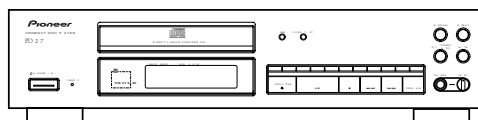


Service Manual

Pioneer



ORDER NO.
RRV2121

COMPACT DISC PLAYER PD-217

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

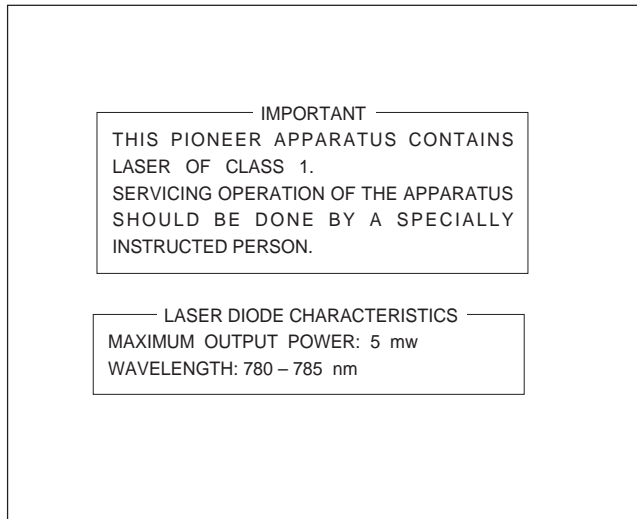
Type	Model	Power Requirement	The voltage can be converted by the following method.
	PD-217		
WPWXJ	○	AC220-240V	—————
RDXJ	○	AC110-127V/ 220-240V	With the voltage selector
RLXJ	○	AC110-120V/ 220-240V	With the voltage selector

CONTENTS

1. SAFETY INFORMATION	2	7. GENERAL INFORMATION	25
2. EXPLODED VIEWS AND PARTS LIST	3	7.1 DISPLAY	25
3. SCHEMATIC DIAGRAM	8	7.2 BLOCK DIAGRAM	26
4. PCB CONNECTION DIAGRAM	12	8. PANEL FACILITIES AND SPECIFICATIONS	27
5. PCB PARTS LIST	15		
6. ADJUSTMENT	17		

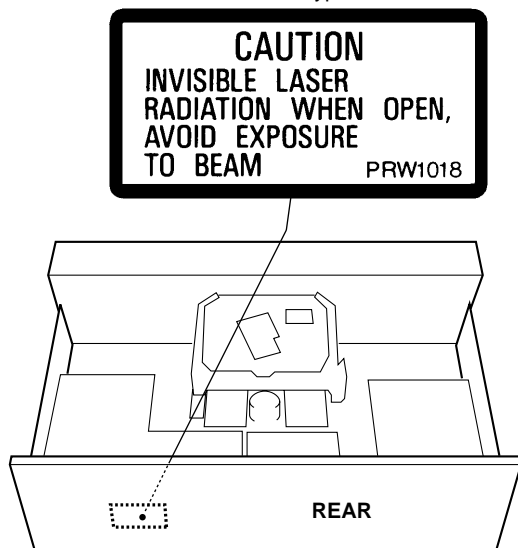
1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.



LABEL CHECK

WPWXJ and RLXJ types



Additional Laser Caution

1. Laser Interlock Mechanism
 The position of the switch (S601) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S601) is not on CLMP terminal side (CLMP signal is OFF or high level.). Thus, the interlock will no longer function if the switch (S601) is deliberately set to CLMP terminal side (low level).
 The interlock also does not function in the test mode*.
 Laser diode oscillation will continue, if pin 33 of CXA1782CQ (IC151) on the MAIN BOARD ASSY is connected to GND, or pin 22 of IC301(LDON) is connected to low level (ON), or else the terminals of Q151 are shorted to each other (fault condition).

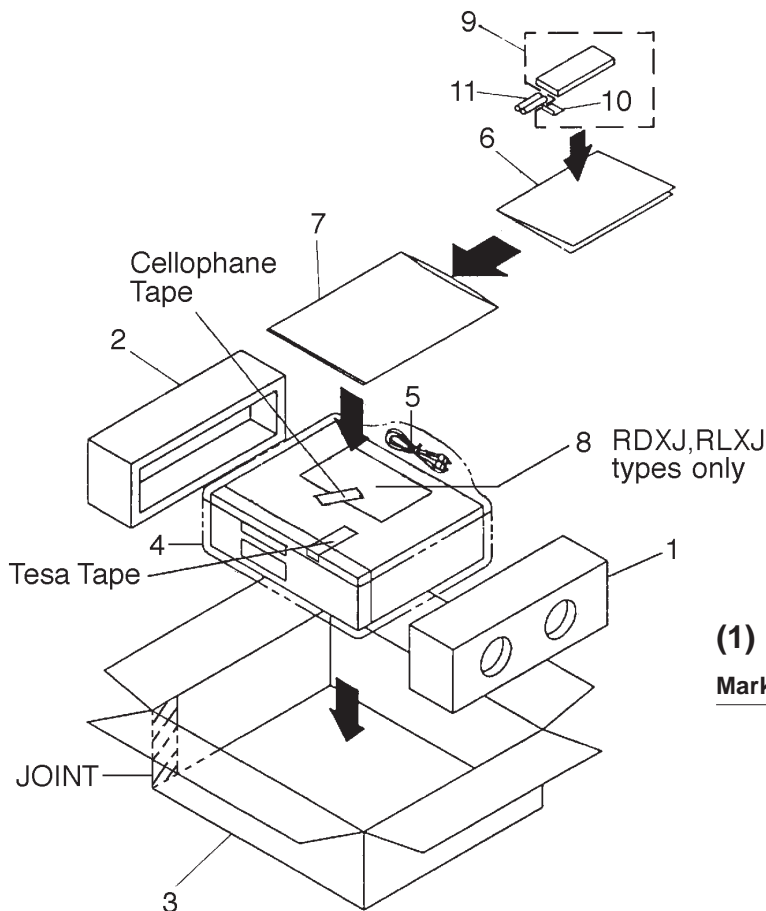
2. When the cover is opened with the servo mechanism block removed and turned over, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

* Refer to page18.

2. EXPLODED VIEWS AND PARTS LIST

- NOTES :
- Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.
 - The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 - Screw adjacent to \blacktriangledown mark on the product are used for disassembly.

2.1 PACKING



(1) PACKING PARTS LIST

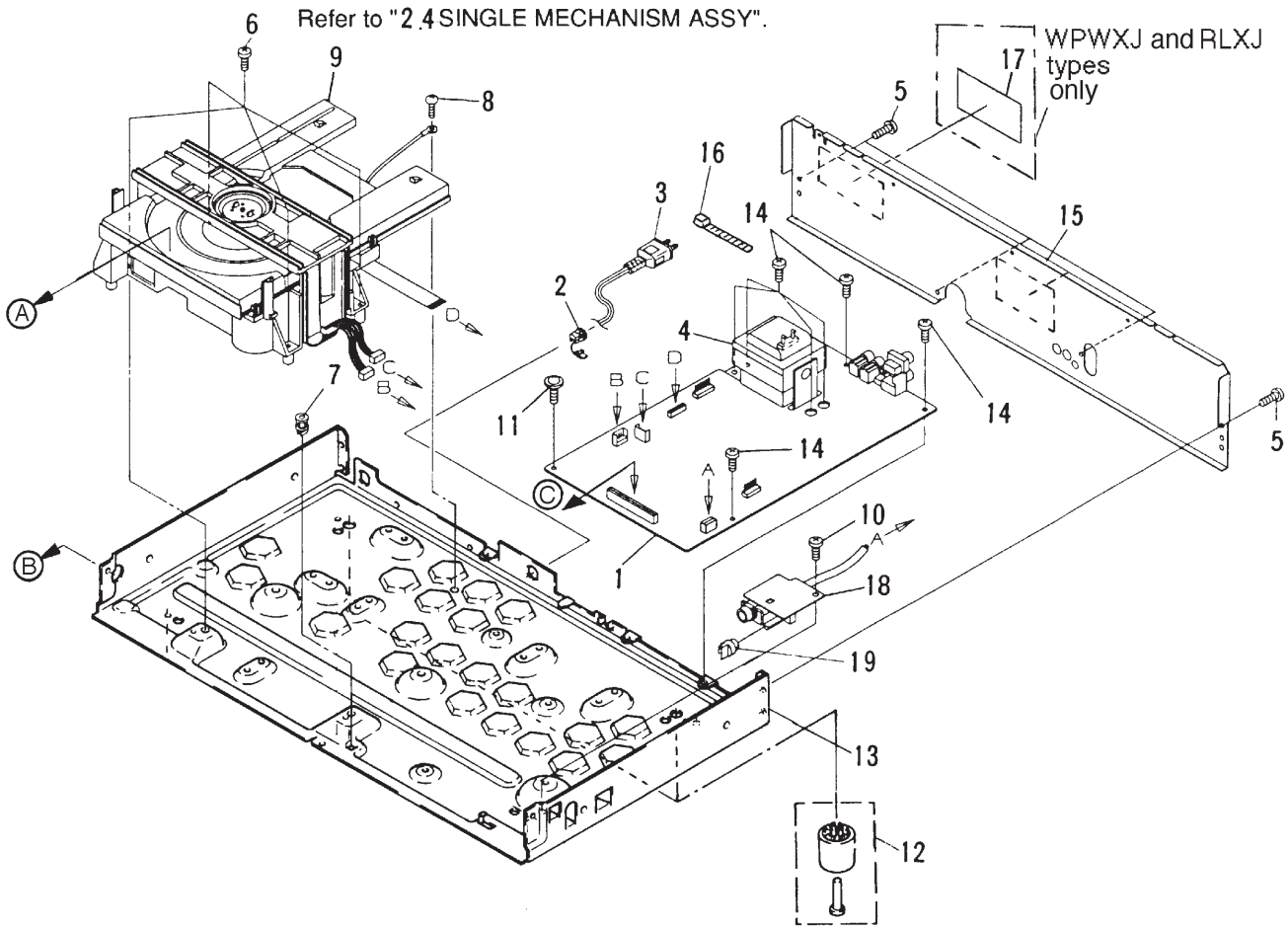
Mark	No.	Description	Part No.
	1	Styrol Protector R	PHA1289
	2	Styrol Protector L	PHA1290
	3	Packing Case	PHG2370
	4	Packing Sheet (750 × 600 × 0.5)	Z23-007
	5	Output Cable (L=1.0m)	PDE1248
	6	Operating Instructions	See Contrast table (2)
	7	Polyethylene Bag (340 × 230 × 0.03)	Z21-038
	8	Caution 220V Label	See Contrast table (2)
	9	Remote Control Unit (CU-PD112)	PWW1158
	10	Battery Cover	AZA7148
NSP	11	Dry Cell Batteries(AA/R6P)	VEM-013

(2) CONTRAST TABLE

PD-217/WPWXJ, RDXJ and RLXJ are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.			Remarks
			WPWXJ type	RDXJ type	RLXJ type	
	6	Operating Instructions (English/Spanish/Chinese)	Not used	PRE1280	PRE1280	
	6	Operating Instructions (English)	PRB1287	Notused	Not used	
	8	CAUTION 220V LABEL	Not used	ARR1003	ARR1003	

2.2 EXTERIOR (1/2)



EXTERIOR (1/2) PARTS LIST

(1) EXTERIOR PARTS LIST

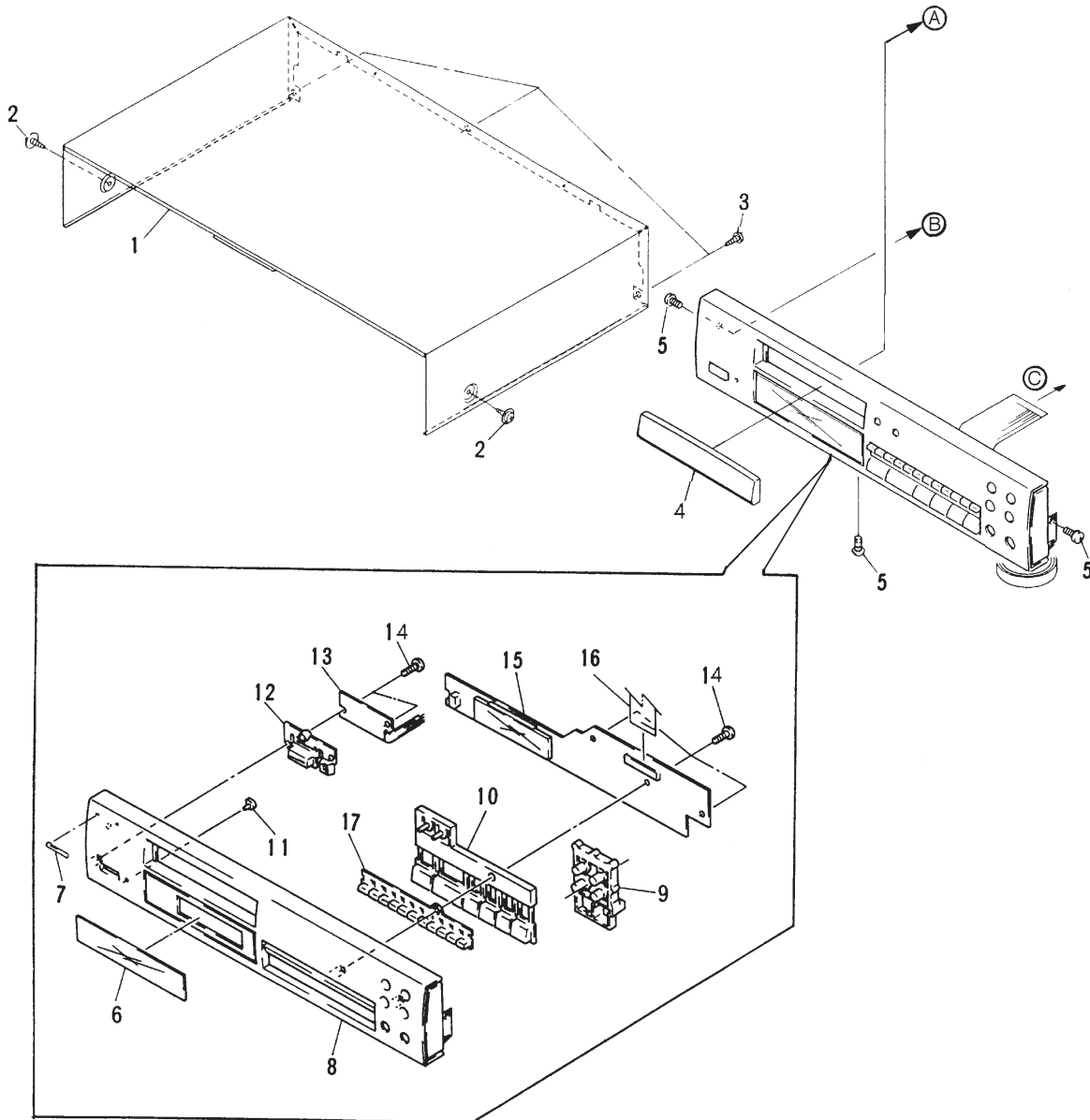
Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	MOTHER BOARD ASSY	See Contrast table (2)		11	Screw	IPZ30P150FCC
△	2	Strain Relief	CM-22B		12	Foot Assy	AEC1531
△	3	AC Power Cord	See Contrast table (2)	NSP	13	Under Base	PNA2177
△	4	Power Transformer	See Contrast table (2)		14	Screw	BBZ30P060FMC
	5	Screw	BBZ30P080FZK		15	Rear Base	See Contrast table (2)
	6	Screw	BBZ30P160FMC		16	Binder (SKB-90BK)	ZCA-SKB90BK
NSP	7	PCB Spacer	PNY-404		17	Caution Label	See Contrast table (2)
	8	Screw	PDZ30P050FMC	NSP	18	HEADPHONE BOARD ASSY	PWZ2949
NSP	9	SINGLE MECHANISM ASSY	PXA1593		19	Headphone Knob	PAC1707
	10	Screw	IBZ30P080FCC				

