

# ONKYO SERVICE MANUAL

CP-1033A

SERIAL NO. 3157

## AUTOMATIC RETURN TURNTABLE Model CP-1033A



UDN, UDC, UD	120V AC, 60 Hz
UGV, UG	220V AC, 50 Hz
UW	120 or 220V AC, 50/60Hz
UQA, UQB	240V, 50 Hz

### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  $\triangle$  ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PARTS NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLE INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

### SPECIFICATIONS

Type:	Two-speed automatic-return turntable
Motor:	Brushless quartz locked direct drive DC motor
Speeds:	33-1/3, 45 rpm
Wow & Flutter:	0.025% (WRMS)
Signal-to-Noise Ratio:	75 dB (DIN-B, IEC-Y)
Tonearm:	Lightweight static balance gimbal-support pipe arm with detachable headsheel (ADC type connector) and direct readout tracking force 13 mm (1/2")
Overhang:	13 mm (1/2")
Cartridge:	VM type (OC-61V)
Impedance:	47 kohms
Output:	3.5 mV
Stylus:	DN-61ST
Power Supply:	AC 110-120, 220-240V 50/60 Hz (or one voltage only)
Dimensions (WxHxD):	418 mm x 132 mm x 376 mm 16-1/2" x 5-1/6" x 14-3/4"
Weight:	5.5 kg 12.1 lbs.

Due to further product improvements, specifications are subject to change without notice.

**ONKYO**  
**AUDIO COMPONENTS**

## SERVICE PROCEDURES

### Instruction resistance measurement

Connect the insulating-resistance tester between the plug of power supply cord and chassis.

Specifications: G/W models 500 V more than 10 MΩ

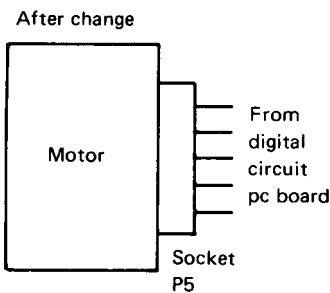
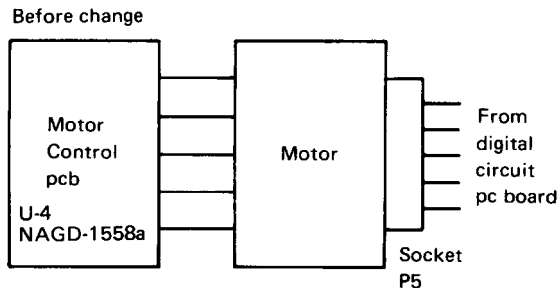
### Replacing the lamps

This unit used the lamps listed below.

Circuit No.	Parts No.	Description
PL201	210170	PL14V 0.06AW-2.0, Lamp
PL202	210170	PL14V 0.06AW-2.0, Lamp

Caution: Before replacing the lamps. Be sure to unplug the power supply cable.

### Connection diagram of motor ass'y



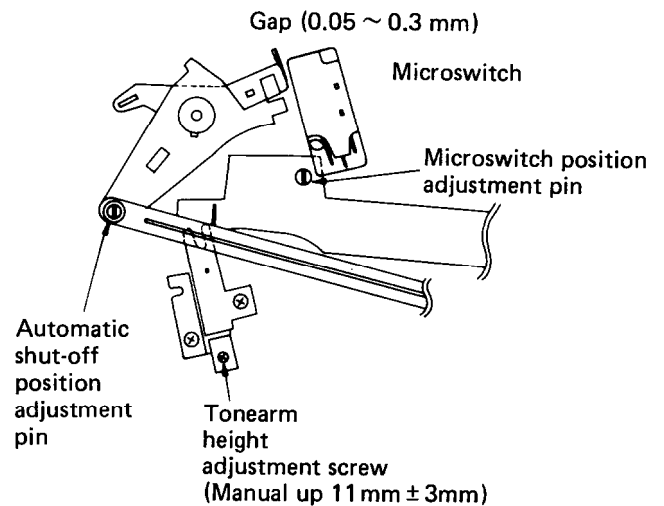
## ADJUSTMENT PROCEDURES

### Automatic shut-off position adjustment

Adjust the shut-off position with the fine adjustment screw. After the adjustment, apply lock-tite to the screw. To adjust the shut-off position for earlier, turn the screw counter-clockwise. To adjust the shut-off position for later, turn the screw clockwise.

