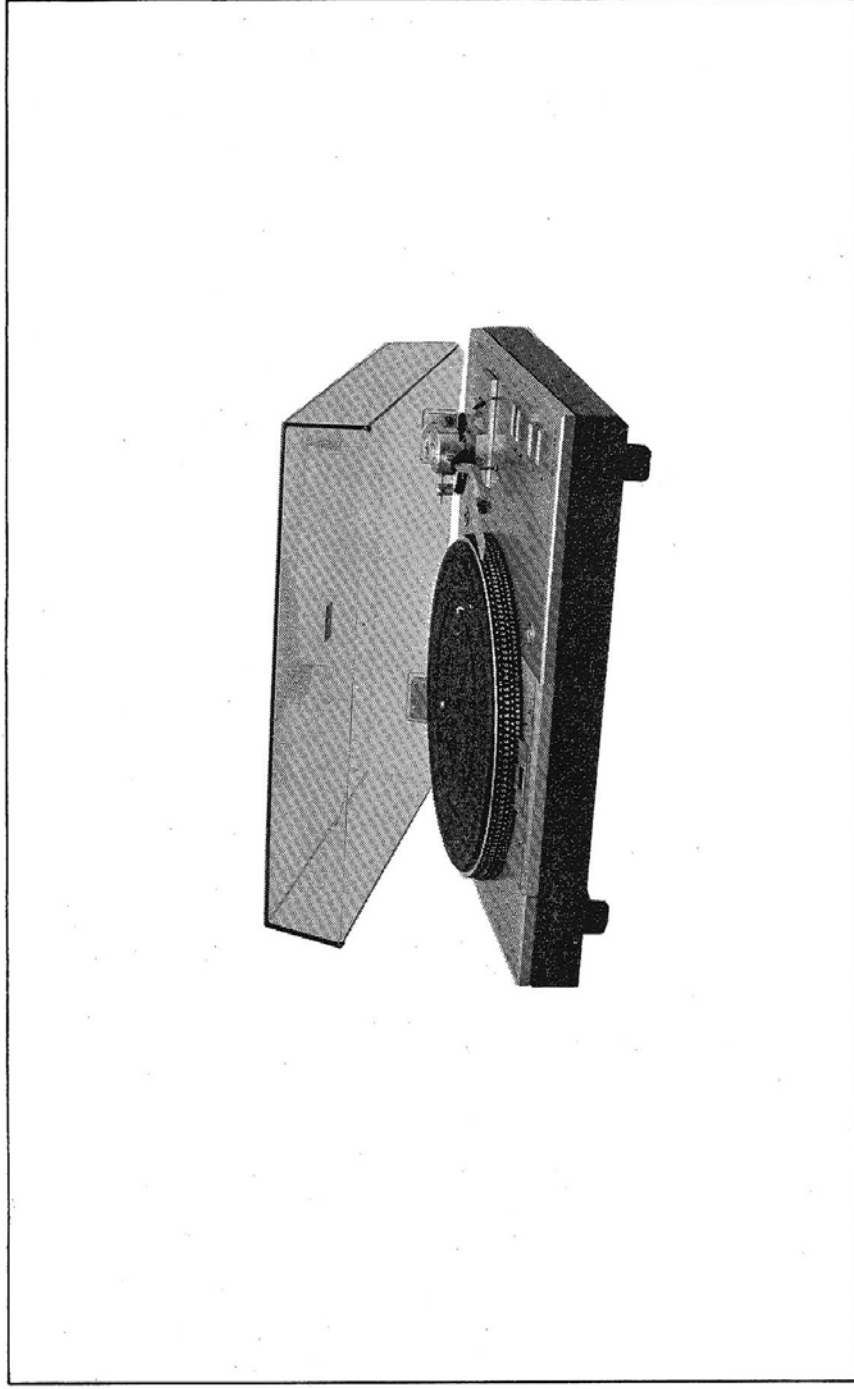


# SERVICE MANUAL



## STEREO TURNTABLE

**TP1030**  
(U.S.A)



### SPECIFICATION

Motor	DC brushless servo motor	Tone arm	Static-balance type
Drive system	Direct drive/Full auto	Tracking error	$\pm 1.5^\circ$
Speeds	33-1/3 and 45 rpm	Stylus pressure force range.	0 - 3 gr.
Speed control range	Individual controls: $\pm 4\%$	Overhang	15 mm
Speed change	Electronic type	Power source	AC: 120V, 60Hz
Wow & flutter	Less than 0.03% WRMS	Power consumption	12 watts
Signal to noise ratio	Better than 60dB	Dimensions (Approx.)	18-5/8" W x 15" D x 5-7/8" H (472 x 380 x 150 mm)
Rumble	-70dB B Din spec	Weight (Approx.)	14 lbs. 2 ozs. (6.4kg)
Turntable platter	12-1/16" (304 mm) dia. 2 lbs 3 ozs (1 kg)		

\* Specifications and design are subject to change without notice.

## ADJUSTMENT

### ADJUSTMENT OF AUTO-RETURN

There is a shaft which is accessible with an ordinary screwdriver through the hole below the tonearm. (See illustration at right.) When the stylus has reached a point approximately 55 mm from the turntable center, turn the shaft clockwise or counter-clockwise and select a position where it actuates the auto return. (Fig. 1)

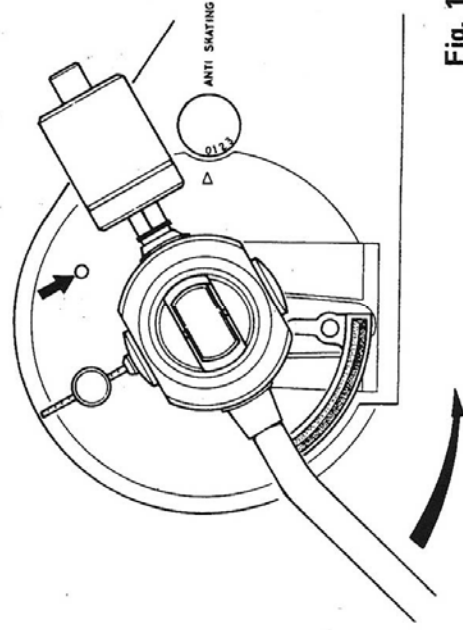


Fig. 1

1. Fix the tonearm to the arm rest.
2. Adjust so that the shortest distance "a" between the boss (62) fitted to the turntable and the lever (M2) becomes 0.2 – 0.5 mm.