(2) CONTRAST TABLE

PD-217/WPWXJ, RDXJ and RLXJ are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.			Remarks
			WPWXJ type	RDXJ type	RLXJ type	
△	1	MOTHER BOARD ASSY	PWM2140	PWM2139	PWM2139	
△	3	AC Power Cord	ADG1123	PDG1013	PDG1003	
△	4	Power Transformer	PTT1236	PTT1238	PTT1238	
	15	Rear Base	PNA2497	PNA2495	PNA2496	
	17	Caution Label	PRW1018	Not used	PRW1018	

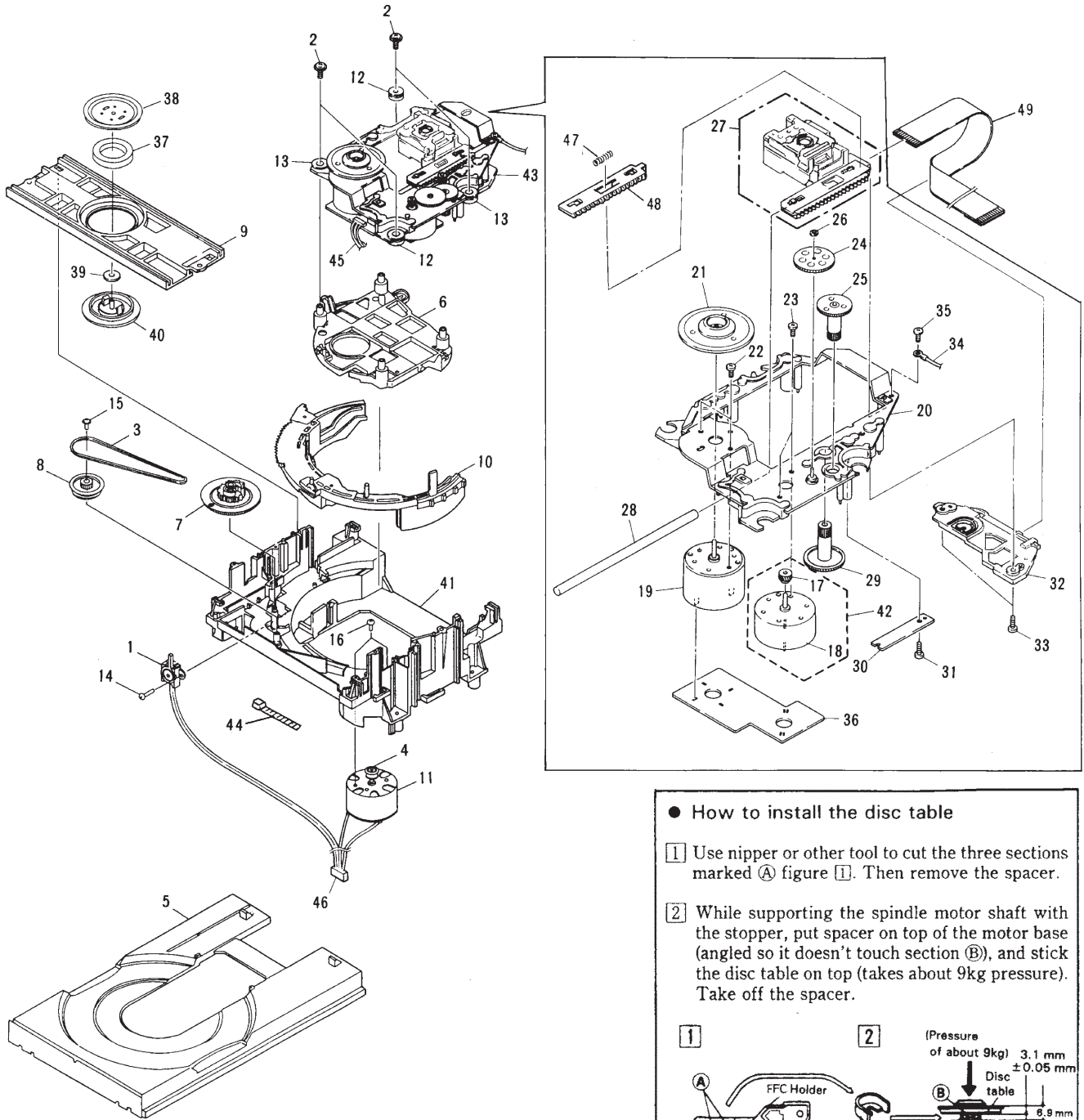
2.3 EXTERIOR (2/2)



■ EXTERIOR (2/2) PARTS LIST

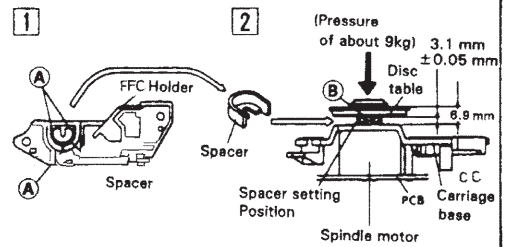
Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Bonnet	PYY1182	11	LED Lens	PNW2019
2	Screw	FBT40P080FZK	12	Power Button	PAC1708
3	Screw	BBZ30P080FZK	NSP 13	SW BOARD ASSY	PWZ2942
4	Tray Name Plate	PNW2923	14	Screw	PPZ30P100FMC
5	Screw	IBZ30P080FCC	NSP 15	DISPLAY BOARD ASSY	PWZ2937
6	Display Window	PAM1666	16	32P F · F · C/30V	PDD1041
7	Name Plate	PAM1776	17	10 Key	PAC1797
8	Function Panel	PNW2911			
9	Mode Button	PAC1796			
10	Operate Button	PAC1798			

2.4 SINGLE MECHANISM ASSY



● How to install the disc table

- 1 Use nipper or other tool to cut the three sections marked (A) figure 1. Then remove the spacer.
- 2 While supporting the spindle motor shaft with the stopper, put spacer on top of the motor base (angled so it doesn't touch section (B)), and stick the disc table on top (takes about 9kg pressure). Take off the spacer.



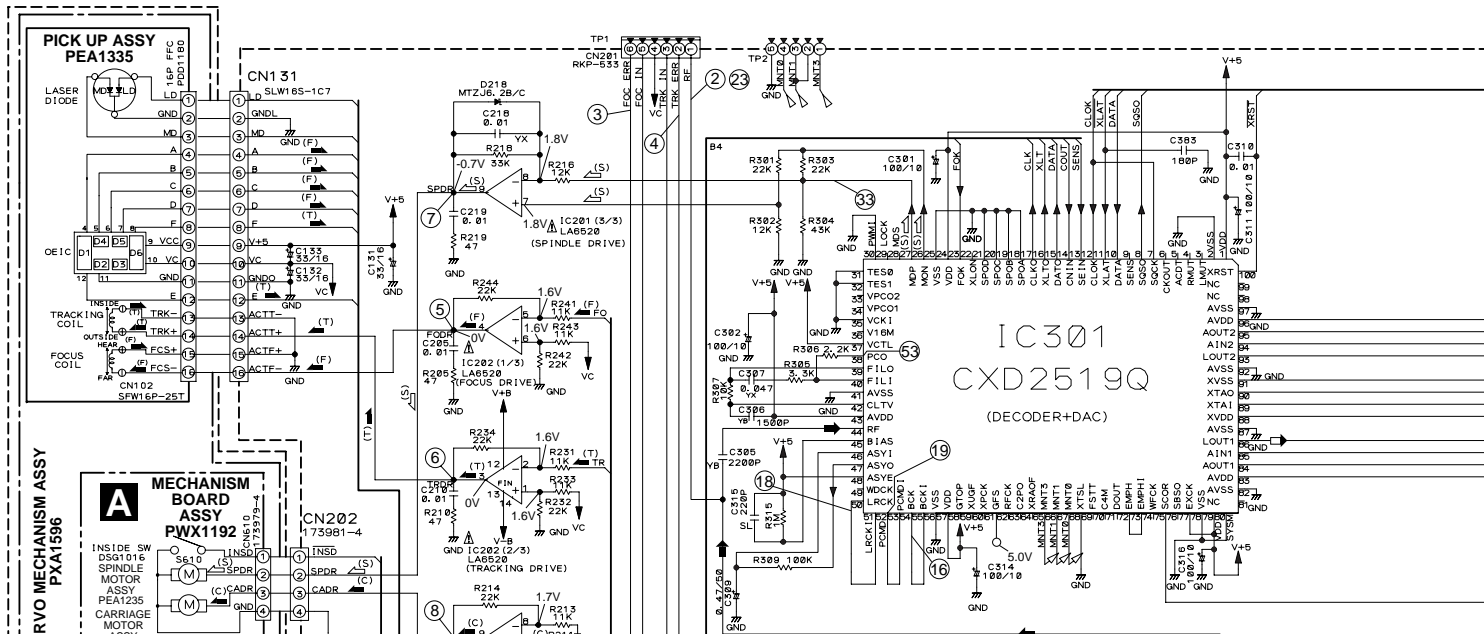
■ SINGLE MECHANISM ASSY PARTS LIST

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	1	Lever Switch (S601)	DSK1003		26	Washer	WT12D032D025
	2	Float Screw	PBA1048		27	PICK UP ASSY-S	PEA1335
	3	Rubber Belt	PEB1193		28	Guide Bar	PLA1094
	4	Motor Pulley	PNW1634		29	Gear 1	PNW2052
	5	Tray Black V	PNW2455		30	Gear Stopper	PNB1303
	6	Float Base	PNW2032		31	Screw	BBZ20P060FMC
	7	Drive Gear 2	PNW2369		32	FFC Holder	PNW2734
	8	Gear Pulley	PNW2034		33	Screw	BPZ26P100FMC
	9	Clamper Base	PNW2375		34	Earth Lead Unit	PDF1104
	10	Clamp Cam	PNW2364		35	Screw	BBZ26P060FMC
	11	D.C. Motor (0.75W, LOADING)	PXM1010	NSP	36	MECHANISM BOARD ASSY	PWX1192
	12	Float Rubber B	REB1287		37	Clamp Magnet	PMF1014
	13	Float Rubber G	REB1288		38	Yoke	PNB1216
	14	Screw	BPZ26P080FMC	NSP	39	H Rubber	PEB1249
	15	Screw	Z39-019		40	Clamper S	PNW1609
	16	Screw	BMZ26P040FMC		41	Loading Base	PNW2376
	17	Pinion Gear	PNW2055		42	D.C. Motor Assy (CARRIAGE)	PEA1246
NSP	18	D.C. Motor (CARRIAGE)	PXM1027	NSP	43	SERVO MECHANISM ASSY	PXA1596
	19	D.C. Motor ASSY (SPINDLE)	PEA1235		44	Binder	Z09-056
	20	Carriage Base	PNW2699		45	Connector Assy (4P)	RDE1043
	21	Disc Holder	PNW1608		46	Connector Assy (5P)	PDE1239
	22	Screw	JFZ20P030FNI		47	PU Rack Spring	ABH7077
	23	Screw	JFZ17P025FZK		48	Rack Holder	PNW2056
	24	Gear 3	PNW2054		49	16P F.F.C/30V	PDD1185
	25	Gear 2	PNW2053				

3. SCHEMATIC DIAGRAM

3.1 MOTHER BOARD ASSY, DISPLAY BOARD ASSY and SW BOARD ASSY

A



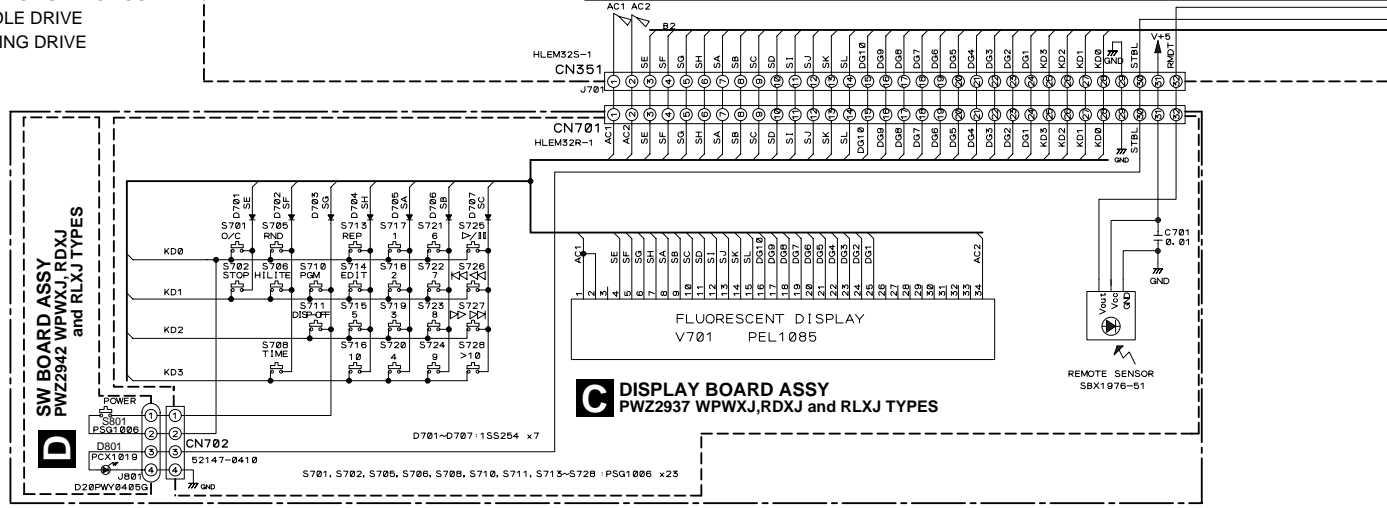
B

C

- SIGNAL ROUTE
- ▶ : AUDIO SIGNAL
- ◀ : AUDIO SIGNAL
- (F) : FOCUS SERVO LOOP
- (T) : TRACKING SERVO LOOP
- (C) : CARRIAGE SERVO LOOP
- (S) : SPINDLE DRIVE
- (L) : LOADING DRIVE

