

ONKYO® SERVICE MANUAL

FULLY AUTOMATIC TURNTABLE MODEL CP-1011F



D model

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SPECIFICATIONS

Type:	2-speed fully automatic turntable
Turntable Platter:	30 cm (12") aluminum diecast
Motor:	Electronic servo DC motor, belt drive
Speeds:	33-1/3 rpm, 45 rpm
Speed Controls:	Adjustable range $\pm 3\%$
Wow & Flutter:	0.05% (WRMS)
Signal-to-Noise Ratio:	67 dB (DIN B)
Tonearm:	Lightweight straight-line static balanced pipe tonearm with detachable headshell (ADC type connector) and counterweight with direct tracking force read out.
Suitable Cartridge	
Weight:	5 – 9 grams
Adjustable Range:	3 grams
Maximum Length:	270 mm (10-5/8")
Effective Arm Length:	213 mm (8-3/8")
Overhang:	14 mm (9/16")
Maximum Tracking Error:	+3 degrees, -1.5 degrees (offset angle 21 degrees)

Cartridge (G/W model)

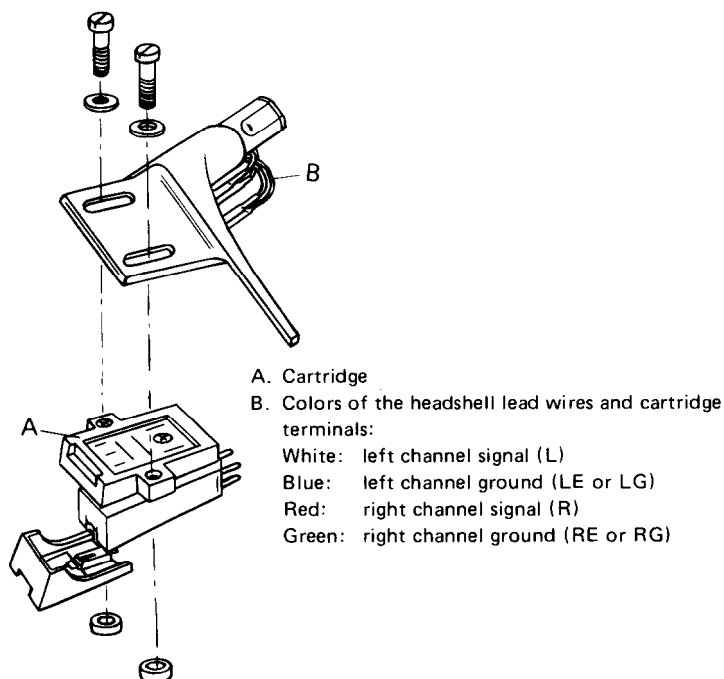
Type:	Moving magnet type (OC – 51M)
Frequency Response:	20 Hz ~ 20,000 Hz
Recommended Load Impedance:	47 kohms
Recommended Tracking Force:	2 grams
Compliance:	8×10^{-6} cm/dyne
Output Voltage:	3.5 mV
Stylus Tip:	0.5 mil diamond
Replacement Stylus:	DN-51ST
Power Supply:	AC110-120, 220-240V, 50/60Hz (W model) AC120V, 60Hz (D model) AC 220V, 50Hz (G model)
Power Consumption:	3 Watts
Dimensions:	418(W) x 371(D) x 140(H) mm (16-1/2" x 14-1/2" x 5-1/2")
Weight:	4.5kg (9.9 lbs.)

Optional Recommended Headshell SH-21E

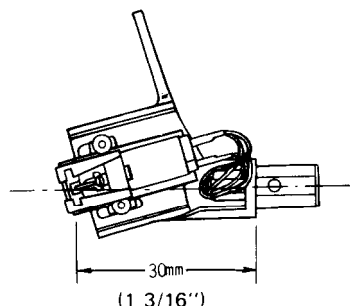
In the interest of further product improvements, specifications are subject to change without notice.

