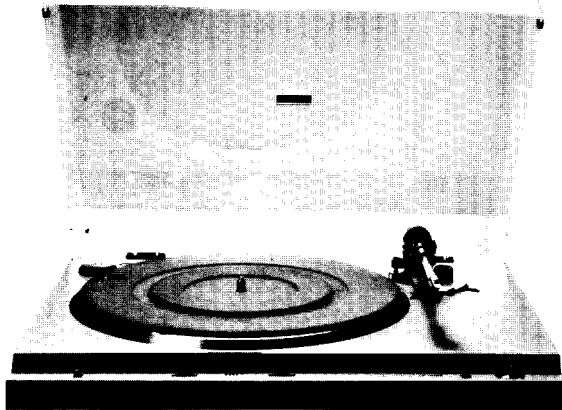


ONKYO SERVICE MANUAL

AUTOMATIC RETURN TURNTABLE

Model CP-1010A



120V model



Universal model

1. SPECIFICATIONS

Type:	2-speed automatic-return turntable with manual lifter	(Only Universal Model)	
Turntable Platter:	31cm (12-1/4") aluminum diecast	Cartridge	
Motor:	FG DC Servo (FG24 poles)	Type:	Moving magnet OC-39M
Speeds:	33-1/3 rpm, 45 rpm	Frequency Response:	18Hz ~ 25,000Hz
Speed Controls:	Adjustable range $\pm 2\%$	Recommended Load	
Wow & Flutter:	0.05% (WRMS)	Impedance:	47k ohms
Signal-to-Noise Ratio:	67dB (DIN B)	Recommended Tracking	
Tonearm:	Static balanced straight pipe	Force:	2 grams
Effective Arm Length:	213mm (8-3/8")	Compliance:	8×10^{-6} cm/dyne
Overhang:	14mm (9/16")	Output Voltage:	4mV
Maximum Tracking Error:	+3 degrees, -1 degree	Stylus Tip:	0.5 mil (13 micron) diamond
Power Consumption:	3 Watts	Replacement Stylus:	DN-39ST
Dimensions:	453(W)x370(D)x133(H)mm	Power Supply:	AC 110-120/220-240V 50/60Hz
Weight:	17-7/8"x14-1/2"x5-1/4" 4.8kg (11 lbs.)	(Only U.S.A. Model)	
		Usable Cartridge Weight:	5 ~ 8 gr.
		Power Supply:	120V 60Hz

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

ONKYO[®]
AUDIO COMPONENTS

2. SERVICE PROCEDURES AND ADJUSTMENTS

1. VOLTAGE CONVERSION (Universal model)

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.

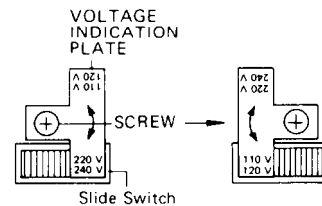


Fig. 1

2. 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 counter-clockwise. To adjust the shut-off position for later, turn the screw clockwise.

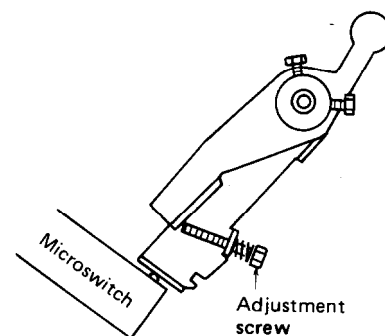


Fig. 2

3. MOTOR SPEED ADJUSTMENT

When motor, turntable platter, belt, etc. are to be replaced or when the setting of revolution has been deviated by the lapse of time, carry out adjustments in the following manner.

Set the speed control volume for fine adjustment nearly at the center, set the speed selector at 33, turn VR1 provided on the control circuit pc board to the point to stop the upper part of the stroboscopic stripes. Then, switchover the rotation to 45, and adjust VR2 so as to stop the lower side of the stroboscopic stripes.

PRECAUTIONS: 1. For continued protection against fire or shock hazard, replace only with same type and same rating fuse.

