

# ONKYO SERVICE MANUAL

model **CP-80M**



model **CP-55A**



model **CP-30M**



**ONKYO®**  
**AUDIO COMPONENT**

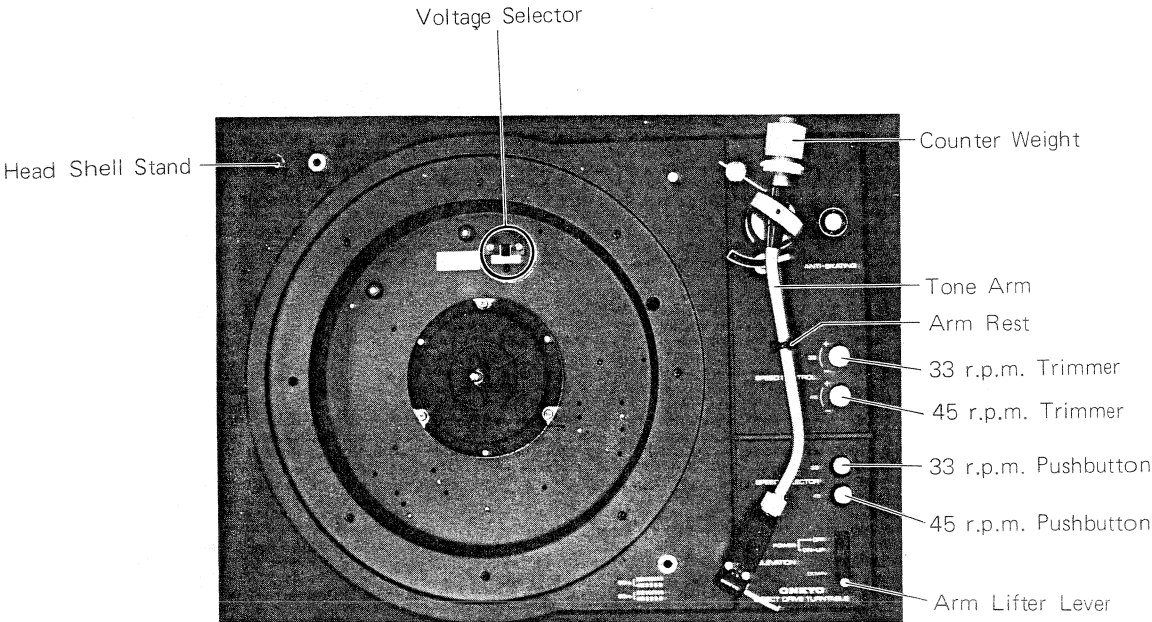
## SPECIFICATIONS

|                         | 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.<br>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.<br>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.<br>Stylus pressure: 0 – 3 gr.<br>Overhang: 15mm<br>Effective arm length: 237mm<br>Tracking error: $\pm 1.5^\circ$ | Static balanced pipe arm with headshell exchangeable system, anti-skating system, lateral blancer and lifter.<br>Tracking force: 0 – 4 g.<br>Overhang: 15mm<br>Effective arm length: 210mm<br>Tracking error: $\pm 1.5^\circ$ | Static Balanced Pipe arm with headshell exchangeable system, lateral balancer and arm lifter.<br>Tracking Force: 0 – 4 g.<br>Overhang: 9.4mm<br>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<br>50/60Hz                                                                                                                                                                                     | AC 110-120/220-240V<br>50/60Hz                                                                                                                                                                                                | AC 110-120/220-240V<br>50/60Hz                                                                                                                                              |
| Power Consumption       | 6W                                                                                                                                                                                                                 | 10W                                                                                                                                                                                                                           | 15W                                                                                                                                                                         |
| Dimensions              | 480W x 180H x 405D mm<br>19"W x 7-1/8"H x 15-3/4"D                                                                                                                                                                 | 480W x 190H x 400D mm<br>18-29/32"W x 7-15/32"H x 15-24/32"D                                                                                                                                                                  | 442W x 165H x 380D mm<br>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.                                                                                                                                                             |

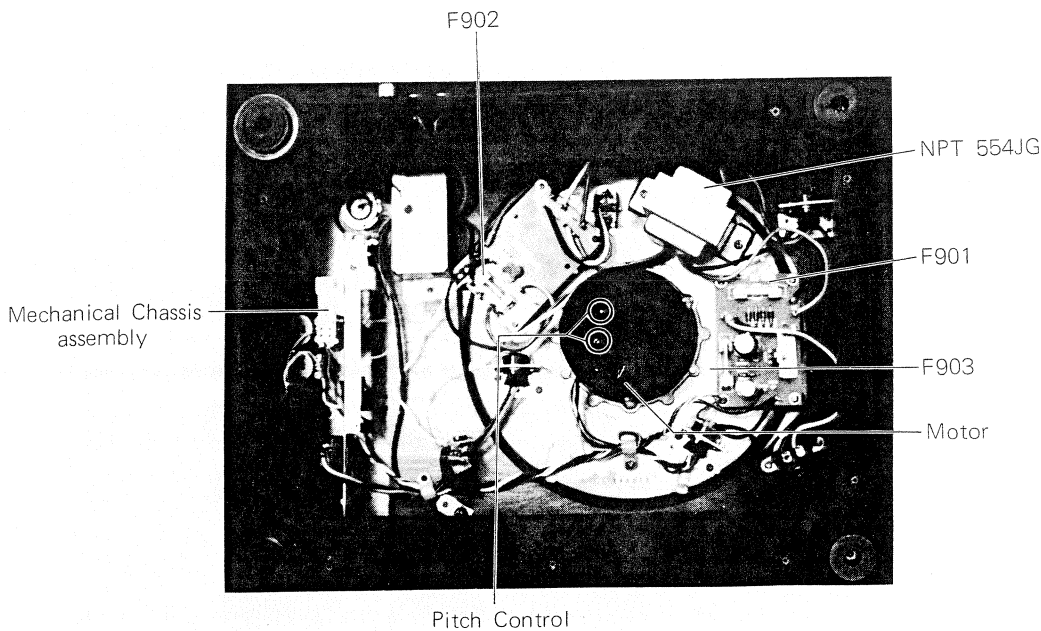
Specifications are subject to change without notice.