ATTACHING THE CARTRIDGE

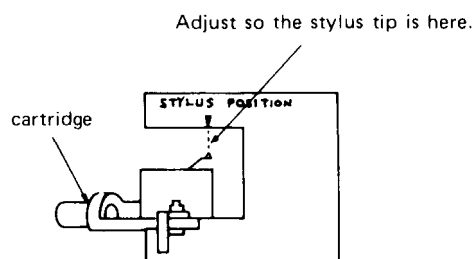
Attach the cartridge as shown below, connecting each of the color coded lead wires to the proper terminal. If a mistake is made, no sound will be heard or stereo reproduction will be lost. Also, to prevent damage to the stylus during installation operations, leave its cover on or remove the stylus completely.



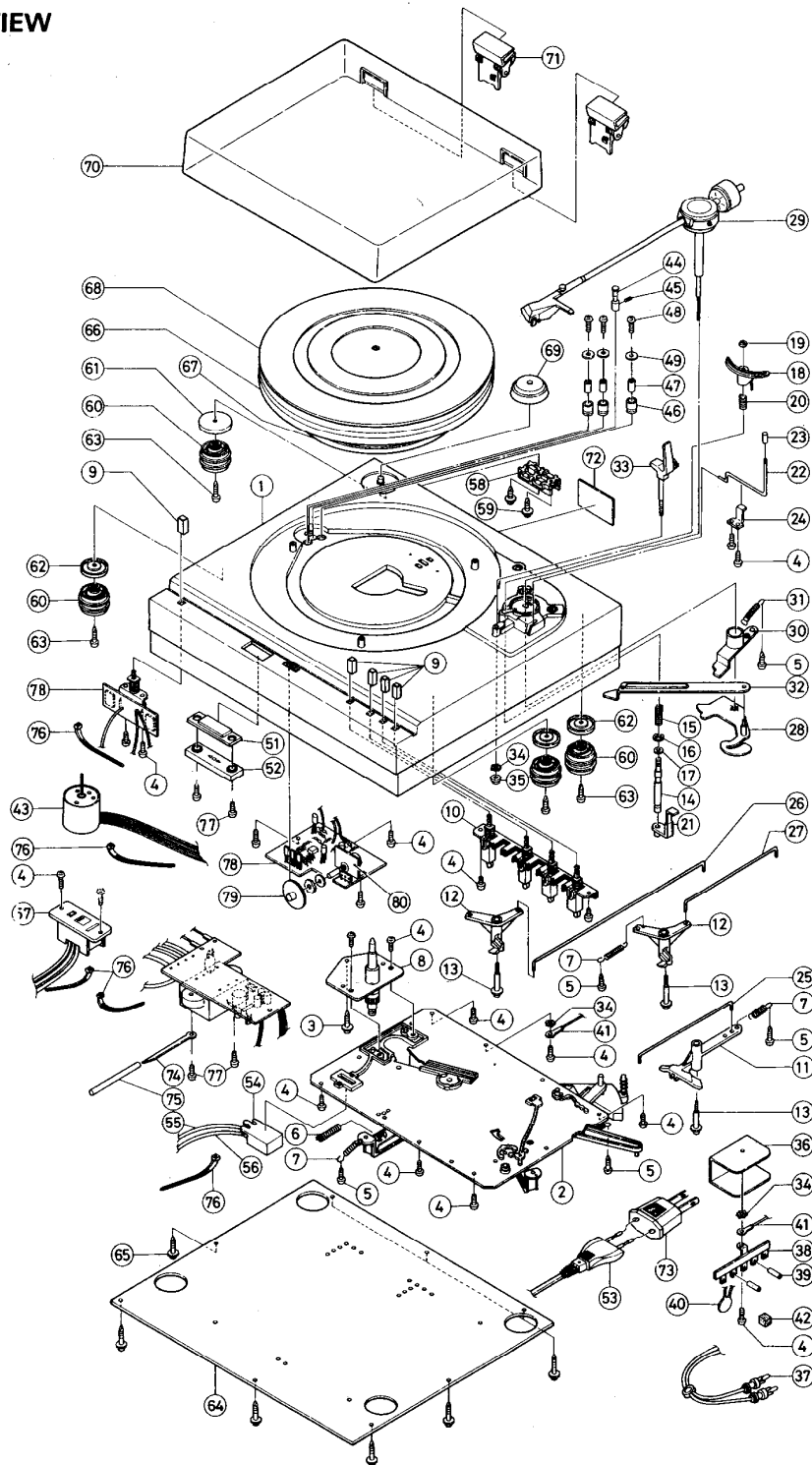
Adjust so the distance between the stylus tip and the base of the headshell is 30 mm (1 3/16") and tighten the screws. This assures the effective length and overhang of the tonearm are correct.