A MOTHER BOARD ASSY
PWM2140 WPWXJ TYPE
PWM2139 RDXJ and RLXJ TYPES

D



C DISPLAY BOARD ASSY
PWM2937 WPWXJ, RDXJ and RLXJ TYPES



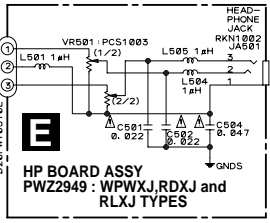
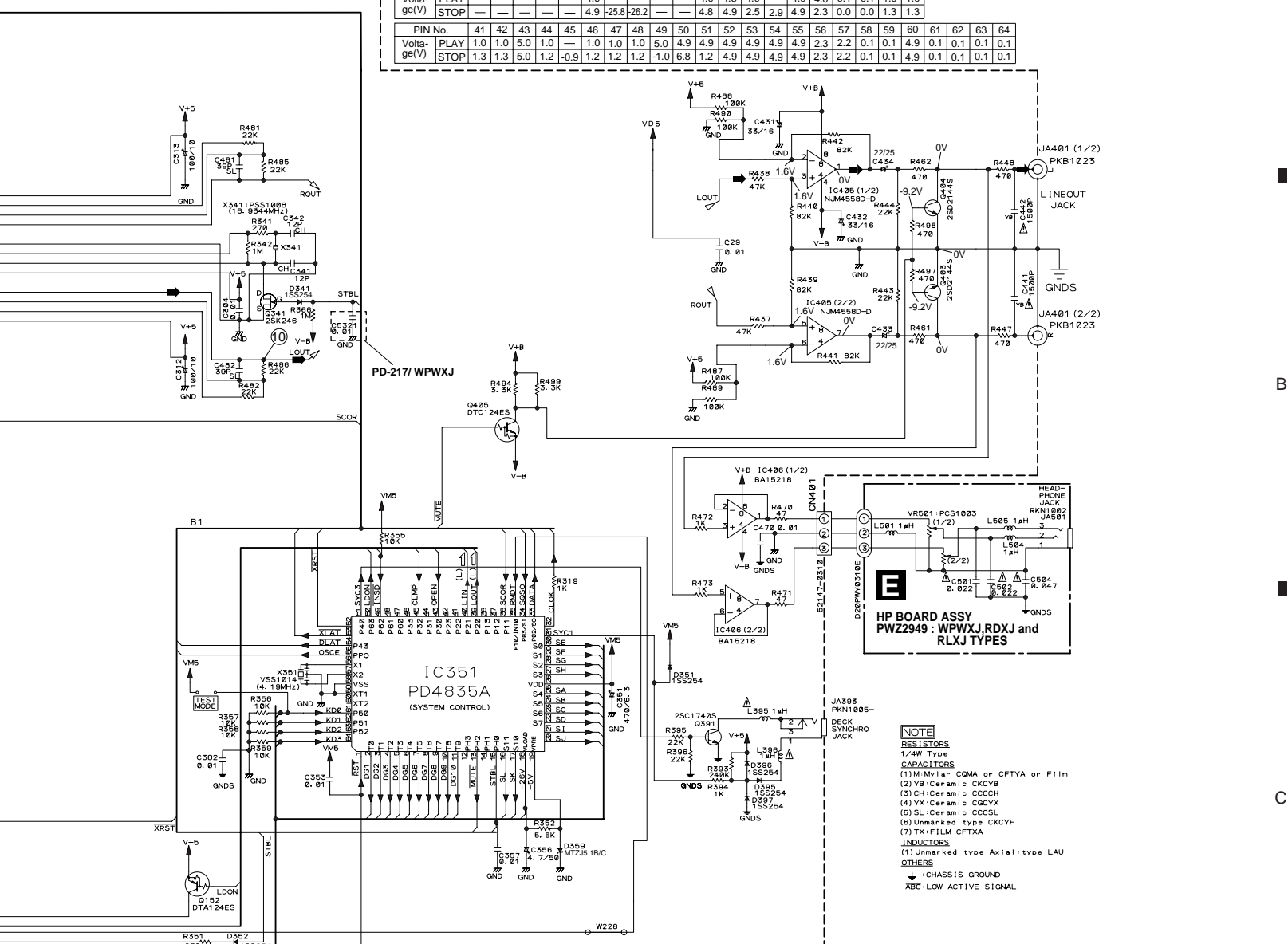
Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "PCB PARTS LIST".

IC351(PD4835A)

PIN No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Volta-ge(V)	PLAY	5.0	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2
Volta-ge(V)	STOP	5.0	-23.8	-23.7	-23.7	-23.8	-23.8	-23.8	-23.8	-23.8	-23.8	-23.8	-23.8	-23.8	-23.8	-23.8	-23.8	-23.8	-23.8	-23.8

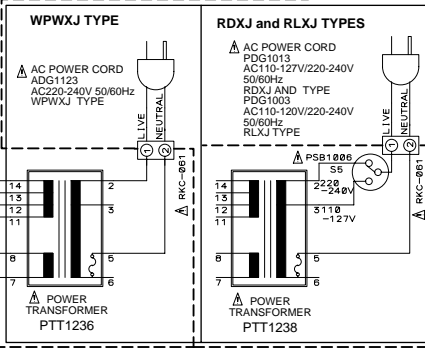
PIN No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Volta-ge(V)	PLAY	—	—	—	—	4.9	—	—	—	—	4.9	4.8	4.0	—	4.9	4.0	0.1	0.1	1.0	1.0
Volta-ge(V)	STOP	—	—	—	—	4.9	-25.8	-26.2	—	—	4.8	4.9	2.5	2.9	4.9	2.3	0.0	0.0	1.3	1.3

PIN No.	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Volta-ge(V)	PLAY	1.0	1.0	5.0	1.0	—	1.0	1.0	1.0	5.0	4.9	4.9	4.9	4.9	4.9	2.3	2.2	0.1	0.1	4.9	0.1	0.1	0.1	0.1
Volta-ge(V)	STOP	1.3	1.3	5.0	1.2	-0.9	1.2	1.2	1.2	-1.0	6.8	1.2	4.9	4.9	4.9	2.3	2.2	0.1	0.1	4.9	0.1	0.1	0.1	0.1



- NOTE**
- RESISTORS**
1/4W Type
- CAPACITORS**
(1)M: Mylar, CQMA or CFTYA or Film
(2)YB: Ceramic CKCYB
(3)CH: Ceramic CCCH
(4)YX: Ceramic CGCYX
(5)SL: Ceramic CCCSL
(6)Unmarked type CKCYF
(7)TX: FILM CFTXA
- INDUCTORS**
(1)Unmarked type Axial type LAU
- OTHERS**
↓: CHASSIS GROUND
ABC: LOW ACTIVE SIGNAL

CAUTION FOR CONTINUED PROTECTION AGAINST RISK OF FIRE
REPLACE WITH SAME TYPE
NO. ICP-N18, MFD BY ROHM CO., LTD. FOR IC31 AND IC34.



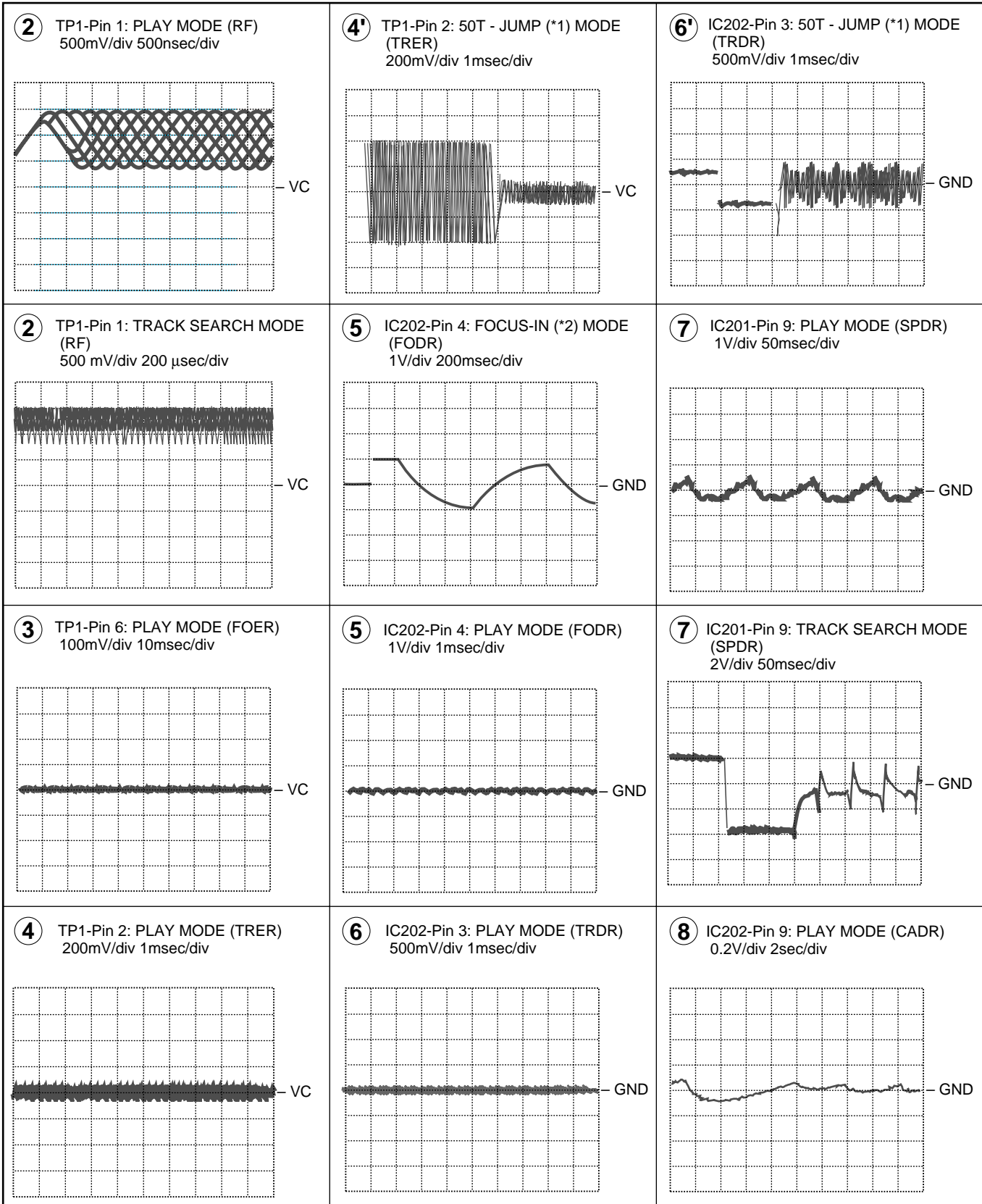
- DISPLAY BOARD ASSY**
S701: ▲ OPEN/CLOSE
S702: ■ STOP
S705: RANDOM
S706: HI-LITE SCAN
S708: TIME
S710: PROGRAM
S711: DISPLAY OFF
S713: REPEAT
S714: EDIT
S715: 5
S716: 10
S717: 1
S718: 2
S719: 3
S720: 4
S721: 6
S722: 7
S723: 8
S724: 9
S725: ►/||PLAY/PAUSE
S726: ◀/◄TRACK
S727: ◀/MANUAL SEARCH REV
S727: ▶/TRACK
S727: ▶/MANUAL SEARCH FWD
S728: >10
- SW BOARD ASSY**
S801: POWER STANDBY/ON

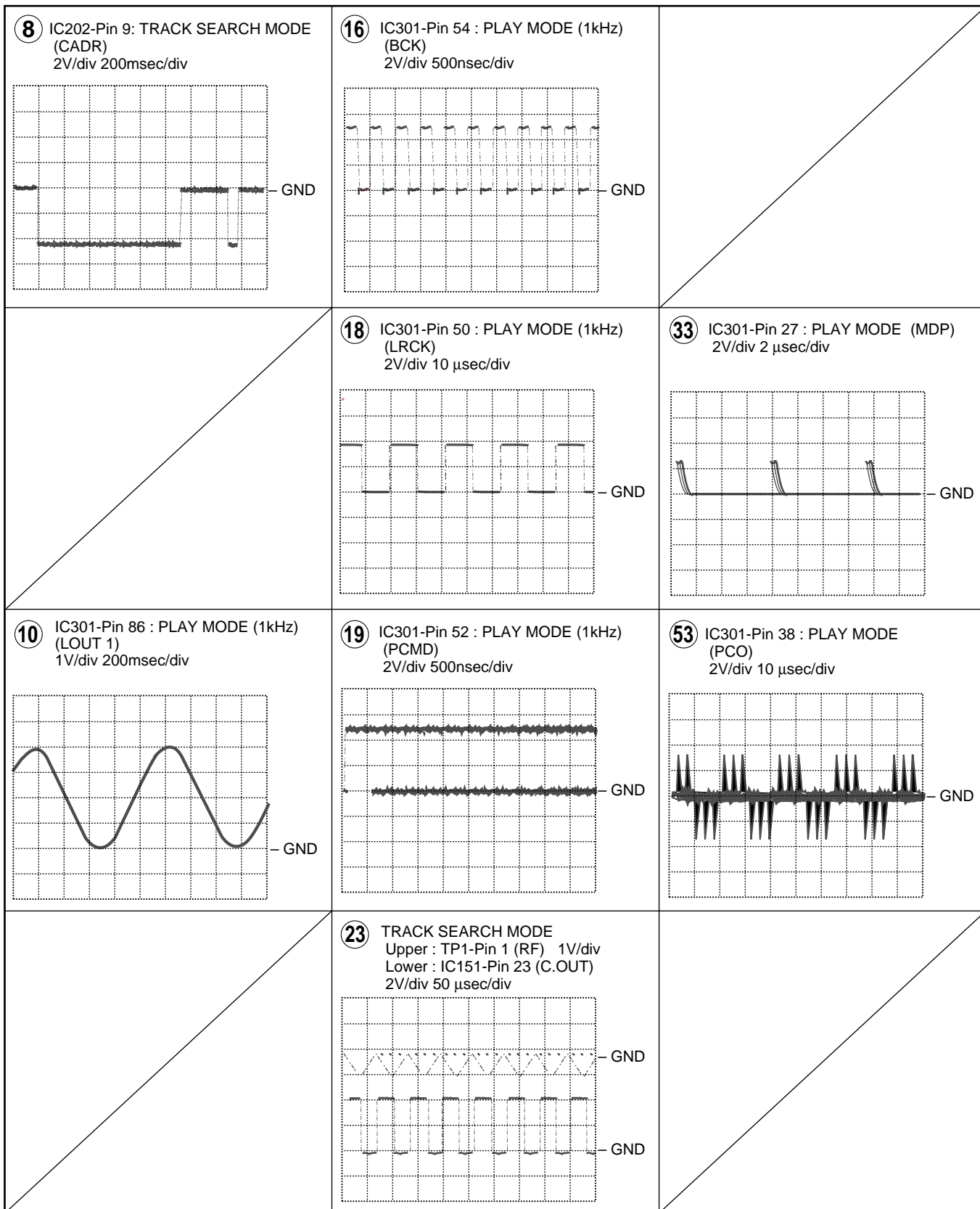
B Waveforms (Mother Board Assy)

Note: The encircled numbers denote measuring point in the schematic diagram.

