

45 RPM CONVERSION for M100A and MH100A 78 RPM SEEBURG'S

SIMPLIFIED • LOWER PRICED • FASTER INSTALLATION
TO SAVE YOU MONEY AND INCREASE YOUR TAKE

Convert your Seeburg M- and MH-100A's
to 45 rpm — quickly and easily — at a price
SO LOW the conversion will pay for itself
from the savings made possible by the less
expensive 45 rpm disks.

**45 rpm
only**

\$ 44⁵⁰

FAST CARRIAGE GEARS FOR 45 RPM UNIT
AVAILABLE — \$5.00 EXTRA

50 CYCLE AVAILABLE

SEE OTHER SIDE FOR ILLUSTRATED PARTS LIST.

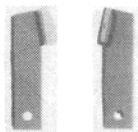
33¹/₃ rpm only \$22.50



CALCOIN CORPORATION 11167 W. Pico Blvd., Los Angeles 64

COMPLETE PARTS LIST OF 45 R.P.M. CONVERSION

ALL SCREWS, WASHERS ETC. ARE ASSEMBLED IN THEIR RESPECTIVE PARTS

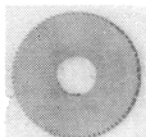


D-1026L-A LEFT FRONT RECORD SUPPORT BRACKET

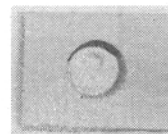
D-1026R-A RIGHT FRONT RECORD SUPPORT BRACKET



D-1030-A *2 start* WORM



D-1031-A *77 teeth* HELICAL GEAR



D-1032-A
CHANGE GEAR BLOCK



D-1033-A RECORD CENTERING HUB



D-1051-A 2-45 R.P.M. NEEDLES

NOTE THE SIMPLICITY OF PARTS
CONTAINED IN THE 45 R.P.M.
CONVERSION.



D-1083-A REAR RECORD SUPPORT BAR



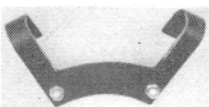
A-8004-A FRONT RECORD SUPPORT BAR ASSEMBLY



A-8005-A TRANSFER HEAD



A-8006-A COUNTERWEIGHT ARM ASSEMBLY



A-8007-A RECORD GUARD ASSEMBLY



A-8008-A PICK-UP ARM STOP ASSEMBLY



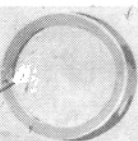
A-8010-A
RECORD CHUTE ASSEMBLY



1000 PICK-UP ADAPTOR



1200 TRIP LEVER ROLLER



3004-A FLYWHEEL ADAPTER RING

33 1/3 CONVERSION CONSISTS OF THE
FOLLOWING PART NUMBERS:

D-1032-A
D-1054-A

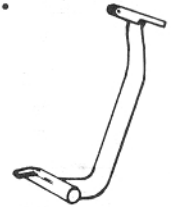
D-1053-A
D-1051-A

D-1086-A TRAVEL CARRIAGE GEARS (2)
OPTIONAL EQUIPMENT NOT SHOWN.

INSTALLATION INSTRUCTIONS FOR CONVERSION OF MODELS M100A & 'MH100A SEEBURG PHONOGRAPHS TO 45R.P.M.

NOTICE:

BEFORE INSTALLATION OF YOUR CONVERSION KIT, CHECK THE TRANSFER ARM ON YOUR 78 RPM. IF THE HEAD DOES NOT HAVE A ROLLER, REMOVE THE ARM AND EXCHANGE IT FOR A LATER MODEL WITH ROLLER, AT YOUR NEAREST SEEBURG DISTRIBUTOR. REMOVE ROLLER FROM NEW TRANSFER ARM AND INSTALL IT.



FOREWORD:

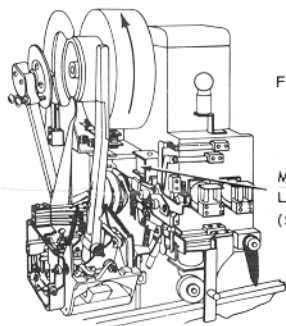
Before installing this Conversion Kit, your Seeburg Phonograph should be in good operating condition. We suggest that enough time be taken to thoroughly clean the mechanism and cabinet, check all adjustments and lubricate all moving parts. A copy of the Seeburg "Select-O-Matic 100 A" service manual may be obtained from your nearest Seeburg Distributor for \$1.50.

