MICRO SEIKI®

DIRECT DRIVE TURNTABLE SYSTEM

DD-40

SERVICE MANUAL



MICRO SEIKI CO.,LTD.
TOKYO JAPAN

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PARTS NOMENCLATURE

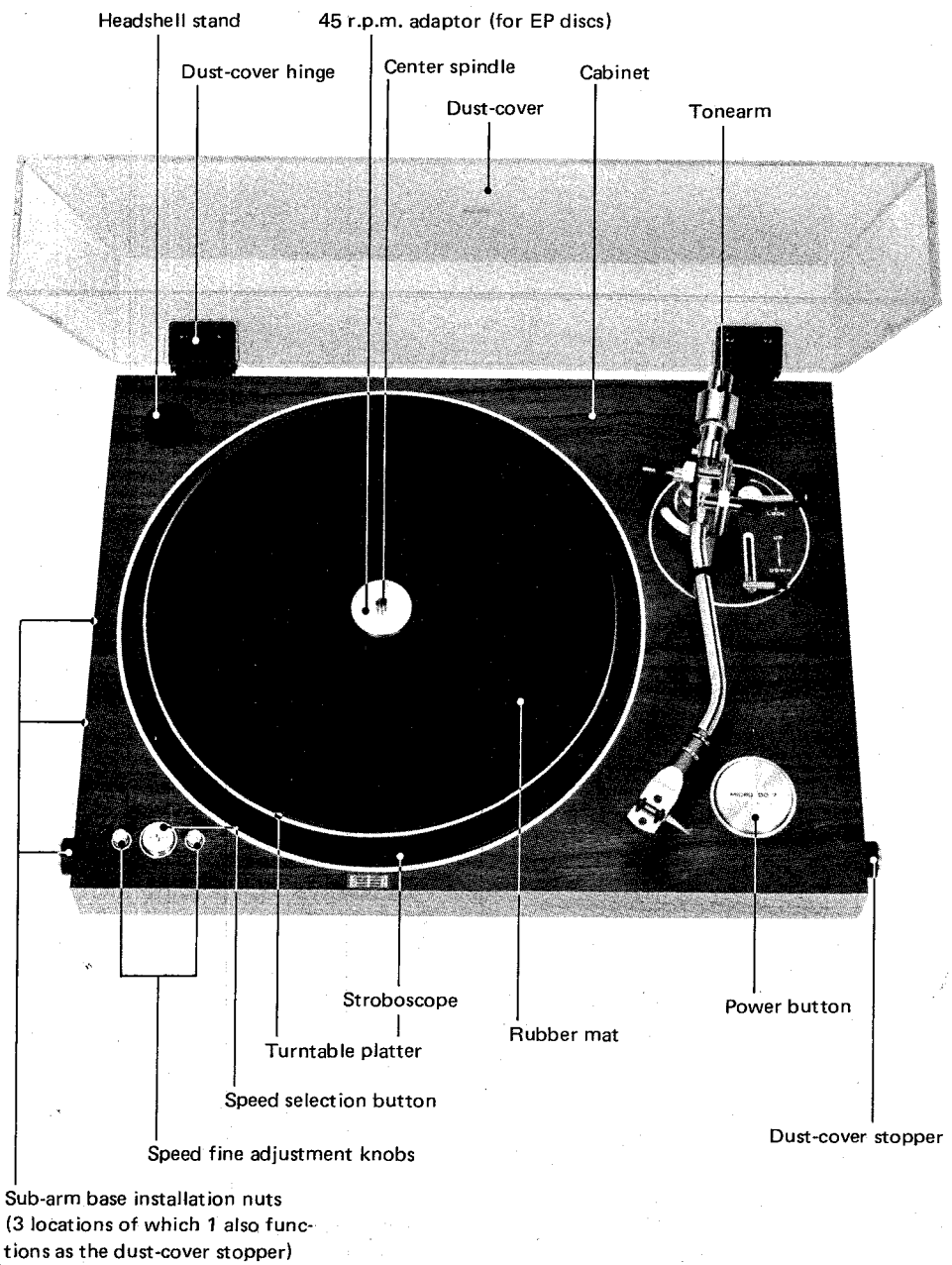


Photo 1

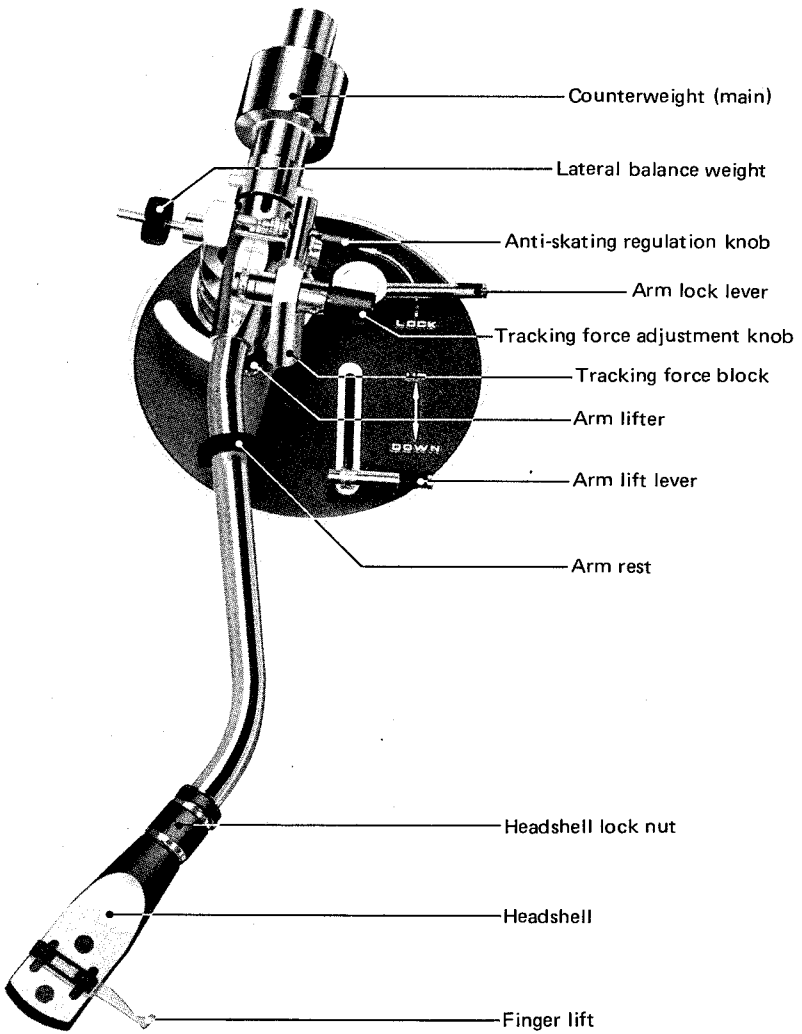


Photo 2

REPLACEMENT

- TONEARM REPLACEMENT
  1) Remove the turntable platter.
  2) Remove the 3 screws at the bottom of the wooden base.

