

SERVICE MANUAL



STEREO TURNTABLE

TP 220
(EUROPE)



SPECIFICATIONS

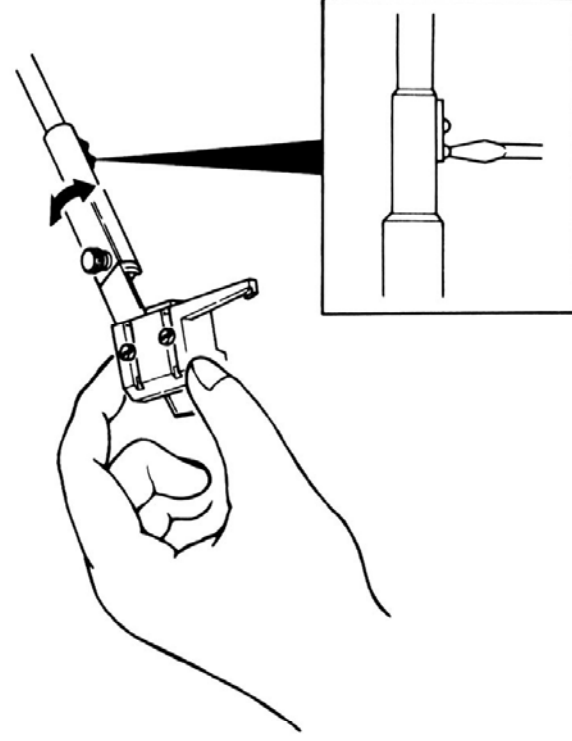
Motor	DC servo motor	Stylus pressure	1.5 — 2.5 g.
Drive system	Belt drive	Stylus pressure force range	0 — 3 g.
Speed	33-1/3 and 45 rpm	Frequency response	20 — 20,000 Hz
Wow and flutter	0.05% (WRMS)	Channel separation	20 dB
Turntable platter	12" (304 mm)	Power source	AC: 220V, 50Hz
Tone arm	Static-balance straight type	Power consumption	1.5W
Tracking error	±1.5°	Dimensions (Approx.) (TPB1)	16-13/16" x 13-3/8" x 3-15/16"
Overhang	19/32" (15 mm)	Weight (Approx.) (TPB1)	420(W) x 340(D) x 100(H) mm
Cartridge and stylus	Magnetic stereo cartridge (VM type) (No. AT3601), 0.6 mil diamond stylus (No. ATN3601)		5 lbs. 12 oz. (2.6 kg.)

ADJUSTMENT

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.

NOTE: Do not take out these screws.

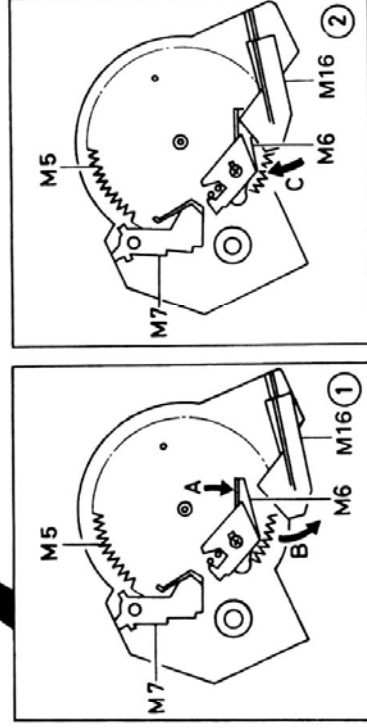
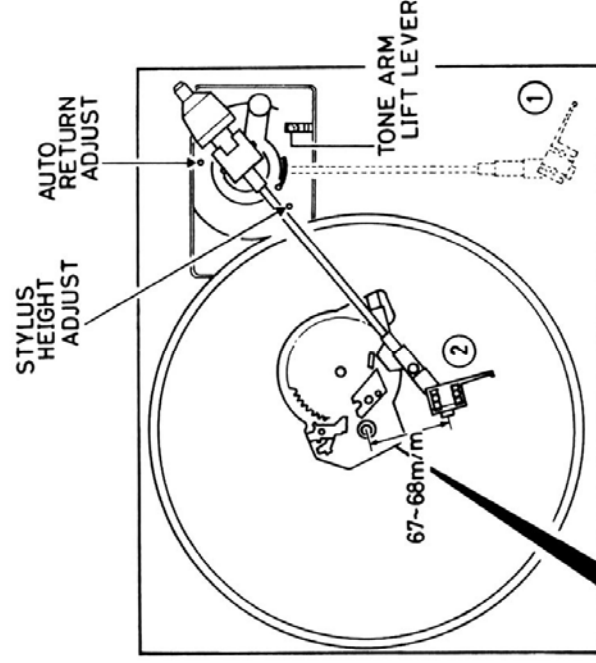


