

MICRO SEIKI®

DIRECT DRIVE AUTOMATIC
TURNTABLE SYSTEM

DD-35 SERVICE MANUAL



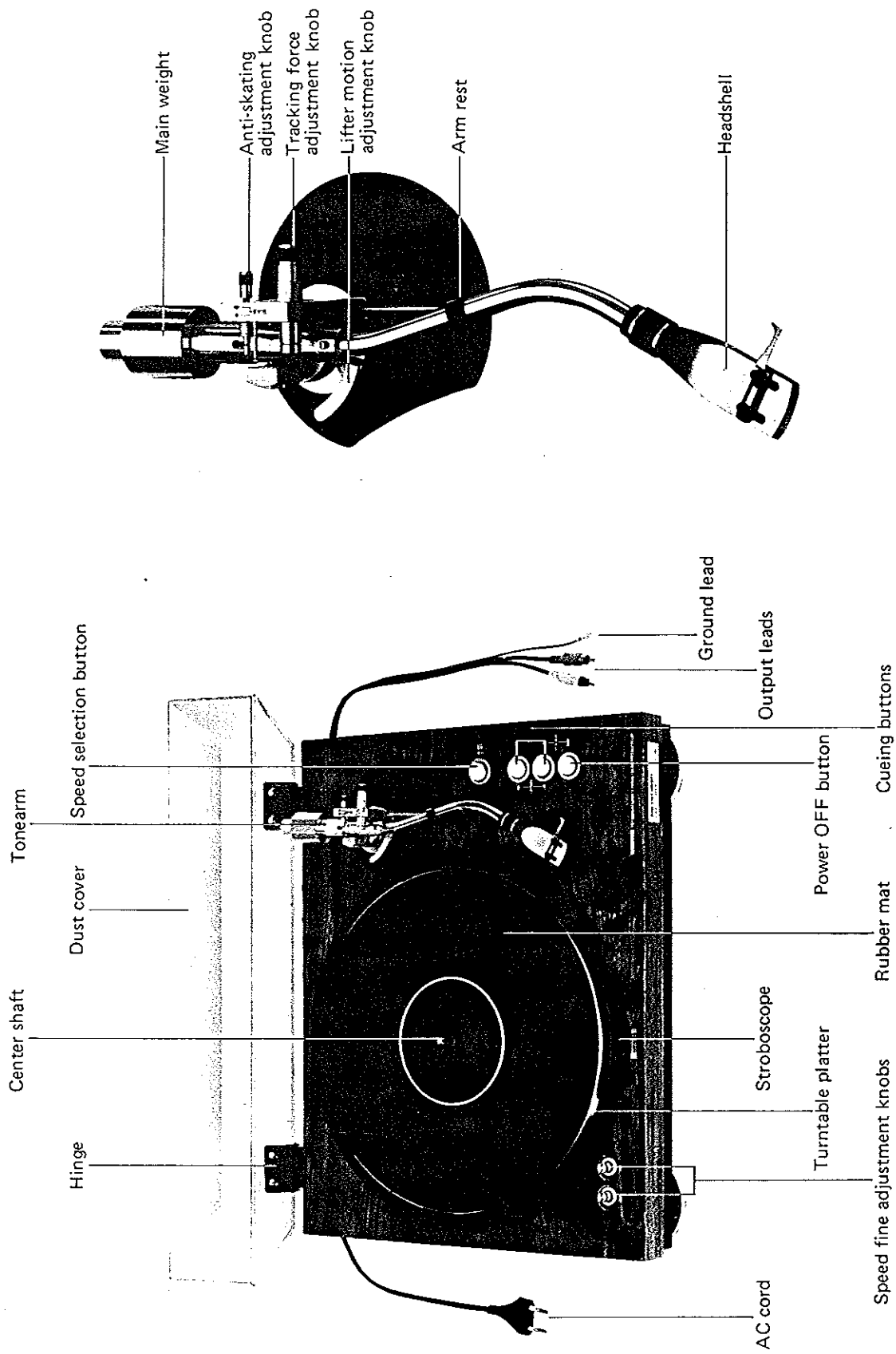
MICRO SEIKI CO., LTD.
TOKYO JAPAN

Distributed in U.S.A. by
TEAC CORPORATION OF AMERICA 7733 Telegraph Road, Montebello, Ca. 90640
Printed in JAPAN