**CP-80M**

**TOP VIEW**

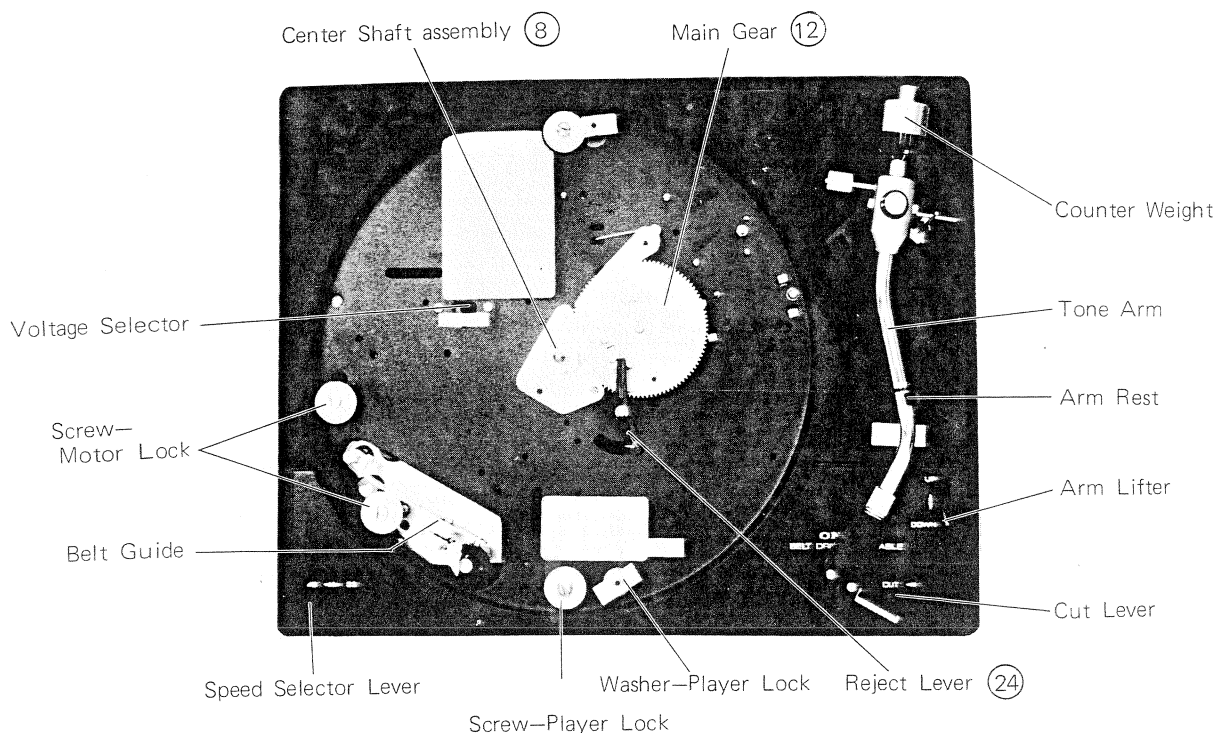


**BOTTOM VIEW**

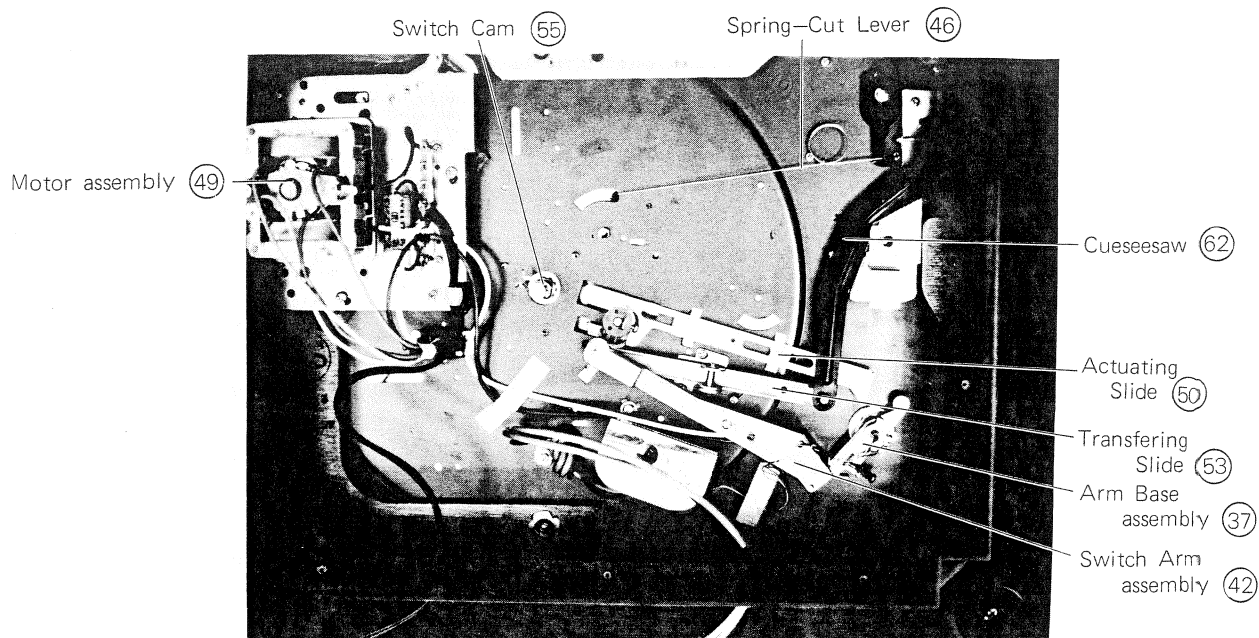


# CP-55A

## TOP VIEW

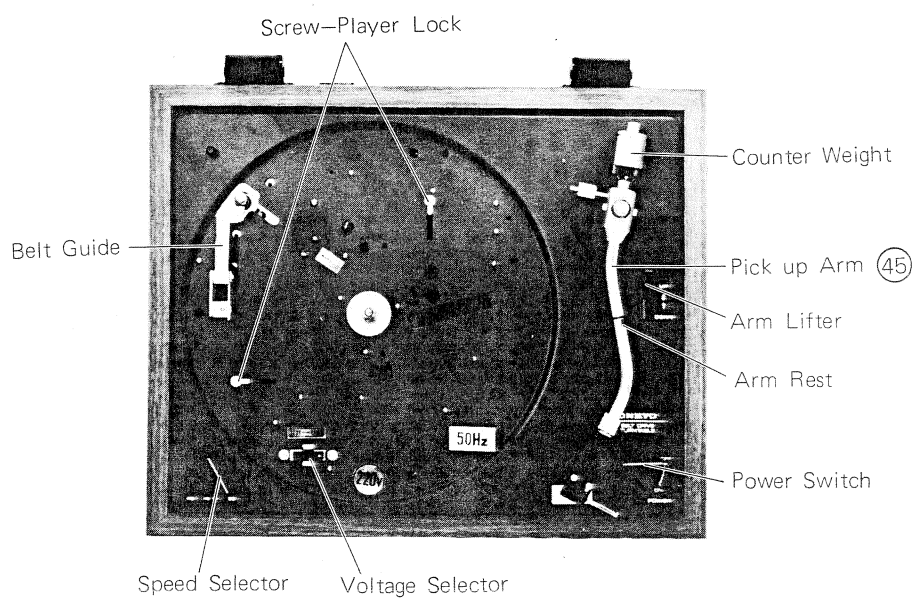


## BOTTOM VIEW

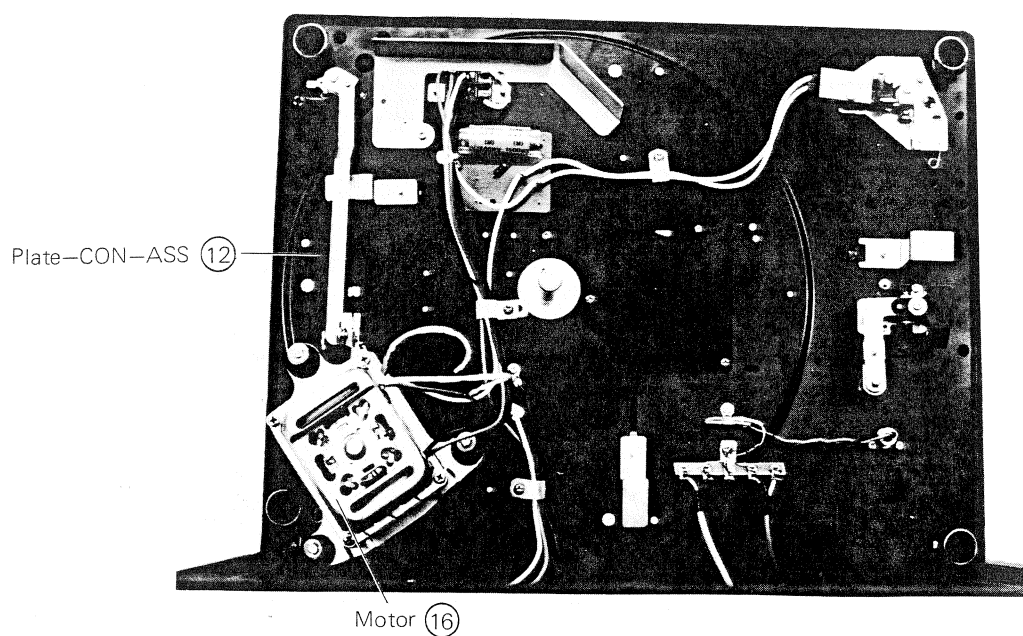


## CP-30M

### 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.

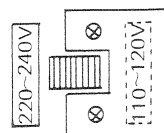


Fig. 1

### 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.

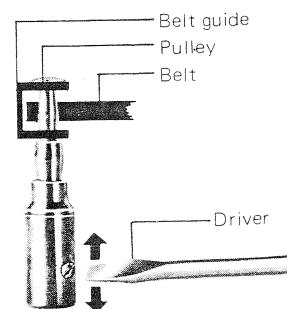


