

# ONKYO SERVICE MANUAL

model **CP-80M**



model **CP-55A**



model **CP-30M**



**ONKYO**®  
**AUDIO COMPONENT**

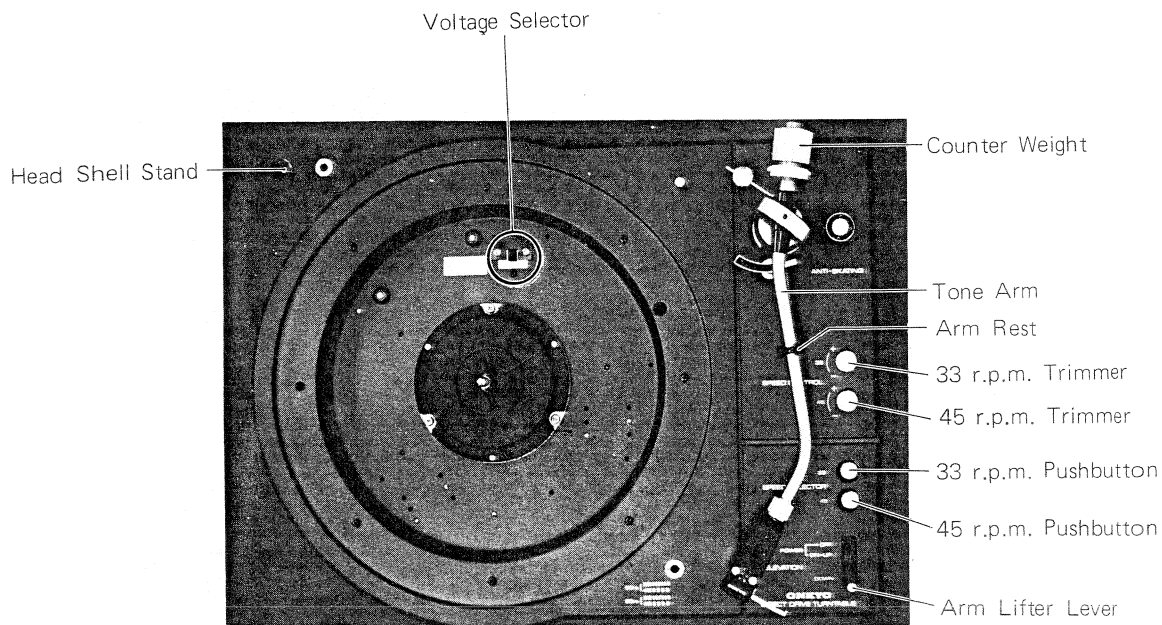
## SPECIFICATIONS

	CP-80M	CP-55A	CP-30M
Type	Manual player with direct drive turntable	Auto return Player	Manual player with arm Lifter
Turntable	31cm, Alminum diecasted with stroboscope direct driven. Weight: 1.6kg	30cm, Alminum diecasted belt driven.	30cm, Alminum diecasted belt driven.
Motor	8 Poles DC servo motor	4 Pole Synchronous	4 Pole Synchronous
Speed	33-1/3, 45 r.p.m. adjustable	33-1/3, 45 r.p.m.	33-1/3, 45 r.p.m.
Pitch Control	Variable $\pm 2\%$		
Wow & Flutter	below 0.06%	below 0.08%	below 0.18%
Signal to Noise Ratio	over 55dB	over 40dB	over 30dB
Tone Arm	Static balanced pipe arm with headshell exchangeable, inside force canceller & lateral balancer. Stylus pressure: 0 - 3 gr. Overhang: 15mm Effective arm length: 237mm Tracking error: $\pm 1.5^\circ$	Static balanced pipe arm with headshell exchangeable system, anti-skating system, lateral blancer and lifter. Tracking force: 0 - 4 g. Overhang: 15mm Effective arm length: 210mm Tracking error: $\pm 1.5^\circ$	Static Balanced Pipe arm with headshell exchangeable system, lateral balancer and arm lifter. Tracking Force: 0 - 4 g. Overhang: 9.4mm Effective arm length: 215mm
Cartridge	Moving Magnet type (EMPIRE 909 E/X), 0C-30M	Moving Magnet type 0C-29M	Moving Magnet type 0C-24M
Frequency Response	12-25,000Hz	20-25,000Hz	30-15,000Hz
L/R Balance	1.5dB (at 1kHz)	2.5dB	3dB
Separation	25dB (at 1kHz)	25dB (1kHz)	20dB
Output	5mV (at 1kHz)	3.5mV (1kHz)	3.5mV at (1kHz)
Compliance	$10 \times 10^{-6}$ cm/dyne	$10 \times 10^{-6}$ cm/dyne	$8 \times 10^{-6}$ cm/dyne
Load impedance	50k $\Omega$	50k $\Omega$	50k $\Omega$
Correct stylus pressure	2.0 g	2.0 g	2.5 g
Stylus	0.4 x 0.7 mil oval type diamond	0.6 mil diamond	0.5 mil diamond
Stylus Model No.	DN-30ST	DN-29ST	DN-24ST
Power Supply Rating	AC 100-120/220-240V 50/60Hz	AC 110-120/220-240V 50/60Hz	AC 110-120/220-240V 50/60Hz
Power Consumption	6W	10W	15W
Dimensions	480W x 180H x 405D mm 19"W x 7-1/8"H x 15-3/4"D	480W x 190H x 400D mm 18-29/32"W x 7-15/32"H x 15-24/32"D	442W x 165H x 380D mm 17-3/8"W x 6-1/2"H x 14-15/16"D
Weight	9.5kgr. 21 lbs.	8kg 17.6 lbs.	7kgr. 15.4 lbs.

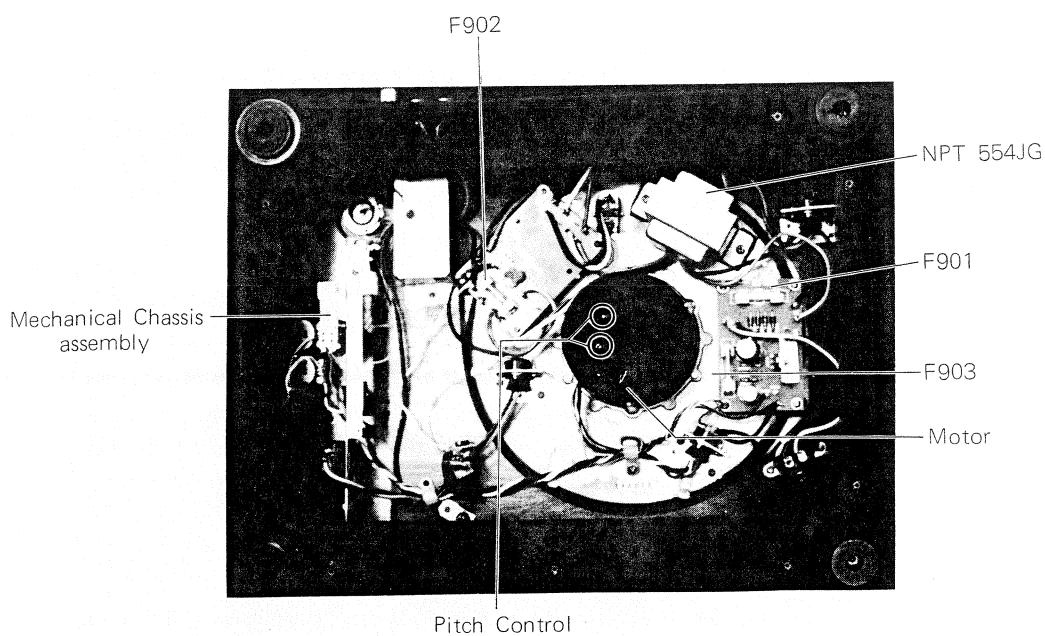
Specifications are subject to change without notice.

