



SR-2020

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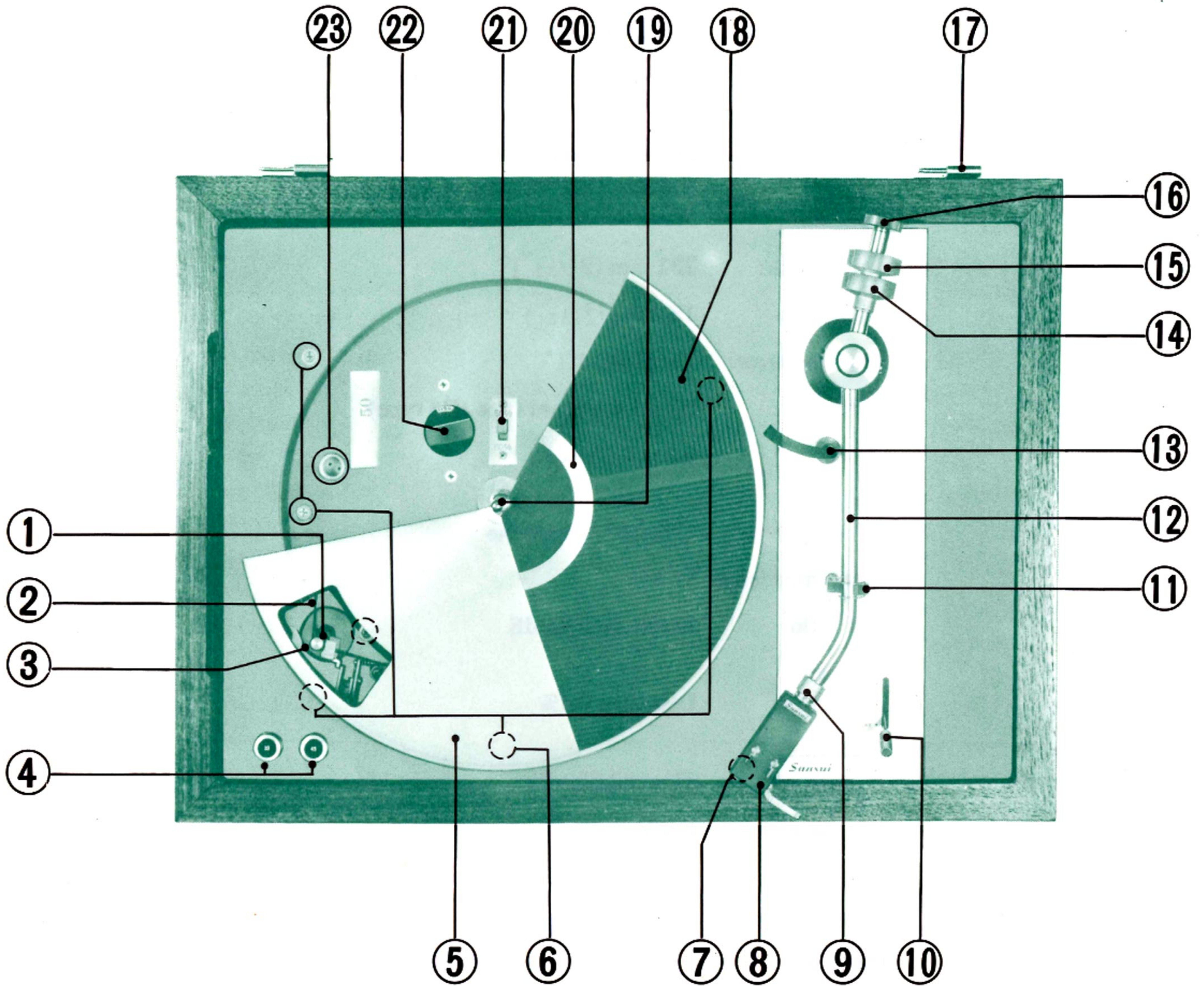
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1. SPECIFICATION

Type:	2-speed, belt-driven manual turntable
Rated speeds:	33 ¹ / ₃ , 45 rpm
Motor:	4-pole hysteresis synchronous
Turntable (Platter):	Aluminum alloy die-cast, 300 mm (11 ³ / ₁₆ ") ϕ , 1.1 kg (2.43 lbs)
Tonearm:	Static-balanced tubular
Arm length:	231 mm (9 ³ / ₃₂ ")
Overhang:	15 mm (1 ⁹ / ₃₂ ")
Tracking error:	Less than $\pm 1^\circ$
Cartridge:	Induced magnet type (IM type)
Stylus:	0.5 mil diamond
Stylus compliance:	17 $\times 10^{-6}$ cm/dyne
Load impedance:	50 k Ω
S/N ratio:	Better than 45 dB
Wow and Flutter:	Less than 0.1%
Frequency response:	15 ~ 20,000 Hz
Output voltage:	5 mV
Crosstalk:	Better than 30 dB at 1 kHz
Stylus pressure:	1.5 ~ 2 grams
Dust cover:	Smoked acrylic dust cover
Cabinet:	Walnut, open-pore finished
Power source:	100 V, 115 V, 130 V, 200 V, 230 V and 250 V, 50/60 Hz
Dimensions:	Width 520 mm (20 ¹⁵ / ₃₂ "), depth 375 mm (14 ⁹ / ₁₆ "), height 190 mm (7 ³ / ₁₆ ")
Weight:	8.0 kg (17.63 lbs)

※ Manufacturer reserves a right to change design and/or specifications without notice for purpose of improvement.

2. CONTROLS, INDICATORS AND OTHERS



- | | | |
|-------------------------|--------------------------|-----------------------------|
| ① Belt guide | ⑨ Locking nut | ⑰ Hinge |
| ② Belt | ⑩ Control lever | ⑱ Turntable spindle |
| ③ Capstan | ⑪ Arm rest | ⑲ Turntable spindle |
| ④ Speed selector switch | ⑫ Tonearm | ⑳ Turntable ring |
| ⑤ Turntable (Platter) | ⑬ Arm lifter | ㉑ Frequency selector switch |
| ⑥ Shipping bolts | ⑭ Stylus pressure weight | ㉒ Voltage selector |
| ⑦ Cartridge (Stylus) | ⑮ Main weight | ㉓ Oil orifice |
| ⑧ Shell | ⑯ Sub weight | |

3. MAINTENANCE

3-1. Changing the capstan

The SR-2020's power source frequency has been properly adjusted for the area. If the turntable is brought to the country or area where electrical cycles change from 50 to 60 Hz or vice versa, an adjustment in the turntable speed is necessary as follows.

1. Remove the turntable (platter) and belt.
2. Loosen the setscrew of the capstan and pull the capstan up.
3. Attach a proper capstan (the thicker one is for 50 Hz).
4. Adjust the height of the capstan so that the belt moves smoothly while changing the turntable speed from $33\frac{1}{3}$ to 45 rpm or vice versa, then tighten the setscrew of the capstan securely.
5. At the same time, set the frequency selector switch for the new frequency by sliding.