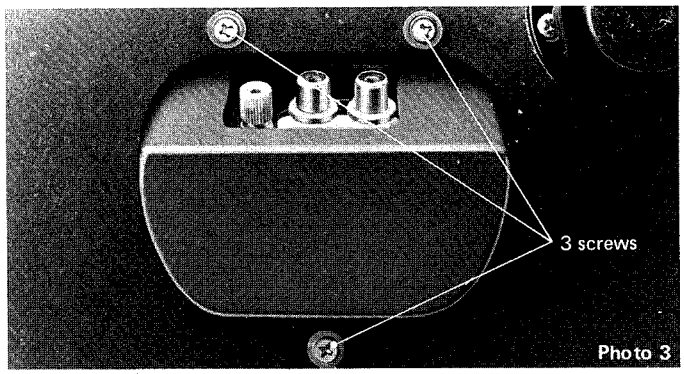
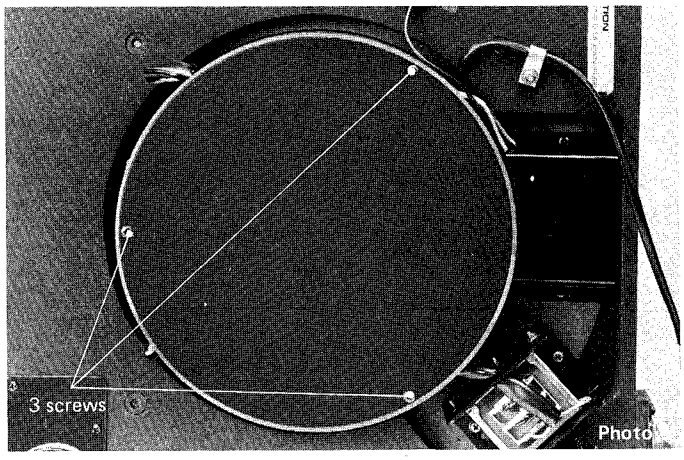


Photo 3

- MOTOR REPLACEMENT
  1) Remove the 3 screws retaining the bottom cover to the main panel.



Photo

  2) Unsolder the lead wires from the power supply circuit board and the termnal lug.
  3) Remove the 3 screws retaining the motor cover to the main panel.

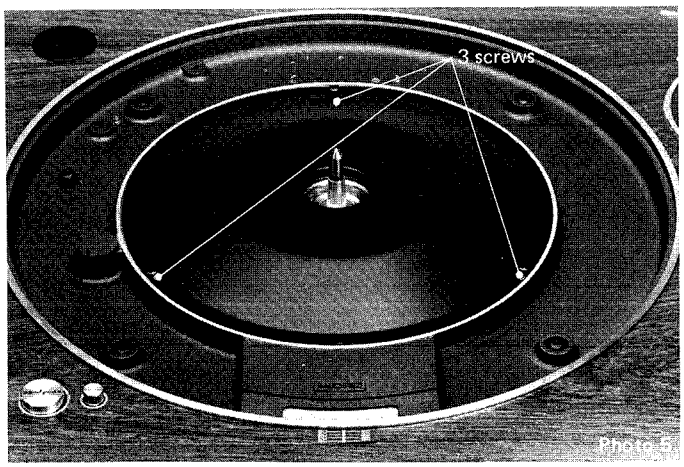


Photo 5

  4) Remove the 3 screws securing the motor to the main panel.

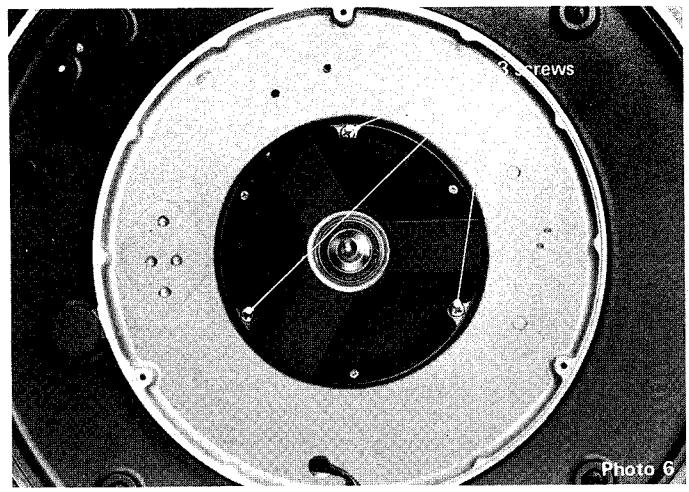


Photo 6

- POWER SUPPLY CIRCUIT BOARD REPLACEMENT
  1) Remove the 3 screws retaining the bottom cover to the main panel.
  2) Unsolder the lead wires from the circuit board.
  3) Remove the 2 screws retaining the circuit board to the main panel.

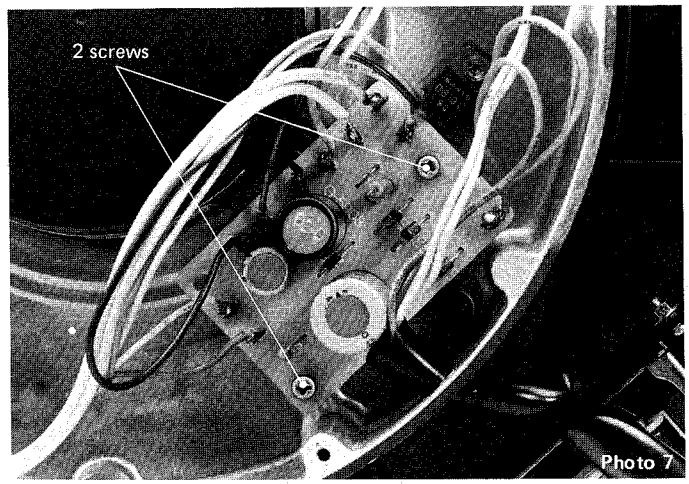
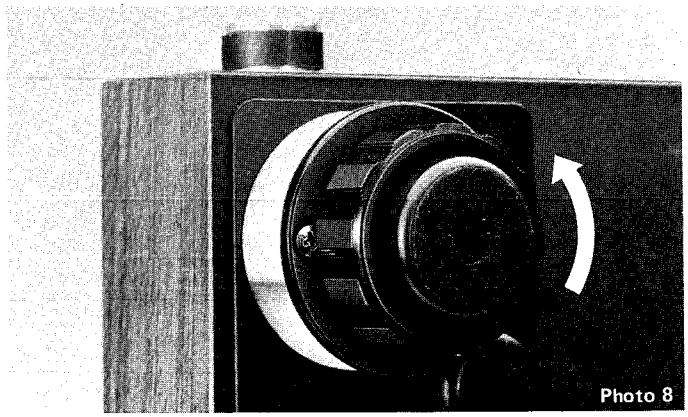


Photo 7

- POWER SWITCH REPLACEMENT
  1) Remove the height adjustor of the rubber foot.


Photo 8

  2) Remove the 3 screws retaining the foot base to the wooden base and the power switch cover.

