Admiral

RC400 RECORD CHANGER

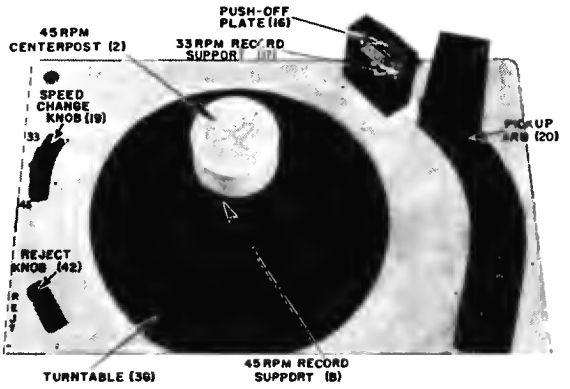

Figure 1. RC400 Record Changer (Top View).

OPERATING INSTRUCTIONS

SELECTING CENTERPOST

To play 45 RPM records, insert the large diameter (plastic) centerpost (2) into the hole in the center of the turntable (38). While holding the turntable with one hand, turn the centerpost counter-clockwise until the lock-in-lugs fall into and lock in the three slots in the turntable. To remove this centerpost, hold the turntable with one hand and turn the centerpost clockwise; then lift it up.

To play 33 RPM records, insert the small diameter (metal) centerpost (1) into the center of the turntable and press it down until it "locks" in place. To remove this centerpost, merely lift it straight up and out.

SETTING SPEED CHANGE KNOB

To play 45 RPM records, set the Speed Change Knob (19) so that its indicating arrow points to "45".

RC400 PARTS LIST

Ref. No.	Port Number	Description
1	G400B 409	33 RPM Centerpost
2	G400B 410	†45 RPM Centerpost Complete
3	403A 1	45 RPM Centerpost Cap
4	414A 35	Slicer Return Spring
5	401A 276	Top Slicer
6	401A 275	Bottom Slicer
7	405A 125	Record Supports Return Spring
8	403A 40	Record Supports
9	G400A 411	Slicer Com and Shoft
10	403B 43	45 RPM Centerpost Base
11	405A 124	45 RPM Push-Off Return Spring
12	60-1000-C2-47	Screw, #6-32x1" R.H.M.S. (2 req.)
13	401A 229	Retoining Ring
14	402A 312	Lock Nut
15	402A 313	45 RPM Push-Off Adjusting Shoft
16	G400A 417	33 RPM Push-Off Plote and Shaft
17	401A 311	33 RPM Record Support
18	G400A 41B	Record Support Housing and Sleeve
19	403A 42	Speed Chonge Knob
20	403B 300	Pickup Arm
21	G400A 433	Pickup Arm Counterweight
22	402A 320	Pickup Arm Pivot Screw
23	1A73-10	Screw, #6x3/8 Shakeproof Type (2 req.)
24	42-187-C2-47	Lock Screw, #4-40x3/16 F.H.M.S
25	G400A 439	Cable and Pin Jock Assembly
26	2810-5-59	Speed Nut
27	409A 300 or 409A 301	Cartridge with needle (See Figure 10) / Cartridge with needle (See Figure 11)
28	98A 15-6 or 98A 15-14	Needle (See Figure 10) / Needle (See Figure 11)
29	98A 54-2	Needle Nut (Knurled)
30	4B 1-7-47	Flot Washer, .096x3/16x1/32 (2 req.)
31	402A 335	Screw, #2x1/4 Fil. Hd. (2 req.)
32	G400A 401	Pickup Arm Lift Rod and Plate
33	G400A 432	Pivot Bracket and Collar (includes Allen screw)
34	1A 43-9	Allen Hd. Set Screw, #6-32x1/4
35	405A 303	Drive Wheel Spring
36	G400A 407	Drive Wheel Assembly (less spring)
37	414A 300	Turntoble Retoining Clip
38	G400A 403	Turntable and Hub Assembly
39	412A 300	Cork Washer (2 req.)
40	415A 300	Thrust Bearing Assembly
41	G400C 438	Changer Pan and Stud Assembly
42	403A 302	Reject Knob
43	G400A 414	Reject Lever and Studs
44	405A 127	Reject Lever Return Spring
45	9BA 54-5	Idler Wheel Retoining Spring
46	98A 54-6 / 98A 54-11	Fibre Washer, 3/16" ID x 9/32" OD (4 req.) / Metol Washer, 3/16" ID x 9/32" OD (Quontity vories; reploce as found in chonger.)
47	98A 54-7	Compound Idler Wheel
48	98A 54-8	Fibre Washer (5/32 ID x 3/8" OD)
49	9BA 54-9	Metol Washer (5/32" ID x 5/16" OD)
50	98A 54-10	Idler Wheel Spring
51	407C 300	Motor; 33 and 45 RPM; 60 cycle
52	3A 4-5-47	#6 Split Lock Washer
53	2A 1-11-47	Hex. Nut, #6-32
54	88A 8-1	Motor Plug (male)
55	406A 301	Motor Mounting Grommet (3 req.)
56	4B 1-68-47	Flat Washer, .196x3/8x1/32 (5 req.)
57	401A 317	Retaining Ring (3 req.)
58	405A 308	Changer Mtg. Spring (3 req.)
59	402A 334	Chonger Mtg. Screw (3 req.)
60	402A 115	Plastiscrew, #6x3/8
61	401A 307	Trip Bracket
62	401A 173	Flat Washer
63	401A 177	Retoining Ring (7 req.)
64	405A 302	Set-Down Spring
65	401A 315	Index Bracket
66	4B 1-87-47	Flat Washer, .25x3/8x1/32
67	401A 229	Retoining Ring
68	405A 307	Lift Adjusting Lock Spring
69	402A 306	Pick Up Arm Lift Adjusting Nut
70	88A 2-3	Plug, Mole (for shielded cable)
71	413A 11-1	Shielded Coble and Plug
72	G400A 427	Pickup Arm Lever and Trip Bracket (less springs)
73	405A 127	Trip Tension Spring
74	405A 305	Trip Adjusting Lock Spring
75	402A 328	Trip Adjusting Screw
76	405A 92	Cycle Spring
77	4B 1-178-0	Flat Washer, .196x3/8x1/64
78	G400B 416	Drive Brocket (includes hub and studs)
79	4B 1-67-47	Flat Washer, .196x5/16x1/32
80	G400A 420	Push-Off Brocket Assembly
81	65-375-C2-47	Push-Off Adjustment Lock
	41A 17-40	Operating Instructions for Models 5W11, 5W12
	S275	Service Manual for RC400 Record Chonger
	1A45-2	Allen Wrench, #6