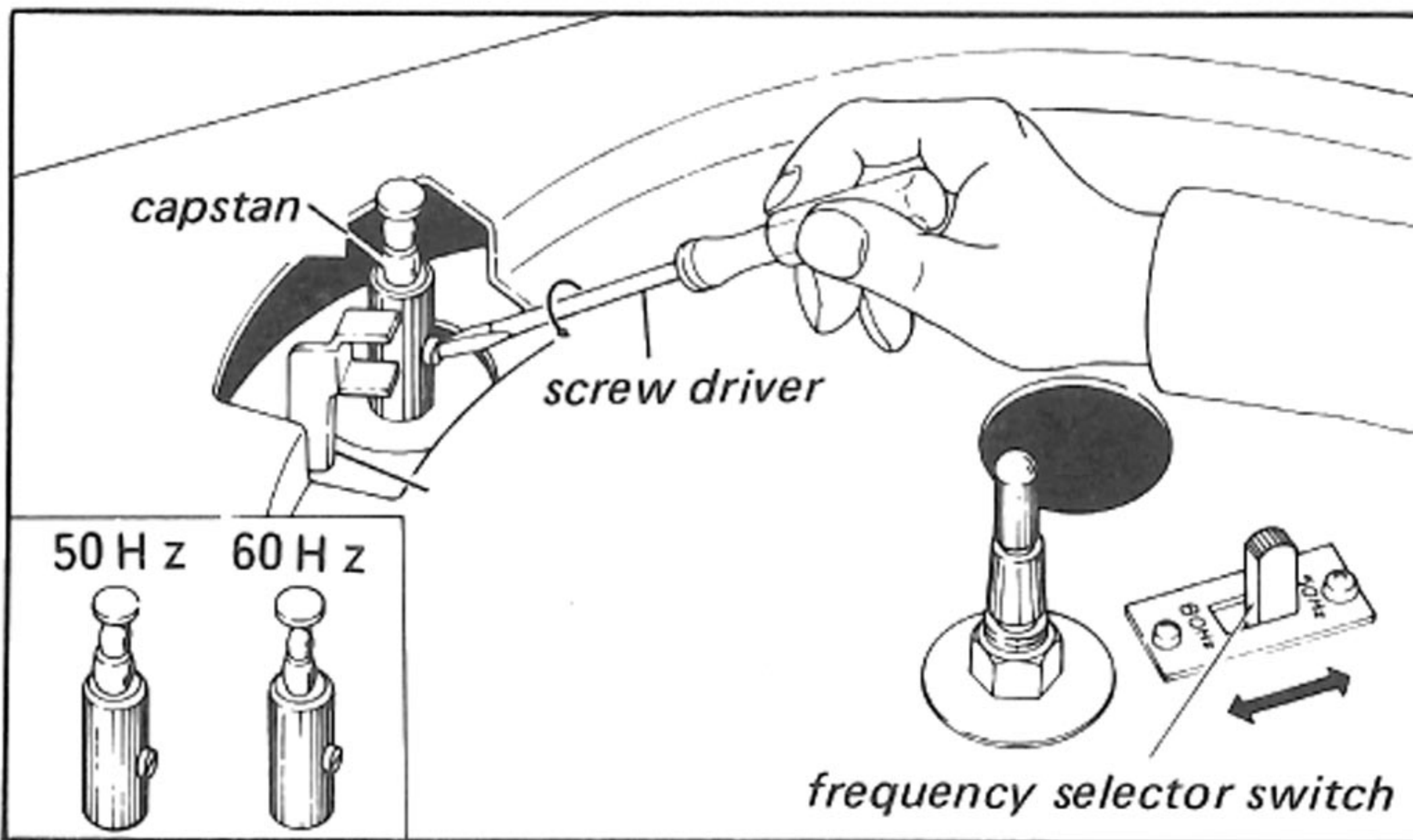


Fig. 3-1

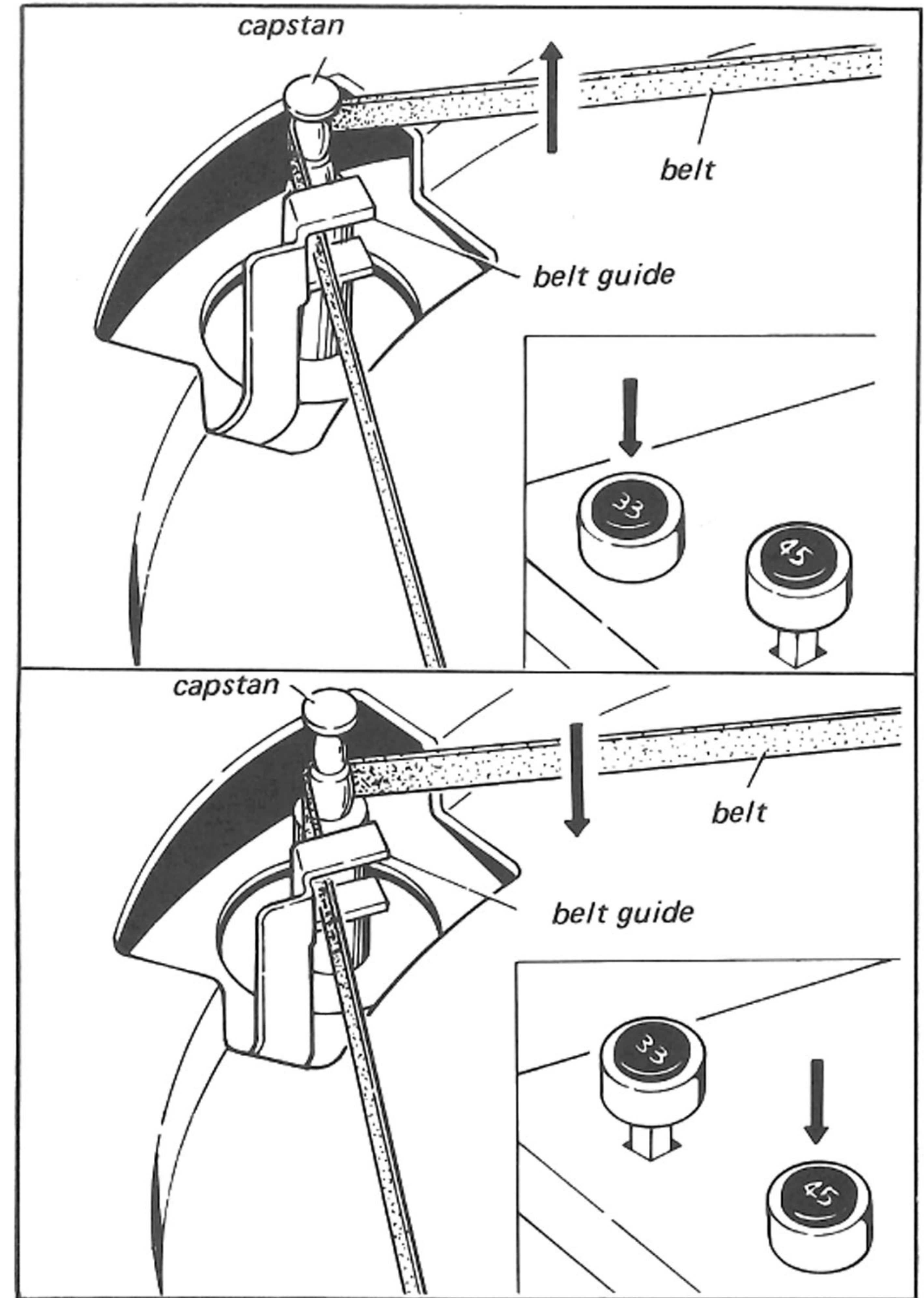


Fig. 3-2

3-2. Replacing the cartridge

1. Turn the locking nut counterclockwise and pull the shell out.
2. Remove the cartridge by loosening the nuts and disconnecting the leads.
3. Attach the cartridge and connect the leads in place correctly.
4. After replacement, adjust the stylus pressure again. (See page 1-5, 4-1. Adjusting the stylus pressure.)

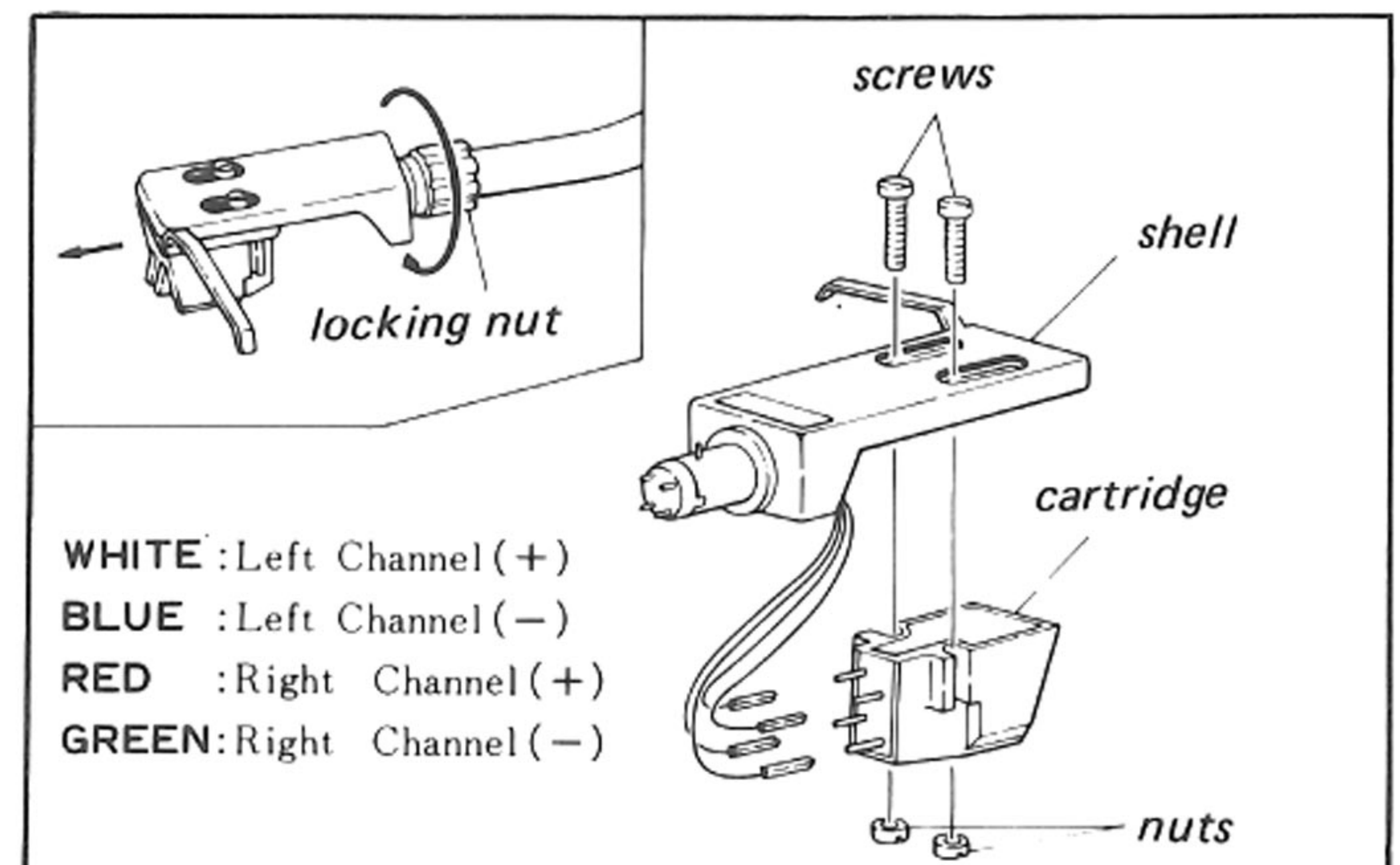


Fig. 3-3

3-3. Oiling

Although the need for oiling depends on usage, oiling should be performed once a year (every 1,000 hours of operation).

1. Motor

Remove the turntable (platter) and apply a few drops of oil. Use only the oil attached with the turntable. Be careful that the oil does not stain the belt or the capstan.

2. Turntable spindle

Remove the bottom cover from the cabinet and loosen the setscrew in the bearing section of the turntable spindle, pull the spindle up and apply a few drops of oil.