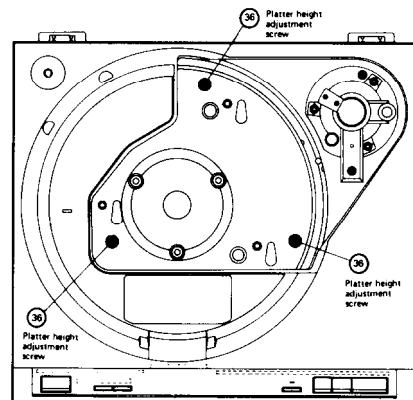
### 1. Stylus height adjustment (AUTO UP)

Set the tonearm in the up position and adjust the lifter plate screw so the height of the stylus tip is 10 mm ± 3 mm above the platter mat.

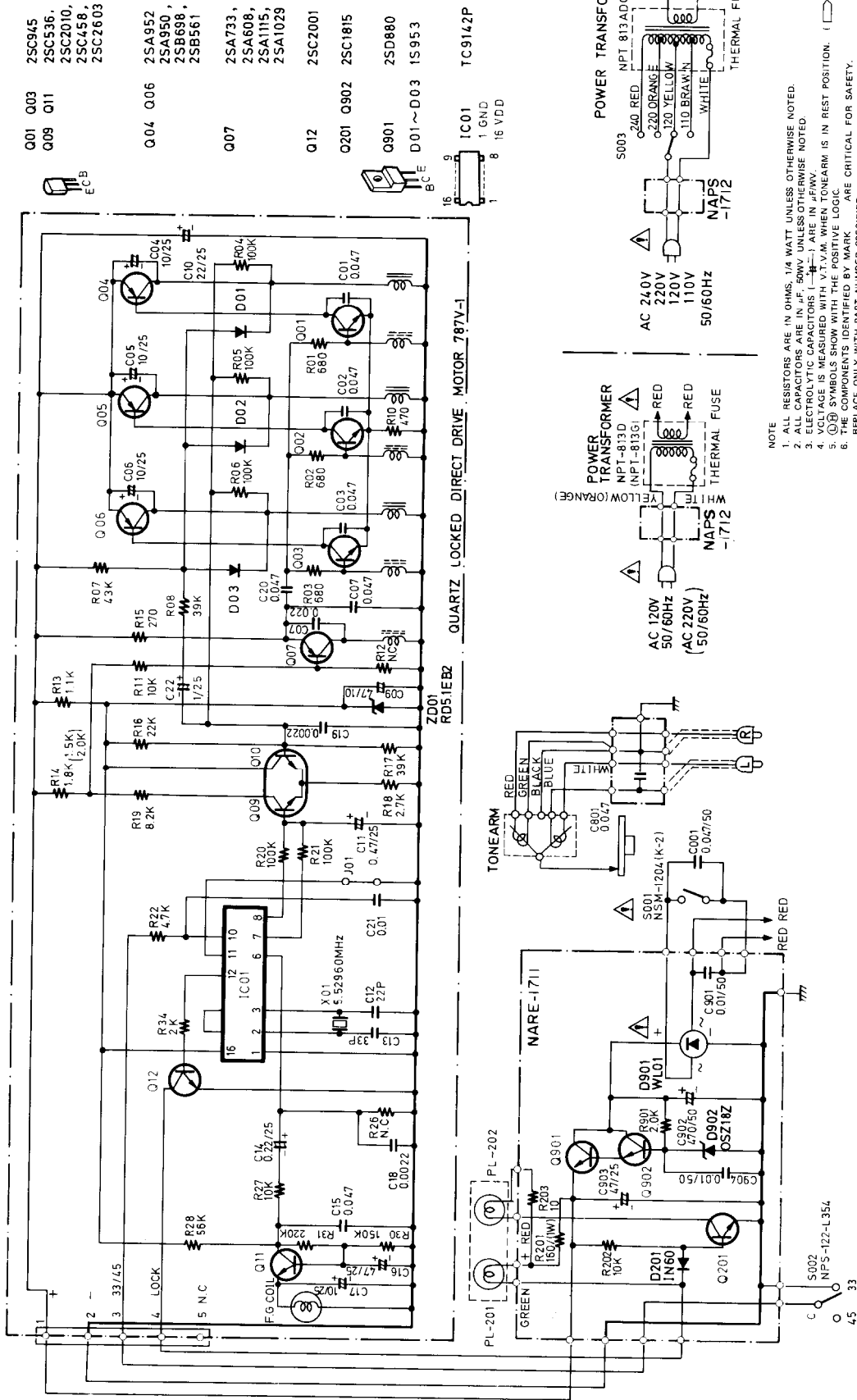


### 2. Platter height adjustment

Return the unit to the upright position