HCD-W550

SERVICE MANUAL

Canadian Model
AEP Model
UK Model
E Model
Australian Model
Tourist Model

- HCD-W550 is the deck, CD section in MHC-W550/W770AV.

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CD Section	Model Name Using Similar Mechanism	HCD-GR8/RX90
	CD Mechanism Type	CDM38-5BD29A
	Base Unit Name	BU-5BD29A
Tape deck Section	Model Name Using Similar Mechanism	HCD-GR5/RX50
	Tape Transport Mechanism Type	TCM-220WR2E

SPECIFICATIONS

CD player section

system	Compact disc and digital audio system
Laser	Semiconductor laser (l = 780 mm) Emission duration : continuous
Laser output	Max. 44.6 mW* *This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Frequency response	2Hz - 20 kHz (± 0.5dB)
Wavelenght	780 - 790 mm
Signal to noise ratio	More than 90 dB
Dynamic renge	More than 90 dB

CD OPTICAL DIGITAL OUT
(Square optical connector jack, rear panel)

Wavelength	600 mm
Output Level	- 18 dBm

Tape player section

Recording system	4 track 2 channel stereo
Frequency response (DOLBY NR OFF)	60 - 13,000 Hz (± 3dB), using Sony TYPE I cassette 60 - 14,000 Hz (± 3 dB), using Sony TYPE II cassette

General

Dimensions (w / h / d)	Approx. 280 ¥ 205 ¥ 359 mm
Mass	Approx. 4.3 kg

Design and specifications are subject to change without notice.

STEREO CASSETTE DECK CD PLAYER

MICROFILM

SONY®

TABLE OF CONTENTS

SERVICING NOTE

- Supplying power during servicing

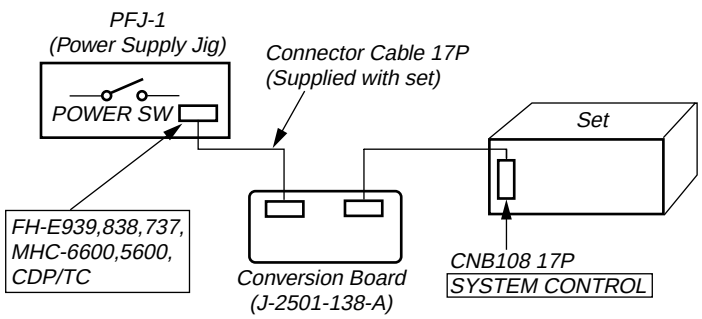
This equipment cannot operate without using a separate power supply. Connect to the STR-W550/W770AV when performing service work.

To apply power set the SYSTEM POWER switch on the Tuner/Amp to ON.

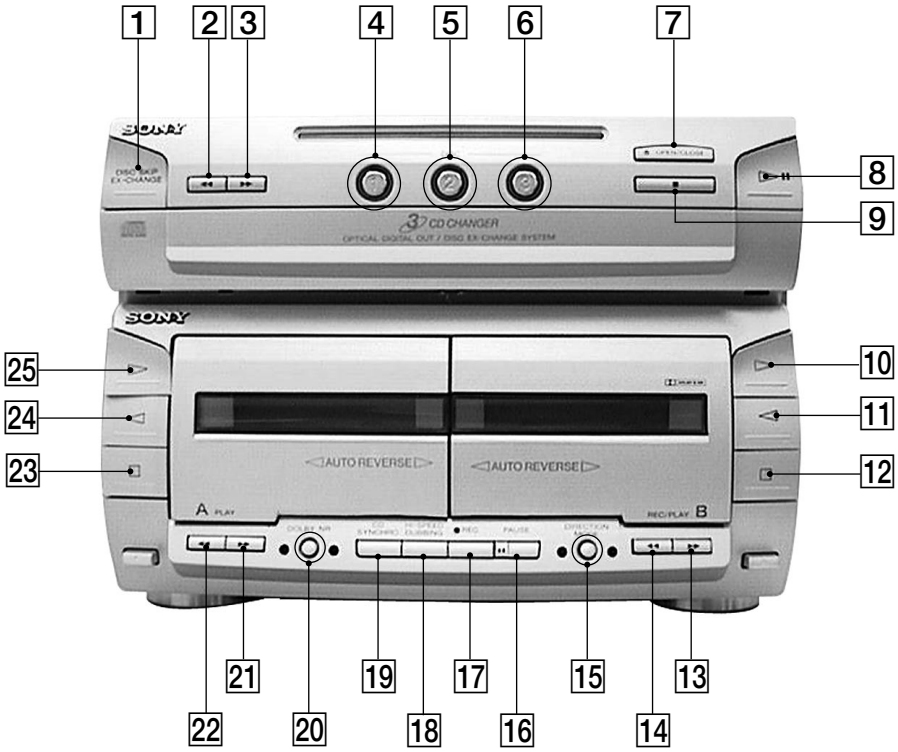
When other units are not available use the PFJ-1 power supply jig.

When using the PFJ-1, simultaneously press the CD STOP button and the DECK A ►► (fast rightward) button to turn on the power.

[Connection Diagram]



SECTION 1
GENERAL

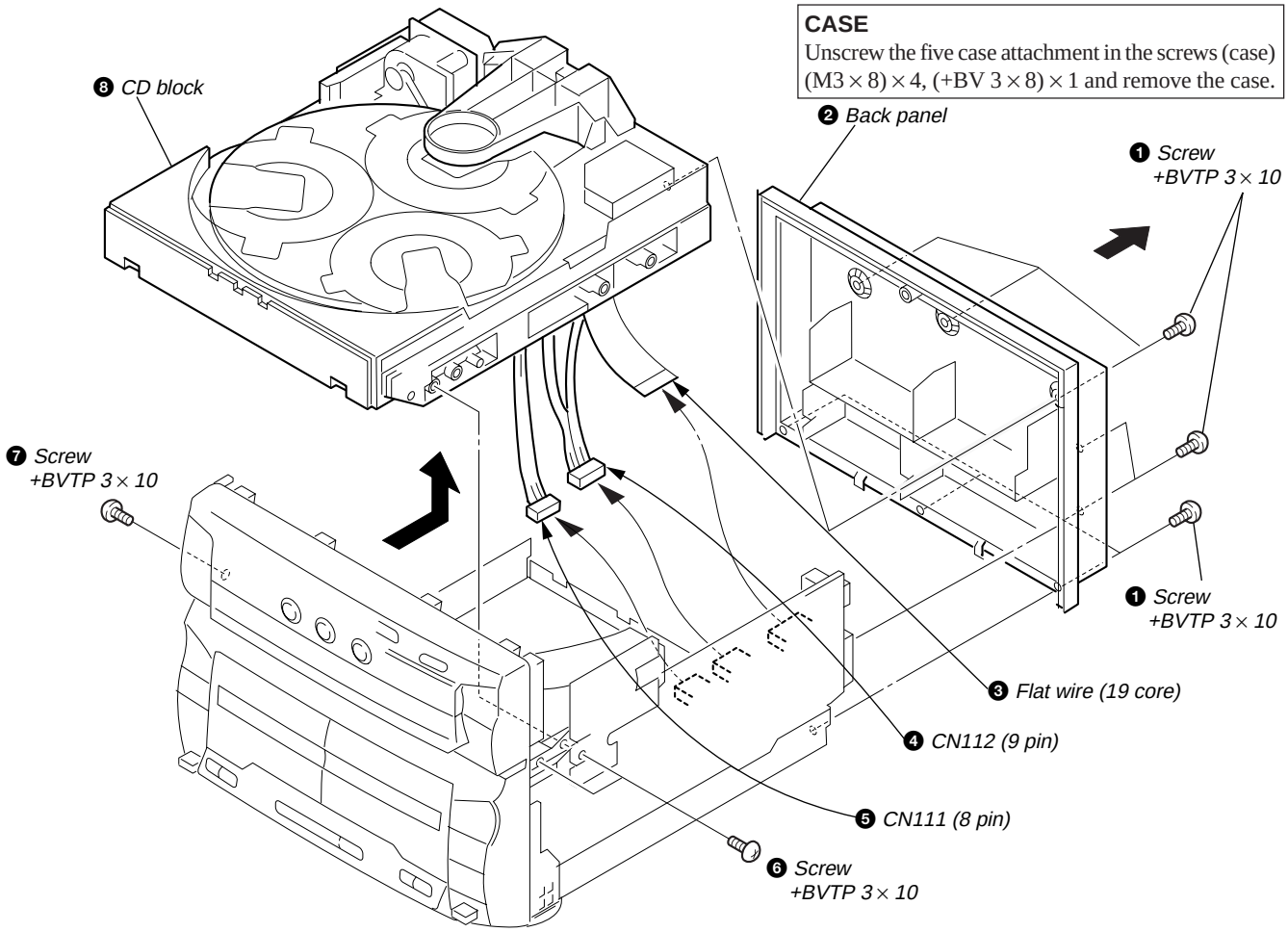


1 DISC SKIP EX-CHANGE Button (CD)
2 ◀◀ Button (CD)
3 ▶▶ Button (CD)
4 DISC 1 Button (CD)
5 DISC 2 Button (CD)
6 DISC 3 Button (CD)
7 ⏏ OPEN/CLOSE Button (CD)
8 ▷II Button (CD)
9 ■ Button (CD)
10 ▷ Button [B] (DECK)
11 ◁ Button [B] (DECK)
12 □ Button [B] (DECK)
13 ▶▶ Button [B] (DECK)
14 ◀◀ Button [B] (DECK)
15 DIRECTION MODE Button (DECK)
16 PAUSE Button (DECK)
17 REC Button (DECK)
18 HI-SPEED DUBBING Button (DECK)
19 CD SYNCHRO Button (DECK)
20 DOLBY NR Button (DECK)
21 ▶▶ Button [A] (DECK)
22 ◀◀ Button [A] (DECK)
23 □ Button [A] (DECK)
24 ◁ Button [A] (DECK)
25 ▷ Button [A] (DECK)

SECTION 2
DISASSEMBLY

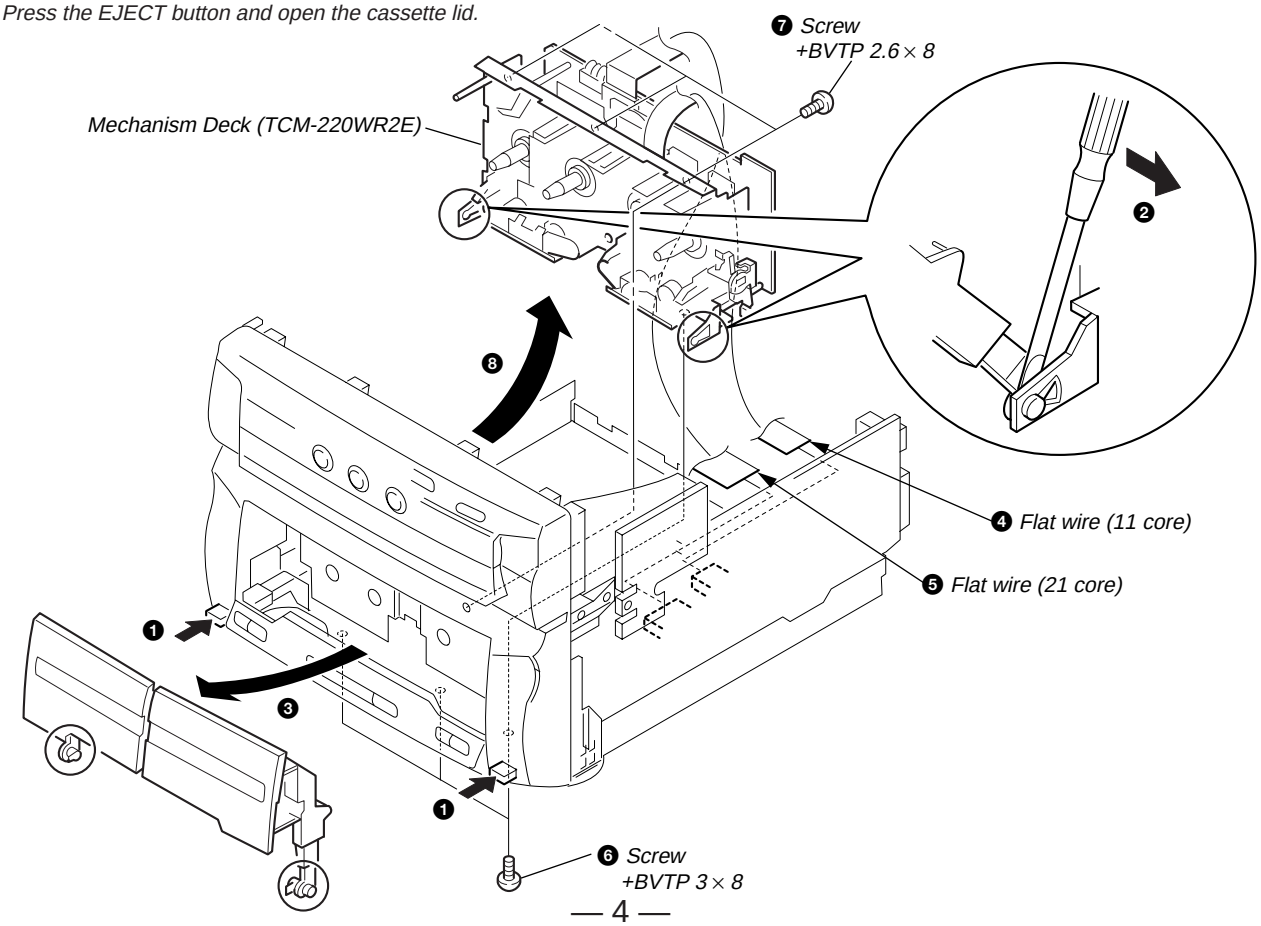
Note : Follow the disassembly procedure in the numerical order given.

2-1. BACK PANEL, CD BLOCK REMOVAL

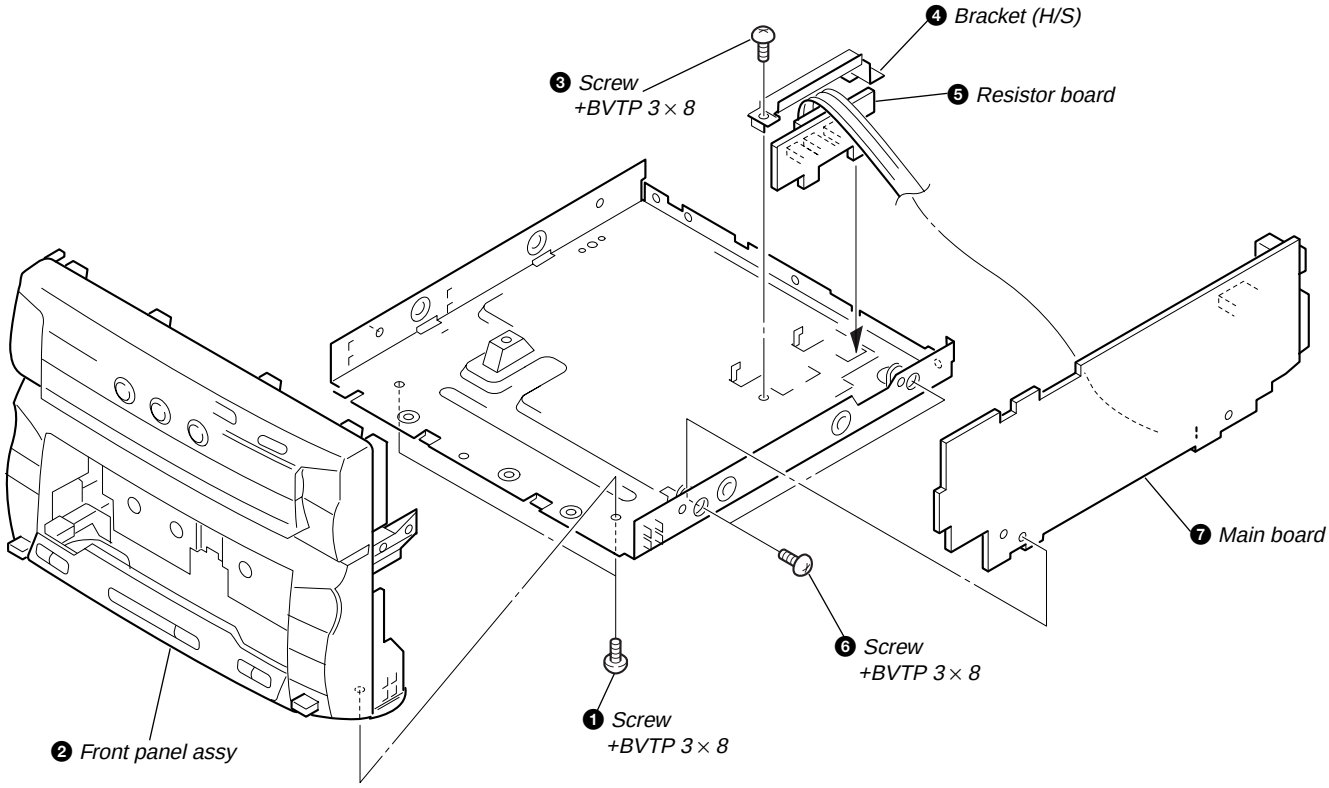


2-2. CASSETTE LID (A)/(B) ASSY, MECHANISM DECK REMOVAL

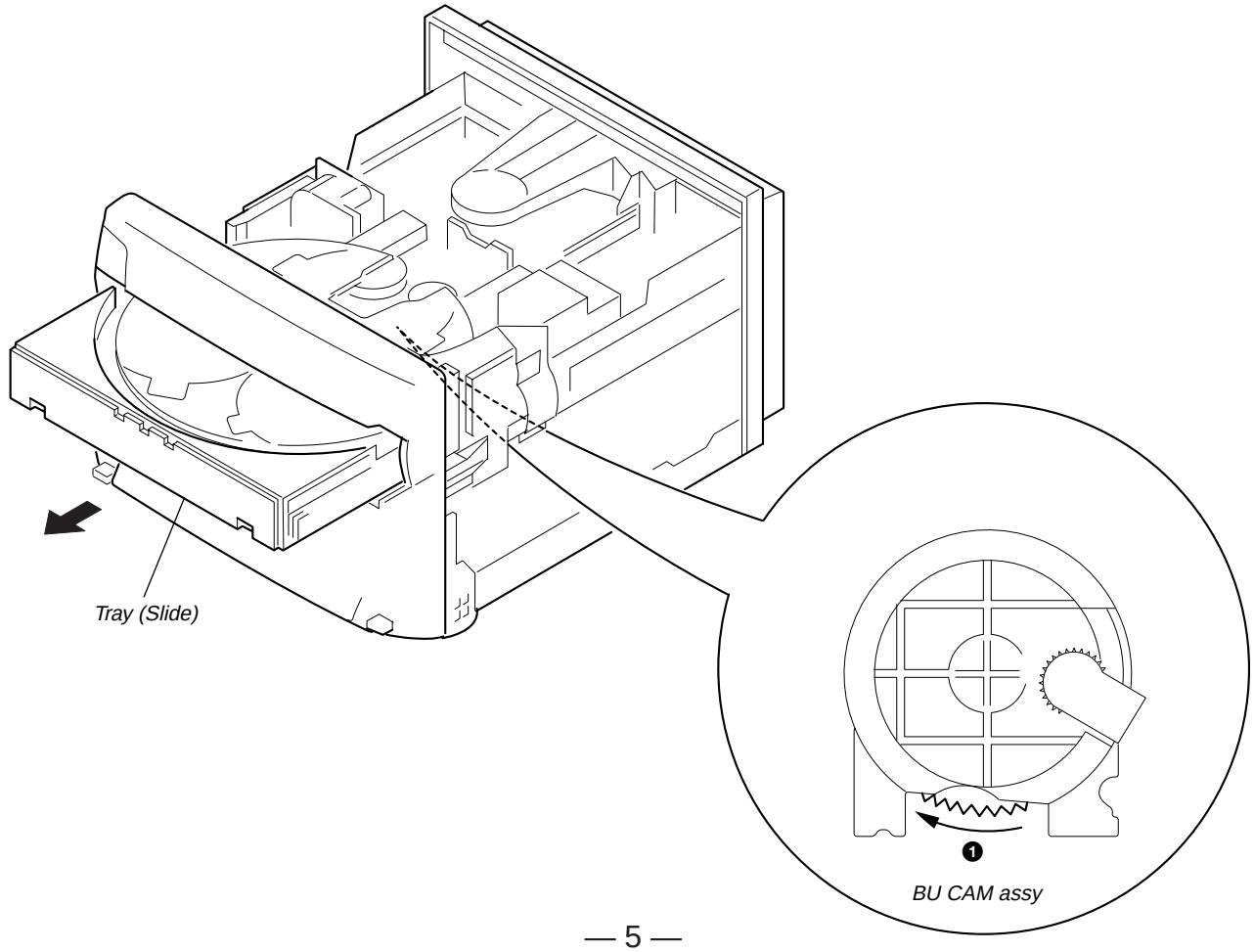
① *Press the EJECT button and open the cassette lid.*



2-3. MAIN BOARD, RESISTOR BOARD, FRONT PANEL ASSY REMOVAL



- **Tray (Slide) getting out procedure on the power supply is OFF**
  Rotate the BU CAM assembly in the direction of the arrow and pull out the slide.



SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENT

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
   record/playback head — pinch roller
   erase head — rubber belts
   capstan — idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

• Torque Measurement

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	36 to 61g•cm (0.50 – 0.84 oz•inch)
Forward Back Tension	CQ-102C	2 to 6g•cm (0.028 – 0.083 oz•inch)
Reverse	CQ-102RC	36 to 61g•cm (0.50 – 0.84 oz•inch)
Reverse Back Tension	CQ-102RC	2 to 6g•cm (0.028 – 0.083 oz•inch)
FF, REW	CQ-201B	61 to 143g•cm (0.85 – 1.99 oz•inch)

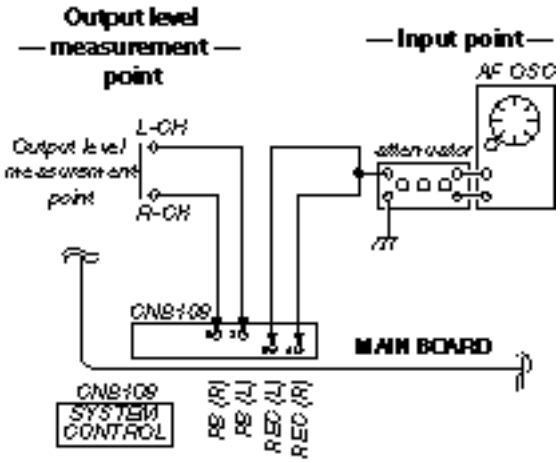
• Tape Tension Measurement

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 100 g (3.53 oz)
Reverse	CQ-403R	more than 100 g (3.53 oz)

3-2. ELECTRICAL ADJUSTMENT

DECK SECTION

1. The adjustment should be performed in the publication. (Be sure to make playback adjustment at first.)
2. The adjustment and measurement should be performed for both L-CH and R-CH.
   • Switch position
   DOLBY NR switch : OFF
   FUNCTION button : OFF
   EFFECT switch : OFF
   DBFB switch : OFF
3. Deck section electrical adjustments are made in test mode by press key switch same time CD STOP DECK A STOP and DECK B STOP button.
4. Input point and output level measurement point.



• Test Tape

Tape	Signal	Used for
P-4-A100	10 kHz, –10 dB	Head Azimuth Adjustment
P-4-L300	315 Hz, 0dB	Level Adjustment
WS-48B	3 kHz, 0dB	Tape Speed Adjustment

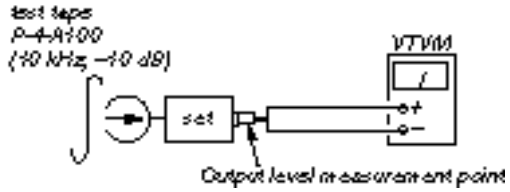
0 dB=0.775V

Record/Playback Head Azimuth Adjustment

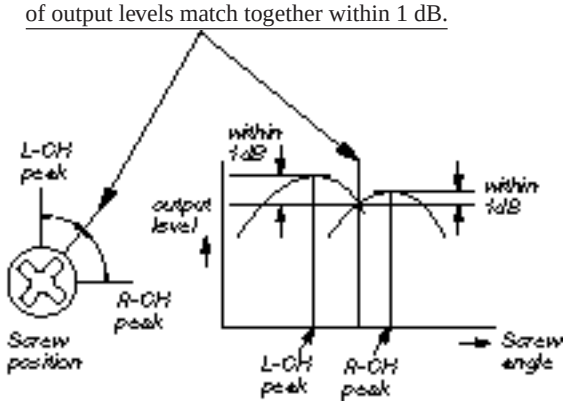
DECK A **DECK B**

Procedure:

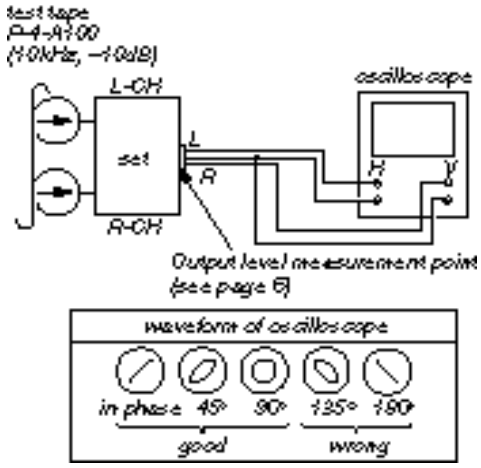
1. Forward Playback mode
   Reverse Playback mode



2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB.

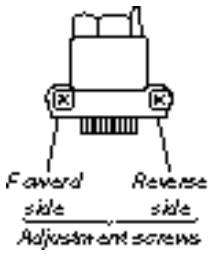


3. Playback Mode



4. Change the playback mode and repeat the steps 1 to 3.
5. After the adjustment, lock the adjustment screw with suitable locking compound.

Adjustment Location:
— Record/playback head (Deck A and B) —

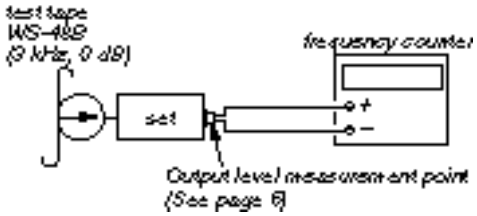


Tape Speed Adjustment DECK A DECK B

Note: Start the Tape Speed adjustment as below after setting to the test mode.
Set to test mode. (Press key switch same time CD STOP DECK A STOP and DECK B STOP button.)
Test mode off. (Power off.)

Procedure:

- Perform high speed adjustment before normal speed adjustment.
  Mode: Playback



Speed	Deck	Adjustment	Frequency counter
*High	A	RV652	5,910 to 6,090 Hz
	B	RV652	
Normal	A	RV651	2,910 to 3,090 Hz
	B	RV651	

* Continue to press HIGH SPEED DUBBING switch (S259) in playback mode : High speed playback.

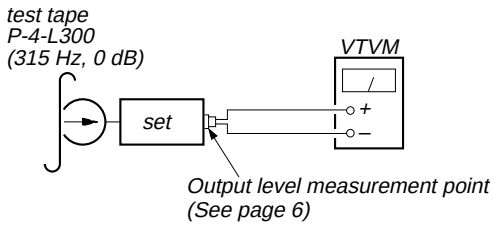
Frequency difference between the beginning and the end of the tape should be within ± 3%.
Frequency difference between deck A and deck B the beginning of the tape should be within 1.5 %.

Adjustment Location: AUDIO board (See page 8)

Sample Value of Wow and flutter
W.RMS (JIS) within 0.3%
(test tape: WS-48B)

Playback level Adjustment DECK A DECK B

Procedure:
— FWD playback Mode —



Deck A is RV311 (L-CH) and RV411 (R-CH), Deck B is RV301 (L-CH) and RV401 (R-CH) so that adjustment within adjustment level as follows.

Adjustment Level:
LINE OUT level : –8.2 to –7.2 dB (301.5 to 338.3 mV)
Level Difference between Channels : within 0.5 dB

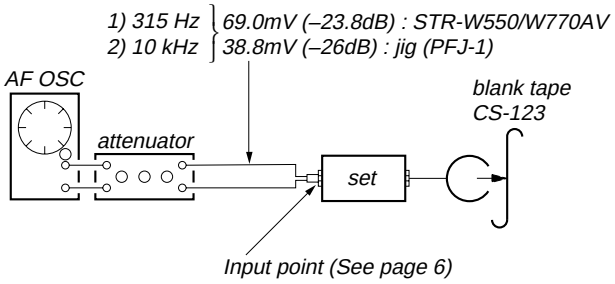
Confirm the OUTPUT level does not change in playback mode while changing the mode from playback to stop several times.

Adjustment Location: AUDIO board (See page 8)

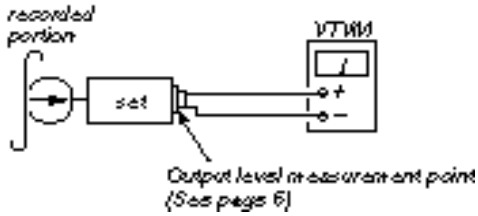
Record Bias Adjustment DECK B

Procedure:

1. Record mode



2. Mode: Playback



3. Confirm playback the signal recorded in step 1 become adjustment level as follows.
4. If these levels do not adjustment level, adjustment the RV341 (L-CH) and RV441 (R-CH) to repeat steps 1 and 4.

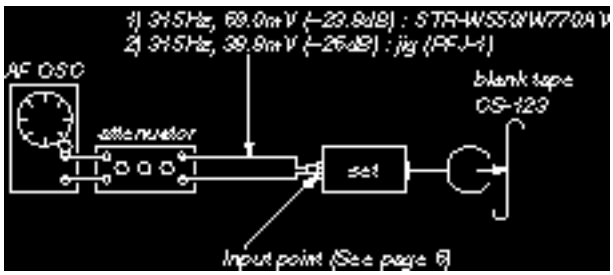
Adjustment level: Playback output of 315 Hz to playback output of 10 kHz: 0 ± 1.0 dB (0 ± 4.5mV).

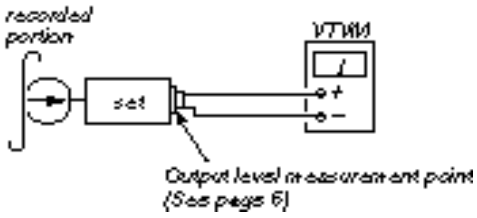
Adjustment Location: AUDIO board

Record Level Adjustment DECK B

Procedure:

1. Record mode





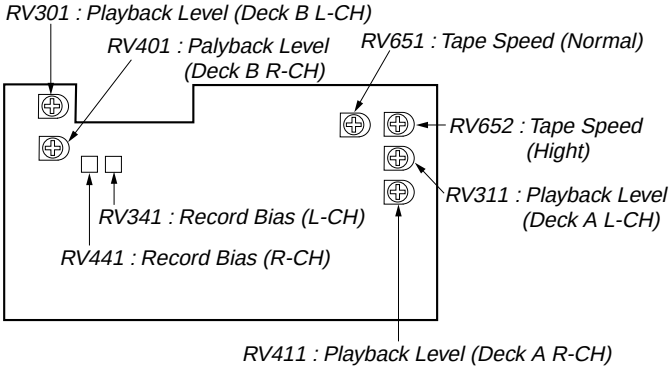
2. Playback mode
3. Confirm playback the signal recorded in step 1 become adjustment level as follows.
4. If these levels do not adjustment level, adjustment the RV401 (L-CH) and RV451 (R-CH) to repeat steps 1 and 4.

Adjustment Level:
OUTPUT level: –23.8 dB ± 1.0 dB (56.1 to 44.6 mV)

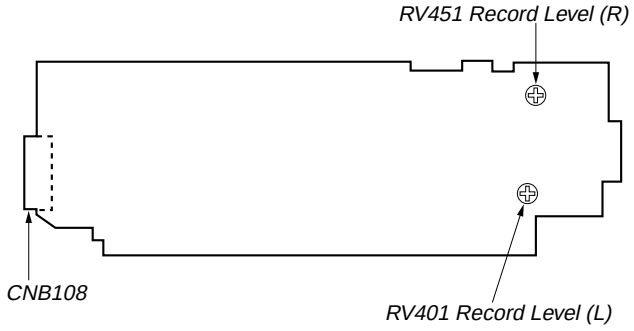
Adjustment Location: MAIN board

Adjustment Location :

[AUDIO BOARD] — Component Side —



[MAIN BOARD] — Component Side —



CD SECTION

Note :

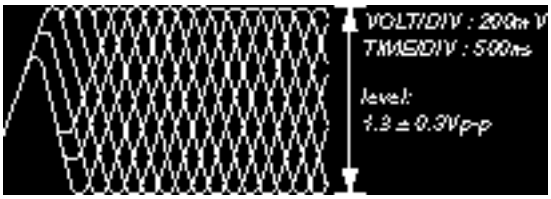
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10M impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal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

Focus Bias check

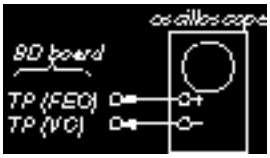
Procedure:

1. Connect oscilloscope to test point TP (RF). (GND terminal : VC)
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that the shape " " can be clearly distinguished at the center of the waveform and check the RF signal level.

- **RF signal**



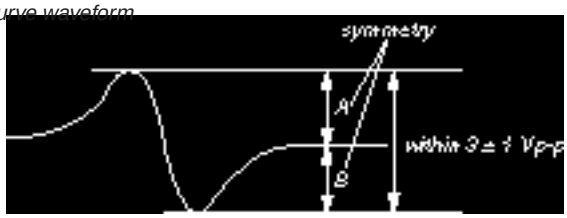
S Curve Check



Procedure:

1. Connect oscilloscope to test point TP (FEO).
2. Connect between test point TP (FOK) and GND by lead wire.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3±1 Vp-p.

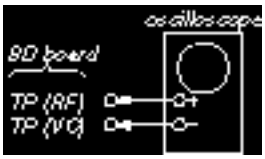
S-curve waveform



6. After check, remove the lead wire connected in step 2.

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

RF Level Check



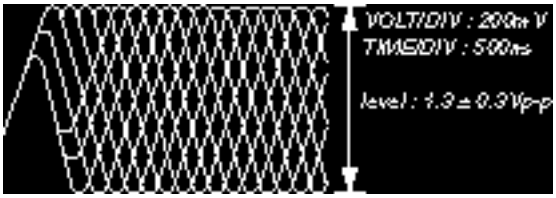
Procedure:

1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

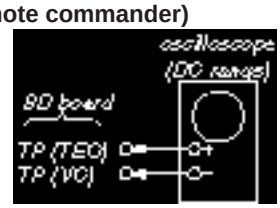
Note:

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

- **RF signal**



E-F Balance (1 Track Jump) check
(Without remote commander)

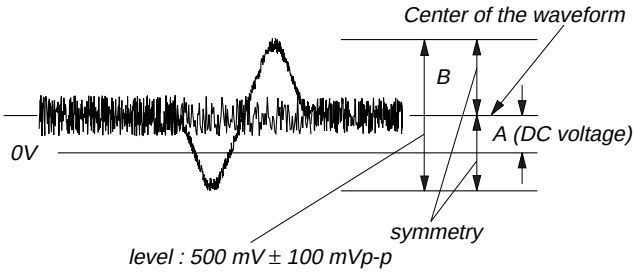


Procedure:

1. Connect oscilloscope to test point TP (TEO) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in to play the number five track.
4. Press the "P (Pause)" button. (Becomes the 1 track jump mode)
5. Check the level B of the oscilloscope's waveform and the A (DC voltage) of the center of the Traverse waveform.
   Confirm the following:

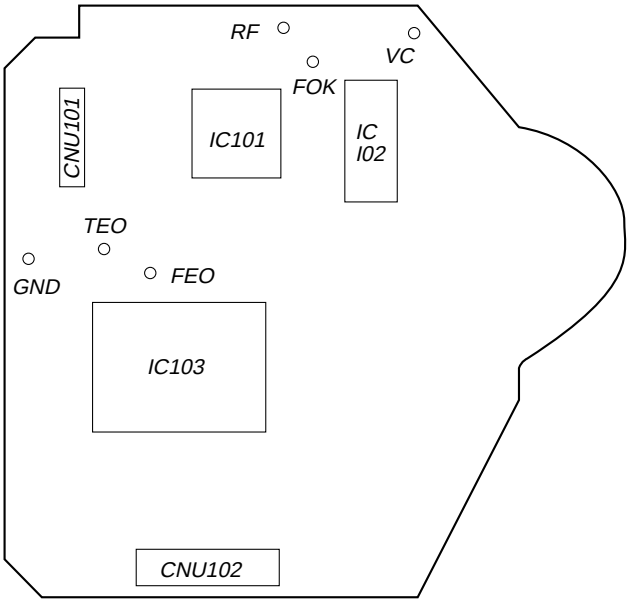
$$\frac{A - B}{2\,(A + B)} \times 100 = \pm 7\ (\%)$$

1 track jump waveform



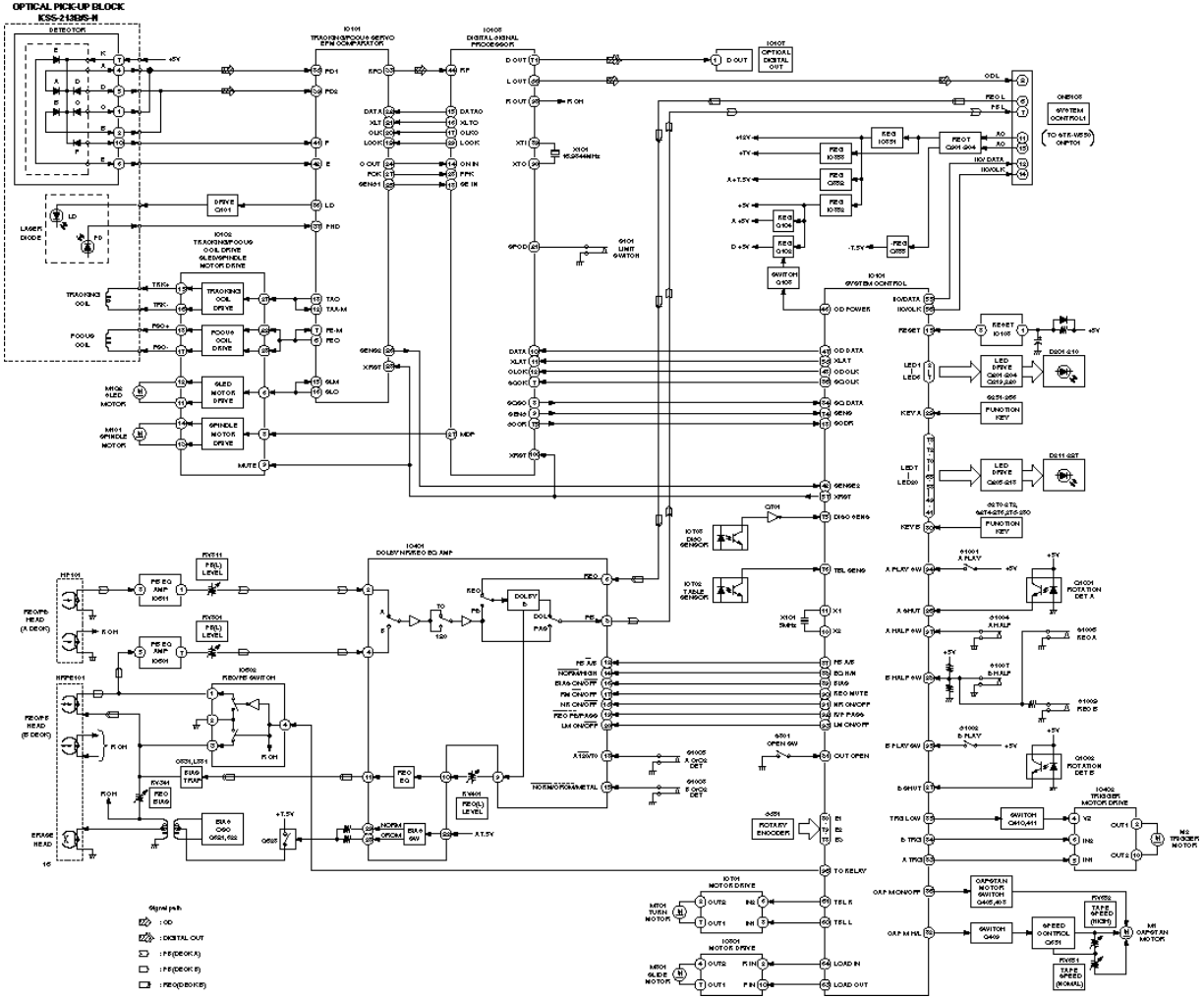
Adjustment Location:

[BD BOARD] (Conductor Side)

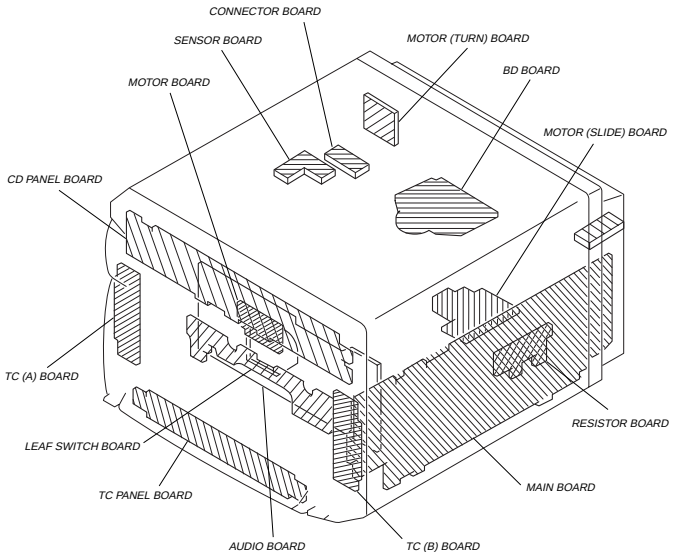


SECTION 4
DIAGRAMS

4-1. BLOCK DIAGRAM



4-2. CIRCUIT BOARDS LOCATION



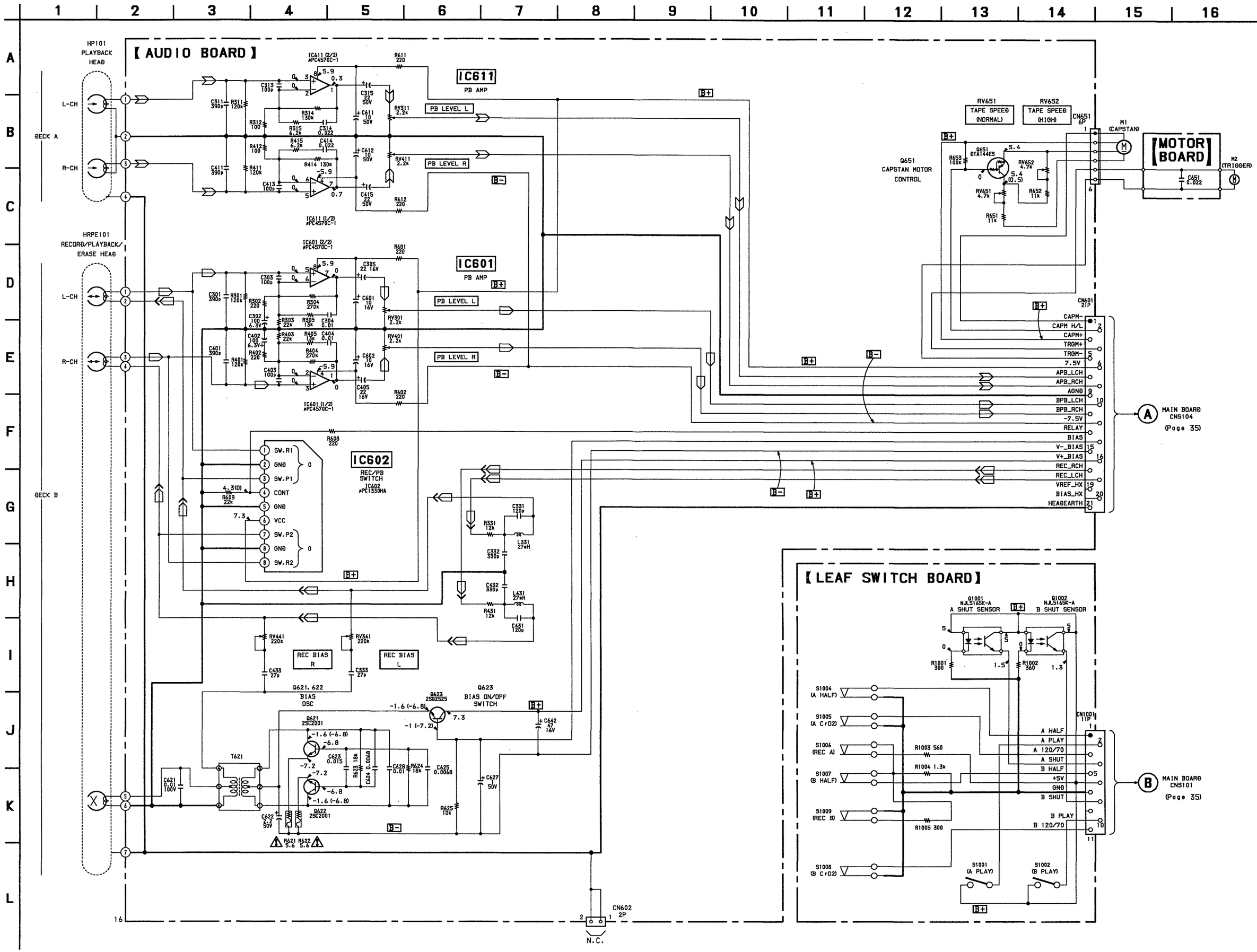
4-3. SCHEMATIC DIAGRAM — AUDIO SECTION —