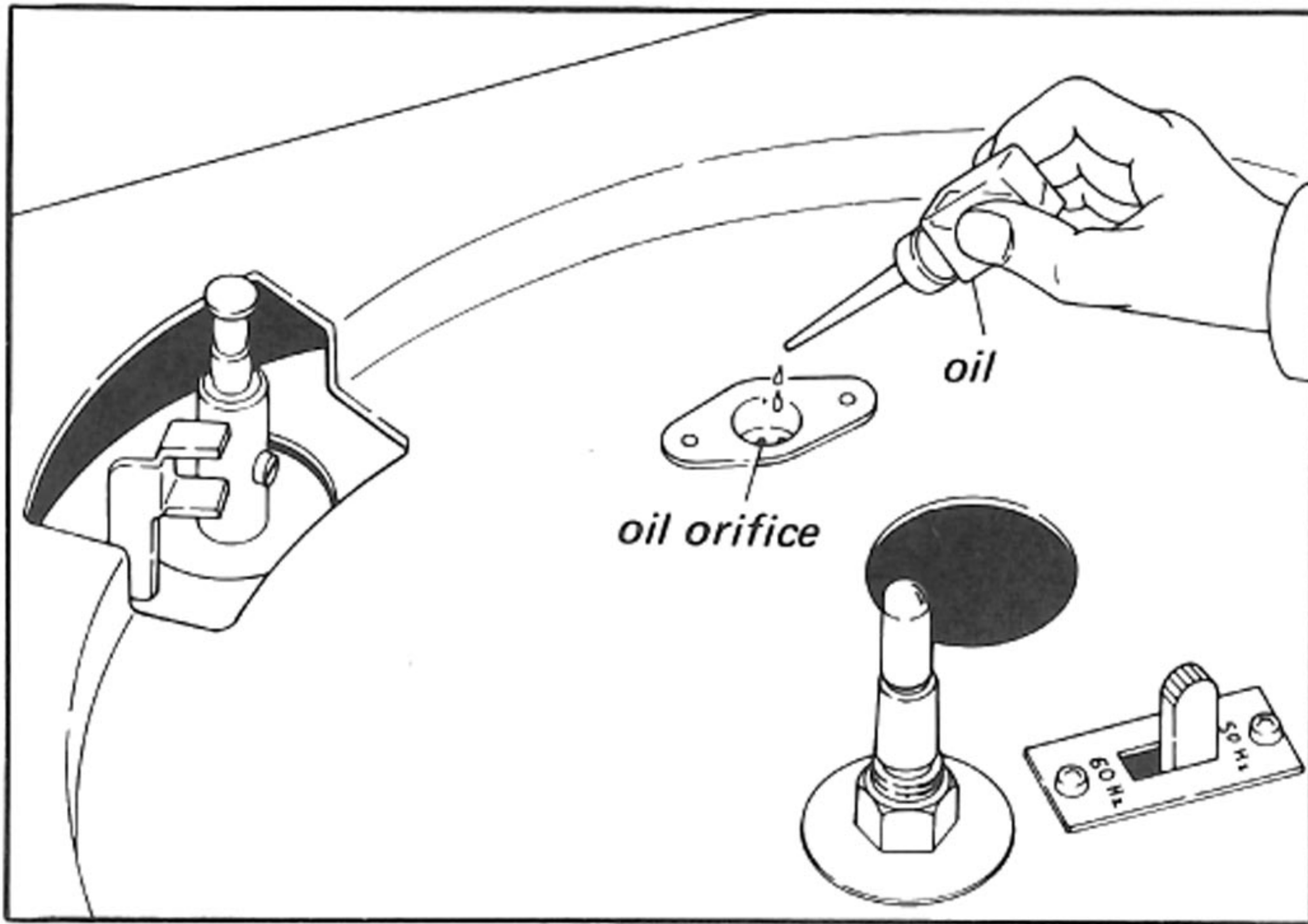


Fig. 3-4

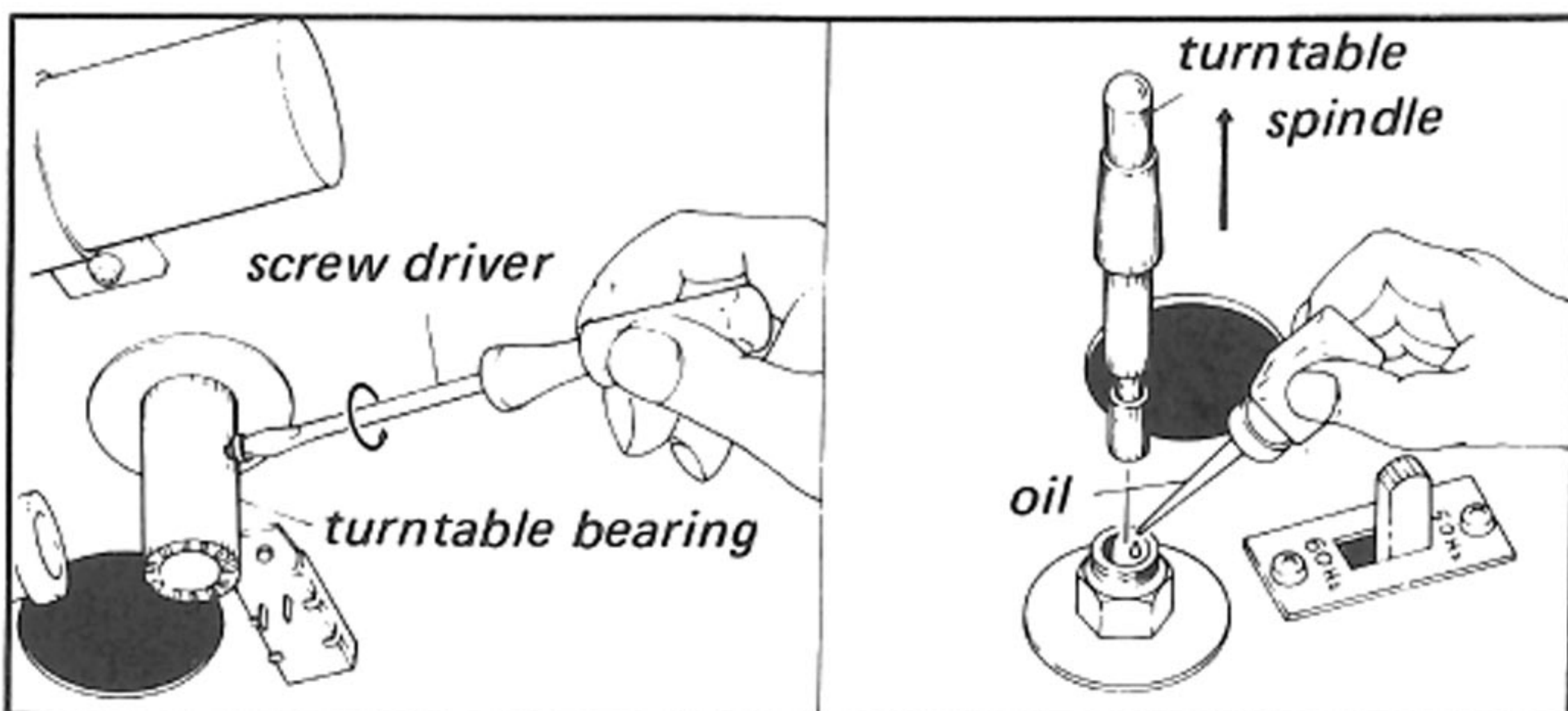


Fig. 3-5

3-4. Changing the LINE voltage

The SR-2020 can be used at six different voltages: 100 V, 115 V, 130 V, 200 V, 230 V and 250 V. Be careful not to switch to the wrong position.