**NOTE:** This adjustment is impossible to do unless a part of the turntable is chipped off and such a jig by which the boss is visible is prepared. Adjust by tightening the stopper (63) set screw (b), loosening the (c) a little, and moving the stopper. (Fig. 2)

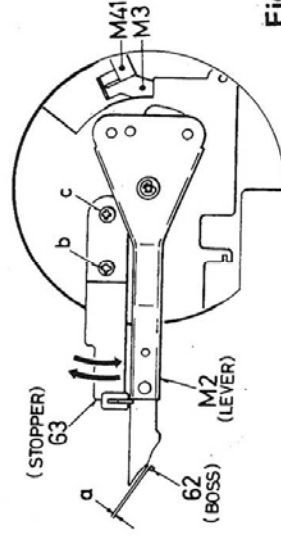


Fig. 2

3. Fix the stopper after agreeing the needle point of the headshell with the boss (62) of the turntable.  
**NOTE:** This adjustment is impossible to do unless the said jig is prepared.
4. Adjust so that a clearance between the feed lever (M3) and the tip of the arm lever (M41) becomes 0 – 0.3 mm by means of a blade screwdriver inserted into a hole put on with seal (67) at the position above the arm part over the deck panel. (Fig. 3)

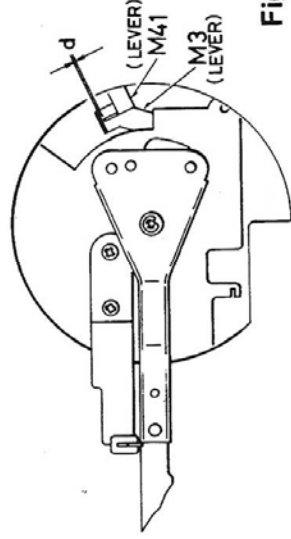


Fig. 3

### ADJUSTMENT OF HEADSHELL

The headshell attached to the tonearm should not be inclined either to the right or to the left. If necessary, loosen the two screws on the bottom of the tubular arm and adjust the headshell. Be sure that the stylus is normal to the record surface. (Fig. 4)

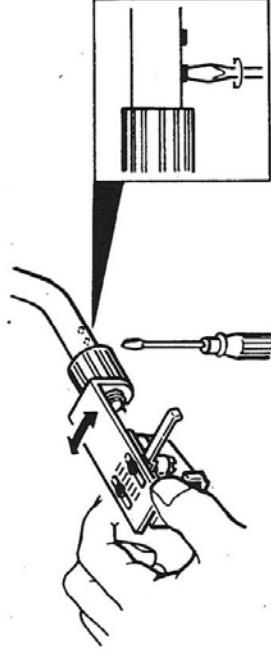


Fig. 4

## ADJUSTMENT

### ADJUSTMENT OF TONEARM LIFTER

Set the cuing lever to UP and the distance between the stylus and the record to about 9 mm by adjusting the arm lifter screw. (Fig. 5)

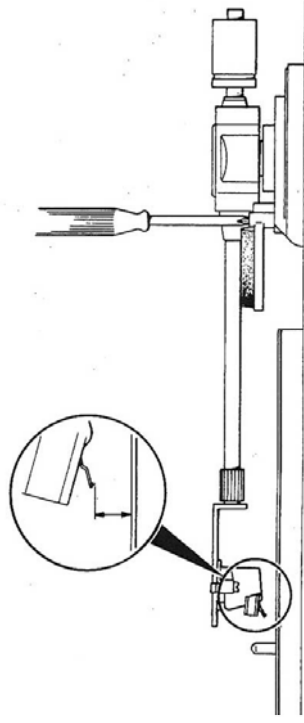


Fig. 5

### ADJUSTMENT OF LIFT-UP LEVER SPRING

Switch off power when the auto-return has worked and adjust spring tension to provide a clearance of 11 mm between the stylus and the record. In this adjustment, the lift-up lever will go up if the screw (M6) is turned clockwise. (Fig. 6)

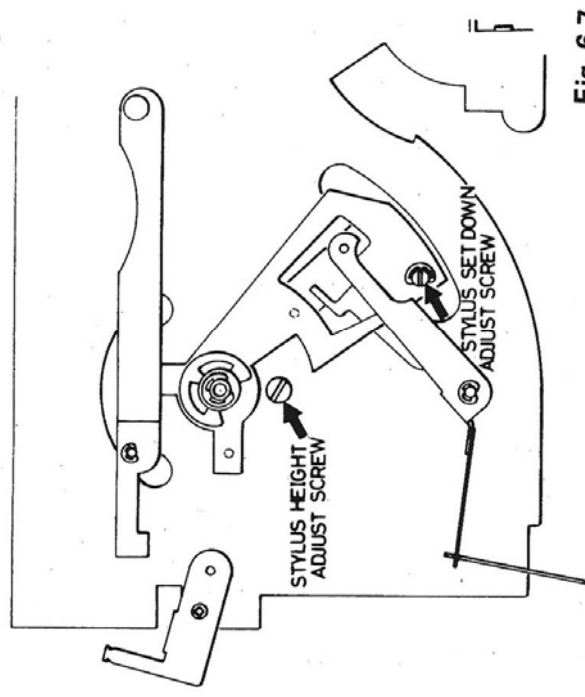


Fig. 6,7

### ADJUSTMENT OF STYLUS SET DOWN

Adjust the position the needle comes down in an auto play. Adjust the shaft (M32) so that the needle comes down at the position of 147 mm apart from the center of a 12" record. (Fig. 7)

