CDP-C5CS

SERVICE MANUAL

Ver. 1.0 2004.11

US Model
Canadian Model

Model Name Using Similar Mechanism	CDP-CE375
CD Mechanism Type	CDM59-5BD27
Base Unit Name	BU-5BD27
Optical Pick-up Name	PXR-104X

SPECIFICATIONS

Compact disc player

Laser	Semiconductor laser (λ = 780 nm) Emission duration: continuous
Frequency response	2 Hz to 20 kHz ± 0 5 dB
Dynamic range	More than 93 dB
Harmonic distortion	Less than 0.0045%

Outputs

	Jack type	Maximum output level	Load impedance
ANALOG OUT	Phono jacks	2 V (at 50 kilohms)	Over 10 kilohms
DIGITAL OUT (OPTICAL)	Optical output connector	–18 dBm	Wave length: 660 nm
PHONES	Stereo phone jack	10 mW	32 ohms

General

Power requirements	120 V AC, 60 Hz
Power consumption	11 W
Dimensions (approx.) (w/h/d)	430 x 110 x 400 mm (17 x 4 3/8 x 15 3/4 in.) incl. projecting parts
Mass (approx.)	5 kg (11 lbs 1 oz)

Supplied accessories

Audio cord (2 phono plugs – 2 phono plugs) (1)
Remote commander (remote) (1)
R6 (size AA) batteries (2)

Design and specifications are subject to change without notice.

COMPACT DISC PLAYER

9-879-248-01
2004K1678-1
© 2004.11

Sony Corporation
Audio Group
Published by Sony Engineering Corporation

SONY®

TABLE OF CONTENTS

SAFETY-RELATED COMPONENT WARNING!!

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

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

SAFETY CHECK-OUT

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

LEAKAGE TEST

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

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

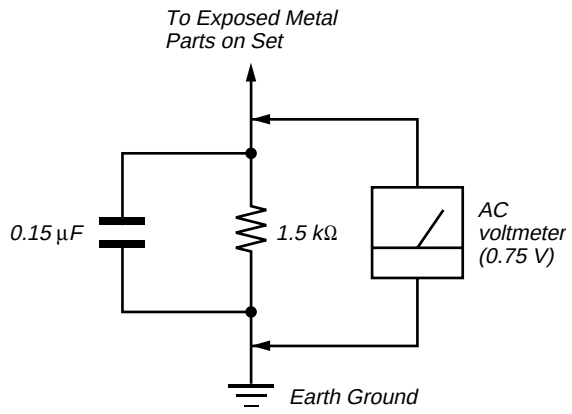


Fig. A. Using an AC voltmeter to check AC leakage.

SECTION 1
SERVICING NOTES

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

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

NOTES ON LASER DIODE EMISSION CHECK

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

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.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

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

Notes on chip component replacement

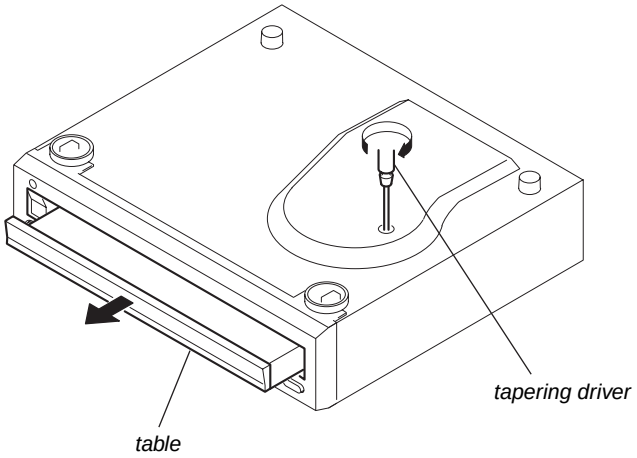
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

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

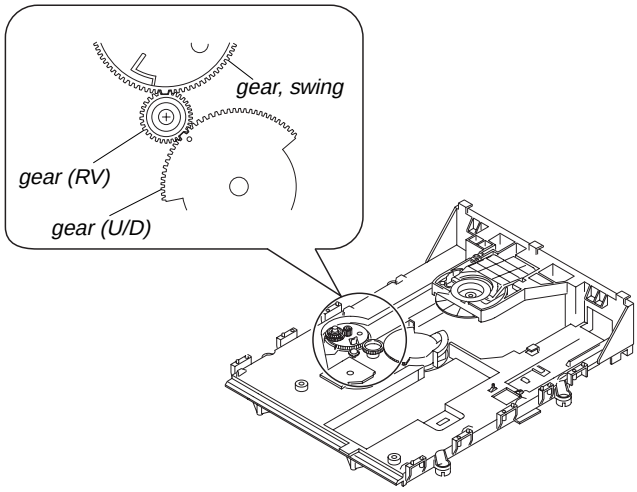
HOW TO OPEN THE DISC TABLE WHEN POWER SWITCH TURNS OFF

Insert a tapering driver into the aperture of the unit bottom, and turn it in the direction of the arrow (to OUT direction).



** To close the disc table, turn the tapering driver in the reverse direction (to IN direction).*

NOTE FOR MAIN GEAR INSTALLATION



SECTION 2
GENERAL

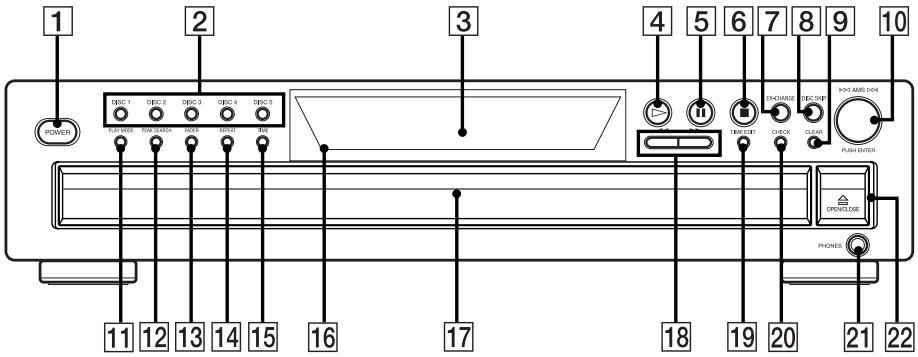
This section is extracted from instruction manual.

Front Panel

The items are arranged in alphabetical order.

Refer to the pages indicated in parentheses ( ) for details.

CDP-C5CS

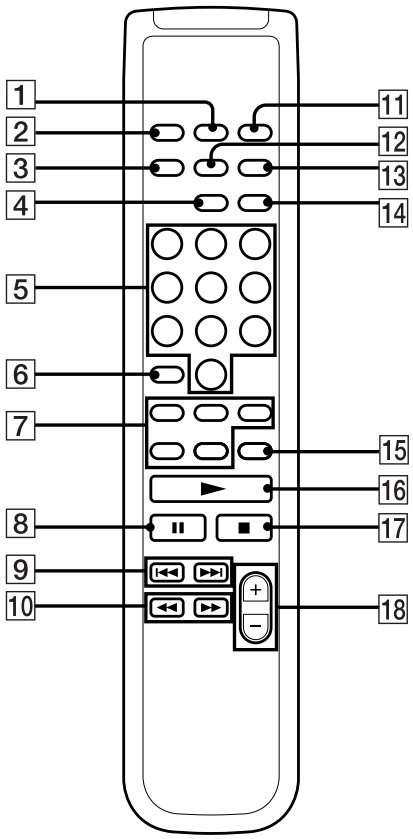


CHECK 20 (11, 12)
CLEAR 9 (11, 12)
DISC 1–5 2 (7, 8, 11)
Disc compartment 17 (7)
DISC SKIP 8 (7, 10, 12)
Display 3 (9)
EX-CHANGE 7 (10, 13)
FADER 13 (12)
PEAK SEARCH 12 (13)
PHONES jack 21 (8)
PLAY MODE 11 (8, 11, 13)
POWER 1 (7)
Remote sensor 16 (6)
REPEAT 14 (8)
TIME 15 (9, 10)
TIME EDIT 19 (12)

BUTTON DESCRIPTIONS

⏏ OPEN/CLOSE 22 (6, 7, 8, 9)
▷ 4 (7, 8, 11, 13)
❚❚ 5 (8, 13)
■ 6 (8, 13)
⏮◁◁AMS▷▷⏭ dial 10 (8, 9, 11, 13)
◀◀/▶▶ 18 (8, 9, 12)

Remote Control



ANALOG OUT LEVEL +/– 18 (8, 9)
CHECK 12 (11, 12)
CLEAR 13 (11, 12)
CONTINUE 2 (7)
DISC 1–5 7 (7, 8, 11)
DISC SKIP 15 (7, 10, 12)
FADER 14 (12)
Number buttons 5 (8, 11)
PROGRAM 11 (7)
REPEAT 3 (8)
SHUFFLE 1 (7)
TIME 4 (9, 10)

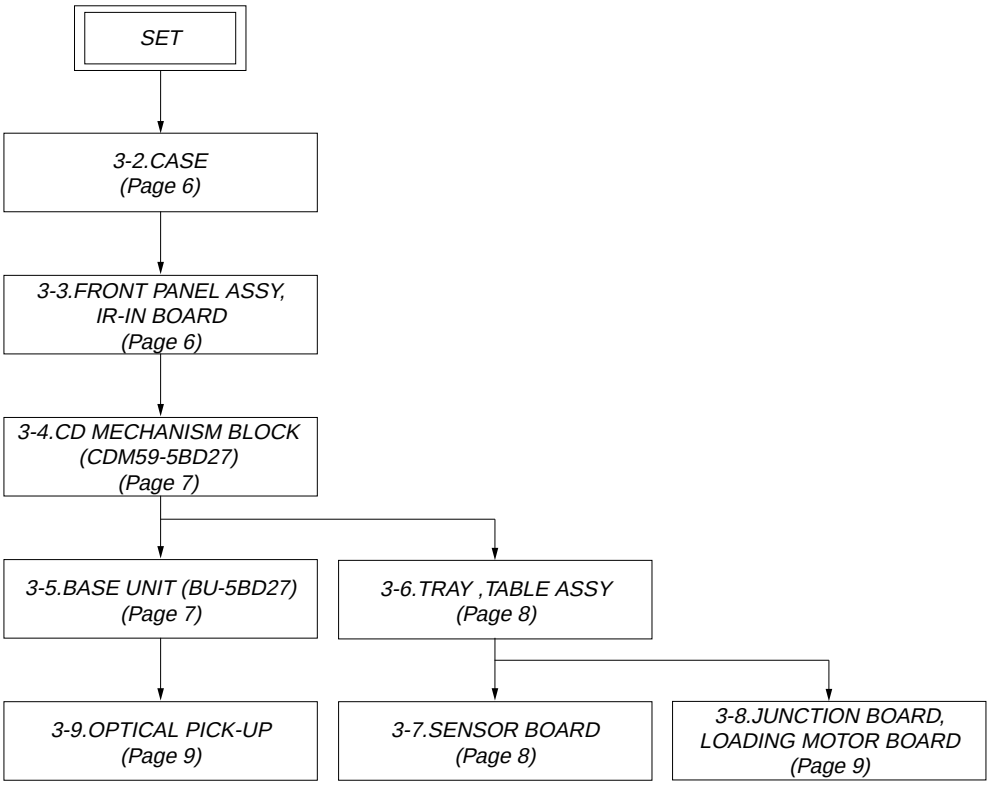
BUTTON DESCRIPTIONS

>10 6 (8)
► 16 (8, 11, 13)
❚❚ 8 (8, 13)
■ 17 (8, 13)
⏮◀◀ AMS ▶▶⏭ 9 (8, 9, 11, 13)
◀◀/▶▶ 10 (8, 9, 12)

SECTION 3
DISASSEMBLY

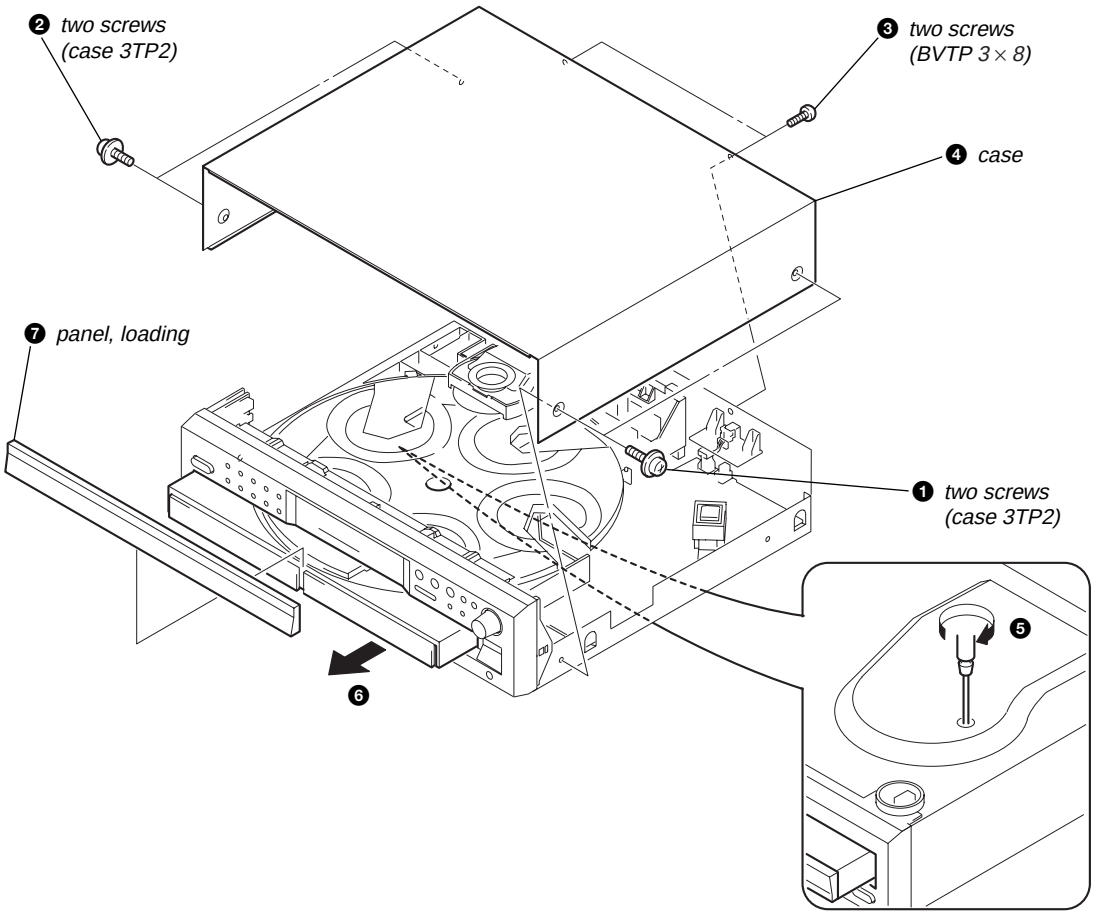
3-1. DISASSEMBLY FLOW

• The equipment can be removed using the following procedure.

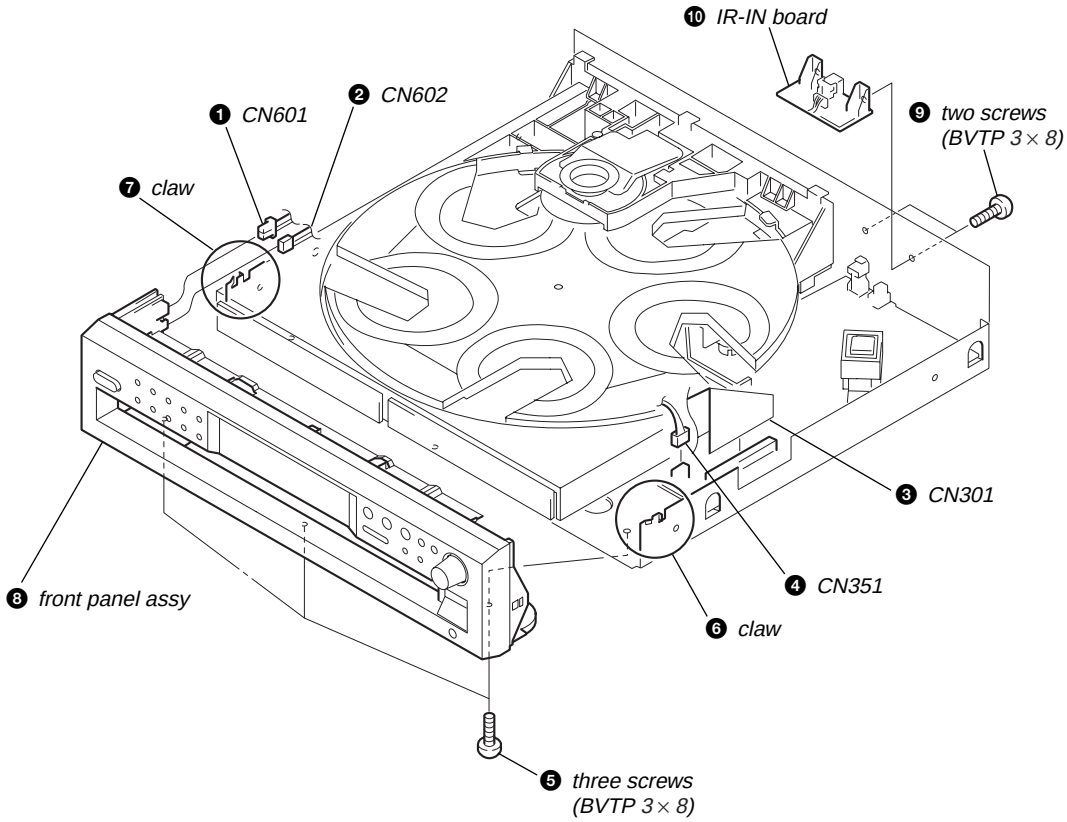


Note: Follow the disassembly procedure in the numerical order given.