†This 45 RPM centerpost (G400B410) is very similar to, but is not interchangeable with, the 45 RPM centerpost (G400B329) used in models RC221, RC222. The centerposts can be readily identified by noting that the length of the un-threaded portion of the push-off adjusting shaft (15) is approximately 5/16" in G400B410, and 3/4" in G400B329.

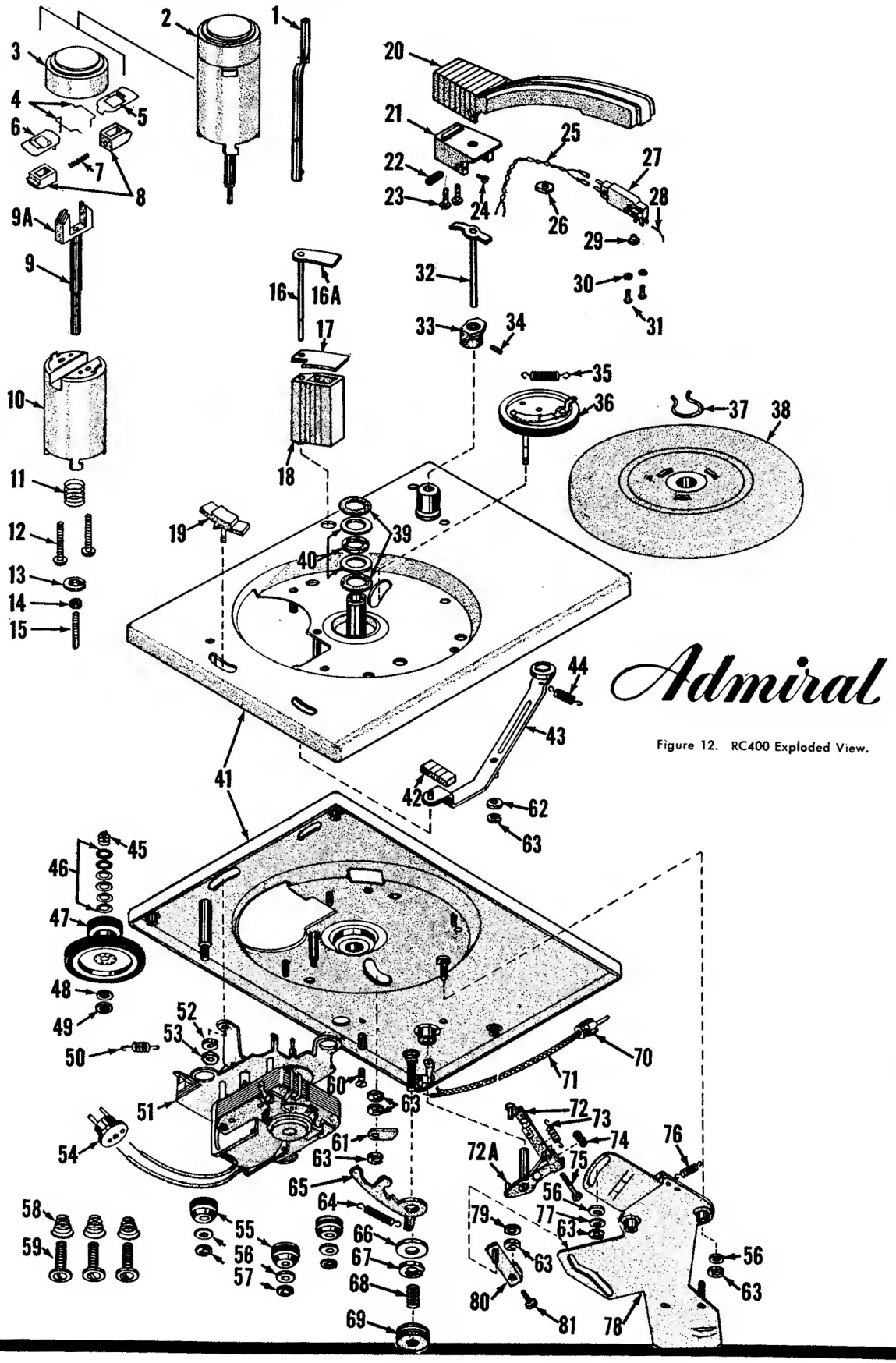

Figure 12. RC400 Exploded View.

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To play 33 RPM records, set this knob so its indicating arrow points to "33". When moving this knob to either position, make sure that the knob "clicks" into position.

This control also has a center ("neutral") position for disengaging the rubber-tired idler wheel (47). The changer pan is not marked "neutral" but the position can be felt when the Speed Change Knob is halfway between "33" and "45". In this position, the compound idler wheel is not in contact with the drive shaft or the turntable. **When the record changer is not going to be used for some time, set the speed change knob in the center position.**

LOADING AND STARTING THE RECORD CHANGER

To load 45 RPM records, place as many as ten over the 45 RPM centerpost so that the bottom record rests on the record supports (8). To load 33 RPM records, place as many as ten over the 33 RPM centerpost so that the bottom record rests on the ledge on the centerpost (1) and the 33 RPM record support (17). Start the changer by turning the Radio-Phono switch on the radio to the "Phono-On" position.

STOPPING AND UNLOADING

Turn changer off by turning Radio-Phono switch on the radio to "Phono-Off" position. Do not turn changer off during change cycle. To unload, merely lift records straight up.

THE CHANGE CYCLE

45 RPM OPERATION