### ADJUSTMENT OF TURNABLE SPEED

Set the fine speed control dials to their center positions (each has three protrusions, of which only one can be set to the center). Make adjustment by inserting a screwdriver into the holes. When properly adjusted, the zebra strobo-scope marks on the turntable platter seem to be stationary at the selected speed. (Fig. 8)

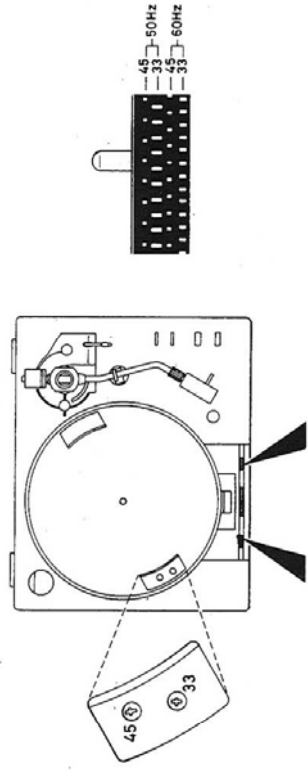


Fig. 8

### REPAIR

Dismount the turntable platter and supply two to three drops of oil into the D.D. motor through the hole in the motor housing.

Be careful not to stain any exposed part with oil.

This caution is necessary to prevent operating trouble. (Fig. 9)

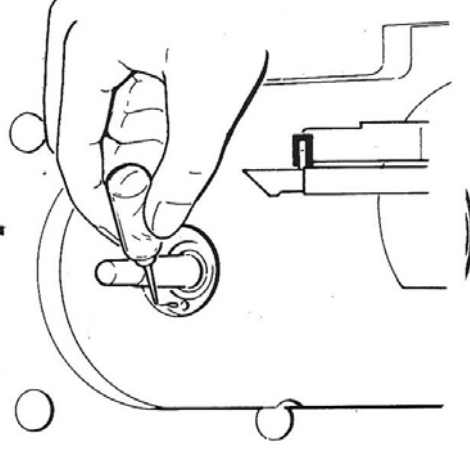
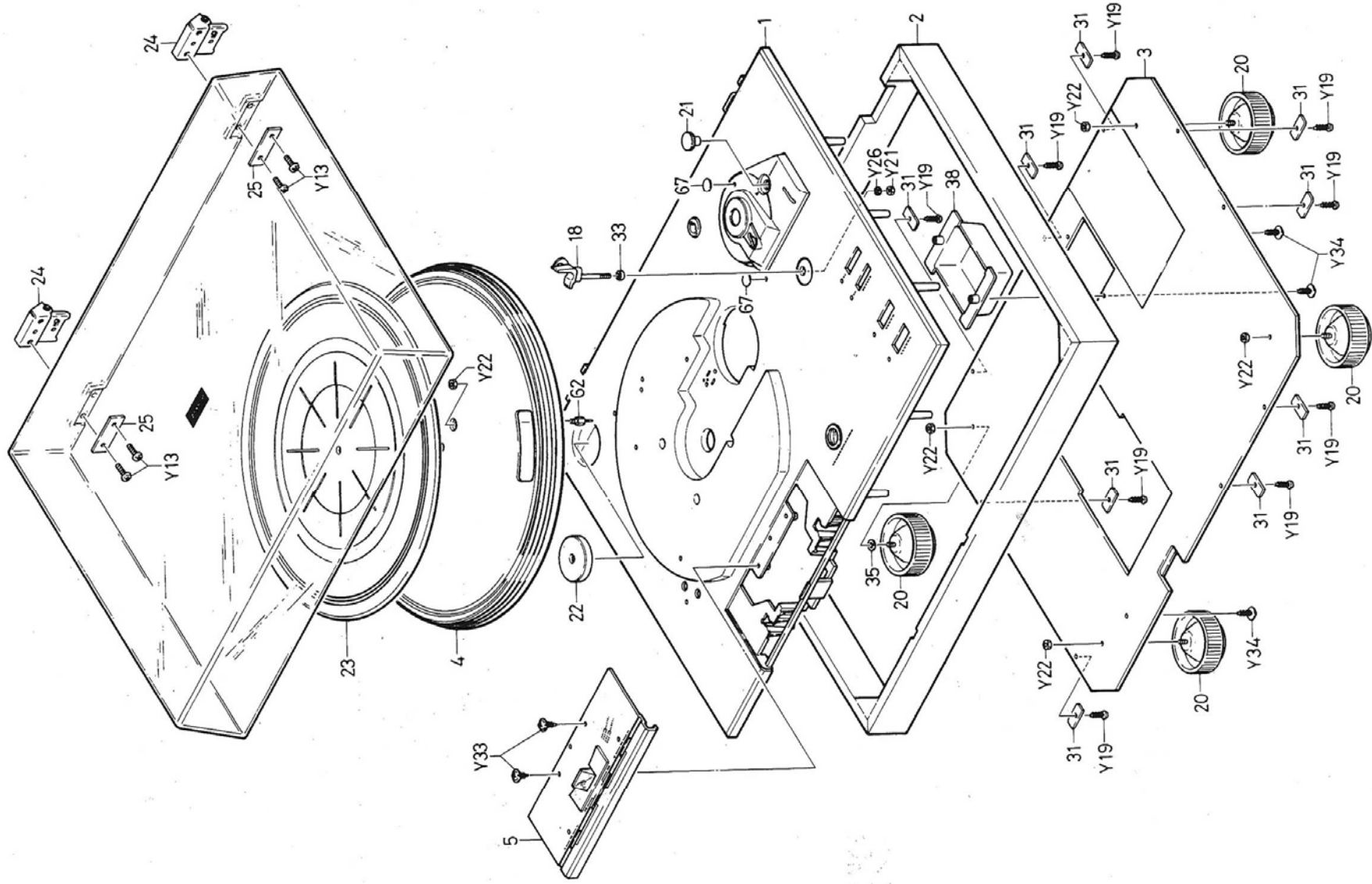