# CP-80M

## TOP VIEW

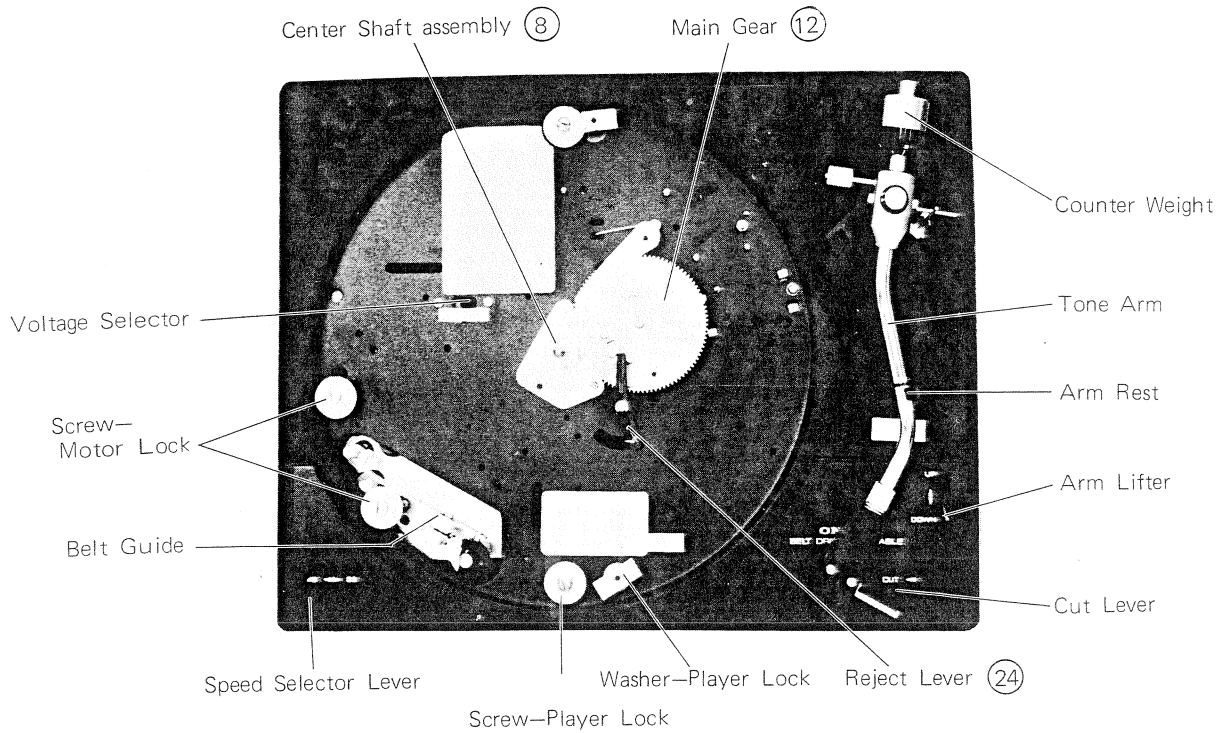


## BOTTOM VIEW

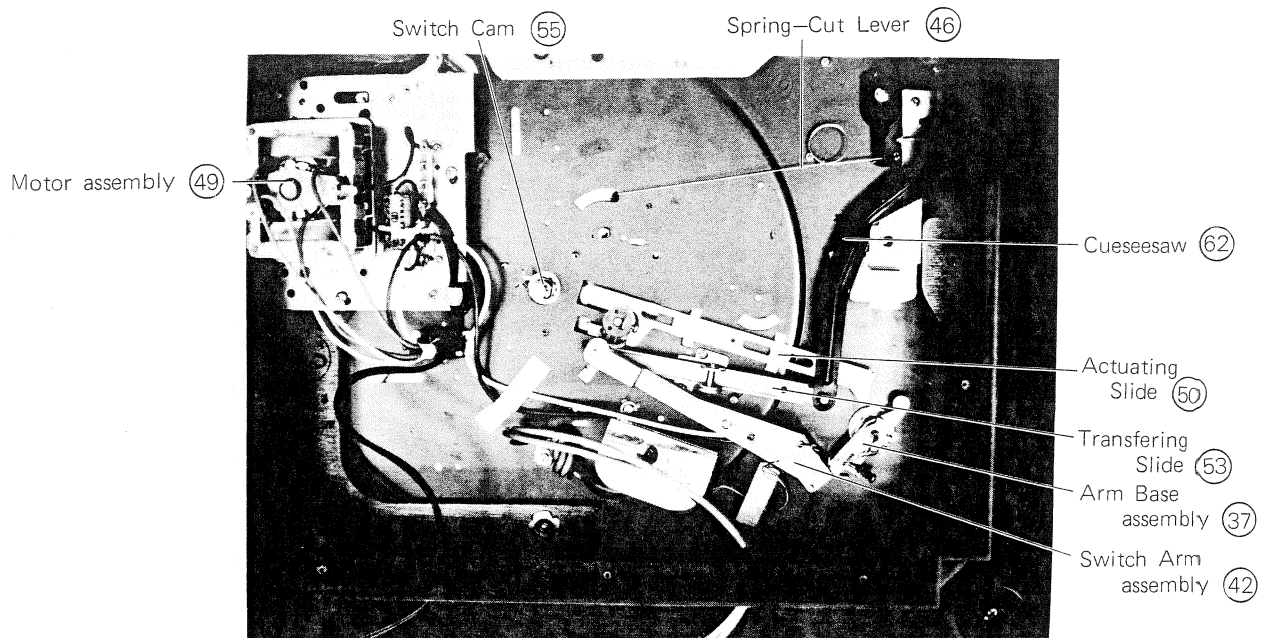


# CP-55A

## TOP VIEW

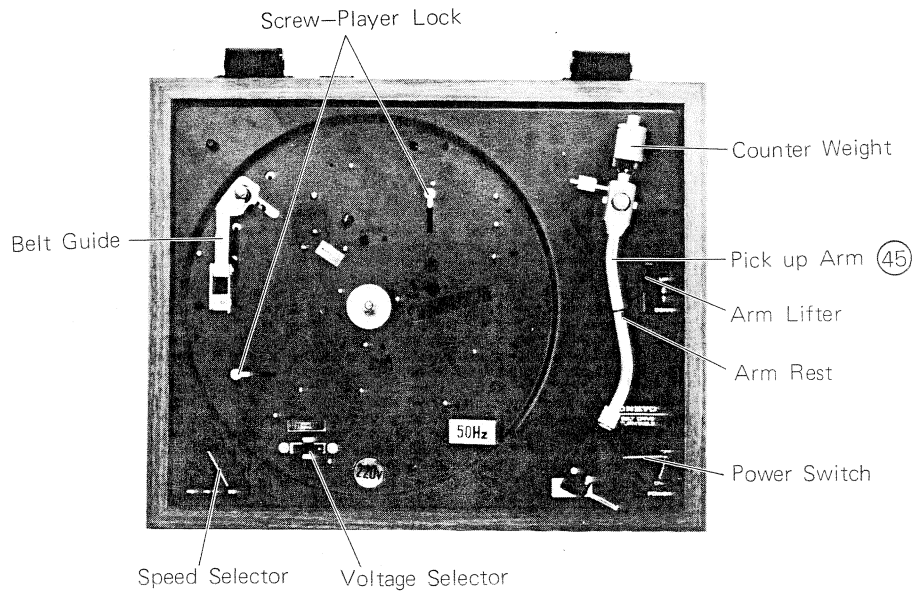


## BOTTOM VIEW

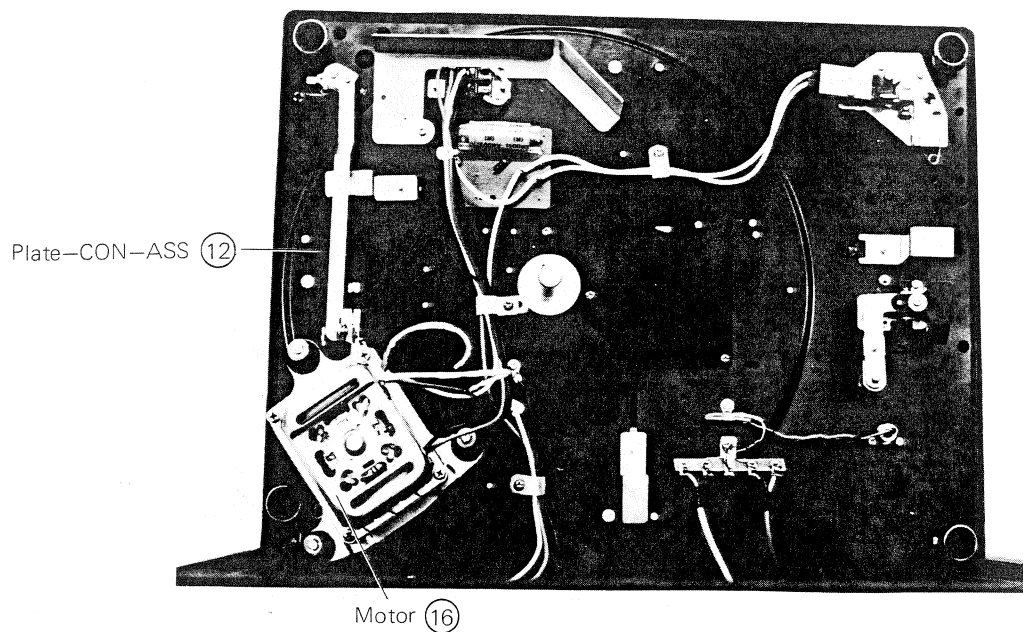


# CP-30M

## TOP VIEW



## BOTTOM VIEW



# SERVICE ADJUSTMENT AND PROCEDURE

## Power voltage selection

The record player has been set at a voltage of 220/240V before shipment.  
To change for 110/120V, turn switch to the right position.  
To change voltage, detach the fixture plate, adjust switch position and reattach the fixture plate.  
The voltage selector switch is located under the turntable.

