

# MECHANICAL PARTS LIST (CONT'D.)

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
47	400B745-1	Switch and Reject Arm Ass'y.	93	404B46-1	Leveling Arm Bearing
48	400A620-1	Gear Indexing Arm and Stud Ass'y.	94	414B64-1	Speed Shift Wire Link
49	415A31-1	Drive Gear Bearing	95	414A63-1	On-Off Reject Wire Link
50	405A140-1	Spring, Reject Arm and Shut-Off Link Return	96	402A369-1	Screw (#6-32 x 5/16HH SL STS)
51	402A376-1	Screw (#6-32 x 3/8RH PH STS)	97		Screw
52	405A161-1	Spring, Set-Down Pivot	98	405A162-1	Spring, Leveling Arm Return
53	400A652-1	12" Set-Down Slide Assembly	99	405A140-1	Spring, Reject Arm Return
54	405A159-1	12" Set-Down Slide Spring	100	401A388-6	Washer, Steel (.254ID x 1/2OD x 1/32)
55	1C191-78-47	Screw (#6-32 x 3/16RH PH SEMS)	101	405A167-1	Retaining Ring
56		Baseplate	102	401A355-7	"E" Retaining Ring (3/8")
57	403B107-1	Knob, Off-On Reject (Series 9)	103	405A173-1	Spring, Gear Indexing
	403B107-2	Knob, Off-On Reject (Series 10)	104	405A99-1	Retaining Washer (39/64ID x 1 1/4OD x 5/64)
	403B107-1	Knob, Off-On Reject (Series 12)	105	415A29-2	Thrust Bearing Assembly
	403B107-3	Knob, Off-On Reject (Series 14)	106	406B38-1	Washer, Neoprene
58	403B106-1	Knob, Speed Change	107	402A296-1	Set-Screw, Knurled Point
59	401A497-1	On-Off Reject Link	108	404B48-1	Turntable Support Hub
60	401A496-1	Speed Shift Link	109	401A355-1	"E" Retaining Ring (3/16")
61	405A139-2	Spring, Float	110		Washer
62	414A57-1	Shut-Off Link Hold Down	111	400A682-1	Push-Off Lever and Stud Ass'y.
63	401A355-1	"E" Ring Retainer (3/16")	112	405A154-1	Push-Off Safety Spring
64	412A52-1	Washer, Fishpaper (196ID x 3/8OD x .015)	113	400A605-1	Drive Eccentric Ass'y.
65	402A370-1	Screw (#6-32 x 3/16RH PH STS)	114	401A388-1	Washer, Steel (.196ID x 1/2OD x .031)
66	400A606-1	Switch and Mounting Plate Ass'y.	115	1C194-553-47	Screw (#8-32 x 1/4BH SL SEMS)
67	401A388-4	Washer, Brass (.196ID x 5/16OD x .015)	116	401A450-1	Push-Off Link
68	401A355-1	"E" Retainer Ring (3/16)	117	401A388-1	Washer, Steel (.196ID x 1/2OD x .031)
69	514A37-1	Cocking Roller	118	401A355-1	"E" Retaining Ring (3/16")
70	401A355-1	"E" Retainer Ring	119	405A152-1	Spring, Shut-Off Return
71	400A653-3	Set-Down Index Ass'y. (Series 9)	120	412A52-1	Washer, Fishpaper (.196ID x 3/8OD x .015)
	400A653-1	Set-Down Index Ass'y. (Series 10)	121	401A355-1	"E" Retaining Ring (3/16")
	400A653-1	Set-Down Index Ass'y. (Series 12)	122	401A388-1	Washer, Steel (.196ID x 1/2OD x .031)
	400A653-1	Set-Down Index Ass'y. (Series 14)	123	401A355-1	"E" Retaining Ring (3/16")
72	406A29-3	10" Index Finger Cap (Series 9)	124	401A398-1	Shut-Off Delay Stop
	406A29-1	10" Index Finger Cap (Series 10)	125	405A153-1	Shut-Off Engagement Spring
	406A29-1	10" Index Finger Cap (Series 12)	126	407C35-4	Motor Assy., 4-Speed, 117V, 60 Cycle AC (Series 9)
	406A29-1	10" Index Finger Cap (Series 14)		407C35-4	Motor Assy., 4-Speed, 117V, 60 Cycle AC (Series 10)
73	405A143-1	Spring, Index Return		409C35-4	Motor Assy., 4-Speed, 117V, 60 Cycle AC (Series 12)
74	405A146-1	Spring, Arm Return			Spring (Part of 126)
75	415A35-1	Set-Down Arm Spacer			Rubber Grommet, Speed Change
76	400A616-1	Set-Down Arm Assembly			Retaining Ring (Part of 126)
77	412A40-1	Set-Down Friction Washer	127		
78	401A396-4	"C" Retaining Ring (5/16")	128	406A36-1	*Idler Wheel (Part of 126)
79	400B715-1	Tone Arm Control Lever Ass'y.	129	98C15-118	Retaining Ring (Part of 126)
80	405A144-1	Set-Down Engagement Spring	130		Speed Change Spring Retaining Cap (Part of 126)
81	402A284-1	Lift Rod	131*	98C15-114*	Spring, Speed Change (Part of 126)
82	401A388-4	Washer, Brass (.196ID x 5/16OD x .015)	132	98C15-117	Motor Mounting Grommet (Part of 126)
83	401A355-1	"E" Retainer Ring (3/16")	133	98C15-119	Washer, Steel (.196ID x 1/2OD x .031)
84	405A145-1	Spring, Safety	134	98C15-120	"E" Retaining Ring (3/16")
85	400A629-1	Shut-Off Link and Arm Ass'y.	135	98C15-117	Spring, Idler
86	405A151-1	Spring, Shut-off Arm	136	401A388-1	50 Cycle Conversion Kit (not shown)
87	400A621-2	Control Plate Assembly			
88	400A622-1	Safety Arm and Stud Ass'y.			
89	401A355-2	"E" Retaining Ring (1/4")			
90	401A448-1	Drive Link			
91	401A388-5	Washer, Brass (.196ID x 1/2OD x .028)			
92	401A355-1	"E" Retaining Ring (3/16")			