0.1A (UL) P.N. 252064

2. Cabinet composition

Turntable board : Polystyrene

Bottom board : Hardboard

Dust cover : Polystyrene

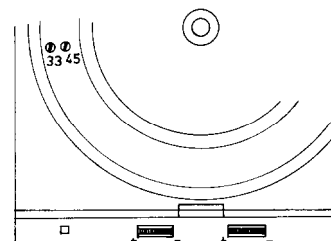
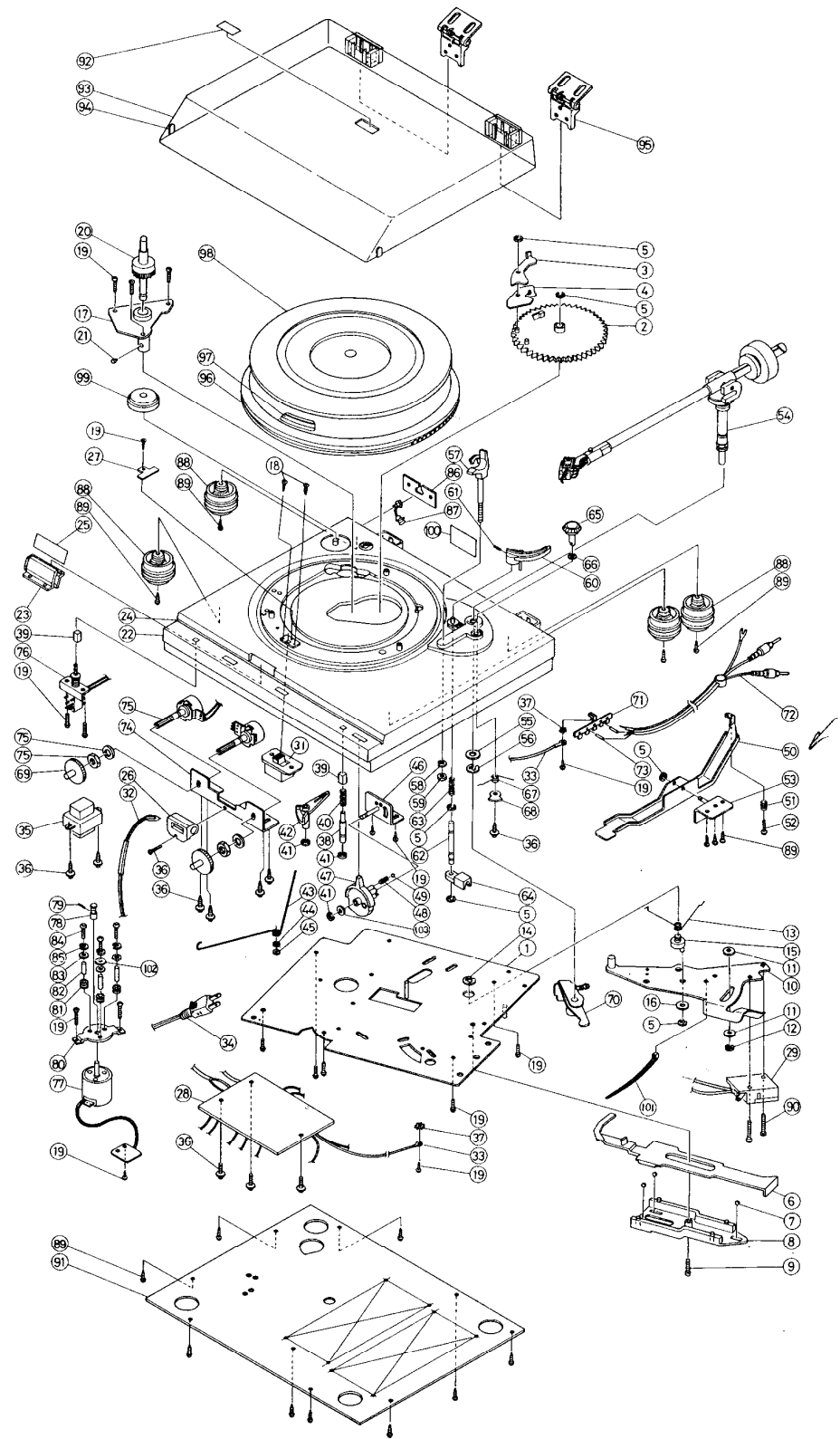


