ADMIRAL
SERVICE MANUAL
T1128

MODEL
RC 700
RECORD CHANGER

RECORD CHANGER MODEL IDENTIFICATION CHART
RC700 SERIES

RECORD CHANGER MODEL NO.	TURNTABLE AND MAT COLOR	ESCUTCHEON COLOR	LEVELING ARM COLOR	TONE ARM COLOR	MOTOR NUMBER	CARTRIDGE NUMBER
RC7A0B-10H	Brown	——	Beige	Beige	407C34-3	409B29-1-1
RC7B0B-10H	Brown	——	Beige	Beige	407C33-3	409B29-1-1
RC7E0B-8AD	Brown	——	Beige	Beige	407C34-1	409B28-1
RC7E0B-20AC	Brown	——	Beige	Beige	407C34-1	409C37-1
RC7E0B-22AE	Brown	——	Beige	Beige	407C34-1	409C39-1
RC7E0B-23AE	Brown	——	Beige	Beige	407C34-1	*409C39-2
RC7E0C-17AF	Brown	Gold	Beige	Beige, with Gold Edge	407C34-1	*409B33-2-1
RC7E0C-17W	Brown	Gold	Beige	Beige, with Gold Edge	407C34-1	*409B33-2-1
RC7E0C-22V	Brown	Gold	Beige	Beige, with Gold Edge	407C34-1	409C39-1
RC7E0D-16AF	Brown, with Gold Inlay	——	Beige	Beige, with Gold Edge	407C34-1	409B33-1-1
RC7E0D-18Z	Brown, with Gold Inlay	——	Beige	Beige, with Gold Edge	407C34-1	409C34-1-1
RC7E0G-17Q	Brown, with Gold Inlay	Gold	Gold	Beige, with Gold Edge & Gold Inlay	407C34-1	*409B33-2-1
RC7E0G-17W	Brown, with Gold Inlay	Gold	Gold	Beige, with Gold Edge & Gold Inlay	407C34-1	*409B33-2-1
RC7E0G-19W	Brown, with Gold Inlay	Gold	Gold	Beige, with Gold Edge & Gold Inlay	407C34-1	*409C34-2-1
RC7E0G-23V	Brown, with Gold Inlay	Gold	Gold	Beige, with Gold Edge & Gold Inlay	407C34-1	*409C39-2
RC7F0B-8AD	Brown	——	Beige	Beige	407C33-1	409B28-1
RC7F0B-20AC	Brown	——	Beige	Beige	407C33-1	409C37-1
RC7F0B-22AE	Brown	——	Beige	Beige	407C33-1	409C39-1
RC7F0B-23AE	Brown	——	Beige	Beige	407C33-1	*409C39-2
RC7F0C-17AF	Brown	Gold	Beige	Beige, with Gold Edge	407C33-1	*409B33-2-1
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RC7F0C-22V	Brown	Gold	Beige	Beige, with Gold Edge	407C33-1	409C39-1
RC7F0D-16AF	Brown, with Gold Inlay	——	Beige	Beige, with Gold Edge	407C33-1	409B33-1-1
RC7F0D-18Z	Brown, with Gold Inlay	——	Beige	Beige, with Gold Edge	407C33-1	409C34-1-1
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RC7F0G-17W	Brown, with Gold Inlay	Gold	Gold	Beige, with Gold Edge & Gold Inlay	407C33-1	*409B33-2-1
RC7F0G-19W	Brown, with Gold Inlay	Gold	Gold	Beige, with Gold Edge & Gold Inlay	407C33-1	*409C34-2-1
RC7F0G-23V	Brown, with Gold Inlay	Gold	Gold	Beige, with Gold Edge & Gold Inlay	407C33-1	*409C39-2
400B750-7 or 9400L6-1	Brown with Gold Inlay	---	Beige	Beige with Gold Edge	407C33-1	*409B34-2-1

*Indicates the use of a .7 mil diamond LP stylus and record brush assembly.

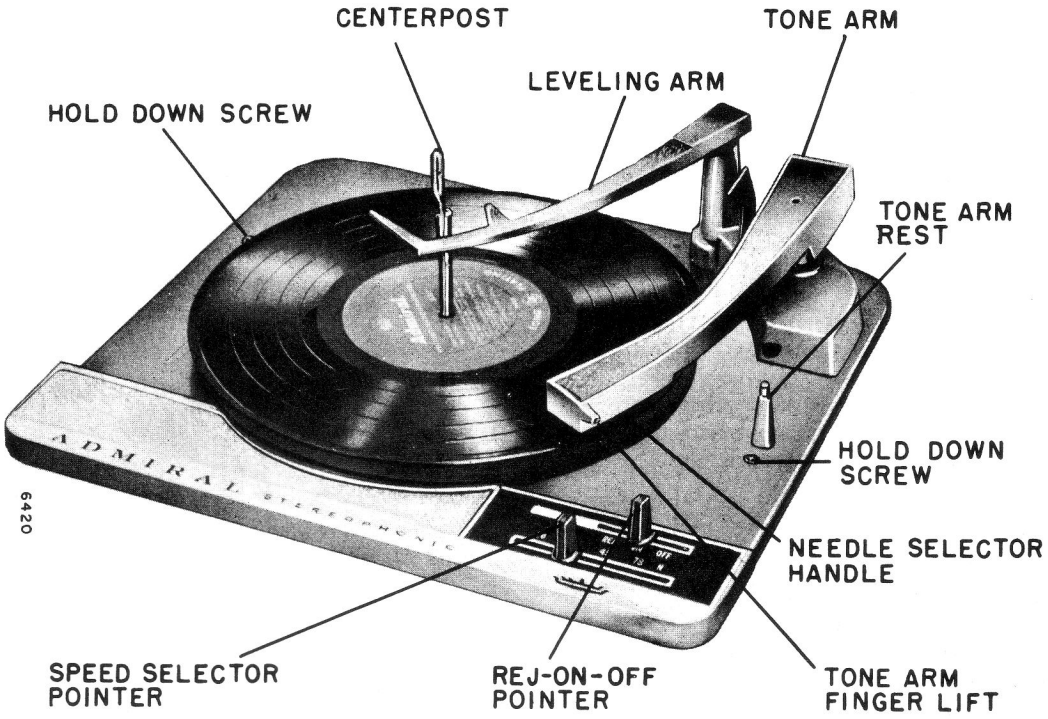


Figure 1. Top View of RC700 Record Changer.

INSTALLATION

Power Supply . . .

. . . Operate changer only on 110-120 volts AC.

Before Operating the Record Changer . . .

. . . "Float" record changer on its spring mounting. Alternately turn the two changer hold-down screws on top of changer platform in a clockwise direction until changer platform rises flush with top of screws.

. . . Remove needle guard from pick-up cartridge in Tone Arm and cardboard shipping retainers from top of changer.

. . . Lift Tone Arm free of stud on top of tone arm rest.

. . . The record changer must be level. An uneven floor or thick carpet under only the front of the cabinet may cause groove skipping on 45 or 33⅓ RPM records.

Shipping Instructions . . .

. . . If it is ever necessary to ship the set, alternately turn the two hold-down screws in a counterclockwise direction until changer pan is secured to its mounting board.

. . . Press Tone Arm onto stud on top of tone arm rest. If necessary, lightly tie down Tone Arm and Leveling Arm to prevent them from moving.

SPECIFICATIONS

General Performances . . .

. . . The 4-speed record changers covered by this service manual will play and change automatically all commercially manufactured records and shut off after playing the last record, with Tone Arm landing on tone arm rest.

. . . These changers are designed to play:
Twelve 10″ records, or
Ten 12″ records, or
Twelve 10″ and 12″ records of the same speed intermixed, or
Fourteen 7″, 45 RPM records.

. . . The 45 RPM Spindle (part number 400C686-2), or adapters for center holes (part number 48A8-2) may be used when playing 45 RPM records.

Manufacturing Specifications . . .

. . . Tone Arm —
Stylus Pressure Limits:
6-8 grams for all Stereophonic changers.
8-10 grams for all monaural changers.
Set Down Limits (as measured from center of centerpost to tip of stylus):
7″ records—3-11/32 ± .040″
10″ records—4-25/32 ± .050″
12″ records—5-25/32 ± .050″

. . . 50 Cycle Application —

The motors used in the record changers covered by this service manual are not designed for conversion to 50 cycle operation. A motor designed for 50 cycle operation is available only by special order.

OPERATING INSTRUCTIONS

Setting The Needle Selector Handle

The number (or letters) facing up on the Needle Selector Handle indicates which stylus is pointing down from the Tone Arm.

Setting The Speed Selector Pointer

Correct turntable speed may be selected by sliding the Speed Selector Pointer to the position indicated for 16, 33, 45, or 78 RPM recordings.

When the record changer is not being used, the Speed Selector Pointer should be placed in the neutral (N) position to prevent the possibility of flat spots from developing on the idler wheel tire.

Loading Records

Grasp Leveling Arm at shaft end and lift straight up until it clears the top of the centerpost. Turn arm to right as far as it will go without forcing.

Place a stack of records (all the same speed) on the centerpost. Turn Leveling Arm back over centerpost and let it settle down on the record stack.

Starting The Record Changer

NOTE: In radio-phono or TV-phono combinations, it will be necessary to set the Function switch to "Phono" position and set the master Off-On switch to "On" position before starting the record changer.

Slide the Rej-On-Off pointer to "Rej" position momentarily and release. The pointer will automatically return to the "On" position. The changer will go through its change cycle, and the bottom record in the stack will drop to the turntable. As the Tone Arm sets down on the record, adjust Volume (or Loudness) control for desired sound output level.

When the last record has finished playing, the changer will go through its normal change cycle; the Tone Arm will position itself on the tone arm rest; and, power to the turntable motor will automatically be switched off.

NOTE: In straight phono models, these changers will automatically switch off power to both the turntable motor and amplifier after the last record finishes playing. In combination models, these changers will switch off power only to the turntable motor. The master Off-On switch on the radio or television control panel must be turned to the "Off" position if the set is no longer to be used.

Record Push-Off

The record push-off is built into the centerpost, and operates automatically during the change cycle.

Tone Arm Set-Down

The tone arm set-down point is automatically selected during the change cycle, immediately after the first record drops to the turntable.