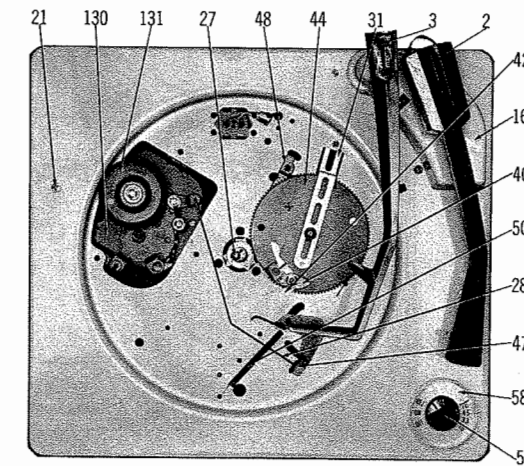
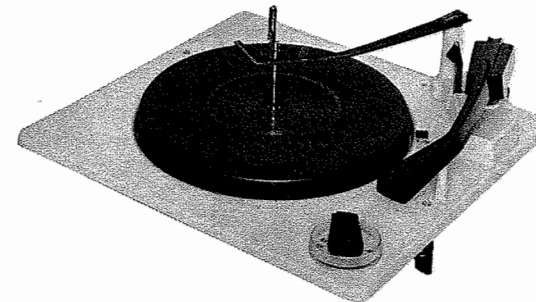
▲ Includes Ref. No. 5, 6, 7, 8, 9, 10, 11

\* Idler Wheel WALSCO Replacement Part No. 1490-03

SET 671 FOLDERIO

400B752-5/-9/-10/-12/-14/-20

PHOTOFACT® Folder



TRADE NAME	Ensign Model 400B752 Series 5, 9, 10, 12, 14, & 20
SUPPLIER	Ensign Industrial Sales, 3800 Cortland Street, Chicago 47, Illinois
TYPE SET	AC Operated 4 Speed Automatic Record Changer Playing 7", 10", or 12" Records, which may be intermixed if they are of the same speed.
POWER SUPPLY	110 - 120 Volts AC, 60 Cycles

## PREPARING FOR OPERATION

- Float the changer on its mounting springs by turning the hold-down screws in a clockwise direction until the screw heads are flush with the changer baseplate.
- Remove needle guard from pick-up cartridge.
- Lift tone arm free of rest post.
- Level the record changer.

## SPECIAL INSTRUCTIONS

- When changer is not in use, place the speed selector in the neutral (N) position to prevent flat spots from developing on the idler wheel (131).
- Do not turn off the power to the changer, or handle the tone arm during the change cycle.

## CLEANING

Clean the following parts: idler wheel (131), inside rim of turntable, trip slider (31), engagement

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## LUBRICATION

CAUTION: Do not apply grease or oil to the trip slider (31). Under normal operating conditions, the motor should never require lubrication. Gear engagement panel (40), fiber washer (41), and trip motion arm (42) must be kept clean and dry.

- Leveling arm shaft (97) must be free of binding in its bearing in the tone arm base. Lubricate the leveling arm shaft using a thin coat of light grease.
- The turntable hub should be lubricated with a good grade of light oil. The oil must be fluid so it will penetrate and be absorbed by the bearing material. Do not use grease of any kind.
- The pivot points of the set-down index (71) should not be lubricated. They must be kept clean and dry so it will pivot from its own weight. However, a nonhardening grease should be applied to the set-down position slides.

pawl (40), motor pulley, and trip motion arm (42) with alcohol to remove any grease or oil.