and rotate the float base height adjustment screw. Adjust so that the platter height is 13 mm ± 2 mm above the cabinet.

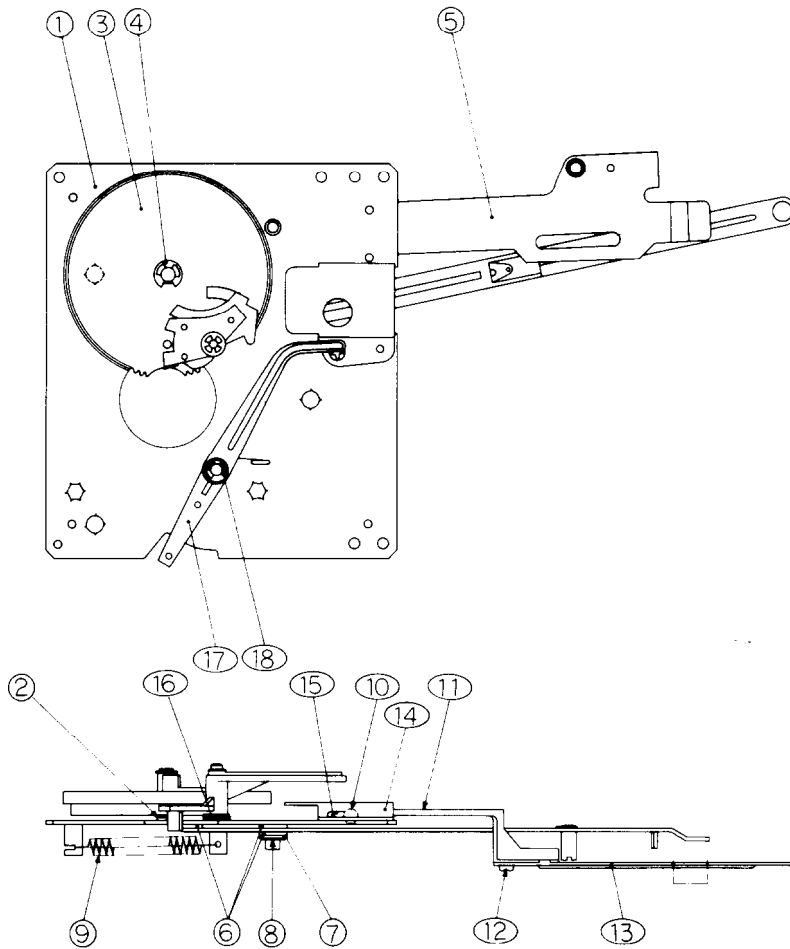


**SCHEMATIC DIAGRAM**



- Q01 Q03 2SC945
- Q09 Q11 2SC536
- Q04 Q06 2SA952
- Q07 2SA733, 2SA608, 2SA1115, 2SA1029
- Q12 2SC2001
- Q201 Q902 2SC1815
- Q901 2SD880
- D01~D03 1S953