Fig. 3

EXPLODED VIEW

REF. NO.	PARTS NO.	DESCRIPTION
1	24506235	Sub-chassis
	24503061	R gear ass'y (2-5)
2	24503062	R gear (1)
3	24506116	Clutch plate
4	24506117	Clutch guide
5	893030	E-3, Circlip
6	24506221	Actuating slide
7	24500505	4φ, Steelball
8	24506222	Actuating base
9	838130122	BT+3x12, Tapping screw
10	24506220	Operating plate
11	87613010	FW3.2φx1.0φx0.5t, Washer
12	893020	E-2, Circlip
13	24503033	Spring for 15
14	24506038	E-6, Circlip
15	24506120	Eccentric pin
16	24506137	BW5.2φx1.0φx0.2t, Washer
17	24502045	T.T. bearing
18	82113012	FM+3x12, Pan head screw (U)
19	838130082	BT+3x8, Screw
20	24502046	T.T. shaft
21	24506086	Stopper
22	24509150	Cabinet
23	24504263	Cover for lamp
24	24509142	Film
25	24509143	Sheet
26	24504264	Holder for lamp
27	24505065	Fixture plate (U)
28	24505073	Power supply p.c.b.complete(U)
	24505077	Power supply p.c.b.complete(A)
29	24503068	Microswitch
30		
31	250159	Slide switch (U)
32	211003	Neon lamp
33	24505069	Wire for ground
34	24505076	Power supply cord (A)
	24505068	Power supply cord (U)
35	230315	Power transformer (U)
	230316	Power transformer (A)
36	831130082	3STW+8BQ, Tapping screw
37	87313008	TOW-3, Toothed washer
38	24504265	Reject shaft
39	28320303	Reject knob
40	24503073	Spring for reject button
41	893032	E-3-2, Circlip
42	24504266	Reject lever
43	24503074	Reject spring
44	87613008	FW3.2φx8φx0.5t, Washer
45	24506067	CSTW-3, Retaining clip
46	24506237	Cueing bracket
47	24504267	Cueing lever
48	24503075	Spring for 47
49	24500505	4φ, Steelball
50	24506238	Cueing seesaw
51	24500773	Spring for 50
52	833130162	FM+3x16, Pan head screw
53	24506239	Seesaw base
54	24501220	Tonearm ass'y (U)
	24501229	Tonearm ass'y (A)
55	24506240	FW1.0φx2.2φx1t, Washer
56	24506241	E-9, Circlip
57	24501221	Arm rest
58	87113006	SSW-3, S washer
59	863130	FLN-3, Nut
60	24504268	Elevation plate
61	801205	FT-2.6x4, Screw
62	24504269	Elevation shaft
63	24500774	Elevation spring
64	24506242	Lifter plate
65	24504270	IFC knob
66	24506243	Washer
67	24503077	IFC spring
68	24504271	IFC cam
69	24504272	Knob for speed control
70	24506225	Arm base ass'y
71	24506034	Terminal
72	24505061	Output cord (U)
	24505075	Output cord (A)
73	24505012	Tube
74	24506244	Bracket for variable resistor
75	5146014	Variable resistor
76	25035144	Push switch
77	24502057	Phono motor
78	24502040	Pulley
79	801161	F-T-2x3, Screw for pulley
80	24506189	Bracket for motor
81	24502060	Cushion
82	24506190	Pipe
83	87613013	FW3.2x1.3x0.8, Washer
84	82112612	FM+2.6x12, Pan head screw
85	87142604	SSW-2.6, S washer
86	24506226	Plate for power supply cord (U)
	24506245	Plate for power supply cord (A)
87	270280	SR-4K-4, Strainrelief (U)
	270025	SR-3P-4, Strainrelief (A)
88	24509144	Leg
89	833240124	FMT+4x12, Screw



