

# ONKYO SERVICE MANUAL

## AUTOMATIC RETURN TURNTABLE

### Model CP-1005A



#### 1. SPECIFICATIONS

<b>Type:</b>	2 speed automatic-return turntable with manual lifter	<b>Frequency Response:</b>	20 Hz – 20,000 Hz
<b>Turntable Platter:</b>	30 cm (11-7/8") Aluminum diecast	<b>Recommended Load Impedance:</b>	47 kohms
<b>Motor:</b>	4 pole synchronous	<b>Recommended Tracking Force:</b>	2 grams
<b>Speeds:</b>	33-1/3 rpm, 45 rpm	<b>Compliance:</b>	$7 \times 10^{-6}$ cm/dyne
<b>Wow &amp; Flutter:</b>	0.08% WRMS	<b>Output Voltage:</b>	3.0 mV
<b>Signal-to-Noise Ratio:</b>	62 dB (DIN-B)	<b>Stylus Tip:</b>	0.65 mil diamond, conical
<b>Tonearm:</b>	Static balanced S-type pipe arm	<b>Replacement Stylus:</b>	DN-1005 ST
<b>Effective Arm Length:</b>	210 mm (8-5/16")	<b>Power Supply Rating:</b>	AC110 – 120, 220 – 240V 50/60 Hz
<b>Overhang:</b>	11 mm (7/16")	<b>Power Consumption:</b>	9 Watts
<b>Maximum Tracking Error:</b>	+3 degrees, -1 degree	<b>Dimensions (W x H x D):</b>	454 mm x 354 mm x 130 mm 17-7/8" x 14" x 5-1/8"
<b>Cartridge:</b>		<b>Weight:</b>	5 kg (11 lbs.)
<b>Type:</b>	Moving magnet (OCH-1005M)		

In the interest of further product improvements, specifications are subject to change without notice.

**ONKYO**<sup>®</sup>  
**AUDIO COMPONENTS**

## 2. SERVICE PROCEDURES AND ADJUSTMENTS

### 1. VOLTAGE CONVERSION

This turntable may be set to operate at either 110V–120V or 220V–240V at 50Hz to 60Hz. The voltage selector switch is under the turntable. If a voltage change is necessary, remove the lock plate, switch to the proper voltage, and replace the plate.

**CAUTION: DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CONVERTING VOLTAGE.**

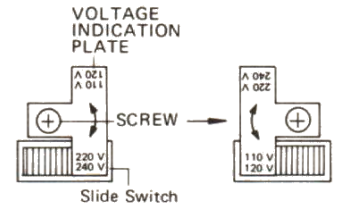


Fig. 1

### 2. CHANGE FREQUENCY

In almost all cases, the frequency of turntable is preset to 50Hz. In order to comply with a frequency of 60Hz, replace the motor pulley with the extra one included in the accessory bag. Remove the 50Hz pulley with a small-size screwdriver. During this operation, set the speed selector to the 33 rpm position and be sure that the top surfaces of the pulley and belt guide are even as shown in the diagram fig-2.

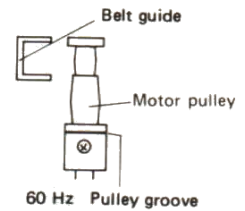


Fig. 2

### 3. AUTOMATIC SHUT-OFF POSITION ADJUSTMENT

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

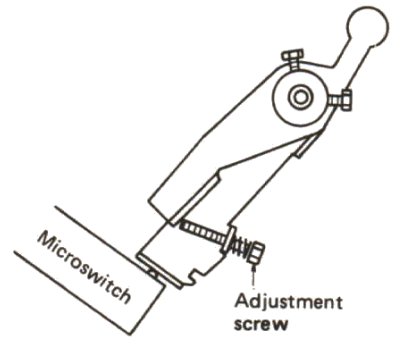


Fig. 3

### 4. ELEVATION PLATE ADJUSTMENT

Adjust the elevation plate height with the screw. (See fig-4) To adjust the height for higher, turn the screw counter-clockwise.

To adjust the height for lower, turn the screw clockwise.