Fig. 2

## 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.

## 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.

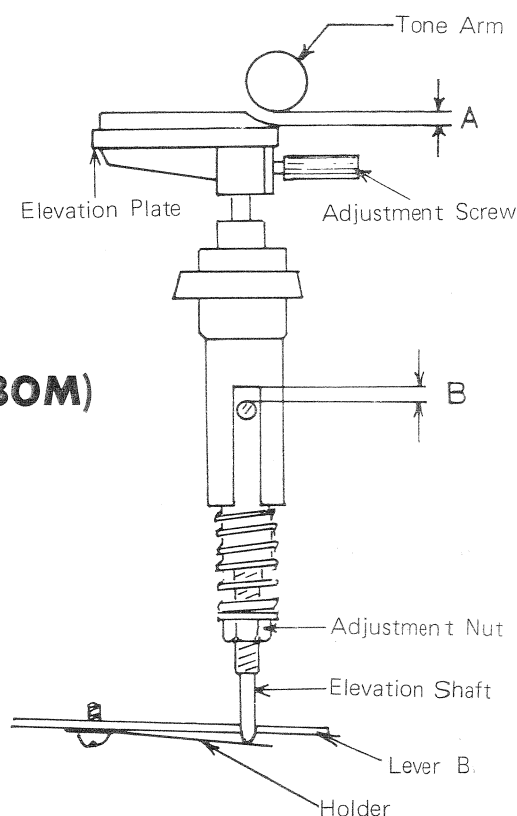


Fig. 3

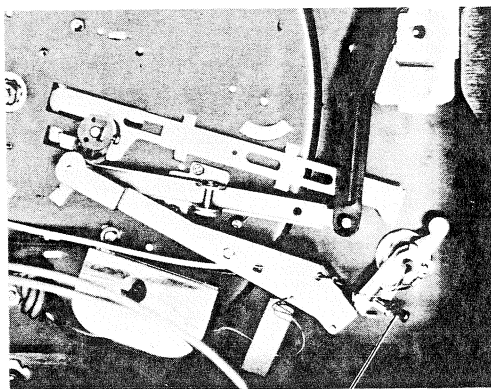
## Auto-return (CP-55A)

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

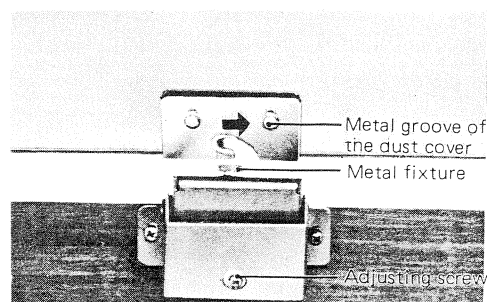
Fit the metal groove of the dust cover in the metal fixture of the turntable board and draw the dust cover in the marked direction.