Use the included overhang gauge as shown below, placing the cartridge in the gauge and setting the location of the stylus tip as indicated.

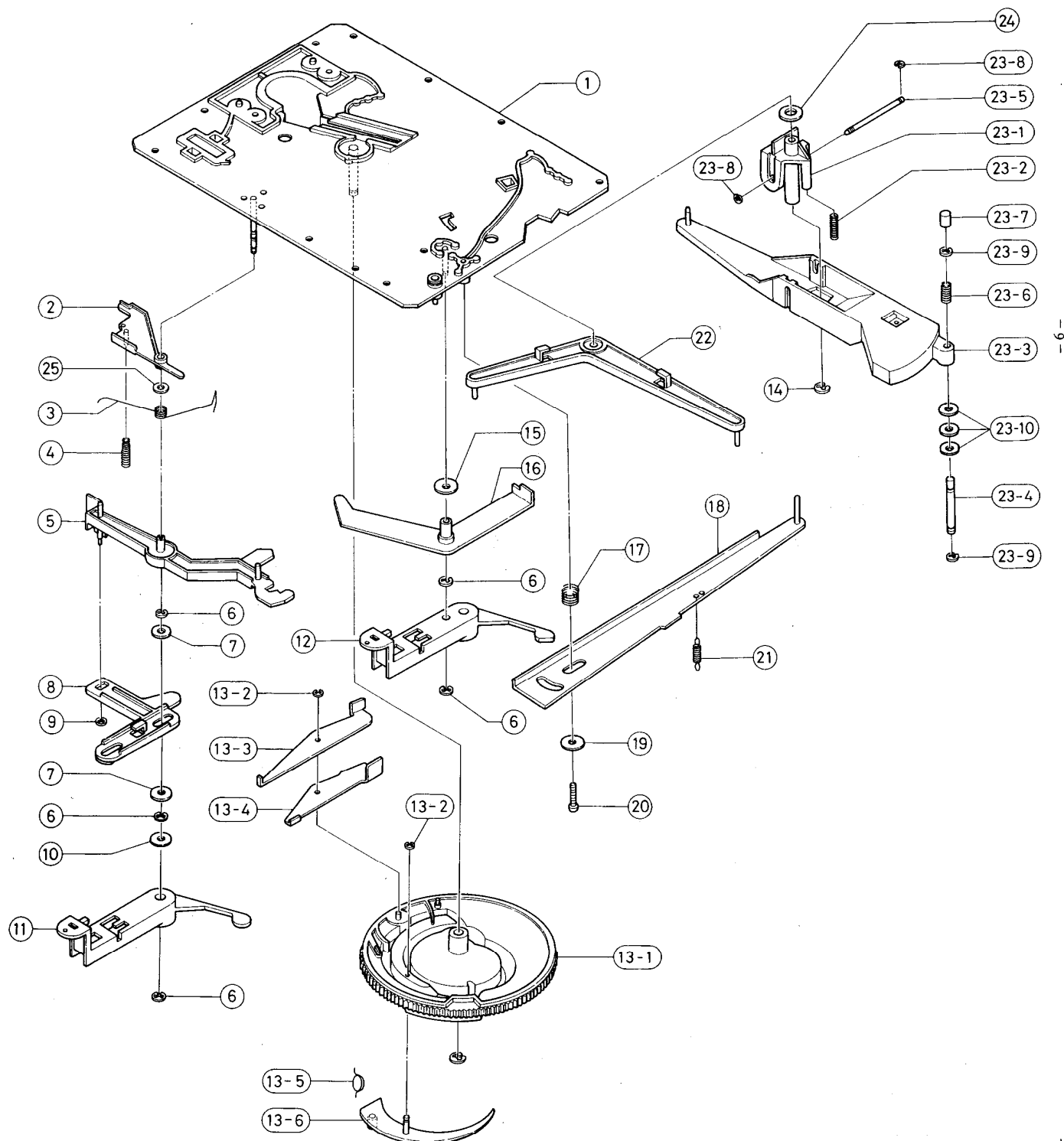


EXPLODED VIEW



REF. NO.	PARTS NO.	DESCRIPTION	REF. NO.	PARTS NO.	DESCRIPTION	REF. NO.	PARTS NO.	DESCRIPTION
1	24509226	Cabinet ass'y	29	24501321	Screw, tonearm	58	24506517	Holder
2	24506475	Mechanism chassis		24501346	OC-51M, Cartridge (G/W)	59	831130122	TPT+3x12, Screw
3	831130082	TPT+3x8, Screw		24501308	DN-51ST, Stylus (G/W)	60	24509144	Leg
4	838130082	BT+3x8, Screw	30	24506510	Selecto	61	24509196	Plate, leg
5	834130122	FMT+3x12, Screw	31	24500771	Spring, start lever	62	24509227	Plate, leg
6	24506519	Spring	32	24506511	Actuating slide	63	833140162	FMT+4x16, Screw
7	24503053	Spring, start lever	33	24506516	Arm rest	64	24509219	Bottom board
8	24506496	T.T. shaft ass'y	34	87313008	TOW-3, Toothed washer	65	831140125	4STW+12B, Tapping screw
9	28320303	Button	35	86213010	M3, Nut	66	24502117	Turntable platter
10	24503105	Push switch	36	24506032	Shielded plate	67	242129B	Belt
11	24506498	Start cam	37	24505126	Output cable	68	24509111B	T.T. sheet
12	24506499	Cam	38	24506034	Terminal	69	242049A	45 rpm adaptor
13	24506523	Special screw	39	24505012	Tube	70	24509215	Dust cover
14	24506503	Shaft, elevation	40		0.005μF, 50V, Ceramic capacitor	71	28180062	Hinge