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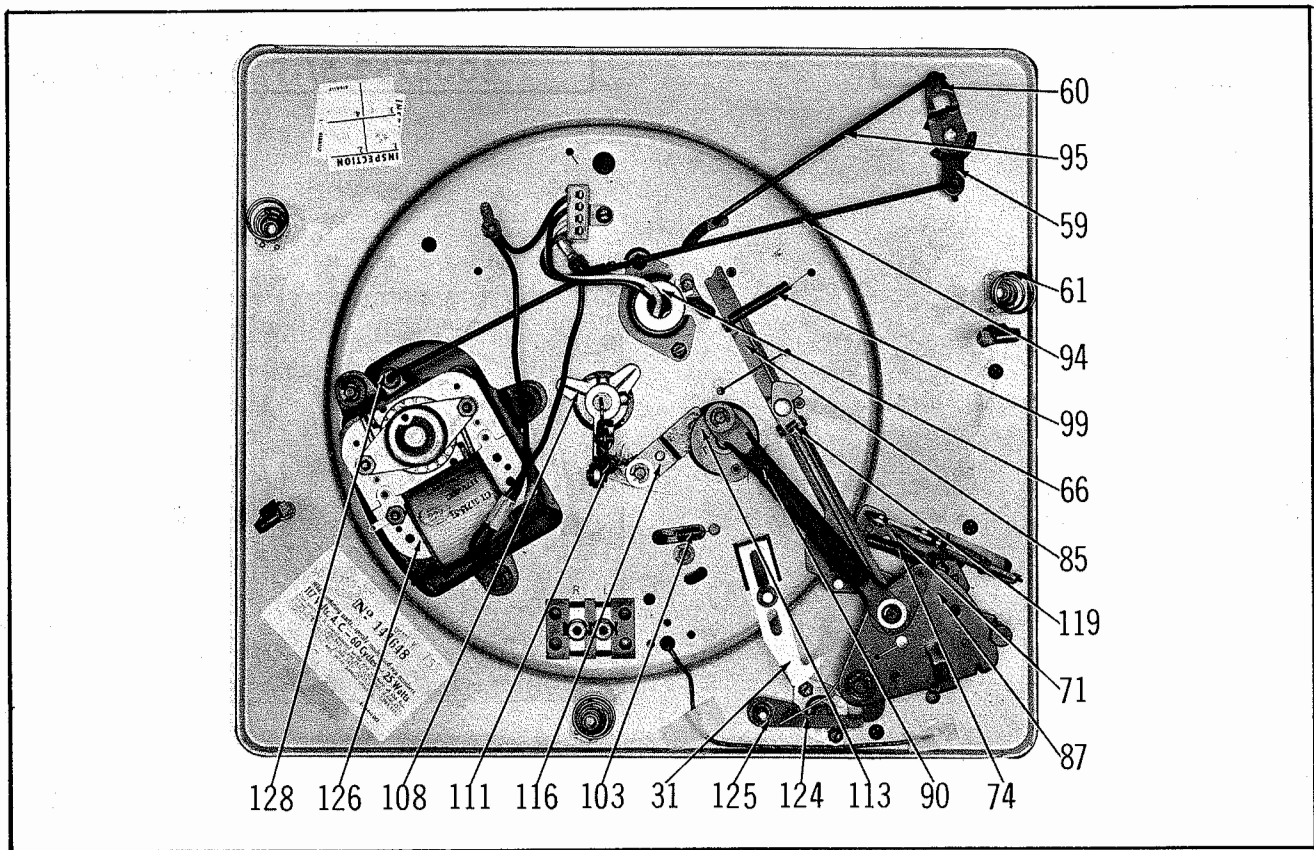
HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

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CHANGE CYCLE

It is recommended that a geared hub (normally riveted to the turntable) be obtained so the change cycle can be observed by rotating the geared hub by hand in a clockwise direction. The change cycle can then be more readily followed and the function of each part more easily understood.

The turntable is driven by idler wheel (131) riding against the inside rim of the turntable (25). Speed is determined by the diameter of the stepped motor shaft (either 78, 45, 33, or 16) driving the idler wheel (131).

The cycling mechanism is driven through its change cycle by drive gear (44) powered by the geared hub of the turntable. When the changer is out of cycle, the "open space" on the drive gear is held next to the turntable hub by the gear indexing arm (48) and spring (103).

This mechanism utilizes what is commonly known as a velocity trip consisting of two main parts: the trip motor arm (42) and the gear engagement pawl (40).

While a record is being played, the trip slider (31) is moved slowly by the stud on the tone arm control lever (79), which is moved by the tone arm. The stud on the trip slider (31) rides against the trip motion arm (42), moving it slightly. Since the gear engagement pawl (40) is held against the trip motion arm (42) by the trip friction spring (39), the gear engagement pawl (40) is also moved towards the turntable hub. Since this movement is slight, the vertical catch on the gear engagement pawl (40) is just touched and kicked away by the lug on the turntable hub. This occurs with each revolution of the turntable until the gear engagement pawl is moved in rapidly and posi-

tioned in front of the lug during the next rotation of the turntable.