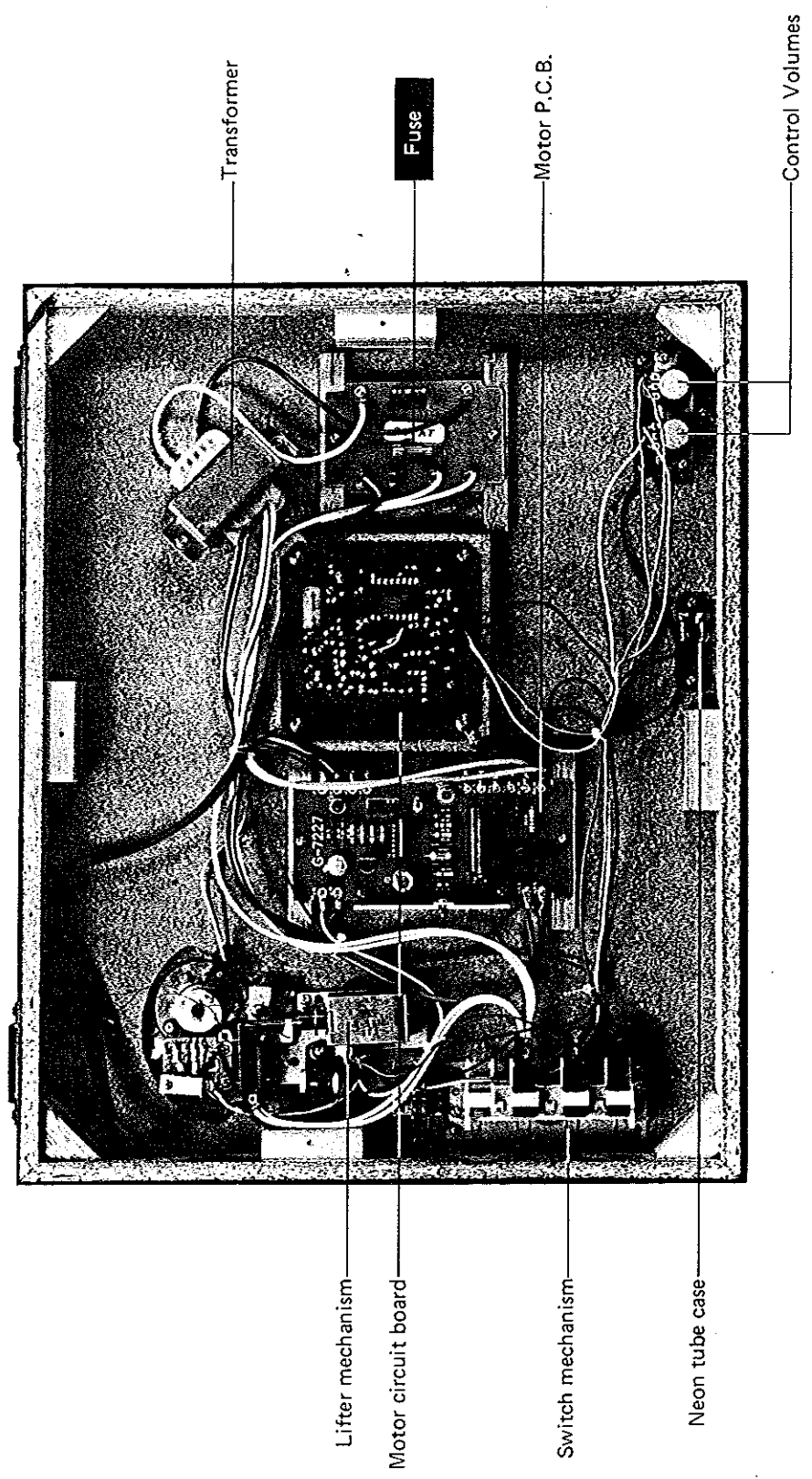
CONTENTS

1.	PARTS NOMENCLATURE.....	3
2.	PARTS NOMENCLATURE (BACK PANEL).....	4
3.	ADJUSTMENT	
	FINE SPEED ADJUSTMENT	5
	CHECK & ADJUSTMENT OF CONTROL P.C.B. ASS'Y.....	5
4.	OPERATION.....	6
5.	SCHEMATIC DIAGRAM.....	7
6.	EXPLODED VIEW.....	8
7.	PARTS LIST FOR EXPLODED VIEW.....	9
8.	DETAIL VIEWS FOR ASS'Y PARTS	
	A. TONEARM ASS'Y.....	10
	B. VOLUME MOUNTING PLATE ASS'Y.....	11
	C. SWITCH MOUNTING PLATE ASS'Y.....	11
	D. SWITCH MECHNAISM ASS'Y.....	12
	E. LIFTER MECHANISM ASS'Y.....	13
9.	PACKING FOR SHIPMENT.....	14
10.	SPECIFICATIONS.....	15

PARTS NOMENCLATURE



PARTS NOMENCLATURE (Backpanel)



THE IMPORTANT SAFETY NOTICE

The fuse is the special component which is important for safety. It is essential that this fuse should be replaced with manufacturer's specified part to prevent shock, fire, or other hazards. Do not modify the original design.

ADJUSTMENT

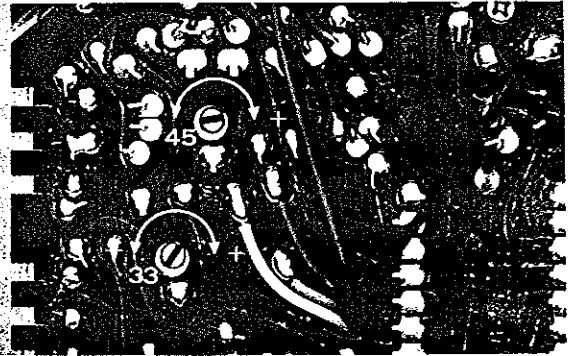
FINE SPEED ADJUSTMENT FOR TURNTABLE SPEEDS

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

1. Set the speed fine adjustment knobs to the middle position.
2. While watching the stroboscope stripes on the turntable platter, adjust the variable resistor on the motor circuit board for appropriate static display of the strobe.

CHECK & ADJUSTMENT OF CONTROL P.C.B. ASS'Y

1. Apply power to turntable and button.
2. Check voltages indicated in Fig. 1.
3. Connect VTVM to the terminals as shown in Fig. 2.
4. Adjust variable resistor slowly for $4\text{ V} \pm 0.1$ on VTVM.



KEY NO.	PART NO.	DESCRIPTION
1	31327	Control PB
2	60305	Nut M3
3	60245	⊕ Pan Head SEMS Screw M3 x 8
4	45804	Heat Sink
5	60141	⊕ Pan Head Tapping Screw ϕ 3 x 6

TRANSISTORS

Q ₁	00065	2SD 313
Q ₂	00094	2SC 2209
Q ₃		2SC 828

C MOS IC

Q ₄	00093	MM74C00
----------------	-------	---------

DIODES

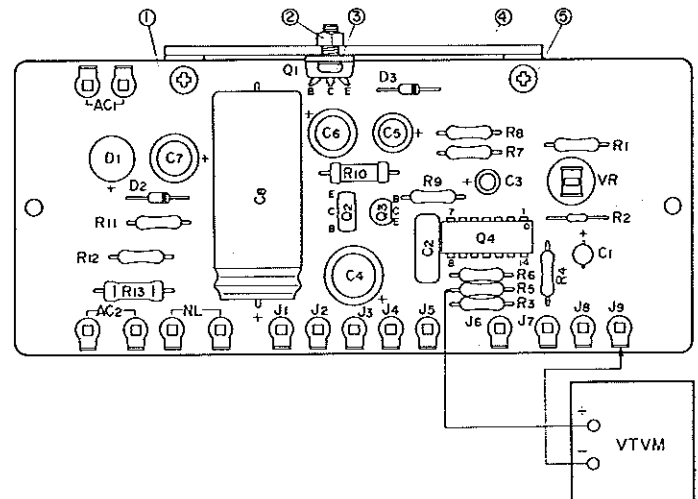
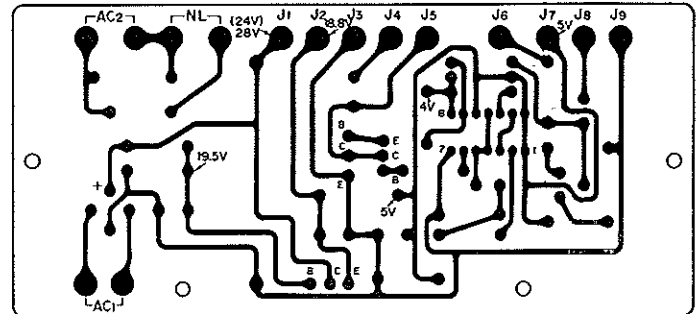
D ₁	00124	WO2
D ₂	00284	XZ-195
D ₃	00095	XZ-049

CAPACITORS

C ₁	00098	10 μ F	10WV
C ₂	00100	0.1 μ F	50WV
C ₃	00111	2.2 μ F	25WV
C ₄	02434	330 μ F	25WV
C ₅	02419	100 μ F	10WV
C ₆	00067	100 μ F	25WV
C ₈	00353	2200 μ F	35WV