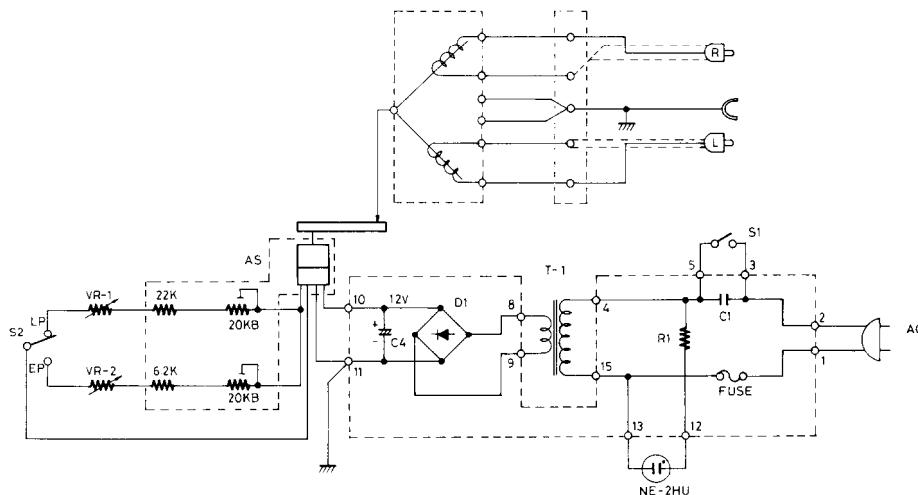
REF. NO.	PARTS NO.	DESCRIPTION
90	82112614	FM+2.6x14, Pan head screw
91	24506246	Bottom board
92	24504275	Plate
93	24509127	Dust cover
94	24509128	Cushion
95	24506234	Hinge
96	24502076A	Turntable platter
97	242129B	Belt
98	24509111	T.T. mat
99	292049A	4.5 adaptor
100	29360269	Rating label (U)
	29360283	Rating label (A)
101	260208	Binder
102	24506236	FW4.7x12x1, Washer
103	24506252	NE4.7φx1.0φx0.5t, Nylon washer
104	29375025	Exchangeable label (U)