FROM THE FRONT OF THE MACHINE

1. START:

- Turn off the machine and remove both plastic carriage covers and all records. Do not lose carriage cover screws.
- Adjust reversing switch brackets on Seeburg chassis so that carriage over-travels as little as possible past the last record on each end.

COUNTER-CLOCKWISE



FRONT

MANUALLY TRIP THE TRIP RELAY BY LIFTING THE ARMATURE WHEN REQUIRED (SEE TEXT)

FIGURE 1.
FRONT OF SEEBURG UNIT

2. RECORD CENTERING HUB (See Fig. 2):

- Remove clamp plate assembly from clamp arm with screws "A" (Fig. 2).
- Remove screws "B" (Fig. 2) and screw new "Record Centering Hub D-1033-A" to the inside of the clamp plate with the four new #2-56 x 1/4 round head screws and 4 #2 lock washers furnished. Discard old screws "B". Replace clamp plate with screws "A".

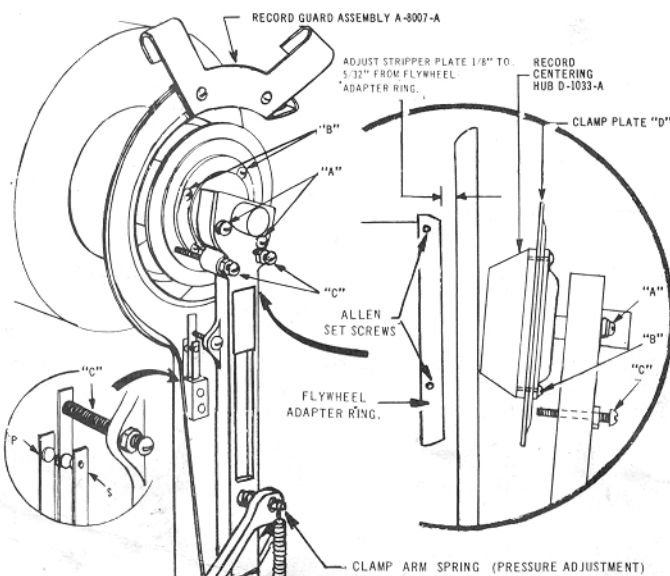


FIGURE 2. CLAMP PLATE AND ARM

- Remove rubber ring from flywheel and CLEAN THOROUGHLY. Install new "Flywheel Adapter Ring" on flywheel. Center ring with 3 Allen set screws (1/16" wrench). If the flywheel is too large for the Adapter Ring, turn motor on and lightly file the flywheel down with a fine file or emory cloth.
- Remove the spring on clamp arm, take off "C" washer, and remove the spacer washer. Reinsert the "C" washer and spring. This will produce a greater pressure on the record to keep the records from slipping. If this is not sufficient pressure, ream the hole to enable the "C" washer to go in farther.

3. INSTALLATION OF NEW WORM AND HELICAL (WORM) GEAR (See Fig. 3):

- Remove gear box cover "A" (Fig. 3). Do not lose screws.
- Remove lock nut "E" and set screw "H".
- Remove worm bearing block "B".
- Tap out the taper pins "C" (Fig. 3) with a 3/32" drift punch. Be sure to drive the small ends of the taper pins.