RESISTORS

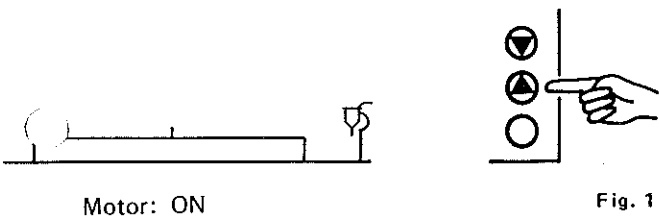
VR	00101	47K Ω	
R ₁	00018	120K Ω	1/4W
R ₂	00112	100K Ω	1/8W
R ₃	00540	100K Ω	1/4W
R ₄	00104	680K Ω	1/4W
R ₅	00532	47K Ω	1/4W
R ₆	00506	3.9K Ω	1/4W
R ₇	00188	1K Ω	1/4W
R ₈	00506	3.9K Ω	1/4W
R ₉	00532	47K Ω	1/4W
R ₁₀	00128	750K Ω	1W
R ₁₁	00559	620K Ω	1/4W
R ₁₂	00058	15K Ω	1/4W
R ₁₃	00059	33K Ω	1/2W



OPERATION

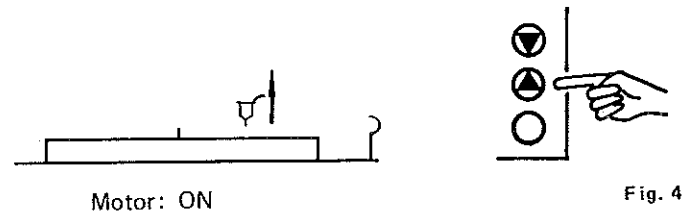
1. Playing Records

- 1) Press ▲ button and platter rotates.

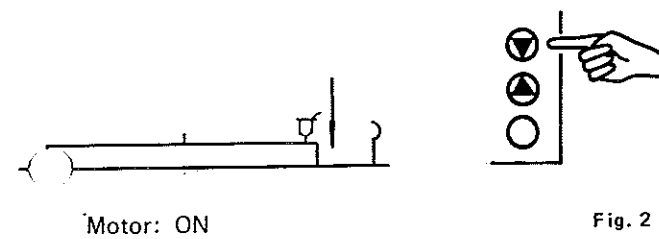


2. Raising Tonearm in Midst of Record

- 2) Press the button. The tonearm will be gently raised while the platter continues to rotate.

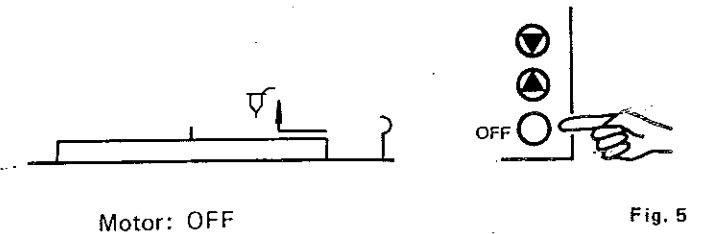


- 2) Press SPEED selector button to select platter rotating speed according to the record. (▲ 33/ ▼ 45 rpm)
- 3) Position tonearm over desired starting point of the record and press the ▼ button. Platter rotates and tonearm is gently lowered onto the record to begin playing.

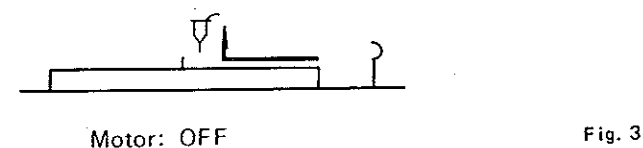


3. Stopping Play in Midst of Record

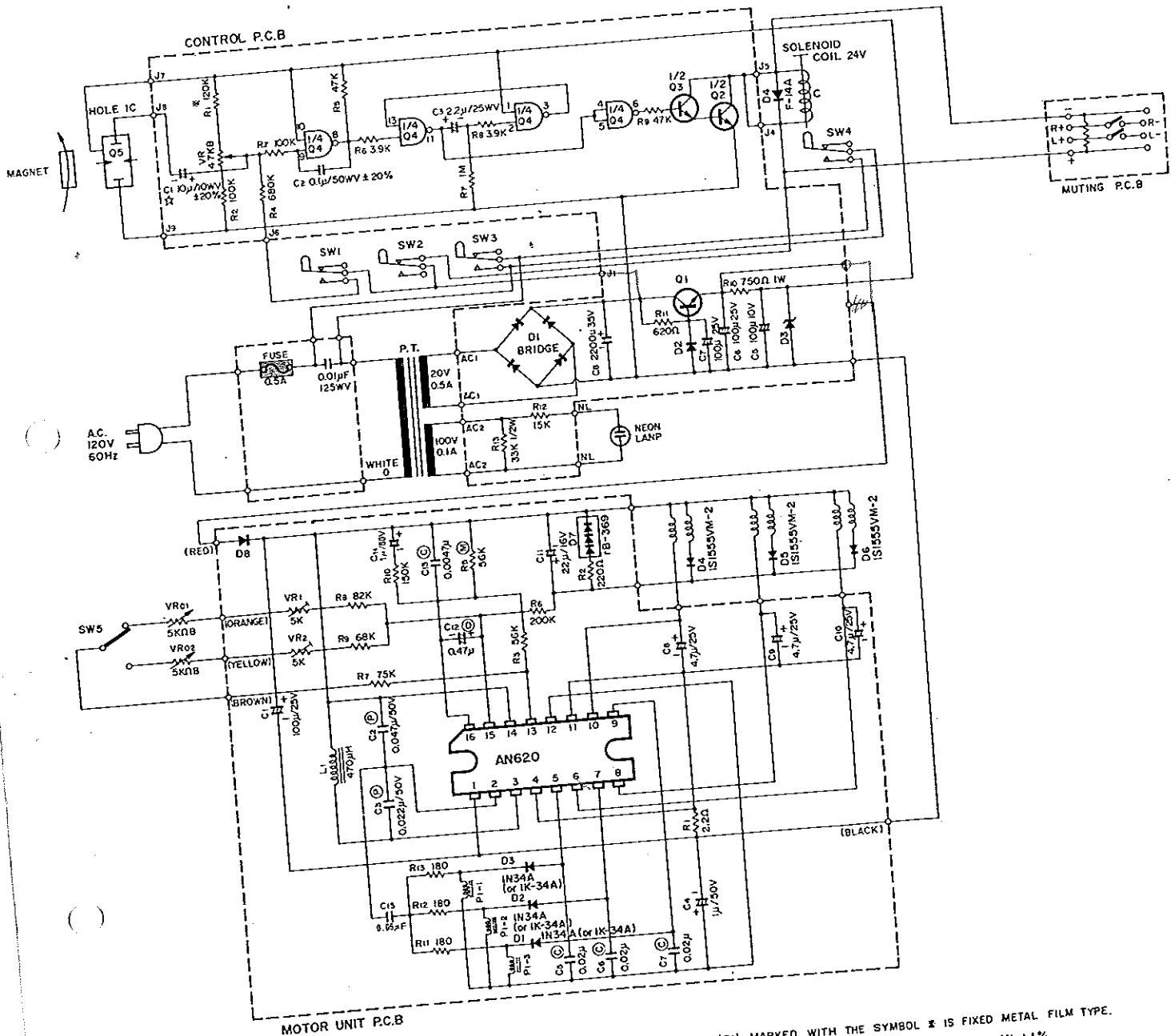
- 3) Press the OFF button. The tonearm raises and platter rotation stops.