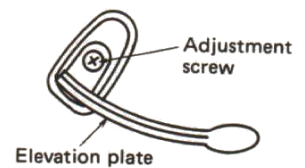
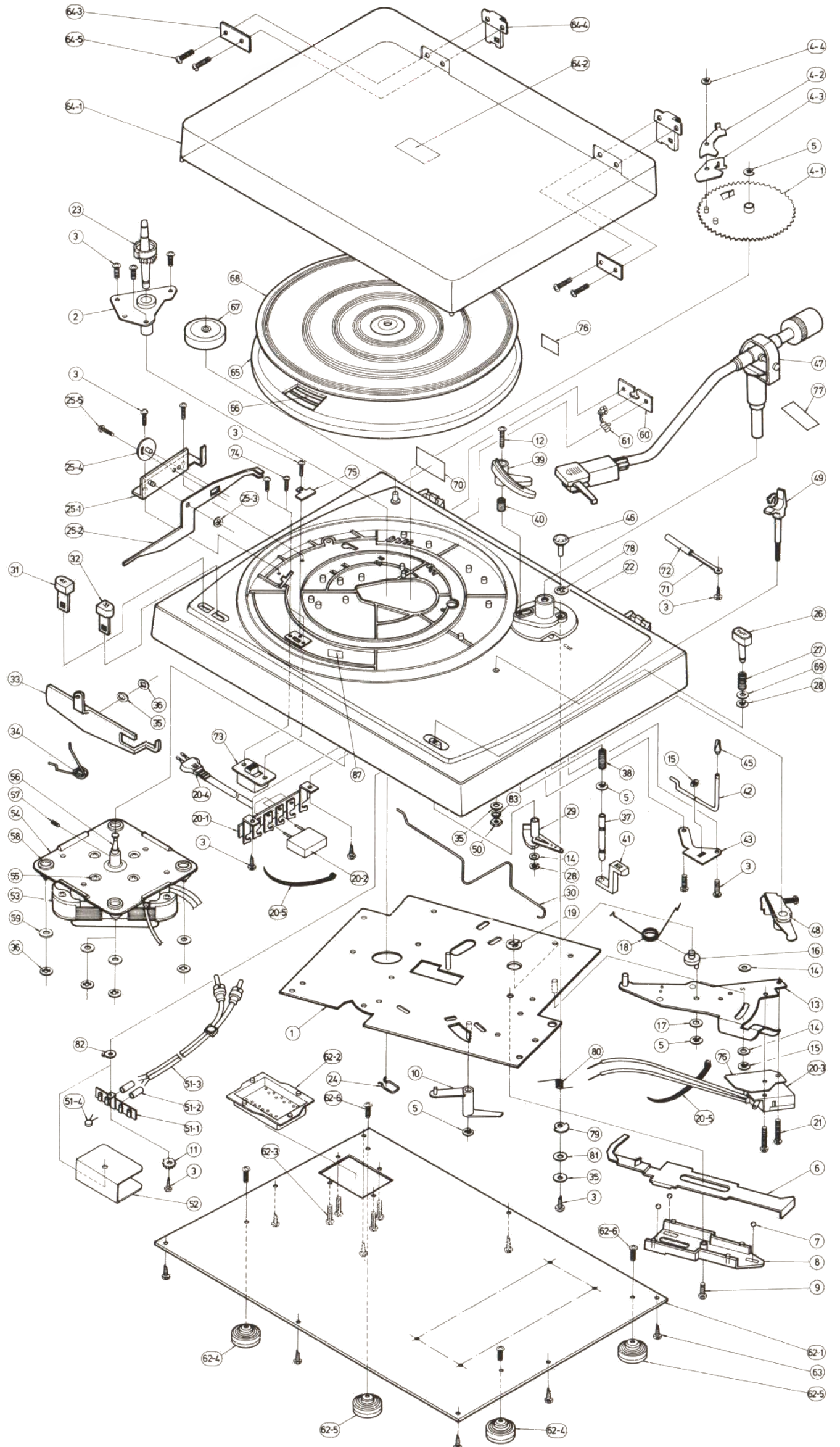