As the stylus enters the trip groove of the record, the trip slider (31) is moved in rapidly by the tone arm. The gear engagement pawl (40) moves in front of and engages with the lug on the turntable hub. This causes the drive gear (44) to rotate far enough so the teeth will engage with those on the turntable hub and start the change cycle.

The change cycle may also be actuated by moving the Rej-On-Off knob to the "Rej" position momentarily. The arm on the end of reject arm (47) moves the gear engagement pawl (40) into position to engage the lug on the turntable hub.

As the teeth on the turntable hub and drive gear (44) mesh, starting the rotation of the drive gear, the drive eccentric also rotates since both are mounted on the same shaft. As the drive eccentric rotates clockwise, the drive link (90) pivots the control plate (87) causing the inclined cutout to move from beneath the tone arm lift rod (81). This raises the tone arm from the record. The safety arm (88) travels with control plate (87) so the stud on the safety arm engages the tone arm control lever (79) to move the tone arm away from the spindle.

When the tone arm clears the record, the roller on drive eccentric (113) engages the push-off link (116). The push-off link then moves the push-off lever (111) so it engages the push-off adjustment nut (23) on the end of the shaft in the spindle, moving the push-off shaft up into the spindle. The push-off shaft engages the ejector and pushes it up and out at the shelf of the spindle.

TROUBLE CHART (CONT'D.)

Symptom	Cause	Remedy
Records fall to turntable unevenly.	1. Spindle dirty.	1. Polish spindle with a soft cloth dampened with oil.
	2. Push-off lever (111) binding.	2. Be sure it is free of any foreign material and pivots freely.
	3. Push-off shaft out of adjustment.	3. See "Push-Off Adjustment".
Records do not push off, or more than one record falls.	1. Lever return spring in spindle weak or broken.	1. Replace spindle (27).
	2. Push-off return spring (22) weak or broken.	2. Replace.
	3. Push-off shaft out of adjustment.	3. See "Push-Off Adjustment".
	4. Foreign material between record shelf and ejector in the spindle.	4. Clean out any foreign material that may be between the record shelf and ejector.
Changer fails to trip.	1. Trip slider (31) binding.	1. Clean any oil, grease, or dirt from the trip slider (31) so that it moves freely.
	2. Trip motion arm (42) and gear engagement pawl (40) dirty.	2. Clean or replace parts.
	3. Trip slider return spring on control plate (87) loose, bent, or misplaced.	3. Replace control plate (87).
	4. Gear index assembly (48) binding.	4. Free gear index assembly (48) and replace if necessary.
	5. Drive gear assembly (44) binding in bushing (49).	5. If drive gear shaft is bent, replace. If bushing is worn, replace.
	6. Tone arm leads too tight, preventing the tone arm from moving freely.	6. Dress tone arm leads so tone arm can move freely throughout its travel.
	7. Tone arm control lever and shaft assembly (79) does not rotate freely in set-down arm assembly (76), causing tone arm to bind.	7. Set-down friction washer (77) should be replaced if it is oil soaked.
Tone arm skips grooves on records.	1. Grooves on records dirty or damaged.	1. Clean records or replace.
	2. Record changer not level.	2. Level record changer from front to back and from side to side.
	3. Stylus worn.	3. Replace stylus.
	4. Binding at bearing (34) in the tone arm base (16) or between the shaft of the tone arm control lever (79) and the shaft of the set-down arm (76).	4. Clean these parts and polish the shafts with a soft cloth slightly dampened with oil.
	5. Trip slider (31) dirty, greasy, or oily; is bent or has burrs on it.	5. Clean any dirt, grease or oil from trip slider (31). If bent, re-shape trip slider or replace.
	6. Trip motion arm (42) and gear engagement pawl (40) binding.	6. If these parts cannot move freely, replace so they will not load the trip slider (31).
Changer rumble or noise.	1. Changer does not float freely on its mounting springs.	1. Be sure the changer hold-down screws are flush with baseplate.
	2. Neoprene washer (106) worn.	2. Replace.
	3. Mechanical part near motor rubbing.	3. If a mechanical part is bent; straighten, if worn, replace.
Changer will not shut off automatically.	1. Binding between leveling arm shaft (3) and bearing (93) in tone arm base.	1. Clean leveling arm shaft (3) and polish shaft with a cloth dampened with oil.
	2. Not enough tension in shut-off delay engagement spring (125).	2. Replace.
	3. Shut-off delay stop (124) binding.	3. Clean any foreign material from delay stop (124) and make sure it moves freely.
	4. Cam on shut-off link (85) binding.	4. Clean or replace.
	5. Shut-off arm spring (86) weak.	5. Replace.
	6. Felt washer (12) damaged.	6. Replace.

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ENSIGN MODELS

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4. Adjust the set-down adjustment screw (6) so the stylus will land in the lead-in groove of the 10" record.
5. Check the set-down point with each size record. Touch up the set-down adjustment until the tone arm sets down properly for all record sizes.

