

LUBRICATING

Apply light nonhardening grease to sliding cam surfaces and pivot points.

Apply light machine oil on tone arm lift rod, idler wheel bearings, and motor bearings.

Do not lubricate turntable driving surface, the teeth on the cycling gear, or turntable hub.

MECHANICAL PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1*	35429*	Idler Wheel*	51	27144	Trip Lever Cap
2		Idler Spring	52	33722	Trip Lever Clutch
3		Idler Lever	53	16817	Retard Assembly Spring
4	43381	Stabilizer Arm	54	27149	Trip Lever
5	43512	Turntable Assembly	55	9510	Anti Skate Spring
6	43117	Speed Selector Knob	56	6884	Spindle Ball
7	43117	Function Selector Knob	57	33948	Spindle Push Rod
8	43118	Cue Knob	58	41278	Stud
9	25364	Spindle	59	33993	Shift Bracket
10	35150	Control Lever Assembly	60	25432	Compression Spring
11	29378	Stabilizer Arm Shaft	61	18185	7-inch Setdown Button
12	35547	Alignment Bracket and Shut-off Delay Assembly	62	21799	7-inch Button Spring
13	43136	Reject Rod	63	26599	7-inch Button Ramp
14	35588	Ejector Bracket Assembly	64	24240	Tone Arm Safety Spring
15	27261	Trip Link	65	4339	Safety Plate
16	43135	On/Off Reject Control Lever	66	29082	Hinge Arm Assembly
17	25365	Finger and Shaft Assembly	67	35926	Pivot Button
18	33943	Locator	68	43151	Cartridge and Shroud Assembly
19	9509	Lift Rod Spring	69	43167	Tone Arm Tube
20	24445	Lift Rod	70	43386	Tone Arm Lock Collar
21	35149	Shut-off Lever	71	43148	Carriage Assembly
22	37276	Drive Gear Assembly	72	43565	Hinge Spring (Long)
23	35533	Slide Assembly	73	43168	Adjusting Arm
24	36379	Escape Lever Spring	74	40171	End Cap and Insert Assembly
25	33945	On/Off Switch Assembly	75	40170	Adjusting Shaft and Knob Assembly
26	43141	Cue Lever	76	43127	Hinge Spring (Short)
27	43123-10	Cue Control Wire	77	43383	Adjusting Knob
28	7113	Reject Spring	78	29075	Restrictor Screw
29	35538	Idler Arm and Shaft Assembly	79	43389-1	Cue Shelf
30	35513	Yoke	80		Spring Anchor Plate
31	43126	Speed Cam	81	43114	Tone Arm Lock
32	29376	Speed Cam Detent Spring	82	43143-7 1/2	Cue Wire Tube
33	43156	Tone Arm Latch Rod	83	33398	Reject Rod Spring
34	43132	Speed Control Lever	84	43394	Tone Arm Lock Spring
35	35439	Retard Assembly	85	43566	Latch Rod Spring
36	27147	Slide Detent Spring	86	43143-10 9/16	Speed Control Wire Tube
37	42150	Motor, 117 VAC, 60 Cycles	87	43142	Cue Wire Cap
38	24452	12-inch Selector Lever	88	43015	Clutch Arm
39	14951	12-inch Selector Spring	89	98120-1/8	Clutch Pad
40	25819	Manual Play Lever Spring	90	27159	Stabilizer Arm Shaft Spring
41	16807	Manual Play Lever	91	43133-13 1/4	Speed Control Wire
42	16808	Manual Play Lever Pin	92	6876	Thrust Bearing
43	24689	Reset Lever Spring			
44	35597	Return Spring			
45	20886	Reset Lever			
46	30317	7-inch Lever Bumper			
47	35611	7-inch Lever Spring			
48	30420	7-inch Lever			
49	9557	Retard Lever			
50	36379	Shut-off Lever Spring			

* Idler Wheel -- WALSCO Replacement Number 1496-05.