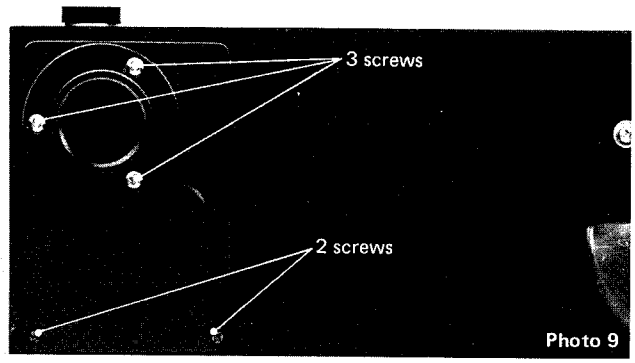
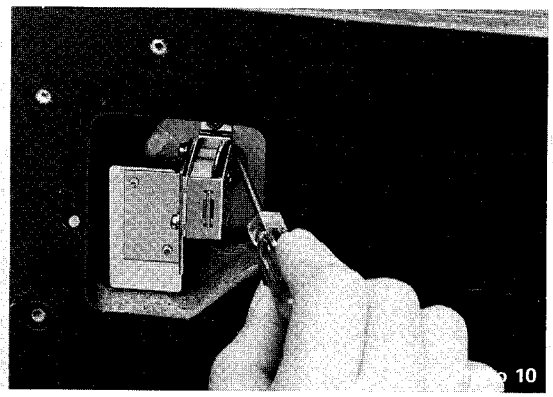


Photo 9

3) Remove the 2 screws retaining the cover to the wooden base.
4) To remove the power button, insert the screwdriver in to the center hole of the power switch bracket and push up.


Photo 10

5) Remove the 2 screws retaining the power switch mechanism ass'y to the bracket.

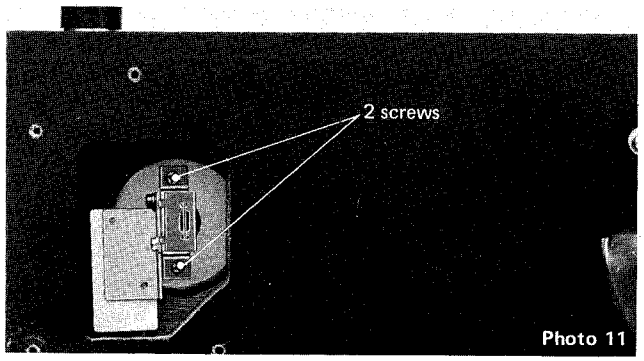


Photo 11

6) Unsolder the lead wires from the micro switch.
7) Remove the 2 polycarbonate screws retaining the micro switch to the assembly.

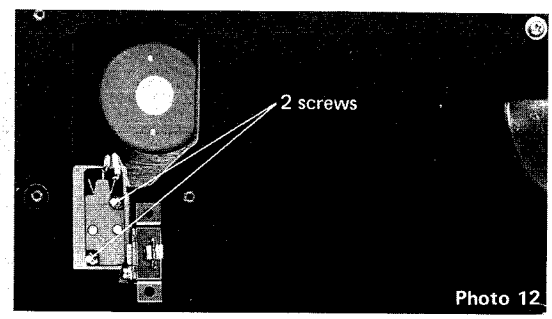
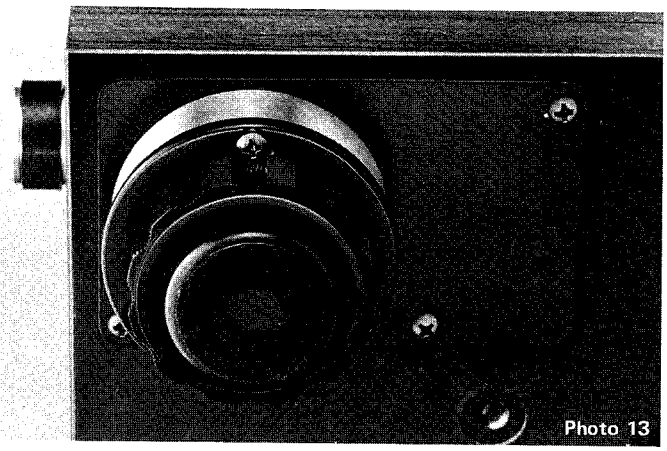


Photo 12

- SPEED SELECTION SWITCH & VARIABLE RESISTOR REPLACEMENT

1) Remove the height adjustor of the rubber foot.


Photo 13

2) Remove the 3 screws retaining the foot base to the wooden base and the selection switch cover.
3) Remove the 3 screws retaining the cover to the wooden base.

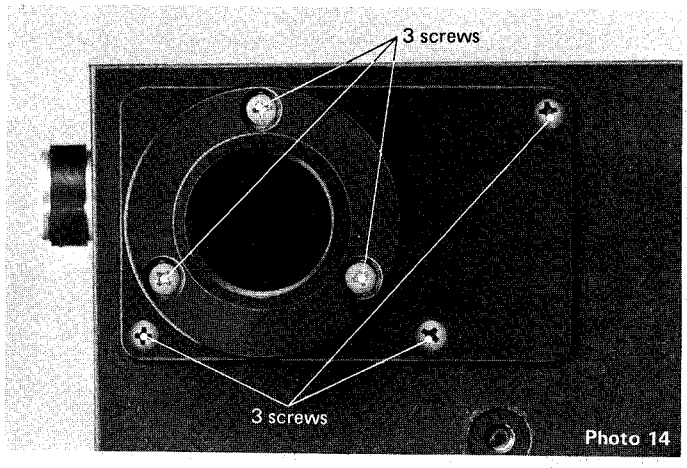


Photo 14

4) Unsolder the lead wires from the selection switch or variable resistor.
5) Remove the 3 screws retaining the selection switch bracket to the wooden base.

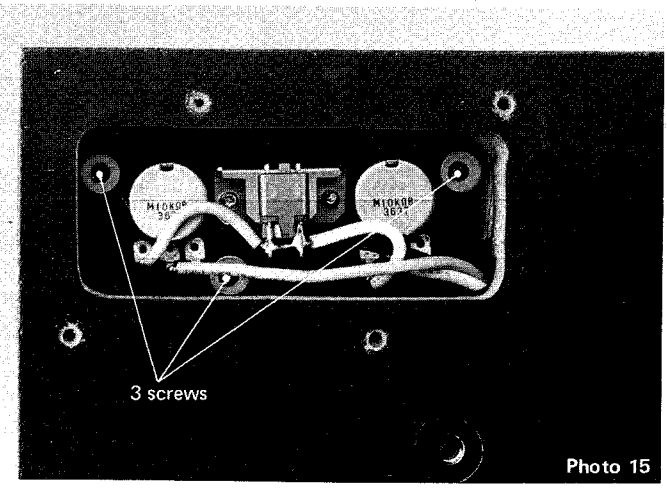


Photo 15

ADJUSTMENTS

- Overhang adjustment

  Overhang is the distance between the center of the platter spindle and the stylus tip. The DD-40 is designed to operate with minimal tracking error when the overhang is adjusted to 15 mm. In order to adjust the cartridge correctly, place the enclosed overhang gauge over the headsheel as shown in photo 5.

  Loosen the cartridge securing screws and align the stylus to the ▼ marks on the gauge by moving the cartridge either forward or backward. When a different cartridge is installed in the headshell, be sure to re-adjust, using the method described above.

