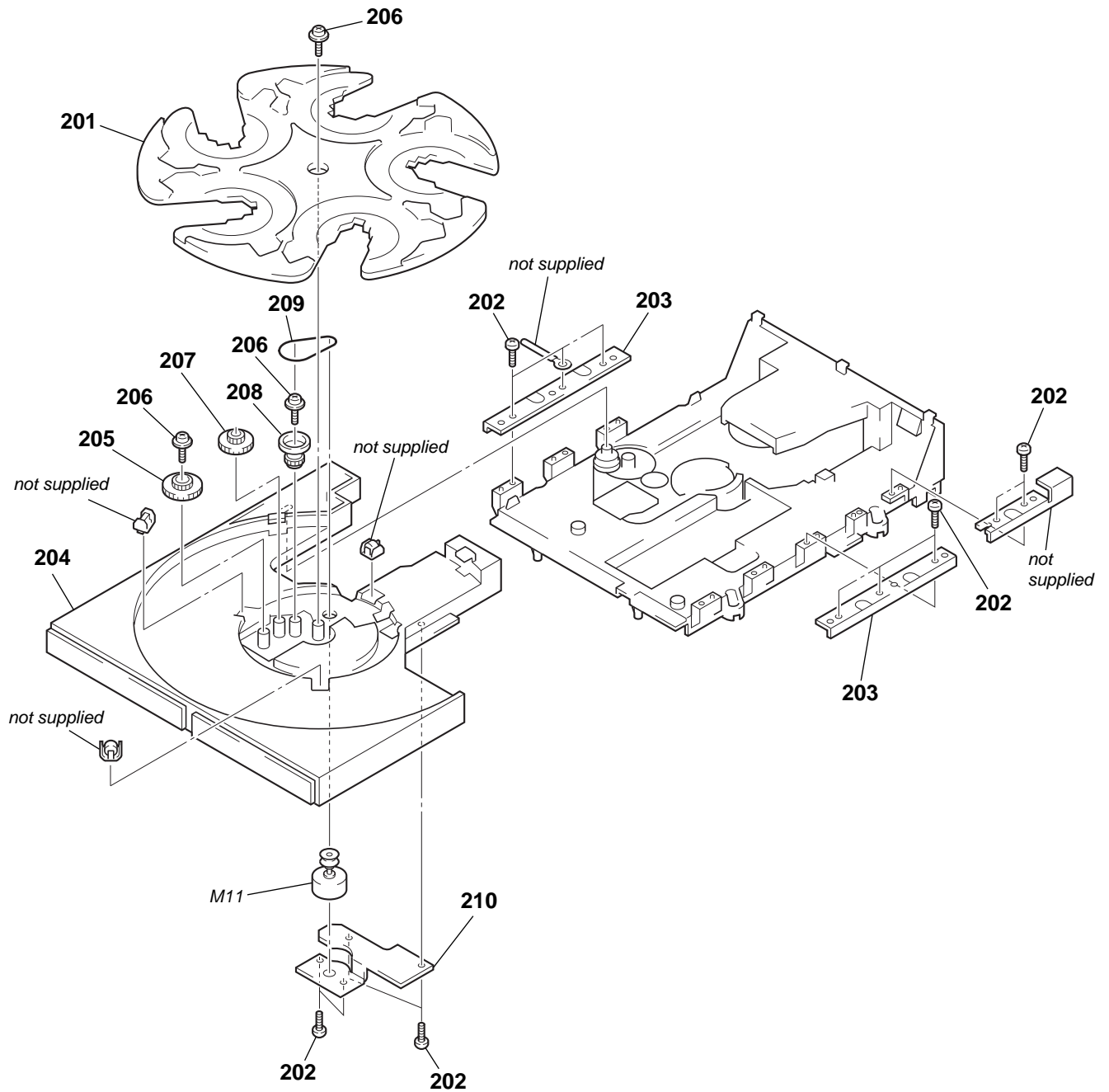
7-3. MAIN CHASSIS SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
101	A-4725-662-A	MAIN BOARD, COMPLETE		108	4-970-123-01	FOOT (F50180S)	
102	1-757-135-11	WIRE (FLAT TYPE) (35 CORE)		109	A-4725-664-A	AUDIO BOARD, COMPLETE	
103	1-757-097-11	WIRE (FLAT TYPE) (25 CORE)		110	A-4725-665-A	I/O BOARD, COMPLETE	
104	1-782-901-11	WIRE (FLAT TYPE) (19 CORE)		111	A-4725-666-A	D-POWER BOARD, COMPLETE	
105	4-966-267-11	BUSHING (FBS001), CORD		112	1-679-308-11	AC BOARD	
△ 106	1-783-531-31	CORD, POWER		△ T101	1-435-973-11	TRANSFORMER, POWER	
107	4-230-686-11	PANEL, BACK		△ T102	1-435-733-21	TRANSFORMER, POWER	

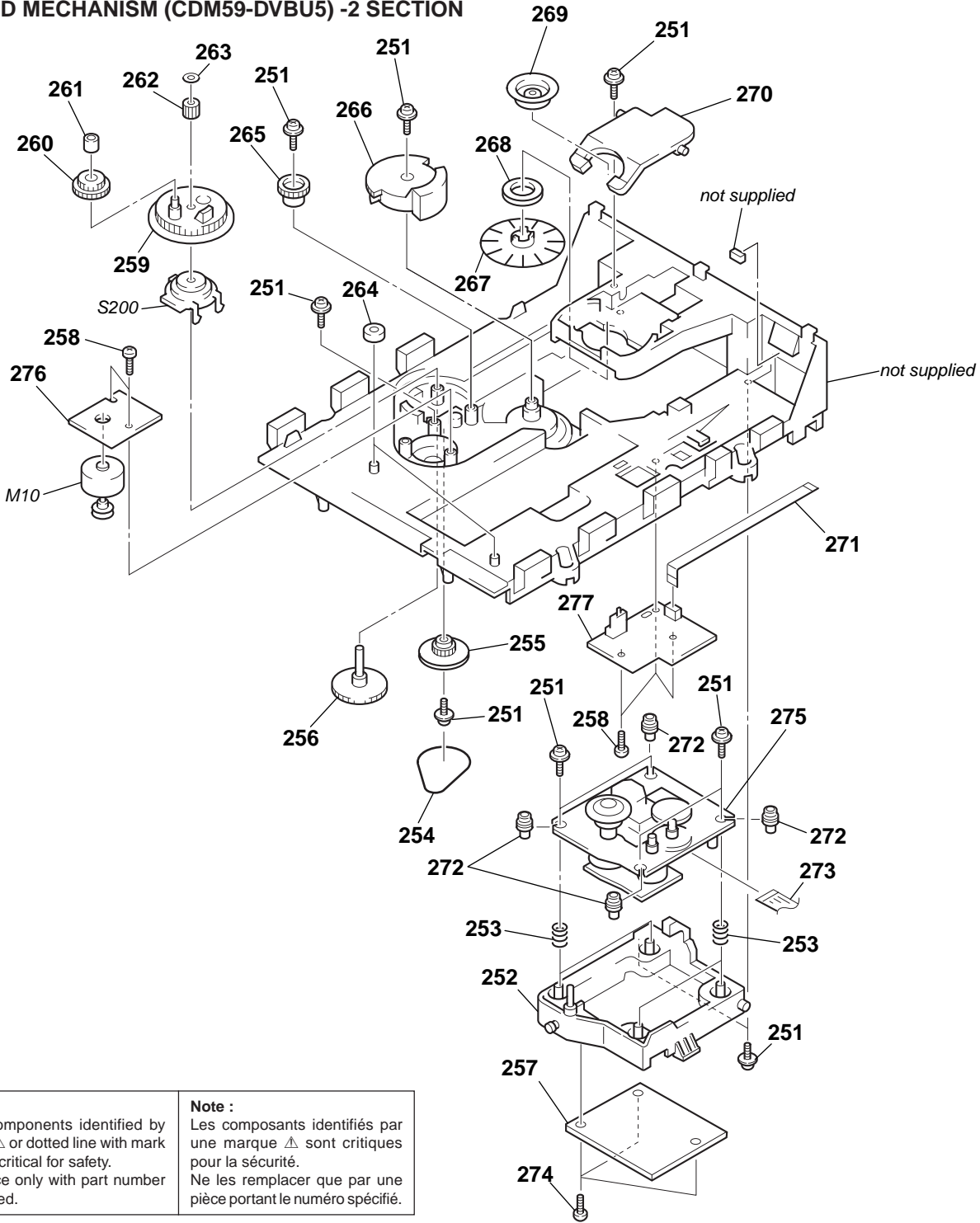
<p>The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
---	---

7-4. CD MECHANISM (CDM59-DVBU5) -1 SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
201	4-224-603-01	TRAY		207	4-224-616-01	GEAR (RM-M)	
202	4-218-253-01	SCREW (M2.6), +BTPP		208	4-224-615-01	GEAR (RM-B)	
203	4-224-619-01	BRACKET (GUIDE)		209	4-225-328-01	BELT (ROTARY)	
204	4-224-602-01	TABLE		210	1-676-245-11	SENSOR BOARD	
205	4-224-617-01	GEAR (RM-E)		M11	A-4672-867-A	MOTOR ASSY, ROTARY (TRAY)	
206	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING					

7-5. CD MECHANISM (CDM59-DVBU5) -2 SECTION



<p>Note : The components identified by mark ▲ or dotted line with mark ▲ are critical for safety. Replace only with part number specified.</p>	<p>Note : Les composants identifiés par une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
---	---

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
251	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING		266	4-224-605-01	GEAR (U/D)	
252	4-229-955-04	HOLDER (BU)		267	X-4953-250-1	PLATE (A) ASSY, CHUCKING	
253	4-231-449-01	SPRING (230), CONE TYPE COIL		268	3-061-886-01	YOKE	
254	4-225-885-01	BELT (LOADING)		269	4-229-957-01	PLATE (B), CHUCKING	
255	4-225-844-01	GEAR (LOADING A)		270	4-224-618-01	LEVER (LIFTER)	
256	4-224-613-01	GEAR (SHAFT)		271	1-791-930-11	WIRE (FLAT TYPE) (6 CORE)	
257	A-4725-382-A	RF BOARD, COMPLETE		272	4-227-549-11	INSULATOR	
258	4-218-253-01	SCREW (M2.6), +BTTP		273	1-757-097-11	WIRE (FLAT TYPE) (25 CORE)	
259	4-224-607-01	GEAR, SWING		274	4-951-620-01	SCREW (2.6X8), +BVTP	
260	4-224-609-01	GEAR (LOADING C)		▲ 275	8-820-132-02	OPTICAL PICK-UP (KHM-230AAA/J1NP)	
261	4-224-608-01	COLLAR, SWING		276	1-676-244-11	LOADING MOTOR BOARD	
262	4-224-611-01	GEAR (LOADING B)		277	1-676-246-11	JUNCTION BOARD	
263	3-016-533-21	WASHER (FR), STOPPER		M10	A-4672-879-A	MOTOR ASSY, LOADING	
* 264	4-951-619-21	CUSHION (A)		S200	1-418-746-11	ENCODER, ROTARY	
265	4-224-606-01	GEAR (RV)					

SECTION 8
ELECTRICAL PARTS LIST

AC

AC SW

AUDIO

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- CAPACITORS:
uF: μF
- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- COILS
uH: μH

- SEMICONDUCTORS
In each case, u: μ, for example:
uA...: μA..., uPA..., μPA...,
uPB..., μPB..., uPC..., μPC...,
uPD..., μPD...