*1 50T-JUMP: After switching to the pause mode, press the manual search key.

*2 FOCUS-IN: Press the play key without loading a disc.





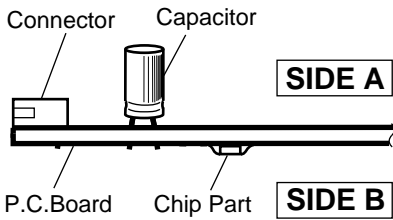
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

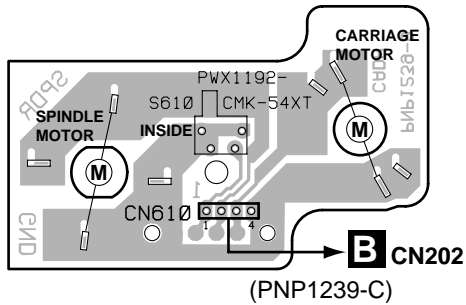
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

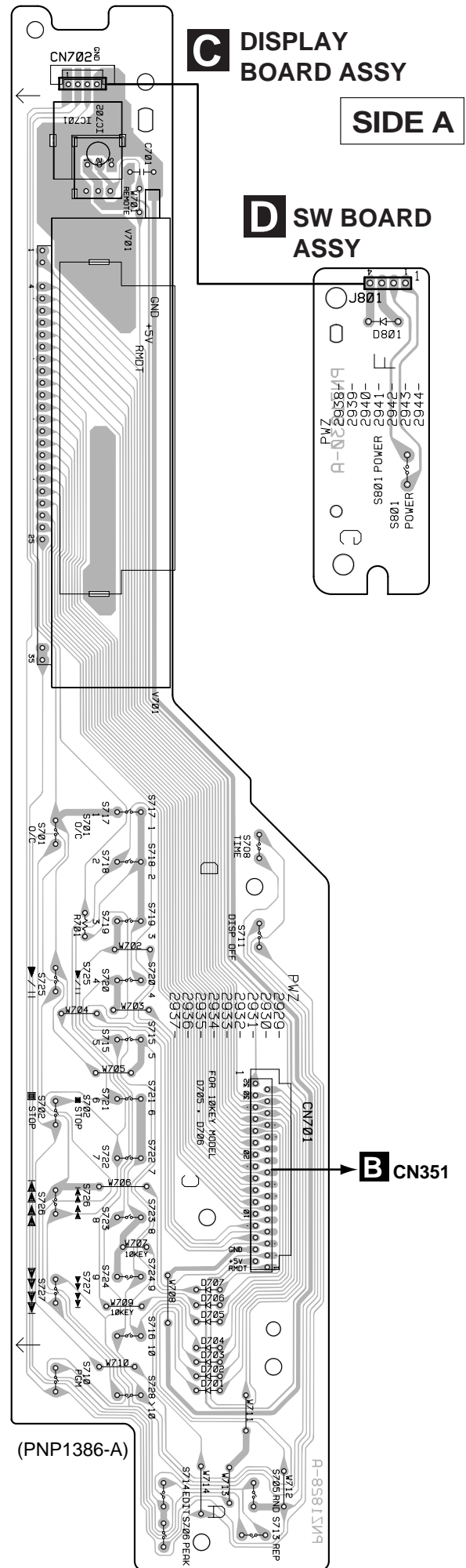
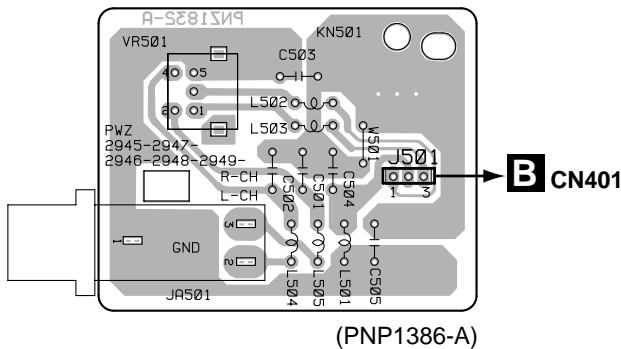
3. The parts mounted on this PCB include all necessary parts for several destinations.
- For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



A MECHANISM BOARD ASSY

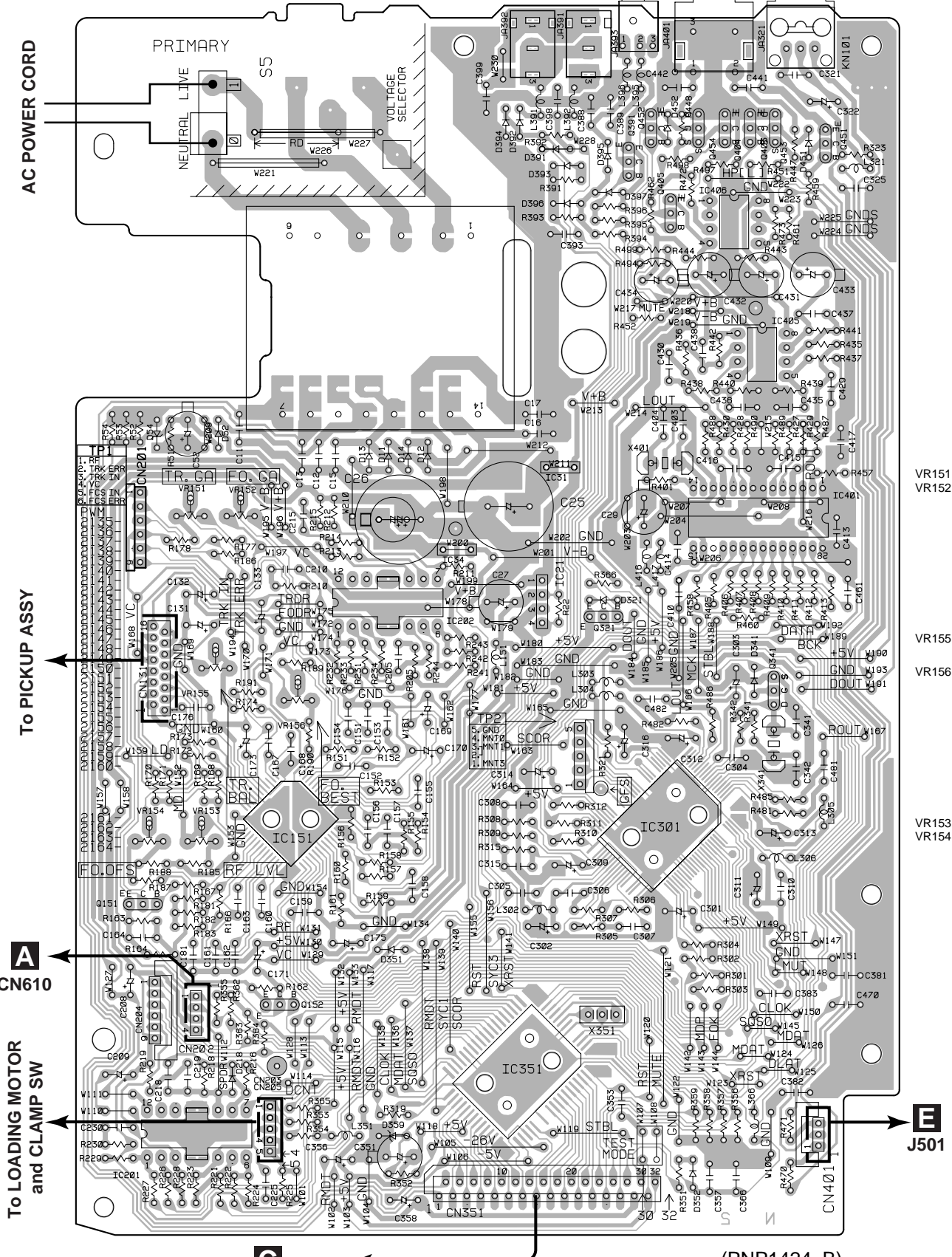


E HP BOARD ASSY



B MOTHER BOARD ASSY

SIDE A



AC POWER CORD

PRIMARY

NEUTRAL LIVE

VOLTAGE SELECTOR

To PICKUP ASSY

To LOADING MOTOR and CLAMP SW

CN610

CN701

J501

(PNP1424-B)

Q391
Q452
Q404
Q403
Q453
Q451

Q405
IC406

IC405

IC31

VR151
VR152

IC34

IC202

IC21

Q321

VR155

VR156

Q341

VR153

VR154

Q151

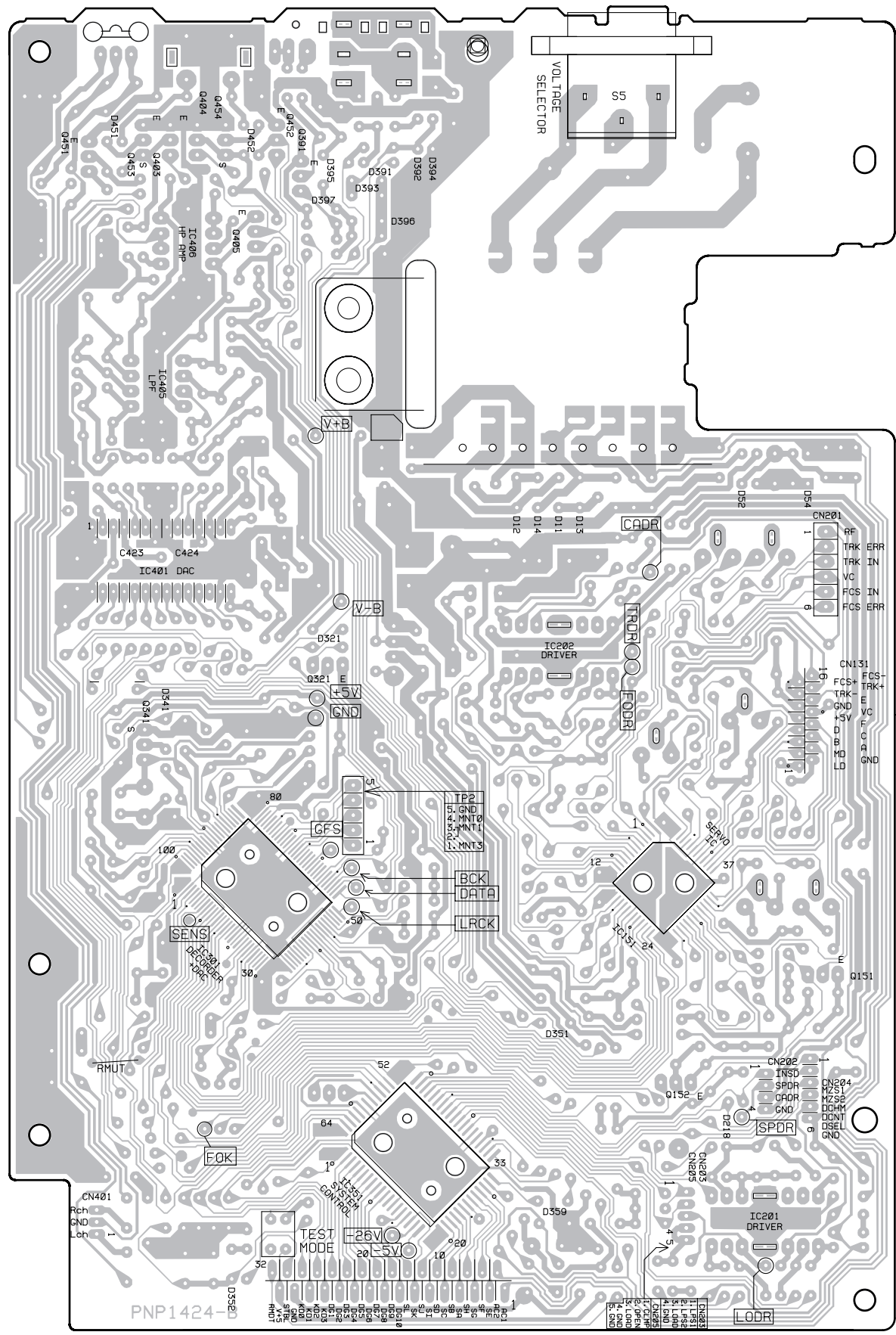
Q152

B

SIDE B

B MOTHER BOARD ASSY

A
B
C
D



IC301
IC151

IC351

TEST MODE

26V

5V

PNP1424-B

OPEN

5V

10V

15V

20V

25V

30V

35V

40V

45V

50V

55V

60V

65V

70V

75V

80V

85V

90V

95V

100V

105V

110V

115V

120V

125V

130V

135V

140V

145V

150V

155V

160V

165V

170V

175V

180V

185V

190V

195V

200V

PNP1424-B

B

5. PCB PARTS LIST

- NOTES :
- Parts marked by “ NSP ” are generally unavailable because they are not in our Master Spare Parts List.
 - The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 - When ordering resistors, first convert resistance values into code form as shown in the following examples.
- Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by $J = 5\%$, and $K = 10\%$).
- 560 $\Omega \rightarrow 56 \times 10^1 \rightarrow 561$ RD1/4PU $\begin{matrix} 5 & 6 & 1 \\ | & | & | \\ J & & \end{matrix}$
- 47k $\Omega \rightarrow 47 \times 10^3 \rightarrow 473$ RD1/4PU $\begin{matrix} 4 & 7 & 3 \\ | & | & | \\ J & & \end{matrix}$
- 0.5 $\Omega \rightarrow R50$ RN2H $\begin{matrix} R & 5 & 0 \\ | & | & | \\ K & & \end{matrix}$
- 1 $\Omega \rightarrow 1R0$ RS1P $\begin{matrix} 1 & R & 0 \\ | & | & | \\ K & & \end{matrix}$
- Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
- 5.62k $\Omega \rightarrow 562 \times 10^1 \rightarrow 5621$ RN1/4PC $\begin{matrix} 5 & 6 & 2 & 1 \\ | & | & | & | \\ F & & & \end{matrix}$