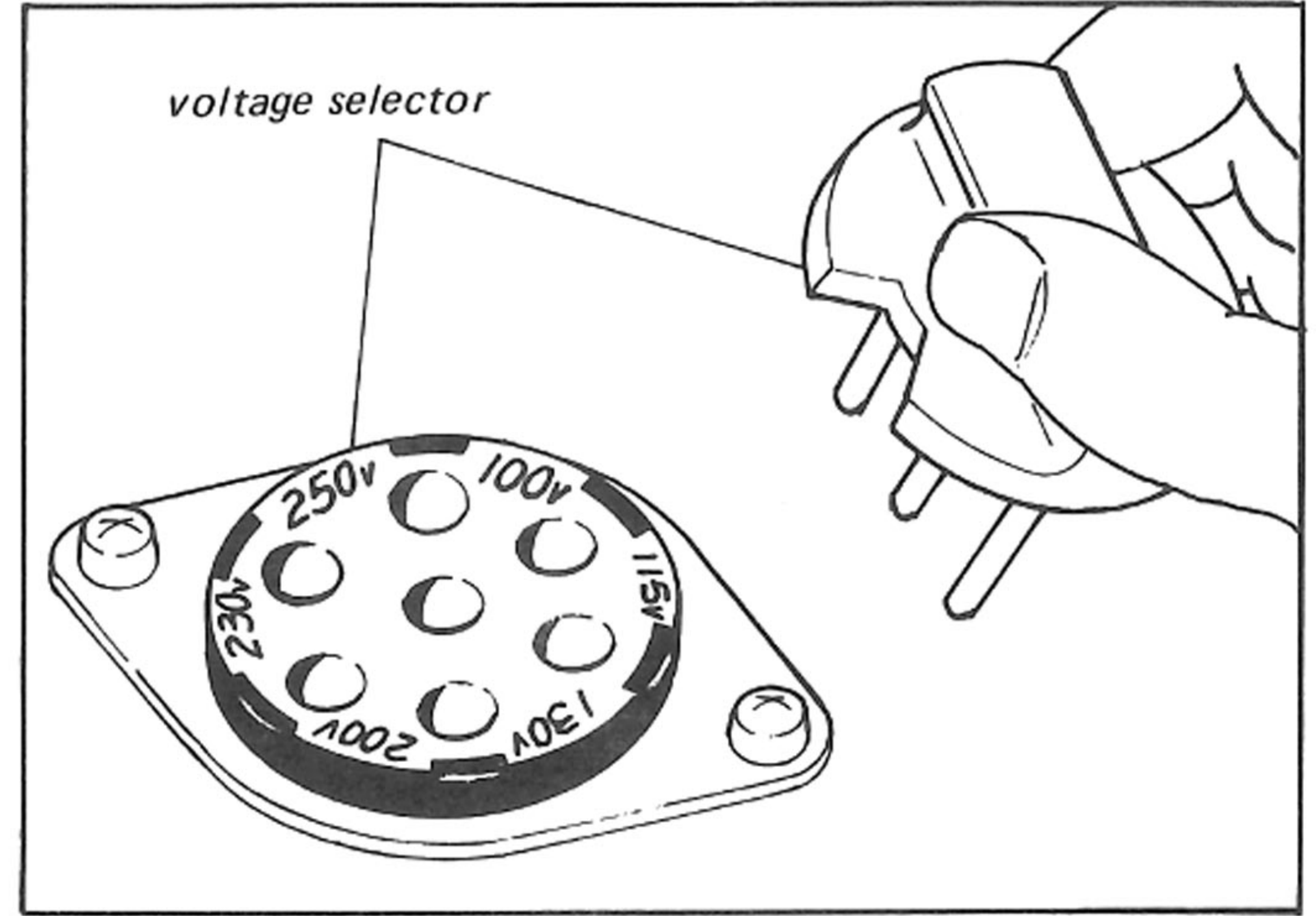


Fig. 3-6

4. ADJUSTMENT

4-1. Adjusting the stylus pressure

1. Remove the stylus cover from the cartridge and set the control lever to PLAY.
2. Remove the tonearm from its rest and join the stylus pressure weight with the main weight.
3. Move the main weight including the stylus pressure weight back and forth until the tonearm balances.
4. In this condition, move the stylus pressure weight only so that the stylus pressure scale coincides with the stylus pressure. Each notch on the main weight represents 0.5 gram.

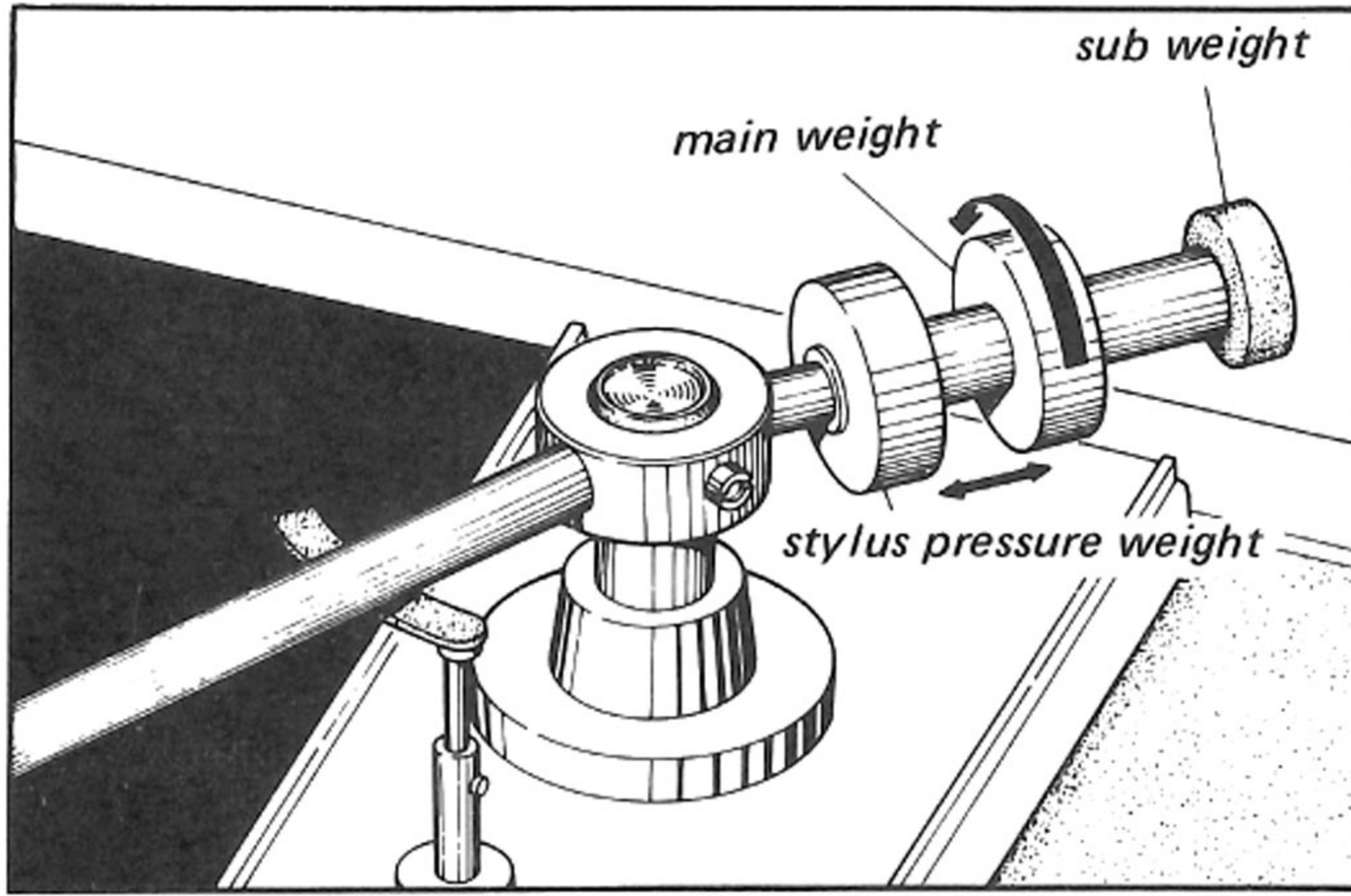
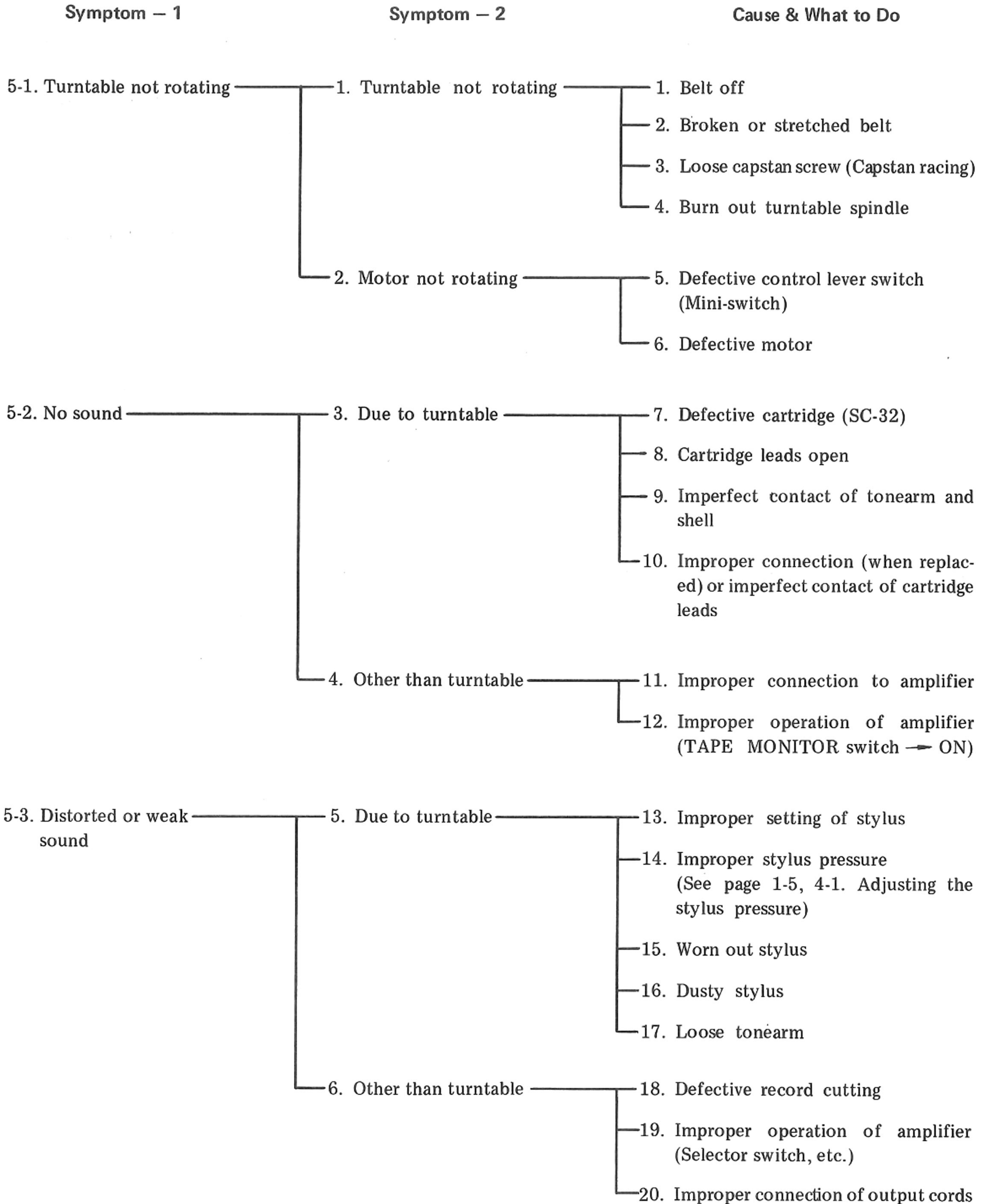