- 4) At the end of the record, the tonearm automatically raises and platter rotation stops.



SCHEMATIC DIAGRAM



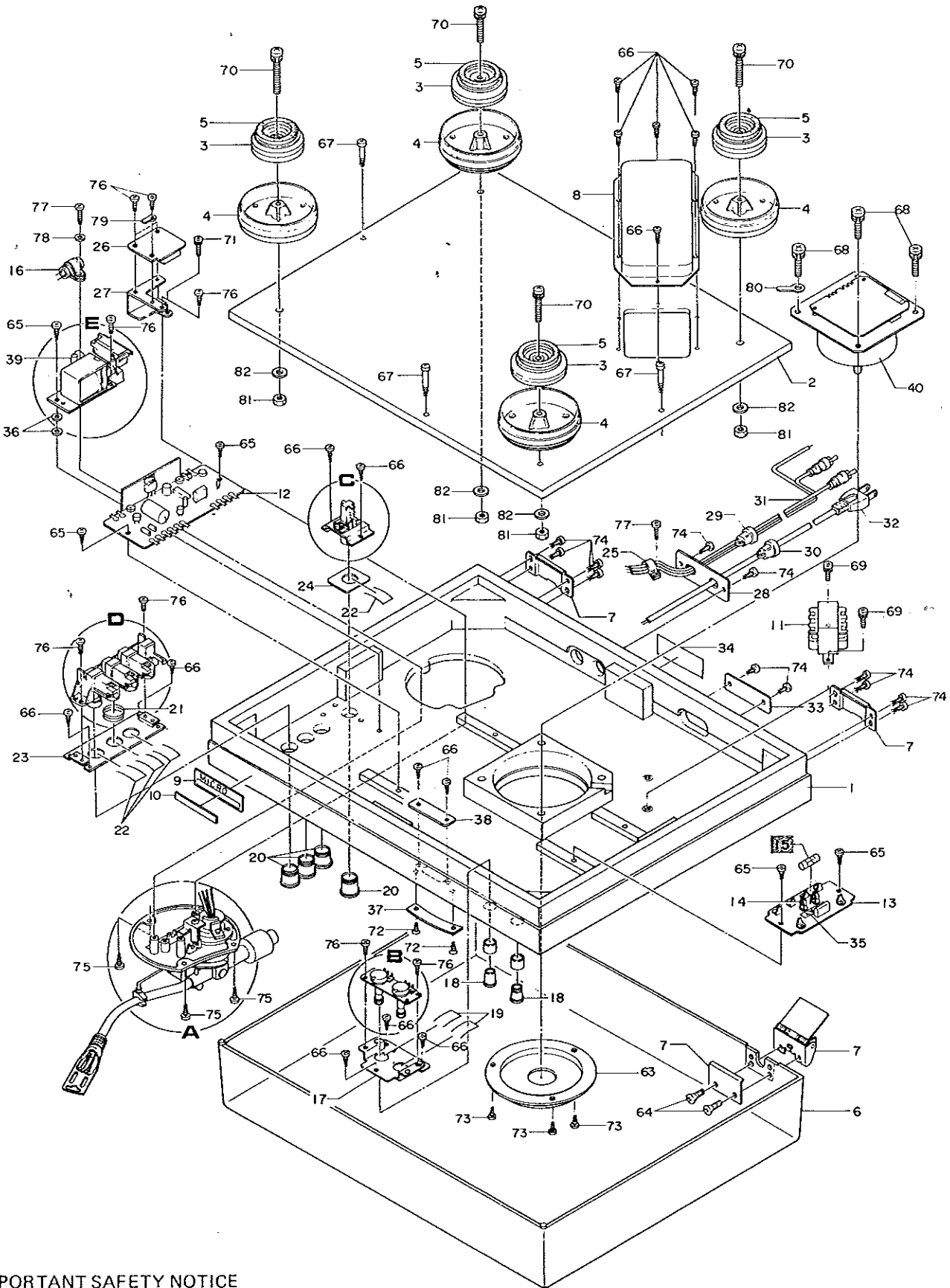
- Q1 : 2SD313
- Q2 : 2SC372 (2SC828)
- Q3 : 2SD325 (2SD234), 2SC2209
- Q4 : CMOS IC MM74C00 (NS)
- Q5 : HOLE IC DN-835 (NS)
- D1 : SILICON DIODE BRIDGE W02 (G.I)
- D2 : ZENER DIODE WZ-187 (JRC)
- D3 : ZENER DIODE XZ-049 (JRC)
- D4 : SILICON DIODE F-14A (NEC)
- R2 : ERD-10T ±5% (MATSUSHITA)
- C8 : ECEB-35S 222 (MATSUSHITA)

- NOTE 1. RESISTOR (R) MARKED WITH THE SYMBOL \times IS FIXED METAL FILM TYPE. AND DECLINATION OF THIS RESISTOR MOST BE LESS THAN ±1%.
2. NO MARKED RESISTORS IS 1/4W AND LESS THAN ±5%.
 3. DECLINATION OF NO MARKED CAPACITORS IS -10~+75%.
 4. CAPACITOR MARKED WITH \star MOST BE DIP-TANTALUM TYPE.
 5. \otimes MARKED RESISTOR IS METAL FILM TYPE.
 6. \odot MARKED CAPACITOR IS DIP TANTALUM TYPE.
 7. \oplus MARKED CAPACITOR IS POLYESTER FILM TYPE.
 8. \odot MARKED CAPACITOR IS CERAMIC TYPE.

THE IMPORTANT SAFETY NOTICE

The fuse is the special component which is important for safety. It is essential that this fuse should be replaced with manufacture's specified part to prevent shock, fire, or other hazards. Do not modify the original design.

EXPLODED VIEW



THE IMPORTANT SAFETY NOTICE

The fuse is the special component which is important for safety. It is essential that this fuse should be replaced with manufacture's specified part to prevent shock, fire, or other hazards. Do not modify the original design.