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.

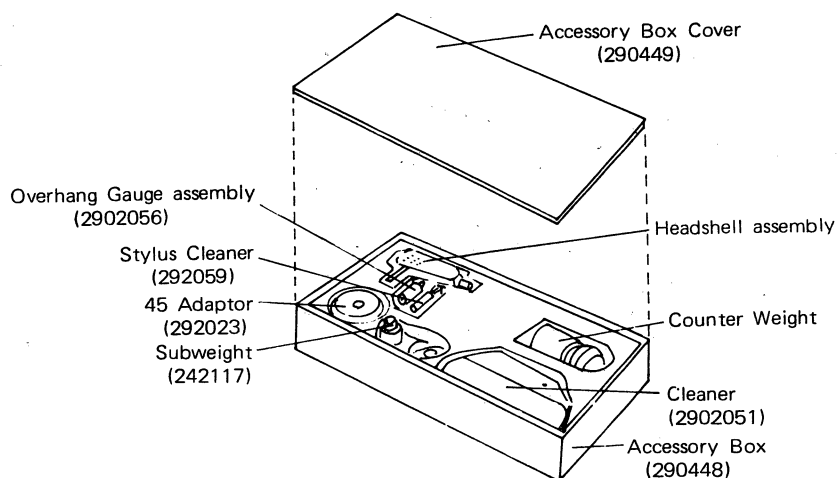


Turntable board

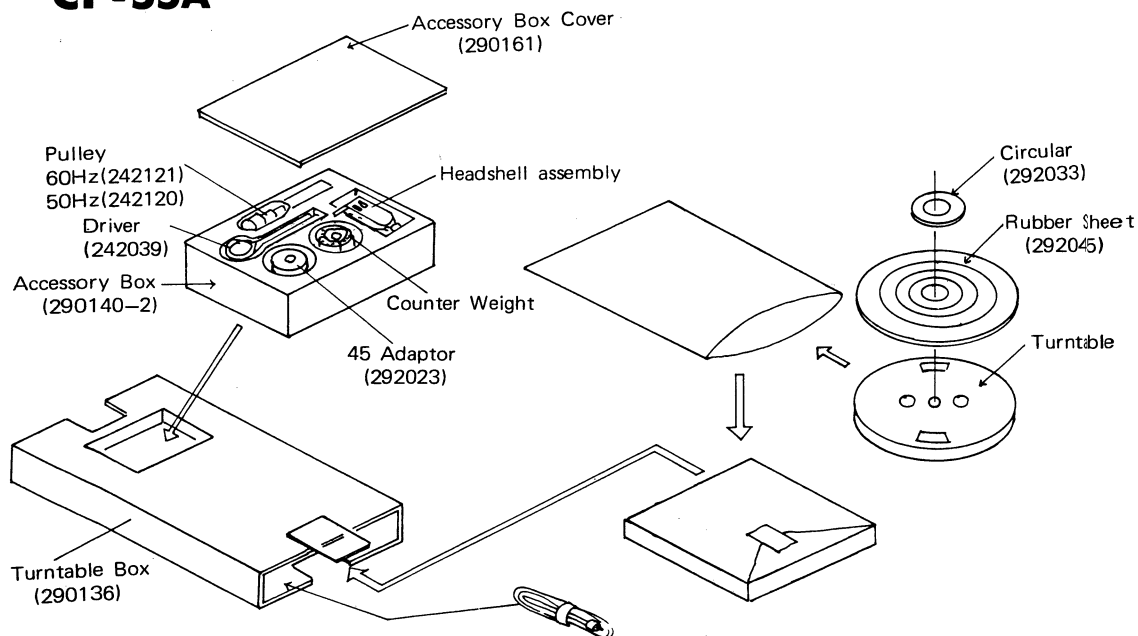
## Packing procedure

### Accessory Box

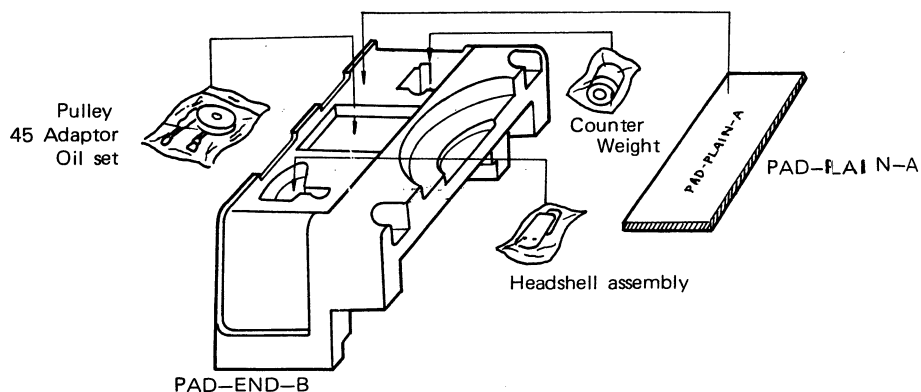
#### CP-80M



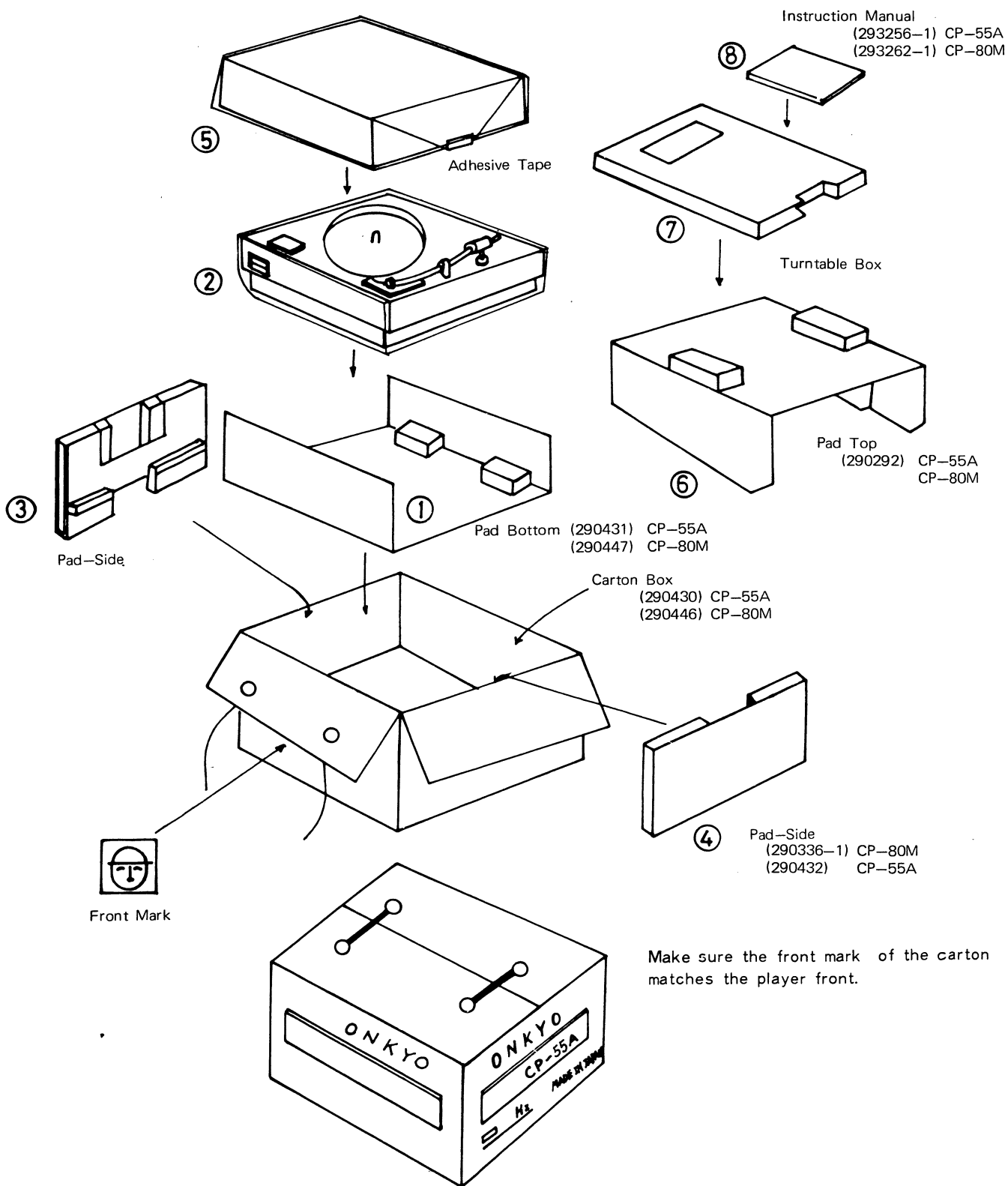