SET 1108 FOLDER 5

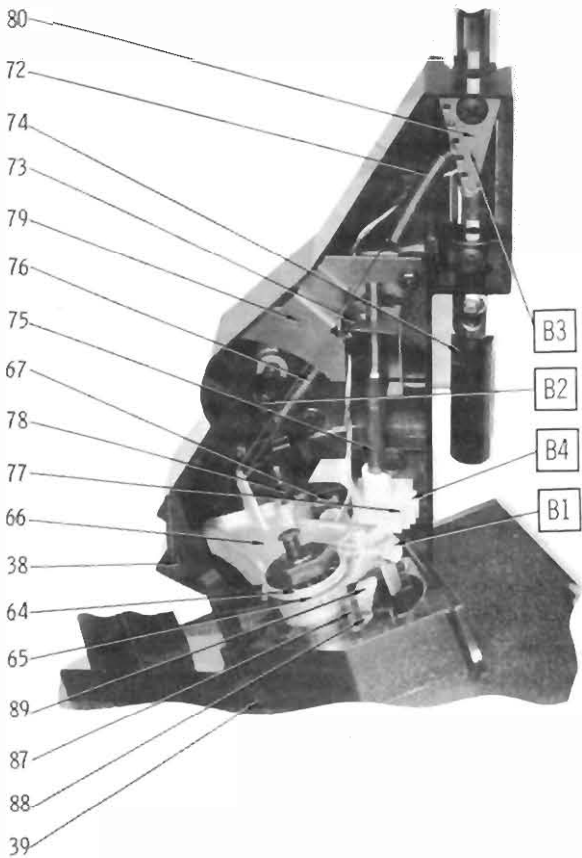
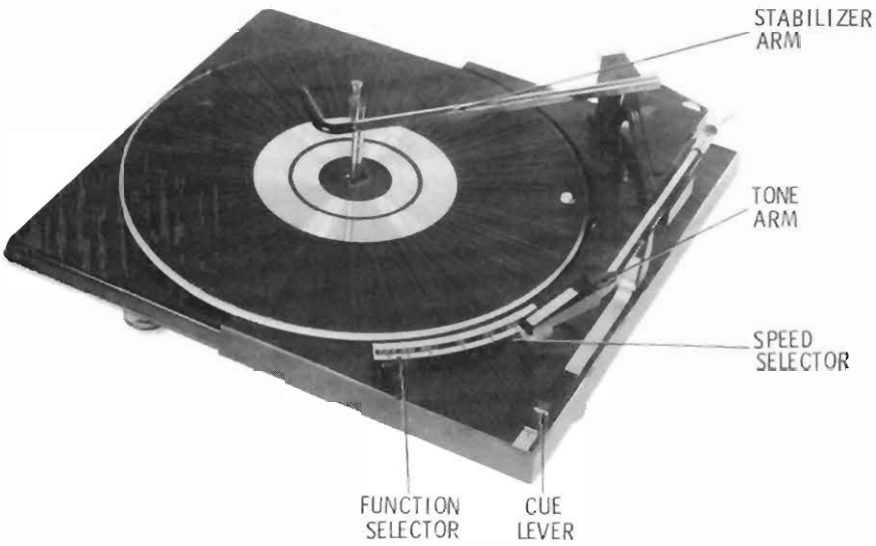
V-M MODELS
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REMEMBER TO ASK— "What else needs fixing?"