15	24504279	Spring, elevation	41	24505143	Cable	72		Rating label
16	893030	E-3, Circlip	42	24509104	Mounting stud	73		Conversion plug (W)
17	24506506	4.7φ x 8φ x 0.5t, Nylon washer	43	24502116	Motor with pulley	74	251073	Terminal
18	24506504	Plate, elevation	44	24502115	Pulley	75		Tube
19	24506275	Nut	45	801161	T-2x3, Screw, pulley	76		Binder
20	24503075	Spring, cam	46	24502060	Cushion, motor	77		P.c.b. ass'y
21	24506505	Lifter arm	47	24506190	Pipe	78		L.E.D. and motor control p.c.b.
22	24506507	Cue lever	48	82112612	FM+2.6x12, Screw		24505132	Speed selector switch p.c.b.
23	24506399	Knob, lifter lever	49	87613013	FW3x13x0.8t, Washer		24505138	Power supply p.c.b. (D)
24	24506508	Pressure plate, lever	51	24504308	Cover, L.E.D.		24505142	Power supply p.c.b. (G)
25	24506513	Rod, selector	52	24504307	Guide, L.E.D.		24505139	Power supply p.c.b. (W)
26	24506514	Rod, selector	53	24505076	Power supply cable (D)	79	24506512	Knob, volume
27	24506515	Rod, selector		24505068	Power supply cable (G/W)	80	24506521	Bracket, volume
28	24506509	Tonearm base	54	24503023	Micro switch			D: Only 120V model
29	24501349	Tonearm ass'y	55		Cable			G: Only 220V model
	24501350	Counter weigh.	56		Cable			W: Only 110/120, 220/240V model
	24501354	Headshell	57		Voltage selector (W)			