Fig. 9

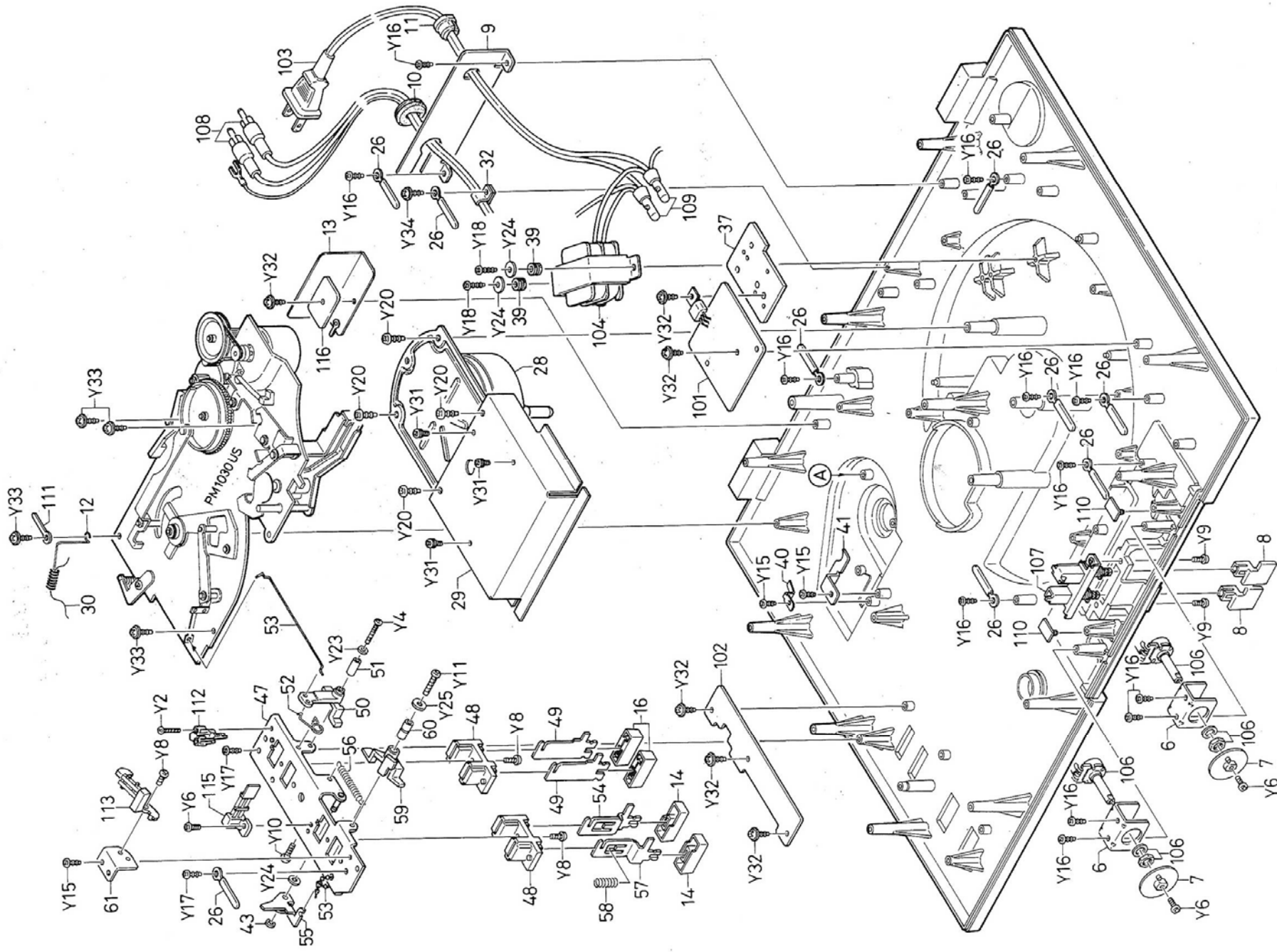
CABINET EXPLODED VIEW



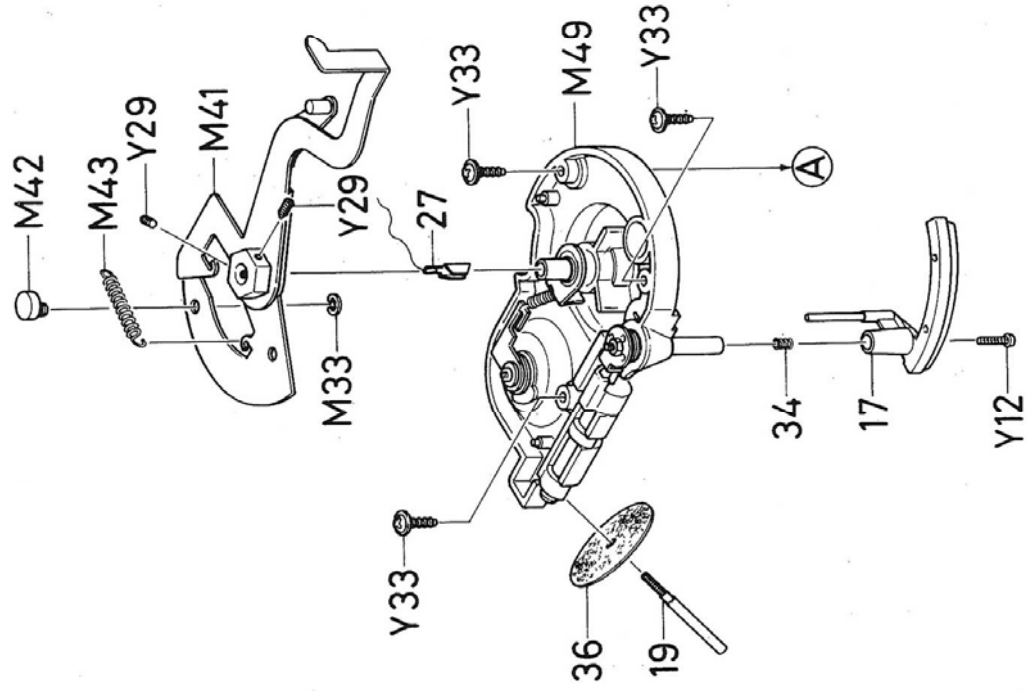
PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
<b>PACKING</b>							
	141-6-144T-51300	Foam Plastic Case	2	53	141-2-735T-10700	Rod, Size Select	1
	141-6-317T-01300	Pad, Top	1	54	141-2-731T-60000	Slide, Repeat	1
	141-6-316T-88500	Pad, Dust Cover	1	55	141-2-742T-16900	Lever, Repeat	1
	141-6-113T-87600	Individual Carbon	1	56	141-2-855T-31200	Spring Coil, Repeat	1
	141-2-337T-10400	Ribbon, Tone Arm	1	57	141-2-731T-59900	Slide, Start Cut	1
	141-6-231T-10200	Inner Poly Cover, Cord	2	58	141-2-855T-31300	Spring Coil, Slide Back	1
	141-6-231T-10100	Inner Poly Cover, Cartridge etc.	2	59	141-2-742T-17600	Lever, Start Cut	1
	141-6-231T-60702	Inner Poly Cover, Set	1	60	141-2-461T-32100	Pipe	1
	141-6-231T-35402	Inner Poly Cover, Turntable	1	61	141-2-365T-41400	Bracket, Start Switch	1
	141-6-231T-25352	Inner Poler Cover, Inst B	1	62	141-0-462T-51700	Boss Ass'y	1
	141-6-472T-06200	Caution Label, High Voltage	1	63	141-2-465T-16300	Stoper	1
	141-6-440T-04400	Hang Tag	1	64	141-2-445T-21500	Rubber Cushion	1
	141-6-231T-10100	Inner Poly Cover, Cartridge Screw	1	65	141-2-246T-38100	Sheet	1
	141-6-317T-06700	Pad, Turntable	1	67	141-6-479T-35800	Label	2
	141-6-479T-35800	Label	2				
<b>ACCESSORIES</b>							
	141-6-410T-18700	Instruction Manual	1	<b>HARD WARE</b>			
	141-6-493T-01100	Customer Card	1				
	141-2-862T-00400	Screw Driver, Lateral Weight Fixed	1				
<b>CABINET &amp; CHASSIS</b>							
1	141-0-121T-14700	Deck Panel Ass'y	1	Y1		Screw, Pan Head 2x6	2
2	141-0-111T-37900	Cabinet Ass'y	1	Y2		Screw, Pan Head 2x10	1
3	141-2-126T-27300	Back Lid	1	Y3		Screw, Pan Head 3x12	1
4	141-2-118T-00402	Turntable	1	Y4		Screw, Pan Head 2x16	1
5	141-0-153T-45800	Escutcheon Ass'y	1	Y5		Screw, Pan Head 2.6x4	2