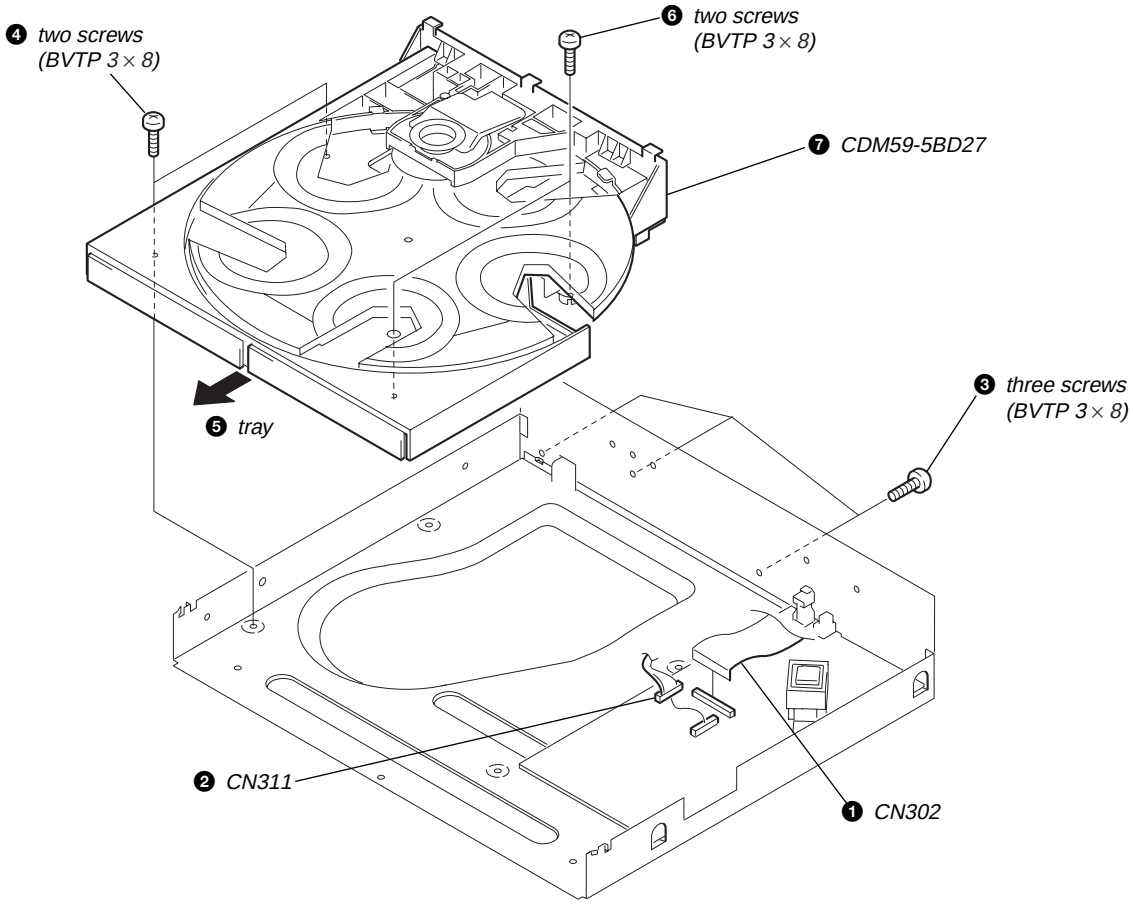
3-2. CASE



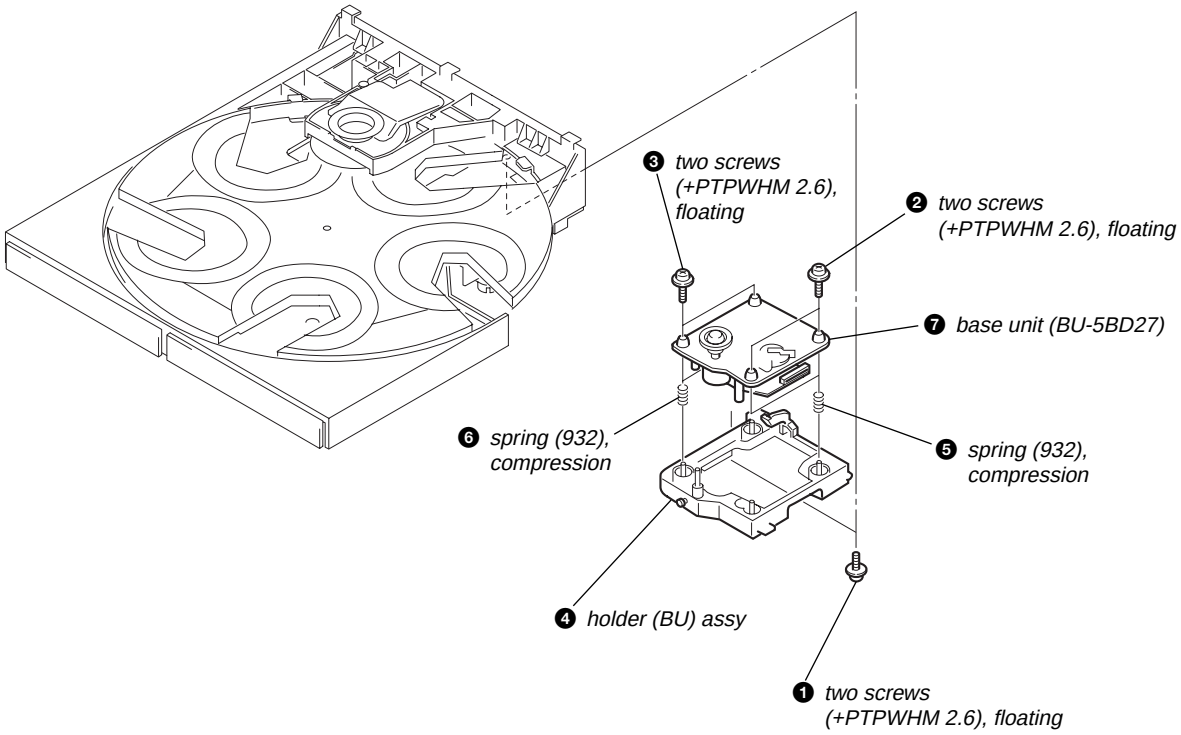
3-3. FRONT PANEL ASSY, IR-IN BOARD



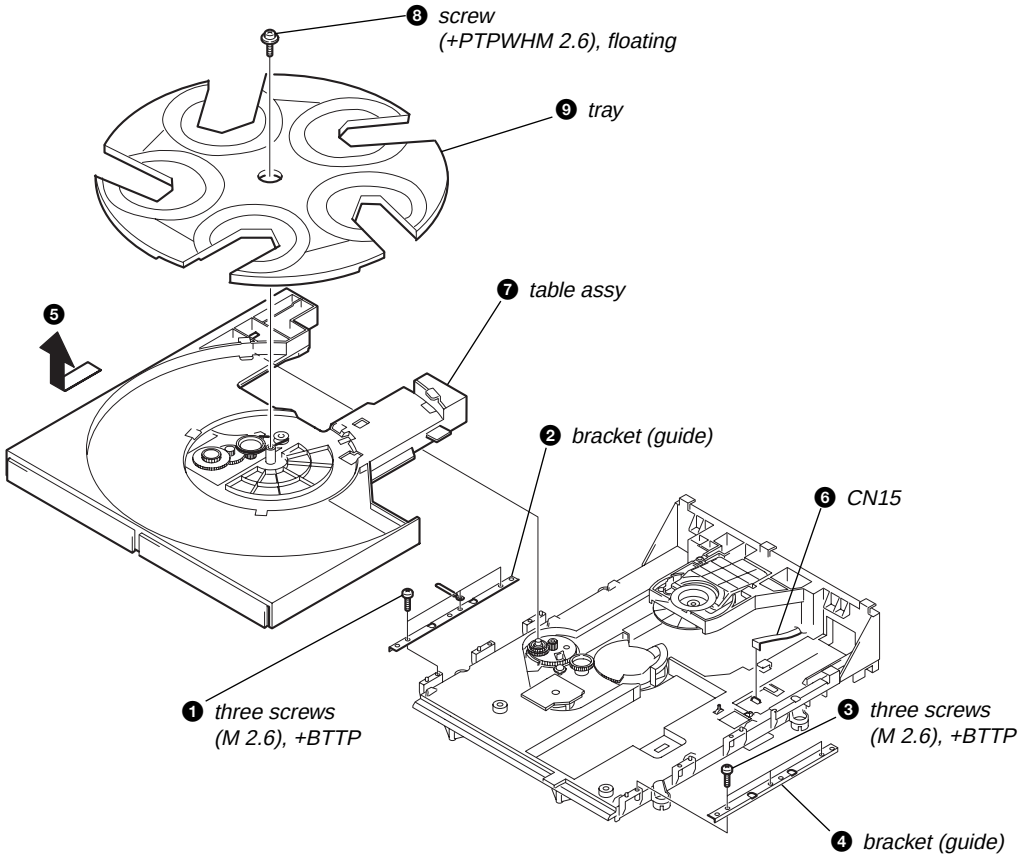
3-4. CD MECHANISM BLOCK (CDM59-5BD27)



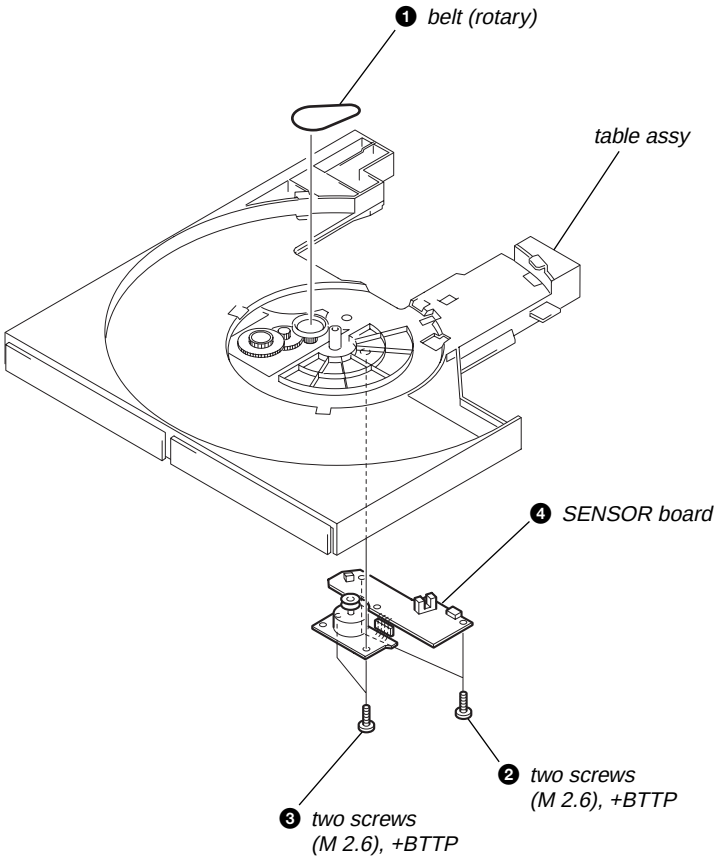
3-5. BASE UNIT (BU-5BD27)



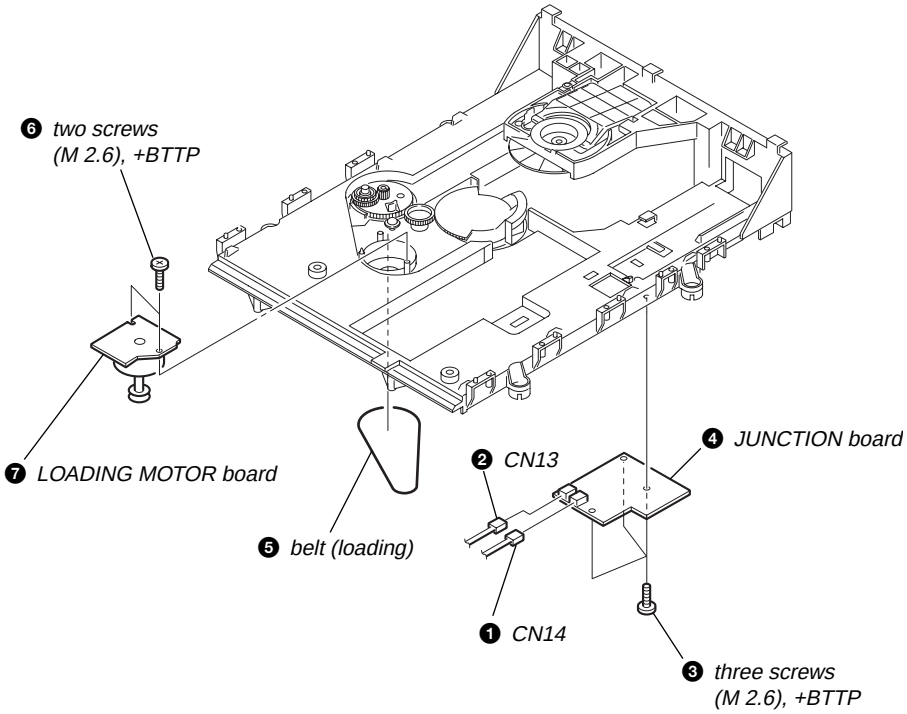
3-6. TRAY, TABLE ASSY



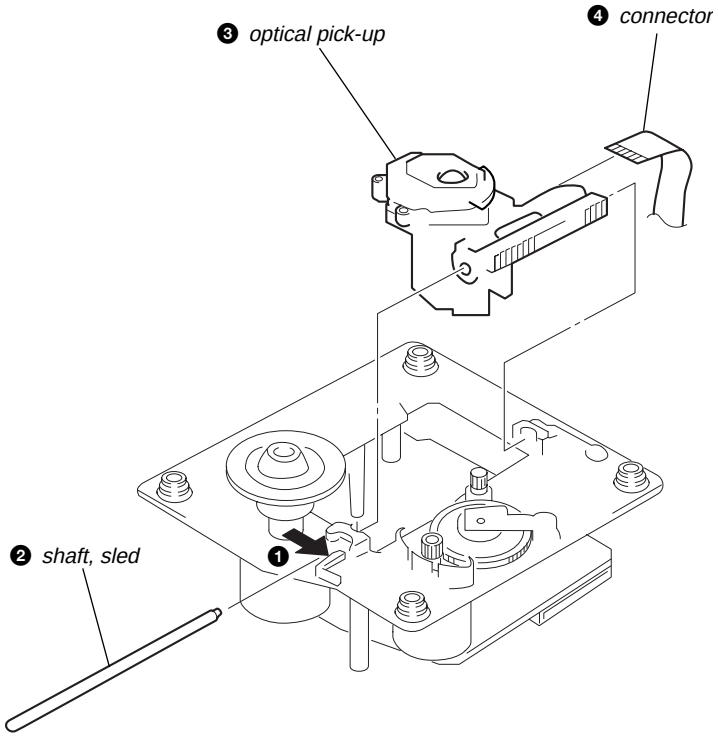
3-7. SENSOR BOARD



3-8. JUNCTION BOARD, LOADING MOTOR BOARD



3-9. OPTICAL PICK-UP



SECTION 4
TEST MODE

ADJ MODE

NOTE: This mode cannot be performed without a general remote commander.

1. Chuck the CD first, and then turn OFF the power.
2. Short-circuit the test point TP1 (ADJ) of the MAIN board and ground with a lead wire.
3. Press the [POWER] button to turn ON the power.
   The CD is playback automatically and the ADJ mode is set.
4. To exit the mode, press the [POWER] button to turn OFF the power.

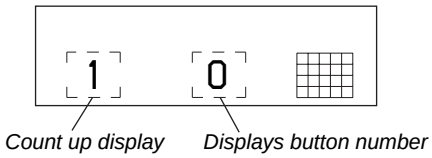
- Prohibits high speed search during accessing
- Ignores even if GFS becomes "L"

ADJ Mode Special Function Table

Button	Function
PLAY MODE	Auto gain display (Focus, Tracking and Sledding)
TIME EDIT	RFCK → GFS → Error rate display

FLUORESCENT INDICATOR TUBE ALL LIT, AND KEY CHECK MODE

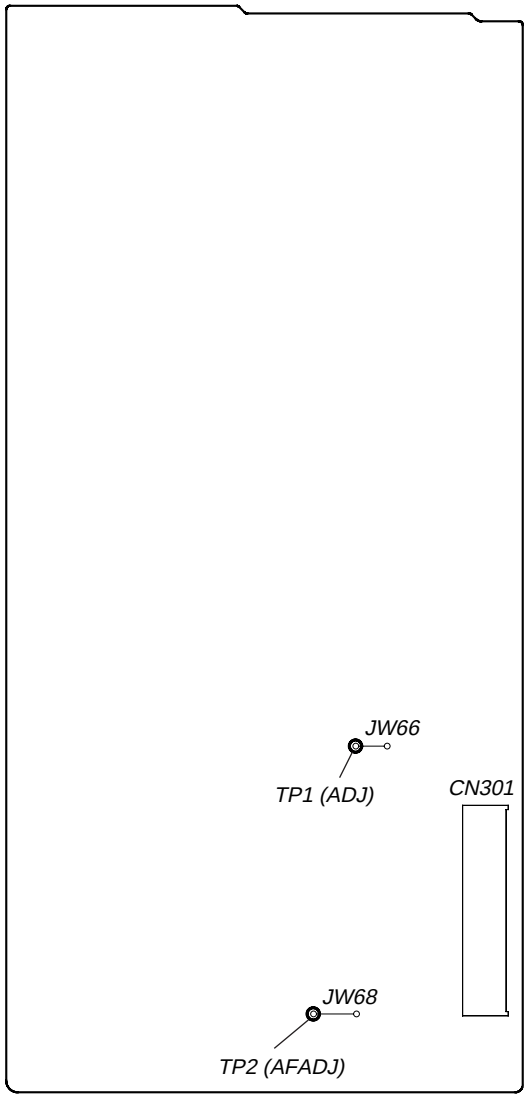
1. Short-circuit the test TP2 (AFADJ) of the MAIN board and ground with a lead wire.
2. Press the [POWER] button to turn ON the power.
   The whole fluorescent indicator tube lights up.
3. All buttons have individual button numbers.
   When a button is pressed, the button number is counted up and displayed.



   When remote controller signals are received, "RM ✻✻" will be displayed.
   (✻✻ are the numbers corresponding to the remote controllerbuttons.)
   When using the remote controller, switch the [CD1/2/3] switch to CD1.
4. To exit the mode, press the [POWER] button to turn OFF the power.

Connecting Location:

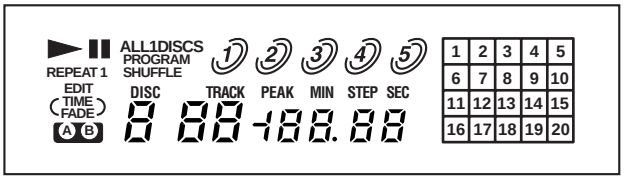
– MAIN BOARD (Component Side) –



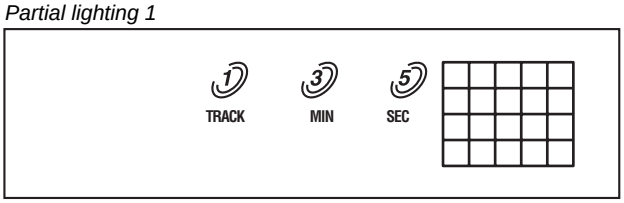
Buttons and Corresponding Button Numbers

Button	Button Number or Display
DISC1	12
DISC2	11
DISC3	10
DISC4	9
DISC5	8
PLAY MODE	20
PEAK SEARCH	19
FADER	18
REPEAT	17
TIME	16
▷ (PLAY)	Partial lighting 1
❚❚ (PAUSE)	Partial lighting 2
■ (STOP)	All lit
EX-CHANGE	35
DISC SKIP	36
◀◀	24
▶▶	25
TIME EDIT	26
CHECK	27
CLEAR	28
AMS (push)	37
AMS (turn)	When rotated clockwise: The music calendar numerals light up in ascending order. When rotated counterclockwise: The music calendar numerals light up in descending order.