Velocity Trip

The velocity-type trip used depends on a rapid movement of the tone arm toward the spindle in any area between 2 1/4" and 1 15/16" from the center of the record. There is no adjustment for this type of trip. In order to function properly there must be sufficient friction between the trip motion arm (42) and the gear engagement pawl (40). If there is insufficient friction, or these parts do not turn together readily, both parts should be replaced.

Push-Off

The push-off adjustment must be checked whenever the spindle has been moved or replaced. Record push-off is accomplished by an ejector and push-off shaft built into the spindle. The ejector and push-off shaft are actuated during the change cycle by safety spring (112). If ejector travel is insufficient for record push-off, adjustment may be required.

The ejector travel can be adjusted by nut (23). When properly adjusted, the ejector should extend just slightly beyond the edge of the shelf on the spindle at push-off.

**IMPORTANT:** Additional travel must be allowed for the push-off shaft and ejector after the

push-off lever has traveled its full distance.

To adjust the push-off, proceed as follows:

1. Rotate the turntable clockwise by hand. Move the Rej-On-Off control to the Rej. position, and let it return to the On position.
2. Continue the turntable rotation slowly until the roller on the drive eccentric (113) engages the push-off link (116). Rotate the turntable until the roller has moved the push-off link its full distance. Push-off lever (111) now is extended its maximum travel.
3. Check the position of the ejector at the shelf on the spindle. If necessary, use a 1/4" open-end wrench to turn the push-off adjustment nut (23) counterclockwise until the ejector extends just beyond the edge of the shelf.
4. Press the push-off adjustment nut (23) to check for additional travel before the push-off shaft stops. The ejector should move out past the shelf slightly more than necessary for push-off.
5. Slide a seven-thousandth inch (.007) feeler gauge between the flat surface of the adjustment nut (23) and the safety spring (112). Adjust until the feeler gauge passes between them freely.

**NOTE:** The additional travel for the push-off shaft may vary. In order to obtain proper push-off, the clearance of seven-thousandth inch must not vary more than plus or minus five-thousandth inch.

TROUBLE CHART

Symptom	Cause	Remedy
Continuous tripping.	1. Gear indexing spring (103) tension insufficient.	1. Replace.
	2. Trip slider return spring on control plate (87) bent.	2. Straighten or replace.
	3. Trip slider (31) bent.	3. Straighten or replace.
	4. Gear index arm assembly (48) binding against baseplate.	4. Free gear index arm assembly (48) so it will function without binding.
Tone arm does not set down properly.	1. Set-down misadjusted.	1. See "Set-Down" Adjustment.
	2. Set-down index assembly (71) binding.	2. Clean all pivot points, Make sure the half punches are interlocked into the holes of the baseplate.
Records squeaks on turntable.	1. Label burrs folded into center hole.	1. Carefully remove the label burrs with a small knife.
	2. Spindle surface dirty.	2. Put a few drops of light machine oil on a soft cloth and polish the spindle.
Changer trips into change cycle before finishing record.	1. Foreign material between trip motion arm (42) and engagement pawl (40).	1. Clean and wipe dry.
	2. Trip slider return spring on control plate (87) bent.	2. Bend back to its original position.
	3. Trip slider (31) bent.	3. Bend to its original form or replace.
Changer stalls in change cycle.	1. Oil on idler wheel (131), motor pulley, and turntable rim.	1. Clean all drive surfaces with alcohol.
	2. Push-off adjustment has improper clearance.	2. See "Push-Off Adjustment".
	3. Defective motor (126).	3. Replace.

As the ejector moves up, it engages the center hole of the bottom record on the shelf. As the ejector moves out of the spindle, the record moves with it until the center hole is clear of the shelf on the spindle, dropping the record down the spindle onto the turntable. The remaining records are held on the shelf by the spindle slide above the ejector.

As the drive eccentric (113) starts into the second half of the change cycle, the push-off return spring (22) returns the safety spring (112), push-off lever (111), and push-off link (116) to the proper position, letting the push-off ejector return to position ready for push-off of the next record.

After push-off, and during the second half of the change cycle, the tone arm is returned to the edge of the record on the turntable. The tone arm is mounted to the tone arm control lever (79).

Engagement spring (80) presses the tone arm control lever against the cork friction washer (77) on set-down arm (76), and as the set-down arm return spring (74) draws the set-down arm toward the spindle, the cork friction washer returns the tone arm control lever.

As control plate (87) is returned by the drive link (90), the inclined cutout moves beneath the tone arm lift rod (81) allowing it to descend into the inclined cutout and the tone arm is lowered to the record.

The set-down index (71) automatically determines the correct set-down position of the tone arm for each record size. A long stud on the safety arm (88) moves the set-down arm (76) and index finger on set-down arm (76) engages the set-down index (71). The set-down index is released by the index pin on the set-down arm to permit the set-down index to pivot of its own weight and lift the index finger to the edge of the turntable.