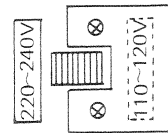


Fig. 1

## 60Hz Pulley replacement

This turntable was adjusted to 50Hz before shipment.  
When operating this set on 60Hz power, it is necessary to change the pulley.  
To change the pulley, first remove the 50Hz pulley with a screw driver and replace it with the 60Hz pulley in the accessory box.  
Adjust pulley height to line up with drive belt guide before tightening pulley lock screw.  
Adjust the pulley up or down so that the belt does not touch the belt-guide.  
Tighten pulley lock screw.

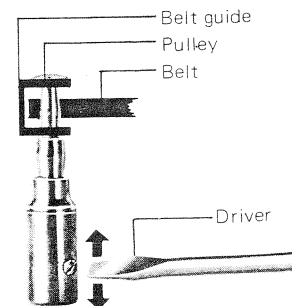


Fig. 2

## Tonearm height (CP-80M)

Adjust the height with the lever B. (See Fig. 3)

The tonearm lifts up when the lever B is bended up, and the tonearm goes down when it is bended down.

Adjust the height slightly with the adjustment screw of the elevation plate.

### (Notes)

When space B is less, tonearm doesn't go down, for oil is attached to the screw.

The lever B is interlocked to the microswitch for muting.

Moving the lever B, certify the action of the muting.

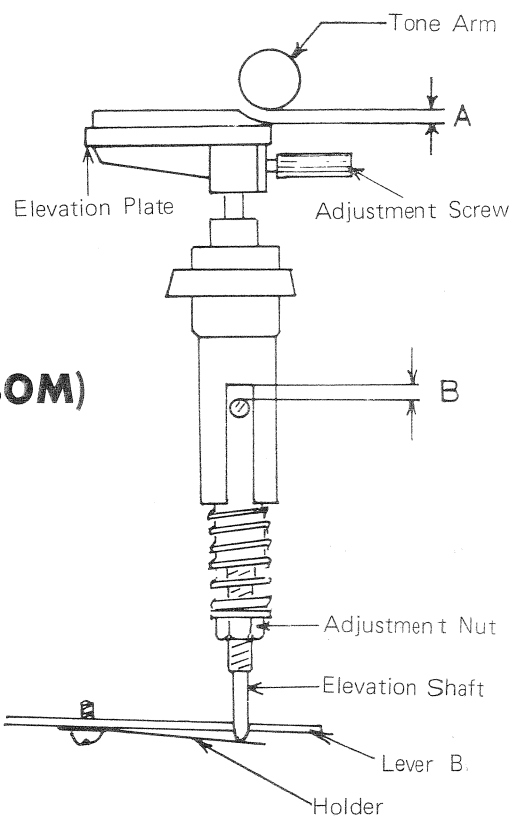


Fig. 3

## Tonearm descending speed (CP-80M)

Adjust descending speed with the adjustment nut.

To accelerate descending speed, the nut moves up.

To decelerate, the nut moves down.

## Speed(pitch) Adjustment (CP-80M)

The variable pitch control of the motor allows adjustment of the turntable speed within a 4% range. (+2% to -2%)

Turning the pitch control clockwise produces increasing speed.

Turning the pitch control counterclockwise produces decreasing speed.

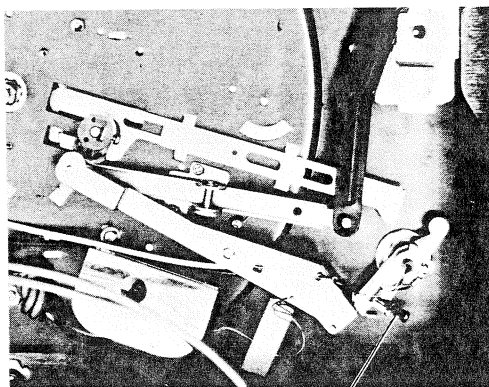
## Auto-return (CP-55A)

Adjust the return position with the fine adjustment screw.

After final adjustment, apply lock-tite to the screw.

The stylus point moves below the correct point when it is rotated clockwise.

The stylus point moves closest to the record edge when it is rotated counterclockwise.



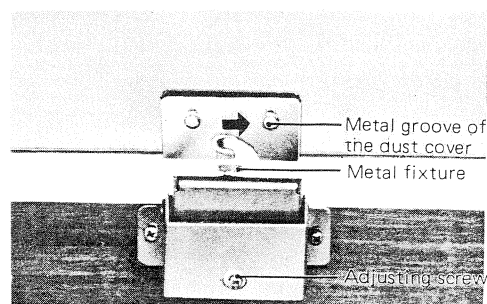
Fine Adjustment Screw

## Dust cover hinge

Fit the metal groove of the dust cover in the metal fixture of the turntable board and draw the dust cover in the marked direction.

This will enable you to fix the dust cover firmly.

As the dust cover is a free stop-type it can be opened to any angle. If the regulation of its opening angle is difficult because of the condition of the spring, turn the adjustment screw at the back of the hinge. Turning the screw to the left results in firm tightening of the spring.