Rejecting A Record

If the record changer will not trip into the change cycle at the end of a record, or if you wish to stop playing a record and start playing the next one in the stack, slide the Rej-On-Off pointer to the "Rej" position momentarily and release.

Stopping And Unloading

Do not switch off power to the changer or handle the Tone Arm during the change cycle. The changer may be stopped at any time a record is playing by sliding the Rej-On-Off pointer to the "Off" position. When a changer is shut off in this manner, carefully lift Tone Arm off of record playing surface and place on tone arm rest.

Grasp Leveling Arm at the shaft end; lift straight up until it clears centerpost; then position it over Tone Arm. Lift record stack straight up off of centerpost.

CHANGE CYCLE

When following this change cycle, keep in mind that a velocity type trip is used, which depends upon a rapid movement of the tone arm toward the centerpost. Note that the Push-Off, Trip, and Set-Down mechanisms function independently.

If at all possible, observe the change cycle of a record changer which is operating properly. It is a good idea to rotate the turntable clockwise by hand and repeat the change cycle until the function of each part is understood.

Since the reject mechanism is located on the top side of the changer pan underneath the turntable, it is impossible to view this mechanism during normal operation of the changer. However, a geared hub (normally riveted to the turntable) is available as a separate replacement part. (Part number 404B47-1.) To observe the action of the reject mechanism, remove the turntable, insert the geared hub, and rotate the hub clockwise by hand.

The changer operates as follows: The turntable is driven by the motor idler wheel riding against its inside rim. The speed of the turntable is determined by the diameter of the shaft driving the idler wheel rubber tire.

The changer mechanism is driven during its change cycle by the drive gear (41), which in turn is driven by the gear hub of the turntable. During normal record play, the "dead spot" on the drive gear is held next to the turntable hub by the gear indexing arm (46) and spring (55).

Velocity Trip

This changer employs a velocity trip, consisting primarily of two parts; the trip motion arm (39), and the gear engagement pawl (37). These parts are mounted near the "dead spot" on drive gear (41). See figure 4.

During normal record play, the trip slider (32) is moved slowly by the stud on the tone arm control lever (81) which moves with the tone arm. The stud on the trip slider (32) rides against the trip motion arm (39), moving it very slightly. Since the gear engagement pawl (37) is held against the trip motion arm (39) by the trip friction spring (36), the gear engagement pawl (37) is also moved slightly toward the turntable hub. Since this movement is only slight, the vertical catch on the gear engagement pawl (37) is just touched and "kicked away" by the lug on the turntable hub until the gear engagement pawl is moved in rapidly enough to position in front of the lug for the next turntable cycle.

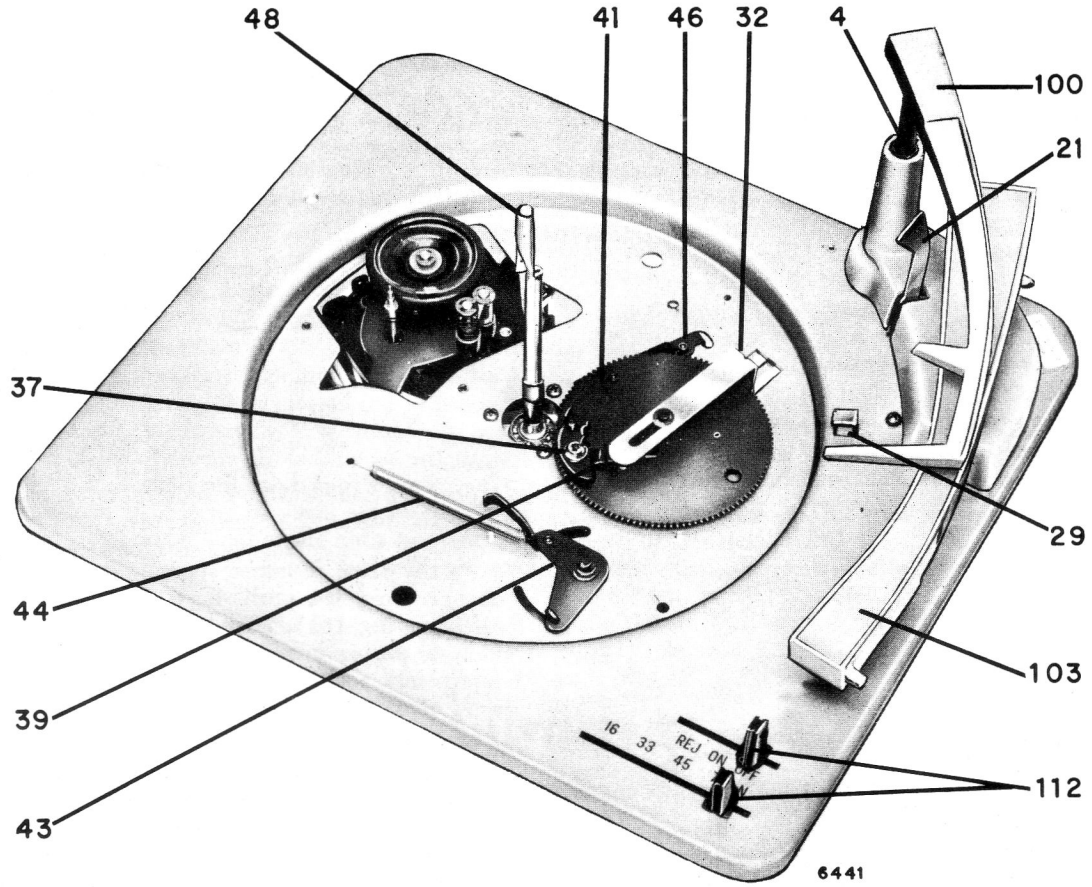


Figure 2. Top View of RC700 Changer with Turntable Removed. Changer out of cycle.

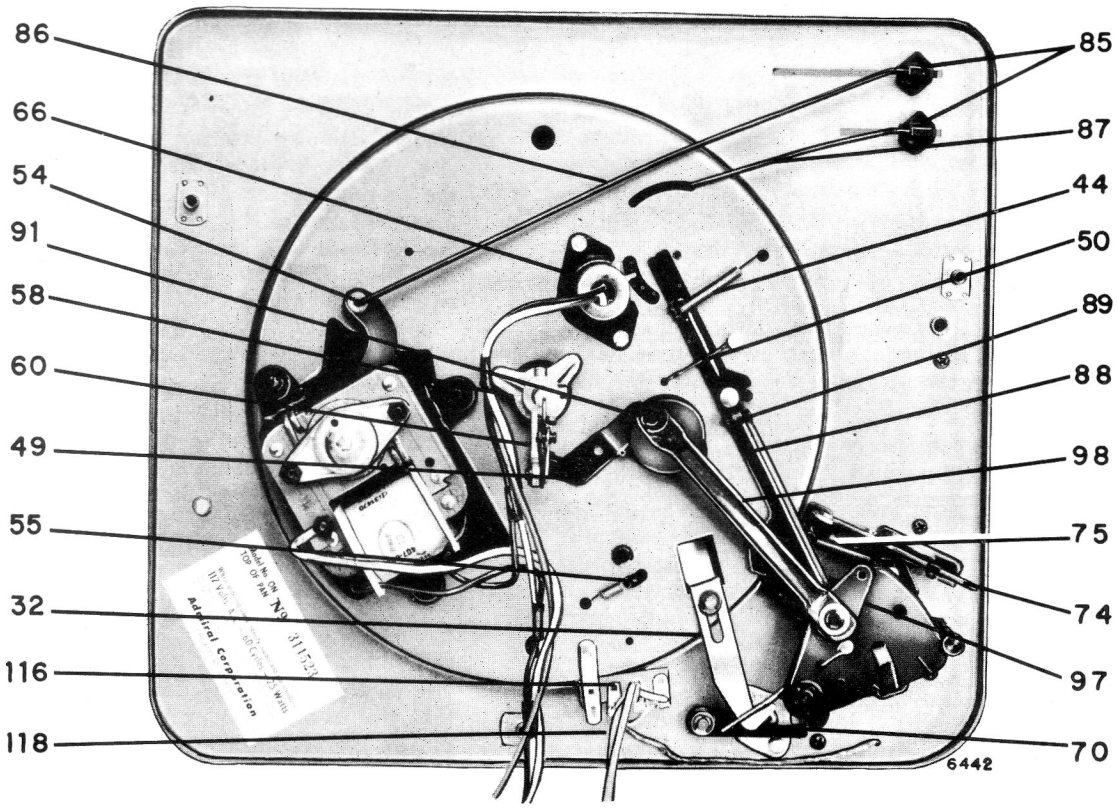


Figure 3. Bottom View of RC700 Changer. Changer out of cycle.

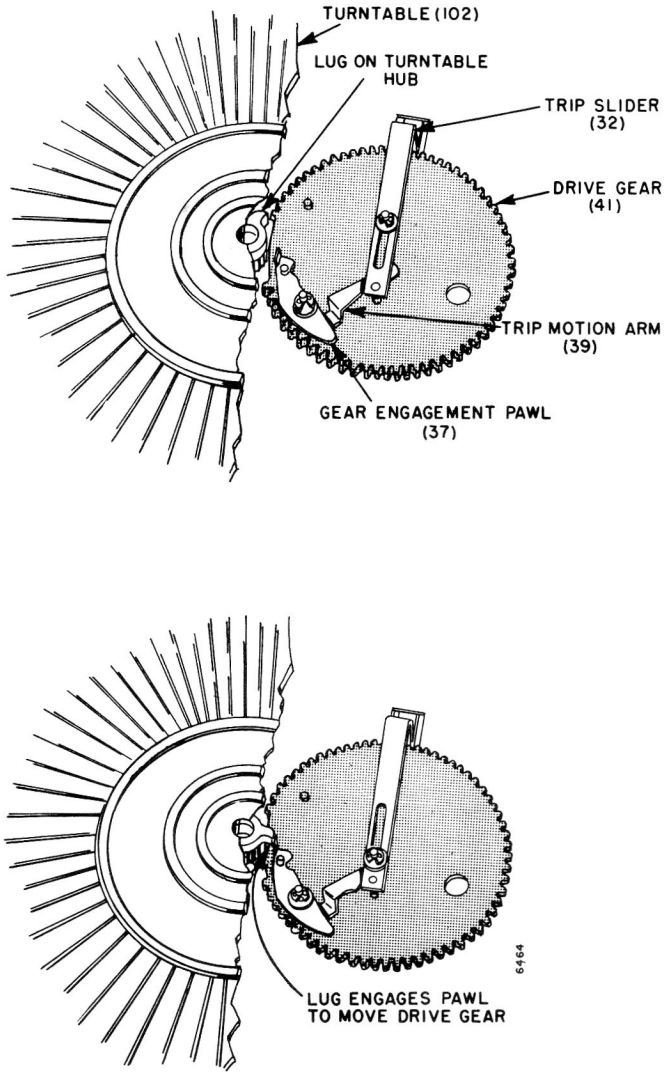


Figure 4. Position of Drive Gear Out of Cycle and at Start of Change Cycle.