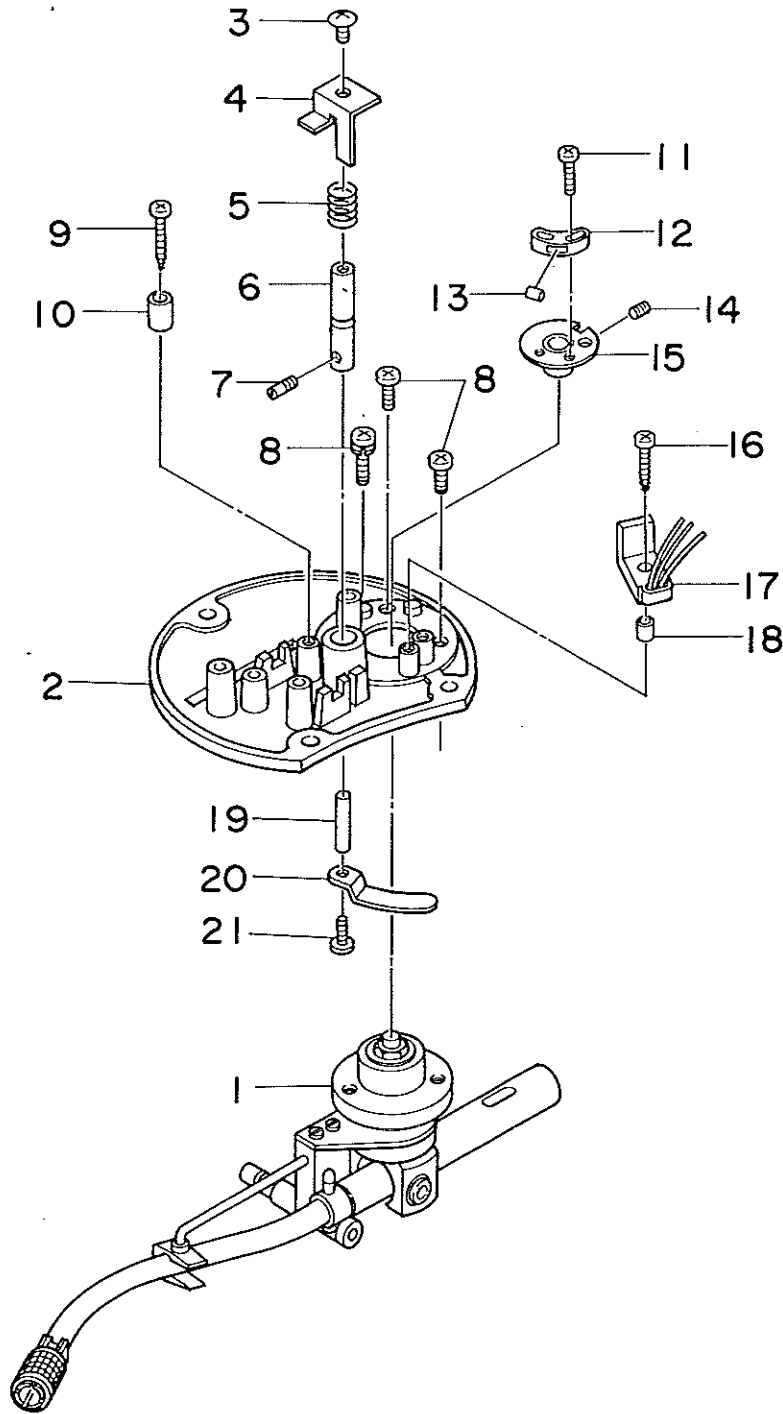
PARTS LIST FOR EXPLODED VIEW

KEY NO.	PART NO.	DESCRIPTION
1	10349	Wooden Base
2	20797	Bottom Cover
3	46859	Cushion Rubber
4	31213	Insulator Cover
5	46859	Insulator Felt
6	20548	Dust Cover
7	30740	Look Plate Spring Hinge Ass'y
8	31025	Power Transformer Cover
9	30986	Badge
10	46472	Name Plate
11	31264	Power Transformer
12	20823	Auto up Control Circuit Board
13	314006	Power Supply Circuit Board
14	00084	Fuse Holder SN5051
15	00079	Fuse $\phi 6 \times 32L$ 0.5A 250 V
16	00132	Capacitor 0.01 μ F 125WV
	46688	Volume Plate
	46677	Volume Ring
19	46681	Volume Ring Spring
20	46676	Push Button Ring
21	44951	Button Ring Spring
22	44746	Button Ring Stopper Spring
23	44745	Switch Mechanism Mounting Plate
24	46686	Bottom Ring Mounting Washer
25	00090	Cord Holder No.5120
26	471512	Muting Circuit Board Ass'y
27	31256	Muting Circuit Board Ass'y Holder Plate
28	46367	Cord Holder
29	53222	Cord Bushing F-4
30	53141	Cord Bushing D-3
31	30389	Out Put Cord Ass'y
32	40073	AC Cord
33	46847	Blanking Cover
34	46759	Rating Cover
35	44833	Fuse Caution Label
36	44836	Lifter Mechanism Mounting Collar
37	46694	Neon Tube Cover
38	46683	Neon Tube Circuit Board Ass'y
39	00063	Silicon Diode
40	00289	Motor Ass'y PCL-15U1
41		Carton Box
42	44784	Platter Cover
43	20549	Turntable Platter
44	45023	Rubber Mat
45		Packing Material R
46		Packing Material L
47		Parts Container
48	44818	Middle Packing
49	44811	Cover Sheet
50	44901	Record Adaptor 45 rpm
51	40321	Screw Driver
52		Instruction Manual
53	44691	Main Weight
54	30366	Head Shell
55	42890	Overhang Gauge
56	60161	Flat Fillister Head Screw M2.6 x 18
57	60160	Flat Fillister Head Screw M2.6 x 14
58	60159	Flat Fillister Head Screw M2.6 x 10
59	70002	Polyester Pouch
60	70031	Polyester Sheet
61	70031	Polyester Sheet
62	70019	Polyester Pouch
63		Top Cover
64	60385	Oval Counter Sunk Screw M4 x 10