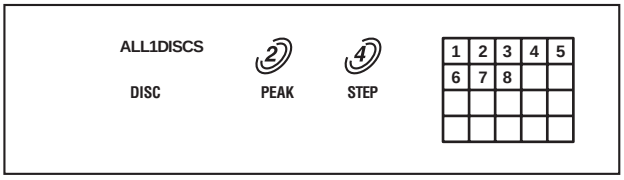
All lit



Partial lighting 1



Light alternately



Partial lighting 2

Light alternately

AGING MODE

For the aging mode, three modes of all mode, disc table mode, and loading mode are available.

This set has the Aging mode for operation check of the mechanism deck.

- If a failure occurred
  The aging operation stops and a faulty status is displayed on the fluorescent indicator tube.
- If no failure occurs
  The aging operation continues repeatedly.

NOTE: Do not use the test disc when performing aging.
Aging will not be performed properly if discs with tracks shorter than 4 seconds are used.

Procedure:

1. Press the [POWER] button and turn ON the power.
2. Set discs on all trays.
   (More than two discs if five are not available)
3. All mode:
   Press the [CHECK], [PLAY MODE] and [■] buttons at the same time.
   Disc table mode:
   Press the [CHECK], [PLAY MODE] and [DISC SKIP] buttons at the same time.
   Loading mode:
   Press the [CHECK], [PLAY MODE] and [EX-CHANGE] buttons at the same time.
4. Aging starts, and the fluorescent indicator tube will display the following.
5. To exit the mode, press the [POWER] button to turn OFF the power.

Code No.	Status	All mode	Disc table mode	Loading mode	Display in Normal operation	Display in case of failure
0	CLOSE (Tray closed)	○	×	○	A-0	Err 0
1	TOC reading	○	○	○	A-1	Err 1
2	Access to last track	○	×	×	A-2	Err 2
3	Play of last track (3 sec)	○	×	×	Counter display	Err 3
4	EX OPEN (Tray opened while chucking)	○	×	○	A-4	Err 4
5	EX SKIP (Disc tray rotated)	○	×	×	A-5	Err 5
6	EX CLOSE (Tray closed)	○	×	○	A-6	Err 6
7	Access to first track	○	×	×	A-7	Err 7
8	Play of first track (3 sec)	○	×	×	Counter display	Err 8
9	OPEN (tray opened)	○	×	○	A-9	Err 9
A	DISC SKIP (Disc tray rotated, and next disc was selected)	○	○	×	A-A	Err A

The discs are selectie in the order of DISC1 → DISC2 → DISC3 → DISC4 → DISC5 → DISC1 → .... Empty trays are skipped.
But the order is random in the disc table mode.

MECHANISM DECK CHECK MODE

For the mechanism deck check mode, two modes of disc table mode and loading mode are available.
In the mechanism deck check mode, the disc table turning time and the loading time in each section are measured and displayed.

Procedure:

Disc table mode:
Press the [POWER] switch while pressing [▷] , [⏏ OPEN/CLOSE] and [REPEAT] buttons simultaneously.
Loading mode:
Press the [POWER] switch while pressing [▷] , [⏏ OPEN/CLOSE] and [TIME] buttons simultaneously.

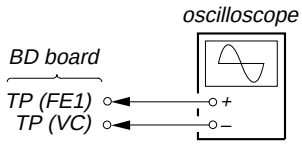
Display contents

Mode	Check command	Display
Disc table mode (Table turning time measurement)	0: Right one turn	r 12.5
	1: Left one Turn	L 10.2
	2: Measurement end	r 5.3
	3: Undefined	
Table mode (Loading time measurement)	4: Star position	Sta – –.–
	5: Open → Close	CLo 10.2
	6: Close → BU up	UP 0.7
	7: BU up → EX open	EoP 6.2
	8: EX open → EX close	ECL 10.3
	9: EX close → BU down	don 1.2
	A: BU down → Open	oPn 9.3
	FF: Measurement end	CLo 1.7

SECTION 5
ELECTRICAL ADJUSTMENTS

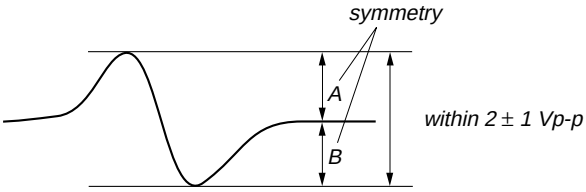
NOTE:
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use PATD-012 disc (4-225-203-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S Curve Check
Connection:



Procedure:
1. Set the test disc (PATD-012). Disc chucking operation is complete, then press the [POWER] button to turn the power off.
2. Connect an oscilloscope to test point TP (FE1) and TP (VC) on the BD board.
3. Connect between test point TP (ADJ) on the MAIN board and GND by lead wire.
4. Press the [POWER] button to turn the power on and enter the ADJ mode.
   Then playback the number two track automatically, press the ■ button to stop the playback.
5. Press the [CHECK] button actuate the focus search. (actuate the focus search when disc table is moving in and out)
6. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 2 ± 1 Vp-p.

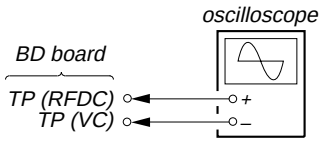
S-curve waveform



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

Checking Location: BD board

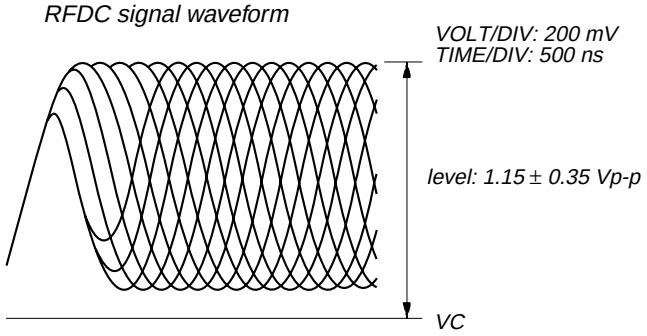
RFDC Level Check
Connection:



Procedure:
1. Set the test disc (PATD-012). Disc chucking operation is complete, then press the [POWER] button to turn the power off.
2. Connect an oscilloscope to test point TP (RFDC) and TP (VC) on the BD board.
3. Connect between test point TP (ADJ) on the MAIN board and GND by lead wire.
4. Press the [POWER] button to turn the power on and enter the ADJ mode, then playback the number two track automatically.
5. Confirm that oscilloscope waveform is clear and check the level of between RFDC top and VC is correct or not.

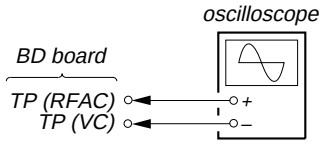
NOTE: A clear RFDC signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

RFDC signal waveform



Checking Location: BD board

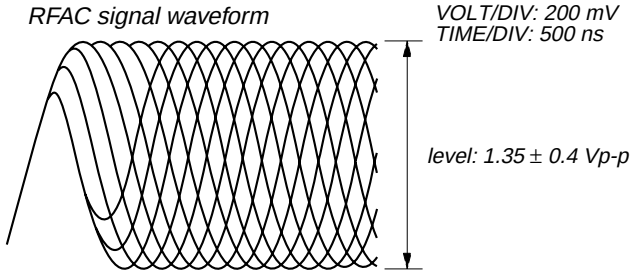
RFAC Level Check
Connection:



Procedure:
1. Set the test disc (PATD-012). Disc chucking operation is complete, then press the [POWER] button to turn the power off.
2. Connect an oscilloscope to test point TP (RFAC) and TP (VC) on the BD board.
3. Connect between test point TP (ADJ) on the MAIN board and GND by lead wire.
4. Press the [POWER] button to turn the power on and enter the ADJ mode, then playback the number two track automatically.
5. Confirm that oscilloscope waveform is clear and check RFAC signal level is correct or not.

NOTE: A clear RFAC signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

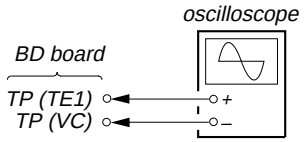
RFAC signal waveform



Checking Location: BD board

E-F Balance Check

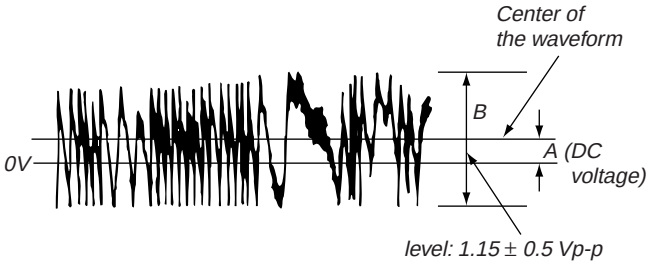
Connection:



Procedure:

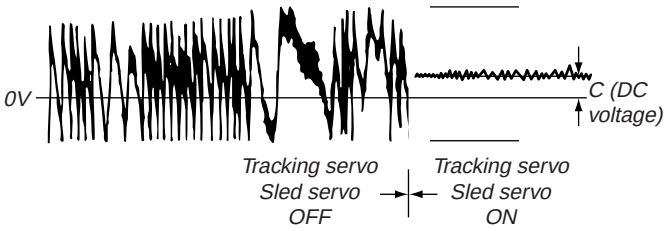
1. Set the test disc (PATD-012). Disc chucking operation is complete, then press the POWER button to turn the power off.
2. Connect an oscilloscpe to test point TP (TE1) and TP (VC) the BD board.
3. Connect between test point TP (ADJ) on the MAIN board and GND by lead wire.
4. Press the POWER button to turn the power on and enter the ADJ mode, then playback the number two track automatically.
5. Press the TIME button. (The tracking servo and the sledding servo are turned OFF)
6. Check the level B of the oscilliscope waveform and the A (DC voltage) of the center of the Traverse waveform.
   Confirm the following :
   A/B x 100 = less than ± 22%

Traverse Waveform



7. Press the TIME button. (The tracking servo and sledding servo are turned ON)
   Confirm the C (DC voltage) is almost equal to the A (DC voltage) is step 6.

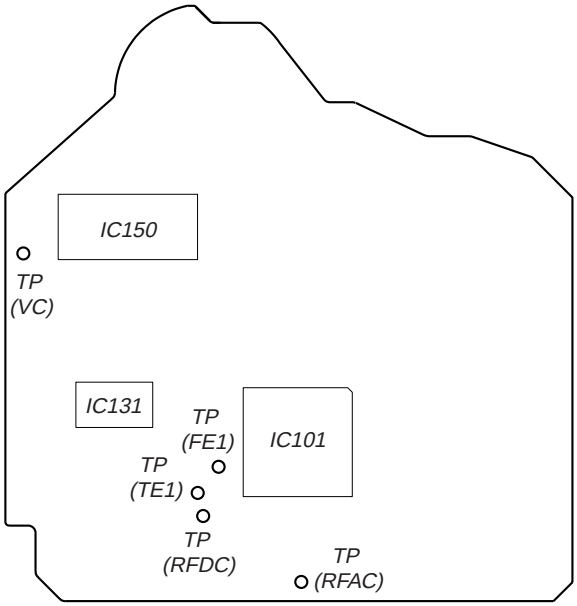
Traverse Waveform



Checking Location: BD board

Checking Location:

– BD BOARD (Conductor Side) –



SECTION 6
DIAGRAMS

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

For Schematic Diagrams.
Note:
- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
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 piéce portant le numéro spécifié.

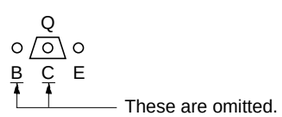
- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : CD PLAY
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD PLAY
  ⇨ : DIGITAL OUT

For Printed Wiring Boards.
Note:
- o——— : parts extracted from the component side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing.

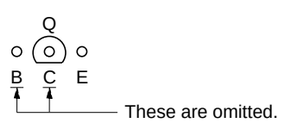
(The other layers' patterns are not indicated.)

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

- **Indication of transistor**

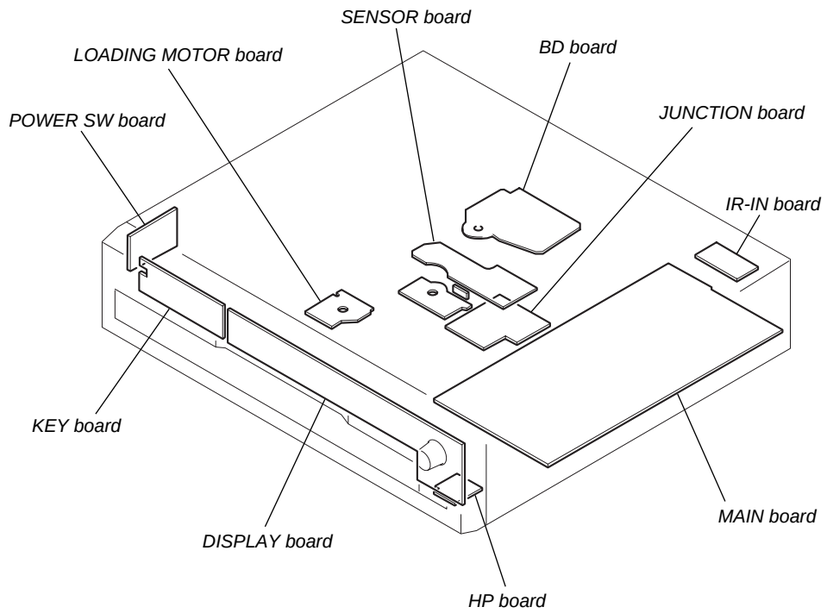


These are omitted.

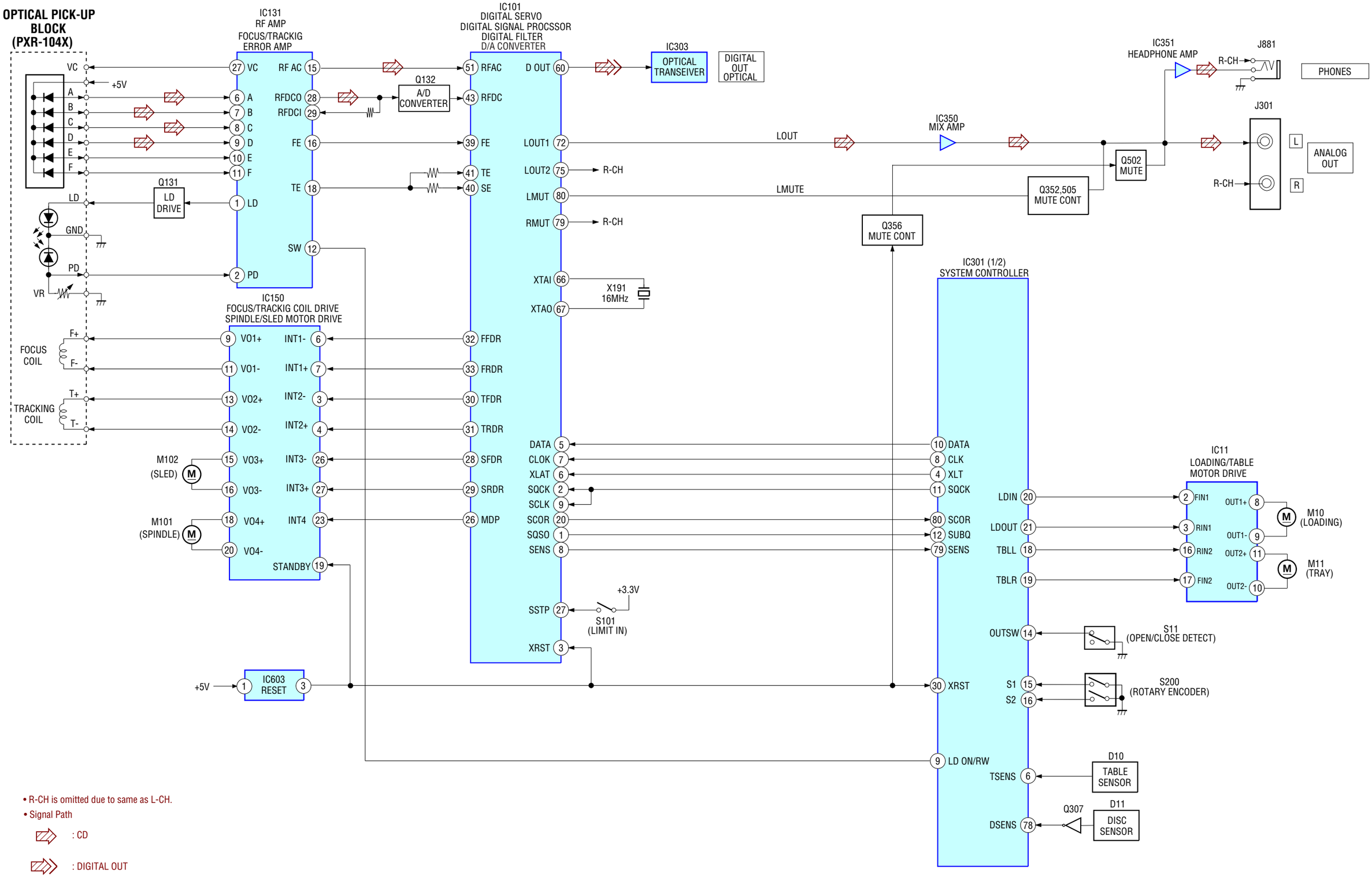


These are omitted.