(U): Only Universal model
(A): Only 120V model

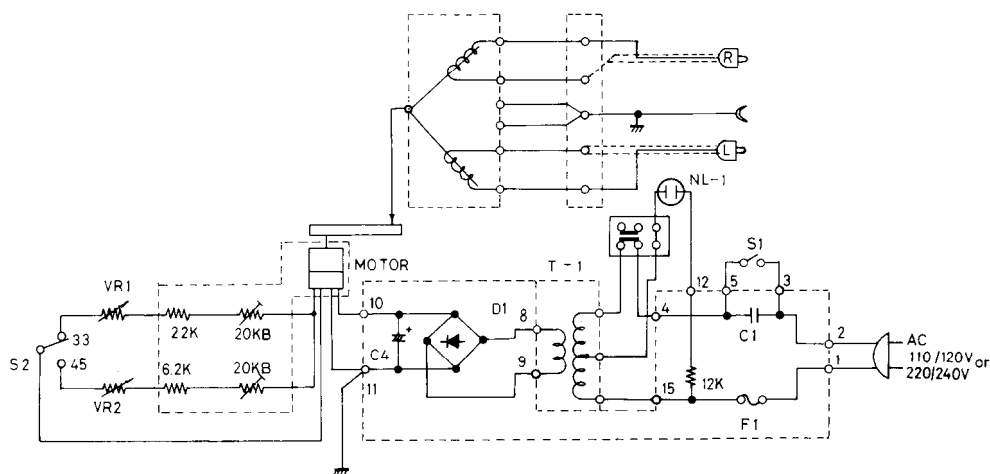
CP-1010A CP-1010A

CONNECTION DIAGRAM

120V model



Universal model



PARTS LIST

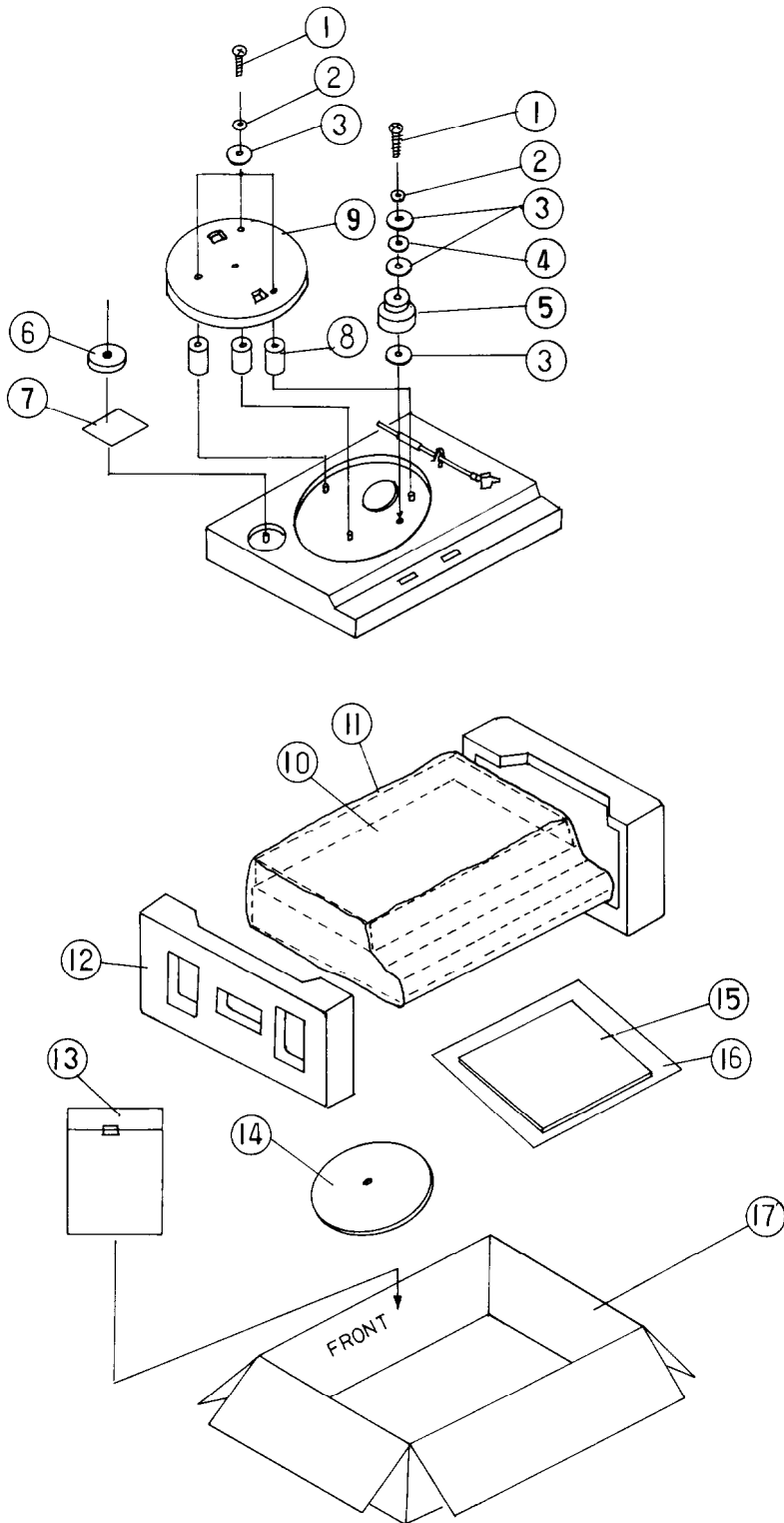
Universal model

REF. NO.	PARTS NO	DESCRIPTION
29	24503068	Microswitch
76	25035144	Speed selector switch
75	5146014	Variable resistor
31	250159	Slide switch
77	24502057	Phono motor with semi-fixed resistor p.c.b.
28	24505073	Power supply p.c.b. complete
	24506098	Fuseholder
	351241021	1,000 μ F, 16V, Elect. capacitor
	431521235	12k Ω , 1/2W, Solid resistor
	223833	SIRBA10, Bridge diode
	252064	0.1A, Fuse
32	211003	Neon lamp
	24505076	Power supply cord
	24505077	Output cord
	230315	Power transformer
22	24509150	Cabinet
69	24504272	Speed control knob
39	28320303	Push switch knob
47	24504267	Cueing lever
57	24501221	Arm rest
	24509114	Leg
65	24504270	IFC knob
54	24501220	Tonearm ass'y
	24501228	Tonearm
	24501227	Screw for headshell
	24501222	Counter weight
	24501223	Headshell
	24501183	OC-39M, Cartridge
	24501185	DN-39ST, Stylus
	24501186	Stylus cover
92-94	24509126	Dust cover ass'y
95	24506234	Hinge
96	24502076A	Turntable platter
97	242129B	Belt
98	24509111	T.T. mat
	MSS-8512A	Turntable