■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.			Remarks
		WPWXJ	RDXJ	RLXJ	
\triangle	MOTHER BOARD ASSY	PWM2140	PWM2139	PWM2139	
\triangle NSP	SUB BOARD ASSY	PWX1400	PWX1400	PWX1400	
NSP	└ DISPLAY BOADR ASSY	PWZ2937	PWZ2937	PWZ2937	
NSP	└ SW BOARD ASSY	PWZ2942	PWZ2942	PWZ2942	
NSP	└ HP BOARD ASSY	PWZ2949	PWZ2949	PWZ2949	
NSP	SINGLE MECHANISM ASSY	PXA1593	PXA1593	PXA1593	
NSP	└SERVO MECHANISM ASSY	PXA1596	PXA1596	PXA1596	
NSP	└MECHANISM BOARD ASSY	PWX1192	PWX1192	PWX1192	

■ CONTRAST OF PCB ASSEMBLIES

MOTHER BOARD ASSY

PWM2140 and PWM2139 are constructed the same except for the following:

Mark	Symbol and Description	Part No.		Remarks
		PWM2140	PWM2139	
\triangle	C173, C5321 S5 Voltage Selector	CKCYF103Z50 Not used	Not used PSB1006	

■ PARTS LIST FOR PD-217/WPWXJ

Mark No.	Description	Part No.	Mark No.	Description	Part No.
B MOTHER BOARD ASSY					
SEMICONDUCTORS					
	IC406	BA15218	Q151		2SA854S
	IC151	CXA1782CQ	Q391		2SC1740S
	IC301	CXD2519Q	Q403, Q404		2SD2144S
\triangle	IC31, IC34	ICP-N10	Q152		DTA124ES
\triangle	IC201, IC202	LA6520	Q405		DTC124ES
	IC405	NJM4558D-D	Q341		2SK246
	IC351	PD4835A	D341, D351, D352, D395- D397		1SS355
\triangle	IC21	PQ05RR12	D54		MTZJ18B
			D359		MTZJ5.1B
			D218		MTZJ6.2B
			\triangle D11- D14, D52		S5688G

Mark No. Description Part No.

COILS AND FILTERS

L351 (RADIAL INDUCTOR) LFA100J
 L395, L396 (RADIAL INDUCTOR) LFA1R0J

CAPACITORS

C181 CCCCH100D50
 C341, C342 CCCCH120J50
 C383 CCCSL181J50
 C315 CCCSL221J50
 C481, C482 CCCSL390J50

C309 CEASR47M50
 C171, C175, C301, C311- C314 CEAS101M10
 C316, C302 CEAS101M10
 C52 CEAS101M35
 C26 CEAS102M16

C433, C434 CEAS220M25
 C27, C131- C133, C431, C432 CEAS330M16
 C25 CEAS332M16
 C169, C170, C356 CEAS4R7M50
 C351 CEAS471M6R3

C156, C161, C164, C168, C218 CGCYX103K25
 C160 CGCYX333K25
 C167 CGCYX472K25
 C152, C307 CGCYX473K25
 C157 CGCYX823K25

C163 CKCYB102K50
 C176, C306, C441, C442 CKCYB152K50
 C305 CKCYB222K50
 C162 CKCYB332K50
 C151 CKCYB682K50

C29, C159, C173, C205, C210 CKCYF103Z50
 C215, C219, C304, C310, C353 CKCYF103Z50
 C357, C382, C470, C5321 CKCYF103Z50
 C11, C13, C15, C16, C17 CKCYF103Z50
 C153, C154, C155, C158 CQMBA104J50



RESISTORS

VR153, VR155 (10kΩ- B) RCP1045
 VR151, VR152, VR154 (22kΩ- B) RCP1046
 VR156 (220kΩ- B) RCP1049
 Other Resistors RD1/4PU□□□J

OTHERS

CN202 MT 4P CONNECTOR 173981-4
 CN205 MT 5P CONNECTOR 173981-5
 CN351 32P FFC CONNECTOR HLEM32S-1
 JA401 2P JACK PKB1023
 JA393 JACK PKN1005

X341 XTAL RES (16.9344 MHz) PSS1008
 CN201 CONNECTOR 6P RKP-533
 CN131 CONNECTOR SLW16S-1C7
 X351 CERAMIC RESONATOR VSS1014
 (4.19MHz)
 CN401 3P JUMPER CONNECTOR 52147-0310



TERMINAL RKC-061

Mark No. Description Part No.

C DISPLAY BOARD ASSY
SEMICONDUCTORS

D701- D707 1SS254

CAPACITOR

C701 CKCYF103Z50

SWITCHES

S701, S702, S705- S708, S710 PSG1006
 S711, S713- S728 PSG1006

OTHERS

CN702 4P JUMPER CONNECTOR 52147-0410
 CN701 CONNECTOR HLEM32R-1
 V701 FL INDICATOR TUBE PEL1085
 REMOTE SENSOR SBX1976-51

D SW BOARD ASSY
SEMICONDUCTOR

D801 PCX1019

SWITCH

S801 PSG1006

OTHER

J801 2mm JUMPER WIRE D20PWY0405G

E HP BOARD ASSY
RESISTOR

VR501 (5kΩ- B) PCS1003

COILS AND FILTERS

L501, L504, L505 (AXIAL INDUCTOR) LAU1R0J

CAPACITORS

C501, C502 CKCYF223Z50
 C504 CKCYF473Z50

OTHERS

JA501 HP JACK RKN1002
 J501 3P JUMPER WIRE D20PWY0310G

A MECHANISM BOARD ASSY
SWITCH

S610 DSG1016


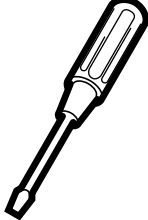


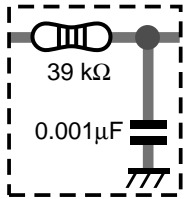


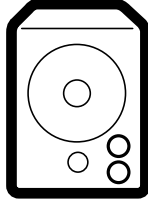
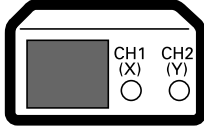
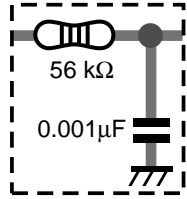
OTHER

CN610 MT 4P CONNECTOR 173979-4

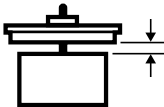
6. ADJUSTMENT

6.1 PREPARATIONS

6.1.1 Jigs and Measuring Instruments

 <p>CD TEST DISC (YEDS-7)</p>	 <p>⊖ screwdriver (small)</p>	 <p>⊕ screwdriver (medium)</p>	 <p>⊕ screwdriver (large)</p>	 <p>Low pass filter ① (39 kΩ + 0.001μF)</p>
 <p>⊖ Precise screwdriver</p>	 <p>Ball point hexagon wrench (size: 1.5mm) GGK1002</p>	 <p>Low-frequency oscillator</p>	 <p>Dual-trace oscilloscope (10 : 1 probe)</p>	 <p>Low pass filter ② (56 kΩ + 0.001μF)</p>

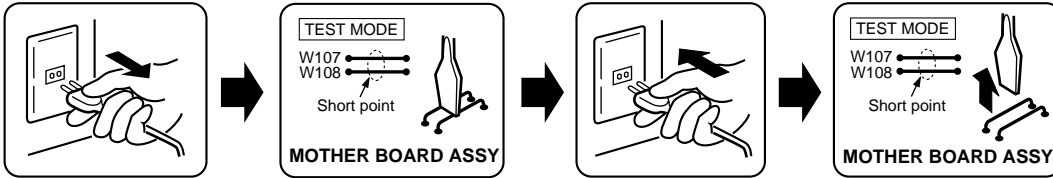
6.1.2 Necessary Adjustment Points

When	Adjustment points
Exchange PICKUP	1.2.3.4.5.6.7. 8.9.10.11.12 → Page 19 - 24
Exchange MOTHER BOARD ASSY	1.3.5.6.7.8. 9.10.11.12 → Page 19 - 24
Exchange SERVO MECH ASSY	1.2.3.4.5.6.7. 8.9.10.11.12 → Page 19 - 24
Exchange SPINDLE MOTOR	 ADJ → Page 6

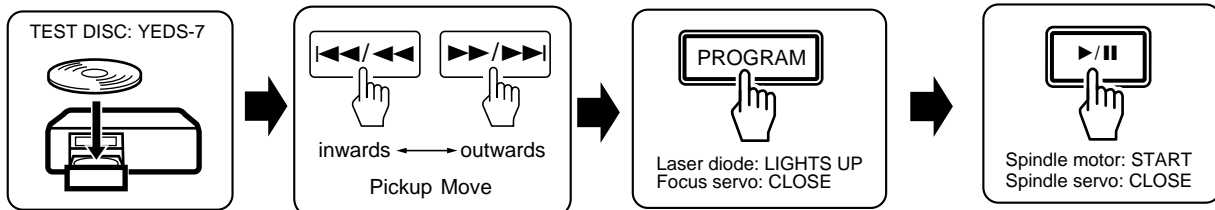
6.2 ADJUSTMENT

6.2.1 How to Start/Cancel Test Mode

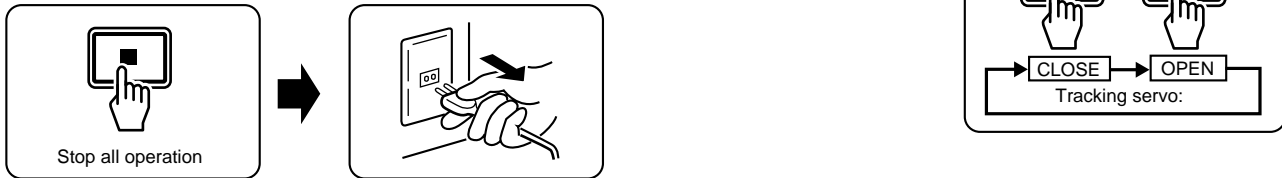
TEST MODE : ON



TEST MODE : PLAY



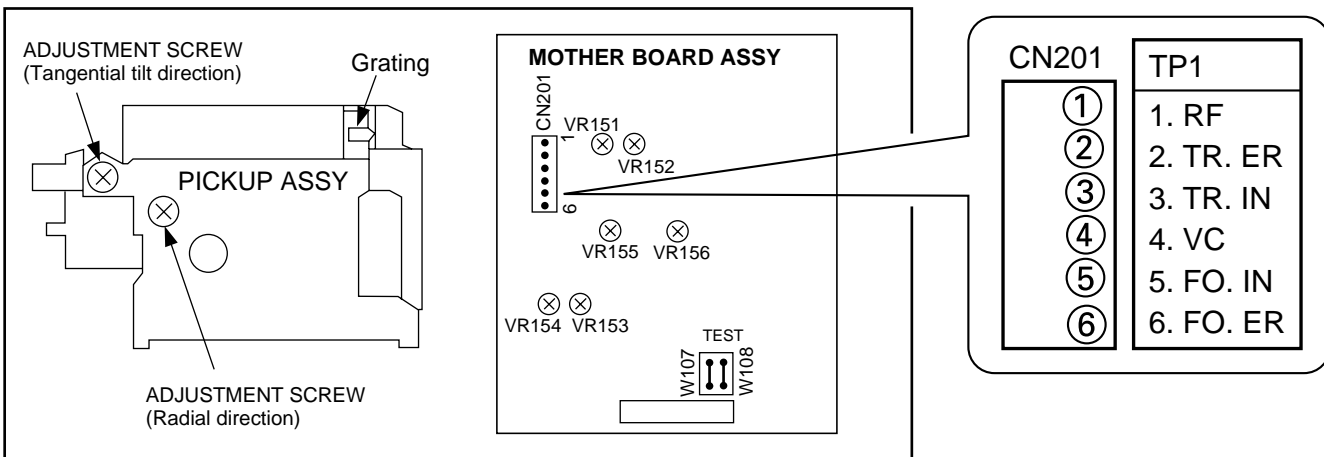
TEST MODE : STOP → CANCEL



6.2.2 Adjustment Location

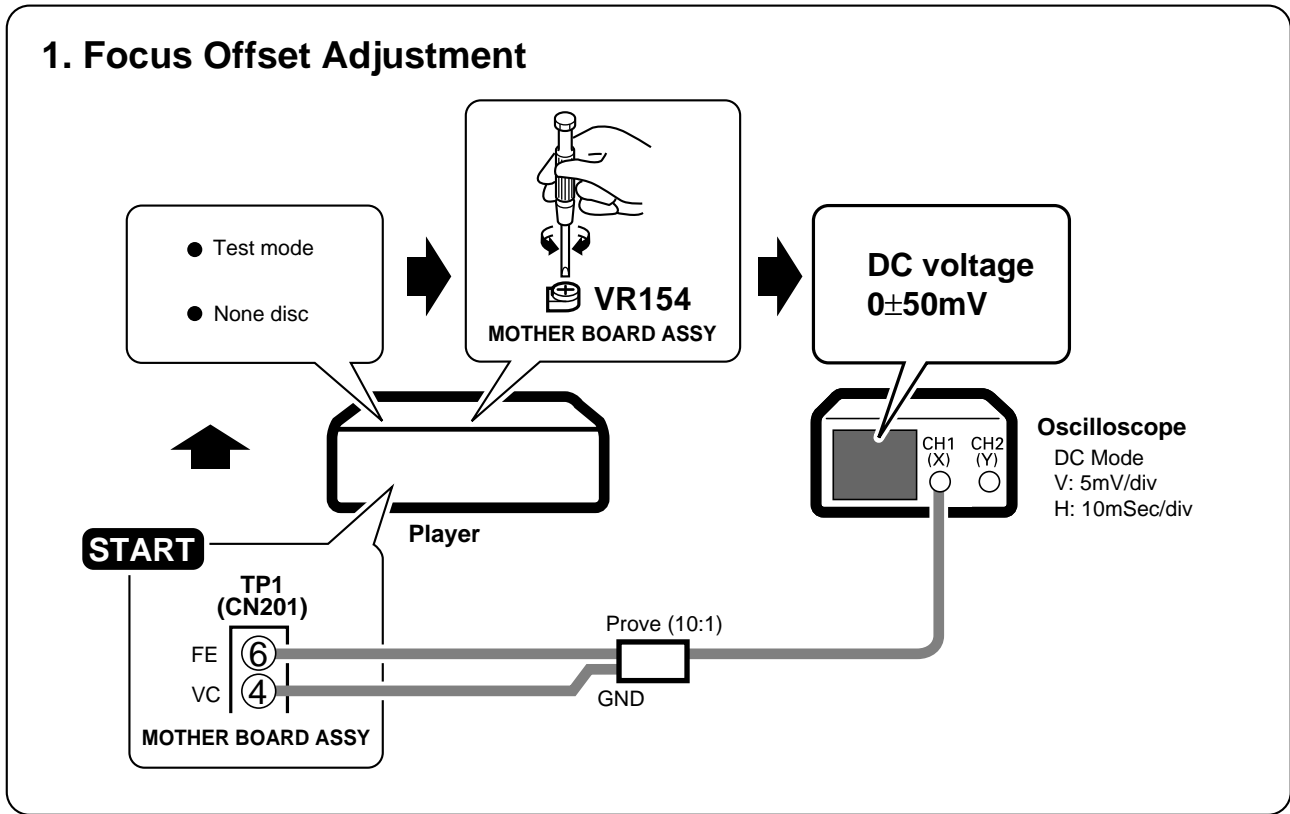
VR151. TR GAIN VR154. FO OFFSET
 VR152. FO GAIN VR155. TR BAL
 VR153. RF LEVEL VR156. FO BEST