MECHANISM-EXPLODED VIEW



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REF. NO.	PARTS NO.	DESCRIPTION
1		Sub-chassis ass'y
2	24506477	Clutch lever
3	24506478	Spring, clutch lever
4	24503029	Spring, clutch lever
5	24503079	Switch lever (2)
6	893030	E-3, Circlip
7	24506480	FW4.7φx12φx0.5 ^t , Washer
8	24506518	Repeat lever
9	24506482	CSTW-2.4, CS ring
10	24506483	FW4.7φx12φx0.3 ^t , Washer
11	24506484	Start lever
12	24506481	Repeat lever
13	24500747	Main gear ass'y
13-1		Main gear

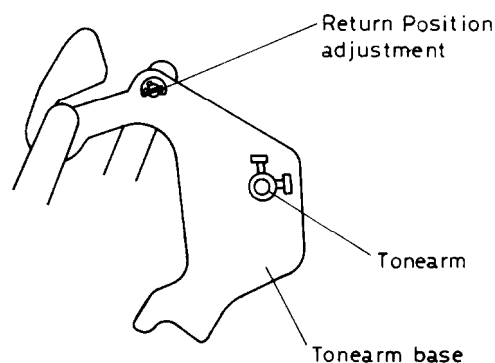
REF. NO.	PARTS NO.	DESCRIPTION
13-2	893020	E-2, Circlip
13-3	24506099	Clutch plate
13-4	24500405	Guide, clutch plate
13-5	24501012	Spring
13-6	24500338	Lever
14	893040	E-4, Circlip
15	24506485	FW4.7φx12φx0.8 ^t , Washer
16	24500408	Guide, selector
17	24506486	Spring
18	24500301	Arm, selector
19	24506487	FW3.2φx13φx0.8 ^t , Washer
20	833130162	FMT3x16, Screw
21	24503054	Spring, selector arm
22	24506488	Lever, switch

REF. NO.	PARTS NO.	DESCRIPTION
23	24506489	Rotation plate ass'y
23-1		Base
23-2	24506491	Spring
23-3	24506492	Rotation plate
23-4	24506493	Shaft, friction
23-5	24501019	Shaft, plate
23-6	24506494	Spring, friction
23-7	24500516	Friction rubber
23-8	893020	E-2, Circlip
23-9	893030	E-3, Circlip
23-10	24506495	4.7φx10φx0.5 ^t , Fiber washer
24	24506501	FW6.2φx12φx0.3 ^t , Washer
25	24506502	FW6.2φx12φx0.2 ^t , Washer

ADJUSTMENT PROCEDURES

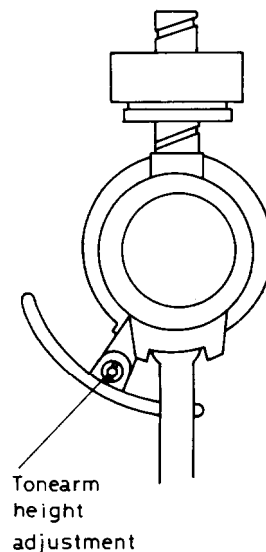
1. Auto-return position

Adjust the return position by the eccentric pin attached by the tonearm base. To adjust the return position for faster, turn the eccentric pin clockwise. To adjust the return position for later, turn the eccentric pin counter-clockwise.



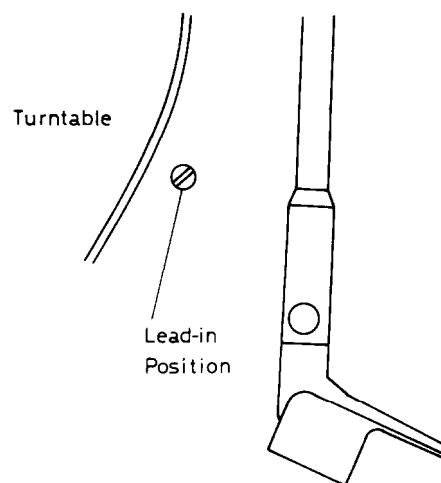
2. Tonearm height

- 1) Press the record size selector to 17cm position and the power switch to the ON position.
 - 2) Press the play button.
 - 3) As soon as the tonearm comes over the turntable platter, press the power switch to the off position.
 - 4) Adjust the screw on the lifter plate for 12 ± 1 mm height between the stylus tip and the turntable platter mat.
- Note: To adjust the height for lower, turn the screw clockwise. To adjust the height for higher, turn the screw counter-clockwise.