(See Figures 2, 3 and 4)

If at all possible, we recommend that you carefully observe the operation of a changer that is in normal operating condition. It is a good idea to rotate the turntable by hand and repeat the change cycle until you understand the function of each part.

The changer operates as follows: The turntable (38) is driven by the smaller of the two rubber tires on the compound idler wheel (47), riding against the outer rim of the turntable.

The speed of the turntable is determined by the setting of the speed change knob (19). When the knob is in the "45" position, the larger rubber tire on the compound idler wheel (47) rides against the 45 RPM section (larger diameter) of the motor drive shaft. When the knob is moved to "33", the compound idler wheel moves so that the larger tire rides against the 33 RPM section (smaller diameter) of the motor drive shaft. See Figure 2.

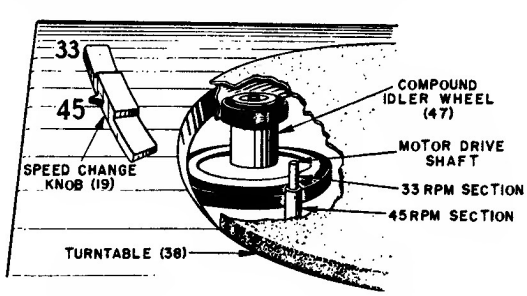

Figure 2. Compound Idler Wheel and Motor Drive Shaft.

The changer mechanism is driven through change cycle by the knurled hub of the turntable rotating the rubber tired drive wheel (36). During normal playing, the drive wheel does not touch the knurled hub of the turntable. See Figure 3A. As the needle enters the record spiral grooves and moves towards the centerpost, the pickup arm lever and stud (72) moves simultaneously and rotates the trip bracket (61) counter-clockwise. Since the trip bracket and drive wheel are on the same shaft, the drive wheel is pivoted approximately 10 degrees counter-clockwise. The rubber tire contacts the knurled hub of the turntable, and is rotated in a counter-clockwise direction. See Figure 3B.

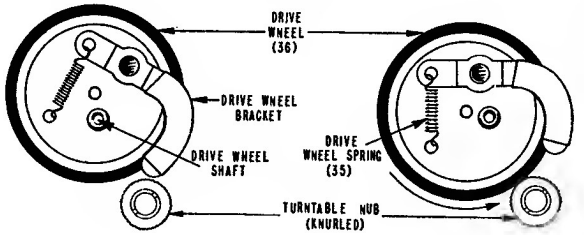

Figure 3A Figure 3B

Drive Wheel Positions.