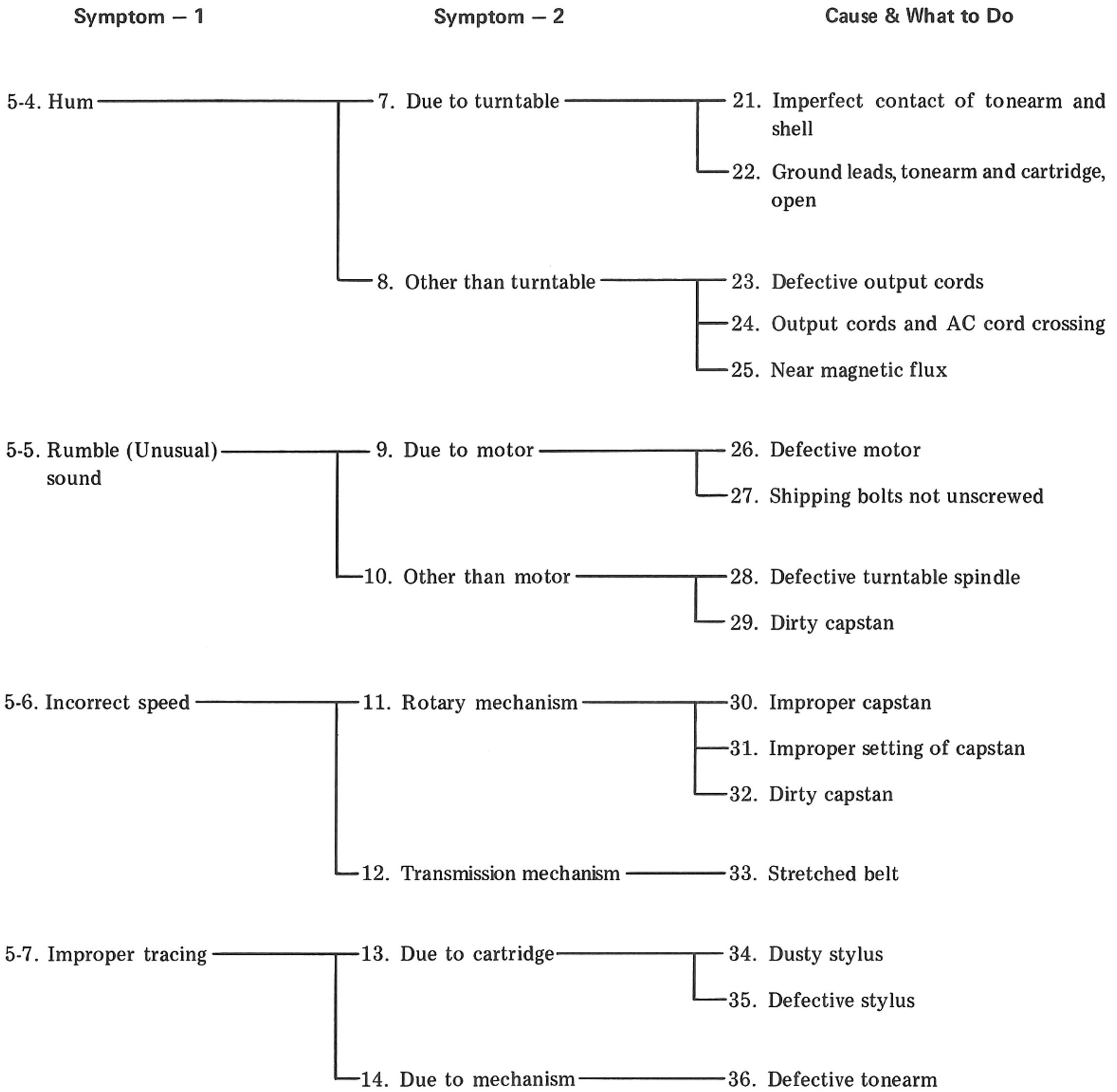
Fig. 4-1

4-2. Adjusting the arm lifter

1. Set the record on the turntable (platter) and switch the control lever to OFF or ON.
2. Move the tonearm above the record.
3. Adjust the height of the arm lifter so that the space between the record and stylus is 6–12 mm.
4. Check that the stylus slowly comes down on the record when the control lever is switched to PLAY.
5. In this condition, the stylus on the record, checks the height of the tonearm so that the tonearm is level with the record.
6. After adjustment, check its operation a few times.