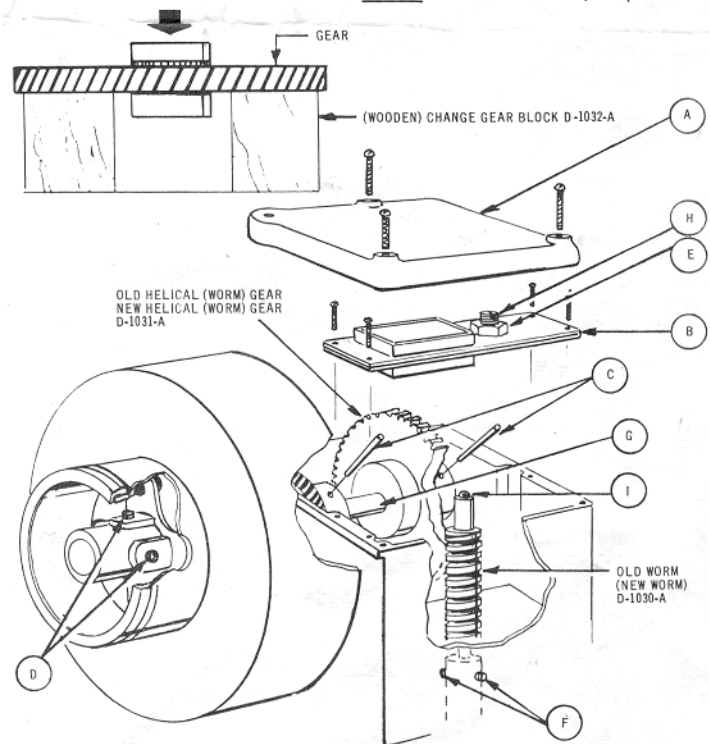


FIGURE 3. HELICAL WORM GEAR AND WORM

- Loosen the set screws "D" (Fig. 3) nearly all the way out and remove the "Spider".
- Slide the helical worm gear to the left and disengage it from the worm. Use a cloth and pliers to hold shaft, if necessary.
- Loosen both set screws "F" on the worm end of the motor coupling and remove worm by lifting upwards.

- H. Slide the drive shaft "G" to the right (away from the fly-wheel) slowly, far enough to allow the gears to be removed. Be sure to support the fly-wheel when moving the shaft as it and the two washers between it and the gear box will come completely off. Be sure not to lose these two washers.
- I. Place the old helical worm gear on the wooden "Gear Change Block D-1032-A" provided (Fig. 3) and tap the gear from its hub. Place a piece of wood on the end of the hub for tapping purposes. Do not strike the hub directly with the hammer. Tap the new Helical Worm Gear D-1031-A on the old hub in the same manner except turn the hub over and place the new "Helical Worm Gear" between the hub and the wooden "Change Gear Block".
- J. Place the long end of the new "Worm D-1030-A" into the motor coupling and re-tighten the set screws "F". Be sure that the worm is seated into the coupling as far as it will go.
- K. Re-assemble the gears, shaft and "Spider" in the reverse order of dis-assembly being careful to match the large end of the holes in the gear hubs to the large end of the holes in the shaft when replacing the taper pins "C" (Fig. 3). Also, be sure to replace the two washers between the fly-wheel and the gear box (see paragraph H) and the heavy thrust washer between the inside wall of the gear box and the face of the helical gear.
- L. Replace bearing block "B" with lock nut "E" and set screw "H"
- M. Place either the small (1/8" dia.) ball bearing removed from the end of the old worm or the new ball bearing furnished into the recessed top end of the new Worm. Then install the set screw "H" and screw in until snug against the ball bearing - then back out the set screw one fourth of a turn, hold same in this position, while installing and tightening lock nut "E".
- N. Check oil and re-install Gear Box Cover "A".

2. CONTINUATION:

- D. The pause in this operation was to allow the "Spider" to be removed and re-installed more easily - now proceed.
- E. Replace the clamp plate assembly with the screws "A" (Fig. 2). Adjust for centering when tightening screws "A" by holding the clamp plate in against the fly-wheel face.
- F. The clamp plate "free position" may be adjusted with screws "C" (Fig. 2) if necessary to accomplish the free movement of the new "Record Centering Hub D-1033-A" on and off the "Spider". These screws, however, must not be allowed to drag on the clamp plate when same is pushed in against the fly-wheel face. When properly adjusted, tighten the lock nuts.

4. INSTALLATION OF NEW PICK-UP ADAPTOR AND RELATED PARTS (See Fig. 4):

- A. Remove the old pick-up holder from the pick-up arm by removing screws "A" and attach the new "Pick-up Adaptor 1000" to the pick-up arm with these same screws "A".
- B. Insert the contact plate from the old pick-up holder into the new "Pick-up Adaptor" and insert the two new 45 R.P.M. needles into the pick-up. (Fig. 4).