This rapid movement only occurs when the trip slider (32) is moved rapidly, by the tone arm, as the needle enters the trip grooves of the record. The gear engagement pawl (37) then moves in front of and engages the lug on the turntable hub. This causes the drive gear (41) to be rotated far enough so that the teeth on the drive gear will engage the teeth on the turntable hub, starting the change cycle. See figure 4.

The change cycle can also be started by sliding the reject pointer to the "Rej" position momentarily. The arm on the end of the reject arm assembly (43) moves the gear engagement pawl (37) into position to engage the lug on the turntable hub.

As drive gear (41) begins to rotate, the drive eccentric (91) also rotates, since both parts are mounted on the same shaft. See figure 3. As the drive eccentric rotates clockwise, the drive link (98) pivots the control plate (95). As the control plate pivots, the inclined cut-out moves from beneath the tone arm lift rod (82), raising the tone arm from the record. The safety arm (97) travels with the control plate (95). The stud on the safety arm engages the tone arm control lever (81) and moves the tone arm away from the centerpost.

Push-Off

When the tone arm is clear of the turntable, the roller on the drive eccentric (91) engages the push-off link (49). The push-off link moves the push-off lever (60), which in turn engages the safety spring (61) with the push-off adjustment nut (63) on the end of the push-off shaft in the centerpost. As the push-off link (49) is moved by the drive eccentric, the push-off lever (60) causes the safety spring (61) to move the push-off shaft up into the centerpost. The push-off shaft engages the ejector and pushes it up and out at the shelf of the centerpost. See figure 7.

As the ejector moves up, it engages the center hole of the record at the bottom of the stack on the shelf. As the ejector moves out of the centerpost, the record moves with it until the center hole is clear of the shelf of the centerpost. The record drops down the centerpost to the turntable. The balance of the stack of records is held on the shelf by the centerpost slide above the ejector.

As the drive eccentric starts into the second half of the change cycle, the push-off return spring (62) returns the safety spring (61), push-off lever (60), and push-off link (49) to proper position and permits the push-off ejector to return into position for push-off for the next record on the shelf of the centerpost.

Set-Down

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 (81). The set-down engagement spring (83) presses the tone arm control lever against the cork friction washer (80). As the set-down arm return spring (75) draws the set-down arm (79) toward the centerpost, the cork friction washer returns the tone arm control lever with the set-down arm.

As the control plate (95) is returned by drive link (98), the inclined cut-out moves beneath the tone arm lift rod (82). As the tone arm lift rod descends into the inclined cut-out, the tone arm is lowered to the record.

The set-down index (74) automatically determines the correct set-down position of the tone arm for each record size. An index pin on the set-down arm (79) engages with the set-down index (74). As the long stud on the safety arm (97) moves the set-down arm (79), the index pin on the set-down arm releases the set-down index and permits it to pivot of its own weight and lift the index finger to the edge of the turntable.

A 7-inch record cannot obstruct the index finger. Therefore, the set-down index will pivot its full distance to the position which will permit the index pin on the set-down arm to enter the proper index slot for 7-inch set-down. The set-down arm return spring (75) draws the set-down arm (79) toward the centerpost and the index pin on the set-down arm travels into the end of the index slot. Since the index pin is held in the index slot against moving further toward the centerpost, the index slot will determine where set-down occurs.

A 10-inch record will extend past the edge of the turntable far enough for the index finger cap (29) to momentarily "feel" the edge of the record. The index finger cannot rise as high as it was when no record obstructed its rise, thus the set-down index is positioned to permit the index pin on the set-down arm (79) to enter the index slot for 10-inch set-down.

The 12-inch set-down trigger (21) "feels" the presence of a 12-inch record. When a 12-inch record drops down the

centerpost, it momentarily forces the 12-inch set-down trigger (21) towards the back corner of the record changer. This releases the 12-inch set-down slide (26) which is pulled by its spring (25) until it moves into a slot on the set-down index (74). With the set-down index (74) held by the 12-inch set-down slide (26), the index pin on the set-down arm will enter the slot for 12-inch set-down.

At the beginning of each change cycle, the 12-inch set-down slide (26) is reset into position to be triggered by the 12-inch set-down trigger (21), by means of the pin on the safety arm and stud assembly (97). This pin actuates a roller located on the underside of the pan that is attached to the 12-inch set-down slide (26).

Intermix of 10-inch and 12-inch records is thus accomplished, since the index finger's rubber cap (29) will always "feel" the equivalent of a 10-inch record, and the 12-inch set-down trigger (21) will correct this action for every 12-inch record that slides down the centerpost.

Automatic Shut-Off

After the last record of the stack on the shelf has been ejected to the turntable, the leveling arm (100) drops about 3/16 of an inch beneath the shelf. The bottom end of the leveling arm shaft extends beneath the changer pan and will lower the shut-off delay stop (70). The shut-off link control arm on the shut-off link (88) is then permitted to pivot with the shut-off arm spring (93) fastened at its other end to the control plate (95). The shut-off link control arm will draw the shut-off link and engage its cam that positions the shut-off link in line with the stud on the reject arm (43).

As the shut-off link (88) is drawn toward the control plate (95), the stop on the shut-off link moves into the path of the stud on the tone arm control lever (81).

When the control plate (95) begins to return in the second half of the change cycle, a stud on the control plate moves the shut-off link (88) to snap off the phonograph motor switch (66) and return the "Off-On-Rej" pointer to "Off.

The tone arm control lever (81) is held by the tone arm stop on the shut-off link (88) while the control plate (95) is going through the second half of the change cycle and the tone arm is held suspended above the tone arm rest (24). As the inclined cut-out moves under the tone arm lift rod (82), the tone arm is lowered onto the tone arm rest.

ADJUSTMENTS

When making the following adjustments, keep in mind that the Push-Off, Trip, and Set-Down mechanisms function independently.

Velocity Trip Mechanism

These record changers use a velocity type trip, which depends upon a rapid movement of the tone arm toward the centerpost in any area between 2¼" to 1-15/16" from the center of the record. *This trip requires no adjustment.* However, in order for the changer to trip properly, there must be sufficient friction between the trip motion arm (39) and the gear engagement pawl (37). If insufficient friction is evident, or if these parts do not turn together readily, replacement of the Gear Engagement Pawl and Trip Motion Arm Assembly (part number 400A588-2) is recommended. This assembly is adjusted at the factory with the precise amount of friction required for correct trip action.

Set-Down Adjustment

The set-down adjustment may be made while the changer is in its compartment or cabinet. Adjustment of the set-down point is made by adjusting the set-down adjusting screw (5). See figure 5. The tone arm will automatically set down properly on 7-inch or 12-inch records if the set-down adjustment is made properly on a 10-inch record. The set-down adjustment screw is accessible through the hole in the left side of the tone arm. Turning this screw out (counterclockwise) moves the set-down point of the tone arm closer to the centerpost, and turning this screw in (clockwise) moves it away from the centerpost.

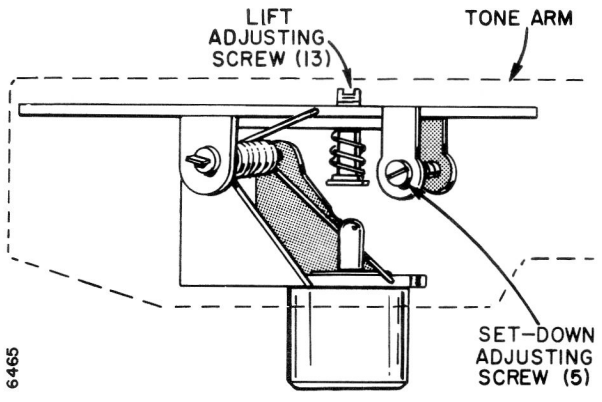


Figure 5. Set-Down and Lift Adjustments.

Be sure the record changer is level. Make the set-down adjustment as follows:

1. Place a 10-inch record on the turntable.
2. Slide the reject pointer to the "Rej" position momentarily and let it return to "On." The changer will begin its automatic cycle. Slide the reject pointer to the "Off" position so that the turntable will stop after set-down has begun, but before the needle has touched the record.

NOTE: This step may be more easily performed while the changer is operated at 33 RPM.

3. Place a ruler against the centerpost and measure the distance between the near side of the centerpost and the needle. This distance should be between 4-13/16" and 4-12/16".
4. When the 10-inch adjustment is correct, the needle should set-down between 5-13/16" and 5-12/16" from the near side of the centerpost on 12-inch records, and between 3-6/16" to 3-5/16" on 7-inch records.
5. Check the set-down point with each size of record. "Touch-up" the set-down adjustment until the set-down has been optimized for all record sizes.

Adjusting The Tone Arm Lift

Be sure the record changer is level. The tone arm lift adjustment may be made while the changer is in its compartment or cabinet. The tone arm lift adjusting screw (13) is accessible through a hole on the top of the tone arm at the tone arm base. If the tone arm lift is too great, that is, if the tone arm touches the record at the bottom of the stack on the shelf of the centerpost, turn the lift adjusting screw counterclockwise. If the tone arm lift is not great enough

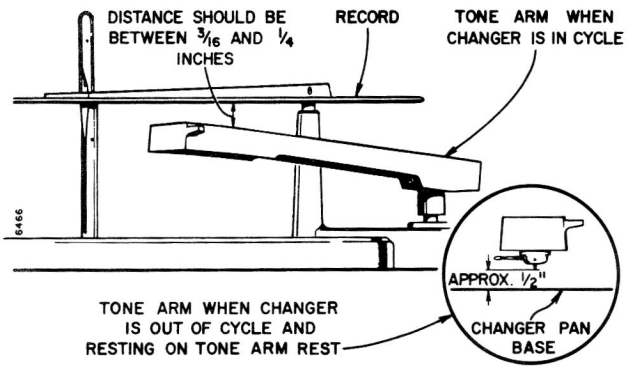


Figure 6. Checking Tone Arm Lift.

to pass above a stack of 12 standard 10", 78 RPM records on the turntable, turn the lift adjusting screw clockwise. See figures 5 and 6.