- **Circuit Boards Location**



6-1. BLOCK DIAGRAM — BD SECTION —

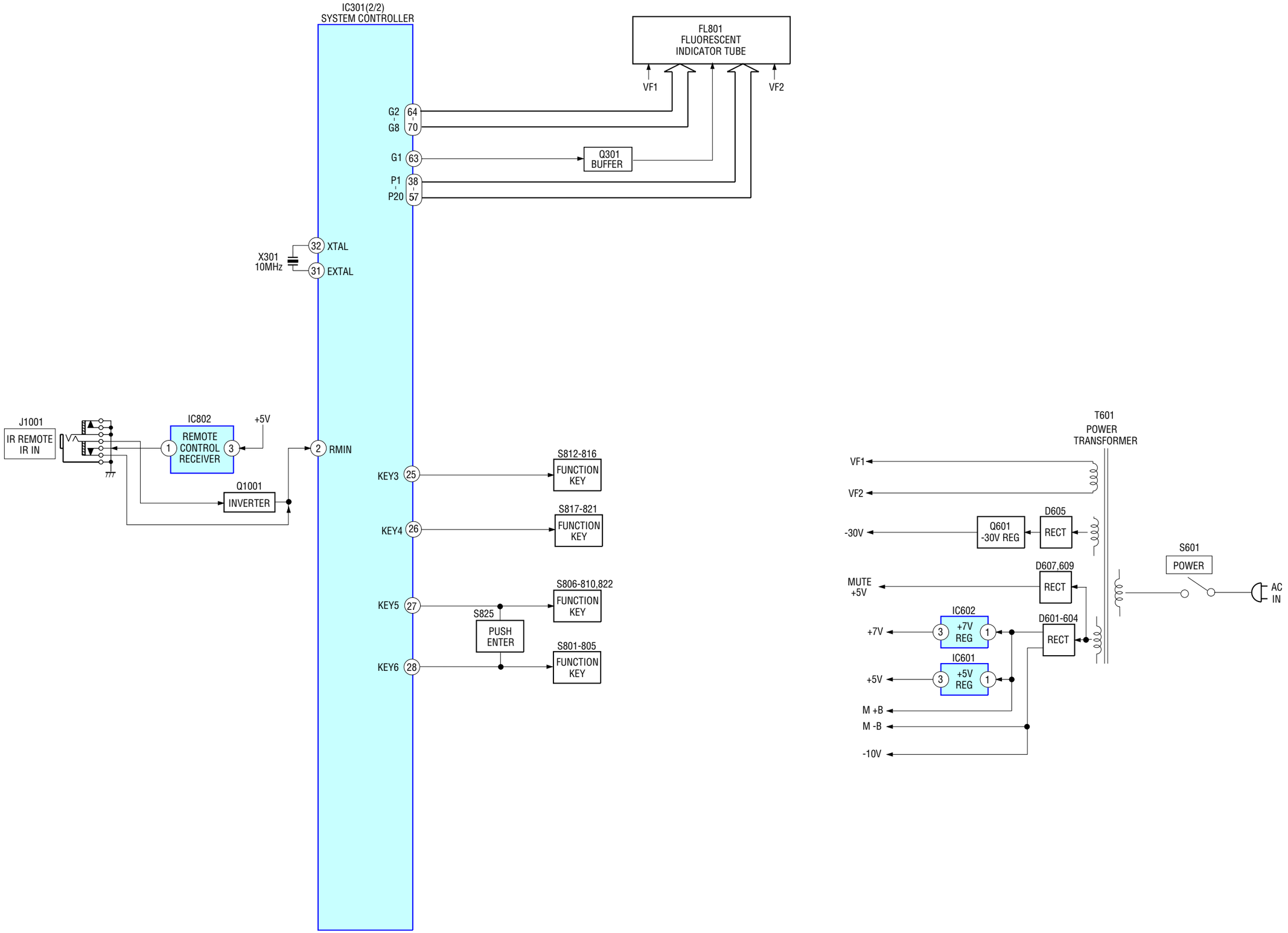


- R-CH is omitted due to same as L-CH.
- Signal Path

: CD

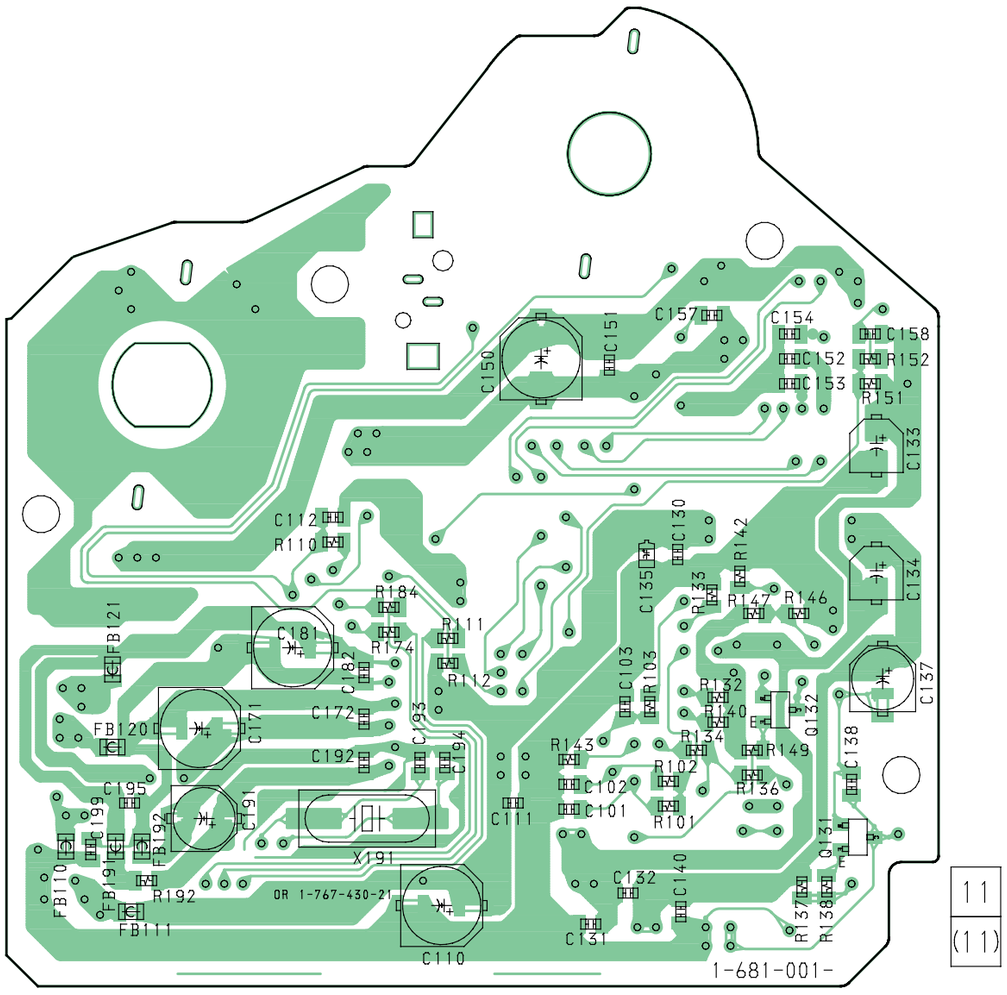
: DIGITAL OUT

— DISPLAY SECTION —

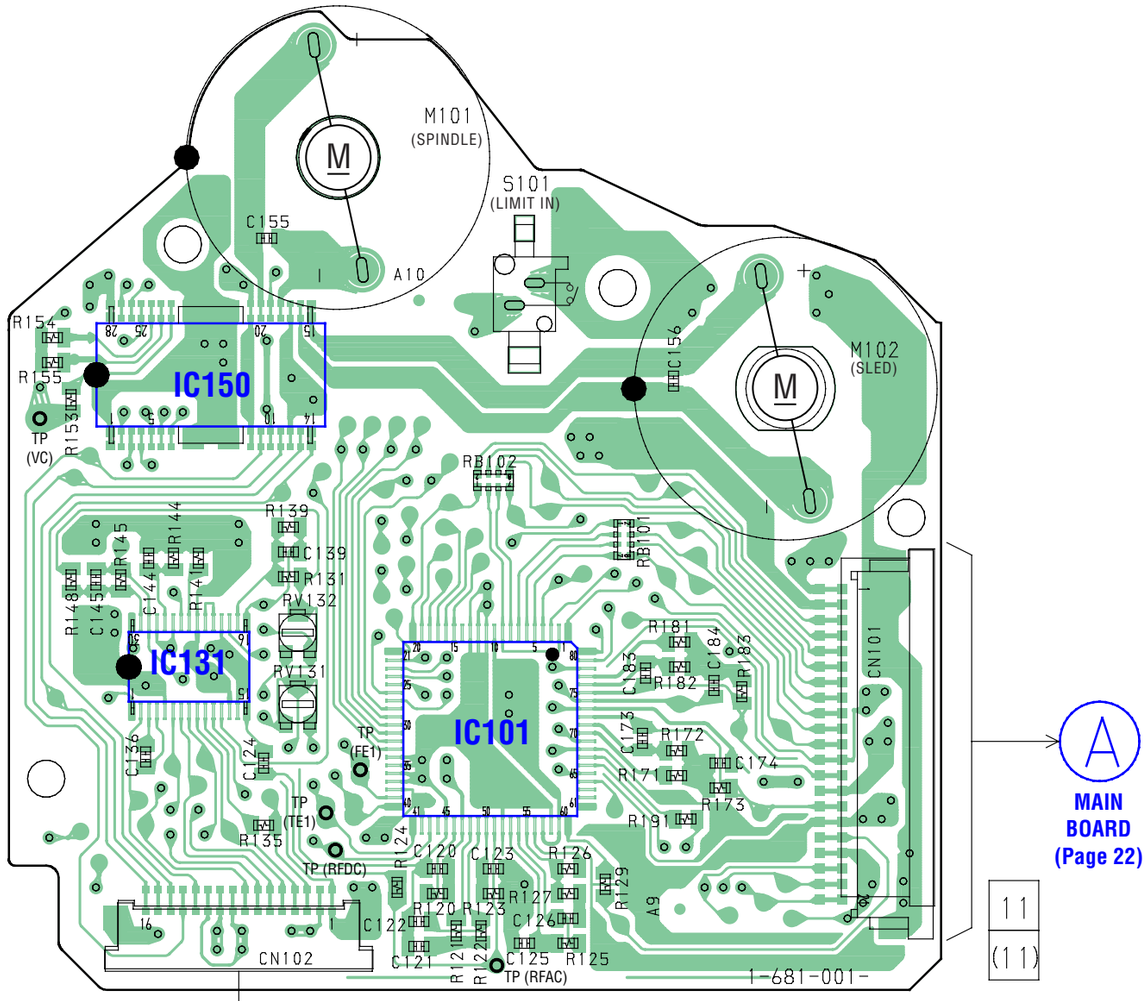


6-2. PRINTED WIRING BOARD — BD SECTION — • See page 15 for Circuit Boards Location.

【 BD BOARD 】(COMPONENT SIDE)



【 BD BOARD 】(CONDUCTOR SIDE)



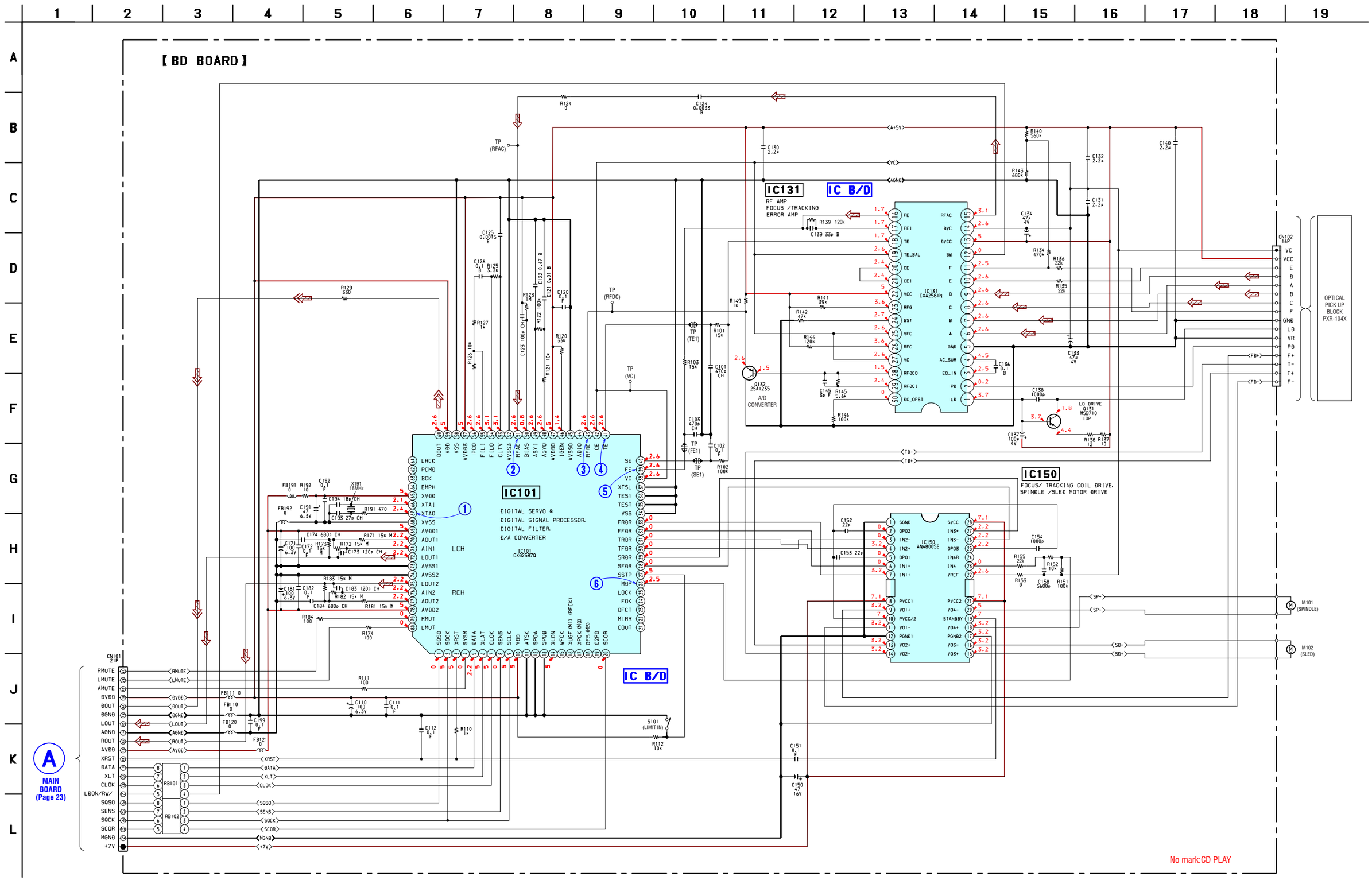
OPTICAL PICK-UP BLOCK
PXR-104X

• **Semiconductor Location**

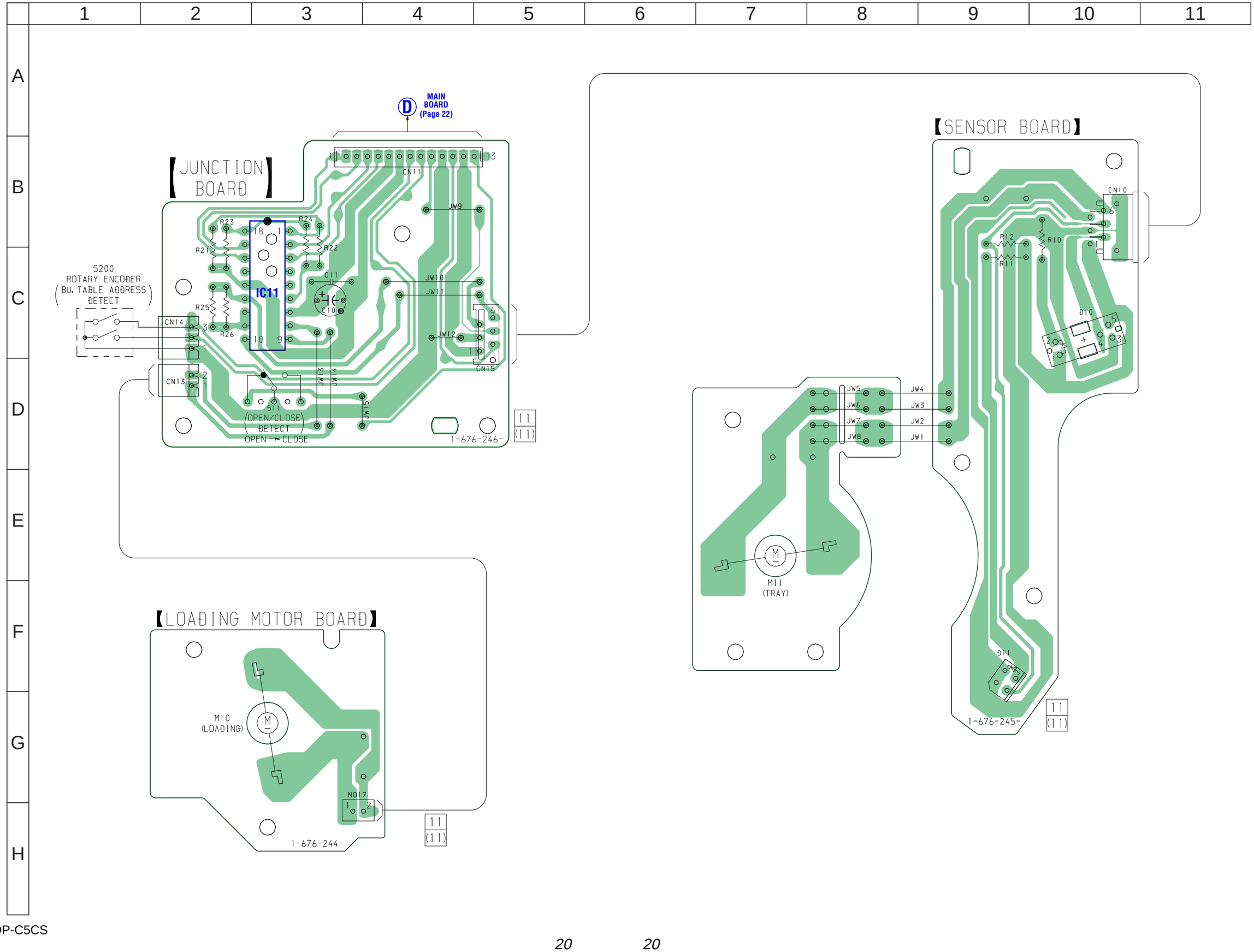
Ref. No.	Location
IC101	C-6
IC131	C-5
IC150	B-5
Q131	D-3
Q132	C-3

6-3. SCHEMATIC DIAGRAM — BD SECTION —

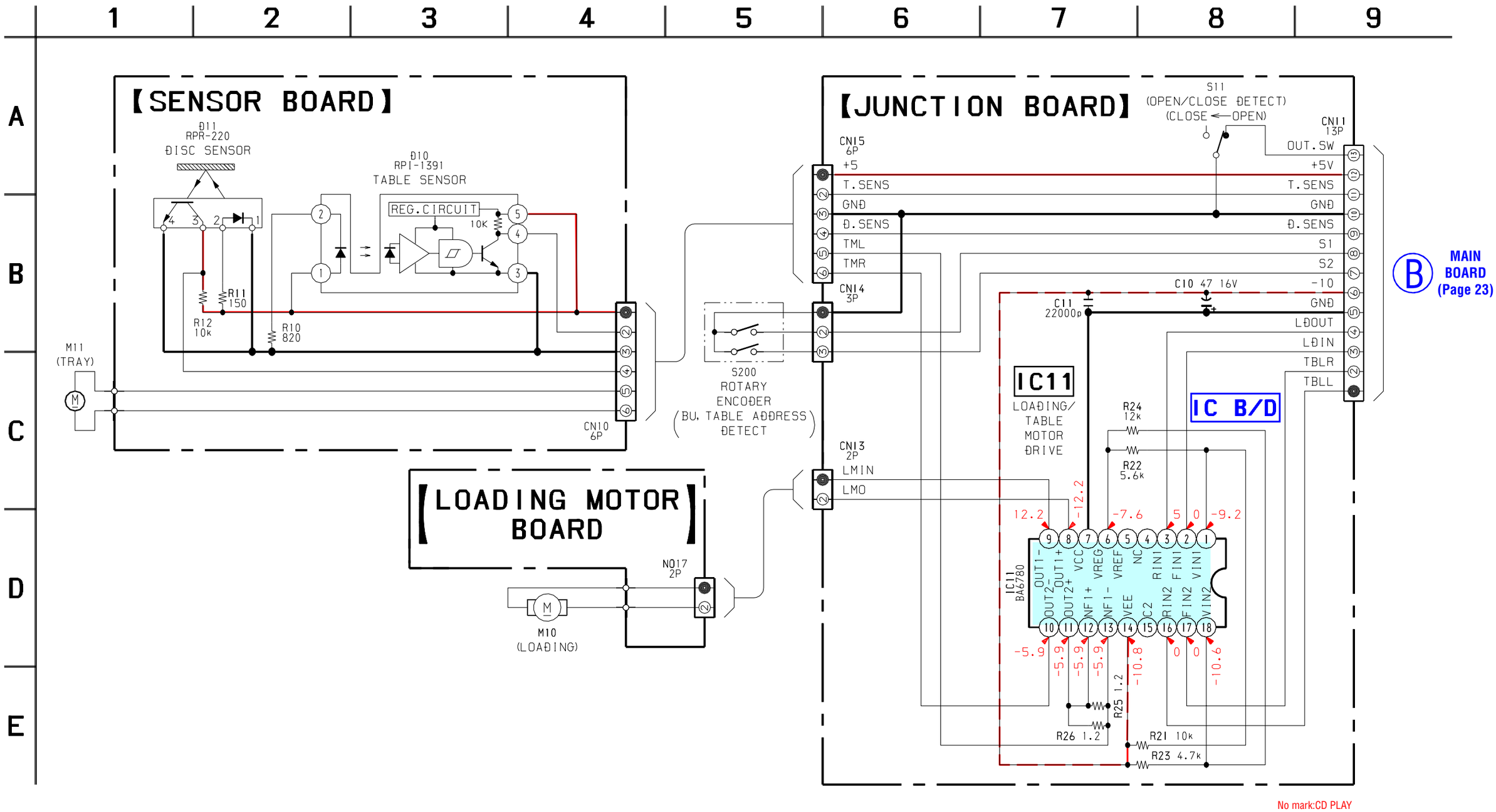
• See page 26 for Waveforms. • See page 26, 27 for IC Block Diagrams.