## MECHANISM COMPONENT LOCATION



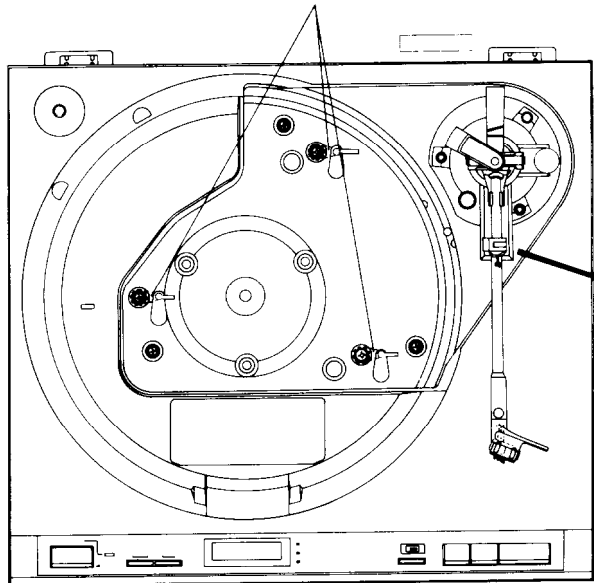
## FULLY AUTOMATIC MECHANISM-PARTS LIST

REF. NO.	PARTS NO.	DESCRIPTION
1	24506526	Chassis
2	24506528	Poly-slider washer
3	24506527	Gear mechanism
4	893050	Washer
5	24506529	Slide arm ass'y
6	24506446	Washer
7	24506655	Washer
8	893040	Washer
9	24506439	Spring
10	24506443	Steelball
11	24506652	Trip lever
14	24506531	Plate
15	833130062	Tapping screw
16	24506431	Spring
17	24506532	Reject arm
18	893030	Washer