(REAR)

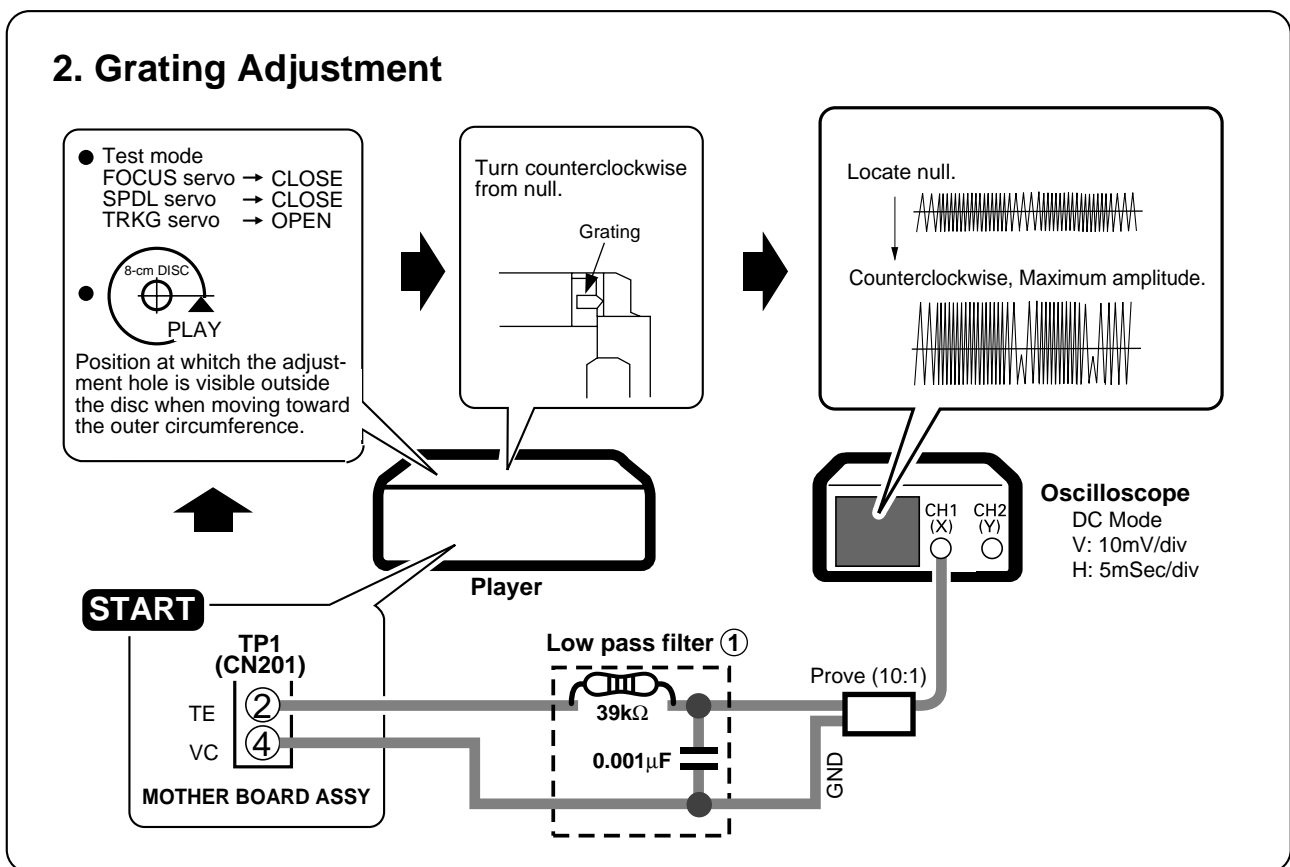


6.2.3 Check and Adjustment

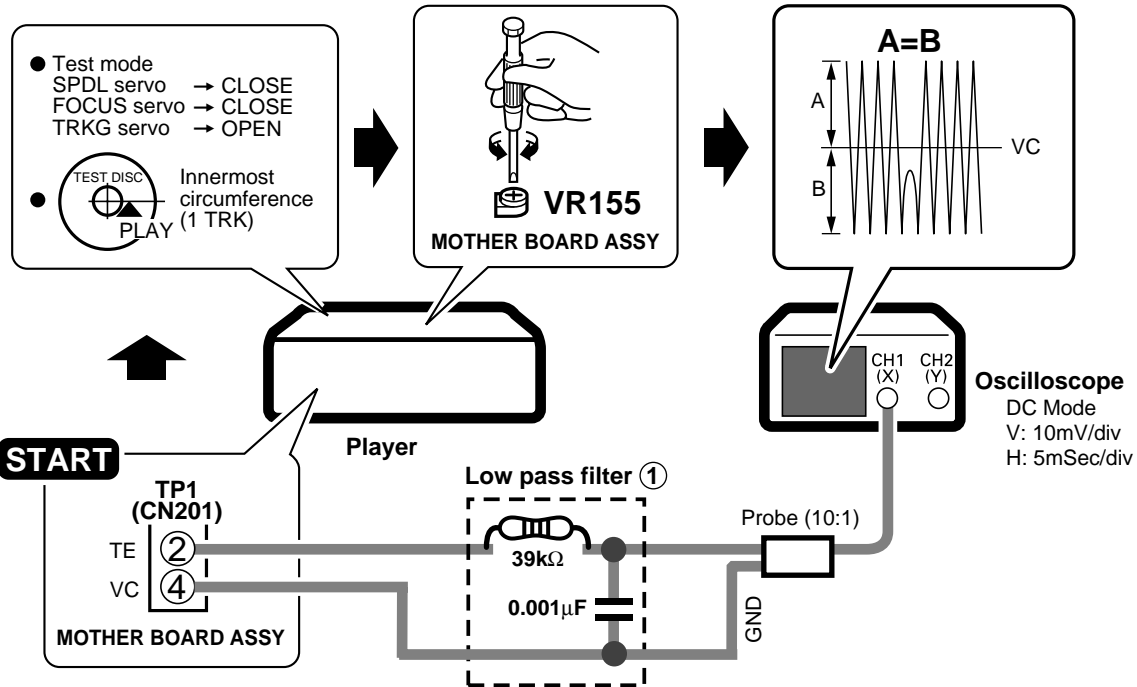
1. Focus Offset Adjustment



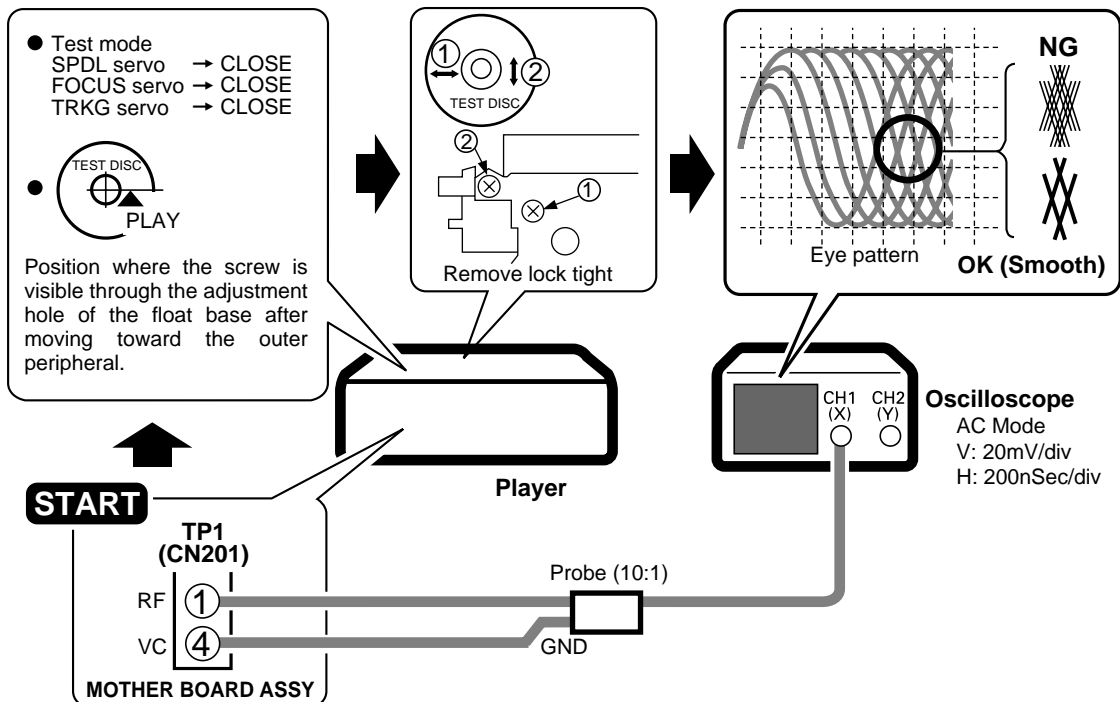
2. Grating Adjustment



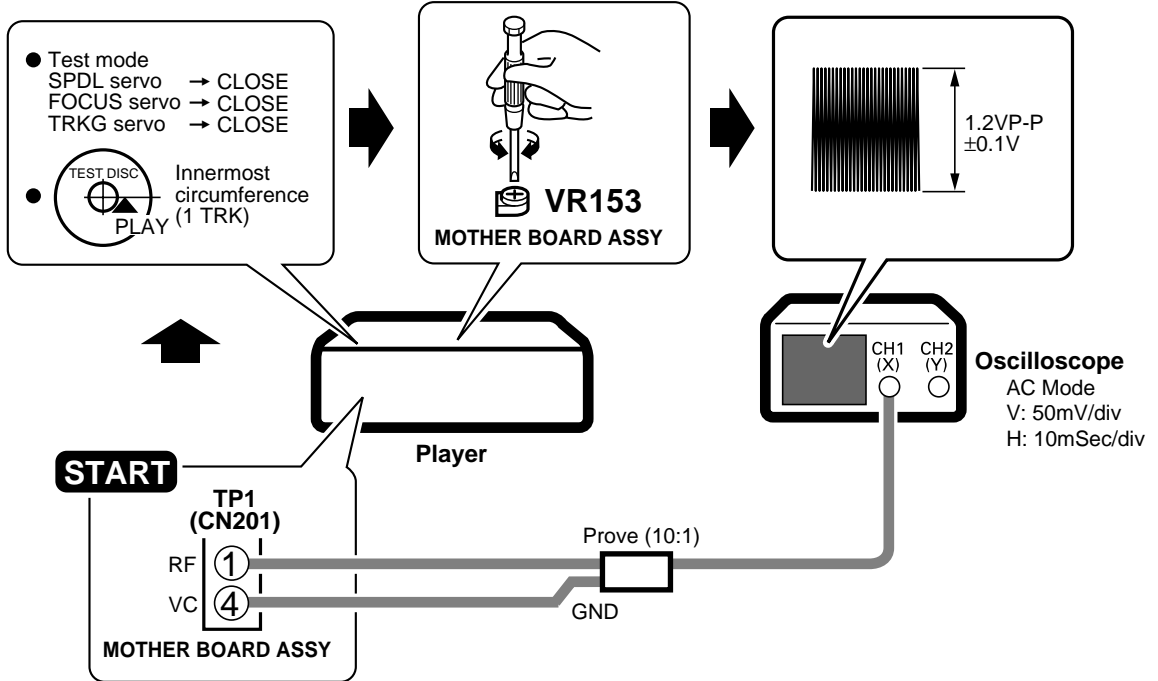
3. Tracking Error Balance Adjustment



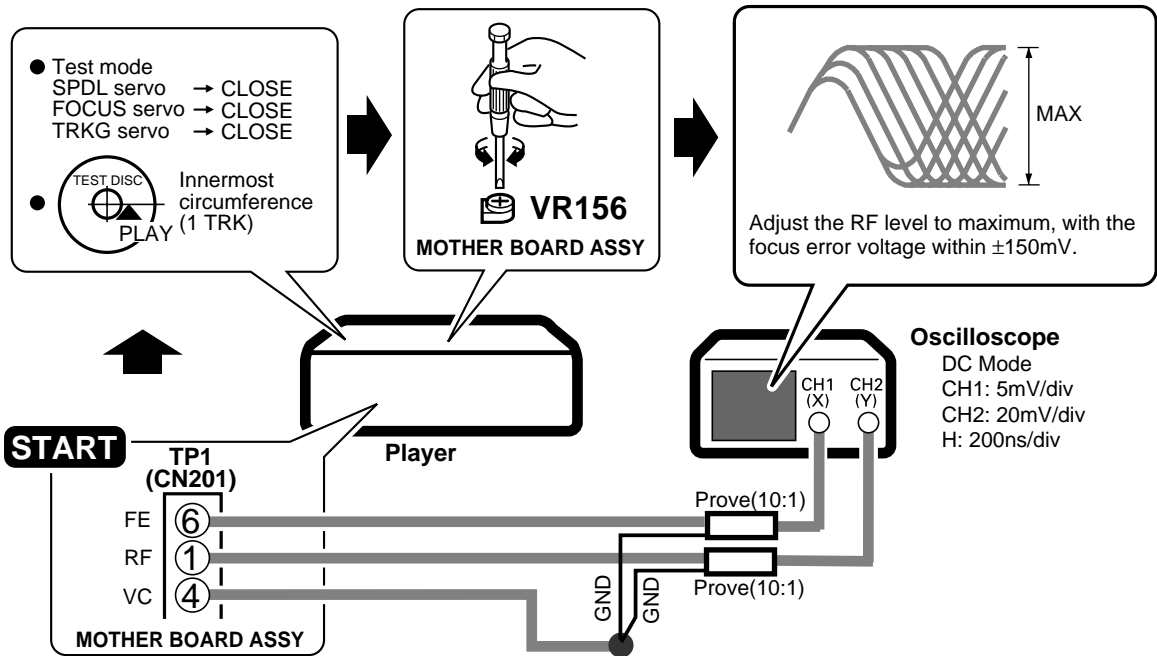
4. Pickup ①Radial ②Tangential Direction Tilt Adjustment