When the changer is in change cycle, the top surface of the tone arm head must be approximately 3/16 to 1/4 inch beneath the bottom record resting on the centerpost shelf.

Push-Off Adjustment

The push-off adjustment must be checked whenever the centerpost has been removed or changed. Record push-off is accomplished by means of an ejector and push-off shaft built into the centerpost. During the change cycle, the ejector and push-off shaft are moved by the safety spring (61). If ejector travel is not sufficient for record push-off, adjustment may be required.

Ejector travel is adjusted by the hexagonal adjustment nut (63). With proper push-off adjustment, the ejector should extend just slightly beyond the edge of the shelf on the centerpost. See figure 7.

Additional travel must be allowed for the push-off shaft and ejector after the push-off lever (60) has moved its full distance.

To adjust the push-off, proceed as follows:

1. Rotate the turntable clockwise by hand. Slide the reject pointer to "Rej" position and let it return to "On."

2. Continue rotating turntable slowly until the roller on the drive eccentric (91) engages the push-off link (49). Rotate the turntable until the roller has moved the link its full distance. The push-off lever (60) is now extended its maximum travel.

3. Check the position of the ejector at the shelf of the centerpost. The ejector should extend just beyond the edge of the shelf. See figure 7. If the ejector does not extend beyond the edge of the shelf, turn the push-off adjustment nut (63) counterclockwise to increase the amount of push-off. Use a 1/4" open-end wrench for this adjustment.

4. Press the hexagonal adjustment nut (63) 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 before it stops.

5. Slide a 10 thousandths of an inch (.010) feeler gauge between the flat surface of the adjustment nut (63) and the safety spring (61) to check, and adjust until gauge passes freely.

NOTE: The additional travel for the push-off shaft may vary, of course, in order to obtain proper push-off. However, the clearance of 10 thousandths of an inch (.010) must not vary more than plus or minus 5 thousandths.

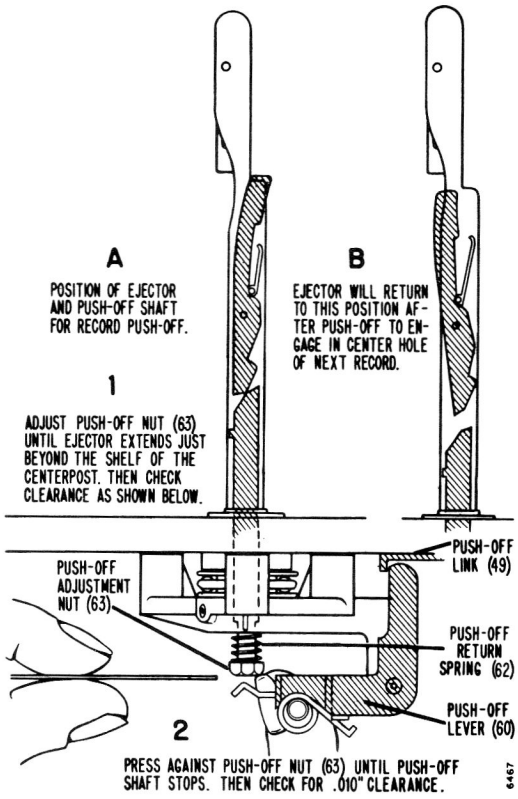


Figure 7. Adjusting for Correct Push-off.

SERVICE AND REPAIR

Lubrication

When lubricating the changer, keep oil or grease away from the motor shaft, idler wheel, turntable rim, and any surfaces the idler wheel may contact. Under normal operating conditions, the motor should never require lubrication.

DO NOT apply grease or oil to the trip slider (32). No lubricant is required between the gear engagement pawl (37), fiber washer (38), and trip motion arm (39). These parts should be kept CLEAN and DRY.

Before lubricating the set-down index (74), refer to figure 8. Grease or oil must not exist at certain points on the set-down index.

The leveling arm shaft (4) must be free of binding in its bearing (64). Molykote type G lubricant (part number 418A78-1) should be used to lubricate the shaft.

The oilite bearing in the turntable hub may be lubricated with Turbine Oil (part number 418A61-1), if required. Oil used here must be fluid in order that it may penetrate and be absorbed by the bearing material. DO NOT use grease of any kind.

The turntable thrust bearing (56) should be thoroughly cleaned with carbon tetrachloride and then packed with clean Cosmolube #1 (part number 418A50-1) whenever the changer is serviced.

Other highly loaded points of movement throughout the record changer should be cleaned and then lubricated with Cosmolube #1 (part number 418A50-1) whenever the changer is serviced.

Use alcohol to remove any grease or oil which may be on the idler wheel tire, inside rim of turntable, or rubber grommets.

Removing The Turntable

CAUTION: DO NOT attempt to pry turntable out of changer pan.

1. Place speed selector knob (112) in "N" (neutral) position.
2. Remove the "E" retaining ring (1) at top of turntable hub.
3. Firmly grasp outside rim of turntable with both hands (180° apart) and carefully lift up over centerpost (48). Use care when removing turntable.

Replacing The Turntable

1. Place speed selector knob (112) in "N" (neutral) position.
2. Carefully place turntable over centerpost onto changer pan. (NOTE: Turntable will only slide down centerpost when "slide" on top of centerpost is raised.)
3. Do not force the turntable to engage the idler wheel with turntable rim or attempt to pry the idler wheel with any tools. Always move the idler wheel by moving the idler wheel slide which is accessible from the underside of the changer pan through the opening for the turntable motor.
4. Replace "E" retaining ring (1) at top of turntable hub.

Replacing Set-Down Index

Although the set-down index (74) is factory assembled and requires no adjustment, some care is required when it is being replaced. The top surface of the set-down index bracket mounts to the changer pan and is positioned by two 1/8 inch diameter half-punches which interlock in holes in the changer pan. A #6-32 machine screw secures the set-down index in place. See figure 8.

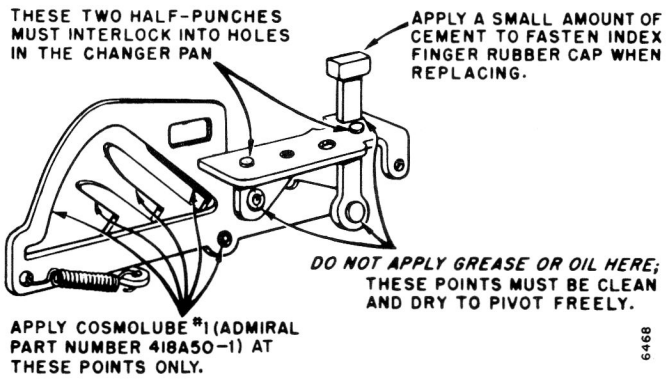


Figure 8. Set-Down Index Assembly.

Replacing The Centerpost

The centerpost is held in the turntable hub by an Allen set screw. The milled flat at the lower end of the centerpost (just above the push-off spring) must be aligned with this set screw. The lower edge of the retaining ring groove on the centerpost must be flush with the top surface of the turntable shaft, or be no more than 5 thousandths of an inch above the turntable shaft after the Allen set screw is tightened to hold the centerpost in place.

Whenever the centerpost has been removed or replaced, the push-off adjustment must be checked. The push-off adjustment nut on the push-off shaft is pre-adjusted at the factory and is ready for installation. The final adjustment is made after the centerpost is installed. See "Push-Off Adjustment" on page 8.

Idler Wheel Adjustments

Refer to the illustration in figure 9 and the following adjustment information:

1. Set speed selector pointer to 16, 33, or 45 RPM.
2. Check fiber washers (121 or 132) at top and bottom of idler wheel. Replace washers if deformed.
3. Slide a 30 thousandths of an inch (.030) feeler gauge between the bottom of the idler wheel tire and the following step on the rotor shaft (Point C).
4. Add to, or subtract from the amount of washers at Point B until the feeler gauge at Point C passes freely.
5. Place enough fiber washers under the "E"-Ring at Point A to keep the up and down play of the idler wheel to a minimum.

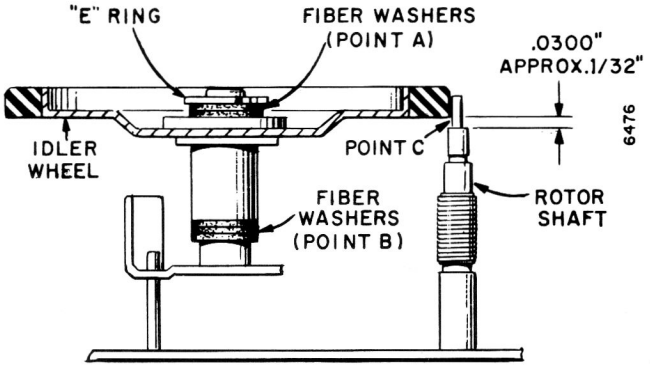


Figure 9. Idler Wheel Adjustments.

Disassembling Control Knob from Knob Retainer

To disassemble the control knob from its knob retainer, refer to the illustration in figure 10 and proceed as follows:

1. Place a small screwdriver at each leg tip projecting from sides of knob retainer as shown in figure 10.
2. Press leg tips together until they disengage from sides of knob retainer, and push legs up into knob retainer.
3. Remove screwdrivers. Grasp control knob (at top of changer pan) and pull knob from retainer.

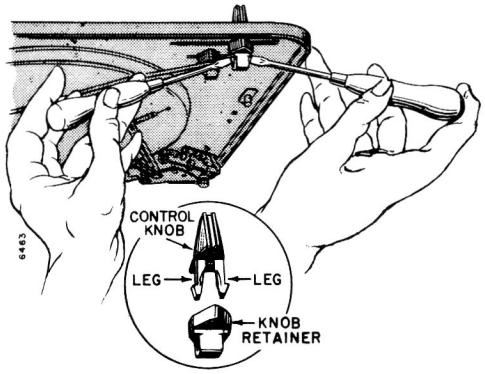


Figure 10. Control Knob Disassembly.