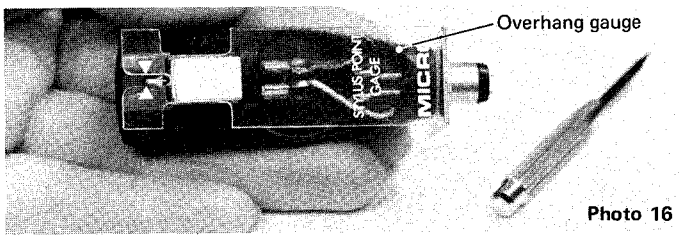


Photo 16

- Headshell Tilt Adjustment

  If there is headshell tilt after shell change-over, remedy this condition by loosening the clamp screw and correcting the faulty tilt as shown in Photo 17.

  Caution: Do not adjust or tamper with this screw unless it is necessary.

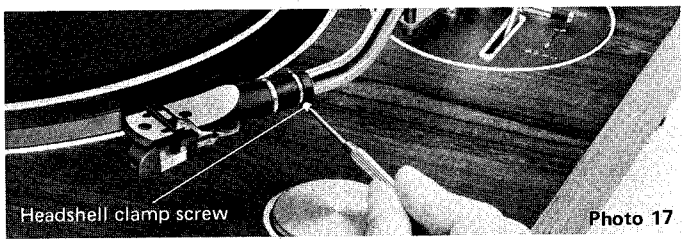


Photo 17

- LATERAL BALANCING ADJUSTMENT

  1) Turn the tracking force adjustment knob to set the tracking force level to zero.
  2) Turn the counterweight to achieve the tonearm balance.
  3) Plug the large lateral balance weight on to the lateral shaft.

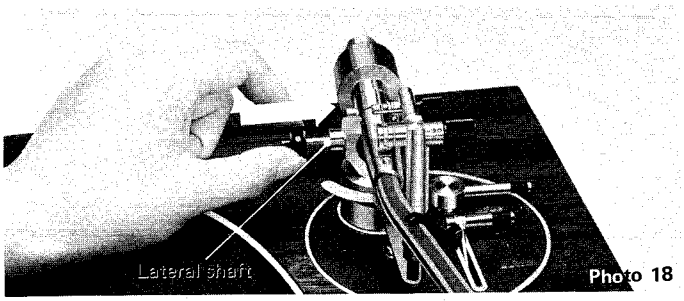
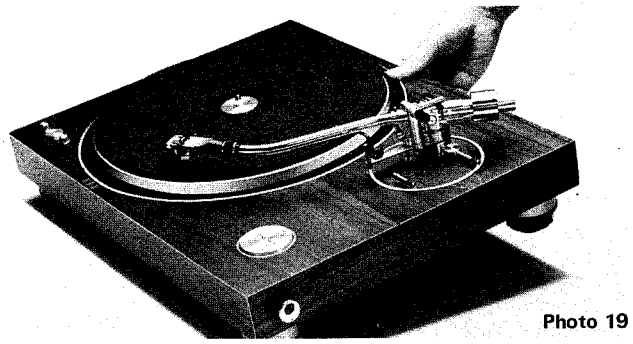


Photo 18

  4) Raise the rear of the turntable and observe the direction in which the tonearm travels. Slide the lateral balance weight along the shaft in the same direction until the tonearm stop moving.


Photo 19

  5) Tighten the lock screws to secure the lateral balance weight.

Note:

(1) In a case such as that shown in Fig. 1 when the lateral balance weight has been set at the extreme end of the lateral shaft, and yet the tonearm continues to travel in the direction shown by arrow A, correct by using both the large and the small lateral weights.

(2) In a case such as that shown in Fig. 1 when the large lateral balance weight has been set at the innermost point on the lateral shaft, and yet the tonearm continues to travel in the direction shown by assow B, change to the small balance weight and re-adjust.

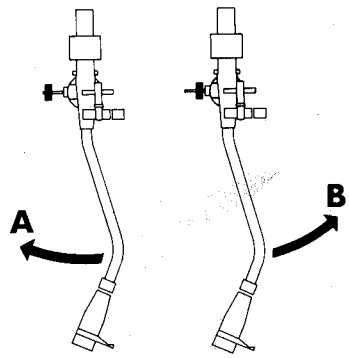
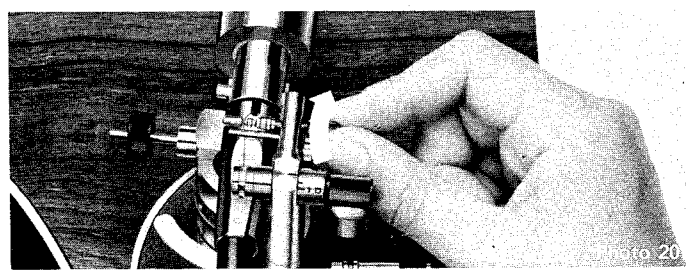


Fig. 1

- Anti-skating Adjustment

  The DD-40 anti-skating device can be regulated to conform with stylus tip configurations. When the cartridge to be used has an elliptical stylus, turn the anti-skating regulation knob until the red line on the shaft is aligned with that inscribed on the wire guide (see Photo 20 and Fig. 2). With a spherical stylus align the blue line on the shaft to that on the wire guide. Set this way, corresponding outside force is added, rendering regulation unnecessary even when the tracking force is changed.


Photo 20

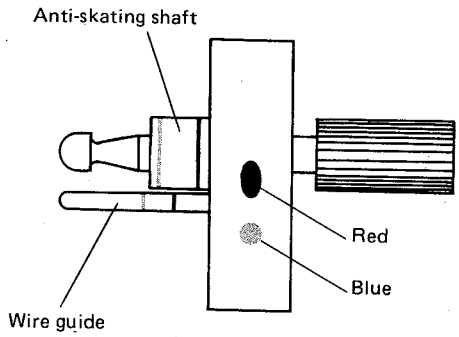


Fig. 2

- Arm Lifting Adjustment

The optimum distance between the stylus tip and the record surface is approximately 1 cm. Raise the arm lift lever and move the tonearm to a point above the record surface. Determine whether the distance between the stylus and the record surface is adequate. If necessary, regulate the adjusting screw as illustrated in Photo 21.

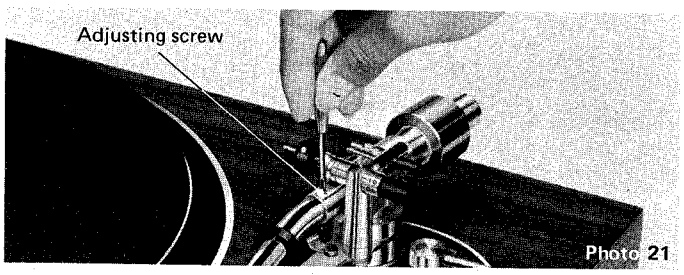


Photo 21

In case where an adjustment cannot be completed by means of the adjusting screw only, loosen the lifter mechanism height adjustment screw and re-adjust the height of the arm lift (see Photo 22).