6	141-2-361T-15400	Bracket, VR	2	Y6		Screw, Pan Head 2.6x6	4
7	141-2-163T-41100	Rotary Knob, Speed Adjust	2	Y7		Screw, Pan Head 3x4	1
8	141-2-161T-49900	Push Button, Speed Select	2	Y8		Screw, Pan Head 3x6	7
9	141-2-367T-31600	Bracket Socket	2	Y9		Screw, Pan Head 3x8	7
10	141-2-445T-16000	Rubber Cushion	1	Y10		Screw, Pan Head 3x10	4
11	141-2-464T-11800	Fixer, Power Cord	1	Y11		Screw, Pan Head 3x16	4
12	141-2-852T-51800	Spring Wire	1	Y12		Screw, Flat Head 3x10	1
13	141-2-322T-47100	Shield Plate	1	Y13		Screw, Binding Head 4x12	1
14	141-2-161T-47901	Push Button, Start/Repeat	1	Y14		Screw, Tapping 2x4	1
15	141-0-194T-01200	Dust Cover Ass'y	2	Y15		Screw, Tapping 3x6	3
16	141-2-161T-58800	Push Button, Record Size Select	2	Y16		Screw, Tapping 3x8	14
17	141-0-872T-00201	Lifter Ass'y	1	Y17		Screw, Tapping 3x10	2
18	141-0-873T-00203	Rest Ass'y	1	Y18		Screw, Tapping 3x12	2
19	141-0-742T-07200	Lever Ass'y	1	Y19		Screw, Tapping 3x14	9
20	141-0-174T-06602	Stand Ass'y	4	Y20		Screw, Tapping 4x20	4
21	141-2-163T-53800	Rotary Knob, IFC	1	Y21		Nut, Hexagon 3	1
22	141-2-352T-19900	Spacer, 45 rpm Adaptor	1	Y22		Washer 2x6x0.4	5
23	141-2-246T-11501	Sheet, Turntable	1	Y23		Washer 3x8x0.5	1
24	141-2-251T-06103	Hinge	2	Y24		Washer 3x10x1	3
25	141-2-351T-47500	Bracket, Mounting	2	Y25		Washer, Spring 2.6	1
26	141-2-472T-01201	Lug	10	Y26		Screw, Headless 2x4	1
27	141-2-472T-06801	Lug	1	Y27		Screw, Headless 2.6x4	1
28	4-527T-12400	Motor	1	Y28		Screw, Headless with Hexagon Hole 3x4	2
29	141-2-322T-45300	Shield Plate Motor ) or	1	Y29		Screw, Headless with Hexagon Hole 3x4	2
30	141-2-322T-48800	Shield Plate Motor	1	Y30		Screw, Headless with Hexagon Hole 4x4	2
31	141-2-411T-03902	Plate Nut, Rear Cover	1	Y31		Screw, Pan Head with Spring 3x6	3
32	141-2-464T-30000	Fixer	1	Y32		Screw, Tapping with Washer 3x8	6