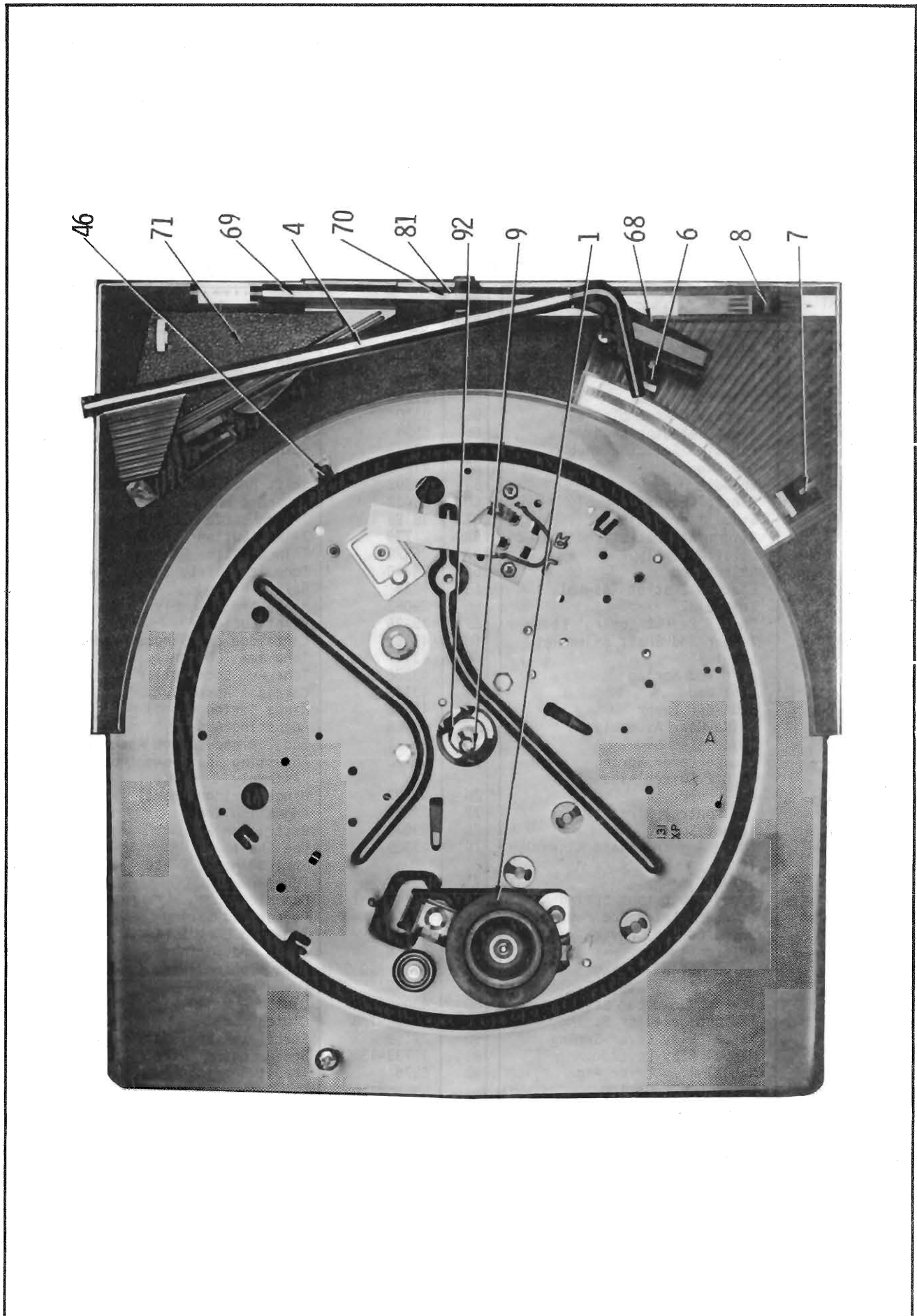
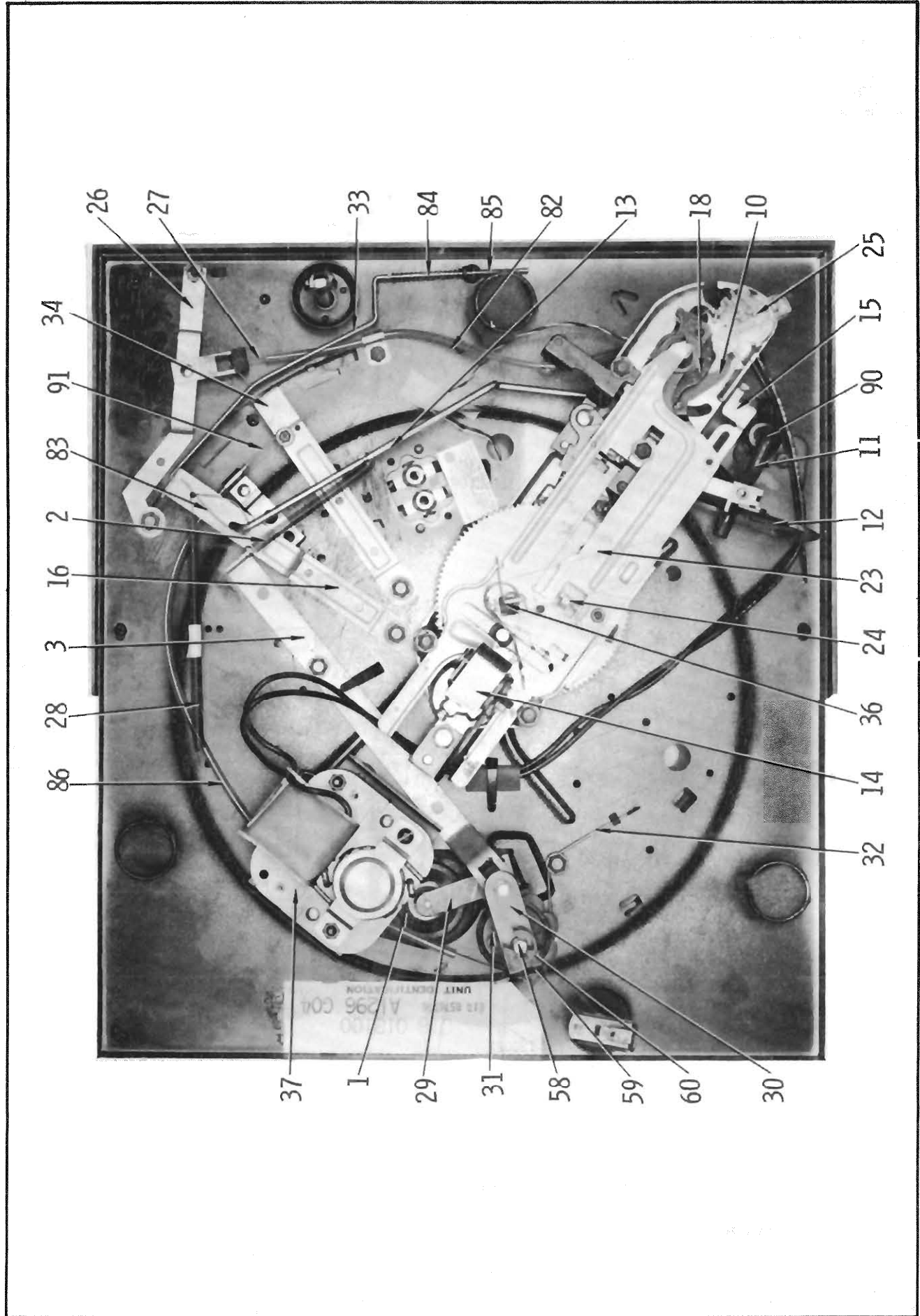