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

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

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

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
	1-679-308-11	AC BOARD *****					
		< CAPACITOR >					
Δ C1031	1-113-927-11	CERAMIC	10000PF 20.00% 250V	C119	1-128-201-11	ELECT	100uF 20.00% 63V
Δ C1032	1-113-927-11	CERAMIC	10000PF 20.00% 250V	C120	1-128-197-11	ELECT	10uF 20.00% 50V
Δ C1033	1-127-780-51	CERAMIC	220PF 10.00% 250V	C153	1-119-800-11	ELECT	100uF 20.00% 25V
Δ C1035	1-127-780-51	CERAMIC	220PF 10.00% 250V	C154	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
Δ C1036	1-127-780-51	CERAMIC	220PF 10.00% 250V	C155	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
		< CONNECTOR >					
* CN1011	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P		C209	1-130-848-00	FILM	0.0082uF 3.00% 100V
	CN1012	1-564-321-00	PIN, CONNECTOR 2P	C210	1-130-848-00	FILM	0.0082uF 3.00% 100V
* CN1013	1-564-321-21	PIN, CONNECTOR 2P		C211	1-130-977-11	FILM	0.036uF 3.00% 100V
	CN1014	1-564-321-00	PIN, CONNECTOR 2P	C212	1-136-250-11	FILM	0.001uF 3.00% 100V
		< COIL >		C213	1-130-977-11	FILM	0.036uF 3.00% 100V
Δ L991	1-424-485-11	FILTER, LINE *****		C214	1-136-250-11	FILM	0.001uF 3.00% 100V
				C215	1-136-229-11	FILM	0.0016uF 3.00% 100V
				C216	1-136-250-11	FILM	0.001uF 3.00% 100V
				C217	1-130-973-00	MYLAR	0.022uF 5.00% 100V
				C218	1-128-201-11	ELECT	100uF 20.00% 63V
				C219	1-128-201-11	ELECT	100uF 20.00% 63V
				C220	1-128-197-11	ELECT	10uF 20.00% 50V
				C253	1-119-800-11	ELECT	100uF 20.00% 25V
				C254	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
				C255	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
	1-679-312-11	AC SW BOARD *****		C301	1-135-760-51	ELECT	1000uF 50V
		< CAPACITOR >		C302	1-135-774-51	ELECT	470uF 63V
Δ C1030	1-113-927-11	CERAMIC	10000PF 20.00% 250V	C303	1-119-835-11	ELECT	33uF 20.00% 63V
		< CONNECTOR >		C304	1-136-850-11	MYLAR	0.1uF 5.00% 63V
				C305	1-119-835-11	ELECT	33uF 20.00% 63V
				C306	1-119-835-11	ELECT	33uF 20.00% 63V
				C307	1-119-835-11	ELECT	33uF 20.00% 63V
CN1010	1-564-321-00	PIN, CONNECTOR 2P		C308	1-136-850-11	MYLAR	0.1uF 5.00% 63V
		< SWITCH >		C309	1-165-319-11	CERAMIC CHIP	0.1uF 50V
				C310	1-165-319-11	CERAMIC CHIP	0.1uF 50V
Δ S1025	1-572-267-51	SWITCH, PUSH (AC POWER)(1 KEY)(POWER) *****		C311	1-128-200-11	ELECT	47uF 20.00% 63V
				C312	1-117-775-31	ELECT	0.1uF 10.00% 250V
				C313	1-102-961-00	CERAMIC	27PF 5% 50V
				C314	1-102-961-00	CERAMIC	27PF 5% 50V
				C315	1-165-319-11	CERAMIC CHIP	0.1uF 50V
	A-4725-664-A	AUDIO BOARD, COMPLETE *****		C321	1-163-009-11	CERAMIC CHIP	0.001uF 10.00% 50V
		< CAPACITOR >		C322	1-163-009-11	CERAMIC CHIP	0.001uF 10.00% 50V
C109	1-130-848-00	FILM	0.0082uF 3.00% 100V	C323	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C110	1-130-848-00	FILM	0.0082uF 3.00% 100V	C324	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V
C111	1-130-977-11	FILM	0.036uF 3.00% 100V	C332	1-119-838-21	ELECT	220uF 20.00% 63V
C112	1-136-250-11	FILM	0.001uF 3.00% 100V				
C113	1-130-977-11	FILM	0.036uF 3.00% 100V	C333	1-119-838-21	ELECT	220uF 20.00% 63V
				C348	1-128-204-11	ELECT	470uF 20.00% 63V
C114	1-136-250-11	FILM	0.001uF 3.00% 100V	C349	1-128-204-11	ELECT	470uF 20.00% 63V
C115	1-136-229-11	FILM	0.0016uF 3.00% 100V	C350	1-135-713-51	ELECT	2200uF 63V
C116	1-136-250-11	FILM	0.001uF 3.00% 100V	C353	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C117	1-130-973-00	MYLAR	0.022uF 5.00% 100V				
C118	1-128-201-11	ELECT	100uF 20.00% 63V				

AUDIO

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C361	1-119-801-21	ELECT	220uF 20.00% 16V	C2211	1-130-977-11	FILM	0.036uF 3.00% 100V
C362	1-119-801-21	ELECT	220uF 20.00% 16V	C2212	1-136-250-11	FILM	0.001uF 3.00% 100V
C930	1-137-366-11	MYLAR	0.0022uF 5.00% 50V	C2213	1-130-977-11	FILM	0.036uF 3.00% 100V
C931	1-137-366-11	MYLAR	0.0022uF 5.00% 50V	C2214	1-136-250-11	FILM	0.001uF 3.00% 100V
C932	1-135-689-11	ELECT	6800uF 25V	C2215	1-136-229-11	FILM	0.0016uF 3.00% 100V
C941	1-137-366-11	MYLAR	0.0022uF 5.00% 50V	C2216	1-136-250-11	FILM	0.001uF 3.00% 100V
C942	1-137-366-11	MYLAR	0.0022uF 5.00% 50V	C2217	1-130-973-00	MYLAR	0.022uF 5.00% 100V
C943	1-119-815-11	ELECT	2200uF 20.00% 35V	C2218	1-128-201-11	ELECT	100uF 20.00% 63V
C944	1-119-815-11	ELECT	2200uF 20.00% 35V	C2219	1-128-201-11	ELECT	100uF 20.00% 63V
C945	1-119-815-11	ELECT	2200uF 20.00% 35V	C2220	1-128-197-11	ELECT	10uF 20.00% 50V
C946	1-119-815-11	ELECT	2200uF 20.00% 35V	C2301	1-135-760-51	ELECT	1000uF 50V
C1109	1-130-848-00	FILM	0.0082uF 3.00% 100V	C2302	1-135-774-51	ELECT	470uF 63V
C1110	1-130-848-00	FILM	0.0082uF 3.00% 100V	C2303	1-119-835-11	ELECT	33uF 20.00% 63V
C1111	1-130-977-11	FILM	0.036uF 3.00% 100V	C2304	1-136-850-11	MYLAR	0.1uF 5.00% 63V
C1112	1-136-250-11	FILM	0.001uF 3.00% 100V	C2305	1-119-835-11	ELECT	33uF 20.00% 63V
C1113	1-130-977-11	FILM	0.036uF 3.00% 100V	C2306	1-119-835-11	ELECT	33uF 20.00% 63V
C1114	1-136-250-11	FILM	0.001uF 3.00% 100V	C2307	1-119-835-11	ELECT	33uF 20.00% 63V
C1115	1-136-229-11	FILM	0.0016uF 3.00% 100V	C2308	1-136-850-11	MYLAR	0.1uF 5.00% 63V
C1116	1-136-250-11	FILM	0.001uF 3.00% 100V	C2315	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C1117	1-130-973-00	MYLAR	0.022uF 5.00% 100V	C2332	1-119-838-21	ELECT	220uF 20.00% 63V
C1118	1-128-201-11	ELECT	100uF 20.00% 63V	C2333	1-119-838-21	ELECT	220uF 20.00% 63V
C1119	1-128-201-11	ELECT	100uF 20.00% 63V			< CONNECTOR >	
C1120	1-128-197-11	ELECT	10uF 20.00% 50V	CN301	1-770-167-11	CONNECTOR, FFC/FPC 19P	
C1209	1-130-848-00	FILM	0.0082uF 3.00% 100V	CN302	1-770-167-11	CONNECTOR, FFC/FPC 19P	
C1210	1-130-848-00	FILM	0.0082uF 3.00% 100V	CN303	1-691-766-11	PLUG (MICRO CONNECTOR) 4P	
C1211	1-130-977-11	FILM	0.036uF 3.00% 100V	CN305	1-691-767-11	PLUG (MICRO CONNECTOR) 5P	
C1212	1-136-250-11	FILM	0.001uF 3.00% 100V	CN306	1-691-765-11	PLUG (MICRO CONNECTOR) 3P	
C1213	1-130-977-11	FILM	0.036uF 3.00% 100V	CN307	1-564-505-11	PLUG, CONNECTOR 2P	
C1214	1-136-250-11	FILM	0.001uF 3.00% 100V	CN351	1-506-468-11	PIN, CONNECTOR 3P	
C1215	1-136-229-11	FILM	0.0016uF 3.00% 100V	CN352	1-568-951-11	PIN, CONNECTOR 2P	
C1216	1-136-250-11	FILM	0.001uF 3.00% 100V	CN1306	1-691-765-11	PLUG (MICRO CONNECTOR) 3P	
C1217	1-130-973-00	MYLAR	0.022uF 5.00% 100V	CN1307	1-564-505-31	PLUG, CONNECTOR 2P	
C1218	1-128-201-11	ELECT	100uF 20.00% 63V	CN2303	1-691-766-11	PLUG (MICRO CONNECTOR) 4P	
C1219	1-128-201-11	ELECT	100uF 20.00% 63V	CN2306	1-691-765-11	PLUG (MICRO CONNECTOR) 3P	
C1220	1-128-197-11	ELECT	10uF 20.00% 50V	CN2307	1-564-505-21	PLUG, CONNECTOR 2P	
C1301	1-135-760-51	ELECT	1000uF 50V			< DIODE >	
C1302	1-135-774-51	ELECT	470uF 63V	D361	8-719-977-40	DIODE UDZ-TE-17-13B	
C1303	1-119-835-11	ELECT	33uF 20.00% 63V	D362	8-719-016-74	DIODE 1SS352-TPH3	
C1304	1-136-850-11	MYLAR	0.1uF 5.00% 63V	D930	8-719-210-39	DIODE EC10QS04-TE12L5	
C1305	1-119-835-11	ELECT	33uF 20.00% 63V	D931	8-719-210-39	DIODE EC10QS04-TE12L5	
C1306	1-119-835-11	ELECT	33uF 20.00% 63V	D932	8-719-210-39	DIODE EC10QS04-TE12L5	
C1307	1-119-835-11	ELECT	33uF 20.00% 63V	D933	8-719-210-39	DIODE EC10QS04-TE12L5	
C1308	1-136-850-11	MYLAR	0.1uF 5.00% 63V	D940	8-719-210-39	DIODE EC10QS04-TE12L5	
C1315	1-165-319-11	CERAMIC CHIP	0.1uF 50V	D941	8-719-210-39	DIODE EC10QS04-TE12L5	
C1332	1-119-838-21	ELECT	220uF 20.00% 63V	D942	8-719-210-39	DIODE EC10QS04-TE12L5	
C1333	1-119-838-21	ELECT	220uF 20.00% 63V	D943	8-719-210-39	DIODE EC10QS04-TE12L5	
C2109	1-130-848-00	FILM	0.0082uF 3.00% 100V			< TERMINAL >	
C2110	1-130-848-00	FILM	0.0082uF 3.00% 100V	ETP101	1-537-770-11	TERMINAL BOARD, GROUND	
C2111	1-130-977-11	FILM	0.036uF 3.00% 100V	ETP102	1-537-770-11	TERMINAL BOARD, GROUND	
C2112	1-136-250-11	FILM	0.001uF 3.00% 100V	ETP103	1-537-770-11	TERMINAL BOARD, GROUND	
C2113	1-130-977-11	FILM	0.036uF 3.00% 100V	ETP104	1-537-770-11	TERMINAL BOARD, GROUND	
C2114	1-136-250-11	FILM	0.001uF 3.00% 100V	ETP301	4-924-264-41	TERMINAL, MOUNT	
C2115	1-136-229-11	FILM	0.0016uF 3.00% 100V	ETP401	1-537-770-11	TERMINAL BOARD, GROUND	
C2116	1-136-250-11	FILM	0.001uF 3.00% 100V	ETP402	1-537-770-11	TERMINAL BOARD, GROUND	
C2117	1-130-973-00	MYLAR	0.022uF 5.00% 100V	ETP403	1-537-770-11	TERMINAL BOARD, GROUND	
C2118	1-128-201-11	ELECT	100uF 20.00% 63V	ETP931	1-537-770-11	TERMINAL BOARD, GROUND	
C2119	1-128-201-11	ELECT	100uF 20.00% 63V	ETP932	1-537-770-11	TERMINAL BOARD, GROUND	
C2120	1-128-197-11	ELECT	10uF 20.00% 50V				
C2209	1-130-848-00	FILM	0.0082uF 3.00% 100V				
C2210	1-130-848-00	FILM	0.0082uF 3.00% 100V				