33	141-2-683T-32401	Ring	1	Y33		Screw, Tapping with Washer 3x10	9
34	141-2-855T-14200	Spring Coil	2	Y34		Screw, Tapping with Washer 3x12	4
35	141-2-352T-25300	Spacer	2				
36	141-2-241T-20400	Veil	10				
37	141-2-368T-11400	Heat Sink	1				
38	141-2-135T-48501	Cover	1				
39	141-2-445T-05000	Rubber Cushion	2				
40	141-2-853T-60700	Spring Plate	1				
41	141-2-464T-31600	Fixer	1				
42	141-2-453T-61300	Washer	1				
43	141-2-457T-23000	Special Washer 2mm	1				
44	141-2-457T-13500	Special Washer	1				
45	141-2-457T-23100	Special Washer 3mm	1				
46	141-2-453T-30502	Washer 4.1x6.5x0.5 Nylon	1				
47	141-0-747T-16000	Bracket Lever Ass'y	1				
48	141-2-737T-06000	Bracket, Slide	2				
49	141-2-731T-59800	Slide, Size Select	2				
50	141-2-742T-17500	Lever, Size Select	1				
51	141-2-461T-32000	Pipe, Size Select	1				
52	141-2-855T-23800	Spring Coil, Size Select	1				
<b>ELECTRICAL PARTS</b>							
103	4-243T-81271	Power cord	1	103	4-243T-81271	Power cord	1
104	4-251T-90500	Power Trans	1	104	4-251T-90500	Power Trans	1
105	4-231T-82700	Switch	1	105	4-231T-82700	Switch	1
106	4-222T-51573	Variable Resistor, Fine Speed Adjust	2	106	4-222T-51573	Variable Resistor, Fine Speed Adjust	2
107	4-231T-82800	Switch, Speed Select	1	107	4-231T-82800	Switch, Speed Select	1
108	4-243T-15171	Lead Cord, Output	1	108	4-243T-15171	Lead Cord, Output	1
109	141-2-382T-07100	Terminal	2	109	141-2-382T-07100	Terminal	2
111	123-2-472R-00600	Lug	1	111	123-2-472R-00600	Lug	1
112	4-231T-82900	Switch, Record Size Select	1	112	4-231T-82900	Switch, Record Size Select	1
113	4-231T-83000	Switch, Start Cut	1	113	4-231T-83000	Switch, Start Cut	1
114	4-231T-83100	Switch, Muting	1	114	4-231T-83100	Switch, Muting	1
115	4-231T-83400	Switch, Repeat	1	115	4-231T-83400	Switch, Repeat	1
116	4-230T-82100	P.C. Board, Output	1	116	4-230T-82100	P.C. Board, Output	1