120V model

REF. NO.	PARTS NO.	DESCRIPTION
29	24503068	Microswitch
76	25035144	Speed selector switch
75	5146014	Variable resistor
77	24502057	Phono motor with semi-fixed resistor p.c.b.
28	24505077	Power supply p.c.b. complete
	24506098	Fuseholder
	351241021	1,000 μ F, 16 V, Elect. capacitor
	431521235	12k Ω , 1/2W, Solid resistor
	223833	SIRBA10, Bridge diode
	252064	0.1A, Fuse
32	211003	Neon lamp
34	24505076	Power supply cord
72	24505075	Output cord
35	230316	Power transformer
22	24509150	Cabinet
69	24504272	Speed control knob
39	28320303	Push switch knob
47	24504267	Cueing lever
57	24501221	Arm rest
	24509114	Leg
65	24504270	IFC knob
54	24501233	Tonearm ass'y
	24501228	Tonearm
	24501227	Screw for headshell
	24501222	Counter weight
	24501223	Headshell
92-94	24509126	Dust cover ass'y
95	24506234	Hinge
96	24502076A	Turntable platter
97	242129B	Belt
98	24509111	T.T. mat
	MSS-8512B	Turntable

PACKING PROCEDURES



PARTS LIST

REF. NO.	PARTS NO.	DESCRIPTION
1	24509147	FMT ± 4 × 30, Screw
2	870063	FW4.6φ × 10φ × 0.5t, Washer
3	24500464	Caution card
4	24506248	4.7φ × 28φ × 0.4t, Washer
5	24501220	Counter weight
6	292049A	45 adaptor
7	24509061	Poly sheet
8	24509149A	Spacer
9	24502076	Turntable platter
10	29095016	Protection sheet (Dust cover/Turntable)
	29095097	280×220, Protection sheet (Power supply cord)
11	29100018	650 × 750mm, Poly bag
12	29090432	Pad
13	29100005	330 × 220, Poly bag
	29340317	Instruction manual (U)
	29340342	Instruction manual (A)
	29365006	Warranty card (A)
	25055018	CV-K-1, Conversion plug (U)
14	24509111	T.T. mat
15	24509148	Pad sheet
16	29100008	450 × 350, Poly bag
17	29050253	Carton box

U: Universal model
A: U.S.A. model

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CP-1010A

Automatic Return Turntable

WARNING

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Copy the Serial Number and Model Number

The serial number is written on the rear side of this unit.

Copy the serial number and model number onto your warranty card and keep it in a safe place.

Instruction Manual

ONKYO

Turntable Assembly

- * Remove all component parts from the packaging and wipe the unit clean.
- * For safety reasons, do not connect the power cord and the connecting cables until the turntable has been properly assembled, and the tonearm adjustments have been completed.
- * Remove the counterweight locking screw.
- * Save the locking screw and all other packing material for future use when you may wish to ship the turntable again.

Mounting the Turntable Platter

1. Place the drive belt around the inner rim of the turntable platter. Use your finger to pull the end of the belt through the turntable platter hole as shown.
2. Place the turntable platter on the spindle, keeping the belt in place.
3. Place the end of the drive belt around the motor pulley as shown.
4. Rotate the turntable platter clockwise a couple of times to see that the drive belt is properly mounted.
5. Lay the rubber mat on top of the turntable platter.

Attaching the Cartridge

Note: This operation is only necessary in units where the cartridge has been packed separately. In some units the cartridge has already been attached to the tonearm.

1. Mount the cartridge into position in the headshell.
2. Adjust the distance from the stylus tip to the neck of the headshell to the value designated in the diagram.
3. Connect the following headshell lead wires to the corresponding cartridge pins.

White lead	left channel signal
Blue lead	left channel ground
Red lead	right channel signal
Green lead	right channel ground

4. Then lock the headshell onto the tonearm. The above adjustment will ensure that the correct overhang is also adjusted.

Adjusting the Tonearm

1. Unhook the hook and remove the stylus cover and the vinyl ribbon securing the tonearm to the arm rest. Remember that the tonearm, cartridge, and stylus assembly are extremely delicate pieces of equipment and must be handled at all times with the utmost care.