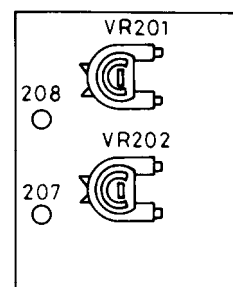
3. Lead-in position

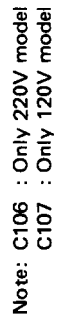
Remove the rubber cap. Press the record size selector to 30cm position and the speed selector to 45 r.p.m. To adjust lead-in position for faster (outside), turn the eccentric pin clockwise. To adjust the lead-in position for later (inside), turn the eccentric pin counter-clockwise.



4. Speed control

- 1) Put the stroboscope on the turntable platter.
- 2) Set the speed control so that the center L.E.D. lights up.
- 3) Press the speed selector switch to 33 r.p.m., and adjust VR201 so that the stroboscope stripes appear to be stationary.
- 4) Then switch over to 45 r.p.m., and adjust VR202 to obtain the same stationary stroboscope condition.





CIRCUIT NO.	PARTS NO.	DESCRIPTION
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
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100	100	100

X101	Transistor	2SD468(B) or 2SD468(C)
	2211682 or 2211683	
ZD101 D101 D102	Diodes	RD12EB1 W03(B) 1S953
	223963	
	223851	
	223104	
R101	Resistor	270Ω, 1W, Metal oxide film
	441622714	
C101 C102-C105 C106 C107	Capacitors	470μF, 16V, Elect. 47μF, 16V, Elect. 0.047μF, 250V, IS (G/W model) 0.01μF, 125V, CS (D model)
	352744711	
	352744701	
	3500063	
	3500060	
PT101	Power transformer	NPT-720D, D model NPT-720G, G/W model
	230448	
	230449	
A101	Power supply cable	D model G/W model
	24505076	
	24505068	

INDICATOR AND MOTOR DRIVE CIRCUIT PC BOARD

CIRCUIT NO.	PARTS NO.	DESCRIPTION
IC201	IC	
	222465	NJM4558D
	X201	Transistor
2210353 or		2SC945(P) or
2210354		2SC945(Q)
D201-D203 D204, D206	Diodes	
	223104	1S953
	225049 or	SEL-1121R(B) or
	225050	SEL-1121R(C)
	D205	225051 or
225052		SEL-1321G(C)
VR201 VR202 VR203	Resistors	
	24509229	VZ083L1 5K, Semi-fixed
	24509230	VZ083L1 10K, Semi-fixed
	5148054	N16RG2KB15, Speed control
		variable