Note:

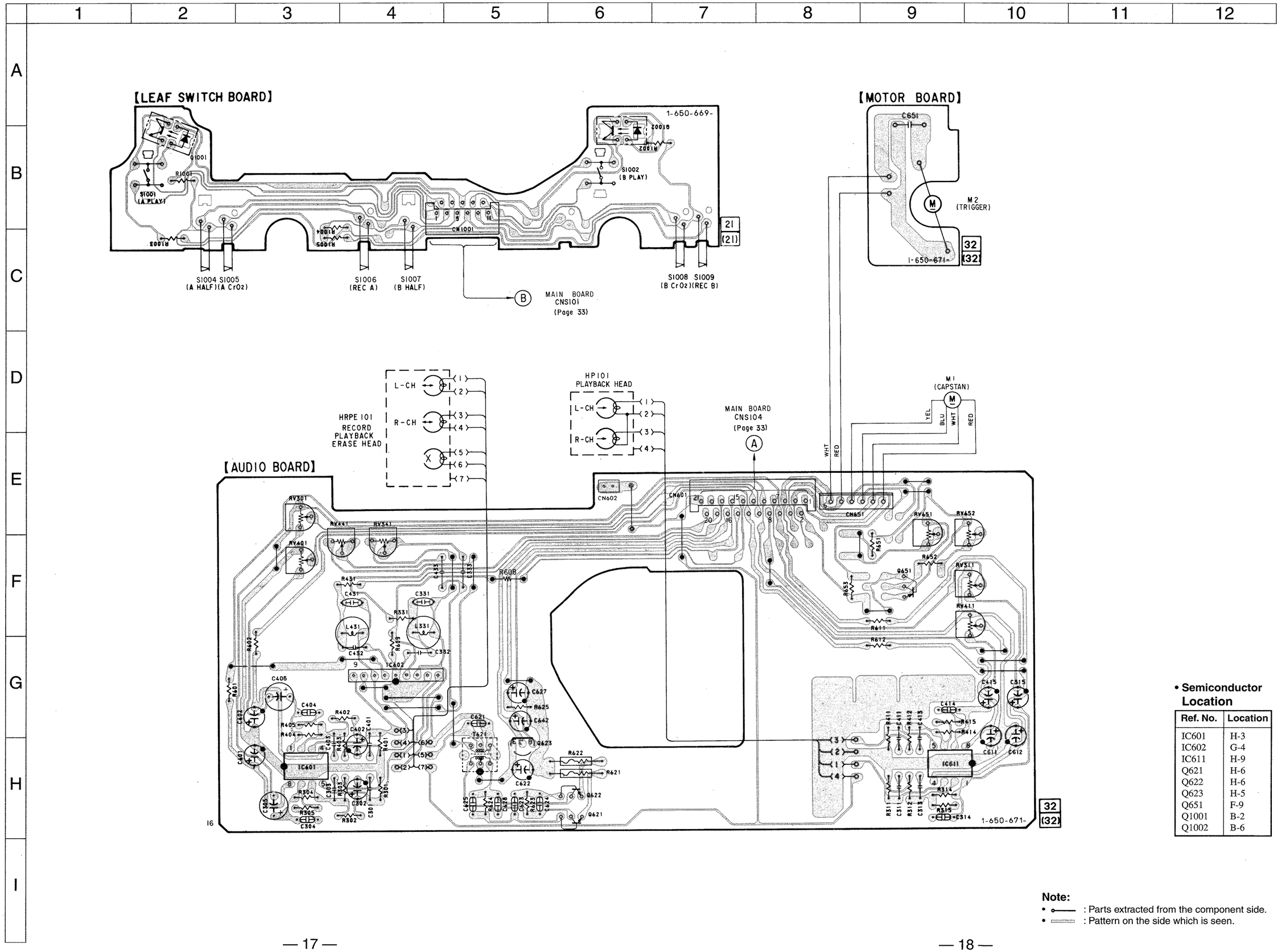
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- : fusible resistor

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

- B+ : B+ Line.
- B– : B– Line.
- : Adjustment for repair.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
  No mark : PLAY
- Voltage variations may be noted due to normal production tolerances.
- Signal path
  : PB (DECK A) : PB (DECK B) : REC (DECK B)


【AUDIO BOARD】
HP101
PLAYBACK
HEAD
L-CH
R-CH
DECK A
DECK B
HRPE101
RECORD/PLAYBACK/
ERASE HEAD
IC611 (2/2)
μPC4570C-1
IC611
PB AMP
IC611 (1/2)
μPC4570C-1
IC601 (2/2)
μPC4570C-1
IC601
PB AMP
IC601 (1/2)
μPC4570C-1
PB LEVEL L
PB LEVEL R
IC602
REC/PB
SWITCH
IC602
μPC1330HA
SW.R1
GND
SW.P1
CONT
GND
VCC
SW.P2
GND
SW.R2
REC BIAS
R
REC BIAS
L
Q621, 622
BIAS
OSC
Q623
BIAS ON/OFF
SWITCH
Q623
2SB2525
Q621
2SC2001
Q622
2SC2001
T621
RV651
TAPE SPEED
(NORMAL)
RV652
TAPE SPEED
HIGH
CN651
6P
M1
(CAPSTAN)
M2
(TRIGGER)
【MOTOR
BOARD】
Q651
CAPSTAN MOTOR
CONTROL
Q651
DTA144ES
CN601
21P
CAPM-
CAPM H/L
CAPM+
TRGM-
TRGM+
7.5V
APB_LCH
APB_RCH
AGND
BPB_LCH
BPB_RCH
-7.5V
RELAY
BIAS
V-_BIAS
V+_BIAS
REC_RCH
REC_LCH
VREF_HX
BIAS_HX
HEADEARTH
MAIN BOARD
CN5104
(Page 35)
CN602
2P
N.C.
【LEAF SWITCH BOARD】
Q1001
NJL5165K-A
A SHUT SENSOR
Q1002
NJL5165K-A
B SHUT SENSOR
S1004
(A HALF)
S1005
(A CrO2)
S1006
(REC A)
S1007
(B HALF)
S1009
(REC B)
S1008
(B CrO2)
S1001
(A PLAY)
S1002
(B PLAY)
CN1001
11P
A HALF
A PLAY
A 120/70
A SHUT
B HALF
+5V
GND
B SHUT
B PLAY
B 120/70
MAIN BOARD
CN5101
(Page 35)
B+
B-

4-4. PRINTED WIRING BOARD — AUDIO SECTION —



• **Semiconductor Location**

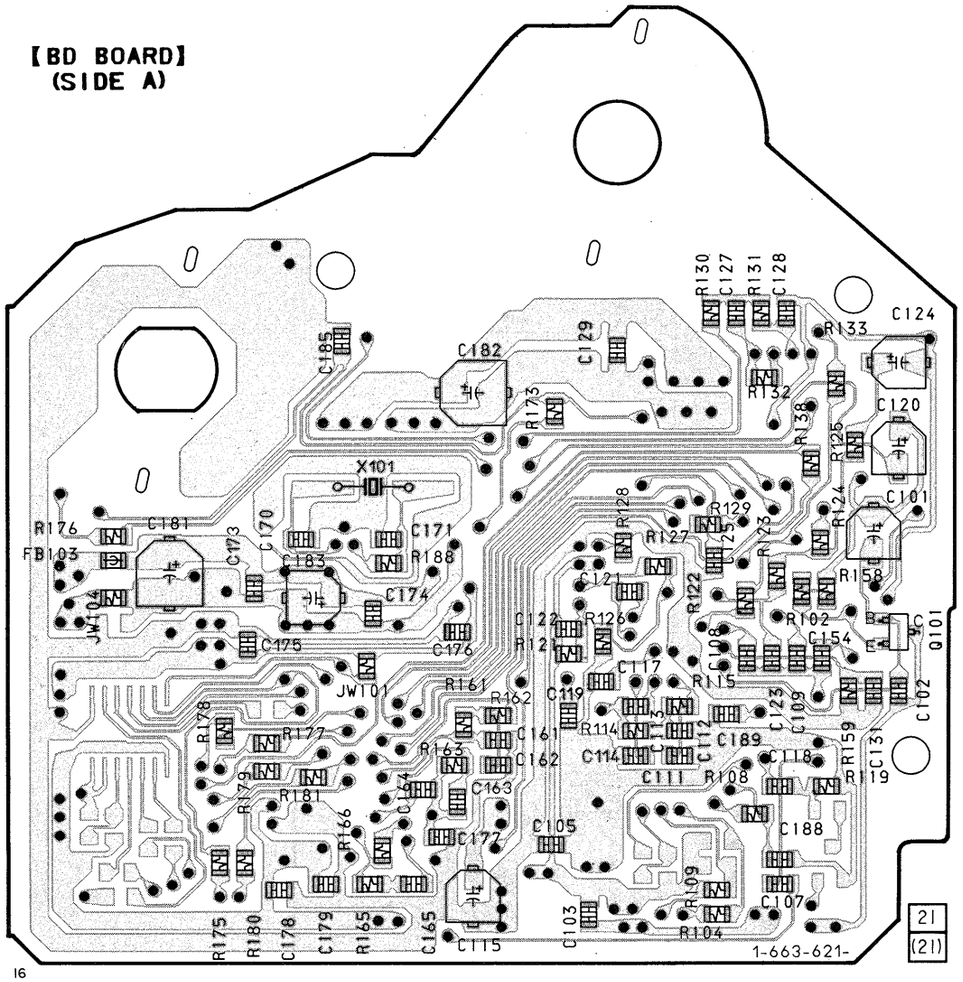
Ref. No.	Location
IC601	H-3
IC602	G-4
IC611	H-9
Q621	H-6
Q622	H-6
Q623	H-5
Q651	F-9
Q1001	B-2
Q1002	B-6

Note:

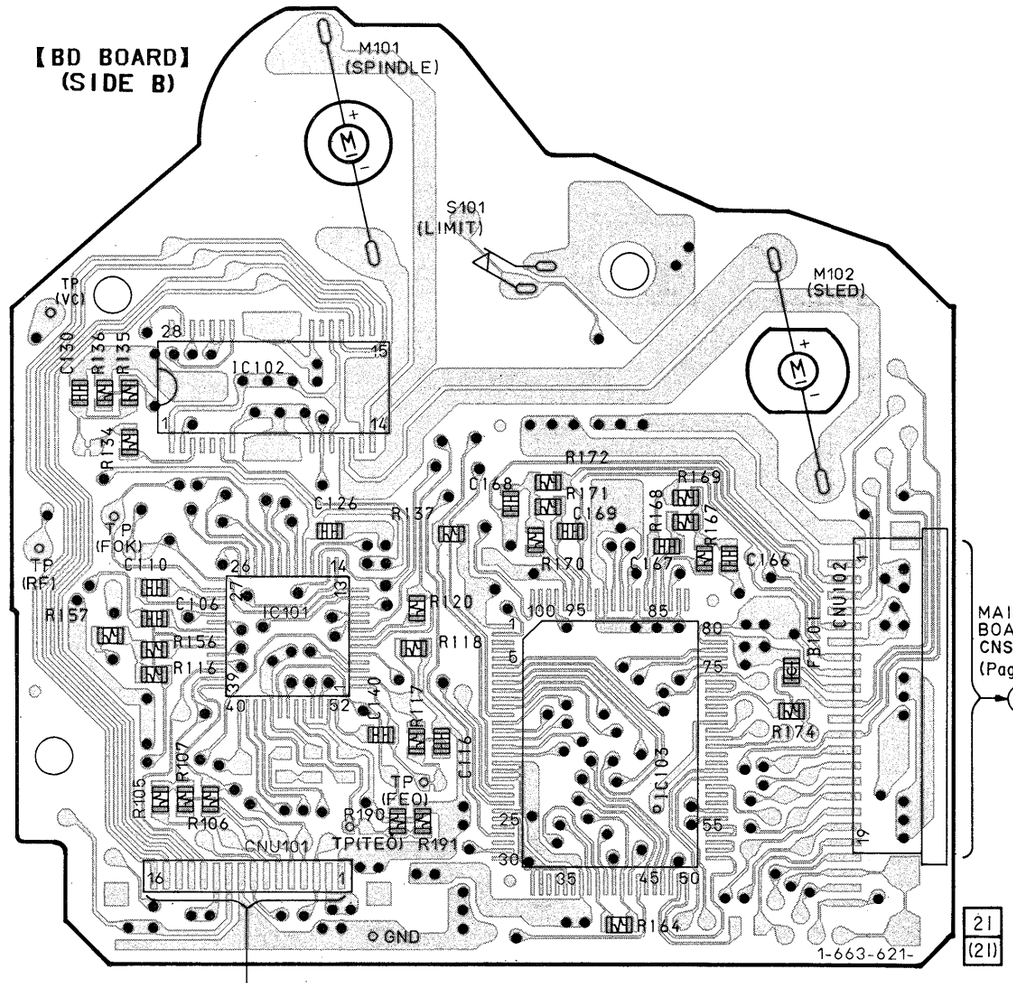
- ⟷ : Parts extracted from the component side.
- ▭ : Pattern on the side which is seen.

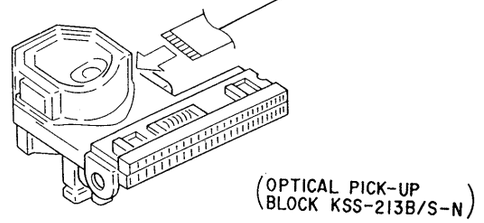
4-5. PRINTED WIRING BOARD — BD SECTION —

【BD BOARD】
(SIDE A)



【BD BOARD】
(SIDE B)



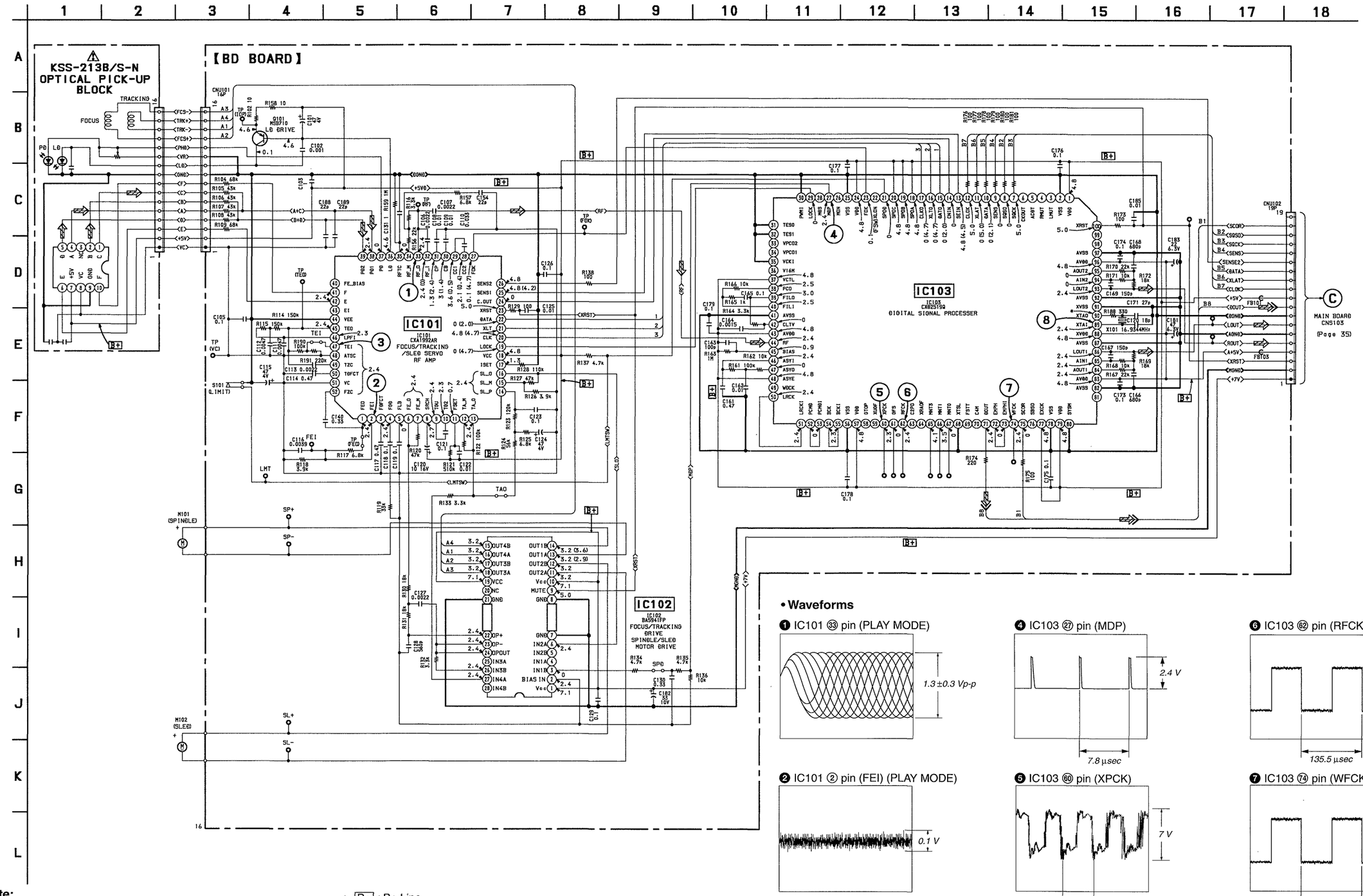


• **Semiconductor Location**

Ref. No.	Location
IC101	D-7
IC102	C-7
IC103	E-9
Q101	D-5

Note:
- ⟜ : Parts extracted from the component side.
- ● : Through hole.
- ▭ : Pattern on the side which is seen.

4-6. SCHEMATIC DIAGRAM — BD SECTION —



Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.

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 pièce portant le numéro spécifié.