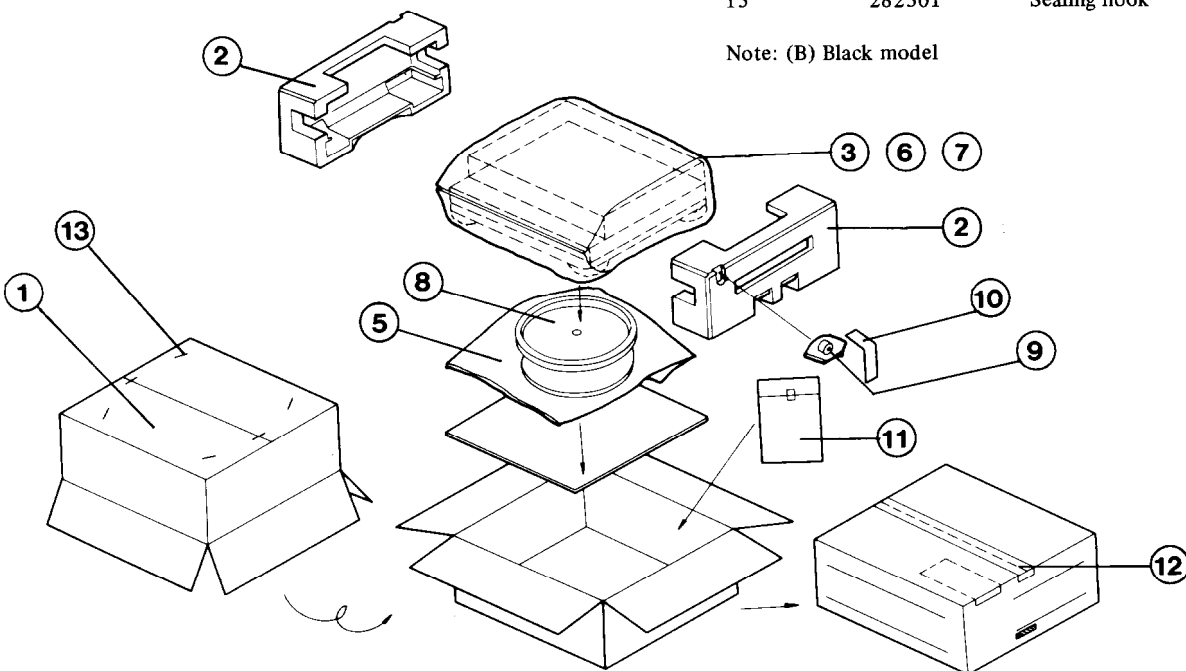
# PACKING VIEW

REF. NO.	PARTS NO.	DESCRIPTION
1	29050775	Master carton box
	29050836	Master carton box (B)
2	29090791	Pad L
3	29090837	Pad, tonearm
5	29090787	Pad sheet
6	29100049	640x620mm, Poly-vinyl bag
7	29095295	Sheet
8	24502159	Turntable platter
	24509286	T.T. sheet
	29100046	370x470mm, Poly-vinyl bag
9	24501462	Counter weight
	29100002A	80x150mm, Poly-vinyl bag
10	26013	P.P tape
11		Accessory bag complete
		<b>120V model</b>
	29340695	Instruction manual
	292049A	45rpm agaptor
	24509197	Overhang gauge
	24501330	Cartridge attachment parts ass'y
	29358002	Service station list (Only USA model)
	29365006-5	Warranty card (Only USA model)
	29100005	220x330mm, Poly-vinyl bag
		<b>220V model</b>
	29340696	Instruction manual
	292049A	45rpm adaptor
	24509197	Overhang gauge
	29358004	Service station list
		(Only West Germany model)
	29365005-3A	Warranty card
		(Only West Germany model)
	29100005	220x330mm, Poly-vinyl bag
		<b>120/220V model</b>
	29340696	Instruction manual
	292049A	45rpm adaptor
	24509197	Overhang gauge
	25055040	C-V-K2, Conversion plug
	29100005	220x330mm, Poly-vinyl bag
12	260012	W550mm, Damplon tape
13	282301	Sealing hook

4TTP+20P (BC) Tapping screw (833440200)  
 Spacer (27270115)  
 W4x12F (BC) SN87644012