ADJUSTMENT OF AUTO-RETURN

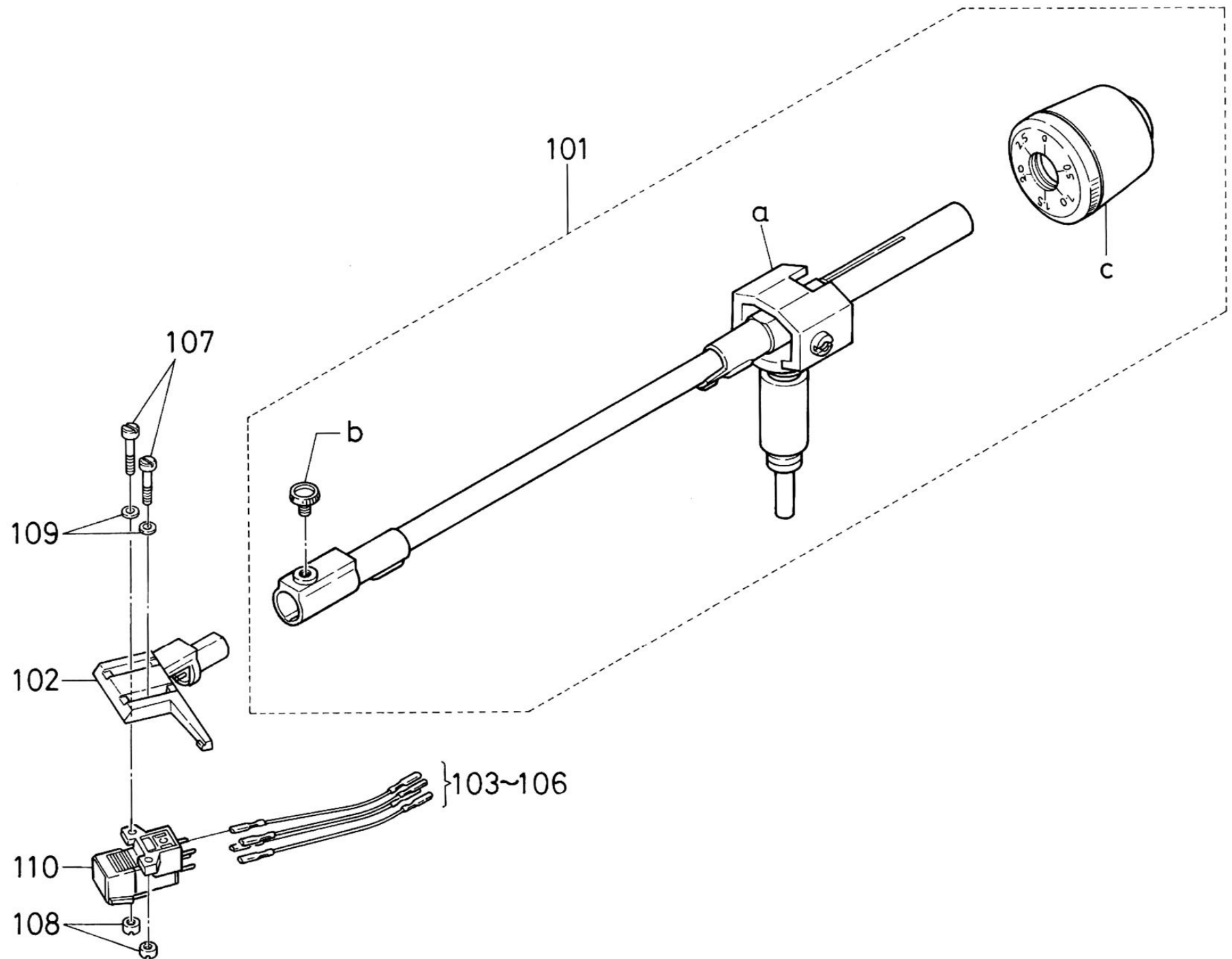
Remove the turntable, and place the tonearm in the reset position (1). In this state, move the gear M5 so that the end of lever M7 may be seated in the recess of cam of main gear M5. Push lower trip lever M6 and trip lever M16 in the direction of arrow A and arrow B, respectively.