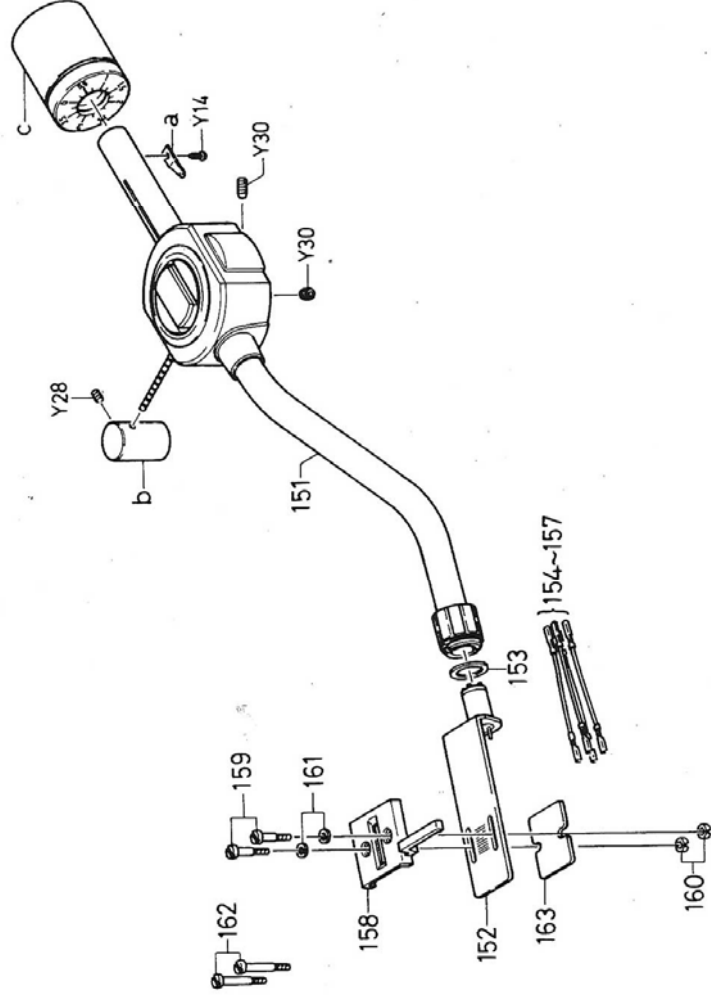
CHASSIS EXPLODED VIEW



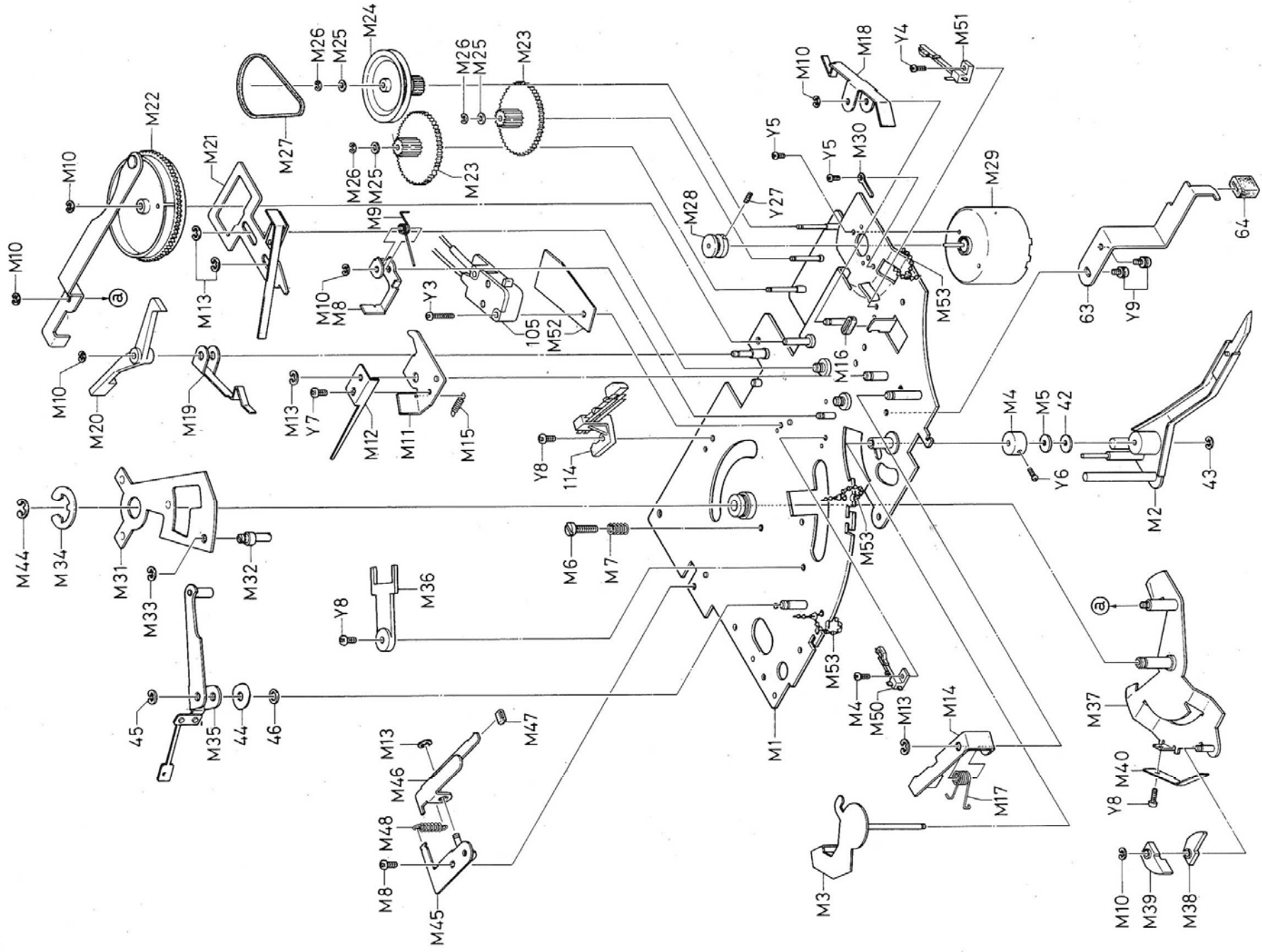
MECHANISM EXPLODED VIEW



ARM EXPLODED VIEW



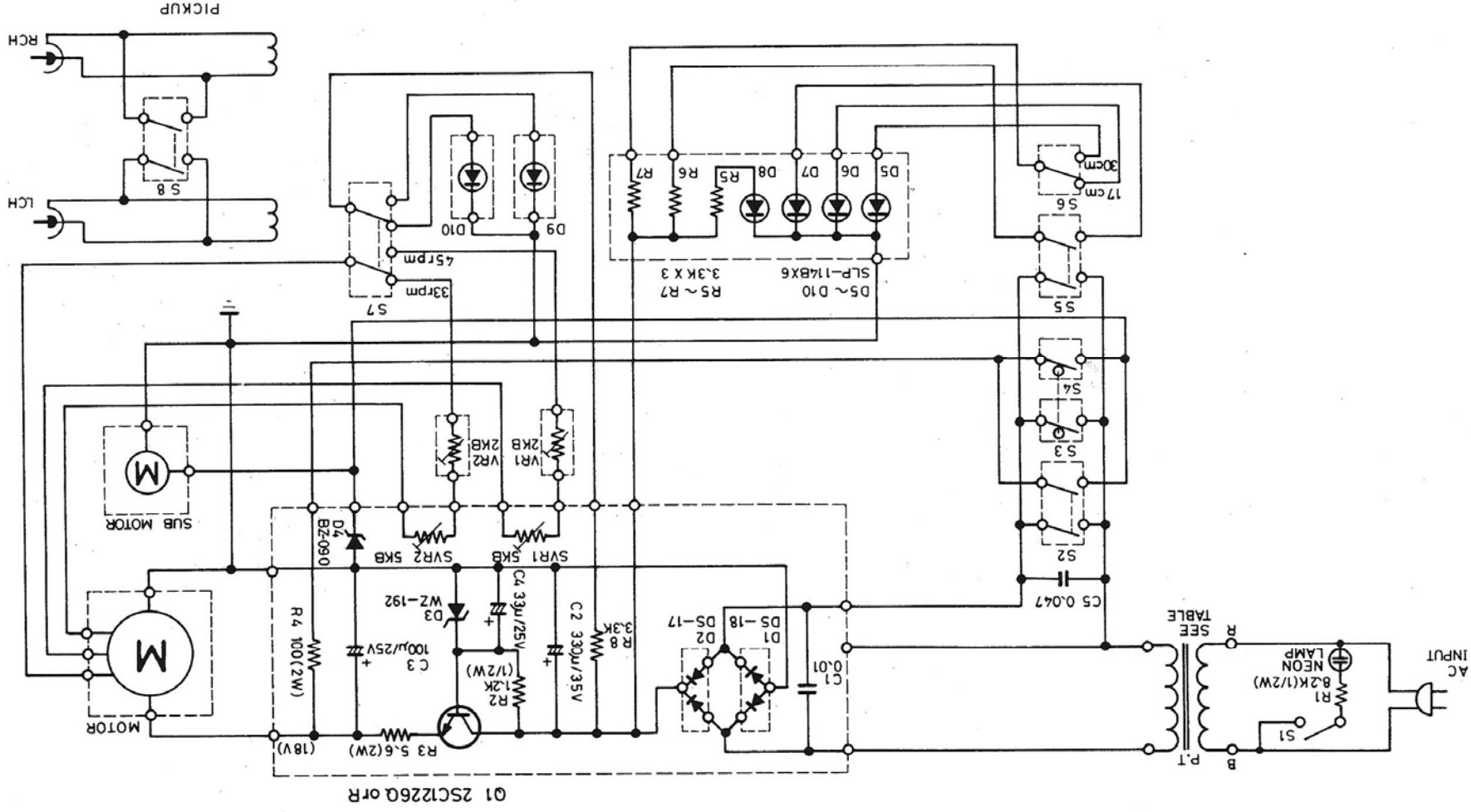