RECORD CHANGER TROUBLE SHOOTING

Changer Will Not Trip Into Change Cycle

1. Check to see that there is no binding of the leveling arm shaft (4) at the leveling arm bearing (64).

2. Check that the trip slider (32) is free of oil, grease, or dirt, and that the trip slider moves freely.

3. Check that the trip motion arm (39) and the gear engagement pawl (37) are free of oil, grease, or dirt, and that these parts move together readily. If necessary, replace Gear Engagement Pawl and Trip Motion Arm Assembly (part number 400A588-2).

4. Check for bent, loose, or misplaced trip slider return spring on the control plate (95).

5. Check to see that the gear index assembly (46) is not binding on changer pan.

6. Check for binding of drive gear assembly (41) in bushing (47).

7. Examine tone arm lead (109) to make sure lead does not hinder normal swing of tone arm (103).

8. Check tone arm control lever and shaft assembly (81). Shaft should be free to rotate in set-down arm assembly (79). With changer in its normal operating position, and out of cycle, set-down friction washer (80) should not be in contact with set-down arm assembly (79).

Changer Repeatedly Trips Into Cycle

1. Check tension of gear indexing spring (55).

2. Check for bent trip slider return spring on the control plate (95).

3. Check for bent trip slider (32).

4. Check gear index arm assembly (46) for binding against changer pan.

Tone Arm Does Not Set-Down Properly

1. Check set-down adjustment. See "Set-Down Adjustment" on page 7.

2. Check for binding in set-down index assembly (74).

3. Check that the set-down index bracket properly interlocks with changer pan. See figure 8.

Tone Arm Skips Grooves On Records

1. Be sure the grooves on records are clean and not damaged.

2. Check that the record changer is level in its cabinet or compartment.

3. Check the condition of the phonograph needle in the pickup cartridge; replace worn needles. Check that the needle is not twisted or bent out of shape.

4. Be sure that there is no binding at the bearing (64) in the tone arm base (19) or between the shaft of the tone arm control lever (81) and the shaft of the set-down arm (79).

5. Check that the trip slider (32) is free of oil, grease, or dirt, and that the slider is not bent and is free of burrs.

6. Check for binding between the trip motion arm (39) and the gear engagement pawl (37). These parts must move without loading the trip slider.

Records "Squeak" On Turntable

1. Be sure the records are free of label burns folded into the center hole.

2. Remove any dirt on the surface of the centerpost.

3. Place a few drops of light machine oil in a soft cloth and polish the centerpost with this cloth.

Changer Causes Rumble Or Noise

Rumble is due to vibrations developed by the motor finding a conducting path to the pick-up. This path is generally through the thrust bearing to the turntable. To reduce rumble developed in this manner, the thrust bearing should be thoroughly cleaned with carbon tetrachloride and packed with clean Cosmolube #1 (part number 418A50-1). Rumble may also be caused by insufficient motor grommet cushioning, idler wheel not rolling freely, or idler wheel being at an angle. These points should be checked if cleaning and greasing thrust bearing does not reduce rumble. Also, check the following:

1. BE SURE that the record changer "floats" on its spring mounting. See "Before Operating the Record Changer" on page 3.

2. Check for any mechanical rub near the motor.

3. Check for deformed neoprene washer (57) under thrust bearing (56).

4. Check for broken float spring.

5. On changers having an escutcheon (114), be sure escutcheon is securely held to changer pan by the three speed nuts (115).

6. Speed selector knob (112) should not bind on top surface of pan (or escutcheon).

Records Do Not Push Off, Or More Than One Record Drops To The Turntable

1. Check for broken or weak ejector return spring in the centerpost.

2. Check for weak push-off return spring (62).

3. Check the push-off adjustment. See figure 7.

4. Check that no foreign material is between the record shelf and the ejector in the centerpost.

Changer Trips Into Change Cycle Before Finishing Record

1. Check for foreign material between trip motion arm (39) and engagement pawl (37).

2. Check for bent trip slider return spring on the control plate (95).

3. Check for bent trip slider (32).

Records Fall To Turntable Unevenly

1. Be sure centerpost is clean.
2. Be sure push-off ejector operates freely.
3. Check the push-off adjustment. See figure 7.

Changer Stalls In Change Cycle

1. Idler wheel rubber tire may have foreign material on it. Clean the idler wheel and the turntable rim with alcohol.
2. Be sure push-off adjustment has proper clearance. See figure 7.

Changer Does Not Shut Off Automatically

1. Check for binding between leveling arm shaft (4) and the bearing (64) in tone arm base. Use Molykote type G lubricant (part number 418A78-1) to lubricate the shaft.
2. Check tension in shut-off delay stop engagement spring (71).
3. Check for binding of shut-off delay stop (70).
4. Check for binding of cam on shut-off link (88).
5. Check tension in shut-off arm spring (93).
6. Examine felt washer (18). Replace washer if deformed.

CAUTIONS

1. Never operate record changer through changer cycle with power while the changer is tilted up on one edge. Keep changer level when checking operation with power.
2. See that the motor shaft, the rubber tire on the idler wheel, and the inside rim of the turntable is free of oil, grease, dirt or any foreign material. Alcohol should be used for cleaning these parts. When handling these parts, keep fingers and hands away from the driving surface. Natural body oils may cause slippage.
3. Always move the speed selector pointer until it makes a definite stop and locks into position. Erratic action will result if this is not done.
4. Be sure that the changer "floats" on its spring mounting. Noise will result from any mechanical coupling between the changer and its mounting board, resulting in a rumble in the speaker.

45 RPM SPINDLE

Operation of the 45 RPM Spindle

When the record changer is not in change cycle, the 45 RPM records rest upon the protruding ends of the record shelves (205a, 205b). See figure 11.

When the record changer goes into change cycle, the ejector arm and push-off shaft on the centerpost assembly are moved by the push-off lever (60). See figure 7.

The outward movement of the ejector arm in the centerpost assembly pushes against the push-off slider assembly (207) causing the push-off slider assembly drive studs to move the record slicers (203) outward. As the record slicers move outward and hold all but one record, the push-off slider assembly drive studs continue in their forward motion to drive the record shelves (205a, 205b) inward, allowing the one record not held by the record slicers to drop to the turntable.

As the push-off slider assembly returns to its original position, the record shelves move outward and the record slicers move inward, allowing the remaining records in the stack to again rest on the record shelves until the next change cycle.

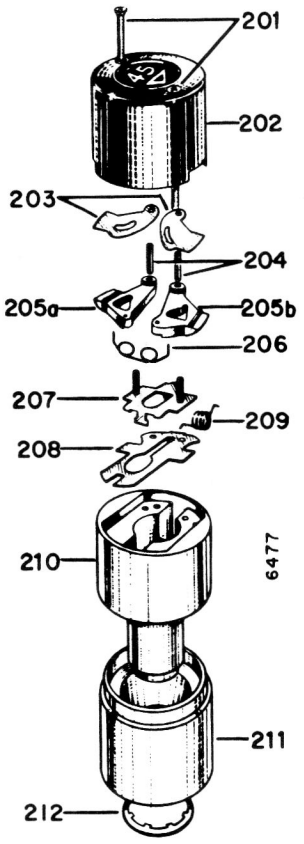


Figure 11. Exploded View of 45 RPM Spindle.

Disassembling the 45 RPM Spindle

To disassemble the 45 RPM Spindle, refer to the exploded view illustration of the Spindle in figure 11 and proceed as follows:

1. Place Spindle upside-down on a clean, flat service.

2. Remove Retaining Ring (212) by prying under it and remove Rotating Base (211) from rest of Spindle.

3. Remove two screws (201) that hold Spindle Cap Assembly (202) to Spindle Body (210) and lift Spindle Cap Assembly from Spindle Body.

All moving parts which may require replacement are contained in the Spindle Body (210) and are now accessible.

To replace the Shelf Return Spring (206), the two Pivot Studs (204) must be loosened enough to allow clearance between the Record Shelf (205a, 205b) and the Push-Off Slider Assembly (207).

To replace the Record Slicers (203), Record Shelf (205a, 205b), Push-Off Slider Assembly (207), Mounting Plate (208), or Slicer Return Spring (209), remove the two Pivot Pins (204).

CAUTION

Since the pressure exerted by the Slicer Return Spring (209) on the Push-Off Slider Assembly (207) and Mounting Plate (208) may cause these three parts to spring out of the Spindle Body (210) as they are removed, take particular care when disassembling. Reassemble these three parts as illustrated in figure 12.

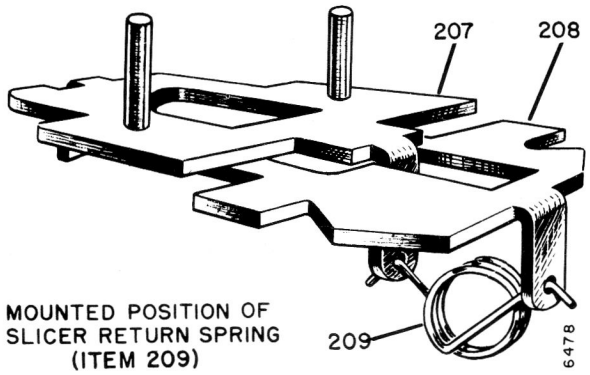


Figure 12. Position of Slicer Return Spring.