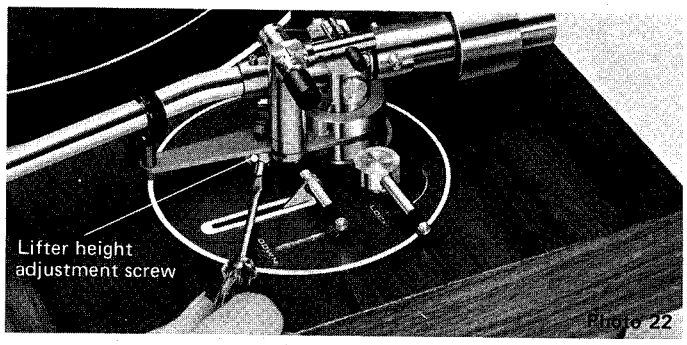


Photo 22

- Tonearm Height Adjustment

It is necessary to adjust the tonearm height (in conformity with the height of the cartridge being used) until it lies on a plane parallel to the record surface.

Place a record on the turntable and lower the arm lift lever. Then, watching from the right-hand side of the unit, release the arm lock lever and observe if the tonearm adopts a parallel position. (When the lock is released, the tonearm will rise to the furthest point permitted by its spring.) If the required adjustment still exceeds the height obtained by the spring, further adjust by gently pulling up the base cap. (Photo 23)

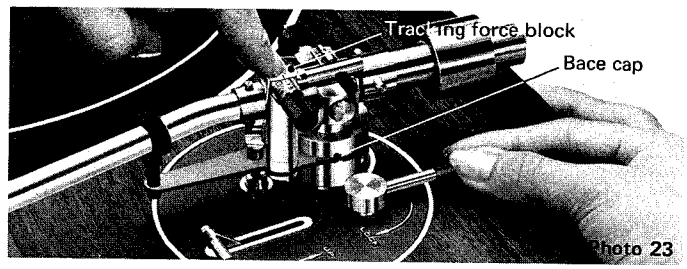


Photo 23

- FINE SPEED ADJUSTMENT FOR TURNTABLE SPEEDS

When adjustment of the speed fine adjustment knob does not give a satisfactory speed, adjust the motor in accodrance with the following procedure.

1) Remove the 3 screws retaining the bottom cover to the main panel.
2) Set the speed fine adjustment knobs to the middle position.
3) While watching the stroboscope stripes on the turntable platter, adjust the variable resistor inside the motor for appropriate static display of the strobe.

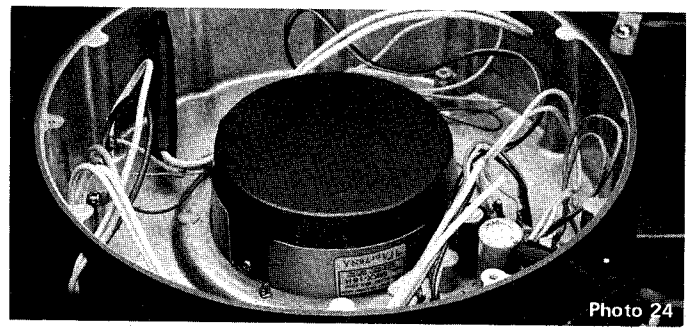


Photo 24

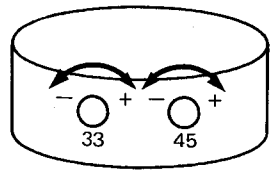


Fig. 3

4) Alternate switching between 33 and 45 rpm speeds while making adjustment. Make sure that both speeds are correct.

- DUST COVER HINGES ADJUSTMENT

The tention of the dust cover hinges can be adjusted by turning the screws on the back of the hinges.

1. Counter clockwise: More tension
2. Clockwise : Less tension

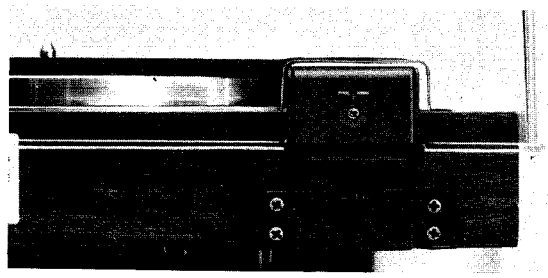
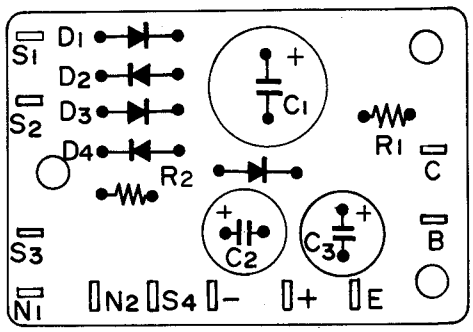


Photo 25

POWER SUPPLY CIRCUIT ASS'Y

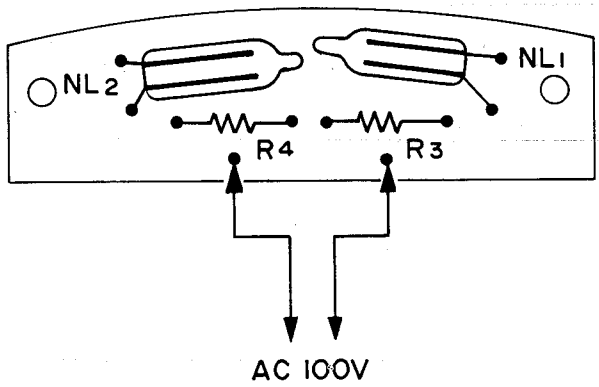
(TOP VIEW)



CIRCUIT REF. No.	PARTS No.	DESCRIPTION
D1~D4	00063-06	F-14A
ZD1	00064-00	WZ-240
C1	00066-00	470μ/35V
C2	00067-04	100μ/25V
C3	00068-09	220μ/35V
R1	00069-03	3.3K 1/4W
R2	00070-06	33K 1/2W