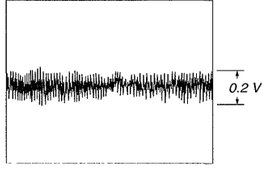
- B+ : B+ Line.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
  No mark : STOP
  ( ) : PLAY
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Signal path
  : CD : DIGITAL OUT

• Waveforms

❶ IC101 ㉝ pin (PLAY MODE)

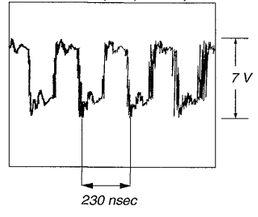
❷ IC101 ② pin (FEI) (PLAY MODE)

❸ IC101 ㊼ pin (TEI) (PLAY MODE)

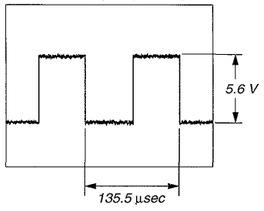


❹ IC103 ㉗ pin (MDP)

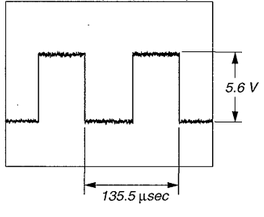
❺ IC103 ㊿ pin (XPCK)



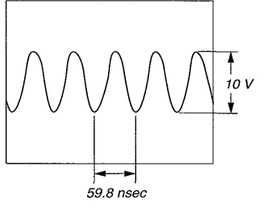
❻ IC103 ㊷ pin (RFCK)



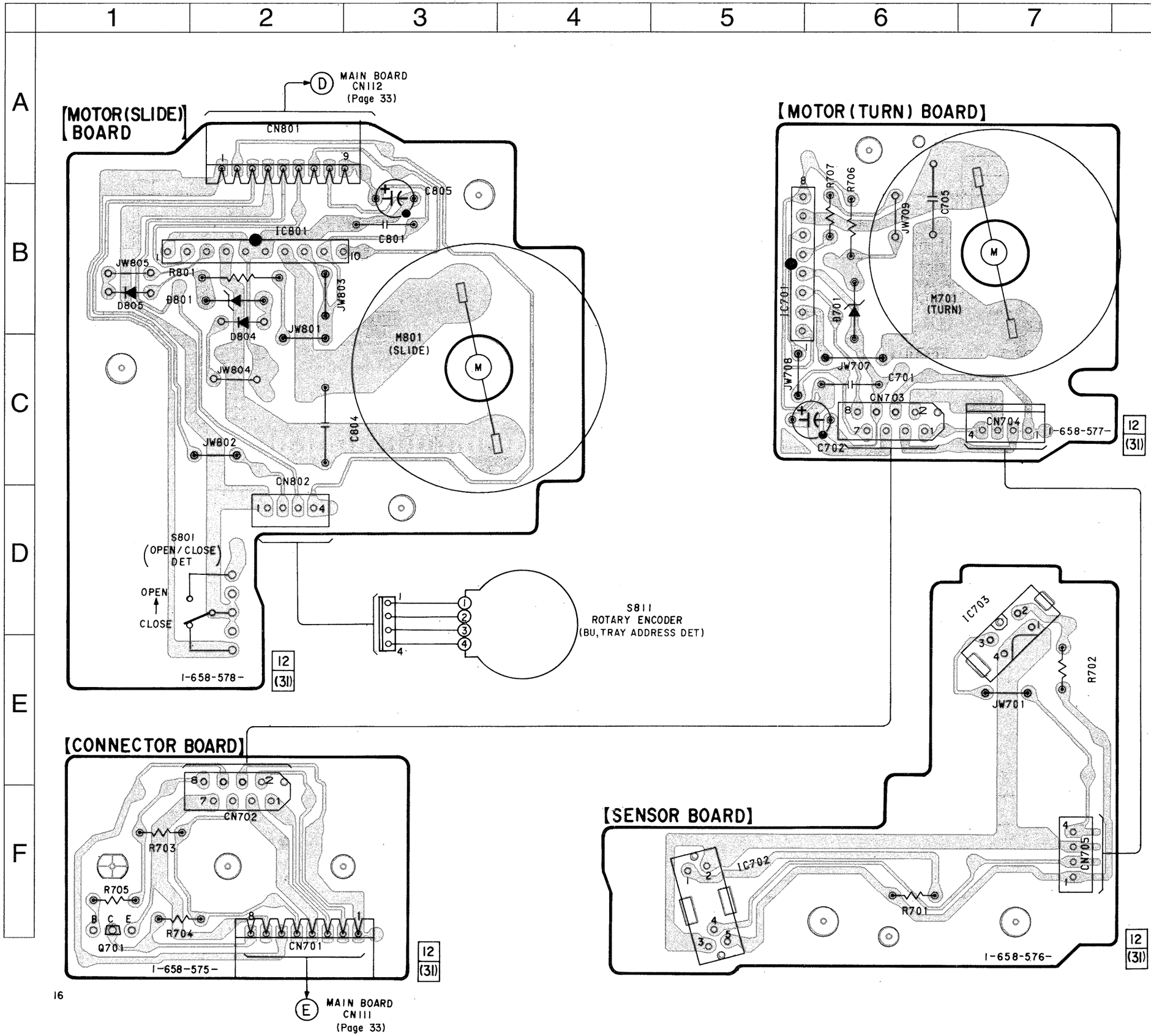
❼ IC103 ㉞ pin (WFCK)



❽ IC103 ㊾ pin (XTAI)



4-7. PRINTED WIRING BAORD — MOTOR SECTION —



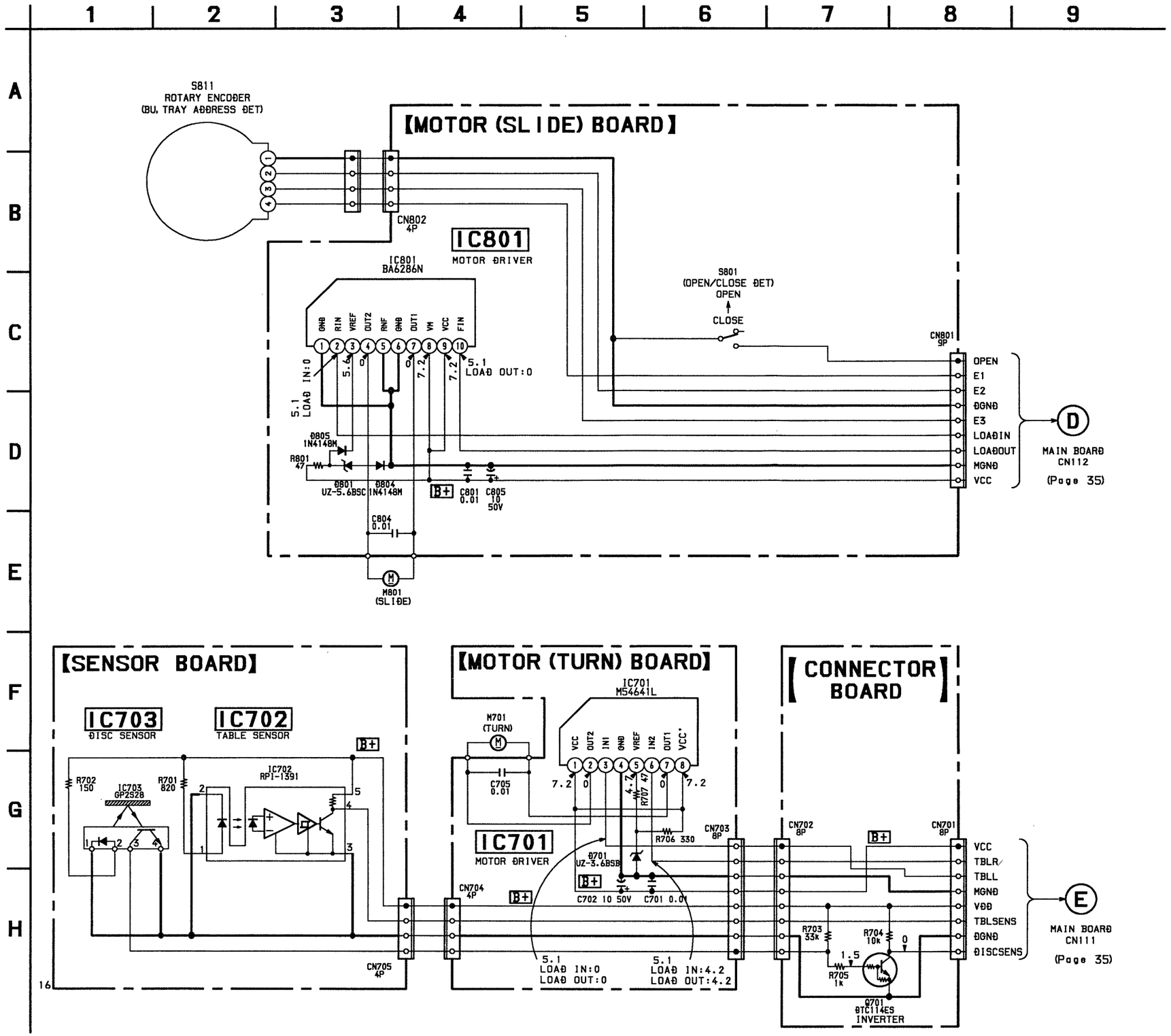
• **Semiconductor Location**

Ref. No.	Location
D701	B-6
D801	B-2
D804	B-2
D805	B-1
Q701	F-1
IC701	B-5
IC702	F-5
IC703	D-7
IC801	B-2

Note:

- ——o—— : Parts extracted from the component side.
- ● : Through hole.
- ▒▒▒ : Pattern on the side which is seen.

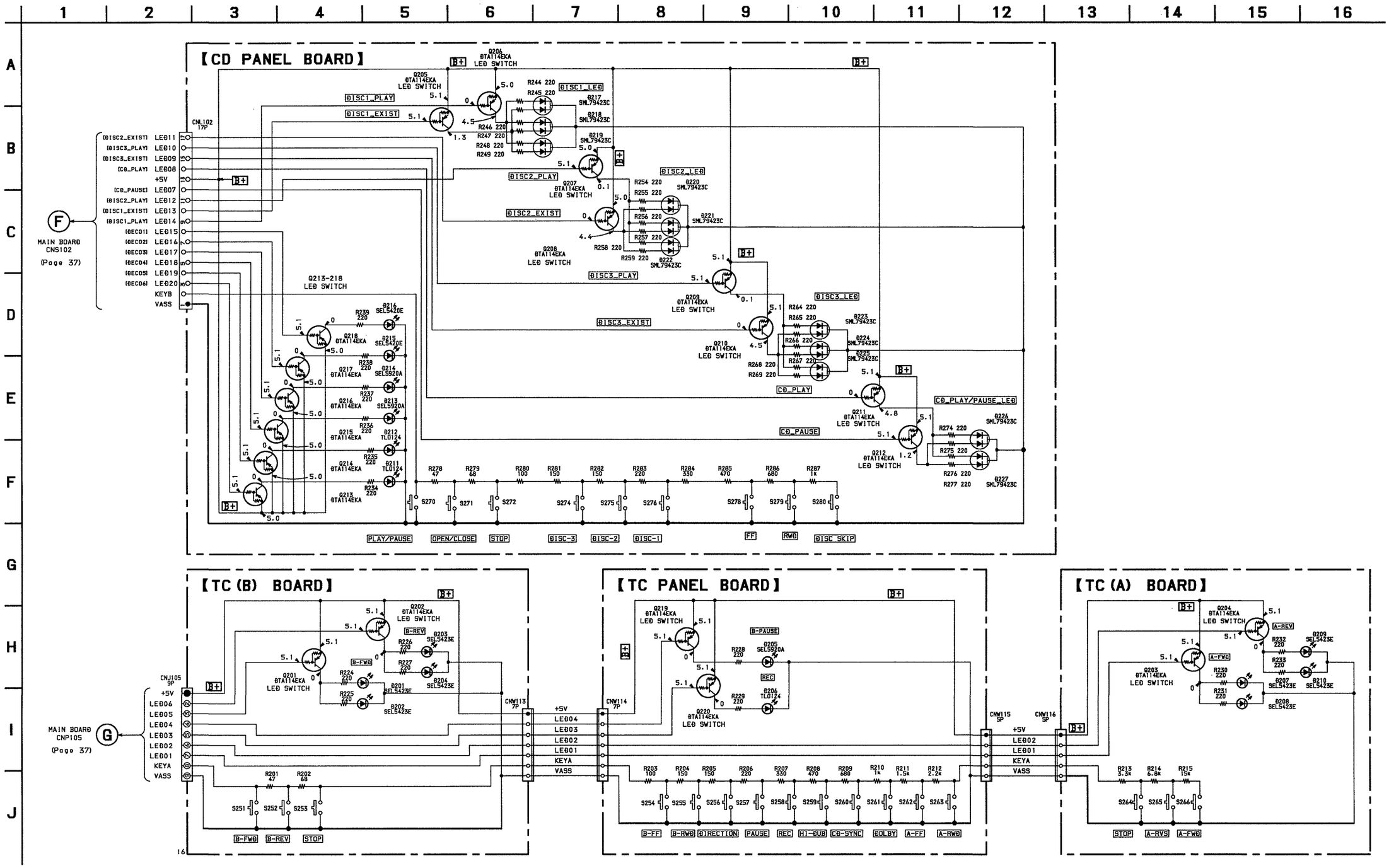
4-8. SCHEMATIC DIAGRAM — MOTOR SECTION —



Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- B+ : B+ Line.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
  No mark : STOP
- Voltage variations may be noted due to normal production tolerances.

4-9. SCHEMATIC DIAGRAM — PANEL SECTION —

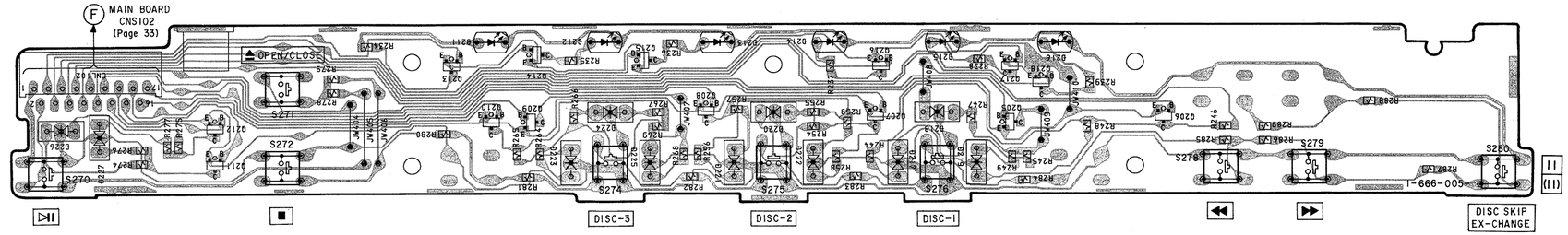


Note:

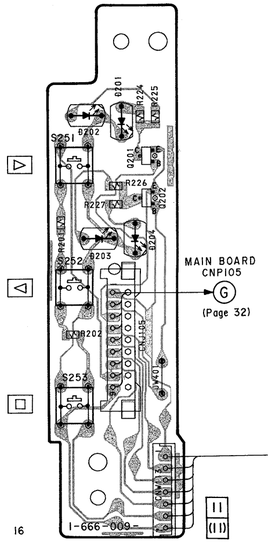
- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- B+ : B+ Line.
- ▭ : Adjustment for repair.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
  No mark : PLAY
- Voltage variations may be noted due to normal production tolerances.

4-10. PRINTED WIRING BOARD — PANEL SECTION —

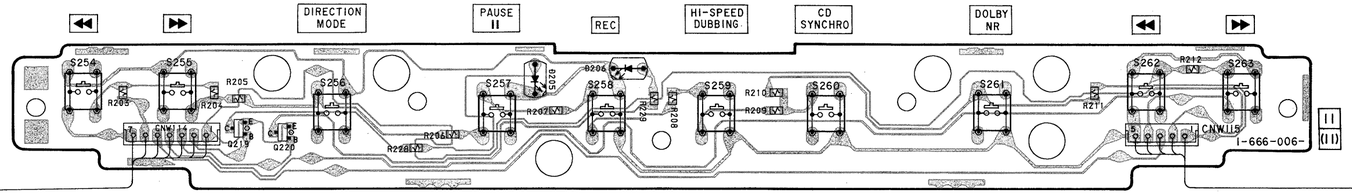
【CD PANEL BOARD】



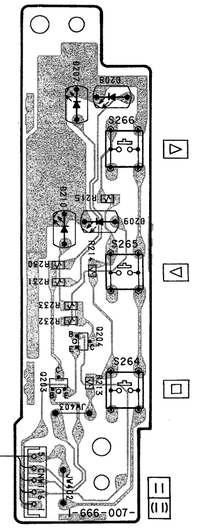
【TC (B) BOARD】



【TC PANEL BOARD】



【TC (A) BOARD】

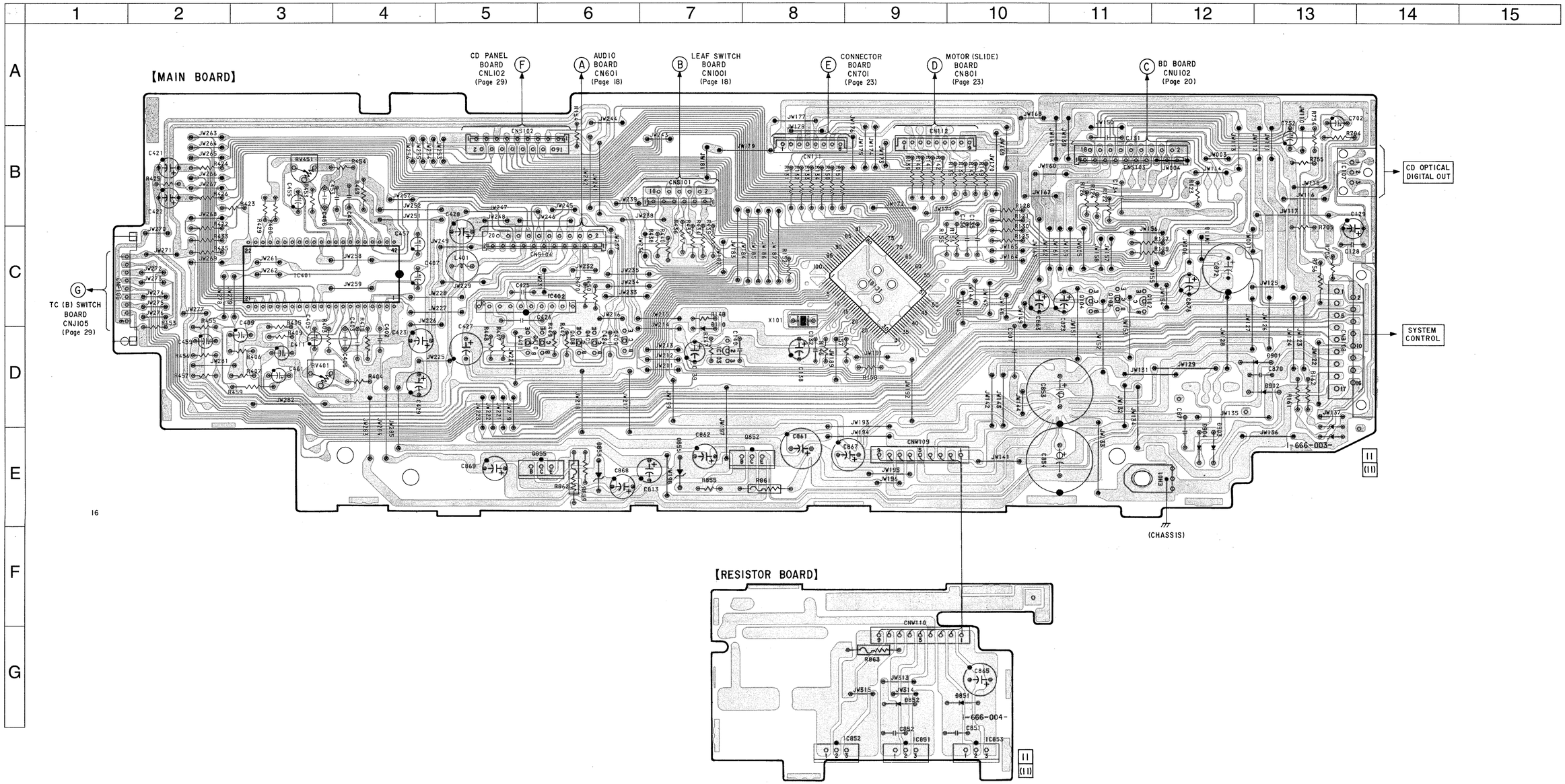


• **Semiconductor Location**

Ref. No.	Location
D201	D-2
D202	D-1
D203	E-1
D204	E-2
D205	F-6
D206	F-7
D207	D-12
D208	D-13
D209	E-12
D210	E-12
D211	A-5
D212	A-6
D213	A-7
D214	A-7
D215	A-8
D216	A-9
D217	B-8
D218	B-8
D219	B-8
D220	B-7
D221	B-7
D222	B-7
D223	B-5
D224	B-6
D225	B-6
D226	B-2
D227	B-2
Q201	D-2
Q202	E-2
Q203	F-12
Q204	F-12
Q205	B-9
Q206	B-10
Q207	B-8
Q208	B-6

Note:
- ⟷ : Parts extracted from the component side.
- ▬ : Pattern on the side which is seen.

4-11. PRINTED WIRING BOARD — MAIN SECTION —

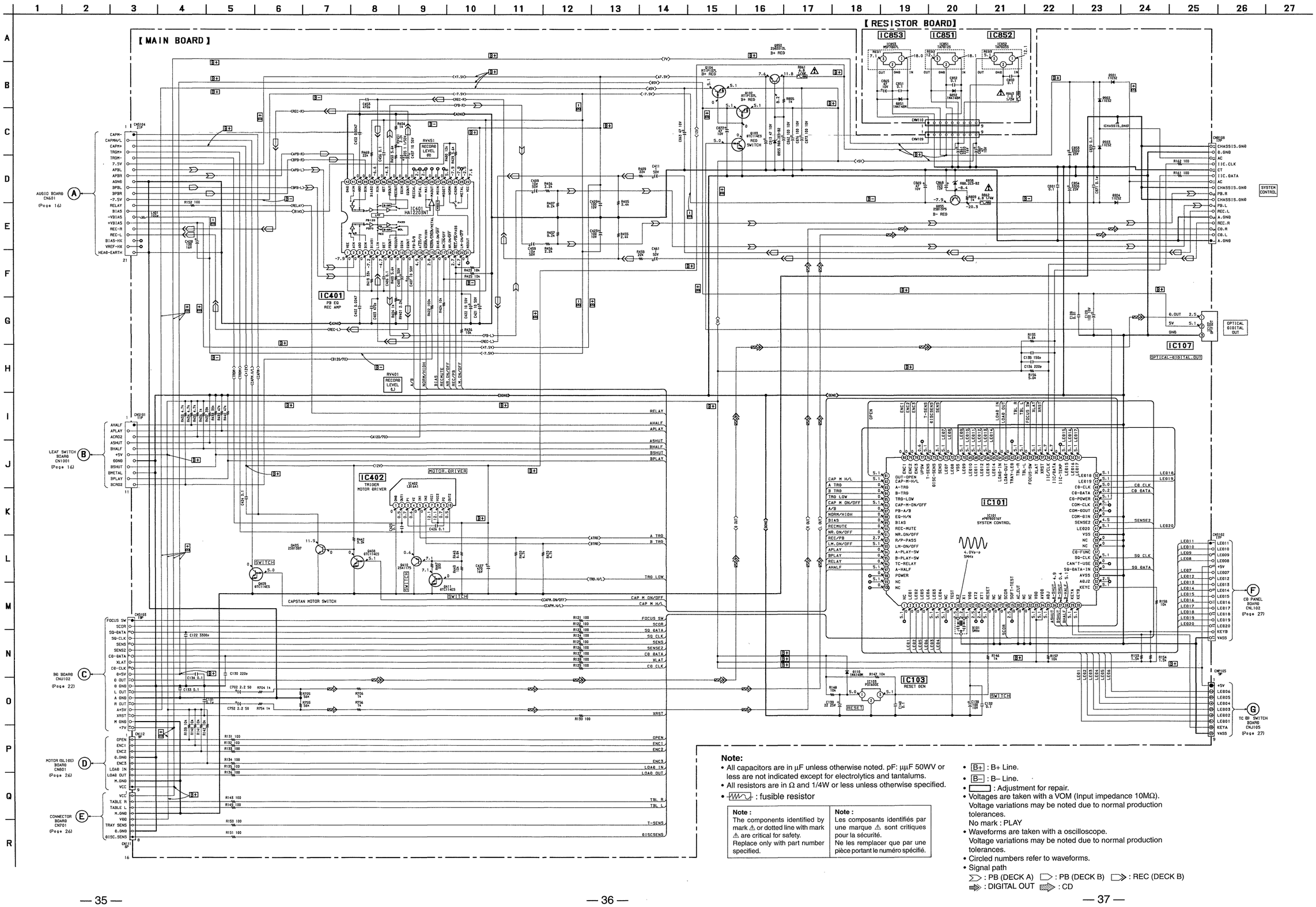


• **Semiconductor Location**

Ref. No.	Location
D110	D-7
D855	E-7
D858	E-6
D901	D-13
D902	D-13
D903	E-12
D904	E-12
IC101	C-9
IC103	D-7
IC107	B-13
IC401	C-3
IC402	C-6
Q102	C-11
Q103	C-11
Q104	C-11
Q405	D-6
Q408	D-6
Q409	D-6
Q410	D-6
Q411	D-5
Q852	E-8
Q855	E-6

Note:
- ⟷ : Parts extracted from the component side.
- ═══ : Pattern on the side which is seen.