Binder



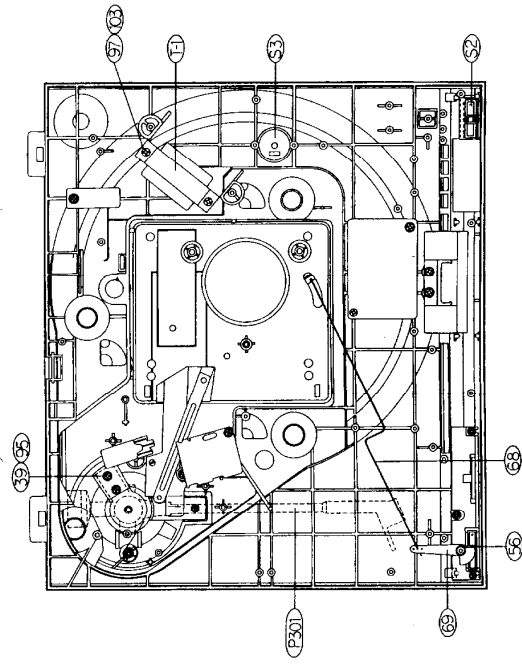
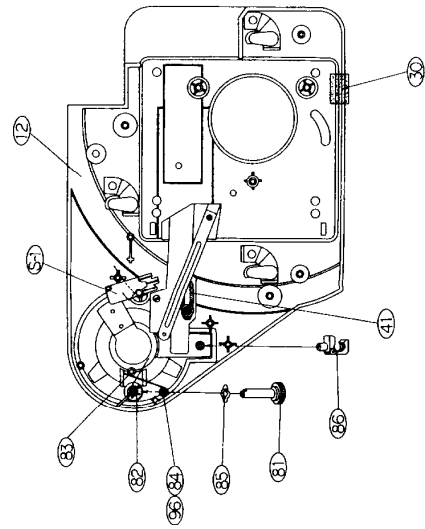
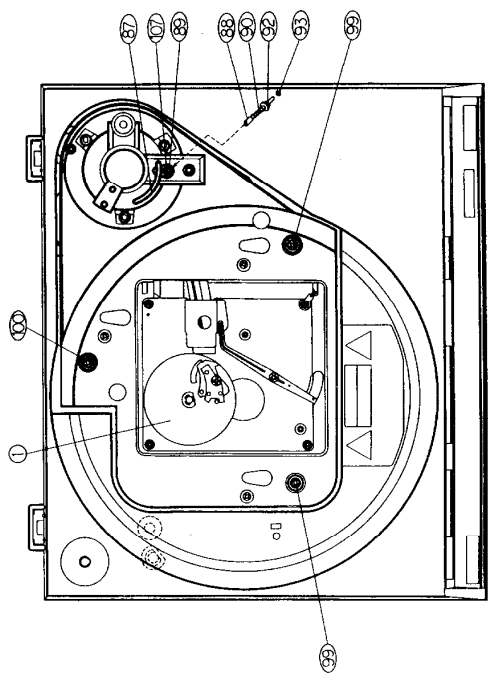
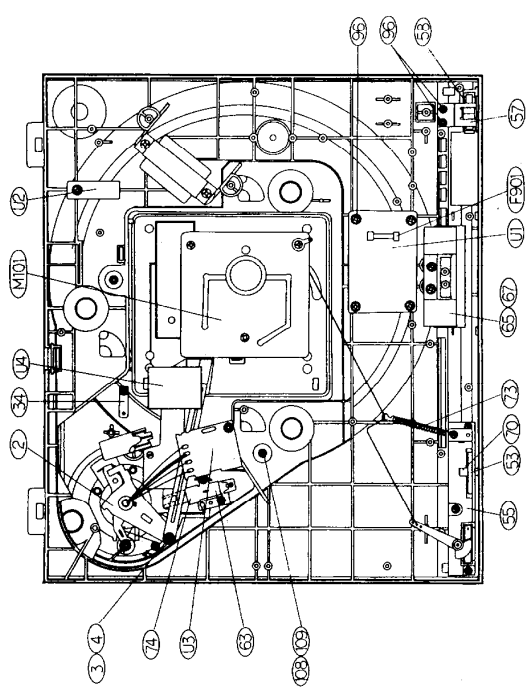
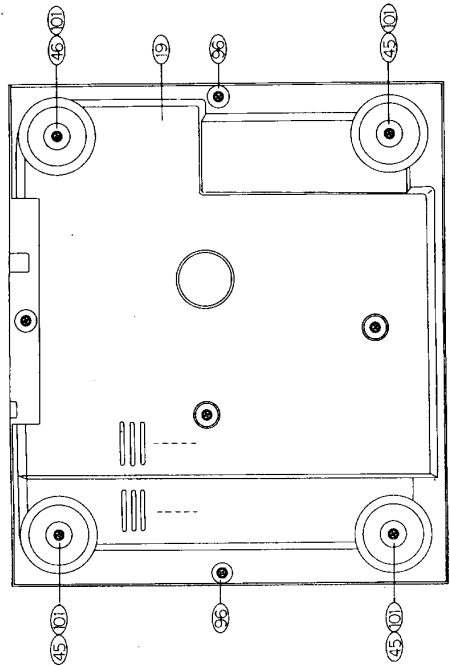
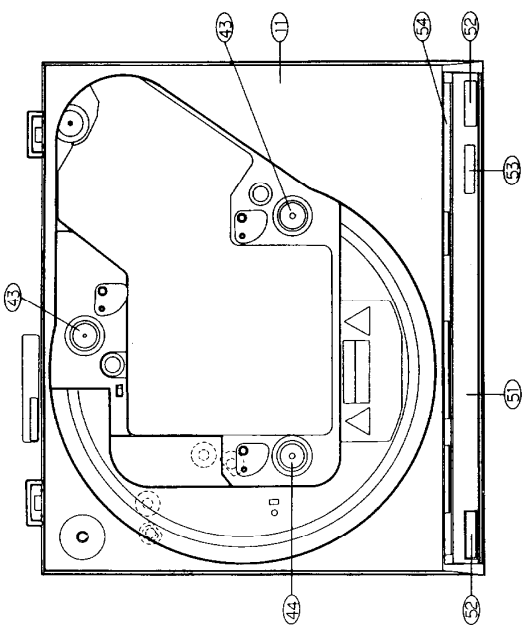
Note: (B) Black model