2. Mount the counterweight onto the rear end of the tonearm and rotate until the tonearm reaches a position of equilibrium. (Check that the cueing lever has been set to the DOWN position.)
3. Then, while holding the main part of the counterweight steady, rotate the tracking force scale ring to align the "0" position with the tracking force index line.
4. Next, rotate the counterweight (plus ring) to the "2" position when a designate tracking force rating of the usable cartridge is 2 grams, thereby adjusting tracking force to 2 grams. (If a different tracking force rating is used, readjust accordingly.)
5. Adjust the anti-skating control dial to the same value as the tracking force ("2" in this case).

Placement of the Turntable

Your CP-1010A turntable features high precision mechanisms, and is very sensitive to vibrations, extreme-temperatures, high humidity, dust, and other external influences. To ensure years of trouble free operation, avoid the following places when setting up the turntable:

- * Tables or shelves which are not horizontal and which are prone to transmit vibrations.
- * Places near a radiator or other heat generating appliances, or in direct sunlight.
- * Places near the speakers as howling may result.
- * Magnetic fields.

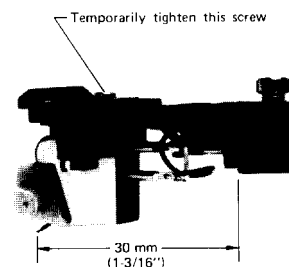
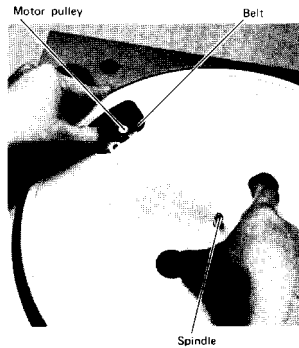
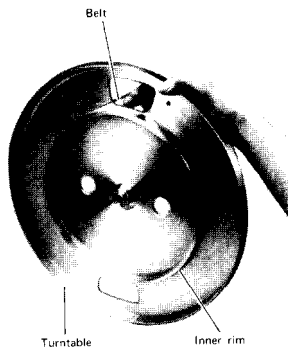
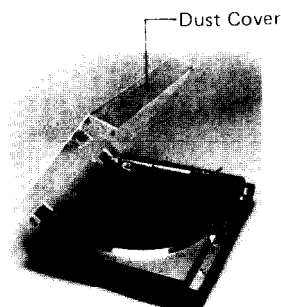
Replacing the Stylus

Under normal use, the provided diamond stylus will last about 500 hours (1000 LP record sides). Timely replacement is essential because a worn stylus will not only adversely affect music quality but also damage the record itself. The stylus is extremely delicate and must never come into contact with your fingers or any hard object.

Cleaning the Unit

From time to time, wipe the surface with a dry silicone cloth, or other soft fabric. For harder-to-remove smudges etc, dip a soft cloth into a solution of natural cleanser, wring out, firmly, and carefully.

Then wipe away any remaining solution with a soft dry cloth. Do not use the firmer fabrics designed for kitchen use, or volatile liquid such as thinner, since this is likely to scratch the surface, and remove the lettering.



Turndtable Facilities

1 Record Speed Selector

The turntable may be set to operate at either 33 rpm or 45 rpm. The speed should only be changed while the turntable is rotating in order to avoid the possibility of twisting the drive belt.

2 Reject Button

To stop the record before it has ended, press the reject button. The tonearm will automatically rise and return to the arm rest, and the turntable will stop.

3 Cueing Lever

While operating the turntable, the cueing lever is used to raise and lower the tonearm. It is also used when selecting specific bands to be played on an LP record album.

4 Tonearm

A straight statically balanced tonearm is employed in this unit.

5 Headshell

The headshell may be removed from the tonearm if necessary by rotating the locking screw counterclockwise.

6 Locking Screw

The locking screw holds the headshell (with cartridge and stylus assembly) in place on the tonearm.

7 Arm Rest

The tonearm should rest on the arm rest when not in use. A hook is provided to prevent accidentally knocking the tonearm off the arm rest.

8 Counterweight

The counterweight must be adjusted to provide the proper tracking force for the cartridge used.

9 Anti-skating Control

The anti-skating control is set to the same value as the tracking force setting.