Fig. 4

### 3. EXPLODED VIEW

#### PARTS LIST

REF. NO.	PARTS NO.	DESCRIPTION
1	24506219	Sub chassis
2	24500204	T.T. bearing
3	838130082	BT(+) $3 \times 8$ , Tapping screw
4	24503061	R gear ass'y
4-1	24503062	R gear
4-2	24506116	Clutch plate
4-3	24506117	Clutch guide
4-4	893030	E-3, Washer
5	893030	E-3, Washer
6	24506221	Actuating slide
7	24500505	4 $\phi$ , Steelball
8	24506222	Base, actuating slide
9	838130122	BT(+) $3 \times 12$ , Tapping screw
10	24500311	Reject lever
11	87313008	TOW-3, Washer
12	82113014	FM $\#3 \times 14$ , Screw
13	24506220	Operation plate
14	87613010	FW3.2 $\phi \times 10\phi \times 0.5t$ , Washer
15	893020	E-2, Washer
16	24506120	Eccentric screw
17	24506137	BW5.2 $\phi \times 10\phi \times 0.2t$ , Washer
18	24503033	Spring
19	24506038	E-6, Washer
20	24503067	Switch ass'y
20-1	24506072	2L4P, Terminal
20-2	24509129	0.022 $\mu$ F, 250V, Capacitor
20-3	24503068	Microswitch
20-4	24505068	Power supply cord
20-5	260208	Binder
21	82112614	FM(+) $2.6 \times 14$ , Screw
22	24509113	Cabinet
23	24502016	T.T. shaft
24	24500781	Stopper
25	24504057	Speed selector base ass'y
25-1	24504049	Speed selector base
25-2	24504240	Speed selector arm
25-3	893032	E-3.2, Washer
25-4	24506036	Eccentric pin
25-5	82113008	FM $\#3 \times 8$ , Sems screw
26	24504248	Reject button
27	24503011	Spring for 26
28	893032	E-3.2, Washer
29	24504039	Reject lever
30	24503069	Spring for reject lever
31	24504245	Push button for 45 r.p.m.
32	24504246	Push button for 33 r.p.m.
33	24504249	Speed selector cam
34	24503012	Spring
35	87613008	FW3.2 $\phi \times 8\phi \times 0.5$ , Washer
36	24506067	CSTW3, Retaining clip
37	24504250	Elevation shaft
38	24500774	Spring for 37
39	24504251	Elevation plate
40	24503070	Spring
41	24504252	Cueing arm
42	24504254	Cueing lever
43	24504253	Tonearm base plate
44		
45	24504255	Cueing knob
46	24504258	I.F.C. knob
47	24501201	Tonearm ass'y
48	24506225	Arm base (2)
49	24501165	Arm rest
50	863130	FLN-3, Nut
51	24505066	Terminal ass'y
51-1	24506213	Terminal
51-2	24505012	Tube
51-3	24500486	Output cord
51-4	335124727	0.0047 $\mu$ F, 50V, capacitor
52	24506208	Shielded plate
53	24502071	Phono motor
54	24506218	Bracket for 53
55	801105	TP(+) $3 \times 6$ , Sems screw
56	24502023	50Hz pulley
57	24502024	60Hz pulley
58	24501026	Cushion for motor
59	87613012	FW3.2 $\phi \times 12\phi \times 0.8t$ , Washer
60	24506226	Bracket for power supply
61	270280	Strainrelief
62	24506228	Bottom board ass'y
62-1	24506227	Bottom board
62-2	24504260	Motor cover
62-3	833130122	FMT(+) $3 \times 12$ , Tapping screw
62-4	24509100	Leg
62-5	24509101	Leg
62-6	82113014	FM(+) $3 \times 14$ , Pan head screw
63	83314012	FMT(+) $4 \times 12$ , Tapping screw
64	24509108	Dust cover ass'y
64-1	24509109	Dust cover