#### CP-55A



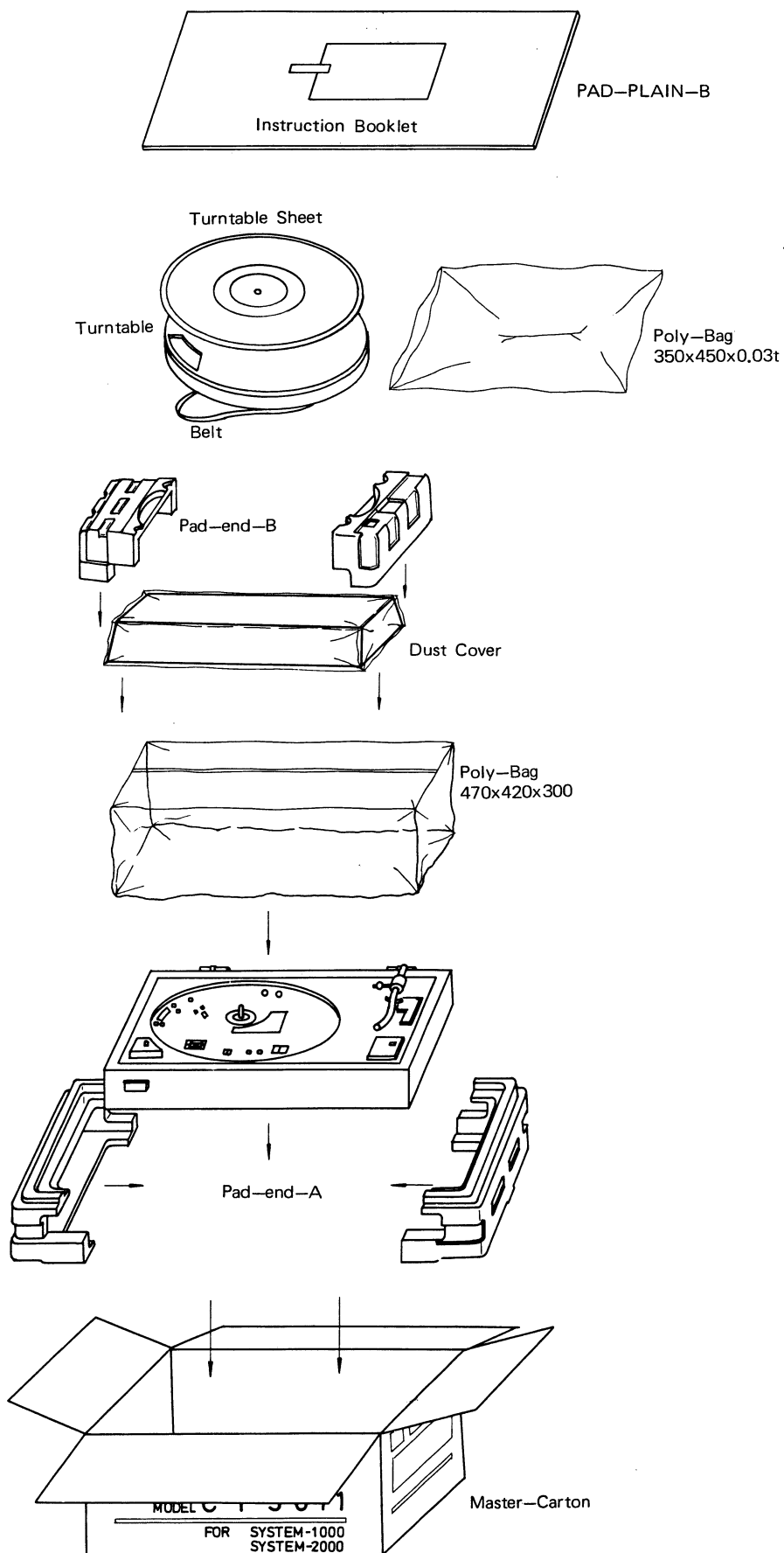
#### CP-30M



# CP-55A



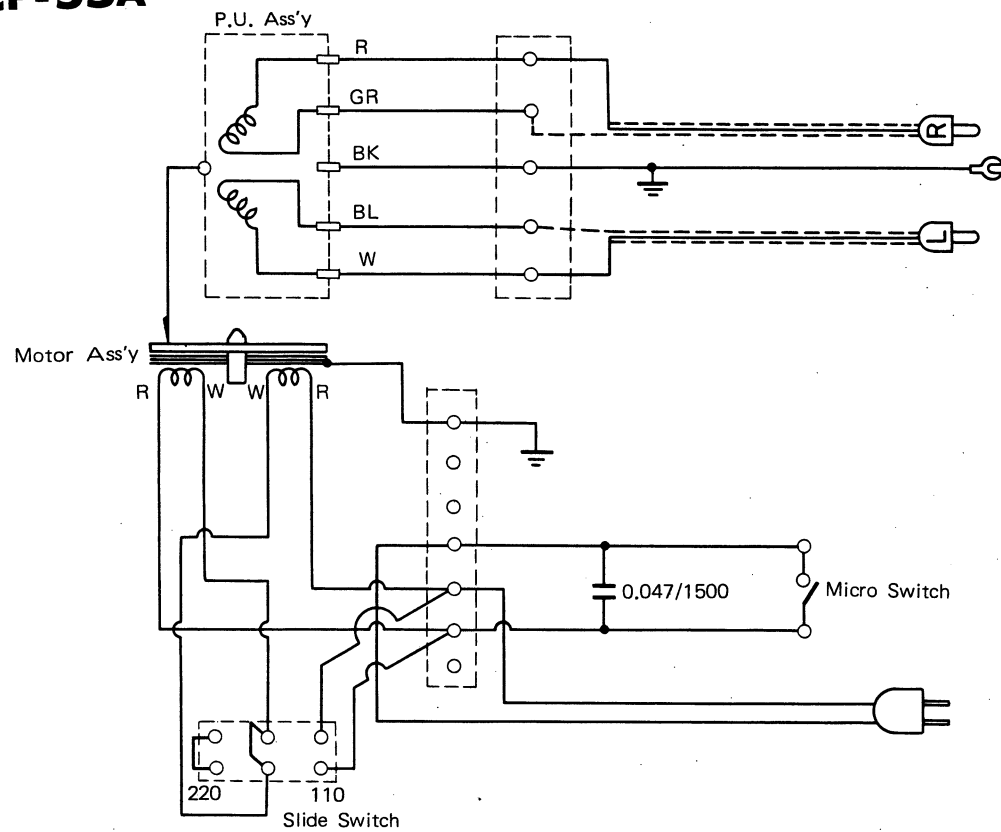
## CP-30M



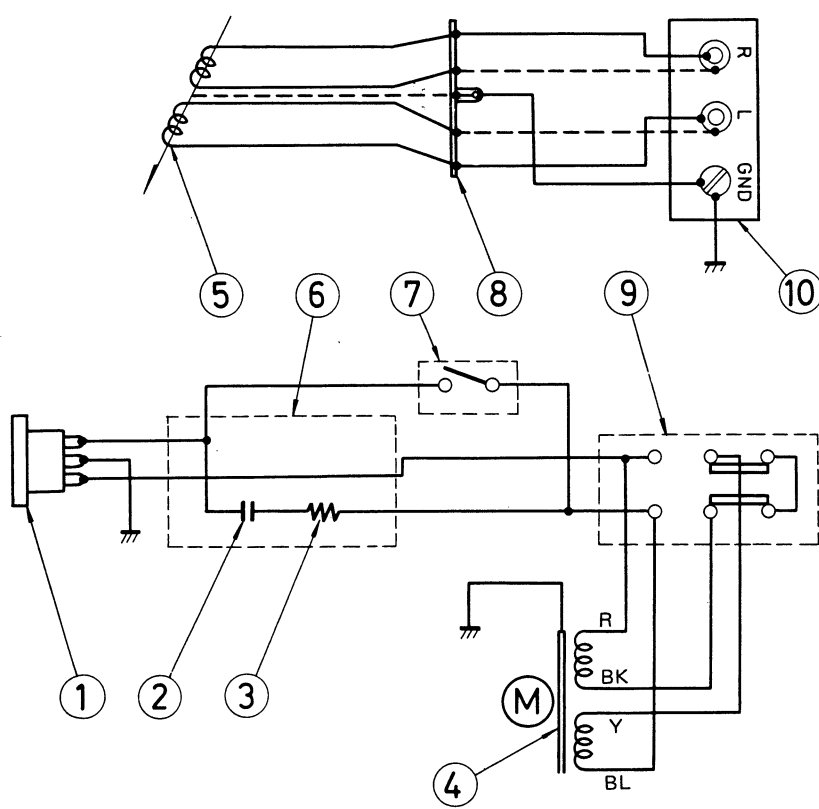


# Circuit Diagram

## CP-55A

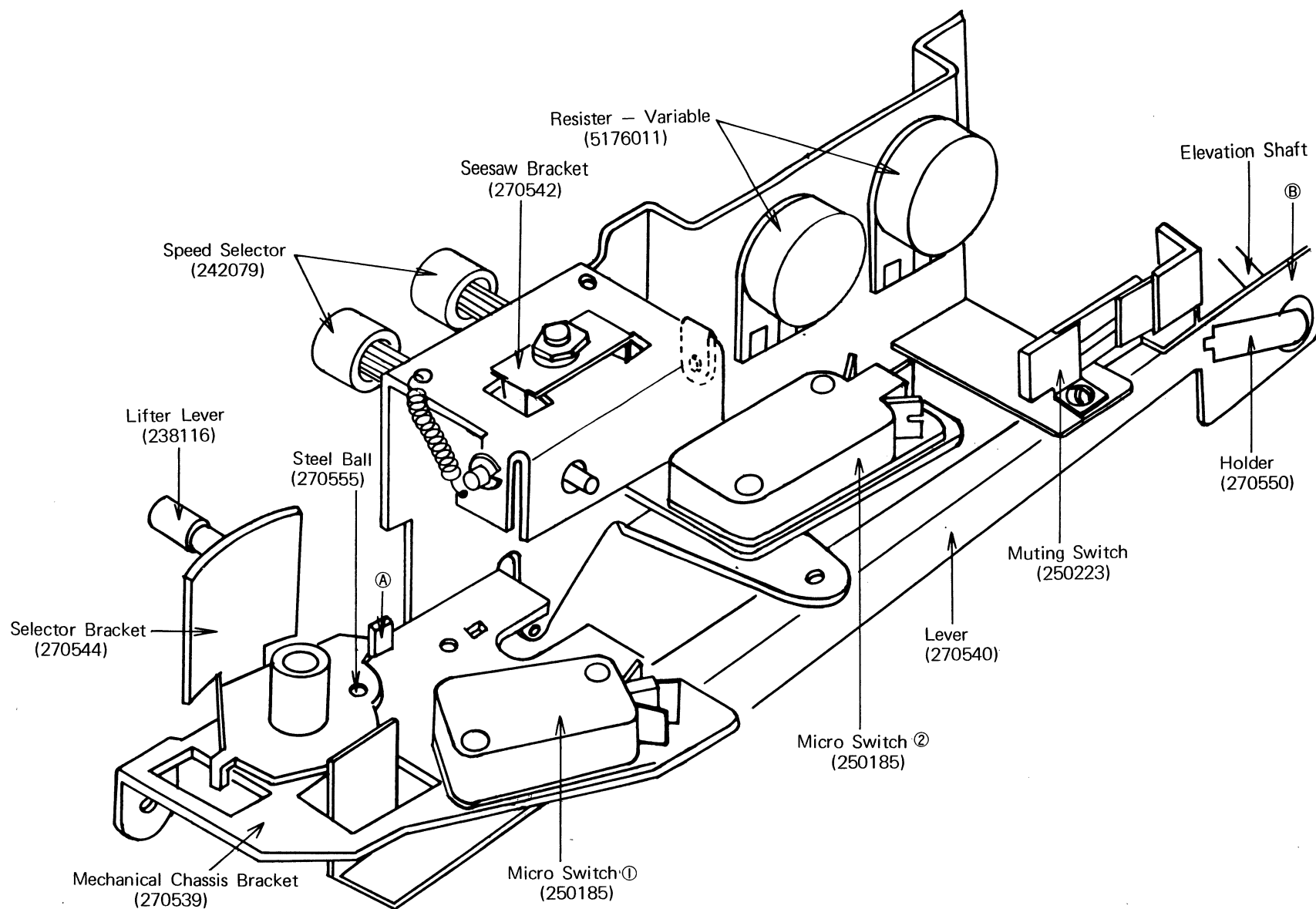