When 7" records are being changed, the index finger moves to its extreme upward position. The set-down arm return spring (74) draws the set-down arm (76) toward the spindle. In this position, the index pin on the set-down arm (76) will travel to the front slot in the set-down index. Since the index pin is held in the front slot, it is prevented from moving further toward the spindle, and the inward travel of the tone arm will stop directly over the lead-in groove.

A 10" record extends past the edge of the turntable far enough for the index finger cap (72) to contact the edge of the record. Since the index finger

cannot raise as high as when 7" records are being changed, the rear of the set-down index drops just far enough to allow the index pin on the set-down arm (76) to ride into the middle slot of the set-down index. When the index pin is located in this middle slot, the inward travel of the tone arm will stop directly over the lead-in groove of a 10" record.

A 12" record extends far enough to trip the set-down trigger (34). The 12" set-down slide (53) is released, and is pulled by spring (54) until it moves into a slot on the set-down index (71). Since the set-down index (71) is held by the 12" set-down slide (53), the index pin on the set-down arm (76) enters the slot for 12" set-down.

The 12" set-down slide (53) is reset at the beginning of each change cycle. It is triggered by the 12" set-down trigger (34), by means of the pin on the safety arm and stud assembly (88). The pin is actuated by a roller on the underside of the pan attached to the 12" set-down slide (53).

When playing 10" or 12" records the rubber cap (72) of the index finger feels the equivalent of a 10" record, so the 12" set-down trigger (34) corrects this action for 12" records and permits intermixing of 10" and 12" records.

Automatic Shutoff

As the last record drops the leveling arm (4) falls below the shelf on the spindle and its shaft extends far enough beneath the changer pan to lower the shut-off delay stop (124). This permits the shut-off link control arm (on the shut-off link) to pivot since its spring (86) has one end fastened to the control plate (87). The shut-off link control arm draws the shut-off link, and engages its cam that positions the shut-off link in line with the stud on the reject arm (47).

As the shut-off link (85) is drawn toward the control plate (87), the stop on the shut-off link moves into the path of the stud on the tone arm lever (79). When the control plate (87) begins its return in the second half of the change cycle, a stud on the control plate moves the shut-off link (85) forward to turn off the motor switch and return the "Rej-On-Off" control to the "Off" position. Also, the tone arm control lever (79) is held by the tone arm stop on the shut-off link (85) as the control plate (87) goes through the second half of the change cycle. The tone arm is held suspended above the tone arm rest (32) until the inclined cutout moves under the tone arm lift rod (81) letting the tone arm be lowered onto the tone arm rest.