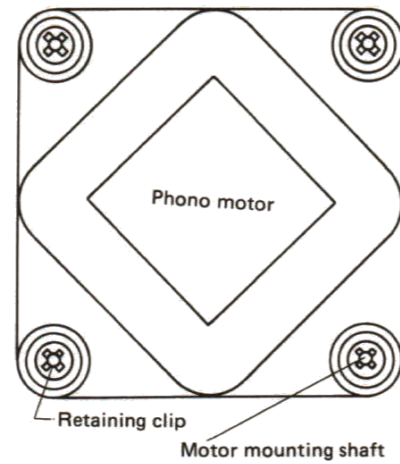
REF. NO.	PARTS NO.	DESCRIPTION
64-2	24504238	Name plate
64-3	24506135	Plate
64-4	24506134	Hinge
64-5	82544008	FM(+) $4 \times 8$ , Binding screw
65	24501025	Turntable platter
66	242129B	Belt
67	292049A	45 Adaptor
68	24509111	T.T. mat
69	24506230	NW4.7 $\times 8 \times 0.5t$ , Nylon washer
70	29360272	Rating label
71	24506031	Terminal
72	79006	Tube
73	250159	S-J0275, Voltage selector slide switch
74	82113010	FM(+) $3 \times 10$ , Screw
75	24505065	Voltage plate
76	282742	Model tag

REF. NO.	PARTS NO.	DESCRIPTION
77	29375027	Stylus label
78	24503071	Spring
79	24504262	Cam for I.F.C.
80	24503072	Spring for I.F.C.
81	24509114	Rubber bush
82	251073	4 $\phi$ terminal
83	87113006	SSW-3, Spring washer
84		
85		
86		
87	24500451	Label for 50Hz