The drive wheel shaft is fitted through the drive bracket (78) and is mounted OFF CENTER on the drive wheel (36). Due to the cam action of the "off-center" drive wheel (36), rotation of the drive wheel, by the knurled hub of the turntable, forces the drive shaft out. Since the drive shaft is fitted through the drive bracket (78), the drive bracket is pivoted around the drive bracket hub. The cycle spring (76) maintains pressure on the drive bracket so that the drive wheel tire is kept in contact with the knurled hub. After the changer has been tripped and the drive bracket begins to be pivoted by the movement of the drive wheel, the arm lift incline (78A) on the drive bracket moves across the lift rod moving it upward. This lifts the pickup arm off of the record. Stud (78C) on the drive bracket now contacts the pickup arm lever and begins to move it so the pickup arm moves out from the center of the record.

At about this time, the push-off adjusting shaft (15) on the 45 RPM centerpost (2) starts moving up the push-off incline (78B) on the drive bracket (78). See figure 12. This causes the push-off shaft to move up into the centerpost. As the push-off shaft moves into the centerpost. As the push-off shaft moves into the centerpost, the slicers (5 and 6) ride on the incline of the slicer cam and consequently move out of the centerpost. The record supports (8) are also brought into the centerpost as each slicer is hooked to the record support on the opposite side of the centerpost.

As the drive bracket continues to pivot, the pickup arm continues to move away from the record, the slicers (5 and 6) continue to come out, and the record supports continue to pull in. When the pickup arm has moved to the right almost as far as it will go, the record supports (8) have pulled into the centerpost enough to drop the bottom record to the turntable and the slicers are out far enough to hold up the remainder of the stack of records.

The pickup arm lever control stud (72A) riding against the indexing edge of the index bracket (65) controls the movement of the pickup arm. The index bracket (65) and set down spring (64) prevent the pickup arm from moving out too far. (Later in the change cycle the index bracket (65) and set-down spring (64) control the set-down point.)

At this point, the drive wheel (36) has gone through one-half of its rotation and as the drive wheel continues to rotate, the drive bracket (78) will begin to return to its normal (out of change cycle) position.

The set-down spring (64) keeps the pickup arm lever (72) in contact with the arm control stud (78C) on the drive bracket. Therefore as the drive bracket moves back toward its normal position, the pickup arm is moved in toward the set-down point. When the pick-up arm lever stud (72A) has reached the indexing point (notch) in the index bracket, the pickup arm has reached the set-down point and stops moving in toward the centerpost. At this time, the drive bracket has pivoted to a point where the lift rod (32) starts moving down the arm lift incline (78A) in the drive bracket and the pickup arm starts moving down toward the record. When the arm has moved down about halfway, the second stud on the drive bracket (78D) moves the index bracket (65) away from the stud on the pick-up arm lever so that the pickup arm is free to travel in on the lead in grooves on the record.

Almost simultaneously, the push-off adjusting shaft (15) is riding down the push-off incline (78B) on the drive bracket. This allows the push-off return spring (11) on the centerpost to pull the cam and shaft assembly (9) down.

The record supports are forced out of the centerpost by their return spring (7) and the slicers are moved into the centerpost by the slicer return springs (4). When the slicers are all the way in, the stack drops to the record supports (8).

The drive wheel is no longer in contact with the knurled hub but it is rotated approximately 20 degrees further by the drive wheel bracket, which is held against the knurled hub of the turntable by the drive wheel bracket spring (35).

When the drive wheel bracket has rotated past the knurled hub, the drive wheel must be rotated another 10 degrees by the trip bracket (61), or reject lever (43), before it will contact the knurled hub and begin the change cycle. When the reject knob (42) is moved to the "Rej" position, the reject lever roller rotates the drive wheel the necessary 10 degrees and the change cycle begins.

33 RPM OPERATION

The change cycle for 33 RPM operation is exactly the same as for 45 RPM operation, except for change cycle time and the fact that 33 RPM records are supported by the offset on the 33 RPM centerpost and the 33 RPM record support (17), and are pushed off by the push-off plate (16).

When the drive bracket (78) has pivoted to the point where the pickup arm is clear of the record, the stud (80A) on the push-off bracket (80) is moved by the slot (78E) in the drive bracket. This movement causes the push-off plate (16) to pivot and push-off the bottom record. The remainder of the records are held back by the small sliding piece at the top of the centerpost. When the drive bracket pivots back to its normal playing position, the push-off bracket stud (80A) follows the slot in the drive bracket and causes the push-off plate to pivot back to its normal position. Then the record stack drops to the record support (17) from the push-off plate (16).