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks	
		< FERRITE BEAD >		L941	1-424-090-11	COIL, LINE FILTER		
FB301	1-414-234-11	FERRITE	OUH	L942	1-424-090-11	COIL, LINE FILTER		
FB302	1-414-234-11	FERRITE	OUH			< TRANSISTOR >		
FB303	1-414-234-11	FERRITE	OUH	Q151	8-729-141-74	TRANSISTOR	2SC3624A-T2L15L16	
FB304	1-414-234-11	FERRITE	OUH	Q251	8-729-141-74	TRANSISTOR	2SC3624A-T2L15L16	
FB305	1-414-234-11	FERRITE	OUH	Q360	8-729-900-53	TRANSISTOR	DTC114EKA-T146	
FB311	1-216-295-00	SHORT	0	Q361	8-729-207-71	TRANSISTOR	RN2405-TE85L	
FB312	1-216-295-00	SHORT	0	Q362	8-729-027-38	TRANSISTOR	DTA144EKA-T146	
FB313	1-216-295-00	SHORT	0			< RESISTOR >		
FB943	1-412-473-21	INDUCTOR	OUH	R109	1-249-162-11	CARBON	10 5% 1/3W	
FB1301	1-414-234-11	FERRITE	OUH	R110	1-249-198-11	CARBON	330 5% 1/3W	
FB1302	1-414-234-11	FERRITE	OUH	R111	1-249-162-11	CARBON	10 5% 1/3W	
FB2301	1-414-234-11	FERRITE	OUH	R112	1-249-198-11	CARBON	330 5% 1/3W	
FB2302	1-414-234-11	FERRITE	OUH	R113	1-249-200-11	CARBON	390 5% 1/3W	
		< FUSIBLE >		R114	1-249-210-11	CARBON	1K 5% 1/3W	
△FR310	1-212-881-11	FUSIBLE	100 5%	1/4W	R115	1-247-744-11	CARBON	270 5% 1/2W F
△FR361	1-212-982-00	FUSIBLE	100 5%	1/2W	R116	1-249-200-11	CARBON	390 5% 1/3W
△FR366	1-212-889-00	FUSIBLE	220 5%	1/4W	R117	1-249-210-11	CARBON	1K 5% 1/3W
△FR367	1-212-889-00	FUSIBLE	220 5%	1/4W	R118	1-247-744-11	CARBON	270 5% 1/2W F
△FR1310	1-212-881-11	FUSIBLE	100 5%	1/4W	R119	1-247-249-00	CARBON	2.4K 5% 1/3W
△FR2310	1-212-881-11	FUSIBLE	100 5%	1/4W	R120	1-247-249-00	CARBON	2.4K 5% 1/3W
		< IC >		R121	1-214-929-00	METAL	470K 1% 1/2W	
IC102	8-759-602-83	IC M5238P		R122	1-249-162-11	CARBON	10 5% 1/3W	
IC103	8-759-712-02	IC NJM2114D		R125	1-249-186-11	CARBON	100 5% 1/3W	
IC202	8-759-602-83	IC M5238P		R151	1-216-105-11	RES-CHIP	220K 5% 1/10W	
IC203	8-759-712-02	IC NJM2114D		R152	1-216-101-00	METAL CHIP	150K 5% 1/10W	
IC300	8-759-231-53	IC M5F7805L		R153	1-216-085-11	RES-CHIP	33K 5% 1/10W	
IC301	8-759-836-44	IC CXD9657N/2K		R154	1-216-113-00	METAL CHIP	470K 5% 1/10W	
IC302	8-759-486-55	IC NJM2370U33-TE2		R155	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	
IC303	8-759-591-61	IC TC7WHU04FU(TE12R)		R156	1-216-019-00	METAL CHIP	56 5% 1/10W	
IC304	6-700-066-01	IC HD74LV157ATELL		R209	1-249-162-11	CARBON	10 5% 1/3W	
IC304	8-759-549-07	IC SN74LV157APWR		R210	1-249-198-11	CARBON	330 5% 1/3W	
IC306	6-700-067-01	IC HD74LV161ATELL		R211	1-249-162-11	CARBON	10 5% 1/3W	
IC306	6-700-067-01	IC SN74LV161APWR		R212	1-249-198-11	CARBON	330 5% 1/3W	
IC307	8-759-711-85	IC NJM4580E-D(T1)		R213	1-249-200-11	CARBON	390 5% 1/3W	
IC310	8-759-231-59	IC M5F7815L		R214	1-249-210-11	CARBON	1K 5% 1/3W	
IC311	8-759-245-87	IC M5F7915L		R215	1-247-744-11	CARBON	270 5% 1/2W F	
IC1102	8-759-602-83	IC M5238P		R216	1-249-200-11	CARBON	390 5% 1/3W	
IC1103	8-759-712-02	IC NJM2114D		R217	1-249-210-11	CARBON	1K 5% 1/3W	
IC1202	8-759-602-83	IC M5238P		R218	1-247-744-11	CARBON	270 5% 1/2W F	
IC1203	8-759-712-02	IC NJM2114D		R219	1-247-249-00	CARBON	2.4K 5% 1/3W	
IC1301	8-759-836-44	IC CXD9657N/2K		R220	1-247-249-00	CARBON	2.4K 5% 1/3W	
IC1302	8-759-486-55	IC NJM2370U33-TE2		R221	1-214-929-00	METAL	470K 1% 1/2W	
IC2102	8-759-602-83	IC M5238P		R222	1-249-162-11	CARBON	10 5% 1/3W	
IC2103	8-759-712-02	IC NJM2114D		R225	1-249-186-11	CARBON	100 5% 1/3W	
IC2202	8-759-602-83	IC M5238P		R251	1-216-105-11	RES-CHIP	220K 5% 1/10W	
IC2203	8-759-712-02	IC NJM2114D		R252	1-216-101-00	METAL CHIP	150K 5% 1/10W	
IC2301	8-759-836-44	IC CXD9657N/2K		R253	1-216-085-11	RES-CHIP	33K 5% 1/10W	
IC2302	8-759-486-55	IC NJM2370U33-TE2		R254	1-216-113-00	METAL CHIP	470K 5% 1/10W	
		< COIL >		R255	1-216-065-11	RES-CHIP	4.7K 5% 1/10W	
L151	1-410-658-31	INDUCTOR CHIP	220uH	R256	1-216-019-00	METAL CHIP	56 5% 1/10W	
L251	1-410-658-31	INDUCTOR CHIP	220uH	R301	1-249-478-11	CARBON	2.2 5% 1/2W F	
L306	1-424-153-11	FILTER, NOISE		R303	1-216-025-11	RES-CHIP	100 5% 1/10W	
L930	1-424-090-11	COIL, LINE FILTER		R304	1-216-025-11	RES-CHIP	100 5% 1/10W	
L931	1-424-090-11	COIL, LINE FILTER						

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

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

SCD-C555ES

AUDIO **DISPLAY**

Ref. No.	Part No.	Description	Quantity	Tolerance	Remarks	Ref. No.	Part No.	Description	Quantity	Tolerance	Remarks
R305	1-216-025-11	RES-CHIP	100	5%	1/10W	R2111	1-249-162-11	CARBON	10	5%	1/3W
R306	1-216-025-11	RES-CHIP	100	5%	1/10W	R2112	1-249-198-11	CARBON	330	5%	1/3W
R307	1-216-025-11	RES-CHIP	100	5%	1/10W	R2113	1-249-200-11	CARBON	390	5%	1/3W
R308	1-216-049-11	RES-CHIP	1K	5%	1/10W	R2114	1-249-210-11	CARBON	1K	5%	1/3W
R309	1-216-049-11	RES-CHIP	1K	5%	1/10W	R2115	1-247-744-11	CARBON	270	5%	1/2W F
R311	1-259-937-11	CARBON MELF	16K	2%	1/8W	R2116	1-249-200-11	CARBON	390	5%	1/3W
R312	1-216-121-11	RES-CHIP	1M	5%	1/10W	R2117	1-249-210-11	CARBON	1K	5%	1/3W
R313	1-216-025-11	RES-CHIP	100	5%	1/10W	R2118	1-247-744-11	CARBON	270	5%	1/2W F
R314	1-216-033-00	METAL CHIP	220	5%	1/10W	R2119	1-247-249-00	CARBON	2.4K	5%	1/3W
R315	1-216-025-11	RES-CHIP	100	5%	1/10W	R2120	1-247-249-00	CARBON	2.4K	5%	1/3W
R316	1-216-033-00	METAL CHIP	220	5%	1/10W	R2121	1-214-929-00	METAL	470K	1%	1/2W
R317	1-216-295-11	SHORT	0			R2122	1-249-162-11	CARBON	10	5%	1/3W
R319	1-216-081-00	METAL CHIP	22K	5%	1/10W	R2125	1-249-186-11	CARBON	100	5%	1/3W
R320	1-216-049-11	RES-CHIP	1K	5%	1/10W	R2209	1-249-162-11	CARBON	10	5%	1/3W
R321	1-216-025-11	RES-CHIP	100	5%	1/10W	R2210	1-249-198-11	CARBON	330	5%	1/3W
R322	1-216-025-11	RES-CHIP	100	5%	1/10W	R2211	1-249-162-11	CARBON	10	5%	1/3W
R331	1-216-025-11	RES-CHIP	100	5%	1/10W	R2212	1-249-198-11	CARBON	330	5%	1/3W
R332	1-216-025-11	RES-CHIP	100	5%	1/10W	R2213	1-249-200-11	CARBON	390	5%	1/3W
R333	1-216-025-11	RES-CHIP	100	5%	1/10W	R2214	1-249-210-11	CARBON	1K	5%	1/3W
R334	1-216-025-11	RES-CHIP	100	5%	1/10W	R2215	1-247-744-11	CARBON	270	5%	1/2W F
R362	1-216-081-00	METAL CHIP	22K	5%	1/10W	R2216	1-249-200-11	CARBON	390	5%	1/3W
R363	1-216-105-11	RES-CHIP	220K	5%	1/10W	R2217	1-249-210-11	CARBON	1K	5%	1/3W
R364	1-216-049-11	RES-CHIP	1K	5%	1/10W	R2218	1-247-744-11	CARBON	270	5%	1/2W F
R365	1-216-097-11	RES-CHIP	100K	5%	1/10W	R2219	1-247-249-00	CARBON	2.4K	5%	1/3W
R1109	1-249-162-11	CARBON	10	5%	1/3W	R2220	1-247-249-00	CARBON	2.4K	5%	1/3W
R1110	1-249-198-11	CARBON	330	5%	1/3W	R2221	1-214-929-00	METAL	470K	1%	1/2W
R1111	1-249-162-11	CARBON	10	5%	1/3W	R2222	1-249-162-11	CARBON	10	5%	1/3W
R1112	1-249-198-11	CARBON	330	5%	1/3W	R2225	1-249-186-11	CARBON	100	5%	1/3W
R1113	1-249-200-11	CARBON	390	5%	1/3W	R2237	1-216-295-11	SHORT	0		
R1114	1-249-210-11	CARBON	1K	5%	1/3W	R2301	1-249-478-11	CARBON	2.2	5%	1/2W F
R1115	1-247-744-11	CARBON	270	5%	1/2W F	R2303	1-216-025-11	RES-CHIP	100	5%	1/10W
R1116	1-249-200-11	CARBON	390	5%	1/3W	R2304	1-216-025-11	RES-CHIP	100	5%	1/10W
R1117	1-249-210-11	CARBON	1K	5%	1/3W	R2311	1-259-937-11	CARBON MELF	16K	2%	1/8W
R1118	1-247-744-11	CARBON	270	5%	1/2W F						< VIBRATOR >
R1119	1-247-249-00	CARBON	2.4K	5%	1/3W						
R1120	1-247-249-00	CARBON	2.4K	5%	1/3W	X301	1-767-406-11	VIBRATOR, CRYSTAL 11.2896MHz			
R1121	1-214-929-00	METAL	470K	1%	1/2W	*****					
R1122	1-249-162-11	CARBON	10	5%	1/3W						
R1125	1-249-186-11	CARBON	100	5%	1/3W						
R1209	1-249-162-11	CARBON	10	5%	1/3W						
R1210	1-249-198-11	CARBON	330	5%	1/3W						
R1211	1-249-162-11	CARBON	10	5%	1/3W	*	1-535-303-00	WIRE, JUMPER			
R1212	1-249-198-11	CARBON	330	5%	1/3W	*	4-996-686-11	HOLDER (FL)			
R1213	1-249-200-11	CARBON	390	5%	1/3W						
R1214	1-249-210-11	CARBON	1K	5%	1/3W						< CAPACITOR >
R1215	1-247-744-11	CARBON	270	5%	1/2W F	C1001	1-126-785-11	ELECT	47uF	20.00%	10V
R1216	1-249-200-11	CARBON	390	5%	1/3W	C1002	1-165-319-11	CERAMIC CHIP	0.1uF		50V
R1217	1-249-210-11	CARBON	1K	5%	1/3W	C1003	1-164-222-11	CERAMIC CHIP	0.22uF		25V
R1218	1-247-744-11	CARBON	270	5%	1/2W F	C1004	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
R1219	1-247-249-00	CARBON	2.4K	5%	1/3W	C1005	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
R1220	1-247-249-00	CARBON	2.4K	5%	1/3W	C1006	1-165-319-11	CERAMIC CHIP	0.1uF		50V
R1221	1-214-929-00	METAL	470K	1%	1/2W	C1007	1-165-319-11	CERAMIC CHIP	0.1uF		50V
R1222	1-249-162-11	CARBON	10	5%	1/3W	C1008	1-165-319-11	CERAMIC CHIP	0.1uF		50V
R1225	1-249-186-11	CARBON	100	5%	1/3W	C1009	1-163-104-00	CERAMIC CHIP	30PF	5%	50V
R1301	1-249-478-11	CARBON	2.2	5%	1/2W F	C1010	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
R1303	1-216-025-11	RES-CHIP	100	5%	1/10W	C1011	1-165-319-11	CERAMIC CHIP	0.1uF		50V
R1304	1-216-025-11	RES-CHIP	100	5%	1/10W	C1012	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
R1311	1-259-937-11	CARBON MELF	16K	2%	1/8W	C1013	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
R2109	1-249-162-11	CARBON	10	5%	1/3W	C1014	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
R2110	1-249-198-11	CARBON	330	5%	1/3W	C1018	1-163-117-00	CERAMIC CHIP	100PF	5%	50V