C. Attach the pick-up to the new "Pick-up Adaptor 1000" with the two 6/32 x 5/16" Flat Head Machine Screws furnished.

D. Loosen screws and turn the spring lugs "C" (Fig. 4) downward into a straight line with the springs. Do this carefully. This will apply approximately 12 grams needle pressure on the record being played. Tighten screws to hold lugs in this position.

E. Lift the pick-up arm up and place the new "Counter-Weight Arm Assembly A-8006-A" in position as shown (Fig. 4). This "Counter-Weight Assembly" is pre-set to counter balance the new "Pick-up Adaptor 1000".

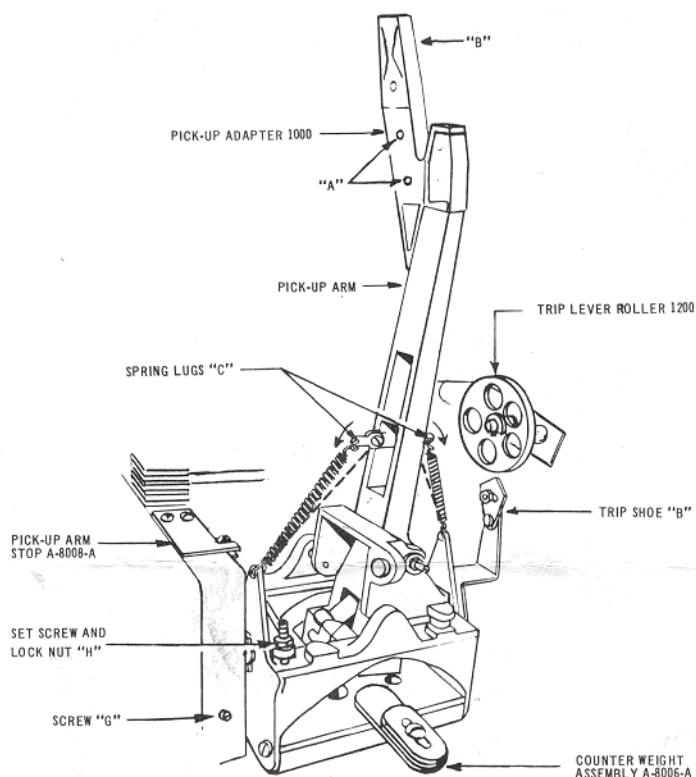


FIGURE 4. PICK-UP ARM

F. Screw on new "Pick-up Arm Stop A-8008-A" using the two 5/40 x 1/4 Round Head Machine Screws furnished, and adjust the new set screw and Lock Nut mounted thereon to allow the pick-up arm to move forward (by the record grooves) sufficiently to trip and cancel the record just played but not far enough to scrape into the paper record label. Also adjust screw "G" (Fig. 4) so that the needle in the pick up is deposited (at start of play) midway between the edge, and the first groove of the record. In order to perform the foregoing place a record in playing position and turn fly-wheel by hand. In order to turn the fly-wheel by hand, manually release the trip relay (See Fig. 1) and turn the fly-wheel with the left hand and assist by turning the motor coupling with the right hand.

G. Adjust trip shoe "B" (Fig. 4) by loosening, moving and re-tightening nut so as to actuate the new "Trip Lever Roller 1200" after record has finished playing.

5. INSTALLATION OF TRIP LEVER ROLLER (See Fig. 4):

A. At "Trip Lever Roller" location (Fig. 4), remove the retaining washer, the spacer and the old roller. Also remove the saw tooth segment.

- B. Place the new "Trip Lever Roller 1200" on the stud with the hub turned in. Then replace the spacer and the retaining washer.
- C. Be sure the new "Roller" turns freely - if not leave the spacer off.
- D. Adjust the set screw and lock nut "H4" so that "Pick-up Adaptor 1000" clears record about 1/2" when not playing.