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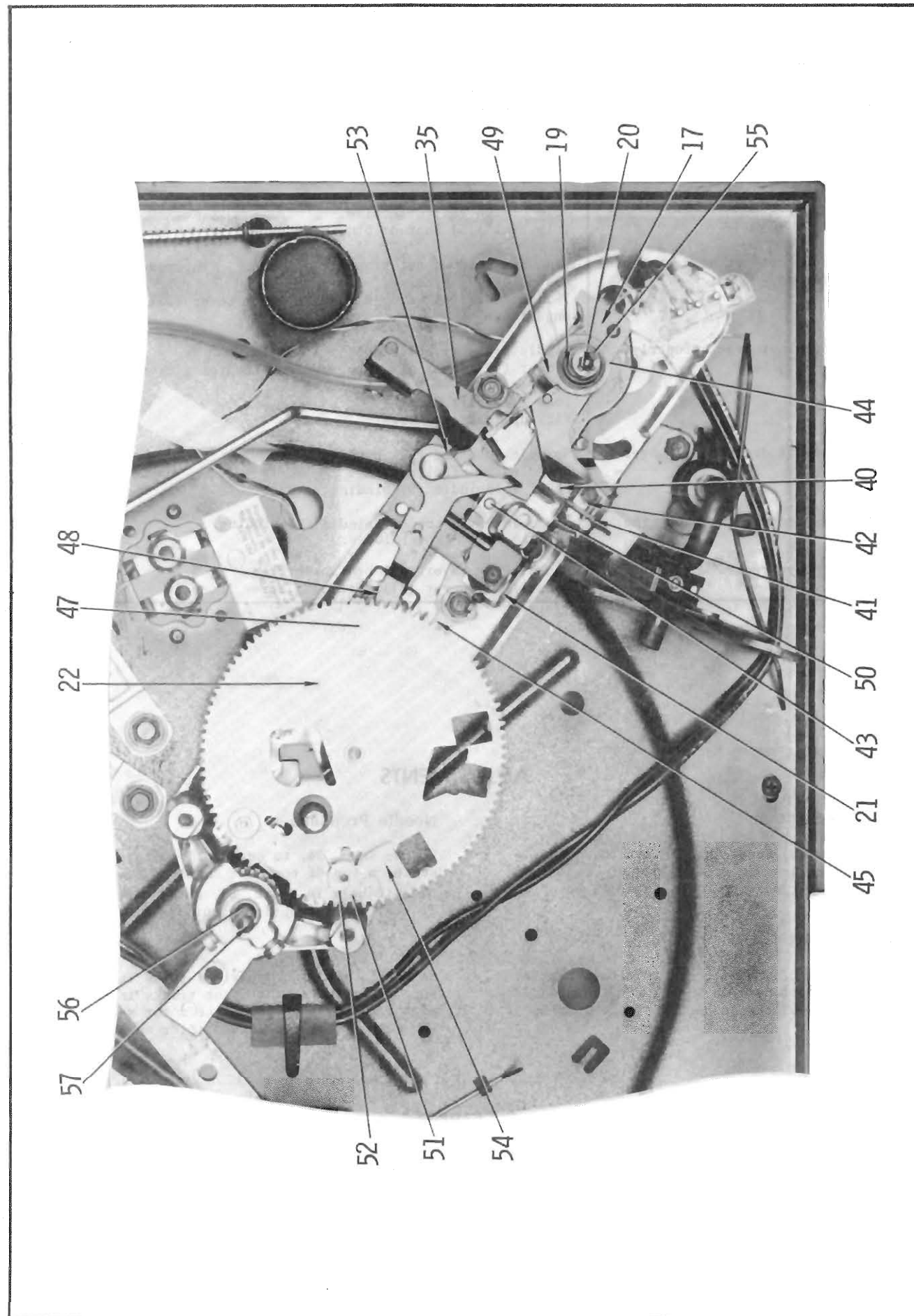