SPEED SELECTOR PC BOARD

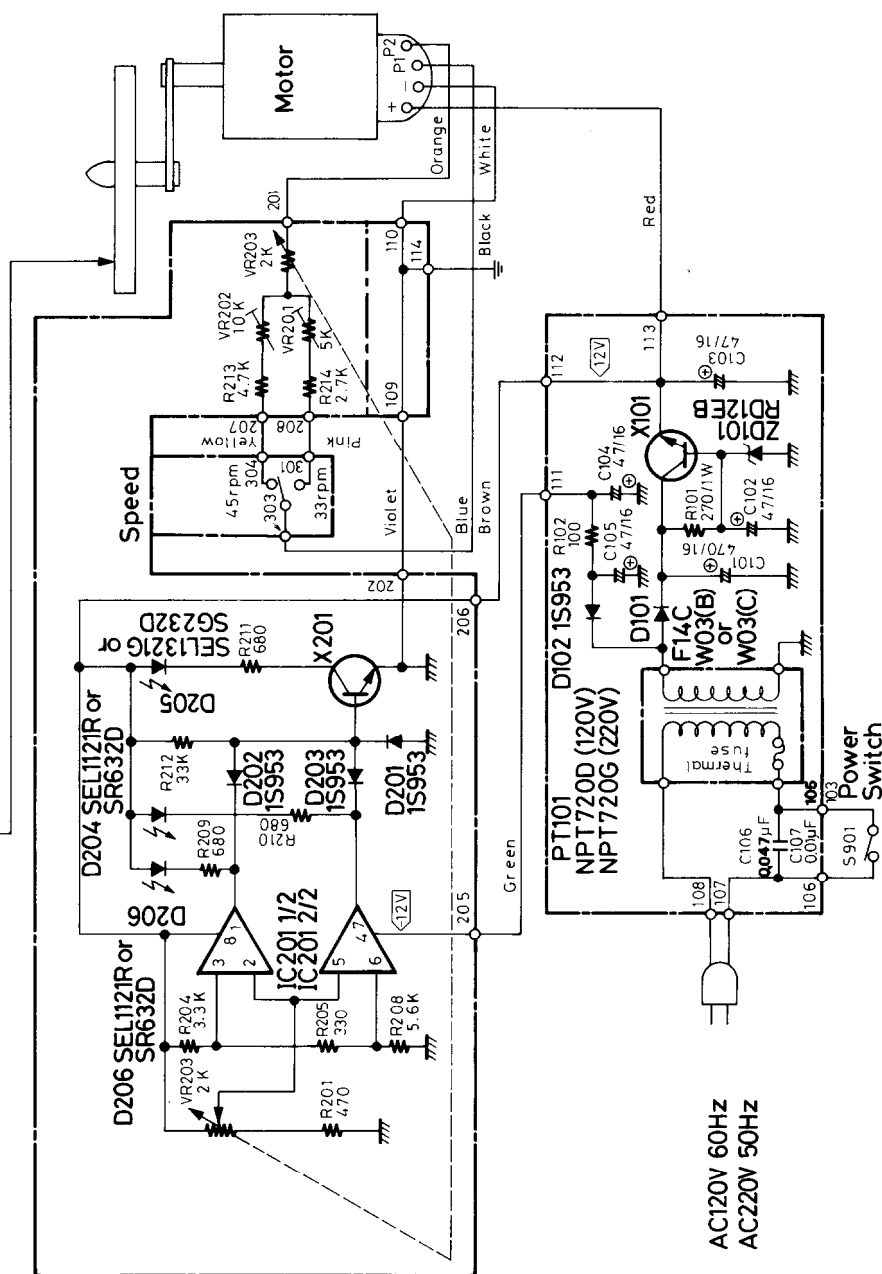
CIRCUIT NO.	PARTS NO.	DESCRIPTION
SW301	25035189	Speed selector

The diagram illustrates the wiring for a 5P terminal. On the left, the 'Tonearm assy' is shown with five output lines: Red, Green, Black, Blue, and White. These lines are connected to a central point. The '5P Terminal' on the right has five inputs: Rch, Lch, and two unlabeled inputs. The wiring is as follows:

- The Red line connects to the top input of the 5P terminal.
- The Green line connects to the middle input of the 5P terminal.
- The Black line connects to the bottom input of the 5P terminal.
- The Blue line connects to the Rch input of the 5P terminal.
- The White line connects to the Lch input of the 5P terminal.

 A ground symbol is connected to the central point of the tonearm assembly outputs.