4-12. SCHEMATIC DIAGRAM — MAIN SECTION —



Note:

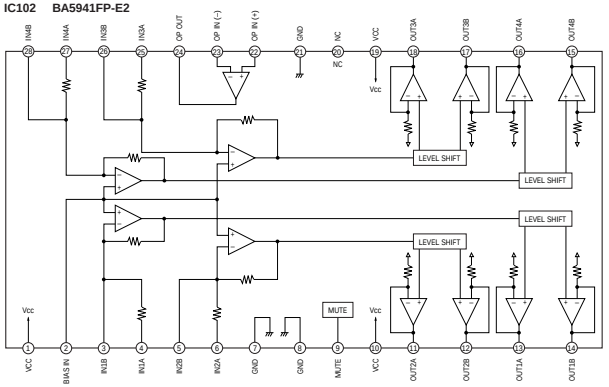
- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- ⁄\⁄\⁄\ : fusible resistor

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 pièce portant le numéro spécifié.

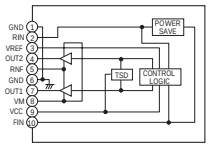
- B+ : B+ Line.
- B– : B– Line.
- ▭ : Adjustment for repair.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances. No mark : PLAY
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path
  ▷ : PB (DECK A) ▷ : PB (DECK B) ▷ : REC (DECK B)
  ⇉ : DIGITAL OUT ⇉ : CD

4-13. IC BLOCK DIAGRAMS

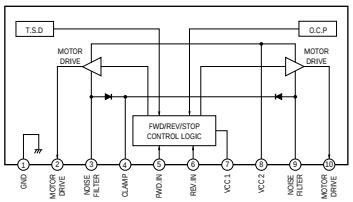
IC102 BA5941FP-E2



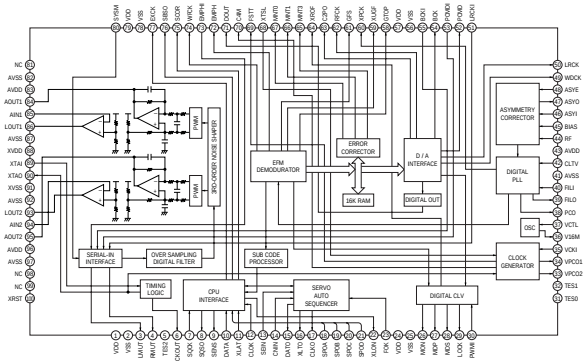
IC801 BA6286N



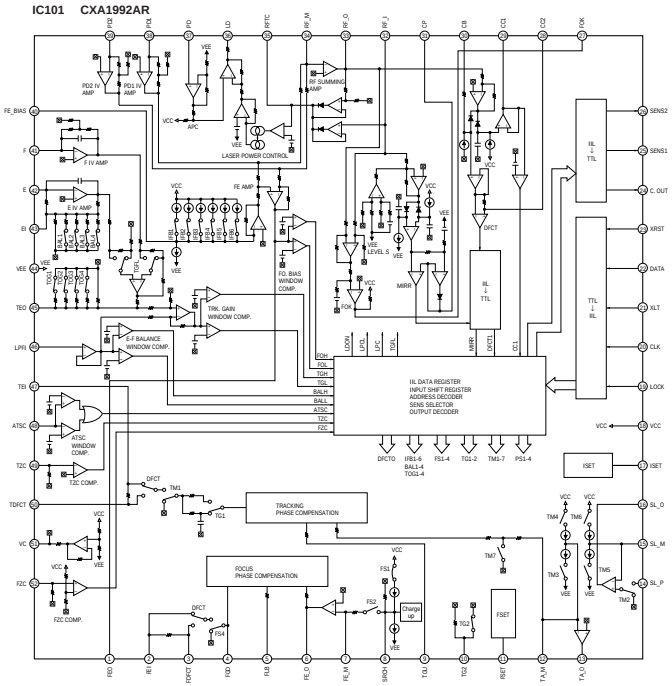
IC402 LB1641



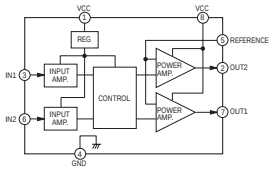
IC103 CXD2519Q



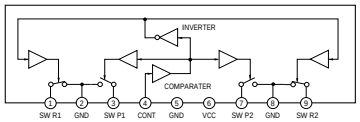
IC101 CXA1992AR



IC701 M54641L



IC602 UPC1330HA



4-14. IC PIN FUNCTION

• IC101 SYSTEM CONTROL (UPD780016YGF-016-3BA)

Pin No.	Pin Name	I/O	Description
1	NC	—	Not used.
2	LED 1	O	LED control.
3	LED 2	O	LED control.
4	LED 5	O	LED control.
5	LED 6	O	LED control.
6	LED 3	O	LED control.
7	LED 4	O	LED control.
8	NC	—	Not used.
9	Test	—	Ground.
10	X2	O	X'tal (5MHz).
11	X1	I	X'tal (5MHz).
12	Vdd	—	5V.
13	XT2	—	Not used.
14	XT1	—	Not used.
15	Reset	I	Reset signal input.
16	NC	—	Not used.
17	NC	—	Not used.
18	SCOR	I	CD Q data request.
19	SOFT TEST	O	Soft operation check port.
20	AC CUT	I	AC power supply check.
21	NC	—	Not used.
22	NC	—	Not used.
23	Vdd	—	5V.
24	AVdd	—	5V.
25	ADJ	I	CD adjustment port.
26	A SHUT	I	Reel pulse detection.
27	B SHUT	I	Reel pulse detection.
28	B-HALF	I	Cassette half detection.
29	KEY A	I	Key input.
30	KEY B	I	Key input.
31	KEY C	I	Key input.
32	ADJ 2	—	Not used.
33	AVSS	—	Ground.
34	SQ DATA IN	I	CD data input.
35	NO USE	—	Not used.
36	SQ CLK	O	Clock for data input.
37	$\overline{\text{CD-FUNC}}$	—	Not used.
38	NC	—	Ground.
39	NC	—	Ground.
40	VSS	—	Ground.
41	LED 20	—	Not used.
42	SENSE2	I	BD status input.
43	COM D IN	—	Ground.
44	COM D OUT	—	Not used.
45	COM CLK	—	Not used.
46	CD POWER	O	CD power.
47	CD DATA	O	CD data output.
48	CD CLK	O	CD clock.
49	LED 19	O	LED control.
50	LED 18	O	LED control.

Pin No.	Pin Name	I/O	Description
51	LED 17	O	LED control.
52	LED 16	O	LED control.
53	LED 15	O	LED control.
54	IIC-TEMP	—	Not used.
55	IIC DATA	I/O	Communciation data.
56	IIC CLK	I/O	Comunicaton clock.
57	XRST	O	CD reset.
58	XLAT	O	CD latch.
59	FOCUS SW	O	Focus switch.
60	TBL L	O	Table-L.
61	TBL R	O	Table-R.
62	TRAY LED	—	Not used.
63	LOAD OUT	O	Load out.
64	LOAD IN	I	Load in.
65	LED 14	O	LED control.
66	LED 13	O	LED control.
67	LED 12	O	LED control.
68	LED 11	O	LED control.
69	LED 10	O	LED control.
70	LED 9	O	LED control.
71	Vss	—	Ground.
72	LED 8	O	LED control.
73	LED 7	O	LED control.
74	SENS	I	BD status input.
75	DISC SENS	I	Disc sensor.
76	T-SENS	I	Table sensor.
77	UPSW	—	Not used.
78	ENC3	I	Encoder input for CDM38.
79	ENC2	I	Encoder input for CDM38.
80	ENC1	I	Encoder input for CDM38.
81	OUT OPEN	I	Encoder input for CDM38.
82	CAP M H/N	O	Capstan motor H/N selection.
83	A TRG	O	Mechanism timing output control.
84	B TRG	O	Mechanism timing output control.
85	TRG LOW	O	Mechanism timing output control.
86	CAP M ON/OFF	O	Capstan motor ON/OFF switch.
87	PB A/B	O	Playback A/B selection.
88	EQ H/N	O	Equalizer H/L selection.
89	BIAS	O	Bias ON/OFF.
90	REC MUTE	O	REC mute.
91	NR ON/OFF	O	NR ON/OFF.
92	R/P PASS	I/O	REC/PB/PASS select.
93	LM-ON/OFF	O	TC mute.
94	A PLAY SW	I	Mechanism PLAY switch.
95	B PLAY SW	I	Mechanism PLAY switch.
96	TC RELAY	O	Head selection.
97	A HALF	I	Cassette half detection.
98	POWER	—	Not used.
99	NC	—	Not used.
100	NC	—	Not used.

SECTION 5
EXPLODED VIEWS

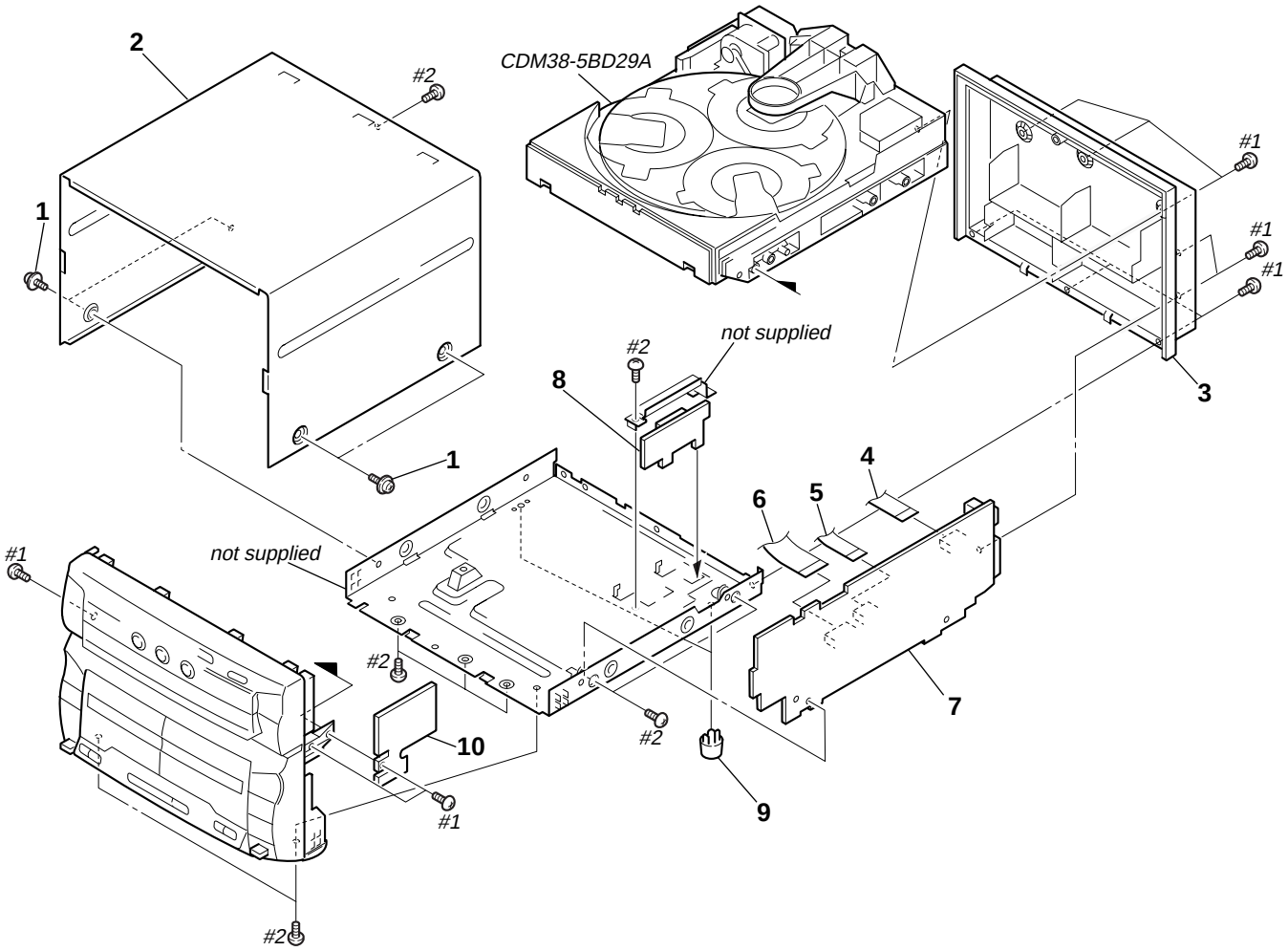
Note:

- -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 ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

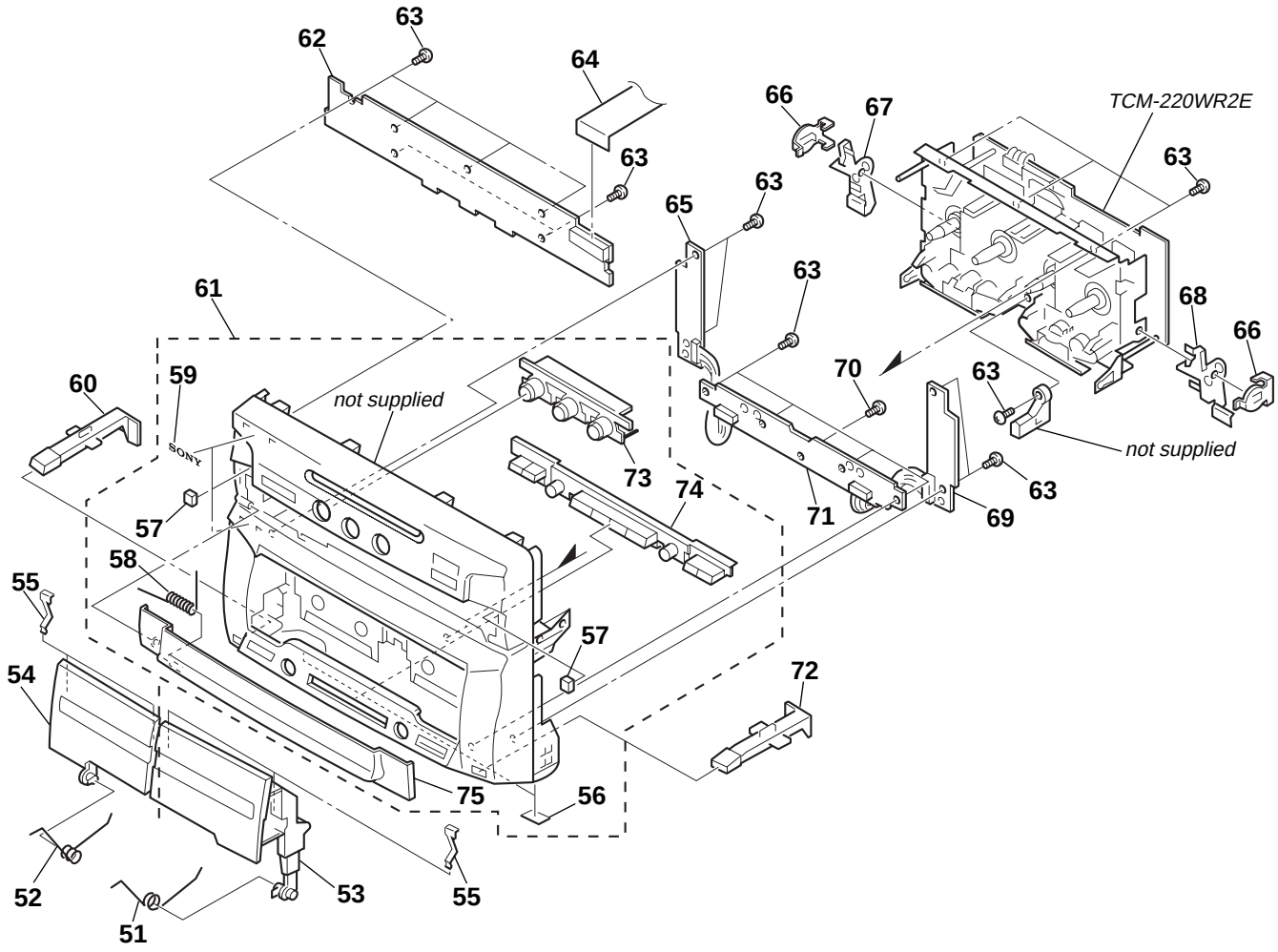
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

5-1. MAIN SECTION



Ref. No.	Part No.	Description	Remarks
1	3-363-099-11	SCREW (CASE 3 TP2)	
* 2	4-991-364-31	CASE	
* 3	4-991-349-01	PANEL, BACK	
4	1-773-112-11	WIRE (FLAT TYPE) (19 CORE)	
5	1-765-325-11	WIRE (FLAT TYPE) (11 CORE)	
6	1-773-155-11	WIRE (FLAT TYPE) (21 CORE)	
* 7	A-4398-493-A	MAIN BOARD, COMPLETE	
* 8	1-666-004-11	RESISTOR BOARD	
9	4-970-381-11	FOOT (REAR)	
* 10	1-666-009-11	DUMMY BOARD	

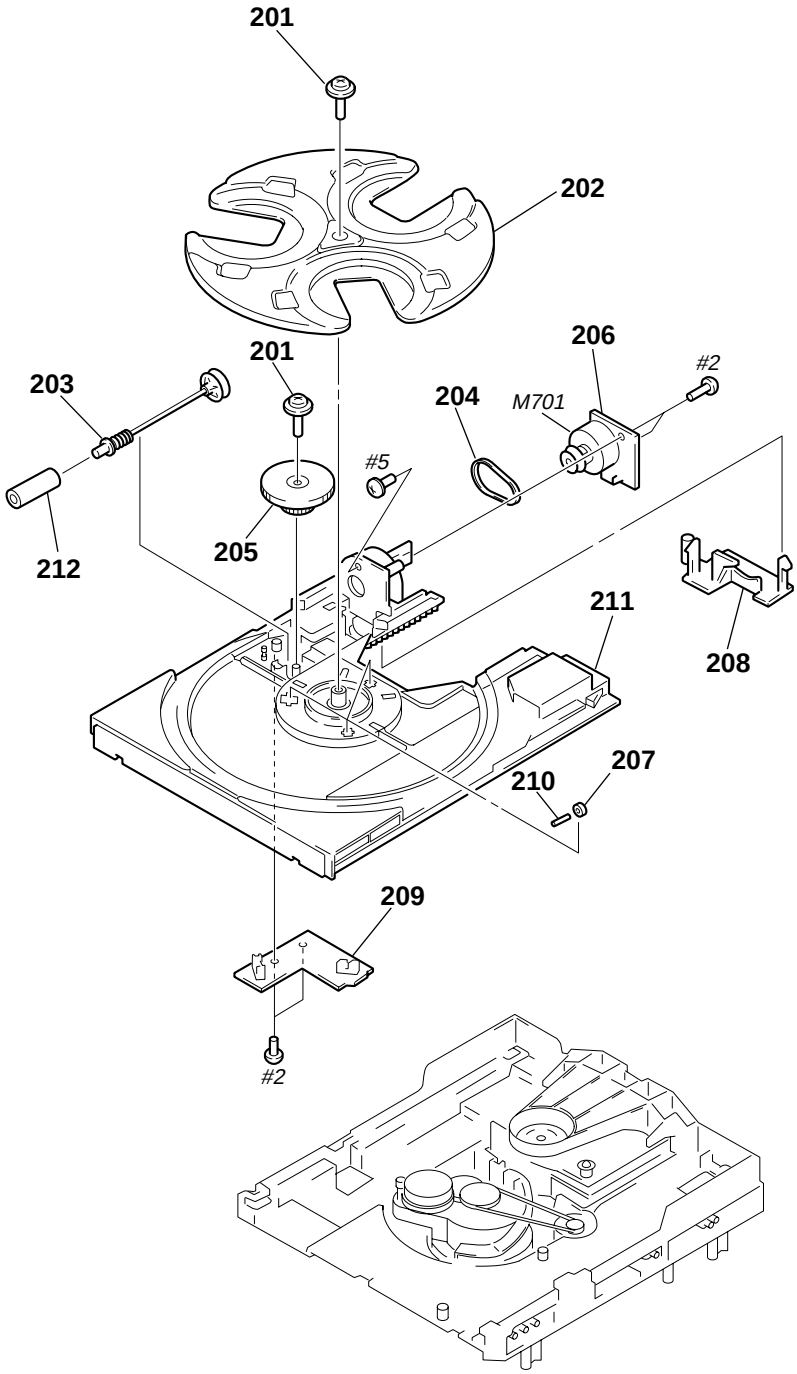
5-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remarks
51	4-959-232-11	SPRING (R), TORSION	
52	4-959-231-11	SPRING (L), TORSION	
53	X-4948-605-1	LID (B) ASSY, CASSETTE	
54	X-4948-604-1	LID (A) ASSY, CASSETTE	
55	4-959-229-11	DETENT, CASSETTE	
56	4-977-358-11	CUSHION (8X12.5)	
57	4-991-366-01	CUSHION	
58	4-991-795-11	SPRING	
59	4-962-708-11	EMBLEM (4-A), SONY	
60	4-991-341-01	BUTTON (EJECT A)	
61	X-4948-606-1	PANEL ASSY, FRONT	
* 62	A-4398-495-A	CD PANEL BOARD, COMPLETE	
63	4-951-620-01	SCREW (2.6X8), +BVTP	