6-4. PRINTED WIRING BOARD — CDM59 COMB SECTION — • See page 15 for Circuit Boards Location.

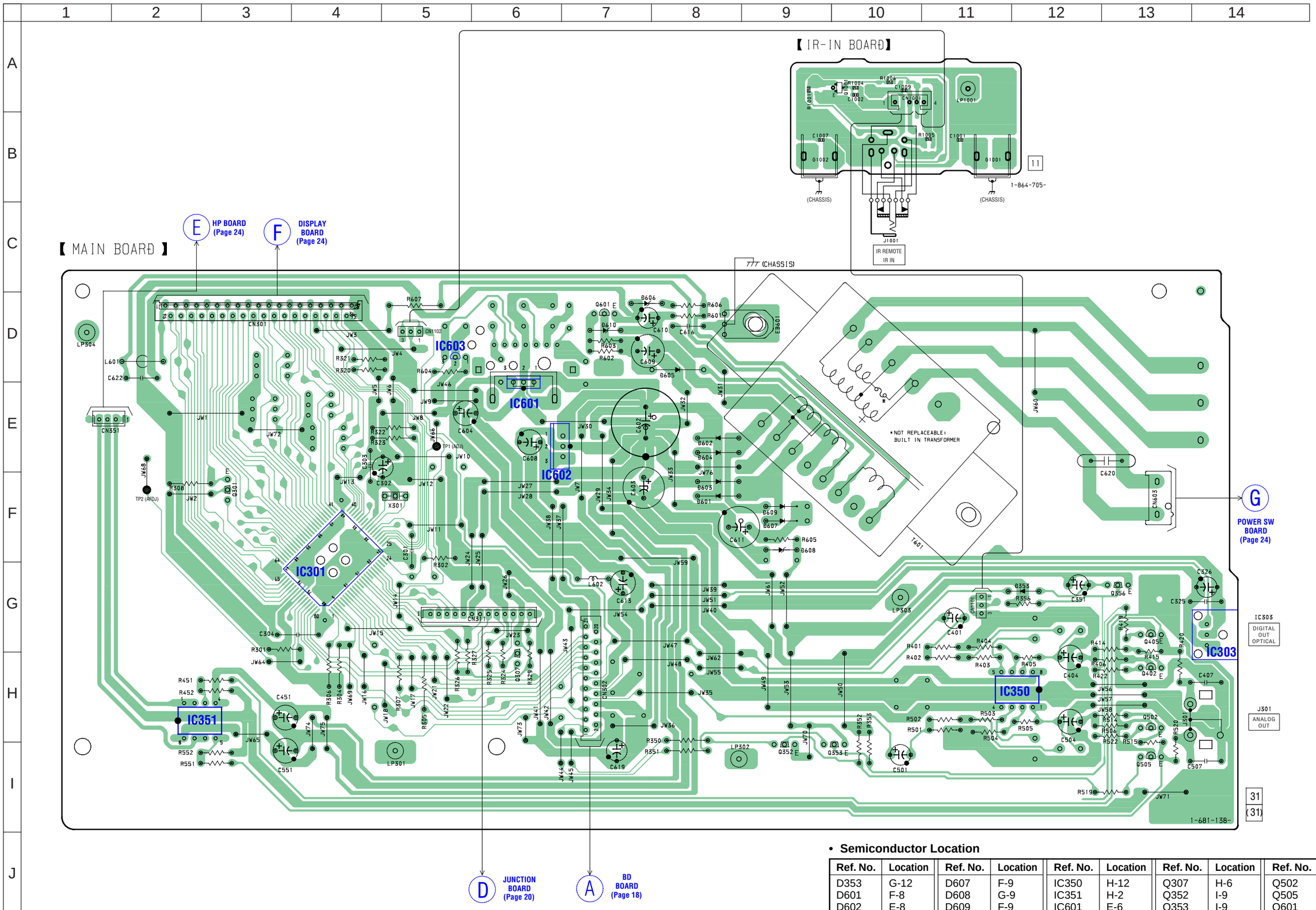


6-5. SCHEMATIC DIAGRAM — CDM59 COMB SECTION — • See page 27 for IC Block Diagram.



6-6. PRINTED WIRING BOARD — MAIN SECTION —

• See page 15 for Circuit Boards Location.

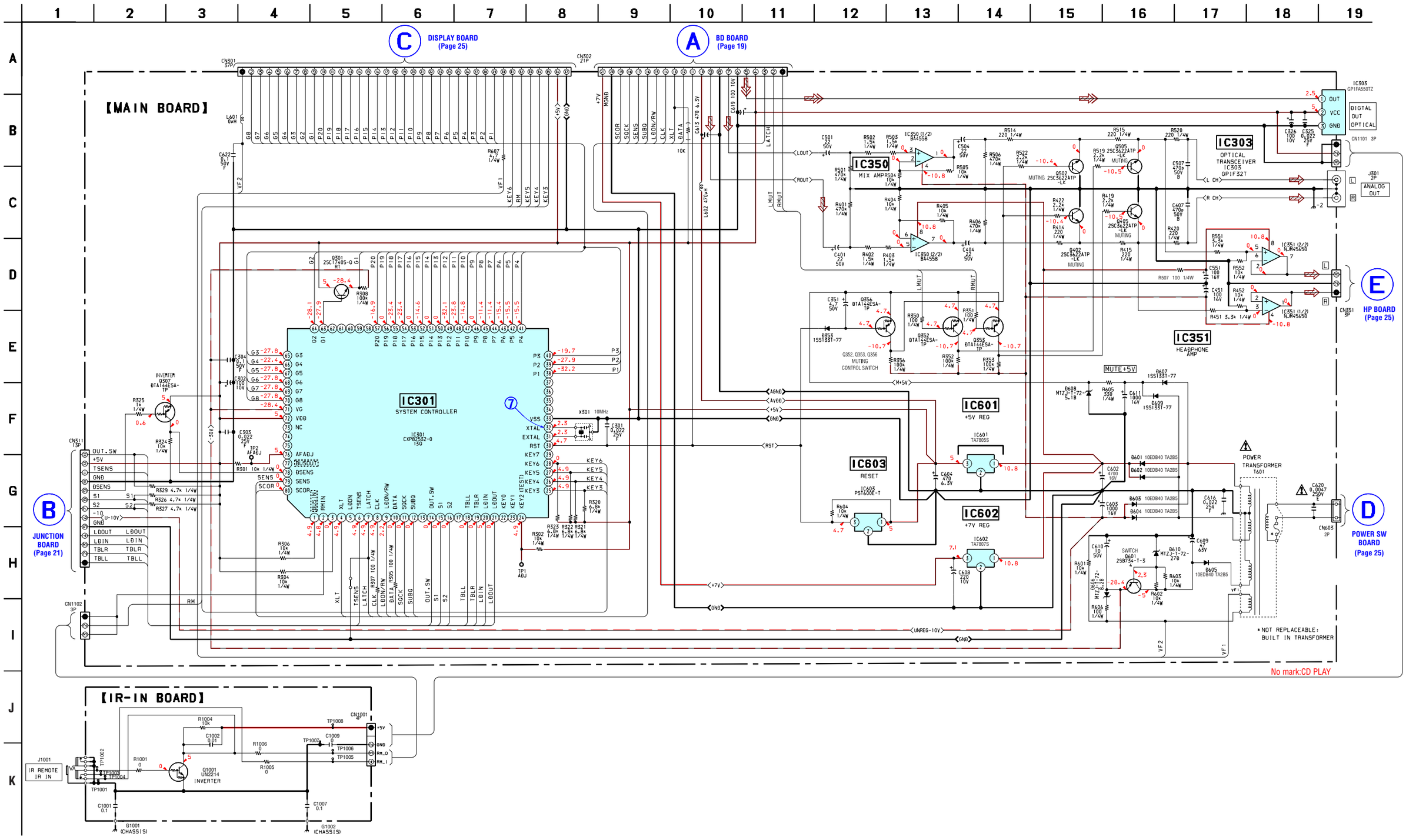


• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D353	G-12	D607	F-9	IC350	H-12	Q307	H-6	Q502	H-13
D601	F-8	D608	G-9	IC351	H-2	Q352	I-9	Q505	I-13
D602	E-8	D609	F-9	IC601	E-6	Q353	I-9	Q601	D-7
D603	F-8	D610	D-7	IC602	F-6	Q356	G-13	Q1001	A-10
D604	E-8			IC603	D-5	Q402	H-13		
D605	D-8	IC301	G-4			Q405	G-13		
D606	D-7	IC303	H-14	Q301	F-3	Q301	F-3		

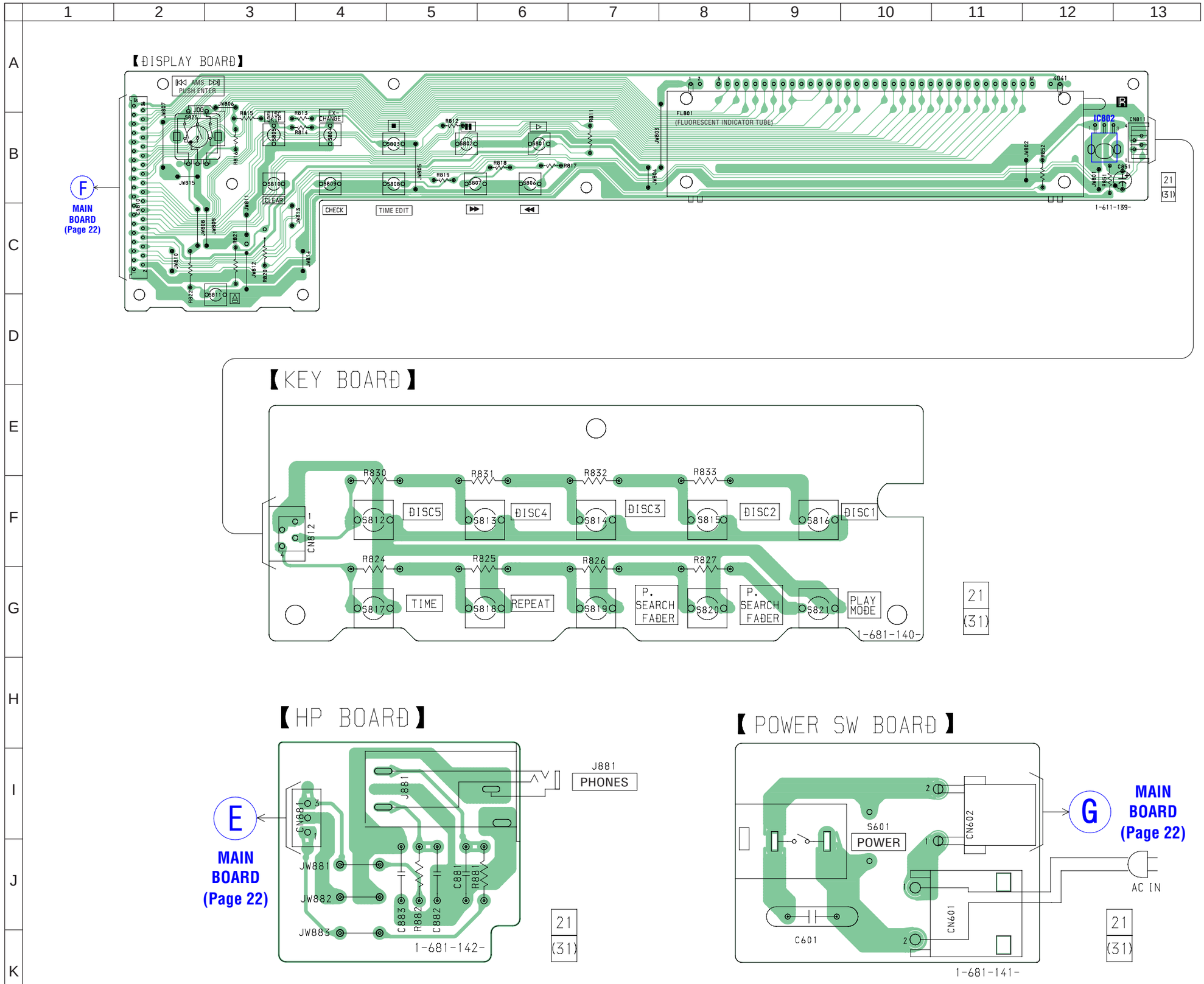
6-7. SCHEMATIC DIAGRAM — MAIN SECTION —

• See page 26 for Waveform. • See page 28 for IC Pin Function Description.

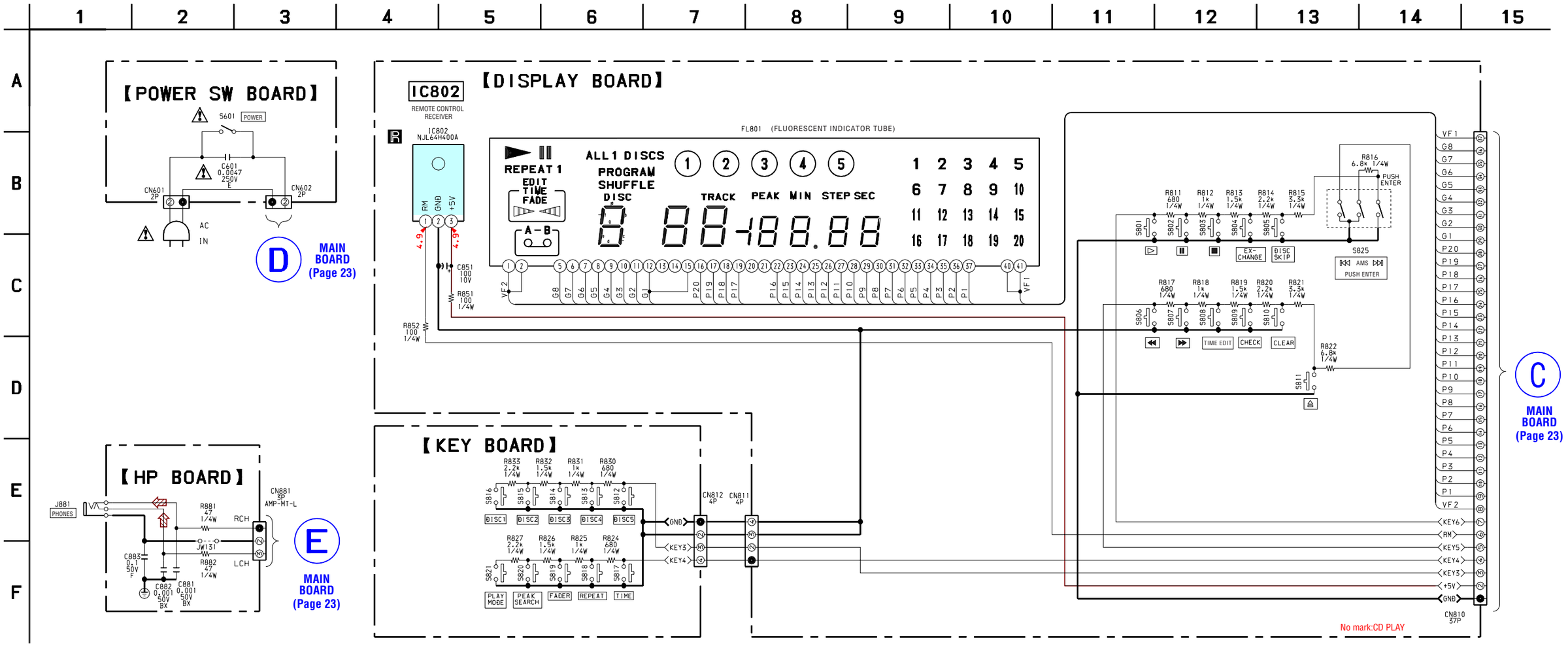


6-8. PRINTED WIRING BOARD — PANEL SECTION —

• See page 15 for Circuit Boards Location.