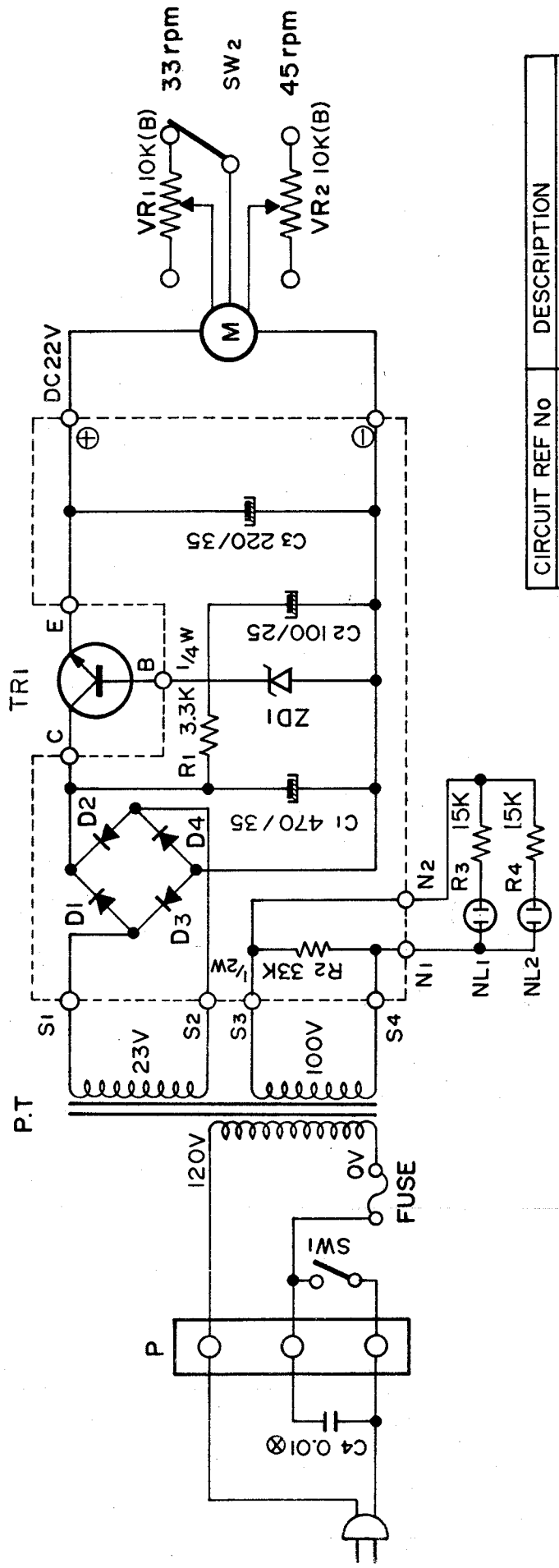
NEON LAMP CIRCUIT ASS'Y

(TOP VIEW)



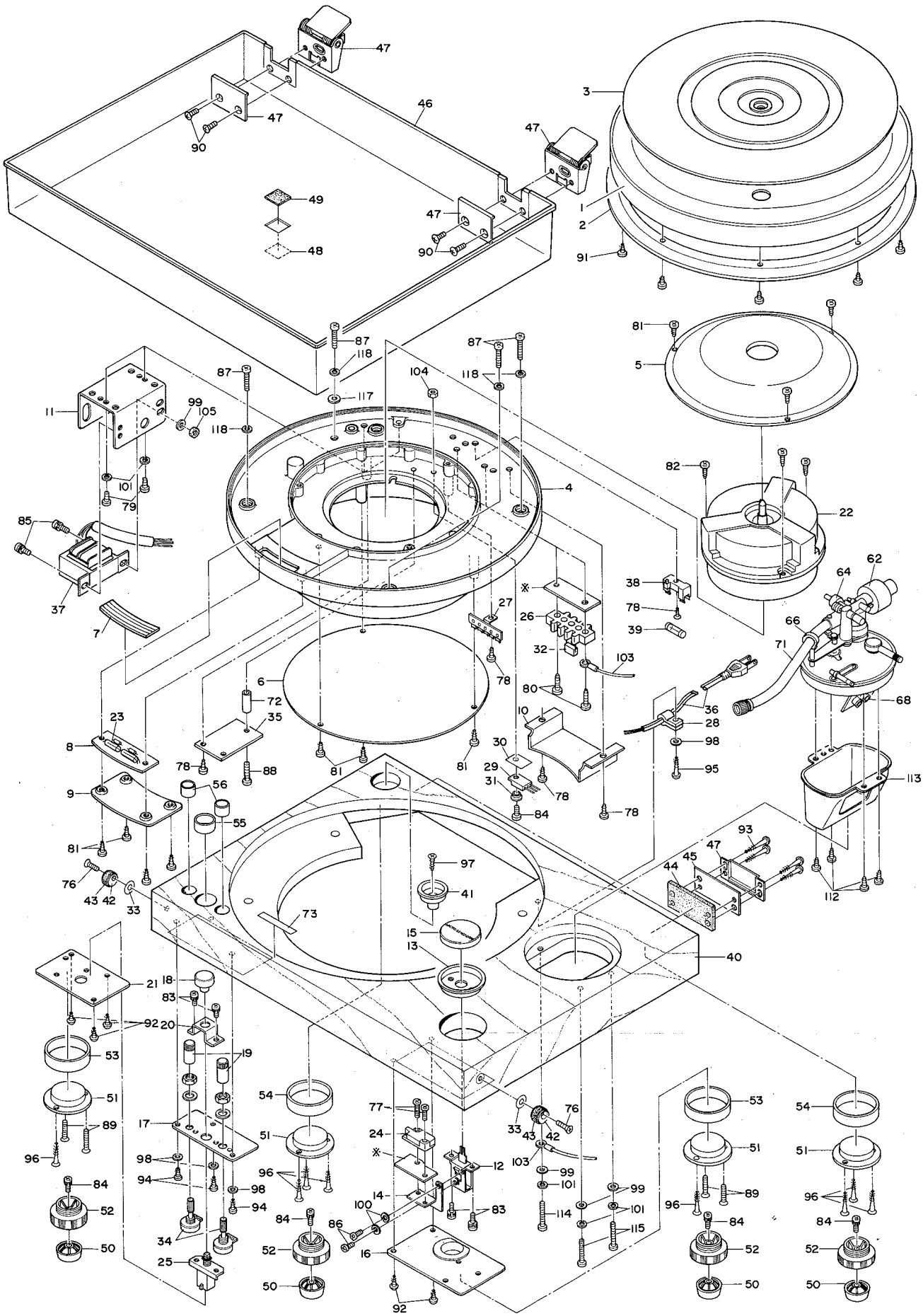
CIRCUIT REF. No.	PARTS No.	DESCRIPTION
R3.R4	00058-05	15K 1/4W
NL1 .NL2	00057-00	NL-13

POWER SUPPLY CIRCUIT DIAGRAM



CIRCUIT REF No	DESCRIPTION
TR1	2SD313 , 2SD325
D1~D4	F-14A
ZD1	WZ-240
NL1,NL2	NL-13
FUSE	0.5A φ6x23L
P.T	POWER TRANSFORMER
P	TERMINAL 3P