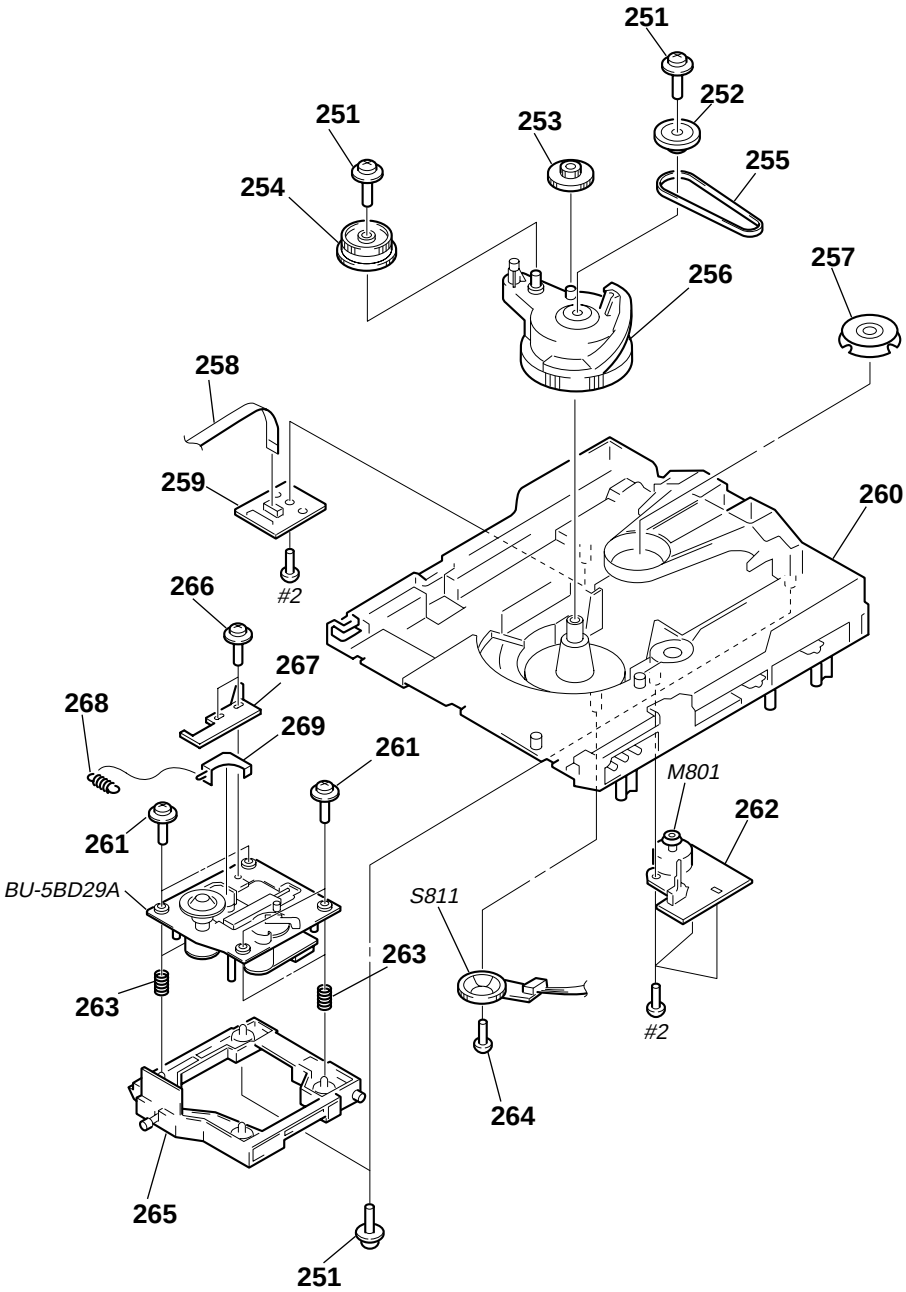
Ref. No.	Part No.	Description	Remarks
64	1-773-053-11	WIRE (FLAT TYPE) (17 CORE)	
* 65	1-666-007-11	TC (A) BOARD	
66	3-354-957-01	JOINT (LOCK LEVER)	
* 67	3-354-953-01	LEVER (LOCK LEVER L)	
* 68	3-354-954-01	LEVER (LOCK LEVER R)	
* 69	1-666-008-11	TC (B) BOARD	
70	4-951-620-11	SCREW (2.6X10), +BVTP	
* 71	A-4398-496-A	TC PANEL BOARD, COMPLETE	
72	4-991-342-01	BUTTON (EJECT B)	
73	X-4948-607-1	BUTTON (3CD) ASSY	
74	X-4948-608-1	BUTTON (TC) ASSY	
75	4-991-332-01	PANEL, LOADING	

5-3. CD MECHANISM DECK SECTION-1 (CDM38-5BD29A)



Ref. No.	Part No.	Description	Remarks
201	4-917-583-21	BRACKET, YOKE	
202	4-977-945-01	TRAY (TURN)	
203	X-4946-665-1	SHAFT ASSY, WORM	
204	4-977-943-01	BELT (TURN) (1.2)	
205	4-977-956-01	WHEEL, WORM	
* 206	1-658-577-11	MOTOR (TURN) BOARD	
207	X-4924-457-11	ROLLER ASSY	
208	4-977-941-01	BEARING (WORM)	
* 209	1-658-576-11	SENSOR BOARD	
210	4-934-376-01	SHAFT (ROLLER)	
211	4-977-944-01	TRAY (SLIDE)	
212	4-981-187-01	COLLAR (WORM)	
M701	A-4672-004-A	MOTOR ASSY (TURN)	

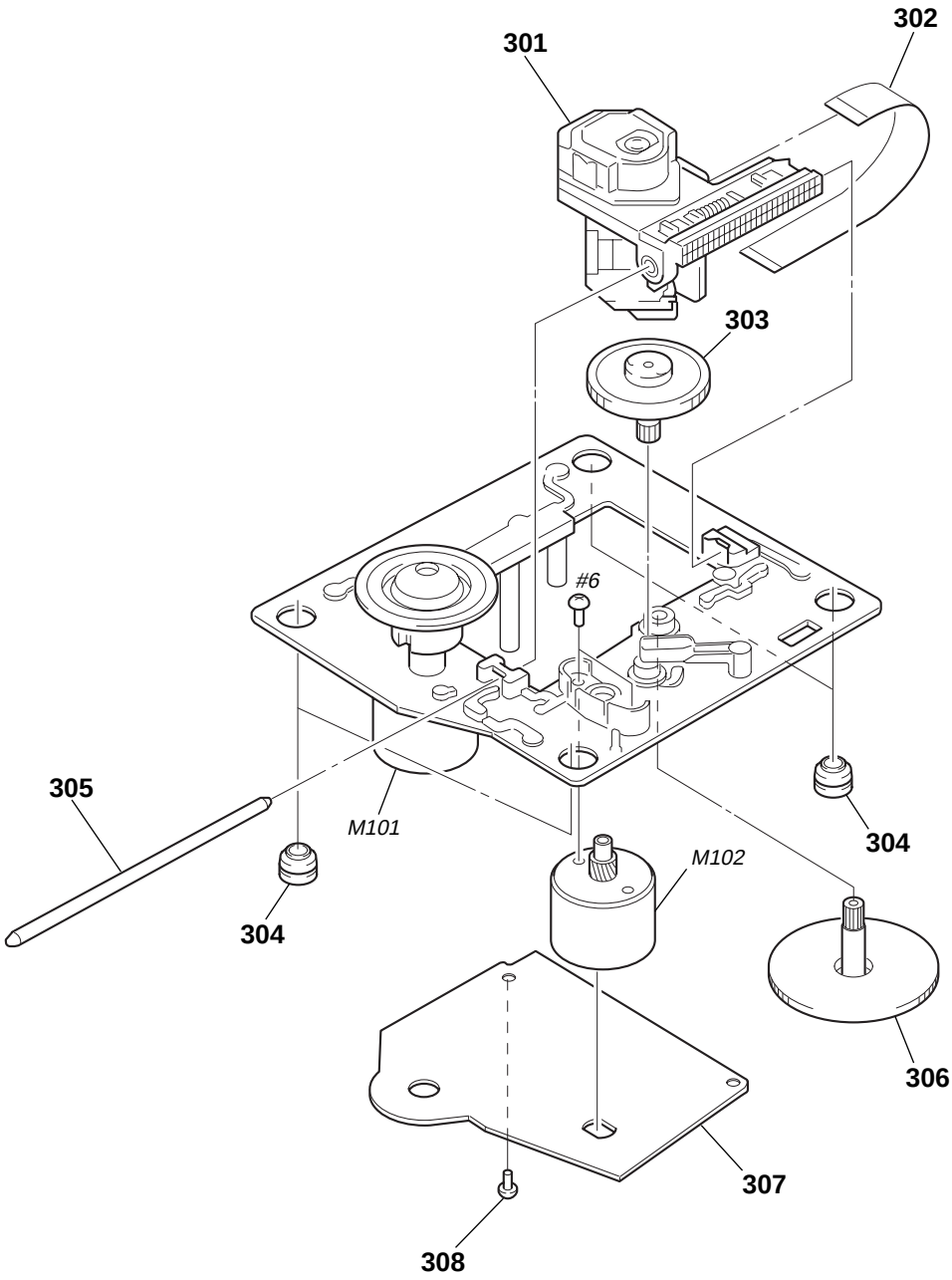
5-4. CD MECHANISM DECK SECTION-2 (CDM38-5BD29A)



Ref. No.	Part No.	Description	Remarks
251	4-917-583-71	BRACKET, YOKE	
252	4-977-954-01	PULLEY (SL)	
253	4-977-953-01	GEAR (SL-A)	
254	4-977-955-01	GEAR (SL-B)	
255	4-977-942-01	BELT (SL) (1.4)	
256	X-4946-667-1	CAM ASSY, BU	
257	1-452-538-11	MAGNET	
258	1-776-042-11	WIRE (FLAT TYPE) (8 CORE)	
* 259	1-658-575-11	CONNECTOR BOARD	
* 260	X-4946-668-1	CHASSIS (CDM) ASSY	
261	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	

Ref. No.	Part No.	Description	Remarks
* 262	1-658-578-11	MOTOR (SLIDE) BOARD	
263	4-982-447-01	SPRING (BU), COMPRESSION	
264	4-951-620-41	SCREW (2.6), +BVTP	
* 265	X-4946-666-1	HOLDER (BU) ASSY	
266	4-989-494-01	SCREW (SLIDER), STEP	
267	4-989-492-11	SLIDER (38)	
268	4-989-819-02	SPRING, TENSION	
269	4-989-491-11	COVER, LENS	
M801	A-4672-004-A	MOTOR ASSY (SLED)	
S811	1-473-335-11	ENCODER, ROTARY (BU,TRAY ADDRESS DET)	

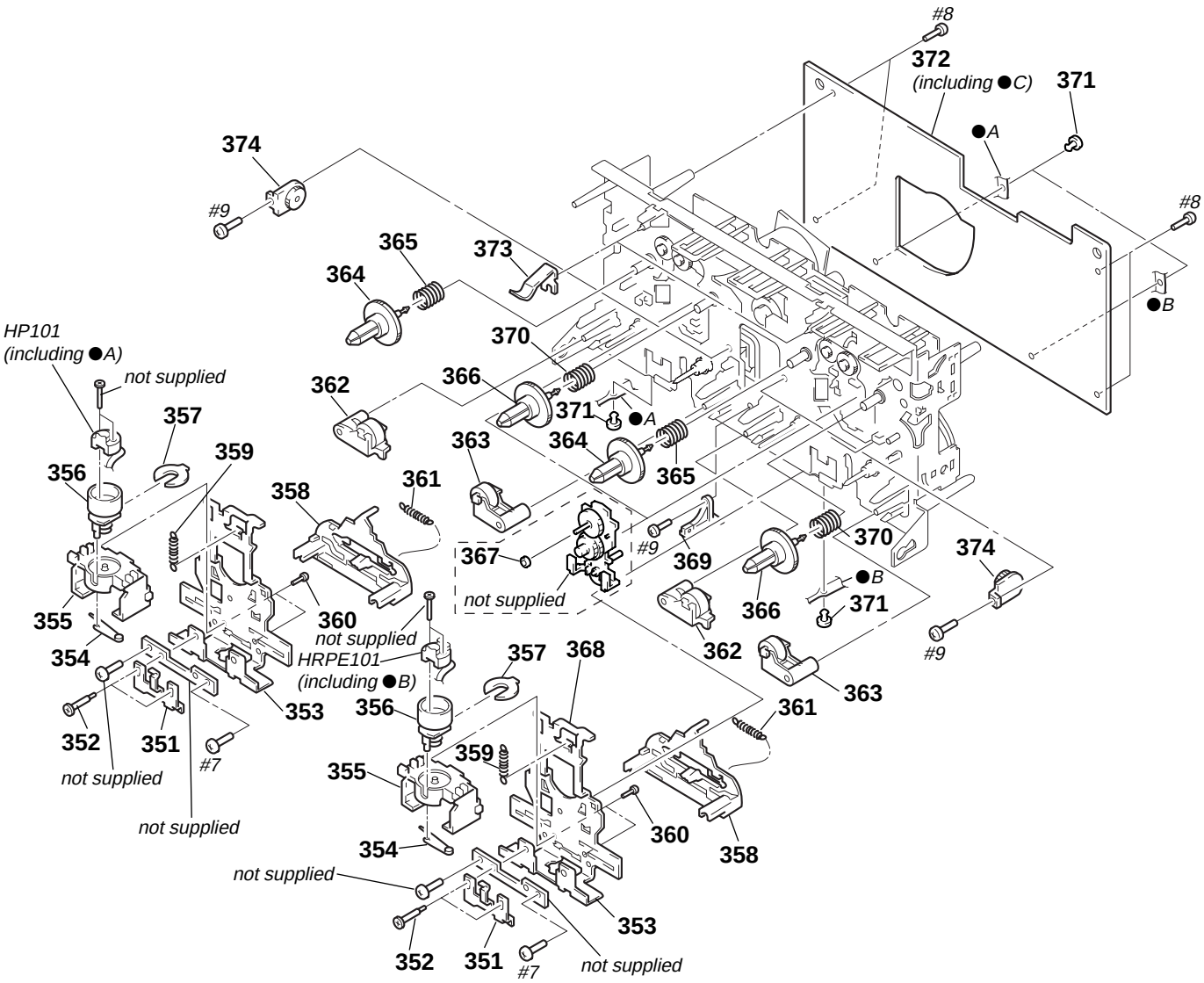
5-5. BASE UNIT SECTION (BU-5BD29A)



Ref. No.	Part No.	Description	Remarks
⚠301	8-848-379-31	OPTICAL PICK-UP KSS-213B/S-N	
302	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
303	4-917-567-01	GEAR (M)	
304	4-951-940-01	INSULATOR (BU)	
305	4-917-565-01	SHAFT, SLED	
306	4-917-564-01	GEAR (P), FLATNESS	
* 307	A-4699-522-A	BD BOARD, COMPLETE	
308	4-951-620-01	SCREW (2.6X8), +BVTP	
M101	X-4917-523-4	MOTOR 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.

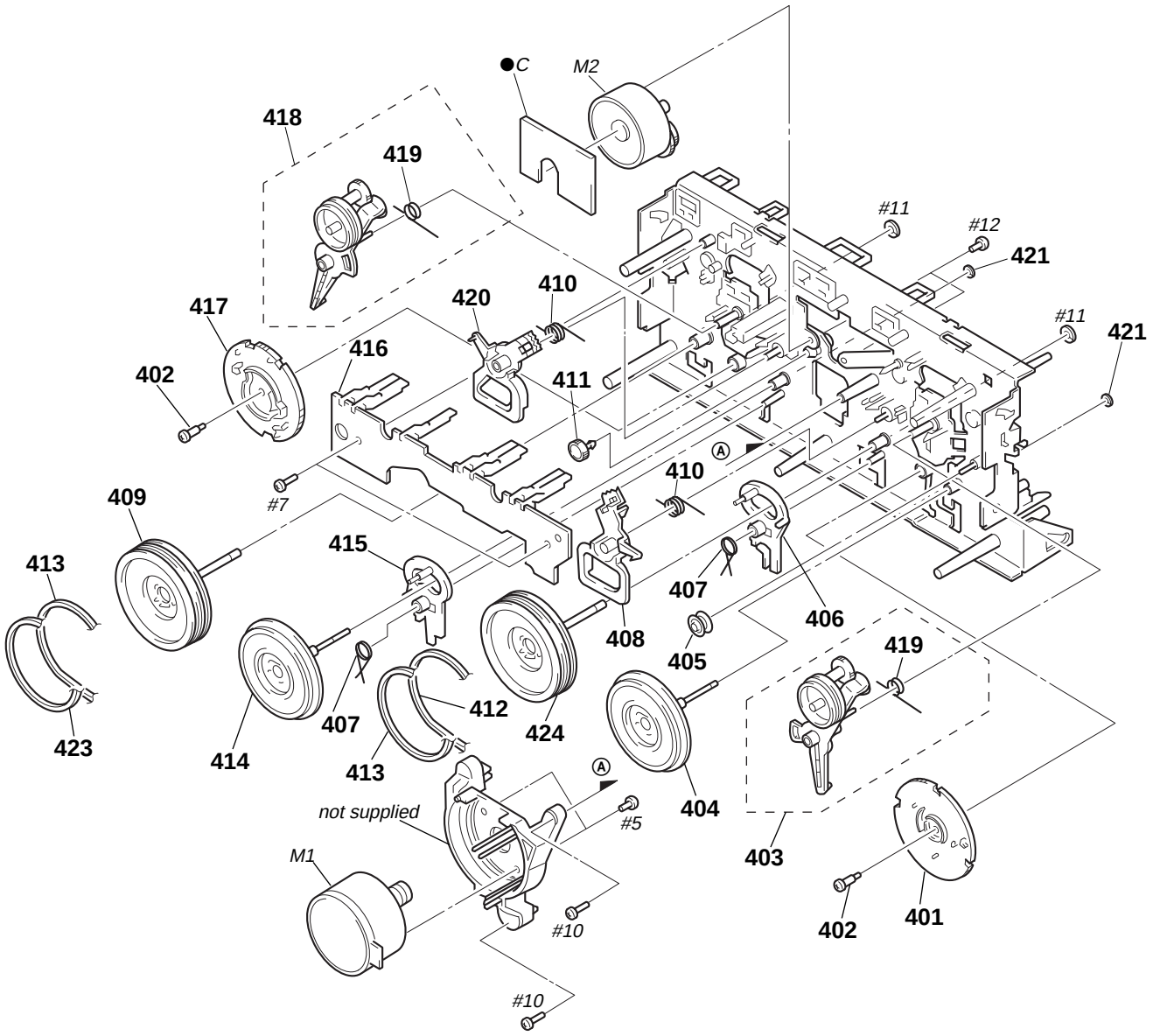
5-6. TAPE MECHANISM DECK SECTION-1 (TCM-220WR2E)



Ref. No.	Part No.	Description	Remarks
351	3-908-560-01	SPRING, AZIMUTH ADJUSTMENT	
352	3-919-684-01	SCREW, AZIMUTH ADJUSTMENT	
353	X-3373-113-1	SLIDER (HEAD) ASSY	
354	3-908-556-01	SPRING, HEAD TOGGLE	
355	3-908-558-02	FITTING BLOCK, HEAD	
356	3-908-557-02	ROTARY BLOCK, HEAD	
* 357	3-908-559-01	STOPPER, AZIMUTH	
358	3-908-555-01	SLIDER (REV SLIDER)	
359	3-917-143-11	SPRING, TENSION	
360	3-388-848-01	SCREW (P2X6) (B TIGHT)	
361	3-939-371-01	SPRING (1), TENSION	
362	X-3369-909-1	PINCH LEVER (REV) ASSY	
363	X-3369-908-1	PINCH LEVER (FWD) ASSY	
364	3-908-613-01	GEAR (S), REEL	
365	3-917-141-01	SPRING, COMPRESSION	
366	X-3371-305-1	REEL (T) ASSY	
367	3-669-465-01	WASHER (1.5), STOPPER	
368	X-3370-173-1	TU ASSY	
* 369	4-980-439-01	FULCRUM, HOLDER	
370	3-917-142-01	SPRING, COMPRESSION	
371	3-939-862-01	CLIP	
* 372	A-2007-435-A	AUDIO BOARD, COMPLETE	
373	3-930-972-01	DETENT, HALF	
374	3-354-963-01	DAMPER	
HP101	1-500-093-11	HEAD, MAGNETIC (PLAYBACK)(DECK A)	
HRPE101	1-500-094-11	HEAD, MAGNETIC (REC/PB/ERASE)(DECK B)	

5-7. TAPE MECHANISM DECK SECTION-2 (TCM-220WR2E)

• C: MOTOR board



Ref. No.	Part No.	Description	Remarks
401	3-908-597-01	CAM (A)	
402	3-908-608-11	SCREW, STEP	
403	X-3372-930-1	ARM (A) ASSY, FR	
404	X-3370-169-1	FLYWHEEL (AR) ASSY	
405	3-928-047-01	PULLEY, TENSION	
406	3-908-599-01	LEVER (REV-A)	
407	3-908-601-01	SPRING (REV LEVER), TORSION	
408	3-908-603-01	LEVER (TRIGGER A)	
409	X-3367-593-1	FLYWHEEL (BF) ASSY	
410	3-908-605-01	SPRING (TRIGGER), TORSION	
411	3-908-609-01	GEAR, TRIGGER	
412	3-913-845-11	BELT (A)	
413	3-913-846-11	BELT (FR)	
414	X-3370-171-1	FLYWHEEL (BR) ASSY	
415	3-908-600-01	LEVER (REV-B)	
* 416	1-650-669-11	LEAF SWITCH BOARD	
417	3-908-598-01	CAM (B)	
418	X-3372-931-1	ARM (B) ASSY, FR	
419	3-914-111-01	SPRING (FR), TORSION	
420	3-908-604-01	LEVER (TRIGGER B)	
421	3-911-115-01	WASHER, STOPPER	
423	3-917-176-11	BELT (B)	
424	X-3370-172-1	FLYWHEEL (AF) ASSY	
M1	A-2004-409-A	MOTOR ASSY, CAPSTAN	
M2	A-2004-410-A	MOTOR ASSY, DC (TRIGGER)	

SECTION 6
ELECTRICAL PARTS LIST

AUDIO

Note:

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

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.