6-9. SCHEMATIC DIAGRAM — PANEL SECTION —

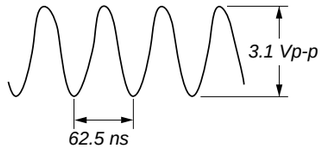


CDP-C5CS

- **Waveforms**

– BD Board –

① IC101 ⑥⑦ (XTAO)

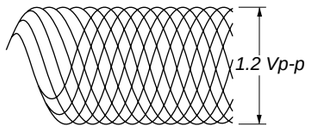


1 V/DIV, 40 ns/DIV

④ IC101 ④① (TE) (CD Play Mode)

100 mV/DIV, 1 ms/DIV

② IC101 ⑤① (RF AC) (CD Play Mode)

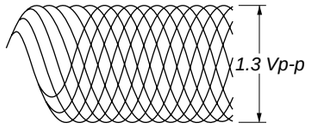


500 mV/DIV, 100 ns/DIV

⑤ IC101 ③⑨ (FE) (CD Play Mode)

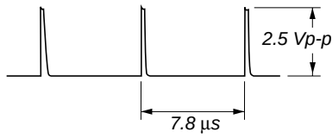
500 mV/DIV, 1 ms/DIV

③ IC101 ④③ (RF DC)



500 mV/DIV, 100 ns/DIV

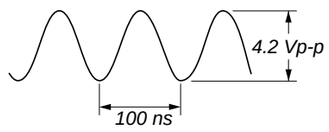
⑥ IC101 ②⑥ (MDP) (CD Play Mode)



1 V/DIV, 1 µs/DIV

– MAIN Board –

⑦ IC301 ③② (XTAL)

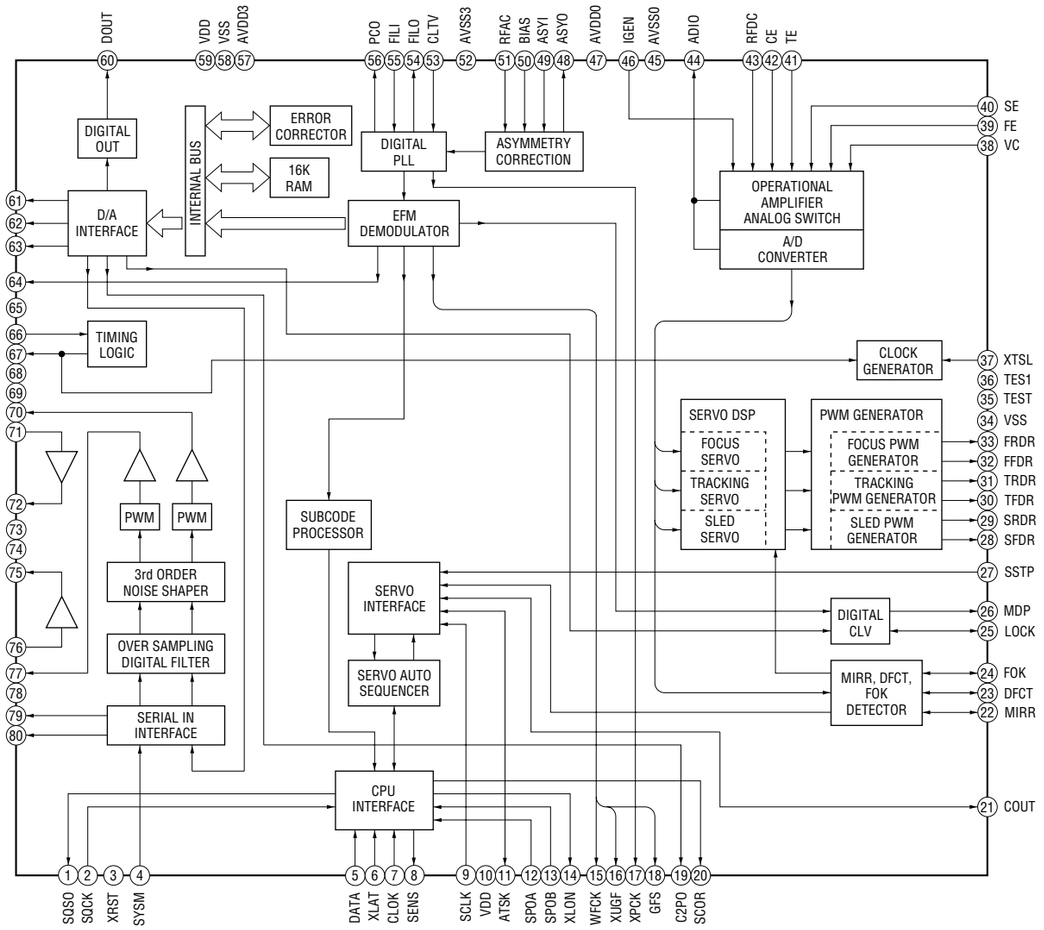


1 V/DIV, 40 ns/DIV

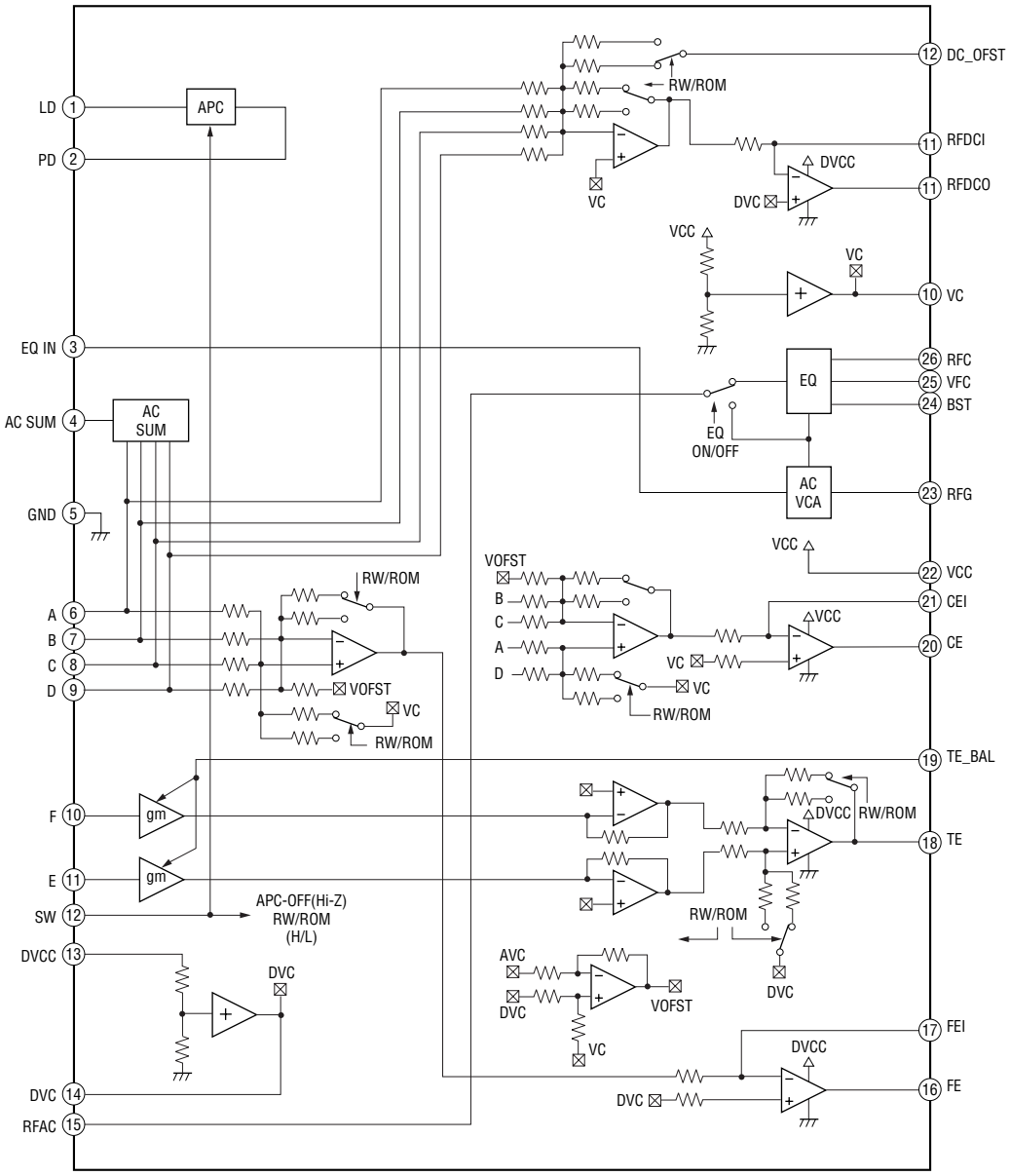
- **IC Block Diagrams**

– BD Board –

IC101 CXD2587Q

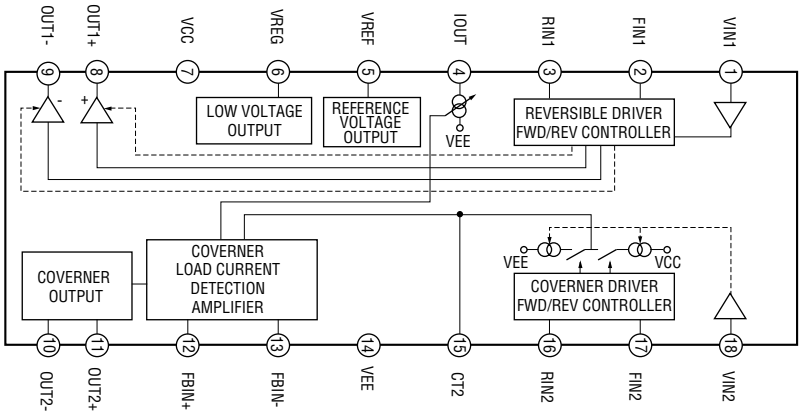


IC131 CXA2581N



– JUNCTION Board –

IC11 BA6780



• IC Pin Function Description

MAIN BOARD IC301 CXP82532-013Q (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	BUSIN	I	Sircs remote control signal input terminal Not used (pull up)
2	RMIN	I	Remote control signal input from the remote control receiver (IC802)
3	NC	I	Not used (pull up)
4	XLT	O	Serial data latch pulse signal output to the CXD2587Q (IC101)
5	LDON	—	Not used
6	TSENS	I	Detect signal input from the table sensor (D10)
7	LATCH	O	SYSH signal output to the CXD2587Q (IC101)
8	CLK	O	Serial data transfer clock signal output to the CXD2587Q (IC101)
9	LDON/RW	O	Laser diode ON/OFF output
10	DATA	O	Serial data output to the CXD2587Q (IC101)
11	SQCK	O	Sub-code Q data reading clock signal output to the CXD2587Q (IC101)
12	SUBQ	I	Sub-code Q data signal input from the CXD2587Q (IC101)
13	NC	—	Not used (open)
14	OUT SW	I	Detect signal input from the open/close detect switch (S11)
15	S1	I	Detect signal input from the tray address detect switch (S200)
16	S2	I	Detect signal input from the tray address detect switch (S200)
17	NC	—	Not used (open)
18	TBLL	O	Table motor drive signal (counterclockwise) output to the BA6780 (IC11)
19	TBLR	O	Table motor drive signal (clockwise) output to the BA6780 (IC11)
20	LD IN	O	Loading motor (M10) drive signal output to the BA6780 (IC11) *1
21	LD OUT	O	Loading motor (M10) drive signal output to the BA6780 (IC11) *1
22	KEY0	—	Not used (open)
23	KEY1	—	Not used (open)
24	KEY2(TEST)	I	Key input terminal (TEST)
25	KEY3	I	Key input terminal (A/D input) (S812 to S816)
26	KEY4	I	Key input terminal (A/D input) (S817 to S821)
27	KEY5	I	Key input terminal (A/D input) (S806 to S810)
28	KEY6	I	Key input terminal (A/D input) (S801 to S805)
29	KEY7	—	Not used (open)
30	RST	I	System reset signal input from the reset signal generator (IC603) “L”:reset For several hundreds msec. after the power supply rises, “L” is input, then it changes to “H”
31	EXTAL	I	Main system clock input terminal (10 MHz)
32	XTAL	O	Main system clock output terminal (10 MHz)
33	VSS	—	Ground terminal
34	NC	—	Not used (open)
35	NC	—	Not used (open)
36	NC	—	Not used (open)
37	NC	—	Not used (open)

*1 Loading motor (M10) control

Operation / Terminal	OFF	OFF	IN	BRAKE
LOAD IN (pin ⑳)	“L”	“L”	“H”	“H”
LOAD OUT (pin ㉑)	“L”	“H”	“L”	“H”

Pin No.	Pin Name	I/O	Description
38 to 57	P1 to P20	O	Segment drive signal output to the fluorescent indicator tube (FL801)
58 to 62	NC	O	Not used (open)
63 to 70	G1 to G8	O	Grid drive signal output to the fluorescent indicator tube (FL801)
71	VG	—	Power supply terminal (–30V) (for fluorescent indicator tube drive)
72	VDD	—	Power supply terminal (+5V)
73 to 75	NC	O	Not used (open)
76	AFADJ	I	Setting terminal for the test mode “L” active
77	BUSOUT	O	Sircs remote control signal output terminal Not used (open)
78	DSENS	I	Detect signal input from the disc sensor (D11)
79	SENS	I	Internal status (SENSE) signal input from the CXD2587Q (IC101)
80	SCOR	I	Sub-code sync (S0+S1) detection signal input from the CXD2587Q (IC101)

SECTION 7
EXPLODED VIEWS

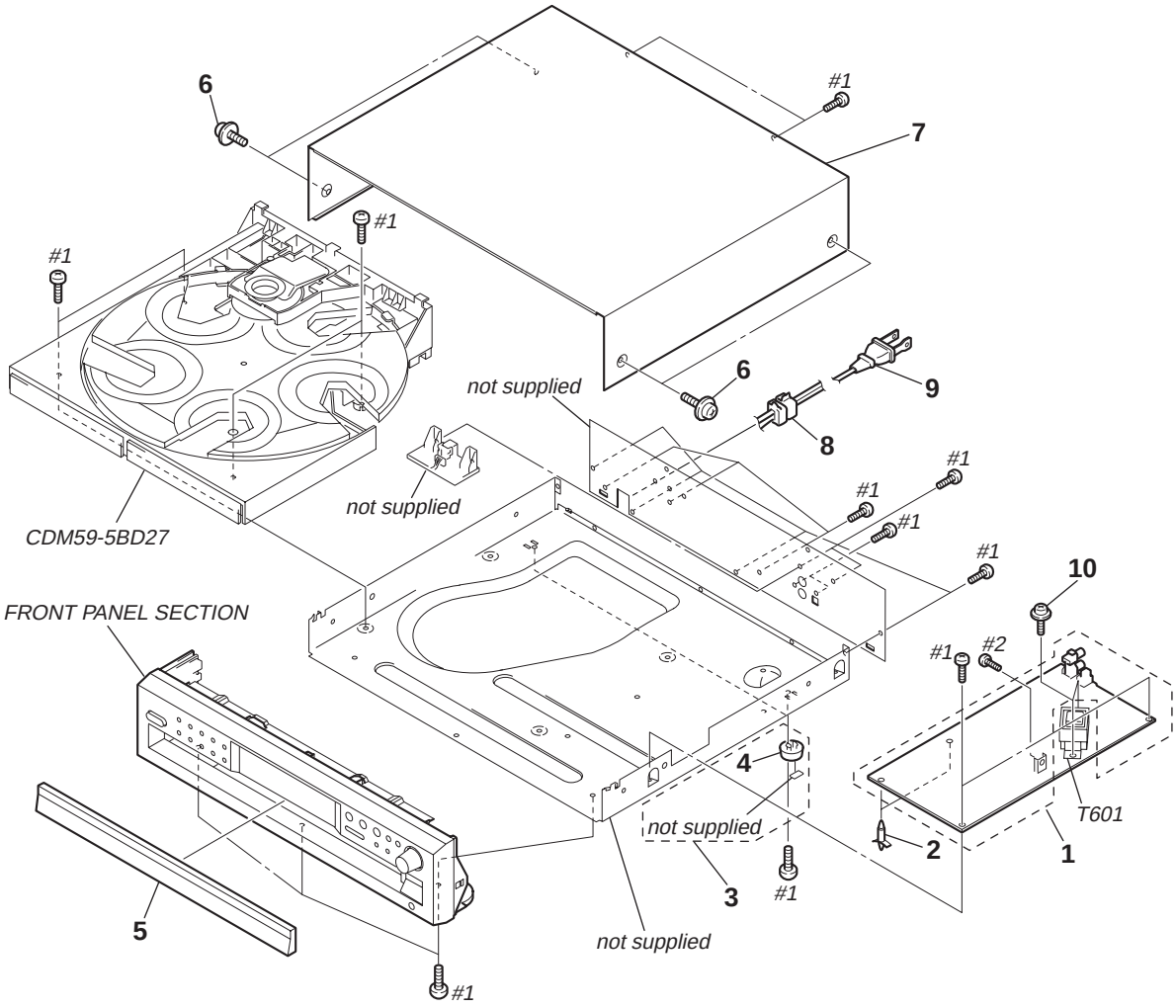
NOTE:

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

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

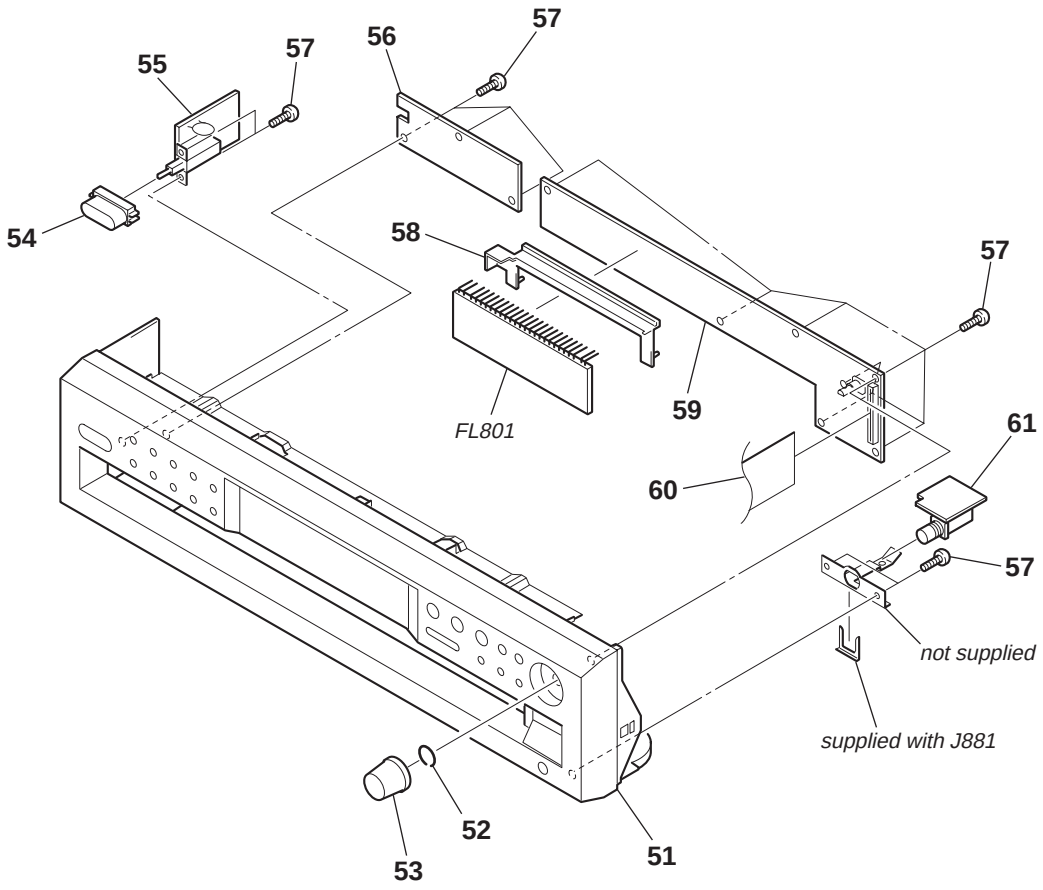
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. CASE SECTION