KEY NO.	PART NO.	DESCRIPTION
65	60135	⊕ Pan Head Tapping Screw $\phi 3 \times 12$
66	60134	⊕ Pan Head Tapping Screw $\phi 3 \times 8$
67	60540	⊕ Pan Head Tapping Screw $\phi 3 \times 20$
68	60484	⊕ Pan Head SEMS Screw M4 x 35
69	60247	⊕ Pan Head SEMS Screw M4 x 10
70	60504	⊕ Pan Head SEMS Screw M5 x 35
71	60006	⊕ Pan Head SEMS Screw M3 x 6
72	60541	⊕ Countersunk Tapping Screw $\phi 3.5 \times 10$
73	60495	⊕ Pan Head Tapping Screw $\phi 3 \times 8$
74	60751	⊕ Pan Head Tapping Screw $\phi 3 \times 12$
75	60275	⊕ Binding Head Tapping Screw $\phi 4 \times 12$
76	60141	⊕ Pan Head Tapping Screw $\phi 3 \times 6$
77	60178	⊕ Pan Head Tapping Screw $\phi 3 \times 14$
78	60378	Flat Washer $\phi 3 \times \phi 8 \times 0.8t$
79	60544	Terminal Lug
80	60062	Terminal Lug
81	60430	Nut M5
82	60542	Flat Washer $\phi 5 \times \phi 10 \times 1t$

DETAIL VIEWS FOR ASS'Y PARTS

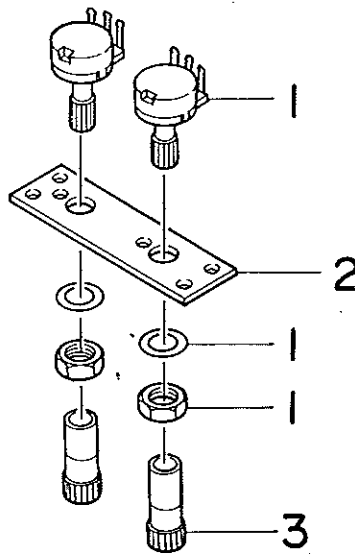
A. TONEARM ASS'Y



KEY NO.	PART NO.	DESCRIPTION
1		Tone Arm Ass'y
2	20785	Arm Base
3	600909	Truss Screw M3 x 5
4	44743	Stopper
5	43934	Lifit Spring
6	45067	Lifter Shaft
7	43864	Set Screw
8	60245	Pan Head Screw SEMS M3 x 8
9	60588	Pan Head Screw M2.6 x 14
10	46692	Lifter Cam Stopper
11	60543	Pan Head Screw M2 x 8

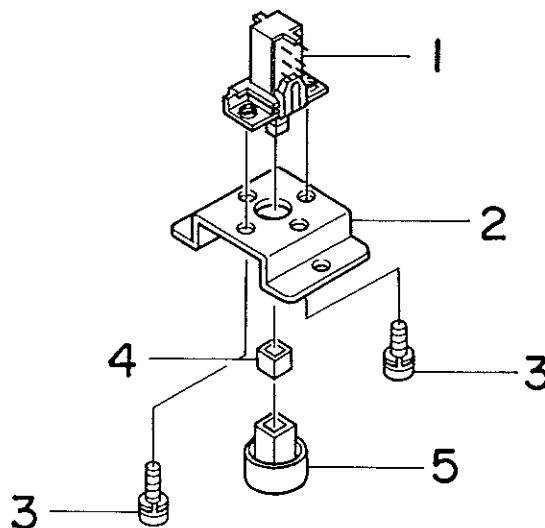
KEY NO.	PART NO.	DESCRIPTION
12	46387	Magnet Holder
13	40259	Magnet
14	60102	Set Screw
15	46391	Rotary Plate Ass'y
16	60249	+ Pan Head Tapping Screw M2.6 x 8
17	46941	Sensor Ass'y
18		Spacer
19	43927	Guide Plate Shaft
20	43926	Guide Plate
21	43864	Guide Plate Screw M2

B. VOLUME MOUNTING PLATE ASS'Y



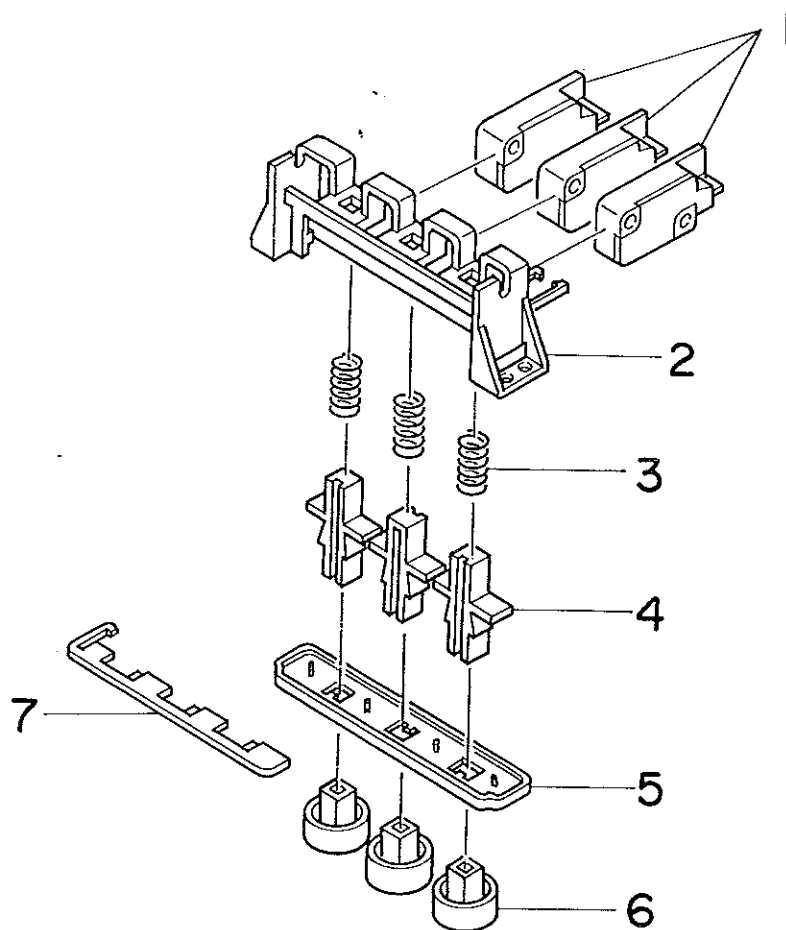
KEY NO.	PART NO.	DESCRIPTION
1	00193	Volume 5 k with Nut and Spring Washer
2	46688	Volume Mounting Plate
3	43826	Control Knob