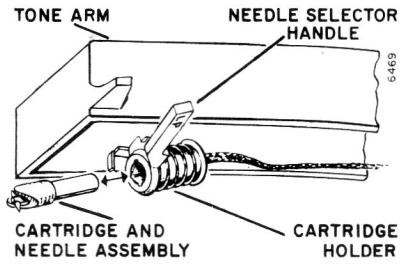
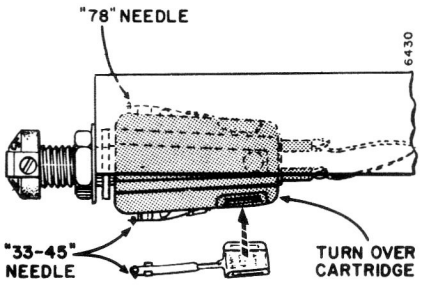
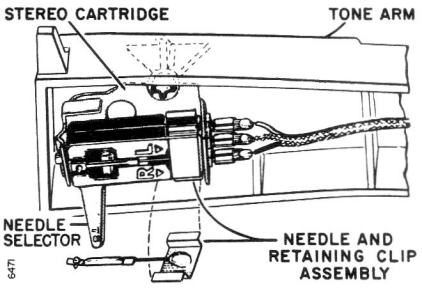
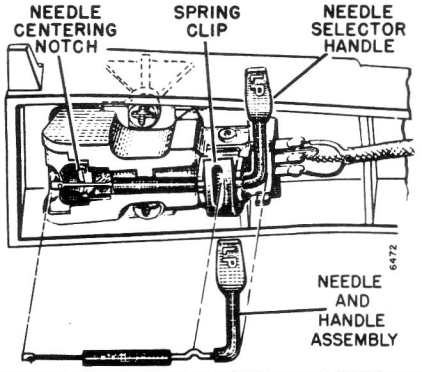
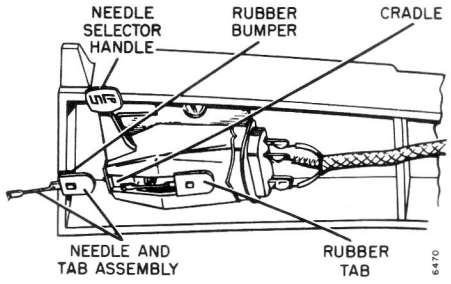
Parts List for 45 RPM Spindle (400C686-2)

Ref. No.	Part No.	Description
201	402A 377-2	Screw, #4-40x1¾"—OH PH MS (2 required)
202	400A 692-2	Spindle Cap Assembly (Brown)
203	401A 457-1	Record Slicer (2 required)
204	402A 372-1	Pivot Pin, Shelf and Slider
205a	403A 91-1	Record Shelf, Left (Black)
205b	403A 92-1	Record Shelf, Right (Black)
206	405A 170-1	Spring, Shelf Return
207	400A 691-1	Push-off Slider Assembly
208	401A 460-1	Mounting Plate
209	405A 169-1	Spring, Slicer Return
210	403B 89-2	Spindle Body (Beige)
211	403A 93-2	Spindle Rotating Base (Beige)
212	401A 414-2	Retaining Ring

notes

NEEDLE REPLACEMENT INFORMATION

To obtain the part number of the pick-up cartridge used in a specific record changer, refer to the "MODEL IDENTIFICATION CHART" or "PARTS LIST." Adjacent each cartridge illustration is parts and service information applicable to that particular cartridge.

	CARTRIDGE NUMBER	NEEDLE REPLACEMENT PROCEDURE
	**409B28-1**	Cartridge and needles are molded into one assembly. To remove cartridge and needle assembly, firmly hold cartridge holder with one hand, and gently pull cartridge and needle assembly straight out of holder with other hand. Insert new cartridge and needle assembly in same position.
	**409B29-1-1** **409C37-1**	Individual needles used for 78 and 33-45. Turn Needle Selector knob so that desired number (78 or 33-45) is facing up. Corresponding needle will point down. Grasp retaining clip and slip worn needle from cartridge. Position new needle in same position and press its clip in until it snaps onto cartridge.
	**409B33-1-1** **409B33-2-1**	Individual needles used for 78 and LPS. Turn Needle Selector handle so that desired number (78 or LPS) is facing up. Corresponding needle will be pointing down. Grasp retaining clip and slip worn needle from cartridge. Position new needle in same position and press its clip in until it snaps onto cartridge.
	**409C34-1-1** **409C34-2-1**	Both needles are mounted to a common shaft which is connected to the Needle Selector handle. To remove needle assembly, move Needle Selector handle down until it is perpendicular with tone arm. Open spring clip slightly and slip needle assembly out by Needle Selector handle. Make sure needle shaft clears centering notch. To replace needle assembly, open spring clip slightly and slip new assembly into position.
	**409C39-1** **409C39-2**	Individual needles used for 78 and LPS. Turn Needle Selector handle so that desired number (78 or LPS) is facing up. Corresponding needle will point down. Lift rubber tab and slide assembly toward front of cartridge. Position rubber-bumper of new assembly in cradle and slide along guide rails toward rear of cartridge.

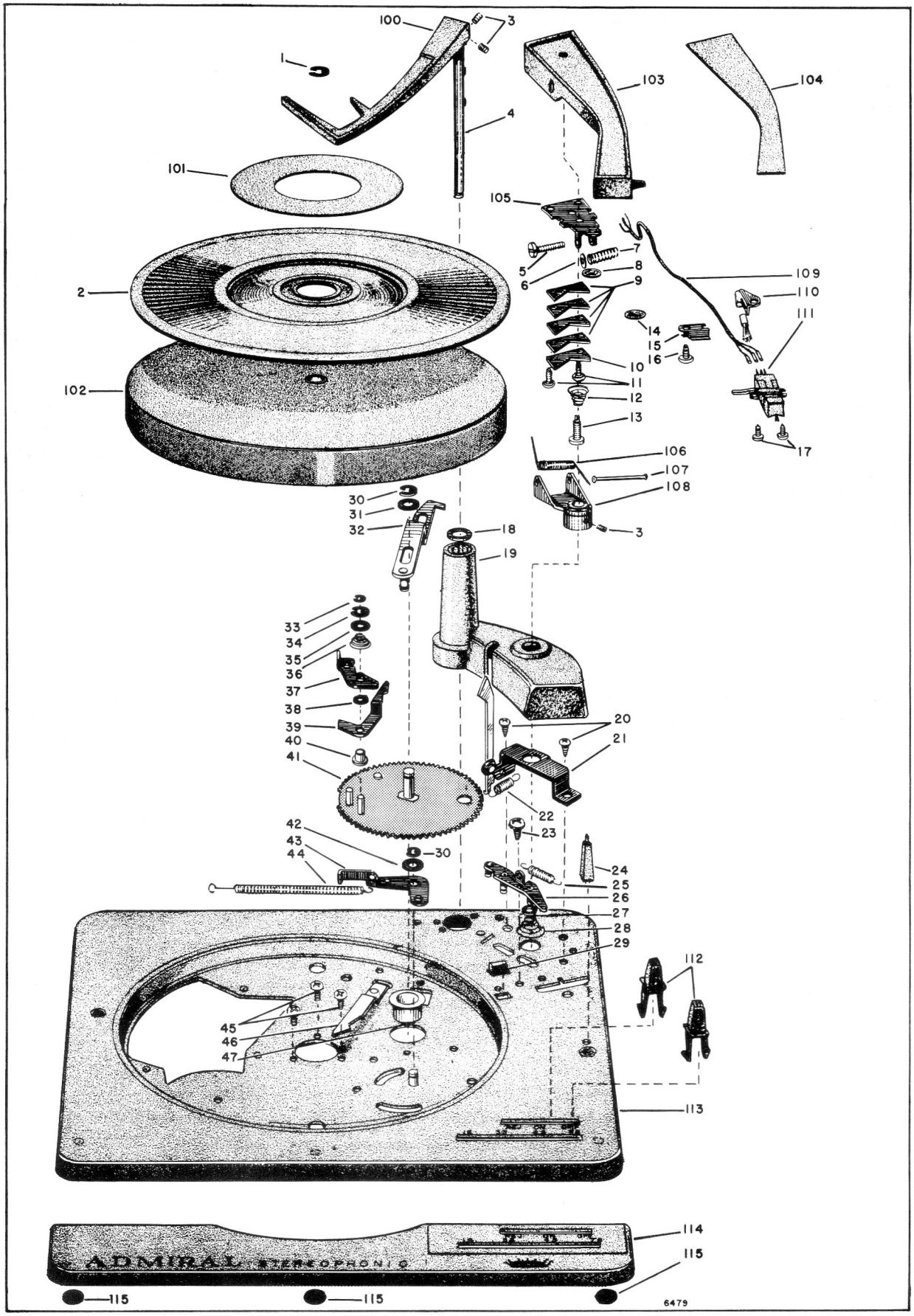


Figure 13A. Exploded View of Parts Above Changer Pan.