Ref. No.	Part No.	Description	Remark
1	A-1082-287-A	MAIN BOARD, COMPLETE	
2	4-943-687-01	HOLDER, PC BOARD	
3	X-4953-448-1	FOOT ASSY	
4	4-232-237-01	FOOT (DIA. 30)	
5	4-231-683-31	PANEL, LOADING	
6	3-363-099-11	SCREW (CASE 3 TP2)	
7	4-231-686-31	CASE (409538)	
* 8	3-703-244-00	BUSHING (2104), CORD	
⚠9	1-783-531-32	CORD, POWER	
10	3-703-249-02	SCREW, S TIGHT, +PTTWH 3X6	
⚠T601	1-435-342-11	TRANSFORMER, POWER	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

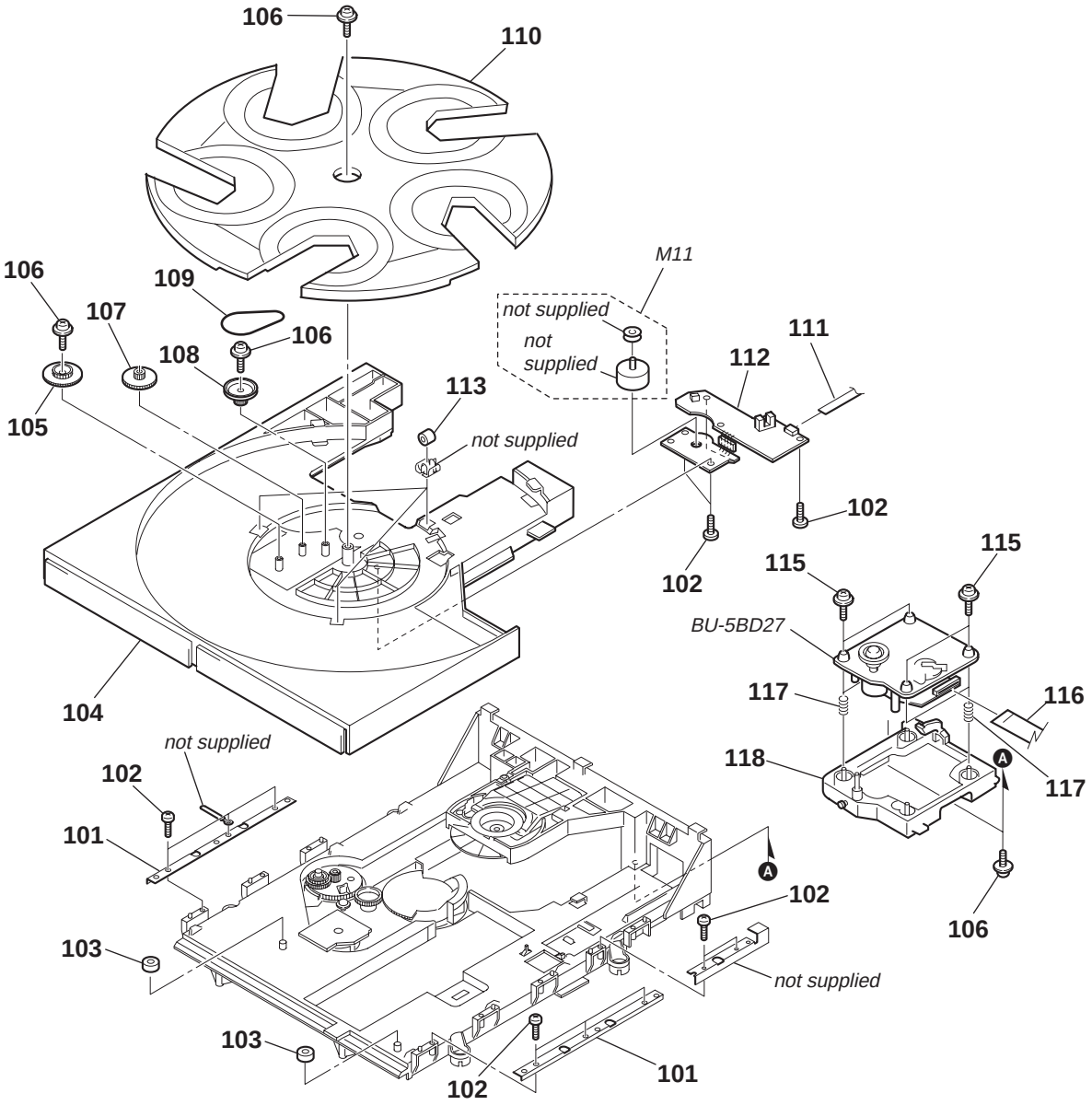
7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	X-2024-234-1	PANEL ASSY, FRONT	
52	3-354-981-11	SPRING (SUS), RING	
53	4-231-928-11	KNOB (AMS)	
54	4-231-973-11	BUTTON (POWER)	
55	1-681-141-21	POWER SW BOARD	
56	1-681-140-21	KEY BOARD	

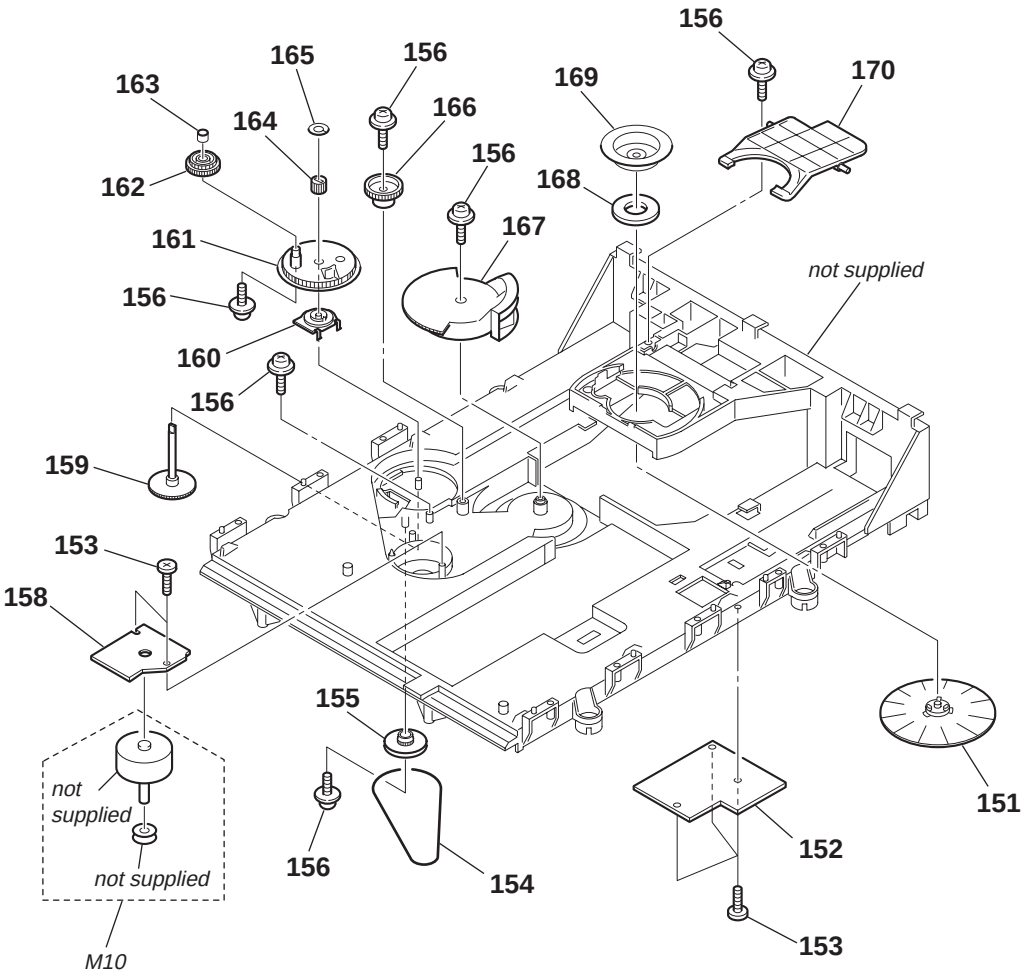
Ref. No.	Part No.	Description	Remark
57	3-087-053-01	+BVTP2.6 (3CR)	
58	4-231-690-01	HOLDER (FL A)	
59	1-681-139-21	DISPLAY BOARD	
60	1-823-116-11	WIRE (FLAT TYPE) (37 CORE)	
61	1-681-142-21	HP BOARD	
FL801	1-517-946-21	INDICATOR TUBE, FLUORESCENT	

7-3. CD MECHANISM SECTION (1) (CDM59-5BD27)



Ref. No.	Part No.	Description	Remark
101	4-224-619-01	BRACKET (GUIDE)	
102	4-218-253-32	SCREW (M2.6), +BTTP	
103	4-951-619-01	CUSHION (A)	
104	4-224-602-03	TABLE	
105	4-224-617-01	GEAR (RM-E)	
106	4-218-252-52	SCREW (+PTPWH M2.6), FLOATING	
107	4-224-616-01	GEAR (RM-M)	
108	4-224-615-03	GEAR (RB)	
109	4-225-328-01	BELT (ROTARY)	
110	4-224-603-06	TRAY	
111	1-791-930-11	WIRE (FLAT TYPE) (6 CORE)	
112	1-676-245-11	SENSOR BOARD	
* 113	X-4924-457-1	ROLLER ASSY	
115	4-218-253-32	SCREW (M2.6), +BTTP	
116	1-823-115-11	WIRE (FLAT TYPE) (21 CORE)	
117	4-959-996-01	SPRING (932), COMPRESSION	
118	X-4952-312-1	HOLDER (BU) ASSY	
M11	A-4735-761-A	MOTOR ASSY, ROTARY (TRAY)	

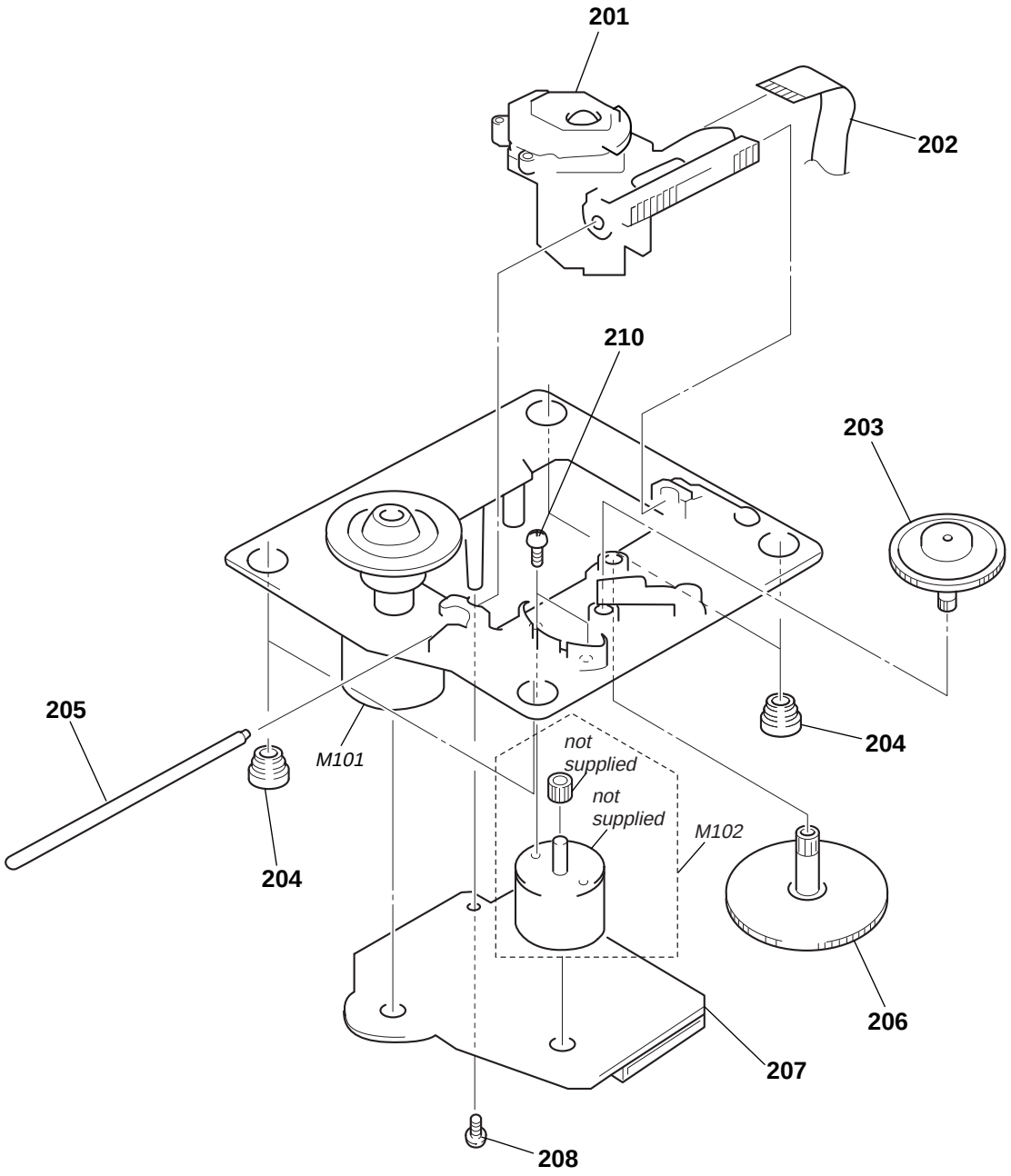
7-4. CD MECHANISM SECTION (2) (CDM59-5BD27)



Ref. No.	Part No.	Description	Remark
151	X-4952-019-4	PULLEY (A) ASSY, CHUCKING	
152	1-676-246-11	JUNCTION BOARD	
153	4-218-253-32	SCREW (M2.6), +BTTP	
154	4-225-885-01	BELT (LOADING)	
155	4-225-844-01	GEAR (LOADING A)	
156	4-218-252-52	SCREW (+PTPWH M2.6), FLOATING	
158	1-676-244-11	LOADING MOTOR BOARD	
159	4-224-613-01	GEAR (SHAFT)	
160	1-418-746-11	ENCODER, ROTARY	
161	4-224-607-01	GEAR, SWING	

Ref. No.	Part No.	Description	Remark
162	4-224-609-01	GEAR (LOADING C)	
163	4-224-608-01	COLLAR, SWING	
164	4-224-611-01	GEAR (LOADING B)	
165	3-016-533-01	WASHER (FR), STOPPER	
166	4-224-606-01	GEAR (RV)	
167	4-224-605-01	GEAR (U/D)	
168	1-471-061-11	MAGNET ASSY	
169	4-221-688-01	PULLEY (B), CHUCKING	
170	4-224-618-01	LEVER (LIFTER)	
M10	A-4735-762-A	MOTOR ASSY, LOADING (LOADING)	

7-5. BASE UNIT SECTION (BU-5BD27)



Ref. No.	Part No.	Description	Remark
⚠201	1-796-033-11	OPTICAL PICK-UP (PXR-104X)	
202	1-782-817-11	WIRE (FLAT TYPE) (16 CORE)	
203	4-917-567-01	GEAR (M)	
204	4-951-940-01	INSULATOR (BU)	
205	4-917-565-01	SHAFT, SLED	
206	4-917-564-01	GEAR (P), FLATNESS	

Ref. No.	Part No.	Description	Remark
207	A-4725-568-A	BD BOARD, COMPLETE	
208	3-087-053-01	+BVTP2.6 (3CR)	
210	3-713-786-51	SCREW +P 2X3	
M101	X-4917-523-3	BASE (OUTSERT) ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	

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.

SECTION 8
ELECTRICAL PARTS LIST

BD

NOTE:

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

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

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

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

Ref. No.	Part No.	Description			Remark
	A-4725-568-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C102	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C103	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C110	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C111	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C112	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C120	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C121	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C122	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C123	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C124	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C125	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C126	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C130	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C131	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C132	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C133	1-126-208-21	ELECT CHIP	47uF	20%	4V
C134	1-126-208-21	ELECT CHIP	47uF	20%	4V
C136	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C137	1-126-209-11	ELECT CHIP	100uF	20%	4V
C138	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C139	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C140	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C145	1-162-908-11	CERAMIC CHIP	3PF	0.25PF	50V
C150	1-126-204-11	ELECT CHIP	47uF	20%	16V
C151	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C152	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C153	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C154	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C158	1-164-172-11	CERAMIC CHIP	0.0056uF	10%	25V
C171	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C172	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C173	1-162-928-11	CERAMIC CHIP	120PF	5%	50V
C174	1-115-412-11	CERAMIC CHIP	680PF	5%	25V
C181	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C182	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C183	1-162-928-11	CERAMIC CHIP	120PF	5%	50V
C184	1-115-412-11	CERAMIC CHIP	680PF	5%	25V
C191	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C192	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C193	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C194	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C199	1-164-156-11	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
CN101	1-784-360-11	CONNECTOR, FFC (LIF (NON-ZIF)) 21P			
CN102	1-777-937-11	CONNECTOR, FFC/FPC 16P			
		< RESISTOR >			
FB191	1-216-864-11	SHORT CHIP	0		
		< IC >			
IC101	8-752-386-85	IC CXD2587Q			
IC131	8-752-089-74	IC CXA2581N-T4			
IC150	8-759-829-14	IC AN4800SB			
		< TRANSISTOR >			
Q131	8-729-010-08	TRANSISTOR	MSB710-R		
Q132	8-729-600-22	TRANSISTOR	2SA1235-F		
		< RESISTOR >			
R101	1-216-835-11	METAL CHIP	15K	5%	1/10W
R102	1-216-845-11	METAL CHIP	100K	5%	1/10W
R103	1-216-835-11	METAL CHIP	15K	5%	1/10W
R110	1-216-821-11	METAL CHIP	1K	5%	1/10W
R111	1-216-809-11	METAL CHIP	100	5%	1/10W
R112	1-216-833-11	METAL CHIP	10K	5%	1/10W
R120	1-216-839-11	METAL CHIP	33K	5%	1/10W
R121	1-216-833-11	METAL CHIP	10K	5%	1/10W
R122	1-216-845-11	METAL CHIP	100K	5%	1/10W
R123	1-216-857-11	METAL CHIP	1M	5%	1/10W
R125	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R126	1-216-833-11	METAL CHIP	10K	5%	1/10W
R127	1-216-821-11	METAL CHIP	1K	5%	1/10W
R129	1-216-815-11	METAL CHIP	330	5%	1/10W
R134	1-216-853-11	METAL CHIP	470K	5%	1/10W
R135	1-216-837-11	METAL CHIP	22K	5%	1/10W
R136	1-216-837-11	METAL CHIP	22K	5%	1/10W
R137	1-216-797-11	METAL CHIP	10	5%	1/10W
R138	1-216-798-11	METAL CHIP	12	5%	1/10W
R139	1-216-846-11	METAL CHIP	120K	5%	1/10W
R140	1-216-854-11	METAL CHIP	560K	5%	1/10W
R141	1-216-840-11	METAL CHIP	39K	5%	1/10W
R142	1-216-841-11	METAL CHIP	47K	5%	1/10W