C. SWITCH MOUNTING PLATE ASS'Y



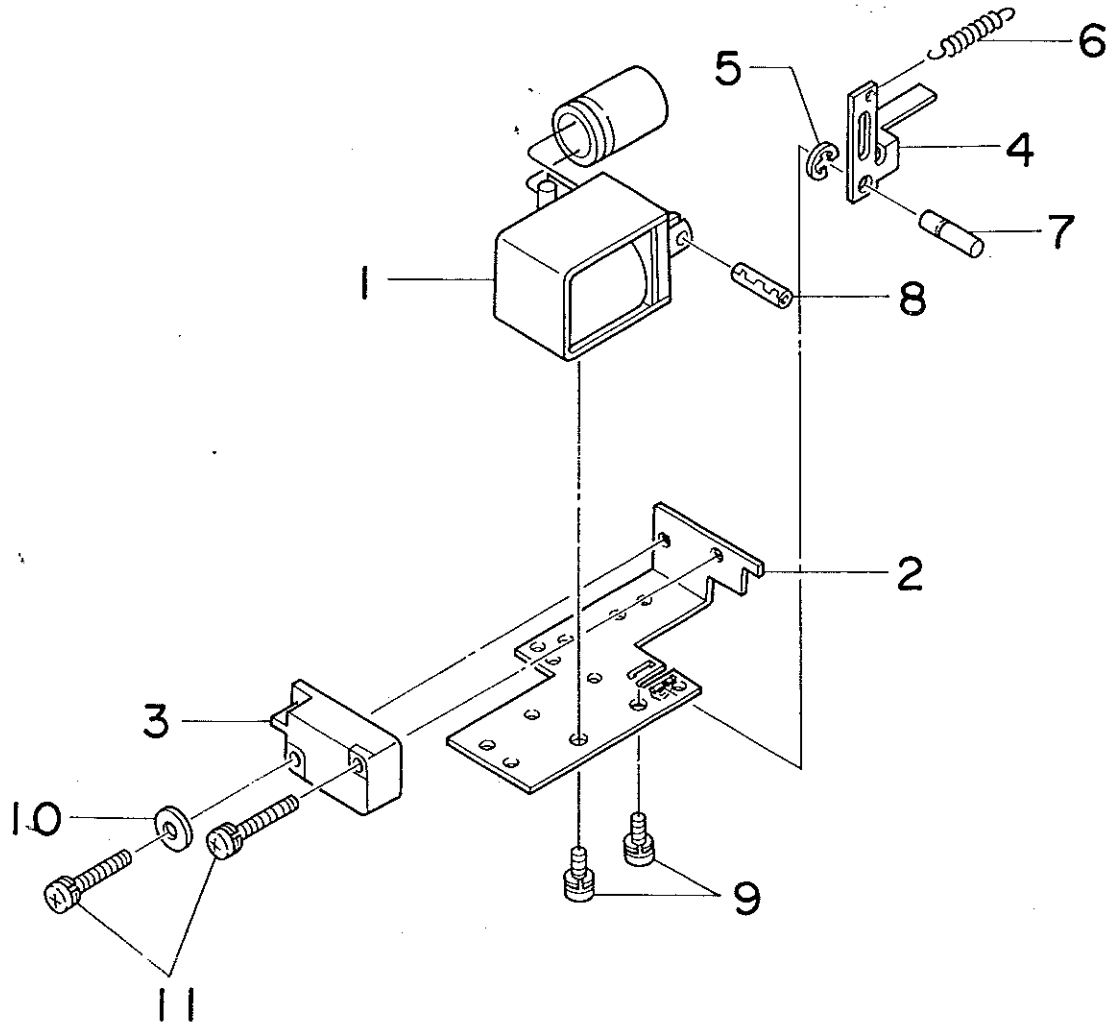
KEY NO.	PART NO.	DESCRIPTION
1	43970	Push Switch SUE-12
2	46680	Switch Mounting Plate
3	60006	Pan Head SEMS Screw M3x6 M3 x 6
4	44623	Spacer
5	44678	Push Button

D. SWITCH MECHANISM ASS'Y



KEY NO.	PART NO.	DESCRIPTION
1	00030	Micro Switch AM4100
2	30875	Switch Mechanism Frame
3	44904	Return Spring
4	44873	Actuator Rod
5	44543	Rod Guide Plate
6	46678	Push Button
7	44518	Slide Stopper

E. LIFTR MECHANISM ASS'Y

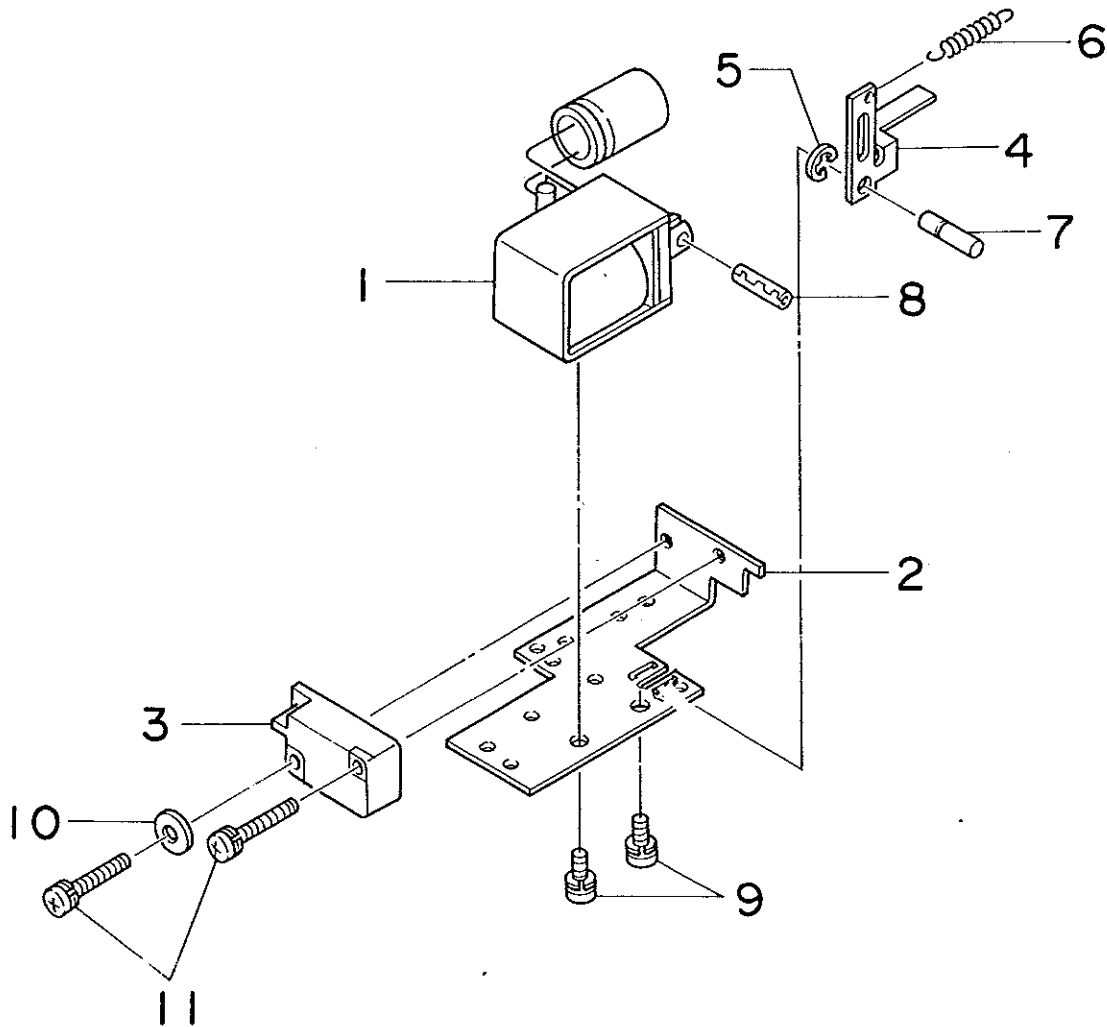


KEY NO.	PART NO.	DESCRIPTION
1	30858	Lifter Mechanism Mounting Plate
2	31166	D.C. Solenoid Unit
3	00063	Silicon Diode F-14A
4	60189	Spring Pin
5	44487	Lifter Cam
6	45463	Lifter Spring