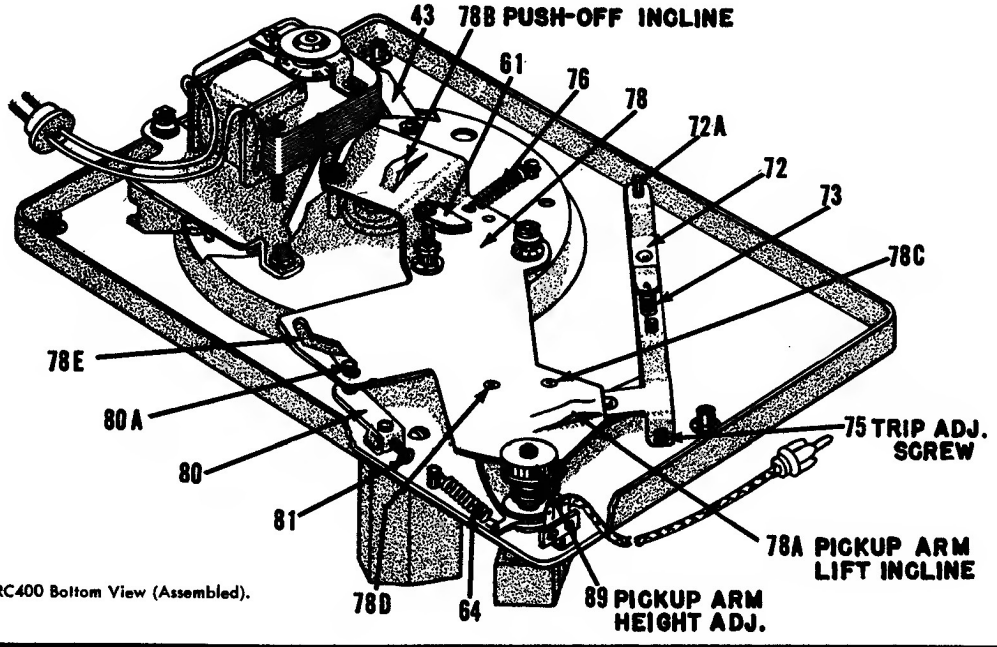

Figure 4. RC400 Bottom View (Assembled).

ADJUSTMENTS

TRIP ADJUSTMENT

This record changer employs the position type trip; that is, it trips into change cycle when the needle in the pickup arm reaches a given distance from the center of the record. If the trip is properly adjusted, the record changer will trip into change cycle when the needle is between 2" to 2-3/16" from the center of the hole in the turntable or approximately half way in on the spiral groove in the center of the record.

If the record changer does not trip at the proper position, it will be necessary to adjust the trip adjusting screw (75). See figure 4. Turning this screw in (clockwise) moves the trip point away from the centerpost. Turning it out, moves the trip point nearer to the centerpost.

If the screw is turned all the way out, the changer may not trip. If it is turned in too far, the changer may trip before the record finishes playing.

33 RPM PUSH-OFF ADJUSTMENT (See Figures 1 and 4)

If 33 RPM records do not drop to the turntable during change cycle, it may be necessary to correct the push-off adjustment.

The push-off is properly adjusted when the leading edge of the push-off plate (16) extends to a maximum of 1/32" beyond the edge of the record support (17) during change cycle.

To make this adjustment, proceed as follows:

1. With the record changer in change cycle, rotate the turntable by hand until the pickup arm STOPS moving away from the centerpost.
2. Loosen the set screw (81) on the push-off bracket (80) and move the push-off plate (16) so that its leading edge extends 1/32" beyond the edge of the record support (17). Then tighten the set screw (81).
3. Load the record changer with 33 RPM records, place the changer in operation and keep rejecting records until the stack has been dropped to the turntable.
4. If records still do not drop properly, repeat steps 1 through 3.

ADJUSTMENT OF SET-DOWN POINT (See Figures 4 and 5)

This record changer does not have a conventional set-down screw adjustment. The pickup arm should set-down properly unless the Allen set screw (34) on the pivot collar (33) is loosened, or excessive pressure has been applied to the pickup arm.

When properly adjusted for correct set-down, the needle point will set-down between 2-9/16" and 2-10/16" from the near side of the 45 RPM centerpost. (Between 3-5/16" and 3-6/16" from center of the hole in the turntable.) Making this adjustment for 45 RPM records, automatically provides correct set-down for 33 RPM records.

If the pickup arm does not set-down properly, the set-down point adjustment should be made as follows:

1. Insert the 45 RPM centerpost (2); set the speed change knob (19) to the "45" position; move the reject knob (42) to the "Rej" position and then rotate the turntable (clockwise) by hand JUST to the point where the pickup arm stops moving in toward the centerpost and starts moving downward. DO NOT ROTATE THE TURNTABLE BEYOND THIS POINT.
2. Insert a #6 Allen wrench into the Allen set screw (34) on the pivot collar (33) as shown in Figure 5. Do NOT loosen the Allen set screw.