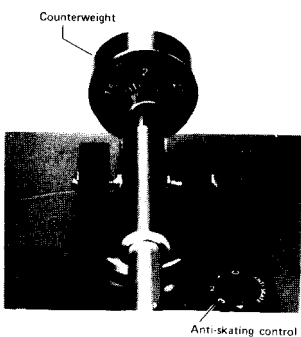
10 11 Speed Controls

These controls are used to adjust for speed deviations indicated by the stroboscope.

12 Stroboscope

The stroboscope is a device used to indicate rotational speed accuracy.

Exact speed (33 1/3 or 45 rpm) is achieved when the stripes in the relevant band appear to be standing still.



Common Modes of Operation

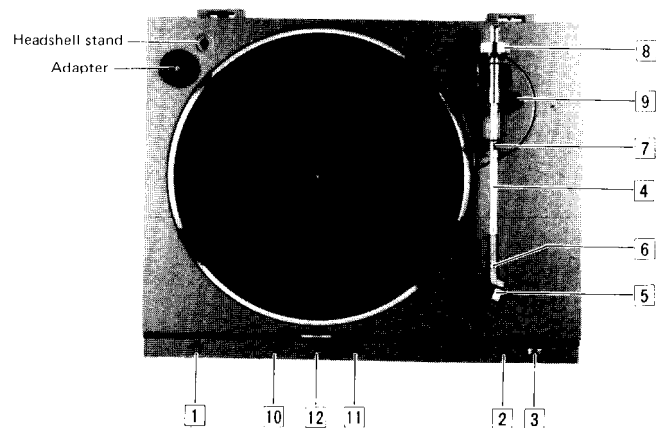
Record Playing

Before starting to play records, be sure that the speakers and turntable are correctly connected to the integrated amplifier and that the tracking force is set at the designated value (i.e. "2"). The L (white plug) output connecting cable is to be connected to the amplifier's LEFT phono input terminal, while the R (red plug) output cable is to be connected to the amplifier's RIGHT input terminal.

1. Place a record on the rubber mat.
2. Set the cueing lever into the UP position.
3. Move the tonearm carefully across to the outer edge of the record. The turntable will commence to rotate immediately.
4. Check that the speed selector has been set to the correct speed for the record to be played.
5. At the same time that the turntable commences to rotate, the stroboscope lamp will light up. If the stripes in the relevant band appear to move either forward or backward, adjust the corresponding speed control until they become stationary. Stripes appearing to go forward indicate that the turntable speed is too fast, while stripes appearing to go backward indicate too slow a speed.
6. Position the stylus above the outer record groove, or above any other desired part of the record, and set the cueing lever to the DOWN position. The stylus will lower gently onto the record to commence play.
7. At the end of the record, the tonearm will rise, return to the arm rest automatically, and the turntable will stop rotating.
8. To stop play before the end of the record, set the cueing lever in the UP position, and return the tonearm to the arm rest by hand. This step may also be performed automatically by pressing the reject button. In either case, the turntable also will come to a stop. At the end of play, always relock the tonearm to the arm rest to protect the cartridge from possible damage.

Caution:

Never touch the tonearm during automatic operation.



Specifications

Type: 2-speed automatic-return
turntable with manual lifter
Turntable Platter: 31 cm (12-1/4") aluminum
diecast
Motor: FG DC Servo (FG24 poles)
Speeds: 33-1/3 rpm, 45 rpm
Speed Controls: Adjustable range $\pm 2\%$
Wow & Flutter: 0.05% (WRMS)
Signal-to-Noise Ratio: 67 dB (DIN B)
Tonearm: Static balanced straight pipe
Effective Arm Length: 213 mm (8-3/8")
Overhang: 14 mm (9/16")
Maximum Tracking Error: +3 degrees, -1 degree

Usable Cartridge Weight: Min. 5.0 g, Max. 8.5 g
Power Supply: AC 120V, 60 Hz
Power Consumption: 3 Watts
Dimensions: 453(W) x 370 (D) x 133(H) mm
17-7/8" x 14-1/2" x 5-1/4"
Weight: 4.8 kg (11 lbs.)

Cabinet Composition
Turntable Board: Polystyrene
Bottom Board: Hardboard
Dust Cover: Polystyrene

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

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