Insert a screwdriver into the hole for "auto return adjust" and turn it right or left until the end of trip lever M16 starts to hit against the lower trip lever M6 (arrow C) when the distance between the center shaft of turntable and stylus becomes 67 to 68 mm by moving the tonearm.

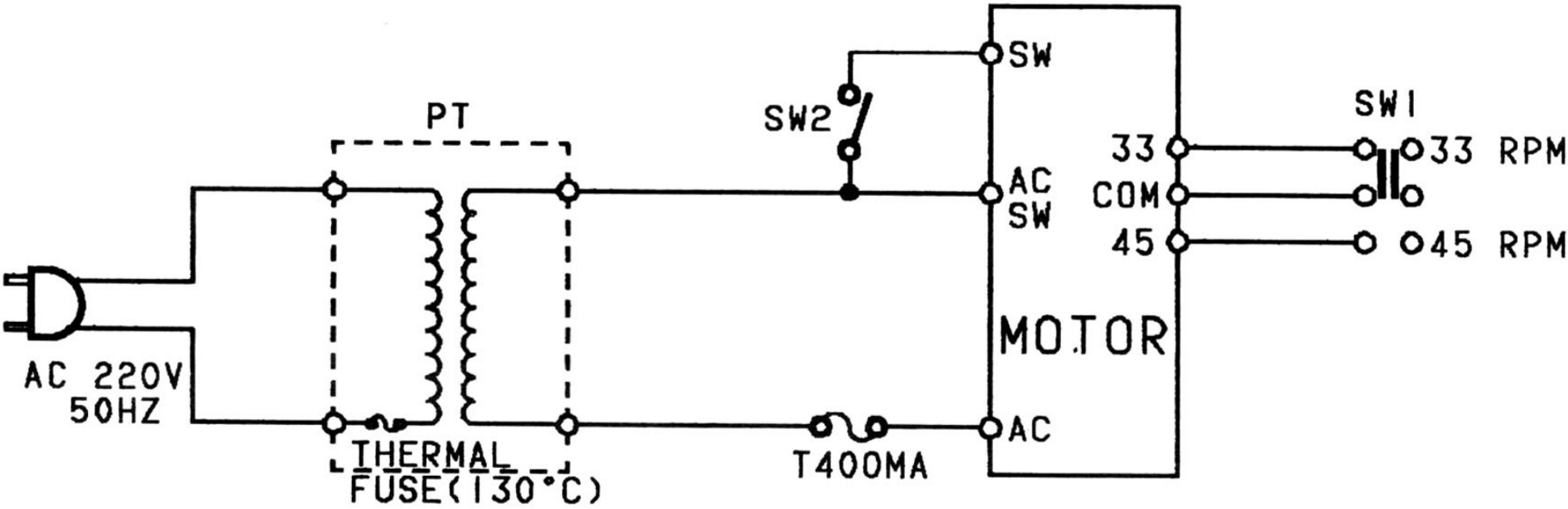
Put on the turntable, and check the auto-return performance.