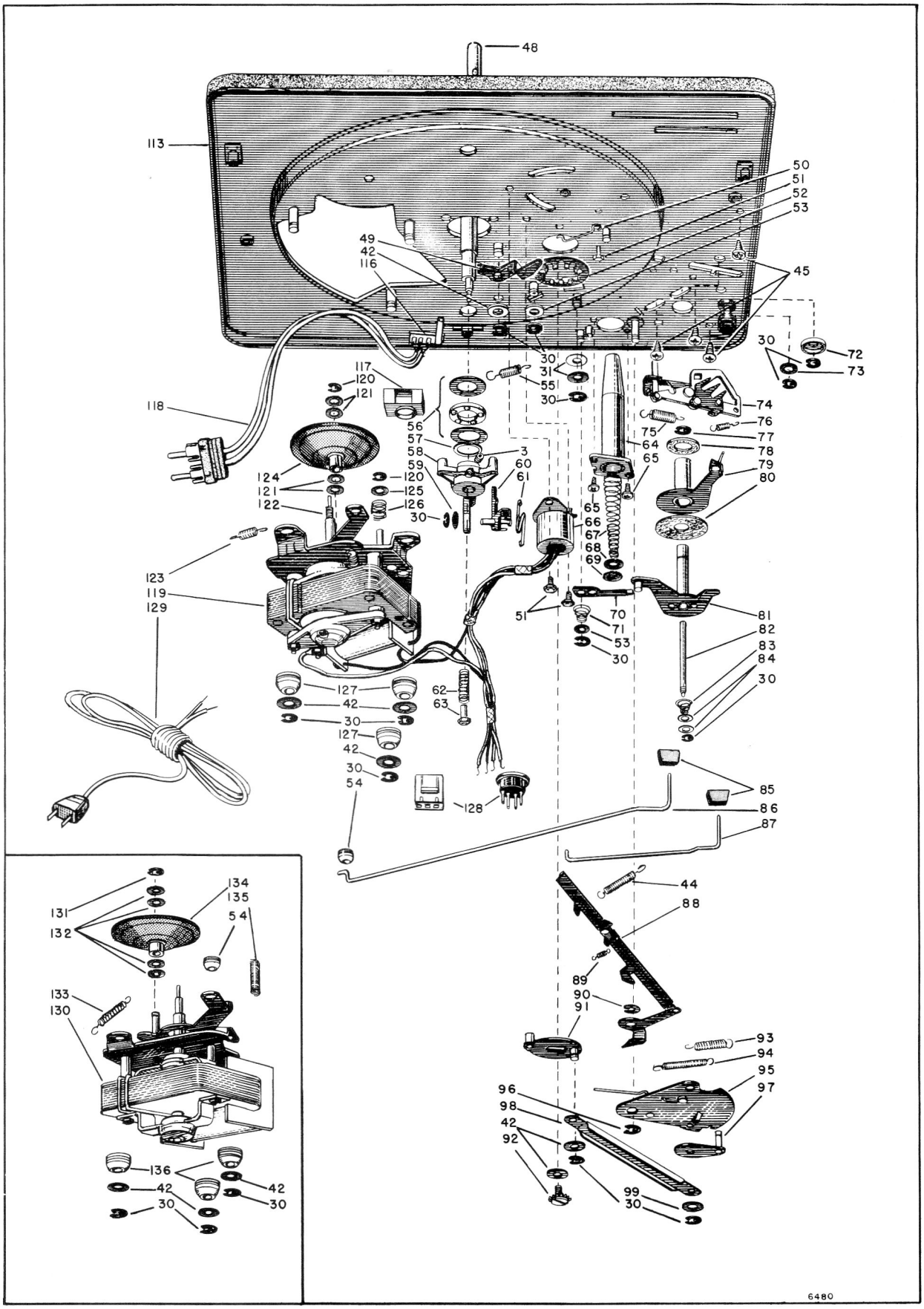


Figure 13B. Exploded View of Parts Below Changer Pan.

RC700 SERIES RECORD CHANGER PARTS LIST

Reference Number (Ref. No.) Numbering System

Reference Numbers are grouped into three series. Items numbered 1 to 99 designate parts common to all changer models covered by this manual. Items numbered in the 100 series designate parts common to a specific record changer model covered by this manual. Items numbered in the 200 series designate 45 RPM Spindle parts.

Ref. No.	Description	Part No.
1	"E"-Retaining Ring (5/16")	401A 355-3
2	Turntable Mat, Rubber, Brown	406D 37-1
3	Knurled Point Set-Screw (#8-32x3/16)	402A 296-1
4	Leveling Arm Shaft	402B 382-1
5	Set-Down Adjust Screw (#4-40x¾ BHMS)	1C 188-513-47
6	Set-Down Adjust Washer, Steel (.125 I.D. x ¼ O.D. x 1/32)	4C 1-19-47
7	Set-Down Adjust Lock Spring	405A 137-1
8	Speed Nut (⅛")	2C 10-5-59
9	Tone Arm Counterweight	401A 481-2
10	Tone Arm Counterweight	401A 481-1
11	Screw (#4x5/16 RH PH STS)	402A 375-2
12	Lift Adjust Lock Spring	405A 148-1
13	Lift Adjust Screw	402A 290-1
14	Washer, Fiber (.120 I.D. x ½ O.D. x .020)	412A 50-1
15	Tone Arm Clip	401A 428-1
16	Screw (#4x3/16 RH PH STS)	402A 366-1
17	Screw (#4x¼ RH PH STS)	402A 375-1
18	Washer, Felt (19/64 I.D. x ½ O.D. x 3/64)	412A 47-1
19	Tone Arm and Leveling Arm Base (Beige)	403C 85-5
20	Screw (#6-32x¼ RH PH STS)	402A 373-1
21	Tone Arm Alignment Bracket and Trigger Assembly (incl. Ref. No. 22)	400A 651-2
22	12" Trigger Cocking Spring	405A 160-1
23	Screw (#6-32x3/16 RH PH SEMS)	1C 191-78-58
24	Tone Arm Rest (Beige)	403A 65-7
25	12" Set Down Slide Spring	405A 159-1
26	12" Set Down Slide Assembly	400A 652-1
27	"C"-Retaining Ring	401A 396-5
28	Set-Down Pivot Spring	405A 161-1
29	10" Index Finger Cap	406A 29-2
30	"E"-Retaining Ring (3/16")	401A 355-1
31	Washer, Fishpaper (.196 I.D. x ⅜ O.D. x .015)	412A 52-1
32	Trip Slider and Stud Assembly	400B 719-1
33	"E"-Retaining Ring (⅛")	401A 355-6
34–40	Gear Engagement Pawl and Trip Motion Arm Assembly	400A 588-2
41	Drive Gear, Shaft, and Stud Assembly	400A 587-3
42	Washer, Steel (.196 I.D. x ½ O.D. x .031)	401A 388-1
43	Switch and Reject Arm Assembly	400A 725-1
44	Reject Arm Return Spring	405A 140-1
45	Screw (#6-32x⅜ RH PH STS)	402A 376-1
46	Gear Indexing Arm and Stud Assembly	400A 620-1
47	Drive Gear Bearing	415A 31-1
48	Centerpost Assembly (incl. Ref. Nos. 62 and 63)	400B 681-1
49	Push-Off Link	401A 450-1
50	Shut-Off Link Hold-Down	414A 50-1
51	Screw (#6-32x3/16 - RH PH STS)	402A 370-1
52	Retaining Washer (39/64 I.D. x 1¼ O.D. x 5/64)	405A 99-1
53	Washer, Brass (.196 I.D. x ⅜ O.D. x 1/64)	4B 2-178-0
54	Shift Link Grommet	406A 36-1
55	Gear Indexing Spring	405A 147-1
56	Thrust Bearing	415A 29-2
57	Washer, Neoprene (.440 I.D. x 17/32 O.D. x .034)	406B 38-1
58	Turntable Support Hub	404B 48-1
59	Washer, Steel (.196 I.D. x ⅜ O.D. x .028)	401A 388-2
60	Push-Off Lever and Stud Assembly (incl. Ref. No. 61)	400A 682-1
61	Push-Off Safety Spring	405A 154-1
62	Push-Off Return-Spring	405A 142-1
63	Push-Off Adjustment Nut	403A 87-1
64	Leveling Arm Bearing	404B 46-1
65	Screw (#6-32x5/16 HH SL STS)	402A 369-1
66	Switch and Mounting Plate Assembly	400A 606-1
67	Leveling Arm Return Spring	405A 162-1
68	Washer, Steel (.265 I.D. x ½ O.D. x 1/32)	4C 1-127-47
69	Retaining Washer (7/32 I.D. x 7/16 O.D. x .020)	405A 167-1
70	Shut-Off Delay Stop	401A 398-1
71	Shut-Off Engagement Spring	405A 153-1
72	Cocking Roller	415A 37-1
73	Washer, Steel (.196 I.D. x ⅜ O.D. x .010)	401A 455-1
74	Set-Down Index Assembly (incl. Ref. Nos. 29 and 76)	400A 653-2
75	Arm Return Spring	405A 146-1
76	Index Return Spring	405A 143-1
77	"C"-Retaining Ring (5/16")	401A 396-4
78	Set-Down Arm Spacer	415A 34-1
79	Set Down Arm Assembly	400A 616-1
80	Set-Down Friction Washer, Cork (21/64 I.D. x 1-1/16 O.D. x .047)	412A 40-1
81	Tone Arm Control Lever Assembly	400B 715-1
82	Lift Rod	402A 284-1
83	Set-Down Engagement Spring	405A 144-1
84	Washer, Steel (.196 I.D. x 5/16 O.D. x 1/64)	4C 1-195-47
85	Control Knob Retainer	403B 99-1
86	Speed Change Wire Link	414B 56-1
87	Switch and Reject Wire Link	414A 55-1
88	Shut-Off Link and Arm Assembly (incl. Ref. No. 134)	400A 629-1
89	Shut-Off Cam Return Spring	405A 152-1
90	"E"-Retaining Ring (⅜")	401A 355-7
91	Drive Eccentric Assembly	400A 605-1
92	Screw (#8-32x¼ BH SL SEMS)	1C 194-553-47
93	Shut-Off Arm Spring	405A 151-1
94	Safety Spring	405A 145-1
95	Control Plate Assembly	400A 621-2
96	"E"-Retaining Ring (¼")	401A 355-2
97	Safety Arm and Stud Assembly	400A 622-1
98	Drive Link	401A 448-1
99	Washer, Brass (.196 I.D. x ½ O.D. x .028)	401A 439-1