# COMPONENT LOCATION PARTS LIST

REF. NO.	PARTS NO.	DESCRIPTION	REF. NO.	PARTS NO.	DESCRIPTION
1	24506650-1	Fully automatic mechanism ass'y	96	831430100	3TTW+10P (BC), Tapping screw
2	24506649A	Restore lever	97	833440120	4TTP+12P (BC), Tapping screw
3	870090	STWL-4, Fiber washer	98	833440200	4TTP+20P (BC), Tapping screw
4	8930301S	ES-3S, Ring E	99	82144016	4P+16FN (BC), Pan head screw
11	28110272	Cabinet	100	82144020	4P+20FN (BC)
	28110280	Cabinet (B)	101	801275	Special screw
12	28110273A	Floating base	102	801228	Special screw
	28110281	Floating base (B)	103	87644012	W4x12F (BC), Washer
16	24509279	Dust cover	104	8761401816	W4x18F, Washer
18	28180078	Hinge	105	27270115	Spacer
	28180080	Hinge (B)	106	82142004	2P+4FN, Pan head screw
19	28153076	Bottom board	107	82142008	2P+8FN, Pan head screw
22	24502159	Turntable platter	108	870060	W3x15mm, Washer
29	28140507	t15x30x30mm, Cushion	109	86414010	FWN4x10FN, Flange nut
30	28140496	Cushion	C001	335624730	0.047μF, 50V, Ceramic capacitor
31	27270057	Spacer	△ F901	252101	800mA, ST-6, Fuse
32	27180195	Spring, power		252069	0.8A-SE-EAK, Fuse (G/U)
33	27140393	Bracket AC	M101	24502156	787V1, Motor (Before change)
34	27140523	Bracket I		24502156-1	787V1, Motor (After change)
35	27150126	Shielded plate	M101a	24503106	Gear, turntable platter
36	28140485	Cushion	P001	2000246	NSAS-2P184, Socket
38	270520	Support, power transformer	P301	24501455	Tonearm ass'y (D)
39	87313006	M-3B, Toothed washer		24501463	Tonearm ass'y (G/U)
41	27270120	Spacer		24501325	Headshell
43	24509289	Insulator E		24501457	Tonearm
44	24509314	Insulator Y		24501321-1	Attachment screw
45	24509313	Insulator G		24501460	Counter weight
46	24509312	Insulator F	P302	24501330	Cartridge attachment part ass'y (D)
51	27262233	Plate M		24501138	2.6x11, Screw
	27262242	Plate M (B)		24501123	2.6x11, Nut
52	28321193	Knob L		24500079	Washer
	28321330	Knob L (B)	P303	242953	0C-61V, Cartridge (G/U)
53	28335019	Cueing lever		242954	DN-61ST, Stylus
	28335027	Cueing lever (B)		24501467	Stylus cover
54	28191194	Clear plate		2450067	M2.6x10, Screw
55	27267274A	Operation guide		24500079	Washer
	27267305	Operation guide (B)		24501123	Nut
56	28400143A	Slide shaft	PL201	210170	PL14V 0.06AW-2.0, Lamp
57	27140793B	Bracket L	PL202	210170	PL14V 0.06AW-2.0, Lamp
58	27267275B	Guide L	△ S001	24503023	NMS-1204K-2, Microswitch
59	893030S	ES-3, Circlip	S002	25035390	NPS-122-L354, switch
60	27180080	Spring	△ S003	25065168	Voltage selector switch (U)
61	800509	3x20, Spring pin	△ T001	230722	NPT-813D, Power transformer
62	27180181	Spring		230723	NPT-813G, Power transformer (G)
63	28335016	Cueing lever		230725	NPT-813ADGQ, Power transformer (Q)
64	28198596	Facet	U1	10088511	NARE-1711, Rectifying circuit pc board ass'y (D)
65	28133078	Back plate A		10094511a	NARE-1711a, Rectifying circuit pc board ass'y (G/U)
66	27140790	Bracket	U2	10088512	NAPS-1712, Power supply terminal pc board ass'y
67	28133079	Back plate B	U3	16627510	NAPI-1010, Output terminal pc board ass'y
68	28400144A	Reject rod	U4	10128588A	NADG-1558a, Motor control pc board ass'y (Only use the motor of before change)
69	24506417A	Reject lever	△ W1	253099B	AS-UC-3, Power supply cable (D)
70	891020	CS-2, Ring CS		253083	AS-CEE, Power supply cable (G/U)
71	28140502	7x40x7mm, Cushion	△ W1a	270025	SR-3P-4, Strainrelief (D)
72	27180196	Spring, cueing		270280	SR-4K-4, Strainrelief (G/U)
73	27180198	Spring R	W3	260208	Binder
74	27180199	Spring C			
81	28321163-1	Knob IFC	Note:	(D): Only 120V model	
82	28400012A	Cam IFC		(G): Only 220V model	
83	27180175A	Spring IFC		(U): Only Universal model	
84	27267271	Guide IFC		(B): Only black model	
85	870071	WW-6, Wave washer			
86	24506645	Tonearm rest			
87	24501363	Lifter plate			
88	27260115A	Lifter shaft			
89	27180068	Spring			
90	27180067	Spring			
91	8930301S	ES-3S, Washer			
92	87644012	W4x12, Washer			
93	870108	t1x10x3.5mm, Washer			
95	831430128	3TTW+12B (BC), Tapping screw			