FROM THE FRONT OF THE MACHINE

6. INSTALLATION OF FRONT RECORD RACK SUPPORT

(See Fig. 5.):

- A. Place the new "Front Record Support Brackets D-1026-A" (Fig. 5) on top of the Seeburg number strip mounts with the flanges turned in and re-install the Seeburg screws "B" (Fig. 5). (One on each end of rack).
- B. Screw on the new "Front Record Support Bar Assembly A-8004-A", rubber edge up, to the flanges of the "Support Brackets D-1026-A" with two of the 6/32 x 1/4 round head machine screws furnished and two of the #6 washers. (Fig. 5.):

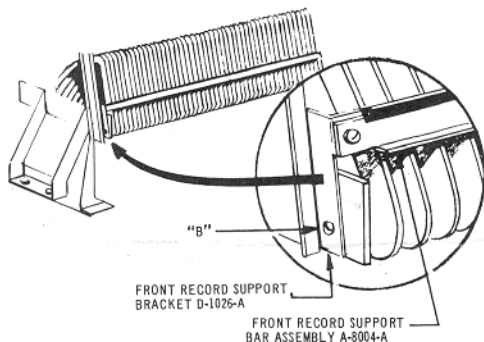


FIGURE 5. FRONT RECORD RACK SUPPORT

7. INSTALLATION OF RECORD STOP

- A. Install the rubber record support in the center of the rack curve (See Fig. 6).

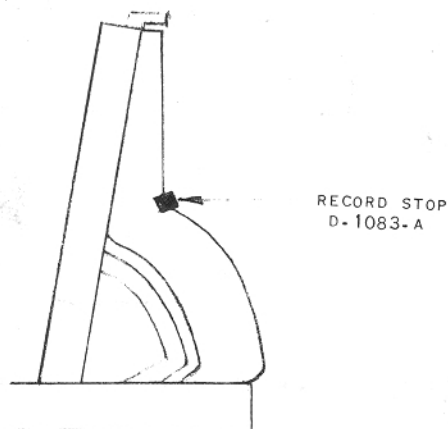


FIGURE 6. RECORD STOP.

8. INSTALLATION OF NEW RECORD CHUTE:

- A. Remove the old record chute, its actuating lever assembly and the old safety lever back stop (Fig. 10).

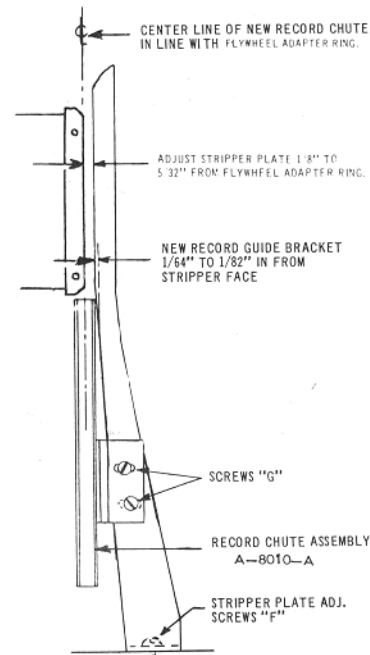


FIGURE 7. RECORD CHUTE

- B. Loosen stripper plate adjusting screws "F" (Fig. 7) and move stripper plate face in to 1/8" to 5/32" from the fly-wheel face. Then re-tighten the screws "F". (Fig. 7).

- C. Screw the new "Record Chute Assembly A-8010-A" on the plate frame with screws "G" which are the same screws removed from the old record guide bracket. Tighten screws "G".

9. INSTALLATION OF NEW TRANSFER ARM HEAD ASSEMBLY A-8005-A (See Fig. 8. and 9.

- A. Turn fly-wheel counter clockwise (See Section IV, paragraph F) until the transfer arm ((Fig. 9) is in a raised position, remove the old retaining clip, both old levers and the old leaf spring.
- B. Slip the new "Platform S-5002-A" down over the four existing register pins (Fig. 8). NOTE: If your transfer arm does not have a roller - remove the arm and exchange it for a later model with roller from Seeburg distributor. Remove roller from new transfer arm and install it.