KEY NO.	PART NO.	DESCRIPTION
7	44485	Cam Shaft
8	00053	Micro Switch AM41009
9	60190	E Ring D2.3
10	60006	⊥ Pan Head Screw Sems. M3 x 6
11	60227	⊥ Pan Head Screw Sems. M3 x 15
12	60043	Fiber Washer 3 ϕ x 10 ϕ x 1t

CORRECTION

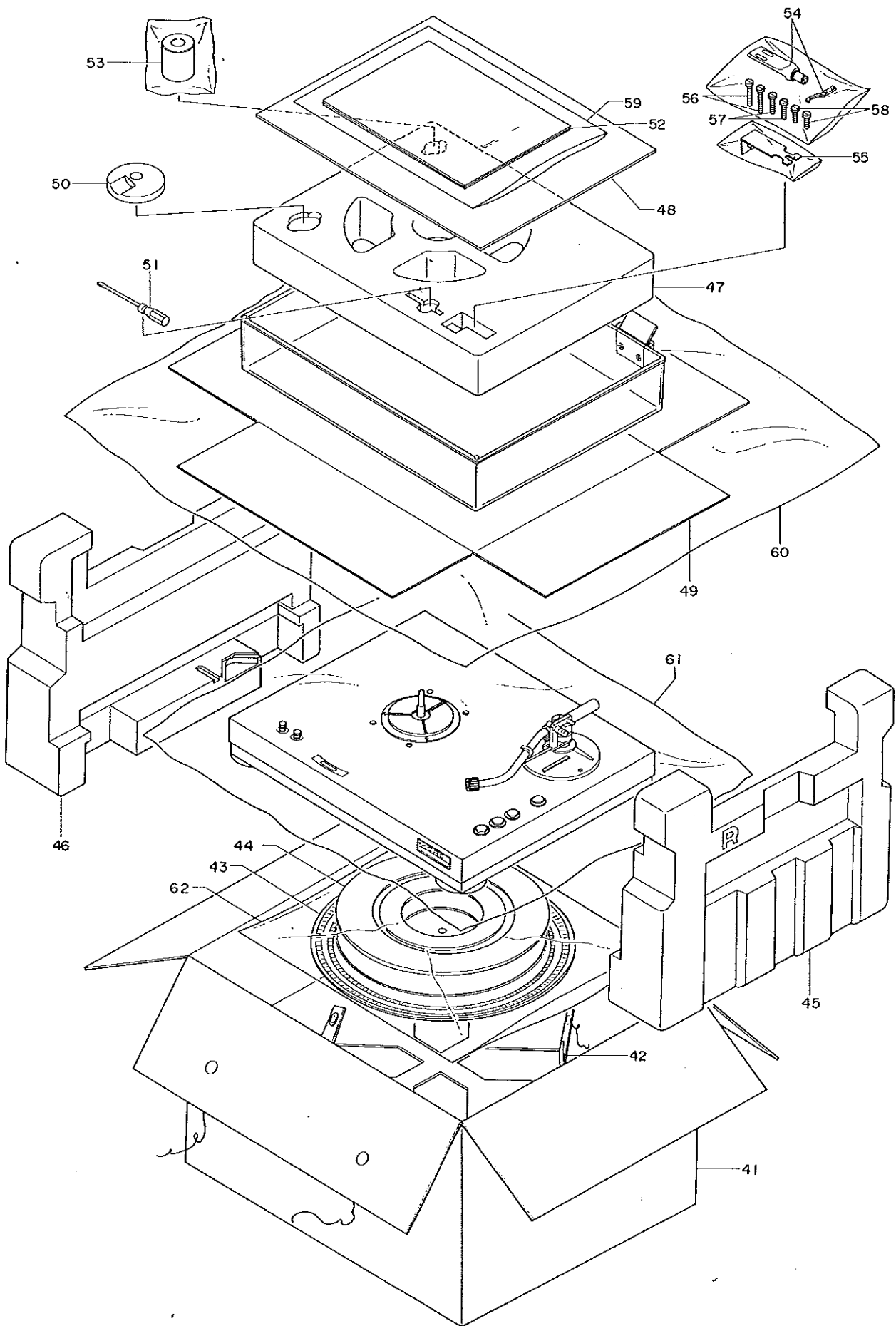
E. LIFTR MECHANISM ASS'Y



KEY NO.	PART NO.	DESCRIPTION
1	30863	Solenoid Unit
2	30853	Mounting Plate
3	00030	Micro Switch AM4100
4	44487	Lifter Cam
5	60190	E Ring
6	45463	Spring

KEY NO.	PART NO.	DESCRIPTION
7	44485	Cam Shaft
8	60189	Spring Pin 3φ x 10
9	60006	+ Pan Head SEMS Screw M3 x 6
10	60378	Fiber Washer 3φ x 10φ x 1t
11	60489	+ Pan Head Screw M3 x 14

PACKING FOR SHIPMENT



SPECIFICATIONS

TURNTABLE

Drive System.....	Direct drive with DC servo motor
Speeds.....	33-1/3, 45 rpm
Fine speed adjustment range.....	± 6%
Turntable platter	Die-cast aluminum 33 cm (13 inch) 1.5 kg (3.3 lbs)
Wow & flutter.....	Less than 0.03%
S/N ratio.....	More than 60 dB
Power.....	U.S.A. & Canada 117 V 60 Hz, other areas 220-240 V, 50 Hz, 12 W

(Be sure the power requirement of this machine corresponds to the outlet of your room).

TONEARM

Type.....	Dynamic balance
Effective length.....	222 mm (8-3/4 inch)
Overhang.....	15 mm (9/16 inch)
Offset angle.....	22° 25'
Maximum tracking error.....	Less than 1.5°
Range of tracking force adjustment.....	0 - 3 g
Dimensions.....	(W) 454 x (D) 383 x (H) 153 mm (17-7/8 x 15-5/64 x 6-1/32 inch)
Weight.....	7.9 kg (17.6 lbs)