ARM EXPLODED VIEW



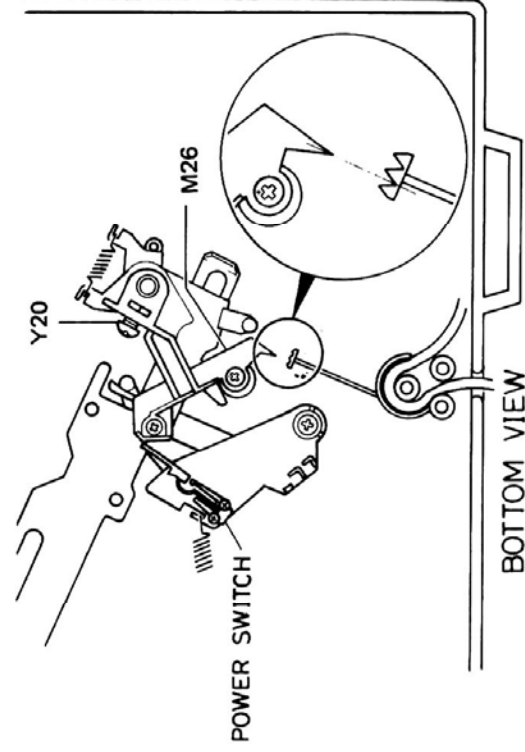
SCHEMATIC DIAGRAM_____



ADJUSTMENT

ADJUSTMENT OF MICROSWITCH

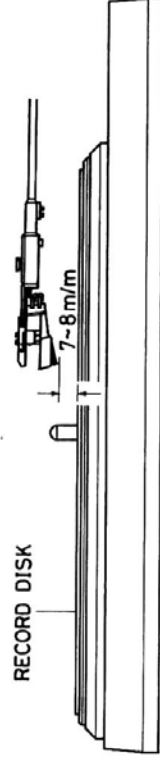
Determine the position with screw Y20 so that the end of arm lever M26 may coincide with the notch of the rib in the bottom of deck panel when the tonearm is set in the reset position (see expanded view).



ADJUSTMENT OF STYLUS HEIGHT

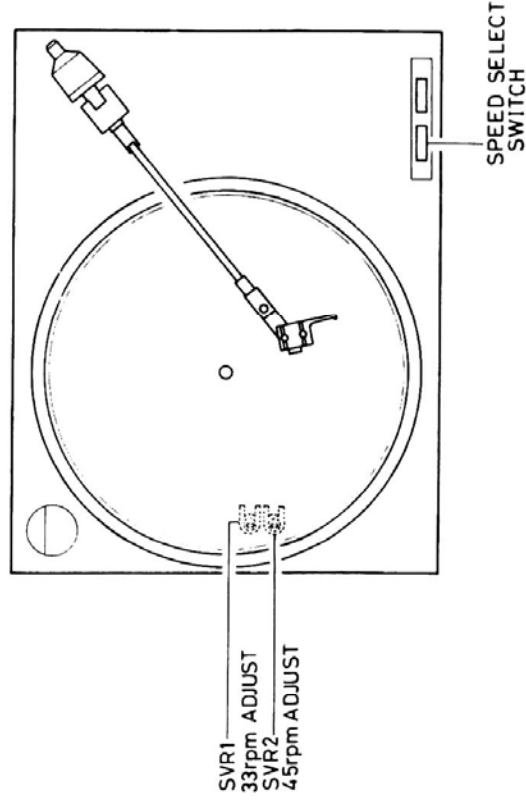
Setting the record disk in place, raise the tonearm lift lever.

Bring the tonearm to above the disk, and insert a screwdriver into the "stylus height adjust" hole (see drawing for ADJUSTMENT OF AUTO-RETURN) and turn it right or left until the distance between the disk and stylus becomes 7 to 8 mm.