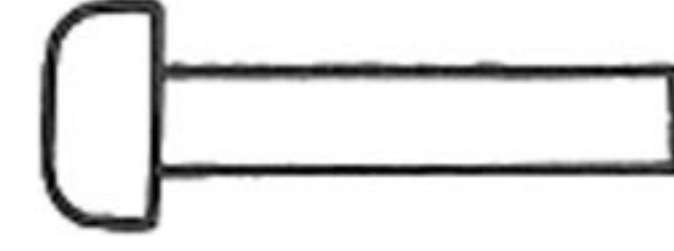

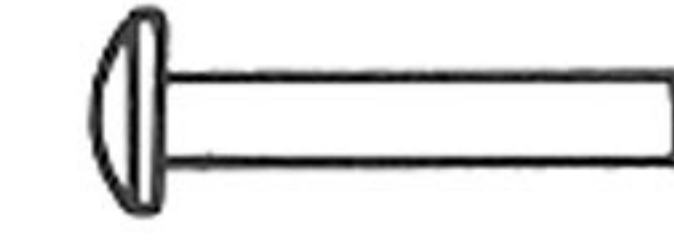

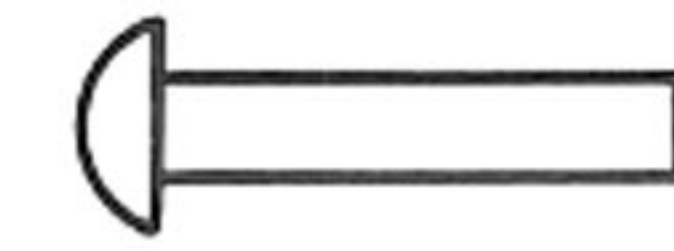

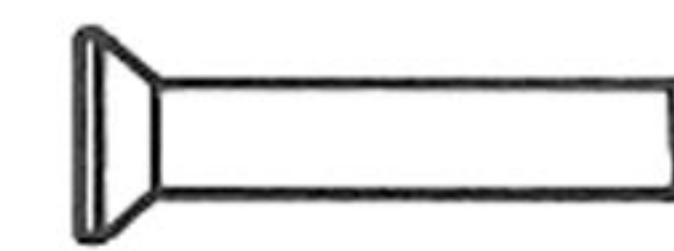

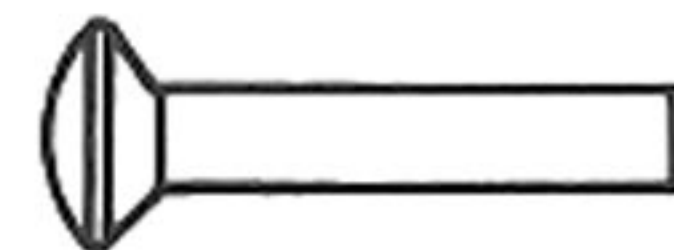

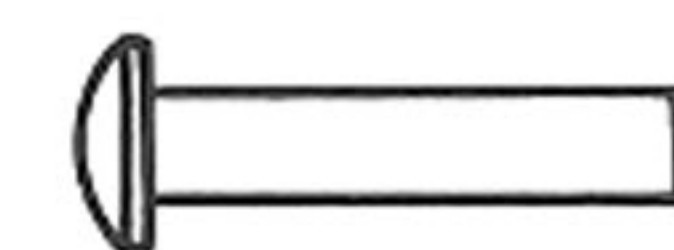

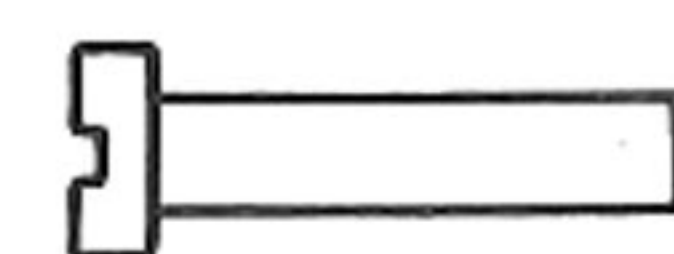




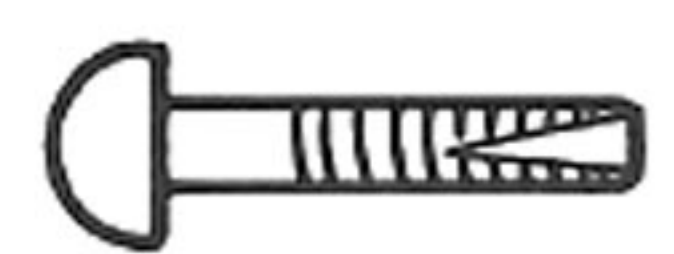












5. TROUBLESHOOTING





6. EXPLODED VIEW & PARTS LIST

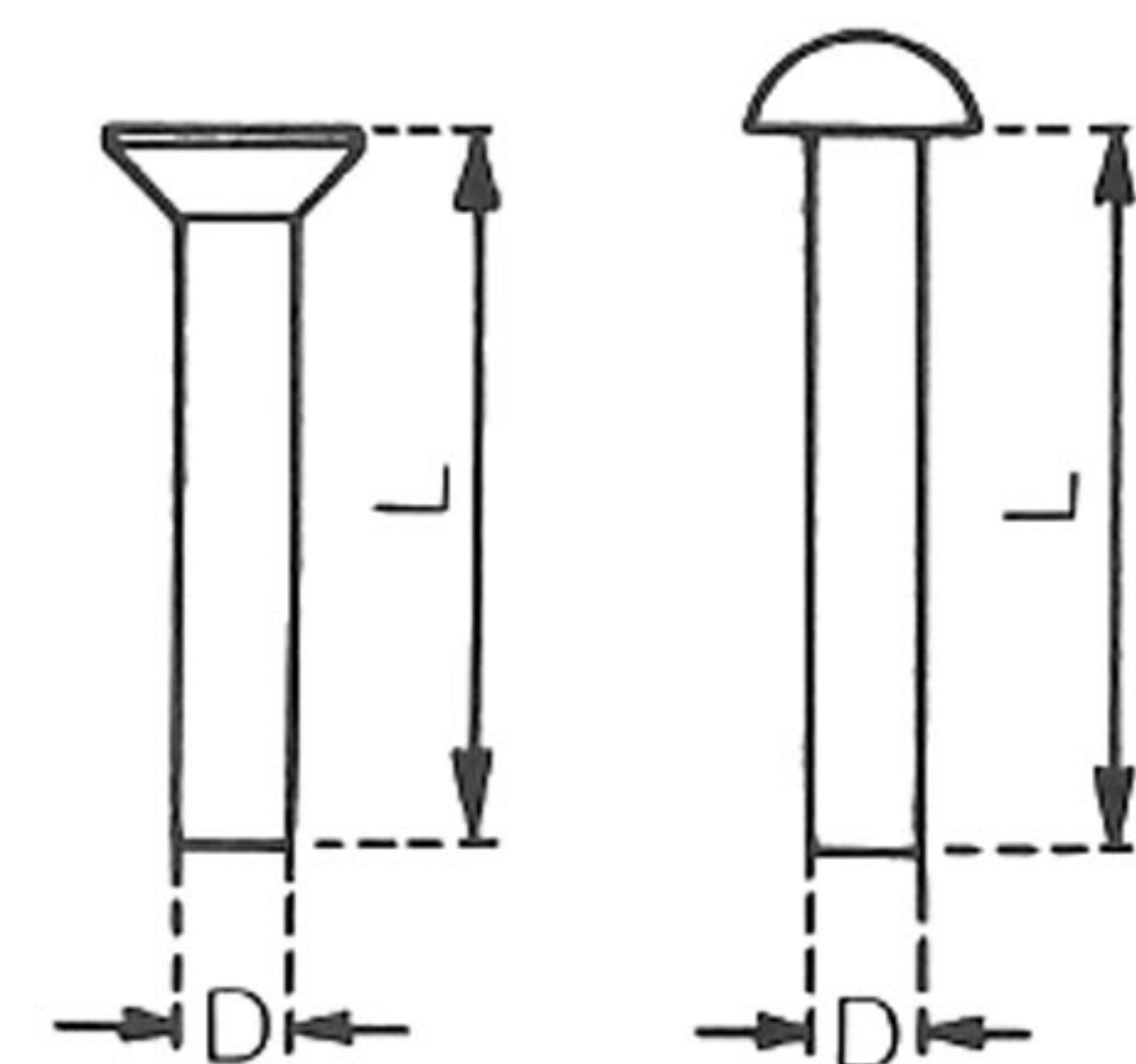
Hardware Nomenclature

	Name	Abbreviation		Type
SCREW	Pan Head Screw	P		
	Binding Head Screw	B		
	Round Head Screw	R		
	Flat Countersunk Head Screw	F		
	Oval Countersunk Head Screw	O		
	Truss Head Screw	T		
	Flat Fillister Screw	FS		
	Oval Countersunk Wood Screw	OC		
	Flat Countersunk Wood Screw	FC		
	Pan Head Tapping Screw	PT		
	SETSCREW	Hex. Socket Setscrew	S	
Slot Type Setscrew		SS		
WASHER	Retaining Ring (E washer)	E		
	Plane Washer	P		
	Spring Washer	S		
	Corrugated Washer	C		
	Toothed Lock Washer	TL		

EXAMPLE

FS type Screw, M3 x 6 (BLK)

----- Color
 ----- Length in mm (L)
 ----- Diameter in mm (D)
 ----- Type & Name



All screws conform to ISO standards, unless otherwise noted.

6-1. Exploded view (1) and parts list (See Fig. 6-1)

※ Use the stock number for parts order. If the stock number is unknown, use the model's name, fig. number, parts number and parts name correctly.

Parts No.	Stock No.	Description
1	5100062	B Type Screw, M4 x 8
2	5111060	Hex Cap Nut, M4
3	5100062	B Type Screw, M4 x 8
4	5111060	Hex. Cap Nut, M4
5	6922040	Hinge D
6	5100062	B Type Screw, M4 x 8
7	5111060	Hex. Cap Nut, M4
8	5100062	B Type Screw, M4 x 8
9	5111060	Hex. Cap Nut, M4
10	6922050	Hinge F
	7022020	Stay Ass'y
11		Setscrew A, stay
12		Washer B, stay
13		Setscrew B, stay
14		Nylon Washer, stay
15		Arm, stay
16		Nylon Washer, stay
17		Washer A, stay
18	5362020	Name Plate, dust cover
19	5362020	Name Plate, dust cover
20	5062070	Dust Cover
21	5392030	Ring, turntable
22	5502050	Rubber Mat, turntable
23	6112010	Turntable
24	6032010	Belt
25	5140019	OC Type Screw, M2.7 x 16
26	5140019	OC Type Screw, M2.7 x 16
27	5140019	OC Type Screw, M2.7 x 16
28	5140019	OC Type Screw, M2.7 x 16
29	5140019	OC Type Screw, M2.7 x 16
30	5140019	OC Type Screw, M2.7 x 16
31	5140019	OC Type Screw, M2.7 x 16
32	5140019	OC Type Screw, M2.7 x 16
33	5512050	Insulator
34	5512050	Insulator
35	5512050	Insulator
36	5512050	Insulator
37	5732100	Bottom Cover
38	5110361	Hex. Nut, M4 x 7 x 3.2
39	5121260	S Type Washer, 4 x 1.4 x 1.0
40		P Type Washer, 4.5 x 24 x 0.8
41	5110361	Hex. Nut, M4 x 7 x 3.2
42		P Type Washer, 4 x 12 x 0.5

Parts No.	Stock No.	Description
43		Setscrew, panel
44		Rubber Cushion, panel
45		P Type Washer, 4 x 16 x 0.8
46	5110361	Hex. Nut, M4 x 7 x 3.2
47	5121260	S Type Washer, 4 x 1.4 x 1.0
48		P Type Washer, 4.5 x 24 x 0.8
49	5110361	Hex. Nut, M4 x 7 x 3.2
50		P Type Washer, 4 x 12 x 0.5
51		Setscrew, panel
52		Rubber Cushion, panel
53		P Type Washer, 4 x 16 x 0.8
54	5110361	Hex. Nut, M4 x 7 x 3.2
55	5121260	S Type Washer, 4 x 1.4 x 1.0
56		P Type Washer, 4.5 x 24 x 0.8
57	5110361	Hex Nut, M4 x 7 x 3.2
58		P Type Washer, 4 x 12 x 0.5
59		Setscrew, panel
60		Rubber Cushion, panel
61		P Type Washer, 4 x 16 x 0.8
62	5110361	Hex. Nut, M4 x 7 x 3.2
63	5121260	S Type Washer, 4 x 1.4 x 1.0
64		P Type Washer, 4.5 x 24 x 0.8
65	5110361	Hex. Nut, M4 x 7 x 3.2
66		P Type Washer, 4 x 12 x 0.5
67		Setscrew, panel
68		Rubber Cushion, panel
69		P Type Washer, 4 x 16 x 0.8
70		Output Cords
71		AC Cord
72	5143027	FC Type Screw, M3.1 x 16
73	5143027	FC Type Screw, M3.1 x 16
74	5143027	FC Type Screw, M3.1 x 16
75	6922040	Hinge B
76	5143027	FC Type Screw, M3.1 x 16
77	5143027	FC Type Screw, M3.1 x 16
78	5143027	FC Type Screw, M3.1 x 16
79	6922050	Hinge E
80	5502180	Cushion
81	5502180	Cushion
82	5332030	Badge
83	5732120	Cabinet