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C1019	1-163-117-00	CERAMIC CHIP	100PF 5% 50V	R1019	1-216-073-11	RES-CHIP	10K 5% 1/10W
C1020	1-165-319-11	CERAMIC CHIP	0.1uF 50V	R1020	1-216-025-11	RES-CHIP	100 5% 1/10W
C1021	1-165-319-11	CERAMIC CHIP	0.1uF 50V	R1021	1-216-073-11	RES-CHIP	10K 5% 1/10W
C1022	1-126-785-11	ELECT	47uF 20.00% 10V	R1022	1-216-049-11	RES-CHIP	1K 5% 1/10W
C1023	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V	R1023	1-216-025-11	RES-CHIP	100 5% 1/10W
C1024	1-163-005-91	CERAMIC CHIP	470PF 10.00% 50V	R1024	1-216-073-11	RES-CHIP	10K 5% 1/10W
C1025	1-165-319-11	CERAMIC CHIP	0.1uF 50V	R1025	1-216-049-11	RES-CHIP	1K 5% 1/10W
C1026	1-165-319-11	CERAMIC CHIP	0.1uF 50V	R1026	1-216-025-11	RES-CHIP	100 5% 1/10W
C1028	1-165-319-11	CERAMIC CHIP	0.1uF 50V	R1027	1-216-073-11	RES-CHIP	10K 5% 1/10W
C1037	1-163-117-00	CERAMIC CHIP	100PF 5% 50V	R1029	1-216-025-11	RES-CHIP	100 5% 1/10W
C1038	1-163-117-00	CERAMIC CHIP	100PF 5% 50V	R1030	1-216-073-11	RES-CHIP	10K 5% 1/10W
		< CONNECTOR >		R1031	1-216-295-11	SHORT	0
* CN1001	1-568-934-11	PIN, CONNECTOR 7P		R1032	1-216-073-11	RES-CHIP	10K 5% 1/10W
* CN1002	1-568-954-11	PIN, CONNECTOR 5P		R1033	1-216-073-11	RES-CHIP	10K 5% 1/10W
CN1006	1-506-468-11	PIN, CONNECTOR 3P		R1034	1-216-073-11	RES-CHIP	10K 5% 1/10W
		< DIODE >		R1035	1-216-073-11	RES-CHIP	10K 5% 1/10W
D1000	8-719-303-02	DIODE SEL6510C-TH10		R1038	1-216-298-00	METAL CHIP	2.2 5% 1/10W
D1001	8-719-050-89	DIODE SEL6910A-TH10		R1039	1-216-073-11	RES-CHIP	10K 5% 1/10W
D1002	8-719-016-74	DIODE 1SS352-TPH3		R1040	1-216-097-11	RES-CHIP	100K 5% 1/10W
D1003	8-719-210-39	DIODE EC10QS04-TE12L5		R1041	1-216-097-11	RES-CHIP	100K 5% 1/10W
		< TERMINAL >		R1042	1-216-097-11	RES-CHIP	100K 5% 1/10W
ET1001	1-537-770-11	TERMINAL BOARD, GROUND		R1044	1-216-027-00	METAL CHIP	120 5% 1/10W
		< FILTER >		R1045	1-216-049-11	RES-CHIP	1K 5% 1/10W
FL1000	1-518-749-11	INDICATOR TUBE, FLUORESCENT		R1046	1-216-027-00	METAL CHIP	120 5% 1/10W
		< IC >		R1047	1-216-049-11	RES-CHIP	1K 5% 1/10W
IC1001	8-759-337-52	IC LC75721E		R1048	1-216-033-00	METAL CHIP	220 5% 1/10W
IC1002	8-752-925-06	IC CXP84120-090Q		R1049	1-216-033-00	METAL CHIP	220 5% 1/10W
		< TRANSISTOR >		R1050	1-216-037-00	METAL CHIP	330 5% 1/10W
Q1000	8-729-900-53	TRANSISTOR DTC114EKA-T146		R1051	1-216-037-00	METAL CHIP	330 5% 1/10W
Q1001	8-729-900-53	TRANSISTOR DTC114EKA-T146		R1052	1-216-073-11	RES-CHIP	10K 5% 1/10W
Q1002	8-729-900-53	TRANSISTOR DTC114EKA-T146		R1053	1-216-041-00	METAL CHIP	470 5% 1/10W
Q1003	8-729-900-53	TRANSISTOR DTC114EKA-T146		R1054	1-216-041-00	METAL CHIP	470 5% 1/10W
Q1004	8-729-900-53	TRANSISTOR DTC114EKA-T146		R1055	1-216-073-11	RES-CHIP	10K 5% 1/10W
Q1005	8-729-900-53	TRANSISTOR DTC114EKA-T146		R1056	1-216-045-00	METAL CHIP	680 5% 1/10W
Q1006	8-729-900-53	TRANSISTOR DTC114EKA-T146				< COMPOSITION CIRCUIT BLOCK >	
		< RESISTOR >		RB1000	1-234-521-11	CIRCUIT BLOCK, COMPOSITION	
R1000	1-216-049-11	RES-CHIP	1K 5% 1/10W	RB1001	1-234-521-11	CIRCUIT BLOCK, COMPOSITION	
R1001	1-216-049-11	RES-CHIP	1K 5% 1/10W	RB1002	1-234-520-11	CIRCUIT BLOCK, COMPOSITION	
R1003	1-216-027-00	METAL CHIP	120 5% 1/10W			< SWITCH >	
R1004	1-216-027-00	METAL CHIP	120 5% 1/10W	S1000	1-570-101-51	SWITCH, KEY BOARD (SACD/CD)	
R1006	1-216-073-11	RES-CHIP	10K 5% 1/10W	S1001	1-570-101-51	SWITCH, KEY BOARD (MULTI/2CH)	
R1008	1-216-121-11	RES-CHIP	1M 5% 1/10W	S1003	1-771-349-21	SWITCH, KEYBOARD (PLAY)	
R1009	1-216-073-11	RES-CHIP	10K 5% 1/10W	S1004	1-771-349-21	SWITCH, KEYBOARD (DISC SKIP)	
R1011	1-216-073-11	RES-CHIP	10K 5% 1/10W	S1005	1-771-349-21	SWITCH, KEYBOARD (PAUSE)	
R1012	1-216-073-11	RES-CHIP	10K 5% 1/10W	S1006	1-771-349-21	SWITCH, KEYBOARD (EX-CHANGE)	
R1013	1-216-073-11	RES-CHIP	10K 5% 1/10W	S1007	1-771-349-21	SWITCH, KEYBOARD (STOP)	
R1014	1-216-073-11	RES-CHIP	10K 5% 1/10W	S1008	1-771-349-21	SWITCH, KEYBOARD (EJECT)	
R1015	1-216-025-11	RES-CHIP	100 5% 1/10W	S1009	1-476-100-11	ENCODER, ROTARY (AMS)	
R1016	1-216-025-11	RES-CHIP	100 5% 1/10W	S1010	1-786-082-21	SWITCH, KEYBOARD (CHECK)	
R1017	1-216-025-11	RES-CHIP	100 5% 1/10W	S1011	1-786-082-21	SWITCH, KEYBOARD (CLEAR)	
R1018	1-216-025-11	RES-CHIP	100 5% 1/10W			< VIBRATOR >	
				X1000	1-781-472-21	VIBRATOR, CERAMIC	

SCD-C555ES

DOOR MOTOR

DOOR SW

D-POWER

Ref. No.	Part No.	Description	Remarks
	1-679-309-11	DOOR MOTOR BOARD *****	
		< CAPACITOR >	
C1027	1-165-319-11	CERAMIC CHIP 0.1uF	50V
		< CONNECTOR >	
* CN1005	1-568-942-11	PIN, CONNECTOR 4P	
CN1008	1-506-481-11	PIN, CONNECTOR 2P	

	1-679-310-11	DOOR SW BOARD *****	
		< CONNECTOR >	
* CN1016	1-568-941-11	PIN, CONNECTOR 3P	
		< SWITCH >	
S1022	1-771-339-41	SWITCH, PUSH (IN SW)	
S1023	1-771-339-41	SWITCH, PUSH (OUT SW)	

	A-4725-666-A	D-POWER BOARD, COMPLETE *****	
	4-902-345-01	HEAT SINK	
	7-685-872-09	SCREW +BVTT 3X8 (S)	
		< CAPACITOR >	
C402	1-128-562-11	ELECT 47uF	20.00% 100V
C404	1-128-562-11	ELECT 47uF	20.00% 100V
C405	1-130-483-00	MYLAR 0.01uF	5% 50V
C406	1-130-479-00	MYLAR 0.0047uF	5% 50V
C407	1-130-483-00	MYLAR 0.01uF	5% 50V
C408	1-135-698-11	ELECT 10000uF	16V
C409	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C410	1-135-748-11	ELECT 4700uF	35V
C411	1-135-748-11	ELECT 4700uF	35V
C413	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C414	1-135-698-11	ELECT 10000uF	16V
C415	1-130-483-00	MYLAR 0.01uF	5% 50V
C416	1-130-483-00	MYLAR 0.01uF	5% 50V
C417	1-135-696-11	ELECT 4700uF	16V
C418	1-135-698-11	ELECT 10000uF	16V
C419	1-135-696-11	ELECT 4700uF	16V
C420	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C422	1-135-742-11	ELECT 4.7uF	50V
C424	1-164-695-11	CERAMIC CHIP 0.0022uF	5.00% 50V
C425	1-164-695-11	CERAMIC CHIP 0.0022uF	5.00% 50V
C426	1-164-695-11	CERAMIC CHIP 0.0022uF	5.00% 50V
C442	1-135-743-11	ELECT 10uF	50V
C443	1-135-743-11	ELECT 10uF	50V
C444	1-126-965-11	ELECT 22uF	20.00% 50V
		< CONNECTOR >	
CN400	1-691-768-11	PLUG (MICRO CONNECTOR) 6P	
CN401	1-564-505-11	PLUG, CONNECTOR 2P	
* CN404	1-568-954-11	PIN, CONNECTOR 5P	
* CN405	1-568-936-11	PIN, CONNECTOR 9P	

Ref. No.	Part No.	Description	Remarks
		< DIODE >	
D400	8-719-973-02	DIODE RLZ-J8.2B-TE11	
D401	8-719-420-70	DIODE MA3360-H-TX	
D402	8-719-210-33	DIODE EC10DS2TE12L	
D403	8-719-210-33	DIODE EC10DS2TE12L	
D404	8-719-210-33	DIODE EC10DS2TE12L	
D405	8-719-210-33	DIODE EC10DS2TE12L	
D406	8-719-210-39	DIODE EC10QS04-TE12L5	
D407	8-719-210-39	DIODE EC10QS04-TE12L5	
D408	8-719-210-39	DIODE EC10QS04-TE12L5	
D409	8-719-210-39	DIODE EC10QS04-TE12L5	
D410	8-719-210-39	DIODE EC10QS04-TE12L5	
D411	8-719-210-39	DIODE EC10QS04-TE12L5	
D412	8-719-210-39	DIODE EC10QS04-TE12L5	
D413	8-719-210-39	DIODE EC10QS04-TE12L5	
D416	8-719-210-39	DIODE EC10QS04-TE12L5	
D418	8-719-210-39	DIODE EC10QS04-TE12L5	
D432	8-719-820-05	DIODE 1SS181-TE85L	
D433	8-719-801-78	DIODE 1SS184-TE85L	
D434	8-719-158-49	DIODE UDZ-TE-17-12B	
		< IC >	
IC400	8-759-394-35	IC BA12T	
IC401	8-759-445-59	IC BA033T	
IC402	8-759-450-47	IC BA05T	
IC403	8-759-450-47	IC BA05T	
		< COIL >	
L400	1-424-090-11	COIL, LINE FILTER	
L401	1-424-090-11	COIL, LINE FILTER	
L402	1-410-482-31	INDUCTOR 100uH	
L403	1-410-482-31	INDUCTOR 100uH	
		< TRANSISTOR >	
Q401	8-729-209-71	TRANSISTOR 2SA12130-TE12L	
		< RESISTOR >	
R400	1-216-089-11	RES-CHIP 47K	5% 1/10W
R401	1-216-025-11	RES-CHIP 100	5% 1/10W
R402	1-216-025-11	RES-CHIP 100	5% 1/10W
R403	1-216-089-11	RES-CHIP 47K	5% 1/10W
R404	1-216-061-11	RES-CHIP 3.3K	5% 1/10W
△ R405	1-212-877-11	FUSIBLE 68	5% 1/4W
R406	1-216-069-00	METAL CHIP 6.8K	5% 1/10W
R408	1-216-013-00	METAL CHIP 33	5% 1/10W
R412	1-216-073-11	RES-CHIP 10K	5% 1/10W
R413	1-216-073-11	RES-CHIP 10K	5% 1/10W
R414	1-216-073-11	RES-CHIP 10K	5% 1/10W
R416	1-216-076-00	METAL CHIP 13K	5% 1/10W
R417	1-216-076-00	METAL CHIP 13K	5% 1/10W
R418	1-216-076-00	METAL CHIP 13K	5% 1/10W
R419	1-216-076-00	METAL CHIP 13K	5% 1/10W
R420	1-216-076-00	METAL CHIP 13K	5% 1/10W