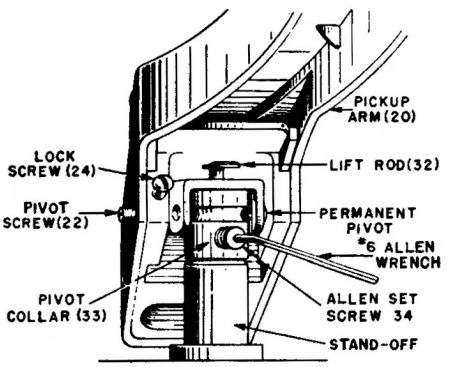

Figure 5. Pickup Arm Mounting Detail.

3. From the underside of the changer, hold the pickup arm lever and trip bracket assembly (72) STATIONARY so that it can not move down or to either side.
4. Slightly loosen the Allen set screw (34).
5. Place a ruler against the near side of the 45 RPM centerpost and then move the pickup arm until the distance between the needle and centerpost is from 2-9/16" to 2-10/16".
6. Tighten the Allen set screw (34) VERY CAREFULLY to avoid moving the pickup arm. Before firmly tightening the Allen set screw, make sure that there is a little space (ten thousandths of an inch) between the pivot collar (33) and the stand-off.

ADJUSTING THE PICKUP ARM HEIGHT

This record changer is designed so that when the needle rests 1/16" above the changer pan, the pickup arm will automatically lift high enough during change cycle to clear the top record of a stack of ten 33 RPM records on the turntable and will not lift high enough to strike the bottom record of a stack of 33 RPM records to be played.

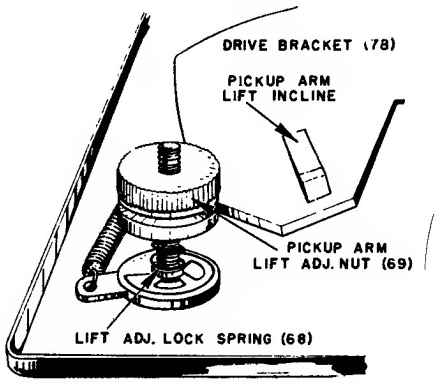

Figure 6. Adjusting Pickup Arm Height.

With the record changer out of change cycle and the pickup arm clear of the turntable, adjust the pickup arm lift adjusting nut (69) (see figure 6), so that the needle rests 1/16" above the top of the changer pan. Turning the nut (69) clockwise raises the pickup arm; turning it counter-clockwise lowers the pickup arm.

To check this adjustment, load the record changer with ten 33 RPM records. Turn the changer on and reject records until the stack has been dropped to the turntable. The pickup arm should not lift high enough to strike the bottom record (of the stack about to be played) but should lift high enough to play the tenth record on the turntable.

If, for some reason, the arm strikes the bottom record or will not lift high enough to play the tenth record, a compromise adjustment should be made. That is, raise the arm slightly to make the arm lift higher or lower the arm slightly to prevent it from striking the bottom record.

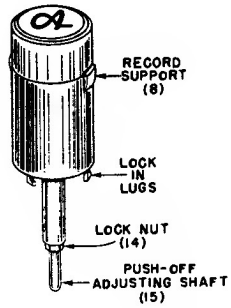

Figure 7. 45 RPM Centerpost.

45 RPM CENTERPOST ADJUSTMENT

If 45 RPM records do not drop to the turntable as they should, or if the turntable stalls during change cycle, it will be necessary to adjust the 45 RPM centerpost, (2).

The push-off adjusting shaft (15) is the only adjustment on this centerpost. When properly adjusted, the dimension from the bottom of the adjusting nut (14) to the end of the push-off adjusting shaft (15) is approximately ½ inch. To make an adjustment, proceed as follows:

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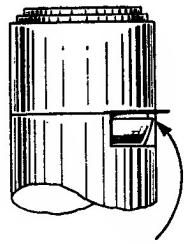
1. Turn the set off. Push the Reject knob (42) to the "Rej" position. Then rotate the turntable clockwise (to the right) by hand until the pickup arm moves as far away from the turntable as it will go. Do not continue to rotate the turntable beyond this point.

2. Insert the 45 RPM centerpost and lock it in place.

3. In this position the record supports (8) should be pulled into the centerpost until the top edge of the



Corner of record support (8) must be slightly (1/32") inside centerpost wall.

Figure 8. 45 RPM Centerpost Adjustment.

record supports are just inside the centerpost. You should only be able to see approximately 1/32 of an inch of the centerpost wall. See figure 8.