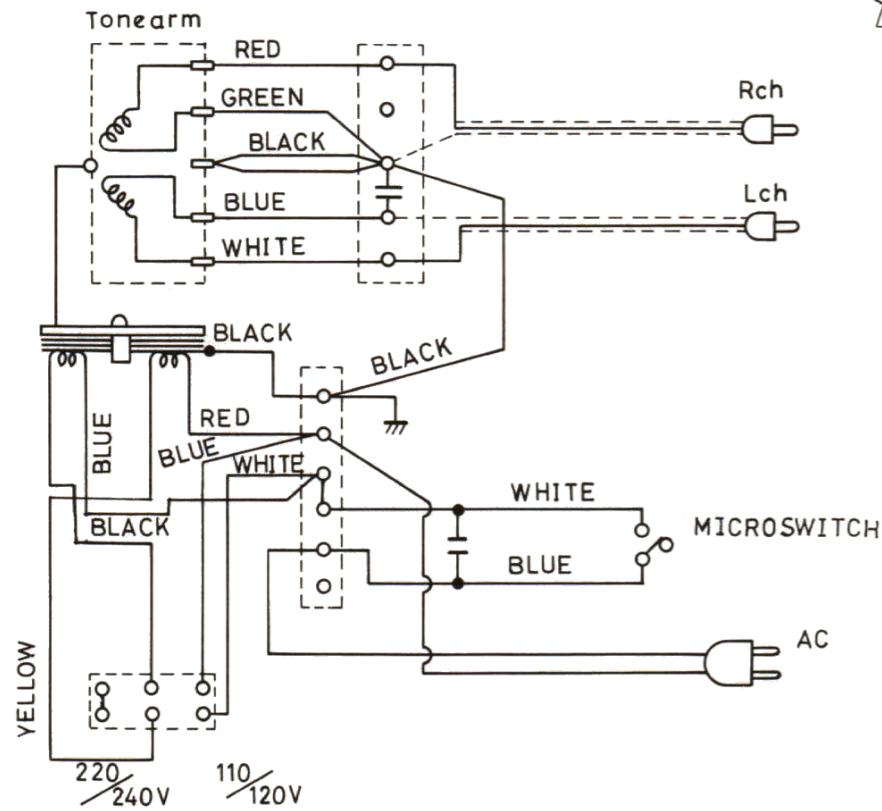
**5. REPLACING THE MOTOR**

1. Remove eight screws which hold the bottom board to the turntable board.
2. Cut four retaining clips.

**CAUTION:** Don't damage the motor mounting shaft and motor cushion.



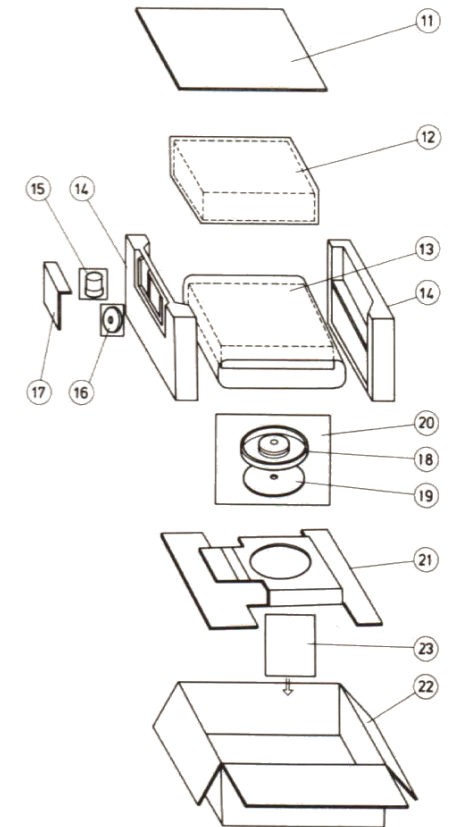
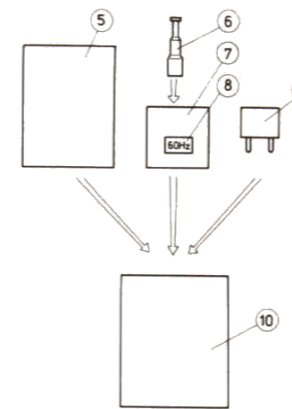
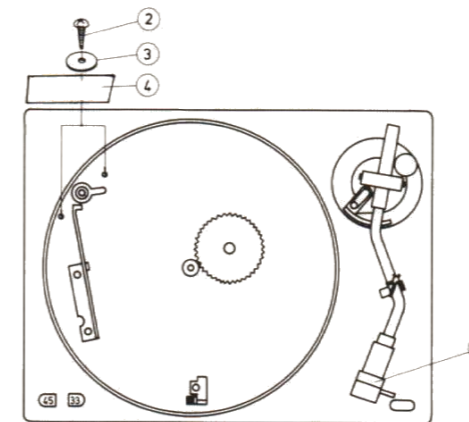
**4. CONNECTION DIAGRAM**



**5. PARTS LIST**

REF. NO.	PARTS NO.	DESCRIPTION	REF. NO.	PARTS NO.	DESCRIPTION
47	24501201	Tone arm ass'y	23	24502016	T.T. bearing
	24501202	Tonearm	22	24509113	Cabinet
	24501203	Counter weight	31	24504245	Push button for 45 r.p.m.
	24506231	Washer	32	24504246	Push button for 33 r.p.m.
	24506232	Toothed lock washer	26	24504248	Reject button
	24506233	Nut	46	24504258	I.F.C. ass'y
	24501204	OCH-1005M, Cartridge with headshell		24504256	I.F.C. knob
	24501206	DN-1005ST, Stylus		24504257	I.F.C. plate
	24501207	Stylus cover	53	24502071	IM-S275-12D-05, Phono motor
20	24503067	Switch ass'y	58	24501026	Motor cushion
	24503068	Microswitch	36	24506067	CSTW-3, Retaining clip
	250159	S-J-0275, Slide switch	64	24509108	Dust cover
66	242129B	Belt	65	24501025	Turntable platter
68	24509111	T.T. mat	56	24502023	Pulley for 50Hz
			57	24502024	Pulley for 60Hz

**6. PACKING PROCEDURES**



REF. NO.	PARTS NO.	DESCRIPTION	REF. NO.	PARTS NO.	DESCRIPTION
1	24501207	Stylus protection cover	13	29095016	Protection sheet
2	24506113	FM(±)4×10, motor locked screw with spring	14	24509116	Side pad
3	87714012	FM4×12×0.8, Washer	15	24501203	Counter weight
4	24505067	Caution card	16	292049A	45 r.p.m. adaptor
5	29340323	Instruction manual	17	24509135	Pad, accessory
6	24502024	Pulley for 60Hz	18	24501025	Turntable
7	29100002	70×100mm, Ploy bag		242129B	Belt
8	24500452	Label for 60Hz	19	24509111	T.T. mat
9	25055018	CV-K-1, Conversion plug	20	29100008	450×350mm, Poly bag
10	29100005	220×330mm, Poly bag	21	24509133	Turntable case
11	24509134	Top pad	22	29050252	Carton box
12	29095016	Protection sheet	23		Accessory bag complete

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