RC700 SERIES RECORD CHANGER PARTS LIST

REFER TO PAGE 19 FOR PARTS LIST ON 400B750-7 OR 9400L6-1 RECORD CHANGER

Ref. No.	Description	Part No.	RC7A0B-10H	RC7B0B-10H	RC7E0B-8AD	RC7E0B-20AC	RC7E0B-22AE	RC7E0B-23AE	RC7E0C-17AF	RC7E0C-17W	RC7E0C-22V	RC7E0D-16AF	RC7E0D-18Z	RC7E0G-17Q	RC7E0G-17W	RC7E0G-19W	RC7E0G-23V	RC7F0B-8AD	RC7F0B-20AC	RC7F0B-22AE	RC7F0B-23AE	RC7F0C-17AF	RC7F0C-17W	RC7F0C-22V	RC7F0D-16AF	RC7F0D-18Z	RC7F0G-17Q	RC7F0G-17W	RC7F0G-19W	RC7F0G-23V
100	Leveling Arm																													
	Painted Sandalwood Metallic	404C 52-1	1	1	1	1	1	1	1	1	1	1	1	—	—	—	—	1	1	1	1	1	1	1	1	1	—	—	—	—
	Gold Plate	404C 52-3	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	—	—	—	—	—	—	—	—	—	1	1	1	1
101	Turntable Mat Inlay (Gold)	401A 484-1	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	—	—	—	—	—	—	—	1	1	1	1	1	1
102	Turntable Assembly																													
	(incl. Ref. No. Item 2)	400C 718-1	1	1	1	1	1	1	1	1	1	—	—	—	—	—	—	1	1	1	1	1	1	1	—	—	—	—	—	—
	(incl. Ref. No. Items 2 & 101)	400C 718-2	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	—	—	—	—	—	—	—	1	1	1	1	1	1
103	Tone Arm																													
	Beige	403D 100-1	—	—	1	—	1	1	—	—	—	—	—	—	—	—	—	1	—	1	1	—	—	—	—	—	—	—	—	—
	Beige with Gold Edge	403D 100-3	—	—	—	—	—	—	1	1	1	1	1	1	1	1	1	—	—	—	—	1	1	1	1	1	1	1	1	1
	Beige (for front mtg. cartridge)	403D 101-1	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
104	Tone Arm Inlay (Gold)	401C 483-1	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	—	—	—	—	—	—	—	—	—	1	1	1	1
105	Tone Arm Suspension Assembly (incl. Ref. No. Items 3, 5, 6, 7, 12, 13, 106, 107, and 108)	400A 727-1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
		400A 727-2	—	—	—	—	1	1	1	1	1	1	—	1	1	—	1	—	—	1	1	1	1	1	1	—	1	1	—	1
		400A 727-3	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		400A 727-4	—	—	—	1	—	—	—	—	—	—	—	1	—	—	1	—	1	—	—	—	—	—	—	1	—	—	1	—
106	Counter-Balance Spring		Part of Tone Arm Suspension Assembly—See Ref. No. 105																											
107	Pivot Shaft		Part of Tone Arm Suspension Assembly—See Ref. No. 105																											
108	Tone Arm Mtg. Bracket and Hub Assembly		Part of Tone Arm Suspension Assembly—See Ref. No. 105																											
109	Tone Arm Shielded Lead Assembly (incl. pin jacks)	400A 600-4	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
		400A 660-5	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		400A 693-1	—	—	—	—	—	—	1	1	—	1	—	1	1	—	—	—	—	—	—	1	1	—	1	—	1	1	—	—
		400A 693-2	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	1	—
		400A 693-6	—	—	—	—	1	1	—	—	1	—	—	—	—	—	1	—	—	1	1	—	—	1	—	—	—	—	—	1
		400A 703-4	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
110	Record Brush and Mtg. Bracket Assembly	400A 731-1	—	—	—	—	—	1	1	1	—	—	—	1	1	1	1	—	—	—	1	1	1	—	—	—	1	1	1	1
111	Pick-up Cartridge	409B 28-1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
	†Needle, Dual (Sapphire)	98C 15-89	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
	Pick-up Cartridge	409B 29-1-1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	†Needle, LP (Sapphire)	98C 98-121	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	†Needle, 78 (Sapphire)	98C 95-5	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Pick-up Cartridge	409B 33-1-1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
	†Needle, LP (Sapphire)	98C 15-100	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
	†Needle, 78 (Sapphire)	98C 15-101	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
	Pick-up Cartridge	409B 33-2-1	—	—	—	—	—	—	1	1	—	—	—	1	1	—	—	—	—	—	—	1	1	—	—	—	1	1	—	—
	†Needle, LP (Diamond)	98C 15-102	—	—	—	—	—	—	1	1	—	—	—	1	1	—	—	—	—	—	—	1	1	—	—	—	1	1	—	—
	†Needle, 78 (Sapphire)	98C 15-101	—	—	—	—	—	—	1	1	—	—	—	1	1	—	—	—	—	—	—	1	1	—	—	—	1	1	—	—
	Pick-up Cartridge	409C 34-1-1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
	†Needle, Dual (Sapphire)	98C 95-8	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
	Pick-up Cartridge	409C 34-2-1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
	†Needle, Dual (Diamond-Sapphire)	98C 95-9	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
	Pick-up Cartridge	409C 37-1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
	†Needle, LP (Sapphire)	98C 95-4	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
	†Needle, 78 (Sapphire)	98C 95-5	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
	Pick-up Cartridge	409C 39-1	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—
	†Needle, LP (Sapphire)	98C 95-14	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—
	†Needle, 78 (Sapphire)	98C 95-15	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—
	Pick-up Cartridge	409C 39-2	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	1
	†Needle, LP (Diamond)	98C 95-16	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	1
	†Needle, 78 (Sapphire)	98C 95-15	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	1

Ref. No.	Description	Part No.	RC7A0B-10H	RC7B0B-10H	RC7E0B-8AD	RC7E0B-20AC	RC7E0B-22AE	RC7E0B-23AE	RC7E0C-17AF	RC7E0C-17W	RC7E0C-22V	RC7E0D-16AF	RC7E0D-18Z	RC7E0G-17Q	RC7E0G-17W	RC7E0G-19W	RC7E0G-23V	RC7F0B-8AD	RC7F0B-20AC	RC7F0B-22AE	RC7F0B-23AE	RC7F0C-17AF	RC7F0C-17W	RC7F0C-22V	RC7F0D-16AF	RC7F0D-18Z	RC7F0G-17Q	RC7F0G-17W	RC7F0G-19W	RC7F0G-23V
112	Control Knob (Brown)	403B 98-1	2	2	2	2	2	2	—	—	—	2	2	—	—	—	—	2	2	2	2	—	—	—	2	2	—	—	—	—
		403B 98-2	—	—	—	—	—	—	2	2	2	—	—	2	2	2	2	—	—	—	—	2	2	2	—	—	2	2	2	2
113	Changer Pan Assembly	§																												
114	Escutcheon (Gold)	404C 51-1	—	—	—	—	—	—	1	1	1	—	—	1	1	1	1	—	—	—	—	1	1	1	—	—	1	1	1	1
115	Speed Nut (3/16"), Escutcheon Retaining	401A 485-1	—	—	—	—	—	—	3	3	3	—	—	3	3	3	3	—	—	—	—	3	3	3	—	—	3	3	3	3
116	Terminal Board																													
	2-lug	10D 1-98	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
	3-lug	10D 1-101	—	—	—	—	—	—	1	1	1	1	1	1	1	1	1	—	—	—	—	1	1	1	1	1	1	1	1	1
	4-lug	10D 1-105	—	—	—	1	1	1	—	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—	—	—	—	—	—
117	Terminal Board Shield (for 3-lug terminal board)	401A 461-1	—	—	—	—	—	—	1	1	1	1	1	1	1	1	1	—	—	—	—	1	1	1	1	1	1	1	1	1
119	Motor Assembly, 117V, 60 cycle (4-speed; 2-pole: 4-step shaft)	407C 33-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	1	1	1	1	1	1	1
	Motor Assembly, 90V, 60 cycle (4-speed; 2-pole; 4-step shaft)	407C 33-3	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
120	"E"-Retaining Ring	98C 15-118	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	1	1	1	1	1	1	1
121	Washer, Fiber	98C 15-127	—	‡	—	—	—	—	—	—	—	—	—	—	—	—	—	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
122	78 RPM Drive Spring	98C 15-116	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	1	1	1	1	1	1	1
123	Idler Spring	98C 15-115	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	1	1	1	1	1	1	1
124	Idler Wheel	98C 15-114	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	1	1	1	1	1	1	1
125	Speed Changer Spring Retaining Cap	98C 15-119	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	1	1	1	1	1	1	1
126	Speed Changer Spring	98C 15-120	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	1	1	1	1	1	1	1
127	Motor Mtg. Grommet	98C 15-117	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3	3	3	3	3	3	3	3	3	3	3	3
128	Record Changer Power Connector																													
	4-prong Plug (Alden type)	88B 8-5	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
	3-pin Plug, less pins (Amp-Lok type)	33C 287-2	—	—	1	1	—	—	1	1	1	1	—	1	1	1	1	1	1	—	—	1	1	1	1	—	1	1	1	1
	terminal pin (for Amp-Lok type plug)	9B 35-12	—	—	3	3	—	—	3	3	3	3	—	3	3	3	3	3	3	—	—	3	3	3	3	—	3	3	3	3
129	Line Cord and Plug (6')	89C 1-4	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
130	Motor Assembly 117V, 60 cycle (4-speed; 2-pole; 4-step shaft)	407C 34-1	—	—	1	1	1	1	1	1	1	1	1	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
	Motor Assembly, 90V, 60 cycle (4-speed; 2-pole; 4-step shaft)	407C 34-3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
131	"E"-Retaining Ring	98C 15-124	1	—	1	1	1	1	1	1	1	1	1	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
132	Washer, Fiber	98C 15-125	‡	—	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	—	—	—	—	—	—	—	—	—	—	—	—	—
133	Idler Spring	98C 15-122	1	—	1	1	1	1	1	1	1	1	1	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
134	Idler Wheel	98C 15-121	1	—	1	1	1	1	1	1	1	1	1	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
135	Link Spring	98C 15-126	1	—	1	1	1	1	1	1	1	1	1	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
136	Motor Mtg. Grommet	98C 15-123	3	—	3	3	3	3	3	3	3	3	3	3	3	3	3	—	—	—	—	—	—	—	—	—	—	—	—	—

400B750-7 (9400L6-1) PARTS LIST

REF#	DESCRIPTION	PART NUMBER
100	Levelling Arm, Beige	404C52-4
101	Turntable Mat Inlay (Gold)	401A484-1
102	Turntable Assembly (Incl. Ref. No. Items 2&101)	400C718-2
103	Tone Arm, Beige	400D100-5
105	Tone Arm Suspension Assembly (Incl. Ref. No. Items 3, 5, 6, 7, 12, 13, 106, 107, and 108)	400A727-4
106	Counter Balance Spring - Part of Tone Arm Suspension Assembly	
107	Pivot Shaft - See Ref. No. 105	
108	Tone Arm Mtg. Bracket and Hub Assembly See Ref. No 105	
109	Tone Arm Shielded Lead Assembly (incl. Pin Jacks)	400A693-2
110	Record Brush & Mtg. Bracket Assembly	400A731-1
111	Pick-Up Cartridge	409C34-2-1
	Needle, Dual (Sapphire-Diamond)	98C95-9
112	Control Knob	403B98-1
	Control Knob Retainer	403B99-1
116	Terminal Board, 3 lug	10D1-101
119	Motor Assembly, 117V, 60 Cycle (4 Speed; 2-Pole: 4-Step Shaft)	407C33-1
120	"E"-Retaining Ring	98C15-118
121	Washer, Fibre	98C15-127
122	78 R.P.M. Drive Spring	98C15-116
123	Idler Spring	98C15-115
124	Idler Wheel	98C15-114
125	Speed Changer Spring Retaining Cap	98C15-119
126	Speed Changer Spring	98C15-120
127	Motor Mtg. Grommet	98C15-117
128	Record Changer Power Connector, 3-Pin Plug, less Pins (Amp-Lok Type)	33C287-2
	Terminal Pin (for Amp-Lok Type Plug)	9B35-12