4. If the record supports do not pull into the centerpost as far as the position shown in figure 8, remove centerpost, loosen the locknut (14) and turn the push-off adjusting shaft out (counter-clockwise) approximately one half turn.

5. Insert the centerpost and check to see if the record supports "pull in" to the proper position. If they do not, repeat step 4. If they pull in far enough, proceed with step 6.

6. Place a stack of 45 RPM records on the centerpost and turn the record changer on. Push the Reject knob to the "Rej" position and then keep rejecting records until the whole stack has been dropped to the turntable. If each record slides smoothly down the centerpost, the adjustment is satisfactory.

IMPORTANT: If the turntable stalls during change cycle, the push-off adjusting shaft may have been turned out too far. Remove the 45 RPM centerpost and run the changer through change cycle. If the changer does not stall with the centerpost removed, turn the push-off adjusting shaft in about four or five full turns and repeat steps 1 through 6 above.

SERVICE AND REPAIR

DISASSEMBLING THE 45 RPM CENTERPOST
(See Figure 9)

To disassemble the centerpost for parts replacement etc., proceed as follows:

1. Remove screws (12) from underside of centerpost and lift up the centerpost cap (3). See figure 9. *CAUTION: When the centerpost cap (3) is off, use extra care to keep from accidentally pushing up on the push-off adjusting shaft (15). If this shaft is puhed up, the slicer return springs (4) and slicers may fly off and be lost.*

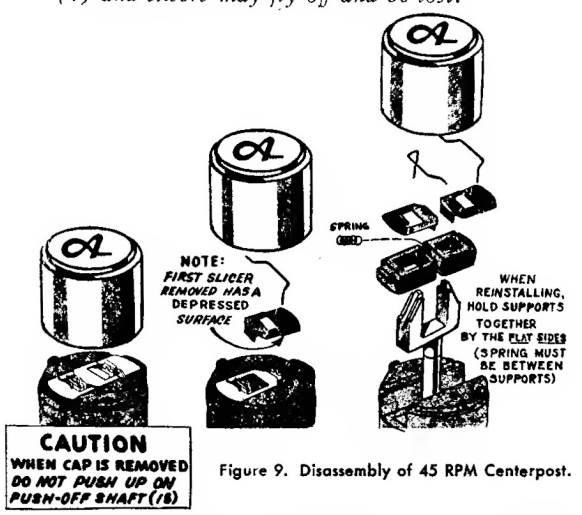


Figure 9. Disassembly of 45 RPM Centerpost.

2. Using a "long nose" pliers or tweezers, remove the slicer spring (4) which holds the top slicer (5) in place. Then remove the top slicer. (NOTE: This slicer has an offset. It must be removed first when disassembling and installed last when reassembling).

3. Remove the other slicer return spring and the bottom slicer (6).

4. Now, push up on the push-off adjusting shaft (15) until the record supports (8) come up over the top of the centerpost.

5. Grasp both record supports with the thumb and two forefingers and lift them off of the slicer cam (9A). Release record supports carefully so record support return spring (7) is not lost.

6. To remove the slicer cam and push-off assembly (9), remove the retaining ring (13) and the push-off return spring (11) from the underside of the centerpost and lift the assembly off from the top of the centerpost.

When assembling the centerpost, merely reverse the above procedure. When installing the record supports (8) and their return spring (7), place the spring between the record supports and compress the spring enough so the record supports can be slid down over the slicer cam (9A). When installing the slicers (5 and 6) be sure to install the flat slicer (5) first, and then the slicer with the offset.

REMOVING THE PICKUP ARM
(See Figure 5)

If the pickup arm must be removed for any reason, proceed as follows:

Important

Do NOT loosen the Allen set screw (34) in the pivot collar (33). If the screw is loosened, it will be necessary to make the set-down point adjustment.

1. Loosen the pivot locking screw (24) at the front of the pickup arm counterweight (21).
2. Turn the pivot screw (22) almost all the way out.
3. Move the pickup arm to the right to free the permanent pivot (part of the counterweight) from the pivot hole in the pivot collar (33). In early production changers, it may be necessary to use a slight twisting or "wiggling" motion to free the permanent pivot. When the permanent pivot has been freed, merely lift the pickup arm assembly up and off.

To reinstall the pickup arm assembly proceed as follows:

1. Slide the counterweight down on the pivot collar (33) until the permanent pivot point falls into the pivot hole in the pivot collar. In early production changers, it may be necessary to set the permanent pivot point in the pivot hole and then twist or "wiggle" the arm until the counterweight falls into the proper position.
2. Tighten the pivot screw (22) until it is tight and then back it off just enough so the pickup arm can move up and down freely.
3. Tighten the pivot locking screw (24).

REMOVING TURNTABLE (3B) AND THRUST BEARING ASSEMBLY (40)

To remove the turntable first place the speed change knob (19) in the "neutral" position. Being sure that the changer is not in change cycle, move the pickup arm away from the turntable. Then remove the retaining clip (37) on top of the turntable and lift the turntable straight up.