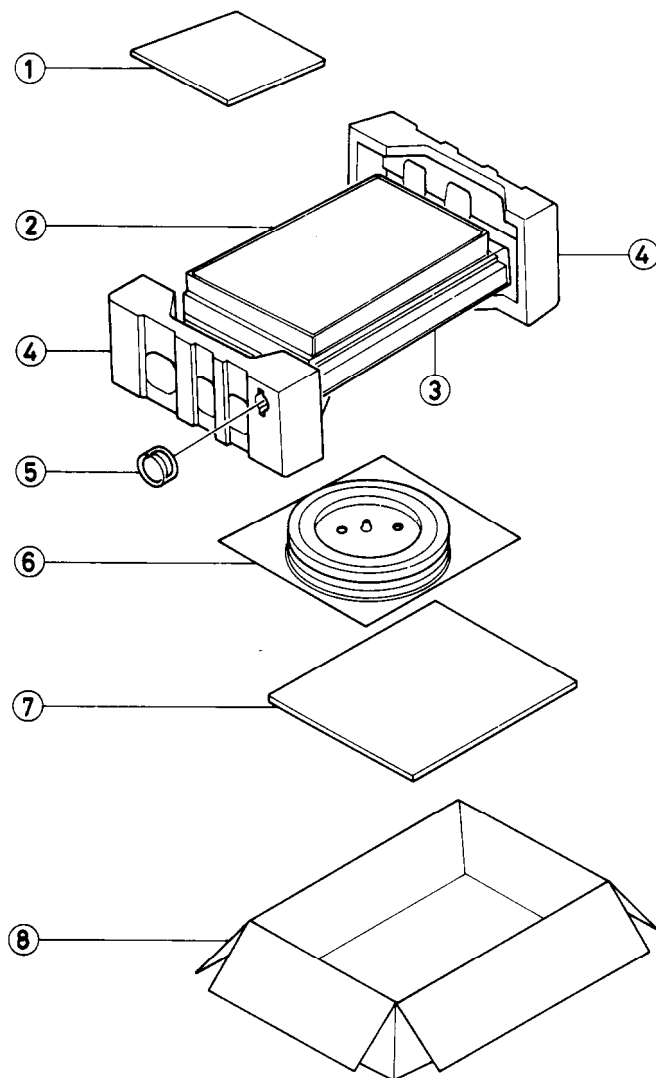
- | | |
|-------|---|
| X101 | 2SD667(B)(C) 2SD571(L)(M)
2SD468(B)(C) 2SD778(B)(C)
2SD471(M)(L) or 2SC2236(Q)(Y) |
| X201 | 2SC945(P)(Q) or 2SC1815(V)(GR) |
| IC201 | JPCA458C
NJM4558D
NJM4559D
RC4558P or TL4558P |



NOTE:

1. ALL RESISTORS ARE IN OHMS, $\frac{1}{2}$ WATT UNLESS OTHERWISE NOTED.
2. ALL CAPACITORS ARE IN μ F, 50WV UNLESS OTHERWISE NOTED.
3. ELECTROLYTIC CAPACITORS (~~10~~¹⁵) ARE IN μ F/MV.
4. VOLTAGE IS MEASURED WITH V.T.V.M. WHEN TONEARM IS IN REST POSITION.
5. CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.
6. C106 : Only 220V model
C107 : Only 120V model

PACKING PROCEDURES



D Model

REF. NO.	PARTS NO.	DESCRIPTION
1	292049A	Accessory bag ass'y
	24509197	45 r.p.m. adaptor
	24501330	Overhang gauge
	29340459	Cartridge mounting part ass'y
	29365006	Instruction manual
	29358002	Warranty card (Only U.S.A. model)
		Service station list (Only U.S.A. model)
2	29100005	220x330mm, Poly bag
3	29100050	Protection sheet
4	29095012	Protection sheet
5	24509223	Pad
6	24501350	Counter weight
	29100002	30x150mm, Poly bag
	24502117	Turntable platter
	242129B	Belt
	24509111B	T.T. mat
	29100046	370x470mm, Poly bag
7	24509224	Pad sheet
8	29050394	Master carton box

G/W Model

REF. NO.	PARTS NO.	DESCRIPTION
1	292049A	Accessory bag ass'y
	29340460	45 r.p.m. adaptor
	29365005-2	Instruction manual
		Warranty card (Only Germany model)
2	29100005	220x330mm, Poly bag
3	29100050	Protection sheet
4	29095012	Protection sheet
5	24509223	Pad
6	24501350	Counter weight
	29100002	30x150mm, Poly bag
	24502117	Turntable platter
	242129B	Belt
	24509111B	T.T. mat
	29100046	370x470mm, Poly bag
7	24509224	Pad sheet
8	27050394	Master carton box

Notes: D --- 120V model G --- 220V model W --- 110 ~ 120/220 ~ 240V model

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