- 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...

Ref. No.	Part No.	Description			Remarks
*	A-2007-435-A	AUDIO BOARD, COMPLETE **********			
		< CAPACITOR >			
C301	1-162-289-31	CERAMIC	390PF	10%	50V
C302	1-126-968-11	ELECT	100uF	20%	6.3V
C303	1-162-282-31	CERAMIC	100PF	10%	50V
C304	1-130-483-00	MYLAR	0.01uF	5%	50V
C305	1-107-715-11	ELECT	22uF	20%	16V
C311	1-162-289-31	CERAMIC	390PF	10%	50V
C313	1-162-282-31	CERAMIC	100PF	10%	50V
C314	1-130-487-00	MYLAR	0.022uF	5%	50V
C315	1-126-233-11	ELECT	22uF	20%	50V
C331	1-137-427-11	FILM	120PF	5%	50V
C332	1-162-288-31	CERAMIC	330PF	10%	50V
C333	1-162-209-31	CERAMIC	27PF	5%	50V
C401	1-162-289-31	CERAMIC	390PF	10%	50V
C402	1-126-968-11	ELECT	100uF	20%	6.3V
C403	1-162-282-31	CERAMIC	100PF	10%	50V
C404	1-130-483-00	MYLAR	0.01uF	5%	50V
C405	1-107-715-11	ELECT	22uF	20%	16V
C411	1-162-289-31	CERAMIC	390PF	10%	50V
C413	1-162-282-31	CERAMIC	100PF	10%	50V
C414	1-130-487-00	MYLAR	0.022uF	5%	50V
C415	1-126-233-11	ELECT	22uF	20%	50V
C431	1-137-427-11	FILM	120PF	5%	50V
C432	1-162-288-31	CERAMIC	330PF	10%	50V
C433	1-162-209-31	CERAMIC	27PF	5%	50V
C601	1-104-396-11	ELECT	10uF	20%	16V
C602	1-104-396-11	ELECT	10uF	20%	16V
C611	1-124-907-11	ELECT	10uF	20%	50V
C612	1-124-907-11	ELECT	10uF	20%	50V
C621	1-137-150-11	FILM	0.01uF	5%	100V
C622	1-126-961-11	ELECT	2.2uF	20%	50V
C623	1-136-155-00	FILM	0.015uF	5%	50V
C624	1-130-481-00	MYLAR	0.0068uF	5%	50V
C625	1-130-481-00	MYLAR	0.0068uF	5%	50V
C627	1-124-903-11	ELECT	1uF	20%	50V
C628	1-136-153-00	FILM	0.01uF	5%	50V
C642	1-104-664-11	ELECT	47uF	20%	16V
C651	1-161-494-00	CERAMIC	0.022uF		25V
		< CONNECTOR >			
CN601	1-695-382-31	PIN, CONNECTOR (PC BOARD) 21P			
CN602	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CN651	1-564-521-11	PLUG, CONNECTOR 6P			

Ref. No.	Part No.	Description				Remarks
		< IC >				
IC601	8-759-111-44	IC uPC4570C-1				
IC602	8-759-143-54	IC uPC1330HA				
IC611	8-759-111-44	IC uPC4570C-1				
		< COIL >				
L331	1-410-780-11	INDUCTOR	27mH			
L431	1-410-780-11	INDUCTOR	27mH			
		< TRANSISTOR >				
Q621	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q622	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q623	8-729-030-18	TRANSISTOR	2SD2525			
Q651	8-729-900-65	TRANSISTOR	DTA144ES			
		< RESISTOR >				
R301	1-247-881-00	CARBON	120K	5%	1/4W	
R302	1-249-409-11	CARBON	220	5%	1/4W	F
R303	1-249-433-11	CARBON	22K	5%	1/4W	
R304	1-247-889-00	CARBON	270K	5%	1/4W	
R305	1-247-858-11	CARBON	13K	5%	1/4W	
R311	1-247-881-00	CARBON	120K	5%	1/4W	
R312	1-247-807-31	CARBON	100	5%	1/4W	
R314	1-247-882-11	CARBON	130K	5%	1/4W	
R315	1-247-850-11	CARBON	6.2K	5%	1/4W	
R331	1-249-430-11	CARBON	12K	5%	1/4W	
R401	1-247-881-00	CARBON	120K	5%	1/4W	
R402	1-249-409-11	CARBON	220	5%	1/4W	F
R403	1-249-433-11	CARBON	22K	5%	1/4W	
R404	1-247-889-00	CARBON	270K	5%	1/4W	
R405	1-247-858-11	CARBON	13K	5%	1/4W	
R411	1-247-881-00	CARBON	120K	5%	1/4W	
R412	1-247-807-31	CARBON	100	5%	1/4W	
R414	1-247-882-11	CARBON	130K	5%	1/4W	
R415	1-247-850-11	CARBON	6.2K	5%	1/4W	
R431	1-249-430-11	CARBON	12K	5%	1/4W	
R601	1-249-409-11	CARBON	220	5%	1/4W	F
R602	1-249-409-11	CARBON	220	5%	1/4W	F
R608	1-249-409-11	CARBON	220	5%	1/4W	F
R609	1-249-433-11	CARBON	22K	5%	1/4W	
R611	1-249-409-11	CARBON	220	5%	1/4W	F
R612	1-249-409-11	CARBON	220	5%	1/4W	F
⚠R621	1-212-851-00	FUSIBLE	5.6	5%	1/4W	F
⚠R622	1-212-851-00	FUSIBLE	5.6	5%	1/4W	F
R623	1-249-432-11	CARBON	18K	5%	1/4W	
R624	1-249-432-11	CARBON	18K	5%	1/4W	

AUDIO BD

Ref. No.	Part No.	Description			Remarks
R625	1-249-429-11	CARBON	10K	5%	1/4W
R651	1-247-856-00	CARBON	11K	5%	1/4W
R652	1-247-856-00	CARBON	11K	5%	1/4W
R653	1-249-441-11	CARBON	100K	5%	1/4W
		< VARIABLE RESISTOR >			
RV301	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV311	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV341	1-238-551-11	RES, ADJ, CARBON 220K			
RV401	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV411	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV441	1-238-551-11	RES, ADJ, CARBON 220K			
RV651	1-238-599-11	RES, ADJ, CARBON 4.7K			
RV652	1-238-599-11	RES, ADJ, CARBON 4.7K			
		< TRANSFORMER >			
T621	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			
**********					
	A-4699-522-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-126-607-11	ELECT CHIP	47uF	20%	4V
C102	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C103	1-164-346-11	CERAMIC CHIP	1uF		16V
C105	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C106	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C107	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C108	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C109	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C110	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C111	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C112	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C113	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C114	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C115	1-126-607-11	ELECT CHIP	47uF	20%	4V
C116	1-163-016-00	CERAMIC CHIP	0.0039uF	10%	50V
C117	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C118	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C119	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C120	1-124-779-00	ELECT CHIP	10uF	20%	16V
C121	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C122	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C123	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C124	1-126-607-11	ELECT CHIP	47uF	20%	4V
C125	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C126	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C127	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C128	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C129	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C130	1-164-336-11	CERAMIC CHIP	0.33uF		25V
C131	1-164-346-11	CERAMIC CHIP	1uF		16V
C140	1-110-501-11	CERAMIC CHIP	0.33uF	10%	16V
C154	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C161	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C162	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C163	1-163-117-00	CERAMIC CHIP	100PF	5%	50V

Ref. No.	Part No.	Description			Remarks
C164	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C165	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C166	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C167	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C168	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C169	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C170	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C171	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C173	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C174	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C175	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C176	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C177	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C178	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C179	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C181	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C182	1-126-393-11	ELECT	33uF	20%	10V
C183	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C185	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C188	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C189	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
		< CONNECTOR >			
CNU101	1-770-014-11	CONNECTOR, FFC/FPC 16P			
CNU102	1-778-874-11	CONNECTOR,FFC(LIF(NON-ZIF))19P			
		< FERRITE BEAD >			
FB101	1-414-234-11	INDUCTOR, FERRITE BEAD			
FB103	1-414-234-11	INDUCTOR, FERRITE BEAD			
		< IC >			
IC101	8-752-080-62	IC CXA1992AR			
IC102	8-759-429-32	IC BA5941FP-E2			
IC103	8-752-378-66	IC CXD2519Q			
		< JUMPER RESISTOR >			
JW101	1-216-295-91	CONDUCTOR, CHIP	(2012)		
JW104	1-216-295-91	CONDUCTOR, CHIP	(2012)		
		< TRANSISTOR >			
Q101	8-729-010-08	TRANSISTOR MSB710-R			
		< RESISTOR >			
R102	1-216-001-00	METAL CHIP	10	5%	1/10W
R104	1-216-093-00	METAL CHIP	68K	5%	1/10W
R105	1-216-088-00	METAL CHIP	43K	5%	1/10W
R106	1-216-088-00	METAL CHIP	43K	5%	1/10W
R107	1-216-088-00	METAL CHIP	43K	5%	1/10W
R108	1-216-088-00	METAL CHIP	43K	5%	1/10W
R109	1-216-093-00	METAL CHIP	68K	5%	1/10W
R114	1-216-101-00	METAL CHIP	150K	5%	1/10W
R115	1-216-101-00	METAL CHIP	150K	5%	1/10W
R116	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R117	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R118	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W
R119	1-216-085-00	METAL CHIP	33K	5%	1/10W
R120	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R121	1-216-114-00	METAL GLAZE	510K	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R122	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R123	1-216-099-00	METAL CHIP	120K	5%	1/10W
R124	1-216-091-00	METAL CHIP	56K	5%	1/10W
R125	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R126	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W
R127	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R128	1-216-098-00	METAL CHIP	110K	5%	1/10W
R129	1-216-025-91	METAL GLAZE	100	5%	1/10W
R130	1-216-079-00	METAL CHIP	18K	5%	1/10W
R131	1-216-079-00	METAL CHIP	18K	5%	1/10W
R132	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R133	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R134	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R135	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R136	1-216-073-00	METAL CHIP	10K	5%	1/10W
R137	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R138	1-216-025-91	METAL GLAZE	100	5%	1/10W
R156	1-216-081-00	METAL CHIP	22K	5%	1/10W
R157	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R158	1-216-001-00	METAL CHIP	10	5%	1/10W
R159	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R161	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R162	1-216-073-00	METAL CHIP	10K	5%	1/10W
R163	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R164	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R165	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R166	1-216-073-00	METAL CHIP	10K	5%	1/10W
R167	1-216-081-00	METAL CHIP	22K	5%	1/10W
R168	1-216-073-00	METAL CHIP	10K	5%	1/10W
R169	1-216-079-00	METAL CHIP	18K	5%	1/10W
R170	1-216-081-00	METAL CHIP	22K	5%	1/10W
R171	1-216-073-00	METAL CHIP	10K	5%	1/10W
R172	1-216-079-00	METAL CHIP	18K	5%	1/10W
R173	1-216-025-91	METAL GLAZE	100	5%	1/10W
R174	1-216-033-00	METAL CHIP	220	5%	1/10W
R175	1-216-025-91	METAL GLAZE	100	5%	1/10W
R176	1-216-025-91	METAL GLAZE	100	5%	1/10W
R177	1-216-025-91	METAL GLAZE	100	5%	1/10W
R178	1-216-025-91	METAL GLAZE	100	5%	1/10W
R179	1-216-025-91	METAL GLAZE	100	5%	1/10W
R180	1-216-025-91	METAL GLAZE	100	5%	1/10W
R181	1-216-025-91	METAL GLAZE	100	5%	1/10W
R188	1-216-037-00	METAL CHIP	330	5%	1/10W
R190	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R191	1-216-105-91	METAL GLAZE	220K	5%	1/10W
		< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF			
		< VIBRATOR >			
X101	1-767-408-21	VIBRATOR, CRYSTAL 16.93MHz			

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Ref. No.	Part No.	Description	Remarks
*	A-4398-495-A	CD PANEL BOARD, COMPLETE	
		**********	
		< CONNECTOR >	
CNL102	1-568-860-21	SOCKET, CONNECTOR 17P	
		< DIODE >	
D211	8-719-812-44	DIODE TLO124	
D212	8-719-812-44	DIODE TLO124	
D213	8-719-033-06	DIODE SEL5920A	
D214	8-719-033-06	DIODE SEL5920A	
D215	8-719-032-86	DIODE SEL5420E	
D216	8-719-032-86	DIODE SEL5420E	
D217	8-719-056-13	DIODE SML79423C-TP15 (DISC-1)	
D218	8-719-056-13	DIODE SML79423C-TP15 (DISC-1)	
D219	8-719-056-13	DIODE SML79423C-TP15 (DISC-1)	
D220	8-719-056-13	DIODE SML79423C-TP15 (DISC-2)	
D221	8-719-056-13	DIODE SML79423C-TP15 (DISC-2)	
D222	8-719-056-13	DIODE SML79423C-TP15 (DISC-2)	
D223	8-719-056-13	DIODE SML79423C-TP15 (DISC-3)	
D224	8-719-056-13	DIODE SML79423C-TP15 (DISC-3)	
D225	8-719-056-13	DIODE SML79423C-TP15 (DISC-3)	
D226	8-719-056-13	DIODE SML79423C-TP15 (▶II)	
D227	8-719-056-13	DIODE SML79423C-TP15 (▶II)	
		< TRANSISTOR >	
Q205	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q206	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q207	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q208	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q209	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q210	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q211	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q212	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q213	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q214	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q215	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q216	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q217	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q218	8-729-027-23	TRANSISTOR DTA114EKA-T146	
		< RESISTOR >	
R234	1-216-033-00	METAL CHIP 220 5%	1/10W
R235	1-216-033-00	METAL CHIP 220 5%	1/10W
R236	1-216-033-00	METAL CHIP 220 5%	1/10W
R237	1-216-033-00	METAL CHIP 220 5%	1/10W
R238	1-216-033-00	METAL CHIP 220 5%	1/10W
R239	1-216-033-00	METAL CHIP 220 5%	1/10W
R244	1-216-033-00	METAL CHIP 220 5%	1/10W
R245	1-216-033-00	METAL CHIP 220 5%	1/10W
R246	1-216-033-00	METAL CHIP 220 5%	1/10W
R247	1-216-033-00	METAL CHIP 220 5%	1/10W
R248	1-216-033-00	METAL CHIP 220 5%	1/10W
R249	1-216-033-00	METAL CHIP 220 5%	1/10W
R254	1-216-033-00	METAL CHIP 220 5%	1/10W
R255	1-216-033-00	METAL CHIP 220 5%	1/10W
R256	1-216-033-00	METAL CHIP 220 5%	1/10W

CD PANEL | CONNECTOR | LEAF SWITCH | MAIN

Ref. No.	Part No.	Description			Remarks
R257	1-216-033-00	METAL CHIP	220	5%	1/10W
R258	1-216-033-00	METAL CHIP	220	5%	1/10W
R259	1-216-033-00	METAL CHIP	220	5%	1/10W
R264	1-216-033-00	METAL CHIP	220	5%	1/10W
R265	1-216-033-00	METAL CHIP	220	5%	1/10W
R266	1-216-033-00	METAL CHIP	220	5%	1/10W
R267	1-216-033-00	METAL CHIP	220	5%	1/10W
R268	1-216-033-00	METAL CHIP	220	5%	1/10W
R269	1-216-033-00	METAL CHIP	220	5%	1/10W
R274	1-216-033-00	METAL CHIP	220	5%	1/10W
R275	1-216-033-00	METAL CHIP	220	5%	1/10W
R276	1-216-033-00	METAL CHIP	220	5%	1/10W
R277	1-216-033-00	METAL CHIP	220	5%	1/10W
R278	1-216-017-91	METAL GLAZE	47	5%	1/10W
R279	1-216-021-00	METAL CHIP	68	5%	1/10W
R280	1-216-025-91	METAL GLAZE	100	5%	1/10W
R281	1-216-029-00	METAL CHIP	150	5%	1/10W
R282	1-216-029-00	METAL CHIP	150	5%	1/10W
R283	1-216-033-00	METAL CHIP	220	5%	1/10W
R284	1-216-037-00	METAL CHIP	330	5%	1/10W
R285	1-216-041-00	METAL CHIP	470	5%	1/10W
R286	1-216-045-00	METAL CHIP	680	5%	1/10W
R287	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R288	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R289	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
		< SWITCH >			
S270	1-762-750-11	SWITCH, TACTILE (►II)			
S271	1-762-750-11	SWITCH, TACTILE (⏏OPEN/CLOSE)			
S272	1-762-750-11	SWITCH, TACTILE (■)			
S274	1-762-750-11	SWITCH, TACTILE (DISC-3)			
S275	1-762-750-11	SWITCH, TACTILE (DISC-2)			
S276	1-762-750-11	SWITCH, TACTILE (DISC-1)			
S278	1-762-750-11	SWITCH, TACTILE (◄◄)			
S279	1-762-750-11	SWITCH, TACTILE (►►)			
S280	1-762-750-11	SWITCH, TACTILE (DISK SKIP EX-CHANGE)			
**********					
*	1-658-575-11	CONNECTOR BOARD			
		**********			
		< CONNECTOR >			
* CN701	1-568-946-11	PIN, CONNECTOR 8P			
CN702	1-750-413-11	CONNECTOR, FFC/FPC 8P			
		< TRANSISTOR >			
Q701	8-729-900-80	TRANSISTOR DTC114ES			
		< RESISTOR >			
R703	1-249-435-11	CARBON	33K	5%	1/4W
R704	1-249-429-11	CARBON	10K	5%	1/4W
R705	1-249-417-11	CARBON	1K	5%	1/4W F
**********					
*	1-650-669-11	LEAF SWITCH BOARD			
		**********			
		< CONNECTOR >			
CN1001	1-695-372-31	PIN, CONNECTOR (PC BOARD) 11P			

Ref. No.	Part No.	Description			Remarks
		< TRANSISTOR >			
Q1001	8-749-010-90	TRANSISTOR PHOTO REFLECTOR			NJL5165KA-H
Q1002	8-749-010-90	TRANSISTOR PHOTO REFLECTOR			NJL5165KA-H
		< RESISTOR >			
R1001	1-247-818-11	CARBON	300	5%	1/4W
R1002	1-247-820-11	CARBON	360	5%	1/4W
R1003	1-249-414-11	CARBON	560	5%	1/4W F
R1004	1-247-834-11	CARBON	1.3K	5%	1/4W
R1005	1-247-818-11	CARBON	300	5%	1/4W
		< SWITCH >			
S1001	1-692-832-11	SWITCH, PUSH (1 KEY)(A PLAY)			
S1002	1-692-832-11	SWITCH, PUSH (1 KEY)(B PLAY)			
S1004	1-571-281-21	SWITCH, LEAF (A HALE)			
S1005	1-571-281-21	SWITCH, LEAF (A CrO2)			
S1006	1-572-248-11	SWITCH, LEAF (REC A)			
S1007	1-572-248-11	SWITCH, LEAF (B HALE)			
S1008	1-571-281-21	SWITCH, LEAF (B CrO2)			
S1009	1-571-281-21	SWITCH, LEAF (REC B)			
**********					
*	A-4398-493-A	MAIN BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C001	1-164-159-11	CERAMIC	0.1uF		50V
C128	1-162-306-11	CERAMIC	0.01uF	20%	16V
C129	1-126-933-11	ELECT	100uF	20%	10V
C131	1-164-159-11	CERAMIC	0.1uF		50V
C132	1-164-159-11	CERAMIC	0.1uF		50V
C134	1-164-159-11	CERAMIC	0.1uF		50V
C135	1-162-290-31	CERAMIC	470PF	10%	50V
C136	1-162-290-31	CERAMIC	470PF	10%	50V
C138	1-126-933-11	ELECT	100uF	20%	10V
C139	1-128-551-11	ELECT	22uF	20%	25V
C140	1-164-159-11	CERAMIC	0.1uF		50V
C402	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C403	1-162-290-31	CERAMIC	470PF	10%	50V
C405	1-126-301-11	ELECT	1uF	20%	50V
C406	1-137-399-11	FILM	0.1uF	5%	50V
C407	1-126-964-11	ELECT	10uF	20%	50V
C409	1-126-964-11	ELECT	10uF	20%	50V
C411	1-126-301-11	ELECT	1uF	20%	50V
C421	1-126-964-11	ELECT	10uF	20%	50V
C422	1-126-964-11	ELECT	10uF	20%	50V
C423	1-126-933-11	ELECT	100uF	20%	10V
C424	1-164-159-11	CERAMIC	0.1uF		50V
C425	1-164-159-11	CERAMIC	0.1uF		50V
C426	1-164-159-11	CERAMIC	0.1uF		50V
C427	1-126-935-11	ELECT	470uF	20%	16V
C428	1-126-933-11	ELECT	100uF	20%	16V
C429	1-126-933-11	ELECT	100uF	20%	10V
C452	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C453	1-162-290-31	CERAMIC	470PF	10%	50V
C455	1-126-301-11	ELECT	1uF	20%	50V