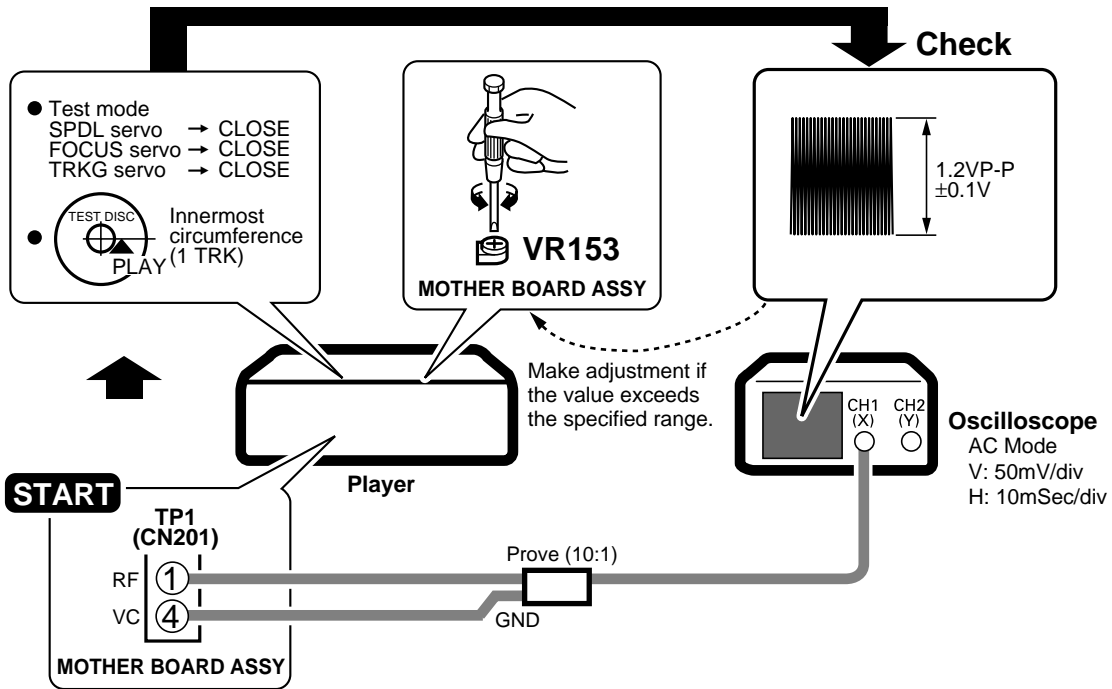
5. RF Level Adjustment I



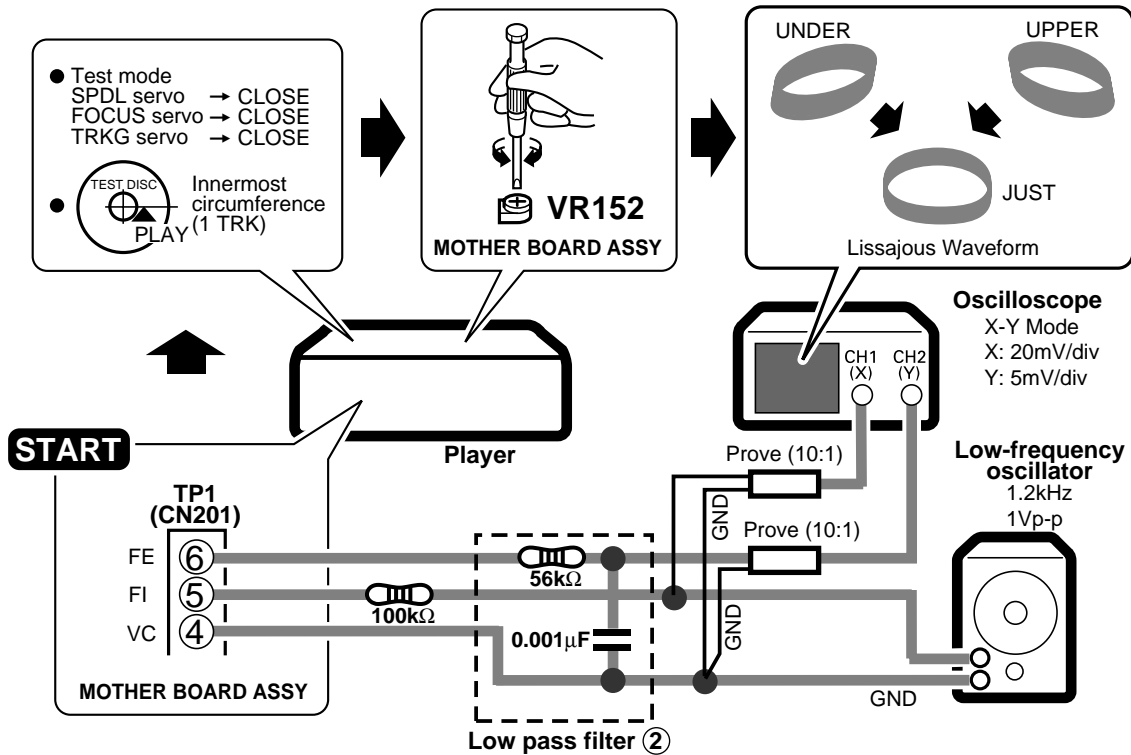
6. Focus Best Adjustment I



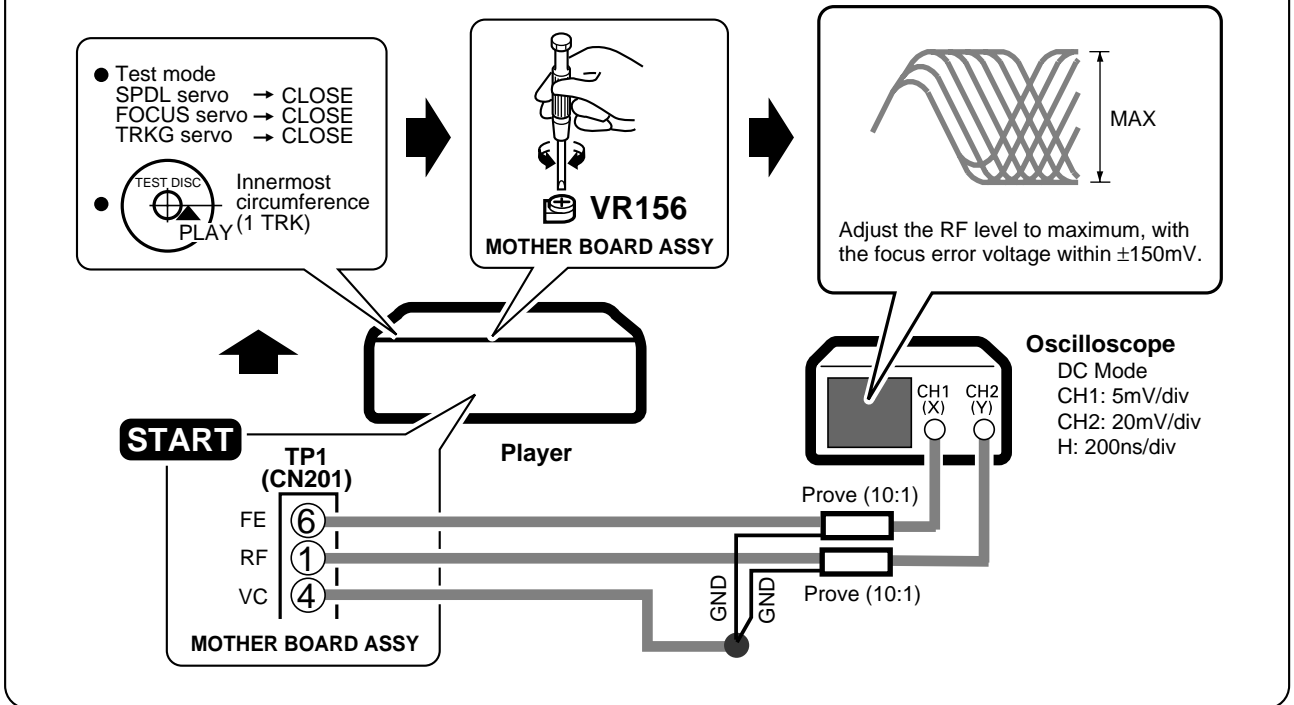
7. RF Level Adjustment II



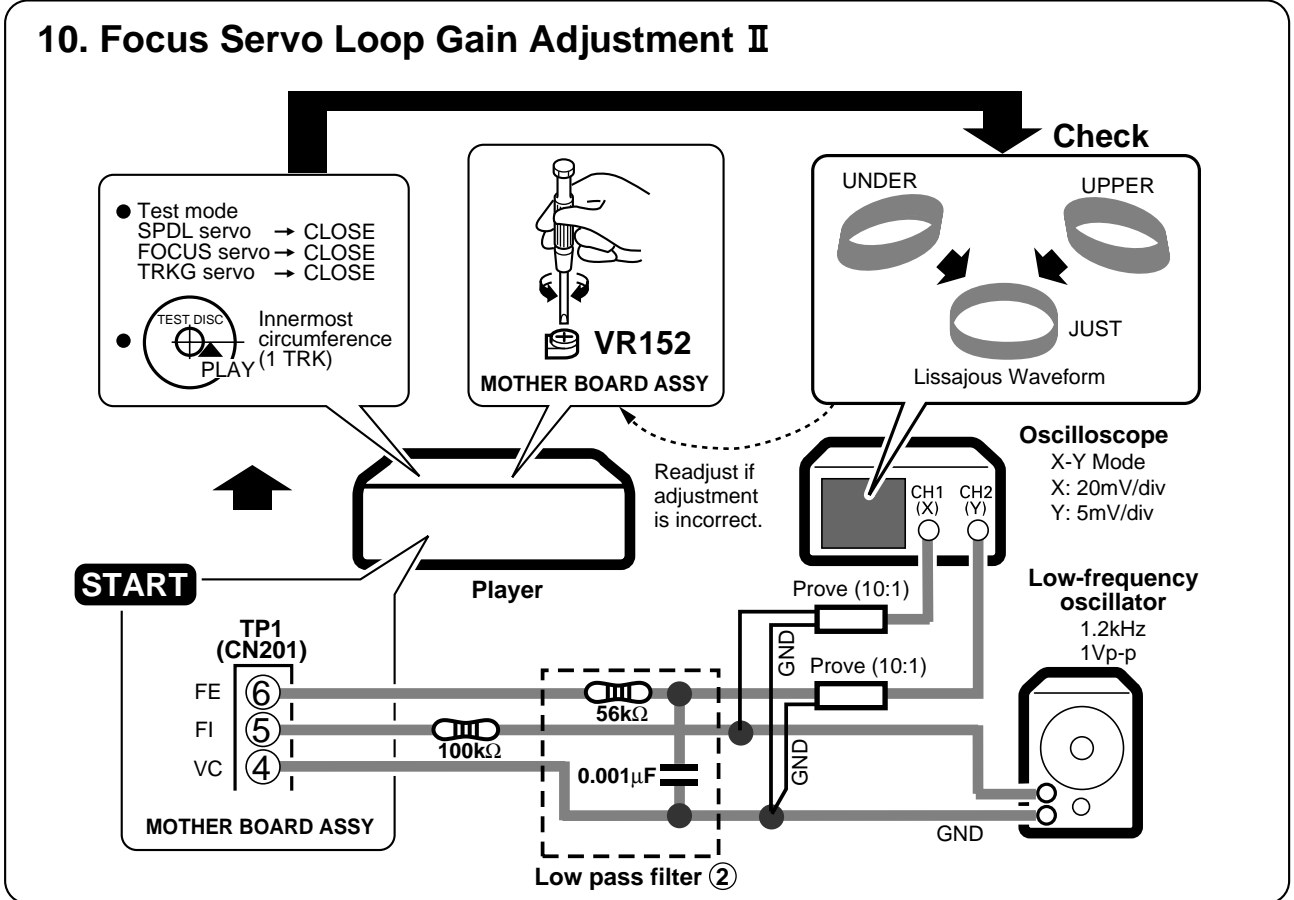
8. Focus Servo Loop Gain Adjustment I



9. Focus Best Adjustment II

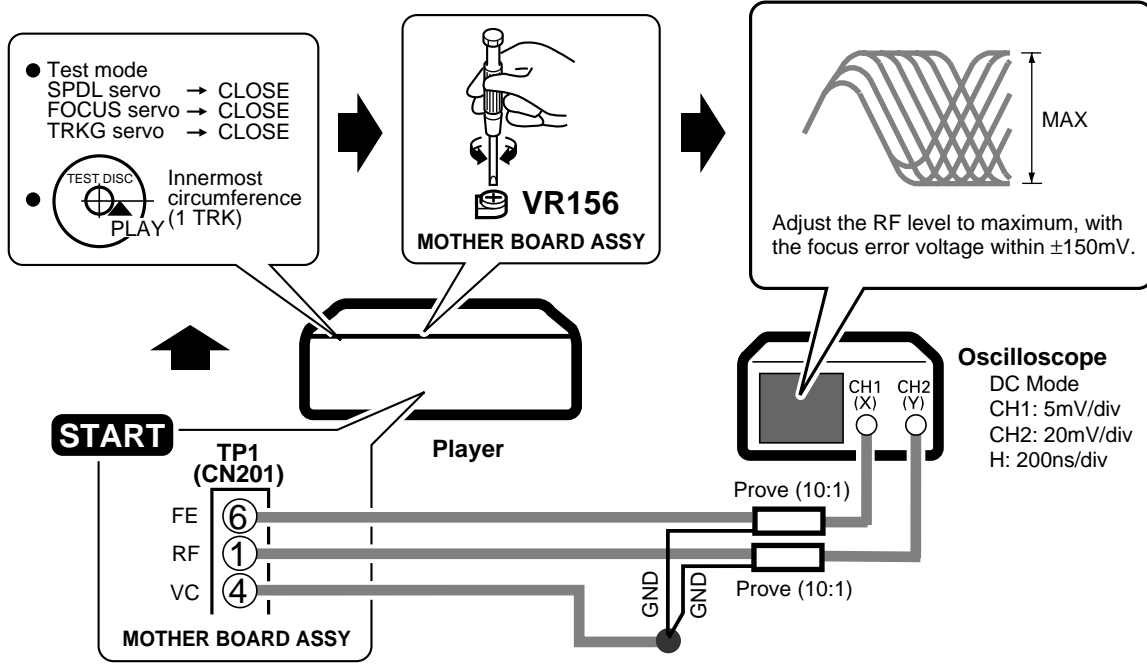


10. Focus Servo Loop Gain Adjustment II

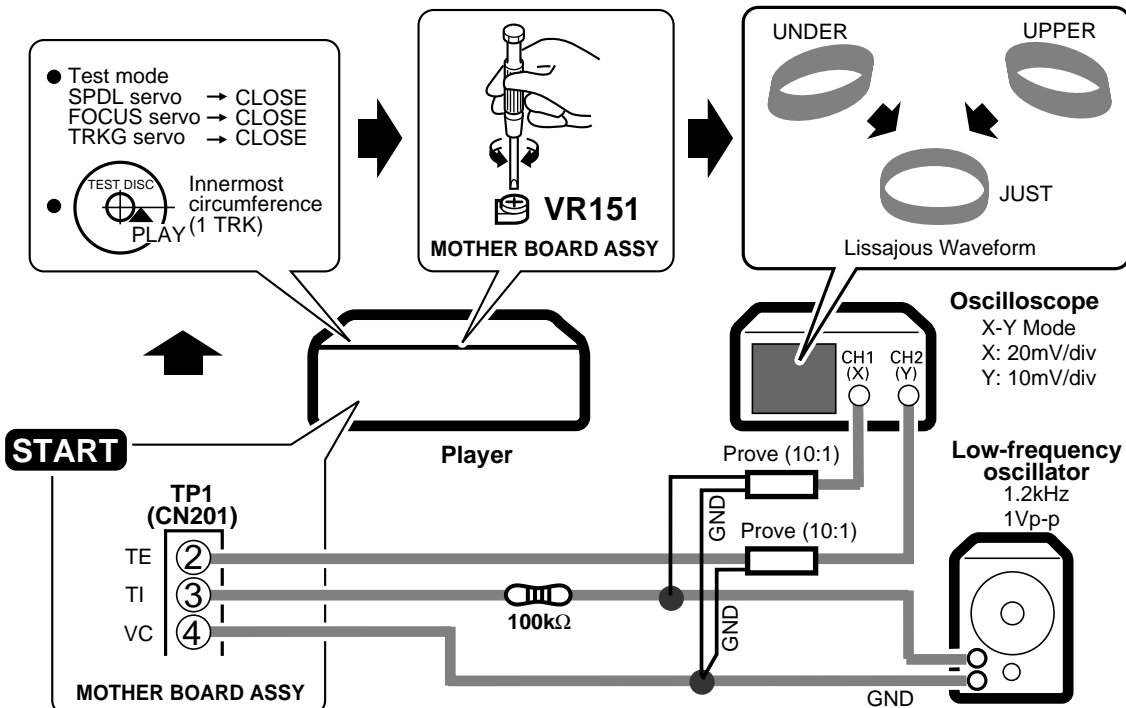


11. Focus Best Adjustment III

Adjust this point only if adjustment was made in item 10.



12. Tracking Servo Loop Gain Adjustment



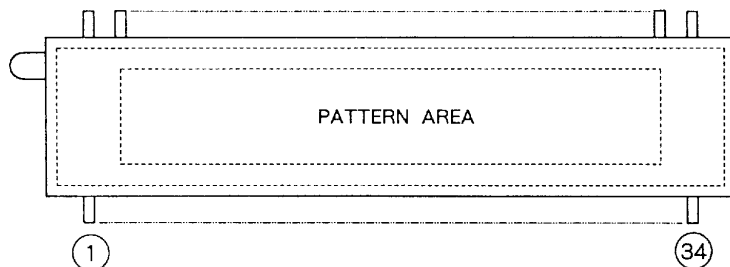
7. GENERAL INFORMATION

7.1 DISPLAY

■ PEL1085 (V701: DISPLAY BOARD ASSY)

■ FL INDICATOR TUBE

● Pin Assignment



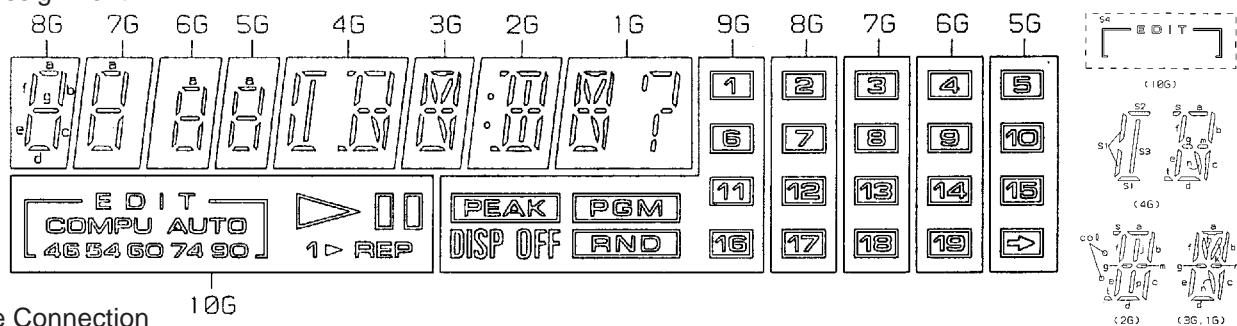
NOTE

- 1) F1, F2.....Filament
- 2) NP.....No pin
- 3) NX.....No extend pin
- 4) DL.....Datum Line
- 5) 1G - 10G.....Grid

● Pin Connection

PIN No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
CONNECTION	F	F	N	P	P	P	P	P	P	P	P	P	P	P	1	9	8	7	6	5	4	3	2	1	N	N	N	N	N	N	N	N	N	N	F
	1	2	P	1	2	3	4	5	6	7	8	9	0	1	2	G	G	G	G	G	G	G	G	G	G	X	X	X	X	X	X	X	P	X	2

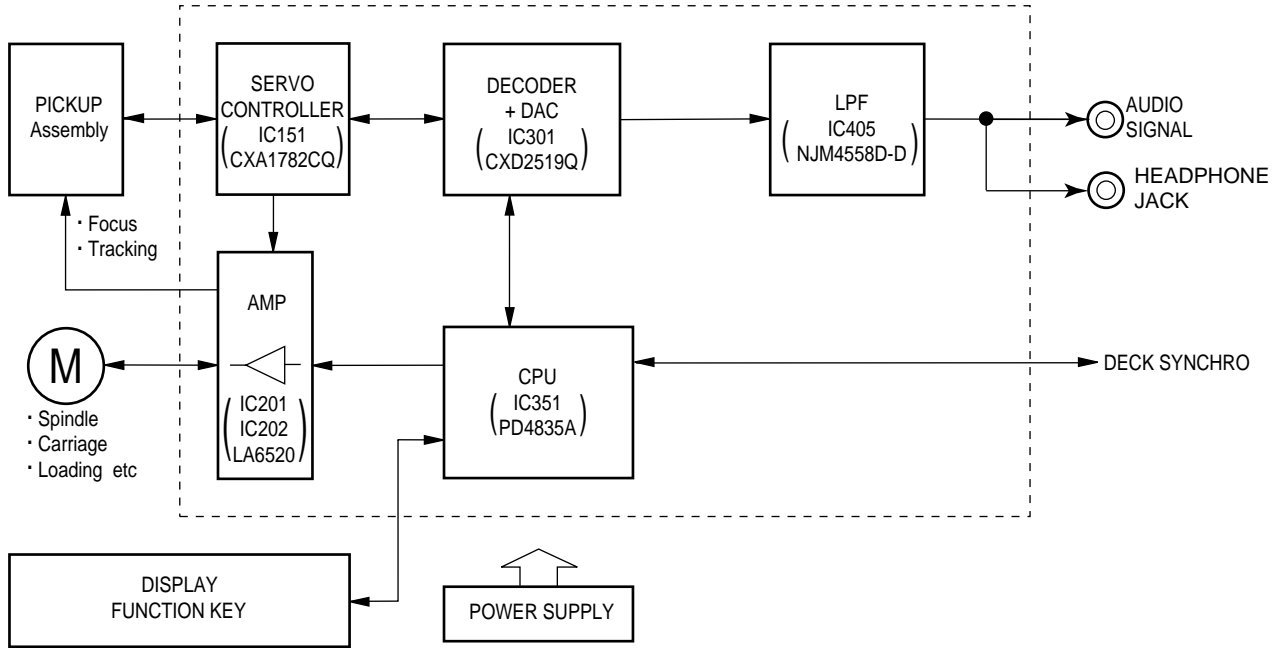
● Grid Assignment



● Anode Connection

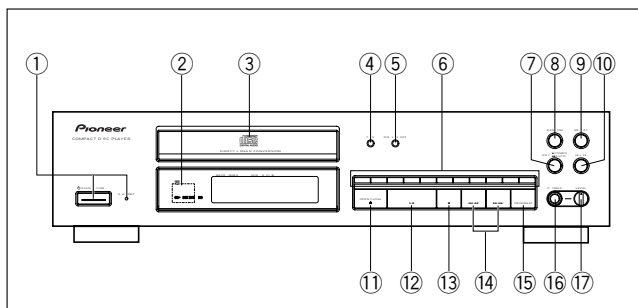
	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	4G	RND	e	e	e	e	e	e	e	e
P2	54	PGM	f	f	f	f	f	f	f	f
P3	60	PEAK	g	g	g	g	g, m	g, m	g, m	g
P4	1▷	DISP OFF	-	-	-	-	s, t	-	s, t	m
P5	74	-	a	a	a	a	a	a	a	a
P6	90	-	b	b	b	b	b	b	b	b
P7	AUTO	-	c	c	c	c	c	c	c	c
P8	COMPU	-	d	d	d	d	d	d	d	d
P9	S4	1	2	3	4	5	S2	h	col	h
P10	▷	6	7	8	9	10	S3	k	j, p	k
P11	▯▯	11	12	13	14	15	n	n	-	n
P12	REP	16	17	18	19	▷	S1	-	-	?

7.2 BLOCK DIAGRAM



8. PANEL FACILITIES AND SPECIFICATIONS

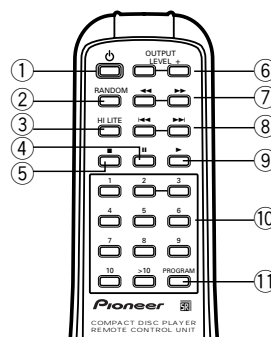
■ PANEL FACILITIES



FRONT PANEL

- ① **STANDBY/ON switch and STANDBY indicator**
- ② **Remote sensor**
Receives the signal from the remote control unit.
- ③ **Disc tray**