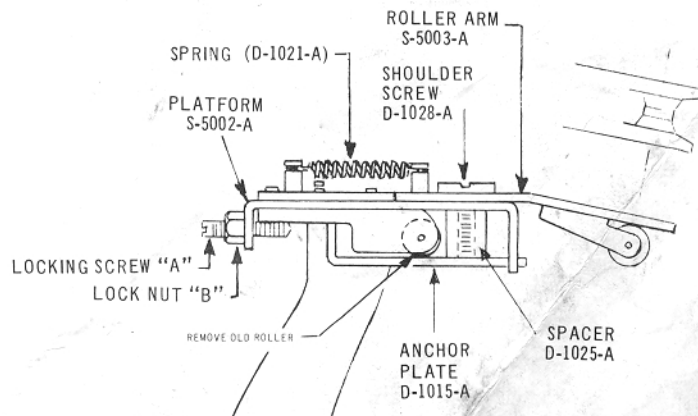


FIGURE 8. TRANSFER ARM HEAD ASSEMBLY A-8005-A

- C. Lay new "Roller Arm S-5003-A" on the "platform" and position as shown (Fig. 8). Also, position as shown the new "Anchor Plate D-1015-A".

D. Place new "Spacer D-1025-A" between the "Platform" and the "Anchor Plate" and hold together with one hand. With the other hand insert the new "Shoulder Screw D-1028-A" through the slotted hole in the "Roller Arm" and the hole in the "Platform". Push same on through the new "Spacer" and tighten securely into the tapped hole in the "Anchor Plate."

E. Screw in the new Locking "Screw A" until the "Platform" is firmly held down. Then tighten lock nut "B" (Fig. 8).

F. Place one end of the new "Spring D-1021-A" on post of "Platform" and the other end on the post of the "Roller Arm".

G. Lubricate sparingly around swivel connection and "Roller" axle. Check for free swiveling and return to center. Check the Roller for free turning.

10. ADJUST RECORD OFF-CENTER SWITCH.

(See Fig. 2):

A. Manually turn the fly-wheel (IV-F) counter clockwise until the clamp plate is against the fly-wheel.

B. Adjust screw "C" so that contact "P" is closed with about one ounce pressure (with no record on fly-wheel - Clamp Plate in).

C. Contact "S" should be closed with about one ounce pressure during scanning ("Clamp Plate" out.) (Fig. 2).

11. INSTALLATION OF RECORD GUARD

(See Fig. 2):

A. Slide the new "Record Guard Assembly A-8007-A" on the end of the stripper plate as shown.

B. When in place, tighten the two 6/32 x 3/8 R.H. screws to hold the new "Record Guard" securely in place.

C. Should the screwing down operation tend to lean the "Record Guard" over slightly, straighten with fingers.

12. TRANSFER ARM ADJUSTMENT AND INSTALLATION OF SPRING. (See Fig. 13).

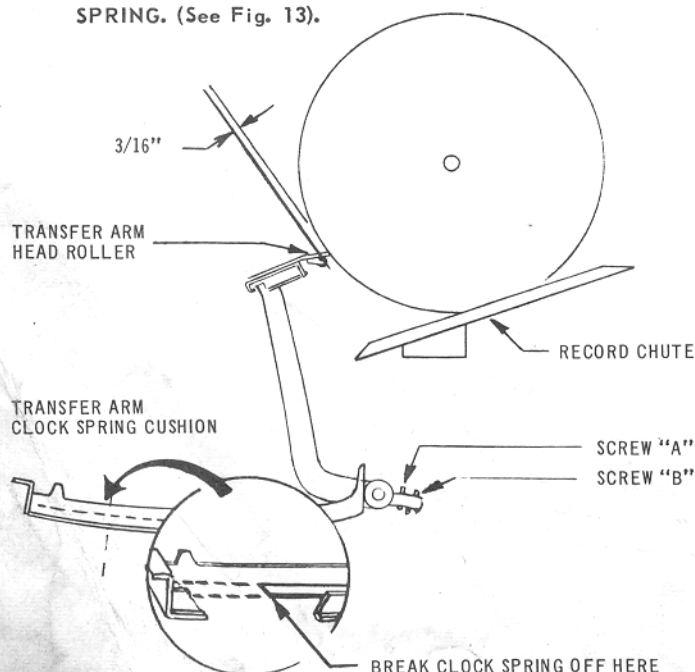


FIGURE 9 TRANSFER ARM ADJUSTMENT AND INSTALLATION OF SPRING

A. With a record in "Play" position, turn the adjusting screw "A" until there is a 3/16 inch gap between the "Transfer Arm Head Roller" and the edge of the record.