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

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

HP

I/O

JUNCTION

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
	1-679-311-11	HP BOARD *****				< IC >	
*	4-962-201-01	PLATE (HP), GROUND < CAPACITOR >		IC395	8-749-012-69	IC GP1F38T (OPTICAL)	
C1101	1-163-141-00	CERAMIC CHIP 0.001uF 5% 50V				< JACK >	
C1102	1-163-141-00	CERAMIC CHIP 0.001uF 5% 50V		J301	1-785-489-11	JACK, PIN 6P (ANALOG)	
C1103	1-165-319-11	CERAMIC CHIP 0.1uF 50V		J302	1-785-868-21	JACK, PIN 2P (2CH OUT)	
		< CONNECTOR >		J381	1-779-655-21	JACK (SMALL TYPE) (2 GANG)(CONTORL II)	
* CN1101	1-568-941-11	PIN, CONNECTOR 3P < JACK >		J385	1-770-905-21	JACK, PIN 1P (COAXIAL)	
J1101	1-750-162-61	JACK (LARGE TYPE)(PHONES) < COIL >				< COIL >	
L1101	1-424-090-11	COIL, LINE FILTER		L381	1-410-375-11	INDUCTOR CHIP 3.3uH	
L1102	1-424-090-11	COIL, LINE FILTER		L385	1-424-153-11	FILTER, NOISE	
L1103	1-424-090-11	COIL, LINE FILTER		L395	1-424-153-11	FILTER, NOISE	
L1104	1-412-004-31	INDUCTOR 6.8uH				< TRANSISTOR >	
L1105	1-412-004-31	INDUCTOR 6.8uH		Q381	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L1106	1-412-004-31	INDUCTOR 6.8uH < VARIABLE RESISTOR >		Q382	8-729-120-28	TRANSISTOR 2SC1623-T1-L5L6	
RV1101	1-223-359-11	RES, VAR, CARBON 1K/1K (PHONE LEVEL) *****				< RESISTOR >	
A-4725-665-A	I/O BOARD, COMPLETE *****			R123	1-249-186-11	CARBON 100 5% 1/3W	
	< CAPACITOR >			R124	1-249-186-11	CARBON 100 5% 1/3W	
C365	1-165-319-11	CERAMIC CHIP 0.1uF 50V		R223	1-249-186-11	CARBON 100 5% 1/3W	
C366	1-165-319-11	CERAMIC CHIP 0.1uF 50V		R224	1-249-186-11	CARBON 100 5% 1/3W	
C367	1-165-319-11	CERAMIC CHIP 0.1uF 50V		R381	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
C381	1-163-033-11	CERAMIC CHIP 0.022uF 50V		R382	1-216-073-91	RES-CHIP 10K 5% 1/10W	
C382	1-163-031-11	CERAMIC CHIP 0.01uF 50V		R383	1-216-001-00	METAL CHIP 10 5% 1/10W	
C383	1-163-031-11	CERAMIC CHIP 0.01uF 50V		R386	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
C385	1-135-743-11	ELECT 10uF 50V		R387	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
C386	1-164-222-11	CERAMIC CHIP 0.22uF 25V		R388	1-216-063-91	RES-CHIP 3.9K 5% 1/10W	
C387	1-163-227-11	CERAMIC CHIP 10PF 0.50PF 50V		R389	1-216-033-00	METAL CHIP 220 5% 1/10W	
C388	1-164-346-11	CERAMIC CHIP 1uF 16V		R390	1-216-021-00	METAL CHIP 68 5% 1/10W	
C389	1-163-025-11	CERAMIC CHIP 0.001uF 50V		R391	1-216-097-11	RES-CHIP 100K 5% 1/10W	
C390	1-165-319-11	CERAMIC CHIP 0.1uF 50V		R1123	1-249-186-11	CARBON 100 5% 1/3W	
C395	1-135-743-11	ELECT 10uF 50V		R1223	1-249-186-11	CARBON 100 5% 1/3W	
C396	1-164-222-11	CERAMIC CHIP 0.22uF 25V < CONNECTOR >		R2123	1-249-186-11	CARBON 100 5% 1/3W	
CN304	1-691-766-11	PLUG (MICRO CONNECTOR) 4P		R2223	1-249-186-11	CARBON 100 5% 1/3W	
CN353	1-568-951-11	PIN, CONNECTOR 2P				< RELAY >	
CN385	1-568-955-11	PIN, CONNECTOR 6P		RY301	1-755-295-11	RELAY	
CN1304	1-691-766-11	PLUG (MICRO CONNECTOR) 4P		RY1301	1-755-295-11	RELAY	
CN2304	1-691-766-11	PLUG (MICRO CONNECTOR) 4P < DIODE >		RY2301	1-755-295-11	RELAY	
D363	8-719-016-74	DIODE 1SS352-TPH3				*****	
D364	8-719-016-74	DIODE 1SS352-TPH3			1-676-246-11	JUNCTION BOARD *****	
D365	8-719-016-74	DIODE 1SS352-TPH3				< CAPACITOR >	
D381	8-719-016-74	DIODE 1SS352-TPH3		C10	1-124-589-11	ELECT 47uF 20% 16V	
				C11	1-161-494-00	CERAMIC 0.022uF 25V	
						< CONNECTOR >	
				CN11	1-573-911-11	PIN, CONNECTOR 13P	
				CN13	1-506-481-11	PIN, CONNECTOR 2P	
				* CN14	1-568-941-11	PIN, CONNECTOR 3P	
				* CN15	1-568-825-11	SOCKET, CONNECTOR 6P	
						< IC >	
				IC11	8-759-356-03	IC BA6780	

SCD-C555ES

JUNCTION	KEY	LOADING MOTOR	MAIN
-----------------	------------	----------------------	-------------

Ref. No.	Part No.	Description	Remarks		
< RESISTOR >					
R21	1-249-429-11	CARBON 10K 5%	1/4W		
R22	1-249-426-11	CARBON 5.6K 5%	1/4W		
R23	1-249-425-11	CARBON 4.7K 5%	1/4W	F	
R24	1-249-430-11	CARBON 12K 5%	1/4W		
R25	1-249-382-11	CARBON 1.2 5%	1/6W	F	
R26	1-249-382-11	CARBON 1.2 5%	1/6W	F	
< SWITCH >					
S11	1-771-836-11	SWITCH, LEVER (SLIDE)	(OPEN/CLOSE DETECT)		

	1-679-313-11	KEY BOARD	*****		
< CONNECTOR >					
CN1004	1-506-468-11	PIN, CONNECTOR 3P			
< RESISTOR >					
R1059	1-216-033-00	METAL CHIP 220 5%	1/10W		
R1060	1-216-033-00	METAL CHIP 220 5%	1/10W		
R1061	1-216-037-00	METAL CHIP 330 5%	1/10W		
R1062	1-216-037-00	METAL CHIP 330 5%	1/10W		
R1063	1-216-041-00	METAL CHIP 470 5%	1/10W		
R1064	1-216-041-00	METAL CHIP 470 5%	1/10W		
R1065	1-216-045-00	METAL CHIP 680 5%	1/10W		
R1066	1-216-045-00	METAL CHIP 680 5%	1/10W		
R1067	1-216-057-00	METAL CHIP 2.2K 5%	1/10W		
R1068	1-216-057-00	METAL CHIP 2.2K 5%	1/10W		
< SWITCH >					
S1012	1-771-349-21	SWITCH, KEYBOARD (DISC1)			
S1013	1-771-349-21	SWITCH, KEYBOARD (CONTINUE)			
S1014	1-771-349-21	SWITCH, KEYBOARD (DISC2)			
S1015	1-771-349-21	SWITCH, KEYBOARD (SHUFFLE)			
S1016	1-771-349-21	SWITCH, KEYBOARD (DISC3)			
S1017	1-771-349-21	SWITCH, KEYBOARD (PROGRAM)			
S1018	1-771-349-21	SWITCH, KEYBOARD (DISC4)			
S1019	1-771-349-21	SWITCH, KEYBOARD (MENU)			
S1020	1-771-349-21	SWITCH, KEYBOARD (DISC5)			
S1021	1-771-349-21	SWITCH, KEYBOARD (TIME/TEXT)			

	1-676-244-11	LOADING MOTOR BOARD	*****		

	A-4725-662-A	MAIN BOARD, COMPLETE	*****		
< CAPACITOR >					
C506	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C507	1-165-176-11	CERAMIC CHIP 0.047uF	10.00%	16V	
C508	1-165-176-11	CERAMIC CHIP 0.047uF	10.00%	16V	
C509	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C510	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	

Ref. No.	Part No.	Description	Remarks		
C511	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C513	1-115-156-11	CERAMIC CHIP 1uF		10V	
C516	1-162-966-11	CERAMIC CHIP 0.0022uF	10%	50V	
C517	1-125-822-11	TANTALUM 10uF	20.00%	10V	
C518	1-164-156-11	CERAMIC CHIP 0.1uF		25V	
C519	1-164-156-11	CERAMIC CHIP 0.1uF		25V	
C520	1-126-395-11	ELECT 22uF	20%	16V	
C521	1-162-965-11	CERAMIC CHIP 0.0015uF	10%	50V	
C523	1-162-965-11	CERAMIC CHIP 0.0015uF	10%	50V	
C525	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C526	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C528	1-125-822-11	TANTALUM 10uF	20.00%	10V	
C530	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C531	1-165-176-11	CERAMIC CHIP 0.047uF	10.00%	16V	
C532	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C533	1-162-966-11	CERAMIC CHIP 0.0022uF	10%	50V	
C534	1-162-970-11	CERAMIC CHIP 0.01uF	10%	25V	
C535	1-162-966-11	CERAMIC CHIP 0.0022uF	10%	50V	
C536	1-125-891-11	CERAMIC CHIP 0.47uF	10.00%	10V	
C539	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C541	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C542	1-125-891-11	CERAMIC CHIP 0.47uF	10.00%	10V	
C543	1-164-156-11	CERAMIC CHIP 0.1uF		25V	
C544	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C545	1-125-822-11	TANTALUM 10uF	20.00%	10V	
C547	1-164-156-11	CERAMIC CHIP 0.1uF		25V	
C548	1-162-970-11	CERAMIC CHIP 0.01uF	10%	25V	
C549	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C550	1-162-963-11	CERAMIC CHIP 680PF	10%	50V	
C551	1-125-891-11	CERAMIC CHIP 0.47uF	10.00%	10V	
C553	1-162-970-11	CERAMIC CHIP 0.01uF	10%	25V	
C554	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C555	1-162-963-11	CERAMIC CHIP 680PF	10%	50V	
C556	1-125-822-11	TANTALUM 10uF	20.00%	10V	
C558	1-162-963-11	CERAMIC CHIP 680PF	10%	50V	
C559	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C560	1-162-965-11	CERAMIC CHIP 0.0015uF	10%	50V	
C561	1-115-156-11	CERAMIC CHIP 1uF		10V	
C562	1-162-963-11	CERAMIC CHIP 680PF	10%	50V	
C563	1-162-927-11	CERAMIC CHIP 100PF	5%	50V	
C565	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C567	1-115-156-11	CERAMIC CHIP 1uF		10V	
C568	1-125-822-11	TANTALUM 10uF	20.00%	10V	
C569	1-164-156-11	CERAMIC CHIP 0.1uF		25V	
C570	1-125-822-11	TANTALUM 10uF	20.00%	10V	
C572	1-115-156-11	CERAMIC CHIP 1uF		10V	
C573	1-162-927-11	CERAMIC CHIP 100PF	5%	50V	
C577	1-162-970-11	CERAMIC CHIP 0.01uF	10%	25V	
C579	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C582	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C583	1-107-826-11	CERAMIC CHIP 0.1uF	10.00%	16V	
C584	1-126-395-11	ELECT 22uF	20%	16V	
C587	1-164-156-11	CERAMIC CHIP 0.1uF		25V	
C588	1-162-966-11	CERAMIC CHIP 0.0022uF	10%	50V	
C589	1-162-966-11	CERAMIC CHIP 0.0022uF	10%	50V	
C590	1-162-964-11	CERAMIC CHIP 0.001uF	10%	50V	
C591	1-125-822-11	TANTALUM 10uF	20.00%	10V	
C592	1-125-822-11	TANTALUM 10uF	20.00%	10V	
C701	1-125-822-11	TANTALUM 10uF	20.00%	10V	
C702	1-125-822-11	TANTALUM 10uF	20.00%	10V	

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C704	1-115-156-11	CERAMIC CHIP	1uF 10V	C795	1-126-206-11	ELECT CHIP	100uF 20% 6.3V
C705	1-115-156-11	CERAMIC CHIP	1uF 10V	C796	1-115-156-11	CERAMIC CHIP	1uF 10V
C706	1-115-156-11	CERAMIC CHIP	1uF 10V	C797	1-127-745-11	ELECT CHIP	22uF 20% 6.3V
C707	1-162-921-11	CERAMIC CHIP	33PF 5% 50V	C800	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C708	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C802	1-125-822-11	TANTALUM	10uF 20.00% 10V
C709	1-115-156-11	CERAMIC CHIP	1uF 10V	C803	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C711	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C804	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C712	1-164-816-11	CERAMIC CHIP	220PF 2.00% 50V	C807	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C713	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C808	1-162-921-11	CERAMIC CHIP	33PF 5% 50V
C714	1-115-156-11	CERAMIC CHIP	1uF 10V	C809	1-125-822-11	TANTALUM	10uF 20.00% 10V
C715	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V	C810	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C716	1-125-891-11	CERAMIC CHIP	0.47uF 10.00% 10V	C811	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C717	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C812	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C718	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C813	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C720	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V	C815	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C721	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C817	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C722	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C818	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C723	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C819	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C724	1-115-156-11	CERAMIC CHIP	1uF 10V	C837	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C725	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C838	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C726	1-115-156-11	CERAMIC CHIP	1uF 10V	C839	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C727	1-125-822-11	TANTALUM	10uF 20.00% 10V	C840	1-125-822-11	TANTALUM	10uF 20.00% 10V
C728	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V	C841	1-125-822-11	TANTALUM	10uF 20.00% 10V
C729	1-125-822-11	TANTALUM	10uF 20.00% 10V	C842	1-115-156-11	CERAMIC CHIP	1uF 10V
C730	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C843	1-115-156-11	CERAMIC CHIP	1uF 10V
C731	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C846	1-126-204-11	ELECT CHIP	47uF 20% 16V
C740	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C847	1-115-156-11	CERAMIC CHIP	1uF 10V
C741	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C848	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C742	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C849	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C743	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C850	1-162-945-11	CERAMIC CHIP	22PF 5% 50V
C744	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C851	1-162-945-11	CERAMIC CHIP	22PF 5% 50V
C745	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C852	1-162-945-11	CERAMIC CHIP	22PF 5% 50V
C752	1-115-156-11	CERAMIC CHIP	1uF 10V	C854	1-115-156-11	CERAMIC CHIP	1uF 10V
C760	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C855	1-115-156-11	CERAMIC CHIP	1uF 10V
C761	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C856	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C762	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C857	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C763	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C858	1-126-204-11	ELECT CHIP	47uF 20% 16V
C764	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C860	1-115-156-11	CERAMIC CHIP	1uF 10V
C765	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C861	1-115-156-11	CERAMIC CHIP	1uF 10V
C766	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	C862	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C767	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C864	1-125-822-11	TANTALUM	10uF 20.00% 10V
C768	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C865	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C769	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C866	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C770	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C867	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C771	1-165-176-11	CERAMIC CHIP	0.047uF 10.00% 16V	C870	1-164-677-11	CERAMIC CHIP	0.033uF 10.00% 16V
C772	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C871	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C773	1-125-891-11	CERAMIC CHIP	0.47uF 10.00% 10V	C872	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C774	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V	C901	1-125-822-11	TANTALUM	10uF 20.00% 10V
C775	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C902	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C776	1-115-156-11	CERAMIC CHIP	1uF 10V	C903	1-125-822-11	TANTALUM	10uF 20.00% 10V
C777	1-115-156-11	CERAMIC CHIP	1uF 10V	C904	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C778	1-115-156-11	CERAMIC CHIP	1uF 10V	C905	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C779	1-125-822-11	TANTALUM	10uF 20.00% 10V	C906	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C780	1-125-822-11	TANTALUM	10uF 20.00% 10V	C907	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C781	1-125-822-11	TANTALUM	10uF 20.00% 10V	C908	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C790	1-126-204-11	ELECT CHIP	47uF 20% 16V	C909	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C791	1-126-206-11	ELECT CHIP	100uF 20% 6.3V	C910	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C792	1-126-206-11	ELECT CHIP	100uF 20% 6.3V	C911	1-125-822-11	TANTALUM	10uF 20.00% 10V
C793	1-126-246-11	ELECT CHIP	220uF 20% 4V	C913	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C794	1-126-246-11	ELECT CHIP	220uF 20% 4V	C914	1-125-822-11	TANTALUM	10uF 20.00% 10V