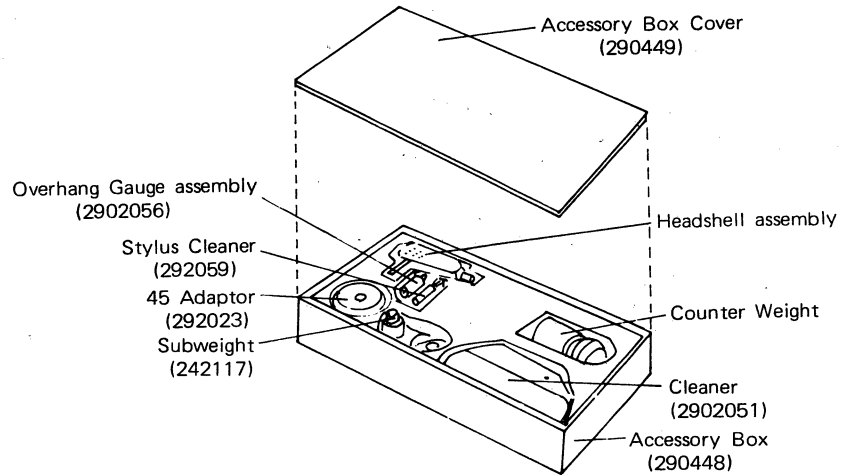
Turntable board



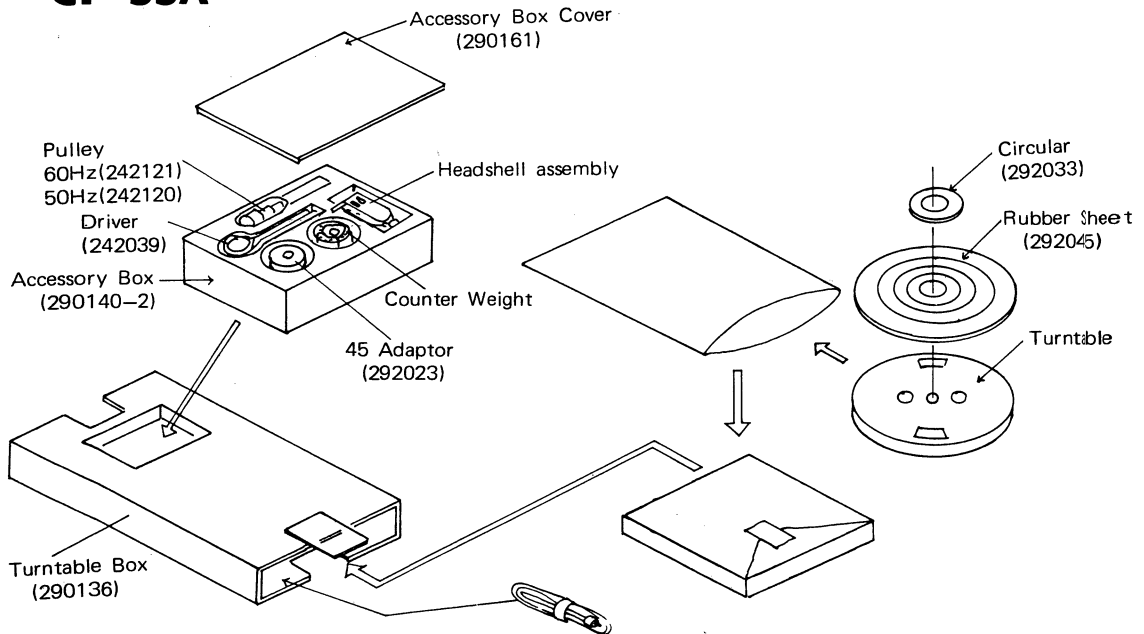
# Packing procedure

## Accessory Box

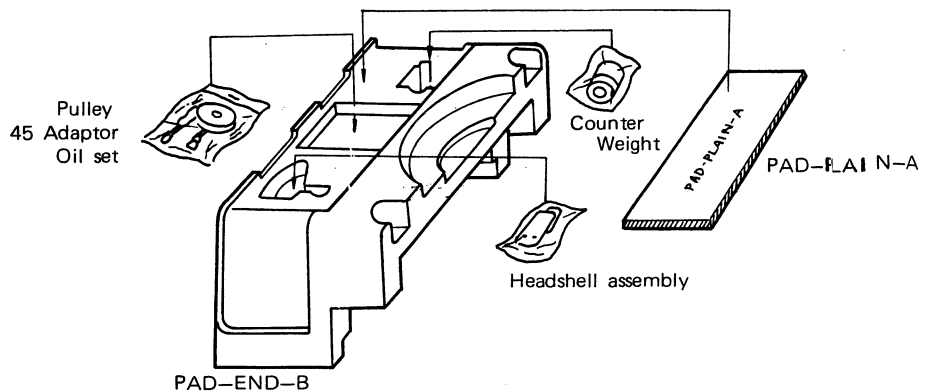
### CP-80M



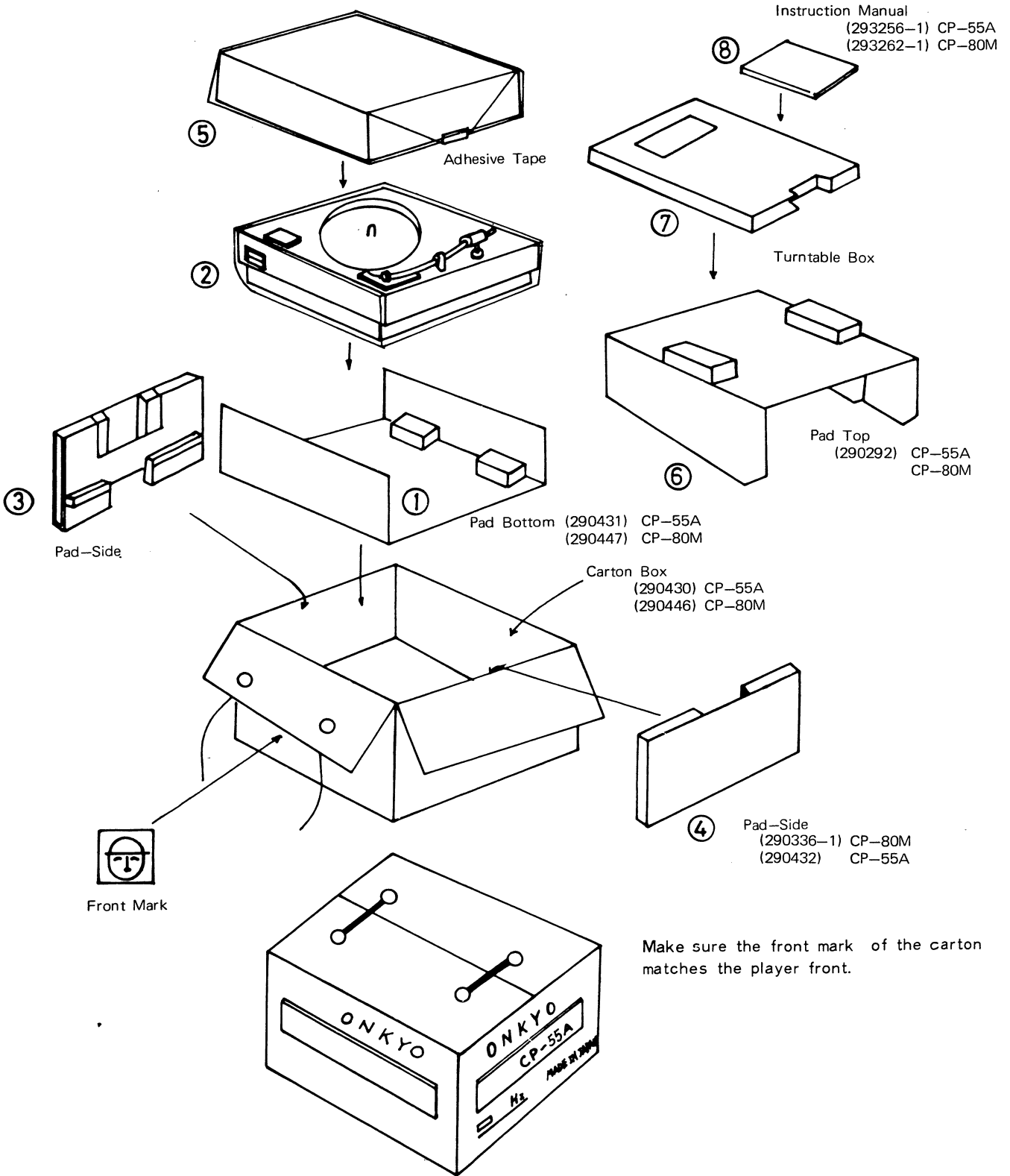
### CP-55A



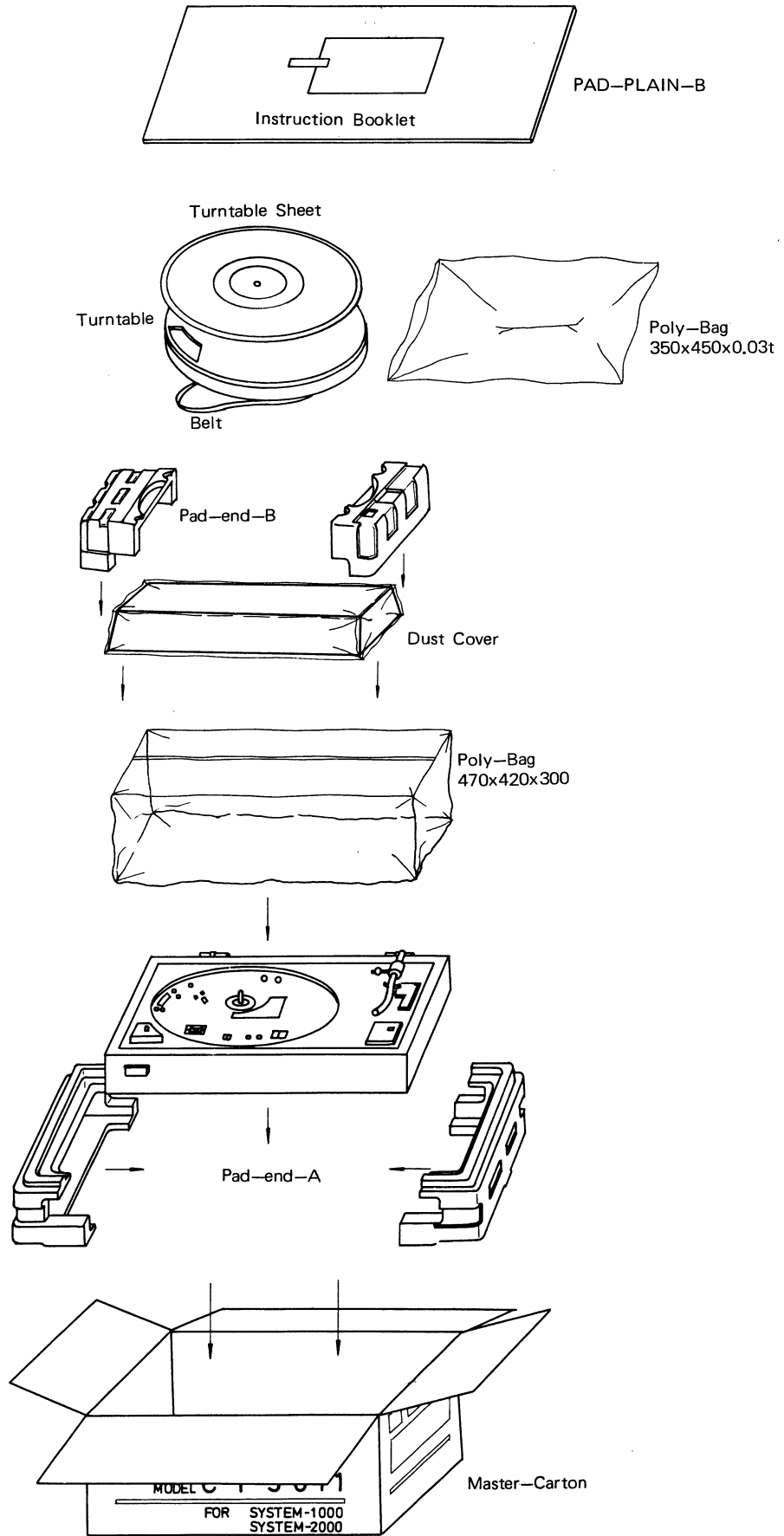
### CP-30M



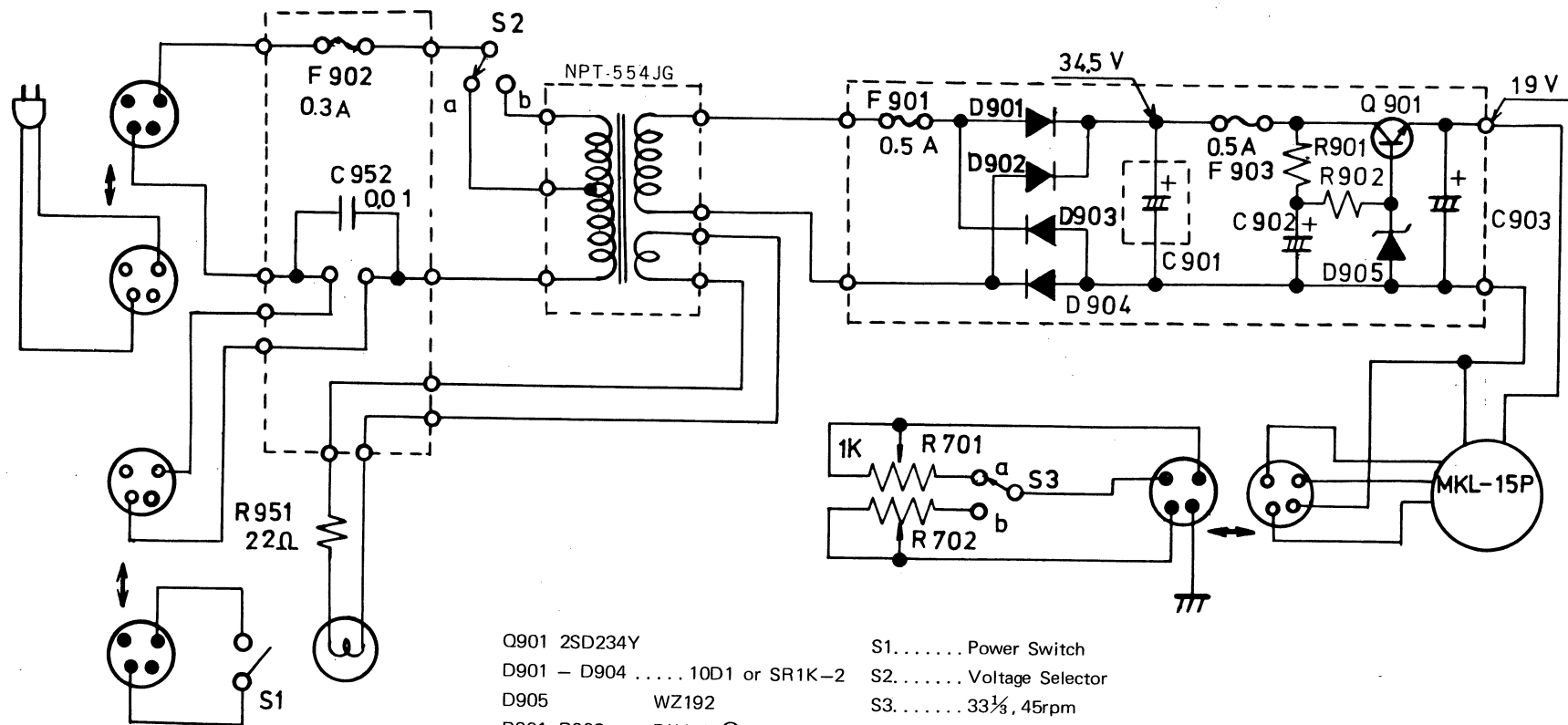
# CP-55A



# CP-30M



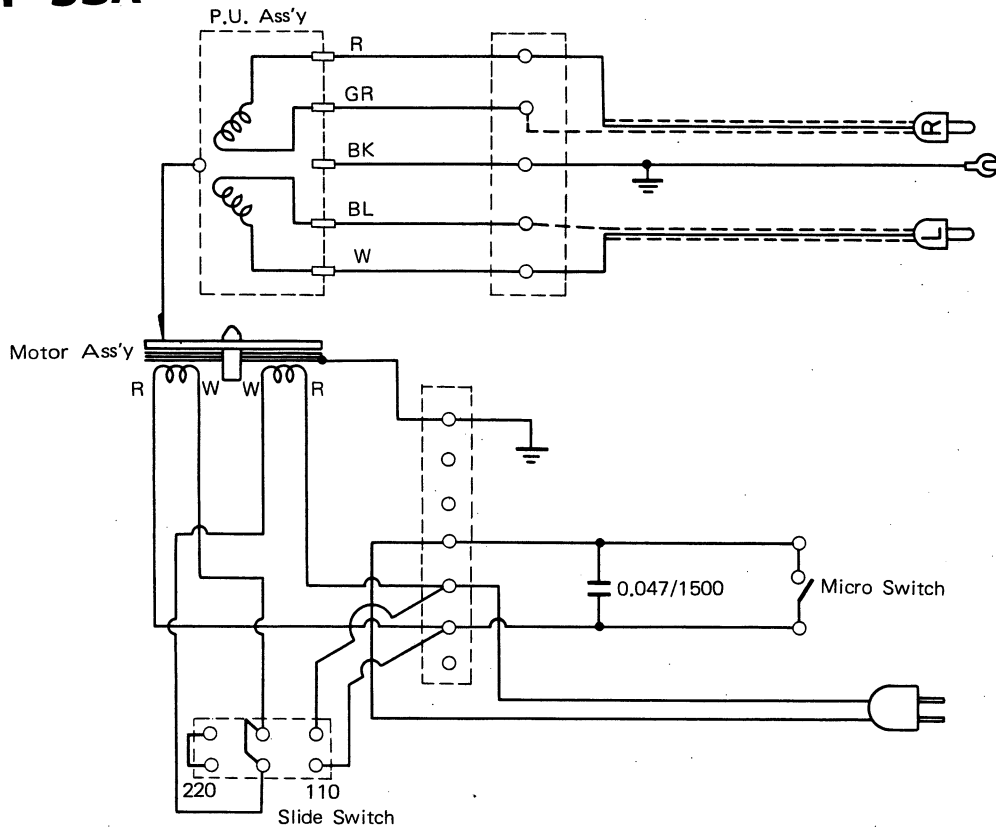
# Circuit Diagram CP-80M



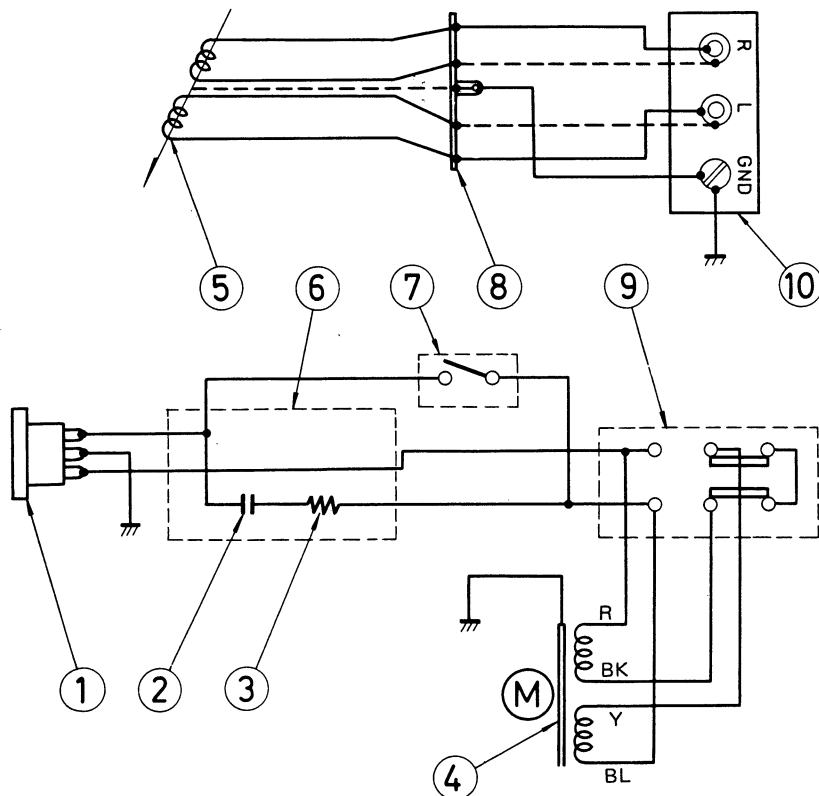
- |                                  |                                  |
|----------------------------------|----------------------------------|
| Q901 2SD234Y                     | S1..... Power Switch             |
| D901 - D904 ..... 10D1 or SR1K-2 | S2..... Voltage Selector         |
| D905 WZ192                       | S3..... 33 $\frac{1}{3}$ , 45rpm |
| R901, R902 R $\frac{1}{4}$ J560Ω | Speed Selector                   |
| C903 25WV 100μF                  |                                  |
| C902 50WV 220μF                  |                                  |
| C901 50WV 1000μF                 |                                  |
| R701, R702..... N24R1KB25        |                                  |