**NOTE: THE COMPONENTS IDENTIFIED BY MARK △ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PARTS NUMBER SPECIFIED.**

COMPONENT LOCATION



# PRINTED CIRCUIT BOARD-PARTS LIST

## RECTIFYING CIRCUIT PC BOARD (NARE-1711/a)

CIRCUIT NO.	PARTS NO.	DESCRIPTION
<b>Transistors</b>		
Q201	2211255	2SC1815 (GR)
Q901	2201074	2SD880 (Y)
Q902	2211254 or 2211255	2SC1815(Y) or 2SC1815 (GR)
<b>Diodes</b>		
D201	223103 or 223132	1N60 or 1K60
D901	223862	WL01
D902	224200 or 2241193	05Z18-Z or GAZ18Z
<b>Capacitors</b>		
C902	352784719	470 $\mu$ F, 50V, Elect.
C903	352754709	47 $\mu$ F, 25V, Elect.
<b>Resistor</b>		
R201	441621614	160ohm, 1W, Metal oxide film
<b>Socket</b>		
P201	2000245	NSAS-5P183
<b>Plug</b>		
P202	25055038	NPLG-2P29
<b>Fuse holder</b>		
	250113	(D)
	25050065	YSH403T (G/U)

## MOTOR CONTROL PC BOARD (NADG-1588a)

CIRCUIT NO.	PARTS NO.	DESCRIPTION
D611-D613	223133	DS-442X, Diode
C631	352780109	1 $\mu$ F, 50V, Elect. capacitor