BD DISPLAY HP IR-IN

Ref. No.	Part No.	Description			Remark
R143	1-216-855-11	METAL CHIP	680K	5%	1/10W
R144	1-216-846-11	METAL CHIP	120K	5%	1/10W
R145	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R146	1-216-845-11	METAL CHIP	100K	5%	1/10W
R149	1-216-821-11	METAL CHIP	1K	5%	1/10W
R151	1-216-845-11	METAL CHIP	100K	5%	1/10W
R152	1-216-833-11	METAL CHIP	10K	5%	1/10W
R153	1-216-864-11	SHORT CHIP	0		
R155	1-216-837-11	METAL CHIP	22K	5%	1/10W
R171	1-218-720-11	METAL CHIP	15K	0.5%	1/10W
R172	1-218-720-11	METAL CHIP	15K	0.5%	1/10W
R173	1-218-720-11	METAL CHIP	15K	0.5%	1/10W
R174	1-216-809-11	METAL CHIP	100	5%	1/10W
R181	1-218-720-11	METAL CHIP	15K	0.5%	1/10W
R182	1-218-720-11	METAL CHIP	15K	0.5%	1/10W
R183	1-218-720-11	METAL CHIP	15K	0.5%	1/10W
R184	1-216-809-11	METAL CHIP	100	5%	1/10W
R191	1-216-817-11	METAL CHIP	470	5%	1/10W
R192	1-216-797-11	METAL CHIP	10	5%	1/10W
		< COMPOSITION CIRCUIT BLOCK >			
RB101	1-233-576-11	RES, CHIP NETWORK	100 (3216)		
RB102	1-233-576-11	RES, CHIP NETWORK	100 (3216)		
		< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT IN)			
		< VIBRATOR >			
X191	1-767-408-21	VIBRATOR, CRYSTAL (16MHz)			
**********					
	1-681-139-21	DISPLAY BOARD **********			
	2-389-320-01	CUSHION			
	4-231-690-01	HOLDER (FL A)			
		< CAPACITOR >			
C851	1-104-658-91	ELECT	100uF	20%	10V
		< CONNECTOR >			
* CN810	1-764-700-11	SOCKET, CONNECTOR 37P			
CN811	1-750-194-11	CONNECTOR, BOARD TO BOARD 4P			
		< FLUORESCENT INDICATOR >			
FL801	1-517-946-21	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC802	8-759-827-70	IC NJL64H400A-1 (R)			
		< RESISTOR >			
R811	1-249-415-11	CARBON	680	5%	1/4W
R812	1-247-831-91	CARBON	1K	5%	1/4W
R813	1-249-419-11	CARBON	1.5K	5%	1/4W
R814	1-249-421-11	CARBON	2.2K	5%	1/4W
R815	1-247-843-11	CARBON	3.3K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R816	1-249-427-11	CARBON	6.8K	5%	1/4W
R817	1-249-415-11	CARBON	680	5%	1/4W
R818	1-247-831-91	CARBON	1K	5%	1/4W
R819	1-249-419-11	CARBON	1.5K	5%	1/4W
R820	1-249-421-11	CARBON	2.2K	5%	1/4W
R821	1-247-843-11	CARBON	3.3K	5%	1/4W
R822	1-249-427-11	CARBON	6.8K	5%	1/4W
R851	1-247-807-31	CARBON	100	5%	1/4W
R852	1-247-807-31	CARBON	100	5%	1/4W
		< SWITCH >			
S801	1-771-349-21	SWITCH, KEYBOARD (▷)			
S802	1-771-349-21	SWITCH, KEYBOARD (❚❚)			
S803	1-771-349-21	SWITCH, KEYBOARD (■)			
S804	1-771-349-21	SWITCH, KEYBOARD (EX-CHANGE)			
S805	1-771-349-21	SWITCH, KEYBOARD (DISC SKIP)			
S806	1-771-349-21	SWITCH, KEYBOARD (◀◀)			
S807	1-771-349-21	SWITCH, KEYBOARD (▶▶)			
S808	1-771-349-21	SWITCH, KEYBOARD (TIME EDIT)			
S809	1-771-349-21	SWITCH, KEYBOARD (CHECK)			
S810	1-771-349-21	SWITCH, KEYBOARD (CLEAR)			
S811	1-771-349-21	SWITCH, KEYBOARD (⏏)			
S825	1-475-543-11	ENCODER, ROTARY (I◁◁AMS▷▷I)			
**********					
	1-681-142-21	HP BOARD **********			
		< CAPACITOR >			
C881	1-162-294-31	CERAMIC	0.001uF	10%	50V
C882	1-162-294-31	CERAMIC	0.001uF	10%	50V
C883	1-164-159-11	CERAMIC	0.1uF		50V
		< JACK >			
J881	1-770-306-11	JACK (LARGE TYPE) (PHONES)			
		< RESISTOR >			
R881	1-249-401-11	CARBON	47	5%	1/4W
R882	1-249-401-11	CARBON	47	5%	1/4W
**********					
		IR-IN BOARD **********			
		< CAPACITOR >			
C1001	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1002	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1007	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1009	1-216-864-11	SHORT CHIP	0		
		< CONNECTOR >			
CN1001	1-784-921-11	PIN, CONNECTOR 4P			
		< JACK >			
J1001	1-566-891-21	JACK (IR REMOTE IR IN)			
		< TRANSISTOR >			
Q1001	8-729-900-52	TRANSISTOR	DTC114YK		

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R1001	1-216-864-11	SHORT CHIP	0		
R1004	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1005	1-216-864-11	SHORT CHIP	0		
R1006	1-216-864-11	SHORT CHIP	0		
**********					
	1-676-246-11	JUNCTION BOARD			
		**********			
		< CAPACITOR >			
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	1-784-767-11	CONNECTOR, FFC 6P			
		< IC >			
IC11	8-759-356-03	IC BA6780			
		< RESISTOR >			
R21	1-249-429-11	CARBON	10K	5%	1/4W
R22	1-249-426-11	CARBON	5.6K	5%	1/4W
R23	1-247-847-91	CARBON	4.7K	5%	1/4W
R24	1-249-430-11	CARBON	12K	5%	1/4W
R25	1-249-382-11	CARBON	1.2	5%	1/4W
R26	1-249-382-11	CARBON	1.2	5%	1/4W
		< SWITCH >			
S11	1-771-836-11	SWITCH, LEVER (SLIDE)			
**********					
	1-681-140-21	KEY BOARD			
		**********			
		< CONNECTOR >			
CN812	1-750-185-11	CONNECTOR, BOARD TO BOARD 4P			
		< RESISTOR >			
R824	1-249-415-11	CARBON	680	5%	1/4W
R825	1-247-831-91	CARBON	1K	5%	1/4W
R826	1-249-419-11	CARBON	1.5K	5%	1/4W
R827	1-249-421-11	CARBON	2.2K	5%	1/4W
R830	1-249-415-11	CARBON	680	5%	1/4W
R831	1-247-831-91	CARBON	1K	5%	1/4W
R832	1-249-419-11	CARBON	1.5K	5%	1/4W
R833	1-249-421-11	CARBON	2.2K	5%	1/4W
		< SWITCH >			
S812	1-771-349-21	SWITCH, KEYBOARD (DISC 5)			
S813	1-771-349-21	SWITCH, KEYBOARD (DISC 4)			
S814	1-771-349-21	SWITCH, KEYBOARD (DISC 3)			
S815	1-771-349-21	SWITCH, KEYBOARD (DISC 2)			
S816	1-771-349-21	SWITCH, KEYBOARD (DISC 1)			
S817	1-771-349-21	SWITCH, KEYBOARD (TIME)			
S818	1-771-349-21	SWITCH, KEYBOARD (REPEAT)			
S819	1-771-349-21	SWITCH, KEYBOARD (FADER)			
S820	1-771-349-21	SWITCH, KEYBOARD (PEAK SEARCH)			
S821	1-771-349-21	SWITCH, KEYBOARD (PLAY MODE)			
**********					
	1-676-244-11	LOADING MOTOR BOARD			
		**********			
**********					
	A-1082-287-A	MAIN BOARD, COMPLETE			
		**********			
	7-685-871-01	SCREW +BVTT 3X6 (S)			
		< CAPACITOR >			
C301	1-161-494-00	CERAMIC	0.022uF		25V
C302	1-104-658-91	ELECT	100uF	20%	10V
C303	1-161-494-00	CERAMIC	0.022uF		25V
C304	1-164-159-11	CERAMIC	0.1uF		50V
C325	1-161-494-00	CERAMIC	0.022uF		25V
C326	1-104-658-91	ELECT	100uF	20%	10V
C351	1-126-963-11	ELECT	4.7uF	20%	50V
C401	1-126-965-91	ELECT	22uF	20%	50V
C404	1-126-965-91	ELECT	22uF	20%	50V
C407	1-162-290-31	CERAMIC	470PF	10%	50V
C451	1-126-933-11	ELECT	100uF	20%	16V
C501	1-126-965-91	ELECT	22uF	20%	50V
C504	1-126-965-91	ELECT	22uF	20%	50V
C507	1-162-290-31	CERAMIC	470PF	10%	50V
C551	1-126-933-11	ELECT	100uF	20%	16V
C602	1-126-937-11	ELECT	4700uF	20%	16V
C603	1-126-767-11	ELECT	1000uF	20%	16V
C604	1-104-655-91	ELECT	470uF	20%	6.3V
C608	1-126-923-91	ELECT	220uF	20%	10V
C609	1-128-552-51	ELECT	47uF	20%	63V
C610	1-126-964-11	ELECT	10uF	20%	50V
C611	1-126-767-11	ELECT	1000uF	20%	16V
C613	1-104-655-91	ELECT	470uF	20%	6.3V
C616	1-161-494-00	CERAMIC	0.022uF		25V
C619	1-104-658-91	ELECT	100uF	20%	10V
⚠C620	1-113-924-11	CERAMIC	0.0047uF	20%	250V
C622	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
CN301	1-784-798-11	CONNECTOR, FFC 37P			
CN302	1-569-937-11	SOCKET, CONNECTOR 21P			
CN311	1-573-911-11	PIN, CONNECTOR 13P			
CN351	1-506-468-11	PIN, CONNECTOR 3P			
CN603	1-792-131-11	LEAD (WITH CONNECTOR)			
* CN1101	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P			
* CN1102	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P			
		< DIODE >			
D353	8-719-991-33	DIODE 1SS133T-77			
D601	6-500-522-11	DIODE 10EDB40-TA2B5			

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.

MAIN **POWER SW**

Ref. No.	Part No.	Description			Remark
D602	6-500-522-11	DIODE 10EDB40-TA2B5			
D603	6-500-522-11	DIODE 10EDB40-TA2B5			
D604	6-500-522-11	DIODE 10EDB40-TA2B5			
D605	6-500-522-11	DIODE 10EDB40-TA2B5			
D606	8-719-110-08	DIODE RD8.2ESB2			
D607	8-719-991-33	DIODE 1SS133T-77			
D608	8-719-109-85	DIODE RD5.1ESB2			
D609	8-719-991-33	DIODE 1SS133T-77			
D610	8-719-983-79	DIODE MTZJ-T-72-27D			
		< GROUND TERMINAL BOARD >			
EB601	1-537-770-21	TERMINAL BOARD, GROUND			
		< IC >			
IC301	8-752-919-66	IC CXP82532-013Q			
IC303	8-749-017-31	IC GP1FA550TZ (DIGITAL OUT OPTICAL)			
IC350	8-759-145-58	IC uPC4558C			
IC351	8-759-167-88	IC NJM4565D			
IC601	8-759-231-53	IC TA7805S			
IC602	8-759-071-48	IC TA7807S			
IC603	8-759-165-82	IC PST600E-T			
		< JACK >			
J301	1-785-868-11	JACK, PIN 2P (ANALOG OUT)			
		< COIL >			
L601	1-412-473-21	INDUCTOR (SMALL TYPE)			
L602	1-414-151-21	INDUCTOR 470uH			
		< TRANSISTOR >			
Q301	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q307	8-729-029-56	TRANSISTOR DTA144ESA			
Q352	8-729-029-56	TRANSISTOR DTA144ESA			
Q353	8-729-029-56	TRANSISTOR DTA144ESA			
Q356	8-729-029-56	TRANSISTOR DTA144ESA			
Q402	8-729-141-26	TRANSISTOR 2SC3622A-LK			
Q405	8-729-141-26	TRANSISTOR 2SC3622A-LK			
Q502	8-729-141-26	TRANSISTOR 2SC3622A-LK			
Q505	8-729-141-26	TRANSISTOR 2SC3622A-LK			
Q601	8-729-140-97	TRANSISTOR 2SB734-34			
		< RESISTOR >			
R301	1-249-429-11	CARBON	10K	5%	1/4W
R302	1-249-429-11	CARBON	10K	5%	1/4W
R304	1-249-429-11	CARBON	10K	5%	1/4W
R305	1-247-807-31	CARBON	100	5%	1/4W
R306	1-249-429-11	CARBON	10K	5%	1/4W
R307	1-247-807-31	CARBON	100	5%	1/4W
R308	1-247-879-91	CARBON	100K	5%	1/4W
R320	1-249-427-11	CARBON	6.8K	5%	1/4W
R321	1-249-427-11	CARBON	6.8K	5%	1/4W
R322	1-249-427-11	CARBON	6.8K	5%	1/4W
R323	1-249-427-11	CARBON	6.8K	5%	1/4W
R324	1-249-429-11	CARBON	10K	5%	1/4W
R325	1-247-831-91	CARBON	1K	5%	1/4W
R326	1-247-847-91	CARBON	4.7K	5%	1/4W
R327	1-247-847-91	CARBON	4.7K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R329	1-247-847-91	CARBON	4.7K	5%	1/4W
R350	1-247-807-31	CARBON	100	5%	1/4W
R351	1-247-807-31	CARBON	100	5%	1/4W
R352	1-247-879-91	CARBON	100K	5%	1/4W
R353	1-247-879-91	CARBON	100K	5%	1/4W
R356	1-247-879-91	CARBON	100K	5%	1/4W
R401	1-247-895-00	CARBON	470K	5%	1/4W
R402	1-249-419-11	CARBON	1.5K	5%	1/4W
R403	1-249-419-11	CARBON	1.5K	5%	1/4W
R404	1-249-429-11	CARBON	10K	5%	1/4W
R405	1-249-429-11	CARBON	10K	5%	1/4W
R406	1-247-895-00	CARBON	470K	5%	1/4W
R407	1-247-807-31	CARBON	100	5%	1/4W
R414	1-249-409-11	CARBON	220	5%	1/4W
R415	1-249-409-11	CARBON	220	5%	1/4W
R419	1-249-421-11	CARBON	2.2K	5%	1/4W
R420	1-249-409-11	CARBON	220	5%	1/4W
R422	1-249-421-11	CARBON	2.2K	5%	1/4W
R451	1-247-843-11	CARBON	3.3K	5%	1/4W
R452	1-249-429-11	CARBON	10K	5%	1/4W
R501	1-247-895-00	CARBON	470K	5%	1/4W
R502	1-249-419-11	CARBON	1.5K	5%	1/4W
R503	1-249-419-11	CARBON	1.5K	5%	1/4W
R504	1-249-429-11	CARBON	10K	5%	1/4W
R505	1-249-429-11	CARBON	10K	5%	1/4W
R506	1-247-895-00	CARBON	470K	5%	1/4W
R507	1-247-807-31	CARBON	100	5%	1/4W
R514	1-249-409-11	CARBON	220	5%	1/4W
R515	1-249-409-11	CARBON	220	5%	1/4W
R519	1-249-421-11	CARBON	2.2K	5%	1/4W
R520	1-249-409-11	CARBON	220	5%	1/4W
R522	1-249-421-11	CARBON	2.2K	5%	1/4W
R551	1-247-843-11	CARBON	3.3K	5%	1/4W
R552	1-249-429-11	CARBON	10K	5%	1/4W
R601	1-249-429-11	CARBON	10K	5%	1/4W
R602	1-249-429-11	CARBON	10K	5%	1/4W
R603	1-249-429-11	CARBON	10K	5%	1/4W
R604	1-249-429-11	CARBON	10K	5%	1/4W
R605	1-249-411-11	CARBON	330	5%	1/4W
R606	1-247-807-31	CARBON	100	5%	1/4W
R607	1-249-389-11	CARBON	4.7	5%	1/4W
		< VIBRATOR >			
X301	1-795-004-21	VIBRATOR, CERAMIC (10MHz)			
**********					
	1-681-141-21	POWER SW BOARD			
		**********			
		< CAPACITOR >			
⚠C601	1-113-924-11	CERAMIC	0.0047uF	20%	250V
		< CONNECTOR >			
* CN601	1-580-230-31	PIN, CONNECTOR (PC BOARD) 2P			
* CN602	1-568-226-11	PIN, CONNECTOR (3.96mm PITCH) 2P			

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.

Ref. No.	Part No.	Description			Remark
		< SWITCH >			
⚠S601	1-762-581-11	SWITCH, AC POWER PUSH (1 KEY) (POWER)			
**********					
	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			
D11	8-749-017-45	SENSOR, PHONT RPR-220C1N			
		< RESISTOR >			
R10	1-249-416-11	CARBON	820	5%	1/4W
R11	1-249-407-11	CARBON	150	5%	1/4W
R12	1-249-429-11	CARBON	10K	5%	1/4W
**********					
		MISCELLANEOUS			
		**********			
⚠9	1-783-531-32	CORD, POWER			
60	1-823-116-11	WIRE (FLAT TYPE) (37 CORE)			
111	1-791-930-11	WIRE (FLAT TYPE) (6 CORE)			
160	1-418-746-11	ENCODER, ROTARY			
⚠201	1-796-033-11	OPTICAL PICK-UP (PXR-104X)			
202	1-782-817-11	WIRE (FLAT TYPE) (16 CORE)			
FL801	1-517-946-21	INDICATOR TUBE, FLUORESCENT			
M10	A-4735-762-A	MOTOR ASSY, LOADING (LOADING)			
M11	A-4735-761-A	MOTOR ASSY, ROTARY (TRAY)			
M101	X-4917-523-3	BASE (OUTSERT) ASSY (SPINDLE)			
M102	X-4917-504-1	MOTOR ASSY (SLED)			
⚠T601	1-435-342-11	TRANSFORMER, POWER			
**********					
		ACCESSORIES			
		**********			
	1-476-132-21	REMOTE COMMANDER (RM-DC355)			
	1-790-735-12	CORD, CONNECTION			
	2-546-622-11	MANUAL, INSTRUCTION (ENGLISH)			
	2-546-622-21	MANUAL, INSTRUCTION (FRENCH)			
	4-981-643-01	COVER, BATTERY (RM-DC355)			

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.

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2004.11	New