# Circuit Diagram

## CP-55A

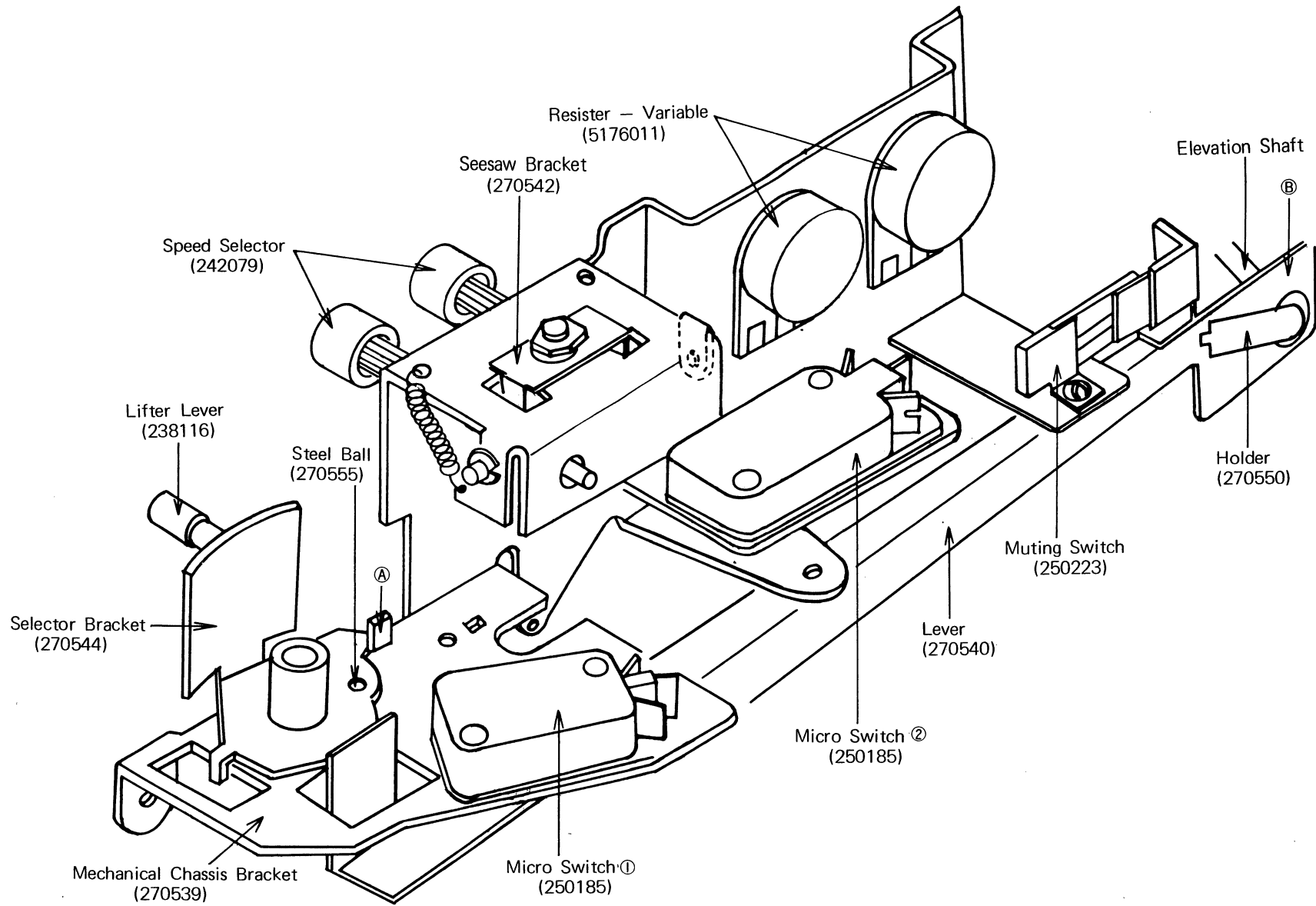


## CP-30M

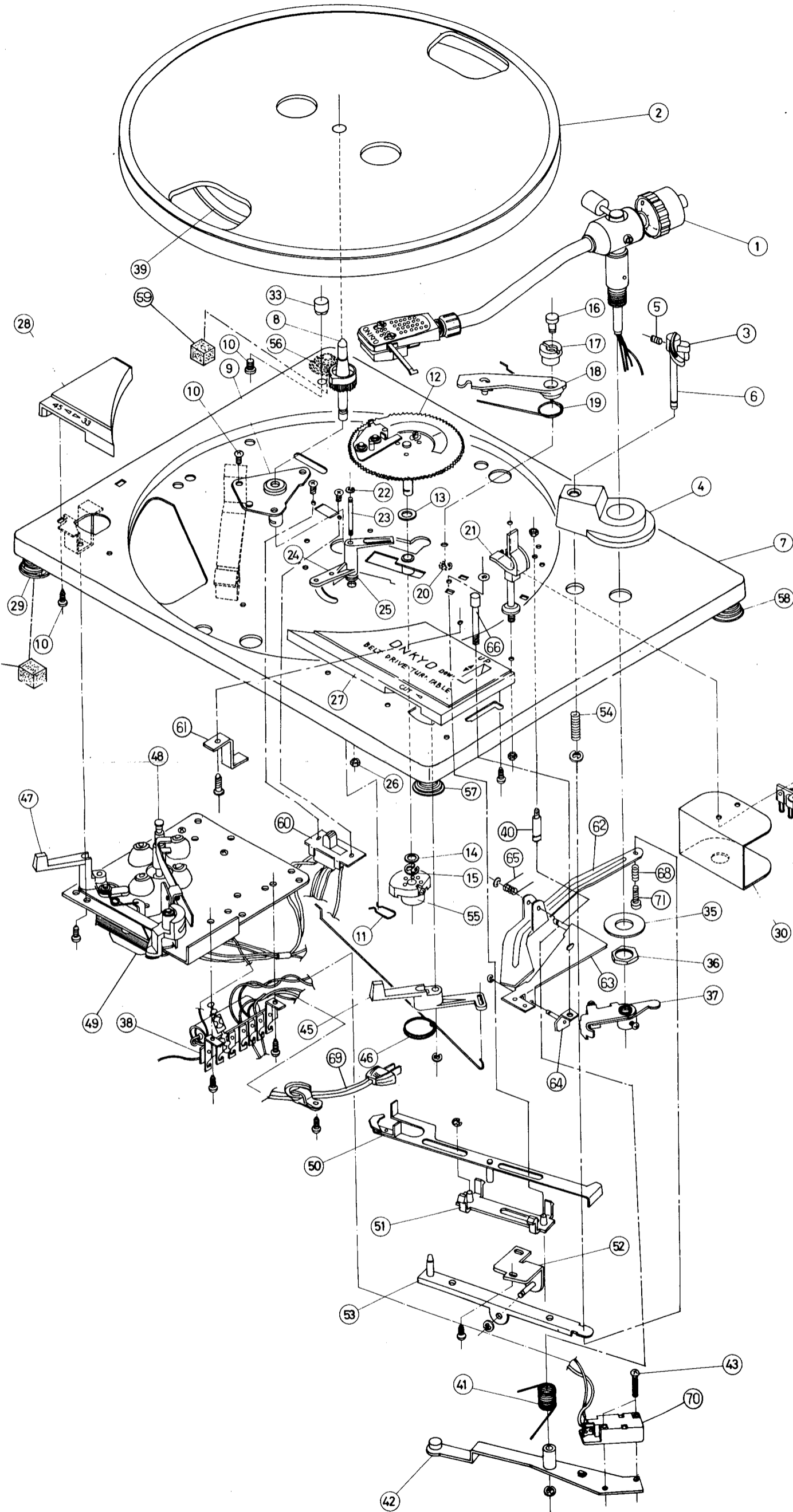


- 1 OUTLET 3P
- 2 C 0.47 -M1500B
- 3 RC 1/2-10-K
- 4 MODR-AC-4
- 5 CARTRIDGE-MM
- 6 PCB
- 7 SW-MICRO
- 8 TERMINAL-114P
- 9 SW-IEESA
- 10 TERMINAL-CPX