Before replacing the turntable, see that the drive wheel (36) is not against the centerpost socket and move the pickup arm as far as possible from the centerpost. Be sure the speed change knob (19) is in the "neutral" position.

No force is needed to seat the turntable.

Replace the turntable retaining clip (37) on the centerpost socket so that its "turned-up" ends are facing upward and away from the pickup arm.

The cork washers (39) and thrust bearing assembly (40) are removed by sliding them over the centerpost socket. Replace them in the order shown in figure 12.

LUBRICATION

Under normal operating conditions, the motor should never require oiling. Also, do NOT use oil on the 45 RPM centerpost and do NOT oil the roller on the reject lever (43). Any oil on this roller will be transferred to the drive wheel tire when the reject knob is moved to the "Rej" position, which might cause the drive wheel (36) to slip during change cycle. The

drive shaft is fitted through an oilite bearing on the drive bracket (78); it also should not require oil.

The rest of the changer, however, should be lubricated with grease whenever it comes into the shop for repairs or adjustment. All pivot and friction points should be greased adequately but not excessively. A good automobile chassis grease may be used for this purpose.

Admiral RC400 Changer

The push-off shaft (16) and the bearing in the turntable hub may be lubricated with SAE No. 20 oil.

Care should be taken to prevent any of the lubricant from coming into contact with the drive or idler wheel tires. Also, be careful when using oil, not to let an excess seep into the felt of the turntable.

RECORD CHANGER TROUBLE SHOOTING

Changer Will Not Trip Into Change Cycle.

1. Check adjustment of trip adjusting screw (75).
2. Check for broken, loose or weak trip tension spring (73).
3. Check for broken, missing or loose trip adjusting lock spring (74).
4. Check for oil or foreign material on the drive wheel tire (36).
5. Check to see that the drive bracket (78) is free (not binding) to pivot around drive bracket hub.
6. Check for broken cycle spring (76).

Changer Trips Into Change Cycle Before Finishing Record.

1. Check adjustment of trip adjusting screw (75). See paragraph under heading "Trip Adjustment."

Changer Will Not Reject.

1. Check for oil or foreign material on the drive wheel tire (36).
2. Check to see that the drive bracket (78) is free to pivot around the drive bracket hub.

Pickup Arm Does Not Set Down Properly.

1. Check set-down adjustment. See paragraph under "Adjustment of Set-down Point".

Records Do Not Drop to Turntable.

1. If 45 RPM records do not drop, adjust push-off adjusting shaft (15). See paragraph under heading "45 RPM Centerpost Adjustment".
2. If 33 RPM records do not drop, check the push-off adjustment. See paragraph under heading "Push-off Adjustment".

Changer Stalls in Change Cycle.

1. Check for parts binding.
2. If changer stalls with 45 RPM centerpost in place, adjust push-off adjusting shaft (15). See paragraph under heading "45 RPM Centerpost Adjustment".

Turntable Will Not Revolve When Changer Is Turned On.

1. Check position of speed change knob (19). If it is in "neutral" position, the turntable will not revolve.
2. Check for oil or foreign material on the tires of the compound idler wheel (47).
3. Check for broken idler wheel spring (50).

Changer Causes Rumble or Noise.

1. Check for broken or missing "float" springs (58).
2. Check for speed change knob shaft (19) rubbing against the edge of the cut-out in the changer pan.

Pickup Arm "Skips" Across Records.

1. Check to be sure that cabinet is level.
2. Check for worn needle.

CAUTIONS AND SERVICE HINTS

1. See that the rubber tires on both the drive wheel (36) and the compound idler wheel (47) are kept clean and free from oil, grease, dirt or any foreign material. Carbona or carbon tetrachloride may be used for cleaning these parts.
2. When handling the idler wheel or drive wheel, keep fingers and hands away from the rubber tires. Natural body oils on these parts may possibly cause slippage.
3. When the turntable is off, do NOT push the drive wheel (26) against the centerpost socket.
4. If the record changer is not going to be used for some time, place the speed-change knob (19) in the "neutral" position. This will eliminate the possibility of denting the idler wheel tires (47).
5. When disassembling the 45 RPM centerpost, do not push up on push-off adjusting shaft (15), just after removing the centerpost cap (3).
6. When removing the pickup arm, do NOT loosen the Allen set screw (34) in the pivot collar (33).
7. Do not oil the roller on the reject bracket (43). Oil will be transferred to the drive wheel tire (26) possibly causing slippage during change cycle.
8. When replacing the turntable retaining clip (37) be sure to slip it on with the "turned-up" ends facing upward.
9. When removing or reinstalling turntable, make sure that the record changer is not in change cycle and that the speed change knob (19) is in the "neutral" position.