Fig. 6-1

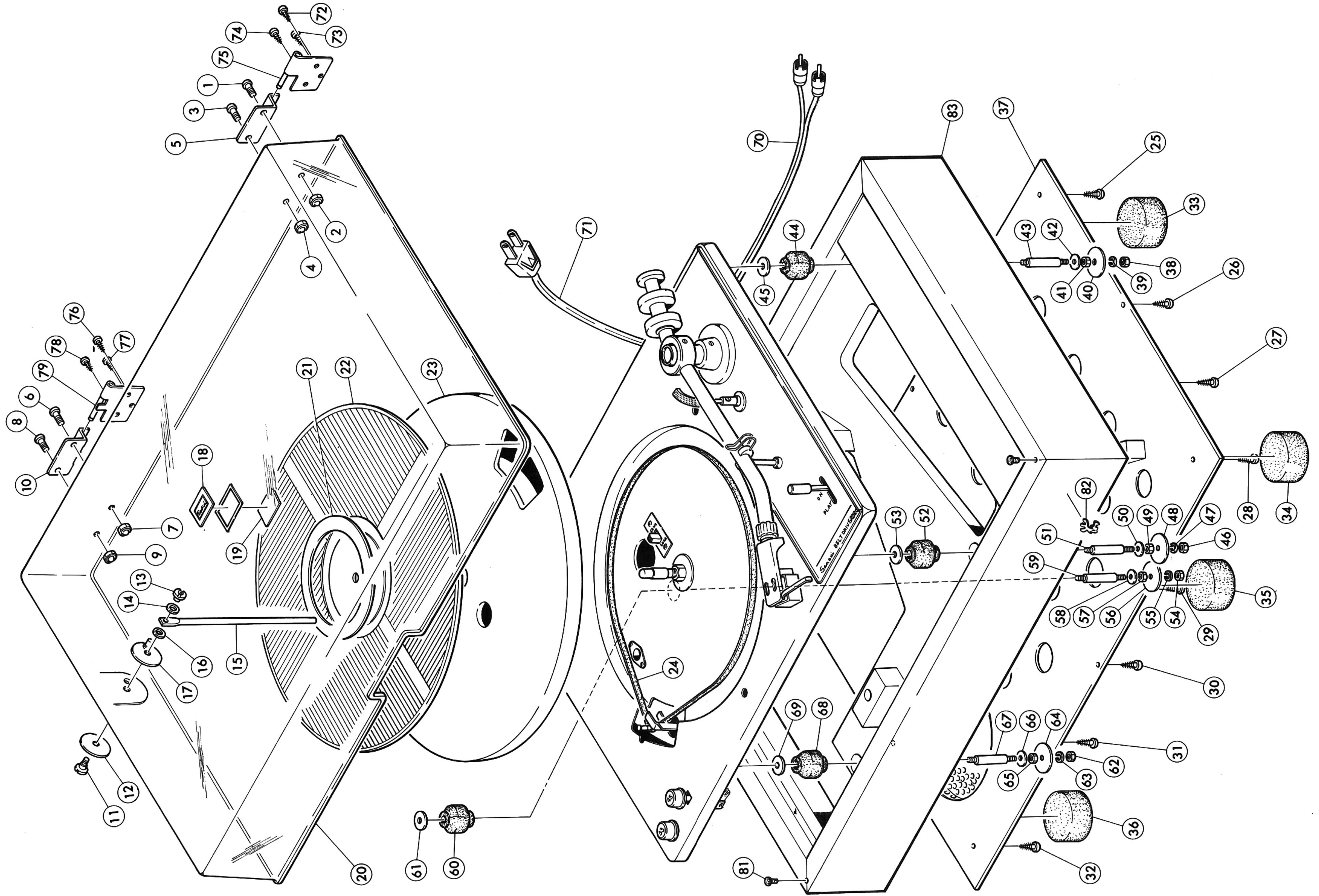
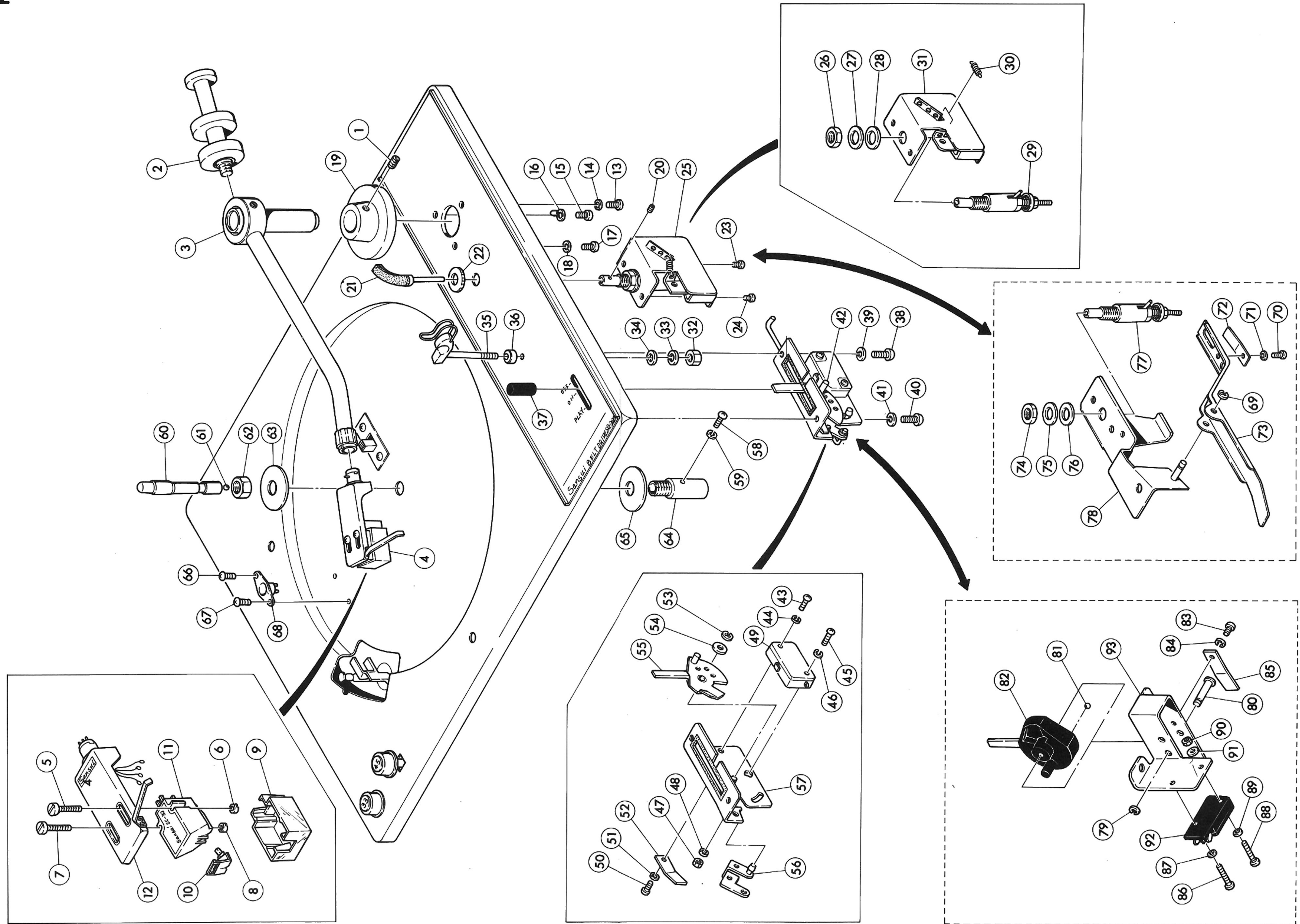


Fig. 6-2



6-2. Exploded view (2) and parts list (See Fig. 6-2)

※ Use the stock number for parts order. If the stock number is unknown, use the model's name, fig. number, parts number and parts name correctly.