B. Turn screw "B" down until the end of same sticks out underneath 3/16" minimum.

13. CLEARANCE FOR NEW TRANSFER HEAD

(Figs. 8 and 9):

A. Mounted to the bottom Seeburg casting that cradles the "Transfer Arm" when in a "down" position (rear of machine) there is a heavy clock spring finger (Fig. 9) Break this off as shown (about 1" to 1-1/4" from the end). This is to prevent the set screw in the new "Transfer Arm Head" to depress same far enough to drag on the framework.

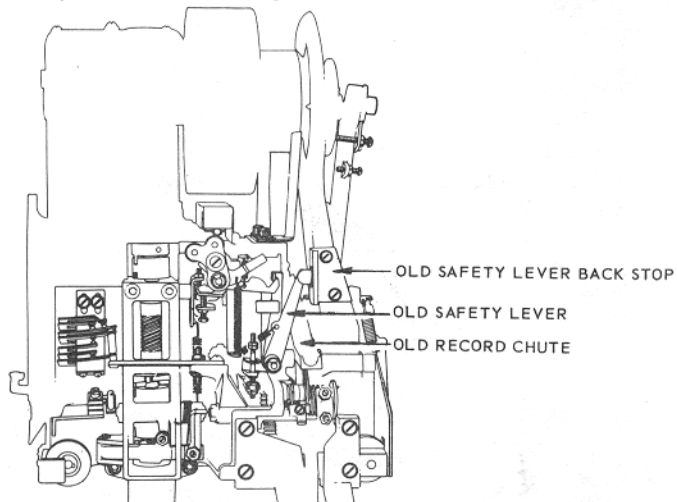


FIGURE 10 REAR OF SEEBURG UNIT

14. FINAL OPERATIONS:

A. Replace both plastic carriage covers.

B. Remove screws holding both pick-up brush brackets.

C. Bend and adjust these brackets so that when re-mounted, brush wipes over the pick-up needle area. Do not attempt to bend these brackets while they are attached to the plastic covers as same will not take the strain and are liable to break.

CONCLUSION:

The parts included in this 45 R.P.M. Conversion Kit have been carefully engineered and exhaustively tested and we are sure that if the installation instructions herein are carefully adhered to, the results will prove most gratifying and your converted machine will perform satisfactorily for years to come.

Please feel free to contact our factory should some part of the installation instructions need to be more detailed. Your inquiries will be answered immediately via air mail.