Ref. No.	Part No.	Description			Remarks
C456	1-137-399-11	FILM	0.1uF	5%	50V
C457	1-126-964-11	ELECT	10uF	20%	50V
C459	1-126-964-11	ELECT	10uF	20%	50V
C461	1-126-301-11	ELECT	1uF	20%	50V
C702	1-126-961-11	ELECT	2.2uF	20%	50V
C752	1-126-961-11	ELECT	2.2uF	20%	50V
C813	1-126-967-11	ELECT	47uF	20%	10V
C853	1-126-944-11	ELECT	3300uF	20%	25V
C854	1-126-944-11	ELECT	3300uF	20%	25V
C861	1-126-768-11	ELECT	2200uF	20%	16V
C862	1-126-933-11	ELECT	100uF	20%	10V
C863	1-126-967-11	ELECT	47uF	20%	10V
C867	1-126-967-11	ELECT	47uF	20%	10V
C868	1-126-923-11	ELECT	220uF	20%	10V
C869	1-126-967-11	ELECT	47uF	20%	10V
C870	1-164-159-11	CERAMIC	0.1uF		50V
C871	1-164-159-11	CERAMIC	0.1uF		50V
C872	1-126-967-11	ELECT	47uF	20%	10V
C873	1-126-933-11	ELECT	100uF	20%	10V
C876	1-126-933-11	ELECT	100uF	20%	10V
		< CONNECTOR >			
* CN111	1-568-935-11	PIN, CONNECTOR 8P			
* CN112	1-568-936-11	PIN, CONNECTOR 9P			
* CNB108	1-764-017-31	HOUSING,CONNECTOR(PC BOARD)17P			
CNP105	1-770-393-11	PIN, CONNECTOR (PC BOARD) 9P			
CNS101	1-569-060-11	SOCKET, CONNECTOR 11P			
CNS102	1-568-440-11	SOCKET, CONNECTOR 17P			
CNS103	1-569-323-11	SOCKET, CONNECTOR 19P			
CNS104	1-569-324-11	SOCKET, CONNECTOR 21P			
		< DIODE >			
D110	8-719-987-63	DIODE 1N4148M			
D855	8-719-110-08	DIODE RD8.2ES-B2			
D858	8-719-110-08	DIODE RD8.2ES-B2			
D901	8-719-024-99	DIODE 11ES2-NTA2B			
D902	8-719-024-99	DIODE 11ES2-NTA2B			
D903	8-719-024-99	DIODE 11ES2-NTA2B			
D904	8-719-024-99	DIODE 11ES2-NTA2B			
		< TERMINAL >			
* EH01	1-537-738-21	TERMINAL, EARTH			
		< IC >			
IC101	8-759-482-60	IC uPD780016YGF-016-3BA			
IC103	8-759-165-82	IC PST600E-T			
IC107	8-749-921-12	IC GP1F32T			
IC401	8-759-363-21	IC HA12203NT			
IC402	8-759-822-09	IC LB1641			
		< COIL >			
L401	1-410-482-31	INDUCTOR 100uH			
		< TRANSISTOR >			
Q102	8-729-040-20	TRANSISTOR RT1P137L-TP			
Q103	8-729-900-80	TRANSISTOR DTC114ES			
Q104	8-729-040-20	TRANSISTOR RT1P137L-TP			
Q405	8-729-801-93	TRANSISTOR 2SD1387			
Q408	8-729-900-80	TRANSISTOR DTC114ES			
Q409	8-729-900-80	TRANSISTOR DTC114ES			
Q410	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q411	8-729-900-80	TRANSISTOR DTC114ES			
Q852	8-729-018-60	TRANSISTOR 2SD2012-LC			
Q855	8-729-018-59	TRANSISTOR 2SB1375-LC			
		< RESISTOR >			
R121	1-247-807-31	CARBON	100	5%	1/4W
R122	1-247-807-31	CARBON	100	5%	1/4W
R123	1-247-807-31	CARBON	100	5%	1/4W
R124	1-247-807-31	CARBON	100	5%	1/4W
R125	1-247-807-31	CARBON	100	5%	1/4W
R126	1-247-807-31	CARBON	100	5%	1/4W
R127	1-247-807-31	CARBON	100	5%	1/4W
R128	1-247-807-31	CARBON	100	5%	1/4W
R129	1-247-807-31	CARBON	100	5%	1/4W
R130	1-247-807-31	CARBON	100	5%	1/4W
R131	1-247-807-31	CARBON	100	5%	1/4W
R132	1-247-807-31	CARBON	100	5%	1/4W
R133	1-247-807-31	CARBON	100	5%	1/4W
R134	1-247-807-31	CARBON	100	5%	1/4W
R135	1-247-807-31	CARBON	100	5%	1/4W
R136	1-247-807-31	CARBON	100	5%	1/4W
R139	1-249-429-11	CARBON	10K	5%	1/4W
R140	1-249-429-11	CARBON	10K	5%	1/4W
R141	1-249-429-11	CARBON	10K	5%	1/4W
R142	1-249-429-11	CARBON	10K	5%	1/4W
R143	1-247-807-31	CARBON	100	5%	1/4W
R146	1-249-417-11	CARBON	1K	5%	1/4W F
R147	1-249-429-11	CARBON	10K	5%	1/4W
R148	1-249-429-11	CARBON	10K	5%	1/4W
R149	1-247-807-31	CARBON	100	5%	1/4W
R150	1-247-807-31	CARBON	100	5%	1/4W
R151	1-247-807-31	CARBON	100	5%	1/4W
R152	1-247-807-31	CARBON	100	5%	1/4W
R153	1-249-419-11	CARBON	1.5K	5%	1/4W F
R154	1-249-419-11	CARBON	1.5K	5%	1/4W F
R155	1-249-425-11	CARBON	4.7K	5%	1/4W F
R156	1-249-425-11	CARBON	4.7K	5%	1/4W F
R157	1-249-429-11	CARBON	10K	5%	1/4W
R158	1-249-429-11	CARBON	10K	5%	1/4W
R161	1-247-807-31	CARBON	100	5%	1/4W
R162	1-247-807-31	CARBON	100	5%	1/4W
R403	1-249-426-11	CARBON	5.6K	5%	1/4W
R404	1-249-417-11	CARBON	1K	5%	1/4W F
R405	1-247-840-00	CARBON	2.4K	5%	1/4W
R406	1-249-421-11	CARBON	2.2K	5%	1/4W F
R407	1-249-428-11	CARBON	8.2K	5%	1/4W F
R409	1-249-433-11	CARBON	22K	5%	1/4W
R419	1-249-435-11	CARBON	33K	5%	1/4W
R422	1-249-441-11	CARBON	100K	5%	1/4W
R423	1-249-432-11	CARBON	18K	5%	1/4W
R424	1-249-429-11	CARBON	10K	5%	1/4W
R425	1-249-429-11	CARBON	10K	5%	1/4W
R426	1-249-429-11	CARBON	10K	5%	1/4W
R429	1-249-426-11	CARBON	5.6K	5%	1/4W
R433	1-249-425-11	CARBON	4.7K	5%	1/4W F

MAIN | MOTOR (SLIDE) | MOTOR (TURN) | RESISTOR

Ref. No.	Part No.	Description			Remarks
R434	1-249-425-11	CARBON	4.7K	5%	1/4W F
R435	1-249-425-11	CARBON	4.7K	5%	1/4W F
R436	1-249-417-11	CARBON	1K	5%	1/4W F
R437	1-249-436-11	CARBON	39K	5%	1/4W
R438	1-249-436-11	CARBON	39K	5%	1/4W
R439	1-249-437-11	CARBON	47K	5%	1/4W
R440	1-249-437-11	CARBON	47K	5%	1/4W
R442	1-247-843-11	CARBON	3.3K	5%	1/4W
R447	1-249-411-11	CARBON	330	5%	1/4W
R448	1-249-427-11	CARBON	6.8K	5%	1/4W F
R449	1-249-429-11	CARBON	10K	5%	1/4W
R450	1-249-425-11	CARBON	4.7K	5%	1/4W F
R453	1-249-426-11	CARBON	5.6K	5%	1/4W
R454	1-249-417-11	CARBON	1K	5%	1/4W F
R455	1-247-840-00	CARBON	2.4K	5%	1/4W
R456	1-249-421-11	CARBON	2.2K	5%	1/4W F
R457	1-249-428-11	CARBON	8.2K	5%	1/4W F
R459	1-249-433-11	CARBON	22K	5%	1/4W
R469	1-249-433-11	CARBON	22K	5%	1/4W
R470	1-249-425-11	CARBON	4.7K	5%	1/4W F
R480	1-249-430-11	CARBON	12K	5%	1/4W
R704	1-249-417-11	CARBON	1K	5%	1/4W F
R705	1-249-438-11	CARBON	56K	5%	1/4W
R706	1-249-417-11	CARBON	1K	5%	1/4W F
R754	1-249-417-11	CARBON	1K	5%	1/4W F
R755	1-249-438-11	CARBON	56K	5%	1/4W
R756	1-249-417-11	CARBON	1K	5%	1/4W F
R855	1-249-417-11	CARBON	1K	5%	1/4W F
R859	1-249-417-11	CARBON	1K	5%	1/4W F
⚠R861	1-212-853-00	FUSIBLE	6.8	5%	1/4W F
⚠R862	1-212-853-00	FUSIBLE	6.8	5%	1/4W F
		< VARIABLE RESISTOR >			
RV401	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV451	1-238-598-11	RES, ADJ, CARBON 2.2K			
		< VIBRATOR >			
X101	1-760-489-11	VIBRATOR, CERAMIC 5MHz			
**********					
*	1-658-578-11	MOTOR (SLIDE) BOARD			
		**********			
		< CAPACITOR >			
C801	1-162-306-11	CERAMIC	0.01uF	20%	16V
C804	1-162-306-11	CERAMIC	0.01uF	20%	16V
C805	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
* CN801	1-568-947-11	PIN, CONNECTOR 9P			
		< DIODE >			
D801	8-719-010-43	DIODE UZ-5.6BSC			
D804	8-719-987-63	DIODE 1N4148M			
D805	8-719-987-63	DIODE 1N4148M			
		< IC >			
IC801	8-759-274-09	IC BA6286N			

Ref. No.	Part No.	Description			Remarks
		< MOTOR >			
M801	A-4672-004-A	MOTOR ASSY (SLED)			
		< RESISTOR >			
R801	1-249-401-11	CARBON	47	5%	1/4W F
		< SWITCH >			
S801	1-762-527-11	SWITCH, ROTARY (OPEN/CLOSE)			
S811	1-473-335-11	ENCODER, ROTARY (BU,TRAY ADDRESS DET)			
**********					
*	1-658-577-11	MOTOR (TURN) BOARD			
		**********			
		< CAPACITOR >			
C701	1-162-306-11	CERAMIC	0.01uF	20%	16V
C702	1-126-964-11	ELECT	10uF	20%	50V
C705	1-162-306-11	CERAMIC	0.01uF	20%	16V
		< CONNECTOR >			
CN703	1-750-413-11	CONNECTOR, FFC/FPC 8P			
CN704	1-506-469-11	PIN, CONNECTOR 4P			
		< DIODE >			
D701	8-719-010-23	DIODE UZ-3.6BSB			
		< IC >			
IC701	8-759-633-65	IC M54641L			
		< MOTOR >			
M701	A-4672-004-A	MOTOR ASSY (TURN)			
		< RESISTOR >			
R706	1-249-411-11	CARBON	330	5%	1/4W
R707	1-249-401-11	CARBON	47	5%	1/4W F
**********					
*	1-666-004-11	RESISTOR BOARD			
		**********			
		< CAPACITOR >			
C851	1-164-159-11	CERAMIC	0.1uF		50V
C852	1-164-159-11	CERAMIC	0.1uF		50V
C865	1-126-967-11	ELECT	47uF	20%	10V
		< DIODE >			
D851	8-719-987-63	DIODE 1N4148M			
D852	8-719-987-63	DIODE 1N4148M			
		< IC >			
IC851	8-759-231-58	IC TA7812S			
IC852	8-759-231-53	IC TA7805S			
IC853	8-759-604-86	IC M5F7807L			

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			Remarks
		< RESISTOR >			
⚠R863	1-212-934-00	FUSIBLE	1	5% 1/2W	F
**********					
*	1-658-576-11	SENSOR BOARD			
		**********			
		< IC >			
IC702	8-749-924-18	IC PHOTO INTERRUPTER RPI-1391			
IC703	8-749-924-30	IC PHOTO REFLECTOR GP2S28			
		< RESISTOR >			
R701	1-249-416-11	CARBON	820	5% 1/4W	F
R702	1-249-407-11	CARBON	150	5% 1/4W	F
**********					
*	1-666-007-11	TC (A) BOARD			
		**********			
		< DIODE >			
D207	8-719-058-03	DIODE SEL5423E-TP15 (▷)			
D208	8-719-058-03	DIODE SEL5423E-TP15 (▷)			
D209	8-719-058-03	DIODE SEL5423E-TP15 (◁)			
D210	8-719-058-03	DIODE SEL5423E-TP15 (◁)			
		< TRANSISTOR >			
Q203	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q204	8-729-027-23	TRANSISTOR DTA114EKA-T146			
		< RESISTOR >			
R213	1-216-061-00	METAL CHIP	3.3K	5% 1/10W	
R214	1-216-069-00	METAL CHIP	6.8K	5% 1/10W	
R215	1-216-077-00	METAL CHIP	15K	5% 1/10W	
R230	1-216-033-00	METAL CHIP	220	5% 1/10W	
R231	1-216-033-00	METAL CHIP	220	5% 1/10W	
R232	1-216-033-00	METAL CHIP	220	5% 1/10W	
R233	1-216-033-00	METAL CHIP	220	5% 1/10W	
		< SWITCH >			
S264	1-762-750-11	SWITCH, TACTILE (□)			
S265	1-762-750-11	SWITCH, TACTILE (◁)			
S266	1-762-750-11	SWITCH, TACTILE (▷)			
**********					
*	1-666-008-11	TC (B) BOARD			
		**********			
		< JACK >			
CNJ105	1-770-402-11	HOUSING, CONNECTOR(PC BOARD)9P			
		< DIODE >			
D201	8-719-058-03	DIODE SEL5423E-TP15 (▷)			
D202	8-719-058-03	DIODE SEL5423E-TP15 (▷)			
D203	8-719-058-03	DIODE SEL5423E-TP15 (◁)			
D204	8-719-058-03	DIODE SEL5423E-TP15 (◁)			
		< TRANSISTOR >			
Q201	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q202	8-729-027-23	TRANSISTOR DTA114EKA-T146			

Ref. No.	Part No.	Description			Remarks
		< RESISTOR >			
R201	1-216-017-91	METAL GLAZE	47	5% 1/10W	
R202	1-216-021-00	METAL CHIP	68	5% 1/10W	
R224	1-216-033-00	METAL CHIP	220	5% 1/10W	
R225	1-216-033-00	METAL CHIP	220	5% 1/10W	
R226	1-216-033-00	METAL CHIP	220	5% 1/10W	
R227	1-216-033-00	METAL CHIP	220	5% 1/10W	
		< SWITCH >			
S251	1-762-750-11	SWITCH, TACTILE (▷)			
S252	1-762-750-11	SWITCH, TACTILE (◁)			
S253	1-762-750-11	SWITCH, TACTILE (□)			
**********					
*	A-4398-496-A	TC PANEL BOARD COMPLETE			
		**********			
		< DIODE >			
D205	8-719-033-06	DIODE SEL5920A (PAUSE ▮▮)			
D206	8-719-812-44	DIODE TLO124 (REC)			
		< TRANSISTOR >			
Q219	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q220	8-729-027-23	TRANSISTOR DTA114EKA-T146			
		< RESISTOR >			
R203	1-216-025-91	METAL GLAZE	100	5% 1/10W	
R204	1-216-029-00	METAL CHIP	150	5% 1/10W	
R205	1-216-029-00	METAL CHIP	150	5% 1/10W	
R206	1-216-033-00	METAL CHIP	220	5% 1/10W	
R207	1-216-037-00	METAL CHIP	330	5% 1/10W	
R208	1-216-041-00	METAL CHIP	470	5% 1/10W	
R209	1-216-045-00	METAL CHIP	680	5% 1/10W	
R210	1-216-049-91	METAL GLAZE	1K	5% 1/10W	
R211	1-216-053-00	METAL CHIP	1.5K	5% 1/10W	
R212	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
R228	1-216-033-00	METAL CHIP	220	5% 1/10W	
R229	1-216-033-00	METAL CHIP	220	5% 1/10W	
		< SWITCH >			
S254	1-762-750-11	SWITCH, TACTILE (◀◀)			
S255	1-762-750-11	SWITCH, TACTILE (▶▶)			
S256	1-762-750-11	SWITCH, TACTILE (DIRECTION MODE)			
S257	1-762-750-11	SWITCH, TACTILE (PAUSE ▮▮)			
S258	1-762-750-11	SWITCH, TACTILE (REC)			
S259	1-762-750-11	SWITCH, TACTILE (HI-SPEED DUBBING)			
S260	1-762-750-11	SWITCH, TACTILE (CD SYNCHRO)			
S261	1-762-750-11	SWITCH, TACTILE (DOLBY NR)			
S262	1-762-750-11	SWITCH, TACTILE (◀◀)			
S263	1-762-750-11	SWITCH, TACTILE (▶▶)			
**********					

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	Remarks
		MISCELLANEOUS	
		**********	
4	1-773-112-11	WIRE (FLAT TYPE) (19 CORE)	
5	1-765-325-11	WIRE (FLAT TYPE) (11 CORE)	
6	1-773-155-11	WIRE (FLAT TYPE) (21 CORE)	
* 10	1-666-009-11	DUMMY BOARD	
64	1-773-053-11	WIRE (FLAT TYPE) (17 CORE)	
257	1-452-538-11	MAGNET	
258	1-776-042-11	WIRE (FLAT TYPE) (8 CORE)	
⚠301	8-848-379-31	OPTICAL PICK-UP KSS-213B/S-N	
302	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
HP101	1-500-093-11	HEAD, MAGNETIC (PLAYBACK)(DECK A)	
HRPE101	1-500-094-11	HEAD, MAGNETIC (REC/PB/ERASE)(DECK B)	
M1	A-2004-409-A	MOTOR ASSY, CAPSTAN	
M2	A-2004-410-A	MOTOR ASSY, DC (TRIGGER)	
M101	X-4917-523-4	MOTOR ASSY, SPINDLE	
M102	X-4917-504-1	MOTOR ASSY, SLED	
M701	A-4672-004-A	MOTOR ASSY (TURN)	
M801	A-4672-004-A	MOTOR ASSY (SLED)	
S811	1-473-335-11	ENCODER, ROTARY (BU,TRAY ADDRESS DET)	

****

Ref. No.	Part No.	Description	Remarks
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#5	7-621-775-00	SCREW +B 2.6X3	
#6	7-621-255-15	SCREW +P 2X3	
#7	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	
#8	7-685-131-19	SCREW +BTP 2.6X4 TYPE2 N-S	
#9	7-685-862-09	SCREW +BVTT 2.6X6 (S)	
#10	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#11	7-623-921-01	RING, RETAINING, CAPSTAN	
#12	7-621-775-10	SCREW +B 2.6X4	

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HCD-W550

SONY

SERVICE MANUAL

Canadian Model
AEP Model
UK Model
E Model
Australian Model
Tourist Model

CORRECTION-1

File this correction with the service manual.

(Page 2)

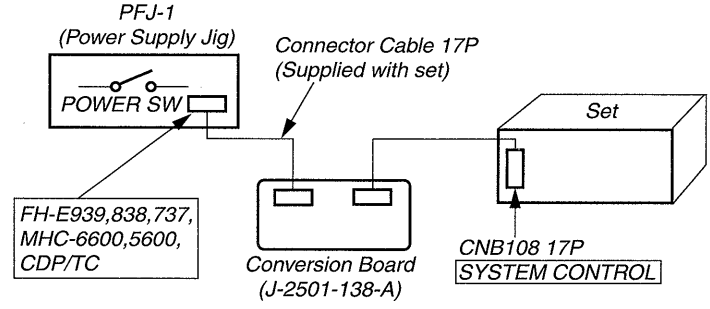
INCORRECT

SERVICING NOTE

- Supplying power during servicing

This equipment cannot operate without using a separate power supply. Connect to the STR-W550/W770AV when performing service work.
To apply power set the SYSTEM POWER switch on the Tuner/Amp to ON.
When other units are not available use the PFJ-1 power supply jig.
When using the PFJ-1, simultaneously press the CD STOP button and the DECK A ▶▶ (fast rightward) button to turn on the power.

[Connection Diagram]



CORRECT

SERVICING NOTE

This model has no built-in power supply, and cannot be operated independently. Be sure to connect with STR-W550 or STR-W770 to perform service.
The measurement specification values, voltage/waveform values shown in this manual are those when connected with STR-W550 or STR-W770.

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Sony Corporation
Home A&V Products Company

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