**Exploded View CP-80M**



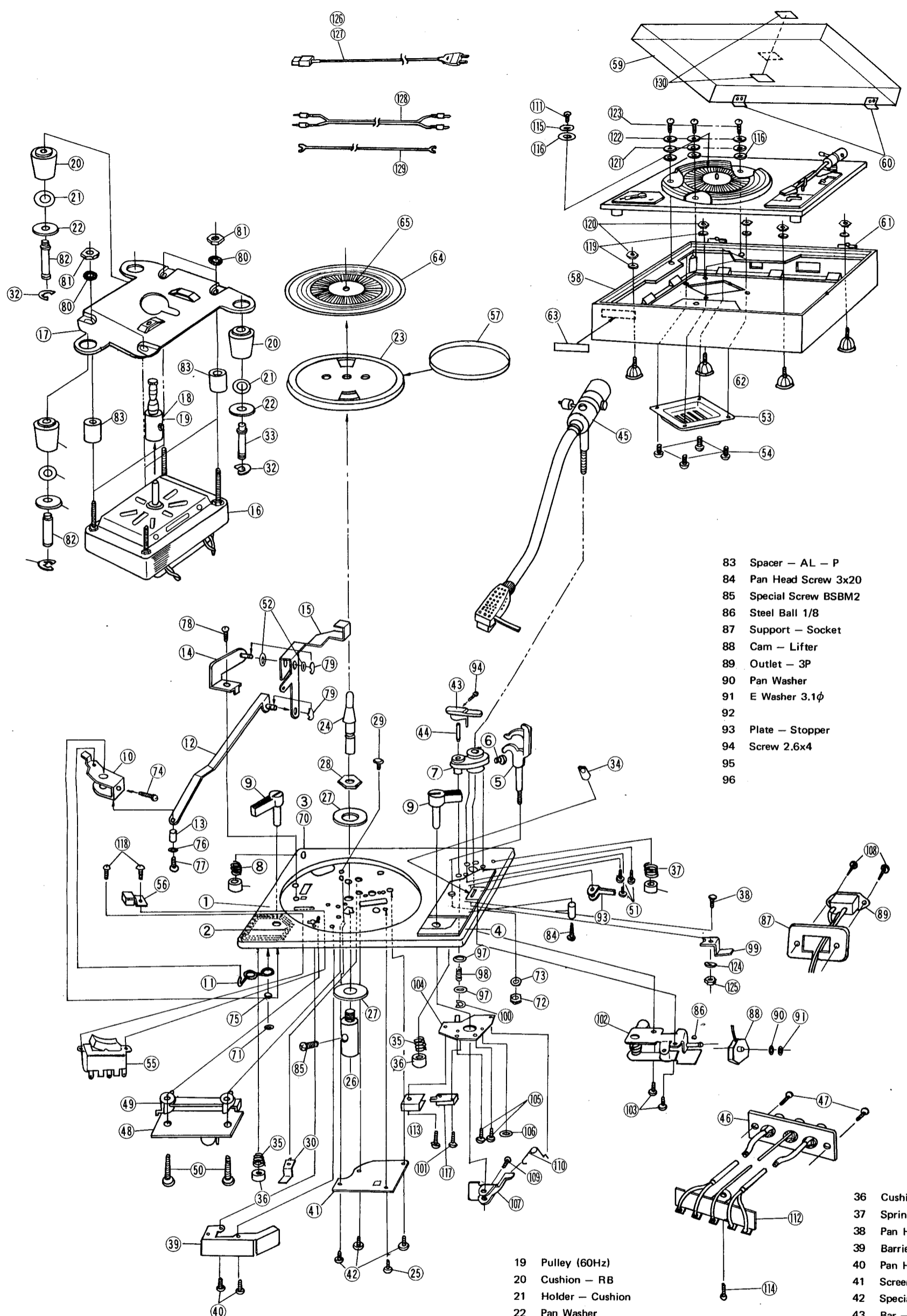
# Exploded View CP-55A



- 1 Tonearm assembly
- 2 Turntable
- 3 Elevation Plate
- 4 Arm Stand
- 5 Screw FT3x3
- 6 Elevation Shaft
- 7 Baseplate Sub assembly
- 8 Center Shaft assembly
- 9 TT Bearing assembly
- 10 Screw FMT+3x8
- 11 Stopper
- 12 Main Gear assembly
- 13 Washer
- 14 Washer
- 15 Circlip E-4
- 16 Stud - Gear Stopper
- 17 Eccentric Base - Gear Stopper
- 18 Gear Stopper
- 19 Spring - Gear Stopper
- 20 Circlip E-4
- 21 Arm Rest assembly
- 22 Circlip
- 23 Shaft - Reject Lever
- 24 Reject Lever
- 25 Spring - Reject Lever
- 26 Nut
- 27 Cover - Cut Lever
- 28 Cover - Speed Selector
- 29 Mounting Spring
- 30 Shield Cover
- 31 Lug terminal assembly (5)
- 32 Cord Holder
- 33 Adaptor Rest
- 34 Output Cord assembly
- 35 Washer - Arm Base
- 36 Nut - Arm Base
- 37 Arm Base assembly
- 38
- 39 Belt
- 40 Shaft - Switch Arm
- 41 Spring - Switch Arm
- 42 Switch Arm assembly
- 43 Screw FM ⊕ 3x14
- 45 Cut Lever
- 46 Spring - Cut Lever
- 47 Speed Selector Lever
- 48 Pulley
- 49 Motor assembly
- 50 Actuating Slide
- 51 Base - Actuating Slide
- 52 Base - Transferring Slide
- 53 Transferring Slide
- 54 Spring - Elevation Shaft
- 55 Switch Cam
- 56 } Mounting Spring
- 57 }
- 58 }
- 59 Mounting Stud
- 60 Slide Switch
- 62 Cueseesaw
- 63 Bracket - Cueseesaw
- 64 Eccentric Cam
- 65 Spring (1) - Cueseesaw
- 66 Arm Lifter
- 67 GND Cord
- 68 Spring (2) - Cueseesaw
- 69 AC Cord
- 70 Microswitch
- 71 Screw FM ⊕ 3x12

# Exploded View CP-30M

- 16 -



- 51 Pan Head Screw 3x10
- 52 Washer
- 53 Cover - Motor
- 54 Pan Head Screw 3x10
- 55 Switch - Seesaw
- 56 Plate - Switch
- 57 Belt
- 58 Cabinet
- 59 Cover - Dust
- 60 Hinge - B
- 61 Hinge - A
- 62 Foot - RB
- 63 Mark
- 64 Turntable Sheet
- 65 Circular Plate
- 66
- 67
- 68
- 69
- 70 Holder - Adaptor
- 71 CS - Ring 3φ
- 72 Nut 3φ
- 73 Spring Washer 3φ
- 74 Pan Head Screw 3x16
- 75 Washer 3φ
- 76 Washer 3φ
- 77 Pan Head Screw 2.6x6
- 78 Pan Head Screw 3x8
- 79 E Washer 3.1φ
- 80 Spring Washer 4φ
- 81 Nut 4φ
- 82 Shaft
- 83 Spacer - AL - P
- 84 Pan Head Screw 3x20
- 85 Special Screw BSBM2
- 86 Steel Ball 1/8
- 87 Support - Socket
- 88 Cam - Lifter
- 89 Outlet - 3P
- 90 Pan Washer
- 91 E Washer 3.1φ
- 92
- 93 Plate - Stopper
- 94 Screw 2.6x4
- 95
- 96
- 97 Washer
- 98 Spring - Push
- 99 Stay - Panel - A
- 100 E Washer 3.1φ
- 101 Pan Head Screw 3x16
- 102 Lever - Lift - ASS
- 103 Pan Head Screw 3x8
- 104 Holder - Switch
- 105 Pan Head Screw 3x10
- 106 CS - Ring 3φ
- 107 Plate - Switch
- 108 Flat Wooden  
Screw 3.1x13
- 109 Pan Head Screw 3x8
- 110 Spring - Torsion - B
- 111 Pan Head Screw 4x12
- 112 Terminal - 1L4P
- 113 Barrier
- 114 Special Screw 3x8
- 115 Fiber Washer
- 116 Label - Cramp
- 117 Switch - Micro
- 118 Special Screw - W 3x10
- 119 Washer 3φ
- 120 Nut 3φ
- 121 Washer 5φ
- 122 Spring Washer 5φ
- 123 Pan Head Screw 5x16
- 124 Spring Washer 3φ
- 125 Nut 3φ
- 126 Cord - AC
- 127 Socket - AC
- 128 Plug - US1P - Cord
- 129 Earth - Cord
- 130 Name Plate