## CP-30M

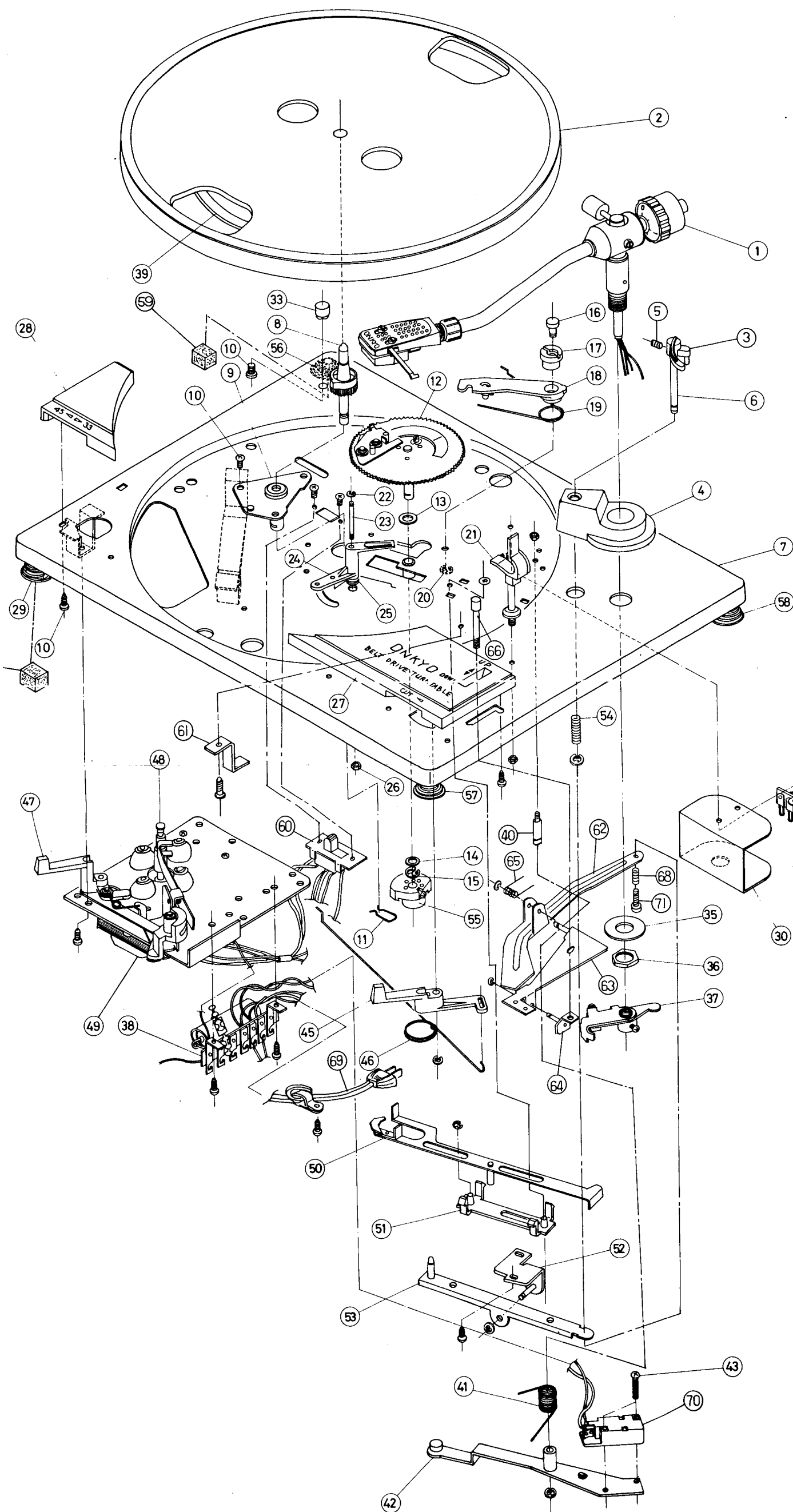


- 1 OUTLET 3P
- 2 C 0.47 -M1500B
- 3 RC 1/2-10-K
- 4 MOTOR-AC-4
- 5 CARTRIDGE-MM
- 6 PCB
- 7 SW-MICRO
- 8 TERMINAL-114P
- 9 SW-IEE SAW
- 10 TERMINAL-CPX

# Exploded View CP-80M

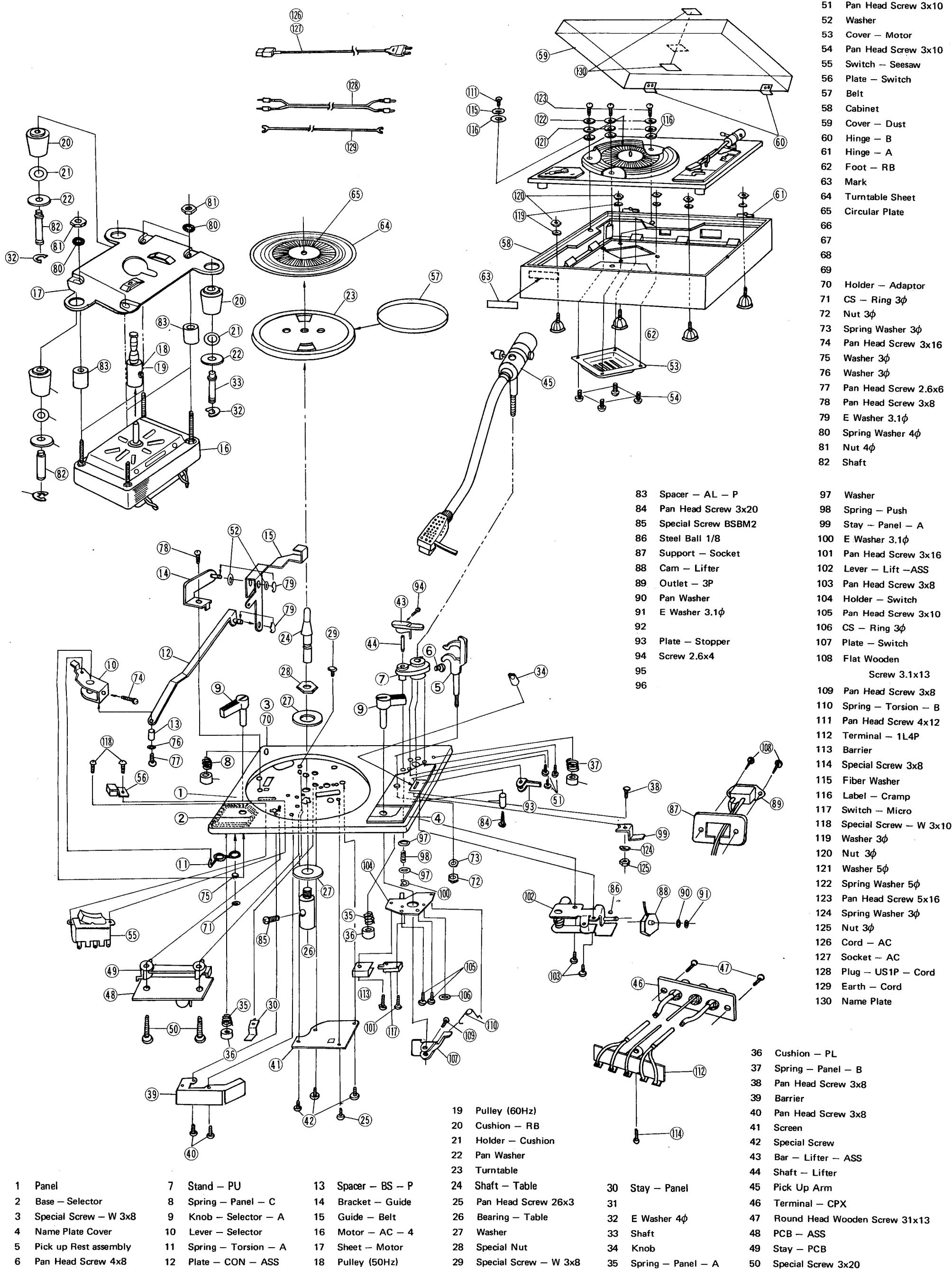


# Exploded View CP-55A



- 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 Cueesaw
- 63 Bracket - Cueesaw
- 64 Eccentric Cam
- 65 Spring (1) - Cueesaw
- 66 Arm Lifter
- 67 GND Cord
- 68 Spring (2) - Cueesaw
- 69 AC Cord
- 70 Microswitch
- 71 Screw FM ⊕ 3x12

## Exploded View CP-30M



# 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<br>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<br>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<br>or<br>SR1K-2  | 4    | 223801<br>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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