- ④ **TIME button**
- ⑤ **DISPLAY OFF button**
- ⑥ **Digit buttons (1 - 10, >10)**
- ⑦ **COMPU/AUTO EDIT button**
- ⑧ **RANDOM button**
- ⑨ **REPEAT button**
- ⑩ **HI-LITE scan button**
- ⑪ **OPEN/CLOSE button (▲)**
- ⑫ **Play/Pause button (▶/⏸)**
- ⑬ **Stop button (■)**
- ⑭ **Track/Manual search buttons**
(|◀◀ / ▶▶|)
- ⑮ **PROGRAM button**
- ⑯ **Headphones jack (PHONES)**
- ⑰ **Headphones volume control (LEVEL)**

REMOTE CONTROL UNIT



REMOTE CONTROL UNIT

Remote control buttons with the same names or marks as buttons on the front panel of the player control the same operations as the corresponding front panel buttons.

- ① **STANDBY/ON(⏻) button**
- ② **RANDOM play button**
- ③ **HI-LITE scan button**
- ④ **PAUSE button (⏸)**
- ⑤ **STOP button (■)**
- ⑥ **OUTPUT LEVEL buttons (-/+)**
- ⑦ **MANUAL search buttons (◀◀ / ▶▶)**
- ⑧ **TRACK search buttons (|◀◀ / ▶▶|)**
- ⑨ **PLAY button (▶)**
- ⑩ **Digit buttons (1 - 10, >10)**
- ⑪ **PROGRAM button**

■ SPECIFICATIONS

1. General

Type	Compact disc digital audio system
Power requirements	
Singapore and Australian models	
.....	110 - 120/220 -240 V, 50/60 Hz
Other models	110 - 127/220 -240 V(switchable) ,50/60 Hz
Power consumption	12 W
Operating temperature	+5°C - +35°C
Weight	3.1 kg
External dimensions	
PD-217	420(W) X 101(H) X 267(D) mm

2. Audio section

Frequency response	2 Hz - 20 kHz
S/N ratio	98 dB or more (EIAJ)
Dynamic range	96 dB or more (EIAJ)
Harmonic distortion	0.003% or less (EIAJ)
Output voltage	2.0 V (EIAJ)
Wow and flutter	Limit of measurement
	(±0.001% W.PEAK) or less (EIAJ)
Channels	2-channel (stereo)

3. Output terminal

Audio line output jacks
 CD•DECK SYNCHRO jack
 Headphones jack (with volume control)

4. Accessories

- Remote control unit 1
- AA/R6P dry cell batteries 2
- Output cable 1
- Operating instructions 1

NOTE:

Specifications and design subject to possible modification without notice, due to improvements.