MECHANISM EXPLODED VIEW



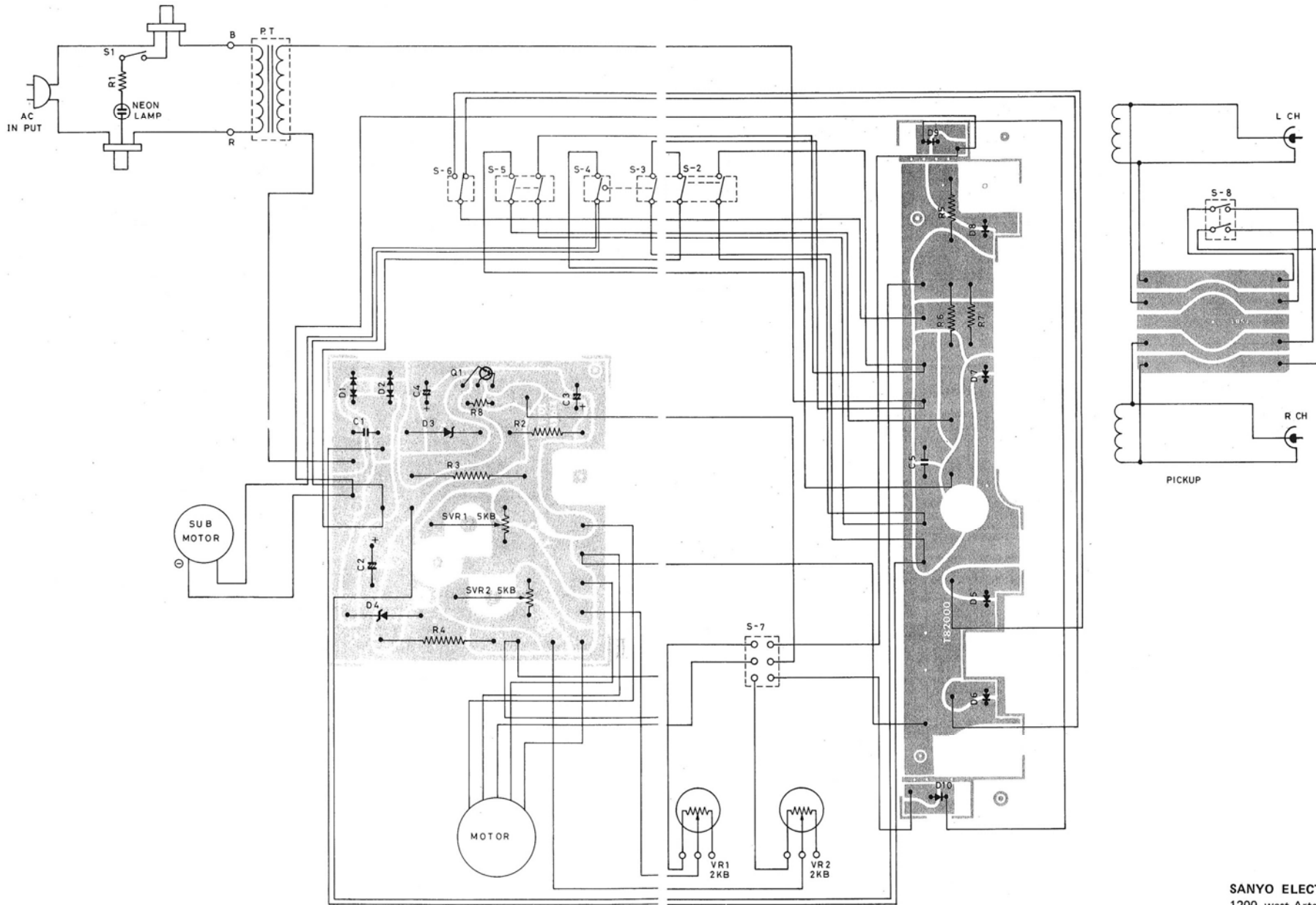




SCHEMATIC DIAGRAM



WIRING DIAGRAM



SANYO ELECTRIC INC.  
1200, west Artesia Blvd.,  
Compton, California 90220