ADJUSTMENTS

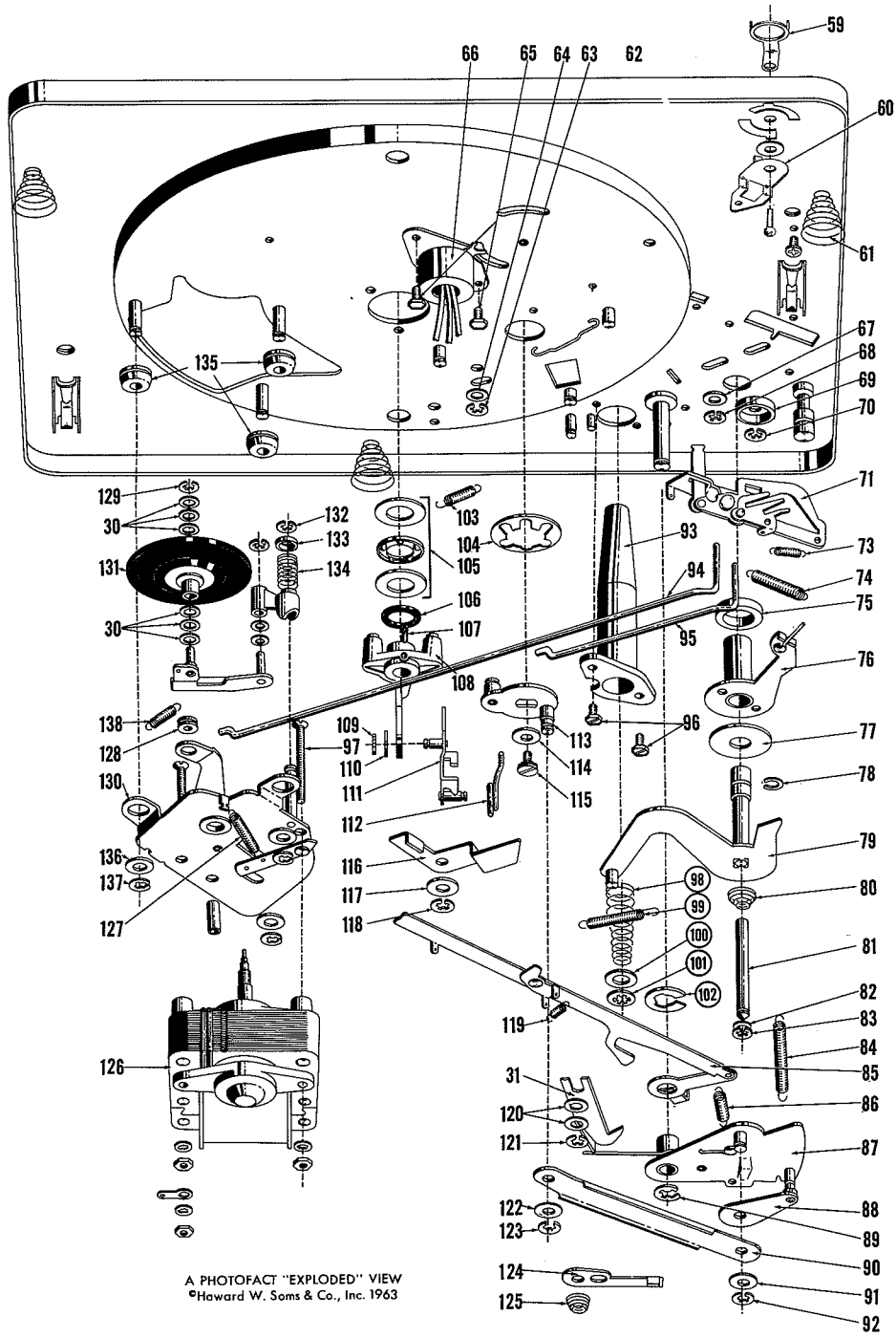
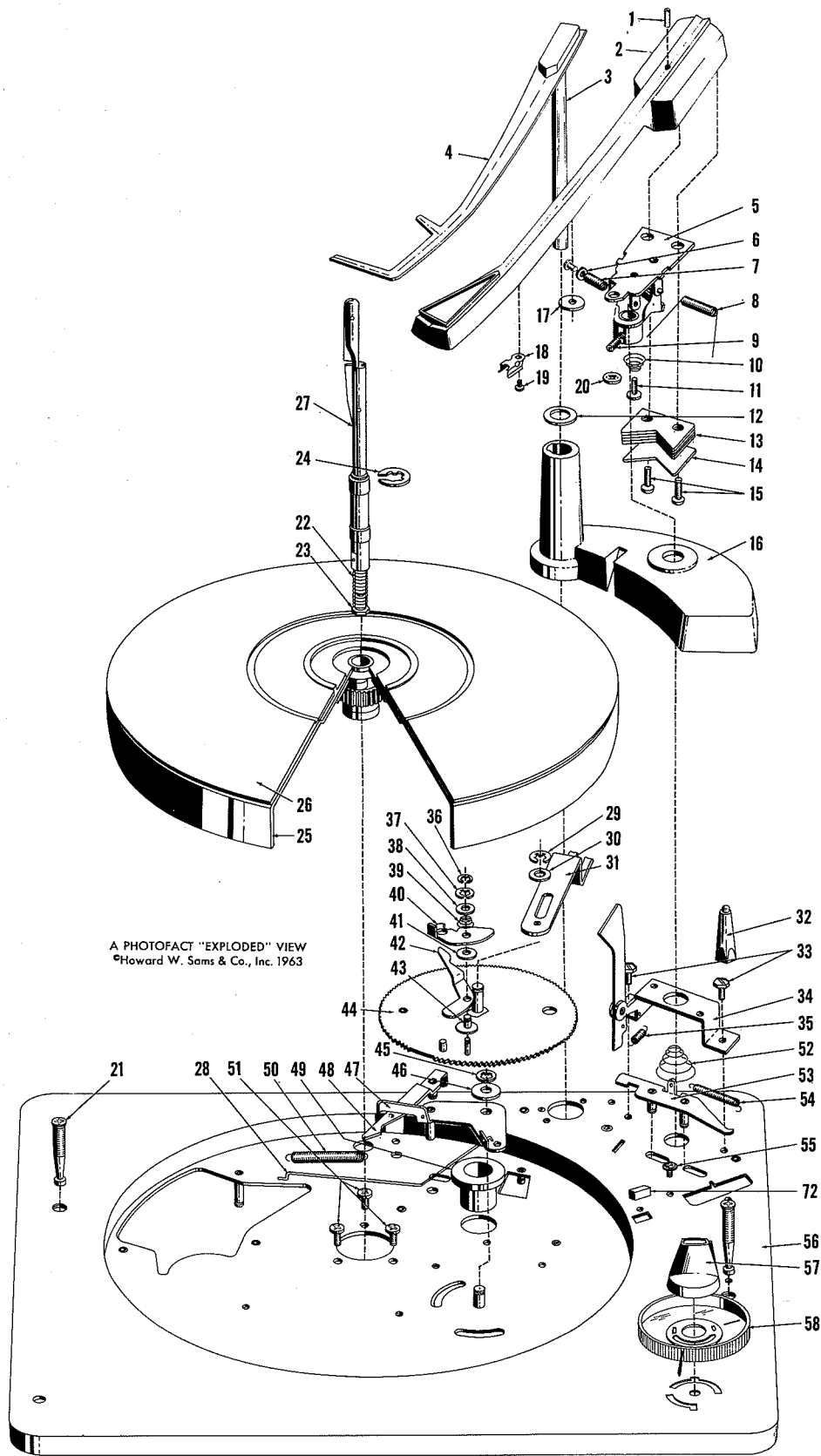
adjusted on a 10" record. The set-down adjustment screw (6) is accessible through a hole in the left side of the tone arm. Turning this screw counterclockwise moves the arm closer to the spindle and turning it clockwise moves it away from the spindle. Make the set-down adjustment as follows:

1. Grasp the leveling arm (3) at the shaft and swing the arm to the right as far as possible.
2. Place a 10" record on the turntable.
3. Trip the Rej-On-Off control and rotate the turntable by hand until the tone arm starts its downward travel to the record.

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ENSIGN MODELS

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Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	403D110-1	Screw, Height Adj.	14	401A481-1	Tone Arm Counterweight	26	406B37-3	Turntable Mat, Rubber (Series 9)
2	403C110-3	Tone Arm, (Series 9)	15	402A375-2	Screw (#4 x 5/16RH PH STS)	27	406B37-4	Turntable Mat, Rubber (Series 10)
3	403D105-1	Tone Arm, (Series 10)	16	403C85-9	Tone Arm and Leveling Arm	28	406B37-2	Turntable Mat, Rubber (Series 12)
4	403C110-3	Tone Arm, (Series 12)		403C85-4	Base (Series 9)	29	400B681-1	Turntable Mat, Rubber (Series 14)
5	400D740-1	Tone Arm, (Series 14)		403C85-4	Tone Arm and Leveling Arm	30	41A65-1	Centerpost Assembly
6	400D740-3	Shaft, Leveling Arm		403C85-4	Base (Series 10)	31	41A65-1	Idle Wheel Pull-Out Wire (Series 12)
7	400D740-4	Leveling Arm (Series 9)		403C85-4	Base (Series 12)	32	41A65-1	"E" Retaining Ring (3/16")
8	400D740-4	Leveling Arm (Series 10)		403C85-8	Tone Arm and Leveling Arm	33	41A65-1	Washer, Fishpaper
9	400D740-3	Leveling Arm (Series 12)		41A50-1	Washer, Fiber	34	41A65-1	Tone Arm Rest (Series 9)
10	400D740-3	Leveling Arm (Series 14)		401A510-1	Clip, Tone Arm	35	41A65-1	Tone Arm Rest (Series 10)
11	400A727-4	▲ Tone Arm Suspension Ass'y. (Series 9)	17	41A50-1	Speed Nut	36	41A65-1	Tone Arm Rest (Series 12)
12	400A727-4	▲ Tone Arm Suspension Ass'y. (Series 10)	18	2C10-5-59	Screw, Hold Down (Series 9)	37	41A65-1	Screw(#6-32 x 1/4RH PH STS)
13	400A727-7	▲ Tone Arm Suspension Ass'y. (Series 12)	19	27A319-13	Screw, Hold Down (Series 10)	38	41A65-1	Tone Arm Alignment Bracket
14	400A727-3	▲ Tone Arm Suspension Ass'y. (Series 14)	20	27A319-11	Screw, Hold Down (Series 12)	39	41A65-1	and Trigger Assembly
15	4C1-19-47	Washer, Set Down Adj.	21	27A319-14	Screw, Hold Down (Series 14)	40	41A65-1	Spring
16	405A137-1	Spring, Set-Down Adj. Lock	22	405A142-1	Spring, Push-Off Return	41	41A65-1	"E" Retaining Ring (1/4")
17	402A296-1	Spring, Counterbalance	23	403A87-1	Nut, Push-Off Adj.	42	41A65-1	Gear Engagement Pawl and
18	405A148-1	Set-Screw, Knurled Point	24	401A355-9	"E" Retaining Ring (5/16")	43	41A65-1	Trip Motion Arm Assembly
19	405A290-1	Spring, Lift Adjust Lock	25	400D741-1	Turntable Ass'y. (Series 9)	44	41A65-1	Drive Gear, Shaft, and Stud
20	412A47-1	Screw, Lift Adjust		400C718-5	Turntable Ass'y. (Series 10)	45	41A65-1	Assembly
21	401A481-2	Washer, Neoprene		400D741-7	Turntable Ass'y. (Series 12)	46	41A65-1	"E" Retaining Ring (3/16")
22		Tone Arm Counterweight						Washer, Steel (.196ID x 1/4OD x .031)

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400B752-9/-10/-12/-14/-20

ENSIGN MODELS

FOLDER 10