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DATE 6-70 SET 1108 FOLDER 5





OPERATING INSTRUCTIONS

Loading

Lift Stabilizer Arm straight up and swing it fully to the right.

Place up to six records of the same size and speed on spindle and lower them onto spindle shelf.

Hold records level and swing Stabilizer Arm inward and lower it onto record stack.

Starting

Set Speed Selector to desired speed.

Move Function Selector to Rej and release. The

Tone Arm will automatically set down at proper point. The changer will automatically play each record and shut off after the last record has played.

Rejecting

To reject a record, move Function Selector to Rej and release.

Cueing Feature

The Cueing Feature makes it possible to interrupt a recording at any point on the record. The Tone Arm is raised and held in place when Cue Knob is moved to the rear. To resume play, move Cue Knob forward.

CUEING SEQUENCE

Moving Cue Knob (8) to the rear pivots Lever (26) to move Cue Control Wire (27) to the rear. Cue Control Wire Cap (87) moves, contacting Cue Shelf (79) to raise the Tone Arm. As Cap (87) moves, Clutch Arm (88) is free to rise. Pad (89), on Clutch Arm (88), contacts Hinge

Arm Assembly (66), holding the Tone Arm in place.

Moving Cue Knob (8) forward reverses the above sequence.

CHANGE CYCLE

Turn-On Sequence

Moving Function Selector (7) to Rej pivots Control Lever (16) to release the pressure on Idler Lever (3) and to move Rod (33), unlocking the Tone Arm. Lever (3), pivoted by Spring (2), pivots Yoke (30) to push Idler Wheel (1) against the drive motor shaft and the inside rim of Turntable (5). Lever (16) also moves Reject Rod (13) to pivot Assembly (10), turning On/Off Switch (25) on and moving Trip Link (15) to pivot Trip Lever (54). Trip Clutch (52), pivoted by Lever (54), pivots the trip pawl on Assembly (22).