EXPLODED VIEW



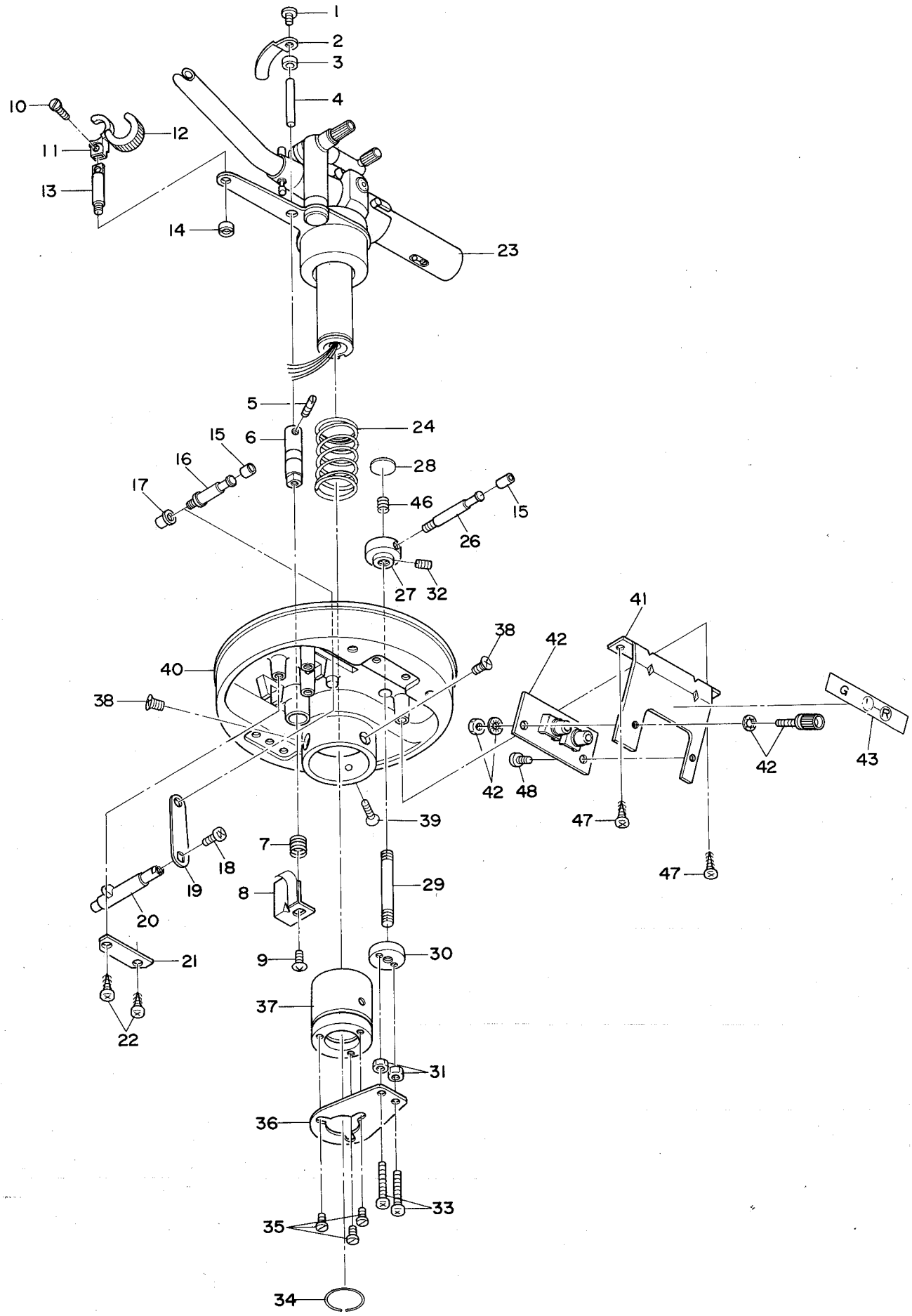
PARTS LIST FOR EXPLODED VIEW

TURNTABLE

REF. NO.	PARTS NO.	DESCRIPTION
1	20584-03	Turntable Platter
2	30728-27	Stroboscope Ring
3	43931-20	Rubber Mat
4	10221-56	Main Panel
5	44135-08	Motor Cover
6	43951-28	Bottom Cover
7	44436-16	Strobe Mask
8	43862-23	Neon Tube Cover
9	4386-24	Neon Tube Circuit Board
10	44414-10	Terminal Cover
11	30853-07	Transformer Holder
12		Power Switch Mechanism Ass'y
13	44160-06	Power Switch Bracket
14	43831-12	Switch Holder
15	44431-08	Power Button
16	43833-32	Power Switch Cover
17	43851-10	Change-over Switch Bracket
18	43942-13	Switch Button Ass'y
19	43826-27	Control Knob
20	44047-29	Button Guide
21	43834-21	Change-over Switch Cover
22	00062-01	Motor KMX-15F
23	00057-00	Neon Tube, NL-13
24	00075-09	Micro Switch, AM-47009
25		Push Switch, SVE-12
26	00080-00	Terminal 3P
27	00074-04	Terminal Lug type 1L4P
28	50032-00	Cord Holder
29	00065-05	Transistor 2SD313
30	50051-08	Insulator Sheet
31	50050-03	Bushing Sanyo M90-02
32	00071-00	X-Type Capacitor 0.01μF
33	44140-14	Washer φ14
34	00060-02	Variable Resistor 10 kΩ (B)
35	44244-05	Power Supply Circuit Board
36	00081-04	AC Cord
37	30866-04	Power Transformer
38	00078-02	Fuse Holder X-N 1157
39	00077-08	Fuse 0.5A
40	10255-13	Wooden Base
41	43969-28	Headshell Stand
42	43842-10	Dust Cover Stopper
43	43843-15	Rubber Ring
44	43847-34	Hinge Base
45	43848-23	Hinge Plate
46	20475-01	Dust Cover
47		Lock Plate & Spring Hinge Ass'y
48	44136-02	Name Plate (Outside)
49	42634-03	Name Plate (Inside)
50	42888-05	Rubber Foot Ass'y 50°
51	43507-31	Foot Base
52	42177-08	Height Adjustor
53	43852-09	Foot Base Ring (S)
54	43936-18	Foot Base Ring (L) (20)
55	43837-25	Decoration Ring (L)
56	43838-20	Decoration Ring (S)
57	43850-15	Record Adaptor 45 rpm
58	42890-02	Overhang Gauge

REF. NO.	PARTS NO.	DESCRIPTION
59	90008-05	Screwdriver
60	41610-06	Stylus Brush
61		Headshell Ass'y
62	43921-06	Main Weight
63	43922-16	Sub-weight
64	44086-13	Lateral Weight (A)
65	44087-18	Lateral Weight (B)
66	42821-01	Tonearm Rest
67	43962-20	Lifter Blade
68	43912-12	Output Terminal Ass'y
69	43910-34	Terminal Holder
70	30729-37	Output Cord
71		Tonearm Ass'y
72	60064-06	Spacer φx17ℓ
73	44040-11	Strobe Label
774	60094-07	Flat Head Screw M2.6x10
75	60095-01	Flat Head Screw M2.6x14
76	60046-08	Countersunk Head Screw M5x20
77		Pan Head Tapping Screw 3x15
78	60065-00	Pan Head Tapping Screw 3x8
79	60066-05	Pan Head Tapping Screw 4x8
80	60067-00	Pan Head Tapping Screw 4x15
81	60047-02	Binding-head Tapping Screw 3x8 B
82	60048-07	Pan Head Tapping Screw 4x16
83		Pan Head Screw M3x5
84		Pan Head Screw M3x8
85		Pan Head Screw M4x10
86	60049-01	Pan Head Screw M3x3
87	60051-09	Pan Head Screw M5x30 B
88	60068-04	Pan Head Screw M3x25
89	60052-08	Oval Countersunk Head Screw M3x25
90	60052-08	Oval Countersunk Head Screw M4x10 B
91		Binding Head Screw M3x8 B
92	60055-07	Oval Head Wood Screw φ3.1x10 B
93	60057-01	Oval Head Wood Screw φ3.1x32 B
94	60057-06	Oval Head Wood Screw φ2.7x10
95	60072-00	Oval Head Wood Screw φ3.1x16
96	60072-00	Oval Head Wood Screw φ3.1x16
97	60074-00	Countersunk Head Wood Screw φ3.1x10 B
98	60074-00	Washer φ3xφ8x0.8t
99	60119-03	Washer φ4xφ10x1t
100	60060-08	Spring Washer M3
101		Spring Washer M4
102	60039-08	Oval Lug M3
103	60062-07	Oval Lug M3
104	60027-05	Nut M3
105	60119-03	Nut M3
106	60096-06	Flat Head Screw M3.6x18 B
107	44430-03	Carton Box
108		Side Packing (R & L)
109		Parts Container
110		Parts Container Cover
111	44168-02	Top Packing
112		Pan Head Tapping Screw M3x5
113		Tonearm Base Cover
114		Pan Head Screw M4x40
115		Pan Head Screw M4x35
116		Cover Sheet