SCD-C555ES

MAIN

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C915	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FB756	1-500-283-11	FERRITE OUH	
C916	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FB757	1-500-283-11	FERRITE OUH	
C917	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FB801	1-500-283-11	FERRITE OUH	
C918	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FB802	1-500-283-11	FERRITE OUH	
C920	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FB803	1-500-283-11	FERRITE OUH	
C921	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	FB804	1-500-283-11	FERRITE OUH	
C923	1-115-156-11	CERAMIC CHIP 1uF	10V	FB1503	1-216-864-11	METAL CHIP 0	5% 1/16W
C924	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V			< FILTER >	
C926	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FL501	1-234-177-11	FILTER, CHIP EMI	
C927	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FL502	1-234-177-11	FILTER, CHIP EMI	
C928	1-125-822-11	TANTALUM 10uF	20.00% 10V	FL701	1-234-177-11	FILTER, CHIP EMI	
C950	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FL702	1-234-177-11	FILTER, CHIP EMI	
C951	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FL703	1-234-177-11	FILTER, CHIP EMI	
C960	1-126-204-11	ELECT CHIP 47uF	20% 16V	FL704	1-234-177-11	FILTER, CHIP EMI	
C961	1-164-677-11	CERAMIC CHIP 0.033uF	10.00% 16V	FL705	1-234-177-11	FILTER, CHIP EMI	
C962	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FL706	1-234-177-11	FILTER, CHIP EMI	
C963	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FL750	1-233-893-21	FILTER, CHIP EMI	
C983	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	FL751	1-234-177-11	FILTER, CHIP EMI	
C990	1-107-826-11	CERAMIC CHIP 0.1uF	10.00% 16V	FL752	1-234-177-11	FILTER, CHIP EMI	
C1500	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FL753	1-234-177-11	FILTER, CHIP EMI	
C1501	1-115-156-11	CERAMIC CHIP 1uF	10V	FL754	1-234-177-11	FILTER, CHIP EMI	
C1502	1-164-156-11	CERAMIC CHIP 0.1uF	25V	FL807	1-234-177-11	FILTER, CHIP EMI	
C1503	1-115-156-11	CERAMIC CHIP 1uF	10V	FL808	1-234-177-11	FILTER, CHIP EMI	
C1504	1-115-156-11	CERAMIC CHIP 1uF	10V	FL810	1-234-177-11	FILTER, CHIP EMI	
C1505	1-115-156-11	CERAMIC CHIP 1uF	10V	FL811	1-234-177-11	FILTER, CHIP EMI	
C1506	1-115-156-11	CERAMIC CHIP 1uF	10V	FL812	1-234-177-11	FILTER, CHIP EMI	
C1507	1-162-921-11	CERAMIC CHIP 33PF	5% 50V	FL813	1-234-177-11	FILTER, CHIP EMI	
C1508	1-125-822-11	TANTALUM 10uF	20.00% 10V	FL815	1-234-177-11	FILTER, CHIP EMI	
		< CONNECTOR >		FL901	1-234-177-11	FILTER, CHIP EMI	
CN503	1-784-883-21	CONNECTOR,FFC(LIF(NON-ZIF))35P		FL902	1-234-177-11	FILTER, CHIP EMI	
CN701	1-794-606-41	PIN, CONNECTOR (PC BOARD) 9P		FL903	1-234-177-11	FILTER, CHIP EMI	
CN801	1-774-731-21	PIN, CONNECTOR (PC BOARD) 5P		FL904	1-234-177-11	FILTER, CHIP EMI	
CN901	1-784-871-21	CONNECTOR,FFC(LIF(NON-ZIF))19P		FL906	1-234-177-11	FILTER, CHIP EMI	
CN902	1-784-871-21	CONNECTOR,FFC(LIF(NON-ZIF))19P		FL907	1-234-177-11	FILTER, CHIP EMI	
CN904	1-774-180-11	PIN, CONNECTOR (PC BOARD) 6P		FL908	1-234-177-11	FILTER, CHIP EMI	
CN905	1-794-804-11	PIN, CONNECTOR (PC BOARD) 13P				< IC >	
CN906	1-794-805-11	PIN, CONNECTOR (PC BOARD) 11P		IC502	8-759-567-26	IC BA5983FP-E2	
		< DIODE >		IC503	8-759-701-40	IC NJM3404AM-TE2	
D903	8-719-049-09	DIODE 1SS367-T3SONY		IC504	8-759-473-95	IC uPC2905T-E1	
D904	8-719-049-09	DIODE 1SS367-T3SONY		IC509	8-752-397-42	IC CXD3008Q	
D905	8-719-049-09	DIODE 1SS367-T3SONY		IC512	8-759-490-71	IC BA5912AFP-YE2	
		< FERRITE BEAD >		IC701	8-752-414-94	IC CXD1882R-1	
FB701	1-469-835-11	FERRITE OUH		IC702	8-759-637-50	IC TA48M025F(Te16L)	
FB702	1-469-835-11	FERRITE OUH		IC703	8-759-701-40	IC NJM3404AM-TE2	
FB703	1-500-283-11	FERRITE OUH		IC706	8-759-543-83	IC GM71VS18163CLT-6TR	
FB704	1-500-283-11	FERRITE OUH		IC708	8-759-701-40	IC NJM3404AM-TE2	
FB705	1-469-835-11	FERRITE OUH		IC801	8-752-407-50	IC CXD2752R	
FB706	1-469-835-11	FERRITE OUH		IC803	8-759-833-14	IC CXD9647R	
FB707	1-500-283-11	FERRITE OUH		IC808	8-759-573-19	IC MT48LC1M16A1TG-7S	
FB708	1-500-283-11	FERRITE OUH		IC810	8-759-449-58	IC LM7131BCM5X	
FB709	1-500-283-11	FERRITE OUH		IC811	8-759-549-25	IC SN74LVU04APWR	
FB710	1-500-283-11	FERRITE OUH		IC812	8-759-549-15	IC SN74LV245APWR	
FB751	1-500-283-11	FERRITE OUH		IC813	8-759-549-15	IC SN74LV245APWR	
FB752	1-500-283-11	FERRITE OUH		IC814	8-759-649-33	IC SN74AHTCT1G08DCKR	
FB753	1-500-283-11	FERRITE OUH		IC901	8-752-916-45	IC CXP974F096R-1	
FB754	1-500-283-11	FERRITE OUH		IC902	8-752-392-03	IC CXD1095BR	
FB755	1-500-283-11	FERRITE OUH					

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
IC903	8-759-643-29	IC BR24C64F-E2		R590	1-218-716-11	METAL CHIP 10K	0.5% 1/16W
IC904	8-759-685-33	IC BU2500FV-E2		R591	1-218-702-11	METAL CHIP 2.7K	0.5% 1/16W
IC905	8-759-636-64	IC M51957BFP-600C		R592	1-218-708-11	METAL CHIP 4.7K	0.5% 1/16W
IC906	8-759-645-76	IC TC74VHCT32AFT		R593	1-218-740-11	METAL CHIP 100K	0.5% 1/16W
IC920	8-759-460-76	IC BA07FP-E2		R594	1-218-728-11	METAL CHIP 33K	0.5% 1/16W
< COIL >				R595	1-218-708-11	METAL CHIP 4.7K	0.5% 1/16W
L801	1-410-369-11	INDUCTOR CHIP 1uH		R596	1-216-864-11	METAL CHIP 0	5% 1/16W
L802	1-410-369-11	INDUCTOR CHIP 1uH		R597	1-218-716-11	METAL CHIP 10K	0.5% 1/16W
L803	1-410-369-11	INDUCTOR CHIP 1uH		R599	1-218-702-11	METAL CHIP 2.7K	0.5% 1/16W
< TRANSISTOR >				R600	1-216-864-11	METAL CHIP 0	5% 1/16W
Q902	8-729-017-30	TRANSISTOR RN1703-TE85R		R601	1-218-724-11	METAL CHIP 22K	0.5% 1/16W
Q903	8-729-017-30	TRANSISTOR RN1703-TE85R		R602	1-218-708-11	METAL CHIP 4.7K	0.5% 1/16W
Q904	8-729-017-30	TRANSISTOR RN1703-TE85R		R603	1-218-704-11	METAL CHIP 3.3K	0.5% 1/16W
Q906	8-729-403-35	TRANSISTOR UN5113-TX		R604	1-218-692-11	METAL CHIP 1K	0.5% 1/16W
< RESISTOR >				R605	1-216-864-11	METAL CHIP 0	5% 1/16W
R501	1-216-833-11	METAL CHIP 10K	5% 1/16W	R606	1-216-841-11	METAL CHIP 47K	5% 1/16W
R502	1-216-833-11	METAL CHIP 10K	5% 1/16W	R607	1-218-708-11	METAL CHIP 4.7K	0.5% 1/16W
R509	1-218-736-11	METAL CHIP 68K	0.5% 1/16W	R608	1-218-716-11	METAL CHIP 10K	0.5% 1/16W
R510	1-218-736-11	METAL CHIP 68K	0.5% 1/16W	R609	1-216-864-11	METAL CHIP 0	5% 1/16W
R511	1-218-740-11	METAL CHIP 100K	0.5% 1/16W	R610	1-216-864-11	METAL CHIP 0	5% 1/16W
R512	1-218-740-11	METAL CHIP 100K	0.5% 1/16W	R611	1-218-724-11	METAL CHIP 22K	0.5% 1/16W
R513	1-216-797-11	METAL CHIP 10	5% 1/16W	R612	1-216-864-11	METAL CHIP 0	5% 1/16W
R515	1-216-864-11	METAL CHIP 0	5% 1/16W	R613	1-216-857-11	METAL CHIP 1M	5% 1/16W
R516	1-216-797-11	METAL CHIP 10	5% 1/16W	R617	1-216-857-11	METAL CHIP 1M	5% 1/16W
R518	1-216-797-11	METAL CHIP 10	5% 1/16W	R618	1-218-911-11	METAL CHIP 470K	0.5% 1/16W
R520	1-216-864-11	METAL CHIP 0	5% 1/16W	R619	1-216-864-11	METAL CHIP 0	5% 1/16W
R522	1-216-864-11	METAL CHIP 0	5% 1/16W	R622	1-216-864-11	METAL CHIP 0	5% 1/16W
R523	1-216-797-11	METAL CHIP 10	5% 1/16W	R625	1-216-815-11	METAL CHIP 330	5% 1/16W
R529	1-218-748-11	METAL CHIP 220K	0.5% 1/16W	R629	1-216-864-11	METAL CHIP 0	5% 1/16W
R530	1-218-748-11	METAL CHIP 220K	0.5% 1/16W	R632	1-216-833-11	METAL CHIP 10K	5% 1/16W
R534	1-218-704-11	METAL CHIP 3.3K	0.5% 1/16W	R634	1-216-831-11	METAL CHIP 6.8K	5% 1/16W
R538	1-218-740-11	METAL CHIP 100K	0.5% 1/16W	R642	1-216-839-11	METAL CHIP 33K	5% 1/16W
R540	1-216-833-11	METAL CHIP 10K	5% 1/16W	R644	1-216-797-11	METAL CHIP 10	5% 1/16W
R541	1-218-740-11	METAL CHIP 100K	0.5% 1/16W	R645	1-216-797-11	METAL CHIP 10	5% 1/16W
R544	1-218-740-11	METAL CHIP 100K	0.5% 1/16W	R654	1-216-833-11	METAL CHIP 10K	5% 1/16W
R545	1-218-740-11	METAL CHIP 100K	0.5% 1/16W	R655	1-216-821-11	METAL CHIP 1K	5% 1/16W
R554	1-216-837-11	METAL CHIP 22K	5% 1/16W	R656	1-216-821-11	METAL CHIP 1K	5% 1/16W
R555	1-218-704-11	METAL CHIP 3.3K	0.5% 1/16W	R657	1-218-700-11	METAL CHIP 2.2K	0.5% 1/16W
R556	1-216-839-11	METAL CHIP 33K	5% 1/16W	R658	1-218-700-11	METAL CHIP 2.2K	0.5% 1/16W
R557	1-216-841-11	METAL CHIP 47K	5% 1/16W	R659	1-218-700-11	METAL CHIP 2.2K	0.5% 1/16W
R558	1-216-841-11	METAL CHIP 47K	5% 1/16W	R660	1-218-700-11	METAL CHIP 2.2K	0.5% 1/16W
R559	1-216-797-11	METAL CHIP 10	5% 1/16W	R661	1-220-920-11	RES-CHIP 0.47	5% 1/2W
R560	1-216-821-11	METAL CHIP 1K	5% 1/16W	R662	1-216-833-11	METAL CHIP 10K	5% 1/16W
R561	1-216-821-11	METAL CHIP 1K	5% 1/16W	R663	1-216-833-11	METAL CHIP 10K	5% 1/16W
R562	1-216-821-11	METAL CHIP 1K	5% 1/16W	R670	1-216-833-11	METAL CHIP 10K	5% 1/16W
R563	1-216-797-11	METAL CHIP 10	5% 1/16W	R671	1-216-833-11	METAL CHIP 10K	5% 1/16W
R569	1-216-864-11	METAL CHIP 0	5% 1/16W	R672	1-216-833-11	METAL CHIP 10K	5% 1/16W
R572	1-216-797-11	METAL CHIP 10	5% 1/16W	R674	1-216-821-11	METAL CHIP 1K	5% 1/16W
R573	1-216-797-11	METAL CHIP 10	5% 1/16W	R675	1-216-821-11	METAL CHIP 1K	5% 1/16W
R577	1-216-864-11	METAL CHIP 0	5% 1/16W	R701	1-218-748-11	METAL CHIP 220K	0.5% 1/16W
R578	1-216-864-11	METAL CHIP 0	5% 1/16W	R702	1-218-740-11	METAL CHIP 100K	0.5% 1/16W
R584	1-218-728-11	METAL CHIP 33K	0.5% 1/16W	R703	1-218-740-11	METAL CHIP 100K	0.5% 1/16W
R586	1-216-864-11	METAL CHIP 0	5% 1/16W	R704	1-218-748-11	METAL CHIP 220K	0.5% 1/16W
R588	1-218-716-11	METAL CHIP 10K	0.5% 1/16W	R705	1-218-740-11	METAL CHIP 100K	0.5% 1/16W
R589	1-218-728-11	METAL CHIP 33K	0.5% 1/16W	R706	1-218-740-11	METAL CHIP 100K	0.5% 1/16W
				R707	1-218-668-11	METAL CHIP 100	0.5% 1/16W
				R708	1-216-857-11	METAL CHIP 1M	5% 1/16W
				R709	1-218-736-11	METAL CHIP 68K	0.5% 1/16W
				R710	1-218-716-11	METAL CHIP 10K	0.5% 1/16W
				R711	1-218-700-11	METAL CHIP 2.2K	0.5% 1/16W