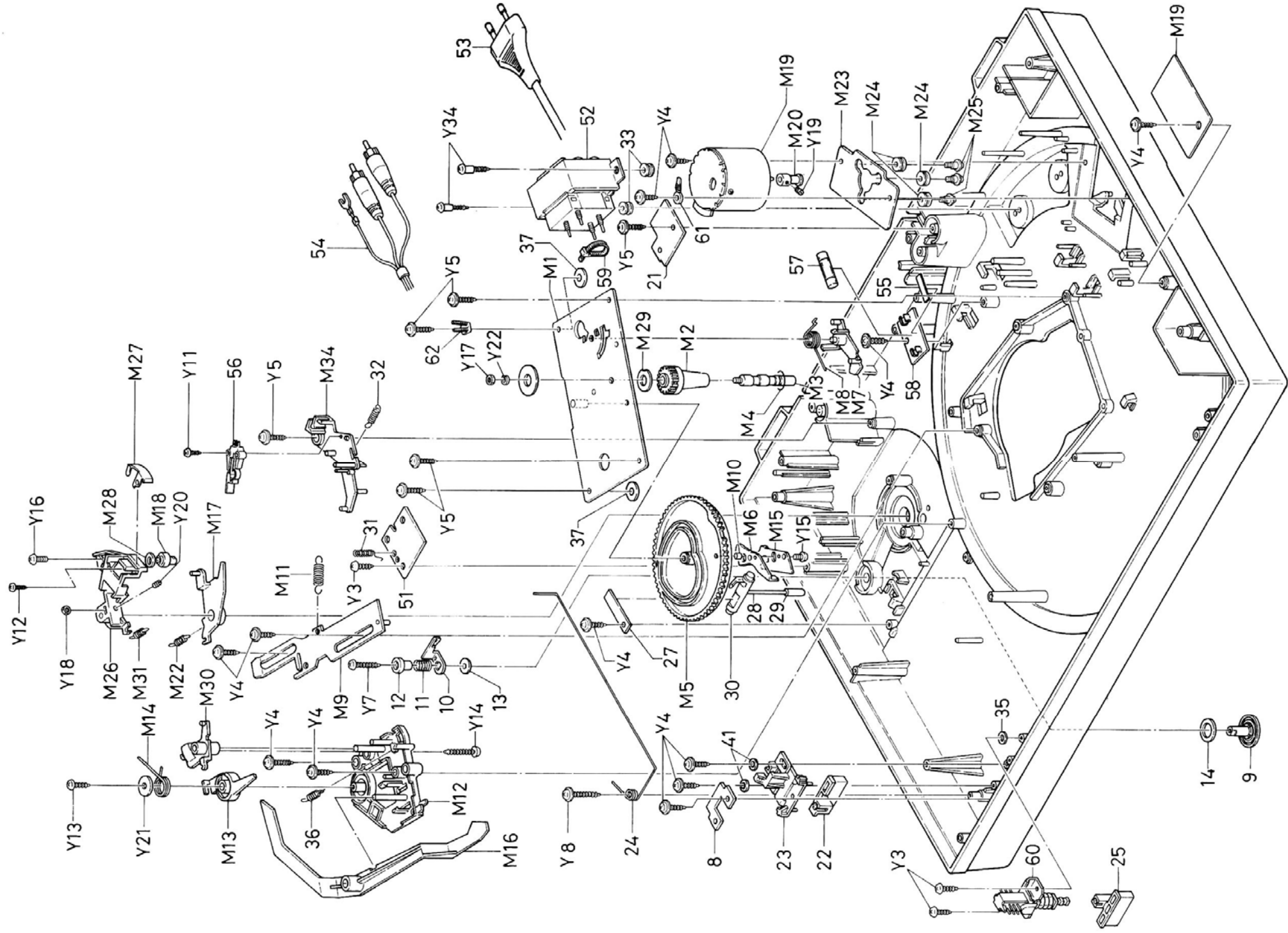


ADJUSTMENT OF TURNTABLE SPEED

Play a wow flutter checking record, and adjust by turning SVR1 (33 rpm) and SVR2 (45 rpm) so as to obtain the specified frequency.



MECHANISM EXPLODED VIEW



CARINET EXPLODED VIEW