A projection on the turntable hub strikes the trip pawl, turning Assembly (22) to engage the drive gear teeth with the teeth on the turntable hub.

Change Sequence

Note: Manually rotate the Turntable to observe the change cycle.

A pin projecting from Assembly (22), through a slot in Slide Assembly (23), moves Slide Assembly (23) to the rear, away from Spindle (9). A ramp on the rear of Assembly (23) moves Lift Rod (20), lifting the Tone Arm and compressing Lift Rod Spring (19) to move Finger and Shaft Assembly (17) upward to engage two formed dimples on Finger (17) with two holes in Locator (18). Locator (18) controls the movement of the Tone Arm during the change cycle.

As Assembly (23) continues to the rear, a tab

on the rear of Assembly (23) contacts and pivots Locator (18) and Shaft Assembly (17), which are locked together, moving the Tone Arm directly above the rest post.

At this point, a tab on the front end of Assembly (23) pivots the lever on Assembly (14) to move Spindle Push Rod (57) upward to pivot the push-off lever in Spindle (9), dropping a record on Turntable (5).

A cam on the top of Assembly (22) moves Reset Lever (45) into mid-position where Lever (45) is engaged and held by Selector Lever (38). Assembly (23) continues to the rear, stops, and then starts forward.

When 7-inch records are being changed, 7-inch Lever (48) is free to move upward, lifting Reset Lever (45) to its upper position to contact the upper step on Locator (18).

When 10-inch records are being changed, the first record to drop onto Turntable (5) depresses Button (61), pushing Ramp (63) downward. The rubber bumper on Lever (48) contacts Ramp (63) to prevent Lever (48) from moving. Consequently, Lever (45) remains in mid-position to contact the center step on Locator (18).

When 12-inch records are being changed, the edge of the dropping record pivots 12-inch Selector Lever (38) to disengage Lever (45) from the bottom edge of Lever (38), permitting Lever (45) to drop into a recess at the bottom of Lever (38) to contact the bottom step on Locator (18).

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FOLDER 5

As Assembly (23) continues forward, the tab on the rear of Assembly (23) moves clear of Locator (18), permitting Spring (44) to pivot Locator (18) to move the Tone Arm over the record to a point where Lever (45) contacts one of the three steps on Locator (18).

As Assembly (22) completes a full rotation, Assembly (23) returns to its original position, setting the Tone Arm down and releasing Spring (19) to move Assembly (17) from Locator (18), permitting the Tone Arm to follow the grooves of the record.

At the end of the change cycle, a tab on Trip Link (15) pivots Trip Lever (54) and Trip Clutch (52) to reset the trip pawl. The pin projecting from Assembly (22) is moved by Spring (36) into a detent on Assembly (23), holding Assembly (22) in the neutral position.

As the Tone Arm follows the grooves of the record, Assembly (17) pivots, moving Trip Link (15) to pivot Trip Lever (54). Trip Clutch (52) does not pivot during this slow steady pressure. As the needle reaches the run-out groove of the record, the movement of the Tone Arm, Trip Link (15), and Trip Lever (54) increases in speed. This increased speed pivots Trip Clutch (52), pivoting the trip pawl. The projection on the turntable hub then strikes the trip pawl, turning Assembly (22) to engage the gear teeth to start the change cycle.

Shut-Off Sequence

When the last record drops, Stabilizer Arm (4) drops to move Shaft (11) downward, pivoting the shut-off delay lever on Assembly (12). The

spring on the shut-off delay lever applies pressure to Lever (21). Lever (21) is prevented from pivoting by the escape lever on Assembly (23).

At this point, Assembly (23) is in its outermost position from Spindle (9). As Assembly (23) moves forward, the end of Lever (21) slides off the escape lever and drops through the slot in Assembly (23). By this time, Locator (18) has pivoted too far to be blocked by Lever (21), and the Tone Arm is permitted to set down on the record.