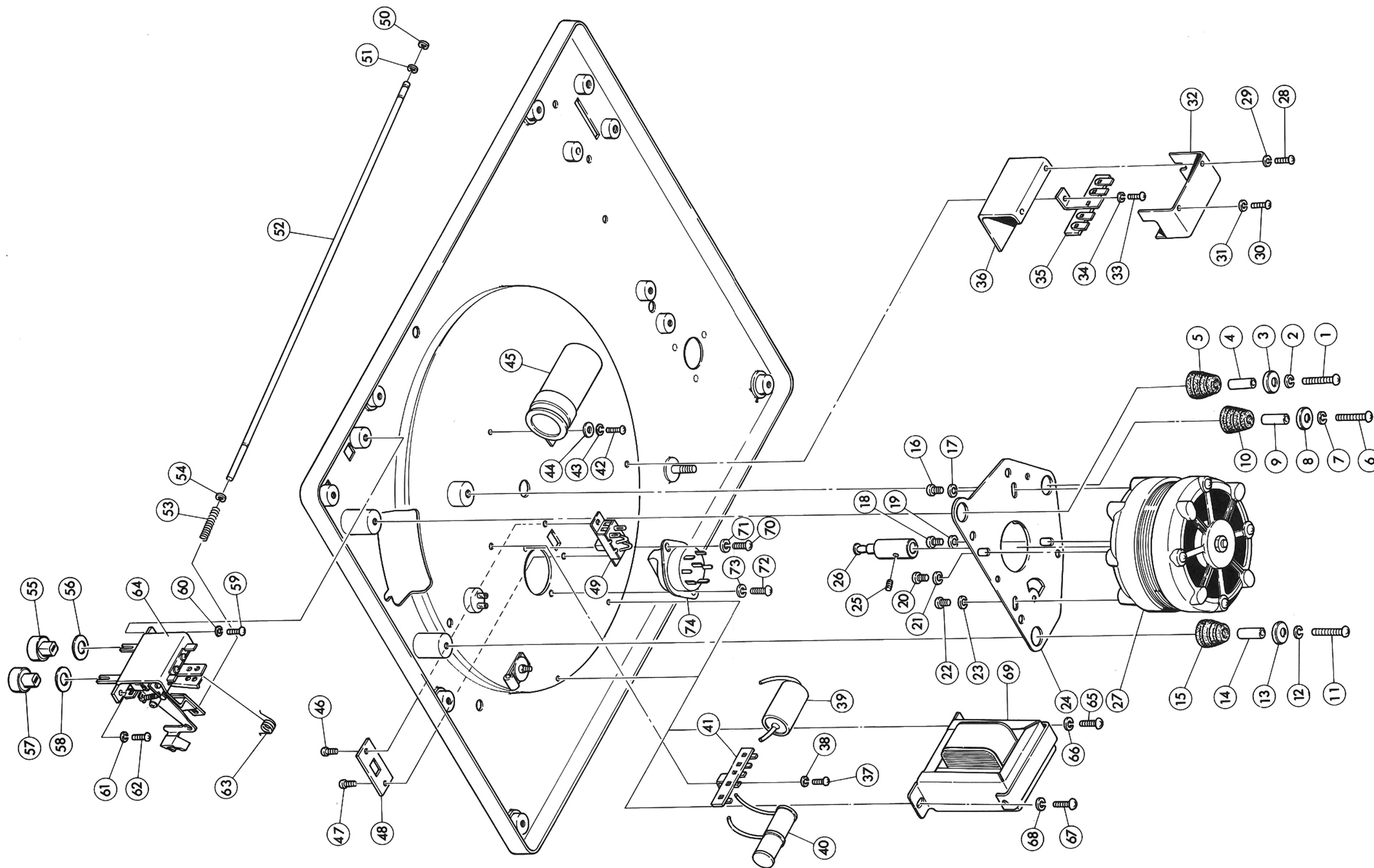
Parts No.	Stock No.	Description	Parts No.	Stock No.	Description
	7092010	Tonearm Ass'y	49	1160040	Micro Switch (AM-4100)
1		SS Type Screw, M4 x 4	50	5103043	P Type Screw, M3 x 6
2	6912010	Main Weight Ass'y	51	5121340	S Type Washer, 3 x 1.1 x 0.7
3		Tonearm	52		Leaf Spring
4		Shell (with cartridge)	53	5151004	E Type Ring, 3φ
5		FS Type Screw, M2.6 x 12	54		P Type Washer, 4 x 10 x 0.5
6		Nut, M2.6	55		Lift Cam
7		FS Type Screw, M2.6 x 12	56		Lever Ass'y
8		Nut, M2.6	57		Case, lift cam
9		Cover, stylus	58	5103041	P Type Screw, M3 x 4
10	4940030	Stylus (SN-31)	59	5121340	S Type Washer, 3 x 1.1 x 0.7
11	4310030	Cartridge (SC-32)		7032010	Turntable Spindle Ass'y
12	6642010	Shell	60		Spindle, turntable
13	5103044	P Type Screw, M3 x 8	61		Steel Ball
14	5121340	S Type Washer, 3 x 1.1 x 0.7	62		Hex. Nut, M9
15	5103044	P Type Screw, M3 x 8	63		P Type Washer, 10 x 30 x 1.5
16	5121340	S Type Washer, 3 x 1.1 x 0.7	64		Bearing, turntable
17	5103044	P Type Screw, M3 x 8	65		P Type Washer, 10 x 30 x 1.5
18	5121340	S Type Washer, 3 x 1.1 x 0.7	66	5103043	P Type Screw, M3 x 6
19	5252010	Base, arm	67	5103043	P Type Screw, M3 x 6
20		SS Type Screw, M3 x 3	68	6932010	Oil Cup
21	5292010	Guide, arm		7052160	Control Lever Ass'y (New Type)
22		Nut, arm lifter	69	5151004	E Type Ring, 3φ
23	5103043	P Type Screw, M3 x 6	70	5103041	P Type Screw, M3 x 4
24	5103043	P Type Screw, M3 x 6	71	5121340	S Type Washer, 3 x 1.1 x 0.7
25		Arm Lifter Ass'y	72		Leaf Spring
26		Hex. Nut, M7.5	73		Lift Lever
27		P Type Washer, 8.5 x 16 x 1.0	74		Hex. Nut, M7.5
28		P Type Washer, 8.5 x 16 x 1.0	75		P Type Washer, 8.5 x 16 x 1.0
29	7082010	Lifter, arm	76		P Type Washer, 8.5 x 16 x 1.0
30		Spring, arm lifter	77		Lifter, arm
31		Case, lifter	78		Case, lifter
32	5110341	Hex. Nut, M3 x 5.5 x 2.4	79	5151004	E Type Ring, 3φ
33	5121340	S Type Washer, 3 x 1.1 x 0.7	80		Shaft, lift cam
34		P Type Washer, 3 x 10 x 1.0	81		Steel Ball
35	6622010	Rest, arm	82		Lift Cam
36		Base, arm rest	83	5103041	P Type Screw, M3 x 4
37	5312010	Cap, control lever	84	5121340	S Type Washer, 3 x 1.1 x 0.7
38	5103043	P Type Screw, M3 x 6	85		Leaf Spring
39	5121340	S Type Washer, 3 x 1.1 x 0.7	86	5103047	P Type Screw, M3 x 14
40	5103043	P Type Screw, M3 x 6	87	5121340	S Type Washer, 3 x 1.1 x 0.7
41	5121340	S Type Washer, 3 x 1.1 x 0.7	88	5103047	P Type Screw, M3 x 14
42	7052150	Control Lever Ass'y	89	5121340	S Type Washer, 3 x 1.1 x 0.7
43	5103047	P Type Screw, M3 x 14	90	5110341	Hex. Nut, M3 x 5.5 x 2.4
44	5121340	S Type Washer, 3 x 1.1 x 0.7	91	5120141	P Type Washer, 3 x 8 x 0.5
45	5103047	P Type Screw, M3 x 14	92	1160040	Micro Switch (AM-4100)
46	5121340	S Type Washer, 3 x 1.1 x 0.7	93		Case, lift cam
47	5110341	Hex. Nut, M3 x 5.5 x 2.4			
48	5120141	P Type Washer, 3 x 8 x 0.5			

6-3. Exploded view (3) and parts list (See Fig. 6-3)

※ Use the stock number for parts order. If the stock number is unknown, use the model's name, fig. parts number and parts name correctly.

Parts No.	Stock No.	Description	Parts No.	Stock No.	Description
1	5103069	P Type Screw, M4 x 25	39		Oil Capacitor,
2	5121360	S Type Washer, 4 x 1.4 x 1.0			0.033 μ F 600 WV
3	5182010	Cup Washer, M4	40		Enameld Wirewound Resistor,
4	5232020	Spacer, motor			300 + 110 Ω 15 W
5	5502040	Rubber Cushion, motor	41	2110070	4-Lug Terminal Strip
6	5103069	P Type Screw, M4 x 25	42	5103044	P Type Screw, M3 x 8
7	5121360	S Type Washer, 4 x 1.4 x 1.0	43	5121340	S Type Washer, 3 x 1.1 x 0.7
8	5182010	Cup Washer, M4	44	5120141	P Type Washer, 3 x 8 x 0.5
9	5232020	Spacer, motor	45		MP Capacitor,
10	5502040	Rubber Cushion, motor			1.8 + 0.5 μ F 250 WV
11	5103069	P Type Screw, M4 x 25	46	5103043	P Type Screw, M3 x 6
12	5121360	S Type Washer, 4 x 1.4 x 1.0	47	5103043	P Type Screw, M3 x 6
13	5182010	Cup Washer, M4	48		Name Plate, frequency
14	5232020	Spacer, motor	49		Slide Switch
15	5502040	Rubber Cushion, motor	50	5151002	E Type Ring, 2 ϕ
16	5103062	P Type Screw, M4 x 8	51	5151002	E Type Ring, 2 ϕ
17	5121360	S Type Washer, 4 x 1.4 x 1.0	52	6512010	Stopper Shaft
18	5103062	P Type Screw, M4 x 8	53		Spring, stopper shaft
19	5121360	S Type Washer, 4 x 1.4 x 1.0	54	5151002	E Type Ring, 2 ϕ
20	5103062	P Type Screw, M4 x 8	55	7102010	Pushbutton (45)
21	5121360	S Type Washer, 4 x 1.4 x 1.0	56		Polyethylene Washer
22	5103062	P Type Screw, M4 x 8	57	7102020	Pushbutton (33)
23	5121360	S Type Washer, 4 x 1.4 x 1.0	58		Polyethylene Washer
24	5242020	Sheet, motor	59	5103043	P Type Screw, M3 x 6
25		SS Type Screw, M3 x 3	60	5121340	S Type Washer, 3 x 1.1 x 0.7
26	6142010	Capstan (50 Hz)	61	5103043	P Type Screw, M3 x 6
	6142020	Capstan (60 Hz)	62	5121340	S Type Washer, 3 x 1.1 x 0.7
27	4320060	Motor	63		Spring, speed selector
28	5103043	P Type Screw, M3 x 6	64	7062010	Speed Selector Ass'y
29	5121340	S Type Washer, 3 x 1.1 x 0.7	65	5103061	P Type Screw, M4 x 6
30	5103043	P Type Screw, M3 x 6	66	5121260	S Type Washer, 4 x 1.4 x 1.0
31	5121340	S Type Washer, 3 x 1.1 x 0.7	67	5103061	P Type Screw, M4 x 6
32		Shield Cover	68	5121260	S Type Washer, 4 x 1.4 x 1.0
33	5103043	P Type Screw, M3 x 6	69		Power Transformer
34	5121340	S Type Washer, 3 x 1.1 x 0.7	70	5103043	P Type Screw, M3 x 6
35	2110070	4-Lug Terminal Strip	71	5121340	S Type Washer, 3 x 1.1 x 0.7
36		Holder, shield	72	5103043	P Type Screw, M3 x 6
37	5103043	P Type Screw, M3 x 6	73	5121340	S Type Washer, 3 x 1.1 x 0.7
38	5121340	S Type Washer, 3 x 1.1 x 0.7	74		Voltage Selector

Fig. 6-3



6-4. Packing and accessories list

Packing list

Parts No.	Stock No.	Description
1		Carton Case
2		Bottom Packing
3	6112010	Turntable
4	5502050	Turntable Rubber Mat
5		Accessory Box
6		Inner Packing
7		Foamed Polystyrene Package (Lower)
8		Record Player
9		Foamed Polystyrene Package (Upper, Left)
10		Foamed Polystyrene Package (Upper, Right)
11	5062070	Dust Cover
12		Inner Packing

Parts No.	Stock No.	Description
1		Screwdriver
2	6142010	Capstan (50 Hz)
	6142020	Capstan (60 Hz)
3		Shell (with cartridge)
4	6642010	Shell
5		Sub Weight A
6		Belt Box
7	6032010	Belt
8		Oil Feeder
9		Shell Setscrews and Nuts
10		45 rpm Adaptor
11	6912010	Main Weight
12		Accessory Box