SCD-C555ES

MAIN

Ref. No.	Part No.	Description			Remarks	Ref. No.	Part No.	Description			Remarks
R712	1-218-716-11	METAL CHIP	10K	0.5%	1/16W	R829	1-216-809-11	METAL CHIP	100	5%	1/16W
R713	1-218-716-11	METAL CHIP	10K	0.5%	1/16W	R830	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R714	1-218-716-11	METAL CHIP	10K	0.5%	1/16W	R831	1-216-839-11	METAL CHIP	33K	5%	1/16W
R716	1-218-668-11	METAL CHIP	100	0.5%	1/16W	R839	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R717	1-218-740-11	METAL CHIP	100K	0.5%	1/16W	R842	1-216-833-11	METAL CHIP	10K	5%	1/16W
R718	1-218-716-11	METAL CHIP	10K	0.5%	1/16W	R847	1-216-801-11	METAL CHIP	22	5%	1/16W
R719	1-218-692-11	METAL CHIP	1K	0.5%	1/16W	R848	1-216-801-11	METAL CHIP	22	5%	1/16W
R720	1-216-821-11	METAL CHIP	1K	5%	1/16W	R849	1-216-801-11	METAL CHIP	22	5%	1/16W
R721	1-218-728-11	METAL CHIP	33K	0.5%	1/16W	R850	1-216-801-11	METAL CHIP	22	5%	1/16W
R724	1-218-692-11	METAL CHIP	1K	0.5%	1/16W	R853	1-216-813-11	METAL CHIP	220	5%	1/16W
R725	1-218-716-11	METAL CHIP	10K	0.5%	1/16W	R854	1-216-813-11	METAL CHIP	220	5%	1/16W
R726	1-218-740-11	METAL CHIP	100K	0.5%	1/16W	R855	1-216-813-11	METAL CHIP	220	5%	1/16W
R727	1-218-704-11	METAL CHIP	3.3K	0.5%	1/16W	R856	1-218-728-11	METAL CHIP	33K	0.5%	1/16W
R728	1-218-716-11	METAL CHIP	10K	0.5%	1/16W	R857	1-218-728-11	METAL CHIP	33K	0.5%	1/16W
R729	1-216-864-11	METAL CHIP	0	5%	1/16W	R858	1-216-819-11	METAL CHIP	680	5%	1/16W
R730	1-216-801-11	METAL CHIP	22	5%	1/16W	R859	1-216-819-11	METAL CHIP	680	5%	1/16W
R731	1-216-801-11	METAL CHIP	22	5%	1/16W	R860	1-216-819-11	METAL CHIP	680	5%	1/16W
R732	1-216-833-11	METAL CHIP	10K	5%	1/16W	R861	1-216-813-11	METAL CHIP	220	5%	1/16W
R733	1-216-833-11	METAL CHIP	10K	5%	1/16W	R870	1-216-833-11	METAL CHIP	10K	5%	1/16W
R734	1-216-833-11	METAL CHIP	10K	5%	1/16W	R872	1-216-864-11	METAL CHIP	0	5%	1/16W
R735	1-216-833-11	METAL CHIP	10K	5%	1/16W	R874	1-216-803-11	METAL CHIP	33	5%	1/16W
R736	1-216-833-11	METAL CHIP	10K	5%	1/16W	R875	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R737	1-216-833-11	METAL CHIP	10K	5%	1/16W	R876	1-216-864-11	METAL CHIP	0	5%	1/16W
R738	1-216-833-11	METAL CHIP	10K	5%	1/16W	R877	1-216-833-11	METAL CHIP	10K	5%	1/16W
R740	1-216-833-11	METAL CHIP	10K	5%	1/16W	R878	1-216-833-11	METAL CHIP	10K	5%	1/16W
R741	1-216-801-11	METAL CHIP	22	5%	1/16W	R879	1-216-833-11	METAL CHIP	10K	5%	1/16W
R742	1-216-801-11	METAL CHIP	22	5%	1/16W	R880	1-216-833-11	METAL CHIP	10K	5%	1/16W
R743	1-216-801-11	METAL CHIP	22	5%	1/16W	R881	1-216-833-11	METAL CHIP	10K	5%	1/16W
R744	1-216-801-11	METAL CHIP	22	5%	1/16W	R882	1-216-833-11	METAL CHIP	10K	5%	1/16W
R745	1-216-841-11	METAL CHIP	47K	5%	1/16W	R883	1-216-833-11	METAL CHIP	10K	5%	1/16W
R746	1-216-841-11	METAL CHIP	47K	5%	1/16W	R884	1-216-833-11	METAL CHIP	10K	5%	1/16W
R750	1-216-833-11	METAL CHIP	10K	5%	1/16W	R885	1-216-833-11	METAL CHIP	10K	5%	1/16W
R761	1-218-700-11	METAL CHIP	2.2K	0.5%	1/16W	R886	1-216-833-11	METAL CHIP	10K	5%	1/16W
R762	1-218-724-11	METAL CHIP	22K	0.5%	1/16W	R887	1-216-833-11	METAL CHIP	10K	5%	1/16W
R763	1-218-714-11	METAL CHIP	8.2K	0.5%	1/16W	R888	1-216-833-11	METAL CHIP	10K	5%	1/16W
R764	1-216-857-11	METAL CHIP	1M	5%	1/16W	R889	1-216-833-11	METAL CHIP	10K	5%	1/16W
R765	1-218-724-11	METAL CHIP	22K	0.5%	1/16W	R891	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R767	1-218-732-11	METAL CHIP	47K	0.5%	1/16W	R892	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R768	1-216-809-11	METAL CHIP	100	5%	1/16W	R893	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R769	1-218-700-11	METAL CHIP	2.2K	0.5%	1/16W	R894	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R770	1-216-864-11	METAL CHIP	0	5%	1/16W	R895	1-218-704-11	METAL CHIP	3.3K	0.5%	1/16W
R771	1-216-801-11	METAL CHIP	22	5%	1/16W	R896	1-218-692-11	METAL CHIP	1K	0.5%	1/16W
R772	1-216-801-11	METAL CHIP	22	5%	1/16W	R900	1-216-809-11	METAL CHIP	100	5%	1/16W
R773	1-216-833-11	METAL CHIP	10K	5%	1/16W	R901	1-216-801-11	METAL CHIP	22	5%	1/16W
R776	1-216-864-11	METAL CHIP	0	5%	1/16W	R902	1-216-801-11	METAL CHIP	22	5%	1/16W
R778	1-218-740-11	METAL CHIP	100K	0.5%	1/16W	R903	1-216-801-11	METAL CHIP	22	5%	1/16W
R780	1-216-864-11	METAL CHIP	0	5%	1/16W	R904	1-216-801-11	METAL CHIP	22	5%	1/16W
R786	1-216-864-11	METAL CHIP	0	5%	1/16W	R905	1-216-801-11	METAL CHIP	22	5%	1/16W
R790	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R906	1-216-801-11	METAL CHIP	22	5%	1/16W
R791	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R907	1-216-801-11	METAL CHIP	22	5%	1/16W
R792	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R908	1-216-801-11	METAL CHIP	22	5%	1/16W
R793	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R909	1-216-801-11	METAL CHIP	22	5%	1/16W
R800	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R911	1-216-864-11	METAL CHIP	0	5%	1/16W
R818	1-216-864-11	METAL CHIP	0	5%	1/16W	R912	1-216-833-11	METAL CHIP	10K	5%	1/16W
R820	1-218-713-11	METAL CHIP	7.5K	0.5%	1/16W	R913	1-216-833-11	METAL CHIP	10K	5%	1/16W
R821	1-216-801-11	METAL CHIP	22	5%	1/16W	R915	1-216-809-11	METAL CHIP	100	5%	1/16W
R822	1-216-801-11	METAL CHIP	22	5%	1/16W	R916	1-216-821-11	METAL CHIP	1K	5%	1/16W
R826	1-216-801-11	METAL CHIP	22	5%	1/16W	R917	1-216-821-11	METAL CHIP	1K	5%	1/16W
R827	1-216-809-11	METAL CHIP	100	5%	1/16W	R919	1-216-801-11	METAL CHIP	22	5%	1/16W
R828	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R920	1-216-809-11	METAL CHIP	100	5%	1/16W