After the last record has played and the needle is in the run-out groove of the record, the changer trips into change cycle to return the Tone Arm directly above the rest post. As Assembly (23) reaches its outermost position, the force applied by the spring on the shut-off delay lever causes the end of Lever (21) to raise, preventing Locator (18) from pivoting, holding the Tone Arm above the rest post.

As Assembly (23) moves forward, the spring on the shut-off delay lever raises Trip Link (15) to permit the tab on the rear of Trip Link (15) to contact Control Lever Assembly (10). Lever (54) on Assembly (22) moves Trip Link (15) forward. As Assembly (23) continues forward, the Tone Arm is set down on the rest post. At the end of the change cycle, the tab on the rear of Link (15) pivots Assembly (10) to turn Switch (25) off. Spring (28) pivots Lever (16), moving Function Selector (7) to Off and moving Rod (33) to lock the Tone Arm to the rest post. Lever (16) also pivots Lever (3) to pivot Yoke (30), pulling Wheel (1) clear of the drive motor shaft and the inside rim of Turntable (5).

TROUBLE CHART (Continued)

SYMPTOM	REMARKS
Changer shuts off when last record drops.	Escape lever binding. Escape Lever Spring (24) missing.
Changer trips into change cycle before needle reaches end of record.	Trip Clutch (52) defective.
Changer does not cycle when record has played.	Trip pawl binding. Trip Clutch (52) defective. Trip Link (15) bent or binding.
Tone Arm does not set down at proper point on record.	Tone arm setdown not properly adjusted. Finger and Shaft Assembly (17) binding. 7-inch Lever (48) and 12-inch Selector Lever (38) not properly engaging.
Tone Arm does not track properly.	Needle pressure not properly adjusted. Finger (17) does not disengage from Locator (18) when cycle is completed. Tone arm shaft binding. Pick-up leads too tight.
Record does not drop when changer cycles.	Spindle Push Rod (57) binding. Spindle Ball (56) missing. Lever in Spindle (9) binding or bent.
Two records drop at the same time.	Slide lever in top of Spindle (9) binding. Spindle Assembly (9) loose.
Changer replays record when set for manual play.	Manual Play Lever (41) bent or broken. Manual Play Lever (41) retaining screw loose.

TROUBLE CHART

SYMPTOM	REMARKS
Turntable does not revolve when Function Selector is turned to On.	Idler Spring (2) broken or missing. Drive motor shaft binding. On/Off switch defective.
Turntable speed too slow.	Thrust bearing (92) dirty or binding. Idler Wheel (1) binding. Drive motor shaft binding.
Turntable stalls during change cycle.	Drive Gear Assembly (22) binding. Idler Wheel (1) greasy or dirty. Drive motor shaft binding. Binding between Lift Rod (20) and Slide Assembly (23).
Changer does not cycle when Function Selector is turned to Rej.	Trip Link (15) bent or broken. Trip pawl on Trip Clutch (52) binding.
Changer continues to cycle.	Trip pawl on Trip Clutch (52) binding. Slide Detent Spring (36) broken or missing.
Changer does not shut off after last record has played.	Stabilizer Arm Shaft (11) binding. Trip Link (15) bent or broken. Shut-off Lever (21) bent or binding. Shut-off delay lever binding.

ADJUSTMENTS

Tone Arm Setdown

Adjust Screw, B1, until needle sets down in the center of the lead-in groove on a 12-inch record. Turning screw clockwise moves set-down point inward.

Tone Arm Height

Adjust Screw, B2, until tone arm clears the top of the rest post by 1/16 inch during change cycle. Turning screw clockwise decreases the lift-up height.

Needle Pressure

Rotate Knob, B4, to center the pointer on the scale on top of tone arm shell. Move spring from hole to hole in Plate, B3, until needle pressure is correct. Nominal pressure is four grams.

Drive Idler Height

Select 33 rpm and adjust the screw in the idler support arm until the idler tracks in the center of the 33 rpm section of the motor shaft. Turning screw clockwise lowers idler wheel.

CLEANING

Using a soft cloth dampened with isopropyl alcohol, clean the driving surfaces of the idler wheel, motor shaft, and inside rim of the turntable.

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