

Automatic Record Changer

Part No. 35-1293

This mechanism consists of a rim driven turntable (not shown) running on a fixed bearing (1), which supports the record spindle (2). The spindle is equipped with a rotatable cap (3) to provide for holding records in automatic operation, when in one position, and removing records or playing manually, when in the other position.

The outer edge of the record is held by record supports (4) and (5), adjustable for 10- and 12-inch, and is steadied by a rubber tipped, spring loaded finger (6).

Control of operation is by a single control button (7), having four positions: "Off" - "Man" - "Aut" and "Rej".

Automatic operation starts when rubber tired drive wheel (8) is moved into contact with turntable rim by tone arm movement or control button. All change functions are controlled by main cam (9) which is driven by drive wheel (8) thru a friction (10) and gear (11) train.

The main cam assembly consists of main cam (9) and automatic trip cam (12). The latter disengages the drive wheel (8) at the end of the change cycle.

The upper side of the main cam (9) controls tone arm swing by engagement with pin in sweep lever (13) attached to tone arm by means of clamp (14) around tone arm pivot sleeve (15). Tone arm lift is controlled by vertical section of main cam (9) operating tone arm thru lift pin (16) inside of sleeve. A boss projecting from the upper side of the main cam (9) displaces the stop lever (17) at the end of the change cycle to permit the tone arm to proceed across the record.

The lower side of the main cam (9) moves the feed lever (18) by means of a roller (19). This movement charges the feed spring (20) and at the proper time permits discharge of the spring causing the feed lever (18) to thrust the feed finger (21). (In top view), forward to feed the record. Connection between feed lever (18) and feed finger (21) is thru feed intermediate lever (22) pivoted in record support post (23). (In top view.)

The stop lever (17), normally held out of engagement by the boss on the main cam (9), swings into position at the start of the change cycle. Its selection of stop points for 10- or 12-inch records is controlled by dog (24) on the record selector shaft running up front of record support post (23) and actuated by swinging record support (4).

The drive wheel (8) is mounted on the carrier lever assembly (25) which is pivoted about the intermediate drive (11). This assembly consists of the carrier lever with its bearings and the trip lever (26). The trip lever (26) carries a pin (27) engaging the automatic trip cam (12); a pawl (28) to engage the serrated edge of sweep lever (13); a positive trip screw (29) to interfere with sweep lever (13). Engagement of pin (27) with automatic trip cam (12) pulls drive wheel (8) out of engagement with turntable at end of change cycle. Reversal of the tone arm movement rotates pawl (28) to release trip lever (26). Thrust of sweep lever (13), when tone arm approaches spindle (2), against positive trip screw (29) releases trip lever (26).

The control lever (31) operated by the control button (7), -a- turns switch on and off -b- prevents carrier lever assembly (25) from swinging when

in manual position -c- permits carrier lever assembly (25) movement to engage drive wheel (8) with turntable, when in automatic position -d- displaces trip lever (26) causing drive wheel (8) engagement with turntable, when pushed to Reject. Function (a) is accomplished by pin which engages dog of toggle switch. Functions (b) and (c) are controlled by shape of rear edge of control lever (31) and a fixed stud (32) in the carrier lever. Function (d) is accomplished by stud (33) in control lever (31) striking edge of trip lever (26) and unlatching pin (27) in same from automatic trip cam (12).

Bearings are separated and center distances maintained by aligning bracket (34) which also carries bearing for record feed lever (18).

ADJUSTMENTS

Positive Trip

The tripping point is adjusted by turning positive trip screw (29) counter-clockwise to trip earlier in playing cycle and clockwise to delay tripping.

Tone Arm

The drop point is adjusted by loosening the screw in clamp (14) slightly to permit repositioning of tone arm in relation to sweep lever (13). Care must be exercised to see that tightening the screw does not cause bind in tone arm swing.

The rise and drop of tone arm is adjusted by bending short arm of lift pin (16) slightly. Long arm must not be distorted or it will bind in pivot sleeve (15).

Record Feed

The feed finger (21) should strike only the bottom record of the stack. Record supports (4) and (5) should be adjusted up or down to obtain this result. Adjustments must be checked for both 10- and 12-inch records as one of the buttons is used in both cases.

Fixed record support (5) can be adjusted for engagement with record by removing hold down finger assembly (6) and loosening two screws under feed finger (21).

Friction drive

The rubber wheel (10) engaging with the intermediate drive assembly (11) should be compressed just enough to prevent slipping or skidding at any portion of the change cycle. Compression is controlled by the nut and locknut, below the rubber wheel.

General

Carrier lever assembly (25) must be perfectly free on its shaft and trip lever (26) must be perfectly free on the carrier lever. All moving parts should be lubricated with oil.

Rubber drive wheels under the turntable and the rim of the turntable must be free of grease or dirt.

Turntable thrust bearing can be lubricated with heavy oil or light grease and radial bearing with light oil.

Pickup lead from tone arm must have slack to permit free movement of arm.