MAIN	REMOTE SENSOR	RF
-------------	----------------------	-----------

Ref. No.	Part No.	Description		Remarks	Ref. No.	Part No.	Description		Remarks		
R921	1-216-809-11	METAL CHIP	100	5%	1/16W	R1510	1-216-801-11	METAL CHIP	22	5%	1/16W
R922	1-216-801-11	METAL CHIP	22	5%	1/16W	R1511	1-216-833-11	METAL CHIP	10K	5%	1/16W
R925	1-216-809-11	METAL CHIP	100	5%	1/16W	R1512	1-216-864-11	METAL CHIP	0	5%	1/16W
R926	1-216-809-11	METAL CHIP	100	5%	1/16W	R1517	1-216-809-11	METAL CHIP	100	5%	1/16W
R928	1-216-809-11	METAL CHIP	100	5%	1/16W	R1519	1-216-864-11	METAL CHIP	0	5%	1/16W
R929	1-216-809-11	METAL CHIP	100	5%	1/16W	R1521	1-216-864-11	METAL CHIP	0	5%	1/16W
R930	1-216-809-11	METAL CHIP	100	5%	1/16W	R1524	1-216-833-11	METAL CHIP	10K	5%	1/16W
R931	1-216-809-11	METAL CHIP	100	5%	1/16W	R1525	1-216-809-11	METAL CHIP	100	5%	1/16W
R932	1-216-809-11	METAL CHIP	100	5%	1/16W	R1526	1-216-864-11	METAL CHIP	0	5%	1/16W
R934	1-216-833-11	METAL CHIP	10K	5%	1/16W	R1527	1-216-821-11	METAL CHIP	1K	5%	1/16W
R935	1-216-833-11	METAL CHIP	10K	5%	1/16W	R1528	1-216-833-11	METAL CHIP	10K	5%	1/16W
R936	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R1530	1-216-864-11	METAL CHIP	0	5%	1/16W
R937	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R1534	1-216-833-11	METAL CHIP	10K	5%	1/16W
R938	1-216-833-11	METAL CHIP	10K	5%	1/16W						
R939	1-216-809-11	METAL CHIP	100	5%	1/16W						< VIBRATOR >
R940	1-216-809-11	METAL CHIP	100	5%	1/16W	X901	1-781-945-21	VIBRATOR, CERAMIC 20MHz			
R941	1-216-809-11	METAL CHIP	100	5%	1/16W	*****					
R942	1-216-809-11	METAL CHIP	100	5%	1/16W						
R943	1-216-809-11	METAL CHIP	100	5%	1/16W		1-679-314-11	REMOTE SENSOR BOARD			
R944	1-216-833-11	METAL CHIP	10K	5%	1/16W						*****
R945	1-216-833-11	METAL CHIP	10K	5%	1/16W						< CAPACITOR >
R947	1-216-864-11	METAL CHIP	0	5%	1/16W						
R948	1-218-720-11	METAL CHIP	15K	0.5%	1/16W	C1000	1-164-505-11	CERAMIC CHIP	2.2uF		16V
R949	1-218-720-11	METAL CHIP	15K	0.5%	1/16W						
R950	1-216-833-11	METAL CHIP	10K	5%	1/16W						< IC >
R951	1-216-821-11	METAL CHIP	1K	5%	1/16W	IC1000	8-749-923-80	IC GP1U90XB			
R952	1-216-827-11	METAL CHIP	3.3K	5%	1/16W						< RESISTOR >
R953	1-216-833-11	METAL CHIP	10K	5%	1/16W						
R954	1-216-833-11	METAL CHIP	10K	5%	1/16W	R1002	1-216-025-11	RES-CHIP	100	5%	1/10W
R955	1-216-801-11	METAL CHIP	22	5%	1/16W	*****					
R956	1-216-801-11	METAL CHIP	22	5%	1/16W						
R957	1-216-801-11	METAL CHIP	22	5%	1/16W		A-4726-527-A	RF BOARD, COMPLETE			
R959	1-216-833-11	METAL CHIP	10K	5%	1/16W						*****
R960	1-216-833-11	METAL CHIP	10K	5%	1/16W						< CAPACITOR >
R961	1-216-821-11	METAL CHIP	1K	5%	1/16W						
R962	1-216-833-11	METAL CHIP	10K	5%	1/16W	C001	1-164-676-11	CERAMIC CHIP	2200PF	5.00%	16V
R964	1-218-704-11	METAL CHIP	3.3K	0.5%	1/16W	C002	1-164-676-11	CERAMIC CHIP	2200PF	5.00%	16V
R969	1-216-833-11	METAL CHIP	10K	5%	1/16W	C003	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
R970	1-216-833-11	METAL CHIP	10K	5%	1/16W	C004	1-115-156-11	CERAMIC CHIP	1uF		10V
R971	1-216-809-11	METAL CHIP	100	5%	1/16W	C005	1-128-993-11	ELECT CHIP	22uF	20%	10V
R975	1-216-833-11	METAL CHIP	10K	5%	1/16W	C006	1-115-156-11	CERAMIC CHIP	1uF		10V
R976	1-216-833-11	METAL CHIP	10K	5%	1/16W	C007	1-124-779-00	ELECT CHIP	10uF	20%	16V
R979	1-216-833-11	METAL CHIP	10K	5%	1/16W	C008	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
R980	1-216-833-11	METAL CHIP	10K	5%	1/16W	C009	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
R981	1-216-833-11	METAL CHIP	10K	5%	1/16W	C010	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
R983	1-216-821-11	METAL CHIP	1K	5%	1/16W	C011	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
R988	1-216-864-11	METAL CHIP	0	5%	1/16W	C012	1-164-172-11	CERAMIC CHIP	0.0056uF	10.00%	25V
R990	1-216-821-11	METAL CHIP	1K	5%	1/16W	C013	1-164-172-11	CERAMIC CHIP	0.0056uF	10.00%	25V
R994	1-216-789-11	METAL CHIP	2.2	5%	1/16W	C014	1-124-779-00	ELECT CHIP	10uF	20%	16V
R996	1-216-833-11	METAL CHIP	10K	5%	1/16W	C015	1-124-779-00	ELECT CHIP	10uF	20%	16V
R998	1-216-864-11	METAL CHIP	0	5%	1/16W	C016	1-164-218-11	CERAMIC CHIP	180PF	0.25PF	50V
R1501	1-216-821-11	METAL CHIP	1K	5%	1/16W	C017	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
R1502	1-216-801-11	METAL CHIP	22	5%	1/16W	C018	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
R1503	1-216-801-11	METAL CHIP	22	5%	1/16W	C019	1-124-779-00	ELECT CHIP	10uF	20%	16V
R1504	1-216-801-11	METAL CHIP	22	5%	1/16W	C020	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
R1505	1-216-801-11	METAL CHIP	22	5%	1/16W	C021	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
R1506	1-216-801-11	METAL CHIP	22	5%	1/16W	C022	1-164-357-11	CERAMIC CHIP	0.001uF	5.00%	50V
R1507	1-216-801-11	METAL CHIP	22	5%	1/16W	C023	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
R1508	1-216-801-11	METAL CHIP	22	5%	1/16W	C024	1-162-974-11	CERAMIC CHIP	0.01uF		50V
R1509	1-216-801-11	METAL CHIP	22	5%	1/16W	C025	1-164-156-11	CERAMIC CHIP	0.1uF		25V

RF

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C026	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V			< TRANSISTOR >	
C027	1-164-156-11	CERAMIC CHIP	0.1uF 25V				
C028	1-128-993-11	ELECT CHIP	22uF 20% 10V	Q001	8-729-805-25	TRANSISTOR	2SB1121-ST-TD
C029	1-124-779-00	ELECT CHIP	10uF 20% 16V	Q002	8-729-805-25	TRANSISTOR	2SB1121-ST-TD
C030	1-128-993-11	ELECT CHIP	22uF 20% 10V	Q003	8-729-805-25	TRANSISTOR	2SB1121-ST-TD
				Q005	8-729-820-90	TRANSISTOR	2SD1621-ST-TD
C031	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V			< RESISTOR >	
C032	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V				
C033	1-128-993-11	ELECT CHIP	22uF 20% 10V	R001	1-216-864-11	METAL CHIP	0 5% 1/16W
C034	1-124-779-00	ELECT CHIP	10uF 20% 16V	R002	1-218-668-11	METAL CHIP	100 0.5% 1/16W
C036	1-164-156-11	CERAMIC CHIP	0.1uF 25V	R003	1-216-839-11	METAL CHIP	33K 5% 1/16W
				R005	1-216-864-11	METAL CHIP	0 5% 1/16W
C037	1-164-357-11	CERAMIC CHIP	0.001uF 5.00% 50V	R006	1-216-864-11	METAL CHIP	0 5% 1/16W
C038	1-126-206-11	ELECT CHIP	100uF 20% 6.3V				
C039	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V	R007	1-216-864-11	METAL CHIP	0 5% 1/16W
C040	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	R008	1-216-864-11	METAL CHIP	0 5% 1/16W
C041	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	R011	1-216-864-11	METAL CHIP	0 5% 1/16W
				R012	1-216-864-11	METAL CHIP	0 5% 1/16W
C042	1-164-677-11	CERAMIC CHIP	0.033uF 10.00% 16V	R013	1-216-864-11	METAL CHIP	0 5% 1/16W
C043	1-164-677-11	CERAMIC CHIP	0.033uF 10.00% 16V				
C044	1-164-392-11	CERAMIC CHIP	390PF 5.00% 50V	R014	1-216-864-11	METAL CHIP	0 5% 1/16W
C045	1-115-416-11	CERAMIC CHIP	0.001uF 5.00% 25V	R015	1-216-803-11	METAL CHIP	33 5% 1/16W
C046	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V	R016	1-216-821-11	METAL CHIP	1K 5% 1/16W
				R017	1-216-817-11	METAL CHIP	470 5% 1/16W
C047	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V	R018	1-216-821-11	METAL CHIP	1K 5% 1/16W
C048	1-165-176-11	CERAMIC CHIP	0.047uF 10.00% 16V				
C049	1-128-993-11	ELECT CHIP	22uF 20% 10V	R019	1-216-803-11	METAL CHIP	33 5% 1/16W
C050	1-128-993-11	ELECT CHIP	22uF 20% 10V	R020	1-216-817-11	METAL CHIP	470 5% 1/16W
C051	1-164-156-11	CERAMIC CHIP	0.1uF 25V	R021	1-219-570-11	RES-CHIP	10M 5% 1/16W
				R022	1-218-718-11	METAL CHIP	12K 0.5% 1/16W
C052	1-164-156-11	CERAMIC CHIP	0.1uF 25V	R023	1-216-864-11	METAL CHIP	0 5% 1/16W
C055	1-128-993-11	ELECT CHIP	22uF 20% 10V				
C060	1-115-156-11	CERAMIC CHIP	1uF 10V	R024	1-216-864-11	METAL CHIP	0 5% 1/16W
C064	1-164-156-11	CERAMIC CHIP	0.1uF 25V	R025	1-216-864-11	METAL CHIP	0 5% 1/16W
C068	1-115-156-11	CERAMIC CHIP	1uF 10V	R027	1-216-864-11	METAL CHIP	0 5% 1/16W
				R029	1-216-841-11	METAL CHIP	47K 5% 1/16W
C069	1-115-156-11	CERAMIC CHIP	1uF 10V	R030	1-216-864-11	METAL CHIP	0 5% 1/16W
C070	1-128-993-21	ELECT CHIP	22uF 20% 10V				
C071	1-128-993-21	ELECT CHIP	22uF 20% 10V	R031	1-216-864-11	METAL CHIP	0 5% 1/16W
C081	1-164-357-11	CERAMIC CHIP	0.001uF 5.00% 50V	R032	1-216-864-11	METAL CHIP	0 5% 1/16W
C082	1-164-357-11	CERAMIC CHIP	0.001uF 5.00% 50V	R033	1-216-864-11	METAL CHIP	0 5% 1/16W
				R036	1-216-833-11	METAL CHIP	10K 5% 1/16W
C084	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V	R044	1-216-832-11	METAL CHIP	8.2K 5% 1/16W
C094	1-128-993-11	ELECT CHIP	22uF 20% 10V				
C095	1-164-156-11	CERAMIC CHIP	0.1uF 25V	R046	1-218-668-11	METAL CHIP	100 0.5% 1/16W
		< CONNECTOR >		R053	1-216-864-11	METAL CHIP	0 5% 1/16W
CN001	1-774-731-21	PIN, CONNECTOR (PC BOARD) 5P		R054	1-216-864-11	METAL CHIP	0 5% 1/16W
CN002	1-770-161-21	PIN, CONNECTOR (PC BOARD) 6P		R060	1-216-864-11	METAL CHIP	0 5% 1/16W
CN003	1-794-707-11	CONNECTOR, FFC/FPC 25P		R065	1-218-716-11	METAL CHIP	10K 0.5% 1/16W
CN005	1-784-883-21	CONNECTOR,FFC(LIF(NON-ZIF))35P					
		< DIODE >		R066	1-218-716-11	METAL CHIP	10K 0.5% 1/16W
D001	8-719-016-74	DIODE 1SS352-TPH3		R068	1-216-839-11	METAL CHIP	33K 5% 1/16W
D002	8-719-016-74	DIODE 1SS352-TPH3		R082	1-216-833-11	METAL CHIP	10K 5% 1/16W
		< IC >		R083	1-216-833-11	METAL CHIP	10K 5% 1/16W
IC001	8-752-403-50	IC CXD1881R		R084	1-216-833-11	METAL CHIP	10K 5% 1/16W
IC004	8-759-058-45	IC NJM3403AV(TE2)					
IC081	8-759-701-40	IC NJM3404AM-TE2		R085	1-216-833-11	METAL CHIP	10K 5% 1/16W
		< COIL >		R086	1-216-833-11	METAL CHIP	10K 5% 1/16W
L001	1-412-031-11	INDUCTOR CHIP 47uH		R087	1-216-833-11	METAL CHIP	10K 5% 1/16W
L002	1-412-031-11	INDUCTOR CHIP 47uH		R088	1-216-864-11	METAL CHIP	0 5% 1/16W
L003	1-412-031-11	INDUCTOR CHIP 47uH		R089	1-216-864-11	METAL CHIP	0 5% 1/16W
				R093	1-216-803-11	METAL CHIP	33 5% 1/16W
				R094	1-216-803-11	METAL CHIP	33 5% 1/16W
				R097	1-216-839-11	METAL CHIP	33K 5% 1/16W
				R098	1-216-839-11	METAL CHIP	33K 5% 1/16W

SENSOR

Ref. No.	Part No.	Description	Remarks
	1-676-245-11	SENSOR BOARD *****	
		< CONNECTOR >	
CN10	1-750-243-11	SOCKET, CONNECTOR 6P < DIODE >	
D10	8-749-924-18	PHOTO INTERRUPTER RPI-1391 (TABLE SENSOR)	
D11	8-749-017-45	SENSOR, PHONT RPR-220C1N (DISC SENSOR) < RESISTOR >	
R10	1-249-416-11	CARBON 820 5% 1/4W F	
R11	1-249-407-11	CARBON 150 5% 1/4W F	
R12	1-249-429-11	CARBON 10K 5% 1/4W	

		MISCELLANEOUS *****	
82	1-541-632-11	MOTOR, DC	
102	1-757-135-11	WIRE (FLAT TYPE) (35 CORE)	
103	1-757-097-11	WIRE (FLAT TYPE) (25 CORE)	
104	1-782-901-11	WIRE (FLAT TYPE) (19 CORE)	
△ 106	1-783-531-31	CORD, POWER	
271	1-791-930-11	WIRE (FLAT TYPE) (6 CORE)	
273	1-757-097-11	WIRE (FLAT TYPE) (25 CORE)	
△ T101	1-435-973-11	TRANSFORMER, POWER	
△ T102	1-435-733-21	TRANSFORMER, POWER	
△ 275	8-820-132-02	OPTICAL PICK-UP (KHM-230AAA/J1NP)	

Ref. No.	Part No.	Description	Remarks
		ACCESSORIES & PACKING MATERIALS *****	
	1-476-601-11	REMOTE COMMANDER (RM-SC500)	
	1-590-925-31	CORD, CONNECTION	
	4-228-696-01	COVER, BATTERY (FOR RM-SC500)	
	4-233-219-11	MANUAL, INSTRUCTION (ENGLISH/FRENCH)	

		HARDWARE LIST *****	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
#4	7-685-885-09	SCREW +BVTT 4X16 (S)	
#5	7-621-775-00	SCREW +B 2.6X3	
#6	7-624-106-04	STOP RING 3.0, TYPE -E	
#7	7-685-646-11	SCREW +BVTP 3X8 CZN	
#8	7-685-646-19	SCREW +BVTP 3X8 CZN	
#9	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	

<p>The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
---	---