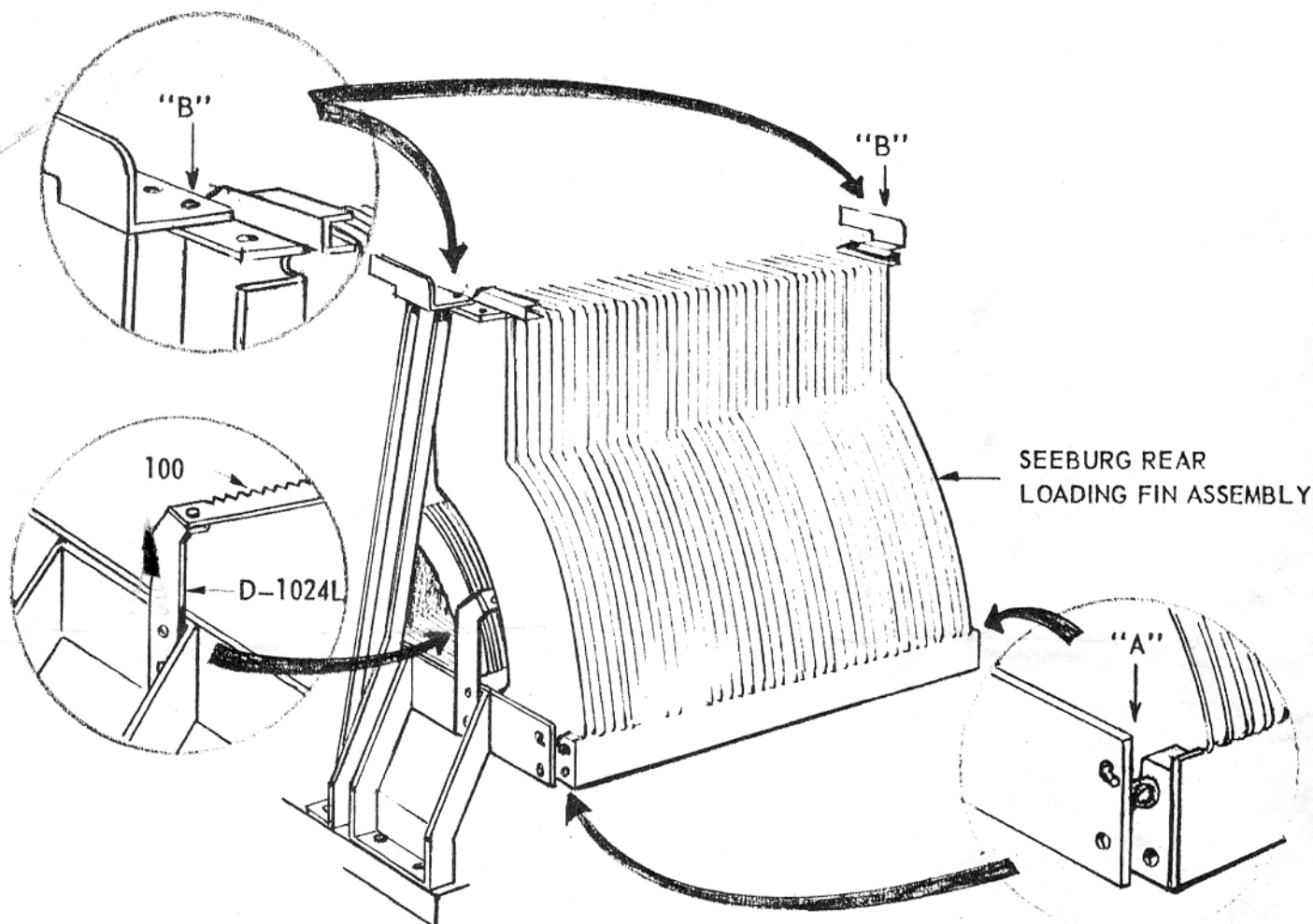
We are also ready now to deliver our 33-1/3 R.P.M. Conversion for the 100A Seeburg, should you be interested.

Thank you for your patronage.

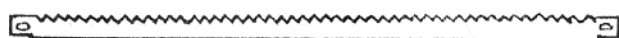
CALCOIN CORPORATION
11167 W. Pico Blvd.,
Los Angeles 64, California

Field tests have shown the addition of the Rear Record Support Bar has become necessary to keep the records centered in the slots and eliminate the transfer arm picking up two records at a time.

The Rear Record Support Bar is now furnished as a standard part and the Record Spot (see Instruction Sheet, page 3, step 7) has been eliminated.



INSTALLATION INSTRUCTIONS



PART NO. 100 REAR RECORD SUPPORT BAR



PART NO. D-1024L REAR RECORD SUPPORT BRACKET



PART NO. D-1024R REAR RECORD SUPPORT BRACKET

1. Install the Left and Right Rear Record Support Brackets by using four 8/32 x 3/16 round head machine screws. Keep flanges turned in.
2. Remove screws "A" from Seeburg rear loading fin assembly. Remove screws "C" and move the loading fin assembly back to the last screw slot and replace and tighten the two screws. Attach "S" hook to loading fin with one of the "C" screws removed. (see illustration).
3. Insert the Rear Record Support Bar, No. 100, and fasten to the brackets with two 8/32 x 3/16 round head screws. Align the Rear Record Support Bar teeth so the records are centered in record rack, and tighten screws.