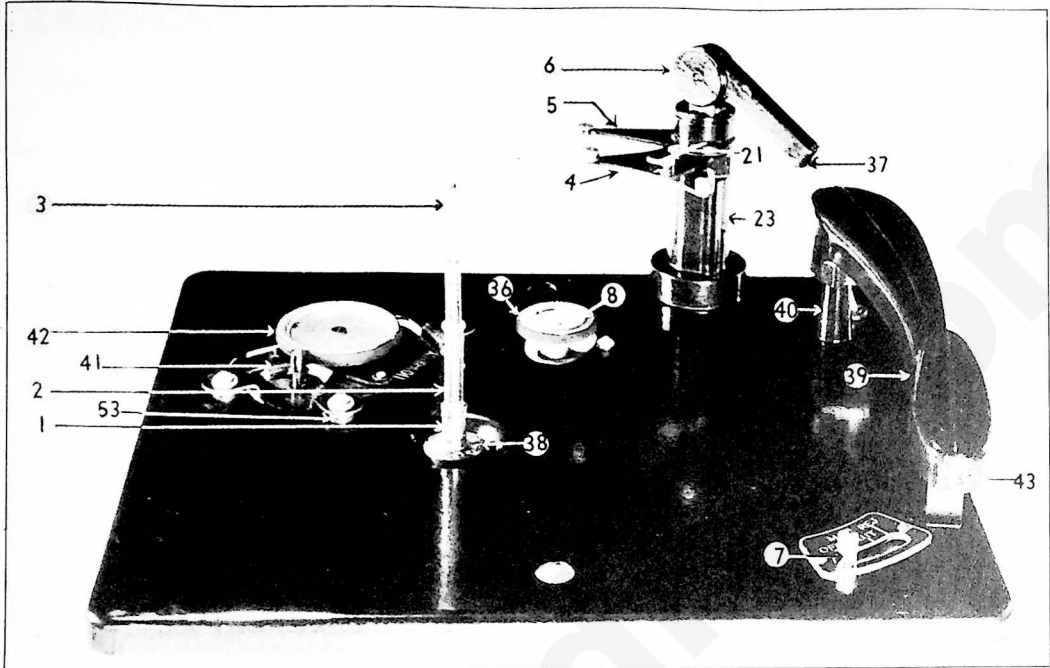


FIG. 1—TOP VIEW—TURNTABLE REMOVED

REPLACEMENT PARTS

Figure No.	Description	Part No.	Figure No.	Description	Part No.	Figure No.	Description	Part No.
1-2-3	Spindle Assembly	35-2570	25	Drive Wheel Carrier Lever Assembly	35-2580	49	Tone Arm Pull In Spring	35-2588
4	Swinging Record Support Assembly	35-2583	31	Operators Lever Assembly	35-2579	50	Record Support Friction Spring	35-2589
5	Stationary Record Support Assembly	35-2582	34	Intermediate Gear Spacer	35-2592	51	Crystal Cartridge	35-2569
6	Feed Cap Assembly	35-2571	36	Drive Wheel Tire	35-2590	52	Motor Assembly	35-2595
8	Drive Wheel and Shaft Assembly	35-2614	37	Rubber Button on Feed Cap Assembly	35-2636	53	Spacer for Motor Mounting	35-2593
9	Main Cam Assembly	35-2574	38	Thrust Bearing Assembly	35-2573	54	Motor for 25 Cycle 110 Volt Operation	35-2625
10	Rubber Drive Wheel	35-2594	39	Pick Up and Tone Arm	35-2612	55	Carrier Lever Spring	35-2622
11	Intermediate Drive Assembly	35-2572	40	Tone Arm Hinge Assembly	35-2615	56	Shielded Pick Up Cable	35-2627
12	Sweep Lever Assembly	35-2576	41	Motor Rim Drive Wheel Spring	35-2624	57	Record Selector Stop Point Dog	35-2617
13	Lift Pin	35-2585	42	Motor Rim Drive Wheel Assembly	35-2623	58	Trip Lever Positive Trip Screw	35-2618
16	Stop Lever Assembly	35-2577	43	Needle Screw	218-1047	59	Carrier Lever Stud	35-2620
17	Record Feed Lever Assembly	35-2575	44	Sapphire Jewel Needle	96-1265	60	Control Lever Stud	35-2621
18	Feed Lever Roller	35-2591	45	Changer Mounting Spring	35-2613	61	Trip Lever Spring	35-2622
20	Record Feed Spring	35-2586	46	Switch and Plate Assembly	35-2581	62	"C" Balance Spring	35-2626
21	Record Feed Finger Assembly	35-2576	47	Turntable Assembly	35-2584	63	Spring for 50 Cycle Operation	28-9003
23	Record Support Assembly	35-2616	48	Stop Lever Spring	35-2587			

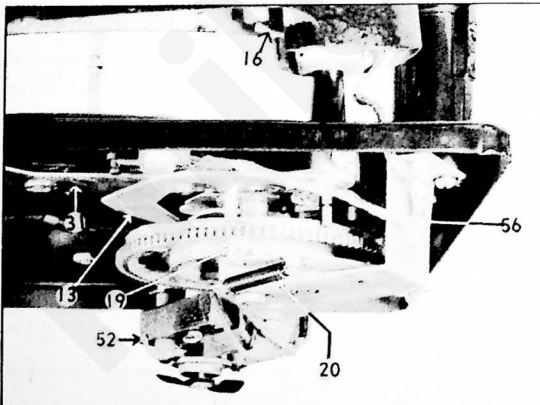


FIG. 2—VIEW LOOKING AT RIGHT SIDE

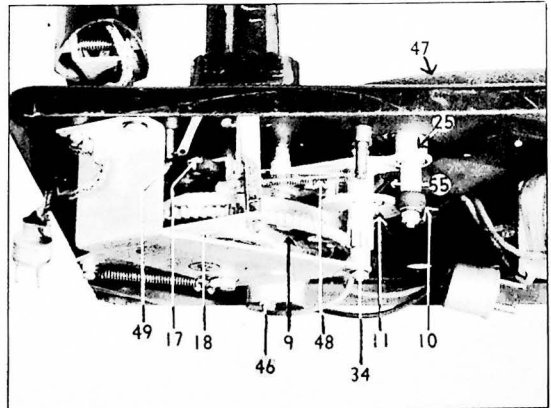


FIG. 3—VIEW LOOKING AT BACK