- 17 -

- |         |              |                    |                  |                 |                     |               |              |                  |                        |                    |           |                |                          |                 |    |                |          |         |                       |                 |                       |                       |            |                       |           |                  |                       |                   |                |                   |                                  |              |               |                       |
|---------|--------------|--------------------|------------------|-----------------|---------------------|---------------|--------------|------------------|------------------------|--------------------|-----------|----------------|--------------------------|-----------------|----|----------------|----------|---------|-----------------------|-----------------|-----------------------|-----------------------|------------|-----------------------|-----------|------------------|-----------------------|-------------------|----------------|-------------------|----------------------------------|--------------|---------------|-----------------------|
| 1 Panel | 7 Stand - PU | 13 Spacer - BS - P | 19 Pulley (60Hz) | 20 Cushion - RB | 21 Holder - Cushion | 22 Pan Washer | 23 Turntable | 24 Shaft - Table | 25 Pan Head Screw 26x3 | 26 Bearing - Table | 27 Washer | 28 Special Nut | 29 Special Screw - W 3x8 | 30 Stay - Panel | 31 | 32 E Washer 4φ | 33 Shaft | 34 Knob | 35 Spring - Panel - A | 36 Cushion - PL | 37 Spring - Panel - B | 38 Pan Head Screw 3x8 | 39 Barrier | 40 Pan Head Screw 3x8 | 41 Screen | 42 Special Screw | 43 Bar - Lifter - ASS | 44 Shaft - Lifter | 45 Pick Up Arm | 46 Terminal - CPX | 47 Round Head Wooden Screw 31x13 | 48 PCB - ASS | 49 Stay - PCB | 50 Special Screw 3x20 |
|---------|--------------|--------------------|------------------|-----------------|---------------------|---------------|--------------|------------------|------------------------|--------------------|-----------|----------------|--------------------------|-----------------|----|----------------|----------|---------|-----------------------|-----------------|-----------------------|-----------------------|------------|-----------------------|-----------|------------------|-----------------------|-------------------|----------------|-------------------|----------------------------------|--------------|---------------|-----------------------|



# PARTS LIST

CP-80M

PARTS NO.	DESCRIPTION	SPECIFICATIONS	Q'TY	STOCK NO.	REMARKS
	Tone Arm		1	242082	
	Head Shell		1	242083	
	Counter Weight		1		
	Lateral Balancer		1	242116	
	Subweight		1	242117	
	Arm Rest assembly		1	242078	
	Motor	MKL-15P	1	242075	
	Lifter Base assembly		1		
	Turntable		1	242076	
	Circular		1	292033	
	Rubber Sheet		1	292032-1	
	Trimmer-Speed Selector		2	242079	
	Push Button-Speed Selector		2	238116	
	Arm Lifter Lever		1	242080	
	Adaptor Rest		1	280705	
	Head Shell Stand		1	280439	
	Mechanical Chassis assembly		1		
	Slide Switch	S-J0275	1	250159	
	Output Cord		1	242074	
	45 Adaptor		1	292023	
	Shell Spacer		(1)	242115	
	Cartridge	OC-30M	1	242084	
	Stylus	DN-30ST	1	242085	
	Cabinet assembly		1	280679	
	Bottom Board		1	280680	
	Insulator		4	280682	
	Dust Cover		1	280638	
	Hinge		2	28064-1	
	Pilot Lamp	RMS-6.3V 50mA-300S	1	210016	
R701, 702	Resister Variable	N24RB1KB25	2	5176011	
F901, 903	Fuse	0.5A-T	2	252023	
F902	Fuse	0.3A-T	1	252016	
C901	Capacitor-Electrolytic	CE62W50V 1000S-R-W	1	3504043	
T901	Transformer-Power	NPT-554JG	1	230045	
S201, 202	Micro Switch	NMS-112SN	2	250185	
NAPS-221					
Q901	Transistor	2SD234(Y)	1	2200020	
D901 - D904	Silicon Diode	10D1 or SR1K-2	4	223801 223804	
C903	Capacitor-Electrolytic	CE04W-25V100S	1	352751011	
C904	Capacitor-Electrolytic	CE04W50V220S	1	352782211	
	Carton Box		1	290446	
	Pad-Top		1	290292	
	Pad-Bottom		1	290447	
	Pad-Side		2	290336-1	
	Accessory Box		1	290448	
	Cover-Accessory Box		1	290449	
	Turntable Box		1	290357-1	
	Instruction Booklet		1	293262-1	

# PARTS LIST

CP-55A

PARTS NO.	DESCRIPTION	SPECIFICATIONS	Q'TY	STOCK NO.	REMARKS
1	Player	MSS-5912B	1	242118	
	Tonearm		1		
	Headshell		1		
	Cartridge	OC-29M	1		
	Stylus	DN-29ST	1		
	Counter Weight		1		
	Lateral Balancer		1		
	Anti-skating System		1		
21	Arm Rest assembly		1		
49	Motor assembly		1		
48	Pulley		1		
39	Belt		1		
2	Turntable		1		
8	Center Shaft assembly		1		
9	TT Bearing assembly		1		
	Circular		1	292033	
	Rubber Sheet		1	292045	
47	Speed Selector Lever		1		
45	Cut Lever		1		
66	Arm Lifter		1		
28	Cover-Speed Selector		1		
27	Cover-Cut Lever		1		
33	Adaptor Rest		1		
3	Elevation Plate		1		
6	Elevation Shaft		1		
	Screw-Motor Lock		2		
	Screw-Player Lock	6M-16F-N	2	81616016	
	Washer-Player Lock	W6-13F	2	87616013	
16	Stud-Gear Stopper		1		
17	Eccentric Base-Gear Stopper		1		
18	Gear Stopper		1		
19	Spring-Gear Stopper		1		
24	Reject Lever		1		
23	Shaft-Reject Lever		1		
4	Arm Base assembly		1		
12	Main Gear assembly		1		
50	Actuating Slide		1		
51	Base-Actuating Slide		1		
52	Base-Transferring Slide		1		
53	Transferring Slide		1		
55	Switch Cam		1		
11	Stopper		1		
46	Spring-Cut Lever		1		
54	Spring-Elevation Shaft		1		
68	Lock Spring-Cueesaw		1		
65	Spring-Cueesaw		1		
60	Slide Switch		1		
70	Micro Switch		1		
69	AC Cord		1		
67	GND Cord		1		
34	Output Cord assembly		1		
	Cabinet assembly		1	281040	
	Hinge		2	280641-1	
	Accessory Box		1	290140-2	
	Cover-Accessory Box		1	290161	
	Dust Cover		1	280638	
	45 Adaptor		1	292023	
	Turntable Box		1	290136	
	Instruction Booklet		1	293256-1	
	Pad-Top		1	290292	
	Pad-Bottom		1	290431	
	Pad-Side		2	290432	
	Carton Box		1	290430	

# PARTS LIST

CP-30M

PARTS NO.	DESCRIPTION	SPECIFICATIONS	Q'TY	STOCK NO.	REMARKS
	Player	MSS-6312	1		
5	Pick up Rest ass		1	24500140	
110	Spring-Torsion-B		1		
16	Motor-AC-4		1	24500940	
19	Pulley (60Hz)		1	24500942	
18	Pulley (50Hz)		1	24500941	
57	Belt		1	24500184	
10	Lever-Select		1		
11	Spring-Torsion-A		1		
9	Knob-Selector-A		2	24500236	
23	Turntable		1	24500192	
24	Shaft-Table		1	24500943	
64	Turntable Sheet		1	292045	
65	Circular Plate		1	292033	
43	Bar-Lifter-ass		1	24500955	
102	Lever-Lift-ass		1		
88	Cam-Lifter		1	24500954	
34	Knob		1	24500945	
45	Pick Up Arm		1	24500939	
	Headshell		1	242130	
	Weight-Main		1	24500937	
	Weight-Lateral		1	24500938	
	Cartridge	OC-24M	1	24500051	
	Stylus	DN-24ST	1	24500021	
	Socket-PS		1	250226	
	Plug-PS		1	250227	
126	Cord-AC		1	253083	
	Plug-2P		1	24500971	
128	Plug-US1P-Cord		1		
129	Earth-Cord		1		
117	Switch-Micro		1	24500946	
55	Switch-Seesaw		1	24500947	
46	Terminal-CPX		1		
58	Cabinet ass		1	24500972	
63	Mark		1	24500975	
59	Cover-Dust		1	24500976	
130	Nameplate		2	24500977	
60	Hinge-B		2	24500973	
87	Support-Socket		1		
	Label-Main		1	24500961	
116	Label-Cramp		5	24500960	
	Label-Belt		1	24500962	
	Label-Voltage (220V-110V)		1	24500959	
	Label-Voltage (220V)		1	24500958	
	Label-Stylus		1		
	Tag Card-Attend		1	24500963	
	Master-Carton		1	24500979	
	Pad-end-A		2	24500980	
	Pad-end-B		2	24500981	
	Pad-Plain-A		1	24500982	
	Pad-Plain-B		1	24500983	
	Pad-Plain		1	24500984	
	Oil Set		1	24500978	
	45 Adaptor		1	292021	
	Instruction Booklet		1	29340008	

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