EXPLODED VIEW (TONEARM)



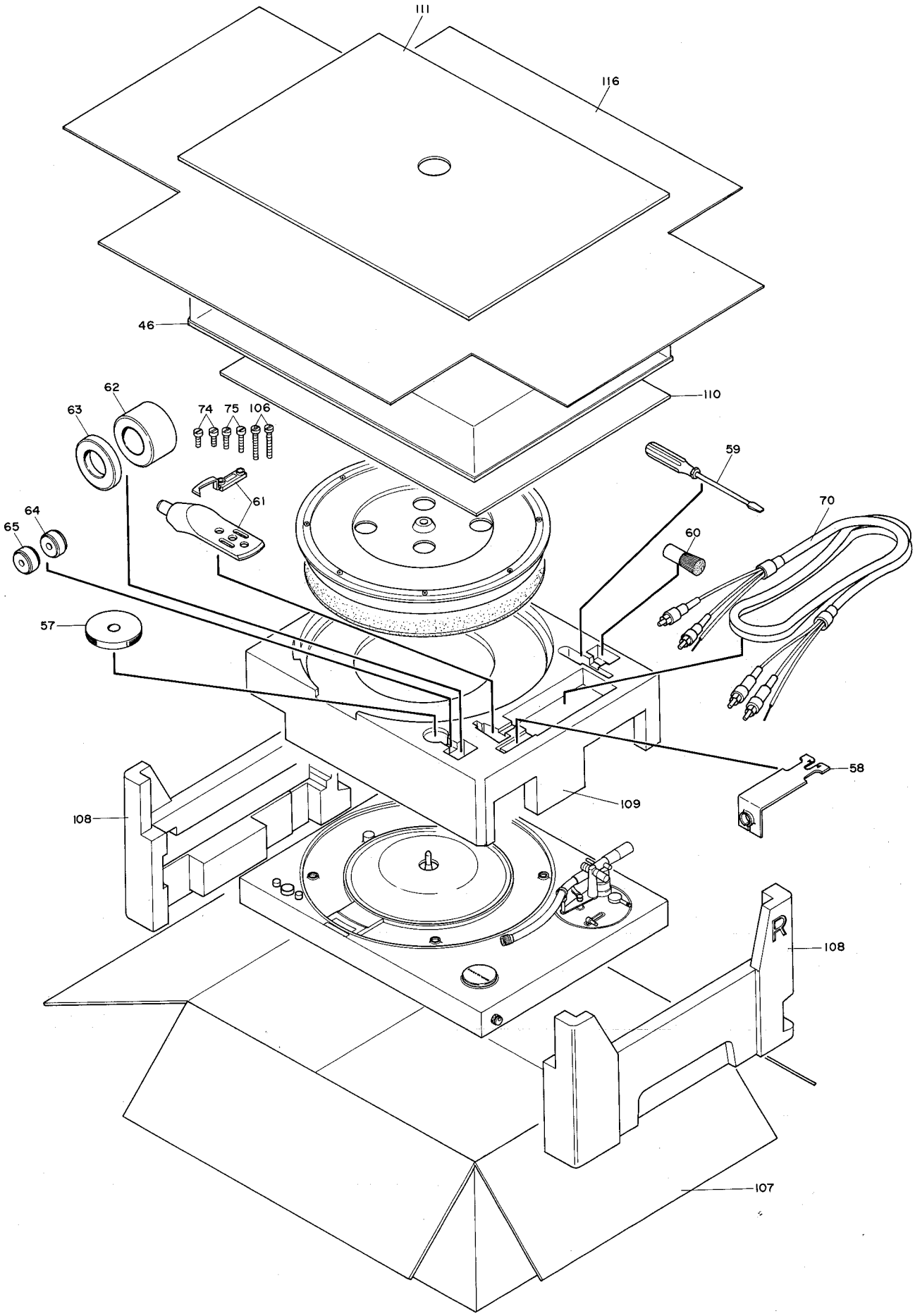
PARTS LIST FOR EXPLODED VIEW

TONEARM ASS'Y

REF. NO.	PARTS NO.	DESCRIPTION
1	43864-22	Set Screw
2	43926-20	Lifter Plate
3	43925-04	Lifter Plate Base
4	43927-24	Lifter Plate Shaft
5	43953-11	Set Screw
6	43928-29	Lifter Shaft
7	43934-24	Lifter Spring
8	43934-24	Actuating Plate
9	60090-09	Truss Screw M3x5
10	60079-02	Screw M2.6x4
11	42821-02	Tonearm Rest
12	42822-01	Tonearm Locker
13	43949-41	Tonearm Rest Holder
14	43950-23	Lock Nut
15	43862-12	Rubber Tube
16	43916-15	Lifter Handle
17	43915-16	Lock Screw
18	60083-09	Binder Tapping Screw M2.6.6
19	43914-27	Lifter Lever
20	43932-30	Cam Shaft
21	43466-36	Cam Shaft Keeper
22	60087-07	Tapping Screw M2.6x5
23	44130-26	Main Sleeve
24	44063-12	Spring
25		
26	43919-14	Lock Handle
27	43917-15	Lock Handle Hub
28	40830-07	Decoration Cap
29	44846-05	Lock Shaft
30	44001-11	Lock Plate Lifter
31	60109-00	M3 Nut
32	60104-07	Set Screw M2x4
33	60088-01	Pan Head Screw M3x18
34	44013-09	Main Sleeve Stopper
35	60080-05	Flat Fillister Head Screw M2.3x5
36	44000-22	Lock Plate
37	44035-26	Lock Sleeve
38	60107-00	Countersunk Head Screw M2.6x6
39	60106-06	Countersunk Head Screw M2.6x8
40	20485-05	Tonearm Base

REF. NO.	PARTS NO.	DESCRIPTION
41	43910-34	Terminal Holder
42	43912-12	Output Terminal Ass'y
43	43956-15	Label
44		
45		
46	60105-01	Set Screw M6x6
47	60081-00	Tapping Screw M3x5
48	40084-03	Pan Head Screw M3x3
49		
50		

PACKING FOR SHIPMENT



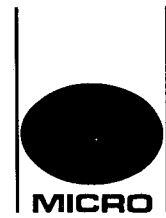
SPECIFICATIONS

MOTOR

Drive system	Direct drive with DC servo motor
Speeds	33-1/3, 45 rpm
Fine speed adjustment range	±6%
Turntable platter	Die-cast aluminum 32 cm (12-5/8 In)
	1.5 kg (3.3 lbs)
Wow & flutter	Less than 0.028%
Power	U.S.A. & Canada 117V 60Hz other areas
	220-240V 50Hz 16.5W

TONEARM

Type	Dynamic balance
Effective length	237 mm (9-5/16 in)
Overhang	15 mm (9-16 in)
Offset angle	21°
Maximum tracking error	Less than 1.5°
Range of stylus tracking force adjustment	0-3 g
Dimensions	(W) 497 x (D) 385 x (H) 154 mm
	(19-9/16 x 15-5/32 x 6-1/16 in)
Weight	11.5 kg (25.4 lbs)



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